

Attachment C

This page intentionally left blank.

BIOLOGICAL ASSESSMENT

OF

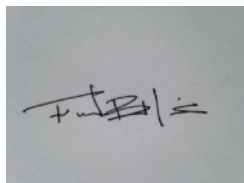
**3406 17 Mile Drive
Pebble Beach, CA 93953
APN 008-381-002**

Prepared for

Hodge/Keare Family Trust
3406 17 Mile Drive
Pebble Beach, CA 93953

Prepared by

Fred Ballerini
Fred Ballerini Horticultural Services
P.O. Box 1023
Pacific Grove, CA 93950
TEL 831.238.6832
fred@fredballerini.com

A rectangular box containing a handwritten signature in black ink. The signature appears to be 'Fred Ballerini' written in a cursive style.

June 29, 2023

I. INTRODUCTION

This 17-page biological assessment report has been authorized by project representative John Hodge (owner) on January 19, 2023.

This report has been prepared to evaluate and document the biological resources present on the residential parcel located at 3406 17 Mile Drive in Pebble Beach, CA. This report will consider the biological impacts and provide recommended measures to reduce impacts of a proposed residential construction project to levels that will support the environmental resources of the property. The project consists of demolition of an existing 6,256 SF residence with attached guest unit, 2 car garage, detached 1,476 SF ADU, and new proposed residential development consisting of an 8,467 SF main residence, 960 SF detached garage with a 960 SF second story ADU, and a 302 SF pool.

II. SUMMARY

The 3406 17 Mile Drive parcel is void of any significant natural community as the site has experienced severe alterations to the degree that any naturally occurring native plant species found on site are the exception. Landscape introductions and large manicured ruderal, weed-infested lawns are the dominant biological features of the parcel. Small fragmented pockets of Coastal Prairie Grassland species and isolated native associated species exist within the entry lawn. A drainage corridor found along the southeast property boundary partially meanders within the parcel boundaries and contains several standing pools of water, providing potential habitat for listed amphibian species. Development is sited to occur within the footprints of pre-existing development, landscape and lawns.

As currently proposed within the project landscape plans, the development project presents the opportunity to improve baseline native habitat conditions with the restoration of oak woodland and grasslands. Civil Engineering and Septic plans were not readily available for review and inclusion in this report.

Findings are included in Section V below describing natural communities near the development zone. Impact assessments and recommendations are included below in Section VIII for the development.

III. REGIONAL SETTING

The project site is located adjacent east of the 13th hole of the Pebble Beach Golf Course in Pebble Beach in a part of the unincorporated region of Monterey County. The parcel location lies within the Del Monte Forest coastal zone area with mixed habitat communities fragmented by urban development. The approximately 2.34-acre parcel is located at 100+ feet elevation on a gentle southwesterly-facing slope in an established residential area above the Carmel Bay shoreline along 17 Mile Drive near the Pebble Beach Lodge. The parcel sits entirely within an area that has experienced complete site alterations with the vegetation of the property nearly devoid of native habitat constituents save for a few native trees and remnant fragments of long removed coastal terrace grasslands. As is common within the Pebble Beach developments, native plant communities of the coastal properties have been fragmented by construction, roads, golf courses, houses, landscaping, invasive species and other adverse impacts over the years that have resulted in an overall lack of significant resource protection.

Plant communities of the regional area include Coastal Scrub associations, Central Maritime Chaparral, Monterey Pine Forest, Monterey Cypress Forest, Coast Live Oak Forest, Grasslands and Dune habitat.

IV. METHODS

Site surveys on the parcel were conducted on April 27 and June 22, 2023. Field methods included focused surveying of the areas designated for the residential construction, general observations of the vegetation within the parcel and adjacent areas, inventorying observed plant and animal species, and photographing proposed development areas. Weather conditions were foggy to clear and full access to the site allowed for careful site and resource observations. A site map with proposed architectural development was provided by the project representative and a spring botanical survey was conducted during the April site visit though no significant native spring-flowering occurrences were noted on the parcel.

The California Natural Diversity Data Base (CNDDDB) maintained by the State of California Department of Fish and Wildlife (CDFW) for the Monterey Quadrangle and the California Native Plant Society Inventory of Rare and Endangered Plants (8th Edition, 2010), were consulted for the identification of known populations of Federal and State listed rare, threatened and endangered plant species on or in the vicinity of the 17 Mile Drive project site. Survey methods included utilizing The Jepson Manual (Hickman 1993), Invasive Plants of California's Wildlands (Bossard, Randall, and Hoshovsky 2000), A Manual of California Vegetation (Sawyer and Keeler-Wolf 1995), and An Illustrated Field Key to the Flowering Plants of Monterey County (Matthews and Mitchell 2015) and the Del Monte Forest Land Use Plan, 2012.

V. LOCAL VEGETATION

Vegetation on the parcel is void of any significant native habitat community as the site has been thoroughly altered long ago to the degree that the dominant plant species within the boundaries of the property appear to have been introduced with the exception of a few stand-alone coast live oak (*Quercus agrifolia*) found along the banks of the southeast drainage corridor.

Entering the parcel from 17 Mile Drive gate, the asphalt driveway gently meanders southwestward, halfway through the parcel to the existing residence and accessory dwelling unit. On either side of the driveway a ruderal, weed-infested open lawn sprawls across the parcel. Invasive kikuyu grass (*Pennisetum clandestinum*) dominates the lawn with other sprawling annual and perennial weeds common in waste soils including English lawn daisy (*Bellis perennis*), rip gut brome (*Bromus diandrus*), red stemmed filaree (*Erodium cicutarium*), six-weeks fescue (*Festuca myuros*), annual bluegrass (*Poa annua*), Bermuda buttercup (*Oxalis pes-caprae*), annual bluegrass (*Poa annua*), common sheep sorrel (*Rumex acetosella*), and others that collectively provide minimal habitat value apart from a rampant pocket gopher (*Thomomys bottae*) population, resident black tail deer (*Odocoileus hemionus*), and several ground foraging bird species that utilize the site.



Entry driveway and kikuyu lawn looking toward 17 Mile Drive from the residence.

Small fragmented patches and isolated species occurrences of coastal prairie grassland constituents exist along portions of the northern entry lawn and include indicator species such as toad rush (*Juncus bufonius*), western rush (*Juncus occidentalis*) and umbrella sedge (*Cyperus eragrostis*) that suggest soils within the site remain wet for a period of time during winter months, making it suitable for native grasses. In all likelihood, the original vegetation of the site was *Coastal Prairie Grassland* habitat similar to what once occupied the coastal terrace near Bird Rock, though less than 1% exists on site today. Observations of foundational grasses including California oatgrass (*Danthonia californica*), foothill needlegrass (*Stipa lepida*), a patch of red fescue (*Festuca rubra*) located in a small wet seep area were noted in several sections of the north lawn area. Three species of grassland associated sedge species including Monterey sedge (*Carex harfordii*), field clustered sedge (*Carex praegracilis*), and short stemmed sedge (*Carex brevicaulis*) were noted along with several isolated spring-flowering species including woolly lotus (*Acropson tomentosus*), blue-eyed grass (*Sisyrinchium bellum*), and golden brodiaea (*Triteleia ixiodes* ssp. *ixiodes*).



Small fragment of remnant coastal prairie grasses (green foliage in foreground) along front lawn.



Native field clustered sedge.



Native California oatgrass.



Native blue-eyed grass.



Endemic golden brodiaea.

Arriving at the existing residence and accessory dwelling unit development, minimal ornamental landscape species isolated to rock-lined planting beds flank the structures with exotic day lily (*Dietes bicolor*), bears breech (*Acanthus mollis*), lavender (*Lavendula sp.*), Japanese boxwood (*Buxus microphylla var. japonica*), watsonia (*Watsonia meriana*), New Zealand flax (*Phormium tenax*), freeway daisy (*Osteospermum fruticosum*), and others. Several patchwork groupings of invasive periwinkle (*Vinca major*) are found growing in a landscape bed with day lily adjacent to the residence along the northwest property boundary.



Existing front landscape.



Existing rear landscape.

Westward at the rear of the house, an expansive exotic kikuyu dominant lawn fills the remainder of the parcel and transitions to a sod green belt near the fairway of the adjacent Pebble Beach Golf Course.



Rear kikuyu lawn transitioning to the golf course.

Monterey cypress (*Hesperocyparis macrocarpa*) are found onsite with several younger (< 12" DBH) along the northwest corner of the parcel and one 24" DBH specimen at the back of the existing house near the top bank of the drainage corridor. The front trees have a lineal planting arrangement and same relative age (+/- 20 yrs) suggesting they are all landscape or screening introductions to the parcel. The recognized range of the indigenous Monterey cypress forest within Pebble Beach does not extend to this part of Pebble Beach.

The drainage corridor along the east parcel boundary has been recently improved by the Pebble Beach company. Vegetation has been cleared on the Pebble Beach property along the corridor and a rock-lined channel has been installed. The majority of the channel lies outside the parcel boundaries, though the storm drain under 17 Mile Drive outfalls within the parcel boundary at the northerly corner of the drainage corridor where an existing standing pool of water is currently fed by a slow trickle of water from the storm drain. Field surveys were conducted for potential amphibian eggs masses or adult presence within the standing pool, but only mosquito larvae were observed.



Drainage corridor outfall.



Drainage corridor slope.

Apart from a few isolated and small patches of coastal prairie grassland constituents along the north portion of the parcel, no rare, endangered or listed plant species or habitat were observed. Current baseline habitat values throughout the parcel are considered low quality and the lack of native habitat constituents on the parcel suggests a low potential for special status species to occur on site.

VI. WILDLIFE

Records review of the CDFW California Natural Diversity Database (CNNDDB) and local knowledge of the Pebble Beach habitats indicate that several special status wildlife species have the potential to occur in the vicinity of the project site, though are unlikely to occur on the parcel as lack of suitable habitat conditions exists for known protected animal species within the Pebble Beach area and none were observed.

During the site visit to the project location, several bird and mammal species were identified (see Observed Animal Species List) and bird nesting monitoring was conducted. Common resident bird species were noted with the majority of species occurring on neighboring parcels containing adequate vegetative cover. Violet green swallows were observed overhead foraging for flying insects the air space above the residence with California towhee and dark-eyed junco observed ground foraging near the northwest parcel boundary.

Other endemic and transient resident animal species are adapted to the fragmented forest habitat of Pebble Beach, though none were observed in the project area. Resident mammals of the Del Monte Forest area are likely to occur on the project site, including

coyotes, (*Canis latrans*), opossums (*Didelphis virginiana*), skunks (*Mephitis mephitis*), raccoons (*Procyon lotor*), house mice (*Mus musculus*), and others. Reptiles are also like to occur including the northern alligator lizard (*Gerrhonotus coeruleus*) and others.

VII. RARE, THREATENED, AND ENDANGERED SPECIES

The parcel and development area were surveyed for occurrences of rare, threatened, and endangered habitat, plant and wildlife species. Monitoring observations also analyzed potential impacts that could result from proposed re-development. The site was also surveyed for current sensitive elements listed by the California Department of Fish and Game Natural Diversity Data Base (CNDDDB) for the Monterey Quadrangle. The potential for listed special-status wildlife species within the development area was determined to be low, based on the site surveys, presence of micro-habitat characteristics, biological knowledge of the target species, introduced landscape plantings and the overwhelming cover of invasive kikuyu grass and that dominates the parcel. Proposed development impacts are completely isolated to areas within footprints of existing development structures, hardscape, landscape features or invasive kikuyu lawn.

State Listing is pursuant to Section 1904 (Native Plant Protection Act of 1977) and Section 2074.2 and 2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing Endangered, Threatened, and Rare species of plants and animals. Federal Listing is pursuant with the Federal Endangered Species Act of 1973.

The California Environmental Quality Act (CEQA) recognizes plants listed by the California Native Plant Society (CNPS) as Rare Plant Rank 1B (plants rare, threatened or endangered in California as special status species. The CNPS website states that, “Plants with a California Rare Plant Rank of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting California Rare Plant Rank 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Wildlife Code and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.”

The following 92 sensitive elements are listed by the CNDDDB for the Monterey 7.5' quadrangle:

<i>Allium hickmanii</i>	Hickman’s Onion
<i>Ambystoma californiense</i>	California tiger salamander
<i>Anniella pulchra nigra</i>	black legless lizard
<i>Arctostaphylos hookeri ssp. hookeri</i>	Hooker’s manzanita
<i>Arctostaphylos montereyensis</i>	Toro manzanita
<i>Arctostaphylos pumila</i>	sandmat Manzanita
<i>Ardea herodias</i>	great blue heron
<i>Astragalus nuttallii var. nuttallii</i>	Nuttall’s milk-vetch
<i>Astragalus tener var. titi</i>	coastal dunes milk-vetch
<i>Athene cunicularia</i>	burrowing owl

<i>Batrachoseps luciae</i>	Santa Lucia slender salamander
<i>Bombus caliginosus</i>	obscure bumble bee
<i>Bombus occidentalis</i>	western bumble bee
<i>Castilleja ambigua</i> var. <i>insalutata</i>	pink Johnny-nip
<i>Castilleja latifolia</i>	Monterey Coast paintbrush
<i>Ceanothus rigidus</i>	Monterey ceanothus
Central Dune Scrub	Central Dune Scrub
Central Maritime Chaparral	Central Maritime Chaparral
<i>Charadrius alexandrinus nivosus</i>	western snowy plover
<i>Chorizanthe douglasii</i>	Douglas' spineflower
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Monterey spineflower
<i>Clarkia jolonensis</i>	Jolon clarkia
<i>Clarkia lewissii</i>	Lewis' clarkia
<i>Coelus globosus</i>	globose dune beetle
<i>Collinsia multicolor</i>	San Francisco collinsia
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	seaside bird's-beak
<i>Coturnicops noveboracensis</i>	yellow rail
<i>Cryptantha rattanii</i>	Rattan's cryptantha
<i>Cypseloides niger</i>	black swift
<i>Danaus plexippus</i>	monarch butterfly
<i>Delphinium hutchinsoniae</i>	Hutchinson's larkspur
<i>Emys marmorata</i>	western pond turtle
<i>Enhydra lutris nereis</i>	southern sea otter
<i>Eriastrum virgatum</i>	virgate eriastrum
<i>Ericameria fasciculata</i>	Eastwood's goldenbush
<i>Eriogonum nortonii</i>	Pinnacles buckwheat
<i>Erysimum menziesii</i>	Menzies' wallflower
<i>Eumetopias jubatus</i>	Steller (= northern) sea lion
<i>Euphilotes enoptes smithi</i>	Smith's blue butterfly
<i>Fritillaria agrestis</i>	stinkbells
<i>Fritillaria liliacea</i>	fragrant fritillary
<i>Gilia tenuiflora</i> ssp. <i>amplifaucalis</i>	trumpet-throated gilia
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	sand gilia
<i>Haliotis cracherodii</i>	black abalone

<i>Haliotis kamtschatkana</i>	pinto abalone
<i>Hesperocypris goveniana</i>	Gowen cypress
<i>Hesperocypris macrocarpa</i>	Monterey cypress
<i>Horkelia cuneata ssp. sericea</i>	Kellogg's horkelia
<i>Hosachia gracilis</i>	harlequin lotus
<i>Iris longipetala</i>	coast iris
<i>Lasiurus cinereus</i>	hoary bat
<i>Laterallus jamaicensis coturniculus</i>	California black rail
<i>Layia carnosa</i>	beach layia
<i>Leptosiphon gradiflorus</i>	large-flowered leptosiphon
<i>Lessingia tenuis</i>	Spring lessingia
<i>Lomatium parvifolium</i>	small-leaved lomatium
<i>Lupinus tidestromii</i>	Tidestrom's lupine
<i>Malacothamnus palmeri var. involucratus</i>	Carmel Valley bush mallow
<i>Microseris paludosa</i>	marsh microseris
<i>Monardella sinuata ssp. nigrescens</i>	northern curly-leaved monardella
<i>Monolopia gracilens</i>	woodland woollythreads
Monterey Cypress Forest	Monterey Cypress Forest
Monterey Pine Forest	Monterey Pine Forest
Monterey Pygmy Cypress Forest	Monterey Pygmy Cypress Forest
<i>Myotis yumanensis</i>	Yuma myotis
<i>Neotoma macrotis luciana</i>	Monterey dusky-footed woodrat
Northern Bishop Pine Forest	Northern Bishop Pine Forest
<i>Oncorhynchus mykiss irideu</i>	steelhead–south/central CA coast
<i>Passerculus sandwichensis alaudinus</i>	Bryant's savannah sparrow
<i>Pelecanus occidentalis californicus</i>	California brown pelican
<i>Phrynosoma blainvillii</i>	coast horned lizard
<i>Pinus radiata</i>	Monterey pine
<i>Piperia yadonii</i>	Yadon's piperia
<i>Piperia michaelii</i>	Michaels's rein orchid
<i>Potentilla hickmanii</i>	Hickman's cinquefoil
<i>Ptychoramphus aleuticus</i>	Cassin's auklet
<i>Rallus obsoletus obsoletus</i>	California Ridgeway's rail
<i>Ramalina thrausta</i>	angel's hair lichen

<i>Rana boylei</i>	foothill yellow-legged frog
<i>Rana draytonii</i>	California red-legged frog
<i>Rosa pinetorum</i>	pine rose
<i>Setophaga petechia</i>	yellow warbler
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom
<i>Sorex ornatus salarius</i>	Monterey shrew
<i>Sorex vakrans paludivagus</i>	Monterey vagrant shrew
<i>Sulcaria spiralis</i>	Twisted horsehair lichen
<i>Taricha torosa</i>	Coast Range newt
<i>Thamnophis hammondi</i>	Two-striped gartersnake
<i>Trifolium hydrophilum</i>	saline clover
<i>Trifolium polyodon</i>	Pacific Grove clover
<i>Trifolium trichocalyx</i>	Monterey clover

Surveys within the parcel were conducted for special status plant and wildlife species known to occupy the local coastal and forest habitats of Pebble Beach. With the exception of the Monterey cypress, which appear to be landscape introduced specimens and not of native origin, no naturally occurring listed mammal, reptile, amphibian, bird or plant species were observed on the parcel. The lack of suitable habitat conditions makes it unlikely that listed special status species potentially occur on the parcel.

VIII. IMPACT ASSESSMENT AND RECOMMENDATIONS

The proposed residential development is sited within redeveloped areas and dominated with exotic vegetation (mostly invasive kikuyu grass). With the incorporation of the impact recommendations outlined below, the proposed construction project on APN 008-381-002 should have a less than significant impact on special natural communities, plants, and animals protected by local, state or federal regulations and does not appear to be at conflict with any local policies or ordinances protecting biological resources located within the subject parcel or adjacent offsite areas.

By implementing extensive grassland restoration as currently proposed in the landscape plan, the project has an opportunity to restore the native coastal prairie grassland community that once likely occurred on the parcel. Without extensive restoration or land management, or if left unchecked, the monoculture of invasive kikuyu grass will continue to persist rendering the parcel in a continued degraded state with low-value habitat and functionality, as is common throughout Pebble Beach with the continued use of ornamental and invasive plants in heavily manipulated landscapes that utilize few beneficial native plants.

Impact 1: Invasive Species Eradication

To assist in the preservation of offsite natural resources that occur beyond the boundaries of the parcel in the forest and coastal plant communities as well as enhancing the potential for improved habitat resources within the parcel, invasive plant eradication should be instituted on the property and include the removal of invasive kikuyu grass as well as eradication of localized patches of invasive periwinkle. Both species are recognized by the California Invasive Plant Council (Cal-IPC) as having *limited* and *moderate* impacts (respectively) to native habitat communities and ecological

functionality. English ivy (*Hedera helix*) is found growing along the entry fence along 17 Mile Drive and is ranked by the Cal-IPC with a *high* degree of potential for severe ecological impacts to native plant communities. Poison hemlock (*Conium maculatum*) and veldt grass (*Ehrharta erecta*) are listed by the Cal-IPC as invasive species, ranked as *moderate* for impacting natural habitat.

- a. Kikuyu grass is easily spread by ground disturbance actions and could potentially spread to other onsite or offsite areas if soil disturbance (including off-haul) occurs prior to the plants removal. Kikuyu grass within the coastal zone will be a long term effort requiring strategic planning and management as it is an especially aggressive spreader in grasslands. Stems, rhizomes and stolon fragments resprout if left in the ground after treatments, making it a challenging plant to fully eradicate. Kikuyu will require eradication prior to grassland restoration seeding and planting. To reduce the potential for kikuyu to further spread toward the drainage corridor or potentially off site, the invasive species should be fully eradicated prior to the commencement of grading or construction activities. Low dose herbicide treatments supplemented with irrigation regimes to germinate underground rhizomes has been documented as an effective eradication strategy.
- b. Invasive periwinkle is found in small distinct patches along the northwestern property boundary and can be easily managed with manual hand pulling efforts. Green waste debris should be hauled off site and responsibly disposed at the local green waste facility.
- c. Highly invasive English ivy is isolated to the front fence along 17 Mile Drive and can be easily eradicated with hand removal techniques. Stumps will also require removal for complete control and follow up seedling eradication protocols should be incorporated in site management of the landscape.
- d. Poison hemlock and veldt grass are notorious disturbance followers and are establishing within the newly barren soils along the drainage corridor. Timing is critical for eradication efforts to prevent both plants and recommendations are to hand remove plants prior to the species setting seed. Yearly spring eradication efforts will be required to prevent the species from establishing and persisting on the parcel and within the drainage corridor.
- e. All disturbed soil generated during any site grading shall be kept free of exotic species, which if left unattended, could cause inadvertent spread of the species and degradation of the sensitive habitats on the site.

Impact 2: Nesting Survey

Prior to any construction activities scheduled to start between February 1 through September 15, a pre-construction nesting survey shall take place to ensure no raptor or sensitive nesting bird species are present. Due to the lack of upper canopy trees on site, the potential is considered low for raptor, resident or migratory birds to utilize the parcel for nesting, however upper canopy trees are found adjacent to the parcel on the east and west within 300 feet of proposed development. If any active nest(s) of protected bird species should occur on or adjacent to the site (within 300 feet), then site preparation and noise generating construction activities associated with future improvement/development conducted during the bird nesting season could result in bird nest failure/abandonment. Implementation of the measure below will reduce this impact to a less than significant level.

- a. If construction activities begin during the bird nesting season (February 1 to September 15), or if construction activities are suspended for at least two weeks and recommence during the bird nesting season, then the applicant shall retain a Monterey County-approved biologist to conduct pre-construction surveys for nesting birds. The surveys shall be performed within suitable nesting habitat

- areas in and adjacent to the site to ensure that no active nests would be disturbed during project implementation.
- b. Surveys shall be conducted no more than two weeks prior to the initiation of construction activities. A report documenting survey results and a plan for active bird nest avoidance (if needed) shall be completed by the project biologist and submitted to the Monterey County Housing and Community Development project planner for review and approval prior to construction activities.
 - c. If no active bird nests are detected during the survey, then project activities can proceed as scheduled. However, if an active bird nest of a protected species is detected during the survey, then a plan for active bird nest avoidance shall determine and clearly delineate an appropriately sized, temporary protective buffer area around each active nest, depending on the nesting bird species, existing site conditions, and type of proposed construction activities. The protective buffer area around an active bird nest is typically 50-300 feet, determined at the discretion of the project biologist.
 - d. To ensure that no inadvertent impacts to an active bird nest shall occur, no construction activities shall occur within the protective buffer area(s) until the juvenile birds have fledged (left the nest), and there is no evidence of a second attempt at nesting, as determined by the project biologist.

Impact 3: Landscape Recommendations

- a. Implementation of an expansive native oak woodland grassland restoration plan as incorporated within the proposed landscape plan for the project will greatly enhance the habitat values of the parcel as well as enhance the scenic and visual resources along the 17 Mile Drive corridor. Grassland graminoid and forb species should be developed with the project biologist and restoration replanting should incorporate site identified coastal prairie grassland and oak woodland constituents. Additionally, prior to ground disturbance, there is an opportunity to salvage and propagate (with a contract-to-grow native nursery supplier) the remnant species on site and utilize the increased stock for replanting the grassland. Provisions should also be incorporated in the landscape plan to manage invasive species by incorporating long term eradication strategies into the site management protocols. Establishing native grasslands is challenging in the earlier stages of development due to fast growing, aggressive invasive species competing for resources.
- b. Pocket gophers and deer browsing can be detrimental to newly established grasslands. Temporary perimeter exclusionary fencing during first year grass establishment and owl boxes (for gopher control) installed on site can assist in improving conditions during the establishment period. The use of poisons for gopher control is not an acceptable strategy due to the high potential of the poison entering the food chain and can have unintended effects including the reduction in the numbers of natural predators that potentially scavenge on poisoned gophers.
- c. Coast live oak trees, including the multi-trunk landmark oak near the rear southeast corner of the residence are susceptible to soil fungal issues. To minimize potential fungal damage to oaks, irrigation (especially summer irrigation) should be omitted within critical root zones of the coast live oak trees.
- d. All bare, exposed soils, including those within the parcel on the slope above the drainage corridor, should be kept free of invasive, exotic plant species. Sediment control devices should be installed on the downhill perimeter of the exposed soil areas. Specifically, sediment control devices, debris fencing or silt dams should be installed in a manner that the adjacent drainage corridor is protected from disturbed, excavated or graded construction soils or construction debris from moving offsite. Disturbed soils shall be stabilized prior to rainy weather, either

with the use of biodegradable netting, mulching or native seeding/planting strategy.

- e. Native plant seeding or revegetation will be necessary in the areas where soil disturbance, including areas where Pebble Beach Company has removed vegetation, such as the slope at the northeast corner of the property were the road culvert outfalls. Newly graded soils along the corridor are being encroached by invasive species including kikuyu grass, poison hemlock, veldt grass and others. Invasive species infestations are rampant in the Pebble Beach open space forest areas, with little control management efforts conducted by the Pebble Beach Company. The natural resource degradation is counter to Del Monte Forest LUP Key Policies that call for long-term preservation of forest resources. To lessen the potential for increased invasive species encroachment from the neighboring drainage corridor, coordination is encouraged between the applicant and Pebble Beach Company to ensure the newly graded corridor is properly managed for eradication of aggressive invasive species that can quickly overwhelm the site.

IX. PLANT & ANIMAL SPECIES OBSERVED:

Note: 1. (∞) denotes landscape-introduced species.

2. (*) denotes exotic/invasive species.

Tree Species

<i>Acacia longifolia</i> ∞ *	golden wattle
<i>Hesperocyparis macrocarpa</i> ∞	Monterey cypress
<i>Pinus radiata</i> ∞	Monterey pine
<i>Quercus agrifolia</i>	coast live oak

Shrubs and Herbaceous Species

<i>Acanthus mollis</i> ∞	bears breech
<i>Acmispon tomentosus</i>	wooly lotus
<i>Bellis perennis</i> *	English lawn daisy
<i>Bromus diandrus</i> *	ripgut brome
<i>Bromus hordeaceus</i> *	soft chess
<i>Buxus microphylla var. japonica</i> ∞	Japanese boxwood
<i>Carex brevicaulis</i>	short stem sedge
<i>Carex harfordii</i>	Monterey sedge
<i>Carex praegracilis</i>	field sedge
<i>Conium maculatum</i> *	poison hemlock
<i>Cynodon dactylon</i> *	Bermuda grass
<i>Cyperus eragrostis</i>	umbrella sedge
<i>Danthonia californica</i>	California oatgrass
<i>Desmazeria rigida</i> *	ferngrass
<i>Dichondra donnelliana</i>	dichondra

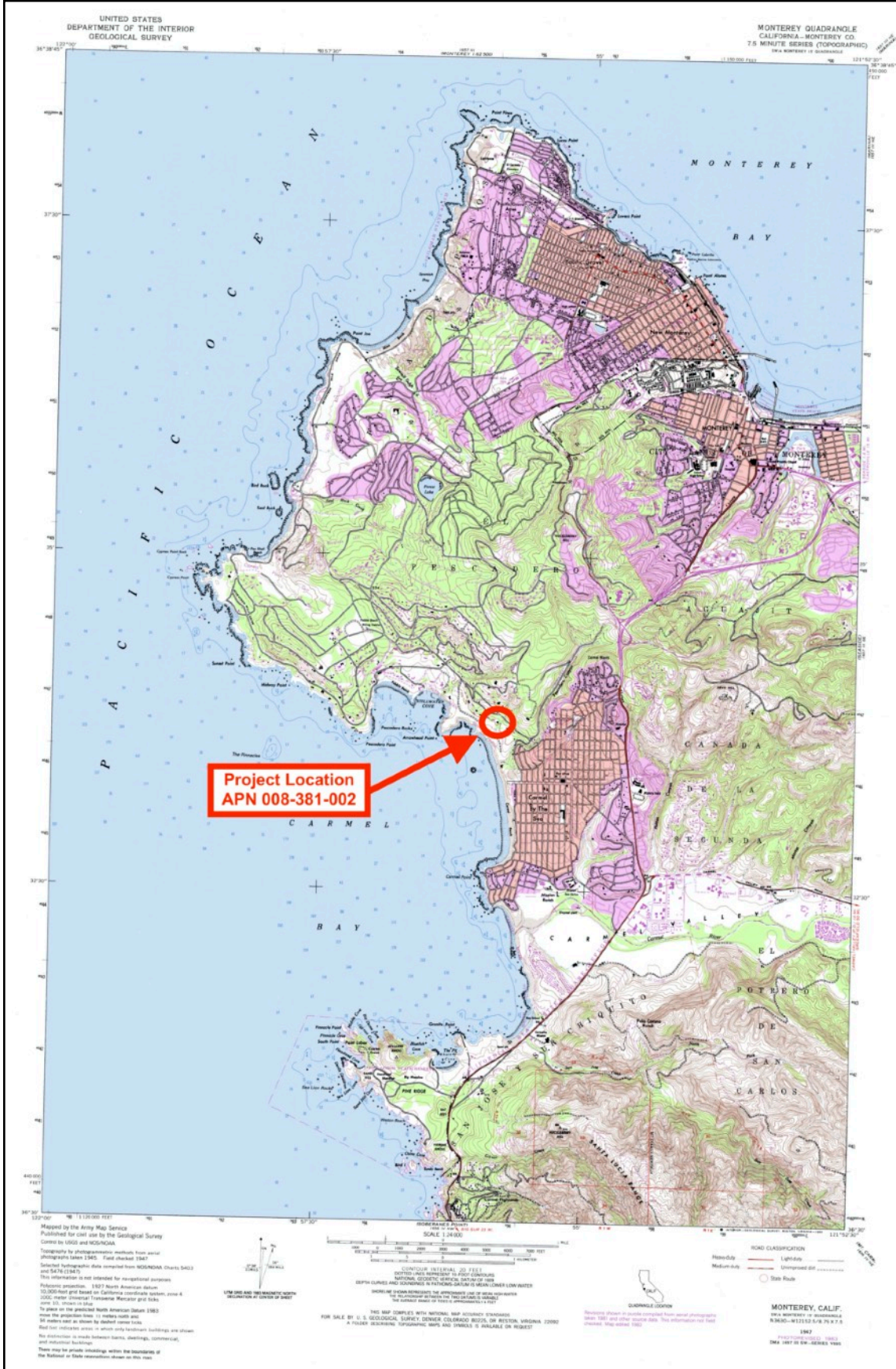
<i>Dietes bicolor</i> ∞	day lily
<i>Ehrharta erecta</i> *	veldt grass
<i>Erodium cicutarium</i> *	red stemmed filaree
<i>Festuca arundinacea</i> *	tall fescue
<i>Festuca myuros</i> *	rattail fescue
<i>Festuca rubra</i>	red fescue
<i>Gastridium phleoides</i> *	Nit grass
<i>Hedera helix</i> *	English ivy
<i>Juncus bufonius</i>	toad rush
<i>Juncus occidentalis</i>	western rush
<i>Lavendula sp.</i> ∞	lavender
<i>Lolium perenne</i> *	perennial ryegrass
<i>Lysimachia arvensis</i> *	scarlet pimpernel
<i>Medicago polymorpha</i> *	burr clover
<i>Melilotus indicus</i> *	Sour clover
<i>Osteospermum fruticosum</i> ∞	freeway daisy
<i>Oxalis pescaprae</i> *	Bermuda buttercup
<i>Paspalum dilatatum</i> *	Dallis grass
<i>Pennisetum clandestinum</i> *	kikuyu grass
<i>Phormium tenax</i> ∞	New Zealand flax
<i>Plantago lanceolata</i> *	English plantain
<i>Poa annua</i> *	annual bluegrass
<i>Rumex acetosella</i> *	sheep sorrel
<i>Sisyrinchium bellum</i>	blue eyed grass
<i>Stipa lepida</i>	foothill needlegrass
<i>Triteleia ixiodes ssp. ixiodes</i>	golden brodiaea
<i>Vinca major</i> *	periwinkle
<i>Vulpia myuros</i> *	six-weeks fescue
<i>Watsonia meriana</i> ∞	bugle lily

Animal Species

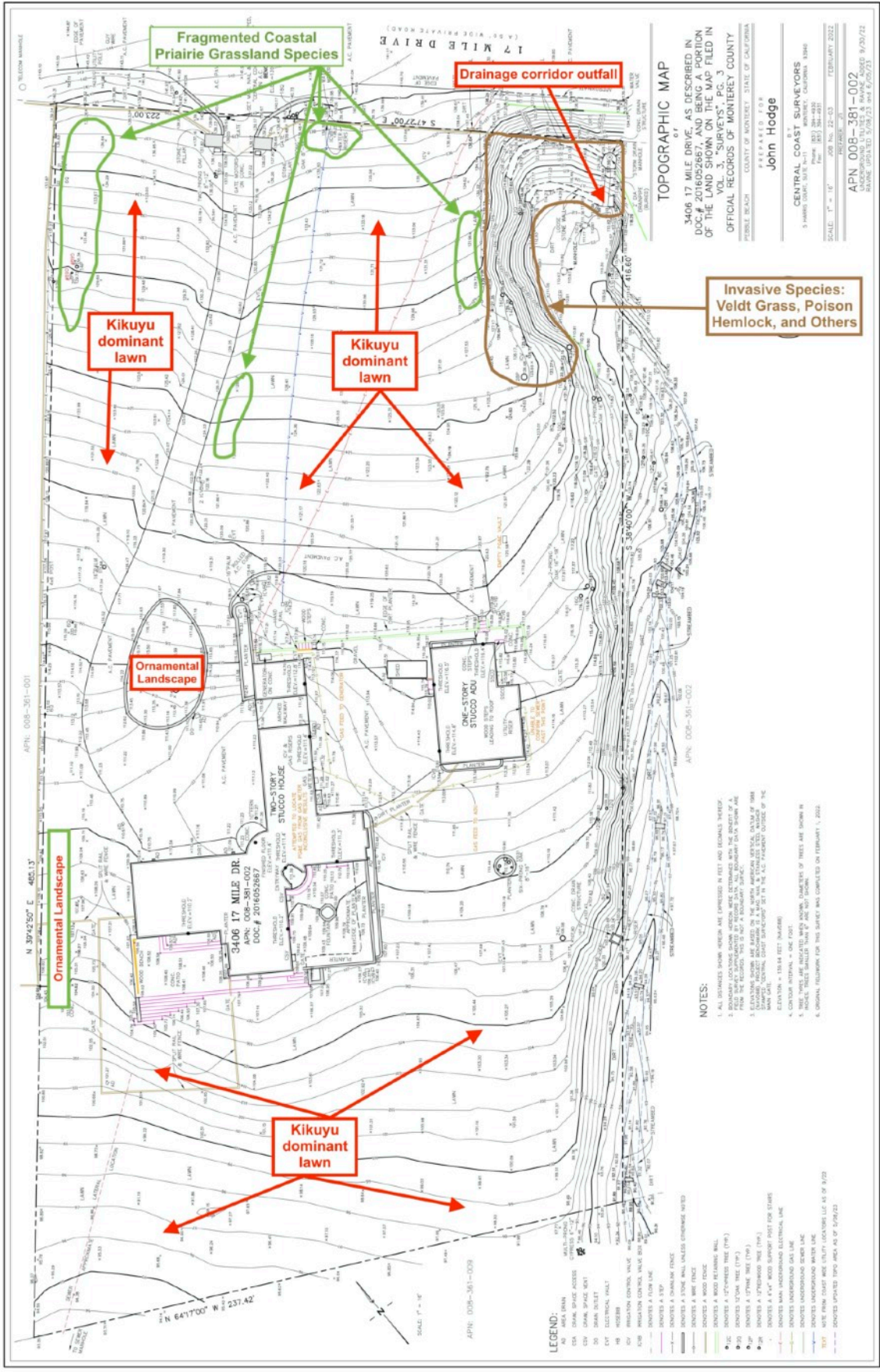
<i>Baeolophus inornatus</i>	oak titmouse
<i>Calypte anna</i>	Anna's hummingbird
<i>Corvus brachyrhynchos</i>	American crow

<i>Cyanocitta stelleri</i>	Stellar's jay
<i>Empidonax difficilis</i>	Pacific-slope flycatcher
<i>Haemorhous mexicanus</i>	house finch
<i>Junco hyemalis</i>	dark-eyed junco
<i>Larus occidentalis</i>	Western gull
<i>Melospiza crissalis</i>	California towhee
<i>Pipilo maculatus</i>	spotted towhee
<i>Poecile rufescens</i>	chestnut-backed chickadee
<i>Psaltiriparus minimus</i>	bushtit
<i>Sayornis nigricans</i>	black Phoebe
<i>Sceloporus occidentalis</i>	Western fence lizard
<i>Sialia mexicana</i>	Western bluebird
<i>Sitta pygmaea</i>	pygmy nuthatch
<i>Spinus pinus</i>	pine siskin
<i>Spinus tristis</i>	American goldfinch
<i>Tachycineta thalassina</i>	violet-green swallow
<i>Thomomys bottae</i>	Botta's pocket gopher
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Zonotrichia leucophrys</i>	white-crowned sparrow

X. SITE MAP



XI. VEGETATION MAP



This page intentionally left blank