

THOMAS K. MOSS
Coastal Biologist

BIOLOGICAL SURVEY REPORT

Mathews Residence
1725 Sunset Drive, Pacific Grove
(APN 007-011-061-036)

Owners:

Bruce and Kim Mathews
11879 South Highway 99
Manteca, CA 95336

August 18, 2019

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BIOLOGICAL SURVEY REPORT
Mathews Residence
1725 Sunset Drive, Pacific Grove
(APN 007-011-061-036)

I. INTRODUCTION

This biological survey report has been prepared in conjunction with a proposal to remodel an existing single-family residence located at 1725 Sunset Drive, Pacific Grove, California (Figures 1). In addition, the project proposes to add an exterior deck, patio and driveway extension and resurface all existing hardscape surfaces (Figures 2 and 3).

The property is located in the Asilomar Dunes, an area of fragile sand dune habitat that supports a number of rare and endangered species. The Pacific Grove Local Coastal Program Land Use Plan provides policies and guidelines for development of properties in the Asilomar Dunes, including requiring a biological survey prior to approval of any development. This report satisfies that requirement.

This report provides a description of the flora and fauna on the property, including the presence or absence of species of special concern; recommendations for minimizing or avoiding impacts from proposed development, and; a list of development guidelines for protecting and restoring the property's natural resource values.

II. ENVIRONMENTAL SETTING

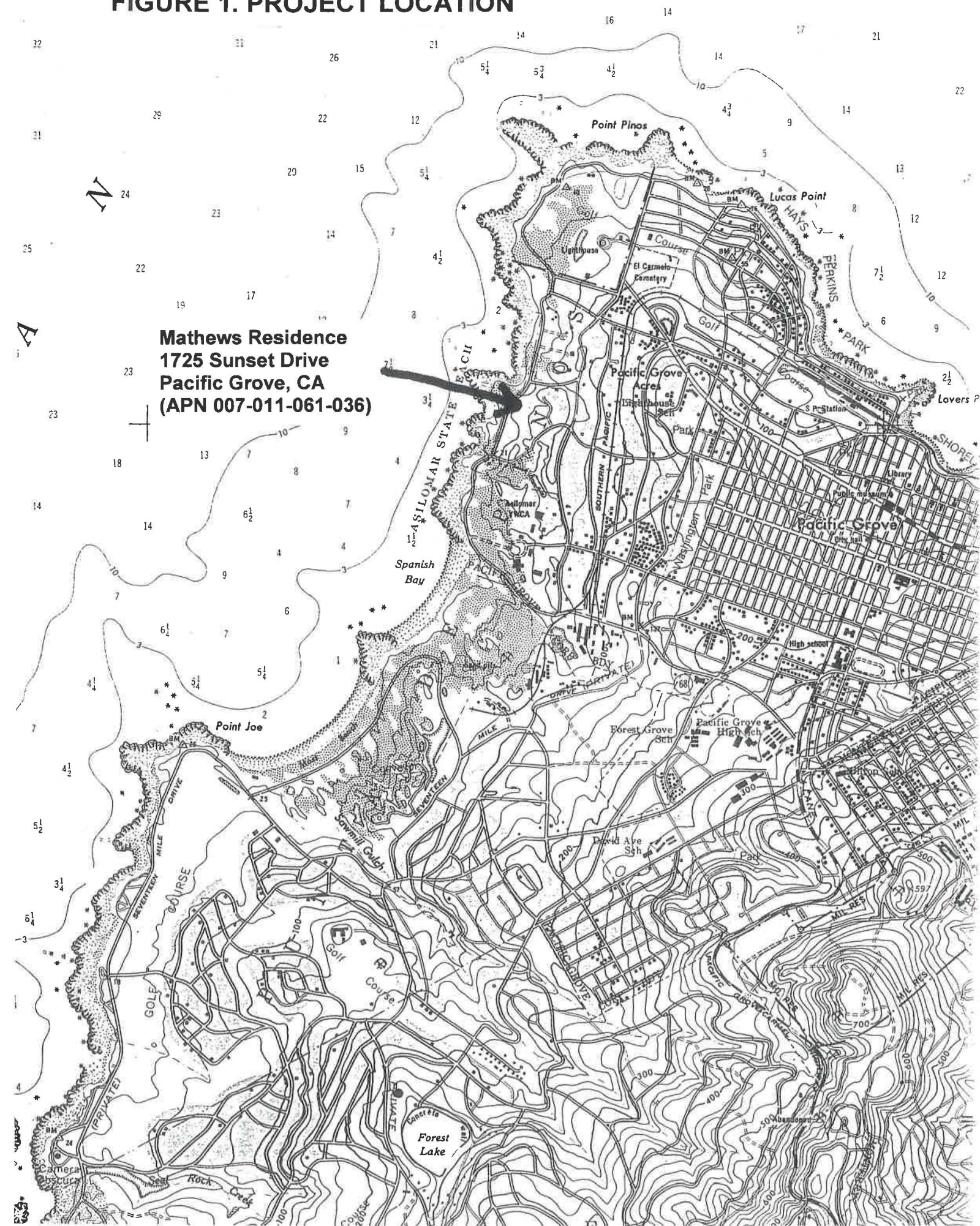
A. General Area

The project site is located in the Asilomar Dunes, a distinct geological complex encompassing approximately 480 acres between Point Pinos and Point Joe on the seaward extremity of the Monterey Peninsula. The Asilomar Dunes extend inland from the shoreline dunes and bluffs through a series of dune ridges and interdune swales into the first band of Monterey pine trees, referred to as the forest-front, to about Asilomar Avenue. The general area surrounding the project site is characterized as scattered residences among open sand dunes and Monterey pine forest.

The Asilomar Dunes is an area with a number of unique biological and geological resources, including at least ten plants and one animal species of special concern and dune landforms that are comprised almost entirely of quartz sand. During the past one hundred years or so, much of the dunes habitat in the Asilomar Dunes was severely damaged or lost as a result of sand mining, residential and golf course development, trampling by pedestrians, encroachment of introduced non-native (exotic) vegetation, and herbivory by a large population of deer.

FIGURE 1. PROJECT LOCATION

Mathews Residence
1725 Sunset Drive
Pacific Grove, CA
(APN 007-011-061-036)



\\sfs-jh001\proj\1725\1725-061-036.dwg 8/27/19 0:00:23 PM

Half-Size on 12x18

FIGURE 2. EXISTING SITE PLAN

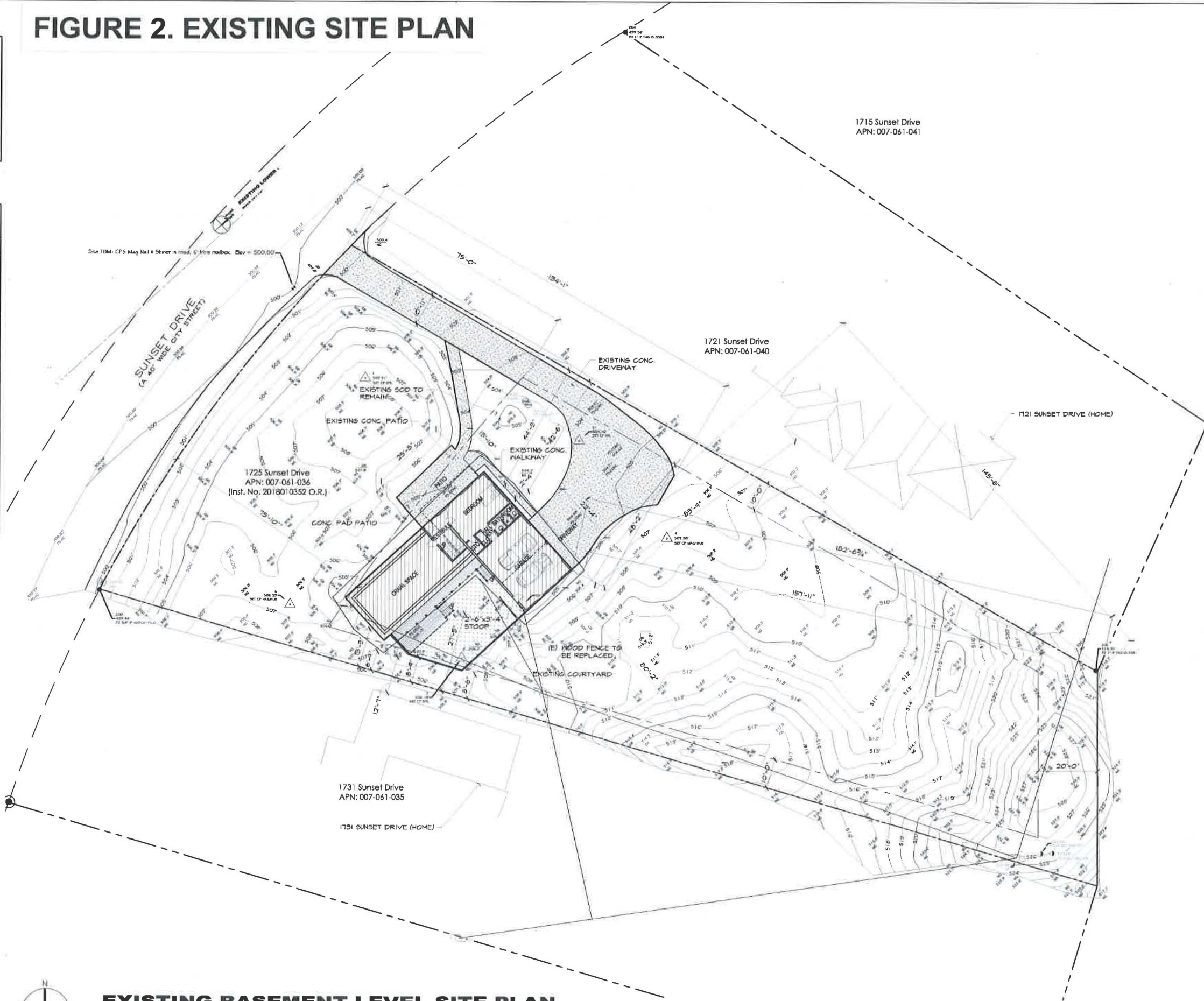
EXISTING SITE PLAN

PROJECT ADDRESS: 1725 SUNSET DRIVE
PACIFIC GROVE, CA 93950

APN: 007-061-036

LOT AREA: 33,811 S.F.

HATCH TYPE	DESCRIPTION	AREA
EXISTING SITE COVERAGE		
	BUILDING FOOTPRINT (HOUSE & GARAGE)	1,785 S.F. (5.28 %)
NON BUILDING FOOTPRINT		
	CONCRETE PATIO	357 S.F. (1.05 %)
	CONCRETE WALKWAY	294 S.F. (0.87 %)
	CONCRETE DRIVEWAY	1,717 S.F. (5.08 %)
	WOOD DECK	262 S.F. (0.77 %)
	WOOD FENCE & DECK WOOD POST	22 S.F. (0.06 %)
TOTAL BUILDING & NON BUILDING COVERAGE =		4,437 S.F. (13.12 %)
ALLOWED		= 5,072 S.F. (15.00 %)



EXISTING BASEMENT LEVEL SITE PLAN

SCALE: 1/16" = 1'-0"

REVISION	No.
CONSULTANT:	
ARCHITECT	 ERIC MILLER ARCHITECTS, INC. 211 HOFFMAN AVENUE MONTEREY, CA 93940 PHONE (831) 372-0410 • FAX (831) 372-7640 • WEB: www.ericmillerarchitects.com
EXISTING BASEMENT LEVEL SITE PLAN	JOB NAME: Mathews Residence 1725 Sunset Drive Pacific Grove CA 93950 A.P.N. 007-061-036
DATE:	8/6/19
SCALE:	1/16" = 1'-0"
DRAWN:	CAD
JOB NUMBER:	18.09
A-1.0 SHEET OF	

THE JOB OR PROJECT SHOWN ON THIS PLAN IS THE PROPERTY OF THE ARCHITECT. THE JOB OR PROJECT SHOWN ON THIS PLAN IS THE PROPERTY OF THE ARCHITECT. THE JOB OR PROJECT SHOWN ON THIS PLAN IS THE PROPERTY OF THE ARCHITECT.

PROPOSED SITE PLAN

PROJECT ADDRESS: 1725 SUNSET DRIVE
PACIFIC GROVE, CA 93940

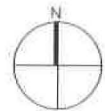
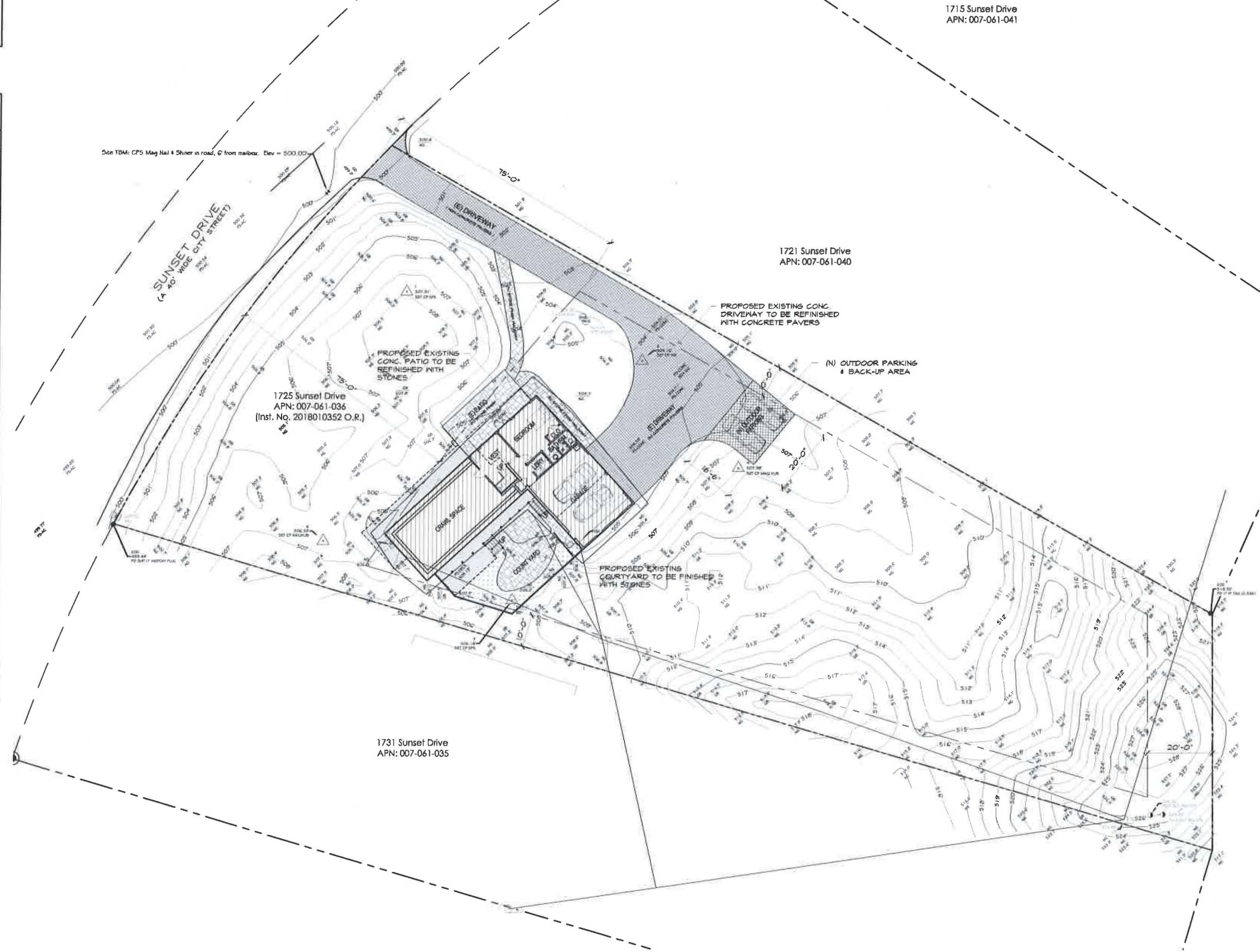
APN: 007-061-036

LOT AREA: 33,811 S.F.

LEGEND

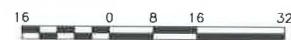
HATCH TYPE	DESCRIPTION	AREA
PROPOSED SITE COVERAGE		
	BUILDING FOOTPRINT (HOUSE & GARAGE)	1,785 S.F. (5.28 %)
	NON BUILDING FOOTPRINT	
	STONE COURT YARD & PATIO	1,005 S.F. (2.97 %)
	PAVERS DRIVEWAY	1,717 S.F. (5.08 %)
	WOOD DECK w/ GLASS RAILING	515 S.F. (1.52 %)
	WOOD FENCE & DECK WOOD POST	22 S.F. (0.06 %)
TOTAL BUILDINGS & NON BUILDINGS COVERAGE = 5,044 S.F. (14.91 %)		ALLOWED = 5,072 S.F. (15.00 %)
PROPOSED IMMEDIATE OUTDOOR LIVING SPACE		
	IMMEDIATE OUTDOOR COURTYARD LANDSCAPE	250 S.F. (0.74 %)
	PERMEABLE PAVERS OUTDOOR PARKING	342 S.F. (1.01 %)
TOTAL IMMEDIATE OUTDOOR LIVING SPACE = 592 S.F. (1.75 %)		ALLOWED IMMEDIATE OUTDOOR LIVING SPACE = 1,640 S.F. (5.00 %)
TOTAL PROPOSED COVERAGE OF BUILDINGS & NON BUILDINGS AND IMMEDIATE OUTDOOR LIVING SPACE = 5,636 S.F. (16.66 %)		ALLOWED = 6,763 S.F. (20.00 %)

FIGURE 3. PROPOSED SITE PLAN (8/6/19)



PROPOSED BASEMENT LEVEL SITE PLAN

SCALE: 1/16" = 1'-0"



NOTE:

- NO TREE PROPOSED TO BE REMOVED
- NO GRADING CUT & FILL TO BE PROPOSED
- LANDSCAPE TO REMAIN NATURAL, REFER TO BIOTIC REPORT

REVISION	No.

CONSULTANT:



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MONTEREY, CA 93940
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ARCHITECT

PROPOSED BASEMENT LEVEL SITE PLAN

JOB NAME: **Mathews Residence**
1725 Sunset Drive
Pacific Grove CA 93940
A.P.N. 007-061-036

DATE: 8/6/19
SCALE: 1/16" = 1'-0"
DRAWN: CAD
JOB NUMBER: 18.04

A-1.1
SHEET OF

Remnant patches of undisturbed dune habitat and examples of restored native dune landscape exist in several locations in the Asilomar Dunes, particularly on state property at Asilomar State Beach and Conference Grounds and on a few private properties. At Asilomar State Beach and Conference Grounds, a major dunes restoration project has been successful in eliminating Hottentot fig ice plant (*Carpobrotus edulis*) and other exotic plants and revegetating with species indigenous to the Asilomar Dunes. Following restoration of properties in the Asilomar Dunes, many species of wildlife have returned that in prior years were nearly absent or only infrequently seen, such as various raptors, including red-tail hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), peregrine falcon (*Falco peregrinus*), and burrowing owl (*Athene cunicularia*). Populations of songbirds, including several species that nest only in larger shrubs near or on the ground, and black legless lizard (*Anniella pulchra nigra*) also increased greatly in numbers.

B. Plant Communities

Native vegetation in the Asilomar Dunes is mainly representative of the Central Dune Scrub Plant Community. In its original, undisturbed condition, the native landscape on the dune ridges forms a relatively open assemblage of prostrate and low growing native plants, including beach sagewort (*Artemisia pycnocephala*), yellow sand verbena (*Abronia latifolia*), beach aster (*Lessingia filaginifolia*), dune blue grass (*Poa douglasii*), mock heather (*Ericameria ericoides*), dune dandelion (*Agoseris apargioides*) and beach primrose (*Camissonia chieranthifolia*). On the coastal bluff above the shoreline and in the swales between the dune ridges, sedges and woodier species create a dense plant cover consisting of dune sedge (*Carex pansa*), coyote brush (*Baccharis pilularis*), yellow bush lupine (*Lupinus arboreus*), lizard tail (*Eriophyllum staechadifolium*), gum plant (*Grindelia latifolia*), seaside daisy (*Erigeron glaucus*), dune buckwheat (*Eriogonum parvifolium*) and yarrow (*Achillea millefolium*). In areas protected from the wind off the ocean, such as in interdune swales and on stabilized interior dunes, the Central Dune Scrub Plant Community intergrades and is replaced by the Monterey Pine Forest Plant Community.

The Asilomar Dunes is a relatively harsh environment for plants. However, the native dune plants are well adapted to the area, being able to withstand the desiccating, salt-bearing affects of the ocean winds and the dry, nutrient poor condition of the soil.

Because of the rarity of many of the plant and animal species and the fragile nature of the dunes habitat, the California Coastal Commission has designated the entire Asilomar Dunes as "Environmentally Sensitive Habitat Area (ESHA)," which under the California Coastal Act requires a higher level of environmental protection and restriction on development.

C. Animals of the Asilomar Dunes

The Asilomar Dunes provides habitat for numerous common mammals, birds, reptiles, amphibians, and invertebrates. The area is also a major Pacific Flyway stopover for a large number of migratory species, ranging from the monarch butterfly (*Danaus plexippus*) to many species of waterfowl and raptors.

This report only looks at the animals that occur inland of the shoreline, given that the property and adjacent areas consist only of dune habitat.

Coastal scrub plant communities are important habitats for wildlife. Mammals like raccoon (*Procyon lotor*), black-tail deer (*Odocoileus hemionus*), and black-tailed jackrabbit (*Lepus californicus*) are common in the Asilomar Dunes, along with the black legless lizard and alligator lizard (*Elgaria coerulea*), and many birds, including Brewer's blackbird (*Euphagus cyanocephalus*), white-crowned sparrow (*Zonotrichia leucophrys*), American crow (*Corvus brachyrhynchos*), and American kestrel.

The Monterey pine and cypress forested areas are the most species-rich habitats in the Asilomar Dunes, depending on the density of the trees and type of understory vegetation (shrubs and/or low herbaceous plants). Black-tailed deer use open areas in the dunes and forest for feeding. But, they are especially dependent on areas of large shrubs or low tree branches where they can find concealment while resting/sleeping or rearing their fawns. A well-developed forest-front in the Asilomar Dunes is of great benefit to the local family groups (cohorts) of deer.

Also common in the forest habitats of the Asilomar Dunes are many birds. Northern flicker (*Colaptes auratus*) and American robin (*Turdus migratorius*) depend on the open areas for foraging, while using the trees for perching and avoiding predators. Dark-eyed junco (*Junco hyemalis*) lives in the forest where there is plenty of understory growth and overhead trees. Allen's and Anna's hummingbirds (*Selasphorus sasin* and *Calypte anna*, respectively) live along the forest edges. Acorn woodpecker (*Melanerpes formicivorus*) and Hutton's vireo (*Vireo huttoni*) depend on the presence of nearby oak trees as food sources, while using old pine trees and snags for storing food and for nesting. The brown creeper (*Certhia americana*) is only found where there are old growth trees. Newts and other salamanders need the cool darkness of damp, well-canopied forests, while other reptiles like garter snake (*Thamnophis sirtalis*) and northern alligator lizard need warmer and drier areas that occur in open canopied forests and adjacent dunes.

A number of common species of butterflies are frequently seen in the Asilomar Dunes. Of greatest interest to the local community is the Monarch butterfly. On sunny days, they venture out of their last overwinter roosting area in Pacific Grove, located off of Ridge Road, just inland of the Asilomar Dunes, looking for early-flowering plants that may provide nectar to them. By February, they are focused on finding a mate, with the females departing for their northbound and inland migration soon afterwards, while the males remain and die here.

D. Species of Special Concern

Species of special concern are those listed by the U.S. Fish and Wildlife Service or the California Department of Fish and Wildlife (CDFW) as rare, threatened or endangered. In addition, the CDFW recognizes plants designated by the California Native Plant Society as either meeting the criteria for listing or as being potentially threatened. Accordingly, all species of special concern must be addressed under the California Environmental Quality Act (CEQA).

The Asilomar Dunes is home to ten plant species and five animal species of special concern. These species and their protection status are described in Table 1. This list does not include various protected marine mammal and bird species that occur along the shoreline of Pacific Grove.

Dune buckwheat, which is not a state or federally listed species, is also treated like a species of special concern because it is the host plant for the endangered Smith's blue butterfly (*Euphilotes enoptes smithii*) during all stages of the butterfly's life. The Smith's blue butterfly occurs along the coastline to the south and north of the Monterey Peninsula; it has not been recorded on the Monterey Peninsula, since it became listed as an Endangered Species in 1976. As a result of numerous dune restoration projects on public and private property on the Monterey Peninsula during the past 35 years, the number of buckwheat plants has been significantly increased and suitable habitat now exists that could support Smith's blue butterfly. No species-specific surveys have been done for the butterfly in the Asilomar Dunes or Pebble Beach in recent years, to verify its presence or absence.

III. BIOLOGICAL SURVEY

A. Methodology

Three biological surveys have been conducted on the property. The first was in 1991, in conjunction with a project to remove a non-permitted extension of the driveway. The second survey was done in April 2018, as part of the current remodel project. The property was inspected again in June 2019, to verify that the distribution of the rare plants had not changed since the previous year. During all three surveys, the entire property was visually inspected and all plants present were identified and recorded. Timing for the surveys was appropriate for identifying the presence or absence of the various species of special concern that occur in the Asilomar Dunes. A complete list of the plant species encountered on the property is provided in Table 2.

Over the past two years, during the course of surveying vegetation and reviewing development plans for the property, all observed species of wildlife were also recorded. Observed species are listed in Table 2.

As part of the surveys in 2018 and 2019, searches were conducted for black legless lizards. Typically, the lizards are found near the surface in the sand or duff

TABLE 1. SPECIES OF SPECIAL CONCERN

Plants

1. Menzies' wallflower (*Erysimum menziesii* ssp. *menziesii*); California Endangered Species, Federal Endangered Species, and California Native Plant Society List 1B - Rare or Endangered.
2. Tidestrom's lupine (*Lupinus tidestromii* var. *tidestromii*); California Endangered Species, Federal Endangered Species, and California Native Plant Society List 1B - Rare or Endangered.
3. Sand gilia (*Gilia tenuiflora* ssp. *arenaria*); California Threatened Species, Federal Endangered Species, and California Native Plant Society List 1B - Rare or Endangered.
4. Beach layia (*Layia carnosa*); California Endangered Species, Federal Endangered Species, and California Native Plant Society List 1B - Rare or Endangered.
5. Monterey spineflower (*Chorizanthe pungens* var. *pungens*); Federal Threatened Species and California Native Plant Society List 1B - Rare or Endangered.
6. Coastal dunes milk-vetch (*Astragalus tener* var. *titi*); California Endangered Species, Federal Endangered Species, and California Native Plant Society List 1B - Rare or Endangered.
7. Pacific Grove clover (*Trifolium polyodon*); California Rare Species, Federal Threatened Species, and California Native Plant Society List 1B - Rare or Endangered.
8. Sandmat manzanita (*Arctostaphylos pumila*); California Native Plant Society List 1B - Rare or Endangered.
9. Monterey paintbrush (*Castilleja latifolia*); California Native Plant Society List 4 - Plants of Limited Distribution.
10. Monterey pine (*Pinus radiata*); California Native Plant Society List 1B - Rare or Endangered.

Animals (Invertebrates, Birds, Reptiles, and Mammals)

11. Black legless lizard (*Anniella pulchra nigra*); California Species of Special Concern.
12. Monarch butterfly (*Danaus plexippus*); CDFW Special Animals list.
13. Raptors (e.g. red-shoulder hawk, red-tailed hawk, northern harrier); Fish and Game Code Birds of Prey.
14. White-tailed kite (*Elanus leucurus*); Fish and Game Code Fully Protected Species.
15. *Smith's blue butterfly (*Euphilotes enoptes smithi*); Federal Endangered Species.
16. American peregrine falcon (*Falco peregrinus*); California Endangered Species.

- No confirmed sightings in the Asilomar Dunes, yet.

TABLE 2. PLANT AND ANIMAL SPECIES ENCOUNTERED

SCIENTIFIC NAME	COMMON NAME
Plants	
<i>Abornia latifolia</i>	Yellow sand verben
<i>Abronia umbellate</i>	Pink sand verben
<i>Acacia longifolia</i> *	Sydney golden wattle
<i>Agoseris apargioides</i>	Dune dandelion
<i>Ambrosia chamissonis</i>	Beach bur
<i>Artemisia pycnocephala</i>	Beach sagewort
<i>Bromus diandrus</i> *	Rippgut grass
<i>Baccharis pilularis pilularis</i>	Coyote brush
<i>Camissonia cheiranthifolia</i>	Beach primrose
<i>Cardionema ramosissimum</i>	Sand mat
<i>Carpobrotus edulis</i> *	Hottentot fig ice plant
<i>Chorizanthe pungens</i> var. <i>pungens</i> ***	Monterey spineflower
<i>Cryptantha leiocarpa</i>	Coast cryptantha (popcorn flower)
<i>Ericameria ericoides</i>	Mock heather
<i>Erigeron glaucus</i>	Seaside daisy
<i>Eriogonum parvifolium</i>	Dune buckwheat
<i>Lessingia filaginifolia</i>	Beach aster
<i>Linaria canadensis</i> var. <i>texana</i>	Toad flax
<i>Lotus heermannii</i>	Wooly lotus
<i>Lotus strigosus</i>	Bishop lotus
<i>Lupinus chamissonis</i> **	Silver bush lupine (Chamisso bush lupine)
<i>Lupinus tidestromii/chamissonis</i> **	Tidestrom's and Silver bush lupine hybrid
<i>Lupinus tidestromii</i> var. <i>tidestromii</i> ***	Tidestrom's lupine
<i>Medicago polymorpha</i> *	Bur-clover
<i>Poa douglasii</i>	Dune bluegrass
<i>Pteridium aquilinum</i>	Bracken fern
Animals (Invertebrates, Birds, Reptiles, and Mammals)	
<i>Anniella pulchra nigra</i>	Black legless lizard
<i>Aphelocoma californica</i>	California scrub jay
<i>Calypte anna</i>	Anna's hummingbird
<i>Charadrius vociferus</i>	Killdeer
<i>Corvus brachyrhynchos</i>	American crow
<i>Elanus leucurus</i>	White-tailed hawk
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Falco sparverius</i>	American kestrel
<i>Haemorhous mexicanus</i>	House finch
<i>Melanerpes formicivorus</i>	Acorn woodpecker
<i>Odocoileus hemionus</i>	Black-tail deer
<i>Picoides pubescens</i>	Downy woodpecker
<i>Procyon lotor</i>	Raccoon
<i>Sturnus vulgaris</i> *	European starling
<i>Zonotrichia leucophrys</i>	White-crowned sparrow

* Exotic species

** Non-local native species (introduced)

*** Endangered or Threatened listed species

layers under larger shrubs, mainly coyote brush and mock heather. The sand was searched under the largest shrubs for the lizards, digging a few inches into the sand by hand.

B. Site Conditions

As shown on the Existing Site Plan (Figure 2), the residence is located in the western half of the 0.78-acre property (Figure 2). The property has an elongated, irregular rectangular shape (an acute trapezoid), measuring over 323 feet on its longest, southern side and over 145 feet on its western side that fronts Sunset Drive. A low dune rises from the western side of the residence and drops off steeply down to Sunset Drive. The property rises to the east of the residence to where the eastern property line runs along the crest of a high dune.

The property's native dune habitat is in a severely degraded condition, with patches of ice plant and areas of open sand dominating the undeveloped portion of the property.

C. Description of Vegetation

The undeveloped portion of the property is comprised mostly of open sand and patches of ice plant. Between the house and Sunset Drive, a sparse cover of native plants is intermixed with the ice plant and open sand (Photo 1). This area also has a relatively high concentration of Tidestrom's lupine plants. The eastern half of the property is dominated by two large "blow-out" areas (bare, eroding sand dune), that cover much of the windward slope of the large dune below the eastern property line (Photo 2). Large patches of ice plant occur on the flatter parts of the property (Photo 3).

The few native dune plants between the house and Sunset Drive is all that remains from a restoration project that was implemented in 1991-92, to mitigate habitat damage that resulted from installation of a non-permitted driveway on the property in early 1991. Restoration activities, including eradicating and replacing the ice plant with native dune plants, only occurred on this portion of the property, as required by the City of Pacific Grove and California Coastal Commission. After ownership of the property changed in 1994, all restoration and landscape maintenance activities ceased. The ice plant began to grow back. In addition, the new owners set up "lawn chairs" on the dunes, and along with the associated foot-traffic, the native vegetation was trampled and many of the plants were lost.

Silver bush lupine (*Lupinus chamissonis*), a California native plant that is not considered indigenous to the Monterey Peninsula, has invaded several parts of the property. It was introduced originally on the Peninsula at nearby Asilomar State Beach and Conference Grounds as part of an effort to stabilize the disturbed sand dunes in the park in the late 1970s. In the 1990s, genetic research conducted by State Parks biologists revealed that silver bush lupine was successfully cross-pollinating with Tidestrom's lupine, producing hybrid plants that were spreading

Photo 1. The area on the west side of the house, (looking east). Scattered native plants remain from 1991-92 restoration project, but are being overtaken by ice plant.



Photo 2. The area on the east side of the house (looking east). Mostly bare sand and ice plant, with large dune blow-out on windward slope of the large dune.



Photo 3. Entrance walkway leading to the front door from the driveway. The ice plant has grown back since this area was restored with native plants in 1991-92. This “sand island,” between the house and the driveway, contains a number of Tidestrom’s lupine and Monterey spineflower plants.



through the dunes and onto neighboring properties. Today silver bush lupine and its hybrid crosses represent a serious threat to the genetic integrity and survival of Tidestrom’s lupine in the Asilomar Dunes. A number of hybrid lupines are intermixed with the native Tidestrom’s lupines in several areas on the property (Photo 4).

Replacing the exotic ice plant and other weeds with appropriate native dune plants and providing long-term maintenance and protection to the property’s dune habitat could be a significant benefit of the current, proposed house-remodeling project.

D. Survey Results - Protected Species

Two protected plant species – Tidestrom’s lupine and Monterey spineflower – were identified on the property during two botanical surveys, conducted on April 20, 1991 and June 5, 1918. The survey in 1991 recorded a total of 132 Tidestrom’s lupines, with 120 plants occurring between the house, driveway and Sunset Drive. The 1918 survey, found a total of 342 Tidestrom’s lupines, with 264 occurring between the house, driveway and Sunset Drive (Figure 4). Also, an estimated total of 150 Monterey spineflower plants were observed growing on the property in 2018, but were not recorded as being present in 1991.

Half-Size on 12x18

FIGURE 4. RARE PLANT DISTRIBUTION MAP

PROPOSED SITE PLAN

PROJECT ADDRESS: 1725 SUNSET DRIVE
PACIFIC GROVE, CA 93950

APN: 007-061-036

LOT AREA: 33,811 S.F.

LEGEND

HATCH TYPE	DESCRIPTION	AREA
PROPOSED SITE COVERAGE		
	BUILDING FOOTPRINT (HOUSE & GARAGE)	1,785 S.F. (5.28 %)
	NON BUILDING FOOTPRINT	
	STONE COURT YARD & PATIO	1,003 S.F. (2.91 %)
	PAVERS DRIVEWAY	1,717 S.F. (5.08 %)
	WOOD DECK W/ GLASS RAILING	515 S.F. (1.52 %)
	WOOD FENCE & DECK WOOD POST	22 S.F. (0.06 %)
TOTAL BUILDING & NON BUILDING COVERAGE =		5,044 S.F. (14.91 %)
ALLOWED =		5,072 S.F. (15.00 %)
PROPOSED IMMEDIATE OUTDOOR LIVING SPACE		
	IMMEDIATE OUTDOOR COURTYARD LANDSCAPE	250 S.F. (0.74 %)
	PERMEABLE PAVERS OUTDOOR PARKING	342 S.F. (1.01 %)
TOTAL IMMEDIATE OUTDOOR LIVING SPACE =		592 S.F. (1.75 %)
ALLOWED IMMEDIATE OUTDOOR LIVING SPACE =		1,690 S.F. (5.00 %)
TOTAL PROPOSED COVERAGE OF BUILDING & NON BUILDING AND IMMEDIATE OUTDOOR LIVING SPACE =		5,636 S.F. (16.66 %)
ALLOWED =		6,763 S.F. (20.00 %)



REVISION	No.

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1725 Sunset Drive
Pacific Grove CA 93950
APN: 007-061-036

PROPOSED BASEMENT LEVEL SITE PLAN
DATE: 8/6/19
SCALE: 1/16"=1'-0"
DRAWN: CAD
JOB NUMBER: 18.09

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Photo 4. Hybrid silver bush lupine/Tidestrom's lupine.



Many Tidestrom's lupines occur close to the southern edge of the driveway, along the pathway to the front entrance door, along the edge of the front entrance patio, and near the west side of the house past the front entrance door. Protection measures, such as fences and routine environmental compliance monitoring during construction, are identified in this report as effective methods for avoidance of adverse impacts to the rare plants during construction.

A pair of Killdeer birds were observed nesting on the ground in 2018 and 2019, about 40 feet east of the house. They are easily disturbed and scared off of their nest if approached by people. All four eggs hatched both years.

A cursory search was made for black legless lizards, the only protected animal species that potentially occurs on the property. The sand was gently finger-raked beneath several mock heather and coyote brush plants, but no lizards were uncovered. They also can occur under other native plants, if a duff layer has developed under the plants, and in areas where native plants are densely intermixed with ice plant. They likely do occur on the property, though few in numbers, given that suitable habitat (native vegetation) is scarce at this time.

Photo 5. Killdeer (bird) eggs are laid on the ground and blend into their surroundings.



IV. IMPACT ASSESSMENT AND MITIGATION MEASURES

A. Project Description

The project proposes to remodel an existing single-family residence. Significant changes to the exterior of the building and hardscape surfaces are proposed, including the following:

- Add a 5-foot wide deck to the west and south sides of the residence (first story of the residence).
- Replace the building's wood siding and windows with stone veneer cladding and larger windows, respectively.
- Install a new stone pavement patio in the Courtyard.
- Enclose the Courtyard by replacing the existing, collapsed 6-foot high fence.
- Resurface the existing driveway with concrete pavers.
- Resurface the entry patio and walkway with stone pavement.
- Reduce the width of the entry patio.
- Extend the driveway, using interlocking permeable pavers, to create parking for two vehicles.
- Relocate the existing chimney and surface with stone veneer.
- Replace the wood shingle roof with a metal roof.
- Replace/add a new screen wall near the front entry door.
- Designate the sandy area portion of the Courtyard as Immediate Outdoor Living Area (IOLA).

B. Site Coverage

The lot encompasses 0.87 acres – 33,811 square feet (SF). According to the proposed site plan (Figure 3), dated 8/6/19, the project will increase total building coverage from 4,437 SF (13.12%) to 5,044 SF (14.91%). The additional coverage is the result of adding a deck on the west and south side of the building and adding a patio in the courtyard on the east side of the house. In addition, the project proposes to add 592 SF (1.75%) as Immediate Outdoor Living Area (IOLA), comprising an outdoor parking area and a landscape area in the Courtyard. The proposed project appears to comply with and not exceed required coverage limits. A breakdown of the coverage calculations is listed on the Existing Site Plan and the Proposed Site Plan (Figures 2 and 3).

C. Potential Impacts and Mitigation Measures

Any new development within ESHA, even if all rare plants and higher valued habitat areas are avoided, will unavoidably cause an adverse impact to ESHA, in that it will result in a net reduction of ESHA. To mitigate this impact, all projects in the Asilomar Dunes have been approved with the requirement that the entire undeveloped portion of a property be restored to its natural, indigenous condition, along with other mitigation requirements.

The City of Pacific Grove and the California Coastal Commission have consistently imposed various conditions when approving residential projects in the Asilomar Dunes, including but not limited to the following:

- Limiting site coverage so that the residence and other non-permeable structures together do not exceed more than 15 percent of total lot coverage for properties over 0.5 acres and 20 percent of total lot coverage for properties equal to or less than 0.5 acres.
- Allowing up to an additional 5 percent of coverage for various permeable structures/"non-habitat" areas, as determined by the California Coastal Commission (i.e., permeable decks, driveways/parking areas, walkways, and courtyards), which is usually referred to as "Immediate Outdoor Living Area" in project plans.
- Designing and siting new structures so as to avoid, if feasible, or minimize negative impacts to species of special concern and sensitive areas.
- Requiring preparation of a Habitat Restoration Plan by a qualified biologist for restoring the indigenous plant community(s) on the entire undeveloped portion of the property.
- Recording a deed restriction for the purpose of ensuring the long-term maintenance and protection of the restored native habitat on the undeveloped portion of the property.
- Providing for environmental monitoring and reporting by a qualified biologist during construction and restoration of the native habitat.

The entire Asilomar Dunes has been designated as ESHA by the California Coastal Commission and is subject to the policies and requirements of the Pacific Grove Coastal Program Land Use Plan. As ESHA, this coastal sand dune area is provided the highest level of legal recognition and protection for its natural resource values, as represented by its unique geological and biological components. In practice, all new development in the Asilomar Dunes has been required to avoid impacting areas of highest environmental/biological sensitivity, whenever feasible, such as areas that support rare plants and animals and forest-front trees. In some cases, areas that support high-quality, intact native plant cover have also been avoided when siting new development.

Two small groups of Tidestrom's lupine plants, totaling seven plants, are located 10 feet from the cantilevered exterior wall on the west side of the house (Photos 6 and 7). The project proposes to add a new 5-foot wide deck to the exterior of the house in this location. It will therefore be located five feet from the two groups of rare plants. It is possible to build the deck and complete the other major exterior renovations on the exterior of the building without impacting the plants, by installing temporary construction fences and placing wire cages or boxes over the plants of concern during construction. The risk of damage to the rare plants near the house from house structural maintenance activities, particularly window washing, will remain about the same or will slightly increase. Installing wire baskets or boxes over the plants of concern and their seedlings on a permanent basis, or at least until the plants possibly no longer occur here, can mitigate this risk.

Presently, eleven Tidestrom's lupine plants are growing within inches of the existing front door entry patio on the west side of the house (Photo 8). Any work to resurface the patio could result in damage or loss of the plants of concern. To avoid possible impact to the rare plants, the project proposes to reduce the width of the patio on its west side from 14 feet to 12.5 feet, and repave the surface with concrete stone. Pulling the patio back from the rare plants by 18 inches, as proposed, will provide sufficient space to resurface the patio and avoid impacts to the rare plants. Also, protection of the rare plants over the longer term from sweeping and cleaning, etc., of the patio will be enhanced by creating this 18 inch wide buffer space. A temporary fence will be installed between the rare plants and the patio during the house remodel project, to help minimize risk of damage to the rare plants.

To avoid construction-related impacts to Tidestrom's lupine plants, the following recommendations will be implemented during the project:

- Habitat protection fencing will be installed by the Project Biologist prior to the start of any demolition or construction-related work, as shown in Figure 5.
- Wire baskets or boxes will be placed over the individual Tidestrom's lupine plants closest to the proposed new deck and entry patio on the west side of the house.
- Construction activities on the exterior and outside of the house will be monitored on a frequent basis, no less than one-time each week by the Project Biologist.

Photo 6. Tidestrom's lupine plants (yellow flags), located 10 to 12-feet from the house (exterior siding), along the western side of the house where a 5 foot wide deck is proposed.



Photo 7. Tidestrom's lupine plants (yellow flags), located 10-feet from the house (exterior siding), along the western side of the house where a 5 foot wide deck is proposed.



Photo 8. The location of Tidestrom's lupine plants (yellow flags) growing along the edge of the front door entry patio.



Taking measures to protect the rare plants and provide for the restoration and long-term maintenance of the dune habitat on the property, if successful, would provide substantial mitigation for any potential environmental impacts resulting from construction proposed by the current project.

D. Guidelines for Development

Below is a list of development guidelines for this project, to address and satisfy the environmental protection and mitigation requirements for projects that occur in the Asilomar Dunes. These guidelines and others have typically been applied to other projects in the Asilomar Dunes. The Pacific Grove planning department will incorporate them into a Mitigation and Monitoring Program report for the project, in conjunction with issuing a Mitigated Negative Declaration, to satisfy the requirements of the CEQA. In addition, the California Coastal Commission will impose the same conditions and others, based on specific concerns they may identify when reviewing the project and approving a Coastal Development Permit.

Adoption of the following guidelines, either partially or in their entirety, will be determined by the Pacific Grove planning department and the California Coastal

Half-Size on 12x18

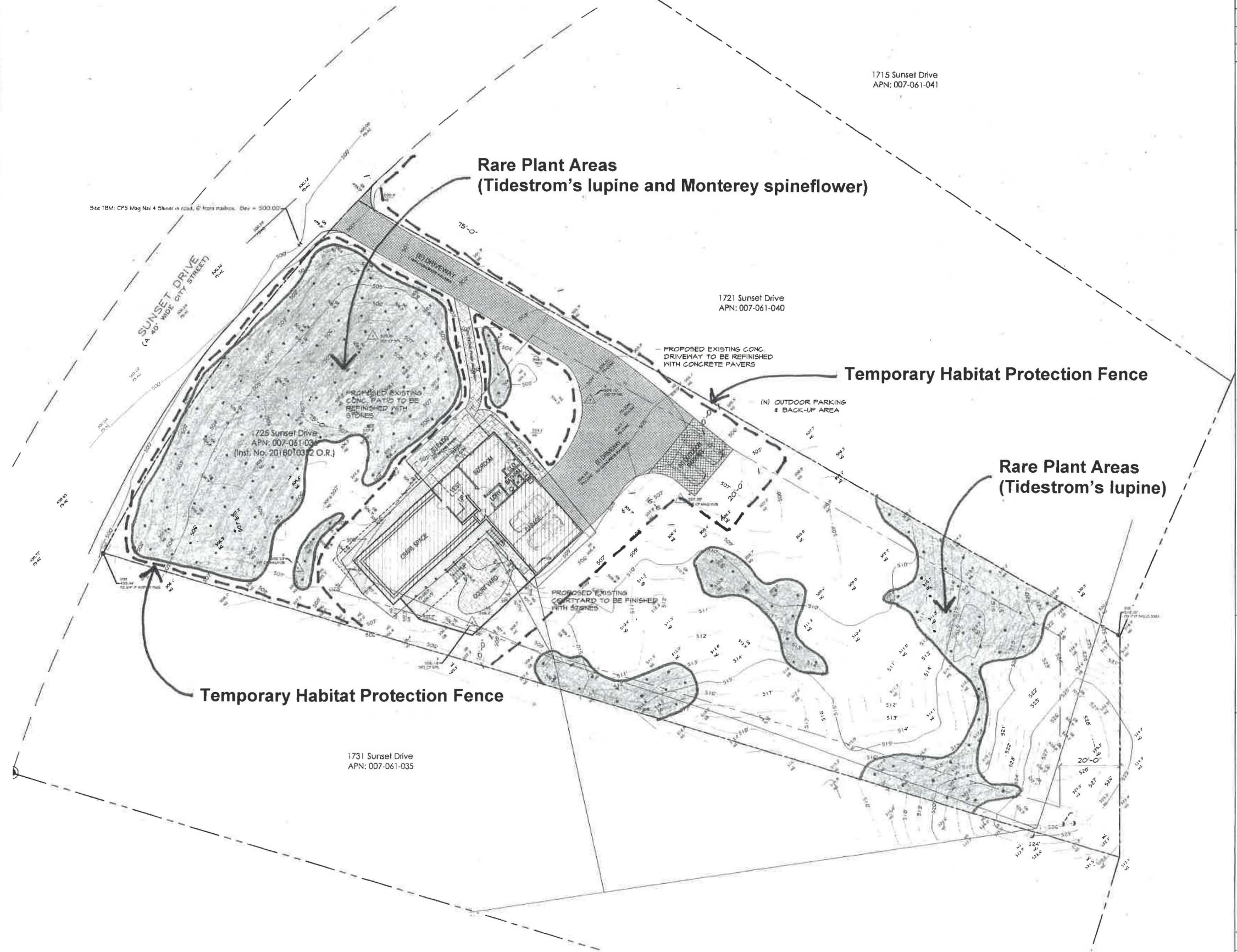
FIGURE 5. HABITAT PROTECTION FENCES

PROPOSED SITE PLAN

PROJECT ADDRESS: 1725 SUNSET DRIVE
PACIFIC GROVE, CA 93950
APN: 007-061-036
LOT AREA: 33,811 S.F.

LEGEND

HATCH TYPE	DESCRIPTION	AREA
PROPOSED SITE COVERAGE		
	BUILDING FOOTPRINT (HOUSE & GARAGE)	1,765 S.F. (5.26 %)
	NON BUILDING FOOTPRINT	
	STONE COURT YARD & PATIO	1,005 S.F. (2.97 %)
	PAVERS DRIVEWAY	1,717 S.F. (5.08 %)
	WOOD DECK W/ GLASS RAILINGS	515 S.F. (1.52 %)
	WOOD FENCE & DECK WOOD POST	22 S.F. (0.06 %)
TOTAL BUILDINGS & NON BUILDING COVERAGE =		5,044 S.F. (14.91 %)
ALLOWED		5,072 S.F. (15.00 %)
PROPOSED IMMEDIATE OUTDOOR LIVING SPACE		
	IMMEDIATE OUTDOOR COURTYARD LANDSCAPE	250 S.F. (0.74 %)
	PERMEABLE PAVERS OUTDOOR PARKING	342 S.F. (1.01 %)
TOTAL IMMEDIATE OUTDOOR LIVING SPACE =		592 S.F. (1.75 %)
ALLOWED IMMEDIATE OUTDOOR LIVING SPACE =		1,690 S.F. (5.00 %)
TOTAL PROPOSED COVERAGE OF BUILDINGS & NON BUILDINGS AND IMMEDIATE OUTDOOR LIVING SPACE =		5,636 S.F. (16.66 %)
ALLOWED		6,768 S.F. (20.00 %)



PROPOSED BASEMENT LEVEL SITE PLAN

SCALE: 1/16" = 1'-0"



NOTE:

- NO TREE PROPOSED TO BE REMOVED
- NO GRADING CUT & FILL TO BE PROPOSED
- LANDSCAPE TO REMAIN NATURAL, REFER TO BIOTIC REPORT

REVISION	No.

CONSULTANT:



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ARCHITECT

PROPOSED BASEMENT LEVEL SITE PLAN

JOB NAME: **Mathews Residence**
1725 Sunset Drive
Pacific Grove, CA 93950
A.P.N. 007-061-036

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1. Planning and Pre-construction Period

- a. A qualified biologist will be retained by the property owner to serve as the Project Biologist for the purposes of providing input on the development plans and for monitoring construction and restoration of the landscape.
- b. All new utility and sewer lines will be shown on the project plans and reviewed by the Project Biologist. Any new underground utilities will be installed in a single corridor that is located in the driveway, rather than traversing the undeveloped portion of the property, if feasible.
- c. All drain lines from roof gutters, drain pits or surface drains will be shown on a plan and reviewed by the Project Biologist.
- d. All walkways, patios, decks and other exterior hardscape surfaces will be shown on the project site plan and building plan. The addition of any walkway surfaces, decks, patios, fences, or driveway/parking expansion subsequent to issuance of a Coastal Development Permit will require the consent of the Pacific Grove planning department and the California Coastal Commission.
- e. Except in certain circumstances where fences are essential to protect sensitive habitat in public use areas, construction of permanent fences are not permitted at this time by the California Coastal Commission in the Asilomar Dunes.
- f. A Habitat Restoration Plan will be prepared by a qualified biologist that defines procedures and standards for restoration, maintenance and monitoring of the undeveloped portion of the property.
- g. Prior to the start of construction, temporary fencing and wire baskets will be installed to delineate the construction zone and protect sensitive habitat and rare plants.
- h. Immediately prior to the start of construction, the project area, as delineated by temporary fencing, will be thoroughly searched for black legless lizards. If any are found, they will be relocated to nearby suitable habitat.
- i. All exotic plants on the project site will be hand-pulled or killed with an appropriate herbicide prior to the start of construction activity, according to specifications described in the approved Habitat Restoration Plan.
- j. The Project Biologist will provide a letter to the Pacific Grove planning

department verifying that the temporary fences have been installed, all of the exotics have been eradicated, and the construction area has been searched for black legless lizards prior to the start of demolition or construction.

2. Construction Period

- a. After a building permit is obtained, a pre-construction meeting will be held between the owner or their representative, the General Contractor, the city planner, and the Project Biologist to review the project permits and all environmental compliance requirements.
- b. Temporary habitat and rare plant protection fences and wire baskets will be maintained by the Project Biologist and kept in good condition. They will remain in place until all construction on the site is completed. Removal or changing the location of a fence or wire basket will require the concurrence of the Project Biologist.
- c. All activities associated with construction, trenching, storage of materials, and disposal of construction wastes and excavated soil will not impact areas protected by fencing. The areas protected by the fence will remain in a trash free condition and not used for material stockpiling, storage or disposal, or vehicle parking. All construction personnel will be prohibited from entering areas protected by fencing.
- d. No construction materials, including but not limited to wood, nails, glass, tile, gravel, paint, cement, joint compound, cleaning solvents or residues from other chemicals, etc., will be disposed of on-site. The General Contractor will be responsible for complying with this requirement and will clean up any spills or contaminated ground to the complete satisfaction of the Project Biologist.
- e. If any excavation spoils (sand only) are generated by the project, it will be disposed either on-site at the direction of the Project Biologist or off-site, preferably within the Asilomar Dunes. Any sand disposal activity will be done in a way as to not negatively affect any existing native vegetation. The proposed location(s) for disposing of any excess sand will be reviewed and approved by the Pacific Grove planning department and the California Coastal Commission.
- f. The Project Biologist will inspect the site daily during any excavation or other ground disturbing activities and no less than one time each week for the duration of the project, to ensure compliance with all provisions for protecting the natural environment. Any activity or condition not in accord with the provisions of this report or permit issued by the California Coastal Commission will be brought to the attention of the owner or their

representative, the General Contractor and, if necessary, the California Coastal Commission and the Pacific Grove planning department.

- g. A qualified biologist will be retained by the property owner to implement the project's Habitat Restoration Plan, including overseeing and supervising each step of the restoration process, as described in the plan.

3. Post-construction Period

- a. At the conclusion of all construction and project-related work, and with the concurrence of the Project Biologist, the temporary fence will be removed.
- b. Native plants will be installed under the direction of the Project Biologist according to the specifications described in the Habitat Restoration Plan and completed prior to receiving final building inspection approval. Depending on seasonal condition and availability of plants, it might not be possible to complete installation of the landscape prior to gaining final building approval. In this case, the applicant should be allowed up to one year to complete the installation following final building approval, either by 1) providing proof of a signed contract for installation of the landscape, or 2) after submitting certificate of deposits or other form of surety to the City of Pacific Grove for the total cost of the restoration project, as determined by the Project Biologist.
- c. No exotic plants or non-local native plants will be planted anywhere on the property. Only plants that are listed in the Habitat Restoration Plan will be used on the property.
- d. When installation of the list of plants has been satisfactorily completed, the Project Biologist will submit a letter to notify the Pacific Grove planning department and the California Coastal Commission, at which time a five-year monitoring and maintenance program will begin, as described in the Habitat Restoration Plan.
- e. A qualified biologist will be retained by the property owner to monitor the landscape restoration project. Project monitoring reports will be submitted to the City of Pacific Grove Community Development Department and the California Coastal Commission annually for the first five years and once every 10 years following completed implementation of the restoration project.
- f. The native landscape will be maintained in perpetuity, as specified in the Habitat Restoration Plan, including removing exotic plants and planting and caring for additional plants, if needed.
- g. If the property should change ownership, future owners of the property will

have the same obligation for preserving, maintaining and perpetuating the native landscape on the property.

V. REFERENCES

California Department of Fish and Game, Natural Diversity Data Base. Special Plants List. January 2001. Quarterly publication, Mimeo.

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Hickman, James C., 1993. The Jepson Manual - Higher Plants of California. University of California Press, Berkeley.

Holland, Robert F., 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game.

Matthews, Mary Ann, 1997. An Illustrated Field Key to the Flowering Plants of Monterey County. California Native Plant Society.

Prepared By: Thomas K. Moss Date: August 18, 2019