

June 23, 2011

Massy Mehdipour
1425 Dana Ave.
Palo Alto, CA 94301

**Supplemental Biological Resource Assessment
1170 Signal Hill Road
Pebble Beach, Monterey County, California**

Dear Ms. Mehdipour:

Zander Associates has reviewed the current plans dated May 27, 2011 for a new residence on your property located at 1170 Signal Hill Road at Pebble Beach (Figure 1). We reviewed the plans in the context of our previous biological assessment prepared for you on June 8, 2010, further site assessment and collaboration with your architect, Bill Bernstein and civil engineers, Whitson Engineers. Zander Associates biologists visited the site on January 13, 2010 and met with Mr. Bernstein for a preliminary assessment of native dune limits. Whitson Engineers subsequently obtained the 1957 grading plans for the original (existing) structure on the property and overlaid those plans on the current topographic map of the site to determine the old grading limit line for the existing residence on the site (Figure 2). Zander Associates biologists visited the site again on April 28, 2011 to confirm that the old grading line established a reasonable boundary between disturbed and more natural dune landforms. Following are the results of our assessment.

Vegetation Characteristics

We characterized and mapped vegetation on the site for our June 8, 2010 report. We also searched for special-status plants during appropriately timed spring visits for that assessment. During our January 13, 2011 visit, we further evaluated vegetation characteristics on and along the edge of the building pad for the existing house. The area abutting the westerly side of the house is mostly flat, compacted, barren sand, sparsely colonized by predominately non-native species such as ripgut brome (*Bromus diandrus*), iceplant (*Carpobrotus* spp.), European beach grass (*Ammophila arenaria*) and other vegetation typical of disturbed sites in the area (see Photos 1 & 2). Apart from scattered elements of coastal scrub vegetation such as individual plants of mock heather (*Ericameria ericoides*) and coyote brush (*Baccharis pilularis*), non-native European beach grass is the dominant cover on the slopes west of the pad around the house as it is on the slope to the south above the existing asphalt driveway. At the northwest corner of the pad (see Photo 3), there is a cluster of well-established Monterey cypress (*Hesperocyparis macrocarpa*), probably planted as ornamental landscape elements when the house was built. North of the house, the flat pad merges into open sand on more

natural dune contours, bounded by another planted cypress and a once-landscaped concrete walkway leading to Signal Hill Road on the east (see Photo 4). The easterly side of the existing house facing Signal Hill Road is dominated by several mature trees and shrubs, including Monterey cypress, eucalyptus (*Eucalyptus* sp.) and tea tree (*Leptospermum* sp.) planted as landscape elements to screen the residence from the road (see Photos 5 & 6).

On April 28, 2011, we visited the property again and traversed the entire site to search for target special-status plants. For the second consecutive year, we did not identify any rare, threatened, endangered or otherwise special status plant species on the site, with the exception of Monterey pine and Monterey cypress.¹ However, the focus of our April 28th site visit was to evaluate the previous grading line on the ground as a basis for determining the limits of disturbed dunes on the property (see below).

Topographic Overlay

Whitson Engineers determined the previous grading limit line for the existing house by comparing pre-construction dune contours and proposed grading shown on the 1957 plans with the current topographic map of the site. According to those plans, site grading for the original structure created a terraced building pad by cutting into higher areas and side-casting excess sand to the west (See Figure 2). In addition, the slope of the dune form immediately south of the existing asphalt driveway was cut back to accommodate site grading and development in that area. Cutting and filling also occurred prior to the development of the residence during construction of Signal Hill Road along the easterly property boundary.

While remnant contours of the side-cast sand on the slopes just west of the main terrace are evident on the existing topographic map (Figure 2), Whitson could not definitively conclude that those slopes qualified as disturbed dunes. A sewer cleanout further to the west marks the location of an underground sewer line that traverses the lot in westerly direction and connects to a six inch force main at the western corner of the lot according to the Pebble Beach Community Services District Sewer Atlas. Trenching and other disturbance during installation of the sewer line along that alignment almost certainly affected the native dune landforms in that area. Consequently, the limit of grading line illustrated on Figure 2 is a conservative representation of the extent of previous site disturbance.

During our April 28th site visit, we walked the alignment of the previous grading limit line produced by Whitson as illustrated on Figure 2. We used a hand held Trimble® GPS unit (sub-meter accuracy) to confirm the location of the line and its relationship to vegetation patterns on the site (see above). We confirmed that the disturbed dune limit line established

¹ As noted in our 2010 report, both Monterey pine and Monterey cypress are native to the Del Monte Forest and are included on the California Native Plant Society's List 1B, species considered rare, threatened or endangered in California and elsewhere. However, the cypress on the site appear to have been planted as ornamental landscape elements and an individual pine downslope of the house is likely a seedling of trees in the landscape of adjacent houses. Nonetheless, these trees are afforded special consideration; their removal would be subject to review by the Pebble Beach Company Forester and/or Monterey County.

by Whitson was well within the disturbed vegetation signature we had identified during previous site work. Thus, the grading limit line provides a very reasonable (and probably conservative) basis for identifying the boundary of the environmentally sensitive habitat area (ESHA) on the site.

ESHA Review

The California Coastal Act defines ESHA as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5). The Del Monte Forest LUP elaborates on this definition by specifically stating that ESHAs "include rare, endangered, or threatened species and their habitats; other sensitive species and habitats such as species of restricted occurrence and unique or especially valuable examples of coastal habitats...." The LUP then references "a complete listing" of ESHAs in the Del Monte Forest Area included as an appendix (Appendix A of the LUP) and a map of their locations shown on a figure (Figure 2 of the LUP).

Figure 2 of the LUP maps the limits of the Signal Hill Dune with its boundary across Signal Hill Road from the Mehdipour property. No other ESHA locations are mapped in the vicinity of the site, but the LUP does require a biological site survey to determine the presence of special status species and "to detect the presence of any of the habitats in Appendix A of this Plan."

In practice, the ESHA definition has been applied to any occurrences of special status species and important habitats in the Del Monte Forest Area regardless of whether they are included on Appendix A or mapped in the LUP. Under the broadest interpretation, any remnants of the former dune system may be considered ESHA, which could include most of the previously undisturbed portions of the Mehdipour property.

Significant disruption of ESHA for non-resource dependent uses (e.g. residential development) is generally not allowable under the Coastal Act; Monterey County LCP policies typically require strict avoidance of ESHA. Only uses compatible with restoration and enhancement of remnant native sand dune habitat such as low-intensity scientific, educational or recreational activities are permissible under the Del Monte Forest LUP (Policy 18).

Assessment

The proposed new residence would be built over the area currently occupied by the existing house, driveway and previously graded pad (see Figure 3). Site grading and construction would not occur beyond the limits of the 1957 grading limits as determined by Whitson Engineers. Vegetation characteristics within these grading limits are representative of disturbed sites; nowhere within the previous grading limits are there natural dune landforms stabilized by native vegetation (listed as ESHA in Appendix A of the LUP). We did not find

any special status dune plants on the site during spring surveys conducted over two consecutive years. However, Monterey pine and Monterey cypress can be considered as special-status species in their native range as noted above; any proposed tree removal and replacement should be coordinated with the Pebble Beach Company Forester and Monterey County. Although there is some potential for the presence of California legless lizards (*Anniella pulchra*) and coast horned lizards (*Phrynosoma coronatum frontale*) on the site, as noted in our 2010 report, significant disruption of suitable habitat for these species is not likely to result from site grading and construction for the proposed new residence. A pre-construction search and relocation effort for these species within the development envelope by a qualified biologist should reduce any potential impacts. Scattered coast buckwheat, the host plant for the federally-listed Smith's blue butterfly (*Euphilotes enoptes smithi*)_occurs well outside of the grading limits; in any case, we do not expect the butterfly to occur in the vicinity based on previous years of surveys and assessment in the area.

The majority of the remnant dune landforms on the site beyond the old grading limits are not stabilized by native vegetation but by European beach grass and mats of iceplant, even in the mapped coastal scrub areas. The non-native cover substantially limits the successful establishment and growth of native dune plant species, including special status species. Implementation of a dune restoration plan could eradicate or at least control beach grass and iceplant, introduce native species and allow for expansion of dune habitat characteristics over the remaining areas on the site, virtually up to the foundation of the new residence. Coupled with a dune restoration plan, the current plans for the new residence on the Mehdipour site should not result in significant disruption, either directly or indirectly, of any ESHA resources.

We trust that this assessment will assist you in your application process with Monterey County. Please call or email (mzander@zanderassociates.com) me if you have any questions.

Sincerely,




Michael Zander
Principal

Attachments: Figure 1, Site Location
 Figure 2, Developed/Disturbed Dune Limits - Topographic Base
 Figure 3, Proposed New Residence within Developed/Disturbed Dune
 Limits – Aerial Base
 Site Photographs

Copies (via email) Bill Bernstein



Legend

 Property Boundary

1 inch equals 1,667 feet

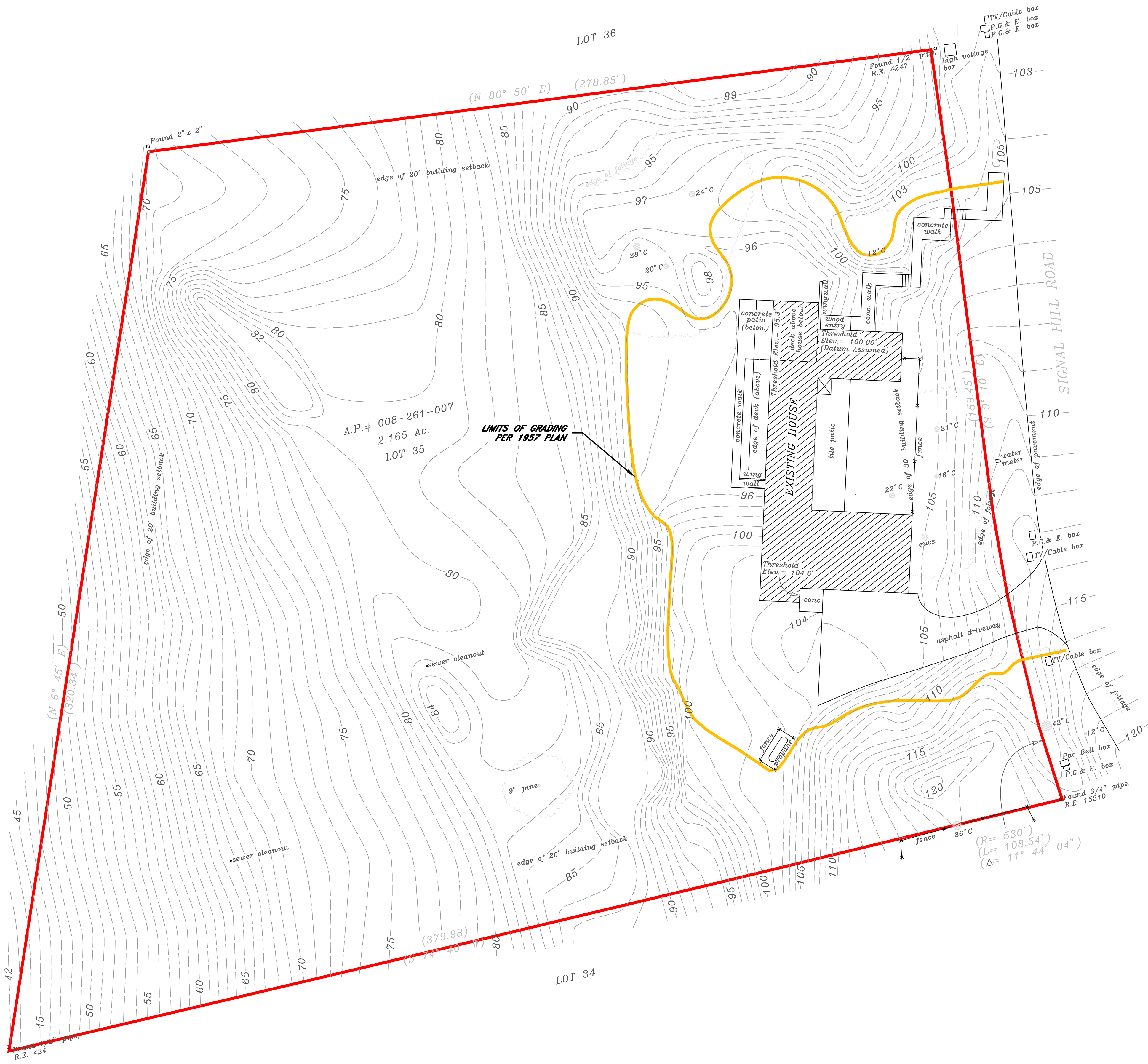


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 4460 Redwood Hwy, Suite 16-240
 San Rafael, CA 94903

Site Location
 Mehdi-pour Property
 Pebble Beach, California

Date: 6/10

Figure
 1





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Scale: 1" = 50'

LEGEND:

- Proposed New Residence
- Limits of Grading per 1957 Plan
- Property Boundary

Proposed New Residence within
 Developed/Disturbed Dune Limits
 Mehdiপুর Property
 Pebble Beach, California
 Date: 6/11

Figure
 3

Site Photographs – January 13, 2011
1170 Signal Hill Road



Photo 1: Flat pad with open sand and non-native plants in front (east) of existing house



Photo 2: Iceplant & beachgrass colonizing pad at front (east) of existing house

Site Photographs – January 13, 2011
1170 Signal Hill Road



Photo 3: Mature cypress trees to be preserved at northwest corner of pad



Photo 4: Concrete walkway at Signal Hill Road to the north of existing house

Site Photographs – January 13, 2011
1170 Signal Hill Road



Photo 5: Looking northerly to non-native landscaping east of house along Signal Hill Road



Photo 6: Looking southerly to landscaped cypress trees along fence line east of existing house.