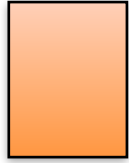


Exhibit D

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FRED BALLERINI
BIOLOGICAL AND HORTICULTURAL SERVICES

September 5, 2018

To: Daniel Peterson
Studio Carver Architecture
PO Box 2684
Carmel, CA 93921

RE: Marshall Residence
APN 418-031-012
Biological Sensitive Species Resource Review

Dear Daniel,

Per your request, on August 30, I visited the subject Marshall residential parcel, to review and document any existing sensitive biological resources within the proposed development area of the parcel.

The purpose of this letter is to document the findings of a brief biological survey conducted within the residential parcel. The Big Sur Coast Land Use Plan (LUP) and The California Natural Diversity Data Base (CNDDDB) maintained by the State of California Department of Fish and Wildlife (CDFW) were utilized to determine known populations of Federal and State listed rare, threatened and endangered habitat and plant species on or in the vicinity of the subject project site located in the Soberanes Topographic Quadrangle and adjacent quadrangles. Below is a outline of sensitive element observations in the context of their relationship with the BSC LUP and preliminary recommendations to reduce impacts and improve habitat qualities.

Summary of Findings:

1. Redwood Forest

The subject residential parcel zone lies within environmentally sensitive redwood forest habitat. This habitat is dominated by coast redwood (*Sequoia sempervirens*). Other trees which are present here are big-leaf maple (*Acer macrophyllum*), tan-oak (*Notholithocarpus densiflora*), and California laurel (*Umbellularia californica*). Understory

plants within the redwood forest community include common sword fern (*Polystichum munitum*), California wood fern (*Dryopteris californica*), false Solomon's seal (*Smilacina racemosa*), pink star- flower (*Trientalis latifolia*), western wake-robin (*Trillium ovatum*), thimbleberry (*Rubus parviflora*), fairy bells (*Disporum hookeri*), sweet-scented bedstraw (*Galium triflorum*), white-flowered hawkweed (*Hieracium albiflorum*), Douglas' iris (*Iris douglasiana*), redwood sorrel (*Oxalis oregana*) and others that make up a rich diverse habitat. This community is considered rare by CDFW, and environmentally sensitive habitat under the provisions of the Big Sur Coast LUP (Ref. Policy 3.3.3.A.8.). Impacts will occur to redwood tree roots as a result of shallow grading along the south portion of the project (in the area of the existing redwood deck) and from drilling activities for ten 18-inch concrete caissons installed 8-feet deep into the alluvial soils straddling the creek. LUP Policy 3.3.3.A.8., calls for reduction of damage to redwood trees, mandating that "development be sited and designed to have minimum impacts on redwood trees from soils compaction and other disturbances to tree roots. Impacts to redwood understory habitat is anticipated to be less than significant as the construction zone has limited native understory constituents within the area anticipated for disturbance.

The native redwood understory vegetation within the residential setting has been degraded in several areas from concentrated human impacts and invasive species encroachment, specifically English ivy (*Hedera helix*) which is located on the landscape plane as well as growing upwards enveloping redwood tree trunks. English ivy is listed by the California Invasive Plant Council as having adverse impacts on native ecosystems and on the Marshall property it has the ability to invade environmentally sensitive habitats. Implementing an exotic species control will be consistent with several LUP policies regarding environmentally sensitive habitats (Ref. LUP Policies 3.3.2.1. + 3.3.2.7). Grading impacts will result in removal of the majority of the English ivy in the south portion of the project. Following an eradication program will be consistent with the Big Sur Coast LUP Policy 3.3.3.A.10, in which exotic plant eradication is encouraged (provided that erosion control has been implemented). To prevent erosion in areas treated for eradication, exposed areas not stabilized with existing native plants must be revegetated with site appropriate native species endemic to the communities in which the exotics were removed.

1a. Preliminary Recommendations

- Caisson spoils need to be restricted from entering the creek banks or creek bed.
- Grading should be monitored along the south area (front of house) and avoid severing root impacts to major redwood tree roots greater than 2" diameter.
- English ivy removal should be conducted prior to grading in order to prevent the unintentional relocation/distribution of invasive ivy.
- Site should be restored with native redwood duff and site appropriate native plant species to stabilize graded soils.
- Site parking and construction staging should occur in pre-existing parking areas to prevent further soil compaction in outlining areas near redwood trees.
- Native habitat areas should be fenced with habitat protection fencing to prevent unwarranted construction impacts to native redwood forest understory natural communities.

2. Nesting Survey

Coast redwoods within the Big Sur region have been used for roosting by California condors (*Gymnogyps californianus*), a bird which is both State and Federally-listed endangered. Though unlikely to be used for nesting due to the noise impacts and proximity of Palo Colorado access road, roosting is feasible for the birds within the trees. Suitable roosting and nesting habitat exists for several wildlife species, including raptors near the development area, whose presence if detected, could impact the timing of future development. Raptor nests are protected during breeding season under the Department of Fish and Wildlife code and if the start of development lies within the nesting period, pre-construction surveys would be required to detect the presence or absence of nesting.

2a. Preliminary Recommendations

- If project implementation begins between March and July, a nesting survey is recommended and buffer zones will be established around raptor nests if an occurrence is observed.

3. Riparian

The project site lies straddling the Palo Colorado creek corridor containing wetland riparian constituents adjacent to the footprint of the house structure along the river banks. The riparian natural community contains mix of riparian species that include giant chain fern (*Woodwardia fimbriata*), giant horsetail (*Equisetum telmateia* ssp. *braunii*), and seep spring monkey flower (*Mimulus guttatus*) mixed with herbaceous redwood understory constituents. This community is considered rare by DFG, and environmentally sensitive habitat under the provisions of the Big Sur Coast LUP (Ref. Policy 3.3.) Development within environmentally sensitive habitats must be consistent with LUP mandates contained in Policy 3.3.2. Development must also be minimized to “that needed for the structural improvements themselves” (Ref. Policy 3.3.2.4). Additionally, as specified in LUP Policy 3.3.3.A.3., “development...shall be sited to protect riparian habitat values...and restricted to low intensities and constructed to minimize erosion, runoff and water pollution.” LUP Policy 3.3.3.A.4. specifies that “setbacks of 150’ on each side of the streambank shall be required...unless a narrower corridor can be demonstrated to be sufficient to protect existing vegetation...”. Policy 3.3.3.A.5. requires that “access routes...shall be sited to avoid significant impacts to riparian corridors.” Grading and soil disturbance could result in the deposition of excavated material into the creek drainage and/or surrounding wetland vegetation on the creekbanks, causing reduction of the wetland habitat found there.

If the banks of the river are involved in any restoration implementation, a CDFW 1603 permit (Streambed Alteration Agreement) could be required, though agency consultation would be recommended prior to planning to ensure compliance. Native restoration and channelling traffic through intentional corridors would enhance the natural creek bank community and further stabilize the river banks in the event of a high flow event.

3a. Preliminary Recommendations

- If the construction zone is restricted to areas only necessary for project implementation, impacts are expected to be less than significant in this habitat community with the incorporation of habitat protection fencing, sediment control devices, erosion control, and contractor quality-control/education of protecting creek bank and creek bed from adverse construction impacts.
- Habitat restoration of native plants should occur on creek banks after construction project implementation is completed.

4. Listed Amphibian Species

Several amphibian species including the California red-legged frog (*Rana draytonii*), a federally- listed threatened species and a California species of special concern, are listed in the Soberanes topographic quadrangle and adjacent quadrangles. CRLF are found in ephemeral or permanent bodies of water including wetlands, ponds, lakes and low-gradient, slow moving stream reaches with permanent pools, primarily in coastal drainages along California's central coast. Preliminary aquatic resource surveys were conducted for wildlife species associated with riparian and wetland habitats. There were no confirmed occurrences noted during brief preliminary surveys, however conditions exist on property that would suggest a moderate potential for species to be present and pre-grading surveys are recommended to ensure no listed biological amphibious taxa are present within the development areas.

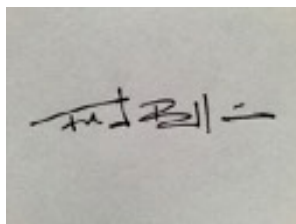
4a. Preliminary Recommendations

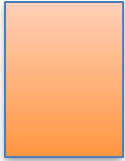
- Conduct pre-grading survey to determine the presence or absence of listed amphibians and report results to Monterey County Resource Management Agency – Project Planner. Should listed species be observed and observation locations are determined to be potentially impacted by the proposed development, protocols by the biologist will be developed to ensure the resources are not disturbed through avoidance or relocation efforts.

Thank you for the opportunity to provide biological services for your project. Please phone or email if you have any questions or require further analysis.

Sincerely,

Fred Ballerini





Fred Ballerini
Biological and Horticultural Services

February 27, 2019

To: Daniel Peterson
Studio Carver Architecture
PO Box 2684
Carmel, CA 93921

RE: **Marshall Property: Amphibian + Nesting Survey**
PLN190006
APN 418-031-012-000
36963 Palo Colorado Road, Carmel, CA

Dear Daniel,

Per your request, I conducted a site visit on February 25 to survey for potential raptor or migratory bird nesting behavior or occurrences within the project site and within 200-feet of proposed project area at the residential property located at 36963 Palo Colorado Road in Carmel, CA. Amphibian surveys were also conducted as the site has a moderate potential for sensitive species to be present.

Site Conditions:

Native ground cover vegetation was dense on the property outside the development area with the ground plane dominated by redwood understory and riparian forb species. Within the development area, invasive English ivy (*Hedera helix*) is found along the entry of the property, climbing up several coast redwoods (*Sequoia sempervirens*), and along the eastern creek bank mixed with riparian forb constituents. Tall coast redwoods tower over the parcels perimeter and adjacent residential parcels, creating a high canopy of foliage cover. The project site is adjacent to the Palo Colorado road.

Bird Observation Data

The site visit consisted of 120+ minutes of birding observation in the early morning hours for the parcel and areas within a 200-foot proximity of proposed site disturbance, including observations for tree, understory and ground nesting species. Species were noted and the area was meticulously monitored. Access was unimpeded and weather conditions were unsettled with sunny conditions giving way to increasing cloud cover. Visual sightings and audible observations were used to identify the species diversity within and/or bypassing the parcel. Bird behavioral observations also included analyzing breeding ethology; including the courtship phase such as singing, food offering, nudging/ preening, or copulation, nest building phase such as nest building, material gathering, and mate guarding, incubation phase and nestling phase. Canopy surveying for potential nesting was conducted using high magnification binoculars. The birding survey included observations for locally

significant birds as noted within the California Department of Fish and Game's California Natural Diversity Database (CNDDB) within the USGS Soberanes Point and adjacent Quadrangles.

Amphibian Observation Data

The site visit consisted of creek bank analysis of fallen bark, wood debris, mammal burrows, leaf litter and rocks as all these features are important microhabitat elements for salamanders, frogs and other amphibious wildlife. Surveys were also conducted within the areas of proposed development. The creek channel is narrow; 3 to 6-feet wide within the property boundary, and current flow rates were considered too rapid for most amphibian breeding due to the absence of sluggish creek pools or still-water ponding on the subject parcel which are required for breeding and egg development. Stream bank edges were observed for any egg masses, tadpoles, or adult presence.

Locally Significant Animals

Several bird species within the California Natural Diversity Database, including the black swift (*Cypseloides niger*), western snowy plover (*Charadrius alexandrinus nivosus*), ash storm petrel (*Oceanodroma homochroa*), yellow warbler (*Setophaga petechia*), California brown pelican (*Pelecanus occidentalis californicus*), California clapper rail (*Rallus longirostris obsoletus*), burrowing owl (*Athene cunicularia*) and others are included as sensitive or listed species for the Soberanes Point and adjacent Quadrangles. Most of the listed species would not be found in the subject parcel due to the habitat type not supporting such species.

California newts (*Taricha torosa*), a California Department of Fish and Wildlife species of special concern are noted to migrate to ponds and reservoirs from late December to February depending on rainfall amounts. Populations found in sluggish stream pools typically migrate later, typically March and April after stream flooding has subsided.

California red-legged frog (*Rana draytonii*), a Federally threatened species is active year-round and breeding in ponds or slow streams from November to April.

The foothill yellow-legged frog (*Rana boylei*) a State candidate threatened species, breeds in streams and rivers typically from April until early July after streams have slowed from winter runoff.

Bird/Nesting Findings

Surveys found no evidence of active nesting for any species during the site observations in the study area, most likely a result of birds not engaging in nesting activity at this early juncture of the season.

Fifteen (15) bird species were recorded within and surrounding the parcel (ground plane and air born). Several observed species were monitored moving through the parcel in transit (American crow and turkey vulture) or identified from birdcalls from adjacent parcels (Stellar's jay and band-tailed pigeon). Other species were noted throughout the parcel. Migratory birds have begun entering the Monterey peninsula and courting season is at the very early stages of development. No sensitive bird species or locally significant species as noted in the CNDDB Soberanes Quadrangle or adjacent quadrangles were noted as occurring within the observation areas.

Amphibian Findings

Surveys found no evidence of the listed species or any other amphibious species within the subject area of proposed development, though presently the creek is experiencing a high flow event due to the abundant rains and lacks suitable breeding conditions.

California newts and California red-legged frog have a low to moderate potential to breed on the parcel due to the rapid water movement and lack of sluggish pools.

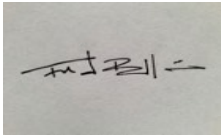
Foothill yellow-legged frogs have a moderate potential to breed on site, however the timing of the start of the proposed project does not coincide with breeding if the project starts before late April.

Recommendations:

Vegetation removal and site prep should begin as soon as feasible to avoid any potential nesting impacts that may develop over the next few weeks as birds will begin courtship and nesting in the forthcoming months. If vegetation removal activities are delayed more than three weeks from the date of this report, a follow up survey should be initiated to ensure no nesting impacts occur prior to the proposed vegetation removal or site prep. If a second survey is required due to project delays and nesting is found to occur, the implementation of nest buffers (no-clearance zones) could be established around all confirmed active nests and suspected nest areas. The qualified biologist will determine size and shape of the buffer depending on various factors including: site topography, proximity of nest to naturally open areas, type/density of vegetation cover, nesting period, a particular species' sensitivity to disturbance, and extent of clearance activities that will be occurring next to the buffer.

Sedimentation and erosion control measures are required to be installed prior to site disturbance in order to protect water resources and potential impacts to amphibious wildlife that may occur downstream of the project site.

Please phone or contact me with any questions. Thank you.

A handwritten signature in black ink, appearing to read "Fred Ballerini", on a light-colored rectangular background.

Fred Ballerini

Observed Species List:

<i>Aphelocoma californica</i>	Western scrub jay
<i>Calypte anna</i>	Anna's hummingbird
<i>Cathartes aura aura</i>	turkey vulture
<i>Certhia americana</i>	brown creeper
<i>Corvus brachyrhynchos</i>	American crow
<i>Cyanocitta stelleri</i>	Steller's jay (coastal)
<i>Empidonax difficilis</i>	Pacific-slope flycatcher
<i>Haemorhous mexicanus</i>	house finch
<i>Haemorhous purpureus californicus</i>	purple finch (Western)
<i>Junco hyemalis</i>	dark-eyed junco
<i>Patagioenas fasciata</i>	band-tailed pigeon
<i>Pipilo crissalis</i>	California towhee
<i>Poecile rufescens</i>	chestnut-backed chickadee
<i>Psaltiriparus minimus</i>	bushtit
<i>Sitta pygmaea</i>	pygmy nuthatch

END