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4161 Sunridge Road
Tree Assessment
Arborist report

Prepared for:

Steven Rivera

Prepared by:

Frank Ono

Forester

Society of American Foresters I.D. # 48004

Certified Arborist #536

1213 Miles Avenue

Pacific Grove, CA 93950

August 10, 2023

Owner:

Steven Rivera
4161 Sunridge Rd.
Pebble Beach, CA, 93953

Architect:

Eric Miller Architects Inc.
211 Hoffman Avenue
Monterey, CA 93940

Forester and Arborist

Frank Ono, Society of American Foresters # 048004, Certified Arborist #536
F.O. Consulting
1213 Miles Ave
Pacific Grove, CA 93950

SUMMARY

Development is proposed for this site entailing the construction of a new 856 square-foot accessory dwelling unit, consisting of a living room, kitchen, two bedrooms, one bathroom, mechanical room, and roof deck. The project as proposed will require the removal of two county-protected trees; one (1) Monterey pine and one (1) Coast live oak. A tree assessment/arborist report has been prepared that identifies and addresses the effects that the project will have on the existing tree resources on site as well as a list of recommendations for the project.

INTRODUCTION

This tree assessment/arborist report is prepared for Mr. Steven Rivera, the owner of the property located at 4161 Sunridge Road, Pebble Beach CA by Frank Ono, Urban Forester and Certified Arborist, (Society of American Foresters #48004, and International Society of Arboriculture Certified Arborist #536) due to the proposed construction improvements for the new ADU. The Del Monte Forest Land Use Plan and Monterey County Zoning Ordinance Title 20 identify Monterey pine trees and oak trees as native tree species that require protection and special consideration for management. The project will impact several native trees protected by the Del Monte Forest Land Use Plan, that will need to be removed.

ASSIGNMENT/SCOPE OF PROJECT

Ongoing development of this parcel will have varying effects on trees adjacent to construction. To ensure the protection of the tree resources on site, the property owner, Mr. Rivera, has requested an assessment report of the trees in proximity to the proposed development areas to work in conjunction with other conditions for approval of the building permit application. To accomplish this assignment, the following tasks have been completed;

- Evaluate health, structure, and preservation suitability for each tree within or adjacent (15 feet or less) to the proposed development of trees greater than or equal to six diameter inches at 24 inches above grade.
- Review proposed building site plans as provided by Eric Miller, Architects Inc.
- Make recommendations for alternative methods and preconstruction treatments to facilitate tree retention.
- Create preservation specifications, as it relates to a Tree Location/Preservation Map.
- Determine the quantity of trees affected by construction that meet “Landmark” criteria as defined by the County of Monterey, Title 20 Monterey County Zoning Ordinance; as well as mitigation requirements for those to be affected.
- Document findings in the form of a report as required by the County of Monterey Planning Department.

LIMITATIONS

This assignment is limited to the review of plans submitted to me dated June 14, 2022, by Eric Miller Architects Inc. to assess the effects of potential construction to trees within or adjacent to construction activities. The assessment has been made of these plans specifically and no other plans were reviewed. Only minor grading and erosion details are discussed in this report as they relate to tree health.

PURPOSE

This tree assessment report is prepared for this parcel due to proposed construction activities that are intent on improving the property located at 4161 Sunridge Road, Pebble Beach CA. The purpose of the assessment is to determine if any trees will be affected by the proposed project. Monterey pine and Oak trees are considered protected trees as defined by the County of Monterey, Title 20 Monterey County Zoning Ordinance.

The goal of this report is to act as a plan to protect and maintain the Del Monte Forest Land Use Plan forested resources through the adherence to development standards, which allow the protection and maintenance of its forest resources. Furthermore, it is the intended goal of this document to aid in planning to offset any potential effects of the proposed development on the property while encouraging forest stability and sustainability, perpetuating the forested character of the property and the immediate vicinity.

SITE DESCRIPTION

- 1) Assessor's Parcel Number: 008-071-012-000
- 2) Location: 4161 Sunridge Road, Pebble Beach CA
- 3) Parcel size: Approximately .3 Acres
- 4) Existing Land Use: The parcel is developed, zoned MDR/4-D(CZ)
- 5) Slope: The parcel is on a mildly sloped with no slopes greater than 25%
- 6) Soils: The parcel is located on a soil classified by the Monterey County Soils report as NcE Narlon loamy fine sand, 15 to 30 percent slopes. This is a strongly sloping and moderately steep soil on uplands. It has a profile similar to the one described as representative of the series, but the depth to the clay subsoil is 12 to 20 inches. Slopes associated with this soil type are mostly 12 to 20 percent. Runoff is medium, and the erosion hazard is moderate. The soil has moderately low productivity for Monterey pine (site index averages about 60). The seedling mortality is low, equipment limitations and the wind throw hazard are severe. The productivity rating is based on the premise that trees of 60 to 90 feet are common, and some are up to 100 feet heights that are attained in 80 to 100 years.
- 7) Vegetation: The vegetation on site is composed primarily of some oak understory with some Monterey pine and Monterey cypresses as the upper canopy. Areas around the house and yard areas have been planted with ornamental understory and are densely populated with black acacia trees.
- 8) Forest Condition and Health: The stand of trees and their health is evaluated with the use of the residual trees and those of the surrounding adjacent trees as a complete stand. This portion of the stand is a mixture of a fragmented closed-cone pine forest. The upper crown is dominant with Monterey cypress and pine trees that range from poor to fair health. Within the stand of Monterey pine, there is evidence of some pine pitch canker and some canopy loss due to engraver beetle. The native understory is composed of Coast live oak that appears to be healthy with no evidence of significant insects or diseases.

BACKGROUND

I (Frank Ono, Ono Consulting) have been requested for a site review and assessment of trees on this land due to the proposed construction of an ADU. The site review and assessment focused on incorporating the preliminary location of site improvements coupled with consideration for the general goals of site improvement desired by the landowner. A study of the individual trees was made to determine the treatments necessary to complete the project and meet the goals of the landowner. As a result, trees within and immediately adjacent to the proposed development area were located, measured, inspected, flagged, and recorded. The assessment of each tree concluded with an opinion of whether the tree should be removed, or preserved, based on the extent and effect of construction activity on the short- and long-term health of the tree. All meetings and field reviews were focused on the area immediately surrounding the proposed development.

OBSERVATIONS/DISCUSSION

The following list includes observations made while on site and summarizes details discussed during this stage of the planning process.

- The site is heavily vegetated within the rear yard where the ADU is proposed.
- The area where the ADU is proposed is surrounded by a mixture of black acacia (*Acacia melanoxylon*) trees, coast live oak (*Quercus agrifolia*), and a larger diameter Monterey pine (*Pinus radiata*).
- Most of the trees on the property range in diameter sizes (6"-32" diameter).
- Two protected trees are located within or directly adjacent to the proposed ADU. These will be impacted by the construction due to their position and are proposed for removal.
 - #766 – 10" Coast live oak is within the building footprint.
 - #763 – 36" Monterey pine will require root loss, (approximately 24% or more); thus, its stability will be questionable.
- In addition to the county-protected trees located in or near the construction area, the ADU site is forested with black acacia that will need to be removed several are within the building footprint.
- The site also has several 'Monterey pines located within the front yard and west side yard and Monterey Cypressess that will not be affected.
- No alternate building sites were considered for this assessment as the site where the ADU is proposed is fairly open and landscaped mainly with ornamental plantings.

TREE CHARACTERISTICS

The trees listed in the following table are located along the rear yard starting from the gate to the back of the existing structure. The trees have been tagged in the field and are rated Good, Fair, or Poor according to their health, vigor, and structural condition.

ID#	Diameter	Species	Health	Structure	Remove	Prune	Comments
754	10	MP	Fair	Fair			Near gate
755	8	MP	Fair	Fair			Near gate
756	36	MC	Fair	Fair			Dominant
757	8	MC	Fair	Fair			Suppressed
759	32	MP	Fair	Fair			Dominant
760	6	RDW	Fair	Fair			Suppressed
761	16	CLO	Fair	Fair			Suppressed
762	9	CLO	Fair	Fair		x	Suppressed
763	33	MP	Fair	Fair	x		Within 4' from the building corner
764	10	MC	Fair	Fair			Near fence line
765	16	CLO	Fair	Fair		x	Between the existing structure and ADU
766	9	CLO	Fair	Fair	x		Suppressed and within the building footprint

CONCLUSION/PROJECT ASSESSMENT

This proposal to construct an ADU on the existing residence is planned to maintain the existing wooded environment. The remainder of the property contains tree cover. Several additional non-native trees (black acacia) located within or near the ADU footprint will require removal. The remainder of the protected trees will remain undisturbed. Whenever construction activities take place near trees, there is the potential for those trees to experience a decline in the long term as well. The greatest attempt has been made to identify and remove those trees likely to experience such a decline.

Short-Term Effects.

Site disturbance will occur during building construction. Short-term site effects are confined to the construction envelope and immediate surroundings where a 10" diameter oak and a 33" diameter Monterey pine will be removed. Additional surrounding trees may need to be pruned and root systems reduced. No additional tree removal is anticipated.

Long Term Affects

No significant long-term effects on the forest ecosystem are anticipated. The project as proposed is not likely to significantly reduce the availability of wildlife habitat over the long term, will not affect wind or air movement, or have a significant effect on light, shade, or erosion.

RECOMMENDATIONS

Pre-Construction Meeting

It is recommended that a project arborist/forester be retained and before the start of construction a meeting and training session shall be conducted to communicate and instruct personnel about tree removal, retention, and protection. The pre-construction meeting will include instructions on required tree protection and exclusionary fencing installed before grading, excavation, and construction procedures. Meeting attendees should include all involved parties such as site clearance personnel, construction managers, heavy equipment operators, and tree service operators. A certified professional such as a Monterey County-qualified forester or County qualified arborist will conduct training. A list of pre-construction attendees and the materials discussed may be maintained to be provided to the county. Meeting attendees must agree to abide by tree protection and instructions as indicated during the meeting and agree to ensure tree protection will remain in place during the entire construction period.

Tree Removal and Replacement

Two county-protected trees are proposed for removal on this project; a 10" diameter oak and a 33" diameter Monterey pine. The pine should be replaced at a minimum with two 5-gallon size Monterey pines to sustain the forested environment and the oak should be replaced by a five-gallon size or larger oak. All other County-protected trees are to remain and be protected from construction effects when closer than 25 feet from construction.

The tree removal contractor shall verify the absence of active animal or bird nesting sites before any tree removal. If any active animal or bird nesting sites are found before tree removal, work shall be stopped until a qualified biologist is consulted for further recommendations.

Success Criteria for Plant Re-establishment

Should replacement be mandated, implementation of the success criteria is recommended to be a condition of project approval to ensure the survivability and proper growth of the replacement or relocation of trees. Replant success criteria will be defined to meet a 100% survival rate or better and implemented as follows.

A qualified professional should monitor newly planted trees for the following:

- Tree health and growth rates of new planting must be assessed by a qualified forester or certified arborist.
- Trees suffering poor growth rates or declining health are to be identified and documented as to the reason it was not successful.
- Invigoration treatments if feasible will be recommended and implemented.
- Dead trees or trees identified in an irreversible state of decline will be replaced after a written recommendation is made by a qualified forester or certified arborist identifying the type and location of the new replacement. Trees found that need replacement will be replaced on a 1:1 ratio. Replant material should be minimum container grown five gallon-size with a tree stem caliper greater than 1/2" in diameter measured just above the root collar.

- Near the end of the monitoring period, the status of the new plantings will be again assessed to make certain that success criteria have been met and all mitigation trees planted are performing well.
- At the end of the project, a report shall be prepared by a qualified forester or arborist and submitted to the Planning Department for review and approval by the Director of Planning describing reforestation activities, success rates, and adjustments for previous failures or unsuccessful transplanting.

Tree Pruning

It is to be understood that the pruning of retained trees will be expected for this site, especially adjacent to the building construction areas. Pruning also should include larger canopied trees that have deadwood or are exhibiting some minor structural defect or minor disease that must be compensated. Trees should be monitored on occasion for health and vigor after pruning. Should the health and vigor of any tree decline it will be treated as appropriately recommended by a certified arborist or qualified forester.

It is to be understood that the pruning of retained trees is expected for this site. Pruning shall conform to the following standards:

- Clear the crowns of diseased, crossing, weak, and dead wood to a minimum size of 1-1/2 inch in diameter;
- Remove stubs, cutting outside the wound wood tissue that has formed around the branch;
- Interior branches shall not be stripped out.
- Pruning cuts larger than 4 inches in diameter, except for deadwood, shall be avoided, unless deemed crucial for safety (broken, cracked, crossing, rubbing, etc.) or those interfering with vehicular traffic.
- Pruning cuts that expose heartwood shall be avoided whenever possible.
- Pruning shall not be performed during periods of flight of adult boring insects because fresh wounds attract pests (generally spring). Pruning shall be performed only when the danger of infestation has passed.
- All pruning shall be performed by a qualified arborist or under the supervision of a ISA Certified Arborist or Tree Worker. Arborists are required to have a State of California Contractors License for Tree Service (C-61/D49) and provide proof of workers' compensation and general liability insurance.
- All pruning shall be per the Tree Pruning Guidelines (International Society of Arboriculture) and/or the ANSI A300 Pruning Standard (American National Standard for Tree Care Operations) and adhere to the most recent edition of ANSI Z133.1.
- No more than 20 percent of live foliage shall be removed within the trees.
- Brush shall be chipped, and chips shall be spread underneath trees within the tree protection zone to a maximum depth of 6 inches, leaving the trunk clear of mulch.

Tree protection

Before the commencement of any construction activity, the following tree protection measures shall be implemented and approved by a qualified arborist or forester:

- Trees located adjacent to the construction area shall be protected from construction equipment damage by the use of temporary fencing and wrapping trunks with protective materials.
- Fencing shall consist of any combination of chain link, supported snowdrift or plastic mesh, hay bales, or field fence. Fencing shall have cross bracing (typically 2x4 material) on both the top and lower edges of the fencing material to prevent sagging and provide lateral support. Fencing shall stand a minimum height of four feet above grade and be placed to the farthest extent possible from the tree's base protecting the tree's drip line area (typically 10-12 feet away from the base of a tree).
- In cases where access or space is limited it is permissible to protect trees within the 10-12-foot distance after determination and approval is made by a qualified forester or arborist.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials are not allowed adjacent to trees on the property, especially within fenced areas.
- Fenced areas and trunk protection materials shall remain in place during the entire construction period.

Grading and Excavation

- Roots will be located before any trenching, grading, or any other digging or soil removal. Tree root discovery is to be monitored by a qualified arborist or forester to ensure against drilling or cutting into or through major roots.
- Excavation or trenching for footings located adjacent to any tree shall be done by hand where practical and any roots greater than 2 inches in diameter bridged or pruned appropriately.
- Roots to be cut should be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.
- Any roots damaged during grading or excavation shall be exposed to sound tissue and cut cleanly with a saw.

If at any time significant roots are discovered:

- The arborist will be authorized to halt excavation until appropriate mitigation measures are formulated and implemented.
- If significant roots are identified that must be removed that will destabilize or negatively affect the target trees, the property owner will be notified immediately and a determination for removal will be assessed and made as required by law for treatment of the area that will not risk death decline or instability of the tree consistent with the implementation of appropriate construction design approaches to minimize affects, such as hand digging, bridging or tunneling under roots, etc.

General best Management Practices to Observe

The trees preserved around the construction site will have the greatest chance of success if the following practices are adhered to:

The health of trees remaining should not be affected if the following practices are adhered to:

- A) Do not deposit any fill around trees, which may compact soils and alter water and air relationships. Avoid depositing fill, parking equipment, or staging construction materials near existing trees. Covering and compacting soil around trees can alter water and air relationships with the roots. Fill placed within the drip line may encourage the development of oak root fungus (*Armillaria mellea*). As necessary, trees may be protected by boards, fencing, or other materials to delineate protection zones.
- B) Pruning shall be conducted so as not to unnecessarily injure the tree. General principles of pruning include placing cuts immediately beyond the branch collar, making clean cuts by scoring the underside of the branch first, and for live oak, avoiding the period from February through May.
- C) Native live oaks are not adapted to summer watering and may develop crown or root rot as a result. Do not regularly irrigate within the drip line of oaks.
- D) Root cutting should occur outside of the springtime. Late June and July would likely be the best. Pruning of the live crown should not occur from February through May.
- E) Tree material greater than 3 inches in diameter remaining on-site for more than one month that is not cut and split into firewood should be covered with clear plastic that is dug in securely around the pile. This will discourage infestation and dispersion of bark beetles.
- F) A mulch layer up to approximately 4 inches deep should be applied to the ground under selected oaks following construction. Only 1 to 2 inches of mulch should be applied within 1 to 2 feet of the trunk, and under no circumstances should any soil or mulch be placed against the root crown (base) of trees. The best source of mulch would be from chipped material generated on-site.
- G) If trees near the development are visibly declining in vigor, a Professional Forester or Certified Arborist should be contacted to inspect the site to recommend a course of action.

FUELS MANAGEMENT PLAN

The area should follow the requirements of California State Defensible Space Regulations conforming to California Public Resource Code (PRC) 4291.

Vegetation Management and Slash Removal

The area must be prepared and maintained for fuel management and defensible space. A fuel ladder is a continuous line of vegetation from the ground into the canopy or upper branches of a tree that may allow a fire to climb into the canopy. The idea is to make the homesite defensible by breaking up the continuity of fuels in both vertical and horizontal directions. Deadfall and cut branches which are fuel for a fire must be removed from the treatment area. This may be done either by hauling it off or by hiring a tree service to chip.

The following are management measures to be taken and maintained for trees within the disturbed and outlying area.

- Cut any dry or dead grass to a maximum height of 4 inches. The exceptions are grasses and forbs which are isolated from other fuels or those necessary to minimize erosion and may be maintained at a height of 18 inches.
- Dead plants should be cut to ground level, do not remove them as roots may still be present to minimize potential soil erosion. Maintain all remaining live landscape plants with regular water, keeping dead branches, leaves, and needles removed.
- Remove limbs within ten (10) feet of chimneys.
- Horizontal Clearances (within 100 feet of structures)
 - Trees- must have a spacing of at least 10 feet between crowns on shallow or almost level slopes (an exception is that trees growing as clusters with continuous canopy or aggregate may be treated as an individual tree to make a shaded fuel break).
 - Shrubs- must have a four-foot clearance on shallow or almost level slopes. Where slopes are steep (over 40 %) the spacing must be 40 feet between shrubs.
- Vertical Clearances of trees and large shrubs (within 100 feet of structures)
 - Trees and shrubs must have a vertical clearance of at least 6 feet from ground fuels on shallow or almost level slopes. Remove all limbs within 6 feet of ground fuel from the ground fuel's highest point and trim dead portions of tree limbs up to 10 feet. Where slopes are steep (over 40 %) the clearance must be higher up to 30 feet.
 - Shrubs- must have four-foot clearance on shallow or almost level slopes. Where slopes are steep (over 40 %) the clearance must be 40 feet from ground fuels.
- Remove from the area dead fallen material unless embedded in the soil.
- Remove all cut material from the area or chip and spread it on site.
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Report Prepared By:



Frank Ono, SAF Forester #48004 and ISA Certified Arborist #536

August 10, 2023

Date

PHOTOGRAPHS



Tree #763 is a large-diameter pine that will become impacted by grading



Oak #766 is hidden by Black acacia that must be removed.

REVISION	No.

CONSULTANT:

ARCHITECT:

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SITE PLAN

Rivera A.D.U.
 4161 Sunridge Rd
 Pebble Beach, CA 93953
 A.P.N. 008-071-012-000

DATE: 11/09/22
 DRAWN BY: C.S.
 CHECKED BY: C.S.
 SCALE: 1/8"=1'-0"

A-1.1
 SHEET 1 OF 1

