Exhibit F



Mendoza Residence 17090 Wallace Court Aromas, CA Tree Resource Assessment

Prepared for:

Francisco Mendoza

Prepared by:

Frank Ono Urban Forester Member Society of American Foresters #48004 ISA Certified Arborist #536

September 6, 2016

Owner:

Francisco Mendoza 2985 Rea Court Aromas, CA 95004

Architect:

N/A

Forester and Arborist

Frank Ono, Member SAF #48004, ISA Certified Arborist #536 F.O. Consulting 1213 Miles Ave Pacific Grove, CA 93950

SUMMARY

Development is proposed for this site requiring removal of two oak trees and excavation near several other oak trees on site. The project proposes to build a two story single-family dwelling attached garage on this parcel. Most the trees found on the property are considered to be in fair condition both structurally and in health. Excavation must be performed near a number of trees and in particular two trees will need removal. The site is large enough with ample space to mitigate removal with replanting of additional trees A tree assessment/arborist report has been prepared that identifies and addresses the affects that the project will have to the existing tree resources on site as well as a list of recommendations regarding trees on the project.

INTRODUCTION

This tree assessment/arborist report is prepared for Francisco Mendoza, the owner of the property located at 17090 Wallace Court, Aromas CA by Frank Ono, Urban Forester and Certified Arborist (member Society of American Foresters #48004 and International Society of Arboriculture Certified Arborist #536) due to the proposed construction. The North Monterey County Land Use Plan and Monterey County Zoning Ordinance Title 20 identify native Coast live oak trees as species requiring protection and special consideration for management.

ASSIGNMENT/SCOPE OF PROJECT

To ensure protection of the tree resources on site, the property owner, Francisco Mendoza, has requested an assessment of the trees in proximity to proposed development areas. The findings of the report are to be documented in an arborist report 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 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 Mr. Mendoza.
- Make recommendations for alternative methods and pre-construction 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 July 29, 2016 by Mid Coast Engineers to assess affects from 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 it relates to tree health. It is not the intent of this report to be a monetary valuation of the trees or provide risk assessment for any tree on this parcel, as any tree can fail at any time. No clinical diagnosis was performed on any pest or pathogen that may or may not be present. In addition to an inspection of the property, F.O. Consulting relied on information provided in the preparation of this report (such as, surveys, property boundaries, and property ownership) and must reasonably rely on the accuracy of the information provided. F.O. Consulting shall not be responsible for another's means, methods, techniques, schedules, sequence or' procedures, or for contractor safety or any other related programs; or for another's failure to complete the work in accordance with the plans and specifications.

PURPOSE AND GOAL

This tree assessment/arborist report is prepared for this parcel due to proposed construction activities located at 17090 Wallace Court, Aromas CA. The purpose of the assessment is to determine what, if any, of the trees will be affected by the proposed project. Oak trees are considered protected trees as defined by the County of Monterey, Title 20 Monterey County Zoning Ordinance unless shown to be an introduced or planted species.

The goal of this report is to protect and maintain the North Monterey County forested resources through the adherence of development standards, which allow the protection, and maintenance of its forest resources. Furthermore it is the intended goal of this report to aid in planning to offset any potential effects of 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: 181-171-047-000.
- 2) Location: 17090 Wallace Court, Aromas, CA.
- 3) Parcel size: 28.32 Acres.
- 4) Existing Land Use: The parcel is zoned for residential use RDR/5(CZ).
- 5) Slope: The parcel ranges from mild to steep sloped. Slopes in the project area range from 8% to over 12%.
- 6) Soils: The parcel is located on soils classified by the Monterey County Soils report as Arnold series loamy sand soils. The Arnold series consists of somewhat excessively drained soils that formed on hills and uplands in old marine sand dunes or in materials weathered from soft sandstone. Permeability is rapid, and the available water capacity is 3 to 5 inches. Roots penetrate to a depth of more than 60 inches. Runoff is rapid, and the erosion hazard is high.
- 7) Vegetation: The vegetation on site is converted oak woodland composed primarily of native Coast live oak with associated and ornamental understory being primarily poison oak and non-native grasses.
- 8) Forest Condition and Health: The stand of trees and health are evaluated with the use of the residual trees combined with surrounding adjacent trees as a complete stand. The surrounding forest canopy is fragmented, portions of the canopy are open where there are roadways and some farming is taking place. The stand is a stand of dominant Coast live oak (*Quercus agrifolia*) mainly in fair to good condition.

BACKGROUND

Assessment focuses on incorporation of the preliminary location of site improvements coupled with consideration for the general goals desired of the landowner. Proposed improvements assessed included preserving trees to the greatest extent feasible, maintaining the view shed and general aesthetic quality of the area while complying with Monterey County Codes. The study of individual trees determined treatments necessary to complete the project and meet the goals of the landowner. Trees within and immediately adjacent 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 to the short and long term health of the tree. All meetings and field review 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 where the building is proposed has no existing structures or hardscaped parking areas; it does however have an existing roadway leading to an existing water storage tank which will be used for access to the house.
- Trees are located throughout the property with canopy spread covering approximately 60-70% of the property. The property is densely populated with trees; trees are spaced at approximately 10-20 feet apart. Basal area calculation shows there are approximately 70-90 trees per acre, therefore, it is estimated there are approximately 1500 or more oak trees of various sizes on this lot.
- Two trees are required for removal with the proposed building site footprint (#896 22" diameter oak and #897- 17" diameter oak both trees have structural or health problems).
 - #896 22" diameter tree with the stem cracked and splitting open
 - #897 17" diameter tree with decay at the base
- One tree is located near the edges of the construction envelope and may need root pruning. Tree #884 may have its root zone encroached, however root loss will be minimal and it is expected that the tree will not be affected negatively; the tree is expected to satisfactorily survive construction.
- Other existing trees are to remain and at a distance they will not be harmed by construction or excavation techniques.
- The site map submitted to me does not show excavation or installation of septic or leach fields, however these can be assessed at a future date as there are clearings where it may be installed with ample space to allow for the installation of these items.

TREE CHART

Trees assessed and identified on the site map

ID#	Diameter	Species	Condition	Remove	Comments	
881	9"	Coast Live oak	Fair			
882	8"	Coast Live oak	Fair			
883	14"	Coast Live oak	Fair/Poor		Sunscald	
884	9", 15",18"	Coast Live oak	Fair/Poor		3 Stems and Sunscald	
885	10"13", 18"	Coast Live oak	Fair/Poor		4 Stems and Sunscald	
886	24"Cluster	Coast Live oak	Fair/Poor		3 Stems and Sunscald	
887	24"	Coast Live oak	Fair			
888	12"	Coast Live oak	Fair			
889	16"	Coast Live oak	Fair			
890	24" Cluster	Coast Live oak	Fair		4 Stems	
891	15"	Coast Live oak	Fair			
892	13", 15"	Coast Live oak	Fair/Poor		Sunscald	
893	12",20"	Coast Live oak	Fair/Poor		South limb is leaning over the and Sunscald	
894	24"	Coast Live oak	Fair			
895	15"	Coast Live oak	Fair/Poor		Topped and Sunscald	
896	22"	Coast Live oak	Poor	Х	Stem is cracking at the base	
897	17"	Coast Live oak	Poor	X	Decay at the base of stem	

CONCLUSION/PROJECT ASSESSMENT

This proposal to build a single-family residence and garage is planned to maintain the existing oak forested environment. The building placement allows the forest to continue to exist and regenerate over time. Tree removal proposed for this site due to construction is the minimum for the situation. Remaining trees are expected to survive if properly protected and monitored. The remainder of the property contains tree cover, which will remain undisturbed. No watercourses are near the planned construction.

Short Term Affects

Site disturbance will occur during building construction. Short term site affects are confined to the construction envelope and immediate surroundings where two trees will be removed. Adjacent trees may require some minor pruning and root systems reduced slightly. Care will be taken to insure no pruning or root removal of trees will be over 30% as the pruning of tree crowns above 30% and/or reduction of root area may have a short term effects on trees treated, including a reduction of growth and potential limb dieback.

Long Term Affects

No significant long term affects to the oak forest ecosystem is anticipated as the proposed project is adjacent an existing roadway and is partially developed. There is also an adjacent residential site. The project as proposed is not likely to significantly reduce the availability of wildlife habitat over the long term. Whenever construction activities take place near trees, there is the potential for those trees to experience decline in the long term as well. The greatest attempt has been made to identify for removal those trees likely to experience decline.

RECOMMENDATIONS

Pre-Construction Meeting

It is recommended that a project arborist be retained. Prior to the start of construction a meeting and training session must be conducted in order to be communicate and instruct personnel about tree retention and protection. The pre-construction meeting will include required tree protection and exclusionary fencing installed prior to grading, excavation and construction procedures. Meeting attendees shall be all involved parties including 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. Meeting attendees must agree to abide to tree protection and instructions as indicated during the meeting and agree to insure tree protection will remain in place during entire construction period.

Tree Removal and Replacement

Two trees are to be removed (#896 and #897) which are within the building envelope. The site may sustain additional oak replanting, therefore it is recommended replanting be with five gallon size or larger Coast live oak in locations near or adjacent the removed trees. In addition, the County also requires independent monitoring of replanted trees to insure replanting is successful (the term of monitoring is at County discretion, typically one –three years dependent on the type of permit). Remaining trees are outside the construction envelope and to be protected from construction impacts.

Tree Protection Prior to Construction Activities

Prior to the commencement of construction activities consult with an approved arborist regarding tree protection implementation as follows:

- Trees located adjacent to construction areas shall be protected from damage by construction equipment by the use of temporary fencing and through wrapping of trunks with protective materials.
- Fencing shall consist of chain link, heavy duty snowdrift, heavy duty plastic mesh, hay bales, or field fence.
- Fencing must not be to be attached to the tree. It shall be free standing and self-supporting so as not to damage trees. Fencing shall be rigidly supported and shall stand a minimum of height of four feet above grade.
- The stakes shall be set at a distance which will support fencing (typically 6-8 feet apart) secured with wire wood or plastic as a support to keep the fencing materials from sagging; the base of the fencing shall be supported with straw wattles unless approved by the arborist.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall not be allowed adjacent to trees on the property especially within fenced areas.
- Fenced areas and the trunk protection materials must remain in place during the entire construction period.

During grading and excavation activities:

- All trenching, grading or any other digging or soil removal that is expected to encounter tree roots will be monitored by a qualified arborist or forester to ensure against drilling or cutting into or through major roots.
- The project arborist shall be on site during excavation activities to direct any minor field adjustments that may be needed.
- Trenching for the retaining wall and driveway located adjacent to any tree shall be done by hand where practical and any roots greater than 3-inches diameter shall be bridged or pruned appropriately.
- Roots that must be cut shall 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.
- Roots found 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/forester 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 affects the target trees negatively, 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..

Best Management Practices to Observe (BMP)

The following best management practices must be adhered to:

- A) Tree service Contractors will verify animal or bird nesting prior to tree work. If nesting activity of migratory birds are found, work must stop and a wildlife biologist consulted before commencing work (the typical bird nesting season ranges from February 22 to August 1).
- B) 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 rot fungus (Armillaria mellea). As necessary, trees may be protected by boards, fencing or other materials to delineate protection zones.
- C) Pruning shall be conducted so as not to unnecessarily injure the tree. General-Principals 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.
- D) Native live trees 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 trees.
- E) Root cutting shall occur outside of the springtime. Late June and July would likely be the best. Pruning of the live crown shall not occur February through May.
- F) Tree material greater than 3 inches in diameter remaining on site more than one month that is not cut and split into firewood must be covered with thick clear

- plastic that is dug in securely around the pile to discourage infestation and dispersion of bark beetles.
- G) A mulch layer up to approximately 4 inches deep should be applied to the ground under selected trees following construction. Only 1 to 2 inches of mulch should be applied within 1 to 2 feet of the trunk, and under no circumstances shall 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.
- H) If trees along 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.

Report	Prepared	By:
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<u>September 6, 2016</u>

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

Date

PHOTOGRAPHS



Tree #896



Tree #897





