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#### **Arborists Report and Tree Impact Summary**

For the Project

Pritchard Farm
196 E Spain Street
Sonoma, CA
Parcel #018-171-011 & 018-171-012

Prepared on

March 25, 2024

Prepared For: Thornley Associates, Inc.

19201 Sonoma Hwy, #227

Sonoma, CA 95476

Prepared by: Nicole Harrison, Consulting Arborist

ASCA Registered Consulting Arborist #719 ISA Certified Arborist WE-6500AM, TRAQ





Thornley Assoc., 196 E Spain, City of Sonoma

March 25, 2024

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#### **Findings Summary**

Tom Thornley, on behalf of the design group including RBA Architecture and on behalf of the property owner, contacted Nicole Harrison to update the previous arborist report (prepared by California Tree & Landscape Consulting<sup>1</sup>) to include an evaluation of the impacts to the trees from the proposed development plans<sup>2</sup>.

A total of 28 trees were evaluated in October of 2022 by Tyler Thomson, ISA Certified Arborist #WE-12751A. The data collected at the time of these evaluations was relied upon to produce this report.

7 trees are considered Significant according to the City of Sonoma municipal code<sup>3</sup>. At this time, only 1 protected tree is proposed for removal (#7946), however, impacts to the other trees have not been determined. Utility trenching and grading will need to be analyzed. (See Page 2)

Table 1 - Summary of Tree Data

Tree Species	Trees Inventoried	Trees located on the Parcel⁴	Significant Trees	Total Significant Trees for Removal	Impacted Trees⁵
Box Elder, Acer negundo	1	0	1 (Q)	1	-
California Bay Laurel, Umbellaria californica	1	1	0	0	-
Coast Live Oak, Quercus agrifolia	5	2	3	0	3
Deodar Cedar, Cedrus deodara	1	1	1	0	1
Fig, Ficus carr	3	3	0	0	2
Glossy Privet, Ligustrum lucidium	2	2	0	0	-
Modesto Ash, Fraxinus velutina 'Modesto'	1	1	0	0	-
Olive, Olea europea	5	5	1	0	1

<sup>&</sup>lt;sup>1</sup> Also prepared by Nicole Harrison.

<sup>&</sup>lt;sup>2</sup> Plans 'Pritchard Farm' enlarged site plan (North) and (South) by RBA Architecture dated 2/26/2024.

<sup>&</sup>lt;sup>3</sup> Trees not located on residential property with a trunk diameter of 18" in circumference (5.73" diameter) and trees on residential property located in the front or side street setbacks with a trunk diameter of 54" in circumference (17.19" diameter) are considered 'Significant'. Municipal Code 12.08.020, P. and Q.

<sup>&</sup>lt;sup>4</sup> Focal Point is not a licensed land surveyor. Tree ownership was not determined. Conclusions within this report are based on existing fences or other landmarks which may not represent the actual property boundary.

<sup>&</sup>lt;sup>5</sup> Total impacted trees including both significant and not significant. Impacts are based on distance relationships and occur when development activities occur within the nonintrusion zone. See Development Impacts, page 6. Grading and Utility plans were not evaluated.

Tree Species	Trees Inventoried	Trees located on the Parcel <sup>4</sup>	Significant Trees	Total Significant Trees for Removal	Impacted Trees <sup>5</sup>
Plum, Prunus sp.	4	4	0	0	-
Pear, Pyrus sp.	2	2	0	0	-
Pepper Tree, Shinus molle	1	1	1	0	0
Silver Maple, Acer saccharinum	1	1	0	0	1
Willow, Salix sp.	1	1	0	0	-
Total	28	24	7	1	8

# Table 2 - Tree Impact Summary

Tree Species	Total Significant Trees for Removal	Total Diameter Inches	Mitigation Inches, Running Total
Box Elder, Acer negundo	1 (#7946)	9	9
	Total Significant Trees Impacted		
Coast Live Oak, Quercus agrifolia	1 (Tree #200)	10	May not be Required To Be Determined at Project Completion
Deodar Cedar, Cedrus deodara	1 (#7947)	34	" "
Olive, Olea europea	1 (#7945)	27	<i>u u</i>
Total Mitigation Inches		9	9

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#### **Assignment**

Evaluate and document the protected trees at the project location and impacts to the tree resources on the site. Provide submittal documentation according to the requirements of the City of Sonoma for the development permit application in accordance with the current plans.

## **Assignment Limitations**

Data collected was by a visual ground inspection of the trees without exploratory techniques such as digging, sounding, etc. No testing or analysis was conducted.

#### Methods

Tree Location: The GPS location of each tree was collected using the ESRI's ArcGIS collector application on an Apple iPhone or Samsung. The data was then processed in ESRI's ArcMap by Nicole Harrison or Julie McNamara to produce the tree location map. The map doesn't not always accurately depict the tree location on the aerial background, a surveyor's topographic map, or on the developers plans. The tree location map included with the arborist report is for reference and additional work may be required to match the actual tree locations as surveyed by a professional surveyor.

Tree Measurements: DSH (diameter standard height) was provided in the previous arborist report by Helix Environmental Planning. Measurements were spot checked for accuracy but I do not testify that all measurements are correct.

Unless otherwise indicated, A Basic Visual Assessment (level 2 in Tree Risk Assessment) was performed in accordance with the International Society of Arboriculture's best management practices. This assessment level is limited to the observation of conditions and defects which are readily visible. Additional limiting factors, such as blackberries, poison oak, and/or debris piled at the base of a tree can inhibit the visual assessment and should be noted in the data. Although we do our best to evaluate trees visually, sounding of the trunk and excavation around the base of the tree to determine the presence of decay is not included in the visual assessment and could dramatically change the arborist rating of the tree. In the event that a visual clue indicates this further testing may be necessary, the recommendation of that tree will be to re-evaluate.

#### **Terms**

The following terms are used in the Tree Data table (Table 3).

ID Tag # The pre-stamped tree number on the tag which is installed at approximately 6 feet

above ground level on the north side of the tree. Series 100 tags are virtual – no

physical tag was placed on the tree.

Species The species of a tree is listed by our local and correct common name and botanical

name by genus (capitalized) and species (lower case). Oaks frequently cross-pollinate and hybridize, but the identification is towards the strongest

characteristics.

#### DSH

'Diameter at Standard Height' is normally measured at 4'6" (above the average ground height for urban forestry), but if that varies then the location where it is measured is noted in the next column "measured at". (1) For a tree that branches at or below 4.5 feet, DSH means the diameter at the narrowest point between the grade and the branching point; and (2) For a tree with a common root system that branches at the ground, DSH means the diameter of the largest trunk only.

#### Non Intrusion Zone

The radius of the nonintrusion root zone is a radius equal to the protected distance required by the City of Sonoma municipal code 12.08.020, definitions clause I. converted to feet and factored by tree age, condition and health pursuant to the industry standard. Best Management Practices: Managing Trees During Construction, the companion publication to the Approved American National Standard, provides guidance regarding minimum tree root protection zones for long term survival. In instances where a tree is multi-stemmed the protected root zone is equal to the extrapolated diameter (sum of the area of each stem converted to a single stem) factored by tree age, condition and health.

# Arborist Rating

Subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead) as in Chart A. The rating was done in the field at the time of the measuring and inspection.

No problem(s)	5	Excellent
No apparent problem(s)	4	Good
Minor problem(s)	3	Fair
Major problem(s)	2	Poor
Extreme problem(s)	1	Very Poor
Dead	0	Dead

Rating #0: This indicates a tree that has no significant sign of life.

<u>Rating #1:</u> The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

**Notes** 

Provide notable details about each tree which are factors considered in the determination of the tree rating including: (a) condition of root crown and/or roots; (b) condition of trunk; © condition of limb and structure; (d) growth history and twig condition; (e) leaf appearance; and (f) dripline environment. Notes also indicate if the standard tree evaluation procedure was not followed (for example - why DSH may have been measured at a location other than the standard 54"). Additionally, notes will list any evaluation limiting factors such as debris at the base of a tree.

#### **Development Impacts**

Impact Term:

Projected development impacts are based on tree condition, species tolerance, distance relationships between the tree location and proposed grading, and the arborists previous experience and judgment. Field inspections and findings during the development project at the time of grading and trenching can change relative impacts. Closely followed guidelines and requirements can result in a higher chance of survival, while requirements that are overlooked can result in a dramatically lower chance of survival. Impacts are measured as follows:

	- 5		_	1	

Negligible Tree is unlikely to show any symptoms. Chance of

survival post development is excellent. Impacts to the Critical Root Zone are less than 10% and no changes to

Long Term Result of Impact:

the normal flow of water within the surrounding

topography are proposed.

Minor Tree is likely to show minor symptoms. Chance of

survival post development is good. Impacts to the Critical Root Zone are less than 15% and species

tolerance is good.

Moderate Tree is likely to show moderate symptoms. Chance of

survival post development is fair. Impacts to the Protected Root Zone are less than 35% and species

tolerance is good or moderate.

Severe Tree is likely to show moderate symptoms annually and

a pattern of decline. Chance of long term survival post development is low. Impacts to the Protected Root Zone are up to 50% and species tolerance is moderate to

poor.

Critical Tree is likely to show moderate to severe symptoms

annually and a pattern of decline. Chance of long term survival post development is negligible. Impacts to the

Protected Root Zone are up to 80%.

#### Observations

The site is a previously developed residential parcel with a barn. There is street frontage on two sides of the parcel with trees in the right of way (1) at the corner of E. Spain and 2nd, and (2) along 2nd.

There are also 2 large trees in the front that will require special protection measures during development.

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Table 3 - Tree Information Data

Field Tag #	Signific ant Tree	Location	Off site	Species Common Name	Species Botanical Name	DBH (in.)	Multi-S tems	Measu red at	Canopy Radius	Arborist Rating	Field Notes	Development and Protection Notes	Non-Int rusion Zone
200	Yes (Q)	Side Street Setback	Yes	Coast Live Oak	Quercus agrifolia	10 (?) Not in Data		54	15	3 Fair - Minor Problems	good base, structure and vigor. next to fence east.	Requires exclusionary fencing from project onset. Pre-Con meeting with arborist and project team to determine appropriate protection during development	12
201	Yes (Q)	Side Street Setback	Yes	Coast Live Oak	Quercus agrifolia		14,16	54	28	3 Fair - Minor Problems	fair base. metal fence in lower trunk. good structure and vigor.	Unlikely to be impacted.	20
202	Yes	Street Frontag e	Yes	Coast Live Oak	Quercus agrifolia	17		54	28	3 Fair - Minor Problems	good base, next to fence. pruned south canopy. fair vigor.	Unlikely to be impacted.	16
7945	Yes	Street Frontag e		Olive	Olea europae a	27		54	20	3 Fair - Minor Problems	good base. healthy trunk. multi stem at 8'. pruned south canopy, some minor decay present. fair canopy structure. good vigor.	Requires exclusionary fencing from project onset. Pre-Con meeting with arborist and project team to determine appropriate protection during development	20
7946	Yes (Q)	Street Frontag e	Yes	Box Elder	Acer negundo	9		54	12	or Health	50% dead bark on base and trunk. large decayed flush cut north at 3'. topped or failed apical trunk at 10'. unbalanced, weakly attached canopy stem leans south.	Proposed for Removal	

Field Tag #	Signific ant Tree	Location	Off site	Species Common Name	Species Botanical Name	DBH (in.)	Multi-S tems	Measu red at	Canopy Radius	Arborist Rating	Field Notes	Development and Protection Notes	Non-Int rusion Zone
7947	Yes	Street Frontag e		Deodar Cedar	Cedrus deodara	34		54	25	3 Fair - Minor Problems	base growing over concrete walkway, good base, structure and vigor. mid way up trunk east pruned for powerlines. good vigor. Power pole in close proximity.	Arborist on site for removal of walkway within 10' of tree. Requires exclusionary fencing from project onset. Pre-Con meeting with arborist and project team to determine appropriate protection during development	20
7948	No	Street Side Setback		Olive	Olea europae a	9		36	11	3 Fair - Minor Problems	rocks around base, good base. codominant at 4'. tree leans slightly southwest. good vigor.	Proposed for Removal	
7949	No	Interior		Olive	Olea europae a	14		36	13	3 Fair - Minor Problems	good base and flare. codominant at 4 and 7'. good canopy structure. good vigor.	Proposed for Removal	
7950	No	Interior		Plum	Prunus sp.	15		54	14	or Health	spiraled, possibly girdling roots at flare. extensive bark and heartwood decay starting at 4' and up to 9', 75% dead bark. 50% dead branches. low vigor.	Proposed for Removal	
7951	No	Interior		Coast Live Oak	Quercus agrifolia		6,8	54	15	3 Fair - Minor Problems	good base. codominant at 3'. good canopy structure. good vigor.	Recommend exclusionary fencing from project onset. Pre-Con meeting with arborist and project team to determine appropriate protection	10

Field Tag #	Signific ant Tree	Location	Off site	Species Common Name	Species Botanical Name	DBH (in.)	Multi-S tems		Canopy Radius	Arborist Rating	Field Notes	Development and Protection Notes	Non-Int rusion Zone
												during development. Tree unlikely to survive without adequate protection, summer irrigation and chemical treatment. Arborist to develop full protection plan at Pre-Con.	
7952	No	Interior		Olive	Olea europae a	10		36	14	3 Fair - Minor Problems	fair base. tree leans moderately southwest. codominant at 4'. good vigor.	Proposed for Removal	
7953	No	Interior		Glossy Privet	Ligustru m lucidum		5, 9	54	13	3 Fair - Minor Problems	codominant at 5", crowded stems. multi stem at 5.5'. good structure and vigor.	Proposed for Removal	
7954	No	Interior		Glossy Privet	Ligustru m lucidum		3,3,4, 4	54	13	3 Fair - Minor Problems	multi stem at 8", inclusions below unions. fair vigor.	Proposed for Removal	
7955	No	Interior		Ornament al Pear	Pyrus calleryan a	8		36	9		moderate bark damage on trunk. bark damage in canopy stems. low canopy. fair vigor.	Proposed for Removal	
7956	No	Interior		Modesto Ash	Fraxinus velutina 'Modest o'	6		54	13	1 Extreme Structure or Health Problems	extensive base and trunk decay, 60% dead bark. leans east. low vigor.	Proposed for Removal	

Field Tag #	Signific ant Tree	Location	Off site	Species Common Name	Species Botanical Name	DBH (in.)	Multi-S tems	Measu red at	Canopy Radius	Arborist Rating	Field Notes	Development and Protection Notes	Non-Int rusion Zone
7957	No	Interior		Willow	Salix sp.		12,12, 19	54	29	2 Major Structure or Health Problems	multi stem at 1'. stems lean heavy northwest. fair vigor.	Proposed for Removal	
7958	No	Interior		Edible Fig	Ficus carica		6,6,6	54	11	3 Fair - Minor Problems	multi stem at 1'. good structure and vigor.	Proposed for Removal	
7959	No	Interior		Plum	Prunus sp.		4,5,6	54	10	or Health	codominant at grade and 1.5'. 50% dead bark. high amount of dead branches. sparse canopy. low vigor.	Proposed for Removal	
7960	No	Interior		Edible Fig	Ficus carica	9		48	10	3 Fair - Minor Problems	good base. fair structure. slightly sparse foliage.	Summer irrigation and root protection during development. Small enough that it could be replaced if necessary	10
7961	No	Interior		Plum	Prunus sp.	14		36	10	1 Extreme Structure or Health Problems	spiraled base and trunk. 80% dead bark on canopy stems, codominant at 4'. low vigor.	Proposed for Removal	
7962	No	Street Side Setback		California Bay Laurel	Umbellul aria californi a		11,15	54	10	3 Fair - Minor Problems	codominant at 2'. plum east growing into base. small branch die back. fair vigor.	Proposed for Removal	

Field Tag #	Signific ant Tree	Location	Off site	Species Common Name	Species Botanical Name	DBH (in.)	Multi-S tems	Measu red at	Canopy Radius	Arborist Rating	Field Notes	Development and Protection Notes	Non-Int rusion Zone
7963	No	Street Side Setback		Plum	Prunus sp.	11		54	8		75% decay at base and trunk. growing through adjacent bay tree base. extensive canopy stem decay. low vigor.	Proposed for Removal	
7964	No	Street Side Setback		Edible Fig	Ficus carica		5,5	54	6	or Health	good base, rosemary around base. codominant at 2'. sparse, small foliage. 25% dead branches.	Summer irrigation and root protection during development. Small enough that it could be replaced if necessary	10
7965	Yes	Street Side Setbac k		Pepper Tree	Schinus molle		15,23	54	23	or Health	extensive base decay, completely hollow. extensive trunk decay in both stems. codominant at grade. healthy foliage. fair canopy structure.	Install exclusionary fencing at 18' from trunk. Re-evaluate for risk assessment	18
7966	No	Rear Yard		Coast Live Oak	Quercus agrifolia	23		54	24	or Health	40% dead bark on base southeast. dead bark on trunk. sparse foliage throughout canopy. branch tip die back. fair structure. fair/low vigor.	Install exclusionary fencing at 18' from trunk. Re-evaluate for risk assessment	18
7967	No			Ornament al Pear	Pyrus calleryan a		4,5	54	5	2 Major Structure or Health Problems	codominant at grade, crowded stems. 50% dead branches.	Proposed for Removal	
7968	No	Interior		Olive	Olea europae a	13		54	12	3 Fair - Minor Problems	fair base. multi stem a5 5'. leans slightly west. good vigor.	Proposed for Removal	

	Signific ant Tree	Location	Off site	Species Common Name	Species Botanical Name	DBH (in.)		Canopy Radius	Arborist Rating	Field Notes	Development and Protection Notes	Non-Int rusion Zone
7969	No	Interior		Silver Maple	Acer sacchari num	23	24	19	3 Fair - Minor Problems	swollen base. codominant at 4'. fair canopy structure. slightly sparse foliage. fair vigor.	Recommend exclusionary fencing from project onset. Pre-Con meeting with arborist and project team to determine appropriate protection during development. Tree unlikely to survive without adequate protection, summer irrigation and chemical treatment. Arborist to develop full protection plan at Pre-Con.	

## Conclusion and Arborists Recommendations for Site Planning

The Owner and/or Developer should ensure the project arborist's protection measures are incorporated into the site plans and followed. Tree specific protection measures can be found in Table 3 (pages 8-13).

#### **Prior to Onsite Activity:**

- A tree protection zone should be discussed at a precon meeting with the project arborist. The project arborist may require, at their discretion, the following protections:
  - o Additional Exclusionary fencing for tree root protection;
  - Board and batten tree trunk protection;
  - o 5/8" OSB placed on the ground in areas where foot traffic will be heavy during the demolition or construction;
  - o A minor adjustment to the location of any trenches to avoid tree roots and/or hydrovac excavation to avoid tree roots:
  - o Chemical treatments (for root vigor, insect protection and/or fungicide treatments to cut roots) for any of the trees;
  - o Clearance pruning supervised by the project arborist.

#### **During Construction:**

- Site monitoring by the project arborist is recommended at least once per month during the development project.
- Any trenching inside the root zone of trees of any protected tree shall be directly supervised by the project arborist. A hydraulic or air spade may be required for digging and placement of pipes underneath the roots, or boring of deeper trenches underneath the roots.
- The project arborist should directly supervise the clearance pruning, irrigation, fertilization, placement of mulch and chemical treatments.
- Clearly designate an area on the site outside the drip line of all trees where construction
  materials may be stored, and parking can take place. No materials or parking shall take place
  within the protected root zones of the protected trees;
- Construction debris shall not be placed within the critical root zone of any protected tree;
- All trees not specifically addressed within this report shall be protected by strict adherence to the General Development Recommendations, Appendix 2.

**Project Arborist:** 

Nicole Harrison

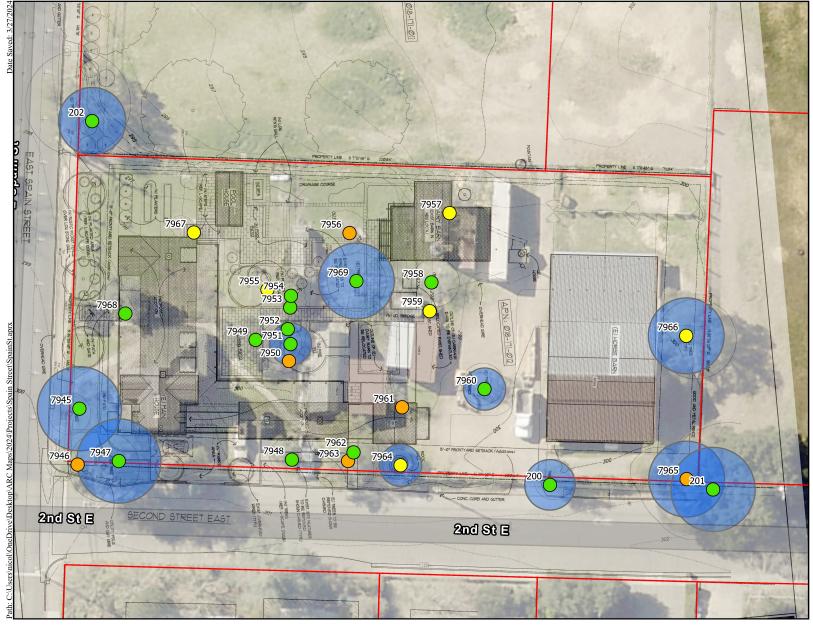
Registered Consulting Arborist #719

ISA Certified Arborist and Municipal Specialist #WE-6500AM

ISA Qualified Tree Risk Assessor

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#### Project Arborist

The project arborist for your development project is a consulting arborist with experience in interpretation of the County ordinances and requirements, preparation of Tree Protection Plans, onsite supervision of mechanical equipment during grading near trees, and communications with the County regarding tree preservation issues. The project arborist is responsible for notification to the County of the anticipated impacts to the individual trees and woodlands, as well as, verification of the actual impacts at the end of the project. The project arborist will provide an unbiased professional opinion as to the likelihood of survival of the trees retained during development.

#### Arborist Rating

Arborist condition ratings are subjective to condition and are based on both the health and the structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead). The ratings are calculated based on a level 2 visual assessment from the ground. No exploratory excavation, sounding, or other investigative actions were taken to determine if unseen defects may be present. The color coding in the legend indicates the overall condition of the







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#### PRICHARD FARM

196 East Spain St Sonoma, Sonoma County, CA 018-171-011 & 018-171-012 Prepared for: RBA Architecture

Ν

0 510 20 30 Feet

1 inch equals 16 miles

General Protection Guidelines

Unless specifically stated in a Tree Protection Plan, all of the following guidelines shall be followed for every tree to be preserved (on and off the site).

- 1. All trees to be preserved shall have their root zones and trunk(s) protected with a four (4) foot high orange or yellow plastic, high visibility exclusionary fence surrounding the trees root zone. The fence shall be staked 10o.c. maximum spacing, with 5 steel T posts, 2 x 2 square or 2+ wood posts. The exclusionary area shall be under the trees branched canopy and extend out to the trees longest dripline radius plus one foot, as a circle. The fencing shall completely surround the Protected Root Zone and not be U shaped or open at any point. Whenever possible, include as many trees that are to be preserved into one fenced exclusionary Protected Root Zone.
- 2. Soil contamination shall be avoided by eliminating chemical dumping on the property that may infiltrate into the Protected Root Zone. No: washing, dumping, or contaminating the site including but not necessarily limited to the following: concrete from tools or trucks, paint materials, sheetrock mud or stucco materials, other chemicals, solvents, herbicides, etc. Limestone gravel should not be used as base material or for drain rock as it will change the pH to be more alkaline, and may harm the native oaks.
- 3. Do not nail, tie, screw, or fasten any signs, braces, etc. to the trees that are to remain.
- 4. Clearance or any other type of pruning shall be directly supervised by the project arborist. All cutting, pruning, trimming, cabling, guying, and or bracing systems shall conform to the most current standards of the American National Standards Institute (ANSI). The current ANSI Tree Care Standards are A300 (Parts
- 1-4) 2000 to 2002 (copies at: www.ansi.org). The Best Management Practices (BMPs) are a companion publication to the ANSI Tree Care Standards, printed by the ISA (copies at: www.isa-arbor.com). The BMP booklets explain the details of the ANSI Tree Care Standards and how to follow them correctly.
- 5. Pruning of branches under 3 in diameter should be made with sharp hand tools: pruners, loppers, and/or handsaws, not chainsaws.
- Additional requirements may be added by the project arborist to enhance the likelihood of survival of the trees. These measures will be identified in the arborist reporting.

# Appendix 2 - Arborists General Recommendations for All Trees

- 1) Evaluate your large trees every 3 years. A qualified ISA Certified and Consulting arborist can help identify defects which might lead to failure and/or diseases and other health considerations that can be treated to promote a healthy urban forest. In addition, climate change trends may affect trees and your arborist can help identify actions, such as irrigation, that can improve the lifespan of the your trees.
- 2) Mulch the area under your native trees and, in particular, the native oaks' branched canopy with arborist type hard wood chips (4-6") deep), not redwood or cedar bark. Mulch produced from the trees on your property which are to be removed promotes soil fertility and increases the likelihood your trees will be healthy years into the future.
- 3) All trees to be saved during any work on the site, including clearing, grubbing, and even just equipment access, shall have their root zones and trunk(s) protected with a six (6') foot high chain link exclusionary fence surrounding the trees' root zone. The exclusionary area shall be under the tree's branched canopy and extend out to the tree's longest dripline radius plus one foot, as a circle. Where new construction will be within the Protected Root Zone, the fencing shall be 4' away from the footings, and extend around the rest of the canopy of the tree from that point. The fencing shall be maintained and not removed until the completion of construction. The fencing shall completely surround the Protected Root Zone and not be "U" shaped or open at any point. Whenever possible, include as many trees that are to be saved into one fenced exclusionary Protected Root Zone. The fencing plan will be completed once the developer decides on driveway, utility, and structure placement.
- 4) As soon as the concrete is poured and the forms are stripped, backfill the footings and stem walls. The protected trees nearby that are to remain should be watered to the point of soil saturation.
- 5) Care must also be continued after the construction is over to select the right plants to live under and near the native oaks. Watered lawns and any frequent summer watering near California oaks will not mix well over a long period. This will cause the oaks to perish due to Armillaria mellea (oak root fungus). The demise of the native oaks due to Armillaria mellea may take 5 20 years. Oaks should live 200 300 years.
- 6) To help control root damage, utility-trenching paths are to be established away from the roots and branches of the oaks that are to remain.
- 7) Soil compaction shall be avoided by maintaining the exclusionary Protected Root Zone fencing, keeping material storage, people, portable outhouses, vehicles, and dogs out of this area.
- 8) Soil contamination shall be avoided by eliminating chemical dumping on the property that may infiltrate into the Protected Root Zone. No: washing, dumping, or contaminating the site including but not necessarily limited to the following: concrete from tools or trucks, paint materials, sheetrock mud or stucco materials, other chemicals, solvents, herbicides, etc. Limestone gravel should not be used as base material or for drain rock as it will change the pH to be more alkaline, and may harm the native oaks.
- 9) Do not nail, tie, screw, or fasten any signs, braces, etc. to the trees that are to remain.
- 10) The cut and fill material excavated from or added to the lot can kill an oak by removing too many roots, drying or wetting the soil or by suffocating the roots with too much soil. Care must be taken with the added soil

as well as with the actual excavation. Roots need air as much as they need water to survive and for the whole tree to live and to flourish. If fill material is needed, properly designed aeration/ventilation systems made to protect the trees and allow for the fill material can be installed.

- 11) When deciding on a pruning arborist, inquire about a chipper and require them to utilize the chipped branches of the trees to be removed or pruned. The chips are to be used under the oaks that are to remain, as mulch in the Protected Root Zone. Other mulch may be used of arborist type woodchips (4 6" deep), but not redwood or cedar bark.
- 12) When the recommended pruning is completed, it is only advisable if a qualified ISA Certified Arborist is on site. No cutting of live wood over 2" shall be made. All cutting, pruning, trimming, cabling, guying, bracing, and lightning protection systems shall conform to the most current standards of the American National Standards Institute (ANSI). The current ANSI Tree Care Standards are A300 (Parts 1-4) 2000 to 2002 (copies at: www.ansi.org). The BMPs are "Best Management Practices", as companion publications to the ANSI Tree Care Standards, printed by the International Society of Arboriculture (copies at: www.isa-arbor.com). The BMP booklets explain the details of the ANSI Tree Care Standards and how to follow them correctly. Pruning of branches under 3" in diameter should be made with sharp hand tools: pruners, loppers, and/or handsaws, not chainsaws.

These important details will greatly increase the likelihood of survival for your protected trees.

### Appendix 3 - Disclosure, Assumptions and Disclaimer

- 1. I, Nicole Harrison, ISA Certified Arborist WE-6500AM, with "Focal Point Arboriculture Consulting", did personally inspect the site and investigate the tree(s) as mentioned in this and I performed all aspects of this report unless noted otherwise in the report.
- 2. I have neither financial interest in the tree work that may or may not be done, nor financial interest in the property where the tree(s) is (are) located unless noted within the report.
- 3. All opinions and recommendations expressed herein this report are solely mine. I have used my specialized education, knowledge, training and experience to examine the tree(s) and to make my opinions and recommendations to enhance the beauty, health and longevity, with an attempt to reduce the risk of who and/or what is near these trees. I cannot guarantee or warranty that a tree will be healthy or safe under all circumstances, nor for a specific period of time or that problems may not arise in the future.
- 4. My report with its opinions and recommendations are limited to the tree(s) inspected.
- 5. I attempt to be cognizant of the whole scope of a project, but many matters are beyond the scope of my professional consulting arborist services such as: exact property boundaries, property ownership, site lines, easements, codes, covenants & restrictions (CC&Rs), disputed between neighbors, and other issues.
- 6. I rely on the information disclosed to me and assume the information to be complete, true, and accurate.
- 7. The inspection is limited to visual examination of accessible items of the tree(s), from the ground unless otherwise noted, without excavation, probing, boring, or dissection, unless noted otherwise. Only information covered in this report was examined, and reflects the condition of those inspected items at that specific time.
- 8. Clients may choose to accept or disregard these opinions and recommendations of the arborist or to seek additional advice.
- 9. This report is copyrighted. Any modification or partial use shall nullify the whole report. Do not copy without written permission. This report is for the client and the client's assignees.
- 10. Sketches, diagrams, graphs, drawings, and photographs within this report are intended as visual aids and are not necessarily to scale, and should not be construed as engineering or architectural detail, reports or surveys.
- 11. I shall not attend or give a deposition and/or attend court by reason of this report unless fees are contracted for in advance, according to my standard fee schedule, adjusted yearly, for such services as described.

Signed:

# Appendix 4 - Site Photographs

Looking Approximately West. Historical Google imagery. Trees 7946, 7945, and 7947 (left to right). Tree 7946 is proposed for removal and 7945, 47 are proposed for retention with impacts. Tree 7946 has been utility pruned and as of October 2022 has 50% dead bark on base and trunk. large decayed flush cut north at 3', and weak attachment of the canopy.



Looking Approximately West. Historical Google imagery. Tree 200. Compacted gravel driveway and curb to be reconstructed. Protection of the existing roots will be determined during the development process.



Looking West. Tree 655. Note lean from ground and growth over curb (contact stress response). May indicate lack of compression roots.