



January 13, 2025

TREE ASSESSMENT, PROTECTION, AND MITIGATION PLAN

Job Location: 1 HOT SPRINGS RD., Santa Barbara, CA 93108

Prepared for:

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SUMMARY

The subject property is approximately 2.5 acres long, located between Channel Drive and the Southern Pacific Railroad. The proposed project is a multi-family housing development.

There are 25 trees on the site, including seven native oaks (one of which is dead) and 18 non-native trees. All the oaks, except the dead tree and one love tree, will be retained. All non-natives, except for one eucalyptus, will be removed. The one oak tree to be removed is in conflict with the proposed retaining wall along the north property line.

The preliminary landscape plan shows approximately 199 new trees to be planted. One 48" box oak will be required to mitigate the removed oak.

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BACKGROUND AND ASSIGNMENT

The owner of the subject property is proposing to build a multi-family housing development. I was retained to inventory and assess the trees, potential impacts from construction, and prepare a report with my findings and recommendations. I performed my fieldwork on September 3, 2024.

PURPOSE

I will assist my client and the project team in protecting trees to the greatest extent feasible, complying with the conditions of the City of Santa Barbara.

SCOPE OF PROJECT

The following tasks were required to complete my assignment:

- Review the site plans and visit the site.
- Inventory and assess native trees within the parameters of new construction.
- Update the site plan with the critical root zones of trees.
- Communicate any concerns with the project team.
- Prepare the report.

My assessment and report follows the protocol in the most recent publications:

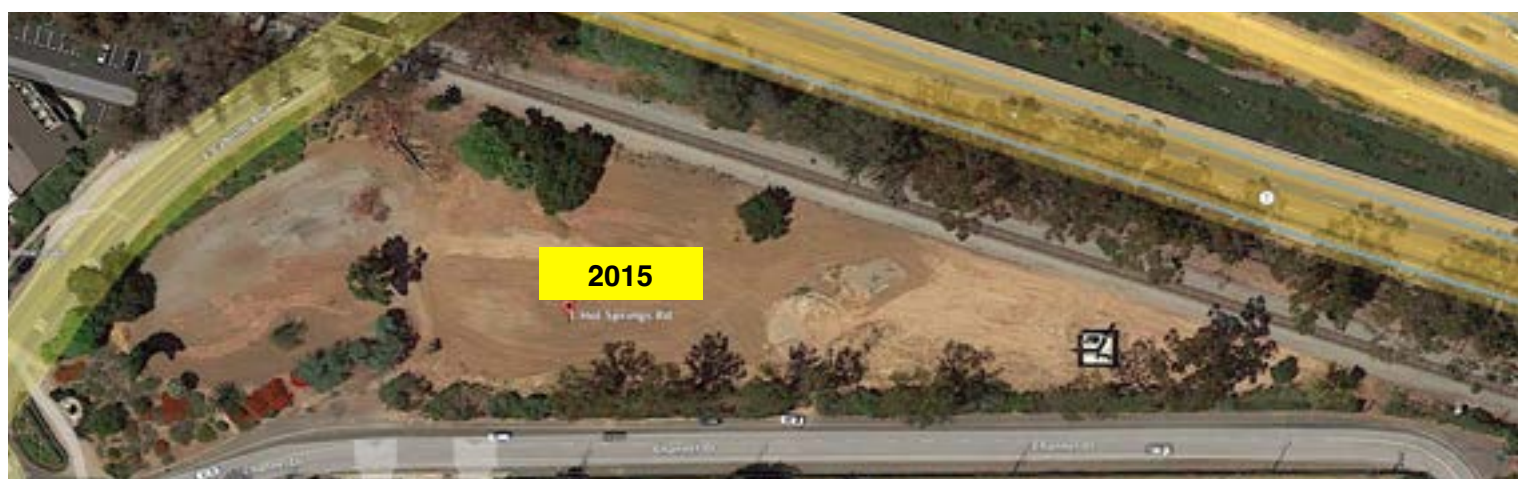
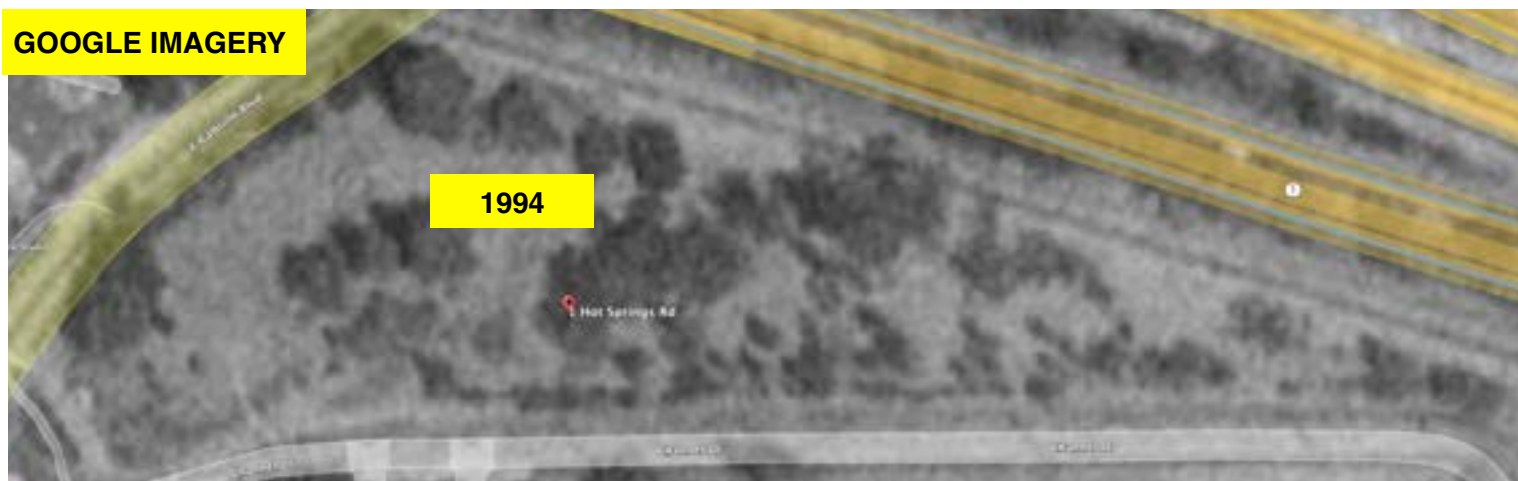
- *The International Society of Arboriculture's Best Management Practices-Managing Trees During Construction.*
- *American National Standards Institute (ANSI) A300 Part 5-Management of Trees and Shrubs During Site Planning, Development, and Construction.*

OBSERVATIONS

1. The area of the site is approximately 2.5 acres.
2. It is located south of the Southern Pacific Railroad tracks and Highway 101, and north of the Santa Barbara Cemetery with the entrance on Channel Dr.
3. A review of the 2015 topographical site plan and historical *Google Earth* imagery shows a degradation of the site (loss of trees) over the past 30 years.
4. The site is vacant with the exception of 25 trees within the development parameters and a utility tower. Note that several inventory trees are adjacent to but outside of the building envelopes.
5. Of the 25 existing trees, seven are native oaks, two are east of the project site, three are west of the project site, one is dead, and one is along the north property line.
6. The northern property line oak is the only oak within construction parameters.
7. There are 18 other non-native trees, 17 of which are proposed to be removed. The one non-native to be retained is a sugar gum eucalyptus, which warrants pruning.
8. The first table below identifies the tree species by common and botanical names, along with the quantities.
9. The second table is the actual tree inventory and assessment.
10. The site plans show the location of each tree by corresponding number.
11. Aside from oak trees outside of grading limits, most other trees are interior to the site and conflict with grading and construction.
12. The preliminary landscape plan shows that 199 trees will be planted on the site, although species have not yet been determined.

Tree Common Name	Botanical Name	Quantity	Project Status
Flowering Eucalyptus	<i>Corymbia ficifolia</i>	1	Remove
Silver Wattle	<i>Acacia dealbata</i>	1	Remove
Monterey Cypress	<i>Hesperocyparis macrocarpa</i>	1	Remove
Bailey Acacia	<i>Acacia baileyana</i>	1	Remove
Date Palm	<i>Phoenix canariensis</i>	1	Remove
Mexican Blue Palm	<i>Brahea armata</i>	1	Remove
Cook Pine	<i>Araucaria columnaris</i>	1	Remove
California Live Oak	<i>Quercus agrifolia</i>	7	Retain 5 - Remove 1 live and 1 dead tree
Pittosporum	<i>Pittosporum undulatum</i>	2	Remove 2
Eugenia	<i>Syzygium australe</i>	1	Remove
Sugar Gum Eucalyptus	<i>Eucalyptus cladocalyx</i>	1	Retain
Silk Oak	<i>Grevilia robusta</i>	1	Remove
Blue Gum Eucalyptus	<i>Eucalyptus globulus</i>	6	Remove 6
TOTALS		25 Trees	Remove 19/Retain 6

GOOGLE IMAGERY



TREE INVENTORY

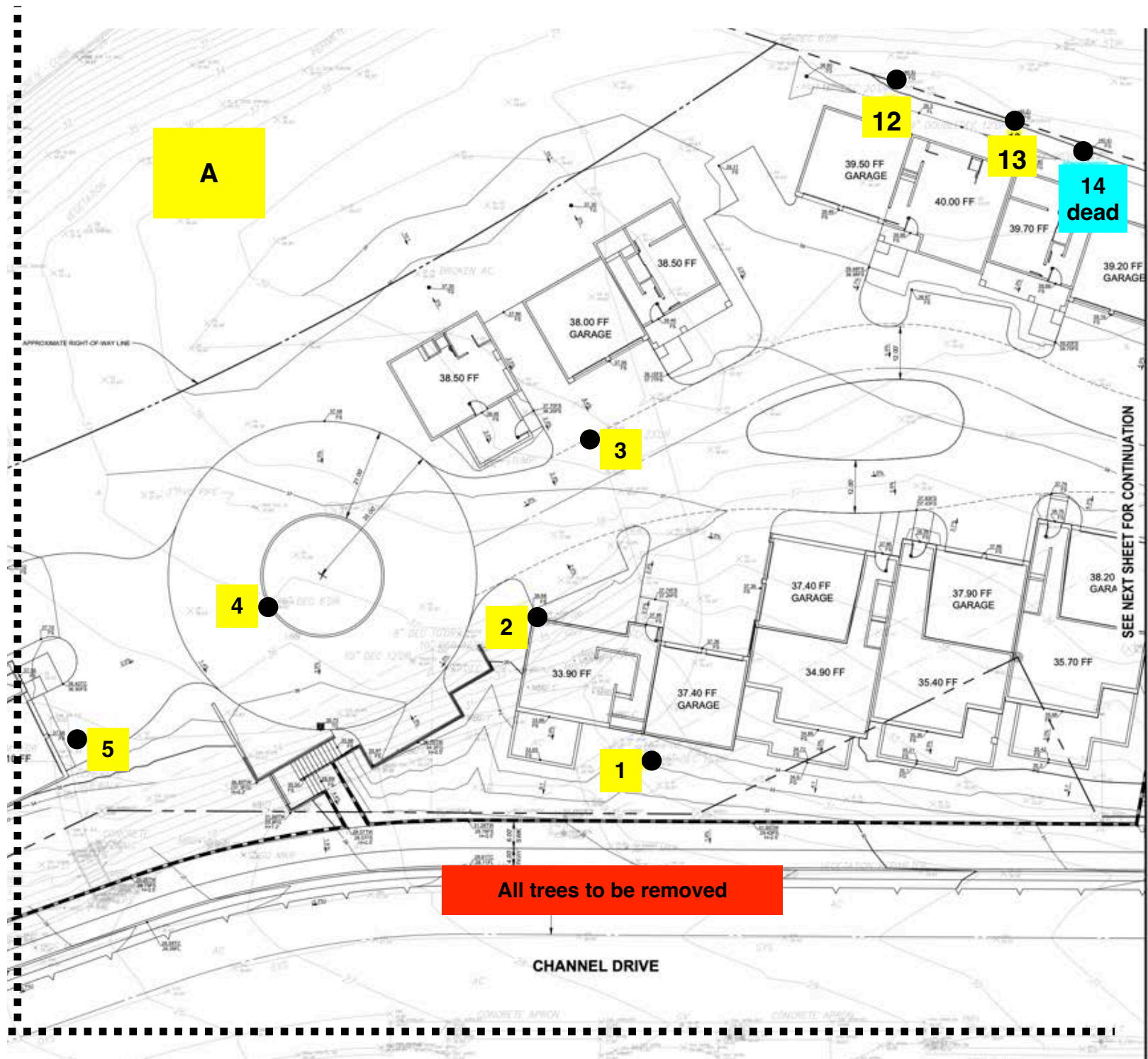
My observations, assessment, and findings are listed in the table below.

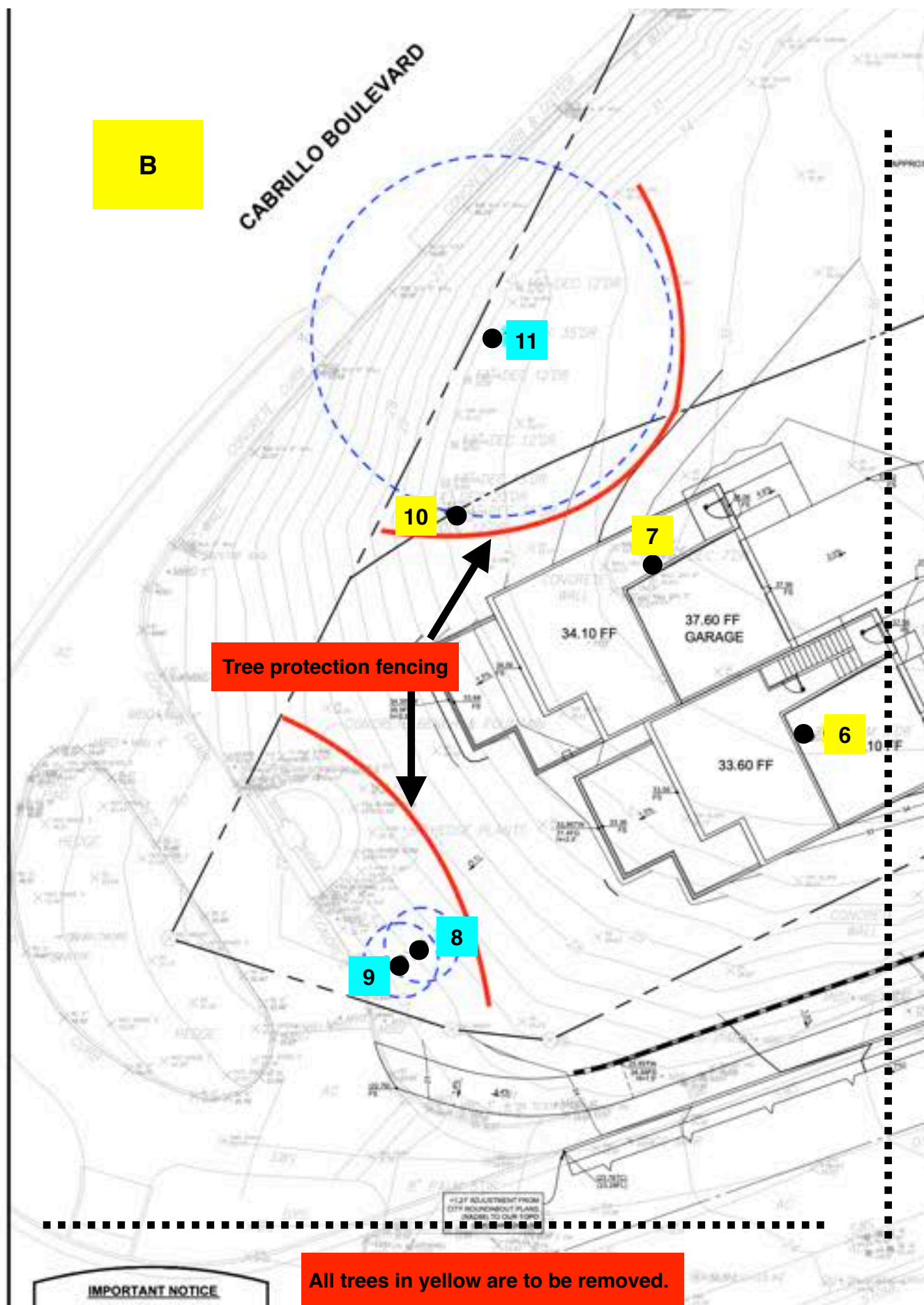
- Tree # corresponds with the site plan.
- Type is the common name.
- DBH is the trunk diameter (inches) at breast height, measured at 54" above ground. Multiple trunks are indicated with a "/" between numbers.
- CRZ is the critical root zone and is shown for native oaks only and is represented in radius-feet.
- Approximate height is S=small (< 10'), M=medium (> 10' and < 40'), and L=large (> 40').
- Condition is an assessment of biological health and mechanical structure and is rated as G=good, F=fair, or P=poor. A tree can be in good biological health but have a poor structure, and vice versa. If a tree is healthy but structurally poor, then it is considered to be in poor condition.
- Comment is a note of significance to myself.
- Project impact is the proposed status of the tree relative to the project.
- Cells in yellow are trees proposed to be removed (including one dead oak).
- Cells in blue are native oaks (do not include dead trees).

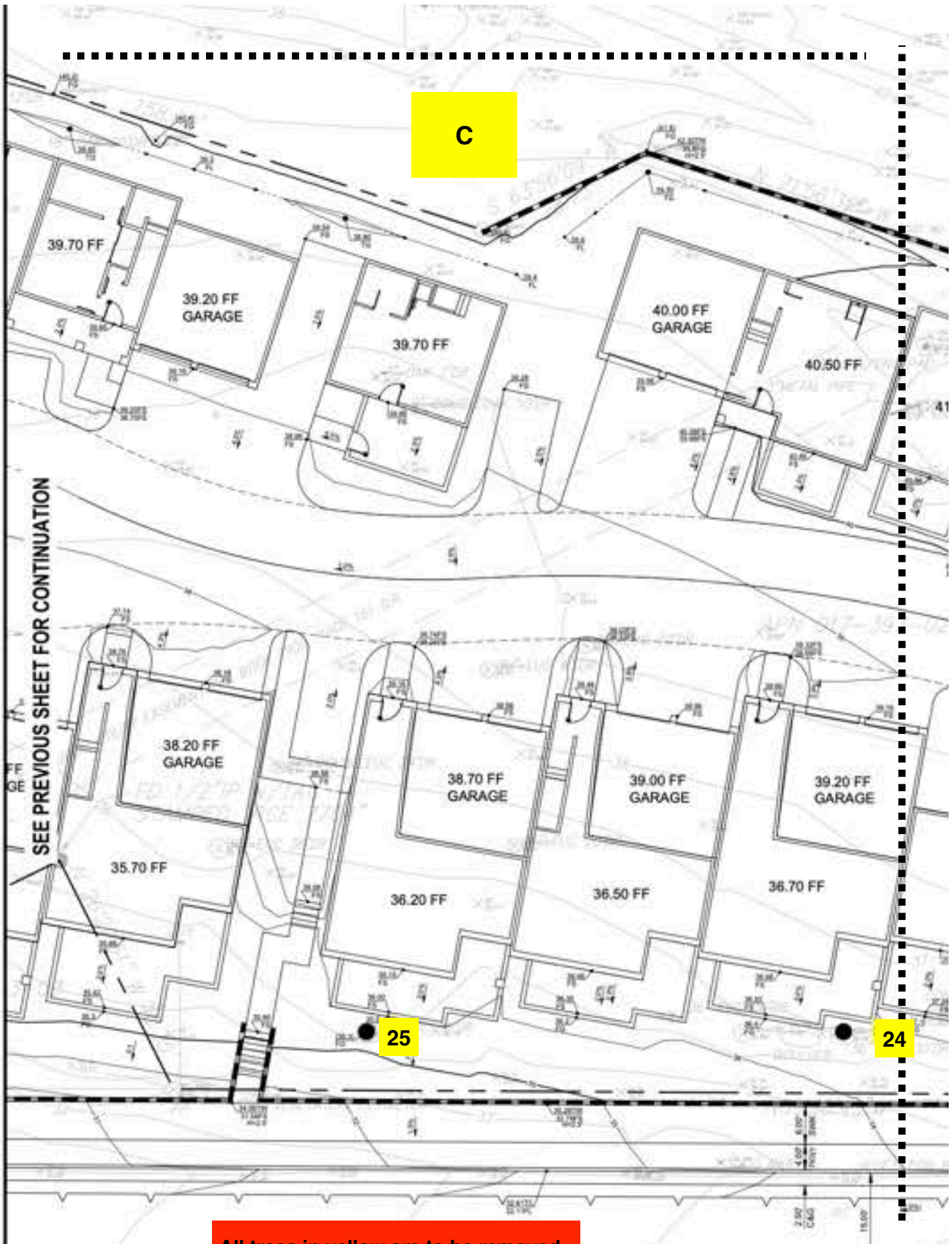
#	Type	DBH "	CRZ r'	Height	Condition	Comment	Project Impact
1	Flowering euc	19		M	F	Topped	Remove
2	Acacia	9		S	P	Small horizontal tree	Remove
3	Cypress	34		L	F	Senescent, dead top and declining	Remove
4	Acacia	6		M	F	Small volunteer	Remove
5	Date palm	36		S	G	Small volunteer	Remove
6	Bruhia	20		M	G	Could transplant	Remove
7	Cook pine	23		L	F	Significant lean to south	Remove
8	Oak	12	12	M	G	Not on survey, coupled with #9	Protect-outside of area
9	Oak	12	12	M	G	Not on survey, coupled with #8	Protect-outside of area
10	Pittosporum	12		M	P	Adjacent dead pitt	Remove
11	Oak	29	29	M	G	Low skirt, grows south	Protect-outside of area
12	Pittosporum	19		M	P	In decline	Remove
13	Eugenia	13/9		M	F	Not great	Remove
14	Oak	26	dead	M	Dead	Infested with oak bark beetles	Remove
15	Oak	13	13	M	G	Along north prop line	Remove
16	Sugar gum euc	36/ 33		L	G	Needs cleaning, lots of deadwood	Protect-outside of area
17	Oak	11	11	S	P	Severe sycamore borer	Protect-outside of area
18	Silk oak	20		M	P	Dying back	Remove
19	Oak	9	9	S	G		Protect-outside of area
20	Blue gum euc	32		L	F	Stressed, leans to south	Remove
21	Blue gum euc	38		L	F	Toward rd	Remove
22	Blue gum euc	26		L	F	Topped	Remove
23	Blue gum euc	37		L	F	Toward rd	Remove
24	Blue gum euc	42		L	F	Topped	Remove
25	Blue gum euc	44		L	F	Topped	Remove

SITE PLANS

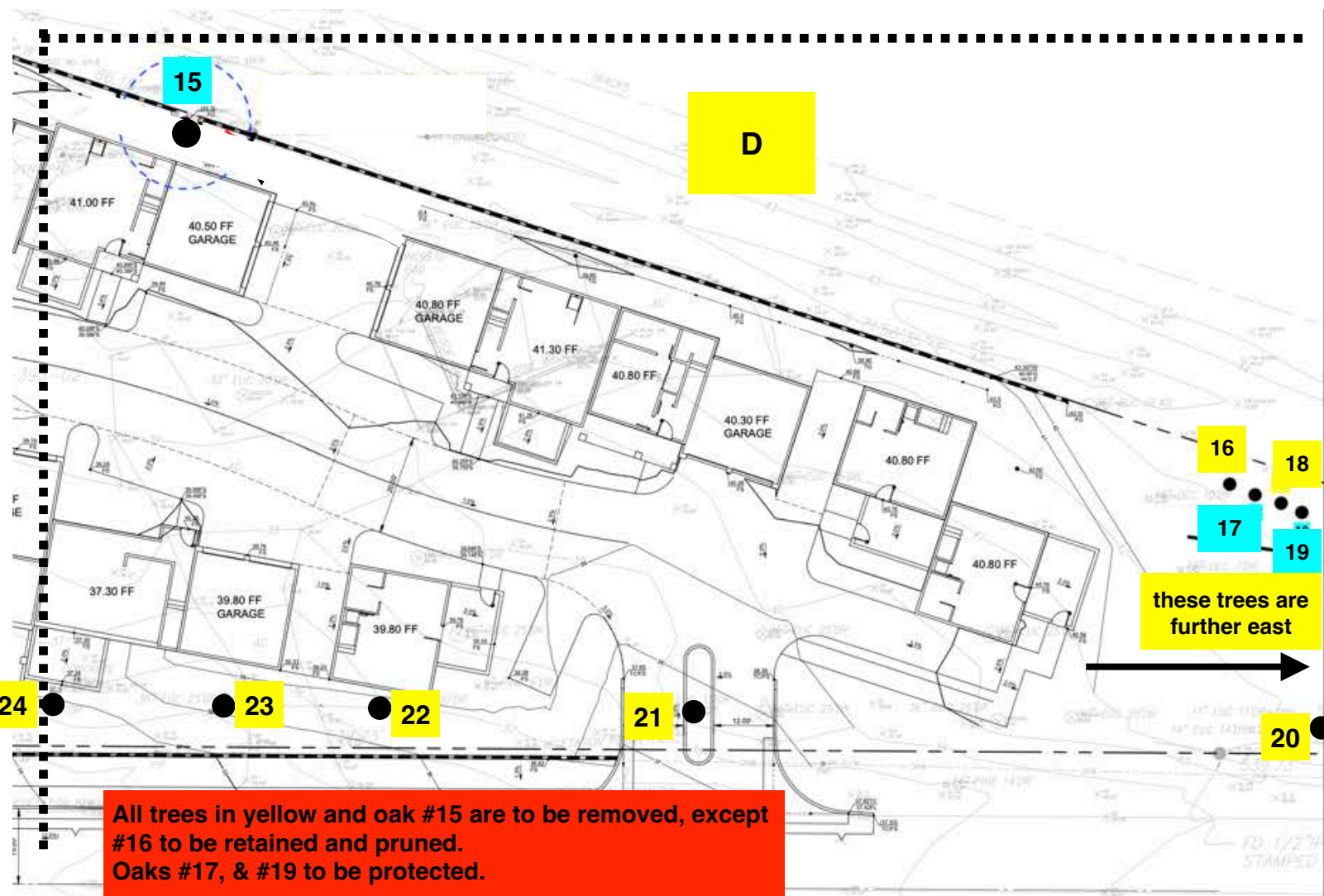








All trees in yellow are to be removed.



TREE PROTECTION MEASURES

PRE-CONSTRUCTION

Fencing and Signage

1. In designated areas, install fences to establish TPZs (tree protection zones).
2. TPZs are necessary to keep out construction activities, equipment, storage of materials, and dumping of spoils.
3. Use chain-link fencing adjacent to work areas. These fences should be 5'-6' in height on moveable stands.
4. Fences must remain upright and secure throughout the duration of the project.

Egress and Staging

5. There is an adequate area on the site to avoid tree protection zones.

Tree Care: Pruning & Irrigation

6. Prior to construction, prune trees to be retained. Remove the deadwood and lift low and heavy limbs where they may conflict with workers and construction.

CONSTRUCTION

Site Monitoring

7. Activities within construction areas where trees are to be protected must be monitored by the project arborist, primarily near oak #15.

Root Protection & Root Pruning

8. When work is necessary within the CRZ of trees to be retained, cut roots 1/2" and greater with a sharp tool perpendicular to the root growth. Use a hand pruner, hand saw, lopping pruner, or reciprocating saw to cut roots cleanly.
9. Root sealers have been determined not to be effective in preventing decay and should not be used.
10. When roots are cut, the newly exposed soil profile must be kept moist to encourage an area conducive to new root growth and prevent water loss from the soil.
11. In shallow cuts, light watering may be adequate.
12. Where soil cuts are deep, cover the newly exposed soil profile with burlap secured to the vertical cut with soil staples.
13. Stuff peat moss between the soil and the entire width of the burlap. Soak the peat and keep it moist to maintain a high water potential outside of the soil cut and minimize water loss from the remaining soil.
14. In some situations, it may be easier to use vertically placed sheets of plywood secured upright with stakes and stuffed with peat moss (between soil and plywood). Keep the peat wet.

Trenching, Excavation, and Grading

15. When trenching or excavating within a CRZ or TPZ, use care to minimize root damage. Use the smallest equipment in sensitive areas. Follow root pruning and irrigation measures above. The project arborist must monitor these activities adjacent to trees.

Utilities

16. The path of utilities should avoid tree protection zones. If a utility must travel within the CRZ, consider boring beneath roots larger than 2" in diameter. The depth and distance from the trunk should be determined by the project arborist prior to the commencement of boring. If trenching is the preferred method, the project arborist should determine the path with the least potential impact.

Irrigation and Dust

17. Construction activities can create copious amounts of dust. Depending on the project's timing, hose off the tree canopy to wash dust from leaf surfaces.
18. If trees are root-pruned or suffering from drought, irrigate the root zone as directed by the project arborist.

Drainage

19. Construction and grade changes should not alter water flow to protected trees unless supplemented with drains or irrigation, depending on the needs.

Landscape Installation

20. Use smaller plants in sensitive root areas to avoid damage to protected trees.
21. Avoid excess irrigation to protected trees as determined by species.
22. Use plants compatible with the water requirements of protected trees.
23. Avoid digging trenches to install irrigation and lighting within TPZs. Look for direction from the project arborist if questions arise.
24. When installing lighting on trees, avoid girdling trunks and limbs with permanent ties. Fasteners that screw into the trunk and limbs should be approved prior to installation.

REFERENCES

- ANSI (*American National Standards Institute*) A300: Part 5 - *Management of Tree and Shrubs During Site Planning, Site Development, and Construction*, 2012
- *Best Management Practices: Managing Trees During Construction, Second Edition*, International Society of Arboriculture, Champaign, Illinois, 2016.
- Harris, R. W., and Matheny, N. P., and Clark, J. R., 2004. *Arboriculture: Integrated Management of Landscape Trees, Shrubs, and Vines*, Fourth Edition. Prentice Hall.
- Matheny and Clark, *Trees and Development; A Technical Guide To Preservation of Trees During Land Development*, ISA, 1998.

ARBORIST'S DISCLOSURE AND CERTIFICATION OF PERFORMANCE

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services, such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

I, Bill Spiewak, certify:

I have personally inspected the trees on the property referred to in this report and have stated my findings accurately.

The analysis, opinions, and conclusions stated herein are my own and are based on current scientific procedures and commonly accepted arboricultural practices.

Signed:

Bill Spiewak

Bill Spiewak

Registered Consulting Arborist #381

American Society of Consulting Arborists

Board Certified Master Arborist #310B

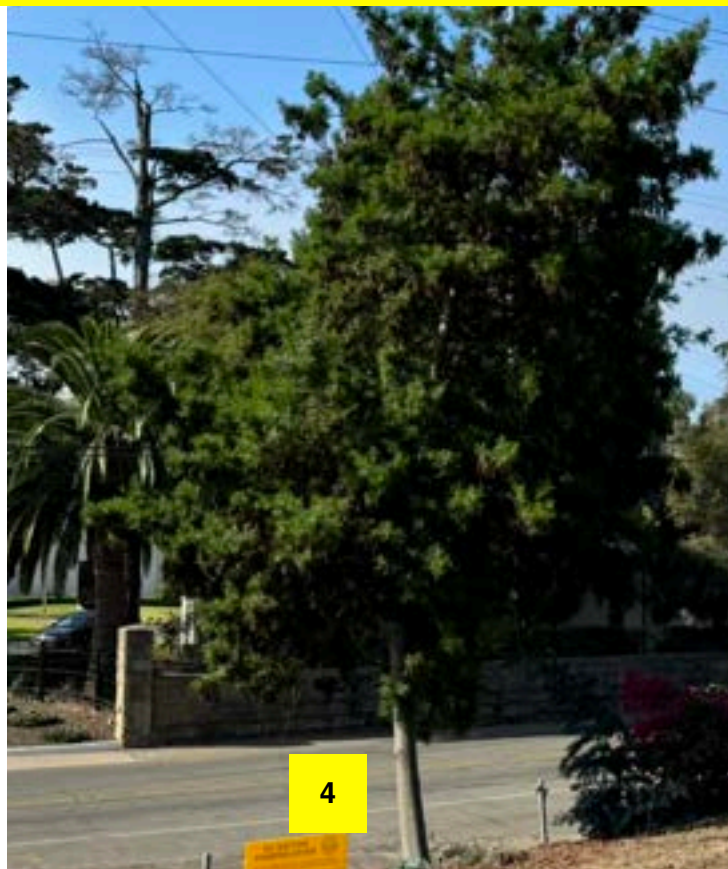
International Society of Arboriculture



PHOTOS



#1, a Flowering Eucalyptus (not a true euc) is in the proposed entryway along with #2, a fallen Bailey Acacia and #3 a young Silver Wattle Acacia. Cypress #3 is also in the middle of the project and is in decline.





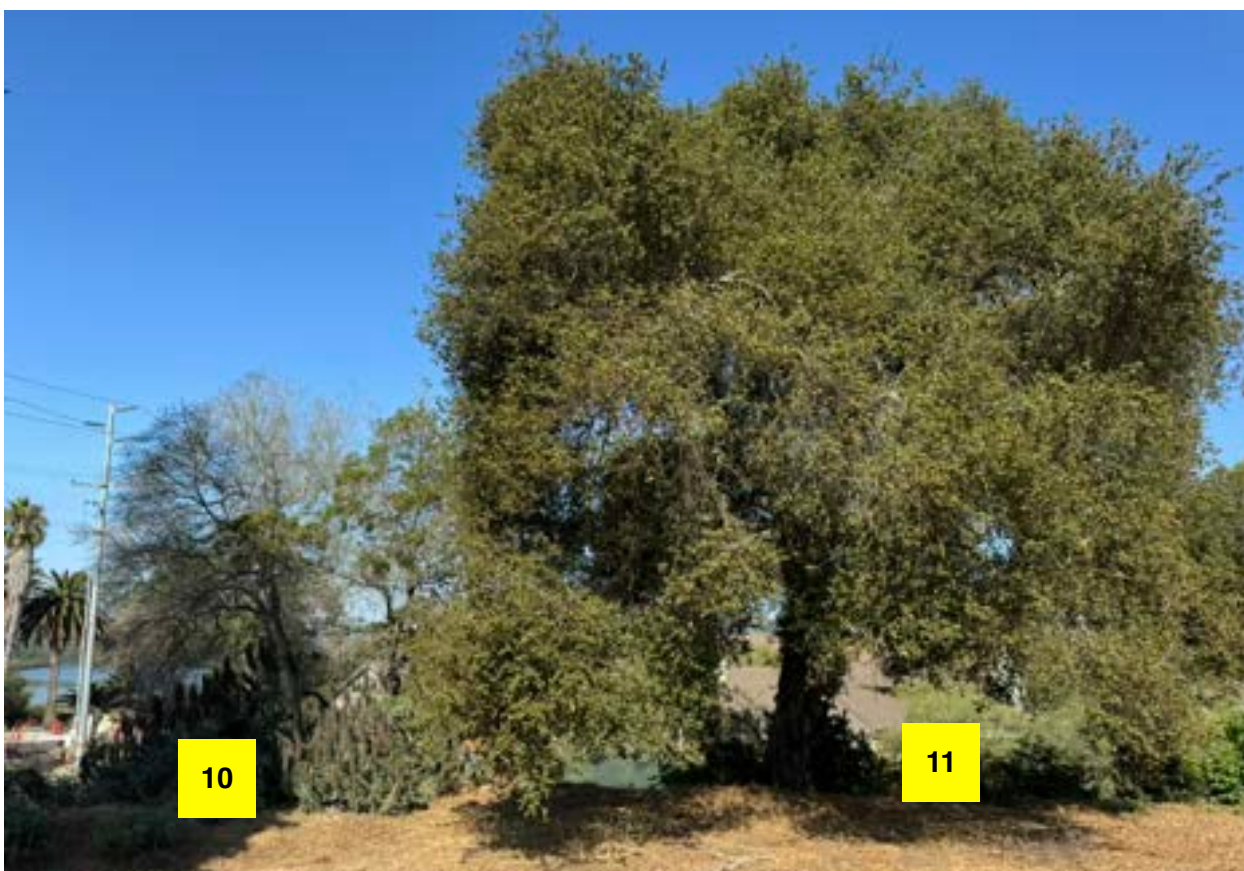
Both palms above can be relocated, although #6 is a *Brahea* and more valuable than the Date Palm #5.

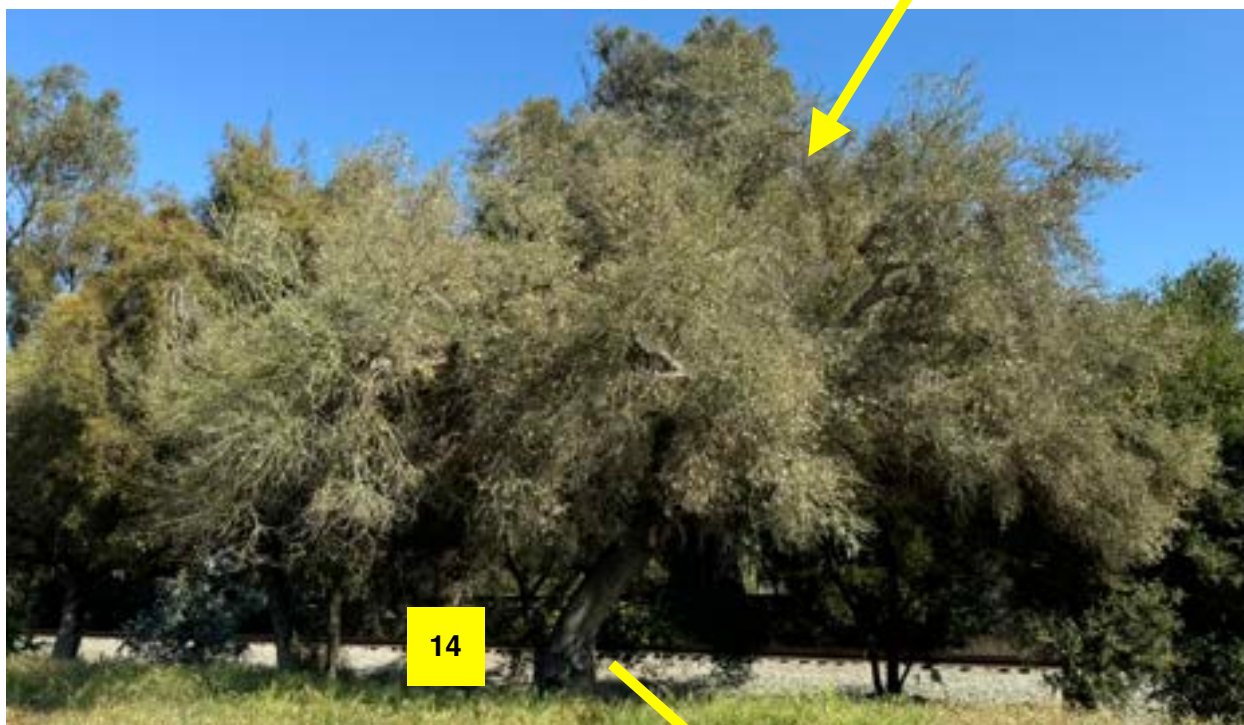
The Cook Pine #7 is in the middle of the project site and will be removed.





Oak #8 and 39 are side by side and west of the project area.
Pittosporum #10 is in decline and needs to be removed.
Oak #11 is also west of the project area.





Oak #14 is dead from oak bark beetle infestation. Small inset shows holes in the trunk where beetles entered and bored into the xylem (water conduction tissue). This is easier to see in the field.

Trees #12 and #13 (Pittosporum and Eugenia) are non-natives and are to be removed due to their location along the proposed retaining wall.

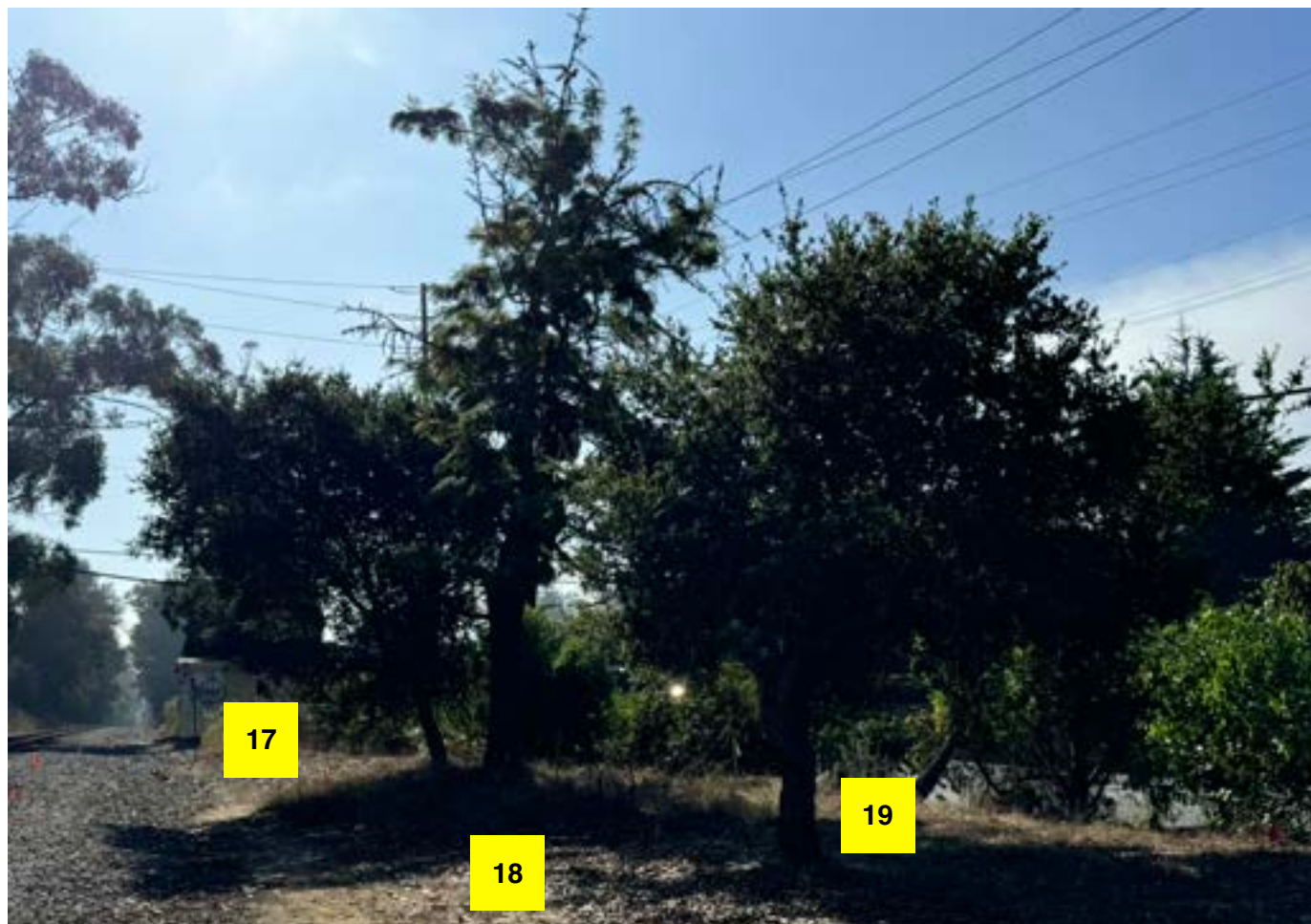




Oak #15 is to be removed.

Sugar Gum Eucalyptus #16 is east of the project area and can be retained and poses a low risk if properly pruned.





Trees #17 - #19 are also east of the project area. #18 is a Silk Oak (non-native) and in poor condition. Oak #19 is infested with sycamore borer but can be retained and is likely to survive.





Six Blue Gum Eucalyptus along the project site that overhang Channel Drive and the proposed new residences. These are proposed to be removed.

