

MACNAIR  
&  
ASSOCIATES  
CONSULTING ARBORISTS AND HORTICULTURISTS



July 25, 2017

Mr. Rob Gjestland  
Senior Planner  
City of Sonoma  
No. 1 The Plaza  
Sonoma, CA 95476

RE: Peer Review of Arborist Reports- 149 4th Street Residence, Lot 227 Residence, Lot 228 Residence & Driveway Project (Brazil Street)

Dear Mr. Gjestland,

Pursuant to a request from the City of Sonoma, this report provides a peer review of the Tree Preservation and Mitigation Reports prepared for the 149 4th Street Residence, Lot 227 Residence, Lot 228 Residence & Access Driveway (Brazil Street) residential projects. These arborist reports were prepared by Horticultural Associates (HA) dated June 7, 2017.

This report addresses the following tasks:

1. Review the tree health and structural ratings of trees within the construction areas.
2. Verify the tree removals required for project construction.
3. Assess the probable construction impacts and feasibility for trees designated to be preserved.
4. Review tree preservation recommendations and procedures.
5. Review of proposed mitigation for tree removals.

Documents Reviewed:

1. Preliminary Grading and Drainage Analysis dated May 25, 2017, prepared by Bear Flag Engineering.
2. Brazil Street Lot 228-Presentation-14April 2017 and Project Narrative (Inc. view analysis) prepared by Nick Lee Architecture.
3. Brazil Street Lot 227-Presentation-14April 2017 and Project Narrative (Inc. view analysis) prepared by Nick Lee Architecture.
4. 2017-04-14 4TH-NLA (149 4<sup>th</sup> Street project analysis) prepared by Nick Lee Architecture.
5. Tree Preservation and Mitigation Report 149 4<sup>th</sup> Street dated 6/7/17.
6. Tree Preservation and Mitigation Report Lot 227 Brazil Street dated 6/7/17.

7. Tree Preservation and Mitigation Report Lot 228 Brazil Street dated 6/7/17.

METHODOLOGY:

Two site inspections were conducted reviewing tree locations, tree location plans, tree health and structural ratings, and tree zones identified as visual screening in the architectural presentations. The grading plans were evaluated for probable construction impacts to trees with the results compared to the “expected impact” conclusions in the HA Tree Preservation and Mitigation Reports.

Specifically, fill and cut grading impacts were assessed with distance to the tree measured. The Critical Root Zones<sup>1</sup> were calculated with the grading impact and distance to the tree protection and critical root zones determining the degree of construction impact.

Trees located near grading, excavation, or construction limits were categorized into the following five construction impact categories.

- No Impact: Trees located a sufficient distance from the grading limits and outside the tree protection zone where no impact is expected.
- Limited Impact: Tree located at the outer edge of the Tree Protection Zone (TPZ). Typical protection requirement is fencing to avoid soil impacts from construction activities.
- Moderate Impact: Grading, excavation, or other intensive construction activities occurring within the TPZ, but outside the critical root zone (CRZ) (the area around the tree where roots critical for stability and health are located). More intensive tree protection procedures are usually required and may include root pruning, crown pruning, and cultural procedures for mitigating the impact.
- Significant Impact: Grading, excavation, or other intensive construction activities occurring close to or within the CRZ. Intensive tree protection procedures as well as post-construction management, including supplemental irrigation, are usually required. Depending upon the size of the tree and level of potential root loss, a risk assessment may also be appropriate.
- Removal Due to Construction: Trees located within or adjacent to building construction zones or grading limits and requiring removal.

The corresponding impact categories and description in the HA reports are:

*“Considering the proximity of construction activities, type of activities, tree species, and tree condition the following ratings are used to estimate the amount of impact on tree health and stability. Most trees will tolerate a (1) rating, many trees could tolerate a (2) rating with careful consideration and mitigation, but trees with a (3) rating are poor candidates for preservation due to their very close proximity to construction or because they are located within the footprint of construction and cannot be preserved.”*

---

<sup>1</sup> The Critical Root Zone is the radial area around the trunk where all root impacts should be avoided or mitigated with specialized procedures. Typically, the critical root zone will be a radial distance equal to three times to five times (3X-5X) the trunk diameter.

HA Impact Categories:

- (1) Minor impact on long-term tree integrity can be expected as a result of proposed development.
- (2) Moderate impact on long-term tree integrity can be expected as a result of proposed development.
- (3) Significant impact on long-term tree integrity can be expected as a result of proposed development (includes removal).

RESULTS/DISCUSSION:

Health and Structural Ratings:

The health and structural ratings provided in the HA report were found to be reasonably accurate. A random sample approach was used for this assessment. There are variations in the health assessment that may be due to the seasonal timing of the original HA evaluation. Also, due to the rating coding method with no narrative provided in the HA report, it was difficult to accurately interpret the ratings.

The tree screening areas shown on the Tree Screening and Impact Exhibit (7/14/17) has important screening areas that were not fully surveyed and only partially evaluated within the HA report. cursory field observations of these areas indicate variability in the health and structural condition within these tree zones.

Tree Construction Impact Assessment:

The following tables summarize the construction impact analysis results and differences between the HA report conclusions and the MacNair and Associates (MA) results. Also provided is a summary of the total number of tree species and the removal and significant impact estimates. Trees with significant impacts will have a high risk of decline post-construction and should be considered as probable removals.

**149 4th Street Residence**

Removal and Significant Impact Results:

Tree Species	Total Trees	HA Removal Estimate	HA Significant Impact Estimate	MA Removal Estimate	MA Significant Impact Estimate	Difference
blue oak	40	23	2	25	3	+3
coast live oak	19	8	0	7	2	+1
California bay laurel	4	2	0	2	0	0
European olive	5	4	0	4	0	0
Monterey pine	2	0	0	0	0	0
Oregon white oak	2	1	0	1	0	0

Tree Species	Total Trees	HA Removal Estimate	HA Significant Impact Estimate	MA Removal Estimate	MA Significant Impact Estimate	Difference
almond	1	1	0	1	0	0
valley oak	1	0	0	0	1	+1
Totals:	74	39	2	40	6	5

The MA analysis concludes that five additional trees will require removal or be subject to significant construction impact at the 149 4<sup>th</sup> Street Residence site.

All Construction Impact Categories:

Construction Impact Category	HA Results	MA (MacNair and Assoc.) Results
Minor (Limited) or No Impact	17	20
Moderate Impact	16	8
Significant Impact	2	6
Removal Required	39	40
Total Trees:	74	74

**Lots 227 and 228 Driveway**

Removal and Significant Impact Results:

Tree Species	Total Trees	HA Removal Estimate	HA Significant Impact Estimate	MA Removal Estimate	MA Significant Impact Estimate	Difference
blue oak	2	0	1	1	0	+1
coast live oak	41	11	5	16	6	+6
European olive	5	4	0	4	0	0
Totals:	48	15	6	21	6	6

The MA analysis concludes that six additional trees will require removal or be subject to significant construction impact as part of the driveway construction.

Construction Impact Category	HA Results	MA (MacNair and Assoc.) Results
Minor (Limited) or No Impact	12	16
Moderate Impact	15	5
Significant Impact	6	6
Removal Required	15	21
Total Trees:	48	48

**Lot 227 Residence**

Removal and Significant Impact Results:

Tree Species	Total Trees	HA Removal Estimate	HA Significant Impact Estimate	MA Removal Estimate	MA Significant Impact Estimate	Difference
bay laurel	3	3	0	3	0	0

Tree Species	Total Trees	HA Removal Estimate	HA Significant Impact Estimate	MA Removal Estimate	MA Significant Impact Estimate	Difference
California buckeye	1	1	0	1	0	0
coast live oak	32	15	1	15	4	+3
European olive	1	0	0	0	0	0
Totals:	37	19	1	19	4	3

The MA analysis concludes that three additional trees will require removal or be subject to significant construction impact as part of the residential construction.

Construction Impact Category	HA Results	MA (MacNair and Assoc.) Results
Minor (Limited) or No Impact	7	10
Moderate Impact	10	4
Significant Impact	1	4
Removal Required	19	19
Total Trees:	37	37

### Lot 228 Residence

Removal and Significant Impact Results:

Tree Species	Total Trees	HA Removal Estimate	HA Significant Impact Estimate	MA Removal Estimate	MA Significant Impact Estimate	Difference
bay laurel	1	0	1	0	1	0
blue oak	2	1	0	1	0	0
coast live oak	4	1	1	2	0	+1
Totals:	7	2	2	3	1	1

The MA analysis concludes that one additional tree is likely to require removal as part of the residential construction.

Construction Impact Category	HA Results	MA (MacNair and Assoc.) Results
Minor (Limited) or No Impact	3	3
Moderate Impact	0	0
Significant Impact	2	1
Removal Required	2	3
Total Trees:	7	7

In summary, a total of 15 additional trees will likely require removal or are significantly impacted compared to the estimates of the HA report, and 20 additional trees compared to the civil engineer estimate. The MA estimate for total trees removed or significantly impacted for all four construction areas is 100 trees. The tree impact analysis data is provided in Appendix A of this report.

Tree Preservation Recommendations:

The HA report provides generalized procedures for tree protection and damage mitigation. These include establishment of a tree protection zone (TPZ), tree protection fencing, avoiding grading within the TPZ, mulch application, pruning, requirement for soil work within the TPZ that work be supervised by the project arborist, root pruning procedures, cultural mitigation procedures for impacted trees, and requirements for tree removal work.

Tree Removal Mitigation:

The Preliminary Grading and Drainage Analysis states that damaged or removed trees will be replaced at 1.5 to 1 ratio. Based upon the MA 100 tree estimate of removed and significantly impacted trees, this mitigation approach requires 150 replacement trees. Trees are to be planted near the removed tree locations, adjacent to the driveway and in open areas downslope of the residences to ensure visual screening. No planting or landscape plans have been submitted to show the precise locations of the replacement trees.

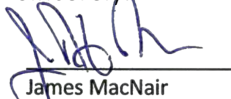
It is this author's opinion that this is an adequate and appropriate approach for replacement of the removed trees and to ensure future screening of the hillside residences.

RECOMMENDATIONS:

- 1.) The project arborist should provide more detailed tree protection specifications for the individual trees based upon the specific construction impact.
- 2.) Consider removal of the olives that have naturalized within the native woodland areas. Olives are considered an invasive species within native plant communities. Additional replacement mitigation trees are not necessary given the 150 replacement trees already designated.
- 3.) The woodland zones important for visual screening are recommended for detailed evaluation by the project arborist to assess the health of the trees and to provide long term management requirements.
- 4.) A landscape plan showing replacement tree locations, irrigation, and maintenance requirements should be prepared and submitted to the city as a condition of approval.
- 5.) Wildland fire defensible space (vegetation management) requirements should be verified as compliant with the mitigation and tree preservation goals of the project.

Please contact me with any questions, or if additional information is required.

Sincerely,



James MacNair

International Society of Arboriculture Certified Arborist (WC-0603A)  
International Society of Arboriculture Qualified Tree Risk Assessor

## Appendix A

# Tree Evaluation and Construction Impact Analysis Data Matrix

Caymus Builders 149 4th Street and Lots 227 and 228 Brazil Street Project  
Tree Construction Impact Analysis Matrix

construction impact is more severe than HA rating.

149 4th Street East Tree Construction Impacts

Horticultural Associates (HA) Tree Data												MacNair and Associates (MA) Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?
1	<i>Pinus radiata</i>	Monterey Pine	12+12+13	21	40	18	2	2	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located outside construction area. No impact.	5	NI	Yes
2	<i>Quercus agrifolia</i>	Coast Live Oak	4+5+7	10	20	12	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located outside construction area. No impact.	3	NI	Yes
3	<i>Quercus agrifolia</i>	Coast Live Oak	7+10	12	25	12	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located outside construction area. No impact.	3	NI	Yes
4	<i>Pinus radiata</i>	Monterey Pine	24	24	35	18	2	2	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located outside construction area. No impact.	6	NI	Yes
5	<i>Olea europaea</i>	Olive	2+4+4+5+6	10	15	12	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
6	<i>Quercus garryana</i>	Oregon Oak	10	10	22	14	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
7	<i>Quercus garryana</i>	Oregon Oak	14	14	35	25	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Not shown on plan.	4	?	
8	<i>Quercus douglasii</i>	Blue Oak	18	18	35	24	4	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located in 16' diameter circle. Grading cut and fill zone on three sides of the tree. Significant to severe impact likely.	5	SI	Yes
9	<i>Quercus douglasii</i>	Blue Oak	16	16	35	24	4	3	Yes	3	2	Located within grading limits. Removal required.	4	RC	Yes
10	<i>Olea europaea</i>	Olive	4+12+10+10+5	20	30	18	4	3	Yes	3	2	Located within grading limits. Removal required.	5	RC	Yes
11	<i>Quercus douglasii</i>	Blue Oak	14	14	35	18	4	3	Yes	3	2	Located within grading limits. Removal required.	4	RC	Yes
12	<i>Quercus douglasii</i>	Blue Oak	5+5+6	9	12	10	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
13	<i>Quercus douglasii</i>	Blue Oak	12	12	35	18	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
14	<i>Quercus douglasii</i>	Blue Oak	10	10	30	12	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
15	<i>Quercus douglasii</i>	Blue Oak	10	10	15	12	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
16	<i>Quercus douglasii</i>	Blue Oak	12	12	30	18	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
17	<i>Quercus douglasii</i>	Blue Oak	20	20	40	18	4	3	Yes	3	2	Located within grading limits. Removal required.	5	RC	Yes
18	<i>Quercus douglasii</i>	Blue Oak	13	13	40	18	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
19	<i>Quercus douglasii</i>	Blue Oak	10	10	35	14	3	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
20	<i>Prunus dulcis</i>	Almond	10	10	30	12	2	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
21	<i>Quercus douglasii</i>	Blue Oak	13	13	30	10	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located within 4' of retaining wall on three sides and with a 4' cut. Removal likely required.	3	RC	No
22	<i>Quercus douglasii</i>	Blue Oak	14	14	35	15	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 6' from grading limits. Moderate impact likely.	4	MI	Yes
23	<i>Quercus douglasii</i>	Blue Oak	12	12	35	15	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 20' from grading limits. No impact expected.	3	NI	Yes
24	<i>Quercus douglasii</i>	Blue Oak	20	20	35	22	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from retaining wall with 2' cut. Significant impact. Removal may be required.	5	SI	No
25	<i>Quercus douglasii</i>	Blue Oak	6	6	25	15	2	2	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from grading limits. Limited impact likely.	2	LI	Yes
26	<i>Olea europaea</i>	Olive	12	12	25	16	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
27	<i>Quercus douglasii</i>	Blue Oak	5+3	6	8	12	2	2	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
28	<i>Quercus douglasii</i>	Blue Oak	6	6	30	12	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
29	<i>Quercus agrifolia</i>	Coast Live Oak	6+4	7	22	12	2	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
30	<i>Quercus douglasii</i>	Blue Oak	6+9	11	21	15	3	3	Yes	3	3	Located within grading limits. Removal required.	3	RC	Yes
31	<i>Quercus douglasii</i>	Blue Oak	7	7	35	15	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 6' from grading limits. Moderate impact likely.	2	MI	Yes
32	<i>Quercus douglasii</i>	Blue Oak	6	6	25	14	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
33	<i>Quercus agrifolia</i>	Coast Live Oak	6+6	8	20	12	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 6' from grading limits. Moderate impact likely.	2	MI	Yes
34	<i>Quercus douglasii</i>	Blue Oak	5+7	9	30	15	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 3' from grading limits. Moderate impact likely.	2	Mi	Yes
35	<i>Quercus douglasii</i>	Blue Oak	4	4	20	12	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from grading limits. No impact.	1	NI	Yes
36	<i>Quercus agrifolia</i>	Coast Live Oak	6+8	10	18	12	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
37	<i>Quercus douglasii</i>	Blue Oak	8+8	11	30	14	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
38	<i>Umbellularia californica</i>	California Bay	7	7	25	12	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
39	<i>Quercus douglasii</i>	Blue Oak	12+18	22	40	22	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from grading limits. Moderate impact possible.	6	MI	Yes
40	<i>Quercus agrifolia</i>	Coast Live Oak	10	10	20	14	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 12' from grading limits. No impact expected.	3	NI	Yes



Caymus Builders 149 4th Street and Lots 227 and 228 Brazil Street Project  
Tree Construction Impact Analysis Matrix

Horticultural Associates (HA) Tree Data												MacNair and Associates (MA) Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?
41	<i>Quercus douglasii</i>	Blue Oak	12	12	35	18	4	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located in 12' diameter circle. Fill zone on three sides of the tree. Removal likely required.	3	RC	No
42	<i>Quercus agrifolia</i>	Coast Live Oak	13	13	30	25	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
43	<i>Umbellularia californica</i>	California Bay	6	6	30	12	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
44	<i>Quercus agrifolia</i>	Coast Live Oak	11+12	16	30	18	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 6' and 8' from retaining wall. Significant impact likely.	4	SI	No
45	<i>Umbellularia californica</i>	California Bay	7	7	35	14	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from retaining wall. No impact expected.	2	NI	Yes
46	<i>Quercus agrifolia</i>	Coast Live Oak	18	18	35	25	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from retaining wall. Limited impact expected.	5	LI	Yes
47	<i>Quercus agrifolia</i>	Coast Live Oak	12+16+16	26	40	28	4	2	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from retaining wall. Significant impact likely.	7	SI	No
48	<i>Quercus douglasii</i>	Blue Oak	6	6	25	14	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
49	<i>Quercus douglasii</i>	Blue Oak	6	6	30	16	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
50	<i>Quercus douglasii</i>	Blue Oak	7	7	30	16	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
51	<i>Quercus douglasii</i>	Blue Oak	6	6	22	16	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
52	<i>Quercus douglasii</i>	Blue Oak	7	7	30	15	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
53	<i>Quercus douglasii</i>	Blue Oak	7	7	30	15	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
54	<i>Quercus douglasii</i>	Blue Oak	6+8+12	16	35	20	3	2	Yes	3	2	Located within grading limits. Removal required.	4	RC	Yes
55	<i>Quercus douglasii</i>	Blue Oak	6	6	18	10	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
56	<i>Olea europaea</i>	Olive	4	4	20	10	4	3	Yes	3	2	Located within grading limits. Removal required.	1	RC	Yes
57	<i>Quercus agrifolia</i>	Coast Live Oak	9	9	21	12	3	2	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
58	<i>Quercus douglasii</i>	Blue Oak	10+10	14	30	16	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from grading limits. No impact expected.	4	NI	Yes
59	<i>Quercus agrifolia</i>	Coast Live Oak	12	12	14	10	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from grading limits. No impact expected.	3	NI	Yes
60	<i>Quercus agrifolia</i>	Coast Live Oak	17	17	35	18	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from grading limits. No impact expected.	4	NI	Yes
61	<i>Quercus douglasii</i>	Blue Oak	14+8+8+5	19	40	20	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from 2' grading cut. Moderate impact likely.	5	MI	Yes
62	<i>Quercus douglasii</i>	Blue Oak	10+14	17	40	18	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 4' from 3' grading cut. Significant impact likely.	4	SI	Yes
63	<i>Quercus douglasii</i>	Blue Oak	5+4	6	25	14	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 20' from grading limits. No impact expected.	2	NI	Yes
64	<i>Quercus douglasii</i>	Blue Oak	12+13+13	22	40	22	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from grading limits. Moderate impact expected.	6	MI	No
65	<i>Quercus douglasii</i>	Blue Oak	11	11	20	16	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from grading limits. Moderate impact likely.	3	MI	No
136	<i>Quercus agrifolia</i>	Coast Live Oak	8	8	20	10	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
137	<i>Quercus agrifolia</i>	Coast Live Oak	6	6	20	8	4	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
138	<i>Quercus agrifolia</i>	Coast Live Oak	4	4	14	5	4	3	Yes	3	2	Located within grading limits. Removal required.	1	RC	Yes
139	<i>Quercus agrifolia</i>	Coast Live Oak	5	5	14	8	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Tree trunk location not shown on plan. Appears to be approximately 8' from grading limits. No impact expected.	2	NI	Yes
140	<i>Quercus lobata</i>	Valley Oak	25	25	40	18	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from grading limits. Drainage outflow nearby. Moderate to severe impact likely.	6	MI/SI	No
141	<i>Quercus agrifolia</i>	Coast Live Oak	7+9	11	25	12	4	3	Yes	3	2	Located >25' from grading limits. No impact expected.	3	NI	No
142	<i>Umbellularia californica</i>	Bay Laurel	3+4+4+9	11	20	10	4	4	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from grading limits. No impact expected.	3	NI	Yes
143	<i>Quercus agrifolia</i>	Coast Live Oak	24+24+10	35	40	20	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located >30' from grading limits. No impact expected.	9	NI	Yes
144	<i>Olea europaea</i>	Olive	5	5	20	10	4	4	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 20' from grading limits. No impact expected. Shown as a removal on plan.	1	NI	Yes

Caymus Builders 149 4th Street and Lots 227 and 228 Brazil Street Project  
Tree Construction Impact Analysis Matrix

Horticultural Associates (HA) Tree Data												MacNair and Associates (MA) Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?

**Lots 227 and 228 Driveway Tree Construction Impacts**

Horticultural Associates Tree Data												MacNair and Associates Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?
66	<i>Quercus agrifolia</i>	Coast Live Oak	5+5+7+10+12	19	15	18	3	2	Yes	3	2	Located in driveway grading limits. Removal required.	5	RC	Yes
67	<i>Quercus agrifolia</i>	Coast Live Oak	3x4+3x10+5	22	18	18	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway grading limits. Moderate impact possible.	6	MI	No
89	<i>Olea europaea</i>	Olive	7+7	10	15	12	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway grading limits and retaining wall. Limited impact likely.	3	LI	Yes
92	<i>Quercus douglasii</i>	Blue Oak	15	15	30	15	4	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Shown on plan as located 10' from driveway grading limits and retaining wall. Moderate impact likely. Tagged in field in different location where removal would be required.	4	RC	No
93	<i>Olea europaea</i>	Olive	5+10	11	30	14	3	3	Yes	3	2	Located in driveway grading limits. Removal required.	3	RC	Yes
95	<i>Quercus agrifolia</i>	Coast Live Oak	3x12+2x10+4	25	22	16	3	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from driveway grading limits. Significant impact.	6	SI	Yes
96	<i>Quercus agrifolia</i>	Coast Live Oak	15+5	16	25	16	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 20' from driveway grading limits and retaining wall. Limited impact possible.	4	LI	Yes
97	<i>Quercus douglasii</i>	Blue Oak	6+5	8	20	14	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 20' from driveway retaining wall. No impact expected.	2	NI	Yes
98	<i>Quercus agrifolia</i>	Coast Live Oak	3x6+7	13	21	14	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 12' from driveway grading limits and 15' from retaining wall. Limited impact possible.	3	LI	Yes
99	<i>Quercus agrifolia</i>	Coast Live Oak	3x8+2x12+10	24	18	21	3	2	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from driveway grading limits and 20' from retaining wall. Moderate impact likely.	6	MI	Yes
100	<i>Quercus agrifolia</i>	Coast Live Oak	7+7+12+13	20	25	18	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway retaining wall. Moderate to significant impact likely.	5	MI/SI	No
101	<i>Quercus agrifolia</i>	Coast Live Oak	10+10+12	19	25	20	3	3	Yes	3	2	Located in driveway grading limits. Removal required.	5	RC	Yes
102	<i>Olea europaea</i>	Olive	4x4	8	18	10	3	3	Yes	3	2	Located in driveway grading limits. Removal required.	2	RC	Yes
103	<i>Quercus agrifolia</i>	Coast Live Oak	12	12	18	18	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	3	RC	Yes
104	<i>Quercus agrifolia</i>	Coast Live Oak	11	11	15	12	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from driveway retaining wall. Significant impact likely.	3	SI	No
105	<i>Quercus agrifolia</i>	Coast Live Oak	10x4	13	30	18	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway retaining wall. Moderate impact likely.	3	MI	Yes
106	<i>Quercus agrifolia</i>	Coast Live Oak	6	6	14	19	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 6' from driveway retaining wall. Limited impact likely.	2	LI	Yes
107	<i>Quercus agrifolia</i>	Coast Live Oak	25	25	25	20	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from driveway retaining wall. Impact within critical root zone. Removal likely required.	6	RC	No
108	<i>Quercus agrifolia</i>	Coast Live Oak	5+8+10	14	18	18	2	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway retaining wall. Moderate impact likely.	4	MI	Yes
109	<i>Quercus agrifolia</i>	Coast Live Oak	12+12+6+18	25	45	22	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	6	RC	Yes
110	<i>Quercus agrifolia</i>	Coast Live Oak	10+10+8+8+6	19	35	18	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	5	RC	Yes
111	<i>Quercus agrifolia</i>	Coast Live Oak	10+10+12+12	22	45	24	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	6	RC	Yes

Caymus Builders 149 4th Street and Lots 227 and 228 Brazil Street Project  
Tree Construction Impact Analysis Matrix

Horticultural Associates (HA) Tree Data												MacNair and Associates (MA) Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?
112	<i>Quercus agrifolia</i>	Coast Live Oak	14+14+12	23	40	21	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway retaining wall. Significant impact likely.	6	SI	No
113	<i>Olea europaea</i>	Olive	6+4+2+2	8	16	14	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	2	RC	Yes
114	<i>Quercus agrifolia</i>	Coast Live Oak	10+14	17	35	18	4	3	No	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from driveway retaining wall. No impact expected.	4	NI	Yes
115	<i>Quercus agrifolia</i>	Coast Live Oak	12	12	35	18	4	3	No	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from driveway retaining wall. No impact expected.	3	NI	Yes
116	<i>Quercus agrifolia</i>	Coast Live Oak	12	12	35	18	4	3	No	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from driveway retaining wall. No impact expected.	3	NI	Yes
117	<i>Quercus agrifolia</i>	Coast Live Oak	8	8	35	18	4	3	No	1	1, 3, 4, 5, 6, 7, 8, 9	Located 18' from driveway retaining wall. No impact expected.	2	NI	Yes
118	<i>Quercus agrifolia</i>	Coast Live Oak	14	14	35	20	4	3	No	1	1, 3, 4, 5, 6, 7, 8, 9	Located 20' from driveway retaining wall. No impact expected.	4	NI	Yes
119	<i>Quercus agrifolia</i>	Coast Live Oak	13	13	35	20	4	3	No	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from driveway retaining wall. No impact expected.	3	NI	Yes
120	<i>Quercus agrifolia</i>	Coast Live Oak	16	16	40	20	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Not found on plan.	4	?	
121	<i>Quercus agrifolia</i>	Coast Live Oak	12+9	15	40	20	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from driveway retaining wall. No impact expected.	4	NI	Yes
122	<i>Quercus agrifolia</i>	Coast Live Oak	12	12	25	21	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Not found on plan.	3	?	
123	<i>Quercus agrifolia</i>	Coast Live Oak	10	10	40	18	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located >25' from driveway retaining wall. No impact expected.	3	NI	Yes
124	<i>Quercus agrifolia</i>	Coast Live Oak	8	8	35	14	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	2	RC	Yes
125	<i>Quercus agrifolia</i>	Coast Live Oak	8+8+4	12	30	15	3	3	Yes	3	2	Located in driveway grading limits. Removal required.	3	RC	Yes
126	<i>Quercus agrifolia</i>	Coast Live Oak	3x12+2x15+4+14	33	45	30	2	2	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway grading limits. Significant impact likely.	8	SI	Yes
127	<i>Quercus agrifolia</i>	Coast Live Oak	18	18	40	20	4	3	Yes	3	2	Located adjacent to driveway grading limits. Removal required.	5	RC	Yes
128	<i>Quercus agrifolia</i>	Coast Live Oak	3x18+3x12	40	40	30	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway retaining wall. Significant impact likely.	10	SI	No
175	<i>Quercus agrifolia</i>	Coast Live Oak	4x12+3x15	35	45	30	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located in driveway grading limits. Removal required.	9	RC	No
176	<i>Quercus agrifolia</i>	Coast Live Oak	8+4	9	22	12	4	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located less than 5' from driveway grading limits. Removal likely required.	2	RC	No
177	<i>Quercus agrifolia</i>	Coast Live Oak	13	13	40	25	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from driveway grading limits. Moderate impact possible.	3	MI	Yes
178	<i>Quercus agrifolia</i>	Coast Live Oak	5+12+13	18	40	25	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	5	RC	Yes
179	<i>Quercus agrifolia</i>	Coast Live Oak	8	8	30	16	4	4	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located adjacent to driveway grading limits (grading cut). Removal likely required.	2	RC	No
180	<i>Quercus agrifolia</i>	Coast Live Oak	6+8	10	25	15	3	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located adjacent to driveway grading limits (grading cut). Removal likely required.	3	RC	No
181	<i>Quercus agrifolia</i>	Coast Live Oak	12+15+20	28	45	25	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	7	RC	Yes
182	<i>Olea europaea</i>	Olive	6+5+4+3+3	10	18	12	4	3	Yes	3	2	Located in driveway grading limits. Removal required.	3	RC	Yes
183	<i>Quercus agrifolia</i>	Coast Live Oak	6+10+10+12+14	23	45	28	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Not found on plan.	6	?	

**Lot 227 Tree Construction Impact Analysis**

Horticultural Associates Tree Data												MacNair and Associates Impact Analysis			
------------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Caymus Builders 149 4th Street and Lots 227 and 228 Brazil Street Project  
Tree Construction Impact Analysis Matrix

Horticultural Associates (HA) Tree Data												MacNair and Associates (MA) Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?
74	<i>Umbellularia californica</i>	California Bay	7	7	15	10	4	3	Yes	3	2	Located less than 5' from garage and substantial grading cut.. Removal required.	2	RC	Yes
75	<i>Umbellularia californica</i>	California Bay	5+5	7	15	10	4	3	Yes	3	2	Located less than 5' from garage and substantial grading cut.. Removal required.	2	RC	Yes
76	<i>Umbellularia californica</i>	California Bay	7	7	15	10	4	3	Yes	3	2	Located less than 5' driveway grading cut. Removal required.	2	RC	Yes
78	<i>Quercus agrifolia</i>	Coast Live Oak	8+10	13	14	12	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from garage footprint corner. No impact expected.	3	NI	Yes
79	<i>Quercus agrifolia</i>	Coast Live Oak	6+8	10	16	12	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from garage footprint corner. No impact expected.	3	NI	Yes
80	<i>Quercus agrifolia</i>	Coast Live Oak	18+18+12	28	21	15	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from driveway and rock wall. Located 11' from drainage inlet. Moderate impact.	7	MI	Yes
81	<i>Quercus agrifolia</i>	Coast Live Oak	10	10	20	14	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 9' from grading limits. Limited impact expected.	3	LI	Yes
82	<i>Quercus agrifolia</i>	Coast Live Oak	4+4+6+6	10	18	12	3	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
83	<i>Quercus agrifolia</i>	Coast Live Oak	10+12+13	20	21	15	4	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from edge of 1' fill zone. Moderate to significant impact possible.	5	MI/SI	No
84	<i>Quercus agrifolia</i>	Coast Live Oak	12	12	25	18	4	3	Yes	3	2	Located within grading limits. Removal required.	3	RC	Yes
85	<i>Quercus agrifolia</i>	Coast Live Oak	14+15	21	30	18	4	3	Yes	3	2	Located within grading limits. Removal required.	5	RC	Yes
86	<i>Quercus agrifolia</i>	Coast Live Oak	24	24	40	28	4	3	Yes	3	2	Located within grading limits. Removal required.	6	RC	Yes
87	<i>Quercus agrifolia</i>	Coast Live Oak	12+12+6	18	20	20	3	3	Yes	3	2	Located within grading limits. Removal required.	5	RC	Yes
145	<i>Quercus agrifolia</i>	Coast Live Oak	6+8+9	13	20	14	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 18' from pool footprint and 20' from driveway grading limits. No impact expected.	3	NI	Yes
146	<i>Quercus agrifolia</i>	Coast Live Oak	6+10	12	25	15	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from pool footprint. Limited impact possible.	3	LI	Yes
147	<i>Quercus agrifolia</i>	Coast Live Oak	12+10+6+6+6+5+9	21	25	21	3	2.5	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 25' from grading limits. No impact expected. Note: trunk location not shown on plan.	5	NI	Yes
148	<i>Quercus agrifolia</i>	Coast Live Oak	12+12+6+6+5+12	21	25	22	3	2.5	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 15' from driveway grading limits and drainage rock outflow. Possible limited impact. Note: trunk location not shown on plan.	5	LI	Yes
149	<i>Quercus agrifolia</i>	Coast Live Oak	8+8+6+6+5+7	17	20	20	3	2.5	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located approximately 5 to 7' from drainage rock dispersal outlet. Moderate impact possible. Note: trunk location not shown on plan.	4	MI	Yes
150	<i>Quercus agrifolia</i>	Coast Live Oak	12+12+14+14+10	28	21	20	3	2.5	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 20 to 25' from grading limits. Moderate impact possible.	7	MI	Yes
151	<i>Quercus agrifolia</i>	Coast Live Oak	5+16	17	20	15	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 20 to 25' from grading limits. No impact expected.	4	NI	Yes
152	<i>Olea Europaea</i>	Olive	8+4+4	10	20	10	4	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 20 to 25' from grading limits. No impact expected.	3	NI	Yes
153	<i>Quercus agrifolia</i>	Coast Live Oak	6+6	8	15	10	4	4	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 20 to 25' from grading limits. No impact expected.	2	NI	Yes
154	<i>Quercus agrifolia</i>	Coast Live Oak	4	4	15	8	4	4	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located 5' from storm drainage line. Moderate impact possible.	1	MI	Yes
155	<i>Quercus agrifolia</i>	Coast Live Oak	12+12	17	18	25	3	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	Located 10' from pool footprint. Moderate to significant impact possible.	4	MI/SI	Yes
156	<i>Quercus agrifolia</i>	Coast Live Oak	5	5	6	14	2	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located approximately 10' from building footprint. Located in apparent drainage swale. Moderate to significant impact potential. Note: trunk location not shown on plan.	1	MI/SI	No

Caymus Builders 149 4th Street and Lots 227 and 228 Brazil Street Project  
Tree Construction Impact Analysis Matrix

Horticultural Associates (HA) Tree Data												MacNair and Associates (MA) Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?
157	<i>Quercus agrifolia</i>	Coast Live Oak	5+5+7+8+10+12	20	40	21	3	3	Yes	2	1, 3, 4, 5, 6, 7, 8, 9	Located approximately 12' from building footprint. Located in apparent drainage swale. Moderate to significant impact possible. Note: trunk location not shown on plan. Clearance pruning likely required.	5	MI/SI	No
158	<i>Quercus agrifolia</i>	Coast Live Oak	12+5+10+15	22	40	20	3	3	Yes	3	2	Shown as removed on plan. Located 7' from building corner.	6	RC	Yes
159	<i>Quercus agrifolia</i>	Coast Live Oak	6	6	20	15	3	3	Yes	3	2	Located adjacent to grading limits. Removal required.	2	RC	Yes
160	<i>Quercus agrifolia</i>	Coast Live Oak	5+4+3	7	20	14	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
161	<i>Quercus agrifolia</i>	Coast Live Oak	6+6	8	12	18	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
162	<i>Quercus agrifolia</i>	Coast Live Oak	6+5+12+12	19	35	18	3	3	Yes	3	2	Located within grading limits. Removal required.	5	RC	Yes
163	<i>Aesculus californica</i>	California Buckeye	5	5	10	12	4	3	Yes	3	2	Located within grading limits. Removal required.	1	RC	Yes
164	<i>Quercus agrifolia</i>	Coast Live Oak	5+4+10+11	17	20	14	3	3	Yes	3	2	Located within grading limits. Removal required.	4	RC	Yes
165	<i>Quercus agrifolia</i>	Coast Live Oak	8	8	24	12	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
166	<i>Quercus agrifolia</i>	Coast Live Oak	5+7+9	17	10	10	3	3	Yes	3	2	Located within grading limits. Removal required.	4	RC	Yes
167	<i>Quercus agrifolia</i>	Coast Live Oak	6	6	10	12	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes
168	<i>Quercus agrifolia</i>	Coast Live Oak	9	9	6	10	3	3	Yes	3	2	Located within grading limits. Removal required.	2	RC	Yes

**Lot 228 Tree Construction Impact Analysis**

Horticultural Associates Tree Data												MacNair and Associates Impact Analysis			
Tree #	Species	Common Name	Trunk (DBH Inches)	Tree Protection Zone (radius in feet)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Tag?	Expected Impact	Recommendations	MA Construction Impact Analysis	Critical Root Zone (feet)	MA Impact Code	Analysis Consistent with HA Assessment?
68	<i>Quercus douglasii</i>	Blue Oak	8+8+4	12	18	14	3	3	Yes	1	1, 3, 4, 5, 6, 7, 8, 9	Located 15' downslope of fill daylight line. No significant impact likely.	3	NI	Yes
69	<i>Quercus agrifolia</i>	Coast Live Oak	18+15+14	28	21	16	4	3	Yes	3	2 (Removal)	Located adjacent to fill and cut areas. Horizontal trunk structure extends into driveway. Removal required.	7	RC	Yes
70	<i>Quercus agrifolia</i>	Coast Live Oak	24	24	16	22	4	2	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	1' to 2' fill shown around tree and within critical root zone. 2' grading cut upslope in adjacent driveway. Removal likely required.	6	RC	No
71	<i>Umbellularia californica</i>	California Bay	4+4+4	7	15	12	4	3	Yes	3	1, 3, 4, 5, 6, 7, 8, 9	1' to 2' fill shown around tree. 2' grading cut upslope in adjacent driveway. Could possibly be saved.	2	SI	Yes
72	<i>Quercus agrifolia</i>	Coast Live Oak	22	22	12	24	4	3	Yes	1.5	1, 3, 4, 5, 6, 7, 8, 9	Located 25' from garage and 20' from driveway. None or minor impact expected.	6	LI	Yes
73	<i>Quercus agrifolia</i>	Coast Live Oak	18+18	25	25	24	4	3	Yes	1.5	1, 3, 4, 5, 6, 7, 8, 9	Located 25' from garage and 20' from driveway. None or minor impact expected.	6	LI	Yes
88	<i>Quercus douglasii</i>	Blue Oak	3x12+14+14+15	32	30	20	3	3	Yes	3	2 (Removal)	Located in fill slope. Removal Required.	8	RC	Yes