

Deborah Ellis, MS

Consulting Arborist & Horticulturist



## ARBORIST REPORT

Tree Inventory, Tree Descriptions and Recommendations Relative to Proposed Construction

### Winchester Boulevard Office

Winchester Boulevard at Shelburne Way, Los Gatos

### Property Owner:

South Beach Partners LLC/Cumulus Capital Holdings, LLC

### Prepared for:

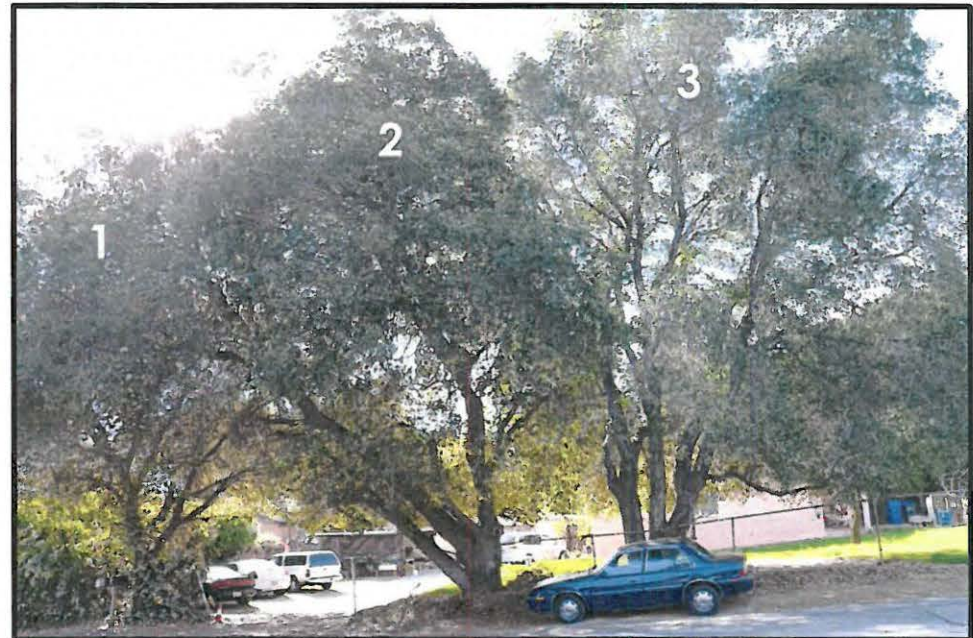
Marni Moseley  
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### Prepared by:

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**FEBRUARY 12, 2016**

Report History: This is my fourth report for this project. My most recent previous report is dated March 23, 2015.

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EXHIBIT 7

EXHIBIT 7



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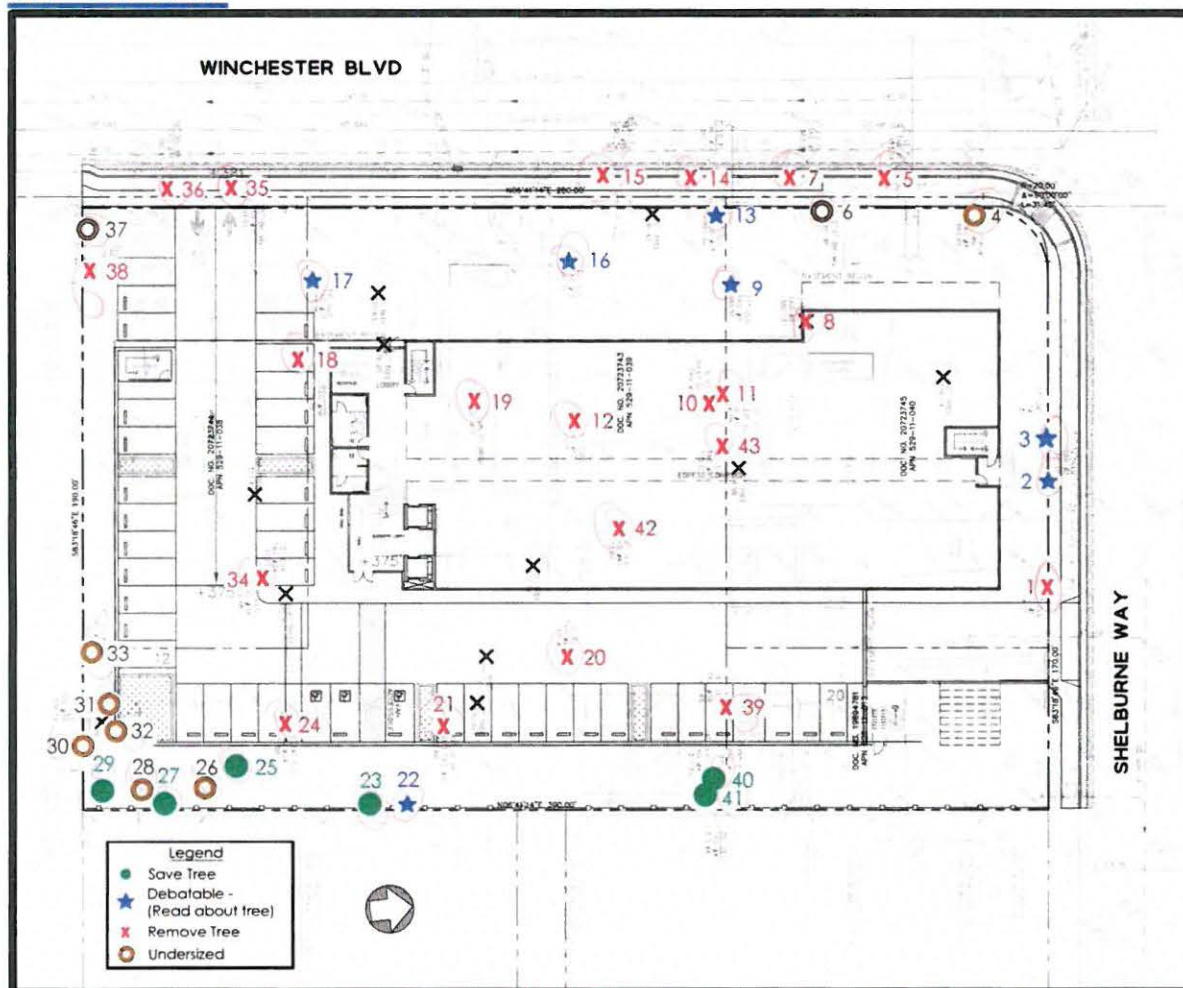
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Cover photo: coast live oaks #1, 2 and 3. As per the current plans, tree #1 will be removed and #2 and 3 will remain, but construction is really too close to trees #2 and 3 for them to remain. All photos in this report were taken by D. Ellis on February 9, 2016 unless otherwise noted.





## TREE MAP



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## SUMMARY

### THE PROJECT

Pre-development plans proposed to merge four properties zoned O, demolish three existing single-family residences and accessory structures and construct a new two-story office building with below grade and at grade parking.

### THE TREES AND HOW THE PROJECT WILL AFFECT THEM

Thirty-six (36) protected trees<sup>1</sup> are listed and described in this report. A summary of all trees is provided in Table 1 on beginning on page 4, and a more detailed description of the trees is provided in Table 5 (the *Complete Tree Table*) beginning on page 15. The Complete Tree Table also provides recommended minimum root protection distances for those trees that will or may be saved, as well as other important information about individual trees.

After review of the current plans and in light of individual tree condition and preservation suitability, I have listed **23 protected trees for removal**, **7 trees as "Debatable"** and **6 trees that can probably be saved**. Separate Tables listing trees to Remove, Save or are Debatable are on pages 7 through 9.

All of the protected trees are native to the immediate vicinity of the site except for **London planes #5, 7, 14 and 15, weeping bottlebrush #19 and goldenrain tree #38**.

There are many nice, large native oak trees here; primarily coast live oaks. There are also many fruit trees on the property which were not evaluated (fruit trees less than 18 inch trunk diameter are not considered to be protected trees). The large oak trees would be nice to retain, but it may be difficult to provide adequate space for their long term survival. Most of the oaks are in "Fair/Good" to "Good" condition. The reason for their good condition is that the tree have not been disturbed for many years, and most of them have a large

<sup>1</sup> For the purpose of this report a protected tree is: all trees which have a (4) four-inch or greater diameter of any trunk, when removal relates to any review for which zoning approval or subdivision approval is required. Exceptions are: fruit or nut trees that less than eighteen (18) inches in diameter or any of the following species that are less than 24 inches in diameter: black acacia (*Acacia melanoxylon*), tulip tree (*Liriodendron tulipifera*), tree-of-Heaven (*Ailanthus altissima*), Tasmanian blue gum Eucalyptus (*Eucalyptus globulus*), Red River gum Eucalyptus (*Eucalyptus camaldulensis*), other Eucalyptus species (*E. spp.*) (Hillsides only), glossy privet (*Ligustrum lucidum*) and and palms (except *Phoenix canariensis*).





area of unpaved soil around them with a thick natural leaf litter (mulch) accumulation. The trees have also not been overpruned. This will all change as the property is developed, however.

The goal of the developer to save many of the oaks is admirable, but it will probably not work out unless the design is modified significantly. Although it may look like these trees could be saved by looking at the Tree Disposition Plan, just because the trunk (depicted as a dot symbol on the plan) is outside of an improvement does not mean that the tree can actually be saved or that it will be viable after development occurs around it. Many of these trees are large and wide-spreading, and they have existed in an undisturbed state for many years. For example, a 2-story building is proposed at 12 feet from the trunks of large and wide-spreading **coast live oaks #2 and 3**. This is simply not going to work from many standpoints. Please review the photos of these trees and you will understand what I mean. A new sidewalk is also proposed on the opposite side of oaks #2 and 3, with a few to several feet from the trunks. For oaks #2 and 3 and many of the other large oaks on this site, the proposed building must be moved much farther from their trunks and canopies—preferably to at least 10 feet beyond the canopy.

Even if trees adjacent to proposed buildings or other improvements are left standing, grading, construction vehicle traffic and other activities and radically changing the environment may cause them to decline and die over a period of years. Even if trees are provided with minimal root protection distances to remain, their canopies may be decimated by the clearance needed for the proposed building as well as construction of the building itself. This is difficult to visualize from the current Tree Disposition Plan, and it is often very hard to visualize from the additional construction plans which will be forthcoming. Viewing the tree photos in this report will be helpful to remind people just how large many of these trees really are, and visiting the site is also important. Story posts to depict the three dimensional size of the above-ground portion of the building is mandatory and I must review this. A basement parking area is also planned, and the excavation for this (whether there will be over-excavation beyond the actual building footprint) will be very important in determining if some of the trees near the building can actually be saved. It is important to understand however, that the depth of the excavation is not as important for trees as the distance of the excavation from the trunk of the tree, since most tree roots are shallow – within the upper 18 inches of soil.

I am not trying to paint a completely negative picture of the tree preservation possibilities for this project, but I think that we have to be realistic. Big changes are needed in the design in order to save many of the large trees that the developer currently proposes to save.



## **THE BEST TREES ON SITE TO SAVE:**

- **coast live oaks #1,2,3, 9,12,16,17,18,21,23,24,25,34,39 and 41.**
- **valley oak #40**
- **goldenrain tree #38**

All of these trees have "Fair/Good" or better preservation suitability. Underlined trees are listed to be saved; all others are to be removed or are "debatable" save or remove.

## **TABLE 1 SUMMARY TREE TABLE**

This table is continued through page 6.

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Action	Reason
1	coast live oak	20	Good \$7900	Severe	Remove	Construction
2	coast live oak	15, 15, 23	Fair/Good 23,100	Severe	Debatable	Construction
3	coast live oak	19,23	Fair/Good 6,400	Severe	Debatable	Construction
4	Tree less than Protected Size					
5	London plane	7	Fair/Poor 1,260	Severe	Remove	
6	Tree less than Protected Size					
7	London plane	6	Fair/Poor 1,260	Severe	Remove	Construction
8	coast live oak	6	Fair 1,080	Severe	Remove	Construction
9	coast live oak	30 (3)	Good 15,500	Moderate/Severe	Debatable	Construction



**Table 1, Summary of Trees** (continued from the previous page).

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Action	Reason
10	Calif. bay	5,6 7	Fair 160	Severe	Remove	Construction
11	coast live oak	7,9	Fair 930	Severe	Remove	Construction
12	coast live oak	25	Good 10,200	Severe	Remove	Construction
13	coast live oak	7	Fair/Good 1,220	Severe	Debatable	Construction
14	London plane	7	Fair/Poor 1,350	Severe	Remove	Construction
15	London plane	6	Fair/Poor 1,260	Severe	Remove	Construction
16	coast live oak	25	Good 11,900	Moderate/Severe	Debatable	Construction
17	coast live oak	21	Good 8,000	Moderate	Debatable	Construction
18	coast live oak	28	Good 14,900	Severe	Remove	Construction
19	weeping bottlebrush	7	Fair 1,080	Severe	Remove	Construction
20	coast live oak	6	Fair/Poor 900	Severe	Remove	Construction
21	coast live oak	11,13,18	Fair/Good 13,300	Severe	Remove	Construction
22	coast live oak	13	Fair 2,280	Moderate	Debatable	Construction/Structure
23	coast live oak	15	Fair/Good 3,010	Low	Save	
24	coast live oak	15,16	Fair/Good 8,000	Severe	Remove	Construction



Table 1, Summary of Trees (continued from the previous page).

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Action	Reason
25	coast live oak	17	Fair/Good 4,040	Moderate	Save	
26	Tree less than Protected Size					
27	coast live oak	18	Fair 4,870	Low	Save	
28	Tree less than Protected Size					
29	coast live oak	7	Fair 1,260	Low	Save	
30-33	Tree less than Protected Size					
34	coast live oak	17	Good 4,930	Severe	Remove	Construction
35	black walnut	23 (3.5)	Poor 1,760	Severe	Remove	Construction/Structure
36	black walnut	19 (3.5)	Poor/ Unacceptable 600	Severe	Remove	Construction/Structure
37	Tree less than Protected Size					
38	goldenrain tree	19 (4)	Fair/Good 2,840	Severe	Remove	Construction
39	coast live oak	26	Good 11,000	Severe	Remove	Construction
40	valley oak	16	Good 5,800	Moderate	Save	
41	coast live oak	25	Good 9,000	Moderate	Save	
42	coast live oak	23	Good 8,700	Severe	Remove	Construction
43	coast live oak	12	Fair/Poor 1,570	Severe	Remove	Construction

End of Table. 36 Protected Trees.



**TABLE 2 TREES TO REMOVE**

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Reason
1	coast live oak	20	Good \$7900	Severe	Construction
5	London plane	7	Fair/Poor 1,260	Severe	Construction
7	London plane	6	Fair/Poor 1,260	Severe	Construction
8	coast live oak	6	Fair 1,080	Severe	Construction
10	Calif. bay	5,6 7	Fair 160	Severe	Construction
11	coast live oak	7,9	Fair 930	Severe	Construction
12	coast live oak	25	Good 10,200	Severe	Construction
14	London plane	7	Fair/Poor 1350	Severe	Construction
15	London plane	6	Fair/Poor 1260	Severe	Construction
18	coast live oak	28	Good 14900	Severe	Construction
19	weeping bottlebrush	7	Fair 1080	Severe	Construction

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Reason
20	coast live oak	6	Fair/Poor 900	Severe	Construction
21	coast live oak	11,13,18	Fair/Good 13,300	Severe	Construction
24	coast live oak	15,16	Fair/Good 8,000	Severe	Construction
34	coast live oak	17	Good 4,930	Severe	Construction
35	black walnut	23 (3.5)	Poor 1,760	Severe	Construction/Structure
36	black walnut	19 (3.5)	Poor/ Unacceptable 600	Severe	Construction/Structure
38	goldenrain tree	19 (4)	Fair/Good 2,840	Severe	Construction
39	coast live oak	26	Good 11,000	Severe	Construction
42	coast live oak	23	Good 8,700	Severe	Construction
43	coast live oak	12	Fair/Poor 1570	Severe	Construction

23 Trees

**TABLE 3 TREES LISTED AS "DEBATABLE"**

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Reason "Debatable"
2	coast live oak	15, 15, 23	Fair/Good 23,100	Severe	Construction
3	coast live oak	19,23	Fair/Good 6,400	Severe	Construction
9	coast live oak	30 (3)	Good 15,500	Moderate/Severe	Construction
13	coast live oak	7	Fair/Good 1,220	Severe	Construction
16	coast live oak	25	Good 11,900	Moderate/Severe	Construction
17	coast live oak	21	Good 8,000	Moderate	Construction
22	coast live oak	13	Fair 2280	Moderate	Construction/Structure

7 Trees



**TABLE 4 TREES TO SAVE**

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact
23	coast live oak	15	Fair/Good 3,010	Low
25	coast live oak	17	Fair/Good 4,040	Moderate
27	coast live oak	18	Fair 4,870	Low
29	coast live oak	7	Fair 1,260	Low
40	valley oak	16	Good 5,800	Moderate
41	coast live oak	25	Good 9,000	Moderate

6 Trees



## RECOMMENDATIONS

- 1) **The project is at a very preliminary design phase, and there are many improvements that are not shown on the plan that I reviewed.** For this report I have reviewed only the Tree Disposition Plan (Sheet 1 of 1) dated November 18, 2015. As additional plans are developed and reviewed by me I expect that construction impacts will increase for many trees, for example due to grading, underground utilities and landscaping. It is likely that more trees will need to be removed than are listed for removal in this report, and design revision will be recommended for some or all of the trees that may remain. I should review all site-based plans for this project as they are developed. Plans should be full-size, to-scale and with accurately located tree trunks and canopy driplines relative to proposed improvements. Scale should be 1:20 or 1:10.
- 2) **Existing protected trees to be saved or removed should be numbered on all site-based plans to match the tree tag numbers that are used in this arborist report.** There are tree tag numbers on the Tree Disposition Plan, but in order to make the plan simpler and easier to read make the protected tree numbers larger and bold and reduce the size of the (X) symbol for trees of less than protected size to be removed, so that we can easily see and concentrate on the protected trees. Note that tree disposition is likely to change over time as the full project plans are developed, and that is fine since we all know this at the present time.
- 3) **The proposed building is simply too close to many of the large oak trees,** even though these trees are shown to be saved. Examples are **coast live oaks #2, 3, 9, 16 and 17**. The building should be moved to 10 feet beyond the actual dripline of the trees unless it can be shown (e.g. with story posts) that the building itself as well as construction of the building, will not cause excessive pruning of the canopies of these trees.
- 4) **At this time it appears that the following trees will need be removed based upon the plan that I reviewed: #1,5-8, 10, 1-12, 14, 15, 18-21, 24, 34-39, 42 and 43.** Alternatively for those trees listed as having "Fair" or better tree preservation suitability, it may be possible to save them if the tree root protection distances listed in the *Complete Tree Table* as well as adequate space for the canopy can be provided.
- 5) **Trees listed as "Debatable" at this time are: #2, 3,9, 13, 16, 17 and 22.** Read about these 7 trees in the *Notes* Section of the *Complete Tree Table* in order to determine what to do with them (can they be saved or should they be removed)? A "Debatable" designation means that there is a problem with retaining that tree, such as a tree that is shown to be saved but is a poor species for the site, or in poor condition. Another common cause is that the tree is shown to be saved but construction may be too close to it. The reason for the "Debatable" designation can be found in the "Reason" and "Notes" column of the *Complete Tree Table*. Additional action or decisions are necessary on the part of the tree owner, project architects or others involved in the project design and construction are necessary in order to resolve whether a debatable tree will be saved or removed.





- 6) **The Town of Los Gatos Tree Protection Directions will need to be incorporated into the final project plans.** At this point we are probably quite way from the final plans, but I have included the Directions on pages 31 through 35 so that everyone will understand what is required from the start. At this time the following 6 trees will most likely be saved: **#23, 25, 27, 29, 40 and 41**. The Town of Los Gatos Tree Protection Directions replace any tree protection notes, specifications or other directions (including detail drawings) that may be included in the plans.
- 7) **As a part of the design process, try to keep improvements (and any additional over-excavation or work area beyond the improvement) as far from tree trunks and canopies as possible.** 6xDBH<sup>2</sup> or the dripline of the tree, whichever is greater, should be used as the minimum distance for any soil disturbance to the edge of the trunk. 3xDBH should be considered the absolute minimum distance from any disturbance to the tree trunk on one side of the trunk only, for root protection. Farther is better, of course. For disturbances on multiple sides of the trunk, then 6xDBH or greater should be used, and farther is also better here. Tree canopies must also be taken into consideration when designing around trees. Don't forget the minimum necessary working margin around improvements as you locate those improvements. Disturbance usually comes much closer to trees than the lines shown on the plans!
- 8) **Landscaping – be aware of the following as landscape plans are developed:**
  - a) New landscaping and irrigation can be as much or more damaging to existing trees than any other type of construction. The same tree root protection distances recommended for general construction should also be observed for new landscaping. Within the root protection zone it is usually best to limit landscape changes to a 3 to 4-inch depth of coarse organic mulch such as wood or bark chips or tree trimming chippings spread over the soil surface. The environment around existing trees should be changed very carefully or not at all – please consult with me regarding changes in the landscape around existing trees and/or have me review the landscape and irrigation plans for this project.
  - b) This site contains oaks that are native to the immediate area (coast live oak and valley oak). These tree species fare best with no irrigation during the normal dry months of the year. The best treatment of the ground beneath the canopies of native oaks is nothing but their own natural leaf and twig litter mulch. Exceptions to irrigation restriction include during the winter in extended drought periods, as temporary compensation for root loss due to construction, and for newly planted trees during their 2 to 3 year establishment period after installation. Native oak species are often killed due to inappropriate landscaping that is installed around them; mostly commonly landscaping that requires frequent irrigation such as lawns or other high water-use plants. Large drought tolerant trees such as native oaks can become dangerous when exposed to frequent irrigation, especially close to their trunks. California native oaks that are treated in this manner may contract **root rot diseases** and fall over at the roots; often

<sup>2</sup> See pages 30 -31 for an explanation of tree protection root distances.



causing great damage and personal injury if there are targets in their vicinity such as homes, cars and people. It is important to landscape correctly around our native oaks; e.g. summer dry. I have attached a publication entitled *Living among the Oaks, Keeping Native California Oaks Healthy* to assist in best managing the oaks on the property, as well as the directions to follow in items 'b' and 'c' below.

- c) Around the native oaks: there shall be no planting or irrigation (including drip irrigation) within a minimum radius of 10 feet from the trunks of the oaks or the inner half of the dripline of the tree, whichever is greater. Farther is better. Within this 10-foot (or greater) radius around the trunk a 3 to 4-inch depth of coarse organic mulch such as wood or bark chips or tree trimming chippings shall be spread over the soil surface. Shredded redwood bark is not allowed. Keep the mulch off the root collar of the trees. Beyond this 10-foot (or greater) protective, mulched area only drought-tolerant, summer-dry plant species, preferably plant species that are native to the immediate area and grow commonly in association with the native oaks, may be planted. Only summer-dry tolerant plants are allowed within the outer half of the dripline of the tree or 20 feet from the trunk, whichever is greater. Such plants may be planted from no larger than 1-gallon cans in holes that are hand-dug manually with a shovel (no power equipment such as augers allowed). These plants must be spaced sparsely (e.g. planted no closer than 4 feet apart) and watered with drip irrigation. The planting zone around these plants shall be mulched in the same manner previously described. The drip irrigation for these plants should preferably be abandoned after a 2 to 3 year establishment period.

9) **General Tree Maintenance:**

- a) The root collars and lower trunks of some of the trees were obscured from view by vegetation, excess soil or other covering. Such portions of the tree should be uncovered and the tree re-evaluated by the arborist.
- b) Do no unnecessary pruning, fertilization or other tree work. Pre-construction pruning should be limited to the absolute minimum required for construction clearance. A qualified tree service should be hired to provide such pruning.





## **INTRODUCTION**

### **PURPOSE & USE OF REPORT**

This survey and report was required by the Town of Los Gatos as a part of the building permit process for this project. The purpose of the report is to identify and describe the existing protected trees on or adjacent to the project site that are within or close to proposed construction -- their size, condition and suitability for preservation. Only Town of Los Gatos protected trees were evaluated. The audience for this report is the property owner, developer, project architects and contractors, and Town of Los Gatos authorities concerned with tree preservation and tree removal. The goal of this report is to preserve existing trees on or adjacent to the project site that are in acceptable condition, good species for the area and will fit in well with the proposed new use of the site.

### **BACKGROUND INFORMATION**

My previous arborist report for this project are:

- April 23, 2012 (Report #1)
- October 14, 2013 (Report #2)
- March 23, 2015 (Report #3)

All protected trees were re-measured and re-evaluated on February 9, 2016 for this current report. Since my last report dated March 23, 2015 the Tree Protection Section of the Los Gatos Town Code was revised. Trunk diameter measurement height was changed from 3 to 4.5 feet above the ground. This change caused some trees which had been reported on previously to move out of the protected tree classification. Previous reports had also included some trees of less than protected size, which were numbered and reported on. This current report lists only the protected trees, which are 36 out of the originally 43 tagged trees.



## METHODOLOGY

I performed a brief evaluation of the subject trees from the ground on February 9, 2016. Tree characteristics such as form, weight distribution, foliage color and density, wounds and indicators of decay were noted. Surrounding site conditions were also observed. Evaluation procedures were taken from:

- American National Standard A-300 (Part 5) – 2012 for Tree Care Operations – Tree, Shrub & Other Woody Plant Management – Standard Practices (Management of Trees, & Shrubs During Site Planning, Site Development and Construction).
- International Society of Arboriculture, Best Management Practices:
  - Managing Trees during Construction. 2008
  - Tree Inventories. 2013

The above references serve as industry professional standards for tree evaluation and written findings and recommendations for trees on construction sites prior, during and after site development.

Each of the trees was tagged in the field (exceptions noted) with metal number tags that correspond with the tree numbers referenced in this report and on the Tree Map. I measured the trunk diameter of each tree with a diameter tape at 4.5 feet above the ground (DBH), which is also the required trunk diameter measurement height of the Town of Los Gatos. DBH is used calculate tree protection distances and other tree-related factors. Trunk diameter was rounded to the nearest inch. I estimated the tree's height and canopy spread. Tree *Condition* (structure and vigor) was evaluated and I also recorded additional notes for trees when significant. Tree species and condition considered in combination with the current or (if applicable) proposed use of the site yields the *Tree Preservation Suitability* rating. The more significant trees (or groups of trees) were photographed with a digital camera. Some of these photos are included in this report, but all photos are available from me by email if requested.





## OBSERVATIONS

### SITE CONDITIONS

Site topography is mainly level. There are two existing houses on the site, plus several smaller accessory buildings. The Northeast corner of the property is currently being used as an office and storage yard for a construction company. Most of the uncovered ground area of the site is currently an old orchard remnant including walnuts and other small fruit trees. There is more landscaping in the southwest quadrant of the site which contains the largest house, but landscaping consists mainly of fruit trees and native coast live oaks that are probably of *natural growth* (they were not planted). Most of the planted areas are probably not irrigated. Landscape maintenance is of a "low" level. Sun exposure for the trees varies from full to partly shaded, depending upon proximity to existing buildings and to other trees.

## APPENDIX

### TABLE 5 COMPLETE TREE TABLE

This Table is continued through page 25. Data fields in the Table are explained on pages 25 to 30.

Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTPZ
1	<i>Quercus agrifolia</i> , coast live oak	20	35x30	75	80	Good \$7900	Severe	Remove	Construction	Construction: trunk is at entrance driveway/sidewalk. Condition: ivy partly covers lower trunk including, including large-diameter ivy stems. Cyclone fence engulfed by trunk.	5	10	15



Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
2	coast live oak	15, 15, 23	40x35	85	50	Fair/Good 23,100	Severe	Debatable	Construction	Construction: the trunk of this large, tall and wide-spreading tree is shown to be 12 feet from the proposed 2-story building and underground parking garage. This simply will not work and the tree must be removed if the plans are not changed. Even though the minimum root protection distance on one side of the tree is 10 feet, and it this could be met by the current design, the canopy of the tree would be massacred and root damage (including soil compaction due to construction traffic and materials between the tree and the building) makes trying to save this tree unreasonable. If this tree is to be saved then the building should be at least 10 feet beyond the dripline. This tree (and adjacent oak #3 are large trees and they need a lot of space preserved around them if they are to remain. The proposed sidewalk as well, less than 2 feet from the trunk, is	10	19	29





Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
										likely to cause damage to or cause the removal of large support roots close to the trunk. <u>Condition</u> : cyclone fence including top rail are embedded in trunk.			
3	coast live oak	19,23	45x35	70	70	Fair/Good 6,400	Severe	Debatable	Construction	<u>Construction</u> : similar to previous oak #2. <u>Condition</u> : same as previous oak #2.	5	10	14
4	Tree less than Protected Size												
5	<i>Platanus x hispanica</i> , London plane	7	20x18	90	50	Fair/Poor 1,260	Severe	Remove		<u>Construction</u> : new sidewalk in vicinity of tree will extend to curb; perhaps for a bus stop. <u>Other</u> : this is a Town Street Tree installed in a 3-foot wide parkstrip planter between sidewalk and curb. Pavement damage would occur in the future from this large-growing tree species, were it to remain in its current location and conditions.	5	5	5
6	Tree less than Protected Size												



Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTPD
7	London plane	6	20x18	90	50	Fair/Poor 1,260	Severe	Remove	Construction	Construction: new sidewalk configuration proposed around tree, with curb in location of trunk. Condition: same as #5	5	5	5
8	coast live oak	6	20x18	80	40	Fair 1,080	Severe	Remove	Construction	Construction: tree at corner of proposed building.	5	5	5
9	coast live oak	30 (3)	45x40	80	60	Good 15,500	Moderate/Severe	Debatable	Construction	Construction: tree trunk is shown to be 16 feet from edge of proposed building, and there will be a new sidewalk at about 23 feet to the west. Potential root damage should be at a tolerable level as long as there is minimal over-excavation beyond the actual building and basement. Significant canopy reduction pruning may be necessary however, and story posts are necessary to accurately assess the extent of this impact. Also a part of construction impact is demo of the existing building and pavement 15 - 22 feet from the trunk.	7	15	22
10	Umbellularia californica, Calif. bay	5, 6, 7	40x25	80	60	Fair 160	Severe	Remove	Construction	Construction: tree is within proposed building. Condition: stump sprout.	5	5	5





Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
11	coast live oak	7.9	35x20	70	50	Fair 930	Severe	Remove	Construction	<u>Construction</u> : tree is within proposed building. <u>Condition</u> : root collar obscured by leaf litter.	5	5	5
12	coast live oak	25	50x40	70	70	Good 10,200	Severe	Remove	Construction	<u>Construction</u> : tree is within proposed building.	6	13	19
13	coast live oak	7	20x12	75	60	Fair/Good 1,220	Severe	Debatable	Construction	<u>Construction</u> : a new sidewalk is proposed right up to the edge of the trunk. Even if the tree survives, it will cause significant pavement damage in the future. Either remove the tree or transplant it elsewhere. The tree is in good enough condition and accessible for transplanting.	5	5	5
14	London plane	7	20x20	90	60	Fair/Poor 1,350	Severe	Remove	Construction	<u>Construction</u> and <u>Other</u> : same as previous London plane street trees #5 and 7.	5	5	5
15	London plane	6	18x20	90	50	Fair/Poor 1,260	Severe	Remove	Construction	<u>Construction</u> and <u>Other</u> : same as previous London plane street trees #5, 7 and 14.	5	5	5
16	coast live oak	25	50x35	80	70	Good 11,900	Moderate/Severe	Debatable	Construction	<u>Construction</u> : tree trunk is shown to be 24 feet from edge of proposed building, and there will be a new sidewalk at about 15 feet to the west. Potential root damage is probably far	6	13	19

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Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
										enough from the trunk so that the tree can remain viable, but story posts should also be used to assess effect on the canopy. Also a part of construction impact is demo of the existing building 5 feet from the trunk. <u>Condition</u> : shrubs and a short brick wall obstruct root collar. Shrub roots beginning to girdle tree roots; these shrubs roots should be cut and removed.			
17	coast live oak	21	50x40	85	70	Good 8,000	Moderate	Debatable	Construction	<u>Construction</u> : a proposed parking space is 9 feet from the trunk, building at 21 feet and sidewalk at 22 feet. From a root preservation standpoint since there are disturbances on multiple sides of the trunk there should be no soil disturbance closer than 14 feet. As with several of the previous large oaks that are shown to remain, story posts are needed to see if this will really work. Also a part of construction impact is demo of the existing building and pavement 7 feet from the trunk	5	11	16

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Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
18	coast live oak	28	60x40	80	70	Good 14,900	Severe	Remove	Construction		7	14	21
19	<i>Callistemon viminalis</i> , weeping bottlebrush	7	12x10	60	60	Fair 1,080	Severe	Remove	Construction	<u>Construction</u> : within proposed building.	5	5	9
20	coast live oak	6	22x16	60	40	Fair/Poor 900	Severe	Remove	Construction	<u>Construction</u> : within proposed driveway.	5	5	5
21	coast live oak	11, 13, 18	45x40	70	60	Fair/Good 13,300	Severe	Remove	Construction	<u>Construction</u> : within proposed parking area.	8	15	23
22	coast live oak	13	40x22	80	50	Fair 2,280	Moderate	Debatable	Construction/Structure	<u>Construction</u> : proposed curb and driveway 16-17 feet from trunk which is fine, but tree leans significantly toward roadway (about 20 degrees). Not sure if construction traffic will not be compatible with tree canopy, and also future vehicle traffic through site after construction complete. This must be investigated further.	3	7	7
23	coast live oak	15	35x25	80	50	Fair/Good 3,010	Low	Save		<u>Construction</u> : proposed curb and driveway 17-18 feet from trunk/ <u>Condition</u> : significant trunk crook.	4	8	8
24	coast live oak	15, 16	45x40	70	60	Fair/Good 8,000	Severe	Remove	Construction	<u>Construction</u> : within proposed parking area.	6	12	18

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Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTPD
25	coast live oak	17	50x30	70	60	Fair/Good 4,040	Moderate	Save		Construction: proposed parking area curb 6 feet from trunk. Check canopy clearance for future parking. Condition: ivy grows up trunk.	4	9	9
26	Tree less than Protected Size										5	5	5
27	coast live oak	18	35x20	80	60	Fair 4,870	Low	Save		Construction: proposed parking lot 17-18 feet from trunk. Condition: much of lower 10 feet of trunk covered with ivy and debris, so trunk diameter is estimated.	4	9	14
28	Tree less than Protected Size										5	5	5
29	coast live oak	7	20x18	80	60	Fair 1,260	Low	Save		Construction: proposed parking area 15 feet from trunk. Condition: ivy and debris obscure trunk and lower portion of tree.	5	5	5
30-33	Trees less than Protected Size										5	5	5

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Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
34	coast live oak	17	35x35	75	70	Good 4,930	Severe	Remove	Construction	<u>Construction</u> : within proposed parking area.	4	9	9
35	<i>Juglans californica hindsii</i> , black walnut	23 (3.5)	40x35	40	40	Poor 1,760	Severe	Remove	Construction/Structure	<u>Construction</u> : sidewalk will be reconfigured and trunk is in its path. <u>Condition</u> : large mechanical wounds (past vehicle impacts) to trunk have resulted in dead decayed wood. Tree is too high risk to keep in this location anyway. Tree is deciduous and leafless now, so it is hard to tell with certainty how much of canopy is dead, but there are definitely many dead branches.	6	11	5
36	black walnut	19 (3.5)	30x30	20	20	Poor/ Unacceptable 600	Severe	Remove	Construction/Structure	<u>Construction</u> : same as previous <u>Condition</u> : same as previous but worse.	5	9	5
37	Tree less than Protected Size										5	5	5
38	<i>Koelreuteria paniculata</i> , goldenrain tree	19 (4)	30x33	70	70	Fair/Good 2,840	Severe	Remove	Construction	<u>Construction</u> : trunk is about 7 feet from proposed parking area, but this tree is shown to be removed. Assume that removal is due to grading because tree is located very	5	9	19

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Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
										close to decorative wall to west and existing driveway slopes downward to garage. I think there will probably be fill soil placed in this area. Branches are fairly low and much of canopy would need to be removed for clearance.			
39	coast live oak	26	35x30	80	60	Good 11,000	Severe	Remove	Construction	Construction: located within proposed parking area.	6	13	20
40	Quercus lobata, valley oak	16	50x35	75	70	Good 5,800	Moderate	Save		Construction: proposed parking area is 10 -11 feet from trunk. Canopy is very high right now, so this should work. Also a part of construction impact is demo of the existing buildings 7 to 11 feet from the trunk. Condition: base of trunk is 2 feet from base of trunk of adjacent oak #41.	4	8	12
41	coast live oak	25	45x40	75	60	Good 9,000	Moderate	Save		Construction: proposed parking area is 14 feet from trunk. Canopy is fairly high, so probably no problem with clearance. Also a part of construction impact is demo of the existing buildings 8 to 10 feet from the trunk. Condition: asymmetric canopy	6	13	19

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Tree #	Species & Common Name	Trunk Diam.	Size	CONDITION		Preservation Suitability & Value	Expected Construction Impact	Action	Reason	Notes	TREE ROOT PROTECTION DISTANCES		
				Vigor	Structure						3xDBH	6xDBH	OTZ
										due to canopy interference by adjacent oak #40.			
42	coast live oak	23	45x45	70	70	Good 8,700	Severe	Remove	Construction	<u>Construction</u> : located within proposed building.	6	12	17
43	coast live oak	12	30x22	70	40	Fair/Poor 1,570	Severe	Remove	Construction	<u>Construction</u> : located within proposed building. <u>Condition</u> : very grove affected	5	6	6

## EXPLANATION OF TREE TABLE DATA COLUMNS:

- Tree Number** (the field tag number of the existing tree). Each existing tree in the field is tagged with a 1.25 inch round aluminum number tag that corresponds to its tree number referenced in the arborist report, Tree Map, Tree Protection Specifications and any other project plans where existing trees must be shown and referenced.
- Tree Name and Type:**  
Species: The *Genus* and *species* of each tree. This is the unique scientific name of the plant, for example *Quercus agrifolia* where *Quercus* is the Genus and *agrifolia* is the species. The scientific names of plants can be changed from time to time, but those used in this report are from the most current edition of the *Sunset Western Garden Book* (2012) Sunset Publishing Corporation. The scientific name is presented at its first occurrence in the Tree Table, along with the regional common name. After that only the common name is used.
- Trunk DBH**. Tree trunk diameter in inches "at breast height" (measured at 4.5 feet above ground level). This is the forestry and arboricultural standard measurement height that is also used in many tree-related calculations. It is also the trunk diameter measurement height required by the Town of Los Gatos. For multi-trunk trees, trunk diameter is measured for the largest trunk and estimated for all smaller trunks. Trunk diameter is measured when possible, and estimated when it is not possible or safe to physically measure. A number in parentheses (3) after the trunk diameter(s) indicates that it



was not possible to measure the trunk at 4.5 feet (due to tree architecture) and so the diameter was measured at this alternate height (in feet), which reflects a more realistic trunk diameter for the tree.

*Examples: an "18" in the Diameter column means that the tree has a diameter of 18 inches at 4.5 feet above the ground. An "18 (3" means that trunk diameter was 18 inches measured at 3 feet above the ground. "18, 7, 5" means that this is a multi-trunk tree with trunk diameters of 18, 7 and 5 inches at 4.5 feet above the ground.*

- 4) **Size:** tree size is listed as height x width in feet, estimated and approximate and intended for comparison purposes.
- 5) **Condition Ratings:** Trees are rated for their *condition* on a scale of zero to 100 with zero being a dead tree and 100 being a perfect tree (which is rare – like a supermodel in human terms). A 60 is "average" (not great but not terrible either). There are two components to tree condition – **vigor** and **structure**, and each component is rated separately. Averaging the two components is not useful because a very low rating for either one could be a valid reason to remove a tree from a site -- even if the other component has a high rating. Numerically speaking for each separate component:

100 is equivalent to *Excellent* (an 'A' academic grade), 80 is *Good* (B), 60 is *Fair* (C), 40 is *Poor* (D), 20 is *Unacceptable* (F) and 0 is *Dead*.

- Relative to the scope of work for this report, tree Condition has been rated but not explained in detail and recommendations for the management of tree condition have not been included. The tree owner may contact Deborah Ellis for additional information on tree condition and specific recommendations for the general care of individual trees relative to their condition.
- The *Condition* of the tree is considered relative to the tree species and present or future intended use of the site to provide an opinion on the tree's Preservation Suitability Rating (i.e. "Is this tree worth keeping on this site, in this location, as explained in Table 6 on the next page. This is based upon the scenario that the tree is given enough above and below-ground space to survive and live a long life on the site. Ratings such as "Fair/Good" and "Fair/Poor" are intermediate in nature. The Preservation Suitability rating is not always the same as the Condition Rating because (for example) some trees with poor condition or structure can be significantly improved with just a small amount of work – and it would be worthwhile to keep the tree if this were done.



**Table 6 Preservation Suitability Rating Explanation**

<b>Excellent</b>	Such trees are rare but they have unusually good health and structure and provide multiple functional and aesthetic benefits to the environment and the users of the site. These are great trees with a minimum rating of "Good" for both vigor and structure. Equivalent to academic grade 'A'.
<b>Good</b>	These trees may have some minor to moderate structural or condition flaws that can be improved with treatment. They are not perfect but they are in relatively good condition and provide at least one significant functional or aesthetic benefit to the environment and the users of the site. These are better than average trees equivalent to academic grade 'B'.
<b>Fair</b>	These trees have moderate or greater health and/or structural defects that it may or may not be possible to improve with treatment. These are "average" trees – not great but not so terrible that they absolutely should be removed. The majority of trees on most sites tend to fall into this category. These trees will require more intensive management and monitoring, and may also have shorter life spans than trees in the "Good" category. Retention of trees with moderate suitability for preservation depends upon the degree of proposed site changes. Equivalent to academic grade 'C'.
<b>Poor</b>	These trees have significant structural defects or poor health that cannot be reasonably improved with treatment. These trees can be expected to decline regardless of management. The tree species themselves may have characteristics that are undesirable in landscape settings or may be unsuitable for high use areas. I do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Equivalent to academic grade 'D'.
<b>None</b>	These trees are dead and/or are not suitable for retention in their location due to risk or other issues. In certain settings however, (such as wilderness areas, dead trees are beneficial as food and shelter for certain animals and plants including decomposers. Equivalent to academic grade 'F'.

- 6) **Value:** Tree monetary appraisal is based upon: (1) Cost of Installation plus (2) its increase in value over a container-size tree if a larger size tree being appraised. This value is then adjusted according to: (a) *Species* (according to regional published species ratings), (b) *Condition* of the tree, and (c) *Location* of the tree (an average of the sub-categories of *Site*, *Contribution* and *Placement*). The methodology and calculations for the Trunk Formula Method are taken from two industry standard texts – The Guide for Plant Appraisal, 9th edition, 2000, edited by the Council of Tree & Landscape Appraisers and published by the International Society of Arboriculture, and the Species Classification and Group Assignment, 2004, published by the Western Chapter of the International Society of Arboriculture. The cross-sectional trunk diameter price presented in this text has been adjusted slightly downward to match the current actual average wholesale cost of a 24-inch box nursery tree in this area. Note that the values produced for this report



are meant for reference only and may not reflect the true value of the tree that could be calculated by a thorough and more detailed analysis of each individual tree.

- a) **Caveats regarding tree values:** The values in this report have not been subjected to a "reasonableness test" which compares the value of trees and landscaping to the total value of the property. The values in the report were calculated quickly and are intended to be approximate and for reference only. Research on tree and landscape values has shown that landscaping can contribute up to 20% of the total property value. In some cases however, tree appraisals have produced tree values that exceed the value of the entire property. Performing a reasonableness test screens for this error. For certain trees in this report I have decreased or increased tree values when I felt that the calculated values were too high or too low.
- b) **The Trunk Formula Method** is used for trees that are too large for practical replacement with a similar size nursery container-grown tree. This method applies to trees with trunk diameters that are larger than 8-inches, measured at 12 inches above the ground. For the purpose of this report, all trees with trunk diameters of 8 inches or greater measured at DBH (4.5 feet above the ground) are appraised by this method.
- c) **The Replacement Cost Method** is used for smaller trees with trunk diameters up to 4-inches in diameter measured at 12 inches above the ground. This is generally equivalent to a 48-inch box-size tree. The replacement cost for such a tree shall be the average wholesale cost of the tree multiplied by two to include transportation to the site, planting and other costs. This price is then adjusted (usually downward) based upon the Condition ratings percentages for the appraised tree. For the purpose of this report, all trees with trunk diameters of 7 inches or less measured at DBH (4.5 feet above the ground) are appraised by this method. The following cost basis is used (based upon the average of wholesale tree prices from Boething Treeland Nursery, Portola Valley and Valley Crest Tree Nursery, Sunol, 2/2/2015):

Trunk DBH	Replacement tree size	Replacement Tree Wholesale Cost x 2 (for installation, etc.)
<1" to 1"	15 gallon	\$47.50 x 2 = \$95
2-3"	24" box	\$162.50 x 2 = \$325
4-5"	36" box	\$412.50 x 2 = \$825
6-7"	48" box	\$900 x 2 = \$1800

- d) **Tree values for tree protection bonds:** Prior to commencing work, the tree-regulating authority may require that the contractor furnish a bond equal to some portion of the total appraised value of the trees on the site based upon the values presented in the Arborist Report. Bond money will be returned to the contractor upon the completion of the project with deductions or additional fines imposed based upon tree protection compliance and the final condition of the trees. Tree values are often used to establish a benchmark amount to fine the contractor if non-compliance with the Tree Protection Specifications or other negligence causes a subject tree to be removed or unnecessarily damaged. The full value amount should be charged to the contractor if a tree is damaged to the degree that it must be removed. A portion of the value of the tree





plus any necessary remediation costs, as determined by the tree owner, should be charged to the contractor if the tree is damaged but does not have to be removed.

7) **Action (Disposition):**

- a) **Save:** it should be no problem save this tree utilizing standard tree protection measures.
- b) **Remove:** this recommendation is based upon tree condition, preservation suitability, expected impact of construction, poor species for the site or any combination of these factors.
- c) **Debatable:** there is a problem with potentially retaining this tree. Find out why in the *Reason* and *Notes* columns of the Complete Tree Table. Examples are:

- The tree is shown to be saved (and may be a desirable tree to save) but proposed construction is too close or is uncertain and may cause too much damage to retain the tree. Design changes may be recommended to reduce damage to the tree so that it can be saved.
- Further evaluation of the tree is necessary (e.g. the tree requires further, more detailed evaluation that is beyond the scope of this tree survey and report. Examples are advanced internal decay detection and quantification with resistance drilling or tomography, a "pull test" to assess tree stability from the roots, or tissue samples sent to a plant pathology laboratory for disease diagnosis.
- Condition: the tree is in "so-so" or lesser condition and an argument could be made to either save or remove the tree as it stands now. In some cases the owner will make the decision to save or remove the tree based upon the information provided in this report as well as the owner's own preferences.
- Species: the tree may be a poor species for the area or the intended use of the developed site.
- Uncertain construction impact
- Other (as explained for the individual tree)

8) **Reason** (for tree removal or to explain why a tree is listed as "Debatable" or "Uncertain"). Multiple reasons may be provided, with the most significant reason listed first. Reasons can include but are not limited to:

- **Construction** (excessive construction impact is unavoidable and it is not worthwhile to try and save the tree)
- **Condition** (e.g. poor tree condition – either *vigor*, *structure* or both)
- **Landscaping** (the tree is being removed because it does not fit in with or conflicts with proposed new landscaping)
- **Owner's Decision** (for some reason the owner has decided to remove this tree)
- **Species** (the tree is a poor species for the use of the site)
- **Risk** (the tree presents moderate to excessive risk to people or property that cannot be sufficiently mitigated)

9) **Notes:** This may include any other information that would be helpful to the client and their architects and contractors within the scope of work for this report, such as a more detailed explanation of tree condition or expected construction impact.



**10) Tree Protection Distances:**

- a) Root Protection: see pages 30-31 for a detailed explanation.
- b) Canopy Protection: Additional space beyond root zone protection distances may be necessary for canopy protection.
- c) I have increased a few of the calculated tree protection distances for certain individual trees based upon my professional judgment and relative to site constraints. For example the minimum root protection distance I will list for any tree is 5 feet.

## **TREE ROOT PROTECTION DISTANCES**

No one can estimate and predict with absolute certainty how far a soil disturbance such as an excavation must be from the edge of the trunk of an individual tree to effect tree stability or health at a low, moderate or severe degree -- there are simply too many variable involved that we cannot see or anticipate. 3xDBH however, is a reasonable "rule of thumb" minimum distance (in feet) any soil disturbance should be from the edge of the trunk on one side of the trunk. This is supported by several separate research studies including (Smiley, Fraedrich, & Hendrickson 2002, Bartlett Tree Research Laboratories). DBH is trunk "diameter at breast height" (4.5 feet above the ground). This distance is often used during the design and planning phases of a construction project in order to estimate root damage to a tree due to the proposed construction. It tends to correlate reasonably well with the *zone of rapid taper*, which is the area in which the large buttress roots (main support roots close to the trunk) rapidly decrease in diameter with increasing distance from the trunk. For example, using the 3X DBH guideline an excavation should be no closer than 4.5 feet from the trunk of an 18-inch DBH tree. For trees with multiple trunks, an adjusted DBH is often calculated using 100% of the largest trunk plus 50% of the remaining smaller trunks. Such distances are guidelines only, and should be increased for trees with heavy canopies, significant leans, decay, structural problems, etc. I will generally not recommend a root protection distance of less than 5 feet for any tree, even very small trees. It is also important to understand that in actual field conditions we often find that much less root damage occurs than was anticipated by the guidelines. 3xDBH may be more of an aid in preserving tree stability and not necessarily long-term tree health.

**6 to 18 X DBH** is the minimum distance which is recommended in the *ANSI (American National Standard) A300 (Part 5)-2012 Management of Trees & Shrubs During Site Planning, Site Development, & Construction*, and also in the companion publication from the International Society of Arboriculture, *Best Management Practices, Managing Trees During Construction*, 2008. When the 6 to 18 x DBH distance cannot be met, "appropriate mitigation or determination that the work will not impact tree health and stability shall be performed", according to the ANSI Standard. ANSI A300 (Part 8) - 2013 Root Management, states: "When roots are damaged within 6 times the trunk diameter (DBH) mitigation shall be recommended." For practical purposes I use the 6 x DBH distance as the minimal distance acceptable (in most circumstances) in order to maintain good tree health and structural stability. The 6 x DBH distance or greater should definitely be used when there are soil disturbances on more than one side of the trunk.





**OTPD (Optimum Tree Protection Zone):** OTPD is the distance in feet from the trunk of the tree, all around the tree, that construction or other disturbance should not encroach within. If this zone is respected, then chances of the tree surviving construction disturbance are very good. This method takes into account tree age and the particular species tolerance to root disturbance. Although there are no scientifically based methods to determine the minimum distance for construction (for example, root severance) from trees to assure their survival and stability, there are some guidelines that are often used in the arboricultural industry. The most current guideline comes from the text, *Trees & Development*, Matheny et al., International Society of Arboriculture, 1998. Due to the crowded, constrained nature of many building sites it is often not possible to maintain the OPTZ distance recommended for many of the trees -- therefore I have also listed alternate distances of 3 and 6X DBH.

## **LOS GATOS TREE PROTECTION REQUIREMENTS**

### **LOS GATOS TOWN CODE**

#### **Chapter 29 – ZONING REGULATIONS**

#### **Article I. – IN GENERAL**

#### **Division 2. TREE PROTECTION**

#### **Sec. 29.10.1005. Protection of trees during construction.**

(a) Protective tree fencing shall specify the following:

- (1) **Size and materials.** Six (6) foot high chain link fencing, mounted on two-inch diameter galvanized iron posts, shall be driven into the ground to a depth of at least two (2) feet at no more than 10-foot spacing. For paving area that will not be demolished and when stipulated in a tree preservation plan, posts may be supported by a concrete base.
- (2) **Area type to be fenced.** Type I: Enclosure with chain link fencing of either the entire dripline area or at the tree protection zone (TPZ), when specified by a certified or consulting arborist. Type II: Enclosure for street trees located in a planter strip: chain link fence around the entire planter strip to the outer branches. Type III: Protection for a tree located in a small planter cutout only (such as downtown): orange plastic fencing shall be wrapped around the trunk from the ground to the first branch with 2-inch wooden boards bound securely on the outside. Caution shall be used to avoid damaging any bark or branches.
- (3) **Duration of Type I, II, III fencing.** Fencing shall be erected before demolition, grading or construction permits are issued and remain in place until the work is completed. Contractor shall first obtain the approval of the project arborist on record prior to removing a tree protection fence.
- (4) **Warning sign.** Each tree fence shall have prominently displayed an 8.5 x 11-inch sign stating: "Warning—Tree Protection Zone-this fence shall not be removed and is subject to penalty according to Town Code 29.10.1025".





(b) All persons, shall comply with the following precautions:

- (1) **Prior to the commencement of construction, install the fence at the dripline, or tree protection zone (TPZ) when specified in an approved arborist report, around any tree and/or vegetation to be retained which could be affected by the construction and prohibit any storage of construction materials or other materials, equipment cleaning, or parking of vehicles within the TPZ. The dripline shall not be altered in any way so as to increase the encroachment of the construction.**
- (2) **Prohibit all construction activities within the TPZ, including but not limited to: excavation, grading, drainage and leveling within the dripline of the tree unless approved by the Director.**
- (3) **Prohibit disposal or depositing of oil, gasoline, chemicals or other harmful materials within the dripline of or in drainage channels, swales or areas that may lead to the dripline of a protected tree.**
- (4) **Prohibit the attachment of wires, signs or ropes to any protected tree.**
- (5) **Design utility services and irrigation lines to be located outside of the dripline when feasible.**
- (6) **Retain the services of a certified or consulting arborist who shall serve as the project arborist for periodic monitoring of the project site and the health of those trees to be preserved. The project arborist shall be present whenever activities occur which may pose a potential threat to the health of the trees to be preserved and shall document all site visits.**
- (7) **The Director and project arborist shall be notified of any damage that occurs to a protected tree during construction so that proper treatment may be administered.**

(Ord. No. 2114, §§ I, II, 8-4-03)

**Sec. 29.10.1010. Pruning and maintenance.**

All pruning shall be in accordance with the current version of the International Society of Arboriculture Best Management Practices—Tree Pruning and ANSI A300-Part 1 Tree, Shrub and Other Woody Plant Management—Standard Practices, (Pruning) and any special conditions as determined by the Director. For developments, which require a tree preservation report, a certified or consulting arborist shall be in reasonable charge of all activities involving protected trees, including pruning, cabling and any other work if specified.

- (1) **Any public utility installing or maintaining any overhead wires or underground pipes or conduits in the vicinity of a protected tree shall obtain permission from the Director before performing any work, including pruning, which may cause injury to a protected tree. (e.g. cable TV/fiber optic trenching, gas, water, sewer trench, etc.).**
- (2) **Pruning for clearance of utility lines and energized conductors shall be performed in compliance with the current version of the American National Standards Institute (ANSI) A300 (Part 1)-Pruning, Section 5.9 Utility Pruning. Using spikes or gaffs when pruning, except where no other alternative is available, is prohibited.**
- (3) **No person shall prune, trim, cut off, or perform any work, on a single occasion or cumulatively, over a three-year period, affecting twenty-five percent or more of the crown of any protected tree without first obtaining a permit pursuant to this division except for pollarding of fruitless mulberry trees (*Morus alba*) or other species approved by the Town Arborist. Applications for a pruning permit shall include photographs indicating where pruning is proposed.**





- (4) **No person shall remove any Heritage tree or large protected tree branch or root through pruning or other method greater than four (4) inches in diameter (12.5" in circumference) without first obtaining a permit pursuant to this division.**

(Ord. No. 2114, §§ I, II, 8-4-03)

**Sec. 29.10.1015. No limitation of authority.**

Nothing in this division limits or modifies the existing authority of the Town under Division 29 of Title 29 (Zoning Regulations), Title 26 (Public Trees) or the Hillside Development Standards and Guidelines to require trees and other plants to be identified, retained, protected, and/or planted as conditions of the approval of development. In the event of conflict between provisions of this division and conditions of any permit or other approval granted pursuant to Chapter 29 or Chapter 26 of the Town Code or the Hillside Development Standards and Guidelines. The more protective requirements shall prevail.

(Ord. No. 2114, §§ I, II, 8-4-03)

**Sec. 29.10.1020. Responsibility for enforcement.**

All officers and employees of the Town shall report violations of this division to the Director of Community Development. Whenever an Enforcement Officer as defined in Section 1.30.015 of the Town Code determines that a violation of this code has occurred, the Enforcement Officer shall have the authority to issue an administrative citation pursuant to the provisions of Section 1.30.020 of the Town Code

Whenever an Enforcement Officer charged with the enforcement of this Code determines that a violation of that provision has occurred, the Enforcement Officer shall have the authority to issue an administrative citation to any person responsible for the violation.

(Ord. No. 2114, §§ I, II, 8-4-03)

**Sec. 29.10.1025. Enforcement—Remedies for violation.**

In addition to all other remedies set forth in this code or otherwise provided by law, the following remedies shall be available to the Town for violation of this division:

- (1) **Tree removals in absence of or in anticipation of development.** If a violation occurs in the absence of or prior to proposed development, then discretionary applications and/or building permit applications will not be accepted or processed by the Town until the violation has been remedied to the reasonable satisfaction of the Director. Mitigation measures as determined by the Director may be imposed as a condition of any subsequent application approval or permit for development on the subject property. A mitigation plan shall include specific measures for the protection of any remaining trees on the property, and shall provide for the replacement of each hillside tree that was removed illegally with a new tree(s) in the same location(s) as those illegally removed tree(s). The replacement ratio shall be at a greater ratio than that required in accordance with the standards set forth in Sec. 29.10.0985 of this division. If the court or the Director directs a replacement tree





or trees to be planted as part of the remedy for the violation, the trees shall be permanently maintained in a good and healthy condition. The property owner shall execute a five-year written maintenance agreement with the Town. For those trees on public property, replacement is to be determined by the Director of Community Development or by the Director of Parks and Public Works.

- (2) **Pending development applications. Incomplete applications will not be processed further until the violation has been remedied.** If an application has been deemed complete, it may be denied by the Director or forwarded to the Planning Commission with a recommendation for denial at the Director's discretion. Mitigation measures as determined by the director may be imposed as a condition of approval. A mitigation plan shall include specific measures for the protection of any remaining trees on the property, and shall provide for the replacement of each hillside tree that was removed illegally with a new tree(s) in the same location(s) as those illegally removed tree(s). The replacement ratio shall be at a greater ratio than that required in accordance with the standards set forth in Sec. 29.10.0985 of this division. If the court or the Director directs a replacement tree or trees to be planted as part of the remedy for the violation, the trees shall be permanently maintained in a good and healthy condition. The property owner shall execute a five-year written maintenance agreement with the Town. For those trees on public property, replacement is to be determined by the Director of Community Development or by the Director of Parks and Public Works.

- (3) **Projects under construction.**

a. If a violation occurs during construction, the Town may issue a stop work order suspending and prohibiting further activity on the property pursuant to the grading, demolition, and/or building permit(s) (including construction, inspection, and issuance of certificates of occupancy) until a mitigation plan has been filed with and approved by the Director, agreed to in writing by the property owner(s) or the applicant(s) or both, and either implemented or guaranteed by the posting of adequate security in the discretion of the Director. A mitigation plan shall include specific measures for the protection of any remaining trees on the property, and shall provide for the replacement of each hillside tree that was removed illegally with a new tree(s) in the same location(s) as those illegally removed tree(s). The replacement ratio shall be at a greater ratio than that required in accordance with the standards set forth in Sec. 29.10.0985 of this division. If the court or the Director directs a replacement tree or trees to be planted as part of the remedy for the violation, the trees shall be permanently maintained in a good and healthy condition. The property owner shall execute a five-year written maintenance agreement with the Town. For those trees on public property, replacement is to be determined by the Director of Community Development or by the Director of Parks and Public Works.

b. The violation of any provisions in this division during the conduct by any person of a tree removal, landscaping, construction or other business in the Town shall constitute grounds for revocation of any business license issued to such person.

- (4) **Civil penalties.**

Notwithstanding section 29.20.950 relating to criminal penalty, any person found to have violated section 29.10.0965 shall be liable to pay the Town a civil penalty as prescribed in subsections a. through d.

a. As part of a civil action brought by the Town, a court may assess against any person who commits, allows, or maintains a violation of any provision of this division a civil penalty in an amount not to exceed five thousand dollars per violation.

b. Where the violation has resulted in removal of a protected tree, the civil penalty shall be in an amount not to exceed five thousand dollars per tree unlawfully removed, or the replacement value of each such tree, whichever amount is higher. Such amount shall be payable to the Town and deposited into the Tree Replacement Fund. Replacement value for the purposes of this section shall be determined





Service since 1984

utilizing the most recent edition of the Guide for Plant Appraisal, as prepared by the Council of Tree and Landscape Appraisers and the Species and Group Classification Guide published by the Western Chapter of the International Society of Arboriculture.

c. If the court or the Director directs a replacement tree or trees to be planted as part of the remedy for the violation, the trees shall be permanently maintained in a good and healthy condition. The property owner shall execute a five year written maintenance agreement with the Town.

d. The cost of enforcing this division, which shall include all costs, staff time, and attorneys' fees.

(5) **Injunctive relief.** A civil action may be commenced to abate, enjoin, or otherwise compel the cessation of such violation.

(6) **Costs.** In any civil action brought pursuant to this division in which the Town prevails, the court shall award to the Town all costs of investigation and preparation for trial, the costs of trial, reasonable expenses including overhead and administrative costs incurred in prosecuting the action, and reasonable attorney fees.

(Ord. No. 2114, §§ I, II, 8-4-03)

#### **Sec. 29.10.1030. Fees.**

The fee, as adopted by Town Resolution, prescribed therefore in the municipal fee schedule shall accompany the removal or pruning permit application submitted to the Town for review and evaluation pursuant to this division.

(Ord. No. 2114, §§ I, II, 8-4-03)

#### **Sec. 29.10.1035. Severability.**

If any provision of this division or the application thereof to any person or circumstance is held to be invalid by a court of competent jurisdiction, such invalidity shall not affect any other provision of this division which can be given effect without the invalid provision or application, and to this end the provisions of this division are declared to be severable.

(Ord. No. 2114, §§ I, II, 8-4-03)

#### **Sec. 29.10.1040. Notices.**

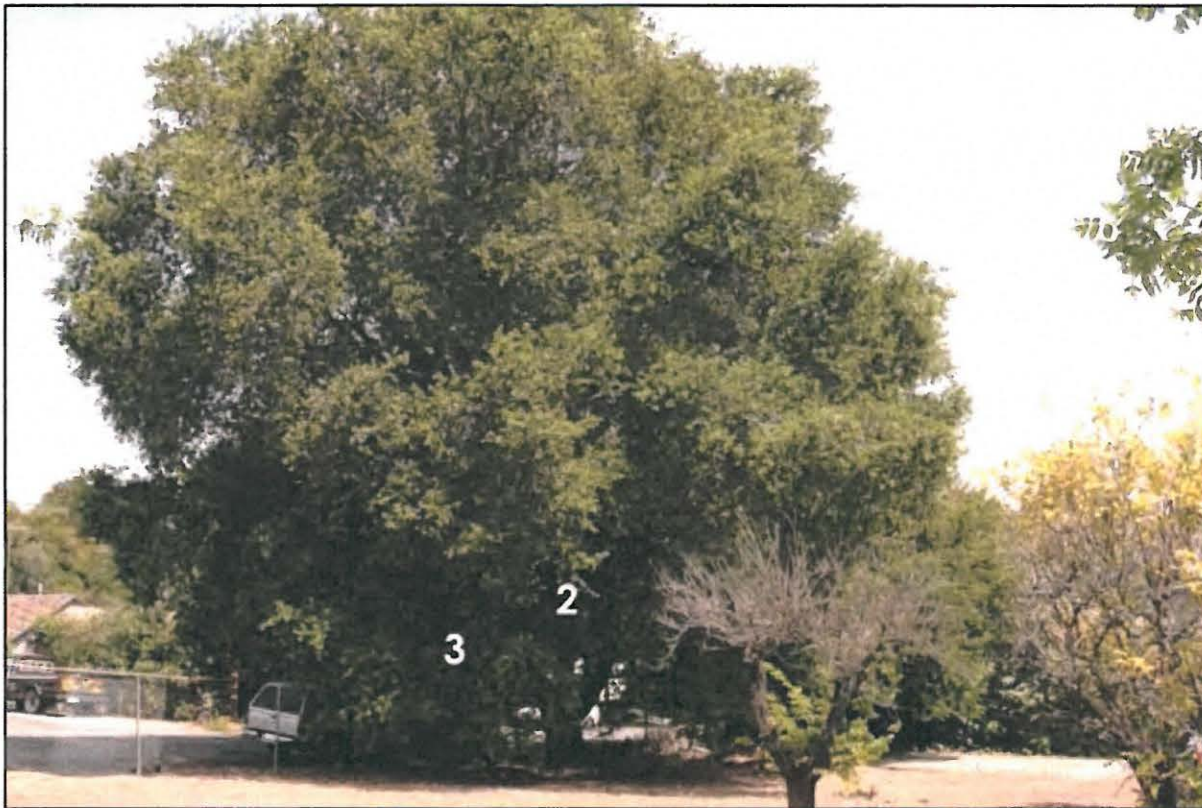
All notices required under this division shall conform to noticing provisions of the applicable Town Code.

#### **Sec. 29.10.1045. Appeals.**

Any interested person may appeal a decision of the director pursuant to this division in accordance with the procedures set forth in section 29.20.260 of the Town Code. All appeals shall comply with the public noticing provisions of section 29.20.450 of the Town Code.

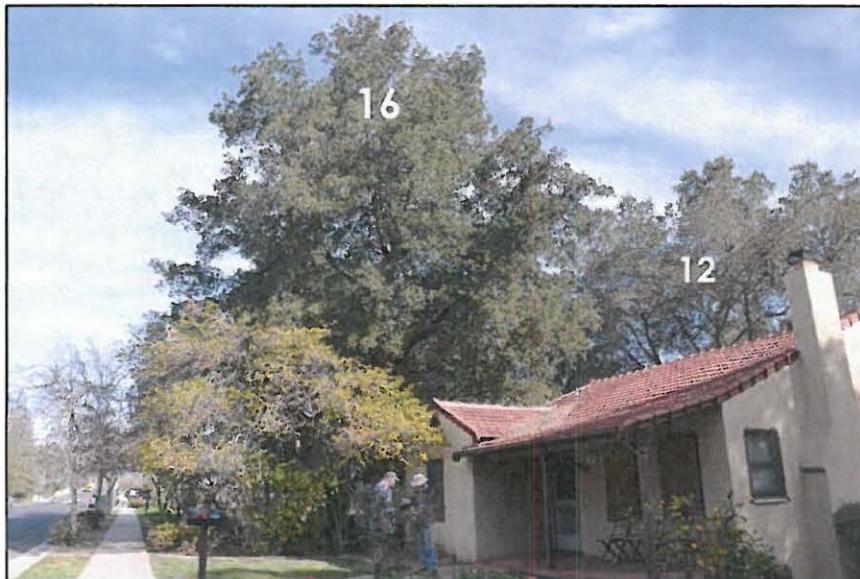
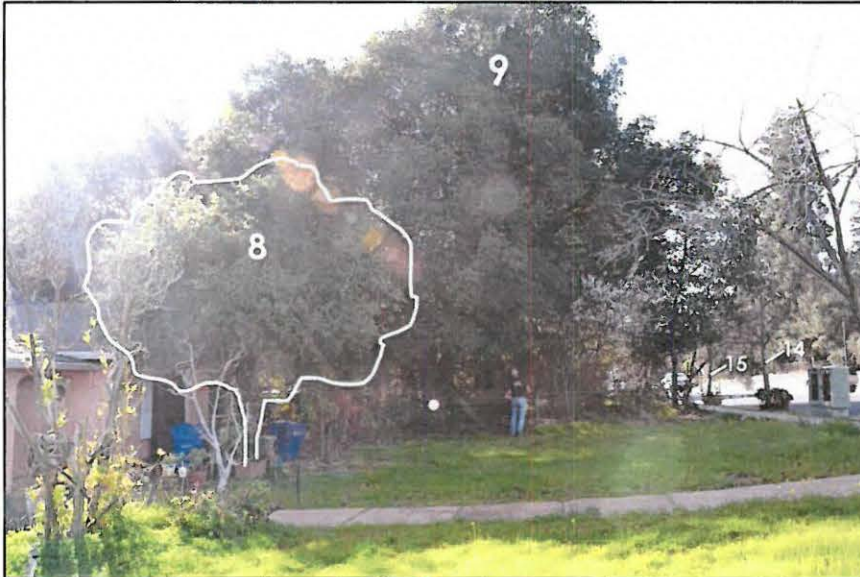
(Ord. No. 2114, §§ I, II, 8-4-03)

## TREE PHOTOS



This is a partial side-view of **coast live oaks #2 and 3** from the southwest. Imagine a 2-story building 12 feet from the trunks of these trees, which tucked well inside the canopy. Now imagine trying to construct the 2-story building without having to cut off all the branches on the building side of the trunk. Such pruning will be necessary if the building is constructed as shown on the plan I reviewed. This photo was taken April 9, 2012 so the trees have probably grown a bit larger since then.





Upper Left: **coast live oak #8** (foreground) with large coast live oak #9 in the background. Winchester Blvd. to the right.

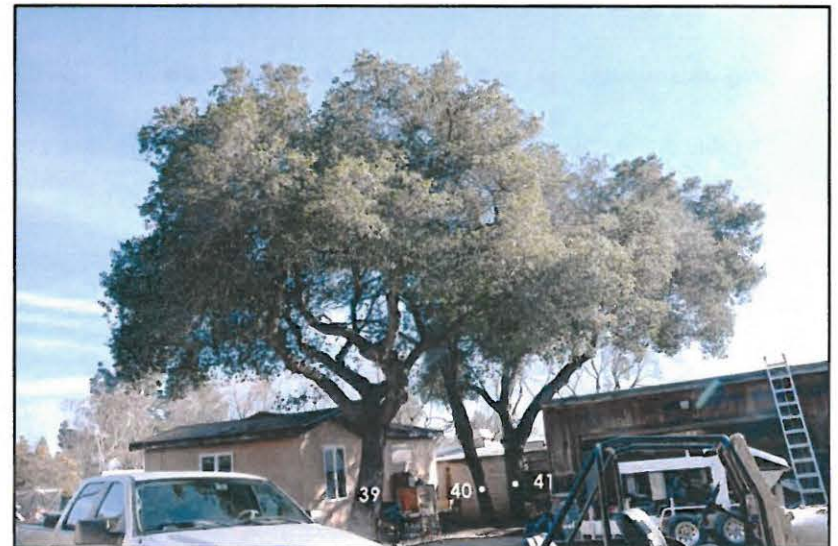
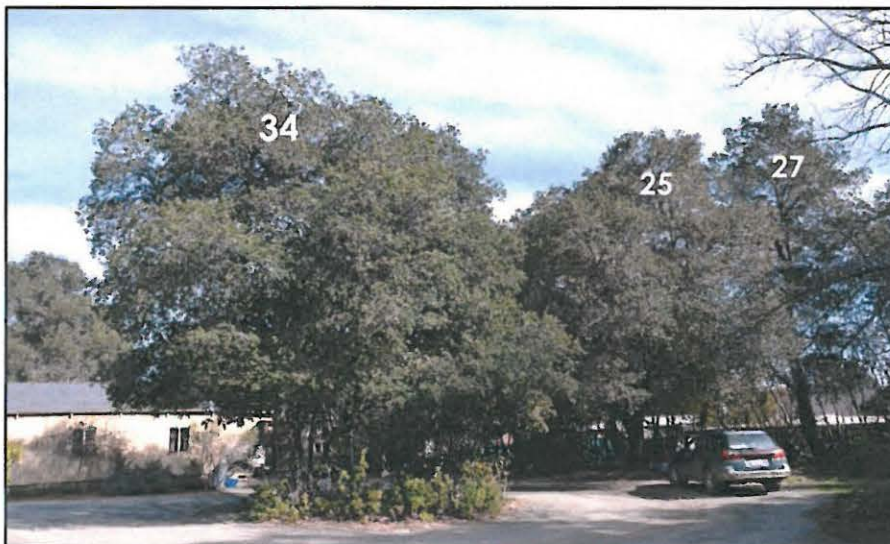
Lower Left: **coast live oaks #12 and 16**. Winchester Blvd. to the left.

Right: **coast live oaks #17 and 18**. Winchester Blvd. is toward the foreground.



Deborah Ellis, MS

Consulting Arborist & Horticulturist



Upper Left: **coast live oaks #21-23.**

Lower Left: **coast live oaks #25, 27 and 34.**

Right: **coast live oaks #29 and 41, with valley oak #40 in the background.**





Upper photo: **coast live oak #42**, with smaller **coast live oak #43** in the background.

Lower photo: ground surface around **coast live oak #17**, which is typical for many of the trees on site - natural leaf and twig litter mulch. This is the best ground covering for most trees, although I would pull it away from the root collars. The soil is very loose and friable, and this probably has a lot to do with the high vigor ratings for many of these oaks.







## **ASSUMPTIONS & LIMITATIONS**

1. **Tree locations** were provided by an unknown party and are shown on the Tree Map on page 1 of this report. The tree map is a reduced partial copy of the Tree Disposition Plan that I was given. Tree locations are assumed to be accurate but should be verified in the field.
2. **The Condition Ratings for deciduous trees that are out of leaf (because they have shed their leaves for winter dormancy) are estimated.** More accurate condition ratings for these trees can be obtained after they have fully leafed out (usually mid-May through September). Deciduous trees on this site that were completely leafless or in the process of shedding their leaves are: London plane, black walnut, golden raintree and valley oak.
3. **A Level 2 Basic Evaluation** of the subject trees described in this report was performed on February 9, 2016 for the purpose of this report. This is a brief visual evaluation of the tree from the ground, without climbing into the tree or performing detailed tests such as extensive digging, boring or removing samples. The tree is viewed by walking all around it, unless this is not possible. This type of evaluation is an initial screening of the tree after which the evaluator may recommend that additional, more detailed examination(s) be performed if deemed necessary. An assessment of tree risk was not performed during the evaluation.
4. **Trees on neighboring properties were not evaluated.** They were only viewed cursorily from the project site. I did not enter the neighboring property to inspect these trees up close.
5. **Some trees had their root collars and or lower trunks covered** with soil, vegetation or debris and were obstructed from view when I conducted my tree evaluation. If these trees may remain, the obstructions should be removed and I should re-examine these previously covered areas.
6. **I did the best I could at estimating construction impacts to trees based upon the plans, but this is difficult to accomplish with certainty at a scale of 1:20.** I do not have knowledge about the construction methods that will be used on this project and how the site will be staged for construction – these factors can increase or decrease the effect of construction on trees. How heavy equipment will move on the site is another factor we are unaware of – even though trees may not be located close to improvements, they may be located within equipment travel or staging areas. It is possible therefore, that more trees will need to be removed than are presently listed for removal in this report. On the other hand I may have overestimated construction impact in some cases – so that some trees that are listed for removal may not end up having to be removed after all.
7. **Any information and descriptions provided to me for the purpose of my investigation in this case and the preparation of this report are assumed to be correct.** Any titles and ownerships to any property are assumed to be good and marketable. I assume no responsibility for legal matters in character nor do I render any opinion as to the quality of any title.
8. **The information contained in this report covers only those items that were examined** and reflects the condition of those items at the time of inspection.
9. **Loss or removal of any part of this report** invalidates the entire report.





10. **Possession of this report, or any copy thereof, does not imply right of publication** for use for any purpose by any person other than to whom this report is addressed without my written consent beforehand.
11. **This report and the ratings or values represented herein represent my opinion.** My fee is in no way contingent upon the reporting of a specified value or upon any finding or recommendation reported.
12. **This report has been prepared in conformity with generally acceptable appraisal/diagnostic/reporting methods and procedures** and is consistent with practices recommended by the International Society of Arboriculture and the American Society of Consulting Arborists.
13. **My evaluation of the trees that are the subject of this report is limited to visual examination of accessible items without dissection, excavation, probing or coring.** There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
14. **I take no responsibility for any defects in any tree's structure.** No tree described in this report has been climbed and examined from above the ground, and as such, structural defects that could only have been discovered have not been reported, unless otherwise stated. Structural defects may also be hidden within a tree, in any portion of a tree. Likewise, **root collar excavations and evaluations** have not been performed unless otherwise stated.
15. **The measures noted within this report are designed to assist in the protection and preservation of the trees mentioned herein,** should some or all of those trees remain, and to help in their short and long term health and longevity. This is not however; a guarantee that any of these trees may not suddenly or eventually decline, fail, or die, for whatever reason. Because a significant portion of a tree's roots are usually far beyond its dripline, even trees that are well protected during construction often decline, fail or die. Because there may be hidden defects within the root system, trunk or branches of trees, it is possible that trees with no obvious defects can be subject to failure without warning. The current state of arboricultural science does not guarantee the accurate detection and prediction of tree defects and the risks associated with trees. There will always be some level of risk associated with trees, particularly large trees. It is impossible to guarantee the safety of any tree. Trees are unpredictable.

Deborah Ellis, MS

Consulting Arborist & Horticulturist



\*\*\*\*\*

I certify that the information contained in this report is correct to the best of my knowledge, and that this report was prepared in good faith. Thank you for the opportunity to provide service again. Please call me if you have questions or if I can be of further assistance.

Sincerely,

*Deborah Ellis*

Deborah Ellis, MS.

Consulting Arborist & Horticulturist

Certified Professional Horticulturist #30022

ASCA Registered Consulting Arborist #305

I.S.A. Board Certified Master Arborist WE-457B

I.S.A. Tree Risk Assessment Qualified



## ENCLOSURES:

- *Keeping Native Calif. Oaks Healthy*. Hagen. June 1990. California Department of Forestry & Fire Protection. Tree Notes #7.

## REFERENCES:

- American National Standard A300 (Part 5)-2012 for Tree Care Operations – Tree, Shrub & Other Woody Plant Management – Standard Practices:
  - (Part 5) – 2012 – Management of Trees & Shrubs During Site Planning, Site Development, & Construction.
  - (Part 8) – 2013. Root Management.
  - (Part 9) – 2011. Tree Risk Assessment. Tree Structure Assessment.
- Best Management Practices, International Society of Arboriculture:
  - Managing Trees during Construction. 2008
  - Tree Inventories. 2013.
- The Guide for Plant Appraisal, 9th edition, 2000, edited by the Council of Tree & Landscape Appraisers and published by the International Society of Arboriculture.
- Species Classification & Group Assignment. Western Chapter of the International Society of Arboriculture. 2004.

PO Box 3714, Saratoga, CA 95070. 408-725-1357. [decah@pacbell.net](mailto:decah@pacbell.net). <http://www.decah.com>.





## GLOSSARY

1. **Crooks** are unnatural bends or sharp angles in branches or trunks caused by the removal of other attached branches or trunks; often with a vertical growing side branch at the end. This concentrates weight at the end of the branch, and also over some inevitable decay from a pruning wound.
2. **Dripline**: the area under the total branch spread of the tree, all around the tree. Although tree roots may extend out 2 to 3 times the radius of the dripline, a great concentration of active roots is often in the soil directly beneath this area. The dripline is often used as an arbitrary "tree protection zone".
3. **Grove**: is a group of trees that located close together that shelter each other from wind and the elements, having "knit" canopies. If of the same species, there is usually root grafting between trees, which lends support from the ground, as well as water and mineral sharing. Removal of one or some grove members could cause remaining members to be unstable due to a reduction of previous shelter. Grove trees often have asymmetrical canopies when viewed as individuals.
4. **Project Arborist**. **The arborist who is appointed to be in charge of arborist services for the project.** That arborist shall also be a *qualified consulting arborist* (either an International Society of Arboriculture (ISA) Board-Certified Master Arborist or an American Society of Consulting Arborists (ASCA) Registered Consulting Arborist) that has sufficient knowledge and experience to perform the specific work required. For most construction projects that work will include inspection and documentation of tree protection fencing and other tree protection procedures, and being available to assist with tree-related issues that come up during the project.
5. **Qualified Consulting Arborist**: must be either an International Society of Arboriculture (ISA) Board-Certified Master Arborist or an American Society of Consulting Arborists (ASCA) Registered Consulting Arborist that has sufficient knowledge and experience to perform the specific work required.
6. **Qualified Tree Service**: A tree service with a supervising arborist who has the minimum certification level of ISA (International Society of Arboriculture) Certified Arborist for at least 5 years, in a supervisory position on the job site during execution of the tree work. The tree service shall have a State of California Contractor's license for Tree Service (C61-D49) and provide proof of Workman's Compensation and General Liability Insurance. The person(s) performing the tree work must understand and adhere to the most current of the following arboricultural industry tree care standards:
  - Best Management Practices, Tree Pruning. International Society of Arboriculture, PO Box 3129, Champaign, IL 61826-3129. 217-355-9411
  - ANSI A300 Pruning Standards. Ibid. (Covers tree care methodology).
  - ANSI Z133.1 Safety Requirements for Arboricultural Operations. Ibid. (Covers safety).
7. **Root collar & root collar excavation and examination**: The *root collar* (junction between trunk and roots) is critical to whole-tree health and stability. A root collar excavation carefully uncovers this area (with hand digging tools, water or pressurized air). The area is then examined to assess its health and structural stability. Buttress roots may be traced outward from the trunk several feet. Decay assessment of the large roots close to the trunk (buttress roots) involves additional testing such as drilling to extract interior wood with a regular drill, or the use of a resistance-recording drill to check for changes in wood density within the root; as would be caused by decay or cavities. It is important to note that root decay often begins on the underside of roots, which is not detectable in a root collar excavation unless the entire circumference of the root is





excavated and visible. Drill tests may detect such hidden decay. Note that it is not possible to uncover and evaluate the entire portion of the root system that is responsible for whole-tree stability. Decayed roots that are inaccessible (e.g. underneath the trunk) can be degraded to the extent that the whole tree may fail even though uncovered and examined roots in accessible locations appear to be sound.

8. **Root rot disease** is caused by wet, poorly aerated soil conditions. Degradation of roots (root rot) and sometimes the lower trunk (crown rot) ensues on weakened, susceptible plant species not adapted to such a soil environment. Opportunistic plant root pathogens (such as water mold fungi) are often the secondary cause of the problem. Root rot is a particular problem among drought tolerant plants that are not adapted to frequent irrigation during our normally rain-free months, such as many of our California native plants. The problem is often worsened in fine-textured heavy clay soils that retain water more than do the coarser, fast-draining soils such as occur in the natural environment of many of our native plants.
9. **Stump sprout trees** are the result of a tree trunk being cut down to a short stump close to the ground. If the tree survives, it sends out many small shoots (suckers) from around the cut stump. Some of these suckers may survive and grow to become significant trunks. These trunks are spaced very close together and usually have included bark between them, which reduces the strength of their union. Such trunks are prone to failure. Stump sprout trees can be very structurally unsound, particularly as they become large and old. There is often a great deal of decay associated with the mother stump, which can also reduce mechanical stability.
10. **Summer Dry:** Our native oak species are adapted to our "summer dry" climate. When the soil in their root system is kept moist during our normally dry months, these oaks are predisposed to attack by fungal root rot pathogens that are usually present in our soils. Therefore it is important to keep irrigation as far from the tree trunk (preferably beyond the mature dripline) as possible. The best landscape treatment underneath native oaks is non-compacted soil covered with a 3 to 4-inch depth of oak wood, leaf and twig litter (the tree's natural litter). Keep this mulch 6 to 12 inches away from the root collar (junction of trunk and roots). An exception to the no summer water rule would be newly planted oaks (for the first 2 to 3 years after planting, until they are "established") and also during droughts that occur during the normal rainy season.



Deborah Ellis, MS

Consulting Arborist & Horticulturist



Marni Moseley  
Town of Los Gatos Community Development Department  
110 E. Main Street  
Los Gatos, CA 95031

June 10, 2016

### **Arborist Report #5, Winchester Boulevard Office**

Dear Marni:

This report is a review and comment on the plan submittal for this project dated May 4, 2016. This plan depicts a beautiful building with underground parking. My most recent previous report for this report is dated February 12, 2016 and that report should be used as background information for this current review.

#### **Summary:**

In the current plan set the following dispositions for 34 protected trees are proposed:

- **Remove tree due to construction: 22 trees** (#3, 5, 7, 8, 10, 11, 12, 13, 14, 15, 18, 19, 20, 21, 24, 34, 35, 36, 38, 39, 42 and 43).
- **Save the following 12 trees:** #1, 2, 9, 16, 17, 22, 23, 25, 27, 29, 40 and 41. Actually all of these trees are "Debatable" Save or Remove due to potential construction impact, which will be discussed individually for each tree.

A Summary Table listing all trees is on pages 2 - 3. Recommendations for those trees which are proposed to be saved are on pages 4 - 7.

**Summary Tree Table***Continued on the next page*

Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Action	Reason
1	coast live oak	20	Good \$7900	Moderate/ Severe	Debatable	Construction
2	coast live oak	15, 15, 23	Fair/Good \$23,100	Moderate/ Severe	Debatable	Construction
3	coast live oak	19,23	Fair/Good 6,400	Severe	Remove	Construction
4	Tree less than Protected Size					
5	London plane	7	Fair/Poor 1,260	Severe	Remove	Construction
6	Tree less than Protected Size					
7	London plane	6	Fair/Poor 1,260	Severe	Remove	Construction
8	coast live oak	6	Fair 1,080	Severe	Remove	Construction
9	coast live oak	30 (3)	Good 15,500	Moderate/Severe	Debatable	Construction
10	Calif. bay	5,6 7	Fair 160	Severe	Remove	Construction
11	coast live oak	7,9	Fair 930	Severe	Remove	Construction
12	coast live oak	25	Good 10,200	Severe	Remove	Construction
13	coast live oak	7	Fair/Good 1,220	Severe	Remove	Construction
14	London plane	7	Fair/Poor 1350	Severe	Remove	Construction
15	London plane	6	Fair/Poor 1260	Severe	Remove	Construction
16	coast live oak	25	Good 11,900	Moderate/Severe	Debatable	Construction
17	coast live oak	21	Good 8,000	Moderate/Severe	Debatable	Construction
18	coast live oak	28	Good 14900	Severe	Remove	Construction
19	weeping bottlebrush	7	Fair 1080	Severe	Remove	Construction
20	coast live oak	6	Fair/Poor 900	Severe	Remove	Construction
21	coast live oak	11,13,18	Fair/Good 13,300	Severe	Remove	Construction
22	coast live oak	13	Fair 2280	Moderate	Debatable	Construction/ Structure





Tree #	Common Name	Trunk Diam.	Preservation Suitability & Value	Expected Construction Impact	Action	Reason
23	coast live oak	15	Fair/Good 3,010	Moderate	Debatable	Construction
24	coast live oak	15,16	Fair/Good 8,000	Severe	Remove	Construction
25	coast live oak	17	Fair/Good 4,040	Moderate	Debatable	Construction
26	Tree less than Protected Size					
27	coast live oak	18	Fair 4,870	Moderate	Debatable	Construction
28	Tree less than Protected Size					
29	coast live oak	7	Fair 1,260	Moderate	Debatable	Construction
30	Tree less than Protected Size					
31	Tree less than Protected Size					
32	Tree less than Protected Size					
33	Tree less than Protected Size					
34	coast live oak	17	Good 4,930	Severe	Remove	Construction
35	black walnut	23 (3.5)	Poor 1,760	Severe	Remove	Construction/Structure
36	black walnut	19 (3.5)	Poor/ Unacceptable 600	Severe	Remove	Construction/ Structure
37	Tree less than Protected Size					
38	goldenrain tree	19 (4)	Fair/Good 2,840	Severe	Remove	Construction
39	coast live oak	26	Good 11,000	Severe	Remove	Construction
40	valley oak	16	Good 5,800	Moderate	Debatable	Construction
41	coast live oak	25	Good 9,000	Moderate	Debatable	Construction
42	coast live oak	23	Good 8,700	Severe	Remove	Construction
43	coast live oak	12	Fair/Poor 1570	Severe	Remove	Construction

End of Table



## Recommendations for Protected Trees Proposed to be Saved:

### All trees:

- Grading, particularly surface grading for drainage, is shown close to and around all trees. This must not happen. Preferably the distance of 6xDBH as listed in my February 12, 2016 report (Complete Tree Table) should remain free of disturbance including grubbing, surface drainage or other grading, underground utilities, etc. Is the site over-engineered from a grading for drainage standpoint? This is fine as long as there are no existing trees, but if there are trees then the grading needs to be reduced significantly in order to save the trees. Tree roots are shallow; mostly within the upper 18 inches of soil. Grading not only directly damages these roots, but soil compaction caused by grading causes indirect, long term damage to roots. More undisturbed soil is necessary around trees to be saved. Limits of grading around trees must be shown on the grading plans.
- Landscaping: is not specified around trees to remain. Please review pages 11-12 of my February 12, 2016 report for directions on landscaping around the native oaks. All of the trees proposed to be saved are native oaks. In summary I do not want to see any planting or irrigation around these trees; only a 4 inch depth of wood, bark or tree trimming chippings mulch spread over the soil surface underneath the canopy of these trees. Think of this as an "open, natural" look. Less is more.
- Tree Protection Fence Detail, Sheet L-4: remove this. Replace with Town of Los Gatos Tree Protection Directions.

### #2 coast live oak (17 + 32"):

Distances from edge of trunk to improvements:

- building: 25'
- Stairs to building: 15'
- Sidewalk (at Shelburne Ave.): 2'
- Raised planters to east: 18'

Comments: too much going on too close to the tree. In my previous report I asked that the building (and this includes things outside the building such as stairs) be kept at least 10 feet beyond the dripline of the tree. This has not happened and I still recommend that this be done. Make sure this is the actual dripline in the field, as I am not sure that the dripline on the plan is accurate. Erect story posts so that we can see where the building (including stairs) will actually be located. The 6xDBH distance for this tree is 19 feet. Move the raised planters to beyond this distance. Regarding the sidewalk, for tree #2 as well as tree #3 sidewalk construction could damage large roots close to the trunk and cause the tree to die and/or fall over. Can the sidewalk be raised above grade to preserve existing roots – perhaps like decking? Or can the sidewalk area be something gold fines? Could the sidewalk be eliminated? If sidewalk construction proceeds as planned, you are taking your chances with trees #2 and 3.





**#3 coast live oak (19+23")**

Distances from edge of trunk to improvements:

- building: 18'
- Stairs to building: 14'
- Bio-retention area: 12'
- Sidewalk (at Shelburne Ave.): 3'

Comments: same as for tree #2. Note that I found an error in my February 12, 2016 report – the 3xDBH distance for this tree should be 8.25 feet, not 5 feet, and the 6xDBH distance should be 17 feet, not 10 feet.

**#9 coast live oak (30")**

Distances from edge of trunk to improvements:

- building: 14'
- Sidewalk (at Shelburne Ave.): 23'
- drainage pipe centerlines 9 and 20'
- landscape lighting for tree

Comments: building is too close to tree. Move building and other improvements such as drainage pipes so that there will be no soil disturbance closer than 15 feet from trunk. This means the building must be farther than 15 feet from the trunk. Ideally the building should be 10 feet or more from edge of canopy. Erect story posts so that we can better understand how much. Landscape lighting must include no trenching. The 6xDBH distance for this tree is 15 feet.

**#16 coast live oak (25"):**

Distances from edge of trunk to improvements:

- building: 24'
- Sidewalk (at Shelburne Ave.): 13'
- drainage pipe centerlines 9 and 20' '
- landscape lighting for tree

Comments: one drainage pipe must be moved farther from the trunk so that there is no soil disturbance closer than 13 feet from the trunk. Erect story posts to see if there is any effect on canopy. Landscape lighting must include no trenching.



**#17 coast live oak (21"):**

Distances from edge of trunk to improvements:

- building: 22'
- Sidewalk (at Shelburne Ave.): 12'
- drainage pipe centerline 15'
- retaining wall/fill: 12 & 15', also 2-4' to cut, 10' other side

Comments: the 6xDBH distance for this tree is 11 feet. Change the design so that there is no soil disturbance closer than 11 feet from the trunk. Some redesign of the deck/retaining wall is necessary.

**#22 coast live oak (13"):**

Distances from edge of trunk to improvements:

- parking lot: 18'

Comments: the parking lot is far enough away from this tree from a root perspective, but the tree leans significantly toward the parking lot (about 20 degrees). This should be investigated further to make sure the tree will not interfere with vehicle movement and parking. The 6xDBH distance for this tree is 7 feet.

**#23 coast live oak (15"):**

Distances from edge of trunk to improvements:

- parking lot: 17'

Comments: no problems for this tree except for the general grading/drainage mentioned in the first paragraph. The 6xDBH distance for this tree is 8'.

**#25 coast live oak (17")**

Distances from edge of trunk to improvements:

- parking lot: 6'

Comments: parking lot a bit closer than preferable, but since this is a disturbance only one side of the tree I can accept it (if construction work is done carefully), since at least it is beyond the 3xDBH distance of 4.5 feet. 6xDBH 9 feet.

**#27 coast live oak (18"):**

Distances from edge of trunk to improvements:

- parking lot: 17'

Comments: no problems for this tree except for the general grading/drainage mentioned in the first paragraph. 6xDBH distance for this tree is 9 feet.





**#29 coast live oak (7"):**

Distances from edge of trunk to improvements:

- parking lot planter: 10'

Comments: no problems for this tree except for the general grading/drainage mentioned in the first paragraph. 6xDBH distance for this tree is 5 feet.

**#40 valley oak (16"):**

Distances from edge of trunk to improvements:

- parking lot: 11-12'
- bio-retention area: 22'

Comments: no problems for this tree except for the general grading/drainage mentioned in the first paragraph. 6xDBH 8 feet.

**#41 coast live oak (25"):**

Distances from edge of trunk to improvements:

- parking lot: 15'
- bio-retention area: 25'

Comments: no problems for this tree except for the general grading/drainage mentioned in the first paragraph. 6xDBH: 13 feet.

\*\*\*\*\*

I certify that the information contained in this report is correct to the best of my knowledge, and that this report was prepared in good faith. Thank you for the opportunity to provide service again. Please call me if you have questions or if I can be of further assistance.

Sincerely,

Deborah Ellis, MS.

Consulting Arborist & Horticulturist

Certified Professional Horticulturist #30022

ASCA Registered Consulting Arborist #305

I.S.A. Board Certified Master Arborist WE-457B

I.S.A. Tree Risk Assessment Qualified



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Jocelyn Puga  
Town of Los Gatos Community Development Department  
110 E. Main Street  
Los Gatos, CA 95031

July 22, 2016

### **Winchester Office Building, Winchester Boulevard and Shelburne Way**

Dear Jocelyn:

This letter summarizes my understanding of the decisions that were made at the site meeting this morning with you, Doug Rich and his design team and me.

**Coast live oaks #2 and 3:** sidewalk along Shelburne Avenue will be concrete built on grade with no excavation, using TMI Structural Soil™ to create level base. The building will necessitate pruning to reduce canopy spread toward the building by approximately 14 feet. This is slightly over a third of the canopy spread between trunk and building, which is significant. Pruning to create the 5-foot clearance necessary between the building wall and the tree canopy will not be ideal (in many cases proper pruning cuts will not be possible) but this is a better alternative than removing the trees. It is imperative that a qualified tree service<sup>1</sup> be used to perform this pruning. Thought must be put into each pruning cut in order to minimize damage to the tree. I recommend Saratoga Tree Service (Blair Glenn) for this work. His phone number is: (408) 866-7200.

**Coast live oak #9:** on site we measured the wall of the proposed building to be at about the actual dripline of the tree. This will necessitate reducing the canopy spread toward the building by pruning by 5 feet. This should not be a problem as it will require small cuts made to twigs and small terminal branches. Again, a qualified tree service should perform this pruning.

**Coast live oaks #16 and 17:** adjustments to move improvements farther from the trees will be made. For the deck around oak #17, a minimum 1/8 inch gap should be created between deck surface boards, to allow more natural rainfall to penetrate the deck. The existing natural leaf litter mulch should not be removed underneath the deck area.

<sup>1</sup> **Qualified Tree Service:** A tree service with a supervising arborist who has the minimum certification level of ISA (International Society of Arboriculture) Certified Arborist for at least 5 years, in a supervisory position on the job site during execution of the tree work. The tree service shall have a State of California Contractor's license for Tree Service (C61-D49) and provide proof of Workman's Compensation and General Liability Insurance. The person(s) performing the tree work must understand and adhere to the most current of the following arboricultural industry tree care standards:

- Best Management Practices, Tree Pruning. International Society of Arboriculture, PO Box 3129, Champaign, IL 61826-3129. 217-355-9411
- ANSI A300 Pruning Standards. Ibid. (Covers tree care methodology).
- ANSI Z133.1 Safety Requirements for Arboricultural Operations. Ibid. (Covers safety).



**Other:**

1. For all trees that will remain that are adjacent to buildings, erect story posts so that I can verify the amount of pruning necessary for building clearance.
2. Retain existing natural leaf and twig litter underneath the canopy of trees that will remain. This natural mulch should only be removed in the location of improvements.

\*\*\*\*\*

I certify that the information contained in this report is correct to the best of my knowledge, and that this report was prepared in good faith. Thank you for the opportunity to provide service again. Please call me if you have questions or if I can be of further assistance.

Sincerely,

Deborah Ellis, MS.

Consulting Arborist & Horticulturist

Certified Professional Horticulturist #30022

ASCA Registered Consulting Arborist #305

I.S.A. Board Certified Master Arborist WE-457B

I.S.A. Tree Risk Assessment Qualified







ARCHITECTURE

PLANNING

URBAN DESIGN

May 5, 2016

Ms. Marni Moseley  
Community Development Department  
Town of Los Gatos  
110 E. Main Street  
Los Gatos, CA 95031

**RE: 15860-15894 Winchester Blvd.**

Dear Marni:

I reviewed the drawings, and visited the site. My comments and recommendations are as follows:

**Neighborhood Context**

The site is composed of three adjacent lots fronting on Winchester Blvd. Commercial uses are to the east, and nearby Winchester Blvd. frontages are occupied by a mix of residential and commercial uses. Photos of the site and surrounding neighborhood are shown on the following page.



**EXHIBIT 10**





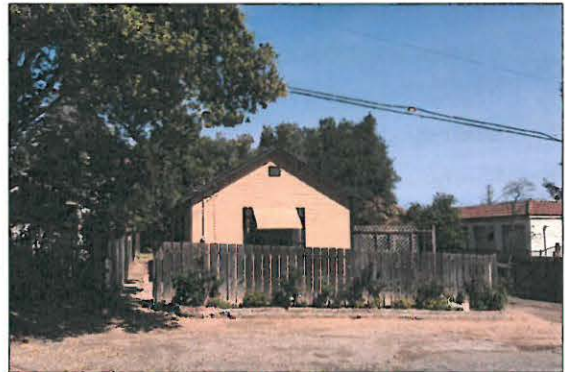
*View to the site from corner*



*Winchester Blvd. frontage*



*Structure across Shelburne Way from site*



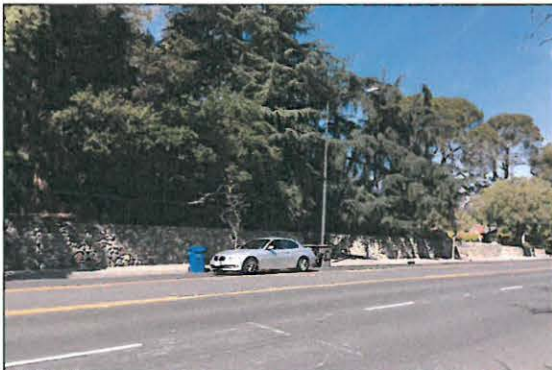
*Structure across Shelburne Way from site*



*Adjacent building to the east*



*Nearby building to the east*



*View across Winchester Blvd.*



*View across Winchester Blvd.*



### Concerns and Recommendations

The project is very well designed in a Contemporary Style. Parking is visually subordinated to the building. The Winchester Blvd. elevation is varied in height and facade treatment to break the building up into visually smaller elements. And the architectural materials and details are authentic to the architectural style - see front and rear elevation sketches below.



I have no recommendations for changes, but I would note that while the immediate neighborhood here is such that this Contemporary Style building should be a comfortable fit, that may not be the case for other sites along Winchester Blvd. A fairly recent building constructed just over a block to the north (see photo to the right) was designed with a much more traditional style because of its relative close proximity to smaller single family homes which established a small scale streetscape character. The merits of each individual project should be judged on its compatibility with the immediate neighborhood.



Marni, please let me know if you have any specific questions or need any other specific issues addressed.

Sincerely,

CANNON DESIGN GROUP

Handwritten signature of Larry L. Cannon in black ink.

Larry L. Cannon  
President

CANNON DESIGN GROUP

700 LARKSPUR LANDING CIRCLE , SUITE 199 , LARKSPUR , CA . 94939