

TOWN OF LOS GATOS EXHIBIT 7 PLANNING DIVISION

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March 24, 2014

Mr. Erwin Ordoñez Community Development Department Town of Los Gatos 110 E. Main Street Los Gatos, CA 95031

RE: 620 Blossom Hill Road

Dear Erwin:

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

Neighborhood Context

The site is large, and currently occupied by the existing auto dealership. It is bounded on the east by a small shopping center at the Los Gatos Blvd./Blossom Hill Road intersection and an Acura dealership facing Los Gatos Blvd. Single and multifamily residential neighborhoods border the site on the west and across Blossom Hill Road. Photographs of the neighborhood context are shown below.





View of existing dealership showroom from Blossom Hill Road



Blossom Hill frontage looking east



Adjacent residential neighborhood



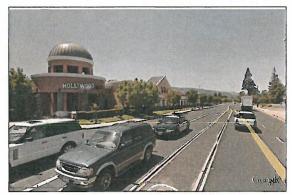
New residential development across Blossom Hill Road



Existing dealership showroom



Blossom Hill frontage looking west



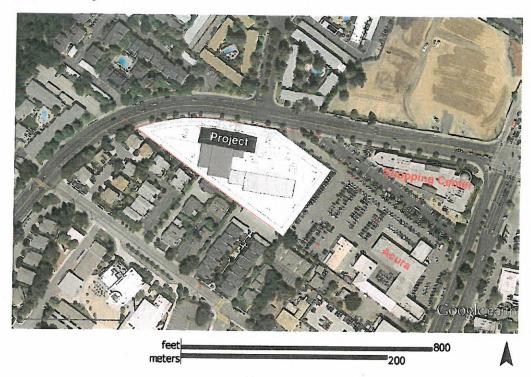
Adjacent shopping center Blossom Hill Road

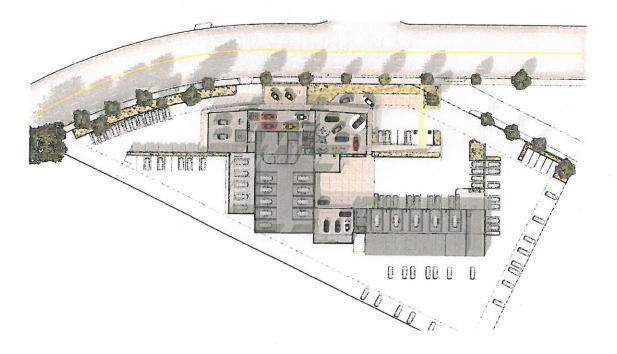


Nearby Acura dealership on Los Gatos Blvd.

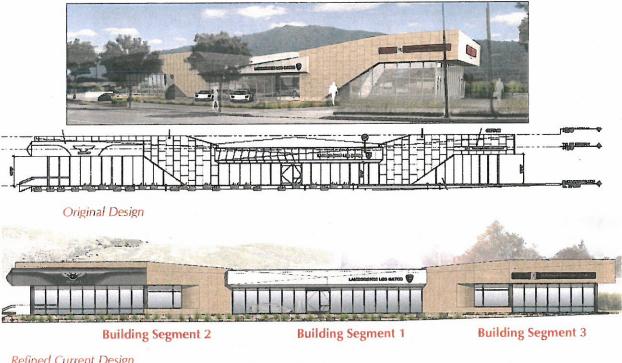
Issues and Concerns

The building complex would not be significantly larger overall or located any closer to the street frontage than the adjacent shopping center and Acura auto dealership, as shown in the site plan superimposed over the air photo, and the proposed floor plan below.





The proposed showroom design is for a single long, modern style structure with solid and glass walls. Although held to a relatively low height to partially mitigate view blockage to the distant hills, it will still be highly distinctive landmarktype of structure. Its landmark nature, however, has been refined since the initial submission, and seems like it will more comfortably fit within the Los Gatos town fabric. See the original proposal and current design illustrations below.



Refined Current Design





Showroom West Elevation

The building height has been lowered, the building skin materials and modulation of parapet heights has visually segmented the larger building into three distinct elements, and the treatment of the wall and glass surfaces at the end showroom has bee greatly refined.

Recommendations

I have no recommendations for changes to the project design.

Erwin, please let me know if you have any questions, or if there are other issues that I did not address.

Sincerely,

CANNON DESIGN GROUP

Larry L. Cannon

ARBORIST REPORT

Los Gatos Luxury Cars 620 Blossom Hill Road Los Gatos, California

Prepared for:

Erwin Ordonez Town of Los Gatos Community Planning Department 110 E. Main Street Los Gatos, CA 95031

Prepared by:

Deborah Ellis, MS. Consulting Arborist & Horticulturist

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FEBRUARY 20, 2014

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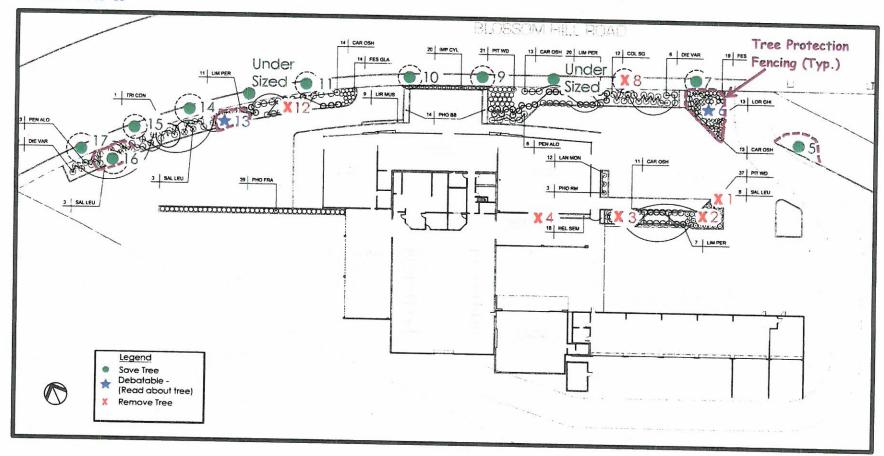


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Cover photo: The showroom of Los Gatos Luxury Cars along Blossom Hill Road, looking to the Northwest. City street trees crape myrtles #10 and #9 are visible and labeled. All photos in this report were taken by D. Ellis on February 18, 2014.

TREE MAP





SUMMARY

DESCRIPTION OF PROJECT:

Los Gatos Luxury Cars will be remodeling their complex. New buildings will be constructed and the site will be relandscaped. The existing parking lot will be reconfigured and much of that will be converted to new buildings.

DESCRIPTION OF EXISTING TREES:

There are 17 <u>protected trees</u>¹ on the project site that are within or adjacent to new construction, including 8 City street trees. All evaluated trees are described briefly the Summary Tree Table (Table 1) on page 3 and in greater detail in the Complete Tree Table (Table 3) beginning on page 7. The Complete Tree Table also includes suggestions for reducing construction (including landscape) impact to trees when possible and practical.

¹ For the purpose of this project, a protected tree in Los Gatos as defined in the <u>Los Gatos Town Code</u>, <u>Division 2 Tree Protection</u>, <u>Section 29.10.0960</u>, <u>12/3/2010 the Scope of Protected Trees</u> is any tree with a 4-inch or greater diameter of any trunk, when removal relates to any review for which zoning approval or subdivision approval is required. Town Street trees of any size are protected. Fruit trees less than 18 inches in trunk diameter are exempt.



TABLE 1 SUMMARY TREE TABLE

Tree #	Common Name	Trunk Diam. @3ft.	Preservation Suitability	Expected Construction Impact	Action	Reason
01	Australian willow	9	Good	Severe	Remove	Construction
02	Australian willow	6	Fair	Severe	Remove	Construction
03	Australian willow	8	Good	Severe	Remove	Construction
04	Australian willow	10	Good	Severe	Remove	Construction
05	Brisbane box	8	Fair	Low	Save	Construction
06	Australian willow	9	Good	Moderate/Severe		Landaganina
*07	Crape myrtle	7	Good	Low/Moderate	Save	Lanuscaping
*08	Crape myrtle	8	Poor	Low/Moderate	Remove	Structure
*09	Crape myrtle	8	Good	Low/Moderate	Save	Structure
*10	Crape myrtle	6	Good	Low/Moderate	Save	
*11	Crape myrtle	6	Good	Low/Moderate	Save	<u> </u>
12	Brisbane box	10	Fair	Severe	Remove	Constructi
13	Brisbane box	7		Moderate/Severe		Construction
*14	Crape myrtle	9			Save	Landscaping
*15	Crape myrtle					
*16	Brisbane box			Moderate/Severe	Save	
*17	Crape myrtle				Save	

^{*}City street tree.

RECOMMENDATIONS

- 1. Remove the following 6 trees: #1-4 Australian willows, #8 crape myrtle and #12 Brisbane box.
- 2. Save and protect the following 9 trees: #5, 7, 9-11 and 14-17.
- 3. The following 2 trees are listed as "Debatable"; #6 Australian willow and #13 Brisbane box due to proposed landscaping around them. Read about these trees in the Notes column of the Complete Tree Table and follow Recommendation #10 below.
- Replace crape myrtle #8 (due to poor condition) with a new crape myrtle tree, as part of new landscaping.
- 5. Tree Disposition Plan: re-label the trees with the tree numbers used in this report. These are the actual numbers on the tree tags that were placed on these trees in the field. Also revise the Legend so that the tree tag numbers are used.
- 6. Tree Protection Notes (sheet L101) remove these from the plan sheet and replace them with the Town of Los Gatos General Tree Protection Directions, which are included on pages 16–18 of this report.
- 7. Eight of the above trees are crape myrtle City street trees with tree grates covering the small planter area around there trunk. Therefore it is not possible to fence these trees individually with Type 2 fencing, as required in the Town of Los Gatos General Tree Protection Directions. These trees can be protected by fencing them off from construction with the perimeter cyclone fencing that is during construction.
- 8. Tree Disposition should match on all site-based plan sheets. Some of the sheets vary in which trees will be saved or removed. On the demo sheets number the trees as per the tree numbers in this report and clearly show which trees will be removed. On the grading plan show the numbered trees and show which trees will be saved or removed. On the landscape and irrigation plans show the numbered trees that will remain.
- 9. 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. $5xDBH^2$ 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. 3xDBHshould 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

^{2 3 &}amp; 5xDBH: See pages 15 and 16 for an explanation of these calculations which are used to estimate root protection distances for trees.



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disturbances on multiple sides of the trunk, then 5xDBH 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!

- 10. New landscaping around any of the existing trees that will remain. New landscaping around existing trees can be as damaging to the trees as any other type of construction. For this trees that will remain on the project site, the 5xDBH tree root protection distances listed in the Complete Tree Table should be observed for new landscaping. Within this radius all around the trunk of the tree all that is allowed is 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. There should be no soil disturbance within this zone, and that includes rototilling and irrigation. Any existing turfgrass (e.g. around Brisbane box trees #13 and 16) should be left intact and carefully killed by spraying with Roundup™ herbicide, according to manufacturer's label directions and using a shielded spray. Dead grass shall be left in place to decompose and as mulch depth reduced to 1-2 inches in this zone.
 - Keep in mind that Australian willow (e.g. tree #6) is listed as having a "Moderate" water requirement as per the WUCOLS list. Any new landscape planting around this tree species (beyond the 5xDBH radius) should have similar water requirement. The same goes for Brisbane box, which has a similar water requirement. The Australian box trees have been maintained in a fairly dry condition since they have been planted however so adjust irrigation to keep applied water outside of the 5xDBH zone for each tree.
 - Irrigation: switch individual emitters for Netafim™ inline drip tubing, placed on top of the soil and underneath the mulch, at least relative to the existing trees that will remain. This is a more durable type of drip irrigation and I recommend it for all the plantings, however.
- 11. The metal tree grates around crape myrtle City street trees #7, 9-11, 14, 15 and 17 have trunk openings that are too small or will soon be too small due to trunk diameter growth. The root collars of several of these trees are starting to grow over the grate, which can eventually girdle and kill the tree or cause it to fall over. Cut the grates to make the tree trunk hole larger so that there is a gap of at least 2 inches between the grate and the tree's root collar or trunk.
- 12. Construction or landscaping work done underneath the dripline of existing trees should preferably be done by hand, taking care to preserve existing roots in undamaged condition as much as possible and cutting roots cleanly by hand when first encountered, when those roots must be removed. A qualified consulting arborist (the project arborist) should be hired to monitor tree protection and supervise all work underneath the dripline of trees.



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13. The following plans listed in <u>Table 2</u> below have or have not been reviewed prior to the development of this Arborist Report. Those plans not reviewed should be reviewed by me; otherwise potential construction impacts to trees may be missed and trees will be exposed to additional damage.

Table 2 Plans Reviewed or not Reviewed (continued on the next page)

PLAN	DATE	SHEET	REVIEWED	SHOULD	NOTES
Existing Site Topographic Map including existing tree trunk locations	No date	C1	х		Demo Plan. The closest plan to an existing topo of the site.
Construction Staging					
Demolition	No date, 1/7/14	CI D101	Х		
Proposed Site Layout	1/7/14	A101	Х		
Grading/Drainage	No date	C2	Х		
Underground Utility				х	If includes anything not shown on the Grading/Drainage plan.
Site & Building Sections	1/7/14	A303	Х		
Erosion Control					
Building Exterior Elevations	1/7/14	A301, 302	х		
Roof					
Shadow Study					
Construction Details that would affect trees (for example building foundations, pavement installation including sub-grade preparation, underground utility installation)		÷		х	
Landscape Planting	1/6/14	L301	X		
Irrigation Plan	1/6/14	L201	X		
Landscape & Irrigation Details					
Other (Tree Disposition Plan)	1/6/14	L101	X		



APPENDIX

TABLE 3 COMPLETE TREE TABLE

This Table is continued through page 10. Data fields in the Table are explained on pages 10 to 13. *City street tree

	Species Trunk	Territor's	CONE	DITION			NUT I			TREE ROOT PROTECTION DISTANCES			
Tree #	& Common Name	Diam. @3ft.	Size	Vigor	Structure	Preservation Suitability	Expected Construction Impact	Action	on Reason	Notes	3хDВН	5хDВН	OTPZ
01	Geijera parviflora, Australian willow	9	20*18	80	70	Good	Severe	Remove	Construction	Construction: existing curb will be removed, and although planter area seems to remain in the same location there will be an electric vault installed just south of the tree. New landscaping is planned in the vicinity.	2	4	6
02	Australian willow	6	16*12	75	50	Fair	Severe	Remove	Construction	Construction: same as above	1	2	4
03	Australian willow	8	14*12		70	Good	Severe	Remove	Construction	Construction: similar to the above, the planter area in which this tree is located will be demo'd, and a bioswale will be constructed to the east of the tree.	2	3	6
04	Australian willow	10	20*18	85	60	Good	Severe	Remove	Construction	Construction: within proposed new building.	2	4	7
05	Lophosternon confertus, Brisbane box	8	25*16	80	60	Fair	Low	Save		Construction: This tree has a wrought iron fence on the south side of the trunk, which can serve as a portion of the tree protection fencing for this tree. New (temporary chain link) fencing must be placed at the edge of the planter	2	3	6



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	Species	Trunk		COND	NOITION						TRE PRODIST		TION
Tree #	& Common Name	Diam. @3ft.	Size	Vigor	Preservation Suitability Preservation Impact Reason Notes	Notes	3хDВН	5 х D ВН	OTPZ				
we want										underneath the dripline of this tree, along the Acura of Los Gatos roadway. This tree is not shown on the landscape plans; please add it to those plans.			
06	Australian willow	9	18*18	80	60	Good	Moderate/ Severe	Debatable	Landscaping	Construction: If this tree remains around it then the landscape plans need to be changed so that there is no soil disturbance within a minimum of 4 feet all around the edge of the trunk. Also refer to the Recommendations section of this report for more information on landscaping around this species.	2	4	6
07	Lagerstroemia hybrid, Crape myrtle	7	20*12	85	70	Good	Low/ Moderate	Save		Condition: car hit mechanical wound to lower trunk facing street; minor long-term significance.	2	3	4
*08	Crape myrtle	8	20*15	80	20	Poor	Low/ Moderate	Remove	Structure	Condition: car hit has cracked trunk all the way through from ground to 4.5 feet above the ground; can see daylight through crack – also much internal decay visible. As a part of new landscaping replace this tree a new tree of same species.	2	3	4
*09	Crape myrtle	8	20*16	80	75	Good	Low/ Moderate	Save		Condition: root collar is close to edge of tree grate. Cut grate to create a gap of several inches between trunk and grate.	2	3	4
*10	Crape myrtle	6	18*10	75	70	Good	Low/ Moderate	Save		Condition: minor car hit wound to lower trunk.	1	2	3

Deborah Ellis, MS

Consulting Arborist & Horticulturist



		Trunk		CONE	DITION		Expected	PERMA DE			TREE ROOT PROTECTION DISTANCES		
Tree	Common Name	mmon ame Diam. Size Size Suitability Construction Impact Reason	Reason	Notes	3хDВН	5хDВН	OTPZ						
*11	Crape myrtle	6	18*10	80	60	Good	Low/ Moderate	Save		Condition: minor basal trunk wounds from sucker removal.	1	2	3
13	Brisbane box	10	30*18		60	Fair	Severe	Remove		Construction: tree located in proposed bioswale area, and is shown to be removed on Tree Disposition Plan, although not all other plans. Condition: recently lion-tail pruned. This species is often pruned in this manner because it tends to fall over from the base in heavy winds. It is fast growing, develops a dense and heavy canopy and often has a poor root system from the nursery container – commonly with girdling roots.	2	4	7
			28*15	80		Fair	Moderate/ Severe	Debatable		Construction: too much landscape disturbance too close to the trunk of this tree. No disturbance within a 5-foot radius of the trunk. Condition: recently lion-tail pruned. A girdling wire is embedded in the trunk at about 8 feet above the ground – cut off the portion of wire that is not embedded and leave the embedded portion.	2	3	5
14	Crape myrtle	9	25*18	90	50	Fair	Low/ Moderate	Save		Condition: root collar recently starting to overgrow tree grate. Cut grate to create a gap of several inches between trunk and grate. Large scaffold branch failure wound and cavity on trunk.	2	4	5



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	Species			COND	OITION						TREE ROPROTECT DISTANCE		TION
Tree #	& Common Name	Diam. @3ft.	Size	Vigor	Structure	Preservation Suitability	Expected Construction Impact	Action	ction Reason	Notes	ЗхDВН	5хDВН	OTPZ
*15	Crape myrtle	8	25*16	90	70	Good	Low/ Moderate	Save		Condition: root collar starting to overgrow tree grate. Cut grate to create a gap of several inches between trunk and grate.	2	3	4
16	Brisbane box	11	30*18	85	60	Fair	Moderate/ Severe	Save		Construction: too much landscape disturbance too close to the trunk of this tree. No disturbance within a 5-foot radius of the trunk. Condition: recently lion-tail pruned. Cut and remove % inch girdling root at root collar/soil surface.	3	4	8
*17	Crape myrtle	8	25*18	85	70	Good	Low/ Moderate	Save		Condition: root collar starting to overgrow tree grate. Cut grate to create a gap of several inches between trunk and grate.	2	3	4

EXPLANATION OF TREE TABLE DATA COLUMNS:

1) 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.

2) 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.



- Service since 1984
- 3) Trunk diameter (at 3 feet above the ground). This is the trunk diameter measurement height required by the Town of Los Gatos, in lieu of <u>DBH</u>³.
- 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 <u>Table 4</u> below and 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 4 Preservation Suitability Rating Explanation (continued on the next page)

Excellent	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'.
Good	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'.

³ <u>DBH</u> is 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.



<u>Table 4</u> Preservation Suitability Rating Explanation (continued from the previous page)

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Fair	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'.
Poor	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'.
None	These trees are dead and are not suitable for retention in their location. 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'.

14. Action (Disposition):

- Save
- **Remove** (based upon tree condition, preservation suitability, expected impact of construction, poor species for the site or any combination of these factors).
- **Debatable:** there is a problem with potentially retaining this tree. Please read about the tree in the *Notes* column of the Complete Tree Table. Examples are:
 - o The tree is shown to be saved (and may be a desirable tree to save) but proposed construction is too close and will cause too much damage to the tree. Design changes are recommended to reduce damage to the tree.
 - o <u>Further evaluation</u> 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" 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.
 - Uncertain construction impact
 - Other (as explained for the individual tree)



- Service since 1984 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
 - 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)
- 16. 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. When reasonable, methods of reducing construction impact (including design changes) are presented here.
- 17. Tree Protection Distances (See pages 15 and 16).
 - a. Root Protection:
 - 3 and 5xDBH: Both the 3 and 5xDBH distances are listed for each tree. For multi-trunk trees 100% of the DBH of the largest trunk is added to 50% of the DBH for all other trunks in order to compute the operational DBH to use for these the Tree Protection Distance calculations.
 - OTPZ (Optimum Tree Protection Zone): This is calculated as per the text, <u>Trees & Development</u>, Matheny et al., International Society of
 not be possible to maintain the OPTZ distance recommended for trees on many projects due to crowded site conditions, the Arborist may
 omit this requirement and list only the 3 and 5xDBH distances.
 - b. <u>Canopy Protection</u>: Additional space beyond root zone protection distances may be necessary for canopy protection.

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SUPPORTING INFORMATION

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 <u>purpose</u> of the report is to identify and describe the existing protected trees on site - - their size, condition and suitability for preservation. The <u>audience</u> 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 <u>goal</u> of this report is to preserve the existing protected trees on site that are in acceptable condition, are good species for the area and will fit in well with the proposed new use of the site.

METHODOLOGY

I performed a basic evaluation of the subject trees on February 18, 2014. 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:

- <u>Guide for Plant Appraisal</u>, 9th edition, 2000, authored by the Council of Tree and Landscape Appraisers (CTLA) and published by the International Society of Arboriculture (ISA).
- Species Classification and Group Assignment published by the Western Chapter of the International Society of Arboriculture (WCISA), 1992.

The above references serve as industry professional standards for tree and landscape evaluations.

I measured the trunk diameter of each tree with a diameter tape at 3 feet above the ground, which is the required trunk diameter measurement height of the Town of Los Gatos. Trunk diameter was extrapolated to DBH (diameter at breast height, 4.5 feet above the ground) because DBH is also used calculate tree protection distances and other tree-related factors. The DBH figure is not included in the Tree Tables, but I have used it to estimate construction impacts to trees. 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

The site contains a main car showroom building and several smaller service buildings. A large portion of the west half of the site is mostly taken up by a parking lot. Site topography is generally level. Trees receive full sun. I am not sure if the parking lot trees are irrigated, but the trees in the landscape frontage along Blossom Hill Road are located in an irrigated lawn. Landscape maintenance at this site is of a moderate level.

TREE PROTECTION DISTANCES

3 TO 5 X DBH

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 affect 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 excavation 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. Such distances are guidelines only, and should be increased for trees with heavy canopies, significant leans, decay, structural problems, etc. 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. 5X DBH or greater is the "preferred" minimum distance which should be strived for, and this distance or greater should probably be used when there are multiple trenches on more than one side of the trunk. The roots beyond the zone of rapid taper form an extensive network of long, rope-like roots one to two inches in diameter. These woody perennial roots are referred to as transport roots, which will have less of an impact on tree health tha



OTPZ (OPTIMUM TREE PROTECTION ZONE)

OTPZ 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, DBH 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, <u>Trees & Development</u>, Matheny et al., International Society of Arboriculture, 1998. The tree protection zone calculation method in this text was used to obtain the OTPZ's provided in this report. Due to the crowded, constrained nature of many building sites it is often not be possible to maintain the OPTZ distance recommended for many of the trees -- therefore I have also listed alternate distances of 3 and 5X DBH (see paragraph above).

LOS GATOS GENERAL TREE PROTECTION DIRECTIONS

Note that the following is excerpted from Division 2 (Tree Protection) of the <u>Los Gatos Town Code</u> and does not constitute the complete Division 2 text. The owner/applicant is responsible for implementing all pertinent requirements of the Code relative to tree protection.

Sec. 29.10.1000 New Property Development

(1) The final approved Tree Preservation Report shall be included in the building permit set of development plans and printed on a sheets titled: Tree Preservation Instruction (Sheet T-1, T-2, etc.). These Sheets shall be referenced on all relevant sheets (civil, demolition, utility, landscape, irrigation) where tree impacts from improvements may be shown to occur.

(3.b.) The site or landscape plans shall indicate which trees are to be removed. However, the plans do not constitute approval to remove a tree until a separate permit is granted. The property owner or applicant shall obtain a protected tree removal permit, as outlined in section 29.10.0980 for each tree to be removed to satisfy the purpose of this definition.

(3.e.) Protective fencing inspection: Prior to issuance of any demolition, grading or building permit, the applicant or contractor shall submit to the building department a written statement verifying that the required tree protection fence is installed around street trees and protected trees in accordance with the Tree Preservation Report.



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(3.g.) An applicant with a proposed development which requires underground utilities shall avoid the installation of said utilities within the dripline of existing trees whenever possible. In the event that this is unavoidable, all trenching shall be done using directional boring, air-spade excavation or by hand, taking extreme caution to avoid damage to the root structure. Work within the dripline of existing trees shall be supervised at all times by a certified or consulting arborist.

Section 29.10.1005 Protection of Trees During Construction

a) Protective tree fencing shall specify the following:

- 1) Size and materials: A five (5) or 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 arborist4. 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 begins and remain in place until final landscaping is required. Contractor shall first obtain the approval of the project arborist on record prior to removing a tree
- 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 or vehicles inside the fence. The dripline shall not be altered in any way so as to increase the encroachment of the construction.
 - 2) Prohibit 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 If it is not possible to place Type 1 or Type 2 tree protection fencing at the dripline due to the construction, then place the fencing as far from the trunk as possible, including as much of the dripline as possible, while still allowing for enough room to build improvements. If this happens to be within all or some of the dripline, then so be it. But the contractor must try to fence off as much area under the canopy as possible, do not be irresponsible about this.

- 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 the certified or consulting arborist for periodic monitoring of the project site and the health of those trees to be preserved. The certified or consulting arborist shall be present whenever activities occur that pose a potential threat to the health of the trees to be preserved.
- 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.

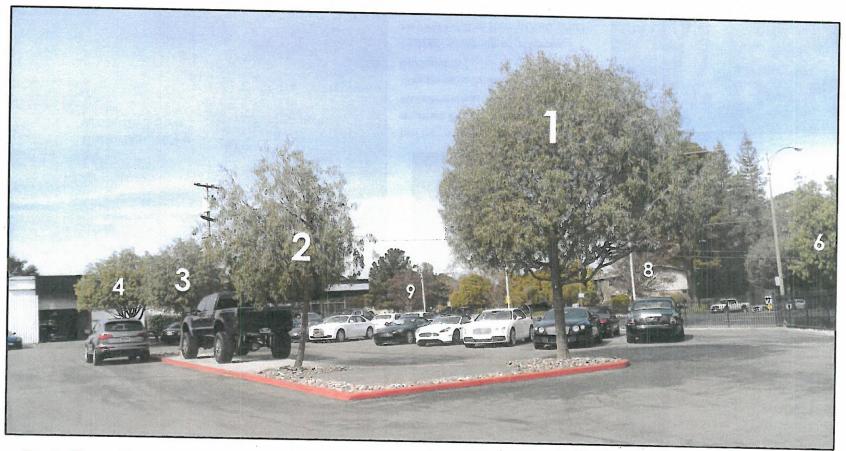
Section 29.10.1010 Pruning and Maintenance

All pruning of protected trees shall be consistent with the current edition of Best Management Practices – Tree Pruning, established by the International Society of Arboriculture (ISA) 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 cabling, and fertilizing if specified.

- 1) Any public utility installing or maintaining any overhead wires or underground pies 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 is prohibited.



TREE PHOTOS



Australian willows #1, 2, 3, 4 and 6, with City street tree crape myrtles #8 and 9 visible in the background.

Deborah Ellis, MS

Consulting Arborist & Horticulturist









Left photo: crape myrtle street trees #7 and 8, with Australian willow #6 and Brisbane box #5 in the background.

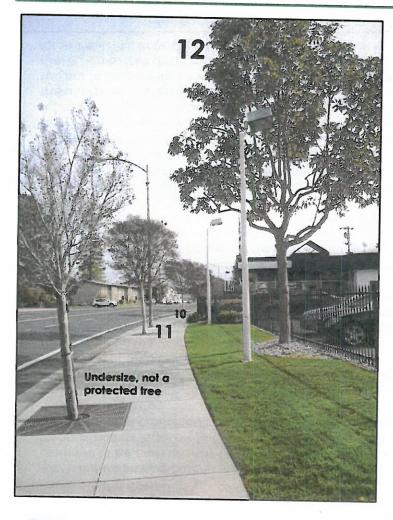
Center: close-up of crape myrtle #8 with cracked trunk; this tree should be removed and replaced.

Left: close-up of crape myrtle #14 overgrowing tree grate.

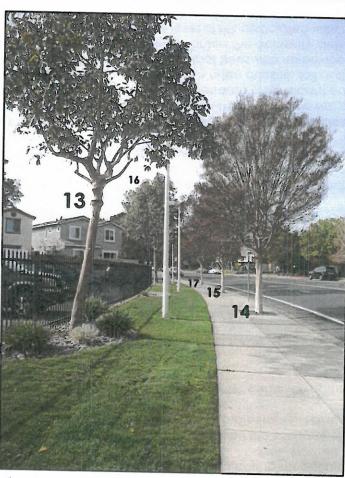




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Brisbane box #12 on the right, with crape myrtle street trees #10 and 11 at left.



Brisbane box trees #13 and 16 on the left, with crape myrtle street trees #14, 15 and 17 on the right.

ASSUMPTIONS & LIMITATIONS

- 1) Tree locations were provided by David Vorhees, civil engineer and are shown on the Tree Map on page 1 of this report. The tree map is a reduced partial copy of the Landscape Planting Plan that I was given. Tree locations are assumed to be accurate but should be verified in the field.
- 2) 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.
- 3) 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.
- Loss or removal of any part of this report invalidates the entire report.
- 5) 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.
- 6) This report and the 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.
- 7) 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.
- 8) 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.
- 9) 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.
- 10) 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.



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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





GLOSSARY

- 1) <u>Arborist, Qualified Consulting</u>: 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.
- 2) <u>Basic Evaluation</u> (of Trees): A 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. This is an initial screening of the tree after which the evaluator may recommend that additional, more detailed examination(s) be performed.
- 3) <u>Dripline</u>: 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".
- 4) Girdling roots are roots that grow circularly around the trunk (rather than away from the trunk) and compress the trunk or other roots, constricting the growth of these parts. Circling roots grow similarly, but they do not (or have not yet) restricted growth. Girdling roots can inhibit the flow of water and nutrients by "choking" vascular elements in the trunk or other roots, and they can also cause whole-tree failures at the root collar.
- 5) <u>Lion-tail pruning</u> removes interior branches and concentrates foliage at the ends of branches. This may result in sunburned bark tissue, watersprouts, cracks in branches, reduced branch taper, increased load on branch unions, and weakened branch structure. Lion tailing also changes the dynamics of the branch and often results in excessive branch breakage.
- 6) 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.
- 7) Scaffold branch: a primary structural branch arising from the trunk of a tree. Usually the largest and often the lowest branches of the tree.
- Suckers are secondary upright shoots arising from the roots or root collar (junction between roots and trunk) of a tree, or below the graft union. On a grafted tree the suckers (originating from the *stock* which includes the roots), are often not the same plant species as the *scion* (the grafted, desirable aboveground part). Suckers can be a nuisance in landscape situations. In nature however, suckers can serve to keep a tree alive after fire or mechanical damage that kills or removes the aboveground part of the tree.
- 9) <u>WUCOLS</u>: Water Requirements as referenced in this report refer to W.U.C.O.L.S. (Water Use Classification of Landscape Species a Guide to the Water Needs of Landscape Plants). This is now available online at: http://www.water.ca.gov. Go to this web site, then type "WUCOLS" in the Search box. Then see the *Species Evaluation List* beginning on page 63. The entire file path is: http://www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf

