



Arborist Report

**2303 Gianera Street
Santa Clara, CA**

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2303 Gianera Street
Santa Clara, CA

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Arborist Report

2303 Gianera Street
Santa Clara, CA

Introduction and Overview

Gianera Estate LLC is planning to re-develop the property located at the 2303 Gianera Street in Santa Clara. HortScience | Bartlett Consulting, Divisions of The F. A. Bartlett Tree Expert Company, was asked to prepare an **Arborist Report** for the trees within the project area as part of the application to the City of Santa Clara. This report responds to that request.

This report provides the following information:

1. An assessment of the health, structural condition, and suitability for preservation of the trees located on and adjacent to the proposed project.
2. An assessment of the trees that would be preserved and removed based on preliminary development plans.
3. Preliminary guidelines for tree preservation during the design, construction, and maintenance phases of development.

Tree Assessment Methods

Trees were assessed on October 13, 2023. The assessment included all trees measuring 3 inches and larger in diameter located within and adjacent to the project area. The assessment procedure was a visual assessment from the ground, consisting of the following steps:

1. Identifying the tree species.
2. Attaching a numerically coded metal tag to the trunk of each tree.
3. Recording the tree's location on a map.
4. Measuring the trunk diameter at a point 54-inches (4.5 feet) above grade.
5. Evaluating the health and structural condition using a scale of 1 – 5:
 - 5** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
 - 4** - Tree with slight decline in vigor, small amount of twig dieback, or minor structural defects that could be corrected.
 - 3** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
 - 2** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
 - 1** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormic shoots (secondary shoots that arise along the trunk and branches); extensive structural defects that cannot be abated.
6. Rating the suitability for preservation as “high”, “moderate” or “low.” Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.
 - High:** Trees with good health and structural stability that have the potential for longevity at the site.
 - Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring and may have shorter life span than those in ‘high’ category.
 - Low:** Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have

characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

Eighteen (18) trees representing 12 species were assessed, tagged as #150 - 167. Four off-site trees (#164 - 167) were included in the assessment. Overall, ten trees were in fair condition, five were poor, and three were good. In general species present were ornamental or fruit trees that are commonly observed in the region. Monterey cypress was the only species native to California. All trees appeared to have been planted as part of existing landscape treatment. Descriptions of each tree are provided in the **Tree Assessment Form** and locations are shown on the **Tree Assessment Plan** (see Exhibits).

**Table 1. Tree condition and frequency of occurrence.
2303 Gianera Street, Santa Clara, CA.**

Common Name	Scientific Name	Condition			Total
		Poor (1-2)	Fair (3)	Good (4-5)	
Loquat	<i>Eriobotrya japonica</i>	-	1	-	1
Monterey cypress	<i>Hesperocyparis macrocarpa</i>	-	1	-	1
Japanese privet	<i>Ligustrum japonicum</i>	1	-	-	1
Glossy privet	<i>Ligustrum lucidum</i>	-	1	-	1
Apple	<i>Malus domestica</i>	1	-	-	1
Victorian box	<i>Pittosporum undulatum</i>	-	1	-	1
Carolina cherry laurel	<i>Prunus caroliniana</i>	1	-	-	1
Almond	<i>Prunus dulcis</i>	2	-	-	2
Peach	<i>Prunus persica</i>	-	1	-	1
Callery pear	<i>Pyrus calleryana</i>	-	1	-	1
Holly oak	<i>Quercus ilex</i>	-	3	-	3
Mexican fan palm	<i>Washingtonia robusta</i>	-	1	3	4
Total		5	10	3	18

The existing site consists of two residences with outbuildings on a flat lot surrounded by housing on three sides and a large electrical substation to the north. All on-site trees were growing in the rear yard. Following are brief descriptions of the trees:

- Four Mexican fan palms were present; two (#166 and 167) were off-site at the east and west sides of the property. Condition was good (3 palms) and fair (palm #157). The three palms in good condition: #160 (Photo 1) and off-site palms #166 and 166 were the only trees in good condition at the site. Diameters ranged from 16 to 21 inches, with brown trunk heights from 7 to 30 feet.



Photo 1. Palm #160 and off-site trees #164 and 165 were growing at the north corner of the site.

- Three holly oaks were growing on the west side. All were young and in fair condition, with stem diameters from 3 to 6 inches. The oaks were growing at or close to either building walls or the property line (Photo 2).

Photo 2. Holly oak #150 was growing near a wall at the west property line.

- Two almond trees were growing together near the oaks. Almond #154 had multiple stems from one to five inches and the main stem was dead. Almond #155 had a 5-inch stem that had failed and turned upright. Both were in poor condition.

The remaining nine species were represented by one tree each:

- Loquat #152 had multiple attachments at the base from 2 to 5 inches and a wide spreading crown. It was in fair condition.



- Carolina cherry laurel #156 was topped and in poor condition, with codominant stems and trunk bleeding below the attachment. It was young in development and diameter was 7 inches.



- Peach #158 had codominant stems of 11 and 4 inches. It was in fair condition with some twig dieback in a wide spreading crown.

- Monterey cypress #159 had codominant stems of 12 and 7 inches. It had a full crown and was in fair condition (Photo 3).

Photo 3. Monterey cypress #159 was in fair condition with a full crown.

- Apple #161 had multiple attachments at the base of 2 to 3 inches and was growing in a 2-foot wide space. It was in poor condition.

- Japanese privet #162 was growing against a wall. It had multiple basal attachments from 2 to 4 inches and was in poor condition.
- Glossy privet #163 grew at the edge of a walkway. It had multiple attachments of from 2 to 4 inches and was fair.
- Off-site Callery pear #164 was 10 inches in diameter and in fair condition (Photo 1). It had a full crown that extended 3 feet over the property.
- Off-site Victorian box #165 was fair and branches extended 5 feet over the property (Photo 1). Trunk diameter was 7 inches.

Protected Trees in Santa Clara

The City of Santa Clara Municipal Code 12.35.080 defines Protected trees as certain species with a diameter of 12 inches or more measured at 54 inches above natural grade on private property, and any private tree with a diameter of 38 inches or more. By this definition, there were no Protected trees on the site. Heritage trees are specific trees adopted by the City of Santa Clara and listed in the Heritage Tree Inventory, Appendix Ten, 8.10. There were no Heritage trees identified at this site. Individual trees' Protected status are described in the Tree Assessment Form (see Exhibits).

Suitability for Preservation

Trees that are preserved on sites where development or other improvements are planned, must be carefully selected to make sure that they may survive construction impacts, adapt to a new environment and perform well in the landscape. Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. Evaluation of suitability for preservation considers several factors:

- **Tree health**
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees. Trees in good condition are in better health than those in poor condition.
- **Structural integrity**
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. Defects such as codominant or multiple stems, lean and other deviations from the vertical, heavy branches and decay are problematic and may increase the potential for a tree to fail. For example, Carolina cherry laurel #156 was topped and had codominant stems with trunk bleeding below the attachment. I do not recommend preservation of this tree.
- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. For instance, Victorian box and holly oak have moderate tolerance to construction impacts. Monterey cypress is intolerant of site disturbance.
- **Tree age and longevity**
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Species invasiveness**
Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (www.cal-ipc.org) lists species identified as being invasive. Santa Clara is part of the Central West Floristic Province. Mexican fan palm is considered moderately invasive and glossy privet is invasive on a limited basis. Victorian box and Callery pear are on the watch list for invasiveness.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2, below).

**Table 2. Tree suitability for preservation.
2303 Gianera Street, Santa Clara, CA.**

High	Trees with good health and structural stability that have the potential for longevity at the site. None of the trees assessed had high suitability for preservation.
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Moderate	Trees in fair health and/or possessing structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than
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those in the high category. All four Mexican fan palms and Monterey cypress #159 had moderate suitability for preservation.

Low	Trees in poor health or possessing significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. The remaining 13 trees had low suitability for preservation.
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We consider trees with high suitability for preservation to be the best candidates for preservation during development. We do not generally recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The **Tree Assessment** was the reference point for tree condition and quality. Impacts from the proposed project were assessed using the Gianera Street 8 – Residential Dwelling Subdivision/Tentative Parcel Map Survey (V.R.E. Design, 9/28/2023).

The proposed project would demolish the existing buildings and replace them with eight lots containing 2-story residences. Based on my assessment of the proposed plan and evaluation of the trees, I recommend the removal of all 14 trees on the site (#150 – 163) and preservation of off-site trees #164 – 167. None of the trees proposed for removal are *Protected*.

Successful retention of the trees to be preserved will require adherence to the **Tree Preservation Guidelines** (below).

Tree Preservation Guidelines

All on-site trees will be removed. Trees located off-site but close to the project boundary will be retained. The following recommendations will help reduce impacts to off-site trees from development and maintain their health and structural stability through the clearing, grading and construction phases.

Design recommendations

1. Where possible, include the location of all trees within 10 feet of the project limit. Include trunk locations on all project plans.
2. The project's perimeter security fence will also serve as the **TREE PROTECTION ZONE**. No grading, excavation, construction or storage of materials should occur outside the project limit.
3. All plans affecting trees shall be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, demolition plans, grading plans, drainage plans, utility plans, and landscape and irrigation plans.

4. Irrigation systems must be designed so that no trenching severs roots larger than 2 inches in diameter will occur within the **TREE PROTECTION ZONE**.
5. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

Pre-demolition and pre-construction treatments and recommendations

1. The project's perimeter security fence will also serve as the **TREE PROTECTION ZONE**. No grading, excavation, construction or storage of materials should occur outside the project limit.
2. Off-site trees to be preserved may require pruning to provide clearance for demolition, grading and construction. Tree care firm providing the pruning shall be a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the latest edition of the Best Management Practices for Pruning (International Society of Arboriculture) and the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300).
3. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain shall be removed by a Certified Arborist or Certified Tree Worker and not by the demolition contractor. The Certified Arborist or Certified Tree Worker shall remove the trees in a manner that causes no damage to the tree(s) and understory to remain.
4. Trees to be removed shall be felled so as to fall away from **TREE PROTECTION ZONE** and avoid pulling and breaking of roots of off-site trees to remain. If roots are entwined, the Consulting Arborist may require first severing the major woody root mass before extracting the trees.
5. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

Recommendations for tree protection during construction

1. Any approved grading, construction, demolition or other work within 5 feet of the **Tree Protection Zone** should be monitored by the Consulting Arborist.
2. Any root pruning that will occur within 5 feet of the **Tree Protection Zone** shall receive the prior approval of and may be supervised by the Consulting Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2 inches in diameter should be avoided.
3. If roots 2 inches and greater in diameter are encountered during site work and must be cut to complete the construction, the Consulting Arborist must be consulted to evaluate effects on the health and stability of the tree and recommend treatment.
4. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.

If you have any questions regarding my observations or recommendations, please feel free to contact me.

HortScience | Bartlett Consulting

A handwritten signature in black ink that reads "Pam Nagle". The signature is written in a cursive, flowing style.

Pam Nagle
Consulting Arborist and Urban Forester
Certified Arborist #WE-9617A
Registered Consulting Arborist #805
ISA Tree Risk Assessment Qualified



Exhibits

Tree Assessment Form

Tree Assessment Plan



Tree Assessment

2303 Gianera Street
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October 2023



Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
150	Holly oak	6,5	No	3	Low	Codominant at base; growing at base of wall; full crown.
151	Holly oak	4	No	3	Low	Single stem; 6" from wall; sooty mold.
152	Loquat	5,5,2	No	3	Low	Multiple attachments at base; wide spreading crown.
153	Holly oak	3	No	3	Low	Single stem; 6" from wall; surrounded by cactus.
154	Almond	5,4,3,1,1,1	No	2	Low	Main stem dead; sprouts from base.
155	Almond	5	No	2	Low	Stem failed then turned upright; upright stem topped with resprouts.
156	Carolina cherry laurel	7	No	2	Low	Codominant at 5' with bleeding below attachment; topped.
157	Mexican fan palm	21	No	3	Moderate	25' brown trunk; base pillows over concrete walkway.
158	Peach	11,4	No	3	Low	Codominant at 4'; twig dieback; wide spreading crown.
159	Monterey cypress	12,7	No	3	Moderate	7" stem attached at 1'; full crown.
160	Mexican fan palm	18	No	4	Moderate	Tagged on cactus; can't see base; dead fronds to ground; 12' brown trunk; surrounded by cactus.
161	Apple	3,3,3,2,2,2	No	2	Low	Multiple attachments at base; growing in 2' wide space; base of tree fills the space; full crown.
162	Japanese privet	4,4,3,3,3,2,2,2	No	2	Low	Multiple attachments at base; growing in 2' wide space; growing against wall; dieback.
163	Glossy privet	4,3,3,2,2	No	3	Low	Multiple attachments at base; growing at edge of concrete sidewalk; small holly oak at base.
164	Callery pear	10	No	3	Low	Off-site; no tag; trunk is approximately 2' from fence; canopy extends 3' over fenceline; full crown.
165	Victorian box	7	No	3	Low	Off-site; no tag; trunk is approximately 1' from fence; canopy extends 5' over fenceline; can't see trunk; history of branch failures; dieback.
166	Mexican fan palm	16	No	4	Moderate	Off-site; no tag; trunk is at edge of fence; canopy extends 2' over fenceline; can't see trunk; 7' brown trunk.

Tree Assessment

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
167	Mexican fan palm	16	No	4	Moderate	Off-site; no tag; trunk is at edge of fence; canopy extends 5' over fenceline; can't see trunk; 30' brown trunk.

Tree Assessment Plan

2303 Gianera Street
Santa Clara, CA

Prepared for:
Gianera Estate LLC
San Jose, CA

October 2023

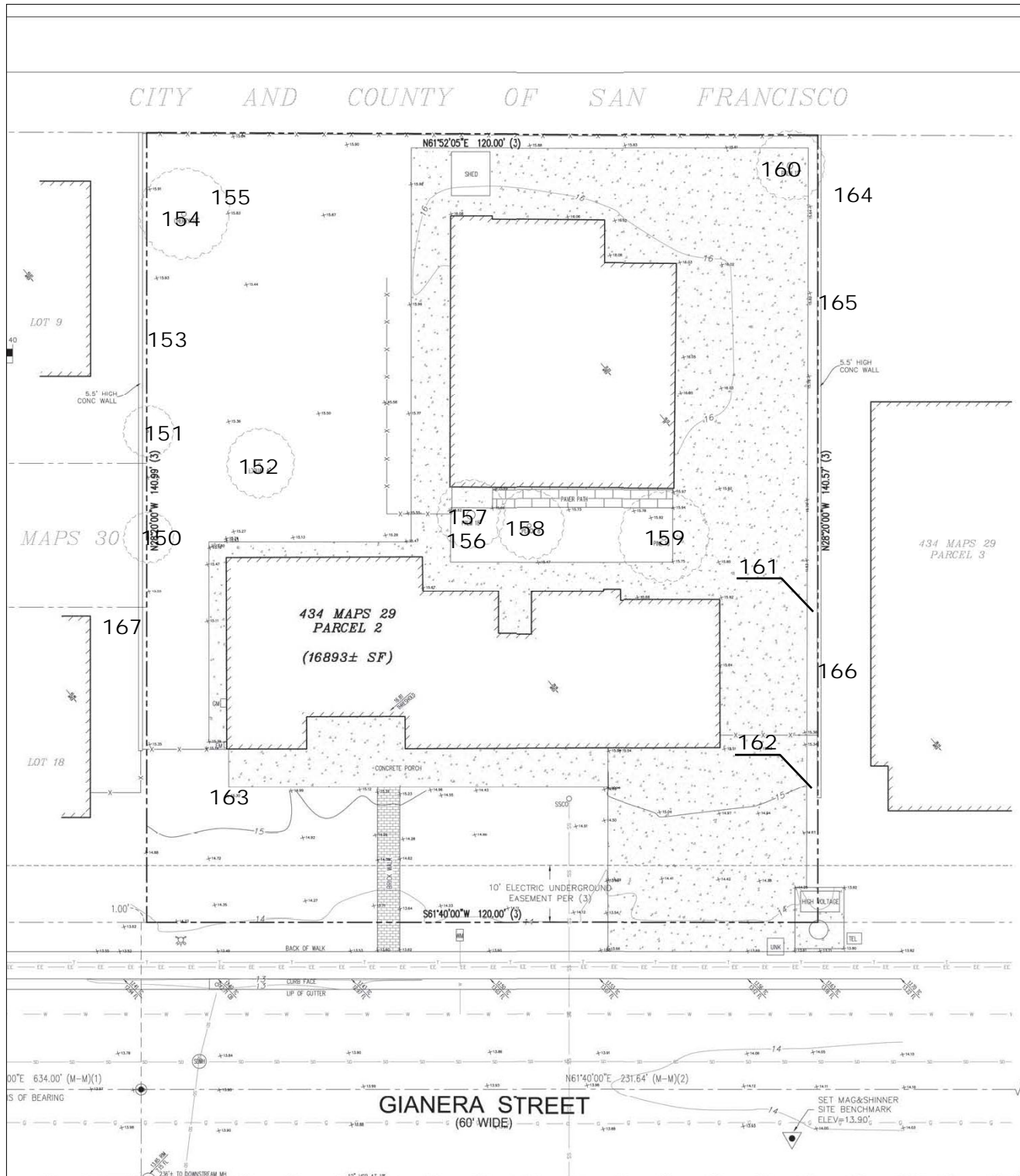


No Scale

Notes:

Base map provided by:
Zhen's Land Surveying, Inc.
San Mateo, CA

Numbered tree locations are approximate



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