

DATE: November 12, 2013

CATEGORY: New Business

DEPT.: Community Development/

Public Works

TITLE: Marketing of the 6.69-Acre Moffett

Gateway Site Located at 750 Moffett

Boulevard (APN 153-19-007)

RECOMMENDATION

Direct staff to issue a Request for Proposals (RFP) to obtain proposals for private development of the 6.69-acre Moffett Gateway property with the following parameters:

1. Long-term ground lease; and

2. A preference for development proposals containing hotel and office uses.

BACKGROUND

Moffett Gateway

In September 2009, the City acquired title to the former County Vector Control property, identified as 750 Moffett Boulevard (APN 153-19-007), and hereinafter referred to as the Moffett Gateway property. The Moffett Gateway property is a relatively large undeveloped parcel, totaling 6.69 acres, located at the southwest quadrant of Highway 101 and Moffett Boulevard. The Moffett Gateway property is an irregular-shaped parcel bounded by Moffett Boulevard and a PG&E substation to the south, Stevens Creek to the west, and a 3.03-acre Caltrans parcel to the north and east (Attachment 1).

The City purchased the Moffett Gateway property with the intent to utilize the property for revenue generation. The 2030 General Plan land use designation for the Moffett Gateway property is Mixed-Use Corridor. Permitted land uses include multi-family residential, office, commercial, and lodging. The allowable floor area ratio (FAR) is 1.85 (approximately 60 dwelling units per acre), of which up to 0.50 FAR can be office use.

The Moffett Gateway property is bisected by storm and sanitary sewer lines. A PG&E gas main crosses the property as well (Attachment 1). Buildings cannot be constructed

Marketing of the 6.69-Acre Moffett Gateway Site Located at 750 Moffett Boulevard (APN 153-19-007) November 12, 2013 Page 2 of 8

over the utility lines; however, the construction of surface parking and driveways would be allowed.

The City has completed a comprehensive environmental site assessment of the Moffett Gateway property. The investigation confirms the existence of trichloroethylene (TCE), in shallow and deeper aquifers. Except for one small plume near former Vector Control buildings, it is apparent the major plume originates from an off-site source. The Federal Environmental Protection Agency, in concert with the Regional Water Quality Control Board, is continuing to investigate the source and responsible party(ies) for the TCE release. The environmental site assessment of the Moffett Gateway property concludes that the level and extent of TCE groundwater contamination would not preclude development of the property, although some protective measures may need to be taken during design and construction (e.g., installation of vapor barriers).

Caltrans Parcel

Caltrans owns a triangular-shaped, 3.03-acre property adjacent to the Moffett Gateway property. The property is a remnant created when the Highway 101/Highway 85 interchange was reconfigured (Attachment 1). The property is landlocked and has no legal access from Highway 101 or Moffett Boulevard. Future access could only be gained across or through the City-owned Moffett Gateway site.

The City considered the possible acquisition of the Caltrans property to create a larger, more developable site. Caltrans requires property declared surplus to be sold at fair-market value, as established by an appraisal. Caltrans requires an appraisal of surplus property to consider a property's assemblage value, or contributory value to an adjoining property, resulting in a higher value than one might reasonably assume for a landlocked parcel. Because of the assessed value of the Caltrans parcel and other considerations, including the fact the Moffett Gateway property can be economically developed without the Caltrans parcel, staff does not recommend acquisition of the Caltrans parcel.

Moffett Boulevard, between Highway 101 and the Highway 85 overpass, is Caltrans' right-of-way. Except for 40' of access rights the City has to the Moffett Gateway property near the controlled intersection of Moffett Boulevard and Leong Drive (next to the PG&E substation), Caltrans controls the access rights along Moffett Boulevard. To optimize the development of the Moffett Gateway property and enhance vehicle circulation, staff recommends acquisition of additional access rights to widen the existing access point and to create a second right-in/right-out driveway to and from

Marketing of the 6.69-Acre Moffett Gateway Site Located at 750 Moffett Boulevard (APN 153-19-007) November 12, 2013 Page 3 of 8

Moffett Boulevard. Staff is currently in negotiations with Caltrans for the possible acquisition of additional access rights along Moffett Boulevard.

ANALYSIS

The City's goal in purchasing the 6.69-acre Moffett Gateway property was to market and develop the site for revenue generation. The size, location, and flexible land uses create an excellent opportunity for the City to generate revenue from this strategic property.

Long-Term Ground Lease

A fundamental question for the City Council is whether to market the Moffett Gateway property for a long-term ground lease or a sale. Based on preliminary analysis of developing the property with hotel and office uses, a long-term lease could yield approximately \$2 million annually in lease and tax revenues. A sale of the property would generate a one-time payment of approximately \$11 million based on a fairly recent appraisal. Staff recommends a long-term ground lease rather than the sale of the Moffett Gateway property to generate sustained income and use City land to help strengthen the local economic base.

Use of Property

In fall 2012, Seifel Consulting, Inc., conducted a preliminary analysis based on four conceptual development scenarios at the Moffett Gateway property. Potential financial analysis was prepared for each of the development concepts, assuming a long-term ground lease. Financial analysis from all sources included lease revenue, property taxes, sales taxes, and transient-occupancy taxes. Two development concepts include development of the 6.69-acre City-owned property only, and the other two concepts considered development of both the City-owned property and the adjacent 3.03-acre Caltrans property which would total 9.72 acres. The concepts explored included hotel, office, and big box retail uses. The development concept which included combined hotel and office uses on the 6.69-acre City-owned property is projected to provide the best financial return to the City.

Although the preliminary analysis included a residential development alternative, this option presents several challenges. First, an environmental site assessment confirmed the existence of TCE, which makes residential development less desirable. Second, the Moffett Gateway property is bounded by two freeways and is a relatively isolated property that would not have a neighborhood feel if it were developed for residential

Marketing of the 6.69-Acre Moffett Gateway Site Located at 750 Moffett Boulevard (APN 153-19-007) November 12, 2013 Page 4 of 8

uses. Finally, residential development would not yield retail sales or transient-occupancy taxes, nor create long-term employment opportunities. Since revenue generation has been the primary goal for development of the Moffett Gateway site, and since the site's prime location creates abundant visibility opportunities for a corporate partner and a hotel operator, staff recommends against a residential development alternative.

Some site constraints must also be considered in the future development of the property. In order to optimize the economic potential of the property, Council is being asked to provide direction on a number of issues to minimize the amount of risk and uncertainty to potential bidders.

Site Constraints (Trees, Access, Environmental Assessment)

Trees

A significant challenge to development of the Moffett Gateway property is the number of trees on the site. A June 2011 Arborist Report prepared by a certified arborist inventoried 360 trees on the Moffett Gateway property and the adjoining Caltrans parcel. The breakdown is 256 trees on the Moffett Gateway property and 104 trees on the Caltrans parcel. A summary of the tree species is included as Attachment 2. The inventory identified 196 Heritage trees on the Moffett Gateway property.

Any economically viable development of the Moffett Gateway property would require the removal of a significant number (more than 75 percent) of the trees to accommodate structures, surface parking, and driveways. There are a total of 256 trees on the property. To develop the site for hotel and office uses based on conceptual diagrams, approximately 53 trees will be retained and 203 trees will be removed. Approximately 80 California pepper trees are currently located on a berm constructed by the County as a visual barrier and running north to south on the east side of the Moffett Gateway property (Attachment 2). The berm would have to be graded and leveled to accommodate development, parking, and traffic circulation. This would likely result in the loss of most, if not all, of these trees. Staff recommends that development proposals submitted in response to the impending Request for Proposals be required to minimize disruption and preserve as many trees as possible through a tree preservation and removal plan. Tree preservation and removal plans will be a factor in the RFP evaluation.

Marketing of the 6.69-Acre Moffett Gateway Site Located at 750 Moffett Boulevard (APN 153-19-007) November 12, 2013 Page 5 of 8

Site Access

Legal access to the property is currently limited to a 40′ wide opening near the southern end of the property, across from Leong Drive and near the PG&E substation. Caltrans controls access along Moffett Boulevard between Highway 101 and the Highway 85 overcrossing, but has agreed in principle to relinquishing an additional 486′ of frontage along Moffett Boulevard to the City. Staff is currently in negotiations with Caltrans for the possible acquisition of additional access rights along Moffett Boulevard.

Environmental Assessment

As stated earlier, the City has completed a comprehensive environmental site assessment of the Moffett Gateway property. The assessment confirmed the existence of TCE. Small quantities of TCE were reported for cleaning and may have been a component of stored pesticides during the County of Santa Clara's Vector Control use. A mixed-use hotel and office project may be developed upon environmental regulatory agency clearance, which is anticipated to be established in the next few months.

Developing the Moffett Gateway site with a combination of hotel and office uses is most advantageous financially for the City, and is consistent with permitted and provisional uses allowed on the property and meets the 2030 General Plan land use designation: Mixed-Use Corridor. Therefore, staff recommends development of the City-owned 6.69-acre Moffett Gateway property with hotel and office uses only.

<u>Process for Request for Proposals, Key Proposal Terms, Evaluation of Proposals, and Negotiations</u>

If directed by Council, it is anticipated that a Request for Proposals would be issued in early 2014 for the design and construction of a hotel and office project. Responses to the RFP will likely be due in March 2014. Key elements of the RFP will include a detailed project description, track record of successful similar developments, and fulfillment of project and Council objectives. The RFP is proposed to include the following terms:

- Lease of Moffett Gateway site from the City for 55 years plus options;
- Development of a hotel and office project;
- Reasonable long-term financial return to the City;

- Ensure project proposal meets the 2030 General Plan land use designation of Mixed-Use Corridor;
- Deposit to the City prior to entering the Exclusive Right to Negotiate Agreement process;
- Financial strength of potential developer;
- Development pro formas;
- Project parking plan; and
- Tree preservation and removal plan.

Staff anticipates contracting with a (yet to be determined) Real Estate Advisor to assist with real estate consultant needs related to marketing the site, evaluation of proposals in response to the RFP, pro forma analysis, lease negotiation, and development agreement. This is anticipated to be within the City Manager's contracting authority. Proposals will be assessed on the developer's qualifications for the Moffett Gateway development, understanding of and responsiveness to the City's objectives, and demonstration of the site's revenue generation value.

The City will embark on a two-step exclusive negotiations process with a development firm for the purpose of reaching agreement on a comprehensive Disposition and Development Agreement (DDA) and a long-term ground lease. The process will commence with the execution of a 90-day Exclusive Right to Negotiate (ERN) with the selected development firm, and conclude with a long-term ground lease through a DDA.

FISCAL IMPACT

The recommended course of action of marketing the Moffett Gateway property for a long-term ground lease with hotel and office uses could generate approximately \$2 million per year in lease and tax revenues. The lease revenues would be negotiated to escalate over time with periodic adjustments. Capital Improvement Project (CIP) 12-43 was established for the preparation for development of the property and was funded with \$725,000. The costs were estimated to provide for acquisition of the Caltrans site, environmental studies and analysis, regulatory agency costs, legal fees, surveys, and economic and financial analysis. There is a balance of approximately \$263,000 available

in the CIP, which is sufficient to cover the City's anticipated costs of issuing an RFP, evaluating proposals, and awarding a contract.

CONCLUSION

Staff seeks direction to proceed with issuing a Request for Proposals to obtain proposals for private development of the 6.69-acre Moffett Gateway property. This includes engaging a Real Estate Advisor to assist with marketing the Moffett Gateway property with a long-term ground lease opportunity and a preference for development proposals that contain hotel and office uses. Project funding is to be provided from CIP 12-43, which has an available balance of approximately \$263,000.

NEXT STEPS

If Council approves staff's recommendations, staff will proceed with the following:

- Complete negotiations with Caltrans for purchase of Moffett Boulevard access rights and return to Council for review, approval, and appropriations if necessary;
- Secure the services of a Real Estate Advisor to assist in marketing the site, including evaluation of proposals in response to the RFP, conducting pro forma analysis, lease negotiation, and providing guidance throughout the development agreement process;
- Issue the RFP in January 2014 with proposals due in March 2014; and
- Present proposals to City Council in a May 2014 Study Session and seek Council direction on terms of an Exclusive Right to Negotiate Agreement.

ALTERNATIVES

There are several alternatives that Council can elect to exercise:

- 1. Determine to sell the Moffett Gateway property rather than pursue a long-term ground lease. If Council does not approve proceeding with a long-term ground lease, staff will prepare for disposition with an invitation for bids for the Moffett Gateway property and will not commence the RFP process.
- 2. Pursue other land uses.

- 3. Pursue a purchase of the Caltrans site.
- 4. Provide other direction.

PUBLIC NOTICING

The meeting agenda and Council report have been posted on the City's website and announced on Channel 26 cable television. Interested parties, including North Whisman Neighborhood Association, have also been sent a copy of the agenda and Council report.

Prepared by: Approved by:

Alex Andrade Randal Tsuda

Economic Development Manager Community Development Director

Dennis P. Drennan Michael A. Fuller

Real Property Program Administrator Public Works Director

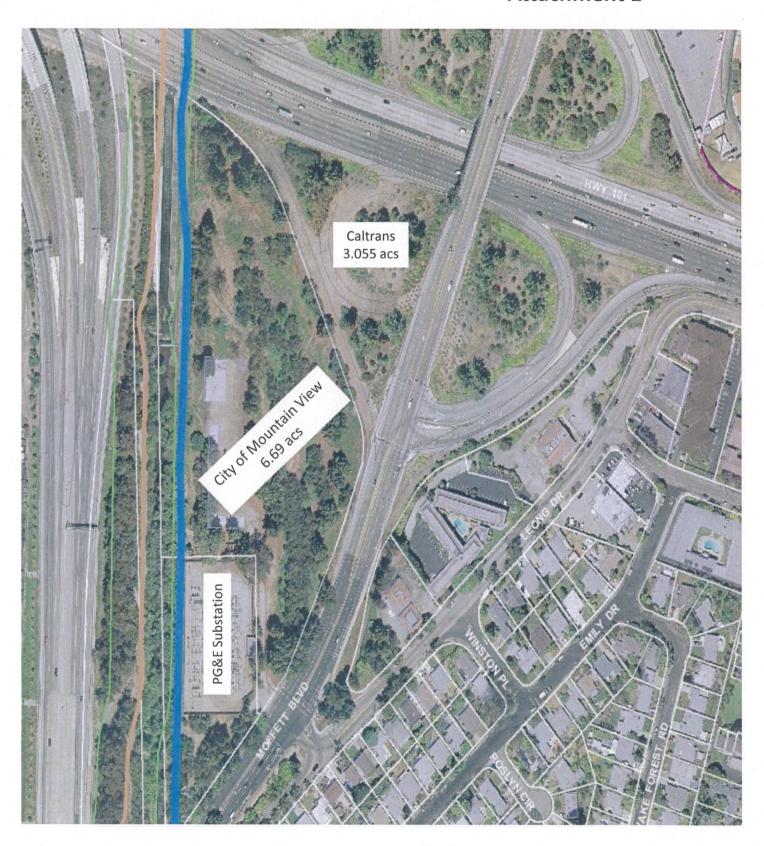
Daniel H. Rich City Manager

AA-DPD/5/CAM 824-11-12-13CR-E

Attachments: 1. Aerial Map of Moffett Gateway

2. Arborist Summary of Tree Species

Attachment 1



Moffett Gateway

ASCA Member ISA Certified Arborist #WE-0132A www.rmarborist.com eMail: ray@rmarborist.com

Ray Morneau • ARBORIST •

550 S. Shoreline Blvd. Mountain View, CA 94041-1929 Tel: 650-964-7664 Fax: 650-938-1577

Update of Certified Arborist's Property Preview Tree Inventory

June 29, 2011

Prepared for:
Dennis Drennan
Public Works – Engineering Division
500 Castro Street
Mountain View, CA 94041

Project:
Moffett Gateway Properties - Moffett Blvd & Hwy 101
Mountain View, California

Contents

- 1.0 Assignment
- 2.0 Summary
- 3.0 Tree Preservation Precepts
- 4.0 Site-Specific Information
 - 4.1 Basic Tree Preservation Plan (TPP)
 - 4.2 Tree Preservation Guidelines: Focused
- 5.0 Certification
- Appendix A Glossary
- Appendix B Selected References
- Appendix C Excel[™] Spreadsheet: Data for Inventoried Trees
- Appendix D Inventory Legend
- Appendix E Site Map with Tree Numbers for general tree locations
- Appendix F Pocket-fold-out Map with Tree Numbers.

1.0 Assignment

I have been retained by The City of Mountain View (Dennis Drennan, representative) to refresh the inventory for trees on site, showing the status of Heritage Trees, while also characterizing the smaller trees. This will update my August 2005 report.





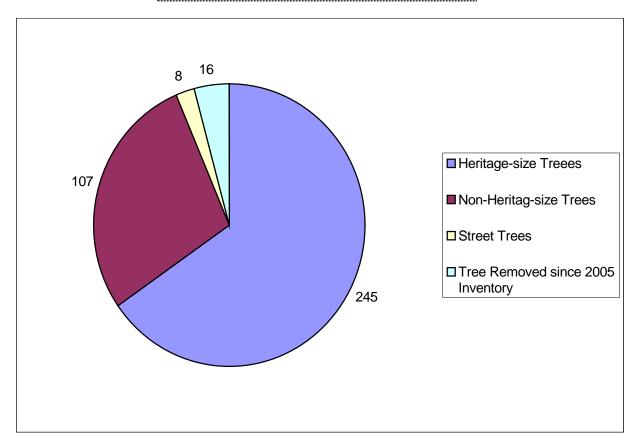
2.0 Summary

Moffett Gateway, for the purposes of this report, is bounded by Moffett Boulevard, US Highway 101, and Stevens Creek. It includes a portion of cloverleaf that is no longer used as a CalTrans freeway ramp.

When planning how to change a site's use, inventories such as this can assist with identifying the existing tree resources in order to hopefully preserve more of the better trees.

This inventory identified 376 trees on site of which 245 are heritage-tree-size by Mountain View Municipal Code, 8 are Street Trees, 107 are non-heritage-size. And 16 were in the 2005 inventory, but now are gone.

| 245 Heritage-size Treees |
|--------------------------------------|
| 107 Non-Heritag-size Trees |
| 8 Street Trees |
| 16 Tree Removed since 2005 Inventory |
| 376 Total Tree Lines In Inventory |





There were 21 different genera of trees, with several including multiple species (28 species in all).

| Name, Common | | Name Botanical |
|----------------------------------|----------------|--|
| Almond | 1 | Name, Botanical |
| Ash, Shamel | 2 | Prunus amygdalus Fravinus uhdai |
| Poofwood Common | 2 12 | Fraxinus uhdei |
| Beefwood, Common | <u>.</u> | |
| Blue Gum | 3 | Eucalyptus globulus |
| Buckeye, California | 8 | Aesculus californica |
| Cedar, Atlas | 1 | Cedrus atlantica |
| Cedar, Deodar | 35 | Cedrus deodara |
| Cedar, Eastern Red | 2 | Juniperus virginiana |
| Cherry, Hollyleaf | 1 | Juniperus virginiana Prunus ilicifolia Rhamnus californica |
| Coffeeberry | 2 | Rhamnus californica |
| Coffeeberry, Italian | 5 | Rhamnus alaternus |
| Elm, Chinese | 3 | Ulmus parvifolia |
| Fig, Edible | 1 | Ficus carica |
| Locust, Black | 6 | Robinia pseudoacacia |
| Locust, Black Oak, Coast Live | 2 | Robinia pseudoacacia Quercus agrifolia |
| [Oak, Holly | 1 | Quercus ilex |
| Oak, Red Olive, Common | 1 | Quercus rubra |
| Olive, Common | 3 | Olea europa |
| Palm, Canary Island Date | 1 | Phoenix canariensis |
| Pepper, California | 89 | Schinus molle |
| Pine, Aleppo | 19 | Pinus halepensis |
| Pine, Canary Island | | Pinus canariensis |
| Pine, Monterey | 3 | Pinus radiata |
| Redbud, American | 42 | Cercis canadensis |
| Redwood, Coast | 3 | Sequoia sempervirens |
| Sycamore, California | 13 | Platanus racemosa |
| Tree of Heaven | 1 | Ailanthus altissima |
| Walnut, Black | 10 | Juglans nigra |
| | 376 | |

| Name, Botanical | | Name, Common |
|------------------------------------|--------|---|
| Aesculus californica | 8 | Buckeye, California |
| Ailanthus altissima | 1 | Tree of Heaven |
| Casuarina equisetifolia | 12 | Beefwood, Common |
| Cedrus atlantica | 1 | Cedar, Atlas |
| Cedrus deodara | 35 | Cedar, Deodar |
| Cercis canadensis | 42 | Redbud, American |
| Eucalyptus globulus | 3 | Blue Gum |
| Ficus carica | 1 | Fig, Edible |
| Fraxinus uhdei | 2 | Ash, Shamel |
| Juglans nigra | 10 | Walnut, Black Cedar, Eastern Red |
| Juniperus virginiana | 2 | Cedar, Eastern Red |
| Olea europa | 3 | Olive, Common |
| Phoenix canariensis | 1 | Palm, Canary Island Date Pine, Canary Island |
| Pinus canariensis | 103 | Pine, Canary Island |
| Pinus halepensis | 19 | , |
| Pinus radiata | 3 | Pine, Monterey |
| Platanus racemosa | 13 | Sycamore, California |
| Prunus amygdalus | 4 | Almond |
| Prunus ilicifolia | 1 | Cherry, Hollyleaf |
| Quercus agrifolia | 2 1 | Oak, Coast Live |
| Quercus ilex | 1 | Oak, Holly Oak, Red |
| Quercus rubra Rhamnus alaternus | 5 | Coffeeberry, Italian |
| Rhamnus californica | ა 2 | Coffeeberry |
| Robinia pseudoacacia | 6 | Locust, Black |
| Schinus molle | 89 | Pepper, California |
| Sequoia sempervirens | 3 | Redwood, Coast |
| Ulmus parvifolia | 3 | Elm, Chinese |
| - Cirido parvirona | 376 | , |
| Ī | | |



| 1 | 0% | Dead |
|-----|---------------|-----------|
| 56 | 1% to 25% | Very Poor |
| 136 | 26% to 49% | Poor |
| 151 | 50% to 69% | Fair |
| 16 | 70% to 89% | Good |
| 0 | 90% to 100% | Excellent |
| 16 | [blank space] | missing |

376 = Total

For an un-manicured, low-intensity site, this tree population could be a lot worse off! About half are in "Fair" to "Good" condition, even without particularly attentive care. And it is obvious that some degree of care has been kept up with (clean-up of dead, burned, overgrown; mowing of competing blackberries; crown raising for visual clearance and for perimeter fence installation). Many of the wood chips that were generated appear to have been retained on site as a good mulch layer benefiting root zones.

Inventories are preliminary steps, which can help guide planning and design decisions. On-going consultations can review plans as they are drafted [to be alert for tree conflicts], provide a Tree Preservation Plan (TPP) [including site-specific Tree Protection Measures (TPMs)], and monitor progress [with periodic site inspections].

3.0 Tree Preservation Precepts

Trees prefer their status quo. Avoid disruption. Changes are always negative for the tree, but some change is inevitable. Minimizing changes to that status quo is the key to tree preservation.

Reduce all aspects of change as much as possible in all phases of the project – from planning to grading, trenching, building, pruning, even landscape installation. Cutting off rootlets, removing branches, even soil compaction introduce stresses for trees.

Yes, change is necessary, but the trees fare best if all changes are well thought out with all effects taken into account. Intentionally stressing a tree ought to be done thoughtfully.

Books have been written on this topic – but if I had to choose three basic concepts to highlight:

- Start early to preserve trees that are assets, but preserve whole trees (including roots), not merely trunks.
- The owner(s) must have the entire team committed to preserving each tree everyday (from the designer to the project manager to the guys with the nail bags).
- Minimize impacts, or the tree will require you to mitigate, lest you destroy its rootlets or its structure or its environment



4.0 Site-Specific Information (Moffett Blvd & Hwy 101)

As most recently amended by Ordinance No. 01.03, current Chapter 32 of the Mountain View City Code applies. This defines "Heritage Trees" as any tree with a trunk circumferene of 48" (15.3" dbh), plus oaks, redwoods, and cedars measuring 12" circumference (3.8" dbh).

Usung the 2005 inventory as a bsse, the information and tags were refreshed/updated for those 277 trees. I added 99 more trees that had grown larger and/or been planted more recently than at inventory time in 2005.

4.1 Basic Tree Preservation Plan (TPP)

Some basic principles of tree preservation include:

- ➤ Site-specific Tree Protection Measures (TPMs) must be drafted by the Project Arborist.
- ➤ Plan for tree preservation in advance planning to preserve whole trees, including roots (preserve large portions of root zone, not merely some of the top).
- ➤ Choose the specific trees that the project team wants to preserve.
- Establish a sufficiently-large tree protection zone (TPZ) for each tree or groupings of trees. Ideally the TPZ should extend out to the drip line at a minimum.
- When calculating TPZs, note that most trees have widespread, very shallow root systems.
- The main TPM is exclusionary Tree Protection Fencing (TPF).
- ➤ Soil buffering supplements TPF by adding mulch over root zone soil. This helps to avoid compacting the soil, which eliminates needed oxygen and damages roots.
- Monthly deep root watering will promote optimal tree health.
- Plan the work flow of the project, including but is not limited to:
 - Routes where workers will walk around the site,
 - Were vehicles and equipment will drive and park,
 - Storage area(s) for materials,
 - Where utilities will be routed (ideally, avoid trenching across any root zone),
 - Tool wash out area for all (including cement trucks, painters, plasters, etc.), and
 - Location of debris boxes and/or collection areas.
- ➤ The use of tree-sensitive structural and hardscape design has a positive impact on the future health and value of the trees preserved.



- 4.2 Tree Preservation Guidelines: Focused:
 - 4.2.1 These Tree Preservation Guidelines contain practical tree information, which helps project team members know what to expect regarding site trees. They help everyone coordinate between various sub-projects within the whole. They help minimize construction impacts and stresses on the trees.

These need to be included as part of the construction documents so that everyone who has a set of drawings also knows what tree protection measures they are required to follow here. Including them as a sheet in the blueline drawings is a typical and straightforward way to accomplish this.

Some cities borrow Palo Alto's standard published T-1 sheet – downloadable from: http://www.cityofpaloalto.org/civica/filebank/ blobdload.asp?BlobID=6460 (last accessed 06/15/2011).

Sometimes the blueprints are already finalized and published before the TPMs are ready. Then this report becomes a standalone document and must be kept with the roll of drawings on the document table.

- 4.2.2 Usually a plan to provide supplemental watering is required, and is likely needed in this case. Root zone moisture under the mulch can be monitored and a deep-soaking can be applied if the upper three inches become dry.
- 4.2.3 If pruning is needed, ANSI A-300 standards apply. The general contractor and the tree care contractor both need to be communicating with the City Arborist and or Project Arborist about specifications.

Besides foliage crown pruning, discuss and plan for grading and trenching for the foundation and the root pruning needed there. Trench with the mini- or smallest-available-excavator working away from the trees. Make any pruning cuts with a sharp tool to minimize breakage, rips, tearing, shattering. Do not "paint" cuts.

4.2.4 Except when performed by the Municipal Tree Crew (under the City Arborist's supervision, all project tree work performed before, during, or after construction is to be done by a qualified tree care contractor with a current, active C61/D49 license issued by the California State Contractors' Licensing Board. This especially includes all pruning, removals (including stump removals) within driplines of trees to be preserved, root pruning, and repair or remedial measures.

That company must have experience on similar projects. The crew must include WCISA Certified Tree Workers who can perform the work under the supervision of an ISA Certified Arborist (or equivalents, if they possess sufficient skill for approval by Project Arborist).

- 4.2.5 Protection: Fencing and root zone buffers root zone buffers prevent soil compaction by cushioning root zones with sheets of plywood to travel over to avoid unintended soil compaction.
 - 4.2.5.1 Before any equipment arrives or project site work commences, root zone



ISA Certif. #WE-0132A 650.964.7664

protection must be in place.

- 4.2.5.2 Typical required fence material would be 6' high chain link. At the contractor's option, depending on site conditions, driven posts may be used. Alternatively, pipe or concrete base supports may be set on top of the ground. Some cities require signs on the fences, warning of penalties in the event fencing is moved or removed prematurely.
- 4.2.5.3 Root zone protection shall buffer the root zone soil before any foot traffic or equipment travel over the surface. Material and thickness depends on traffic, but a 4- to 6-inch layer of wood chips or 1-inch sheet of plywood should suffice for foot traffic and wheelbarrows. Thicken as needed for a heavier piece of equipment. Check with the City Arborist or Project Arborist for thickness and layering of

Check with the City Arborist or Project Arborist for thickness and layering of wood chips, biaxial geogrid, crushed rock, and/or other options.

4.2.5.4 All root zone protection shall remain in-place and effective until final inspection.

4.2.6 Prohibited Acts & Requirements

- 4.2.6.1 No parking or vehicle traffic may travel over any root zones, unless using buffers approved by Project Arborist.
- 4.2.6.2 Have a certified arborist repair any tree damage promptly. And promptly notify Project Arborist.
- 4.2.6.3 No pouring or storage of fuel, oil, chemicals, or hazardous materials under foliage canopies of this site's trees.
- 4.2.6.4 Any temporary construction site utilities shall be placed so as not to affect foliage crowns or root zones. This includes electric, water, communication, portable toilets, etc. Infringement on any tree's space requires Project Arborist consultation.
- 4.2.6.5 No storage of construction materials under any foliage canopy without prior Project Arborist approval.
- 4.2.6.6 No trenching within any tree protection zone without Planning or Project Arborist review. Consult Project Arborist before any trenching or root cutting beneath any tree's foliage canopy.
- 4.2.6.7 Any work inside of Tree Protection Fences and/or encountering roots of 1-inch- or-greater diameter requires the notice to the Project Arborist to arrange for on-site monitoring. Typically, 48-hours prior notice is acceptable. Exception: here we have already discussed how Mr. Netzel may proceed without the Arborist present.
- 4.2.6.8 No clean out of trucks, tools, or other equipment over any root zone. Keep this debris outside of any existing or future root zone.
- 4.2.6.9 No attachment of signs or other construction apparatus to these trees.



5.0 Certification

I certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge, ability, and belief, and are made in good faith.

Thank you for the opportunity to apply my knowledge and expertise working with your trees. Good luck with the next phases of your project. If I can answer any further questions, please inform me of any tree-related queries anyone associated with the project may have.

Respectfully submitted,

Raymond J. Morneau

Raymond J. Morneau

ISA Certified Arborist #WE-0132A

ASCA Member

Schedule of Appendices

Appendix A: Glossary

(Next 3 pages – Page #9-11.)

Appendix B: Selected References

(Following 2 pages – Pages #11-12.)

Appendix C: Excel[™] Spreadsheet: Data for Inventoried Trees

(Following twelve pages – Pages #13-41.)

Appendix D: Inventory Legend

(Following two pages – Pages #42-43.)

Appendix E: Site Map with Tree Numbers for general tree locations

(back page – Pages #44.)

Appendix F: Pocket-fold-out Map with Tree Numbers.

(back cover pocket – Large, folded from ~ 18" X 24".)



ISA Certif. #WE-0132A 650.964.7664

Appendix A: Glossary

ANSI: Acronym for American National Standards Institute. (ISA, 2005, p.6.)

- **ANSI A300 standards:** in the United States, industry-developed, national concensus standards of practice for tree care. (ISA, 2005, p.6.) Six parts have been drafted since 1995: Part 1 Pruning; Part 2 Fertilization; Part 3 Support Systems; Part 4 Lightning Protection; Part 5 Construction Management; Part 6 Transplanting. Each part is reviewed and updated approximately every five years.
- **Arborist:** professional who possesses the technical competence gained through experience and related training to provide for or supervise the management of trees and other woody plants in residential, commercial, and public landscapes. (ISA, 2005, p.8.)
- **Arborist, Consulting:** an arborist who may now limit his practice to inspections, analysis, reporting, and such (rather than the practical side of pruning and removals), often retained by tree owners, attorneys, insurance companies, homeowners associations, developers, and similar clients.
- **Arborist, Project:** an arborist, usually retained by a tree owner, developer, or municipality to provide inspections and reports on the status of site trees during the construction phase of a project.
- **ASCA:** Acronym for American Society of Consulting Arborists. (http://www.ascaconsultants.org/)
- **BMPs:** Best Management Practices publications developed by the International Society of Arboriculture (ISA) to aid in the interpretation and implementation of ANSI A300 standards. Each BMP booklet corresponds to one of the six topics/parts.
- **Hydrophobic:** repelling or not taking in water, as "gorilla hair" mulch when it mats down.
- **ISA:** Acronym for International Society of Arboriculture. (http://www.isa-arbor.com/) (http://www.treesaregood.com)
- **Root-sensitive techniques:** Creative designs and procedures for necessary activities under tree driplines. The less they are used, the more one must expect tree decline and/or removal. Some root-sensitive designs include:
 - See the heading "Tree-sensitive techniques" below.
 - Re-design, re-direct impacts.
 - Consider pier-and-grade-beam techniques (with beam set on top of existing grade with no cut into the root zone).
 - Bore utility installations using one of the trenchless technologies.
 - Minimize base preparation by reducing sections under hardscape.



ISA Certif. #WE-0132A 650.964.7664

- Employ one of the several specs for porous or pervious concrete generally, a "no fines" mixture of Portland cement, rock, and water.
- Design to use biaxial geogrid (e.g. Tensar® BX1200, or similar/equivalent) which geotechnical engineers spec to reduce sections for roads or to build on top of soft soils (even for traffic over peat bogs).
- Support structures/construction with helical piers/anchors, grade beams suspended above root zones, reinforced smaller-diameter piers, cantilevered designs,
- "Tree Preservation" compared with "Tree Retention": Do not confuse these two terms. Too often, in the name of "preservation", a project gives mere lip service to what trees need that is, they only "retain" them for the duration of the project or for a little while after. Real "preservation" requires space the more we whittle away a tree's necessary space, the more we are merely "retaining".
- **Tree Protection Fence (TPF):** Exclusionary fence, ideally positioned to encompass the entire Tree Protection Zone (TPZ), installed before any other phase of the project begins before any materials, equipment, or machinery arrives on site
 - Easily moved fencing is prohibited because that defeats the purpose when moved, it no longer protects. The standard is 6-foot high rolled chain link fence installed on 2-inch diameter, 8-foot tall galvanized posts driven 2-feet into the earth.

An inspection opening or gate no wider than 3-feet is allowed.

It is to remain in place, taut and effective, until the final landscaping phase of the project.

Tree Protection Zone (TPZ): an exclusionary area which must not be compromised without an arborist's review so that mitigation can be considered to minimize impact on the tree. Given the opportunity, the Project Arborist can design tree-specific relief as proactive measures, rather than try to repair damage/effects that need not have happened.

The most commonly established TPZ is five feet (5') beyond the extent of a trees branches or a radius ten times the trunk diameter, whichever is greater (e.g.: a 2-foot diameter tree would have a 20-foot radius TPZ). Ideally, then exclusionary Tree Protection Fence (TPF) would be installed to enclose that zone – any activity inside of that fence/zone must be mitigated to the satisfaction of the program created by the Project Arborist.

Tree-sensitive techniques: Creative designs and procedures for necessary activities near trees. The less they are used, the more one must expect tree decline and/or removal. Some root-sensitive designs include: including:

- See the heading "Root-sensitive techniques" above.
- Build smaller structures, which promote tree preservation rather than "maxing-out" to the extent "allowable".
- Consider the reflective properties of the features you are designing (black asphalt, water in pools, paint or other surfaces),
- Sometimes "flipping" one's design can still build the intended structure, but with less impact near trees one wishes to preserve.



ISA Certif. #WE-0132A 650.964.7664

- Consider all the things that impact the trees above <u>and</u> below ground, including, but not limited to elevations of the structures; cuts and fills; retaining walls; lack of retaining walls; utility lines: trenches or above ground (electric, phone, cable, sanitary sewer, storm sewer, pool service, irrigation, decorative lighting, drainage swales, ...); driveways; patios; sport courts; pathways; solar access; views (near and far, yours and your neighbor's);
- Intensive landscaping under mature native oaks is unlikely to improve the status of any oak tree.
- Avoid mixing turf and trees lawns' soil microbes conflict with trees' microbial environments. They may appear to co-exist, but neither thrives.
- Mulch trees with wood chips from tree pruning operations preferably 2- to 4-inches deep from at least out to their driplines in to their trunks, with the area nearest the trunk tapering to soil level.
- Never mulch with shredded bark, colloquially called "gorilla hair", because it mats
 down and become hydrophobic. If you "inherit" it, then it must be "fluffed up"
 on a quarterly basis. Incorporate large-size mulch particles when replenishing.
- Other mulches require maintenance, too replenish them annually to maintain depth, and fluff or aerate them to break up hydrophobic areas. "Manufactured" mulches often are screened to a uniform size, but their usefulness can be improved by incorporating wood chips from pruning operations, which include varied sizes of leaf and twig and woody matter.

WCISA: Acronym for Western Chapter International Society of Arboriculture. (http://www.wcisa.net/)

Appendix B: Selected References

- ANSI. 2001. American National Standard for Tree Care Operations -- Tree, Shrub, and Other Woody Plant Maintenance -- Standard Practices (Pruning) [a.k.a.: ANSI A300 (Part 1)-2001 (Pruning)] American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018. Telephone: 212.642.4900. [http://www.ansi.org]
- ANSI. 2007 American National Standard for Tree Care Operations -- Tree, Shrub, and Other Woody Plant Maintenance -- Standard Practices (Management of Trees and Shrubs During Land Use Planning, Site Development, and Construction). [a.k.a.: ANSI A300 (Part 5)-2002 (Construction)]
 American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018. Telephone: 212.642.4900. [http://www.ansi.org]
- Britton, Denice F. and Gene P. Snyder. December, 1992. "Construction Damage: Correction Begins With Prevention." *Arbor Age.* 68-8960 Perez Road, Suite J, Cathedral City, CA 92234.
- Dockter, Dave. 2001. "City of Palo Alto Tree Technical Manual -- Standards and Specifications" City of Palo Alto, Department of Planning and Community Development, 250 Hamilton Avenue, Palo Alto, CA 94301 650.329.2441 [http://www.city.palo-alto.ca.us/trees]



ISA Certif. #WE-0132A 650.964.7664

- Dreistadt, Steve H. 1994. *Pests of Landscape Trees and Shrubs, An Integrated Pest Management Guide*. U.C., Division of Agriculture and Natural Resources, Publication #3359. ANR Publications, University of California, 6701 San Pablo Avenue, Oakland, CA 94608-1239.
- Gilman, Edward F. and Sharon J. Lilly. 2002. *Best Management Practices, Tree Pruning*. International Society of Arboriculture, P.O. Box 3129, Champaign, IL 61826-3129. 217.355.9411 (www.isa-arbor.com)
- Harris, R.W. with James R. Clark and Nelda P. Matheny. 1999. *Arboriculture: integrated management of landscape trees, shrubs and vines*. (3rd. ed.) Prentice-Hall, Inc. Upper Saddle River, NJ 07458.
- Illinois Arborist Association. Video, VHS format. *Root Injury and Tree Health*. Available from: International Society of Arboriculture, P. O. Box GG, Savoy, IL. 61874
- ISA (several authors, including: Edward F. Gilman, E. B. Himelick, Patrick Kelsey, Sharon J. Lilly, Thomas E. Smiley, Gary Watson). 1995-2005. *Best Management Practices, Tree Pruning*. International Society of Arboriculture, P.O. Box 3129, Champaign, IL 61826-3129. 217.355.9411 (www.isa-arbor.com)
- Matheny, Nelda and James R. Clark. 1998. *Trees and Development: a Technical Guide to Preservation of Trees During Land Development.* International Society of Arboriculture, P. O. Box 3129, Champaign, IL 61826-3129.
- Meyer, Kenneth D. August, 1995. "Tree Care Practices: Construction Impacts and Remedial Repairs." *Arbor Age.* 68-8960 Perez Road, Suite J, Cathedral City, CA 92234.
- Rouse, Robert. September, 1997. "Planning to Save Trees Before and During Construction." <u>Tree Care Industry</u>. National Arborist Association, P. O. Box 1094, Amherst, NJ 03031-1094.
- Schoenweiss, Donald F. July, 1982. "Prevention and Treatment of Construction Damage to Shade Trees." *Journal of Arboriculture*. Volume 8; Number 7. International Society of Arboriculture, P.O. Box 3129, Champaign, IL 61826-3129. http://www.isa-arbor.com
- Timmons, Mark and John Hartman. Video, VHS format. *Effects of Construction Damage to Trees in Wooded Areas*. International Society of Arboriculture, P. O. Box GG, Savoy, IL. 61874
- Urban, James. 2008. *Up By Roots, Healthy Soils and Trees in the Built Environment*. International Society of Arboriculture, P. O. Box 3129, Champaign, IL. 61826-3129 USA
- Willeke, Donald C. April, 1992. "What Every Builder Should Know." *Western Chapter News*. Volume 18; Number 4. International Society of Arboriculture, Western Chapter, P.O. Box 255155, Sacramento, CA 95865.



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|----|----------------------|------------------------|-------------------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 1 | Cercis canadensis | Redbud, American | 28.0" @ 0" | 12' | 18' | 50% | 55% | 52% Fair | Yes | Mod. | Young | Four 6- to 8-inch stems at ground level, with embedded bark weak crotches. |
| 2 | Cercis canadensis | Redbud, American | 22.5" @ 0" | 6' | 9' | 5% | 2% | 03% V. Pr. | Yes | Mod. | Young | Nine 2- to 4-inch stems at ground level; some deadwood; weak stems to 2-inch diameter in 2005 - now mostly dead. |
| 3 | Cercis canadensis | Redbud, American | 31.3" @ 0" | 6' | 10' | 15% | 10% | 12% V. Pr. | Yes | Mod. | Young | Five 3- to 6-inch stems at ground level; some off-color (water-stressed? otherwise-stressed? - how long has irrigation been off?) that was in 2005 - now some root sprouts, but mostly dead. |
| 4 | Cercis canadensis | Redbud, American | 20.5" @ 0" | 7' | 16' | 25% | 45% | 35% Poor | Yes | Mod. | Young | Five 2- to 5-inch stems at ground level that was in 2005 - now seven stems, and the most vigorous of the bunch - but still declining. |
| 5 | Cercis canadensis | Redbud, American | 18.9" @ 0" | 6' | 17' | 35% | 55% | 45% Poor | Yes | Mod. | Young | Four 2- to 4-inch stems at ground level that was in 2005 - now holding its own, but stressed. |
| 6 | Cedrus atlantica | Cedar, Atlas | 22", 14", 12", 7" | 25' | 47' | 60% | 55% | 57% Fair | Yes | Mod. | Mature | Branches at ground level to four trunks (or scaffold limbs?). Typical interior twiggy deadwood; branch/foliage endweights. |
| 7 | Pinus canariensis | Pine, Canary Island | 25.3" | 23' | 60' | 45% | 25% | 35% Poor | Yes | Good | Mature | Extensive breakage & interior twiggy deadwood; branch/foliage endweights. |
| 8 | Cedrus deodara | Cedar, Deodar | 40.7" @ 0" | 25' | 65' | 65% | 55% | 60% Fair | Yes | Mod. | Mature | Typical extensive interior twiggy deadwood. Patch of stunted needles on north side at about 60-foot height (no apparent cause). |
| 9 | Cedrus deodara | Cedar, Deodar | 10.1" | 15' | 38' | 40% | 30% | 35% Poor | Yes | Mod. | Mature | Crowded; one-sided/lop-sided; trunk jog at 3-foot. |
| 10 | Pinus canariensis | Pine, Canary Island | 16.1" | 12' | 43' | 50% | 35% | 45% Poor | Yes | Good | Mature | Crowded; lop-sided; droopy branching habit; breakage; typical deadwood. |
| 11 | Cedrus deodara | Cedar, Deodar | 30.1" | 30' | 50' | 70% | 60% | 65% Fair | Yes | Mod. | Mature | Typical extensive interior twiggy deadwood; breakage at 40-foot height. |
| 12 | Cedrus deodara | Cedar, Deodar | 24.2" | 27' | 75' | 66% | 50% | 57% Fair | Yes | Mod. | Mature | Crooked; lop-sided; trunk leans 15° toward east; moderate twiggy deadwood; endweights; multiple leaders. |
| 13 | Cedrus deodara | Cedar, Deodar | 20.7" | 20' | 60' | 55% | 45% | 49% Poor | Yes | Mod. | Mature | Lop-sided; multiple leaders that was in 2005 - now 2-inch breakage on freeway side at 28-feet. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 14 | Cedrus deodara | Cedar, Deodar | 24.0" | 25' | 60' | 65% | 60% | 62% Fair | Yes | Mod. | Mature | Prior breakage; endweights; moderate twiggy deadwood; trunk leans 10° toward east. |
| 15 | Cedrus deodara | Cedar, Deodar | 22.1" | 25' | 57' | 65% | 55% | 60% Fair | Yes | Mod. | Mature | Lop-sided; prior breakage; ivy climbs 50-feet(+) up trunk. |
| 16 | Cedrus deodara | Cedar, Deodar | 14.0" | 17' | 47' | 66% | 65% | 65% Fair | No | Mod. | Mature | Crowded; lop-sided. |
| 17 | Cedrus deodara | Cedar, Deodar | 21.0" @ 3' | 25' | 43' | 65% | 55% | 60% Fair | Yes | Mod. | Mature | Crowded; lop-sided; prior breakage; typical twiggy deadwood. |
| 18 | Cedrus deodara | Cedar, Deodar | 38.1" @ 3' | 22' | 70' | 60% | 70% | 65% Fair | Yes | Mod. | Mature | Moderate interior twiggy deadwood; yellowish foliage. |
| 19 | Cedrus deodara | Cedar, Deodar | 44.8" @ 3' | 25' | 65' | 65% | 60% | 62% Fair | Yes | Mod. | Mature | Extensive interior twiggy deadwood; prior breakage (8-inch diameter limb at 25-feet). |
| 20 | Cedrus deodara | Cedar, Deodar | 17.9" | 18' | 60' | 45% | 50% | 47% Poor | Yes | Mod. | Mature | Lop-sided. Now yellowing, declining. |
| 21 | Cedrus deodara | Cedar, Deodar | 34.7" @ 3' | 30' | 67' | 55% | 55% | 55% Fair | Yes | Mod. | Mature | Endweights; extensive prior breakage; multiple leaders. |
| 22 | Schinus molle | Pepper, California | 16.7" @ 0" | 10' | 20' | 55% | 50% | 52% Fair | Yes | Mod. | Young | Three 3- to 4-inch trunks at ground level that was in 2005 - now 7", 7", and 6" stems. |
| 23 | Schinus molle | Pepper, California | | | | | | | | | | Tree now gone. |
| 24 | Schinus molle | Pepper, California | 10.4" @ 0" | 9' | 13' | 50% | 45% | 47% Poor | No | Mod. | Young | Two 3-inch trunks at ground level that was in 2005 - now 5" & 6" trunks with embedded bark attachment at ground level. |
| 25 | Schinus molle | Pepper, California | 13.8" @ 12" | 13' | 22' | 60% | 55% | 57% Fair | No | Mod. | Young | |
| 26 | Cedrus deodara | Cedar, Deodar | 27.9" @ 3' | 25' | 60' | 65% | 60% | 62% Fair | Yes | Mod. | Mature | Trunk leans 10° toward east. |
| 27 | Pinus canariensis | Pine, Canary Island | 21.5" | 20' | 63' | 50% | 30% | 40% Poor | Yes | Good | Mature | Endweights; breakage; typical twiggy deadwood to 4-inch diameter that was in 2005 - now breakage, with hanger at 30-feet (hig by adjacent) that was in 2005 - now breakage - hanger at 30-feet, hit by adjacent. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard. Data date: Spring 2011

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 28 | Pinus canariensis | Pine, Canary Island | 34.3" | 25' | 53' | 10% | 10% | 10% V. Pr . | Yes | Good | Mature | Two leaders at 35-feet; prior breakage; endweights; deadwood to 5-inch diameter that was in 2005 - now some root many curved branches & endweights recent breakage 15-inch diameter from 25-feet with severe foliage branch endweights remaining poised for failure plus the highly unusual occurrence in this species here of Dendroctonus valens (red turpentine beetle) - at least 8 pitch tubess (infestation sites). * |
| 29 | Schinus molle | Pepper, California | 18.3" @ 0" | 20' | 25' | 55% | 55% | 55% Fair | Yes | Mod. | Young | Two trunks (3- and 7-inch) at ground level that was in 2005 - now: 11", 7", 6" trunks. |
| 30 | Schinus molle | Pepper, California | 20.1" @ 0" | 20' | 30' | 55% | 55% | 55% Fair | Yes | Mod. | Young | Two trunks (each 6-inch) at ground level that was in 2005 - now 12- and 10-inch trunks with embedded bark crotch at ground level. |
| 31 | Schinus molle | Pepper, California | 14.9" @ 0" | 10' | 12' | 50% | 50% | 50% Fair | No | Mod. | Young | Two trunks (3- and 4-inch) at ground level that was in 2005 now 6" and 8" trunkd with embedded bark attachments at groundlevel that was in 2005 - now 6- and 8-inch trunks with embedded bark crotch at ground level. |
| 32 | Schinus molle | Pepper, California | 15.2" @ 0" | 9' | 15' | 55% | 55% | 55% Fair | No | Mod. | Young | Two trunks (each 6-inch) at ground level that was in 2005 - now 9- and 8-inch trunks with embedded bark crotch at ground level. |
| 33 | Schinus molle | Pepper, California | 18.0" @ 0" | 13' | 25' | 55% | 55% | 55% Fair | Yes | Mod. | Young | Two trunks (3- and 5-inch) at ground level that was in 2005 now 9- and 10-inch trunks with embedded bark crotch at ground level. |
| 34 | Schinus molle | Pepper, California | 23.2" @ 0" | 12' | 20' | 55% | 55% | 55% Fair | Yes | Mod. | Young | Now, low-branching - perimeter tips touch ground. |
| 35 | Prunus amygdalus | Almond | | | | | | | | | | Tree now gone. |
| 36 | Cercis canadensis | Redbud, American | 16.5" @ 0" | 6' | 11' | 12% | 12% | 12% V. Pr . | Yes | Mod. | Young | Ten stems (1- to 2-inch) from ground level that was in 2005 - now 2- and 3-inch trunks - declining. |
| 37 | Cercis canadensis | Redbud, American | 14.8" @ 0" | 7' | 13' | 30% | 30% | 30% Poor | No | Mod. | Young | Seven stems (1- to 2-inch) from ground level. Some decline and/or dieback that was in 2005 - now to 3" diameters. |

TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|----|-------------------------|-------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 38 | | Redbud, American | 14.5" @ 0" | 8' | 20' | 35% | 35% | 35% Poor | No | Mod. | Young | Eight stems (1- to 3-inch) from ground level that was in 2005 - now 1- to 4-inch diameters - declining. |
| 39 | Aesculus californica | Buckeye, California | 9.8" @ 0" | 10' | 14' | 70% | 70% | 70% Good | No | Good | Young | Multi-stemmed at ground level. Now in tangle of photinia and privet. |
| 40 | Cercis canadensis | Redbud, American | 12.0" @ 0" | 7' | 12' | 25% | 25% | 25% V. Pr. | No | Mod. | Young | Six stems (1- to 4-inch) from ground level. |
| 41 | Ulmus parvifolia | Elm, Chinese | 17.0" | 25' | 47' | 55% | 30% | 45% Poor | Yes | Good | Mature | Crowded; lop-sided due to adjacent redwood; prior breakage; very tangled foliage crown; endweights; 5-inch diameter hanger at 30-feet that was in 2005 - now breakage and substantial deadwood. 7-feet outside of chain link fence. |
| 42 | Ulmus parvifolia | Elm, Chinese | 24.6" @ 0" | 25' | 40' | 49% | 45% | 47% Poor | Yes | Good | Mature | Two 7-inch trunks at ground level; both lean. Crowded; lopsided against other adjacent trees that was in 2005 - now two 9-inch trunkw with substantial deadwood. 15-feet outside of chain link fence. |
| 43 | Ulmus parvifolia | Elm, Chinese | 15.2" | 15' | 35' | 45% | 10% | 25% V. Pr. | Yes | Good | Mature | Two trunks from ground level (10- & 14-inch); endweights; extensive breakage that was in 2005 - now one trunk 3-feet outside of chain link fence. |
| 44 | Primis incimia | Cherry, Hollyleaf | 6.8" | 9' | 28' | 66% | 60% | 60% Fair | No | Mod. | Young | Crowded; lop-sided that was in 2005 - now 3-feet outside of chain link fence; 4-feet to chain link access gate |
| 45 | Platanus racemosa | Sycamore, California | ~10" @ 0" | | | | | | | | | Two 4-inch stems from near ground level; lanky; very crowded that was in 2005 - now GONE. |
| 46 | Aesculus californica | Buckeye, California | 12.7" @ 0" | 6' | 19' | 65% | 65% | 65% Fair | No | Good | Young | Multi-stemmed at ground level that was in 2005 - now two 4-inch stems. |
| 47 | Prunus amygdalus | Almond | 10.5" | 10' | 25' | 55% | 40% | 47% Poor | No | Mod. | Young | Multi-stemmed at ground level that was in 2005 - now 5-, 4-and 3-inch stems; lanky; prior crowding. |
| 48 | , | Redwood, Coast | 34.0" | 22' | 90' | 70% | 90% | 80% Good | Yes | Good | Mature | Dominating specimen in very brushy area. |
| 49 | | Buckeye, California | 9.2" | 12' | 28' | 65% | 65% | 65% Fair | No | Good | Young | Multi-stemmed at ground level that was in 2005 - now 3-, 3-, 4- and 4-inch stems; low branching |
| 50 | Sequoia sempervirens | Redwood, Coast | 12.0" 14.5" | 12' | 45' | 70% | 80% | 75% Good | Yes | Good | Young | Dense basal suckers - many small ones, some to 5- and 11- inch diameter that was in 2005 - now snow on a 6-foot base of basal suckers. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|----|----------------------|-------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 51 | Pinus canariensis | Pine, Canary Island | 24.1" | 25' | 80' | 60% | 60% | 60% Fair | Yes | Good | Mature | At former off-ramp fence; 5-feet to chain link. |
| 52 | Platanus racemosa | Sycamore, California | 30.3" | 25' | 37' | 70% | 45% | 55% Fair | Yes | Good | Mature | Gnarled that was in 2005 - now severely pruned under transmission lines - mid-span between towers. |
| 53 | Platanus racemosa | Sycamore, California | 24.2" | 20' | 35' | 70% | 45% | 55% Fair | Yes | Good | Mature | Typical anthracnose & twiggy deadwood that was in 2005 - now severely pruned under transmission lines - mid-span between towers. |
| 54 | Pinus halepensis | Pine, Aleppo | | | | | | | | | | |
| 55 | Pinus halepensis | Pine, Aleppo | | | | | | | | | | |
| 56 | Pinus halepensis | Pine, Aleppo | | | | | | | | | | |
| 57 | Schinus molle | Pepper, California | 9.3" @ 3' | 12' | 25' | 50% | 40% | 45% Poor | Yes | Mod. | Young | Very lanky; thin foliage crown that was in 2005 - now leaning out from under #52. |
| 58 | Pinus canariensis | Pine, Canary Island | 22.1" | 20' | 65' | 35% | 60% | 48% Poor | Yes | Good | Mature | Fire-blacked trunk; needles scorched to 40-feet (brown dry). |
| 59 | Pinus canariensis | Pine, Canary Island | 24.5" | 25' | 70' | 60% | 60% | 60% Fair | Yes | Good | Mature | Edge of burned area, with a few scorched needles. |
| 60 | Pinus canariensis | Pine, Canary Island | 20.4" | 20' | 75' | 50% | 40% | 45% Poor | Yes | Good | Mature | Fire-blacked trunk; needles scorched to 30-feet+ (brown dry). Co-dominant trunks at 45-feet. |
| 61 | Pinus canariensis | Pine, Canary Island | 20.9" | 18' | 75' | 55% | 60% | 57% Fair | Yes | Good | Mature | Fire-blacked trunk; needles scorched to 60-feet (brown dry). |
| 62 | Pinus canariensis | Pine, Canary Island | 26.6" | 18' | 75' | 60% | 30% | 45% Poor | Yes | Good | Mature | Fire-blacked trunk; needles scorched to 40-feet (brown dry). co-dominant trunks (poor structure) at 50-feet. |
| 63 | Pinus canariensis | Pine, Canary Island | 21.5" | 15' | 75' | 65% | 60% | 63% Fair | Yes | Good | Mature | Fire-blacked trunk; needles scorched to 40-feet (brown dry) on one side. |

TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 64 | Pinus canariensis | Pine, Canary Island | 19.0" | 16' | 70' | 60% | 60% | 60% Fair | Yes | Good | Mature | Fire-blacked trunk; scorched, dead branches to 40-feet (crisp, charred). 12-feet to old freeway chain link that was in 2005 - now low dead brnches. |
| 65 | Pinus canariensis | Pine, Canary Island | 14.4" | 12' | 42' | 40% | 40% | 40% Poor | No | Good | Mature | Charred, dead branches (one side) to 40-feet. |
| 66 | Pinus canariensis | Pine, Canary Island | | | | | | | | | | Stump. |
| 67 | Pinus canariensis | Pine, Canary Island | 20.3" | 17' | 75' | 50% | 40% | 45% Poor | Yes | Good | Mature | Fire-blacked trunk; it got hot! needles scorched to 60-feet (brown dry). 18-feet to old freeway chain link fence. |
| 68 | Pinus canariensis | Pine, Canary Island | 22.8' | 20' | 80' | 55% | 45% | 49% Poor | Yes | Good | Mature | Fire-blacked trunk; scorched lower-40-feet (one side). 16-feet to old freeway chain link fence. |
| 69 | Pinus canariensis | Pine, Canary Island | 17.0" | 18' | 60' | 10% | 30% | 20% V. Pr. | Yes | Good | Mature | Fire-blacked trunk; needles & branches scorched to 60-feet (brown dry) on one side that was in 2005 - now yellowing, declining. |
| 70 | Pinus canariensis | Pine, Canary Island | 19.8" | 18' | 65' | 60% | 40% | 49% Poor | Yes | Good | Mature | Scorched branches & trunk to 50-feet; some new needles since. |
| 71 | Pinus canariensis | Pine, Canary Island | 14.7" | 10' | 60' | 30% | 20% | 25% V. Pr. | No | Good | Mature | Fire-blacked trunk; badly scorched to 50-feet that was in 2005 - now notable deadwood, declining. |
| 72 | Pinus canariensis | Pine, Canary Island | | | | | | | | | | GONE - burned. |
| 73 | Pinus canariensis | Pine, Canary Island | | | | | | | | | | GONE - burned. |
| 74 | Schinus molle | Pepper, California | 30.2" @ 0" | 20' | 38' | 55% | 45% | 49% Poor | Yes | Mod. | Mature | Crowded; thinning; declining; multi-stemmed at ground level (15-, 12-, 8-, & 5-inch diameters); 1-foot to old freeway chain link fence that was in 2005 - now 15-, 14- & 8-inch trunks. |



(ISA Certified Arborist #WE-0132A) 650.964.7664

TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

Species' Tolerance Condition Heritage ongevity Av. Crown Tree (MV) Radius (inches) Height Overall Vigor Form Genus Name. Age Comments species Common Thinning; declining; multi-stemmed at ground level (diameters 14-, 10-, 6-, & 4-inch); 2-foot to old freeway chain link fence. 43.2" Pepper, 49% 75 Schinus molle 15' 38 55% 45% Yes Mod. Mature @ 0" Poor ... that was in 2005 - now 6-inch diameter deadwood on 15-, California 10-, 6-, and 5-inch trunks. Crowded; declining; falling apart at ground level; multistemmed (14-, 12-, 7-, & 7-inch diameters); 1-foot to old 37.3" 47% Pepper, 76 Schinus molle Mature 20' 45' 55% 40% Yes Mod. freeway chain link fence. ... that was in 2005 - now 17- and 14-California @ 0" Poor inch trunks. Five 10-inch trunks at ground level; shaded-out interior as Aesculus Buckeye, 34.0" 70% 18' 38' 75% Good Mature typical inside deadwood; 6-feet to old freeway chain link. ... 65% Yes @ 0" Good californica California that was in 2005 - now 7- to 14-inch trunks. Multi-stemmed at ground level. Typical interior twiggy deadwood. In existing chain link fence. ... that was in 2005 -Olive. 21.0" 78 Olea europa 285 55% 40% Good Mature Yes @ 0" Poor now at edge of chain link fence: major deadwood: 11- and 15-Common inch trunks. 8-feet outside of chain link fence (toward freeway); Cedrus Cedar, 69% 25.4" 23' 50' 66% 75% Mod. Mature endweights; prior breakage (7-inch diam. hanger at 20-feet). ... Yes Fair deodara Deodar that was in 2005 - now notable interior twiggy deadwood. In 2005, had been very stressed, in chain link fence, with Rhamnus 10% V 80 8' 22' 20% 1% Mod. Mature major deadwood. Now suppressed against/in pepper #81 -Coffeeberry No californica now a suckker embedded in #81 trunk. Three trunks at 3-feet; extensive dieback; very stressed; 25-Pepper, 24.1" 15% V 22' 20% 10% 40' Yes Mature Schinus molle Mod California @ 2' Pr. feet to existing old freeway chain link fence. Declining; dieback; 15-feet to existing old freeway chain link 19.2" Pepper, 40% 82 Schinus molle 17' 45% 35% Yes Mature 40' Mod. California @ 3' Poor fence. At edge of clearing; stressed; thinning; declining; major Pepper. 24.5" 42% 83 Schinus molle 25' 40% 45% 50' Yes Mod Mature Poor deadwood accumulation. California @ 2' Major deadwood to 6-inch diameter; 8-inch diameter breakage; 21.7 Pepper, 25% V 84 Schinus molle 30% 20% 40' Mature Yes Mod. California @ 2' Pr. declining; severe stress; tip dieback. Declining: thinning: major deadwood: midway at end of large 27.9" Pepper, 40% 85 Schinus molle 24' 52' 40% Mod. Mature Yes @ 2' Poor California blackberry patch/bramble.



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|----|------------------|-----------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 86 | Schinus molle | Pepper, California | 20.5" @ 3' | 23' | 40' | 20% | 30% | 25% V. Pr. | Yes | Mod. | Mature | Thinning; declining; deadwood accumulation; multi-stemmed at 5-feet; on top of mound in middle of blackberry bramble/patch that was in 2005 - now blackberries are "gone". |
| 87 | Schinus molle | Pepper, California | 22.9" | 16' | 45' | 30% | 20% | 25% V. Pr. | Yes | Mod. | Mature | Declining; lanky; very stressed that was in 2005 - now deadwood to 4-inch diameter; missing bark as fire-scarred (4-feet) east side. |
| 88 | Schinus molle | Pepper, California | 30.8" @ 3' | 27' | 50' | 35% | 40% | 37% Poor | Yes | Mod. | Mature | Thinning; declining; deadwood to 6-inch diameter. |
| 89 | Schinus molle | Pepper, California | 25.2" | 20' | 38' | 20% | 15% | 17% V. Pr. | Yes | Mod. | Mature | Deadwood to 4-inch diameter; prior breakage (12-inch diam.); 16-inch co-dominant trunks at 3-feet that was in 2005 - now has a split 20-inch limb at 3-feet with endweights. |
| 90 | Schinus molle | Pepper, California | 9.7" | 8' | 38' | 20% | 20% | 20% V. Pr. | No | Mod. | Mature | Crowded; lop-sided; 10° lean. |
| 91 | Schinus molle | Pepper, California | 7.8" | 12' | 25' | 15% | 15% | 15% V. Pr. | No | Mod. | Mature | Crowded; leaning; thinning. |
| 92 | Schinus molle | Pepper, California | 26.9" | 20' | 37' | 40% | 40% | 40% Poor | Yes | Mod. | Mature | Thinning; declining; major deadwood to 5-inch diameter that was in 2005 - now poison oak starting at base. |
| 93 | Schinus molle | Pepper, California | 8.2" | 12' | 33' | 40% | 35% | 37% Poor | No | Mod. | Mature | Co-dominant trunks (poor structure) at 1-foot; crowded; lopsided; leaning; declining. |
| 94 | Schinus molle | Pepper, California | 13.9" | 15' | 37' | 35% | 55% | 45% Poor | No | Mod. | Mature | Dieback; declining. |
| 95 | Schinus molle | Pepper, California | 25.5" | 20' | 45' | 30% | 40% | 35% Poor | Yes | Mod. | Mature | Extensive dieback; declining that was in 2005 - now recent 4-inch diameter breakage. |
| 96 | Schinus molle | Pepper, California | 19.4" @ 3' | 12' | 33' | 45% | 45% | 45% Poor | Yes | Mod. | Mature | Dieback; declining; breakage (10-inch diam.) that was in 2005 - now 4-inch breakage at 2-feet. |
| 97 | Schinus molle | Pepper, California | 24.0" @ 3' | 22' | 45' | 55% | 55% | 55% Fair | Yes | Mod. | Mature | Dieback; declining. |
| 98 | Schinus molle | Pepper, California | 27.2" | 25' | 44' | 52% | 55% | 53% Fair | Yes | Mod. | Mature | Major deadwood; declining; urban campsite. |
| 99 | Schinus molle | Pepper, California | 16.1" | 15' | 42' | 25% | 20% | 22% V. Pr. | Yes | Mod. | Mature | Declining; dieback; thinning. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|-------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 100 | Juglans nigra | Walnut, Black | 9.3" | 13' | 40' | 65% | 65% | 65% Fair | No | Poor | Young | Lanky. (3-inch root sucker 4-feet away.) that was in 2005 - now that root sucker is a 7-inch diameter tree and numbered #367. |
| 101 | Schinus molle | Pepper, California | 19.0" @ 3' | 25' | 42' | 55% | 65% | 60% Fair | Yes | Mod. | Mature | Thinning; declining. |
| 102 | Schinus molle | Pepper, California | 22.1" | 25' | 40' | 45% | 55% | 49% Poor | Yes | Mod. | Mature | Dieback; declining. |
| 103 | Schinus molle | Pepper, California | 18.3" @ 3' | 23' | 63' | 38% | 40% | 39% Poor | Yes | Mod. | Mature | Major deadwood; declining. |
| 104 | Schinus molle | Pepper, California | 19.8" @ 3' | 15' | 33' | 15% | 25% | 20% V. Pr. | Yes | Mod. | Mature | Very thin; declining. |
| 105 | Schinus molle | Pepper, California | 18.9" @ 3' | 20' | 40' | 20% | 25% | 22% V. Pr. | Yes | Mod. | Mature | Prior breakage; thinning; declining. |
| 106 | Schinus molle | Pepper, California | 19.9" @ 3' | 20' | 40' | 20% | 25% | 22% V. Pr. | Yes | Mod. | Mature | Thinning; declining that was in 2005 - now notable deadwood. |
| 107 | Schinus molle | Pepper, California | 30.6" @ 0" | 25' | 40' | 35% | 20% | 25% V. Pr. | Yes | Mod. | Mature | Three trunks at ground level; declining; dieback that was in 2005 - now 15-, 11-, 12-, and 8-inch trunks (8"=4-foot stub). |
| 108 | Schinus molle | Pepper, California | 32.5" @ 2' | 25' | 40' | 25% | 25% | 25% V. Pr. | Yes | Mod. | Mature | Prior breakage; cavity at 2-feet; extensive deadwood that was in 2005 - now thinning, declining - 7-feet outside of chain link fence. |
| 109 | Pinus canariensis | Pine, Canary Island | 38.7" @ 2' | 27' | 70' | 60% | 50% | 55% Fair | Yes | Good | Mature | Co-dominant trunks (poor structure) at 5-foot; fire-blackened trunk; scorched branches to 40-feet+, many dead. Outside of chain link fence, 6-feet toward freeway that was in 2005 - now breakage and hangers. |
| 110 | Aesculus californica | Buckeye, California | 40" @ 0" | 20' | 40' | 65% | 70% | 68% Fair | Yes | Good | Mature | Multi-stemmed at ground level; 6-feet outside chain link that was in 2005 - now in brush tangle. |
| 111 | Schinus molle | Pepper, California | 33.6" @1' | 12' | 33' | 30% | 30% | 30% Poor | Yes | Mod. | Mature | Co-dominant trunks (poor structure) at 2-foot; deadwood to 4-inch diameter. Outside of chain link fence, 6-feet toward freeway that was in 2005 - now thinning, declining; 15- and 18-inch trunks at 2-feet. |
| 112 | Schinus molle | Pepper, California | 15.7" | 18' | 45' | 35% | 40% | 37% Poor | Yes | Mod. | Mature | Outside of chain link fence, 6-feet toward freeway that was in 2005 - now notatble deadwood. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 113 | Schinus molle | Pepper, California | 33.7" @1' | 18' | 35' | 40% | 30% | 35% Poor | Yes | Mod. | Ē | All scaffold limbs originate at 3-feet (poor structure); thinning; declining. Outside of chain link fence, 6-feet toward freeway that was in 2005 - now in tangle of brush. |
| 114 | Rhamnus californica | Coffeeberry | 15.2" @ 0" | 6' | 22' | 10% | 10% | 10% V. Pr . | No | Mod. | Mature | Five 3- to 6-inch stems at ground level; tip dieback; declining; some others in area are dead. Outside of chain link fence, 2-feet toward freewaythat was in 2005 - now 4- and 5-inch stems from ground level; substantial dieback; sunburn. |
| 115 | Pinus canariensis | Pine, Canary Island | 20.5" | 20' | 75' | 65% | 70% | 67% Fair | Yes | Good | Mature | Fire-blackened trunk; extensive interior deadwood; minor scorching. |
| 116 | Pinus canariensis | Pine, Canary Island | 18.6" | 20' | 65' | 58% | 40% | 49% Poor | Yes | Good | Mature | Fire-blackened trunk; multiple leaders at 25-feet; lower branches scorched. |
| 117 | Pinus canariensis | Pine, Canary Island | 19.0" | 17' | 60' | 55% | 60% | 57% Fair | Yes | Good | Mature | Fire-blackened trunk; scorched to 50-feet. |
| 118 | Pinus canariensis | Pine, Canary Island | 18.8" | 16' | 70' | 50% | 55% | 52% Fair | Yes | Good | Mature | Some scorch. |
| 119 | Pinus canariensis | Pine, Canary Island | 19.2" | 14' | 65' | 50% | 55% | 52% Fair | Yes | Good | Mature | Some scorch. |
| 120 | Pinus canariensis | Pine, Canary Island | 22.3" | 14' | 70' | 65% | 65% | 65% Fair | Yes | Good | Mature | Some scorch. |
| 121 | Pinus canariensis | Pine, Canary Island | 23.1" | 15' | 55' | 55% | 60% | 58% Fair | Yes | Good | Mature | Fire-blackened trunk; some scorch to 50-feet. |
| 122 | Pinus canariensis | Pine, Canary Island | 17.4" | 13' | 58' | 45% | 20% | 25% V. Pr. | Yes | Good | Mature | Fire-blackened trunk; scorched to top (tip); upper 10-feet is dead (crisped). |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|-------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 123 | Pinus canariensis | Pine, Canary Island | 25.5" | 25' | 70' | 60% | 40% | 49% Poor | Yes | Good | Mature | Fire-blackened trunk; some needle scorch; breakage at 30-foot height that was in 2005 - now significant endweights. |
| 124 | Pinus canariensis | Pine, Canary Island | 11.2" | 12' | 50' | 50% | 45% | 47% Poor | No | Good | Mature | Lower dead; crooked trunk. |
| 125 | Pinus canariensis | Pine, Canary Island | 22.1" | 27' | 65' | 66% | 66% | 66% Fair | Yes | Good | Mature | Endweights. |
| 126 | Platanus racemosa | Sycamore, California | 23.1" | 18' | 47' | 55% | 70% | 62% Fair | Yes | Good | Mature | Two trunks from ground level (15- & 24-inch); typical anthracnose & tip dieback. At west end of County compound that was in 2005 - now smaller stem is gone. |
| 127 | Platanus racemosa | Sycamore, California | 24.6" | 25' | 65' | 65% | 90% | 82% Good | Yes | Good | Mature | Crowded, lop-sided against #128. At west end of County compound. |
| 128 | Platanus racemosa | Sycamore, California | 43.2" | 40' | 60' | 75% | 90% | 82% Good | Yes | Good | Mature | Lop-sided; crooked trunk. At west end of County compound that was in 2005 - now missing 20-inch limb at 4-feet. |
| 129 | Schinus molle | Pepper, California | 41.9" @ 1' | 12' | 26' | 15% | 30% | 22% V. Pr. | Yes | Mod. | Mature | Two co-dominant trunks at 2-feet; thinning; declining; major deadwood. |
| 130 | Schinus molle | Pepper, California | 35.7" @ 1' | 23' | 45' | 25% | 45% | 35% Poor | Yes | Mod. | Mature | Thinning; declining. |
| 131 | Schinus molle | Pepper, California | 16.3" @ 3' | 16' | 35' | 15% | 30% | 25% V. Pr. | Yes | Mod. | Mature | Thinning; declining; major deadwood. |
| 132 | Schinus molle | Pepper, California | 19.5" @ 2' | 18' | 42' | 35% | 50% | 42% Poor | Yes | Mod. | Mature | Thinning; declining. |
| 133 | Schinus molle | Pepper, California | 30.7" @ 1' | 28' | 47' | 25% | 30% | 27% Poor | Yes | Mod. | : | Below ridge, toward County compound; poison oak at base; thinning; declining; extensive deadwood. Three co-dominant trunks at 3- to 5-feet. |
| 134 | Schinus molle | Pepper, California | 27.6" @ 2' | 18' | 47' | 40% | 40% | 40% Poor | Yes | Mod. | Mature | Crowded; one-sided; thinning; declining; major deadwood. |
| 135 | Schinus molle | Pepper, California | 18.4" @ 2' | 17' | 42' | 25% | 40% | 33% Poor | Yes | Mod. | Mature | Thinning; declining; major deadwood. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 136 | Schinus molle | Pepper, California | 20.8" @ 3' | 20' | 40' | 30% | 50% | 40% Poor | Yes | Mod. | Mature | Thinning; declining; three trunks at 3-feet. |
| 137 | Schinus molle | Pepper, California | 17.9" @ 2' | 15' | 42' | 15% | 30% | 25% V. Pr. | Yes | Mod. | Mature | Thinning; declining; major deadwood. |
| 138 | Schinus molle | Pepper, California | 19.6" @ 3' | 23' | 45' | 33% | 30% | 31% Poor | Yes | Mod. | Mature | Thinning; declining; major deadwood. Poison oak at base. |
| 139 | Schinus molle | Pepper, California | 25.8" @ 3' | 27' | 52' | 49% | 60% | 55% Fair | Yes | Mod. | Mature | Thinning; declining; tip dieback. |
| 140 | Schinus molle | Pepper, California | 19.5" | 25' | 45' | 45% | 60% | 52% Fair | Yes | Mod. | Mature | Thinning; declining; major deadwood; limb breakage to 5-inch diameter. |
| 141 | Schinus molle | Pepper, California | 34.3" @ 1' | 30' | 55' | 42% | 60% | 51% Fair | Yes | Mod. | Mature | Thinning; declining; major deadwood. |
| 142 | Schinus molle | Pepper, California | 23.8" | 23' | 40' | 45% | 65% | 55% Fair | Yes | Mod. | Mature | Thinning; declining; major deadwood. |
| 143 | Schinus molle | Pepper, California | 9.6" | 12' | 25' | 5% | 20% | 12% V. Pr. | No | Mod. | Mature | Trunk leans, reaching out from under #142; very thin; declining. |
| 144 | Schinus molle | Pepper, California | 9.5" | 10' | 17' | 7% | 10% | 08% V. Pr. | No | Mod. | Mature | Trunk leans, reaching out from under #142 & #143; very thin; declining. |
| 145 | Schinus molle | Pepper, California | 30.2" @ 0" | 22' | 40' | 66% | 70% | 68% Fair | Yes | Mod. | Mature | Low branching; 3-feet to Moffett chain link fence; off the end of the ridge point by #125. |
| 146 | Pinus canariensis | Pine, Canary Island | 9.3" | 9' | 38' | 45% | 50% | 47% Poor | No | Good | Mature | Crowded, lop-sided by others. |
| 147 | Pinus canariensis | Pine, Canary Island | 15.8" | 17' | 55' | 40% | 55% | 47% Poor | Yes | Good | Mature | Lower branches shaded out. |
| 148 | Pinus canariensis | Pine, Canary Island | 23.0" | 18' | 60' | 66% | 55% | 60% Fair | Yes | Good | Mature | Endweights; breakage; interior twiggy deadwood. |
| 149 | Pinus canariensis | Pine, Canary Island | 20.5" | 19' | 58' | 55% | 65% | 60% Fair | Yes | Good | Mature | Endweights. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 150 | Pinus canariensis | Pine, Canary Island | 25.8" | 25' | 80' | 70% | 70% | 70% Good | Yes | Good | Mature | Endweights. |
| 151 | Pinus canariensis | Pine, Canary Island | 20.5" | 20' | 65' | 70% | 70% | 70% Good | Yes | Good | Mature | Endweights. |
| 152 | Casuarina equisetifolia | Beefwood, Common | 19.9" | 25' | 65' | 65% | 80% | 72% Good | ST | Mod. | Mature | Crowded, lop-sided against #153; lanky; moderate endweights; trunk scrapes at 3-feet. 9-feet back of curb that was in 2005 - now history of breakage. |
| 153 | Casuarina equisetifolia | Beefwood, Common | 18.0" | 27' | 65' | 68% | 70% | 69% Fair | ST | Mod. | Mature | Crowded, lop-sided against #152; lanky; moderate endweights; trunk scrapes at 3-feet. 9-feet back of curb. |
| 154 | Casuarina equisetifolia | Beefwood, Common | 22.3" | 28' | 75' | 70% | 55% | 62% Fair | ST | Mod. | Mature | Crowded, lop-sided against #156; lanky; moderate endweights; trunk scrapes at 3-feet. 9-feet back of curb that was in 2005 - now see co-dominant trunks at 8-feet; prior breakage. |
| 155 | Pinus canariensis | Pine, Canary Island | 19.2" | 18' | 65' | 55% | 70% | 62% Fair | Yes | Good | Mature | Crowded; lower branches shaded out. |
| 156 | Pinus canariensis | Pine, Canary Island | 19.6" | 17' | 75' | 60% | 70% | 65% Fair | Yes | Good | Mature | Very crowded, shaded. |
| 157 | Pinus canariensis | Pine, Canary Island | 20.8" | 22' | 70' | 60% | 70% | 65% Fair | Yes | Good | Mature | Very crowded, shaded; endweights; breakage at 25-feet. |
| 158 | Pinus canariensis | Pine, Canary Island | 18.4" | 15' | 70' | 55% | 70% | 62% Fair | Yes | Good | Mature | Very crowded, shaded. |
| 159 | Pinus canariensis | Pine, Canary Island | 20.5" | 18' | 60' | 50% | 50% | 50% Fair | Yes | Good | Mature | Very crowded, shaded that was in 2005 - now co-dominant above 35-feet with embedded bark crotches. |
| 160 | Pinus canariensis | Pine, Canary Island | 17.9" | 15' | 70' | 55% | 70% | 62% Fair | Yes | Good | Mature | Very crowded, shaded. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 161 | Pinus canariensis | Pine, Canary Island | 21.3" | 22' | 75' | 50% | 45% | 47% Poor | Yes | Good | Mature | Breakage at 40-feet, 5-inch diameter hanger remains at 30-foot height. |
| 162 | Pinus canariensis | Pine, Canary Island | 20.9" | 18' | 60' | 50% | 58% | 54% Fair | Yes | Good | Mature | Lop-sided; breakage. |
| 163 | Pinus canariensis | Pine, Canary Island | 20.4" | 17' | 70' | 50% | 70% | 60% Fair | Yes | Good | Mature | Crowded. |
| 164 | Pinus canariensis | Pine, Canary Island | 18.7" | 15' | 70' | 55% | 65% | 60% Fair | Yes | Good | Mature | Crowded. |
| 165 | Pinus canariensis | Pine, Canary Island | 21.4" | 18' | 70' | 65% | 70% | 67% Fair | Yes | Good | Mature | Crowded; one-sided. |
| 166 | Pinus canariensis | Pine, Canary Island | 19.5" | 15' | 70' | 45% | 65% | 55% Fair | Yes | Good | Mature | Very crowded, shaded. |
| 167 | Pinus canariensis | Pine, Canary Island | 18.9" | 15' | 65' | 50% | 60% | 55% Fair | Yes | Good | Mature | Very crowded, shaded. |
| 168 | Pinus canariensis | Pine, Canary Island | 19.7" | 17' | 60' | 50% | 40% | 45% Poor | Yes | Good | Mature | Crowded; multiple leaders. |
| 169 | Pinus canariensis | Pine, Canary Island | 17.9" | 16' | 70' | 50% | 70% | 60% Fair | Yes | Good | Mature | Crowded that was in 2005 - now extensive deadwood. |
| 170 | Pinus canariensis | Pine, Canary Island | 14.7" | 17' | 65' | 60% | 70% | 65% Fair | No | Good | Mature | Crowded. |
| 171 | Pinus canariensis | Pine, Canary Island | 22.4" | 18' | 65' | 65% | 70% | 67% Fair | Yes | Good | Mature | Crowded; endweights. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|---|--------------------|---|
| 172 | Pinus canariensis | Pine, Canary Island | 20.1" | 12' | 70' | 60% | 70% | 65% Fair | Yes | Good | Mature | Crowded. |
| 173 | Pinus canariensis | Pine, Canary Island | 19.5" | 10' | 70' | 65% | 70% | 67% Fair | Yes | Good | Mature | Crowded. |
| 174 | Pinus canariensis | Pine, Canary Island | 21.8" | 17' | 60' | 60% | 70% | 65% Fair | Yes | Good | Mature | One-sided; endweights. |
| 175 | Pinus canariensis | Pine, Canary Island | 22.0" | 22' | 70' | 66% | 70% | 68% Fair | Yes | Good | Mature | Crowded; lop-sided; one-sided; endweights. |
| 176 | Quercus rubra | Oak, Red | 7.2" | 12' | 35' | 70% | 35% | 49% Poor | ST | Mod. | Young | Crowded against #177 & #159; 7-feet back of curb (Moffett) that was in 2005 - nowvery lop-sided. |
| 177 | Casuarina equisetifolia | Beefwood, Common | 7.8" | 6' | 48' | 50% | 45% | 47% Poor | ST | Mod. | Mature | Dead top; crowded. |
| 178 | Casuarina equisetifolia | Beefwood, Common | 8.2" | 7' | 42' | 52% | 45% | 47% Poor | ST | Mod. | Mature | Just outside fence, 9-feet back of curb (Moffett); crowded; tip dieback. |
| 179 | Casuarina equisetifolia | Beefwood, Common | 10.2" @ 2' | 7' | 50' | 40% | 25% | 33% Poor | ST | Mod. | Mature | Just outside fence, 9-feet back of curb (Moffett); co-dominant trunk with embedded bark crotch (weak attachment) at 6-feet; crowded; lanky; trunk scraped at 3-foot height. |
| 180 | Casuarina equisetifolia | Beefwood, Common | 12.7" | 12' | 50' | 60% | 45% | 52% Fair | ST | Mod. | Mature | Just outside fence, embedded bark crotch (weak attachment) at 38-feet. |
| 181 | Casuarina equisetifolia | Beefwood, Common | 15.2" | 12' | 75' | 60% | 75% | 66% Fair | Yes | Mod. | Mature | Just inside of chain link fence; shaded; crowded that was in 2005 - now just outside of chain link. |
| 182 | Casuarina equisetifolia | Beefwood, Common | 10.9" | 10' | 50' | 60% | 60% | 60% Fair | No | Mod. | Mature | Just inside of chain link fence; misshapen; crowded that was in 2005 - now just outside of chain link. |
| 183 | Schinus molle | Pepper, California | | J | | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | (fallen - now a stump.) |
| 184 | Schinus molle | Pepper, California | 10.4" @ 3' | 10' | 20' | 20% | 30% | 25% V. Pr. | No | Mod. | Mature | Crowded; lop-sided; thinning; declining; major deadwood. |
| 185 | Schinus molle | Pepper, California | 30.9" @ 3' | 22' | 50' | 50% | 45% | 47% Poor | Yes | Mod. | Mature | Three co-dominant trunks at 6-feet; major deadwood. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|------------------|-----------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 186 | Schinus molle | Pepper, California | 34.3" @ 2' | 28' | 60' | 55% | 65% | 60% Fair | Yes | Mod. | Mature | Major deadwood to 6-inch diameter. |
| 187 | Schinus molle | Pepper, California | 24.2" @ 3' | 25' | 35' | 50% | 60% | 55% Fair | Yes | Mod. | Mature | Declining; major deadwood. |
| 188 | Schinus molle | Pepper, California | 32.0" @ 0" | 28' | 48' | 45% | 55% | 49% Poor | Yes | Mod. | Mature | Co-dominant trunks (weak structure); crowded; lop-sided; declining; major deadwood. |
| 189 | Schinus molle | Pepper, California | 22.3" @ 2' | 20' | 35' | 40% | 25% | 65% Fair | Yes | Mod. | Mature | Major deadwood that was in 2005 - now has decay/cavity where stem broke out at 9- to 3-feet. |
| 190 | Schinus molle | Pepper, California | 24.2" | 25' | 45' | 50% | 55% | 52% Fair | Yes | Mod. | Mature | Lop-sided against #191; declining; major deadwood. |
| 191 | Schinus molle | Pepper, California | 28.4" | 28' | 55' | 55% | 15% | 25% V. Pr. | Yes | Mod. | Mature | Cavity south side at 2- to 5-feet with decay to center; 10- to 12-inch breakage to south; major deadwood. |
| 192 | Schinus molle | Pepper, California | 15.7" @ 2' | 15' | 35' | 5% | 5% | 05% V. Pr. | Yes | Mod. | Mature | Thinning; declining; major deadwood that was in 2005 - now mostly dead. |
| 193 | Schinus molle | Pepper, California | 23.5" | 25' | 55' | 45% | 55% | 49% Poor | Yes | Mod. | Mature | Declining; major deadwood. |
| 194 | Schinus molle | Pepper, California | 22.3" @ 3' | 25' | 45' | 50% | 60% | 60% Fair | Yes | Mod. | Mature | Major deadwood. |
| 195 | Schinus molle | Pepper, California | 17.5" @ 3' | 17' | 40' | 40% | 40% | 40% Poor | Yes | Mod. | Mature | Crowded, lop-sided against #194; major deadwood. |
| 196 | Schinus molle | Pepper, California | 32.4" @ 1' | 30' | 50' | 50% | 65% | 57% Fair | Yes | Mod. | Mature | Major deadwood; lop-sided; co-dominant trunks at 3-feet. |
| 197 | Schinus molle | Pepper, California | 16.9" @ 2' | 15' | 35' | 35% | 50% | 47% Poor | Yes | Mod. | Mature | Thinning; declining; major deadwood. |
| 198 | Schinus molle | Pepper, California | 22.4" @ 3' | 28' | 40' | 40% | 55% | 47% Poor | Yes | Mod. | Mature | Thinning; declining; major deadwood. |
| 199 | Schinus molle | Pepper, California | 21.2" @ 4' | 20' | 40' | 30% | 50% | 40% Poor | Yes | Mod. | Mature | Thinning; declining; major deadwood. |
| 200 | Schinus molle | Pepper, California | 28.3" @ 2' | 25' | 42' | 55% | 65% | 60% Fair | Yes | Mod. | Mature | Declining; major deadwood; four co-dominant trunks at 4-feet; located just below patch of poison oak on ridge. |
| 201 | Schinus molle | Pepper, California | 22.5" | 22' | 45' | 35% | 20% | 25% V. Pr. | Yes | Mod. | Mature | Root flare scrape; cavity on south side; trunk cavity at 5-feet; thinning; declining; major deadwood. |
| 202 | Schinus molle | Pepper, California | 23.9" @ 3' | 23' | 42' | 15% | 20% | 17% V. Pr. | Yes | Mod. | Mature | Thinning; declining; major deadwood; breakage. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 203 | Pinus canariensis | Pine, Canary Island | 16.8" | 10' | 40' | 50% | 60% | 55% Fair | Yes | Good | Mature | Some yellowing. |
| 204 | Pinus canariensis | Pine, Canary Island | 27.9" | 17' | 50' | 50% | 40% | 45% Poor | Yes | Good | Mature | Co-dominant trunks at 40-feet. |
| 205 | Pinus canariensis | Pine, Canary Island | 21.5" | 15' | 55' | 35% | 45% | 40% Poor | Yes | Good | Mature | Thin foliage crown. Located near NE corner of County compound that was in 2005 - now thinning, yellowing. |
| 206 | Pinus canariensis | Pine, Canary Island | 23.0" | 17' | 60' | 60% | 70% | 65% Fair | Yes | Good | Mature | Crowded; limbed up to ~25-feet; trunk scraped at 3.5-feet. |
| 207 | Pinus canariensis | Pine, Canary Island | 19.9" | 15' | 58' | 50% | 60% | 55% Fair | Yes | Good | Mature | Crowded; thin; breakage (3-inch diam. at 50-feet). |
| 208 | Pinus canariensis | Pine, Canary Island | 22.9" | 18' | 70' | 58% | 65% | 62% Fair | Yes | Good | Mature | Crowded that was in 2005 - now yellowing. |
| 209 | Pinus canariensis | Pine, Canary Island | 18.7" | 12' | 50' | 65% | 45% | 55% Fair | Yes | Good | Mature | Crowded; shaded out to 30-foot height. |
| 210 | Pinus canariensis | Pine, Canary Island | 21.6" | 16' | 63' | 60% | 70% | 65% Fair | Yes | Good | Mature | Crowded; thin. |
| 211 | Pinus canariensis | Pine, Canary Island | 13.6" | 12' | 48' | 45% | 60% | 52% Fair | Yes | Good | Mature | Crowded; thin. |
| 212 | Pinus canariensis | Pine, Canary Island | 19.8" | 14' | 65' | 45% | 65% | 55% Fair | Yes | Good | Mature | Crowded; shaded out to 30-foot height. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 213 | Pinus canariensis | Pine, Canary Island | 18.8" | 20' | 75' | 55% | 25% | 47% Poor | Yes | Good | Mature | Crowded; misshapen; co-dominant trunks at 28-feet that was in 2005 - now foliage branch endweights have accumulated, and the co-dominant trunk appears to be closer to 22-feet and has a poor attachment (embedded bark crotch). |
| 214 | Pinus canariensis | Pine, Canary Island | 20.0" | 15' | 75' | 55% | 65% | 60% Fair | Yes | Good | Mature | Crowded. |
| 215 | Pinus canariensis | Pine, Canary Island | 21.9" | 21' | 72' | 55% | 60% | 57% Fair | Yes | Good | Mature | Crowded; a little thin; trunk scrape at 5- to 6-feet that was in 2005 - now has moderate endweights, curving branches. |
| 216 | Pinus canariensis | Pine, Canary Island | 17.5" | 12' | 68' | 45% | 60% | 52% Fair | Yes | Good | Mature | Crowded; thin. |
| 217 | Pinus canariensis | Pine, Canary Island | 21.4" | 14' | 65' | 40% | 60% | 49% Poor | Yes | Good | Mature | Crowded. |
| 218 | Pinus canariensis | Pine, Canary Island | 19.5" | 16' | 60' | 50% | 65% | 57% Fair | Yes | Good | Mature | Crowded. |
| 219 | Pinus canariensis | Pine, Canary Island | 17.6" | 12' | 70' | 45% | 40% | 42% Poor | Yes | Good | Mature | Crowded; a little thin; co-dominant stems at 50-feet. [closer to 35-feet] |
| 220 | Pinus canariensis | Pine, Canary Island | 9.8" | 9' | 48' | 35% | 50% | 42% Poor | No | Good | Mature | Crowded; thin that was in 2005 - now declining, suppressed, with notable deadwood. |
| 221 | Pinus canariensis | Pine, Canary Island | 15.6" | 12' | 65' | 35% | 25% | 30% Poor | Yes | Good | Mature | Crowded; two trunks at 40-feet.[closer to 25-feet] |
| 222 | Pinus canariensis | Pine, Canary Island | 13.1" | 10' | 68' | 50% | 60% | 55% Fair | No | Good | Mature | Crowded; trunk scrape at 4- to 6-feet, thin that was in 2005 - now lop-sided, with notable deadwood. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 223 | Pinus canariensis | Pine, Canary Island | 18.3" | 17' | 70' | 45% | 60% | 57% Fair | Yes | Good | Mature | Crowded. |
| 224 | Pinus canariensis | Pine, Canary Island | 12.4" | 8' | 62' | 40% | 50% | 45% Poor | No | Good | Mature | Crowded; thin that was in 2005 - now suppressed. |
| 225 | Pinus canariensis | Pine, Canary Island | 20.6" | 18' | 68' | 60% | 70% | 65% Fair | Yes | Good | Mature | Crowded. |
| 226 | Pinus canariensis | Pine, Canary Island | 18.8" | 16' | 70' | 45% | 50% | 47% Poor | Yes | Good | Mature | Crowded that was in 2005 - now lop-sided; extensive deadwood. |
| 227 | Pinus canariensis | Pine, Canary Island | 18.4" | 20' | 68' | 40% | 50% | 45% Poor | Yes | Good | Mature | Crowded; endweights that was in 2005 - now lop-sided, with major deadwood. |
| 228 | Pinus canariensis | Pine, Canary Island | 16.5" | 14' | 62' | 45% | 60% | 52% Fair | Yes | Good | Mature | Crowded; trunk scrape at 2- to 3-feet. |
| 229 | Pinus canariensis | Pine, Canary Island | 17.6" | 17' | 75' | 63% | 70% | 66% Fair | Yes | Good | Mature | Crowded. |
| 230 | Pinus canariensis | Pine, Canary Island | 16.8" | 17' | 65' | 65% | 70% | 67% Fair | Yes | Good | Mature | Crowded. |
| 231 | Pinus canariensis | Pine, Canary Island | 22.8" | 17' | 72' | 70% | 65% | 67% Fair | Yes | Good | Mature | Crowded; breakage; dead hanger at 50-feet; endweights. |
| 232 | Pinus canariensis | Pine, Canary Island | 21.4" | 14' | 75' | 65% | 70% | 67% Fair | Yes | Good | Mature | Crowded. |
| 233 | Pinus canariensis | Pine, Canary Island | 19.2" | 15' | 70' | 60% | 70% | 65% Fair | Yes | Good | Mature | Crowded. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|-------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 234 | Pinus canariensis | Pine, Canary Island | 24.2" | 18' | 75' | 69% | 65% | 67% Fair | Yes | Good | Mature | Crowded. |
| 235 | Eucalyptus globulus | Blue Gum | 70.5" @ 1' | 40' | 70' | 55% | 40% | 47% Poor | Yes | Mod. | Mature | Substantial endweights. |
| 236 | Eucalyptus globulus | Blue Gum | 16.7" @ 3' | 18' | 38' | 30% | 20% | 25% V. Pr. | Yes | Mod. | Mature | Crowded; lop-sided under #235 that was in 2005 - now12-inch diameter co-dominant trunks at 5-feet. |
| 237 | Pinus radiata | Pine, Monterey | | | | | | | | | | [had been nearly dead - now GONE!] |
| 238 | Pinus canariensis | Pine, Canary Island | 13.2" | 9' | 50' | 40% | 50% | 45% Poor | No | Mod. | Mature | Crowded; trunk scrape at 1-foot. |
| 239 | Pinus radiata | Pine, Monterey | 16.4" | 17' | 45' | 25% | 25% | 25% V. Pr. | Yes | Mod. | Mature | Crowded; trunk scrape by "road"; misshapen; major deadwood. |
| 240 | Pinus canariensis | Pine, Canary Island | 26.2" | 18' | 75' | 45% | 50% | 47% Poor | Yes | Good | Mature | Endweights. |
| 241 | Juniperus virginiana | Cedar, Eastern Red | | | | | | | | | | [fell over - GONE!] |
| 242 | Robinia pseudoacacia | Locust, Black | 18.3" | 20' | 48' | 33% | 30% | 31% Poor | Yes | Good | Mature | Prior breakage; missing second stem at 3-feet that was in 2005 - now has major deadwood. |
| 243 | Pinus canariensis | Pine, Canary Island | 23.2" | 14' | 65' | 65% | 70% | 67% Fair | Yes | Good | Mature | |
| 244 | Pinus canariensis | Pine, Canary Island | 22.7" | 18' | 72' | 55% | 60% | 57% Fair | Yes | Good | Mature | Endweights that was in 2005 - now broken limb hanging at 40-feet - other breakage, too. |
| 245 | Pinus canariensis | Pine, Canary Island | 20.3" | 16' | 70' | 50% | 65% | 57% Fair | Yes | Good | Mature | |



Data date: Spring 2011

TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|-------------------------|-------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 246 | Robinia pseudoacacia | Locust, Black | 24.7" @ 0" | 15' | 38' | 40% | 10% | 25% V. Pr. | Yes | Good | Mature | Co-dominant trunks growing off of old stump at ground level originally probably removed by electric contractor for high voltage lines' clearance near tower that was in 2005 - now 9- and 11-inch trunks, with third 12" trunk missing/decayed. |
| 247 | Pinus canariensis | Pine, Canary Island | 17.9" | 19' | 65' | 55% | 65% | 60% Fair | Yes | Good | Mature | Crowded; lop-sided. |
| 248 | Pinus halepensis | Pine, Aleppo | ~22.8" | 13' | 45' | 40% | 25% | 33% Poor | Yes | Good | Mature | Crowded; lop-sided; topped at 55- to 60-feet for high voltage lines; crooked; leaning; poison oak at base. |
| 249 | Pinus halepensis | Pine, Aleppo | 29.4" | 25' | 66' | 66% | 40% | 48% Poor | Yes | Mod. | Mature | Co-dominant trunks at 10- to 25-feet; root flare defect - missing broken second stem at ground level; crooked; lanky; lop-sided. |
| 250 | Pinus halepensis | Pine, Aleppo | 33.3" | 25' | 67' | 60% | 30% | 45% Poor | Yes | Mod. | Mature | Crooked, leaning, lop-sided over County area; co-dominant trunks at 30-feet. |
| 251 | Platanus racemosa | Sycamore, California | 17.0" | 18' | 47' | 65% | 60% | 62% Fair | Yes | Good | Mature | Crooked, leaning trunk. |
| 252 | Pinus halepensis | Pine, Aleppo | 24.5" | 18' | 47' | 65% | 50% | 57% Fair | Yes | Mod. | Mature | Lop-sided toward high voltage lines; co-dominant trunks at 20-feet (and others). |
| 253 | Pinus halepensis | Pine, Aleppo | 43.2" @ 1' | 24' | 70' | 65% | 35% | 49% Poor | Yes | Mod. | Mature | Poison oak at base; co-dominant trunks at 28-feet that was in 2005 - now major stems pruned off at 3- and 4-feet. |
| 254 | Quercus agrifolia | Oak, Coast Live | 20.0" @ 1' | 20' | 37' | 77% | 45% | 57% Fair | Yes | Good | Mature | Co-dominant trunks at 2-feet that was in 2005 - now 13- and 11-inch trunks w/ embedded bark crotch at 2-feet. |
| | Olea europa | Olive, Common | 18.2" | 12' | 25' | 15% | 10% | 12% V. Pr. | Yes | Good | Mature | Major deadwood; stubbed under high voltage lines that was in 2005 - now re-stubbed for line clearance. |
| 256 | Olea europa | Olive, Common | 12.6" | 15' | 25' | 40% | 20% | 30% Poor | Yes | Good | Mature | Two 12-inch trunks from ground level; major deadwood; stubbed under high voltage lines that was in 2005 - now restubbed and one trunk removed, remaining trunk has 50° lean into #255. |
| 257 | Platanus racemosa | Sycamore, California | 15.8" | 12' | 38' | 50% | 40% | 45% Poor | Yes | Good | Mature | Stubbed under high voltage lines. |
| 258 | Pinus halepensis | Pine, Aleppo | | | | | | | | | | GONE! |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|-------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 259 | Pinus halepensis | Pine, Aleppo | 34.4" @ 2' | 20' | 80' | 65% | 20% | 40% Poor | Yes | Mod. | Mature | Crooked, misshapen, topped prior breakage at 3-foot! |
| 260 | Schinus molle | Pepper, California | 17.5" @ 0" | 8' | 18' | 55% | 20% | 37% Poor | Yes | Mod. | Mature | Split trunk 3- & 10-inch stems at 1-foot. |
| 261 | Platanus racemosa | Sycamore, California | 26.5" @ 1' | 20' | 45' | 70% | 40% | 55% Fair | Yes | Good | Mature | Crowded; lop-sided under adjacent; maybe pruned for high voltage lines that was in 2005 - now large wound at 3-feet (18" stem removed). |
| 262 | Platanus racemosa | Sycamore, California | 26.8" | 25' | 60' | 70% | 75% | 72% Good | Yes | Good | Mature | Poison oak at base. Crowded; lop-sided by adjacent pine. |
| 263 | Schinus molle | Pepper, California | | | | | | | | | | GONE! |
| 264 | Schinus molle | Pepper, California | 7.4" | 7' | 25' | 20% | 0% | 05% V. Pr. | Yes | Mod. | Mature | Thinning; extensive deadwood; trunk broken at 3-feet; extensive trunk decay that was in 2005 - now one 7-inch trunk sucker remains (40° lean). |
| 265 | Pinus halepensis | Pine, Aleppo | 42.8" @ 1' | 25' | 70' | 55% | 40% | 47% Poor | Yes | Mod. | Mature | Five trunks at 4- to 5-feet; extensive interior deadwood; lanky; crowded. |
| 266 | Pinus halepensis | Pine, Aleppo | 29.1" @ 3' | 27' | 60' | 40% | 40% | 40% Poor | Yes | Mod. | Mature | Poison oak at base. Crowded; thinning; extensive interior deadwood. |
| 267 | Pinus halepensis | Pine, Aleppo | 26.3" @ 1' | 25' | 52' | 35% | 20% | 25% V. Pr. | Yes | Mod. | Mature | Crowded; very crooked trunk; thin; misshapen; extensive deadwood. |
| 268 | Pinus halepensis | Pine, Aleppo | ~36.0" @ 1' | 25' | 65' | 45% | 30% | 37% Poor | Yes | Mod. | Mature | Three trunks at 4-feet; crowded by #270; extensive deadwood. Poison oak at base. |
| 269 | Platanus racemosa | Sycamore, California | 33.7" | 30' | 65' | 75% | 90% | 82% Good | Yes | Good | Mature | DOMINANT stands alone. |
| 270 | Platanus racemosa | Sycamore, California | 29.8" | 27' | 85' | 70% | 90% | 80% Good | Yes | Good | Mature | Trunk leans 10° parallel to Highway 85. |
| 271 | Pinus halepensis | Pine, Aleppo | 30.4" | 22' | 60' | 40% | 30% | 35% Poor | Yes | Mod. | Mature | Poison oak at base; endweights; breakage; thinning; codominant trunks at 12-feet; extensive deadwood. |
| 272 | Pinus halepensis | Pine, Aleppo | 23.8" | 20' | 75' | 45% | 25% | 35% Poor | Yes | Mod. | Mature | Co-dominant trunks with embedded bark crotches (weak structure). |
| 273 | Pinus halepensis | Pine, Aleppo | 16.5" | 12' | 38' | 30% | 20% | 25% V. Pr. | Yes | Mod. | Mature | Crowded; lop-sided; under-story to others. Trunk leans 30° parallel to creek. |
| 274 | Pinus halepensis | Pine, Aleppo | 23.7" @ 2' | 15' | 42' | 50% | 20% | 35% Poor | Yes | Mod. | Mature | Two 15-inch trunks at 3-feet. Crowded under #272; lop-sided. Extensive deadwood. Breakage. |

TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|-------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 275 | Pinus halepensis | Pine, Aleppo | | | | | | | | | | GONE! |
| 276 | Pinus radiata | Pine, Monterey | | | | | | | | | | GONE! |
| 277 | Sequoia sempervirens | Redwood, Coast | 34.5" | 25' | 85' | 68% | 90% | 78% Good | Yes | Good | : | Big, generally healthy redwood - plus 10-, 14-, 14-inch basal suckers that was in 2005 - now 10-, 14-, and 14-inch trunks in a clump. |
| | | | a | | | | 0 | | | | | |
| 301 | Aesculus californica | Buckeye, California | 5.9" @ 2' | 7' | 16' | 70% | 60% | 65% Fair | No | Good | = | 12-feet outside of chain link fence; trunk leans 10° northeast; root flare scraped & buried in debris. |
| 302 | Schinus molle | Pepper, California | 29.7" @ 1' | 25' | 40' | 35% | 35% | 35% Poor | Yes | Mod. | Mature | 5-feet outside of chain link fence; side-pruned for fence; co- dominant at 3-feet (8- and 18-inch trunks); major deadwood. |
| 303 | Cercis canadensis | Redbud, American | 1.3" | 3' | 8' | 50% | 50% | 50% Fair | No | Mod. | Young | Recently planted; still staked, but not needed. |
| 304 | Cercis canadensis | Redbud, American | 1.8" | 3' | 8' | 30% | 30% | 30% Poor | No | Mod. | Young | Recently planted; still staked, but not needed. Notable tip dieback. |
| 305 | Cercis canadensis | Redbud, American | 1.5" | 3' | 8' | 35% | 30% | 32% Poor | No | Mod. | Young | Recently planted; still staked, but not needed. Notable tip dieback. |
| 306 | Cercis canadensis | Redbud, American | 3.3" | 6' | 14' | 66% | 75% | 71% Good | No | Mod. | Young | Recently planted; no stake. |
| 307 | Cercis canadensis | Redbud, American | 3.5" @ 3' | 6' | 13' | 66% | 70% | 68% Fair | No | Mod. | Young | Recently planted; co-dominant trunks with embedded bark crotch at 3-feet. |
| 308 | Cercis canadensis | Redbud, American | 2.5" @ 3' | 5' | 14' | 55% | 55% | 55% Fair | No | Mod. | Young | Recently planted. |
| 309 | Cedrus deodara | Cedar, Deodar | 7.3" | 8' | 28' | 55% | 70% | 62% Fair | Yes | Mod. | Semi- mature | Yellowing new needles - stressed? |
| 310 | Cedrus deodara | Cedar, Deodar | 8.0" | 10' | 25' | 55% | 70% | 62% Fair | Yes | Mod. | Semi- mature | Yellowing new needles - stressed? |
| 311 | Cedrus deodara | Cedar, Deodar | 7.0" | 10' | 30' | 60% | 60% | 60% Fair | Yes | Mod. | Semi- mature | Root flare defect. |
| 312 | Cedrus deodara | Cedar, Deodar | 6.5" | 10' | 33' | 65% | 70% | 60% Fair | Yes | Mod. | Semi- mature | |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 313 | Pinus canariensis | Pine, Canary Island | 4.5" | 5' | 22' | 70% | 70% | 70% Good | No | Good | Semi- mature | Likely seedling from nearby parent. |
| 314 | Cercis canadensis | Redbud, American | 1.0" | 2' | 11' | 50% | 50% | 50% Fair | No | Mod. | Young | Recently planted; still staked, but not needed. |
| 315 | Cercis canadensis | Redbud, American | 2.9" @ 3' | 7' | 11' | 60% | 60% | 60% Fair | No | Mod. | Young | |
| 316 | Cercis canadensis | Redbud, American | 2.2" @ 3' | 6' | 10' | 20% | 20% | 70% Good | No | Mod. | Young | Very stressed, thin. |
| 317 | Cercis canadensis | Redbud, American | 2.3" @ 3' | 7' | 13' | 50% | 50% | 50% Fair | No | Mod. | Young | |
| 318 | Cercis canadensis | Redbud, American | 1.0" @ 2' | 5' | 7' | 40% | 40% | 40% Poor | No | Mod. | Young | Recently planted; still staked; 18-feet back of curb (Moffett). |
| 319 | Cercis canadensis | Redbud, American | 2.5" @ 3' | 6' | 7' | 40% | 40% | 40% Poor | No | Mod. | Young | Recently planted; 14-feet back of curb (Moffett). |
| 320 | Cercis canadensis | Redbud, American | 2.8" @ 3' | 7' | 8' | 40% | 40% | 40% Poor | No | Mod. | Young | Recently planted; 14-feet back of curb (Moffett). |
| 321 | Schinus molle | Pepper, California | 4.7" @ 3' | 8' | 12' | 65% | 65% | 65% Fair | No | Mod. | Young | Recently planted; still staked, not needed; 17-feet back of curb (Moffett). |
| 322 | Schinus molle | Pepper, California | 6.4" | 10' | 18' | 65% | 60% | 63% Fair | No | Mod. | Young | Recently planted; 18-feet back of curb (Moffett). |
| 323 | Schinus molle | Pepper, California | 5.8" | 10' | 18' | 60% | 60% | 60% Fair | No | Mod. | Semi- mature | Recently planted; 20-feet back of curb (Moffett). |
| 324 | Cedrus deodara | Cedar, Deodar | 4.5" | 10' | 16' | 40% | 20% | 30% Poor | Yes | Mod. | Semi- mature | 1-foot to Moffett bridge abutment; yellowing new needles. |
| 325 | Fraxinus uhdei | Ash, Shamel | ~14" @ 0" | 14' | 38' | 40% | 10% | 25% V. Pr. | No | Good | | 2-foot to Moffett bridge abutment; species-typical embedded bark crotches. |
| 326 | Ailanthus altissima | Tree of Heaven | 5.5" | 6' | 23' | 30% | 10% | 20% V. Pr. | No | Mod. | Young | 11-foot to Moffett bridge abutment; up against freeway curbwall. |
| 327 | Cercis canadensis | Redbud, American | 2.4" @ 3' | 5' | 9' | 50% | 60% | 55% Fair | No | Mod. | Young | |
| 328 | Cercis canadensis | Redbud, American | 2.3" @ 3' | 4' | 9' | 50% | 60% | 55% Fair | No | Mod. | Young | |

TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|---------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 329 | Cercis canadensis | Redbud, American | 2.1" @ 3' | 5' | 8' | 50% | 60% | 55% Fair | No | Mod. | Young | |
| 330 | Cercis canadensis | Redbud, American | 2.9" @ 3' | 5' | 9' | 50% | 60% | 55% Fair | No | Mod. | Young | |
| 331 | Cercis canadensis | Redbud, American | 2.6" @ 2' | 3' | 7' | 40% | 40% | 40% Poor | No | Mod. | Young | |
| 332 | Cercis canadensis | Redbud, American | 2.3" @ 2' | 4' | 8' | 45% | 45% | 45% Poor | No | Mod. | Young | |
| 333 | Fraxinus uhdei | Ash, Shamel | 8.9" @ 6" | 5' | 23' | 60% | 10% | 25% V. Pr. | No | Good | Semi- mature | Two 4-inch stems at 1-foot with embedded bark crotch. |
| 334 | Cedrus deodara | Cedar, Deodar | 6.5" | 10' | 19' | 65% | 70% | 68% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. |
| 335 | Cedrus deodara | Cedar, Deodar | 3.8" | 6' | 15' | 40% | 65% | 52% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. |
| 336 | Cedrus deodara | Cedar, Deodar | 4.8" | 7' | 15' | 45% | 65% | 55% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. |
| 337 | Cedrus deodara | Cedar, Deodar | 4.6" @ 3' | 9' | 17' | 50% | 60% | 55% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. |
| 338 | Cedrus deodara | Cedar, Deodar | 4.0" @ 3' | 7' | 16' | 50% | 40% | 45% Poor | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. Competing leader (2-inch) at 3-feet. Crowded. |
| 339 | Cedrus deodara | Cedar, Deodar | 5.8" | 6' | 20' | 40% | 60% | 50% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. Lanky. Crowded. |
| 340 | Cedrus deodara | Cedar, Deodar | 6.4" | 9' | 25' | 66% | 66% | 66% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. |
| 341 | Cedrus deodara | Cedar, Deodar | 4.0" @ 3' | 9' | 14' | 55% | 60% | 57% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. Yellow tips. |
| 342 | Cedrus deodara | Cedar, Deodar | 4.1" | 8' | 17' | 60% | 60% | 60% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Yellowtips. |
| 343 | Cedrus deodara | Cedar, Deodar | 5.9" | 8' | 26' | 50% | 50% | 50% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. Crowded; lop-sided. |
| 344 | Cedrus deodara | Cedar, Deodar | 5.6" | 7' | 24' | 55% | 60% | 57% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Thin. Crowded. |
| 345 | Cedrus deodara | Cedar, Deodar | 5.7" | 7' | 25' | 65% | 65% | 65% Fair | Yes | Mod. | Semi- mature | Likely seedling from nearby parent. Crowded. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 346 | Cercis canadensis | Redbud, American | 1.8" @ 2' | 3' | 7' | 40% | 40% | 40% Poor | No | Mod. | Young | |
| 347 | Cercis canadensis | Redbud, American | 2.2" @ 2' | 4' | 7' | 50% | 45% | 47% Poor | No | Mod. | Young | |
| 348 | Cercis canadensis | Redbud, American | 2.0" @ 2' | 4' | 8' | 35% | 45% | 40% Poor | No | Mod. | Young | |
| 349 | Cercis canadensis | Redbud, American | 1.8" @ 2' | 4' | 7' | 40% | 45% | 42% Poor | No | Mod. | Young | |
| 350 | canadensis | Redbud, American | 1.7" @ 2' | 3' | 7' | 50% | 45% | 47% Poor | No | Mod. | Young | Crooked trunk bending/sweep. |
| 351 | Cedrus deodara | Cedar, Deodar | 4.0" | 5' | 18' | 40% | 40% | 40% Poor | Yes | Mod. | Semi- mature | Crowded, lop-sided suppressed under others. Thin. |
| 352 | Cedrus deodara | Cedar, Deodar | 5.9" | 8' | 23' | 65% | 65% | 65% Fair | Yes | Mod. | Semi- mature | |
| 353 | Pinus canariensis | Pine, Canary Island | 8.5" | 8' | 33' | 40% | 30% | 35% Poor | No | Mod. | Semi- mature | Likely seedling from nearby parent. Crowded beside a large mound of many photinia stems/shrubs. Suppressed. Lower limbs dead. |
| 354 | Cercis canadensis | Redbud, American | 1.4" @ 2' | 3' | 7' | 45% | 50% | 47% Poor | No | Mod. | Young | |
| 355 | Cercis canadensis | Redbud, American | 1.7" @ 2' | 5' | 7' | 45% | 45% | 45% Poor | No | Mod. | Young | |
| 356 | Cercis canadensis | Redbud, American | 2.0" @ 2' | 5' | 8' | 40% | 40% | 40% Poor | No | Mod. | Young | |
| 357 | Cercis canadensis | Redbud, American | 2.2" @ 2' | 5' | 7' | 45% | 40% | 42% Poor | No | Mod. | Young | |
| 358 | Cercis canadensis | Redbud, American | 1.8" @ 2' | 5' | 7' | 45% | 40% | 42% Poor | No | Mod. | Young | |
| 359 | Cercis canadensis | Redbud, American | ~17" @ 0" | 4' | 11' | 66% | 55% | 60% Fair | No | Mod. | Young | Twelve 1/2" to 1-1/2" stems from ground level. |
| 360 | [| Redbud, American | ~20" @ 0" | 5' | 12' | 25% | 25% | 25% V. Pr. | No | Mod. | Young | Ten 1" to 2" stems from ground level. Severely declining; extensive deadwood. |
| 361 | Cercis canadensis | Redbud, American | ~9" @ 0" | 4' | 12' | 45% | 40% | 42% Poor | No | Mod. | Young | five 2" to 4" stems from ground level. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-------|----------------------------|-------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 362 | Cedrus deodara | Cedar, Deodar | 7.6" | 12' | 27' | 65% | 65% | 65% Fair | Yes | Mod. | Semi- mature | Crowded, lop-sided. |
| 363 | Cercis canadensis | Redbud, American | ~20" @ 0" | 6' | 12' | 50% | 40% | 45% Poor | No | Mod. | Young | Eight 1" to 2" stems from ground level. |
| 1 3h4 | Aesculus californica | Buckeye, California | 6.7" @ 6" | 8' | 18' | 55% | 45% | 50% Fair | No | Good | Semi- mature | Two 3-inch trunks at 6-inch height - crowded in photinia brush. |
| 365 | Ficus carica | Fig, Edible | 9.7" @ 0" | 10' | 17' | 65% | 55% | 60% Fair | No | Good | Mature | Lanky from prior crowding. Two stems (4" and 5"). |
| 366 | Prunus amygdalus | Almond | 5.6" | 7' | 20' | 55% | 10% | 25% V. Pr. | No | Mod. | Semi- mature | Severely pruned, as if had been a tangle. Re-growth sprouts- shoots not well-attachned. Lower trunk pruning wounds & scrapes = defects(?) recovering? |
| 367 | Juglans nigra | Walnut, Black | 7.3" | 7' | 35' | 55% | 60% | 57% Fair | No | Poor | Semi- mature | Lanky 5-feet to #100. |
| 368 | Juglans nigra | Walnut, Black | 8.1" | 10' | 27' | 40% | 25% | 33% Poor | No | Poor | ≣ | Crowded by pepper tree across fence; 5-feet to chain link. Stressed. |
| 369 | Rhamnus alaternus | Coffeeberry, Italian | 6.0" @ 2' | 8' | 23' | 25% | 20% | 22% V. Pr. | No | Mod. | Ē | Sunburned; dieback; lanky. Two stems (4" and 5") from 3-feet with embedded bark crotch. |
| 370 | Juglans nigra | Walnut, Black | 11.1" @ 0" | 6' | 24' | 20% | 20% | 20% V. Pr. | No | Poor | : | Three stems from ground level (4", 4", and 8"). Scrape wounds. Slower to leaf out than others nearby. |
| 371 | Juglans nigra | Walnut, Black | 13.3" @ 0" | 7' | 23' | 40% | 20% | 30% Poor | No | Poor | : | Two stems (4" and 8") from ground level with embedded bark crotch. Root flare defect. |
| 372 | Rhamnus alaternus | Coffeeberry, Italian | 4.2" | 6' | 22' | 25% | 25% | 25% V. Pr. | No | Mod. | Young | Bleeding canker at 12-feet. |
| 1272 | Aesculus californica | Buckeye, California | 9.9" @ 1' | 9' | 24' | 40% | 50% | 45% Poor | No | Good | = | In midst of pepper tree grove. Lanky. Three 4-inch stems from 2-feet. |
| 374 | Casuarina equisetifolia | Beefwood, Common | 8.7" | 15' | 28' | 30% | 20% | 25% V. Pr. | No | Mod. | = | 12-feet back of curb (Moffett); 3-feet to #152;10-feet to #153. Stubbed at 6-feet 4" and 6" stems. |
| 375 | Juglans nigra | Walnut, Black | 5.8" | 10' | 22' | 38% | 45% | 42% Poor | No | Poor | = | 17-feet to Moffett chain link. Crowded; lop-sided; thin; dieback. |
| 376 | Juglans nigra | Walnut, Black | 4.2" | 7' | 23' | 20% | 15% | 17% V. Pr. | No | Poor | Young | Crowded, lop-sided, misshapen, suppressed, lanky. 31-feet to Moffett chain link. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|----------------------------|------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|---|
| 377 | Prunus amygdalus | Almond | 11.3" @ 1' | 8' | 18' | 30% | 15% | 22% V. Pr. | No | Mod. | Mature | Crowded, lop-sided, misshapen, suppressed. 29-feet to Moffett chain link. Two stems from ground level (7" and 8"). |
| 378 | Juglans nigra | Walnut, Black | 7.3" | 6' | 25' | 55% | 50% | 52% Fair | No | Poor | Semi- mature | 3-feet to Moffett chain link. Lanky. |
| 379 | Juglans nigra | Walnut, Black | 5.4" | 6' | 28' | 35% | 35% | 35% Poor | No | Poor | Semi- mature | 32-feet to Moffett chain link. Lanky; dieback; thin. |
| 380 | Pinus canariensis | Pine, Canary Island | 4.7" | 4' | 30' | 15% | 15% | 15% V. Pr. | No | Mod. | Ē | 2-feet to Moffett chain link. Lanky; suppressed under #158. Likely self-seeded from adjacent parents. |
| 381 | Pinus canariensis | Pine, Canary Island | 7.3" | 4' | 37' | 33% | 15% | 23% V. Pr. | No | Mod. | Ē | Crowded, lop-sided, misshapen, suppressed under #177. 5-feet to Moffett chain link. Likely self-seeded. |
| 382 | Quercus agrifolia | Oak, Coast Live | 6.5" | 6' | 28' | 50% | 45% | 47% Poor | Yes | Good | Semi- mature | Crowded, lop-sided, misshapen, suppressed under #176. 2- feet to Moffett chain link; 6-feet to bua-stop-bench. Trunk leans sweeps 20° over fence. |
| 383 | Casuarina equisetifolia | Beefwood, Common | 14.5" | 15' | 47' | 55% | 35% | 45% Poor | No | Mod. | Mature | 60-feet back of curb (Moffett). 41'south of #384. 3-feet to substation fence. Thin, lanky. |
| 384 | Casuarina equisetifolia | Beefwood, Common | 26.0" | 24' | 48' | 50% | 38% | 44% Poor | Yes | Mod. | Mature | Co-dominant at 8-feet. 6-inches to substation eaves. |
| 385 | Juniperus virginiana | Cedar, Eastern Red | 18.9" | 7' | 45' | 55% | 40% | 47% Poor | Yes | Mod. | Mature | 6-feet to substation fence. Co-dominant at 6-feet. Lanky, misshapen, tangle. |
| 386 | Eucalyptus globulus | Blue Gum | 10.5" | 10' | 55' | 40% | 40% | 40% Poor | No | Mod. | Semi- mature | Crowded, lop-sided, misshapen under others. |
| 387 | Quercus ilex | Oak, Holly | 22.7" @ 1' | 11' | 35' | 40% | 25% | 33% Poor | Yes | Mod. | Mature | 21-feet to cell(?) tower antenna; 5-feet to fence. Co-dominant trunks, multiple stems. Lop-sided, misshapen from previous crowding? |
| 388 | Robinia pseudoacacia | Locust, Black | 8.9" | 18' | 38' | 52% | 35% | 43% Poor | No | Poor | Semi- mature | 4-feet to substation fence. Lanky, crowded, misshapen; a little thin. |



TREE INVENTORY: Moffett Gateway Site: US Hwy 101 at Moffett Boulevard.

| Т# | Genus species | Name, Common | DSH (inches) | Av. Crown Radius | Height | Vigor | Form | Overall Condition | Heritage Tree (MV) | Species' Tolerance | Age / Longevity | Comments |
|-----|-------------------------|--------------------------------|-----------------|---------------------|--------|-------|------|----------------------|-----------------------|-----------------------|--------------------|--|
| 389 | Robinia pseudoacacia | Locust, Black | 8.4" | 8' | 30' | 40% | 20% | 30% Poor | No | Poor | Ē | 45° lean over substation. Crowded, lop-sided, misshapen under #388 and others. |
| 390 | Robinia pseudoacacia | Locust, Black | 12.4" | 18' | 38' | 35% | 30% | 32% Poor | No | Poor | Mature | Trunk leans 40° over auxilliary building outside of substation. Thinning, declining, deadwood to 2-inch diameter, root flare defect. |
| 391 | Rhamnus alaternus | Coffeeberry, Italian | 5.3" | 3' | 20' | 0% | 0% | 00% Dead | No | Mod. | Young | DEAD already. |
| 392 | Rhamnus alaternus | Coffeeberry, Italian | 4.2" | 5' | 24' | 50% | 40% | 45% Poor | No | Mod. | Young | Limbed up to 15-feet. |
| 393 | Rhamnus alaternus | Coffeeberry, Italian | 5.8" | 6' | 22' | 55% | 45% | 49% Poor | No | Mod. | Young | Limbed up to 12-feet. |
| 394 | Platanus racemosa | Sycamore, California | 6.3" | 8' | 30' | 40% | 40% | 40% Poor | No | Good | Ē | Crowded, lop-sided, misshapen crooked trunk with a 25° lean to east. |
| 395 | Robinia pseudoacacia | Locust, Black | 5.3" @ 3' | 7' | 20' | 45% | 25% | 35% Poor | No | Poor | Semi- mature | Co-dominant trunks at 4-feet; thin. |
| 396 | Pinus canariensis | Pine, Canary Island | 4.5" | 2' | 22' | 2% | 2% | 02% V. Pr. | No | Mod. | Semi- mature | Crowded; lanky; top is dead. |
| 397 | Juglans nigra | Walnut, Black | 6.0" | 10' | 35' | 45% | 40% | 42% Poor | No | Poor | Semi- mature | Lanky; endweights; 95-feet across driveway to substation fence. |
| 398 | Phoenix canariensis | Palm, Canary Island Date | 12.7" @ 2' | 5' | 7' | 65% | 65% | 65% Fair | No | Good | | Measured just above dead frond butts. Under canopy of pine #265 and Sycamore #262. |
| 399 | Schinus molle | Pepper, California | 5.7" | 6' | 22' | 35% | 15% | 25% V. Pr. | No | Mod. | Semi- mature | Crowded, lop-sided, leans out from under pine #265. |



Legend: Ray Morneau, Arborist - Tree Inventory Headers

Observations were made and data gathered during my on-site inspections during April, May, and June 2011. Further conclusions and protection measures were refined from office research, seminar information, and past experience based on those observations and data.

All Heritage Trees, per City of Mountain View definitions, were numbered and inspected. The gathered data was entered into a MicroSoft® Excel worksheet. The data is encapsulated into the accompanying "Tree Inventory Data" section. The categories are typically self-descriptive with only the following notes.

| Tree Number: | I sequentially assigned tree numbers from 1 to 277 (using numbering from 2005 inventory), plus 301 to 399. A 1" by 3" |
|--------------|---|
| | aluminum tag is to be stapled to each tree at about eye level. I add a prefix "11" to identify each as linked with this |
| | inventory, thus differentiating it from any other numbering system. |

| Names: | We employ the initial common names from McMinn, if listed, otherwise from Sunset. Scientific/botanical names are |
|--------|--|
| | included to minimize confusion. As applicable, we used McMinn's key and/or Sunset's descriptions. |

| DSH | Diameter at Standard Height: This measurement is the trunk diameter measured at the standard height defined by the |
|-----|--|
| | jurisdiction in which the tree trunk grows. The industry standard is DBH, diameter at breast height, established at 54- |
| | inches above ground level, taken with a standard surveyor's diameter tape, recorded in inches. Exceptions to the 54-inch |
| | level are called out in several jurisdictions (to wit: Campbell at 48"; Redwood City between 6" and 36"). For multi- |
| | trunked trees, measurements were taken below the lowest branch swelling and/or individual stems at 54 inches, or an |
| | average, depending on which height measurement is deemed to produce the best representative figure. [As of 4/6/2004, |
| | Menlo Park changed to 54" above grade.) |

| Crown Radii | us: The tree's foliage crown radius measurements are averaged and shown in feet [(N+S+E+W) / 4]. | |
|-------------|--|--|
| : | | |
| Height: | Estimated distance foliage crown extends above grade, recorded in feet. | |



Legend: Ray Morneau, Arborist - Tree Inventory Headers

| Vigor: | Rating for tree's growth and vitality as a blend of elements like leaf or bud size and color, twig growth (elongation), accumulation of deadwood, cavities, woundwood development, trunk expansion (growth "cracks"), etc. |
|-----------------------|--|
| Form: | Structure rating for tree's architecture as a composite of factors like branch distribution and attachment, lean and balance, effects of prior breakage, crossing-tangled-twisted limbs, codominant trunks and/or branches, decay and cavities, anchorage (roots), etc. |
| Overall Condition: | Percentage rating assessing the tree's overall vigor, recent growth, insects/diseases, and structural defects. Relative text rating included in the same cell as: Excellent, Good, Fair, Poor, Very Poor. |
| | This corresponds to the "Condition Percentage" factor in tree valuations per the Council of Tree and Landscape Appraisers (CTLA) system used by the International Society of Arboriculture. (CTLA, 1992.) It combines foliage, branches, limbs, trunk, and root ratings into a composite condition score. This rating is used in the calculation of these trees' appraised value required by some cities, including Palo Alto and Belmont. |
| Heritage Tree (MV) | Notation of tree's status as "Protected" per City of Mountain View Municipal Code. Trees in town are "Heritage" if 15.3-inch diameter or greater (≥15.3"), or if oaks, cedars, or redwoods 3.8-inch diameter or greater (≥3.8"). Others may be "Designated" ("D") for regulation by the City Council. A third type of regulated tree are "Street Trees" ("ST"). |
| Species' Tolerance | Good / Moderate / Poor: relative rating of the particular species' tolerance of construction impacts - pressures and changes like injury, water changes, fill soil, root loss, site disturbance. (Many on chart in Matheny & Clark.) |
| Age / Longevity | Rates tree's relative age: Young (Long) / Semi-Mature / Mature / Over-Mature (Short). |
| Comments: | Notes; most obvious defects, insects, diseases or unique characteristics. |

