DEPARTMENT OF PUBLIC WORKS
TREE MAINTENANCE ACTIVITIES PERFORMED AND PENDING
DECEMBER 2011

ADDRESS	TYPE OF TREE	DIAMETER	ALTERED (TRIM)	REMOVED	COMMENTS
5 Miller Ave	Monterey Pine	54.4-in DBH (171-in CBH estimated		Top removed, remainder pending PG&E strain guy relocation	Private – still requires PG&E coordination – no permit required (undesirable tree).
ROW at 81 Cazneau Ave	Coast Live Oak	37.7-in CBH	Pending		Application TRP11-252 received with arborist's report. Posted pending alteration. No update from resident.
77 Harrison Ave	Oak			Pending	Reported as dead and application for removal TRP 11-257 received. Investigating. Approved by TVC. DPW investigating current status to see if work done. No arborist report.
ROW at 254 Glen Drive	Pittosporum	37.7-in CBH	View Pending		TRP 11-174 received. Closest neighbor objects. Arborist reports received and additional work requested. Expect approval in some form in January.

DEPARTMENT OF PUBLIC WORKS
TREE MAINTENANCE ACTIVITIES PERFORMED AND PENDING
DECEMBER 2011

ADDRESS	TYPE OF TREE	DIAMETER	ALTERED (TRIM)	REMOVED	COMMENTS
ROW – Intersection between Sausalito Blvd & Spencer Ave on 40 Cooper Lane	Black Acacia	72" DBH 78" DBH		Pending	Co dominant trunks lean away from each other. 1 trunk leans over Spencer Ave; the other is a threat to property at Cooper Lane. Bartlett Tree exposed root collar, ivy & soil removed from bottom of tree to determine risk of failure. Two arborist reports, 1 from homeowner. DPW Division Mgr contacting homeowners.
ROW at 93/109 Bulkley Ave	Cinnamon Camphor	7.0" DBH 7.2" DBH 9.5" DBH		Completed 12-14-11	On public ROW, tree growing in small confined space 4 ft wide, soil shallow, blowing out retaining wall. DPW contacted Elite Tree and Pacific Slope for bids, Elite removed tree. Arborist report from Ed Gurka.

DEPARTMENT OF PUBLIC WORKS
TREE MAINTENANCE ACTIVITIES PERFORMED AND PENDING
DECEMBER 2011

ADDRESS	TYPE OF TREE	DIAMETER	ALTERED (TRIM)	REMOVED	COMMENTS
ROW at 406 Main	Myoporum			Completed 12-14-11	Street tree hazard. Emergency removal in-house.
ROW at 249 Santa Rosa	Pine tree			Completed 12-1-11	Tree caused damage to driveway, trip hazard. Emergency removal in house.

5 Miller

AMERICAN SOCIETY of CONSULTING ARBORISTS

Ed Gurka, Consulting Arborist
Member, American Society of Consulting Arborists

November 21, 2010

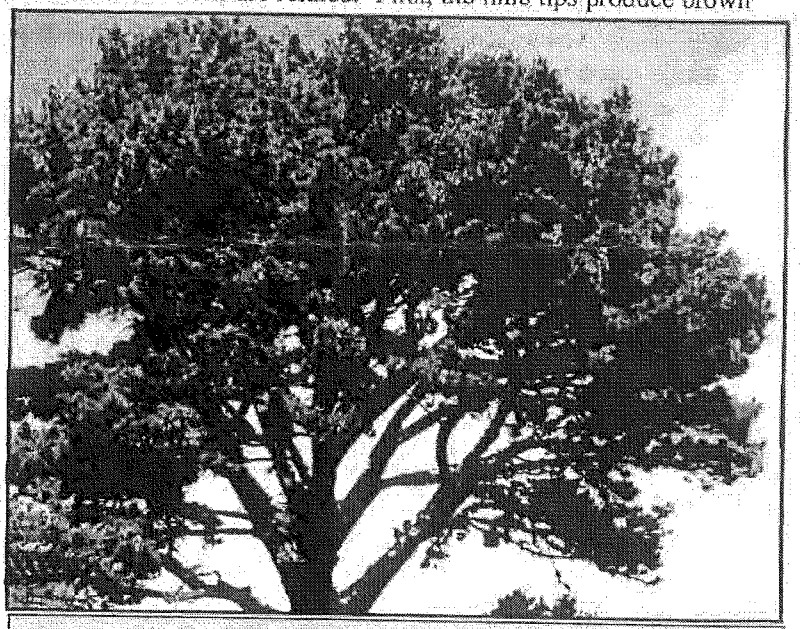
ASSIGNMENT:

A request by the City of Sausalito Public Works Department to inspect a Pine tree at Spencer and Miller Avenue in Sausalito. The inspection results will be presented in an arborist report that will provide a recommendation based on the findings.

OBSERVATIONS and DISCUSSIONS:

On November 19, 2010, I performed a site inspection at the location. The tree is located on a steep bank approximately 15 feet above Spencer Avenue where Miller Avenue intersects with Spencer Avenue. The base of the trunk is just outside of a property fence of 58 Spencer Avenue. The tree is a mature *Pinus radiata*, Monterey Pine. The Diameter at Breast Height, (DBH) is 54.4 inches. Tree height is 71 feet with a canopy spread of 85 to 90 feet. The tree is considered an undesirable species on private property, however, all trees on public property are considered protected if the DBH is 12 inches or greater. The scaffold limbs spread over Spencer Avenue and into neighboring backyard of 58 and 60 Spencer Avenue properties. The limbs extend over 45 feet in each direction away from the trunk center.

The Monterey Pine canopy inspection noted that there is tip dieback of terminal growth points throughout the upper canopy. In other limb tips, where smaller branches terminate, there appeared brown foliage, described as brown needle coloration. It is very possible that the two conditions are related. First, the limb tips produce brown needles that result in bare limb tip branches indicating a condition described as "dieback." This condition appears randomly throughout the canopy.



Brown needles on Pine branch tips. 11.19.2010

This dieback of branch tips and needle browning is a sign of Pine Pitch Canker, a fungal disease that most commonly occurs through wounding from pruning cuts or insect attacks.

At mid-height in the canopy where the main stem divides into scaffold limbs that form the canopy spread center, a group of five or six pruning cuts were noticed. At these pruning cuts, aged sap drip was noticed. This indicates that pruning cuts were made during the time of year when the tree's active growth takes place. The results of the pruning cuts are that the balance of the canopy is altered.

The result of canopy imbalance from pruning cuts is that the tree will shed other portions of the canopy in an attempt to rebalance the alteration. The corrective action occurs as the shedding of smaller diameter branches or larger limbs.

Pruning cuts performed during the growing season produce a sap pitch attracting pine beetles that are also active during the late spring, summer, and early fall months of the year. Since Pine Pitch Canker was noted during the time of visual inspection, the lower trunk area was examined for the presence of *Dendroctonus valens*, Red Turpentine Beetle. This beetle attacks the lower base of Pine trunks and exposed roots just below the soil surface. The Red Turpentine Beetle was detected in multiple locations on every side of the lower tree trunk. The beetle produces pitch tubes visible on the outer bark illustrated in the photograph from just one location on the lower trunk of this pine tree.

Beetle Pitch tubes on lower M. Pine trunk. 11.13.2010

RECOMMENDATIONS:

This Monterey Pine tree is in a stressed condition that has compromised its defense mechanisms. This is exhibited by the symptoms identified and discussed in this report. The tree will continue to decline and will be determined by factors such as continued beetle attacks, advancement of the fungal disease and climate conditions. There are multiple high value risk targets present in the failure path from falling branches and debris from the tree. A heavy pinecone production will also add to the debris produced by the tree. These events will increase with frequency as the tree declines and risk associated within the fall path must be evaluated by the City if the tree is on public right of way. The recommendation, based on these discovered findings from the site inspection, is that the tree should be removed to eliminate the risk.

SUMMARY:

When the decision to remove the tree is made, replacement planting should be considered. A mature tree is a benefit to the community. Trees absorb carbon monoxide and produce oxygen through photosynthesis process. Trees filter the air and prevent erosion and rainwater runoff. They produce shade cooling summer heat, and produce a desirable environment and enjoyment surroundings. These advantages should be included in a tree management program.

Contact Information:

Ed Gurka
Independent Services
San Rafael, CA. 94901
Mobile: 415 601-5337
Email: Egurka1@aol.com

Affiliations and Licenses:

- International Society of Arboriculture, Certified Arborist # 418, 1984 to present.
- American Society of Consulting Arborists, Member, 2000 to present.
- California Department of Pesticide Regulation, Pest Control Advisor PCA 74846, 1989 to present.
- Independent Consulting Arborist Services, 2004-present.

References:

Pest Notes, University of California Division of Agriculture and Natural Resources, Publication 7421 (included)
Plant Pathology, Fifth Edition, George Agrios, page 481, Canker of Forest Trees
ANR University of California, Publication 8025, Frequently Asked Questions about Pine Pitch Canker (included)

ARBORSCIENCE PROVIDING SOUND TREE ADVICE
P.O. BOX 111 • WOODACRE, CA 94973 • (415) 419-5197 • KENT.JULIN@GMAIL.COM

August 10, 2011

Lisa G. Wells
81 Cazneau Ave.
Sausalito, CA 94965-1801

View Obstruction Arborist Report
81 Cazneau Avenue, Sausalito, CA

ASSIGNMENT

ARBORSCIENCE was hired by Lisa Wells to prepare an arborist report in support of her request to trim one City of Sausalito coast live oaks (*Quercus agrifolia*) to maintain her downslope view of Richardson Bay and Sausalito Yacht Harbor from her home at 81 Cazneau Avenue. I conducted my inspections on July 27, August 5, and August 9, 2011.

SCOPE OF WORK AND LIMITATIONS

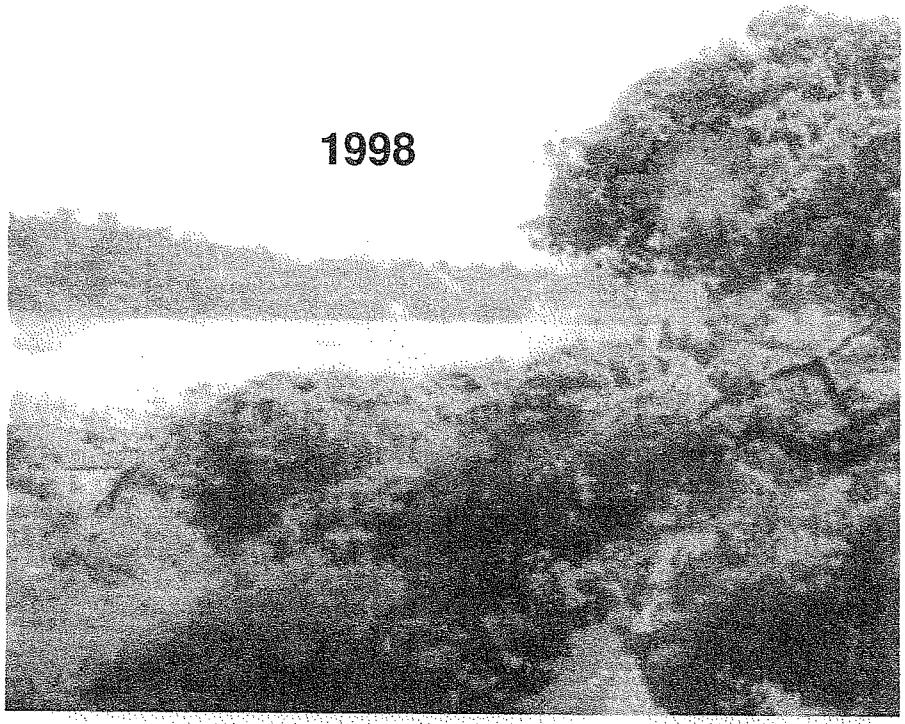
Information regarding property boundaries, land and tree ownership were provided by Lisa Wells and confirmed using a recorded survey for 81 Cazneau. Sausalito Public Works Division Manager Loren Umbertis helped to verify—in the field—that the subject tree is within the City public right-of-way. I have neither personal nor monetary interest in the outcome of this matter. All determinations reflected in this report are objective and to the best of my ability. All observations and conclusions regarding the subject tree and site conditions in this report were made by me, independently, based on my education, experience, and inspection of the site.

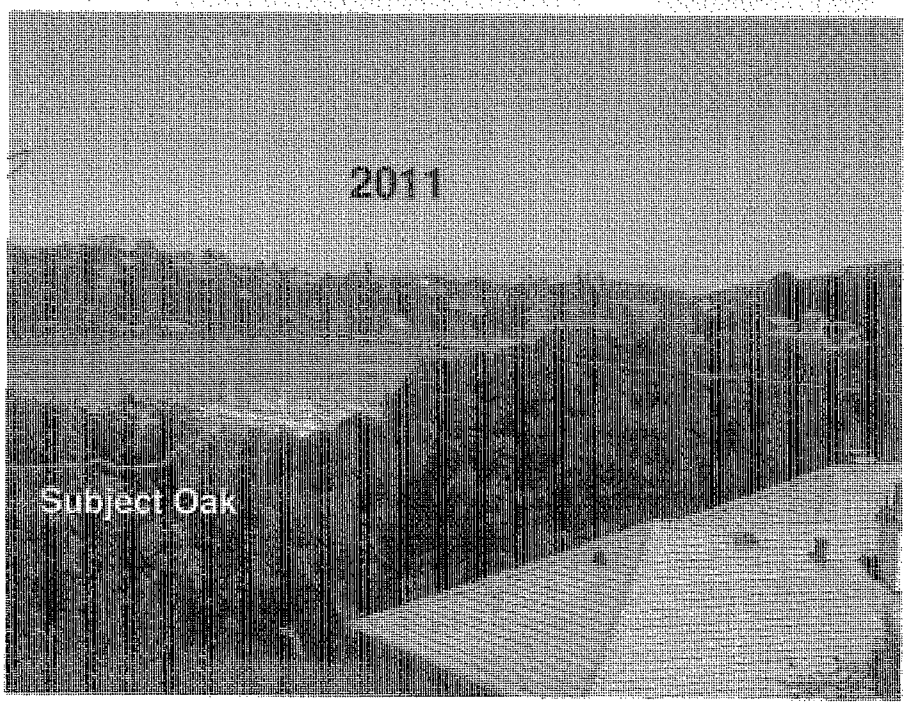
SITE PLAN

Attached is a site plan that includes information including trunk location, circumference and diameter at breast height, total height, drip line, species, appraised value (Trunk Formula Method), nearby structures, parcel lines, and view impairment lines. Appraisal calculation sheets are also attached.

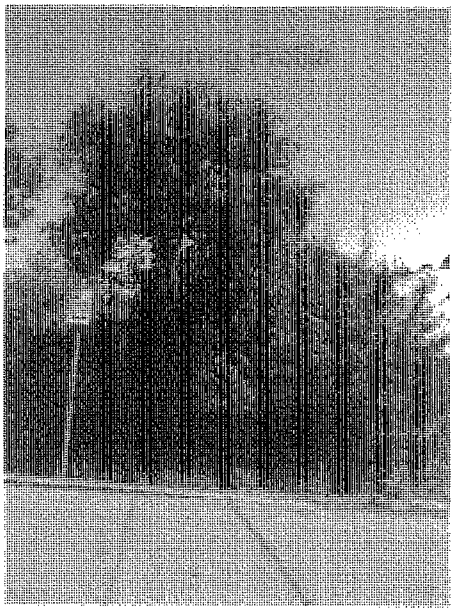
PHOTOGRAPHS

On the next page are two photographs showing the views from the Wells living room that were present in 1998 and in 2011. The approximate line of proposed pruning is shown on the 2011 photo in red.


1998


2011
Subject Oak

NARRATIVE



Description and reasons for alteration. Ms. Wells proposes to prune one coast live oak downslope of her property to restore a documented, pre-existing view of Richardson Bay and Sausalito Yacht Harbor from her living room. Approximately 2-4 feet of the upper canopy would be pruned per American National Standards Institute (ANSI A300) pruning standards. See pruning profile in photo at right.

Dangers which may result by continued existence of the tree if alteration is not performed. Without this maintenance, Ms. Wells' view will continue to diminish the enjoyment and value of her home.

Structural or health effects on the tree which would result from the proposed alteration. The subject tree is expected to maintain its structural integrity and systemic health after pruning is completed.

Estimated frequency and future costs to sustain the desired view. Proposed pruning work is estimated to be $500. Future maintenance will occur at 2- to 3-year-intervals at a comparable cost to the proposed work as adjusted by inflation.

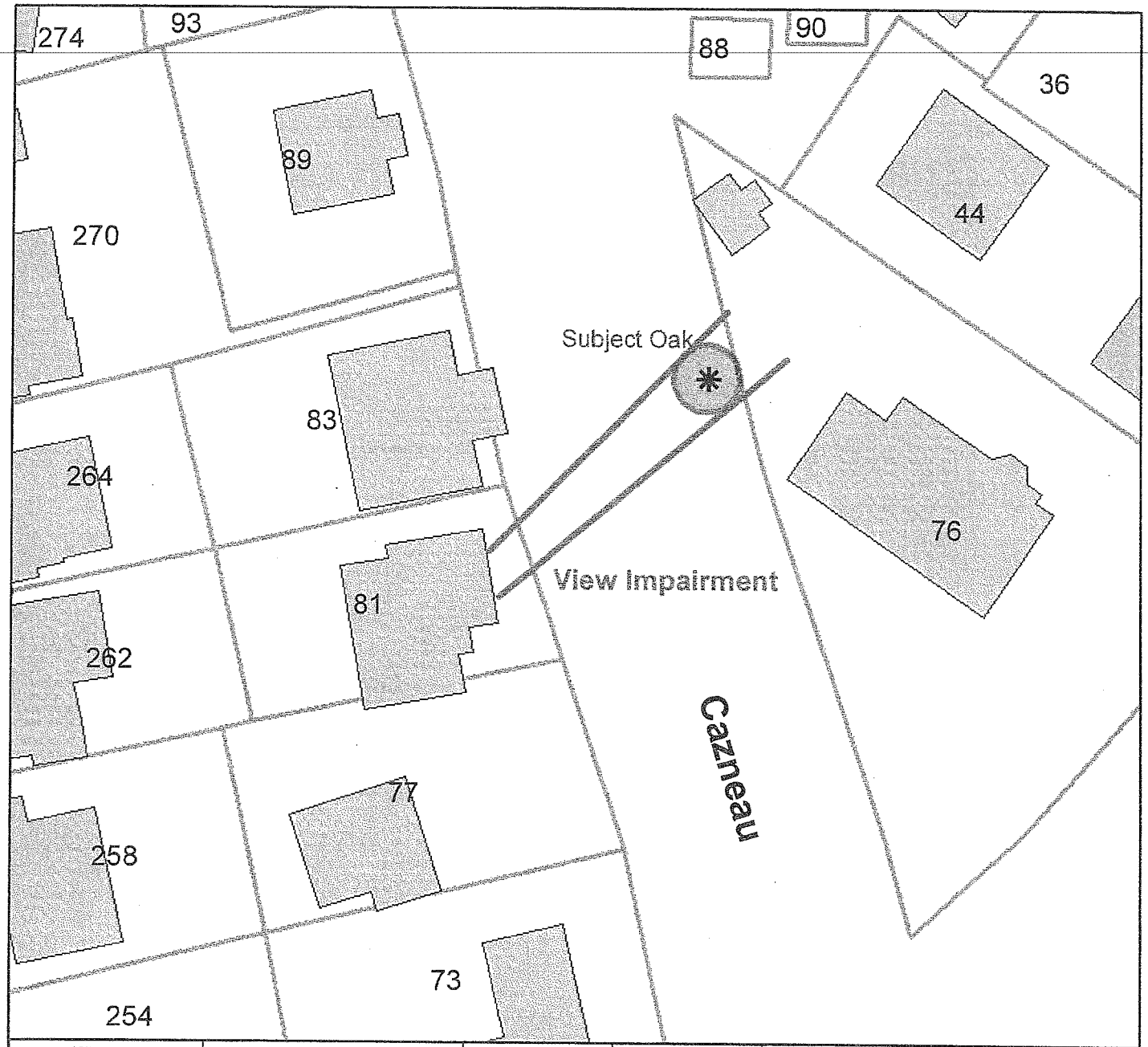
Effects of the alteration on neighboring vegetation. The proposed work is not expected to adversely affect the health of surrounding vegetation which consists of two other nearby oaks, a plum tree, green wattle acacias, English ivy, and Himalaya berries.

Suggestions for improving the health of the tree, such as improving root or soil conditions beneath the tree. I have no recommendations for improving the health of the subject tree.

Sincerely,

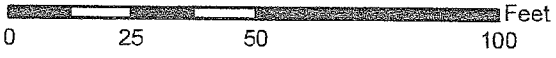
ARBORSCIENCE

Kent R. Julin, Ph.D.
Principal Consulting Arborist and Forester
International Society of Arboriculture Certified Arborist WE-8733A



Tree	Species	CBH (in)	DBH (in)	Height (ft)	Value
Subject Oak	Quercus agrifolia	37.7	12.0	16	$3,000

Site Map for Pruning Application
81 Cazneau Avenue
Sausalito, CA



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Trunk Formula Method

Case # WELLS Property 81 Cazneau Sans. Date 8-9-11

Appraiser Kent Julin ISA# 8733A

Field Observations

1. **Species** Quercus agrifolia
2. **Condition** 80 %
3. **Trunk Circumference** 37.7 (in)/cm **Diameter** 12 (in)/cm (Ivy Covered when measured)
4. **Location** % = [**Site** 90 % + **Contribution** 75 % + **Placement** 70 %] ÷ 3 = 78 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 2.2 (in)/cm
   (Trunk Area) 3.80 (in²)/cm² TA_R
7. **Replacement Tree Cost** $ 172.73
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 172.73
9. **Installed Tree Cost** (#7 + #8) $ 345.46
10. **Unit Tree Cost** $ 45.46 per (in²)/cm²
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) 144 × 0.785
    = 113.04 (in²)/cm²
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 113.64 (in²)/cm² (#11) − TA_R 3.80 (in²)/cm² (#6) = 109.24 in²/cm²
13. **Basic Tree Cost** = TA_{INCR} (#12) 109.24 in²/cm² × **Unit Tree Cost** (#10) $ 45.46 per in²/cm² + **Installed Tree Cost** (#9) $ 345.46 = $ 5311.45
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 5311.45 × **Species** rating (#5) 90 % × **Condition** (#2) 80 % × **Location** (#4) 78 % = $ 2995.66
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 3000.00 KJ

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

254/255 Glen Dr

TREEMASTERS

3175 Kerner Blvd Ste. A
San Rafael, CA 94901
(415) 455-9933 Main
(415) 455-9934 Fax

WWW.TREEMASTERS.COM
treemail@treemasters.com

CA Lic. #660226

November 6, 2010

Miguel Micheltorena
255 Glen Dr
Sausalito, CA 94965

ARBORIST REPORT

I have inspected 4 Pittosporum *undulatum* located at 254 Glen Drive and have made the following report.

Pittosporum *undulatum* is an evergreen tree that is often used as an ornamental plant, due to its attractive fragrant flowers. It is a slender-branched shrub or tree, can grow to 60ft tall, with smooth, gray bark. It has a straight bole, regular whorls of branches, and a dense crown. Leaves alternate, shiny, and flowers almost white. It is a hardy tree that takes well to severe pruning. It is native to south-eastern Australia. This tree is invasive in Australia outside its native range.

The 4 Pittosporum *undulatum* are located in the front yard area of 254 Glen Drive, near street just behind the fence. The overall health of these trees is good. One is to the North side of the gate and other three to the south side. These trees are growing under the PG&E's high voltage power lines and have been pruned various times before to maintain clearance from the high voltage power lines. The constant pruning has unbalanced three of the four Pittosprums. These trees are higher and heavier on the East side; they lean and overhang over the home. The largest of the four (north side of gate) has a multi-spar at about 5 feet from soil line and has weak areas of attachment due to included bark. This along with the unbalanced heavier side has increased the potential for this tree to fail. Pruning these trees will help reduce the potential for tree failure.

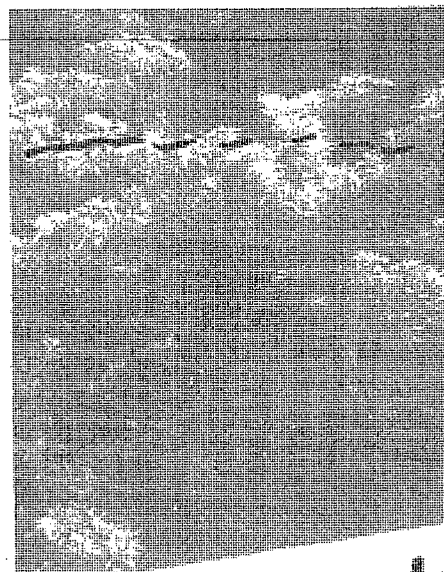
These Pittisporums are also obstructing the view from the property at 255 Glen Dive. In order to improve the view these trees will need to be reduced just below the height of the secondary power lines (second set of lines from the highest). Because these trees are hardy and take to heavy pruning there should not be a problem to reducing these trees. The trees will look bare for a few months because there is no inner canopy. The canopy under the power lines have been reduced and continue to grow and flourish on these trees. Reducing these trees should not be a problem nor have a negative impact on these trees but it will help balance the weight & canopy and reduce potential tree failure. The pruning will also allow for lower canopy to grow and create a better screen and a sound barrier. My recommendation for pruning these trees is in January – March.

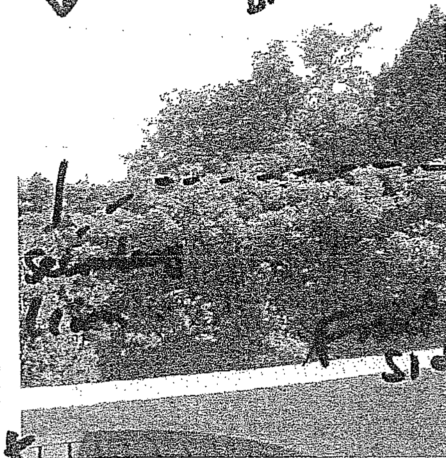
If you have any questions or if I can be of service please free to contact our office at (415) 455-9933 or email treemail@treemasters.com

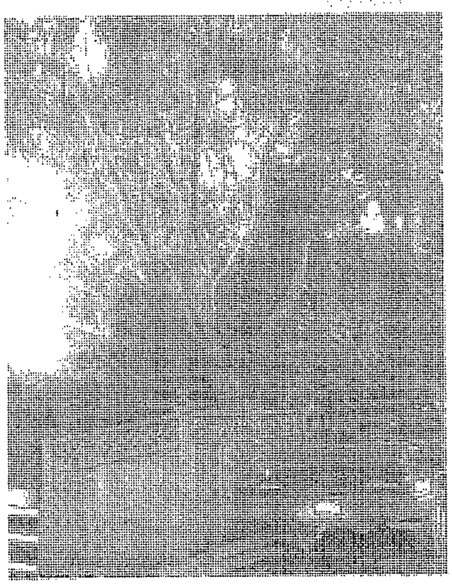
Uriel Barron
ISA Certified Arborist WE-1328A

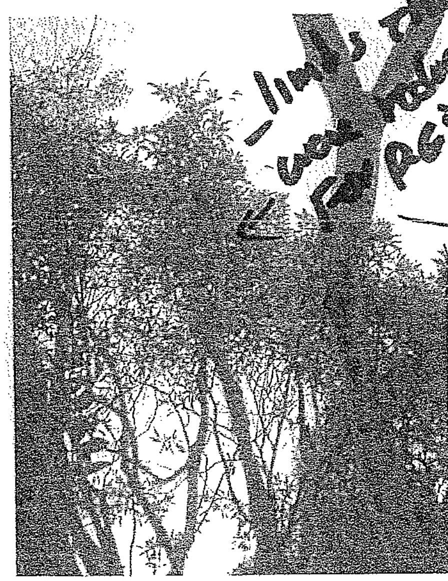
primary lines

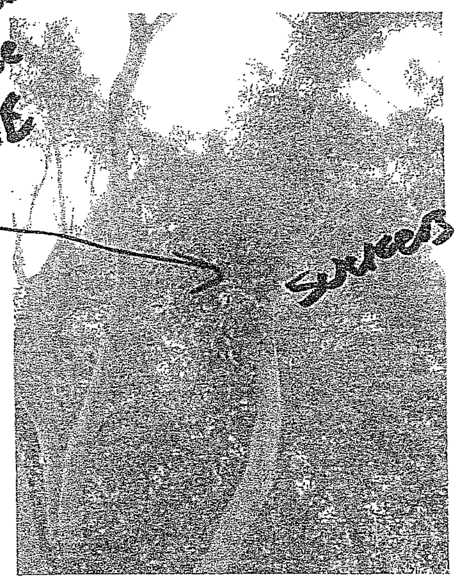
BACK SIDE











CREW + / EQ L/S 1/4 1/2 3/4 FULL W 11/1/10 - 11 AM-12 PM

Fully Insured

TREEMASTERS

(415) 455-9933 • Fax (415) 455-9934
3175 Kerner Blvd Ste. A • San Rafael, CA 94901
WWW.TREEMASTERS.COM
treemail@treemasters.com
CA Lic. #660226

Name: Miguel Micheltorena Date: 10/29/2010

Company: E-mail: miguel.micheltorena@citi.com

Address: 255 Glen Dr Sausalito CA 94965

Billing:

Phone: 415-971-3190 Cell 650-496-3286 Office 415-324-5816 Home

Map: 627-B3 X-Street: Bridgeway Ref. By: Google

Description of Job: TREEMASTERS will perform the following work itemized below and furnish the following labor, materials & equipment to complete that work:

Job Items Set-up, breakdown and dump fee: $120

1) Reduce just below secondary lines (lines below highest set of lines) and shape

Pittosporum *Pittosporum andulatum* across street for improved view 760

Note: Trees not listed on this contract were not inspected or evaluated by TREEMASTERS

☐ Haul Brush & Debris XX Haul Wood ☐ Wood left cut 16" Rounds piled at base of tree ☐ Leave Stump Mulch.

Estimator: Uriel Barron ISA Certified Arborist WE-1328A Date: 11/6/10 Job Cost Total: $880.00

CLIENT HAS THE RIGHT TO REQUIRE CONTRACTOR TO PROVIDE A PERFORMANCE AND PAYMENT BOND.

Authorization To Proceed: The Client hereby authorizes Treemasters to perform the job as described above. Unless otherwise agreed upon in writing by Treemasters, Client agrees to make total payment of the estimated costs and all authorized additional costs upon completion of the Job. By signing below, Client acknowledges that *Client has read and understands all of the provisions on the front and back of this Agreement and agrees to abide by all terms and conditions.* Client also acknowledged receipt of the attached Notice of Owner.

Client's Signature Date:

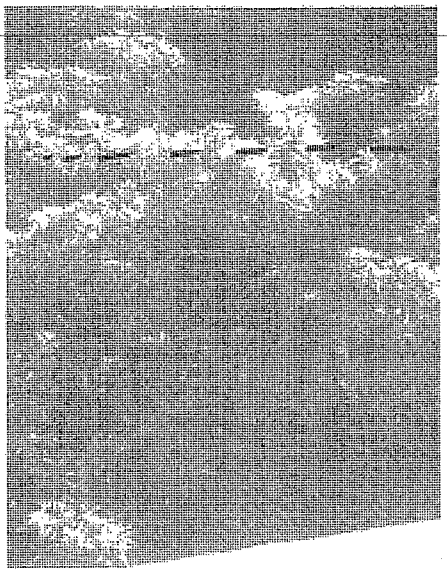
Time For Completion: Treemasters' work crews and equipment will arrive at the job site unannounced unless otherwise noted in this Agreement. Treemasters agrees to substantially commence work within 30 days after Client has executed this agreement and shall diligently pursue the Job to completion within 14 working days, subject to permissible delays. Work will begin approximately on N/A and all work will be completed approximately on N/A. Substantial commencement of the work shall be deemed to be the date when Treemasters first supplies workers to the job who actually start Job operations. Treemasters' failure to commence work substantially within 20 days after the approximate date specified is a violation of the Contractors' State License Law.

Deposit. Client agrees to make the following deposit of $ 0. (Pursuant to California law, deposit cannot exceed $1,000 or 10% of contract price, whichever is less). Client shall pay said deposit with signed contract, or by: N/A.

"Providing great care and attention to the ONE TREE we are working on at that moment."

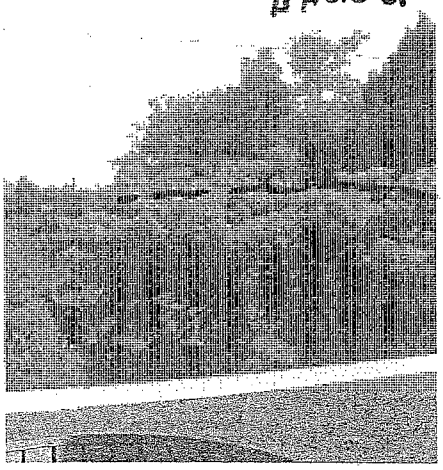
1

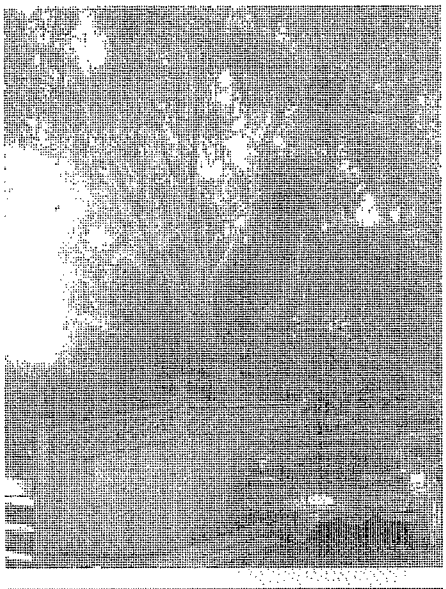
1

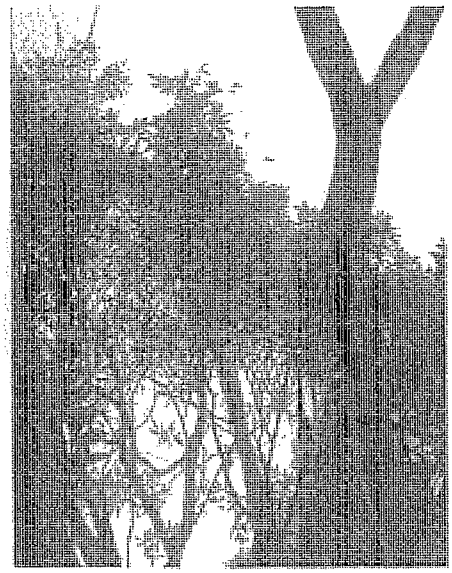


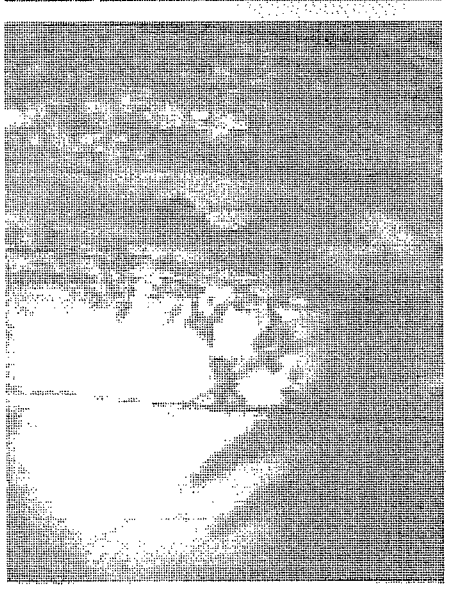
1

BACK Side









255 Glen Dr.

ARBORSCIENCE *PROVIDING SOUND TREE ADVICE*

P.O. BOX 111 • WOODACRE, CA 94973 • (415) 419-5197 • KENT.JULIN@GMAIL.COM

November 26, 2011

Kent Basso
Public Works Supervisor
City of Sausalito
420 Litho Street
Sausalito, CA 94965

Independent Arborist Review
View Restoration Request
255 Glen Drive, Sausalito

ASSIGNMENT

At your request, I have reviewed a view-restoration request made by Miguel and Gina Micheltorena at 255 Glen Drive. The purpose of my review was to assess second-story view changes related to City-owned trees across from their property on Glen Drive. I conducted 4 site visits in October and November 2011 to gather information regarding the subject trees by examining the trees and interviewing involved residents. I also collected current and historical photographs of the view.

DESCRIPTION OF SUBJECT TREES

The five trees of interest are rooted on City of Sausalito right-of-way, inside a fence and nearest to a home owned by Thomas and Suzanne Hodapp at 254 Glen Drive. These trees include four large sweet pittosporum (*Pittosporum undulatum*) and one medium-sized coast live oak (*Quercus agrifolia*). The pittosporums range in diameter at breast height (dbh) from 8.8" to 26.5", have a total height of 30' to 40', and lean heavily to the east. These trees have been regularly pruned for electrical transmission line clearance by PG&E. The largest of these pittosporums has a multi-spar stem with acute angle attachments with included bark. This condition is a recognized tree defect that increases the likelihood of stem failure. The oak has a 25.6" dbh, stands about 25' tall, and has a relatively shallow hedge-pruned, dome-shaped canopy that is slightly weighted more heavily toward the street to the west.

VIEW CHANGES

The Micheltorenas purchased their home on March 3, 2006. Their realtor, Jane Richmond (Pacific Union International & Christie's Great Estates, Mill Valley, 380-6123), captured the eastward view from the 3rd floor of the Micheltorena home in a photograph at the time of the sale. On November 21, 2011 Gina Micheltorena took a photograph from approximately the same location (3rd floor). This photo pair clearly shows that the pittosporums and the oak have both grown significantly in the last five years. In 2006, the upper canopy of the pittosporum was below the lower, secondary electrical

transmission wires. Over the past 5 years, living room views of Richardson Bay and a Sausalito ridgeline to the east have been significantly been reduced by the subject trees (Figure 2).

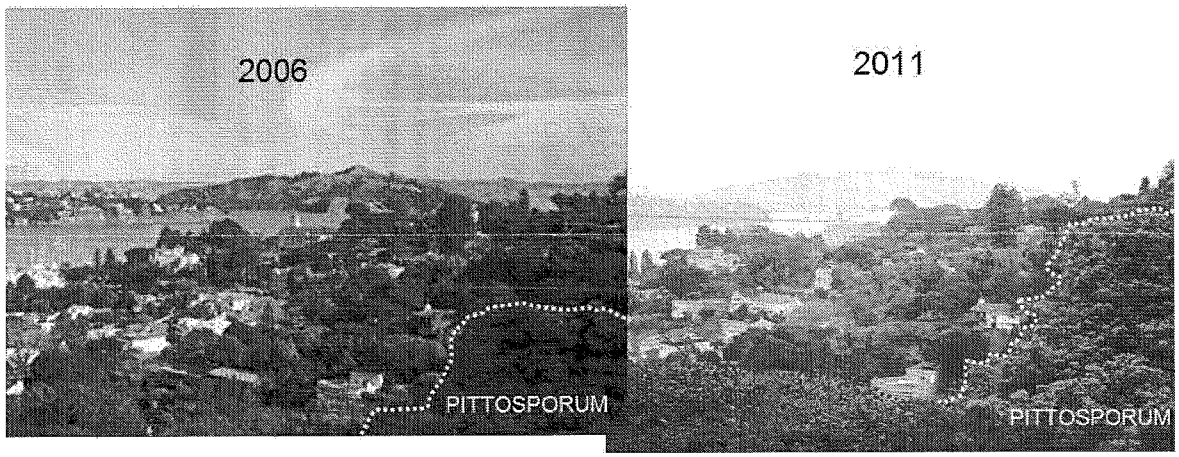


Figure 1. View photographs taken in 2006 and in 2011 from the 3rd floor of the Micheltorena home. Shown are the upper canopy extents of the sweet pittosporums and the coast live oak. A blue-dotted reference line was added along the lower roofline of St. Mary Star of the Sea Church on Harrison Avenue.

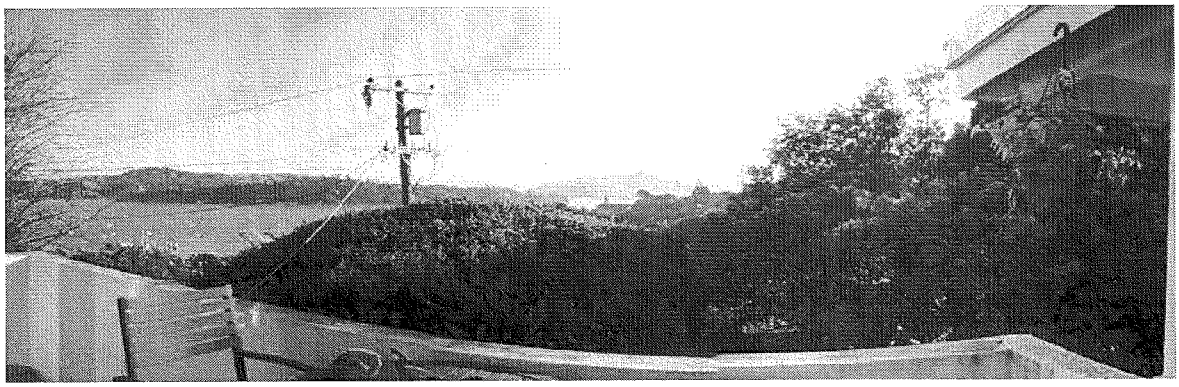


Figure 2. November 2011 view panorama from the 2nd floor of the Micheltorena home. Views of Richardson Bay, the Belvedere shoreline, and a Sausalito ridgeline to the east have been significantly diminished by the subject trees over the past 5 years.

RECOMMENDATIONS

All five subject trees are healthy and will tolerate moderate to heavy view-restoration pruning without compromising their systemic health. The sweet pittosporums have demonstrated their capacity to vigorously respond after pruning by producing lateral branches. The Hodapps desire a dense tree canopy over their front patio; this outcome will be realized several years after the proposed pruning. Pruning will also bring all the subject trees into better balance and reduce the likelihood of trunk- or root failure. I recommend specific measures described below and illustrated in Figure 3.

1. Pittosporums. Initially reduce the height of the pittosporums using drop-crotch pruning in an arc that is about 3 feet below the secondary (lower) electrical transmission wires (Figure 3). Every 2 years—before the growing season begins—perform maintenance pruning to a height of 2 feet below the secondary wires to maintain view of the ridgeline to the east.

2. Coast Live Oak. Reduce the overall height of the oak by 2 feet and window crown by 2-4 feet using drop-crotch pruning. This may need to be done in stages over a two-year period to achieve the recommended final crown height. Balance the tree canopy by pruning more heavily over Glen Drive. Every 2 years, before the growing season begins, perform maintenance pruning to maintain view of the Sausalito waterfront. Both neighbors expressed support (independently) for pruning the oak as proposed.

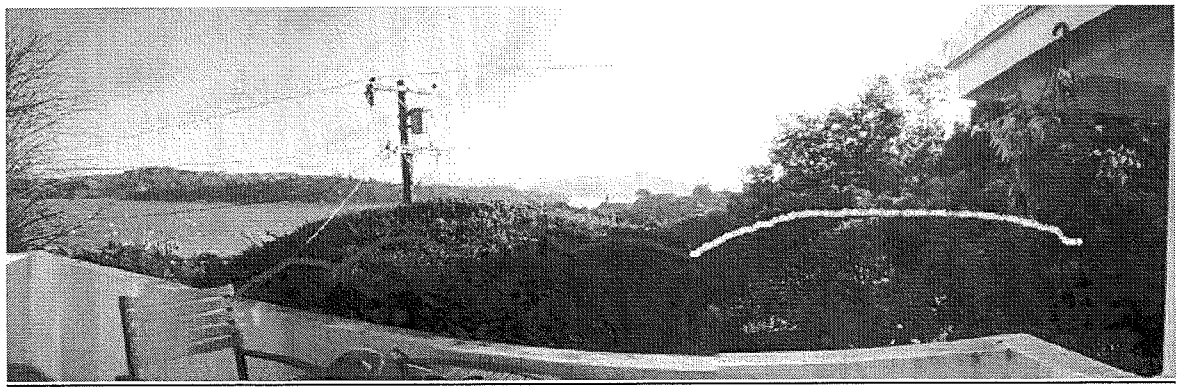


Figure 3. Final pruning height recommendations for the coast live oak (red) and the sweet pittosporums (yellow).

3. Pruning Administration. Engage an independent arborist to contract with tree trimming company and to oversee work to avoid further neighbor disagreements over management of the subject trees.

4. Documentation. Once pruning has been completed, document canopy heights with a photograph taken from the 2nd floor deck of the Micheltorena home for future reference.

Sincerely,

ARBORSCIENCE

Kent R. Julin, Ph.D.
Principal Consulting Arborist
ISA Certified Arborist #WE-8733A

40 Cooper Ln

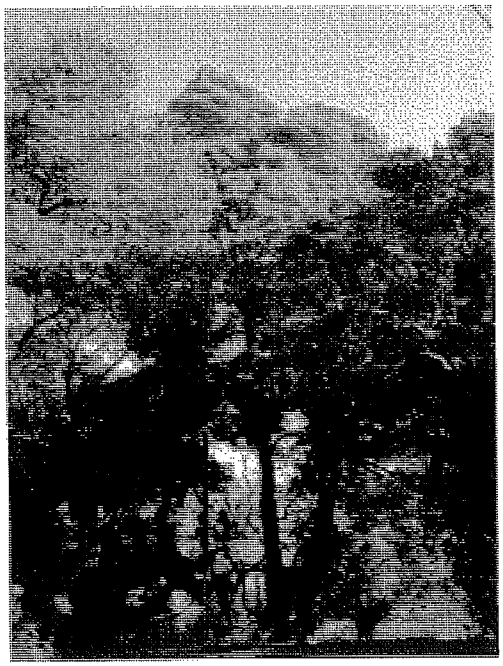
October 18, 2011

City of Sausalito
Attn: Kent Basso
420 Litho St
Sausalito, CA 94965

RE: Black Acacia (*Acacia melanoxylon*) located at the intersection between Sausalito Blvd and Spencer Ave, on the left side of the stairway on Cooper Lane

On Monday, October 17, 2011, I inspected the Black Acacia (*Acacia melanoxylon*) located at the intersection between Sausalito Blvd and Spencer Ave, on the left side of the stairway on Cooper Lane. The objective of the inspection was to evaluate the current safety and health condition of the tree.

The current health condition of the tree is good, based on a visual inspection of the trunk, limbs and foliage. The canopy of the tree is full indicating good vigor (Picture 1).



Picture 1. Black Acacia on the left side of Cooper Ln with a full canopy of green leaves.

There are dead and broken branches that have accumulated in the crown of the tree that should be removed to reduce the risk of branch failure. The tree has two trunks (codominants) that seem to be solid and structurally sound. No structural problems were evident during my inspection. (Picture 2).

Picture 2. The two-trunk Acacia appears to be structurally sound regardless of its codominant condition.

The root collar area will need to be exposed to allow for inspection to determine how safely attached these stems are at the base (Picture 3).

Picture 3. Soil and ivy from the base of the tree need to be cleared to expose the root collar and to allow for a better inspection.

Recommendations

The current condition of the tree does not allow for a proper safety inspection. Therefore, before a decision is made as to whether or not the tree be removed, I recommend that the root collar be exposed and that the tree be pruned according to the following specifications:

- Remove ivy and soil from the bottom of the tree.
- Thoroughly inspect crotches to determine the presence of included bark or other defects.

If after these procedures are performed and, if the tree is considered a hazard, the tree should be removed to eliminate the risk of failure.

If no major structural defects are detected and, if the tree is not considered a hazard, the tree should be pruned according to the following specifications to reduce the risk of failure:

- Clean to remove all dead, diseased and broken branches that are ½" in diameter and larger throughout crown to improve health and appearance and reduce risk of branch failure.
- Thin crown to remove approximately 15%-20% of live branches to reduce weight on branch ends and to allow more light penetration and air circulation throughout the crown.
- Install EHS cables to provide branch/stem support to limit branch/stem movement to reduce the risk of branch failure. Cables require periodic inspection for evidence of fatigue and to verify functionality.

If you have any questions or concerns regarding my assessment, please contact me directly.

Sincerely,

Juan M. Ochoa
Board Certified Master Arborist WE-6480B
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jochoa@bartlett.com

93/109 Bulkley Ave

Ed Gurka, Independent Services
San Rafael, California
Mobile: 415.601.5337

ARBORIST FIELD REPORT

TO: Bud Toly
109 Bulkley Avenue
Sausalito, CA. 94965

WORK PERFORMED AT:

90 103 Bulkley Avenue
Sausalito, CA. 94965

DATE: November 13, 2010

WORK ORDER: Authorization by Mr. Toly to compete site inspection.

DISCRIPTION OF WORK PERFORMED:

Advise property owners how to proceed regarding a conflict with a Camphor tree's root system displacing a rock retaining wall at the entrance to 30-103 Bulkley Avenue.

Site visit to collect information was performed on November 13, 2010 from 10:30-11:30 AM.

The tree is a Cinnamomum camphor. DBH is 7.0, 7.2, and 9.5 inches. This is the measurement of the three main upright branches. Tree height is 25 feet. The tree is located at the beginning of a planter strip at the entrance to 90-103 Bulkley Avenue. There is a rock wall on one side and the stairway that is the entrance to the condominium complex. The Camphor tree is growing in a small confined space that is 4 feet wide. Soil is compacted and very shallow. The tree canopy cover is estimated at 50 percent of normal. This is attributed to shallow compacted soil and height reduction for electric utility lines that supply the complex. A section of the retaining wall had separated and was lying in the street at the time of the site visit. A cluster of roots from the tree was visible where the wall had fallen into the road. The root growth has increased and separated this section of the wall where it now lay in the street. On the opposite side of the tree, tiles from the stairway were separated from the stairway. This was directly in line with the tree trunk and root system.

Camphor trees grow to considerable size and have competitive root systems. The space for this Camphor's development is severely limited. The conflict with the rock retaining wall and stairway entrance to the complex will come into greater conflict if the tree remains. There is no alternative to preserving the tree. It must be removed before root damage to the wall and stairway requires complete replacement. When the Camphor tree is removed, the tree roots must be removed to prevent re growth and eliminate further conflicts.

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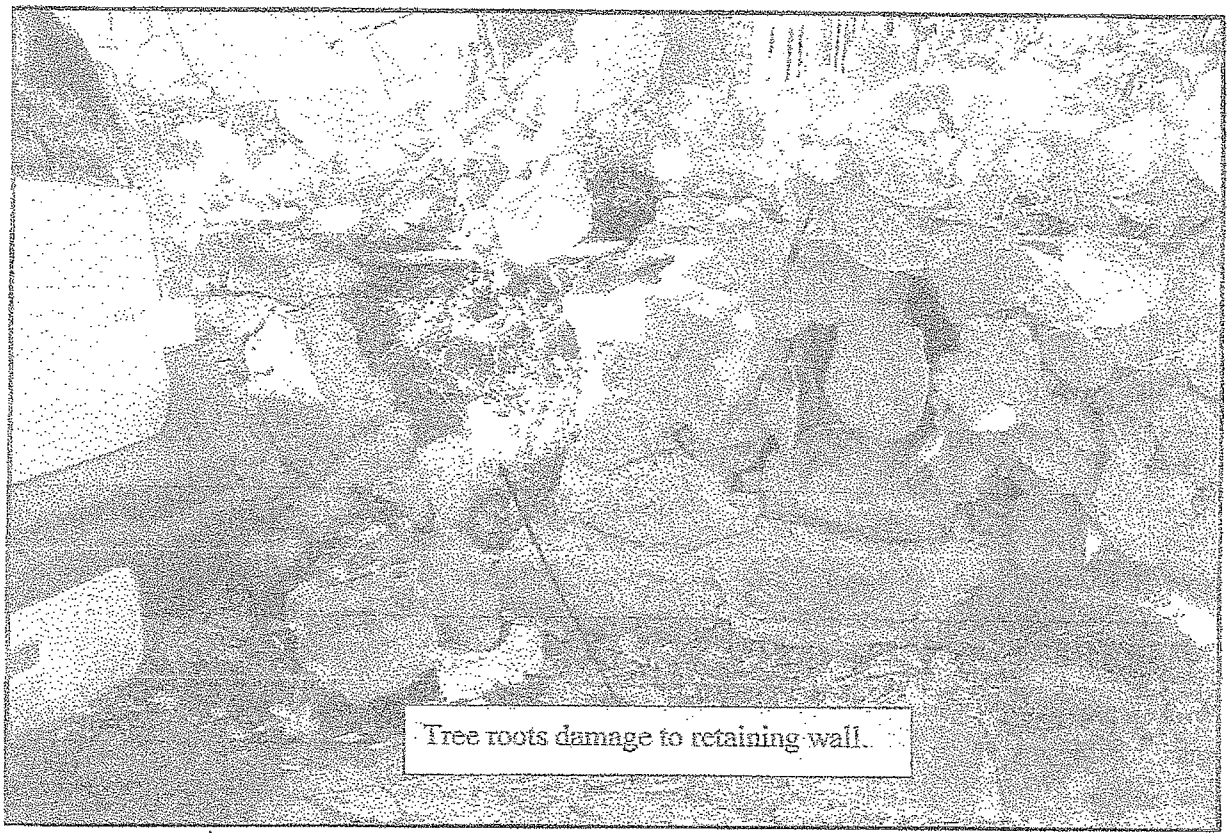
California Department of Pesticide Regulation, Pest Control Advisor # 074846 (1984-present)



Tree roots damage to retaining wall.

Tree root damage to stair tiles

Camphor tree photographs, 90-103 Bulkley Avenue, Sausalito, CA. 11.13.2010