### **Consulting Arborists**

3109 Sacramento Street San Francisco, CA 94115

Member, American Society of Consulting Arborists Certified Arborists, Tree Risk Assessment Qualified

cell/voicemail 415.606.3610

office 415.921.3610

fax 415.921.7711

email RCL3@mindspring.com



**RE:** Landmark Tree Nomination

Coast Redwood (Sequoia sempervirens)

Date: 12/12/16

## ARBORIST REPORT FOR TREE RISK ASSESSMENT

### **Assignment**

- Provide an analysis and professional insights into Tree Risk and Residual Risk as related to Landmark Trees, and specifically to the Coast Redwood at 4 Montclair Terrace, San Francisco.
- Provide comments on tree hazards, and above average risk, and specifically as related to this Coast Redwood.
- Provide an Arborist Report for Tree Risk Assessment.

#### **Background**

Mrs. Jaye has applied for Landmark Tree status through the Department of the Environment, City and County of San Francisco. The process has included public comment at various hearings, and some members of the public have expressed opinions about this tree being "hazardous". Certain opinions came from a next-door neighbor who expressed that the tree was "hazardous" and threatened the safety of her family. This report is meant to address comments and opinions such as this.

#### **Industry Standard for Tree Risk Assessment**

The Tree Care Industry Association has developed industry standards, including ANSI A300 (Part9)-2011 Tree Risk Assessment a. Tree Structure Assessment. This industry standard was developed by consensus of a committee that among others, included American Society of Consulting Arborists, International Society of Arboriculture, National Park Service, Society of Municipal Arborists, Tree Care Industry Association, USDA Forest Service, Utility Arborist Association, and the three largest tree care companies in the United States, Asplundh, Bartlett and Davey. A few citations from this standard help us understand the process of identifying Tree Risk:

90.2 **Reason**: To assess structural integrity and other factors that affect the level of risk to people or property and to provide information for mitigating risk.

### **Consulting Arborists**

3109 Sacramento Street San Francisco, CA 94115

Member, American Society of Consulting Arborists Certified Arborists, Tree Risk Assessment Qualified

cell/voicemail 415.606.3610

office 415.921.3610

fax 415.921.7711

email RCL3@mindspring.com

- 92.10 **failure (tree failure)**: Breakage of stem or branches, or loss of mechanical support in the root system.
- 92.13 mitigation: The process of diminishing risk.
- 92.17 residual risk: Risk remaining after mitigation.
- 92.27 **structural defect**: A feature, condition or deformity of a tree or tree parts that indicates a weak structure and contributes to the likelihood of failure.
- 92.28 **target**: People or property that could be injured or damaged by the failure of a tree or tree parts.
- 93.4.2.2.1 Level 2 assessments shall include a 360-degree, ground-based visual inspection of the tree crown, trunk, trunk flare, above-ground roots, and site conditions around the tree in relation to targets.

#### Tree Risk and This Tree

Mrs. Jaye has allowed access to her property for purposes of evaluation of this Coast Redwood, and the tree has been evaluated for tree risk at a Level 2 assessment. Structural defects were not found in the site conditions, above-ground roots, lower trunk, or trunk flare.

Minor defects were found in the upper trunk and limb structure:

- The upper trunk bifurcated to have a secondary top. Failure of a secondary top is an above-average risk. Upon failure this top could strike the roadway or Mrs. Jaye's property. Mrs. Jaye has proactively pruned this tree and reduced end weight and length of the secondary top. The risk for this potential failure scenario has been mitigated, and the risk is now low.
- The limb structure had developed end-heavy limbs, particularly in the lower part of the tree. This is a normal pattern of growth for a coast redwood growing in the open, and this potential failure scenario is an above-average risk. Upon failure a limb would strike the roadway or Mrs. Jaye's property. Mrs. Jay has proactively pruned this tree to reduce limb end weight throughout the tree. The risk for this potential failure scenario has been mitigated, and the risk is now low.

No other defects were found.

Public comments and opinions regarding defects or "hazards" included reference to a trunk lean and uprooting. There was no indication that the trunk leans, that the tree is uprooting, or is likely to uproot any more than any other normal tree.

### **Consulting Arborists**

3109 Sacramento Street San Francisco, CA 94115

Member, American Society of Consulting Arborists Certified Arborists, Tree Risk Assessment Qualified

cell/voicemail 415.606.3610

office 415.921.3610

fax 415.921.7711

email RCL3@mindspring.com



The "Residual Risk" (or Baseline Risk) is the risk remaining after mitigation. Both minor defects leading to increased risk have been mitigated. The residual risk is now low, and is comparable to residual risk posed by any normal, large coast redwood in a similar setting.

The residual risk posed by this tree is a greater risk than for a small tree, but is still low. Trees that qualify for nomination and consideration for Landmark Tree status are typically large, mature trees. Landmark Trees therefore will always have residual risk that is typical of normal, healthy, large, mature trees of their species, and this risk will exceed that of a small tree. This is a normal, healthy, large and mature tree that has residual risk that is low.

#### Conclusions

The concerns expressed by neighbors about this being a hazardous tree are not based on Tree Risk Assessment industry standards, and cannot be confirmed or verified through a Level 2 inspection. It is not unusual for laypersons to have fear of large trees, or to express a fear as a means to an end. It has been made clear by testimony from some neighbors that this tree has impacted many views. Perhaps since those views are not protected, the "hazardous" argument has been raised.

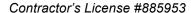
The risk posed by any failure scenario of the entire tree or any parts of this tree is low. The tree is not likely to develop any increased risk over time due to ongoing pruning under the City of San Francisco Pruning Standard and due to pruning to maintain established views.

Several Certified Arborists and some of those being Tree Risk Assessment Qualified have inspected this tree with a Level 2 inspection. None of those Arborists has raised a concern or made a statement indicating that this tree is anything but a low risk tree.

#### Recommendations

I recommend that the Urban Forestry Council and the Board of Supervisors recognize and assert that large, prominent and mature trees are some of the best candidates for Landmark Tree status, and that the residual risk posed by these trees is to be expected and is acceptable under the ordinance.

I recommend that the Urban Forestry Council and the Board of Supervisors consider this tree as posing normal, low risk to the surrounding targets, including people, houses, neighboring property and the streetscape, and that this tree is in fact a worthy candidate for Landmark Tree status.



### **Consulting Arborists**

3109 Sacramento Street San Francisco, CA 94115

Member, American Society of Consulting Arborists Certified Arborists, Tree Risk Assessment Qualified

cell/voicemail 415.606.3610

office 415.921.3610

fax 415.921.7711

email RCL3@mindspring.com



- 1. Any legal description provided to the consultant is assumed to be correct. Title and ownership of all property considered are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
- 2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes or other governmental regulations.
- 3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible. The consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
- 4. Various diagrams, sketches and photographs in this report are intended as visual aids and are not to scale, unless specifically stated as such on the drawing. These communication tools in no way substitute for nor should be construed as surveys, architectural or engineering drawings.
- 5. Loss or alteration of any part of this report invalidates the entire report.
- 6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior written or verbal consent of the consultant.
- 7. This report is confidential and to be distributed only to the individual or entity to whom it is addressed. Any or all of the contents of this report may be conveyed to another party only with the express prior written or verbal consent of the consultant. Such limitations apply to the original report, a copy, facsimile, scanned image or digital version thereof.
- 8. This report represents the opinion of the consultant. In no way is the consultant's fee contingent upon a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
- 9. The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule, an agreement or a contract.
- 10. Information contained in this report reflects observations made only to those items described and only reflects the condition of those items at the time of the site visit. Furthermore, the inspection is limited to visual examination of items and elements at the site, unless expressly stated otherwise. There is no expressed or implied warranty or guarantee that problems or deficiencies of the plants or property inspected may not arise in the future.

#### **Disclosure Statement**

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.





### **Consulting Arborists**

3109 Sacramento Street San Francisco, CA 94115

Member, American Society of Consulting Arborists Certified Arborists, Tree Risk Assessment Qualified



office 415.921.3610

fax 415.921.7711

email RCL3@mindspring.com

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. An arborist cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate the trees.

#### **Certification of Performance**

I, Roy C. Leggitt, III, Certify:

- That we have inspected the trees and/or property evaluated in this report. We have stated findings
  accurately, insofar as the limitations of the Assignment and within the extent and context identified by
  this report;
- That we have no current or prospective interest in the vegetation or any real estate that is the subject
  of this report, and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are original and are based on current scientific procedures and facts and according to commonly accepted arboricultural practices;
- That no significant professional assistance was provided, except as indicated by the inclusion of another professional report within this report;
- That compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I am a member in good standing of the American Society of Consulting Arborists and a member and Certified Arborist with the International Society of Arboriculture.

I have attained professional training in all areas of knowledge asserted through this report by completion of a Bachelor of Science degree in Plant Science, by routinely attending pertinent professional conferences and by reading current research from professional journals, books and other media.

I have rendered professional services in a full time capacity in the field of horticulture and arboriculture for more than 25 years.

Signed:

Date:

12/12/16

Roy C. Lexy.