



FOOTHILL FOREST CARE
CONSULTING ARBORISTS

April 19, 2023

City of Placerville

Arborist Report

for

The Coast Redwood near the

Courthouse and District Attorney's Office

Report Prepared by

Chad Dykstra, ISA Certified Arborist WE-5893A

Member, American Society of Consulting Arborists

ISA TRAQ Qualified Tree Risk Assessor

Certified Tree Care Safety Professional

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Introduction

Assignment

I was called to perform an assessment of the coast redwood located on Bedford Avenue and Main Street. I was contacted by Mr. Terry Zeller on behalf of the City of Placerville to assess the tree and to provide a report of the assessment findings with recommendations/options regarding future tree management.

Assignment Limits

I performed a level three tree risk assessment. I did not ascend this tree during my assessment. Data collected is limited to a casual ground inspection. My role for this assignment is that of tree risk assessor, the City of Placerville fills the role of tree manager.

Purpose and Use of the Report

The purpose of this report is to provide professional assistance and recommendations/options regarding future tree management actions to be taken with this tree. The City of Placerville is the tree's owner and manager and will be responsible for making all management decisions for the tree.

Observations

This report is in response to field observations that were performed on March 9th, 2023 by Chad Dykstra and Caroline Bartz at the above address. The coastal redwood tree, with a Diameter at Standard Height (DSH) of 49 inches, is located on Bedford Avenue and Main Street. It shares its growing space with several monuments below the tree and within the landscaped area. The tree is used as infrastructure for lighting and holiday ornaments. A sidewalk is located around the tree between Bedford Avenue and Main Street with the El Dorado County District Attorney's office to the east of the tree. The sidewalk, curb and gutter have multiple cracks and lifted sections. See photos.

The current appearance of the tree shows a gap in the canopy. There is a branch growing into this negative space. Depending on the viewing angle, the tree's appearance changes drastically.



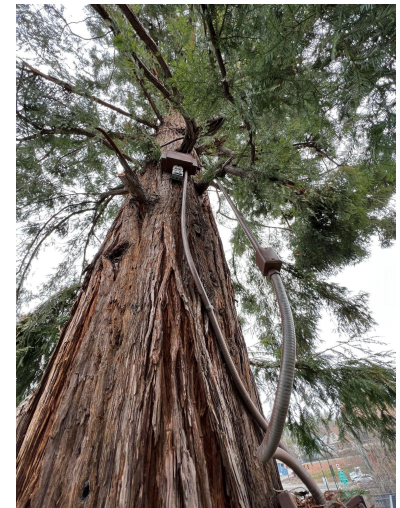
There is an approximately 1 inch crack, crossing the sidewalk around the tree, from the side to the center up to the expansion joint.
The sidewalk has also been ground down in the past to reduce the trip/fall risk.



There is an electrical lighting box and associated conduit for holiday lights affixed to the tree's trunk, as well as, a permanent star ornament located on the top of the tree.
The tree is also being used as a support for irrigation components.



During the 2023 winter storms, branches began falling under the weight of snow. In photo 2, it is clearly seen that the holiday lights are tied up with fallen tree branches.



Testing and Analysis

The app, Tree Plotter, was used to plot the tree. iPads, iPhones and a diameter tape were used to collect individual tree characteristics, health and other relevant data points. Tree Plotter imagery was used to mark the location of the tree on the below diagrams.

Discussion

This redwood tree has special significance and use by the City of Placerville, and is extremely important to the community. The tree is used as the centerpiece for the “tree lighting ceremony” during the holiday season and is visible from Highway 50, as well as many homes and businesses in the city. The Thomas Maul memorial, The Veterans’ Memorial and the Hangtown Historical landmark, number 475 are all located within the tree’s root protection zone.

In late 2022, powerful winter storms with snowfall at lower elevations hit our area and began causing damage to the tree, which continued into the spring of 2023. During these storm events, some of the redwood tree branches fell onto the sidewalk and landscape plants, but caused little damage to the landscape and no injuries to pedestrians. The branch failures created a large, and rather unsightly, gap in the living tree canopy, mostly on the west side of the tree.

The main risk of this tree is branch failure onto historical infrastructure, vehicles, pedestrians, the sidewalk and other targets below the tree. The current risk level is high. Tree risk may be managed with tree removal, tree pruning or the construction of a barrier between the tree and the target being protected. See photos and options and recommendations.

The current appearance of the tree canopy is uneven from certain viewing angles. The gaps in the tree crown will fill in over time, as there are small branches already filling in the open areas of the tree canopy. Using a liquid nutrient four to five times a year will increase the growth speed of the entire tree and the branches filling in the open areas of the canopy.

The damage to the sidewalk was caused by soil expansion from tree root pressure as the roots grow and expand below the sidewalk. The sidewalk directly below the tree could continue to be repaired, or be replaced with a more easily repairable walkway system. The holiday lights attached to and wrapped around branches could have caused some of the branches to fail with the additional pressure from the lighting components. The electrical box and conduit that are attached to the tree were damaged by the recent branch failures.

The tree is in good health; however, tree health and tree risk are different concerns. Tree health may be managed with water, pruning and treatments. Treating the tree proactively can keep the tree in its best possible health and should be done if the tree is retained. Using a tree growth regulator like Paclobutrazol will reduce sprout elongation and redirect tree energy to fine root growth, and other defensive behaviors that will be beneficial for long term tree health. Also, treating the tree with di-potassium salts of phosphates 2-3 times a

year will benefit tree health.

Conclusion

Although it has sustained some unsightly storm damage, the coast redwood tree is relatively healthy. There is a continued high risk of tree branch failure, but this risk may be reduced with pruning. The construction of a barrier between the tree and potential targets that need protection is an option for discussion, as is the continued damage to the sidewalk and the use of chemical treatments.

Options/Recommendations

1. Do nothing and continue to manage the tree in the same manner as the past.
2. Remove the tree.
3. Remove broken branches. Remove holiday lighting, and other infrastructure from off of the tree.
Treat the tree with a tree growth regulator, Paclobutrazol (Shortstop) every 2-3 years.
Treat the tree at least 4 times a year with 5-10-10 liquid fertilizer (GES 5-10-10).
Treat the tree at least 2 times a year with di-potassium salts of phosphates (Reliant).
Installing a permanent holiday lighting system that does not negatively impact the tree could be considered.

Please contact Chad Dykstra, of Foothill Forest Care, if there are any questions about this report.

Disclaimer: I, Chad Dykstra, have analyzed the situation, applied the proper method(s) utilized within my profession, and performed a reasonableness test to assess my decisions, but offer no guarantees on my services or opinions, written or implied.

Respectfully submitted,



Chad Dykstra

ISA Certified Arborist WE-5893A

Member, American Society of Consulting Arborists

ISA TRAQ Qualified Tree Risk Assessor

CTSP Certified Tree Care Safety Professional

APPENDIX A - RISK ASSESSMENT

Details	
Primary ID:	3403
Common Name:	Coast redwood
Scientific Name:	Sequoia sempervirens
DBH:	49
Condition:	Good
Tree Height (Estimated):	95
Height Range:	75ft-100ft
Address:	515 Main Street
Assessor:	Chad Dykstra (WE-5893A)
Assessment Date:	03/09/2023

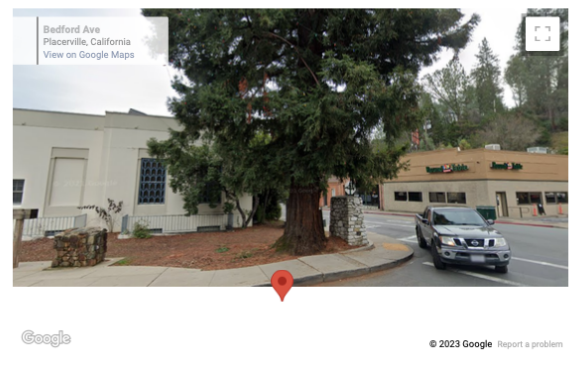
Crown/Branches	
Crown/Branch Issues:	Broken/Hangers, Weak Attachments, Visible Cracks, Overextended Branches, Topped
Main Issue - Branch:	Weak Attachments
Fall Distance/Dead-Weak Branches:	20
Load on Branch Defect:	Significant
Likelihood of Failure - Branches:	Imminent
Likelihood of Impact - Crown/Branches:	High
Likelihood of Failure and Impact - Branches:	Very Likely
Consequences - Branches:	Significant
Risk Rating - Branches:	High

Trunk	
Trunk Issues:	Mechanical Damage
Main Issue - Trunk:	Mechanical Damage
Load on Trunk Defect:	Minor
Likelihood of Failure - Trunk:	Improbable

Photos



Street View



Likelihood of Impact - Trunk:	High
Likelihood of Failure and Impact - Trunk:	Unlikely
Consequences - Trunk:	Severe
Risk Rating - Trunk:	Low

Roots	
Root Issues:	Cut, Lifted
Main Issue - Root:	Lifted
Likelihood of Failure - Roots:	Improbable
Likelihood of Impact - Roots:	Very Low
Likelihood of Failure and Impact - Roots:	Unlikely
Consequences - Roots:	Significant
Risk Rating - Roots:	Low

Overall Rating	
Mitigation Options:	Prune Branch(es)
Residual Risk:	Low
Final/Preliminary?:	Preliminary - Need Level 3 or Other
Inspection Interval:	Annually
Overall Risk Rating:	High



APPENDIX B - SITE PHOTOS







Arborist 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.

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. Arborists 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 risks associated with trees is to eliminate all trees.

Assumptions and Limiting Conditions

1. Consultant assumes that any legal description provided to Consultant is correct and that title to property is good and marketable. Consultant assumes no responsibility for legal matters. Consultant assumes all property appraised or evaluated is free and clear, and is under responsible ownership and competent management.
2. Consultant assumes that the property and its use do not violate applicable codes, ordinances, statutes or regulations.
3. Although Consultant has taken care to obtain all information from reliable sources and to verify the data insofar as possible, Consultant does not guarantee and is not responsible for the accuracy of information provided by others.
4. Clients may not require a Consultant to testify or attend court by reason of any report unless mutually satisfactory contractual arrangements are made, including payment of an additional fee for such Services as described in the Consulting Arborist Agreement.
5. Unless otherwise required by law, possession of this report does not imply right of publication or use for any purpose by any person other than the person to whom it is addressed, without the prior express written consent of the Consultant.
6. Unless otherwise required by law, no part of this report shall be conveyed by any person, including the Client, the public through advertising, public relations, news, sales or other media without the Consultant's prior express written consent.
7. This report and any values expressed herein represent the opinion of the Consultant, and the Consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event or upon any finding to be reported.
8. Sketches, drawings and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by Consultant as to the sufficiency or accuracy of the information.
9. Unless otherwise agreed, (1) information contained in this report covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing or coring. Consultant makes no warranty or guarantee, express or implied that the problems or deficiencies of the plans or property in question may not arise in the future.
10. Loss or alteration of any part of this Agreement invalidates the entire report.

Certificate of Performance

I, Chad Dykstra, certify that:

I have personally inspected the trees and site referred to in this report, and have stated my findings accurately. The extent of the inspection is stated in the attached report under Assignment Limits.

I have no current or prospective interest in the vegetation, or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.

The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and facts.

My analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.

No one provided significant professional assistance to me, except as indicated within the report.

My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client, or any other party, nor upon the results of the assignment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of the International Society of Arboriculture (ISA) and a Certified Arborist. I am also a member in good standing of the American Society of Consulting Arborists. I have been involved in the practice of arboriculture and the care and study of trees for over 30 years.

Signed: Chad Dykstra



Date: April 19, 2023