City of Palo Alto
City Council Staff Report

Report Type: Consent Calendar
Meeting Date: 5/9/2011

Council Priority: {ResProject:ClearLine}

Summary Title: Appeal Director’s Individual Review Approval

Title: Appeal of the Director’s Individual Review Approval of a New Single Family Residence at 258 Tennyson Avenue

From: City Manager

Lead Department: Planning and Community Environment

Recommendation
Staff recommends that the City Council decline to hear the appeal of the Individual Review (IR) application (file 10PLN-00000-00389) for a new two story home at 258 Tennyson Avenue, thereby upholding the Director of Planning and Community Environment’s approval.

Executive Summary
This request is an appeal of the Director’s approval of a Single Family Individual Review (IR) application for a new two -story home at 258 Tennyson Ave. Four or more Council Members' votes would be needed to remove this item off the consent calendar to set the matter for a future hearing.

Appellants Roger Smith and Judy Kay, owners of 270 Tennyson Ave. located directly adjacent to the subject property along the northern property line, were mailed all decision and hearing notices regarding the project. The Manager of Advanced Planning conducted the Director’s Hearing on March 10, 2011, and upheld the tentative approval. The appellant’s objection is directly related to the overall health and safety of the coast live oak tree located on the appellant’s property, of which the trunk is approximately 56 inches away from the shared property line and canopy overhanging the 258 Tennyson Avenue project site. No objections to compliance with the IR Guidelines were stated by the appellant in the appeal letter (Attachment B) setting forth the appellant’s position. Although the health of the live oak tree is relevant to planning approval and was separately considered in the planning process as described in the Director's approval letter (Attachment A), it is not a factor that may be considered as part of the IR review. Therefore, the basis for this appeal is inappropriate and the appeal should be denied.

Background
**Council Review Authority**
The City's Individual Review (IR) procedure provides for City Council “call up” of appeals. When the Director approves an IR application after a Director’s Hearing and a directly affected property owner appeals the decision, the project is placed before Council on the consent calendar for final action. The Council has two options. First, it may approve the item on consent, adopting the findings and recommendations of the Director. Second, if four Council members vote to remove the project from the consent calendar, the Council may determine whether to set a new hearing before the City Council. If the Council agrees to hear an appeal, a hearing is scheduled as soon as practical (PAMC 18.77.075).

**Project Review and Director's Approval**
The single-family individual review rules are design guidelines intended to mitigate the effects of second-story construction on neighboring homes in residential neighborhoods. The Director’s approval letter (Attachment A) sets forth the applicable PAMC sections and notes that the project on the subject property met all of the IR guidelines and R-1 zone regulations to allow the approval.

The IR application was submitted on November 8, 2010. Written comments were received from the appellant on November 19, 2010. The concerns expressed by appellant included: 1) the safety and health of the 23” diameter coast live oak tree (oak tree) located on their property, 2) potential privacy concerns from the proposed two-story development and 3) the approval process for IR applications. On November 22, 2010, staff and the appellant met to discuss the appellant’s concerns. During that meeting the IR issues previously voiced by the appellant were reviewed and confirmed by staff to be compliant with tree and other regulatory criteria: the IR Guidelines, zoning code requirements and the tree ordinance (Palo Alto Municipal Code, Chapter 8.10). The primary concern remained the health of the oak tree and how the construction of a new two-story home with a basement could adversely impact the root structure of the oak tree. It was further explained to the appellant during this meeting the steps the applicant was taking to ensure the long term health of the oak tree. In response to both department staff comments and neighbor concerns the applicant submitted revised plans on January 11, 2011. The revised application was tentatively approved on January 18, 2011. Prior to the effective approval (14 days after the tentative approval date), the appellant requested a Director’s Hearing on February 1, 2011.

The appellants’ request for a hearing was expressly to discuss the conditions of approval provided in the January 18, 2011 approval letter specifically related to the oak tree and to gain a better understanding of the tree protection zone (TPZ). During the hearing, the appellants also reported that some selective trimming had already occurred to the oak tree in the summer of 2010 and that additional trimming for the IR project may be harmful to the tree. The applicant spoke to the steps that were taken to revise the plans to address the concerns of both staff and the appellant. Further explanation regarding the revisions made to the plans is provided in the Discussion section of this report.
On March 24, 2011, following the Director’s Hearing, the Director approved the application with additional conditions. On April 7, 2011, the appellant officially appealed the Director’s decision to approve the IR application for 258 Tennyson Ave (Attachment B), based on two main issues:

1. The root destruction to the oak tree from the planned basement construction;
2. The conditions of approval specifically related to the oak tree.

**Discussion**

The project meets all five of the guidelines for Individual Review, complies with the R-1 Zone District regulations for development, and satisfies the tree ordinance protection measures required. The two tree-related issues appellant has identified are not factors that may be considered under the IR guidelines.

The IR guidelines include criteria related to: basic site planning; neighborhood compatibility for height, mass and scale; resolution of architectural form, massing and roof lines; visual character of street facing facades and entries; and placement of second-story windows and decks for privacy. The project’s compliance with the IR guidelines has not been questioned by the appellants. The individual review program applies to construction of second stories and is intended to mitigate the effects of that construction on neighboring homes. (Palo Alto Municipal Code §18.12.110(a)). Development applications subject to IR must be consistent with these guidelines. (PAMC § 18.12.110(d)). Since the appellants have not identified any adverse affects of the proposed project or misapplication of any of the guidelines, and the IR program is “intended only to mitigate the effects of second story construction” (PAMC § 18.12.110(a)), the appellant’s challenge raises no relevant issues related to the IR approval and the Director’s decision should be upheld.

**Tree Protection**

While the tree protection issue is not the basis for appeal of an IR application, compliance with the City's tree ordinance and technical manual is required for this project, and extensive conditions and measures have been taken to assure the protection of the oak tree, to the satisfaction of the City’s Planning Arborist. Consistent with the provisions of the Tree Technical Manual (TTM), Planning staff required a tree preservation report (TPR) prepared by an ISA certified arborist (Barry Coate), because the IR project would occur within the dripline of the oak tree. The TPR (Attachment C; Page 27) provided for the IR project was peer reviewed by the Planning Arborist and deemed to be adequate to maintain health and safety of the oak during demolition and construction of the IR project. The Planning Arborist determined there were specific measures and work precautions in place to ensure permanent injury would be reasonably minimized to less than significant. These measures, including mandatory arborist inspections and activity reporting to staff, were then incorporated into the IR project documents to be implemented by the sponsor.

*Tree Considerations in Development Plan*
The original IR application was for the demolition of an existing single-story home to be replaced with a new two-story that included a basement. The original plan called for a portion of the new basement to be 11 feet from the oak tree, putting the basement within the dripline (radius 10 times the trunk diameter) of the oak tree. Staff explored options with the applicant to provide added buffer for the tree, and the applicant agreed to move the basement further from the oak to approximately 16 feet from the tree trunk. The estimated root impacts are expected to be an acceptable 10% or less as documented in the TPR provided by Barrie Coate and Associates (whereas national standards prescribe 15% root loss as a threshold). Reports or opinions from ten (10) additional arborists were voluntarily provided by the applicant and are provided as Attachment C of this report. The initial protective measures identified in the TPR regarding protection for the tree were incorporated into the approval conditions.

The appellant’s arborist has objected (Attachment D) that the construction should be maintained completely out of the dripline of the tree, a distance of approximately 19 feet. The City’s Planning Arborist (peer review of professional reports submitted) has confirmed that the project site arborist’s tree protection zone of 16+ feet is adequate. The TPZ is a ‘site-specific’ determination that typically addresses protective measures within the dripline.

**ALTERNATIVE TO STAFF RECOMMENDATION**
The Council’s alternative to the staff recommendation is outlined in Municipal Code Section 18.77.075(g)(2):

“Remove the recommendation from the consent calendar, which shall require four votes, and set the application for a new hearing before the City Council, following which the City Council shall adopt findings and take action on the application.”

If the Council so directs, staff will identify a date for the hearing and will provide appropriate public notice in advance of the hearing.

**POLICY IMPLICATIONS**
The Appeal is based on issues that are not required to be considered in the IR process, or relevant to the IR guidelines. The Director’s decision to approve the application is consistent with staff’s implementation of the Individual Review Guidelines, and with the policies and intent of the Individual Review Process. In addition, the project is consistent with the City’s tree protection regulations.

**ENVIRONMENTAL REVIEW**
This project is exempt from the provision of the California Environmental Quality Act (CEQA) per Section 15303(a) of the CEQA Guidelines.

**ATTACHMENTS:**
- Attachment A: Director Approval Letter (PDF)
- Attachment B: Appellant's Letter of Appeal (PDF)
• Attachment C: Applicant's Arborist Reports (PDF)
• Attachment D: Appellant's Arborist Report (PDF)
• Attachment E: Applicant's Attorney's Letter (PDF)
• Attachment F: Applicant’s Summary Letter (PDF)
• Attachment G: Project Plans (TXT)

Prepared By: Jason Nortz, Planner

Department Head: Curtis Williams, Director

City Manager Approval: James Keene, City Manager
March 24, 2011

Chris Kummerer
643 14th Ave.
Menlo Park, CA 94025

SUBJECT: 258 Tennyson Ave; 10PLN-00389

On January 18, 2011 the Director of Planning and Community Environment conditionally approved Single Family Individual Review application 10PLN-00389 for a new two-story residence at 258 Tennyson Avenue. The approval was granted pursuant to the Palo Alto Municipal Code (PAMC) Chapter 18.12, Section 18.12.110, and Chapter 18.77, Section 18.77.075. The project meets all of the Palo Alto Single Family Individual Review Guidelines and complies with the R-1 Zone District regulations for development, as conditioned.

On February 1, 2011, a request for a Director’s Hearing was made pursuant to PAMC 18.77.075(e). On March 10, 2011, the Director’s Hearing was held. The Director’s designee opened the public hearing, received testimony from the project applicant, the Director’s Hearing requestor, and interested members of the public. The Director’s designee closed the public hearing and informed the applicant and Director’s Hearing requestor that a decision would be made within 14-days.

On March 24, 2011 the Director of Planning and Community Environment, upon review of information in the project file and information obtained at the March 10, 2011 Director’s Hearing, conditionally approved Single Family Individual Review application 10PLN-00389 for a new two-story residence at 258 Tennyson Avenue. This approval is granted pursuant to the Palo Alto Municipal Code (PAMC) Chapter 18.12, Section 18.12.110, and Chapter 18.77, Section 18.77.075. The project meets all of the Palo Alto Single Family Individual Review Guidelines and complies with the R-1 Zone District regulations for development, as conditioned.

CONDITIONS OF APPROVAL:

The approval is subject to the following conditions:

PLANNING DIVISION

1) Apply for a building permit and meet any and all conditions of the Planning, Fire, Public Works, and Building Departments.

2) The project shall be constructed in substantial compliance with revised development plans received on January 11, 2011 on file with the Planning Division.

Planning
250 Hamilton Avenue
P.O. Box 10250
Palo Alto, CA 94303
650.329.2441
650.329.2154

Transportation
250 Hamilton Avenue
P.O. Box 10250
Palo Alto, CA 94303
650.329.2520
650.617.3108

Building
285 Hamilton Avenue
P.O. Box 10250
Palo Alto, CA 94303
650.329.2496
650.329.2240
Department, 250 Hamilton Palo Alto, California except as modified by these conditions of approval.

3) A copy of this approval shall be printed on the first page of the plans submitted for building permit.

4) The addition of a screening wall shall be added on the side of the rear yard deck facing the driveway. The wall needs to be at least 5 feet tall. The wall shall extend past the guardrail at the rear side of the deck at least 18 inches.

5) Upon submittal of an application for a building permit, building plans for any covered project shall include a checklist and green building program description, reflecting any changes proposed since the planning entitlement phase (if a planning entitlement was required). The checklist shall be incorporated onto a separate plan sheet included with the building plans. A qualified green building professional shall provide evidence of adequate green building compliance or documentation to the compliance official to satisfy the requirements of the standards for compliance outlined in Section 18.44.040, prior to issuance of a building permit. All questions concerning the City’s Green Building Standards should be directed to Kristin Parineh at (650) 329-2189.

Planning Arborist

PRIOR TO DEMOLITION, BUILDING OR GRADING PERMIT ISSUANCE

1. BUILDING PERMIT SUBMITTAL REVIEW. Prior to submittal for staff review, the plans submitted for building permit shall be reviewed by the project site arborist to verify that all the arborist’s recommendations have been incorporated into the final plan set. The submittal set shall be accompanied by the project site arborist’s certification letter that the plans have incorporated the following information:

   a. Final Tree Protection Report (TPR) design changes and preservation measures.

   b. Palo Alto Tree Technical Manual Standards, Section 2.00 and PAMC 8.10.080.

   c. Outstanding items. Itemized list and which plan sheet the measures are to be located.

   d. Landscape and irrigation plans are consistent with CPA Tree Technical Manual, Section 5.45 and Appendix L, Landscaping under Native Oaks and PAMC 18.40.130.
2. SITE PLAN REQUIREMENTS. The final Plans submitted for building permit shall include the following information and notes on the relevant plan sheets:
   a. Sheet T-1 Tree Protection-its Part of the Plan
      (http://www.cityofpaloalto.org/environment/urbcanopy.asp), Applicant shall complete the Tree Disclosure Statement. Inspections and monthly reporting by the project arborist are mandatory. (All projects: check #1; with tree preservation report: check #2-6, with landscape plan: check #7.)
   b. The Tree Preservation Report (TPR). All sheets of the TPR approved by the City, (Recommendation For Tree Preservation During Construction at 258 Tennyson Street, Palo Alto, October 12, 2010) shall be printed on numbered Sheet T-1 (T-2, T-3, etc) and added to the sheet index.
   c. Protective Tree Fencing Type. Delineate on grading plans, irrigation plans, site plans and utility plans, Type II fencing around Street Trees and Type I fencing around Protected/Designated trees as a bold dashed line enclosing the Tree Protection Zone (per the approved Tree Preservation Report, listed above) per instructions on Detail #605, Sheet T-1, and the City Tree Technical Manual, Section 6.35-Site Plans.
   d. Site Plan Notes. Note #1. Apply to the site plan stating, "All tree protection and inspection schedule measures, design recommendations, watering and construction scheduling shall be implemented in full by owner and contractor, as stated in the Tree Protection Report on Sheet T-1 and the approved plans". Note #2. All civil plans, grading plans, irrigation plans, site plans and utility plans and relevant sheets shall include a note applying to the trees to be protected, including neighboring trees stating: "Regulated Tree--before working in this area contact the Project Site Arborist at (Barry Coat 408-353-1052) Note #3. "Basement foundation plan. Soils Report and Excavation for basement construction within the TPZ of a protected tree shall specify a vertical cut (stitch piers may be necessary) in order to avoid over-excavating into the tree root zone. Any variance from this procedure requires City Arborist approval, please call (650) 329-2441." Note #4. Utility plan sheets shall include the following note: "Utility trenching shall not occur within the TPZ of the protected tree. Contractor shall be responsible for ensuring that no trenching occurs within the TPZ of the protected tree by contractors, City crews or final landscape workers. See sheet T-1 for instructions."

3. TREE PROTECTION VERIFICATION. Prior to demolition, grading or building permit issuance, a written verification from the contractor that the required protective fencing is in place shall be submitted to the Building Inspections
Division. The fencing shall contain required warning sign and remain in place until final inspection of the project.

DURING CONSTRUCTION

4. EXCAVATION RESTRICTIONS APPLY (TTM, Sec. 2.20 C & D). Any approved grading, digging or trenching beneath a tree canopy shall be performed using ‘air-spade’ method as a preference, with manual hand shovel as a backup. For utility trenching, including sewer line, roots exposed with diameter of 1.5 inches and greater shall remain intact and not be damaged. If directional boring method is used to tunnel beneath roots, then Table 2-1, Trenching and Tunneling Distance, shall be printed on the final plans.

5. EXCAVATION ACTIVITIES. Throughout the excavation activities, appropriate equipment shall be used in a manner that limits impacts to overhanging protected tree limbs or branches. Pruning, if necessary, shall be limited to the minimum extent feasible. Prior to pruning, the project arborist shall conduct a site visit to indicate the appropriate limbs or branches to be pruned. Ground/soil protection shall be in appropriate areas to provide protection during excavation. New condition as of March 24, 2011.

6. PLAN CHANGES. Revisions and/or changes to plans before or during construction shall be reviewed and responded to by the project site arborist, (name of certified arborist of record and phone #), with written letter of acceptance before submitting the revision to the city for review.

7. CONDITIONS. All Planning Department conditions of approval for the project shall be printed on the plans submitted for building permit.

8. TREE PROTECTION COMPLIANCE. The owner and contractor shall implement all protection and Contractor and Arborist Inspection Schedule measures, design recommendations and construction scheduling as stated in the TPR, and is subject to code compliance action pursuant to PAMC 8.10.080. The required protective fencing shall remain in place until final landscaping and inspection of the project. Project arborist approval must be obtained and documented in the monthly activity report sent to the City. A mandatory Monthly Tree Activity Report shall be sent monthly to the City beginning with the initial verification approval, using the template in the Tree Technical Manual, Addendum 11.

9. TREE DAMAGE. Tree Damage, Injury Mitigation and Inspections apply to Contractor. Reporting, injury mitigation measures and arborist inspection schedule (1-5) apply pursuant to TTM, Section 2.20-2.30. Contractor shall be
responsible for the repair or replacement of any publicly owned or protected trees that are damaged during the course of construction, pursuant to Title 8 of the Palo Alto Municipal Code, and city Tree Technical Manual, Section 2.25.

10. GENERAL. The following general tree preservation measures apply to all trees to be retained: No storage of material, topsoil, vehicles or equipment shall be permitted within the tree enclosure area. The ground under and around the tree canopy area shall not be altered. Trees to be retained shall be irrigated, aerated and maintained as necessary to ensure survival.

PUBLIC WORKS ENGINEERING

1) SIDEWALK, CURB & GUTTER: As part of this project, the applicant must replace those portions of the existing sidewalks, curbs, gutters or driveway approaches in the public right-of-way along the frontage(s) of the property that are broken, badly cracked, displaced, or non-standard. Contact Public Works' inspector at 650-496-6929 to arrange a site visit so the inspector can determine the extent of replacement work. The site plan submitted with the building permit plan set must show the extent of the replacement work or include a note that Public Works' inspector has determined no work is required. The plan must note that any work in the right-of-way must be done per Public Works' standards by a licensed contractor who must first obtain a Street Work Permit from Public Works at the Development Center.

2) STREET TREES: The applicant may be required to replace existing and/or add new street trees in the public right-of-way along the property's frontage. Call Public Works' arborist at 650-496-6905 to arrange a site visit so he can determine what street tree work, if any, will be required for this project. The site plan submitted with the building permit plan set must show the street tree work that the arborist has determined, including the tree species, size, location, staking and irrigation requirements. The plan must note that in order to do street tree work, the applicant must first obtain a Permit for Street Tree Work in the Public Right-of-Way from Public Works' arborist.

The following comments are provided to assist the applicant at the building permit phase. You can obtain various plan set details, forms and guidelines from Public Works at the City's Development Center (285 Hamilton Avenue) or on Public Works' website: http://www.cityofpaloalto.org/depts/pwd/forms_permits.asp

Include in plans submitted for a building permit:
3) BASEMENT DRAINAGE: Due to high groundwater throughout much of the City and Public Works prohibiting the pumping and discharging of groundwater, perforated pipe drainage systems at the exterior of the basement walls or under the slab are not allowed for this site. A drainage system is, however, required for all exterior basement-level spaces, such as lightwells or stairwells. This system consists of a sump, a sump pump, a backflow preventer, and a closed pipe from the pump to a dissipation device onsite at least 10 feet from the property line, such as a bubbler box in a landscaped area, so that water can percolate into the soil and/or sheet flow across the site. The device must not allow stagnant water that could become mosquito habitat.

4) BASEMENT SHORING: Shoring for the basement excavation, including tiebacks, must not extend onto adjacent private property or into the City right-of-way without having first obtained written permission from the private property owners and/or an encroachment permit from Public Works.

5) DEWATERING: Basement excavations may require dewatering during construction. Public Works only allows groundwater drawdown well dewatering. Open pit groundwater dewatering is disallowed. Dewatering is only allowed from April through October due to inadequate capacity in our storm drain system. The geotechnical report for this site must list the highest anticipated groundwater level. We recommend a piezometer to be installed in the soil boring. The contractor must determine the depth to groundwater immediately prior to excavation by using the piezometer or by drilling an exploratory hole if the deepest excavation will be within 3 feet of the highest anticipated groundwater level. If groundwater is found within 2 feet of the deepest excavation, a drawdown well dewatering system must be used, or alternatively, the contractor can excavate for the basement and hope not to hit groundwater, but if he does, he must immediately stop all work and install a drawdown well system before he continues to excavate. Public Works may require the water to be tested for contaminants prior to initial discharge and at intervals during dewatering. If testing is required, the contractor must retain an independent testing firm to test the discharge water for the contaminants Public Works specifies and submit the results to Public Works.

Public Works reviews and approves dewatering plans as part of a Street Work Permit. The applicant can include a dewatering plan in the building permit plan set in order to obtain approval of the plan during the building permit review, but the contractor will still be required to obtain a street work permit prior to dewatering. Alternatively, the applicant must include the above dewatering requirements in a note on the site plan. Public Works has a sample dewatering plan sheet and dewatering guidelines available at the Development Center and on our website.
6) **GRADING & DRAINAGE PLAN:** The plan set must include a grading & drainage plan prepared by a licensed professional that includes existing and proposed spot elevations and drainage flow arrows to demonstrate proper drainage of the site. Adjacent grades must slope away from the buildings a minimum of 2%. Downspouts and splashblocks should be shown on this plan, as well as any site drainage features such as swales. Grading will not be allowed that increases drainage onto, or blocks existing drainage from, neighboring properties. Public Works generally does not allow rainwater to be collected and discharged into the street gutter, but encourages the developer to keep rainwater onsite as much as feasible by directing runoff to landscaped and other pervious areas of the site.

Site grading, excavation, and other site improvements that disturb large soil areas may only be performed during the regular construction season (from April 16 through October 15th) of each year the permit is active. The site must be stabilized to prevent soil erosion during the wet season. The wet season is defined as the period from October 15 to April 15. Methods of stabilization are to be identified within the Civil sheets of the improvement plans for approval.

7) **GRADING & EXCAVATION PERMIT:** Show the amount of soil that will be excavated and filled. For new basement projects or if more than 100 cubic yards of soil is disturbed, a *Grading and Excavation Permit* needs to be obtained from Public Works at the Development Center. Refer to the Public Works’ website for “Excavation and Grading Permit Instructions.”

8) **STORM WATER POLLUTION PREVENTION:** The City's full-sized "Pollution Prevention - It's Part of the Plan" sheet must be included in the plan set. Copies are available from Public Works at the Development Center or on our website. Also, the applicant must provide a site-specific storm water pollution control plan sheet in the plan set.

9) **IMPERVIOUS SURFACE AREA:** If the project will be creating or replacing 500 square feet or more of impervious surface, the applicant shall provide calculations of the existing and proposed impervious surface areas with the building permit application. The *Impervious Area Worksheet for Land Developments* form and instructions are available at the Development Center or on our website.

10) **WORK IN THE RIGHT-OF-WAY:** The plans must clearly indicate any work that is proposed in the public right-of-way, such as sidewalk replacement, driveway approach, curb inlet, storm water connections or utility laterals. The plans must include notes that the work must be done per City standards and that
the contractor performing this work must first obtain a *Street Work Permit* from Public Works at the Development Center.

11) LOGISTICS PLAN: The contractor must submit a logistics plan to the Public Works Department prior to commencing work that addresses all impacts to the City's right-of-way, including, but not limited to: pedestrian control, traffic control, truck routes, material deliveries, contractor's parking, concrete pours, crane lifts, work hours, noise control, dust control, storm water pollution prevention, contractor's contact, noticing of affected businesses, and schedule of work. The plan will be attached to a *Street Work Permit*.

This approval will become effective 14 calendar days from the postmark date of this letter, unless the City Clerk's Office receives a written request appealing the Director's decision prior to the end of the business day of the effective approval date, as provided by Chapter 18.77.075 of the PAMC. Please be aware that only the applicant or the owner or occupier of an adjacent property may appeal the decision. In the event that the project is appealed, an additional notice will be mailed with information regarding the scheduled hearing date before the City Council.

A copy of this letter shall accompany all future requests for City permits relating to this approval. This approval expires in 12 months from the effective date.

Should you have any questions regarding this approval, please feel free to contact Jason Nortz, Planner at (650) 617-3137.

Sincerely,

Steven Turner  
Advance Planning Manager

Project Manager: Jason Nortz

cc: Neighbor notification list
Planning Department  
City of Palo Alto

**Regarding 258 Tennyson Avenue, Palo Alto 10PLN-00389, and Request for Hearing by the Palo Alto City Council**

- Our concern is for the health and safety of our Historic, Heritage Oak Tree at our home at 270 Tennyson Avenue.

- As background, you should know that Morgan and Kathryn Stedman built the house we now live in at 270 Tennyson in 1948. They built it around this Heritage Oak. Kathryn and Morgan (a well known architect) were founding members of Committee for Green Foothills in 1966. Our house and tree were featured in a Sunset Magazine Article in 1951. Kathryn was a well-known landscape architect and also taught landscape architecture at Stanford for nine years. She was considered "The Grande Dame of Trees." In 1959 she published "The Trees of Palo Alto." We feel we are carrying on with their tradition of stewardship in protecting our Historic, Heritage Oak.

**PLEASE SEE ATTACHED SUNSET MAGAZINE ARTICLE.**

- Our arborist, Roy Leggitt (a member of the Board of Directors of Canopy), has expressed concern for the safety of our home if our tree's canopy becomes unbalanced from over-pruning by the Owner/Applicant (Mr. Madwed). Mr. Leggitt, our arborist, is also concerned about root destruction due to the planned basement construction. He is also concerned that the construction impacts to our tree that would be caused by development of the neighboring property could limit the future value of our own property.

- At the onset of the evaluation process, we were disappointed that timely contact by the City of Palo Alto Planning Department of modifications to the 258 Tennyson plans was not given to us after being promised in November of 2010 during initial discussions. Unfortunately, we found out about these modifications from a form letter sent to neighbors and were therefore limited in the time we had to formulate our response.

- We were disappointed to learn at the Director's Hearing that our Heritage Oak Tree's diameter was never measured by the applicant. It is our understanding that the Tree Protection Zone (TPZ) is based on that measurement. Due to this fact, we believe the plans are faulty.

- Our Arborist has also outlined our concerns regarding the TPZ in a memo submitted at the Director's Hearing which we feel was summarily disregarded.
• The Owner/Applicant ignored City Arborist Dave Docter's request that limbs to be removed to accommodate the second story of the new house should be first "tagged," either at the building site or by marking up photos. By ignoring the City Arborist's request for "tagging," the City's Planning Department, the City arborist, Mr. Leggett, and we had no input regarding this matter at the Director's Hearing. Further, our arborist has not and will not have an opportunity to review and comment on whether or not the pruning would be acceptable. This makes no sense to us.

• We were also saddened to learn from our arborist that there was inappropriate contact made by the Owner/Applicant to him through repeated emails despite our arborist's request that the owner not contact him as it would be unethical to do so. However, despite all of this, contact by the owner to our arborist has been made as recently as after the Director's Hearing.

• Based on the wording, the Director's Hearing notification caused confusion in the neighborhood that the request for the hearing was made by Applicant when in fact Roger Smith and Judy Kay (owners of the adjacent property at 270 Tennyson) requested the hearing. This does not give proper credence to neighborhood concerns.

• Regarding the March 24, 2011 letter sent out referring to the Director's Hearing on March 10, 2011: Page 4 of 8 "DURING CONSTRUCTION", 5. Excavation Activities. "Throughout the excavation activities, appropriate equipment shall be used in a manner that limits impacts to overhanging protected tree limbs or branches. Pruning, if necessary, shall be limited to the minimum extent feasible. Prior to pruning, the project arborist shall conduct a site visit to indicate the appropriate limbs or branches to be pruned. Ground/soil protection shall be in appropriate areas to provide protection during excavation." NEW CONDITION AS OF MARCH 24, 2011.

• We believe this is NOT TRULY A CONDITION, because of its wording. Regarding (second sentence above) "Pruning, if necessary, shall be limited to the minimum extent feasible." If this was a true condition the word "shall" be limited" should have been used. Instead "minimum extent feasible" was used. The words "shall" and "must" are "conditional" terms.

• The Owner/Applicant's arborist (Barrie Coate’s) report, Job #10-10-124, Page 3, "Tree #2, another coast live oak" states: d. "It will require removal of two 5 inch diameter branches and one eight inch diameter branch which are directly above the roof of the existing house to construct the 2nd. story. In addition it will require end-weight reduction from a 12 inch diameter branch which is directly above those in order to provide clearance for the second story without causing unnecessary damage to the tree". So it is obvious that
pruning is necessary, and not "if necessary."

- Again, we are extremely disappointed that the Planning Department did not adequately address our issues and requests at the Director's Hearing.

- We would like to preserve the character and history of this tree, along with its intrinsic health and safety. We feel that all of these aspects of our tree are threatened by this development. We ask that the City Council review the development plans and the impacts caused to our Historic, Heritage Oak.

Roger V. Smith  
4-7-11

Judith L. Kay  
4-7-11

270 Tennyson Ave.  
Palo Alto, 94301  
650-326-2488
A 50-foot lot with the feel of an acre

This is a small house (1,300 square feet) on a 50-foot lot. But its feeling of spaciousness has no such limits. And here is why.

Heritage Oak - Front Yard

As you step out of your car you catch a curb garden . . .

and walk through the car port garden with its large oak tree.

Move into the entrance hall and you pick up a ground level view of the rear garden. Here, adjoining the living room, the garden is more than just a fence enclosure. The trees next door—the neighbor's trees—and the sky are all part of the "garden" and the view.

Thick bed of ivy in middle of car port drive catches oil drip from the car. Roof makes a sheltered entry

(Old carport, no longer there)

Fencing for privacy in plant material with plastic screen at eye level. Foreground is Stachys lanata

Without curtains, the large windows can shine into the garden
From back garden, you can look through high front windows to street trees, making this a house in the middle of a garden.

Pass through the house, go outside and look back, and you realize that you have not lost the oak tree at the entrance. It is still visible through the high windows.

In this house and garden is an excellent demonstration of what good things can happen when landscape architect and architect work out a planning problem long before the plans are blueprinted. Distant trees and overhead tree branches have much to do with glass areas and ceiling heights.

Sunlight and night lights give changing dimensions. When an everchanging garden dominates living room and kitchen, the house is never frozen in mood.

This dual planning was easier than usual in this case. For the owners and designers of house and garden were Architect Morgan Stedman and his wife, Landscape Architect Kathryn Inlay Stedman, of Palo Alto, California.

View beyond garden shelter shows one of neighborhood trees.

Fresh view of kitchen. Dichondra gives dark pattern on patio.
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With much SMALLER TPZ
SUMMARY OF ARBORISTS' REPORTS

ALL REPORTS REFER TO THE 28" PROPERTY LINE OAK TREE
two of the principal contributors to Palo Alto's Tree Technical Manual are Barrie Coates and Ray Morneau who support our plan.

All but two arborists did a site visit. All used a trunk diameter of 28", confirmed by engineered survey. All had access to Barrie Coates' report as well as complete plan set which included site plan, roof plan, basement plan, and shoring plan. All examined the tree in question as well as the exploratory trench dug which is 8'9" in from tree.

1: Robert Booty: He is in agreement with Barrie Coates' report that planned construction will have no significant impact on the tree primarily due to distance from the tree. He further states that due to the fact that the 28 inch trench dug 9 feet from tree at base of existing foundation found no roots, the likelihood there is an extensive network of roots under the house where there is no water is quite low. He also states radar mapping is of no use in this situation.

2: John Lefingwell, Hortscience: He is in agreement that planned construction will have no impact on the tree. He bases this on four findings:
(1) - 28" trench dug at 9' from tree showed NO significant roots. Since majority of roots are found in the top 36 inches of soil, likelihood of significant root mass under is low.
(2) - less than 10% of root zone will be impacted.
(3) basement excavation in area previously covered by home that most likely limited root growth due to lack of water in heavy clay soil.
(4) - demolition of existing structure will actually provide more exposed root zone.
(5) - coast live oaks have a GOOD TOLERANCE for site disturbance.

3: Ned Patchett: He is in agreement with Barrie Coates' report that planned construction will have no significant impact on the tree.
He based his opinion on the distance from the tree and lack of any root mass at foundation trench. He also felt branch pruning is acceptable and will not impact the tree.

4: David Babby: He is agreement that planned construction will have no significant impact on the oak tree. He based his opinion on the distance from the tree and exploratory trench revealing no roots.
5: Ruben Green: The site plans and arborist report prepared by Barrie Coates will minimize any impacts to the oak tree. The effects of the construction project should be NEGLIGIBLE.

6: David Muffy, CANOPY BOARD MEMBER: The proposed excavations for a new house will not have significant impact on any substantial roots on the oak tree and the planned construction including proposed branch pruning will cause little or no disruption to the health of the protected Coast Live Oak.

7: Bill Pramuk: Based on provided documents, the tree will be at no significant risk of injury or premature decline as long as the Recommendation For Tree Preservation During Construction is followed.

8: David Wood: Based on site visit, report and recommendations from Barrie Coates and Dave Dockter, construction and preservation plans are adequate for tree preservation. The plans MEET the standards as set by the International Society of Tree Arborists.

9: Ray Morneau: He agrees with Barrie Coates tree preservation plan. He believes both the percentage of root loss AND crown pruning will not be a significant impact to oak tree.

10: Walter Levison: His opinion is construction as proposed will cause no significant damage to subject tree. He agrees with Barrie Coate's Tree protection plan. He feels the MAJORITY of the root system will be left intact. He normally uses a CRZ or critical root zone of 12-15 feet for a tree of this size. Furthermore, he goes on to say that there will be "a ZERO decline in tree health". The overall effect of tree pruning will be negligible.
Basic Tree Facts Surrounding Subject Oak Tree

Less than 8% of critical root zone impacted, or that root mass which is under the canopy, will be impacted. Anything less than 15-30% is acceptable in the literature.

Due to placement of new home further away from the property line as compared with older home, more of the root zone will be exposed to nutrients and water needed for tree health.

Current design with cantilevering of first floor obviates the need for excavation within the 16 ft root zone. One can argue there would be more disturbance without a basement.

Structural root plate, which is the main source for tree stability, is 10' for a tree of this size. We are far from this threshold.

Canopy reduction is minimal- two limbs to be removed- or less than 15% of canopy. Tree Manual dictates anything less than 25% acceptable.

It is doubtful there is a meaningful or abundant root network under the house based on following observations:

(1) Long-term presence of current home at 258 Tennyson built around 1942, with a two foot perimeter foundation. Roots grow where water and nutrients are, and roots would be impeded by lack of these requirements as well as foundation barrier. Soils survey did not find any water to a depth of 22 feet.

(2) Exploratory trench dug to a depth of 28” revealed only one root less than ½” in diameter.
Response to issues raised by appellants as detailed in their letter to the City Council

Arborists concern for safety of appellant’s home:

Stability of a tree is determined by the **critical root plate**, which for a tree of this size is 9 feet. Furthermore, since TPZ with be at **16 feet** except where soldier piers are placed. There will be no soil compaction on roots which is the second cause of tree instability. The appellant’s arborist, Mr. leggitt confirms critical root plate determination in an available online arborist report prepared for a client in Sunnyvale, CA on Nov 10, 2008.

Root destruction in the critical root zone is approximately 8%, well within limits imposed by all national societies and municipal standards. The standard ranges between 15-30%. The appellant’s arborist, in a report prepared for client in Orinda, CA dated Jul 26, 2007 advocates on behalf of client for construction of new home and driveway well within the critical root zone or outright removal of heritage oaks.

Neighbors disappointed with poor city notification:

The appellants had both meetings and email correspondence with Jason Nortz and Dave Dokter during the months of Nov, Dec, and Jan. All plans were always on file at the Development center. Furthermore, I dropped off copies of all changes as well as detailed explanation of scientific basis on Dec 23 2010 and Jan 14 2011.

Claim that tree was not measured:

The tree was measured by Wade Hammond, noted surveyor. I also measured the tree according to the standards of ISA. It is referred to in ALL documents as 28”. in the arborist report submitted by the appellants, actually listed at 23.7 “.

Concerns of TPZ disregarded by city:

Per code and tree manual, TPZ is determined by the city arborist and applicant arborist. We met every condition.
Limb removal to be tagged:

This was never a condition for approval. Barrie Coate, our arborist, clearly shows AND describes limbs to be removed. LESS than 15% of canopy at most.

Inappropriate contact with appellant arborist:

I did indeed contact Mr. leggitt in February, as I called EVERY arborist listed in CANOPY website arborist list. I have emails disclosing this exchange. I contacted Mr. leggitt a second time in March to tell him I was filing formal charges of unethical behavior to the ISA, CANOPY, and state consumer board of affairs.

Mislabeling of Directors Hearing Notice:

I have signatures from all neighbors approving project. Residents of 1828 Bryant could not sign since the resident is Editor of the Palo Alto Weekly and cannot sign petitions. Residents of 236 Tennyson do not sign petitions. They both are in support of the project.

Canopy pruning:

Per tree technical manual, and per ALL arborist reports, amount of pruning, estimated to be less than 15%, is well within the limit of 25%.
ISA Certified Arborist Report

Submitted To:

Dave Madwed
258 Tennyson Avenue
Palo Alto, California

Project Location:

258 Tennyson Avenue
Palo Alto, California

Submitted By:

Robert Booty, Registered Member # 487
The American Society of Consulting Arborists
ISA Certified Arborist WC-4286
March 4, 2011
Assignment

I have been retained by Dave Madwed who is building a home in Palo Alto. There are some issues with the placement of a below ground basement. There is a neighboring oak tree near the fence line whose roots might be impacted by the construction of the basement. I have been requested to evaluate the situation and determine if the use of ground penetrating radar for root mapping would be of value in this situation.

Observations

I visited the property February 26, 2011 and met with Dave Madwed who explained his situation to me. The main issue seems to be potential root damage involving the Oak tree identified as tree #2 in Barrie Coates arborist report dated 10-12-2010. Dave showed me the trenches he dug along the foundation near the #2 oak that are 28 inches deep, and no roots were visible. Barrie’s report suggested that the basement be located eleven feet from oak tree #2. Dave Madwed informed me he has moved the basement sixteen feet away from the tree to afford even greater protection to the oak.

Conclusions

Root mapping with ground penetrating radar will not provide me with any meaningful information in this situation. The 28 inch trench at the base of the existing foundation produced no roots. The radar will only penetrate at most 3 ft. Due to the fact oak roots are usually not deeper than 3 ft, the roots most likely have simply grown in a different location due to the long-standing presence of the current house and foundation. Based on trench findings, I highly doubt there is much of a root network under the house. Furthermore, at the present time radar root mapping can not determine how large of a diameter a root is, so it would be impossible to determine where the larger structural roots are located with this technology.

I think the sixteen foot setback as a tree protection zone for the basement is very reasonable and safe; any roots that might be encountered in that area of construction will be smaller and have much less of an impact on the health and stability of the oak tree. What really is of importance is the distance from the tree. There is minimal impact on the tree root zone and no impact on the structural root plate with the basement at 16 feet. I feel that the planned construction at 16 feet more than guarantees the long-standing survival and health of the tree in question.

Recommendations

1. I am in agreement with the current planned placement of the basement at 16 ft from oak tree # 2. This spacing will essentially eliminate any harmful impact to the tree. Root mapping with ground penetrating radar would not be of value in this situation.

2. Have a certified arborist on site overseeing any necessary root pruning.

Robert Booty Registered Consulting Arborist 487
Assumptions and Limiting Conditions

1. Any legal description provided to the appraiser or consultant is assumed to be correct. No responsibility is assumed for matters legal in character nor is any opinion rendered as to the quality of any title.

2. The appraiser or consultant can neither guarantee nor be responsible for accuracy of information provided by others, information not provided or disclosed.

3. The appraiser or consultant shall not be required to give testimony or to attend court by reason of this appraisal or consultation/reports unless subsequent written arrangements are made, including payment of an additional fee for services.

4. Loss or removal of any part of this report invalidates the entire appraisal or report/evaluation.

5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the persons(s) to whom it is addressed without written consent of this appraiser or consultant.

6. This report and the values expressed herein represent the opinion of the appraiser or consultant, and the appraiser’s or consultants fee is in no way contingent upon the reporting of a specified value nor upon any finding to be reported.

7. Sketches, diagrams, graphs, photos, etc., in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys.

8. This report has been made in conformity with acceptable appraisal/evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.

9. No tree described in this report was climbed, unless otherwise stated. Arborist OnSite® cannot assume responsibility for any defects which could only have been discovered by climbing. A full root collar or root crown inspection, consisting of excavating the soil around the tree to uncover hidden defects or disease involving the root collar and major buttress roots, was not performed, unless otherwise stated. Arborist OnSite® cannot accept responsibility for any root defects which could only have been discovered by such an inspection.

Consulting 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. Client may choose to accept or disregard the recommendations of the arborist, or 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 medicine, cannot be guaranteed. 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 all trees.

March 4, 2011
258 Tennyson Avenue
Palo Alto, California
March 4, 2011
258 Tennyson Avenue
Palo Alto, California

Certification of Performance

I, Robert Booty, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report, and have stated my findings accurately. The extent of the evaluation and or appraisal is stated in the attached report and the terms and conditions;

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

- That the analysis, opinions and conclusions stated herein are my own, and are based on current scientific procedures and facts;

- That 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 assessment, the attainment of stipulated results, or the occurrence of any subsequent events;
  - That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices;

- That no one provided significant professional assistance to the consultant, except as indicated within the report.

I further certify that I am a Registered Member of the American Society of Consulting Arborists, and I am an International Society of Arboriculture Certified Arborist. I have been involved in the practice of arboriculture and the care and study of trees for over 42 years.

Robert Booty

Signed:

Date: March 4, 2011
March 2, 2011

Dr. Dave Madweb
190 Park Ave.
Palo Alto, CA 94306

Subject: Assessment of impacts to tree #2
258 Tennyson Ave., Palo Alto

Dear Dr. Madweb:

You are planning to redevelop the property at 258 Tennyson Ave, in Palo Alto. You have an Arborist Report prepared by Barrie Coate that recommends preservation of tree #2 and provides detailed specifications for its protection. You asked that HortScience, Inc. review all relevant plans and reports relating to tree impacts, and provide a second opinion of the potential impacts to tree #2. This letter responds to that request.

Since 1983, HortScience has served clients in the San Francisco Bay Area, California, the United States and abroad. Our mission is to identify and meet the landscape management needs of our clients, and to do so in a technically sound, practical manner. We have extensive experience in the development process and have providing consultation for tree preservation during all phases of development and re-development.

**Background**

Tree #2 is a 28" diameter coast live oak (*Quercus agrifolia*) located off-site, adjacent to the northern property line of the subject site. I did not visit the site to assess the trees health or structural condition and found no reference to the trees condition in Mr. Coate’s report.

I reviewed the following documents as the basis for forming my opinion on the potential impacts to tree #2:

- Recommendations for tree Preservation During Construction at 258 Tennyson Avenue, Palo Alto, prepared by Barrie D. Coate, Consulting Arborist (dated Oct. 12, 2010).
- Site Plan (sheet A1.0) and Basement and First Floor Plans (sheet A2.1), prepared by Chris Kummerer Architects (dated January 19, 2011).

The plans show the location of a proposed single-family residence relative to off-site tree #2. The proposal includes demolition of the existing structure, located 9' south of tree #2, and construction of a below-grade basement approximately 16' south of the tree. The above grade floors will be cantilevered over the basement.

The report by Mr. Coate recommends the following preservation measures for tree #2:

- Excavation or over-excavation for the basement will not encroach any closer than 16' south of the tree, except where the corner of the stairwell to the southwest encroaches to within approximately 14' of the tree.
- No equipment shall be permitted to travel on the exposed soil within 11' south of the tree.
- Demolition of the existing wall and foundation south of the tree must be performed from within the building.
• Type I fence (per the City of Palo Alto Tree Technical Manual) shall be installed 15' south of the tree (1' north of the proposed basement excavation), immediately following demolition of the existing wall and foundation.
• Removal of two (2) 5" and one (1) 8" diameter branches and end-weight reduction pruning of one (1) 12" diameter branch to accommodate construction.
• Wrapping of the trunk up to a height of 20' with Type III fencing (per the City of Palo Alto Tree Technical Manual) to protect against incidental contact.

Assessment of Impacts
As an exploratory measure, a 2' deep trench was excavated by hand along the existing foundation 9' south of the tree to locate roots. No roots larger than 1" in diameter were exposed during the excavation. Since the majority of roots are typically located in the top 24" to 36" of soil, I consider this a positive sign that root disturbance for excavation of the proposed basement 16' from the tree will be minimal.

The proposed construction will demolish the existing foundation and wall, located 9' from tree #2, and excavate a new sub-grade basement 16' from the tree. The following can be anticipated as a result of the proposed changes:
• The basement excavation would impact less than 10% of the existing root zone.
• The basement excavation will be in an area that was previously covered by the existing structure, which likely inhibited root development in this area.
• Demolition of the existing structures will provide an additional 7' of root zone for the tree to the south, east and west.
• The additional root zone should improve the growing environment for the tree over the existing conditions.

In general, we consider coast live oak to have a good tolerance for site disturbance. I believe impacts to tree #2 from the proposed construction are within the tolerance of the tree, provided the tree preservation guidelines specified by Mr. Coate are adhered to.

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

Sincerely,

[Signature]

John Leffingwell
Board Certified Master Arborist #WE-3966B
Registered Consulting Arborist #442
Tree Assessment Report For
Dave Madwed
258 Tennyson Street in Palo Alto, CA

Submitted by
Ned Patchett
Certified Arborist WE-4597A
February 28, 2011

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Summary

Dave Madwed retained my services to perform a tree assessment on a coast live oak located on his neighbor's property. The purpose of my assessment was to determine if the proposed construction of his new home at 258 Tennyson in Palo Alto, CA would cause significant impacts to the neighbor's coast live oak. I was not asked to prepare any tree preservation recommendations as another company, Barrie D. Coate and Associates, had previously been hired to perform this work.

The proposed construction calls for an excavation cut at approximately 17 feet from the trunk of the subject tree. Therefore, portions of the excavation for the proposed basement are located at the edge of the dripline and the optimal tree preservation zone of the subject tree. However, based on my assessment, it is my professional opinion that if a shoring method is used to keep the excavation cut for the basement in a vertical position and the tree preservation instructions prepared by Barrie D. Coate and Associates are properly followed, the impacts to the tree from the proposed construction should not be significant. Therefore, allowing the subject tree to thrive for many years to come.

Introduction

Assignment

Dave Madwed retained my services to perform the following tasks:

1. Assess tree health, condition and potential impacts from the proposed construction of a new home at 258 Tennyson Street in Palo Alto, CA.
2. Document this information in a written report.

Limits of Assignment

I did not perform a detailed root crown inspection nor climb the tree to perform an aerial inspection. In addition, I did not inspect or measure the trunk of the tree because I didn't have permission to access the neighbor's property. Therefore, my examination of the tree is based on a Visual Tree Assessment (VTA) from the Madwed property.
Tree Survey Methods

On February 8, 2011, I visited the site to collect information for this report. I performed a Visual Tree Assessment (VTA) of the subject tree. The following outlines the procedure for collecting information for the tree survey:

1. Identify tree species
2. Identify if the tree is a Protected or Heritage tree, as defined in the City of Palo Alto Municipal Code, Chapter 8, Section 8.10.020; or a Street tree as defined in Section 8.04.010
3. Assess the health and condition of each tree
4. Assess the structural stability of each tree

History and Background

Dave Madwed had previously hired Barrie D. Coate and Associates to prepare the required tree inventory and preservation recommendations for the proposed construction on his new home at 258 Tennyson Street in Palo Alto. I have had the opportunity to review the report and recommendations, which I believe are sufficient, if followed properly. I was asked to assess the subject tree, review the proposed construction plans and to provide an opinion on whether the proposed construction would have a significant impact on the subject tree.

Observations

Site Description

The site is located at 258 Tennyson Street in a residential neighborhood of Palo Alto, CA. A single family residential home is currently located on the property. The existing home will be demolished and a new home will be built on the property. The coast live oak is located on the neighbor’s property, which is on the left side of 258 Tennyson Street.

Subject Tree

The subject tree is a coast live oak *Quercus agrifolia* and I was unable to measure the diameter of the tree. However, based on a visual tree assessment, I have determined that this tree is considered a protected tree by the City of Palo Alto. This tree is in fair health and fair structural condition.
Discussion

Portions of the proposed construction are located within the dripline and optimal tree preservation zone (TPZ) of the subject tree. A proposed basement is located approximately 17 feet from the trunk of the subject tree and the excavation cut required for the installation of the basement has some potential to impact the tree, if a standard OSHA back cut was used during the excavation process. The main floor of the proposed home is located closer to the tree but is cantilevered over the root zone to minimize any root impacts. The upper portion of the house is close to a few branches in the upper crown of the tree, which require removal for clearance purposes.

In addition, a root inspection trench was excavated along the foundation of the existing home to a depth of 2 feet and revealed only one root that measured approximately 5/8 of an inch in diameter (see Photo 1 in Appendix A). It is likely that roots from this tree were removed during the installation of the foundation for the existing home when it was built years ago.

Conclusion

Based on my assessment, it is my professional opinion that if a shoring method is used to keep the excavation cut for the basement in a vertical position and the tree preservation instructions prepared by Barrie D. Coate and Associates are properly followed, the impacts to the tree from the proposed construction should not be significant. Thereby, allowing the subject tree to thrive for many years to come.
Bibliography


Glossary of Terms

Aerial inspection  An inspection of the upper crown of the tree that requires climbing.

Crown  Parts of the tree above the trunk, including leaves, branches and scaffold limbs. (Matheny and Clark, 1994)

Crown Cleaning  The Selective removal of dead branches, diseased and broken branches and the concentration of end weight.

Diameter at standard height (DSH)  The diameter of a tree’s trunk as measured at 4.5 feet from the ground. (Matheny and Clark, 1994)

Root crown  Area where the main roots join the plant stem, usually at or near ground level. Root Collar. (Glossary of Arboriculture Terms, 2007)

Root crown inspection  Process of removing soil to expose and assess the root crown of a tree. (Glossary of Arboriculture Terms, 2007)

Tree protection zone (TPZ)  Defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, especially during construction or development. (Glossary of Arboriculture Terms, 2007)

Visual Tree Assessment (VTA)  A method of visual assessing the condition of a tree that does not include a root crown inspection or an aerial inspection.
Appendix B – Arborist Disclosure Statement

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees. They 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 the 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 risk associated with trees is to eliminate all trees.

Ned Patchett  
Certified Arborist WC-4597
Photo 1 shows the root exploration trench located along the foundation of the existing home.
Appendix C – Certification of Performance

I, Ned Patchett, certify;

- That I have personally inspected the trees and the property referred to in this report. I have stated my findings accurately. The extent of the evaluation and appraisal is stated in the attached report and the Terms of Assignment;
- That 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 the parties involved;
- That the analysis, opinions and conclusions within this report are my own;
- That my analysis, opinions and conclusions were developed and this report has been prepared accordingly to commonly accepted arboricultural practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I further certify that I am an International Society of Arboriculture Certified Arborist, and have been involved in the practice of arboriculture and the study of trees for over 15 years.

Signed: __________________________

Date: __________________________
March 2, 2011

via: email

Dave Madwed
258 Tennyson Avenue
Palo Alto, CA 94301

RE: COAST LIVE OAK - on Northern Neighboring Property
    258 Tennyson Avenue, Palo Alto

Dear Mr. Madwed:

You have retained me to evaluate and opine on the potential impacts that construction of your proposed new home would impose on one coast live oak (Quercus agrifolia) located on the northern neighboring property (identified as a 28-inch oak about 5 feet from the property fence). Items reviewed to develop my opinion are as follows:

- The exploratory trench dug along the existing foundation (observed during a site visit on 2/28/11).
- The report, dated 10/12/10, by Mr. Barrie D. Coate.
- The most recent version of Sheet A1.0 (Site Plan/ROOF Plan) by Chris Kummerer Architect.

Based on my review, I conclude, with a reasonably high degree of certainty, the following:

1. The proposed home can be constructed without adversely impacting the oak, provided recommendations presented on pages 3 and 4 of Mr. Coate’s report (listed under tree #2) are followed throughout demolition, construction and landscaping.
2. The proposed basement is more than sufficiently setback from the oak’s trunk to reasonably protect its roots.
3. Any roots encountered during excavation would represent an insignificant amount and size of the oak’s overall root system.

Sincerely,

David L. Babby
Registered Consulting Arborist® #399
Board-Certified Master Arborist #WE-4001B
Evergreen Arborists Consultants, Inc.

February 28, 2011

Prepared for

Mr. Dave Madwed
Ms. Kathleen Cheplo
258 Tennyson Ave
Palo Alto, CA 94301
February 28, 2011

Mr. Dave Madwed
Ms. Kathleen Cheplo
258 Tennyson Ave
Palo Alto, CA 94301

This letter summarizes the analysis conducted by Ruben Green from Evergreen Arborists Consultants, Inc. My assignment was to review the plans provided by architect Chris Kummerer and the RECOMMENDATION FOR TREE PRESERVATION DURING CONSTRUCTION report dated October 12, 2010, provided by Mr. Barrie Coate. My task was to determine if the plans and arborist report provide reasonable and sufficient guidelines to preserve and protect a Coast live oak tree, Quercus agrifolia, during a construction project located at 258 Tennyson Ave, Palo Alto, CA 94301. The tree in question is located at the adjacent property, 270 Tennyson, Palo Alto, CA 94301. The coast live oak tree is listed as "Tree #2" in the Barrie D. Coate, Consulting Arborist, RECOMMENDATION FOR TREE PRESERVATION DURING CONSTRUCTION report.

The objective of a tree preservation report is to reduce the negative impacts of construction on a tree to a less than significant level. The tree protection regulations are intended to guide a construction project to insure that appropriate practices will be implemented in the field to eliminate undesirable consequences that may result from uninformed or careless acts, and preserve the tree and property values.

Typical negative impacts that may occur during construction include:

1. Mechanical injury to roots, trunk or branches.
2. Compaction of soil.
3. Changes in existing grade by either raising or lowering it.

Mr. Kummerer's site plans and Mr. Coate's arborist report reasonably and sufficiently provide guidelines that should minimize any negative impacts to the tree during the construction project. The effects from this construction project to this oak tree should be negligible.
Figure 1. Bing Map aerial photo of the project that is located at 258 Tennyson Ave, Palo Alto, CA 94301 as depicted by the box. The tree in question is a Coast Live Oak that is located at 270 Tennyson, Palo Alto, CA 94301. This tree is depicted by the dashed circle.
Figure 2. The tree in question is a Coast Live Oak that is located at 270 Tennyson, Palo Alto, CA 94301. This tree is listed at 28” DSH, and listed as tree #2 in the Coate report. This tree is depicted by the dashed circle.

www.greenurborists.com
Consulting Arborists
Landscape Consultants
DAVE MUFFLY
ISA BOARD-CERTIFIED MASTER ARBORIST WE-4279B
381 OXFORD AVENUE
PALO ALTO, CA 94306
650-283-6911  DAVEMUFFLY@YAHOO.COM

HERITAGE TREE PROTECTION
258 TENNYSON AVENUE

INSPCTION DATE: 16 NOVEMBER 2010
REPORT DATE: 19 NOVEMBER 2010

At the request of Dave Madwed, I inspected several Coast Live Oak trees (Quercus agrifolia) at 258 Tennyson Avenue, Palo Alto, prior to proposed construction. These trees are Heritage Trees, protected by city ordinance. The tree of greatest interest originates from the house to the left of 358 Tennyson (facing property from street). This Coast Live Oak is in fair to good condition, though the tree has been stressed by over pruning.

I inspected several trenches which were dug next to the foundation of the current house at 258 Tennyson, exploring for tree roots. As expected, these trenches show very little Coast Live Oak root. Tree roots often “avoid” building foundations, due to the physical barrier, and lack of moisture and soil nutrient. Roots only grow where resources are available.

Also, Coast Live Oak is typically a deeply rooted species, particularly in areas of good soil drainage and quality, which is the case in this neighborhood. The main roots of this tree dive deeply into the ground close to the trunk.

In my professional opinion, the proposed excavations for a new house at 258 Tennyson will not impact any substantial roots on this heritage oak, and the proposed construction will cause little or no disruption to the health of the protected Coast Live Oak.

On the right side of the property (viewed from the street) is another Coast Live Oak. This tree is farther from the proposed construction, and the roots of this tree will be protected during construction by retaining the current concrete driveway until construction is completed.

Respectfully submitted,
Dave Muffy
February 8, 2011

David Madwed
190 Park Avenue
Palo Alto, CA 94306

Arborist Report

Re: Review of Tree Protection Plans

Dear Mr. Madwed,

You requested that I review tree protection plans regarding a coast live oak tree near the location of a new home you are building at 258 Tennyson Street in Palo Alto. You are making efforts to complete the construction without harm to the tree.

You sent me the following documents for review:

- A report by Barrie D. Coate and Associates: *Recommendations for tree Preservation During Construction, Site Visit October 12, 2010*
- *Basement Plan* (showing the face of the tree trunk 11' from the outside of the planned basement wall)
- Site Plan, Sheet A-1.0 *Recommendations for Tree Preservation during Construction*, Barrie Coate.
- Your email message of February 7 stating:

  "...with foundation perimeter 9 feet from tree our new home will have a basement, with closest portion of wall 17 ft 3 in from tree. We are cantilevering out the first floor so no piers or foundation will be required that the outside of the basement wall is 17' 3" from the face of the tree at its closest..."

You also informed me that the subject tree has a trunk diameter of 28" (which did not appear in the other documents).
I have reviewed Mr. Coate's report with respect to tree #1, in which he makes extensive recommendations for tree protection. He concludes that the project could proceed without significant damage to any of the trees. I found the recommendations and conclusion thorough and consistent with my understanding of professional standards for tree protection.

For comparison and an alternative perspective, I have reviewed *Trees and Development*¹ and considered my own experience with coast live oaks on construction projects.

In *Trees and Development* trees are rated for "Relative Tolerance to Development Impacts". Coast live oaks are rated as having "Good" tolerance.

The book provides guidelines for "Calculating the Optimal Tree Protection Zone" (TPZ) based on trunk diameter. It states that this approach is not an absolute rule, but a tool to help the design team.

The method provides for a TPZ radius (in feet) in proportion to the trunk diameter (in inches). For species with "Good" tolerance the proportion ranges from .5' for young trees, to .75' for mature trees, and up to 1.0' for over-mature trees, older than 80% of their life expectancy.

Using the "mature tree" factor of .75' for the subject tree I calculate an optimal TPZ radius of 21 feet. (28 X .75 = 21').

In my experience, coast live oaks that are currently showing good vigor and do not sustain significant root loss, grade fills, other injuries or excessive landscaping and irrigation after construction and are affected by construction only on one side of the root zone can have a significantly smaller TPZ.

Using the "Young tree" proportion, .5' per inch of trunk diameter I calculate a reasonable TPZ radius of 14' for this tree. (28 X .5 = 14)

You state in your email that the outside of the basement wall will be 17' 3" at its closest point, from the face of the trunk.

Based on the provided documents and your email, in my view the tree will be at no significant risk of injury or premature decline as long as the Recommendations for Tree Preservation During Construction are followed throughout the construction process.

Please feel welcome to contact me if you have any further questions on this matter.

Sincerely,

Bill Pramuk
RCA #409
ISA WE 0610
February 21, 2011

Arborist Letter

David Madwed
190 Park Ave
Palo Alto CA, 94301

Ref: 258 Tennyson Ave
Palo Alto CA, 94301

After reviewing the arborist report and preservation recommendations from Consulting Arborist Barrie D. Coate, and recommendations from City Arborist Dave Dockter, in addition to my earlier on site visit, I concur with the above arborist’s that the construction and preservation plans are adequate for the preservation of all the trees on this site. The plans meet the preservation needs of the trees per ISA (International Society of Arboriculture) standards for tree preservation.

Sincerely:

David Wood Natures Touch
ISA Certified Arborist WE-6960-A
ISA Certified Tree Worker #472
Qualified Applicators License QAL 117017
david.wood@comcast.net 408-561-0747
RECOMMENDATION FOR TREE PRESERVATION DURING CONSTRUCTION
AT 258 TENNYSON STREET
PALO ALTO

Prepared at the Request of:
Chris Kummerer, LA
643 14th Ave
Menlo Park CA 94025

Site Visit by:
Barrie D. Coate
Consulting Arborist
October 12, 2010

Job #10-10-124
Assignment
On October 12, 2010, I met Mr. Madwed, the owner, Chris Kummerer, the architect, and Dave Dockter, City of Palo Alto, to review the potential conflict between planned construction and tree preservation.

Summary
There are three coast live oaks (Quercus agrifolia) on adjacent properties and one twin truck redwood on the property, as well as one southern magnolia street tree which must be protected (City of Palo Alto Tree Technical Manual, 1-A).

Revised excavation basement design plans dated January 19, 2011 provide a distance of 16 feet from the trunk of tree #2, the neighbors coast live oak, east of the subject property (refer to Plan Sheet T3) and 11 feet from tree #1, the co-owned live oak on the western property line.

The following recommendations for tree care involve primarily root protection during demolition and construction for trees #1, 2, 7 and 9 and the specific pruning detail which will be necessary to clear the new roof line without causing damage to trees #1 and 2.

Preservation of the twin truck coast redwood in the backyard should be very straightforward.

I see no reason why the construction cannot proceed as planned without causing significant damage to any of the subject trees.

General Comments
All fencing noted in this report is meant to describe Type I, II or Type III fencing as noted in the Tree Technical Manual from the City of Palo Alto.

Type I fencing is 6 foot chainlink fence mounted on 2 inch galvanized iron posts driven at least 2 feet into solid ground. This fencing will be needed for trees #2 and 8 during construction.

Signs warming against tree removal or tree damage must be attached to the top of this fence at 10 foot intervals to warn contractors and subcontractors against damaging or moving of these protective fences.

Type II fencing will be needed for the southern magnolia street tree before demolition begins.

Type III fencing is orange plastic fencing wrapped around a trunk or a limb around which are wrapped with 2" x 4" boards to receive any impact that might occur from construction or demolition activity. This protection will be needed for one trunk of tree #2 and a low limb of tree #1 before demolition begins.

PREPARED BY: BARRIE D. COATE, CONSULTING ARBORIST  OCTOBER 12, 2010
Observations
Trees #1 and 2 are on the east and west sides of the existing house on adjacent properties.

Tree #7 is a huge coast live oak is on the adjacent property just south of the south property line.

Recommendations
Tree #1
a. I suggest that number III fencing material, i.e., orange plastic fencing with 2" by 4" lumber wrapped around it on the side closest to the house be applied to the two trunks which face this property of this 3 trunk tree.

b. I suggest that one 8 inch diameter and one 5 inch diameter low limbs which are horizontal directly over the house be removed.

This will leave a higher canopy on the tree and not detract from its aesthetic or practical usefulness.

c. The root buttress that extends on to this property from the neighbors' tree #1 must be protected from damage. I suggest tacking a 4 inch pad of Styrofoam over the protrusion and attach a patch of orange fencing over that to provide visibility for equipment operators.

d. I suggest that the pavement which currently constitutes the driveway be retained in place until the last possible moment during construction to prevent damage to the roots which are beneath that pavement.

e. I suggest that the new driveway surface be planned to be pervious and that it be laid on top of existing soil grade after the existing pavement has been removed. A product such as Drivable Grass would be appropriate.

In other words, no excavation from the existing grade beneath the existing pavement should be done.

f. No swale may be dug between the backyard and the front yard to facilitate drainage from the back to the front into the existing soil grade to prevent damage to existing roots in that area.

g. The wall of the house must be removed from inside the house and the foundation removed from inside the existing footprint to avoid potential damage to tree #1 by equipment.

h. The excavation for the new basement may be constructed as close as 11 feet from the root buttress of tree #1.

Drivable Grass

PREPARED BY: BARRIE D. COATE, CONSULTING ARBORIST

OCTOBER 12, 2010
Note that this does not refer to the location of the new foundation wall but refers to the actual excavation closest to tree #1.

i. When it is time to finally remove the existing driveway it must be removed by breaking up the driveway into pieces which can be hand loaded into a tractor which is standing on currently intact pavement.

This tractor then backs up as the driveway is demolished until it is beyond the dripline of tree #1.

The newly exposed area may not be traveled on by any wheeled equipment.

The newly exposed surface must be covered immediately with a 4 inch layer of tree chips. If this route must be used for access to the back yard a platform constructed of full 4' by 8' sheets of 1 ½ inch plywood must be laid to cover all areas beneath the canopy (20 feet from the trunk in any direction).

j. After the wall of the building and the foundation have been removed on this side a Type I fence (refer to TTM City of Palo Alto) within 2 feet of the proposed excavation area in an area 40 feet long centered on tree #1. This must be installed immediately after pavement has been removed.

**Tree #2**, another coast live oak.

a. Excavation for the basement must not intrude closer than 16 feet from the trunk of tree #2 except at the corner of the stairwell as shown on Sheet T3. No over-excavation into the area 16 feet from the trunk of tree #2 may occur.

This procedure should remove no more than 10% of the root mass of tree #2 and since ISA guidelines allow removal of up to 15% of the roots of a healthy tree, the effects on the tree will be negligible.

b. The wall of the house closest to tree #2 must be removed from the inside of the house as must the foundation on this side.

c. A Type I fence must be installed within 1 foot of planned basement excavation immediately after the wall and the foundation have been removed.

Under no circumstances may equipment travel on the exposed soil closer than 11 feet from the trunk of this tree.

d. It will require removal of two 5 inch diameter branches and one 8 inch diameter branch which are directly above the roof of the existing house to construct the 2nd story.
In addition it will require endweight reduction from a 12 inch diameter branch which is directly above those in order to provide clearance for the second story without causing unnecessary damage to the tree.

e. I recommend wrapping the trunk of this tree to about 20 feet above grade with Type III fencing to protect the trunk of that tree during demolition and construction.

Tree #3
The lodge pole pine (*Pinus contorta murrayana*).

This is a good specimen of this species but is severely crowded by the adjacent redwood tree and should be removed.

**Trees #4 and 5** are Canary Island pines (*Pinus canariensis*) both in excellent health but tree #4 is badly crowded by the adjacent more important coast redwood.

I suggest those two be removed as soon as the project begins.

Tree #6 is a Hollywood juniper (*Juniperus chinensis kaizuka*).

This tree is in excellent health with very interesting structure.

It could be transplanted to other parts of the site but on the other hand could be removed as well.

Tree #7 is a neighbor’s coast live oak at the back property line.

This is a very large tree of 50 inch trunk diameter with a 90 foot canopy. The tree is in excellent health but has been severely overthinned resulting in very long limbs with branches and foliage only at the ends of long limbs.

Nonetheless this is the neighbors’ tree and theirs to care for.

Protection of the portion of the root zone on this property of this tree should be managed by:

a. Remove the existing Algerian ivy by hoeing it out by hand and carrying it away. Pull all roots possible so that they don’t regrow.

   A tractor may not be used to do this job to avoid damage to the roots of tree #7.

b. I suggest hand leveling the soil beneath this tree as needed to prepare a bed for a parking space for the carport.

c. The carport should be built with four corner piers as a foundation.
d. The floor of the carport or garage must be of a pervious material such as a ¾ inch rock laid over the soil surface or if desired a drive-on pervious block material such as Drivable Grass.

**Tree #8**
This very large coast redwood is in excellent condition and it has unusually large trunks i.e., 44 inches and 40 inches DBH.

a. The tree must be protected by a Type I fence installed 15 feet from the trunk on all sides except that adjacent to the existing shed.

b. The existing shed must be dismantled from the inside, preferably by hand or equipment operating on the inside of the building.

As soon as the shed wall is removed closest to the redwood tree the fence must extend 15 feet from the trunk around the side currently occupied by the shed.

**Tree #9 - The southern magnolia street tree.**
This tree has been severely overthinned and is in very weak condition.

I suggest:

a. That it receive 100 gallons of water per month starting this month.

b. Before demolition equipment arrives on site that a Type II fence be installed from between the existing driveway margin and the tree and to 10 feet in the other direction from the tree to occupy an 18 foot long space protecting the root zone in the parking strip from construction activity.

That fence must remain in place until all demolition and construction equipment is gone from the site.

Respectfully submitted,

[Signature]

Barrie D. Coate

BDC/sl

Encl.
Pictures
Assumptions and Limiting Conditions
Drivable Grass Brochure
Site Plan

PREPARED BY: BARRIE D. COATE, CONSULTING ARBORIST OCTOBER 12, 2010
RECOMMENDATION FOR TREE PRESERVATION DURING CONSTRUCTION AT
258 TENNYSON STREET PALO ALTO

Tree #1.

Tree #2.

Tree #3.

Pine #4.

Pine #5.

Juniper #6.

PREPARED BY: BARRIE D. COATE, CONSULTING ARBORIST

OCTOBER 12, 2010
RECOMMENDATION FOR TREE PRESERVATION DURING CONSTRUCTION AT
258 TENNYSON STREET PALO ALTO

Oak #7.

Redwood #8.

Street tree #9.

Date Palm should be removed.

Oak #1, has an included bark site at 5 feet.

A buttress root protrudes into the driveway.
A low branch should be removed from tree #1 for clearance.

Two low branches and some endweight should be removed from tree #2.

The 2 foot deep trench beside the foundation near tree #2 shows no roots in that location.
RECOMMENDATION FOR TREE PRESERVATION DURING CONSTRUCTION AT
258 TENNYSON STREET PALO ALTO

PREPARED BY: BARRIE D. COATE, CONSULTING ARBORIST

OCTOBER 12, 2010
Status Report on Coast Live Oak Tree
by an Independent Certified Arborist

Site: Neighbor's Residence
North of 258 Tennyson
270 Tennyson Avenue
Palo Alto, CA 94301

Prepared For: David Madwed
258 Tennyson Avenue
Palo Alto, CA 94301

Prepared by: Raymond J. Morneau
ISA CA #WE-0132A
ASCA Member

Inspection Date: October 28, 2010
Report Date: October 31, 2010

1.0 Assignment, Introduction, & Summary:

1.1 ASSIGNMENT: I have been retained by Mr. David Madwed, to inspect and report on
the status of one coast live oak tree (*Quercus agrifolia*) on his north neighbor's property
relative to his planned construction project.

1.2 INTRODUCTION: Barrie Coate is Mr. Madwed's Project Arborist and I have reviewed
his October 12th report, including enhanced site plan (Sheet A1.0).

I understand that Messrs. Madwed, Coate, Kummerer (Project Architect), and Dockter (PA Planning Division Arborist) met on site to discuss possible conflicts for this project
considering existing trees – including this oak, #2 on Mr. Coate's report.

1.3 SUMMARY: My visual tree assessment (VTA) finds this oak in good condition, rates
this tree's structural faults as mere minor issues, finds for high likelihood of successful
survival of associated construction impacts.

This oak is receiving such good attention in the planning process that I would predict easy
success avoiding decline during/following construction of adjacent house with basement.
2.0 Coast Live Oak #2: Observations & Discussions:

2.1 This oak has grown about a 24-inch diameter trunk at 3-feet from the property line fence, 59-feet back of curb. Its canopy hangs 25-feet over this project’s property. Oak #2’s height is in the 55- to 60-foot range.

2.2 **Condition**: Overall = 80% (Good)  [Vigor = 75%; Structure = 85%]

2.3 **Good points:**

2.3.1 This prominent oak is a large-scale tree blending into this neighborhood’s portion of the urban forest.

2.3.2 It provides substantial shade, and the concomitant benefits of a large foliage crown (wind attenuation, carbon sequestering, pollution reduction by trapping particulate matter, wildlife habitat, etc.).

2.3.3 No large-size roots were encountered in the exploratory trench.

2.3.4 The proposed house and basement will be located even more distant from this specimen than the existing home.

2.4 **Negative Points:**

2.4.1 It will be a challenge to build, but minimize disruption to this oak’s environment.

2.4.2 The overhead clearance pruning will be the biggest impact, if Mr. Coate’s recommendations to eliminate root zone compaction can be strictly followed.

3.0 Conclusions & Recommendations

Although crown raising will be required for clearance to have the proposed house fit under this tree, it will not be a significant stress. Tree protection measures as described by Mr. Coate should preserve enough of this oak’s environment that it should survive this project with no noticeable change in it’s condition.

Mr. Coate’s recommended tree protection measures appear to improve on many which have become industry standards — including Palo Alto’s *Tree Technical Manual*.

My only additions would be:
a. to suggest written general pruning specifications in line with the ANSI Standards (A300s), supplementing Mr. Coate’s tree-specific specs, and
b. to call for monitoring of root zone moisture during the city-required on-going project monitoring by the Project Arborist [Mr. Coate].

[My additions are not in conflict or variance with Mr. Coate’s report, as I am confident he includes these in practice for his Palo Alto projects, even if sometimes not formally written.]

October 31, 2010          Oak #2 Status Report (2nd opinion): 258 Tennyson, PA
4.0 Appendices

4.1 LITERATURE & AUTHORITIES


Watson, Dr. Gary W. with Dr. Dan Neely. 1995. Tree and Building Sites. International Society of Arboriculture, P. O. Box 3129, Champaign, IL 61826-3129 USA


4.2 ASSUMPTIONS & LIMITING CONDITIONS

Assumptions & Limiting Conditions Accompanying All Reports by Ray Morneau

A This assignment includes no plant material other than the trees specified in the contract or report assignment and reflects their conditions at the time of my inspection.

B The scope requires no laboratory assessment of either the soil or plant tissue. The inspection is limited to visual examination of accessible items without dissection, excavation, other probing, coring or Resistograph™ testing. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the tree or property in question may not arise in the future.

C 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 specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

D This report is specific to the identified client prepared for, as well as the unique identified site, this individual tree(s), and this particular situation. Although some of the principles herein discussed might appear to be applicable to another site, tree, or situation, it is not possible to effectively carry any of these ideas across to a different scenario. Uncategorically, further investigation of the different scene is required.

Ray Morneau, Arborist  ISA Certified Arborist #WE-0132A  650.964.7664

E Due to the fact that trees are living organisms, the individual variability of each specimen in each situation renders guarantees and/or warranties for my services impracticable. However, following the codes of ethics endorsed by my peers and the professional organizations to which I belong, I offer my opinions relying on my best professional judgment and suggesting best management practices for my clients’ trees.

F If the circumstances surrounding this situation turn to a legal forum, then this report’s consultant-author could be brought into legal testimony or court appearances only with a new assignment covered by additional consultant fees.

G Alteration of this report, intentionally or unintentionally, voids the entire report.

H Sketches, photographs, and any other graphics used in this report are intended solely as visual aids. Every attempt is made to limit distortions and to provide graphics realistic enough for the purposes of this report. Nevertheless, if engineering-accuracy is important to any user of this report, then professionals skilled in the particular discipline must be retained to provide that level of detail.

I 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. Arborist cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, planting, 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 risk associated with trees is to eliminate the trees.

4.3 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.

Respectfully submitted,

Raymond J. Morneau
ISA Certified Arborist #WE-0132A
ASCA Member

October 31, 2010  Oak #2 Status Report (2nd opinion): 258 Tennyson, PA
Assessment of coast live oak (*Quercus agrifolia*) specimen #2 to be preserved at
258 Tennyson
Palo Alto, CA

Prepared at the Request of:
Mr. Dave Madwed, Property Owner
258 Tennyson

Site Visit:
Walter Levison
2/8/2011

Report:
Walter Levison
2/8/2011
1.0 Assignment & Background

The author was requested by Mr. David Madwed, owner of 258 Tennyson to independently assess one (1) coast live oak specimen shown as neighbor-owned tree #2 on the Barrie D. Coate arborist report dated October 12, 2010 which was prepared for the 258 Tennyson site plan project. I was charged with determining if proposed residential construction work already approved for the site will cause significant negative impact(s) to the neighbor tree.

The author was further requested to prepare information from this field assessment into a written arborist report format.

Digital images archived by the author and included in the photographs section below show the existing condition of neighbor tree #2 just east of the property line, and an existing residence foundation footing parallel with (and 5 horizontal feet offset from) the east side of the 258 Tennyson property boundary wood fence.

The author did not include tree maps or sketches with this written report, given that the Barrie Coate report covered this detail.

The author reviewed bird's eye view and side cut view sheets dated 10/28/2010 by project architect Chris Kummerer of Maito Park, California. Included in the reduced size set I reviewed were basement details dated 1/11/2011 showing a basement wall excavation cut at approximately 16 horizontal feet out from the trunk of the subject tree.

Note that my images below include views of the property owner's exploratory hand trench work along the existing residence foundation footing which revealed woody roots no larger than ½ inch diameter each. As noted above, this would appear to indicate that there are no significant roots in the uppermost oxygenated few feet of the soil profile at 10 feet from subject trunk edge, unless there happen to be larger roots plunging to 3 or 4 feet depth under the foundation footing (not typical in unirrigated settings).

2.0 Tree Data & Discussion

The subject tree is a coast live oak (Quercus agrifolia), a species which has good relative tolerance of construction pressure such as root severing.

The subject tree measures 28 inches diameter.

Per my assessment today, the tree has fair live twig density and extension, normal buttress root development, and no indications of decay (see images below).

The tree has been lion-tail pruned in the past by the neighbor's contractor which has stripped out live branches from the inner and lower portions of the canopy; a pruning method which permanently destroys a tree's structure and creates lanky limbs of ever-increasing endweight and

1 Matheny and Clark, Trees and Development
risk of failure. This substandard pruning downgrades the structural rating, though I still rate this tree with an overall condition of 65% or "Fair".

The proposed basement excavation cut is +/- 16 feet or more from the subject trunk edge. A cantilever floor will float over soil grade approximately 4 feet closer to the subject tree trunk (i.e. +/- 12 feet from trunk edge), although in my opinion this expensive root preservation design is not necessary since the existing residence has a concrete perimeter grade beam foundation footing at +/- 10 feet out from trunk edge per my rough field calculation (i.e. a root growth impediment). Thus, it would seem that unless for some reason there are woody roots plunging down below the existing foundation into deep, unirrigated soil beneath the existing residence, we could place the basement wall at 10 feet out from the trunk of the subject tree with little or no effect on the tree’s health or structure.

This being said, it is always wise to offset construction by 4 horizontal feet minimum to account for a construction corridor on which scaffolding and other equipment can be erected to allow for exterior finish work to occur. If a chain link tree protection zone fence (TPZ) were to be erected along a north-south axis over the location of the existing residence foundation footing, that fence would be +/- 10 feet min. horizontal distance from subject tree trunk edge, and new foundation construction could then occur at 14 or 15 feet out from trunk with no risk of significant woody root loss or damage to oak #2. Thus, the current design with proposed basement wall excavation at 16 feet out from trunk is very conservative and will have little or no impact on the tree's overall condition.

The proposed second story work appears to peak out at about 25 feet elevation and will likely clear the subject tree with very little clearance pruning required. The Barrie Coate report notes that there will be two 5 inch limbs and one 8 inch limb removed, as well as reduction of a fourth limb, although from my assessment the proposed upper elevation construction is offset to the west enough that I expect only a single branch of 5 inches diameter to be removed to clear the roof and footprint, plus some endweight reduction pruning work along the west edge of the canopy to clear the roof peak. The overall effect of pruning should be negligible if performed by or under supervision of an ISA Certified Arborist, and complies with the current iteration of the ANSI A300 standards for tree care operations (Pruning).

Barrie Coate’s assessment of the City-approved site plan excavation work noted that the effects to the tree will be "negligible". I concur with all of Mr. Coate’s recommendations for protection of oak #2 prior to and during development (e.g. chain link fence, trunk wrapping to 20 feet, etc.).

Per Trees and Development, a Critical Root Zone (CRZ) for a coast live oak of this size and overall condition rating would be 0.75 feet X diameter inches as a horizontal radial distance from trunk to set construction limits. This calculates to 28 X 0.75 = 21 feet. However, in the real world of Bay Area lot dimensions, this distance is practically never achieved during any site plan project, and the author typically reduces CRZ to 12 to 15 feet for large coast live oaks such as our subject neighbor tree.

\(^2\) Matheny, Smiley, and other sources.
\(^3\) The author has never seen any Bay Area site plan project achieve full CRZ as defined by Trees and Development.

Site Address: 258 Tennyson
Walter Levison © 2011 All Rights Reserved

Registered Member, American Society of Consulting Arborists and Member of the International Society of Arboriculture

Phone/Fax (650) 697-0990
The main CRZ issue to consider is whether the majority of the root system will be left intact or will be compromised. In our case, the north, south, and east sides of the root system will remain totally unaffected by 258 Tennyson construction. This allows us to scale down our CRZ accordingly, and the 12 to 15 foot distance will provide enough root zone retention on the 258 Tennyson side that zero decline in tree health or structure is expected.

3.0 Conclusion & Recommendations

My final prognosis for the tree is that construction as proposed (and approved by the City) will cause no significant damage to the tree. Historical poor pruning by the neighbor’s contractor may predispose the tree to early decline, though this would be completely unrelated to construction at 258 Tennyson.

Mr. Barrie Coate’s recommendations for tree protection before and during construction should be implemented and verified by a project arborist who is preferably an ASCA registered consulting arborist (RCA).

The only recommendation item I can add to the list on Mr. Coate’s report is:

"Prior to commencement of demolition, install a soil buffer consisting of chipper truck wood chips 6 inches thick to the entire open soil Tree Protection Zone area between the east property boundary fence and the chain link TPZ fence. The TPZ fence should be erected along a north-south axis at approximately 2 feet out from east property fence during demolition, and 5 feet out from the east property fence immediately after demolition of the residence is completed."

4.0 Consultant’s Qualifications

- PNW-ISA Certified Tree Risk Assessor #593
- ASCA Registered Consulting Arborist #401
- Milbrae Community Preservation Commission (Tree Board) 2001-2006
- ASCA Arboriculture Consulting Academy graduate, class of 2000
- ISA Certified Arborist #WC-3172
- B.A. Environmental Studies/Soil and Water Resources UC Santa Cruz, Santa Cruz, California 1990
- Peace Corps Soil and Water Conservation Extension Agent Chiangmai Province, Thailand 1991-1993
- Associate Consulting Arborist
Barrie D. Coate and Associates
4/99-8/99

- Contract City Arborist to the City of Belmont
  5/99-present

Continued education through attendance of arboriculture lectures and forums sponsored by The American Society of Consulting Arborists, The International Society of Arboriculture (Western Chapter), and various governmental and non-governmental entities.

(My full curriculum vitae is available upon request)

5.0 Bay Area Vendors

| Advanced Tree Care - Rob Weatherill | Cell 650-537-0172 |
| Maguire Tree Care - Paul Maguire    | Cell 650-245-2620 |

(The above sources have been known to provide high-quality arboriculture services in the past. They are not guaranteed or endorsed by the author.)

6.0 Assumptions and Limiting Conditions

Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised and evaluated as through free and clear, under responsible ownership and competent management.

It is assumed that any property is not in violation of any applicable codes, ordinance, statutes, or other government regulations.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.

The consultant/appraiser 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 and contract of engagement.

Unless required by law otherwise, the possession of this report or a copy thereof does not imply right of publication or use for any other purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.

Unless required by law otherwise, neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initiated designation conferred upon the consultant/appraiser as stated in his qualifications.

This report and any values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

Sketches, drawings, and photographs in this report, being intended for visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by engineers, architects, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by Walter Levison to the sufficiency or accuracy of said information.
Unless expressed otherwise:

a. Information contained in this report covers only those items that were examined and reflects the conditions of those items at the time of inspection; and

b. The inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

Loss or alteration of any part of this report invalidates the entire report.

Arborist Disclosure Statement:

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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 risk associated with trees is to eliminate the trees.

7.0 Certification

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

Signature of Consultant
8.0 Photographs

Oak #2 as viewed from the street looking south. The tree overhangs 258 Tennyson with a lopsided canopy and a very significant amount of wood weight.

Close-up of oak #2 limbs overhanging 258 Tennyson. The limb circled above is the 5 inch limb that will be removed during new construction.

Other limbs extending over the property will partially clear the proposed roof, but will probably require endweight reduction pruning to clear the roof peak.
The owner-dug trench along the existing foundation footing shows roots up to no greater than approximately ½ inch diameter each at 9 to 10 horizontal feet west of the trunk edge of oak #2.

I concur with Barrie Coate that impacts to oak #2 from proposed construction per the approved site plan should be "negligible".

From a quick visual inspection viewing the tree from 258 Tennyson, I could see normal flaring buttress roots around the trunk circumference of oak #2.

The tree appears to be normal and healthy from a distant visual inspection.
Oak #2 in the foreground, with the neighbor residence in the background. The original leader stem of this tree is the limb on the right side of the image which overhangs 258 Tennyson, supporting a canopy that is lopsided to the west.

The smaller diameter stem on the left side of the image was likely a limb which eventually climbed in an upward trajectory and became a codominant mainstem.
We are in support of a new home to be built for the family of Kathleen Cheplo and Dave Madwed at 258 Tennyson Ave in Palo Alto.

244 Tennyson

236 Tennyson

234 Tennyson

243 Tennyson

251 Tennyson

265 Tennyson

Editor of Palo Alto Weekly

1828 Bryant

1818 Bryant
I refer all interested parties to on-going or recently completed projects where coast oak trees, diameter equal or greater to 30 in were within 10 feet of basement construction

2021 Webster- (2) 32 in coast live oak less than 10 feet from basement

1736 Waverley- (1) 28 in coast live oak less than 10 feet from basement

1920 Park- (1) 32 in coast live oak 10 feet from basement
Tree Management Experts
Consulting Arborists
3109 Sacramento Street
San Francisco, CA 94115
Member, American Society of Consulting Arborists
Certified Arborists, Certified Tree Risk Assessors

cell/voicemail 415.906.3610    office 415.921.3610    fax 415.921.7711    email RCL3@mindspring.com

Judy Kay
270 Tennyson Ave.
Palo Alto, CA 94301

Project: Evaluation of the oak in the front yard
Date: 7/31/10

ARBORIST REPORT

Assignment

- Evaluate one coast live oak tree in the front garden.
- Review historic documents regarding the house and garden.
- Evaluate tree health and structure.
- Evaluate proposed construction impacts should plans be approved for a new house on the neighboring lot to the west with a basement and two above ground stories.

Background

Judy Kay contacted me on 6/25/10 with concerns over the sale of the property next door at 258 Tennyson Avenue. She stated that the new owners planned to demolish the existing house, excavate a full basement and build two above ground floors. Her concern was over the impacts that this construction would have on a mature coast live oak (*Quercus agrifolia*) located in her front yard, a tree that she had cared for and enjoyed over the last 25 years since purchasing her home.

Judy shared historic documents with me, and related that Morgan Stedman had designed the house, a local architect of note. She said that Morgan and Katheryn built her house in 1948 as their “honeymoon cottage”, and Katheryn had designed the gardens. She shared a copy of Sunset Magazine from December 1951 where 270 Tennyson and its gardens had been featured.

I related to her that I had known Katheryn Stedman after she had tracked me down 20 years ago while I was collecting the tree data for the first City of Palo Alto tree inventory. Mrs. Stedman was the second landscape architect to be licensed in California, a graduate of UC Berkeley, taught Landscape Architecture at Stanford and had contracted with Mr. Eichler to design gardens for 100 of his homes.

Mrs. Stedman told me that she was active in Palo Alto tree preservation in the 1950’s, 60’s and 70’s. She had told me of her involvement in preserving Palo Alto trees; that she had chaired or been involved in various committees that wrote 3 books, and that the Magnolia trees on University Avenue and in the Crescent Park neighborhood were to be cut down until she led a fight to save them. Although out of print, the books are still valuable
resources and many of the Magnolia trees are still providing benefits to the east part of town.

Review of the Sunset Magazine article from 1951 showed several photographs of 270 Tennyson. The left photo on the first page of the article depicts a tree, carport and the house in the background. Although the carport is removed, the footings are still present. The tree in question is the same coast live oak depicted in this image.

Observations

The coast live oak is 28.5 inches diameter. The trunk is located 56 inches away from the property line with 258 Tennyson, and is 47.5 feet from the back of the sidewalk.

The limbs extend over the entire entry courtyard and much of the roof area at 270 Tennyson, and over about half of the lot width and much of the house at 258 Tennyson. The limbs are low in all areas, just above the single story roofline level.

Limb structure is well distributed throughout the tree, and is reasonably balanced. Pruning appears to have been done regularly and professionally in all parts of the tree over many years.

Foliage is evenly distributed throughout all areas of the tree, and leaves are of proper size, shape, color and density. No evidence of disease, dieback or decline was found.

Discussion and Conclusions

Palo Alto Municipal Code identifies this as a Protected Tree, as stated on the City website (typos corrected):

All evergreen Quercus agrifolia, (Coast Live Oak) and deciduous Quercus lobata, (Valley Oak) that are 11.5-inches or greater in diameter (36-inches circumference) measured at 54-inches above natural grade.

This example is 28.5 inches diameter, well in excess of the 11.5-inch diameter threshold for protection.

Upon review of the historic documents and the importance of Mrs. Stedman in Palo Alto tree history, it is my opinion that this further qualifies this tree to be protected as a Heritage Tree:

It possesses distinctive form, size, age, location, and/or historical significance.

Should the owners at 258 Tennyson submit development plans, this tree must be protected from root and limb losses. According to the Tree Technical Manual, part of Palo Alto Municipal Code, the Tree Protection Zone (TPZ) is set as 10 times the diameter as a radius. For this tree, that distance is 23.75 feet radius, a distance of 19 feet from the property line.
It is critical that this TPZ be respected with regard to foundation, basement and utility line excavation, particularly since the tree leans toward 270 Tennyson and could be made a hazard by way of root losses.

Limb losses for a second story would cause the removal of a significant amount of foliage and would result in large limb cuts. The tree would be made imbalanced in the direction of 270 Tennyson, and would be at an increased risk of uprooting failure with growth directed toward the side of imbalance. In addition, a breach in the limb structure will open the canopy to winds, will create opportunity for limb failures, and will increase the likelihood of limb failures.

If at 258 Tennyson this tree were to experience root losses within the TPZ, development potential at 270 Tennyson would be limited. The tree can only experience a limited amount of construction impact without being de facto condemned, and the loss of roots and limbs and injuries inflicted have a cumulative effect.

**Recommendations**

I recommend that the Planning Department consider the Protected Tree status of this tree in the course of considering approval for new construction, should such a permit be requested.

I recommend that this tree be further protected as a Heritage Tree.
Supporting Information

Photograph 1
Assumptions and Limiting Conditions

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3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible. The consultant cannot 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.

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Disclosure Statement

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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.

Certificate 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 20 years.

Signed:  

Date:  7/31/10
ARBORIST MEMORANDUM

Findings

I have reviewed drawings approved by the Planning Department for the demolition and construction of a new house at 258 Tennyson Avenue. These drawings do not show the extent of construction impacts to the coast live oak (Quercus agrifolia) at 270 Tennyson Avenue.

These drawings have been relied upon by the Planning Department for approval of the project, and have been used by the developer to gather support from numerous Arborists. This approval and support are unreliable given that the developer has failed to provide accurate information that is critical to evaluation of tree impacts.

It is my opinion that the drawings on file with Planning are inadequate to properly measure impacts to the coast live oak, and that the actual impacts this tree will experience are very significant. These impacts will damage tree health and safety, will radically alter the limb structure and appearance of the tree, and will significantly reduce the trees useful life.

City code recognizes a tree protective zone (TPZ) of one-foot radius for each diameter inch. This code is based on tree biology and soil functions, and is designed to recognize and respect the resources required to sustain a tree in healthy condition. Construction impacts to trees are to be measured against this standard.

Plan Deficiencies

This tree measures 23.7 inches diameter and should have a TPZ of 23 feet shown on the site plan, thereby providing a proper reference point from which to measure root and soil loss impacts. Rather than 23 feet, the plan illustrates a distance of 16 feet. Construction encroachments are misrepresented as extending minimally into the 16-foot radius line as if that line is the TPZ. A distance of 16 feet is not the TPZ and is not an appropriate measure of construction encroachment. This smaller radius substantially understates the TPZ.
Total surface area within 23-foot TPZ = 1,661 square feet
Total surface area within 16-foot radius = 804 square feet
The approved plans only recognize 48 percent of the TPZ.

As is typical for coast live oaks, the limb structure of this tree extends considerably beyond the TPZ radius. There is no indication on the drawings of the extent of limb structure or what limb structure will need to be removed for the project to proceed. The new building envelope is more than twice as high as the existing house, and construction will require additional limb losses above the roofline. Another significant impact to limb structure will be aerial access for drilling perimeter foundation soldier piers. The equipment and soldier beams necessary for this construction will extend into the limb structure of the tree and will cause significant limb losses.

With a 23-foot TPZ, two additional soldier piers (piles) with cribbing would be required. Without this detail, the soil embankment would need to be laid back and root losses would extend to the property line. This is not shown on the plans.

Following construction of the basement level the cribbing and soldier piers will need to be removed to 3 feet below grade. This process will cause soil excavation to be done to a depth of 3 feet with a minimum of 2 feet of trench width. This is not shown on the plans.

Conclusions

The plans approved by the Planning Department misrepresented the size and extent of this tree. These plans are an inaccurate measure of construction impacts.

Given accurate data to perform an analysis, construction impacts to the tree are significant. These impacts will adversely and irreparably harm this tree through extensive limb, root and soil losses that will damage tree health, safety and appearance.

The Planning Department should revoke the approval of this plan set based on these inaccuracies and require that accurate plans be submitted for proper consideration.
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Certification of Performance

I, Roy C. Leggett, 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.

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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 20 years.

Signed:  

Date: 3/8/11
April 27, 2011

City Council
City of Palo Alto
250 Hamilton Avenue
Palo Alto, CA 94301

Re: 258 Tennyson Ave., Palo Alto, CA
10PLN-00389

Dear Honorable Mayor and City Council Members,

**Background**

I am writing on behalf of David Madwed and Kathleen Cheplo ("Owners") who seek to construct a new two-story single family residence for their family ("Project") on their property commonly known as 258 Tennyson ("Property"). The Owners purchased the Property for its location as well as for the mature heritage trees located on the Property and around the neighborhood. In consult with their Project architect (Chris Kummerer) and Project arborist (Barrie Coate), the Project was designed to respect and protect the heritage trees located on and around the Property, and the Owners propose specific preservation measures with regard to a certain Heritage Oak Tree ("Oak Tree") located at 270 Tennyson, the northern adjacent property, as the root system and canopy cross property lines.

On January 18, 2011, the Owners received the conditional approval ("First Approval") of the Director of Planning and Community Environment ("Director") for their Project because all Individual Review Guidelines ("Guidelines") were met and the Project complied with the R-1 zoning district regulations. The conditions imposed by the Director included specific tree protection measures for the Oak Tree.

The adjacent neighbors, residing at 270 Tennyson ("Appellants") appealed the First Approval, causing the Project to undergo a Director's hearing. The appeal was rejected
on March 24, 2011, when the Director, upon full review of all information on file, and obtained at the public hearing held on March 10, 2011, conditionally approved the Project with an added condition requiring "appropriate equipment [to] be used in a manner that limits impacts to ... limbs and branches," as well as specific pruning conditions along with ground/soil precautionary measures to provide protection during excavation ("Second Approval"). On April 7, 2011, the Appellants appealed the Second Approval to the City Council ("Council"), based upon tree protection concerns for the Oak Tree.

**Issue on Appeal.**
Pursuant to Palo Alto Municipal Code ("P.A.M.C.") Sec. 18.12.110 (d), the issue on appeal is whether the Director's grant of the Independent Review ("IR") application is consistent with the IR Guidelines. As the appeal before you only raises the viability of tree protection measures, the Council is specifically limited to consideration of whether the Director's IR approval (containing certain tree protection measures) complies with the Guidelines. As with any appeal, this appeal will be placed on the consent agenda pursuant to P.A.M.C. Sec. 18.77.075(g), and the Council will have two options:

1. Adoption of the findings and the recommendation of the Director, thus affirming the Director's IR approval for consistency with the IR Guidelines; or

2. Removal of the Director's recommended approval from the consent calendar (requiring 4 votes) and setting a future hearing wherein the Council would make certain findings and take appropriate action to either grant the IR application or deny the IR application.

As with any quasi-judicial decision, the Director's approval of an IR application must be supported by evidence backed up by facts.

The purpose of this letter is to demonstrate that there is more than substantial evidence supported by facts in the record to provide the Council sound reasons to adopt the Director's Second Approval, thus affirming the IR application for the Project. In fact, there appears to be no evidence to support a contrary conclusion.

**Evidence Supported by the Record.**

1. **Survey by Wade Hammond, dated June 21, 2010.** Attached as Exhibit A, please find a copy of the Property survey which clearly indicates the size and location of the Oak Tree in relation to property lines and the proposed Project. This information was relied upon by City staff, the Director and by the City Arborist in the review of the Project application as well as in formulating the specific tree protection conditions associated with the Project. The Survey was also relied upon by Barrie Coate, the Owner's arborist, as well as eleven (11) other arborists consulted by the Owners.
2. Barrie D. Coate and Associates Report entitled “Recommendations for the Tree Preservation During Construction at 258 Tennyson Street, Palo Alto,” dated October 12, 2010. The recommendations of this report will be incorporated into the Project. The report will be attached to the City’s Staff Report.

3. Dave Dockter, Palo Alto Planning Arborist Report. Mr. Dockter’s report of the Project and the Oak Tree related protection measures will be attached to the City’s Staff Report.

4. IR First and Second Approvals. Both the First and Second Approvals, wherein the City staff approved the Project with specific tree protection conditions, will be attached to the City’s Staff Report.

5. Subsequent Arborist Reports. The Owners sought the expertise of and consulted with eleven (11) additional arborists. All eleven (11) reports, attached to the City’s Staff Report, serve to validate and confirm the tree protection measures recommended for the Project, as well as provide detailed analysis indicating that the design and conditions associated with the Project will improve the root system for the Oak Tree and its overall health going forward.

6. Additional Design Considerations and Accommodations. In addition to adopting the Staff’s tree preservation recommendations, the Owners, in consult with their Project architect and their Project arborist, propose additional specific design solutions for the Project to maximize the health and viability of the Oak Tree, as well as to provide peace of mind for the Appellants. These considerations and accommodations are as set forth in Exhibit B, attached.

Other than the Appellants, the Owners have full Project support from the neighborhood (please refer to Exhibit C). The Owners intend to follow the clear tree protection measures recommended by Barrie Coate and City Staff in addition to the additional voluntary measures set out in Exhibit B. The record is clear and substantiated. There are no questions of fact before the City Council. The Project, as conditioned, is in legal compliance with the Guidelines as well as with the R-1 zoning district regulations for development. For all these reasons, we respectfully request that the City Council affirm the Director’s decision and allow the Owners to proceed with their Project, without any further delay.

Please do not hesitate to contact me or my partner, Mindie Romanowsky, should you wish to discuss this matter prior to the Council meeting set for May 9, 2011.
We would welcome your questions or comments. Thank you for your consideration.

Sincerely,

[Signature]
Margaret A. Sloan

Cc: Mindie S. Romanowsky, Esq.
    David Madwed and Kathleen Cheplo
    Jim Baer
    Lee Wieder
    Don Larkin, Esq.
    Curtis Williams
    Amy French
    Jason Nortz
    David Dockter

Attachments:
Exhibit A    Survey by Wade Hammond, dated June 21, 2010
Exhibit B    Special Design Considerations and Accommodations
Exhibit C    Neighborhood Support
Exhibit B
Special Design Considerations and Accommodations

- Dig exploratory trench 25’ long - over 2’ deep in search of roots.
- Provide shoring drawing attempting to design the shoring pre-construction (shoring drawings are not required at the Planning stage of the project - and are often not required at all).
- Revise plans to move basement walls an additional 5’ away from location that was originally acceptable to Dave Dockter (11’-0” was originally proposed and found acceptable).
- Cantilever main floor out within area of Oak Tree (Tree #2) to eliminate perimeter foundation in the root zone.
- Employ costly 'blind side' construction technique to preserve root structure.
- ‘Float’ concrete slab at stairway landing to minimize depth of excavation there (3’-0” of excavation versus originally proposed ± 3'-6” here).
- Diminish size of second floor to be further away from Oak Tree (Tree #2).
- Offer neighbor a $75000 bond and shorten construction time to 8 months.
We are in support of a new home to be built for the family of Kathleen Cheplo and Dave Madwed at 258 Tennyson Ave in Palo Alto.

244 Tennyson

236 Tennyson

234 Tennyson

243 Tennyson

(Molly Efrusy)

251 Tennyson

265 Tennyson

1828 Bryant

1818 Bryant
EXHIBIT C

RESIDENT SIGNATURES OF SUPPORT EXPLANATION:

1828 Bryant: Editor of the Palo Alto Weekly- cannot sign petitions
In support of project.

236 Tennyson: 100 feet away: do not sign petitions.
In support of project.
Mayor Sid Espinoza
Members
Palo Alto City Council

Curtis Williams
Director
Dept. of Planning & the Community Environment

Re: May 7 Agenda: 258 Tennyson Appeal: Deny Removal from Consent Calendar

Honorable Mayor Espinoza, and Council Members:

The purpose of this brief letter is to summarize the more detailed, three attached materials all of which relate to the Appeal of a single issue – tree protection measures, only, under an IR which has received approval on January 18, 2011, March 10, 2011, and March 24, 2011.

1. **Letter from Respondent David Madwed** building a home for his family. David, a physician, is not a speculative developer for profit but a Palo Alto family man relocating his family. As David’s letter well describes the half-dozen substantial changes he has made to his original home plans – all of which were undertaken to respond to concerns of the Appellant with respect to an oak tree located on the property line shared with the Respondent. These planning and construction precautions, incurred at great expense, ensure the safety of the oak tree. David is a fine man, behaving as a fine and responsive neighbor.

2. **July 27 Letter from Sandy Sloan** discussing the appeal issue, and the boundaries for the City Council under a quasi-judicial hearing that requires any decision to be based on consideration of the evidence under consideration. 11 Arborists opine in writing that the construction to be undertaken by Mr. Madwed will not be significantly impact the tree. The City’s Planning Arborist, David Dockter has agreed with these opinions in writing and by his actions.

3. **A simple bound document containing reports from 11 arbotists** who determine that Madwed's plans an precautions protect the tree. There is a summary page as the Table of Contents for the studies so you do not need to read all the reports to understand the power of their conclusions, though the full reports are provided.

My message is simple: Even with a fully admirable Appellant such as Roger Smith and Judy Kay, because there are no questions of fact, for Council to consider, as pointed out by Ms. Sloan, the City Council should affirm the Director's decisions and allow Madwed's project to proceed without any further delay.

Sincerely yours,

James E. Baer
David Madwed and Kathleen Cheplo  
190 Park Ave  Palo Alto, CA  
650-714-5103

My name is Dave Madwed. I have lived in Palo Alto for the past 22 years, or nearly my entire adult life. I am a physician, not a developer. I have two young children, one of whom will be entering kindergarten next year.

I purchased this home site at 258 Tennyson Avenue last August in preparation to build a new home for my family in a quieter and more serene area of Palo Alto. My wife and I searched for five years to find a lot nearly identical to our prior home on Park Blvd where we have lived for eleven years.

With the help of my architect and with the wise input from the city planning department, we came up with a classic and timeless Craftsman style home that fits the Tennyson lot wonderfully. The design has not been objected to by any neighbors, including the project appellant.

Our initial plan was to have a basement with the exterior wall approximately 10 feet from the oak tree in question. Following a site visit with noted local arborist Barrie Coate and city arborist Dave Dokter, the setback of 10 feet was felt to be adequate protection for the tree in question.

I met with Roger Smith and Judy Kay twice to go over my intentions and home plans. We enjoyed an excellent rapport, and found that we shared a common interest in the welfare of the tree as well as Stanford athletics. I understood from our meetings how well Roger and Judy enjoy their reputations as great community citizens- considerate, straightforward, and generous. This is something we had heard many times from other Palo Altans.

After learning of their concerns for the health of the oak tree near our shared property line, we CHANGED our plans to allay their fears and to improve conditions for the tree. In doing so, we submitted a plan that had a much higher standard than had been applied to dozens, perhaps hundreds, of similarly situated oak trees that subsequently received city approvals based on the science of tree health and protection.

1- We moved the basement wall to 16 feet away at its closest point from the earlier ten feet approved by the arborists.
2- We moved the second floor of the home further away from the tree.
3- We re-engineered the first floor so it cantilevers out and does not require foundation excavation. This change was made at considerable cost.
4- We moved the side setback from its current five feet to eight feet, in doing so, allowing more of the root zone to be actually exposed to air and water.
5- We have designed the basement steps to float on a concrete pad, eliminating the need for excavation.
6- We have obtained an additional TEN arborist reports, ALL of which certify that our proposed design and tree protection plan would cause no harm to the oak tree in question. Every bit of scientific literature in the discipline of horticulture supports our plan.
7- We have offered a $75,000 surety bond for the tree protection- never done for residential projects.

My wife and I respect Roger and Judy, and we have honored their genuine concerns for this oak tree. I look forward to being a good neighbor to them as well as the surrounding community. Residents in the Evergreen Park neighborhood would wholeheartedly substantiate this fact.
We ask the City Council to respect our intentions as both honorable and fair, and more to the point, COMPLETELY in line with ALL requirements as clearly laid out in the IR review process and the Municipal Code as it pertains to the standards outlined in the Tree Technical Manual. All or our arborists, including all but one listed in the CANOPY organization website, supports this project and its extensive tree protection measures—far greater than required by any city policy.

Dozens of homes have been built in the last 15 years where the standards for tree protection have not been nearly as vigorous as the measures we have undertaken. If the matter is to be decided by fairness, respect for the expert opinion of the Planning Dept that has reviewed this matter on THREE occasions, the expert opinion of twelve arborists, the Municipal Code and Tree Technical Manual, there is no choice but to deny the appeal for the third time.