Ms. Jyothy Reddy  
Four Eighteen Holdings LLC  
16005 Greenwood Lane,  
Monte Sereno, CA 95030

RE: Response to Peer Review of Arborist’s report.  
16005 Greenwood Lane,  
Monte Sereno, CA 95030

Greetings Ms. Reddy,

SUMMARY
This tree protection and preservation plan is prepared for review by the City of Monte Sereno regarding the proposed development located at 16005 Greenwood Lane which includes developing the raw land by constructing a new single-family residence with a detached accessory structure to include a pool and landscaping. In response to the above referenced peer review report, I respectfully submit the following summary of circumstances.

1. The driveway entrance remains where originally proposed. The portion of driveway nearest the row of Silver Dollar Eucalyptus' #15-24 (Eucalyptus polyanthemos) was relocated 18' southwest of the trees. The trees will be protected by erecting a single contiguous tree protection fence placed at 15' from the base of the trees. See Appendix E.

2. Relocation of the driveway introduces the risk of adverse impacts to Blue Oak #5 (Quercus douglasii) and Valley Oak #6 (Quercus lobata). The trees will be protected by erecting a single contiguous tree protection fence to surround both trees with a radius equal the trees' combined dripline. See Appendix E.

3. Recommended: prune Silver Dollar Eucalyptus #24 to gain vertical and side clearance for the accessory structure.

4. Construction activities pose a risk to Valley Oak #7 and Valley Oak #8. The trees will be protected by erecting a single contiguous tree protection fence to surround both trees with a radius nearest development activities of no less than 10' for tree #7 and 7.5' for tree #8. Extend the fence to the driplines elsewhere. See Appendix E.

5. Coast Live Oak #10 (Quercus agrifolia) and American Persimmon #11 (Diospyros virginiana) do not require tree protection efforts.

6. Silver Dollar Eucalyptus #1-3, Valley Oak #4, Plum #12 (Prunus spp.), and English Walnut #13 (Juglans regia) are still requested for removal, and Valley Oak #14 is now requested for removal.

7. The proposed landscape plants with drip irrigation are suitable for planting near trees.
BACKGROUND

Thank you for the opportunity to assist you with your tree related issue. I met with you on Wednesday, December 11, 2019 at the above referenced address to discuss your plans to develop this same property and the effect of doing so upon existing trees. During our meeting you informed me that you submitted with your development plans an arborist report prepared by Mr. Kevin R. Kiely of Kiely Arborist Services LLC to the City of Monte Sereno, and the city deemed the report inadequate for the purpose of tree protection and preservation. In response, the city provided you with a peer review of Mr. Kiely’s report that was prepared by Mr. Rick Gessner of Monarch Consulting Arborists LLC which stated that Mr. Kiely’s report "...falls short of the standard of care for a pre-development assessment," RE: Peer Review of Arborist’s Report for 16005 Greenwood Lane, dated November 1, 2019. Mr. Gessner offered the following recommendations:

1. Consider relocating the proposed driveway location to minimize tree impacts both on and off the site.
2. Have the project or a [third-party] independent arborist provide development or construction impact ratings and review the relevant plans to make accurate judgements about impacts and mitigation.
3. Prior to site developments, grading or construction provide quantified (specific radii or mitigation) Tree Protection Zone (TPZ) distances and requirement for protection during all phases of development (pre-construction, construction, post construction, and landscape.)
4. Place all tree numbers and protection schemes on the architectural, civil, and landscape plans.
5. Perform an assessment of valley oak #14 using acceptable methodology or provide a report indicating how the tree can safely be retained with appropriate mitigation.
6. Review the landscape plans for compatibility [with] existing trees.
7. All tree maintenance and care shall be performed by a qualified arborist with a C-61/D-49 California Contractors License. Tree maintenance and care shall be specified in writing according to American National Standard for Tree Care Operations: Tree, Shrub and Other Woody Plant Management: Standard Practices parts 1 through 10 and adhere to ANSI Z133.1 safety standards and local regulations. Work shall be performed according to the most recent edition of the ISA Best Management Practices for each subject matter (pruning etc.).

The latest revised set of design plans reviewed by me were drawn by CB of Bassal Architecture which includes the Site Plan-sheet A1.1, dated 1/29/20; Grading and Drainage-sheet C-3 drawn by S.P. of SMP Civil Engineers, date 2/6/20; Landscape Plan-sheet L1.01 drawn by NC of Crump Landscape Architecture, dated 2/24/19. Subsequent to my site inspection, review of the relevant construction plans, and both arborist reports, I report the following.
ASSIGNMENT, LIMITS, PURPOSE AND USE

1. Provide an arborist report in response to Monte Sereno’s peer review report.
2. Review the latest revised set of design plans to ensure there are no conflicts with regionally accepted Arboricultural standards related to the protection and preservation of trees.
3. Provide recommendations for the protection and preservation of all significant trees identified to be at risk of adverse impacts while adhering to Monte Sereno’s Code of Ordinances: Chapter 10-15 TREE PRESERVATION.

- I utilized data in this report from the tree inventories provided by Mr. Kielty and Mr. Gessner and assume that all tree measurements and tree condition ratings in both inventories are true and correct. See Appendices B & C. The tree inventory of record for this report is found in Appendix A.
- I did not excavate an exploratory trench to verify the existence or location of roots anywhere within the proposed development area. The assumptions made by me concerning trenching, grading, or excavation activities associated with root pruning are based upon my above ground visual inspection of the site and trees as well as my experience and knowledge of trees, their growth habits, and their growth rates both above and below ground.

➢ The purpose of this report is to provide a tree protection and preservation plan that is intended to be used solely by you and your agents for submission to the City of Monte Sereno as the arborist report of record for your construction project located at 16005 Greenwood Lane, Monte Sereno, CA 95030. This report is valid for a period of 12 months from its stated date.

OBSERVATIONS AND DISCUSSION

The subject property is mildly sloped undeveloped land with a predominantly southern aspect that is located in the foothill woodlands southwest of Hwy 9. The subject parcel’s vegetation consists largely of grasses with some trees, the vast majority of which are growing along the property lines. Placement of the proposed residence and driveway are both encumbered by geological considerations and fire department requirements. Additionally, a row of Silver Dollar Eucalyptus trees further impedes development of the property.

Review of the revised site plan shows the entrance to the driveway remains where originally proposed. The driveway itself was relocated so that it now sits 18 feet from the row of Eucalyptus trees; a distance which I assert is sufficient to adhere to regionally accepted arboricultural practices related to the protection and preservation of trees. See Significant Trees at Risk of Adverse Impacts, trees #15-24. Relocating the driveway places Blue Oak #5 and Valley Oak #6 at risk of direct impacts and soil compaction. Both trees now require tree protection efforts. Valley Oak #7 and Valley Oak #8 are at risk of direct impacts and root damage as well and should be protected. See Significant Trees at Risk of Adverse Impacts, trees #5-8. I agree with the assessment that Valley Oak #14 is in "irreversible decline" and should be removed. The proposed landscape plants are suitable for planting near trees. See Appendix D.
Significant Trees at Risk of Adverse Impacts

Conditions for the following 4 trees remain unchanged from Kielty report.

**Tree #1**-is a maturing single-stemmed Silver Dollar Eucalyptus and is still requested for removal; criteria for removal A.

**Tree #2**- is a maturing single-stemmed Silver Dollar Eucalyptus and is still requested for removal; criteria for removal A.

**Tree #3**-is a maturing single-stemmed Silver Dollar Eucalyptus and is still requested for removal; criteria for removal A.

**Tree #4**-is a young co-dominant stemmed Valley Oak and is still requested for removal; criteria for removal A.

The following two trees shall be protected by erecting a single contiguous Type I tree protection zone (TPZ) fence to surround both trees with a radius equal the trees' driplines.

**Tree #5**-is a maturing single-stemmed Blue Oak that measures 21.2" in diameter at breast height (DBH) with a crown spread of 35'. The tree appears structurally and physiologically sound and is located such that it is now at risk of adverse impacts by direct impacts and/or by soil compaction. Erect a Type I TPZ with a radius equal the tree’s dripline. See Appendix E & G.

**Tree #6**-is a maturing single-stemmed Valley Oak that measures 15.3" DBH with a crown spread of 35'. The tree is located adjacent to tree #5. The same considerations apply as with tree #5. Erect a Type I TPZ with a radius equal the tree’s dripline. See Appendix E & G.

The following two trees shall be protected by erecting a single contiguous Type I TPZ fence to surround both trees. TPZ radii discussed separately below.

**Tree #7**-is a maturing single-stemmed Valley Oak that measures 19.8" DBH with a crown spread of 40'. The tree appears structurally and physiologically sound and is located west of the proposed pool such that it is at risk of direct impacts and root damage. Erect a Type I TPZ fence with a radius of no less than 10' on the side facing development activities and equal the tree’s dripline elsewhere. Prior to erecting the TPZ fence the tree should be pruned in a manner described as "raise and tuck back crown for TPZ fence clearance." See Appendix E and Pruning Specifications.

**Tree #8**-is a maturing single-stemmed Valley Oak that measures 14.9" DBH with a crown spread of 35'. The tree appears structurally and physiologically sound and is located adjacent to tree #7. The same considerations apply as with tree #7. Erect a Type I TPZ fence with a radius of no less than 7.5' on the side facing development activities and equal the tree’s dripline elsewhere. See Appendix E.

**Tree #9**-is a short-boled (short-trunk) co-dominant stemmed Valley Oak that measures 24.9" DBH that is located within the footprint of the proposed structure and is still requested for removal; criteria for removal A.
Significant trees at risk of impacts continued.

**Conditions for the following 4 trees remain unchanged from Kielty report.**

**Tree #10**-is a maturing short-boled Coast Live Oak that is not at risk, no mitigation required.

**Tree #11**-is a maturing co-dominant stemmed American Persimmon that is not at risk, no mitigation required.

**Tree #12**-is a maturing co-dominant stemmed Plum that is still requested for removal; criteria for removal A.

**Tree #13**-is a maturing single-stemmed English Walnut that is still requested for removal; criteria for removal A.

**Tree #14**-is a senescent single-stemmed Valley Oak that has reached the end of its safe and functional life span. The tree exhibits a live crown ratio of less than 10%. The tree sits along the southern perimeter of the property and is now requested for removal; criteria for removal A.

**The following 10 trees were numbered 1-10 on Mr. Gessner’s tree inventory but now are identified here as trees #15-24. All 10 trees shall be protected by erecting a single contiguous Type I TPZ fence with a radius of no less than 15’.**

**Trees #15-24**-are all maturing Silver Dollar Eucalyptus trees that measure from 18” to 49” DBH with a co-mingled and wide spreading canopy. It is reasonable to assume that soil conditions in this undeveloped lot were relatively undisturbed for many decades which resulted in the Eucalyptus trees developing deep and expansive root systems. The fact that the existing paver driveway was built less than 5’ away from *both* rows of trees and resulted in negligible adverse effect is a testament to their health and vigor. A similar pervious paver installation is proposed for this project, but now at a much greater distance from the trees.

The peer review report recommends tree protection distances equal to 6x or 12x the diameter of each tree’s trunk. It is my opinion that those standards are excessive and unreasonable. I contend that a distance equal to ~5x the trunk diameters is sufficient. Should any roots be encountered they will likely consist of surface feeder roots which are known to continually and naturally regenerate within the top 12” of soil. Pervious paver installations w/ geotextile cloth typically requires no more than approximately 12 inches of grade change so encountering structural roots 18' from the 10 Eucalyptus trees is highly unlikely. See Appendix F.

Irrigating the trees using high pressure injection equipment prior to beginning activities will help to lessen the short-term impact of feeder root loss. Two to four weeks prior to grading, a one-time total application of 1200 gallons of water injected at 10’ to 15’ away from the base of the trees should suffice. To the extent possible, leave the existing tree litter undisturbed. No additional mulch is required in my opinion.

**Trees #16-24** are 35” DBH or less and fall within the 15’ distance standard. Tree #15 is 49” DBH and does not fall within the 15’ (5x) standard. I assert that a 15’ radius for tree #15 is still sufficient to protect the tree’s long-term health. However, digging the gate post holes requires entry into the TPZ so activities must be monitored. Dig the holes by hand with me onsite to monitor. Placement of the holes can be repositioned as well if large structural roots are encountered. See Root Pruning Specifications and Appendix E.
Trees #15-24 continued.
Silver Dollar Eucalyptus #24 exhibits a suppressed growth habit as a result of being over topped by adjacent Silver Dollar Eucalyptus trees. Nearly the entire canopy is over-hanging into the development area where the accessory structure is proposed. I recommend the tree be pruned in a manner described as "raise and tuck back canopy to gain vertical and side clearance for the accessory structure."

Pruning Specifications
All tree pruning activities shall be performed prior to beginning development activities by a qualified arborist with a C-61/D-49 California Contractors License. Tree maintenance and care shall be specified in writing according to American National Standard (ANSI) for Tree Care Operations: Tree, Shrub and Other woody Plant Management: Standard Practices parts 1 through 10, and adhere to ANSI Z133.1 safety standards and local regulations. Work shall be performed according to the most recent edition of the International Society of Arboriculture© Best Management Practices for each subject matter (Tree Pruning etc.) The use of spikes and/or gaffs when climbing is strictly prohibited.

Raise crown (a.k.a. crown lifting)- The selective removal of lower growing or low hanging limbs to gain vertical clearance. Do not remove living stems greater than 4" in diameter without the approval of the project arborist.

- Trees #7 and 24

Tuck back (a.k.a. reduce end-weight)-Cut the offending stem[s] back to a lateral that is ½ the diameter or more of the parent stem and capable of maintaining apical dominance. Remove no more than 25 percent of the living tissue from the offending stem[s]. Remove all existing dead stubs and/or damaged branches per occurrence. Do not cut back into living stems that are 4" or greater in diameter without the approval of the project arborist.

- Trees #7 and 24

Root Pruning Specifications
In the event roots 2" in diameter or greater are encountered, root pruning may prove necessary. Halt excavation activities and contact the project Arborist to advise if not onsite. The following guidelines shall be adhered to with the project Arborist on site to advise work crews.

- Pruning roots 2" in diameter or greater requires the use of a commercial grade 15-amp reciprocating saw with at least 3 new and unused wood cutting blades available while on-site.
- Cleanly sever the root without ripping or tearing the root tissue. It is preferable to cut back to a lateral root, much like when reducing the length of a stem or branch. Battery operated reciprocating saws with used blades will not be allowed.
- A new unused Arborist hand saw will also be allowed i.e. Fanno™ Tri-Edge Blade Hand Saw.
  - Trees #7, 8, and 15-24
Grading, Excavation, and Trenching

- Grading for the paver driveway and excavation for the accessory structure foundation have the potential to encounter feeder roots originating from the row of Silver Dollar Eucalyptus trees #15-24. The potential for encountering roots 2" in diameter or greater in these areas is low.
  - Mitigate short-term effects of feeder root loss with supplemental irrigation: 1200 gallons of water applied using high pressure injection equipment.
- Excavation for the front gate post holes has the potential to encounter roots 2" in diameter or greater originating from Silver Dollar Eucalyptus #15.
  - Dig post holes by hand. I should be onsite to monitor to advise if roots 2" in diameter or greater are encountered.
- Installation of the earth swale could affect feeder roots originating from trees #21-24 but will likely impose negligible adverse effect upon those trees.
  - Mitigated by supplemental irrigation discussed above.

- Should the installation of underground utilities not reviewed by me as of the date of this report be required within the drip line of any protected tree mentioned herein, all trenching shall be done using directional boring, air-spade excavation or by hand taking extreme caution to avoid damage to the root structure.

Recommended Project Arborist On-Site Monitoring and Duties

- Pre-installation meeting with fencing contractor to identify and locate TPZ locations.
  - Trees #5-8, and 15-24
- Construction, grading, excavation, digging, and/or trenching activities where grade changes exceed 4" within the drip line of any significant tree.
  - Trees #7, 8, and 15-24
- Any tree or root pruning activities that were not discussed herein.

CONCLUSION

It is my professional opinion that the opinions and recommendations offered herein are consistent with satisfying the tree protection and preservation requirements as described by Monte Sereno’s Code of Ordinances: Chapter 10-15 TREE PRESERVATION, as well as those issues and recommendations discussed in the referenced peer review report. Furthermore, should the tree protection and preservation recommendations discussed herein be clearly explained to and understood by all personnel responsible for applying the practical aspects of this project, construction activities should impose no long-term adverse effect upon the subject trees; either by overtly damaging roots or any of the above ground portions of the trees, or by soil compaction. No additional post-construction mitigation efforts are required.
RECOMMENDATIONS

1. Prior to beginning development activities, remove trees #1-4, 9, and 12-14; criteria for removal A.
2. Recommended: prune Silver Dollar Eucalyptus #24 in a manner described as "raise and tuck back canopy to gain vertical and side clearance for accessory structure."
3. Prior to beginning development activities, prune Valley Oak #7 in a manner described as "raise and tuck back canopy to gain clearance for TPZ fence."
4. Two to four weeks prior to beginning activities, use high pressure injection equipment to irrigate trees #15-24 with a total of 1200 gallons of water injected along a parallel path 10' to 15' from the base of the trees.
5. Schedule a pre-installation meeting between myself and the fencing contractor to identify and locate TPZ fence locations.
6. Install TPZ fences per specifications described below.
7. Project arborist should monitor all work within the dripline of trees #5-8, and 15-24.
8. Install drip irrigation for landscape plantings near or within the driplines of significant trees located on the subject and adjacent property. Select non-dyed wood mulch to be applied during landscaping activities near trees #15-24.

Type I Tree Protection Zone

- Is a fenced area erected around a tree or group of trees prior to beginning any demolition, grading, excavation, or other construction activities to protect the roots and soil from compaction, and to keep the tree trunk and branches clear from damage by construction activities.
- A typical TPZ consists of a six-foot-high chained link fence that is securely installed in the ground with 2" posts driven 24" below grade to surround the tree[s] with a radius equal to or as close as possible to the drip line. A sign stating, "Tree Protection Zone-No Entry" is placed in clear view on the fence visible from all points of ingress and egress and left in place for the duration of the construction phase.
- Mulch to a depth of six inches is placed within the TPZ to further protect the tree[s] critical root zone and soil (if needed)—do not cover the base of the trunk with the mulch. Storage of construction materials within the TPZ is strictly prohibited, and physical entry is limited to designated personnel (one or two people preferably). If any work is required with the TPZ, all work is to be done by hand with the project arborist present. No self-propelled equipment may enter the TPZ. The contractor is responsible for contacting the project arborist in a timely manner to have the project arborist present for all work performed within the TPZ of significant trees.

TPZ Specifications:

1. Erect a single contiguous 6' tall chain linked fence secured with 2" metal posts driven 24" below grade no closer than 15' from the row of Silver Dollar Eucalyptus #15-24. Attach tree protection zone warning signs visible from all points of ingress and egress.
2. Erect a single contiguous 6' tall chain linked fence secured with 2" metal posts driven 24" below grade with a radius equal the driplines of Blue Oak #5 and Valley Oak #6. Attach tree protection zone warning signs visible from all points of ingress and egress.
3. Erect a single contiguous 6' tall chain linked fence secured with 2" metal posts driven 24" below grade with a 10' radius on the side nearest development for Valley Oak #7 and 7.5' for Valley Oak #8, extend the radius to the dripline of both trees elsewhere. Attach tree protection zone warning signs visible from all points of ingress and egress.
4. Periodic site visits by the project arborist should ensure the tree protection measures discussed herein are maintained throughout the duration of the project.
Qualifications, Assumptions, and Limiting Conditions

Any legal description provided to the consultant is assumed to be correct. Any titles or ownership of properties are assumed to be good and marketable. All property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

All property is presumed to be in conformance with applicable codes, ordinances, statutes, or other regulations.

Care has been taken to obtain information from reliable sources. However, the consultant cannot be responsible for the accuracy of information provided by others.

The consultant shall not be required to give testimony or attend meetings, hearings, conferences, mediations, arbitration, or trials by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.

This report and any appraisal value expressed herein represent the opinion of the consultant, and the consultant’s fee is not contingent upon the reporting of a specified appraisal value, a stipulated result, or the occurrence of a subsequent event.

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

Unless otherwise expressed: a) this report covers only examined items and their condition 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 structural problems or deficiencies of plants or property may not arise in the future.
Certification of Performance

I David A. Laczko, 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 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 I have no personal interest or bias with respect to the parties involved;

That the 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;

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 other subsequent events;

I further certify that I am a Certified Arborist with the International Society of Arboriculture, and that I acknowledge, accept and adhere to the ISA Standards of Professional Practice. I have been involved with the practice of Arboriculture and the care and study of trees since 1994.

David A. Laczko

ISA Certified Arborist PN #1233A
ISA Tree Risk Assessor Qualified
American Society of Consulting Arborists—Member
International Society of Arboriculture—Member

Copyright
©Copyright 2019, Dave Laczko & Associates, LLC. Other than specified exception granted for copies made by the client for the express uses stated in this report, no parts of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, recording, or otherwise without the express, written permission of the author.
## Appendix A: Tree Inventory of Record

### TREE INVENTORY: FOUR EIGHTEEN HOLDINGS LLC

**PROJECT LOCATION: 16005 GREENWOOD LANE**  
MONTE SERENO, CA 95030

<table>
<thead>
<tr>
<th>TREE #</th>
<th>COMMON NAME</th>
<th>GENUS/SPECIES</th>
<th>DBH</th>
<th>CANOPY</th>
<th>CONDITION</th>
<th>SUITABILITY</th>
<th>INTENSITY</th>
<th>TOLERANCE</th>
<th>PRESCRIPTION</th>
<th>TPZ RADIUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>17.2&quot;</td>
<td>40'</td>
<td>45%</td>
<td>Low</td>
<td>1</td>
<td>Moderate</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>2</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>11.1&quot;</td>
<td>25'</td>
<td>40%</td>
<td>Low</td>
<td>1</td>
<td>Moderate</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>3</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>18.1&quot;</td>
<td>15'</td>
<td>45%</td>
<td>Low</td>
<td>1</td>
<td>Moderate</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>Valley Oak</td>
<td><em>Quercus lobata</em></td>
<td>7.2-4.3&quot;</td>
<td>15'</td>
<td>55%</td>
<td>Low</td>
<td>1</td>
<td>Moderate</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>Blue Oak</td>
<td><em>Quercus douglasii</em></td>
<td>21.2&quot;</td>
<td>35'</td>
<td>50%</td>
<td>High</td>
<td>3</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>Dripline</td>
</tr>
<tr>
<td>6</td>
<td>Valley Oak</td>
<td><em>Quercus lobata</em></td>
<td>15.3&quot;</td>
<td>35'</td>
<td>60%</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>Dripline</td>
</tr>
<tr>
<td>7</td>
<td>Valley Oak</td>
<td><em>Quercus lobata</em></td>
<td>19.8&quot;</td>
<td>40'</td>
<td>70%</td>
<td>High</td>
<td>2</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>10 ft.*</td>
</tr>
<tr>
<td>8</td>
<td>Valley Oak</td>
<td><em>Quercus lobata</em></td>
<td>14.9&quot;</td>
<td>35'</td>
<td>65%</td>
<td>High</td>
<td>2</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>7.5 ft.**</td>
</tr>
<tr>
<td>9</td>
<td>Valley Oak</td>
<td><em>Quercus lobata</em></td>
<td>24.9&quot;</td>
<td>35'</td>
<td>60%</td>
<td>Low</td>
<td>1</td>
<td>Moderate</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>10</td>
<td>Coast Live Oak</td>
<td><em>Quercus agrifolia</em></td>
<td>29.5&quot;</td>
<td>35'</td>
<td>45%</td>
<td>High</td>
<td>5</td>
<td>High</td>
<td>Not at risk</td>
<td>NA</td>
</tr>
<tr>
<td>11</td>
<td>American Persimmon</td>
<td><em>Diospyros virginiana</em></td>
<td>10.2-10.5&quot;</td>
<td>30'</td>
<td>55%</td>
<td>High</td>
<td>5</td>
<td>Good</td>
<td>Not at risk</td>
<td>NA</td>
</tr>
<tr>
<td>12</td>
<td>Plum</td>
<td><em>Prunus spp.</em></td>
<td>6-6.4&quot;</td>
<td>15'</td>
<td>40%</td>
<td>Low</td>
<td>5</td>
<td>NA</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>13</td>
<td>English Walnut</td>
<td><em>Juglans regia</em></td>
<td>11.3&quot;</td>
<td>20'</td>
<td>45%</td>
<td>Low</td>
<td>5</td>
<td>NA</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>14</td>
<td>Valley Oak</td>
<td><em>Quercus lobata</em></td>
<td>47.3&quot;</td>
<td>60'</td>
<td>40%</td>
<td>Low</td>
<td>5</td>
<td>Moderate</td>
<td>Remove</td>
<td>NA</td>
</tr>
<tr>
<td>15</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>49&quot;</td>
<td>Combined</td>
<td>Good</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>16</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>25&quot;</td>
<td>—</td>
<td>Fair</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>17</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>24&quot;</td>
<td>—</td>
<td>Good</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>18</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>34.5&quot;</td>
<td>—</td>
<td>Good</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>19</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>18&quot;</td>
<td>—</td>
<td>Fair</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>20</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>19&quot;</td>
<td>—</td>
<td>Fair</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>21</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>33&quot;</td>
<td>—</td>
<td>Fair</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>22</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>35&quot;</td>
<td>—</td>
<td>Good</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>23</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>31&quot;</td>
<td>—</td>
<td>Fair</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
<tr>
<td>24</td>
<td>Silver Dollar Gum</td>
<td><em>Eucalyptus polyanthemos</em></td>
<td>31&quot;</td>
<td>—</td>
<td>Good</td>
<td>High</td>
<td>4</td>
<td>Moderate</td>
<td>Erect Type I TPZ</td>
<td>15 feet</td>
</tr>
</tbody>
</table>

* 10 feet radius on side facing development activities, radius extended to dripline elsewhere.  
** 7.5 feet radius on side facing development activities, radius extended to dripline elsewhere.  
1 Tree numbers 15-24 are transposed from trees #1-10 from tree inventory provided by Mr. Gesner.

**DBH**-Provided by Mr. Kietly and Mr. Gesner and presumed to be correct.  
**CANOPY**-Provided by Mr. Kietly and presumed to be correct.  
**CONDITION**-Provided by Mr. Kietly and presumed to be correct.  
**SUITABILITY**-Determining a particular specimen's intrinsic value to be preserved based upon structural and physiological well-being, tolerance to withstand impacts, tree age, location, and expected longevity, species invasiveness (High, Moderate, Low).  
**INTENSITY**-Determining the level of adverse impact upon a particular specimen (1 thru 5: 1 = high, 5 = Low).

**TOLERANCE**-Determining the relative tolerance for a particular specimen's ability to withstand adverse impacts (Good, Moderate, Poor).  
**PRESCRIPTION**-fate of a particular specimen: Protect and preserve, monitor activities, or remove.  

Tree Replacement Values (will vary based upon vendor):  
15 gallon = $360.00; 24" boxed = $750.00; 36" boxed = $1550.00
# Appendix B: Kiely Tree Inventory

## Survey table of trees

<table>
<thead>
<tr>
<th>Tree #</th>
<th>Remove</th>
<th>Species</th>
<th>DBH</th>
<th>Con</th>
<th>HT/SP</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>Silver dollar (Eucalyptus polyanthemos)</td>
<td>17.2</td>
<td>45</td>
<td>45/40</td>
<td>Fair vigor, poor form, heavy to south, suppressed</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>Silver dollar (Eucalyptus polyanthemos)</td>
<td>11.1</td>
<td>40</td>
<td>35/25</td>
<td>Poor-fair vigor, poor form, heavy to south, suppressed</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td>Silver dollar (Eucalyptus polyanthemos)</td>
<td>18.1</td>
<td>45</td>
<td>20/15</td>
<td>Poor-fair vigor, poor form, heavy to south,</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
<td>Valley oak (Quercus lobata)</td>
<td>7.2-4.3</td>
<td>55</td>
<td>20/15</td>
<td>Good vigor, fair form, broken limb.</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Blue oak (Quercus douglasii)</td>
<td>21.2</td>
<td>50</td>
<td>25/35</td>
<td>Good vigor, poor form, heavy to south, suppressed</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Valley oak (Quercus lobata)</td>
<td>15.3</td>
<td>60</td>
<td>20/35</td>
<td>Good vigor, fair form, heavy to south, suppressed</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Valley oak (Quercus lobata)</td>
<td>19.8</td>
<td>70</td>
<td>35/40</td>
<td>Good vigor, fair form, heavy to south, suppressed</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Valley oak (Quercus lobata)</td>
<td>14.9</td>
<td>65</td>
<td>40/35</td>
<td>Good vigor, fair form, heavy to south, suppressed</td>
</tr>
<tr>
<td>9</td>
<td>X</td>
<td>Valley oak (Quercus lobata)</td>
<td>24.9</td>
<td>60</td>
<td>30/35</td>
<td>Good vigor, fair form, heavy to south, suppressed</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Coast live oak (Quercus agrifolia)</td>
<td>29.5</td>
<td>45</td>
<td>30/35</td>
<td>Good vigor, poor form, poor crotches at 2 feet</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Persimmon (Diospyros virginiana)</td>
<td>10.2-10.5</td>
<td>55</td>
<td>25/30</td>
<td>Good vigor, fair form, heavy to south, suppressed</td>
</tr>
<tr>
<td>12</td>
<td>X</td>
<td>Plum (Prunus spp)</td>
<td>6-6.4</td>
<td>40</td>
<td>15/15</td>
<td>Good vigor, poor form, heavy to south, suppressed</td>
</tr>
<tr>
<td>13</td>
<td>X</td>
<td>English walnut (Juglans regia)</td>
<td>11.3</td>
<td>45</td>
<td>15/20</td>
<td>Poor-fair vigor, fair form, in decline.</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Valley oak (Quercus lobata)</td>
<td>47.3</td>
<td>40</td>
<td>50/60</td>
<td>Poor vigor, poor form, heavy to south, suppressed</td>
</tr>
</tbody>
</table>
Appendix A: Missing Eucalyptus Tree Table

The trees are listed from the beginning of the driveway moving toward the house.

Table 1: Adjacent Tree Table

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>#</th>
<th>Trunk Diameter (in.)</th>
<th>Health</th>
<th>Structure</th>
<th>Form</th>
<th>Condition</th>
<th>6 x DBH Radius</th>
<th>12 x DBH Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>1</td>
<td>49</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>24.5</td>
<td>49</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>2</td>
<td>25</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>12.5</td>
<td>25</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>3</td>
<td>24</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>4</td>
<td>34.5</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>17.25</td>
<td>34.5</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>5</td>
<td>18</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Fair</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>6</td>
<td>7, 13, 12.5, 19 below bifurcation</td>
<td>Fair</td>
<td>Poor</td>
<td>Poor</td>
<td>Fair</td>
<td>9.5</td>
<td>19</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>7</td>
<td>33</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>16.5</td>
<td>33</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>8</td>
<td>35</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>17.5</td>
<td>35</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>9</td>
<td>31</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Fair</td>
<td>15.5</td>
<td>31</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>10</td>
<td>31</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>15.5</td>
<td>31</td>
</tr>
</tbody>
</table>
Appendix D: Proposed Plant Palette Legend
Plants and trees that require light to moderate irrigation are acceptable choices when planted near or within a tree’s dripline. Water should be applied using drip irrigation apparatus.

### PROPOSED PLANT PALETTE

#### TREES

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>ABBREVIATION</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>QTY</th>
<th>CONTAINER SIZE</th>
<th>WATER USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE PAL</td>
<td>ACER PALMATUM SANGOKAWA</td>
<td>CORAL BARK JAPANESE MAPLE</td>
<td>4</td>
<td>24&quot; BOX</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>ARB MAR</td>
<td>ARBUTUS ‘MARINA’ (FRUITS)</td>
<td>MARINA STRAWBERRY TREE</td>
<td>6</td>
<td>24&quot; BOX</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>MAG ORA</td>
<td>MAGNOLIA GRANDIFLORA LITTLE GEM</td>
<td>LITTLE GEM MAGNOLIA</td>
<td>6</td>
<td>24&quot; BOX</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>QUE AGM</td>
<td>QUERCUS VIRGINIANA</td>
<td>SOUTHERN LIVE OAK</td>
<td>3</td>
<td>24&quot; BOX</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>ORCHARD</td>
<td>ORCHARD TREE TBD</td>
<td>BY OWNER</td>
<td>20</td>
<td>15 GALLON</td>
<td>L</td>
<td></td>
</tr>
</tbody>
</table>

#### SHRUBS

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>QTY</th>
<th>CONTAINER SIZE</th>
<th>WATER USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAVE NOVA</td>
<td>AGAVE NOVA</td>
<td>PLANTED NEAR TREES #15, 5, AND 7</td>
<td>4</td>
<td>5 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>BACHMANN PILLAR TWIN PEAKS</td>
<td>DWARF GOOSE BUSH</td>
<td>PLANTED NEAR TREES #15-21, 5-7</td>
<td>91</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>CAMELLIA JUULIA</td>
<td>BERKELEY ROSE</td>
<td>PLANTED NEAR TREE #7</td>
<td>4</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>CROTON GLORIOSUS FORSYTHIA</td>
<td>POINSETTA</td>
<td>PLANTED NEAR TREES #15, 5, AND 7-8</td>
<td>39</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>DIETERS' GRANDIFLORA</td>
<td>FORSYTHIA</td>
<td>LILAC</td>
<td>16</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>HETEROMELES ARGUTIFOLIA</td>
<td>TOHON</td>
<td>PLANTED NEAR TREES #7</td>
<td>8</td>
<td>5 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>LAUREL LAVANDULA ANGUSTIFOLIA 'HOODST</td>
<td>DWARF ENGLISH LAVENDER</td>
<td>PLANTED NEAR TREES #15, 5, AND 7-8</td>
<td>62</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>LOMANDRA LONDON FOLIO BREEZE</td>
<td>DWARF MATTHIES</td>
<td>PLANTED NEAR TREES #15, 5, AND 7-8</td>
<td>56</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>LOTUS BERTHELOTE</td>
<td>PARROT'S BEAK</td>
<td>PLANTED NEAR TREES #15, 5, AND 7-8</td>
<td>8</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>MAJUNINGA RUGOSA</td>
<td>DEER GRASS</td>
<td>PLANTED NEAR TREE #7</td>
<td>34</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>DOLYSTICHUM HINUM</td>
<td>WESTERN SWORD FERN</td>
<td>PLANTED NEAR TREES #7-8</td>
<td>28</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>PRINSA CAROLINA</td>
<td>CAROLINA CHERRY LABEL</td>
<td>PLANTED NEAR TREES #18-24 AND PROP. LINES</td>
<td>20</td>
<td>5 GALLON</td>
<td>M</td>
</tr>
<tr>
<td>RHAPHIOLEPIS IDA CLARA</td>
<td>WHITE CHINESE HAWTHORN</td>
<td>PLANTED NEAR TREES #15-19</td>
<td>25</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>TRACHY LIBEREA</td>
<td>GERMANIKA</td>
<td>PLANTED NEAR TREES #15, 5, AND 7</td>
<td>25</td>
<td>1 GALLON</td>
<td>L</td>
</tr>
<tr>
<td>THIBOUCHA URVILLE</td>
<td>PRINCESS FLOWER</td>
<td>PLANTED NEAR TREES #15, 5, AND 7</td>
<td>4</td>
<td>5 GALLON</td>
<td>L</td>
</tr>
</tbody>
</table>
Appendix F: Cross-section of typical pervious paver geotextile installation

Geotextile cut flush with top of pavers

Cast in place concrete curb with polymer or mortar adhered paver on top.

2 x #4 Rebar

Min 2"

Surface Water Flows through the No. 8, 89 or 9 stone jointing material between the pavers

Belgard Permeable Pavers
2 3/8'(60mm) thick minimum

Bedding Layer,
2" ASTM No. 8 Stone

Base Layer, Minimum
6" ASTM No. 2 Stone

Geotextile Filtration Fabric on bottom and sides of open graded base, as required.

Subgrade. Prepare according to recommendations in geotechnical report.

Base extends beyond curb to provide working platform for installation.

Min 24"

HIGH WATER TABLE
Appendix G: TPZ Map

Type I Tree Protection Zone

TPZ's are erected to protect a tree above and below ground from development activities. They are erected prior to beginning construction activities then left in place until the final landscaped phase.

Install a 6 feet tall chained link fence using 2 inch diameter posts secured 24" below grade. Surround the whole tree.

TPZ signs visible from all points of ingress and egress. Add 6 inches of mulch, do not bury the base of the tree.
Appendix H: Photographs
H1: Silver Dollar Eucalyptus trees #15-24.

Erect single contiguous Type I TPZ with a radius of no less than 15 ft. See Appendix E.
H2: Valley Oak #4, Blue Oak #5, Valley Oak #6, Valley Oak #14.

Erect Type I TPZ equal the combined driplines for trees #5 and 6. See Appendix E. Remove #4 & 14.
H3: Valley Oak #7 and Valley Oak #8. Erect single contiguous Type I TPZ to surround both trees. See below.

Tree #7 recommend 10 ft. TPZ radius on side facing development activities extended to edge of dripline elsewhere. Tree #8 recommend 7.5 ft. radius on side facing development activities extended to edge of dripline elsewhere. See Appendix E.
H4: Valley Oak #14. Tree exhibits a live crown ratio of less than 10% and is in "irreversible decline."

Request for removal; criteria for removal A.