

San Mateo County Board of Supervisors Meeting

Owner/Applicant:

Attachment:

File Numbers:

Applicant's Appeal

July 5, 2017

San Mateo County Board of Supervisors
400 County Center
Redwood City, CA 94063

Dear San Mateo County Planning Department and Staff, Planning Commission and County Board of Supervisors,

Your reversal of the Planning Commission's decision to deny our application (PLN2016-00226) is humbly requested.

Proposal:

The applicant proposes to subdivide an existing legal 23,641 sq. ft. residential parcel into three (3) residential lots, with Lot 1 being 7,911 sq. ft., Lot 2 being 7,865 sq. ft., and Lot 3 being 7,865 square feet...

At the Planning Commission Hearing on 6/28/2017 we were denied our application for a Minor Subdivision, based on Section 7013.3.b.(3) of the Subdivision Regulations, finding *"That the site is not physically suited for the type of development;"*. We wish this decision to be reversed for the following reasons.

- 1) **Size: 23,641 sq. ft.** Existing Zoning: R-1/S-72 (Single-Family Residential/5,000 sq. ft. minimum parcel size)
 - a) Our proposed lots are considerably larger than the minimums and larger than the average lot in that neighborhood
- 2) **General Plan Designation:** Medium Density Residential (6.1 to 8.7 dwelling units per acre) Existing Land Use: Single-Family Residence
 - a) We are proposing three lots in just over a half acre
- 3) **Water Service:** California Water Service Company
- 4) **Sanitary Service:** West Bay Sanitary District
- 5) **Flood Zone:** FEMA Flood Zone C (area of minimal flooding); Community Panel No. 06081C0313E; Effective date: October 16, 2012
- 6) **Environmental Evaluation:** Categorically Exempt CEQA Section 15315 (Class 15) Minor Land Division.
- 7) **Local Housing Needs:** Our county and the city of Menlo Park have a severe need for housing. This type of project should be the simplest and least resistive way to do that. Almost no one wants Condos, Townhomes or new Apartment buildings next to them. We are proposing to create 3 residential lots considerably larger than the minimum required in this zone. All in an residential area consisting of single family homes.
- 8) **Staff Recommendation:**
 - a) Approve the Minor Subdivision and Street Naming, County File No. PLN 2016-00226.

- b) That the Planning Commission approve the Minor Subdivision, and Street Naming, County File Number PLN 2016-00226, by making the required findings and adopting the recommended conditions of approval listed in Attachment
- c) These were both cut and paste from the original staff report which will now have to follow the PC decision.

9) Trees: The major concern is over one fair vigor/fair form oak tree. The property has 33 live trees of various sizes (four additional trees that are deceased). This number is considerably higher than any of the neighboring properties, and under the proposed two-for-one replacement scheme, the subdivision proposes a net *increase* in the number of trees to nearly 40. The Planning Department staff report contains the results from nearly a year of work from our arborist and the county's consulting arborist and numerous meetings with the neighbors to create this comprehensive plan.

- a) 11 Oaks
- b) 5 Redwoods
- c) Various non-native species make up the balance.
- d) We are proposing to remove two oak trees for the installation of a driveway, including one oak in poor (heavily leaning) form and bad health
 - i) These will be replaced by county recommended two, 48" box trees for each tree that is to be removed.
- e) We also have an extensive tree protection and supervision plan for all of the trees to remain with a multi year tree life guarantee with replacement as per the initial staff report

10) Neighbor/Community Outreach and results. This is another significant disappointment from the Planning Commission decision to deny our application. We have held several meetings with the neighbors to get input and find common ground since prior to our purchase of the property and have made exceptional progress with many of the neighbors, specifically as follows:

- a) **General Concerns of all neighbors** who attended meetings in the beginning.
 - i) **Neighbors object to a four-lot subdivision** as proposed by a previous owner of our parcel
 - (1) Result **we reduced to three lots** and designed accordingly
 - ii) **Neighbors will not allow access** from Crocus Ct or Harrison Way.
 - (1) Result **we prepared two options** for access to our property, driveway along left side and driveway along the right side.
 - (2) **Neighbors selected** the current location in drawing.
 - iii) **Save as many trees as possible.**
 - (1) We did four things immediately
 - (a) Met with the fire protection district to reduce the size and impact of the private roadway to protect additional trees.
 - (b) Had our arborist create a comprehensive tree protection plan for the trees we would be working near.
 - (c) We solicited estimates to transplant the oak tree that would be in the way, estimate was for \$25,000 and we were willing to do it.

(d) We offered to plant trees on either side of fence to maintain screening and even more than the county would require.

(i) Unfortunately the neighbors declined this offer.

b) **Individual Concerns of Neighbors** and results post ZHO, ended up in three categories:

i) **Concerned about protecting redwoods** bordering their properties on Harrison Way. Diane Gosney, Kelly Holzrichter, and Keri Nicholas

(1) Our actions to protect these redwoods:

(a) Revised the location and installation methods for storm drains and sanitary sewer to prevent root damage

(b) We also moved out setbacks along the area where the trees are to keep future development away from root systems. Increased side setbacks to prohibit future home construction in areas that could impact that

(2) Responses from neighbors

(a) 2 signed letters (Diane Gosney and Kelly Holzrichter) now in support of our development

(b) 1 satisfied with the result (Keri Nicholas) but did not provide a signed letter in support. Also did not attend PC hearing either way.

ii) **Concerned about water runoff** from development onto their property, Greg Faris and Leah Rogers

(1) Action by us

(a) Re-designed stormwater system to add a berm in addition to initially proposed measures required by county code

(2) Response from neighbors

(a) Despite their statement to the Zoning Hearing Officer that this was their main concern, and our willingness to resolve it, they refused to come out in support of our project

(b) They also came to speak at the PC meeting bringing up additional topics not having to do with a minor subdivision tentative map submittal and were ultimately successful in confusing the PC into denying our project.

iii) **Concerned about the oak trees** along the border of Crocus Ct, Lynne McClure and Brian Schmidt

(1) Action by us

(a) Proposed access to properties from Crocus Ct which would save the oak tree in question.

(b) Offer to plant several new trees on Crocus Ct and our new development to ensure screening

(c) Engaged our arborist to create a more comprehensive plan to protect trees to remain along Crocus Ct

- (d) Accepted Zoning Hearing Officer's proposal of peer review of our arborists report by a county-retained consulting arborist; accepted additional protective and reparative measures
- (2) Response from neighbors
 - (a) Refused to discuss any access from Crocus Ct
 - (b) Objected to planting of new trees on the Crocus Ct or adjacent parcels
 - (c) Questioned our licenses arborist's knowledge and credentials, rejecting the validity of his report
 - (d) Rejected county staff and consultant's plan to increase net tree count

In conclusion, we have communicated with the neighbors numerous times in person, by phone and by email. We have made significant progress with many of them. We have also followed all county rules, codes, fire department requirements, public works, consulting arborists recommendations and complied with all suggestions and recommendations made by staff. I am confident that given an opportunity to present this project to the Board of Supervisors, it would be evident based on the history, facts presented, research provided, community outreach and size and location of this property we would be immediately approved and the denial of our application would be reversed. The only thing that could make this more obvious would be a site visit.

Your reversal of the Planning Commission's decision is humbly requested.

Dave Bragg
SVRV, LLC
SVRV Land, LLC

County of San Mateo
Planning and Building Department

ALTERNATIVE RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2016-00226 Hearing Date: September 12, 2017

Prepared By: Dave Holbrook
Project Planner

For Adoption By: Board of Supervisors

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the project is categorically exempt, pursuant to the California Environmental Quality Act (CEQA) Guidelines, Section 15315 (Class 15), related to minor division of land (into four or fewer parcels) in urban areas on slopes less than 20%. The project is in an urban area and the site has an average slope of 2.6%.

Regarding the Subdivision, Find:

2. That this tentative map, together with the provisions for its design and improvement, is consistent with the San Mateo County General Plan, as described in the staff report under Section B.2.
3. That the site is physically suitable for the type and proposed density of development. The existing four oak trees on the parcel, as they are affecting by construction of the new private roadway, will be preserved. The two oak trees proposed for removal (due to the roadway' location) will be replaced by 24" boxed oak trees. The redwood trees in the rear of the parcel (as affected by the installation of drainage and sanitary sewer lines, will be preserved. All such preservation methods and tree replacements will occur pursuant to the standards and oversight of a licensed arborist as specified in the conditions pf approval. The R-1/S-72 Zoning District requires a minimum of 5,000 sq. ft. parcel size. The proposed subdivision will result in three (3) lots measuring 5,000+ sq. ft. parcel size, thus complying with the criteria for the Zoning District. The applicant must confirm that sewer and water connections for all parcels are available prior to having the tentative map finalized and recorded. Lots 1, 2, and 3 can be accessed from a new private road: "Cardinal Court."

COUNTY OF SAN MATEO PLANNING AND BUILDING

455 County Center, 2nd
Floor
Redwood City, CA 94063
650-599-7310 T
www.planning.smcgov.org

July 10, 2017

Dave Bragg
Silicon Valley Real Ventures, LLC
P.O. Box 2263
Menlo Park, CA 94026

Dear Mr. Bragg:

Subject: **LETTER OF DECISION**
File No.: PLN 2016-00226
Location: 2050 Santa Cruz Ave, Menlo Park
Assessor's Parcel No.: 074-091-620

On June 28, 2017 the San Mateo County Planning Commission considered a Minor Subdivision, pursuant to Section 7010 of the San Mateo County Subdivision Regulations, to subdivide a 23,641 sq. ft. parcel into three (3) parcels and the assignment of the name "Cardinal Court" to the new private street. This case was remanded, without decision, from the Zoning Hearing Officer.

Based on information provided by staff and evidence presented at the hearing, the Planning Commission denied the Minor Subdivision and Street Naming, County File No. PLN 2016-00226 based on the following Finding of Denial, pursuant to the San Mateo County Subdivision Regulations Section 7013.3.b.:

The proposed site was considered not physically suitable for the proposed density of development. The proposed subdivision of the subject parcel – whose physical constraints include several significant trees (including oaks) - into three lots represents a density of development that: 1) puts at risk the preservation and survival of four oak trees located within a narrow area between the southerly property line (adjacent to Crocus Court) and the proposed roadway, and 2) results in the removal of two oak trees (including an otherwise healthy significant sized Coast Live Oak) located within the path of the proposed roadway. The potential to either reduce the project density (e.g. to a 2-lot subdivision) or to otherwise relocate/redesign the proposed roadway could either eliminate or reduce the risk to these and other trees.

Any interested party aggrieved by the determination of the Planning Commission has the right of appeal to the Board of Supervisors within ten (10) business days from such date of determination. The appeal period for this matter will end at **5:00 p.m. on July 13, 2017**.

Please direct any questions regarding this matter to Senior Project Planner Dave Holbrook at 650-363-1837 or Dholbrook@smcgov.org.



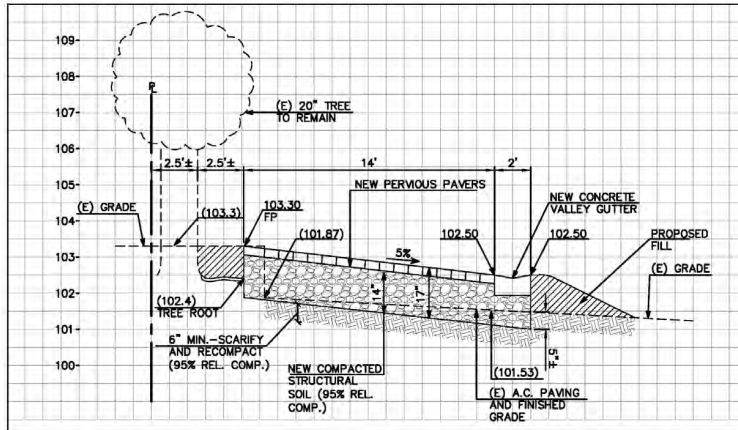
ATTACHMENT E

Sincerely,



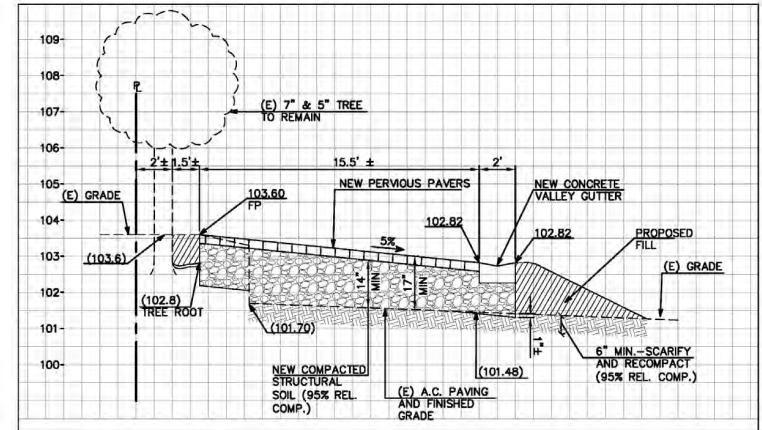
Janneth Lujan
Planning Commission Secretary

cc: Department of Public Works
Planning Director, City of Menlo Park
LAFCO
Menlo Park Fire Department
California Water Service Co.
West Bay Sanitary District
County Assessor



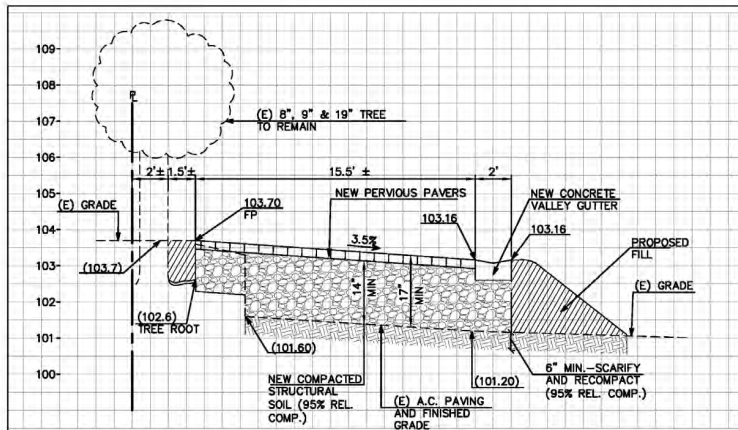
A PROPOSED ROADWAY SECTION AT TREE #1

SCALE: HORZ: 1"= 4' VERTICAL: 1"= 2'
NOTE: EXISTING ELEVATIONS SHOWN IN PARENTHESIS



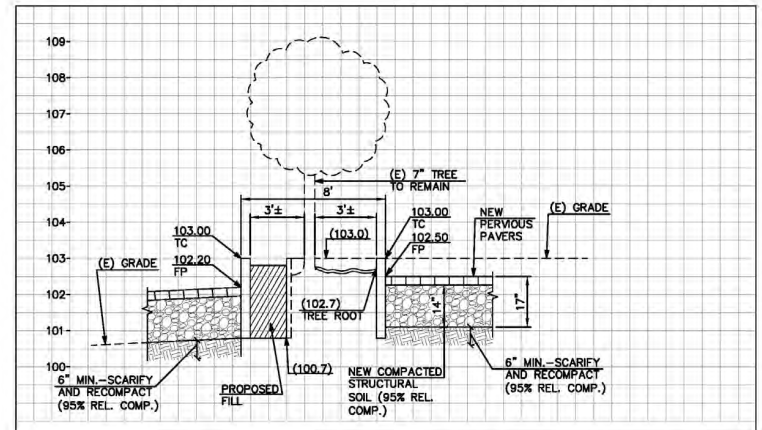
B PROPOSED ROADWAY SECTION AT TREE #26

SCALE: HORZ: 1"= 4' VERTICAL: 1"= 2'
NOTE: EXISTING ELEVATIONS SHOWN IN PARENTHESIS



C PROPOSED ROADWAY SECTION AT TREE #2

SCALE: HORZ: 1"= 4' VERTICAL: 1"= 2'
NOTE: EXISTING ELEVATIONS SHOWN IN PARENTHESIS



D PROPOSED ROADWAY SECTION AT TREE #27

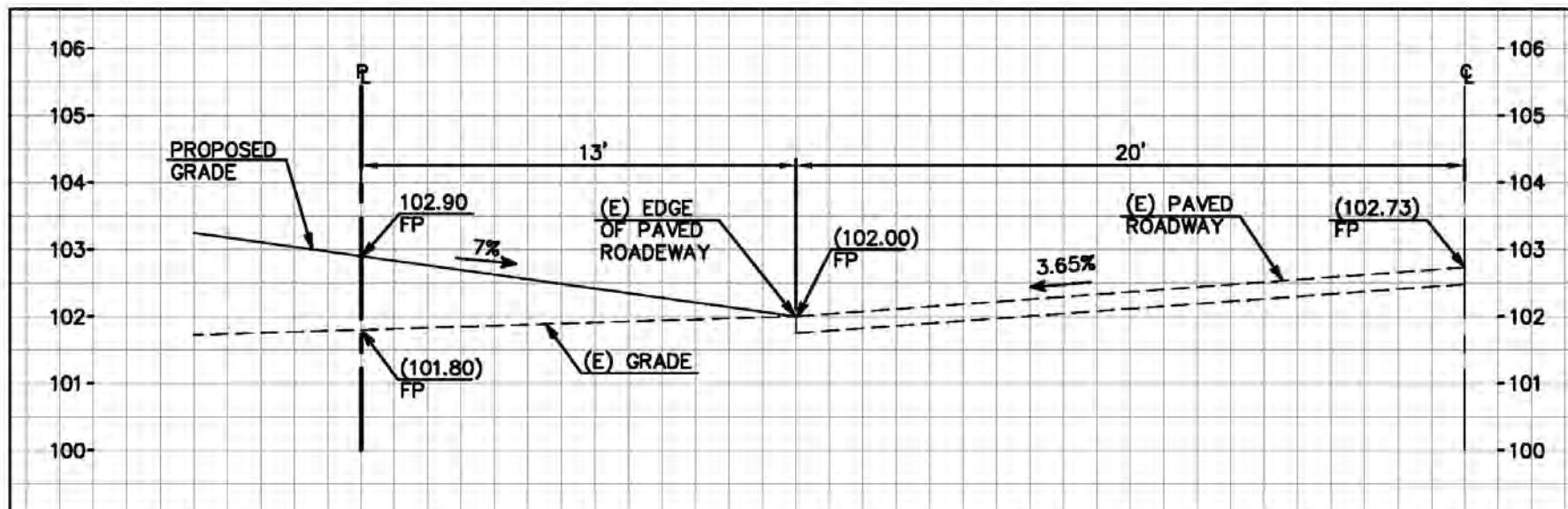
SCALE: HORZ: 1"= 4' VERTICAL: 1"= 2'
NOTE: EXISTING ELEVATIONS SHOWN IN PARENTHESIS

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E

CENTERLINE DRIVEWAY SECTION AT ENTRY

SCALE: HORZ: 1" = 4' VERTICAL: 1" = 2'

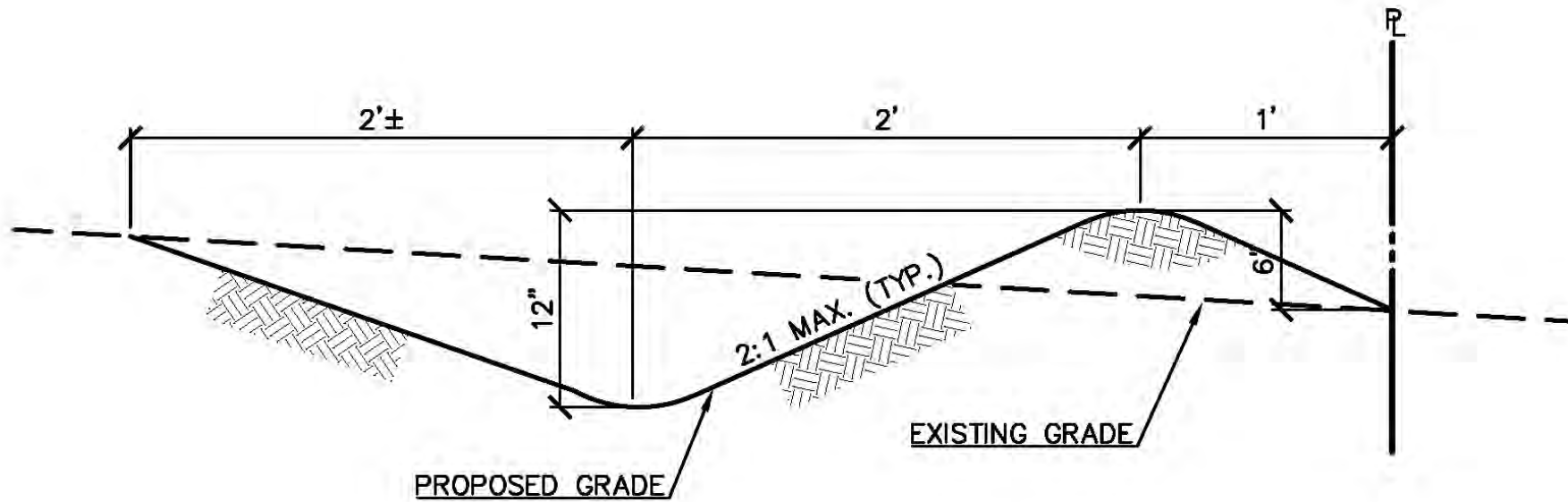
NOTE: EXISTING ELEVATIONS SHOWN IN PARENTHESIS

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Attachment:

File Numbers:



BERM DETAIL

NOT TO SCALE

San Mateo County Board of Supervisors Meeting

Owner/Applicant:

Attachment:

File Numbers:

Arborist's Review

**2050 Santa Cruz Avenue
Menlo Park, CA 94025**

Prepared for:

San Mateo County

June 14, 2017

Prepared By:

Richard Gessner

ASCA - Registered Consulting Arborist ® #496

ISA - Board Certified Master Arborist® WE-4341B

ISA - Tree Risk Assessor Qualified

CA - Qualified Applicators License QL 104230



Monarch Consulting Arborists LLC

P.O. Box 1010
Felton, CA 95018
831. 331. 8982

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Summary

If the proposed Cardinal Pass Way road alignment requires the removal of roots directly adjacent to trees #1, #2, and #26 they will likely decline or become unstable. The proposed road is to be raised to meet the existing grade of the trees or at a minimum higher than the exposed roots. Root washing the area and immediately backfilling with Structural Soil® can be performed to help reduce the likelihood of failure, but the results are uncertain. Coast live oak #27 will have a “Tree Island” constructed around it for preservation. Significant watering, mulching, and other mitigation measures would need to take place to preserve the tree and construct the driveway as proposed. The tree is small and if it were to fail there would now be infrastructure in place to replant with an appropriate specimen.

The storm drain and sewer between trees #13 and #14 are to be directionally bored, not hand dug, and the recommended length of the bore hole is sixty feet, which the most recent plans indicate. This approach will have the least impact on all the trees in the vicinity.

The tree care industry does not have an established mitigation ratio or tree size accounting for loss. San Mateo County provides some mitigation replanting requirements for certain geographic zones and this area is subject to the “significant tree ordinance” which requires planting of mitigation trees “acceptable to the Community Development Director”. Because this project is a subdivision, the Director has broad discretion in establishing replanting requirements.

Tree #3 is not suitable to transplant and should be removed and replaced while the birch near the adjacent site is dead and should be removed as well.

There are three distinct groups of trees that should be protected which include oaks #1, #2, #26, and #27 where possible, coast redwoods #10 through #14, and the olives and oaks along Santa Cruz Avenue #18 through #24. Tree protection zones, guidelines, and specifications should be established for each zone prior to construction or grading and placed on all the plans.

The reports provided by Kielty Arborist Services LLC provide some tree protection guidelines that are adequate, reasonable, and meet typical standards. The reports do not state they are intended to be a “tree protection plan”, although much of that information is provided and discussed. One concern other than content is the reports lack the typical established formatting sequence for report writing in the tree care industry including at a minimum a defined assignment, factual observations, discussion, conclusion, and recommendations. Other than basic tree detail the reports do not reflect the most up to date plan changes or recent site conditions including the locations of roots revealed around trees #1, #2, #26 and #27 in February 2017.



Introduction

Background

San Mateo County sought the assistance of a consulting arborist to conduct a site visit and evaluate several trees to be preserved. The evaluation focused on design details for a private road and associated joint trench to be built within the drip line of four oaks (*Quercus spp.*) along with the assessment of utility trenching near a stand of coast redwoods (*Sequoia sempervirens*). The assignment included a review of the independent arborist report and tree protection plan provided by the applicant's consulting arborist and discussion of other tree protection measures.

Assignment

- Peer-review the information submitted by Kielty Arborist Services, LLC dated October 14, 2016 and May 3, 2017 (both revised reports with no review of original documents).
- Provide an assessment of trees #1, #2, #26, and #27 as they relate to the proposed road and driveway along with discussion of what the exploratory trenching revealed.
- Provide an assessment of the proposed storm and sewer drains along with trenching and boring near trees #10 through #15.
- Consult with the applicant's arborist and Civil Engineer to explore infrastructure alternatives to reduce tree impacts.

Limits of the assignment

- Plans reviewed were as follows: Cardinal Court Vesting Tentative Parcel Map C-1 and C-2 dated May 24 and 5, 2017 provided by MacCleod and Associates. Arborist's reports by Kielty Arborist Services LLC revised report dated October 14, 2016 and revised report dated May 3, 2017.
- The report is limited to the tree and site conditions during two visits on February 2 and 28, 2017.

Purpose and use of the report

The report is to be used by San Mateo County, the property owners, and their agents to provide clarification when assessing application materials regarding tree preservation on 2050 Santa Cruz Avenue. The report is intended to help provide guidance regarding the subdivision of the lot and is not intended to be a tree preservation plan.

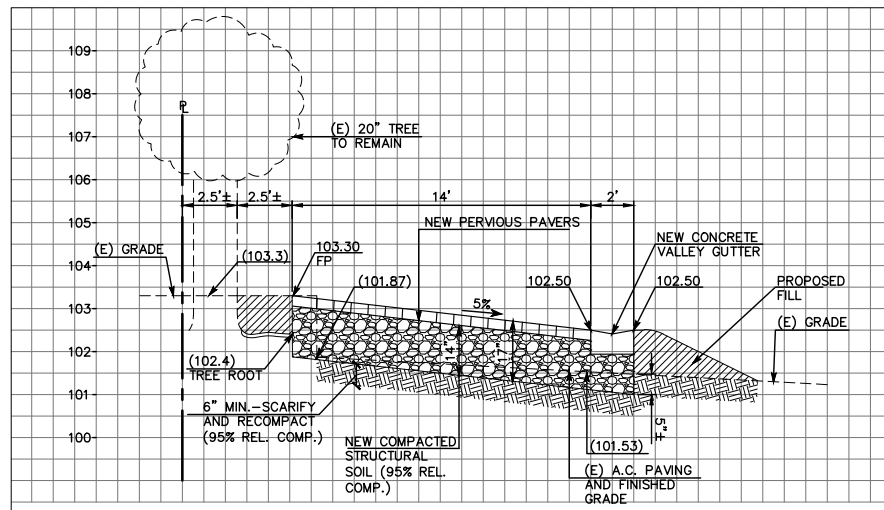


Observations

Site and Plans

The plans indicate the proposed Cardinal Pass Road will be constructed within one foot of trees #1, #2, and #26. It was determined during the site visit on February 2, 2017 that tree #3 was not suitable for transplanting and #4 was already designated for removal. The “Proposed Road Way Sections” indicate the grade raised and sloping upward to meet the existing grade of the trees (Image 1). This section shows the existing fill within one foot of the trees to be removed and the entire roadway designed with Structural Soil® and pervious pavers. The existing conditions include an asphalt driveway about 5 to 6 feet from the trunks. There is a small rock wall about 12 inches high running parallel to the driveway about 5 feet from the trees. The soil slopes upward to the trunks at least two feet above from the existing driveway.

Image 1:
Cardinal Pass
Road Section
for Tree #1



PROPOSED ROADWAY SECTION AT TREE #1

SCALE: HORIZ: 1" = 4' VERTICAL: 1" = 2'
NOTE: EXISTING ELEVATIONS SHOWN IN PARENTHESIS

The joint trench for the gas and electric utility has been moved into the roadway and around tree #1, and now past #2 and #26 at least ten feet away.

Trees #1, #2, #26, and #27 were requested to be further excavated for the February 28th visit.

During the visit a clearly staked joint trench including sewer and storm drain alignment between redwoods #13 and #14 and past oak #15 was provided. The recent plans indicate the location and detail of that proposed trench and directional bore out to Harrison Way. There is a sanitary sewer clean out and spar under redwood #11.



February 28, 2017 Root Inspections

Blue oak #1: Roots revealed in diameter inches left to right: 5, 1, 2, 1, 2.5, 2, 2 at a depth of 16 inches (Images 2 and 3)

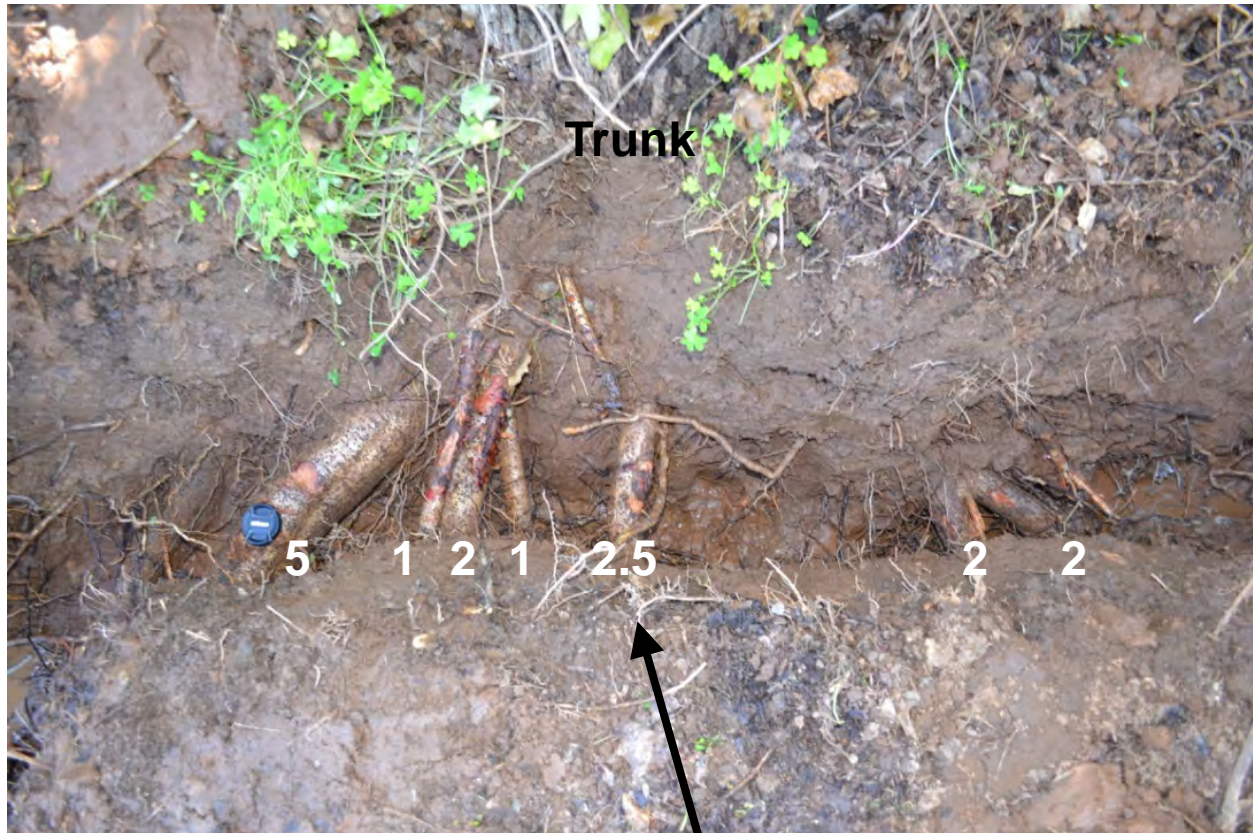


Image 2 (above): Roots emanating from the blue oak #1.

Image 3: Blue oak #1



Coast live oak #26: One root bifurcating bifurcating into two all one inch diameter with an additional on inch root, 33 inches from the trunk (Images 4 and 5).



Image 4 (above): Roots emanating from coast live oak #26.

Image 5: coast live oak #26



Coast live oak #2: Roots revealed in diameter inches left to right: 4, 6, 3, 4 and 6x1 inch
(Images 6 and 7)



Image 6 (above): Roots emanating from coast live oak #2.

Image 7: coast live oak #2



Coast live oak #27: Roots revealed in diameter inches left to right: 1, 2, 2, 3, 1. All roots revealed at four feet from trunk (Image 8). There is a proposed tree well around this tree.



Image 8 (above): Roots emanating from coast live oak #27



Redwoods #13 and #14: Sewer and Storm drain alignment between #13 and #14. Five feet from trunk #13 and four feet from smaller redwood #14 (Image 9).



Image 9 (above): Location of bore between tree #13 and #14



Coast live oak #15: Proposed storm drain would pass close to tree on the backside of the lean (Image 10).



Image 10 (above): Location of bore past tree #15



Kielty Arborist Services, LLC revised report dated October 14, 2016

The reports include a tree inventory with tree numbers, species, trunk diameters, conditions (combined health and structure) numerically defined, and comments.

The “Summary” portion of the report describes trunk protection measures around trees #1, #2, and #26. There is discussion about trenching, materials, root cutting guidelines, and watering requirements.

Coast live oak #3 is suggested to be relocated while #4 is to be removed.

Discussion of trenching for the storm drain past tree #14 along with guidelines for trenching.

Discussion of trenching and protection guidelines near trees #15, #16, and #34.

Tree protection fence placed outside the drip line distances around olives (*Olea europaea*) #20 through #24 with no expected impacts.

The “Tree Protection Plan” section describes fence, trenching, and irrigation for trees retained and is generic guidelines for those subjects.

The “assignment” is to “inspect and comment” on the trees.

There are no “limits of the assignment” to describe what plans were reviewed and no “purpose and use of the report” describing what the report is to be used for and by whom.

“Observations” are described in the “Method” section and include some subjective material including the actual condition rating rather than stating simple facts about the trees and site. This blends both facts and opinions into one narrative.

“Summary” provides a narrative including the elements of discussion, conclusion, and recommendations in no particular order or description. The “Tree Protection Plan” consists of typical boiler plate guidelines for tree protection which are all acceptable practices.



Kielty Arborist Services, LLC revised report dated May 3, 2017

This original report was dated November 30, 2016 and I did not review the original. This report was intended to provide some clarity regarding the road construction near trees #1, #2, and #26 and comment on the dead birch (*Betula pendula*) along the property boundary.

Below is a paraphrased version of the report “Summary” along with quoted sections:

The report suggests using Structural Soil® (Cornell University Mix) with concrete pavers on top around tree #1, #2, and #26.

“The excavation for the new drive will be done by hand severing no significant roots of the oaks.”

“The use of hand digging and the Structural Soil® will reduce impacts to the oaks to an acceptable level. The driveway excavation and installation of the Structural Soil® will be supervised by the site arborist. Impacts should be minor to the 3 oaks with no long term impacts expected. Trimming of the oaks is expected to be minor to facilitate the new driveway.” This is all reference to the proposed Cardinal Pass Way.

There are construction impact ratings provided with no definitions of what the terms mean other than what is inferred. The impacts around trees #1, #2, and #26 are described as “Significant, Moderate, and Major” respectively for those trees. These impact rating are not consistent with the previous paragraph stating “Impacts should be minor to the 3 oaks with no long term impacts expected. “

“Excavation for the driveway will result in some root loss for tree #1, #2 and #26. Root loss should be kept to less than 25 percent.”



Discussion

Cardinal Pass Way construction near trees #1, #2, and #26

The trenches in front of the trees and existing site conditions indicate significant tree roots in the soil directly in front of trees #1 and #2 while tree #26 had very few (only three 1 inch diameter roots were revealed). The *ISA Best Management Practices: Managing Trees During Construction, Second Edition 2016* suggests cutting roots as far as possible from the main stem. When roots are cut close to the trunk stability and health can be significantly compromised, especially when within one to one-and-one-half times the diameter from the trunk (Fite, K., Smiley, T. 2016). Typically oak trees can survive when roots are removed at a maximum encroachment distance of five times the trunk diameter on one side (Costello, L. Hagan, B. Jones, K. 2011)(Coates, B.). Root removal for the road would be well within these limits.

It is a common guideline to allow for roots less than two inches in diameter to be cut clean and removed. However, in this instance the roots revealed, although small in diameter, are the only significant roots in this portion of soil. Root removal would likely result in a significant decline in tree health or stability for trees #1, #2, and #26. The guideline or recommendation allowing for roots less than two inches in diameter to be removed must be eliminated in this circumstance.

The section of road engineering provided indicates the existing soil up to the trunks is to be removed and then filled back with Structural Soil® (Note: Structural Soil® is a trademark of Cornell University and is also commonly referred to as “engineered soil mix” to avoid trademark issues). This could be accomplished if the soil is to be removed through Hydrovac® or Air Spade® excavation. This type of soil replacement could preserve roots in place provided critical roots are avoided. Backfilling the entire area over the roots could be accomplished in theory, but could prove difficult in reality. There may also be other materials or techniques to allow for air exchange at the root/road interface which should be explored.

Root removal or cutting will significantly compromise the trees #1, #2, #26, and #27 and a soil replacement regime could allow for tree preservation and the construction of the roadway with varying results. The trees could survive this process or they could perish within a few years. Nevertheless there would be infrastructure in place to plant new trees with success in the event the trees decline or die.



There is another concern with the roadway section of the plan that could be a result of poor guidance and no fault to the engineer. The sections for each tree indicate the new grade of Cardinal Pass Way with all the Structural Soil® and pavers will match the existing grade. However, this may not be necessary because the trees were somewhat buried in fill with roots about one foot below grade to start with. For example the new finished grade is approximately one foot higher than the depth of the significant roots identified in most instances. There may not be a need to raise the roadway surface this high over the existing roots unless it is for structural or road stability purposes (Image 11). Another alternative is to just use pavers and Structural Soil® under the trees, or within a designated area, and construct the remaining portion of the roadway with other materials. This would allow for a “Tree Well” under the trees that could support both existing or new plantings if required.

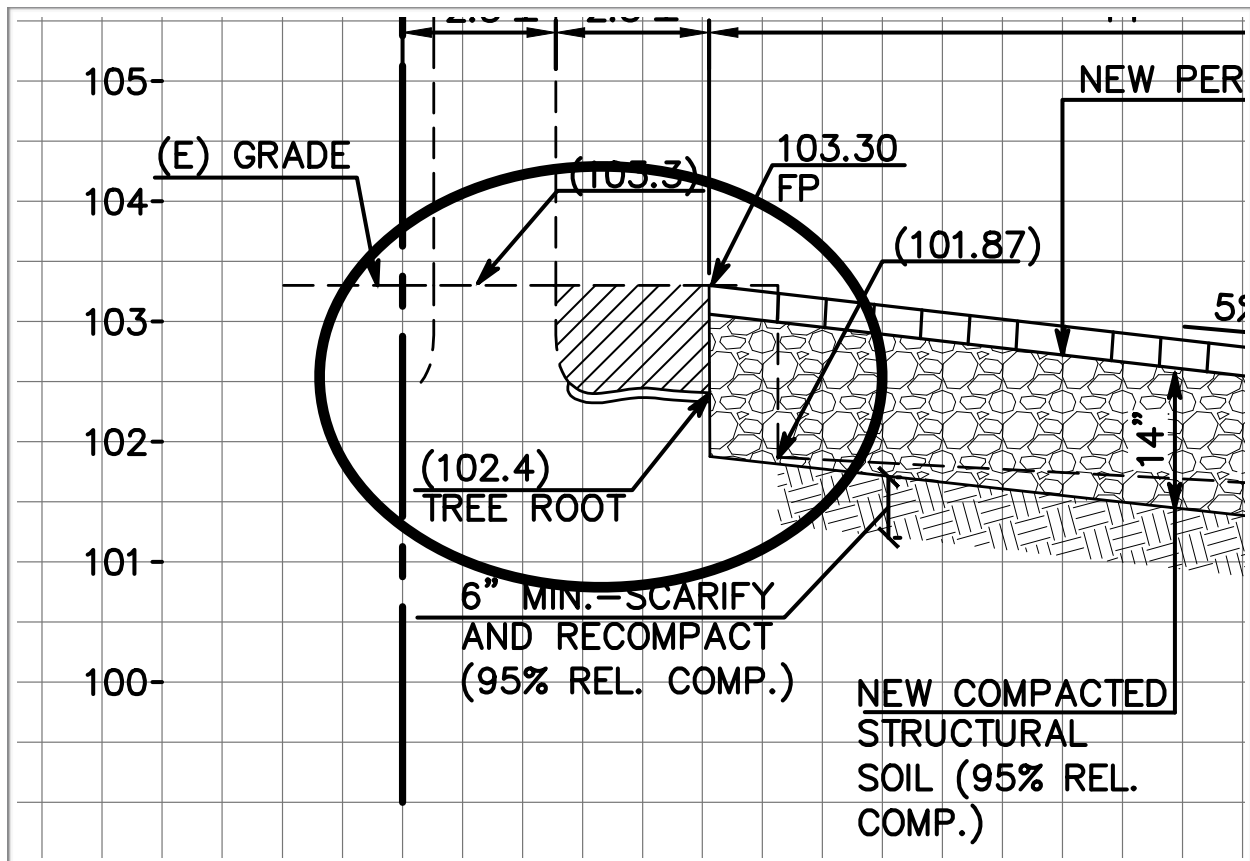


Image 11: Roadway Section with existing root location and ultimate height/depth of Cardinal Pass Way.



Driveway near coast live oak #27

Coast live oak #27 will require a “Tree Island” for preservation. Tree wells and islands are sometimes used to protect and preserve trees when infrastructure is to be built around them. To clarify terms, tree “wells” are used when trees are at or below grade and tree “islands” are used when trees are already growing above grade. A tree “island” is basically a containerized tree which is what would be required for this tree’s preservation. The tree has approximately a seven inch diameter trunk and a true island would require a radius of seven feet around the stem (1 foot per inch trunk diameter radius). However, because only one side of the existing root area will be affected, it is possible to encroach up to the tree’s Critical Root Zone area of five times the trunk diameter (about three feet from the trunk). Significant watering, mulching, and other mitigation measures would need to take place but the tree could be preserved and the driveway constructed nearby. The plans indicate how this will be constructed and again it is possible and if the tree were to decline the space for a new tree would be established. This is a small tree that could be replaced relatively easily through commonly found boxed trees.

Trees #10 through #14

The plans indicate a joint trench that would carry both the sewer and storm drain out to Harrison Way between trees #13 and #14 and no longer past trees #10 through #14. Coast redwoods are considered to have good tolerance to root disturbance if irrigated properly to help mitigate any loss (Matheny, N., Clark J. 1998). The largest trees are #10 and #13 while the remaining trees have smaller diameter trunks. The recommended Tree Protection Zone (TPZ) for this species, age, and size is a factor of eight times the trunk diameter in feet or about 33 feet from the trunks (Fite, K., Smiley, T. 2016). The proposed building footprints are outside this TPZ range and limiting grading in the TPZ will be critical.

There is a sanitary sewer and clean out near or under tree #11. Greater detail on how this will be installed or if this is connected to existing sewer is required.

Establishing irrigation needs is difficult and some generalities can be accepted. The most critical element is that the soil is thoroughly wetted in the upper 6 to 18 inches. Mr. Kielty recommended 300 gallons every two weeks, essentially during the dry season. The average trunk diameter of the five trees is about 31 inches. Typical watering schemes can be established by placing ten gallons of water per inch trunk diameter. In my opinion the recommended amounts by Kielty conform with that recommendation. Watering will need to be monitored and mulch will need to be established in the TPZ as well and has been recommended.



Trees #13 and #14 and directional boring

The plans indicate separate bore holes adjacent to each other for the storm drain and sewer out to Harrison Way near the same location. The established location is between trees #13 and #14. Mr. Kielty recommended at least a four foot boring depth if this was to occur, although he was not privy to the proposed current location at the time of that recommendation. The *ISA Best Management Practices: Managing Trees During Construction, Second Edition 2016* suggests depths at a minimum of three feet. Because the trees are large and the location of the bore hole is close to the trunks, I too would recommend at least a four foot deep bore. Because the bore hole is very close to trees #13 and #14 it is not possible to meet any recommended offset in this location. The recommended length of the bore hole is established at twelve times the trunk diameter which would require a sixty foot bore (30 feet on each side) which is outside the recommended TPZ (Fite, K., Smiley, T. 2016). The hole on the Harrison Way side is obviously closer because the street, curb, and gutter of the residential cul-de-sac is already established.

Group protection

There are three distinct groups of tree that should be protected which include oaks #1, #2, #26, and #27, coast redwoods #10 through #14, and the oaks and olives along Santa Cruz Avenue #18 through #24. It is best to establish these areas to retain the perimeter groups. Retaining their overlapping root area provides the best chance for survival.



Tree planting and mitigation

The tree care industry does not have an established mitigation ratio or tree size accounting for loss. San Mateo County provides some mitigation replanting requirements for certain geographic zones and this area is subject to the significant tree ordinance which requires planting of mitigation trees “acceptable to the Community Development Director”. Since this project is a subdivision, the Director has broad discretion in establishing replanting requirements. The standard of care for tree replacements in Menlo Park also does not have an established replacement plan and is typically a discretionary decision. Only the nearby community of Palo Alto provides a canopy replacement ratio (Table 1). These ratios can be considered the standard of care for the community in the absence of an established plan. Most of the trees to be removed fall into the 28 to 40 foot crown size and four 24 inch box or two 48 inch box replacements should be required for each removal. Locations and species will need to be determined but should consist of drought adapted or naturally occurring plants.

Table 1: Tree Canopy - Replacement Standard

Column 1	Column 2	Column 3
Canopy of the tree to be removed (average distance across the canopy)	Replacement Trees	Alternative Tree
4'-9'	Two 24" Box Size	One 36" Box Size
10'-27'	Three 24" Box Size	Two 36" Box Size
28'-40'	Four 24" Box Size	Two 48" Box Size
56'-60'	Six 24" Box Size	Two 48" Box Size & Two 36" Box Size
60+	Two 24" Box Size & Two 36" Box + Two 48" Box Size	

Provided by the City of Palo Alto 2001.



Clarification for tree #3 and the birch near the adjacent site

Tree #3 is not suitable to transplant and should be removed and replaced. A tree's suitability for transplantation is determined based on its health, structure, age, species characteristics, longevity, current and new growing environments. Prior to transplanting it is important to assess these characteristics. The tree's general health, foliar color and density, and signs of insects or disease are assessed. The structural condition of the tree including the roots, overall shape and symmetry of the crown, current growing environment, and past and future pruning needs all need to be accounted for and be acceptable. Species data and transplantation history and any other conditions that could limit the survival of the plant are also assessed. The transplant site including any above ground or underground utilities, access, soil conditions, slope, grade, and orientation, is also assessed during the evaluation for suitability.

In this instance the tree has a sweep or lean and the trunk flare has been obstructed and deformed. There are overhead utility wires adjacent to the crown. The tree is not a desirable specimen for transplanting due to these critical defects in its form and structure. The tree does not meet the acceptable criteria for transplanting.

The birch tree near the adjacent site is dead and should be removed. The tree is also not large enough to qualify as a significant tree in San Mateo County.



Review Kielty Arborist Services, LLC revised report dated October 14, 2016

The reports provided by Kielty Arborist Services provides recommendations for trenching near trees and irrigation along with roadway base materials and techniques to avoid damage to roots. The report also calls for trunk protection on trees #1, #2, and #26 with wooden slats and recommends fence be placed at 15 feet or one foot outside the drip line distance. The report calls for fence to be placed outside the drip line of the olives #20 through #24. These tree protection measures are adequate, reasonable, and meet industry standards for the potential activities under the trees.

Although there is no TPZ fence location suggestions for redwoods #10 through #14 it is mentioned.

There are concerns with the report based on the “assignment, limitations, purpose and use”. The report only states the site was visited “for the purpose of inspecting and commenting on the trees”. If this is truly the assignment the report provided that detail and discussion.

The report does not state it was intended to be a “tree protection plan” although much of that information is provided and discussed.

The formatting lacks the typical logical sequence of report writing first established in the *Guide to Report Writing for Consulting Arborists, 1995* and later revised as *A Consultant's Guide to Writing Effective Reports, 2004*. Typical arborist's reports should at a minimum include the assignment, observations, discussion, conclusion, and recommendations in that logical sequence. It is not required to write in this format but it is easier to follow and industry standard.

The primary concern with the report is the “assignment” is unclear and does not recognize any limitations including plans reviewed. The lack of information about the roots around trees #1, #2, and #26. There are no optional recommendations for realigning any utilities or avoiding trees where possible, but simply to build as is. The report does not provide any tree protection zone distances for the redwoods other than the boiler plate information at the end stating it should be placed outside the drip line. The tree protection fence detail at the back of the report does not meet industry standards for “sturdy fence” while the description of fence in the report is adequate driven chain link.

Kielty Arborist Services, LLC revised report dated May 3, 2017

This report has little relevance to the most recent plans or conditions. The new information regarding the roots revealed in February is not referenced. The impact ratings are inconsistent with the discussion in the report. The “summary” in the report should not be construed as recommendations for preservation.



Conclusion

If the road alignment requires the removal of roots directly adjacent to trees #1, #2, and 26 the trees will likely decline or become unstable. The proposed road is to be raised to meet the grade of the trees or at a minimum higher than the exposed roots. Root washing the area and immediately backfilling with Structural Soil® can be performed to help reduce the likelihood of failure but the results are an uncertainty. Coast live oak #27 will have a “Tree Island” constructed around it for preservation. Significant watering, mulching, and other mitigation measures would need to take place to preserve the tree and construct the driveway as proposed. The tree is small and if it were to fail there is now infrastructure in place to replant with an appropriate specimen.

The sanitary sewer and storm drains are now proposed to running between trees #13 and #14 through directional boring. This is the least intrusive mechanism to install these utilities and it is not expected to adversely affect the redwoods. Because the trees are large and the location of the bore hole is close to the trunks at least a four foot deep bore is required. Because the bore hole is very close to trees #13 and #14 it is not possible to meet any recommended offset while the recommended length of the bore is twelve times the trunk diameter, or sixty feet has been established.

The tree care industry does not have an established mitigation ratio or tree size accounting for loss. San Mateo County provides some mitigation replanting requirements for certain geographic zones and this area is subject to the significant tree ordinance which requires planting of mitigation trees “acceptable to the Community Development Director”. Because this project is a subdivision, the Director has broad discretion in establishing replanting requirements. However, the nearby community of Palo Alto also provides a canopy replacement ratio. Most of the trees to be removed fall into the 28 to 40 foot crown size and four 24 inch box or two 48 inch box replacements should be required for each removal. Tree locations and species are to be determined later.

Tree #3 is not suitable to transplant and should be removed and replaced while the birch near the adjacent site is dead and should be removed.

There are three distinct groups of trees that should be protected which include oaks #1, #2, and #26, coast redwoods #10 through #14, and the olives along Santa Cruz Avenue #20 through #24.

The reports provided by Kielty Arborist Services provides tree protection guidelines that are adequate, reasonable, and meet industry standards. The reports do not state they were intended to be a tree protection plan, although much of that information is provided and discussed. Aside from now mostly irrelevant content typical arborist’s report should include the assignment, observations, discussion, conclusion, and recommendations in that logical sequence. This format facilitates easier reading of the material presented.



Recommendations

1. The designated project arborist should have the minimum qualifications or designations: International Society of Arboriculture Board Certified Master Arborist® (BCMA) or Certified Arborist Municipal Specialist® (CAMS), or an American Society of Consulting Arborists Registered Consulting Arborist® (RCA®). County selected arborist shall observe, document (photo, video and written) and report to County that the procedures and processes outlined in this report are conducted properly and will provide regular reports to the County.
2. 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.
3. Prior to site improvements, grading or construction provide quantified Tree Protection Zone distances and requirements for protection during construction distances for the three tree groups which include the following: oaks #1, #2, #26, and #27, coast redwoods #10 through #14, and the oaks and olives along Santa Cruz Avenue #18 through #24. Place all the tree protection fence locations and guidelines on the plans including the gradin, drainage, and utility plans. Alternatively create a separate plan sheet that includes all these measures labeled "T-1 Tree Protection Plan."
4. Provide a landscape plan that is to include the type size, and location of all replacement trees using the established table or recommended plantings by San Mateo County.

Cardinal Pass Way and Driveway

5. No roots of any size are to be cut around trees #1, #2, #26, and #27 without the approval of the project arborist. The root area under the trees and existing berm is to be washed away or removed through Hydrovac® or Air Spade® to allow for existing roots to be retained and monitored by the designated project arborist.
6. The roadway is to be constructed with porous materials and engineered soil mix (ESM) or Structural Soil®. All Engineered Soil mixing shall be performed by an agreed upon supplier using appropriate soil measuring, mixing and shredding equipment of sufficient capacity and capability to assure proper quality control and consistent mix ratios. No mixing of engineered soil mix at the project site shall be permitted. Mix suppliers include: TMT Enterprises, 1996 Old Oakland Road, San Jose, California, (408) 432-9040, or approved equal licensed by Amereq Inc. to distribute Engineered Soil according to the Cornell University patent.



Boring and Trenching near #10 through #14

7. Bore hole for the sewer and storm drain must originate outside the TPZ of approximately 30 feet from the coast redwoods #13 and #14. The TPZ for trees #10 through #14 should be 33 feet.
8. Notification: Contractor shall notify the project arborist a minimum of 24 hours in advance of the activity in the TPZ.
9. Tunneling & Directional Drilling: If trenching or pipe installation has been approved within the TPZ, then the trench shall be either cut by hand, air-spade, hydraulic vac excavation or, by mechanically boring the tunnel under the roots with a horizontal directional drill and hydraulic or pneumatic air excavation technology. In all cases, install the utility pipe immediately, backfill with soil and soak within the same day.
10. If trenches are cut and tree roots 2-inches or larger are encountered they must be cleanly cut back to a sound wood lateral root. All exposed root areas within the TPZ shall be backfilled or covered within one hour. Exposed roots may be kept from drying out by temporarily covering the roots and draping layered burlap or carpeting over the upper 3-feet of trench walls. The materials must be kept wet until backfilled to reduce evaporation from the trench walls. No roots greater than 2 inches in diameter should be cut or damaged without the approval of the project arborist.
11. Any approved excavation, demolition or extraction of material shall be performed with equipment sitting outside the TPZ. Methods permitted are by hand digging, hydraulic or pneumatic air excavation technology. Avoid excavation within the TPZ during hot, dry weather.
12. If excavation or trenching for drainage, utilities, irrigation lines, etc., it is the duty of the contractor to tunnel under any roots 2-inches in diameter and greater.



Bibliography

American National Standard for Tree Care Operations: Tree, Shrub and Other Woody Plant Management : Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction)(Part 5). Londonderry, NH: Secretariat, Tree Care Industry Association, 2012. Print.

Costello, Laurence Raleigh, Bruce W. Hagen, and Katherine S. Jones. *Oaks in the urban landscape: selection, care, and preservation*. Oakland, CA: University of California, Agriculture and Natural Resources, 2011. Print.

Fite, Kelby, and Edgar Thomas. Smiley. Managing trees during construction, second edition. Champaign, IL: International Society of Arboriculture, 2016.

Matheny, Nelda P., Clark, James R. Trees and development: A technical guide to preservation of trees during land development. Bedminster, PA: International Society of Arboriculture 1998.



Appendix A: General Tree Protection Guidelines

Pre-Construction Meeting with the Project Arborist

Tree protection locations should be marked before any fencing contractor arrives.

Prior to beginning work, all contractors involved with the project should attend a pre construction meeting with the project arborist to review the tree protection guidelines. Access routes, storage areas, and work procedures will be discussed.

Tree Protection Zones and Fence Specifications

Tree protection fence should be established prior to the arrival of construction equipment or materials on site. Fence should be comprised of six-foot high chain link fence mounted on eight-foot tall, 1 7/8-inch diameter galvanized posts, driven 24 inches into the ground and spaced no more than 10 feet apart. Once established, the fence must remain undisturbed and be maintained throughout the construction process until final inspection.

The fence should be maintained throughout the site during the construction period and should be inspected periodically for damage and proper functions. Fence should be repaired, as necessary, to provide a physical barrier from construction activities.

Tree Protection Signs

All sections of fencing should be clearly marked with signs stating that all areas within the fencing are Tree Protection Zones and that disturbance is prohibited. Text on the signs should be in both English and Spanish (Appendix B).

Monitoring

Any trenching, construction or demolition that is expected to damage or encounter tree roots should be monitored by the project arborist and should be documented.

The site should be evaluated by the project arborist after construction is complete, and any necessary remedial or mitigation work or recommendations should be noted.

Restrictions Within the Tree Protection Zone

No storage of construction materials, debris, or excess soil will be allowed within the Tree Protection Zone. Spoils from the trenching shall not be placed within the tree protection zone either temporarily or permanently. Construction personnel and equipment shall be routed outside the tree protection zones.



Boring or Tunneling

Boring machines should be set up outside the drip line or established Tree Protection Zone. Boring may also be performed by digging a trench on both sides of the tree until roots one inch in diameter are encountered and then hand dug or excavated with an Air Spade® or similar air or water excavation tool. Bore holes should be adjacent to the trunk and never go directly under the main stem to avoid oblique (heart) roots. Bore holes should be a minimum of three feet deep.

Timing and Watering

If the construction is to occur during the summer months supplemental watering should be applied to help ensure survival during and after construction. Ten gallons of water per inch trunk diameter shall be applied every two weeks during the summer months. Soil should be wetted to field capacity and allowed to dry prior to irrigating again. Infrequent soaking is better than frequent low level wetting.



Appendix B: Sample Tree Protection Signs

B1: English

WARNING
Tree Protection Zone

**This Fence Shall not be moved without
approval. Only authorized personnel
may enter this area!**

Project Arborist



B2: Spanish

CUIDADO
Zona De Arbol Pretejido
Esta cerca no sera removida sin
aprobacion. Solo personal autorizado
entrara en esta area!

Project Arborist



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 Richard Gessner, 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 stated herein are my own;

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.

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 Registered Consulting Arborist® with the American Society of Consulting Arborists, and that I acknowledge, accept and adhere to the ASCA Standards of Professional Practice. I am an International Society of Arboriculture Board Certified Master Arborist® and Tree Risk Assessor Qualified. I have been involved with the practice of Arboriculture and the care and study of trees since 1998.

Richard J. Gessner



ASCA Registered Consulting Arborist® #496
ISA Board Certified Master Arborist® WE-4341B
ISA Tree Risk Assessor Qualified



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County of San Mateo
Planning and Building Department

In-Lieu Park Fee Worksheet

[This formula is excerpted from Section 7055 of the County's Subdivision Regulations]

This worksheet should be completed for any residential subdivision which contains 50 or fewer lots. For subdivisions with more than 50 lots, the County may require either an in-lieu fee or dedication of land.

1. For the parcel proposed for subdivision, look up the value of the land on the most recent equalized assessment roll. (Remember you are interested in the land only.)

Value of Land = \$2,167,356

2. Determine the size of the subject parcel in acres.

Acres of Land = $\frac{23,841}{43,560}$ = 0.542 Acres

3. Determine the value of the property per acre.

- a. Set up a ratio to convert the value of the land given its current size to the value of the land if it were an acre in size.

Formula:	
$\frac{\text{Parcel Size in Acres (From Item 2)}}{1 \text{ Acre of Land}}$	$\frac{\text{Value of Subject Parcel (From Item 1)}}{\text{Value of Land/Acre}}$
Fill Out:	
$\frac{0.542}{1 \text{ Acre}}$	$\frac{\$2,167,356}{\text{Value of Land/Acre}}$

- b. Solve for X by cross multiplying.

Formula:	
Value of Land	= $\frac{\text{Value of the Subject Parcel (From Item 1)}}{\text{Size of the Subject Parcel in Acres (From Item 2)}}$
Fill Out:	
Value of Land	= $\frac{\$2,167,356}{0.542}$ = \$3,998,811.81

4. Determine the number of persons per subdivision.

Formula:				
Number of New Lots Created*	X	2.75**	=	Number of Persons Per Subdivision
*Example = A 2-lot split would = 1 newly created lot.				
Fill Out:				
<u> *2 </u>	X	2.75	=	<u> 5.50 </u>
**Average number of persons per dwelling unit according to the most recent federal census (2010).				

5. Determine the parkland demand due to the subdivision.

Formula:				
Number of Persons Per Subdivision Demand (From Item 4)	X	.003*** Acres/Person	=	Parkland
Fill Out:				
<u> 5.50 </u>	X	.003*** Acres/Person=		<u> 0.0165 </u>
***Section 7055.1 of the County's Subdivision Ordinance establishes the need for .003 acres of parkland property for each person residing in the County.				

6. Determine the parkland in-lieu fee.

Formula:				
Parkland Demand (From Item 5) Fee	X	Value of the Land/Acre (From Item 3.b)	=	Parkland In-Lieu Fee
Fill Out:				
<u> 0.0165 </u>	X	<u> \$3,998,811.81 </u>	=	<u> \$65,980.39 </u>

Letter of Referral

December 7, 2016

Silicon Valley Real Ventures LLC.
Attn: Dave Bragg
138 Charcot Avenue
San Jose, CA 95131

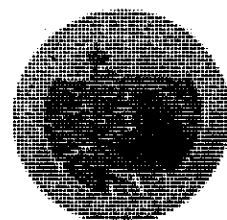
Dear Mr. Bragg:

Location:	2050 Santa Cruz Avenue, West Menlo Park
Assessor's Parcel No.:	074-091-620
File Number:	PLN2016-00226

On December 1, 2016, the Zoning Hearing Officer considered your request for a Minor Subdivision, pursuant to Section 7010 of the County Subdivision Regulations and the State Subdivision Map Act, to subdivide a 23,641 sq. ft. parcel into three (3) parcels and the assignment of the name "Cardinal Court" to the new private street.

In accordance with Section 6104(a) of the San Mateo County Zoning Regulations, the Zoning Hearing Officer found it to be in the public interest to refer the item to the Planning Commission for its consideration with the following direction to staff and the applicant:

- 1) County Planning staff shall confirm with the Menlo Park Fire Protection District (MPFPD) that a narrower width driveway (Cardinal Court) can be approved;
- 2) The applicant shall be required to submit revised plans as needed to reflect the narrower width. The revised driveway plan shall be submitted to the MPFPD for review, which shall include the revised road width along the first 65 feet of its length, with the intent of narrowing the roadway to lessen the impacts to tree Nos. 1, 26 and 2. The plan shall identify all surface materials along the entire roadway's length and be accompanied by a tree maintenance plan to maintain a tree clearance of 13'6" above the road surface and road maintenance in case roots begin lifting the road, available water supply (location of hydrant and water pressure), and assurance that the 3 new houses would be sprinklered. If the MPFPD supports such a request to lessen the roadway's width, such plans shall be included in the packet of materials to be reviewed by the Planning Commission.
- 3) The applicant shall be required to revise the project drainage plan to include a one-foot higher berm along the entire length of the drainage swale located along the northern border of the site (opposite Crocus Court and directly adjacent to neighbors living at 2042 Santa Cruz Avenue). This revision shall include a simple cross-section of the drainage swale in proximity to the boundary of 2042 Santa Cruz Avenue. Require the applicant to submit revised grading and drainage plans as needed for review by the Planning Commission.
- 4) The applicant shall be required to revise the Tentative Map to show the accurate location of the sanitary sewer easement as located along the western border of Lot 1 (pursuant to the civil engineer's corrected detail shown at the December 1, 2017 ZHO meeting);



ATTACHMENT M

- 5) The applicant's civil engineer shall prepare and submit a cross-section (generally south to north) to show how the raised roadway (proposed in the cross section for purposes of minimizing impact to the oak trees slated for preservation as shown at the December 1, 2016 ZHO hearing), would reconcile with the parcel's topography and future driveways serving Lots 2 and 3.
- 6) Staff shall evaluate the use of bonds to ensure that money is available for tree replacement should that be necessary in the future. Explain the regulations related to the use of bonds in the staff report to be considered by the Planning Commission.
- 7) Staff shall confirm with the Department of Public Works that this three-lot subdivision is not subject to the requirement for a traffic study.
- 8) Staff shall hire an independent consulting arborist to peer review the information submitted by Kiely Arborist Services, LLC and to further evaluate or perform the following items:
 - a. Address any potential damage to the Redwood trees (Nos. 10 -14), and other trees (i.e. tree No. 15), which may result from the proposed drainage system and sanitary sewer connection, as occurs on Lot No. 1, as well as the location of future residential development as would occur on that lot. Assess the minimum setbacks (as well as the existence of the sanitary sewer easement as it exists along the western edge of Lot No.1) relative to whether those constraints represent adequate setbacks to best ensure the health of these trees, including recommendations for what would be adequate setbacks for such tree protection;
 - b. Evaluate protecting tree No. 13 in the same manner as tree No. 14 as discussed on pages 6 and 19 of the December 1, 2016 staff report;
 - c. Specify a deep watering schedule as discussed on page 19 of the December 1, 2016 staff report and provide guidance as to the definition of adequate rainfall as discussed in the staff report;
 - d. Assess tree No. 4 and provide input as to the size of a replacement tree and whether a 24" box replacement tree would be appropriate. The size of the replacement tree will be included in a revised Condition No. 5 in the staff report to be considered by the Planning Commission;
 - e. Perform the same type of tree root exploration – with a section diagram provided by the applicant's arborist/engineer - around tree Nos. 2 and 26 as was performed around tree No. 1 and provide recommendations about the appropriate tree protection measures for those trees;
 - f. Analyze potential impacts to tree No. 27 (posed by the future access drive terminus as shown on the latest Tentative Map and provide a professional assessment about including it in a revised Condition No. 7(b)(3) as discussed on pages 19-21 of the December 1, 2016 staff report for inclusion in the staff report to be considered by the Planning Commission;
 - g. Evaluate whether other trees on the site may need protection during construction as discussed for trees in Condition No. 7(b)(3);
 - h. Evaluate and recommend the number and sizes of required replacement trees where needed throughout the site;
 - i. Evaluate the document entitled "Proposed Roadway Section at Tree #1" – as well as similar cross sections to be provided by the applicant on the other two oak trees to be preserved along that left side of the proposed roadway -and provide recommendations regarding the preservation of trees along proposed Cardinal Court during and after construction. Review all cross sections given a reduced roadway width should that reduced width be allowed by Menlo Park Fire Protection District. In the event

- j. Address potential problems of moving Tree No. 3 including identifying a proposed location for the relocated tree, the probability of its survival, and a recommended maintenance regime once it is relocated;
 - k. Address the health and viability of the Birch tree that is on the northern boundary of the site and immediately adjacent to the neighbors at 2042 Santa Cruz Avenue. Provide recommendations about a replacement tree should the Birch tree not be viable;
 - l. Address the Oak Tree that is not numbered on proposed Lot 3;
 - m. Address impacts to significant trees on the site and the proposed tree protection plan in regard to the proposed grading and drainage plan for the three-lot subdivision.
- 9) Staff shall determine who will pay for the consulting arborist. Regardless of who pays for the consulting arborist, the selection and management of the arborist will be the responsibility of the staff of the San Mateo County Planning and Building Department.
- 10) All of the information provided above shall be explained in the staff report to be considered by the Planning Commission and used to redraft pertinent conditions in that revised staff report.
- 11) County Planning staff shall review the status of the pending annexation process with the City of Menlo Park, including a brief update of this process in the staff report to be presented to the Planning Commission, for information purposes only.

Please direct any questions to Senior Planner Dave Holbrook at 650-or 363-1837 or dholbrook@smcgov.org.

Also, please take a few minutes and complete the online version of our Customer Survey which will help us to enhance our customer service. Thank you in advance for your time in providing valuable feedback. The survey is available at: <http://planning.smcgov.org>.

Very truly yours,



Lisa Grote
Zoning Hearing Officer
zhd1117aa.1.LG.dr

cc: Anne Kortlander
Assessor's Office
Brian Schmidt
Building Inspection Section
CAL Water Services
Carin Pacifico
Diane Gosney
Gregory Faris
Linda Barman
Janet Weisman Goff
Public Works Department

Kelly Holzrichter
Judy Horst
Keri Nicholas
Kielty Arborist Services
Laurel Leone
Leah Rogers
Lynn McClure
Menlo Park Fire District
Menlo Park Planning Dept.
Mighty Tree Movers, Inc.