Environmental Quality Commission

REGULAR MEETING AGENDA

Date: 3/27/2018
Time: 6:00 p.m.
City Council Chambers
701 Laurel St., Menlo Park, CA 94025

A. Call to Order

B. Roll Call – Kabat, London, Chair Marshall, Martin, Payne, Vice Chair Price, Turley

C. Public Comment

Under "Public Comment," the public may address the Commission on any subject not listed on the agenda. Each speaker may address the Commission once under Public Comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under Public Comment other than to provide general information.

D. Regular Business

D1. Issue determination on appeal of staff's approval of heritage tree permit for removal of seven redwood trees at 1000 El Camino Real (Staff Report #19-002-EQC)

D2. Approve the February 27, 2019, Environmental Quality Commission meeting minutes (Attachment)

E. Reports and Announcements

E1. Commission reports and announcements

E2. Staff update and announcements

E3. Future agenda items

F. Information Items

F1. City Council work plan transmittal and capital improvement program (CIP) process update (Attachment)

G. Adjournment

At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.
At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.
Any writing that is distributed to a majority of the Commission by any person in connection with an agenda item is a

public record (subject to any exemption under the Public Records Act) and is available for inspection at the City Clerk's Office, 701 Laurel St., Menlo Park, CA 94025 during regular business hours.
Persons with disabilities, who require auxiliary aids or services in attending or participating in Commission meetings, may call the City Clerk's Office at 650-330-6620.
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STAFF REPORT - AMENDED

Environmental Quality Commission
Meeting Date: **3/27/2019**
Staff Report Number: **19-002-EQC**

Regular Business: **Issue determination on appeal of staff's approval of heritage tree permit for removal of seven redwood trees at 1000 El Camino Real**

Recommendation

Staff recommends the Environmental Quality Commission (EQC) deny the appeal and uphold staff's decision to approve the heritage tree removal permit application for seven coast redwood trees at 1000 El Camino Real.

Policy Issues

Under the heritage tree ordinance in the Menlo Park Municipal Code, any resident or property owner may appeal a heritage tree removal permit decision to the EQC. In addition, any resident or property owner may appeal the decision of the EQC to the City Council within 15 days after the decision of the commission. Tree removal decisions made by staff, the EQC, or City Council must be related to the decision making criteria in section 13.24.040 of the heritage tree ordinance.

Background

On November 8, 2017 a permit application was started to remove seven coast redwood trees at 1000 El Camino Real to address water damage in the underground parking garage (Attachment A.) The below grade parking garage and podium structurally supports the entire office building.

The existing waterproofing is compromised due to outdated and/or ineffective waterproofing from the 1980s when the building was originally constructed. This poses a life and safety risk to the building occupants and requires prompt repair. The project involves making structural repairs and installing a waterproof barrier to prevent future damage.

In order to undertake this project, the permit applicant has taken steps to preserve many of the existing heritage trees on the various sides of the building. However, along the El Camino Real frontage of the building, there are seven redwood trees that would not be able to be preserved due to their extensive root system which covers a portion of the top of the underground parking garage (podium.) See Figure 1 and 2 below that shows extent of root cover over the podium.

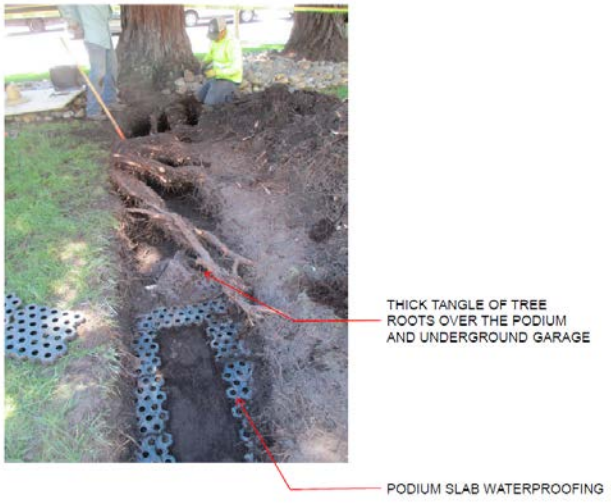

Figure 1: Root Exposure

Figure 2: Additional Root Exposure

The excavation required to install the waterproofing and perform structural repairs would be within the majority of each tree's root zone. This is beyond the recommended arboricultural industry practice for removing roots, and would impact tree stability.

In order to make the repairs and apply a water-proof barrier, these heritage trees and the landscaping above the parking garage would need to be removed and replaced. The approved landscaping plan specifies landscaping with drought tolerant plantings and heritage replacement trees. The replacement trees will be planted on a two to one ratio, meeting the City heritage tree replacement procedures, and selected to have less invasive roots. Replacement trees would be located in relatively the same location as the trees proposed for removal while allowing adequate distance from the parking garage to limit the potential for future root conflicts.

The repair project required Planning Commission approval, and a report was submitted that included a completed arborist form, arborist report, associated site plans and waterproofing/structural reports (Attachment B.) Beofre to Planning Commission approval, staff requested additional information from the permit applicant to evaluate the need for repairs (Attachment C), and excavation to see the extent of root cover (Figures 1 and 2 above.)

On October 22, 2018 the proposed project was approved by the Planning Commission. Afterward, the city arborist tentatively approved the removal of the seven redwood trees based on the need to remove a significant amount of roots beyond arboricultural industry best practice for maintaining tree stability and health. This aligns with the decision making criteria for approving tree removals in the heritage tree ordinance.

During the heritage tree removal appeal period, a number of public comments were received and staff extended the appeal period in order to facilitate an informational meeting at City Hall January 8, 2019. At the meeting, community members expressed an interest in exploring additional alternatives to preserve the heritage trees. On January 9, 2019 an appeal was filed by community members based on the grounds that there are feasible and reasonable alternatives to explore that would preserve the trees and allow the building to be structurally sound (Attachment D.)

Staff met with the lead appellants February 22 to provide information about the appeal process and discuss the five alternatives being explored based on the feedback from the January informational meeting. In addition, staff requested that appellants submit any additional alternatives or information by March 4 to meet the EQC appeal processing timelines. One additional alternative was provided by the appellant to explore.

The City also hired an independent structural engineer and arborist to peer review the approved repair project and the alternatives analysis submitted by the permit applicant. As a result, the structural engineer peer reviewer offered another alternative for the permit applicant to explore.

On March 13, city staff, the permit applicant, and the lead appellants met with a conflict resolution facilitator to have a dialogue about the current findings on the alternatives. The meeting provided additional context and information about the appellant's alternative submitted March 4, which resulted in further investigations. On March 14, the appellant submitted an additional alternative to be explored. Due to the timing of the EQC meeting, this alternative was evaluated at a high level for viability.

As a result of the three meetings with the appellants, eight alternatives were identified. The analysis on each alternative is provided below.

Analysis

Heritage tree removal criteria

Chapter 13.24 of Menlo Park's heritage tree ordinance (Municipal Code) requires staff and the EQC to consider eight factors when determining whether there is good cause for permitting removal of a heritage tree (Attachment E.) This project involves making a determination based on criteria one, two and eight:

- (1) The condition of the trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services;
- (2) The necessity to remove the trees in order to construct proposed improvements to the property;
- (8) The availability of reasonable and feasible alternatives that would allow for the preservation of the trees.

Rationale for approving tree removal for proposed project approved by Planning Commission

The seven redwood trees are growing on the south-west side of subject property in two groupings, which are in close proximity to the building structure. The distances of individual trees from building and underground parking structure vary from 8 feet to less than zero feet.

The current structure of the redwood trees is good. However, the proposed excavation to install waterproofing and repair the underground parking structure involves severing of roots that are primarily responsible for holding the trees upright. The excavation trench would sever roots within three times the diameter of all redwood trees. Industry accepted guidelines prohibit excavation within three to five times the trunk diameter to avoid structurally compromising trees (Best management practices, root management, international society of arboriculture, 2017.) This meets the first two decision making criteria in the heritage tree ordinance for removing the trees.

The current health condition of all the redwood trees is good. Healthy trees are more tolerant of root loss, and coast redwoods are considered to be tolerant of site disturbance and root loss. However, the location and extent of excavation required for building repair would adversely impact tree health to a degree that survival is not likely.

The stress of root removal would have a negative impact on tree health. As a result of drought stress caused by severe root loss, dieback of foliage and limbs would likely be seen starting in the upper crown and progressing down through tree canopy and trunk within a period of months.

In addition, the susceptibility of stressed trees to disease infection of opportunistic pathogens will significantly increase. Diseases such as Botryospheria, which is a common fungal pathogen effecting coast redwoods outside their native range, take advantage of stressed trees that have fewer resources available to allocate toward the production of tannins and other biochemical compounds resistant to disease infection. Drought stresses, subsequent disease infection, and mortality is likely to progress regardless of the of best arboricultural care practices such as irrigation, fertilization and application of fungicides.

The heritage tree removal permit application was approved based on evidence submitted, which met all best practices and industry standards for making the repairs and installing waterproofing in both the structural engineering and arboricultural professions.

Alternatives explored as a result of the appeal

All parties agree that the building needs to be structurally sound, and repairs need to be made to achieve this outcome. The appeal was filed based on the decision making criteria No.8, which is the availability of reasonable and feasible alternatives that would allow the preservation of trees and ensure a structurally sound building.

After receiving community and lead appellant suggestions on potential alternatives, staff directed the permit applicant to explore eight additional alternatives. The applicant's analysis of the alternatives is included as Attachment F.

In addition, staff requested that the permit applicant provide the value of all the trees on-site and the seven redwood trees proposed for removal to provide context for determining the feasibility of alternatives. This was performed by the permit applicant's certified arborist using arboricultural industry guidelines for estimating the value of trees. The seven redwood trees were estimated to have a value of $157,500. The value the existing 76 trees on the property is $703,400. The city hired arborist peer reviewer was in agreement with the permit applicant's arborist estimated values.

To evaluate the reports and documents provided by the permit applicant, the City hired an independent arborist and structural engineer to peer review the approved project and alternatives, and provide an analysis of their findings. These analyses are included as Attachment G. Staff's evaluation of the feasibility and reasonability of each alternative was based on evidence submitted by the appellant, permit applicant and the peer review findings.

Alternative No. 1: abandon the below grade parking and build a new parking structure

This alternative includes abandoning the underground parking garage and filling it with material to structurally support the building. This would not require excavation within the tree roots. This would require supplying parking elsewhere. It was suggested at the community meeting that an above grade parking garage be built on the existing surface parking lot at the rear of the building. This alternative is not considered a feasible because the surface parking lot is located on a different parcel under different ownership and serves the parking demands for the various businesses on the parcel. There is also a San Francisco Public Utilities Commission easement that runs through the parcel which would prohibit the construction of any structures on the site.

Alternative No. 2: retrofit the building with steel beams

This alternative would reinforce the building with steel beams to allow water damage and provide another method for structurally supporting the building. It would not involve installing a waterproof barrier that would require excavation within the tree roots. The structural peer review found this alternative not feasible as it would reduce the required overhead vehicle clearances for below grade parking.

Alternative No. 3: remove the trees in phases
This alternative involved removing some trees in phases to determine the extent of water damage for repair, and see if some trees could be preserved as a result. Regardless of the timing, the excavation required for inspection and repair work will compromise the structural stability of trees due to severing roots within three times the diameter of the respective trunks. The permit applicant's project arborist, the City Arborist and the arborist peer review found this alternative not feasible.

Alternative No. 4: repair the water damage without impacting the trees
This alternative involves evaluating whether the structural repair work could be completed from underneath the parking garage instead of on top.

The structural engineer peer review found that although it may be feasible to repair the identified failed cables from below, the placement of waterproofing to facilitate the protection of the post-tensioning cables needs to be performed from above since that is where the water intrusion is sourced. In addition, the repair of the slab from below would be unconventional and potentially hazardous to construction personnel than repair from above. This alternative would not provide a way to apply the waterproof barrier, which would make the building susceptible to water damage in the future.

The permit applicant's project arborist, the city arborist and the arborist peer review found that the trenching required for waterproofing work from above will the compromise structural stability of trees due to severing of roots within three times the diameter of trunk of respective redwoods.

Staff has concluded based on the peer reviews that this is not a feasible and reasonable alternative.

Alternative No. 5: relocate the heritage trees
This alternative involved evaluating whether the trees could be relocated to another area of the City. The permit applicant's arborist, the city arborist, and the arborist peer review found this alternative not to be feasible due to size of trees, location, soil depth and structure of roots. In addition, individual redwood trees have interlocking and grafting roots with the other adjacent redwoods growing in close proximity.

Alternative No. 6: cut the tree roots and use cables to brace the trees to the building
This alternative would still sever the roots of the tree to allow the waterproof barrier to be installed, but address tree stability from root loss by using temporary cables or other support to brace the trees to the parking garage or building. The hope is that roots could grow back and provide tree stability after a few years so that the cables can be removed. This alternative was suggested by the structural engineer peer reviewer. However, there were questions raised as to overall tree health with significant root loss. In addition, the trees are 85 feet to 90 feet tall which creates a challenge securing in place, and wind factors make this alternative challenging for tree stability.

This type of approach is typically used on small trees, and there is no precedent or evidence to support this approach on trees of this size and scale. While this alternative is possible engineering wise, it was found not feasible by three arborists (permit applicant, city arborist, arborist peer reviewer) due to the impacts on tree health described above from root severing.

Alternative No. 7: saw-cut the post-tensioned slab, add walls for extra support, and remove some existing parking spaces to structurally support the building and divert water
This alternative was presented to staff by the appellant March 4 (Attachment H). It involves allowing the existing water damage to remain by building additional walls in some parking spaces to support the building. No trenching or excavation would occur in the tree root zones, which would allow preservation of the trees.

This alternative would require removing existing parking spaces. The office building is required to provide on-site parking per the planned development permit which indicates a parking requirement of 152 spaces. There are currently 149 parking spaces on-site and additional spaces cannot be removed without providing additional parking on-site. The discrepancy in the total required and total provided spaces may be due to parking updates throughout the years to make the building compliant with accessible parking requirements. This alternative would eliminate approximately 29 parking spaces for a total parking of 121 spaces where 152 are required.

Performing this type work does not align with standard and traditional engineering industry practice. The cost of preforming non-standard repairs adds significantly to the cost of the repairs. The permit applicant estimates that this alternative will increase costs seven to eight times over the proposed repair project valued at $1 million. The structural engineer peer reviewer found the cost estimates to be plausible because the work would be very complex. There is also a question on whether the permit applicant can find an engineering firm that will design and sign the plans for a non-standard approach to the repair work. The structural peer reviewer confirmed that given the current strong construction market, it would be challenging to find a contractor interested in taking on this project given the higher risk compared to more conventional projects.

Lastly, the applicant identified economic impacts to this alternative that include the need to vacate existing tenants for up to two months to complete the work. The structural peer reviewer found this to be plausible. This would result in a loss of revenue and potential loss of tenants over the long term. The nonconforming nature of the work would also impact the buildings market value. This could result in legal challenges with the building owner's lease with the City. The City owns the land and leases the building.

Based on the information and evidence provided by the appellant, permit applicant and the structural peer reviewer, staff's conclusion is that this alternative is not feasible.

Alternative No. 8: modification of Alternative 7

This alternative was submitted by the appellant March 14 in an email that stated the following:

Increase the cross-sectional area of the pillars at the parking level and thus their load-bearing capacity to support (almost) the entire weight of the building, so that N-S P/T tendons are unnecessary. Then the difficult task of installing new anchors at the south walls of the building also becomes unnecessary. Then the podium need not be cut close to the south walls. Retain the E-W cuts in the podium to accommodate the Turfstone panels and the extra dirt-confining walls. Retain the load-bearing function of the E-W P/T tendons.

It modifies the original Alternative No. 7 by decreasing the complexity involved in performing the work, and focuses on increasing the width of columns in the parking garage to provide more structural support. Staff and the permit applicant has not had adequate time to review this alternative fully. The building official and the structural engineer peer reviewer found while this would provide extra support; it does not support the gaps between the columns. It would still require similar repair work of installing cables between the gaps.

This option would likely remove even more parking than alternative No. 7, and similar cost increases would be experienced. Staff's conclusion is that this alternative is not feasible.

Engagement and correspondence

As mentioned in the background, there have been three meetings with the appellants since January. There have been multiple, ongoing, and regular weekly correspondences between the lead appellants, city staff and the permit applicants. These have been in the forms of calls, emails, and providing services at the building/planning counter. The permit applicants and the peer reviewers have responded to many questions

raised by the appellants to help clarify and research alternatives. The processing of this appeal involved support from three departments: the city manager's office, public works and community development. There was one public comment that came through email, and is included in Attachment I.

Recommendations

Given the evidence submitted by the appellant, permit applicant and independent peer reviewers, staff has not been able to identify a feasible and reasonable alternative that would preserve the trees, and recommends denial of the appeal.

Impact on City Resources

There are no additional City resources required for this item.

Environmental Review

This action is not a project within the meaning of the California Environmental Quality Act (CEQA) Guidelines §§ 15378 and 15061(b)(3) as it is a minor change that will not result in any direct or indirect physical change in the environment.

Public Notice

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

Attachments

A. Heritage tree removal permit
B. Planning Commission report packet
C. Additional information requested from the permit applicant by City
D. Appeal letter
E. Decision making criteria for heritage tree removals
F. Permit applicant's alternatives analysis
G. Peer reviews
H. Appellant alternative analysis
I. Public comment received

Report prepared by:
Christian Bonner, City Arborist
Bana Divshali, Acting Building Official
Rebecca Lucky, Sustainability Manager
Kaitie Meador, Senior Planner
Report Reviewed by:
Bill McClure, City Attorney
Deanna Chow, Assistant Community Development Director

ATTACHMENT A

Heritage Tree Removal Permit Application

PAID
NOV 07 2017

This application must be submitted with the Arborist Report Form
Please submit completed forms to:
701 Laurel St., Menlo Park, CA 94025

Application No. HTR2017-00223

Purpose of application: Removal ☑ **Pruning of more than 25%** ☐

Permit Fee: $135.00 (each tree, up to 3 trees); $90 each additional tree (separate forms required for each tree)

PLEASE PRINT CLEARLY

Site Address: 1000 El Camino Real, Menlo Park, CA 94025

Name of Applicant: Matt Matteson (MPOL Investors, LLC) Phone 650-802-1804 FAX _____

Mailing Address: 1510 Fashion Island Boulevard, Suite 380 San Mateo, CA 94404 Email: mmatteson@mattesonrealty.com

Type of Tree: 7 Redwood Trees See Arborist Report Location on property: Front Entrance of Landscapin

Reasons for Request:

See the attached arborist report for the reasons. The main reason is because the roots of the redwood trees on site are causing damage to the existing waterproofing for an underground parking garage that needs to be replaced.

IF TREE IS DEAD or DAMAGING STRUCTURE PLEASE ATTACH PHOTOS DEMONSTRATING CONDITION.

ARE YOU CONSIDERING ANY CONSTRUCTION ON YOUR PROPERTY IN THE NEXT 12 MONTHS?
Yes ■ No ☐
If yes, please submit additional information describing what type of construction is planned and a site plan.

- Tree may not be removed (or pruned over 25%) unless and until the applicant has received final permission from the City as indicated below.
- The signed permit approval form must be on site and available for inspection while the tree work is being performed.
- A suitable replacement tree, 15 gallon size or larger with a mature height of 40 feet or more, is to be installed in the time frame indicated below.

I (we) hereby agree to hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City, including but not limited to, all cost in the City's defense of its actions in any proceeding brought in any State or Federal Court challenging the City's actions with respect to the proposed tree removal.

Incomplete applications will not be processed.

Signature of property owner authorizing access and inspection of tree in his/her absence.

_____ Date: 10/30/17

----------**PLEASE DO NOT WRITE BELOW THIS LINE**----------

PERMIT APPROVED ☐ **PERMIT DENIED** ☐

TIMING OF REMOVAL
☐ Upon receipt of this approved permit
☐ After applying for a Building Permit for associated construction

TIMING OF REPLANTING
☐ Within 30 days of Heritage Tree removal
☐ Prior to final building inspection of associated construction

Staff Signature: _____ **Date:** _____

Print name and title: _____

Arborist Form

Please complete one form for each tree. Mark each tree with colored ribbon or tape prior to our inspection.

Site Address:
1000 El Camino Real, Menlo Park, CA

ARBORIST INFORMATION:

Name of Certified Arborist: **Steve Batchelder**

ISA or ASCA number: WC-0228A Menlo Park Business License number: 71136

Company: **SBCA Tree Consulting**

Address: **1534 Rose Street, Crockett, CA 94525**

Phone: **510-787-3075** FAX: **510-787-3065** Email: **steve@sbcatree.com**

TREE INFORMATION:

Date of Inspection: 6/16/17

Common Name: Coast Redwood Botanical Name: *Sequoia sempervirens*

Location of Tree: 1000 El Camion Real, Menlo Park Height of Tree: 85 feet

Diameter of tree at 54 inches above natural grade: From 26" to 40"

Circumference of tree at 54 inches above natural grade

Condition of Tree:

SEE ATTACHED SBCA ARBORIST REPORT

If recommending removal or pruning, please list all reasons:

None of the 7 redwood trees will survive the root cutting required for the water seal treatment.

Suggested Replacement Tree:

SEE ATTACHED SBCA ARBORIST REPORT AND LANDSCAPE PLAN

Signature of Arborist: Steve Batchelder **Date:** 10/9/2017

CITY OF MENLO PARK/FINANCE DEP
650-330-6704

126696 2:05 PM 11/07/17

EMP: JANICE

701		HERITAGE TREE PERMIT	
	3 @	135.00	405.00
701		HERITAGE TREE PERMIT	
	4 @	90.00	360.00
		1000 El CAMINO REAL	
		PMT BY: MPOC INVESTORS LLC	

SUB-TOTAL :	$765.00
SALES TAX :	.00
TOTAL >	$765.00
PAY TYPE :	CHECK
# 1210	
RECEIVED :	765.00
CHANGE :	.00

701 LAUREL STREET
MENLO PARK, CA. 94025
THANK YOU FOR YOUR BUSINESS

CITY OF MENLO PARK/FINANCE DEP
650-330-6704

126696 2:05 PM 11/07/17

EMP: JANICE

701		HERITAGE TREE PERMIT	
	3 @	135.00	405.00
701		HERITAGE TREE PERMIT	
	4 @	90.00	360.00
		1000 El CAMINO REAL	
		PMT BY: MPOC INVESTORS LLC	

SUB-TOTAL :	$765.00
SALES TAX :	.00
TOTAL >	$765.00
PAY TYPE :	CHECK
# 1210	
RECEIVED :	765.00
CHANGE :	.00

SARES|REGIS

Ken Rakestraw
SRGNC CRES, LLC
901 Mariners Island Boulevard, 7th Floor, San Mateo, California 94404
T: 650-378-2800

November 2, 2017

Attn: Christian Bonner
City Arborist
701 Laurel St., Menlo Park, CA 94025
Phone: 650-330-6793

Christian Bonner,

On behalf of Matt Matteson (MPOC Investors LLC, Client & Owner), SRGNC CRES, LLC ("Sares Regis", Development Manager) is requesting the City of Menlo Park review a tree removal application for their property at 1000 El Camino Real in Menlo Park. Matt Matteson currently has a long term lease with the City of Menlo Park at 1000 El Camino Real where there is currently a 3 story, 40,000 square foot office building on top of an underground parking lot. The underground parking garage podium extends beyond the building footprint and is covered by a waterproofing system and landscaping that was installed back in the 1980s.

The current issue is that the combination of aging waterproofing system and the extensive growth of roots from 7 Redwood trees directly adjacent to the podium of the underground garage. The waterproofing system is leaking into the garage which is causing damage to a few of the post tensioned structural cables.

The problem is that the 7 large Redwood trees are located within close proximity to the podium. In order to repair the existing waterproofing system and post tension cables properly, Steve Batchelder with SBCA recommends that the 7 redwood trees be removed.

Please see the attached signed tree removal application, a proposed tree re-planting plan, SBCA's arborist report about the redwood trees, and reports from our waterproofing consultant (Allana Buick & Bers) and structural consultant (KPFF, Allana Buick & Bers) regarding the extent of the damages to the structure and waterproofing system.

Please contact me if you have any questions or would like to schedule a site walk since the Redwood tree roots are still exposed.

Sincerely,

Ken Rakestraw
Sares Regis Group of Northern California, LLC
901 Mariners Island Boulevard, Suite 700
San Mateo, CA 94404
(949) 244-3085 –C

SBCA TREE CONSULTING

1534 Rose Street, Crockett, CA 94525
Phone: (510) 787-3075
Fax: (510) 787-3065
Website: www.sbcatree.com

Steve Batchelder, Consulting Arborist
WC ISA Certified Arborist #228
CUFC Certified Urban Forester #134
CA Contractor License #(C-27) 53367
E-mail: steve@sbcatree.com

Molly Batchelder, Consulting Arborist
WC ISA Certified Arborist #9613A
ISA Tree Risk Assessment Qualified
E-mail: molly@sbcatree.com

Date: October 2, 2017

To: Ken Rakestraw, Project Manager
Sares Regis Inc.
901 Mariners Island Boulevard, Suite 700
San Mateo, CA 94404

Project Site: 1000 El Camino Real, Menlo Park

Subject: Removal of 7 Coast Redwood trees to accommodate waterproofing

Assignment: *SBCA Tree Consulting was asked to oversee exploratory excavation and to provide a report with observations and recommendations regarding treatment of the redwood trees in the context of the necessary water proofing repairs.*

Background

- Review of Trees and Water Leakage– Arborist Steve Batchelder attended an initial meeting at 1000 El Camino on July 19, 2017. The purpose of the meeting was to review the trees and leakage. A that time, a plan was developed to perform exploratory excavation.
- Review of Exploratory Excavation and Tree Roots – Arborist was present for two meetings. First was during the excavation and a second meeting with all parties to discuss the findings.
- Review of KPFF ENGINEERS FIELD REPORT dated 6/6/17 – This report was made available with the results of the engineering investigation.
- Review of ALLANA BUICK & BERS *Podium Investigation Findings Report* dated August 16, 2017 – This report was also reviewed in the context of the problems identified and the work needed.

Summary

The seven Coast Redwood trees will require removal to accommodate the needed repairs to the below ground garage structure's water proofing. Preliminary exploratory excavation revealed that the level of root cutting required to allow for the repairs will compromise both the health and safety of the redwood trees. Any attempt to try to retain one or two of the redwoods would also compromise the safety due to the level of root loss that would occur and the increased wind exposure resulting from the tree removal.

It is hoped that Coast Live Oak tree #8 can likely be retained. Protection and retention measures needed for the retention of this tree is covered in a second report.

Observations

Tree Descriptions – The table below provides information on seven Coast Redwood trees and one Coast Live Oak.

Tree #	Species	Common Name	DBH	Height	Health	Structure	Notes
1	*Sequoia sempervirens*	Coast Redwood	40	85'	Good	Good	Remove
2	*Sequoia sempervirens*	Coast Redwood	38	85'	Good	Good	Remove
3	*Sequoia sempervirens*	Coast Redwood	34.5	85'	Good	Good	Remove
4	*Sequoia sempervirens*	Coast Redwood	39	85'	Good	Good	Remove
5	*Sequoia sempervirens*	Coast Redwood	38.5	85'	Good	Good	Remove
6	*Sequoia sempervirens*	Coast Redwood	34.5	85'	Good	Good	Remove
7	*Sequoia sempervirens*	Coast Redwood	37	85'	Good	Good	Remove
8	*Quercus agrifolia*	Coast Live Oak	26.5	35'	Good	Good	Retain

Soil Depth – The depth of the soil over the garage roof structure ranges from 12 to 18 inches. The area is covered with turf that appears to be well irrigated. Soil texture is a sandy loam.

Abundant Tree Roots – Redwood tree roots are abundant throughout the turf area which lies above the garage. Though most roots are smaller and fibrous, there are many large roots as well. All roots will need to be cut to access the structure surface to apply the new waterproofing. Because the trees are planted just behind the outer garage wall, extremely large roots are present along the edge of the structure's outer wall. Severing these roots will compromise the root anchoring of the trees.

Discussion

Leakage Found – Both the ALLANA BUICK & BERS and the KPPF engineering reports noted leakage and structural steel degradation. Both reports indicate that repairs are in order. New water seal has been recommended for the entire garage structure.

No Ability to Work around Roots –Exploratory excavation was conducted in two locations adjacent to redwood trees. The size and abundance of roots observed in the soil precludes access to the garage roof surface and corners. Repairs are not possible if the roots remain.

Root Pruning – If roots are cut to accommodate the needed water proofing, the root anchoring and health of the trees would likely be compromised. It is likely that even ceasing the turf irrigation would have a significant adverse impact upon the health of the trees; the majority of the tree roots are located in the irrigated turf area above the garage.

Stand Dynamics – This entails both wind exposure and root grafts. Removing all but one or two of the redwood trees will leave the remaining trees with greater failure potential.

Retention of Coast Live Oak Tree #8 – Though no exploratory investigation has been conducted, it does appear that this tree can be retained with minimal root pruning that will not compromise either the health or stability of this tree. Retention and protection of this tree is covered in a separate report.

Recommendations

Remove 7 Redwood Trees – Removal of the seven Coast Redwood trees appears to be the only viable option to enable the waterproofing to occur. An attempt to retain one or two of the redwoods will generate a serious safety concern and constitute a liability for the tree owner.

Replacement Planting - City of Menlo Park requires a tree with a minimum height of 40 feet. Based upon the ***City-Approved Tree Species*** list, it is recommended that the *Lophostemon confertus* be selected. Recommended per tree soil volume[1] is 1,200 cubic feet. It appears that there is insufficient area for the required number of 15 gallon size replacement trees. We recommend that larger box size trees be considered for planting to compensate for fewer trees. Replacement trees are best located to minimize completion with the London Plane trees located in the adjacent sidewalk.

Retain Coast Live Oak – This tree is noted on the site map as #8. It is farther from the area of work activities. Special excavation procedures and treatments with arborist supervision will be required in the preservation effort.

End Report

Report submitted by:

Steve Batchelder

Steve Batchelder, Consulting Arborist
ISA Certified Arborist WE 228A
CaUFC Certified Urban Forester #138
Calif. Contractor Lic. (C-27) 533675

[1] Soil volume must be with bulk density less than 80% and acceptable horticultural qualities.

Photo Supplement

Photo 1. *Photo shows the four redwood trees located at the south end of the row.*

None of the trees can be retained due to the safety concerns resulting from the level of root loss that will occur.

Photo 2. *Photo above shows trees 5 through 8. Oak tree #8 is in the background (arrow). The oak is farther from the proposed work activities and can likely be retained.*

Photo 3. *Photo to the right shows the massive amount of roots found in the turf area. All of these roots would need to be removed to accommodate the waterproofing.*

Photo 4. *Photo to the left shows the old water proofing and protection open for inspection. Significant root cutting was needed to gain access to the surface of the garage roof. People doing the excavation are working at the edge of the outer wall of the below ground garage. Cutting large roots so close to the tree will compromise the root anchoring and tree stability. Most likely "target" would be El Camino Real in the background.*

End Photo Supplement

STAFF REPORT

Planning Commission
Meeting Date: **10/22/2018**
Staff Report Number: **18-090-PC**

Regular Business: **Architectural Control/Matt Matteson/1000 El Camino Real**

Recommendation

Staff recommends that the Planning Commission approve a request for architectural control to partially demolish an existing podium to perform waterproofing work on an existing below grade parking garage and install new site improvements. The proposed site improvements would include reconfiguration of the existing entry path and courtyard and modifications to the existing outdoor patio at the rear of the building. The proposal also includes the removal of seven heritage trees along El Camino Real. No other changes to the existing office building are proposed. The existing building is located in the SP-ECR/D (El Camino Real/Downtown Specific Plan) zoning district. The recommended actions are included as Attachment A.

Policy Issues

Each architectural control request is considered individually. The Planning Commission should consider whether the required architectural control findings can be made for the proposal.

Background

Site location

The subject property is located at 1000 El Camino Real in the SP-ECR/D (El Camino Real/Downtown Specific Plan) zoning district. Within the SP-ECR/D zoning district, the subject property is located in the El Camino Real South-East (ECR SE) district and the El Camino Real Mixed Use/Residential (ECRMUR) land use designation. The subject property is a corner lot with frontages on El Camino Real and Ravenswood Avenue. Using El Camino Real in the east-west orientation, the subject property is located at the northeast corner of the El Camino Real and Ravenswood Avenue intersection. The project site is developed with a three-story office building with a below grade parking garage and a surface parking lot. Access to the property is provided from El Camino Real, as well as from a driveway on Ravenswood Avenue. Each driveway provides two-way access to and from the site. The surrounding properties are also located in the SP-ECR/D (El Camino Real/Downtown Specific Plan) zoning district and are developed with a variety of commercial uses. A location map is included as Attachment B.

Analysis

Project description

The applicant is proposing site improvements in conjunction with waterproofing repairs to the below grade parking garage. The existing waterproofing of the parking garage is compromised due to outdated

waterproofing from the 1980's when the building was originally constructed and the root systems of several large heritage trees located on and damaging the parking garage wall. In order to repair the wall these heritage trees would be removed, as discussed in a following section, and the landscaping would be removed and replaced above the parking garage. Additional site improvements would include new hardscaping and patios, upgraded accessible path of travel, and new lighting. The building exterior would be updated with new paint colors. The project would not result in any changes to the parking count, gross floor area (GFA), or building coverage.

In addition to the on-site improvements the project also includes expansion of the sidewalk along El Camino Real. The existing sidewalk is currently eight foot wide and the proposed sidewalk would be increased to ten foot wide. The applicant and the City would enter into a cost sharing agreement for the sidewalk improvements and as such, project specific condition of approval 4b has been added regarding the frontage improvements. The layout of the proposed sidewalk would be designed to avoid relocation of the existing utilities and additional impacts to the heritage trees proposed to remain. The project plans and the project description letter are included in Attachments C and D respectively.

Design and materials

The existing site contains a walkway leading from the sidewalk, turf lawn plantings, retaining walls, and a small entry and rear patio area. The applicant is requesting the exterior modifications in order to expand the existing entry and rear patios and update the design with a more contemporary style. The proposed entry patio would feature a larger hardscaped area, additional bench seating, raised planter pots, and an upgraded accessible walkway. The lighting would be upgraded throughout the site including new parking lot and walkway lights. Porcelain paver hardscaping would be installed for the entry and rear patios and walkways. The existing railings would be updated to metal and cable railings in a dark bronze finish to meet building code requirements. The building exterior would feature neutral gray paint colors with a lighter gray on the primary building façade and a darker gray on the building recesses to provide contrast. The proposed landscaping would be drought tolerant plantings and the new tree plantings would be located in relatively the same location as the proposed tree removals along the expanded El Camino Real sidewalk.

Overall, staff believes that the proposed changes would result in a consistent architectural design that would also be compatible with the existing building. The proposed changes would comply with relevant El Camino Real/Downtown Specific Plan design standards and guidelines (many of which are not applicable because this is an existing building that is not being substantially modified), as documented in Attachment E, and the landscaping and site improvements would represent a comprehensive, cohesive aesthetic update.

Trees and landscaping

The applicant has submitted two arborist reports (Attachment F) detailing the species, size, and conditions of the heritage and non-heritage trees on site. The reports discuss the impacts of the proposed improvements, including temporary construction impacts, and provide recommendations for tree maintenance and the protection of the trees.

The arborist reports identified seven heritage trees and eight non-heritage trees proposed for removal. All seven of the heritage trees are redwood trees (Trees 1-4 and 7-9) that range in size from 35 to 40 inches in diameter. According to the arborist report the heritage tree removals are required to repair and maintain the below grade parking garage. The City Arborist has reviewed the arborist report and project plans and tentatively recommended approval of the removals based on the condition of the trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services.

The arborist report outlines tree protection measures to mitigate or avoid impacts to the existing trees. The arborist report indicated that all construction activities occurring inside the root protection zone must be approved and supervised by an arborist. Tree protection fencing in required around the tree protection zone. Any digging and/or trenching in the root protection zone shall be manually preformed. All recommendations identified in the arborist report shall be implemented as part of condition 3e.

The City's heritage tree replacement guidelines for commercial/mixed-use projects require a 2:1 replacement ratio. The heritage tree replacements must be of a species that can reach a mature height of 40 feet or more and street tree replacements must be consistent with the City designated street tree species. The applicant is proposing to provide two heritage tree replacements as street trees and 12 heritage tree replacements as on-site trees, for a total of 14 trees, to compensate for the removal of the seven heritage trees. This would represent a 2:1 replacement ratio for the heritage trees. The tree replacements would include Brisbane box, coast live oak, London plane and white barked birch trees which the City Arborist has reviewed for consistency with the heritage tree replacement requirements.

Correspondence

Staff has not received any items of correspondence on the proposed project.

Conclusion

Staff believes that the proposed site improvements would result in a consistent architectural design for the development as a whole and would generally complement the existing building. In addition, the proposed design, materials, and colors of the patio are compatible with those in the surrounding area. No changes to the existing parking would be proposed and the existing sidewalk would be enhanced along El Camino Real. The removal of the heritage trees is justified because the trees conflict with the existing below grade parking garage. Two new street trees would be located along El Camino Real and 12 new trees would be planted on-site, for a total of 14 heritage tree replacements. The remaining existing trees would be protected during construction and new landscaping would be planted throughout the site. Staff recommends that the Planning Commission approve the proposed project.

Impact on City Resources

The project sponsor is required to pay Planning, Building and Public Works permit fees, based on the City's Master Fee Schedule, to fully cover the cost of staff time spent on the review of the project.

Environmental Review

The Specific Plan process included detailed review of projected environmental impacts through a

program-level Environmental Impact Report (EIR), as required by the California Environmental Quality Act (CEQA). In compliance with CEQA requirements, the Draft EIR was released in April 2011, with a public comment period that closed in June 2011. The Final EIR, incorporating responses to Draft EIR comments, as well as text changes to parts of the Draft EIR itself, was released in April 2012, and certified along with the final Plan approvals in June 2012.

The proposed project is categorically exempt under Class 1 (Section 15301, "Existing Facilities") of the current California Environmental Quality Act (CEQA) Guidelines, and as such, no additional environmental analysis is required above and beyond the Specific Plan EIR. However, relevant mitigation measures from this EIR have been applied and would be adopted as part of the Mitigation, Monitoring, and Reporting Program (MMRP), which is included as Attachment G. Mitigation measures include construction-related best practices regarding air quality, biological resources, noise, and the handling of any hazardous materials.

Public Notice

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. Public notification also consisted of publishing a notice in the local newspaper and notification by mail of owners and occupants within a 300-foot radius of the subject property.

Appeal Period

The Planning Commission action will be effective after 15 days unless the action is appealed to the City Council, in which case the outcome of the application shall be determined by the City Council.

Attachments

A. Recommended Actions
B. Location Map
C. Project Plans
D. Project Description Letter
E. Specific Plan Standards and Guidelines Compliance Worksheet
F. Arborist Report
G. Mitigation, Monitoring, and Reporting Program (MMRP)

Disclaimer

Attached are reduced versions of maps and diagrams submitted by the applicants. The accuracy of the information in these drawings is the responsibility of the applicants, and verification of the accuracy by City Staff is not always possible. The original full-scale maps, drawings and exhibits are available for public viewing at the Community Development Department.

Exhibits to Be Provided at Meeting

None

Report prepared by:
Kaitie Meador, Associate Planner

Report reviewed by:
Kyle Perata, Acting Principal Planner

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1000 El Camino Real – Attachment A: Recommended Actions

LOCATION: 1000 El Camino Real	**PROJECT NUMBER:** PLN2018-00045	**APPLICANT:** Mat Matteson	**OWNER:** City of Menlo Park
PROPOSAL: Request for architectural control to partially demolish an existing podium to perform waterproofing work on an existing below grade parking garage and install new site improvements. The proposed site improvements would include reconfiguration of the existing entry path and courtyard and modifications to the existing outdoor patio at the rear of the building. The proposal also includes the removal of seven heritage trees along El Camino Real. No other changes to the existing office building are proposed. The existing building is located in the SP-ECR/D (El Camino Real/Downtown Specific Plan) zoning district.			
DECISION ENTITY: Planning Commission	**DATE:** October 22, 2018	**ACTION:** TBD	
VOTE: TBD (Barnes, Combs, Goodhue, Kennedy, Onken, Riggs, Strehl)			

ACTION:

1. Make findings with regard to the California Environmental Quality Act (CEQA) that the proposal is within the scope of the project covered by the El Camino Real/Downtown Specific Plan Program EIR, which was certified on June 5, 2012. Specifically, make findings that:
    a. The project is categorically exempt under Class 1 (Section 15301, “Existing Facilities”) of the current CEQA Guidelines.
    b. Relevant mitigation measures have been incorporated into the project through the Mitigation Monitoring and Reporting Program (Attachment G), which is approved as part of this finding.
2. Adopt the following findings, as per Section 16.68.020 of the Zoning Ordinance, pertaining to architectural control approval:
    a. The general appearance of the structure is in keeping with the character of the neighborhood.
    b. The development will not be detrimental to the harmonious and orderly growth of the City.
    c. The development will not impair the desirability of investment or occupation in the neighborhood.
    d. The development provides adequate parking as required in all applicable City Ordinances and has made adequate provisions for access to such parking.
    e. The development is consistent with the El Camino Real/Downtown Specific Plan, as verified in detail in the Standards and Guidelines Compliance Worksheet (Attachment E).
3. Approve the use permit subject to the following ***standard*** conditions:
    a. Development of the project shall be substantially in conformance with the plans prepared by ASD SKY, consisting of 23 plan sheets, dated received October 16, 2018, and approved by the Planning Commission on October 22, 2018, except as modified by the conditions contained herein, subject to review and approval of the Planning Division.
    b. Prior to building permit issuance, the applicants shall comply with all Sanitary District, Caltrans, Menlo Park Fire Protection District, and utility companies’ regulations that are directly applicable to the project.

LOCATION: 1000 El Camino Real	**PROJECT NUMBER:** PLN2018-00045	**APPLICANT:** Mat Matteson	**OWNER:** City of Menlo Park

PROPOSAL: Request for architectural control to partially demolish an existing podium to perform waterproofing work on an existing below grade parking garage and install new site improvements. The proposed site improvements would include reconfiguration of the existing entry path and courtyard and modifications to the existing outdoor patio at the rear of the building. The proposed project also includes the removal of seven heritage trees along El Camino Real. No other changes to the existing office building are proposed. The existing building is located in the SP-ECR/D (El Camino Real/Downtown Specific Plan) zoning district.

DECISION ENTITY: Planning Commission	**DATE:** October 22, 2018	**ACTION:** TBD

VOTE: TBD (Barnes, Combs, Goodhue, Kennedy, Onken, Riggs, Strehl)

ACTION:

c. Prior to building permit issuance, the applicant shall comply with all requirements of the Building Division, Engineering Division, and Transportation Division that are directly applicable to the project.

d. Simultaneous with the submittal of a complete building permit application, the applicant shall submit plans indicating that the applicant shall remove and replace any damaged and significantly worn sections of frontage improvements. The plans shall be submitted for review and approval of the Engineering Division.

e. Heritage trees in the vicinity of the construction project shall be protected pursuant to the Heritage Tree Ordinance and the arborist report prepared by SBCA Tree Consulting, dated July 24, 2018.

f. Prior to building permit issuance, the applicant shall submit a heritage street tree preservation plan, detailing the location of and methods for all tree protection measures. A heritage tree permit will be required to remove any heritage trees.

g. Street trees shall be from the City-approved street tree species or to the satisfaction of City Arborist. Irrigation within public right of way shall comply with City Standard Details LS-1 through LS-19 and shall be connected to the on-site water system, subject to review and approval of the Engineering Division.

h. Simultaneous with the submittal of a complete building permit, the applicant shall provide a completed checklist for Engineering Submittals with Building Permit Applications for review by the Engineering Division.

i. Simultaneous with the submittal of a complete building permit application, the applicant shall submit a Grading & Drainage plan if there are grading changes, subject to review and approval of the Engineering Division.

j. Concurrent with the submittal of a complete building permit application, the applicant shall submit a detailed landscape plan and submit documentation of compliance with the City's Water Efficient Landscape Ordinance (Municipal Code 12.44) if the project is replacing more than 1,000 square feet of irrigated landscaping, subject to review and approval of the Engineering Division.

k. Concurrent with the submittal of a complete building permit application, if the project is creating or replacing more than 5,000 square feet of irrigated landscaping, per the City's Water Efficient Landscape Ordinance (Municipal Code 12.44) the irrigation system shall be

LOCATION: 1000 El Camino Real	**PROJECT NUMBER:** PLN2018-00045	**APPLICANT:** Mat Matteson	**OWNER:** City of Menlo Park

PROPOSAL: Request for architectural control to partially demolish an existing podium to perform waterproofing work on an existing below grade parking garage and install new site improvements. The proposed site improvements would include reconfiguration of the existing entry path and courtyard and modifications to the existing outdoor patio at the rear of the building. The proposed project also includes the removal of seven heritage trees along El Camino Real. No other changes to the existing office building are proposed. The existing building is located in the SP-ECR/D (El Camino Real/Downtown Specific Plan) zoning district.

DECISION ENTITY: Planning Commission	**DATE:** October 22, 2018	**ACTION:** TBD

VOTE: TBD (Barnes, Combs, Goodhue, Kennedy, Onken, Riggs, Strehl)

ACTION:

designed with a separate water service, subject to review and approval of the Engineering Division.

4. Approve the architectural control subject to the following ***project-specific*** conditions:

    a. Prior to building permit issuance, the applicant shall submit documentation of compliance with all Mitigation Monitoring and Reporting Program (MMRP) requirements as specified in the MMRP (Attachment G), subject to review and approval of the Planning Division. Failure to meet these requirements may result in delays to the building permit issuance, stop work orders during construction, and/or fines.

    b. Simultaneous with the submittal of a complete building permit application, the applicant shall submit documentation of compliance with the following requirements for the frontage improvements:
        i. The Menlo Park El Camino Real/Downtown Specific Plan identifies adequate facilities for pedestrian access along El Camino Real. The specific plan identifies a 15-foot wide sidewalk with a minimum 10-foot wide clear walking zone and a minimum 5-foot wide furnishing zone measured from the back of curb. The City has agreed with a 10 feet sidewalk on El Camino Real frontage in order to preserve all trees unaffected by the other work proposed and maintain a consistent cross-section along the entire property frontage. However, a 15 feet sidewalk will be required with the future redevelopment of the site consistent with the vision of the Downtown Specific Plan.
        ii. Tree wells must be adjusted to four foot by six foot if feasible. Currently, the sidewalk is approximately eight foot wide measured from the back of curb to the property line. Therefore, a two foot PAE dedication to achieve the required ten foot wide interim sidewalk is required.
        iii. Any other frontage improvements which are damaged as a result of construction will be required to be replaced.
        iv. All street light and CCTV poles along the project frontage on El Camino Real must be painted Mesa Brown.
        v. Upon completion of the sidewalk improvements, the City will reimburse the developer fifty percent (50%) of the actual costs, not to exceed $42,000.
        vi. Prior to building permit issuance, Applicant shall submit plans for: 1) construction safety fences around the periphery of the construction area, 2) dust control, 3) air pollution control, 4) erosion and sedimentation control, 5) tree protection fencing, and 6) construction vehicle parking. The plans shall be subject to review and approval by the Building, Engineering, and Planning Divisions. The fences and

LOCATION: 1000 El Camino Real	**PROJECT NUMBER:** PLN2018-00045	**APPLICANT:** Mat Matteson	**OWNER:** City of Menlo Park
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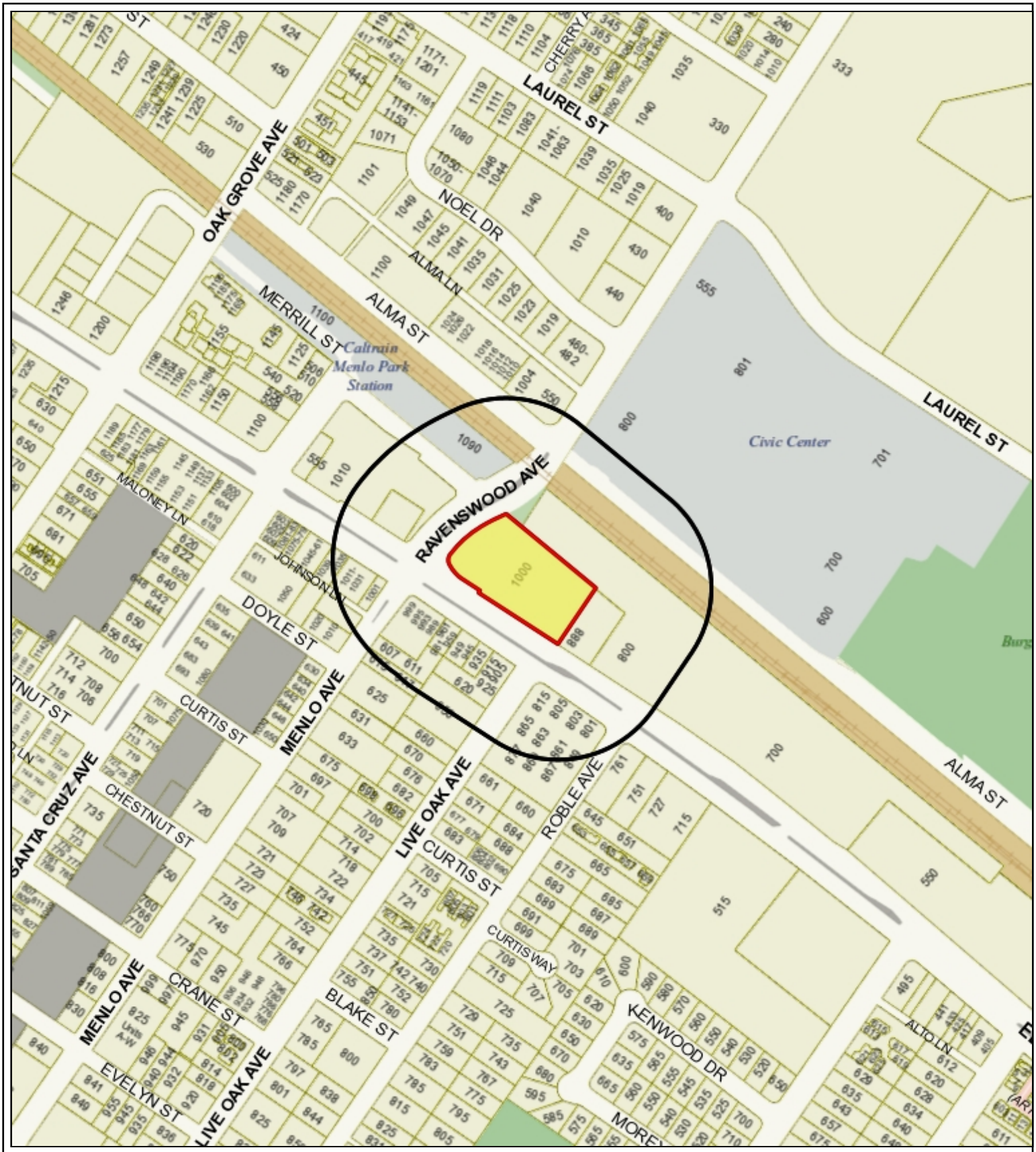
DECISION ENTITY: Planning Commission	**DATE:** October 22, 2018	**ACTION:** TBD	
VOTE: TBD (Barnes, Combs, Goodhue, Kennedy, Onken, Riggs, Strehl)			
ACTION: erosion and sedimentation control measures shall be installed according to the approved plan prior to commencing construction.			



City of Menlo Park

Location Map
1000 El Camino Real

Scale: 1:4,000 | Drawn By: KMM | Checked By: KTP | Date: 10/22/2018 | Sheet: 1

GENERAL NOTES

A0.01
ALL ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE NATIONAL AND LOCAL CODES AND ORDINANCES, WHETHER LISTED HEREIN OR NOT.
A0.02
ANY & ALL GOVERNING LOCAL LABOR LAWS, REGULATIONS & REQUIREMENTS AND THOSE SET AS BUILDING REQUIREMENTS SHALL BE OBSERVED & FOLLOWED AS THEY RELATE TO THIS PROJECT.
A0.03
CONTRACTOR SHALL OBTAIN ALL REQUIRED BUILDING PERMITS AND CERTIFICATE OF OCCUPANCY PERMIT AS WELL AS SEPARATE MECHANICAL, ELECTRICAL, AND PLUMBING PERMITS PRIOR TO AND DURING CONSTRUCTION.
A0.04
MATERIALS, DIMENSIONS, AND OTHER CONDITIONS NOT OTHERWISE INDICATED IN THESE DRAWINGS SHALL BE ASSUMED AS HAVING THE SAME MEANING AS THOSE MOST SIMILARLY DETAILED AND MORE FULLY DEFINED ELSEWHERE IN THE DRAWINGS. CONTRACTOR TO VERIFY W/ ARCHITECT IN WRITING.
A0.05
THE EXTENT OF WORK SHALL BE LIMITED TO THAT INDICATED IN THE CONTRACT DOCUMENTS. NO ADDITIONAL WORK SHALL BE DONE WITHOUT WRITTEN APPROVAL OF OWNER. ANY ADDITIONAL WORK PERFORMED WITHOUT PRIOR WRITTEN APPROVAL BY OWNER SHALL BE AT THE CONTRACTOR'S EXPENSE.
A0.06
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASURING OF EXISTING CONDITIONS PRIOR TO START OF WORK & DURING CONSTRUCTION AS NECESSARY TO ASSURE CONSTRUCTION ADHERENCE TO DRAWINGS. BY ENTERING INTO A CONSTRUCTION CONTRACT FOR THIS WORK, GC SHALL INDICATE HIS FAMILIARITY WITH THE SITE/FIELD CONDITIONS.
A0.07
FLOOR TOLERANCE: IN LAYING OUT THE WORK TO BE COMPLETED, CONSIDERATION SHALL BE GIVEN TO VARIATIONS IN THE FLOOR LEVEL RESULTING FROM THE CONSTRUCTION QUALITY AND LIVE AND DEAD LOADS IMPOSED ON THE STRUCTURE. FIELD VERIFICATIONS SHALL BE MADE OF CONDITIONS TO VERIFY CONSTRUCTION TOLERANCES AND ALIGNMENT OF DOOR HEADS. OTHER HORIZONTAL ELEMENTS SHALL BE MAINTAINED AT CONSTANT LEVEL AND SHALL NOT FOLLOW VARIATIONS IN FLOOR PLANE. LEVEL FLOORS AS REQUIRED BY USING AN APPROVED LEVELING COMPOUND.
A0.08
THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ADEQUATE PRECAUTIONS TO PROTECT BUILDING OCCUPANTS, MATERIALS, & EXISTING FINISHES THROUGHOUT ALL PHASES OF CONSTRUCTION. NOISE, SECURITY, AND DUST BARRIERS BETWEEN CONSTRUCTION AREAS AND OCCUPIED AND PUBLIC AREAS SHALL BE MAINTAINED BY CONTRACTOR.
A0.09
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING BUILDING CORRIDORS CLEAR OF PROJECT MATERIALS AND EQUIPMENT.
A0.10
GC SHALL PROVIDE GENERAL CARPENTRY AS REQUIRED FOR WORK WHICH MAY NOT FALL UNDER THE JURISDICTION OF A SPECIFIED TRADE BUT IS REQUIRED FOR PROPER JOB EXECUTION AND COMPLETION OF CONSTRUCTION.
A0.11
NO MODIFICATIONS/REVISIONS/CHANGES SHALL BE UNDERTAKEN UNLESS SPECIFICALLY SO INSTRUCTED & APPROVED BY CLIENT.
A0.12
CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY AND CONFIRMING THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH WORK IN QUESTION.
A0.13
THE INTENT OF THE CONTRACT DOCUMENTS IS TO EXCLUDE ALL MATERIALS WHICH CONTAIN KNOWN HAZARDOUS SUBSTANCES THESE INCLUDE MATERIALS CONTAINING ASBESTOS, POLYCHLORINATED BIPHENYL(PCB), OR ANY OTHER KNOWN SUBSTANCES DETERMINED TO BE A HEALTH HAZARD BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) AND OTHER RECOGNIZED AGENCIES. IN STUDYING THE CONTRACT DOCUMENTS, AND AT ANY TIME DURING EXECUTION OF THE WORK, THE CONTRACTOR SHALL AT ONCE REPORT TO THE ARCHITECT ANY MATERIALS CONTAINING HAZARDOUS SUBSTANCES THAT HE/SHE MAY DISCOVER. DO NOT PROCEED WITH INSTALLATION OF HAZARDOUS MATERIALS.
A0.14
CONTRACTOR SHALL VERIFY PRESENCE OF HAZARDOUS MATERIALS WITH OWNER. ARCHITECT AND ITS CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL, OR DISPOSAL OF OR EXPOSURE OF PERSONS TO HAZARDOUS MATERIALS IN ANY FORM AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO, ASBESTOS, POLYCHLORINATED BIPHENYL(PCB) OR OTHER TOXIC SUBSTANCES.
A0.15
WHERE PRODUCTS ARE SPECIFIED BY REFERENCE STANDARD OR IN DESCRIPTIVE MANNER WITHOUT MANUFACTURER'S NAME, MODEL NUMBER OR TRADE NAME, CONTRACTOR SHALL SELECT MATERIALS MEETING SPECIFIED REQUIREMENTS WHICH DO NOT CONTAIN KNOWN HAZARDOUS SUBSTANCES IN ANY FORM AND SUBMIT TO ARCHITECT FOR APPROVAL.
A0.16
INSTALL ALL MANUFACTURED ITEMS, MATERIALS AND EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS, EXCEPT THAT THE SPECIFICATIONS HEREIN, WHERE MORE STRINGENT, SHALL BE COMPLIED WITH.

A0.17
IN MAKING REQUESTS FOR SUBSTITUTION, CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THAT MATERIALS REQUESTED FOR SUBSTITUTION ARE FREE OF KNOWN HAZARDOUS SUBSTANCES IN ANY FORM.
A0.18
WARRANTY SHALL BE EXTENDED FOR ALL CONSTRUCTION COMPONENTS, EQUIPMENT AND INSTALLATIONS INCLUDED IN THIS CONTRACT FOR A MINIMUM OF 1 YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
A0.19
GC SHALL RE-EXECUTE ANY WORK THAT FAILS TO CONFORM TO THE DRAWINGS/DETAILS AS SHOWN AND ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP WHICH APPEAR WITHIN A PERIOD OF ONE (1) YEAR.
A0.20
SHOP DRAWINGS SHALL BE SUBMITTED TO ARCHITECT IN TRIPLICATE FOR REVIEW. SHOP DRAWINGS ENHANCE THESE SPECIFICATIONS: APPROVAL OF SHOP DRAWINGS SHALL NOT RELEASE CONTRACTOR FROM RESPONSIBILITY FOR THE WORK AS SPECIFIED.
A0.21
THESE DOCUMENTS INDICATE MATERIALS AND METHODS OF CONSTRUCTION TO ESTABLISH STANDARDS OF QUALITY AND/ OR PERFORMANCE. OTHER MATERIALS AND/OR METHODS WILL BE CONSIDERED BY THE ARCHITECT FOR ACCEPTANCE PROVIDED THAT THEY DO NOT AFFECT THE VISIBLE APPEARANCE. MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE ARCHITECT IN WRITING PRIOR TO ORDERING AND/OR FABRICATION.
A0.22
ALL REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND WILL BE CONSIDERED ONLY IF BETTER SERVICE FACILITIES, A MORE ADVANTAGEOUS DELIVERY DATE, OR LOWER PRICE WITH CREDIT TO THE OWNER IS PROVIDED WITHOUT SACRIFICING QUALITY, APPEARANCE AND FUNCTION. UNDER NO CIRCUMSTANCES WILL THE ARCHITECT BE REQUIRED TO PROVE THAT A PRODUCT PROPOSED FOR SUBSTITUTION IS OR IS NOT OF EQUAL QUALITY TO THE PRODUCT SPECIFIED.
A0.23
CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, IMMEDIATELY FOLLOWING DIRECTIVE TO PROCEED WITH WORK, CONFIRMATION WITH DELIVERY DATES FOR ORDERS OF MATERIALS AND EQUIPMENT AND ANY LONG LEAD TIME ITEMS.
A0.24
DAMAGE: CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIRS OF ANY ACCIDENTAL DAMAGE HE INFLICTS UPON THE EXISTING WORK WHICH WILL REMAIN. IF FOR ANY REASON DAMAGE TO EXISTING WORK OR UTILITIES IS CONSIDERED TO BE UNAVOIDABLE, SUBMIT WRITTEN NOTIFICATION OF THIS BEFORE SIGNING THE CONTRACT. IN THE ABSENCE OF SUCH NOTIFICATION, CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR DAMAGE AND THE COSTS OF SATISFACTORILY REPAIRING OR REPLACING DAMAGED WORK.
A0.25
FINAL CLEANING AT COMPLETION SHALL INCLUDE DUSTING OF ALL FINISHED SURFACES, VACUUMING, REMOVAL OF SPOTS, MARKS, LABELS, FINGERPRINTS, SPILLS, AND CLEANING OF ALL INTERIOR GLASS.
A0.26
JOB SITE CLEAN-UP SPECIFIED IN 0.25 SHALL CONTINUE BEYOND DATE OF SUBSTANTIAL COMPLETION TO MOVE-IN DAY AND SHALL INCLUDE REMOVAL OF ACCUMULATED DEBRIS RESULTING FROM WORK BY TELECOMMUNICATIONS CONTRACTORS AND OTHER VENDORS UNDER CONTRACT TO THE OWNER. (NOTE:FURNITURE PACKING MATERIALS WILL BE RESPONSIBILITY OF FURNITURE VENDOR.)
A0.27
FIRE RATED PARTITIONS SHALL BE NOTED IN STENCIL ABOVE FINISHED CEILING PER APPLICABLE CODE.
A0.28
GENERAL CONDITIONS (AIA DOCUMENT A201) APPLIES TO THIS PROJECT AND IS A PART OF THIS CONTRACT.
A0.29
VERIFY SPECIFIC SECURITY REQUIREMENTS WITH TENANT.
A0.30
SPRINKLER HEAD LOCATION SHALL BE COORDINATED WITH OTHER TRADES BY CONTRACTOR AND SHALL BE AS SPECIFIED BY ENGINEER OR AS REQUIRED BY CODE. SPRINKLERS SHALL BE CENTERED WITHIN EACH CEILING TILE TO PROVIDE A UNIFIED, CONSISTENT AND AESTHETIC ARRANGEMENT. HEADS SHALL BE WHITE FLUSH TYPE OR BUILDING STANDARD IF EQUAL OR BETTER.

ABBREVIATIONS

A/C	AIR CONDITIONER
ADJ	ADJACENT
ADMIN	ADMINISTRATION
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD.	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AVG	AVERAGE
BLDG	BUILDING
BOT	BOTTOM
B.O.	BOTTOM OF
CPT	CARPET
CAB	CABINET
CL	CENTERLINE
CLG	CEILING
CLGHT	CEILING HEIGHT
CLR	CLEAR
CONF	CONFERENCE
CONT	CONTINUOUS
CORR	CORRIDOR
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DTL/DET	DETAIL
DWG	DRAWING
(E)	EXISTING
EL	ELEVATION
ELEV	ELEVATOR
EQ	EQUAL
EQUIP	EQUIPMENT
EXST	EXISTING
FE	FIRE EXTINGUISHER
FLR	FLOOR
FURN	FURNITURE
GA	GAUGE
GALV	GALVANIZED
GWB	GYPSUM WALL BOARD
GYP BD	GYPSUM BOARD
HDW	HARDWARE
HVAC	HEATING, VENTILATING, AIR CONDITIONING
INT	INTERIOR
JAN	JANITOR
JUNC	JUNCTION
LAB	LABORATORY
LAM	LAMINATED
LAV	LAVATORY
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MGR	MANAGER
MISC	MISCELLANEOUS
MIN	MINIMUM
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NOM	NOMINAL
O/	OVER
OC	ON CENTER
OPNG	OPENING
OPP	OPPOSITE
PL	PLASTIC LAMINATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
P.O.T.	PATH OF TRAVEL
PT	PAINT
QTY	QUANTITY
REF	REFERENCE
REFRIG	REFRIGERATOR
REQ	REQUIRED
REV	REVISION/REVISED
RM	ROOM
SAN	SANITARY
SCHED.	SCHEDULE
SEC	SECRETARY
SF	SQUARE FOOT
SIM	SIMILAR
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STD	STANDARD
STOR	STORAGE
SW	SWITCH
(T)	TEMPERED (GLASS)
T.O.	TOP OF
TV	TELEVISION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VENT	VENTILATION
VERT	VERTICAL
VWC	VINYL WALLCOVERING
VEST	VESTIBULE
W/	WITH
WC	WALLCOVERING
WD	WOOD
W/O	WITHOUT

ARCHITECTURAL SYMBOLS

ELEVATION INDICATOR: ELEV.NUMBER – SHEET NUMBER

SECTION INDICATOR: DRAWING NUMBER / SHEET NUMBER

ENLARGED PLAN/DETAIL: DRAWING NUMBER / SHEET NUMBER

ELEVATION HEIGHT INDICATOR: HEIGHT / DESCRIPTION

ALIGN ELEMENTS

NAME / NN.NNN — ROOM TAG

REVISION NUMBER

KEY NOTE

ALTERNATE

MILLWORK NOTE

PROJECT DESCRIPTION

LANDSCAPE RENOVATION INCLUDING STRUCTURAL REPAIR, WATERPROOFING, NEW RAILING, LIGHTING, SIDEWALK EXPANSION, AND TREE REMOVAL. NO CHANGE TO USE, AREA, FAR, OR PARKING.

CODE ANALYSIS

CONSTRUCTION TYPE:	11 (FULLY SPRINKLERED)
LOT AREA:	65,545 SF (PER PARCEL MAP)
BUILDING AREA:	37,845 SF
OCCUPANCY:	OFFICE (B)
NUMBER OF FLOORS:	3 (AND 1 UNDERGROUND GARAGE)
AREA OF WORK: DRAWINGS	SEE LANDSCAPE AND WATERPROOF

GOVERNING CODES:
2016 CBC
2016 CMC
2016 CPC
2016 CEC
2016 CALIF. ENERGY CODE
2016 CALIF. FIRE CODE

PROJECT TEAM

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CONTACT: KEN RAKESTRAW

ARCHITECT: ASD | SKY
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SAN FRANCISCO, CA 94104
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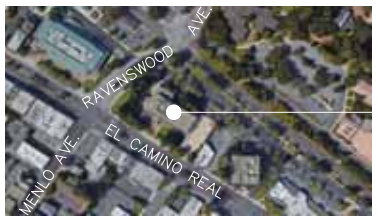
CONTACT: JOE REMLING

STRUCTURAL ENGINEER: KPFF
45 FREMONT STREET, 28TH FLOOR
SAN FRANCISCO, CA 94105
PHONE: 415.989.1004
CONTACT: MONTE RINEBOLD

WATERPROOFING CONSULTANT: ALLANA BUICK & BERS
990 COMMERCIAL STREET
PALO ALTO, CA 94303
PHONE: 415.543.5600
CONTACT: ALEX IVANKOVITSER

INDEX OF DRAWINGS

LOCATION MAP



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JB MATTESON REALTY

NO.	DATE:	REMARKS:
1	08.31.18	RESPONSE TO PLANNING COMMENTS

REVISIONS:

DRAWING TITLE: GENERAL PROJECT INFORMATION SHEET

PROJECT NO.: 27942.00	ISSUE DATE: 11/16/17
DRAWN BY:	CHECKED BY: JH/AS

SHEET NUMBER: **A0.00**

BUILDING STREETSCAPE VIEWS - RAVENSWOOD

(FOR REFERENCE ONLY. NO PROPOSED EXTERIOR BUILDING CHANGES.)

BUILDING STREETSCAPE VIEWS - EL CAMINO REAL

(FOR REFERENCE ONLY. NO PROPOSED EXTERIOR BUILDING CHANGES.)

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NO.	DATE:	REMARKS:
1	10.10.18	RESPONSE TO PLANNING COMMENTS

REVISIONS:

DRAWING TITLE:
EXISTING STREETSCAPE ELEVATIONS - FOR REFERENCE ONLY

PROJECT NO.:	ISSUE DATE:
27942.00	10/10/18
DRAWN BY: JH	CHECKED BY: JH

SHEET NUMBER: A1.01

\\asd-sf1\projects\27924.00 1000 El Camino Real Phase II\A\Drawings\Revit\27924.00_100 Camino Real Phase II\A_Central_A16.rvt

MAIN PEDESTRIAN ENTRANCE VIEW FROM EL CAMINO REAL (SOUTHWEST FACADE)

MAIN VEHICULAR ENTRANCE VIEW FROM EL CAMINO REAL (SOUTHWEST FACADE)

VIEW OF BUILDING EXTERIOR FROM EAST (SOUTHEAST FACADE)

VIEW OF BUILDING EXTERIOR (NORTHEAST FACADE)

VIEW OF BUILDING EXTERIOR FROM RAVENSWOOD (NORTHWEST FACADE)

BUILDING EXTERIOR VIEWS - EL CAMINO REAL

(FOR REFERENCE ONLY. NO PROPPOSED EXTERIOR BUILDING CHANGES.)

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NO.	DATE:	REMARKS:
1	10.10.18	RESPONSE TO PLANNING COMMENTS

REVISIONS:

DRAWING TITLE:
EXISTING BUILDING EXTERIOR - FOR REFERENCE ONLY

PROJECT NO.:	ISSUE DATE:
27942.00	10/10/18
DRAWN BY:	CHECKED BY:
JH	JH

SHEET NUMBER:
A1.02

\\asd-sf1\projects\27924.00 1000 El Camino Real Phase II\A\Drawings\Revit\27924.00_100 Camino Real Phase IIA_Central_A16.rvt

MAIN PEDESTRIAN ENTRANCE VIEW FROM EL CAMINO REAL (SOUTHWEST FACADE)

MAIN VEHICULAR ENTRANCE VIEW FROM EL CAMINO REAL (SOUTHWEST FACADE)

VIEW OF BUILDING EXTERIOR FROM EAST (SOUTHEAST FACADE)

VIEW OF BUILDING EXTERIOR (NORTHEAST FACADE)

VIEW OF BUILDING EXTERIOR FROM RAVENSWOOD (NORTHWEST FACADE)

BUILDING EXTERIOR VIEWS - EL CAMINO REAL

(FOR REFERENCE ONLY. NO PROPPOSED EXTERIOR BUILDING CHANGES.)

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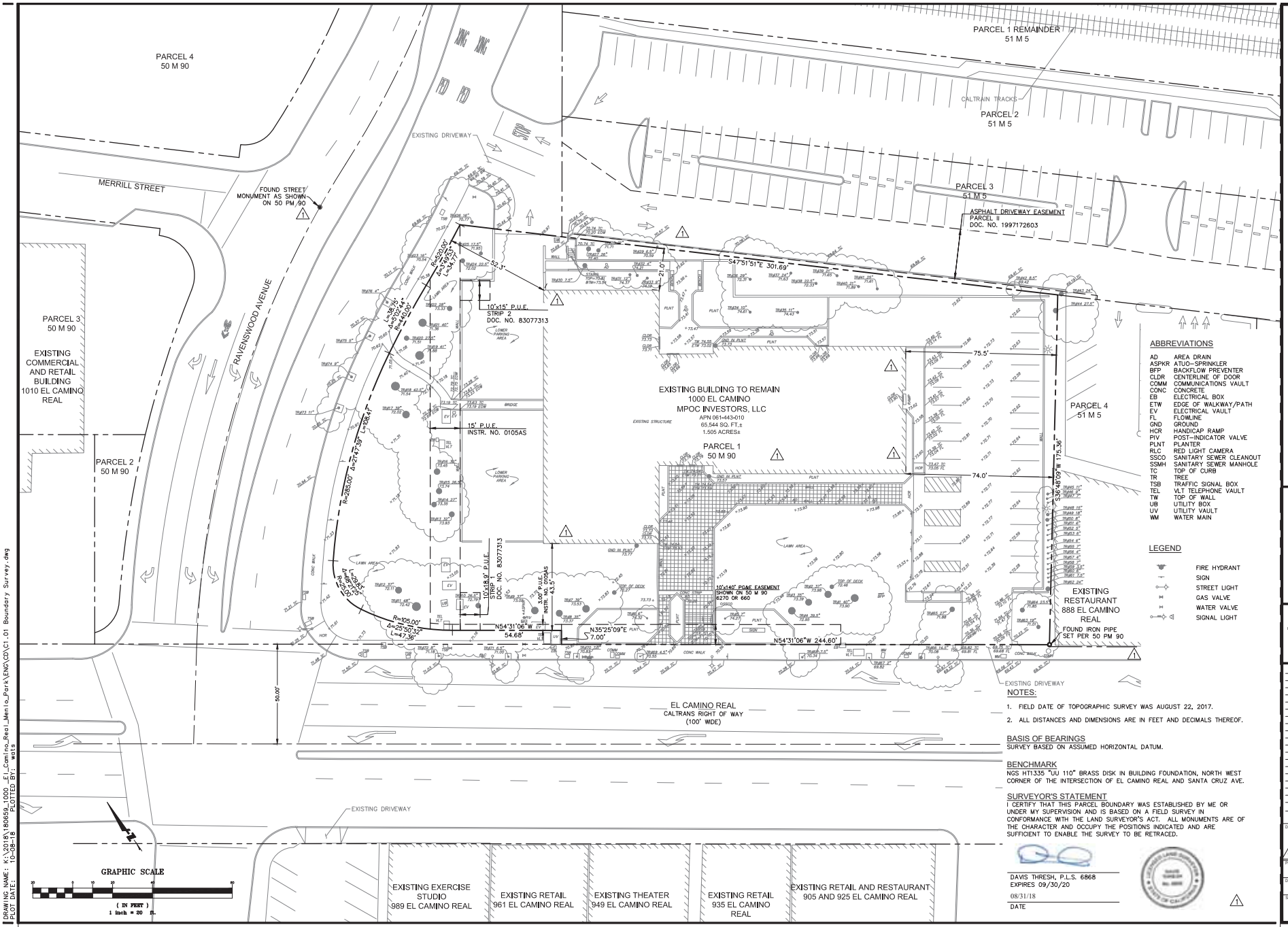
27942.00	10/10/18
DRAWN BY:	CHECKED BY:
JH	JH

SHEET NUMBER:
A1.02

\\asd-sf1\projects\27924.00 1000 El Camino Real Phase II\A\Drawings\Revit\27924.00_100 Camino Real Phase IIA_Central_A16.rvt



ABBREVIATIONS

AD	AREA DRAIN
ASPKR	ATUO-SPRINKLER
BFP	BACKFLOW PREVENTER
CLDR	CENTERLINE OF DOOR
COMM	COMMUNICATIONS VAULT
CONC	CONCRETE
EB	ELECTRICAL BOX
ETW	EDGE OF WALKWAY/PATH
EV	ELECTRICAL VAULT
FL	FLOWLINE
GND	GROUND
HCR	HANDICAP RAMP
PIV	POST-INDICATOR VALVE
PLNT	PLANTER
RLC	RED LIGHT CAMERA
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
TC	TOP OF CURB
TR	TREE
TSB	TRAFFIC SIGNAL BOX
TEL	VLT TELEPHONE VAULT
TW	TOP OF WALL
UB	UTILITY BOX
UV	UTILITY VAULT
WM	WATER MAIN

LEGEND

- FIRE HYDRANT
- SIGN
- STREET LIGHT
- GAS VALVE
- WATER VALVE
- SIGNAL LIGHT

NOTES:

1. FIELD DATE OF TOPOGRAPHIC SURVEY WAS AUGUST 22, 2017.
2. ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.

BASIS OF BEARINGS

SURVEY BASED ON ASSUMED HORIZONTAL DATUM.

BENCHMARK

NGS HT1335 "UU 110" BRASS DISK IN BUILDING FOUNDATION, NORTH WEST CORNER OF THE INTERSECTION OF EL CAMINO REAL AND SANTA CRUZ AVE.

SURVEYOR'S STATEMENT

I CERTIFY THAT THIS PARCEL BOUNDARY WAS ESTABLISHED BY ME OR UNDER MY SUPERVISION AND IS BASED ON A FIELD SURVEY IN CONFORMANCE WITH THE LAND SURVEYOR'S ACT. ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

DAVIS THRESH, P.L.S. 6868
EXPIRES 09/30/20

08/31/18
DATE

BkF ENGINEERS SURVEYORS PLANNERS
150 CALIFORNIA ST., SUITE 600
SAN FRANCISCO, CA 94111
(415) 930-7900
www.bkf.com

1000 EL CAMINO REAL

MENLO PARK, CA

JB MATTESON REALTY

NO.	DATE:	REMARKS:
1	8.31.2018	RESPONSE TO PLANNING COMMENTS

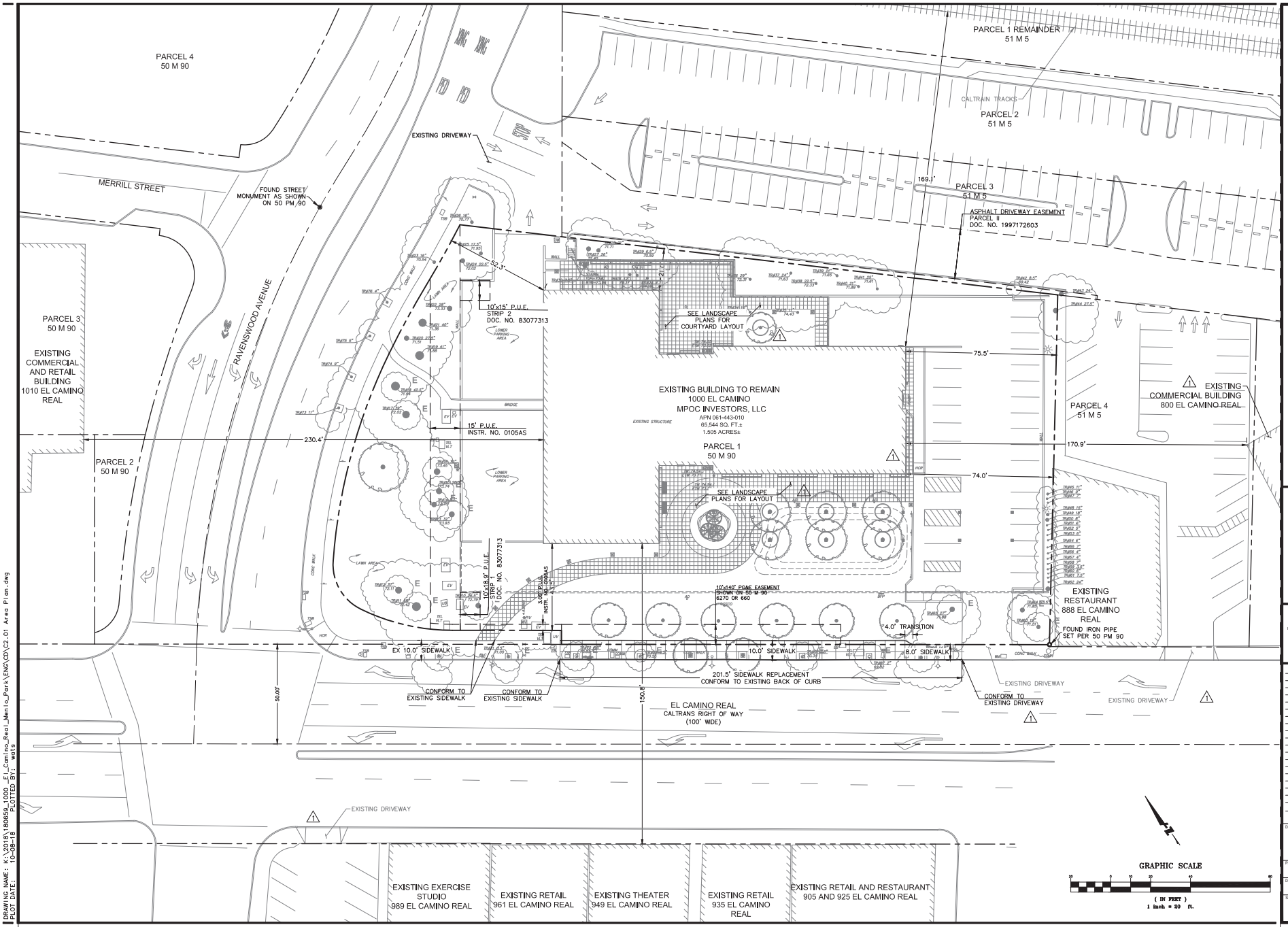
REVISIONS:

DRAWING TITLE: EXISTING CONDITIONS & BOUNDARY SURVEY

PROJECT NO.:	ISSUE DATE:
27942.00	10.10.2018
DRAWN BY: JCW	CHECKED BY: MAO

SHEET NUMBER: 02.01

DRAWING NAME: K:\2018\180659_1000_El_Camino_Real_Menlo_Park\ENG\CD\C1.01 Boundary Survey.dwg
PLOT DATE: 10-08-18 PLOTTED BY: wats



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www.bkf.com

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JB MATTESON REALTY

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. O'CONNELL
No. 75811
EXP. 6/30/20
CIVIL
STATE OF CALIFORNIA

NO.	DATE:	REMARKS:
1	8.31.2018	RESPONSE TO PLANNING COMMENTS

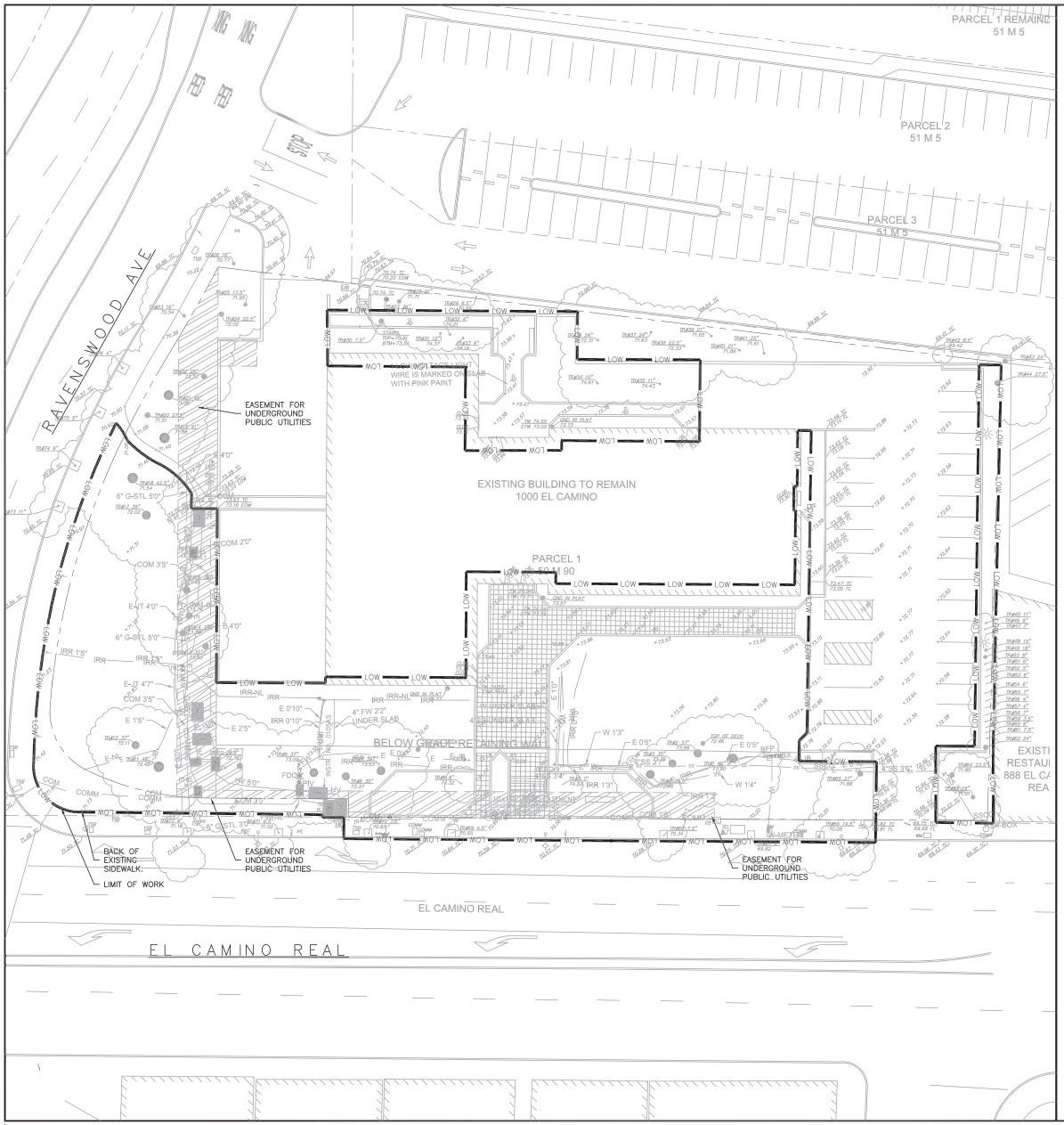
REVISIONS:

DRAWING TITLE: AREA PLAN

PROJECT NO.:	ISSUE DATE:
27942.00	10.10.2018
DRAWN BY: JCW	CHECKED BY: MAO

SHEET NUMBER: **02.02**

DRAWING NAME: K:\2018\180659_1000_El_Camino_Real_Menlo_Park\ENG\CD\C2.01 Area Plan.dwg
PLOT DATE: 10-08-18 PLOTTED BY: wats



LEGEND

SYMBOL	DESCRIPTION
	APPROXIMATE PROPERTY LINE
LOW	LIMIT OF WORK
	(E) CONDITIONS, SEE TOPOGRAPHIC SURVEY
	APPROXIAMTE EASEMENT ZONE FOR PUBLIC UTILITIES

NOTES

1. EASEMENTS AND PROPERTY BOUNDARY ARE APPROXIMATELY LOCATED BASED ON RECORD DRAWINGS (1998 ALTA ACSM LAND TITLE SURVEY, CONDUCTED BY ARCTURUS LAND SURVEY INC, WOODSIDE, CA). APPROXIAMTE EASEMENT ZONE FOR PUBLIC UTILITIES.

2. PER THE 1998 LAND TITLE SURVEY, THE AREA DESCRIBED IS 65,545 SQ. FT. +/-.

3. PER THE 1998 LAND TITLE SURVEY, PARCEL 1 AS SHOWN ON THAT CERTAIN PARCEL MAP FILED FEBRUARY 17, 1981 IN VOLUME 50 OF PARCEL MAPS, PAGES 90 AND 91, DOCUMENT #15050-AS, "BEING A RESUBDIVISION OF ALL LOTS 28, 29, 30, 31 AND PORTIONS 1, 32, AND C, MAP OF MERRILL SUBDIVISIONS FILED IN BOOK 10 OF MAPS AT PAGE 18, SAN MATEO COUNTY RECORDS AND PORTIONS OF THE LANDS OF THE SOUTHERN PACIFIC CO. AND THE LANDS OF THE CITY OF MENLO PARK."

4. PER THE 1998 LAND TITLE SURVEY, THE LOT IS ZONED PLANNED DEVELOPMENT. THERE ARE NO GENERAL STEBACKS. PROJECT IS SITE SPECIFIC.

PLAN

0 20 40 FEET

PLAN NORTH NORTH

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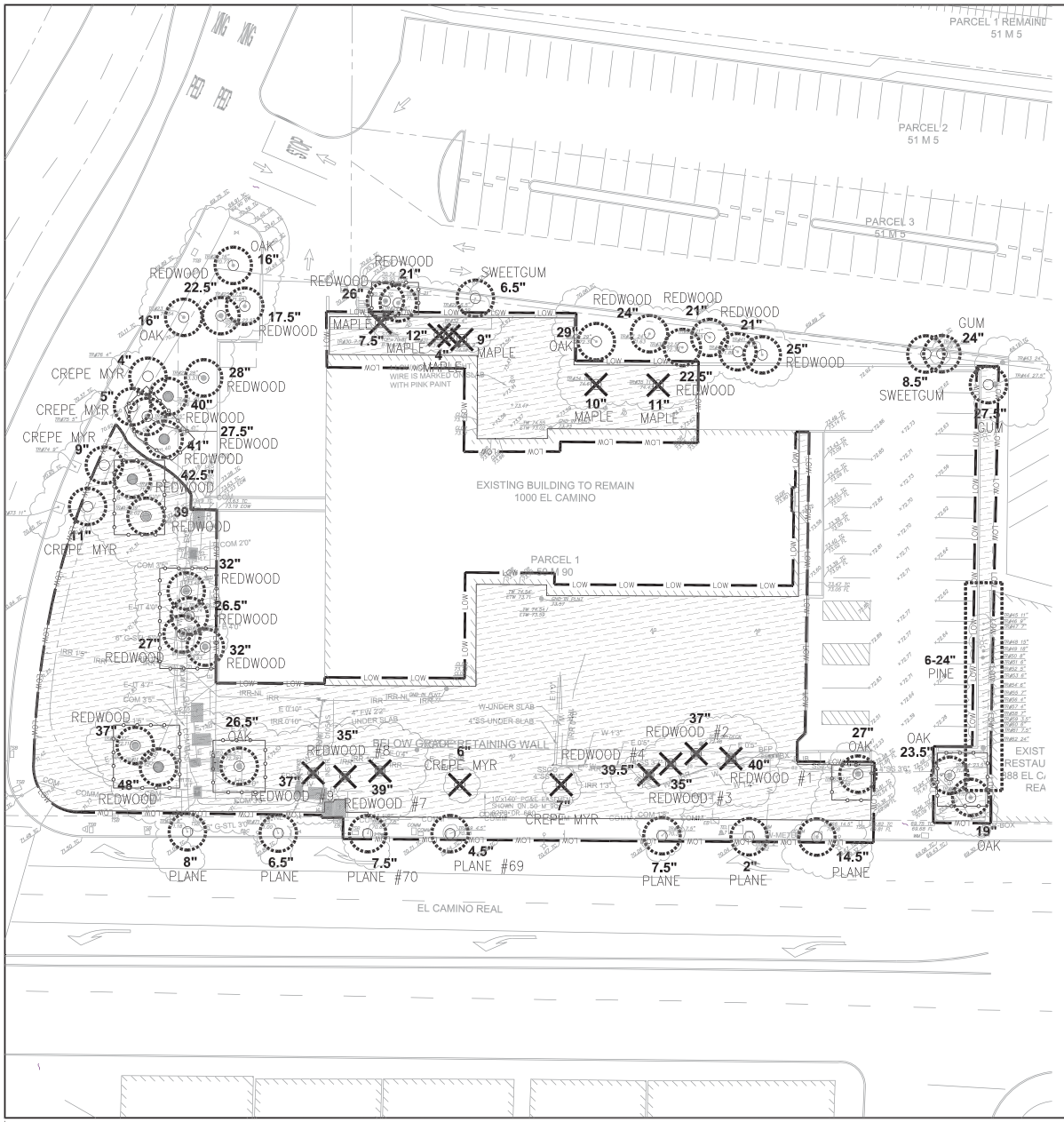
NO:	DATE:	REMARKS:
2	10.10.18	PLANNING RESUBMITTAL #2
1	08.31.18	RESPONSE TO PLANNING COMMENTS

REVISIONS:

DRAWING TITLE:
EXISTING SITE CONTEXT PLAN

PROJECT NO.:	ISSUE DATE:
ASD17-01	12/08/17
DRAWN BY:	CHECKED BY:
	JB

SHEET NUMBER:
L1.00



DEMOLITION LEGEND

SYMBOL	DESCRIPTION
E PLANT NAME	PROTECT (E) TREE TO REMAIN. PROTECT TO THE LIMITS OF THE TREE PROTECTION ZONE (TPZ) AS DEFINED IN THE TREE PROTECTION NOTES AND AS SHOWN ON DETAIL
	REMOVE TREE AND ROOT COMPLETE. SEE ARBORIST REPORT FOR TREE REFERENCE NUMBERS.
	PROTECT TREE TO REMAIN
	DEMOLITION AREA (VEGETATION, IRRIGATION OR HARDSCAPE CHANGE)
	TREE PROTECTION FENCING. 6' CHAIN LINK INSTALLED AROUND THE DRIPLINE OF TREE. 1.5" DIA POSTS DRIVEN 2' INTO THE GROUND. 10' OC MAX PER CITY SPECIFICATIONS

GENERAL REQUIREMENTS

1. DAMAGE TO AREAS OUTSIDE OF LIMIT OF WORK CAUSED BY WORK WITHIN LIMIT OF WORK SHALL BE REPAIRED BY CONTRACTOR AT NO ADDITIONAL COST.
2. COMPLETELY SECURE LIMIT OF WORK LINE WITH TEMPORARY CONSTRUCTION FENCING. ADJUST LOCATIONS AS REQUIRED.
3. STORAGE SHALL BE ON-SITE AND AS APPROVED BY THE OWNER'S REPRESENTATIVE.
4. PROTECT AND VERIFY LOCATION AND DEPTH OF (E) UTILITIES TO REMAIN.

TREE REPLACEMENT

1. TOTAL HERITAGE TREES REMOVAL: (7) SEVEN – (SEQUOIA SEMPERVIRENS) REDWOOD TREES WITH DBH > 15"
2. REQUIRED REPLACEMENT TREES (2:1 RATIO FOR COMMERCIAL) AT #15 CONTAINER: (14) FOURTEEN #15
3. TOTAL PROPOSED TREES: (7) SEVEN. UP-SIZED TWO UNITS TO 36" BOX TREES. ADDITIONAL ORNAMENTAL TREES ALSO ADDED TO SITE (6) SIX 36" BOX FRUITLESS-OLIVES, AND (5) FIVE 24" BOX BIRCHES.
4. REMOVAL OF HERITAGE TREES REQUIRES AN APPLICATION TO THE CITY ARBORIST. TREE REMOVAL PERMIT SUBMITTED TO CHRISTIAN BONNER ON 11/07/2017. CHRISTIAN BONNER AVAILABLE AT 650-330-6780.
5. EXISTING HERITAGE TREES IN THE L.O.W.: 19. TO REMAIN: 12. TO BE REMOVED: 7. ADDITIONAL HERITAGE TREES WITHIN APPROXIMATELY 10' OF THE LOW ARE SHOWN WITH TREE PROTECTION FENCING.
6. SBCA TREE CONSULTING REVIEWED THE CONDITION OF THE TREES TO BE REMOVED AND REPORTED ON OCT 2, 2017. THE HEALTH FOR ALL SEVEN TREES WAS RATED AS "GOOD." THE REPORT ALSO FOUND THAT THERE WAS NO WAY TO WORK AROUND THE ROOTS OF THE TREES TO REPAIR THE STRUCTURAL DAMAGE TO THE BUILDING. ROOT PRUNING WAS ALSO FOUND NOT TO BE FEASIBLE. THE SBCA REPORT RECOMMENDS THE COMPLETE REMOVAL OF THE SEVEN TREES.

TREE MITIGATION CHART

1.	REDWOOD #1	MITIGATED BY TWO LOPHOSTEMON CONFERTUS 36" BOX TREES
2.	REDWOOD #2	MITIGATED BY TWO LOPHOSTEMON CONFERTUS 36" BOX TREES
3.	REDWOOD #3	MITIGATED BY TWO LOPHOSTEMON CONFERTUS 36" BOX TREES
4.	REDWOOD #4	MITIGATED BY TWO PLATNUS ACERFOLIA 'COLUMBIA' 36" BOX TREES
5.	REDWOOD #7	MITIGATED BY TWO BETULA UTILIS 'JACQUEMONTII' 24" BOX TREES
6.	REDWOOD #8	MITIGATED BY ONE BETULA UTILIS 'JACQUEMONTII' 24" BOX TREE & ONE BETULA UTILIS 'JACQUEMONTII' 15 GAL TREE.
7.	REDWOOD #9	MITIGATED BY ONE BETULA UTILIS 'JACQUEMONTII" 15 GAL TREE & ONE QUERCUS AGRIFOLIA 36" BOX TREE

PLAN

0 20 40 FEET PLAN NORTH NORTH

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NO:	DATE:	REMARKS:
2	10.10.18	PLANNING RESUBMITTAL #2
1	08.31.18	RESPONSE TO PLANNING COMMENTS

REVISIONS:

DRAWING TITLE:
DEMOLITION & PROTECTION PLAN

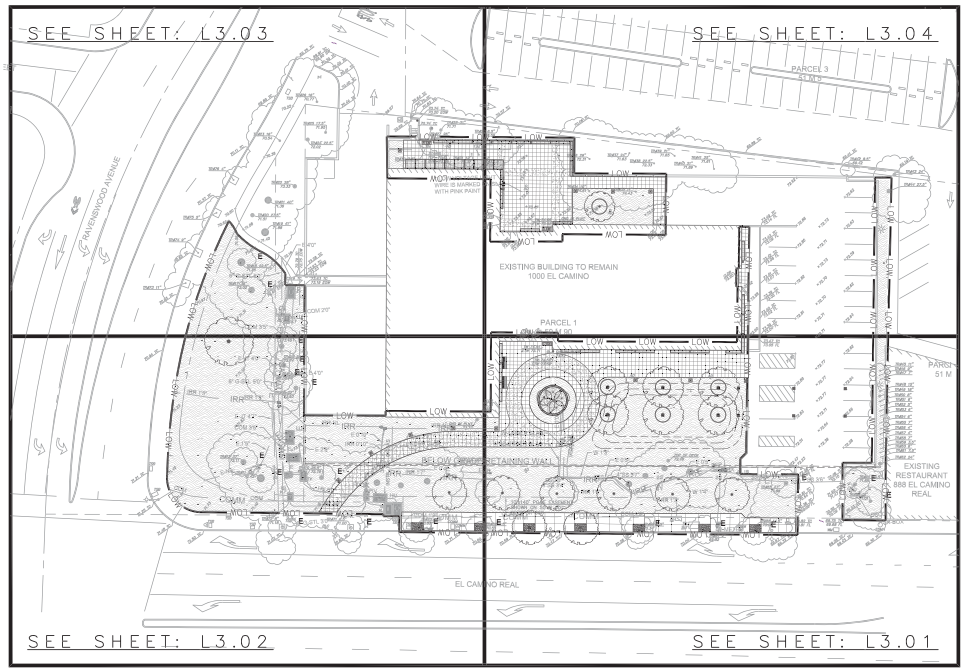
PROJECT NO.:	ISSUE DATE:
ASD17-01	12/08/17
DRAWN BY:	CHECKED BY:
	JB

SHEET NUMBER:
L2.00

IRRIGATION DESIGN INTENT

AS THIS PROJECT IS A REHABILITATED LANDSCAPE PROJECT WITH MORE THAN 1000 SQUARE FEET OF IRRIGATED LANDSCAPING, IT IS SUBJECT TO THE CITY'S WATER EFFICIENT LANDSCAPE ORDINANCE (MUNICIPAL CODE 12.44). THE IRRIGATION SYSTEM SHALL COMPLY WITH THE CITY'S MUNICIPAL CODE CHAPTER 12.44 "WATER-EFFICIENT LANDSCAPING" AND THE STATE OF CALIFORNIA'S 2015 MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). THE MAXIMUM APPLIED WATER ALLOWANCE (MAWA) CALCULATIONS WILL BE FACTORED USING THE EVAPOTRANSPIRATION ADJUSTMENT FACTOR OF 0.45.

THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE THE MINIMUM AMOUNT OF WATER NECESSARY TO SUSTAIN GOOD PLANT HEALTH. IRRIGATION SYSTEM IS TO BE FULLY AUTOMATIC, WEATHER-BASED SYSTEM USING LOW-FLOW DRIP AND BUBBLER DISTRIBUTION. ALL SELECTED COMPONENTS SHALL BE PERMANENT, COMMERCIAL GRADE, SELECTED FOR DURABILITY, VANDAL RESISTANCE AND MINIMUM MAINTENANCE REQUIREMENT. THE SYSTEM SHALL INCLUDE A MASTER CONTROL VALVE AND FLOW SENSING CAPABILITY, WHICH WILL SHUT DOWN ALL OR PART OF THE SYSTEM IF LEAKS ARE DETECTED.



PLANTING DESIGN INTENT

THE PLANTING DESIGN SHALL UTILIZE A VARIETY OF PLANTS TO CREATE LAYERS OF COLOR AND TEXTURE TO COMPLIMENT THE ARCHITECTURE. TREE LOCATIONS HAVE BEEN DESIGNED FOR MAXIMUM AESTHETIC EFFECTS, WHILE LOCATED TO AVOID FUTURE DAMAGE TO THE PODIUM AND ONLY IN LOCATIONS ABLE TO SUPPORT THE WEIGHT OF THE TREE MASS.

PLANT SPECIES SHALL BE SELECTED BASED ON LOCAL CLIMATE SUITABILITY, DISEASE AND PEST RESISTANCE, AND WATER USE AS LISTED IN THE STATE OF CALIFORNIA'S MODEL WATER EFFICIENT LANDSCAPE ORDINANCE PLANT LIST, WUCOLS IV. THE PLANTING DESIGN SHALL NOT INCLUDE HIGH-WATER-USE MOWED LAWN AND SHALL UTILIZE PRIMARILY LOW WATER USE, BAY AREA FRIENDLY PLANT SPECIES. NO PLANTS CONSIDERED INVASIVE IN THE REGION AS LISTED BY THE CAL-IPC SHALL BE USED. THE PLANTING DESIGN LOCATED OFF OF THE PODIUM SHALL ALLOW FOR THE PLANTS TO REACH THEIR NATURAL SIZE TO ELIMINATE THE NEED FOR EXCESSIVE PRUNING OR HEDGING. PLANTS SHALL BE GROUPED IN HYDROZONES BASED ON WATER USE AND EXPOSURE.

SITE ANALYSIS

LOT AREA:	65,545 SF	(UNCHANGED)
FLOOR AREA (E):	15,053 SF	(UNCHANGED)
LAND COVERED BY STRUCTURES:	22.4%	(UNCHANGED)
LANDSCAPING PERCENTAGE	41%	
PAVED PERCENTAGE	37%	
TOTAL NUMBER OF PARKING SPACES:	149	(UNCHANGED)

MATERIALS LEGEND

SYMBOL	KEY	DESCRIPTION
		PLANTING SERIES
		PLANTING AREA
		MOUNDED PLANTING AREA – APPROXIMATE 1' TOPOGRAPHY LINES – SUB-SURFACE, LIGHT-WEIGHT STRUCTURAL FOAM BASE.
		APPROXIMATE LOCATION OF PODIUM POST BELOW. CONTRACTOR TO FIELD VERIFY LOCATION OF SUPPORT POSTS.
		APPROXIMATE LOCATION OF THE EDGE OF THE PODIUM (SUB-SURFACE PARKING GARAGE).
	E	(E) TREE TO REMAIN
	PC	PLATANUS X ACERFOLIA 'COLUMBIA', LONDON PLANE TREE, 36" BOX. NEW STREET TREE.
	LC	LOPHOSTEMON CONFERTUS, BRISBANE BOX, 36" BOX. NEW ON-SITE TREE. TYP OF FIVE.
	AS	ACER PALMATUM 'SANGO KAKU', CORAL BARK MAPLE, 48" BOX. NEW ON-SITE TREE. TYP OF ONE.
	OE	OLEA EUROPAEA 'SWAN HILL', FRUITLESS OLIVE, 48" BOX. NEW ON-SITE TREE. TYP OF SIX.
	BU	BETULA UTILIS 'JACQUEMONTII', HIMALAYAN BIRCH, MIX OF (2) 15 GAL AND (3) 24" BOX. NEW ON-SITE TREE. TYP OF FIVE.
	QA	QUERCUS AGRIFOLIA, COAST LIVE OAK, 36" BOX. NEW ON-SITE TREE. TYP OF ONE.

SYMBOL	KEY	DESCRIPTION
		PORCELAIN PAVER TYPE P1: BELGARD COLOR: GLACIER FINISH: QUARZITI 2.0
		PORCELAIN PAVER TYPE P2: BELGARD COLOR: MOUNTAINS FINISH: QUARZITI 2.0
		WASTE CONTAINER. MAKE: FORMS+SURFACES MODEL: APEX SIZE: 32"H, 21"W, 15"D, COLOR: ARGENTO FINISH: POWDER COAT
		BENCH. MAKE: KEYSTONE RIDGE MODEL: EVERETT WITH BACK SIZE: 6' COLOR: CHARCOAL 7022 FINISH: KEYSHIELD
		PLANTER TYPE 'A' MAKE: TOURNESOL. MODEL: WILSHIRE. SIZE: 10'L X 18"W X 18"H. COLOR: PUDDLE. FINISH: ACRYLIC ENAMEL PAINT. FILLED WITH LIGHT-WEIGHT PLANTING SOIL.
		PLANTER TYPE 'B' MAKE: TOURNESOL. MODEL: WILSHIRE. SIZE: 8'L X 18"W X 18"H. COLOR: PUDDLE. FINISH: ACRYLIC ENAMEL PAINT. FILLED WITH LIGHT-WEIGHT PLANTING SOIL.
		PLANTER TYPE 'C' MAKE: TOURNESOL. MODEL: CUSTOM WILSHIRE. SIZE: 5'L X 5'W X 42"H. COLOR: PUDDLE. FINISH: ACRYLIC ENAMEL PAINT. FILLED WITH LIGHT-WEIGHT PLANTING SOIL.
		PLANTER TYPE 'D' MAKE: OLD TOWN FIBERGLASS. MODEL: CL9642. SIZE: 8'D X 42"H. COLOR: LIGHT GRAY 16. FINISH: ORANGE PEEL. FILLED WITH LIGHT-WEIGHT PLANTING SOIL. TREES IN ROUND PLANTERS TO INCLUDE FX LE LED DOWN-LIGHT IN BRANCHES AND FX NP LED UP-LIGHT AT BASE.
		ILLUMINATED BOLLARD. MAKE: BEGA. MODEL: SQUARE ILLUMINATED. SIZE: 40"H X 3-1/2"W. COLOR: SHERMAN WILLIAMS SW9175 – DEEP FOREST BROWN.
		GUARDRAIL: RETROFIT EXISTING GUARDRAIL WITH CABLE RAILS. COLOR: CHARCOAL. FINISH: LOW GLOSS. 42" HIGH FROM ADJACENT WALKING SURFACE
		ASH URN: MAKE: LANDSCAPE FORMS. MODEL: GRENADIER. COLOR: STORMCLOUD. FREESTANDING

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1	08.31.18	RESPONSE TO PLANNING COMMENTS

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DRAWING TITLE: LANDSCAPE SITE LEGEND

PROJECT NO.:	ISSUE DATE:
ASD17-01	12/08/17
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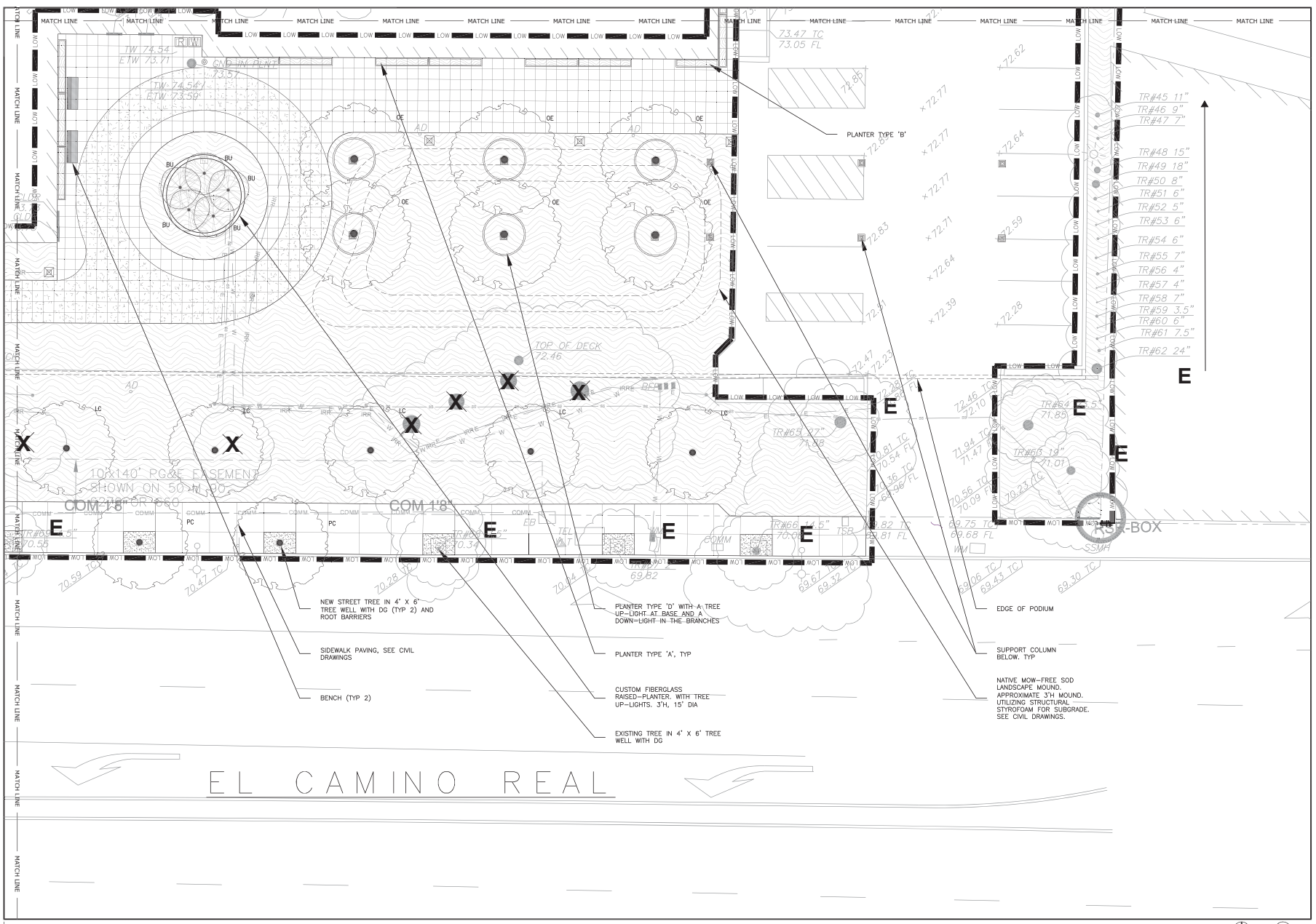

PLAN

0 8 16 FEET

PLAN NORTH

NORTH

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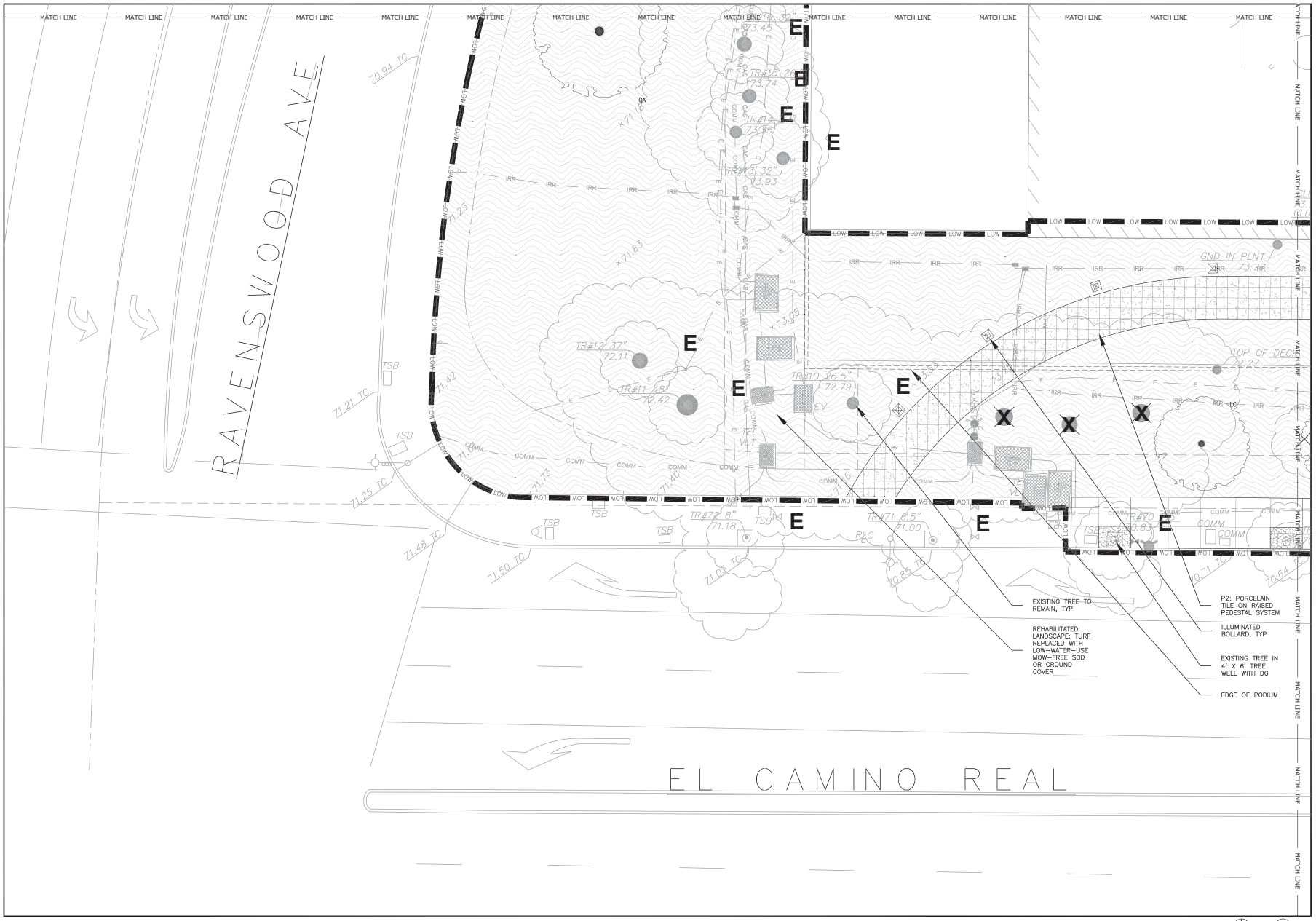

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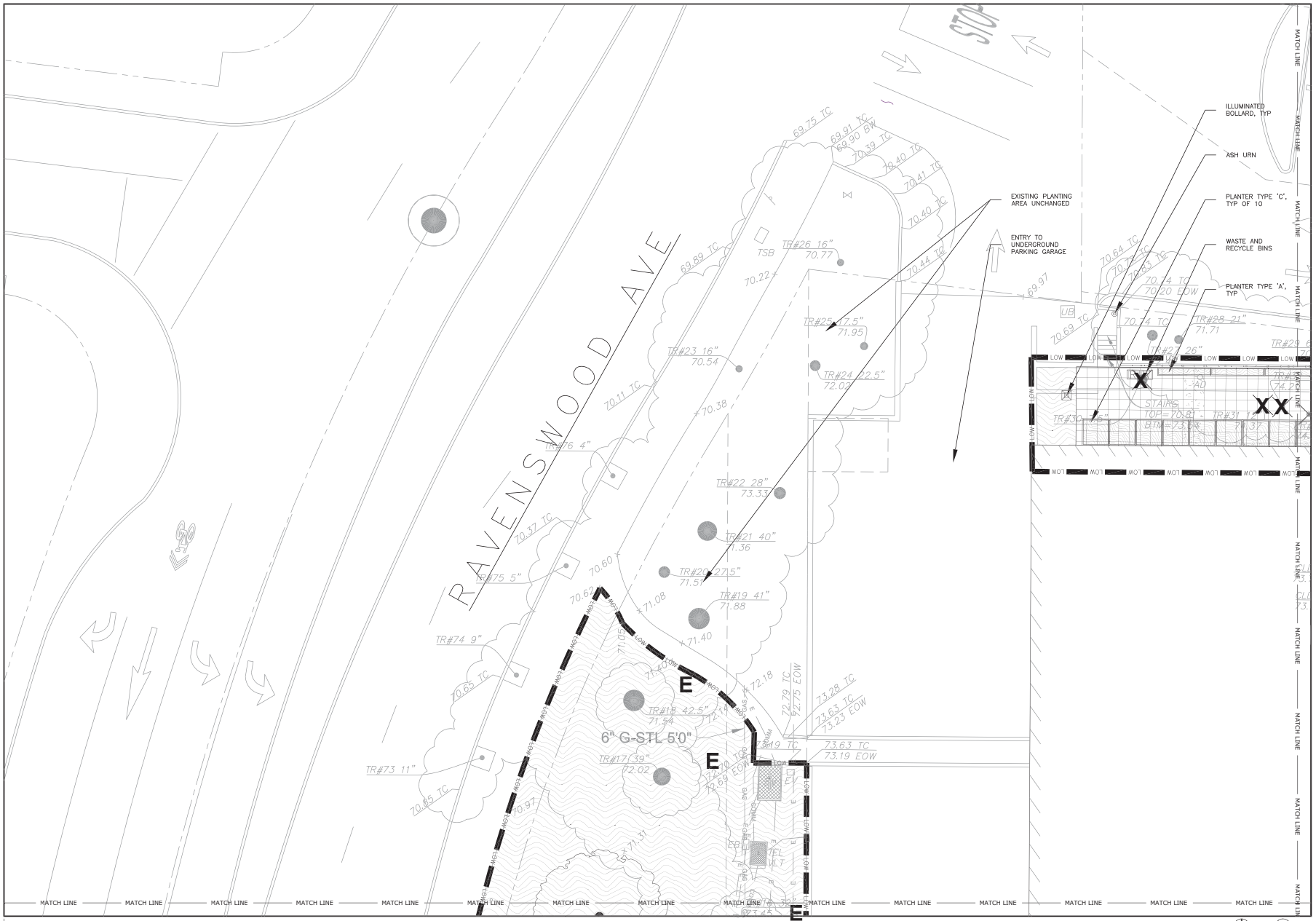
C11



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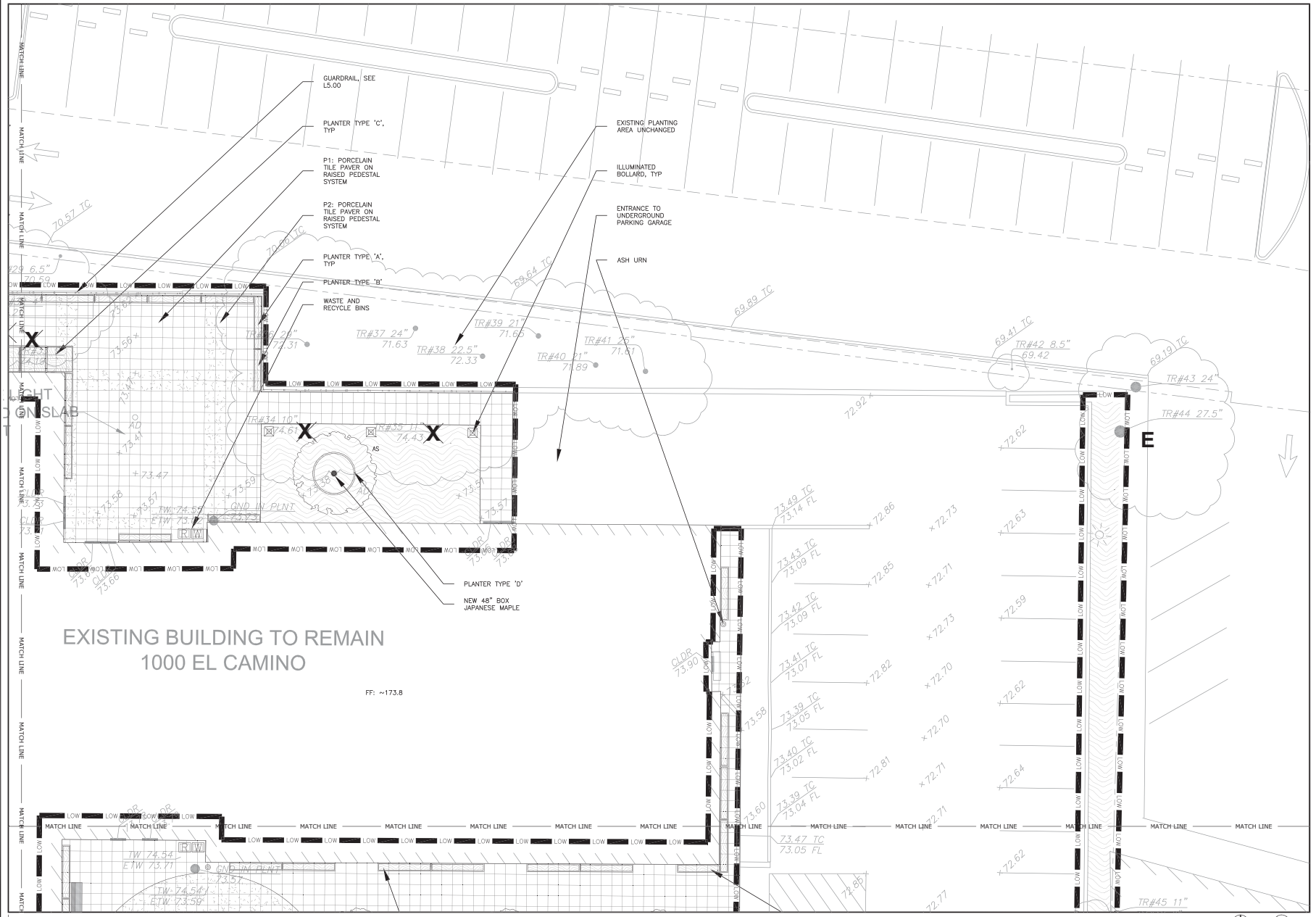

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1	08.31.18	RESPONSE TO PLANNING COMMENTS

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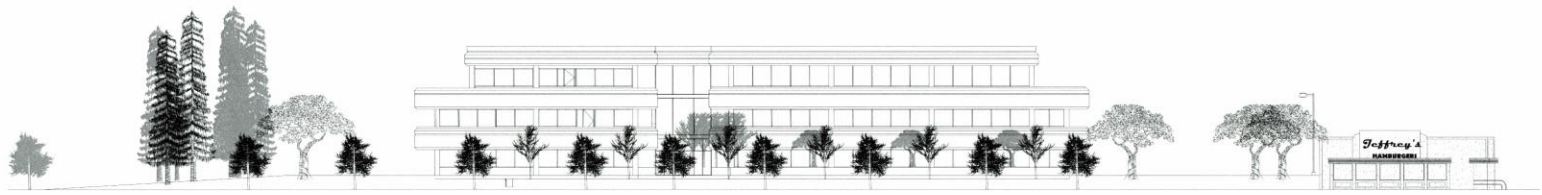

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NO	DATE	REMARKS
2	10.10.16	PLANNING RESUBMITTAL #2
1	08.31.16	RESPONSE TO PLANNING COMMENTS

REVISIONS

DRAWING TITLE
STREETSCAPE

PROJECT NO.	ISSUE DATE
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SHEET NUMBER
L3.05

LC - LOPHOSTEMON CONFERTUS
BRISBANE BOX

1. BOTANICAL NAME: LOPHOSTEMON CONFERTUS
2. COMMON NAME: BRISBANE BOX
3. EVERGREEN
4. WUCOLS WATER USE: MEDIUM
5. INSTALLATION SIZE: 36" BOX
6. MATURE SIZE: 35'-45' TALL, 25' WIDE.

PC - PLATANUS ACERFOLIA 'COLUMBIA'
LONDON PLANE TREE

1. BOTANICAL NAME: PLATANUS ACERFOLIA
2. COMMON NAME: LONDON PLANE TREE 'COLUMBIA'
3. DECIDUOUS
4. WUCOLS WATER USE: MEDIUM
5. INSTALLATION SIZE: 36" BOX
6. MATURE SIZE: 40'-80' TALL, 35' WIDE.

AS - ACER PALMATUM 'SANGO KAKU'
CORAL BARK MAPLE

1. BOTANICAL NAME: ACER PALMATUM 'SANGO KAKU'
2. COMMON NAME: CORAL BARK MAPLE
3. DECIDUOUS
4. WUCOLS WATER USE: MEDIUM
5. INSTALLATION SIZE: 48" BOX
6. MATURE SIZE: 20' TALL, 20' WIDE.

BU - BETULA U. JACQUEMONTII
WHITE BARKED BIRCH

1. BOTANICAL NAME: BETULA JACQUEMONTII
2. COMMON NAME: HIMALAYAN BIRCH
3. DECIDUOUS
4. WUCOLS WATER USE: HIGH
5. INSTALLATION SIZE: MIX OF 24" BOX & 15 GAL
6. MATURE SIZE: 40' TALL, 30' WIDE.

* TREES USED TO MEET CITY OF MENLO PARK MITIGATION REQUIREMENTS

OE - OLEA EUROPEA
OLIVE TREE (NON-FRUITING)

1. BOTANICAL NAME: OLEA EUROPEA 'SWAN HILL'
2. COMMON NAME: OLIVE (NON-FRUITING)
3. EVERGREEN
4. WUCOLS WATER USE: LOW
5. INSTALLATION SIZE: 48" BOX
6. MATURE SIZE: 25'-30' TALL, 25'-30' WIDE.

QA - QUERCUS AGRIFOLIA
COAST LIVE OAK

1. BOTANICAL NAME: QUERCUS AGRIFOLIA
2. COMMON NAME: COAST LIVE OAK
3. EVERGREEN
4. WUCOLS WATER USE: VERY LOW
5. INSTALLATION SIZE: 36" BOX
6. MATURE SIZE: 40'-60' TALL, 40'-50' WIDE.

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1	08.31.18	RESPONSE TO PLANNING COMMENTS

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DRAWING TITLE:
TREE PALETTE

PROJECT NO.:	ISSUE DATE:
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P1 - PORCELAIN PAVER

1 MAKE: BELGARD
2 MODEL: QUARZITI 2.0
3 COLOR: GLACIER
4 FINISH: QUARZITI 2.0
5 SIZE: 2'X2'
6 ADDITIONAL: ON BISON DECK SYSTEM

P2 - PORCELAIN PAVER

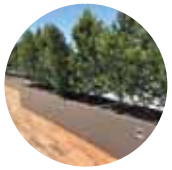
1 MAKE: BELGARD
2 MODEL: QUARZITI 2.0
3 COLOR: MOUNTAINS
4 FINISH: QUARZITI 2.0
5 SIZE: 2'X2'
6 ADDITIONAL: ON BISON DECK SYSTEM

GUARDRAIL

1 MAKE: RETROFIT EXISTING GUARDRAIL WITH CABLE RAILS TO MEET CODE COMPLIANCE
2 MODEL: RETROFIT EXISTING
3 COLOR: DARK BRONZE
4 FINISH: REPAINT TO MATCH EXISTING
5 SIZE: 42" HIGH FROM WALKING SURFACE
6 ADDITIONAL: CABLE RAIL

PARKING LOT LIGHT

1 MAKE: BEGA
2 MODEL: 99446K3
3 COLOR: BRONZE
4 FINISH:SEMI-GLOSS
5 SIZE: 42" HIGH FROM WALKING SURFACE
6 ADDITIONAL: 3000K, REQUIRES 3"OD POLE



PLANTERS - SQUARE & RECTANGLE TYPE 'A', 'B', AND 'C'

1 MAKE: TOURNESOL
2 MODEL: WILSHIRE
3 COLOR: PUDDLE
4 FINISH: ACRYLIC ENAMEL
5 SIZE: 10' X 18" X 18" - OR 6'
6 ADDITIONAL: LIGHT WEIGHT SOIL

PLANTERS - ROUND TYPE 'D'

1 MAKE: OLD TOWN FIBERGLASS
2 MODEL: CL9642
3 COLOR: LIGHT GRAY 16
4 FINISH: ORANGE PEEL
5 SIZE: 8'DIA X 42"H
6 ADDITIONAL:

BENCH

1 MAKE: KEYSTONE RIDGE
2 MODEL: EVERETT WITH BACK
3 COLOR: CHARCOAL 7022
4 FINISH: POWDER COAT
5 SIZE: 6'
6 ADDITIONAL: SURFACE MOUNT

ASH URN

1 MAKE: LANDSCAPE FORMS
2 MODEL: GRENADIER ASH URN
3 COLOR: STORMCLOUD
4 FINISH: POWDER COAT
5 SIZE: 10" X 10" X 35"
6 ADDITIONAL: FREESTANDING

WASTE AND RECYCLE CONTAINER

1 MAKE: FORMS + SURFACES
2 MODEL: APEX
3 COLOR: ARGENTO
4 FINISH: POWDER COAT
5 SIZE: 32"H X 21"W X 15"D
6 ADDITIONAL: WITH LID

ILLUMINATED BOLLARD

1 MAKE: BEGA
2 MODEL: AQUARE ILLUMINATED
3 COLOR: BRONZE
4 FINISH: STANDARD
5 SIZE: 40"H X 3.5"W
6 ADDITIONAL: LED

BUILDING EXTERIOR SCONCE

1 MAKE: INSIGHT
2 MODEL: CYNDER WM2 LED UP/DOWN
3 COLOR: BRONZE
4 FINISH: SEMI-GLOSS
5 SIZE: STANDARD 16"
6 ADDITIONAL: 3000K

TREE LIGHTING

1 MAKE: FXLUMINAIRE
2 MODEL: LE & NP
3 COLOR: BRONZE METALIC
4 FINISH: POWDER COAT
5 SIZE: 1.6"W X 3.3"H AND 10.3" X 2.66"
6 ADDITIONAL: 3900K FROSTED FILTER

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1	08.31.16	RESPONSE TO PLANNING COMMENTS

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SITE MATERIALS

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DAMAGE TO POST-TENSION CABLE STRUCTURE - REQUIRES REPAIR

DAMAGE TO PODIUM WATER-PROOFING AT LOCATIONS ADJACENT TO REDWOOD TREE PLANTING

EXISTING LANDSCAPE CONDITIONS AT FRONT OF BUILDING (SOUTH SIDE). EXTENSIVE TURF LAWN PLANTING WITH REDWOODS INTRUDING UPON PODIUM STRUCTURE

REDWOOD TREE GROVE PLANTED ADJACENT TO PODIUM - PROPOSED FOR REMOVAL TO ALLOW REPAIR

EXPOSED ROOTS OF REDWOODS INTRUDING ON PODIUM INTEGRITY

EXISTING LANDSCAPE CONDITIONS AT THE BACK PATIO (NORTH SIDE)

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EXISTING CONDITIONS

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10/5/2018 10:55 AM

PROPOSED REPLACEMENT LANDSCAPE: FRONT OF BUILDING

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RENDERING

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LEGEND & ANNOTATION

NOTES

BASIS OF BEARINGS

BENCHMARK

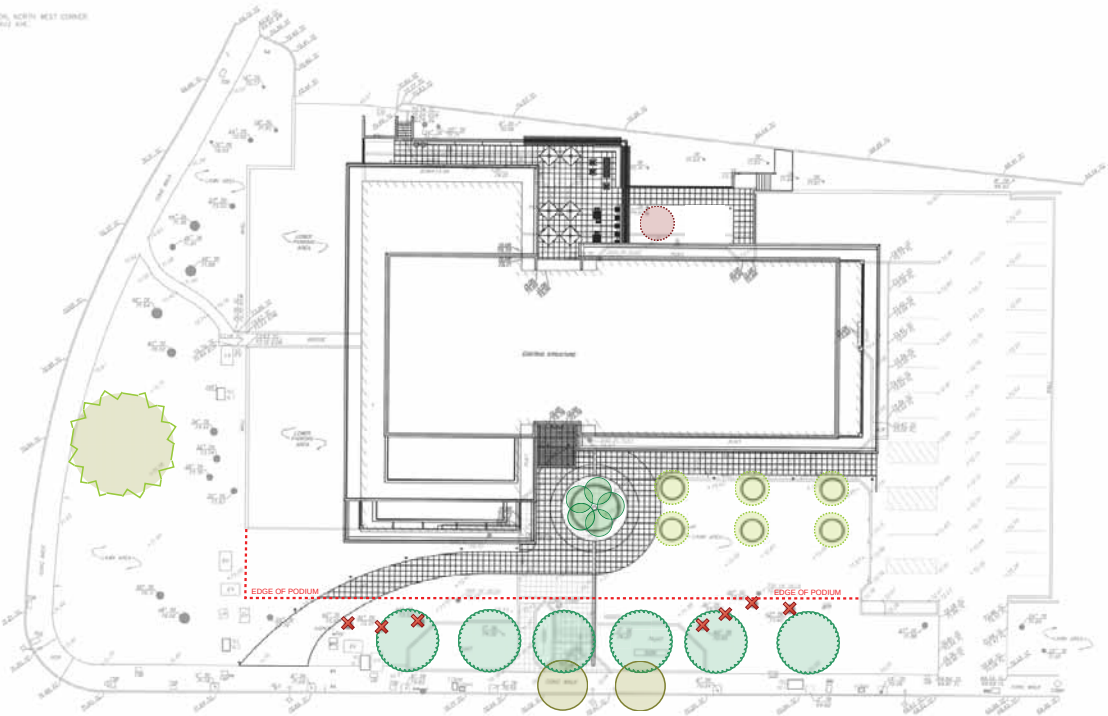
LOPHOSTEMON CONFERTUS
BRISBANE BOX TREE
36" BOX

PLATANUS ACERIFOLIA 'COLUMBIA'
LONDON PLANE TREE
36" BOX

ADDITIONAL PROPOSED TREES
NOT INCLUDED AS PART OF THE
MITIGATION. BIRCH (GREEN), OLIVE
(YELLOW-GREEN, JAPANESE
MAPLE (RED).

EXISTING REDWOOD TREES TO BE
REMOVED

QUERCUS AGRIFOLIA
COAST LIVE OAK
36" BOX



GRAPHIC SCALE

(IN FEET)

SARES REGIS

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MENLO PARK, CALIFORNIA

TREE MITIGATION

JANUARY 26, 2018

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RECORD DRAWING:
PREVIOUSLY SUBMITTED TREE MITIGATION EXHIBIT

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RENOVATION PROJECT

ABBREVIATIONS

∟	ANGLE	E.	EAST	JAN	JANITOR	R.O.	ROUGH OPENING
CL	CENTERLINE	(E)	EXISTING	JST.	JOIST	RSR	RISER
ø	DIAMETER, ROUND	EA.	EACH	JT.	JOINT	RWL	RAIN WATER LEADER
⊥	PERPENDICULAR	E.B.	EXPANSION BOLT				
#	POUND, NUMBER	E.F.	EXHAUST FAN	LAM.	LAMINATE	S.A.C.	SUSPENDED ACOUSTICAL
		E.J.	EXPANSION JOINT	LOC.	LOCATION		CEILING
A.B.	ANCHOR BOLT	ELEC.	ELECTRICAL	L.	LONG	S.A.D.	SEE ARCHITECTURAL
A.B.B.	ALLANA, BUICK AND BERS	ELEV.	ELEVATION	LT.	LIGHT	DRAWINGS	
A.C.	ASPHALTIC CONCRETE	EMER.	EMERGENCY			SAF.	SELF ADHERING FLASHING
ACOUS.	ACOUSTICAL	ENCL.	ENCLOSURE	MAX.	MAXIMUM	S.C.	SOLID CORE
A.A.	AREA DRAIN	E.P.	ELECTRICAL PANEL	M.B.	MACHINE BOLT	S.C.D.	SEE CIVIL DRAWINGS
ADJ.	ADJUSTABLE, ADJACENT	EQ.	EQUAL	MECH.	MECHANICAL	SCHED.	SCHEDULE
A.F.F.	ABOVE FINISH FLOOR	EQUIP.	EQUIPMENT	MEM.	MEMBRANE	SDBO	SEE DRAWINGS BY OTHERS
ALUM.	ALUMINUM	E.W.	EACH WAY	MFR.	MANUFACTURER	SECT.	SECTION
ALT.	ALTERNATE	EXP.	EXPANSION	MIN.	MINIMUM	S.E.D.	SEE ELECTRICAL DWGS.
A.P.	ACCESS PANEL	EXT.	EXTERIOR	MISC.	MISCELLANEOUS	SHT.	SHEET
APPROX.	APPROXIMATE			MTD.	MOUNTED	SIM.	SIMILAR
ARCH.	ARCHITECT	F.D.	FLOOR DRAIN	MTL.	METAL	S.L.D.	SEE LANDSCAPE DRAWINGS
		FDN.	FOUNDATION	MULL.	MULLION	S.M.	SHEET METAL
BD.	BOARD	F.A.	FIRE EXTINGUISHER			S.M.D.	SEE MECHANICAL
BITUM.	BITUMINOUS	F.A.C.	FIRE EXTINGUISHER	N.	NORTH		DRAWINGS
BLDG.	BUILDING		CABINET	N.I.C.	NOT IN CONTRACT	SPEC.	SPECIFICATION
BLK.	BLOCK	F.B.	FINISH FLOOR	NO.	NUMBER	SQ.	SQUARE
BLKG.	BLOCKING	FIN.	FINISH	NOM.	NOMINAL	S.S.	STAINLESS STEEL
BM.	BEAM	FIXT.	FIXTURE	N.T.S.	NOT TO SCALE	S.S.D.	SEE STRUCTURAL DRAWINGS
BOT.	BOTTOM	FL.	FLOOR			STD.	STANDARD
B.S.	BOTTOM OF SILL	FLASH.	FLASHING	OA	OVERALL	STL.	STEEL
BTWN.	BETWEEN	FLUOR.	FLUORESCENT	OBSC.	OBSCURE	STOR.	STORAGE
B.U.R.	BUILT-UP ROOFING	F.O.	FACE OF	O.C.	ON CENTER	STRUCT.	STRUCTURAL
		F.O.C.	FACE OF CONCRETE	O.D.	OUTSIDE DIAMETER	SUSP.	SUSPENDED
		F.O.F.	FACE OF FINISH	O.F.C.I.	OWNER FURNISHED AND	S.V.	SHEET VINYL
CEM.	CEMENT	F.O.S.	FACE OF STUDS		CONTRACTOR INSTALLED	SYM.	SYMMETRICAL
CER.	CERAMIC	FPRF.	FIREPROOF	OFF.	OFFICE		
C.J.	CONTROL JOINT	FRMG.	FRAMING	OH	OPPOSITE HAND	T.C.	TOP OF CURB
CLG.	CEILING	FT.	FOOT, FEET	OPNG.	OPENING	T.O.C.	TOP OF CONCRETE
CLKG.	CAULKING	FTG.	FOOTING	OPP.	OPPOSITE	T.D.	TIE DOWN
C.O.	CLEAN-OUT	FND.	FOUNDATION			TEL.	TELEPHONE
CLR.	CLEAR	FURR.	FURRING	PART.	PARTITION	TEMP.	TEMPERED
COL.	COLUMN			P.B.	PARTICLE BOARD	THK.	THICK
COMP.	COMPOSITION	GA.	GAUGE	P.D.	PLANTER DRAIN	THR.	THRESHOLD
CONC.	CONCRETE	GALV.	GALVANIZED	PLBG.	PLUMBING	T.O.	TOP OF
CONN.	CONNECTION	GWB.	GYPSUM BOARD	PNT.	PAINT	T.O.C.	TOP OF CONCRETE
CONST.	CONSTRUCTION	G.I.	GALVANIZED IRON	PREFAB.	PRE-FABRICATED	T.O.S.	TOP OF SLAB
CONT.	CONTINUOUS	GL.	GLASS	P.T.	PRESSURE TREATED	TYP.	TYPICAL
CORR.	CORRIDOR	GLB	GLUE-LAMINATED BEAM	PL.	PLATE		
CTSK.	COUNTERSINK	GND.	GROUND	P. LAM.	PLASTIC LAMINATE	UNF.	UNFINISHED
CNTR.	COUNTER	GSM	GALVANIZED	PLAS.	PLASTER	U.O.N.	UNLESS OTHERWISE NOTED
CPT.	CARPET		SHEET METAL	PLYWD.	PLYWOOD	UR.	URINAL
CTR.	CENTER	GR.	GRADE	P.O.C.	POINT OF CONNECTION		
		GYP.	GYPSUM	PR.	PAIR	V.C.T.	VINYL COMPOSITION TILE
D.	DEEP					VERT.	VERTICAL
DBL.	DOUBLE	H.R.	HAND RAIL	R	RADIUS	V.I.F.	VERIFY IN FIELD
DEMO.	DEMOLISH	H.B.	HOSE BIBB	(R)	REMOVE		
DET.	DETAIL	H.C.	HOLLOW CORE	R.D.	ROOF DRAIN	W	WIDE / WIDTH
D.F.	DOUGLAS FIR	HDR.	HEADER	R.D.M.	REMOVE DAMAGED	W/	WITH
DIA.	DIAMETER	HDWE.	HARDWARE		MATERIAL	W.I.	WROUGHT IRON
DIAG.	DIAGONAL	H.M.	HOLLOW METAL	RDWD.	REDWOOD	WD.	WOOD
DIM.	DIMENSION	HR.	HOUR	REF.	REFERENCE	W.O.	WHERE OCCURS
DISP.	DISPENSER	HT.	HEIGHT	REG.	REGISTER	W/O	WITHOUT
DN.	DOWN			REINF.	REINFORCED	W.P.	WATERPROOFING
DR.	DOOR	I.D.	INSIDE DIAMETER	RESIL.	RESILIENT	W.R.	WATER RESISTANT
D.S.	DOWN SPOUT	INSUL.	INSULATION	RET.	RETAINING	WRB	WEATHER RESISTIVE
DWG.	DRAWING	INT.	INTERIOR	REV.	REVISION, REVISED		BARRIER
				RM.	ROOM	W.S.	WOOD SCREW
						WSCT.	WAINSCOT
						WT.	WEIGHT
						W.W.F.	WELDED WIRE FABRIC

SYMBOLS LEGEND

SYMBOL	DESCRIPTION	DETAIL NO. (IF ANY)
	MISCELLANEOUS	
B 3.0	DETAIL NUMBER SECTION CUT SHEET NUMBER	
B 3.0	DETAIL NUMBER DETAIL CALL OUT SHEET NUMBER	
#	SHEET KEYED NOTE	

GENERAL NOTES

A. THESE DRAWINGS HAVE BEEN MADE FROM BUILDING RECORD DRAWINGS. BIDDER SHALL VISIT THE SITE AND PROJECT TO FIELD VERIFY EXISTING CONDITIONS AFFECTING HIS WORK PRIOR TO BIDDING. ANY EXISTING CONDITION FOUND NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSULTANTS IMMEDIATELY, PRIOR TO BIDDING OR START OF ANY WORK.

B. NOTES, SECTIONS, AND DETAILS DESCRIBING THE TYPE OF COMPONENT OR NECESSARY WORK TO THAT COMPONENT ARE TYPICAL FOR ALL SIMILAR ITEMS, AND THE NOTE, SECTION, OR DETAIL SHALL APPLY AS IF CALLED OUT SEPARATELY AT EACH LOCATION. THE DETAILS REFLECT A DESIGN OF THE SPECIFIC CONDITION(S) DETAILED. IF, DURING THE PROGRESS OF THE WORK, EXISTING CONDITIONS DIFFER FROM THOSE INDICATED ON THE DRAWINGS TO THE EXTENT THAT THE CONTRACTOR MUST MAKE MODIFICATIONS TO THE GIVEN DETAILS TO MAKE THE DETAIL COMPATIBLE WITH THE EXISTING CONDITIONS, THE CONTRACTOR SHALL OBTAIN A REVISED DETAIL FROM THE CONSULTANTS PRIOR TO THAT DETAIL BEING CONSTRUCTED.

C. CONFLICTS AND/OR PROBLEMS SHALL BE REPORTED PRIOR TO BIDDING FOR RESOLUTION. FAILURE TO REPORT THESE CONFLICTS PLACES THE RESPONSIBILITY ON THE CONTRACTOR TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AT THE CONSULTANTS DIRECTION, AT NO ADDITIONAL COST TO THE OWNER.

D. ALL NOTES DESCRIBING COMPONENTS, SYSTEMS, OR CONSTRUCTION NOT NOTED AS "(E)" OR "EXISTING" ARE NEW, AND ARE REQUIRED TO BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

E. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL FOR ALL SPECIALTY CONNECTIONS, TRANSITIONS, AND TERMINATIONS OF ALL ITEMS OF THE WORK. INCLUDING SADDLES, FLASHINGS, AND OTHER INDUSTRY RECOGNIZED ITEMS THAT MAKE THE WORK COMPLETE.

F. ALL SEALANT WORK SHALL BE IN ACCORDANCE WITH THE SWRI AND THE SEALANT MATERIAL MANUFACTURER. REQUIREMENTS SHOWN IN THE CONSTRUCTION DOCUMENTS ARE ABOVE AND BEYOND THAT REQUIRED BY THE REFERENCED STANDARDS. IF CONFLICTS SHOULD OCCUR BETWEEN STANDARDS AND/OR THE CONSTRUCTION DOCUMENTS, UTILIZE THE HIGHEST QUALITY OR MORE STRINGENT REQUIREMENT.

G. THERE ARE SPECIFICATIONS BOUND SEPARATELY FROM THE CONSTRUCTION DRAWINGS THAT ARE A PART OF THE CONTRACT. THE SPECIFICATIONS AND DRAWINGS ARE COMPLIMENTARY TO ONE ANOTHER AND ARE BOTH REQUIRED TO FULLY DESCRIBE THE CONTRACTOR'S RESPONSIBILITIES UNDER THE CONTRACT. THE DRAWINGS TYPICALLY INDICATE SIZE, FORM, QUANTITY, RELATIONSHIP, AND GENERIC TYPE; THE SPECIFICATIONS TYPICALLY DEFINE THE QUALITATIVE REQUIREMENTS FOR PRODUCTS, MATERIALS, AND WORKMANSHIP. WHAT IS CALLED FOR BY EITHER ONE SHALL BE AS BINDING AS IF CALLED FOR BY ALL.

DRAWING INDEX

SCOPE OF WORK

A. COURTYARD: REMOVE & DISPOSE OF (E) TOPPING SLAB, WATERPROOFING MEMBRANE, SHEET METAL FLASHINGS AND SEALANTS DOWN TO EXISTING STRUCTURAL SLAB.

B. COURTYARD: PROVIDE 215 MIL HOT RUBBERIZED ASPHALT WATERPROOFING, REINFORCING FABRIC, PROTECTION COURSE, DRAIN MAT, SHEET METAL FLASHINGS AND SEALANT.

C. PLANTING: REMOVE & DISPOSE OF EXISTING PLANTING SOILS, WATERPROOFING MEMBRANE, SHEET METAL FLASHINGS AND SEALANTS DOWN TO EXISTING STRUCTURE SLAB.

D. PLANTING: PROVIDE 215 MIL HOT RUBBERIZED ASPHALT WATERPROOFING, REINFORCING FABRIC, PROTECTION COURSE, DRAIN MAT, SHEET METAL FLASHINGS AND SEALANT.

E. REMOVE & DISPOSE OF EXISTING BELOW GRADE PERIMETER WATERPROOFING ALONG GARAGE WALL TO BARE CONCRETE.

F. PROVIDE SHEET MEMBRANE WATERPROOFING, DRAIN MAT, SHEET METAL FLASHINGS AND SEALANT ALONG GARAGE PERIMETER WALLS.

VICINITY MAP

LOCATION MAP

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PRELIMINARY SET
NOT FOR CONSTRUCTION
OR PERMITTING

MENLO PARK
OFFICE CENTER
1000 EL CAMINO REAL
MENLO PARK, CA 94025

RENOVATION PROJECT

FOR:
MATTESON REALITY SERVICES, INC.
1510 FASHION ISLAND BLVD.
SUITE 380
SAN MATEO, CA 94404

ISSUE		
	PLANNING SUBMITTAL	02/02/2018
Mark	Description	Date

DATE	
PROJECT NO.	17-4892.01
CAD DWG FILE	4892_WP100.dwg
DRAWN BY	ELI
CHECKED BY	AI

SHEET TITLE

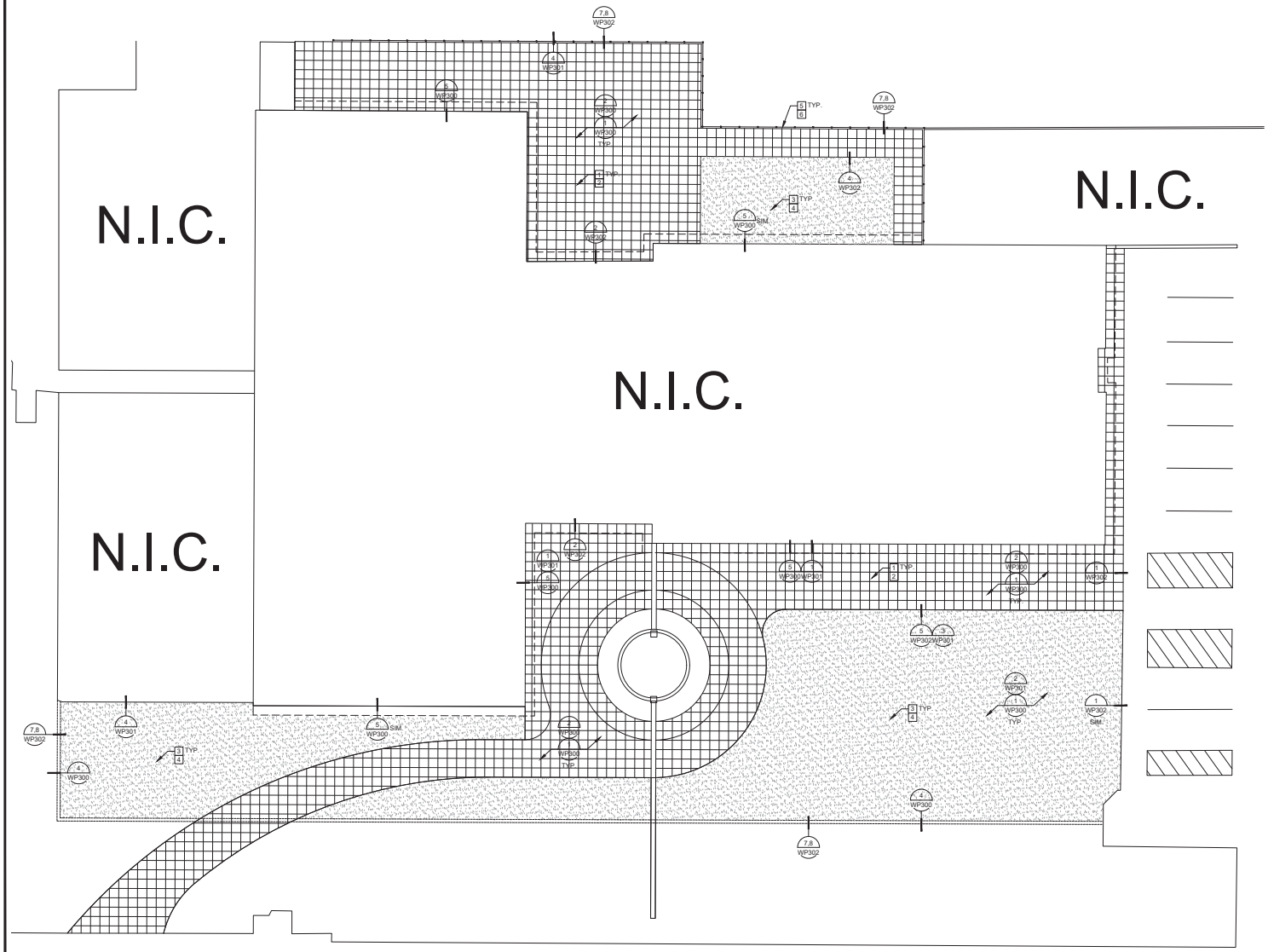
COVER SHEET, GENERAL NOTES AND INDEX

SCALE: NOTED ON DRAWINGS

SHEET **WP100**

PLANNING SUBMITTAL, 02/02/2018

P:\2017 Projects\17-4892.01 Matteson_1000 El Camino Menlo Park_SE Co\05-CD\Drawings\Working Set\4892_WP100.dwg, 2/2/2018 4:26:18 PM



A SITE PLAN

SCALE: NONE

REFERENCE NORTH

GENERAL SHEET NOTES

A. THE TEMPORARY MEASURES AND REQUIREMENTS INDICATED ON THIS SITE PLAN ILLUSTRATE ONLY A PORTION OF THE CONTRACTOR'S RESPONSIBILITY FOR STORAGE, SAFETY, AND PROTECTION UNDER THE CONTRACT.

B. BUILDING MATERIALS TO BE STORED IN INDICATED AREAS ONLY. NO VEHICLES WILL BE ALLOWED ON SITE.

C. CONTRACTORS, SETUP AND STORAGE AREAS SHALL BE WHERE INDICATED ONLY.

E. BUILDING AND SITE TO REMAIN IN-USE. DO NOT BLOCK ACCESS TO SITE OR BUILDING AT ANY TIME.

F. CONTRACTOR TO ABIDE BY SITE PROTECTION AND SITE CLEANING REQUIREMENTS OUTLINED IN DIVISION 1 OF THE SPECIFICATIONS. CONSTRUCTION AND DEMOLITION DEBRIS TO BE CONFINED WITHIN SCAFFOLDING AND BARRIER FENCING, EXCEPT AT DESIGNATED DISPOSAL AREAS.

G. LANDSCAPING AND / OR SITE WORK DAMAGED BY DEMO / CONSTRUCTION OPERATIONS, CONTRACTOR EMPLOYEES, SUB-CONSULATANTS OR CONTRACTORS SUPPLIERS SHALL BE REPLACED BY CONTRACTOR AT NO COST TO OWNER OR OWNER'S REPRESENTATIVES.

H. ANY DAMAGE TO THE BUILDING EXTERIOR FINISHES, WINDOWS, DOORS, SIGNS OR APPURTANCES SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR OWNER'S REPRESENTATIVES.

J. ANY DAMAGE TO (E) PAVED ROADS, WALKWAYS, OR SIDEWALKS SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER OR OWNER'S REPRESENTATIVES.

K. CONTRACTOR SHALL PROVIDE BARRIER FENCING CONTINUOUS AROUND THE AREA OF CONSTRUCTION, INCLUDING GATES AND LOCKS.

L. DOOR ENTRANCE CANOPIES SHALL BE FULL WIDTH OF OPENING. FULLY PROTECTED ENTRANCE AND EXIT PATH FOR OCCUPANTS.

M. PROTECT TRENCH DRAINS AND D.I. WITH FILTER FABRIC FROM DEBRIS GENERATED BY CONSTRUCTION ACTIVITIES FOR ALL STORM DRAINS NEAR CONSTRUCTION AREA.

N. CONTRACTOR SETUP AND STORAGE AREA. WALKWAYS ADJACENT TO SETUP AND STORAGE AREAS TO BE MAINTAINED AT WIDTHS IN COMPLIANCE WITH ADA REQUIREMENTS.

P. PROVIDE ACCESS TO (E) DRIVEWAY, DUMPSTERS, LOCKBOX, FUEL, ETC., INCLUDING ANY GATES OR PROTECTIVE CANOPIES NOT SHOWN HERE.

Q. PROVIDE DETOUR SIGNAGE WHERE DIRECTED BY THE OWNER, INCLUDING FENCE-MOUNTED SIGNAGE NECESSARY TO RE-DIRECT TO AVAILABLE ENTRANCES.

R. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

KEY NOTES

1 COURTYARD: REMOVE & DISPOSE OF (E) TOPPING SLAB, WATERPROOFING MEMBRANE, SHEET METAL FLASHINGS AND SEALANTS DOWN TO EXISTING STRUCTURAL SLAB.

2 COURTYARD: PROVIDE 215 MIL HOT RUBBERIZED ASPHALT WATERPROOFING, REINFORCING FABRIC, PROTECTION COURSE, DRAIN MAT, SHEET METAL FLASHINGS AND SEALANT.

3 PLANTING: REMOVE & DISPOSE OF EXISTING PLANTING SOILS, WATERPROOFING MEMBRANE, SHEET METAL FLASHINGS AND SEALANTS DOWN TO EXISTING STRUCTURE SLAB.

4 PLANTING: PROVIDE 215 MIL HOT RUBBERIZED ASPHALT WATERPROOFING, REINFORCING FABRIC, PROTECTION COURSE, DRAIN MAT, SHEET METAL FLASHINGS AND SEALANT.

5 REMOVE & DISPOSE OF EXISTING BELOW GRADE PERIMETER WATERPROOFING ALONG GARAGE WALL TO BARE CONCRETE.

6 PROVIDE SHEET MEMBRANE WATERPROOFING, DRAIN MAT, SHEET METAL FLASHINGS AND SEALANT ALONG GARAGE PERIMETER WALLS.

LEGEND

COURTYARD: HOT-RUBBERIZED ASPHALT SYSTEM

PLANTING: HOT-RUBBERIZED ASPHALT SYSTEM

POLYMER MODIFIED SLOPING COURSE, SLOPED AT 2% MIN. AWAY FROM PERIMETER OF BUILDING, TYP.

N.I.C. NOT IN CONTRACT

[#] SHEET KEYED NOTE

1 / A3.0 DETAIL NUMBER / DETAIL CALL OUT / SHEET NUMBER

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RENOVATION PROJECT

FOR:
MATTESON REALITY
SERVICES, INC.
1510 FASHION ISLAND BLVD.
SUITE 380
SAN MATEO, CA 94404

ISSUE		
	PLANNING SUBMITTAL	02/02/2018
Mark	Description	Date

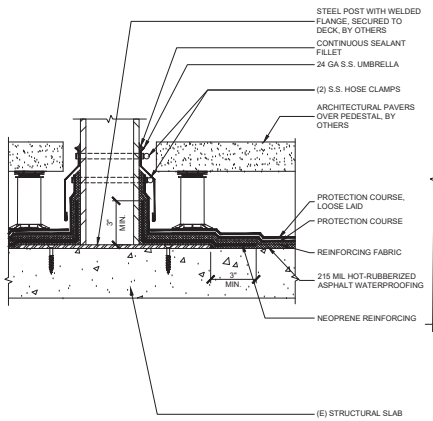
DATE	
PROJECT NO.	17-4892.01
CAD DWG FILE	4892_WP200.dwg
DRAWN BY	ELI
CHECKED BY	AI

SHEET TITLE
SITE PLAN

SCALE: NOTED ON DRAWINGS

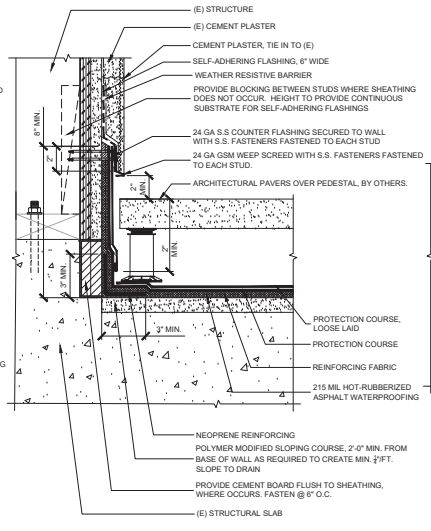
SHEET **WP200**

PLANNING SUBMITTAL, 02/02/2018



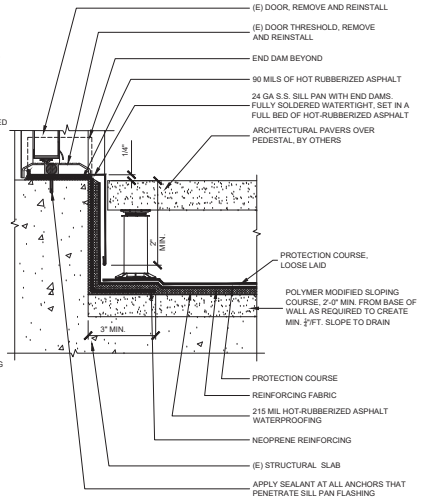
STEEL POST WATERPROOFING 7 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



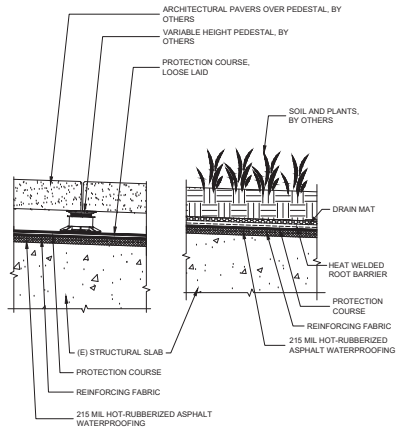
BASE FLASHING AT WALL 5 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



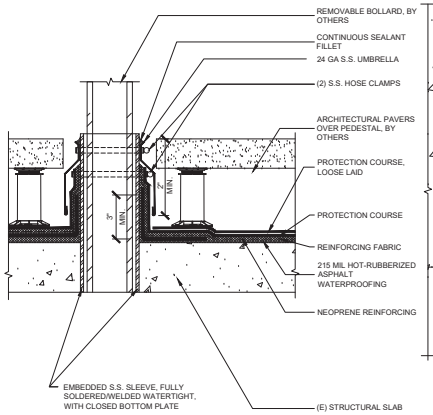
TYPICAL DOOR FLASHING 3 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



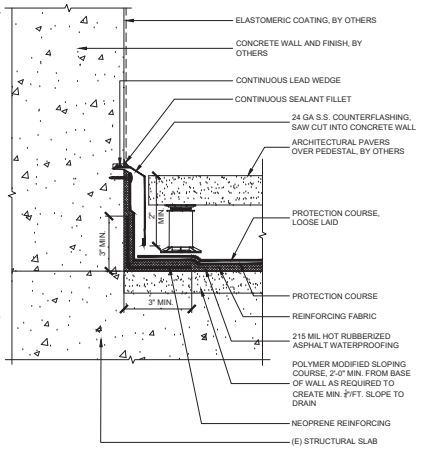
TYPICAL PODIUM DECK WATERPROOFING 1 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



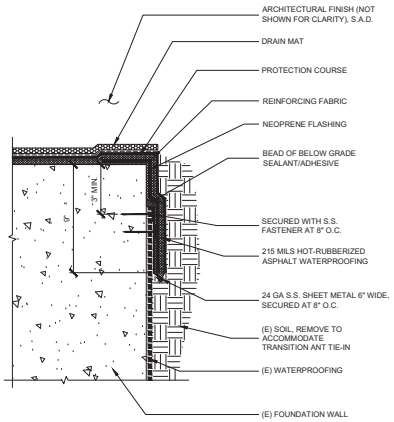
REMOVABLE BOLLARD 8 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



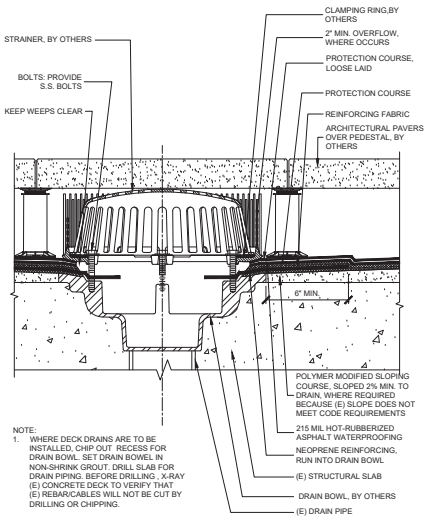
TERMINATION AT WALL 6 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



PLANTER AT GRADE 4 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TYPICAL PODIUM DECK DRAIN 2 WP300

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.

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RENOVATION PROJECT

FOR:
MATTESON REALITY SERVICES, INC.
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SUITE 380
SAN MATEO, CA 94404

ISSUE		
	PLANNING SUBMITTAL	02/02/2018
Mark	Description	Date

DATE	
PROJECT NO.	17-4892.01
CAD DWG FILE	4892_WP300.dwg
DRAWN BY	ELI
CHECKED BY	AI

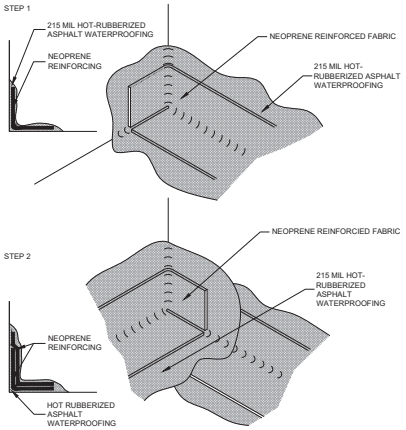
SHEET TITLE
COURTYARD/PLANTER DETAILS

SCALE: NOTED ON DRAWINGS

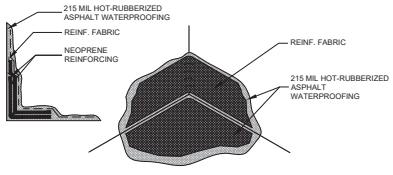
SHEET **WP300**

PLANNING SUBMITTAL, 02/02/2018

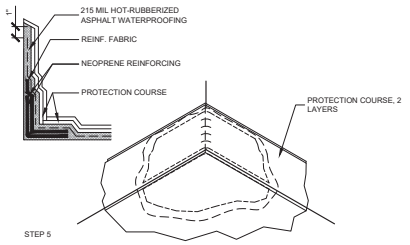
P:\2017 Projects\17-4892.01 Matteson_1000 El Camino Menlo Park_BE Co\05-CD\Drawings\Working Set\4892_WP300.dwg, 2/2/2018 4:26:22 PM



STEP 3 COMPLETELY ENCAPSULATE ALL EXPOSED NEOPRENE REINFORCING WITH A TOP COATING OF HOT RUBBERIZED ASPHALT WATERPROOFING. NO REINFORCING SHOULD BE LEFT EXPOSED OVERNIGHT



STEP 4 COMPLETELY ENCAPSULATE ALL EXPOSED REINFORCING FABRIC WITH A TOP COATING OF 215 MIL HOT-RUBBERIZED ASPHALT WATERPROOFING. NO REINFORCING SHOULD BE LEFT EXPOSED OVERNIGHT

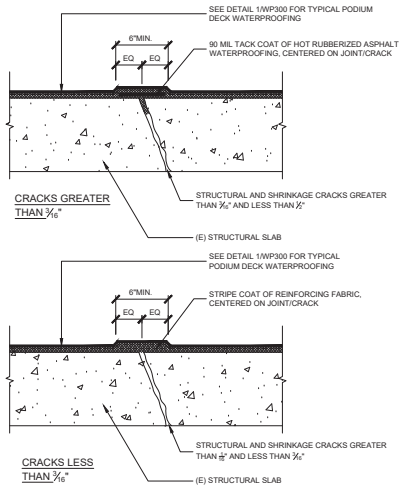


NOTE:
1. OUTSIDE CORNER SIMILAR.

INSIDE CORNER REINFORCEMENT

8 WP301

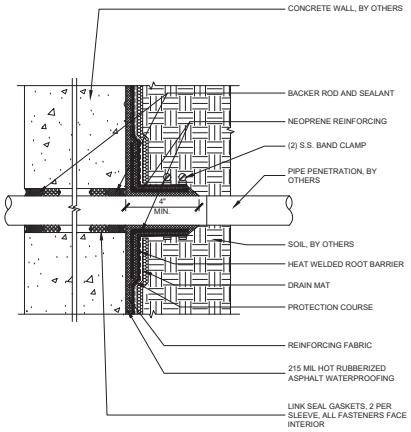
SCALE: 3" = 1'2" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



STRUCTURAL / SHRINKAGE CRACK REPAIR

5 WP301

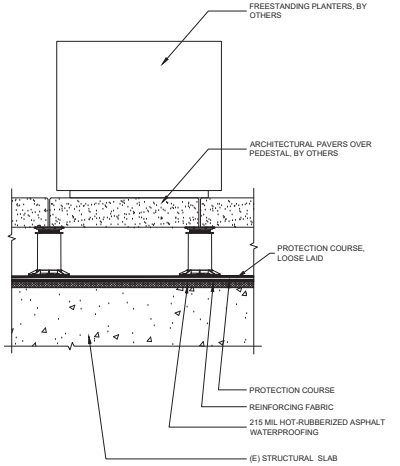
SCALE: 3" = 1'2" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



PLANTER PIPE PENETRATION

3 WP301

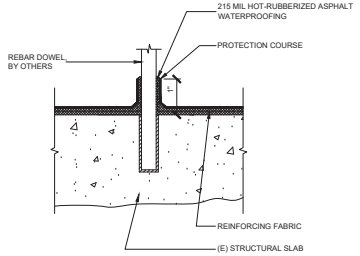
SCALE: 3" = 1'2" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TYPICAL FREESTANDING PLANTER

1 WP301

SCALE: 3" = 1'2" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.

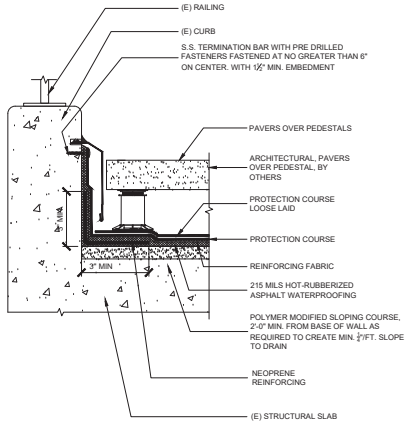


NOTES:
1. DRAIN MAT NOT SHOWN FOR CLARITY.

TYPICAL EPOXY DOWEL

6 WP301

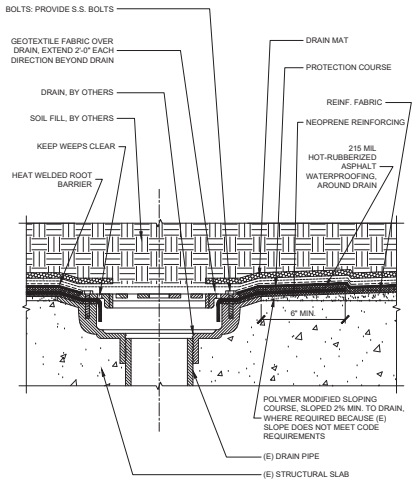
SCALE: 3" = 1'2" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TERMINATION AT CURB

4 WP301

SCALE: 3" = 1'2" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



DRAIN AT PLANTED AREA

2 WP301

SCALE: 3" = 1'2" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.

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PRELIMINARY SET
NOT FOR CONSTRUCTION
OR PERMITTING

MENLO PARK OFFICE CENTER
1000 EL CAMINO REAL
MENLO PARK, CA 94025

RENOVATION PROJECT

FOR:
MATTESON REALITY SERVICES, INC.
1510 FASHION ISLAND BLVD.
SUITE 380
SAN MATEO, CA 94404

ISSUE		
	PLANNING SUBMITTAL	02/02/2018
Mark	Description	Date

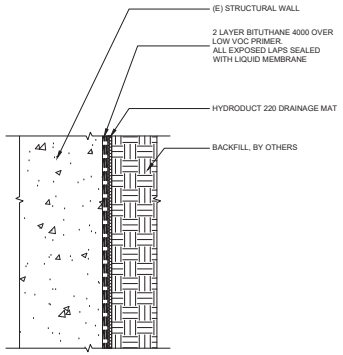
DATE	
PROJECT NO.	17-4892.01
CAD DWG FILE	4892_WP300.dwg
DRAWN BY	ELI
CHECKED BY	AI

SHEET TITLE
COURTYARD/PLANTER DETAILS

SCALE: NOTED ON DRAWINGS

SHEET **WP301**

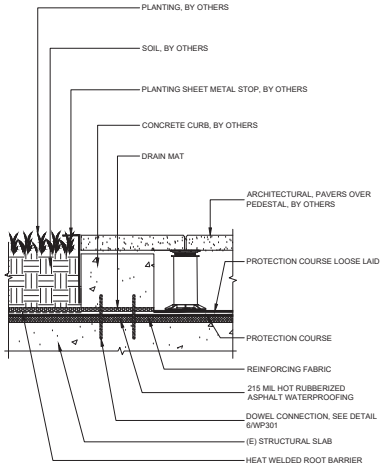
PLANNING SUBMITTAL, 02/02/2018



TYPICAL PERIMETER WALL WATERPROOFING

7 / WP302

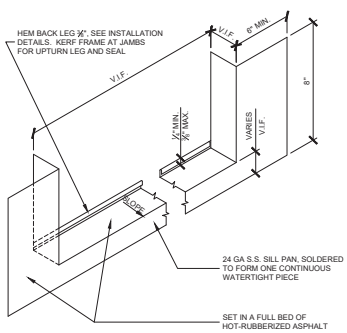
SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TRANSITION FROM PLANTER TO PAVERS AT CURB

5 / WP302

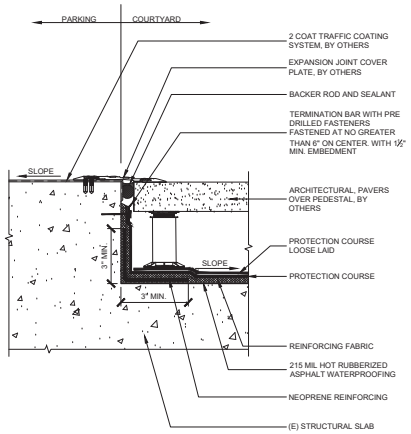
SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TYPICAL DOOR SILL PAN

3 / WP302

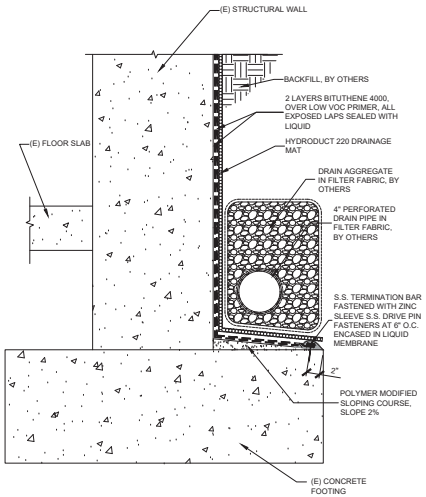
SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



COUNTRYARD TO PARKING DECK TRANSITION

1 / WP302

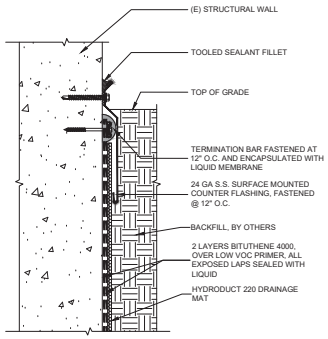
SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TYPICAL BASE OF WALL TERMINATION

8 / WP302

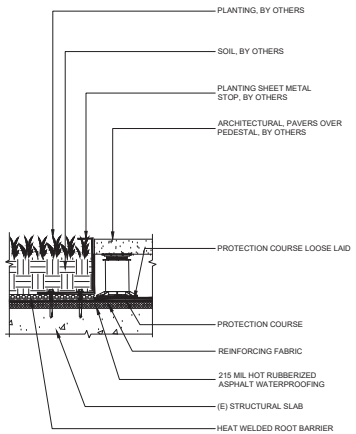
SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TYPICAL TERMINATION AT GRADE

6 / WP302

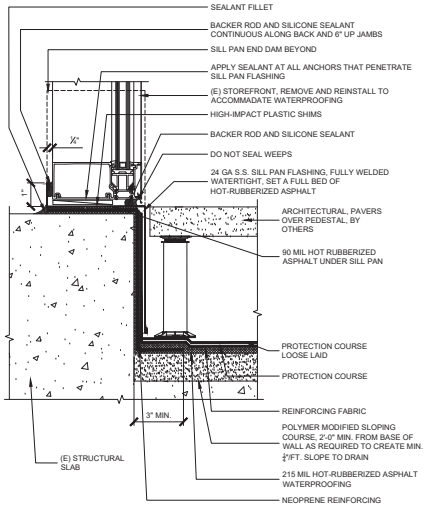
SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



TRANSITION FROM PLANTER TO PAVERS

4 / WP302

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.



PODIUM WINDOW WALL SYSTEM

2 / WP302

SCALE: 3" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.

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SHEET TITLE
COURTYARD/PLANTER DETAILS

SCALE: NOTED ON DRAWINGS

SHEET **WP302**

PLANNING SUBMITTAL, 02/02/2018

SARES | REGIS

Ken Rakestraw
SRGNC CRES, LLC
901 Mariners Island Boulevard, 7th Floor, San Mateo, California 94404
T: 650-378-2800

September 6, 2018

City of Menlo Park
Community Development Department
701 Laurel Street, Menlo Park, CA 94025
Attention: Kaitie Meador, Deanna Chow

Re: 1000 El Camino Real - Project Description Letter Revision 1

To City of Menlo Park Planning Department:

Attached is the resubmittal package for 1000 El Camino Real that includes responses to the Planning Review Comments provided on May 30th and 31st. The project applicant is Sares-Regis, acting as Project Manager on behalf of the building owner, MPOC Investors, LLC ("Owner"), an investment entity managed by Matteson Real Estate Equities, Inc. and Matteson Realty Services, Inc. (the "Matteson Companies") for several decades. This package was prepared by our architects, ASD/SKY, and includes the following documents:

- Project Description Letter
- Design Team Responses to Planning Division Comments
- Planning Resubmittal Drawings

- Planning Submittal Drawings Cover Sheet with Fire Department Approval
- Final Arborist Report and Appendices
- Impervious Area Worksheet and Stormwater Requirements Checklist
- Data Sheet for Projects
- Specific Plan Standards and Guidelines Project Compliance Worksheet
- Request for Evaluation for Potential Historic Significance
- First American Title Insurance Company Preliminary Report

1. BACKGROUND

The site is an approximately 1.5-acre parcel located at the east corner of El Camino Real and Ravenswood Ave. This site contains a three-story office building over a podium garage which is

partially subterranean. The existing building is approximately 40,000 SF. The original construction is circa 1983. Per the 1998 Land Title Survey, the lot is zoned as Planned Development. Formerly part of the non-aligned Ravenswood Avenue/Menlo Avenue "T" intersection with El Camino Real, when the intersection was redesigned in the late 1970's to align these two streets, the surplus land that was formerly the street was available for development. The parcel is owned by the City of Menlo Park, and was ground leased in the early 1980's to the Owner's affiliates in order to facilitate the construction of the building that sits on the site today. This ground lease was extended per mutual agreement between the City and the Owner for another 55 years in 2015.

The site is surrounded by commercial buildings. A three-story commercial complex is located across Ravenswood Ave. to the northwest of the site. One-story commercial buildings are located across El Camino Real to the southwest of the site. A parking lot borders the site to the northeast. A one-story commercial building borders the site to the south east. The site is also home to several heritage redwood trees which were planted as saplings by the Owner at the time of the initial construction of the building.

2. CONDITIONS NECESSITATING THE PROJECT

The building was constructed with an underground parking garage that is not only underneath the building itself; it also extends westward toward El Camino Real such that the majority of the landscape and hardscape area on the front of the building is sitting on top of the underground garage. The same condition occurs at the rear plaza of the building (facing the railroad tracks), where the parking garage underneath extends beyond the building underneath the plaza and landscaped area almost to the rear property line. The "roof" of the garage is a post-tension concrete slab supported by columns in the garage; on top of this concrete slab is a waterproof membrane to keep both rain and irrigation water from penetrating into the concrete slab (and then rusting the steel post-tension cables that provide the slab with its structural integrity). On top of this membrane is either (1) hardscape pathways and plaza areas, or (2) in landscaped areas, no more than approximately 12 to 18 inches of topsoil and landscape planting. The redwood trees on the front of the building (discussed below), totaling seven (7) trees along El Camino Real immediately in front of the plaza area (not the largest redwood trees on the corner of Ravenswood Avenue at El Camino, which are not located above the parking structure), are located at the junction of the garage roof and the vertical garage wall along El Camino Real.

Over the past 35 years, the waterproof membrane, which was new technology in the early 1980's, has failed for two reasons. One is simply age, and the second and more important cause is the extensive and invasive root systems of the seven redwood trees discussed above. The failure of the waterproof membrane has allowed water to penetrate into the post-tension slab comprising the garage roof, threatening its structural integrity. This condition must be rectified immediately to

prevent further structural weakening of the garage roof, and unfortunately the only way to successfully gain access to the garage roof in order to remove the failed membrane and install a new membrane is to demolish and remove all of the hardscape and landscape sitting on top of the garage roof slab (including retaining walls). Once this is accomplished, a new waterproof membrane needs to be installed, on top of which can be installed new hardscape and landscaping.

This condition was recognized and was an important part of the discussions between the City and the Owner with respect to the ground lease extension. The short remaining life of the existing ground lease had significantly hampered the ability of the Owner to finance this critical capital maintenance project, which will be very expensive. The 55-year ground lease extension was completed in 2015, and forensic work and planning for this project commenced immediately thereafter. The City Manager and the City Attorney, in their capacity as acting for the City as "landlord" for the Owner under the ground lease, are both well aware of the need to complete this project rapidly for the reasons discussed above.

While the Owner would prefer to not have to go to this extent to rectify the garage roof structure problem, the need for the project to proceed in this way is unavoidable. Given that, the Owner is using the project to do several important things that will benefit both the property and the City. These include (but are not limited to) (1) the installation of new and more current state of the art hardscaping on the site, (2) upgrading of the ADA access from parking areas and El Camino to the building, (3) installation of more drought tolerant landscaping throughout the property, especially along the El Camino frontage of the building, (4) installation of more water efficient irrigation systems, and (5) more energy efficient exterior light fixtures in the parking area adjacent to the building and in the front and rear plaza areas. Overall, the aesthetic appearance of the building and the site will be dramatically enhanced, water usage for irrigation will be significantly reduced, and the new waterproof membrane will ensure the structural integrity of the garage roof structure for decades.

3. PROPOSED PROJECT

We propose to address the site's waterproofing and structural failure issues at the podium level. Since this will involve sufficient removal of hardscape, vegetation, and soil that currently covers the podium and waterproof membrane, this project will also include upgrades to the landscape design. Unfortunately, access to and repair of the podium level waterproofing system requires disruption and in some cases removal of the existing site vegetation, including some of the heritage trees. While the existing heritage trees will be handled with great care and protected throughout the demolition and construction processes, 7 heritage trees (discussed above) will need to be removed during this process due to their location directly above or adjacent to retention walls and the podium slab. The project team submitted a tree removal application to the City of Menlo Park on November

7, 2017 for the removal of 7 heritage redwood trees in order to perform the repair work. It should be noted that we will be replacing the heritage trees being removed with other trees as agreed to by the City Arborist.

The landscaping renovation scope includes new paved walkways, landscape planters, in-ground vegetation, upgraded guardrails to current code compliance, repainting of site walls, replacement of existing parking pole lighting, and upgraded landscape and walkway lighting. Building upgrades also includes repainting the building exterior and guardrails.

Per the Planning Review comments and pending discussions with the Assistant Community Development Director Deanna Chow and the Assistant Public Works Director, there is a potential 2-foot extension of the existing 8-foot sidewalk along El Camino Real between the existing utility vaults and the parking ramp. This would be a compromise solution of extending the sidewalks from 8' to 10', in lieu of the City's request for a 15' extension, in order to preserve the heritage trees on the site not otherwise affected by the project and to preserve access to parking off of El Camino Real. The scope of the sidewalk extension will take into account protecting the existing trees along the property edge and within the sidewalk along El Camino Real. Provided we reach agreement on the 10-foot sidewalk expansion, we are submitting the new plans that include a 2' extension of the existing 8' sidewalks, with very limited exceptions near the south driveway.

The sidewalk is already 10 feet wide beginning at the utility vaults at the northwest end of the building and remains 10 feet wide as it progresses around the corner at the intersection of El Camino Real and Ravenswood Avenue; it remains 10 feet wide along Ravenswood Avenue to the termination of our property line. Given that we did not plan to replace or increase the size of the sidewalks or incur related expenses as part of the repair project, the bearing of the additional costs we would incur is being discussed with the City.

There are no changes to existing site parking except as required to meet current accessibility codes.

Materials include porcelain pavers, steel cables at guardrails, fiberglass and acrylic planter boxes, metal site furnishings, trees, shrubs and groundcover, and exterior paint.

As discussed above, there is great urgency to this project given the implications for the structural integrity of the garage roof structure and our need to have a fully effective waterproof membrane in place as soon as possible. As with all waterproofing projects of this nature, the work must take place during dry weather, and we wish to begin as soon as possible while the weather still permits. We accordingly request the City of Menlo Park to help expedite the planning and permitting reviews of this project so the work can be completed before the next rain season.

We look forward to a staff response to our re-submittal and scheduling a planning commission meeting so that we can proceed as soon as possible.

Please call me at (949) 244-3085 if you have any questions.

Sincerely,

Ken Rakestraw
Sares Regis Group of Northern California (SRGNC CRES, LLC)
Project Development Manager

cc: Matt Matteson, The Matteson Companies; Jennifer Harding, ASD Architects; Janice Yuen, Sares Regis Group of Northern California (SRGNC CRES, LLC)

Menlo Park El Camino Real/Downtown Specific Plan
Standards and Guidelines: 1000 El Camino Real - Compliance Worksheet

Section	Standard or Guideline	Requirement	Evaluation
E.3.1 Development Intensity			
E.3.1.01	Standard	Business and Professional office (inclusive of medical and dental office) shall not exceed one half of the base FAR or public benefit bonus FAR, whichever is applicable.	*Not Applicable: No changes to the existing building.*
E.3.1.02	Standard	Medical and Dental office shall not exceed one third of the base FAR or public benefit bonus FAR, whichever is applicable.	*Not Applicable: No changes to the existing building.*
E.3.2 Height			
E.3.2.01	Standard	Roof-mounted mechanical equipment, solar panels, and similar equipment may exceed the maximum building height, but shall be screened from view from publicly-accessible spaces.	*Not Applicable: No changes to the existing building.*
E.3.2.02	Standard	Vertical building projections such as parapets and balcony railings may extend up to 4 feet beyond the maximum façade height or the maximum building height, and shall be integrated into the design of the building.	*Not Applicable: No changes to the existing building.*
E.3.2.03	Standard	Rooftop elements that may need to exceed the maximum building height due to their function, such as stair and elevator towers, shall not exceed 14 feet beyond the maximum building height. Such rooftop elements shall be integrated into the design of the building.	*Not Applicable: No changes to the existing building.*
E.3.3 Setbacks and Projections within Setbacks			
E.3.3.01	Standard	Front setback areas shall be developed with sidewalks, plazas, and/or landscaping as appropriate.	*Not Applicable: No changes to the existing building.*
E.3.3.02	Standard	Parking shall not be permitted in front setback areas.	*Not Applicable: No changes to the existing building.*
E.3.3.03	Standard	In areas where no or a minimal setback is required, limited setback for store or lobby entry recesses shall not exceed a maximum of 4-foot depth and a maximum of 6-foot width.	*Not Applicable: No changes to the existing building.*
E.3.3.04	Standard	In areas where no or a minimal setback is required, building projections, such as balconies, bay windows and dormer windows, shall not project beyond a maximum of 3 feet from the building face into the sidewalk clear walking zone, public right-of-way or public spaces, provided they have a minimum 8-foot vertical clearance above the sidewalk clear walking zone, public right-of-way or public space.	*Not Applicable: No changes to the existing building.*
E.3.3.05	Standard	In areas where setbacks are required, building projections, such as balconies, bay windows and dormer windows, at or above the second habitable floor shall not project beyond a maximum of 5 feet from the building face into the setback area.	*Not Applicable: No changes to the existing building.*

Section	Standard or Guideline	Requirement	Evaluation
E.3.3.06	Standard	The total area of all building projections shall not exceed 35% of the primary building façade area. Primary building façade is the façade built at the property or setback line.	*Not Applicable: No changes to the existing building.*
E.3.3.07	Standard	Architectural projections like canopies, awnings and signage shall not project beyond a maximum of 6 feet horizontally from the building face at the property line or at the minimum setback line. There shall be a minimum of 8-foot vertical clearance above the sidewalk, public right-of-way or public space.	*Not Applicable: No changes to the existing building.*
E.3.3.08	Standard	No development activities may take place within the San Francisquito Creek bed, below the creek bank, or in the riparian corridor.	*Not Applicable: No changes to the existing building.*
E.3.4 Massing and Modulation			
E.3.4.1 Building Breaks			
E.3.4.1.01	Standard	The total of all building breaks shall not exceed 25 percent of the primary façade plane in a development.	*Not Applicable: No changes to the existing building.*
E.3.4.1.02	Standard	Building breaks shall be located at ground level and extend the entire building height.	*Not Applicable: No changes to the existing building.*
E.3.4.1.03	Standard	In all districts except the ECR-SE zoning district, recesses that function as building breaks shall have minimum dimensions of 20 feet in width and depth and a maximum dimension of 50 feet in width. For the ECR-SE zoning district, recesses that function as building breaks shall have a minimum dimension of 60 feet in width and 40 feet in depth.	*Not Applicable: No changes to the existing building.*
E.3.4.1.04	Standard	Building breaks shall be accompanied with a major change in fenestration pattern, material and color to have a distinct treatment for each volume.	*Not Applicable: No changes to the existing building.*
E.3.4.1.05	Standard	In all districts except the ECR-SE zoning district, building breaks shall be required as shown in Table E3.	*Not Applicable: No changes to the existing building.*

Section	Standard or Guideline	Requirement	Evaluation
E.3.4.1.06	Standard	In the ECR-SE zoning district, and consistent with Table E4 the building breaks shall: • Comply with Figure E9; • Be a minimum of 60 feet in width, except where noted on Figure E9; • Be a minimum of 120 feet in width at Middle Avenue; • Align with intersecting streets, except for the area between Roble Avenue and Middle Avenue; • Be provided at least every 350 feet in the area between Roble Avenue and Middle Avenue; where properties under different ownership coincide with this measurement, the standard side setbacks (10 to 25 feet) shall be applied, resulting in an effective break of between 20 to 50 feet. • Extend through the entire building height and depth at Live Oak Avenue, Roble Avenue, Middle Avenue, Partridge Avenue and Harvard Avenue; and • Include two publicly-accessible building breaks at Middle Avenue and Roble Avenue.	*Not Applicable: No changes to the existing building.*
E.3.4.1.07	Standard	In the ECR-SE zoning district, the Middle Avenue break shall include vehicular access; publicly-accessible open space with seating, landscaping and shade; retail and restaurant uses activating the open space; and a pedestrian/bicycle connection to Alma Street and Burgess Park. The Roble Avenue break shall include publicly-accessible open space with seating, landscaping and shade.	*Not Applicable: No changes to the existing building.*
E.3.4.1.08	Guideline	In the ECR-SE zoning district, the breaks at Live Oak, Roble, Middle, Partridge and Harvard Avenues may provide vehicular access.	*Not Applicable: No changes to the existing building.*

E.3.4.2 Façade Modulation and Treatment			
E.3.4.2.01	Standard	Building façades facing public rights-of-way or public open spaces shall not exceed 50 feet in length without a minor building façade modulation. At a minimum of every 50' façade length, the minor vertical façade modulation shall be a minimum 2 feet deep by 5 feet wide recess or a minimum 2-foot setback of the building plane from the primary building façade.	*Not Applicable: No changes to the existing building.*
E.3.4.2.02	Standard	Building façades facing public rights-of-way or public open spaces shall not exceed 100 feet in length without a major building modulation. At a minimum of every 100 feet of façade length, a major vertical façade modulation shall be a minimum of 6 feet deep by 20 feet wide recess or a minimum of 6 feet setback of building plane from primary building façade for the full height of the building. This standard applies to all districts except ECR NE-L and ECR SW since those two districts are required to provide a building break at every 100 feet.	*Not Applicable: No changes to the existing building.*
E.3.4.2.03	Standard	In addition, the major building façade modulation shall be accompanied with a 4-foot minimum height modulation and a major change in fenestration pattern, material and/or color.	*Not Applicable: No changes to the existing building.*
E.3.4.2.04	Guideline	Minor façade modulation may be accompanied with a change in fenestration pattern, and/or material, and/or color, and/or height.	*Not Applicable: No changes to the existing building.*
E.3.4.2.05	Guideline	Buildings should consider sun shading mechanisms, like overhangs, *bris soleils* and clerestory lighting, as façade articulation strategies.	*Not Applicable: No changes to the existing building.*
E.3.4.3 Building Profile			
E.3.4.3.01	Standard	The 45-degree building profile shall be set at the minimum setback line to allow for flexibility and variation in building façade height within a district.	*Not Applicable: No changes to the existing building.*
E.3.4.3.02	Standard	Horizontal building and architectural projections, like balconies, bay windows, dormer windows, canopies, awnings, and signage, beyond the 45-degree building profile shall comply with the standards for Building Setbacks & Projection within Setbacks (E.3.3.04 to E.3.3.07) and shall be integrated into the design of the building.	*Not Applicable: No changes to the existing building.*
E.3.4.3.03	Standard	Vertical building projections like parapets and balcony railings shall not extend 4 feet beyond the 45-degree building profile and shall be integrated into the design of the building.	*Not Applicable: No changes to the existing building.*

E.3.4.3.04	Standard	Rooftop elements that may need to extend beyond the 45-degree building profile due to their function, such as stair and elevator towers, shall be integrated into the design of the building.	*Not Applicable: No changes to the existing building.*
E.3.4.4 Upper Story Façade Length			
E.3.4.4.01	Standard	Building stories above the 38-foot façade height shall have a maximum allowable façade length of 175 feet along a public right-of-way or public open space.	*Not Applicable: No changes to the existing building.*
E.3.5 Ground Floor Treatment, Entry and Commercial Frontage			
Ground Floor Treatment			
E.3.5.01	Standard	The retail or commercial ground floor shall be a minimum 15-foot floor-to-floor height to allow natural light into the space**.**	*Not Applicable: No changes to the existing building.*
E.3.5.02	Standard	Ground floor commercial buildings shall have a minimum of 50% transparency (i.e., clear-glass windows) for retail uses, office uses and lobbies to enhance the visual experience from the sidewalk and street. Heavily tinted or mirrored glass shall not be permitted.	*Not Applicable: No changes to the existing building.*
E.3.5.03	Guideline	Buildings should orient ground-floor retail uses, entries and direct-access residential units to the street.	*Not Applicable: No changes to the existing building.*
E.3.5.04	Guideline	Buildings should activate the street by providing visually interesting and active uses, such as retail and personal service uses, in ground floors that face the street. If office and residential uses are provided, they should be enhanced with landscaping and interesting building design and materials.	*Not Applicable: No changes to the existing building.*
E.3.5.05	Guideline	For buildings where ground floor retail, commercial or residential uses are not desired or viable, other project-related uses, such as a community room, fitness center, daycare facility or sales center, should be located at the ground floor to activate the street.	*Not Applicable: No changes to the existing building.*
E.3.5.06	Guideline	Blank walls at ground floor are discouraged and should be minimized. When unavoidable, continuous lengths of blank wall at the street should use other appropriate measures such as landscaping or artistic intervention, such as murals.	*Not Applicable: No changes to the existing building.*
E.3.5.07	Guideline	Residential units located at ground level should have their floors elevated a minimum of 2 feet to a maximum of 4 feet above the finished grade sidewalk for better transition and privacy, provided that accessibility codes are met.	*Not Applicable: No changes to the existing building.*
E.3.5.08	Guideline	Architectural projections like canopies and awnings should be integrated with the ground floor and overall building design to break up building mass, to add visual interest to the building and provide shelter and shade.	*Not Applicable: No changes to the existing building.*

Building Entries			
E.3.5.09	Standard	Building entries shall be oriented to a public street or other public space. For larger residential buildings with shared entries, the main entry shall be through prominent entry lobbies or central courtyards facing the street. From the street, these entries and courtyards provide additional visual interest, orientation and a sense of invitation.	*Not Applicable: No changes to the existing building.*
E.3.5.10	Guideline	Entries should be prominent and visually distinctive from the rest of the façade with creative use of scale, materials, glazing, projecting or recessed forms, architectural details, color, and/or awnings.	*Not Applicable: No changes to the existing building.*
E.3.5.11	Guideline	Multiple entries at street level are encouraged where appropriate.	*Not Applicable: No changes to the existing building.*
E.3.5.12	Guideline	Ground floor residential units are encouraged to have their entrance from the street.	*Not Applicable: No changes to the existing building.*
E.3.5.13	Guideline	Stoops and entry steps from the street are encouraged for individual unit entries when compliant with applicable accessibility codes. Stoops associated with landscaping create inviting, usable and visually attractive transitions from private spaces to the street.	*Not Applicable: No changes to the existing building.*
E.3.5.14	Guideline	Building entries are allowed to be recessed from the primary building façade.	*Not Applicable: No changes to the existing building.*
Commercial Frontage			
E.3.5.15	Standard	Commercial windows/storefronts shall be recessed from the primary building façade a minimum of 6 inches	*Not Applicable: No changes to the existing building.*
E.3.5.16	Standard	Retail frontage, whether ground floor or upper floor, shall have a minimum 50% of the façade area transparent with clear vision glass, not heavily tinted or highly mirrored glass.	*Not Applicable: No changes to the existing building.*
E.3.5.17	Guideline	Storefront design should be consistent with the building's overall design and contribute to establishing a well-defined ground floor for the façade along streets.	*Not Applicable: No changes to the existing building.*
E.3.5.18	Guideline	The distinction between individual storefronts, entire building façades and adjacent properties should be maintained.	*Not Applicable: No changes to the existing building.*
E.3.5.19	Guideline	Storefront elements such as windows, entrances and signage should provide clarity and lend interest to the façade.	*Not Applicable: No changes to the existing building.*
E.3.5.20	Guideline	Individual storefronts should have clearly defined bays. These bays should be no greater than 20 feet in length. Architectural elements, such as piers, recesses and projections help articulate bays.	*Not Applicable: No changes to the existing building.*

E.3.5.21	Guideline	All individual retail uses should have direct access from the public sidewalk. For larger retail tenants, entries should occur at lengths at a maximum at every 50 feet, consistent with the typical lot size in downtown.	*Not Applicable: No changes to the existing building.*
E.3.5.22	Guideline	Recessed doorways for retail uses should be a minimum of two feet in depth. Recessed doorways provide cover or shade, help identify the location of store entrances, provide a clear area for out-swinging doors and offer the opportunity for interesting paving patterns, signage and displays.	*Not Applicable: No changes to the existing building.*
E.3.5.23	Guideline	Storefronts should remain un-shuttered at night and provide clear views of interior spaces lit from within. If storefronts must be shuttered for security reasons, the shutters should be located on the inside of the store windows and allow for maximum visibility of the interior.	*Not Applicable: No changes to the existing building.*
E.3.5.24	Guideline	Storefronts should not be completely obscured with display cases that prevent customers and pedestrians from seeing inside.	*Not Applicable: No changes to the existing building.*
E.3.5.25	Guideline	Signage should not be attached to storefront windows.	*Not Applicable: No changes to the existing building.*
E.3.6 Open Space			
E.3.6.01	Standard	Residential developments or Mixed Use developments with residential use shall have a minimum of 100 square feet of open space per unit created as common open space or a minimum of 80 square feet of open space per unit created as private open space, where private open space shall have a minimum dimension of 6 feet by 6 feet. In case of a mix of private and common open space, such common open space shall be provided at a ratio equal to 1.25 square feet for each one square foot of private open space that is not provided.	*Not Applicable: No changes to the existing building.*
E.3.6.02	Standard	Residential open space (whether in common or private areas) and accessible open space above parking podiums up to 16 feet high shall count towards the minimum open space requirement for the development.	*Not Applicable: No changes to the existing building.*
E.3.6.03	Guideline	Private and/or common open spaces are encouraged in all developments as part of building modulation and articulation to enhance building façade.	*Complies: At the building entry, new pedestrian seating and a central landscape element demarcate a common open space located at the building entry. Private open patio space is located at the rear of the building for building occupants.*
E.3.6.04	Guideline	Private development should provide accessible and usable common open space for building occupants and/or the general public.	*Complies: The entry and rear patios provide private and public open spaces.*

E.3.6.05	Guideline	For residential developments, private open space should be designed as an extension of the indoor living area, providing an area that is usable and has some degree of privacy.	*Not Applicable: No changes to the existing building.*
E.3.6.06	Guideline	Landscaping in setback areas should define and enhance pedestrian and open space areas. It should provide visual interest to streets and sidewalks, particularly where building façades are long.	*Not Applicable: No changes to the existing building.*
E.3.6.07	Guideline	Landscaping of private open spaces should be attractive, durable and drought-resistant.	*Complies: The planting plan uses a simple and attractive plant palette to create a contemporary and simple green base for the existing building. Mass plantings of low-to-the-ground flowering groundcovers and a no-mow meadow are broken up with regular tree spacing. The selected species are durable and reliable, with the majority of the landscape planted with low-water-use plants on the WUCOLS water-use classification chart. Plants that use medium or high-water-use are only used in limited areas. Collectively, the site meets Title 23 Model Water Efficient Landscape and local City municipal code.*
E.3.7 Parking, Service and Utilities			
General Parking and Service Access			
E.3.7.01	Guideline	The location, number and width of parking and service entrances should be limited to minimize breaks in building design, sidewalk curb cuts and potential conflicts with streetscape elements.	*Not Applicable: No changes to the existing building.*
E.3.7.02	Guideline	In order to minimize curb cuts, shared entrances for both retail and residential use are encouraged. In shared entrance conditions, secure access for residential parking should be provided.	*Not Applicable: No changes to the existing building.*
E.3.7.03	Guideline	When feasible, service access and loading docks should be located on secondary streets or alleys and to the rear of the building.	*Not Applicable: No changes to the existing building.*
E.3.7.04	Guideline	The size and pattern of loading dock entrances and doors should be integrated with the overall building design.	*Not Applicable: No changes to the existing building.*
E.3.7.05	Guideline	Loading docks should be screened from public ways and adjacent properties to the greatest extent possible. In particular, buildings that directly adjoin residential properties should limit the potential for loading-related impacts, such as noise. Where possible, loading docks should be internal to the building envelope and equipped with closable doors. For all locations, loading areas should be kept clean.	*Not Applicable: No changes to the existing building.*

E.3.7.06	Guideline	Surface parking should be visually attractive, address security and safety concerns, retain existing mature trees and incorporate canopy trees for shade. See Section D.5 for more compete guidelines regarding landscaping in parking areas.	*Not Applicable: No changes to the existing building.*
Utilities			
E.3.7.07	Guideline	All utilities in conjunction with new residential and commercial development should be placed underground.	*Not Applicable: No changes to the existing building.*
E.3.7.08	Guideline	Above ground meters, boxes and other utility equipment should be screened from public view through use of landscaping or by integrating into the overall building design.	*Tentatively Complies: Meter locations are not yet determined. Planting plan will be adjusted to screen once they are located during the creation of construction documents.*
Parking Garages			
E.3.7.09	Standard	To promote the use of bicycles, secure bicycle parking shall be provided at the street level of public parking garages. Bicycle parking is also discussed in more detail in Section F.5 “Bicycle Storage Standards and Guidelines.”	*Not Applicable: No changes to the existing building.*
E.3.7.10	Guideline	Parking garages on downtown parking plazas should avoid monolithic massing by employing change in façade rhythm, materials and/or color.	*Not Applicable: No changes to the existing building.*
E.3.7.11	Guideline	To minimize or eliminate their visibility and impact from the street and other significant public spaces, parking garages should be underground, wrapped by other uses (i.e. parking podium within a development) and/or screened from view through architectural and/or landscape treatment.	*Not Applicable: No changes to the existing building.*
E.3.7.12	Guideline	Whether free-standing or incorporated into overall building design, garage façades should be designed with a modulated system of vertical openings and pilasters, with design attention to an overall building façade that fits comfortably and compatibly into the pattern, articulation, scale and massing of surrounding building character.	*Not Applicable: No changes to the existing building.*
E.3.7.13	Guideline	Shared parking is encouraged where feasible to minimize space needs, and it is effectively codified through the plan’s off-street parking standards and allowance for shared parking studies.	*Not Applicable: No parking garage proposed in this project.*
E.3.7.14	Guideline	A parking garage roof should be approached as a usable surface and an opportunity for sustainable strategies, such as installment of a green roof, solar panels or other measures that minimize the heat island effect.	*Not Applicable: No changes to the existing building.*
E.3.8 Sustainable Practices			
Overall Standards			
E.3.8.01	Standard	Unless the Specific Plan area is explicitly exempted, all citywide sustainability codes or requirements shall apply.	*Not Applicable: No changes to the existing building.*

Overall Guidelines			
E.3.8.02	Guideline	Because green building standards are constantly evolving, the requirements in this section should be reviewed and updated on a regular basis of at least every two years.	*Not Applicable: No changes to the existing building.*

Leadership in Energy and Environmental Design (LEED) Standards			
E.3.8.03	Standard	Development shall achieve LEED certification, at Silver level or higher, or a LEED Silver equivalent standard for the project types listed below. For LEED certification, the applicable standards include LEED New Construction; LEED Core and Shell; LEED New Homes; LEED Schools; and LEED Commercial Interiors. Attainment shall be achieved through LEED certification or through a City-approved outside auditor for those projects pursing a LEED equivalent standard. The requirements, process and applicable fees for an outside auditor program shall be established by the City and shall be reviewed and updated on a regular basis. LEED certification or equivalent standard, at a Silver level or higher, shall be required for: • Newly constructed residential buildings of Group R (single-family, duplex and multi-family); • Newly constructed commercial buildings of Group B (occupancies including among others office, professional and service type transactions) and Group M (occupancies including among others display or sale of merchandise such as department stores, retail stores, wholesale stores, markets and sales rooms) that are 5,000 gross square feet or more; • New first-time build-outs of commercial interiors that are 20,000 gross square feet or more in buildings of Group B and M occupancies; and • Major alterations that are 20,000 gross square feet or more in existing buildings of Group B, M and R occupancies, where interior finishes are removed and significant upgrades to structural and mechanical, electrical and/or plumbing systems are proposed. All residential and/or mixed use developments of sufficient size to require LEED certification or equivalent standard under the Specific Plan shall install one dedicated electric vehicle/plug-in hybrid electric vehicle recharging station for every 20 residential parking spaces provided. Per the Climate Action Plan the complying applicant could receive incentives, such as streamlined permit processing, fee discounts, or design templates.	*Not Applicable: No changes to the existing building.*

Leadership in Energy and Environmental Design (LEED) Guidelines			
E.3.8.04	Guideline	The development of larger projects allows for more comprehensive sustainability planning and design, such as efficiency in water use, stormwater management, renewable energy sources and carbon reduction features. A larger development project is defined as one with two or more buildings on a lot one acre or larger in size. Such development projects should have sustainability requirements and GHG reduction targets that address neighborhood planning, in addition to the sustainability requirements for individual buildings (See Standard E.3.8.03 above). These should include being certified or equivalently verified at a LEED-ND (neighborhood development), Silver level or higher, and mandating a phased reduction of GHG emissions over a period of time as prescribed in the 2030 Challenge. The sustainable guidelines listed below are also relevant to the project area. They relate to but do not replace LEED certification or equivalent standard rating requirements.	*Not Applicable: No changes to the existing building.*
Building Design Guidelines			
E.3.8.05	Guideline	Buildings should incorporate narrow floor plates to allow natural light deeper into the interior.	*Not Applicable: No changes to the existing building.*
E.3.8.06	Guideline	Buildings should reduce use of daytime artificial lighting through design elements, such as bigger wall openings, light shelves, clerestory lighting, skylights, and translucent wall materials.	*Not Applicable: No changes to the existing building.*
E.3.8.07	Guideline	Buildings should allow for flexibility to regulate the amount of direct sunlight into the interiors. Louvered wall openings or shading devices like *bris soleils* help control solar gain and check overheating. *Bris soleils*, which are permanent sun-shading elements, extend from the sun-facing façade of a building, in the form of horizontal or vertical projections depending on sun orientation, to cut out the sun's direct rays, help protect windows from excessive solar light and heat and reduce glare within.	*Not Applicable: No changes to the existing building.*
E.3.8.08	Guideline	Where appropriate, buildings should incorporate arcades, trellis and appropriate tree planting to screen and mitigate south and west sun exposure during summer. This guideline would not apply to downtown, the station area and the west side of El Camino Real where buildings have a narrower setback and street trees provide shade.	*Not Applicable: No changes to the existing building.*
E.3.8.09	Guideline	Operable windows are encouraged in new buildings for natural ventilation.	*Not Applicable: No changes to the existing building.*

E.3.8.10	Guideline	To maximize use of solar energy, buildings should consider integrating photovoltaic panels on roofs.	*Not Applicable: No changes to the existing building.*
E.3.8.11	Guideline	Inclusion of recycling centers in kitchen facilities of commercial and residential buildings shall be encouraged. The minimum size of recycling centers in commercial buildings should be 20 cubic feet (48 inches wide x 30 inches deep x 24 inches high) to provide for garbage and recyclable materials.	*Not Applicable: No changes to the existing building.*
Stormwater and Wastewater Management Guidelines			
E.3.8.12	Guideline	Buildings should incorporate intensive or extensive green roofs in their design. Green roofs harvest rainwater that can be recycled for plant irrigation or for some domestic uses. Green roofs are also effective in cutting-back on the cooling load of the air-conditioning system of the building and reducing the heat island effect from the roof surface.	*Not Applicable: No changes to the existing building.*
E.3.8.13	Guideline	Projects should use porous material on driveways and parking lots to minimize stormwater run-off from paved surfaces.	*Not Applicable: No changes to the existing building.*
Landscaping Guidelines			
E.3.8.14	Guideline	Planting plans should support passive heating and cooling of buildings and outdoor spaces.	*Complies: Large plant species trees cannot be planted on the southern exposure of the building, due to the underground podium structure. The plans include many trees off of the podium for full growth, and specify medium-sized trees above the podium's support columns. The mow-free meadow that is proposed may offer some cooling effect from the biomass's evapotranspiration. The specified porcelain pavers in the pedestrian walkways are of a light color with an SRI of 80%.*
E.3.8.15	Guideline	Regional native and drought resistant plant species are encouraged as planting material.	*Complies: The majority of the site would be planted with a mow-free meadow grass and ground covers that are rated as low on the WUCOLS water use classification chart.*
E.3.8.16	Guideline	Provision of efficient irrigation system is recommended, consistent with the City's Municipal Code Chapter 12.44 "Water-Efficient Landscaping".	*Complies: The site meets Title 23 Model Water Efficient Landscape and the City's municipal code. It will utilize sub-surface drip irrigation, a smart controller, and low-water-use planting.*
Lighting Standards			

E.3.8.17	Standard	Exterior lighting fixtures shall use fixtures with low cut-off angles, appropriately positioned, to minimize glare into dwelling units and light pollution into the night sky.	*Complies: The specified pole top luminaires feature full cut-off light distribution. Sconce lights are located directly adjacent to the entry doors and distribute light onto the building's surface, minimizing glare. Pedestrian bollard lamps are shielded from direct view while the reflector directs the light onto the illuminated ground surface. Accent landscape lighting features full cut-off light distribution and will either be angle directly downward or angled to minimize glare and light pollution.*
E.3.8.18	Standard	Lighting in parking garages shall be screened and controlled so as not to disturb surrounding properties, but shall ensure adequate public security.	*Not Applicable: No changes to the existing building.*
Lighting Guidelines			
E.3.8.19	Guideline	Energy-efficient and color-balanced outdoor lighting, at the lowest lighting levels possible, are encouraged to provide for safe pedestrian and auto circulation.	*Complies: The specified pole top luminaire is specifically designed for the illumination of parking areas, with a color temperature of 3000K (>85 CRI), providing 3,492 lumens. Two sconces specified at the building's main entry doors help identify the main entrance and are 3000K (90CRI). Pedestrian walk bollards are specified at 3000K (CRI>80), providing 1,371 lumens. The bollard lighting serves to locate, guide, and demarcate along the site's pedestrian walkway. Accent landscape lighting is 3000K (CRI>80) providing 1,371 lumens.*
E.3.8.20	Guideline	Improvements should use ENERGY STAR-qualified fixtures to reduce a building's energy consumption.	*Complies: As applicable, the specified lighting fixtures meet or exceed Energy Star's source efficacy requirement of >65 lm/W per lamp and source light output requirement of >800 lumens. The specified pole top luminaire features integral 120V - 277V electronic 14W LED driver, 17.5 total system watts, 0-10V dimming. The specified entry sconces feature integral 120V - 277V electronic LED driver, 21(up) and 14(down) watts, 0-10V dimming. The specified bollard fixtures feature integral 277V electronic 19.4W LED driver, 23 total system watts, 0-10V dimming. Accent landscape lighting are 2W LED fixtures.*
E.3.8.21	Guideline	Installation of high-efficiency lighting systems with advanced lighting control, including motion sensors tied to dimmable lighting controls or lighting controlled by timers set to turn off at the earliest practicable hour, are recommended.	*Complies: Exterior lighting will be controlled by timers set to turn off at the earliest hour practical. See above description for lighting efficiency information.*
Green Building Material Guidelines			

E.3.8.22	Guideline	The reuse and recycle of construction and demolition materials is recommended. The use of demolition materials as a base course for a parking lot keeps materials out of landfills and reduces costs.	*Complies: Re-use of soil and any materials that are appropriate on site for the scope of work.*
E.3.8.23	Guideline	The use of products with identifiable recycled content, including post-industrial content with a preference for post-consumer content, are encouraged.	*Complies: The majority of this project is a landscape revitalization project. The small amount of hard-scape on-site will use thin-profile, porcelain pavers atop a podium system for easy maintenance and repair.*
E.3.8.24	Guideline	Building materials, components, and systems found locally or regionally should be used, thereby saving energy and resources in transportation.	*Complies: The majority of this project is a landscape revitalization project. The plants specified will come from California nurseries. Podium pavers and supports will be specified to best meet the needs of the project. The paver support system contains 20% post-industrial recycled material.*
E.3.8.25	Guideline	A design with adequate space to facilitate recycling collection and to incorporate a solid waste management program, preventing waste generation, is recommended.	*Tentatively Complies: General contractor will comply with the city requirements during construction of the project and submit a recycling and waste management plan.*
E.3.8.26	Guideline	The use of material from renewable sources is encouraged.	*Complies: The majority of this project is a landscape revitalization project. The plants specified will come from California nurseries.*

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Date: October 2, 2017

To: Ken Rakestraw, Project Manager
Sares Regis Inc.
901 Mariners Island Boulevard, Suite 700
San Mateo, CA 94404

Project Site: 1000 El Camino Real, Menlo Park

Subject: Removal of 7 Coast Redwood trees to accommodate waterproofing

Assignment: *SBCA Tree Consulting was asked to oversee exploratory excavation and to provide a report with observations and recommendations regarding treatment of the redwood trees in the context of the necessary water proofing repairs.*

Background

- Review of Trees and Water Leakage– Arborist Steve Batchelder attended an initial meeting at 1000 El Camino on July 19, 2017. The purpose of the meeting was to review the trees and leakage. A that time, a plan was developed to perform exploratory excavation.
- Review of Exploratory Excavation and Tree Roots – Arborist was present for two meetings. First was during the excavation and a second meeting with all parties to discuss the findings.
- Review of KPFF ENGINEERS FIELD REPORT dated 6/6/17 – This report was made available with the results of the engineering investigation.
- Review of ALLANA BUICK & BERS *Podium Investigation Findings Report* dated August 16, 2017 – This report was also reviewed in the context of the problems identified and the work needed.

Summary

The seven Coast Redwood trees will require removal to accommodate the needed repairs to the below ground garage structure's water proofing. Preliminary exploratory excavation revealed that the level of root cutting required to allow for the repairs will compromise both the health and safety of the redwood trees. Any attempt to try to retain one or two of the redwoods would also compromise the safety due to the level of root loss that would occur and the increased wind exposure resulting from the tree removal.

It is hoped that Coast Live Oak tree #8 can likely be retained. Protection and retention measures needed for the retention of this tree is covered in a second report.

Observations

Tree Descriptions – The table below provides information on seven Coast Redwood trees and one Coast Live Oak.

Tree #	Species	Common Name	DBH	Height	Health	Structure	Notes
1	*Sequoia sempervirens*	Coast Redwood	40	85’	Good	Good	Remove
2	*Sequoia sempervirens*	Coast Redwood	38	85’	Good	Good	Remove
3	*Sequoia sempervirens*	Coast Redwood	34.5	85’	Good	Good	Remove
4	*Sequoia sempervirens*	Coast Redwood	39	85’	Good	Good	Remove
5	*Sequoia sempervirens*	Coast Redwood	38.5	85’	Good	Good	Remove
6	*Sequoia sempervirens*	Coast Redwood	34.5	85’	Good	Good	Remove
7	*Sequoia sempervirens*	Coast Redwood	37	85’	Good	Good	Remove
8	*Quercus agrifolia*	Coast Live Oak	26.5	35’	Good	Good	Retain

Soil Depth – The depth of the soil over the garage roof structure ranges from 12 to 18 inches. The area is covered with turf that appears to be well irrigated. Soil texture is a sandy loam.

Abundant Tree Roots – Redwood tree roots are abundant throughout the turf area which lies above the garage. Though most roots are smaller and fibrous, there are many large roots as well. All roots will need to be cut to access the structure surface to apply the new waterproofing. Because the trees are planted just behind the outer garage wall, extremely large roots are present along the edge of the structure’s outer wall. Severing these roots will compromise the root anchoring of the trees.

Discussion

Leakage Found – Both the ALLANA BUICK & BERS and the KPPF engineering reports noted leakage and structural steel degradation. Both reports indicate that repairs are in order. New water seal has been recommended for the entire garage structure.

No Ability to Work around Roots –Exploratory excavation was conducted in two locations adjacent to redwood trees. The size and abundance of roots observed in the soil precludes access to the garage roof surface and corners. Repairs are not possible if the roots remain.

Root Pruning – If roots are cut to accommodate the needed water proofing, the root anchoring and health of the trees would likely be compromised. It is likely that even ceasing the turf irrigation would have a significant adverse impact upon the health of the trees; the majority of the tree roots are located in the irrigated turf area above the garage.

Stand Dynamics – This entails both wind exposure and root grafts. Removing all but one or two of the redwood trees will leave the remaining trees with greater failure potential.

Retention of Coast Live Oak Tree #8 – Though no exploratory investigation has been conducted, it does appear that this tree can be retained with minimal root pruning that will not compromise either the health or stability of this tree. Retention and protection of this tree is covered in a separate report.

Recommendations

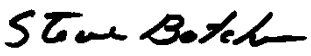
Remove 7 Redwood Trees – Removal of the seven Coast Redwood trees appears to be the only viable option to enable the waterproofing to occur. An attempt to retain one or two of the redwoods will generate a serious safety concern and constitute a liability for the tree owner.

Replacement Planting - City of Menlo Park requires a tree with a minimum height of 40 feet. Based upon the ***City-Approved Tree Species*** list, it is recommended that the *Lophostemon confertus* be selected. Recommended per tree soil volume[1] is 1,200 cubic feet. It appears that there is insufficient area for the required number of 15 gallon size replacement trees. We recommend that larger box size trees be considered for planting to compensate for fewer trees. Replacement trees are best located to minimize completion with the London Plane trees located in the adjacent sidewalk.

Retain Coast Live Oak – This tree is noted on the site map as #8. It is farther from the area of work activities. Special excavation procedures and treatments with arborist supervision will be required in the preservation effort.

End Report

Report submitted by:



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[1] Soil volume must be with bulk density less than 80% and acceptable horticultural qualities.

Photo Supplement

Photo 1. *Photo shows the four redwood trees located at the south end of the row.*

None of the trees can be retained due to the safety concerns resulting from the level of root loss that will occur.

Photo 2. *Photo above shows trees 5 through 8. Oak tree #8 is in the background (arrow). The oak is farther from the proposed work activities and can likely be retained.*

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Photo 3. *Photo to the right shows the massive amount of roots found in the turf area. All of these roots would need to be removed to accommodate the waterproofing.*

Photo 4. *Photo to the left shows the old water proofing and protection open for inspection. Significant root cutting was needed to gain access to the surface of the garage roof. People doing the excavation are working at the edge of the outer wall of the below ground garage. Cutting large roots so close to the tree will compromise the root anchoring and tree stability. Most likely "target" would be El Camino Real in the background.*

End Photo Supplement

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Date: **July 24, 2018**

To: Ken Rakestraw
Senior Project Manager, LEED AP BD+C
901 Mariners Island Boulevard, Suite 700
San Mateo, CA 94404

Project Site: 1000 El Camino Real

Subject: Tree Survey

Assignment: *Arborist was requested to survey all trees within the property and within 10' site including all adjacent street trees. It was also requested that Arborist address:*

- *City Comments contained in "Application Confirmation Notice" dated 5-31-18.*
- Proposed sidewalk widening to 15' along El Camino Real.

Appendix Info

1. Tree Survey Data
2. Tree Location Map
3. Under-pavement graphics
4. Tree Protection Guidelines
5. Site Plan Showing Work Area

City of Menlo Park Tree Ordinance

Definitions of Heritage Tree:

1. Any tree having a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more measured at 54 inches above natural grade.
2. Any oak tree native to California, with a circumference of 31.4 inches (diameter of 10 inches) or more measured at 54 inches above natural grade.
3. Any tree or group of trees specifically designated by the City Council for protection because of its historical significance, special character or community benefit.
4. Any tree with more than one trunk measured at the point where the trunks divide, with a circumference of 47.1 inches (diameter of 15 inches) or more, with the exception of trees that are under twelve (12) feet in height, which are exempt from the ordinance.[1]

[1] http://www.menlopark.org/205/Heritage-Trees

Survey Procedure

Trees Tagged – Each tree was tagged with a metal number tag which corresponds to the numbers used in the Excel data sheets in *Appendix 1* and Tree Location Map *Appendix 2.*

Data Recorded – Arborists recorded data on tree species, diameter (DBH[2]), tree height, canopy spread, health and structural conditions, Heritage Tree Status, and suitability for retention. Notes were recorded to provide commentary on general conditions. Trees with multiple stems were measured at the location just below where the branches emanate. Root Protection Zone (RPZ)[3] for each tree is also provided.

Tree Locations – The survey provides only general tree locations in *Appendix 2.* It is expected that the tree numbers will be recorded accurately in a site survey.

Summary

Tree survey – Seventy-six (76) trees were identified within the scope of the survey. Of these, forty (40) classify as Heritage Trees and eleven (11) are City Street trees.

Project Related Tree Removal – Seven heritage size Coast Redwood trees will be removed. Numbers (1,2,3,4,7,8,9) In addition two crepe myrtle (#'s 5 & 6) and six Japanese maple trees(#'s 30,31,32,33,34 & 35) will be removed. None of the six maple and two crepe myrtle trees are of sufficient size to qualify as heritage.

El Camino Sidewalk widening to 15 feet – In review of proposed plans, it appears the sidewalk can be expanded to 15' but not without significant costs involved with Tree Protection. Within the property, four Coast Live Oak *(Quercus agrifolia)* #s 10, 63, 64 and 65, and two Coast Redwood *(Sequoia sempervirens)* #s 11 and 12 will be impacted. Tree #63 is 15.5' from the face of curb and can only be retained if the sidewalk is narrowed in that location. Other oak trees range from 23' to 32.5' from face of curb. Root and soil protections provided in the tree protection guidelines will apply, as well as special below pavement treatments provided in Appendix 3.

[2] **DBH** is tree diameter measured at 54 inches above soil grade.

[3] **Tree Root Protection Zone (RPZ) -** The tree protection zone designates an area surrounding a tree or grouping of trees that is to be fenced off from all access until designated by a certified arborist. The radial distance of the root protection zone for each tree is provided in Appendix 1 in the RPZ column.

It should be understood that tree roots often extend out from the base to more than three times the distance defined by the critical root zone. An arborist should monitor all grading and trenching activity that is within twice the distance of the RPZ. The larger the protection zone that is provided, the greater the likelihood of long-term tree survival. Based upon evidence, project arborist may also reduce the size of the RPZ.

Existing Sidewalk Trees - It is likely the existing London Plane *(Platanus x hispanica)* #'s 66-72 located in El Camino Real sidewalk planting sites will suffer root damage during sidewalk construction. Root related hardscape displacement was observed adjacent to a few trees. *Appendix 3* contains specifications for treatments in areas where existing tree roots are present. Under-pavement treatments have also been provided to address new tree plantings.

Live Oak Trees # 10 and #65 – These two oaks are both good specimen trees and are worthy of preservation. Both are in close proximity to the work area and may therefore suffer some root loss. Project arborist must supervise or conduct all root pruning. The designated tree root protection zone (RPZ) of both oak trees extends out 27 feet from the base of the tree. Tree protection guidelines provide procedures for working in this area.

There is a possibility that the trees could suffer excessive root loss that compromises future health and safety of the trees. Arborist will make decisions to remove either to these oaks is consultation with City arborist.

Japanese Maple Removal *(Acer palmatum)* – Though there was earlier discussion of boxing and saving these trees we recommend removal of all six maple trees. Only one maple, #31, is in a condition to be worthy of preservation. None of the maple trees are large enough to qualify as "Heritage" trees. It is unlikely that this tree would survive being removed, held in a container and replanted at the end of the project. This is due to the limited depth of the soil (12"). This would generate a shallow and more spreading root system not easily contained in a 5-6 foot wide box. It is recommended that good quality nursery grown trees be installed after the project is completed. Due to the soil volume limitations it is also recommended that fewer trees be planted in this planter.

Survey Data Summary

- Total Trees – Arborist survey identifies 76 trees. Eleven (11) of these are City street trees. Two (2) Peppermint Gum *(Eucalyptus nicholii)* appear to be located just off site on the north eastern corner of the property and were also included in the survey.
- City Ordinance – Forty (40) specimens surveyed have DBHs of 15" or greater and qualify as "Heritage Trees" under City ordinance.
- Species Diversity – Nine (9) different tree species were identified.
- High Value Trees
    - **Coast Redwood** – The most numerous species was the Coast Redwood *(Sequoia sempervirens)*, with 28 specimens identified. All are located on site surrounding the building.
    - **Coast Live Oak** – The four native oaks along El Camino Real and one located in the back of the property are large, mature and valuable specimens. Trees along El Camino Real have endured heading cuts, which is not recommended under ANSI A300 pruning standards.

Table 1 – The table below provides a breakdown of numbers of each tree species surveyed.

	Species	Common Name	Total Amount	Heritage Tree Amount	Overall Retention Suitability	Comments
1	*Acer palmatum*	Japanese Maple	6	0	P	Two display large pruning wounds; two have significant girdling root issues; Two have poor branch attachments; #31 is worthy of transplant but cannot be due to shallow soil.
2	*Afrocarpus gracilior*	African Fern Pine	18	3	P	Hedged; Growing below pavement grade; DBHs were estimated do to limited access
3	*Eucalyptus nicholii*	Peppermint Gum	2	2	F-P	Located at NE corner of property; Structural problems
4	*Lagerstroemia spp*	Crepe Myrtle	6	0	G-P	Redwood trees have out-competed the four street trees for light, planted in root barriers, some display large rip outs; Two trees along El Camino are nice specimens
5	*Liquidambar styraciflua*	American Sweetgum	2	0	P	Poor specimens; Recommend removal.
6	*Platanus x hispanica*	London Plane	7	0	G	All street trees, some pavement uplift; one is blocking street light; Some display leans towards the street likely due to adjacent redwoods
7	*Quercus agrifolia*	Coast Live Oak	5	5	G	Trees along El Camino have received poor pruning in the past; Tree located on north side of building is a fine specimen; All are valuable trees and worthy of retention efforts
8	*Quercus ilex*	Holly Oak	2	2	F-G	Out competed for light by redwoods and not in best of health; Mildew issues
9	*Sequoia sempervirens*	Coast Redwood	28	28	G	Seven trees to be removed. Valuable trees; Those on north side of property smaller in size likely due to limited soil volume
		Totals:	**76**	**40**		

End Report

Report submitted by:

Molly Batchelder, Consulting Arborist
WC ISA Certified Arborist #9613A
Tree Risk Assessment Qualified (TRAQ)

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COLUMN HEADING DESCRIPTIONS

Tag# - Indicates the number tag attached to tree
Species - Scientific name
Common Name - Vernacular name
DBH - Diameter measured in inches at 4.5 feet above soil grade, unless otherwise indicated
Spread - In feet
Health -Tree Health: E is Excellent, G is Good, F is Fair, P is Poor, D is Dead or Dying
Structure- Tree Structural Safety: E is Excellent, G is Good, F is Fair, P is Poor, H is Hazardous
Heritage Tree - Attaining City of Menlo Park Heritage Tree Status: 1 is Yes
Suitability for Retention - Based on Tree Condition: G is Good, F is Fair, P is Poor
RPZ- Root Protection Zone: The radial distance in feet from base of tree that is to be fenced off from all construction access until designated by a certified arborist.
Notes - See below

ABBREVIATIONS AND DEFINITIONS

Notes

Embedded Bark (EB) - AKA Included Bark, this is a structural defect where bark is included between the branch attachment so that the wood cannot join. Such defects have a higher propensity for failure.

Codominant (CD) - A situation where a tree has two or more stems which are of equal diameter and relative amounts of leaf area. Trees with codominant primary scaffolding stems are inherently weaker than stems, which are of unequal diameter and size.

Codominant w/ Embedded Bark (CDEB) - When bark is embedded between codominant stems, failure potential is very high and pruning to mitigate the defect is recommended.

Dead Wood (DW) - Interior dead branches noted in tree.

End Weight Reduction (EWR) - Reduction of end branch end weight recommended to reduce potential for limb failure.

Internal Decay (ID) - Noted by sounding with a mallet or visible cavities/large pruning wounds.

Multi (Multi) - Multiple trunks/stems emanate from below breast height (4.5' above soil grade).

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Notes
1	*Sequoia sempervirens*	Coast Redwood	40	90	G	G	1	G	40	To Be Removed
2	*Sequoia sempervirens*	Coast Redwood	37	90	G	G	1	G	37	To Be Removed
3	*Sequoia sempervirens*	Coast Redwood	35	90	G	G	1	G	35	To Be Removed

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Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Notes
4	*Sequoia sempervirens*	Coast Redwood	39.5	90	G	G	1	G	40	To Be Removed
5	*Lagerstroemia spp*	Crepe Myrtle	7	25	G	G		G	7	To Be Removed,Powdery mildew, Codominant
6	*Lagerstroemia spp*	Crepe Myrtle	6	20	G	G		G	6	To Be Removed
7	*Sequoia sempervirens*	Coast Redwood	39	90	G	G	1	G	39	To Be Removed
8	*Sequoia sempervirens*	Coast Redwood	35	90	G	G	1	G	35	To Be Removed
9	*Sequoia sempervirens*	Coast Redwood	37	90	G	G	1	G	37	To Be Removed
10	*Quercus agrifolia*	Coast Live Oak	26.5	40	G	G	1	G	27	Large pruning wounds, Tussock Moth, 26' from FOC
11	*Sequoia sempervirens*	Coast Redwood	48	90	G	G	1	G	48	23.5' from FOC
12	*Sequoia sempervirens*	Coast Redwood	37	70	G	G	1	G	37	32.5' from FOC
13	*Sequoia sempervirens*	Coast Redwood	32	70	G	G	1	G	32	
14	*Sequoia sempervirens*	Coast Redwood	27	70	G	G	1	G	27	
15	*Sequoia sempervirens*	Coast Redwood	26.5	70	G	G	1	G	27	
16	*Sequoia sempervirens*	Coast Redwood	32	70	G	G	1	G	32	
17	*Sequoia sempervirens*	Coast Redwood	39	75	G	G	1	G	39	
18	*Sequoia sempervirens*	Coast Redwood	42.5	90	G	G	1	G	43	

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Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Notes
19	*Sequoia sempervirens*	Coast Redwood	41	90	G	G	1	G	41	
20	*Sequoia sempervirens*	Coast Redwood	27.5	70	G	G	1	G	28	
21	*Sequoia sempervirens*	Coast Redwood	40	90	G	G	1	G	40	
22	*Sequoia sempervirens*	Coast Redwood	28	70	G	G	1	G	28	
23	*Quercus ilex*	Holly Oak	16	40	F	F	1	F	16	Pruning wounds, out competed by redwoods, Mildew
24	*Sequoia sempervirens*	Coast Redwood	22.5	60	G	G	1	G	23	
25	*Sequoia sempervirens*	Coast Redwood	17.5	50	G	G	1	G	18	
26	*Quercus ilex*	Holly Oak	16	40	F	G	1	G	16	Sparse, powdery mildew
27	*Sequoia sempervirens*	Coast Redwood	26	60	F	G	1	G	26	Sparse
28	*Sequoia sempervirens*	Coast Redwood	21	60	F	G	1	G	21	Sparse
29	*Liquidambar styraciflua*	American Sweetgum	6.5	20	P	P		P	7	Recommend removal. Topped, one branch dead
30	*Acer palmatum*	Japanese Maple	7.5	20	F	F		F	8	To be Removed. Pruning wounds
31	*Acer palmatum*	Japanese Maple	12 @ 1'	20	G	G		G	12	To be Removed. Nice specimen
32	*Acer palmatum*	Japanese Maple	4 @ 4'	15	G	P		P	4	To be Removed. One stem cut and now decayed
33	*Acer palmatum*	Japanese Maple	9 @ 2'	20	G	P		F	9	To be Removed.Lean, EB

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Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Notes
34	*Acer palmatum*	Japanese Maple	10 @ 18"	20	G	P		P	10	To be Removed. Circling girdling roots
35	*Acer palmatum*	Japanese Maple	11 @ 18"	25	G	P		F	11	To be Removed. Circling girdling roots, EB w rib
36	*Quercus agrifolia*	Coast Live Oak	29 @ 3'	50	G	G	1	G	29	
37	*Sequoia sempervirens*	Coast Redwood	24	70	F	G	1	G	24	Sparse
38	*Sequoia sempervirens*	Coast Redwood	22.5	70	F	G	1	G	23	Sparse
39	*Sequoia sempervirens*	Coast Redwood	21	70	F	G	1	G	21	Sparse
40	*Sequoia sempervirens*	Coast Redwood	21	65	F	G	1	G	21	Sparse
41	*Sequoia sempervirens*	Coast Redwood	25	65	F	G	1	G	25	Sparse
42	*Liquidambar styraciflua*	American Sweetgum	8.5 @ 30"	20	P	F		P	7	Sparse
43	*Eucalyptus nicholii*	Peppermint Gum	24	25	G	P	1	P	24	Main stem removal, heavy laterals
44	*Eucalyptus nicholii*	Peppermint Gum	27.5	45	G	F	1	F	28	Rip out, heavy laterals
45	*Afrocarpus gracilior*	African Fern Pine	11	15	G	P		P	11	Hedged
46	*Afrocarpus gracilior*	African Fern Pine	9	15	G	P		P	9	Hedged
47	*Afrocarpus gracilior*	African Fern Pine	7	15	G	P		P	7	Hedged
48	*Afrocarpus gracilior*	African Fern Pine	15 @ 1'	15	G	P	1	P	15	Hedged
49	*Afrocarpus gracilior*	African Fern Pine	18 @ 1'	15	G	P	1	P	18	Hedged

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Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Notes
50	*Afrocarpus gracilior*	African Fern Pine	8	15	G	P		P	8	Hedged
51	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6	Hedged
52	*Afrocarpus gracilior*	African Fern Pine	5	15	G	P		P	5	Hedged
53	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6	Hedged
54	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6	Hedged
55	*Afrocarpus gracilior*	African Fern Pine	7	15	G	P		P	7	Hedged
56	*Afrocarpus gracilior*	African Fern Pine	4	15	G	P		P	4	Hedged
57	*Afrocarpus gracilior*	African Fern Pine	4	15	G	P		P	4	Hedged
58	*Afrocarpus gracilior*	African Fern Pine	7	15	G	P		P	7	Hedged
59	*Afrocarpus gracilior*	African Fern Pine	3.5	15	G	P		P	4	Hedged
60	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6	Hedged
61	*Afrocarpus gracilior*	African Fern Pine	7.5	15	G	P		P	8	Hedged
62	*Afrocarpus gracilior*	African Fern Pine	24 @ base	15	G	P	1	P	24	Hedged
63	*Quercus agrifolia*	Coast Live Oak	19	25	G	F	1	G	19	Topped, Tussock moth,15.5' from FOC
64	*Quercus agrifolia*	Coast Live Oak	23.5 @ 4'	25	G	F	1	G	24	Topped, Tussock moth, 23' from FOC
65	*Quercus agrifolia*	Coast Live Oak	27	25	G	P	1	G	27	Topped, Tussock moth, CDEB, 24' from FOC

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Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Notes
66	*Platanus x hispanica*	London Plane	14.5	50	G	G		G	15	Street light blocked, street tree, hardscape uplift
67	*Platanus x hispanica*	London Plane	2	15	G	G		G	2	Street tree
68	*Platanus x hispanica*	London Plane	7.5	25	F	G		G	8	Anthracnose, street tree
69	*Platanus x hispanica*	London Plane	4.5	25	G	G		G	5	Street tree
70	*Platanus x hispanica*	London Plane	7.5	25	F	G		G	8	Anthracnose, street tree
71	*Platanus x hispanica*	London Plane	6.5	25	F	F		G	7	Anthracnose, lean to street, street tree, hardscape uplift
72	*Platanus x hispanica*	London Plane	8	25	G	F		G	8	Street tree, lean to street
73	*Lagerstroemia spp*	Crepe Myrtle	11	25	G	P		P	11	Lean to street, Breakouts, 2' square root barrier
74	*Lagerstroemia spp*	Crepe Myrtle	9 @ 4'	25	F	F		P	9	Redwoods out competing for light, 2' square root barrier, breakout
75	*Lagerstroemia spp*	Crepe Myrtle	5	20	P	P		P	5	Redwoods out competing for light, poor pruning,, 2' square root barrier
76	*Lagerstroemia spp*	Crepe Myrtle	4	20	P	P		P	4	Redwoods out competing for light,breakout, 2' square root barrier

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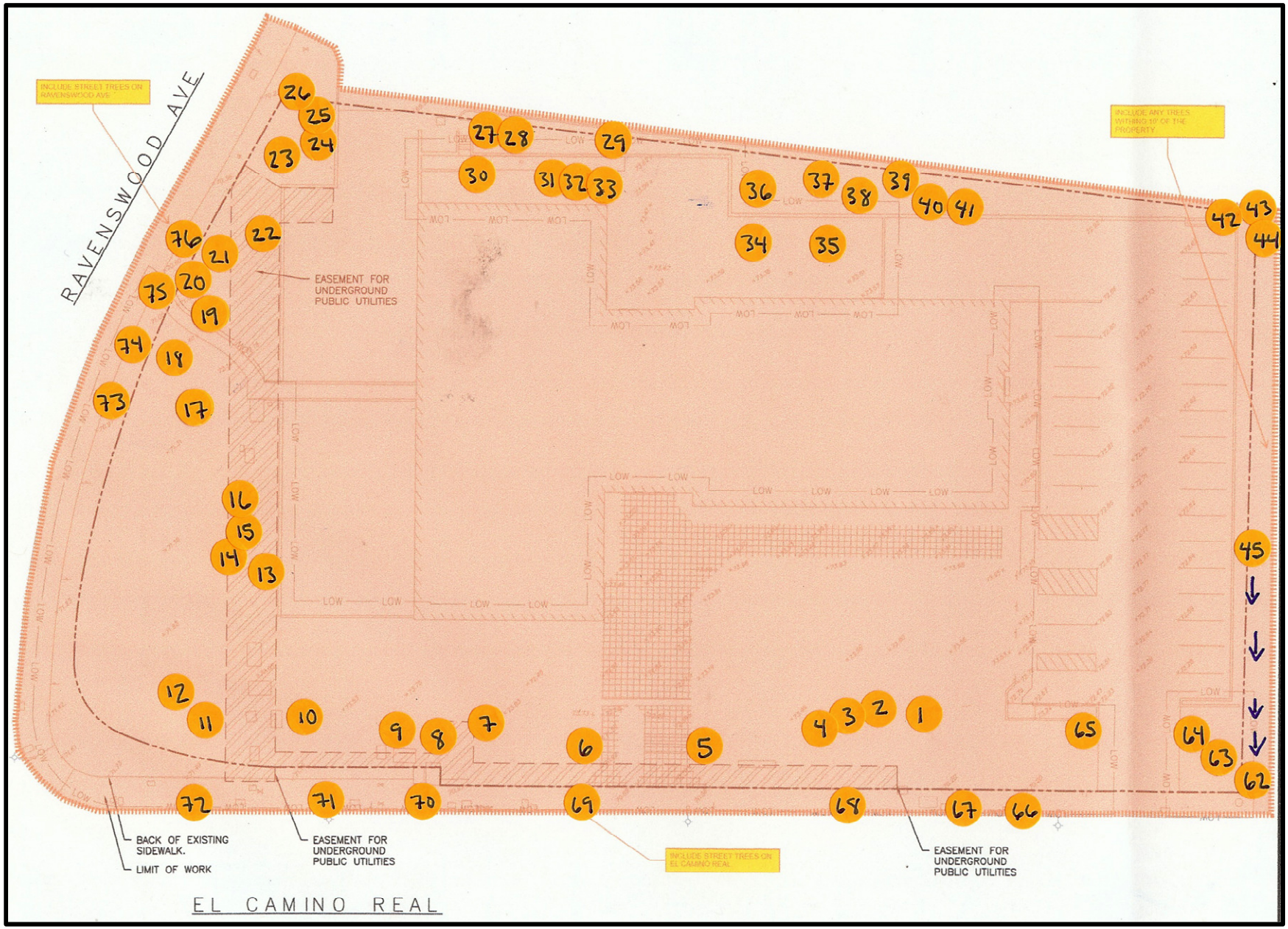

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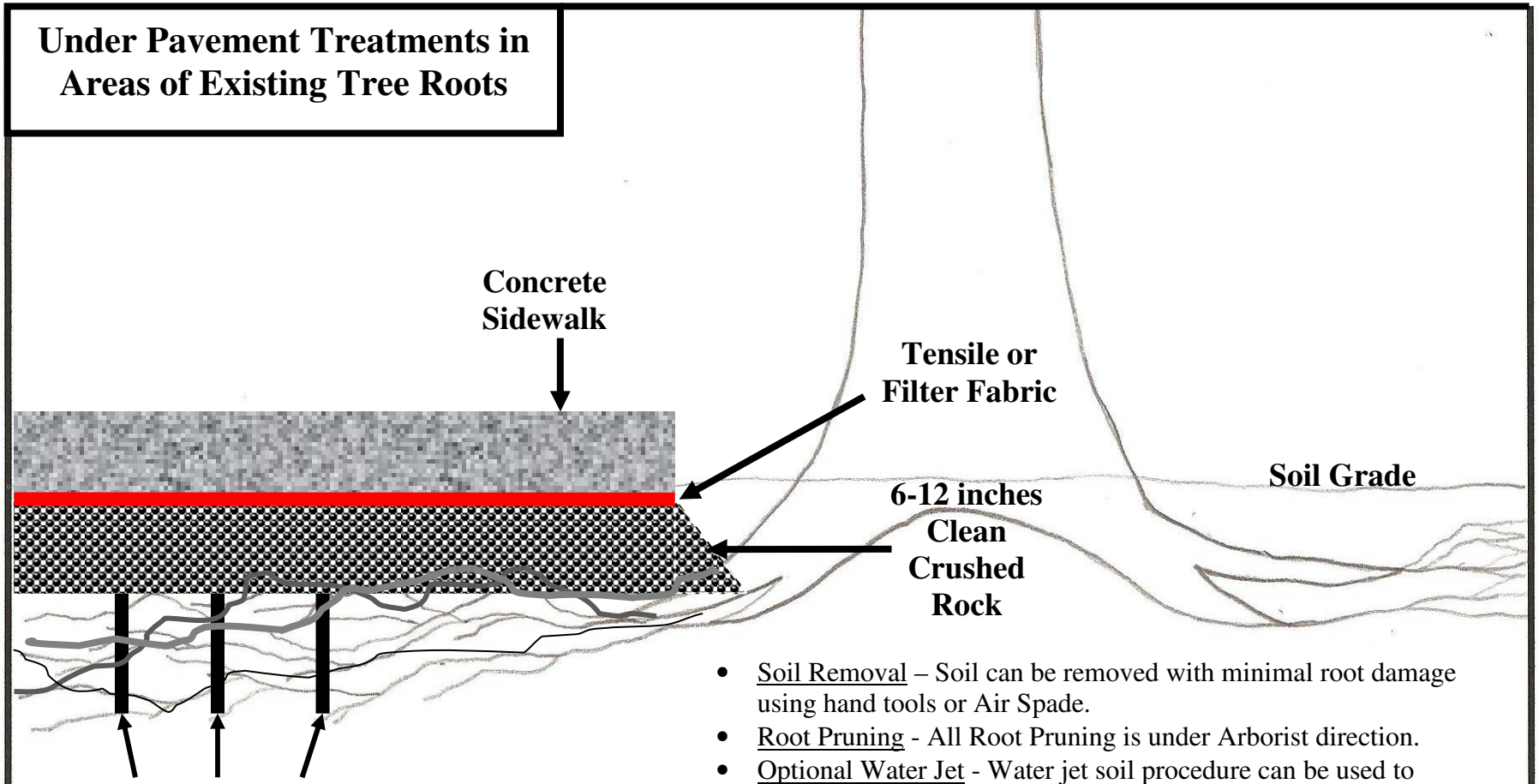
Under Pavement Treatments in Areas of Existing Tree Roots



- Soil Removal – Soil can be removed with minimal root damage using hand tools or Air Spade.
- Root Pruning - All Root Pruning is under Arborist direction.
- Optional Water Jet - Water jet soil procedure can be used to increase the depth of root development.
- Roots Within Rock Strata – Though some roots can be moved deeper others are allowed to remain within the rock matrix.
- Don't Compact Soil - Soil below Crushed Rock is not compacted. Compaction may occur only after at least 6" of rock is in place.

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Tree Preservation Specifications

These guidelines provide for the care and maintenance of the trees before, during and after construction. The goal of tree protection and preservation guidelines is to provide for a successful transition for the tree within the modified site.

To be most effective, tree preservation and health mitigation measures should commence well before the time the trees are to be adversely impacted. In this situation, the tree protections must be in place prior to the beginning of any construction activities.

SUMMARY

- All trees designated for retention must be protected by chain link type fencing at or beyond the designated limit of the root protection zone (RPZ).
- Trees that cannot be fenced at the limit of the RPZ must be provided protections for the trunk, scaffold branches and soil within the designated RPZ. This includes all trees within the designated work areas. Soil protections required for equipment encroachment into the RPZ includes 12 inches of wood chips covered with either trenching plates or 1-1/8 inch plywood that is connected by metal straps.
- No construction activities are permitted until all tree protection is in place and approved by project arborist.
- The oak trees and City street trees along El Camino Real that could be impacted by sidewalk construction are addressed with under pavement treatments have been shown to mitigate the encroachment.
- Oak Trees #10 & #65 – These trees are of special needs during the waterproofing operation due to their close proximity to work activities. Close arborist supervision will be required. Necessary root pruning is undertaken only by project arborist or arborist direct supervision.

PRE-CONSTRUCTION ACTIVITIES

These activities should be undertaken prior to initiation of construction activity. In addition to modifications to the project design to reduce tree impacts, all steps that improve the health of trees prior to construction will greatly improve the chance of survival.

Limits of Construction Activities – The limits of construction activities are indicated in Appendix 5. This area will be fenced.

Tree Root Protection Zone– The limit of the RPZ for the individual trees is listed by tree number in Appendix 1. The RPZ is commonly defined as one (1) foot radial distance for every one (1) inch in tree diameter (DBH). Arborist can modify the RPZ base based upon site conditions and root presence.

Where Possible Place Fencing at or Beyond the Limit of the RPZ – Fencing is to be chain-link type metal fencing with metal posts driven two-feet into the soil. Signs shall be attached to tree protection fencing every 20' which read "TREE PROTECTION ZONE DO NOT ENTER".

PROTECTIONS REQUIRED IN AREAS WHERE RPZ ENCROACHMENT WILL OCCUR

Root Protection – **Areas where roots cannot be fenced** within the RPZ require protection from contaminants and soil compaction. The effects of foot traffic can be mitigated through the use of six (6) inches of wood chip mulch and ¾ inch plywood placed on top. Because of the slope, the plywood can be secured by drilling holes in the plywood and driving metal form stakes through the holes.

Trunk and Scaffold Protection – **Whenever construction activity must occur inside the tree protection zone**, the base of the tree and the first eight-feet of the trunk must be protected. Protection is generally provided by wrapping the trunk up to the first branch with 10 wraps of orange plastic construction fencing or use of straw waddles wrapped around the tree. Additional protection can be provided by either straw bales or use of vertical 2x4 boards strapped to the tree. Arborist may require any or all of the trunk protection measures depending upon the situation.

Mulching – Use of six inches of organic mulch (wood chips are best) on soil surface will reduce soil compaction and evaporative soil moisture loss. Recommended material is wood chips generated from tree trimming. Fresh redwood, incense cedar and walnut chips are not acceptable, nor is palm generated mulch.

Timing of Root Loss – Any necessary root pruning on trees to remain is best conducted in late fall season.

Pruning – Crown pruning must comply with ANSI A300 Pruning Standards. Pruning must be minimized, particularly when root loss occurs. Pruning prior to construction should include: Necessary Clearance Pruning, Deadwood Removal and Safety Pruning. No pruning is necessary at this time.

TREE PROTECTION DURING CONSTRUCTION

Pre-Construction Inspection and Approval of Tree Protections – Arborist must inspect all above activities and provide a letter of acceptance prior to commencing with construction activities.

Pre-Construction Meeting with all Construction Personnel – It is important that construction crew understands the tree protection requirements and this meeting is required at the beginning.

Observe Fenced RPZ – No construction activities are allowing within the RPZ without prior Arborist approval.

Supplemental Irrigation – Arborist will designate supplemental irrigation based upon the level of root loss, soil conditions, tree health and time of year.

SUPERVISION OF WORK ACTIVITIES OCCURING WITHIN THE DESIGNATED RPZ

Arborist Supervision of Encroachment – All activities occurring inside of the designated RPZ must be approved and an arborist must be present to supervise tree protection and root pruning activities.

Treatment of Exposed Roots – Open trenches with exposed roots require minimum two layers of damp burlap or other acceptable covering at all times. An arborist will determine the amount of supplemental watering required based upon soil moisture investigation and weather conditions.

Required Method of Excavation Within Critical Root Zone – Carefully hand excavation shall be the accepted method of excavation. The Air Spade and Ditchwitch are both alternative tools that can be used in the excavation. Arborist is to supervise any such activity.

POST CONSTRUCTION MITIGATION

Monitoring Tree Health – Regular visual inspection of trees will aid in assessing where further mitigation is required. Tree decline should be recorded and referenced against pre-construction health assessment. Leaf and stem insects and fungal pathogens are a sign of poor tree health (low energy reserves).

Monitoring of Soil Moisture – It is important that significant changes in soil moisture levels within tree root zones be identified early, prior to visible evidence of tree decline. Moisture should be monitored by visual inspection using a soil probe or through the use of tensiometers placed at key locations. Supplemental irrigation is best provided during middle and late spring. In cases where trees have suffered root loss, supplemental irrigation will be required for a number of years in the area where roots were severed.

Mitigation of Soil Compaction – The level and depth of soil compaction must be assessed and mitigated as necessary. Mitigation of soil compaction in areas where roots are present must minimize root loss. Tools most suitable to mitigate soil compaction are the water jet or air spade.

Landscaping – All landscaping planning must take precautions when planting within the designated RPZ. All plant materials should be selected for compatibility with the favored moisture regime of the oak trees and other trees to be used in the replacement planting.

With native oak trees, this is particularly critical. Irrigation must be designed to comply with the requirements of the tree species and soil conditions. Irrigation lines must minimize root loss and pass under roots when possible. Air spade is recommended for excavation within the designated RPZ.

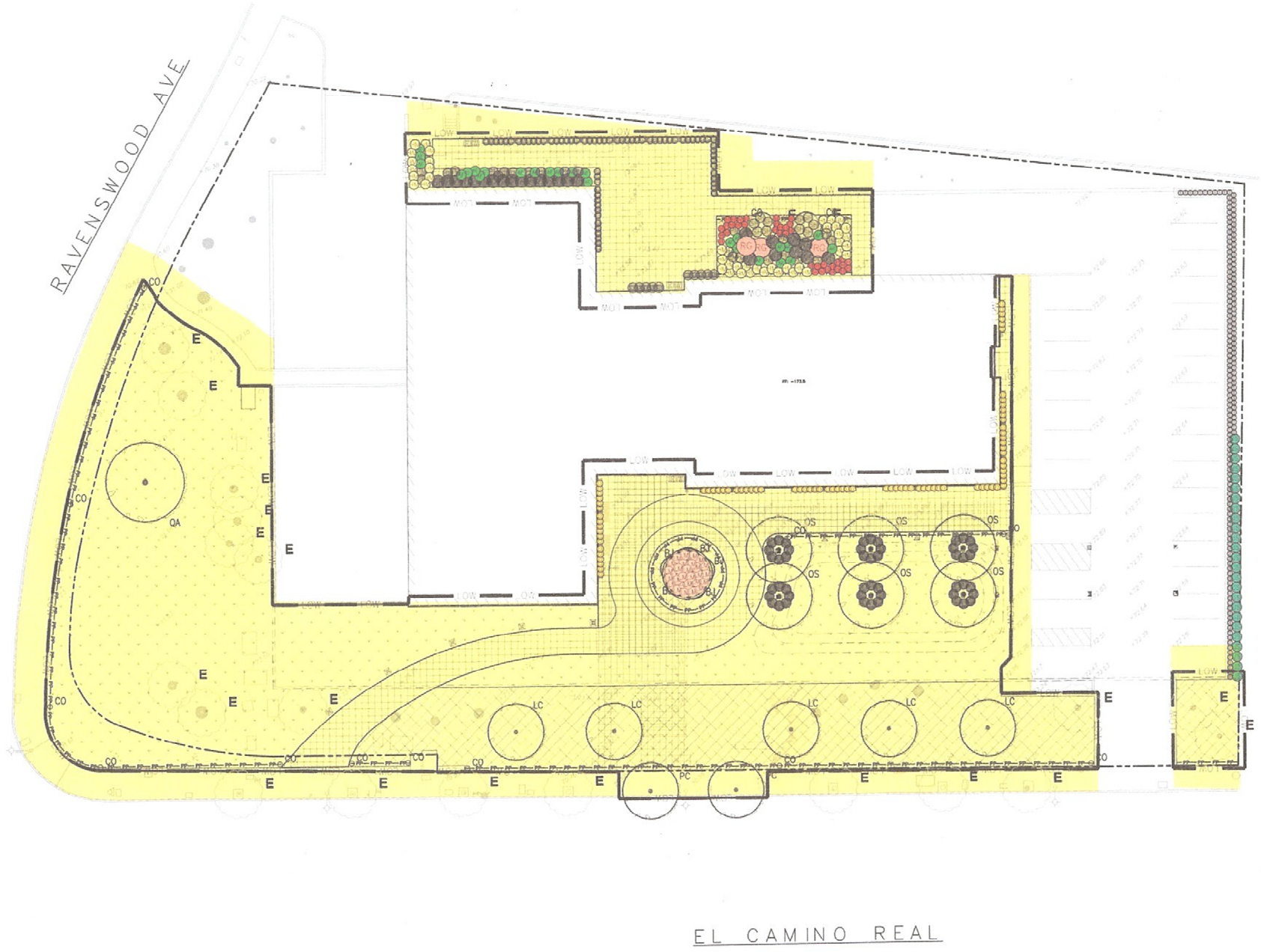
Continued Mulching – Mulch is extremely beneficial in creating a healthy root environment. A regular program of mulch application is recommended to help retain soil moisture, provide a source of

nutrients, and help control weeds. The continued use of good quality compost as a mulch is beneficial as a source of nutrition.

Fertilization – Prior to fertilization, soil analysis and possibly leaf tissue analysis must be undertaken. Trees should be fertilized only when the nutritional limitations have been identified. Leaf tissue analysis is another excellent tool for this determination. Excessive nitrogen fertilization is known to draw sucking insects (aphid, scale, etc.) to the plants and provide nutrition to fungal pathogens in the soil.

Pest Management Program – Healthy trees do not generally have serious pest problems. Stressed trees are attractive hosts to pathogens, which can contribute to decline and eventual death. Pest management is prescribed when monitoring indicates a need and tree health is marginal.

END


RAVENSWOOD AVE
EL CAMINO REAL

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
AIR QUALITY				
IMPACT BEING ADDRESSED: Impact AIR-1: Implementation of the Specific Plan would result in increased long-term emissions of criteria pollutants associated with construction activities that could contribute substantially to an air quality violation. (Significant)				
Mitigation Measure AIR-1a : During construction of individual projects under the Specific Plan, project applicants shall require the construction contractor(s) to implement the following measures required as part of Bay Area Air Quality Management District's (BAAQMD) basic dust control procedures required for construction sites. For projects for which construction emissions exceed one or more of the applicable BAAQMD thresholds, additional measures shall be required as indicated in the list following the Basic Controls.		Measures shown on plans, construction documents and on-going during demolition, excavation and construction.	Project sponsor(s) and contractor(s)	PW/CDD
Basic Controls that Apply to All Construction Sites				
1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.	Exposed surfaces shall be watered twice daily.			
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.	Trucks carrying demolition debris shall be covered.			
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.	Dirt carried from construction areas shall be cleaned daily.			
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.	Speed limit on unpaved roads shall be 15 mph.			
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.	Roadways, driveways, sidewalks and building pads shall be laid as soon as possible after grading.			
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.	Idling times shall be minimized to 5 minutes or less; Signage posted at all access points.			
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.	Construction equipment shall be properly tuned and maintained.			
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.	Signage will be posted with the appropriate contact information regarding dust complaints.			

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure AIR-1b: Each applicant for development projects to be implemented under the Specific Plan for projects that exceed the BAAQMD screening criteria shall develop an Exhaust Emissions Control Plan outlining how construction exhaust emissions will be controlled during construction activities. These plans shall be submitted to the City for review and approval and shall be distributed to all employees and construction contractors prior to commencement of construction activities. The plan shall describe all feasible control measures that will be implemented during construction activities. Feasible control measures may include, but not be limited to, those identified in Mitigation Measure AIR-1a.	Require an Exhaust Emissions Control Plan of each applicant with projects that exceed BAAQMD screening criteria.	Plan approved by City prior to building permit issuance; Measures shown on plans, construction documents and specification and ongoing during construction.	Project sponsors(s) and contractor(s)	CDD
BIOLOGICAL RESOURCES				
Impact BIO-1: The Specific Plan could result in the take of special-status birds or their nests. (Potentially Significant)				
Mitigation Measure BIO-1a: Pre-Construction Special-Status Avian Surveys. No more than two weeks in advance of any tree or shrub pruning, removal, or ground-disturbing activity that will commence during the breeding season (February 1 through August 31), a qualified wildlife biologist will conduct pre-construction surveys of all potential special-status bird nesting habitat in the vicinity of the planned activity. Pre-construction surveys are not required for construction activities scheduled to occur during the non-breeding season (August 31 through January 31). Construction activities commencing during the non-breeding season and continuing into the breeding season do not require surveys (as it is assumed that any breeding birds taking up nests would be acclimated to project-related activities already under way). Nests initiated during construction activities would be presumed to be unaffected by the activity, and a buffer zone around such nests would not be necessary. However, a nest initiated during construction cannot be moved or altered. ***If pre-construction surveys indicate that no nests of special-status birds are present or that nests are inactive or potential habitat is unoccupied:*** no further mitigation is required. ***If active nests of special-status birds are found during the surveys:*** implement Mitigation Measure BIO-1b.	A nesting bird survey shall be prepared if tree or shrub pruning, removal or ground-disturbing activity will commence between February 1 through August 31.	Prior to tree or shrub pruning or removal, any ground disturbing activity and/or issuance of demolition, grading or building permits.	Qualified wildlife biologist retained by project sponsor(s)	CDD

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure BIO-1b: Avoidance of active nests. If active nests of special-status birds or other birds are found during surveys, the results of the surveys would be discussed with the California Department of Fish and Game and avoidance procedures will be adopted, if necessary, on a case-by- case basis. In the event that a special-status bird or protected nest is found, construction would be stopped until either the bird leaves the area or avoidance measures are adopted. Avoidance measures can include construction buffer areas (up to several hundred feet in the case of raptors), relocation of birds, or seasonal avoidance. If buffers are created, a no disturbance zone will be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted will take into account factors such as the following: 1. Noise and human disturbance levels at the Plan area and the nesting site at the time of the survey and the noise and disturbance expected during the construction activity; 2. Distance and amount of vegetation or other screening between the Plan area and the nest; and 3. Sensitivity of individual nesting species and behaviors of the nesting birds.	If active nests are found during survey, the results will be discussed with the California Department of Fish and Game and avoidance procedures adopted. Halt construction if a special-status bird or protected nest is found until the bird leaves the area or avoidance measures are adopted.	Prior to tree or shrub pruning or removal, any ground-disturbing activities and/or issuance of demolition, grading or building permits.	Project sponsor(s) and contractor(s)	CDD
Impact BIO-3: Impacts to migratory or breeding special-status birds and other special-status species due to lighting conditions. (Potentially Significant)				
Mitigation Measure BIO-3a: Reduce building lighting from exterior sources. a. Minimize amount and visual impact of perimeter lighting and façade up-lighting and avoid uplighting of rooftop antennae and other tall equipment, as well as of any decorative features; b. Installing motion-sensor lighting, or lighting controlled by timers set to turn off at the earliest practicable hour; c. Utilize minimum wattage fixtures to achieve required lighting levels; d. Comply with federal aviation safety regulations for large buildings by installing minimum intensity white strobe lighting with a three-second flash interval instead of continuous flood lighting, rotating lights, or red lighting e. Use cutoff shields on streetlight and external lights to prevent upwards lighting.	Reduce building lighting from exterior sources.	Prior to building permit issuance and ongoing.	Project sponsor(s) and contractor(s)	CDD
Mitigation Measure BIO-3b: Reduce building lighting from interior sources. a. Dim lights in lobbies, perimeter circulation areas, and atria;	Reduce building lighting from interior sources.	Prior to building permit issuance and ongoing.	Project sponsor(s) and contractor(s)	CDD

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
b. Turn off all unnecessary lighting by 11pm thorough sunrise, especially during peak migration periods (mid-March to early June and late August through late October); c. Use gradual or staggered switching to progressively turn on building lights at sunrise. d. Utilize automatic controls (motion sensors, photosensors, etc.) to shut off lights in the evening when no one is present; e. Encourage the use of localized task lighting to reduce the need for more extensive overhead lighting; f. Schedule nightly maintenance to conclude by 11 p.m.; g. Educate building users about the dangers of night lighting to birds.				
Impact BIO-5: The Specific Plan could result in the take of special-status bat species. (Potentially Significant)				
Mitigation Measure BIO-5a: Preconstruction surveys. Potential direct and indirect disturbances to special-status bats will be identified by locating colonies and instituting protective measures prior to construction of any subsequent development project. No more than two weeks in advance of tree removal or structural alterations to buildings with closed areas such as attics, a qualified bat biologist (e.g., a biologist holding a California Department of Fish and Game collection permit and a Memorandum of Understanding with the California Department of Fish and Game allowing the biologist to handle and collect bats) shall conduct pre-construction surveys for potential bats in the vicinity of the planned activity. A qualified biologist will survey buildings and trees (over 12 inches in diameter at 4.5-foot height) scheduled for demolition to assess whether these structures are occupied by bats. No activities that would result in disturbance to active roosts will proceed prior to the completed surveys. If bats are discovered during construction, any and all construction activities that threaten individuals, roosts, or hibernacula will be stopped until surveys can be completed by a qualified bat biologist and proper mitigation measures implemented. ***If no active roosts present:*** no further action is warranted. ***If roosts or hibernacula are present:*** implement Mitigation Measures BIO-5b and 5c.	Retain a qualified bat biologist to conduct pre-construction survey for bats and potential roosting sites in vicinity of planned activity. Halt construction if bats are discovered during construction until surveys can be completed and proper mitigation measures implemented.	Prior to tree pruning or removal or issuance of demolition, grading or building permits.	Qualified bat biologist retained by project sponsor(s)	CDD

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure BIO-5b: Avoidance. If any active nursery or maternity roosts or hibernacula of special-status bats are located, the subsequent development project may be redesigned to avoid impacts. Demolition of that tree or structure will commence after young are flying (i.e., after July 31, confirmed by a qualified bat biologist) or before maternity colonies forms the following year (i.e., prior to March 1). For hibernacula, any subsequent development project shall only commence after bats have left the hibernacula. No-disturbance buffer zones acceptable to the California Department of Fish and Game will be observed during the maternity roost season (March 1 through July 31) and during the winter for hibernacula (October 15 through February 15). Also, a no-disturbance buffer acceptable in size to the California Department of Fish and Game will be created around any roosts in the Project vicinity (roosts that will not be destroyed by the Project but are within the Plan area) during the breeding season (April 15 through August 15), and around hibernacula during winter (October 15 through February 15). Bat roosts initiated during construction are presumed to be unaffected, and no buffer is necessary. However, the "take" of individuals is prohibited.	If any active nursery or maternity roosts or hibernacula are located, no disturbance buffer zones shall be established during the maternity roost and breeding seasons and hibernacula.	Prior to tree removal or pruning or issuance of demolition, grading or building permits	Qualified bat biologist retained by project sponsor(s)	CDD
Mitigation Measure BIO-5c: Safely evict non-breeding roosts. Non-breeding roosts of special-status bats shall be evicted under the direction of a qualified bat biologist. This will be done by opening the roosting area to allow airflow through the cavity. Demolition will then follow no sooner or later than the following day. There should not be less than one night between initial disturbance with airflow and demolition. This action should allow bats to leave during dark hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees with roosts that need to be removed should first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours. However, the "take" of individuals is prohibited.	A qualified bat biologist shall direct the eviction of non-breeding roosts.	Prior to tree removal or pruning or issuance of demolition, grading or building permits.	Qualified bat biologist retained by project sponsor(s)	CDD
CULTURAL RESOURCES				
Impact CUL-1: The proposed Specific Plan could have a significant impact on historic architectural resources. (Potentially Significant)				
Mitigation Measure CUL-1: Site Specific Evaluations and Treatment in Accordance with the Secretary of the Interior's Standards:	A qualified architectural historian shall complete a site-specific historic resources study. For structures found to be historic, specify treating conforming to Secretary of	Simultaneously with a project application submittal.	Qualified architectural historian retained by the Project sponsor(s).	CDD **STATUS - COMPLETE:** The building is less than 50 year old and is not

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Site-Specific Evaluations: In order to adequately address the level of potential impacts for an individual project and thereby design appropriate mitigation measures, the City shall require project sponsors to complete site-specific evaluations at the time that individual projects are proposed at or adjacent to buildings that are at least 50 years old. The project sponsor shall be required to complete a site-specific historic resources study performed by a qualified architectural historian meeting the Secretary of the Interior's Standards for Architecture or Architectural History. At a minimum, the evaluation shall consist of a records search, an intensive-level pedestrian field survey, an evaluation of significance using standard National Register Historic Preservation and California Register Historic Preservation evaluation criteria, and recordation of all identified historic buildings and structures on California Department of Parks and Recreation 523 Site Record forms. The evaluation shall describe the historic context and setting, methods used in the investigation, results of the evaluation, and recommendations for management of identified resources. If federal or state funds are involved, certain agencies, such as the Federal Highway Administration and California Department of Transportation (Caltrans), have specific requirements for inventory areas and documentation format. ***Treatment in Accordance with the Secretary of the Interior's Standards.*** Any future proposed project in the Plan Area that would affect previously recorded historic resources, or those identified as a result of site-specific surveys and evaluations, shall conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995). The Standards require the preservation of character defining features which convey a building's historical significance, and offers guidance about appropriate and compatible alterations to such structures.	specify treating conforming to Secretary of the Interior's standards, as applicable.			year old and is not considered historic.
Impact CUL-2: The proposed Specific Plan could impact currently unknown archaeological resources. (Potentially Significant)				

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure CUL-2a: When specific projects are proposed that involve ground disturbing activity, a site-specific cultural resources study shall be performed by a qualified archaeologist or equivalent cultural resources professional that will include an updated records search, pedestrian survey of the project area, development of a historic context, sensitivity assessment for buried prehistoric and historic-period deposits, and preparation of a technical report that meets federal and state requirements. If historic or unique resources are identified and cannot be avoided, treatment plans will be developed in consultation with the City and Native American representatives to mitigate potential impacts to less than significant based on either the Secretary of the Interior's Standards described in Mitigation Measure CUL-1 (if the site is historic) or the provisions of Public Resources Code Section 21083.2 (if a unique archaeological site).	A qualified archeologist shall complete a site-specific cultural resources study. If resources are identified and cannot be avoided, treatment plans will be developed to mitigate impacts to less than significant, as specified.	Simultaneously with a project application submittal.	Qualified archaeologist retained by the project sponsor(s).	CDD
Mitigation Measure CUL-2b: Should any archaeological artifacts be found during construction, all construction activities within 50 feet shall immediately halt and the City must be notified. A qualified archaeologist shall inspect the findings within 24 hours of the discovery. If the resource is determined to be a historical resource or unique resource, the archaeologist shall prepare a plan to identify, record, report, evaluate, and recover the resources as necessary, which shall be implemented by the developer. Construction within the area of the find shall not recommence until impacts on the historical or unique archaeological resource are mitigated as described in Mitigation Measure CUL-2a above. Additionally, Public Resources Code Section 5097.993 stipulates that a project sponsor must inform project personnel that collection of any Native American artifact is prohibited by law.	If any archaeological artifacts are discovered during demolition/construction, all ground disturbing activity within 50 feet shall be halted immediately, and the City of Menlo Park Community Development Department shall be notified within 24 hours. A qualified archaeologist shall inspect any archaeological artifacts found during construction and if determined to be a resource shall prepare a plan meeting the specified standards which shall be implemented by the project sponsor(s).	Ongoing during construction.	Qualified archaeologist retained by the project sponsor(s).	CDD
Impact CUL-3: The proposed Specific Plan may adversely affect unidentifiable paleontological resources. (Potentially Significant)				

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure CUL-3: Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology (SVP), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and will follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate its significance. Training on paleontological resources will also be provided to all other construction workers, but may involve using a videotape of the initial training and/or written materials rather than in-person training by a paleontologist. If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards. (SVP, 1996)	A qualified paleontologist shall conduct training for all construction personnel and field supervisors. If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards.	Prior to issuance of grading or building permits that include subsurface excavations and ongoing through subsurface excavation.	Qualified archaeologist retained by the project sponsor(s).	CDD
Impact CUL-4: Implementation of the Plan may cause disturbance of human remains including those interred outside of formal cemeteries. (Potentially Significant)				
Mitigation Measure CUL-4: If human remains are discovered during construction, CEQA Guidelines 15064.5(e)(1) shall be followed, which is as follows: * In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken: 1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: a) The San Mateo County coroner must be contacted to determine that no investigation of the cause of death is required; and b) If the coroner determines the remains to be Native American:	If human remains are discovered during any construction activities, all ground-disturbing activity within the site or any nearby area shall be halted immediately, and the County coroner must be contacted immediately and other specified procedures must be followed as applicable.	On-going during construction	Qualified archeologist retained by the project sponsor(s)	CDD

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
1. The coroner shall contact the Native American Heritage Commission within 24 hours; 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American; 3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or 2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. a) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the Commission. b) The descendant identified fails to make a recommendation; or c) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.				
GREENHOUSE GASES AND CLIMATE CHANGE				
Impact GHG-1: The Specific Plan would generate GHG emissions, both directly and indirectly, that would have a significant impact on the environment. (Significant)				

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure GHG-1: Implement feasible BAAQMD-identified GHG Mitigation Measures and Proposed City CALGreen Amendments. BAAQMD has identified a menu of over 100 available mitigation measures for the purposes of addressing significant air quality impacts, including GHG impacts that arise from implementation of plans including Specific Plans. Many of the GHG reduction measures are already part of the proposed Specific Plan and discussed in the Project Description. Several BAAQMD identified mitigation measures are not applicable to a Specific Plan as they are correlated to specific elements of a general plan. As an example, Table 4.6-5 presents the mitigation measures contained in the BAAQMD CEQA Guidelines related to Land Use elements and either correlates each to a specific element of the project, explains why it is inapplicable to the proposed project or identifies it as a mitigation measure to be implemented by the proposed project. This method was used in consideration of all BAAQMD identified GHG mitigation measures for plans to develop the following list of available mitigation measures (with BAAQMD-identified category) for the proposed Specific Plan: * Facilitate lot consolidation that promotes integrated development with improved pedestrian and vehicular access (Land Use Element: Compact Development). The Specific Plan's increased intensities encourage lot consolidation for developers wishing to maximize efficiencies and new standards and guidelines will result in improved pedestrian (Section E.5) and vehicular (Section E.3.7) access. * Ensure that new development finances the full cost of expanding public infrastructure and services to provide an economic incentive for incremental expansion (Land Use Element: Compact Development). Specific Plan Section E.3.1 describes a process for public benefit negotiation to obtain additional financing for public infrastructure beyond required payments for impact fees such as park dedication and Transportation Fees.	For project-specific actions: Implement feasible BAAQMD-identified GHG Mitigation Measures. Measures relating to City policies have been incorporated into Specific Plan or otherwise adopted by City (see explanation below regarding applicable measures).	Simultaneous with project application submittal and/or on-going during construction Adopt as part of Specific Plan; verify project compliance simultaneously with project application.	Project sponsor(s) City Council (Plan adoption)	PW/CDD CDD

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
* Ensure new construction complies with California Green Building Code Standards and local green building ordinances (Land Use Element: Sustainable Development). The City currently requires compliance with both California Green Building Code Standards and locally-adopted amendments citywide. Standard E.3.8.01 states that all citywide sustainability codes or requirements shall apply to the Plan area, unless the Plan area is explicitly exempted, which it is not. * Provide permitting incentives for energy efficient and solar building projects (Land Use Element: Sustainable Development). Section E.3.8 of the Specific Plan provides specific standards and guidelines for sustainable practices. Section E.3.1 would allow for the consideration of public benefit bonus intensity or height if a project were to exceed the standards stated Section E.3.8. * Support the use of electric vehicles; where appropriate. Provide electric recharging facilities (Circulation Element: Local Circulation; see also Mitigation Measure GHG-2 below). Mitigation Measure GHG-2a (below) has been incorporated into the Specific Plan. * Allow developers to reach agreements with auto-oriented shopping center owners to use commercial parking lots as park-and-ride lots and multi-modal transfer sites (Circulation Element: Regional Circulation). The intent of the Specific Plan is to preserve and enhance community life, character and vitality through public space improvements, mixed use infill projects sensitive to the small town character of Menlo Park and improved connectivity. Auto oriented shopping centers are not envisioned in the Plan area. * Eliminate [or reduce] parking requirements for new development in the Specific Plan area (Circulation Element: Parking). The Final Specific Plan has been modified to provide for lower parking rates in the station area and station area sphere of influence. ? Encourage developers to agree to parking sharing between different land uses (Circulation Element: Parking). This is permitted by existing City policies and reinforced in the Specific Plan through allowed shared parking reductions (Section F.8).				

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
* Require developers to provide preferential parking for low emissions and carpool vehicles (Circulation Element: Parking). These are included as strategies that may be included in a Transportation Demand Management (TDM) program (Section F.10). * Minimize impervious surfaces in new development and reuse project in the Specific Plan area (Conservation Element: Water Conservation). Section 4.8, Hydrology and Water Quality, of this EIR includes a discussion of existing grading, drainage and hydrology requirements and Specific Plan guidelines to limit impervious surfaces in the Plan area. * Require fireplaces installed in residential development to be energy efficient in lieu of open hearth. Prohibit the installation of wood burning devices (Conservation Element: Energy Conservation). The City of Menlo Park Municipal Code includes Section 12.52, Wood Burning Appliances, to control the use of wood burning devises. * Sealing of HVAC ducts. This is a project level BAAQMD measure that requires the developer to obtain third party HVAC commissioning to ensure proper sealing of ducts and optimal heating and cooling efficiencies. BAAQMD estimated that this measure reduces air conditioning electrical demand by 30 percent. The California Energy commission estimates that air conditioning electrical demand represents approximately 20 percent of total demand for a single family residence and this measure would reduce electrical-related GHG emissions by approximately 100 metric tons/year of CO2e. The City currently requires testing of heating and cooling ducts for all newly constructed buildings.				
HAZARDOUS MATERIALS				
Impact HAZ-1: Disturbance and release of contaminated soil during demolition and construction phases of the project, or transportation of excavated material, or contaminated groundwater could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling. (Potentially Significant)				

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure HAZ-1: Prior to issuance of any building permit for sites where ground breaking activities would occur, all proposed development sites shall have a Phase I site assessment performed by a qualified environmental consulting firm in accordance with the industry required standard known as ASTM E 1527-05. The City may waive the requirement for a Phase I site assessment for sites under current and recent regulatory oversight with respect to hazardous materials contamination. If the Phase I assessment shows the potential for hazardous releases, then Phase II site assessments or other appropriate analyses shall be conducted to determine the extent of the contamination and the process for remediation. All proposed development in the Plan area where previous hazardous materials releases have occurred shall require remediation and cleanup to levels established by the overseeing regulatory agency (San Mateo County Environmental Health (SMCEH), Regional Water Quality Control Board (RWQCB) or Department of Toxic Substances Control (DTSC) appropriate for the proposed new use of the site. All proposed groundbreaking activities within areas of identified or suspected contamination shall be conducted according to a site specific health and safety plan, prepared by a licensed professional in accordance with Cal/OHSA regulations (contained in Title 8 of the California Code of Regulations) and approved by SMCEH prior to the commencement of groundbreaking.	Prepare a Phase I site assessment. If assessment shows potential for hazardous releases, then a Phase II site assessment shall be conducted. Remediation shall be conducted according to standards of overseeing regulatory agency where previous hazardous releases have occurred. Groundbreaking activities where there is identified or suspected contamination shall be conducted according to a site-specific health and safety plan.	Prior to issuance of any grading or building permit for sites with groundbreaking activity.	Qualified environmental consulting firm and licensed professionals hired by project sponsor(s)	CDD
Impact HAZ-3: Hazardous materials used on any individual site during construction activities (i.e., fuels, lubricants, solvents) could be released to the environment through improper handling or storage. (Potentially Significant)				
Mitigation Measure HAZ-3: All development and redevelopment shall require the use of construction Best Management Practices (BMPs) to control handling of hazardous materials during construction to minimize the potential negative effects from accidental release to groundwater and soils. For projects that disturb less than one acre, a list of BMPs to be implemented shall be part of building specifications and approved of by the City Building Department prior to issuance of a building permit.	Implement best management practices to reduce the release of hazardous materials during construction.	Prior to building permit issuance for sites disturbing less than one acre and on-going during construction for all project sites	Project sponsor(s) and contractor(s)	CDD
NOISE				
Impact NOI-1: Construction activities associated with implementation of the Specific Plan would result in substantial temporary or periodic increases in ambient noise levels in the Specific Plan area above levels existing without the Specific Plan and in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Potentially Significant)				

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
Mitigation Measure NOI-1a: Construction contractors for subsequent development projects within the Specific Plan area shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acousticallyattenuating shields or shrouds, etc.) when within 400 feet of sensitive receptor locations. Prior to demolition, grading or building permit issuance, a construction noise control plan that identifies the best available noise control techniques to be implemented, shall be prepared by the construction contractor and submitted to the City for review and approval. The plan shall include, but not be limited to, the following noise control elements: * Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler shall achieve lower noise levels from the exhaust by approximately 10 dBA. External jackets on the tools themselves shall be used where feasible in order to achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible; * Stationary noise sources shall be located as far from adjacent receptors as possible and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible; and	A construction noise control plan shall be prepared and submitted to the City for review. Implement noise control techniques to reduce ambient noise levels.	Prior to demolition, grading or building permit issuance Measures shown on plans, construction documents and specification and ongoing through construction	Project sponsor(s) and contractor(s)	CDD

El Camino Real/Downtown Mitigation Monitoring and Reporting Program				
Mitigation Measure	**Action**	**Timing**	**Implementing Party**	**Monitoring Party**
* When construction occurs near residents, affected parties within 400 feet of the construction area shall be notified of the construction schedule prior to demolition, grading or building permit issuance. Notices sent to residents shall include a project hotline where residents would be able to call and issue complaints. A Project Construction Complaint and Enforcement Manager shall be designated to receive complaints and notify the appropriate City staff of such complaints. Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and day and evening contact numbers, both for the construction contractor and City representative(s), in the event of problems.				
Mitigation Measure NOI-1b: Noise Control Measures for Pile Driving: Should pile-driving be necessary for a subsequently proposed development project, the project sponsor would require that the project contractor predrill holes (if feasible based on soils) for piles to the maximum feasible depth to minimize noise and vibration from pile driving. Should pile-driving be necessary for the proposed project, the project sponsor would require that the construction contractor limit pile driving activity to result in the least disturbance to neighboring uses.	If pile-driving is necessary for project, predrill holes to minimize noise and vibration and limit activity to result in the least disturbance to neighboring uses.	Measures shown on plans, construction documents and specifications and ongoing during construction	Project sponsor(s) and contractor(s)	CDD

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ALLANA BUICK & BERS
Making Buildings Perform Better

August 16, 2017

Ms. Deborah Willard
Matteson Realty Services, Inc.
1510 Fashion Island Blvd., Suite 380
San Mateo, CA 94025

Re: Podium Investigation Findings Report
Menlo Park Office Center
1000 El Camino Real
Menlo Park, CA 94025

J/N: 17-4892.01

Dear Ms. Willard,

Allana Buick & Bers, Inc. (ABBAE) is pleased to provide these findings from our podium waterproofing investigation at the Menlo Park Office Center.

Background

ABBAE was hired to investigate the existing podium areas and post-tensioned slabs related to water intrusion and deterioration occurring at the property.

In addition to visual reviews of the exposed podium and garage areas, ABBAE prepared a protocol for destructive testing (DT) designed to expose limited areas of the existing construction for access for the investigation.

Figure 1 Menlo Park Office Center

Building Construction

The Menlo Park Office Center is a multi-story office building constructed over a reinforced concrete podium structure. The podium is depressed approximately 8'-0" below grade and is the roof structure of the parking garage. The portion of the podium not covered by the office tower is an open pedestrian plaza with large areas of planted grasses and gardens. The building is over 30 years old.

Investigation

We performed a visual review of the interior and exterior of the exposed garage and podium areas prior to destructive testing. ABBAE worked with the DT contractor and the prepared DT protocol to locate areas for removal of overburden to expose concealed conditions.

We conducted site visits during the destructive testing, performed by a qualified licensed DT contractor, to observe and document the existing concealed conditions. This included overburden layers, drainage composites, flashings, and waterproofing membranes of the podium and plater areas.

Findings

Condition photos follow below

Visual Inspection: Visual inspection of the garage interior indicated numerous areas of water intrusion through the foundation walls and the podium slab. Efflorescence and rust stains indicated a history of moisture and the deterioration of reinforcing steel. The staining occurred on both the concrete masonry unit (CMU) foundation walls and the underside of the post-tensioned podium slab. There is significant water intrusion on the El Camino Real facing wall, corresponding with the large trees and landscaping.

Podium Waterproofing: Horizontal podium waterproofing membranes exhibited moisture below the membranes and leaks into the garage below. Courtyard waterproofing had water-filled blisters throughout. Some of the membrane deterioration is due to the age of the waterproofing, and some is damage from trees and other plantings over the waterproofing system.

The extensive network of roots over the podium area are causing damage to the waterproofing through abrasion and penetration. The fine roots are getting below the filter fabric and burrowing into the membrane. This creates pathways for water intrusion. Additionally, the membranes have poor adhesion to their structural substrates, which is allowing water intrusion to travel below the waterproofing.

Foundation Walls: Destructive testing at the below grade foundation walls of the garage along El Camino Real was not practical due to the extent of trees and plantings adjacent to the wall along El Camino. ABBAE was able to observe the foundation wall waterproofing at the rear of the site. The waterproofing in the DT area had slipped significantly below grade, leaving an area of 16"-24" of below grade wall exposed without waterproofing. The failure mode is likely poor adhesion and improper anchorage spacing.

Parking Deck: The exposed parking deck of garage is nearing the end of its effective service life. Traffic wear and thinning topcoat due to UV and heat exposure over time has deteriorated the coating.

Storefront: ABBAE proposed performing limited destructive testing at the storefront and storefront doors on the projects to determine the integration of the waterproofing system with the storefront system; and waterproofing performance of the existing storefront doors. This portion of the destructive testing protocol was denied, so it was not performed or observed by ABBAE.

Figure 2 Staining on CMU foundation walls; staining on floor; from water intrusion.

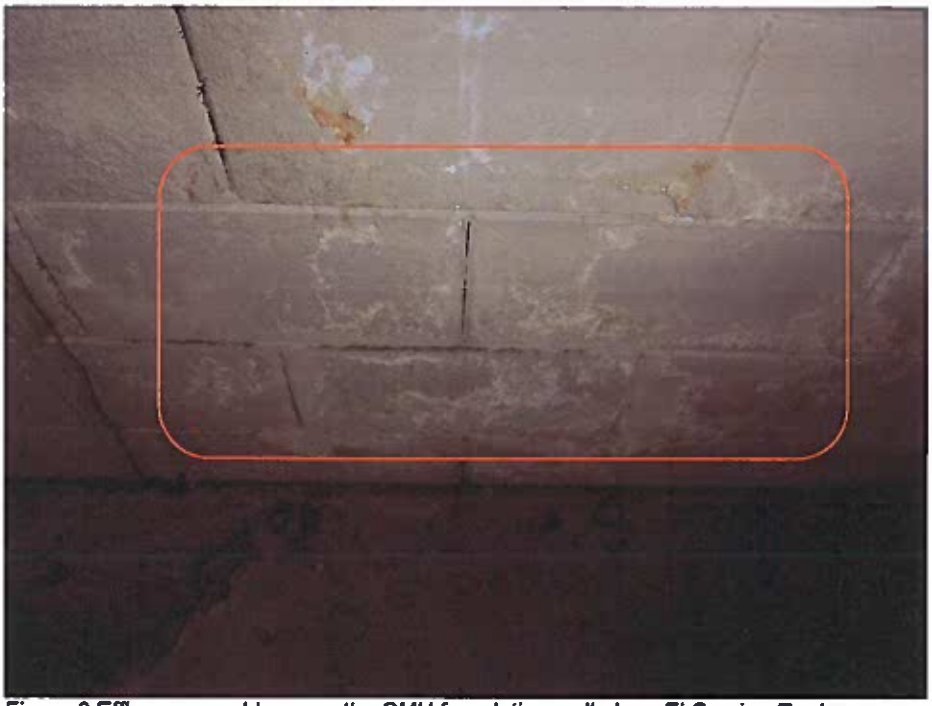

Figure 3 Efflorescence bloom on the CMU foundation wall along El Camino Real.

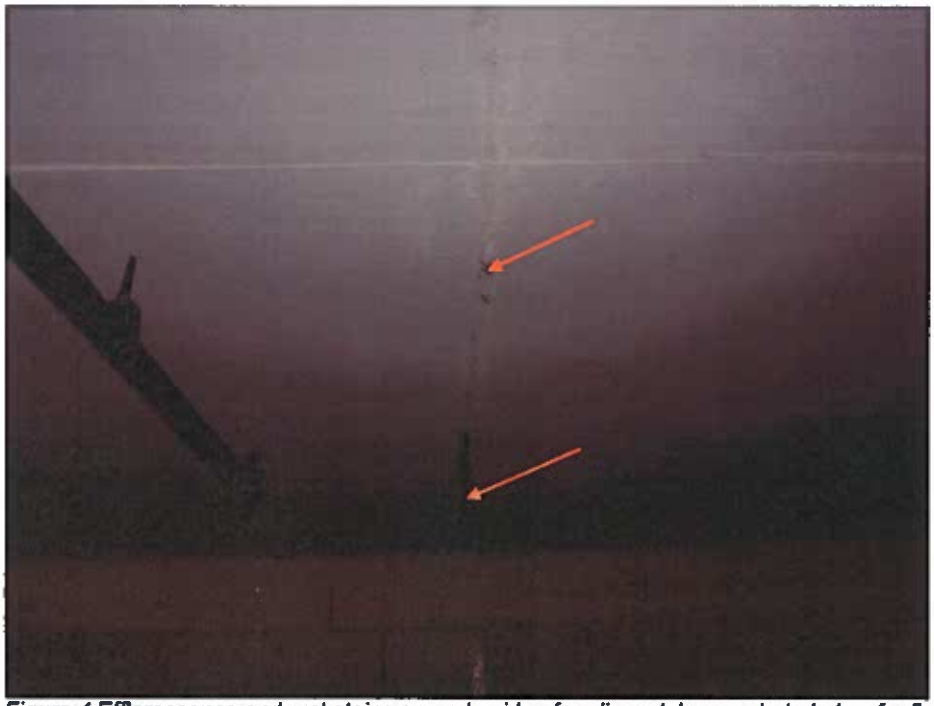

Figure 4 Efflorescence and rust stains on underside of podium slab; see photo below for floor staining at this location.

Figure 5 Water with rust staining from podium slab leak above.

Figure 6 Active dripping from underside of podium slab.

Figure 7 Efflorescence bloom along crack in underside of podium slab.

Figure 8 Overview of grass covered podium over garage; note large trees along El Camino Real.

Figure 9 Destructive testing (DT) area where grass, soil, etc. to expose waterproofing. Note how the small root hairs are embedded within the waterproofing membrane.

Figure 10 DT location showing large root system extending throughout the podium area. Root system is damaging the waterproofing membrane through surface abrasion and by penetrating the membrane - opening pathways for water intrusion into the podium slab.

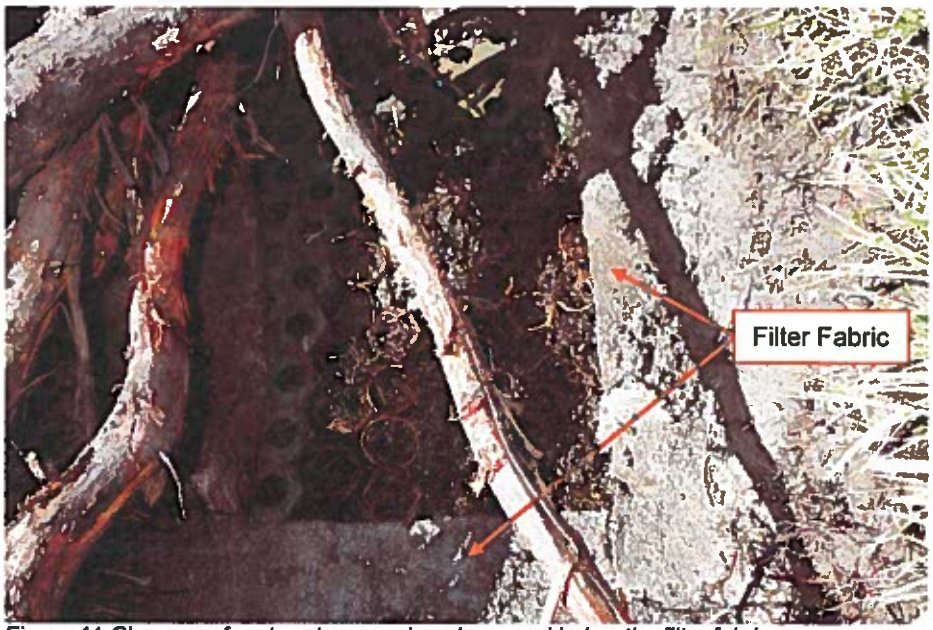

Figure 11 Close-up of root system running above and below the filter fabric.

Figure 12 Large roots extending from trees along El Camino Real toward the building (above the podium area.) These roots are throughout the podium.

Figure 13 Courtyard planter area prior to DT.

Figure 14 DT location in courtyard planter - exposing waterproofing membrane.

Figure 15 Close-up of waterproofing membrane showing blistering.

Figure 16 Sliced blisters seeping trapped water that was below the waterproofing – indicating that moisture is moving through the waterproofing membrane.

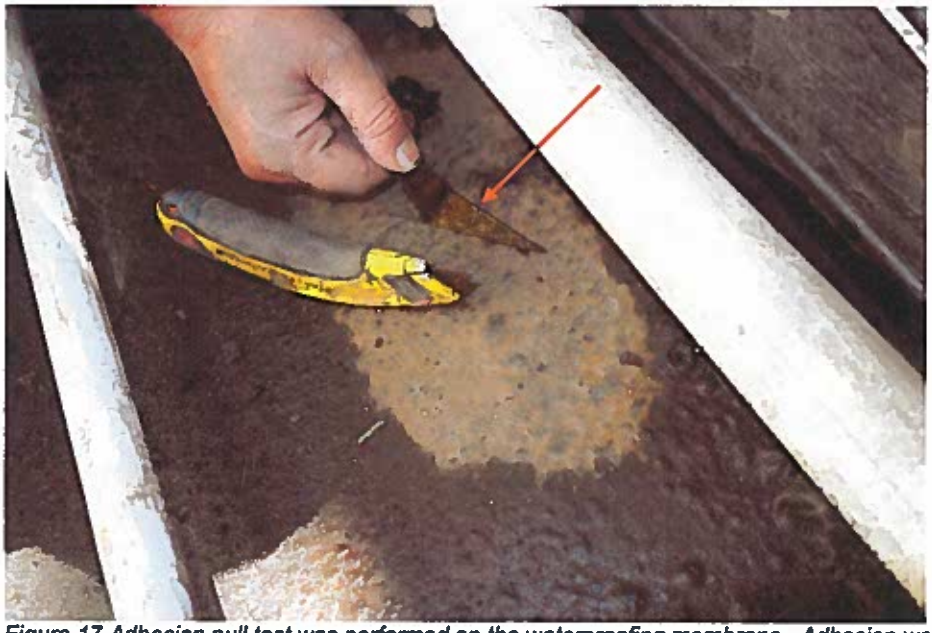

Figure 17 Adhesion pull test was performed on the waterproofing membrane. Adhesion was poor.

Figure 18 Note the network of blisters within the waterproofing membrane.

Figure 19 DT location at the walkway adjacent to the planter area.

Figure 20 Adhesion pull-test was performed on the waterproofing membrane. Adhesion was poor.

Figure 21 Note the void in the membrane where it is unadhered to the slab below.

Figure 22 Note moisture below membrane, indicating water intrusion is occurring. Water below the waterproofing membrane can travel through voids and unadhered portions of the membrane.

Figure 23 DT location at the CMU foundation wall at the rear of the garage. Note that the wall waterproofing has slipped down - leaving a portion of the wall unprotected. Additionally, note the insufficient attachment spacing.

Figure 24 Close-up of attachment pin. Attachment frequency was insufficient.

Figure 25 Samples of self-adhering membrane taken from location. Note the extent of root damage caused by the roots penetrating the membrane.

Figure 26 Topcoat of existing parking deck is aged and maintenance is recommended.

Recommendations

Podium waterproofing: The podium waterproofing requires replacement due to extensive water intrusion through the waterproofing membranes. All overburden above the podium must be removed in order to access and replace the waterproofing membrane. This will include the removal of grasses, plantings, trees, rocks, etc. above the podium. Hot rubberized asphalt waterproofing is the proposed waterproofing system.

The large trees and plantings along El Camino Real require removal due to the extent of root network over the podium area and along the foundation wall. There is no method for repairing or replacing the existing waterproofing without complete access.

A structural review of existing podium structure is required should the landscape architect design increases the dead weight over the podium slabs.

Courtyard area podium waterproofing: The podium waterproofing requires replacement due to extensive water intrusion through the waterproofing membranes. All overburden above the podium must be removed in order to access and replace the waterproofing membrane. This will include the removal of grasses, plantings, trees, rocks, etc. above the podium in the planter areas, and tile and mortar bed at walkway areas. Hot rubberized asphalt waterproofing is the proposed waterproofing system.

A structural review of existing podium structure is required should the landscape architect design increases the dead weight over the podium slabs.

Storefront: We recommend pricing the replacement of the existing storefront in conjunction with the waterproofing replacement. This has the advantage of allowing the integration of the waterproofing and the storefront for best performance of the waterproofing at the storefront sill condition. Otherwise, the performance of the waterproofing transition at the sill condition is not guaranteed.

The existing storefront is over 30 years old. The effective life of anodized finishes is between 35 and 50 years, depending on thickness and quality. Replacing the storefront will improve the energy efficiency and provide greater comfort for the tenants.

Foundation wall waterproofing: The foundation wall waterproofing requires replacement due to extensive water intrusion through the waterproofing membranes. The foundation wall will need to be exposed, with overburden removed, in order to access and replace the waterproofing membrane. This will include the removal of grasses, trees, plantings, rocks, etc. adjacent to the wall. Self-adhering membrane is the proposed waterproofing system.

Parking Deck: We recommend recoating the surface of exposed parking deck area. The longer this maintenance goes unperformed, the more likely a complete removal and replacement of the deck coating will be required. A compatible UV-resistant topcoat is recommended. We can verify with the manufacturer regarding the potential for extending warranty protection.

Thank you for this opportunity to be of service. Please feel free to contact me should you have any questions regarding this letter or any aspect of our services on this project.

Sincerely,
Allana, Buick & Bers, Inc.

Jerome Lew Jeffers II, RBEC, CCS, CCCA
Associate Principal, Design Services Manager

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Commercial Street
Palo Alto, CA
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ALLANA BUICK & BERS
Making Buildings Perform Better

March 24, 2014

Ms. Deborah Willard
Vice President
Commercial Asset Management
Matteson Realty Services, Inc.
1825 South Grant Street
San Mateo, California 94402

Re: Site Visit Report
January 21, 2014 PT Investigation
Menlo Office Center
1000 El Camino Real
Menlo Park, California

PN: 13.3437.01

Dear Ms. Willard,

In accordance with your request, our Structural Engineer (Dennis Wobber, SE) visited the Menlo Office Center site on January 21, 2014 to observe destructive testing of the post tensioned concrete roof deck. The purpose of the probing was to confirm the presence of suspected de-tensioned strands which we believed were the root cause of observed cracking and subsequent leakage of the podium deck.

The following is Mr. Wobber's narrative from his site visit:

> The contractor [Schwager Davis, Inc.] had exposed 19 post-tensioned strands running east-west across the crack. They also exposed a number of strands running north-south at a column line. The contractor demonstrated how they found strands that had lost tension, by using a pry-bar to test the strands for tension. The nine exposed strands running north-south at the column line all appeared to be in good condition with the possible exception of one of them that may have had a partial loss of tension. Because there was no concrete cracking that was oriented perpendicular to those strands, they were assumed to be of little concern.
>
> When the contractor tested the strands running in east-west direction across the crack they found that two out of the 19 had lost all of their tension. The contractor pointed out that the likely location where the strands had been damaged by corrosion was several column lines to the east at an intermediate anchorage of the strands. We found that location and observed of fair quantity of efflorescence indicating that water was getting through a concrete slab joint.
>
> The contractor felt that other strands are in jeopardy of damage from water intrusion at the intermediate anchorage locations, and we agree. Our judgment is that the weakened strands should be repaired but it is not necessary to do it right away. The repair could wait until the near future, when waterproofing above the concrete deck is done, in order to minimize disturbance to the occupants. The waterproofing would also reduce the threat of continuing corrosion at intermediate anchorage locations of other strands.
>
> The contractor also made some other observations that are worth noting:
>
> 1. The contractor recommended that no epoxy or polyurethane crack injection be done at locations were posttensioning occurs. The reason for that is that injection material can bond with the strands and make it very difficult to carry out future repairs. Instead, the contractor recommended that any crack repairs be done by applying surface sealing.

This would be done by routing a shallow groove at the crack location and filling it with caulking.

2. The contractor noted that post-tension cable waterproofing has evolved over the years and has improved greatly, especially since the late 1990s. Strands installed before that time, including the strands in this building, were much more vulnerable to water intrusion, especially at anchor locations.

3. When the time comes to do the repairs, the technique would involve chipping into the slab carefully at a location where the strands are roughly at the mid-depth of the slab. At that location the contractor would pull the damaged strand out from within the sheathing and fish in a new strand. Then they would install a splice that links the new strand to the undamaged original strand, or install all new strands with a new anchor. The estimated cost for this work would be roughly $1,200 for special inspection and roughly $12,000 for the repair of the two damaged strands. The contractor suspects that if further investigation is done later in conjunction with waterproofing, more damaged strands will be discovered.

We also went above the deck to look at the landscaping that would be affected by waterproofing work. There are several redwood trees that would be impacted by removing landscaping in order to install new waterproofing at the top of the slab. Nevertheless it is our recommendation that the waterproofing work not be postponed indefinitely. The more time that passes, the more damaged strands will be discovered. So the sooner waterproofing work can be done, the fewer strand repairs will need to be made.

Thank you for this opportunity to be of service to Matteson Realty Services, Inc. Please call us if you have any questions regarding Mr. Wobber's observations and comments or other aspect of this project.

Very truly yours,

Gerson S. Bers

Gerson S. Bers, LEED-AP
Principal and Vice President

cc: Dennis Wobber, SE ABBAE

45 Fremont Street, 28th Floor San Francisco, CA 94105 415.989.1004 kpff.com

ENGINEER'S FIELD REPORT

Date: 6/6/17 EFR No: 01 Page 1 of 14

Time: 12:00 PM Job No: 1700032

Est. % of Completion: N/A Project: 1000 El Camino Real

Present at Site: Greg Wagner (kpff), Monte Rinebold (kpff), Ken Rakestraw (SRGNC), Meris Ota (SRGNC)

Work in Progress: Site walk

OBSERVATIONS:

1.01 Arrived at jobsite to observe the condition of the existing level 1 podium post-tensioned (P/T) concrete slab, the basement perimeter CMU retaining walls, and the level 2 & 3 wood decks over the P/T concrete slabs.

1.02 Observed at gridlines 2 & 2.5 between gridlines H1-J, continuous cracks that ran in the project east-west direction on the underside of the podium slab as shown in figure 1 and photo 1-3. The underside of the podium slab has previously been chipped and patched in local areas by others to observe the condition of the P/T cables in both directions.

1.02.1 The conditions of the cables were documented by Allana Buick & Bers Inc. in the "Site Visit Report" dated January 21, 2014. Relevant highlights from the report:

1.02.1.1 There are two P/T strands running in the project north-south direction across the crack that are completely detensioned. The contractor (Schwager Davis, Inc.) said the likely region that the P/T tendons had been damaged was at the intermediate anchorage locations.

1.02.1.2 The cables running in the project east-west direction were generally in good condition, except for one cable that had a partial loss of tension.

1.02.2 The protection of the P/T cables at the time the building was constructed in the mid-1980s was not as sophisticated as modern techniques of cable protection, which may be contributing to the observed degradation issues. At the time of construction, it was typical to not repair/tape over tears less than 4" long in the protective sheathing. A similar convention occurred at P/T anchorage zones, where exposure of the anchorage less than 4" was not typically repaired/taped over. Additionally the P/T anchorage systems were not encapsulated and did not have grease caps. So, if

BY: Monte Rinebold

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[ ] Contractor [ ] File [ ]

[ ] Architect [ ] Proj. Engr. [ ]

there are degradation issues at the low point of the P/T tendons, it is not possible to ascertain exactly where the leak is occurring along the length of the cable, since water can enter through a tear and run down the inside the sheathing and pool at the low point.

1.02.2.1 The degraded P/T cables can be cut and replaced, but if the source of the water intrusion isn't found, this issue can potentially occur again in the future. The top of the podium slab would need to be observed to see the condition of the concrete and waterproofing membrane.

1.03 Observed the region above the podium slab at gridline 1/J. See figure 1 and photos 8-9 for approximate edge of podium slab overlaid on the existing landscaping. The edge of podium slab is near some utility pits/boxes as seen in photo 9. Note that access to the top of the podium slab to observe the condition of the concrete and waterproofing membrane would require removal of the existing landscape in local areas.

1.04 Observed at gridlines 3/J & 10/J, there were water intrusion stains on the CMU retaining wall. The podium slopes at ¼"/ft towards gridline J and the observed water stains typically occurred at regions where there were redwood trees in close proximity to the retaining wall, see photos 4-5 & figures 1-2. The existing trees may be affecting the waterproofing of the structure.

1.05 Observed at gridlines 7/B1, there were exposed P/T cables showing signs of corrosion. See photo 6 and figure 2. Due to the cable's exposure to the elements, there could potentially be degradation of the cables from water pooling at the cable's low point.

1.06 Observed at gridlines 6.8/B.5, there were water stains on the underside of the podium slab at the edge of the closure pour. See photo 7 & figure 1. There could be potential corrosion issues for the reinforcement crossing the closure pour and the P/T anchorage at the edge of the closure pour. The condition of the concrete and the waterproofing membrane above should be investigated.

1.07 Observed the existing level 2 wood deck over the concrete P/T slab between gridlines 3-5 & G.8-H.1. See photo 10. It was discussed that the deck may be expanding to the edge of the structure near gridline H.1 in the future.

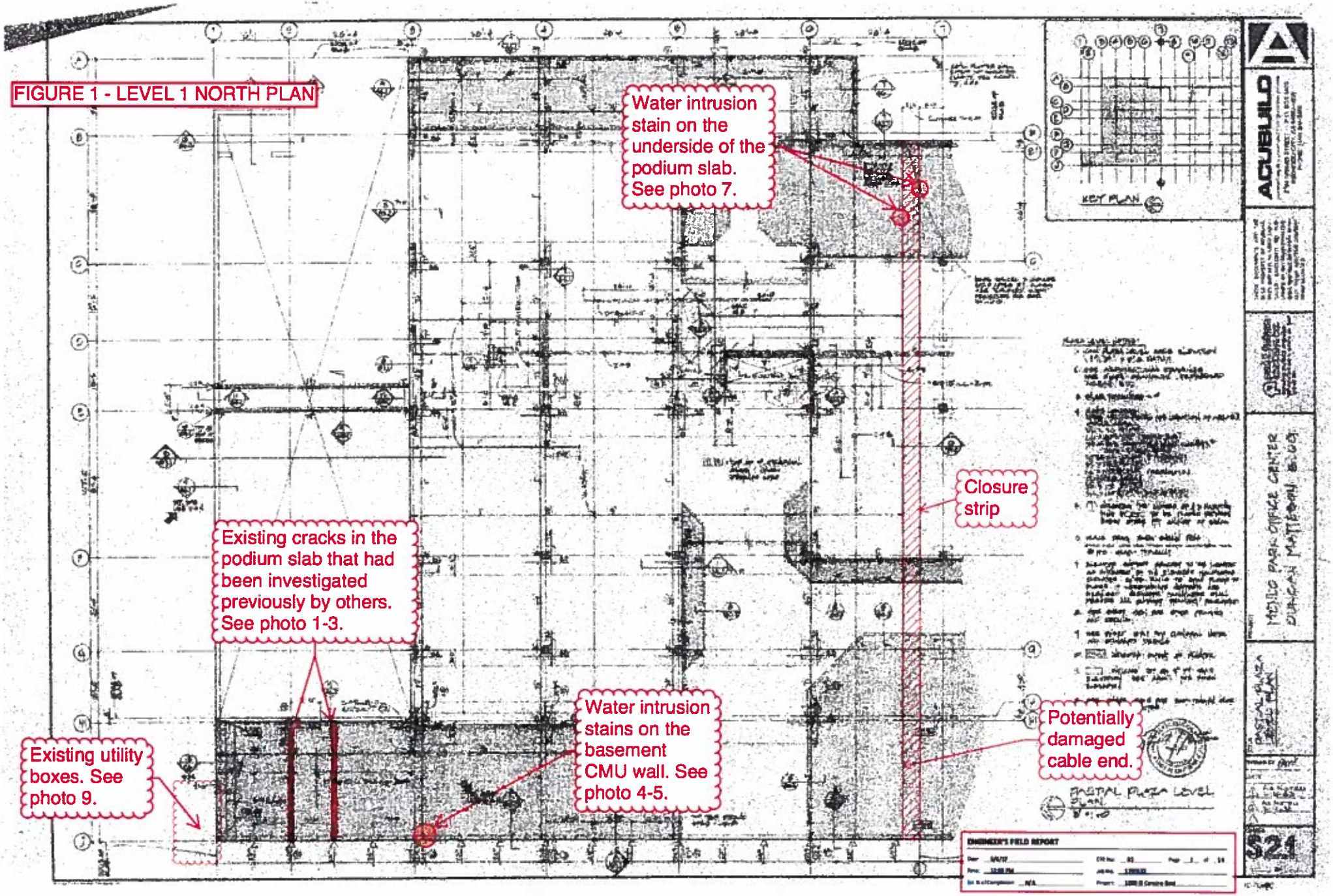
FIGURE 1 - LEVEL 1 NORTH PLAN
Water intrusion stain on the underside of the podium slab. See photo 7.
Closure strip
Existing cracks in the podium slab that had been investigated previously by others. See photo 1-3.
Water intrusion stains on the basement CMU wall. See photo 4-5.
Existing utility boxes. See photo 9.
Potentially damaged cable end.
KEY PLAN
ACUBUILD
HOLLY PARK OFFICE CENTER
DUNCAN MATTHEWS BLVD.
PARTIAL PLAZA LEVEL PLAN
ENGINEER'S FIELD REPORT
521

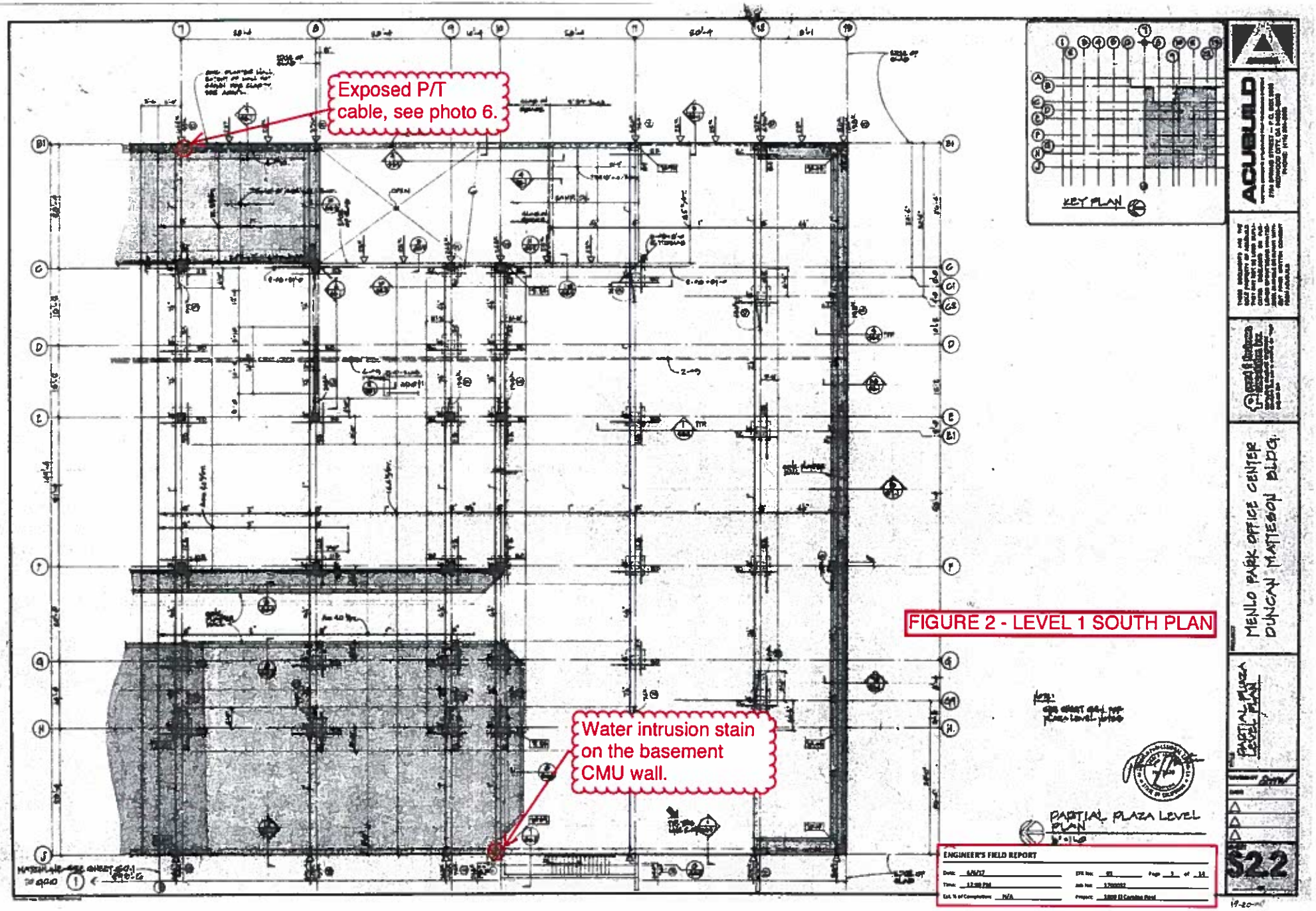

FIGURE 2 - LEVEL 1 SOUTH PLAN

kpff 25

ENGINEER'S FIELD REPORT

Date: 6/6/17 EFR No: 01 Page 5 of 14

Time: 12:00 PM Job No: 1700032

Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 1 – Podium slab cracks along with chip and patch regions at gridlines 2.5/H1

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Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 2 – Podium slab cracks along with chip and patch regions at gridline 2

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Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 3 - Podium slab cracks along with chip and patch regions at gridline 2.5

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Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 4 - Redwood trees close to the basement retaining wall

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Est. % of Completion: N/A Project: 1000 El Camino Real

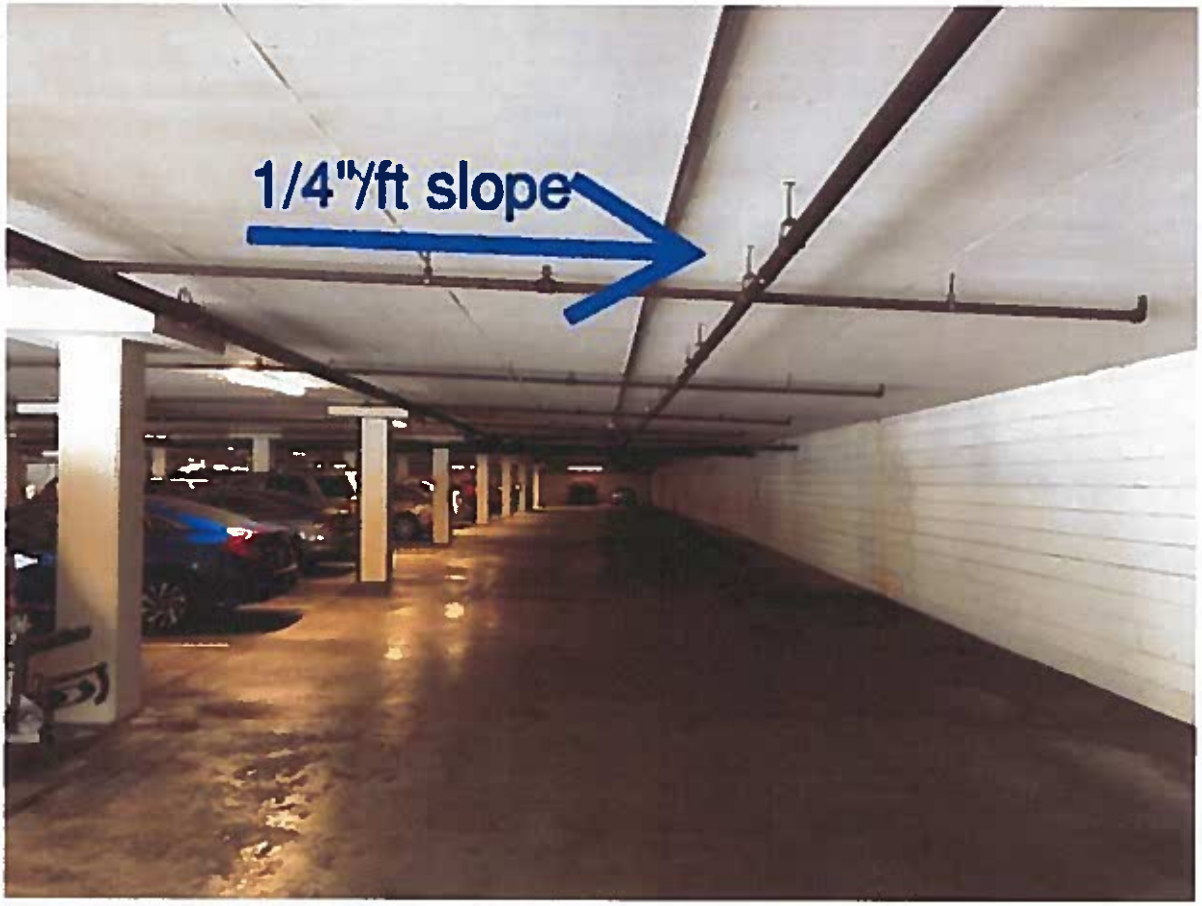

Photo 5 - Podium slope between gridlines H1 & J looking east

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Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 6 - Exposed P/T tendon showing signs of corrosion

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Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 7 - Concrete discoloring at the closure strip near gridline 6.8/B.5

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Time: 12:00 PM Job No: 1700032

Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 8 - Approximate edge of podium shown in red

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Time: 12:00 PM Job No: 1700032

Est. % of Completion: N/A Project: 1000 El Camino Real

Photo 9 - Approximate edge of podium shown in red. Looking south.

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Est. % of Completion: N/A Project: 1000 El Camino Real

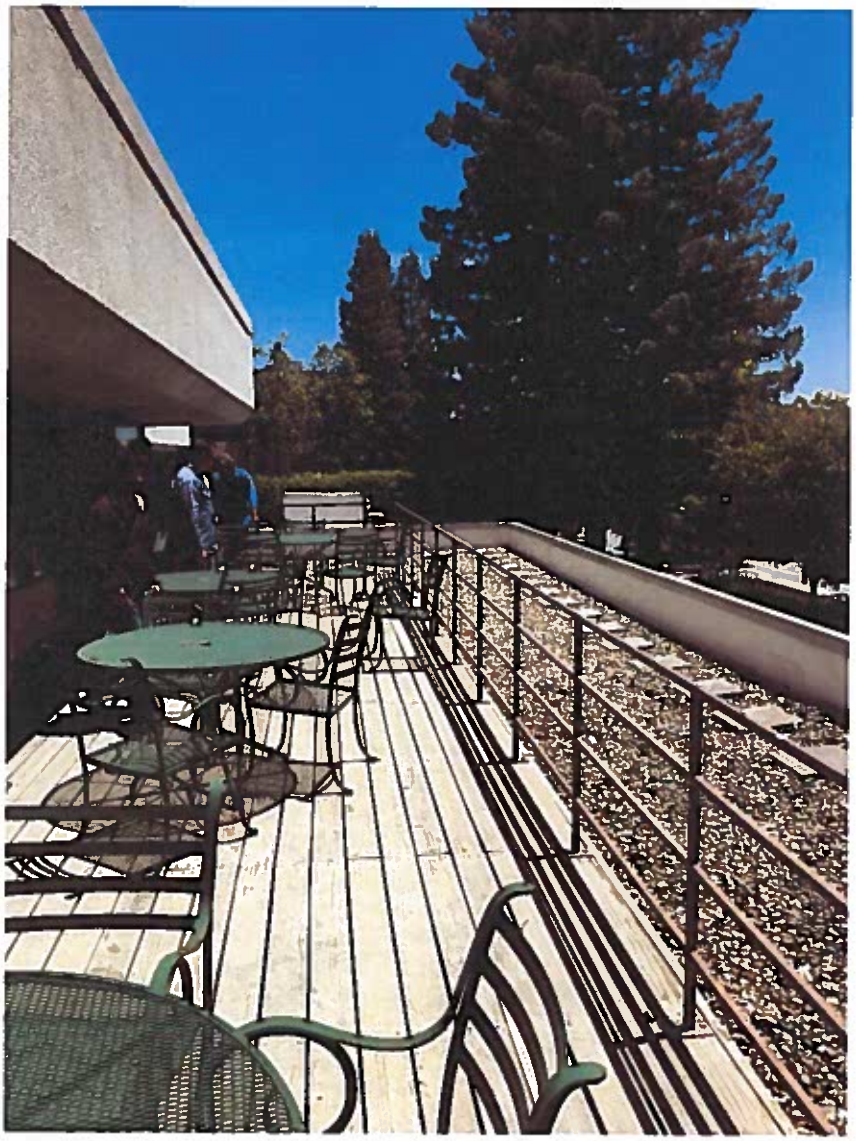


Photo 10 - Level 2 wood deck over the P/T concrete slab

END OF REPORT

45 Fremont Street, 28th Floor San Francisco, CA 94105 415.989.1004 kpff.com

December 15, 2017

Ken Rakestraw
Sares Regis Group of Northern California
901 Mariners Island Boulevard, Suite 700
San Mateo, CA 94404

VIA Email: krakestraw@srgnc.com

Subject: 1000 El Camino Real
Existing plaza level slab condition

Dear Mr. Rakestraw:

The existing plaza level post-tensioned podium slab at the exterior courtyard of 1000 El Camino Real has well documented water intrusion issues which have resulted in post-tensioned cable damage dating back to the site visit on January 21, 2014 and the subsequent report prepared by Allana Buick & Bers (ABBAE) and Schwager Davis, Inc. dated March 24, 2014. Additionally the recent podium waterproofing investigation report prepared by ABBAE on August 16, 2017 confirmed that the waterproofing of the podium slab has been damaged in various areas, which has led to water intrusion. The report also mentions that the existing waterproofing cannot be repaired as-is and will need to be replaced. See the ABBAE report for additional waterproofing recommendations.

Note that the podium slab has shown limited damage per the ABBAE report from March 2014, but as time continues and the water intrusion issues are not addressed properly, it may further affect the strength and serviceability of the existing slab. Moreover, at this time KPFF cannot ascertain the full structural extent of the water damage to the existing podium slab without observing the condition of the top surface of the slab, which would require the waterproofing to be removed. If and when the waterproofing is removed and replaced, we would recommend that KPFF observe the structural condition of the existing slab. Once the extent of the structural damage to the slab is known, repair details can be provided as required. The repair details will be coordinated with the post-tension cable repair subcontractor.

Very truly yours,

Monte Rinebold

Monte Rinebold, P.E.
Project Engineer

GW/mar/11700132-20171215-L1

From: Jennifer Mazzon <[redacted]>
Sent: Tuesday, January 8, 2019 5:58 PM
To: _CCIN <councilmail@menlopark.org>
Subject: Please confirm appeal waiver for the 7 redwoods at 1000 El Camino

Dear City Council members,

It was great to see several of you at today's information session regarding the 7 redwoods at 1000 El Camino. Particular thanks to Cecilia, who attended the entire information session which included just shy of 30 concerned Menlo Park residents.

Can you please confirm that you are waiving the appeal process for us and taking up the agenda item of sending the issue directly to the Environmental Quality Committee in next week's city council meeting? Please do confirm so that we can organize to attend the meeting and speak out

In summary, the key questions that the residents posed were (I'm paraphrasing):

1) Why does the preservation of our heritage trees on city-owned land not take precedence over the maintenance of underground parking spaces?

2) What alternatives to cutting down these majestic, California native trees has the city staff explored, e.g. structure reduction instead of tree reduction?

3) Why were those alternatives deemed less costly to the community than the public value destruction of cutting down these beautiful redwoods that thousands of Menlo Park residents admire in passing daily?

There were lots of other specific questions that the public works manager noted.

Please do reply with confirmation of the appeal process waiver so that we can organize appropriately.

Thank you,

Jen Mazzon
MP Willows resident

(1) The condition of the tree or trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services;

(2) The necessity to remove the tree or trees in order to construct proposed improvements to the property;

(3) The topography of the land and the effect of the removal of the tree on erosion, soil retention and diversion or increased flow of surface waters;

(4) The long-term value of the species under consideration, particularly lifespan and growth rate;

(5) The ecological value of the tree or group of trees, such as food, nesting, habitat, protection and shade for wildlife or other plant species;

(6) The number, size, species, age distribution and location of existing trees in the area and the effect the removal would have upon shade, privacy impact and scenic beauty;

(7) The number of trees the particular parcel can adequately support according to good arboricultural practices;

(8) The availability of reasonable and feasible alternatives that would allow for the preservation of the tree(s).

JB Matteson

March 20, 2019

701 Laurel Street
Menlo Park, CA 94025

RE: 1000 El Camino Real
Response to Community and City Appeal Questions

Dear City of Menlo Park Staff and Environmental Quality Commission Members (EQC),

This letter is a revised version of a letter originally sent to City of Menlo Park Staff on February 19, 2019. It has been revised to incorporate a discussion of Additional Alternatives 6 and 7 from the Peer Reviewers hired by the City (defined below) as well as an alternative option submitted by the Appellants. Where appropriate, exhibits to this letter, primarily created by the Applicant's consultants, have been updated during the period February 19 – March 7, 2019 in order to allow them to address questions raised by City Staff, the Peer Reviewers and the Appellants.

The letter has been prepared with the assistance of his consultants by Matt Matteson, the son of the original developer, Duncan Matteson, who passed away in 2017. The building is managed by JB Matteson, Inc. in San Mateo, and has been managed by Matt (who is Co-President of JB Matteson) for the past 32 years since he joined the predecessor company to JB Matteson in 1986 (three years after the building was completed).

Background

On October 22, 2018, the Menlo Park Planning Commission unanimously approved the application for the 1000 El Camino Real repair project. This application also included a request to remove 7 heritage trees in order to perform required repairs to the waterproofing and structural post tension slab cables. Despite the fact that the tree removals were included in the Planning Commission submission and approval, under the City's ordinances we were made aware that the tree removal aspect of the project is subject to a separate permit with a separate appeal process. Once the trees in question were visibly tagged for removal, members of the community inquired about the project and expressed concerns. In response, on January 8, 2019, the City hosted a community forum meeting related to this project. More specifically, the community expressed an interest in understanding alternate options that would enable the required repairs to the waterproofing and structural post tension cables at the property without removing any heritage trees.

Following this meeting, we understand that an appeal was filed, and that the fees associated with the appeal were waived by the City. To date, we have not received a formal appeal application document nor a formal transcript of the community forum meeting. Based on

our notes from the January 8 meeting, and in collaboration with City Staff, we have identified the alternatives that were suggested by the community. This letter and the supporting exhibits provide a summary of the site's history, a summary of the current conditions, required repairs, and alternative options that the City and Community requested we explore in an effort to avoid removing any heritage trees.

Following the formalization of the appeal to the Environmental Quality Commission, the City has retained two consultants to provide a "peer review" of the submissions from the Applicant's consultants – a structural consultant and an arborist (the "Peer Reviewers"). During the intervening time from the community forum on January 8 to the date of this letter, the Applicant and its consultants have addressed the questions raised by the community as well as those issues and questions raised by City Staff and the Peer Reviewers. This letter and the exhibits attached hereto is intended to summarize the Applicant's responses to all parties. It should be noted by City Staff as well as the Commissioners that both the Applicant as well as its consultants remain available to provide clarifications or answers to questions, as appropriate, and the Applicant and its consultants will provide tours of the site itself if that should prove helpful to the Commissioners.

History of Project Site

The 1000 El Camino Real office building and garage structures are built on land that the City of Menlo Park owns and has ground leased to the building owner, MPOC Investors, LLC, under a long-term lease that has over 50 years remaining.

The 1000 El Camino Real office building and underground garage were built by the current building owner in the early 1980's. The redwood trees along Ravenswood were planted immediately prior to commencement of construction to enable them to grow taller sooner, while the redwood trees along El Camino Real were planted upon the completion of construction as the location where they were planted was required to remain open for waterproofing and construction purposes *(Appendices A-1.4 and A-1.5).* **Prior to the construction of the building there were no trees on the site.** The site was assembled by the City of Menlo Park prior to the inception of the ground lease from the City to the Applicant; the site consists of a combination of the former Ravenswood Avenue (before its realignment to meet Menlo Avenue at the El Camino Real Intersection) an adjacent parcel that contained a private sand and gravel operation.

Current Conditions and Required Repairs

While it is not obvious from looking at 1000 El Camino Real building from the street, the extent of the underground garage and podium runs well beyond the footprint of the office building's footprint *(Appendix A-1.2).* In many instances the garage perimeter wall is located less than one foot from the seven subject redwood trees *(Appendix A-1.8).* The trees' roots have spread across the landscaped area located over the underground garage, up against the perimeter walls of the podium, and have caused damage to the exterior subterranean waterproofing and post tension cables supporting the building's structure *(See Appendix A-1.7 and pages 3, 5, and 6 of Exhibit 2).* The owner actually planted all the trees on site over 30 years ago as saplings *(Appendices A-1.4 and A-1.5)* without understanding or being warned of the future structural and life-safety issues the aggressive root systems of the trees would cause.

In the intervening years, the trees grew taller, but more ominously the root systems of the trees have covered a large portion of the landscaped area on top of the waterproof membrane as well as along the garage wall facing El Camino Real. As a result of the invasive nature of the redwood tree roots coupled with the age of the membrane, the membrane itself has been fully compromised, allowing both irrigation water and rain water to seep into the post tension concrete slab which provides the structural support for the building as well as the underground parking garage. A post tension slab derives its structural integrity from steel cables and tendons embedded in the slab (in addition to steel rebar); when the concrete is partially cured, the cables and tendons are stretched with approximately 33,000 pounds of tension, and the concrete is then left to fully cure. When the concrete has cured, the slab has significant structural integrity enabling it to support the weight of the building and the plaza above the underground garage around the building's perimeter. The ramifications of a failure of the waterproof membrane and the seepage of water into the post tension concrete slab is the rusting of the cables and tendons and surrounding rebar. If a cable or tendon becomes sufficiently rusted, it loses its tension, undermining the structural integrity of the slab itself. If a sufficient number of cables and tendons fail, the building itself becomes structurally unsound. Failures have already occurred to at least three cables/tendons as a result of moisture intrusion and rust, and these failures coupled with the knowledge that the waterproof membrane has failed is what generated the urgency for this project. Importantly, if left unmoved, the tree roots will accelerate such damage.

Contrary to misconceptions, the post tension slab provides the structural support for the entire three-story office building, not just the exterior parking and landscaping areas. The owner's structural engineers have warned that there is a time sensitivity to the repairs that must be made. These repairs are urgent to halt further water intrusion into the post-tension slab structure. Once the repairs to the post tension slab structure itself are complete, it is critical that the waterproofing is also repaired and replaced. Further water penetration into the post tension cables would exacerbate rusting and failing of the cables/tendons, with the potential of a building collapse *(See Exhibit 3)*. Additionally, regardless of alternatives considered, water cannot be allowed to remain in the slab and migrate because water intrusion to the structure endangers the electrical transformers, lighting, wiring, and elevator cabs and equipment located in the underground garage. Finally, additional moisture resulting from a lack of waterproofing will allow for mold to form, which is an environmental health concern for tenants and their visitors. To maintain a watertight building with structural integrity that minimizes risk over the next decades to come, it is critical to remove and fully replace the existing subterranean waterproofing, inspect the numerous post tension cables, and repair any cables that are broken or are at risk for imminent failure. Performing the repairs requires removing the entire waterproofing membrane, cleaning all dirt and debris off the entire existing concrete podium slab, and ensuring the surface is completely dry before installing new waterproofing is the only professional and certifiable method to ensure structural integrity. This is impossible with the tree roots in the way. *Exhibit 2, pages 5 and 7* indicate the required access around the exterior walls and podium surfaces.

Most Critical Post-Tension Cable and Waterproofing Repair Work

The most critical work to be completed in the project (from a life safety standpoint) is the removal of the waterproofing which covers the entire top surface of the post tension slab, cleaning of the slab itself, inspection of the cables and tendons (to determine which have failed

and which are still intact with their original tension), which is accomplished at the perimeter edge of the slab, re-sealing of the cable/tendon sockets following inspection, and the installation of a new waterproof membrane on the slab. The waterproof membrane must "turn the corner" and be wrapped down the exterior wall approximately 3 feet on both the El Camino frontage (considered the "South Side) as well as the rear wall of the building (facing the parking lot adjacent to the railroad tracks – considered the "North Side") in order to be effective*;* this waterproofing is needed to protect the 12" of reinforcing steel in the podium slab that turns down the masonry walls (*See Exhibit 7 for more discussion).* Though this is not an option we would originally propose, we are merely showing this to exemplify how a more minimal approach to waterproofing the podium surface and post-tensioned cables still requires the removal of the trees. Two different conditions exist on the two sides of the building; on the El Camino Real or South Side, the post tension slab perimeter edge is located under about 2 feet of soil in the vicinity of the redwood trees in question, while on the rear or North Side, the post tension slab perimeter edge is located about 3 to 4 feet above grade (*See A-1.9 and A-1.10 for images of the North Side)*. In order to complete the post tension slab tendon inspection and repair work and to remove and properly replace the waterproof membrane on the El Camino or South Side, the construction team requires a perimeter trench of approximately 4 feet wide by 4 feet deep along the podium edge for its entire length. . These required trench dimensions for access cut into the Primary Root Plate (PRP) of the existing trees. In the opinion of our arborist, it is not recommended to reduce a tree's root system to less than its Primary Root Plate *(See Exhibit 4)*. If an attempt is made to cut within the PRP zone of the roots, the trees would not be expected to survive, and tree stability would be a significant issue for years into the future. The trees could fall over into El Camino Real, creating a major safety hazard (*See Exhibit 9)*.

This same critical work can be completed on the rear or North Side of the building without the trenching that is needed for the El Camino Real or South Side because on the North Side the podium slab is actually several feet above grade (*See Exhibit 7 and photos A-1.9 and A1.10 in the Appendix to this letter)*. This is important to our effort to save heritage trees on this site. By not trenching on the rear North Side, we avoid having to remove eight (8) additional heritage trees (seven Redwoods and one Live Oak) whose Primary Root Zone and Primary Root Plate would all be located in the trench that would be needed for access if the post tension slab were located below grade as it is on the El Camino Real South Side..

Waterproofing on Underground Garage Perimeter Walls

The waterproof membrane on the below grade perimeter walls of the underground garage has also failed. While secondary in importance to the post-tension structural slab, the below grade structural masonry walls act not only as soil retaining walls, but they also support the podium slab and they take vertical loads. The top of these walls act as the connection point to the post tension podium slab (*See structural sketch in Exhibit 6)*, and the walls take both vertical loads and provide lateral bracing. The condition of the El Camino Real "South Side" perimeter underground garage masonry wall is especially compromised by the failure of the waterproof membrane. Significant moisture weeping is highly evident on this wall (*See A-1.7)*, which unfortunately means that the steel rebar inside this wall is rusting and subject to failure. The focus here is not on the aesthetic issue of the weeping and staining but rather on the negative impact on the structural integrity of this wall. The consultants' views as expressed in the exhibits to this letter are that the redwood trees and their roots on the El Camino Side of the

building need to be cut within their primary root zone in order to implement the most critical repair work to the podium slab described above. Since those conclusions lead to the removal of the trees anyway, our waterproofing consultant and structural engineer are urgently recommending that the trenching along the El Camino Real garage wall perimeter be extended to 14 feet in depth (the height of the masonry wall located below grade) to enable the installation of a French drain at the bottom of the trench to relieve water pressure build up and installation of the full waterproofing of the entire vertical garage wall along El Camino Real (*See Exhibit 7).*

On the rear North Side of the building, there is also a masonry garage wall that acts as a soil retaining wall and supports the podium slab and takes both vertical and lateral loads. While the top 3 to 4 feet of this wall is above grade (*See A-1.9 and A-1.10)*, thus enabling the most critical work on the slab tendons and podium waterproofing to occur without the need of a trench for access. Our waterproofing consultant also recommends waterproofing this below grade wall (*See Exhibit 7)*, which would require a deeper trench as described above and the removal of the eight heritage trees described above. Despite this recommendation and understanding that we are overruling our consultant on this one aspect of the project, we have decided to forego the waterproofing of the North Side garage wall below grade, primarily in order to save these eight heritage trees. We can partially justify doing so because (1) the most critical work can be done without trenching in this area, and (2) this wall has been subject to far less water intrusion as a result of membrane failure. The much lower incidence of water intrusion on the North Side is likely due to less water being introduced to this area. The area on top of the podium slab on the North Side is primarily a hardscaped plaza with much less landscaped area than on the El Camino Side, and the area where these trees are located is sandwiched between the garage wall and the rear parking lot adjacent to the railroad tracks. Since water on the plaza level and in the parking lot are carried away from the soil by catch basins, much less water enters the area next to the North Side garage wall. Further, the landscaped area where these trees are located is not routinely irrigated.

Trees on Ravenswood Frontage Unaffected

Please note that the largest trees on the corner of Ravenswood and El Camino (and in fact all of the trees along the Ravenswood Avenue frontage) sit outside of the proposed project's envelope and will NOT be affected *(Appendix A-1.6)***.** These are the tallest trees on the site and include one or two that are lit during the year-end holiday season. To be clear, only the seven redwood trees along the El Camino Real frontage beginning just to the left of the driveway near Jeffrey's Hamburgers are at issue (See the x's on *Appendix A-1.8* for the trees proposed for removal).

Tree Removals and Replacement Program

Our preference has always been to avoid removing the seven trees. The arborist agrees that redwood trees are better suited to sites that are unconstrained by structures and where the invasive nature of the roots will not have an adverse impact on foundations, waterproofing or related systems including drainage systems. Redwood trees are also a very thirsty species and make it difficult to sustain drought resistant landscaping because the trees will demand large amounts of water. Accordingly, following the waterproofing repairs the owner has elected to install other tree species on the City's Heritage Tree replacement list that require less water and

have less invasive roots, while leaving alone the redwood trees along the Ravenswood frontage.

In accordance with the City's heritage tree ordinance, the building owner will be replacing the seven heritage redwood trees in a required 2:1 ratio with 14 new trees from the City's approved heritage tree list. This replant program will include a mixture of Brisbane, London Plane, and Coast Live Oak trees, which are more compatible with the limited landscape space, have less destructive root characteristics than the existing redwood trees, are more water-efficient, and will avoid recurrence of this same issue (See proposed replant program on Appendix A-1.8). The owner will also install a root barrier system along the podium's entire perimeter to divert the new trees' roots away from the subterranean walls to protect and preserve the structure and exterior waterproofing on the soil-side of the podium. In addition, the building owner has voluntarily elected to increase the box size of the trees from the standard 24" to the 36" version so that the new trees have larger canopies that are more aesthetically pleasing immediately after planting. Further, the existing grass turf lawn will be replaced with drought tolerant "no mow" fescue which uses significantly less water. This re-planting program offers an opportunity to replace the current grasses and plants along El Camino Real with drought-tolerant landscaping thereby significantly reducing future water consumption.

Alternative Repair Options to Avoid Removing the Heritage trees

As requested by the City and Community, we have investigated every reasonable and feasible option for repairing the existing waterproofing and repairing and inspecting the post tension structural cables on site in an effort to avoid removing the existing trees. In our evaluation, we considered an option "feasible" only if both the waterproofing and structural repairs were achievable, and only if those trees considered for retainage were likely to survive and would not subject the building, the property or the public from undue risk from toppling.

In order to professionally investigate all of the alternative options, we included our structural engineer of record (KPFF engineers), our waterproofing design consultant (Allana Buick and Bers), and our certified arborist (SBCA Tree consulting) who have been involved with this project for over a year. Attached are their professional letters, exhibits, and reports analyzing the recommended solutions and alternative repair options. For your reference, below is a list of our consultants' qualifications and credentials:

Allana Buick & Bers (Waterproofing consultant):

Allana Buick & Bers is one of the leading firms in the world for below-grade waterproofing for new and repair or renovation projects. They have been brought on as the waterproofing expert and design consultant for the project. Please see **Exhibit 1** for more information on Allana Buick & Bers' extensive qualifications and experience with below-grade waterproofing projects.

KPFF Engineers (Structural Engineer of Record):

As the structural engineer of record for the project, KPFF has over 25 years of experience working on post tension cable design and repairs on projects all over the world at a variety of project scales. Please see **Exhibit 3** for more information

on KPFF's qualifications and extensive structural engineering experience related to this project.

SBCA Tree Consulting Group (Certified Arborist):

Steve Batchelder with SBCA Tree Consulting Group has been a Certified Arborist with the International Society of Arboriculture since 1985 and is a Certified Urban Forester since 2010. Steve ran a tree trimming service for a number of years. Molly Batchelder is also a certified arborist for 10 years. Please see **Exhibit 4** for more information on SBCA's qualifications and extensive arborist experience related to this project.

Below are the alternative options that were explored per the request of the City and Community:

Option 1: Building a new parking garage on a neighboring property to replace the 121 parking stalls in the existing underground garage at 1000 El Camino Real.

- Overall, this option is infeasible due to non-ownership of the site, infeasible due to inability to construct on the adjacent site as well as the details listed below.
- The trees and their roots prevent the required access as shown on *page 5 and 7 of Exhibit 2*, therefore the waterproofing and structural repairs are not achievable, and this option is infeasible.
- The City has committed to researching the costs and potential conflicts with nearby easements to install a new parking garage to replace the existing parking density at the 1000 El Camino Real property site. It is important to be aware that the owner of 1000 El Camino Real does not own any adjacent properties and therefore the City would need to identify a neighboring property owner to develop a parking garage to solve the specific and broader parking demands that meet all impacted building owners' needs while also satisfying the City's codified parking density requirement.
- There is a Hetch-Hetchy water line easement in the neighboring properties that will restrict the ability to build a parking garage adjacent to the property.
- It is important that water not be allowed to penetrate into the post tension cables because the cables are susceptible to rusting and failing, with the potential of a building collapse *(See Appendix 3)*. **This option does not allow for a watertight podium because the waterproofing repairs cannot be completed without access to the exterior.**
- Although the new parking lot might provide parking to replace 1000 El Camino Real's underground garage density, there is still the main concern that the post tension slab in need of repair supports the building itself, not just the parking spaces (*See Exhibit 3)*. The repairs of the known failed structural cables, testing all of the 30-year-old structural cables (repairing identified at-risk cables) and replacing the subterranean waterproofing to maintain the property's integrity for structural and life-safety purposes is not optional and must be completed for life safety reasons and to ensure the continued viability of the building itself. **The building is at risk of collapse if the integrity is not maintained. Therefore,**

this option would need to be combined with option 2 - structurally retrofit the garage and building, which is infeasible.

- Additionally, there would be a significant diminution in value to the building tenants due to the removal of onsite underground parking.

Option 2: Structurally Retrofit the Podium with Steel Beams

- This option does not allow the repair of the failed waterproofing that needs to be replaced in order to maintain a watertight structure and avoid corrosion.
- It is important that water cannot be allowed to penetrate into the post tension cables because the cables are susceptible to rusting and failing, with the potential of a building collapse (*See Exhibit 3)*. This option does not allow for a watertight podium because the waterproofing repairs cannot be completed without access to the exterior.
- KPFF Engineers, the structural engineer of record on the project, has reviewed what would be required to convert the existing post tension cable structural system of the building and garage into a structural steel supported podium**. After reviewing this option and the inability to waterproof the podium, KPFF determined it is infeasible (*See Exhibit 3)*.**
- Lastly, per California Building Code (CBC) section 11B-502.5 for parking vertical clearances, there is a requirement to maintain a minimum of 8'-2" (or 98") of clear height at drive aisles and parking spaces. This structural retrofit option requires that structural beams of 2 feet in depth be attached to the ceiling of the entire underground garage. Based on the current 8'-6" height of the ceiling, these 2 feet deep structural beams would reduce the clear height of the garage ceiling down to 6'-6", which is well below the acceptable clear height per code. **Based on these facts, this would result in leaving the entire underground parking useless including all 121 underground parking stalls. Therefore, additional parking would need to be built offsite to maintain the parking demands, as analyzed in Option 1.**

Option 3: Phasing Tree Removal to Incrementally Evaluate Extent of Damage before Removing all Trees

- While this option potentially allows us to reduce the number of trees removed from the start, it doesn't actually solve the overall requirement for removing and repairing the non-functioning waterproofing since it limits the inspection, assessment and repair to only portions of the podium perimeter wall *(See pages 5 and 7 on Exhibit 2)*. This results in a patchwork of functioning and nonfunctioning waterproofing that doesn't solve the problem of water intrusion into the structure. In order to remove and replace the waterproofing, as described above in this letter, the construction team requires a perimeter trench of 4 feet in width and depth to safely inspect and repair the post tension slab cables and remove and reinstall new waterproofing on the exterior of the vertical walls and podium surfaces.

- There is no reason to phase the tree removal because the engineers and design professionals require the inspection and repair all of the post tension cables and replace all waterproofing along the podium perimeter. Phasing the trees does not negate the need for this comprehensive approach. Full access is required, which means the trees must be removed.
- Separately but equally important, our arborist is concerned that phased removal can cause the trees to become unhealthy and unstable. The trees' roots have grown together over time, and the trees rely on protection from wind forces from neighboring trees. The loss of "common" roots and the increased wind loads applied to the remaining trees with compromised root structures results in an unsafe condition for the building occupants and the public using El Camino Real.
- A stand of trees is a grouping of trees, generally of the same species but not always, that benefits from mutual sharing of resources and protection. Therefore, a stand is not necessarily limited to very small and limited groupings. The issues of wind sail forces on a reduced stand of trees that remain after some are removed is critical when significant root loss also occurs.

Option 4: Repair New Waterproofing and Structural Systems Without Removing the Trees

- Our waterproofing consultant, Allana Buick & Bers, reviewed options to install new waterproofing from inside the garage in an effort to avoid removing the trees. After reviewing all options of installing new waterproofing materials from inside the garage, Allana Buick & Bers found it infeasible to inject grout into the vertical perimeter walls because the CMU block material used to construct the walls will easily blow out with the pressure applied by the grout. The CMU block blow out will compromise the integrity of the building structure. In addition, the grout injection solution would not work for the podium surface because there are insufficient soil pressures to contain the grout from spilling out into the landscaped areas, making it ineffective. The grout spilling out would impact the health of the plantings and tree roots located next to the podium. Therefore, in order to replace the waterproofing, the process must be applied to the exterior face of the vertical walls and podium, which requires full access around the podium.
- Our certified arborist has confirmed that the required access around the podium to replace the waterproofing and inspect and repair the cables is in conflict with the Primary Root Plate (PRP), the root zone that cannot be cut to maintain the health of the trees. *(See Exhibit 4 and page 5 of Exhibit 2)*
- Our structural engineer of record, KPFF engineers, has reviewed alternative methods for inspecting and repairing the post tension cables without removing the trees. They determined it is infeasible based on the commercially approved methods because the inspection of the numerous post tension cables and repairs to the known failed or at-risk cables cannot be performed from inside the garage. The only method for safely inspecting the cable tension is on the perimeter of the podium that necessitates exterior access and requires the removal of the trees. Further, the termination points of the cables and tendons are on the perimeter of

the podium slab. These termination points must be inspected and waterproofed. This cannot be done from the inside of the garage.

Option 5: Relocating Heritage Redwood Trees

- Our certified arborist, SBCA Tree consulting, stated that in their professional opinion, given the size and height of these trees, it is infeasible to successfully relocate them (*See Exhibit 4)*. These trees are too large and will suffer extensive root loss if relocation is attempted. For example, if we were to move a tree with an approximate 25" diameter trunk, this would equate to a 14-foot square tree box weighing approximately 100,000 lbs., just to capture the Primary Root Plate (PRP). All the redwood trees in question are have a larger trunk diameter than 25".
- SBCA has seen 30-foot tall redwood trees successfully transplanted, but never a 90-foot tall redwood tree. Furthermore, the adjacent parking structure wall makes it difficult to save much of the root system.

Responses Resulting from the Peer Review Process

As mentioned above, the City retained two consultants, a structural engineer and an arborist, to peer review the Applicant's responses and the applicant's proposed project methods. The Applicant and the Applicant's consultants met with the Peer Reviewers and City Staff at City Hall to go over questions and comments from the Peer Reviewers and to discuss issues related to the project of interest to the Peer Reviewers. The Peer Reviewers presented a new Option 6, not fully endorsed by them but presented for discussion purposes. This Option 6 was to consider cutting the tree roots on the north side (toward the building) of those trees along the El Camino Real side of the podium in order to allow the slab inspection and waterproofing to occur, and then leaving the trees in place by installing cables anchored to the podium slab to stabilize and hold the trees in place after significant root loss. This Option 6 was discussed extensively in the meeting, and the results of that discussion are below.

Option 6: Cutting the Tree Roots, then leaving the Trees in place, and using cables to brace the trees to the building structure

- In order to perform the required repairs and inspection at the podium, it is necessary to cut the roots of the 7 trees in question inside of the Primary Root Plate. During the meeting, it was clear that none of the applicant's arborist, the City's peer review arborist or the City's arborist could cite any successful past precedent of bracing trees of this height and size whose roots had been cut within the primary root plate. While bracing is de rigueur for newly-planted sapling trees as they take root, as we discussed, none of the arborists (all of whose credentials are impeccable) could identify a single successful precedent for trees of a similar scale to those which are in question. As we left the meeting, it was **clear that this was not considered a feasible option from an arborists' perspective. We understood this to be a non-starter and, for this reason, we were not planning to develop a response to this idea.**

- Despite our impressions from the meeting, you have again asked that we address this option in fully, despite the fact that **this is an unconventional and unprecedented approach that incurs undue risk to the building owner and the City as land lessor, members of the public who may be passersby, to the building, and to its occupants, even while all would have to acknowledge that the continued health of the trees is not assured.**

- Perhaps most importantly, our arborist was specifically asked to address the question of whether trees of this size could survive if the roots in the primary root zone were cut back to accommodate the 4-foot trench needed to do the waterproofing work described above**. In his opinion, such a root loss would be sufficient to cause severe decline if not death in the trees. He indicated that the maximum life of the trees might be 5-10 years with care but with an ever-worsening appearance. (*See Exhibit* 9).** Further and equally important, his view was that attempting to secure and stabilize the trees with this type of root loss would require two cables per side attached more than halfway up the trees' trunks. Unfortunately, cables cannot be attached to the trees from the El Camino side, as they would have to be anchored in the middle of the roadway. Accordingly, while cables attached on the building side might prevent the trees from falling onto El Camino Real, the trees could not be prevented from falling onto the building. This was a fatal flaw in this option from his perspective. *(See Exhibit 9 for further detail).*

- While we approached our structural engineers with the question of whether the slab could accommodate anchors, whether such anchors could themselves be strong enough to handle the forces from these large trees in a wind condition, and whether the slab itself could handle such loads when it was not designed for such, they responded that a full technical evaluation of these issues cannot be completed in the timeframe of a day or even a week. It would involve a very complex process of determining an appropriate level of flexibility / stability for the tree bracing; assessing the significant forces imparted on the slab from any single anchor as well as all of the anchors (which itself requires estimates of the forces generated by the weight of the trees, the trees flexing motions, and the variations of wind, especially in storms), the appropriate locations for slab anchoring, and an engineering assessment of how those anchor points would need to be waterproofed, as any penetration of the slab inherently introduces another point of water intrusion and necessitates further waterproofing. This is a very complex idea, and involves many other logistical and design endeavors, all of which would require interdisciplinary coordination. **Further, in light of the fact that the trees cannot be braced from both directions, this analysis does not seem to be worth the additional time and effort, especially since the trees themselves will likely perish from the significant root loss.**

- It must be stated that even if the cable anchoring idea were ultimately found to be structurally possible (setting aside the arborists' concerns for a minute), the network of cable bracing that would be required would be very extensive and quite unsightly, essentially a "trapeze" in the front plaza. It would be clearly visible from El Camino as well as to all tenants and visitors to the building, and would be fully inconsistent with a high-quality Class A landscape and hardscape plan that was contemplated and approved by the Planning Commission. Importantly, it would also be inconsistent with the building owner's obligations under the Ground Lease with the City. The extensive network of cables would convey a sense of concern and risk, completely undermine the current status of the property as a Class A asset, and place the economic viability of the building in question due to its inability to attract the

highest quality tenants who will pay full Class A rents. These are the revenues that are necessary to support the applicant's ground lease payments to the City.

Option 7: Appellant's suggestion of Saw-Cutting the Post-Tensioned Podium Slab

In addition to the Option 6 provided by the Peer Reviewers, the Appellant submitted another option, Option 7, for consideration. This Option is described in a written submittal from Peter Edmonds on March 4, 2019. This option called for Saw-Cutting the Post-Tensioned Slab, de-stressing the cables and tendons, create a hanging pit to hold additional soil for the trees, and create a "Hanging Garden" on the inside of the El Camino garage wall to take advantage of the water seeping through that structural wall. Without addressing the fact that this option completely ignored the need to waterproof the structural podium slab, because it involved saw cutting the slab itself, including portions where tendons exist, and in light of its proposal to de-stress the existing functioning cables and tendons, we presented this option to our structural consultant. **They concluded that the structural integrity of the slab itself would be compromised, the methods requested by the Appellant would compromise the bracing of the top of the El Camino garage wall, the podium slab would no longer be attached to the lateral-force (earthquake) resisting system of the building, and the ignoring of the water intrusion into the garage wall would compromise its structural integrity as well (*See Exhibit 6 for a detailed response from KPFF and Exhibit 7 for a response from ABBAE and Exhibit 8).***

It is for these reasons as well as the inherent safety issues raised by having a contractor's employees saw cutting into a post tension slab with live tendons that we find this Option 7 infeasible, and as the structural integrity of the building itself would be fully compromised, **this Option 7 is considered unsafe.**

Upon further review and investigation of this option after meeting with the appellants on February 13th to learn more about their potential solution, below are a few additional concerns we have about option 7 submitted by the appellants:

- **Not industry-standard design or construction**
    - Options 7 and 8 appear to be unconventional, inherently unsafe and involve extreme risk to the structural integrity of the building. Our team questions whether we will be able to secure a structural engineer with expertise and reputation who will be willing to design and oversee such work and stand behind it with their professional certification, which itself would require their insurance carrier to do so as well. The same is true of a professional, licensed, well capitalized structural contractor of sufficient reputation, and a general contractor overseeing the project.
- **Non-market conforming product**
    - Options 7 and 8 consist of a non-industry standard design that will render our building to be substandard in the eyes of the industry. The non-conforming nature of the work will render the building unsaleable and un-financeable.
    - As seen in *Exhibit 10,* the loss of roughly 29 underground parking reduces the Cornerstone parking ratio from 4/1,000 square feet to 3/1,000 square feet. This

calculation assumes, which has not been verified, that we can still retain the above ground surface parking at the Jeffries Burgers side of the building. It is possible that we may jeopardize the above grade parking spaces due to the abandoned portion of the podium slab.

- It is important to note that the economic value of the building derives from the tenant rents, including the underwriting for the mortgage and the ground lease payments. At this time, we have not yet calculated the exact loss of rents for future leases, however, given the downsizing of the garage and loss of Class A level, one can predict that the detrimental effect this would have on the value of the building and the future rent it could demand.
  - **Please note that it is somewhat irrelevant if the City were to waive higher parking requirements; it is the tenants who require parking at these ratios in order to justify Class A rent levels, and reducing the parking both breaches current leases and prevents that income from being recouped later.**

- **Economic infeasibility**
  - In addition to the details stated above, the additional cost of construction for options 7 and 8 are significantly greater than the cost of more traditional and professional methods of completing this work and will destroy the economic viability of the building.
    - For context, there is a 700-800% increase in the cost of the post tension cable repair work alone.
    - Furthermore, the additional construction for options 7 and 8 would more than double the cost of the entire project. At the very least, this includes the following replacement:
      - Replacement of the egress stair from the garage to the street level (options 7 and 8 would render this stair inaccessible).
      - Construction of new retaining wall located closer to the building where the relocated post-tensioned cables will terminate.
      - Infill of the garage with either soil or concrete where the podium slab is being abandoned.
      - Reworking the entire driveway entrance off El Camino Real on to the above grade parking area now that a portion of the podium slab is cut and lost its structural integrity to support cars above.
    - According to the post-tensioned cable and general contractor, **we would need to vacate the tenants within the building for at least 2 months in order to perform this work. We do not have the rights to require the existing tenants to move back after they have been relocated.** This would be in constructive default under the tenant leases. Despite the millions of dollars that they have invested in their tenant improvement work, it is unlikely that they would be willing to move back into the building after they have moved out as this would introduce a second, unnecessary disruption. We anticipate that the tenants will seek termination of their leases, as well as reimbursement for the tenant improvement work that they have invested in the building and relocation costs. The complexity and cost of relocating a tenant such as

Cornerstone (the main tenant) is extreme and they will be looking to us as the defaulting party under their lease to pay the cost and all damages. This will include all relocation costs (likely in excess of $500,000 - $600,000), tenant improvement costs for new space if they are able to find it in the immediate area (unknown but likely in excess of $1,500,000 based on their two most recent lease renewals), reimbursement for unamortized tenant improvements paid for by Cornerstone in their current space, legal costs to negotiate the termination and new lease, cost of business interruption damages, and damages to their new subtenant Compass Realty for all of these same expenses. Similar costs will be payable to Open Network Labs, the other tenant at 1000 El Camino Real.

- Given this forced vacancy and loss of rent, the building owner would suffer from a loss of revenue, which jeopardizes the mortgage payments, property tax payments, and ground lease payments on top of other operating costs that must be paid regardless of loss of income, and all economic value to our investor group. We will be forced to default on his mortgage and on the ground lease to the City.
- We will be forced to write off all improvements on these spaces and start over with new tenants if he has to re-market the space later.

In essence, Options 7 and 8 result in a "taking" of the building by the City, as its economic value will be so compromised as to place our ownership into insolvency. The City will have forced a breach of the ground lease by our ownership group, and will have forced us to default on our tenant leases and our mortgage loan. The City will thus be responsible for purchasing the building at its current economic value, enabling us to pay off our mortgage lender and returning the equity investment to our investors, pay all damages to our tenants to end their tenancies, and the ground lease will need to be terminated, depriving the City of over $25 million in revenue during the lease term. To say that Options 7 and 8 are "infeasible" is an understatement. The total of all of these costs will likely exceed $80 million.

Option 8: Appellant's suggestion of Saw-Cutting the Post-Tensioned Podium Slab and removing the Post-Tensioned cables

This option is a variation of option 7, but instead of replacing the post-tensioned cables, the cables would be removed altogether. This would require that we additionally follow option 2's result of structural retrofitting the underground garage ceiling to support the building, which is infeasible. Please reference the above bulleted section.

Tree Valuation by a Certified Arborist

In addition to exploring all commercially reasonable, practical and potentially feasible alternatives, the City also requested that we provide a tree valuation by using the arborist appraisal method. We had our certified arborist, SBCA Tree consulting, provide the following

tree valuations for the 1000 El Camino Real property, which are also provided in the attached Arborist tree valuation report:

1980's Conditions

~$0 - Value of trees on site prior to the construction of the existing building

Note: Please be aware that when the 1000 El Camino Real project was developed in the 1980s, there was minimal tree coverage on the property and all trees on site were planted by the building owner.

Current Tree Valuation

$703,400 - Value of all 76 trees installed by the property owner and currently on the site

$157,500 - Value of redwood trees proposed for removal

Construction Costs to Replant the New Trees

Approximately $1,000,000 - This is the cost of construction for the removal of the existing site work and the installation of the new trees per the project's tree replacement program. This includes a percentage of the soft costs, but excludes the cost for the waterproofing and hardscape installation.

Conclusion

We have explored every possible option with a certified arborist, waterproofing design consultant, and structural engineers to avoid removing the trees, but there are no other commercially reasonable, practical and potentially feasible options to repair and maintain the building's structural integrity, related life-safety factors, and extend the useful life expectancy without doing so. We certainly prefer not to have to remove these trees—we planted them over 30 years ago when the building was constructed without understanding the long-term physical and ecological implications of doing so. It is critical to remove these trees so that the repairs to the waterproofing and structural post tension cables are inspected and repaired in a professional and defensible manner to protect and maintain the integrity of the building structure. (The building is at risk of collapse if the integrity is not maintained.)

The urgent need to protect the structural integrity of the building must take precedence, and all alternatives considered previously by us or more recently as part of this process in order to preserve these trees do not adequately provide for professionally mandated structural repairs, nor do they ensure that the waterproof membrane on top and around the podium slab will remain intact going forward.

As owners, we have been excellent stewards of this property since the early 1980's. This repair and renovation project is a complex and costly undertaking which is providing no increase in rentable area or economic benefit to the owners beyond keeping the structure intact and ensuring the waterproof integrity of the structural system. A byproduct of the project will be the installation of 14 new trees from the City's heritage tree species list, re-landscaping with drought tolerant but handsome plant materials and continued maintenance of this high-profile

property in a Class A manner. We respectively request that the Commission allow for the project to proceed as approved by the Planning Commission.

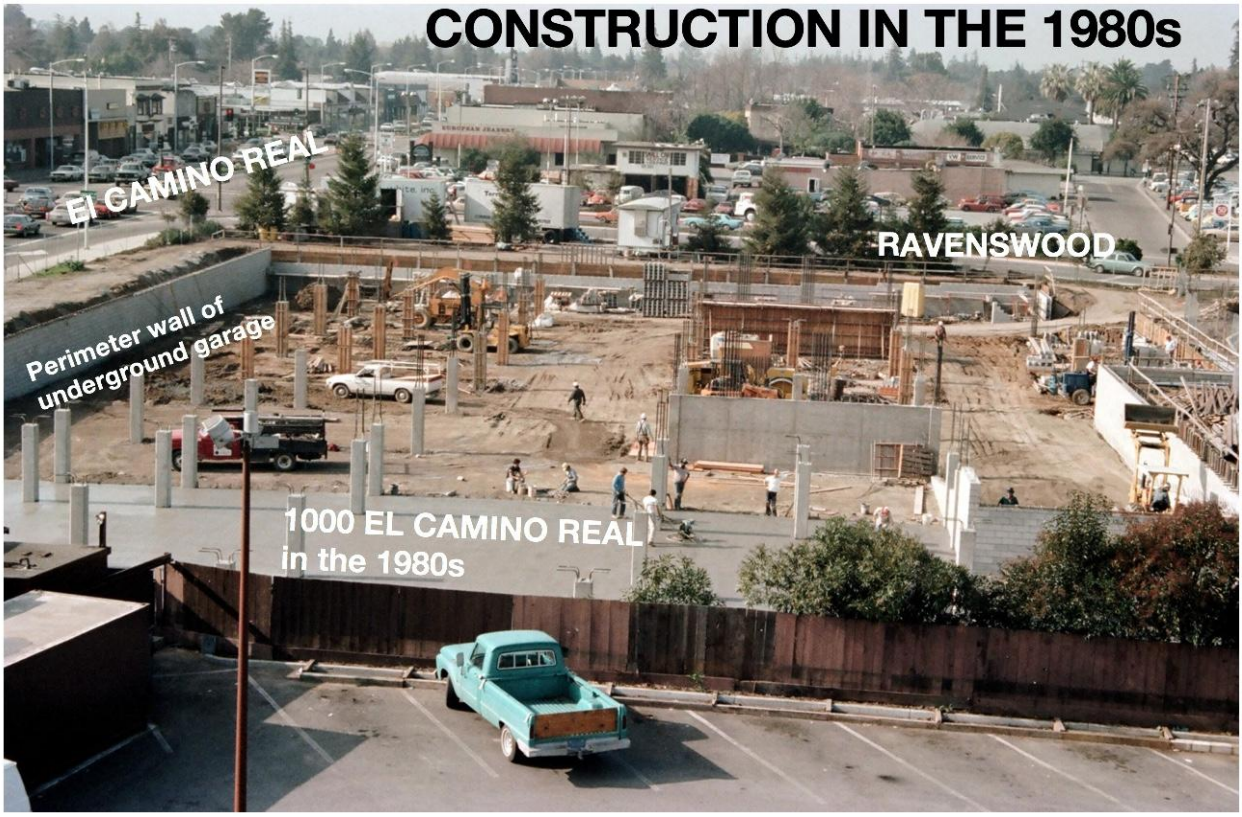
Sincerely,

MPOC Investors, LLC
A California limited liability company
By: Matteson Real Estate Equities, Inc.
A California corporation
Manager

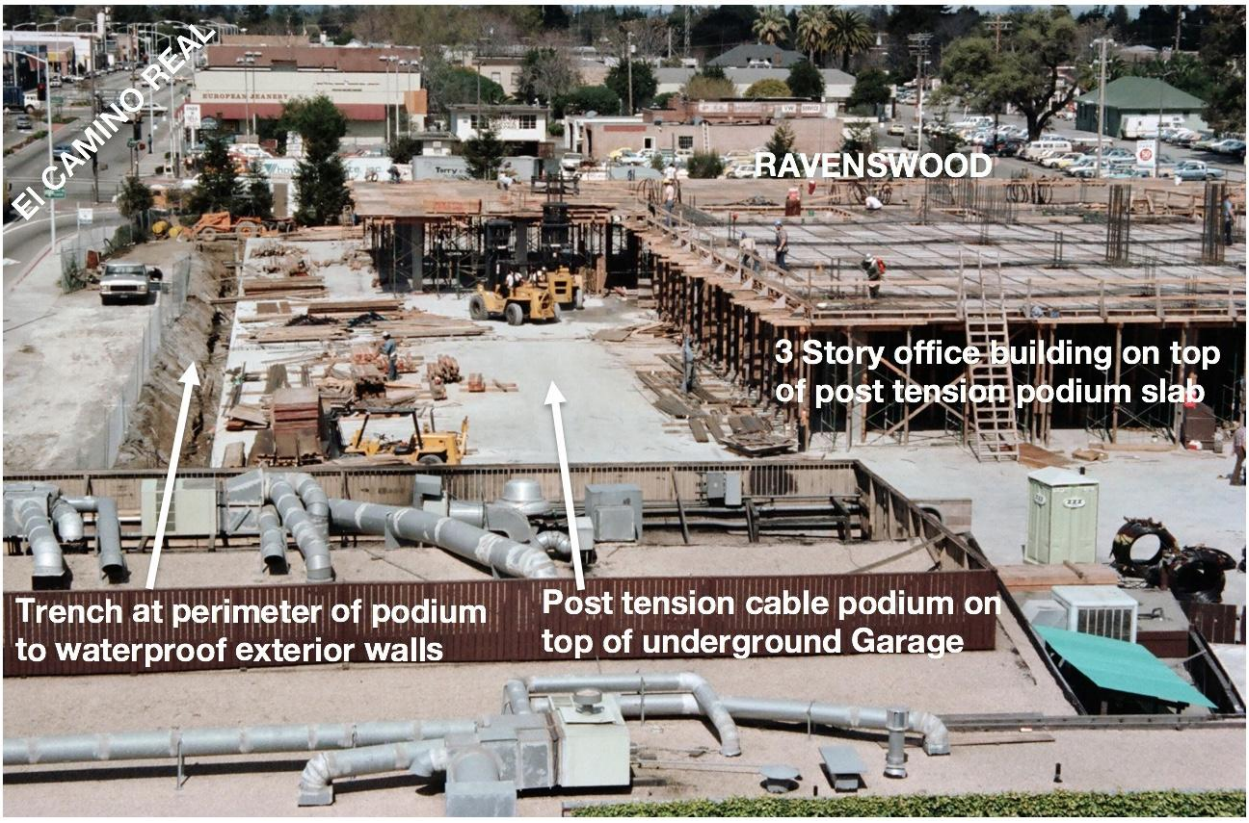
Encl:

Exhibit 1 - Allana Buick and Bers' letter providing an overview of the waterproofing report
Exhibit 2 Rev 1 - Allana Buick and Bers' waterproofing report
Exhibit 3 - KPFF Engineers structural analysis report
Exhibit 4 - SBCA Tree Consulting arborist response to alternative options
Exhibit 5 Rev 1 - SBCA Tree Consulting arborist tree valuation report
Exhibit 6 - KPFF Engineers structural responses to Appellant's additional alternate
Exhibit 7 - Allana Buick and Bers' waterproofing responses to Appellant's additional alternate
Exhibit 8 Rev 1 – Plan and construction section views with dimensions of primary root zones and access requirements for shallow trench
Exhibit 9 – SBCA Tree Consulting arborist response to cutting primary root zones
Exhibit 10 - Underground garage parking impacted by Option 7 or 8

Appendix A-1



A-1.1 - Construction on the 1000 El Camino Real property in the 1980s.



A-1.2 - Construction on the 1000 El Camino Real property in the 1980s.

A-1.3 - Construction of underground garage at 1000 El Camino Real in the 1980s.

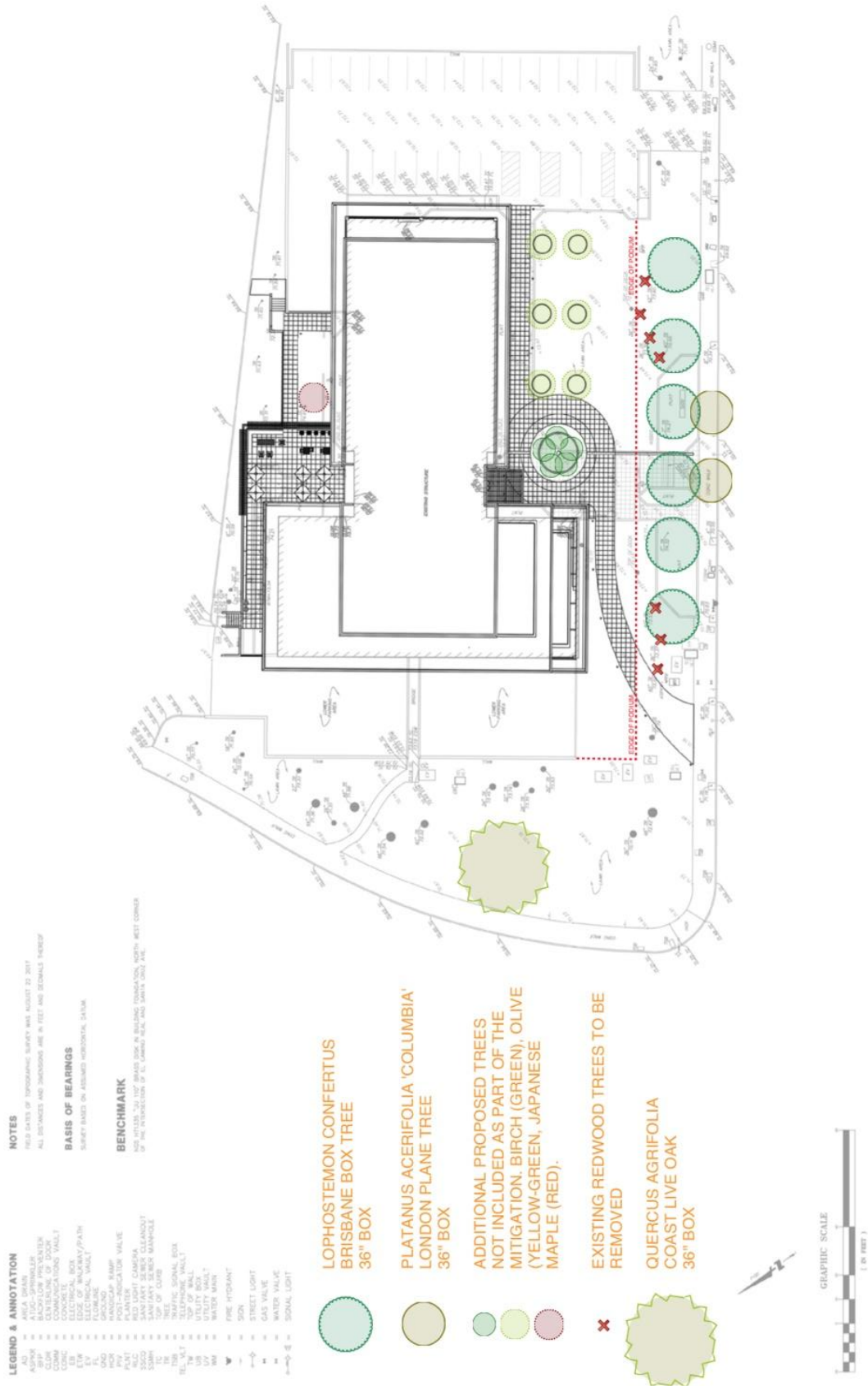
A-1.4 - Tree saplings were planted along El Camino Real in the 1980s.

TODAY **1980s**

A-1.5 - Comparing trees along El Camino Real planted in the 1980s to in 2019.

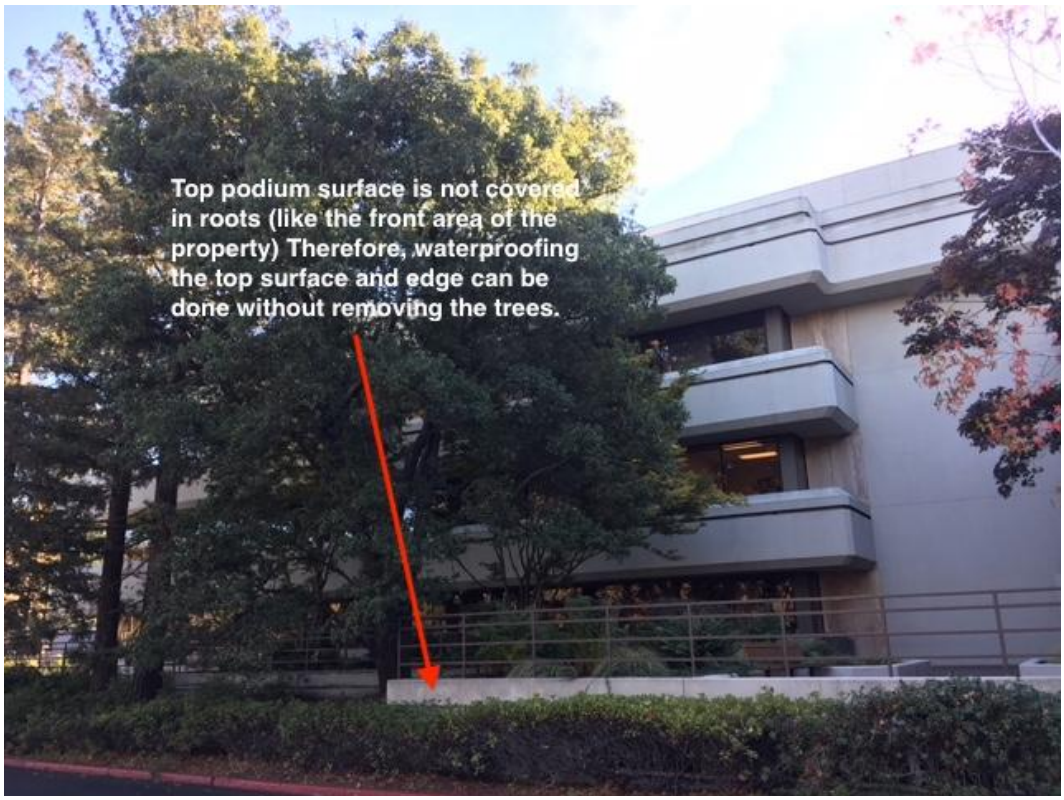
A-1.6 - Trees at corner of Ravenswood and El Camino Real that get wrapped with holiday lights will not be removed.

A-1.7 - Existing conditions at 1000 El Camino Real.



A-1.8 - Proposed tree planting plan at 1000 El Camino Real. The trees to be removed are marked with an **X**.

A-1.9 – View on the north side of the 1000 El Camino Real building showing that the Post tension (P-T) tendons are above grade, which is a different condition than in the front.



A-1.10 – View on the north side of the 1000 El Camino Real building showing that the Post tension (P-T) tendons are above grade, which is a different condition than in the front.

Exhibit 1

Allana Buick & Bers' waterproofing letter & report

Allana Buick & Bers, Inc.
990 Commercial Street
Palo Alto, CA 94303
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www.abbae.com

ALLANA BUICK & BERS

Making Buildings Perform Better

Statement of Qualifications and Narrative of Waterproofing Exhibit Slides for 1000 El Camino Real

ABBAE's Credentials: ABBAE's below-grade waterproofing experience includes new and remedial design and construction administration services. We are familiar with all major waterproofing systems including, but not limited to: fluid applied membranes, self-adhering sheet membranes, bituminous and thermoplastic sheet membranes and composite rubberized asphalt membranes. With a unique breath of experience, ABBAE offers consulting on below-grade waterproofing for both deep and shallow foundations, both in and above local water tables. Our award-winning professional team is well experienced with below-grade systems, including the use of remedial plastic foam grouts, bentonite grouts and surface applied remedial waterproofing materials. Our team also specializes in podium waterproofing systems. Issues such as post-tension cables, deck movement, drainage, expansion joints, drainage, and landscaping must be considered when selecting systems and designing waterproofing for podiums/decks. ABBAE provides design, peer review, mock-up observation and testing, and construction phase support for podium systems.

Mr. Karim Allana has been in the construction field for over 38 years. He specializes in forensic analysis of construction; sustainable design of building envelope systems, roofing and waterproofing; and construction management. Since 1987, Mr. Allana has been the founding principal and Chief Executive Officer (CEO) of Allana Buick & Bers, Inc. (formerly Allana-Lippert). Allana Buick & Bers, Inc. (ABBAE) an Architectural-Engineering firm that specializes in sustainable design of new construction as well as repair to existing buildings. As the Principal-In-Charge, Mr. Allana has performed over 5,750 architectural and engineering projects, in California, Nevada, Washington and Hawaii, for all types of building structures.

ABBAE's select below-grade waterproofing projects include:

- 9th and Broadway, San Diego , California
- 55 Ninth Street, Avalon, San Francisco, California
- 1000 El Camino, San Carlos, California
- Avenue 64 Apartments, Emeryville, California
- Canyon Village Housing, California Polytechnic State University, San Luis Obispo, California
- Crescent Village, Irvine Apartment Company, San Jose, California
- Downtown Jebel Ali Zone 1 Central Plaza, Dubai
- Emery Station East, Emeryville, California
- Hollywood Palladium, Hollywood, California
- Kravis Center, Claremont McKenna Community College, Claremont, California
- McCarthy Residence, Palo Alto, California
- Newport Beach City Hall, Newport, California
- New Science Building, Grossmont High School, Grossmont California
- The Oaks, Irvine Apartment Company, San Jose, California
- Pacific Bell Switch Station, Coronado, California
- Palo Alto Medical Foundation, Medical Office Building, Sunnyvale, California

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- Palo Alto Plaza HOA, Palo Alto, California
- The Pines, Irvine Apartment Company, San Jose, California
- San Jose State University, Campus Village, San Jose, California
- San Jose State University, Duncan Hall of Science, San Jose, California
- Sunnyvale Towne Center, Sunnyvale, California
- Temple Beth El, Berkeley, California
- Terminal C Expansion, San Jose International Airport, San Jose, California
- United States Embassy Compound, Dominican Republic

Narrative of Waterproofing Exhibit slides:

Slide 1. Statement of Qualifications for Allana, Buick and Bers (ABBAE).

Slide 2. Statement of Qualifications for Mr. Karim Allana.

Slide 3. Photo of roots covering the podium slab.

Slide 4. Photo of roots covering the podium slab with waterproofing exposed.

Slide 5. Plan of the site showing areas of required access to allow for repair of Post-Tension cables (PT cables), podium plaza waterproofing and underground parking garage waterproofing, as well as the trees that are preventing this work.

Slide 6. Definition of Primary Root Plate.

Slide 7. Enlarged plan of the south plaza area showing areas of required access to allow for repair of podium slab surface waterproofing and underground parking garage waterproofing, as well as the trees that are preventing this work.

Slide 8. Cutaway view of the garage, showing the PT cables, waterproofing, and roots.

Slide 9. Discussion of Option 2; Steel Structural Retrofit.

Slide 10. Discussion of Option 3; Phased Tree Removal.

Slide 11. Cutaway view of the garage, showing Option 3; Phased Tree Removal and the resultant damage to the trees.

Slide 12. Discussion of Option 4; Waterproofing Repair without Tree Removal.

Slide 13. Photo showing damage to a similar CMU basement wall due to Grout Injection waterproofing.

Slide 14. Cutaway view of the garage, showing Option 4; Grout Injection.

Slide 15. Enlarged detail showing grout injection waterproofing.

Slide 16. Appendix: Background information

Slide 17. Description of ABBAE investigation of the site.

Slide 18. Discussion of investigation findings.

Slide 19. Typical PT cable details.

Slide 20. Photos of PT cables under construction.

Slide 21. Cutaway view of the garage, showing the PT cables, waterproofing, and roots.

Slide 22. Photo showing overview of South podium area shown in following three photo slides.

Slide 23. Photo of excavated area.

Slide 24. Photo of excavation in progress.

Slide 25. Photo of exposed roots and podium surface waterproofing.

Slide 26. Part of a typical podium waterproofing specification outlining cleaning and preparation requirements of concrete surfaces for waterproofing application.

Slide 27. Photos of a similar concrete surface cleaned and prepared for waterproofing application.

Slide 28. Photo of typical grout injection port layout.

Slide 29. Photo of grout injection ports.

Slide 30. Photo of grout injection pump.

Slide 31. Photo of grout injection in process.

Slide 32. Photo of grout-injected cracks.

Slide 33. Photo of grout-injected cracks.

Slide 34. Photo of core drill testing of a grout-injected basement wall.

Slide 35. Photo of a basement wall core sample showing injected grout.

Exhibit 2

Revision 1

Allana Buick & Bers' waterproofing study report

QUALIFICATIONS

Allana, Buick and Bers Architects and Engineers (ABBAE) was retained by the building owner to investigate and address the leaks in the waterproofing into the underground garage and failed post-tension cables.

ABBAE's Credentials

ABBAE's below-grade waterproofing experience includes new and remedial design and construction administration services. We are familiar with all major waterproofing systems including, but not limited to: fluid applied membranes, self-adhering sheet membranes, bituminous and thermoplastic sheet membranes and composite rubberized asphalt membranes. With a unique breath of experience, ABBAE offers consulting on below-grade waterproofing for both deep and shallow foundations, both in and above local water tables. Our award-winning professional team is well experienced with below-grade systems, including the use of remedial plastic foam grouts, bentonite grouts and surface applied remedial waterproofing materials. Our team also specializes in podium waterproofing systems. Issues such as post-tension cables, deck movement, drainage, expansion joints, drainage, and landscaping must be considered when selecting systems and designing waterproofing for podiums/decks. ABBAE provides design, peer review, mock-up observation and testing, and construction phase support for podium systems.

QUALIFICATIONS

Karim Allana's Credentials

Mr. Karim Allana has been in the construction field for over 38 years. He specializes in forensic analysis of construction; sustainable design of building envelope systems, roofing and waterproofing; and construction management. Since 1987, Mr. Allana has been the founding principal and Chief Executive Officer (CEO) of Allana Buick & Bers, Inc. (formerly Allana-Lippert). Allana Buick & Bers, Inc. (ABBAE) an Architectural-Engineering firm that specializes in sustainable design of new construction as well as repair to existing buildings. As the Principal-In-Charge, Mr. Allana has performed over 5,750 architectural and engineering projects, in California, Nevada, Washington and Hawaii, for all types of building structures.

CURRENT CONDITIONS

THICK TANGLE OF TREE ROOTS OVER THE PODIUM AND UNDERGROUND GARAGE

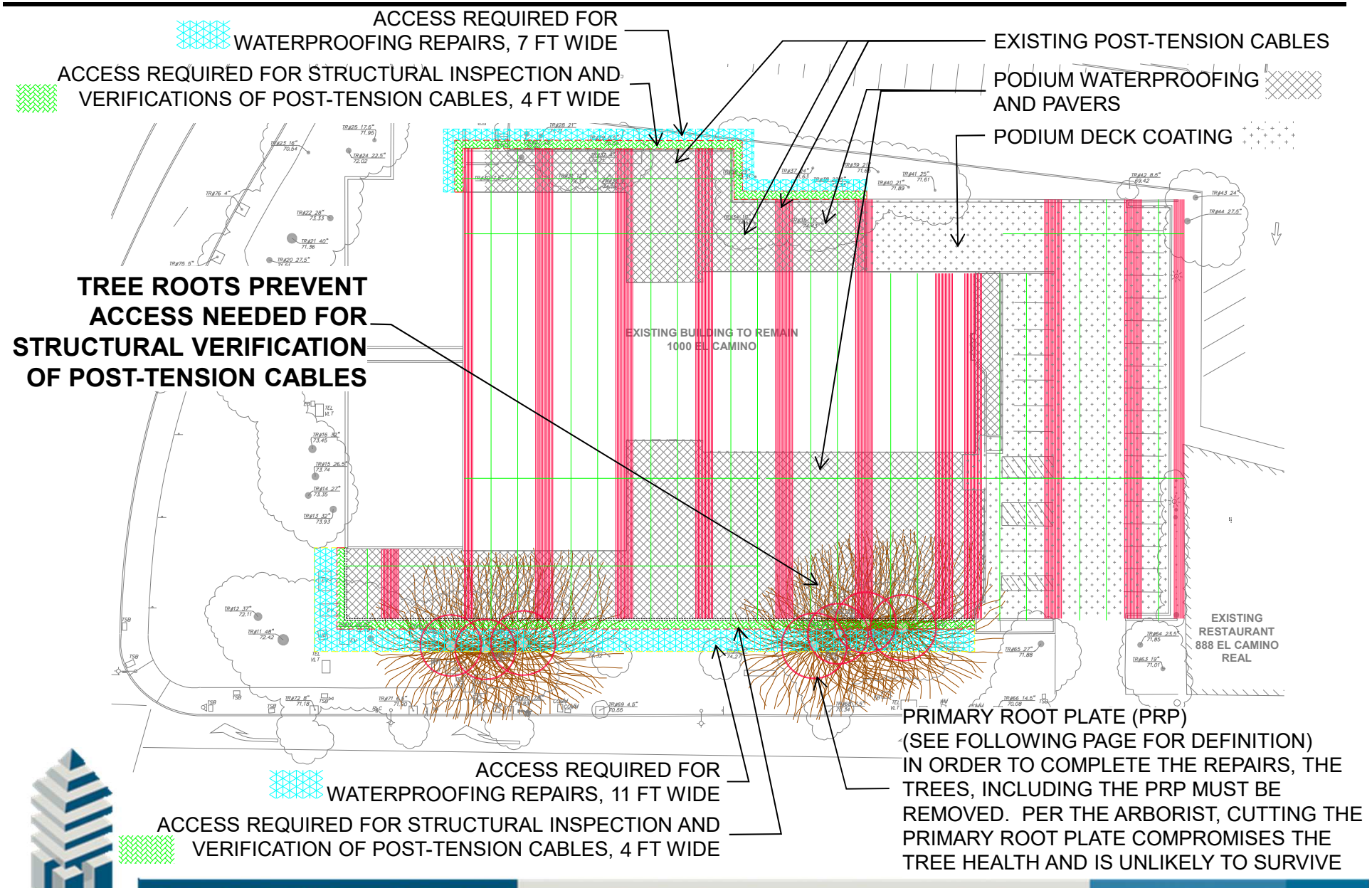
PODIUM SLAB WATERPROOFING

CURRENT CONDITIONS

THICK TANGLE OF TREE
ROOTS OVER THE PODIUM
AND UNDERGROUND GARAGE

PODIUM SLAB WATERPROOFING

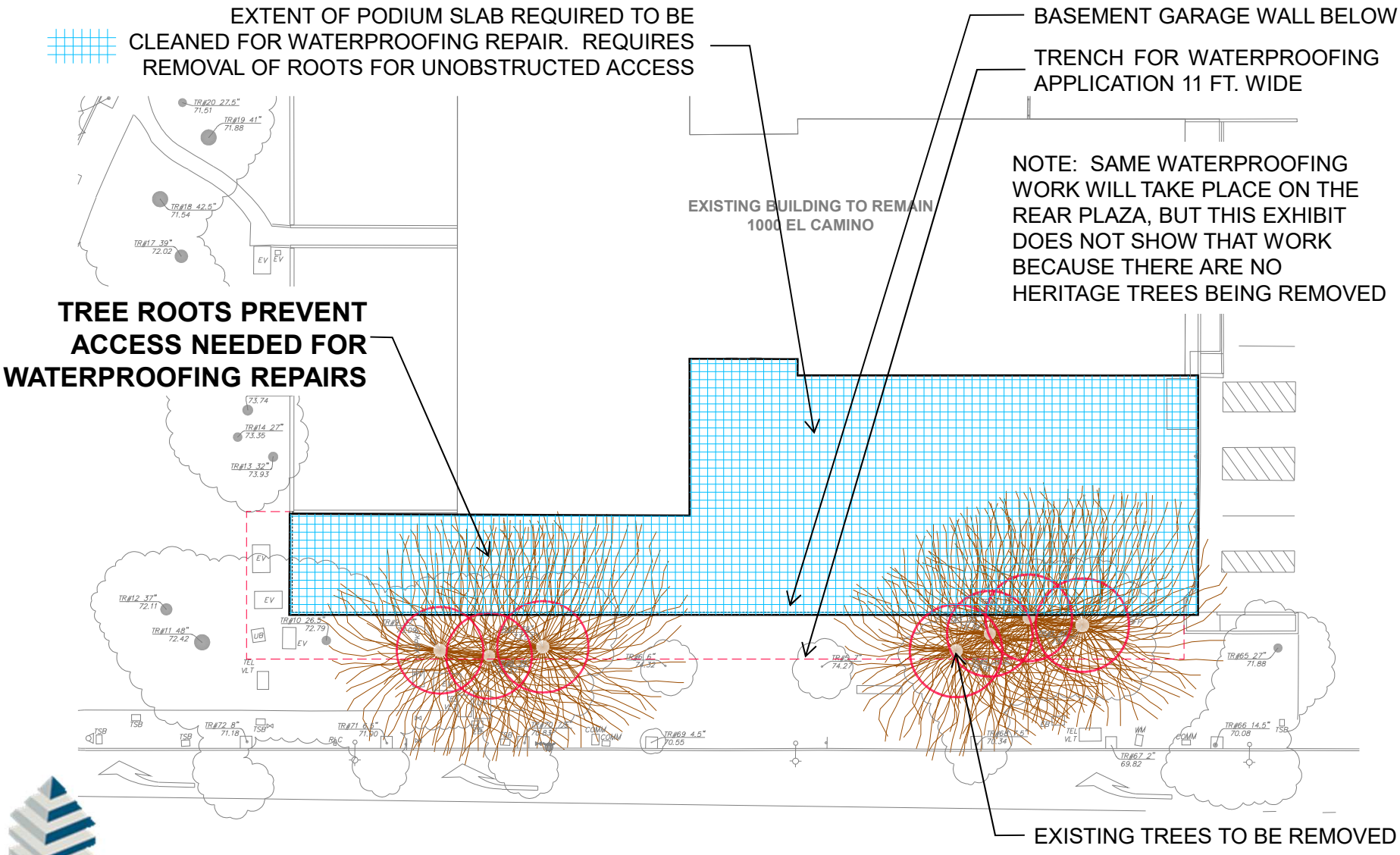
CURRENT CONDITIONS
REQUIRED ACCESS AREAS AT EXTERIOR WALLS



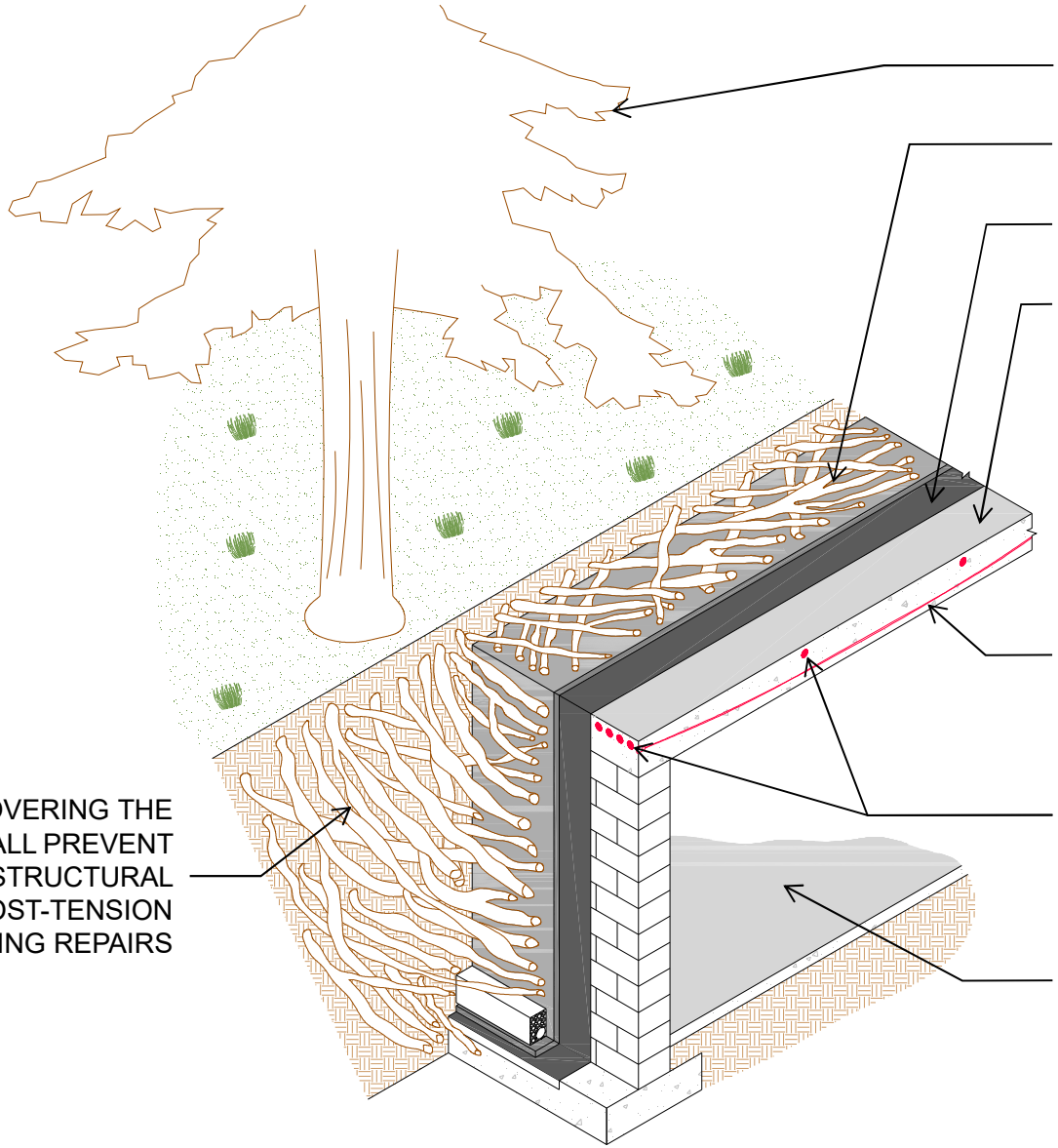
DEFINTION: PRIMARY ROOT PLATE

The Primary Root Plate (PRP) radial distance from the tree base = 3x the diameter of the tree at breast height (DBH) which ranges between 24' to 30' in diameter for the trees proposed to be removed

CURRENT CONDITIONS
REQUIRED ACCESS AREAS AT THE PODIUM SURFACE



CUTAWAY VIEW – PREVENT ACCESS NEEDED FOR STRUCTURAL VERIFICATION OF POST-TENSION CABLES AND WATERPROOFING REPAIRS



OPTION 2
BUILDING & GARAGE STEEL STRUCTURAL RETROFIT [INFEASIBLE]

Recommendations

Podium waterproofing: The podium waterproofing requires replacement due to extensive water intrusion through the waterproofing membranes. All overburden above the podium must be removed in order to access and replace the waterproofing membrane. This will include the removal of grasses, plantings, trees, rocks, etc. above the podium. Hot rubberized asphalt waterproofing is the proposed waterproofing system.

The large trees and plantings along El Camino Real require removal due to the extent of root network over the podium area and along the foundation wall. There is no method for repairing or replacing the existing waterproofing without complete access.

Foundation wall waterproofing: The foundation wall waterproofing requires replacement due to extensive water intrusion through the waterproofing membranes. The foundation wall will need to be exposed, with overburden removed, in order to access and replace the waterproofing membrane. This will include the removal of grasses, trees, plantings, rocks, etc. adjacent to the wall. Self-adhering membrane is the proposed waterproofing system.

Exposing the foundation wall will require a trench to be dug along the wall. The width of the trench will need to be a minimum of three feet wide to provide access for the waterproofing work and for shoring up the soil alongside the trench to prevent collapse.

Waterproofing Preparation: The first step is to remove the soil and existing waterproofing. This may be conceptually possible on the podium deck. But access to the foundation wall will not be possible with the roots in place. The wall extends eleven feet deep. **It will not be possible to dig away the soil, much less remove the existing waterproofing membrane, through a continuous network of intertwined roots that starts at the surface of the soil.**

Waterproofing Installation requires a clean, dust-free and dry surface for the waterproofing membrane to stick to. Dirt, dust and damp will prevent the membrane from adhering to the surface. This creates a space between the waterproofing membrane and the wall that allows water to move around, soaking into the structure as well as to disbanding more and more of the membrane. No waterproofing membrane is perfect; there will be small holes in the membrane, but if the membrane is fully adhered to the wall, the water can't move around and cause damage.

Summary: Providing a clean, dry, dust-free surface is not possible under an intertwined network of roots. With the roots suspended directly above the waterproofing, any disturbance to the root system will cause dirt and bark to fall into the work. Such disturbances will occur constantly as the workers attempt to clean the podium surface and install the waterproofing.

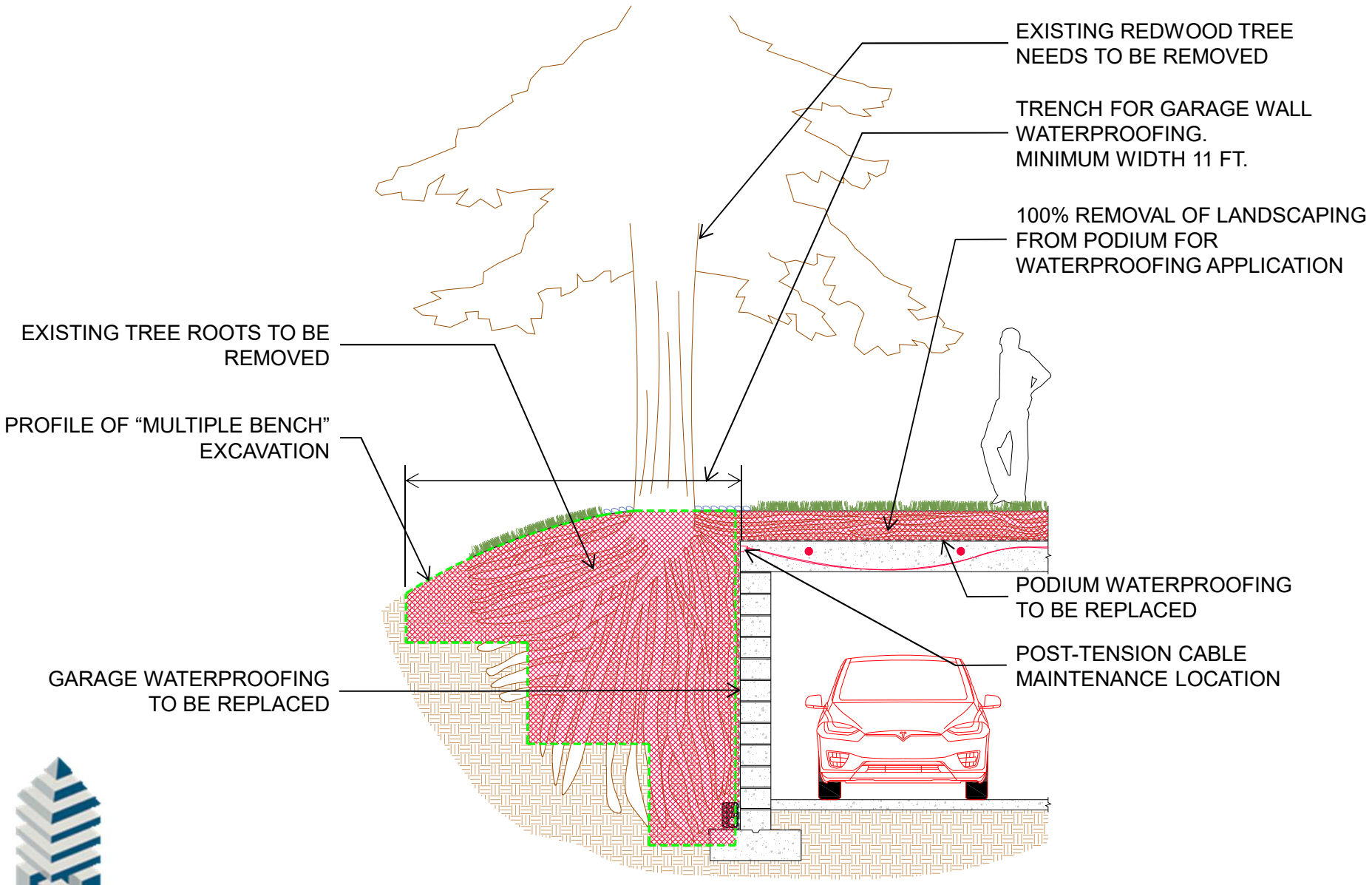
"Conclusion: This option is infeasible because it addresses the repairs of the structural members, but does not provide access to the exterior of the podium and vertical walls to perform the waterproofing. The combination of the existing trees and their extensive and intertwined roots make is impossible to repair the waterproofing without their removal."

OPTION 3
PHASED REDWOOD TREE REMOVAL [INFEASIBLE]

"**Conclusion:** This option is infeasible because phasing of the tree removal doesn't allow for complete access to the entire podium perimeter walls and surface to repair the waterproofing. Complete access requires removal of all seven existing trees and their root system".

INFEASIBLE

OPTION 3
PHASED REDWOOD TREE REMOVAL [INFEASIBLE]



OPTION 4
REPAIR WATERPROOFING WITHOUT TREE REMOVAL [INFEASIBLE]

GROUT INJECTION FOR THE VERTICAL GARAGE WALLS

Polyurethane Foam Grout Injection is a process often used to waterproof existing basement walls that leak. Holes are drilled through the basement walls in a regular pattern across the entire height and width of a wall area. Injection ports are installed in each hole. The grout is then pumped into the ports, in sequence, from the bottom to the top, starting at one end and moving across the wall to the other end. The grout is a polyurethane foam that is injected under pressure between the basement wall and the soil outside. This forms a "curtain" that completely covers the wall.

The grout is injected at high pressure to do this. This is not a problem with a thick concrete wall. But a thin-walled CMU block cannot stand up to the pressure of the grout, and will often crack or break, making the wall weak and requiring structural repair. **Unfortunately, the basement walls at 1000 El Camino are CMU and thus not suitable for grout injection and would be prone to a blow-out.** The following slide shows an example of a different project where a blow-out occurred.

WATERPROOFING OF PODIUM SURFACE ABOVE UNDERGROUND GARAGE

"**Conclusion**: This option is infeasible because it does not provide access to the exterior of the podium concrete slab to perform the waterproofing. The combination of the existing trees and their extensive and intertwined roots make is impossible to repair the waterproofing without their removal. Grout injection is also not an option for the podium surface because there is insufficient soil pressure to confine the grout between the podium and the landscape soil."

INFEASIBLE

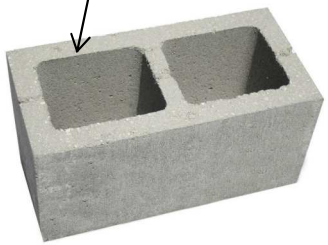
OPTION 4
REPAIR WATERPROOFING WITHOUT TREE REMOVAL [INFEASIBLE]

USING GROUT INJECTION FOR THE VERTICAL GARAGE WALLS

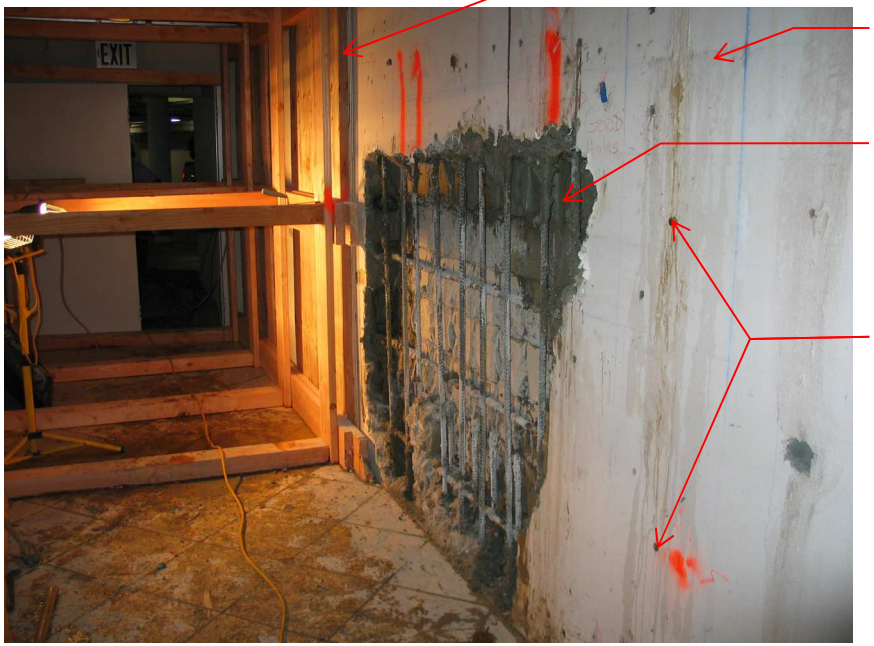
THICK WALL RESISTS GROUT INJECTION PRESSURE

CONCRETE WALL

THIN WALLS OF CMU BLOCK CAN FAIL UNDER GROUT PRESSURE



CMU BLOCK



TEMPORARY SHORING

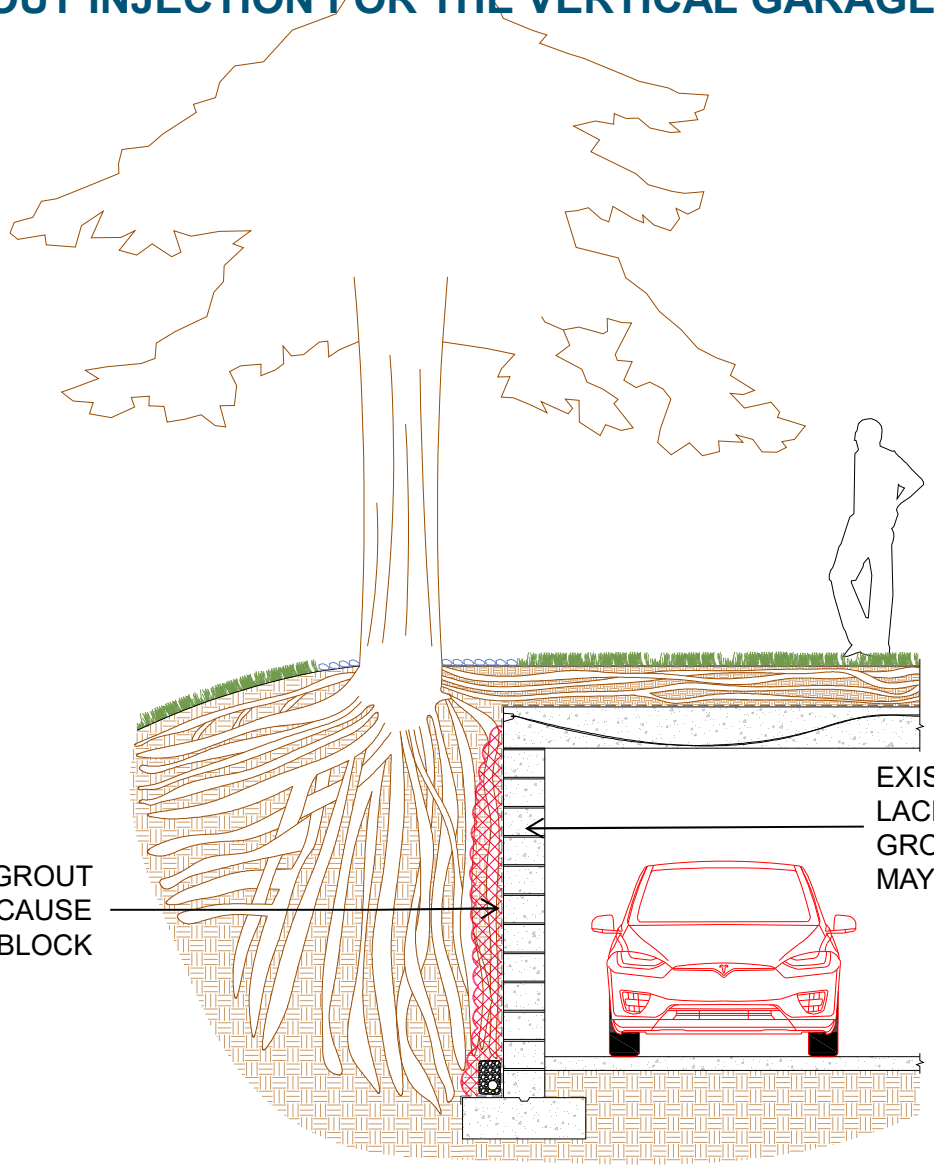
CMU BASEMENT WALL

AREA OF CMU DAMAGED BECAUSE INJECTION GROUT PRESSURE EXCEEDED CMU WALL STRENGTH

GROUT INJECTION PORTS

OPTION 4
REPAIR WATERPROOFING WITHOUT TREE REMOVAL [INFEASIBLE]

USING GROUT INJECTION FOR THE VERTICAL GARAGE WALLS

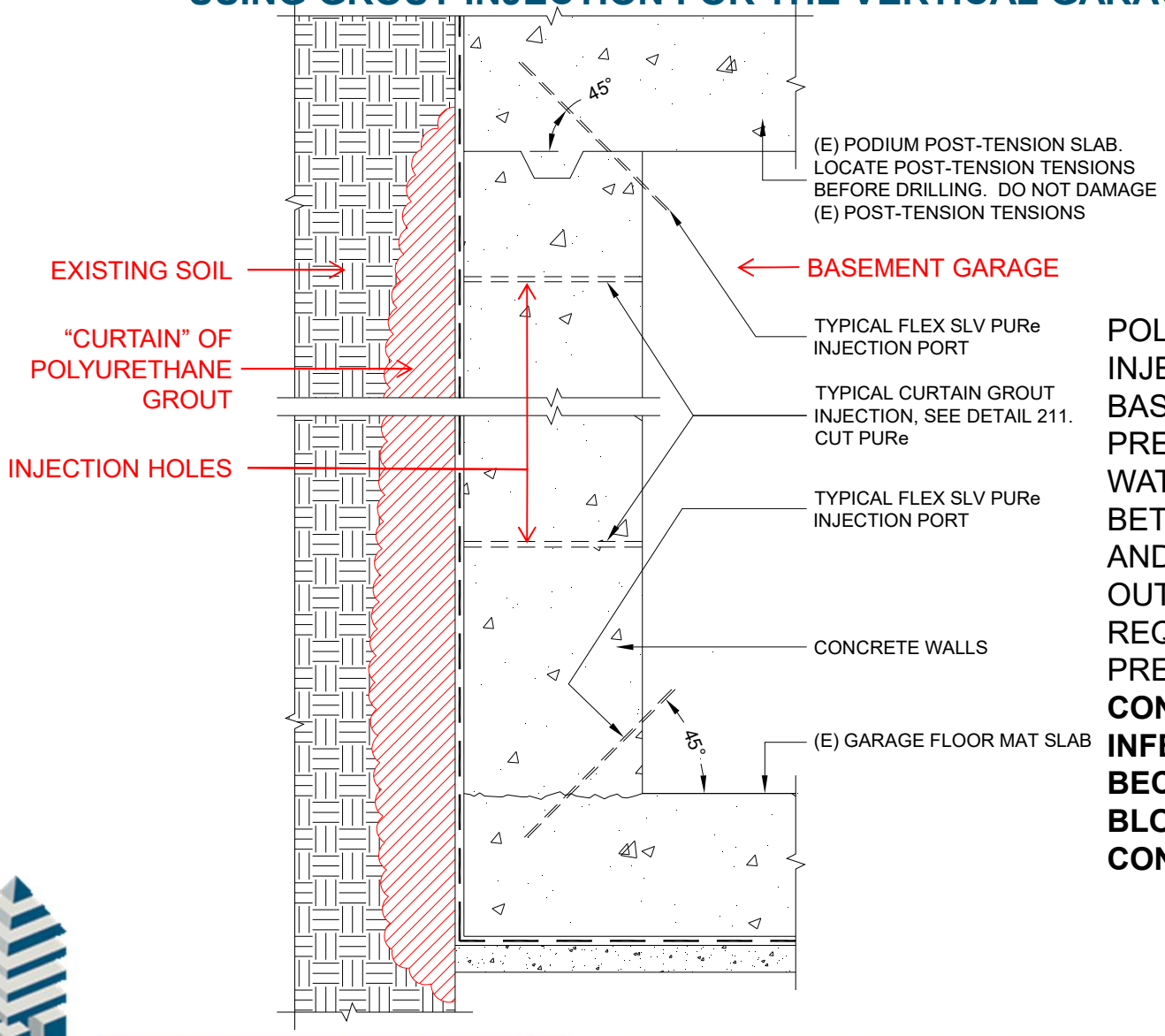


PROPOSED POLYURETHANE GROUT "CURTAIN" IS INFEASIBLE BECAUSE VERTICAL WALL IS MADE OF CMU BLOCK

EXISTING CMU WALL IN GARAGE LACKS STRENGTH REQUIRED FOR GROUT INJECTION OR BLOWOUT MAY OCCUR, SEE NEXT PAGE

OPTION 4
REPAIR WATERPROOFING WITHOUT TREE REMOVAL [INFEASIBLE]

USING GROUT INJECTION FOR THE VERTICAL GARAGE WALLS



POLYURETHANE GROUT IS INJECTED THROUGH THE BASEMENT WALLS AT HIGH PRESURE TO FORM A WATERPROOF "CURTAIN" BETWEEN THE GARAGE WALL AND THE EXISTING SOIL OUTSIDE. A CONCRETE WALL IS REQUIRED TO WITHSTAND THE PRESSURE OF THE GROUT **CONCLUSION: THIS OPTION IS INFEASIBLE FOR THE PROJECT BECAUSE THERE IS A CMU BLOCK WALL AND NO CONCRETE WALL**

APPENDIX: BACKGROUND INFORMATION
BUILDING & GARAGE - SITE INVESTIGATION

Investigation

Allana, Buick and Bers (ABBAE) performed a visual review of the interior and exterior of the exposed garage and podium areas prior to destructive testing.

We conducted site visits during the destructive testing, performed by a qualified licensed DT contractor, to observe and document the existing concealed conditions.

This included overburden layers, drainage composites, flashings, and waterproofing membranes of the podium and planter areas.

BUILDING & GARAGE - SITE INVESTIGATION FINDINGS

Findings

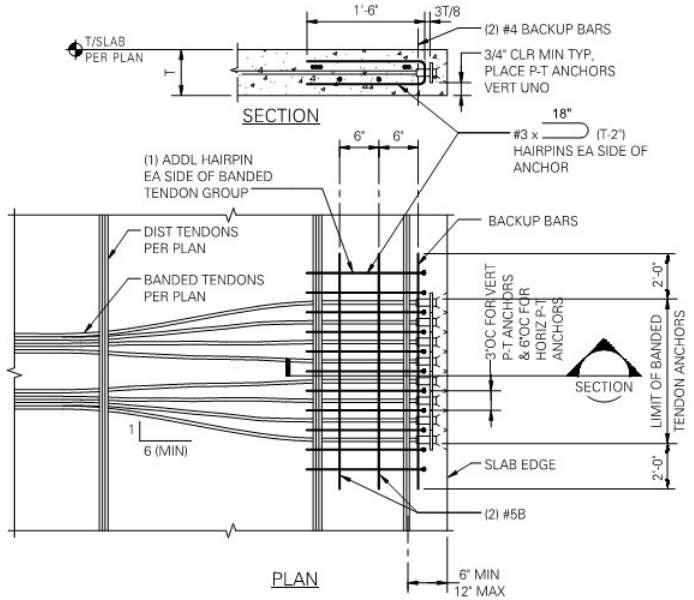
Visual Inspection: Visual inspection of the garage interior indicated numerous areas of water intrusion through the foundation walls and the podium slab. Efflorescence and rust stains indicated a history of moisture and the deterioration of reinforcing steel. The staining occurred on both the concrete masonry unit (CMU) foundation walls and the underside of the post-tensioned podium slab. There is significant water intrusion on the El Camino Real facing wall, corresponding with the large trees and landscaping.

Podium Waterproofing: Horizontal podium waterproofing membranes exhibited moisture below the membranes and leaks into the garage below. Courtyard waterproofing had water-filled blisters throughout. Some of the membrane deterioration is due to the age of the waterproofing, and some is damage from trees and other plantings over the waterproofing system.

The extensive network of roots over the podium area are causing damage to the waterproofing through abrasion and penetration. The fine roots are getting below the filter fabric and burrowing into the membrane. This creates pathways for water intrusion. Additionally, the membranes have poor adhesion to their structural substrates, which is allowing water intrusion to travel below the waterproofing.

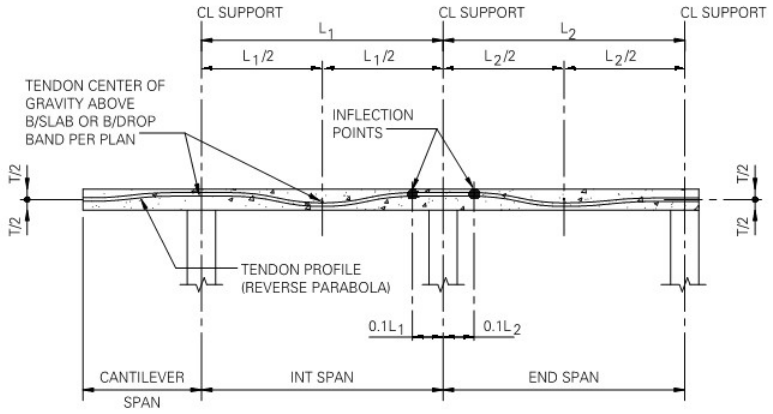
Foundation Walls: Destructive testing at the below grade foundation walls of the garage along El Camino Real was not practical due to the extent of trees and plantings adjacent to the wall along El Camino. ABBAE was able to observe the foundation wall waterproofing at the rear of the site. The waterproofing in the DT area had slipped significantly below grade, leaving an area of 16”-24” of below grade wall exposed without waterproofing. The failure mode is likely poor adhesion and improper anchorage spacing.

TYPICAL PT CABLE DETAILS



NOTE:
STUDRAILS MAY BE USED IN LIEU OF HAIRPINS PENDING STRUCTURAL ENGINEER OF RECORD APPROVAL.

15 ANCHORAGE AT ENDS OF BANDED TENDONS
SCALE: 3/4" = 1'-0" (03307)



18 TYPICAL POST-TENSIONED SLAB PROFILE
SCALE: 3/4" = 1'-0" (03303M)

POST-TENSION CABLE PHOTOS

OVERVIEW

POST-TENSION CABLES

DETAIL AT ANCHORS

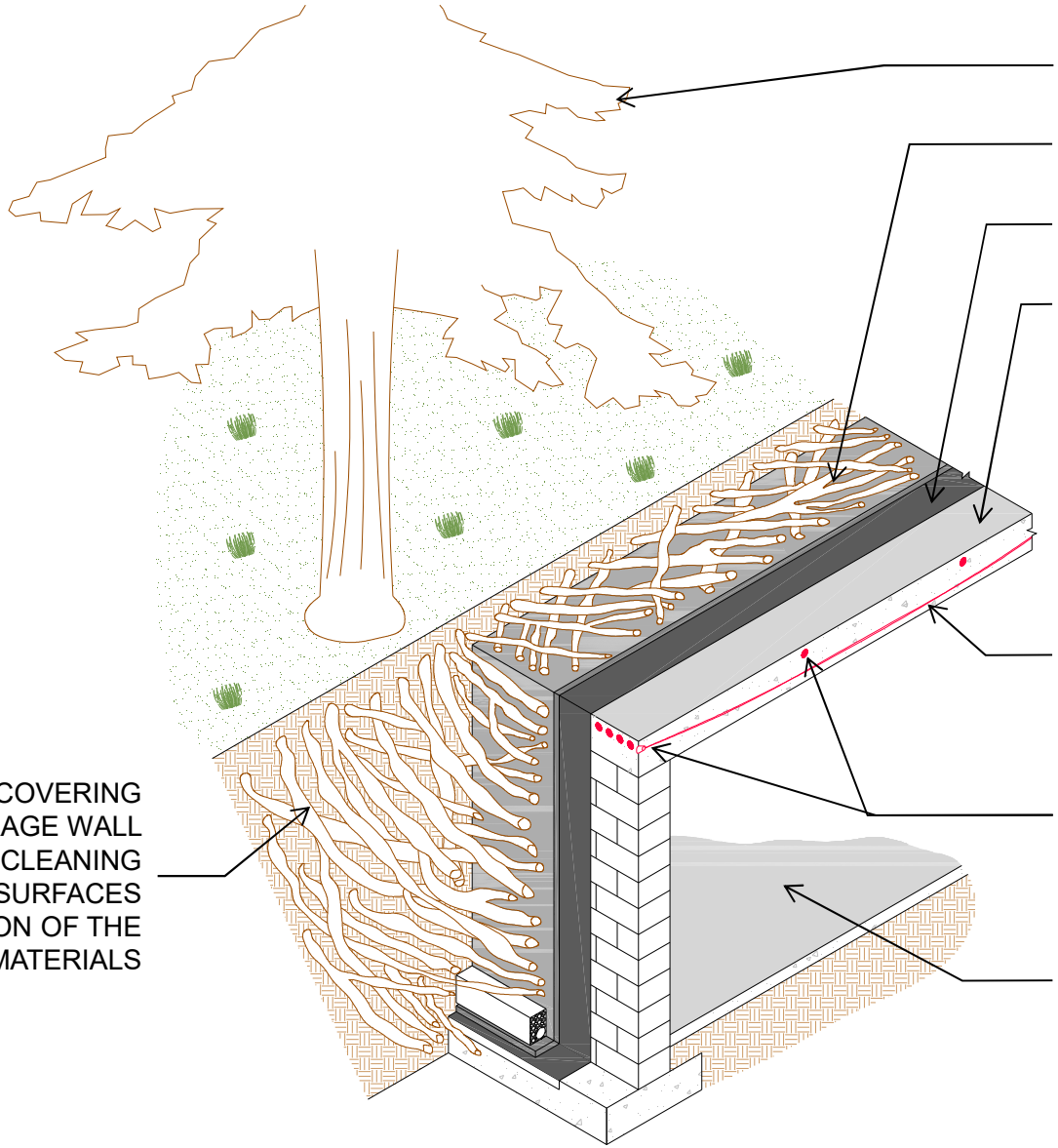
POST-TENSION CABLE SLEEVES

REBAR SLAB REINFORCEMENT

POST-TENSION CABLE ANCHORS LOCATED IN THESE HOLES

POST-TENSION CABLES

CUTAWAY VIEW - ROOTS INTERFERE WITH WATERPROOFING WORK



EXISTING TREES NEED TO BE REMOVED

EXISTING ROOTS

EXISTING WATERPROOFING

EXISTING PODIUM SLAB

EXISTING POST-TENSION CABLES

EXISTING POST-TENSION CABLE ANCHORS INACCESSIBLE FOR MAINTENANCE DUE TO EXISTING TREE ROOTS

EXISTING BASEMENT GARAGE

EXISTING TREE ROOTS COVERING THE PODIUM AND GARAGE WALL PREVENT THE PROPER CLEANING AND PREPARATION OF THE SURFACES AND THE INSTALLATION OF THE WATERPROOFING MATERIALS

PODIUM OVERVIEW

AREA OF EXCAVATION

ROOT EXCAVATION

EXPOST WATERPROOFING

THICK TANGLE OF TREE ROOTS PREVENTS REMOVAL AND REPLACEMENT OF WATERPROOFING BELOW

EXISTING WATERPROOFING DRAINAGE LAYER OF TOP SURFACE OF PODIUM

TYPICAL SPECIFICATION FOR CONCRETE PREPARATION FOR WATERPROOFING

1.1 PREPARATION FOR WATERPROOFING MEMBRANE APPLICATION

A. Concrete decks must be monolithic, smooth, and free of voids, spalled areas, laitance, honeycombs, and protrusions. Remove fins, ridges, and other projections and fill honeycomb, aggregate pockets, and other voids. Clean and prepare existing concrete surfaces using wire brush and other mechanical means.

B. Clean and prepare substrates according to manufacturer's written instructions. Provide clean, dust-free, and dry substrate for waterproofing application.

C. Mask off adjoining surfaces not receiving waterproofing to prevent spillage and overspray affecting other construction.

D. Close off deck drains and other deck penetrations to prevent spillage and migration of waterproofing fluids.

E. Remove grease, oil, form-release agents, paints, curing compounds, and other penetrating contaminants or film-forming coatings from concrete.

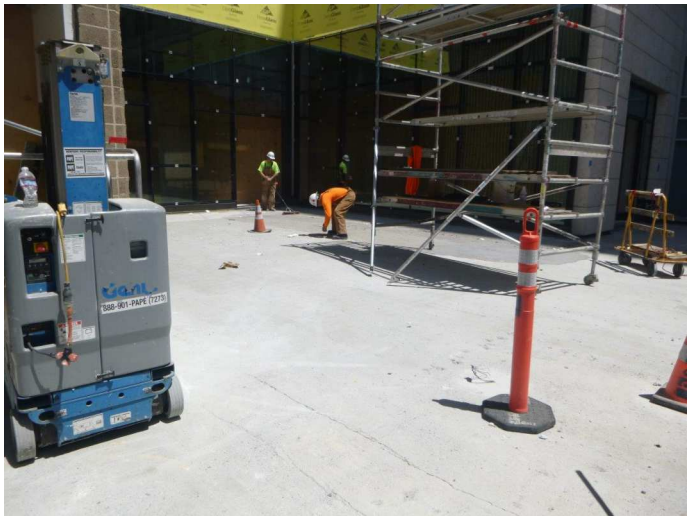
F. Remove fins, ridges, and other projections and fill honeycomb, aggregate pockets, and other voids.

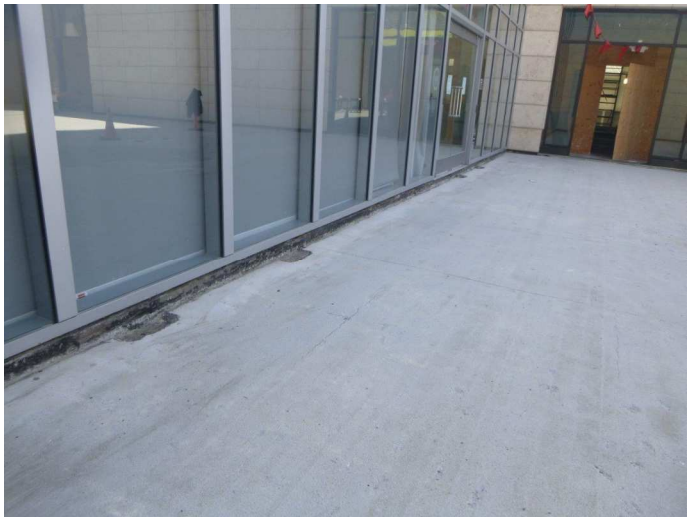
G. Clean existing concrete surfaces using wire brush and other mechanical means.

H. Proceed with installation only when substrate construction and preparation work is complete and in condition to receive waterproofing. Do not apply waterproofing to a damp or wet substrate.

PHOTOS OF CLEAN PODIUM SLAB

Existing waterproofing membrane must be completely removed. Then, existing concrete slab is to be cleaned free of all dirt, dust and debris and be completely dry before new waterproofing can be installed. This impossible with tree roots in the way





GROUT INJECTION PORT LAYOUT

GROUT INJECTION PORTS

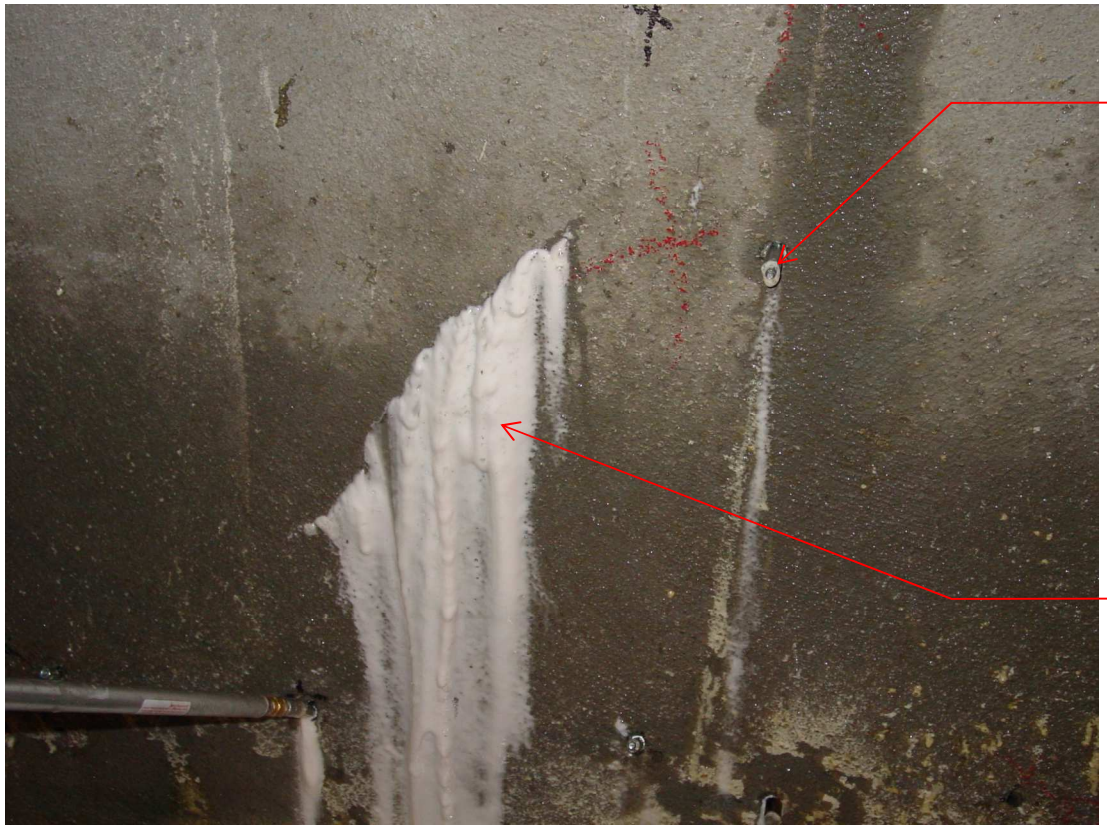
GROUT INJECTION PORTS ARE INSERTED INTO DRILLED HOLES AND TIGHTENED SECURELY IN PLACE

GROUT INJECTION PUMPS

GROUT INJECTION

PORTS ARE INJECTED IN SEQUENCE FROM BOTTOM TO TOP STARTING AT ONE END AND MOVING ACROSS THE WALL TO THE OTHER END

GROUT INJECTION



GROUT INJECTION OVERVIEW

CORE DRILLING BASEMENT WALL TO TEST RESULTS

CONCRETE BASEMENT WALL AFTER GROUT INJECTION

CORE DRILLING THROUGH WALL TO TEST RESULTS

GROUT INJECTION CORE

CORE OF CONCRETE BASEMENT WALL

POLYURETHANE FOAM GROUT HAS FILLED THE VOID AND BLOCKED OUT WATER

(E) WATERPROOFING MEMBRANE WAS NOT PROPERLY ATTACHED TO WALL, CREATING A VOID THAT ALLOWED WATER TO CLEAR INTO BASEMENT

Exhibit 3

KPFF engineers structural analysis report

45 Fremont Street, 28th Floor San Francisco, CA 94105 415.989.1004 kpff.com

February 14, 2019

Ken Rakestraw
SRGNC CRES, LLC
901 Mariners Island Boulevard, Suite 700
San Mateo, CA 94404

Subject: 1000 El Camino Real
Alternative repairs

Dear Mr. Rakestraw:

It is our understanding that the City of Menlo Park has requested that KPFF, as the structural engineer of record on the 1000 El Camino Real Remedial Repair Detailing project, investigate alternative structural schemes to removing the existing redwood trees on the south side of the existing building.

Post-tensioned concrete slab is a structural system wherein steel tendons are cast into the concrete and then stressed to thousands of pounds of force, which compresses the concrete and provides lift. These stressed tendons provide structural capacity in the concrete slab and are commonly used as an alternative to mild rebar reinforcement.

KPFF San Francisco has been designing post-tensioned concrete slab systems since the inception of the office in 1992. We have collaborated with Schwager-Davis to repair damaged post-tensioned concrete slabs on multiple projects.

Our analysis assumes that the existing redwood trees are to remain in place and the damaged existing waterproofing membrane is not repaired or replaced. In this scenario, the water will continue to intrude into the slab and walls, which may lead to the further degradation of the post-tensioned cables. Regardless of any structural repair or retrofit, the continued water intrusion means that the structural performance will degrade. KPFF does not recommend proceeding with any repair procedure unless the structure is waterproofed.

Option 2 - Steel beam retrofit option:
In this scenario, a combination of new structural steel framing and carbon fiber wrap will be used to support the podium loads. Structural steel girders, 24” deep, will be installed between every column. Structural steel beams, 24” deep and spaced at roughly 8’-0” on center, will span between girders. Carbon fiber wrap will be installed on the underside of the existing slab so that the slab may span from steel beam to steel beam.

KPFF assumes in this approach that the remaining concrete slab has enough shear capacity such that it can bear directly atop the new steel beams. Because there is no non-destructive method to test the remaining structural capacity of the existing post-tensioned cables, KPFF assumes in this scenario that there is no remaining load-bearing capacity in the existing podium slab. Therefore, the repair would need to be installed underneath the entirety of the podium slab. Based on the above assumptions and its impacts, KPFF does not believe Option 2 to be a feasible retrofit option.

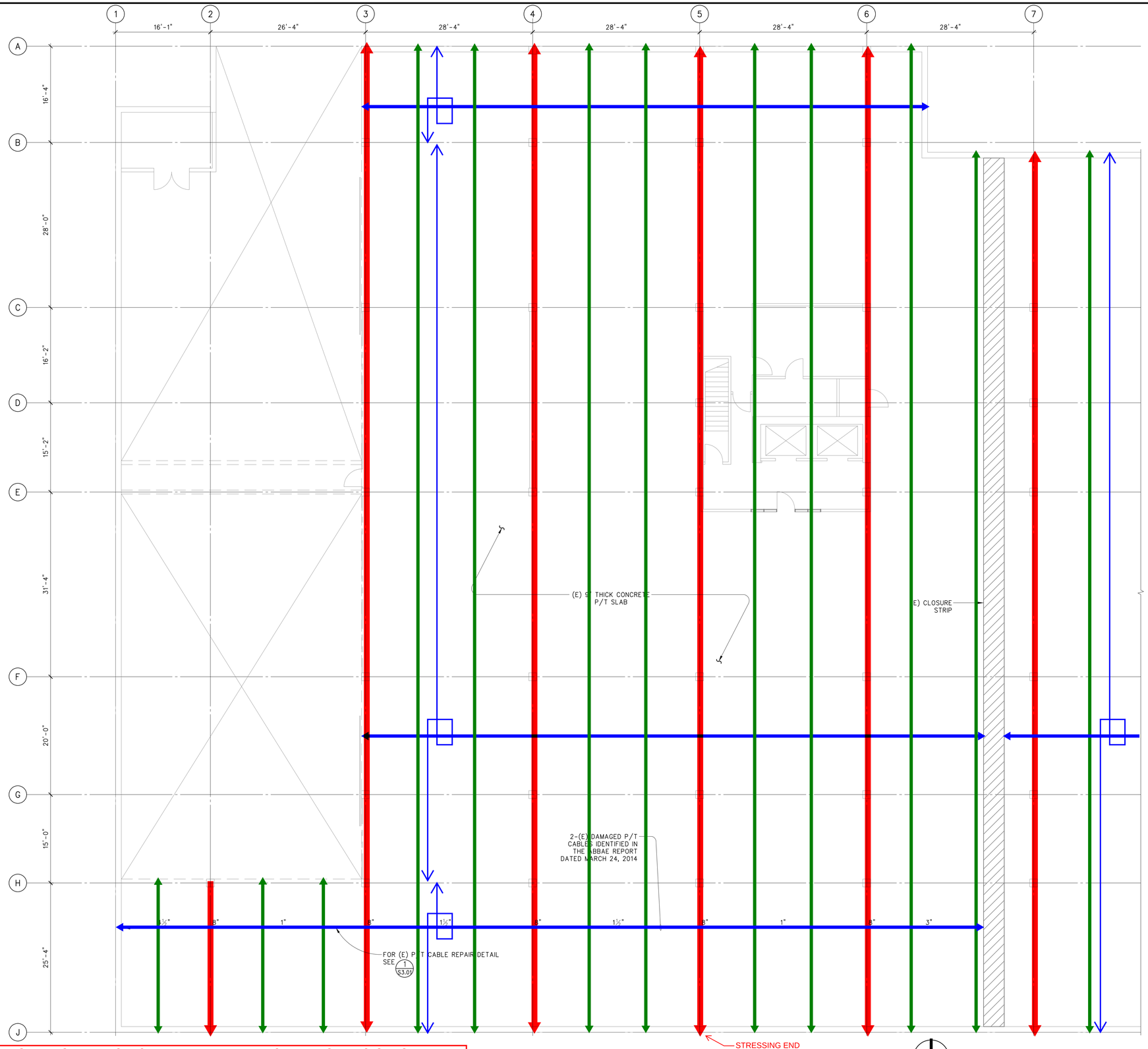
Option 4 - Repair without tree removal:
Per input we received from post-tension repair specialist Schwager Davis, it is not feasible to repair the damaged tendons from below. The existing post-tensioned cables are under thousands of pounds of

pressure, and damaging a tendon under stress would lead to life-safety issues for the personnel in the area. There is only one method to determine if a tendon is under pressure or if it has been damaged and no longer carries any force: to examine the tendon end, which is currently inaccessible due to the existing trees.

If you have any questions about the alternative options, feel free to give us a call.

Sincerely

Greg Wagner, S.E., Principal
GW/CM/1700132-00-20190214-L1



Plaza level - Existing post-tensioned cable layout

PLAZA LEVEL PLAN - SECTOR A

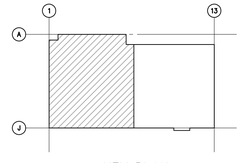
SCALE: 1/8" = 1'-0" | 1 | KPFF K0000 | S2.01

REFERENCE NORTH

DEMOLITION NOTES:

1. CONTRACTOR SHALL HAVE MINIMUM OF 5 YEARS EXPERIENCE IN DETENSIONING AND RETENSIONING P/T CABLES IN EXISTING BUILDINGS.
2. DETENSIONING SHALL BE DONE IN SUCH A WAY AS TO NOT RELEASE ANCHORAGES AT FACE OF BUILDING.

KEY	
⟷	DISTRIBUTED CABLES
⟷	TEMPERATURE CABLES
⟷	BANDS (MULTIPLE TENDONS)



KEY PLAN

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SEOR Contact:
Greg Wagner
Day-to-Day Contact:
Mone Rinebold

1000 EL CAMINO REAL

MENLO PARK, CA

JB MATTESON REALTY

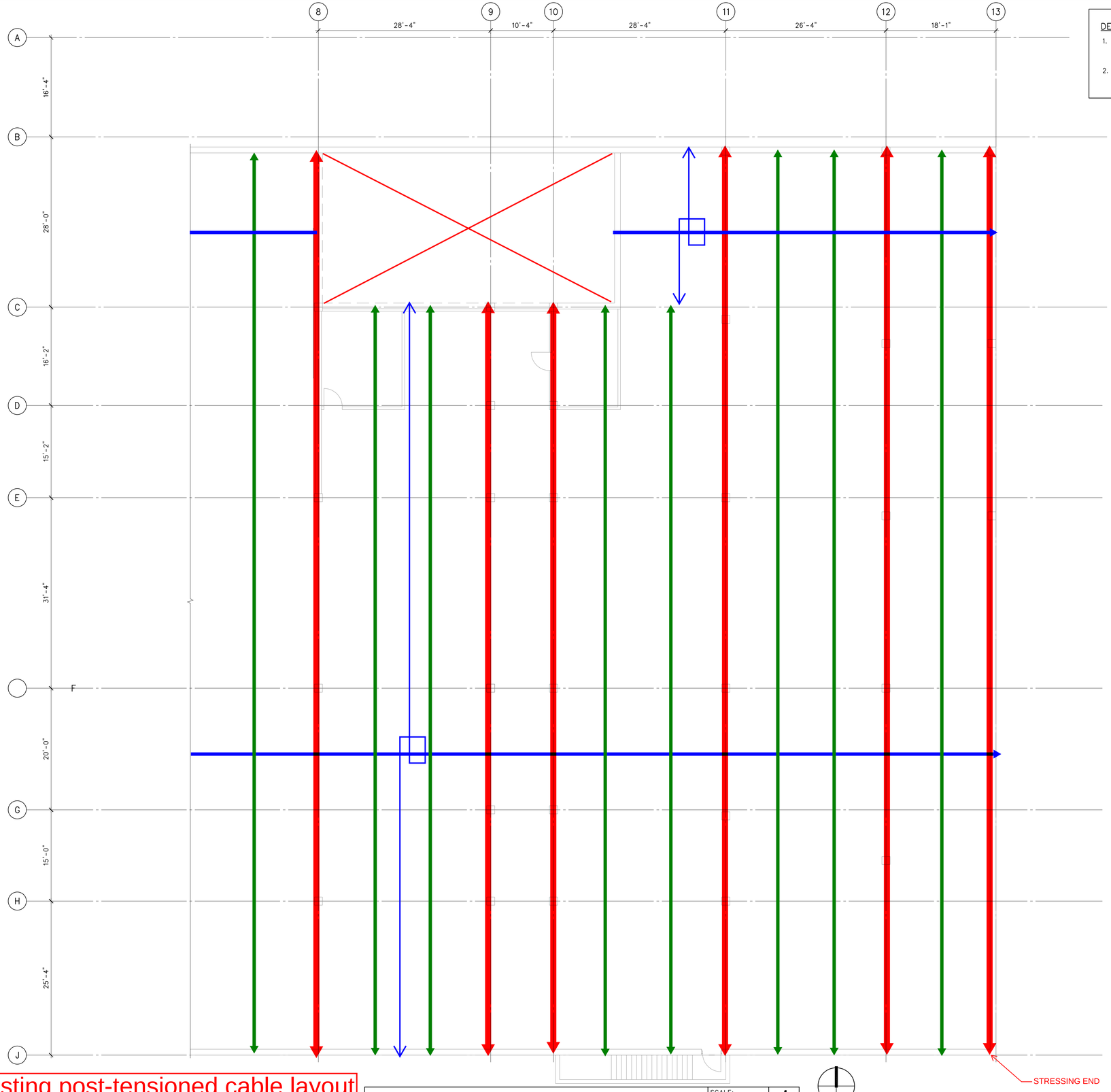
NO:	DATE:	REMARKS:

REVISIONS:

DRAWING TITLE:
PLAZA LEVEL PLAN - SECTOR A

PROJECT NO.:	ISSUE DATE:
K1700132.00	12/18/18
DRAWN BY: KA	CHECKED BY: MR

SHEET NUMBER: **S2.01**



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KEY	
⟷	DISTRIBUTED CABLES
⟷	TEMPERATURE CABLES
⟷	BANDS (MULTIPLE TENDONS)

Plaza level - Existing post-tensioned cable layout

PLAZA LEVEL PLAN - SECTOR B

SCALE: 1/8" = 1'-0"

KPFF KO000 | 1 S2.02

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MENLO PARK, CA

JB MATTESON REALTY

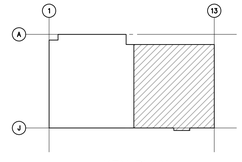
NO:	DATE:	REMARKS:

REVISIONS:

DRAWING TITLE: PLAZA LEVEL PLAN - SECTOR B

PROJECT NO.:	ISSUE DATE:
K1700132.00	12/18/18
DRAWN BY: KA	CHECKED BY: MR

SHEET NUMBER: **S2.02**



KEY PLAN

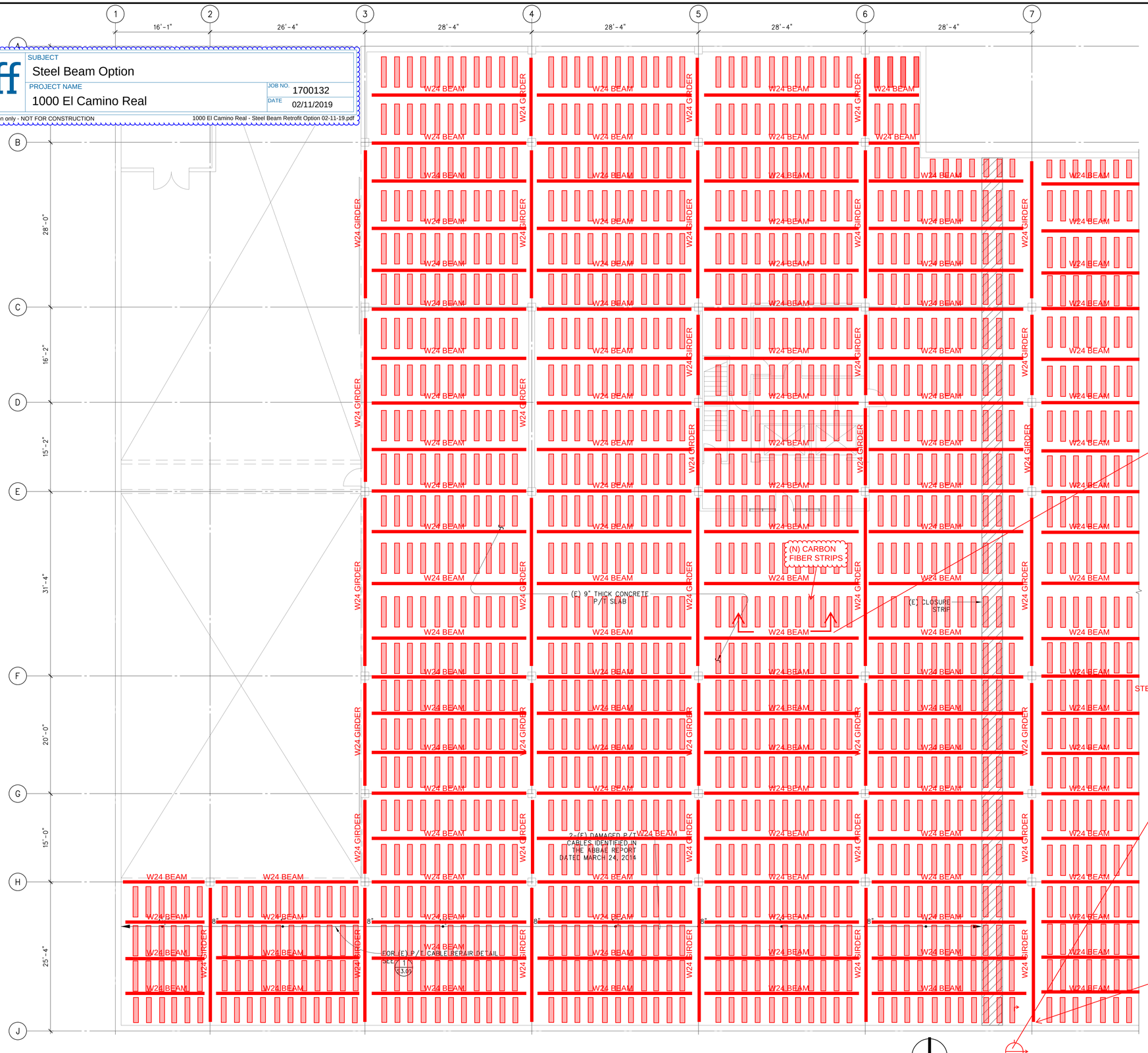
SUBJECT
Steel Beam Option

PROJECT NAME
1000 El Camino Real

JOB NO. 1700132
DATE 02/11/2019

Issued for Coordination only - NOT FOR CONSTRUCTION

1000 El Camino Real - Steel Beam Retrofit Option 02-11-19.pdf



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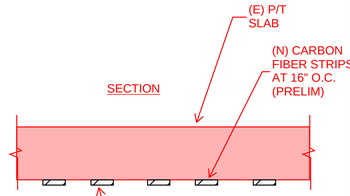
2. DETENSIONING SHALL BE DONE IN SUCH A WAY AS TO NOT RELEASE ANCHORAGES AT FACE OF BUILDING.

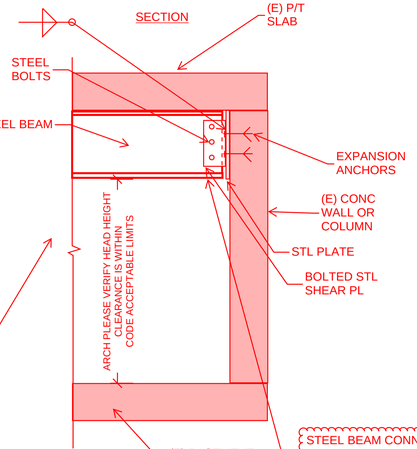
KPFF ASSUMPTIONS LISTED BELOW:
1. ALL (E) P/T BANDS RUNNING NORTH/SOUTH HAVE BEEN DAMAGED BY (E) TREE ROOTS AND HAVE NO REMAINING STRUCTURAL CAPACITY.
2. REPAIR OF ALL DAMAGED (E) P/T BANDS IS NOT POSSIBLE BECAUSE ACCESS TO TENDON ENDS IS BLOCKED BY (E) TREES.
3. (E) CONCRETE PODIUM SLAB HAS ENOUGH SHEAR CAPACITY SUCH THAT SLAB CONNECTION TO (N) STEEL BEAMS DO NOT REQUIRE ADDITIONAL REINFORCEMENT FOR SHEAR.
4. (E) CONCRETE PODIUM SLAB HAS ENOUGH NEGATIVE MOMENT CAPACITY IN TOP OF SLAB SUCH THAT CARBON FIBER STRIPS ARE NOT REQUIRED AT THE TOP OF SLAB.

SECTION

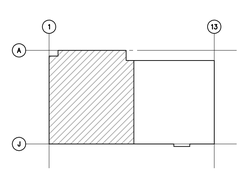


STRIPS OF CARBON FIBER ADHERED TO THE (E) SLAB TO PROVIDE REINFORCEMENT FOR THE (E) SLAB IN BETWEEN THE NEW STEEL BEAMS. NOTE THAT THE CARBON FIBER STRIPS ARE ONLY SHOWN GRAPHICALLY IN ONE BAY, BUT THIS WOULD BE IN ALL BAYS, TYPICAL. -KPFF

SECTION



STEEL BEAM CONNECTIONS TO THE EXISTING CONCRETE WALLS OR COLUMNS ARE TO USE BOLTED STEEL SHEAR PLATES THAT ATTACH TO A STEEL PLATE WITH POST-INSTALLED EXPANSION ANCHORS IN THE COLUMN/WALL. -KPFF



KEY PLAN

REFERENCE NORTH

PLAZA LEVEL PLAN - SECTOR A

SCALE: 1/8" = 1'-0"
KPFF K0000
1
S2.01

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Day-to-Day Contact:
Mone Rinebold

1000 EL CAMINO REAL

MENLO PARK, CA

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NO.	DATE	REMARKS

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PLAZA LEVEL PLAN - SECTOR A

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SUBJECT
Steel Beam Option

PROJECT NAME
1000 El Camino Real

JOB NO. 1700132

DATE 02/11/2019

Issued for Coordination only - NOT FOR CONSTRUCTION

1000 El Camino Real - Steel Beam Retrofit Option 02-11-19.pdf

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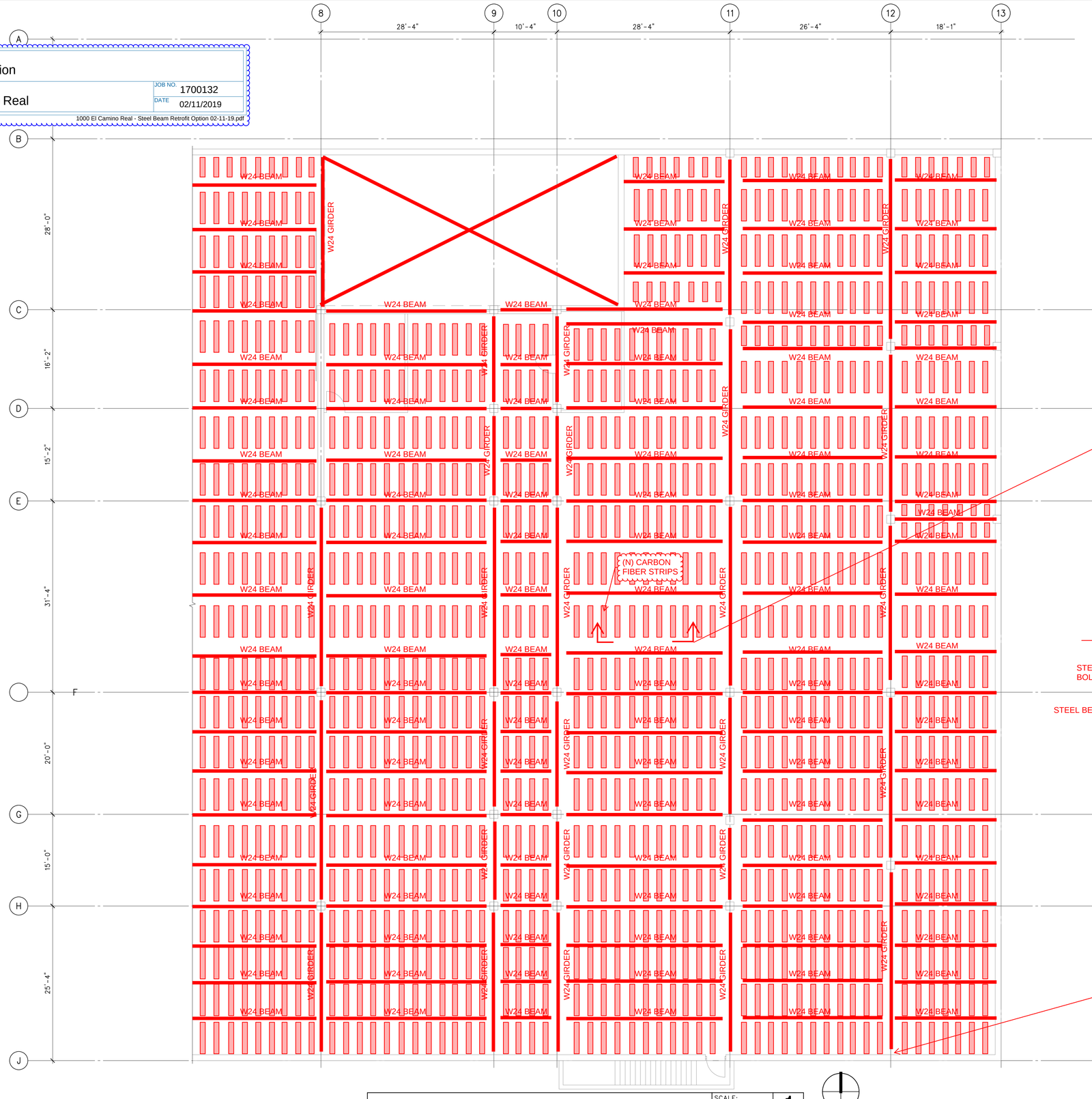

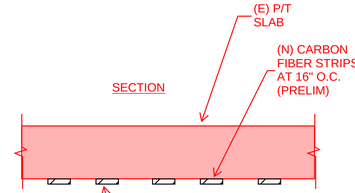

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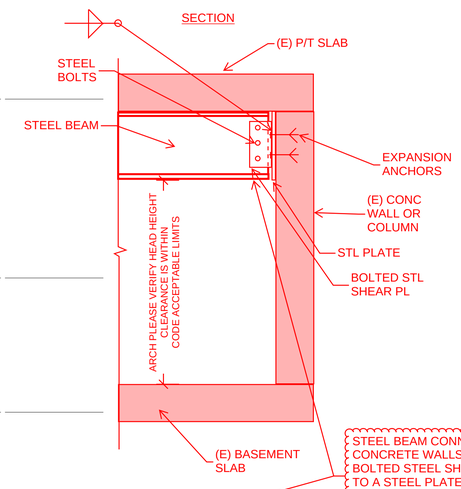

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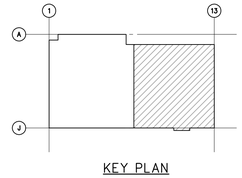

KEY PLAN

PLAZA LEVEL PLAN - SECTOR B

SCALE: 1/8" = 1'-0"

KPFF K0000 S2.02

REFERENCE NORTH

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PLAZA LEVEL PLAN - SECTOR B

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K1700132.00	12/18/18
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SHEET NUMBER: **S2.02**

Exhibit 4

SBCA Tree Consulting arborist response to alternative options

SBCA TREE CONSULTING

1534 Rose Street, Crockett, CA 94525
Phone: (510) 787-3075
Fax: (510) 787-3065
Website: www.sbcatree.com

Steve Batchelder, Consulting Arborist
WC ISA Certified Arborist #228
CUFC Certified Urban Forester #134
CA Contractor License #(C-27) 53367
E-mail: steve@sbcatree.com

Molly Batchelder, Consulting Arborist
WC ISA Certified Arborist #9613A
ISA Tree Risk Assessment Qualified
E-mail: molly@sbcatree.com

Date: Amended 2/19/19

To: Ken Rakestraw

Project: 1000 El Camino Real. (*Water Sealing of Garage Roof)*

Subject: Arborist Comments pertaining to arborist experience and possible options available.

Assignment: Arborist was asked to comment on three options presented for possible resolution of the treatment of seven Coast Redwood trees (*Sequoia sempervirens*) currently designated for removal. Arborist was also asked to provide some background on our background and discussion of what constitutes a "stand of trees".

What Constitutes a Stand of Trees? - A stand of trees is a grouping of trees, generally of the same species, but not always, where trees benefit from mutual sharing of resources and protection. It has been shown that trees do communicate on a wider level than previously thought. Therefore a stand is not necessarily limited to very small and limited groupings. The concern for wind sail forces on the trees that remain after removal of some trees from a stand becomes critical whenever significant root loss also occurs to the remaining trees.

Arborist experience:

Steve Batchelder has been a Certified Arborist with the International Society of Arboriculture since 1985 and a Certified Urban Forester since 2010. He has experience in seedling tree production and operated a tree trimming service for a number of years. Steve is also a licensed landscape contractor. Molly is a certified arborist as well as being Tree Risk Assessor Qualified (TRAQ).

Experience over many years includes:

- El Cerrito Greenway planting in 1992
- City of Berkeley, University Avenue Median Planting 1995.
- Consulting on World Trade Center, Pixar, Linkedin and Chiron (now Novartis) where we first used structural soil with Peter Walker & Partners
- Currently working with Facebook (last 10 years) in Menlo Park.
- We have participated in volunteer projects in Crockett, Richmond, El Cerrito, the John Muir site in Martinez.
- We have many other projects we could name as well as cities and school districts we have worked with.

For additional regarding SBCA TREE Consulting please visit the web site listed above.

COMMENTS ON THREE OPTIONS

Option 3, Phased Tree Removal – Phased tree removal will not resolve the primary issues of the root intrusion, tree safety and health. It is true that the root anchoring[1] may not be compromised fully for those redwood trees farther from the parking garage. Significant root loss would still occur. The source of moisture for the trees is the irrigated turf that will no longer be available when roots are severed.

When trees are removed from a stand[2], the trees that remain will be subject to greater wind forces. Stands of trees tend to buffer one another from the wind forces. The combination of root loss and increase in wind force will increase the potential for root failure and associated liability.

Option 4, Repair Without Tree Removal – Arborist has viewed the exploratory excavation which exposed roots as well as the top of the parking structure. Repair of the garage roof surface requires that roots be severed outside of the garage wall.

For many of the trees, this location where root cutting will occur is within "the primary root plate". This is a distance of three times the tree diameter from the base of the tree[3]. If roots are severed within the primary root plate, industry standard generally requires that the tree be removed due to safety issues if there is a significant "target" the tree could impact.

The recent instance of root cutting from trenching in Washington Park in San Francisco required the removal of a number of mature Canary Island Pines Trenching operation severed roots within the primary root plate necessitating their removal. The potential target rating was high as in this instance.

Tree health would also be compromised and lead to decline and death. The sandy irrigated soil on the garage roof is the primary reason the trees have done so well. Large trees such as these have significant moisture needs. Without that source of moisture these large trees will surely go into decline. Many coast redwood trees in the Bay Area have been stressed and dying lately, even without serious root loss.

Option 5, Relocation of trees – It is not possible to successfully relocate such large trees. The cost of moving a 90 foot tall redwood tree would be more than the value of the tree. There would be almost no chance that the trees would survive for long. The height and wind sail would make them unstable and unsafe.

End Comments

[1] Roots have three main functions: 1) uptake water and nutrients; 2) carbohydrate storage; 3) anchor the plant to the ground.

[2] Tree Stand- "Tree community that possesses sufficient uniformity in composition, constitution, age, spatial arrangement, or condition to be distinguishable from adjacent communities."
https://definedterm.com/stand_of_trees

[3] Primary Root Plate (PRP) - For example, a tree with an diameter of 20" measured at 4.5 feet above soil grade will have a PRP equal to a 60 foot radial distance from the tree base.

1000 El Camino Real

Exhibit 5

Revision 1

SBCA Tree Consulting Arborist Tree Valuation Report & Distance Calculations

SBCA TREE CONSULTING

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Molly Batchelder, Consulting Arborist
WC ISA Certified Arborist #9613A
ISA Tree Risk Assessment Qualified
E-mail: molly@sbcatree.com

Date: Amendment 2, 2-13-19

To: Ken Rakestraw
SRGNC CRES, LLC

Subject: Valuation of 76 trees located at 1000 El Camino Real.

Assignment: Arborist was asked to value trees located on the property as well as adjacent City Trees.

Project: 1000 El Camino Real, Menlo Park, water sealing of parking garage.

Source: Tree Valuation was conducted in accordance with the WC-ISA publication "Council of Tree & Landscape Appraisers: Guide for Plant Appraisal, 9th edition.

Summary

Trees valued are located on the parcel at 1000 El Camino Real and adjacent street trees. A total of 76 trees were surveyed and valued. Eleven of the trees valued are City Street trees located in sidewalk planting locations. The value of all 76 trees was estimated to be $703,400.

The value of the seven trees (#1 thru 4 and #7 thru 9) that are currently designated for removal is $157,500.

Appendix 1 – Tables of individual tree values and cost of replacement trees
Appendix 2 – Tree Location Map

Tree species and numbers identified with designated Species Class and Species Group assignments.

Species	*# Trees*	*Species Class*	*Species Group*
Acer palmatum	*6*	*2*	*2*
Afrocarpus gracilior	*18*	*2*	*2*
Eucalyptus nicholii	*2*	*2*	*3*
Lagerstromea (hybrid)	*6*	*1*	*1*
Liquidambar styraciflua	*2*	*3*	*2*

Platanus x hispanica	*7*	*1*	*3*
Quercus agrifolia	*5*	*1*	*3*
Quercus ilex	*2*	*2*	*2*
Sequoia sempervirens	*28*	*1*	*4*

Tree Valuation, Source and Methodology

This tree valuation report was requested by City Arborist and prepared according to the standards for tree valuation presented in GUIDE FOR PLANT APPRAISAL, published by the International Society of Arboriculture, 2000, Ninth Edition, as requested by City Arborist.

Information regarding tree species is from the publication: SPECIES CLASSIFICATION AND GROUP ASSIGNMENTS, published by the International Society of Arboriculture.

Tree valuation is determined by using the *Trunk Formula* method as the tree is larger than the standard 24" box size utilized in tree valuation.

Trunk Formula Method of Determining Tree Value

The current price for a 24-inch box tree, installed in the landscape, is $516 (Council of Tree & Landscape Appraisers). Value is affected by tree species, tree condition and the location in which the tree is growing. The terms below are used is the valuation Table 2.

- **Species** – Tree species is identified by the arborist providing the valuation. The tree species provided both Class and Group assignments for different tree species. The species Class and Group ratings are discussed below:
    - **Species Class** – The class reflects how well the tree species is suited to the area and the specific site conditions.
    - **Species Group** – The group rating reflects the rate of growth for the tree species. The group rating determines the *basic price per square inch* of the trunk area for the different species.
- **DBH** - Diameter at Breast Height, measured at 4.5 feet above the average soil grade. Tree valuation is based upon DBH measurements. Multi-stemmed trees based on the sum of the cross sectional area of all stems measured at 4.5 feet.
- **Trunk Area** – The surface area of the cross sectional area of the tree trunk measured at 4.5 feet above the soil grade (DBH).
- **Species Price per Square Inch**. – Determined from Species Group rating.
- **Base Value** – This is the Trunk Area multiplied by the price per square inch.
- **Condition** – This reflects the health and structural condition of the trees assigned by arborist.
- **Location** – The location factor is assigned to the tree based upon the average of three conditions. The factors that were considered are the "*Site", the "Contribution" and the "Placement*".
- **Tree Value** – Determined by first adding the installed price of a 24" box size tree ($516) to the Basic Value and then factor by Species Class, tree condition and location. The tree value is rounded to the nearest $100.

Valuation submitted by:

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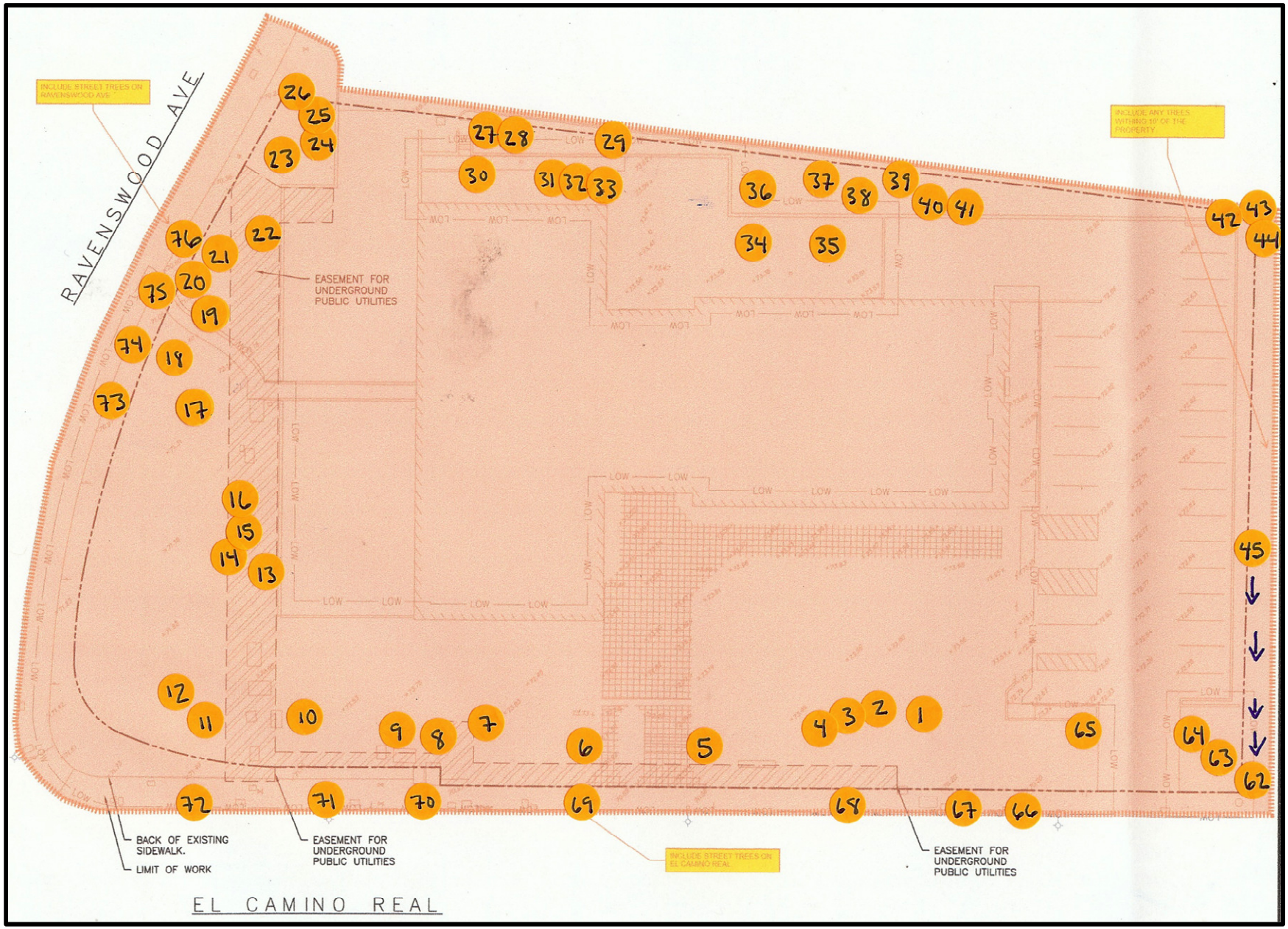

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COLUMN HEADING DESCRIPTIONS

Tag# - Indicates the number tag attached to tree
Species - Scientific name; Asterisk (*) indicates proposed for removal
Common Name - Vernacular name
DBH - Diameter measured in inches at 4.5 feet above soil grade, unless otherwise indicated
Spread - In feet
Health -Tree Health: E is Excellent, G is Good, F is Fair, P is Poor, D is Dead or Dying
Structure- Tree Structural Safety: E is Excellent, G is Good, F is Fair, P is Poor, H is Hazardous
Heritage Tree - Attaining City of Menlo Park Heritage Tree Status: 1 is Yes
Suitability for Retention - Based on Tree Condition: G is Good, F is Fair, P is Poor
RPZ- Root Protection Zone: The radial distance in feet from base of tree that is to be fenced off from all construction access until designated by a certified arborist.
Center Tree to Wall - Distance from the edge of the wall to the center of the tree.
Root Crown to Wall - Distance of the closest edge of the root crown to the edge of the wall.
PRP- Primary Root Plate: The radial distance in feet from the base of the tree where root severance can increase risk of tree failure by roots.
Notes - See below

Tag #	Species	Common nam	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes
1	*Sequoia sempervirens* *	Coast Redwood	40	90	G	G	1	G	40	3.5'	minus 8"	10'	Estimated diameter of the PRP is 26.5'
2	*Sequoia sempervirens* *	Coast Redwood	37	90	G	G	1	G	37	1' 4"	minus 1' 8"	9.25'	Estimated diameter of the PRP is 24.5'
3	*Sequoia sempervirens* *	Coast Redwood	35	90	G	G	1	G	35	5'	2' 6"	8.75'	Estimated diameter of the PRP is 23.5'
4	*Sequoia sempervirens* *	Coast Redwood	39.5	90	G	G	1	G	40	9' 4"	6' 8"	10'	Estimated diameter of the PRP is 26.5'
5	*Lagerstroemia spp* *	Crepe Myrtle	7	25	G	G		G	7			1.75'	Powdery mildew, Codominant
6	*Lagerstroemia spp* *	Crepe Myrtle	6	20	G	G		G	6			1.5'	
7	*Sequoia sempervirens* *	Coast Redwood	39	90	G	G	1	G	39	8'	5' 9"	9.75'	Estimated diameter of the PRP is 26'

8	*Sequoia sempervirens* *	Coast Redwood	35	90	G	G	1	G	35	10' 3"	7' 10"	8.75'	Estimated diameter of the PRP is 23.5'
9	*Sequoia sempervirens* *	Coast Redwood	37	90	G	G	1	G	37	8' 10"	6' 7"	9.25'	Estimated diameter of the PRP is 24.5'
10	*Quercus agrifolia*	Coast Live Oak	26.5	40	G	G	1	G	27	6' 7"	5' 5"	6.75'	Large pruning wounds, Tussock Moth, 26' from FOC

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Tag# - Indicates the number tag attached to tree
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Common Name - Vernacular name
DBH - Diameter measured in inches at 4.5 feet above soil grade, unless otherwise indicated
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Structure- Tree Structural Safety: E is Excellent, G is Good, F is Fair, P is Poor, H is Hazardous
Heritage Tree - Attaining City of Menlo Park Heritage Tree Status: 1 is Yes
Suitability for Retention - Based on Tree Condition: G is Good, F is Fair, P is Poor
RPZ- Root Protection Zone: The radial distance in feet from base of tree that is to be fenced off from all construction access until designated by a certified arborist.
Center Tree to Wall - Distance from the edge of the wall to the center of the tree.
Root Crown to Wall - Distance of the closest edge of the root crown to the edge of the wall. "minus" indicates overlap.
PRP- Primary Root Plate: The radial distance in feet from the base of the tree where root severance can increase risk of tree failure by roots.
Notes - See below

ABBREVIATIONS AND DEFINITIONS

Notes

Embedded Bark (EB) - AKA Included Bark, this is a structural defect where bark is included between the branch attachment so that the wood cannot join. Such defects have a higher propensity for failure.

Codominant (CD) - A situation where a tree has two or more stems which are of equal diameter and relative amounts of leaf area. Trees with codominant primary scaffolding stems are inherently weaker than stems, which are of unequal diameter and size.

Codominant w/ Embedded Bark (CDEB) - When bark is embedded between codominant stems, failure potential is very high and pruning to mitigate the defect is recommended.

Dead Wood (DW) - Interior dead branches noted in tree.

End Weight Reduction (EWR) - Reduction of end branch end weight recommended to reduce potential for limb failure.

Internal Decay (ID) - Noted by sounding with a mallet or visible cavities/large pruning wounds.

Multi (Multi) - Multiple trunks/stems emanate from below breast height (4.5' above soil grade).

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes
1	*Sequoia sempervirens* *	Coast Redwood	40	90	G	G	1	G	40	3.5'	minus 8"	10'	Estimated diameter of the PRP is 26.5'
2	*Sequoia sempervirens* *	Coast Redwood	37	90	G	G	1	G	37	1' 4"	minus 1' 8"	9.25	Estimated diameter of the PRP is 24.5'
3	*Sequoia sempervirens* *	Coast Redwood	35	90	G	G	1	G	35	5'	2' 6"	8.75	Estimated diameter of the PRP is 23.5'
4	*Sequoia sempervirens* *	Coast Redwood	39.5	90	G	G	1	G	40	9' 4"	6' 8"	10	Estimated diameter of the PRP is 26.5'
5	*Lagerstroemia spp* *	Crepe Myrtle	7	25	G	G		G	7			1.75	Powdery mildew, Codominant
6	*Lagerstroemia spp* *	Crepe Myrtle	6	20	G	G		G	6			1.5	
7	*Sequoia sempervirens* *	Coast Redwood	39	90	G	G	1	G	39	8'	5' 9"	9.75	Estimated diameter of the PRP is 26'
8	*Sequoia sempervirens* *	Coast Redwood	35	90	G	G	1	G	35	10' 3"	7' 10"	8.75	Estimated diameter of the PRP is 23.5'
9	*Sequoia sempervirens* *	Coast Redwood	37	90	G	G	1	G	37	8' 10"	6' 7"	9.25	Estimated diameter of the PRP is 24.5'
10	*Quercus agrifolia*	Coast Live Oak	26.5	40	G	G	1	G	27	6' 7"	5' 5"	6.75	Large pruning wounds, Tussock Moth, 26' from FOC
11	*Sequoia sempervirens*	Coast Redwood	48	90	G	G	1	G	48			12	23.5' from FOC
12	*Sequoia sempervirens*	Coast Redwood	37	70	G	G	1	G	37			9.25	32.5' from FOC
13	*Sequoia sempervirens*	Coast Redwood	32	70	G	G	1	G	32			8	

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes
14	*Sequoia sempervirens*	Coast Redwood	27	70	G	G	1	G	27			6.75	
15	*Sequoia sempervirens*	Coast Redwood	26.5	70	G	G	1	G	27			6.75	
16	*Sequoia sempervirens*	Coast Redwood	32	70	G	G	1	G	32			8	
17	*Sequoia sempervirens*	Coast Redwood	39	75	G	G	1	G	39			9.75	
18	*Sequoia sempervirens*	Coast Redwood	42.5	90	G	G	1	G	43			10.75	
19	*Sequoia sempervirens*	Coast Redwood	41	90	G	G	1	G	41			10.25	
20	*Sequoia sempervirens*	Coast Redwood	27.5	70	G	G	1	G	28			7	
21	*Sequoia sempervirens*	Coast Redwood	40	90	G	G	1	G	40			10	
22	*Sequoia sempervirens*	Coast Redwood	28	70	G	G	1	G	28			7	
23	*Quercus ilex*	Holly Oak	16	40	F	F	1	F	16			4	
24	*Sequoia sempervirens*	Coast Redwood	22.5	60	G	G	1	G	23			5.75	
25	*Sequoia sempervirens*	Coast Redwood	17.5	50	G	G	1	G	18			4.5	
26	*Quercus ilex*	Holly Oak	16	40	F	G	1	G	16			4	
27	*Sequoia sempervirens*	Coast Redwood	26	60	F	G	1	G	26			6.5	
28	*Sequoia sempervirens*	Coast Redwood	21	60	F	G	1	G	21			5.25	

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes
29	*Liquidambar styraciflua*	American Sweetgum	6.5	20	P	P		P	7			1.75	
30	*Acer palmatum* *	Japanese Maple	7.5	20	F	F		F	8			2	
31	*Acer palmatum* *	Japanese Maple	12 @ 1'	20	G	G		G	12			3	
32	*Acer palmatum* *	Japanese Maple	4 @ 4'	15	G	P		P	4			1	
33	*Acer palmatum* *	Japanese Maple	9 @ 2'	20	G	P		F	9			2.25	
34	*Acer palmatum* *	Japanese Maple	10 @ 18"	20	G	P		P	10			2.5	
35	*Acer palmatum* *	Japanese Maple	11 @ 18"	25	G	P		F	11			2.75	
36	*Quercus agrifolia*	Coast Live Oak	29 @ 3'	50	G	G	1	G	29			7.25	
37	*Sequoia sempervirens*	Coast Redwood	24	70	F	G	1	G	24			6	
38	*Sequoia sempervirens*	Coast Redwood	22.5	70	F	G	1	G	23			5.75	
39	*Sequoia sempervirens*	Coast Redwood	21	70	F	G	1	G	21			5.25	
40	*Sequoia sempervirens*	Coast Redwood	21	65	F	G	1	G	21			5.25	
41	*Sequoia sempervirens*	Coast Redwood	25	65	F	G	1	G	25			6.25	
42	*Liquidambar styraciflua*	American Sweetgum	8.5 @ 30"	20	P	F		P	7			2.25	

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes
43	*Eucalyptus nicholii*	Peppermint Gum	24	25	G	P	1	P	24			6	
44	*Eucalyptus nicholii*	Peppermint Gum	27.5	45	G	F	1	F	28			7	
45	*Afrocarpus gracilior*	African Fern Pine	11	15	G	P		P	11			2.75	
46	*Afrocarpus gracilior*	African Fern Pine	9	15	G	P		P	9			2.25	
47	*Afrocarpus gracilior*	African Fern Pine	7	15	G	P		P	7			1.75	
48	*Afrocarpus gracilior*	African Fern Pine	15 @ 1'	15	G	P	1	P	15			3.75	
49	*Afrocarpus gracilior*	African Fern Pine	18 @ 1'	15	G	P	1	P	18			4.5	
50	*Afrocarpus gracilior*	African Fern Pine	8	15	G	P		P	8			2	
51	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6			1.5	
52	*Afrocarpus gracilior*	African Fern Pine	5	15	G	P		P	5			1.25	
53	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6			1.5	
54	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6			1.5	
55	*Afrocarpus gracilior*	African Fern Pine	7	15	G	P		P	7			1.75	
56	*Afrocarpus gracilior*	African Fern Pine	4	15	G	P		P	4			1	
57	*Afrocarpus gracilior*	African Fern Pine	4	15	G	P		P	4			1	

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes
58	*Afrocarpus gracilior*	African Fern Pine	7	15	G	P		P	7			1.75	
59	*Afrocarpus gracilior*	African Fern Pine	3.5	15	G	P		P	4			1	
60	*Afrocarpus gracilior*	African Fern Pine	6	15	G	P		P	6			1.5	
61	*Afrocarpus gracilior*	African Fern Pine	7.5	15	G	P		P	8			2	
62	*Afrocarpus gracilior*	African Fern Pine	24 @ base	15	G	P	1	P	24			6	
63	*Quercus agrifolia*	Coast Live Oak	19	25	G	F	1	G	19			4.75	Topped, Tussock moth,15.5' from FOC
64	*Quercus agrifolia*	Coast Live Oak	23.5 @ 4'	25	G	F	1	G	24			6	Topped, Tussock moth, 23' from FOC
65	*Quercus agrifolia*	Coast Live Oak	27	25	G	P	1	G	27			6.75	Topped, Tussock moth, CDEB, 24' from FOC
66	*Platanus x hispanica*	London Plane	14.5	50	G	G		G	15			3.75	
67	*Platanus x hispanica*	London Plane	2	15	G	G		G	2			1	
68	*Platanus x hispanica*	London Plane	7.5	25	F	G		G	8			2	
69	*Platanus x hispanica*	London Plane	4.5	25	G	G		G	5			1.25	
70	*Platanus x hispanica*	London Plane	7.5	25	F	G		G	8			2	
71	*Platanus x hispanica*	London Plane	6.5	25	F	F		G	7			1.75	
72	*Platanus x hispanica*	London Plane	8	25	G	F		G	8			2	

Tag #	Species	Common name	DBH	Spread	Health	Structure	Heritage Tree	Suitability for Retention	RPZ	Center Tree to Wall	Root Crown to Wall	PRP	Notes
73	*Lagerstroemia spp*	Crepe Myrtle	11	25	G	P		P	11			2.75	Lean to street, Breakouts, 2' square root barrier
74	*Lagerstroemia spp*	Crepe Myrtle	9 @ 4'	25	F	F		P	9			2.25	Redwoods out competing for light, 2' square root barrier, breakout
75	*Lagerstroemia spp*	Crepe Myrtle	5	20	P	P		P	5			1.25	Redwoods out competing for light, poor pruning,, 2' square root barrier
76	*Lagerstroemia spp*	Crepe Myrtle	4	20	P	P		P	4			1	Redwoods out competing for light,breakout, 2' square root barrier

40

	Species	Common Name	Total Amount	Heritage Tree Amount	Overall Retention Suitability	Comments
1	*Acer palmatum*	Japanese Maple	6	0	G-P	Two display large pruning wounds; two have significant girdling root issues; Two have poor branch attachments; #31 is worthy of transplant
2	*Afrocarpus gracilior*	African Fern Pine	18	3	P	Hedged; Growing below pavement grade; DBHs were estimated do to limited access
3	*Eucalyptus nicholii*	Peppermint Gum	2	2	F-P	Located at NE corner of property; Structural problems
4	*Lagerstroemia spp*	Crepe Myrtle	6	0	G-P	The 4 street trees are outcompleted for light by adjacent redwoods, planted in root barriers, some display large rip outs; Two trees along El Camino are nice specimens
5	*Liquidambar styraciflua*	American Sweetgum	2	0	P	Poor specimens, recommend removal
6	*Platanus x hispanica*	London Plane	7	0	G	All street trees, some pavement uplift; one is blocking street light; Some display leans towards the street likely due to adjacent redwoods
7	*Quercus agrifolia*	Coast Live Oak	5	5	G	Trees along El Camino have received poor pruning in the past; Tree located on north side of building is a fine specimen; All are valuable trees and worthy of retention efforts
8	*Quercus ilex*	Holly Oak	2	2	F-G	Out competed for light by redwoods and not in best of health; Mildew issues
9	*Sequoia sempervirens*	Coast Redwood	28	28	G	Valuable trees; Those on north side of property smaller in size likely due to limited soil volume
		Totals:	**76**	**40**		

Appendix 1
Tree Valuation Data

Tree No.	Species	Working DBH	Trunk Area (TA)	Trunk Area of Replacement Tree (TAR) Group	Species Price per square inch. Group	Installed Cost of 24 " box size	Species Class	Base Value	Condition	Location	Tree Value	Value To Closest $100
1	*Sequoia sempervirens*	40	1256	4.75	36.36	516	0.9	$41,461.91	0.9	0.9	$ 33,584	$ 33,600
2	*Sequoia sempervirens*	37	1074.665	4.75	36.36	516	0.9	$35,527.90	0.9	0.9	$ 28,778	$ 28,800
3	*Sequoia sempervirens*	35	961.625	4.75	36.36	516	0.9	$31,828.78	0.9	0.9	$ 25,781	$ 25,800
4	*Sequoia sempervirens*	39.5	1224.7963	4.75	36.36	516	0.9	$40,440.79	0.9	0.9	$ 32,757	$ 32,800
5	*Lagerstroemia spp*	7	38.465	2.09	82.82	516	0.9	$3,227.32	0.9	0.9	$ 2,614	$ 2,600
6	*Lagerstroemia spp*	6	28.26	2.09	82.82	516	0.9	$2,466.66	0.9	0.9	$ 1,998	$ 2,000
7	*Sequoia sempervirens*	39	1193.985	4.75	36.36	516	0.9	$39,432.53	0.9	0.9	$ 31,940	$ 31,900
8	*Sequoia sempervirens*	35	961.625	4.75	36.36	516	0.9	$31,828.78	0.9	0.9	$ 25,781	$ 25,800
9	*Sequoia sempervirens*	37	1074.665	4.75	36.36	516	0.9	$35,527.90	0.9	0.9	$ 28,778	$ 28,800
10	*Quercus agrifolia*	26.5	551.26625	3.8	45.46	516	0.9	$22,915.03	0.9	0.9	$ 18,561	$ 18,600
11	*Sequoia sempervirens*	48	1808.64	4.75	36.36	516	0.9	$59,546.50	0.9	0.9	$ 48,233	$ 48,200
12	*Sequoia sempervirens*	37	1074.665	4.75	36.36	516	0.9	$35,527.90	0.9	0.9	$ 28,778	$ 28,800
13	*Sequoia sempervirens*	32	803.84	4.75	36.36	516	0.9	$26,665.42	0.9	0.7	$ 16,799	$ 16,800.00
14	*Sequoia sempervirens*	27	572.265	4.75	36.36	516	0.9	$19,087.36	0.9	0.7	$ 12,025	$ 12,000.00

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Tree No.	Species	Working DBH	Trunk Area (TA)	Trunk Area of Replacement Tree (TAR) Group	Species Price per square inch. Group	Installed Cost of 24 " box size	Species Class	Base Value	Condition	Location	Tree Value	Value To Closest $100
15	*Sequoia sempervirens*	26.5	551.26625	4.75	36.36	516	0.9	$18,400.20	0.9	0.7	$ 11,592	$ 11,600.00
16	*Sequoia sempervirens*	32	803.84	4.75	36.36	516	0.9	$26,665.42	0.9	0.7	$ 16,799	$ 16,800.00
17	*Sequoia sempervirens*	39	1193.985	4.75	36.36	516	0.9	$39,432.53	0.9	0.8	$ 28,391	$ 28,400.00
18	*Sequoia sempervirens*	42.5	1417.9063	4.75	36.36	516	0.9	$46,760.13	0.9	0.8	$ 33,667	$ 33,700.00
19	*Sequoia sempervirens*	41	1319.585	4.75	36.36	516	0.9	$43,542.66	0.9	0.8	$ 31,351	$ 31,400.00
20	*Sequoia sempervirens*	27.5	593.65625	4.75	36.36	516	0.9	$19,787.37	0.9	0.8	$ 14,247	$ 14,200.00
21	*Sequoia sempervirens*	40	1256	4.75	36.36	516	0.9	$41,461.91	0.9	0.8	$ 29,853	$ 29,900.00
22	*Sequoia sempervirens*	28	615.44	4.75	36.36	516	0.9	$20,500.22	0.9	0.8	$ 14,760	$ 14,800.00
23	*Quercus ilex*	16	200.96	2.24	77.04	516	0.9	$14,294.45	0.5	0.8	$ 5,718	$ 5,700.00
24	*Sequoia sempervirens*	22.5	397.40625	4.75	45.46	516	0.9	$16,581.14	0.9	0.8	$ 11,938	$ 11,900.00
25	*Sequoia sempervirens*	17.5	240.40625	4.75	45.46	516	0.9	$10,157.64	0.9	0.8	$ 7,314	$ 7,300.00
26	*Quercus ilex*	16	200.96	2.24	77.04	516	0.7	$11,232.57	0.7	0.8	$ 6,290	$ 6,300.00
27	*Sequoia sempervirens*	26	530.66	4.75	36.36	516	0.9	$17,725.88	0.7	0.7	$ 8,686	$ 8,700.00
28	*Sequoia sempervirens*	21	346.185	4.75	36.36	516	0.9	$11,689.12	0.7	0.7	$ 5,728	$ 5,700.00
29	*Liquidambar styraciflua*	6.5	33.16625	2.24	77.04	516	0.9	$2,660.30	0.3	0.7	$ 559	$ 600.00
30	*Acer palmatum*	7.5	44.15625	2.24	77.04	516	0.9	$3,422.31	0.6	0.7	$ 1,437	$ 1,400.00

Tree No.	Species	Working DBH	Trunk Area (TA)	Trunk Area of Replacement Tree (TAR) Group	Species Price per square inch. Group	Installed Cost of 24 " box size	Species Class	Base Value	Condition	Location	Tree Value	Value To Closest $100
31	*Acer palmatum*	10	78.5	2.24	77.04	516	0.9	$5,803.56	0.9	0.7	$ 3,656	$ 3,700.00
32	*Acer palmatum*	4	12.56	2.24	77.04	516	0.9	$1,231.55	0.9	0.7	$ 776	$ 800.00
33	*Acer palmatum*	7	38.465	2.24	77.04	516	0.9	$3,027.70	0.9	0.7	$ 1,907	$ 1,900.00
34	*Acer palmatum*	7.5	44.15625	2.24	77.04	516	0.9	$3,422.31	0.9	0.7	$ 2,156	$ 2,200.00
35	*Acer palmatum*	8.5	56.71625	2.24	77.04	516	0.9	$4,293.17	0.9	0.7	$ 2,705	$ 2,700.00
36	*Quercus agrifolia*	27	572.265	4.75	45.56	516	0.9	$23,786.39	0.9	0.7	$ 14,985	$ 15,000.00
37	*Sequoia sempervirens*	24	452.16	4.75	36.36	516	0.9	$15,157.04	0.7	0.7	$ 7,427	$ 7,400.00
38	*Sequoia sempervirens*	22.5	397.40625	4.75	36.36	516	0.9	$13,365.28	0.7	0.7	$ 6,549	$ 6,500.00
39	*Sequoia sempervirens*	21	346.185	4.75	36.36	516	0.9	$11,689.12	0.7	0.7	$ 5,728	$ 5,700.00
40	*Sequoia sempervirens*	21	346.185	4.75	36.36	516	0.9	$11,689.12	0.7	0.7	$ 5,728	$ 5,700.00
41	*Sequoia sempervirens*	25	490.625	4.75	36.36	516	0.9	$16,415.77	0.7	0.7	$ 8,044	$ 8,000.00
42	*Liquidambar styraciflua*	7	38.465	2.24	77.04	516	0.7	$2,469.54	0.4	0.5	$ 494	$ 500.00
43	*Eucalyptus nicholii*	24	452.16	3.8	45.46	516	0.7	$14,783.71	0.4	0.5	$ 2,957	$ 3,000.00
44	*Eucalyptus nicholii*	27.5	593.65625	3.8	45.46	516	0.7	$19,286.41	0.6	0.5	$ 5,786	$ 5,800.00
45	*Afrocarpus gracilior*	11	94.985	2.24	77.04	516	0.7	$5,517.55	0.3	0.4	$ 662	$ 700.00

Tree No.	Species	Working DBH	Trunk Area (TA)	Trunk Area of Replacement Tree (TAR) Group	Species Price per square inch. Group	Installed Cost of 24 " box size	Species Class	Base Value	Condition	Location	Tree Value	Value To Closest $100
46	*Afrocarpus gracilior*	9	63.585	2.24	77.04	516	0.7	$3,824.21	0.3	0.4	$ 459	$ 500.00
47	*Afrocarpus gracilior*	7	38.465	2.24	77.04	516	0.7	$2,469.54	0.3	0.4	$ 296	$ 300.00
48	*Afrocarpus gracilior*	12.5	122.65625	2.24	77.04	516	0.7	$7,009.81	0.3	0.4	$ 841	$ 800.00
49	*Afrocarpus gracilior*	15.5	188.59625	2.24	77.04	516	0.7	$10,565.82	0.3	0.4	$ 1,268	$ 1,300.00
50	*Afrocarpus gracilior*	8	50.24	2.24	77.04	516	0.7	$3,104.54	0.3	0.4	$ 373	$ 400.00
51	*Afrocarpus gracilior*	6	28.26	2.24	77.04	516	0.7	$1,919.21	0.3	0.4	$ 230	$ 200.00
52	*Afrocarpus gracilior*	5	19.625	2.24	77.04	516	0.7	$1,453.54	0.3	0.4	$ 174	$ 200.00
53	*Afrocarpus gracilior*	6	28.26	2.24	77.04	516	0.7	$1,919.21	0.3	0.4	$ 230	$ 200.00
54	*Afrocarpus gracilior*	6	28.26	2.24	77.04	516	0.7	$1,919.21	0.3	0.4	$ 230	$ 200.00
55	*Afrocarpus gracilior*	7	38.465	2.24	77.04	516	0.7	$2,469.54	0.3	0.4	$ 296	$ 300.00
56	*Afrocarpus gracilior*	4	12.56	2.24	77.04	516	0.7	$1,072.54	0.3	0.4	$ 129	$ 100.00
57	*Afrocarpus gracilior*	4	12.56	2.24	77.04	516	0.7	$1,072.54	0.3	0.4	$ 129	$ 100.00
58	*Afrocarpus gracilior*	7	38.465	2.24	77.04	516	0.7	$2,469.54	0.3	0.4	$ 296	$ 300.00
59	*Afrocarpus gracilior*	3.5	9.61625	2.24	77.04	516	0.7	$913.79	0.3	0.4	$ 110	$ 100.00
60	*Afrocarpus gracilior*	6	28.26	2.24	77.04	516	0.7	$1,919.21	0.3	0.4	$ 230	$ 200.00

Tree No.	Species	Working DBH	Trunk Area (TA)	Trunk Area of Replacement Tree (TAR) Group	Species Price per square inch. Group	Installed Cost of 24 " box size	Species Class	Base Value	Condition	Location	Tree Value	Value To Closest $100
61	*Afrocarpus gracilior*	7.5	44.15625	2.24	77.04	516	0.7	$2,776.46	0.3	0.4	$ 333	$ 300.00
62	*Afrocarpus gracilior*	16	200.96	2.24	77.04	516	0.7	$11,232.57	0.3	0.4	$ 1,348	$ 1,300.00
63	*Quercus agrifolia*	19	283.385	3.8	45.46	516	0.9	$11,954.94	0.9	0.8	$ 8,608	$ 8,600.00
64	*Quercus agrifolia*	22	379.94	3.8	45.46	516	0.9	$15,905.39	0.9	0.8	$ 11,452	$ 11,500.00
65	*Quercus agrifolia*	27	572.265	3.8	45.46	516	0.9	$23,774.18	0.9	0.8	$ 17,117	$ 17,100.00
66	*Platanus x hispanica*	14.5	165.04625	3.8	45.46	516	0.9	$7,113.23	0.9	1	$ 6,402	$ 6,400.00
67	*Platanus x hispanica*	2	3.14	3.8	45.46	516	0.9	$489.00	0.9	1	$ 440	$ 400.00
68	*Platanus x hispanica*	7.5	44.15625	3.8	45.46	516	0.9	$2,167.14	0.7	1	$ 1,517	$ 1,500.00
69	*Platanus x hispanica*	4.5	15.89625	3.8	45.46	516	0.9	$1,010.91	0.9	1	$ 910	$ 900.00
70	*Platanus x hispanica*	7.5	44.15625	3.8	45.46	516	0.9	$2,167.14	0.7	1	$ 1,517	$ 1,500.00
71	*Platanus x hispanica*	6.5	33.16625	3.8	45.46	516	0.9	$1,717.49	0.7	1	$ 1,202	$ 1,200.00
72	*Platanus x hispanica*	8	50.24	3.8	45.46	516	0.9	$2,416.05	0.9	1	$ 2,174	$ 2,200.00
73	*Lagerstroemia spp*	11	94.985	2.09	82.82	516	0.9	$7,440.21	0.9	1	$ 6,696	$ 6,700.00
74	*Lagerstroemia spp*	8.5	56.71625	2.09	82.82	516	0.9	$4,587.73	0.7	1	$ 3,211	$ 3,200.00
75	*Lagerstroemia spp*	5	19.625	2.09	82.82	516	0.9	$1,823.02	0.3	1	$ 547	$ 500.00

Tree No.	Species	Working DBH	Trunk Area (TA)	Trunk Area of Replacement Tree (TAR) Group	Species Price per square inch. Group	Installed Cost of 24 " box size	Species Class	Base Value	Condition	Location	Tree Value	Value To Closest $100
76	*Lagerstroemia spp*	4	12.56	2.09	82.82	516	0.9	$1,296.41	0.3	1	$ 389	$ 400.00
										Total:	**$ 703,452**	$ 703,400

1000 El Camino Real

Exhibit 6

KPFF Structural Responses to Additional Alternates Proposed

45 Fremont Street, 28th Floor San Francisco, CA 94105 415.989.1004 kpff.com

March 6, 2019

Ken Rakestraw
SRGNC CRES, LLC
901 Mariners Island Boulevard
San Mateo, CA 94404

Subject: 1000 El Camino, Menlo Park, CA
Structural review of Additional Alternate Proposed by appellant, Peter Edmonds

Dear Mr. Rakestraw:

KPFF has received and performed a preliminary review of the document "Observations on the Planning Commission's & City Arborist's Approval Part 2 with Annexes" which outlines an Additional Alternate proposed by appellant Peter Edmonds for 1000 El Camino in Menlo Park, California.

As KPFF understands, the appellant proposes as an alternative to "isolate" the post tensioned slab to the south of the building adjacent to the trees by cutting out a strip of the slab that runs in the east-west direction for the entire length of the building between Grids 11 and 12. The appellant proposes to de-tension all of the post-tension tendons that will be affected by this cut and then re-anchor the north-south tendons on the north side of the new cut. The tendons in the isolated south slab are to be abandoned in the slab. No remedial measures are proposed to guard against future deterioration to the isolated south slab. The appellant also proposes to build a hanging pit below the isolated southern slab that will hold additional soil. Slots in the east-west direction are to be cut in the isolated southern slab so that the tree roots will be able to access the soil in the new hanging pit. The Additional Alternate also proposes a "Hanging Garden" located on the southern retaining wall as a solution for the seepage of water through that wall.

This proposal is not structurally feasible and does not adequately address all structural requirements for the project. A highlight of some of the structural issues are outlined below. A full evaluation and response of this alternative would require a much larger discussion/write up.

Isolated Southern Slab

- The concrete, tendons, and rebar all work together for the structural capacity of the slab. For the isolated slab, if the tendons are cut and abandoned and the concrete and rebar are allowed to continue to deteriorate the structural integrity of the slab would be compromised.
- The smaller east-west slots will further compromise the structural integrity of the slab.
- The hanging planter/soil pits beneath the slab increase the loads to the slab which affects the structural integrity of the slab.
- As currently designed, the slab braces the top of the retaining walls. The introduction of a slot compromises the bracing of the top of the retaining wall.
- By isolating the southern slab, the slab is no longer attached to the lateral-force resisting system of the building.

Northern Slab

- The tendons in the north-south direction that are being cut shorter may not be structurally adequate anymore and would need to be evaluated because of the new end span condition created.

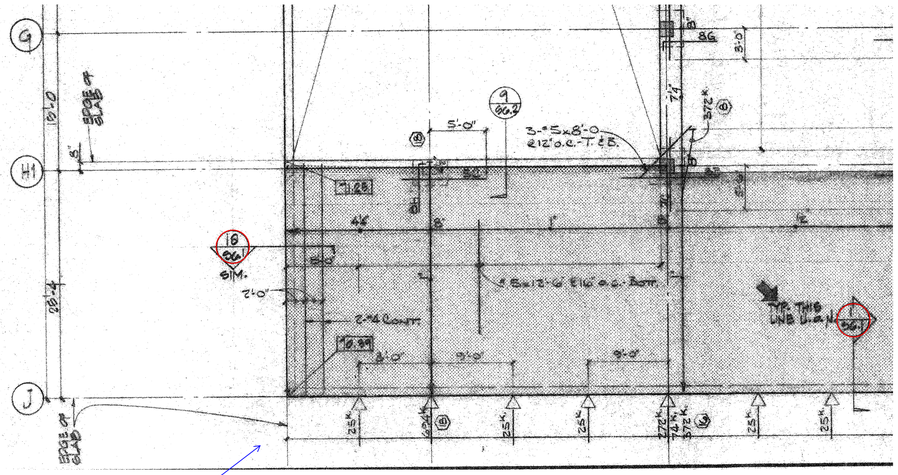
Southern Retaining Wall

- The Hanging Garden proposal does not address the water seepage through the wall, the further degradation of the rebar and affects the structural integrity of the wall.

Very truly yours,

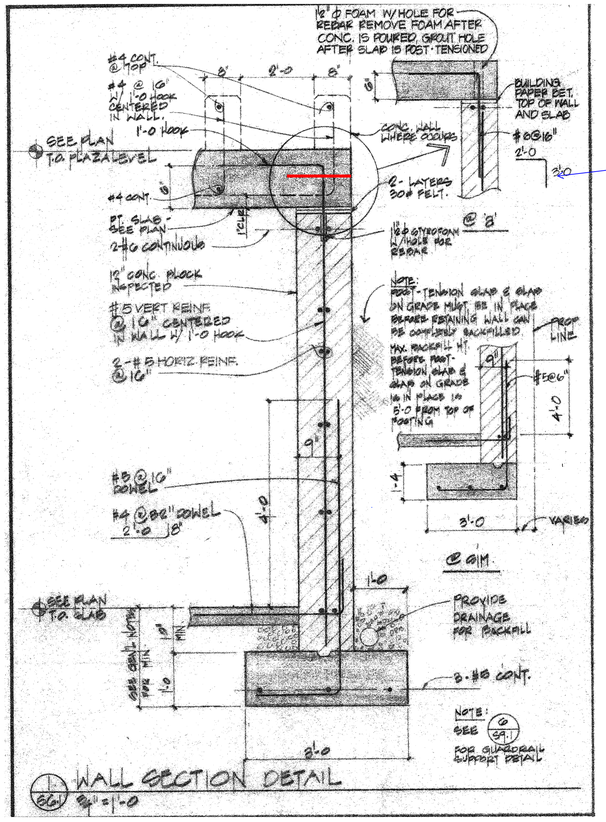
Greg Wagner, SE
Principal

GW/mns/1700132-00-20190306-L1



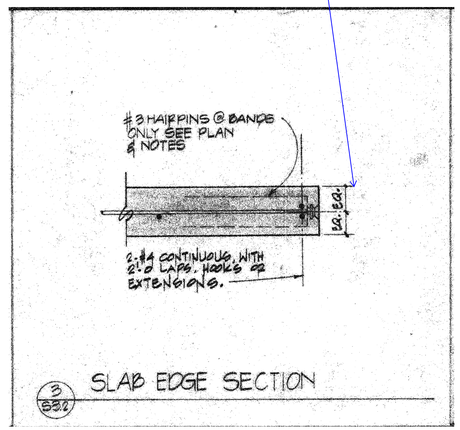
for oak tree location see tree survey

partial plaza level plan from original drawings

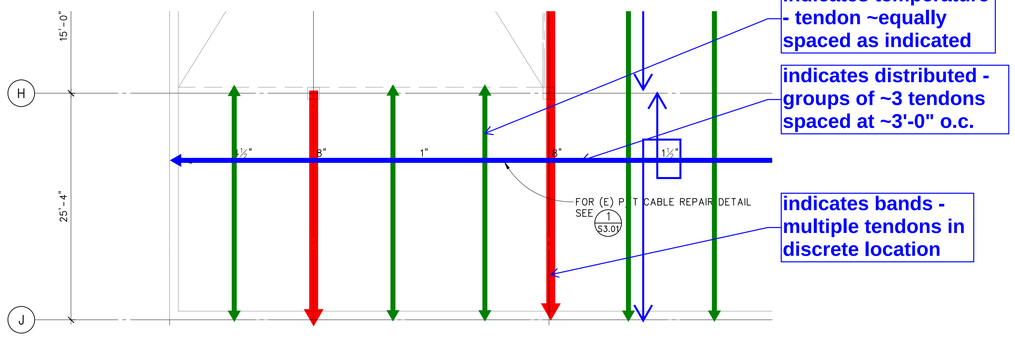


post tension anchorage at mid-slab depth at edge of slab per typical slab detail 3/S3.2 indicated below. Slab is 9" thick per plans. Access requirements to review anchored is 4 1/2" down form top of slab

detail 1 and 1A/S6.1 from original drawings



detail 3/S3.2 from original drawings



partial plaza w/ approximate post tensioning

kpff

SUBJECT: P/T Anchorage Access

PROJECT NAME: 1000 El Camino

JOB NO. 1700132

DATE 02/28/2019

Issued for Coordination only - NOT FOR CONSTRUCTION

1000 El Camino Real

Exhibit 7

ABBAE Waterproofing Responses to
Additional Alternates Proposed

Allana Buick & Bers, Inc.
990 Commercial Street
Palo Alto, CA 94303
t 650.543.5600
f 650.543.5625
www.abbae.com

ALLANA BUICK & BERS

Making Buildings Perform Better

March 6, 2019

Narrative of exhibits

Attached Exhibits:

Drawing Sheet A100 “South Side Tree Plan”

Drawing Sheet A200 “Sections”

Narrative:

1. The existing waterproofing on top of the Post Tensioned (PT) podium slab and at the below grade walls have failed. These failures in the slab and walls are causing corrosion damage to the “cables” and “reinforcing steel” of the PT slab as well as the reinforcing steel connecting the PT slab to the masonry wall. The below grade structural masonry wall not only acts as a soil retaining wall, it also supports the podium slab and takes vertical loads. As a waterproofing engineer, ABB strongly recommends that both the PT slab and the below grade masonry walls be re-waterproofed and the critical cables and reinforcing steel be protected.
2. As for the degree and level of damage being caused by water, the damage to the PT slab is more immediate life safety in nature as opposed to the below grade masonry walls. All the horizontal areas of the podium as well as the 12” of reinforcing steel that turns down the masonry walls are in the critical zone.
3. Due to the life safety nature of the PT slab failure, it is very important that we perform a waterproofing repair impacting any of the P-T tendons and the rebar connecting the slab/wall juncture as soon as feasible; i.e. waterproof the podium slab (both the horizontal top surface and 30’ overlap on the vertical CMU walls).
4. While the below grade masonry wall structural below the 30” turndown is not to a point of “life safety” yet, it is a matter of time (2-10 years) before they become a serious problem as well. ABB strongly recommends that if feasible, the walls also be repaired during this renovation.
5. In order to perform the waterproofing of the critical PT slab area, this work will require a trench of 4’ wide off the edge of podium and 2-4’ deep below the surface of podium. On the El Camino side, the edge of the slab is under 2’ of soil and planting. This access to waterproof the podium and turndown at the top of masonry wall will require a trench minimum 4’ deep trench to expose the PT tendons to perform a life safety inspection as well as to waterproof the slab and 2’ down the vertical face of the wall.
6. The arborist (SBCA) went on site and calculated the critical primary root zones of the trees along El Camino Real that are not recommended to be cut to maintain the health of the trees.The critical primary root zones are shown on Exhibit sheet A100.
7. At the El Camino side, the PT slab is buried under the dirt by 24” – 30”. As seen on the plan view sheet A100 attached, the necessary 4’ trench for access to perform the work

Initials_____

at the edge of the podium and down 2' of the walls overlaps well within the critical primary root zone of all 7-redwood trees. The access to repair just the PT slab issue will require the 7 redwood trees on El Camino side to be removed.

8. Our arborist believes that the trench required to waterproof the podium and top of the wall will reuire removal of the 7 redwood trees on El Camino side. Since the trees need to be removed anyway, we recommend moving forward with the previously planned excavation by trenching deeper with stepped-bench trench to install the waterproofing on the entire vertical face of the masonry wall along El Camino.
9. Along the back of the building, the soil/grade level is below the PT slab edge. Therefore, the PT slab and top of the masonry walls are above grade and exposed and can be repaired either without a trench or with minor excavation. While to podium and the top of the wall can be waterproofed on the back side without impacting the trees, ABB does recommend waterproofing the below grade walls and repairing them which will unfortunately require removing the trees from the backyard as well. It is our understanding that the owners are willing to forgo waterproofing the below grade walls on the back of the building in order to save the trees. Therefore, currently there is no plan to excavate below grade on the back of the property and save additional heritage trees that the building owner wants to protect.

Responses to Appellant questions:

QUESTIONS FOR STRUCTURAL ENGINEER **posed by Peter Edmonds, 2/22/19**

Q4. How did the destructive-testing engineers know where to chip into the ceiling of the south gallery's west side to examine tendons? [ref. Transmittal letter dated 3/24/14 from ABBAE

Response:

The Contractor for the DT work, Schwager Davis, Inc. located the cables using non-destructive scanners.

Additional Questions from Community: **posed by appellants on 2/22/19**

They are also proposing a variant of alternative No.4 that involves removing only some of the trees as shown in the last page of the attached. Per their email, this is what they envision:

1. Leave all trees in place; isolate the section of the post-tensioned (P/T) concrete podium beneath the landscaping south of the building by excavating a trench and cutting out a strip of concrete; problems of encroaching on the root protection zone of the 3-tree redwood cluster and relieving and restoring tension in the P/T tendons; AND
2. Leave all trees and landscaping undisturbed and work only on the underside of the podium from the parking space to cut out a strip of the concrete roof to isolate the section south of the building; no need for arborist's waiver; engineering-only problems of relieving and restoring tension in the P/T tendons and locating equipment for cutting concrete overhead.

Response:

The existing podium waterproofing system has failed. Unless it is replaced additional damage will continue to the PT Cables and other structural components, requiring additional repairs in the future.

Additional Community Input: **Submitted by Peter Edmonds, PhD on 3/4/19**

Regarding the document titled:

OBSERVATIONS on the MENLO PARK PLANNING COMMISSION's and CITY ARBORIST's APPROVALS OF AN APPLICATION TO RENOVATE PROPERTY AT 1000 EL CAMINO REAL, including REMOVAL OF SEVEN COAST-REDWOOD HERITAGE TREES

From (Part 1) page 2:

CRITIQUE

The City Arborist's recorded contributions consist of 2 emails totaling only 12 lines, of which 3 are quotation of "considerations" from the Heritage-Tree Ordinance. Available evidence indicates that, before signifying his approval, he consulted only a single colleague in the Planning Dept., who raised doubt about "whether or not the trees are causing the problem[s]"

[i.e., the problem[s] comprising:

- penetration of the water-proofing membrane above the concrete podium by small roots (AABAE letter dated Aug.16, 2017, p.2 of 16, 3rd paragraph alleges "abrasion" by roots – Ha Ha!);
- ingress of water resulting in corrosion of an unknown number of steel, tensioning strands inside the podium (KPFF[1]: 1.02.1.1, 1.02.1.2, 1.02.2,1.05,1.06);
- cracks in concrete, visible on the underside of the podium (KPFF[3]:1.02);
- stains and efflorescence on the south retaining wall of the parking space (KPFF[3]: 1.04);
- alleged rust-staining of other walls of the parking space (AABAE letter dated Aug. 16, 2017, p.2 of 16, 1st para-graph, these walls subsequently painted over).]

Responses to the highlighted waterproofing related items:

- Root damage to waterproofing membranes is a well-known, studied and documented scientific fact. Green roof designs include Root Barriers to protect against this. Older “green or garden” roofs often did not have root barrier. New designs also limit the trees and shrubs with non-aggressive roots.
- Rust stains are an indication of water intrusion.

From (Part 1) page 3:

Problem that any feasible alternative to removal of redwood trees might address

2) Cracks in concrete podium:
The proposed alternative procedure will isolate the south section of the podium and render repair unnecessary. Cracks may be filled cosmetically with caulking as the consultant firm AABAE recommends in cases of stressed components

Response:

This is taken out of context; the ABBAE Mar 24, 2014 letter in question states:

> The contractor also made some other observations that are worth noting:
>
> 1. The contractor recommended that no epoxy or polyurethane crack injection be done at locations were posttensioning occurs. The reason for that is that injection material can bond with the strands and make it very difficult to carry out future repairs. Instead, the contractor recommended that any crack repairs be done by applying surface sealing. This would be done by routing a shallow groove at the crack location and filling it with caulking.

This is actually a warning against injecting the PT slab from below due to the PT Cable sleeves. The crack sealant recommended by the Contractor would be installed along with a new waterproofing membrane.

From (Part 1) page 4:

Minor Problems that any feasible alternative to removal of redwood trees need not address

1) Stains and efflorescence on walls:
Stained walls have been repainted since they were observed in 2017.
Efflorescence on the south retaining wall will be addressed later.

Response:

Stains and efflorescence are indicative of water intrusion. In a steel-reinforced concrete or masonry structure such as this, water intrusion causes rusting of the steel components, which can lead to spalling and structural failure. It is critical that these signs be monitored, investigated and addressed appropriately on a case-by-case basis.

From (Part 2) page 6:

Long-term stability of the trees

The City Arborist and Applicant's consultant arborists have expressed concern that the 7 redwood trees have insufficient root anchorage currently to assure long-term stability when exposed to wind forces. Safety of pedestrians and traffic using El Camino Real is the issue. Therefore.....

IT IS PROPOSED TO CUT AWAY AND REMOVE TWO WEST-TO-EAST STRIPS OF THE ISOLATED SOUTH SECTION OF THE PODIUM SLAB OF COMBINED LENGTH APPROX. EQUAL TO THE LENGTH OF THE MATTESON BUILDINGS AND REPLACE THEM WITH LATTICE PANELS THAT WOULD ALLOW

PENETRATION OF TREE ROOTS TO LARGE QUANTITIES OF EXTRA SANDY LOAM PACKED INTO ENCLOSURES INSTALLED AT THE PARKING LEVEL.

Response:

The existing podium waterproofing system has failed. Unless it is replaced additional damage will continue to the PT Cables and other structural components, requiring additional repairs in the future. Cutting the PT slabs and add soil in the garage is impractical.

From (Part 2) page 8:

Include Hanging Garden

The presence of water seeping through the south retaining wall of the parking space offer an opportunity to use it imaginatively instead of decrying the efflorescence and small pools of water on the floor, while paying no attention to the similar pools of water that form at the south end of the inclined entry ramp, which is open to the sky, when it rains.

Pooled water

Seepage: "Has to be fixed !" < 20 ft.> Rain water at foot of ramp: No one cares!

The porous wall seems ideal for conversion to a Hanging Garden: Hemi-spherical concrete bowls could be attached to the wall in a staggered array, filled with earth and planted with ferns and vines; possibly install trellis on wall and water-collection trays as desired in the ceiling space; encourage growth of lichens, ferns and cave-dwelling plants. A Hanging Garden could be promoted as a feature of the site.

With more attention to lighting and management, the weeping south wall could be used alternatively for a vertical, hydroponic facility nurturing salad greens that could be harvested for use in the cafeteria on the third floor.

Response:

Efflorescence is indicative of water intrusion and damage to the structure, which, in a steel-reinforced concrete structure such as this, causes rusting of the steel components, which can lead to spalling and structural failure. The proposed Hanging Garden would not address this issue. Drainage water on an exposed slab-on-grade is not an issue.

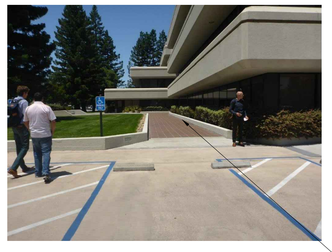
1000 El Camino Real

Exhibit 8

Revision 1

Layout plans and construction sections showing trees, primary root zones, and the construction access to repair podium slab

EXISTING BUILDING TO REMAIN
1000 EL CAMINO



LEGEND

- PRIMARY ROOT PLATE (PRP): RADIUS = ROOT CROWN + 3X TRUNK DIA
- ROOT CROWN (DIA. AT SOIL LEVEL)
- TRUNK DIA. (4 FT. ABOVE SOIL LEVEL)

TR#18 42.5" 71.54
TR#17 39" 72.02
TR#16 32" 73.45
TR#15 26.5" 73.74
TR#14 27" 73.35
TR#13 32" 73.93
TR#12 37" 72.11
TR#11 48" 72.42
TR#10 26.5" 72.79
TR#9 37" 73.09
TR#8 35" 73.37
TR#7 38" 73.53
TR#6 6" 74.32
TR#5 7" 74.27
TR#4 37" 72.95
TR#3 37" 73.39
TR#2 37" 73.98
TR#1 40" 73.90
TR#72 8" 71.18
TR#71 6.5" 71.00
TR#70 7.5" 70.83
TR#69 4.5" 70.55
TR#68 7.5" 70.34
TR#67 2" 69.82

TREE #10 PRIMARY ROOT PLATE: 7'-11". CUT OFF FOR TRENCH: 5'-5" (26% "PRP" AREA)
OAK TREE # 10 IS 1'-5" FROM TRENCH
OAK TREE # 10 ROOT CROWN 5'-5" FROM PODIUM
DATUM: FACE OF CURB
DATUM - PODIUM EDGE: 25'-5"
TREE #9 PRIMARY ROOT PLATE: 11'-7". CUT OFF FOR TRENCH: 6'-8" (24% "PRP" AREA)
TREE #9 IS 2'-7" FROM TRENCH
TREE # 9 ROOT CROWN 6'-7" FROM PODIUM
TREE #8 PRIMARY ROOT PLATE: 10'-9". CUT OFF FOR TRENCH: 4'-11" (17% "PRP" AREA)
TREE #8 IS 3'-10" FROM TRENCH
TREE # 8 ROOT CROWN 7'-10" FROM PODIUM
TREE #7 PRIMARY ROOT PLATE: 11'-11". CUT OFF FOR TRENCH: 8'-0" (29% "PRP" AREA)
TREE #7 IS 1'-9" FROM TRENCH
TREE # 7 ROOT CROWN 5'-9" FROM PODIUM
DATUM: FACE OF BLDG. WALL
DATUM - PODIUM EDGE: 24'-9"
DATUM: FACE OF CURB AT WALKWAY
DATUM - PODIUM EDGE: 54'-8"
TREE #4 PRIMARY ROOT PLATE: 12'-9". CUT OFF FOR TRENCH: 8'-0" (27% "PRP" AREA)
TREE #4 IS 2'-0" FROM TRENCH
TREE # 4 ROOT CROWN 6'-0" FROM PODIUM
TREE #3 PRIMARY ROOT PLATE: 11'-4". CUT OFF FOR TRENCH: 10'-11" (48% "PRP" AREA)
TREE #3 IS IN THE TRENCH
TREE # 3 ROOT CROWN 1'-10" FROM PODIUM
TREE #2 PRIMARY ROOT PLATE: 11'-9". CUT OFF FOR TRENCH: 14'-11" (67% "PRP" AREA)
TREE #2 IS IN THE TRENCH
TREE # 2 ROOT CROWN OVERLAPS PODIUM 1'-8"
TREE #1 PRIMARY ROOT PLATE: 13'-2". CUT OFF FOR TRENCH: 14'-8" (57% "PRP" AREA)
TREE #1 IS IN THE TRENCH
TREE # 1 ROOT CROWN OVERLAPS PODIUM: 8"

LAWN ON PODIUM
EDGE OF PODIUM
TRENCH
LINE OF TRENCH REQUIRED FOR PODIUM POST-TENSION CABLE REPAIRS. 4'-0" WIDE X 4'-0" DEEP
LAWN ON GRADE
SIDEWALK
CURB
EL CAMINO REAL

16'-0" FROM SIDEWALK
12'-6" FROM SIDEWALK
12'-0" FROM SIDEWALK
13'-8" FROM SIDEWALK
41'-10" FROM SIDEWALK
19'-4" FROM SIDEWALK
23'-0" FROM SIDEWALK
25'-6" FROM SIDEWALK

EV, EB, TEL VLT, UB, UV, WV, ASPK, TSB, R&C, COMM, WM, EB, BKP

1 SOUTH SIDE TREE PLAN

SCALE: 1/8"=1'-0"

8 6 4 2 0 8 16

SCALE: 1/8" = 1'-0"

1 INCH AT FULL SCALE. IF NOT 1 INCH THIS DRAWING HAS BEEN REPRODUCED (NOT TO SCALE SHOWN)

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1000 El Camino Real
Menlo Park, CA

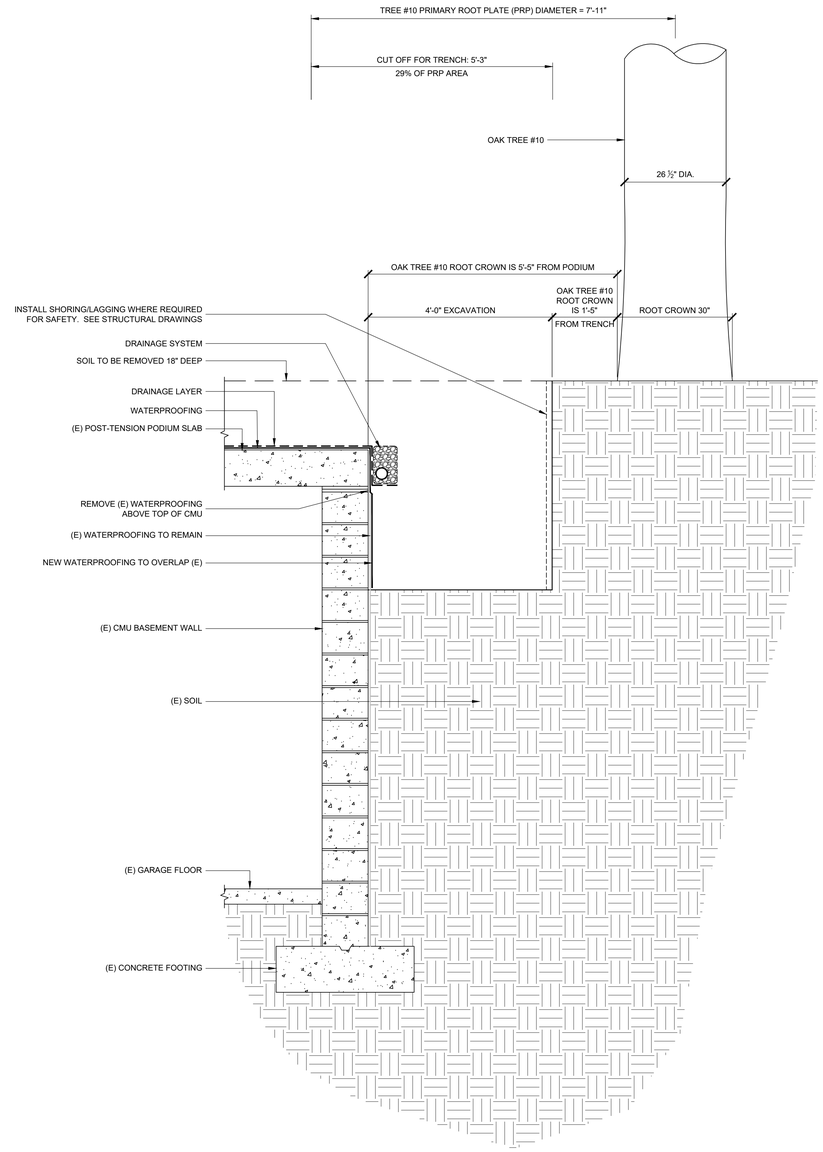
ISSUE		
	FOR EQR MEETING	03/06/2019
Mark	Description	Date

DATE	DATE
PROJECT NO.	17-4892.01
CAD DWG FILE	####_A100.dwg
DRAWN BY	PD
CHECKED BY	PD

SHEET TITLE
SOUTH SIDE TREE PLAN

SCALE: NOTED ON DRAWINGS

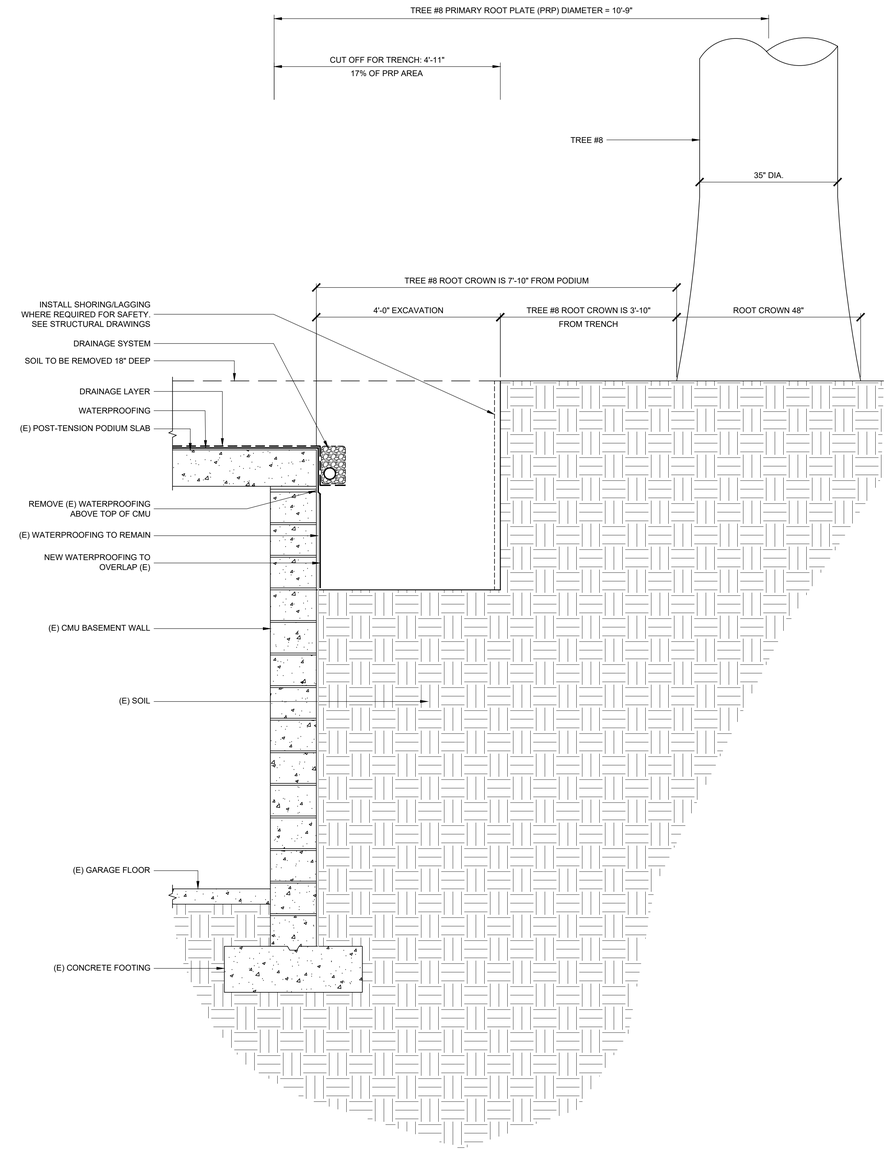
SHEET **A100**



WALL SECTION AT TREE #10 SHOWING MINIMUM REPAIR SCOPE

SCALE: 3/4" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.

2
A200



WALL SECTION AT TREE #8 SHOWING MINIMUM REPAIR SCOPE

SCALE: 3/4" = 12" NOTE: SOME ASSEMBLIES EXPLODED FOR CLARITY. DO NOT SCALE DETAILS.

1
A200

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ISSUE		
	FOR EQR MEETING	03/06/2019
Mark	Description	Date

DATE	DATE
PROJECT NO.	17-4892.01
CAD DWG FILE	####_A100.dwg
DRAWN BY	PD
CHECKED BY	PD

SHEET TITLE
SECTIONS

SCALE: NOTED ON DRAWINGS

SHEET **A200**

Exhibit 9

SBCA Tree Consulting - Arborist response to cutting tree primary root zone

SBCA TREE CONSULTING

1534 Rose Street, Crockett, CA 94525
Phone: (510) 787-3075
Fax: (510) 787-3065
Website: www.sbcatree.com

Steve Batchelder, Consulting Arborist
WC ISA Certified Arborist #228
CUFC Certified Urban Forester #134
CA Contractor License #(C-27) 53367
E-mail: steve@sbcatree.com

Molly Batchelder, Consulting Arborist
WC ISA Certified Arborist #9613A
ISA Tree Risk Assessment Qualified
E-mail: molly@sbcatree.com

To: Ken Rakestraw
Senior Project Manager,

Date: 3/7/2019

Project: 1000 El Camino Real, Menlo Park Waterproofing.

Subject: Redwood Tree Questions

Assignment: Arborist was asked to address below questions from Ken Rakestraw:

Based on the hypothetical option that we are required to cut the roots within the primary root zone back so we can install a 4' wide trench (as seen on ABBAE's exhibit attached), what is the likelihood that the trees would survive if we attached cables to structural hold the tree in place?

Would it be a 25% chance of surviving? Or 10%? Or no chance of survival?

Tree Health and Longevity

If Roots are Severed for Required Repairs and Trees Secured by cables - The root loss would be sufficient to cause severe decline if not death in the trees. If root barriers are used to prevent root development back into the podium area preventing future root access to this soil area, the moisture and nutritional needs of the canopy cannot be met. The question regarding "*chance of survival*" must addressed as: How long would the trees be expected to stay alive? Could stay alive for 5-10 years or more with care and an ever-worsening appearance.

Stability

Though the trees could possibly be secured from the side away from El Camino, they cannot be secured from falling toward the structure. Each tree would require at least two cables per side. It should be noted that the root crown of two of the trees extends past wall and onto the podium. Cutting roots on the wall side would result in loss of compressive support offered by the podium and wall. This could result in failure toward the structure. It has been shown that compressive support is critical to root anchoring and that the majority of root failures are due to loss of compression support.

The only treatment that could keep the trees safe and alive for some time longer would be to cut the trees to less than 1/3 their current height and administer special care after. This is not acceptable from an aesthetic perspective as it would be an eyesore to all who appreciate trees. "*Let trees die with dignity*" *Dr. Alex Shigo.*

END COMMENTS

Memorandum

DATE: March 12, 2019

TO: Rebecca Lucky, Sustainability Manager

FROM: James R. Clark, Managing Consulting Arborist

SUBJECT: 1000 El Camino Real

JB Matteson leases the subject property from the City of Menlo Park. In October 2018 the Menlo Park Planning Commission approved an application to repair the existing underground garage. Included in the application was a request to remove seven coast redwood (*Sequoia sempervirens*) trees located on the west side of the property. The approval decision was appealed by members of the Menlo Park community.

You requested a peer review of the documents relevant to the application to remove the trees and the appeal. You provided me with the following:

- Heritage tree removal application. October 2, 2017. Included report prepared by SBCA Tree Consulting and including supporting documents.
- Menlo Park staff report to the Planning Commission. October 22, 2018.
- Appellant questions. February 22, 2019 and March 4, 2019.
- Applicant's documentation for exploring alternative options that are feasible and reasonable. February 19, 2019. Revised March 7, 2019.
- I attended meetings with City staff and the applicant team on February 25 and March 4, 2019.
- Doug Hohback's memorandum dated March 11, 2019.

Background

The seven redwood trees were installed in the 1980s when the building was constructed. Part of site development included construction of an underground garage. The redwoods were placed in close proximity to the wall and podium of the garage. Over time, tree roots have grown into the landscape area that covers the top of the garage. The seven redwoods were evaluated by SBCA Tree Consulting (project arborist) as having good health and structure. Trunk diameters ranged from 34½- to 40 inches. Tree height was 85-feet.

SBCA Tree Consulting documented the extent of root growth over the garage structure via two exploratory trenches. In both cases, turf and soil were excavated and the roots retained. The depth of soil above the podium was 12- to 18-inches. SBCA Tree Consulting described the size of the exposed roots as fine, large and extremely large. One trench appeared to have been excavated in the center of the turf area. The second near one of the trees. Excavation revealed a dense mat of redwood tree roots.

The application to remove the trees was approved by on October 22, 2018. The staff report supported the application.

Applicant's Repair Plan and Impacts to the Redwoods
JB Matteson's repair plan near the redwoods involves removing all tree roots growing on top of the podium. In addition, waterproofing must "turn the corner" by excavating a trench 4½-feet deep by 4-feet wide along the entire length of the podium. Repairs were depicted on Sheet A100 and A200. Sheet A100 provided a plan view of existing conditions and the 4-foot trench required to repair the podium. Sheet A200 illustrated a vertical section of the planned trench in relation to the podium wall and trees #8 and 10. Coast redwood #8 is the tree farthest away from the edge of the podium.

SBCA Tree Consulting defined "primary root plate" as "the radial distance in feet from the base of the tree where root severance can increase risk of tree failure by roots." No source for this definition was offered. Elsewhere, the "Primary Root Plate (PRP) (was calculated as) the radial distance from the tree base = 3x the diameter of the tree at breast height (DBH) which ranges between 24- to 30-feet in diameter for the trees proposed to be removed. The size of the "primary root plate" is, however, miscalculated in both Exhibit 2 and Exhibit 4 (option 4). In the later, SBCA Tree Consulting calculated the "primary root plate" of a 20-inch diameter trees as 60-feet. Using his formula, 20-inches times 3 is 60-inches (5-feet), not 60-feet.

SBCA Tree Consulting also noted "If roots are severed within the primary root plate, industry standard generally requires that the tree be removed due to safety issues if there is a significant "target" the tree could impact." No citation for the industry standard is included.

Observations and Comments
In evaluating impacts to the trees, the key question is: would removing the roots from the podium and the associated trench kill the trees and/or make them unstable, thereby necessitating their removal? The applicant's arboricultural consultant, SBCA Tree Consulting, says yes and recommends removal. In his view, the health and structural stability of the redwoods would be severely impacted because root cutting would occur within the "primary root plate".

I respond to this question by discussing effects of root severance on tree health and tree stability.

Tree Stability
When evaluating the severity of root severance on one side of the tree, research has determined a threshold of three to five times the trunk diameter. No root severance should occur closer than three times the trunk diameter. This recommendation is related in a general way to the size of the root plate. The 2011 edition of the *Glossary of Arboricultural Terms* (International Society of Arboriculture) defined root plate as "the combination of large structural and smaller roots and soil near the base of a tree's trunk and largely responsible for holding the tree erect." If the root plate is responsible for tree stability, the damaging or cutting the root plate would compromise stability.

If the threshold for tree stability associated with root severance is three times the diameter of the tree, does the proposed plan exceed that limit? The answer is yes (Table 1, following page). I used Sheet 100 to determine the distances from the tree trunk and edge of the trunk to the podium wall and edge of excavation. The edge of excavation is within three times the trunk diameter limit for all seven redwoods and the coast live oak.

Tree Health
There are a number of guidelines to determine the size of a tree protection zone including several based on trunk diameter. There are not, however, guidelines for how much root severance may occur before the tree health is compromised and the tree dies.

Coast redwood is considered tolerant of root severance (as is coast live oak). Trees in good condition are better able to tolerant impacts from construction that those in fair or poor health. One key to successful root regeneration in coast redwood is consistent irrigation during the summer months.

All seven coast redwoods and coast live oak #10 are all within 4-feet of the edge of the trench required to undertake the proposed repairs. Despite the health of the trees and the species tolerance, I consider the impact on the tree to be severe and beyond the tolerance of the trees. Given this impact, I concur with the October 2018 decision to permit removal of the redwoods.

Alternative Options
The city is reviewing several options for preserving the trees, and have requested a peer review on whether they are feasible and/or reasonable:

1. **Build a new parking garage on a neighboring property to replace the 150 parking stalls in the existing underground garage.**
   This option does not relate to trees, so I have no comment.

2. **Structurally Retrofit the Podium with Steel Beams.**
   This option does not relate to trees, so I have no comment.

3. **Phase Tree Removal to Incrementally Evaluate Extent of Damage before Removing all Trees.**
   Even phased removal would require excavation of a 4-foot wide by 4½-foot deep trench around the perimeter of the podium. The edge of the trench would be within three times the diameter of seven coast redwood and the single coast live oak. Impacts to tree health and structural stability would be beyond the tolerance of the trees. I do not consider this a reasonable option.

4. **Repair New Waterproofing and Structural Systems Without Removing the Trees.**
   This option deals with correcting damage to the garage wall. Even if this were possible, tree roots on the podium would need to be removed. This requires excavation of a 4-foot wide by 4½-foot deep trench around the perimeter of the podium. The edge of the trench would be within three times the diameter of seven coast redwood and the single coast live oak. Impacts to tree health and structural stability would be beyond the tolerance of the trees. I do not consider this a reasonable option.

Table 1. Distance of root severance in relation to threshold for tree stability. 1000 El Camino Real. City of Menlo Park.

Tree No.	Species	Trunk Diameter (in.)	3x trunk Diameter (ft.)	Center of trunk….. to edge of podium (ft.)	to edge of 4' wide trench ('ft.)	to edge of 2½' wide trench (ft.)	Is edge of 4' wide trench within 3x trunk diameter?	Is edge of 2½' wide trench within 3x trunk diameter?
1	Coast redwood	40	10.0	3.5	<0.0	1.0	Yes	Yes
2	Coast redwood	37	9.3	1.3	<0.0	<0.0	Yes	Yes
3	Coast redwood	35	8.8	5.0	1.0	2.5	Yes	Yes
4	Coast redwood	39½	9.9	9.3	5.3	6.8	Yes	Yes
7	Coast redwood	39	9.8	8.0	4.0	5.5	Yes	Yes
8	Coast redwood	35	8.8	10.3	6.3	7.8	Yes	Yes
9	Coast redwood	37	9.3	8.8	4.8	6.3	Yes	Yes
10	Coast live oak	26½	6.6	6.7	2.7	5.2	Yes	Yes

Notes: Size of root plate is approximately 3x the trunk diameter.
4' wide trench was proposed by applicant JB Mattson.
2½' wide trench was proposed by peer reviewer Doug Hohbach.

Alternative Options, continued

5. **Relocate Heritage Redwood Trees.**
   I have no experience with relocating large coast redwood trees. Root ball size for relocation is normally suggested at 10-inches of root ball for each inch of trunk diameter. A 40-inch diameter tree would require a root ball of 33-feet. Among the subject trees, redwoods #1, 2 and 3 are too close to the podium wall to permit excavation of a root ball, let alone a symmetric one. Similarly, a number of utility vaults are located near redwoods #8 and 9 and constrain excavation near those trees. Redwoods #4 and 7 would appear to be the only viable candidates for relocation. I do not, however, consider this a reasonable option.

6. **Cutting the Tree Roots, then leaving the Trees in place, and using cables to brace the trees to the building structure.**
   This is more of an engineering problem than an arboricultural one. I do not feel competent to address the engineering aspects of this option. That said, if this option requires excavation of a 4-foot wide by 4½-foot deep or even a 2.5 wide foot trench around the perimeter of the podium, then the trees should be removed. Even if tree stability could be enhanced, the loss of roots associated with excavating the trench would be beyond the tolerance of the trees' health. I do not consider this a reasonable option.

7. **Appellant's suggestion of Saw-Cutting the Post-Tensioned Podium Slab.**
   This is more of an engineering problem than an arboricultural one. I do not feel competent to address the engineering aspects of this option. If this option does not require excavation of 4-foot wide by 4½-foot deep trench around the perimeter of the podium, then the trees could be retained.

Tree Valuation

Exhibit #5 prepared by SBCA Tree Consulting provided an estimate of the value of trees located at 1000 ECR including the seven coast redwood trees. The estimated replacement cost all 76 trees on the site was estimated to be $703,400 including $157,500 for the seven coast redwood trees. This analysis reflects the size, condition and general desirability of coast redwoods in Bay Area landscapes. The redwoods in question represent only 9% of the number of trees on the site but 22% of the estimated replacement cost.

I reviewed the methodology used by SBCA Tree Consulting to prepare the estimate of value and found it in general compliance with routine practice.

Doug Hohbach Memorandum. March 11, 2019

Doug Hohbach, a structural and civil engineer, was also retained by the City of Menlo Park to provide a peer review of the applicant's alternative findings. One of his findings was

> "The repair of the podium slab and replacement of the waterproofing could be accomplished by removal of the soil above the slab along with a trench of minimum dimensions of approximately 2.5 feet wide and 4 feet deep at the edge of the slab to access the tendon anchorage."

He also suggested that the depth of the trench could be limited to 2-feet, i.e., the depth of the podium. By reducing the size of the trench, Mr. Hohbach suggested that impacts to trees will be reduced, and thereby permit their retention.

I evaluated the impact of reducing the trench width using the same approach I applied to the applicant's proposal (see Table 1). Even if the trench width is reduced to 2½-feet, all seven coast redwoods and the coast live oak would still be within the threshold for stability of three times the trunk diameter. Therefore, reducing the trench width from 4-feet to 2½-feet does not reduce impacts to tree stability and would not permit their retention.

Summary

The applicant has established the requirement for root removal in order to allow repairs to the podium and garage walls. Proposed treatment is to remove roots from the top of the podium and excavate along the edge of the wall to a depth of 4½-feet. Based on my analysis, excavation would exceed a threshold by being closer than 3x the diameter for all seven coast redwoods and coast live oak #10. The stability of the trees will be adversely impacted.

I recommend that the applicant be permitted to remove the trees as there are no feasible or reasonable alternatives to retain the trees.

HortScience | Bartlett Consulting

James R. Clark, Ph.D.
Certified Arborist WE-0846A
Registered Consulting Arborist #357

March 11, 2019

City of Menlo Park
Attn: Rebecca L. Lucky
Sustainability Manager
City Hall - 2nd Floor
701 Laurel St., Menlo Park, CA 94025

Project: 1000 El Camino Heritage Tree Appeal
Hohbach-Lewin, Inc. Project No. 13744C

Subject: Structural Peer Review

Dear Ms. Lucky -

We appreciate the opportunity to serve the city in this matter. Over the past several weeks we have been reviewing various provided materials and provided feedback. We have also briefly reviewed the original construction documents on file at the Building Department. The March 7, 2019 letter by the Applicant, JB Matteson, to the City of Menlo Park regarding the subject matter and its associated exhibits effectively summarizes the information provided to the City over this period by the applicant, so this letter is intended to provide our professional opinions regarding the structural engineering aspects of the content. The Matteson letter in general is informative and addresses the relevant issues. On key issues we have stated below where we concur. Where we have differences of opinion or perspective we have also stated them below.

We have also addressed the alternative options that were explored by the Applicant at the request of the City, where we have judged that structural input is relevant.

- The structural damage of significance that has been reported is corrosion of some distributed tendons in the podium slab at discrete locations due to water intrusion. Since this has reportedly resulted in the failure (loss of tension) in at least three tendons, the podium slab has been weakened and should be repaired. This situation also is potentially indicative of other damage to post-tensioning tendons; this eventuality should be investigated as part of a repair. The waterproofing membrane should be repaired or replaced to prevent water intrusion in the future that could cause future similar damage.

- The repair of the podium slab and replacement of the waterproofing could be accomplished by removal of the soil above the slab along with a trench of minimum dimensions of approximately 2.5 feet wide and 4 feet deep at the edge of the slab to access the tendon anchorage.

- The repair of the slab from below would be unconventional and almost certainly more potentially hazardous to construction personnel than repair from above, and would not facilitate the repair or replacement of the above slab waterproofing.

- The perimeter CMU retaining wall structural damage does not appear to be significant.

- The identified water proofing deficiency is in the upper two feet or so of the retaining wall, thus it appears that the repairs could potentially be limited to that depth.

- The CMU retaining walls were designed to be fully grouted and if so, an injection grouting approach from the inside face should be feasible. However, if large voids exist due to incomplete original grouting, then localized blowouts of pressurized grout during installation are possible.

- If the root removal could be restricted to the area above the podium, and maybe a few feet beyond where necessary, perhaps some of the trees would survive. It seems that a probabilistic assessment of tree survival likelihood based on percentage of shallow root loss should be feasible for an arborist to calculate.

- A more rigorous analysis of the likelihood of the trees falling after the partial root removal would be informative, however based on the submitted material, it appears that the arborist profession does not generally address the potential of tree toppling in this manner. Another approach would be to do a load test on the tree after root removal to determine if it continues to be capable to resist expected wind loads.

- Regarding **Option 2: Structurally Retrofit Podium with Steel Beams**: We concur that it is not feasible to strengthen the podium slab from below utilizing steel framing and also maintain required clearances for parking.

- Regarding **Option 4: Repair Waterproofing and Structural Systems Without Removing the Trees** Although it may be feasible to repair the identified failed cables from below, the placement of waterproofing to facilitate the protection of the post-tensioning cables needs to be performed from above, since that is where the water intrusion is sourced from.

- Regarding **Option 6: Cutting the Tree Roots, then leaving the Trees in place.** Struts braced to the parking structure could be provided to brace the trees after the podium waterproofing repair. We have performed conceptual calculations on this idea and have found that an 8" diameter pipe brace attached to the tree at a height of 40 feet and braced at a 45 degree angle to the top of the podium at a column location would provide sufficient strength to prevent a tree from toppling towards the building. However two struts (or a combination of struts and cable stays) as a minimum would be required even if only one tree were to be braced. Braces could also be provided at a steeper angle if necessary. Note that the anchorage force to the top of the podium would not be that large – the primary design challenges are the length of the brace and the attachment to the tree. The attachment of the brace to the tree would need to be flexible enough for the tree to deform normally under typical wind loadings so that excessive stress was not added to the tree trunk at that height and so that the root system continued to feel stress so that it would regrow. This type of approach is of course used on small trees, but we cannot cite precedent for this approach being previously utilized on trees of this scale.

  A load test could potentially be performed on a braced tree at some future point in time to determine if it had regained sufficient root strength such that toppling would be unlikely. If load test were successful that could provide a basis for removing the bracing.

- Regarding **Option 7: Appellant's suggestion of Saw-cutting Podium Slab** It appears that this option could only be feasible in concert with partial abandonment of the lower level with a concomitant loss of parking spaces. The cut would have to be located carefully at a location where the banded tendons are located at mid-depth, so that they could be re-anchored appropriately and also where the cut did not result in a weakening of the adjacent slab beneath the building, which might not be feasible. A new wall or set of walls would need to be added adjacent to the cut to replace the lateral resistance currently provided by the El Camino side wall and to provide gravity support for the slab. Also some walls might need to be added to maintain the structural integrity of the now separated El Camino side portion of the podium slab.

Please don't hesitate to contact me with any questions or comments.

Sincerely yours,

Doug Hohbach, S.E.
Principal

OBSERVATIONS on the MENLO PARK PLANNING COMMISSION's and CITY ARBORIST's APPROVALS OF AN APPLICATION TO RENOVATE PROPERTY AT 1000 EL CAMINO REAL, including REMOVAL OF SEVEN COAST-REDWOOD HERITAGE TREES
and
PUBLIC INPUT OF ALTERNATIVES TO APPLICANT's PLAN for THE ENVIRONMENTAL QUALITY COMMISSION's MEETING ON MARCH 20, 2019

For the attention of: Menlo Park Environmental Quality Commission's Sustainability Manager and its Independent Consulting Structural Engineer and Independent Arborist, concerned with the Appeal against said Approvals.

Summary

The review of this application (HTR-0023) and/or reporting by City Commissions and Staff has been deficient due to ignoring the absence of any discussion of alternative(s) to the Applicant's plan and accepting assertions without evidence that no other plan is reasonable and feasible. The City Arborist in particular seems to have exercised no independent judgement.
Alternative procedures that obviate the removal of the 7 redwood Heritage trees are offered as Plans A and B.

RECITALS and OBSERVATIONS

April 04, 2018: Email from City Arborist,C. Bonner to City Planner K. Meador recommends approval of the application (HTR2017-00223) for removal of 7 redwood Heritage trees on the basis of **two considerations**, (1) and (8), in the Heritage-Tree Ordinance (HTO) "to use in determining whether there is good cause for removal or heavy pruning of a heritage tree" [1]:
(1) *The condition of the tree(s) with respect to disease, danger of falling, proximity to existing or proposed structures and [or?] interference with utility services;*
Observations:
Sensible reading dictates that any one of these conditions can be definitive, so "or" instead of "and" is read; The City Arborist DID NOT IDENTIFY in his email the specific condition(s) that he considered definitive when arriving at his conclusion.

[Deficiency]

Disease:
In the table on p.58 of Staff Report 18-090-PC all 7 redwood Heritage trees and 1 oak tree are listed in "Good" Health[2]

[Does not justify removal.]

Danger of Falling or Proximity to Existing or Proposed Structures:
On p.58 of SR 18-090-PC, SBCA Tree Consulting states:
"Abundant Tree Roots – Redwood tree roots are abundant throughout the turf area which lies above the garage. Though most roots are smaller and fibrous, there are many large roots as well. All roots will need to be cut to access the structure surface to apply the new waterproofing. Because the trees are planted just behind [south of] the outer garage wall, extremely large roots are present along the edge of the structure's outer wall. Severing these roots will compromise the root anchoring of the trees."
and on p.59:
"Root Pruning – If roots are cut to accommodate the needed water proofing, the root anchoring and health of the trees would likely be compromised."

---

[1] www.menlopark.org/205/Heritage-tree-protection-....
[2] SBCA Tree Consulting's Report to Sares Regis, dated Oct. 2, 2017

"Stand Dynamics – This entails both wind exposure and root grafts. Removing all but one or two of the redwood trees will leave the remaining trees with greater failure potential."
"Remove 7 Redwood Trees – Removal of the seven Coast Redwood trees appears to be the only viable option to enable the waterproofing to occur. An attempt to retain one or two of the redwoods will generate a serious safety concern and constitute a liability for the tree owner."
[Would justify removal, if Applicant's plan were implemented.]

Interference with Utility Services
[This condition has not been invoked.]

and HTO consideration:
(8) *The availability of reasonable and feasible alternatives that would allow for the preservation of the trees*.
[NOWHERE IN EMAILS, REPORTS AND SUPPORTING DOCUMENTS IS THERE DISCUSSION OF ANY ALTERNATIVES NOR ANY COMMENT UPON THEIR ABSENCE.]
[Inadequate review and reporting]

and on p.57, in Summary:
"The seven Coast Redwood trees will require removal to accommodate the needed repairs to the below ground garage structure's water proofing. Preliminary exploratory excavation revealed that the level of root cutting required to allow for the repairs will compromise both the health and safety of the redwood trees. Any attempt to try to retain one or two of the redwoods would also compromise the safety due to the level of root loss that would occur and the increased wind exposure resulting from the tree removal."
[Note: All mentions of "health", except one, in SR 18-090-PC refer to health *of the trees*.]

CRITIQUE

The City Arborist's recorded contributions consist of 2 emails totaling only 12 lines, of which 3 are quotation of "considerations" from the Heritage-Tree Ordinance. Available evidence indicates that, before signifying his approval, he consulted only a single colleague in the Planning Dept., who raised doubt about "whether or not the trees are causing the problem[s]"
[i.e., the problem[s] comprising:
- penetration of the water-proofing membrane above the concrete podium by small roots (AABAE letter dated Aug.16, 2017, p.2 of 16, 3rd paragraph alleges "abrasion" by roots – Ha Ha!);
- ingress of water resulting in corrosion of an unknown number of steel, tensioning strands inside the podium (KPFF[3]: 1.02.1.1, 1.02.1.2, 1.02.2,1.05,1.06);
- cracks in concrete, visible on the underside of the podium (KPFF[3]:1.02);
- stains and efflorescence on the south retaining wall of the parking space (KPFF[3]: 1.04);
- alleged rust-staining of other walls of the parking space (AABAE letter dated Aug. 16, 2017, p.2 of 16, 1st paragraph, these walls subsequently painted over).]

A project manager, Ken Rakestaw, solicited by the City Arborist and writing on March 05, 2018 as an employee of a firm (Sares Regis) hired by Applicant, asserts "urgency to repair the post tension structural cables in the podium slab as soon as possible", while a project engineer, Monte Rinebold, employed by another firm (KPFF) that conducted a field inspection on June 6, 2017, asserted on Dec. 15, 2017 that if "water intrusion issues are not addressed properly, it [they] may further affect the strength and serviceability of the existing slab."
Neither of these engineers' assertions and opinion are supported by quantitative evidence. The Staff Report 18-090-PC picks up and reiterates the message of urgency without citing additional evidence.
[Unproven Assertions, Unsubstantiated Opinion, Inadequate Review]

[3] Engineer's Field Report, 6/6/17

Minor Problems that any feasible alternative to removal of redwood trees need not address

1) Stains and efflorescence on walls:
Stained walls have been repainted since they were observed in 2017.
Efflorescence on the south retaining wall will be addressed later.

Problem that any feasible alternative to removal of redwood trees might address

2) Cracks in concrete podium:
The proposed alternative procedure will isolate the south section of the podium and render repair unnecessary. Cracks may be filled cosmetically with caulking as the consultant firm AABAE recommends in cases of stressed components.[4]

Major Problems that any feasible alternative to removal of redwood trees must address

3) Corrosion and weakening of steel, post-tensioning strands in the podium slab;
4) Long-term stability of the trees.

VIEWPOINT

Instead of defending trees that allegedly pose a threat to the integrity of the podium, I will portray the podium as a threat to the trees!
I emphasize that the Heritage Tree Ordinance confers a right to preservation on Heritage Trees and the 7 redwoods have earned that protection by surpassing the trunk-diameter threshold for Heritage Tree classification, i.e., I am interested in exploring as a legal theory a proposition that would be an analog of the statute of limitations, governed not by elapsed time but by trunk diameter, which is a proxy for elapsed time, and argue that, because of the Heritage tree status, the Aoplicants are now too late in trying to exert a claim to protect their structural property from the Heritage trees .....

PLAN A

Definitions: Usage of terms in this document is believed to be customary:
A "strand" is a monofilament that is a component of a twisted bundle consisting of many strands.
A "cable" is the twisted bundle of steel strands, which is anchored at each end by a fixed or tensioning anchor.
A "tendon" is a monofilament traversing a span and anchored at each end by a fixed or tensioning anchor.

[4] Transmittal letter dated Mar. 24, 2014, bottom of p.1

Critical Root Zone

The CRZ is equal to:

One foot of tree protection for every inch in tree diameter

For example, a tree with a 12-inch DBH or caliper breast height, would require 12 feet of protection on every side measured from the base of the tree.

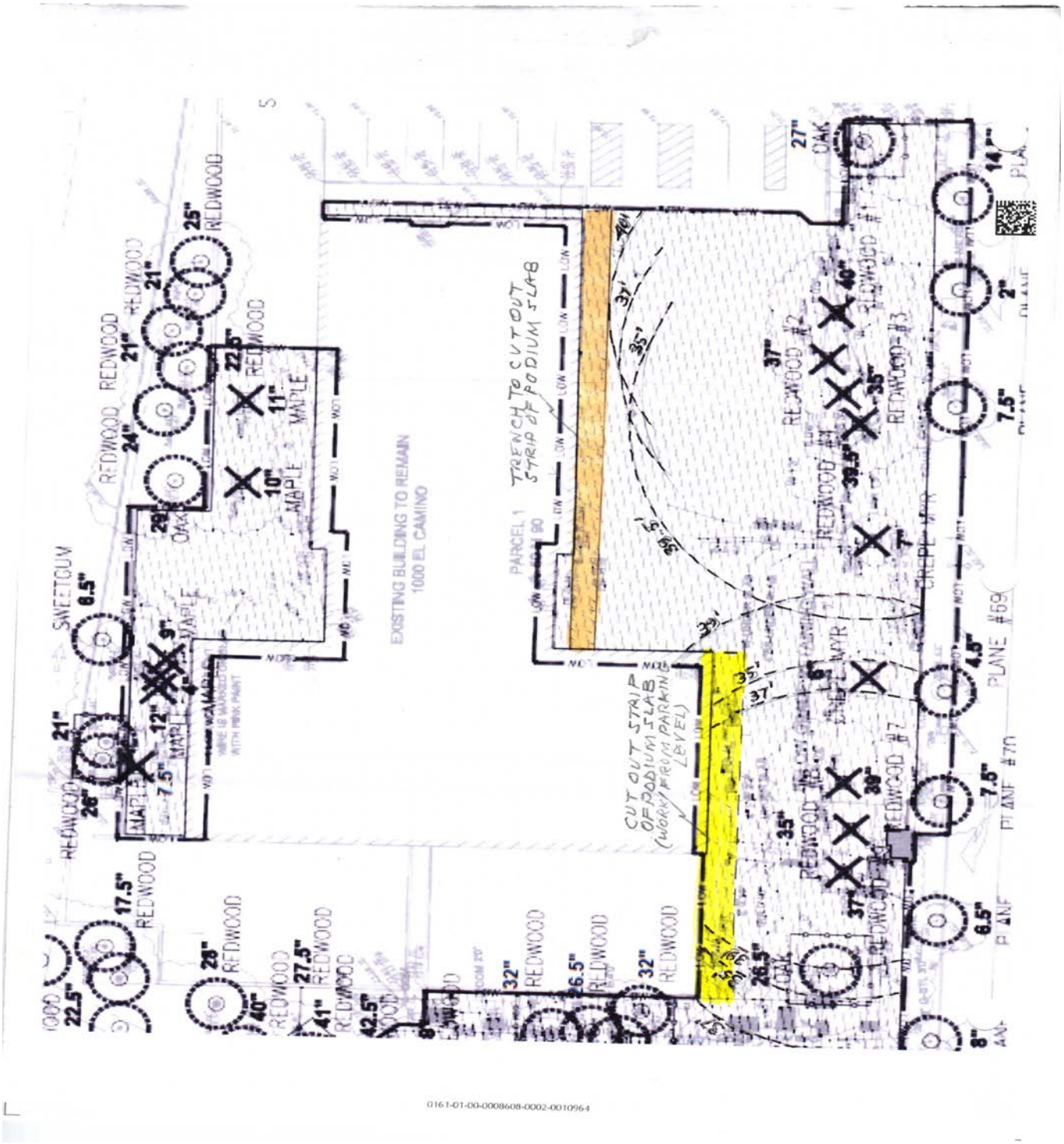
This area must be protected using 4' fence (orange mesh construction fence is acceptable)

In the CRZ:

(1) No alteration or disturbance to existing grade
(2) No storage of construction materials, equipment, soil, or debris
(3) No disposal of any liquids e.g. concrete, gas, oil, paint; and blacktop
(4) No trenching within the critical root zone
(5)Trees within the CRZ must be watered every 10 days from April-September

Figure above is from DDOT[5] Blue Book, Requirements (ddot.dc.gov) Engineering Standards and Guidelines; Standard Specifications for Highways and Structures (UK). The U.S.standard for Root Protection Zone (RPZ) is the same.

[5] DDOT = District Department of Transportation, UK U.S.standard for Root Protection Zone is the same.



Site Plan showing boundaries of Root Protection Zones (RPZ = CRZ) for 7 Coast Redwood Trees and colored regions where it is proposed to cut strips out of the concrete podium slab[6]

[6] Adapted from p.19 pf SR 18-090-PC, Sheet L2.00

[end of Part 1, submitted by Menlp Park resident, Peter Edmonds, PhD, March4 2019]

begin Part 2 of OBSERVATIONS.....]

Corrosion and weakening of steel, post-tensionin strands in the podium slab

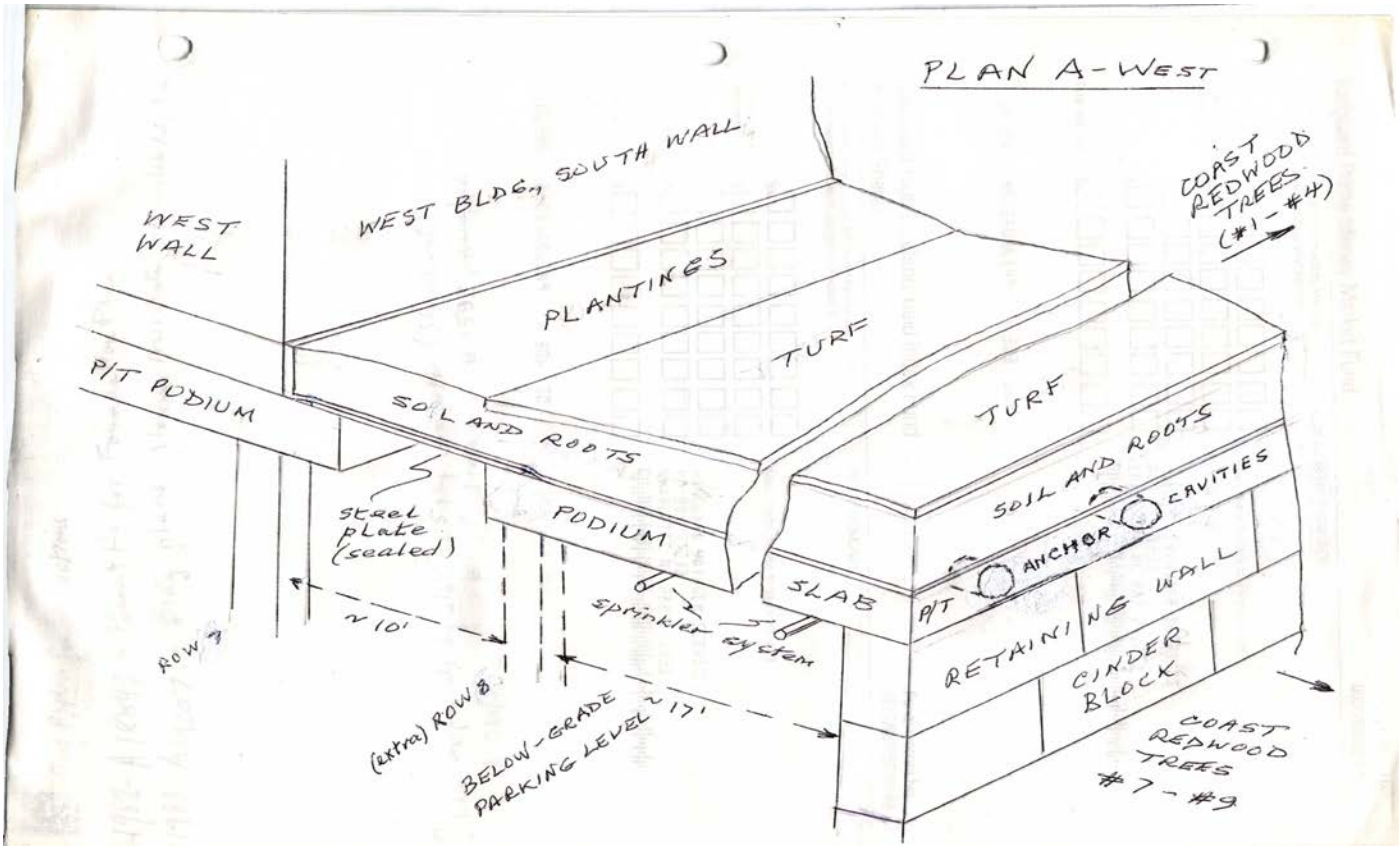
Applicant's engineering consultants judged the cause of this problem to be the action of moisture/water that accumulated under gravity at the lowest points of some strands' trajectories, i.e. at the terminal or intermediate anchors (KPFF[7])
Two north-south strands were "completely detensioned" (KPFF[8] 1.02.1.1) and one east-west cable[tendon] "had a partial loss of tension" (KPFF[8] 1.02.1.2). Evidence of inspections can be seen at 11 patches in the ceiling of the parking space in the south gallery, west end.

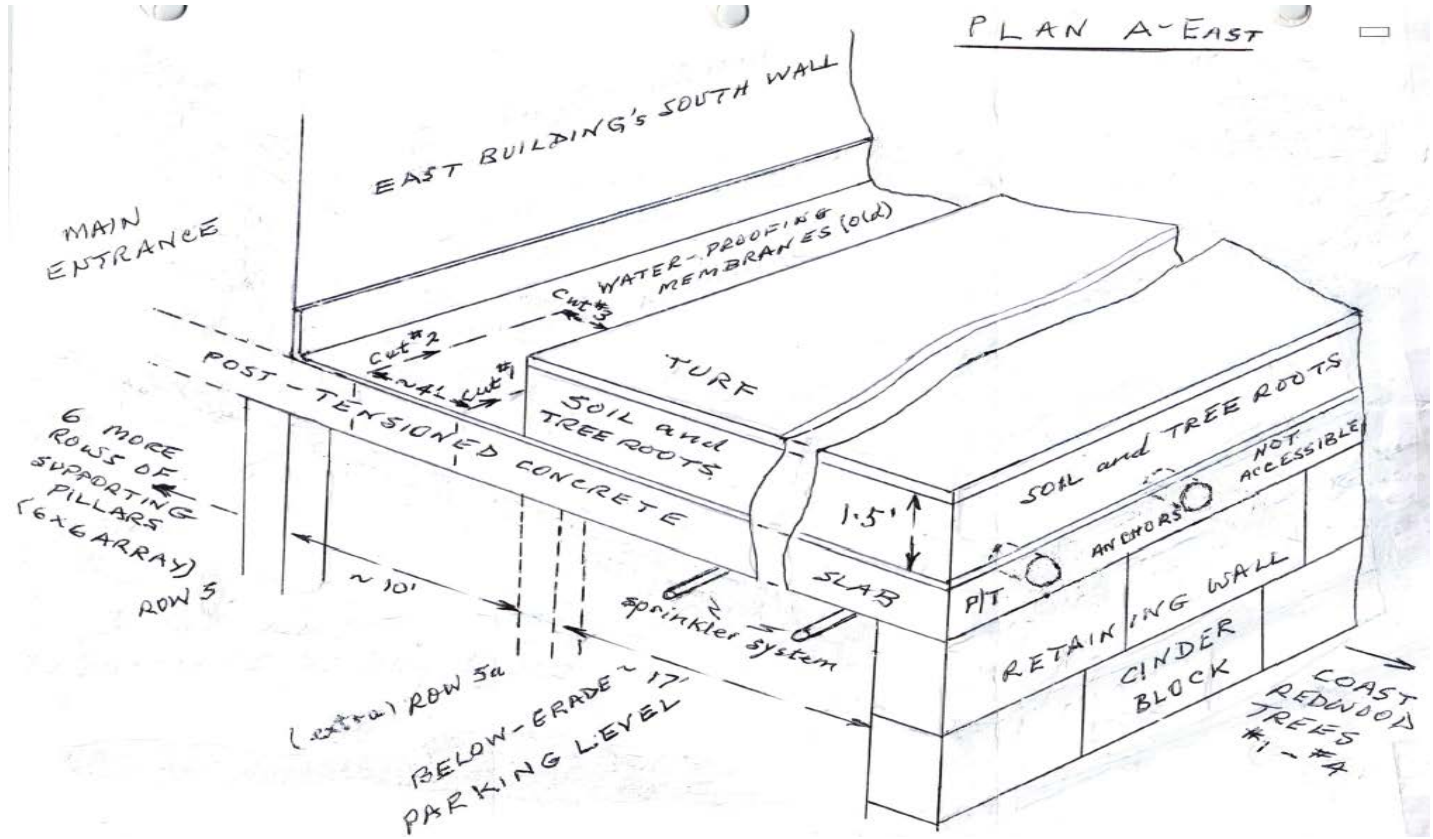
The (deceased) architect's plans (MP Building Dept. permit #A18843, 1982-83) of the Matteson buildings refer to ½" cables but illustrate only tendons.

THE PROPOSED ALTERNATIVE PROCEDURE IS TO ISOLATE THE SOUTH SECTION OF THE PODIUM SLAB BY CUTTING ACROSS IT IN THE WEST-EAST DIRECTION AND RELOCATING THE SOUTH ANCHORS OF THE NORTH-SOUTH TENDONS AT THE NEWLY EXPOSED SOUTHERN EDGES OF THE PODIUM SLAB IN THE VICINITIES OF THE SOUTH WALLS OF THE WEST AND EAST BUILDINGS.

Suggested procedures are illustrated by Figs. A-WEST and A-EAST.
Conceptual drafts of detailed procedures are available as Annexes A-WEST and A-EAST but are omitted from this version due to file-size limitations.

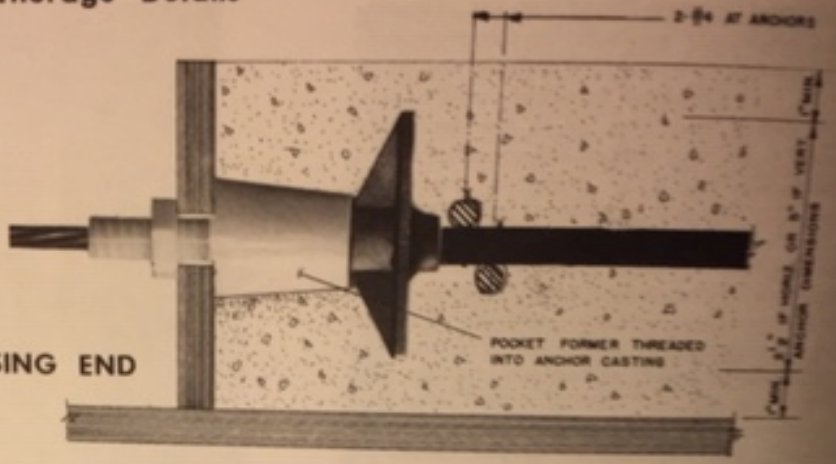
[7] Field Engineer's Report, 6/6/17: 1.02.1.1, 1.02.1.2, 1.02.2,1.05,1.06


PLAN A-WEST
WEST WALL
WEST BLDG, SOUTH WALL
PLANTINGS
TURF
TURF
COAST REDWOOD TREES (#1 - #4)
P/T PODIUM
SOIL AND ROOTS
SOIL AND ROOTS
steel plate (sealed)
PODIUM
CAVITIES
ANCHOR
SLAB
P/T
RETAINING WALL
CINDER BLOCK
sprinkler system
ROW 1
~10'
(extra) ROW 8
BELOW-GRADE PARKING LEVEL ~17'
COAST REDWOOD TREES #7 - #9

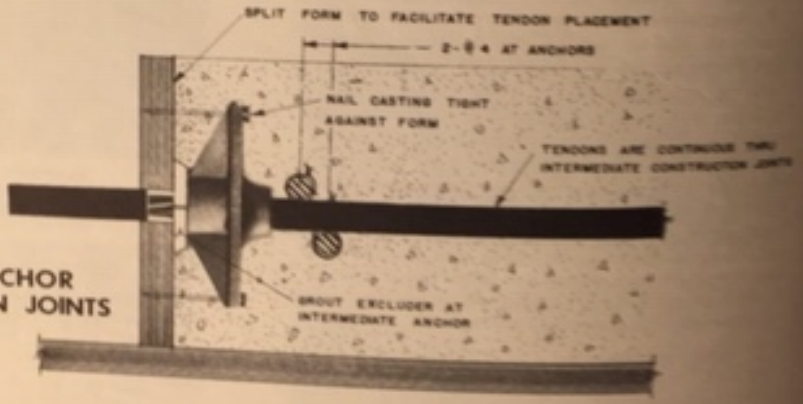

PLAN A-EAST
EAST BUILDING'S SOUTH WALL
MAIN ENTRANCE
WATER-PROOFING MEMBRANES (OLD)
Cut #3
Cut #2
Cut #1
POST-TENSIONED CONCRETE
TURF
SOIL and TREE ROOTS
SOIL and TREE ROOTS
6 MORE ROWS OF SUPPORTING PILLARS (6x6 ARRAY)
1.5'
NOT ACCESSIBLE
ANCHORS
P/T
SLAB
RETAINING WALL
CINDER BLOCK
ROW 5
~10'
sprinkler system
(extra) ROW 5a
BELOW-GRADE ~17' PARKING LEVEL
COAST REDWOOD TREES #1 - #4

Mono-Strand Anchorage Details

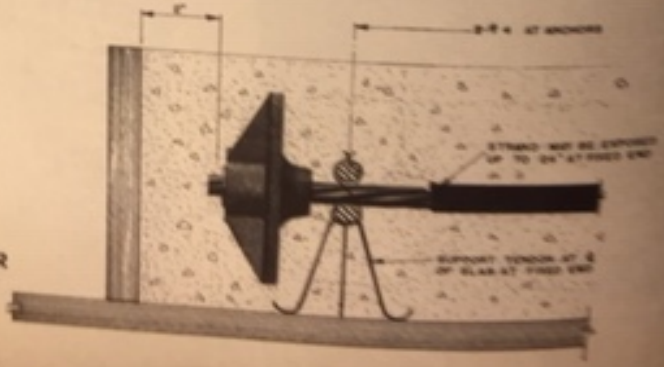
TYPICAL STRESSING END



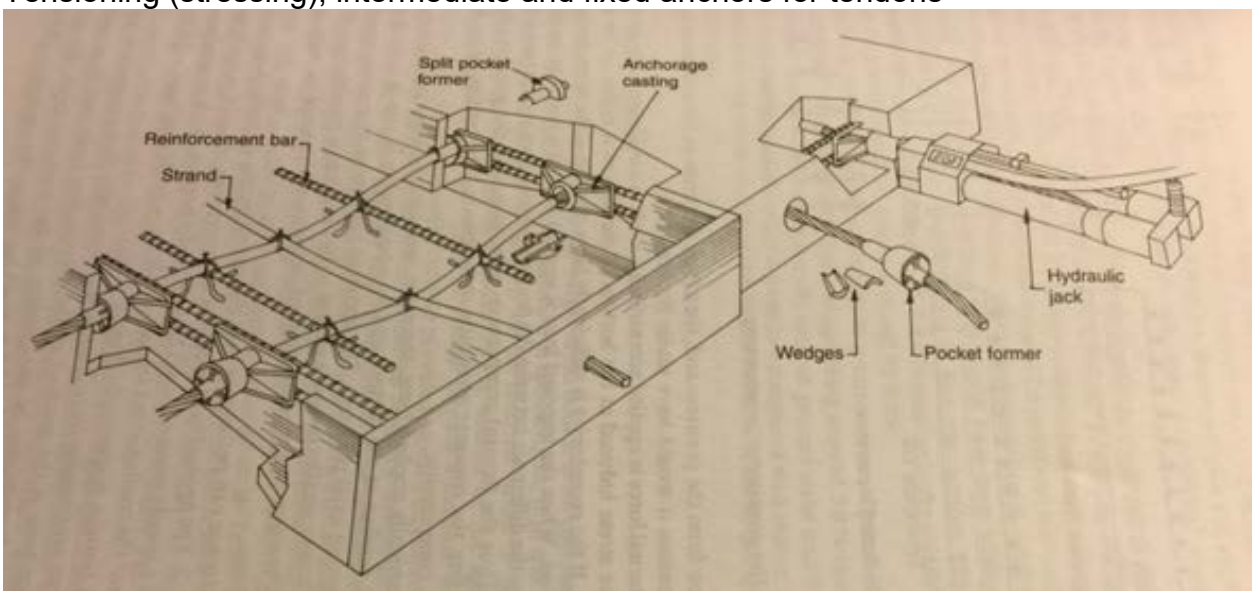
INTERMEDIATE ANCHOR AT CONSTRUCTION JOINTS



FIXED END ANCHOR



Tensioning (stressing), intermediate and fixed anchors for tendons[8]



Schematic of preparation for post-tensioning of a floor[9]

Isolation of the south section of the podium slab will render afunctional (without function) the slack residues of tensioning cables that it contains, so any further deterioration they experience will be immaterial. In the second part of this Plan A below, it is proposed to remove a portion of the isolated south section of the podium to allow free access by redwood tree roots to extra soil to be provided. Hence, further deterioration of some concrete that would have been exposed to seepage of irrigation water will no longer be a problem because it will not be there. Remaining portions of the isolated section of the podium shall be adequate to support the weight of overburden[10], i.e., ≤ 1.5 ft. of sandy loam or ≤ 130 lb/ft^2, excluding visiting, self-propelled machinery that may park on top.
Ownership of the trees has yet to be determined and may be addressed in the original lease (1980) or its subsequent five amendments (It is not in the Sixth, which I have read), as is also who made the final decision to plant the redwoods and who actually planted them on whose orders.

All cutting of the podium slab south of the West Building could be performed (laboriously) on the ceiling of the parking level.
THE ROOT PROTECTION ZONES SHOWN ON THE SITE PLAN WOULD NOT BE INFRINGED.

[8] Source: Post-Tensioning Manual, Third Edition, 1981, Post-Tensioning Institute, Phoenix AZ. Single copy for educational purposes.
[9] Souce: Post-Tensioning Concrete Floors, by Sami Kahn and Martin Williams, Butterworth-Heinemann, 1995. Single copy for educational purposes.
[10] calculated from Densities of Different Soil Types, https://structx.com/Soi_Properties_002.html]

CONCRETE GRINDER RENTAL & CONCRETE EQUIPMENT::

CUT-N-BREAK CONCRETE SAW ELECTRIC

3 Hour: $200.00

Daily: $375.00

Weekly: $1,500.00

Comments:

- Husqvarna K3000 Cut-n-Break Electric Concrete Saw Rental

It is envisaged that the cutting (with an electric, twin-blade Husqvarna K3000 Cut-'n-Break Concrete Saw, which can be rented from AAA-Rentals, Redwood City, for $375/day, $1,500/week (or buy one?) would be performed under the flower bed along the south wall of the West Building.

On the south side of the East Building, cutting could be performed (more conveniently) from above by temporarily removing and storing the flower bed, since the Root Protection Zones of redwoods #1, #2, #3 & #4 in the 4-tree cluster terminate at least 5 ft. short of the building's south wall (see Site Plan showing RPZs). A diamond concrete chain saw seems like one suitable tool (available from AAA-Rentals for $100/day, $400/week.

Cutting across the podium slab in the west-east direction necessitates cutting all north-south cables/tendons running beneath the West and East Buildings, which would be dangerous to the operator, if they were still tensioned at 347-396 kilopounds/in^2 (A18843, Sheet S3.2-8 P/T Slab Detail).

To relax tensions, it is necessary to locate the north-south tensioning anchors. The (deceased) architect's plans do not indicate (to me) whether these are at the north or south edge of the podium slab or neither. The necessity for post-tensioning in 1983 would seem to preclude fixed anchors at both ends but I found no indication of any anchors other than fixed, button-ends in the plans; Sheet S3.2 is the only one designated for P/T Slab Detail in the index on Sheet A-0 of plans filed under Building Dept. permit #A19207).

The conceptual drafts of detailed procedures (Annexes omitted from this version due to file-size limitations) suppose that tensioning anchors can be located at the north end by the chipping cement facing of the north edge of the podium (behind the shrubbery) to reveal anchor cavities. After tension on a tendon is relaxed and the tendon cut at the southern end, it can be withdrawn from its anchor at the north end, inspected for corrosion and replaced by fishing individual strands or entirely

as indicated. An estimated cost in 2014 was "$1,200 for special inspection and roughly $12,000 for the repair of the two damaged strands[11]."

North Edge of the Podium partially supporting the West Building
The open grille with vertical bars ventilates the parking space below the Podium.

A friendly architect passing by the Building Dept's public desk suggested chipping into the ceiling of the parking space to expose tensioned cables/tendons and gripping them with a tool that does not require passing the cable/tendon through a central orifice. It is unclear whether such a tool exists and how it would be able to exert enough force to overcome the tension, allow the proximal portion of the cable to be cut and relax the tension in a controlled manner.

Long-term stability of the trees

The City Arborist and Applicant's consultant arborists have expressed concern that the 7 redwood trees have insufficient root anchorage currently to assure long-term stability when exposed to wind forces. Safety of pedestrians and traffic using El Camino Real is the issue. Therefore.....

IT IS PROPOSED TO CUT AWAY AND REMOVE TWO WEST-TO-EAST STRIPS OF THE ISOLATED SOUTH SECTION OF THE PODIUM SLAB OF COMBINED LENGTH APPROX. EQUAL TO THE LENGTH OF THE MATTESON BUILDINGS AND REPLACE THEM WITH LATTICE PANELS THAT WOULD ALLOW PENETRATION OF TREE ROOTS TO LARGE

[11] AABAE transmittal letter dated Mar. 24, 2014, p.2, item 3

QUANTITIES OF EXTRA SANDY LOAM PACKED INTO ENCLOSURES INSTALLED AT THE PARKING LEVEL.
The total volume of extra soil needed is yet to be determined. Suggestions for design and procedures depend upon specifications not yet received.

This proposal may impact the parking level configuration and may result is some reduction in the number of parking spaces available. On the other hand, the desired volume of sandy loam might be accommodated in enclosures that merely decrease the ceiling height over some of the aisles and parking spaces. All such enclosures will require rust protection and inclined bottom panels for drainage, eventually to a grating seen in the floor in the south-east corner of the parking space. Any disadvantage is rated minor in the light of the availability of on-site surface parking east of the Matteson Buildings, public parking to the north and the observed under-utilization of the below-grade parking (Photo below taken on Friday, January 18, 2019, 4:25 pm). Some space in the north-east corner is currently dedicated to storage of office furniture.

Constructing a new south wall along the line of the southern-most line of pillars in the parking space would separate soil in an enclosure in the south gallery from the future available parking space. The next gallery northward could be repurposed as the entry for cars by moving the entrance gate at the foot of the inclined ramp (south-west corner of structures) and repainting the pattern of parking slots on the floor. The aisles for circulation of cars are wider than necessary now and could be narrowed.

Include Hanging Garden

The presence of water seeping through the south retaining wall of the parking space offer an opportunity to use it imaginatively instead of decrying the efflorescence and small pools of water on the floor, while paying no attention to the similar pools of water that form at the south end of the inclined entry ramp, which is open to the sky, when it rains.

Pooled water

Seepage: "Has to be fixed !" < 20 ft.> Rain water at foot of ramp: No one cares!

The porous wall seems ideal for conversion to a Hanging Garden: Hemi-spherical concrete bowls could be attached to the wall in a staggered array, filled with earth and planted with ferns and vines; possibly install trellis on wall and water-collection trays as desired in the ceiling space; encourage growth of lichens, ferns and cave-dwelling plants. A Hanging Garden could be promoted as a feature of the site.

With more attention to lighting and management, the weeping south wall could be used alternatively for a vertical, hydroponic facility nurturing salad greens that could be harvested for use in the cafeteria on the third floor.

PLAN B

In the event that PLAN A does not find favor and recommendation by the EQC, Plan B is offered to save 4 of the 7 redwood trees by transplanting them to a municipal park; I suppose that this proposal would entail referral to the Parks and Recreation Commission.

A major factor in successful transplantation is preservation of as much as possible of the roots system. By delineating Root Protection Zones and equating them with Root Preservation Zones on enlarged portions of Sheet L2.00 (p.19 of SR 18-090-PC), boundaries can be drawn that optimize the areas of intertwined root systems that could be preserved with uprooted redwoods #1 and #4 from the 4-tree cluster and #7 and #9 from the 3-tree cluster, i.e, the outermost trees in the two clusters, whose roots predominate in the >180 degree sectors colored yellow and orange in Figures B-WEST and B-EAST. The white area in Fig. B-EAST represents an area available for taking roots of trees being sacrificed for grafting into the missing <180 sectors of the trees being transplanted.

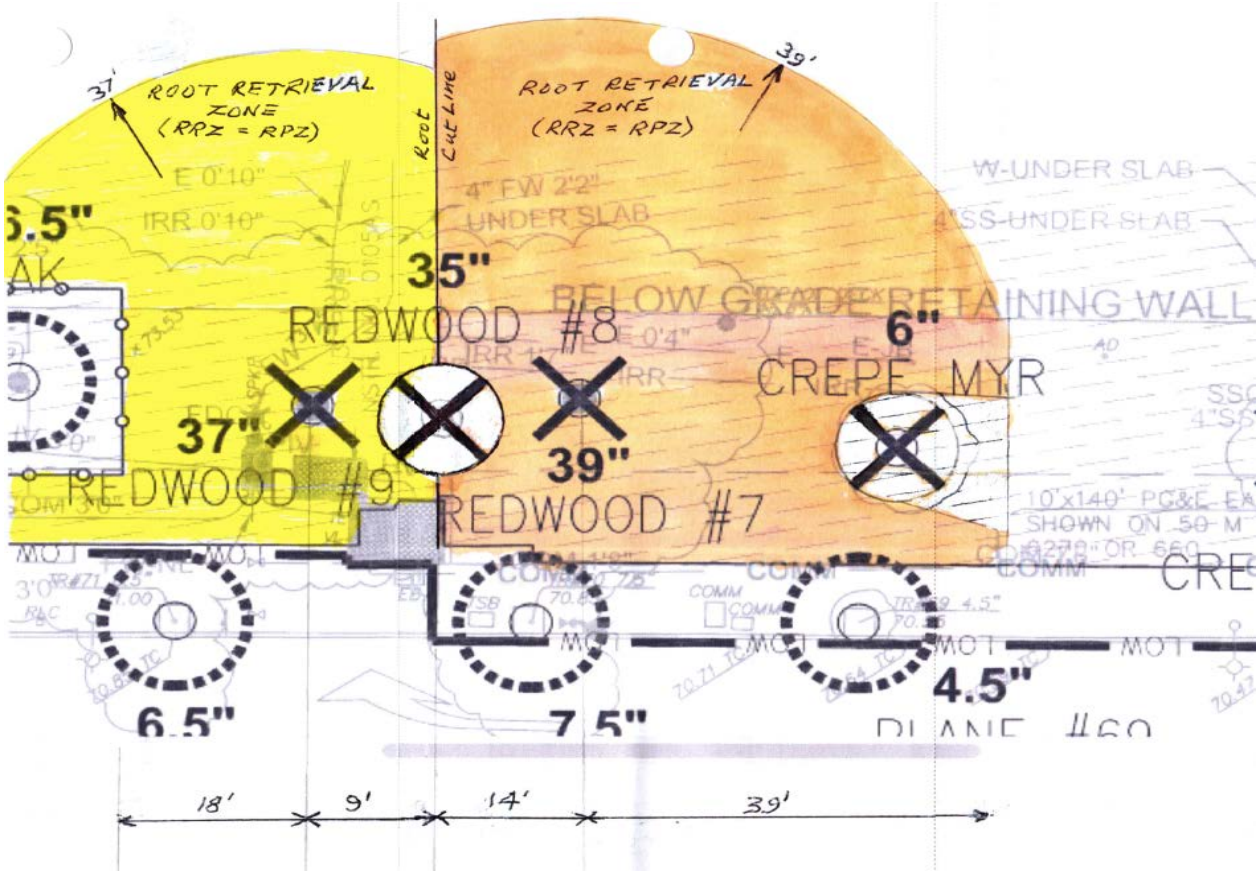


Figure B-WEST

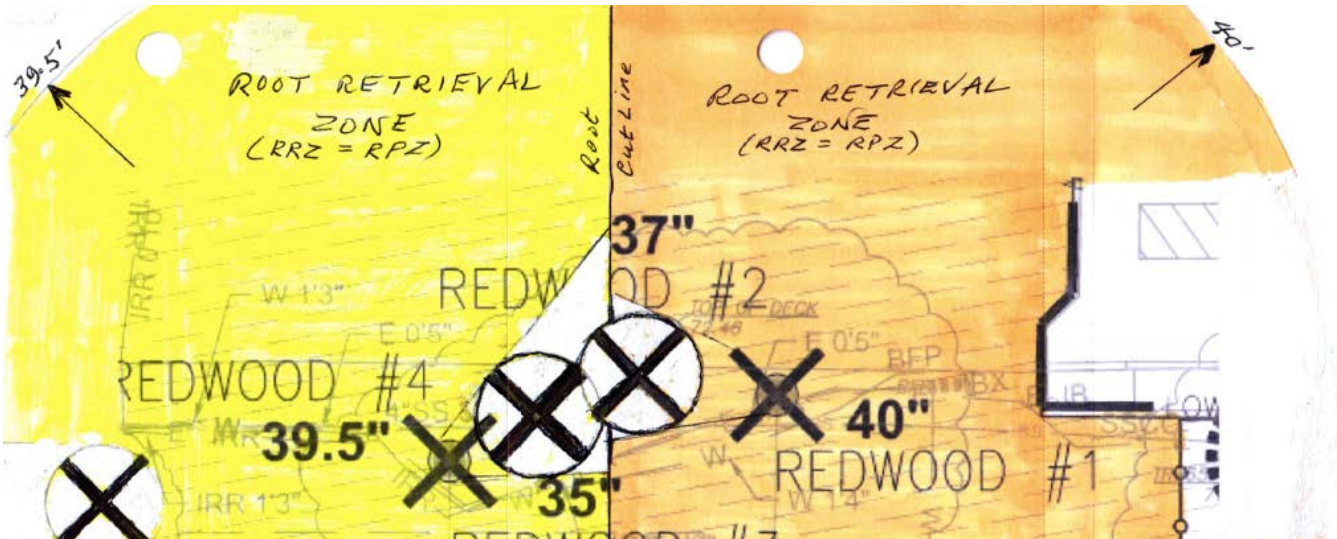


Figure B-EAST

Transplanted trees will need cable stays to stabilize them against wind forces for years until their root systems have regrown sufficiently to dispense with these stays.

ANNEXES

Annexes A-E and A-W are appended to demonstrate that the proposer has attempted to think through the implications of his proposals. They are in draft form and errors, omissions and inconsistencies may be present. It should not be necessary for any readers of this proposal to study them in detail, since they will surely be revised or discarded, if the proposal is advanced to a subsequent stage.

ANNEX A-EAST

CONCEPTUAL DRAFT PROCEDURE WITH ACCESS TO PODIUM FROM ABOVE & BELOW

A-E1. If necessary, remove and preserve plants (shrubbery) prior to exposing locations of post-tensioning tendon anchors on edge of the podium (concrete-slab roof of parking space). Remove plugging material from anchor cavities.

A-E2. Measure positions of tensioning-tendon anchors on north edge of the podium, East Building; [compare with 1982-83 architectural plans; where shown?]

A-E3. At the below-grade parking level, position a robust mobile scaffold under the middle of the podium at its south end.

A-E4. Remove the sprinkler system and electric wiring in conduits and distribution boxes from the ceiling along the south gallery and temporarily reconnect as necessary to preserve proper operation of sprinklers and electricity service not removed from other galleries.

A-E5. Install supporting post or arch under middle of podium at south end and ~ 10' south of existing pillar (gridline HI on Sheet S2.1. Plan #A18843 -1983); repeat installation of posts or arches under south end of slab in line with each exiting pillar on gridline HI as far eastward as the one aligned with east wall of East Building or any intermediate (east-west) tendon-anchor array.

A-E6. Remove and store plants in flower bed along south wall of East Building.

A-E7. While avoiding further damage to waterproofing membrane above concrete slab, carefully excavate ~ 5'-wide trench along the south wall of the West Building.

A-E8. Cut waterproofing membrane along the centerline of the trench and fold back over turf; protect them with plywood panels laid on top of a thick layer of wood chippings.

A-E9. At the north end, release most of the tension on the westmost tendon (#x) intersecting the trench.

A-E10. At the bottom of the trench (A-E7) mark the top surface of the slab approx. half-way (30% - 70%) between all north-south tendons running beneath the East building (using data from step A-E1 above. Identify from measurement at east anchors [and architectural plans] and mark positions of any east-west tendon sleeves within the bounds of the trench.

A-E11. With rotary, diamond-blade, power tool adjusted to suit the depth (9") of the slab, begin Cut #1 at west end of concrete slab exposed by trench, avoiding any east-west tendon sleeves; continue cutting eastward to the position marked (A-E10).

A-E12. Support an approx. 4'-wide portion of the slab north of Cut#1 on jacks from below.

A-E13. Withdraw >4' of cut tendon #x at north end.

A-E14. With rotary, diamond-blade. power tool, begin Cut #2 at west end of trench, avoiding east-west tendon sleeves; continue cutting eastward to the position marked (A-E10).

A-E14.1 Release tension on any east-west tendon situated between Cut #1 and Cut #2.

A-E15. Perform Cuts #3 and #4 joining Cut #1 and Cut#2 along orthogonal lines at a distance equal to the radius of the diamond blade to the east of the starting points of Cuts #1 and #2 and to the west of the position marked (A-E10), severing any east-west tendon that is encountered; do not cut beyond visible Cuts #1 and #2 in the top surface.

A-E16. Lower jacks slightly below concrete slab; crack off and remove the rectangular cut-out portion of the slab. Repair any chipped locations on the underside of the slab.

A-E17. Prepare the exposed south edge of the slab to receive a tensioning anchor for tendon #x.

A-E18. At the north end, push tendon #x back into its sleeve.

A-E19. At the new south end, thread a new tendon-tensioning and/or anchoring fitting onto the free end of tendon #x and secure it to the south edge of the slab.

A-E20.1 If a tensioning fitting was fitted to the south edge, attach a tensioning device to the free end of tendon #x and exert required tension; hammer(?) home locking wedges (?) and remove tensioning device.

A-E20.2 If a fixed-anchoring fitting was fitted to the south edge, attach a tensioning device at the north end of tendon #x and exert required tension; hammer(?) home locking wedges (?) and remove tensioning device; plug the anchor cavity and install a water-proof cover, if provided.

A-E20.3 Plug and seal tendon-sleeve orifices exposed on south side of rectangular aperture cut into slab.

A-E21. Repeat steps A9-E through A-E20 above for all tendons *one at a time* [or how many at the same time?] along the trench and continue as far as a line projected from the east wall of the East Bldg..

A-E22.If necessary, with a jackhammer, extend the rectangular aperture cut out of the concrete slab eastward and westward *but without breaching any north-south tendon sleeves*, to form two C-shaped boundaries of the aperture bridging Cuts#1 & #2, thus avoiding stress concentration at 90^{o} corners.

A-E22.1 If an east-west tendon was severed (repeatedly) during A15, then install a tendon-tensioning anchor on the newly exposed west end of the cut-out aperture. Tension tendon to spec and lock.

A-E23. Install a water-proof lid strong enough to support expected loads over the entire aperture that was cut into the podium.

A-E24. Remove plywood panels; fold back old water-proofing membranes, trim and perform sealing as desired.

A-E25. (deleted)

A-E26. Backfill trench and restore flower bed and turf.

A-E26.1 Restore north end anchors to sealed and water-proofed condition; restore plantings.

A-E27. Convert the south wall at the parking level into a vertical, hydroponic Hanging Garden: attach concrete quarter-spherical bowls to wall in a staggered array, fill with earth and plant ferns and vines; possibly install trellis on wall and water-collection trays in ceiling space; encourage growth of lichens, ferns and cave-dwelling plants. Promote Hanging Garden as a feature.

A-E27.1 Alternatively, construct a more presentable curtain wall to wall off the south cinder-block retaining wall.

A-E28. Restore sprinkler system in south gallery to original configuration.

A40. Admire the undisturbed Coast Redwood trees.

ANNEX A-WEST

CONCEPTUAL DRAFT PROCEDURE WITH ACCESS TO PODIUM only FROM BELOW

A-W1. If necessary, remove and preserve plants prior to exposing post-tensioning tendon anchors on edge of the podium (concrete-slab roof of parking space).

A-W2. Measure positions of tensioning-tendon anchors on north edge of the podium, West Building; [compare with 1982-83 architectural plans; where shown?]

A-W3. At the below-grade parking level, position a robust mobile scaffold under the west edge of the podium/slab at its south end.

A-W4. Remove the sprinkler system and electric wiring in conduits and distribution boxes from the ceiling along the south gallery and temporarily reconnect as necessary to preserve proper operation of sprinklers and electricity service not removed from other galleries.

A-W5. Install supporting post or arch under west edge of podium at south end and ~ 10' south of existing pillar (gridline HI on Sheet S2.1. Plan #A18843 -1982/83); repeat installation of posts or arches on gridline HI under south end of podium in line with each exiting pillar as far eastward as the one aligned with the east wall of West Building or the intermediate (east-west?) tendon-anchor array.

A-W6. At north end, release most of the tension on tendon #1 (counting from west to east).

A-W7. On the underside of the podium (roof of the parking space}, mark the bottom surface of the slab approx. half-way (30% - 70%) between all north-south tendons running beneath the West building (using data from step A-W1 above). Similarly identify from measurement of positions of west anchors [and architectural plans?] and mark positions of any east-west tendon sleeves within the bounds of the gridline HI and the row of new pillars or arches (A-W5).

A-W8. Working on the underside of the podium/slab with a rotary, diamond-blade, power tool (e.g., Husqvarna K3000, AAA Rentals, RC & MP, (650-365-6743, aaarentals@pacbell.net), adjusted to max. depth (2.5"), begin Cut #1 at west edge of concrete slab, avoiding any east-west tendon sleeves; continue cutting eastward to the position marked (A-W10). Break out the concrete strip between the double cut with the pry bar provided.

A-W8.1 Deepen Cut #1 in 2.5" increments to 7.5" total by two repetitions of A-W11.

A-W8.2 Adjust the depth of cut to 1.5" and repeat A-W11, avoiding damage to the overlying water-proofing membrane as much as possible.

A-W9. Support an approx. 4'-wide portion of the slab north of Cut#1 on jacks on the mobile scaffold.

A-W10. Withdraw >4' of cut tendon #1 at north end.

A-W10.1 Release tension on any east-west tendons situated between Cut #1 and Cut #2 (A-W14).

A-W11. Working on the underside of the podium/slab with the rotary, diamond-blade. power tool, begin Cut #2 at west edge of concrete slab, avoiding east-west tendon sleeves; continue cutting eastward to the position marked (A-W7). Break out the concrete strip between the double cut with the pry bar provided.

A-W11.1 Repeat A-W8.1 and A-W8.2 for Cut #2.

A-W12. Perform Cut #3 joining Cut #1 and Cut#2 along an orthogonal line at a distance equal to the radius of the diamond blade to the west of the position marked (A-W7), severing any east-west tendon that is encountered; do not cut beyond visible Cuts #1 and #2 in the bottom surface. Repeat to achieve a total depth of 9" (=3 x 2.5" + 1.5").

A-W13. Lower jacks slightly below concrete slab to crack off and remove the rectangular cut-out portion of the slab.

A-W13.1 Spray the *central areas* of the top surfaces of 2 rigid, rectangular steel plates with beveled and rounded edges, as necessary for A-W16.2, with *vegetable oil* (cooking oil spray-cans), avoiding dripping from plate edges. Also spray central area of exposed underside of water-proofing membrane.

A-W13.2 Temporarily support exposed bulging membrane supporting 1.5 ft of soil (~100 lb/ft2) with two oiled, rectangular steel plates on jacks with rotating caps. Raise the eastern jack to relieve some soil pressure on the western plate. With pry bar(s) rotate the western plate 90 degrees to bridge the aperture in the slab; tap with a wooden mallet the eastern edge of the plate to move it westward as far as desired to support soil overburden. Raise the plate thus positioned on its jack and inject waterproofing sealant under plate and above concrete at all overlapping surfaces. Release the jacks under the western and eastern plates; smooth the extruded sealant. Reposition the mobile scaffold approx. 1-plate-length to the east.

A-W13.2 Repeat A-W13.1, applying sealant to the abutting parallel edges of the plates until the exposed east end of the aperture prevents positioning of more steel plates.

A-W13.3 Repeat A-W8 through A-W13.2 until the eastern end of the aperture extends beyond the east wall of the West Building or the intermediate anchor-array for east-west tendons.

A-W14. Prepare the exposed south edge of the slab to receive a tensioning anchor for tendon #1.

A-W15. At the north end, push tendon #1 back into its sleeve.

A-W16. At the new south end, thread a new tendon-tensioning and/or anchoring fitting onto the free end of tendon #1 and secure it to the south edge of the slab.

A-W17.1 If a tensioning fitting was fitted to the south edge, attach a tensioning device to the free end of tendon #1 and exert required tension; hammer(?) home locking wedges (?) and remove tensioning device.

A-W17.2 If a fixed-anchoring fitting was fitted to the south edge, attach a tensioning device at the north end of tendon #1 and exert required tension; hammer(?) home locking wedges (?) and remove tensioning device; install a water-proof cover for the new anchor, if provided.

A-W17.3 Plug and seal tendon-sleeve orifices exposed on south side of rectangular aperture cut into slab.

A-W18. Repeat steps A-W6 through A-W17 above for all tendons *one at a time* [or how many at the same time?] across the south face of the West Building and continue as far as the east-west intermediate anchor array.

A-W19. If necessary, with a jackhammer, extend the rectangular aperture cut out of the concrete slab eastward *but without breaching any north-south tendon sleeves*, to form two C-shaped boundaries of the aperture bridging Cuts#1 & #2, thus avoiding stress concentration at 90- degree corners.

A-W19.1 If an east-west tendon was severed (repeatedly) during A-W12, then install a tendon-tensioning anchor on the newly exposed west end of the cut-out aperture. Tension this tendon to spec and lock it.

A-W20. Apply additional water-proofing sealant around the entire aperture that was cut into the podium/slab.

A-W20.1 Install removable ceiling panels to enclose the 9"-deep aperture in the ceiling.

A-W21 Restore north end anchors to sealed and water-proofed condition; restore plantings.

A-W22. Convert the south wall at the parking level into a vertical, hydroponic Hanging Garden: attach concrete quarter-sphericalbowls to wall in a staggered array, fill with earth and plant ferns and vines; possibly install trellis on wall and water-collection trays in ceiling space; encourage growth of lichens, ferns and cave-dwelling plants. Promote Hanging Garden as a feature of the site.

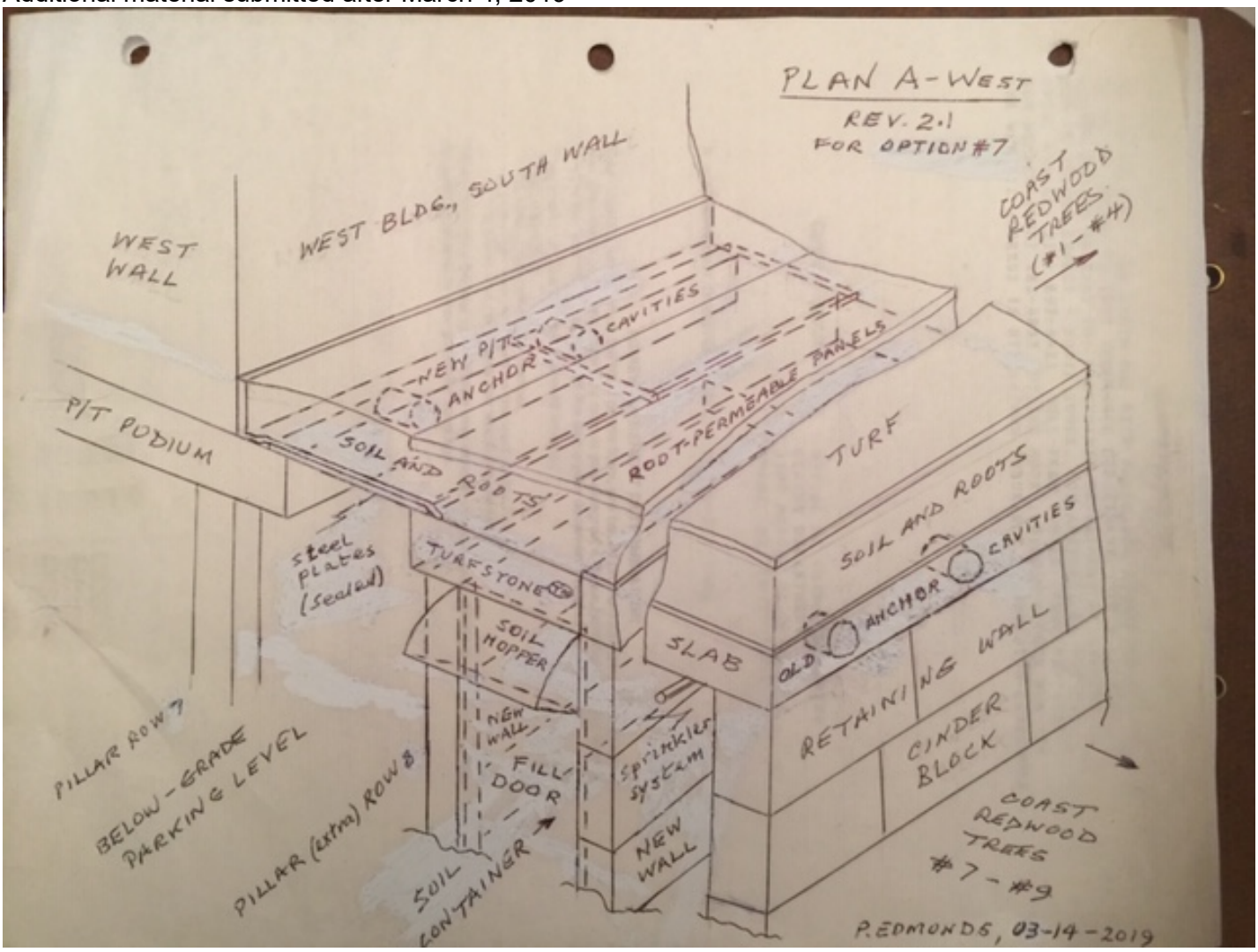
A-W22.1 Alternatively, construct a more attractive curtain wall to wall-off the south cinder-block retaining wall.

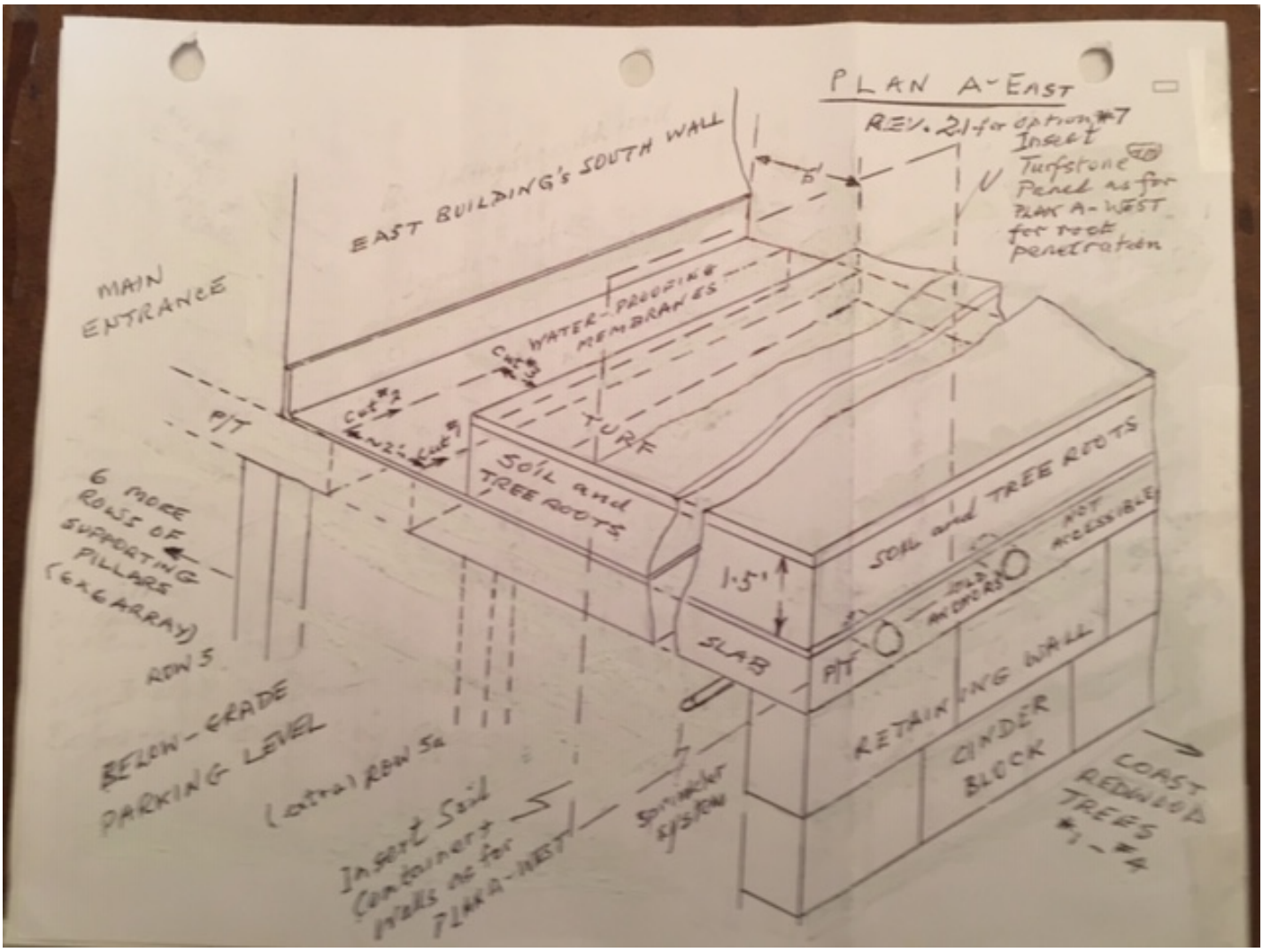
A-W23. Restore sprinkler system in south gallery to original configuration.

A40. Admire the undisturbed Coast Redwood trees.

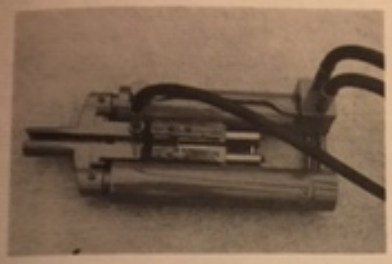
Submitted by Menlo Park Resident Peter Edmonds, PhD, March 4, 2019

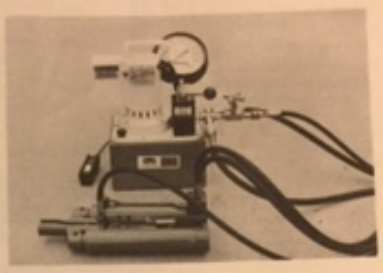
Additional material submitted after March 4, 2019



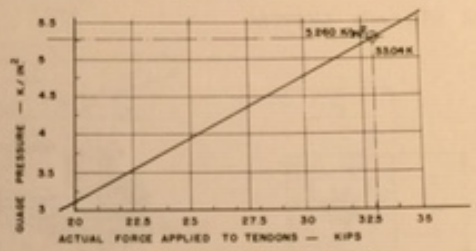

PLAN A-EAST
REV. 21 for option #7
Insert Turfstone Panel as for PLAN A-WEST for roof penetration
EAST BUILDING's SOUTH WALL
MAIN ENTRANCE
WATER-PROOFING MEMBRANES
Cut #3
Cut #2
Cut #1
P/T
TURF
SOIL and TREE ROOTS
6 more rows of supporting pillars (6x6 array)
ROW 5
1.5'
SOIL and TREE ROOTS
SLAB
P/T
RETAINING WALL
CINDER BLOCK
COAST REDWOOD TREES #1 - #4
BELOW-GRADE PARKING LEVEL
(extra) ROW 5a
Insert Soil Containers as for PLAN A-WEST
SPRINKLER SYSTEM

Mono-Strand Stressing Details

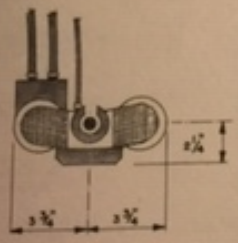


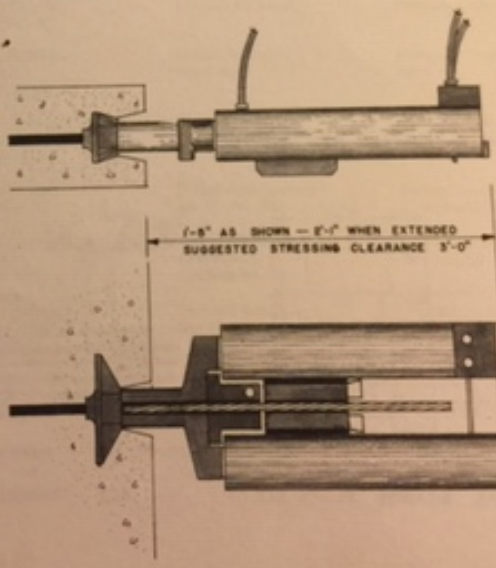


STRESSING JACK CALIBRATION CURVE



OPEN-THROAT STRESSING JACK





TECHNICAL DATA

LENGTH OF STROKE	— 8 IN.
EFFECTIVE RAM AREA	— 6.28 IN.²
OPERATING PRESSURE	— 5260 LB./IN.²
GUAGE FACE DIAMETER	— 6 IN.
OPERATING WEIGHT	— 47 LB.
FORCE AT STRESSING	— 33.04 K.
FORCE AT SEATING	— 28.91 K.

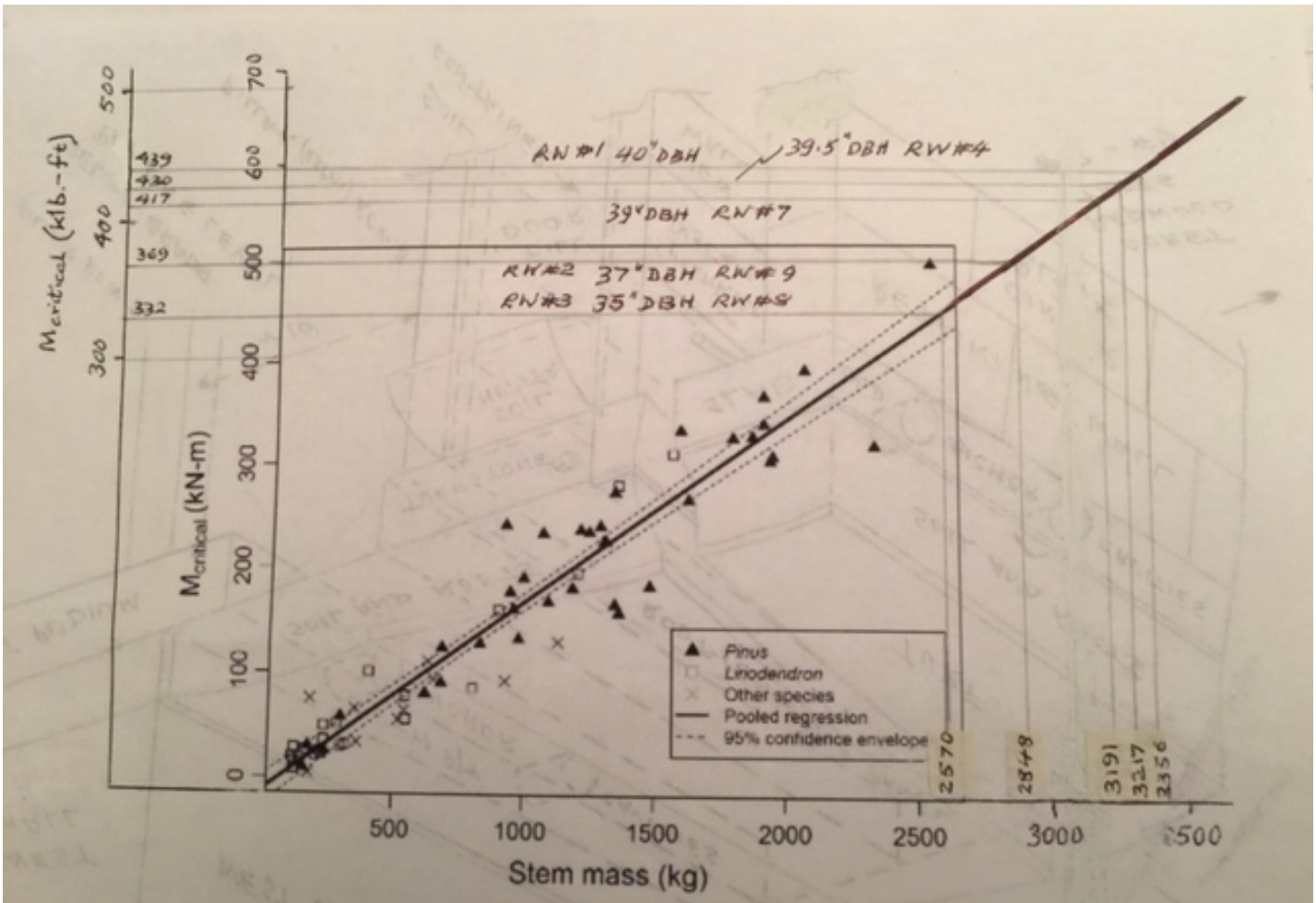


Fig. 2. Critical turning moment (N-m) vs. stem mass (kg). Regression line and confidence envelopes are for all species pooled.

SKIP NAVIGATION

CONCRETE PAVERS

PERMEABLE PAVERS

- Aqua-Bric®
- Aqua-Bric IV™
- Eco-Stone®
- Turfstone™
- Andover 5511™ Permeable

RETAINING WALLS & COPING

STEPS, STAIRS & ELEVATIONS

FIRE PITS

KING OF HEARTHS

ELEMENTS WITH STYLE

PACKAGING DIRECTORY

PHOTO GALLERIES

INSTALLATION

Homeowners

Contractors

Designers

Galleries

Catalog

Our Turfstone concrete grid paving slab features a flat, “lattice” style surface with apertures that can be planted with grass or filled with stone to infiltrate stormwater. Turfstone accommodates pedestrian and vehicular traffic and is suitable for driveways, overflow parking, access lanes or anywhere “greenspace” pavement is desired. Properly installed, Turfstone is “snow-plow safe”. Turfstone also can be used on slopes and swales for erosion control.

Download Page PDF

Download Patterns

Dimensions & Coverage

Turfstone	23 5/8" x 15 3/4"	3 1/8" thick	2.6 sq ft/pc	145.6 sf/cube

Single Unit

Go back

Turfstone™

Stones with Style®

Skip navigation

Traditional Shapes & Finishes
Drum-Roll Tumbled Shapes and Finishes
Industrial Pavers

Elements of Style

Skip navigation

Barbeque Surround Kit
Curbstone™ Edging
Pillar Caps

Permeable Pavers

Skip navigation

Aqua-Bric®
Aqua-Bric IV™
Eco-Stone®
Turfstone™

Steps with Style®

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Chelmsford™ Step
Rockport™ Steps

Walls with Style®

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Retaining Walls
Garden Walls
Coping with Style

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Administrative, Sales & Marketing Offices

45 Power Road
P.O. Box 747
Westford, MA 01886
P: 978-692-3076
F: 978-692-0817

Hardscape Sales & Showroom

232 Lexington Street
Waltham, MA 02452
P: 781-894-3200
F: 781-894-1879

Manufacturing & Order Center

55 Power Road
P.O. Box 747
Westford, MA 01886
P: 978-692-3076
F: 978-692-0487

True Value by Ideal Hardware Store

232 Lexington Street
Waltham, MA 02452
P: 781-894-2188

Herren, Judi A

From: Tom Kabat <tomgkabat@gmail.com>
Sent: Tuesday, February 5, 2019 5:46 PM
To: Lucky, Rebecca L
Subject: Fwd: 1000 ECR tree removal

fyi

Begin forwarded message:

From: Akomoroske [redacted]
Subject: 1000 ECR tree removal
Date: February 5, 2019 at 4:50:59 PM PST
To: tomgkabat@gmail.com

Dear sir,
I made a suggestion earlier that the city might make a trade with the building owner of 1000 ECR whereby the city would take over 1000 ECR in return for the current city hall/admin building (some money may need to change hands depending upon relative valuations of the buildings). This would put city hall back into the historic center of town (the BBC was the city hall at one time). It would also allow the city to modify 1000 ECR to save the redwoods and assure their future growth. It would at the same time provide an improved working and parking environment for the occupants of 1000 ECR. At the time I made the suggestion, I was unaware the city owned the land under 1000 ECR. Now knowing that, the trade may not seem so outlandish after all. I think this option should be evaluated in the decision process for this issue so that all possibilities are addressed.
Sincerely,
Alex Komoroske

PS- I would appreciate it if you could share this email with the other members of your board. I will notify the City Council members separately.

Sent from my iPad

CITY OF MENLO PARK

REGULAR MEETING MINUTES - DRAFT

Date: 2/27/2019
Time: 6:00 p.m.
City Hall - "Downtown" Conference Room
701 Laurel St., Menlo Park, CA 94025

A. Chair Marshall called the meeting to order at 6:08 p.m.

B. Roll Call

Present: Kabat, London, Chair Marshall, Martin, Payne, Vice Chair Price, Turley
Absent: None
Staff: Sustainability Manager Rebecca Lucky and Sustainability Specialist Joanna Chen

C. Regular Business

C1. Welcome Commissioner Turley

Chair Marshall introduced the item.

C2. Discuss a recommendation to City Council to explore adopting 2020 energy reach codes for new development (Staff Report #19-001-EQC)

Chair Marshall introduced the item.

- Rachael Londer from County of San Mateo spoke in support of exploring the reach codes and inviting staff and Commissioners to attend various reach code presentations.
- Diane Bailey spoke in support of implementing reach codes and developing carbon free buildings

The Commission directed staff to return in April with the cost effectiveness study from San Mateo County expected in March to advise City Council.

C3. Discuss Arbor Day/Week logistics and coordination

Chair Marshall introduced the item.

The Commission discussed Urban Canopy Preservation subcommittee assisting with the organization.

C4. Discuss Chair's quarterly report to City Council on March 12, 2019

Chair Marshall introduced the item.

C5. Discuss 2019 Environmental Quality Commission meeting schedule

Rebecca Lucky introduced the item.

The Commission requested that the November and December meetings be combined and to cancel the August meeting.

C6. Approve the December 5, 2018 Environmental Quality Commission meeting minutes (Attachment)

Rebecca Lucky introduced the item.

ACTION: Motion and second (Martin/London) to approve the December 5, 2018, Environmental Quality Commission meeting minutes, passed unanimously.

D. Reports and Announcements

D1. Commission reports and announcements

There are no reports.

D2. Staff updates and announcements.

Commissioner Deb Martin expressed concern on regional Dumbarton Bridge construction.

E. Adjournment

Chair Marshall adjourned the meeting at 8:34 p.m.

Minutes prepared by Joanna Chen.

CITY OF MENLO PARK

MEMORANDUM

Date: 3/18/2019
To: Commission Members
From: Nick Pegueros, Assistant City Manager
Re: City Council Work Plan Transmittal and Capital Improvement Program (CIP) process update

The City Council established its 2019 work plan earlier this month. The work plan is the guiding document for the initiatives and projects staff will be working on throughout the next 12-18 months.

CIP budget project prioritization

The CIP contains nearly 80 distinct capital improvement projects; many carried over from prior years that are underway. New for 2019, staff categorized the approved projects in relative priority based on several factors as outlined in Attachment A. Tier 1 indicates that a project will receive the highest relative priority for staff and consultant resources. Tiers 2 and 3, respectively, indicates that a project will receive significant resources only after the higher tier projects have received the necessary resources. Tier N/A indicates that a project is not currently competing for resources. Staff is committed to completing the projects outlined in the CIP budget, regardless of tiers.

2019 top priorities

As part of the annual goal setting process, the City Council identified its top priorities for the year. As a “top priority” project, staff will strategically realign all available resources necessary to achieve the milestones outlined in the project description. If there is a challenge meeting major milestones for a top priority project, staff may choose to strategically defer work on other projects to keep the top priority project on schedule, to the greatest extent possible. While the focus will be on the top priority projects, staff will continue to work diligently on all the projects included in the work plan. Also, staff will continue to work on the CIP and deliver daily services to the community. The City Council’s top priority projects are as follows:

- Transportation master plan (lead department: public works)
- Chilco Street improvement project (lead department: public works)
- Middle Avenue pedestrian and bicycle rail crossing (lead department: public works)
- Heritage tree ordinance update (lead department: city manager’s office)
- Belle Haven Branch library (lead department: library)

2019 work plan

In addition to the top priorities, the annual goal setting process identifies a number of other projects of importance to the City Council for work in 2019. The 2019 work plan contains of the following projects:

- Formation of a transportation management association
- El Camino Real/ Downtown specific plan update

- Market affordable housing preservation
- Short-term rental ordinance
- Single-Family residential design review
- Develop and implement near-term downtown parking and access strategies
- Zero waste implementation
- Implement the information technology master plan (year 2; land management)

CIP process update

As part of the annual budget development process, the City updates its Five-Year Capital Improvement Plan (CIP), even though only the first year of CIP is funded by Council. The CIP typically represents recommendations for short- and long-range public investment in infrastructure development, maintenance, improvement and acquisition. The CIP provides a link between the City's various master planning documents, and various budgets and funding sources, and provides a means for planning, scheduling, funding and implementing capital projects over the next five years. Typically, a capital project is defined as a project costing more than $75,000.

At this time, we do not intend to add additional items to the CIP for funding beyond those identified during the 2019 work plan development. The focus for the year is the Council approved work plan. It is important to note that some of the items in the work plan are not currently funded and they will be proposed as part of the upcoming budget for Fiscal Year 2019-20. There may be a few CIP items added for funding in FY 2019-20, but they will mainly be based on legal requirements. Other items that were previously listed in the CIP for FY 2019-20 and not included in the Council work plan may be shifted to the next fiscal year.

Commission considerations

The CIP process should be a continuous discussion. It is important for the commissions to continually think about projects throughout the year and to discuss the merits of those projects including how they fit into the overall master plans within the City. The Council will be provided regular updates on the work plan items throughout the year. These updates can serve as an opportunity and check in for the commissions to discuss any future projects that might be important to the City in the context of master plans and issues that arise.

Thank you, as always, for your valuable support of the Council's efforts to meet their goals of responsible fiscal management of the City's resources and infrastructure.

Attachments

A. City Council adopted Capital Improvement Project Prioritization for 2019
B. City Council adopted fiscal year 2019-20 budget principles and 2019 priorities and work plan Web link: https://www.menlopark.org/DocumentCenter/View/20838/G3---20180312-Work-plan-SR-CC
C. City Budget Web Link: https://www.menlopark.org/ArchiveCenter/ViewFile/Item/8539

CITY OF MENLO PARK

MEMORANDUM

Date: 2/21/2019
To: Starla Jerome-Robinson, City Manager
From: Justin Murphy, Public Works Director
Re: CIP Prioritization

This memo is a follow up item outlined in the January 29, 2019 staff report regarding the 2019 Council policy priorities and work plan (Staff Report #19-018-CC). This memo transmits a comprehensive listing of how staff is prioritizing almost 80 City Council adopted Capital Improvement Program (CIP) projects. The attachment includes annotated tables excerpted from the City Council adopted fiscal year 2018-19 budget for the 5-Year CIP.

Funding for particular CIP projects can be traced back as far as Fiscal Year 2003-2004. Many CIP projects are annual or biannual programs (e.g., Street Resurfacing), and the CIP Budget serves as the tool for funding those programs. Other CIP projects involved multiple phases with funding allocated over multiple years (e.g., Emergency Water Storage/Supply). Assuming that every project that is currently funded is considered a priority, it is then a matter of relative priority. In order to communicate the relativity to help inform the Council's goal setting, staff established a system with three tiers – 1, 2, and 3 – with 1 being the highest relative priority and 3 being the lowest relative priority. Priority considerations are generally based on the following along with available staffing:

- Regulatory compliance
- Public safety
- Preservation of city assets
- Improved efficiencies
- Grant funding timelines
- First in, first out

Staff applied these prioritization tiers to each currently funded projects within the seven established subject matter categories in the CIP Budget. Each category serves as a good proxy for the availability of eligible funding sources and staff skill sets that are required to execute on applicable projects. Projects that are complete as of February 2019 or have not yet been funded are labeled as not applicable (N/A) for terms of the prioritization. The following table summarizes how many projects are in the various tiers for each category and the applicable pages in the CIP Budget for project descriptions and funding sources.

At the February 2, 2019 goal setting session, staff sought the City Council's confirmation that the prioritization outlined in this memo reflects the City Council's priorities. As a result of that meeting and follow up considerations, tiers for three projects were modified: Chrysler Pump Station Improvements (moved from Tier 2 to Tier 1), Welcome to Menlo Park Monument Signs (moved from Tier 3 to Tier 2), and Downtown Parking Structure Study (moved from Tier 2 to Tier 3 to accommodate development of near-term parking strategies and advancing the monument signs).

Table 1: Project summary							
		Priority					
Category	CIP budget	Tier 1	Tier 2	Tier 3	Subtotal	N/A	Total
City buildings and systems	113-121	4	3	4	11	5	16
		36%	27%	36%	100%		
Environment	123-126	2	2	1	5	0	5
		40%	40%	20%	100%		
Parks and recreation	127-134	3	3	3	9	5	14
		33%	33%	33%	100%		
Stormwater	135-139	1	4	1	6	1	7
		17%	67%	17%	100%		
Streets and sidewalks	141-148	3	4	3	10	3	13
		30%	40%	30%	100%		
Traffic and transportation	149-158	4	6	6	16	1	17
		25%	38%	38%	100%		
Water	159-163	2	2	1	5	2	7
		40%	40%	20%	100%		
Total		**19**	**24**	**19**	**62**	**17**	**79**

City Buildings & Systems

CITY BUILDINGS & SYSTEMS

The City's aging facilities require both regular maintenance and more substantive system replacements. Projects included under the City Buildings and Systems CIP category focus on improvements to existing City-owned facilities and the construction of new buildings. These improvements allow the City to continue to maintain and enhance services to the community.

This category also includes funding for upgrades to the City's systems such as information technology. This category of the CIP is least likely to be eligible for outside funding, with the exception of donations, and therefore is fully funded by transfers from the General Fund.

		Projected Carryover	2018–19 NEW FUNDS	Future Funding Needs (unfunded)			
				2019-20	2020-21	2021-22	2022-23
CITY BUILDINGS & SYSTEMS	Priority						
Belle Haven Youth Center Improvements	Tier 1	-	$200,000	-	-	-	-
Burgess Pool Lobby Renovation	N/A	-	-	-	125,000	-	-
City Buildings (Minor)	Tier 2	642,930	500,000	500,000	500,000	500,000	500,000
City Buildings HVAC Modifications	Tier 3	125,000	420,000	-	-	-	-
Corporation Yard Master Plan	N/A	-	-	-	-	100,000	-
Cost of Service/Fee Study	N/A	48,187	-	-	-	100,000	-
Facilities Maintenance Master Plan	Tier 3	150,000	-	-	-	-	-
Fire Plans and Equipment Replacement for City Builc	Tier 1	60,442	115,000	-	-	-	-
Furniture Replacement	Tier 3	-	400,000	-	-	-	-
Gate House Fence Replacement	Tier 3	120,000	-	-	-	-	-
Information Technology Master Plan and Implementation	Tier 1	2,940,809	-	1,250,000	1,250,000	1,250,000	1,250,000
Library System Improvement: Belle Haven Branch Li	Tier 1	36,807	450,000	-	-	-	-
Library System Improvement: Main Library	Tier 2	140,220	-	-	-	-	-
Onetta Harris Community Center Gymnasium Floor Replacement	N/A	-	-	300,000	-	-	-
Onetta Harris Community Center Multipurpos Room Renovation	N/A	-	-	150,000	-	-	-
Police Parking Lot Security	Tier 2	31,027	-	-	-	-	-
Subtotal		**$4,295,422**	**$2,085,000**	**$2,200,000**	**$1,875,000**	**$1,950,000**	**$1,750,000**

Environment

ENVIRONMENT

The Environment CIP provides for a variety of projects and programs to further the City's environmental sustainability initiatives, including those in the City Council adopted Climate Action Plan. This category of the CIP is primarily supported by the General Fund. However, initiatives pertaining to solid waste are funded through refuse rates.

			2018–19	Future Funding Needs (unfunded)			
		Projected Carryover	NEW FUNDS	2019-20	2020-21	2021-22	2022-23
ENVIRONMENT	Priority						
Climate Action Plan	Tier 2	$203,057	$100,000	$100,000	$100,000	$100,000	$100,000
Electric Vehicle Chargers at City Facilities	Tier 2	-	200,000	400,000	-	-	-
Heritage Tree Ordinance Program Evaluation	Tier 1	63,338	-	-	-	-	-
Sea Level Rise Resiliency Plan	Tier 3	-	150,000	-	-	-	-
Trash and Recycling Strategic Plan	Tier 1	59,764	-	-	-	-	-
Subtotal		**$326,159**	**$450,000**	**$500,000**	**$100,000**	**$100,000**	**$100,000**

Parks & Recreation

PARKS & RECREATION

The Parks & Recreation CIP provides for a variety of projects and programs to meet the recreational needs of the community. In fiscal year 2018–19, the City anticipates conclusion of a comprehensive Parks & Recreation Master Plan. Based on public input, the Plan will recommend improvements and initiatives to the City's parks and recreation facilities to continue to meet the needs of the community and program users.

This category of the CIP is primarily supported by the General Fund. However, voter approved Measure T General Obligation authority permits the City to issue a third tranche of debt to help finance the Parks & Recreation Master Plan initiatives. In addition, certain capital projects may qualify to use Recreation In-Lieu impact fees imposed on new development. Finally, due to the relationship of the Bedwell Bayfront Park and the former landfill, certain projects may have access to funds collected through refuse rates to maintain the landfill.

			2018–19	Future Funding Needs (unfunded)			
		Projected Carryover	NEW FUNDS	2019-20	2020-21	2021-22	2022-23
PARKS & RECREATION	Priority						
Aquatic Center Maintenance (annual)	Tier 2	$99,068	$400,000	$400,000	$400,000	$400,000	$400,000
Bedwell Bayfront Park Collection and Leachate Systems Repair	Tier 1	4,174,123	-	-	-	-	-
Bedwell Bayfront Park Master Plan Implementa	N/A	-	-	4,000,000	-	-	-
Belle Haven Pool Master Plan Implementation	N/A	-	-	370,000	-	-	-
Civic Center Campus Improvements	Tier 3	100,000	-	500,000	500,000	500,000	-
Jack Lyle Park Restroom	N/A	588,146	-	-	-	-	-
Library Landscaping	N/A	436,743	-	-	-	-	-
Park Improvements (Minor)	Tier 2	129,294	200,000	200,000	200,000	200,000	200,000
Park Pathways Repairs	Tier 3	-	200,000	500,000	500,000	500,000	500,000
Park Playground Equipment	Tier 1	1,000,000	-	500,000	550,000	-	-
Parks and Recreation Master Plan Update	Tier 1	187,263	-	-	-	-	-
Sport Field Renovations	N/A	-	-	300,000	300,000	300,000	300,000
Tennis Court Maintenance	Tier 2	120,000	120,000	120,000	120,000	120,000	120,000
Willow Oaks Park Improvements	Tier 3	536,481	375,000	-	-	-	-
Subtotal		**$7,371,118**	**$1,295,000**	**$6,890,000**	**$2,570,000**	**$2,020,000**	**$1,520,000**

Stormwater

STORMWATER

The Stormwater CIP consists of projects and programs required to address the impacts of flooding in the watershed and stormwater water quality. These projects involve improvements that address localized drainage issues and larger interagency efforts to address flooding concerns associated with San Francisquito Creek, the Bayfront Canal and the Atherton Channel. In addition, projects in this category may be required to meet National Pollution Elimination Discharge System (NPDES), an unfunded mandate to minimize debris and pollutants discharged to San Francisco Bay. This category of the CIP is solely supported by the General Fund and future demand for funds is unknown. Other possible funding strategies for these projects include grants, as well as the development of benefit assessment districts that can pay for improvements in specific sections of the City where more investment needs have been identified.

			2018–19	Future Funding Needs (unfunded)			
		Projected Carryover	NEW FUNDS	2019-20	2020-21	2021-22	2022-23
STORMWATER	Priority						
Bayfront Canal and Atherton Channel Flood Protection	Tier 2	$442,309	-	-	-	-	-
Chrysler Pump Station Improvements	Tier 1	6,027,976	-	-	-	-	-
Green Infrastructure Plan	Tier 1	142,598	100,000	-	-	-	-
San Francisquito Creek Flood Reduction and Restoration	Tier 2	250,000	-	-	-	-	-
San Francisquito Creek Upstream of 101 Flood Protection	Tier 2	120,007	-	-	-	-	-
Stormwater Master Plan	Tier 3	-	350,000	-	-	-	-
Willow Place Bridge Abutment Repairs	N/A	-	-	250,000	-	-	-
Subtotal		**$6,982,890**	**$450,000**	**$250,000**	**-**	**-**	**-**

Streets & Sidewalks

STREETS & SIDEWALKS

The Streets and Sidewalks CIP projects maintain and improve the City's roadways, City-owned parking plazas, and sidewalks. This category of the CIP is supported by a variety of sources including funds from the State of California, impact fees, parking permit sales, special gas tax levies, and countywide sales tax levies.

			2018–19	Future Funding Needs (unfunded)			
		Projected Carryover	NEW FUNDS	2019-20	2020-21	2021-22	2022-23
STREETS AND SIDEWALKS	Priority						
Chilco Street and Sidewalk Installation	Tier 1	$43,120	-	-	-	-	-
Downtown Parking Structure Study	Tier 3	720,718	-	-	-	-	-
Downtown Parking Utility Underground	Tier 3	-	200,000	500,000	-	5,000,000	-
Downtown Streetscape Improvement	Tier 3	303,288	-	100,000	-	-	-
Oak Grove Safe Routes to School and Green Infrastructure	Tier 1	615,000	-	-	-	-	-
Parking Plaza 7 Renovations	N/A	-	-	200,000	2,000,000	-	-
Parking Plaza 8 Renovations	N/A	-	-	200,000	-	2,000,000	-
Santa Cruz and Middle Avenues Resurfacing	Tier 2	212,533	-	2,300,000	-	-	-
Sharon Road Sidewalk Installation	Tier 2	-	935,000	-	-	-	-
Sidewalk Repair Program	Tier 2	7,371	500,000	500,000	500,000	500,000	500,000
Street Resurfacing Project	Tier 1	2,899,424	4,200,000	1,100,000	6,500,000	1,100,000	6,500,000
Welcome to Menlo Park Monument Signs	Tier 2	-	180,000	400,000	-	-	-
Willow Oaks Park Bicycle Connector	N/A	-	-	500,000	-	-	-
Subtotal		**$4,801,454**	**$6,015,000**	**$5,800,000**	**$9,000,000**	**$8,600,000**	**$7,000,000**

Traffic & Transportation

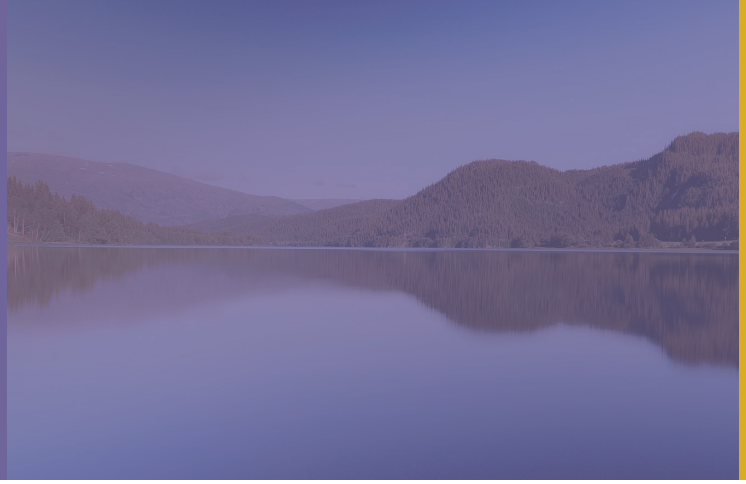
TRAFFIC & TRANSPORTATION

The Traffic and Transportation CIP provides for projects that improve multi-modal access and safety and manage the flow of traffic on City streets. Regional projects for which the City is an active partner, such as the Willow Road and US Highway 101 interchange, are also included. This category of the Capital Improvement Plan is supported by a variety of sources including funds from the State of California, impact fees, special gas tax levies, and countywide sales tax levies.

Many of these projects are also supported by funds in the annual operating budget for routine maintenance of traffic signals, signs, and street markings, and for transportation planning efforts, such as the Safe Routes to Schools program. This category is also heavily supported by local, regional and state grant funding opportunities, such as competitive programs for bicycle and pedestrian improvements, railroad safety improvements, and traffic management strategies.

		Projected Carryover	2018–19 NEW FUNDS	Future Funding Needs (unfunded)			
				2019-20	2020-21	2021-22	2022-23
TRAFFIC & TRANSPORTATION	Priority						
Bayfront Expressway, Willow Road & Marsh Road Adaptive Signal	Tier 2	$266,046	-	-	-	-	-
Carlton Ave, Monte Rosa Dr, & N. Lemon Ave Traffic Calm	Tier 3	125,000	-	-	-	-	-
Dumbarton Rail Corridor Planning Support	Tier 3	20,219	-	-	-	-	-
El Camino Real Crossings Improvements	Tier 3	324,650	-	-	-	-	-
Haven Avenue Streetscape Improvement	Tier 2	706,138	-	-	-	-	-
Middle Avenue Caltrain Crossing Study Design & Constructi	Tier 1	463,725	1,100,000	-	9,900,000	-	-
Middlefield Road and Linfield Drive Santa Monica Aven Crosswalk Improvements	N/A	-	-	80,000	880,000	-	-
Oak Grove, University, Crane Bicycle Improvement Project	Tier 2	66,691	-	-	-	-	-
Pierce Road Sidewalk and San Mateo Drive Bike Route Installa	Tier 2	-	1,007,000	-	-	-	-
Ravenswood Avenue/Caltrain Grade Separation	Tier 1	33,605	-	-	25,000,000	-	-
Traffic Signal Modifications	Tier 3	290,000	350,000	350,000	350,000	350,000	350,000
Transit Improvements	Tier 2	84,577	-	-	-	-	-
Transportation Master Plan	Tier 1	54,157	-	-	-	-	-
Transportation Projects-Minor	Tier 2	75,000	150,000	150,000	150,000	150,000	150,000
Willow Road Transportation Study	Tier 3	159,692	-	-	-	-	-
Willow/101 Interchange	Tier 1	101,721	-	-	-	-	-
Willows Neighborhood Complete streets	Tier 3	300,000	-	-	-	-	-
Subtotal		**$3,071,221**	**$2,607,000**	**$580,000**	**$36,280,000**	**$500,000**	**$500,000**

Water



WATER

Water CIP projects improve the delivery of safe drinking water to those residents served by the City's municipal water service. This category of the CIP is supported by water ratepayers and capacity charges paid by new connections to the water system. Other possible funding strategies for these projects include grants, the issuance of water revenue bonds, State low interest loans, as well as the development of benefit assessment districts that can pay for improvements in specific sections of the City where more investment needs have been identified.

		Projected Carryover	2018–19 NEW FUNDS	Future Funding Needs (unfunded)			
				2019-20	2020-21	2021-22	2022-23
WATER	Priority						
Automated Water Meter Reading	Tier 3	$500,000	$600,000	$1,800,000	$1,200,000	$400,000	-
Emergency Water Storage / Supply	Tier 1	4,195,359	2,000,000	2,800,000	2,800,000	-	-
Fire Flow Capacity Improvements	N/A	-	-	1,000,000	1,000,000	1,000,000	1,500,000
Reservoir No. 2 Roof Replacement	Tier 2	1,490,686	2,650,000	-	-	-	-
Reservoirs #1 & #2 Mixers	Tier 2	114,949	-	-	-	-	-
Urban Water Management Plan	N/A	-	-	140,000	-	-	-
Water Main Replacement Project	Tier 1	1,240,053	600,000	2,050,000	3,600,000	1,800,000	1,800,000
Subtotal		**$7,541,047**	**$5,850,000**	**$7,790,000**	**$8,600,000**	**$3,200,000**	**$3,300,000**