

Environmental Quality Commission



REGULAR MEETING AGENDA

Date: 4/17/2019
Time: 6:00 p.m.
City Hall - "Downtown" Conference Room
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. Receive information on Parks and Recreation facilities master plan updates ([Attachment](#))
- D2. Receive information on State of the urban forest arborist report ([Staff Report #19-003-EQC](#))
- D3. Receive information green infrastructure master plan updates ([Staff Report #19-004-EQC](#))
- D4. Approve the March 27, 2019, Environmental Quality Commission meeting minutes ([Attachment](#)).

E. Reports and Announcements

- E1. Commission reports and announcements
- E2. Staff update and announcements

F. 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.

Agendas are posted in accordance with Government Code Section 54954.2(a) or Section 54956. Members of the public can view electronic agendas and staff reports by accessing the City website at menlopark.org/agenda and can receive e-mail notification of agenda and staff report postings by subscribing to the "Notify Me" service at menlopark.org/notifyme. Agendas and staff reports may also be obtained by contacting City Clerk at 650-330-6620. (Posted: 04/11/2019)



PARKS AND RECREATION FACILITIES MASTER PLAN UPDATE

Environmental Quality Commission - April 17, 2019

ANNILAGA FAMILY
GYMNASIUM



COMMUNITY INPUT



- 3 community meetings (80+ attendees)
- 1 Facebook live stream (185 views to date)
- 20 intercept activities (2000+ participants)
- 6 focus groups (schools/sports groups/businesses/city programs/city staff/cultural, arts, and community/environmental)
- 4 oversight and outreach committee meetings
- Online survey (500+ responses to date)
- 2 presentations to Belle Haven Homes Association
- 18 outreach efforts in the Belle Haven neighborhood – Spring Fair/Farmers Market/Summer Concerts/Open House/Special Events
- 1 Facebook group



GOALS AND GUIDELINES

GOALS AND GUIDELINES

- One Menlo Park
 - G.1.1 An integrated, equitable and inclusive park and recreation system
 - G.1.2 A connected and accessible park and recreation system

- Unique and Distinctive
 - G.2.1 Reflect a sense of place and community
 - G.2.2 Supports health and wellness
 - G.2.3 Integrate nature and green spaces throughout the city

GOALS AND GUIDELINES

- Operational Efficiency and Economic Feasibility
 - G.3.1 Economic sustainability in development. Operation and maintenance
 - G.3.2 Long-term costs of operation and maintenance considered in the project development process
 - G.3.3 Equitable fees, programs, staffing and hors that support overall cost recovery
- Creative Solutions
 - G.4.1 Expand parks and recreation opportunities

GOALS AND GUIDELINES

■ Environmental Sustainability

G.5.1 Environmental sustainability is integral to development and management

- 5.1.1 Utilize Best Practices
- 5.1.2 Conserve Water
- 5.1.3 Stormwater Management
- 5.1.4. Energy Efficiency
- 5.1.5 Sustainable and/or Edible Landscapes
- 5.1.6 Sustainable Buildings
- 5.1.7 Resilience

GOALS AND GUIDELINES

■ Environmental Sustainability

G.5.2 Integrate Educational Sustainability in Parks and Recreation Facilities

- 5.1.1 Signage
- 5.1.2 Educational Landscapes
- 5.1.3 Engage Children

NEXT STEPS

- Online comment survey open until April 19, 2019
 - May 21, 2019 – City Council information item, master plan document available for public review
 - May 22, 2019 – Parks and Recreation Commission Meeting
 - June 18, 2019 – City Council Meeting
-
- Additional information on City Website
 - <https://menlopark.org/mymenloparks>

[HTTPS://MENLOPARK.ORG/COMMENTS](https://menlopark.org/comments)



Menlo Parks Parks and Recreation Master Plan

[More Information on the PLAN](#)

Tell us what
you think!



Draft Guidelines



DRAFT Recommendations

The City of Menlo Park has been working for over a year to develop a new **Parks and Recreation Master Plan**.

DRAFT Parks and Recreation Master Plan Guidelines and Recommendations

What area of Menlo Park do you live?

- ☐ Belle Haven
- ☐ Central Menlo Park (Central, Linfield Oaks, Vintage Oaks)
- ☐ Downtown (Incl. Allied Arts)



THANK YOU



STAFF REPORT

Environmental Quality Commission

Meeting Date: 4/17/2019

Staff Report Number: 19-003-EQC

Regular Business: Receive information on State of the urban forest arborist report

Recommendation

Staff will provide an informative item on the annual arborist report and no action is required.

Policy Issues

The annual arborist report is consistent with the following policies: heritage tree ordinance, street tree ordinance, and street tree management plan.

Background

Beginning in 2011 the City Arborist has presented annually to the Environmental Quality Commission (EQC) on the state of the urban forest. The intent of the presentation is to provide updates the EQC on the administration of the Heritage Tree Ordinance and maintenance operations as it relates to City maintained trees.

Analysis

Staff considered these following topics to complete the report:

Urban forest overview - There are approximately 19,500 City maintain trees in Menlo Park with an estimated value of roughly \$62 million dollars. The size distribution on City trees is varied with a concentration of trees falling in the smaller to medium sized range.

Heritage tree ordinance - In the 2017-2018 fiscal year, 623 trees were approved for removal while 65 trees were either denied for removal, had application for removal withdrawn, or are pending information and/or analysis required by the applicant

City tree maintenance overview – There are 16 tree maintenance districts in the City of Menlo Park. Maintenance is coordinated by district so that all City trees are maintained on a routine 5-year pruning cycle. Maintenance activity includes the following:

1. Public noticing of scheduled maintenance
2. A Level 1 assessment of tree condition
3. Pruning as needed to clean, raise, and address any major structural defects identified at time of assessment or as directed by the city arborist, and
4. Updating the City tree inventory.

The majority of the routine pruning work is performed by the City tree maintenance contractor, West Coast Arborists. Other tree maintenance activities, such as service request pruning, emergency response, tree planting, young tree structural pruning, and re-staking is performed primarily by the City tree crew. Since 2010-2011 fiscal year the City has consistently planted a greater number of public trees than have been removed. However, the total number of City maintained trees has remained relatively static since 2003.

Street tree management plan revisions – Work is currently underway to revise the existing street tree management plan, which was most recently revised in 2006. Current revisions are focused on updating Street Tree planting guidelines, revising the Street Tree replacement plan, updating the removal prioritization system, and specifying the Street Tree removal process.

Tree City USA award – In 2018 the City of Menlo Park was awarded the Arbor Day Foundation's Tree City USA award for t 20 years in a row and this year the City will celebrate Arbor Day on April 18.

Impact on City Resources

There is no direct impact on City resources associated with the action in this staff report.

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 proposes an organizational structure 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. State of the urban forest presentation

Report prepared by:
Christian Bonner, Public Works Supervisor – City Arborist



STATE OF THE URBAN FOREST

City Arborist Report



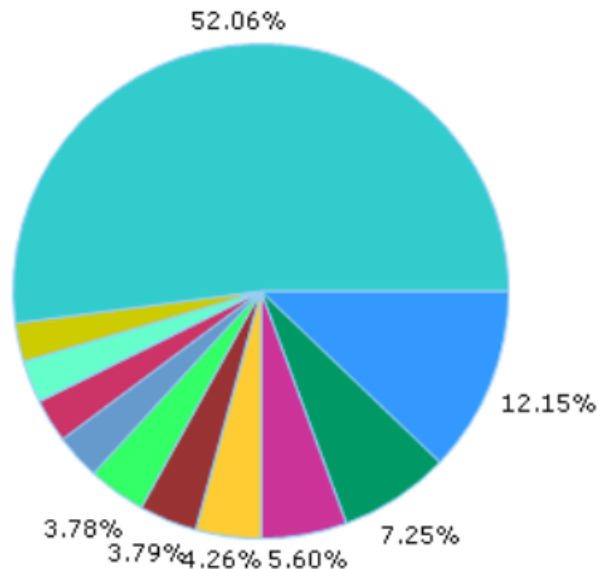
URBAN FOREST OVERVIEW

SPECIES COMPOSITION & ESTIMATE VALUE OF CITY TREES



	Botanical	Common	Total	Pct.	Estimated Value
	Quercus agrifolia	COAST LIVE OAK	2,370	12.15%	\$15,000,980.00
	Liquidambar styraciflua	AMERICAN SWEETGUM	1,413	7.25%	\$7,240,600.00
	Platanus X hispanica	LONDON PLANE	1,092	5.60%	\$3,564,940.00
	Eucalyptus rudis	DESERT GUM	831	4.26%	\$446,720.00
	Magnolia grandiflora	SOUTHERN MAGNOLIA	739	3.79%	\$4,771,670.00
	Quercus lobata	VALLEY OAK	737	3.78%	\$2,270,070.00
	Pistacia chinensis	CHINESE PISTACHE	580	2.97%	\$803,610.00
	Acer rubrum	RED MAPLE	557	2.86%	\$348,570.00
	Eucalyptus spathulata	NARROW LEAFED GIMLET	537	2.75%	\$627,570.00
	Lagerstroemia indica	CRAPE MYRTLE	494	2.53%	\$472,990.00
	Other	OTHER	10,152	52.06%	\$26,585,290.00
	Total Trees		19,502	100%	\$62,133,010.00

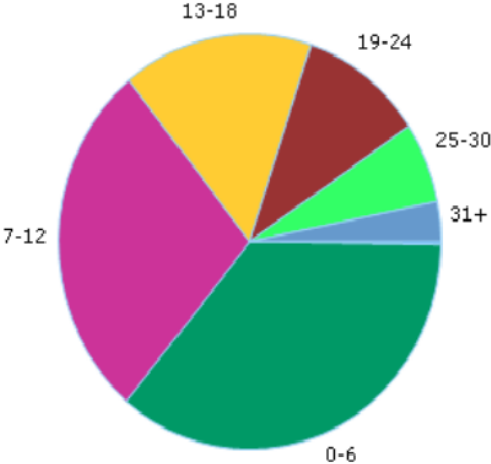
Top 10 Species / Estimated Value



SIZE DISTRIBUTION OF CITY TREES

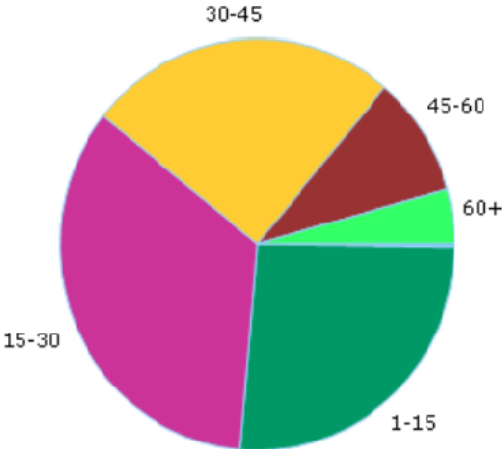


Frequency By DBH



DBH (inches)	Total	Pct.
Vacant Sites	42	0.22%
0-6	7,002	35.90%
7-12	5,468	28.04%
13-18	3,129	16.04%
19-24	2,031	10.41%
25-30	1,222	6.27%

Frequency By Height



Height (feet)	Total	Pct.
Stumps	46	0.24%
1-15	5,096	26.13%
15-30	6,707	34.39%
30-45	4,955	25.41%
45-60	1,852	9.50%
60+	846	4.34%
Total Trees	19,502	100%



HERITAGE TREE PERMITTING OVERVIEW



Heritage Tree Removal Permit Application

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

Application No. _____

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

Permit Fee: \$210.00 (each tree, up to 3 trees); \$174 each additional tree (separate forms required for each tree)

PLEASE PRINT CLEARLY

Site Address: _____

Name of Applicant: _____ Phone: _____ FAX: _____

Mailing Address: _____ Email: _____

Type of Tree: _____ Location on property: _____

Reasons for Request: _____

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: _____

-----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: _____

- Permit applications received: 367
- Permits approved: 623 (trees)
- Permits denied: 16 (trees)
- Applications withdrawn: 20 (trees)
- Applications pending: 29 (trees)



CITY TREE MAINTENANCE OVERVIEW

CITY TREE MAINTENANCE



ROUTINE MAINTENANCE PROGRAM



- 16 Maintenance Districts

- 5 Yr. Maintenance Cycle

- Level 1 Assessment
- Public noticing
- Pruning
- Inventory updates
- Maintenance recommendations

PARK TREE MAINTENANCE

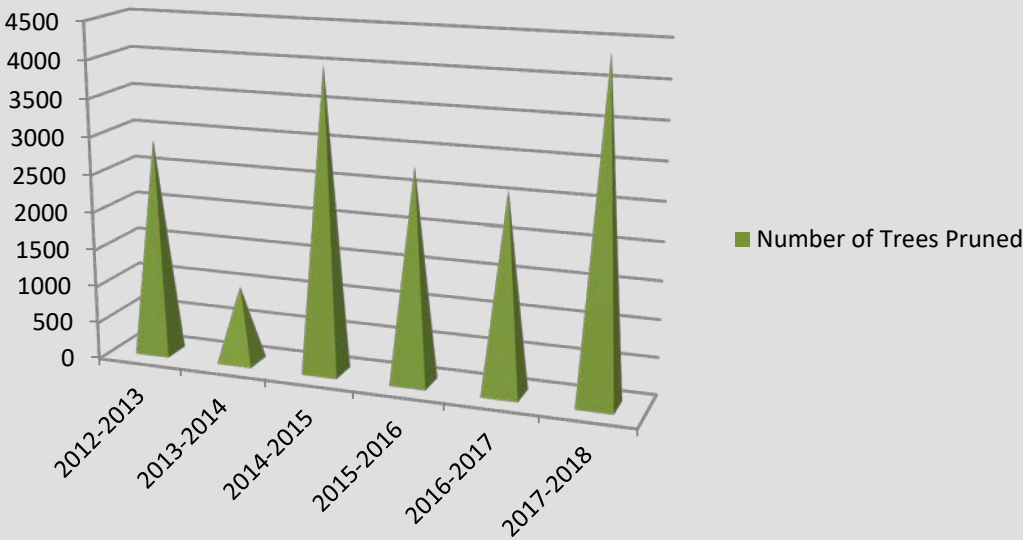


- 16 Parks & Recreation Use Areas
- 9 Facilities



TREE MAINTENANCE HISTORY

Total Number of City Trees Pruned



STREET TREE SERVICE REQUESTS



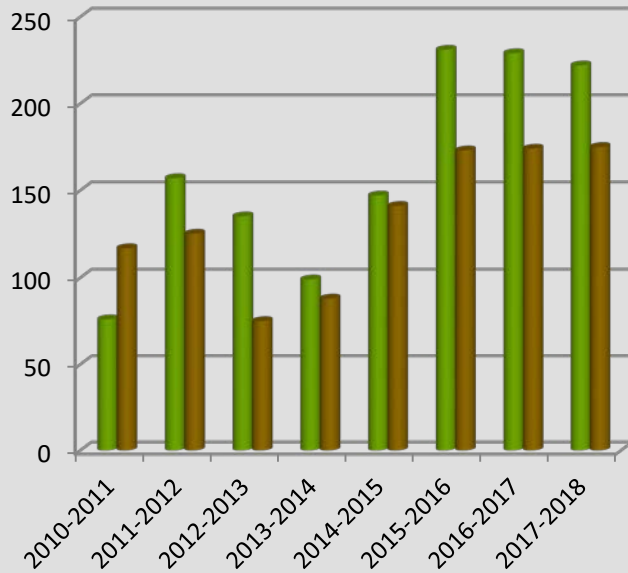
CITY TREE CREW



EMERGENCY RESPONSE







TREE REMOVAL & REPLACEMENT SUMMARY



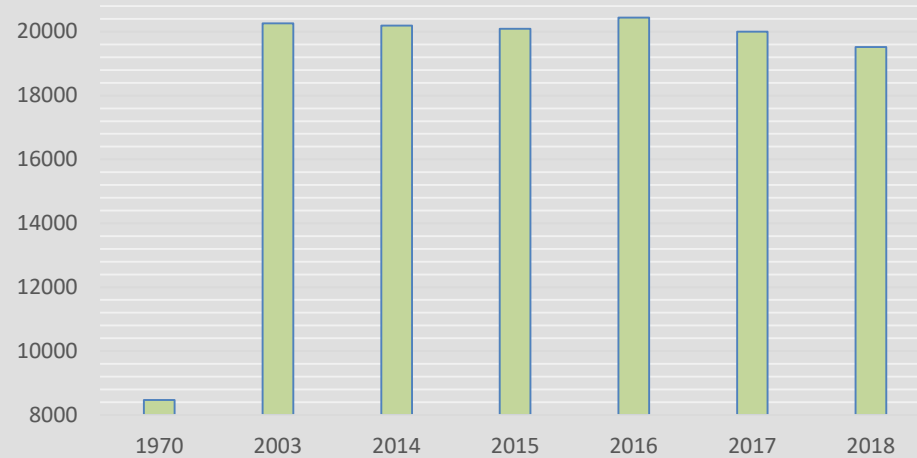
■ Trees Planted
■ Trees Removed



STREET TREE CANOPY COVERAGE



Total City Maintained Trees 1970-2018



STREET TREE MANAGEMENT PLAN REVISIONS



- **Specify planting guidelines**
 - Vacant sites
 - Development
 - Removal/Replacement
- **Update replacement plan**
 - Species designation
- **Update removal prioritization**
- **Document Street Tree removal process**
 - Heritage Tree overlap
 - Jurisdiction
 - Tree protections





TREE CITY USA

TREE CITY USA AWARD FOR 20 YEARS



Session will time out in: 59:26



MENLO PARK

A Tree City USA for 20 Years

A Tree City USA Growth Award for 5 Years

Tree City Growth Award

[Printable Tree City USA Checklist](#)
[Print Current Year Application](#)
[Print Previous Year Application](#)
[Print 2 Year Ago Application](#)



Quick Info

Welcome, Christian Bonner

Coordinator:
James Scheid
California Department of
Forestry and Fire Protection
415-265-9059
james.scheid@fire.ca.gov

Application must be submitted by
12/31/2018



Your Account

[Change Password](#)
[Logout](#)

2018 Tree City USA Application - Approved

☒ [General Information](#)

☒ [Standard 1 - A Tree Board or Department](#)

☒ [Standard 2 - A Community Tree Ordinance](#)

☒ [Standard 3 - A Community Forestry Program with an Annual Budget of at least \\$2 Per Capita](#)

☒ [Standard 4 - An Arbor Day Observance and Proclamation](#)

☒ [Signature Form](#)

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ARBOR DAY TREE PLANTING - 3/13/18





THANK YOU



STAFF REPORT

Environmental Quality Commission

Meeting Date: 4/17/2019

Staff Report Number: 19-004-EQC

Presentation: Receive information green infrastructure master plan updates

Recommendation

Staff will provide an update on the forthcoming green infrastructure plan (GI Plan) to the Environmental Quality Commission (EQC). The GI Plan is a State mandate that promotes clean storm water discharge to the Bay while addressing elements of Menlo Park's sustainability and environmental initiatives.

Policy Issues

Development of the GI Plan is consistent with the following general plan goals and programs:

- Land Use Element Goal LU-7 and Program LU-7.I:
 - Goal LU-7:
Promote the implementation and maintenance of sustainable development, facilities, and services to meet the needs of Menlo Park's residents, businesses, workers and visitors.
 - Program LU-7.I:
Develop a Green Infrastructure Plan that focuses on implementing citywide projects that mitigate flooding and improve storm water quality.
- Circulation Element Goal CIRC-2 and Policy CIRC-2.10:
 - Goal CIRC-2:
Increase accessibility for the use of streets by pedestrians, bicyclists and transit riders.
 - Policy CIRC-2.10:
Maximize the potential to implement green infrastructure by:
 - a) Reducing or removing administrative, physical and funding barriers;
 - b) Setting implementation priorities based on storm water management needs, as well as the effectiveness of improvements and the ability to identify funding; and
 - c) Taking advantage of opportunities such as grant funding, routine repaving or similar maintenance projects, funding associated with Priority Development Areas, public private partnerships and other funding opportunities.

Background

On January 1, 2016, the Regional Water Quality Control Board adopted a new Municipal Regional Permit (MRP) obligating cities to develop a GI Plan. Traditional stormwater management sent untreated water into the storm drain system which was directly discharged to local water bodies, like the San Francisco Bay. The use of GI advances a shift to more resilient public storm drain infrastructure by prioritizing

treatment facilities that store and treat runoff through more natural means of vegetation and soils (e.g., green infrastructure.) Consequently, this results in cleaner discharge to localized waterbodies while mitigating flooding in public right-of-way (ROW.)

The GI Plan considers sustainability initiatives for prioritizing green infrastructure opportunities. For example, green roofs synergize with building efficiency goals pursuant to LEED (Leadership in Energy and Environmental Design) credits for sustainable sites. Additionally, GI facilities may incorporate trees to promote improved air quality while mitigating the heat island effect as outlined in the climate action plan.

The City's engineering division has also been promoting GI on upcoming projects in the City's capital program. Therefore, select frontage, sidewalk, and street retrofits are being analyzed for opportunities to install storm water treatment facilities where constraints such as space and funding allow. In addition to the stormwater and safety benefits these devices provide, they can also enhance aesthetics of the street by adding landscaping and vegetation.

Analysis

The City hired a consultant (EOA, Inc.) to develop the GI Plan in August 2018. The consultant was scoped to complete the following tasks:

Table 1: Tasks	
Task	Scope of work
A	Prioritization and mapping of GI potential and planned projects
B	Develop process for tracking and mapping completed projects
C	Develop overall GI guidelines, standard specifications and design details
D	Develop requirements for design of projects to meet sizing requirements
E	Planning document update, summary of updates, and work plan for future plans
F	Workplan for completion of prioritized projects
G	Evaluation of funding options
H	Conduct outreach and education with public, staff and elected officials
I	Develop the GI plan, inclusive of tasks A through H above

To date all Tasks, barring B and I, have been substantially completed. The remaining tasks are under development with a target deadline by mid-April 2019.

Future key milestones to complete the GI Plan are outlined in the table below. Staff plans to transmit the final draft plan to the EQC for reference, if desired. Since many of the design details would be applicable to future capital projects, these guidelines could serve as a reference document for the Commission going forward.

Table 2: Upcoming milestones	
Deliverable	Target date
GI Plan – final draft	April 2019
Presentation to City Council	May 21, 2019
Adoption by City Council	July 16, 2019
Submittal to State	Sept 30, 2019

Impact on City Resources

City Council has approved a total of \$300,000 for the GI Plan over the adopted fiscal year 2016-2017, fiscal year 2017-2018 and fiscal year 2018-2019 budgets. Development of the GI Plan is not expected to exceed this amount and there is adequate funding to complete its effort.

Environmental Review

The City Council's adoption of the GI Plan is categorically exempt from the California Environmental Quality Act under Guidelines §15307 (actions by Regulatory Agencies for Protection of Natural Resources.)

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. Green Infrastructure presentation

Report prepared by:
Michael Fu, Associate Civil Engineer

Report reviewed by:
Nicole H. Nagaya, Assistant Public Works Director



GREEN INFRASTRUCTURE (GI)

THE PLAN FOR A SUSTAINABLE FUTURE

INTRODUCTION

- The City is developing a Green Infrastructure (GI) Plan
- This plan addresses environmental and transportation concerns
- Staff welcomes the Commission's role in promoting GI



PRESENTATION NARRATIVE

- A Pressing Concern
- The Solution
- Our GI Plan





A PRESSING CONCERN

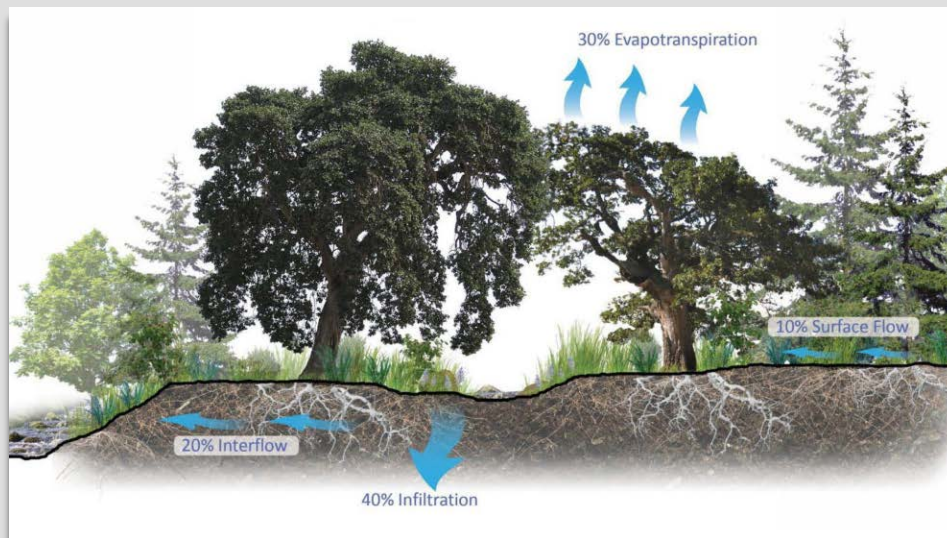
THE PROBLEM

- Untreated runoff is polluting the environment and Bay...



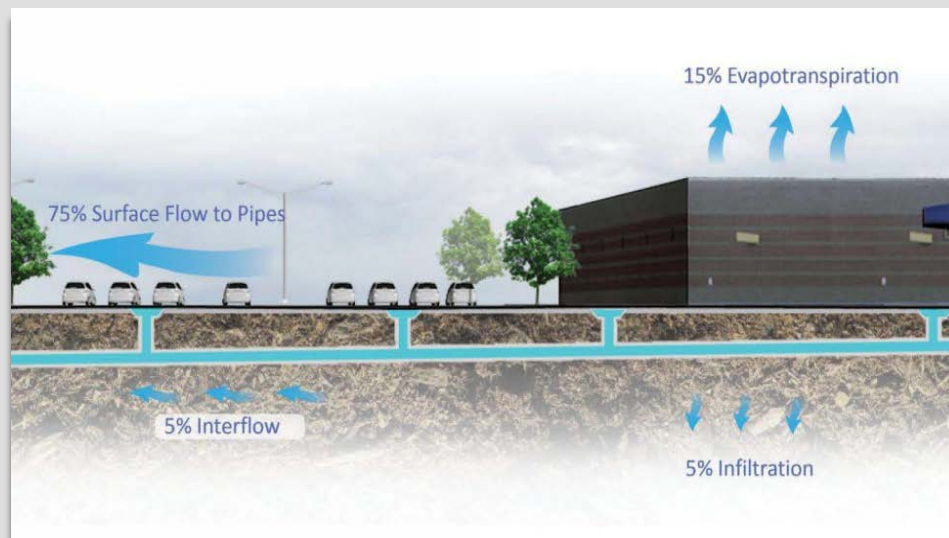
PRE-DEVELOPMENT

- Runoff is filtered by landscape and absorbed through native soil



POST-DEVELOPMENT

- Impervious area hinders infiltration and increases pollutant loads



HOW ARE WE IMPACTED

- Untreated runoff exacerbates pollution and erosion to the Bay
- Pollutants such as PCBs and mercury contaminate wildlife
- Cities are mandated to take action to address the concern



THE SOLUTION

GREEN INFRASTRUCTURE (GI)

- Our plan for a eco-friendly, sustainable City



WHAT IS GREEN INFRASTRUCTURE (GI)?

- Storm water treatment features that use vegetation and natural processes to mimic Pre-Development conditions.



Example 1: GI planter strip



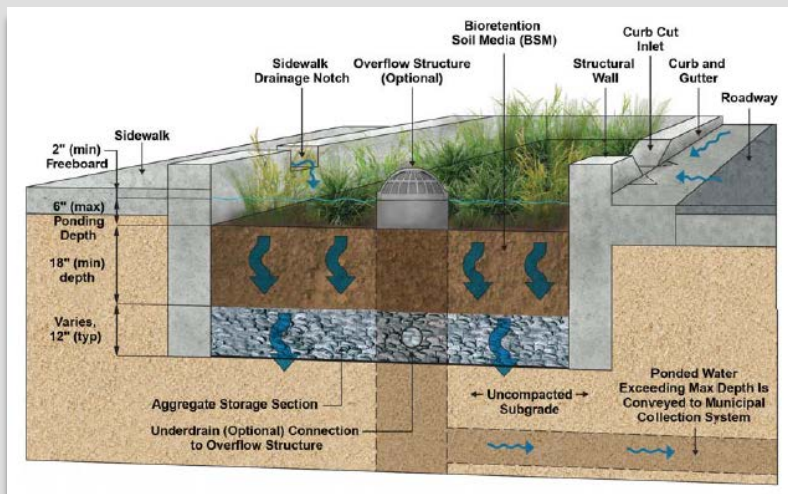
Example 2: Permeable paver w/ swale



Example 3: Bioretention Area

HOW DOES GI WORK?

- Vegetation and special soils treat raw storm water
- Designed to retain storm water and slow runoff



BENEFITS OF GREEN INFRASTRUCTURE

- Promotes groundwater
- Treats pollutants from runoff
- Enhances urban greening
- Mitigates flooding and erosion
- Improves air quality
- Alleviates Heat Island Effect



GREEN INFRASTRUCTURE (GI)

- So we can transition from this...



GREEN INFRASTRUCTURE (GI)

- To a more sustainable future!



ADDITIONAL EXAMPLES

CURB EXTENSION

- Provides added buffer between vehicles and pedestrians
- Promotes safer pedestrian crossings and traffic calming



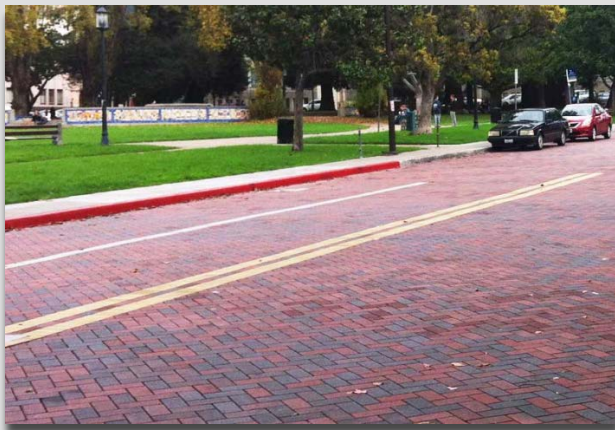
LANDSCAPE BARRIER

- Promotes safety between vehicles and bicycles
- Linear treatment ideal for lengthy street spans (Green Streets)



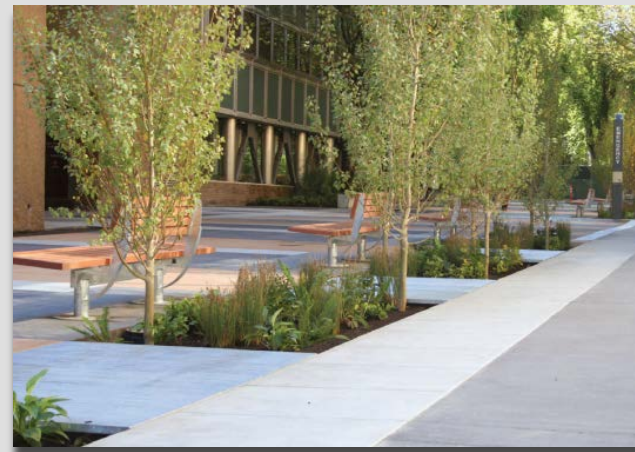
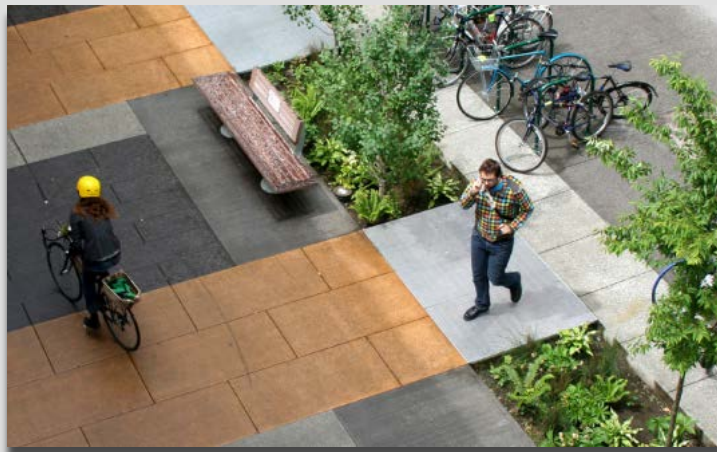
PERMEABLE PAVING

- Good option where space is constrained
- Utilized in parking lots and low density roads



STORM WATER TREATMENT PLANTERS

- Good option where space is limited (sidewalks, etc.)
- Enhances urban greenery and beautification



BIORETENTION AREA

- Can accommodate select trees to promote urban greenery
- Ideal for parking lots, parks, and wider streets



GREEN ROOF

- Mitigates heat island effect and provides recreation
- Reduces energy usage to promote sustainability





OUR GI PLAN

REGULATORY BACKGROUND

- The NPDES program is delegated to Regional Water Quality Control Boards
- Bay Area's Regional Board issues a Municipal Regional Permit (MRP) to regulate clean storm water
- The latest MRP requires Cities to submit a master plan for storm water treatment by 9/30/19 (aka **GI Plan**)



GI PLAN – OBJECTIVES

- Update City policy
- Prioritize and track projects
- Establish design guidelines
- Evaluate funding options
- Promote outreach



GI PLAN – COMPLETED MILESTONES

Council Actions	Adopted
Adopted Budgets(s) FY2016 - 2019	June 2015 – 2018
GI Workplan	May 23, 2017
RFP for GI Plan Consultant	July 3, 2017
Authorize Consultant Contract	August 6, 2018

GI PLAN – UPCOMING MILESTONES

- We welcome your support moving forward!

Deliverable	Target Date
GI Plan – Final Draft	April 2019
Presentation to Council	May 21, 2019
Adoption by Council	July 16, 2019
Submittal to State	Sept 30, 2019

HOW THE COMMISSION CAN HELP

- Integrate GI as part of future Sustainability initiatives
- Promote the concept of “no missed opportunities”
- Help promote GI outreach
- Review related GI guidelines and City policies on next slide

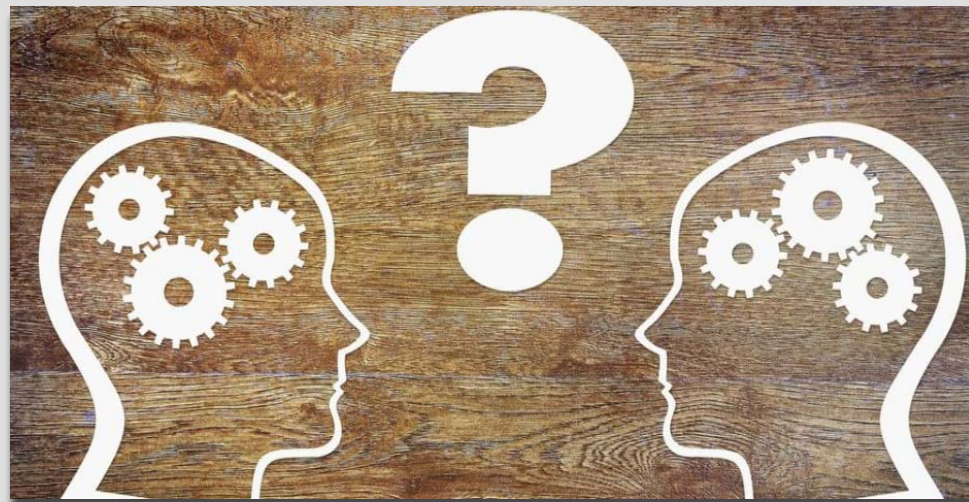


RELATED POLICIES & PLANS

- SMC's Sustainable Streets Guidelines: [Link](#)
- General Plan Update: [Link](#)
- Transportation Master Plan: [Link](#)
- Climate Action Plan: [Link](#)
- Parks and Recreation Facilities Plan: [Link](#)



QUESTIONS?





THANK YOU



REGULAR MEETING MINUTES - DRAFT

Date: 3/27/2019
Time: 6:00 p.m.
City Council Chambers
701 Laurel St., Menlo Park, CA 94025

A. Chair Marshall called the meeting to order at 6:18 p.m.

B. Roll Call

Present: Kabat, London, Chair Marshall, Martin, Payne, Vice Chair Price, Turley
Absent: None
Staff: City Arborist Christian Bonner, Sustainability Specialist Joanna Chen, Acting Building Official Bana Divshali, Sustainability Manager Rebecca Lucky, and Senior Planner Kaitie Meador

C. Public Comment

None.

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.

Chair Marshall introduced the item.

Sustainability Manager Rebecca Lucky made the presentation (Attachment).

Building owner of 1000 El Camino Real Matt Matteson, structural engineer Greg Wagner, and waterproofing consultant Karim Allana made a presentation (Attachment).

The heritage tree permit appellants, Jen Mazzon, Peter Edmonds, and Judy Rocchio made a presentation (Attachment).

- Margaret Melaney spoke in support of the appeal to preserve the trees.
- John O'Brien spoke against the delay in the heritage tree appeal process timeline.
- Steve Pursell spoke in support of the appeal to preserve the trees.
- Jane David spoke in support of the appeal to preserve the trees and suggested bringing in additional expertise to find feasible alternatives.
- Darshama Greenfield spoke in support of the appeal to preserve the trees.
- Angela Evans and Ella spoke in support of the appeal to preserve the trees.
- Tim Norton spoke against the appeal to preserve the trees to reduce the safety risks associated with the building.
- Joe Nootbaar spoke against the appeal to preserve the trees, and suggested planting native trees (e.g., coast live oak).

- Peter Edmonds spoke on a letter sent earlier in the week and supported the appeal to preserve the trees.
- Maritza Longland spoke in support of the appeal to preserve the trees.
- Jeff Hardy spoke in support of the appeal to preserve the trees and the proposed alternative No. 3.
- Angela Hayes requested more details on the proposed 14 replacement trees.
- Michelle Beauchamp spoke in support of the appeal to preserve the trees.
- Henry Riggs spoke against the appeal to preserve the trees.
- Charles Albanese spoke in support of the appeal to preserve the trees.
- Pasha Sadri spoke in support of the appeal to preserve the trees and suggested looking for alternative transportation options to reduce parking spaces.

ACTION: Motion and second (Marshall/Kabat) to 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 based on No. 2 heritage tree ordinance removal criteria to repair the building and No. 8 removal criteria that there were no reasonable and feasible alternatives presented that could preserve the trees, passed (4-3, Martin, London, and Payne dissenting).

The Environmental Quality Commission took a 20-minute recess.

- D2. Approve the February 27, 2019, Environmental Quality Commission meeting minutes.

Chair Marshall introduced the item.

ACTION: Motion and second (London/Marshall) to approve the February 27, 2019, Environmental Quality Commission meeting minutes, passed unanimously.

E. Reports and Announcements

- E1. Commission reports and announcements

Chair Marshall provided a verbal update on coordinating with the Boys and Girls Club for Arbor Day and confirmed it will occur during the second week of April.

- E2. Staff update and announcements

Staff updated the commission on the County's proposal for local building energy codes (Reach codes).

- E3. Future agenda items

Commissioner Kabat provided a verbal interest in discussing the reach codes.

E. Adjournment

Chair Marshall adjourned the meeting at 10:12 p.m.

Minutes prepared by Joanna Chen.

The background image shows a lush green field with a wooden fence in the foreground. Two people are standing in the distance on a grassy hill under a cloudy sky. The image is partially obscured by a teal banner at the bottom.

1000 EL CAMINO HERITAGE TREE APPEAL

REPAIR PROJECT BACKGROUND

- Building was built in the early 1980s
- The building supports (cables/tendons) located in the parking garage have water damage, and need prompt repair
- Install new waterproof barrier



Photo 6 - Exposed 9/1 tendon showing signs of corrosion



REASON FOR REQUESTING TREE REMOVALS

- Repair work and installation of waterproof barrier would occur within major root zone of 7 coast redwood trees
- Root removal within three times the diameter of a tree impacts stability and is not recommended by standard arboricultural practices



THICK TANGLE OF TREE
ROOTS OVER THE PODIUM
AND UNDERGROUND GARAGE
PODIUM SLAB WATERPROOFING



THICK TANGLE OF TREE
ROOTS OVER THE PODIUM
AND UNDERGROUND GARAGE

PODIUM SLAB WATERPROOFING

TREE HISTORY, PRESERVATION, AND REPLACEMENTS

- Trees voluntarily planted by the developer
- 76 trees on or near the site and 40 are heritage trees
- Tree replacement for this project is 2:1
- Plans were revised to preserve trees
- Replacement trees will be a mixture of Birch, Olive, and Japanese Maple trees



PROJECT APPROVAL PROCESS AND APPEAL

- October 2018- Planning Commission approval
- December 2018- community members raised concerns about the proposed tree removals
- January 2019-informational meeting and appeal filed
- Are there feasible and reasonable alternatives that could preserve the trees?



APPEAL PROCESS CONTINUED

- Involved staff from three departments: Community Development, Public Works, and the City Manager's Office
- Late January:
 - Five alternatives identified for further exploration
 - Independent structural engineer and arborist hired for peer review
- Late February :
 - Staff met with appellants to outline the five alternatives being explored based on January informational meeting
 - Requested that any additional alternatives be submitted by March 4 (one was provided)
 - Structural engineer peer reviewer submitted an alternative to explore
- March:
 - City staff, permit applicant, peer reviewers, and appellant met using conflict resolution facilitator
 - Appellant clarified March 4th submittal
 - Submits another alternative on March 14th

ANALYSIS OF ALTERNATIVES

- Eight alternatives were analyzed
- Alternatives analysis involved considering the following:
 - Ability to preserve the trees and maintain overall good health
 - Legal restrictions or violations of other local, regional, and state rules/regulations
 - Prompt repair or new structural support within the next few months to reduce life and safety risks
 - Cost of the alternative in relation to the value of the trees
- The trees proposed for removal are estimated to have a value of \$157,500



ALTERNATIVES EXPLORED

1. Abandon parking garage and build new parking structure
2. Retrofit the building with steel beams in the parking garage
3. Remove the trees in phases
4. Repair the water damage without impacting the trees
5. Relocate the trees
6. Cut the tree roots and brace the trees to the building (structural engineer peer reviewer)
7. Remove existing parking spaces and add walls to provide new support (March 4th alternative submitted by appellant)
8. Modification of No.7 by increasing the width of existing columns in the parking garage to provide more support.

NO.7 REMOVE PARKING AND ADD WALLS

- Would not require trenching or installing waterproof barrier
 - Diverts water elsewhere
 - Provide additional support by building walls in existing parking spaces
- Removes required parking needed for this type of development.
- Work does not align with standard engineering practice, making it costly
 - Estimated to be 7-8 times more than original project proposal valued at \$1 million
 - Difficulty in finding an engineering firm to take on the project given current market conditions
- Requires relocating tenants and possible loss of tenants
- Could have legal implications in lease agreements
- Not recommended due to infeasibility and parking changes would delay prompt repair of the project

NO.8 WIDEN PARKING COLUMNS

- Similar to No.7 but requires less complexity
- Would still remove required parking and be costly
- Cable/tendon support would still be needed between columns, requiring similar repair work as the original proposal.
- Not recommended due to infeasibility



CONCLUSION AND RECOMMENDATION

- Peer reviewers found that the quality of information submitted by the permit applicant sound and concurred with major findings of the permit applicant
- The heritage tree ordinance requires staff (and other decision making bodies) to make removal decisions based on eight criteria of the ordinance

CONCLUSION AND RECOMMENDATION

- Three of the eight criteria were used to evaluate this decision:
 - The condition of the trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services;
 - The necessity to remove the trees in order to construct proposed improvements to the property;
 - The availability of reasonable and feasible alternatives that would allow for the preservation of the trees.
- For reasonable and feasible alternatives, the following additional criteria was used for this project:
 - Ability to preserve the trees and maintain good health
 - Legal restrictions or conflict with other rules and regulations
 - Prompt repair or new structural support within the next few months to reduce life and safety risks
 - Cost of the alternative in relation to the value of the trees
- Based on the information and evidence submitted to date, staff has not been able to identify a reasonable or feasible alternative and recommends the trees be removed

EQC DETERMINATION PROCESS

- Make findings according to the ordinance's eight decision making criteria
- Address the appeal request to determine if any of the options are feasible and reasonable
- Discussion guidance:
 - Does the commission find that one or more of these alternatives are reasonable and feasible?
 - If so, which ones are they?
 - Why does the commission deem them feasible and reasonable?
 - Does the commission find there are no feasible or reasonable alternatives?
 - If so, why?



THANK YOU

1000 El Camino Real

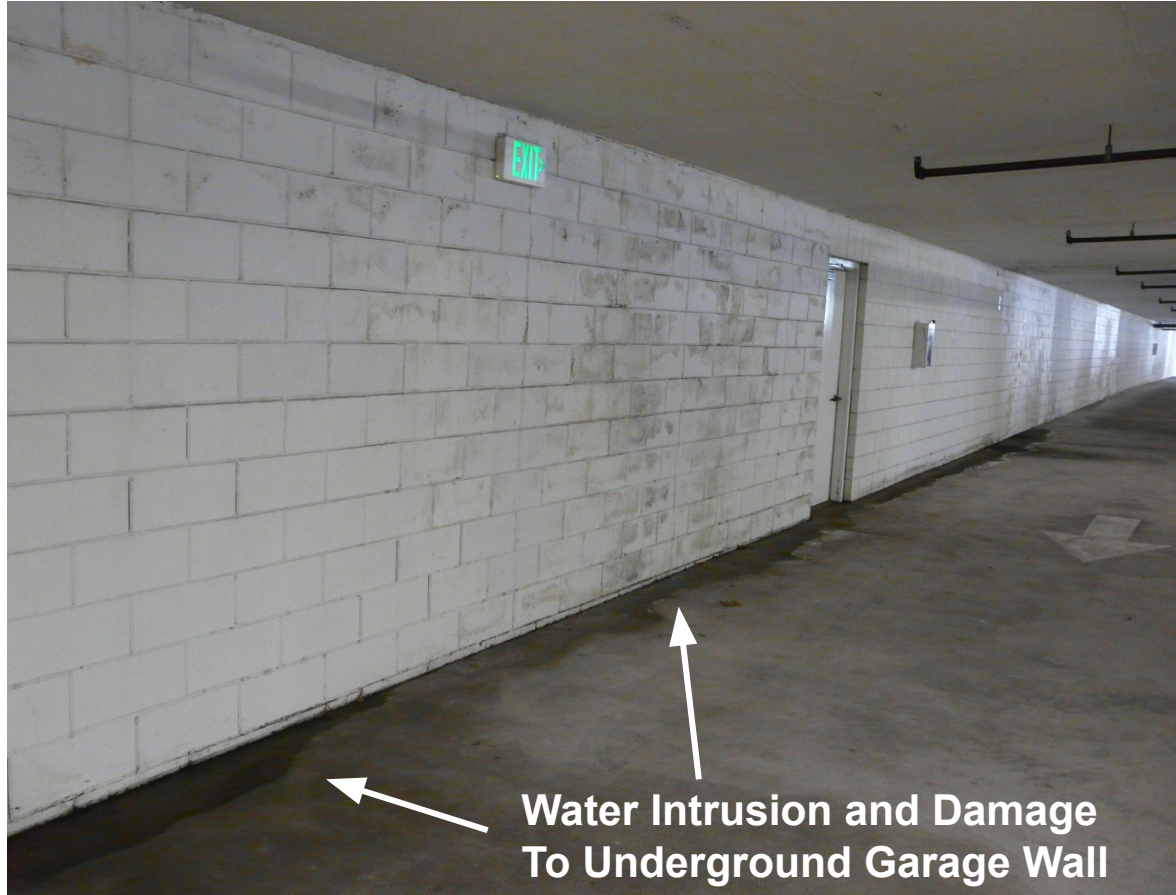
ENVIRONMENTAL QUALITY COMMISSION HEARING

3-27-2019

1000 EL CAMINO REAL BUILT IN THE 1980s



Existing Conditions



Post-tensioned cable corrosion



Existing Conditions



Underground Garage Edge



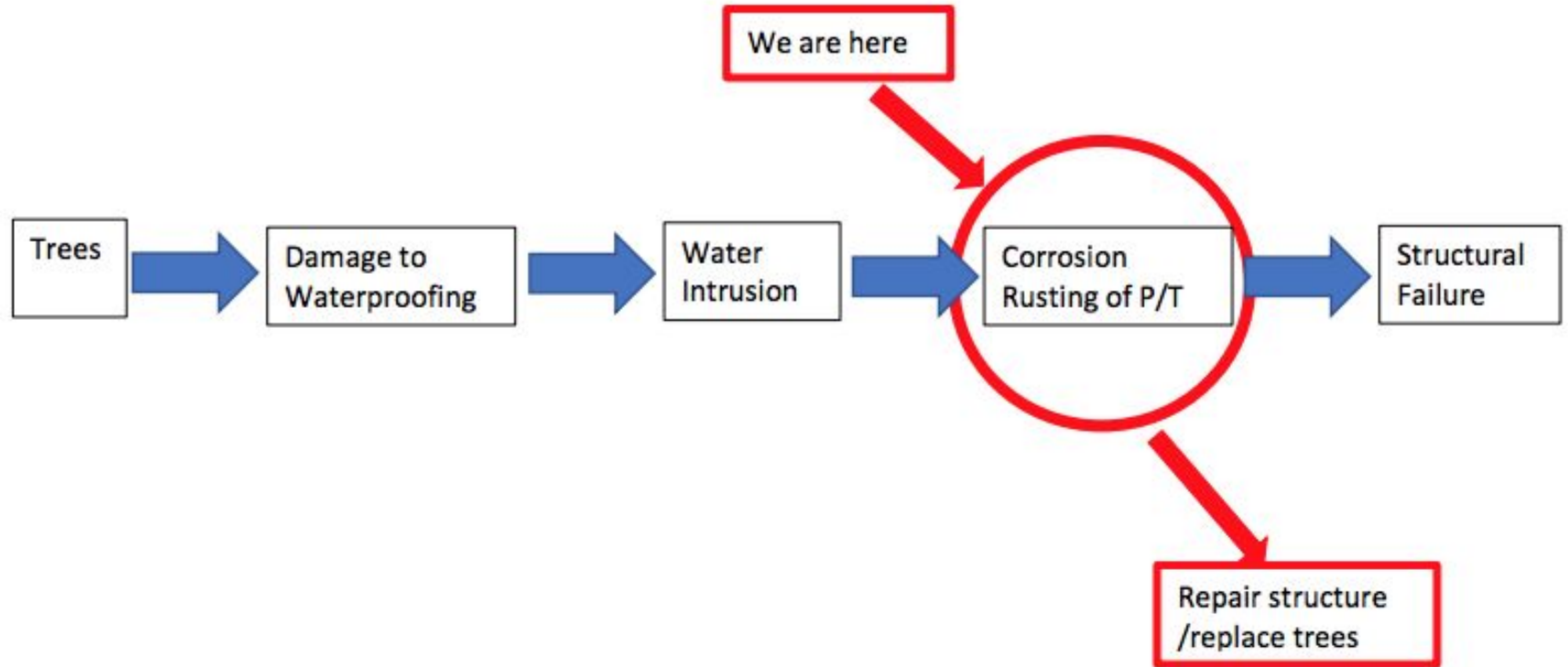
Waterproofing Failed

CONSTRUCTION IN THE 1980s





The Problem



Saving the Trees Along Ravenswood



Many Experts Reviewing The Problem Together

1000 El Camino Real Consultants	City of Menlo Park
Karim Allana - Allana Buick & Bers (Waterproofing Consultant) (Onboarded 5-6 years ago)	
Greg Wagner - KPFF Engineers (Structural Engineer)	Doug - City Peer Review Structural
Steve Batchelder - SBCA Tree Consulting (Arborist)	Christian - City Arborist Jim - City Peer Review Arborist
NOVO Construction - General Contractor	
Shwager Davis - Post-tensioned Cable Contractor	
Carducci & Associates - Landscape Architect	

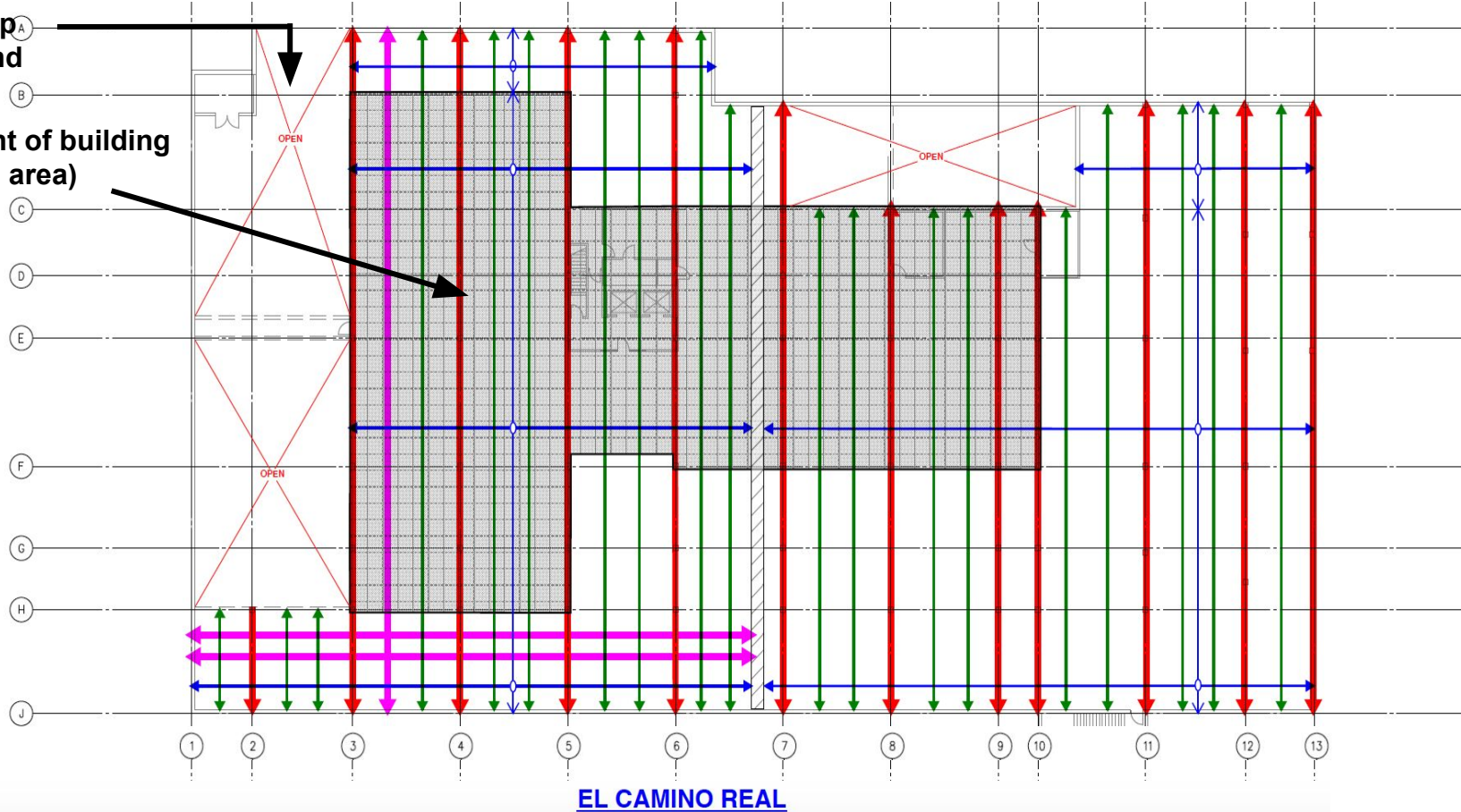
Post-Tensioned Cable Podium Slab

Entrance Ramp
to Underground
Garage

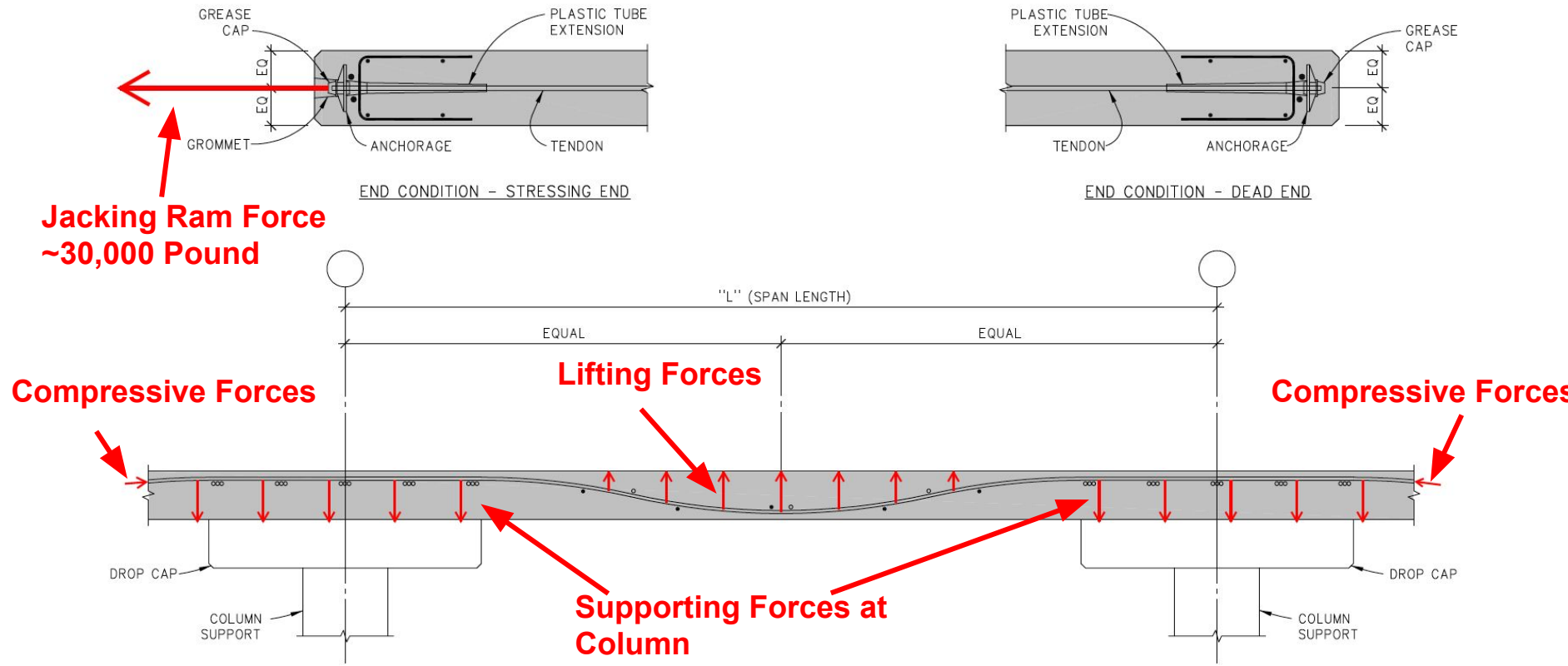
Footprint of building
(shaded area)

RAVENSWOOD AVENUE

- Known Broken Post-tension Cables
- Other Existing Post-tension Cables

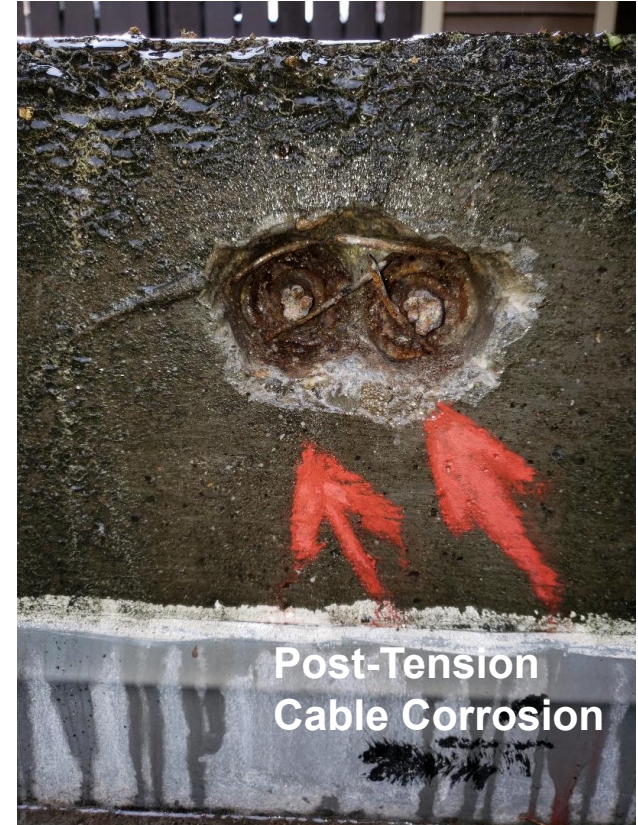
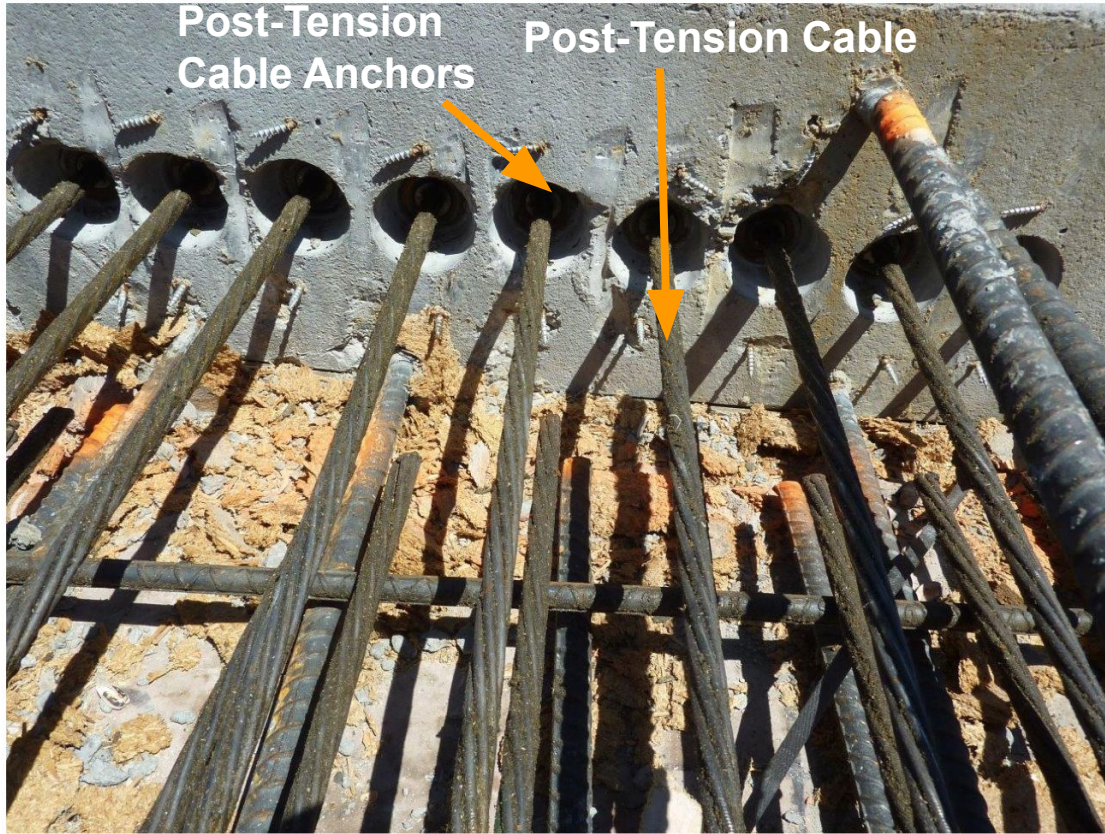


Post-Tensioned Cable Structural System

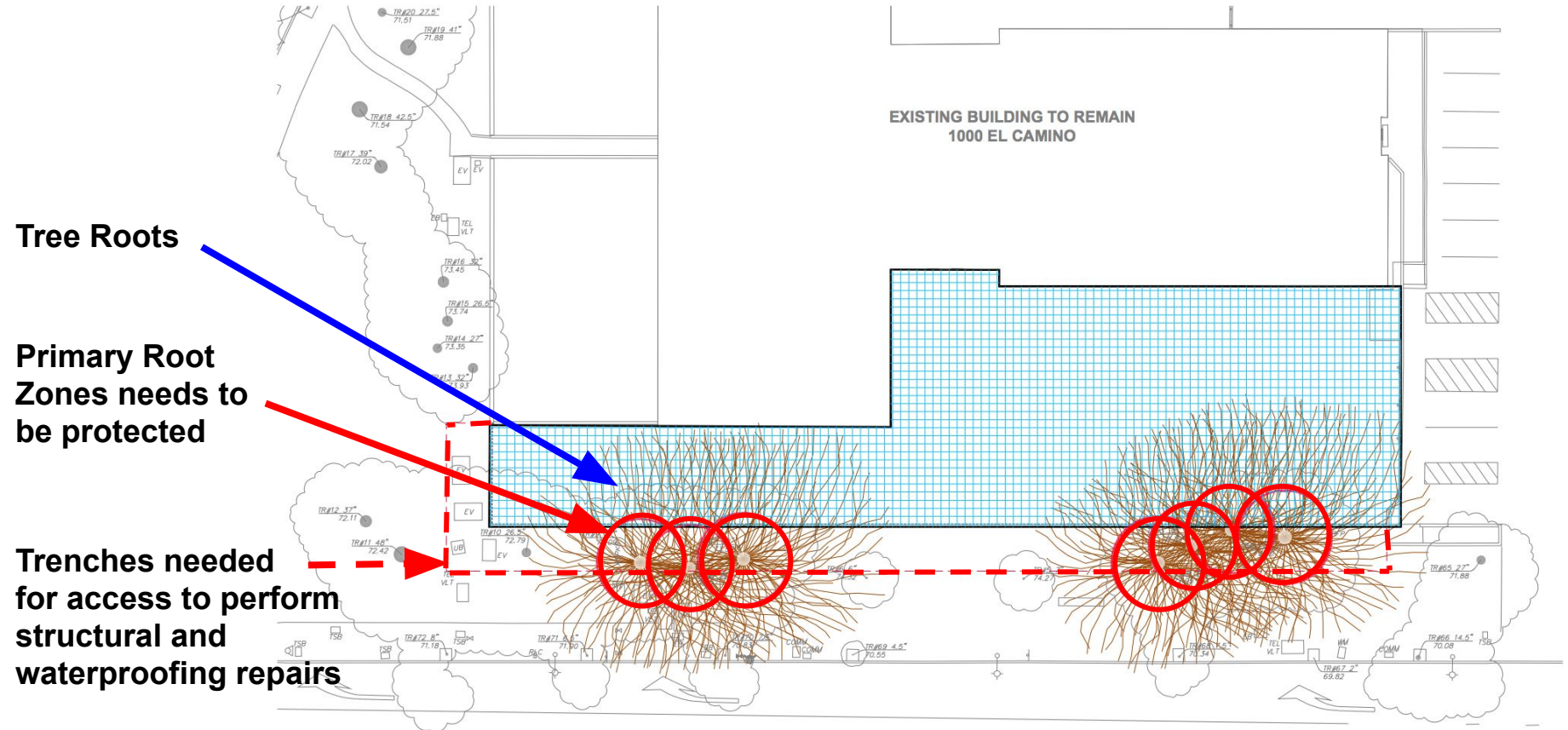


POST-TENSIONED TENDON PROFILE

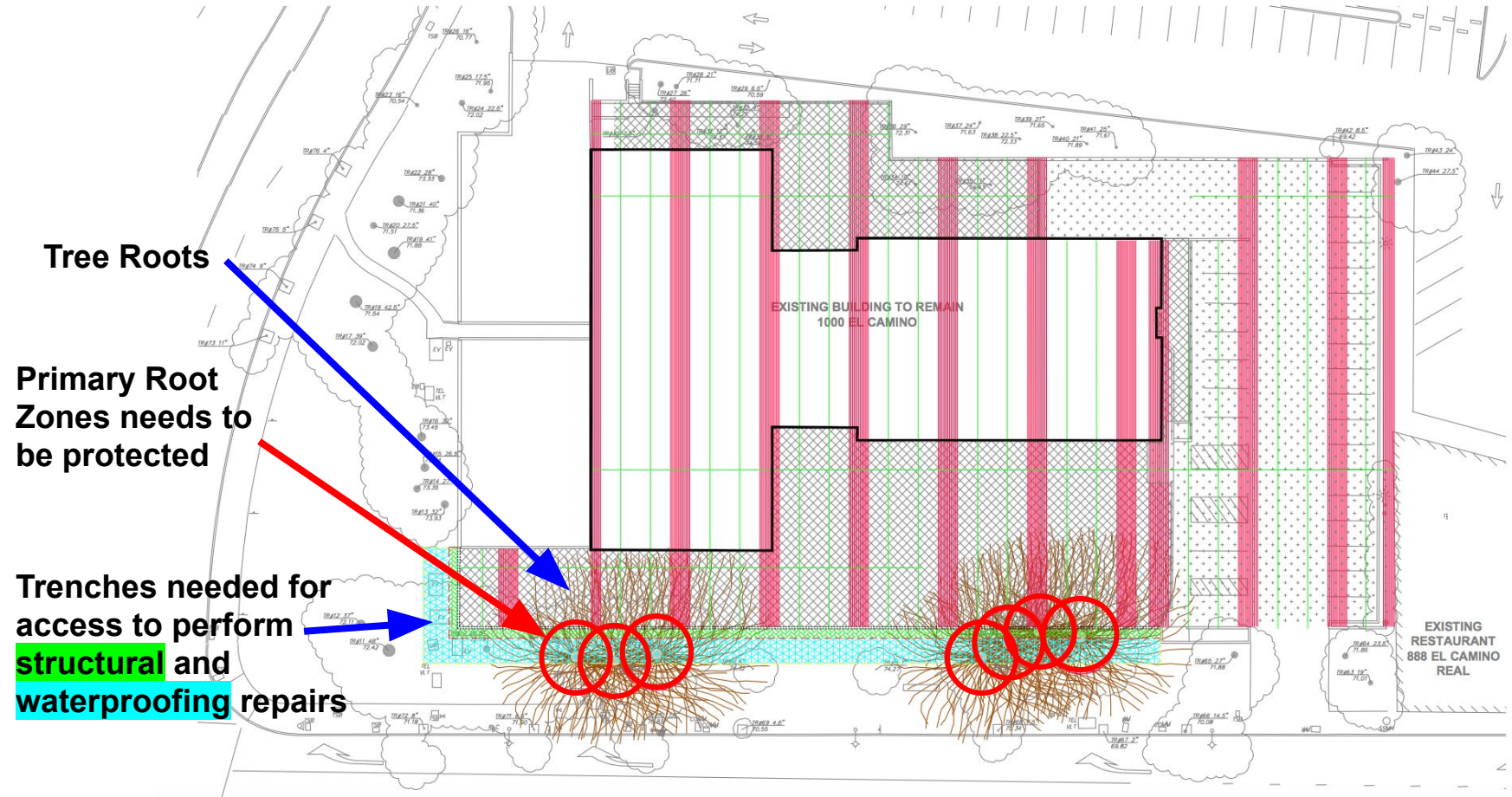
Post-Tensioned Cables and Corrosion



Why Water Is A Problem For Post-Tension Slab And Retaining Walls



Why Water Is A Problem For Post-Tension Slab And Retaining Walls

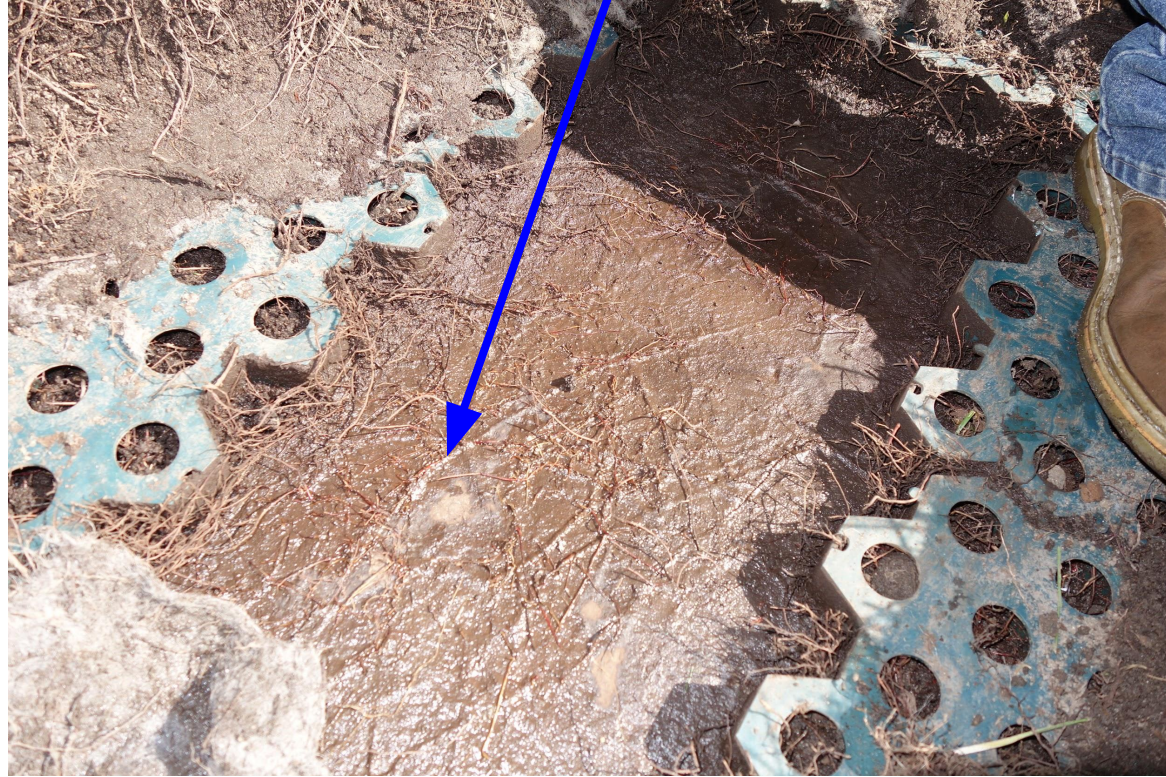


Existing Conditions



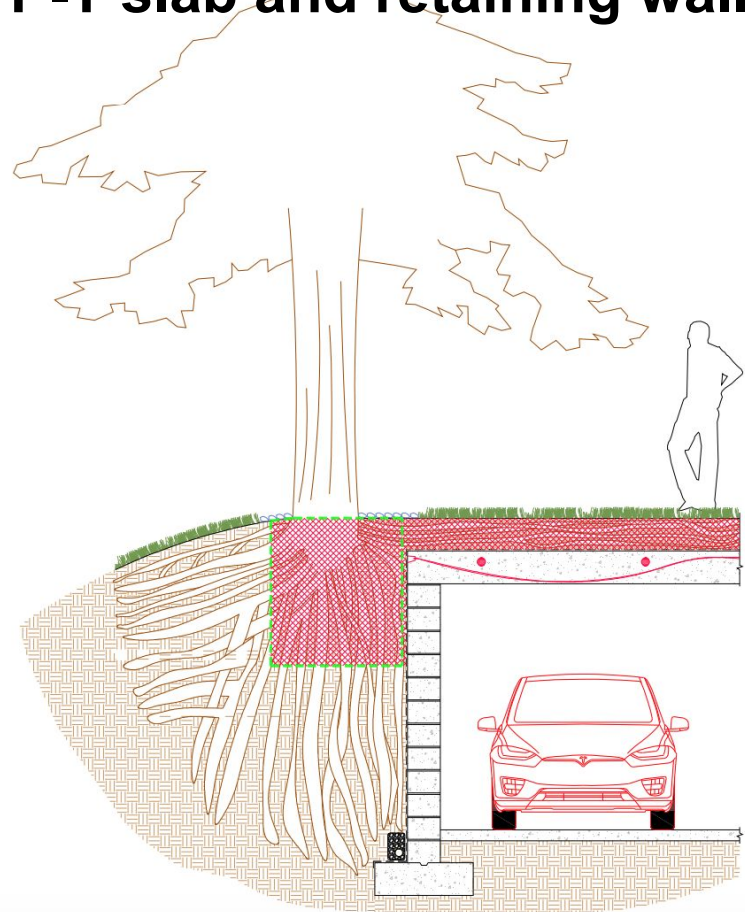
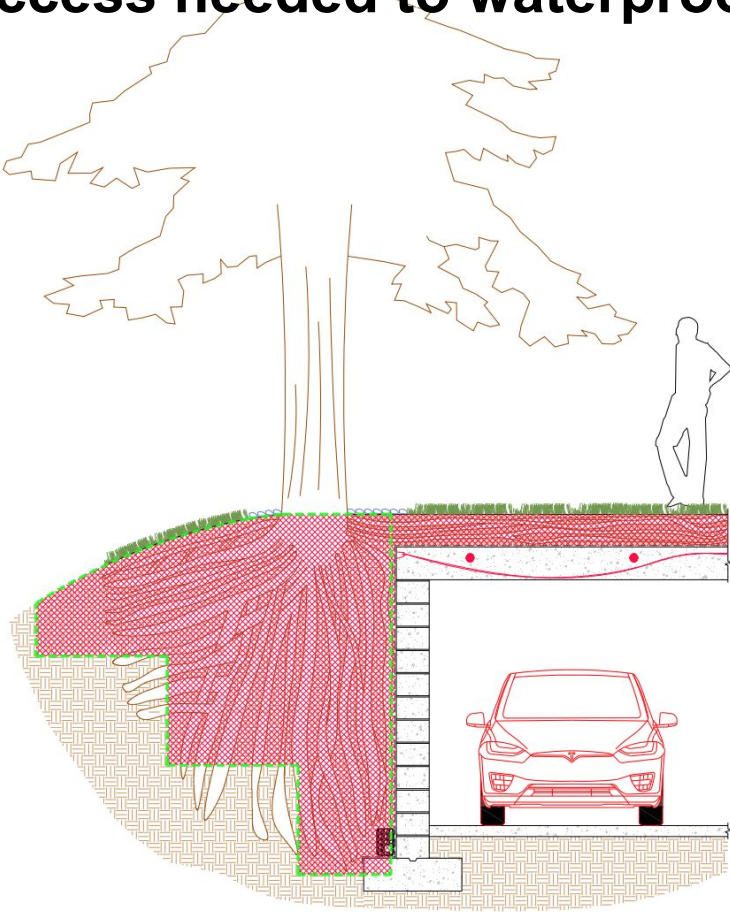
WATERPROOFING FAILED

**Underground
Garage Edge**



**Roots Under Damaged
Waterproofing**

Access needed to waterproof the P-T slab and retaining walls



To be “feasible”, an alternate option must:

- **Allow for the complete inspection and proper repair of the structure as soon as possible**
- **Allow for the comprehensive waterproofing of the structural slab and basement walls to protect the structural components from destructive rust in the future, and**
- **Ensure that any trees that remain are healthy, have a likelihood of remaining so, and are not at significant risk of toppling from weakened root structures and wind forces**

All 8 Alternative Options Reviewed

Option 1 - Building a new parking garage on a neighboring property to replace the 150 parking stalls in the existing underground garage at 1000 El Camino Real. (This requires option 2 as well)

Option 2 - Structurally Retrofit the Podium with Steel Beams (must relocate utilities in ceiling of garage)

Option 3 - Phasing Tree Removal to Incrementally Evaluate Extent of Damage before removing all Trees

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

Option 5 - Relocating Heritage Redwood Trees

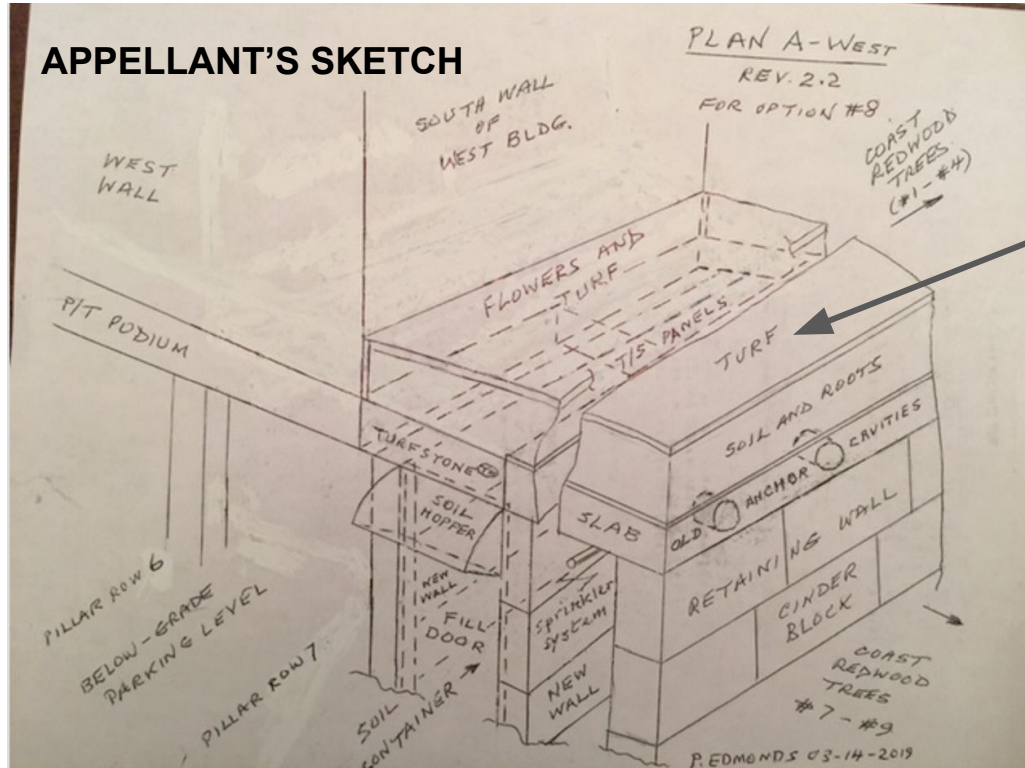
Option 6 - Cutting the Tree Roots, then leaving the Trees in place.

Option 7 - Appellant's suggestion of Saw-cutting Podium Slab and relocating the cables with a new retaining wall within the garage

Option 8 - Saw cut but remove cables and structural retrofit garage (which would require option 2)

Alternate Options 7 and 8

Appellant's suggestion of Saw-cutting Podium Slab and relocating the cables with a new retaining wall within the garage

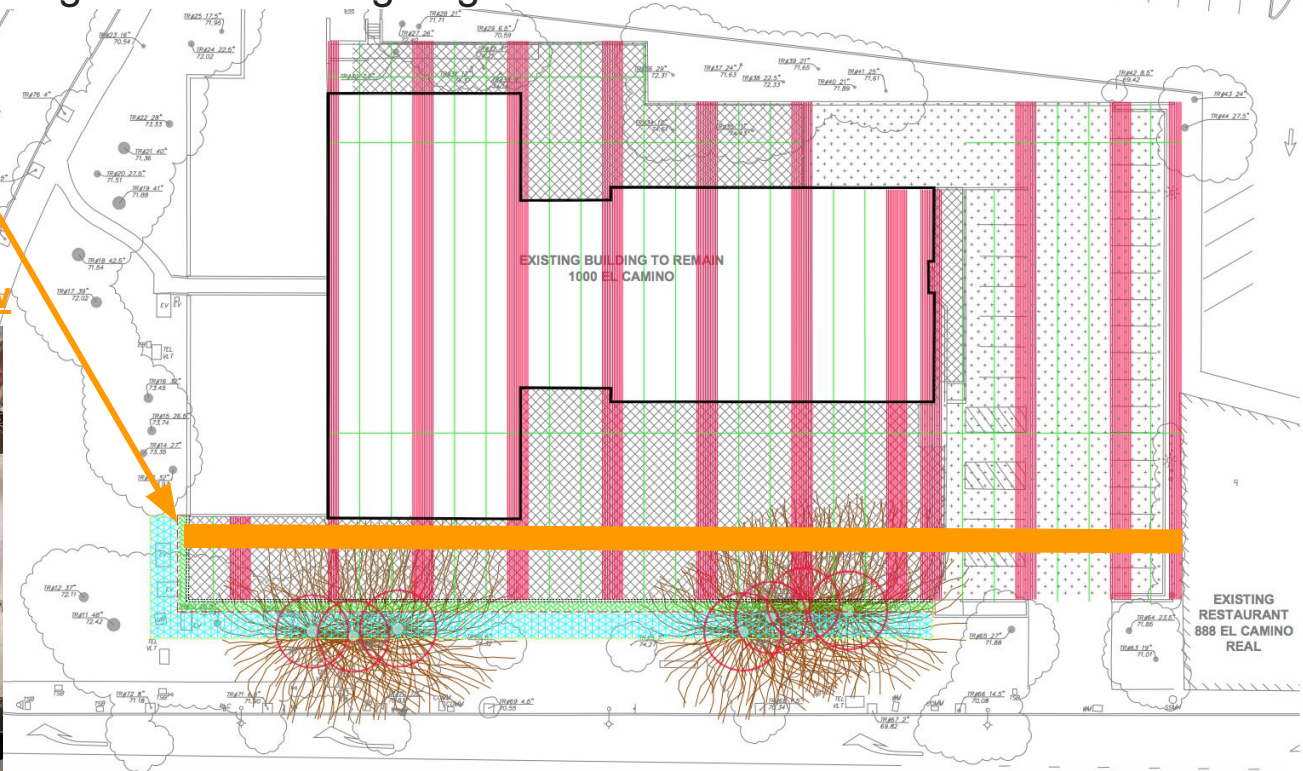


Alternate Options 7 and 8

Appellant's suggestion of Saw-cutting Podium Slab and relocating the cables with a new retaining wall within the garage

Cut podium concrete
and relocate
post-tensioned
structural cables

Example image below



Alternate Option 2

Structurally Retrofit the Podium with Steel Beams

Structural steel throughout garage would block the clearance for cars to enter garage. This would require us to go with option 1 to build a new parking



Significant problems with Options 7 and 8

- Not industry best practices
- Inherently unsafe
- Involve extreme risk to the structural integrity of the building
- Work is sufficiently dangerous that the tenants must completely vacate the premises for two months
- We do not have the legal right to force our tenants to vacate and then move back into the building
- Post-Tension cables are each under 30,000 pounds of tension, and the saw cutting process is risky
- Difficulty securing contractors with the expertise and reputation who will be willing to design and oversee such work
- Importantly, Options 7 and 8 result in the loss of at least 29 parking stalls, a significant portion of the building's parking
- In essence, the building becomes unsaleable and unfinanceable.
- Cause code compliance issues, including the loss of a code-required emergency stairwell and interference with the building's main utility connections
- Fail at least two of the three feasibility requirements outlined above. Structurally, the options are highly complex and risky.

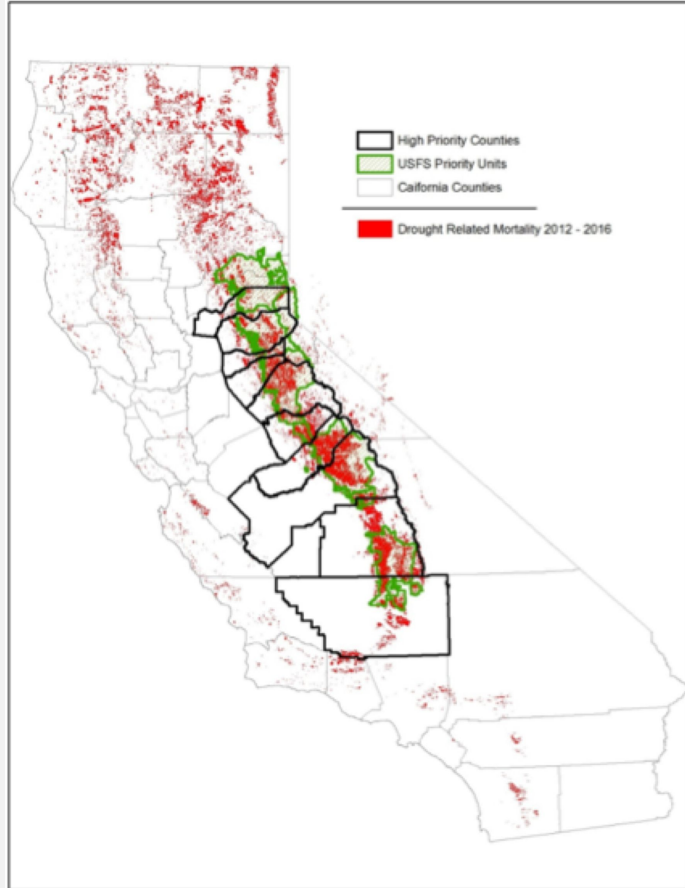
Heritage Tree Preservation in Action

Think of the long haul, don't let the trees fall.



March 27, 2019

Millions of trees have died in California since 2010



Per Sierra Nevada Conservancy estimates, California drought-related tree mortality has resulted in **200 million dead trees** since 2010

Image from Tree Mortality Task Force 2017, "Tree Mortality: Facts and Figures"

Hundreds of Menlo Park heritage trees are cut down **every year**

Example: Intersection of 101 and Willow Road

Before tree removal (June 2017)



After tree removal (December 2017)



~700 heritage trees were cut down in Menlo Park in 2018

These 7 heritage trees are **special**

Facts about these 7 redwoods at the center of Menlo Park (1000 El Camino and Ravenswood):

Species	<i>Sequoia sempervirens</i>
Age	about 40 years
Average Height (max)	85 feet (366')
Average Diameter (max)	35''- 40'' (24')
Average Life Expectancy (max)	500-700 year (2,000 years)
Average Carbon Sequestration Potential	roughly 800 tons CO ² per tree or 5,600 tons

Data source: [Sempervirens.org](https://sempervirens.org)



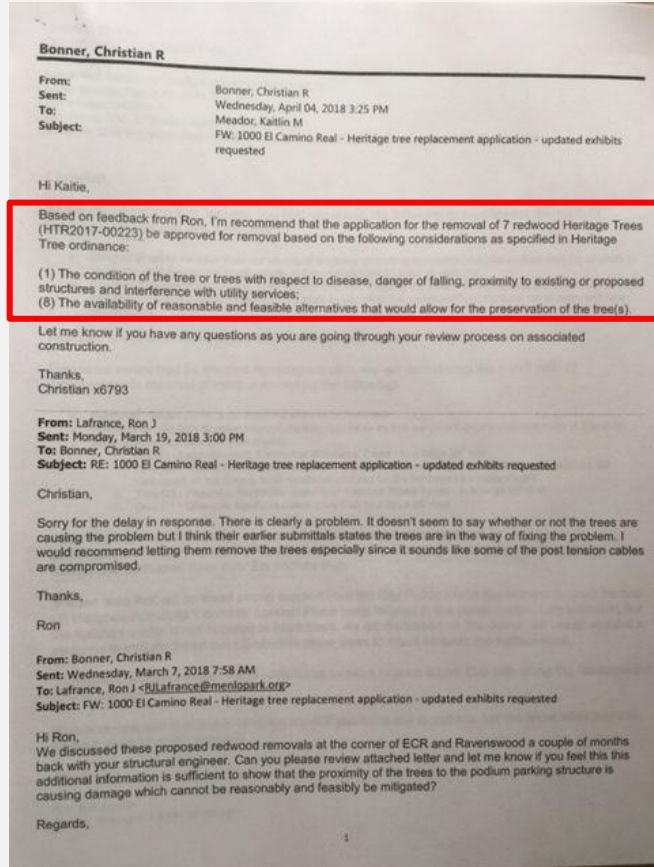
These 7 heritage trees are **valuable**

Benefits of these 7 redwoods to our community that weigh heavily in favor of preservation:

- Carbon sequestration in a climate crisis era
- Downtown and neighborhood beauty
- Air and noise pollution mitigation
- Habitat for numerous species
- Calming effect for a hectic world
- Increased property values
- Vital for a Tree City USA
- Shade in summer



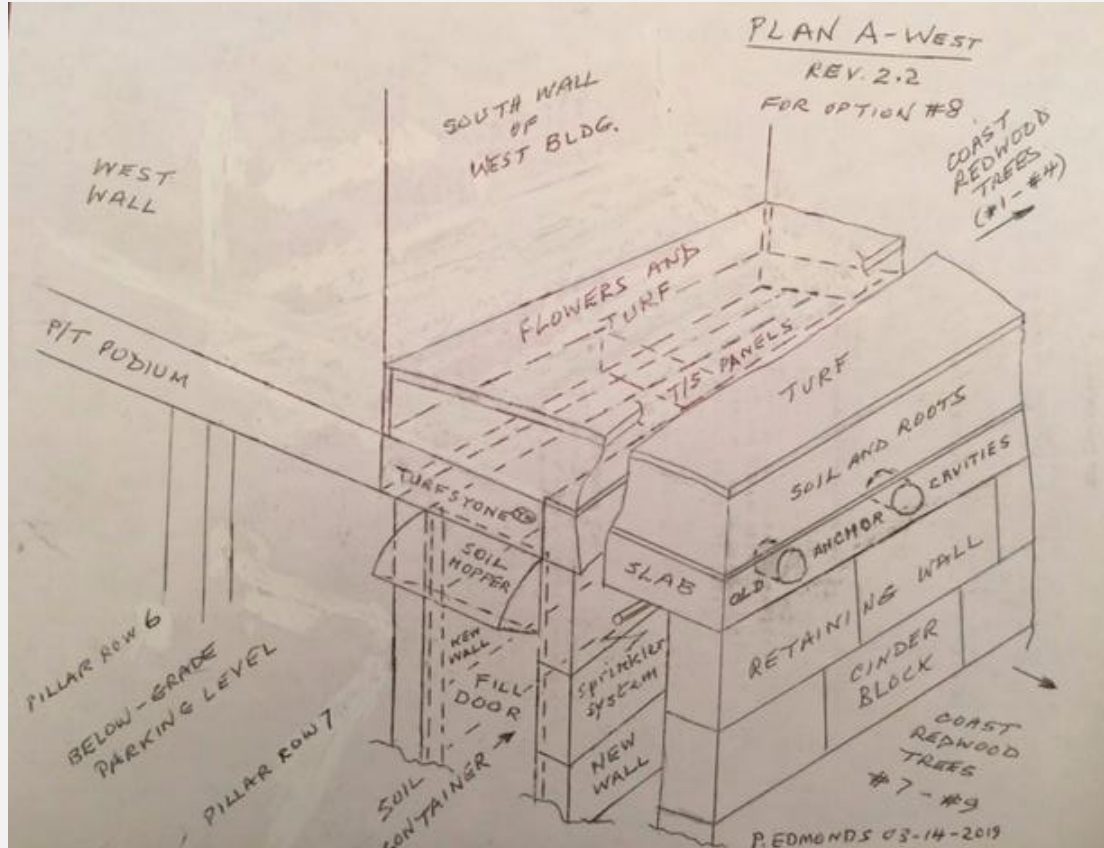
The initial tree removal approval was made on 2 FALSE premises



Initial approval of the tree removal was based on two assertions that have proved to be incorrect:

- (1) Condition of the trees with respect to; disease, danger of falling, proximity to existing or proposed structures and interference with utility service – **FALSE - The trees are currently not diseased, not in any danger of falling, not within proximity to existing or proposed structures and they do not interfere with utility services.** As a matter of fact, they are healthy and thriving.
- (8) No availability of reasonable and feasible alternatives that would allow for preservation of the trees or feasible alternatives to removing the trees – **FALSE - There are alternatives for repairing the building structure without endangering the trees.**

Viable alternatives are deemed “infeasible” only because they cost \$\$



Options #7-8 would preserve all the trees while resulting in building repair cost increases and parking space reduction in the building's underground parking garage.

The building structure repair solution should be designed around preserving the TREES, not the PARKING SPACES.

These 7 heritage trees are ~~valuable~~ **invaluable** to our community

Planted on city-owned land 40 years ago in the heart of Menlo Park, these 7 indigenous trees are an invaluable asset to all of us and an invaluable legacy to many future generations.

Please stand with the trees and preserve the Environmental Quality of Menlo Park!



Key considerations for EQC deliberation:

1. About structural engineering
2. Different premises & approaches
3. Principal technical features
4. Economic valuation vs. amenity loss
5. Parking space loss vs. amenity loss
6. Reconsideration of Option 2
7. Transplantation
8. Staff report issues



Physics 101

STATICS

Moduli of Elasticity

Stress / Strain

Force / Displacement

Push / Yield

DYNAMICS

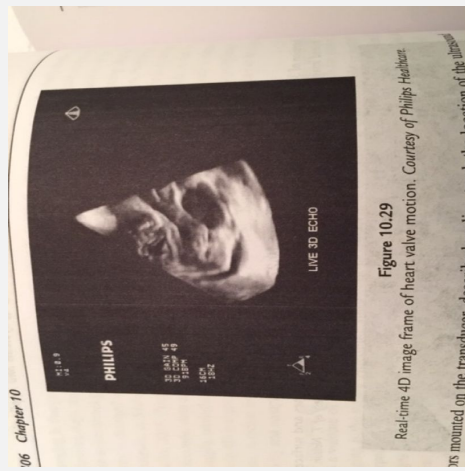
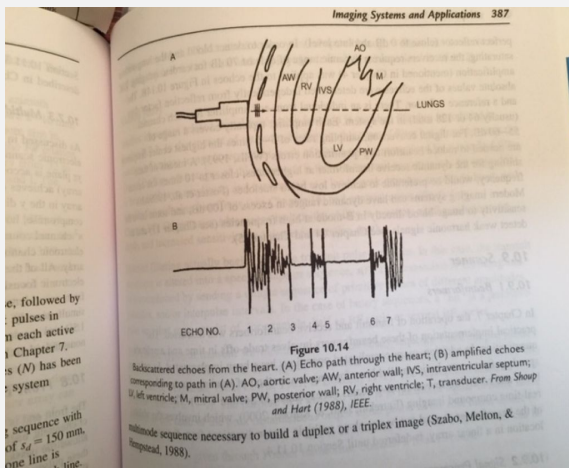
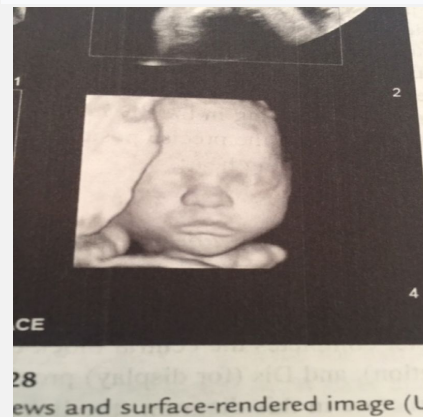
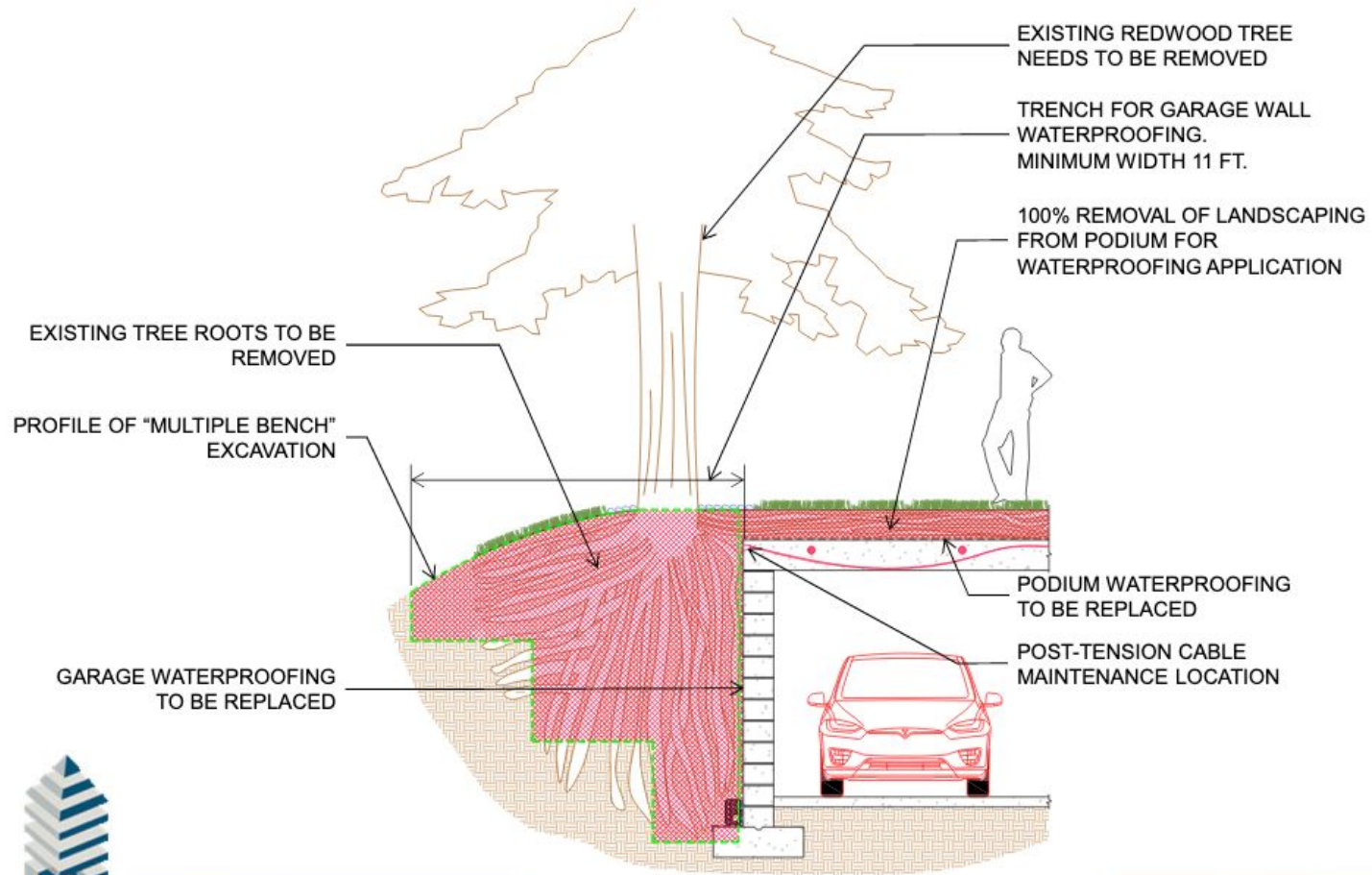


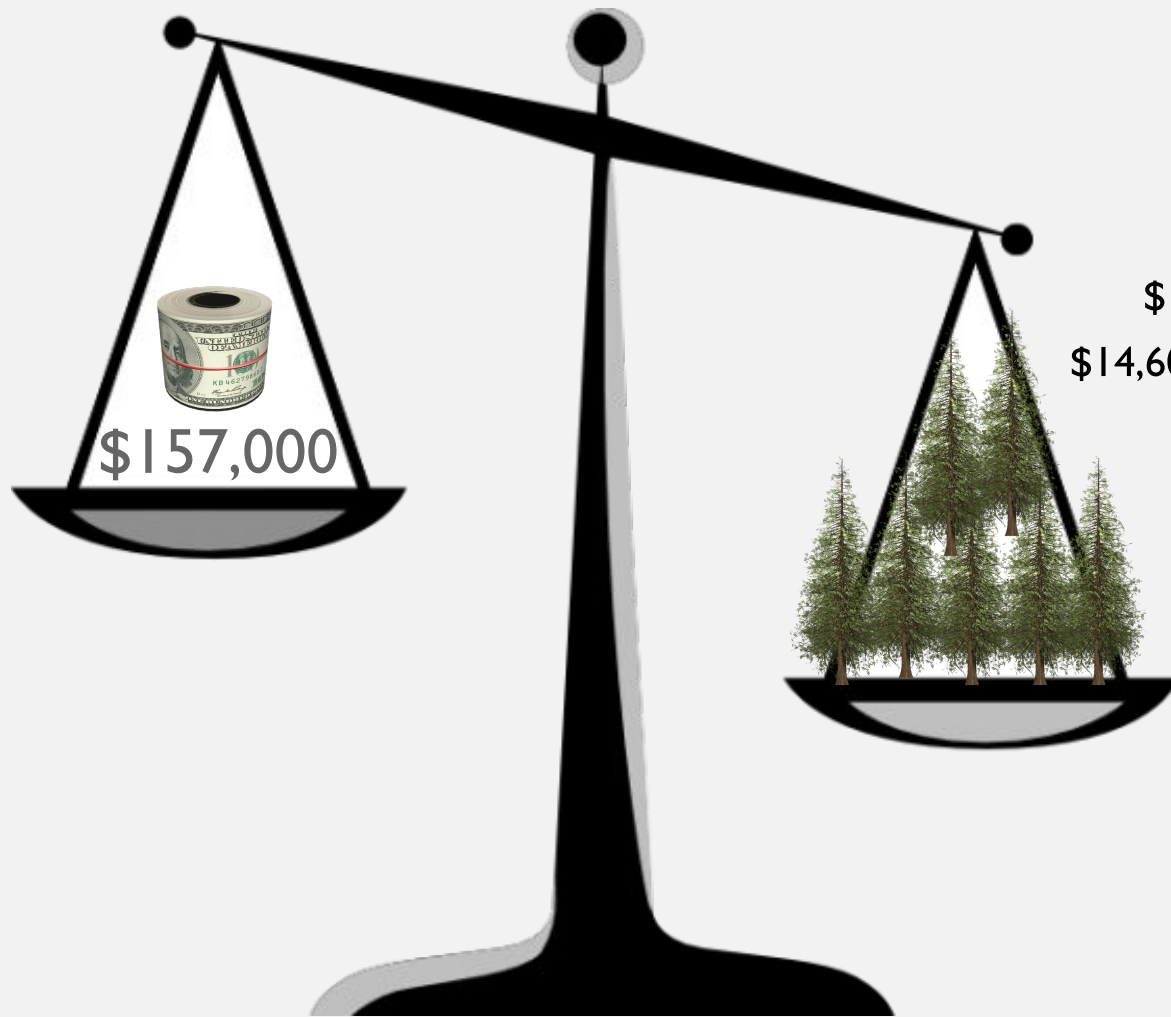
Figure 10.29 Real-time 4D image frame of heart valve motion. Courtesy of Philips Healthcare. The transducer, described earlier, tracks the location of the ultrasound beam.



(T.L.Szabo, 2ndedn. 2014)







\$1 per person per day

\$365 per person per year

\$14,600 per person for 40 years

\$14,600,000 per 1000 people for 40 years

feasible adjective

fea·si·ble | \ 'fē-zə-bəl  \

Definition of *feasible*

- 1 : capable of being done or carried out
// a feasible plan
- 2 : capable of being used or dealt with successfully : SUITABLE
- 3 : REASONABLE, LIKELY
// gave an explanation that seemed feasible enough

reasonable adjective

rea·son·able | \ 'rēz-nə-bəl , 'rē-zən-ə-bəl\

Definition of *reasonable*

- 1
 - a : being in accordance with reason
// a reasonable theory
 - b : not extreme or excessive
// reasonable requests
 - c : MODERATE, FAIR
// a reasonable chance
// a reasonable price
 - d : INEXPENSIVE
- 2
 - a : having the faculty of reason
 - b : possessing sound judgment
// a reasonable man



FOR THE GOOD OF
MENLO PARK