City of Palo Alto
Tree Protection - It's Part of the Plan!

Make sure your crews and subs do the job right!

Fenced enclosures around trees are essential to protect them by keeping the foliage canopy and branching structure clear from contact by equipment, materials and activities, preserving roots and soil conditions in an intact and non-compacted state, and identifying the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved. **An approved tree protection report must be added to this sheet when project activity occurs within the TPZ of a regulated tree.**
For detailed information on Palo Alto's regulated trees and protection during development, review the **City Tree Technical Manual** (TTM) found at www.cityofpaloalto.org/trees/.

TREE DISCLOSURE STATEMENT

CITY OF PALO ALTO
Planning Division, 250 Hamilton Avenue
Palo Alto, CA 94301
(650) 329-2441
http://www.cityofpaloalto.org

Palo Alto Municipal Code, Chapter 8.10.040, requires disclosure and protection of certain trees located on private and public property, and that they be shown on approved site plans. A completed disclosure statement must accompany all building permit applications that include exterior work, all demolition or grading permit applications, or other development activity.

PROPERTY ADDRESS: 486 HAMILTON AVE.

Are there Regulated[1] trees on or adjacent to the property? (YES) **NO** (If no, proceed to Section 4)

[Sections 1- 4 MUST be completed by the applicant. Please circle and/or check where applicable.]

1. Where are the trees? Check those that apply. **(Plans must be submitted showing over 4" diameter trees)**
   - ☐ On the property
   - ☐ On adjacent property overhanging the project site
   - ☒ In the City planter strip or right-of-way easement within 30' of property line (Street Trees)*

*Street trees[1] **require special protection by a fenced enclosure,** per the attached instructions. Prior to receiving any permit, you must provide an authorized Street Tree Protection Verification form by calling Public Works Operations at 493-5953 for inspection of required type I, II or III fencing (see attached Detail #605).

2. Are there any Protected[1] or Designated[1] Trees? **YES** (Check where applicable) (NO)
   - ☐ Protected Tree (s)
   - ☐ Designated Tree (s)
   - ☐ On or overhanging the property

3. Is there activity or grading within the dripline? (radius 10 times the trunk diameter) of these trees? (YES)[2] **NO**
*If Yes, a **Tree Preservation Report** must be prepared by an ISA certified arborist and submitted for staff review (see TTM[2], Section 6.25). Attach this report to Sheet T-1, 'Tree Protection, its Part of the Plan!", per Site Plan Requirements.*

4. Are the Site Plan Requirements** completed? **YES** **NO**

**Protection of Regulated trees during development require the following: (1) Plans must show the measured trunk diameter and canopy dripline; (2) Plans must denote, as a bold dashed line, a fenced enclosure area out to the dripline, per Sheet T-1 and Detail #605 - http://www.cityofpaloalto.org/trees/forms.htm (See also TTM[2], Section 2.15 for area to be fenced)

I, the undersigned, agree to the conditions of this disclosure. I understand that knowingly or negligently providing false or misleading information in response to this disclosure requirement constitutes a violation of the Palo Alto Municipal Code Section 8.10.040, which can lead to criminal and/or civil legal action.

Signature: KHOI LE (Prop. Owner or Agent) Print: KHOI LE Date: 10.17.2019

FOR STAFF USE:

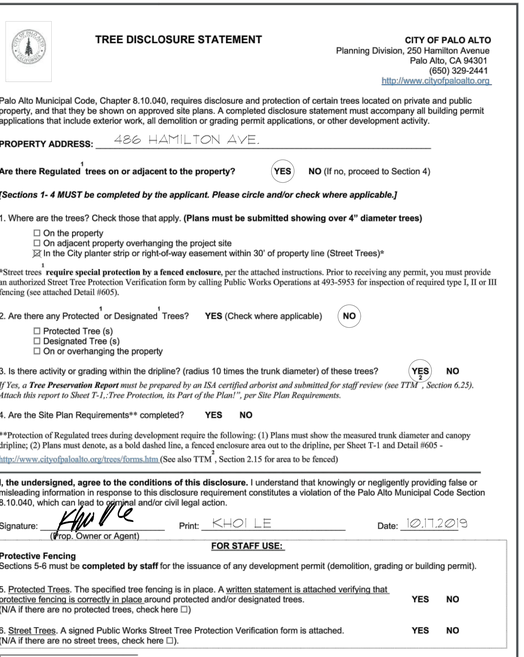
Protective Fencing
Sections 5-6 must be **completed by staff** for the issuance of any development permit (demolition, grading or building permit).

5. Protected Trees. The specified tree fencing is in place. A written statement is attached verifying that protective fencing is correctly in place around protected and/or designated trees. **YES** **NO**
(N/A if there are no protected trees, check here ☐)

6. Street Trees. A signed Public Works Street Tree Protection Verification form is attached. **YES** **NO**
(N/A if there are no street trees, check here ☐).

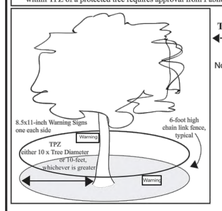
[1] Regulated Trees – a) Street trees – trees on public property; b) Protected trees – Coast Live Oaks or Valley Oaks which are 11.5" in diameter or larger, Coast Redwoods which are 18" in diameter or larger, when measured 54" above natural grade; and Heritage trees are trees designated by City Council; and c) Designated Trees – commercial or non-residential property trees, which are part of an approved landscape plan.
[2] Palo Alto Tree Technical Manual (TTM) contains instructions for all requirements on this form, available at http://www.cityofpaloalto.org/planning-community/tree_technical-manual.html

S:Plan/Pladiv/Arborist/Tree Protection Info/Tree Disclosure Statement Revised 08/06



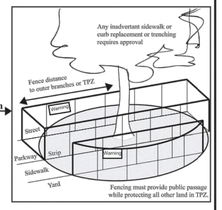
For written specifications associated with illustrations below, see Public Works Specifications Section 31
Detailed specifications are found in the Palo Alto Tree Technical Manual (TTM) (www.cityofpaloalto.org/trees/)

Tree Protection Zone (TPZ) shown in gray (radius of TPZ equals 10-times the diameter of the tree or 10-feet, whichever is greater).
- Restricted activity area -- see Tree Technical Manual Sec 2.15(E).
- Restricted trenching area -- see Tree Technical Manual Sec 2.20(C-D), any proposed trench or form work within TPZ of a protected tree requires approval from Public Works Operations. Call 650-496-5953.

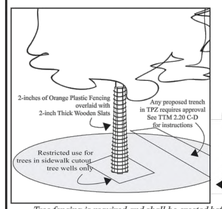


Type I Tree Protection — For all Ordinance Protected and Designated trees, as detailed in the site specific tree preservation report (TPR) prepared by the applicant's project arborist as diagramed on the plans.

Note: Ordinance Protected & Designated Trees. Issuance of a permit requires applicant's project arborist written verification Type I is installed correctly according to the plans and Tree Preservation Report



Type II Tree Protection



Note: Street Trees. Issuance of a permit requires Public Works Operations inspection and signed approval on the Street Tree Verification (STV) form provided.

Type III Tree Protection
(to be used only with approval of Public Works Operations)

Tree fencing is required and shall be erected before demolition, grading or construction begins.

Rev	By	Date
0	DWH	12/14/92
01	D.D.	08/04/04
02	D.D.	08/10/06

Tree Protection During Construction

City of Palo Alto Standard

Approved by: Dave Dockter
PE No.
Date 2006
Dwg No. 605

Scale: NTS

Table 2-2 Palo Alto Tree Technical Manual

CONTRACTOR & ARBORIST INSPECTION SCHEDULE

Reference the Palo Alto Tree Technical Manual is available at www.cityofpaloalto.org/environment/

ALL CHECKED ITEMS APPLY TO THIS PROJECT:

1. ☑ **Inspection of Protective Tree Fencing**. For Public Trees, the Street Tree Verification Form shall be signed by the City Arborist. For Protected Trees, the project site arborist shall provide an initial Monthly Tree Activity Report form with a photograph verifying that he has conducted a field inspection of the trees and that the correct type of protective fencing is in place around the designated tree protection zone (TPZ) prior to issuance of a demolition, grading, or building permit. (See TTM, Verification of Tree Protection, Section 1.39).
2. ☑ **Pre-Construction Meeting**. Prior to commencement of construction, the applicant or contractor shall conduct a pre-construction meeting to discuss tree protection with the job site superintendent, grading operators, project site arborist, City Arborist, and, if a city maintained irrigation system is involved, the Parks Manager (Contact 650-496-6962).
3. ☑ **Inspection of Rough Grading or Trenching**. Contractor shall ensure the project site arborist performs an inspection during the course of rough grading or trenching adjacent to or within the TPZ to ensure trees will not be injured by compaction, cut or fill, drainage and trenching, and if required, inspect aeration systems, tree wells, drains and special paving. The contractor shall provide the project arborist at least 24 hours advance notice of such activity.
4. ☑ **Monthly Tree Activity Report Inspections**. The project site arborist shall perform a minimum monthly activity inspection to monitor and advise on conditions, tree health and retention or, immediately if there are *any revisions* to the approved plans or protection measures. The Tree Technical Manual Monthly Tree Activity Report format shall be used and sent to the Planning Dept. landscape review staff no later than 14 days after issuance of building permit date. Fax to (650) 329-2154. (See TTM, Monthly Tree Activity Inspection Report, Addendum 11 & section 1.17).
5. ☑ **Special activity within the Tree Protection Zone**. Work in the TPZ area (see also #7 below) requires the direct onsite supervision of the project arborist (see TTM, Trenching, Excavation & Equipment, Section 2.20 C).
6. ☐ **Landscape Architect Inspection**. For discretionary development projects, prior to temporary or final occupancy the applicant or contractor shall arrange for the Landscape Architect to perform an on site inspection of all plant stock, quality of the materials and planting (see TTM, Planting Quality, Section 5.20.1 A) and that the irrigation is functioning consistent with the approved construction plans. The Planning Dept. landscape review staff shall be in receipt of written verification of Landscape Architect approval prior to scheduling the final inspection, unless otherwise approved.
7. ☐ **List Other** (please describe as called out in the site Tree Preservation Report, Sheet T-1, T-2, etc.)
   - *
   - *

City of Palo Alto Tree Technical Manual ADDENDUM 11

Arborist Firm Data Here email: RCA/ISA Certified Arborist #WE-000 Contract Cell #:

Monthly Tree Activity Report- *Construction Site*

Inspection Date: _____ **Inspection #**_____	**Site address:** _____ Palo Alto, CA	**Contractor-Main Site Contact Information**	#1: Job site superintendent Company: Email: Job site Office: Cell: Mail:
		Also present:	• _____ • _____
Distribution:	1. City of Palo Alto 2. Others	**Attn: Dave Dockter**	Dave.dockter@cityofpaloalto.org 650-329-2440

Provide the requested minimum information with each report, customize as necessary. To be completed by project site arborist. Send monthly to city arborist at above address until project completion. Use additional sheets as needed.

1. Assignment Activity (Demolition/grading/sewer/trenching/foundation/list relevant visits)
   a. Pre-construction meeting requirement with sub-contractors
   b. Inspect to verify that tree protection measures are in place
   c. Determine if field adjustments, watering or plan revisions may be needed
2. Field Observations (general site-wide and list by individual tree number)
   a. Tree Protection Fences (TPF) are …
   b. Trenching has/will occur …
3. Action Items (list site-wide, by tree number and date to be satisfied) and Date Due
   a. Tree Protection Fence (TPF) needs adjusting (tree # x, x, x)
   b. Root zone buffer material (wood chips) can be installed next
   c. Schedule sewer trench, foundation dig with …
4. Photographs (use often)
5. Tree Location Map (mandatory 8.5 x 11 sheet)
6. Recommendations, notes or monitor items for project/staff/schedule
   •
7. Past visits (list carry-over items satisfied/still outstanding)
   •

Respectfully submitted,

Project site arborist
Consultant contact information (Include email, cell#, and mailing)
Cc:

Enter Date CPA Monthly Tree Activity Report: Type site address here Page #1 of 1

APPENDIX J

PALO ALTO
STREET TREE PROTECTION INSTRUCTIONS
--SECTION 31--

31-1 General
- **a.** **Tree protection has three primary functions**, 1) to keep the foliage canopy and branching structure clear from contact by equipment, materials and activities; 2) to preserve roots and soil conditions in an intact and non-compacted state and 3) to identify the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved.
- **b.** **The Tree Protection Zone (TPZ)** is a restricted area around the base of the tree with a radius of ten-times the diameter of the tree's trunk or ten feet; whichever is greater, enclosed by fencing.

31-2 Reference Documents
- **a.** **Detail 605** – Illustration of situations described below.
- **b.** **Tree Technical Manual (TTM) Forms** (http://www.cityofpaloalto.org/trees/)
  1. Trenching Restriction Zones (TTM, Section 2.20(C))
  2. Arborist Reporting Protocol (TTM, Section 6.30)
  3. Site Plan Requirements (TTM, Section 6.35)
  4. Tree Disclosure Statement (TTM, Appendix J)
- **c.** **Street Tree Verification (STV) Form** (http://www.cityofpaloalto.org/trees/forms)

31-3 Execution
- **a.** **Type I Tree Protection:** The fence shall enclose the entire TPZ of the tree(s) to be protected throughout the life of the construction project. In some parking areas, if fencing is located on paving or concrete that will not be demolished, then the posts may be supported by an appropriate grade level concrete base, if approved by Public Works Operations.
- **b.** **Type II Tree Protection:** For trees situated within a planting strip, only the planting strip and yard side of the TPZ shall be enclosed with the required chain link protective fencing in order to keep the sidewalk and street open for public use.
- **c.** **Type III Tree Protection:** To be used only with approval of Public Works Operations. Trees situated in a tree well or sidewalk planter pit, shall be wrapped with 2-inches of orange plastic fencing from the ground to the first branch and overlaid with 2-inch thick wooden slats bound securely (slats shall not be allowed to dig into the bark). During installation of the plastic fencing, caution shall be used to avoid damaging any branches. Major limbs may also require plastic fencing as directed by the City Arborist.
- **d.** **Size, type and area to be fenced.** All trees to be preserved shall be protected with six (6') foot high chain link fences. Fences are to be mounted on two-inch diameter galvanized iron posts, driven into the ground to a depth of at least 2-feet at no more than 10-foot spacing. Fencing shall extend to the outer branching, unless specifically approved on the STV Form.
- **e.** **'Warning' signs.** A warning sign shall be weather proof and prominently displayed on each fence at 20-foot intervals. The sign shall be minimum 8.5-inches x 11-inches and clearly state in half inch tall letters: "WARNING - Tree Protection Zone - This fence shall not be removed and is subject to a fine according to PAMC Section 8.10.110."
- **f.** **Duration**. Tree fencing shall be erected before demolition; grading or construction begins and remain in place until final inspection of the project, except for work specifically allowed in the TPZ. Work or soil disturbance in the TPZ requires approval by the project arborist or City Arborist (in the case of work around Street Trees). Excavations within the public right of way require a Street Work Permit from Public Works.
- **g.** **During construction**
  1. All neighbors' trees that overhang the project site shall be protected from impact of any kind.
  2. The applicant shall be responsible for the repair or replacement plus penalty of any publicly owned trees that are damaged during the course of construction, pursuant to Section 8.04.070 of the Palo Alto Municipal Code.
  3. The following tree preservation measures apply to all trees to be retained:
     - **a.** No storage of material, topsoil, vehicles or equipment shall be permitted within the TPZ.
     - **b.** The ground under and around the tree canopy area shall not be altered.
     - **c.** Trees to be retained shall be irrigated, aerated and maintained as necessary to ensure survival.

END OF SECTION

City of Palo Alto 2004 Standard Drawings and Specifications
Street Tree Verification of Protection, PWE, Section 31 Revised 08/06

City of Palo Alto
Tree Department
Public Works Operations
PO Box 10250 Palo Alto, CA 94303
650/496-5953 FAX: 650/852-9289
treeprotection@CityofPaloAlto.org

Verification of Street Tree Protection

Applicant Instructions: Complete upper portion of this form. Mail or FAX this form along with signed Tree Disclosure Statement to Public Works Dept. Public Works Tree Staff will inspect and notify applicant.

APPLICATION DATE:	10/17/2019
ADDRESS/LOCATION OF STREET TREES TO BE PROTECTED:	486 HAMILTON AVE.
APPLICANT'S NAME:	KHOI LE
APPLICANT'S ADDRESS:	120 BLOOMFIELD RD, BURLINGAME, CA 94010
APPLICANT'S TELEPHONE & FAX NUMBERS:	415.290.9093

This section to be filled out by City Tree Staff

1. The Street Trees at the above address(es) are adequately protected. The type of protection used is:	YES ☐ NO* ☐ * If NO, go to #2 below
Inspected by:	
Date of Inspection:	
2. The Street Trees at the above address are **NOT** adequately protected. The following modifications are required: Indicate how the required modifications were communicated to the applicant.	
Subsequent Inspection	
Street trees at above address were found to be adequately protected:	YES ☐ NO* ☐ * If NO, indicate in "Notes" below the disposition of case.
Inspected by:	
Date of Inspection:	
Notes: List City street trees by species, site, condition and type of tree protection installed. Also note if pictures were taken. Use back of sheet if necessary.	

Return approved sheet to Applicant for demolition or building permit issuance.

S:\PWD\OPS\Tree\DS\St.TreeProtect 5/1706

---WARNING---
Tree Protection Zone

This fencing shall not be removed without City Arborist approval (650-496-5953)

Removal without permission is subject to a $500 fine per day*

Palo Alto Municipal Code Section 8.10.110

City of Palo Alto Tree Protection Instructions are located at http://www.city.palo-alto.ca.us/trees/technical-manual.html

SPECIAL INSPECTIONS **PLANNING DEPARTMENT**

TREE PROTECTION INSPECTIONS MANDATORY

PAMC 8.10 PROTECTED TREES. CONTRACTOR SHALL ENSURE PROJECT SITE ARBORIST IS PERFORMING REQUIRED TREE INSPECTION AND SITE MONITORING. PROVIDE WRITTEN MONTHLY TREE ACTIVITY REPORTS TO THE PLANNING DEPARTMENT LANDSCAPE REVIEW STAFF BEGINNING 14 DAYS AFTER BUILDING PERMIT ISSUANCE.

BUILDING PERMIT DATE: _____

DATE OF 1ST TREE ACTIVITY REPORT: _____

CITY STAFF: _____

REPORTING DETAILS OF THE MONTHLY TREE ACTIVITY REPORT SHALL CONFORM TO SHEET T-1 FORMAT. VERIFY THAT ALL TREE PROTECTION MEASURES ARE IMPLIMENTED AND WILL INCLUDE ALL CONTRACTOR ACTIVITY, SCHEDULED OR UNSCHEDULED, WITHIN A TREE PROTECTION ROOT ZONE. NON-COMPLIANCE IS SUBJECT TO VIOLATION OF PAMC 8.10.080. REFERENCE: PALO ALTO TREE TECHNICAL MANUAL, SECTION 2.00 AND ADDENDUM 11.

Apply Tree Protection Report on sheet(s) T-2

Use addtional "T" sheets as needed

486 HAMILTON

Project Data

T-1

All other tree-related reports shall be added to the space provided on this sheet (adding as needed)
Include this sheet(s) on Project Sheet Index or Legend Page.
A copy of T-1 can be downloaded at
http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=6460

Special Tree Protection Instruction Sheet
City of Palo Alto

T-1

Le Architecture

482 - 486 Hamilton Avenue

Consulting Arborist Report v2

December 3, 2019

ARBORIST TREE ASSESSMENT and APPRAISAL REPORT v2

482-486 Hamilton Avenue
Palo Alto, California

Submitted to:

Mr. Khoi Le
Le Architecture
120 Bloomfield Road
Burlingame, CA 94010

Completed by:

Walter Fujii
RCA No. 402
ISA No. WE 2257A

Fujiitrees Consulting, LLC
24701 Broadmore Avenue
Hayward, California 94544
(415) 699-6269
walt@fujiitrees.com
web site: Fujiitrees.com

March 29, 2019 v1
December 3, 2019 v2

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482 - 486 Hamilton Avenue

Palo Alto

Consulting Arborist Narrative

Disclaimer:
Fujiitrees Consulting, LLC (FTC) last visited 482-486 Hamilton Avenue on March 18, 2019. The consultant has no knowledge of current site and tree conditions, but was informed by the Client that all trees covered in this report remain and the surrounding conditions are unchanged. This updated report was revised to only address possible construction impacts to an existing tree located near a redesigned garage entrance.

Introduction
Background
Le Architecture (Client) requested Fujiitrees Consulting, LLC (FTC), to assess four trees located on the property known as 482-486 Hamilton Avenue in the city of Palo Alto (City). Future development plans require submittal of an arborist tree report, including a tree appraisal and a tree protection plan to the City Planning and Community Environment Department (PCE).

FTC completed a tree report dated March 29, 2019 that was accepted by the Client. It was agreed that FTC completed the requested assignment.

In an email dated November 21, 2019, the Client informed FTC that the original design for a garage entry on Hamilton Ave. was not received well by the Palo Alto Architecture Review Board.

In response to the Palo Alto Review Board's concern over the garage entry, the Client proposed entry to the parking garage along Cowper Street and forwarded updated plans to FTC. The curb cut for the garage entry is very close to an existing street tree that FTC assessed in the aforementioned report.

Assignment
To satisfy a request from the City, FTC was asked to identify the subject tree, state the Tree Protection Zone (TPZ) of the subject tree and describe possible construction impacts to the subject tree as a result of the proposed curb cut. The Client asked that the report of March 29, 2019 be properly updated to reflect the new garage entrance design.

Survey Methods
A visual assessment of the trees was made from the ground. No samples were collected for laboratory analysis, the trees were not entered and root collar examinations were not completed as none of these tasks were part of the assignment. Trees assessed in this report were limited to those trees specified by the Client.

Blue aluminum numerical tags were affixed on the north facing side of the trunk approximately six feet above grade when physically possible. The numerical sequence of tag numbers was one through four.

Trunk diameters of trees were measured with a diameter tape at the height of 54 inches (4 feet 6 inches) above grade. The height of trunk measurement was specified in the Palo Alto Tree Technical Manual.

Tree height and crown radius were approximated and are accurate within five feet. A laser range finder was used to sample trees in order to gauge the accuracy of the approximated height and crown widths.

Appraisal Method
In order to determine the value of the trees located on the property, the City of Palo Alto required submittal of an appropriate tree appraisal. An appraisal using the Trunk Formula Method as specified in the Guide for Plant Appraisal 9th Edition (Guide) prepared by the Council of Tree and Landscape Appraisers (CTLA) and published by the International Society of Arboriculture (ISA) was completed.

Although a newly released 10th Edition of the guide is available, FTC has decided that the newly introduced concepts should be tested in the real world prior to use with FTC clients. That said, FTC was deposed and testified as an expert witness for tree appraisals employing the 9th Edition of the Guide.

Observations and Discussion
On March 18, 2019, FTC visited the project site, 482-486 Hamilton Avenue. An existing commercial building housed a cleaners and restaurant with one store front up for lease.

The tree species and (occurrence) of the five assessed trees contained in this report include: flowering pear, *Pyrus calleryana* (2) and holly oak, *Quercus ilex* (2) and Chinese pistache *Pistacia chinensis* (1).

All five trees are located between the sidewalk and curb. It is FTC's understanding that these are publicly owned trees (street trees).

Tree 1 is a mature flowering pear located in a planter strip shared with utility vaults. (Photos 1&2) The planter strip is approximately 4.5 feet by 23.5 feet. Vegetation and debris prevented an accurate measurement. Ivy covering the trunk obstructed a measurement of the trunk diameter. (Photos 1 & 2) Cocoons were observed on the trunk.

In November 2019, FTC was informed that a curb cut was proposed within two feet of the trunk as part of installing a new driveway entrance for the proposed structure. FTC was also informed that an earlier plan to install the driveway on the Hamilton side of the property was not received well by the Palo Alto Architecture Review Board.

According to the site plans, an existing water service and backflow prevention device are located in the area of the proposed driveway.

Tree 2 is a younger flowering pear located on the Hamilton Avenue side of the property. (Photo 3) This tree was installed in a 3 foot by 3 foot tree well and covered with a tree grate. (Photo 4) Cocoons were also observed on the trunk.

Tree 3, a mature holly oak displays a high canopy that was pruned to be clear of the store front signs. (Photo 5) Much of the foliage is covered with black sooty mold. The planter strip measures approximately 3 feet 11 inches by 7.5 feet. At one point the planter narrows to 2 feet 11 inches. (Photo 6)

Tree 4 is a younger holly oak also afflicted with black sooty mold. The planter strip measures approximately 3 feet 11 inches by 5 feet 3 inches.

Tree 5 is a mature Chinese pistache. This off-site tree was assessed for the report because its canopy overhangs the property. Its planting strip was not measured.

Analysis
Excavation for the proposed curb cut and driveway next to Tree 1 is well within the Tree Protection Zone (TPZ) of six times the trunk diameter as recommended by the Best Management Practices,(BMP) Root Management (2017) published by the International Society of Arboriculture (ISA). As per ISA BMP's, the minimum TPZ radius for Tree 1 is 10.5 feet.

The Excavation will require damaging approximately 40 percent of the root system for Tree 1. Removal of the water service will contribute to this damage. In order to properly install the driveway, this root damage cannot be avoided. The callery pear species is not known to be tolerant of soil disturbances. (Matheny and Clark 1998)

The cocoons observed on the trunks of trees 1 and 2 were left by the western tussock moth *(Orgyia vetusta)*. This pest is most often associated with oaks and is known to defoliate trees when they attack in great numbers. Healthy trees are able to leaf out after the larvae become moths. Biological controls have been used to manage these pests.

Trees 3 and 4 were infested with aphid which excrete a honeydew that drops on leaves, or any flat surface beneath the canopy. Black sooty mold develops on the honeydew but is more unattractive than harmful. Frequent washing of leaves with a high pressure volume of water on a regular basis is one method to manage aphids.

Nothing remarkable was observed on the trunk, limbs and branches of tree 5.

The subject trees were assessed for structure, health and overall condition. Evaluation Factors for Determining Overall Tree Condition – Table 1, defines the characteristics for each rating.

Suitability Factors for Tree Preservation – Table 2, explains the method behind the rating system. This qualitative rating is a contributing factor when deciding the reasonableness of whether to accommodate a tree by design.

The Tree Assessment Chart – Table 3, contains the collected tree data from the subject trees. Data includes tag number, tree measurements, and ratings for structure, health and overall condition with a separate suitability rating for preservation. Entries include the Arborist's comments and recommendations.

The Tree Appraisal Worksheet – Table 4, presents the collected data and trunk formula calculations used to determine tree value.

Conclusions
The anticipated root damage to Tree 1 will jeopardize the health and stability of the tree. The original plan for an entrance from Hamilton Avenue was not received well by the Palo Alto Architecture Review Board. FTC was informed that under the circumstances this was the next best option for a driveway entrance.

In light of this tree species low tolerance of soil disturbances relocating the tree is not a viable option. That said, in order to construct the necessary driveway, Tree 1 should be removed for reasons of safety.

The subject street trees 1 through 5 were determined to be in overall fair condition. Properly applied maintenance practices performed on a regular basis will extend the useful life of the trees. Obviously such tasks are within the purview of the city of Palo Alto.

If future plans involve sidewalk improvements, accepted arboricultural practices encourage larger planting strips or tree wells for street trees 2 and 4.

The total appraised value for the four trees was determined to be $16,090. Appraised value of Tree 1 is $3650. Please refer to Table 4 – Tree Appraisal Worksheet.

When the Tree Protection Plan is properly implemented, construction impacts to the subject trees are expected to be greatly minimized.

Recommendations
1. To remove a street tree, authorization is required from the City of Palo Alto prior to scheduling removal operations. Replacement tree requirements and other conditions may apply. It is the responsibility of the Owner to understand and comply with those conditions. Options for consideration:

   i. Upon approval from the City, plant a replacement street tree approximately six feet from the proposed driveway. Possible tree species to consider are the crepe myrtle *(Lagerstroemia 'Muskogee')* or the Eastern redbud *(Cercis canadensis)*.

   OR

   ii. Upon approval from the City, plant a replacement tree at an off-site location such as a municipal park.

2. The final grading, improvement and construction plans should be reviewed by the Project Arborist prior to the commencement of construction activities in order to update tree protection plans if necessary.

3. Authorization is required from the city of Palo Alto prior to scheduling any necessary tree work on the subject trees. Other conditions may apply and it is the responsibility of the Owner to understand and comply with those conditions.

4. The Tree Protection Plan (Appendix 2) is to be properly implemented before, during and after construction.

5. Questions regarding the information contained in this report are to be addressed to Fujiitrees Consulting, LLC.

Report 2 contains updated findings and recommendations based on what was observable to FTC at the time of the initial site visit and on information currently made available to FTC. This report is provided for the Client to make informed decisions regarding the subject trees contained in this report.

ARBORIST REPORT

486 HAMILTON AVE
PALO ALTO, CALIFORNIA
March 10, 2020

LE
ARCHITECTURE
BURLINGAME CA
650.239.9062
www.lkearchitecture.com

Literature Referenced v2

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Table 1

Evaluation Factors for
Determining Overall Tree Condition

Table 1 v2
Evaluation Factors for Determining Overall Tree Condition
482-486 Hamilton Avenue
Menlo Park, California

Factor	Variation of condition factor	Points
Canopy Development	100% density and balanced	(5)
	90% with variable density	(4)
	60 to 90% density but unbalanced	(3)
	20 to 60% density, sparse	(2)
	Less than 20%, very sparse	(1)
Growth rate	Abundant new growth throughout canopy	(5)
	Displays new growth	(4)
	New growth is short but presents	(3)
	Stunted growth some dieback / deadwood	(2)
	Stunted growth and abundant dieback	(1)
Insects and Diseases	None visible	(5)
	Minor evidence is visible	(4)
	Limited pest damage	(3)
	Significant damage or infestation	(2)
	Severe damage and infestation	(1)
Structural Integrity	Sound with a vertical trunk	(5)
	Minor branch attachment flaws	(4)
	Branches not evenly distributed	(3)
	Trunk lean and/or branch failures	(2)
	Severe lean and/or large branch or stem failures	(1)
Trunk condition	Sound, solid, round circumference	(5)
	Wounds display good compartmentalization	(4)
	Benign cavities, missing bark, no conks	(3)
	Conks and poor compartmentalization	(2)
	Extensive decay and heart rot	(1)
Root Collar	Fully exposed, good flare, sound buttress roots	(5)
	Exposed collar, irregular qualities	(4)
	Partially exposed, possible flaws, no visible decay	(3)
	<40% of root collar is decayed, undercut or girdled	(2)
	>40% of root collar is decayed, undercut or girdled	(1)

Total points	Condition class	Percentage for Overall Condition
27 - 30	Very Good	90 -100
21 - 26	Good	70 - 89
15 - 20	Fair	50 - 69
9 - 14	Poor	30 - 49
3 - 8	Very Poor	10 - 29
0 - 2	Dead	0 - 9

Table 2

Suitability Factors for Tree Preservation

Table 2 v2
Suitability Factors for Tree Preservation
482-486 Hamilton Avenue
Mountain View, California

Suitability Factors
To assist in the design process assessed trees have been rated as to suitability for preservation. Factors that influence suitability include:

Health: Overall tree vigor, extension of new growth, proper closing of wounds and the presence of plant pathogens.

Structure: The overall tree architecture, including roots, trunk, limbs, and branches are visually assessed for defects. A defect that can be corrected by proper arboricuttural practices may allow a tree to be preserved.

Useful Life Expectancy: The life of a tree is much like a bell-shaped curve; where aging accentuates tree vigor until a point at the top of the curve where aging now reduces tree vigor and decline begins. A species may be long lived but have a poor structure that is prone to fail and should not be considered suitable.

Tree Species: The factors described above are predicated on the tree species. Certain species grow slowly and decline slowly. Other species grow quickly and decline quickly. Tree species that are invasive, or a nuisance or have an inherently poor structure are to be avoided.

Suitability Ratings
When the above factors are considered, assessed trees were rated as HIGH, MODERATE or LOW in suitability for preservation. An explanation for each rating is provided below.

HIGH: Trees which are significant and expected to provide long-term contributions to the site. They display fair or better health and fair or better structural condition. On-going suitability may require typical maintenance practices commonly associated with the tree species. These trees are the most suitable for retention measures and are worthy of consideration during the design process or design revision.

MODERATE: Trees which contribute to the site but provide less than significant contributions for reasons of health, structural condition or appearance. On-going suitability will require properly implemented maintenance practices. Design revisions to preserve these trees may not be warranted.

LOW: Trees which provide minor contributions to the property for reasons of poor health, structural condition or appearance. A tree species that is a nuisance due to litter, will grow too large for the area or is known to develop a structure prone to failure is also rated low in suitability. Generally speaking, trees in this category are not expected to benefit or respond to acceptable corrective measures. Removal of these trees will often allow the safe, useful and aesthetic enjoyment of the property. *Preservation of low rated trees is not recommended.*

*Preservation is referred to as "Conservation" in ANSI A300 (Part 5) – 2005 Management

Table 3

Tree Assessment Chart

Table 3 v2
Tree Assessment Chart (Updated 12.2.19)
482–486 Hamilton Avenue
Palo Alto, California

Tree No.	Common Name	Tree Species	Measured Trunk Diameter 1/	Measured Trunk Diameter 1/	Measured Trunk Diameter 1/	Adjusted Trunk Diameter 2/	Approximate Height 3/	Approximate Crown 4/	Appraisal Ratings: Canopy	Growth	Pests	Structure	Trunk	Root Collar	Condition Rating	Overall Condition 5/	Suitability for Preservation 6/	Regulated Tree 7/	Comments
1	callery pear	*Pyrus calleryana*	21.1			21	60	40	3	3	2	3	3	3	57%	Fair	MOD	Yes	Dormant. Tussock moth cocoons, rather asymmetrical canopy but it is a street tree, numerous trunk wounds. Redesigned driveway entrance places curb within two feet of trunk. Proposed excavation for driveway will impact tree.
2	callery pear	*Pyrus calleryana*	5			5	22	4	3	3	2	3	3	3	57%	Fair	MOD	Yes	Dormant. Young tree, Tussock moth cocoons, rather asymmetrical canopy but it is a street tree, numerous trunk wounds
3	holly oak	*Quercus ilex*	19.7			20	50	35	4	4	1	3	3	3	60%	Fair	MOD	Yes	Aphid infestation resulting in sooty mold on leaves and bark, dense canopy, numerous trunk wounds.
4	holly oak	*Quercus ilex*	11			11	25	15	4	4	1	3	3	3	60%	Fair	MOD	Yes	Aphid infestation resulting in sooty mold on leaves and bark, dense canopy, numerous trunk wounds.
5	Chinese pistache	*Pistacia chinensis*	9.3			9	18	30	4	4	1	3	3	3	60%	Fair	HIGH	Yes	Dormant. Well formed canopy. Numerous trunk wounds.

1/ Trunk Diameter: Measured at 4.5 feet above the existing grade with a diameter tape.
2/ Adjusted Trunk Diameter: Diameters were rounded to whole numbers. Multi-stem trunk diameters were added together as stated in the ordinance.
3/ Approximate Height: Tree height was visually approximated
4/ Crown Radius: Distance was paced across the area of the dripline
5/ Overall Condition: Please refer to Table 1 for an explanation of terms.
6/ Suitability for Preservation: Please refer to Table 2 for an explanation of terms. Mod. = Moderate
7/ Regulated Tree: As per Palo Alto Municipal Code Chapter 8.10.

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Table 4

Tree Appraisal Worksheet
(Adjusted for trees 30 inches
Or less in trunk diameter.)

Table 4 v2
Tree Appraisal Worksheet
(Trees 30 inches or less in trunk diameter.)
482-486 Hamilton Avenue
Palo Alto, California

		1	2	3	4			5		6	7	8	9	10	11	12	13	14	
LINE NO.	TREE NO.	SPECIES	CONDITION %	DIAMETER	1/ LOCATION %	SITE %	CONTRIBUTION %	PLACEMENT %	SPECIES RATING %	REPLACEMENT TREE SIZE (SQ. INCHES)	TRUNK AREA	REPLACEMENT TREE COST	INSTALLATION COST	2/ INSTALLED TREE COST	3/ UNIT TREE COST	APPRAISED TRUNK AREA	APPRAISED TREE TRUNK INCREASE	BASIC TREE COST	APPRAISED VALUE	*/ ADJUSTED APPRAISED VALUE
1	1	caller pear	57%	21.1	80%	95%	75%	70%	30%	1.69	2.2420	172.73	345.46	$518.19	$77.04	349.4899	347.2478	$27,270.16	$3,730.56	$3,650
2	2	caller pear	57%	5	80%	95%	75%	70%	30%	1.69	2.2420	172.73	345.46	$518.19	$77.04	19.6250	17.3830	$1,857.37	$254.09	$250
3	3	holly oak	60%	19.7	80%	95%	75%	70%	70%	1.69	2.2420	172.73	345.46	$518.19	$77.04	304.6507	302.4086	$23,815.75	$8,002.09	$7,800
4	4	holly oak	60%	11	80%	95%	75%	70%	70%	1.69	2.2420	172.73	345.46	$518.19	$77.04	94.9850	92.7430	$7,663.11	$2,574.80	$2,520
5	5	Chinese pistache	60%	9.3	80%	95%	75%	70%	70%	1.69	2.2420	172.73	345.46	$518.19	$77.04	67.8947	65.6526	$5,576.07	$1,873.56	$1,870
																		TOTAL APPRAISED VALUE		$16,090

1/ Location is the average attained by adding columns 5, 6 and 7 with the total divided by 3.
2/ Refer to the "Species Classification and Group Assignment", a regional supplement to the CTLA Guide for Plant Appraisal, 9th Edition, unless noted otherwise.
3/ If appraised value is $5000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
*/ Appraisal calculations as specified in the CTLA Guide for Plant Appraisal, 9th Edition are for trees 30 inches and less in trunk diameter.

Fujiitrees Consulting, LLC

ARBORIST REPORT

486 HAMILTON AVE
PALO ALTO, CALIFORNIA
March 10, 2020

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650.239.9062
www.klearchitecture.com

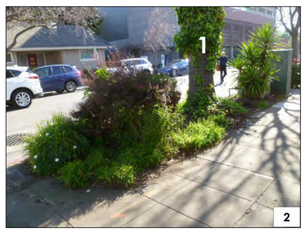
Appendix 1

Photograph Exhibit

Fujiitrees CONSULTING
ART · SCIENCE · CRAFT

Appendix 1
Photograph Exhibit
482 – 486 Hamilton Avenue
Palo Alto, California

1



2

Photo 1. Tree 1 is located on the Cowper side of the property and is now dormant. Red line is approximate location of proposed curb cut.

Photo 2. The approximate area of the planter strip is 4.5 feet by 23.5 feet. Vegetation and debris prevented an accurate measurement.

Appendix 1 v2
Photograph Exhibit
482 – 486 Hamilton Avenue
Palo Alto, California

3

4

Photo 3. Tree 2 is located at the corner of Hamilton and Cowper. Like Tree 1, it is now dormant.

Photo 4. The approximate area of the tree well is 3 feet by 3 feet.

Appendix 1
Photograph Exhibit
482 – 486 Hamilton Avenue
Palo Alto, California

5

6

Photo 5. Tree 3 is located on Hamilton side of the property. An arrow points to past trunk damage.

Photo 6. The approximate area of the planter strip is 3 feet 11 inches by 7.5 feet. This tree well narrows to 2 feet 11 inches.

Appendix 1
Photograph Exhibit
482 – 486 Hamilton Avenue
Palo Alto, California

7

8

Photo 7. Tree 4 is located on the Hamilton side of the property.

Photo 8. The approximate area of the planter strip is 3 feet 11 inches by 5 feet 3 inches.

Appendix 1
Photograph Exhibit
482 – 486 Hamilton Avenue
Palo Alto, California

9

10

Photo 9. Tree 5, a dormant off-site tree, is located on Cowper Street and its canopy overhangs the property.

Photo 10. The planter strip was observed to be off-site and not measured.

Appendix 1
Photograph Exhibit
482 – 486 Hamilton Avenue
Palo Alto, California

11

Photo 9. An example of Type 2 tree protection when a tree or trees are located between a sidewalk and the curb.

Photo 10. Pictured is an example of a typical warning sign to be posted on the tree protection fencing.

12

Appendix 2

Tree Protection Plan

Fujiitrees CONSULTING, LLC
ART · SCIENCE · CRAFT

Appendix 2 v2
Tree Protection Plan
482 – 486 Hamilton Avenue
Palo Alto, California

1 This Tree Protection Plan is to be included as a detail on the final site plan used for construction.

2 A Consulting Arborist who is a member of the American Society of Consulting Arborists (ASCA) or is certified by the International Society of Arboriculture (ISA) is to be retained to act as the Project Arborist to monitor any construction activities that may impact the health of protected trees at the site.

3 Supplemental Water
- 3.1 Prior to construction operations, soil surrounding the trees should be checked for moisture content.
- 3.2 Supplemental watering is to be provided by the contractor as determined by the Project Arborist.

4 Prior to the start of grading and construction, all regulated trees are to be checked for equipment and building clearance and professionally pruned. (Refer to item 16 - Tree Contractors.) **Have written authorization in-hand from the City, prior to scheduling any such tree work.**

5 Prior to the start of grading and construction and when approved by the City, **Tree 1** should be properly removed by a qualified tree contractor. The stump is to be entirely removed to prevent interference with proposed excavation. (Refer to item 16 - Tree Contractors.) **Have written authorization in-hand from the City, prior to scheduling any such tree removal.**

6 Prior to the start of grading and construction, a minimum six inch layer of clean wood chips is to be installed within the dripline of protected trees where possible.

7 Prior to the start of grading and construction activities, **Trees 3, 4 and 5** require TYPE 2 temporary protective barriers consisting of chain link fencing six feet high, attached to two inch diameter metal posts, eight feet long, driven two feet into the ground and spaced no more than 10 feet apart are to be placed along the edge of sidewalk, along the back of the parking lot curb and closed at both ends at limits specified by the Project Arborist.

8 See photos 9 & 10, Detail 605 and Section 31 Information sheet following this plan.

9 Prior to the start of grading and construction activities, **Tree 2** requires TYPE 3 tree protection consisting of a trunk wrap described below:

- 9.1 Trunk Wrap
  - 9.1.1 The trunk is to be wrapped with a 2-inch layer of orange plastic construction fencing as padding from the ground up to the first branch.
  - 9.1.2 Wooden slats 2-inches thick are to be bound securely, edge to edge, on the outside of the plastic fencing.
  - 9.1.3 A single layer of orange plastic construction fencing is to be wrapped and secured around the outside of the wooden slats.
  - 9.1.4 Major scaffold limbs may require protection as determined by the Project Arborist.

10 A means of access to the protected tree is to be a component of the tree protection fencing to allow examination and watering of the trees.

11 A warning sign, minimize size 8.5" x 11" is to be secured to each fence. The warning sign should be made weather proof. (See photo 10 and the example following this plan.)

12 Chain link panels five to six feet high may be used when approved by the City of Palo Alto and the Project Arborist.

13 The tree protection fencing is not to be moved without approval from the Project Arborist.

14 The area within the fencing is the Tree Protection Zone (TPZ).

15 Tree Protection Zone (TPZ) Restrictions
- 15.1 All work within the TPZ is to be approved by the City or Project Arborist prior to the commencement of the task.
- 15.2 The Project Arborist or designee is to be present to monitor work performed within the TPZ.
- 15.3 No vehicles or equipment are allowed within the dripline or TPZ of any protected tree.
- 15.4 No storage or dumping of construction materials, equipment, supplies, chemicals, paints, concrete or spoils is permitted within the TPZ.
- 15.5 No exhaust is permitted to be discharged into the canopy of trees.
- 15.6 All work within the TPZ is to be performed by hand held equipment.
- 15.7 Boring under tree roots or trenching by use of pneumatic equipment such as an Air Spade® is recommended.

- 15.8 Grade changes or excavations within the TPZ are to be first authorized and later supervised by the Project Arborist.

16 Tree Contractors
- 16.1 All tree work (pruning, tree removal and stump grinding) is to be performed by a State of California Licensed Tree Contractor. (C61 and D49)
- 16.2 All pruning is to be performed or directed by a Certified Arborist or a Certified Tree Worker in accordance with the Best Management Practices for Pruning (International Society of Arboriculture) and adhere to the most recent editions of the American National Standards Institute (ANSI) for Tree Care Operations (Z133.1) and Pruning (A300 – Part 1).

17 Post Construction Care
- **17.1 Post Construction Care will require authorization (permit) from the City of Palo Alto prior to beginning any work on the subject trees.**
- 17.2 Trees preserved at the construction site will experience a physical environment different from that of pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management and irrigation may be required. These trees may require pruning on a 5 to 7 year cycle.
- 17.3 All tree work (pruning and removals) is to be performed by a State of California Licensed Tree Contractor. All pruning is to be performed or directed by a Certified Arborist or a Certified Tree Worker.

STREET TREE PROTECTION SPECIFICATIONS

31-1 General – Tree protection has three primary functions, 1) to keep the foliage canopy and branching structure clear from contact by equipment, materials and activities; 2) to preserve roots and soil conditions in an intact and non-compacted state and 3) to identify the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved.

31-2 Reference Documents

a. Detail 505 – Illustration of situations described below.

b. Tree Technical Manual (www.cityofpaloalto.org/trees/)
1. Trenching Restriction Zone s (Section 2.20(C))
2. Arborist Reporting Protocol (Section 6.30)
3. Site Plan Requirements (Section 6.35)

31-3 Materials

a. The Tree Protection Zone (TPZ) is an restricted area around the base of the tree with a radius of 10 times the diameter of the tree's trunk or ten feet, whichever is greater, enclosed by fencing.

b. Type I Tree Protection: The fence shall enclose the entire area under the canopy dripline or TPZ (whichever is greater) of the tree(s) to be protected throughout the life of the construction project. In some parking areas, if fencing is located on paving or concrete that will not be demolished, then the posts may be supported by an appropriate grade level concrete base, if approved.

c. Type II Tree Protection: For trees situated within a planting strip, only the planting strip and yard side of the TPZ shall be enclosed with the required chain link protective fencing in order to keep the sidewalk and street open for public use.

d. Type III Tree Protection: Trees situated in a tree well or sidewalk planter pit, shall be wrapped with 2-inches of orange plastic fencing from the ground to the first branch and overlaid with 2-inch thick wooden slats bound securely (slats shall not be allowed to dig into the bark). During installation of the plastic fencing, caution shall be used to avoid damaging any branches. Major scaffold limbs may also require plastic fencing as directed by the City Arborist.

e. Size, type and area to be fenced. All trees to be preserved shall be protected with six (6') foot high chain link fences. Fences are to be mounted on two-inch diameter galvanized iron posts, driven into the ground to a depth of at least 2-feet at no more than 10-foot spacing.

f. 'Warning' sign. A warning sign shall be prominently displayed on each fence at 20-foot intervals. The sign shall be a minimum 8.5-inches x 11-inches and clearly state: "WARNING - Tree Protection Zone - This fence shall not be removed and is subject to a fine according to PAMC Section 8.10.110."

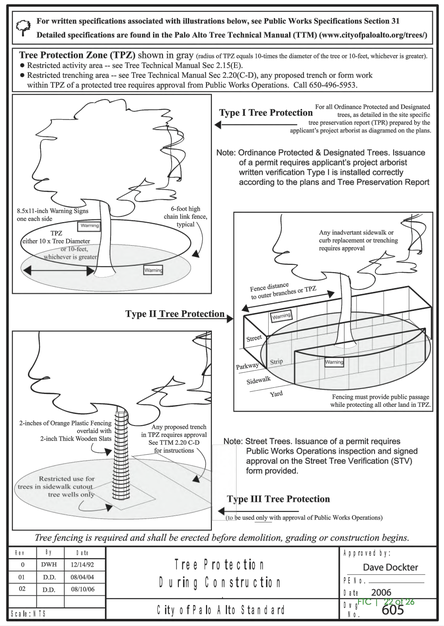
31-4 Execution

a. Duration. Tree fencing shall be erected before demolition, grading or construction begins and remain in place until final inspection of the project, except for work specifically allowed in the TPZ. Work or soil desturbance in the TPZ requires approval by the project arborist or City Arborist (in the case of work around Street Trees). Excavations within the public ROW require a Street Work Permit from Public Works.

b. During construction

1. All neighbors' trees that overhang the project site shall be protected from impact of any kind.
2. The applicant shall be responsible for the repair or replacement plus penalty of any publicly owned trees that are damaged during the course of construction, pursuant to Section 8.04.070 of the Palo Alto Municipal Code.
3. The following tree preservation measures apply to all trees to be retained:
   - **a.** No storage of material, topsoil, vehicles or equipment shall be permitted within the TPZ.
   - **b.** The ground under and around the tree canopy area shall not be altered.
   - **c.** Trees to be retained shall be irrigated, aerated and maintained as necessary to ensure survival.

END OF SECTION



WARNING-
Tree Protection Zone

This fencing shall not be removed without City Arborist approval (650-496-5953). Removal without permission is subject to a $500 fine per day*.

Palo Alto Municipal Code Section 8.10.110

ARBORIST REPORT

486 HAMILTON AVE
PALO ALTO, CALIFORNIA
March 10, 2020

LE ARCHITECTURE
BURLINGAME CA
650.239.9062
www.learchitecture.com

Appendix 3

Tree Location Map

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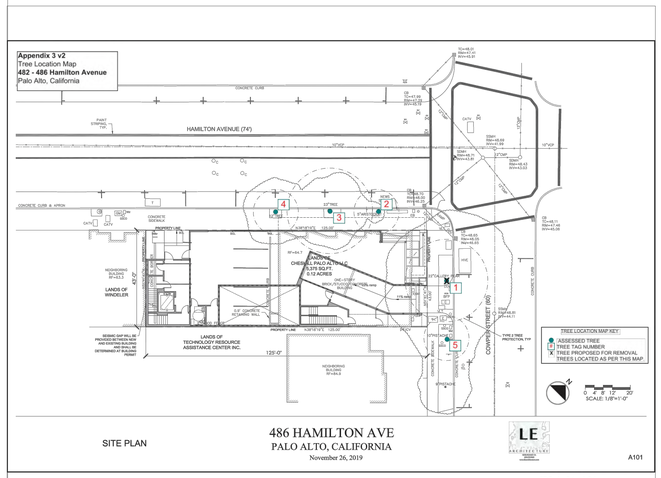

Attachments

Certificate of Performance

Terms and Conditions

Fujiitrees CONSULTING
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Certification of Performance

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

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

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

That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results of the assessment the attainment of stipulated results or the occurrence of any subsequent events;

That my analysis opinions and conclusion were developed and this report has been prepared according to commonly accepted Arboricultural practices;

I further certify that I am a Registered Consulting Arborist® by the American Society of Consulting Arborists (ASCA) and a Certified Arborist by the International Society of Arboriculture (ISA).

Disclosure Statement

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees and recommend measures to enhance the beauty and health of trees and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Certain conditions are often hidden within trees or below the ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances or for a specific period of time. Likewise remedial treatments cannot be guaranteed.

Trees can be managed but they cannot be controlled. To live near trees is to accept some degree of risk.

FUJIITREES CONSULTING, LLC

By: _____ Date: December 3, 2019

Walter Fuji, RCA®
Manager and Consulting Arborist

Fujiitrees Consulting, LLC
TERMS AND CONDITIONS

The following terms and conditions apply to all oral and written reports and correspondence pertaining to the consultations, inspections and activities of Fujiitrees Consulting, LLC hereinafter referred to as "Consultant".

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

2. It is assumed that any property referred to in any report or in conjunction with any services performed by the Consultant, is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations, and that any titles and ownership to any property are assumed to be good and marketable. Any existing liens and encumbrances have been disregarded.

3. Possession of this report or a copy thereof does not imply any right of publication or use for any purpose, without the express permission of the Consultant and the Client to whom the report was issued. Loss, removal or alteration of any part of a report invalidates the entire appraisal/evaluation.

4. The scope of any report or other correspondence is limited to the trees and conditions specifically mentioned in those reports and correspondence. The Consultant assumes no liability for the failure of trees or parts of trees, either inspected or otherwise. The Consultant assumes no responsibility to report on the condition of any tree or landscape feature not specifically requested by the named client.

5. No tree described in this report was climbed, unless otherwise stated. The Consultant cannot take responsibility for any defects, which could only have been discovered by climbing. A full root crown examination (RCX), consisting of excavating the soil around the tree to uncover the root crown and major buttress roots was not performed unless otherwise stated. The Consultant cannot take responsibility for any root defects, which could only have been discovered by such an inspection.

6. The Consultant shall not be required to provide further documentation, give testimony, be deposed, or attend court by reason of this appraisal/report unless subsequent contractual arrangements are made, including payment of additional fees for such services as described by the Consultant or in the fee schedules or contract.

7. The Consultant offers no guarantees or warrantees, either expressed or implied, as to the suitability of the information contained in the reports for any purpose. It remains the responsibility of the Client to determine applicability to his/her particular case.

8. Any report and the values, observations, and recommendations expressed therein represent the professional opinion of the Consultant, and the fee for services is in no manner contingent upon the reporting of a specified value nor upon any particular finding to be reported.

9. Any photographs, diagrams, graphs, sketches, or other graphic material included in any report, being intended solely as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys, unless otherwise noted in the report. Any reproductions of graphs material or the work produce of any other persons is intended solely for the purpose of clarification and ease of reference. Inclusion of said information does not constitute a representation by the Consultant as to the sufficiency or accuracy of that information.

10. Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

11. Payment terms are net payable upon receipt of invoice unless other arrangements have been mutually agreed upon. All balances due beyond 30 days of invoice date will be charged a service fee of 1.5 percent per month (18.0% APR). All checks returned for insufficient funds or any other reason will be subject to a $25.00 service fee. Advance payment of fees may be required in some cases.

Fujiitrees CONSULTING, LLC
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486 HAMILTON AVENUE
PALO ALTO, CA
LANDSCAPE CONCEPT

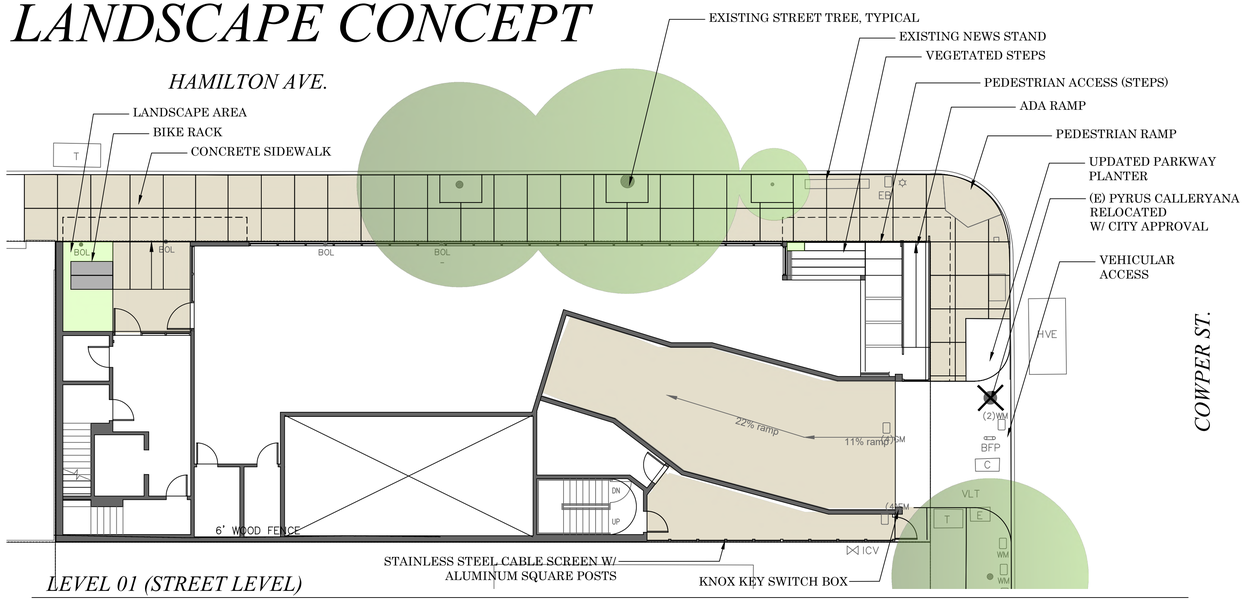
STATEMENT OF DESIGN INTENT:

CREATE A LANDSCAPE AESTHETIC WHICH COMPLIMENTS THE CONTEMPORARY ARCHITECTURAL STYLE WHILE CREATING INVITING ENTRIES, PEDESTRIAN CORRIDORS AND COURTYARDS. TO ACCOMPLISH THESE GOALS, LANDSCAPED AREAS AND POTTERY HAVE BEEN STRATEGICALLY LOCATED THROUGHOUT EACH LEVEL.

LEVEL ONE INCOPORATES PEDESTRIAN ENTRIES WHICH ARE FLANKED BY RAISED PLANTERS UTILIZING A COMBINATION OF SUCCULENTS, SHRUBS AND GRASSES. ADDITIONALLY, VEGETATED STEPPERS HAVE BEEN INTRODUCED TO TO SOFTEN THE ENTRY WHILE MAINTAINING THE MODERN AESTHETIC .

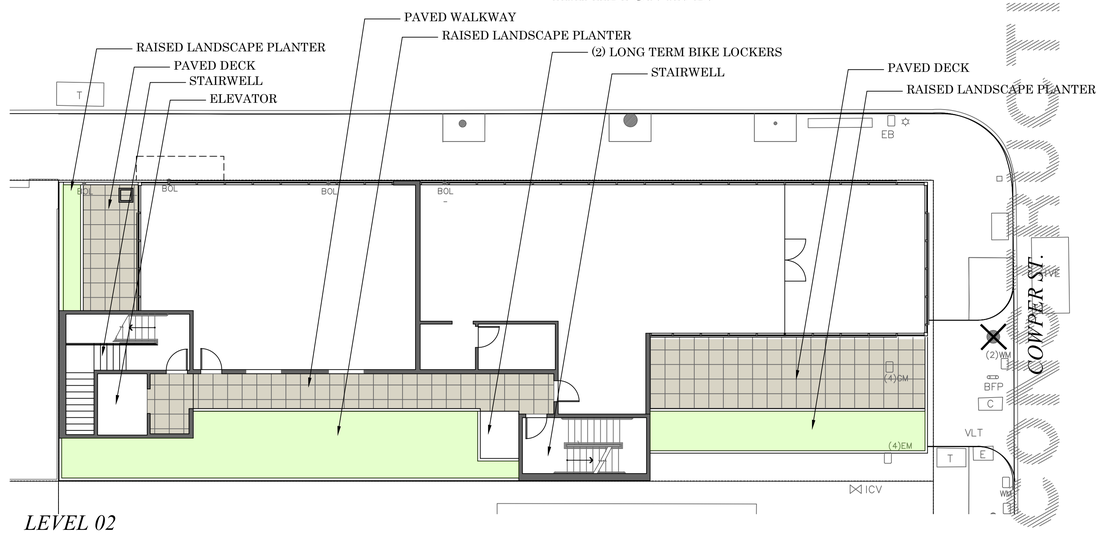
LEVEL TWO UTILIZES A MIX OF SUCCULENTS AND LOW WATER USE SHRUBS TO CREATE INVITING PEDESTRIAN CORRIDORS AND COURTYARDS.

LEVEL THREE UTILIZES A MIX OF SUCCULENTS AND SHRUBS WITH THE ADDITION OF POTTERY STRATEGICALLY LOCATED TO PROVIDE CLIMBING VINES INTENDED TO ENHANCE THE ARCHITECTURAL FACADE OFFERING TEXTURE AND COLOR TO THE ARCHITECTURAL TRELLISES.



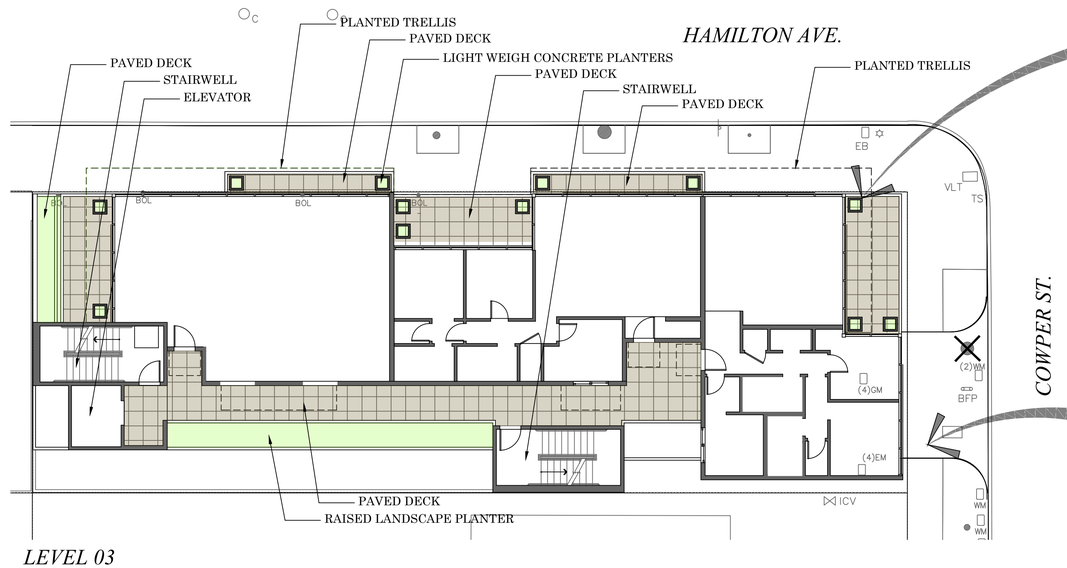
LEVEL 01 (STREET LEVEL)

SCALE: 1"=10'



LEVEL 02

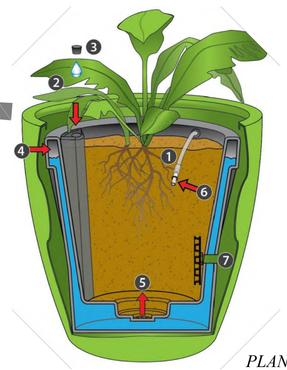
SCALE: 1"=10'



LEVEL 03

SCALE: 1"=10'

NOTES:
- THE LANDSCAPE SHALL COMPLY WITH THE CRITERIA OF THE WATER EFFICIENT LANDSCAPE ORDINANCE (WELO)
- A WEATHER BASED AUTOMATIC IRRIGATION CONTROLLER SHALL BE UTILIZED.
- ALL PLANTER AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED BARK MULCH.



PLANTER IRRIGATION

LIGHT WEIGHT PLANTER AND RAISED PLANTERS

VEGETATED TRELLIS

VEGETATED STEPS

NOT FOR CONSTRUCTION

1" = 10'

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SHEET 1 of 4
12/11/19

PLOT LOG: 10/18/19, 11/20/19, 12/11/19, 02/20/19, 02/19/20

486 HAMILTON AVENUE
PALO ALTO, CA
LANDSCAPE CONCEPT












PLANTING NOTES

1. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF SITE CONDITIONS WHICH PREVENT INSTALLATION PER PLANS AND SPECIFICATIONS. CONTRACTOR SHALL NOT PROCEED WITH WORK PRIOR TO CLARIFICATION BY LANDSCAPE ARCHITECT OR CITY INSPECTOR.
2. CONTRACTOR SHALL BE LIABLE FOR REMOVING AND RE-INSTALLING IRRIGATION EQUIPMENT, AND REPLANTING AREAS WHICH ARE NOT INSTALLED PER PLAN AND SPECIFICATIONS.
3. REFER TO PLANTING SPECIFICATIONS FOR INSPECTION/CERTIFICATION SCHEDULE.
4. IRRIGATION SYSTEM SHALL BE INSTALLED PRIOR TO PLANT MATERIALS.
5. TREES AND SHRUBS SHALL BE PLANTED AFTER CONCRETE PLACEMENT BUT NOT BEFORE IRRIGATION COVERAGE TEST No. 1 HAS BEEN APPROVED (SEE SPECIFICATIONS).
6. PLACE TREES BETWEEN IRRIGATION HEADS WHEREVER POSSIBLE.
7. LANDSCAPE CONTRACTOR SHALL TAKE FOUR (4) SOIL SAMPLES FROM THE SITE AT LOCATIONS APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REP. THESE SAMPLES SHALL BE TAKEN AT A DEPTH OF 12" AFTER ROUGH GRADING AND SUBMITTED TO AN APPROVED SOIL AND PLANT LABORATORY FOR AGRICULTURAL SUITABILITY TESTING. THE COST OF TESTING SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
8. THE RECOMMENDATIONS OF THE SOIL REPORT SHALL SUPERSEDE THE SOIL PREPARATION AND BACKFILL MIX SPECIFICATIONS (SEE SPECIFICATIONS). THE CONTRACTOR SHALL SUBMIT A COPY OF ALL SOILS REPORTS TO THE LANDSCAPE ARCHITECT PRIOR TO MODIFICATION OF THESE SPECIFICATIONS.
9. CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND/OR REPLACEMENT OF ANY DAMAGED LANDSCAPE AREAS BEYOND THE LIMIT OF WORK, THAT IS A DIRECT RESULT OF THE LANDSCAPE CONSTRUCTION AND/OR HIS SUB- CONTRACTOR. REPLACEMENT ITEMS SHALL BE EXACT DUPLICATES OF ORIGINAL WORK OR PLANTS, UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.
10. CLEAN-UP SHALL TAKE PLACE ON A DAILY BASIS UNLESS OTHERWISE APPROVED BY OWNER'S REP.
11. WEED ABATEMENT: AFTER EARTHWORK, INSTALLATION OF IRRIGATION SYSTEM, AND SOIL PREPARATION, BUT PRIOR TO PLANTING, PERFORM WEED ABATEMENT PROGRAM TO ALL PLANTING AREAS AS FOLLOWS:
    A. APPLY SULFATE OF AMMONIA AT THE RATE OF 5 LBS. PER 1,000 SQ. FT. TO ALL AREAS TO BE PLANTED.
    B. KEEP AREA MOIST BY REGULAR IRRIGATION FOR A PERIOD OF TWO (2) WEEKS TO GERMINATE EXISTING WEED SEEDS.
    C. AT THE END OF TWO WEEKS, APPLY 'ROUND UP' OR EQUAL SYSTEMIC HERBICIDE. DO NOT IRRIGATE WITHIN SIX (6) HOURS AFTER APPLICATION. REFER TO MFG. SPECIFICATIONS FOR PERIOD OF TIME REQUIRED FROM TIME OF APPLICATION TO TIME OF PLANTING. AFTER COMPLETE WEED KILL, REMOVE ALL WEED RESIDUE AND TOP GROWTH AND DISPOSE OF IN A LEGAL MANNER.

ALL HERBICIDES SHALL BE APPLIED ONLY BY A CALIFORNIA LICENSED APPLICATOR.

12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL PLANT MATERIAL INDICATED ON PLANS. QUANTITIES INDICATED ON PLAN ARE FOR ESTIMATION PURPOSES
13. TREES WITHIN 5' OF PAVING SHALL HAVE ROOT BARRIERS INSTALLED PER MANUF. SPECIFICATIONS. ROOT BARRIER SHALL BE AMERICAN DRAINAGE 'ROOT BARICADE' MODEL RB-24 AVAILABLE THRU: NDS (800) 726-1994
14. SOIL MANAGEMENT SHALL BE PER SOILS REPORT, PROVIDED BY OWNER

IRRIGATION NOTES

1. INSTALL ALL IRRIGATION COMPONENTS ACCORDING TO LOCAL CODES AND ORDINANCES.
2. THE CONTRACTOR SHALL OBTAIN, COORDINATE AND PAY FOR ANY AND ALL PERMITS AND ALL INSPECTIONS AS REQUIRED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY ENCROACHMENT INTO ADJACENT PROPERTY, R.O.W.'S, EASEMENTS, SETBACKS OR ANY OTHER LEGAL PROPERTY RESTRICTIONS EITHER
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR/REPLACE AT NO ADDITIONAL COST TO THE OWNER, ANY DAMAGE TO UNDERGROUND UTILITIES THAT MAY OCCUR.
5. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY AND ALL DAMAGES TO OPERATIONS OR WORK OF OTHER CONTRACTORS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ACTIVITIES WITH ALL AGENCIES AND OTHER TRADES
6. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS SHOWN ON PLANS AT THE SITE PRIOR TO COMMENCEMENT OF ANY WORK. ALL DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO PROJECT LANDSCAPE ARCHITECT AND CITY INSPECTOR FOR DIRECTION. ANY CONTINUATION OF WORK IS AT THE CONTRACTOR'S RISK AND EXPENSE.
7. THE CONTRACTOR SHALL ONLY APPLY SUFFICIENT WATER TO PROMOTE HEALTHY GROWTH OF THE PLANT MATERIAL. AT NO TIME WILL THE CONTRACTOR APPLY WATER AT A RATE OF FREQUENCY WHICH CAUSES RUNOFF OR SOIL SATURATION.
8. REFER TO DETAILS AND SPECIFICATIONS FOR INSTALLATION OF ALL COMPONENTS.
9. THE WORK SHOWN ON THESE PLANS IS DIAGRAMATIC, ALL ITEMS, IE. CONTROLLERS, VALVES, MAINLINES, SLEEVES, WIRES, IRRIGATION HEADS ETC... ARE SHOWN IN THIER APPROXIMATE LOCATIONS ONLY. DO NOT SCALE DIMENSIONS, DETAIL DRAWINGS MAY CLARIFY LOCATION OF SOME ITEMS, THE CONTRACTOR SHALL NOT LOCATE ANY ITEMS WHERE OVIOUS THAT THEY ARE IN CONFLICT WITH UNDERGROUND UTILITIES, STRUCTURES, OTHER IMPROVEMENTS, OR VEHICULAR OR PEDESTRIAN SAFETYL CONSIDERATIONS.
10. ADJUST ALL HEADS FOR MINIMUM OVERSPRAY ON ANY NONPLANTED AREAS AND COMPLETE COVERAGE OF LANDSCAPE AREAS. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING CONDITIONS (USE VARIABLE ARC NOZZLES AS NECESSARY).
11. LOCATE ALL SHRUB SPRAY HEADS 6" FROM EDGE OF PAVING.
12. DO NOT USE FIXED RISERS EXCEPT ON SLOPES. MARKED OR UNMARKED.
13. USE 4" POP-UP HEADS IN TURF AREAS, AND 6" POP-UP HEADS IN SHRUB AREAS.
14. USE VARIABLE ARC NOZZLES FOR AREAS OTHER THAN 90, 180, OR 360 DEGREES.
15. SLEEVE IRRIGATION WIRING, LATERAL LINES AND MAINLINE UNDER ALL PAVING. ALL SLEEVES TO BE 2x SIZE OF PIPE TO BE SLEEVED
16. USE CHECK VALVES AS REQ'D TO ELIMINATE LOW HEAD DRAINAGE.
17. USE HUNTER PRESSURE COMPENSATING DEVICES ON ALL NOZZLES.
18. WHERE VERTICAL OBSTRUCTIONS IN THE LANDSCAPE AREA INTERFERE WITH THE SPRAY PATTERN OF ANY SPRINKLER RESULTING IN THE IMPROPER COVERAGE OF IRRIGATION, THE IRRIGATION CONTRACTOR SHALL RECTIFY THE COVERAGE OF IRRIGATION. THE IRRIGATION CONTRACTOR SHALL RECTIFY THE SITUATION BY FIELD ADJUSTMENT TO THE IRRIGATION SYSTEM. THIS MAY REQUIRE THE ADDITION OF QUARTER CIRCLE SPRINKLERS TO EACH SIDE OF THE OBSTRUCTION OR OTHER MEASURES. ALL SUCH ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
19. PIPING AND WIRE CONDUIT PENETRATIONS THROUGH WALLS AND INSTALLATION OF ANY IRRIGATION EQUIPMENT UNDER PAVING MUST BE COORDINATED WITH THE GENERAL CONTRACTOR AND CONTRACTORS OF ALL VARIOUS TRADES THAT MAY BE INVOLVED TO ELIMINATE PROBLEMS THAT MAY ARISE FROM INACCESSIBILITY OF DAMAGE TO ANOTHER TRADE'S WORK.

PRELIMINARY IRRIGATION CALCULATIONS

486 HAMILTON, PALO ALTO

Eto	43
Total HA	1,116
Special HA	0
ETAF Average	0.49
ETAF Total	0.49

ZONE	WATER USE	PF	METHOD	IE	ETAF	HA	ETAF*HA	ETWU
FLOOR 1	MOD	0.4	DRIP	0.81	0.5	150	74	1,975
FLOOR 2	MOD	0.4	DRIP	0.81	0.5	826	408	10,875
FLOOR 3	MOD	0.4	DRIP	0.81	0.5	140	69	1,843
LS TOTALS						1,116	551	14,693

SLA	WATER USE				ETAF	HA	ETAF*HA	ETWU
N/A	HIGH				1.0	0	0	0
SLA TOTALS						**0**	**0**	**0**

MAWA = (ETo) (0.62) [(0.7× LA) + 0.3 x SLA)]

MAWA	20,827	Gallons
	2,784	HCF

SHRUB	2,314	75%
LAWN (25% MAX)	768	25%

ETWU=(Eto)(0.62) x [(PFxHA)/ED+SLA]

ETWU	14,693	Gallons

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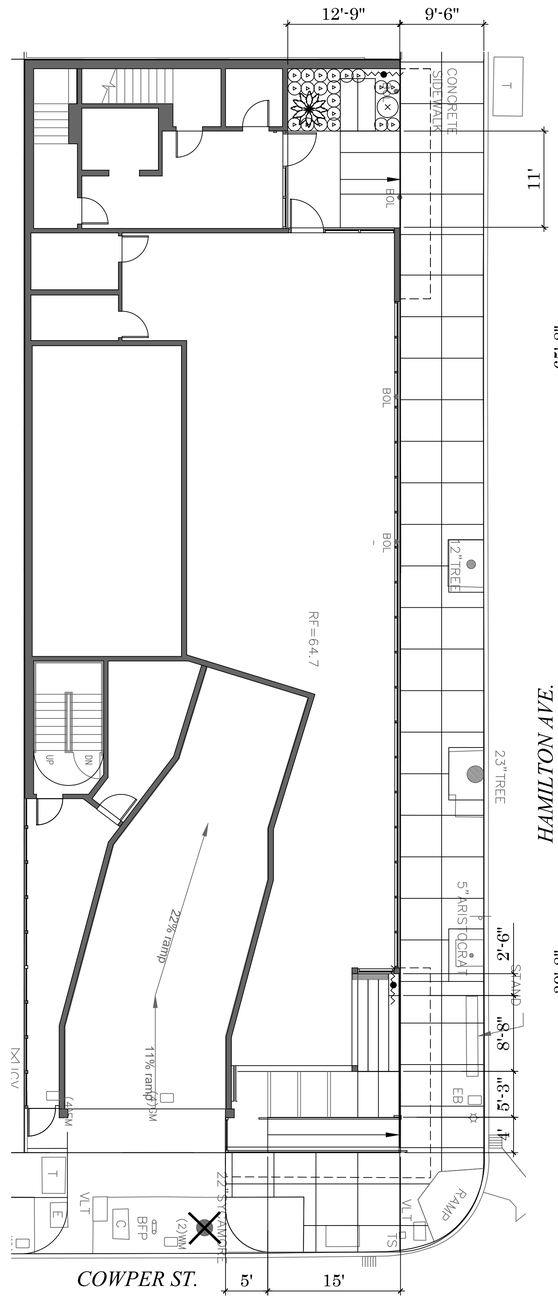
PLOT LOG: 10/18/19, 11/20/19, 12/11/19, 0/20/19

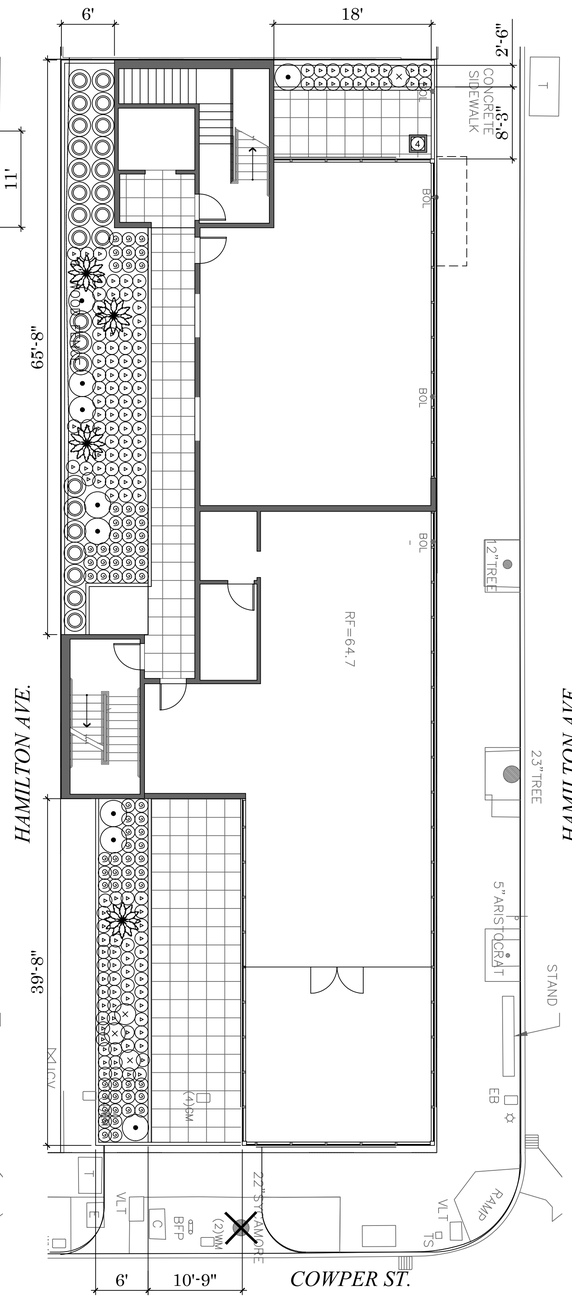
FOR CONSTRUCTION

486 HAMILTON AVENUE
PALO ALTO, CA
PRELIMINARY PLANTING PLAN



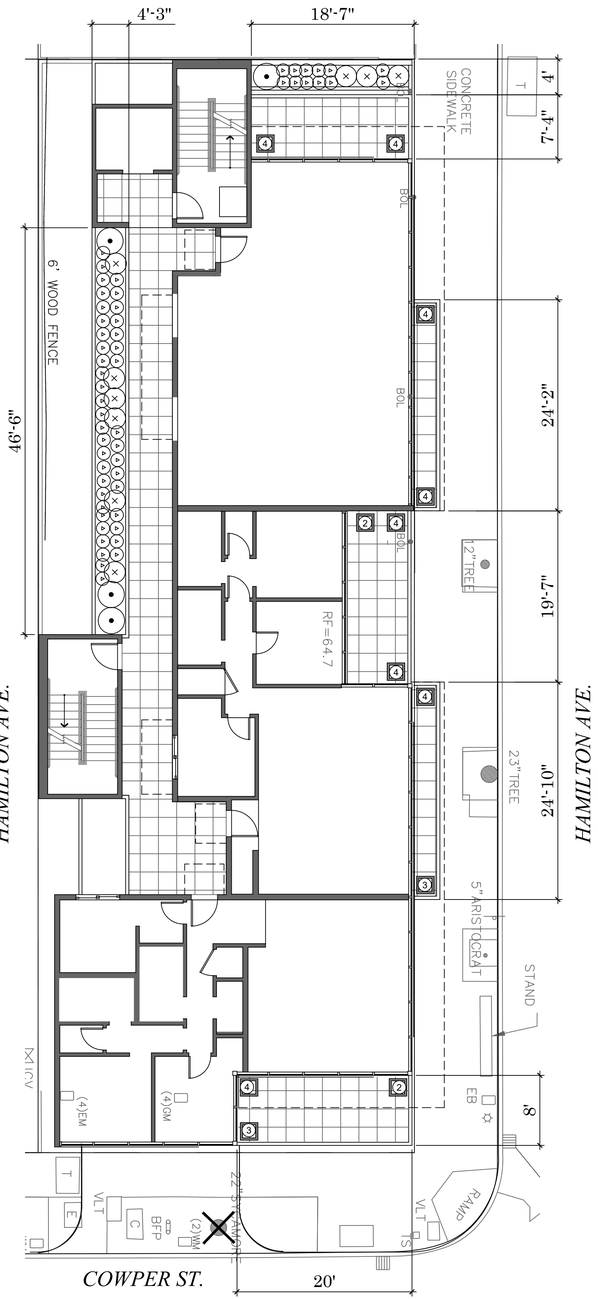
LEVEL 01

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



LEVEL 02

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



LEVEL 03

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

PRELIMINARY PLANT LIST

GENERAL LANDSCAPE AREAS

	BOTANICAL NAME	COMMON NAME	EXPOSURE	WUCOLS
	SHRUBS			
×	AGAVE VILMORINIANA	OCTOPUS AGAVE	SUN/SHADE	LOW
×	AGAVE NOVA	BLUE FOX AGAVE	SUN/SHADE	LOW
⊕	BERBERIS SPC'S	BARBERRY	SUN/SHADE	LOW
⊕	DIETES BICOLOR	FORTNIGHT LILY	SUN	LOW
⊕	PITTOSPORUM SPECIES	PITTOSPORUM	SUN/SHADE	MOD
△	ROSMARINUS O. 'KEN TAYLOR'	DWARF ROSEMARY	SUN	LOW
△	CAREX DIVULSA	BERKELEY SEDGE	SUN/SHADE	LOW
	POTTED PLANTS			
1	ACACIA 'COUSIN ITT'	COUSIN ITT ACACIA	SUN/SHADE	LOW
2	AGAVE NOVA	BLUE FOX AGAVE	SUN/SHADE	LOW
3	CASUARA CLAUCA 'COUSIN IT'	COUSIN IT CASUARA	SUN/SHADE	LOW
4	HARDENBERGIA 'HAPPY WANDERER'	LILAC VINE	SUN/SHADE	MOD

NOTES:
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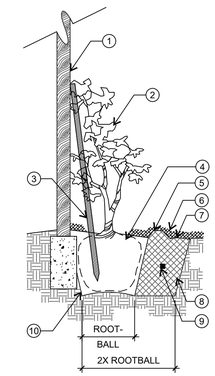
- A WEATHER BASED AUTOMATIC IRRIGATION CONTROLLER SHALL BE UTILIZED.
- ALL PLANTER AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED BARK MULCH.



VINE INSTALL / STAKING

LEGEND

1. FENCE OR WALL OR TRELLIS, PER PLAN
2. STAKED VINE - LEAN AGAINST VERTICAL BACKDROP WITH NURSERY STAKE
3. NURSERY STAKE
4. VINE ROOTBALL - SET 1" ABOVE FINISH GRADE
5. 3" HIGH TEMPORARY BERM
6. 3" SHREDDED BARK MULCH - PER SPECIFICATIONS. PULL BACK FROM MAIN STEM OF TREE
7. FINISH GRADE
8. BACKFILL MIX - REFER TO SPECIFICATIONS
9. FERTILIZER TABS - PER SPECIFICATIONS
10. SCRATCH ROOTBALL AND SIDES OF PLANT PIT TO LOOSEN PRIOR TO PLANTING
11. 12 GAUGE GALVANIZED WIRE - SECURE VINE TO WIRE WITH NURSERYMAN'S TAPE
12. 5/16" DIAMETER EYEBOLTS - INSTALL WITH LEAD SHIELDS AT MASONRY WALLS
13. EYEBOLTS FOR FUTURE USE

1/8"=1'-0"

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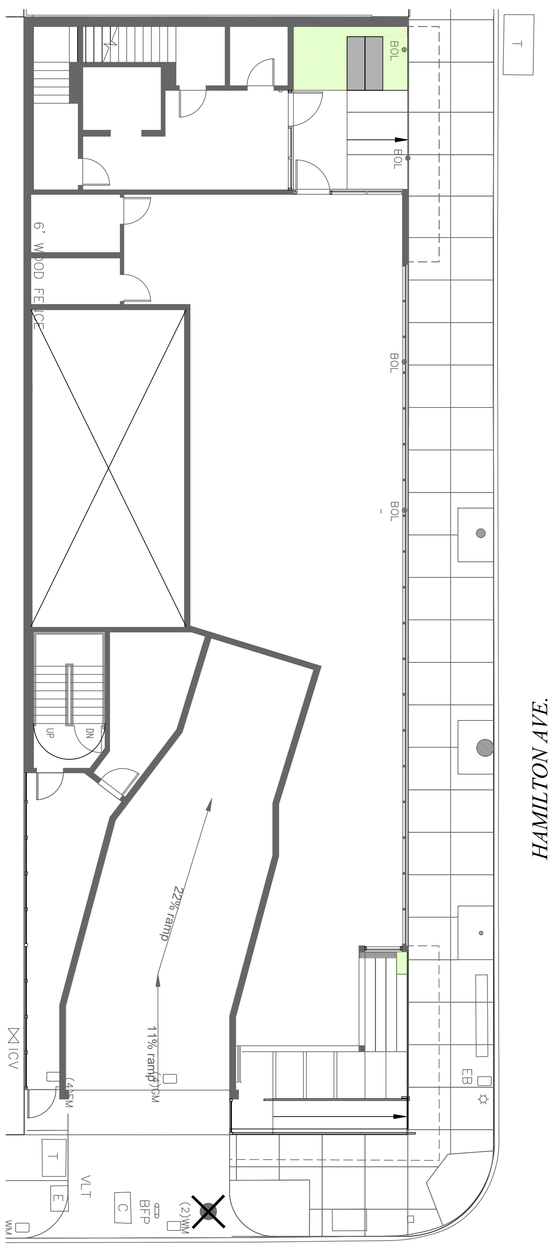
SHEET 3 of 4
12/11/19

PLOT LOG: 10/18/19, 11/20/19, 12/11/19, 02/20/19

FOR CONSTRUCTION

486 HAMILTON AVENUE
PALO ALTO, CA
PRELIMINARY PLANTING PLAN

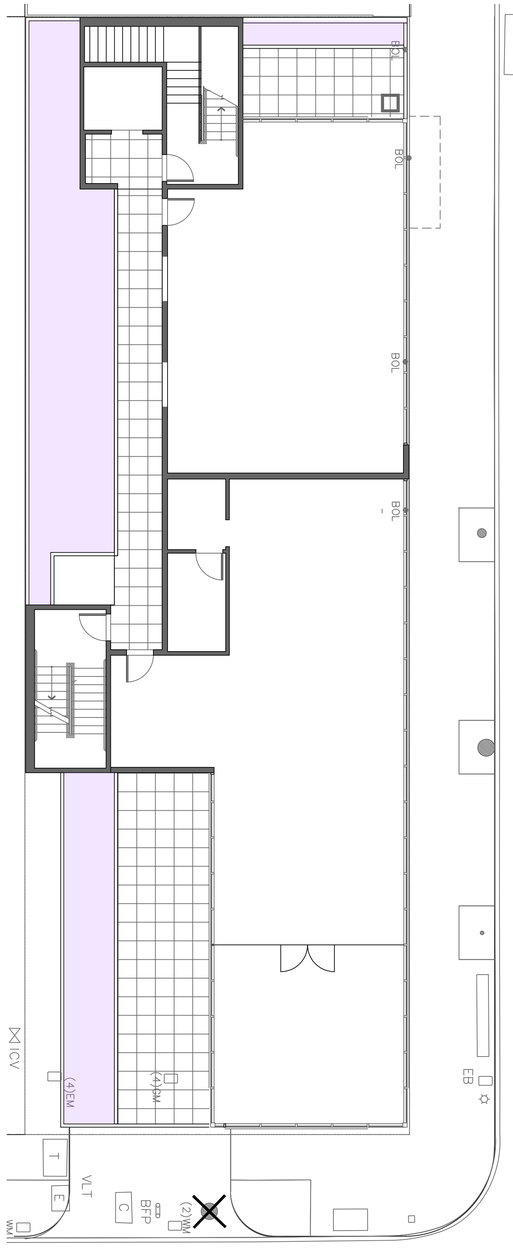


HAMILTON AVE.

COWPER ST.

LEVEL 01

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

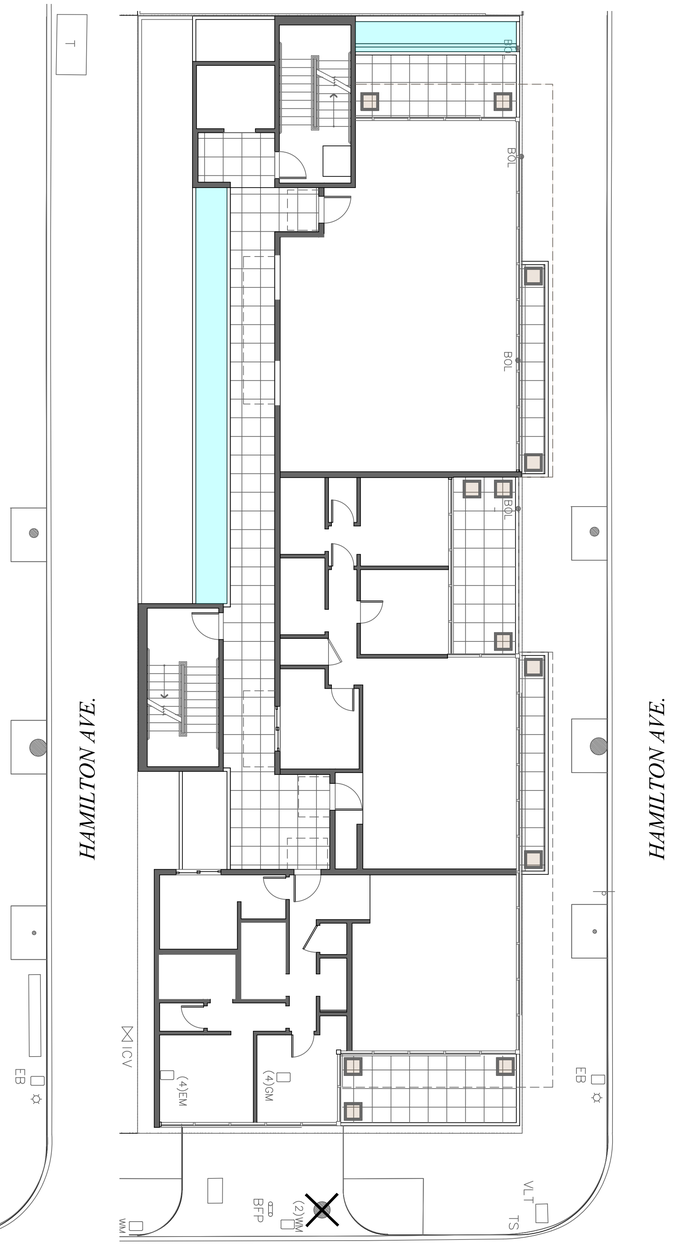


HAMILTON AVE.

COWPER ST.

LEVEL 02

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



HAMILTON AVE.

COWPER ST.

LEVEL 03

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

HYDROZONE LEGEND

SYMBOL	ZONE #
	HZ 01 - LEVEL 01
	HZ 02 - LEVEL 02
	HZ 03 - LEVEL 03
	HZ 04 - POTS

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NOT FOR CONSTRUCTION

1/8"=1'-0"

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SHEET 3 of 4
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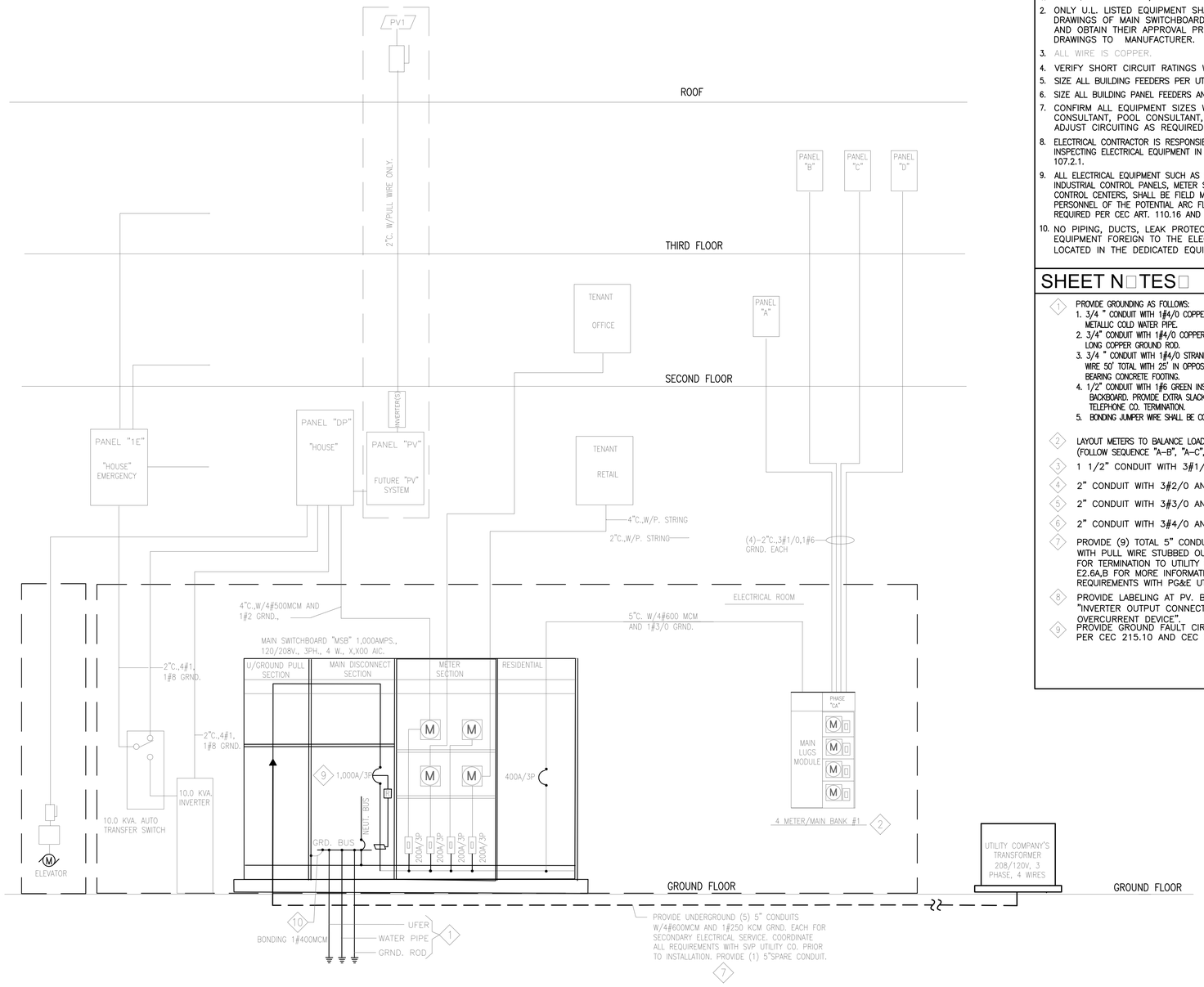


SINGLE LINE DIAGRAM

GENERAL NOTES

1. ALL EQUIPMENT IS NEW, UNLESS OTHERWISE NOTED AS EXISTING.
2. ONLY U.L. LISTED EQUIPMENT SHALL BE USED. SUBMIT SHOP DRAWINGS OF MAIN SWITCHBOARD TO CITY OF MOUNTAIN VIEW AND OBTAIN THEIR APPROVAL PRIOR TO RELEASING SHOP DRAWINGS TO MANUFACTURER.
3. ALL WIRE IS COPPER.
4. VERIFY SHORT CIRCUIT RATINGS WITH UTILITY COMPANY.
5. SIZE ALL BUILDING FEEDERS PER UTILITY COMPANY REQUIREMENTS.
6. SIZE ALL BUILDING PANEL FEEDERS AND BRANCH CIRCUITS PER N.E.C.
7. CONFIRM ALL EQUIPMENT SIZES WITH OWNER, ELEVATOR CONSULTANT, POOL CONSULTANT, AND MECHANICAL ENGINEER. ADJUST CIRCUITING AS REQUIRED.
8. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE ARRANGEMENT OF INSPECTING ELECTRICAL EQUIPMENT IN A DE-ENERGIZED STATE PER CBC 107.2.1.
9. ALL ELECTRICAL EQUIPMENT SUCH AS SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES AND MOTOR CONTROL CENTERS, SHALL BE FIELD MARKED WITH WARNING QUALIFIED PERSONNEL OF THE POTENTIAL ARC FLASH HAZARDS AND APPROPRIATE PPE REQUIRED PER CEC ART. 110.16 AND NFPA -70E-2000.
10. NO PIPING, DUCTS, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION SHALL BE LOCATED IN THE DEDICATED EQUIPMENT SPACE. CEC 110.26(E).

SHEET NOTES

1. PROVIDE GROUNDING AS FOLLOWS:
   1. 3/4 " CONDUIT WITH 1#4/0 COPPER GROUND WIRE TO BUILDING METALLIC COLD WATER PIPE.
   2. 3/4" CONDUIT WITH 1#4/0 COPPER GROUND WIRE TO 3/4" DIA. x 10' LONG COPPER GROUND ROD.
   3. 3/4 " CONDUIT WITH 1#4/0 STRANDED BARE COPPER UFER GROUND WIRE 50' TOTAL WITH 25' IN OPPOSIDE DIRECTIONS ENCASED IN LOAD BEARING CONCRETE FOOTING.
   4. 1/2" CONDUIT WITH 1#6 GREEN INSULATED COPPER GROUND WIRE TO TELEPHONE BACKBOARD. PROVIDE EXTRA SLACK OF GROUND WIRE AND COILD FOR FUTURE TELEPHONE CO. TERMINATION.
   5. BONDING JUMPER WIRE SHALL BE COPPER #3/0 MIN.
2. LAYOUT METERS TO BALANCE LOAD AMONG PHASES "A", "B" AND "C". (FOLLOW SEQUENCE "A-B", "A-C", "B-C").
3. 1 1/2" CONDUIT WITH 3#1/0 AND 1#6 GROUND.
4. 2" CONDUIT WITH 3#2/0 AND 1#6 GROUND.
5. 2" CONDUIT WITH 3#3/0 AND 1#6 GROUND.
6. 2" CONDUIT WITH 3#4/0 AND 1#4 GROUND.
7. PROVIDE (9) TOTAL 5" CONDUITS (ONE CONDUIT IS A SPARE) WITH PULL WIRE STUBBED OUT 5' BEYOND PROPERTY LINE FOR TERMINATION TO UTILITY CO. TRANSFORMER. SEE SHEET E2.6A,B FOR MORE INFORMATION. COORDINATE ALL REQUIREMENTS WITH PG&E UTILITY CO. PRIOR TO WORK.
8. PROVIDE LABELING AT PV. BREAKER TO READ "WARNING": "INVERTER OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE".
9. PROVIDE GROUND FAULT CIRCUIT BREAKER AND RELAY PER CEC 215.10 AND CEC 230.95.

BUILDING LOAD CALCULATION

LOAD DESCRIPTION	TOTAL CONNECTED LOAD VA.	TOTAL CONNECTED LOAD AMPS.
RESIDENTIAL (4 UNITS; 4,265 S.F.):		
LIGHTING 4,265 x 3W/S.F.	12,795	
APPLIANCE CIRCUITS 3,000 x 4	12,000	
LAUNDRY CIRCUITS 1,500 x 4	6,000	
DISHWASHER 1,200 x 4	4,800	
GARBAGE DISPOSAL 1,000 x 4	4,000	
HOOD 400 x 4	1,600	
REFRIGERATOR 800 x 4	3,200	
HEAT PUMP 8,000 x 4	32,000	
DRYER 5,000 x 4	20,000	
SUB TOTAL RESIDENTIAL:	96,395	
38% PER 2011 NEC ART. 220-84 = (96,395 x 0.45) =	43,380	120.6
"NON RESIDENTIAL" (5,500 S.F.):		
HOUSE PANEL (OFFICE, HVAC AND PLUMBING COMMON AREAS E.T.C.	12,000	
ELEVATOR 1 x 30,000	30,000	
ELECTRICAL CHARGERS 2 x 6,000	12,000	
COMMERCIAL AREA (RETAIL) 2,200 S.F.	113,000	
COMMERCIAL AREA (OFFICE) 1,900 S.F.	54,000	
EXTERIOR LIGHTING	10,000	
BOOSTER & SEWAGE EJECTOR PUMPS	10,000	
CAR LIFTS 4 x 4,000	16,000	
SPARE	20,000	
SUB TOTAL "NON RESIDENTIAL"	259,000	719.4
TOTAL KVA. "RESIDENTIAL AND "NON RESIDENTIAL" 43.4 + 259 = 302.4 KVA	302.4	840.0
TOTAL AMPS. @ 120/208V., 3ø, 4W		840.0
BUILDING SERVICE SIZE	**1,000 AMPS.**	

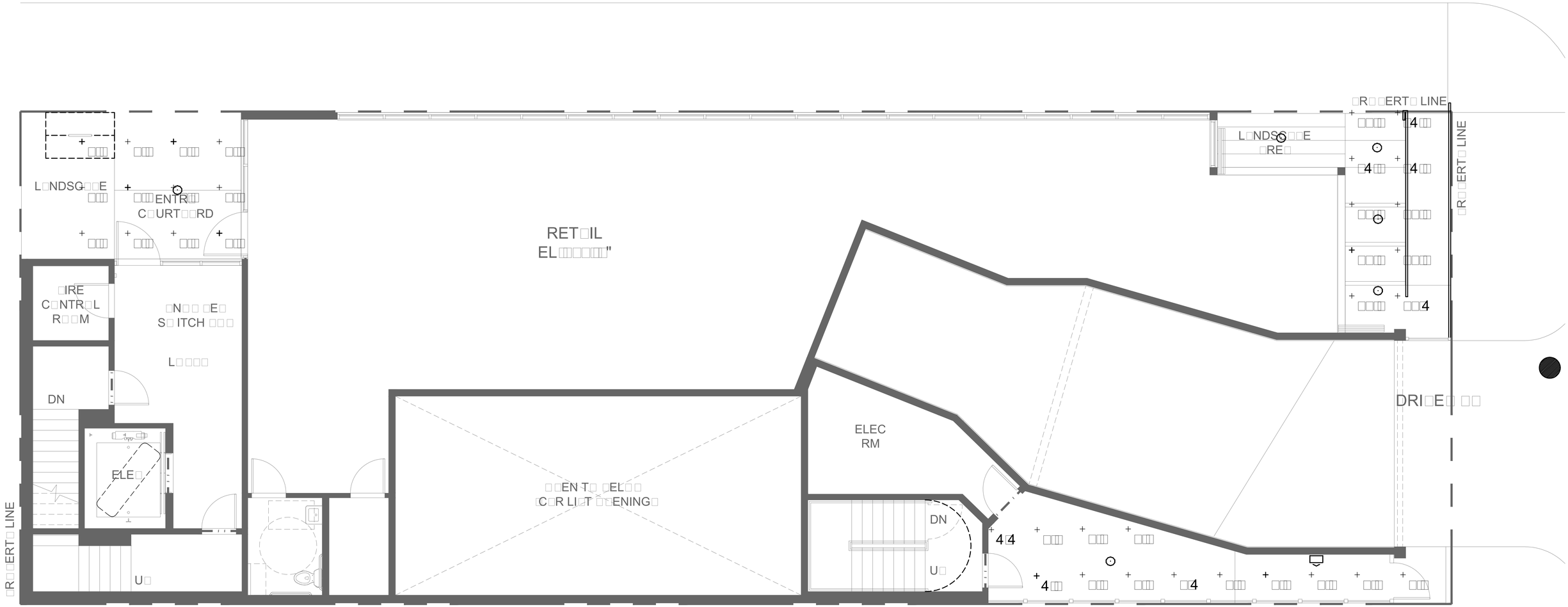
LOAD CALCULATION

ELECTRICAL CALCULATION

486 HAMILTON AVE
PALO ALTO, CALIFORNIA
December 16, 2019

LE ARCHITECTURE
BURLINGAME CA
650.239.9062
www.klearchitecture.com

H□MILT□N □□ENUE



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ENTR□ C□URT□□RD □RE□	+	□□□ □□	□□□ □□	□□□ □□	□□□□□	□□□□□

N

0 1' 2' 4' 6' 10'
SCALE: 1/4"=1'-0"

LE□EL □ □□H□T□METRIC

486 HAMILTON AVE
PALO ALTO, CALIFORNIA
December 16, 2019

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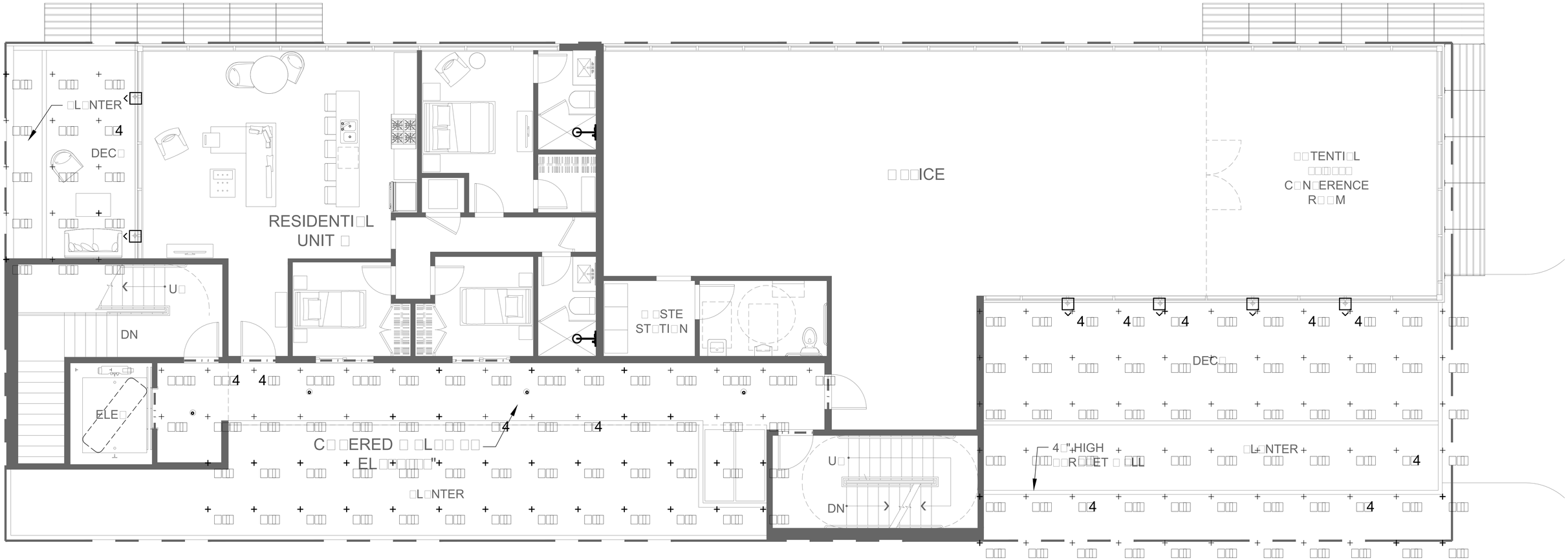
E□□



ST□TISTICS						
D□□□r□□□□□	S□□ □□□	□□□	M□□	M□□	M□□M□□	□□□M□□
DEC□ □□ □□NE	+	□□□ □□	□□□ □□	□□□ □□	□□□□□	□□□□□
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0 1' 2' 4' 6' 10'
SCALE: 1/4"=1'-0"

LE□EL □ □L□□R □L□N

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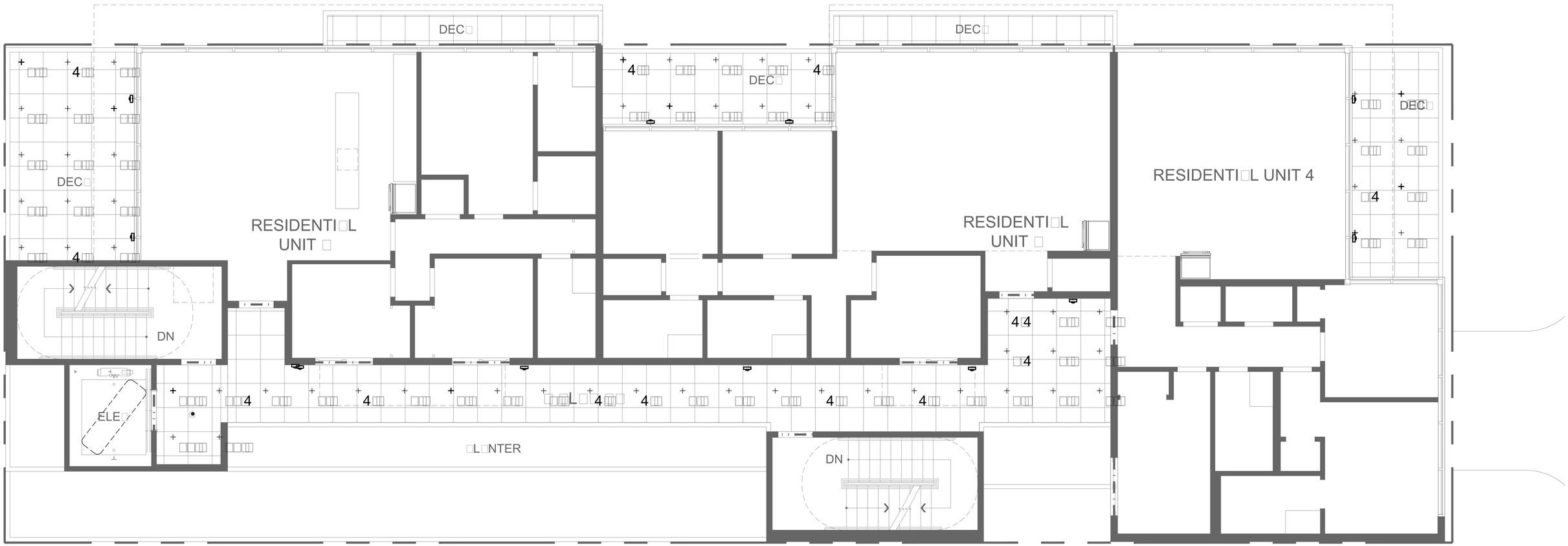

STATISTICS						
Description	Square Feet					
DECK ONE	+					
DECK ONE	+					
DECK ONE	+					

N

0 1' 2' 4' 6' 10'
SCALE: 1/4"=1'-0"

LEVEL 4 DIAGRAMMATIC

486 HAMILTON AVE
PALO ALTO, CALIFORNIA
December 16, 2019

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Type: D32

2 SERIES LED INTERNATIONAL
2RE-FD

RECESSED LED DOWNLIGHT FITTING
FIXED ROUND EXPANDED APERTURE DEEP REGRESS

Fixed 2.35" (60mm) aperture halogen fitting with tapered wide aperture with deeply regressed light source for balanced glare control and efficiency. May be installed as flange overlay or flush zero-sightline. Available in 80+ & 95+ CRI with delivered lumen range of 518lm to 1541lm. Field-changeable reflectors available in 15° & 25° or 40° & 60° beams. May be installed as flange overlay or flush zero-sightline. IP20 Dry / Damp and IP64 Wet location.

PERFORMANCE

80+ CRI PERFORMANCE (40° Reflector)

LED Configuration	Delivered Lumens lm	Power Consumption W	Luminous Efficacy lm/W
80X-07B	518	7	74
80X-10B	695	10	68
80X-13B	936	15	64
80X-16B	1141	18	63
80X-21B	1312	26	51
80X-10C (15° Reflector)	753	14	55
80X-13C (15° Reflector)	1014	20	52

95+ CRI PERFORMANCE (40° Reflector)

LED Configuration	Delivered Lumens lm	Power Consumption W	Luminous Efficacy lm/W
95X-07B	518	9	55
95X-10B	695	14	49
95X-13B	936	20	47
95X-21B	1541	31	50
95X-10C (15° Reflector)	725	19	38
95X-13C (15° Reflector)	1014	30	34

ORDERING INFORMATION - DOWNLIGHT FITTING

2RE-FD – [ ] – [ ] – [ ] – [ ] – [ ] – E – [ ] – [ ]

- **2RE-FD**: 2 SERIES ROUND EXPANDED APERTURE FIXED DEEP REGRESS
- **RATING**: 1 IP20 Dry / Damp; 4 IP64 Wet
- **FLANGE COLOR**: WH White; BK Black; PR Primer; AS Satin Silver; AB Architectural Bronze; IG Industrial Gray; SS Brushed Stainless Steel; CH Chrome; PB Polished Oil-Rubbed Bronze Plate; MB Matte Oil-Rubbed Bronze Plate; CF Custom Finish [1]
  - [1] Custom finishes assigned unique suffix upon receipt of order, consult factory for additional cost
- **CRI / LED**: 80X 80+ CRI; 95X 95+ CRI
- **SOURCE LUMENS**: 07B 700lm; 10B 1000lm; 13B 1300lm; 18B 1800lm; 21B 2100lm; 10C 1000lm; 13C 1300lm
  - [2] Not available for 95X
- **CCT**: 27 2700K; 30 3000K; 35 3500K; 40 4000K
- **REFLECTOR**: 1 40°; 2 60°
- **INSTALL TYPE**: E Expert
- **CEILING THICKNESS**: 0 0.125" - 0.49" (3mm - 12mm); 1 0.50" - 0.75" (13mm - 19mm); 2 0.76" - 1.25" (20mm - 31mm); 3 1.26" - 2.00" (32mm - 50mm); 4 2.01" - 3.00" (51mm - 76mm)
- **OPTIONAL CONFIGURATIONS**: Leave blank unless specifying optional configuration: 01 Linear Spread Lens [3]; 02 Honeycomb Louver [3]; 03 Clear Glass Lens; 04 Soft Focus Lens; 05 Frosted Glass Lens; 06 Amber Glass Lens; 07 Warm Tone Lens; 08 Frosted Soft Focus Lens; 09 Ultra Violet Lens; 10 Spread Glass Lens; 11 Shatterproof Soft Focus Lens; 12 Shatterproof Frosted Glass Lens; 13 Shatterproof Spread Glass Lens; 14 316 Marine-Grade Stainless Steel Faceplate; 25 Shatterproof Clear Glass Lens; 26 Frosted Linear Spread Lens [4]
  - [3] IP20 Dry / Damp location only

POWER SUPPLY

PS – INT – [ ] – [ ] – [ ] – [ ]

- **PS**: 2 SERIES POWER SUPPLY
- **INT**: INTERNATIONAL
- **CRI / LED**: 80X 80+ CRI; 95X 95+ CRI
- **SOURCE LUMENS**: 07B 700lm; 10B 1000lm; 13B 1300lm; 18B 1800lm [5]; 21B 2100lm; 10C 1000lm; 13C 1300lm
  - [2] Not available for 95X
- **INPUT VOLTAGE**: 1 120V 60Hz; 2 240V 50Hz
- **POWER SUPPLY**: TR1 Triac Reverse Phase (ELV) (Mexico Only) [4]
- AN2 0-10V Analog; EA1 eldoLED 0-10V Analog, Logarithmic; LA1 eldoLED 0-10V Analog, Linear; DA1 eldoLED DALI, Linear & Logarithmic; ED1 eldoLED DALI Logarithmic; LD1 eldoLED DALI Linear; NO2 Non-Dimming
  - [4] TR1 not available for 80X-07B, 80X-16B, 80X-21B, 95X-07B, 95X-21B, 95X-13C
  - [5] Not available for 80X-16B, 80X-21B, 95X-07B, 95X-21B, 95X-13C

©2018 Lucifer Lighting Company
As part of its policy of continuous research and product development, the company reserves the right to change or withdraw specifications without prior notice.

[PH] +1-210-227-7329
[FAX] +1-210-227-4967

[DATE OF REV: 031518]

GE Evolve™
Canopy LED Soffit
ECLS

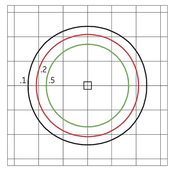
Project name _____
Date _____
Type _____

ECLS	01	_	__	SM	7	__	_	_	__	____	___

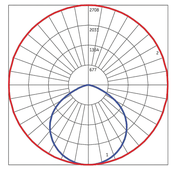
- **FAMILY**: E = Evolve; C = Canopy; L = LED; S = Soffit
- **GENERATION**: 01 = 1st Gen
- **VOLTAGE**: 0 = 120-277; D = 347* ; * Not available with optical code T5
- **OPTICAL CODE**
- **DISTRIBUTION**: SM = Symmetric Medium
- **CRI**: 7 = 70 CRI
- **CCT**: 30 = 3000K; 40 = 4000K; 50 = 5000K
- **DIMMING**: 1 = None; A = Wired to Control 0-10V Leads; D = External wired 0-10V Leads
- **CONTROLS**: 1 = None; A = Motion Sensor @ Programmed Sensor; B = Daintree Motion Sensor; # Requires Dimming Option A
- **MOUNTING**: SM = Surface Mount; RM = Recessed Mount; PM = Pendant Mount; JM = J-Box Mount; SB = Surface Mount w/Beauty Plate
- **FINISH**: WHITE = White; BLCK = Black; ORBZ = Dark Bronze
- **OPTIONS**: Y = Coastal Finish; SC = Side Conduit Holes; XXX = Special Options

TYPE V	OPTICAL CODE	DIST	TYPICAL INITIAL LUMENS 3000K	TYPICAL INITIAL LUMENS 4000K	TYPICAL INITIAL LUMENS 5000K	TYPICAL SYSTEM WATTAGE 120-277V	TYPICAL SYSTEM WATTAGE 347V	IES FILE NUMBERS 3000K 120-277V	IES FILE NUMBERS 3000K 347V	IES FILE NUMBERS 4000K 120-277V	IES FILE NUMBERS 4000K 347V	IES FILE NUMBERS 5000K 120-277V	IES FILE NUMBERS 5000K 347V
	T5	SM	3600	3700	3700	29	N/A	ECLS01_T5SM730_-120-277V.IES	N/A	ECLS01_T5SM740_-120-277V.IES	N/A	ECLS01_T5SM750_-120-277V.IES	N/A
	A5	SM	5200	5400	5400	39	43	ECLS01_A5SM730_-120-277V.IES	ECLS01_A5SM730_-347V.IES	ECLS01_A5SM740_-120-277V.IES	ECLS01_A5SM740_-347V.IES	ECLS01_A5SM750_-120-277V.IES	ECLS01_A5SM750_-347V.IES
	B5	SM	6900	7100	7100	54	58	ECLS01_B5SM730_-120-277V.IES	ECLS01_B5SM730_-347V.IES	ECLS01_B5SM740_-120-277V.IES	ECLS01_B5SM740_-347V.IES	ECLS01_B5SM750_-120-277V.IES	ECLS01_B5SM750_-347V.IES

Photometrics
ECLS - Symmetric Medium
7,100 lumens, 5000K (ECLS01_B5SM750_)



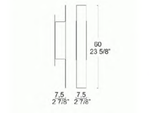
Grid Distance in Units of Mounting Height at 15'
Initial Footcandle Values at Grade



– Vertical plane through horizontal angle of Max. Cd at 90°
– Horizontal cone through vertical angle of Max. Cd at 1°

Cutsheet

Opi Wall Sconce



Design by

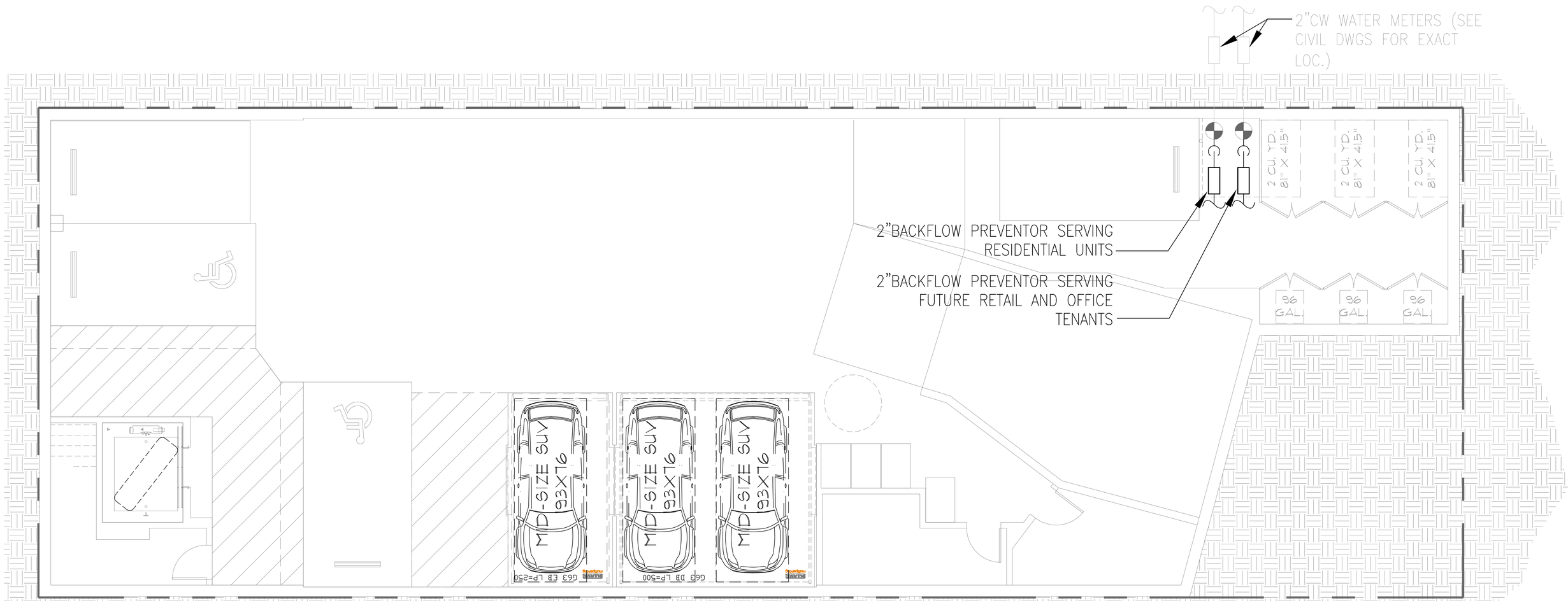
Alessandro Piva

Description

The Opi Wall Sconce by Leucos has been designed by Alessandro Piva. Composed of aluminum and available in either a matt white or matt grey finish. Illumination is provided by 2 X 50W GU10 incandescent/halogen.

Additional Information

MANUFACTURER	Leucos
MANUFACTURER	Leucos
FIXTURE TYPE	Wall Lamp
DESIGN BY	Alessandro Piva
MANUFACTURER MODEL NUMBER(S)	0001889 I 0001886
COUNTRY OF MANUFACTURE	Italy
STYLE	Modern / Contemporary
COLOR	Gray, White
DIMENSIONS IN INCHES AND CM	Height: 23 5/8" (60 cm) Width: 2 7/8" (7.5 cm), Depth:2 7/8" (7.5 cm)
LAMPING	2 X 50W GU10 incandescent/halogen
SOCKET TYPE	GU10
DIMMABLE WITH EXTERNAL DIMMER	Yes
LAMPING TYPE	Halogen / Incandescent
MATERIAL(S)	Aluminum
LISTING TYPE	UL Listed, cUL Listed, ADA Listed



RESIDENTIAL COMMERCIAL FIXTURE UNITS

RESIDENTIAL UNIT TYPES	CW FU	SS FU	GW FU
RETAIL SPACE	12 (EST.)	12 (EST.)	–
OFFICE SPACE	14 (EST.)	14 (EST.)	–
COMMERCIAL SUB-TOTAL	26 (EST.)	26 (EST.)	–

TOTAL COMMERCIICAL
CW-FU = 26
GPM = 39 TOTAL SS-FU
2" PIPE @ 39 GPM VELOCITY =4.5 FT/S
(VELOCITY BASED ON COPPER PIPE)

CALCULATIONS BASED ON UPC 2019 APP. A, TABLE A-2, CHART A-4

RESIDENTIAL FIXTURE UNITS

RESIDENTIAL UNIT TYPES	CW FU	SS FU	GW FU
UNIT #1	16	–	–
UNIT #2	16	–	–
UNIT #3	16	–	–
UNIT #4	16	–	–
RESID. SUB-TOTAL	64	–	–

TOTAL RESIDENCE
CW-FU = 64
GPM = 35
2" PIPE @ 35 GPM VELOCITY =3.5 FT/S
(VELOCITY BASED ON COPPER PIPE)

CALCULATIONS BASED ON UPC 2019 APP. A, TABLE A-2, CHART A-4

GAS LOAD CALCULATIONS

EQUIPMENT	QTY.	CFH/EA	TOTAL CFH	PIPE SIZE
RESIDENTIAL				
RANGE/OVEN	4	80	320	–
DOMESTIC WATER HEATER	4	40	160	–
CLOTH DRYER	4	40	160	–
OUTDOOR BBQ	4	60	240	–
GAS HEATER	4	45	180	–
			1,060	

LOW PRESSURE GAS LINE (< 2PSI WC): DISTANCE FROM METER TO LAST EQUIPMENT SERVED = 200 FT @ GRAND TOTAL 1,060 CFH. 2.5" LOW PRESSURE MAIN GAS LINE REQUIRED.

CALCULATIONS BASED ON CPC 2019

ONE-RESIDENTIAL GAS METER

N

0 1'2' 4' 6' 10'
SCALE: 1/4"=1'-0"

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PALO ALTO, CALIFORNIA

M□rc□1, 2020

□□ □L□□R □L□N

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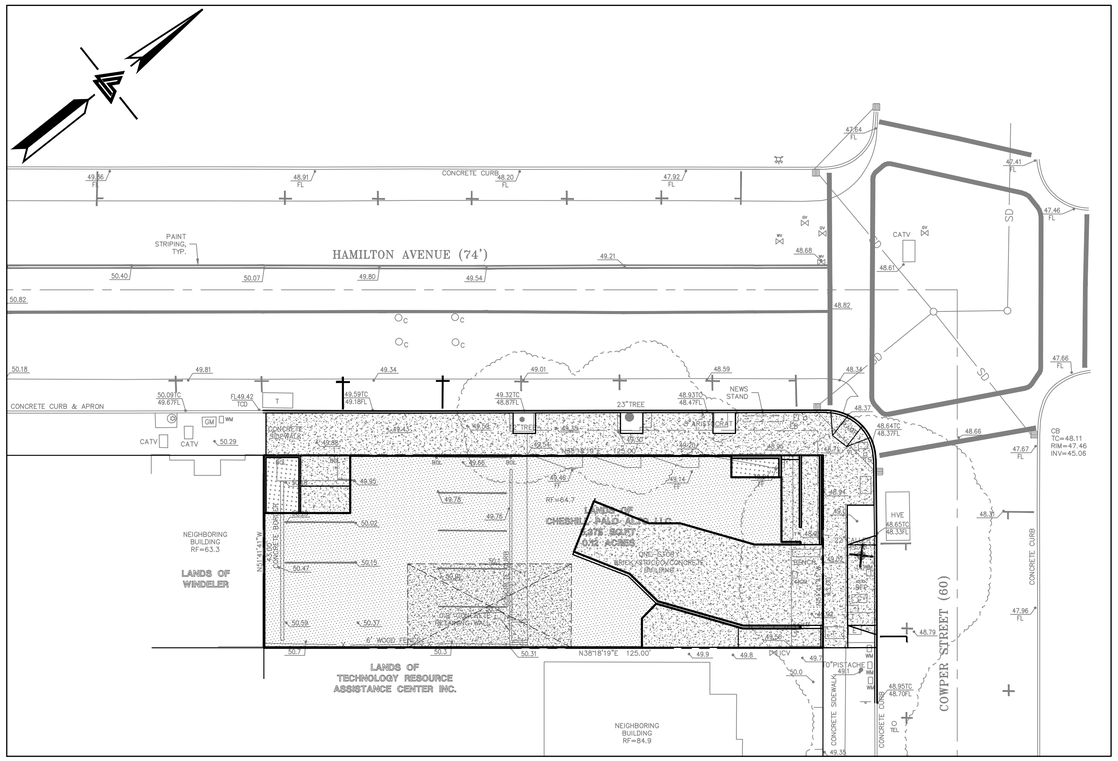
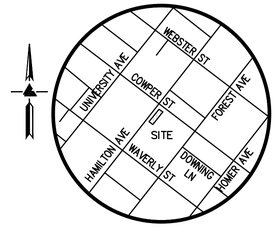
NEW MIXED USE BUILDING
482-486 HAMILTON AVENUE
PALO ALTO, CALIFORNIA

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		BOUNDARY
		PROPERTY LINE
		RETAINING WALL
		LANDSCAPE RETAINING WALL
	RW RW	RAINWATER TIGHTLINE
	SUB	SUBDRAIN LINE
	TL	TIGHTLINE
SD	SD	STORM DRAIN LINE
SS	SS	SANITARY SEWER LINE
W	W	WATER LINE
G	G	GAS LINE
P	P	PRESSURE LINE
JT	JT	JOINT TRENCH
		SET BACK LINE
		CONCRETE VALLEY GUTTER
		EARTHEN SWALE
CB	CB	CATCH BASIN
JB	JB	JUNCTION BOX
AD	AD	AREA DRAIN
SDMH	SDMH	CURB INLET
		STORM DRAIN MANHOLE
		FIRE HYDRANT
SSMH	SSMH	SANITARY SEWER MANHOLE
		STREET SIGN
222.57 INV	222.57 INV	SPOT ELEVATION
		FLOW DIRECTION
	D	DEMOLISH/REMOVE
		BENCHMARK
200	200	CONTOURS
		TREE TO BE REMOVED
XX" TREE		



KEY MAP
1" = 10'



VICINITY MAP
NO SCALE

OWNER'S INFORMATION

OWNER:
THOMAS CHEUNG
160 ISLAND DRIVE
PALO ALTO, CA 94301

APN: 120-16-008

REFERENCES

THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO:

1. TOPOGRAPHIC SURVEY BY LEA & BRAZE ENGINEERING, INC. ENTITLED:
   "TOPOGRAPHIC SURVEY"
   482-486 HAMILTON AVENUE
   PALO ALTO, CA
   DATED: 10-12-18
   JOB#: 2181118
2. SITE PLAN BY KHOI LE-LE ARCHITECTURE ENTITLED:
   "NEW MIXED USE BUILDING"
   482-486 HAMILTON AVENUE
   PALO ALTO, CA

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

ABBREVIATIONS

AB	AGGREGATE BASE	LF	LINEAR FEET
AC	ASPHALT CONCRETE	MAX	MAXIMUM
ACC	ACCESSIBLE	MH	MANHOLE
AD	AREA DRAIN	MIN	MINIMUM
BC	BEGINNING OF CURVE	MON.	MONUMENT
B & D	BEARING & DISTANCE	MRO	METERED RELEASE OUTLET
BM	BENCHMARK	(N)	NEW
BUB	BUBBLER BOX	NO.	NUMBER
BW/FG	BOTTOM OF WALL/FINISH GRADE	NTS	NOT TO SCALE
		O.C.	ON CENTER
CB	CATCH BASIN	O/	OVER
C & G	CURB AND GUTTER	(PA)	PLANTING AREA
℄	CENTER LINE	PED	PEDESTRIAN
CPP	CORRUGATED PLASTIC PIPE (SMOOTH INTERIOR)	PIV	POST INDICATOR VALVE
		PSS	PUBLIC SERVICES EASEMENT
CO	CLEANOUT	ℙ	PROPERTY LINE
COTG	CLEANOUT TO GRADE	PP	POWER POLE
CONC	CONCRETE	PUE	PUBLIC UTILITY EASEMENT
CONST	CONSTRUCT or -TION	PVC	POLYVINYL CHLORIDE
CONC COR	CONCRETE CORNER	R	RADIUS
CY	CUBIC YARD	RCP	REINFORCED CONCRETE PIPE
D	DIAMETER	RIM	RIM ELEVATION
DI	DROP INLET	RW	RAINWATER
DIP	DUCTILE IRON PIPE	R/W	RIGHT OF WAY
EA	EACH	S	SLOPE
EC	END OF CURVE	S.A.D.	SEE ARCHITECTURAL DRAWINGS
EG	EXISTING GRADE	SAN	SANITARY
EL	ELEVATIONS	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	SDMH	STORM DRAIN MANHOLE
EQ	EQUIPMENT	SHT	SHEET
EW	EACH WAY	S.L.D.	SEE LANDSCAPE DRAWINGS
(E)	EXISTING	SPEC	SPECIFICATION
FC	FACE OF CURB	SS	SANITARY SEWER
FF	FINISHED FLOOR	SSCO	SANITARY SEWER CLEANOUT
FG	FINISHED GRADE	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	ST.	STREET
FL	FLOW LINE	STA	STATION
FS	FINISHED SURFACE	STD	STANDARD
G	GAS	STRUCT	STRUCTURAL
GA	GAGE OR GAUGE	T	TELEPHONE
GB	GRADE BREAK	TC	TOP OF CURB
HDPE	HIGH DENSITY CORRUGATED POLYETHYLENE PIPE	TOW	TOP OF WALL
		TEMP	TEMPORARY
HORIZ	HORIZONTAL	TP	TOP OF PAVEMENT
HI PT	HIGH POINT	TW/FG	TOP OF WALL/FINISH GRADE
H&T	HUB & TACK	TYP	TYPICAL
ID	INSIDE DIAMETER	VC	VERTICAL CURVE
INV	INVERT ELEVATION	VCP	VITRIFIED CLAY PIPE
JB	JUNCTION BOX	VERT	VERTICAL
JT	JOINT TRENCH	W/	WITH
JP	JOINT UTILITY POLE	W, WL	WATER LINE
L	LENGTH	WM	WATER METER
LNDG	LANDING	WWF	WELDED WIRE FABRIC

FEMA NOTE:

THIS PROJECT IS LOCATED WITHIN FEMA FLOOD ZONE "X". ZONE "X" IS DESIGNATED AS: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

NO BASE FLOOD ELEVATION FOR SUBJECT SITE WAS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) NO. 06085C0010H, EFFECTIVE DATE MAY 18, 2009.

ESTIMATED EARTHWORK QUANTITIES

CUBIC YARDS	WITHIN BUILDING FOOTPRINT	OUTSIDE BUILDING FOOTPRINT	TOTAL CUBIC YARDS
CUT	1,395	5	1,400
FILL	15	5	20
EXPORT			1,380

NOTE:
GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT IN-SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER-EXCAVATION, TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION (IF ANY). NOTE ADDITIONAL EARTHWORKS, SUCH AS KEYWAYS OR BENCHING MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEER IN THE FIELD AT TIME OF CONSTRUCTION. CONTRACTOR TO VERIFY QUANTITIES.

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER
ENTER CARLIAO
No. C79555
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

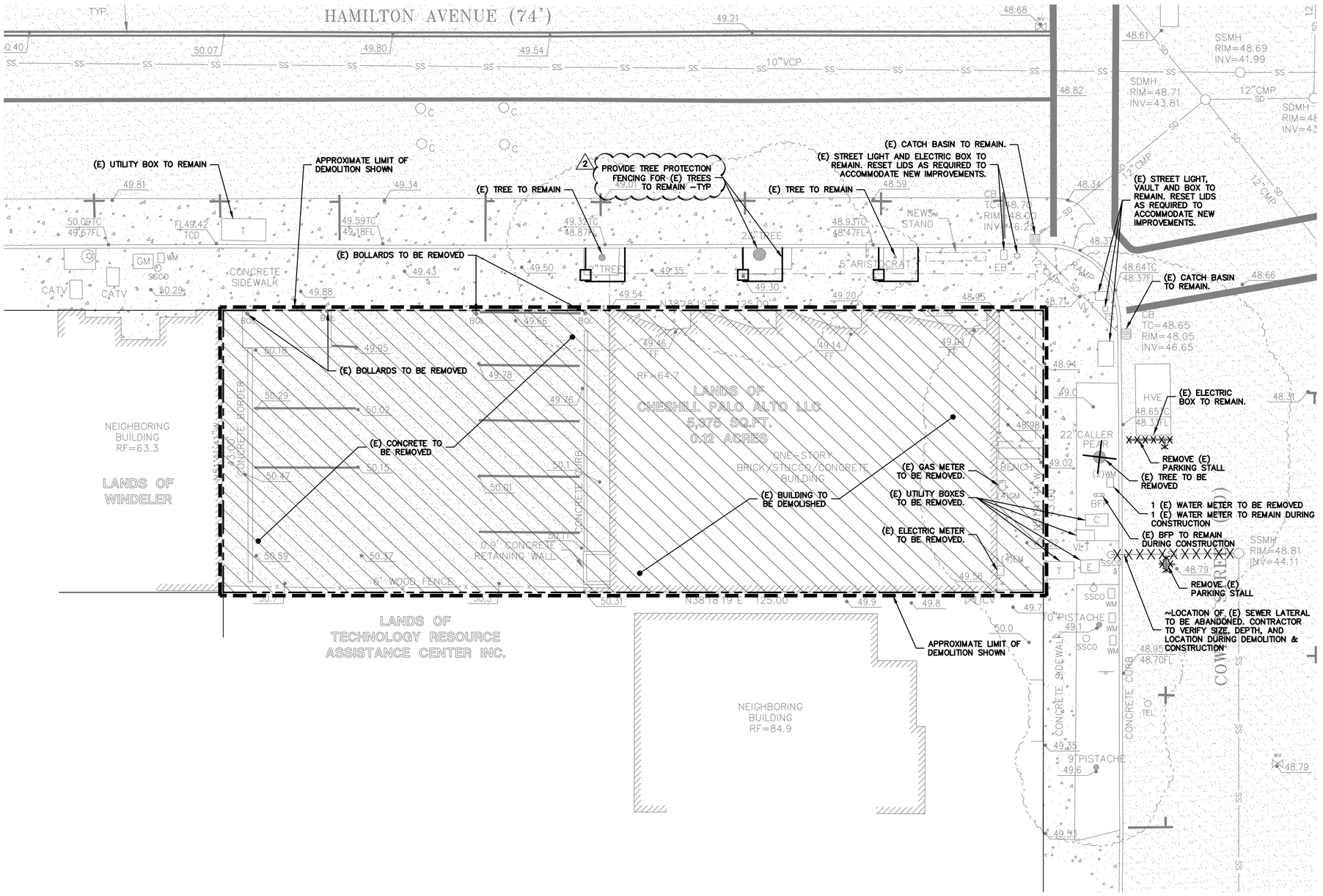
482-486 HAMILTON AVENUE
PALO ALTO, CALIFORNIA
APN: 120-16-008
SANTA CLARA COUNTY

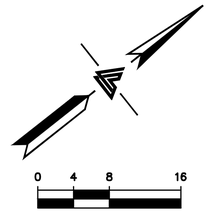
TITLE SHEET

REVISIONS	BY
–	–
–	–
–	–
2 PLAN CHECK 03-08-20	TB
1 PLAN CHECK 12-18-19	TB

JOB NO:	2190188
DATE:	10-11-19
SCALE:	1" = 10'
DESIGN BY:	CA
DRAWN BY:	TB
SHEET NO:	C-1.0

01 OF 08 SHEETS





SCALE: 1" = 8'

DEMOLITION KEYNOTES 41 TO X

DEMOLISH (E) IMPROVEMENTS AS NECESSARY TO ACCOMMODATE (N) CONSTRUCTION. NO DEMOLITION SHALL COMMENCE WITHOUT REQUIRED DEMOLITION PERMITS.

REMOVE (E) TREE. CONTRACTOR SHALL OBTAIN THE PROPER TREE REMOVAL PERMITS AS REQUIRED.

PROVIDE TREE PROTECTION AROUND TREES TO REMAIN. SEE DETAIL 6 ON SHEET ER–2.

REGISTERED PROFESSIONAL ENGINEER TIMOTHY CARLSON No. C79555 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
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(F) (510) 887–3019

SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966–1338
(F) (916)797–7363
WWW.LEABRAZE.COM

482–486 HAMILTON AVENUE PALO ALTO, CALIFORNIA

APN: 120–16–008

SANTA CLARA COUNTY

DEMOLITION PLAN

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2	PLAN CHECK 03–08–20	TB
1	PLAN CHECK 12–18–19	TB
	REVISIONS	BY

JOB NO:	2190188
DATE:	10–11–19
SCALE:	1" = 8'
DESIGN BY:	CA
DRAWN BY:	TB
SHEET NO:	C-2.0

02 OF 08 SHEETS

OWNER'S ACKNOWLEDGMENT

I/WE HEREBY STATE THAT I/WE THE OWNER(S) OF THE LAND INCLUDED WITHIN THE SUBDIVISION SHOWN UPON THIS MAP AND I HEREBY AGREE TO THE FILING OF THIS TENTATIVE MAP AND AGREE TO COMPLY WITH THE PROVISIONS OF THE CITY OF PALO ALTO'S COMPREHENSIVE PLAN AND STATE OF CALIFORNIA MAP ACT AS THEY APPLY TO THE PROCESSING AND APPROVAL OF SAID MAP. THE CURRENT ZONING FOR THIS PROPERTY IS CT, ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE CITY OF PALO ALTOS & WGW STANDARDS.

AS OWNER: THOMAS CHEUNG

BY: _____ DATE: _____
THOMAS CHEUNG

OWNER'S INFORMATION

OWNER:
THOMAS CHEUNG
160 ISLAND DRIVE
PALO ALTO, CA 94301

APN: 120-16-008

PROJECT DATA

TRACT NO.	
RECORD OWNER(S)/ SUBDIVIDERS:	THOMAS CHEUNG 160 ISLAND DRIVE PALO ALTO, CA 94301
CIVIL ENGINEER:	LEA & BRAZE ENGINEERING INC. 2495 INDUSTRIAL PARKWAY WEST HAYWARD, CA 94545 (510) 887-4086 CONTACT: PETE CARLINO
UNIT COUNT:	MIXED USE – 3 UNIT COMMERICAL & 4 UNIT RESIDENTIAL CONDOMINIUM
ASSESSOR'S PARCEL NO.	120-16-008

PROJECT DESCRIPTION/IMPROVEMENTS

CONSTRUCTION OF A NEW THREE STORY MIXED USE BUILDING – COMMERCIAL & RESIDENTIAL CONDOMINIUM UNITS WITH BELOW GRADE PARKING.

REFERENCES

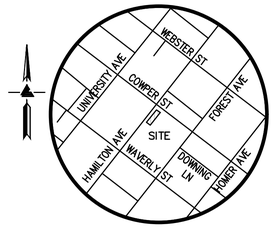
THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO:
1. TOPOGRAPHIC SURVEY BY LEA & BRAZE ENGINEERING, INC. ENTITLED:
"TOPOGRAPHIC SURVEY"
482-486 HAMILTON AVENUE
PALO ALTO, CA
DATED: 10-12-18
JOB#: 2181118

2. SITE PLAN BY KHOI LE-LE ARCHITECTURE ENTITLED:
"NEW MIXED USE BUILDING"
482-486 HAMILTON AVENUE
PALO ALTO, CA

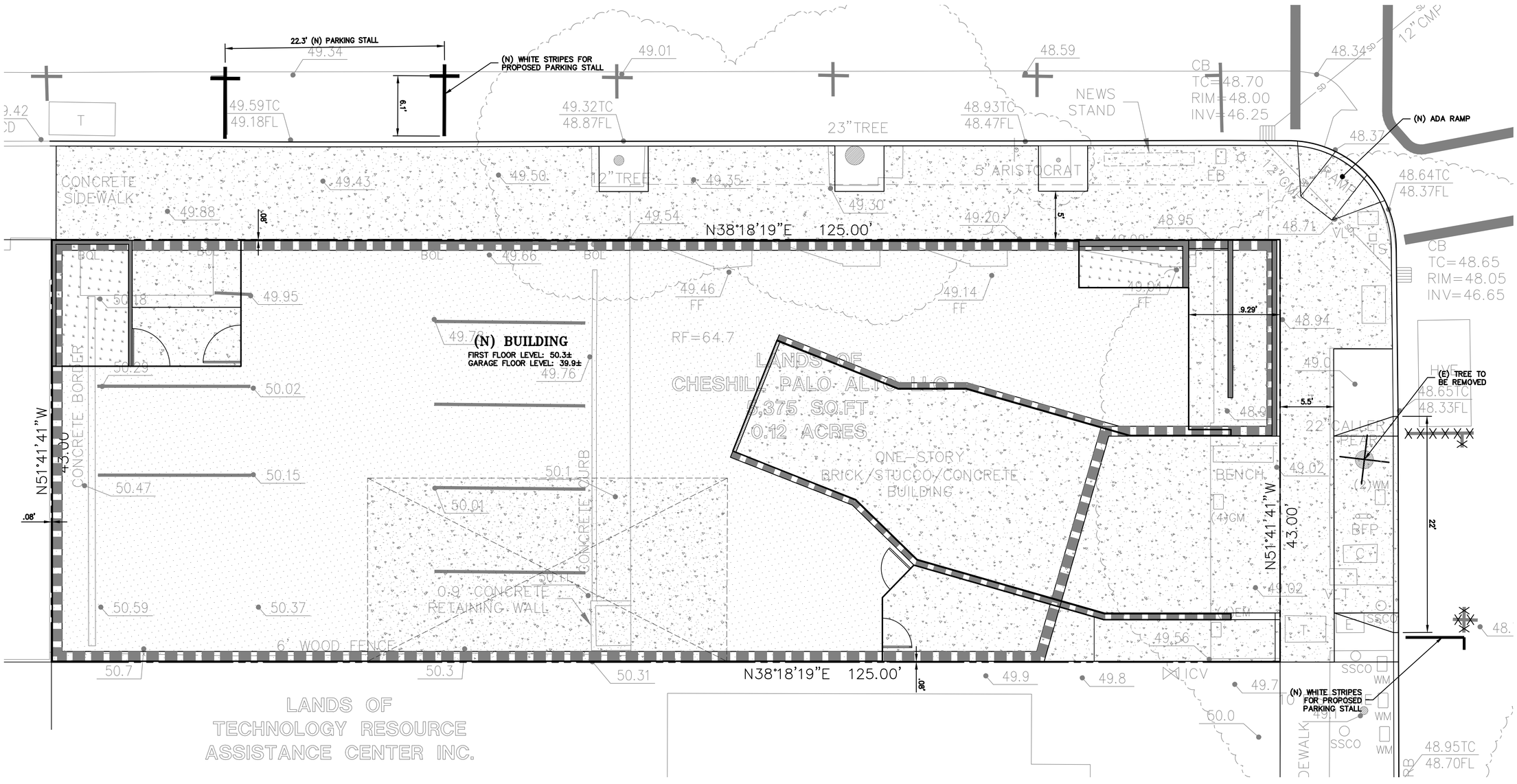
THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

NOTE:
ALL EXISTING BUILDINGS, STRUCTURES, AND ON-SITE IMPROVEMENTS ARE PROPOSED TO BE REMOVED".

0 2.5 5 10
SCALE: 1" = 5'



VICINITY MAP
NO SCALE



REGISTERED PROFESSIONAL ENGINEER PETER CARLINO No. C79555 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
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SACRAMENTO REGION
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WWW.LEABRAZE.COM

482-486 HAMILTON AVENUE
PALO ALTO, CALIFORNIA
SANTA CLARA COUNTY
APN: 120-16-008

TENTATIVE MAP

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2	PLAN CHECK 03-08-20	TB
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JOB NO:	2190188
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DRAWN BY:	TB
SHEET NO:	

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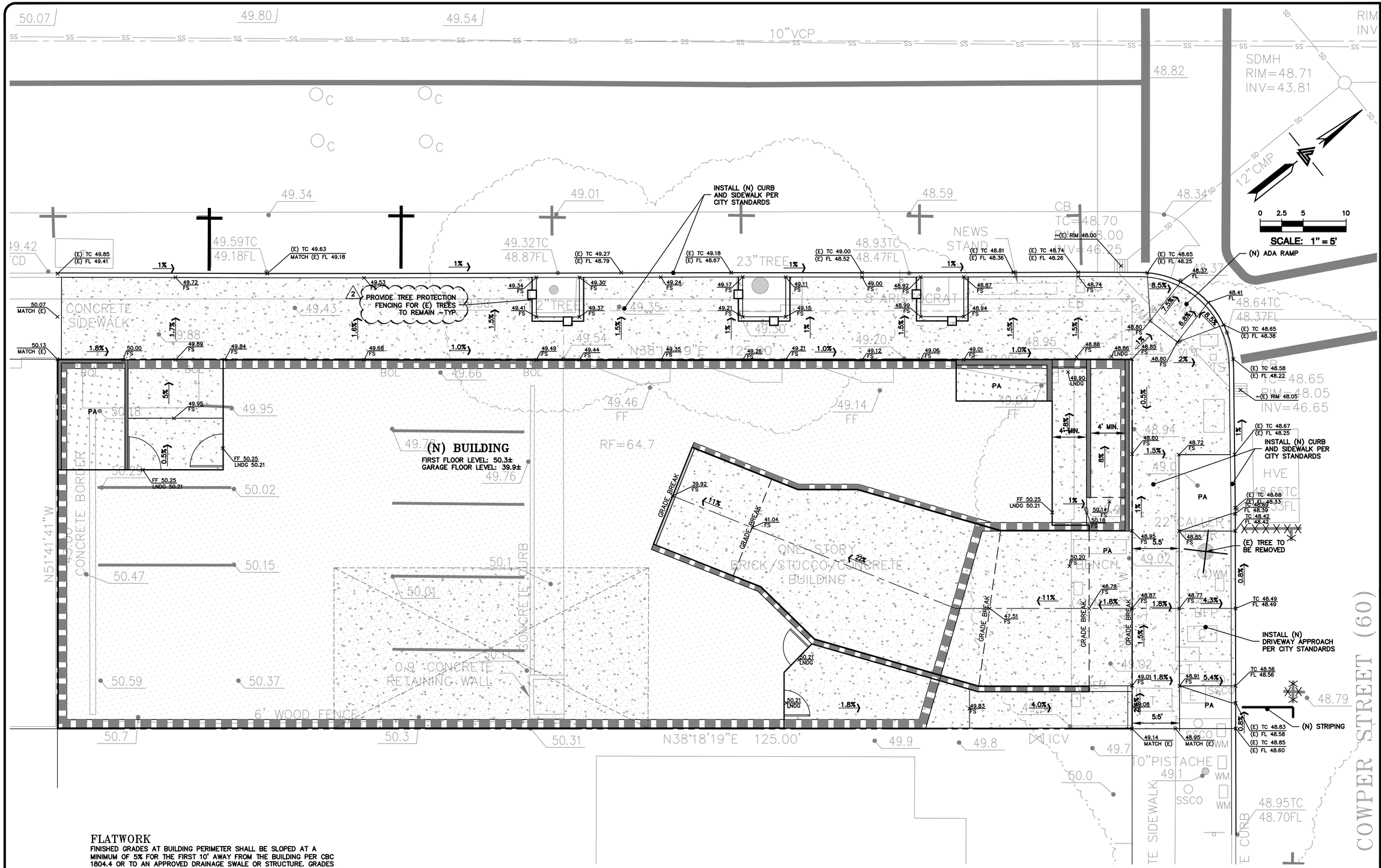
03 OF 08 SHEETS



FLATWORK

FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MINIMUM OF 5% FOR THE FIRST 10' AWAY FROM THE BUILDING PER CBC 1804.4 OR TO AN APPROVED DRAINAGE SWALE OR STRUCTURE. GRADES SHALL CONTINUE TO SLOPE TOWARDS POSITIVE DRAINAGE AND A POSITIVE OUTFALL. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND BOTTOM OF MUD SILL AT ALL TIMES PER CBC 2304.12.1.2 UNLESS STRUCTURAL DETAILING ALLOWS LESS. REFER TO STRUCTURAL PLANS FOR FOUNDATION DESIGN AND DETAILS.

PROVIDE 2% SLOPE ACROSS FLAT WORK AND/OR PAVING PER CBC 1804.4. SLOPE TOWARDS POSITIVE DRAINAGE AS SHOWN ON PLAN.

(N) CONCRETE DRIVEWAY.

(N) SIDEWALK, CURB, AND GUTTER PER CITY OF PALO ALTO STANDARDS.

*** BUILDING PAD NOTE:**
ADJUST PAD LEVEL AS REQUIRED. REFER TO STRUCTURAL PLANS FOR SLAB SECTION OR CRAWL SPACE DEPTH TO ESTABLISH PAD LEVEL.

REGISTERED PROFESSIONAL ENGINEER — PETER CARLIANO — No. C79550 — CIVIL — STATE OF CALIFORNIA — ORIGINAL SIGNATURES IN BLUE INK

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CIVIL ENGINEERS • LAND SURVEYORS
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482–486 HAMILTON AVENUE
PALO ALTO, CALIFORNIA

APN: 120-16-008

SANTA CLARA COUNTY

GRADING PLAN

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04 OF 08 SHEETS

HAMILTON AVENUE (74')

NOTE:
CONTRACTOR SHALL FIELD VERIFY LOCATIONS & DEPTHS OF EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF CONFLICTS IF ANY EXIST.

~LOCATION OF (E) WATER LINE –TYP

INSTALL AN APPROVED REDUCED PRESSURE PRINCIPAL ASSEMBLY RRPA BACKFLOW PREVENTER FOR EACH CITY WATER SERVICE WILL BE PROVIDED AND INSTALLED PER WGW STANDARDS.
THE RRPA SHALL BE INSTALLED ON THE OWNER'S PROPERTY AND DIRECTLY BEHIND THE WATER. BACKFLOW ASSEMBLY WILL BE PROVIDED AND

~LOCATION OF (E) TELEPHONE AND COMMUNICATIONS LINE –TYP

~LOCATION OF (E) ELECTRICAL LINES –TYP

CPAU TO INSTALL ~29 LF (N) HDPE SANITARY SEWER LATERAL AT 10.6%

CPAU TO INSTALL (N) 6" FIRE PROTECTION WATER LINE PER WGW STANDARDS

CPAU INSTALL (N) 4" WATER LINE PER WGW STANDARDS

INSTALL 2 (N) METER METERS PER WGW STANDARD DETAIL WD-05A

~LOCATION OF (E) ELECTRICAL LINES –TYP

~8 LF (N) SANITARY SEWER LATERAL AT 10.6%

INSTALL (N) 1" DOMESTIC WATER LINE DESIGN BY OTHERS

INSTALL (N) 4" DOMESTIC WATER LINE DESIGN BY OTHERS

NEW RESIDENTIAL UNITS REQUIRE SEPARATE WATER METERING EITHER BY CITY OR PRIVATE SUBMETERS.
INDIVIDUAL WATER METERS FOR RESIDENTIAL UNITS WILL BE PROVIDED AND INSTALLED PER WGW STANDARDS.

(N) BUILDING
FIRST FLOOR LEVEL: 50.3±
GARAGE FLOOR LEVEL: 39.9±

INSTALL (N) TRENCH DRAIN

CONNECT (N) TRENCH DRAIN TO (N) SS EJECTOR VIA (N) 4" TIGHTLINE

SS EJECTOR

(E) GAS METERS TO BE REMOVED AND GAS SERVICE TO BE DISCONNECTED BY CPAU AFTER SUBMITTAL OF DISCONNECTION REQUEST & VACANCY FORMS

(E) UTILITY BOXES TO BE REMOVED.

(E) ELECTRIC METER TO BE REMOVED.

INSTALL (N) JOINT TRENCH LINE

~LOCATION OF (E) ELECTRICAL LINES –TYP

(E) ELECTRIC BOX TO REMAIN.

REMOVE 1 (E) WATER METER

1 (E) WATER METER TO REMAIN FOR USE DURING CONSTRUCTION

(E) WATER SERVICE TO BE DISCONNECTED AND ABANDONED AFTER TRANSFER TO (N) SERVICE

(E) BFP TO BE REMAIN FOR USE DURING CONSTRUCTION.

REMOVE (E) SSCO

~LOCATION OF (E) SEWER LATERAL TO BE ABANDONED. CONTRACTOR TO VERIFY SIZE, DEPTH, AND LOCATION DURING DEMOLITION & CONSTRUCTION

(E) SEWER SERVICE TO BE DISCONNECTED AND ABANDONED AFTER TRANSFER TO (N) SERVICE

~(E) RIM 48.00
~(E) INV 46.25

~(E) RIM 48.05
~(E) INV 46.65

UTILITIES

INSTALL (N) SANITARY SEWER LATERALS. USE 4" PVC (SDR-26) SLOPED AT 2% MINIMUM. CONNECT TO (E) SEWER MAIN AS SHOWN. PROVIDE CLEANOUT TO GRADE AT BUILDING AND BEHIND PROPERTY LINE AND AT MAJOR CHANGES IN DIRECTION AS SHOWN. REUSE (E) LATERAL IF POSSIBLE. CONNECT PER DISTRICT STANDARDS.

CONNECT (N) FIRE PROTECTION SERVICE PER CITY STANDARDS.

CONNECT (N) WATER SERVICE PER CITY STANDARDS.

CONNECT (N) LANDSCAPE SERVICE PER CITY STANDARDS.

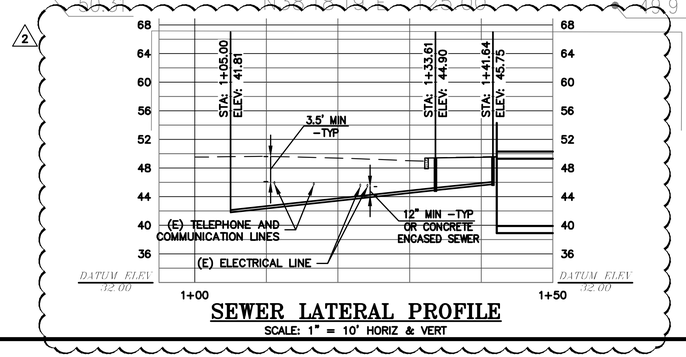
INSTALL (N) JOINT TRENCH FOR SERVICES INCLUDING ELECTRIC, CATV & TELEPHONE FROM NEAREST POINT OF CONNECTION. DESIGN BY OTHERS.

INSTALL (N) GAS SERVICE PER CITY STANDARDS. DESIGN BY OTHERS.

INSTALL (N) ENVIRONMENTAL ONE SEWER EJECTOR SYSTEM.

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT

NOTE:
ALL UTILITIES SHALL BE DESIGNED AND INSTALLED PER CPAU WGW STANDARDS



SEWER LATERAL PROFILE
SCALE: 1" = 10' HORIZ & VERT

0 2.5 5 10
SCALE: 1" = 5'

REGISTERED PROFESSIONAL ENGINEER PETER CARLIANO No. C79555 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

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UTILITY PLAN

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C-4.0

05 OF 08 SHEETS

PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. LEA & BRAZE ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

EROSION CONTROL NOTES:

1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS PROJECT.
3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
4. SANITARY FACILITIES SHALL BE MAINTAINED IN SECONDARY CONTAINMENT ON THE SITE AT ALL TIMES.
5. ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS YEAR–ROUND, AS OPPOSED TO ONLY DURING THE RAINY SEASON. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT–LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING POLLUTION SHALL BE MAINTAINED AT ALL TIMES.
7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15TH.
9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED YEAR–ROUND.
10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM. IF ANY EROSION AND SEDIMENT CONTROL MEASURES ARE REMOVED FROM THE RIGHT–OF–WAY BY CITY STAFF DURING A RAIN EVENT, THE CONTRACTOR SHALL REPLACE THE EROSION AND SEDIMENT CONTROL MEASURE BY THE END OF THE FOLLOWING BUSINESS DAY.
12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY LOCAL JURISDICTION'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
14. EROSION CONTROL MEASURES SHALL BE ON–SITE YEAR–ROUND.
15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED YEAR–ROUND.
16. PLANS SHALL BE DESIGNED TO MEET C3 REQUIREMENTS OF THE MUNICIPAL STORMWATER REGIONAL PERMIT("MRP") NPDES PERMIT CAS 612008.
17. THE CONTRACTOR TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN OR COUNTY STORM DRAIN SYSTEMS.
18. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
19. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN INSPECTOR. THE ADJACENT STREET SHALL AT ALL TIMES BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE TOWN RIGHT–OF–WAY.
20. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE INSPECTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO NOT INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT–OF–WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
21. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH PERMS IN CONJUNCTION OF ALL LANDSCAPING.
22. STOCKPILED MATERIALS SHALL BE COVERED WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT IS SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL RAINY SEASON.
23. EXCESS OR WASTE CONCRETE MUST NOT BE WASHED INTO THE PUBLIC RIGHT–OF–WAYOR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
24. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND

EROSION CONTROL NOTES CONTINUED:

24. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MUST NOT BE WASHED INTO THE DRAINAGE SYSTEM,
25. DUST CONTROL SHALL BE DONE BY WATERING AND AS OFTEN AS REQUIRED BY THE TOWN INSPECTOR.
26. SILT FENCE(S) AND/OR FIBER ROLL(S) SHALL BE INSTALLED PRIOR TO SEPTEMBER 15TH AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS,TO PUBLIC OWNED FACILITIES.

EROSION CONTROL MEASURES:

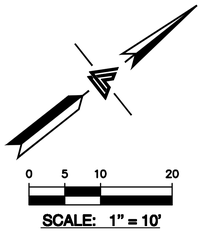
1. EROSION CONTROL FACILITIES SHALL BE IN PLACE YEAR–ROUND.
2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
3. CONSTRUCTION ENTRANCES/EXITS SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES/EXITS. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 15, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE–STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF LEA & BRAZE ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY LEA & BRAZE ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION'S STANDARDS AND THE APPROVAL OF THE LOCAL JURISDICTION'S ENGINEERING DEPARTMENT.
8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWN SLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY END BUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

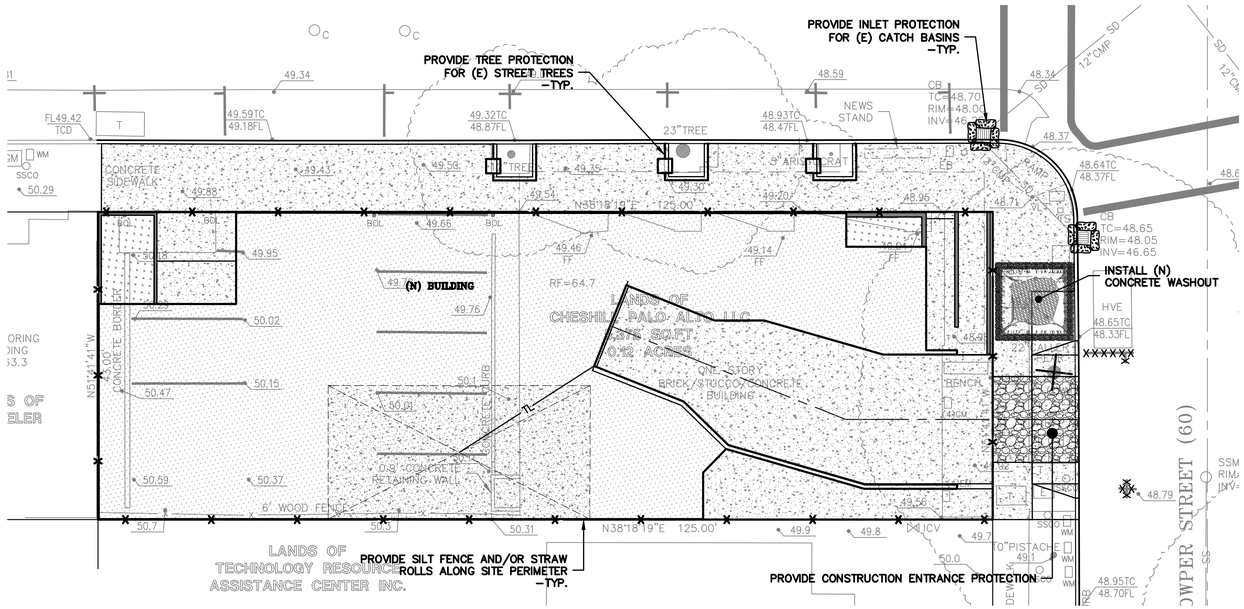
REFERENCES:

1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

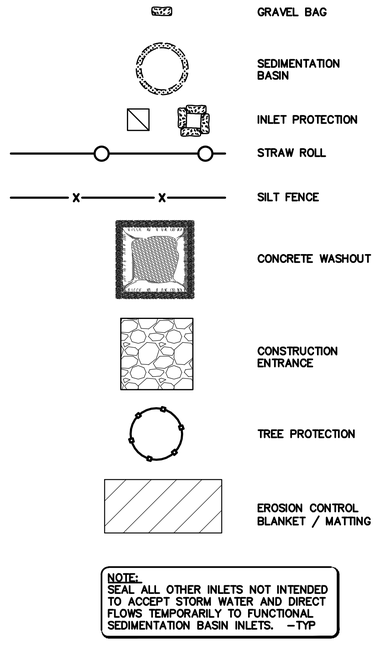
PERIODIC MAINTENANCE:

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
   - A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
   - B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
   - C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
   - D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
   - E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   - F. RILLS AND GULLIES MUST BE REPAIRED.
2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION





EROSION CONTROL LEGEND



NOTE:
SEAL ALL OTHER INLETS NOT INTENDED TO ACCEPT STORM WATER AND DIRECT FLOWS TEMPORARILY TO FUNCTIONAL SEDIMENTATION BASIN INLETS. –TYP

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EROSION CONTROL PLAN

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2	PLAN CHECK 03–08–20	TB
1	PLAN CHECK 12–18–19	TB
	REVISIONS	BY

JOB NO:	2190188
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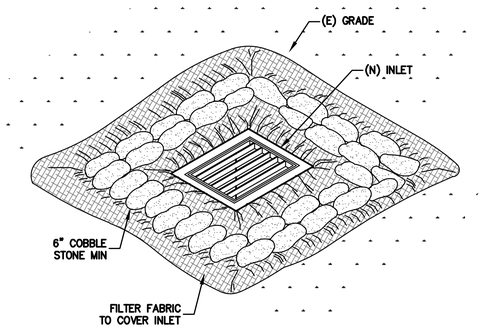
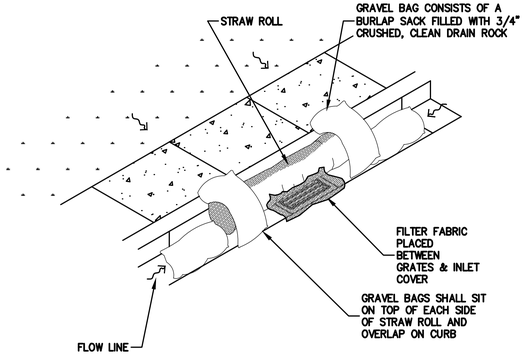
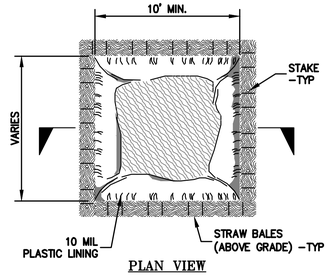
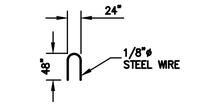


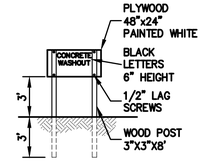
1 ER-2 **INLET PROTECTION**
NTS



2 ER-2 **STREET INLET PROTECTION**
NTS



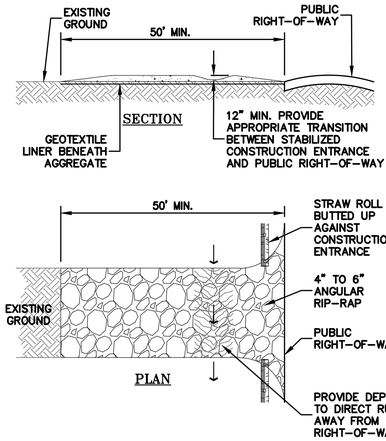




NOTES:
ACTUAL LAYOUT DETERMINED IN FIELD.

THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 10' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

3 ER-2 **CONCRETE WASHOUT**
NTS



NOTES:

STABILIZED CONSTRUCTION SITE ACCESS SHALL BE CONSTRUCTED OF 3" TO 4" WASHED, FRACTURED STONE AGGREGATE.

MATERIAL SHALL BE PLACED TO A MINIMUM THICKNESS OF 12". LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 50'.

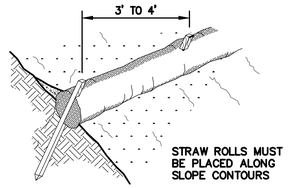
WIDTH SHALL BE A MIN. OF 15' OR GREATER IF NECESSARY TO COVER ALL VEHICULAR INGRESS AND EGRESS. PROVIDE AMPLE TURNING RADII.

THE ENTRANCE SHALL BE KEPT IN GOOD CONDITION BY OCCASIONAL TOP DRESSING WITH MATERIAL AS SPECIFIED IN ABOVE NOTE.

ACCESSES SHALL BE INSPECTED WEEKLY DURING PERIODS OF HEAVY USAGE, MONTHLY DURING NORMAL USAGE, AND AFTER EACH RAINFALL, WITH MAINTENANCE PROVIDED AS NECESSARY.

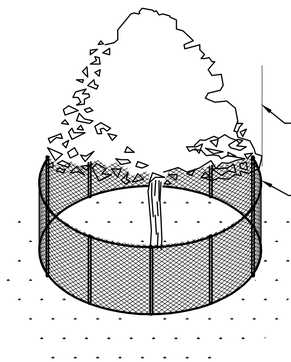
PERIODIC TOP DRESSING SHALL BE DONE AS NEEDED.

4 ER-2 **CONSTRUCTION ENTRANCE**
NTS



NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. CONTRACTOR IS RESPONSIBLE FOR REGULAR MAINTENANCE AND INSPECTION. THE SILT SHALL BE CLEANED OUT WHEN IT REACHES HALF THE HEIGHT OF THE ROLL.

X ER-X **STRAW ROLLS FLAT LOT**
NTS

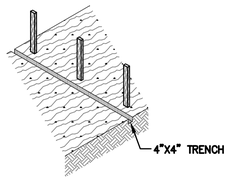


NOTE:
REFER TO LANDSCAPE ARCHITECTURAL PLANS FOR ADDITIONAL TREE PROTECTION INFORMATION.

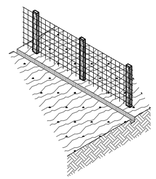
NOTE:
LOCAL JURISDICTION MIGHT HAVE MORE STRINGENT REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING W/ INSPECTOR TO ENSURE PROPER PROCEDURES ARE BEING FOLLOWED.

6 ER-2 **EXISTING TREE PROTECTION DETAIL**
NTS

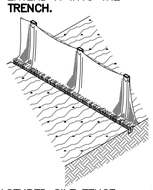
1. SET POSTS AND EXCAVATE A 4"X4" TRENCH UP SLOPE ALONG THE LINE OF POSTS.



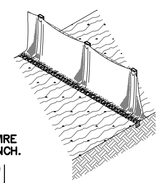
2. STAPLE WIRE FENCE TO THE POSTS.

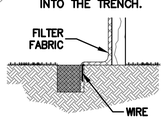


3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.





NOTE:
PREMANUFACTURED SILT FENCE PRODUCTS MAY BE USED IN LIEU OF WIRE FENCE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND MAINTAIN KEYING OF FABRIC PER THIS DETAIL.

NOTE:
IT IS ESSENTIAL THAT THE WIRE/FABRIC BE FULLY EMBEDDED INTO THE GROUND SO RUN-OFF CANNOT FLOW FREELY UNDER FENCE.

7 ER-2 **SILT FENCE**
NTS

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EROSION CONTROL DETAILS

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SHEET NO:	

ER-2

07 OF 08 SHEETS

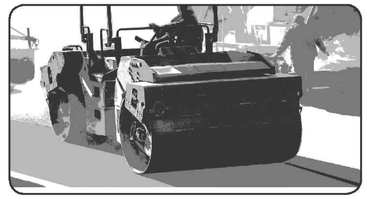
POLLUTION PREVENTION — IT'S PART OF THE PLAN

Construction projects are required to implement year-round stormwater BMPs, as they apply to your project.

Runoff from streets and other paved areas is a major source of pollution to San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep construction dirt, debris, and other pollutants out of storm drains and local creeks. Following these guidelines will ensure your compliance with City of Palo Alto Ordinance requirements.








MATERIALS & WASTE MANAGEMENT

Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or when they are not in use.
- ☐ Use (but don't overuse) reclaimed water for dust control.
- ☐ Ensure dust control water doesn't leave site or discharge to storm drains.

Hazardous Materials

- ☐ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ☐ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ☐ Follow manufacturer's application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☐ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ☐ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leaks. Never clean out a dumpster by hosing it down on the construction site.
- ☐ Place portable toilets away from storm drains. Make sure they are in good working order. Check frequently for leaks.
- ☐ Dispose of all wastes and demolition debris properly. Recycle materials and wastes that can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation.
- ☐ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
- ☐ Keep site clear of litter (e.g. lunch items, cigarette butts).
- ☐ Prevent litter from uncovered loads by covering loads that are being transported to and from site.

Construction Entrances and Perimeter

- ☐ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☐ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

EQUIPMENT MANAGEMENT & SPILL CONTROL

Maintenance and Parking

- ☐ Designate an area of the construction site, well away from streams or storm drain inlets and fitted with appropriate BMPs, for auto and equipment parking, and storage.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ☐ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ☐ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ☐ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment, and do not use diesel oil to lubricate equipment or parts onsite.

Spill Prevention and Control

- ☐ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ☐ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks. Use drip pans to catch leaks until repairs are made.
- ☐ Clean up leaks, drips and other spills immediately and dispose of cleanup materials properly.
- ☐ Use dry cleanup methods whenever possible (absorbent materials, cat litter and/or rags).
- ☐ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ☐ Report any hazardous materials spills immediately! Call City of Palo Alto Communications, **(650) 329-2413**. If the spill poses a significant hazard to human health and safety, property or the environment, you must report it to the State Office of Emergency Services. **(800) 852-7550 (24 hours).**

EARTHMOVING

Grading and Earthwork

- ☐ Schedule grading and excavation work during dry weather.
- ☐ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☐ Remove existing vegetation only when absolutely necessary, plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Prevent sediment from migrating offsite and protect storm drain inlets, drainage courses and streams by installing and maintaining appropriate BMPs (e.g., silt fences, gravel bags, fiber rolls, temporary swales, etc.).
- ☐ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ☐ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells.
  - Buried barrels, debris, or trash.
- ☐ If the above conditions are observed, document any signs of potential contamination and clearly mark them so they are not disturbed by construction activities.

Landscaping

- ☐ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ☐ Stack bagged material on pallets and under cover.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

CONCRETE MANAGEMENT & DEWATERING

Concrete Management

- ☐ Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- ☐ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

Dewatering

- ☐ Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.
- ☐ Be sure to obtain a Permit for Construction in the Public Street from Public Works Engineering before discharging water to a street, gutter, or storm drain. Call the Regional Water Quality Control Plant (RWQCP) at **(650) 329-2598** for an inspection prior to commencing discharge. Use filtration or diversion through a basin, tank, or sediment trap as required by the approved dewatering plan. Dewatering is not permitted from October to April.
- ☐ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the City inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

PAVING/ASPHALT WORK

Paving

- ☐ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ☐ Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.

Sawcutting & Asphalt/Concrete Removal

- ☐ Protect storm drain inlets during saw cutting.
- ☐ If saw cut slurry enters a catch basin, clean it up immediately.
- ☐ Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.

PAINTING & PAINT REMOVAL

Painting Cleanup and Removal

- ☐ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ☐ Sweep up or collect paint chips and dust from non-hazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state certified contractor.


STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO $10,000 PER DAY!

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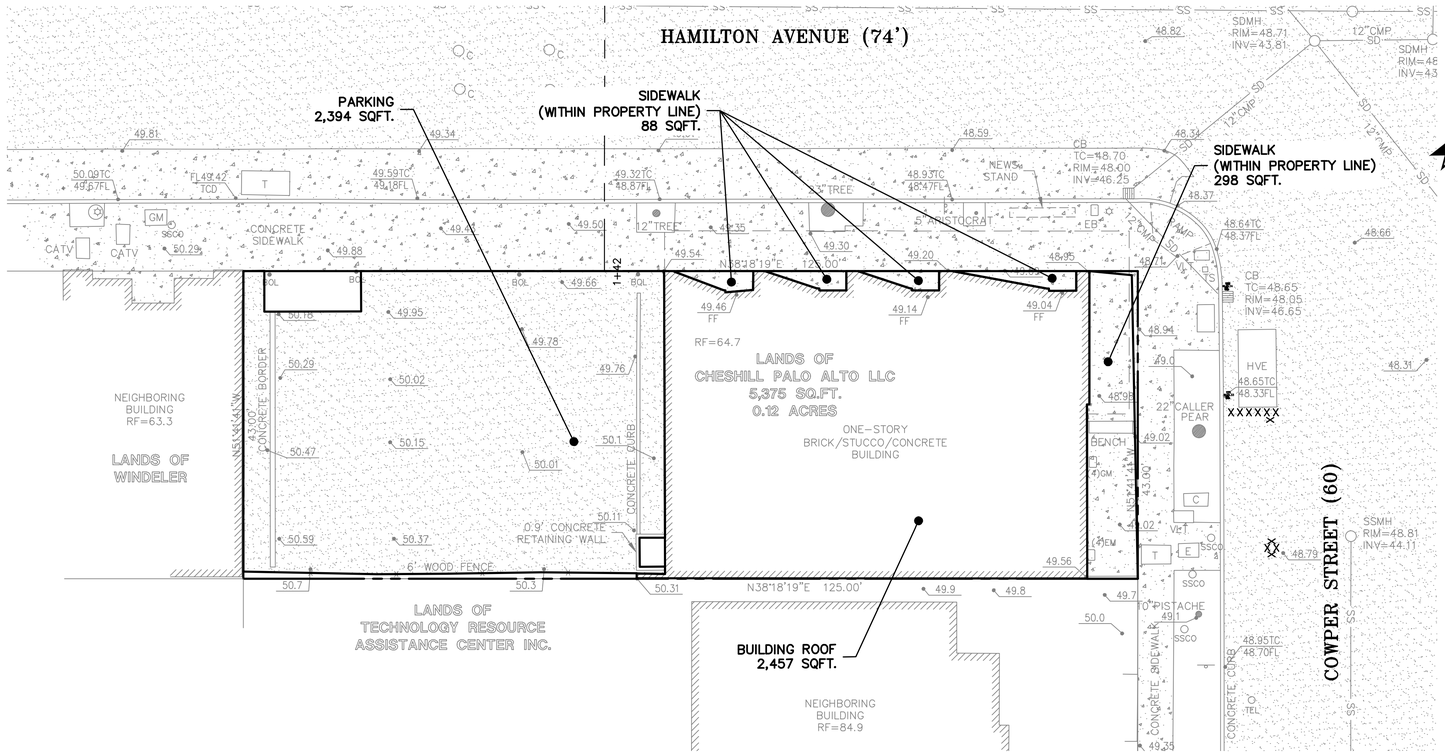
08 OF 08 SHEETS



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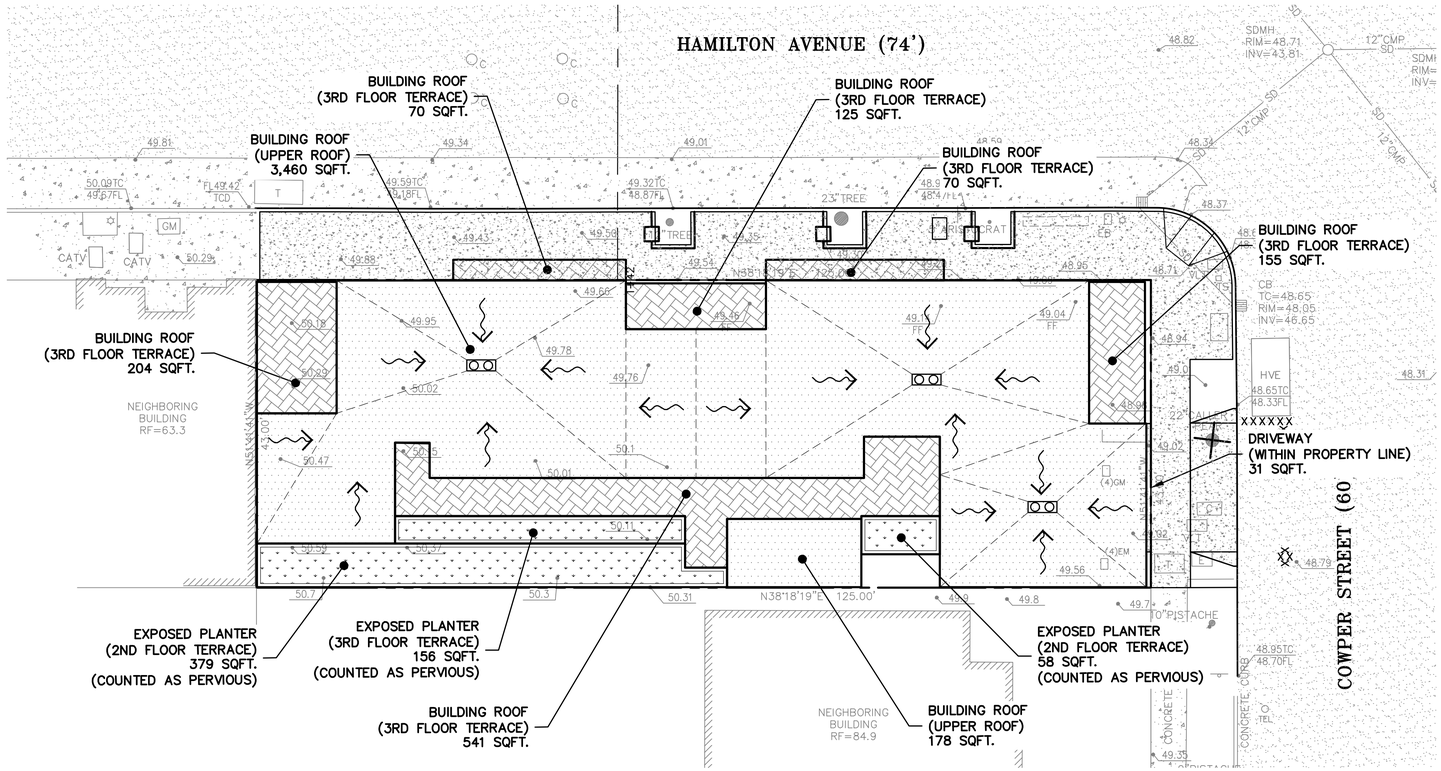

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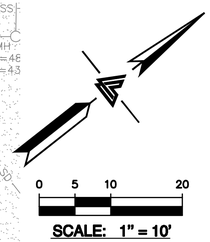

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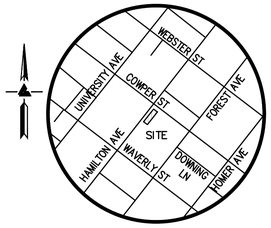

VICINITY MAP
NO SCALE

TABLES AND CALCULATIONS:

TABLE 1:
ON-SITE PERVIOUS AND IMPERVIOUS SURFACE COMPARISON

	EXISTING CONDITIONS (SQ FT)	%	PROPOSED CONDITIONS (SQ FT)	%	DIFFERENCE (SQ. FT)	%
SITE (ACRES) = 0.12	5,375	100.0	5,375	100.0	0	0.0
BUILDING ROOF:	2,457	45.7	4,803	98.4	+2,346	+43.6
IMPERVIOUS DRIVEWAY:	0	0.0	31	0.6	+31	+0.6
SIDEWALKS, PATIOS, PATHS, ETC.:	386	7.2	0	0.0	−386	−7.2
IMPERVIOUS UN-COVERD PARKING:	2,394	44.5	0	0.0	−2,394	−44.5
PERVIOUS PAVERS:	0	0.0	0	0.0	0	0.0
GREEN ROOF:	0	0.0	0	0.0	0	0.0
LANDSCAPE:	138	2.6	541	10.0	+403	+7.4
TOTAL	5,375	100.0	5,375	100.0	0	0.0
IMPERVIOUS SURFACES:	5,237	97.4	4,834	90.0	−403	−7.4
PERVIOUS SURFACES:	138	2.6	541	10.0	+403	+7.4
TOTAL	5,375	100.0	5,375	100.0	0	0.0

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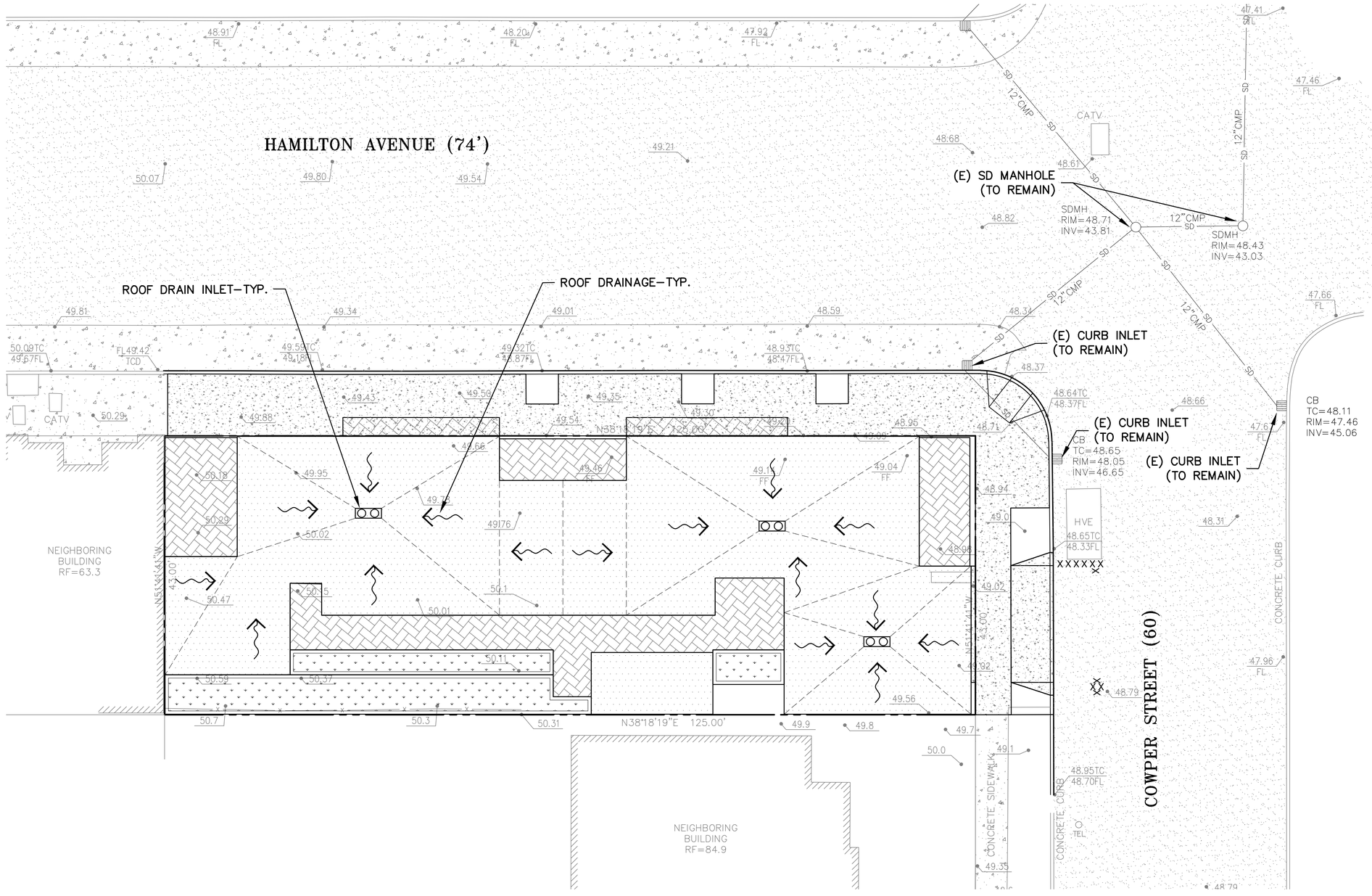
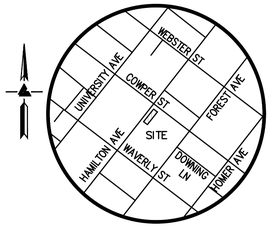
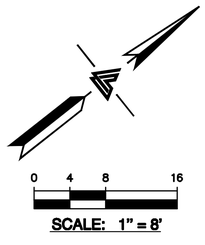
09 OF 08 SHEETS





VICINITY MAP
NO SCALE



SCALE: 1" = 8'

TABLES AND CALCULATIONS:

TABLE 1:
ON–SITE PERVIOUS AND IMPERVIOUS SURFACE COMPARISON

	EXISTING CONDITIONS (SQ FT)	%	PROPOSED CONDITIONS (SQ FT)	%	DIFFERENCE (SQ. FT)	%
SITE (ACRES) = 0.12	5,375	100.0	5,375	100.0	0	0.0
BUILDING ROOF:	2,457	45.7	4,803	98.4	+2,346	+43.6
IMPERVIOUS DRIVEWAY:	0	0.0	31	0.6	+31	+0.6
SIDEWALKS, PATIOS, PATHS, ETC.:	386	7.2	0	0.0	–386	–7.2
IMPERVIOUS UN–COVERD PARKING:	2,394	44.5	0	0.0	–2,394	–44.5
PERVIOUS PAVERS:	0	0.0	0	0.0	0	0.0
GREEN ROOF:	0	0.0	0	0.0	0	0.0
LANDSCAPE:	138	2.6	541	10.0	+403	+7.4
TOTAL	5,375	100.0	5,375	100.0	0	0.0
IMPERVIOUS SURFACES:	5,237	97.4	4,834	90.0	–403	–7.4
PERVIOUS SURFACES:	138	2.6	541	10.0	+403	+7.4
TOTAL	5,375	100.0	5,375	100.0	0	0.0

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
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WWW.LEABRAZE.COM

REGISTERED PROFESSIONAL ENGINEER
TYLER CARLSON
No. C79555
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

482–486 HAMILTON AVENUE
PALO ALTO, CALIFORNIA
APN: 120–16–008
SANTA CLARA COUNTY

STORMWATER
CONTROL PLAN

–		–
–		–
–		–
2	PLAN CHECK 03–08–20	TB
1	PLAN CHECK 12–18–19	TB
	REVISIONS	BY

JOB NO: 2190188
DATE: 10–11–19
SCALE: 1" = 8'
DESIGN BY: CA
DRAWN BY: TB
SHEET NO:

SCP-2

10 OF 08 SHEETS

NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS.

UNDERGROUND UTILITY LOCATION IS BASED ON SURFACE EVIDENCE.

BUILDING FOOTPRINTS ARE SHOWN TO FINISHED MATERIAL (STUCCO/SIDING) AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR).

EASEMENT NOTE

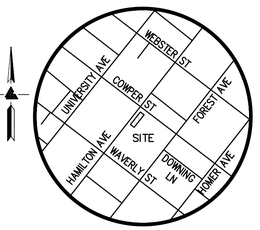
THERE ARE NO EASEMENTS PER TITLE REPORT ISSUED BY CHICAGO TITLE COMPANY TITLE NUMBER FWPS-2989180548MC DATED MAY 22, 2018

BENCHMARK

CITY OF PALO ALTO BENCHMARK 2026
C/S N. COR. N.E. RET AT THE INTERSECTION OF COWPER AND HAMILTON.
ELEVATION = 47.76'
(ADJUSTED TO NAVD 88 DATUM)

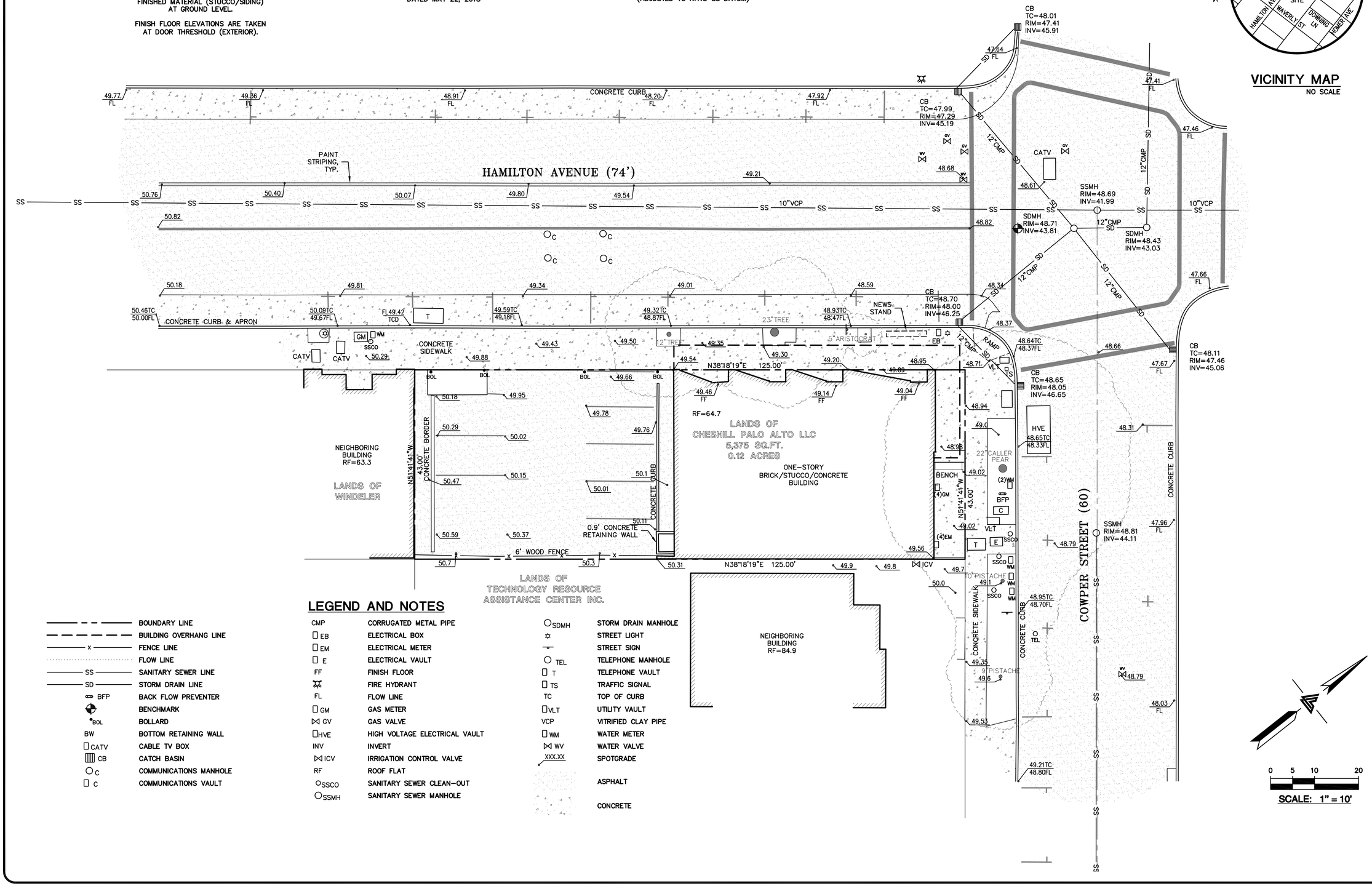
SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 48.76'
(NAVD 88 DATUM)



VICINITY MAP

NO SCALE



LEGEND AND NOTES

BOUNDARY LINE	
BUILDING OVERHANG LINE	
FENCE LINE	
FLOW LINE	
SANITARY SEWER LINE	
STORM DRAIN LINE	
BFP	BACK FLOW PREVENTER
BENCHMARK	
BOL	BOLLARD
BW	BOTTOM RETAINING WALL
CATV	CABLE TV BOX
CB	CATCH BASIN
C	COMMUNICATIONS MANHOLE
C	COMMUNICATIONS VAULT

CMP	CORRUGATED METAL PIPE
EB	ELECTRICAL BOX
EM	ELECTRICAL METER
E	ELECTRICAL VAULT
FF	FINISH FLOOR
FH	FIRE HYDRANT
FL	FLOW LINE
GM	GAS METER
GV	GAS VALVE
HVE	HIGH VOLTAGE ELECTRICAL VAULT
INV	INVERT
ICV	IRRIGATION CONTROL VALVE
RF	ROOF FLAT
SSCO	SANITARY SEWER CLEAN-OUT
SSMH	SANITARY SEWER MANHOLE
SDMH	STORM DRAIN MANHOLE
	STREET LIGHT
	STREET SIGN
TEL	TELEPHONE MANHOLE
T	TELEPHONE VAULT
TS	TRAFFIC SIGNAL
TC	TOP OF CURB
VLT	UTILITY VAULT
VCP	VITRIFIED CLAY PIPE
WM	WATER METER
WV	WATER VALVE
XXX.XX	SPOTGRADE
	ASPHALT
	CONCRETE

0 5 10 20

SCALE: 1" = 10'

GREGORY F. BRAZE No. 7623 Exp. 12-31-2014 REGISTERED CIVIL ENGINEER STATE OF CALIFORNIA

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CALIFORNIA

APN: 120-16-008

SANTA CLARA COUNTY

TOPOGRAPHIC SURVEY

–	–
–	–
–	–
TREE UPDATE 12-18-19	DB
REVISIONS	BY
JOB NO:	2181118
DATE:	10-12-18
SCALE:	1" = 10'
FIELD BY:	DR
DRAWN BY:	DB
SHEET NO:	SU1

1 OF 1 SHEETS