



PROJECT DIRECTORY

PROJECT SPONSOR:
Jason Matlof
HALF DOME CAPITAL
855 El Camino Real, #13A-264
Palo Alto, CA 94301

CIVIL ENGINEER:
Chris Wood
LUK & ASSOCIATES
738 Alfred Nobel Dr.
Hercules, CA, 94547
510.724.3388
www.lukassociates.com

ARBORIST:
Richard Gessner
MONARCH CONSULTING ARBORISTS
P.O. Box 1010
Felton, CA 95018
831.331.8962
www.monarcharborists.com

ARCHITECT:
Isaiah Stackhouse, Principal
TRACHTENBERG ARCHITECTS
2421 Fourth Street
Berkeley, CA 94710
510.649.1414
www.TrachtenbergArch.com

LANDSCAPE ARCHITECT:
Pennel Phillips
INSIDE OUT
6000 Harwood Avenue
Oakland CA 94618
510.655.7674
www.aboutinsideout.com

PROJECT DESCRIPTION

PROJECT ADDRESS:
3265 EL CAMINO REAL
PALO ALTO, CA 94306
(APN: 132-38-020)

SCOPE OF WORK:
NEW CONSTRUCTION OF A 5-STORY 100% AFFORDABLE MULTIFAMILY HOUSING DEVELOPMENT WITH 44 DWELLING UNITS AND GROUND LEVEL LOBBY AND PARKING.

ZONING CODE SUMMARY
(BASED ON THE PALO ALTO MUNICIPAL ZONING CODE)

SITE ZONING: CS
PROPOSED ZONING: PHZ

DRAWING LIST	
ARCHITECTURAL	LANDSCAPE
A0.0 GENERAL INFORMATION	L1.0 LANDSCAPE PLAN
A0.1 PROJECT DATA	L2.0 LANDSCAPE PLAN, PLANT LIST
A0.2 SITE CONTEXT PHOTOS	I1.0 PRELIMINARY HYDROZONE PLAN
A0.3 NEIGHBORHOOD CONTEXT	I2.0 PRELIMINARY HYDROZONE PLAN
A0.3 VICINITY MAP	
A0.4 PROJECT DIAGRAMS	GREEN BUILDING
A0.5 PROJECT DIAGRAMS	GB-1 CALGREEN CHECKLIST
A1.0 EXISTING CONDITIONS	GB-3 GREEN BUILDING NOTES
A1.1 EXISTING CONDITIONS	
A2.1 PLAN AT GROUND LEVEL	ARBORIST
A2.2 PLAN AT LEVEL 2	T-1 TREE PROTECTION SHEET
A2.3 PLAN AT LEVELS 3-5	T-2 TREE PROTECTION SHEET
A2.4 PLAN AT ROOF LEVEL	T-3 ARBORIST REPORT
A3.1 BUILDING SECTIONS	T-4 ARBORIST REPORT
A3.2 BUILDING ELEVATIONS	T-5 ARBORIST REPORT
A3.3 BUILDING ELEVATIONS	
A3.4 CONCEPTUAL RENDERING	
A3.5 CONCEPTUAL RENDERING	
A3.6 CONCEPTUAL RENDERING	
A4.1 SCHEMATIC DETAILS	
MAT MATERIAL BOARD	
LT1.1 LIGHTING & PHOTOMETRIC PLAN	
LT1.2 LIGHTING FIXTURE SPECS	
CIVIL	
C4.1 GRADING PLAN ELEVATIONS	
C5.1 UTILITY PLAN	
C6.1 STORMWATER TREATMENT PLAN	

APPROVAL STAMPS

RECEIVED, REVIEWED & REVISION STAMPS

TRACHTENBERG
ARCHITECTS

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

**3265
EL CAMINO
REAL**

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

GENERAL
INFORMATION

A0.0

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

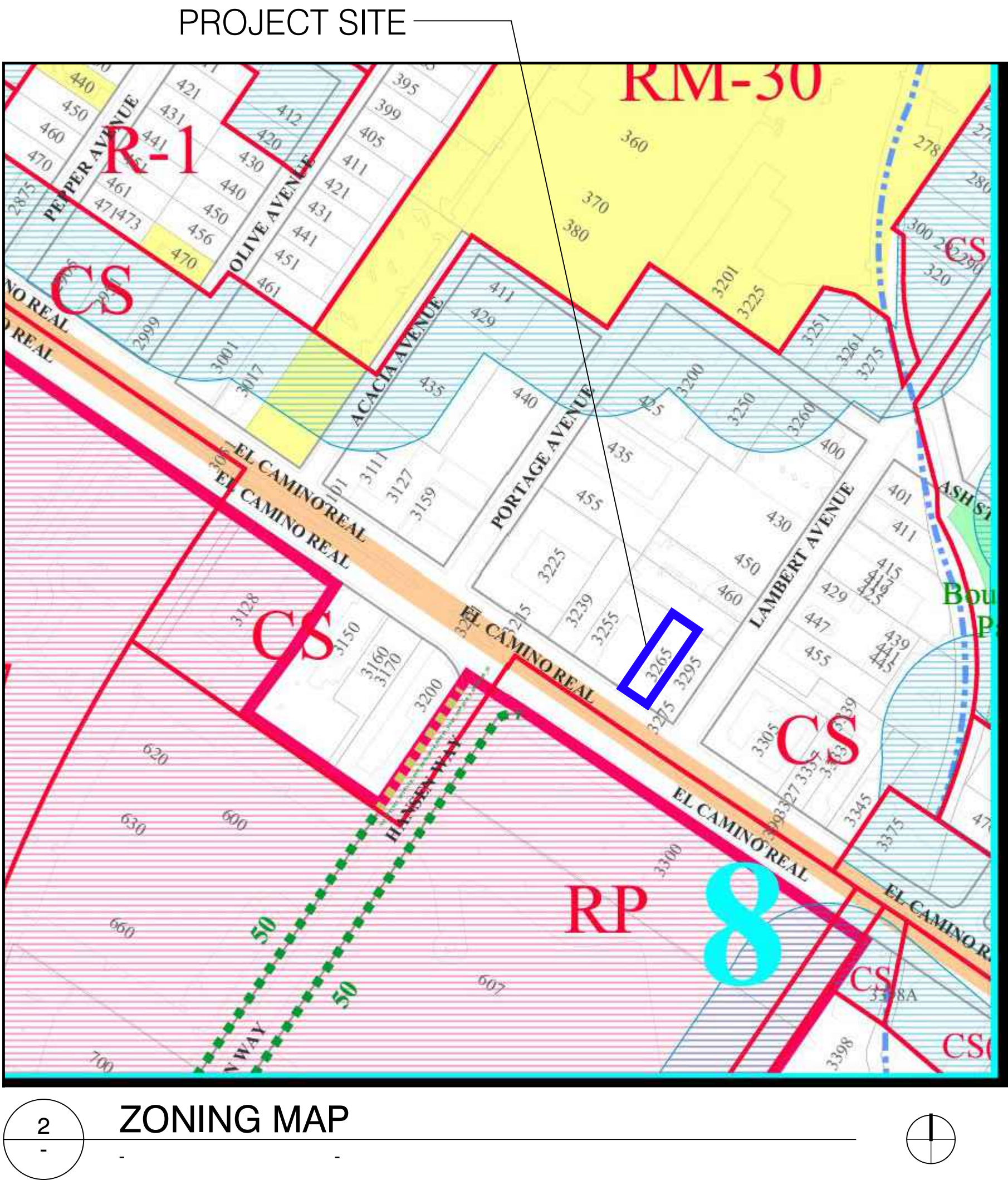
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

PROJECT
DATA

A0.1



PROJECT DATA				
	REQUIRED CS DEVELOPMENT STANDARD	AH DEVELOPMENT STANDARD	PROPOSED PHZ	COMPLIANCE
MINIMUM SITE AREA	NO MINIMUM	NO MINIMUM	7,493	COMPLIES
MINIMUM FRONT YARD	0'-10' (8'-12' EFFECTIVE SIDEWALK WIDTH)	0'-10' (8'-12' EFFECTIVE SIDEWALK WIDTH)	4' (12' EFFECTIVE SIDEWALK WIDTH)	COMPLIES
REAR YARD	10'	10'	0'	WAIVER
INTERIOR SIDE YARD	NONE	NONE	VARIES 0'-5'	COMPLIES
BUILD-TO LINES	50% FRONTAGE BUILT TO SETBACK	50% FRONTAGE BUILT TO SETBACK	100% FRONTAGE BUILT TO SETBACK	COMPLIES
MAX. SITE COVERAGE AREA	3,747	NONE REQUIRED	6,525	COMPLIES
MAX. SITE COVERAGE %	50%	NONE REQUIRED	87%	COMPLIES
MAX. BUILDING HEIGHT	50' (+15' FOR EQUIP.)	50' (+15' FOR EQUIP.)	58'-6" (69' TO ELEV. OVERRUN)	WAIVER
MAX. FAR	0.6	2.0	3.46	WAIVER
RESIDENTIAL DENSITY (UNITS / ACRE)	NO MAX	NO MAX	256	COMPLIES
MIN. GROUND FLOOR COMMERCIAL FAR	N/A	NONE REQUIRED	NONE	COMPLIES
DAYLIGHT PLANE ABUTTING RESIDNETIAL ZONE	NONE, DOES NOT ABUT RESIDENTIAL	NONE, DOES NOT ABUT RESIDENTIAL	NONE, DOES NOT ABUT RESIDENTIAL	COMPLIES
MINIMUM LANDSCAPE/OPEN SPACE COVERAGE	30%	20%	28%	COMPLIES
MINIMUM USABLE OPEN SPACE (SF/UNIT)	150	50	26	WAIVER
VEHICLE PARKING	44	33	28	WAIVER
BICYCLE PARKING	44	44	44	COMPLIES
LOADING SPACE	NONE FOR <50 UNITS	NONE FOR <50 UNITS	NONE	COMPLIES
SHARED E-BIKES	N/A	N/A	3	COMPLIES
GROSS FLOOR AREA TABLE				
	GROSS FLOOR AREA	REFERNECE PARKING AREA		
ROOF	730			
LEVEL 5	6,055			
LEVEL 4	6,055			
LEVEL 3	6,055			
LEVEL 2	6,055			
LEVEL 1	962	5,505		
TOTAL	25,912			
SITE AREA	7,493			
FAR	3.46			
UNIT TABLE				
	STUDIOS	1-BEDROOMS	TOTAL	
ROOF				
LEVEL 5	6	5	11	
LEVEL 4	6	5	11	
LEVEL 3	6	5	11	
LEVEL 2	6	5	11	
LEVEL 1			0	
TOTAL	24	20	44	
	55%	45%		
AFFORDABLE UNITS				
LOW-INCOME UNITS (51-80% AMI)	5	4	9	20%
MODERATE INCOME UNITS (81-120% AMI)	19	16	35	80%
TOTAL AFFORDABLE UNITS			44	100%
OPEN SPACE TABLE				
	AREA / PER	#	TOTAL	
ROOF DECK	1,155	1	1,155	
TOTAL USABLE OPEN SPACE			1,155	
NON-QUALIFYING OPEN SPACE				
LEVEL 2 PATIOS (AVG)	98	5	490	
JULIET BALCONIES	14	31	434	
TOTAL LANDSCAPE/OPEN SPACE			2,079	
PROJECT DATA				

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

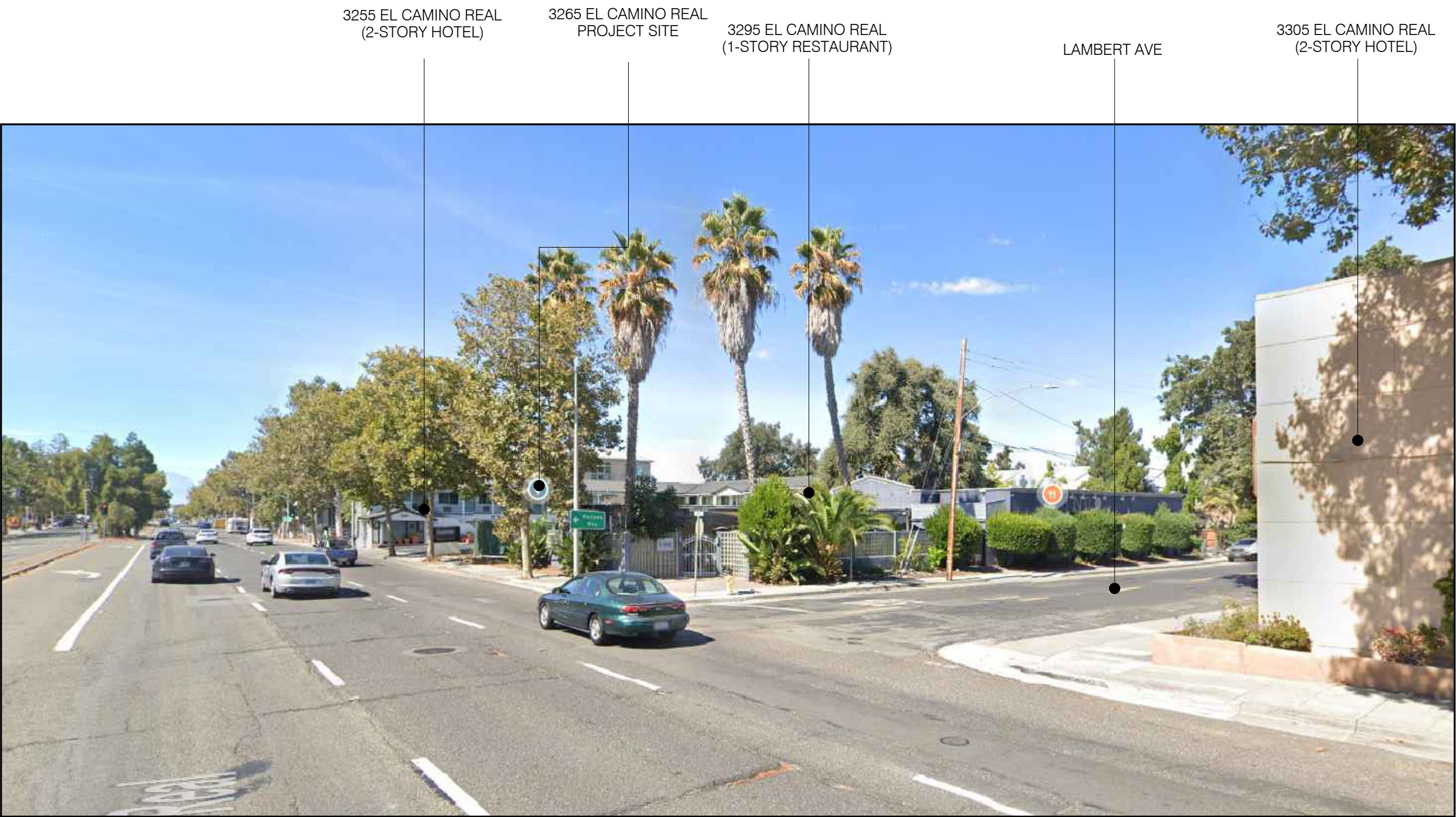
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

SITE CONTEXT
PHOTOS

A0.2



4
VIEW FROM EL CAMINO REAL - LOOKING NORTHWEST



2
VIEW FROM EL CAMINO REAL - LOOKING AT FRONT OF SITE



3
VIEW FROM EL CAMINO REAL - LOOKING SOUTHEAST



1
SATELLITE MAP

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

**3265
EL CAMINO
REAL**

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

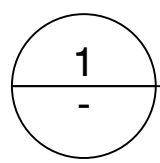
JOB: 2226

SHEET:

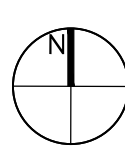
NEIGHBORHOOD
CONTEXT

A0.3

SATELLITE IMAGE DATED APRIL 2022



NEIGHBORHOOD CONTEXT WITH PROPOSED PROJECTS



APPROVED PROJECTS

PENDING PROJECTS

PROJECT SITE



2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

**3265
EL CAMINO
REAL**

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

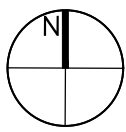
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

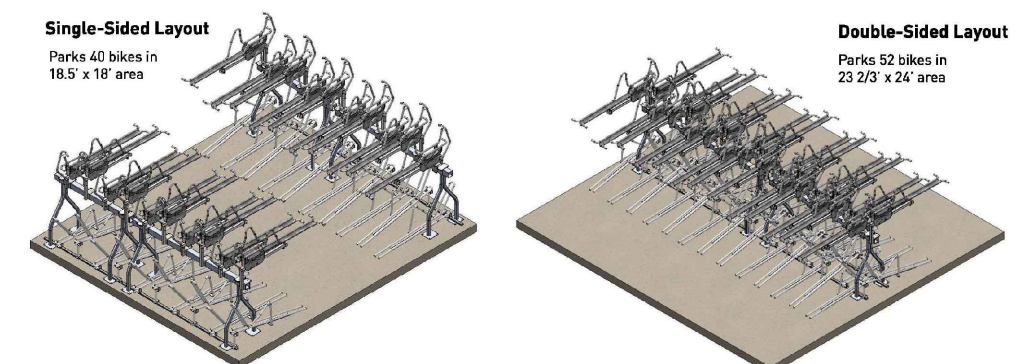
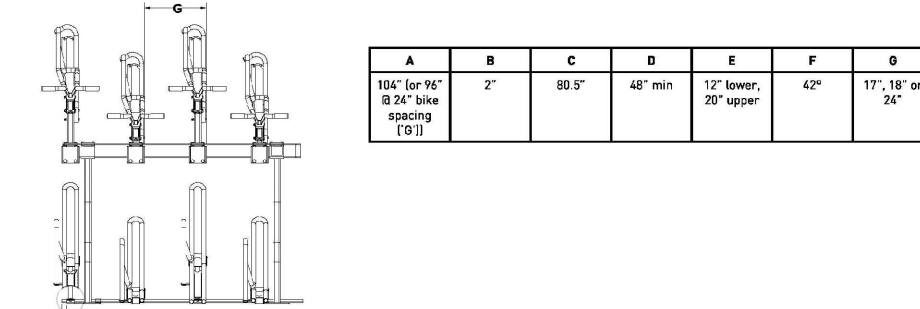
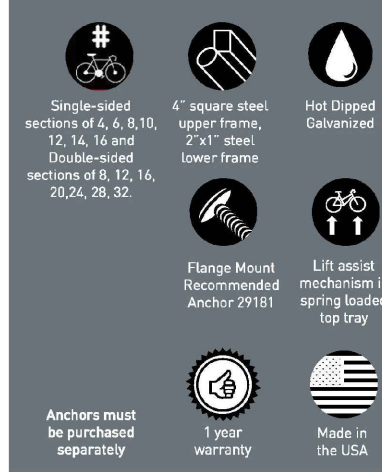
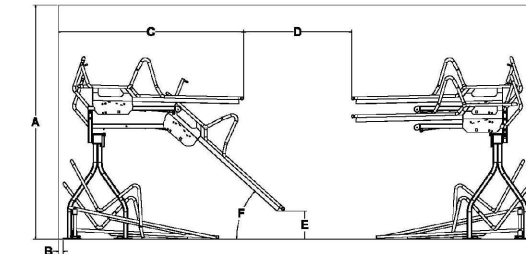
VICINITY
MAP

A0.4



Spacing and Dimensions

For a full list of dimensions and spacing requirements and recommendations, please see our technical specification document or installation manual.



Our Saris Infrastructure representatives can assist with custom layout and spacing to meet your room dimensions and desired bike capacity.

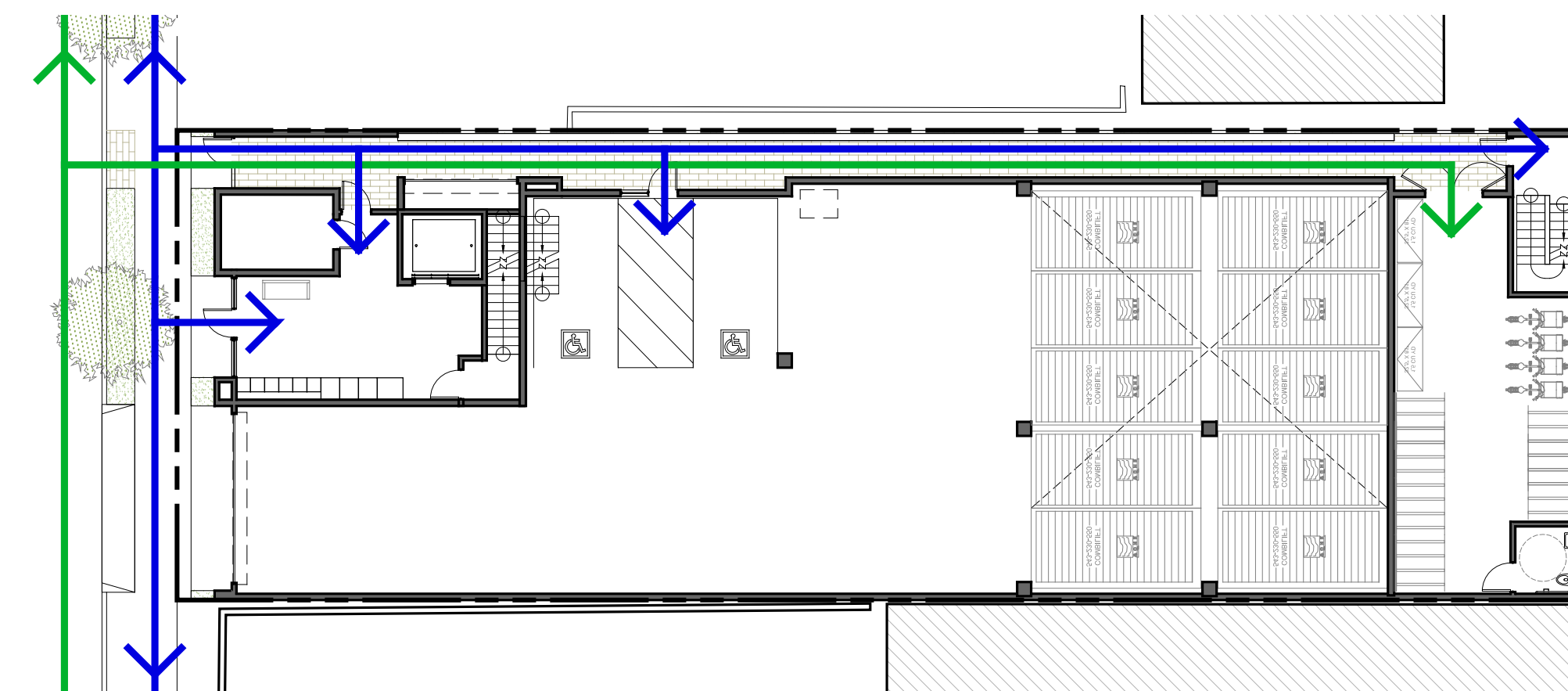
Saris Infrastructure 800.763.7257 www.sarisinfrastructure.com



4 BIKE RACK SPEC

4

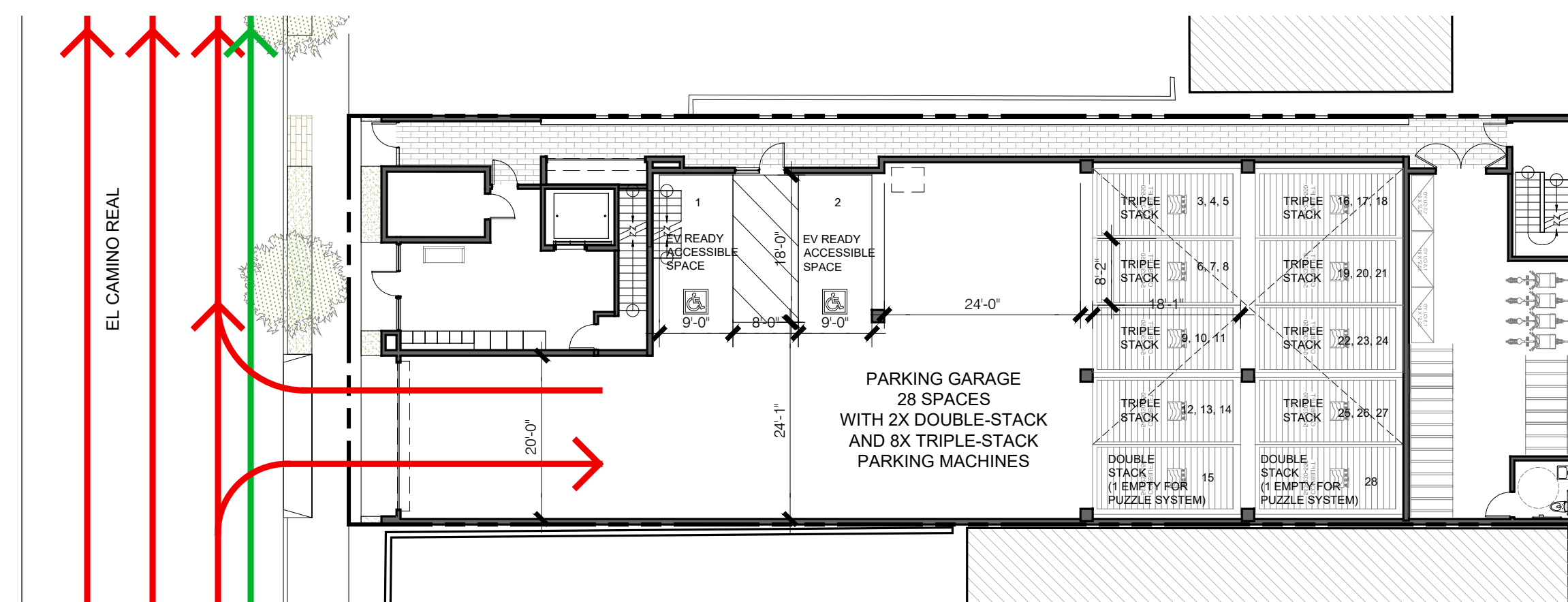
 PEDESTRIAN PATH
 BICYCLE PATH
 VEHICULAR PATH



3 PEDESTRIAN / BICYCLE CIRCULATION

3

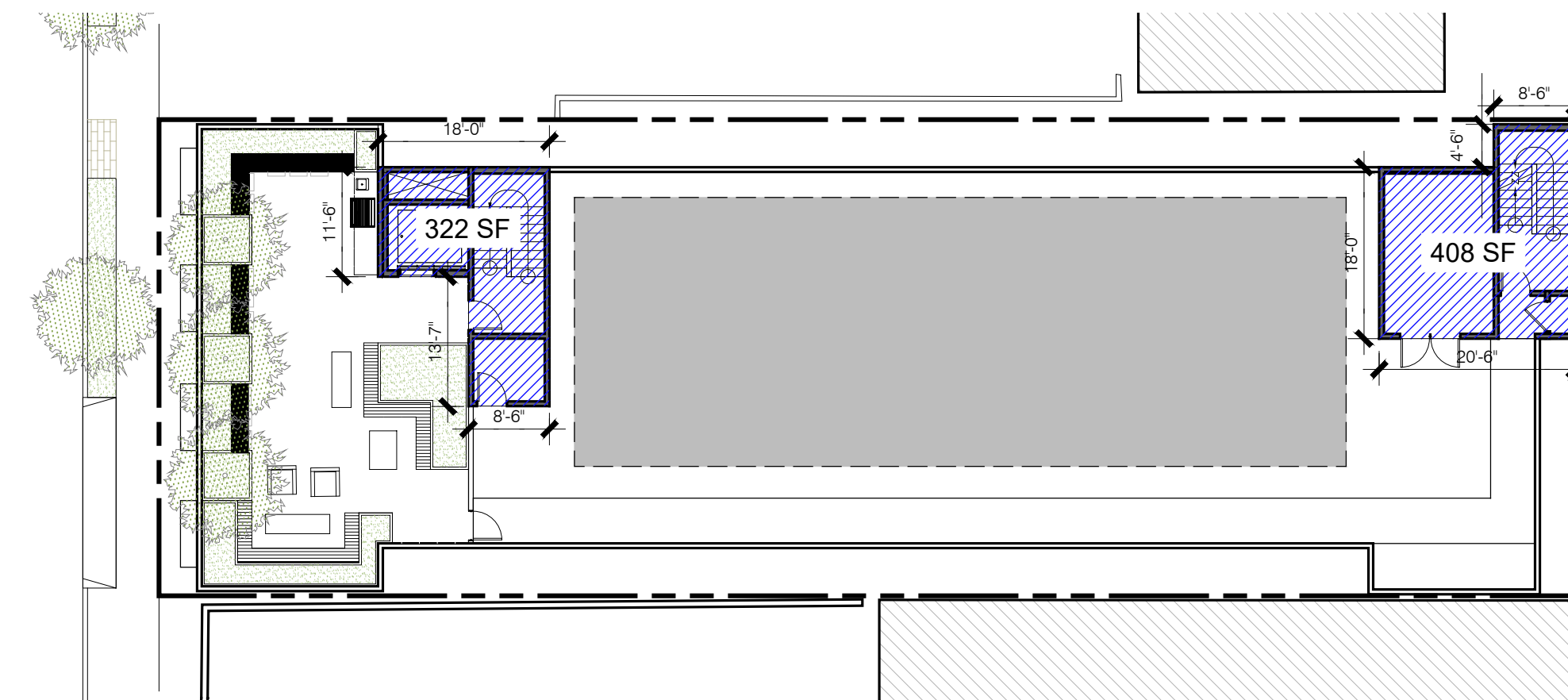
1/16" = 1'-0" @ 24X36 1/32" = 1'-0" @ 11X17



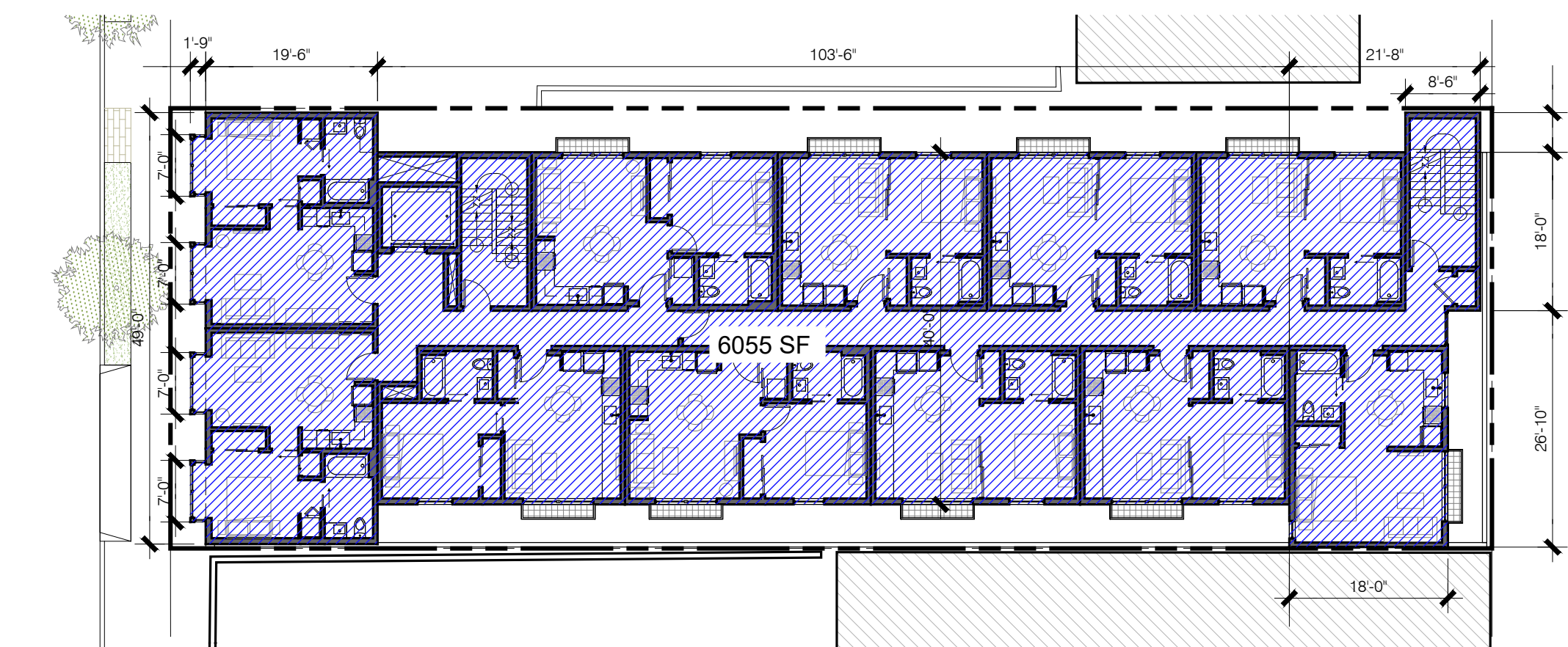
2 PARKING & VEHICULAR CIRCULATION

2

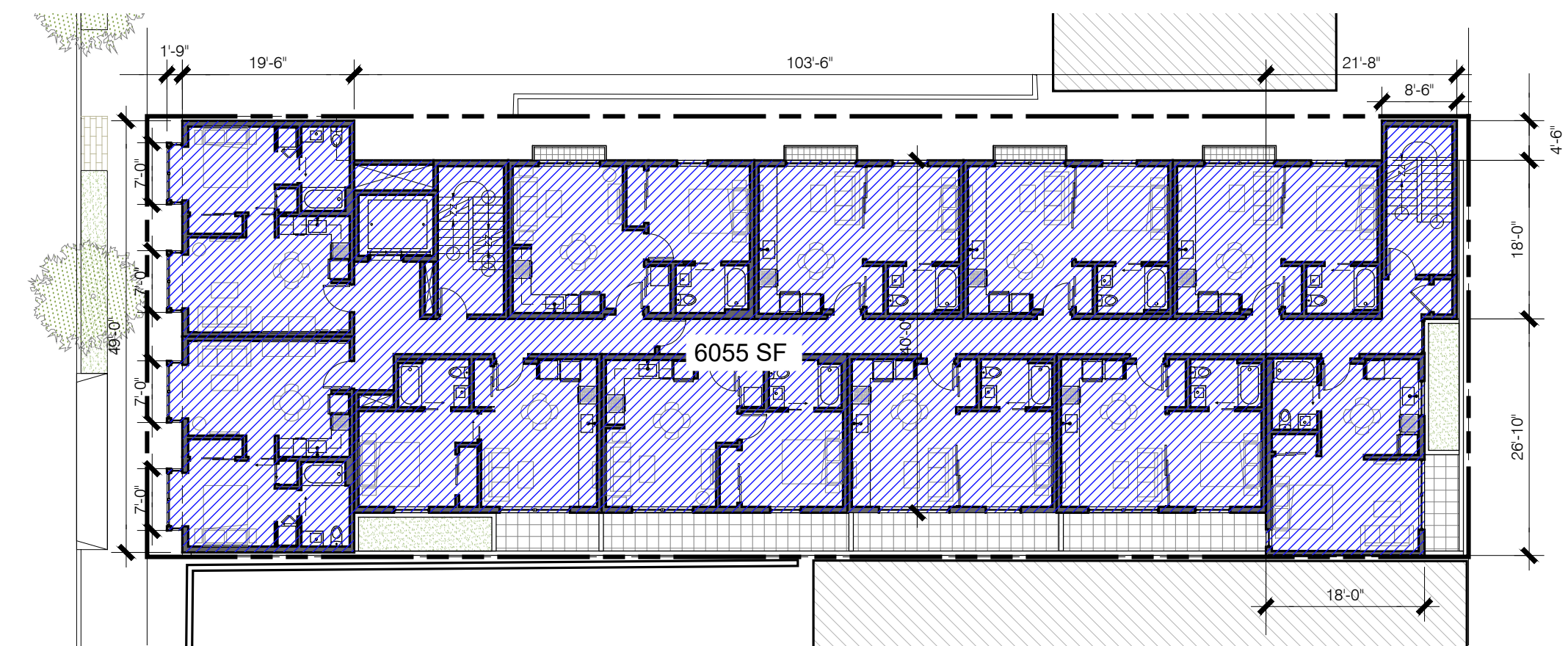
1/16" = 1'-0" @ 24X36 1/32" = 1'-0" @ 11X17



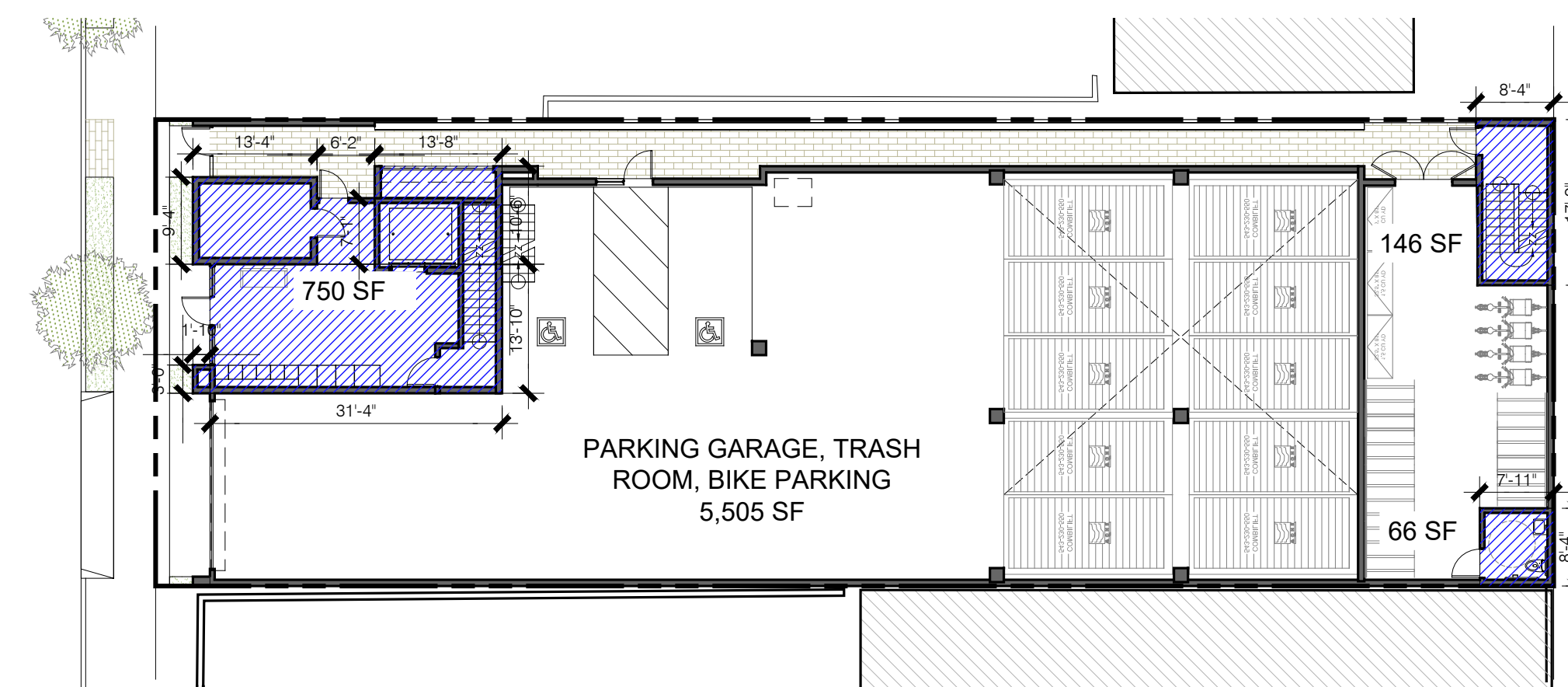
ROOF



LEVELS 3-5



LEVEL 2



GROUND LEVEL

1 FAR DIAGRAMS

1

1/16" = 1'-0" @ 24X36 1/32" = 1'-0" @ 11X17

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

**3265
EL CAMINO
REAL**

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

PROJECT DIAGRAMS

A0.4

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

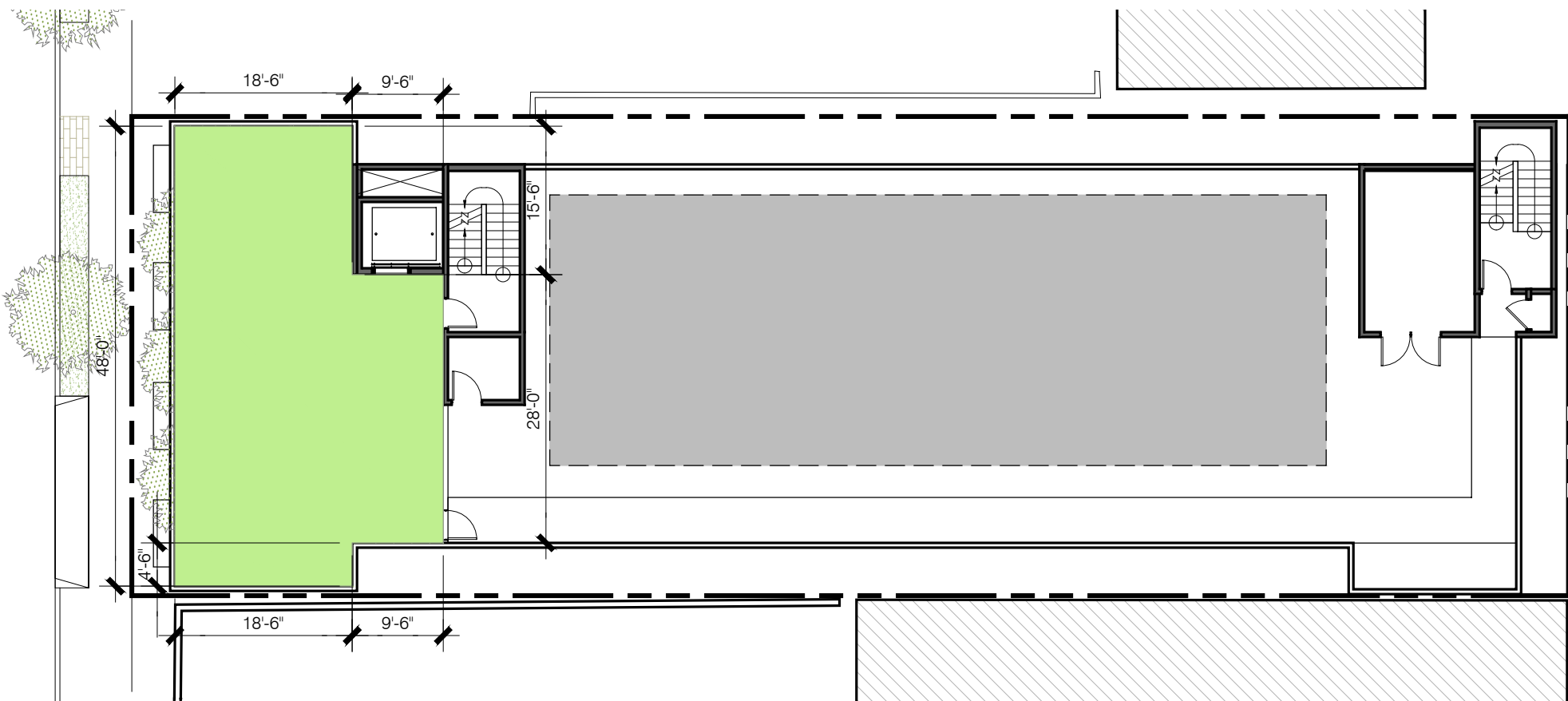
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

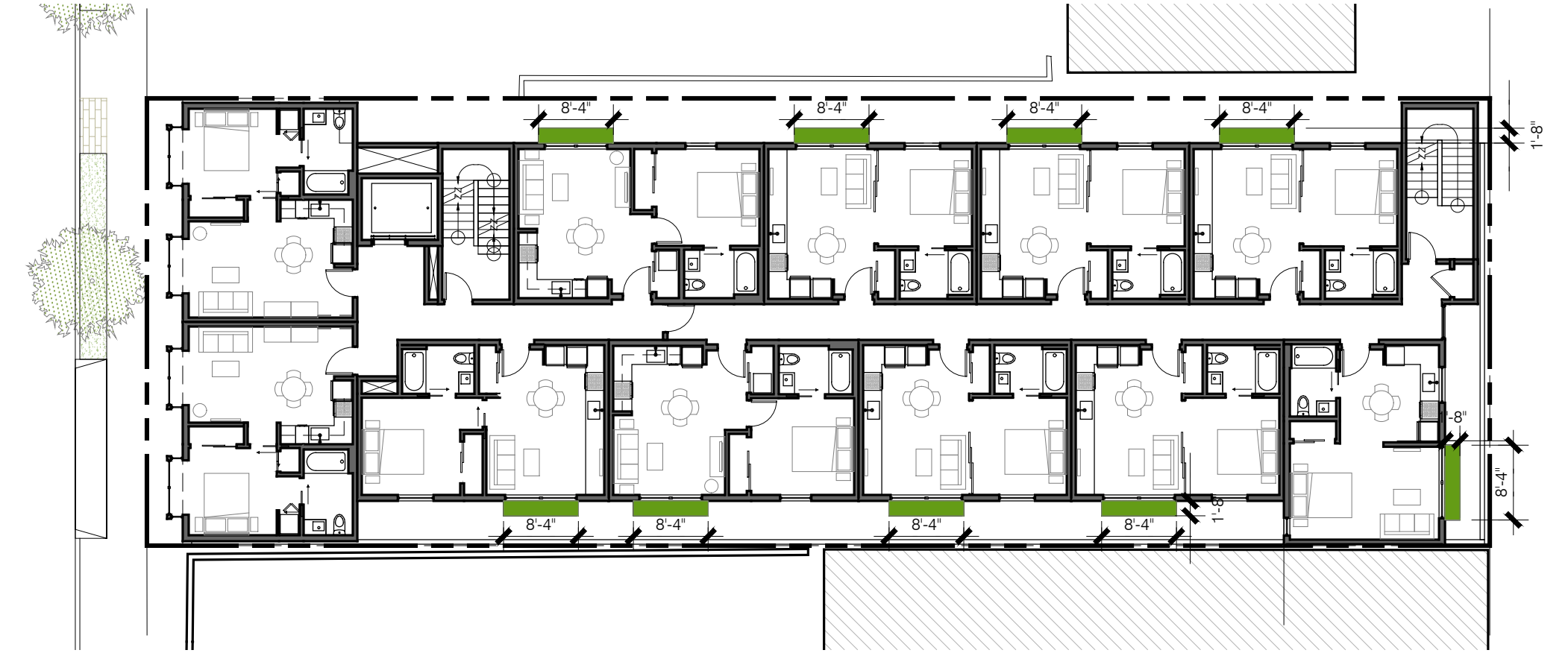
SHEET:

PROJECT
DIAGRAMS

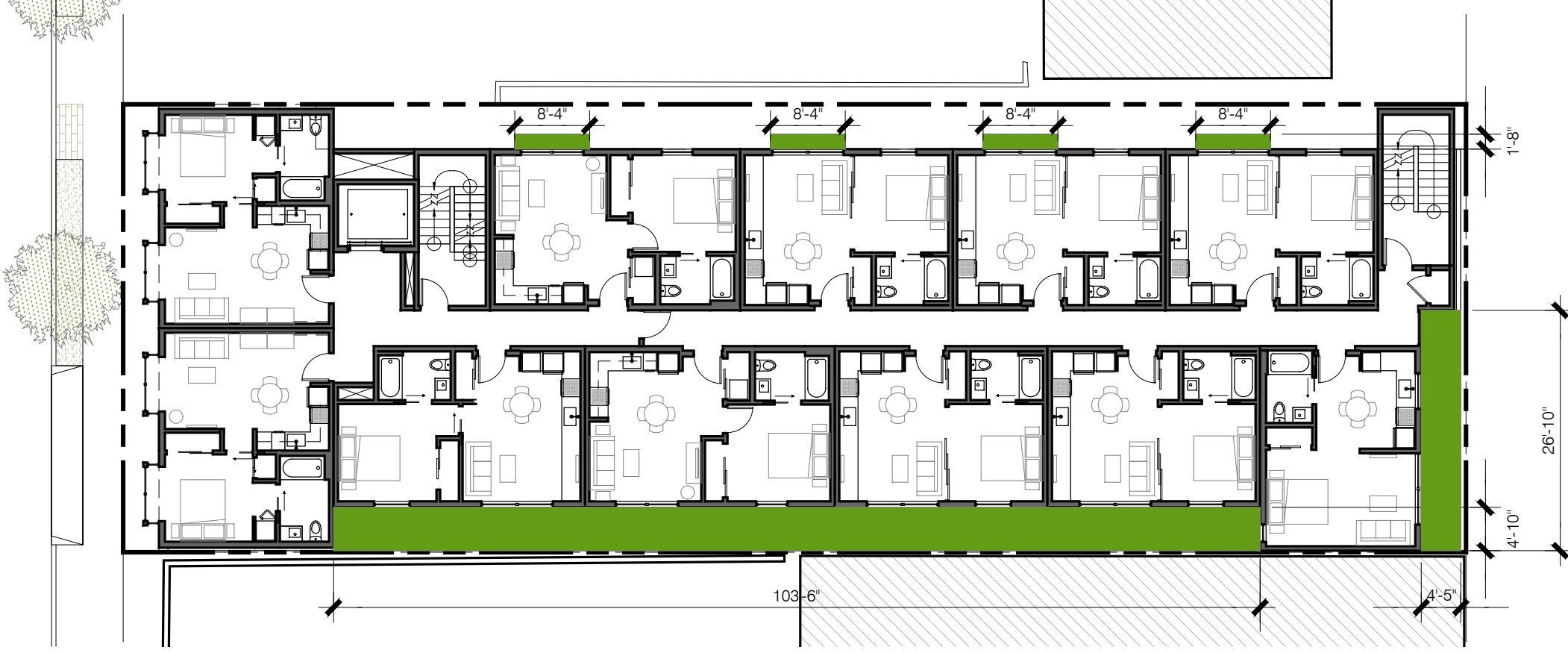
A0.5



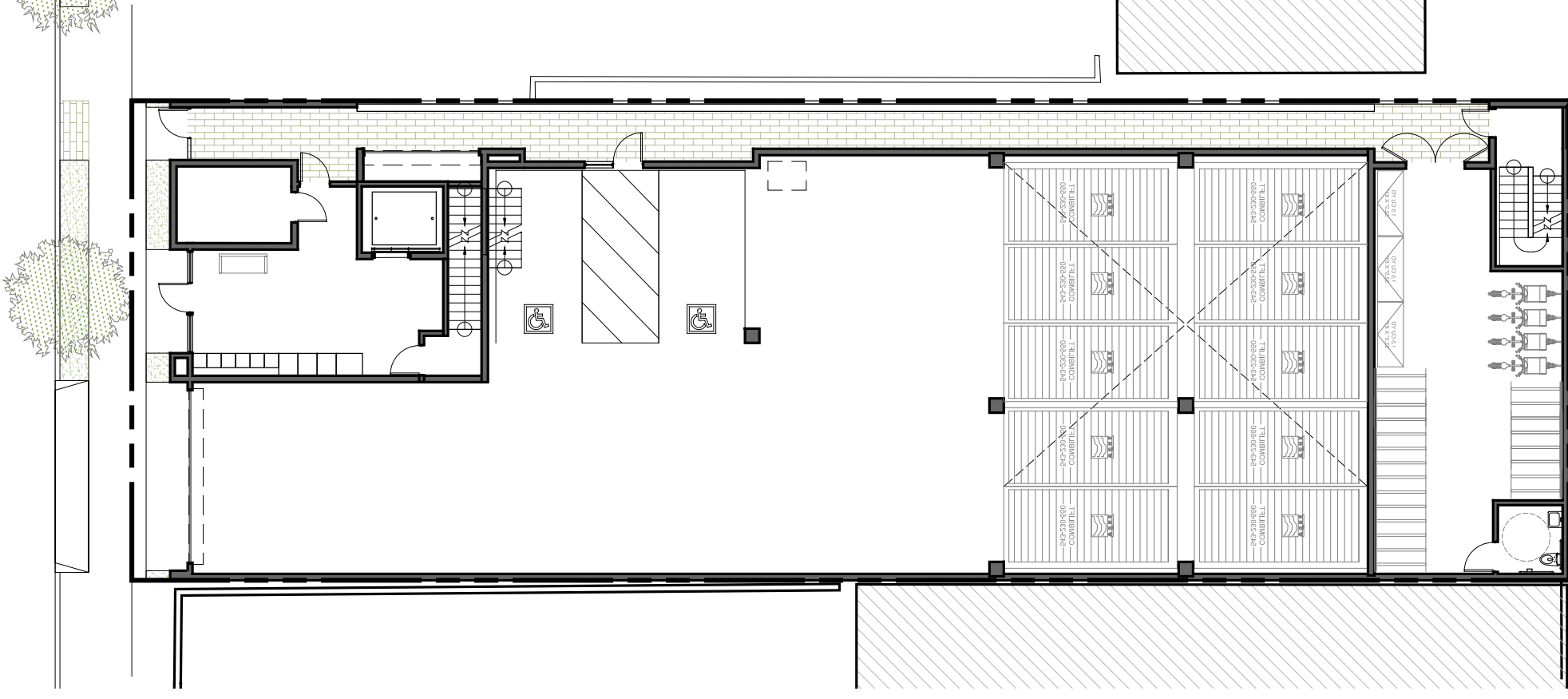
ROOF



LEVELS 3-5



LEVEL 2



GROUND LEVEL

OPEN SPACE TABLE			
	AREA / PER	#	TOTAL
ROOF DECK	1,155	1	1,155
TOTAL USABLE OPEN SPACE			1,155
NON-QUALIFYING OPEN SPACE			
LEVEL 2 PATIOS (AVG)		98	490
JULIET BALCONIES		14	434
TOTAL LANDSCAPE/OPEN SPACE			2,079

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

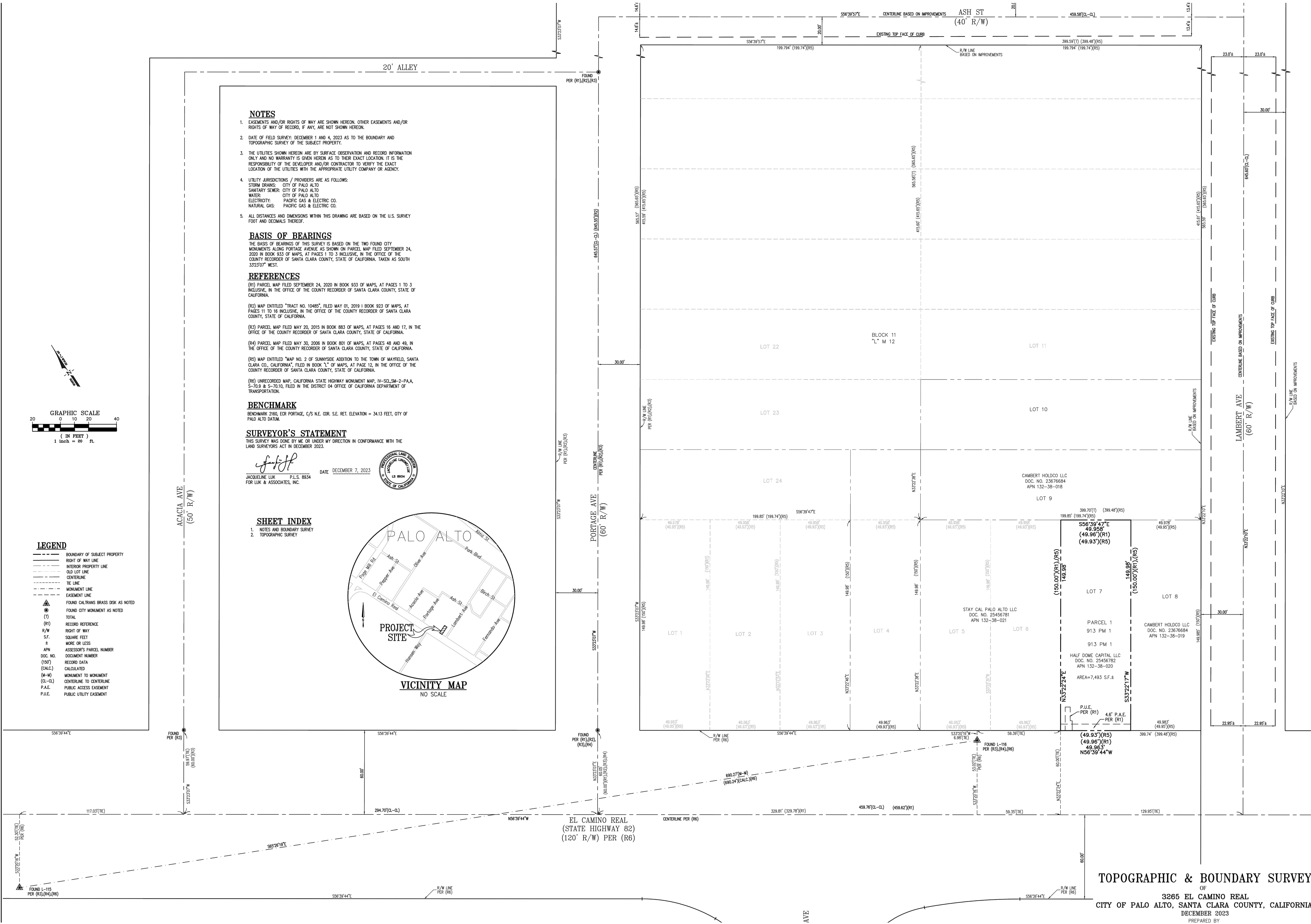
SHEET:

EXISTING
CONDITIONS

TOPOGRAPHIC & BOUNDARY SURVEY

OF
3265 EL CAMINO REAL
CITY OF PALO ALTO, SANTA CLARA COUNTY, CALIFORNIA
DECEMBER 2023
PREPARED BY

A1.0



EXISTING CONDITIONS

3/64" = 1'-0" @ 24X36 3/128" = 1'-0" @ 11X17

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

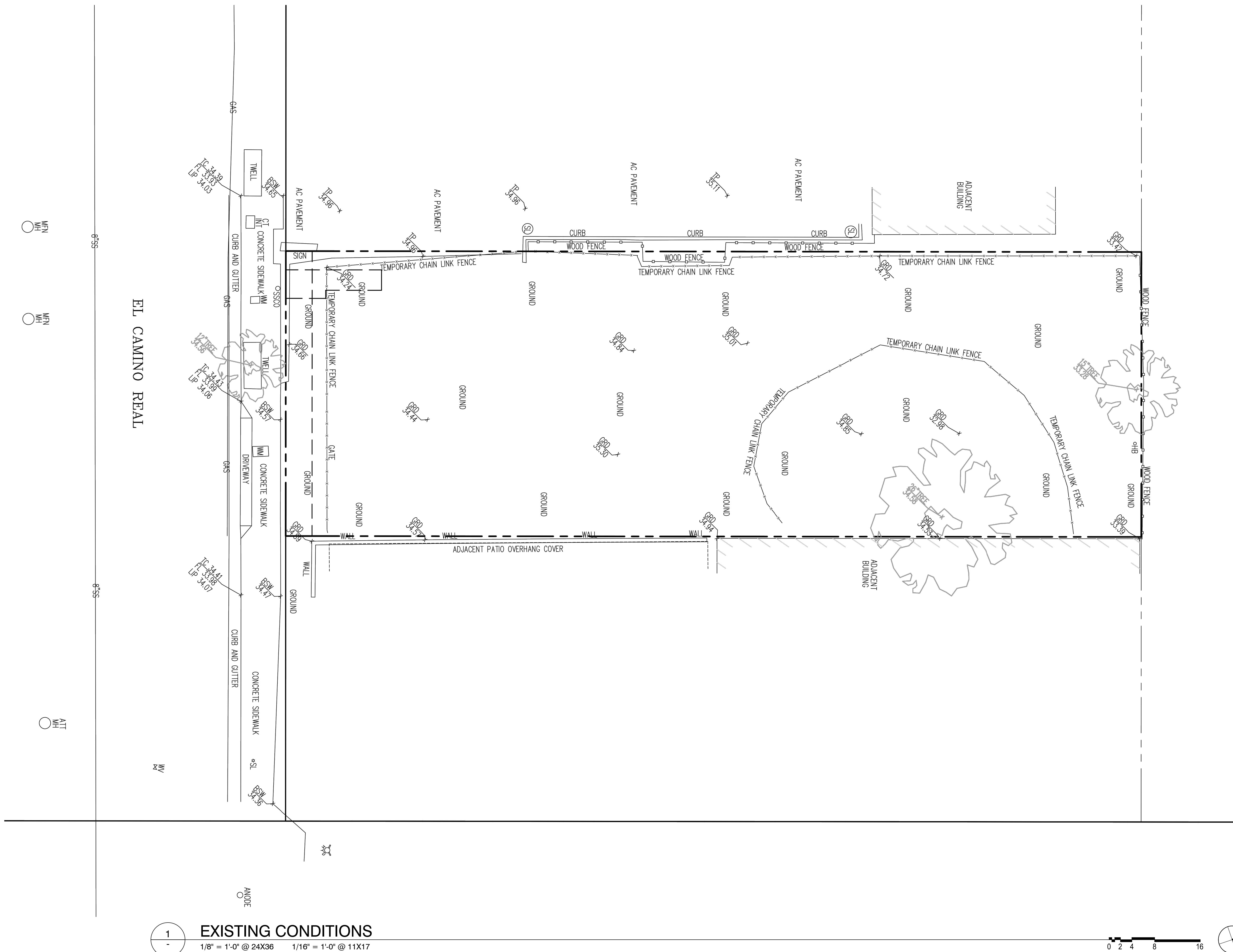
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

EXISTING CONDITIONS

A1.1



3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

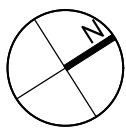
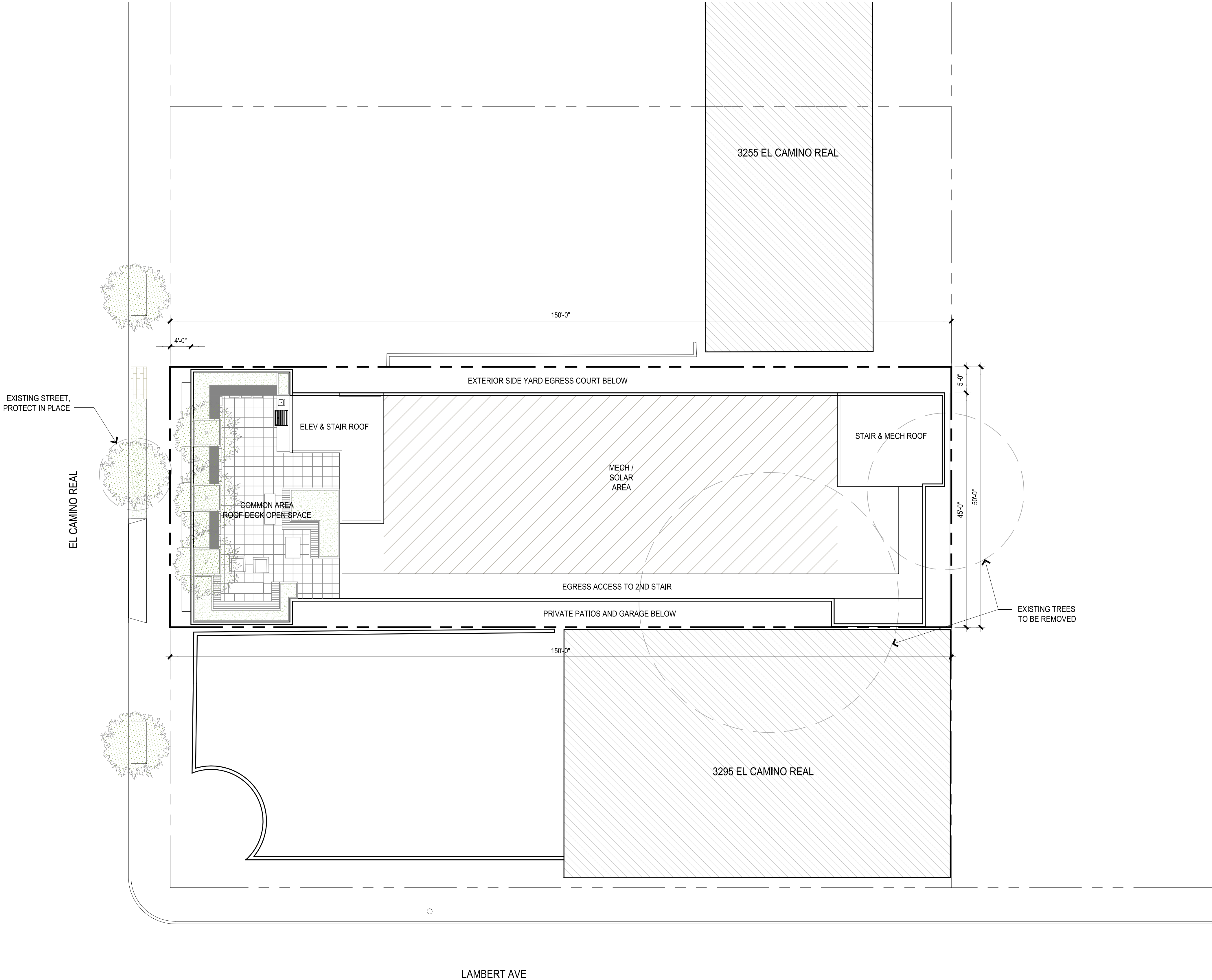
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

PLAN AT
SITE PLAN

A2.0



Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

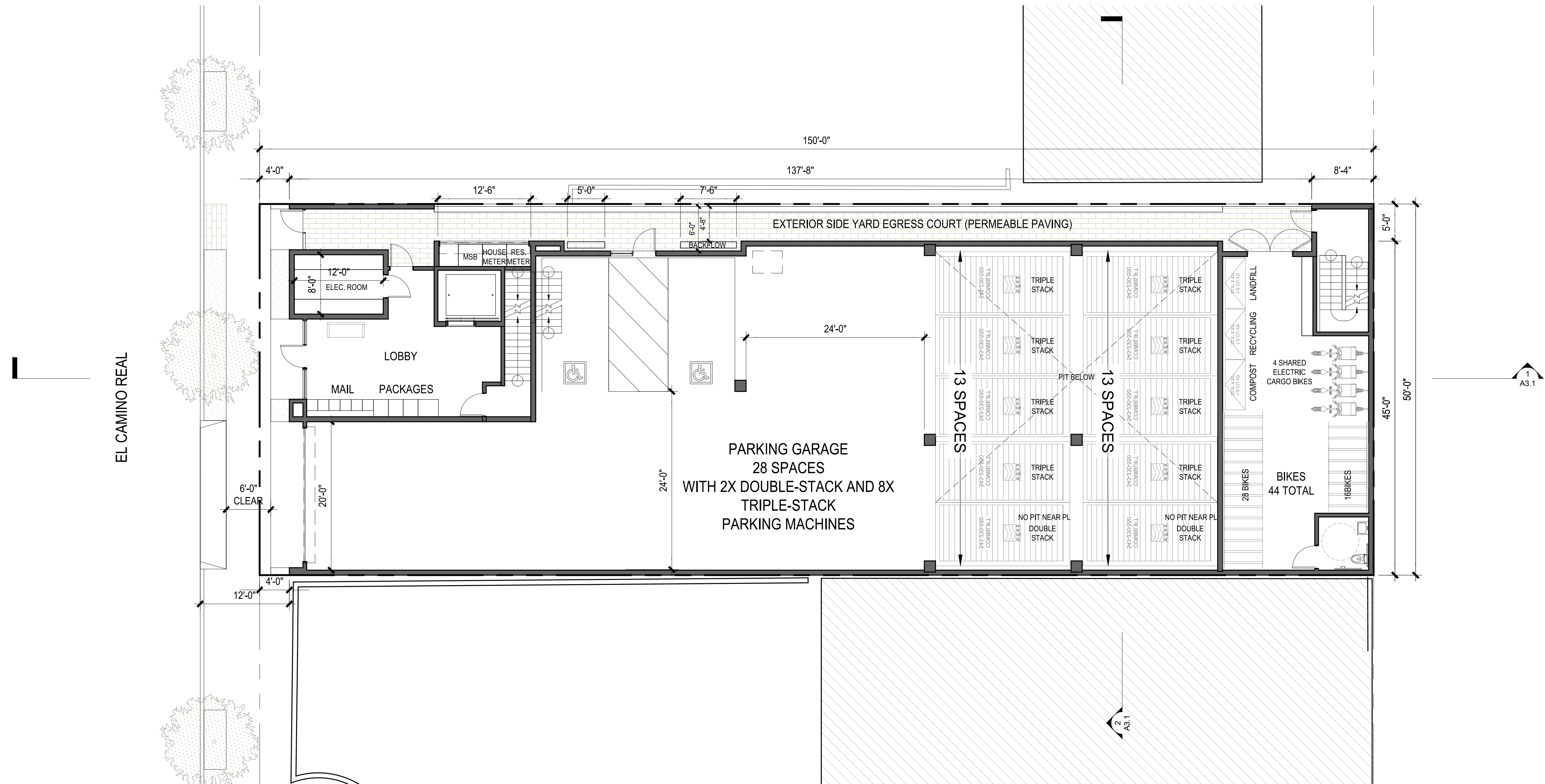
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

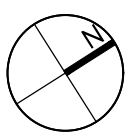
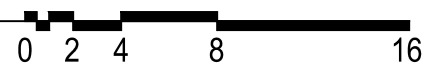
SHEET:

PLAN AT GROUND LEVEL

A2.1



1 PLAN AT GROUND FLOOR



3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

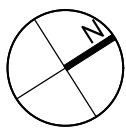
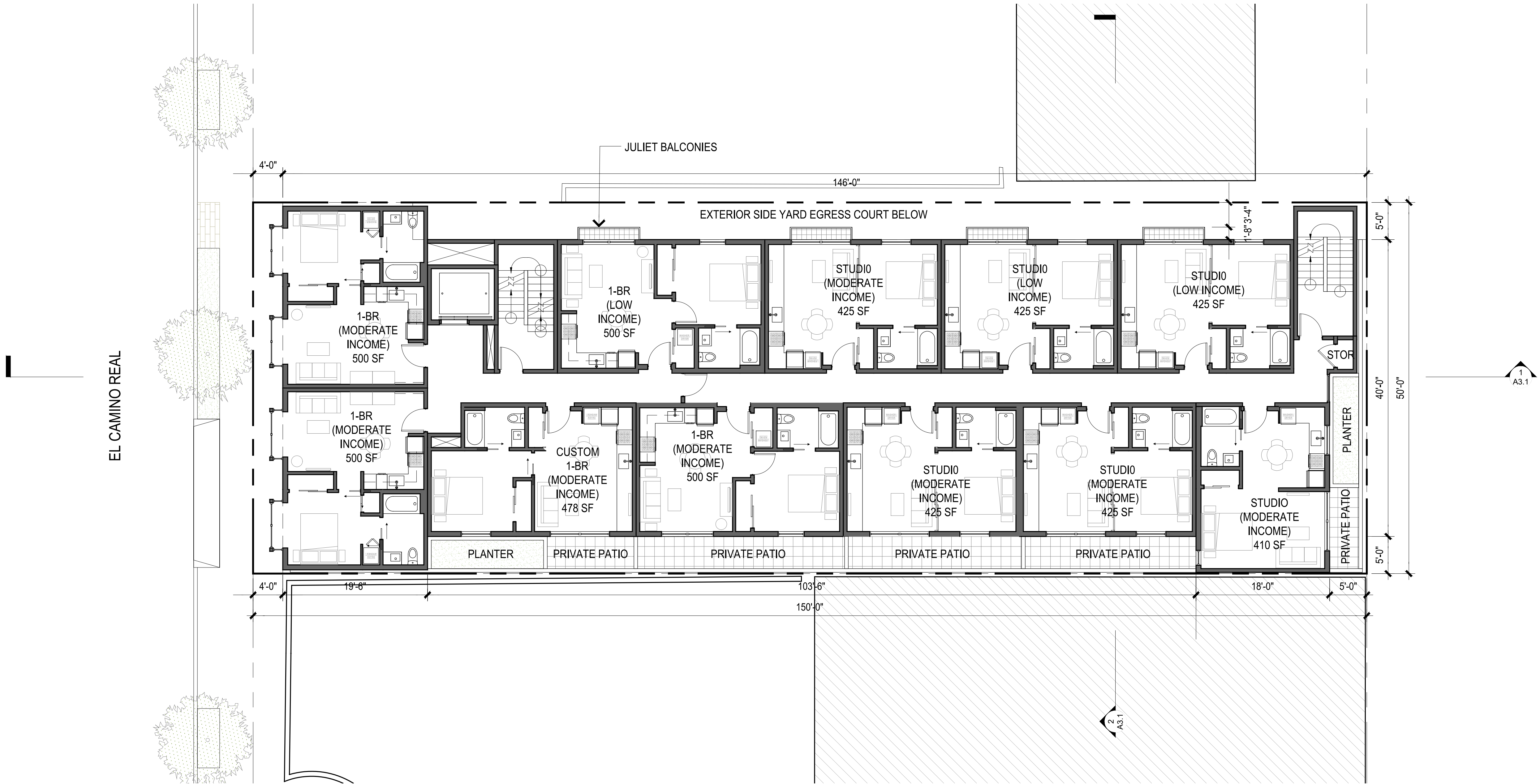
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

PLAN AT
LEVEL 2

A2.2



3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

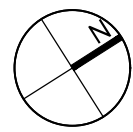
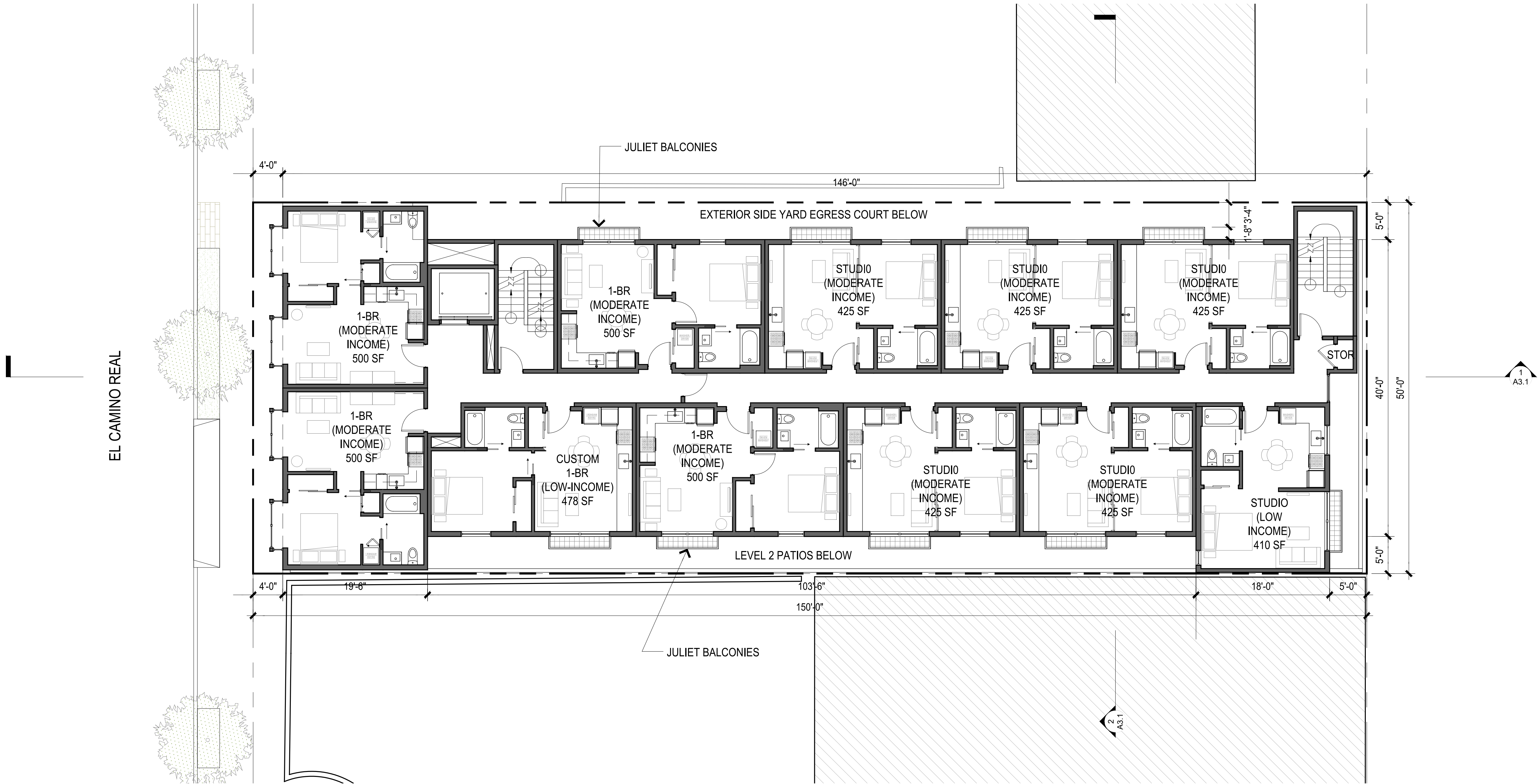
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

PLAN AT
LEVELS 3-5

A2.3



3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

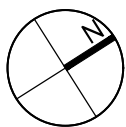
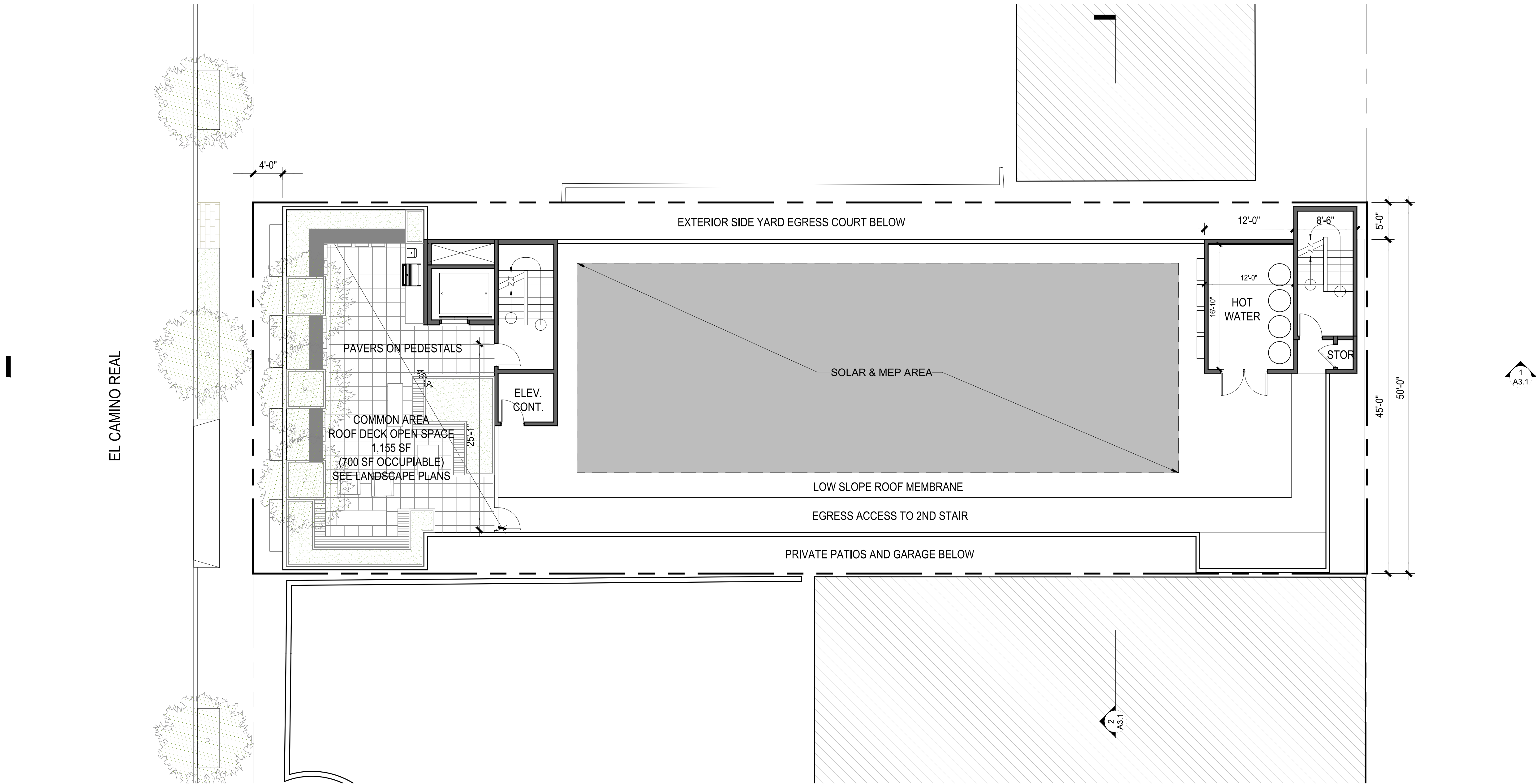
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

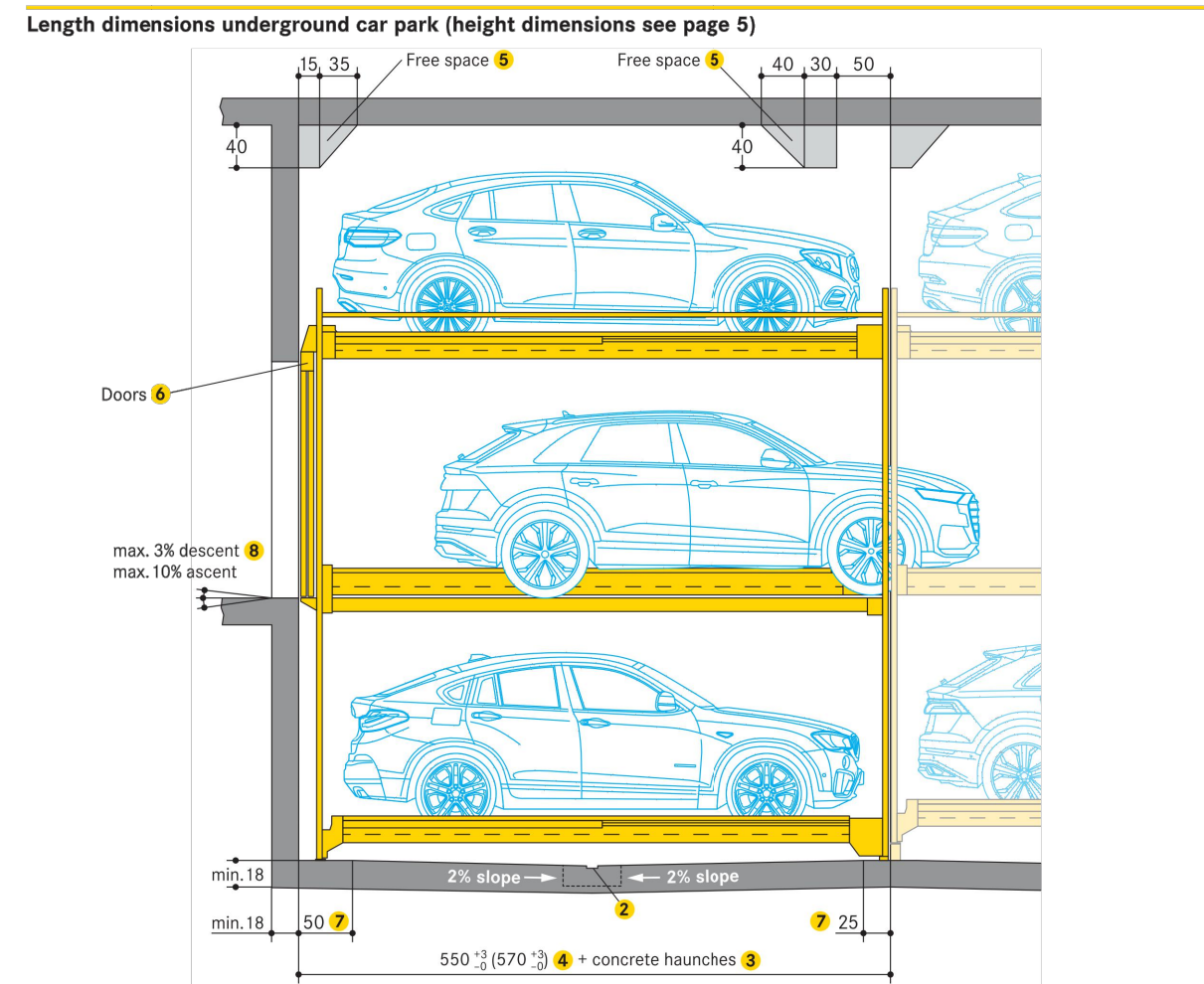
JOB: 2226

SHEET:

PLAN AT
ROOF LEVEL

A2.4

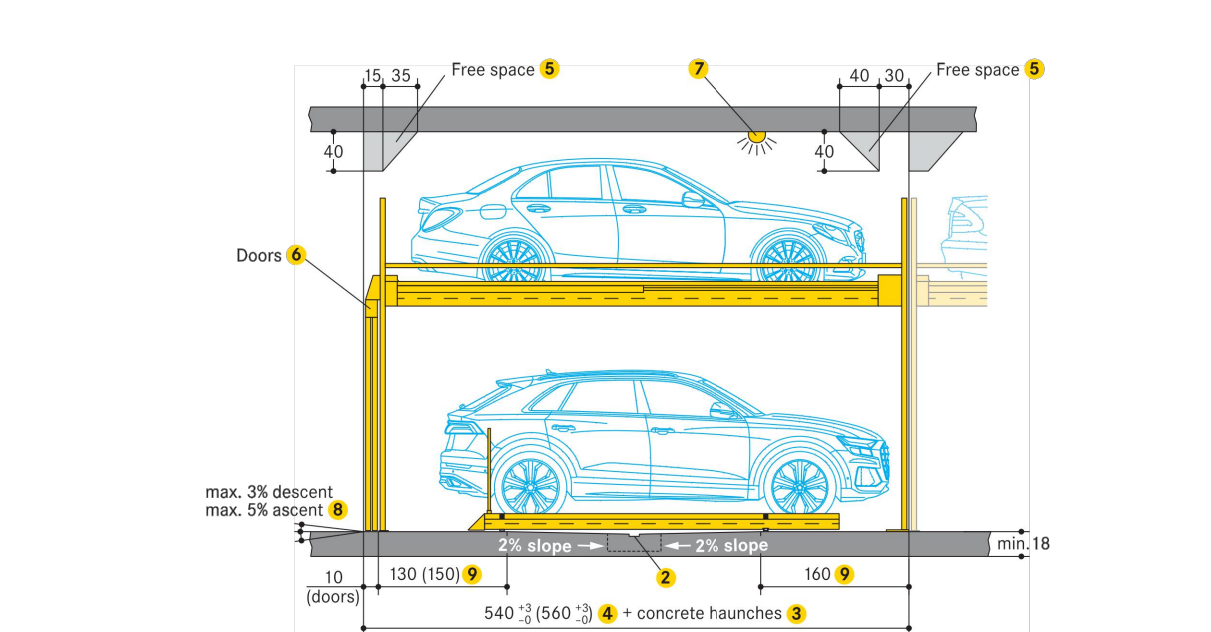




- | | |
|---|--|
| <ul style="list-style-type: none"> Increasing of platform load at extra cost Drainage channels (performed by the customer): <ul style="list-style-type: none"> • 50 mm wide x 10 mm deep • in case of installation of a pump, it is necessary to comply with the drainage system specified by the pump manufacturer Chairs and/or concrete haunches (performed by the customer): <ul style="list-style-type: none"> • not allowed along the pit floor-to-wall joints • should channels or undercuts be necessary, the system width must be increased by 100 mm 500 mm vehicle length – 550 mm pit depth (including doors) <ul style="list-style-type: none"> • 500 mm vehicle length – 570 mm pit depth (including doors) • pit depth 525 mm + pit length + 10 cm • pit depth 560 mm + pit length + 20 cm | <ul style="list-style-type: none"> Free space: <ul style="list-style-type: none"> • please ask Wöhr for the dimension sheets Doors (see page 1/12) <ul style="list-style-type: none"> • In this area, 60° of downward/upward slope in longitudinal and cross direction For above ground garages with a slope, a drainage channel in the driveway is recommended |
|---|--|
- Dimensions**

Dimensions and tolerances are the minimum, finished dimensions tolerances must be taken into consideration

all dimensions are given in cm



- | | |
|--|---|
| <p>1 Increasing of platform load at extra cost</p> <p>2 Drainage channels (performed by the customer)</p> <p>Channels or underlayment concrete haunches performed by the customer</p> <ul style="list-style-type: none"> - not allowed along the floor-to-wall joints - should be done underneath the structure, the system width needs to be reduced or the pit needs to be widened <p>3 500 mm vehicle length = 540 cm installation length
620 cm vehicle length = 560 cm installation length (including doors)</p> <p>4 Free spaces:
please see WÖHR for the dimension sheets</p> | <p>5 Doors (see page 7/8)</p> <p>6 Flashing light</p> <p>7 For above ground grates with a slope, a drainage channel in the driveway is recommended</p> <p>8 In this area, 0.3% of downward/upward slope in longitudinal and cross direction</p> <p>Dimensions</p> <ul style="list-style-type: none"> - all dimensions specified are the minimum, finished dimensions - tolerances must be taken into consideration - all dimensions are given in cm |
|--|---|

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

**3265
EL CAMINO
REAL**

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

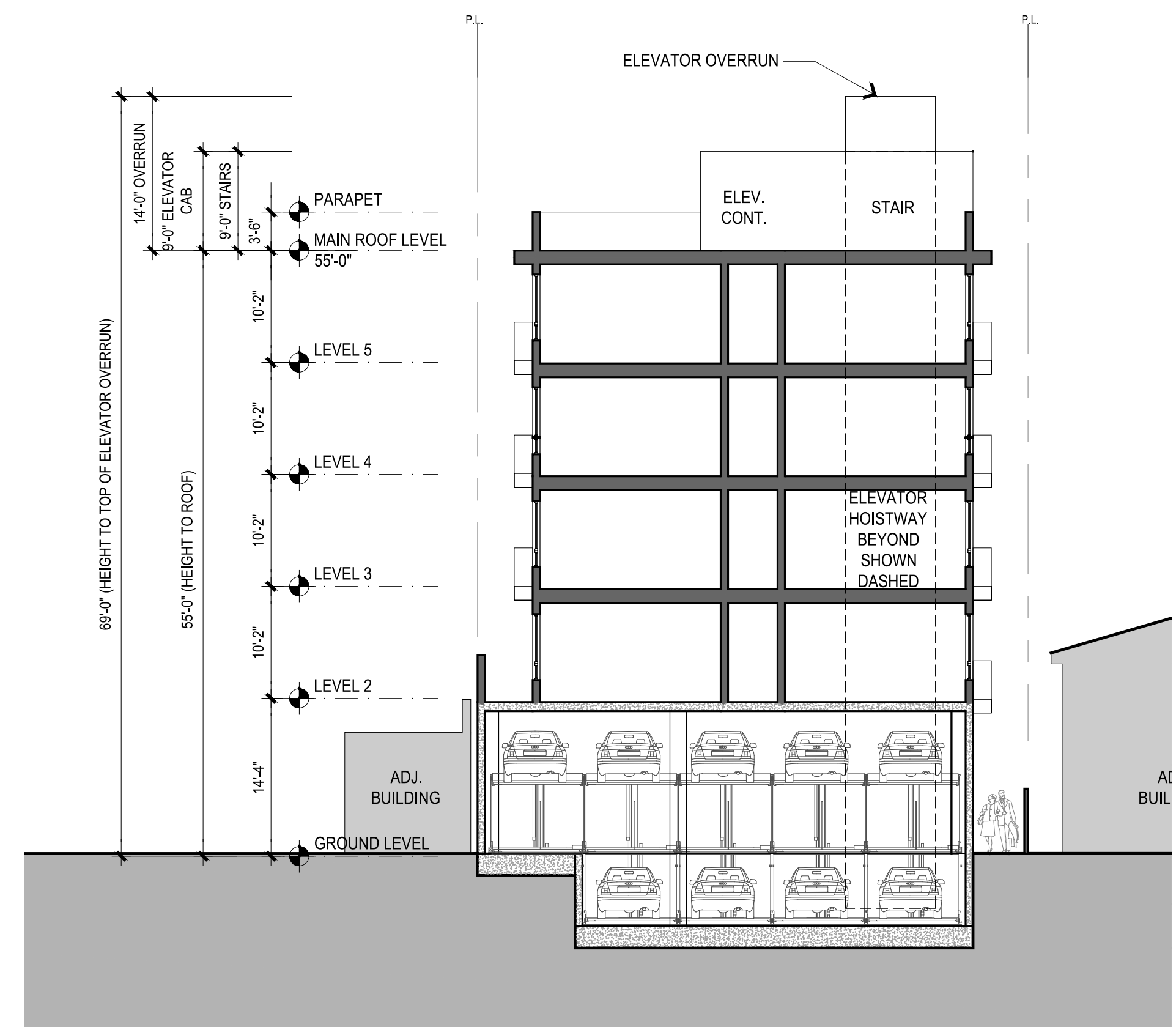
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

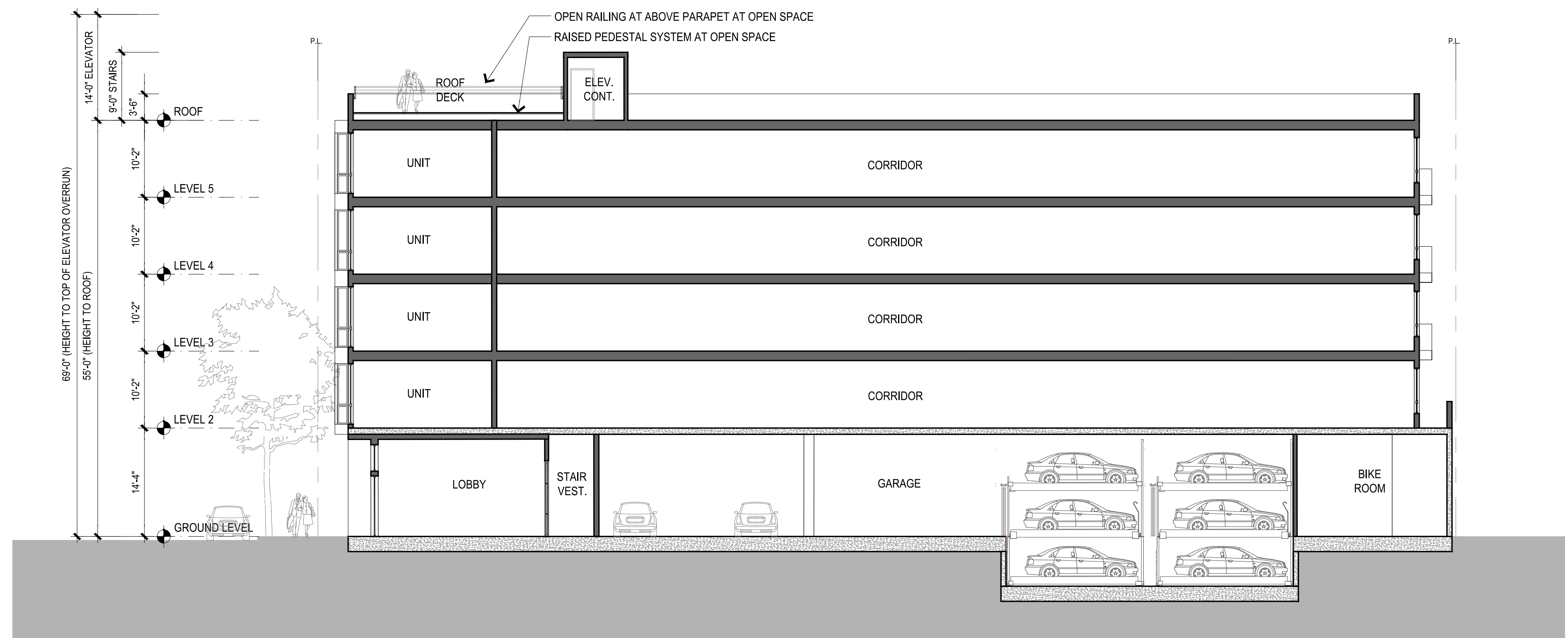
SHEET:

BUILDING SECTIONS

A3.1



2 BUILDING SECTION LOOKING SOUTH
3/32" = 1'-0" @ 24X36 3/64" = 1'-0" @ 11X17



BUILDING SECTION LOOKING WEST

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

BUILDING
ELEVATION

A3.2



1
-
WEST ELEVATION
3/32" = 1'-0" @ 24X36 3/64" = 1'-0" @ 11X17

0 2 4 8 16



1
-
SOUTH ELEVATION / STREET STRIP
3/32" = 1'-0" @ 24X36 3/64" = 1'-0" @ 11X17

0 2 4 8 16

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

BUILDING
ELEVATION

A3.3



1
-
EAST ELEVATION
3/32" = 1'-0" @ 24X36 3/64" = 1'-0" @ 11X17

0 2 4 8 16



1
-
NORTH ELEVATION
3/32" = 1'-0" @ 24X36 3/64" = 1'-0" @ 11X17

0 2 4 8 16

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

CONCEPTUAL
RENDERING

A3.4



2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

**3265
EL CAMINO
REAL**

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

CONCEPTUAL
RENDERING

A3.5



2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

CONCEPTUAL
RENDERING

A3.6



3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

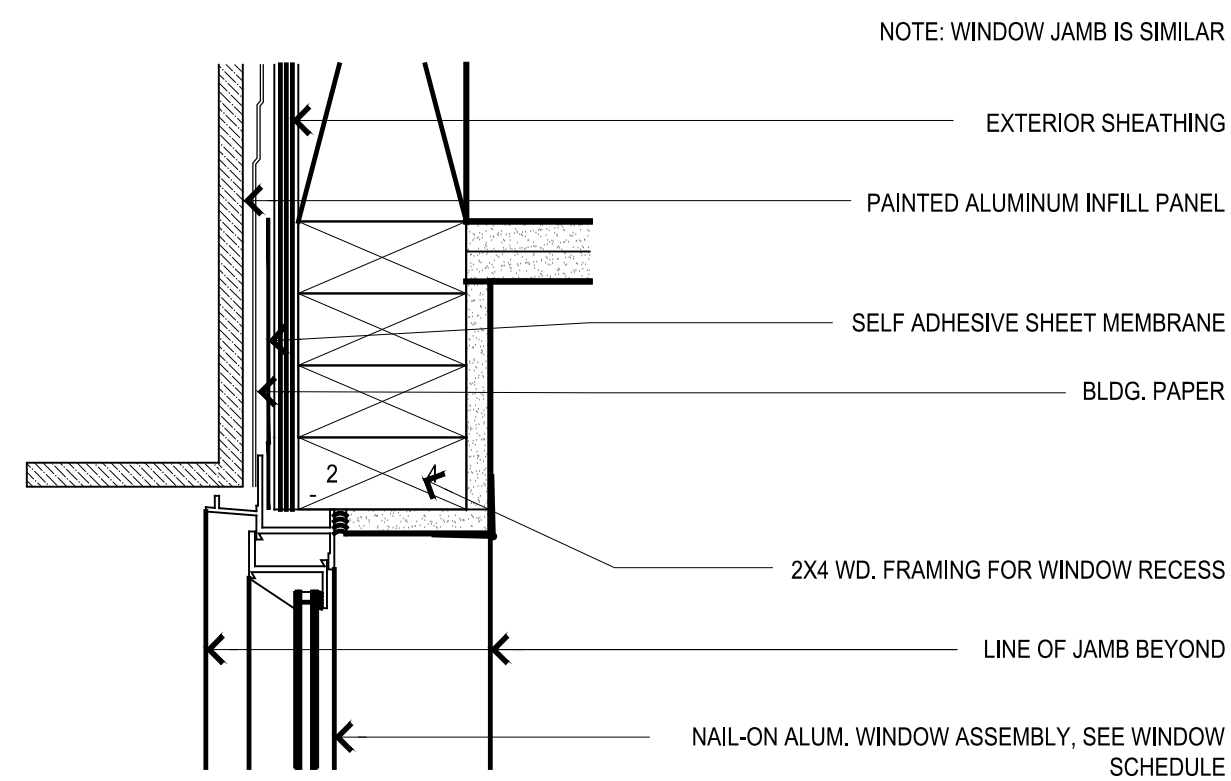
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

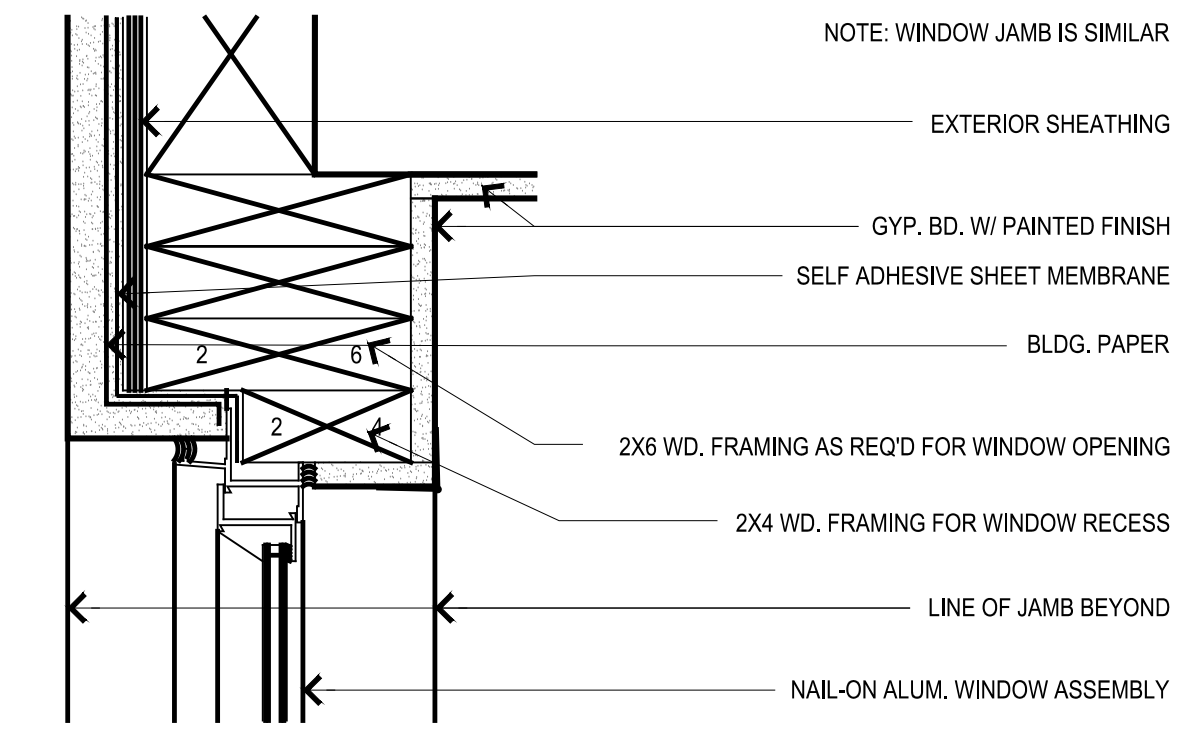
SHEET:

SCHEMATIC
DETAILS

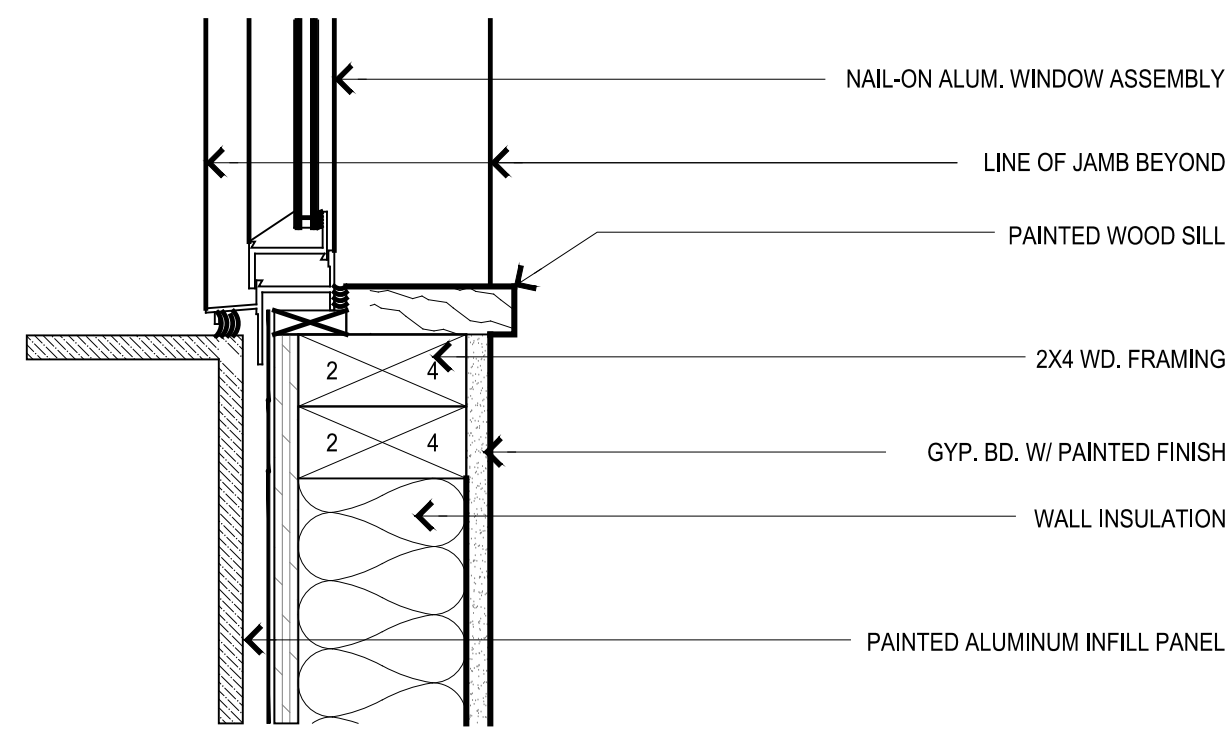
A4.1



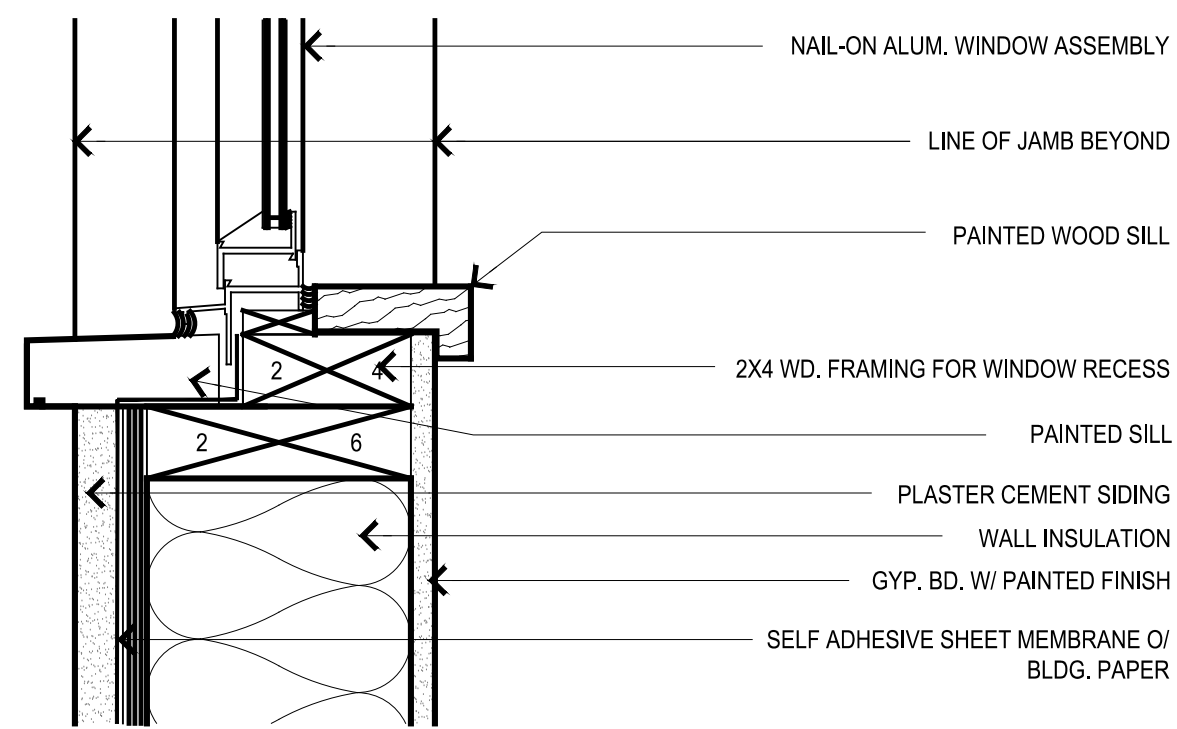
5
-
TYP. HEAD @ FILL PANEL
3"=1'-0"



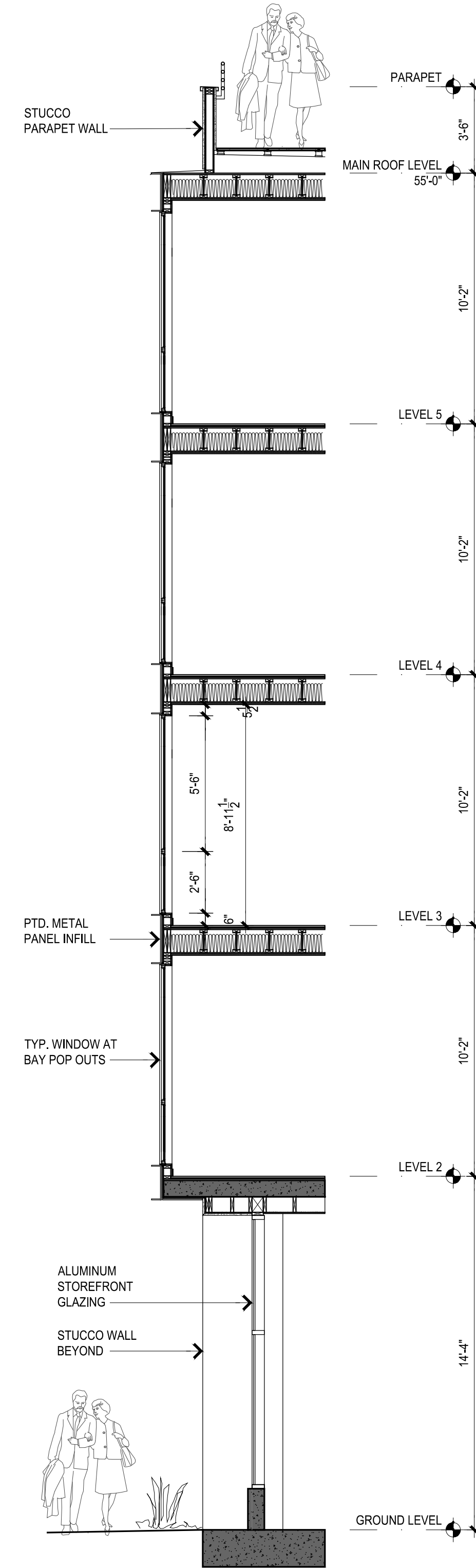
3
-
TYP. STUCCO HEAD / JAMB
3"=1'-0"



4
-
TYP. SILL AT FILL PANEL
3"=1'-0"



2
-
TYP. STUCCO SILL
3"=1'-0"



1
-
TYPICAL WALL SECTION AT SOUTH FACADE
1/4" = 1'-0" @ 24X36 1/8" = 1'-0" @ 11X17

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

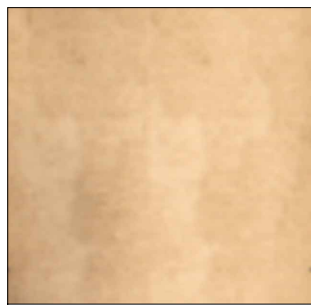
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

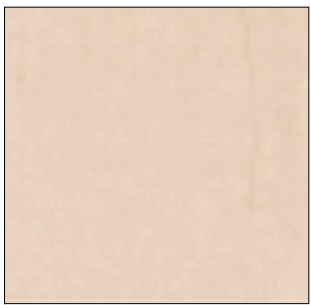
SHEET:

MATERIAL
BOARD

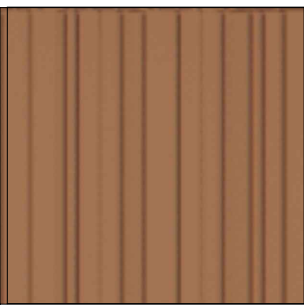
MAT



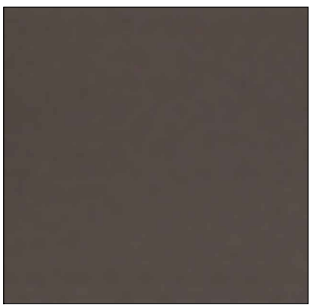
INTEGRAL
COLOR STUCCO



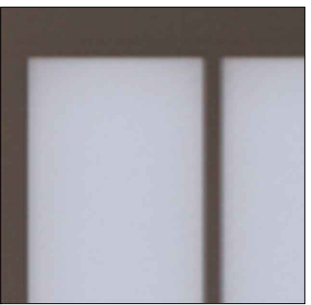
INTEGRAL
COLOR STUCCO



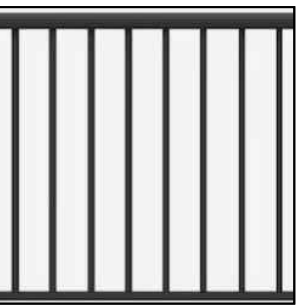
PAINTED
PANELING



METAL INFILL
PANELS



ALUMINUM
WINDOWS



METAL RAILING

ALUMINUM
WINDOW

INTEGRAL COLOR
STUCCO

METAL INFILL
PANELS

INTEGRAL COLOR
STUCCO

METAL PICKET
RAILING

PAINTED
PANELING



Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

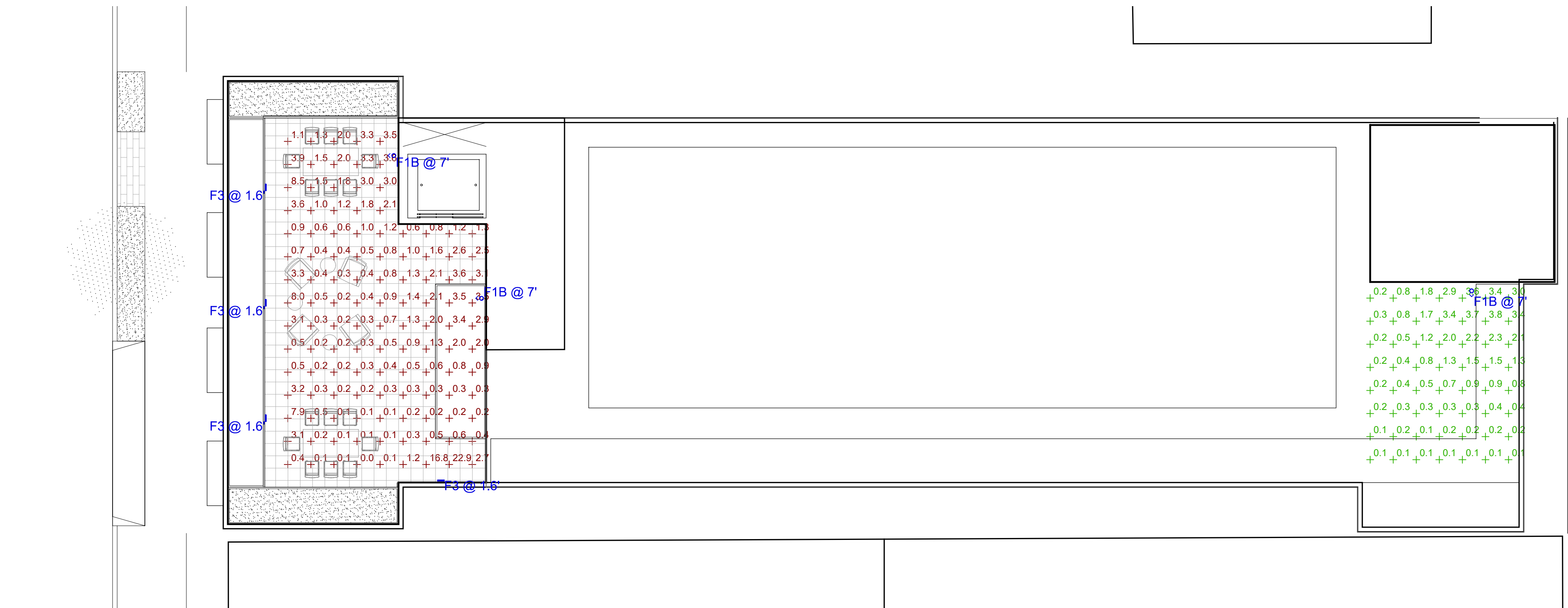
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

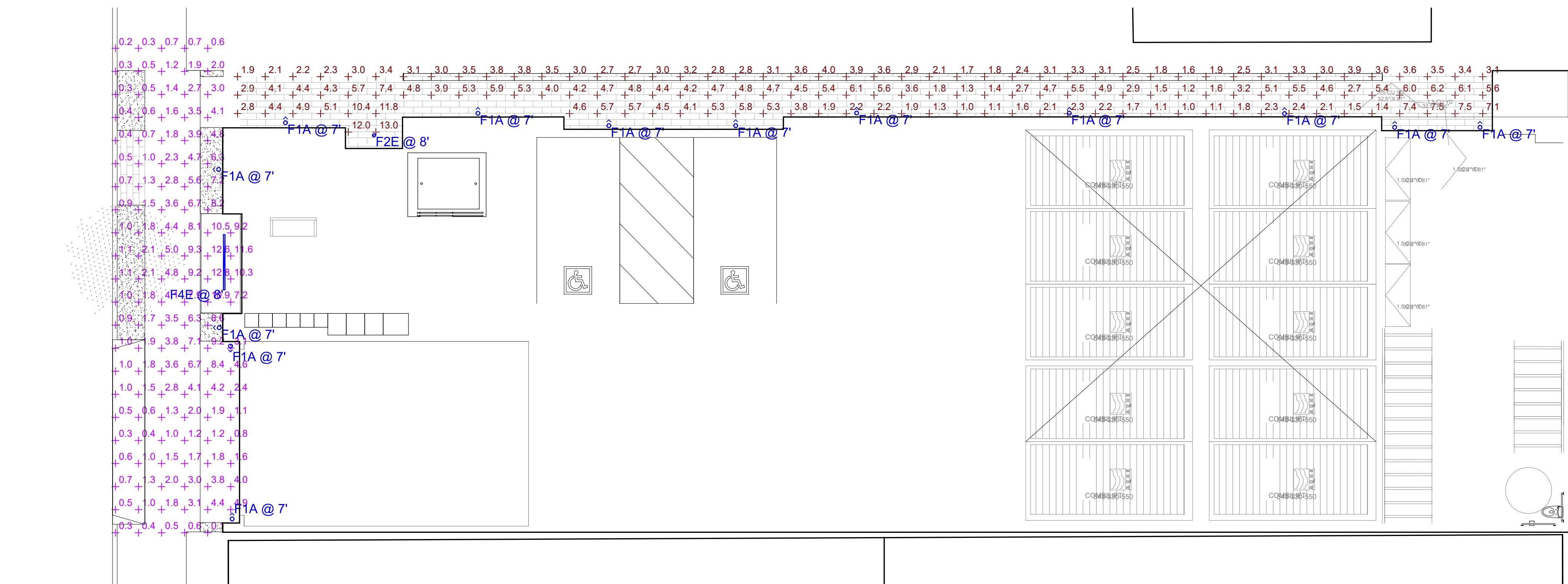
LIGHTING & PHOTOMETRIC PLAN

LT1.1



LIGHTING PLAN - ROOF

1/8" = 1'-0" @ 24X36 1/16" = 1'-0" @ 11X17

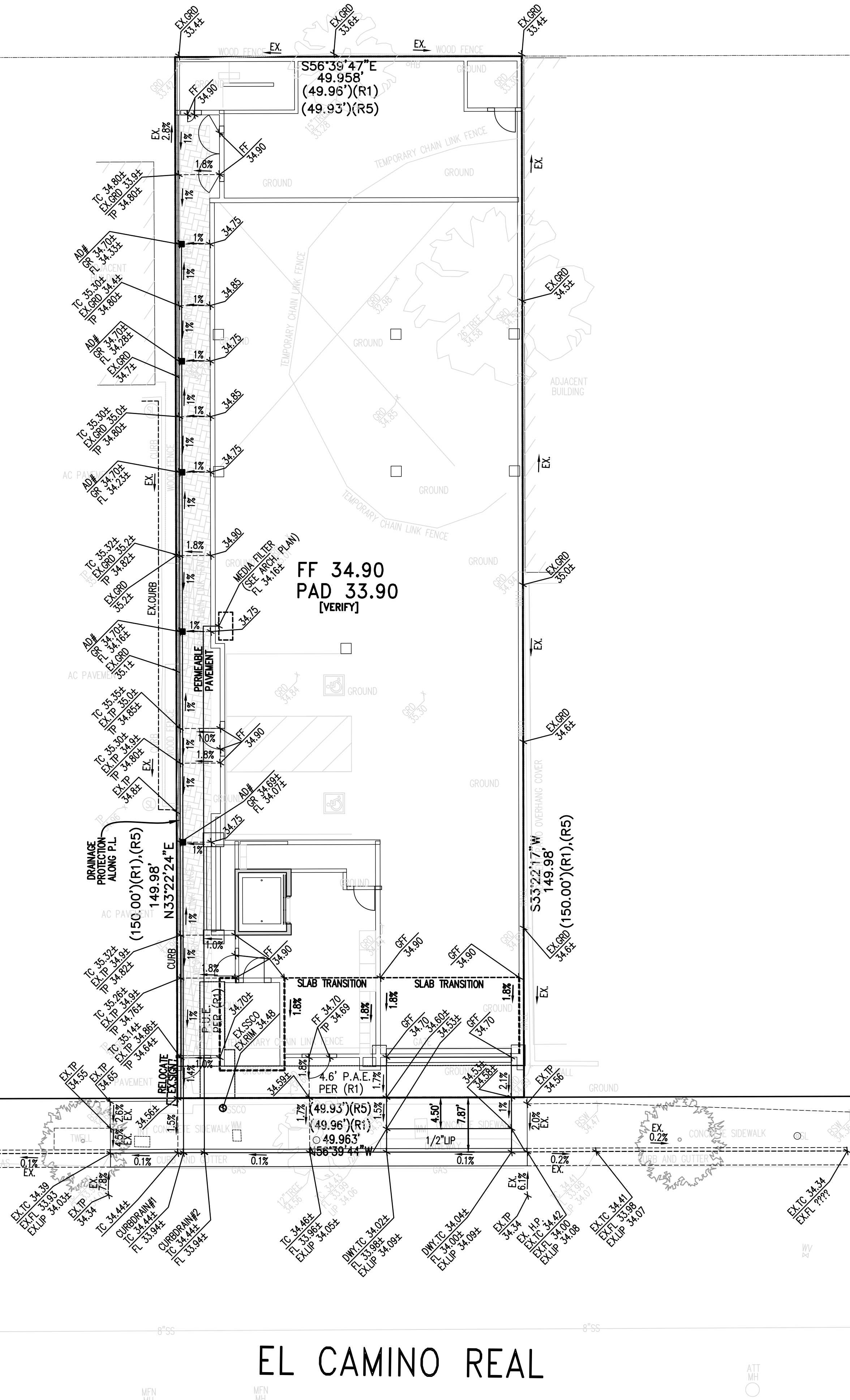
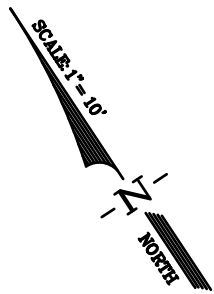
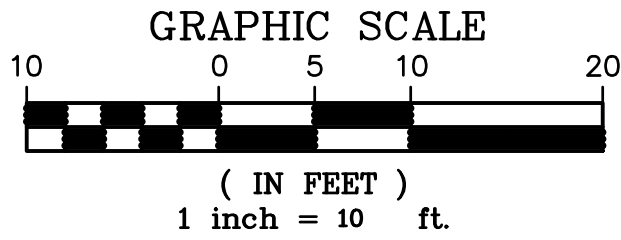


LIGHTING PLAN - GROUND LEVEL

$1/8" = 1'-0" @ 24 \times 36$ $1/16" = 1'-0" @ 11 \times 17$

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Building Entry-0'0" (Copy)	+	3.1 fc	12.8 fc	0.1 fc	128.0:1	31.0:1
Egress Path-0'0" (Copy)	+	3.8 fc	13.0 fc	1.0 fc	13.0:1	3.8:1
Roof stairs / door(Copy)	+	1.1 fc	3.8 fc	0.1 fc	38.0:1	11.0:1
Rooftop Patio-0'0" (Copy)	+	1.7 fc	22.9 fc	0.0 fc	N/A	N/A

Schedule									
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
	F1A	13	LIGMAN	UMV-30013-11W-T2-W30-01-120/277	Marvik 2 medium down light	4 LED 3000K - T2 wide	574	0.85	11
	F1B	3	LIGMAN	MV-30013-T4-W30-01-120/277	Marvik 2 medium down light	4 LED 3000K - T4 forward throw	597	0.85	11
	F2E	1	Lithonia Lighting	LDN4 30/10 LDHAR LED MVOLT G210 E10WCP (with an integral emergency battery)	4" aperture recessed downlight LEDN, 3000K, 1000LM, CLEAR, MATTE DIFFUSE REFLECTOR, 80CRI	3000K LED	922	0.85	10.58
	F3	4	Luminis Canada Inc.	SCENA step light # SN825-L1L5	Scena - Surface Square 8.5in	(5) Nichia NVSL1219F c/w Thomas Research-LED20W-24-C0700-XX @ 120.00V	556	0.85	12.2
	F4E	1	Alight Architectural Lighting	LIN 3 SP 6' LS 30 U HE F B D E TP (with an integral EM battery)	6' linear wet rated ceiling surface mount fixture under awning, Lino Slim LS HE	3000K LED	2132	0.82	28.5



TRACHTENBERG
ARCHITECTS

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

Luk and Associates
Civil Engineering
Land Planning
Land Surveying
738 Alfred Nobel Drive
Hercules, CA 94547
Phone (510) 724-3388
Fax (510) 724-3383

Seal:

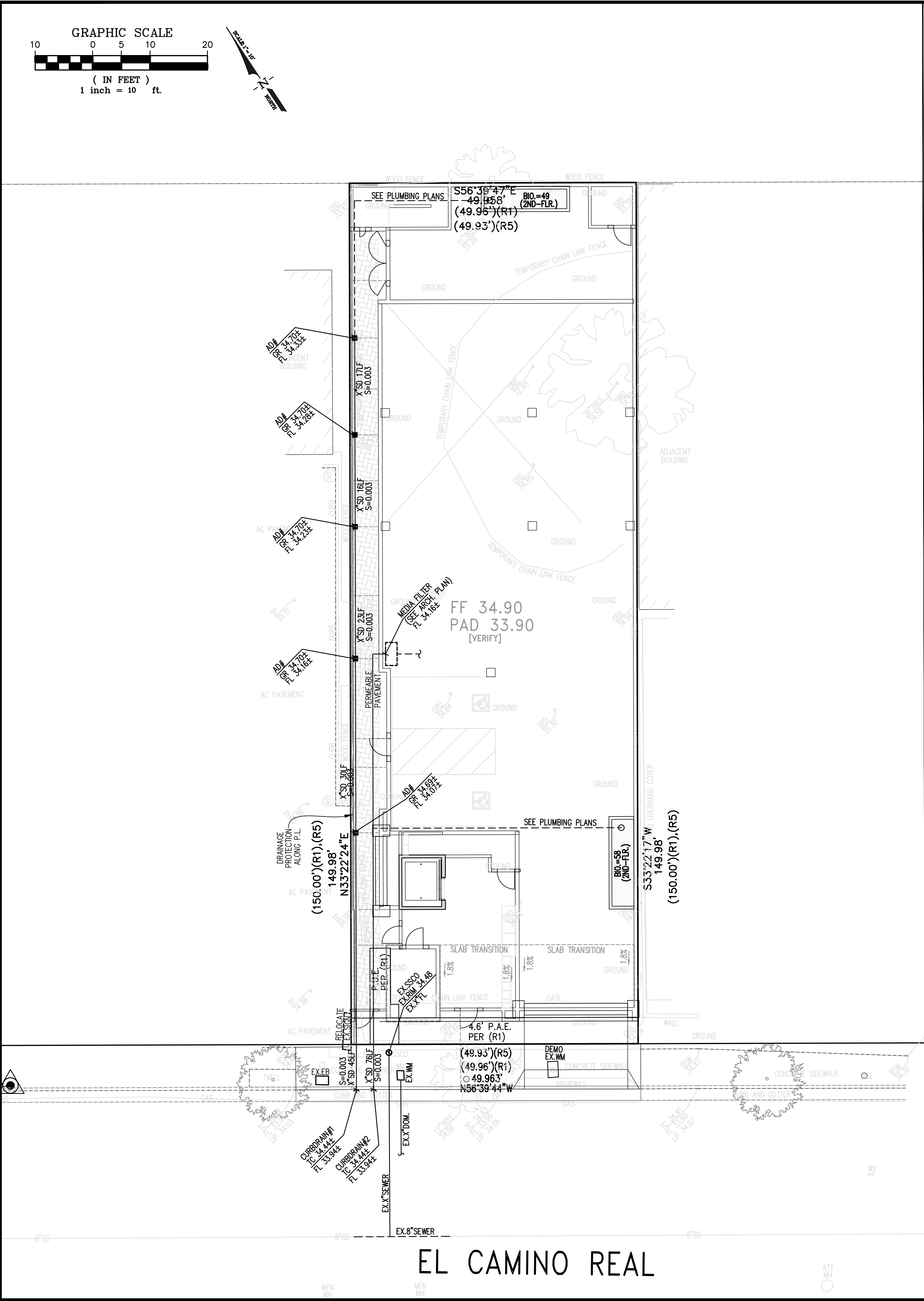
3265 EL CAMINO REAL
TITLE
3265 EL CAMINO REAL
PALO ALTO, CA

REVISIONS

NO.	DATE	DESCRIPTION
△		
△		
△		
△		
△		

Title:
GRADING PLAN:
ELEVATIONS

Date: DEC. 2023
Scale: 1" = 10'
Drawn By: C.W.
Checked By: J.L.
Job No.: 23252A10
Drawing No.: MASTER-23252A10
Plot Date: 2023-12-20
Sheet No.: C-4.1



TRACHTENBERG
ARCHITECTS

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

Luk and Associates
Civil Engineering
Land Planning
Land Surveying
738 Alfred Nobel Drive
Hercules, CA 94547
Phone (510) 724-3388
Fax (510) 724-3383

Seal:

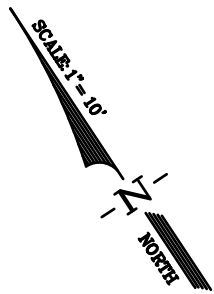
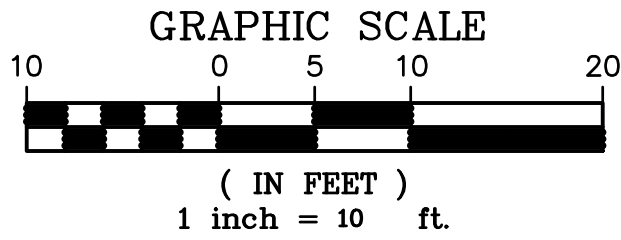
3265 EL CAMINO REAL
TITLE
3265 EL CAMINO REAL
PALO ALTO, CA

REVISIONS	

REVISIONS		
NO.	DATE	DESCRIPTION
△		
△		
△		
△		
△		

Title:
UTILITY PLAN:

Date:	DEC. 2023
Scale:	1" = 10'
Drawn By:	C.W.
Checked By:	J.L.
Job No.:	23252A10
Drawing No.:	MASTER-23252A10
Plot Date:	2023-12-20
Sheet No.:	C-5.1



A#4 (8.9%)
TOTAL=667
IMP.=0
PERM.PVMT.=667
(SELF-TREATING)

A#3 (14.6%)
TOTAL=1096
IMP.=1047
BIO.MIN.=42

A#2 (56.2%)
TOTAL=4212
IMP.=4212
(TO MEDIA FILTER)

MEDIA FILTER
(GARAGE LEVEL)

A#1 (17.5%)
TOTAL=1311
IMP.=1253
BIO.MIN.=51

A#5 (2.8%)
TOTAL=207
IMP.=207
(UNTREATABLE)
[PUBLIC ACCESS ESMT.]

EL CAMINO REAL

LAMBERT AVE.

STORM TREATMENT NOTES:

PER SANTA CLARA COUNTY CLEAN WATER PROGRAM PUBLICATION:
"C.3 STORMWATER HANDBOOK" DATED JUNE 2016

1) HYDRO-MODIFICATION & STORM TREATMENT:

- A) THE PROJECT SITE CREATES BETWEEN 10,000 SF AND 1-ACRE OF IMPERVIOUS SURFACE AREA FOR THE PROPOSED PRIVATE PROPERTY. THUS THE PROJECT WILL BE REQUIRED TO SUBMIT A STORMWATER CONTROL PLAN AND INCLUDE LID MEASURES CONSISTENT WITH SIZING FACTORS AND CRITERIA FOR "TREATMENT ONLY".
- B) AS THE PROJECT PROPOSES LESS THAN 1-ACRE OF IMPERVIOUS SURFACES ON THE SITE, HYDROMODIFICATION (FLOW CONTROL) IS NOT A REQUIREMENT PER THE GUIDEBOOK.

2) THE PROJECT SITE IS DELINEATED INTO THE MANAGEMENT AREAS SHOWN ON THE CHART ON THIS SHEET.

3) FOR GROUP D NATIVE SOIL, THE TREATMENT METHOD IS CHOSEN TO BE BIOTENTION FACILITY.

A = CONFIGURATION OF AREA
V1 = SURFACE RESERVOIR VOLUME
V2 = SUB-SURFACE RESERVOIR VOLUME

CRITERIA APPLY TO BIOTENTION FACILITY (FOR TREATMENT AND FLOW CONTROL):

- SIZING FACTOR (SF) [BIOTENTION FACILITY] = 4%
- SURFACE RESERVOIR DEPTH = 6 INCHES
- SOIL MIX DEPTH = 18 INCHES
- UNDERDRAIN = 4 INCHES

4) FOR SELF-RETAINING AREAS, THE RATIO OF IMPERVIOUS TO PERVIOUS AREA SHALL BE LESS THAN OR EQUAL TO 2:1 (TREATMENT ONLY) OR 1:1 (TREATMENT & FLOW CONTROL). SELF-RETAINING AREAS SHALL CAPTURE AND FLOW CONTROL A 1" PRECIPITATION DEPTH PER COUNTY DESIGN STANDARDS*.

5) FOR SELF-TREATING AREAS, THE PERCENTAGE OF IMPERVIOUS AREA MUST BE LESS THAN 5% PER COUNTY DESIGN STANDARDS*.

6) SPECIAL PROJECT INFORMATION:

- NOT IN A PDA
- SITE AREA = 7,500-SF (0.172-ACRE)
- AFFORDABILITY FOR THE 44 UNITS (255-DU/ACRE):
 - LOW INCOME (51-80% AMI) -> 20% OF TOTAL OR 9 UNITS (5 STUDIOS + 4 1BDR)
 - MODERATE INCOME (81-120% AMI) -> 80% OF TOTAL OR 35 UNITS (19 STUDIOS + 16 1BDR)
- CREDITS:

4.1. MODERATE INCOME YIELDS...	50% LID CREDIT
4.1. DENSITY YIELDS...	15% LID CREDIT
4.2. 0% SURFACE PARKING YIELDS...	5% LID CREDIT
4.3. NO LOCATION CREDITS...	0% LID CREDIT
4.4. TOTAL=	70% LID CREDIT

THEREFORE, 70% OF THE SITE CAN USE NON-LID STORMWATER TREATMENT MEASURES. THE REMAINING 30% WILL NEED TO USE STANDARD LID TREATMENT MEASURES.

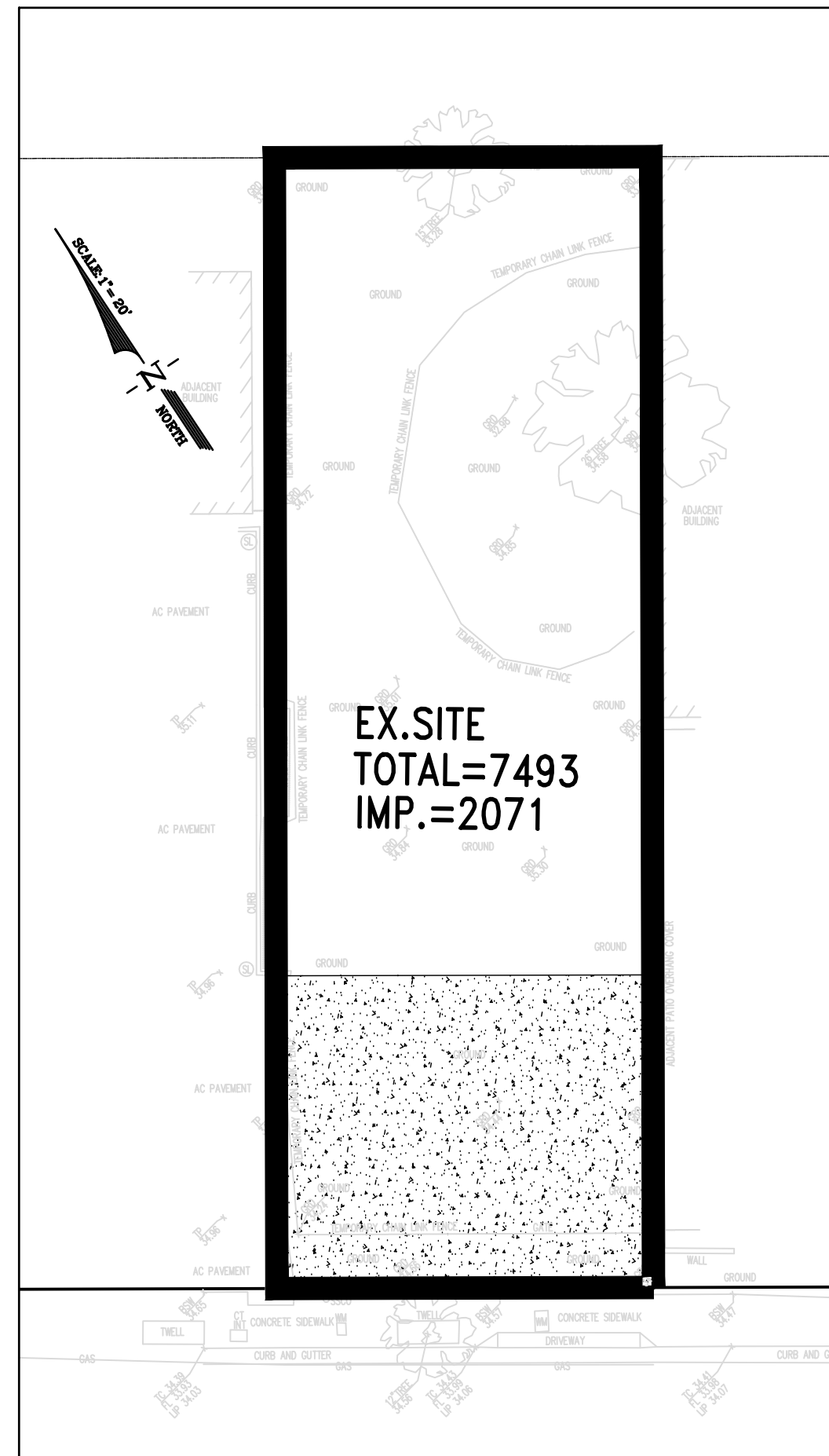
EXISTING SURFACE-AREA TABLE

EXISTING SITE			
IMPERVIOUS [TO REMAIN] (SF)	IMPERVIOUS [TO REMOVE] (SF)	PERVIOUS AREA (SF)	TOTAL
0	2,071	5,422	7,493

PROPOSED SURFACE-AREA TABLE

PROPOSED SITE			
IMPERVIOUS [TO REMAIN] (SF)	IMPERVIOUS [TO INSTALL] (SF)	PERVIOUS AREA (SF)	TOTAL
0	6,464	1,029	7,493

EXISTING SITE:



TRACHTENBERG
ARCHITECTS

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

Luk and Associates

Civil Engineering
Land Planning
Land Surveying

738 Alfred Nobel Drive
Hercules, CA 94547
Phone (510) 724-3388
Fax (510) 724-3383

Seal:



3265 EL CAMINO REAL
TITLE
3265 EL CAMINO REAL
PALO ALTO, CA

REVISIONS

REVISIONS

NO.	DATE	DESCRIPTION
△		
△		
△		
△		

Title:
STORMWATER
TREATMENT PLAN

Date: DEC. 2023

Scale: 1" = 10'

Drawn By: C.W.

Checked By: J.L.

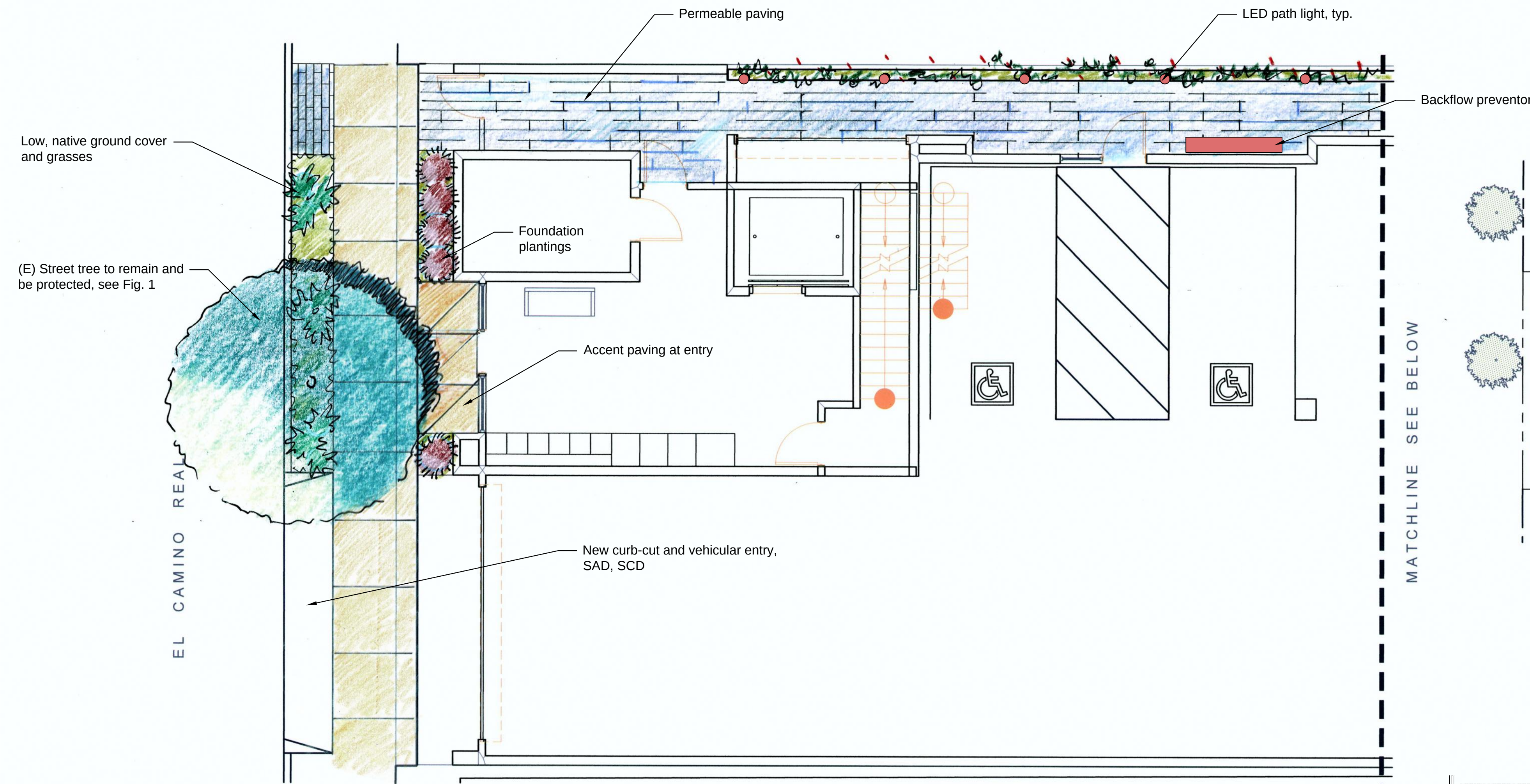
Job No.: 23252A10

Drawing No.: MASTER-23252A10

Plot Date: 2023-12-20

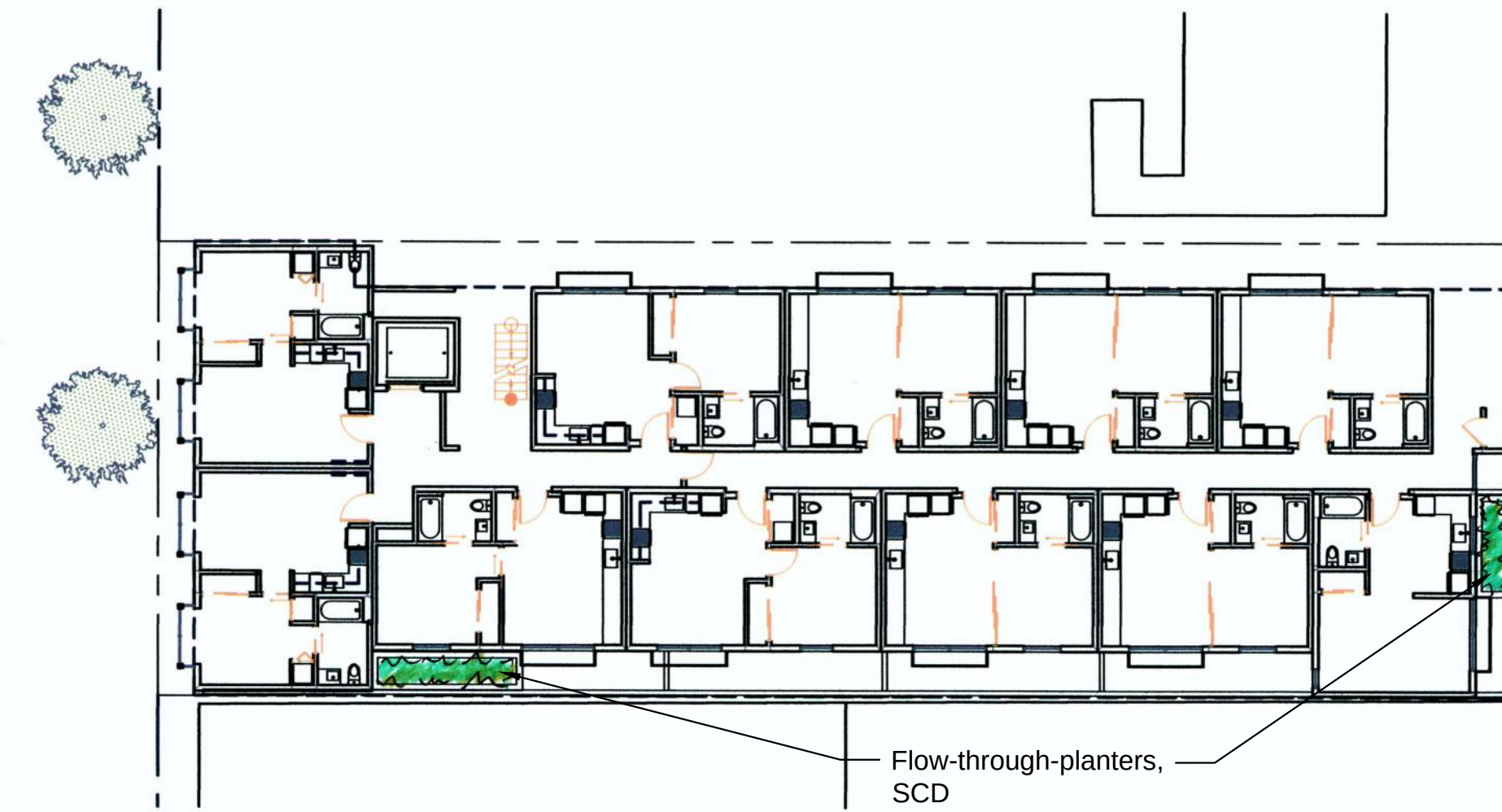
Sheet No.:

C-6.1

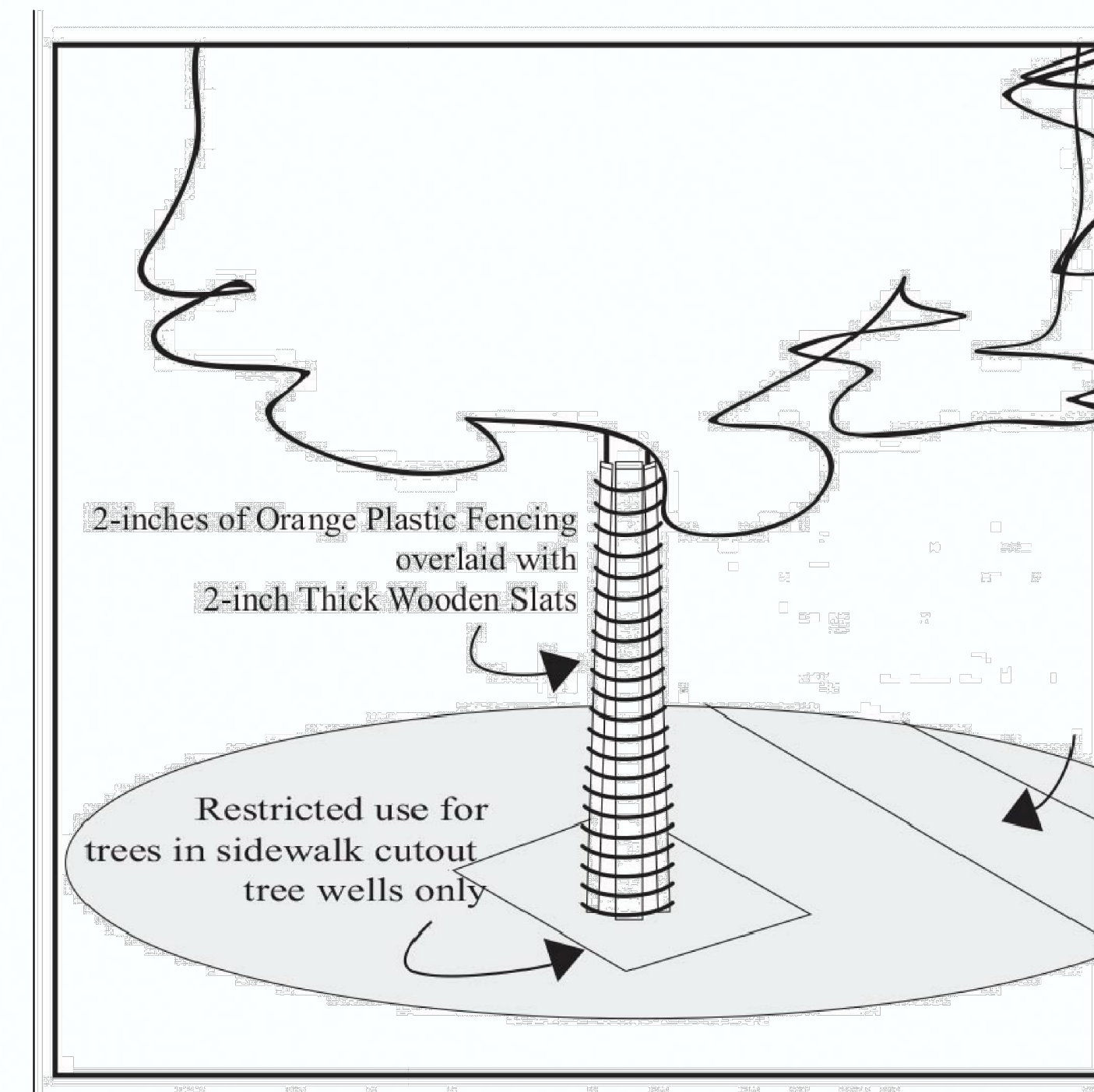
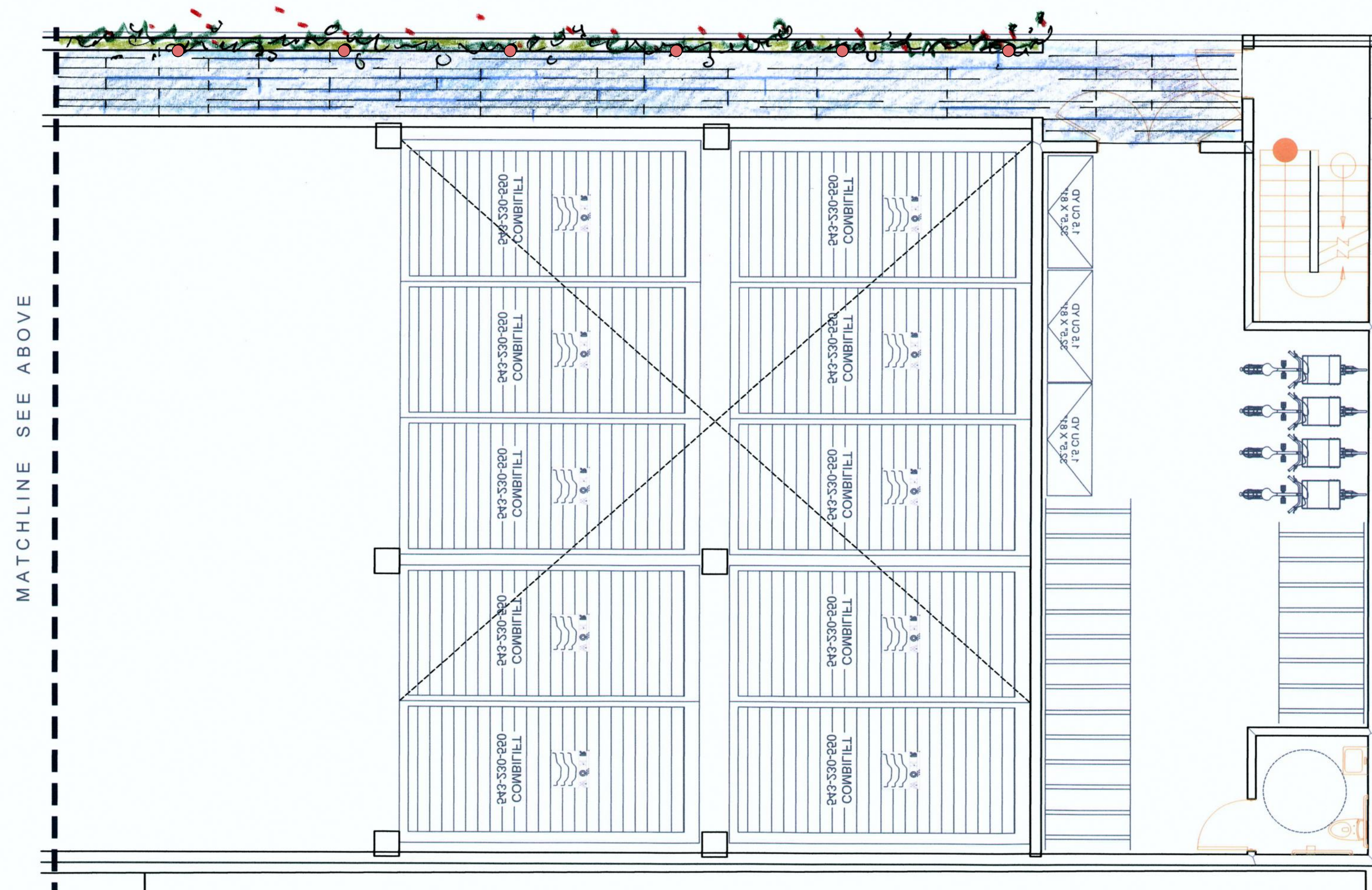


I have complied the criteria of the Model Water Efficient Landscape Ordinance and have applied them for the efficient use of water in the landscape design plan.

John Pennell Phillips
RLA 5602



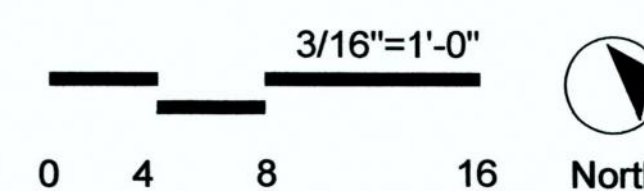
FTP's at Level 2
NTS



TYPE III TREE PROTECTION: TREES IN STREET ROW, 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 PROJECT ARBORIST OR CITY ARBORIST.

1 Fig 1 Type III Tree Protection
NTS

See Sheet L2.0 for Plant List & Notes



TRACHTENBERG
ARCHITECTS

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

INSIDEOUT

landscape architecture
6000 Harwood Ave
Oakland CA 94618
www.aboutinsideout.com

3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

Level 1 & 2:
Preliminary
Landscape Plan

L1.0

FOR AGENCY REVIEW ONLY: NOT FOR CONSTRUCTION



Countertop seating



Chinese pistache - Pistachia chinensis



Grill / kitchen & pedestal pavers



Built-in seating



Permeable pavers



Seating / planting

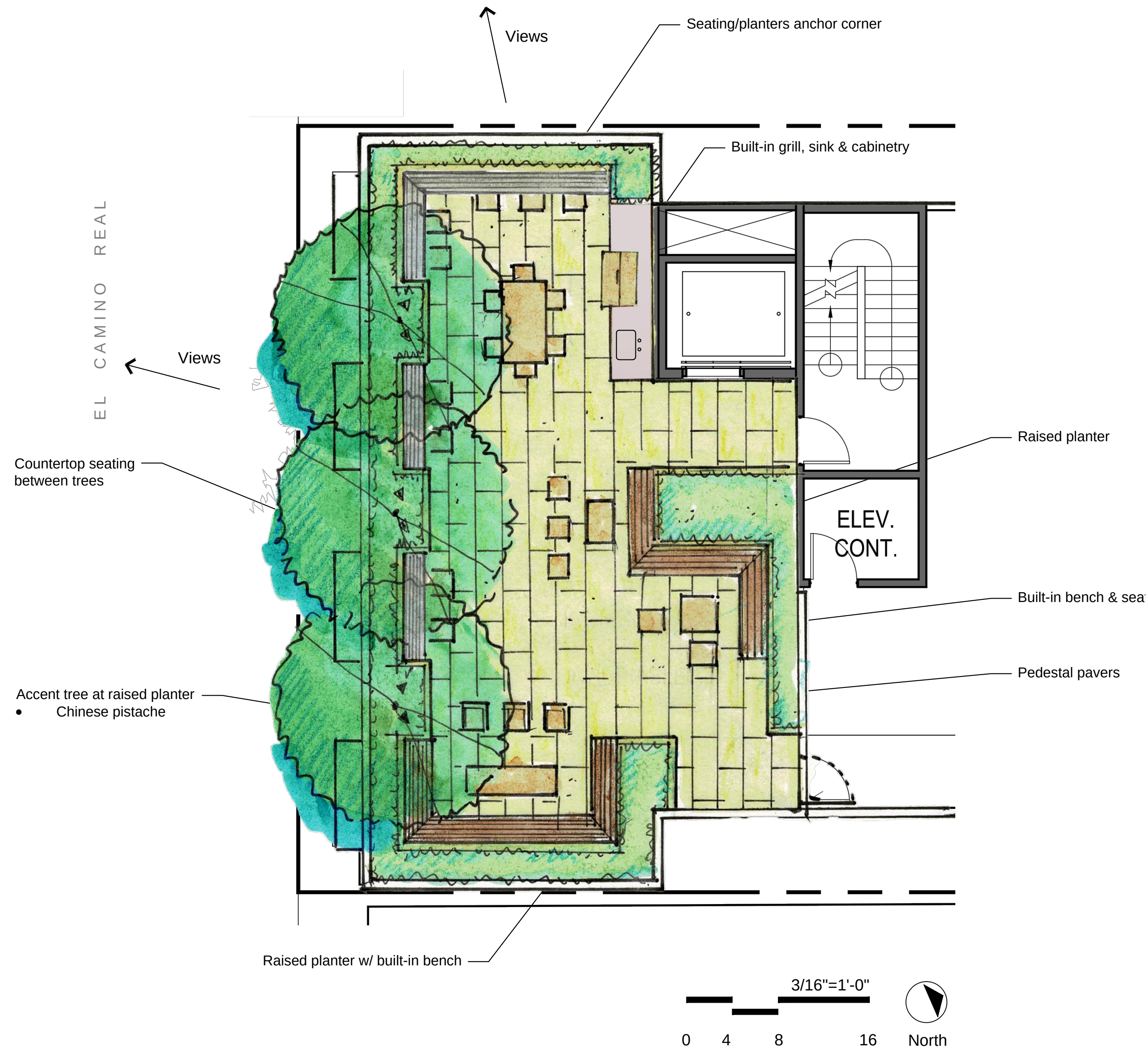
Suggested Plant List

Index	Latin Name	Common Name	Size	Height (ft)	Width (ft)	WELO	FTP*	Invasive	CA Native	Notes
Trees										
PC	Pistachia chinensis	Chinese pistache	24" box	25'	25'	L		No		Proposed roof deck tree
Shrubs										
Spacing										
AB	Abutilon 'Moned'	Super red flowering maple	5 gallon		4'-0"	M		No		
AD	Asparagus densiflora	Myer's asparagus	1 gallon		30"	M		No		
AH	Anigozanthos hybrids	Kangaroo paw	1 gallon		36"	L		No		
BG	Blechnum gibbum 'Silver Lady'	Silver Lady fern	5 gallon		as shown	M		No		
CC	Ceanothus concha	Wild lilac	1 gallon		5'-0"	L		No	Yes	
CD	Carex divulsa	Berkeley sedge	1 gallon		2'-0"	L	X	No		Flow-through-planter vegetation
CS	Calandrinia spp. (menziesii, maritima, or/and breweri)	Rock purslane	1 gallon		36"	L		No	Yes	Accent
DO	Daphne odora	Winter daphne	5 gallon		36"	L		No		
HM	Heuchera hybrids	Coral bells	1 gallon		18"	M		No	Yes	
HQ	Hydrangea quercifolia	Oakleaf hydrangea	5 gallon		4'-0"	M		No		
JP	Juncus patens 'Carmen's gray'	Carmen's gray rush	1 gallon		24"	L	X	No	Yes	Flow-through-planter vegetation
LL	Lomandra longifolia 'Seabreeze'	Seabreeze lomandra	1 gallon		24"	L		No		
MB	Mimulus aurantiacus var. bifidus 'Ivory White'	White Santa Lucia Monkeyflower	5 gallon		30"	L	X	No		
MC	Muhlenbergia capillaris 'Lenca'	Pink Muhly grass	1 gallon		36"	L		No		
MR	Muhlenbergia rigens	CA Deer Grass	1 gallon		48"	L	X	No	Yes	
WG	Westringia fruticosa Grey Box	Dwarf coast rosemary	5 gallon		30"	L		No		
Vines & Groundcover										
CP	Campanula poscharskyana	Serbian Bellflower	1 gallon		as shown	M		No		
FP	Ficus pumila	Creeping fig	1 gallon		8'-0"	M		No		Vine along western fence
FR	Festuca rubra	Creeping fescue	sod		—	L		No	Yes	
FS	Festuca x 'Siskiyou Blue'	Siskiyou fescue	1 gallon		24"	L		No	Yes	
MP	Myoporum parvifolium	NCN	1 gallon		8'-0"	L		No		
NS	Nepeta 'Six Hills Giant'	Six Hills Giant Catmint	1 gallon		24"	L		No		

Note: all plantings, including street trees, will be watered by an automated irrigation system compliant with the City of Palo Alto code. The proposed planting shall be WELO compliant.

Note: 50% of proposed plant palette shall be California native species, to be calculated by quantities of each plant in construction set.

*Species selected for flow-through planters (FTP) per Stormwater C.3 Guidebook (Dalziel et. al. 2022).



TRACHTENBERG
ARCHITECTS

2421 Fourth Street
Berkeley, California 94710
510.649.1414
www.TrachtenbergArch.com

INSIDEOUT

landscape architecture
6000 Harwood Ave
Oakland CA 94618
www.aboutinsideout.com

3265 EL CAMINO REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

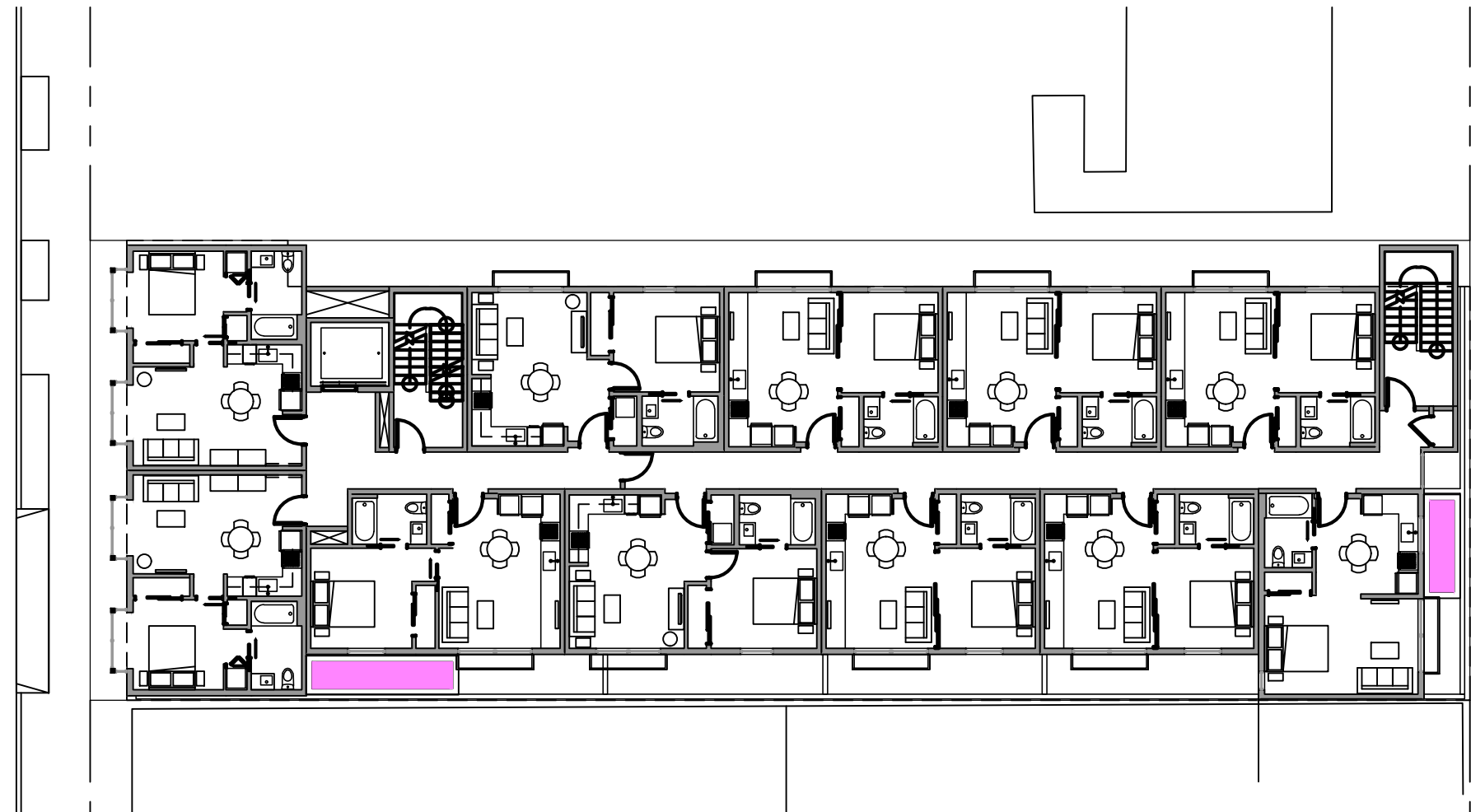
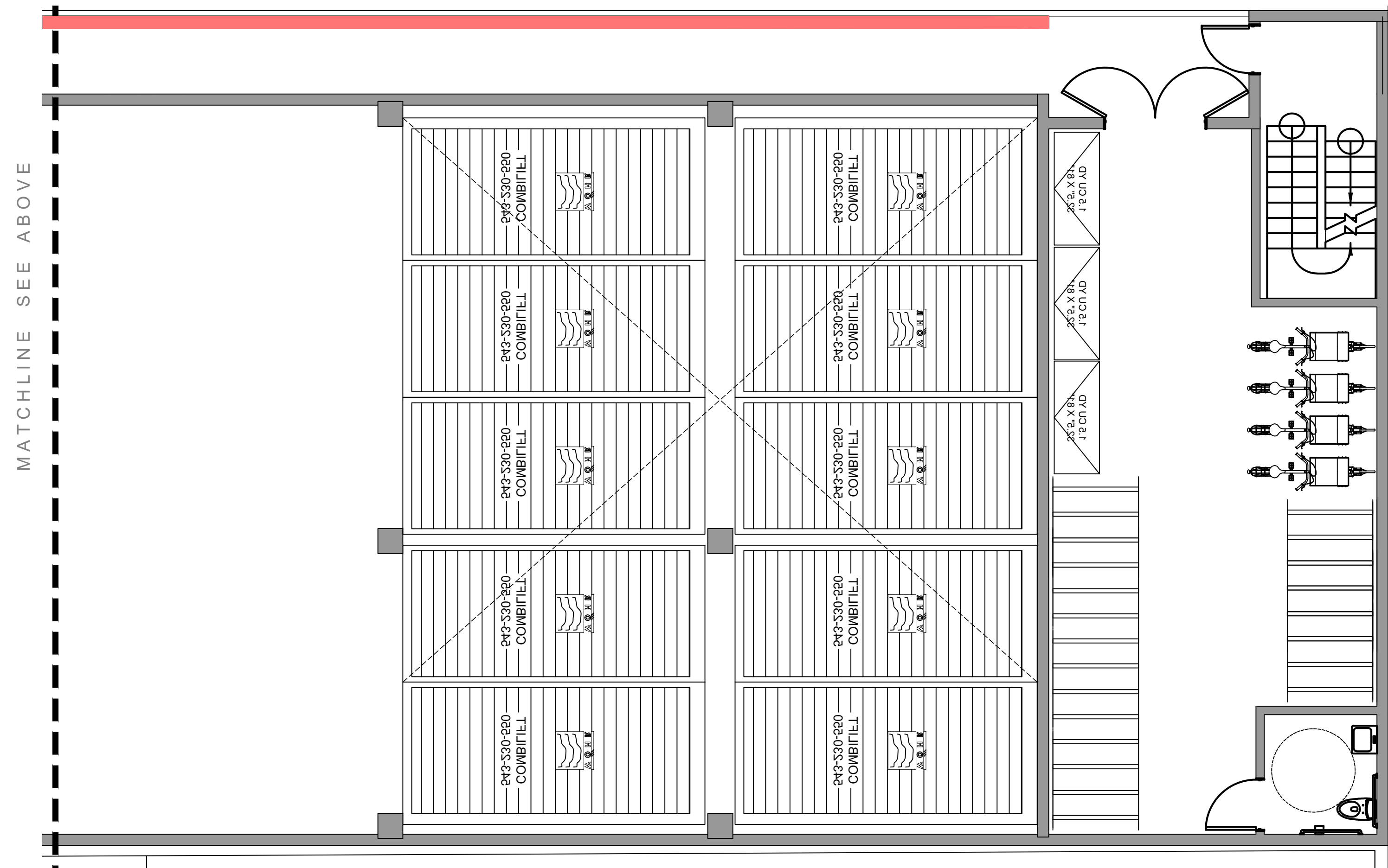
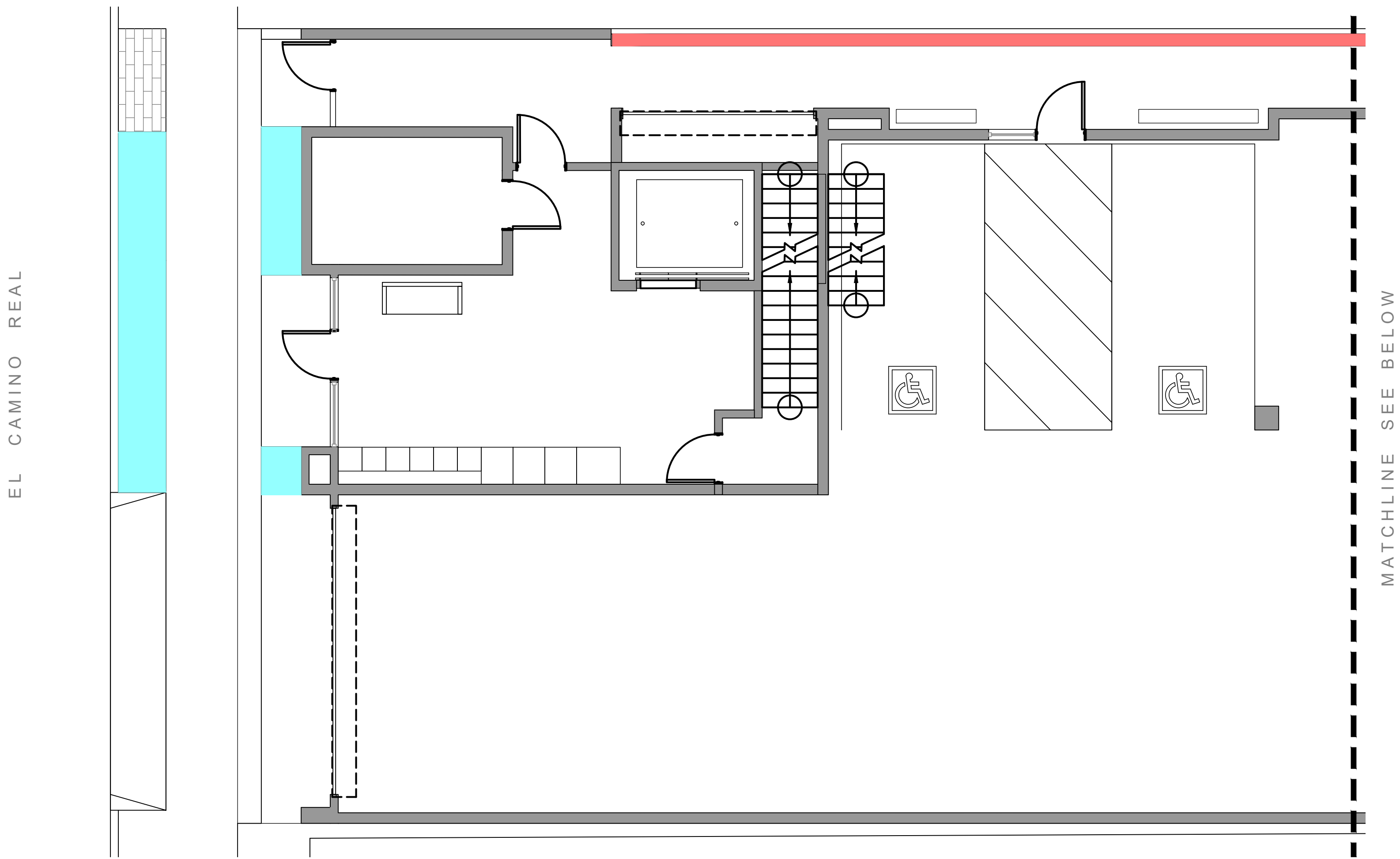
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

Roof Deck:
Preliminary
Landscape Plan,
Imagery, Plant List

L2.0



FTPs at Level 2
NTS

Hydrozone Legend

- HZ 1 - Shrub/GC - Sunny - Low
- HZ 2 - Shrub/GC - Shade - Low
- HZ 3 - Shrub/GC - Shade - Moderate
- HZ 4 - Vine - Shade - Moderate

Water Efficient Landscape Worksheet

California Water Efficient Landscape Worksheet							
Reference Evapotranspiration (ET _o)	43		Project Type		Residential		0.55
Hydrozone # / Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^d
Regular Landscape Areas							
HZ 1 - Shrub - Sunny - L	0.2	Drip	0.81	0.25	99	24	652
HZ 2 - Shrub - Shade - L	0.2	Drip	0.81	0.25	325	80	2139
HZ 3 - Shrub - Shade - M	0.5	Drip	0.81	0.62	71	44	1168
HZ 4 - Vine - Shade - M	0.5	Drip	0.81	0.62	80	49	1317
			0.75	0.00		0	0
Totals					575	198	5276
Special Landscape Areas							
				1		0	0
				1		0	0
				1		0	0
				1		0	0
Totals					0	0	0
ETWU Total							5276
Maximum Allowed Water Allowance (MAWA) ^e							8431

ETAF Calculations

Regular Landscape Areas

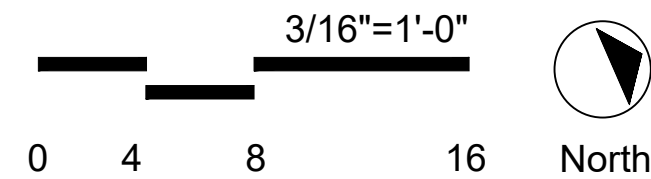
Total ETAF x Area	198
Total Area	575
Average ETAF	0.34

All Landscape Areas

Total ETAF x Area	198
Total Area	575
Average ETAF	0.34

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Total Landscape Area in this package: 575 SQ. FT.



3265
EL CAMINO
REAL

Palo Alto, CA

01.05.2024 MAJOR AR SUBMITTAL

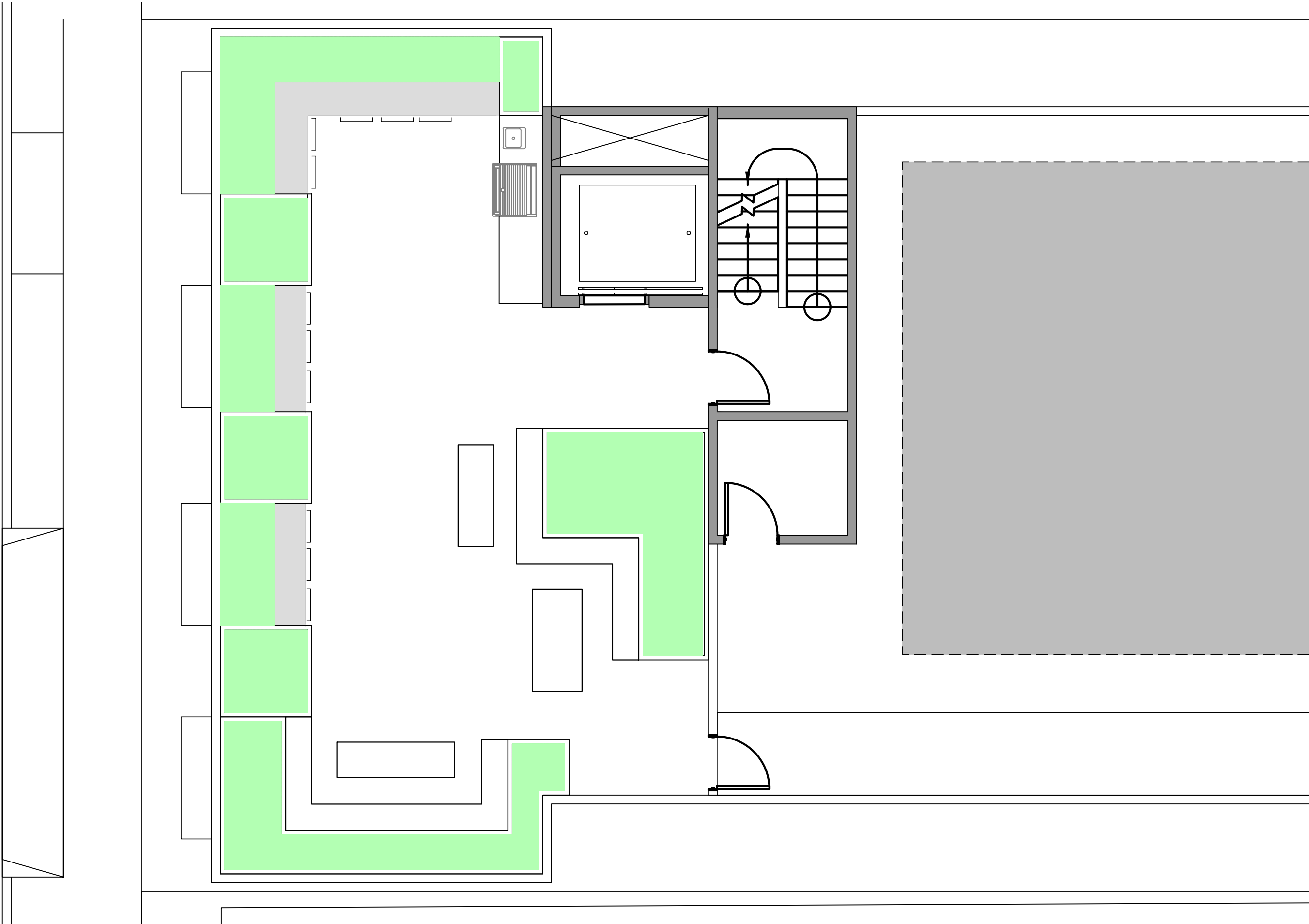
ALL DRAWINGS AND WRITTEN MATERIAL APPEARING
HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED
WORK OF THE ARCHITECT AND MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN
CONSENT OF TRACHTENBERG ARCHITECTS.

JOB: 2226

SHEET:

Roof Deck:
Preliminary
Hydrozone Plan

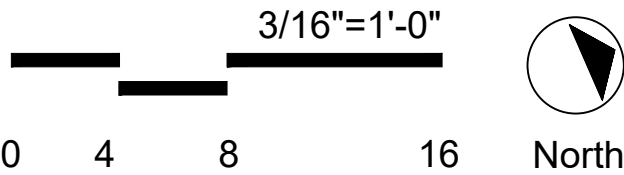
12.0



Hydrozone Legend

- HZ 1 - Shrub/GC - Sunny - Low
- HZ 2 - Shrub/GC - Shade - Low
- HZ 3 - Shrub/GC - Shade - Moderate
- HZ 4 - Vine - Shade - Moderate

* See "Level 1 & 2: Preliminary Hydrozone Plan"
for Water Efficient Landscape Worksheet



		Compliance Path Verification							
		Plan Check		Rough GB Inspection IVR # 152		Final Inspection IVR # 153			
		CORR	INITIAL	CORR	INITIAL	CORR	INITIAL	Part 2	Part 2
4.5 Environmental Quality		Code Section Y		Plan Sheet, Spec or Attachment Reference					
	Mandatory	Fireplaces shall be direct-vent sealed combustion type (all-electric)	PAMC 16.14.090 / 4.503.1	X					
	Mandatory	Covering of duct openings, protection of mechanical equipment during construction	4.504.1.X	GB-3					
	Mandatory	Adhesives, sealants and caulks - Table 4.504.1 and 4.504.2 for VOC limits	4.504.2.1.X	GB-3					
	Mandatory	Paints and coatings - Table 4.504.3 for VOC limits	4.504.2.2.X	GB-3					
	Mandatory	Aerosol paints and coatings	4.504.2.3.X	GB-3					
	Mandatory	Verification - Documentation to verify complaint VOC limit on finish materials	4.504.2.X	GB-3					
	Mandatory	Carpet systems- Documentation to verify complaint with VOC limits	4.504.3	GB-3					
	Mandatory	Carpet cushion	4.504.3.1.X	GB-3					
	Mandatory	Carpet systems: Carpet adhesive - Table 4.504.1 for VOC limits	4.504.3.2.X	GB-3					
	Tier 2 Mand.	Resilient flooring systems for 100% - Tier 2 requirements	PAMC 16.16.070 & 16.14.080/ A4.504.2	GB-3					
	Mandatory	Composite wood products	4.504.5	GB-3					
	Mandatory	Concrete slab foundations - vapor retarder required	4.505.2.X	GB-3					
	Mandatory	Capillary break for slab-on-grade foundations	4.505.2.1.X	GB-3					
	Mandatory	Moisture content of building materials ≤ 19% for wall and floor framing	4.505.3	GB-3					
Mandatory	Bathroom exhaust fans (when required) shall be provided with the following:	4.506.1.X	GB-3						
	1. ENERGY STAR fans ducted to outside of building.	X	GB-3						
	2. Humidity controlled OR functioning as a component of a whole-house ventilation system	X	GB-3						
	3. Humidity controls with manual or automatic means of adjustment for relative humidity range of ≤ 50% to 80% max	X	GB-3						
	Heating and air conditioning system design (all-electric on or after January 1, 2021)	PAMC 16.14.090 / 4.507.2	GB-3						
Mandatory	Indoor Air Quality Management Plan (MP)	PAMC 16.14.410	GB-3						
Elective	Compliance with formaldehyde limits	PAMC 16.14.260/ A4.504.1	X	GB-3					
Elective	Thermal insulation	PAMC 16.14.270/ A4.504.3	X						
Elective	Construction filters [HR]	A4.506.2	X						
Elective	Direct-vent appliances	A4.506.3	X						
Elective	Innovative concepts and local environmental conditions.	A4.509.1	X						

CITY STAMPS ONLY

Make sure your crews and subs do the job right!

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/



City of Palo Alto
250 Hamilton Avenue, Palo Alto, CA 94301

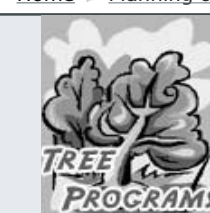


[Search:](#)

[Advanced](#)

[Browse By Topic](#)

[Home](#)
[» Planning & Community Environment](#)



Tree Technical Manual

To purchase the Tree Technical Manual

June, 2001 First Edition

View by section:

- Table of Contents (PDF, 87KB)
- Intent and Purpose (PDF, 1.05MB)
- Introduction - Use of Manual (PDF, 1.05MB)
- Section 1.0 - Definitions (PDF, 94KB)
- Section 2.0 - Protection of Trees During Construction (PDF, 259KB)
- Section 3.0 - Removal, Replacement & Planting of Trees (PDF, 117KB)
- Section 4.0 - Hazardous Trees (PDF, 104KB)
- Section 5.0 - Tree Maintenance Guidelines (PDF, 110KB)
- Section 6.0 - Tree Reports (PDF, 84KB)

View ALL sections:

- Tree Technical Manual - Full (PDF, 1.84MB)

APPENDICES

- A: Palo Alto Municipal Code Chapter 8.10, Tree Preservation & Management Regulations
- B: Tree City - USA
- C: ISA Hazard Evaluation Form
- D: List of Inherent Failure Patterns for Selected Species (Reference source)
- E: ISA Tree Pruning Guidelines (PDF, 1.85MB)
- F: Tree Care Safety Standards, ANSI Z133.1-1994 (Reference source)
- G: Pruning Performance Standards, ANSI A300-1995 (Reference source) H: Tree Planting Details, Diagram 504 & 505
- I: Tree Disclosure Statement
- J: Palo Alto Standard Tree Protection Instructions

APPENDIX J

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 its 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

31-2-01

Illustration of situations described below.

b.

Tree Technical Manual (TTM) Form (<http://www.cityofpaloalto.org/trees>)

1. **Trenching Restriction Zones (TTM, Section 2.20)(C)**

a. **Aspen Rooting Proximity (TTM, Section 2.20)(C)**

2. **Site Plan Requirements (TTM, Section 3.5)**

3. **Tree Disclosure Statement (TTM, Section 3.6)**

c.

Street Tree Verification (STV) Form (<http://www.cityofpaloalto.org/trees/form>)

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 or near concrete and will not be demolished, then the post-and-rail fence may be replaced 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 shall be wrapped with 2-inches of orange plastic fencing from the ground to the first branch and overlaid with 2-inch black webbing strapping (chains) to be allowed to dig under the bark. During installation of the plastic fencing, caution shall be used to avoid damaging any branches. Major limbs may also require plastic fencing directed by the City Arboretist.

d.

Site, type and area to be fenced. All trees to be protected shall be fenced with a (6) foot high chain link fence. Fences are to be mounted on two-inch diameter galvanized pipe from the street, driven into the ground to a depth of at least 2 feet to no more than 10-foot spacing. Fencing shall extend to the outer branching, unless specifically approved by the City Arboretist.

e.

Warning signs: A warning sign shall be weather proof and prominently displayed on each side of 20-foot diameter tree. The sign shall be placed on the ground 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 arboretist or City Arboretist (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:

- No storage of material, supplies, vehicles or equipment shall be permitted within the TPZ.
- The ground under and around the tree canopy and soil shall not be altered.
- Trees to be retained shall be irrigated, arreated and maintained as necessary to ensure survival.

END OF SECTION

City of Palo Alto 2004 Standards Documents and Specifications

Street Tree Verification of Protection, PWC, Section 31

Revised 08/06

	City of Palo Alto Treedepartment Public Works Operations PO Box 10250 Palo Alto, CA 94303 650/496-5953 FAX: 650/852-0289 treedep@cityofpaloalto.org	Verification of Street Tree Protection
<i>Applicant Instructions:</i> Complete upper portion of this form. Mail or FAX this form along with signed Tree Disclosure Statement to Public Works Dept.		
APPLICATION DATE:	1/5/2024	
ADDRESS/LOCATION OF STREET TREES TO BE PROTECTED:	3265 El Camino Real	
APPLICANT'S NAME:	Isaiah Stackhouse	
APPLICANT'S ADDRESS:	2421 Fourth St, Berkeley CA	
APPLICANT'S TELEPHONE & FAX NUMBERS:	510-649-1414	
<i>This section to be filled out by City Tree Staff</i>		
1. The Street Trees at the above address(es) are adequately protected. The type of protection used is: Inspected by: Date of inspection:	YES ☐ NO* ☐ * If NO, go to #2 below	
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.		
<i>Subsequent Inspection</i>		
Street trees at above address were found to be adequately protected: Inspected by: Date of inspection:	YES ☐ NO* ☐ * If NO, indicate in "Notes" below the disposition of case.	
Notes: List City street trees by species, size, condition and type of tree protection installed. Also note if pictures were taken. Use back of sheet if necessary.		

---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 INSPECTIONSPLANNING DEPARTMENT

TREE PROTECTION INSPECTIONS MANDATORY

PAMC HAS 10% PROTECTED TREES. CONTRACTOR SHALL ENSURE PROJECT SITE ARBORIST IS PERFORMING REQUIRED TREE REMOVAL AND SITE MONITORING. PROVIDE WRITTEN MONTHLY TREE ACTIVITY REPORTS TO THE PLANNING DEPARTMENT LANDSCAPE REVIEW STAFF BEGINNING 14 DAYS AFTER BEGING TREETRIMMING.

BEGINNING PERMIT DATE:

DATE OF 1ST TREE ACTIVITY REPORT:

CITY STAFF:

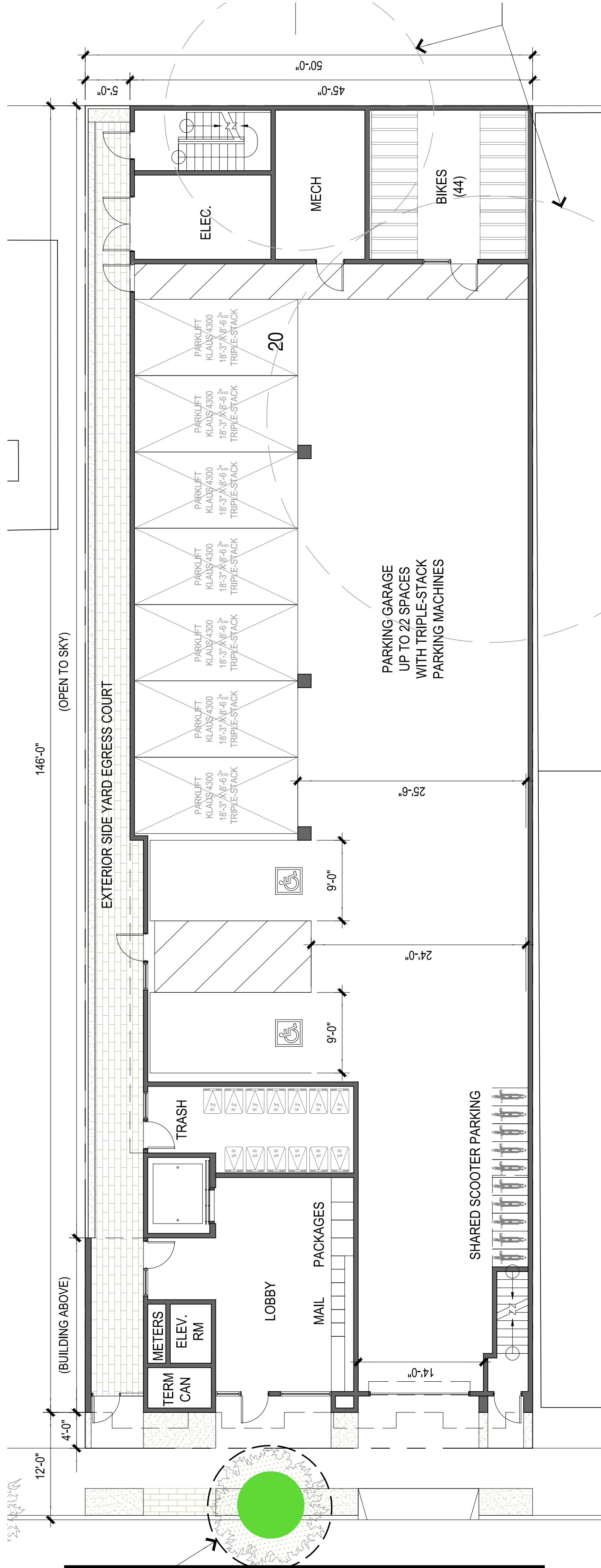
REPORTING DETAILS OF THE MONTHLY TREE ACTIVITY REPORT SHALL CONFORM TO SHEET T-1 FORMAT. VERIFY THAT ALL TREE PROTECTION MEASURES ARE IMPLEMENTED AND WILL INCLUDE ALL CONTRACTOR ACTIVITY, SCHEDULED OR UNSCHEDULED, WITHIN A TREE PROTECTION ROOT ZONE. NON-COMPLIANCE IS SUBJECT TO VIOLATION OF PAMC § 8.10.080.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

Use additional “T” sheets as needed

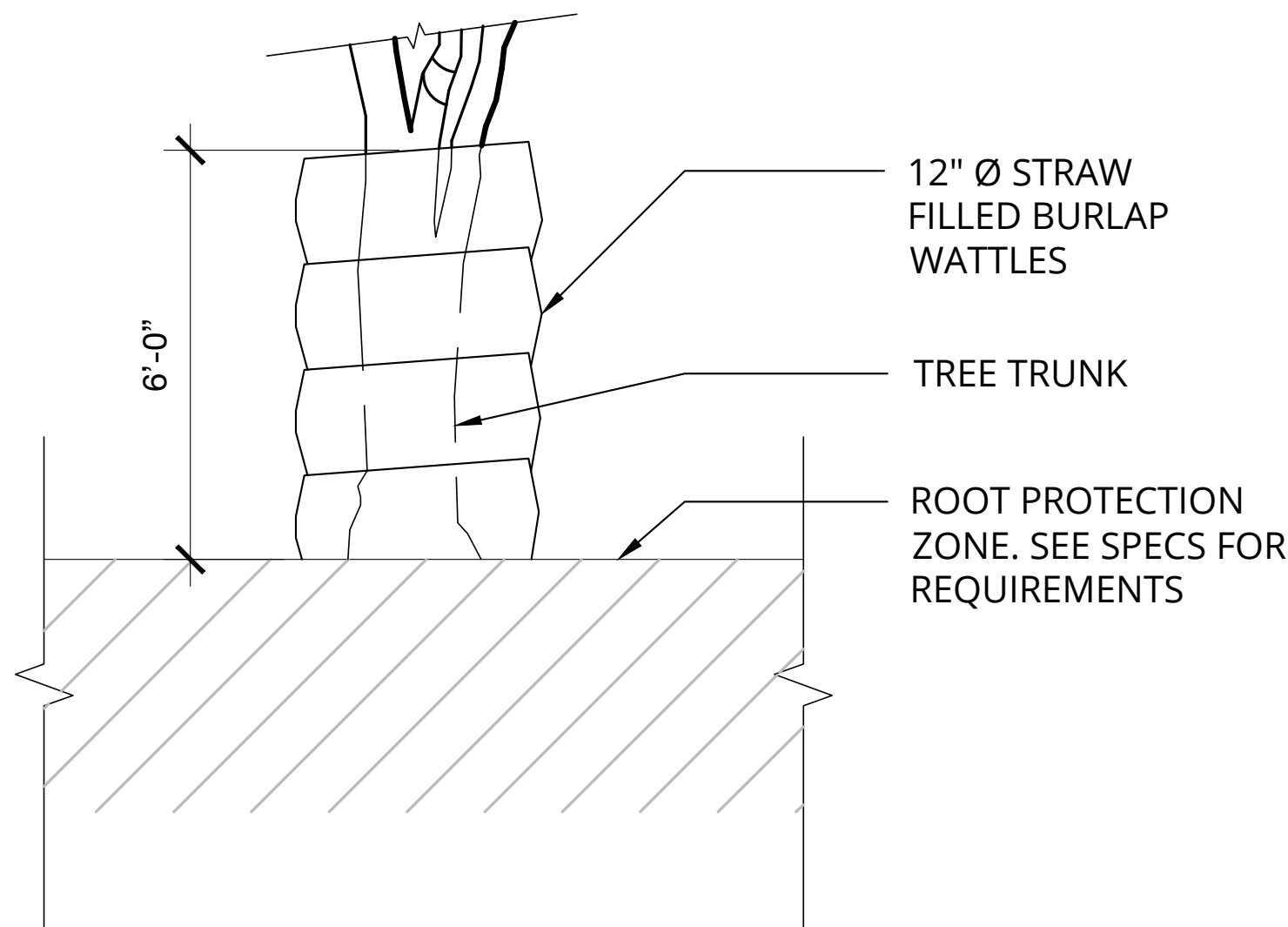
Project Data

A copy of T-1 can be downloaded at
<http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=6460>

T-1



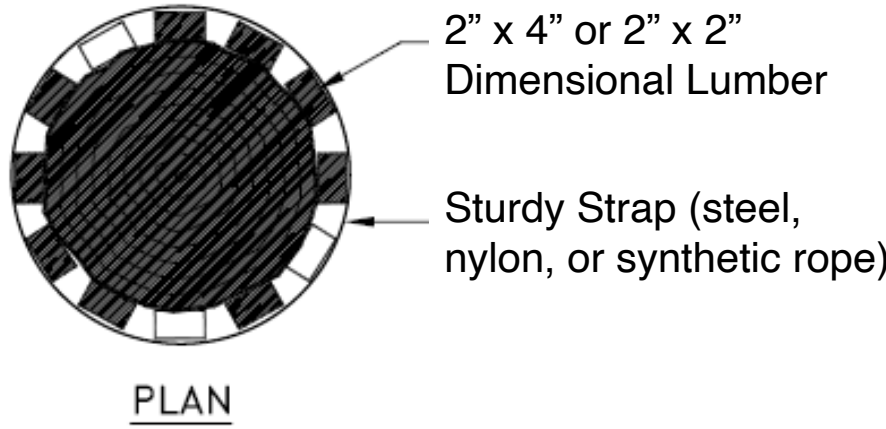
Type III Tree Protection around the trunk of the London plane.



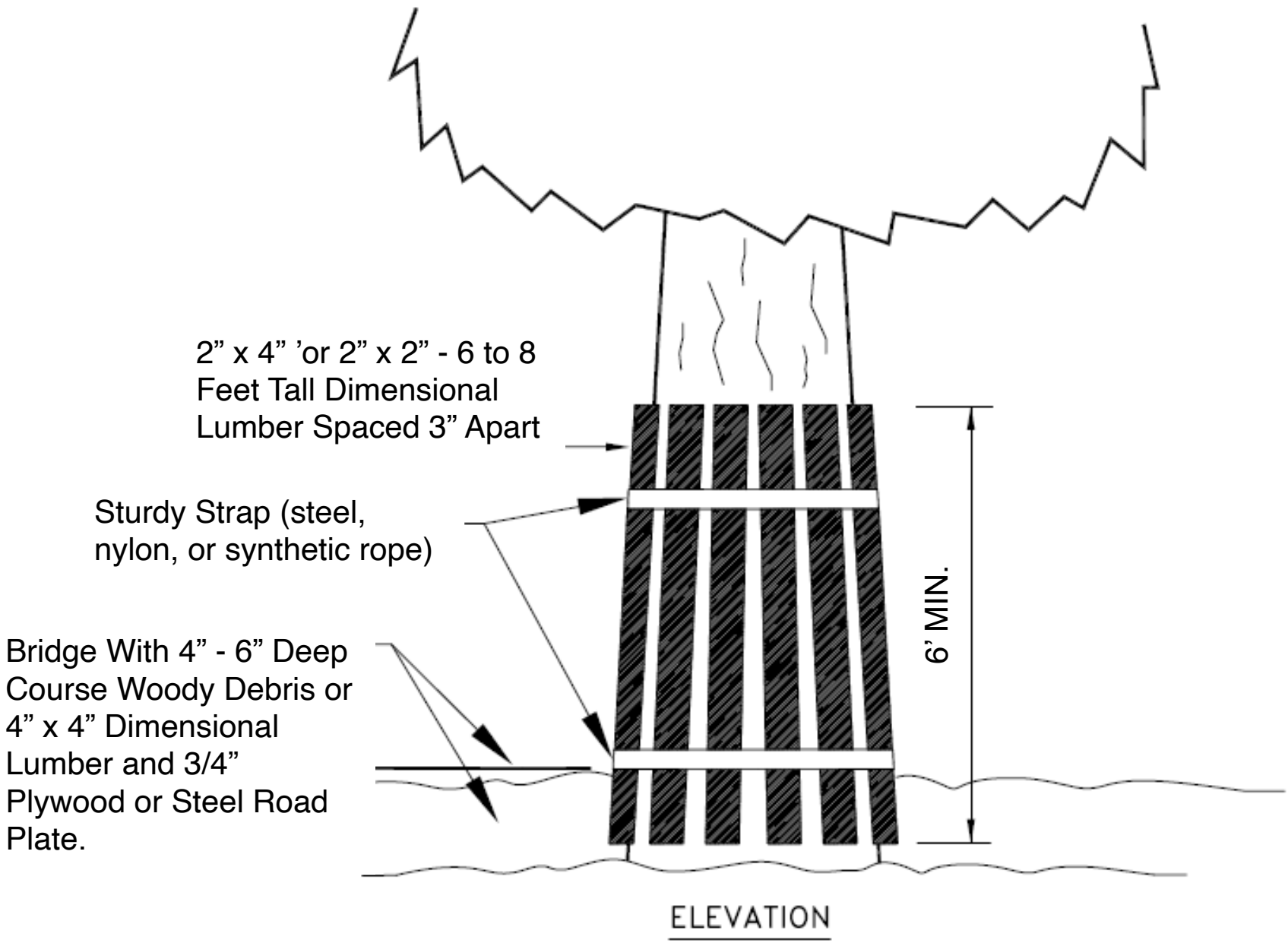
SECTION VIEW

S-Y TRUNK PROTECTION WITH WATTLE

Note: See Local Ordinance Requirements and Arborist's Report for Additional Protection Specifications and Guidelines.



PLAN



ELEVATION

Trunk Protection Vertical Timber Detail

Tree Inventory, Assessment,
And
Protection Report

3265 El Camino Real
Palo Alto, CA 94306

Prepared for:

Half Dome Capital LLC

December 19, 2023

Prepared By:

Richard Gessner
ASCA - Registered Consulting Arborist @ #496
ISA - Board Certified Master Arborist® WE-43418



© Copyright Monarch Consulting Arborists LLC, 2023

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Table of Contents

Summary.....1

Introduction.....1

Analysis.....3

Discussion.....4

Conclusion.....6

Recommendations.....7

Bibliography.....8

Glossary of Terms.....9

Appendix A: Site Plan and Tree Locations.....11

Appendix B: Tree Assessment Table.....12

Appendix C: Photographs13

C3: Valley Oak.....15

Appendix D: Tree Protection Guidelines.....16

Appendix E: Tree Protection Signs24

Qualifications, Assumptions, and Limiting Conditions26

Certification of Performance.....27

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Discussion

Condition Rating

A tree's condition is a determination of its overall health, structure, and form for a combined condition rating (ISA 2018).

The London plane Street Tree is in good condition defined as good health, structure, and form with adequate size for its location.

The valley oak is in fair condition with good health, fair structure, and poor form with major asymmetry and deviation from the species normal growth habit. The valley oak is a large specimen but it is growing directly adjacent to the neighboring building. The outer trunk is within three feet of the building wall, and the upper crown has been sheered at the property boundary, creating a significant asymmetric crown.

The black acacia has good health, poor structure, and good form and is also in fair condition with one major defect, its multiple vertical stems (codominancy).

Expected Impact Level

Impact level defines how a tree may be affected by construction activity and is described as low, moderate, or high. The valley oak and black acacia will be highly impacted and required to be removed while the Street Tree London plane is expected to be impacted low to moderately depending on the sidewalk renovations and any utility routing.

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Summary

The applicant is planning to demolish the trees on the vacant site to construct a new high density housing project. The inventory contains three trees, one London plane (*Platanus x hispanica*) Street Tree, one black acacia (*Acacia melanoxylon*) Protected Mature, and one valley oak (*Quercus lobata*) Protected Native. The London plane Street Tree is in good condition while the black acacia and valley oak are in fair shape.

The valley oak and black acacia will be highly impacted and required to be removed while the Street Tree London plane is expected to be impacted low to moderately depending on the sidewalk renovations and any utility routing.

The applicant would be required to replace the trees with either in in-lieu fee along with a new Street Tree to account for the loss. For this project it is possible the trees could meet the findings for removal as indicated PAMC 8.10.050(d)(1) as described above. There were three trees appraised for a rounded depreciated value of \$28,650.00.

Introduction

Background

The applicant is planning to demolish the trees on the vacant site to construct a new high density housing project. I agrees to provide a pre-development assessment of the trees on-site to help satisfy the City of Palo Alto planning requirements and to assess the condition and influence the project will have on the trees.

Assignment

1. Provide an arborist's report including an assessment of the trees within the project area and those directly adjacent that could be affected by the project. The assessment is to include the species, size (trunk diameter), and condition (health, structure, form).
2. Provide expected impact ratings and tree protection specifications and guidelines.

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Conclusion

The applicant is planning to demolish the trees on the vacant site to construct a new high density housing project.

The inventory contains three trees, one London plane Street Tree, one black acacia Protected Mature, and one valley oak Protected Native.

The London plane Street Tree is in good condition while the black acacia and valley oak are in fair shape.

The valley oak and acacia will be highly impacted and removed while the London plane Street Tree is to be retained and protected.

For this project it is possible the trees to be removed could meet the findings for removal as indicated PAMC 8.10.050(d)(1).

There were three trees appraised for a rounded depreciated value of \$28,650.00.

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Limits of the Assignment

1. The information in this report is limited to the condition of the trees during my inspection on November 28, 2023. No tree risk assessments were performed.
2. The plans reviewed for this assignment were as follows (Table 1).

Table 1: Plans Reviewed Checklist

Plan	Date	Sheet	Reviewed	Source
Existing Site Topographic Map or A.L.T.A with tree locations			No	
Proposed Site Plan	07/28/23	A2.1, A2.2, A2.3	Yes	Trachtenberg Architects
Demolition Plan			No	
Construction Staging			No	
Grading and Drainage			No	
Utility Plan and Hook-up locations			No	
Exterior Elevations			No	
Landscape Plan			No	
Irrigation Plan			No	
T-1 Tree Protection Plan	12/19/23	1-4	Yes	Monarch Consulting Arborists LLC

Purpose and use of the report

The report is intended to identify all the trees within the plan area that could be affected by a project. The report is to be used by the property owners, their agents, and the City of Palo Alto as a reference for existing tree conditions to help satisfy planning requirements.

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Recommendations

1. Instructions for the T-2 and T-3 sheets should have the following sections of this report pasted onto them: "Recommendations", Appendix B, Appendix D, and Appendix E.
2. Wrap the trunk of Street Tree #1 with straw wattle or brace with timbers as indicated in Appendix D2.
3. All tree maintenance and care shall be performed by a qualified arborist with a C-61/D-49 California Contractors License. Tree maintenance and care shall be specified in writing according to American National Standard for Tree Care Operations: *Tree, Shrub and Other Woody Plant Management: Standard Practices* parts 1 through 10 and adhere to ANSI Z133.1 safety standards and local regulations. All maintenance is to be performed according to ISA Best Management Practices.
4. Refer to Appendix D for general tree protection guidelines including recommendations for arborist assistance while working under trees, trenching, or excavation within a trees drip line or designated TPZ/CRZ.
5. Provide a copy of this report to all contractors and project managers, including the architect, civil engineer, and landscape designer or architect. It is the responsibility of the owner to ensure all parties are familiar with this document.
6. Arrange a pre-construction meeting with the project arborist or landscape architect to verify tree protection is in place, with the correct materials, and at the proper distances.
7. Monitor the health and structure of all trees for any changes in condition. Perform any other mitigation measures to help ensure long term survival. Have a qualified arborist perform a Level 2: Basic Tree Risk assessment as described in ISA. *Best Management Practices: Tree Risk Assessment* (2017).

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Analysis

Tree appraisal was performed according to the Council of Tree & Landscape Appraisers *Guide for Plant Appraisal 10th Edition, 2019* (CLTA) along with Western Chapter International Society of Arboriculture *Species Classification and Group Assignment, 2004*. The trees were appraised using the "Cost Approach" and more specifically the "Trunk Formula Technique" (Appendix B).

"Trunk Formula Technique" is calculated as follows: Basic Tree Cost = (Unit tree cost x Appraised trunk area), Appraised Value = (Basic tree cost X functional Limitations (percentage) X Condition (percentage) X External Limitations (percentage)).

There were three trees appraised for a rounded depreciated value of \$28,650.00. Appraisal worksheets are available upon request.

Tree Inventory

The inventory consists of trees on the property with trunk diameters greater than four inches (12.56 inches circumference) and those within 30 feet of proposed building footprint/area of work or with crowns that extending over the boundary. The City of Palo Alto has five categories of tree protection which are as follows:

- **Street Trees:** Trees growing in the city right-of-way or on public property.
- **Protected Native Species Trees:** big leaf maples, incense cedars, coast live oaks, blue oaks, CA black oaks or valley oaks which are 11.5" in diameter or larger and coast redwoods which are 18" in diameter or larger, when measured 54" above grade.
- **Protected Mature Trees:** Any tree equal to or greater than 15" DBH (Excluding invasive species and high water users).
- **Designated Trees:** Mitigation trees or commercial and non-residential property trees, which are part of a previously approved landscape plan.
- **Heritage Trees:** Specific individual trees designated by Council. See the Heritage Tree List.

The inventory contains three trees, one London plane Street Tree, one black acacia Protected Mature, and one valley oak Protected Native which are as follows:

Table 2: Tree Inventory and Characteristics

Species	Trunk Diameter	Condition	Status
London plane (<i>Platanus x hispanica</i>)	14	Good	Street Tree
black acacia (<i>Acacia melanoxylon</i>)	23	Fair	Protected Mature
valley oak (<i>Quercus lobata</i>)	40	Fair	Protected Native Species

3265 El Camino Real Arborist's Assessment and Report December 19, 2023

Bibliography

American National Standard for Tree Care Operations: Tree, Shrub and Other Woody Plant Management - *Standard Practices* (Management of Trees and Shrubs During Site Planning, Site Development, and Construction)(Part 5). Londonderry, NH: Secretariat, Tree Care Industry Association, 2019. Print.

Gilpin, R, Hauer, R, Matheny, N, and Smiley, E.T. *Managing trees during construction*, Third edition. Champaign, IL: International Society of Arboriculture, 2023.

ISA. *Guide For Plant Appraisal 9th Edition*. Savoy, IL: International Society of Arboriculture, 2000. Print.

ISA. *Guide For Plant Appraisal 10th Edition*. Savoy, IL: International Society of Arboriculture, 2018. Print.

ISA. *Species Classification and Group Assignment, 2004* Western Chapter Regional Supplement. Western Chapter ISA

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

Smiley, E, Matheny, N, Lilly, S, ISA. *Best Management Practices: Tree Risk Assessment*: International Society of Arboriculture, 2017. Print

Glossary of Terms

Calculated tree protection zone: A TPZ calculated using the trunk diameter and a multiplication factor based on species tolerance to construction and tree age. It is often plotted on a plan as a circle or other arbitrary shape and can be used as a guide for establishing the specified TPZ.

Critical root zone: a conceptual soil area containing the minimal amount of all the essential parts of the root zone needed to sustain tree health and structural integrity. There are no universally accepted methods to calculate the CRZ.

Defect: An imperfection, weakness, or lack of something necessary. In trees defects are injuries, growth patterns, decay, or other conditions that reduce the tree's structural strength.

Diameter at breast height (DBH): Measures at 1.4 meters (4.5 feet) above ground in the United States, Australia (arboriculture), New Zealand, and when using the Guide for Plant Appraisal, 9th edition; at 1.3 meters (4.3 feet) above ground in Australia (forestry), Canada, the European Union, and in UK forestry; and at 1.5 meters (5 feet) above ground in UK arboriculture.

Drip Line: Imaginary line defined by the branch spread or a single plant or group of plants.

Drip Line (Palo Alto): means the area within X distance from the trunk of a tree, measured from the perimeter of the trunk of the tree at 54-inches above natural grade, where X equals a distance ten times the diameter of the trunk at 54-inches above natural grade.

Form: describes a plant's habit, shape or silhouette defined by its genetics, environment, or management.

Health: Assessment is based on the overall appearance of the tree, its leaf and twig growth, and the presence and severity of insects or disease.

Mechanical damage: Physical damage caused by outside forces such as cutting, chopping or any mechanized device that may strike the tree trunk, roots or branches.

Scaffold branches: Permanent or structural branches that for the scaffold architecture or structure of a tree.

Specified tree protection zone (specified TPZ): a TPZ that is adjusted in size or shape to accommodate the existing infrastructure, planned construction, and aspects of the site, as well as the tree canopy conformation, visible root intrusion, size, condition, maturity, and species response to construction.

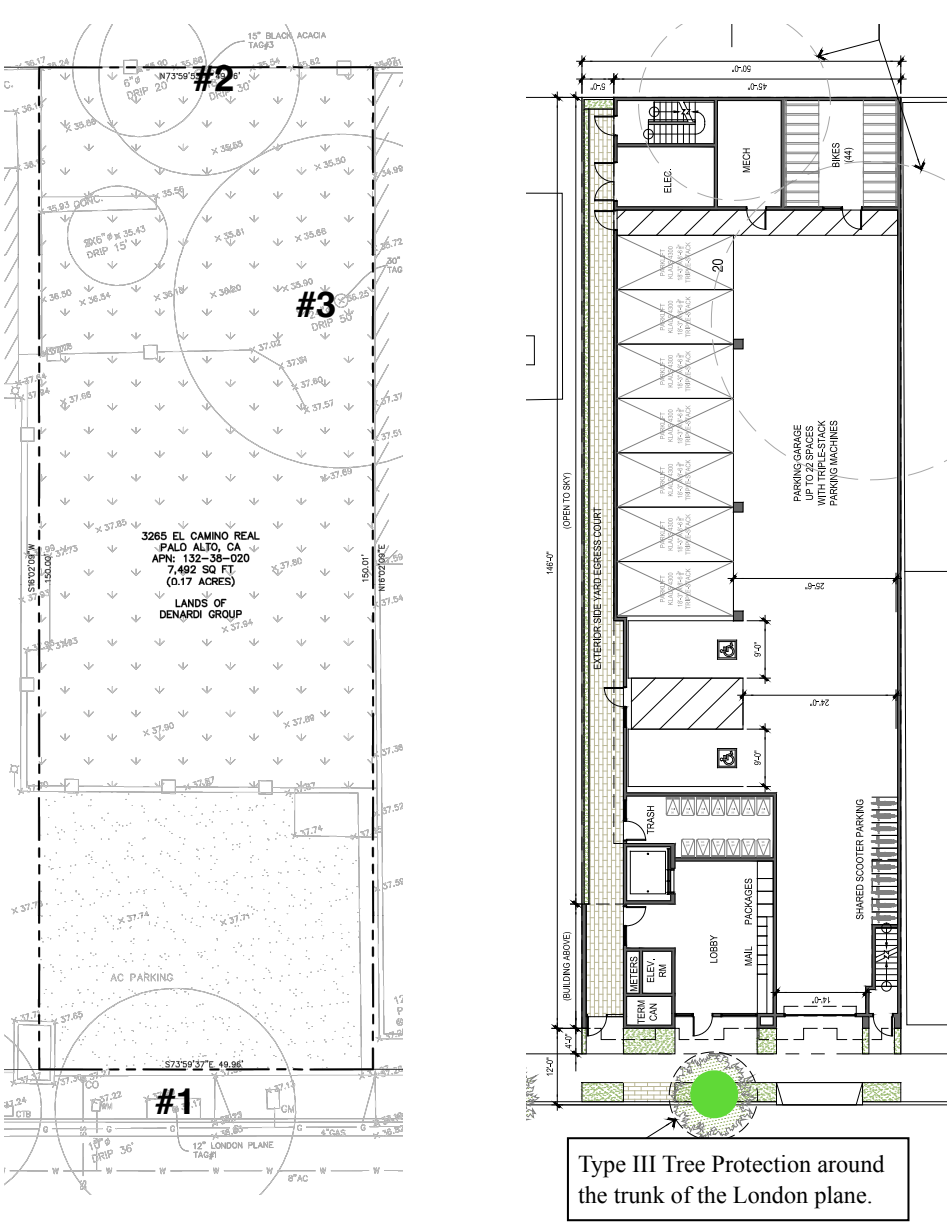
Straw wattle: also known as straw worms, bio-logs, straw noodles, or straw tubes are man made cylinders of compressed, weed free straw (wheat or rice), 8 to 12 inches in diameter and 20 to 25 feet long. They are encased in jute, nylon, or other photo degradable materials, and have an average weight of 35 pounds.

Tree Protection Zone (TPZ): Defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, especially during construction or development.

Tree Risk Assessment: Process of evaluating what unexpected things could happen, how likely it is, and what the likely outcomes are. In tree management, the systematic process to determine the level of risk posed by a tree, tree part, or group of trees.

Trunk: Stem of a tree.

Appendix A: Site Plan and Tree Locations



Appendix B: Tree Assessment Table

Table 3: Tree Inventory and Characteristics Summary						
Species	Trunk Diameter	Drip Line (ft.)	Condition	Expected Impact	Status	Rounded Depreciated Value
London plane (<i>Platanus x hispanica</i>)	14	12	Good	Low-Moderate/Retain	Street Tree	\$2,120.00
black acacia (<i>Acacia melanoxylon</i>)	23	19	Fair	High/Remove	Protected Mature	\$2,630.00
valley oak (<i>Quercus lobata</i>)	40	33	Fair	High/Remove	Protected Native Species	\$23,900.00

Appendix C: Photographs
C1: London Plane Street Tree



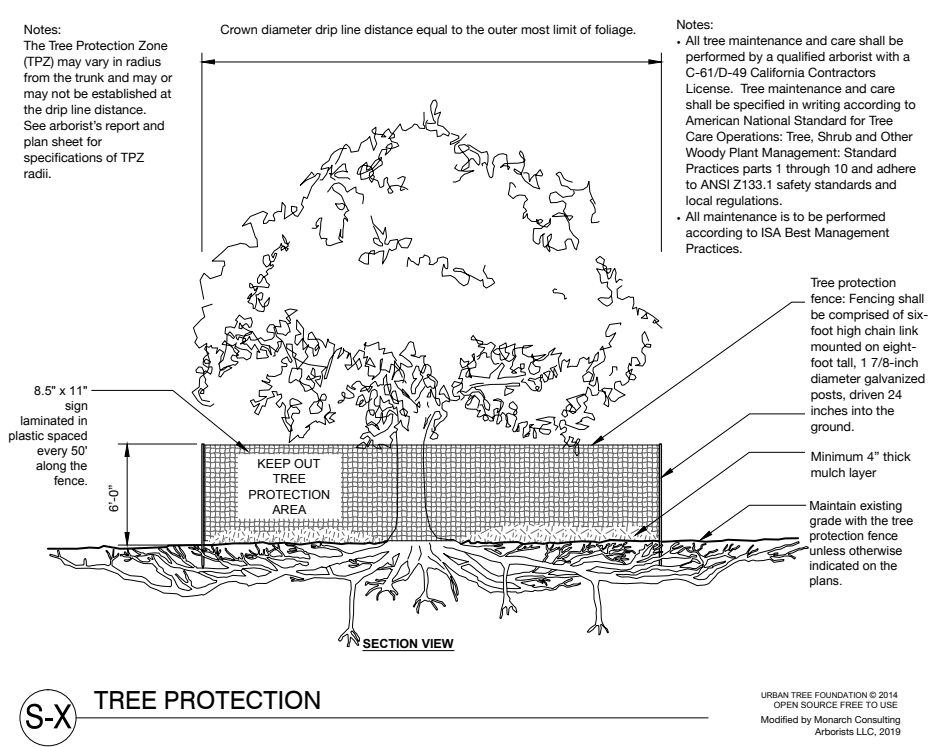
C2: Black Acacia



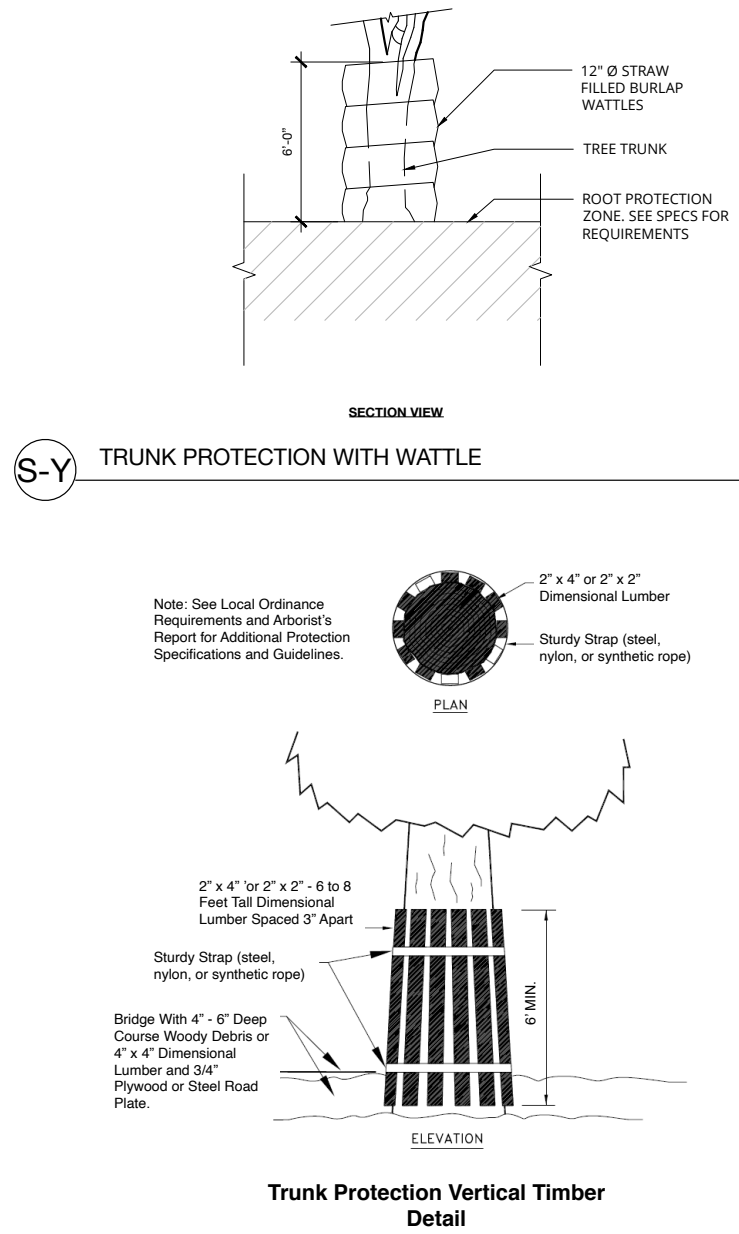
C3: Valley Oak



Appendix D: Tree Protection Guidelines
D1: Plan Sheet Detail S-X (Type I)



D2: Plan Sheet Detail S-Y (Type III)



D3: Palo Alto Required Practices

Activities prohibited within the TPZ include

In addition to the tree protection guidelines stipulated in Appendix D the following is prohibited within the tree protection zone and required by the Palo Alto Municipal Code (Copied from the Tree Technical Manual, City of Palo Alto 2001).

Storage or parking vehicles, building materials, refuse, excavated spoils or dumping of poisonous materials on or around trees and roots. Poisonous materials include, but are not limited to, paint, petroleum products, concrete or stucco mix, dirty water or any other material which may be deleterious to tree health.

The use of tree trunks as a winch support, anchorage, as a temporary power pole, sign posts or other similar function.

Cutting of tree roots by utility trenching, foundation digging, placement of curbs and trenches and other miscellaneous excavation without prior approval of the City Arborist.

Soil disturbance or grade change (see Grade Changes and Trenching, Section 2.20).

Drainage changes.

Grading Limitations within the Tree Protection Zone

The following changes in grade are prohibited within the tree protection zone and required by the Palo Alto Municipal Code (Copied from the Tree Technical Manual, City of Palo Alto 2001).

Grade changes outside of the TPZ shall not significantly alter drainage to the tree.

Grade changes within the TPZ are not permitted.

Grade changes under specifically approved circumstances shall not allow more than 6-inches of fill soil added or allow more than 4-inches of existing soil to be removed from natural grade unless mitigated.

Grade fills over 6-inches or impervious overlay shall incorporate notes: an approved permanent aeration system, permeable material or other approved mitigation.

Grade cuts exceeding 4-inches shall incorporate retaining walls or an appropriate transition equivalent.

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
Trenching or Tunneling for Utilities Near Street Trees		
When trenching near the street tree the following shall be followed and required by the Palo Alto Municipal Code (Copied from the Tree Technical Manual, City of Palo Alto 2001):		
Notification: Contractor shall notify the project arborist a minimum of 24 hours in advance of the activity in the TPZ.		
Root Severance: Roots that are encountered shall be cut to sound wood and repaired. Roots 2-inches and greater must remain injury free.		
Root injury (Root Injury, Section 2.25 A-1): If trenches are cut and tree roots 2-inches or larger are encountered they must be cleanly cut back to a sound wood lateral root. The end of the root shall be covered with either a plastic bag and secured with tape or rubber band, or be coated with latex paint. All exposed root areas within the TPZ shall be backfilled or covered within one hour. Exposed roots may be kept from drying out by temporarily covering the roots and draping layered burlap or carpeting over the upper 3- feet of trench walls. The materials must be kept wet until backfilled to reduce evaporation from the trench walls.		
Excavation: Any approved excavation, demolition or extraction of material shall be performed with equipment sitting outside the TPZ. Methods permitted are by hand digging, hydraulic or pneumatic air excavation technology. Avoid excavation within the TPZ during hot, dry weather.		
If excavation or trenching for drainage, utilities, irrigation lines, etc., it is the duty of the contractor to tunnel under any roots 2-inches in diameter and greater.		
Prior to excavation for foundation/footings/walls, grading or trenching within the TPZ, roots shall first be severed cleanly 1-foot outside the TPZ and to the depth of the future excavation.		
The trench must then be hand dug and roots pruned with a saw, sawzall, narrow trencher with sharp blades or other approved root pruning equipment.		
Tunneling & Directional Drilling: If trenching or pipe installation has been approved within the TPZ, then the trench shall be either cut by hand, air-spade, hydraulic vac-on excavation or, by mechanically boring the tunnel under the roots with a horizontal directional drill and hydraulic or pneumatic air excavation technology. In all cases, install the utility pipe immediately backfill with soil and soak within the same day. Installation of private utility improvements shall be tunnel bored beneath the tree and roots.		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 19 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
Root Zone Protection Around the Protected Trees		
The following measures should be taken when designing the car wash station and required by the Palo Alto Municipal Code (Copied from the Tree Technical Manual, City of Palo Alto 2001):		
Heavy Equipment: Use of backhoes, steel tread tractors or any heavy vehicles within the TPZ is prohibited unless approved by the City Arborist. If allowed, a protective root buffer (see Root Buffer and Damage to Trees, Section 2.25 A-1) is required. The protective buffer shall consist of a base course of tree chips spread over the root area to a minimum of 6-inch depth, layered by 3/4-inch quarry gravel to stabilize 3/4-inch plywood on top. This buffer within the TPZ shall be maintained throughout the entire construction process.		
Structural design: If injurious activity or interference with roots greater than 2-inches will occur within the TPZ, plans shall specify a design of special foundation, footing, walls, concrete slab or pavement designs subject to City Arborist approval. Discontinuous foundations such as concrete pier and structural grade beam must maintain natural grade (not to exceed a 4-inch cut), to minimize root loss and allow the tree to use the existing soil.		
Hardscape installation: When designing hardscape areas near trees, the project architect or engineer should consider the use of recommended base course material such as an engineered structural soil mix. The Palo Alto approved structural soil mix will allow a long term cost effective tree and infrastructure compatibility that is particularly suited for the following types development projects: repair or replacement of sidewalk greater than 40-feet in length; subdivisions with new street tree plantings; planting areas that are designed over structures or parking garages; confined parking lot medians and islands or other specialized conditions as warranted. (see City of Palo Alto Public Works Improvement Specifications Standards and: www.amerseq.com/cuintro)		
Tree Pruning, Surgery, and Removal		
Minimum Pruning: If the project arborist recommends that trees be pruned, and the type of pruning is left unspecified, the standard pruning shall consist of ‘crown cleaning’ as defined by ISA Best Management Practices: Pruning 2008 with the objective to reduce risk and/or improve structure.		
Maximum Pruning: Maximum pruning should only occur in the rarest situation approved by the City Arborist. No more than one fourth (25 percent) of the functioning leaf and stem area may be removed within one calendar year of any protected or designated tree, or removal of foliage so as to cause the unbalancing of the tree.		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 20 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
Tree Workers: Pruning shall not be attempted by construction or contractor personnel, but shall be performed by a qualified tree care specialist or certified tree worker, according to specifications written according to ANSI A300 (Part 1) <i>Pruning</i> with measurable criteria outlining the objective, method (type), amount or quantity of live foliage to be removed, the size range of branches indicated in diameter, and the location within the tree where the pruning is to be performed.		
Surgery: Prior to construction, if it is necessary to promote health and prolong useful life or the structural characteristics, then trees shall be provided the appropriate treatments (e.g. cavity screening, bark tracing, wound treatment, cables, rods or pole supports) as specified by the project arborist.		
Tree Removal Procedure: When Regulated Trees are removed and adjacent trees that are to be preserved (as shown on the approved site plans) must be protected, then the following tree removal practices apply:		
• Tree Removal: Removal of trees that extend into the branches or roots of Regulated Trees shall not be attempted by demolition or construction personnel, grading or other heavy equipment. A certified arborist or tree worker shall remove the tree carefully in a manner that causes no damage above or below ground to trees that remain.		
• Stump Removal: Before performing stump extraction, the developer shall first consider whether or not roots may be entangled with trees that are to remain. If so, these stumps shall have their roots severed before extracting the stump. Removal shall include the grinding of stump and roots to a minimum depth of 24-inches but expose soil beneath stump to provide drainage. In sidewalk or small planter areas to be replanted with a new tree, the entire stump shall be removed and the planting pit dug to a depth of 30- inches. If dug below 30-inches, compact the backfill to prevent settling. Large surface roots three feet from the outside circumference shall be removed, including the spoils and backfilled with City approved topsoil to grade, and the area tamped to settle the soil.		
Damage to Trees		
Reporting: Any damage or injury to trees shall be reported within 6-hours to the project arborist and job superintendent or City Arborist so that mitigation can take place. All mechanical or chemical injury to branches, trunk or to Required Practices notes: roots over 2-inches in diameter shall be reported in the monthly inspection report.		
Penalty for damage to street trees: In the event that street trees or their roots have been damaged, the contractor or property owner shall be subject to the penalty rate of \$100.00 per inch of damage.		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 21 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
D4: General Best Management Practices		
Tree protection locations should be marked before any fencing contractor arrives.		
Pre-Construction Meeting with the Project Arborist		
Prior to beginning work, all contractors involved with the project should attend a pre construction meeting with the project arborist to review the tree protection guidelines. Access routes, storage areas, and work procedures will be discussed.		
Tree Protection Zones and Fence Specifications		
Tree protection fence should be established prior to the arrival of construction equipment or materials on site. Fence should be comprised of six-foot high chain link fence mounted on eight-foot tall, 1 7/8-inch diameter galvanized posts, driven 24 inches into the ground and spaced no more than 10 feet apart. Once established, the fence must remain undisturbed and be maintained throughout the construction process until final inspection. The fence should be maintained throughout the site during the construction period and should be inspected periodically for damage and proper functions.		
Monitoring		
Schedule for arborist monitoring should be monthly and when trenching near protected trees.		
Restrictions Within the Tree Protection Zone		
No storage of material, topsoil, vehicles or equipment shall be permitted within the tree enclosure area. The ground under and around the tree canopy area shall not be altered. Trees to be retained shall be irrigated, aerated and maintained as necessary to ensure survival.		
Root Pruning and Trenching		
Any trenching, construction or demolition that is expected to damage or encounter tree roots should be monitored by the project arborist or a qualified ISA Certified Arborist and should be documented.		
Root pruning shall be supervised by the project arborist. When roots over two inches in diameter are encountered they should be pruned by hand with loppers, handsaw, reciprocating saw, or chain saw rather than left crushed or torn. Roots should be cut beyond sinker roots or outside root branch junctions and be supervised by the project arborist. When completed, exposed roots should be kept moist with burlap or backfilled within one hour.		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 22 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
Boring or Tunneling		
Boring machines should be set up outside the drip line or established Tree Protection Zone. Boring may also be performed by digging a trench on both sides of the tree until roots one inch in diameter are encountered and then hand dug or excavated with an Air Spade® or similar air or water excavation tool. Bore holes should be adjacent to the trunk and never go directly under the main stem to avoid oblique (heart) roots. Bore holes should be a minimum of three feet deep.		
Timing		
If the construction is to occur during the summer months supplemental watering and bark beetle treatments should be applied to help ensure survival during and after construction.		
Tree Pruning and Removal Operations		
All tree pruning or removals should be performed by a qualified arborist with a C-61/D-49 California Contractors License. Tree pruning should be specified according to ANSI A-300A pruning standards and adhere to ANSI Z133.1 safety standards. Trees that need to be removed or pruned should be identified in the pre-construction walk through.		
Tree Protection Signs		
All sections of fencing should be clearly marked with signs stating that all areas within the fencing are Tree Protection Zones and that disturbance is prohibited. Text on the signs should be in both English and Spanish (Appendix E).		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 23 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
Appendix E: Tree Protection Signs		
E1: English		
Warning Tree Protection Zone This Fence Shall Not Be Removed Without City Arborist Approval (650) 496-5953 Removal Without Permission is Subject to a \$500.00 Fine Per Day Palo Alto Municipal Code Section 8.10.110		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 24 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
E2: Spanish		
Cuidado Zona De Arbol Pretejido Esta valla no podrán ser sacados Sin City Arborist Aprobación (650) 496-5953 Extracción sin permiso está sujeta a una Multa de \$ 500.00 por día Palo Alto Municipal Code Section 8.10.110		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 25 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
Qualifications, Assumptions, and Limiting Conditions		
Any legal description provided to the consultant is assumed to be correct. Any titles or ownership of properties are assumed to be good and marketable. All property is appraised or evaluated as though free and clear, under responsible ownership and competent management.		
All property is presumed to be in conformance with applicable codes, ordinances, statutes, or other regulations.		
Care has been taken to obtain information from reliable sources. However, the consultant cannot be responsible for the accuracy of information provided by others.		
The consultant shall not be required to give testimony or attend meetings, hearings, conferences, mediations, arbitration, or trials by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.		
This report and any appraisal value expressed herein represent the opinion of the consultant, and the consultant's fee is not contingent upon the reporting of a specified appraisal value, a stipulated result, or the occurrence of a subsequent event.		
Sketches, drawings, and photographs in this report are intended for use as visual aids, are not necessarily to scale, and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is only for coordination and ease of reference. Inclusion of said information with any drawings or other documents does not constitute a representation as to the sufficiency or accuracy of said information.		
Unless otherwise expressed: a) this report covers only examined items and their condition at the time of inspection; and b) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that structural problems or deficiencies of plants or property may not arise in the future.		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 26 of 27

3265 El Camino Real	Arborist's Assessment and Report	December 19, 2023
Certification of Performance		
I Richard Gessner, Certify:		
That I have personally inspected the tree(s) and/or the property referred to in this report, and have stated my findings accurately. The extent of the evaluation and/or appraisal is stated in the attached report and Terms of Assignment;		
That I have no current or prospective interest in the vegetation or the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved;		
That the analysis, opinions and conclusions stated herein are my own;		
That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted Arboricultural practices;		
That no one provided significant professional assistance to the consultant, except as indicated within the report.		
That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any other subsequent events;		
I further certify that I am a Registered Consulting Arborist® with the American Society of Consulting Arborists, and that I acknowledge, accept and adhere to the ASCA Standards of Professional Practice. I am an International Society of Arboriculture Board Certified Master Arborist®. I have been involved with the practice of Arboriculture and the care and study of trees since 1998.		
Richard J. Gessner	  	
ASCA Registered Consulting Arborist® #496 ISA Board Certified Master Arborist® WE-4341B		
Copyright		
© Copyright 2023, Monarch Consulting Arborists LLC. Other than specific exception granted for copies made by the client for the express uses stated in this report, no parts of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, recording, or otherwise without the express, written permission of the author.		
	Monarch Consulting Arborists LLC - P.O. Box 1010, Felton, CA 95018 831.331.8982 - rick@monarcharborist.com	Page 27 of 27