

# 1401 S Mary Ave, Sunnyvale, CA 94087 --- HOUSE ADDITION

REVISION	BY
△	Lin.X 02-27-2026
△	Lin.X 03-17-2026
△	Lin.X 04-07-2026

## STREET VIEW



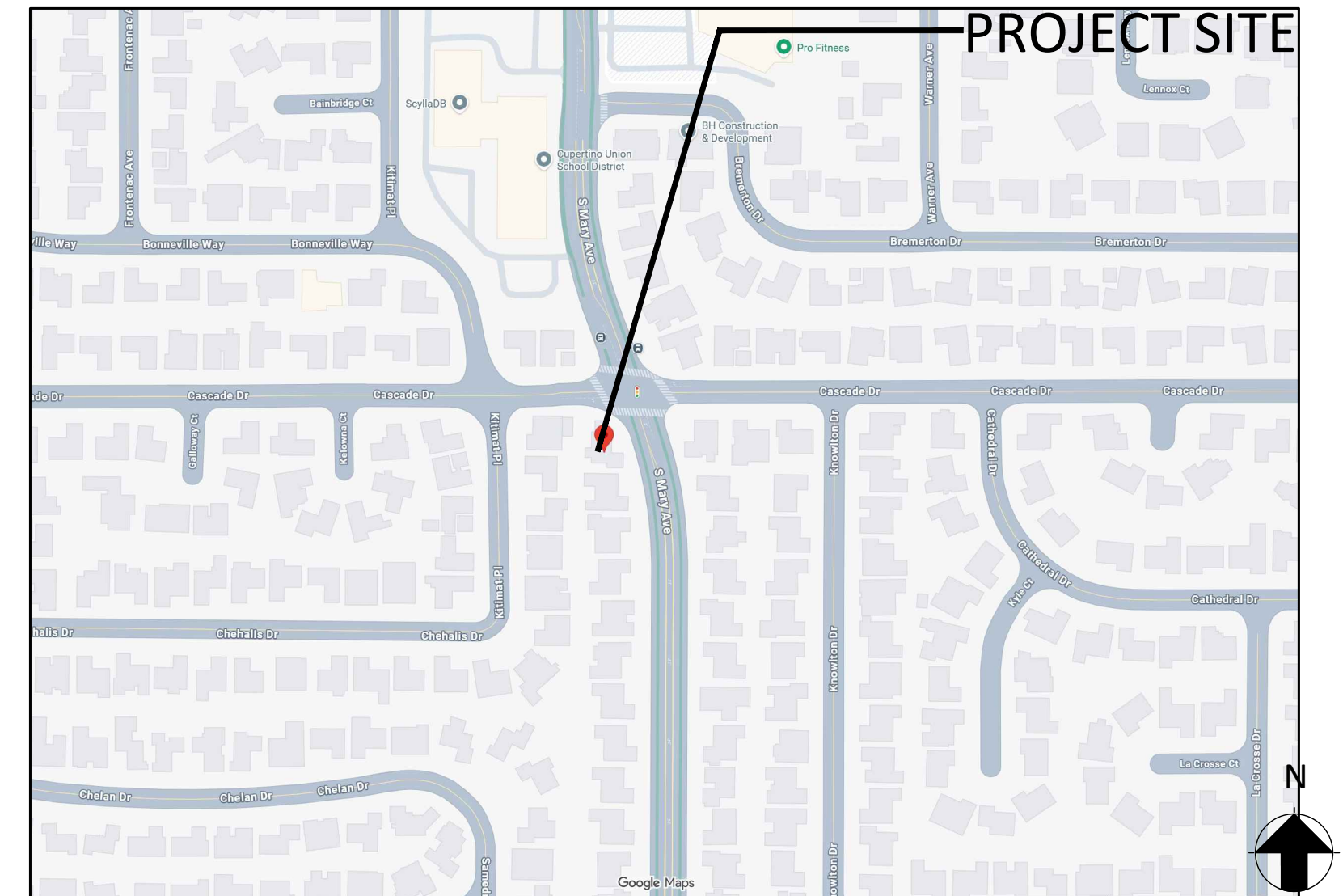
## PROJECT INFORMATION

PARCEL NUMBER: 32022053  
 ZONING DISTRICT: R-1  
 OCCUPANCY: R-3/U  
 CONSTRUCTION TYPE: TYPE V - B  
 NUMBER OF STORIES: ONE  
 NUMBER OF UNITS: ONE  
 (E) FIRE SPRINKLER: NO  
 (N) FIRE SPRINKLER: YES (NFPA 13D)  
 NUMBER OF PARKING SPACES: TWO  
 MAIN HOUSE HEIGHT : 17'-5 1/2"  
 FLOOD ZONE: X  
 LOT AREA: 8,146 SF  
 (E) LIVING AREA: 1,363 SF  
 (E) GARAGE: 501 SF  
 (E) BUILDING AREA 1,864 SF  
 (E) PORCH: 28 SF  
 (E) FAR: 0.2288  
 (E) LOT COVERAGE: 1,892 SF  
 (E) PERCENT LOT COVERAGE: 23.23%  
 (N) ADD AREA: 730 SF  
 (N) LIVING AREA: 2,134 SF  
 (N) GARAGE: 460 SF  
 (N) BUILDING AREA 2,594 SF  
 (N) PORCH: 48 SF  
 (N) FAR: 0.3184  
 (N) LOT COVERAGE: 2,642 SF  
 (N) PERCENT LOT COVERAGE: 32%  
 (E) 1 UNIT. 3 BEDROOMS 2 BATHS  
 (N) 1 UNIT. 4 BEDROOMS 4 BATHS

## SCOPE OF WORK

- HOUSE ADDITION INCLUDING:
1. ADD 730 SF LIVING AREA.
  2. CONVERT 41 SF OF GARAGE INTO LIVING AREA.
  3. GROUND FLOOR LIVING AREA REMODEL WITH LAYOUT CHANGE.
  4. THE MAIN ELECTRICAL PANEL IS UPGRADED TO 200A.
  5. NEW ELECTRICAL SUB-PANEL (100 AMPS).
  6. NEW SKYLIGHT (6 TOTAL).
  7. NEW HEAT PUMP (HEATING AND COOLING SYSTEM).
  8. NEW GAS WATER HEATER.

## VICINITY MAP



## APPLICABLE BUILDING CODES

THIS PROJECT SHALL COMPLY WITH THE FOLLOWING BUILDING CODES AND ASSOCIATED CITY OF SUNNYVALE AMENDMENTS:

- 2025 CALIFORNIA RESIDENTIAL CODE
- 2025 CALIFORNIA BUILDING CODE
- 2025 CALIFORNIA GREEN BUILDING CODE
- 2025 CALIFORNIA ELECTRICAL CODE
- 2025 CALIFORNIA MECHANICAL CODE
- 2025 CALIFORNIA PLUMBING CODE
- 2025 CALIFORNIA FIRE CODE
- 2025 CALIFORNIA ENERGY CODE
- SUNNYVALE REACH CODE

## SOLAR PV DEFERRED SUBMITTALS:

OWNER OF THE PROPERTY NEEDS OBTAIN SOLAR PV PERMIT SEPARATELY.

## SPRINKLER SYSTEM DEFERRED SUBMITTALS:

OWNER OF THE PROPERTY NEEDS OBTAIN SPRINKLER SYSTEM PERMIT SEPARATELY.

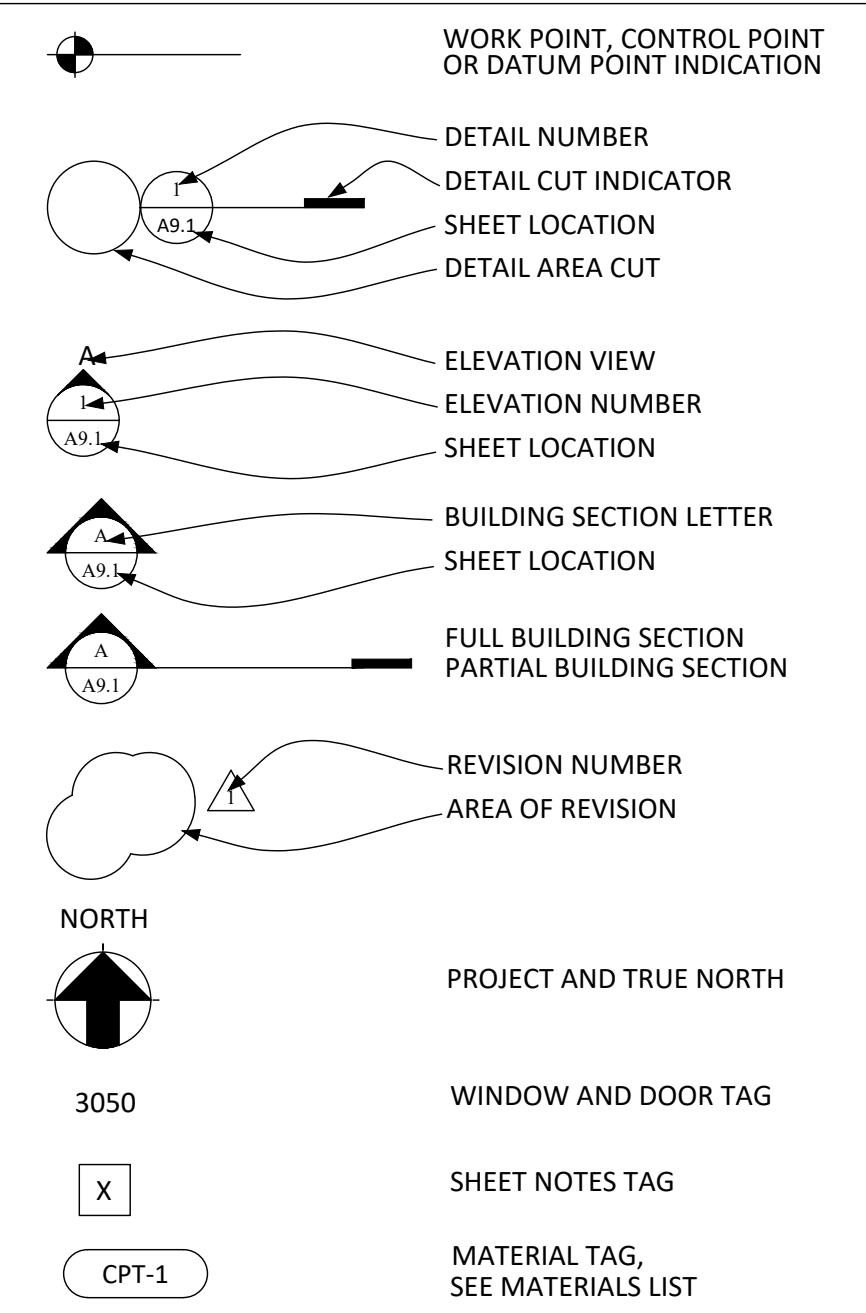
NOTE:  
THE BUILDING SHALL BE EQUIPPED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM. PER SMC 16.17.080, AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN EXISTING ONE AND TWO-FAMILY DWELLINGS WHEN ADDITIONS OR CONVERSIONS FROM NON-HABITABLE TO HABITABLE SPACES ARE MADE THAT ARE IN EXCESS OF 50 PERCENT OF THE EXISTING HABITABLE BUILDING AREA.

NOTE:  
COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE SUNNYVALE MUNICIPAL CODE (SMC), CALIFORNIA FIRE CODE (CFC), TITLE 19 CALIFORNIA CODE OF REGULATIONS, AND SUNNYVALE FIRE PREVENTION PROCEDURES/REQUIREMENTS.

## ABBREVIATIONS

&: AND  
 @: AT  
 ABV: ABOVE  
 AC: AIR CONDITIONING, ACOUSTICAL  
 ADH: ADHESIVE  
 ADJ: ADJUST, ADJUSTABLE, ADJACENT  
 AFF: ABOVE FINISHED FLOOR  
 AGA: AMERICAN GAS ASSOCIATION  
 ALT: ALTERNATE, ALTERATION; ALTITUDE  
 BR: BEDROOM  
 CLG: CEILING  
 CSMT: CASEMENT  
 DTL: DETAIL  
 E: EXISTING  
 ELEC: ELECTRICAL  
 GA: GAUGE, GAGE  
 GAL: GALLON  
 GC: GENERAL CONTRACTOR  
 GFCI: GROUND FAULT CIRCUIT INTERRUPTED  
 GLZ: GLAZE  
 GPH: GALLONS PER HOUR  
 GVL: GRAVEL  
 GYP: GYPSUM  
 GYP BD: GYPSUM BOARD  
 INSTL: INSTALL  
 N: NEW  
 SH: SINGLE HUNG  
 U.O.N.: UNLESS OTHERWISE NOTED  
 V.C.T: VINYL COMPOSITION TILE  
 VERT: VERTICAL  
 VYL: VINYL  
 WD: WOOD  
 WDW: WINDOW  
 W.P.M: WATER PROOFING MEMBRANE  
 WT: WEIGHT  
 YD: YARD

## GRAPHIC SYMBOL LEGEND



## DRAWING DIRECTORY

- ARCHITECTURAL
- A-1.0 GENERAL INFORMATION
  - BOUNDARY SURVEY
  - A-1.1 EXISTING & NEW SITE PLAN
  - A-1.1a FENCE DETAILS
  - A-1.1b TREE PROTECTION PLAN
  - A-1.1c TREE PROTECTION PLAN
  - A-1.2 FLOOR AREA DIAGRAM
  - A-2.0 EXISTING & NEW GROUND FLOOR PLAN
  - A-2.1 EXISTING & NEW ROOF PLAN
  - A-2.2 CALCULATION SHEET FOR REMOVED OR ALTERED EXTERIOR WALLS
  - A-3.0 EXISTING & NEW RIGHT SIDE ELEVATION
  - A-A SECTION
  - A-3.1 EXISTING & NEW LEFT SIDE ELEVATION
  - A-3.2 EXISTING & NEW REAR ELEVATION
  - A-3.3 EXISTING & NEW FRONT ELEVATION
  - B-B SECTION
  - A-4.0 BLUEPRINT FOR A CLEAN BAY
- CALGREEN
- CG-1 CALGREEN RESIDENTIAL MANDATORY CHECKLIST

NOTES:

- IF THE DEVELOPER IS PROPOSING ANY WORK IN THE PUBLIC RIGHT OF WAY, THEN THE DEVELOPER MUST SUBMIT A TRAFFIC CONTROL PLAN WITH OFF-SITE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL. PER THE CITY'S TEMPORARY TRAFFIC CONTROL (TTC) CHECKLIST, THE TRAFFIC CONTROL PLAN SET SHALL INCLUDE A SUMMARY OF THE TRAFFIC CONTROL TYPES, DATES, TIMES, AND BLOCKS AFFECTED. ALL CONSTRUCTION RELATED MATERIALS, EQUIPMENT AND CONSTRUCTION WORKERS PARKING NEED TO BE STORED ON-SITE AND THE PUBLIC STREETS NEED TO BE KEPT FREE AND CLEAR OF CONSTRUCTION DEBRIS.
- THE DEVELOPER IS RESPONSIBLE FOR RESTORING AND REPLACING ANY DAMAGE IN THE PUBLIC RIGHT OF WAY OR ANY DAMAGE TO THE TRAFFIC CONTROL DEVICES CAUSED DUE TO CONSTRUCTION ACTIVITIES.

**J & S CONSULTANT INC**  
 131 Sequoia Ave,  
 Redwood City, CA 94061  
 Telephone: (415) 810-0188  
 E-mail: jamesli1618@yahoo.com

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 1401 S Mary Ave,  
 Sunnyvale, CA 94087  
 APN: 32022053

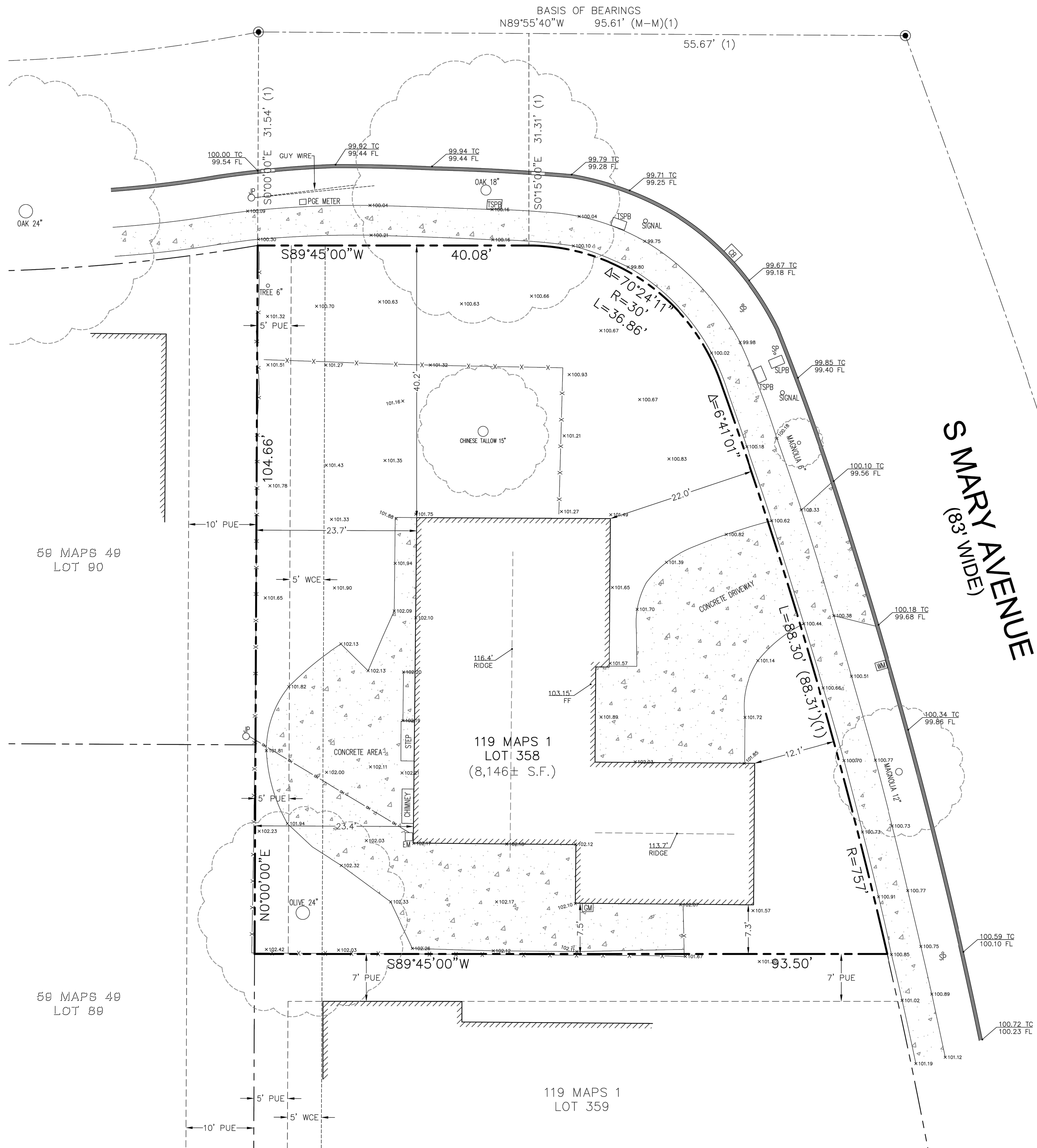
**GENERAL INFO.**

Owner: Qian Li  
 Tel: 669-241-9869  
 e-mail: qian.li.1618@gmail.com



Date	01-12-2025
Scale	
Drawn	Lin.X
Job	
Sheet	<b>A-1.0</b>
	Of Sheets

# S MARY AVENUE (62' WIDE)



### ABBREVIATIONS AND LEGEND

BSBL	BUILDING SETBACK LINE	⊙	SANITARY SEWER MANHOLE
CB	CATCH BASIN	⊙	STORM DRAIN MANHOLE
CONC	CONCRETE	⊙	FIRE HYDRANT
EM	ELECTRIC METER	—OH—	OVERHEAD ELECTRICAL LINE
EP	EDGE OF PAVEMENT		
FT	FRUIT TREE		
GM	GAS METER		
GND	GROUND		
HCR	HANDICAP RAMP		
JP	JOINT POLE		
PUE	PUBLIC UTILITY EASEMENT		
SP	SIGN POLE		
SSCO	SANITARY SEWER CLEAN OUT SEARCH FOR NOT FOUND		
SFNF	TOP OF CURB		
TC	TOP OF CURB		
TSPB	TRAFFIC SIGNAL PULL BOX		
UNK T	UNKNOWN TREE		
WM	WATER METER		
---	BOUNDARY LINE		
-X-X-	EXISTING FENCE LINE		
---	EXISTING BUILDING OUTLINE		
( )	INDICATES REFERENCE MAP NUMBER		

### REFERENCE INFORMATION

- (1) TRACT NO. 2687, 119 MAPS 1, SANTA CLARA COUNTY RECORDS
- (2) TRACT NO. 1529, 59 MAPS 49, SANTA CLARA COUNTY RECORDS

### EASEMENTS:

EASEMENTS SHOWN ARE BASED ON A REVIEW OF THE SUBDIVISION MAP ONLY.

### NOTE:

- (1) DATE OF FIELD SURVEY: JANUARY, 2026.
- (2) UNLESS OTHERWISE NOTED, TREES SHOWN WERE MEASURED AT THE GROUND AND TRUNK DIAMETERS WERE MEASURED 4' ABOVE GROUND. DRIP LINES WERE NOT MEASURED AND DEPICTED GRAPHICALLY IN THEIR APPROXIMATE LOCATIONS ONLY.
- (3) ALL DISTANCES AND DIMENSIONS SHOWN ARE IN FEET AND DECIMALS THEREOF UNLESS OTHERWISE NOTED.
- (4) BUILDING OUTLINE WAS MEASURED AT BUILDING EXTERIOR FINISH WALL SURFACE UNLESS OTHERWISE NOTED.
- (5) ELEVATION SHOWN ARE ON ASSUMED ELEVATION DATUM.

### UTILITY NOTE

- 1. THE SURFACE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED FROM RECORDS OF THE VARIOUS AGENCIES. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THEIR INDICATED LOCATION, SIZE, OR TYPE. RECORD UTILITY INFORMATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.
- 2. EXISTING SANITARY SEWER CLEAN OUT (SSCO) WAS SEARCHED NOT FOUND.

### SPECIAL NOTE:

THE LOT AREA SHOWN ON THIS BOUNDARY SURVEY MAP IS CALCULATED BASED ON PRECISE FIELD MEASUREMENTS AND THE DIMENSIONS RECORDED ON OFFICIAL SUBDIVISION OR RECORD OF SURVEY MAPS. THIS AREA IS DETERMINED BY A LICENSED SURVEYOR AND REFLECTS THE MOST ACCURATE AND RELIABLE INFORMATION AVAILABLE. PLEASE BE AWARE THAT FIGURES FROM CITY/COUNTY RECORDS OR REAL ESTATE WEBSITES MAY DIFFER DUE TO VARIATIONS IN DATA SOURCES OR ESTIMATION METHODS AND SHOULD NOT BE CONSIDERED AS ACCURATE AS THIS SURVEY.

### Purpose of Survey and Limitations of Use:

This Boundary and Topographic Survey is prepared exclusively for site planning and development purposes in connection with proposed [house addition / new residence / ADU] design and permitting. It is not intended for use in resolving property line disputes, fence encroachments, or other legal matters. Use of this map for any other purpose may require additional services.

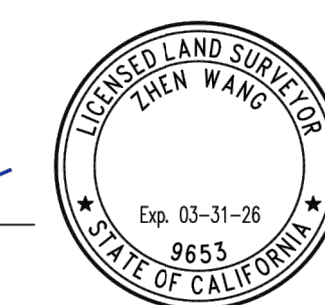
## BOUNDARY TOPOGRAPHIC SURVEY

LOT 358, AS SHOWN ON "TRACT NO. 2687 CHERRYHILL WEST UNIT NO. 5", BOOK 119 OF MAPS AT PAGE 1, SANTA CLARA COUNTY RECORDS. APN 320-22-053

(1401 S MARY AVENUE)

CITY OF SUNNYVALE SANTA CLARA COUNTY CALIFORNIA  
 SCALE: 1"=8' JANUARY, 2026

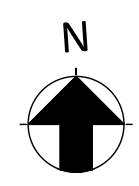
Zhen Wang  
 ZHEN WANG



02/01/2026  
 DATE

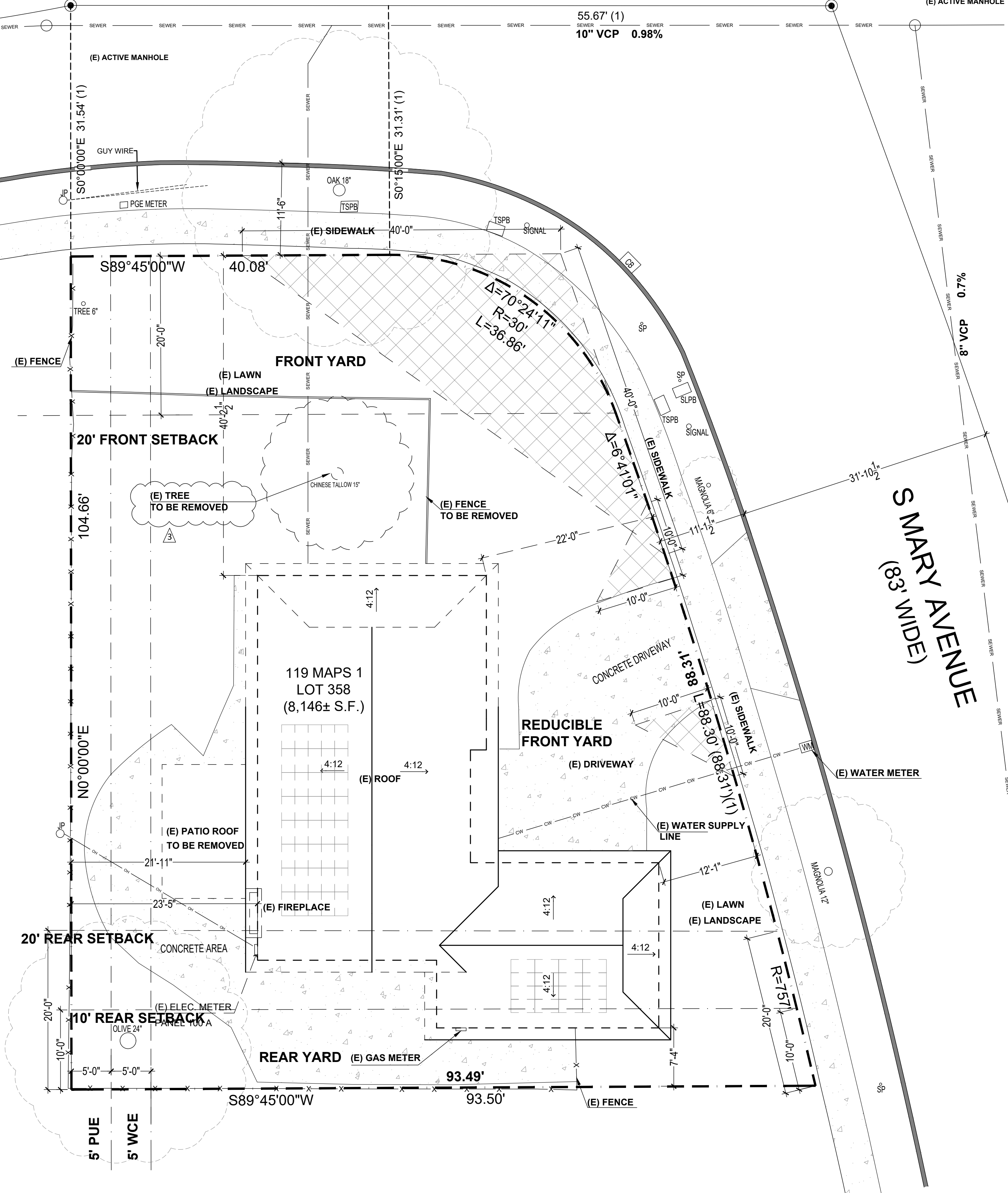
ZHEN'S LAND SURVEYING CORP.  
 WALNUT CREEK, CALIFORNIA  
 TEL: (415)802-9945 | INFO@ZHENSLANDSURVEYING.COM

REVISION	BY
1	Lin.X 02-27-2026
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3	Lin.X 04-07-2026



# S MARY AVENUE (62' WIDE)

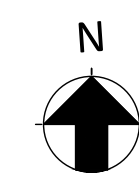
BASIS OF BEARINGS  
N89°55'40"W 95.61' (M-M)(1)



ABBREVIATIONS AND LEGEND

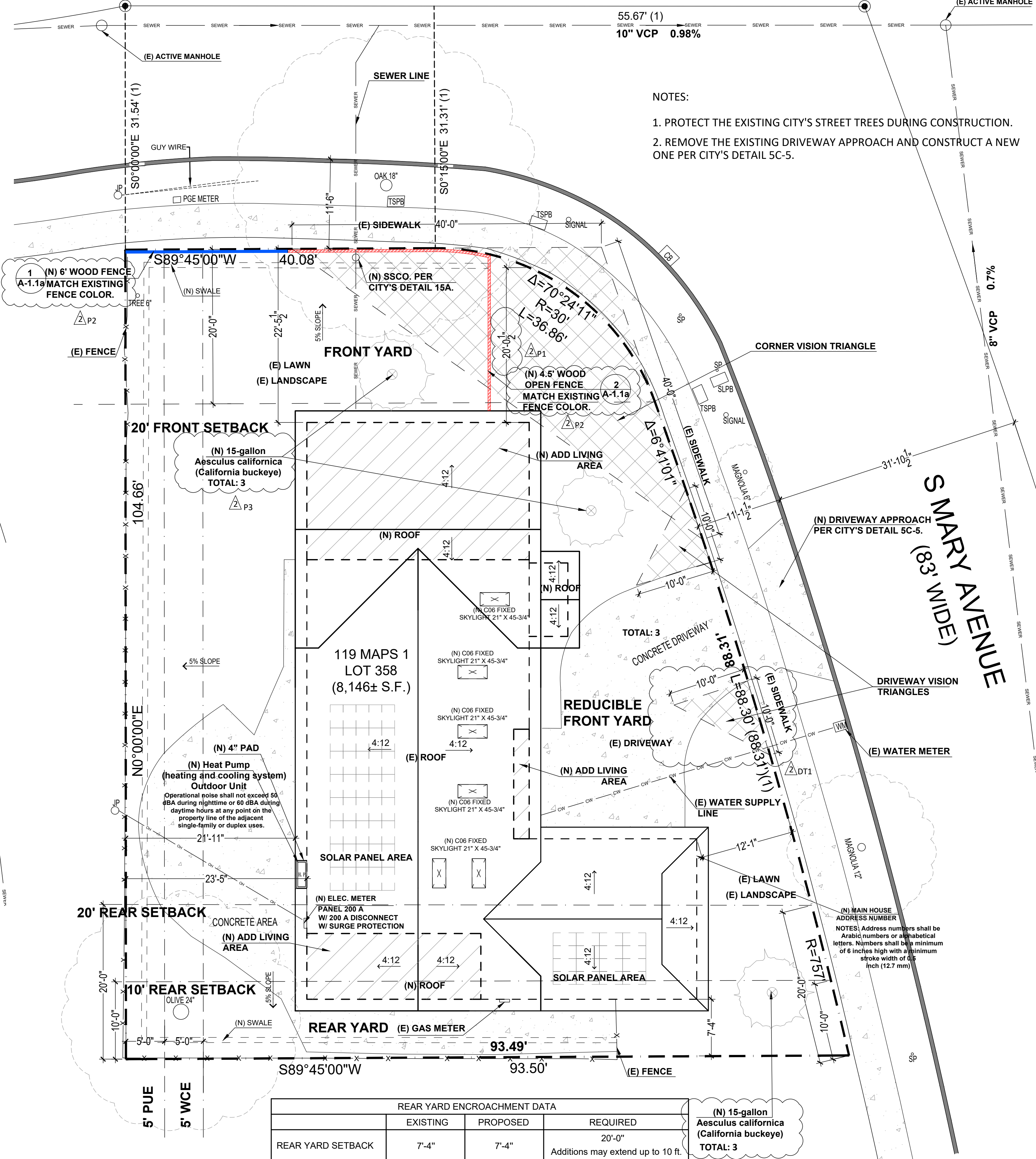
CB	CATCH BASIN
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SP	SIGN POLE
TSPB	TRAFFIC SIGNAL PULL BOX
WM	WATER METER

**(E) SITE PLAN**  
SCALE: 1/8"=1'-0"



# S MARY AVENUE (62' WIDE)

BASIS OF BEARINGS  
N89°55'40"W 95.61' (M-M)(1)



REAR YARD ENCROACHMENT DATA			
	EXISTING	PROPOSED	REQUIRED
REAR YARD SETBACK	7'-4"	7'-4"	20'-0" Additions may extend up to 10 ft.
10'-20' REAR YARD ENCROACHMENT AREA	357 SF	496 SF	Not cover more than 25% of the required rear yard area. 1,799X 25%= 449.75 SF
20' REAR YARD ENCROACHMENT AREA	424 SF	615 SF	

**(N) SITE PLAN**  
SCALE: 1/8"=1'-0"

- NOTES:
1. PROTECT THE EXISTING CITY'S STREET TREES DURING CONSTRUCTION.
  2. REMOVE THE EXISTING DRIVEWAY APPROACH AND CONSTRUCT A NEW ONE PER CITY'S DETAIL 5C-5.

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**(E) & (N) SITE PLAN**

Owner:  
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Tel: 669-241-9869  
e-mail: qian.li.bj@gmail.com



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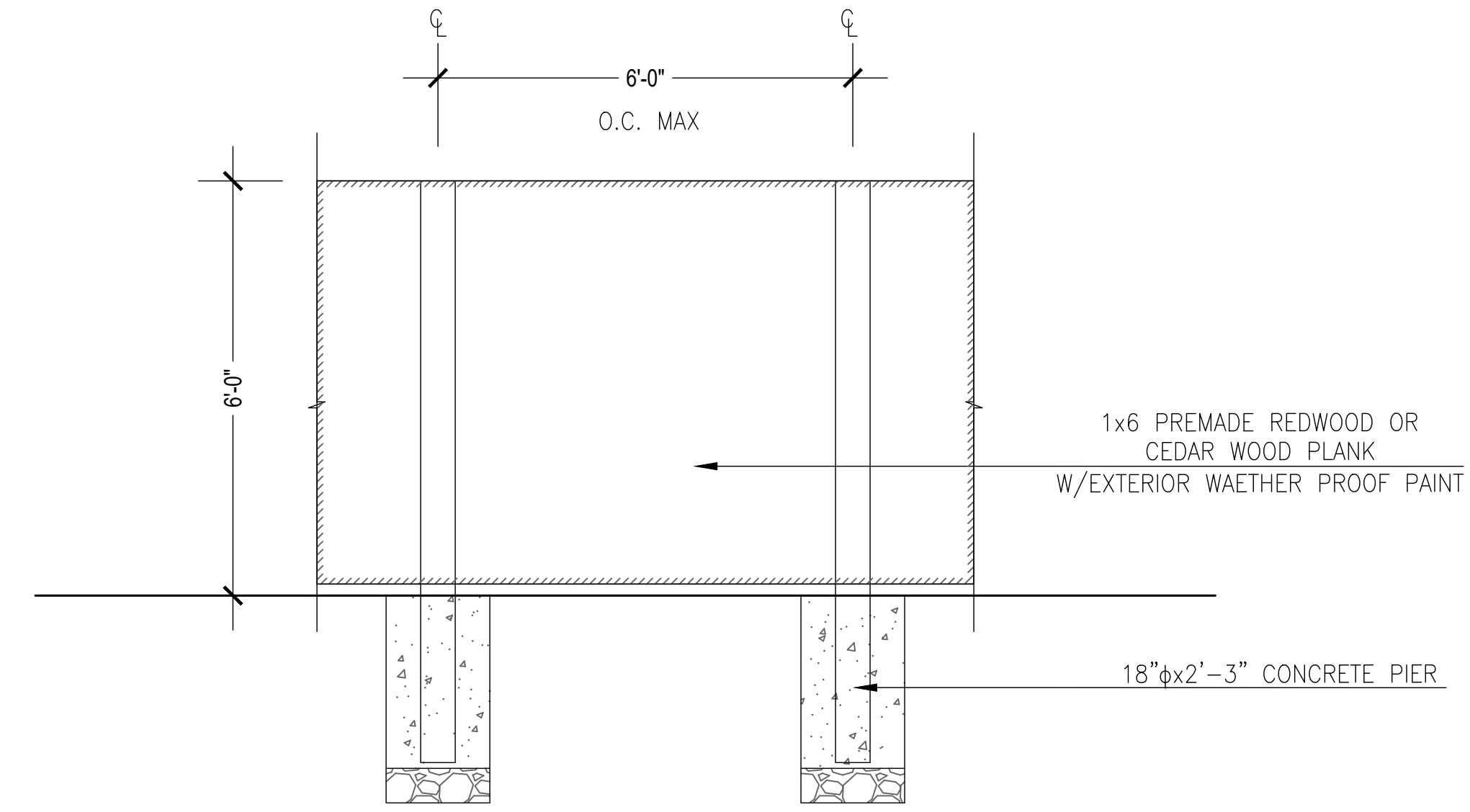
FENCE DETAILS

Owner:  
 Qian Li  
 Tel: 669-241-9859  
 e-mail: qian.li.bj@gmail.com

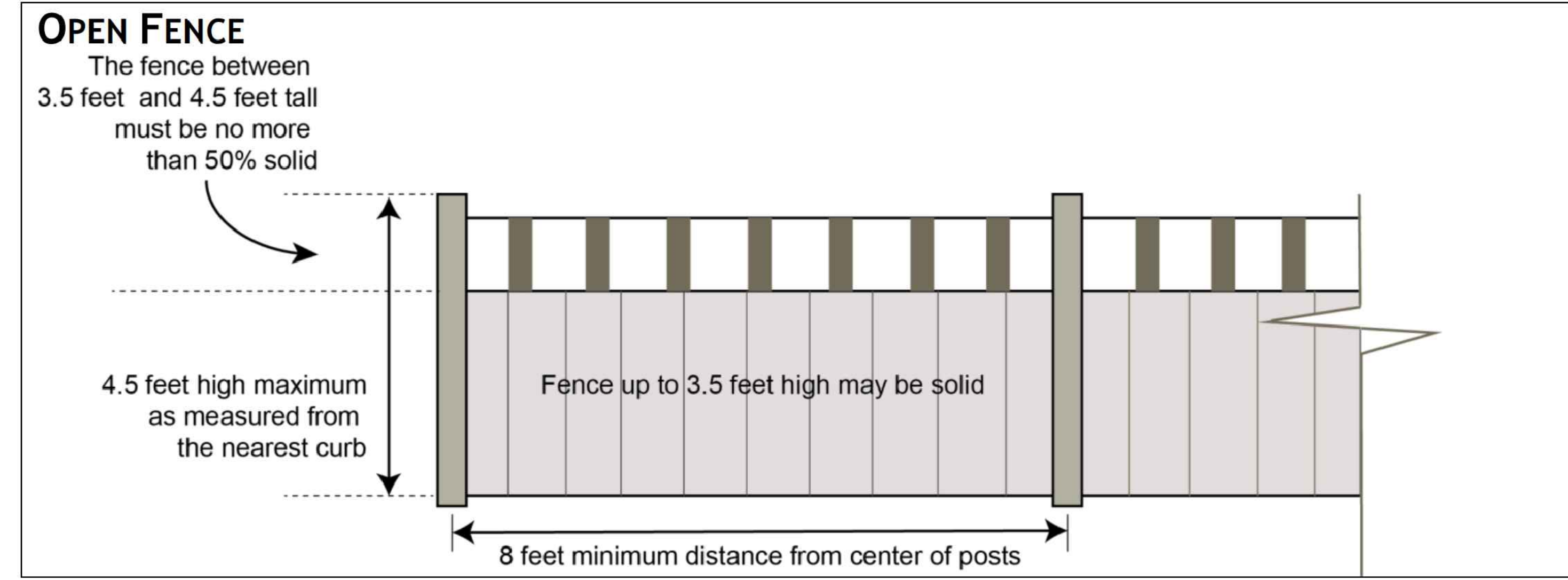


Date 01-12-2025  
 Scale 1/2"=1'-0"  
 Drawn Lin.X  
 Job

Sheet  
**A-1.1a**  
 Of Sheets



**6 FT HIGH WOOD FENCE 1**  
 SCALE: 1/2"=1'-0"



**4.5 FT HIGH WOOD OPEN FENCE 2**  
 SCALE: 1/2"=1'-0"

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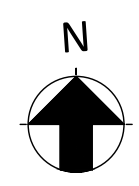
**TREE PROTECTION PLAN**

Owner:  
Qian Li  
Tel: 669-241-9869  
e-mail: qian.li.lij@gmail.com



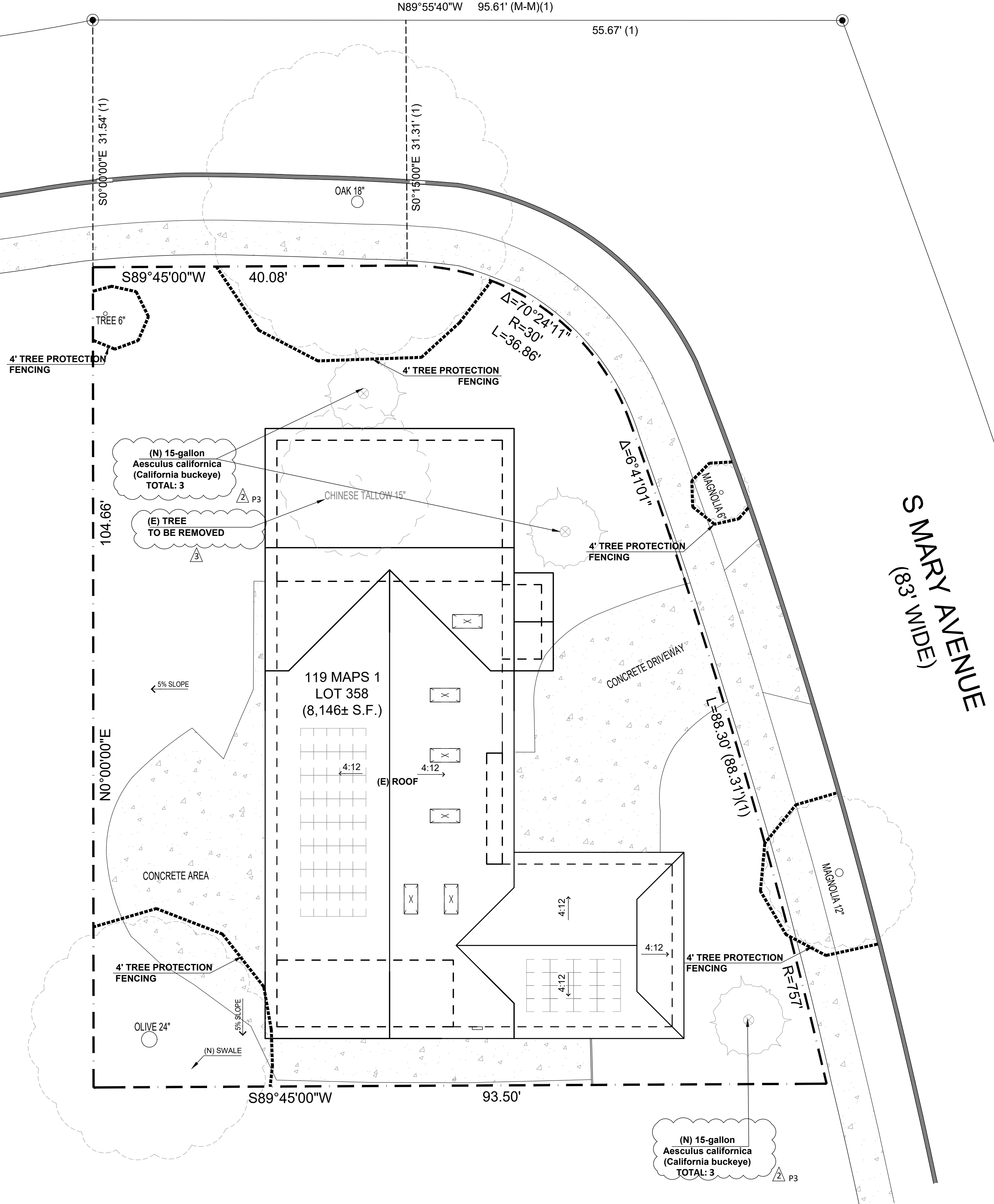
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**S MARY AVENUE**  
(62' WIDE)

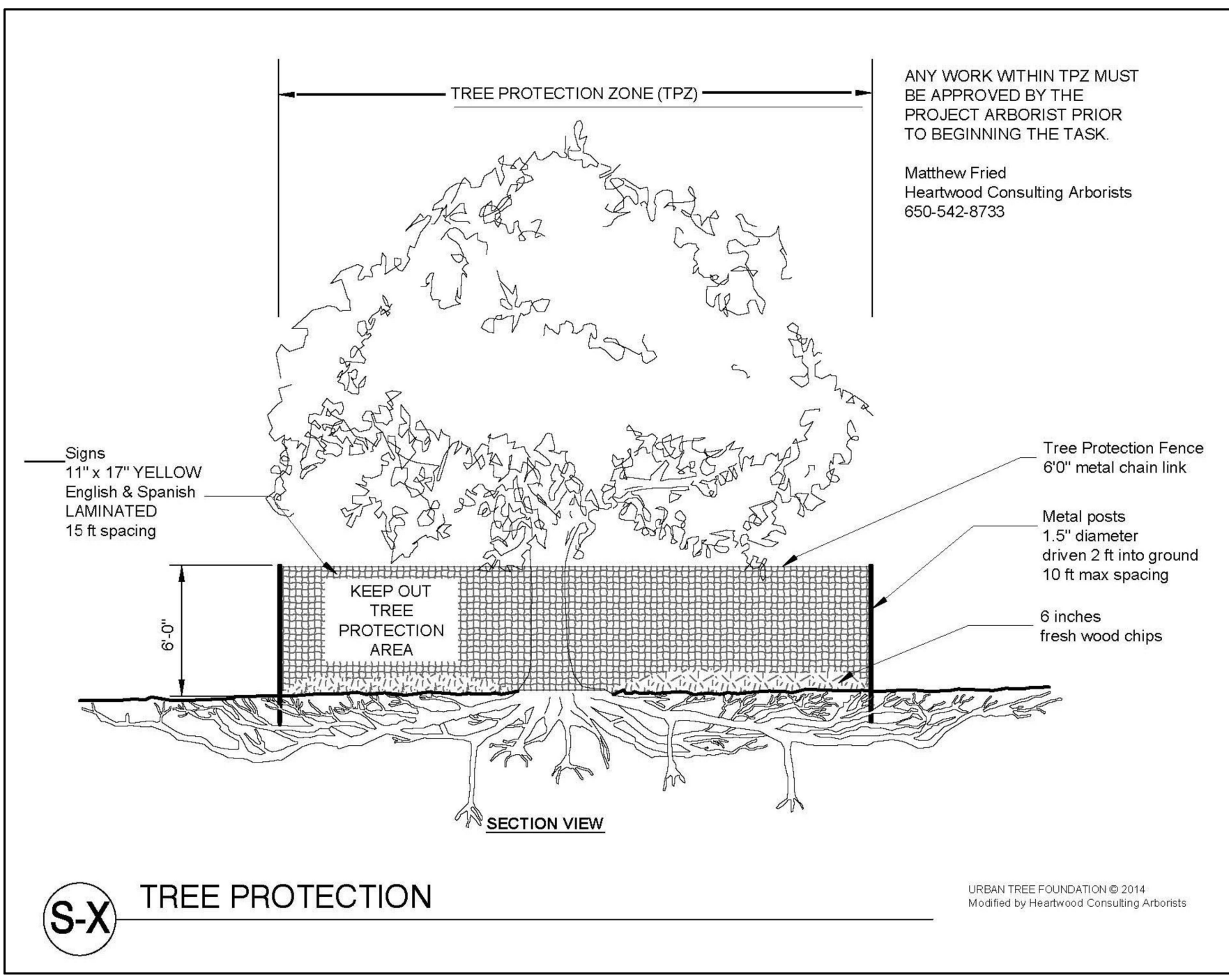
BASIS OF BEARINGS  
N89°55'40"W 95.61' (M-M)(1)



**S MARY AVENUE**  
(83' WIDE)

**TREE PROTECTION NOTES:**

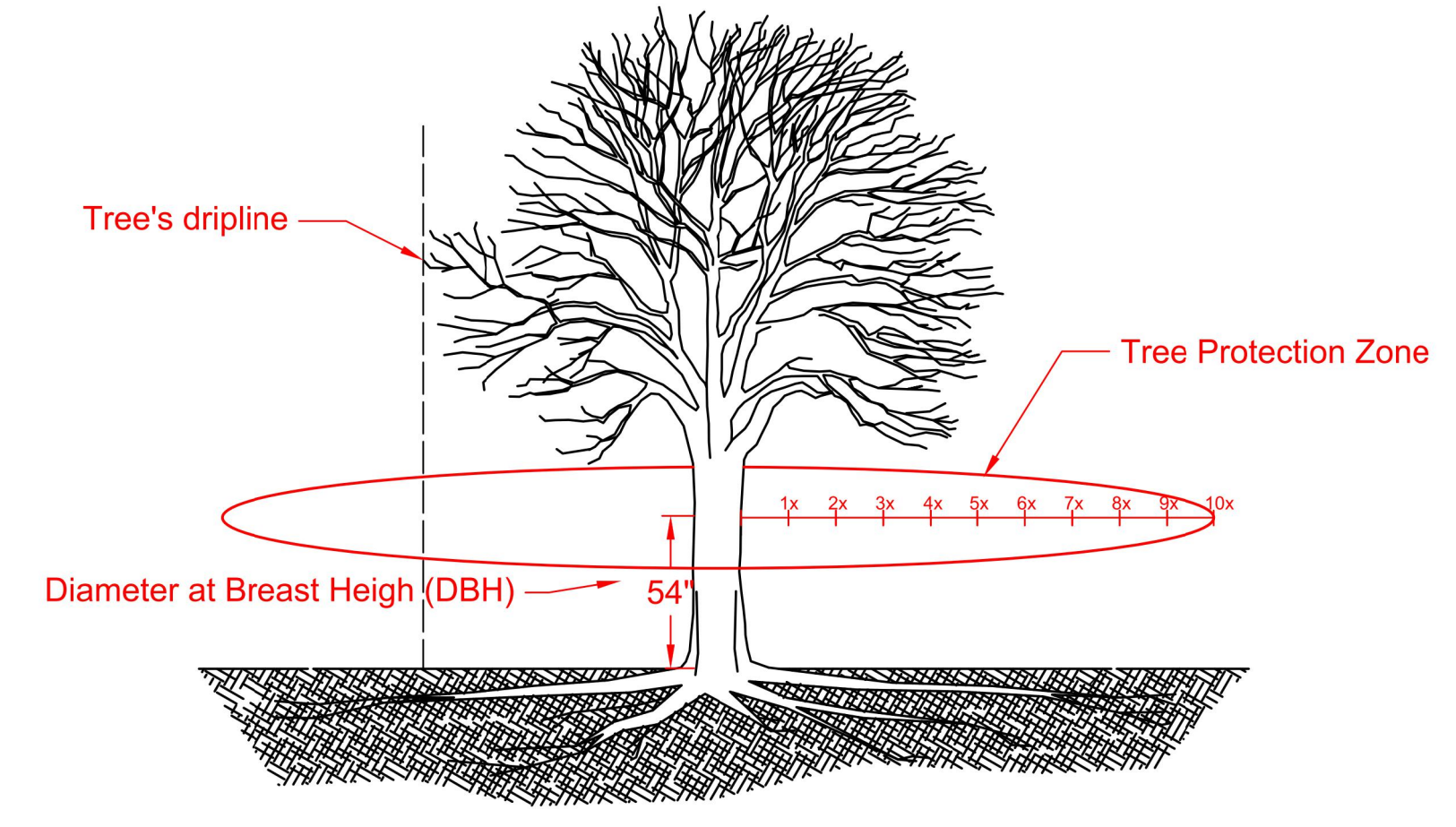
- TREE PROTECTION FENCE:**  
PRIOR TO ANY CONSTRUCTION, INSTALL TREE PROTECTION FENCES AT THE LOCATIONS AND DISTANCES SHOWN ON SHEET T-1. THE AREA WITHIN THE FENCE IS THE TREE PROTECTION ZONE (TPZ).
  - FENCE SHALL BE SIX (6)-FOOT-TALL CHAIN LINK.
  - FENCE POSTS SHALL BE 1.5 INCHES IN DIAMETER, DRIVEN 2 FEET INTO THE GROUND, AT MOST 10 FEET APART.
  - PERMANENT WALLS AND FENCES MAY BE USED INSTEAD OF CHAIN LINK FENCE WHERE THEY ARE OF COMPARABLE HEIGHT AND STURDINESS TO CHAIN LINK.
  - MOVABLE BARRIERS OF CHAIN LINK FENCE SECURED TO CEMENT BLOCKS MAY BE SUBSTITUTED FOR FIXED FENCE IN LIMITED CIRCUMSTANCES AND WITH CITY ARBORIST APPROVAL IF THE FENCE WILL HAVE TO BE MOVED TO ACCOMMODATE CERTAIN CONSTRUCTION PHASES.
  - MANUALLY SPREAD A 6-INCH LAYER OF COARSE WOODCHIPS THROUGHOUT ENTIRE TPZ PRIOR TO CONSTRUCTION ACTIVITY.
  - CUSTOM TPZ WARNING SIGNS (ENGLISH AND SPANISH) SHALL BE PRINTED ON 11" X 17" LAMINATED YELLOW PAPER AND SECURED IN A PROMINENT LOCATION ON EACH PROTECTION FENCE.
  - IF CONSTRUCTION ACTIVITIES ARE PLANNED BETWEEN APRIL AND OCTOBER, TEMPORARY SUPPLEMENTAL IRRIGATION (SOAKER HOSE) SHALL BE INSTALLED THROUGHOUT THE TPZ. THE PROJECT ARBORIST WILL DIRECT THE WATERING SCHEDULE BASED ON SITE-SPECIFIC CONSIDERATIONS AND RECENT WEATHERHOWN IN THE CONTRACTOR'S DETAILED REDLINES. THESE REDLINES SHALL BE PROVIDED TO THE ENGINEER OF RECORD FOR THE PREPARATION OF ACCURATE RECORD DRAWINGS.
- TREE PROTECTION VERIFICATION LETTER:**  
NOTIFY THE PROJECT ARBORIST AFTER TREE PROTECTION MEASURES HAVE BEEN INSTALLED. THE PROJECT ARBORIST MUST INSPECT THE MEASURES TO VERIFY THEIR COMPLIANCE AND WILL ISSUE A LETTER TO THE CITY WITH THEIR FINDINGS.
- MEETING WITH PROJECT ARBORIST:**  
PRIOR TO BEGINNING ANY WORK OR DEMOLITION, 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.
  - IDENTIFY ANY POTENTIAL CLEARANCE PRUNING THAT MAY BE REQUIRED TO ACCOMMODATE CONSTRUCTION.
  - THE GENERAL CONTRACTOR OR PROJECT MANAGER IS RESPONSIBLE UNG THIS MEETING.
- ALERT PROJECT ARBORIST WHEN CONSTRUCTION IS SCHEDULED TO BEGIN. THE PROJECT ARBORIST SHALL VISIT THE SITE MONTHLY UNTIL PROJECT COMPLETION TO:**
  - MONITOR THE EFFECTIVENESS OF THE TREE PRESERVATION PLAN.
  - PROVIDE RECOMMENDATIONS FOR ANY NECESSARY ADDITIONAL CARE OR TREATMENT.
  - ISSUE A REPORT TO THE CITY WITH THEIR FINDINGS.
  - THE FINAL REPORT WILL INCLUDE RECOMMENDATIONS FOR POST-CONSTRUCTION MITIGATION AND TREATMENTS, IF APPROPRIATE.
- MAINTAIN TREE PROTECTION FENCES AROUND ALL TPZS AND INSPECT DAILY FOR #1 DAMAGE AND PROPER FUNCTION.**
- DO NOT REMOVE, ADJUST, OR WORK INSIDE ANY TPZ WITHOUT CONSULTING THE PROJECT ARBORIST.**
- TREE PROTECTION ZONE (TPZ) RESTRICTIONS:**
  - NO OPERATION, STORAGE, OR PARKING OF VEHICLES OR HEAVY EQUIPMENT.
  - NO STORAGE OR DISPOSAL OF BUILDING MATERIALS, REFUSE, SOIL, EXCAVATED SPOILS, OR CHEMICALS OF ANY KIND.
  - NO CUTTING OF TREE ROOTS BY UTILITY TRENCHING, FOUNDATION DIGGING, OR ANY MISCELLANEOUS EXCAVATION WITHOUT PRIOR APPROVAL OF THE PROJECT ARBORIST.
  - NO USE OF TPZ AS A REST/LUNCH/BREAK AREA BY PROJECT STAFF.
  - NO GRADE CHANGES OF ANY KIND EXCEPT AS EXPRESSLY DESIGNED OR APPROVED BY THE PROJECT ARBORIST.
  - NO ALTERATION OR DISTURBANCE, FOR ANY DURATION, OF THE GROUND INSIDE THE TPZ.
- ANY WORK WITHIN ANY TPZ MUST BE APPROVED BY THE PROJECT ARBORIST PRIOR TO BEGINNING THE TASK.**
- ROOT MANAGEMENT:**
  - IF ROOTS 1-2 INCHES IN DIAMETER MUST BE CUT, SEVER THEM CLEAN AND SQUARE AT UNDAMAGED TISSUE USING BYPASS PRUNERS FOR A SHARP SAW.
  - IF ROOTS OVER 2" MUST BE CUT, STOP WORK IN THAT AREA AND CONTACT THE PROJECT ARBORIST IMMEDIATELY FOR GUIDANCE.
  - THE PROJECT ARBORIST WILL INSPECT THE EXPOSED ROOT(S) TO ASSESS THE IMPACT OF CUTTING AND OVERSEE/DOCUMENT ANY APPROVED ROOT CUTTING.
  - EXPOSED ROOTS AND UPPER 3 FEET OF TRENCH WALLS SHALL BE COVERED WITH 3-4 LAYERS OF BURLAP OR ABSORBENT FABRIC AND KEPT MOIST UNTIL BACKFILLED.
- PRUNING / TRIMMING:**  
ANY PRUNING OF ANY LIMBS OR ROOTS OVER 2" DIAMETER MUST BE SUPERVISED BY THE PROJECT ARBORIST.



**LEGEND**  
----- TREE PROTECTION FENCE

**(N) TREE PROTECTION PLAN**  
SCALE: 1/8"=1'-0"

**1 TREE PROTECTION ZONE SECTION VIEW**



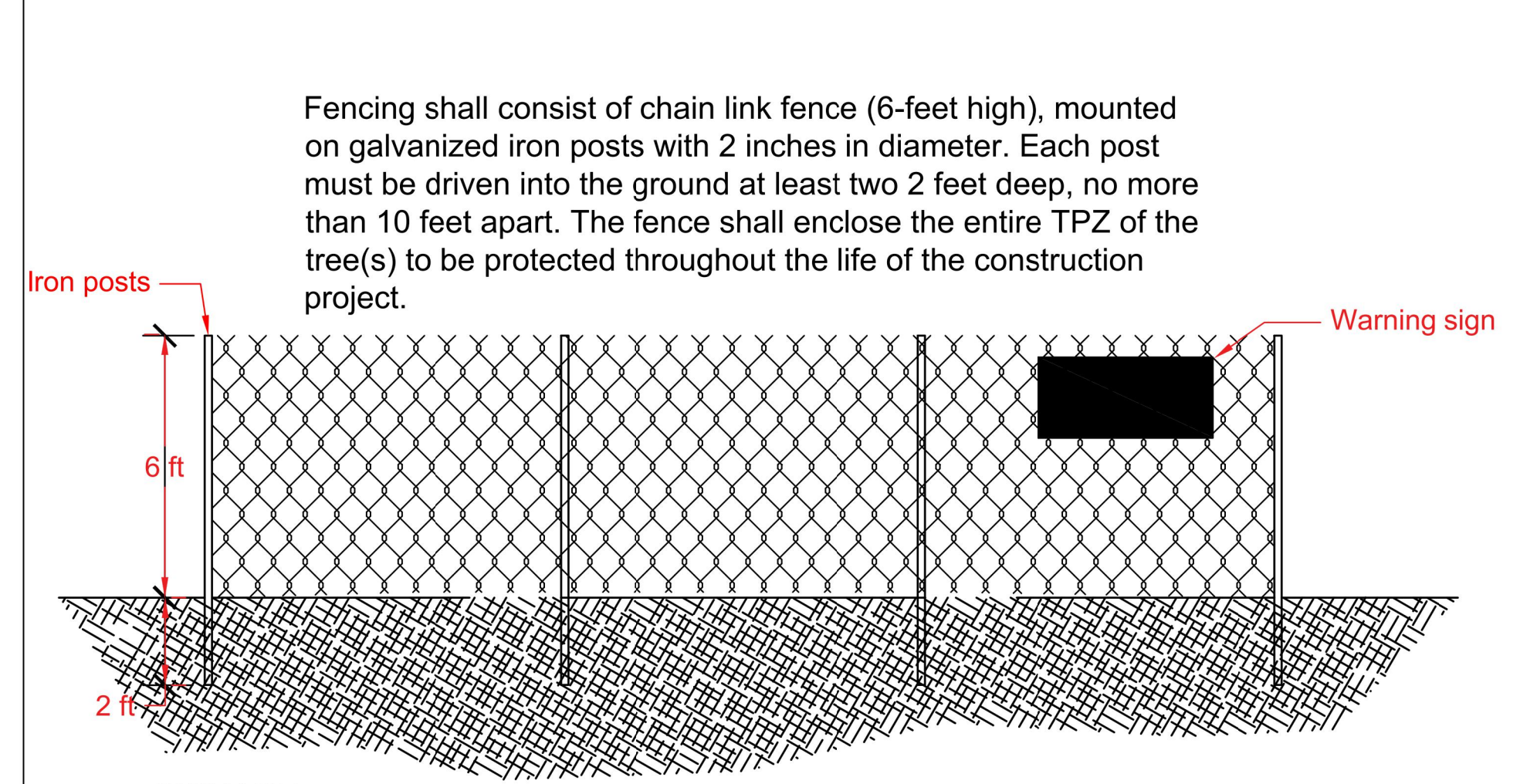
**PROTECTED TREES**

In the City of San Mateo per Chapter 13.40 of the Municipal Code, the following trees are considered protected:

- Heritage Trees
  - Oak trees with a trunk diameter of 10 inches or more
  - Any other tree species with a trunk diameter of 15 inches or more.
- Street Trees
  - All trees growing within the public right of way.
- Existing Trees/Major Vegetation
  - Trees with a trunk diameter of 6 inches or more designated as protected as part of a Planning Application subject to Chapter 27.71.

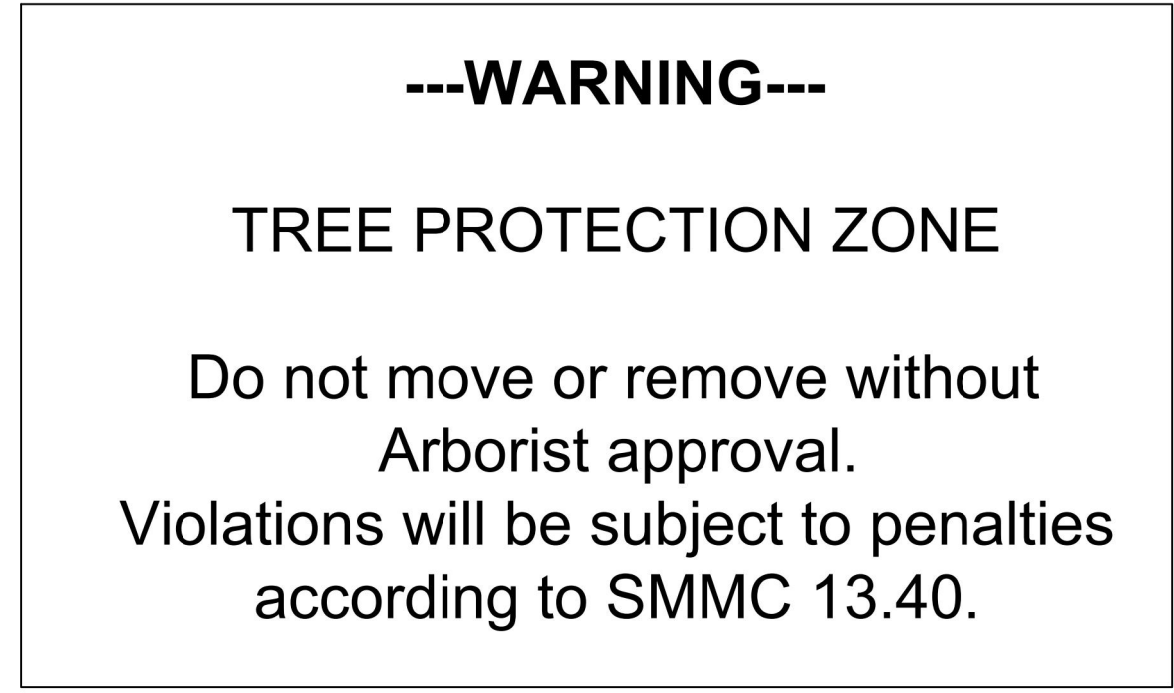
Tree Protection Zone (TPZ) is the area surrounding a tree with a radius equal to 10 times the diameter of the trunk measured at 54" above grade or as otherwise specified by a Project Arborist and approved by the City Arborist. Construction activities as defined by the Code are not allowed within the TPZ. It is unlawful for any person to cause damage to a Protected Tree compromising its health or structural integrity according to accepted industry standards, or to cause damage that is severely detrimental to its overall aesthetics. Any violations may result in penalties described in SMMC 13.40.160."

**2 TREE PROTECTION FENCING AND SIGN DETAILS SECTION VIEW**

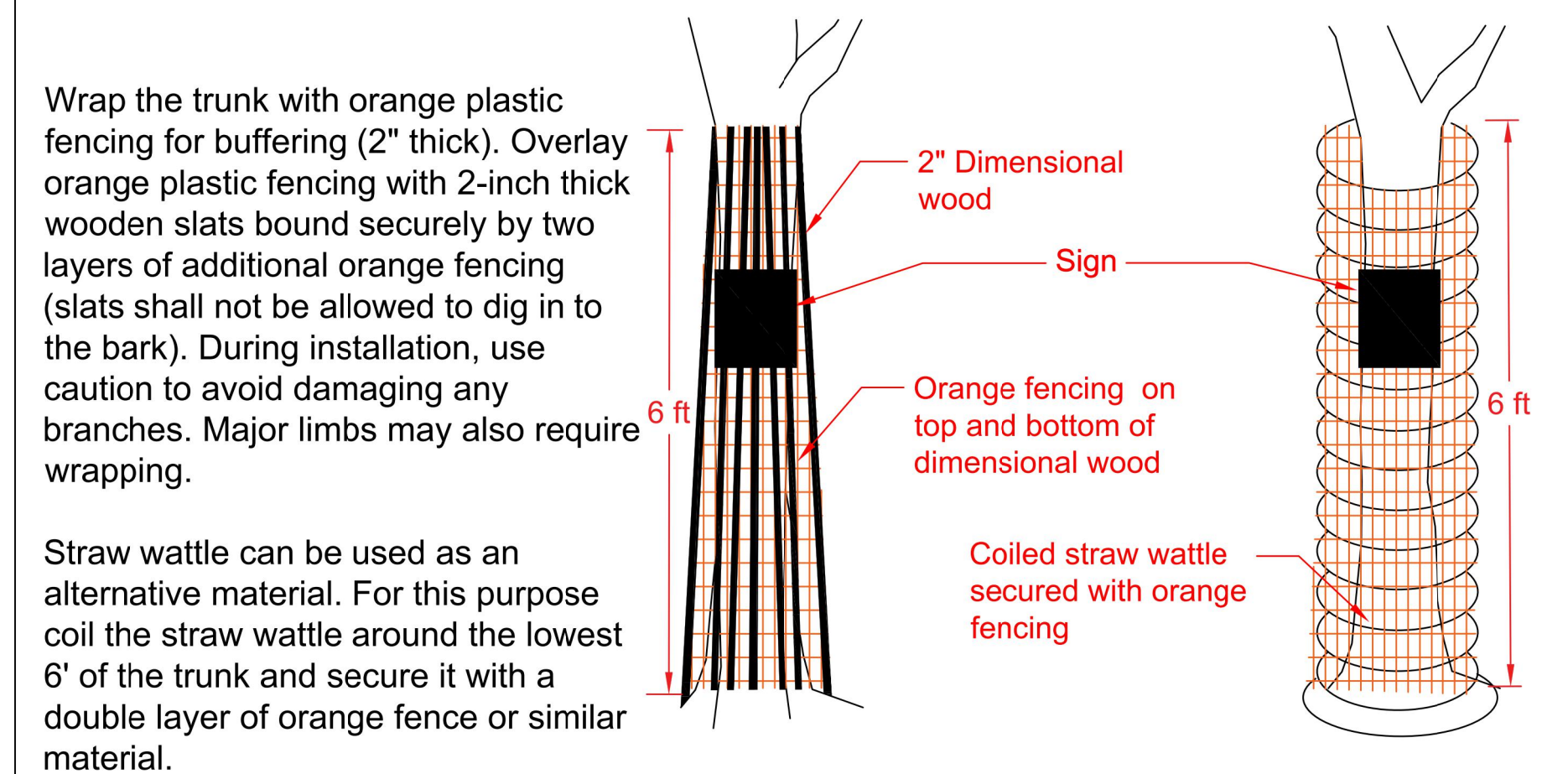


**SIGNAGE**

Warning signs shall be installed to be displayed on fencing and trunk wraps. Tree signs should be in English, Spanish or any other language if required.

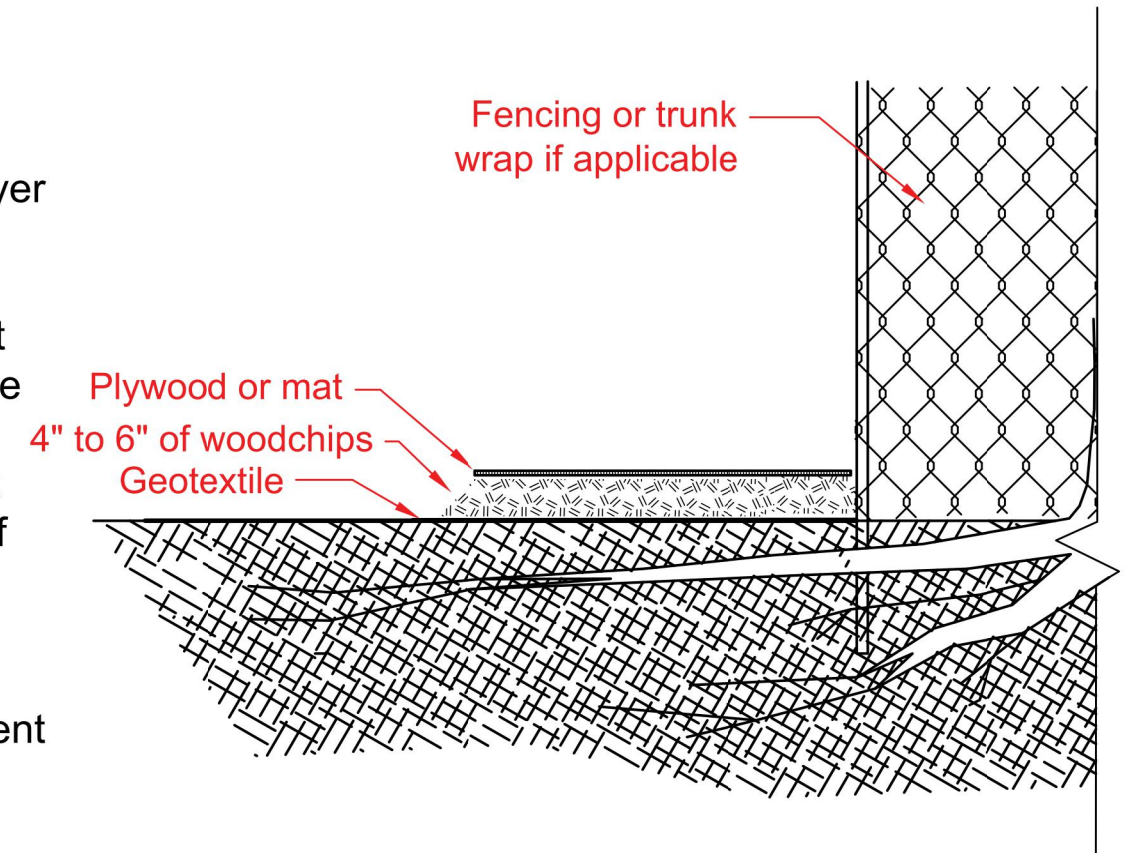


**3 TRUNK AND ROOT PROTECTION DETAILS TRUNK WRAP**



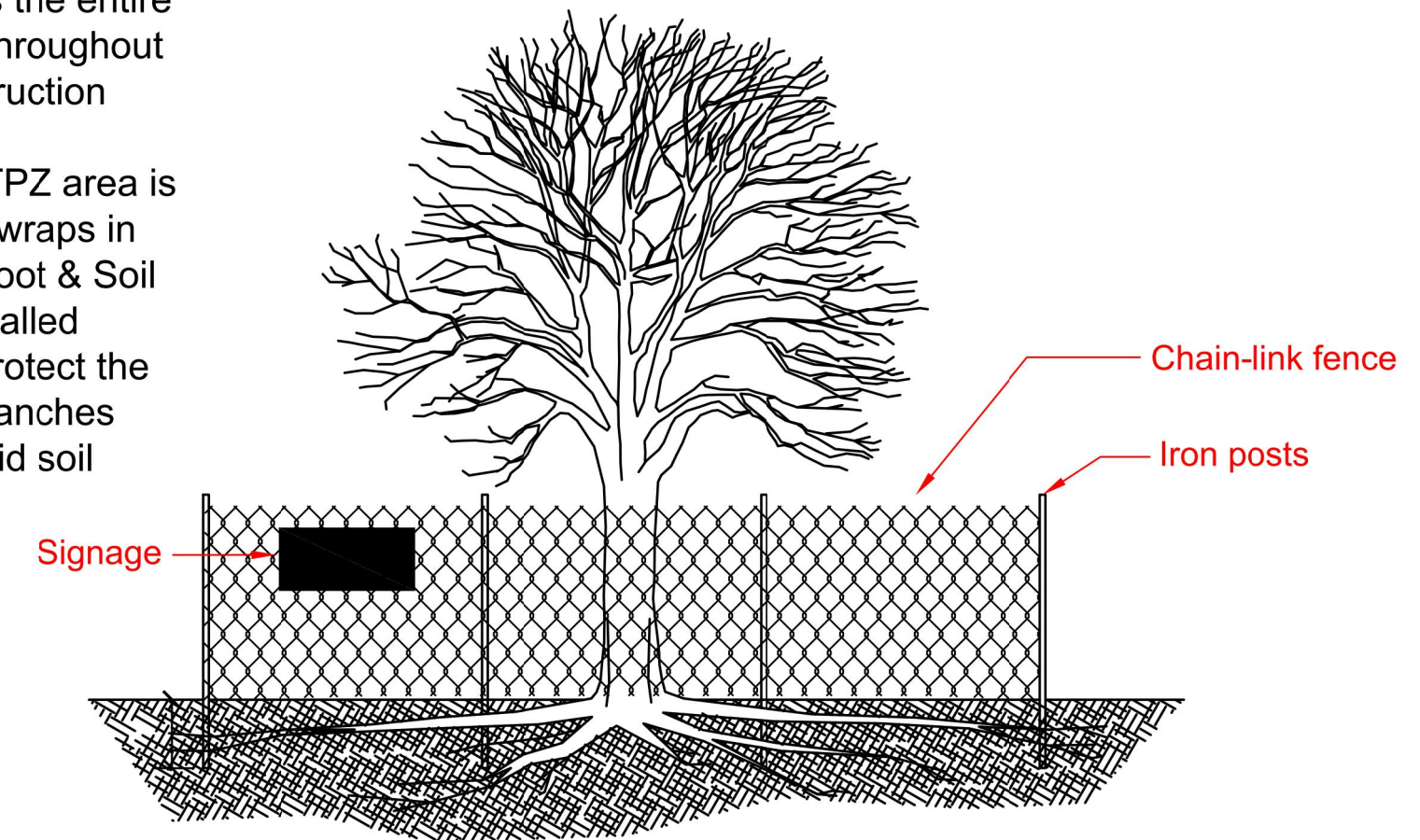
**ROOT BUFFER**

Root buffers consist of secured geotextile material covered with a layer 4" to 6" of clean wood chips and 3/4-inch plywood sheets securely installed over the wood chips. Do not use geotextile fabric if root buffers are to be left permanently. The Project Arborist shall be present during the installation and removal of root buffers. Any root buffer variation must be approved by the City Arborist in accordance with the Best Management Practices (BMPs).

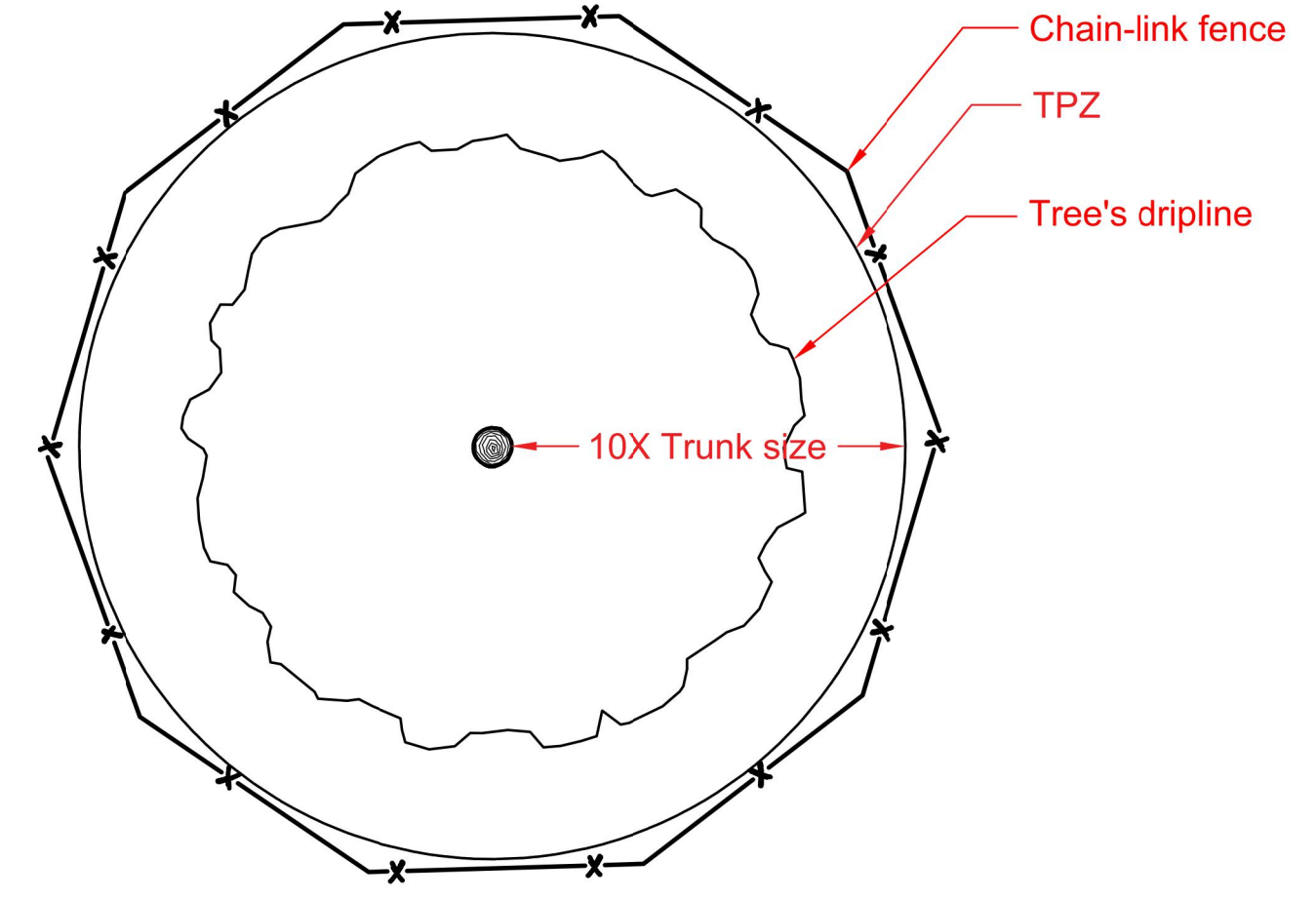


**4 TYPE I COMPLETE FENCING SECTION VIEW**

The fence encloses the entire TPZ of the tree(s) throughout the life of the construction project. When fencing the TPZ area is not feasible, Trunk wraps in combination with Root & Soil buffers shall be installed within the TPZ to protect the trunk, roots, and branches from injury and avoid soil compaction.



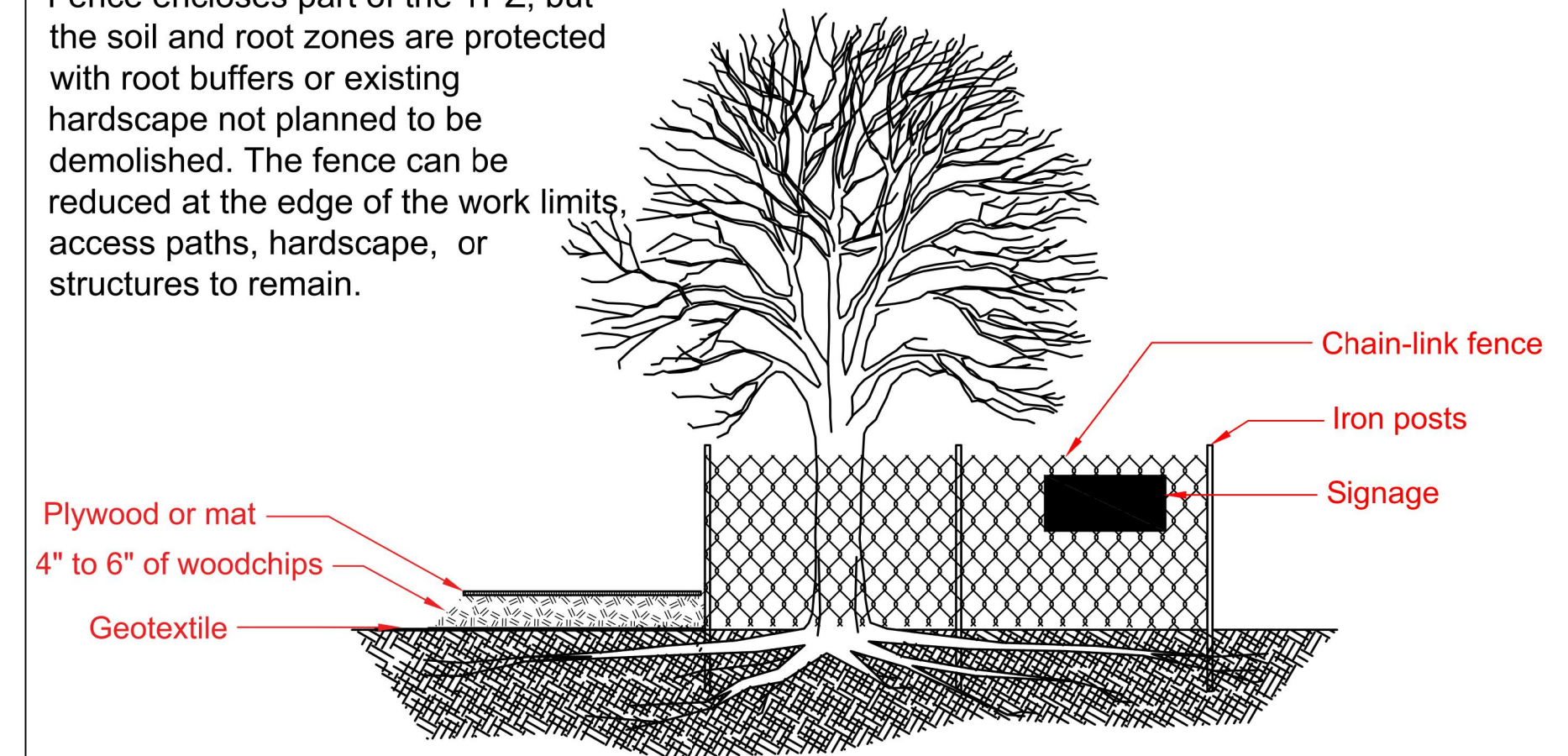
**PLAN VIEW**



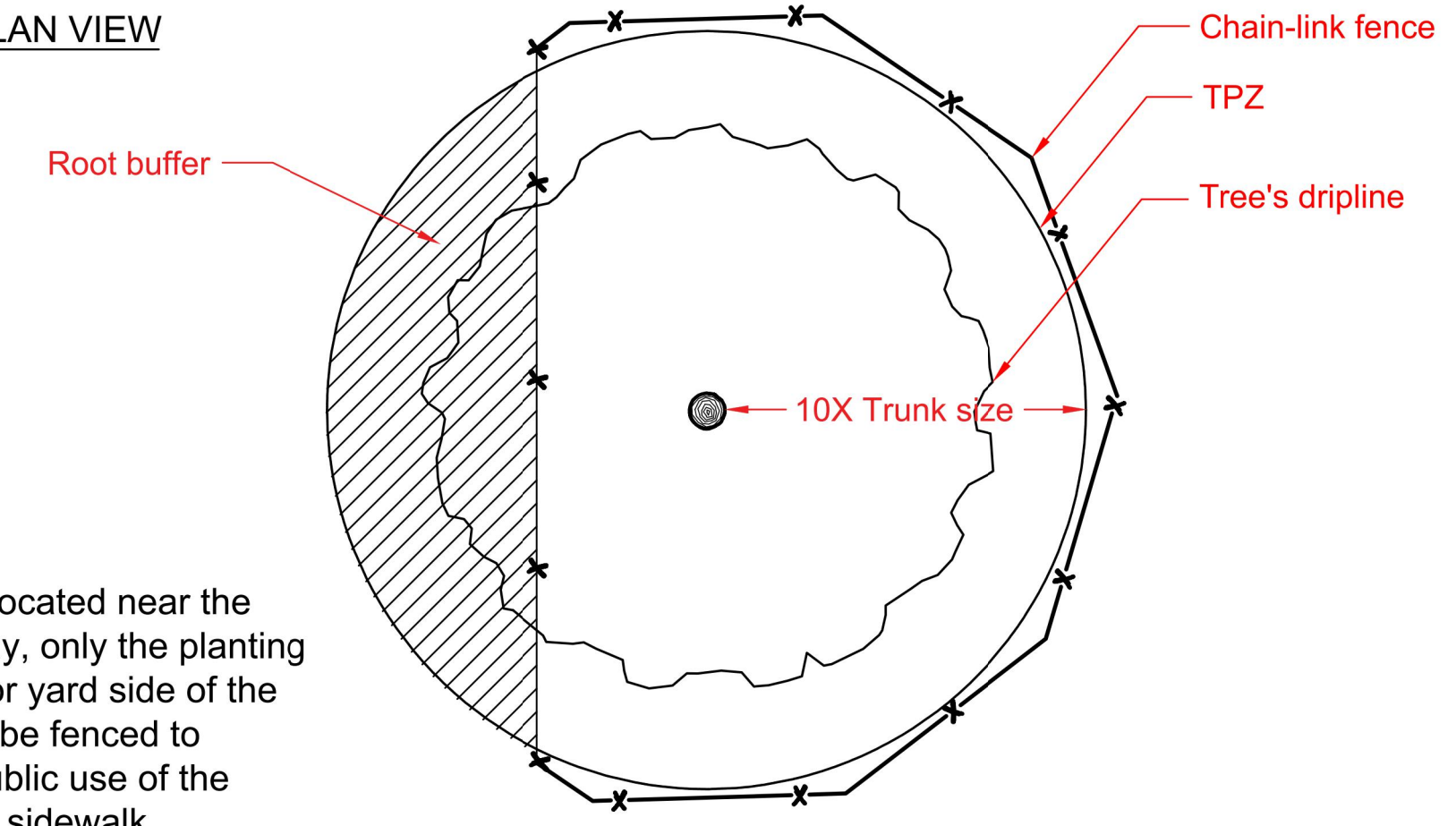
Fencing a group of trees at the TPZ radius of the largest tree is acceptable rather than fencing each tree in the group individually. Adjustments and/or reparations for protective fencing shall be performed in a timely manner to avoid damages to Protected trees.

**5 TYPE II REDUCED FENCING SECTION VIEW**

Fence encloses part of the TPZ, but the soil and root zones are protected with root buffers or existing hardscape not planned to be demolished. The fence can be reduced at the edge of the work limits, access paths, hardscape, or structures to remain.



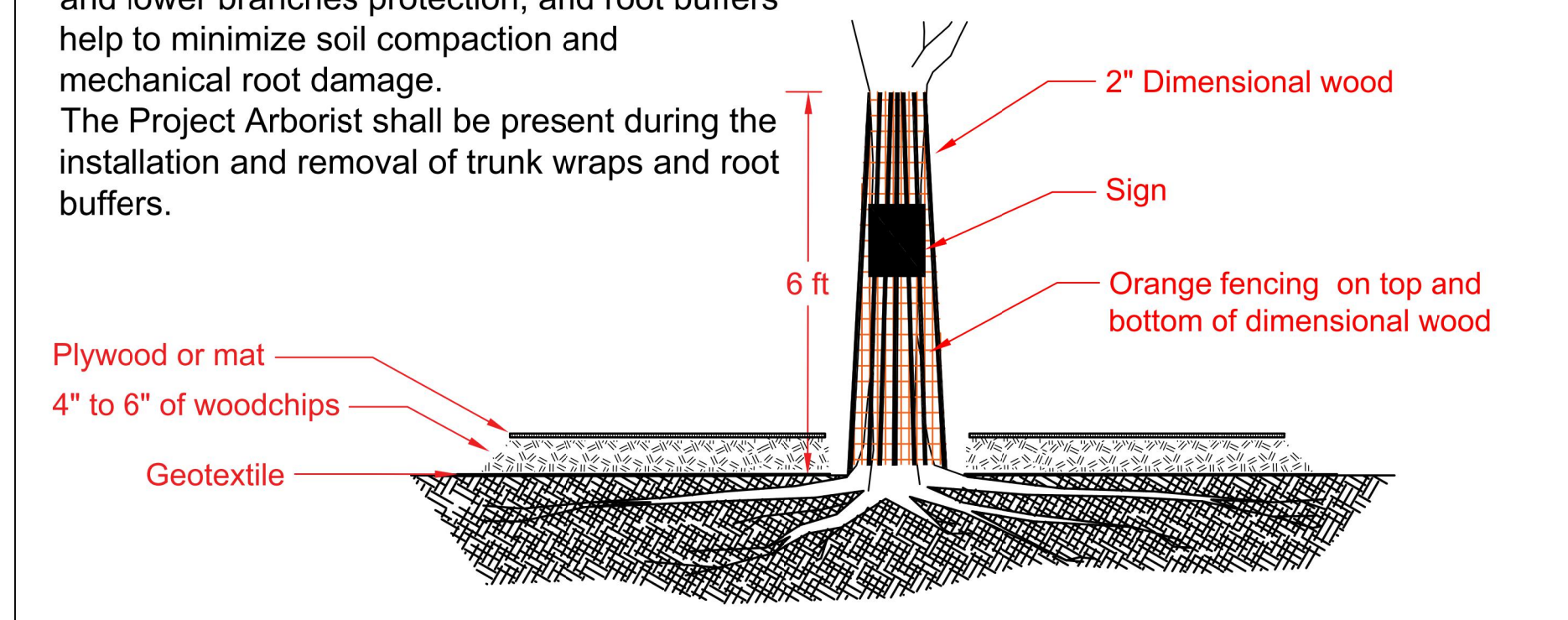
**PLAN VIEW**



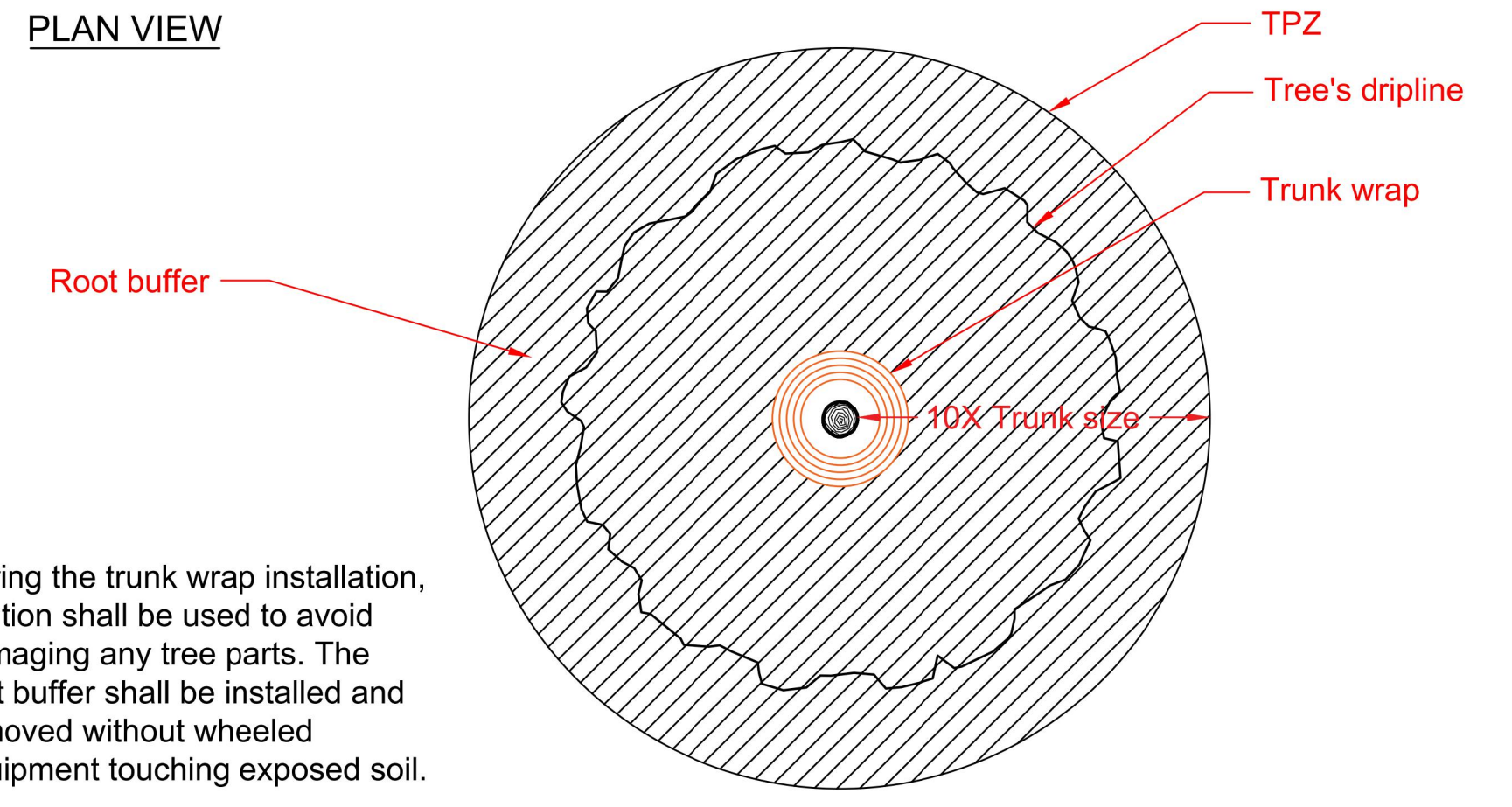
For trees located near the right of way, only the planting strip and/or yard side of the TPZ shall be fenced to provide public use of the street and sidewalk.

**6 TYPE III TRUNK WRAP & ROOT BUFFER SECTION VIEW**

To be used when construction activities cannot be kept outside of TPZ and/or installing fencing is not feasible. Trunk wraps account for trunk and lower branches protection, and root buffers help to minimize soil compaction and mechanical root damage. The Project Arborist shall be present during the installation and removal of trunk wraps and root buffers.



**PLAN VIEW**



During the trunk wrap installation, caution shall be used to avoid damaging any tree parts. The root buffer shall be installed and removed without wheeled equipment touching exposed soil.

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HOUSE ADDITION  
1401 S Mary Ave,  
Sunnyvale, CA 94087  
APN: 32022053

TREE PROTECTION PLAN

Owner: Qian Li  
Tel: 669-241-9859  
e-mail: qian.li.bj@gmail.com



Date: 01-12-2025  
Scale:  
Drawn: Lin.X  
Job:  
Sheet:

**A-1.1c**  
Of Sheets

REVISION	BY
△	Lin.X 02-27-2026
△	Lin.X 03-17-2026
△	Lin.X 04-07-2026

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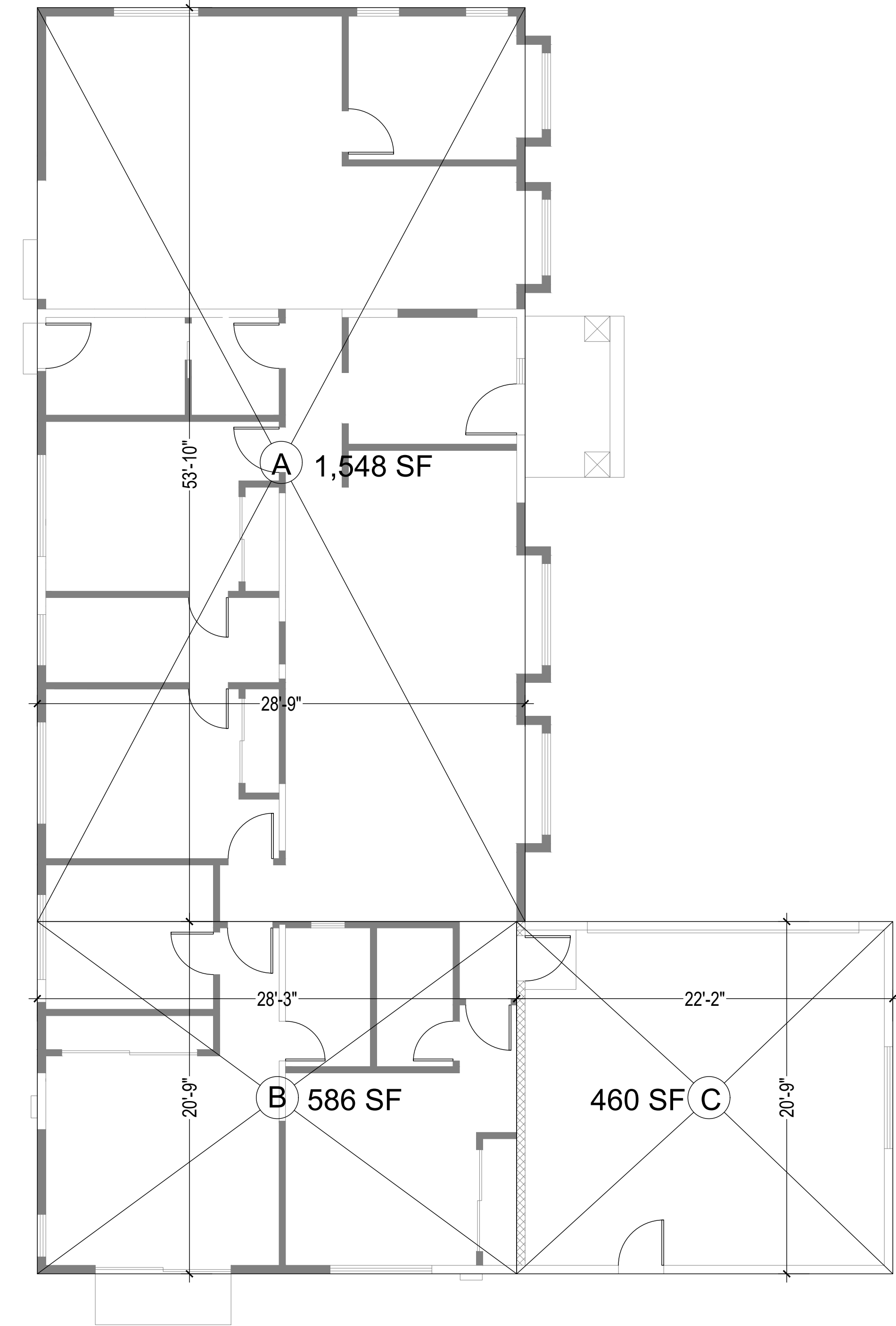
FLOOR AREA DIAGRAM

Owner:  
 Qian Li  
 Tel: 669-241-9859  
 e-mail: qian.li.bj@gmail.com



Date 01-12-2025  
 Scale 3/16"=1'-0"  
 Drawn Lin.X  
 Job

Sheet  
**A-1.2**  
 Of Sheets

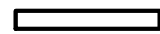
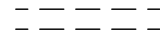


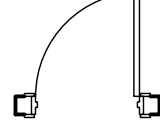
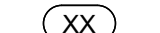


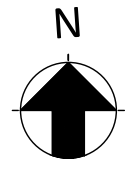
(N) GROUND FLOOR PLAN

GROSS AREA CALCULATIONS			
FLOORS	SPACES	SIZE	AREAS(SQF)
GROUND FLOOR	A	28'-9" X 53'-10"	1,548
	B	28'-3" X 20'-9"	586
GARAGE	C	22'-2" X 20'-9"	460
TOTAL BUILDING AREA			2,594
LOT AREA			8,146
FLOOR AREA RATIO (FAR)			2,594 / 8,146 = 0.3184
R-0, R-1 AND R-2 SINGLE-FAMILY HOME: 45% FAR OR 3,600 SQUARE FOOT FLOOR AREA, WHICHEVER IS LESS.			

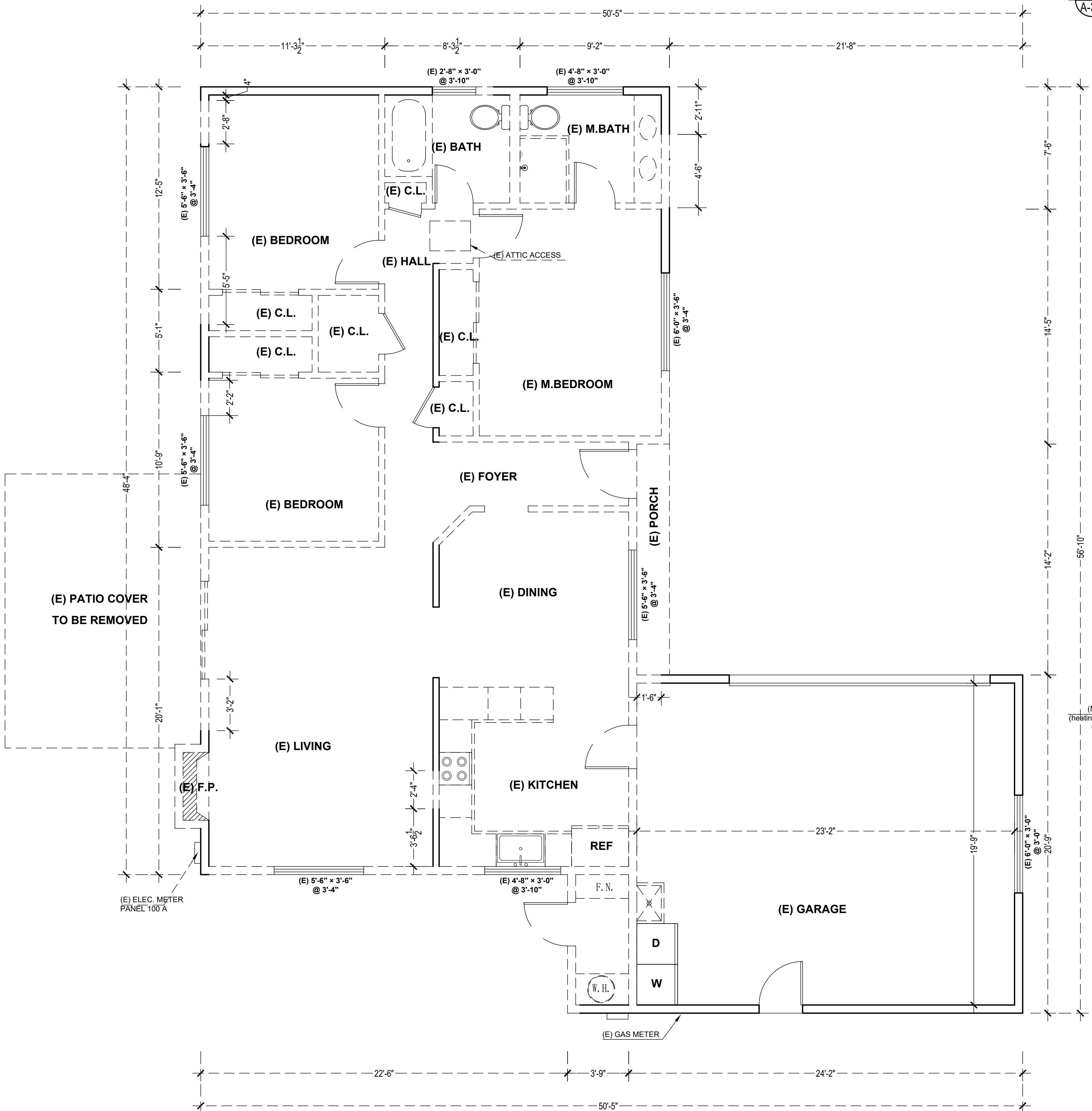
(N) FLOOR AREA DIAGRAM

FLOOR PLAN LEGEND

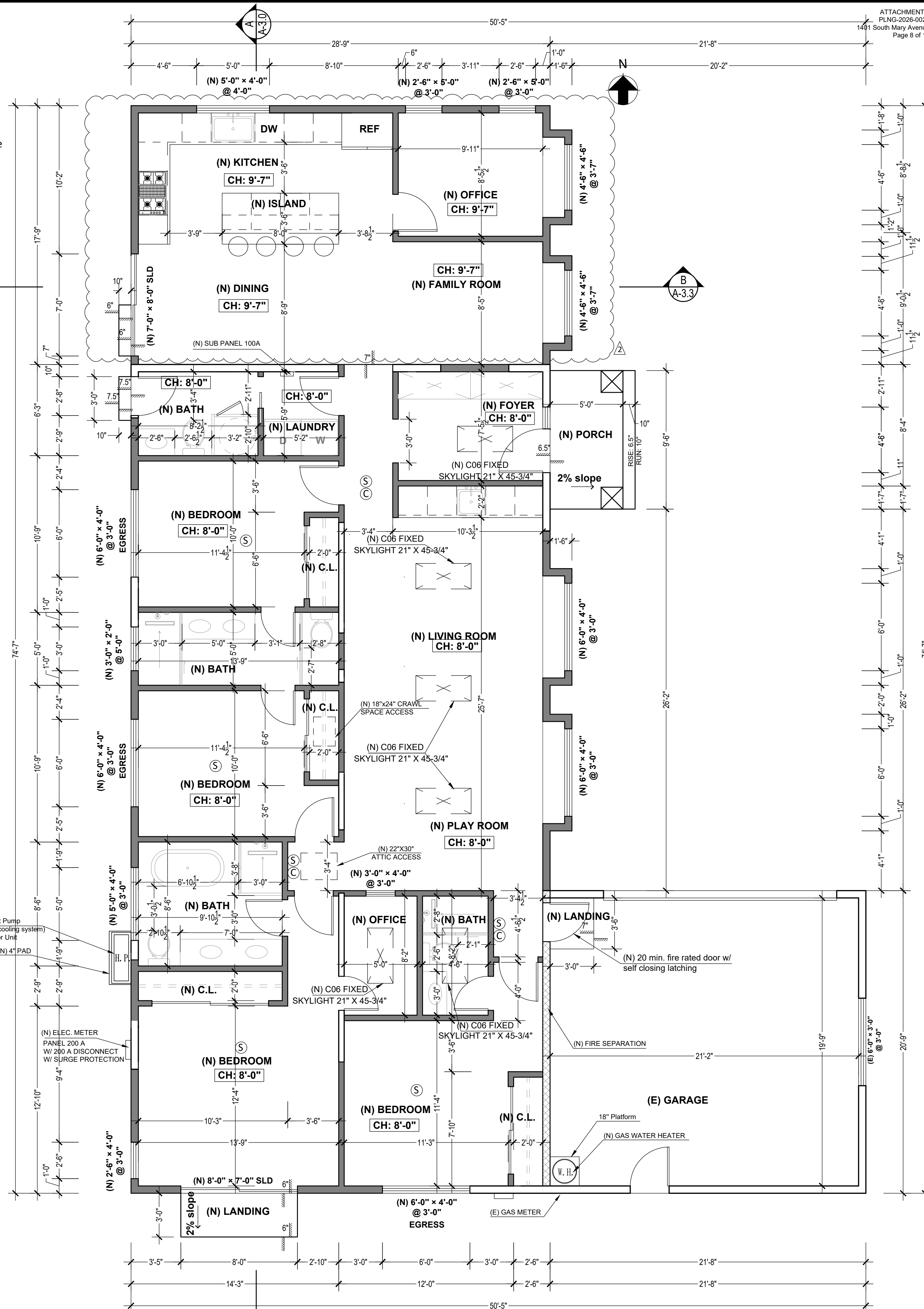
-  EXISTING EXTERIOR WALLS WITH PLATE HEIGHT OR WALL HEIGHT INCREASE
-  EXISTING WALL TO BE DEMOLISHED
-  NEW WALL:  
2x4 OR 2x6 (PLUMBING WALL) WOOD STUDS @16" O.C. W/ 5/8" THK. TYPE X. GYP BD. ON BOTH SIDE. USE W/R GREEN GYP. BD. @ WET WALLS
-  FIRE SEPARATION:  
5/8" THK. TYPE X. GYP BD. ON BOTH SIDE.
-  EXISTING OR NEW DOOR
-  DOOR TAG  
SEE DOOR SCHEDULE FOR ADDITIONAL INFORMATION





NOTE:  
 [BE] 1031.3 Emergency escape and rescue openings. Emergency escape and rescue openings shall comply with Sections 1031.3.1 through 1031.3.3.  
 1031.3.1 Minimum size. Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53m<sup>2</sup>).  
 Exception: The minimum net clear opening for grade-floor emergency escape and rescue openings shall be 5 square feet (0.46m<sup>2</sup>).  
 [BE] 1031.3.2 Minimum dimensions. The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508mm). The net clear opening dimensions shall be the result of normal operation of the opening.  
 [BE] 1031.3.3 Maximum height from floor. Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.  
 [BE] 1031.4 Emergency escape and rescue doors. Where a door is provided as the required emergency escape and rescue opening, it shall be a swinging door or a sliding door.



(E) GROUND FLOOR PLAN  
SCALE: 1/4"=1'-0"



(N) GROUND FLOOR PLAN  
SCALE: 1/4"=1'-0"

-  SMOKE DETECTOR
-  CARBON MONOXIDE ALARM

REVISION	BY
1	Lin.X 02-27-2026
2	Lin.X 03-17-2026

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HOUSE ADDITION  
 1401 S Mary Ave,  
 Sunnyvale, CA 94087  
 APN: 32022053

(E) & (N) GROUND FLOOR PLAN

Owner:  
 Qian Li  
 Tel: 669-241-9869  
 e-mail: qian.li.bj@gmail.com



Date	01-12-2025
Scale	1/4"=1'-0"
Drawn	Lin.X
Job	
Sheet	

A-2.0  
Of Sheets

ATTACHMENT 5  
 PLNS-2026-00226  
 1401 South Mary Avenue  
 Page 8 of 16

REVISION	BY
△	Lin.X 02-27-2026
△	Lin.X 03-17-2026

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**HOUSE ADDITION**  
 1401 S Mary Ave,  
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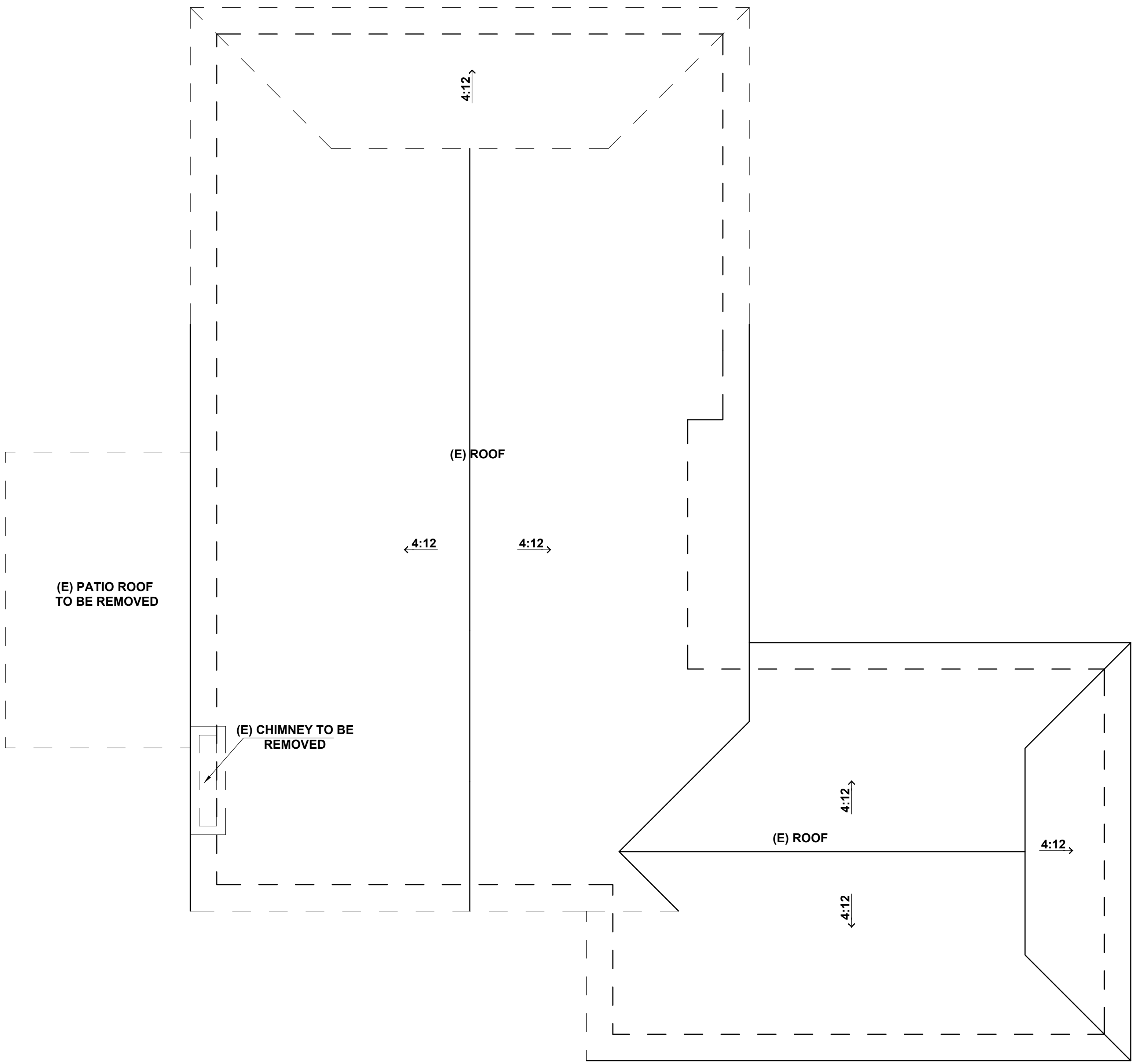
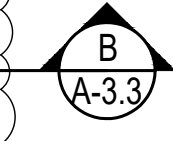
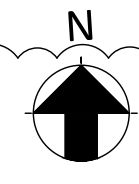
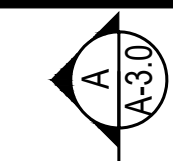
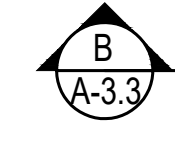
**(E) & (N) ROOF PLAN**

Owner:  
 Qian Li  
 Tel: 669-241-9869  
 e-mail: qian.li.bj@gmail.com

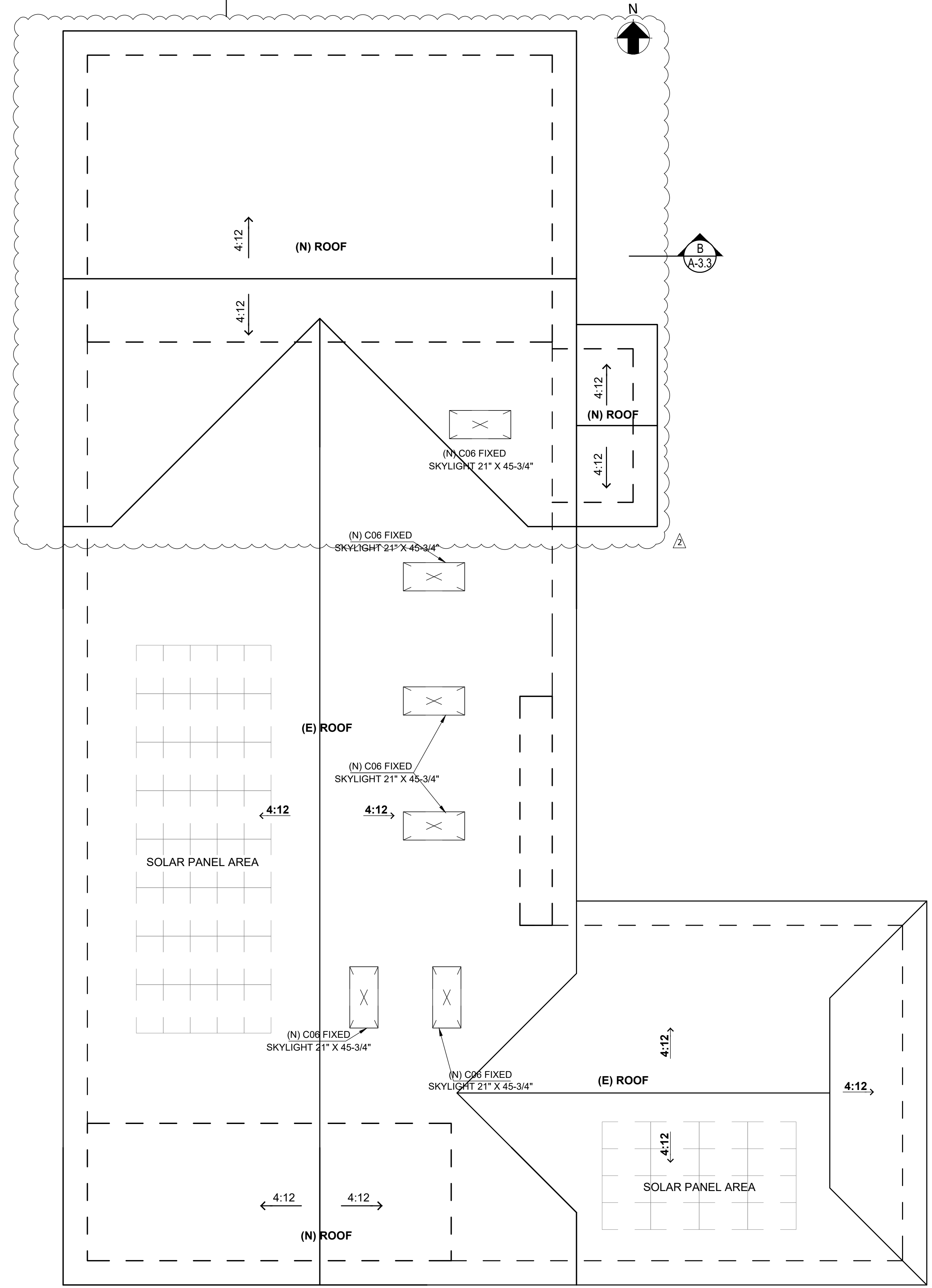


Date 01-12-2025  
 Scale 1/4"=1'-0"  
 Drawn Lin.X  
 Job  
 Sheet

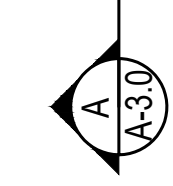
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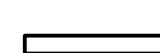
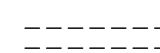
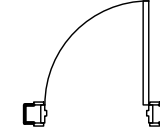
**(E) ROOF PLAN**  
 SCALE: 1/4"=1'-0"

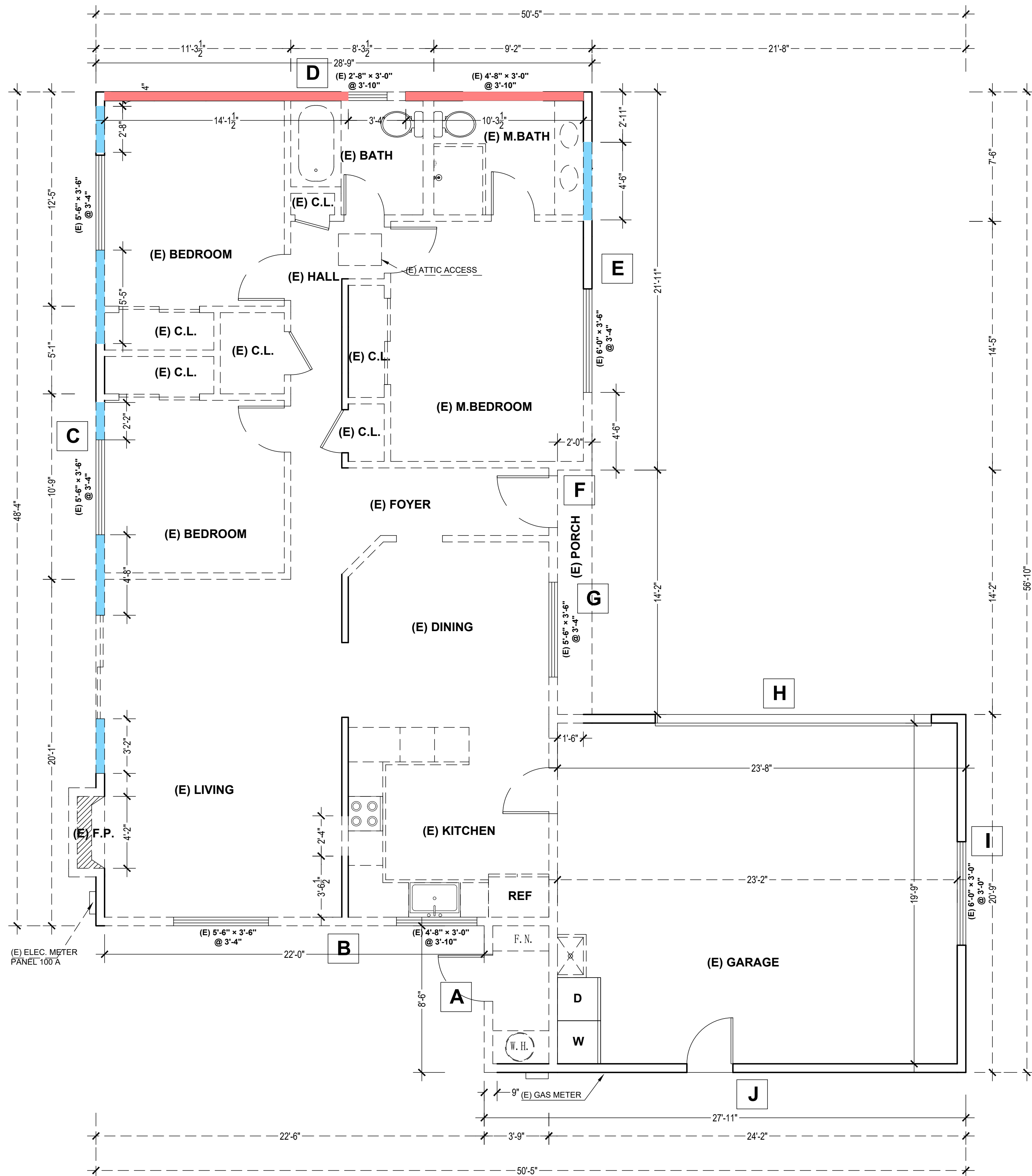
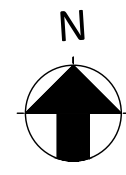


**(N) ROOF PLAN**  
 SCALE: 1/4"=1'-0"



FLOOR PLAN LEGEND

-  EXISTING EXTERIOR WALLS WITH NEW WINDOW OR DOOR OPENINGS ADDED
-  EXISTING EXTERIOR WALLS CONVERTED TO INTERIOR WALLS
-  EXISTING EXTERIOR WALLS
-  EXISTING WALL TO BE DEMOLISHED
-  EXISTING OR NEW DOOR



DEMO GROUND FLOOR PLAN  
SCALE: 1/8"=1'-0"

CALCULATION SHEET FOR REMOVED OR ALTERED WALL					
SYMBOL	EXISTING LENGTH	EXISTING EXTERIOR WALLS WITH NEW WINDOW OR DOOR OPENINGS ADDED	EXISTING EXTERIOR WALLS CONVERTED TO INTERIOR WALLS	EXISTING WALL TO BE DEMOLISHED	REMAINING LENGTH
A	8'-6"	0'-0"	0'-0"	8'-6"	0'-0"
B	22'-6"	0'-0"	0'-0"	22'-0"	0'-6"
C	48'-4"	18'-1"	0'-0"	4'-2"	26'-1"
D	28'-9"	0'-0"	24'-5"	3'-4"	1'-0"
E	21'-11"	4'-6"	0'-0"	4'-6"	12'-11"
F	2'-0"	0'-0"	0'-0"	2'-0"	0'-0"
G	14'-2"	0'-0"	0'-0"	14'-2"	0'-0"
H	23'-8"	0'-0"	0'-0"	1'-6"	22'-2"
I	19'-9"	0'-0"	0'-0"	0'-0"	19'-9"
J	27'-11"	0'-0"	0'-0"	0'-9"	27'-2"
TOTAL	217'-6"	22'-7"	24'-5"	60'-11"	109'-7"
PERCENTAGE	REMOVED OR ALTERED			REMAINING	
	(22'-7"+24'-5"+60'-11") / 217'-6" X 100%= 49.62%			109'-7" / 217'-6" X 100%= 51.38%	

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HOUSE ADDITION  
1401 S Mary Ave,  
Sunnyvale, CA 94087  
APN: 32022053

CALCULATION SHEET FOR  
REMOVED OR ALTERED  
EXTERIOR WALLS

Owner:  
Qian Li  
Tel: 669-241-9859  
e-mail: qian.li.bj@gmail.com

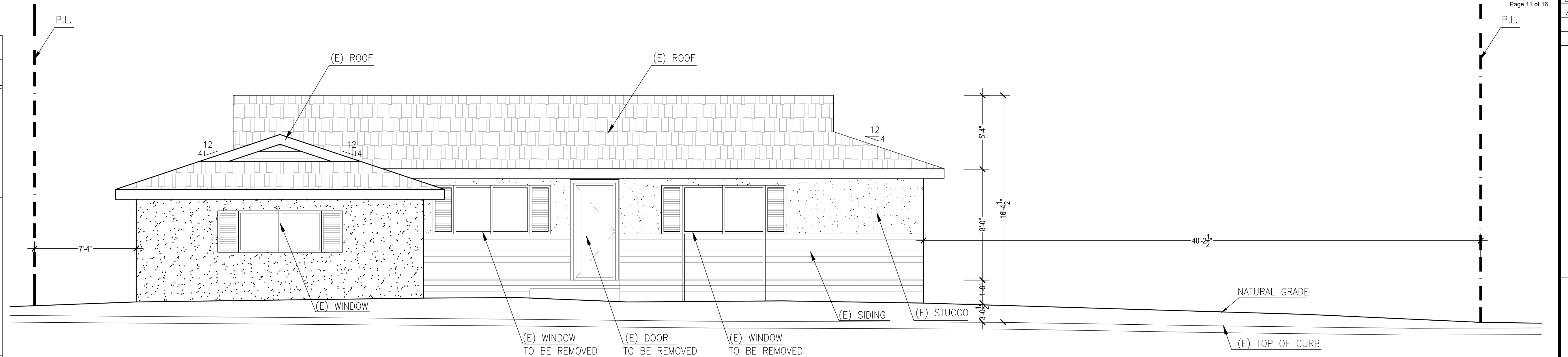


Date 01-12-2025  
Scale 1/4"=1'-0"  
Drawn Lin.X  
Job  
Sheet

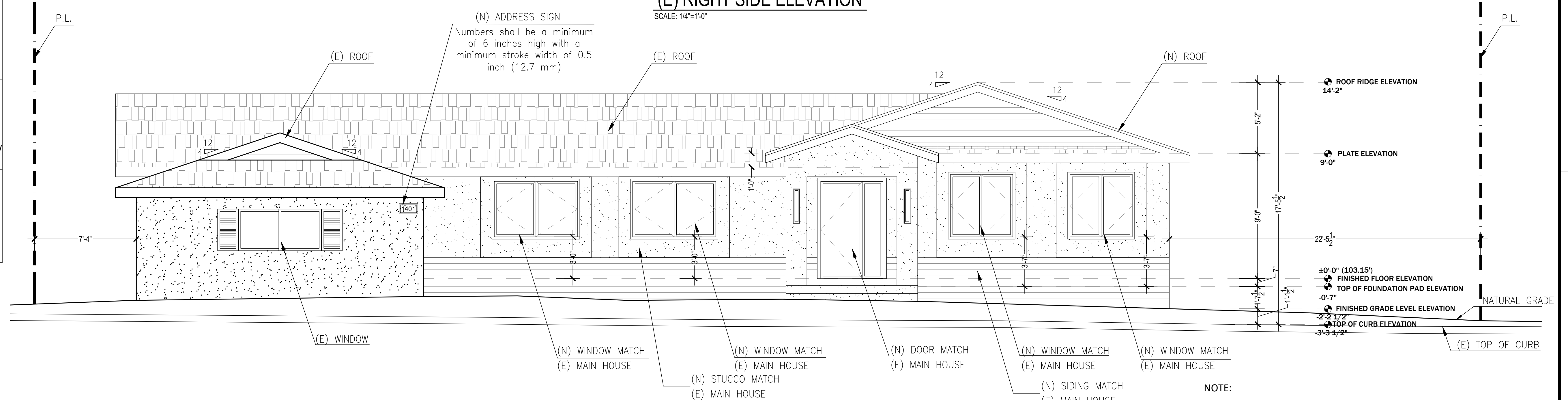
A-2.2  
Of Sheets

MATERIAL SCHEDULE

#	ITEM	DESCRIPTION
1	ROOF	(OWENS CORNING®) CLASS B FIRE-RETARDANT ROOF COVERING  COLOR: MATCH (E) MAIN HOUSE ROOF
2	WALL - STUCCO SMOOTH ACRYLIC FINISH	STUCCO PAINT EXTERIOR FINISH 3 COATS, 7/8" MIN. THICK, CRC R703.7.2, AND CBC 2513.4 TWO LAYERS OF GRADE D PAPER UNDER CEMENT PLASTER COVERING WHERE OCCURS OVER PLYWOOD SHEATHING, CRC R703.7.3  COLOR: MATCH (E) MAIN HOUSE WALL
3	WOOD SIDING	0.438 IN. X 48 IN. X 96 IN. PRIMED HARDBOARD FACE 8 IN. OC T1-11 PLYWOOD SIDING PANEL  COLOR: MATCH (E) MAIN HOUSE WALL
4	WINDOW	MILGARD WINDOW: WHITE FIBERGLASS WINDOW WITHOUT ANY GRIDS  COLOR: MATCH (E) MAIN HOUSE WINDOW
5	ENTRANCE DOOR	FROM ALUGUARD, J85 ALUMINUM ENTRANCE DOOR COLOR: GREY

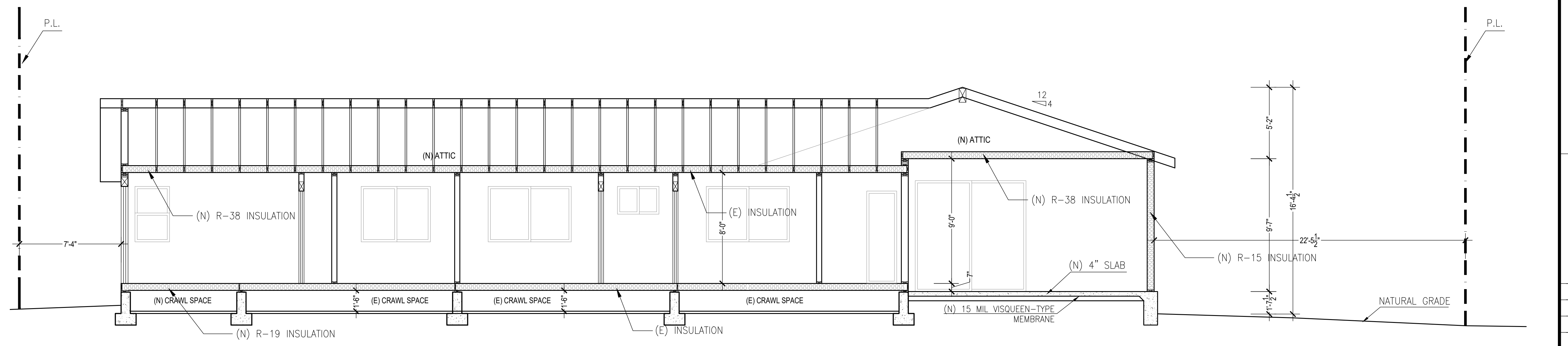


(E) RIGHT SIDE ELEVATION  
SCALE: 1/4"=1'-0"



(N) RIGHT SIDE ELEVATION  
SCALE: 1/4"=1'-0"

NOTE:  
1. THE EXTERIOR FINISH MATERIALS OF THE NEW ADDITION(S) OF THE STRUCTURE, WHICH SHALL MATCH THE EXISTING PORTIONS OF THE HOUSE.



A-A SECTION  
SCALE: 1/4"=1'-0"

REVISION	BY
Δ	Lin.X 02-27-2026
Δ	Lin.X 03-17-2026

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HOUSE ADDITION  
1401 S Mary Ave,  
Sunnyvale, CA 94087  
APN: 32022053

(E) & (N) RIGHT SIDE ELEVATION  
A-A SECTION

Owner:  
Qian Li  
Tel: 669-241-9869  
e-mail: qian.li.bj@gmail.com



Date	01-12-2025
Scale	1/4"=1'-0"
Drawn	Lin.X
Job	
Sheet	

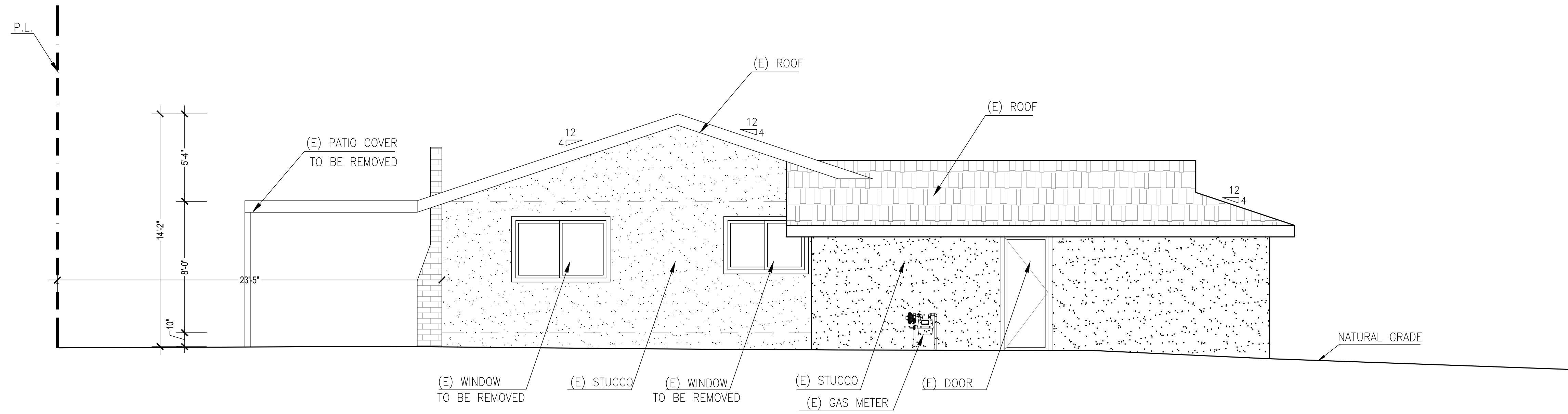
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Of Sheets



REVISION	BY
△	Lin.X 02-27-2026
△	Lin.X 03-17-2026

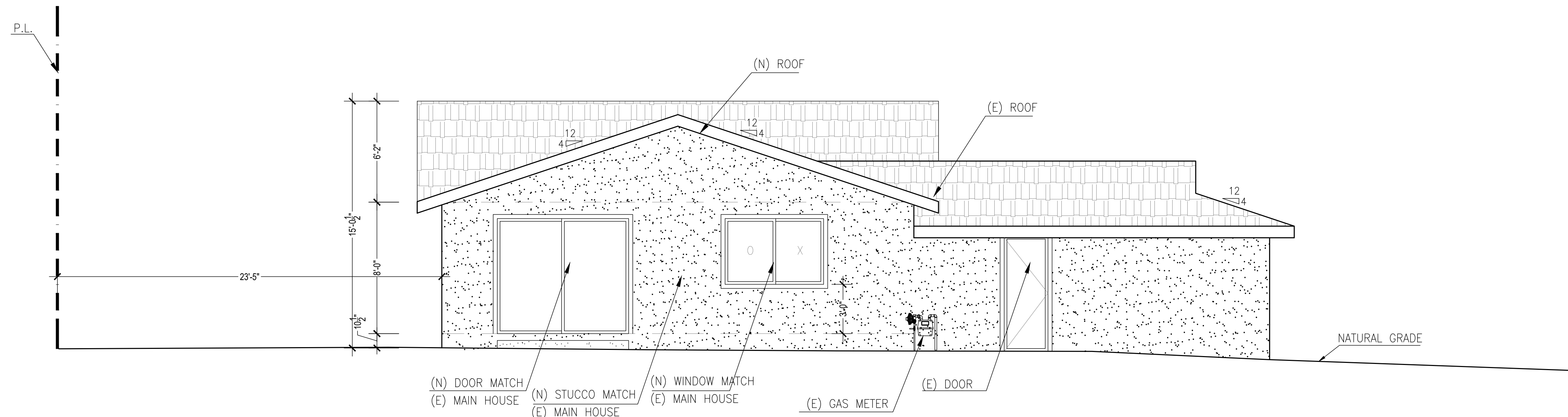
**MATERIAL SCHEDULE**

#	ITEM	DESCRIPTION
1	ROOF	(OWENS CORNING ®) CLASS B FIRE-RETARDANT ROOF COVERING  COLOR: MATCH (E) MAIN HOUSE ROOF
2	WALL - STUCCO SMOOTH ACRYLIC FINISH	STUCCO PAINT EXTERIOR FINISH 3 COATS, 7/8" MIN. THICK, CRC R703.7.2, AND CBC 2513.4 TWO LAYERS OF GRADE D PAPER UNDER CEMENT PLASTER COVERING WHERE OCCURS OVER PLYWOOD SHEATHING, CRC R703.7.3  COLOR: MATCH (E) MAIN HOUSE WALL
3	WOOD SIDING	0.438 IN. X 48 IN. X 96 IN. PRIMED HARDBOARD FACE 8 IN. OC T1-11 PLYWOOD SIDING PANEL  COLOR: MATCH (E) MAIN HOUSE WALL
4	WINDOW	MILGARD WINDOW: WHITE FIBERGLASS WINDOW WITHOUT ANY GRIDS  COLOR: MATCH (E) MAIN HOUSE WINDOW
5	ENTRANCE DOOR	FROM ALUGUARD, J85 ALUMINUM ENTRANCE DOOR COLOR: GREY



**(E) REAR ELEVATION**

SCALE: 1/4"=1'-0"



**(N) REAR ELEVATION**

SCALE: 1/4"=1'-0"

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**(E) & (N) REAR ELEVATION**

Owner:  
Qian Li  
Tel: 669-241-9859  
e-mail: qian.li.lij@gmail.com

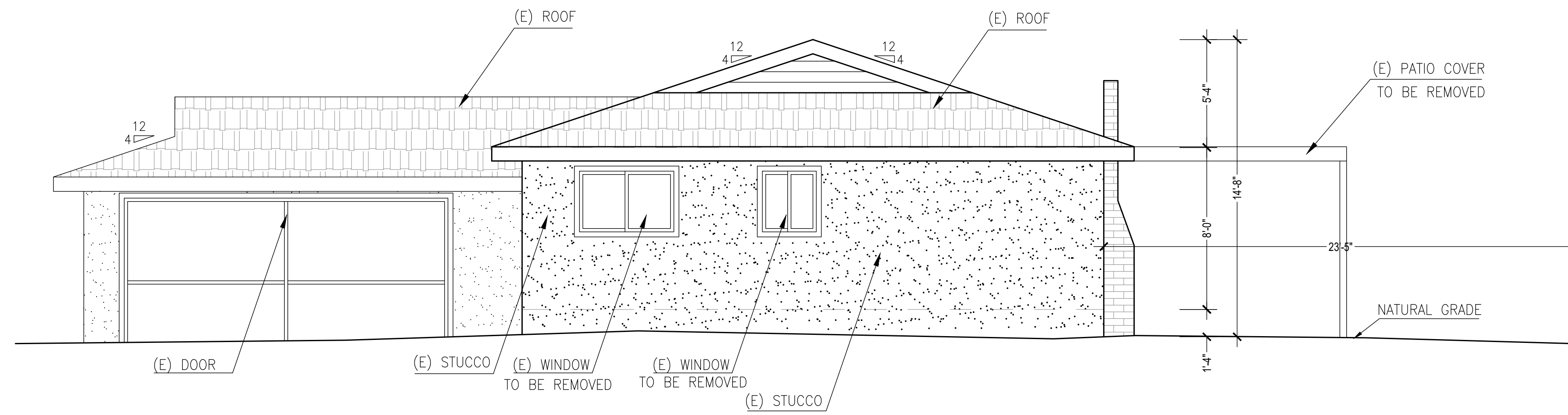


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Job

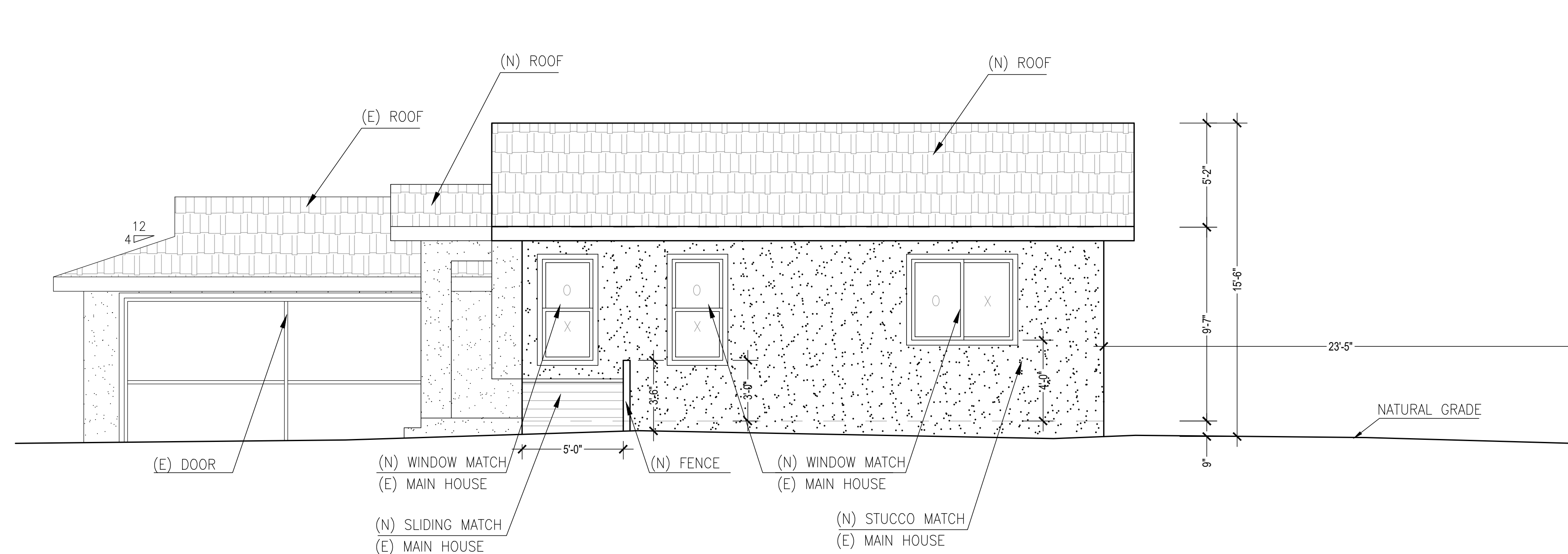
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Of Sheets

MATERIAL SCHEDULE

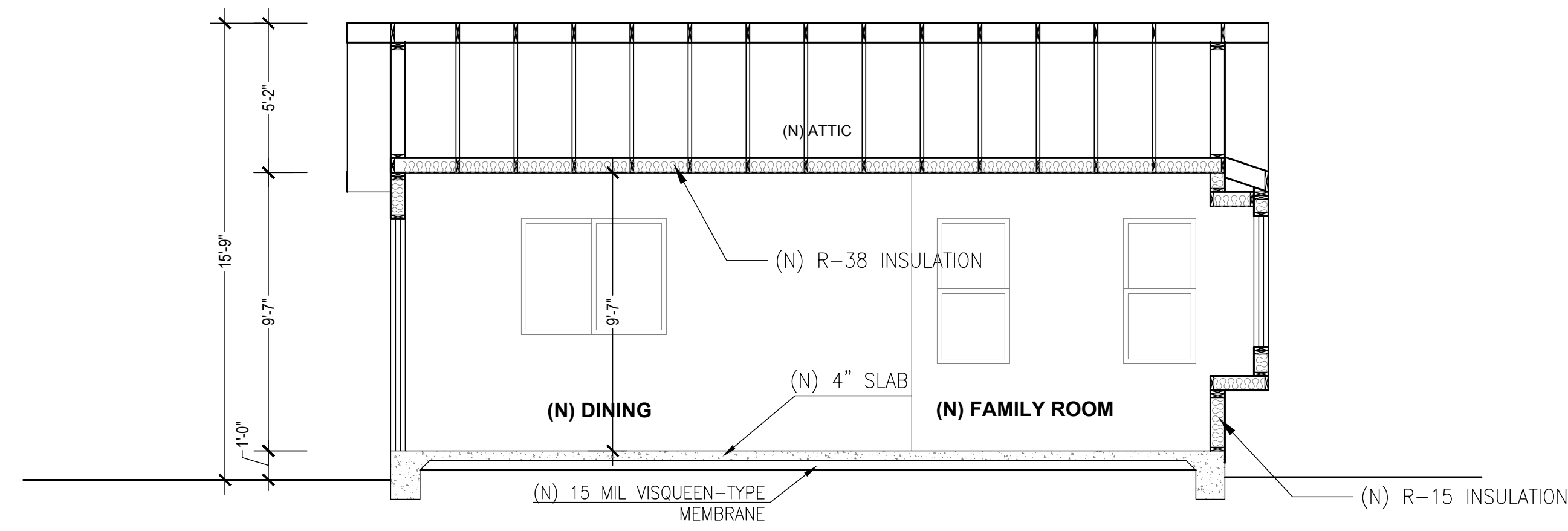
#	ITEM	DESCRIPTION
1	ROOF	(OWENS CORNING®) CLASS B FIRE-RETARDANT ROOF COVERING COLOR: MATCH (E) MAIN HOUSE ROOF
2	WALL - STUCCO SMOOTH ACRYLIC FINISH	STUCCO PAINT EXTERIOR FINISH 3 COATS, 7/8" MIN. THICK, CRC R703.7.2, AND CBC 2513.4 TWO LAYERS OF GRADE D PAPER UNDER CEMENT PLASTER COVERING WHERE OCCURS OVER PLYWOOD SHEATHING, CRC R703.7.3 COLOR: MATCH (E) MAIN HOUSE WALL
3	WOOD SIDING	0.438 IN. X 48 IN. X 96 IN. PRIMED HARDBOARD FACE 8 IN. OC T1-11 PLYWOOD SIDING PANEL COLOR: MATCH (E) MAIN HOUSE WALL
4	WINDOW	MILGARD WINDOW: WHITE FIBERGLASS WINDOW WITHOUT ANY GRIDS COLOR: MATCH (E) MAIN HOUSE WINDOW
5	ENTRANCE DOOR	FROM ALUGUARD, J85 ALUMINUM ENTRANCE DOOR COLOR: GREY



**(E) FRONT ELEVATION**  
SCALE: 1/4"=1'-0"



**(N) FRONT ELEVATION**  
SCALE: 1/4"=1'-0"



**B-B SECTION**  
SCALE: 1/4"=1'-0"

REVISION	BY
△	Lin.X 02-27-2026
△	Lin.X 03-17-2026

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Sunnyvale, CA 94087  
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(E) & (N) FRONT ELEVATION  
B-B SECTION

Owner:  
Qian Li  
Tel: 669-241-9859  
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Date	01-12-2025
Scale	1/4"=1'-0"
Drawn	Lin.X
Job	
Sheet	

**A-3.3**  
Of Sheets

# Blueprint for a Clean Bay

Best Management Practices for the Construction Industry



Remember: The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.

## Preventing Pollution: It's Up to Us

In the Santa Clara Valley, storm drains transport water directly to local creeks and San Francisco Bay without treatment. Stormwater pollution is a serious problem for wildlife dependent on our creeks and bays and for the people who live near polluted streams or bays. Common sources of this pollution include spilled oil, fuel, and fluids from vehicles and heavy equipment; construction debris; sediment created by erosion; landscaping runoff containing pesticides or weed killers; and materials such as used motor oil, antifreeze, and paint products that people pour or spill into a street or storm drain.



Thirteen valley municipalities have joined together with Santa Clara County and the Santa Clara Valley Water District to educate local residents and businesses and fight stormwater pollution. This "blueprint" summarizes "Best Management Practices" (BMPs) for stormwater pollution prevention.

### Spill Response Agencies:

In the City of Sunnyvale, DIAL 9-1-1.

State Office of Emergency Service  
Warning Center (24 hours)  
..... 1-800-852-7550

Santa Clara County Environmental  
Health Services  
..... (408) 299-6930

### Small Business Hazardous Waste Disposal Program

Santa Clara County businesses that generate less than 27 gallons or 220 pounds of hazardous waste per month are eligible to use Santa Clara County's Small Business Hazardous Waste Disposal Program. Call (408) 299-7300 for a quote, more information or guidance on disposal.

### Local Pollution Control Agencies:

County of Santa Clara  
Pollution Prevention Program  
..... (408) 441-1195

County of Santa Clara Integrated Waste  
Management Program  
..... (408) 441-1198

Santa Clara County Hazardous  
Waste Program  
..... (408) 299-7300

County of Santa Clara District Attorney  
Environmental Crimes Hotline  
..... (408) 299-TIPS

Santa Clara Valley Water District  
..... (408) 265-2600

Santa Clara Valley Water  
District Pollution Hotline  
..... 1-888-510-5151

Santa Clara County Recycling Hotline  
..... 1-800-533-8414

Regional Water Quality Control Board  
Serving San Francisco Bay Region  
..... (510) 622-2300

Sunnyvale Water Pollution  
Control Plant  
..... (408) 730-7270

Sunnyvale Recycling Program  
..... (408) 730-7262

SMArT Station®  
(Green Team/Zanker of Sunnyvale)  
Recycling Drop-Off Center,  
Garbage Disposal  
..... (408) 752-8530

## General Construction and Site Supervision



### Who should use this information?

- General Contractors
- Site Supervisors
- Inspectors
- Home Builders
- Developers
- Homeowners

### Doing the Job Right General Principles

- Keep an orderly site and ensure good housekeeping practices are used.
- Maintain equipment properly.
- Cover materials when they are not in use.
- Keep materials away from streets, storm drains and drainage channels.
- Ensure dust control water doesn't leave site or discharge to storm drains.

### Advance Planning To Prevent Pollution

- Schedule excavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins. Use the *Erosion and Sediment Control Field Manual*, available from the Regional Water Quality Control Board San Francisco Bay Region, as a reference.
- Control the amount of runoff crossing your site (especially during excavation) by using berms or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams or berms where appropriate.
- Train your employees and subcontractors. Make sure everyone who works at the construction site is familiar with this information. Inform subcontractors about the stormwater requirements and their own responsibilities. Use BAASMA, *Blueprint for a Clean Bay*, a construction best

management practices guide available from the Santa Clara Valley Urban Runoff Pollution Prevention Program, and California Storm Water Quality Association Stormwater Best Management Practice Handbook: Construction, (Jan 2003) as references.

### Good Housekeeping Practices

- Designate one area of the site for auto parking, vehicle refueling, and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets, bermed if necessary. Make major repairs off site.
- Keep materials out of the rain - prevent runoff contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
- Keep pollutants off exposed surfaces. Place trash cans and recycling receptacles around the site to minimize litter.
- Clean up leaks, drips and other spills immediately so they do not contaminate soil or groundwater or leave residue on paved surfaces.
- Never hose down "dirty" pavement or surfaces where materials have spilled.
- Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the dust down.
- 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. Never clean out a dumpster by hosing it down on the construction site.

- Place portable toilets away from storm drains. Make sure portable toilets are in good working order. Check frequently for leaks.

### Materials/Waste Handling

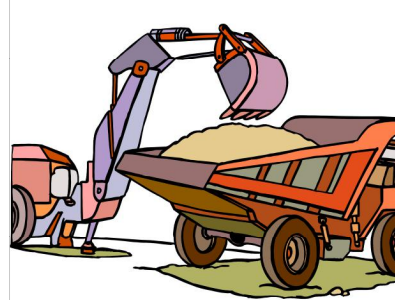
- Practice Source Reduction - minimize waste when you order materials. Order only the amount you need to finish the job.
- Use recyclable materials whenever possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.
- Dispose of all wastes properly. Many construction materials and wastes, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled. (See Sunnyvale Recycling Program information listed above.) Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. Never bury waste materials or leave them in the street or near a creek or stream bed.

### Permits

- In addition to local grading and building permits, you will need to obtain coverage under the State's General Construction Activity Stormwater Permit if your construction site's disturbed area totals 1 acre or more. Information on the General Permit can be obtained from the Regional Water Quality Control Board.

## Earth-Moving and Dewatering Activities

### Who should use this information?



- Bulldozer, Back Hoe, and Grading Machine Operators
- Dump Truck Drivers
- Site Supervisors
- General Contractors
- Home Builders
- Developers

### Storm Drain Pollution from Earth-Moving Activities

Soil excavation and grading operations loosen large amounts of soil that can flow or blow into storm drains when handled improperly. Sediments in runoff can clog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay. Effective erosion control practices reduce the amount of runoff crossing a site and slow the flow with check dams or roughened ground surfaces.

Contaminated groundwater is a common problem in the Santa Clara Valley. Depending on soil types and site history, groundwater pumped from construction sites may be contaminated with toxics (such as oil or solvents) or laden with sediments. Any of these pollutants can harm wildlife in creeks or the Bay, or interfere with wastewater treatment plant operation. Discharging sediment-laden water from a dewatering site into any water of the state without treatment is prohibited.

### Doing the Job Right

- General Business Practices**
  - Schedule excavation and grading work during dry weather.
  - Perform major equipment repairs away from the job site.
  - When refueling or vehicle/equipment maintenance must be done on site, designate a location away from storm drains.
  - Do not use diesel oil to lubricate equipment parts, or clean equipment.
- Practices During Construction**
  - Remove existing vegetation only when absolutely necessary. Plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
  - Protect downslope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or ditches to divert runoff around excavations. Refer to the Regional Water Quality Control Board's *Erosion and Sediment Control*

*Field Manual* for proper erosion and sediment control measures, and California Stormwater Quality Association Stormwater Best Management Practice Handbook (construction, 2003)

Dewatering Operations  
*Check for Toxic Pollutants*

- Check for odors, discoloration, or an oily sheen on groundwater.
- Call your local wastewater treatment agency and ask whether the groundwater must be tested.
- If contamination is suspected, have the water tested by a certified laboratory.
- Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain (if no sediments present) or sanitary sewer. OR, you may be required to collect and haul pumped groundwater offsite for treatment and disposal at an appropriate treatment facility.

### Check for Sediment Levels

- If the water is clear, the pumping time is less than 24 hours, and the flow rate is less than 20 gallons per minute, you may pump water to the street or storm drain.
- If the pumping time is more than 24 hours and the flow rate greater than 20 gpm, call your local wastewater treatment plant for guidance.
- If the water is not clear, solids must be filtered or settled out by pumping to a settling tank prior to discharge. Options for filtering include:
  - Pumping through a perforate pipe sunk part way into a small pit filled with gravel.
  - Pumping from a bucket placed below water level using a submersible pump;
  - Pumping through a filtering device such as a swimming pool filter or filter fabric wrapped around end of suction pipe.
- When discharging to a storm drain, protect the inlet using a barrier of burlap bags filled with drain rock, or cover inlet with filter fabric anchored under the grate. OR pump water through a grassy swale prior to discharge.

### Detecting Contaminated Soil or Groundwater

Contaminated groundwater is a common problem in the Santa Clara Valley. It is essential that all contractors and subcontractors involved know what to look for in detecting contaminated soil or groundwater, and testing ponded groundwater before pumping. Watch for any of these conditions:

1. Unusual soil conditions, discoloration or odor.
2. Abandoned underground tanks.
3. Abandoned wells.
4. Buried barrels, debris or trash.

If any of these are found follow the procedures below.

## Roadwork and Paving

### Who should use this information?

- Road Crews
- Driveway/Sidewalk/Parking Lot Construction Crews
- Seal Coat Contractors
- Operators of Grading Equipment, Paving Machines, Dump Trucks, Concrete Mixers
- Construction Inspectors
- General Contractors
- Developers
- Home Builders



### Storm Drain Pollution from Roadwork

Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for asphalt, saw-cut slurry, or excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

### Doing the Job Right

- General Business Practices**
  - Develop and implement erosion/sediment control plans for roadway embankments.
  - Schedule excavation and grading work during dry weather.
  - Check for and repair leaking equipment.
  - Perform major equipment repairs at designated areas in your maintenance yard, where cleanup is easier. Avoid performing equipment repairs at construction sites.
  - When refueling or when vehicle/equipment maintenance must be done on site, designate a location away from storm drains and creeks.
  - Do not use diesel oil to lubricate equipment parts or clean equipment.
  - Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly.
  - Take broken up concrete to a local recycling facility. Call the Sunnyvale Recycling Program at (408) 730-7262 for information.

### During Construction

- Avoid paving and seal coating in wet weather, or when rain is forecast, to prevent fresh materials from contacting stormwater runoff.
- Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- Protect drainage ways by using earth dikes, sand bags, or other controls to divert or trap and filter runoff.
- Never wash excess material from exposed aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.
- Cover stockpiles (asphalt, sand, etc.) and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.
- Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use.
- Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags) Dig up, remove, and properly dispose of contaminated soil.

- Collect and recycle or appropriately dispose of excess abrasive gravel or sand.
- Avoid over-application by water trucks for dust control.

### Asphalt/Concrete Removal

- Avoid creating excess dust when breaking asphalt or concrete.
- After breaking up old pavement, be sure to remove all chunks and pieces. Make sure the pavement does not come in contact with rainfall or runoff.
- When making saw cuts, use as little water as possible. Shovel or vacuum saw-cut slurry and remove from the site. Cover or protect storm drain inlets during saw-cutting. Sweep up, and properly dispose of, all residues.
- Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm drains.

### Storm Drain Pollution from Roadwork

Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible.

## Painting and Application of Solvents and Adhesives



### Who should use this information?

- Painters
- Paperhangers
- Plasterers
- Graphic Artists
- Dry Wall Crews
- Floor Covering Installers
- General Contractors
- Home Builders
- Developers
- Homeowners

### Storm Drain Pollution from Paints, Solvents, and Adhesives

All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

### Doing the Job Right

- Handling Paint Products**
  - Keep all liquid paint products and wastes away from the gutter, street, and storm drains. Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of as hazardous. Contact the Santa Clara County Hazardous Waste Program at (408) 299-7300.
  - Wash water from painted buildings constructed before 1978 can contain high amounts of lead, even if paint chips are not present. Before you begin stripping paint or cleaning pre-1978 building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. See Yellow Pages for a state-certified laboratory.
  - If there is loose paint on the building, or if the paint tests positive for lead, block storm drains. Check with the wastewater treatment plant to determine whether you may discharge water to the sanitary sewer, or if you must send it offsite for disposal as hazardous waste.

### Paint Removal

- Buildings constructed before 1978 may have lead paint in them. Test paint for lead by taking samples to a local environmental testing laboratory to determine if removed paint must be disposed of as hazardous waste.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury or tributyl tin must be disposed of as hazardous wastes. Lead based paint removal requires a state-certified contractor.
- When stripping or cleaning building exteriors with high-pressure water, block storm drains. Direct wash water onto a dirt area, or check Sunnyvale Water Pollution Control Plant (408) 730-7270 to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.

### Painting Cleanup

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, French 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. Dispose of excess liquids and residue as hazardous waste.

- 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 and residue as hazardous waste.
- When thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill. Leave lids off paint cans so the refuse collector can see that they are empty. Empty, dry paint cans also may be recycled as metal.
- Dispose of empty aerosol paint cans as hazardous waste or at household hazardous waste collection events.

### Recycle/Reuse Leftover Paints Whenever Possible

- Donate excess water-based (latex) paint for reuse. Call the Santa Clara County Hazardous Waste Program at (408) 299-7300 for details.
- Reuse leftover oil-based paint. Dispose of non-recyclable thinners, sludge and unwanted paint, as hazardous waste.
- Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

## Landscaping, Gardening, and Pool Maintenance



### Who should use this information?

- Landscapers
- Gardeners
- Swimming Pool/Spa Service and Repair Workers
- General Contractors
- Home Builders
- Developers
- Homeowners

### Storm Drain Pollution from Landscaping and Swimming Pool Maintenance

Many landscaping activities expose soils and increase the likelihood that earth and garden chemicals will run off into the storm drains during irrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These chemicals are toxic to aquatic life.

### Doing the Job Right

- General Business Practices**
  - Protect stockpiles (e.g. asphalt, sand, or soil) and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.
  - Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage cabinet.
  - Schedule grading and excavation projects during dry weather.
  - Use temporary check dams or ditches to divert runoff away from storm drains.
  - Protect storm drains with sandbags or other sediment controls.
  - Revegetation is an excellent form of erosion control for any site. Replant as soon as possible with temporary vegetation such as grass seed.
- Landscaping/Garden Maintenance**
  - Consider using Integrated Pest Management Techniques. Use pesticides sparingly, according to instructions on the label. Rinse empty containers, and use rinsewater as product. Dispose of rinsed, empty containers in the trash.
  - Dispose of unused pesticides as hazardous waste.

- Curbside pickup of yard waste is provided for Sunnyvale residences. Place yard waste in approved containers at curbside for pickup on waste collection days. Commercial entities may take yard waste to the Sunnyvale SMArT station for recycling. Contact the Sunnyvale Recycling Program (408) 730-7262 for further information.
- Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost if possible.
- Do not blow or rake leaves, etc. into the street, or place yard waste in gutters or on dirt shoulders. Sweep up any leaves, litter or residue in gutters or on street.

### Pool/Fountain/Spa Maintenance

When it's time to drain a pool, spa, or fountain, please be sure to call the Sunnyvale Water Pollution Control Plant (408) 730-7270 before you start for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Discharge flows should be kept to the low levels typically possible through a garden hose. Higher flow rates may be prohibited by local ordinance.

### Filter Cleaning

- Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area, and spade filter residue into soil. Dispose of spent diatomaceous earth in the garbage.
- If there is no suitable dirt area, call the Sunnyvale Water Pollution Control Plant (408) 730-7270 for instructions on discharging filter backwash or rinsewater to the sanitary sewer.

## Fresh Concrete and Mortar Application

### Who should use this information?

- Masons and Bricklayers
- Sidewalk Construction Crews
- Patio Construction Workers
- Construction Inspectors
- General Contractors
- Home Builders
- Developers
- Concrete Delivery/Pumping Workers



### Storm Drain Pollution from Fresh Concrete and Mortar Applications

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and is prohibited by law.

### Doing the Job Right

- General Business Practices**
  - Wash out concrete mixers only in designated wash-out areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse.
  - Wash out chutes onto dirt areas at site that do not flow to streets or drains.
  - Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect dry materials from wind.
  - Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
  - Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.

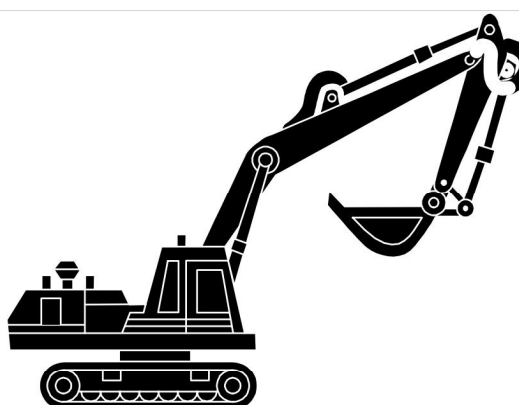
### During Construction

- Don't mix up more fresh concrete or cement than you will use in a two-hour period.
- Set up and operate small mixers on tarps or heavy plastic drop cloths.
- When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
- Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
- 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) be vacuumed from a catchment by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete at a local recycling facility. Call the Sunnyvale Recycling Program at (408) 730-7262 for information.
- Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- Never dispose of washout into the street, storm drains, drainage ditches, or streams.

## Heavy Equipment Operation

### Who should use this information?

- Vehicle and Equipment Operators
- Site Supervisors
- General Contractors
- Home Builders
- Developers



### Stormwater Pollution from Heavy Equipment on Construction Sites

Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible.

### Doing the Job Right

- Site Planning and Preventive Vehicle Maintenance**
  - Designate one area of the construction site, well away from streams or storm drain inlets, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance. Contain the area with berms, sand bags, or other barriers.
  - Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
  - Perform major maintenance, repair jobs, and vehicle and equipment washing off site where cleanup is easier.
  - If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in separate containers. Recycle them wherever possible, otherwise, dispose of them as hazardous wastes.
  - Do not use diesel oil to lubricate equipment parts, or clean equipment. Use only water for any onsite cleaning.
  - Cover exposed fifth wheel hitch and other oily or greasy equipment during rain events.
  - Use as little water as possible for dust control. Ensure water used doesn't leave silt or discharge to storm drains.

### Spill Cleanup

- Clean up spills immediately when they happen.
- Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible and properly dispose of absorbent materials.
- 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 significant spills to the appropriate local spill response agencies immediately. In Sunnyvale, dial 9-1-1 if hazardous materials might enter the storm drain.
- If the spill poses a significant hazard to human health and safety, property or the environment, you must also report it to the State Office of Emergency Services 1-800-852-7500.

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HOUSE ADDITION  
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APN: 32022053

BLUEPRINT FOR A CLEAN BAY

Owner:  
Qian Li  
Tel: 669-241-9869  
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# CALGREEN RESIDENTIAL MANDATORY CHECKLIST

THESE REQUIREMENTS APPLY TO BUILDING PERMITS SUBMITTED ON OR AFTER JANUARY 1, 2023

Following is a standardized checklist of the 2022 California Green Building Standards Code (CalGreen) requirements that may be used to demonstrate compliance with the CalGreen Mandatory Measures (Chapter 4). This checklist is required for all new buildings and additions/alterations that increase the building's conditioned area. The requirements shall apply only to and/or within the specific area of the addition or alteration.

CALGreen Reference	Description	Designer's Comments with Plan Sheet Reference
<b>4.1 Planning and Design</b>		
4.106.2	<b>Storm Water Drainage and Retention during construction.</b> A plan is developed and implemented to manage storm water drainage during construction.	Sheet: CG-1
4.106.3	<b>Grading and paving.</b> Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings	Sheet: CG-1
4.106.4.1	<b>New one- and two-family dwellings and townhouses with attached private garages.</b>	Sheet: N/A
	1. In private garages with two or more parking spaces, install a Level 2 EV Ready Space and Level 1 EV Ready Space.	
	2. In private garages with only one parking space, install a Level 2 EV Ready Space.	
	3. In each carport space assigned to a dwelling unit, install a Level 2 EV Ready Space.	
	4. For parking spaces not assigned to a dwelling unit:	
	a. 30% of the unassigned parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number.	
	b. In addition, each remaining unassigned parking space(s) shall be provided with at least a Level 1 EV Ready Space.	
4.106.4.1.1	<b>Identification.</b> The raceway termination location shall be permanently and visibly marked as "Level 2 EV-Ready".	
4.106.4.2	<b>New multifamily dwellings.</b> The following requirements apply to all new multifamily dwellings:	Sheet: N/A
	1. 30% of the dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number.	
	2. In addition, each remaining dwelling unit with parking space(s) shall be provided with at least a Level 1 EV Ready Space.	
<b>Notes:</b>		
	1. ALMS may be installed to decrease electrical service and transformer costs associated with EV Charging Equipment subject to review of the authority having jurisdiction.	
	2. Installation of Level 2 EV Ready Spaces above the minimum number required level may offset the minimum number Level 1 EV Ready Spaces required on a 1:1 basis.	
	3. The requirements apply to multifamily buildings with parking spaces including: a) assigned or leased to individual dwelling units, and b) unassigned residential parking.	
	4. If a building permit applicant provides documentation detailing that the increased cost of utility service or on-site transformer capacity would exceed an average of \$4,500 for each parking	

One-Stop Permit Center at City Hall, 456 W. Olive Ave., 408-730-7444  
Building and Planning hours are 8 a.m. - 12:30 p.m. and 1 - 5 p.m.  
Sunnyvale.ca.gov

spaces with Level 2 EV Ready Spaces and Level 1 EV Ready Spaces, the applicant shall provide EV infrastructure up to a level that would not exceed this cost for utility service or on-site transformer capacity.

5. All accessible parking spaces for covered newly constructed multifamily dwellings shall provide Level 1 EV Ready Space or Level 2 EV Ready Spaces.

4.106.4.2.2.1 **Electric vehicle charging stations (EVCS).**  
Electric vehicle charging stations required by Section 4.106.4.2 shall comply with Section 4.106.4.2.2.1.

**Exception:** Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code Chapter 11B, for applicable requirements.

4.106.4.3 **New hotels and motels.** In residential new construction buildings designated primarily for hotel and motel use with parking:

- 20% of parking spaces shall be provided with at least one Level 2 Ready Space. Calculations for the required minimum number of Level 2 Ready Space shall be rounded up to the nearest whole number.
- An additional 50% shall be provided with at least EV Capable.

Calculations for the required minimum number of spaces equipped with Level 2 Ready Space and EV Capable spaces shall all be rounded up to the nearest whole number.

Construction plans and specifications shall demonstrate that all raceways shall be a minimum of 1" and sufficient for installation of Level 2 Ready Space and all required EV Capable spaces; Electrical calculations shall substantiate the design of the electrical system to include the rating of equipment and any on-site distribution transformers, and have sufficient capacity to simultaneously charge EVs at all required EV spaces including EV Capable spaces; and service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

**Notes:**

- ALMS may be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without ALMS.

4.106.4.3 **Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings.** When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

**Notes:**

- Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
- There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

Sheet: N/A

## 4.2 Energy Efficiency

4.201.1 **Scope** Compliance with the California Energy Commission mandatory standards. Sheet: CG-1

## 4.3 Water Efficiency and Conservation

4.303.1.1 **Water Closets.** Effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Sheet: CG-1

4.303.1.2 **Urinals.** The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush. Sheet: N/A

4.303.1.3 **Showerheads.** Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. When a shower is served by more than one showerhead, the combined flow rate of all shower heads shall not exceed 1.8 gallons per minute at 80 psi. Sheet: CG-1

4.303.1.4 **Faucets.** Residential lavatory faucets shall not exceed 1.2 gpm at 60 psi. Lavatory faucets in common and public use areas in residential buildings shall not exceed 0.5 gpm at 60 psi. Metering faucets installed in residential buildings shall not deliver more than 0.2 gallons per cycle. Kitchen faucets shall not exceed 1.8 gpm at 60 psi. Sheet: CG-1

4.303.2 **Submeters for multifamily building and dwelling units in mixed-use residential/commercial buildings.** Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code. Sheet: N/A

4.303.3 **Standards for plumbing fixtures and fittings.** Plumbing fixtures and fittings shall be installed per the California Plumbing Code. Sheet: CG-1

4.304.1 **Outdoor potable water use in landscape areas.** Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO). Sheet: CG-1

4.305.1 **Recycled water supply systems.** Newly constructed residential developments, where recycled water is available from a municipal source may be required to have recycled water supply systems installed. Sheet: N/A

## 4.4 Material Conservation and Resource Efficiency

4.406.1 **Rodent Proofing.** Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents. Sheet: CG-1

4.408 **Construction waste management.** Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste. The City of Sunnyvale requires the use of Green Halo, the Construction and Demolition Waste Management Plan (CDWMP) waste-tracking program to document and monitor compliance. Sheet: CG-1

4.410.1 **Operation and maintenance manual.** An operation and maintenance manual shall be provided to the building occupant or owner. Sheet: CG-1

4.410.2 **Recycling by occupants.** Where 5 or more multifamily dwelling units are constructed on a building site, readily accessible areas shall be identified for the collection of recycling. Sheet: N/A

## 4.5 Environmental Quality

4.503.1 **Fireplaces.** Any installed wood stove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable and shall have a permanent label indicating they are certified to meet the emission limit. Sheet: N/A

4.504.1 **Covering of duct openings and protection of mechanical equipment during construction.** Duct openings and other related air distribution component openings shall be covered during construction. Sheet: CG-1

4.504.2 **Finish material pollutant control.**  
**Adhesives, sealants and caulks.** Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits.  
**Paints and coatings.** Paints, stains and other coatings shall be compliant with VOC limits.  
**Aerosol paints and coatings.** Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic compounds.  
**Verification.** Documentation shall be provided to verify that compliant voe limit finish materials have been used. Sheet: CG-1

4.504.3 **Carpet systems.** All carpet and carpet cushion installed in the building interior shall meet the testing and product requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (also known as Specification 01350.)  
**Carpet adhesive.** All carpet adhesive shall meet the requirements of Table 4.504.1. Sheet: CG-1

4.504.4 **Resilient flooring systems.** Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (also known as Specification 01350.) Sheet: CG-1

4.504.5 **Composite wood products.** Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.) Sheet: CG-1

4.505.2 **Concrete slab foundations.** Vapor retarder and capillary break is installed at slab-on-grade foundations. Sheet: CG-1

4.505.3 **Moisture content of building materials.** Moisture content of building materials used in wall and floor framing is checked before enclosure. Sheet: CG-1

4.506.1 **Each bathroom shall be provided with the following:** Sheet: CG-1

1. ENERGY STAR fans ducted to terminate outside the building.  
2. Fans must be controlled by a humidity control (separate or built-in); OR functioning as a component of a whole-house ventilation system.  
3. Humidity controls with manual or automatic means of adjustment, capable of adjustment between a relative humidity range of ≤ 50 percent to a maximum of 80 percent.

4.507.2 **Heating and air-conditioning system design.** Duct systems are sized, designed, and equipment is selected using the following methods: Sheet: CG-1

- Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2016 or equivalent.
- Size duct systems according to ANSI/ACCA 1 Manual D-2014 or equivalent.
- Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2016 or equivalent.

**Chapter 7: Installer and Special Inspector Qualifications**  
702.1 **Installer Training.** HVAC system installers are trained and certified in the proper installation of HVAC systems. Sheet: CG-1

702.2 **Special Inspection.** Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.

703.1 **Documentation.** Verification of compliance with this code may include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.

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Date 01-12-2025

Scale

Drawn Lin.X

Job

Sheet

CG-1

Of Sheets