

# F.A.R. Calculator

**Instructions:** Enter the information in the white boxes below. The spreadsheet will calculate the proposed FAR (floor area ratio), the 100% max FAR (per the Zoning Ordinance for "Required FAR"), and the 85% max FAR (per the Zoning Ordinance for "Required FAR"). Additionally, it will determine whether a FAR Modification is required. "Guideline FAR" calculations are as outlined in the "Applicability" section of the Single Family Residence Design Guidelines, page 31-C.

The **Net Lot Area** does not include any Public Road Easements or Public Road Right-of-Way areas. The proposed **TOTAL Net FAR Floor Area** shall include the net floor area of all stories of all buildings, but may or may not include basement/interior floor area. For further clarification on these definitions please refer to SBMC §28.15.083 & 30.300. This form has not yet been updated for current Title 30 zone designations, see SBMC §30.010 for comparison.

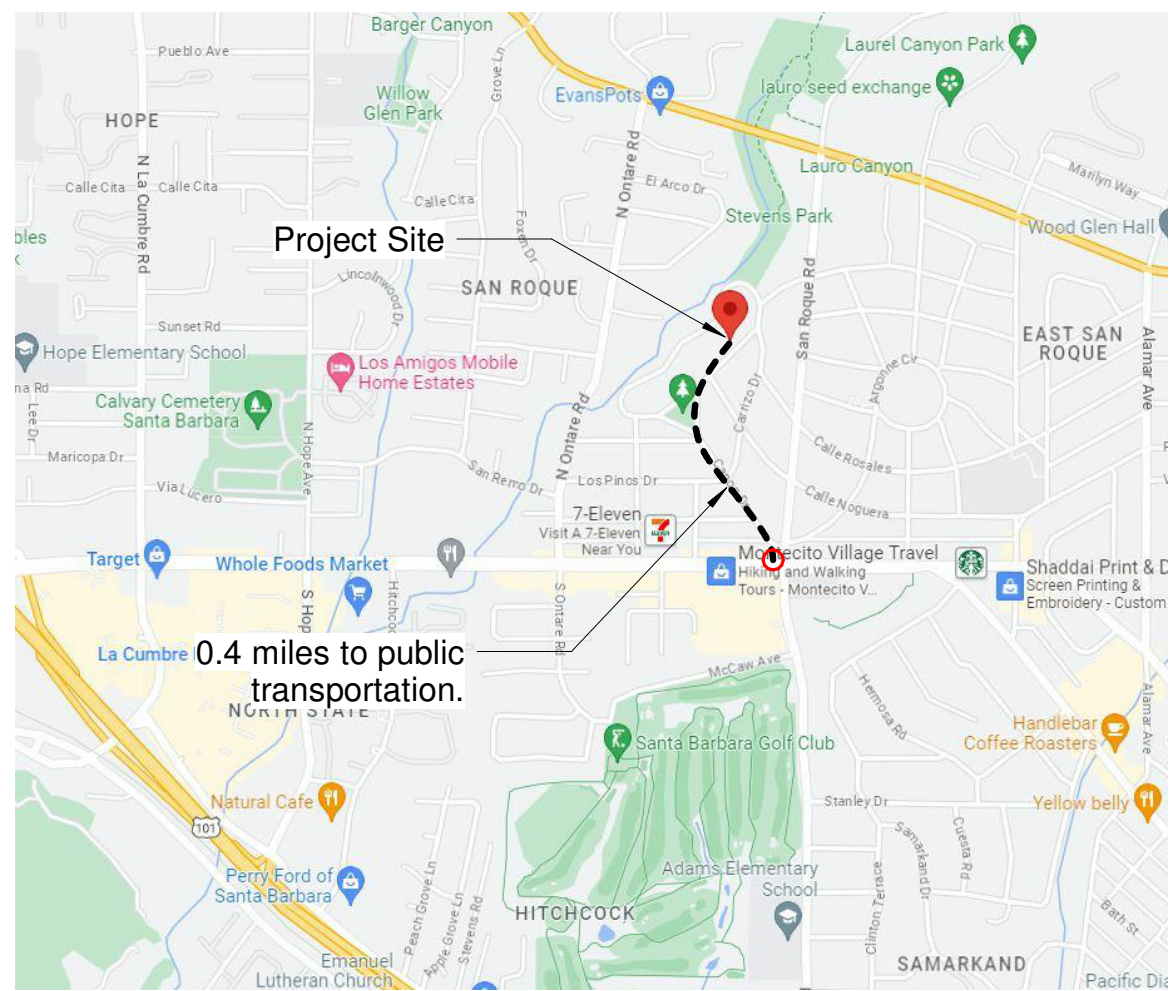
ENTER Project Address:	215 Canon Dr
Is there a basement or cellar existing or proposed?	No
ENTER Proposed TOTAL Net FAR Floor Area (in sq. ft.):	4,386
ENTER Zone ONLY from drop-down list:	E-2 or RS-10
ENTER Net Lot Area (in sq. ft.):	25,409
Is the height of existing or proposed buildings 17 feet or greater?	No
Are existing or proposed buildings two stories or greater?	No
The FAR Requirements are:	GUIDELINE**
ENTER Average Slope of Lot:	24.00%
Does the height of existing or proposed buildings exceed 25 feet?	No
Is the site in the Hillside Design District?	No
Does the project include 500 or more cu. yds. of grading outside the main building footprint?	No
An FAR MOD is not required per SBMC §28.15 or §30.20.030	

FLOOR AREA RATIO (FAR):	0.173
Lot Size Range:	>= 20,000 sq. ft.
MAX FAR Calculation (in sq. ft.):	4,430 + (0.013 x lot size in sq. ft.)
100% MAX FAR:	0.187
100% MAX FAR (in sq. ft.):	4,760
85% of MAX FAR (in sq. ft.):	4,046
80% of MAX FAR (in sq. ft.):	3,808
The 4386 square foot proposed total is 93% of the MAX FAR.*	

\* NOTE: Percentage total is rounded up.  
 \*\*NOTE: If your project is located on a site with multiple or overlay zones, please contact Planning Staff to confirm whether the FAR limitations are "Required" or "Guideline".

Acreage Conversion Calculator	
ENTER Acreage to Convert to square footage:	1.00
Net Lot Area (in sq. ft.):	43560

# Vicinity Map



0.4 miles to public transportation.

# Utilities

Accessory Dwelling Unit shall be on the Primary Residence meters for water, gas, electricity, & sanitary sewer.

# Separate Permits

- Solar photovoltaic (PV) system to be included into this Building Permit See Sheets AX.0.
- Fire Sprinklers

# Enhanced Durability, Reduced Maintenance

Annular Spaces around pipes, electrical cables, conduits and other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.

# Smoke Detectors and CO Alarms

Provide Smoke Detectors & Carbon Monoxide Alarms per California Residential Code

# Pollutant Control

See A0.2 and A0.3 for California Green Building Standards Code provisions for pollutant control regarding ducts, indoor air quality, mechanical equipment and finish materials. Conform to provisions for Interior Moisture Control, Indoor Air Quality, Installer & Special Inspector Qualifications, and Verifications.

# Operation & Maintenance

At the time of final inspection, an operation & maintenance manual, compact disc or web-based reference shall be placed in the building. This manual shall include all of the items listed on California Green Building Standards Code Section 4.410.1. Refer to sheets A0.2 and A0.3.

# Construction Waste Reduction, Disposal and Recycling

See A0.2 and A0.3 for California Green Building Standards Code provisions for construction waste management and documentation of diversion approach.

An approved County sorting/recycling facility must be utilized for construction waste management to comply with Construction Waste Reduction, Disposal and Recycling provisions of California Green Building Standards Code Section 4.408.1 (minimum 65% non-hazardous materials recycled and/or salvaged for re-use).

**Approved Waste Management Company:**  
 Marborg Industries  
 728 E Yanonali  
 Santa Barbara, CA 93103  
 Phone: (805) 963-1852

# Area Calculations

<b>Existing Floor Area:</b>			
Existing Single Story Primary Residence:	2,715 Net / 3,041 Gross		
Existing Detached 2-car Garage:	433 Net / 485 Gross		
<b>Total Existing Floor Area:</b>	<b>3,148 Net / 3,526 Gross</b>		
<b>Proposed Floor Area:</b>			
New Special Accessory Dwelling Unit:	798 Net / 909 Gross		
New 2-car Detached Garage:	440 Net / 494 Gross		
<b>Total Proposed Floor Area:</b>	<b>1,238 Net / 1,403 Gross</b>		
<b>TOTAL PROPOSED FLOOR AREA ON SITE:</b>	<b>4,386 Net / 4,929 Gross</b>		
(Existing - Demolition + Additions = Total Proposed)			

# Project Data

Property Owner	Arlon and Sylvia Martin 215 Canon Drive Santa Barbara, CA 93105
Owner's Representative	Anne Martin and Bowen Fredericks 215 Canon Drive Santa Barbara, CA 93105
Project Address	215 Canon Drive Santa Barbara, CA 93105
APN	053-161-002
Zone	RS-10 / SRP / USS (Title 30 Zoning - Inland)
Lot Size per Assessor	0.58 Acres
Lot Size	25,409.41 SF
Slope (Estimate from City's GIS System)	24%
General Plan Neighborhood	San Roque
High Fire Hazard Area	Yes, Foothill Zone
Flood Hazard Area	No (Area of Minimal Flood per FEMA)
# of Stories	1
Occupancy Classification:	R-3
Construction Type:	VB
Fire Sprinkler System:	No

**Applicable Codes:**  
 2022 California Residential Code  
 2022 California Plumbing Code  
 2022 California Electrical Code  
 2022 California Mechanical Code  
 2022 California Fire Code  
 2022 California Energy Code  
 2022 California Green Building Standards Code  
 Santa Barbara County (SBCO) Building Ordinance #5092  
 SBCO Grading Ordinance #4766

- Project Description**  
 Permit a new Special Accessory Dwelling Unit, 798 sf, one-bedroom, 1.5-bathroom. Permit a new 2-car garage detached from the Special Accessory Dwelling Unit, with a new driveway, new access stairs and new 5'-3" x 8'-11" entry porch.
- Permit proposed front yard setback tree removal :  
 (2) Jacaranda mimosifolia, Jacaranda.  
 (2) Ligustrum lucidum, Glossy Privet.  
 - Parks and Recreation Commissioners approved mitigation :  
 - Plant (3) Trees with a minimum height of 25 feet at maturity.  
 Minimum of (2) replacement trees shall be planted in the public right of way.
- Permit proposed front yard setback tree mitigation :  
 (3) New 15-gallon Jacaranda replacement tree  
 Species: Jacaranda mimosifolia.
- Permit proposed (3) 15-gallon oaks on site to mitigate the impact to one oak.  
 Species: Quercus Agrifolia.
- Requesting a Minor Zoning Exception (MZE) to permit portions of a proposed retaining wall within 10 ft of the front lot line exceeding 42 inches.

<b>Proposed Grading:</b>		
CUT	FILL	NET
136 cy	277 cy	141 cy (Import)
<b>Paving Analysis:</b>		
Proposed New Impervious surface area		1,992 SF
SWMP Requirement:		Tier 2

**Notes:**  
 Allwork in the Public Right-of-Way requires a separate permit from public works.

# Parking Calculations

<b>Primary Residence:</b>	
Existing Parking - Primary residence: 2 covered / 0 uncovered	
Proposed Parking - Primary Residence: 2 covered/ 0 uncovered - <b>no change</b>	
Required Parking - Primary Residence: 2 covered - <b>no change</b>	
<b>Special Accessory Dwelling Unit:</b>	
Proposed Parking - Accessory Dwelling Unit: 2 covered / 0 uncovered	
Required Parking - Accessory Dwelling Unit: 0 parking spaces *	

\* Parking Exception for Certain Accessory Dwelling Unit pursuant to SBMC 30.185.040.K.5.a.i.

# Sheet Index

A0.0	Cover Sheet
TS	Topographic Survey
BMP-1	Erosion Control Simple
C1.0	Cover
C2.0	Notes
C3.0	Grading and Drainage Plan
C4.0	Utility Plan
C5.0	Sections and Details
C5.1	Sections and Details
C6.0	Retaining Wall Plan and Profile
EC1.0	Erosion and Sediment Control Plan
EC2.0	Erosion and Sediment Control Plan
HE1of1	Hydrology Exhibit
A0.1	Site Plan - Accessory Dwelling Unit
A0.2	Green Buildings Standards Code
A0.3	Green Buildings Standards Code
A0.4	Soils Report, Pages 1-6
A0.5	Soils Report, Pages 7-13
A0.6	Soils Report, Appendix A
A0.7	Soils Report, Appendix B
A0.10	Biological Site Assessment
A0.11	Arborist Report
A1.1	Proposed Floor Plan
A1.2	Proposed Roof Plan
A1.3	Reflected Ceiling Plan
A1.4	Proposed Systems Plan
A2.1	Elevations
A3.1	Sections
A3.2	Garage Sections / Elevations
A4.0	Color and Materials Board
A4.1	Specifications
A4.2	Specifications / Tree Removal Letter
A4.3	Surrounding Streetscape
S-1.1	Structural Title Sheet
S-1.2	Structural Specifications
S-1.3	Special Inspections
S-2.1	Foundation Plan
S-2.2	Roof Framing Plan
S-3.1	Structural Details
S-3.2	Structural Details

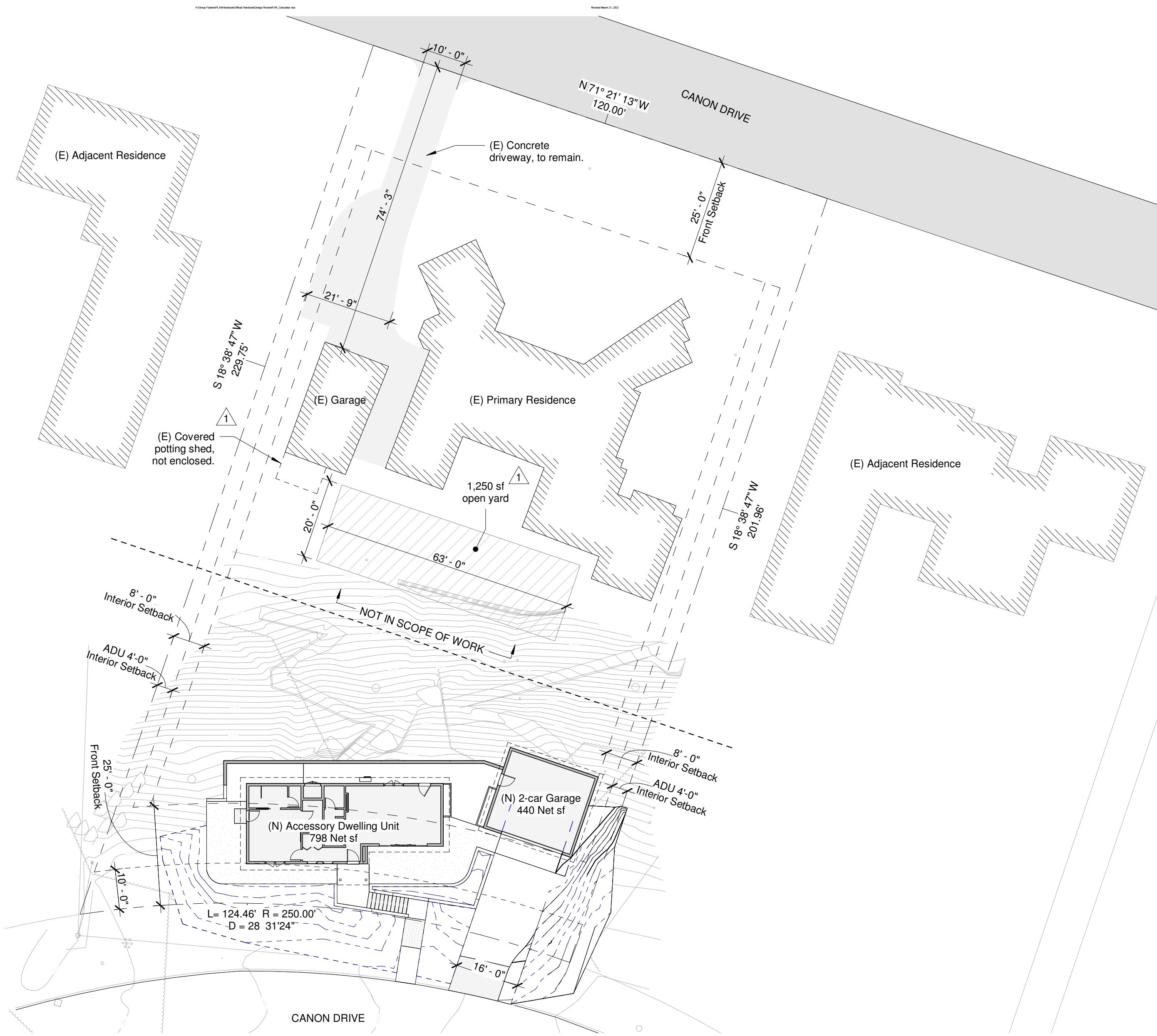
# Project Team

**Architect:**  
 Vanguard Planning, Inc.  
 April Palencia, AIA  
 (805) 896-2544  
 april.palencia@vanguardplanning.com

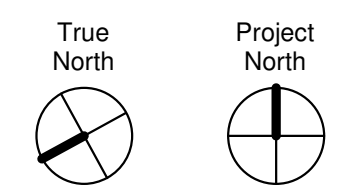
**Structural Engineer:**  
 Ashley & Vance Engineering  
 Paul Belmont, PE  
 (805) 962-9666, x 158  
 paul@ashleyvance.com

**Civil Engineer:**  
 Walsh Engineering  
 Trisha Wall, PE  
 (805) 319-4948 x 108  
 trisha@walshengineering.net

**Geotechnical Engineer:**  
 Beacon Geotechnical, Inc.  
 Nicholas A. McClure  
 (805) 239-9457  
 beacongeotechnical@gmail.com



1 Overall Site Plan  
 1" = 20'-0"



215 Canon  
 215 Canon Drive  
 Santa Barbara, CA 93105

735 State Street, Suite 204  
 Santa Barbara, CA 93101  
 805.966.3966 office  
 805.715.7005 fax  
 vanguardplanning.com



Stamp/Signature:  
 Sergio Ormachea

PLN2023-00393

Planning Submittal	2023-09-15
Revisions:	
Response to 1st Review	2024-03-14
Response to 2nd review	2024.04.15

Sheet Title:  
**Cover Sheet**

Sheet No.:  
**A0.0**

Blank space for City stamps

GENERAL NOTES

PARTIAL TOPOGRAPHIC FIELD SURVEY CONDUCTED APRIL 6TH, 2022 AND MAY 2ND, 2023

BOUNDARY DATA PER BK 15 PG 108 MAPS

THE BASIS OF BEARINGS FOR THIS SURVEY IS A WESTERLY LINE OF CANNON DRIVE ESTABLISHED BY A FOUND 1/2" IRON PIPE MARKING THE BC OF THE CURVE SHOWN HERE ON AND A SPLIT OF THE CURB FACES FRONTING THE PROPERTY.

THE BENCHMARK FOR THIS SURVEY IS A SET 60D NAIL ON THE FRONT YARD OF THE HOUSE THE ELEVATION BEING 293.33' (NAVD88). SHOWN HEREON.

1 FOOT CONTOUR INTERVAL

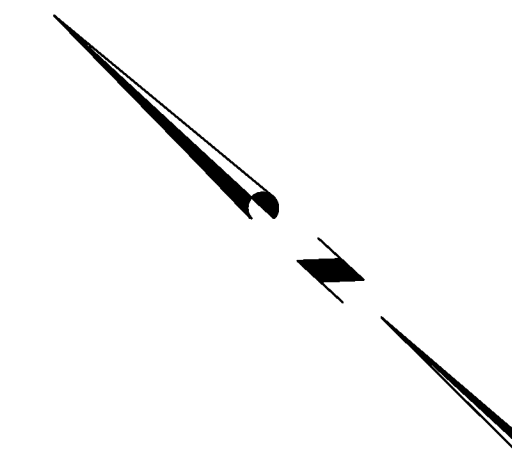
LEGEND

- AC ASPHALT
- AD AREA DRAIN
- B BOULDER
- CNC CONCRETE
- CLSTR SHRUB CLUSTER
- EL ELEVATION
- EM ELEC METER
- FF FINISH FLOOR
- FOUND FOUND
- FS FINISH SURFACE
- GM GAS METER
- HB HOSE BIB
- IN INCH
- MB MAIL BOX
- NG NATURAL GROUND
- OHD OVERHEAD ELECTRICITY
- PP POWER POLE
- SCO SEWER CLEAN OUT
- R 15 MB 108
- FOUND MONUMENT PER R
- LOCATION OF PROPERTY CORNER PER R
- PROPERTY LINE
- BUILDING LINE
- OVERHEAD POWER
- OAK DRIP LINE/HEDGE
- METAL RAIL
- WIRE FENCE
- WALL
- PP POWER POLE
- WM WATER METER
- G GAS TEE
- TREE TRUNK
- GW GUY WIRE
- S SEWER MANHOLE
- ASPHALT

UNPLOTTABLE EASEMENTS

- EASEMENT TO BARKLEY S. WYCKOFF AND MARY S. WYCKOFF, FOR THE RIGHT TO CONSTRUCT, PLACE, ERECT, OPERATE, REPAIR AND MAINTAIN WATER, GAS AND SEWER PIPES AND POLES AND CONDUITS FOR TELEPHONE AND ELECTRIC AND POWER WIRES PER THE DOCUMENT RECORDED AUG 26, 1937 IN BOOK 399 PAGE 492 OF OFFICIAL RECORDS.
- EASEMENT TO SANTA BARBARA TELEPHONE COMPANY, A CORPORATION, ITS SUCCESSORS AND ASSIGNS, PER THE DOCUMENT RECORDED JAN 20TH, 1938 IN BOOK 422 PAGE 272 OF OFFICIAL RECORDS.

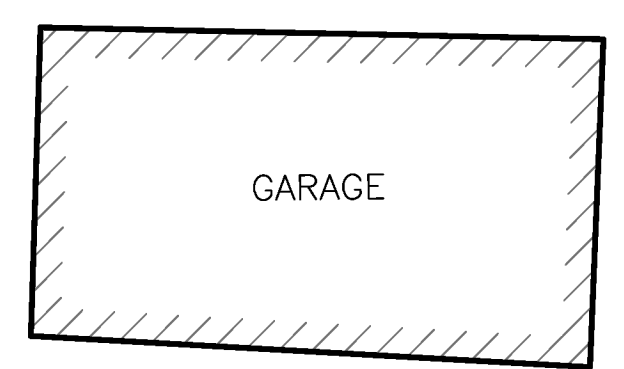
FND 1/2" IRON PIPE



SCALE 1"=10'

LOT 206 PER R

N 42°40'00" W 229.75'



LOT 205 PER R

APN: 053-161-002

HOUSE

BENCHMARK ELEVATION=293.33'

N 47°20'00" E 120.00'

CANNON DRIVE

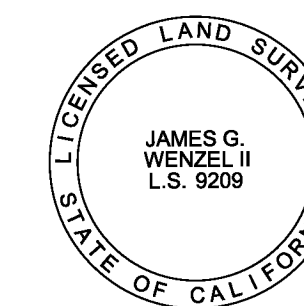
40'

LOT 205 PER R

N 42°40'00" W 201.96'

292.38'

JAMES G. WENZEL II 02-22-24



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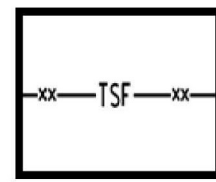
WW SURVEYING, INC.

SHEET	TITLE	DATE	REVISION	BY
3	2-22-24	UPDATED TREE DESCRIPTION		JW
2	7-31-23	REVIEWED TITLE, ADDED EASEMENT STATEMENT		JW
1	5-3-23	ADDITIONAL TOPOGRAPHY		JW

PROJECT	TOPOGRAPHIC SURVEY	PROJECT S03862
SCALE	1" = 10'	SCALE 1" = 10'
DATE	02-22-24	DATE 02-22-24
DRAWN BY	BS	DRAWN BY BS
CHECKED BY	JW	CHECKED BY JW
215 CANON DRIVE SANTA BARBARA, CA		TS
WW SURVEYING, INC. 1727 STATE STREET SUITE 25 SANTA BARBARA, CA 93101		
(805) 748-3234		
		1 OF 1 SHEETS

# Temporary Silt Fence

SC-1



Standard Symbol

BMP Objectives	
Soil Stabilization	<input checked="" type="checkbox"/>
Sediment Control	<input checked="" type="checkbox"/>
Tracking Control	<input type="checkbox"/>
Wind Erosion Control	<input type="checkbox"/>
Non-Stormwater Management	<input type="checkbox"/>
Materials and Waste Management	<input type="checkbox"/>

## Definition and Purpose

A silt fence is a temporary linear sediment barrier of permeable fabric designed to intercept and slow the flow of sediment-laden sheet flow runoff. Silt fences allow sediment to settle from runoff before water leaves the construction site.

## Appropriate Applications

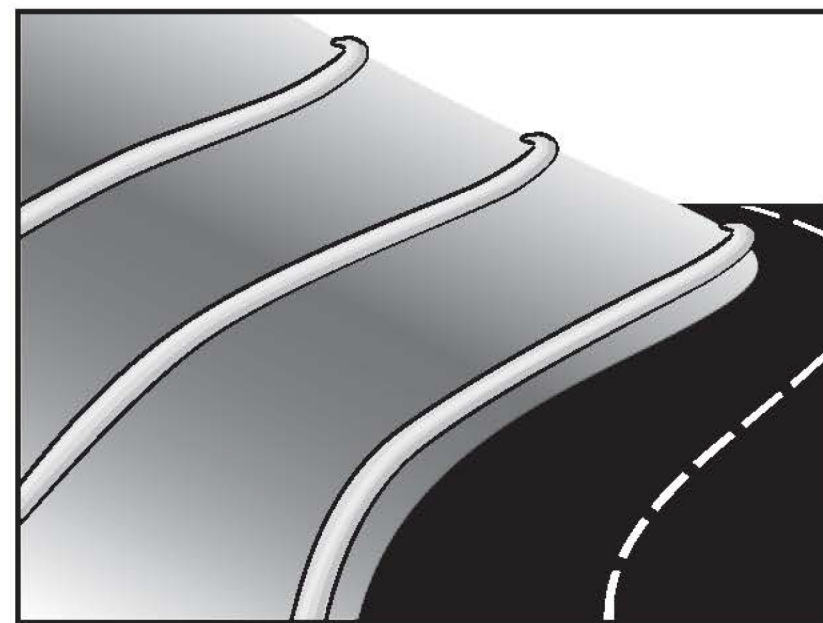
- Below the toe of exposed and erodible slopes.
- Down-slope of exposed soil areas.
- Around temporary stockpiles.
- Along streams and channels.
- Along the perimeter of a project.

## Limitations

- Not effective unless trenched and keyed in.
- Not intended for use as mid-slope protection on slopes greater than 4:1 (H:V).
- Must be maintained.
- Must be removed and disposed of.
- Don't use below slopes subject to creep, slumping, or landslides.

# Fiber Rolls

SE-5



Categories	
EC	Erosion Control <input checked="" type="checkbox"/>
SE	Sediment Control <input checked="" type="checkbox"/>
TC	Tracking Control <input type="checkbox"/>
WE	Wind Erosion Control <input type="checkbox"/>
NS	Non-Stormwater Management Control <input type="checkbox"/>
WM	Waste Management and Materials Pollution Control <input type="checkbox"/>

Legend:  
 Primary Category  
 Secondary Category

## Description and Purpose

A fiber roll consists of straw, coir, or other biodegradable materials bound into a tight tubular roll wrapped by netting, which can be photodegradable or natural. Additionally, gravel core fiber rolls are available, which contain an imbedded ballast material such as gravel or sand for additional weight when staking the rolls are not feasible (such as use as inlet protection). When fiber rolls are placed at the toe and on the face of slopes along the contours, they intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff (through sedimentation). By interrupting the length of a slope, fiber rolls can also reduce sheet and rill erosion until vegetation is established.

## Suitable Applications

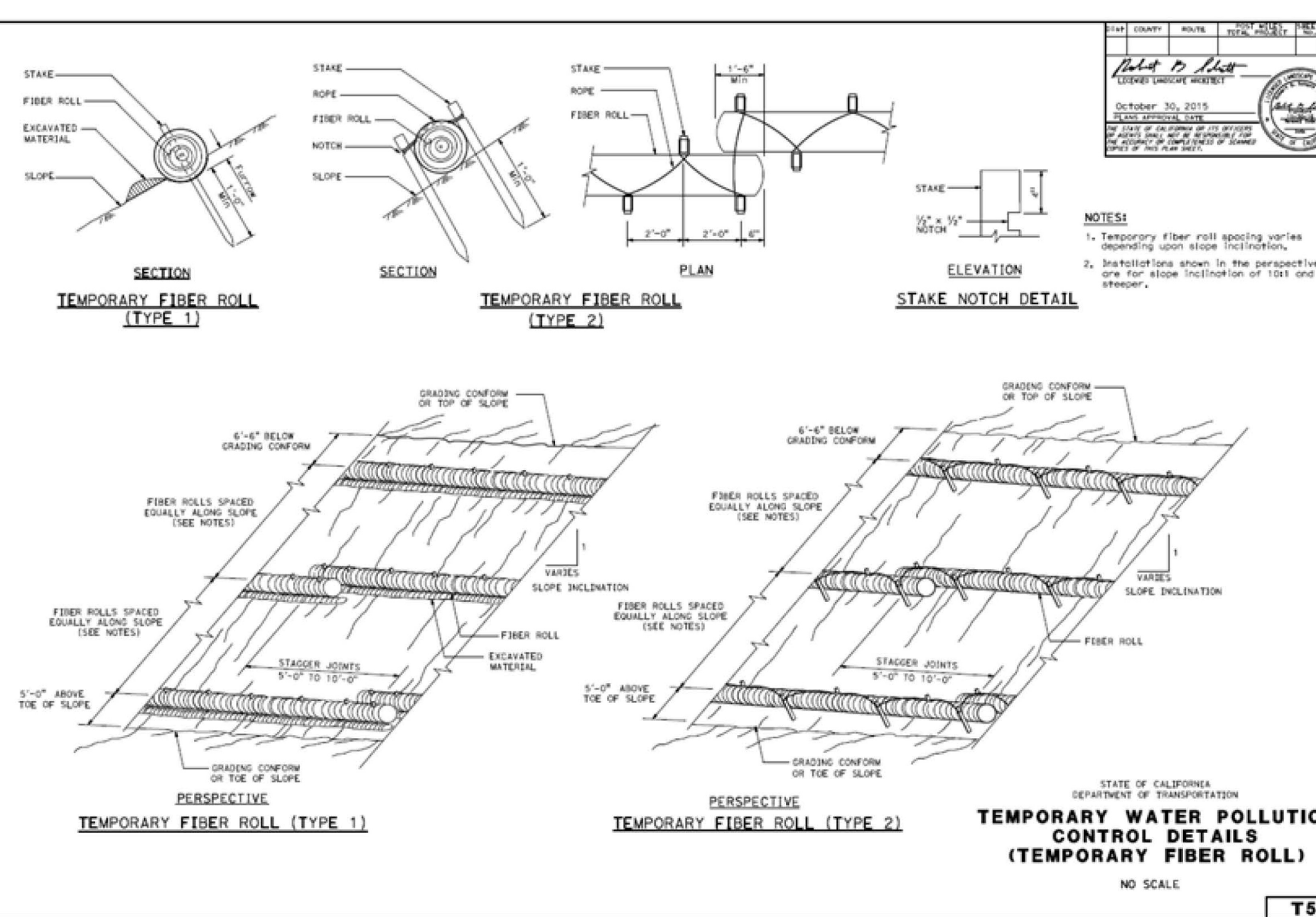
- Fiber rolls may be suitable:
- Along the toe, top, face, and at grade breaks of exposed and erodible slopes to shorten slope length and spread runoff as sheet flow.
  - At the end of a downward slope where it transitions to a steeper slope.
  - Along the perimeter of a project.
  - As check dams in unlined ditches with minimal grade.
  - Down-slope of exposed soil areas.
  - At operational storm drains as a form of inlet protection.

Targeted Constituents	
Sediment	<input checked="" type="checkbox"/>
Nutrients	<input type="checkbox"/>
Trash	<input type="checkbox"/>
Metals	<input type="checkbox"/>
Bacteria	<input type="checkbox"/>
Oil and Grease	<input type="checkbox"/>
Organics	<input type="checkbox"/>

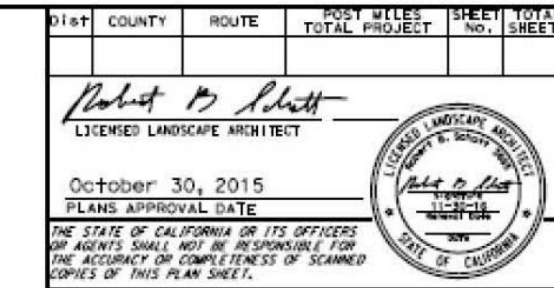
Potential Alternatives	
SE-1	Silt Fence
SE-6	Gravel Bag Berm
SE-8	Sandbag Barrier
SE-14	Biofilter Bags



# Fiber Rolls



# Stabilized Construction Entrance/Exit TC-1



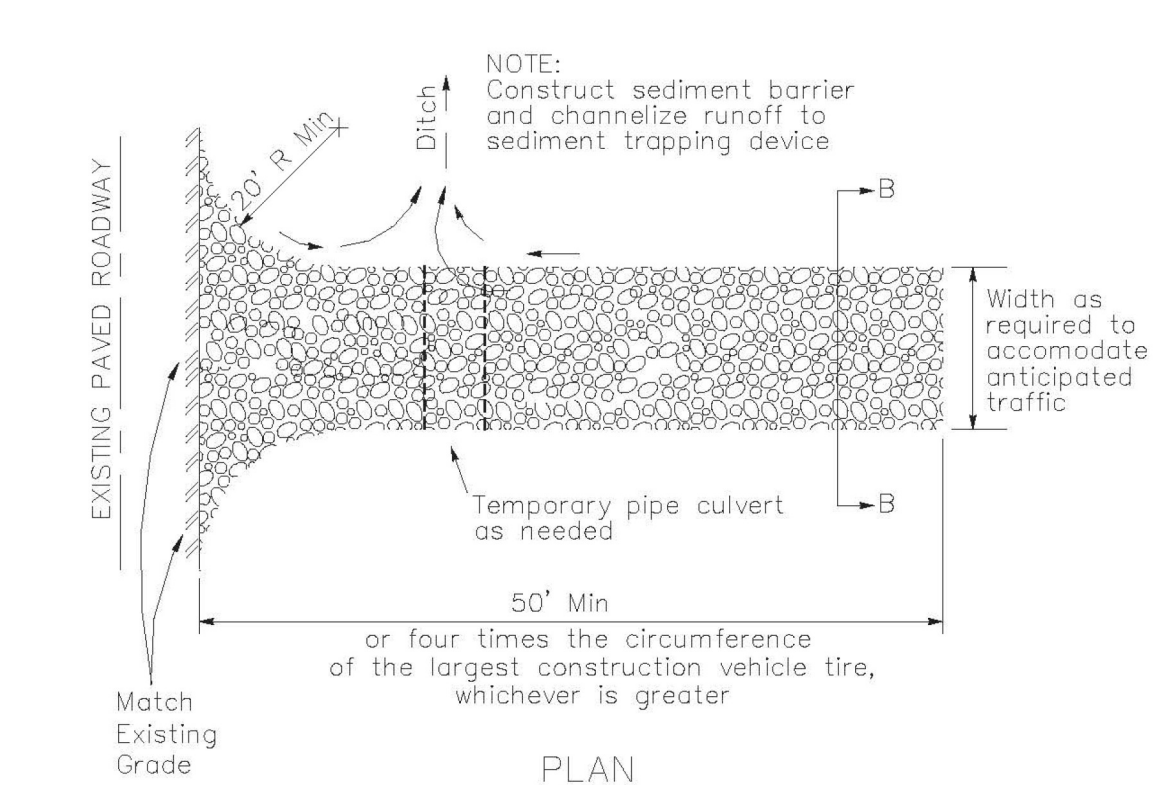
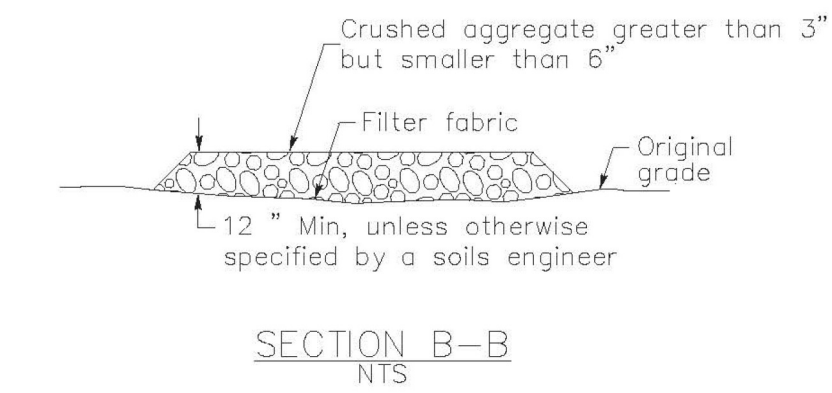
## NOTES:

- The down stream end of the temporary silt fence shall have the last 8' angled up slope.
- Setback dimensions may vary to fit field conditions.
- Posts to overlap and fence fabric to fold around each post one full turn. Secure fabric with 4 staples for each post.
- Posts shall be driven tightly together to prevent potential flow-through of sediment at the joint. The tops of the posts shall be secured to each other with wire.
- For each end post, fence fabric shall be folded around two posts one full turn and secured with 4 staples.
- Minimum of 4 staples shall be installed per post. Dimensions shown are typical.
- Maintenance openings shall be constructed in a manner to ensure that sediment is retained by the temporary silt fence.
- Joint sections shall not be placed at sump locations.

## LEGEND

- TAMPED BACKFILL
- SLOPE DIRECTION
- DIRECTION OF FLOW

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY SILT FENCE)**  
NO SCALE  
T51

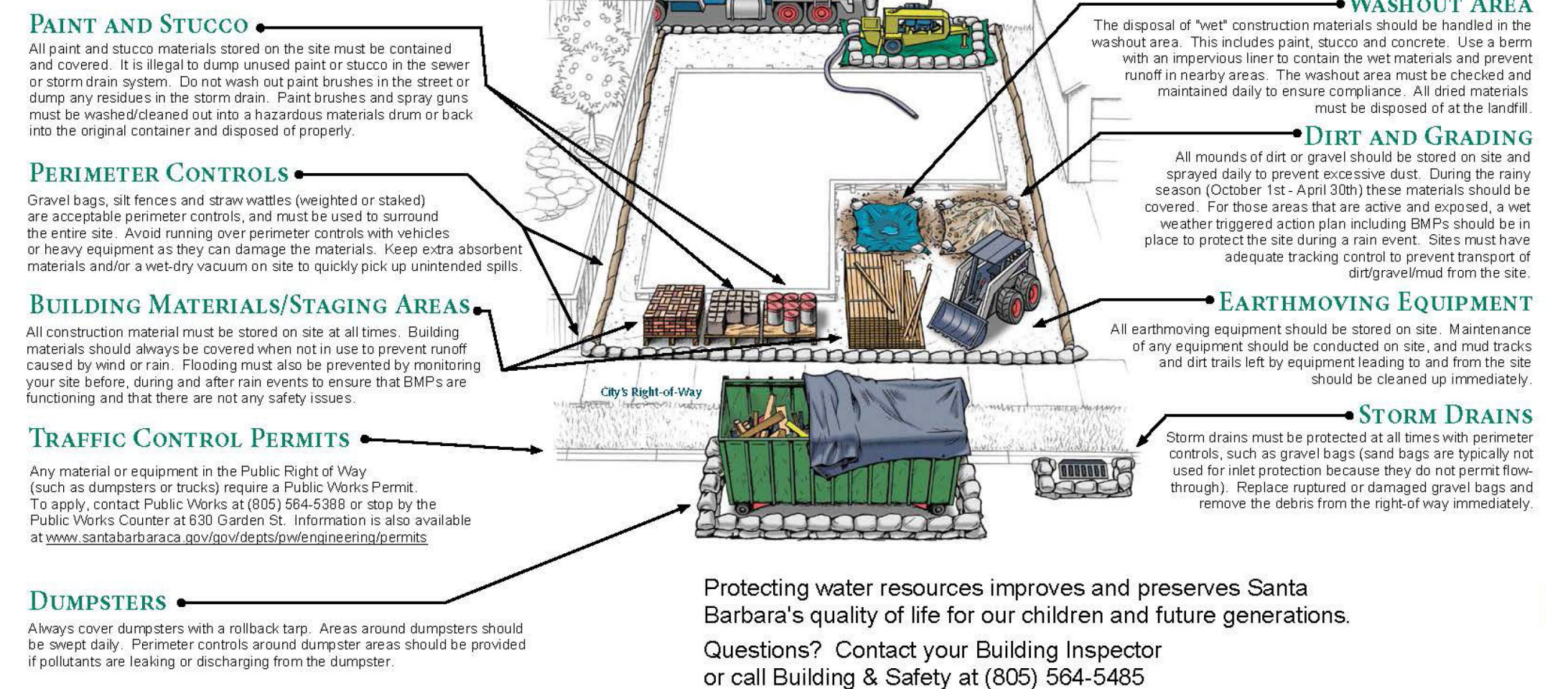


# CONSTRUCTION SITE BEST MANAGEMENT PRACTICES

THE FOLLOWING BMPs MUST BE PROPERLY USED AT ALL CONSTRUCTION SITES IN THE CITY TO PROTECT STORM DRAINS AND MINIMIZE POLLUTION

The City of Santa Barbara Building & Safety Division Erosion/Sedimentation Control Program SBMC 22.85.020 and SBMC 16.15.010 prohibit pollutant discharges at work sites from flowing into storm drains and polluting local creeks, water courses and the ocean.

To stay in compliance and keep your project on schedule, make sure BMPs are in place and functioning, make sure BMPs are in place and functioning, make sure BMPs are in place and functioning. Sites must be checked and maintained daily.



City of Santa Barbara  
EROSION / SEDIMENTATION CONTROL AND  
STORMWATER QUALITY MANAGEMENT PROGRAM

ABBREVIATIONS		
±	APPROXIMATE VALUE PLUS OR MINUS	LF LINEAL FEET
( )	EXISTING ELEVATION	MAX MAXIMUM
AB	AGGREGATE BASE	MEP MECHANICAL ELECTRICAL PLUMBING
AC	ASPHALT CONCRETE	MH MANHOLE
BC	BEGINNING OF CURVE	MIN MINIMUM
BVC	BEGINNING OF VERTICAL CURVE	(N) NEW ITEM
BFE	BASE FLOOD ELEVATION	NTS NOT TO SCALE
BLD	BUILDING	OH OVERHEAD UTILITY
BO	BLOW-OFF ASSEMBLY	OR OVERLAND RELEASE FOR DRAINAGE
BOW	BACK OF WALK	(P) PROPOSED ITEM
CO	CLEANOUT	PL PROPERTY LINE
CL	CENTERLINE	PUE PUBLIC UTILITY EASEMENT
DIP	DUCTILE IRON PIPE	PVC POLYVINYL CHLORIDE PIPE
DW	DOMESTIC WATER SERVICE	RCP REINFORCED CONCRETE PIPE
(E)	EXISTING ITEM	ROW RIGHT OF WAY
EC	END OF CURVE	R/W RIGHT OF WAY
EVC	END OF VERTICAL CURVE	SD STORM DRAIN
EP	EDGE OF PAVEMENT	SS SANITARY SEWER
EX	EXISTING	STA STATION
FF	FINISH FLOOR	STD STANDARD
FG	FINISH GRADE	SIW SIDEWALK
FH	FIRE HYDRANT	S/W TOP OF CURB
FS	FINISH SURFACE	TF TOP OF FOOTING
FL	FLOW LINE	TG TOP OF GRATE
FW	FIRE WATER SERVICE	TW TOP OF WALL
GB	GRADE BREAK	TYP TYPICAL
HP	HIGH POINT	UNO UNLESS NOTED OTHERWISE
HWM	HIGH WATER MARK	VC VERTICAL CURVE
INV	INVERT	VCP VITRIFIED CLAY PIPE
IRR	IRRIGATION	W WATER SERVICE
JT	JOINT TRENCH UTILITIES	WR RECLAIMED WATER SERVICE

**ANNOTATION LEGEND**

	GENERAL NOTE
	STORM DRAIN KEY NOTE/GENERAL KEY NOTE
	WATER KEY NOTE
	SANITARY SEWER KEY NOTE
	DRY UTILITY KEY NOTE
	CAUTIONARY KEY NOTES
	REVISION TO PLAN OR MODIFICATION TO DETAIL
	DETAIL CALLOUT (TOP=DETAIL NO./BTM.=SHEET NO.)
	SECTION CALLOUT (TOP=SECTION NO./BTM.=SHEET NO.)
	ELEVATION GRADE CALLOUT (PROPOSED)
	ELEVATION GRADE CALLOUT (MATCH EXISTING)
	BUILDING FINISH FLOOR ELEVATION/PAD ELEVATION
	DIRECTION OF FLOW/ PERCENT SLOPE
	UTILITY INVERT (SIZE, DIRECTION, ELEVATION)
	DIMENSION

**GENERAL LEGEND**

	EXISTING/PROPOSED CENTERLINE (CL)
	EXISTING PROPERTY LINE (EX. PL)
	PROPOSED PROPERTY LINE (PL)
	PROPOSED SETBACK LINE
	EXISTING/PROPOSED EASEMENT
	PROPOSED SAWCUT
	GUTTER FLOWLINE
	PROPOSED RETAINING WALL HEIGHT PER PLAN.
	PROPOSED CONCRETE PAVEMENT/HARDSCAPE
	PROPOSED ASPHALT CONCRETE PAVEMENT
	PROPOSED GRAVEL
	PROPOSED PERVIOUS PAVERS
	PROPOSED CONCRETE PAVERS
	DEEPEMED FOUNDATION WALL, RETAINED HEIGHT PER PLAN, SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.
	RAISED FOUNDATION WALL, RETAINED HEIGHT PER PLAN, SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.

**GRADING LEGEND**

	GRADE BREAK
	DAYLIGHT OF GRADING LIMITS (CUT/FILL LINE)
	LIMIT OF DISTURBANCE
	SWALE
	CONTOUR MAJOR
	CONTOUR MINOR
	TOP OF SLOPE
	TOE OF SLOPE
	OVERLAND RELEASE PATH

**STORM DRAIN LEGEND:**

	STORM DRAIN PIPE LENGTH, SIZE AND SLOPE (SD)
	PROPOSED SLOT/TRENCH DRAIN
	PROPOSED BIO RETENTION BASIN
	ENERGY DISSIPATOR
	HEADWALL/ENDWALL
	FLARED END SECTION
	DROP INLET
	MANHOLE
	CLEANOUT

**SANITARY SEWER LEGEND:**

	SANITARY SEWER PIPE LENGTH, SIZE AND SLOPE (SS)
	SANITARY SEWER MANHOLE (SSMH)
	SANITARY SEWER CLEANOUT TO GRADE (SSCO)
	SANITARY SEWER BACKWATER VALVE

**WATER LEGEND:**

	DOMESTIC WATER SERVICE AND SIZE (DW)
	FIRE WATER SERVICE AND SIZE (FW)
	GATE VALVE
	FIRE HYDRANT (FH)
	POST INDICATOR VALVE (PIV)
	FIRE DEPARTMENT CONNECTION (FDC)
	BACKFLOW DEVICE FOR FIRE SERVICE (RPZ OR DDC)
	BACKFLOW DEVICE FOR DOMESTIC SERVICE (RPZ)
	DOMESTIC WATER METER
	IRRIGATION METER (DESIGN BY OTHERS)
	THRUST BLOCK

**DRY UTILITY LEGEND:**

	DRY UTILITY SERVICE
	PROPOSED PULL BOX
	PROPOSED STREET LIGHT
	PROPOSED SITE LIGHT

# ONSITE IMPROVEMENT PLANS

FOR

# MARTIN RESIDENCE

215 CANON DRIVE, SANTA BARBARA, CA 93105  
APN: 053-161-002



VICINITY MAP

**APPLICABLE CODES**

- 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)
- PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2022 CALIFORNIA BUILDING CODE (CBC)
- PART 2, TITLE 24, CCR
- 2022 CALIFORNIA PLUMBING CODE (CPC)
- PART 5, TITLE 24, CCR
- 2022 CALIFORNIA FIRE CODE (CFC)
- PART 9, TITLE 24, CCR

ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE APPLICABLE STANDARDS OF THE CODE SECTIONS REFERENCED ABOVE, AND ANY OTHER APPLICABLE STATE AND LOCAL GOVERNING AGENCY ORDINANCES, LAWS, RULES, REGULATIONS, AND PROJECT CONDITIONS OF APPROVAL.

NOTHING IN THESE DRAWINGS SHALL BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES, STANDARDS, OR PROJECT REQUIREMENTS.

**STANDARDS**

THE IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE STANDARD DRAWINGS AND SPECIFICATIONS LISTED BELOW. IN THE EVENT OF A DISCREPANCY BETWEEN THESE PLANS AND THE STANDARD DRAWINGS AND SPECIFICATIONS, THE GOVERNING ORDER OF PRECEDENCE SHALL BE AS FOLLOWS:

- STATE STANDARD PLANS AND SPECIFICATIONS (CALTRANS)
- CITY OF SANTA BARBARA STANDARD PLANS AND SPECIFICATIONS
- STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (PWC)
- IMPROVEMENT PLAN DRAWINGS AND SPECIFICATIONS BY WALSH ENGINEERING

**SURVEY AND MAPPING**

THE TOPOGRAPHIC SURVEY AND MAPPING INFORMATION, INCLUDING BUT NOT LIMITED TO EXISTING SURFACE FEATURES, PROPERTY LINES, RIGHT-OF-WAY, CENTERLINE, EASEMENTS, AND RECORD INFORMATION, SHOWN ON THESE IMPROVEMENT PLANS WERE PROVIDED BY THE SURVEY BELOW. A COPY WAS PROVIDED TO WALSH ENGINEERING BY THE PROFESSIONAL LAND SURVEYOR OR OWNER UPON THE START OF OUR DESIGN. A COPY OF SAID SURVEY IS ON FILE WITH THE DESIGN ENGINEER. WALSH ENGINEERING ASSUMES NO RESPONSIBILITY FOR INCORRECT, INACCURATE OR INSUFFICIENT INFORMATION SUPPLIED TO US AT THE TIME OF PROJECT DESIGN OR PROJECT REVISIONS.

- TITLE: "TOPOGRAPHIC SURVEY"  
DATED: 05-03-23
- TITLE: "TOPOGRAPHIC SURVEY"  
DATED: 07-31-23

WW SURVEYING, INC.  
1727 STATE STREET SUITE 25  
SANTA BARBARA, CA 93101  
(805)748-3234

A TITLE REPORT WAS NOT AVAILABLE AT THE TIME OF INITIAL SURVEY, THEREFORE EASEMENTS OR OTHER FEE CONVEYANCES WHICH MAY AFFECT THE SUBJECT PROPERTY HAVE NOT BEEN SHOWN AND THE BOUNDARY LINES SHOWN DO NOT REPRESENT THE TRUE OR ACTUAL BOUNDARY LINES. DETERMINATION OF THE ACTUAL PROPERTY BOUNDARIES WILL REQUIRE A COMPLETE BOUNDARY SURVEY, THE SETTING OF PROPERTY MONUMENTS AND THE FILING OF A CORNER RECORD OR RECORD OF SURVEY IN CONFORMANCE WITH STATE LAW (LS ACT SEC. 8762). PROPERTY LINES, EASEMENTS, AND BUILDING SETBACKS SHOULD BE DETERMINED FROM AN ACTUAL BOUNDARY SURVEY. IF NOT, MODIFICATIONS TO THE STRUCTURE MAY BE NECESSARY DURING CONSTRUCTION.

**BENCHMARK**

THE BENCHMARK FOR THIS SURVEY IS A SET 60D NAIL ON THE FRONT YARD OF THE HOUSE THE ELEVATION BEING 293.33' (NAVD88), SHOWN HEREON.

**BASIS OF BEARINGS**

THE BASIS OF BEARINGS FOR THIS SURVEY IS A WESTERLY LINE OF CANON DRIVE ESTABLISHED BY A FOUND 1/2" IRON PIPE MARKING THE BC OF THE CURVE SHOWN HERE ON AND A SPLIT OF THE CURB FACES FRONTING THE PROPERTY.

**GEOTECHNICAL REPORT/LETTER**

GEOTECHNICAL ENGINEERING REPORT(S):  
TITLE: "GEOTECHNICAL ENGINEERING REPORT"  
BY: BEARON GEOTECHNICAL INC.  
DATE: 4/14/2022

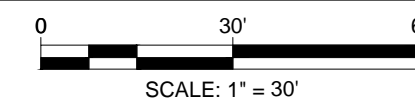
THE IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN CONFORMANCE WITH GEOTECHNICAL ENGINEERING RECOMMENDATIONS PREPARED FOR THIS PROJECT. IT IS UNDERSTOOD THAT THE CONTRACTOR(S) PERFORMING THE WORK WILL UTILIZE THE GEOTECHNICAL ENGINEERING REPORT AS A SUPPLEMENT TO THESE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO REFERENCE THE PLANS AND REPORTS AND INCORPORATE THE RECOMMENDATIONS AND STANDARDS PROVIDED IN EACH DOCUMENT.

THESE PLANS SHALL BE REVIEWED BY THE PROJECT GEOTECHNICAL ENGINEER TO VERIFY CONFORMANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS STATED IN THE REFERENCED GEOTECHNICAL ENGINEERING REPORT PREPARED FOR THIS PROJECT. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

GEOTECHNICAL ENGINEER SHALL BE ENGAGED TO REVIEW THESE PLANS AND ISSUE APPROVAL LETTER INCLUDING REVIEW OF THE ALTERNATE SLOPE SETBACK (IF NECESSARY) IN COMPLIANCE WITH THE FOLLOWING CODE SECTION: CBC 1803.5.10, WHERE SETBACKS OR CLEARANCES OTHER THAN THOSE REQUIRED IN SECTION 1808.7 ARE DESIRED, THE BUILDING OFFICIAL SHALL BE PERMITTED TO REQUIRE A GEOTECHNICAL INVESTIGATION BY A REGISTERED DESIGN PROFESSIONAL TO DEMONSTRATE THAT THE INTENT OF SECTION 1808.7 WOULD BE SATISFIED. SUCH AN INVESTIGATION SHALL INCLUDE CONSIDERATION OF MATERIAL, HEIGHT OF SLOPE, SLOPE GRADIENT, LOAD INTENSITY AND EROSION CHARACTERISTICS OF SLOPE MATERIAL.



SITE LIMITS MAP



**SHEET INDEX**

- C1.0 - COVER
- C2.0 - NOTES
- C3.0 - GRADING AND DRAINAGE PLAN
- C4.0 - UTILITY PLAN
- C5.0 - SECTIONS AND DETAILS
- C5.1 - SECTIONS AND DETAILS
- C6.0 - RETAINING WALL PLAN AND PROFILE
- EC1.0 - EROSION AND SEDIMENT CONTROL PLAN
- EC2.0 - EROSION AND SEDIMENT CONTROL DETAILS

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**WALSH ENGINEERING**  
WALSHENGINEERING.NET (805) 319-4948  
1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

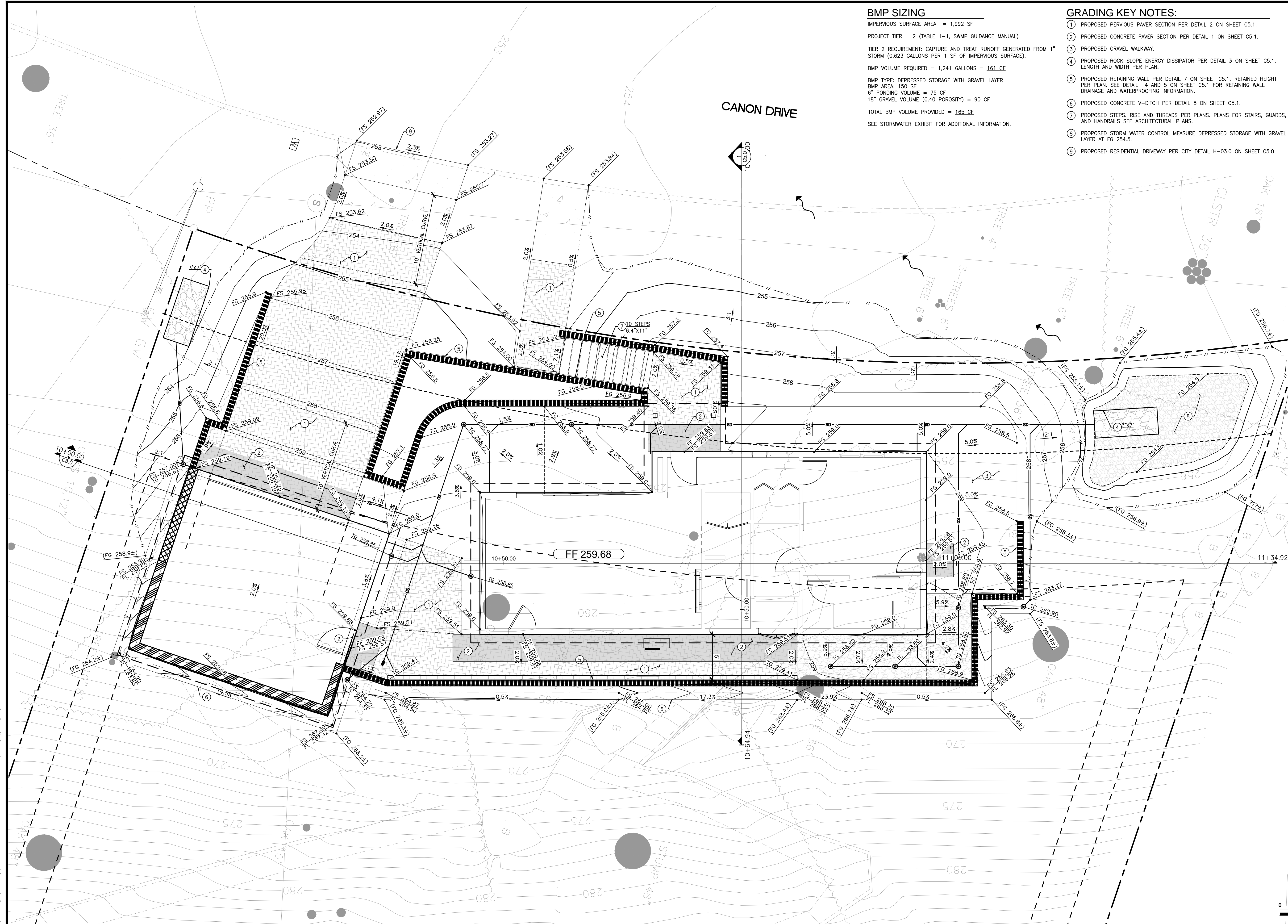
**MARTIN RESIDENCE**  
215 CANON DRIVE, SANTA BARBARA, CA 93105

DESIGNED BY:	TW/SA
CHECKED BY:	TW
APPROVED BY:	MRW
DATE:	2/26/2024

**COVER**

**SHEET**  
**C1.0**





**BMP SIZING**  
 IMPERVIOUS SURFACE AREA = 1,992 SF  
 PROJECT TIER = 2 (TABLE 1-1, SWMP GUIDANCE MANUAL)  
 TIER 2 REQUIREMENT: CAPTURE AND TREAT RUNOFF GENERATED FROM 1" STORM (0.623 GALLONS PER 1 SF OF IMPERVIOUS SURFACE).  
 BMP VOLUME REQUIRED = 1,241 GALLONS = 161 CF  
 BMP TYPE: DEPRESSED STORAGE WITH GRAVEL LAYER  
 BMP AREA 150 SF  
 6" PONDING VOLUME = 75 CF  
 18" GRAVEL VOLUME (0.40 POROSITY) = 90 CF  
 TOTAL BMP VOLUME PROVIDED = 165 CF  
 SEE STORMWATER EXHIBIT FOR ADDITIONAL INFORMATION.

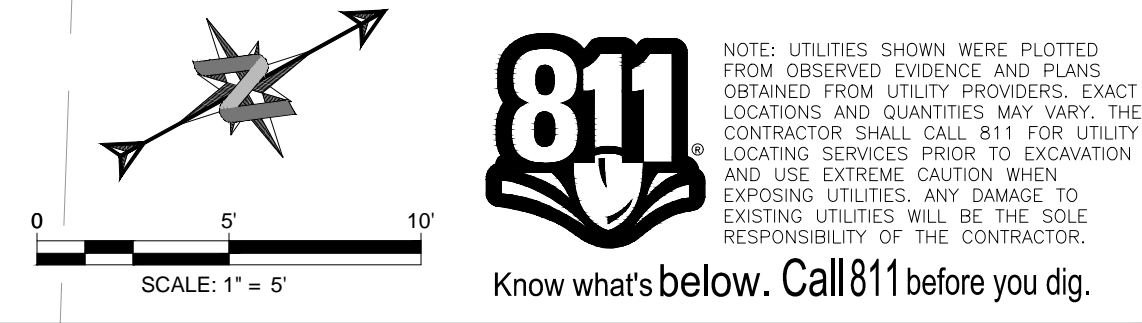
- GRADING KEY NOTES:**
- 1 PROPOSED PERVIOUS PAVER SECTION PER DETAIL 2 ON SHEET C5.1.
  - 2 PROPOSED CONCRETE PAVER SECTION PER DETAIL 1 ON SHEET C5.1.
  - 3 PROPOSED GRAVEL WALKWAY.
  - 4 PROPOSED ROCK SLOPE ENERGY DISSIPATOR PER DETAIL 3 ON SHEET C5.1. LENGTH AND WIDTH PER PLAN.
  - 5 PROPOSED RETAINING WALL PER DETAIL 7 ON SHEET C5.1. RETAINED HEIGHT PER PLAN. SEE DETAIL 4 AND 5 ON SHEET C5.1 FOR RETAINING WALL DRAINAGE AND WATERPROOFING INFORMATION.
  - 6 PROPOSED CONCRETE V-DITCH PER DETAIL 8 ON SHEET C5.1.
  - 7 PROPOSED STEPS, RISE AND THREADS PER PLANS. PLANS FOR STAIRS, GUARDS, AND HANDRAILS SEE ARCHITECTURAL PLANS.
  - 8 PROPOSED STORM WATER CONTROL MEASURE DEPRESSED STORAGE WITH GRAVEL LAYER AT FG 254.5.
  - 9 PROPOSED RESIDENTIAL DRIVEWAY PER CITY DETAIL H-03.0 ON SHEET C5.0.

- GENERAL LEGEND**
- EXISTING/PROPOSED CENTERLINE (E)
  - EXISTING PROPERTY LINE (EX. P)
  - PROPOSED PROPERTY LINE (E)
  - PROPOSED SETBACK LINE
  - EXISTING/PROPOSED EASEMENT
  - PROPOSED SAWCUT
  - GUTTER FLOWLINE
  - PROPOSED RETAINING WALL. HEIGHT PER PLAN.
  - PROPOSED CONCRETE PAVEMENT/HARDSCAPE
  - PROPOSED ASPHALT CONCRETE PAVEMENT
  - PROPOSED GRAVEL
  - PROPOSED PERVIOUS PAVERS
  - PROPOSED CONCRETE PAVERS
  - DEEPEEN FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.
  - RAISED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.

- GRADING LEGEND**
- GB - RIDGE - HINGE, GRADE BREAK
  - CUT/FILL DAYLIGHT OF GRADING LIMITS (CUT/FILL LINE)
  - LIMIT OF DISTURBANCE
  - SWALE
  - 100 CONTOUR MAJOR
  - 99 CONTOUR MINOR
  - TOP OF SLOPE
  - TOE OF SLOPE
  - OVERLAND RELEASE PATH

- STORM DRAIN LEGEND:**
- SOLF12"SD@0.5% STORM DRAIN PIPE LENGTH, SIZE AND SLOPE (SD)
  - PROPOSED SLOT/TRENCH DRAIN
  - PROPOSED BIO RETENTION BASIN
  - ENERGY DISSIPATOR
  - HEADWALL/ENDWALL
  - FLARED END SECTION
  - DROP INLET
  - MANHOLE
  - CLEANOUT

- GRADING GENERAL NOTES:**
- SEE STORM DRAIN AND UTILITY INFORMATION ON SHEET C4.0.
  - ALL CLEARING, GRUBBING, SITE PREPARATION, OVER-EXCAVATION, EARTHWORK, ENGINEERED FILL, GEOTEXTILE MATERIAL, AND MATERIAL TESTING SHALL BE IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEERING REPORT BY GEOTECHNICAL ENGINEERING REPORT, DATED APRIL 14, 2022.
  - ESTIMATED EARTHWORK QUANTITIES:  
 CUT 136 CY  
 FILL 277 CY  
 NET 141 CY (IMPORT)  
 NOTE: THE CUT AND FILL QUANTITIES SHOWN ABOVE ARE FOR PERMIT PURPOSES ONLY. THE CONTRACTOR SHALL, AFTER EXAMINING THE GRADING PLAN, SOILS REPORT AND TERRAIN, PREPARE HIS/HER ESTIMATE INDEPENDENTLY OF THE ENGINEER'S ESTIMATE.
  - GRADING TO COMPLY WITH CBC 1804.4. SLOPE PERVIOUS GROUND AWAY FROM FOUNDATION AT A MINIMUM SLOPE OF 5% FOR A MINIMUM DISTANCE OF 10 FEET. SLOPE IMPERVIOUS GROUND AT A MINIMUM SLOPE OF 2% FOR A MINIMUM DISTANCE OF 10 FEET. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, PROVIDE A 5% SLOPE TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING DRAINAGE AWAY FROM FOUNDATIONS WITH THE USE OF SWALES SLOPED AT 2% LONGITUDINALLY ALONG FLOW LINE, OR DRAINAGE INLETS WITH STORM DRAIN PIPE DIRECTED TO DISCHARGE AWAY FROM FOUNDATIONS IN A NON-EROSIVE MANNER.
  - PER FIGURE 1808.7.1 OF THE CBC (CRC FIGURE R403.1.7.1), BUILDINGS LOCATED AT THE TOE OF A SLOPE SHALL BE LOCATED AT LEAST THE SMALLER OF H/2 AND 15 FEET AWAY FROM THE TOE OF SLOPE AND SHALL BE LOCATED AT LEAST THE SMALLER OF H/3 AND 40 FEET AWAY FROM THE TOP OF SLOPE. "H" IS THE HEIGHT OF SLOPE AND HAS BEEN PROVIDED HEREON. PER CBC SECTION 1808.7.1 (CRC R403.1.7.1), WHEN A RETAINING WALL IS PRESENT AT THE TOE OF A SLOPE, THE HEIGHT OF THE SLOPE SHALL BE MEASURED FROM THE TOP OF THE WALL TO THE TOP OF THE SLOPE. FOR ALTERNATIVE SLOPE SETBACKS, THE GEOTECHNICAL ENGINEER SHALL REVIEW THESE PLANS AND ISSUE AN APPROVAL LETTER IN COMPLIANCE WITH CBC SECTION 1803.5.10 (CRC R403.1.7.4).
  - PER CBC SECTION 2304, IN LANDSCAPE AREAS ADJACENT TO BUILDING FOUNDATIONS, CONTRACTOR SHALL PROVIDE 8" FROM FINISH FLOOR ELEVATION DOWN TO SOIL FINISH GRADE FOR PROPER CLEARANCE BETWEEN SOIL AND BOTTOM SILL PLATES. IN HARDSCAPE AREAS, CONTRACTOR SHALL PROVIDE MINIMUM OF 2" FROM FINISH FLOOR TO DOWN TO FINISH SURFACE OF HARDSCAPE FOR PROPER CLEARANCE BETWEEN SOIL AND WOOD SIDING, UNLESS OTHER MEANS OF WATERPROOFING IS NOTED ON BUILDING PLANS/DETAILS AND APPROVED BY LOCAL AGENCY.



NO.	DATE	REVISIONS

**W WALSH ENGINEERING**  
 WALSHENGINEERING.NET (805) 319-4948  
 1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

**MARTIN RESIDENCE**  
 215 CANON DRIVE, SANTA BARBARA, CA 93105

REGISTERED PROFESSIONAL ENGINEER  
 MATTHEW R. WALSH  
 C 79026  
 NOT FOR CONSTRUCTION  
 STATE OF CALIFORNIA

DESIGNED BY:	TW/SA
CHECKED BY:	TW
APPROVED BY:	MRW
DATE:	2/26/2024

**GRADING AND DRAINAGE PLAN**  
C3.0

SHEET

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**SANITARY SEWER KEY NOTES**

- ① PROPOSED 4" SANITARY SEWER LATERAL. MAINTAIN A MINIMUM SLOPE OF 2% IN LATERAL. SEE PLUMBING PLANS BY OTHERS FOR CONTINUATION WITHIN 5' OF THE BUILDING, INCLUDING CLEANOUT AT FACE OF BUILDING.
- ② PROPOSED SANITARY SEWER CLEANOUT WITH COVER TO GRADE PER DETAIL 13 ON SHEET C5.1.
- ③ TIE-IN TO EXISTING SANITARY SEWER LATERAL.
- ④ REROUTE EXISTING SEWER LATERAL AROUND PROPOSED ADU AND GARAGE. MAINTAIN A MINIMUM SLOPE OF 2% IN REROUTED LATERAL.
- ⑤ ADJUST MANHOLE LID TO GRADE.

**STORM DRAIN KEY NOTES**

- ① PROPOSED 8" DRAIN INLET AT CONCRETE V-DITCH PER DETAIL 9 ON SHEET C5.1.
- ② PROPOSED 8" DRAIN INLET WITH PEDESTRIAN RATED GRATE PER DETAIL 10 ON SHEET C5.1.
- ③ PROPOSED 3" PVC STORM DRAIN FOR ROOF DRAINAGE. SEE M.E.P. PLANS FOR CONTINUATION WITHIN 5' OF THE BUILDING. TIE INTO PROPOSED STORM DRAIN SYSTEM.
- ④ PROPOSED STORM DRAIN CLEANOUT WITH COVER TO GRADE PER DETAIL 6 ON SHEET C5.1.
- ⑤ PROPOSED 6" TRENCH DRAIN.

**WATER KEY NOTES**

- ① PROPOSED 1" DOMESTIC WATER METER PER CITY STANDARD W-6.0 ON SHEET C5.0. PROVIDE 1" TO 2" REDUCER FITTING ON PRIVATE SIDE OF METER TO TRANSITION TO A 2" LINE.
- ② PROPOSED 2" WATER LINE TO PROVIDE DOMESTIC AND FIRE SPRINKLER SERVICES. SEE MECHANICAL PLANS BY OTHERS FOR CONTINUATION WITHIN 5' OF BUILDING. MECHANICAL AND FIRE SPRINKLER DESIGNERS TO VERIFY SIZING. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- ③ PROPOSED POINT OF CONNECTION TO EXISTING WATER LINE MAIN. EXISTING WATER MAIN LOCATION IN STREET UNKNOWN DURING PREPARATION OF THIS PLAN. CONTRACTOR TO LOCATE PRIOR TO CONSTRUCTION.

**CAUTIONARY KEY NOTES**

- ① THE EXACT UTILITY INVERT AND LOCATION IS UNKNOWN DURING PREPARATION OF THIS PLAN. THE CONTRACTOR SHALL POTHOLE AND VERIFY EXISTING UTILITY INVERT AND LOCATION PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING MATERIALS. PROVIDE ENGINEER WITH POTHOLE INFORMATION 30 DAYS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS TO ALLOW ADEQUATE TIME FOR REVISIONS TO PLANS.
- ② EXISTING OVERHEAD UTILITY LINE TO REMAIN. CONTRACTOR SHALL INCORPORATE CONSTRUCTION MEASURES TO ENSURE THE OVERHEAD LINE IS NOT IMPACTED.

**UTILITY GENERAL NOTES**

- 1. FOR PIPE MATERIALS AND ADDITIONAL NOTES, SEE SHEET C2.0.
- 2. FOR TRENCH SECTION, BACKFILL AND SURFACE REPLACEMENT, SEE DETAIL 12 ON SHEET C5.1.
- 3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL INVERTS OF EXISTING UTILITIES AT POINTS OF CONNECTION AND PROPOSED UTILITY CROSSINGS BY OBSERVATION OR POTHOLES METHODS. NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES IN THESE PLANS AND ACTUAL FIELD INFORMATION.

**GENERAL LEGEND**

- EXISTING/PROPOSED CENTERLINE (C)
- - - EXISTING PROPERTY LINE (E)
- . - PROPOSED PROPERTY LINE (E)
- - - PROPOSED SETBACK LINE
- - - EXISTING/PROPOSED EASEMENT
- - - PROPOSED SAWCUT
- GUTTER FLOWLINE
- PROPOSED RETAINING WALL. HEIGHT PER PLAN.
- PROPOSED CONCRETE PAVEMENT/HARDSCAPE
- PROPOSED ASPHALT CONCRETE PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PERVIOUS PAVERS
- PROPOSED CONCRETE PAVERS
- DEEPENED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.
- RAISED FOUNDATION WALL. RETAINED HEIGHT PER PLAN. SEE STRUCTURAL PLANS BY OTHERS FOR CONSTRUCTION DETAILS.

**STORM DRAIN LEGEND:**

- SOL12"SD@0.5%--- STORM DRAIN PIPE LENGTH, SIZE AND SLOPE (SD)
- PROPOSED SLOT/TRENCH DRAIN
- PROPOSED BIO RETENTION BASIN
- ENERGY DISSIPATOR
- HEADWALL/ENDWALL
- FLARED END SECTION
- DROP INLET
- MANHOLE
- CLEANOUT

**SANITARY SEWER LEGEND:**

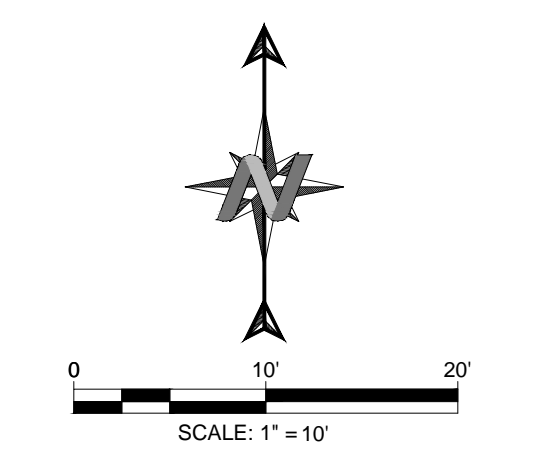
- 75LF6"SS@2.0%--- SANITARY SEWER PIPE LENGTH, SIZE AND SLOPE (SS)
- SANITARY SEWER MANHOLE (SSMH)
- SANITARY SEWER CLEANOUT TO GRADE (SSCO)
- SANITARY SEWER BACKWATER VALVE

**WATER LEGEND:**

- 6"DW--- DOMESTIC WATER SERVICE AND SIZE (DW)
- 6"FW--- FIRE WATER SERVICE AND SIZE (FW)
- GATE VALVE
- FIRE HYDRANT (FH)
- POST INDICATOR VALVE (PIV)
- FIRE DEPARTMENT CONNECTION (FDC)
- BACKFLOW DEVICE FOR FIRE SERVICE (RPZ OR DDC)
- BACKFLOW DEVICE FOR DOMESTIC SERVICE (RPZ)
- DOMESTIC WATER METER
- IRRIGATION METER (DESIGN BY OTHERS)
- THRUST BLOCK

**DRY UTILITY LEGEND:**

- DRY UTILITY SERVICE
- PROPOSED PULL BOX
- PROPOSED STREET LIGHT
- PROPOSED SITE LIGHT



**811**

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

Know what's below. Call 811 before you dig.

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NO.	DATE	REVISIONS

**W WALSH ENGINEERING**

WALSHENGINEERING.NET (805) 319-4948

1108 GARDEN STREET, SUITE 202-204 SAN LUIS OBISPO, CA 93401

MARTIN RESIDENCE

215 CANON DRIVE, SANTA BARBARA, CA 93105

REGISTERED PROFESSIONAL ENGINEER

MATTHEW R. WALSH

C 79026

NOT FOR CONSTRUCTION

STATE OF CALIFORNIA

DESIGNED BY: TW/SA

CHECKED BY: TW

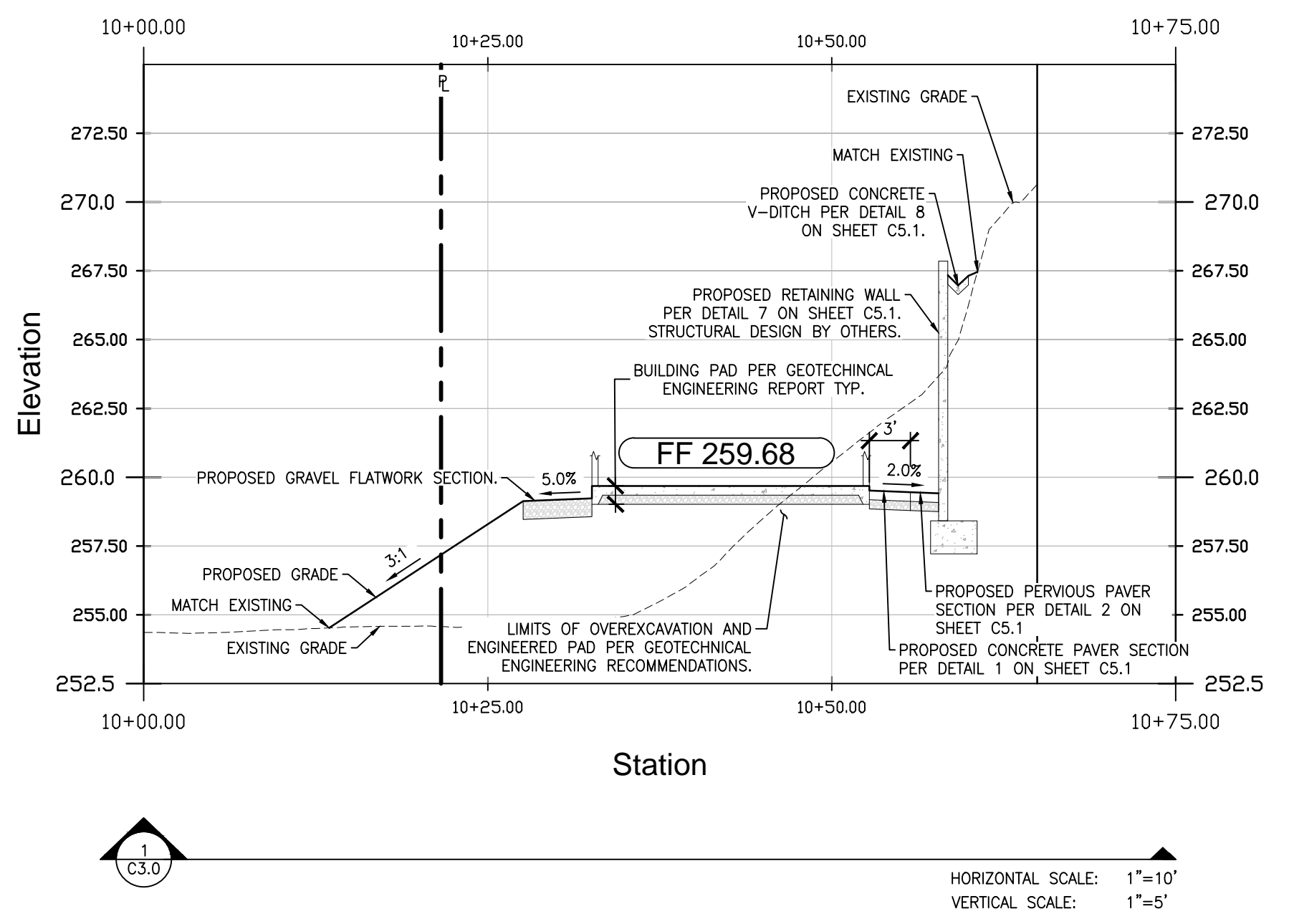
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DATE: 2/26/2024

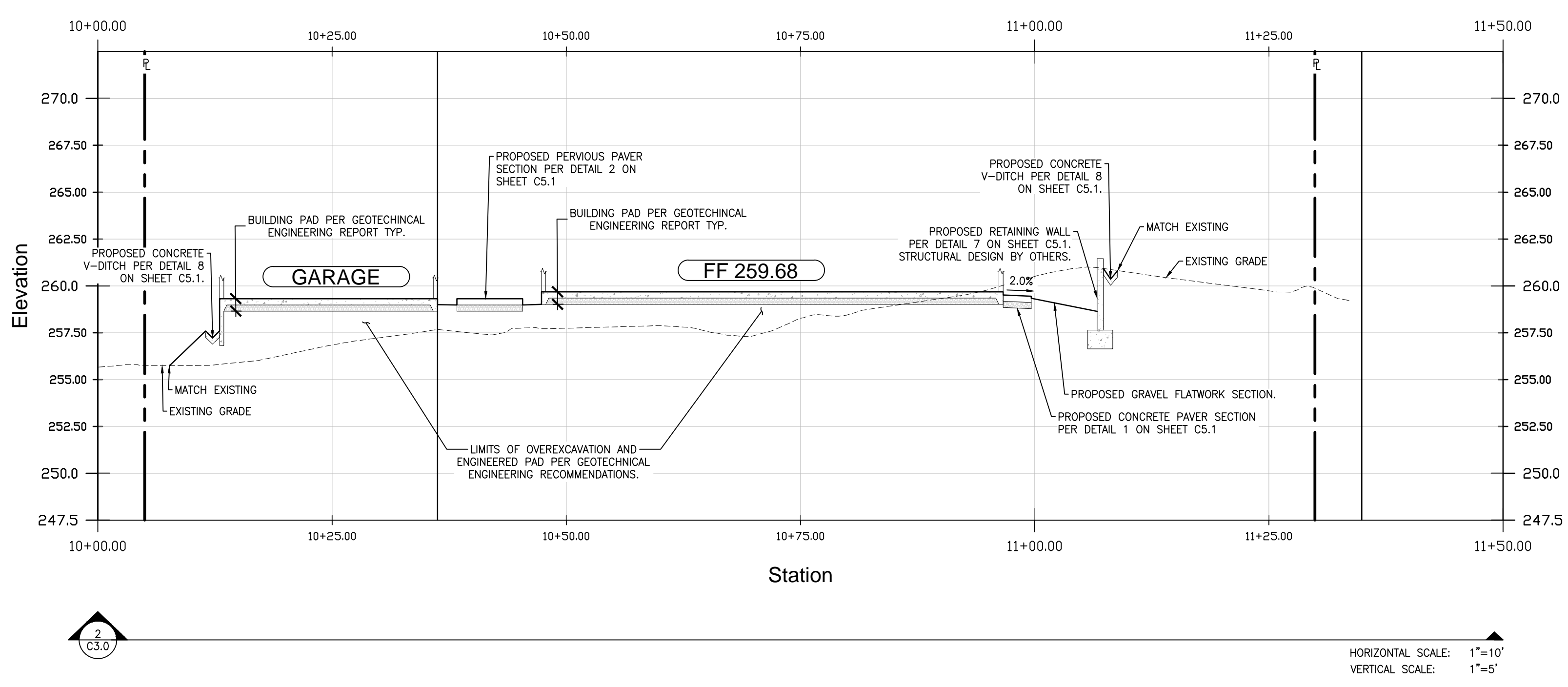
UTILITY PLAN

SHEET

**C4.0**



**SLOPE SETBACK PER CBC 1808A.7.1**  
 TOE OF SLOPE SETBACK CALCULATION  
 H=28'  
 SMALLER OF: H/2 OR 15' MAX  
 $H/2 = 28'/2 = 14' > 15'$   
 REQUIRED SETBACK PER CBC FIGURE 1808A.7.1 = 14' (ACTUAL SETBACK 5')  
 \*NOTE: PROPOSED ALTERNATE SETBACKS HAVE BEEN SENT TO SOIL BEACON GEOTECHNICAL INC. FOR ISSUANCE OF GEOTECHNICAL CONSIDERATIONS AND ACCEPTANCE.



**PLAN VIEW**

**SECTION A-A**

**TYPICAL DETAIL**

**NOTES:**

- This driveway is to be used in residential areas, when plans showing such use are approved by the City Engineer, or designee, and for replacement of driveway only.
- Driveway width (W) shall be 10 feet minimum and 16 feet maximum. Any driveway or combination of driveways which exceed the maximum width must be approved by the City Engineer, or designee.
- Where multifamily driveway width exceeds 12 feet, provide a 1.5 inch deep contraction joint in center.
- The driveway slab shall be 6 inches thick. The sidewalk within the driveway width shall be 6 inches thick (see note 5 for exceptions).
- Driveway with 8 inch slab thickness shall be used when serving three or more residences, or when plans showing such use are approved by the City Engineer or designee.
- Gutter width shall match adjacent gutter.
- Flare width (X) shall be 1 foot for each 2 inches of curb height.
- Where existing gutter has been overlaid, and a new driveway is being installed, the new gutter shall be installed to match existing gutter. Asphalt concrete shall be placed over the new gutter to the grade of the existing pavement.
- Driveway approach consists of gutter, ramp, flares, and sidewalk portions, placed monolithically.
- See detail H-06.1 for sidewalk.
- Where existing gutter exceed 3 feet, and concrete is in good condition, an 18" cut into existing gutter may be made if approved by City Inspector.
- Provide a minimum 5' wide sidewalk across driveway, or as approved by City Engineer, at 2% slope.

**RESIDENTIAL DRIVEWAY**

REV. DATE: 09/19/19 DETAIL: H-03.0  
 APPROVED: [Signature]  
 PUBLIC WORKS DIRECTOR

**PLAN VIEW**

**SIDE VIEW SECTION A-A**

**END VIEW SECTION B-B**

**NOTES:**

- Meter box shall be non skid Polymer Concrete as Manufactured by: Amorncast Products Company, 13230 Saffery Street, North Hollywood, CA 91605, (818) 982-3600
- Bottom of meter box shall rest firmly on a 12 inch thick bed of 1 inch crushed rock extending 6 inches beyond the outside walls of the meter box.

**METER BOX**  
 5/8-INCH AND 1-INCH METERS

REV. DATE: 10/17/17 DETAIL: W-06.0  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: [Signature]

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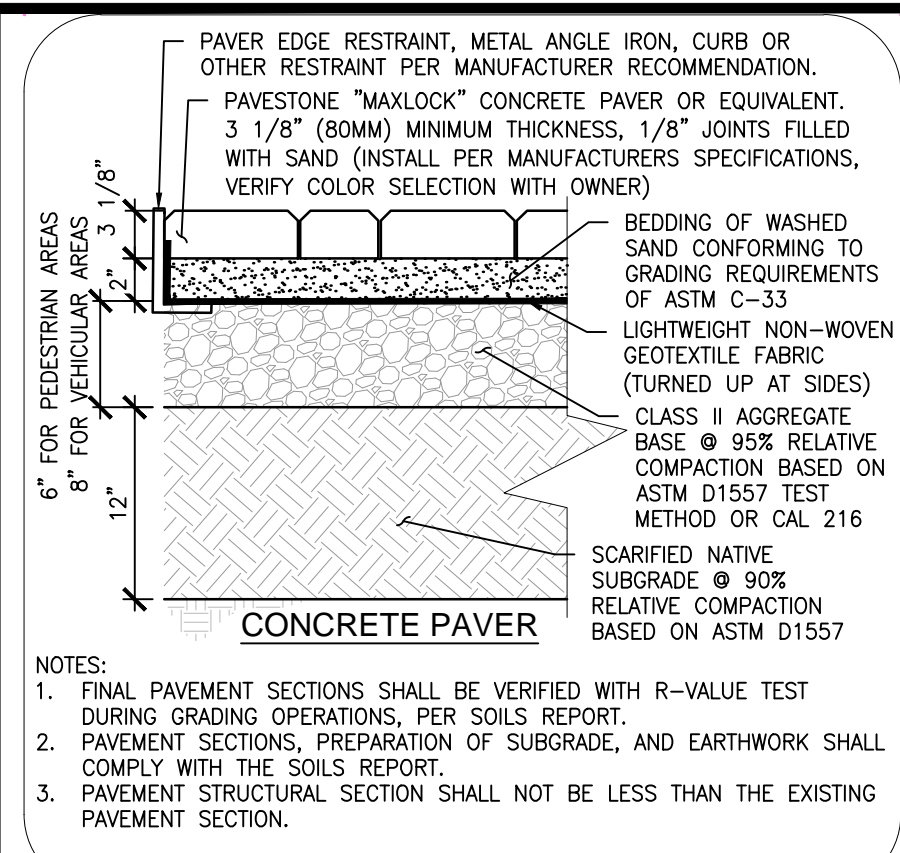


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 DATE: 2/26/2024

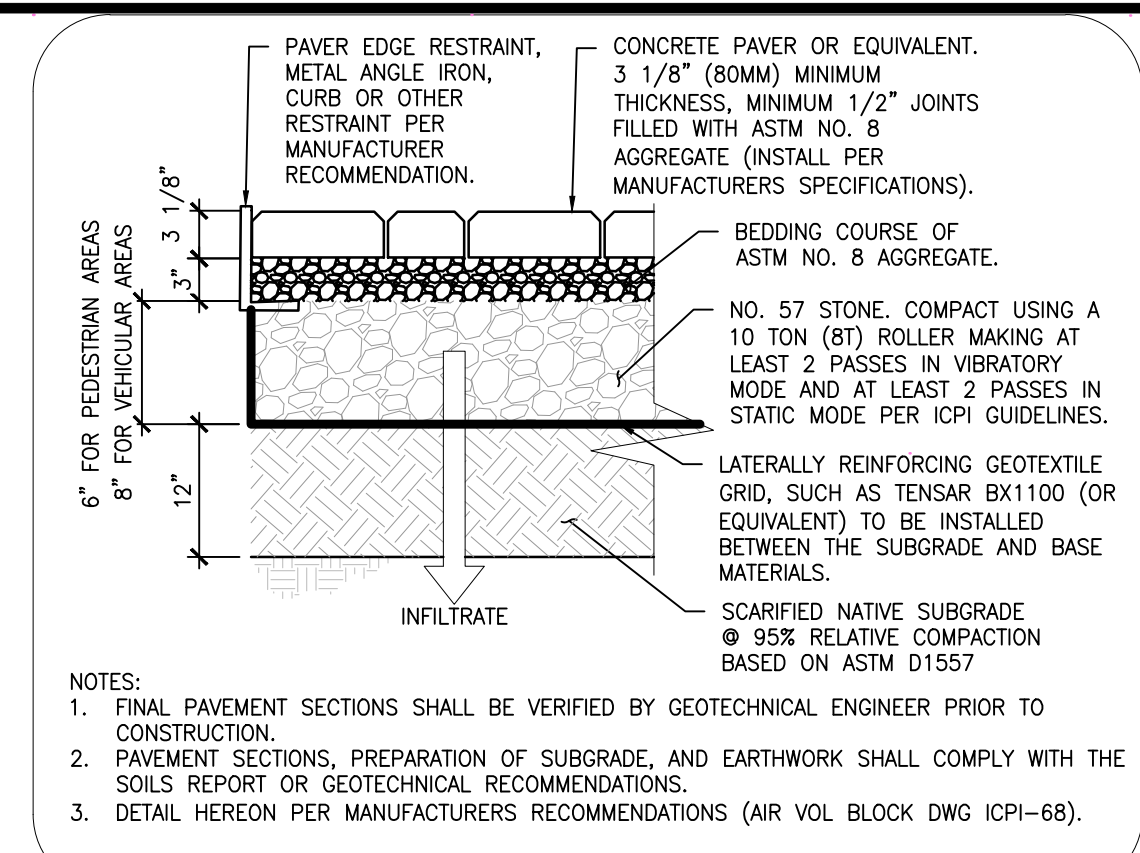
**SECTIONS AND DETAILS**

SHEET  
**C5.0**

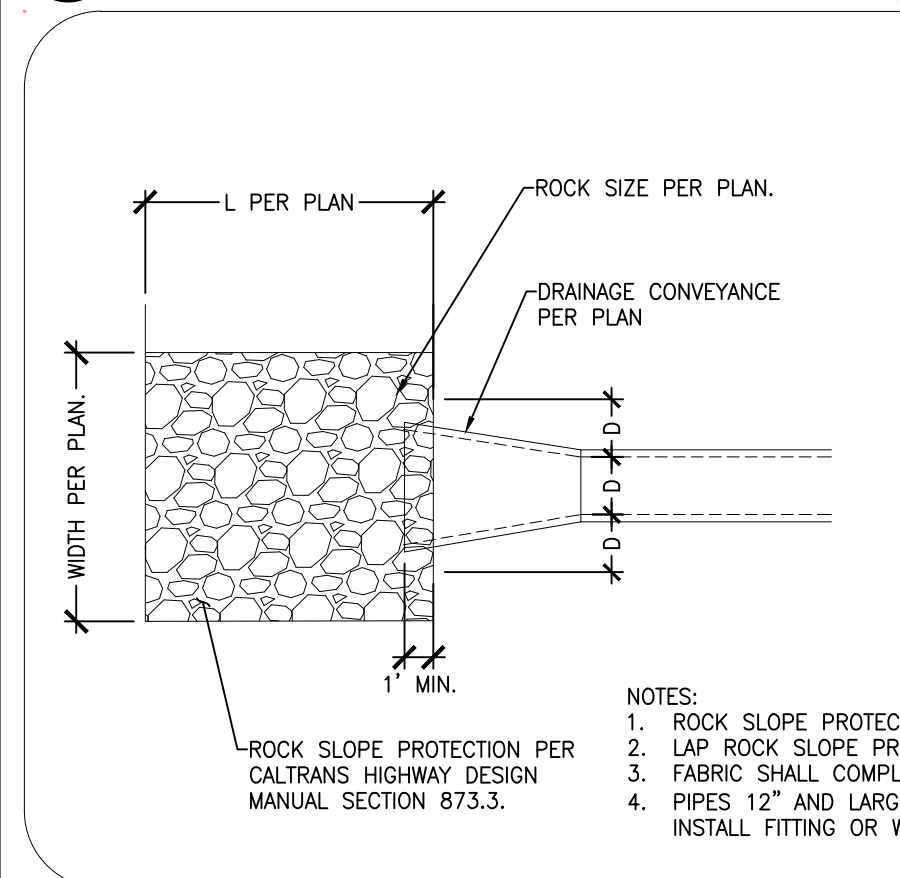




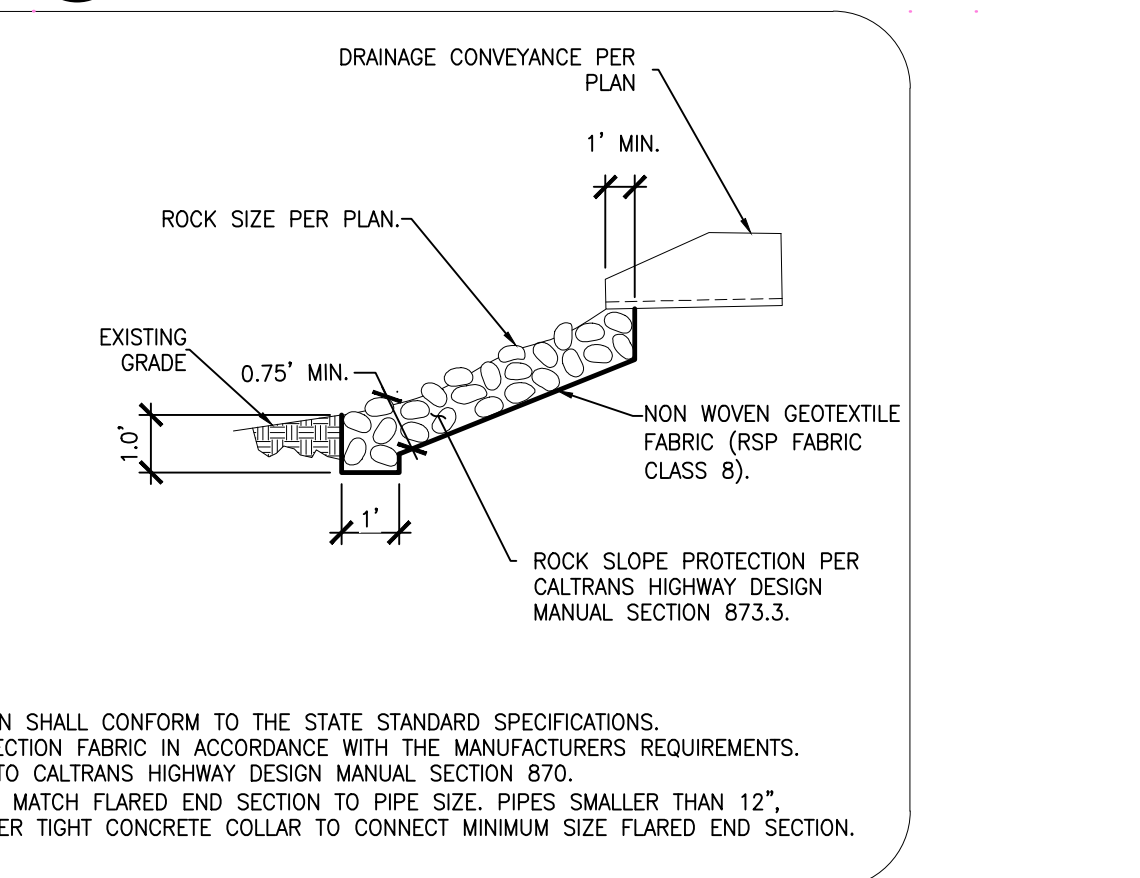
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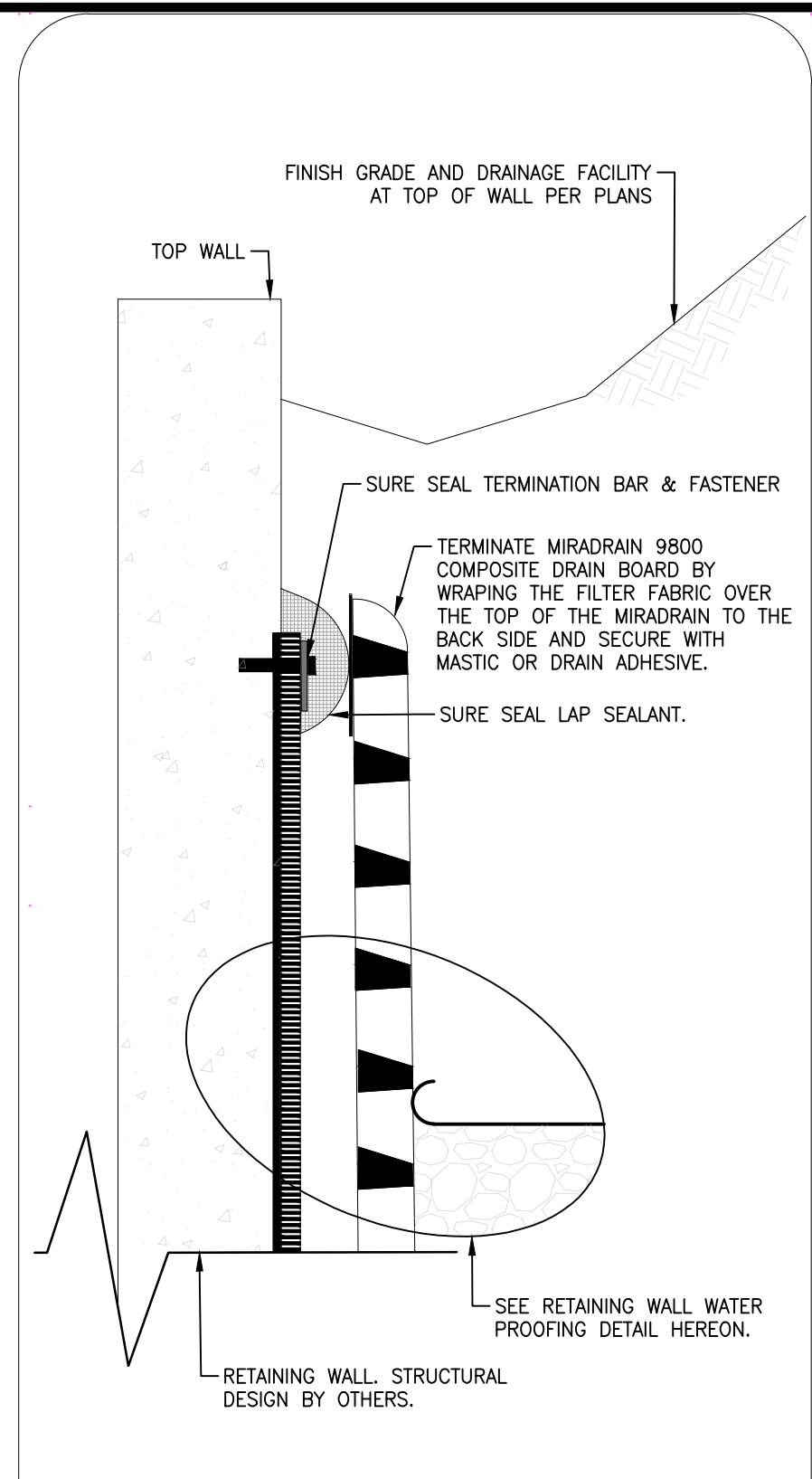
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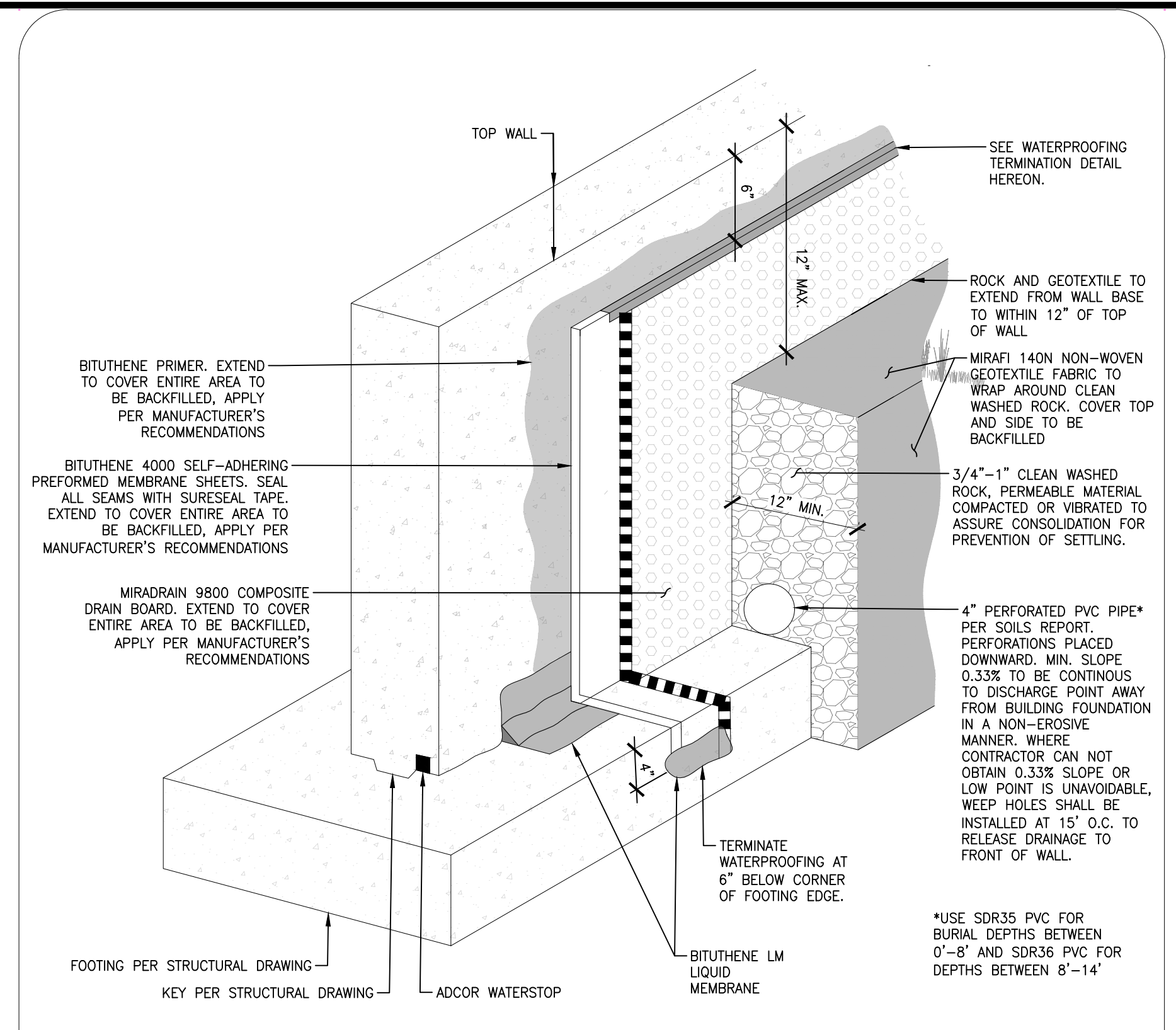
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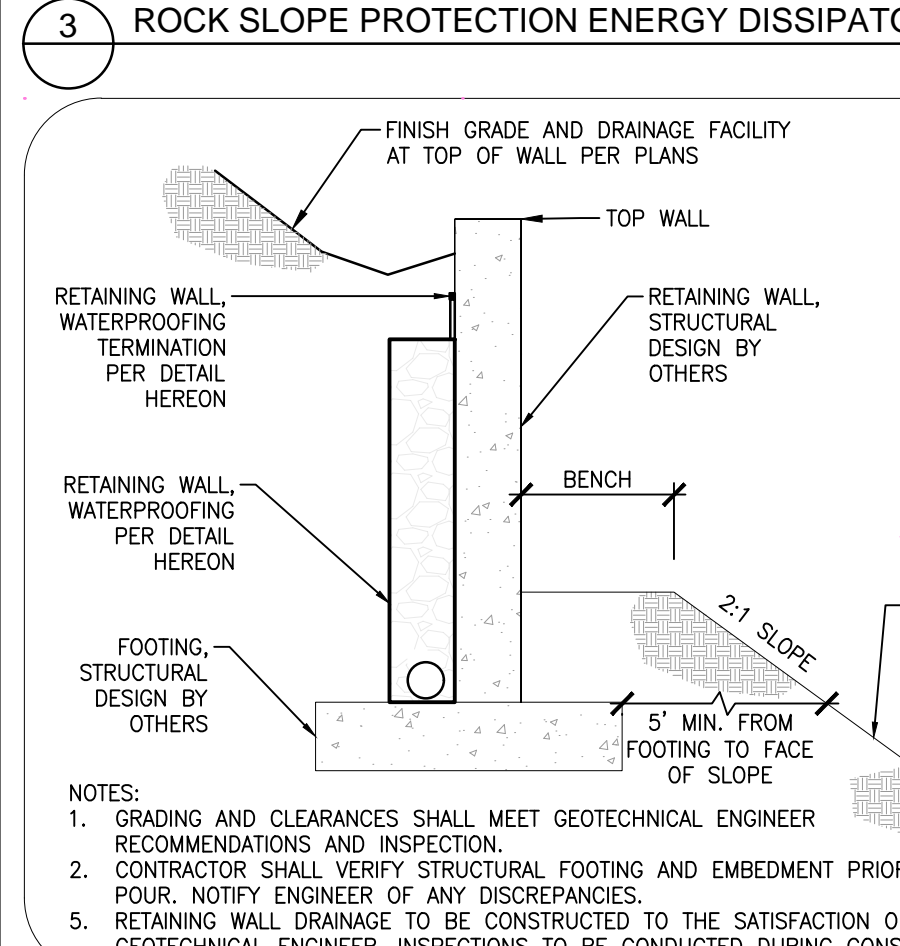
3 ROCK SLOPE PROTECTION ENERGY DISSIPATOR



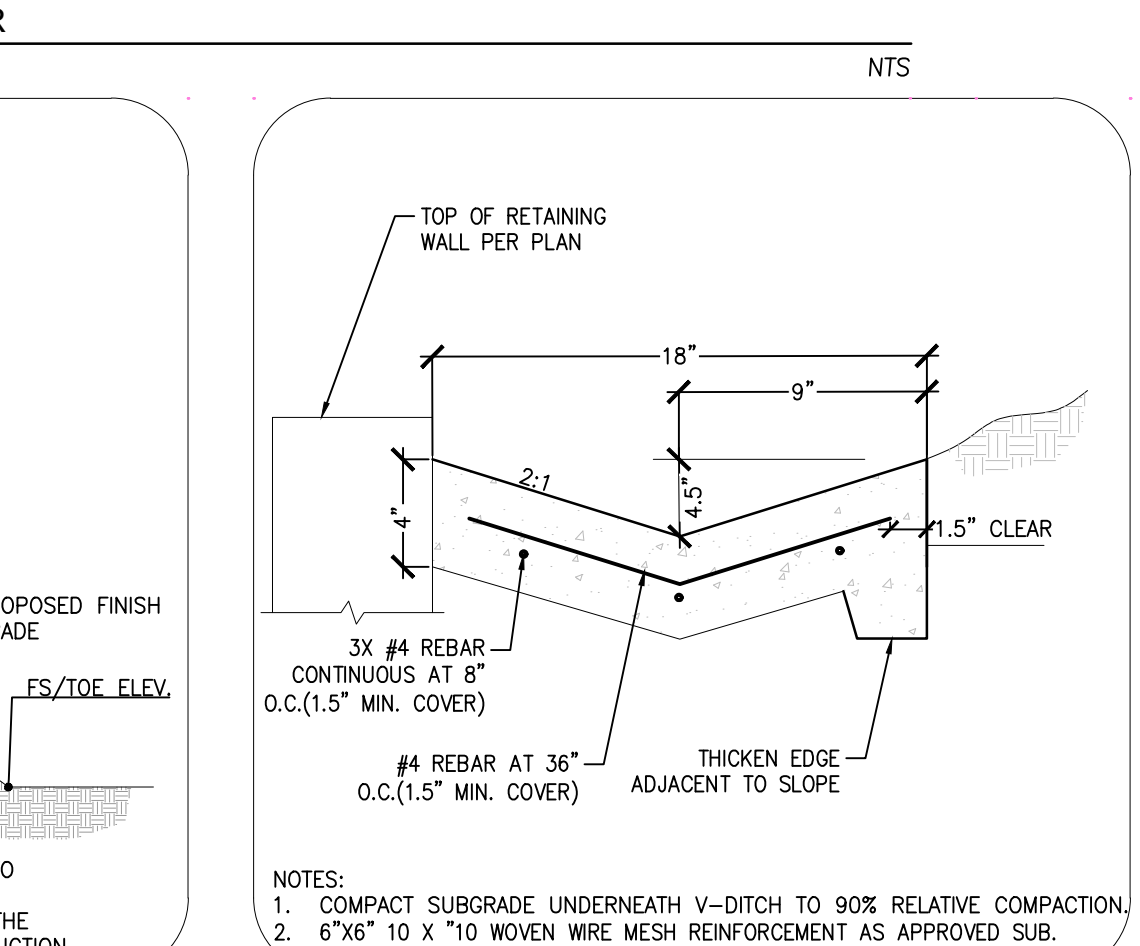
4 WATERPROOFING TERMINATION DETAIL



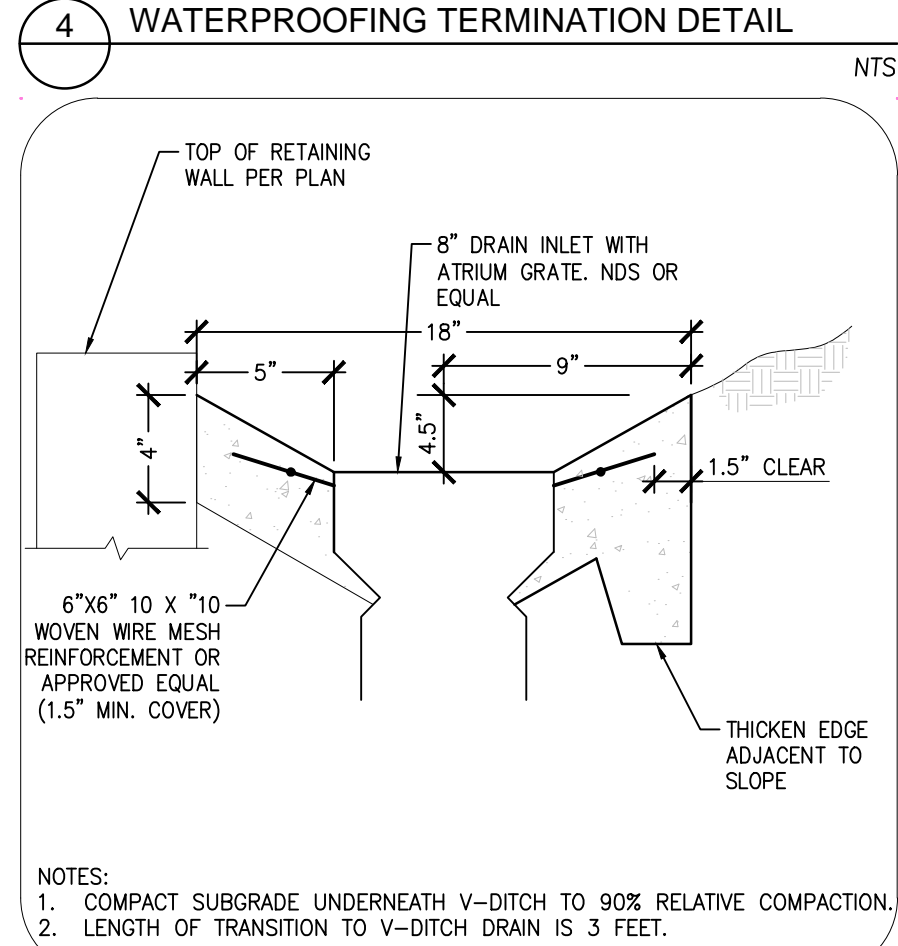
5 RETAINING WALL WATERPROOFING



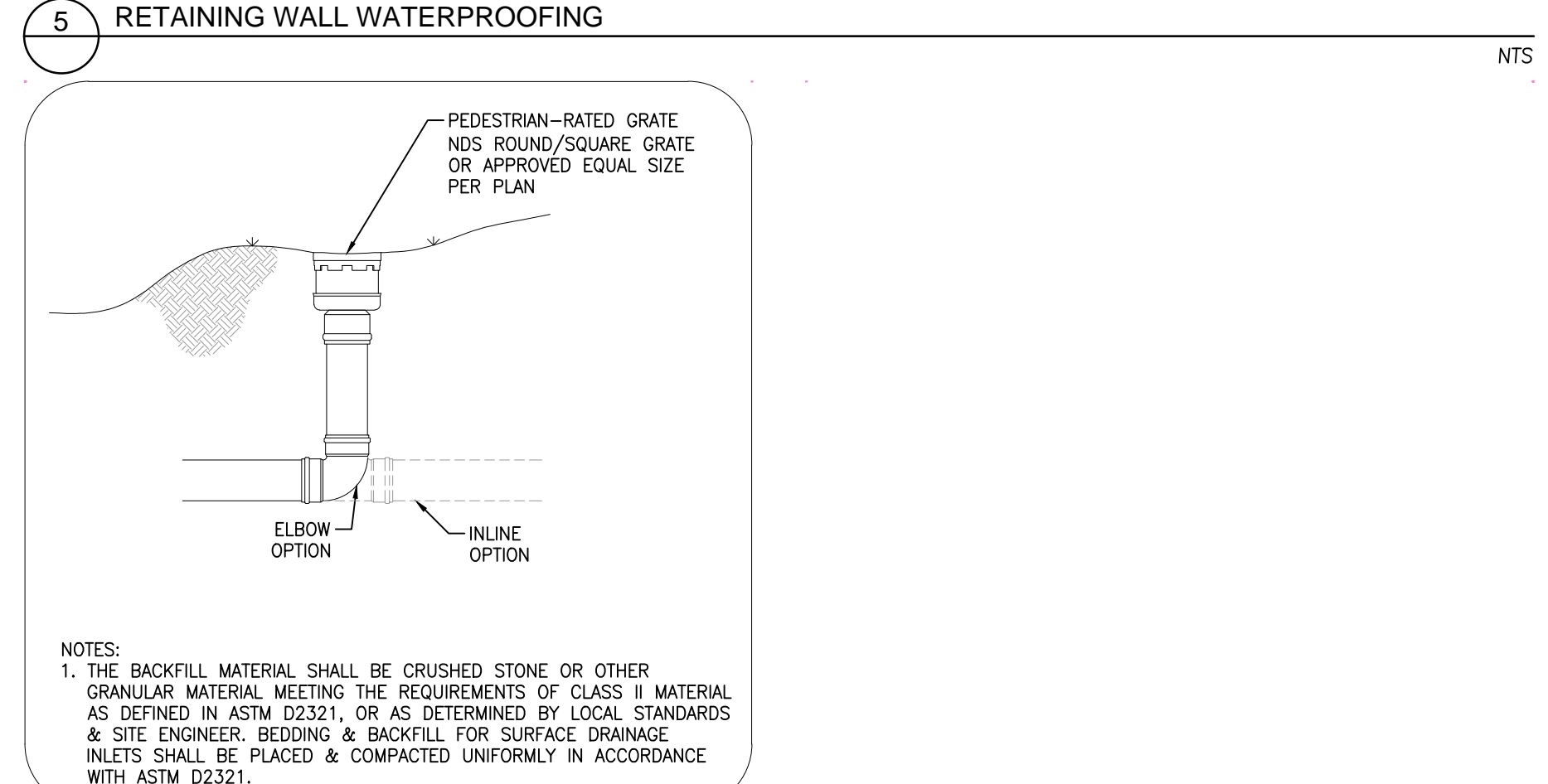
7 RETAINING WALL GRADING



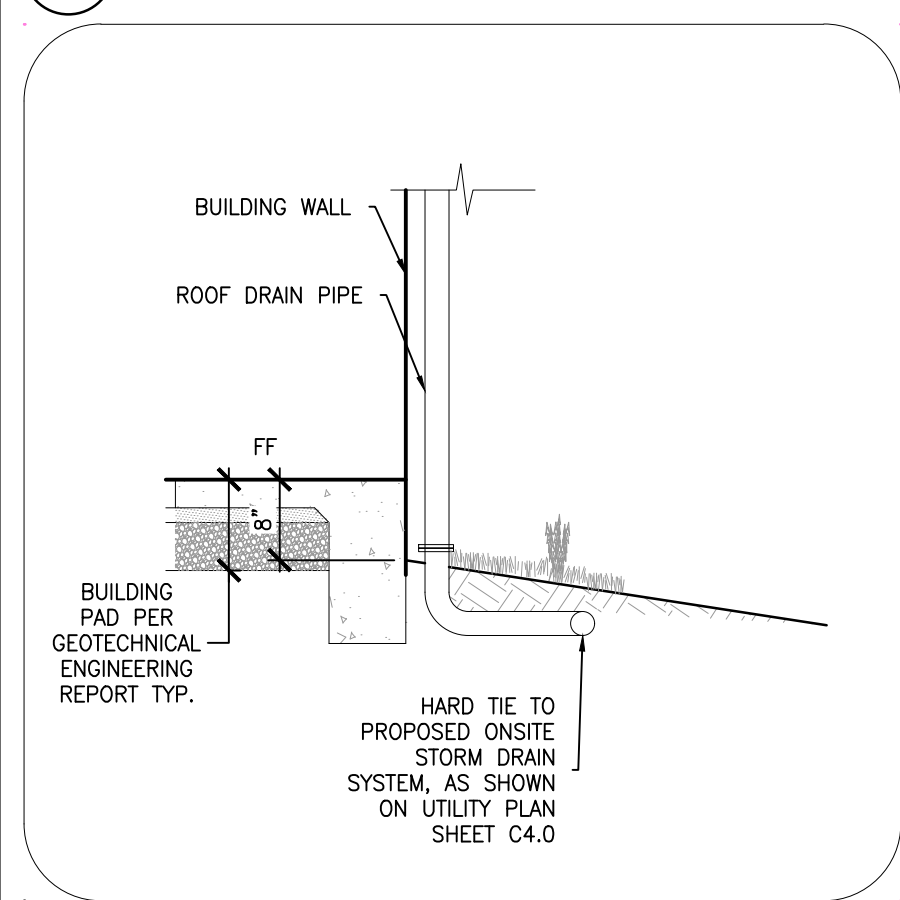
8 CONCRETE V-DITCH



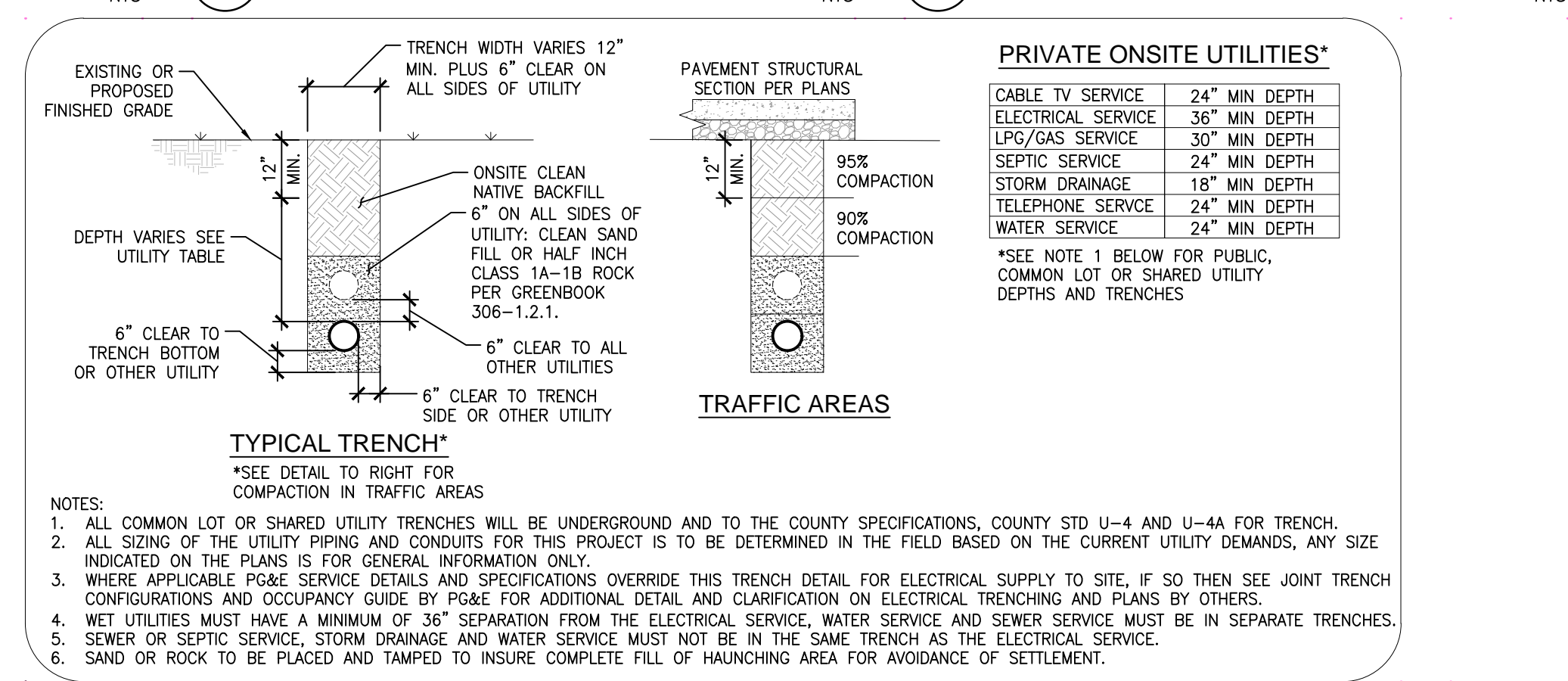
9 8" DRAIN INLET AT CONCRETE V-DITCH



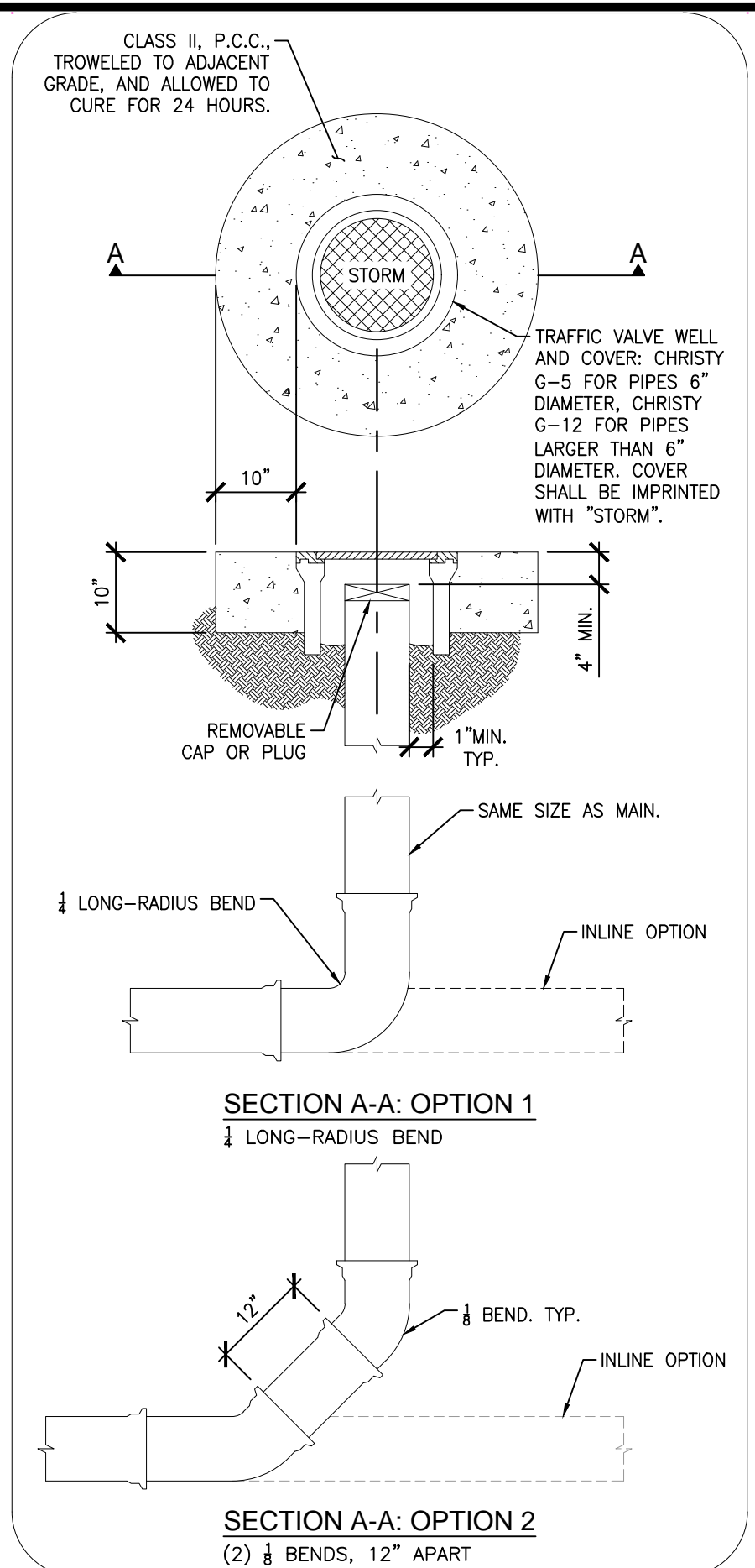
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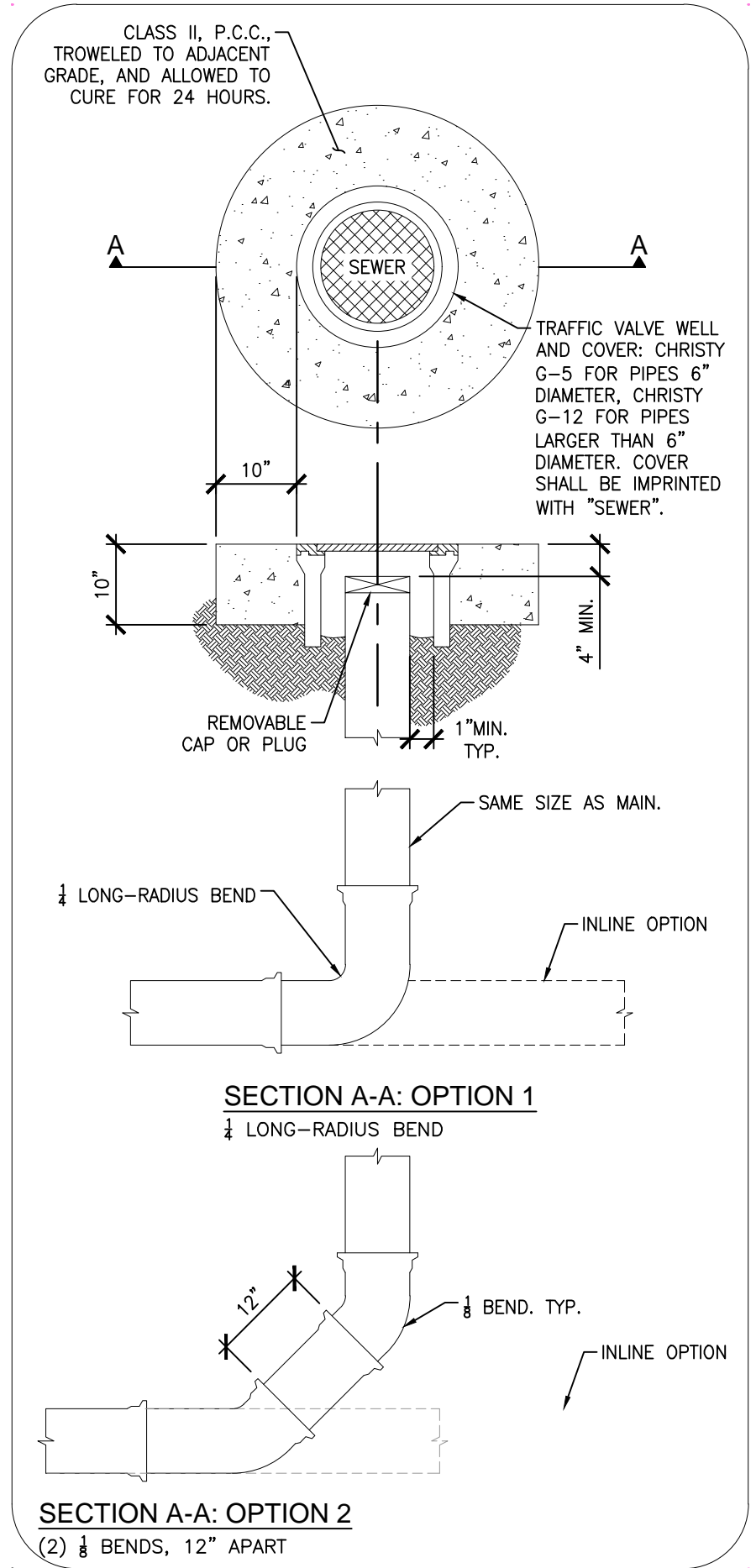
11 ROOF DOWNSPOUT HARDTIE CONNECTION



12 PRIVATE UTILITY TRENCH DETAIL



6 STORM CLEANOUT



13 SEWER CLEANOUT

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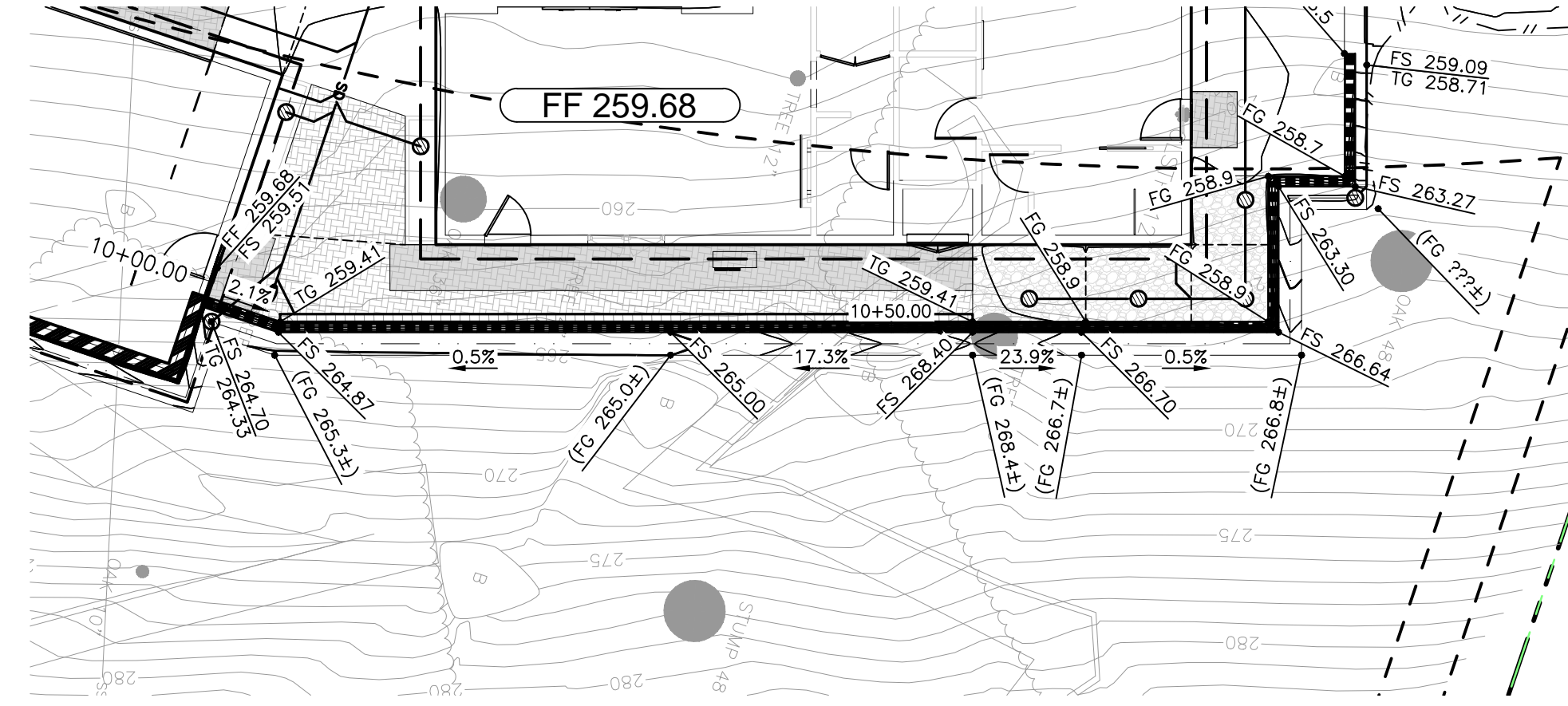
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 215 CANON DRIVE, SANTA BARBARA, CA 93105

REGISTERED PROFESSIONAL ENGINEER  
 MATTHEW R. WALSH  
 C 79026  
 NOT FOR CONSTRUCTION  
 STATE OF CALIFORNIA

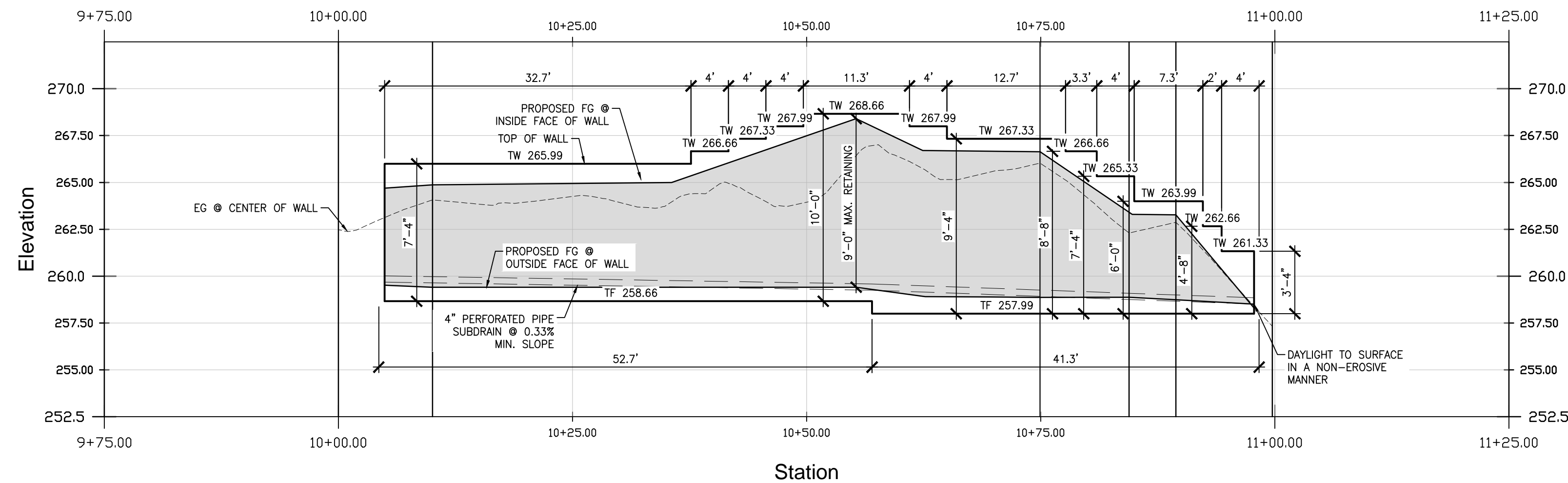
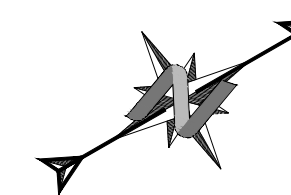
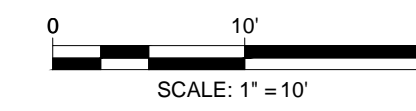
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 CHECKED BY: TW  
 APPROVED BY: MRW  
 DATE: 2/26/2024

SECTIONS AND DETAILS  
**C5.1**

SHEET



PLAN VIEW



RETAINING WALL #1 PROFILE STA: 9+75.00 - 11+25.00

HORIZONTAL SCALE: 1"=10'  
VERTICAL SCALE: 1"=5'

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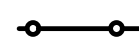


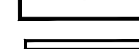
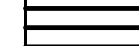
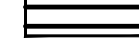


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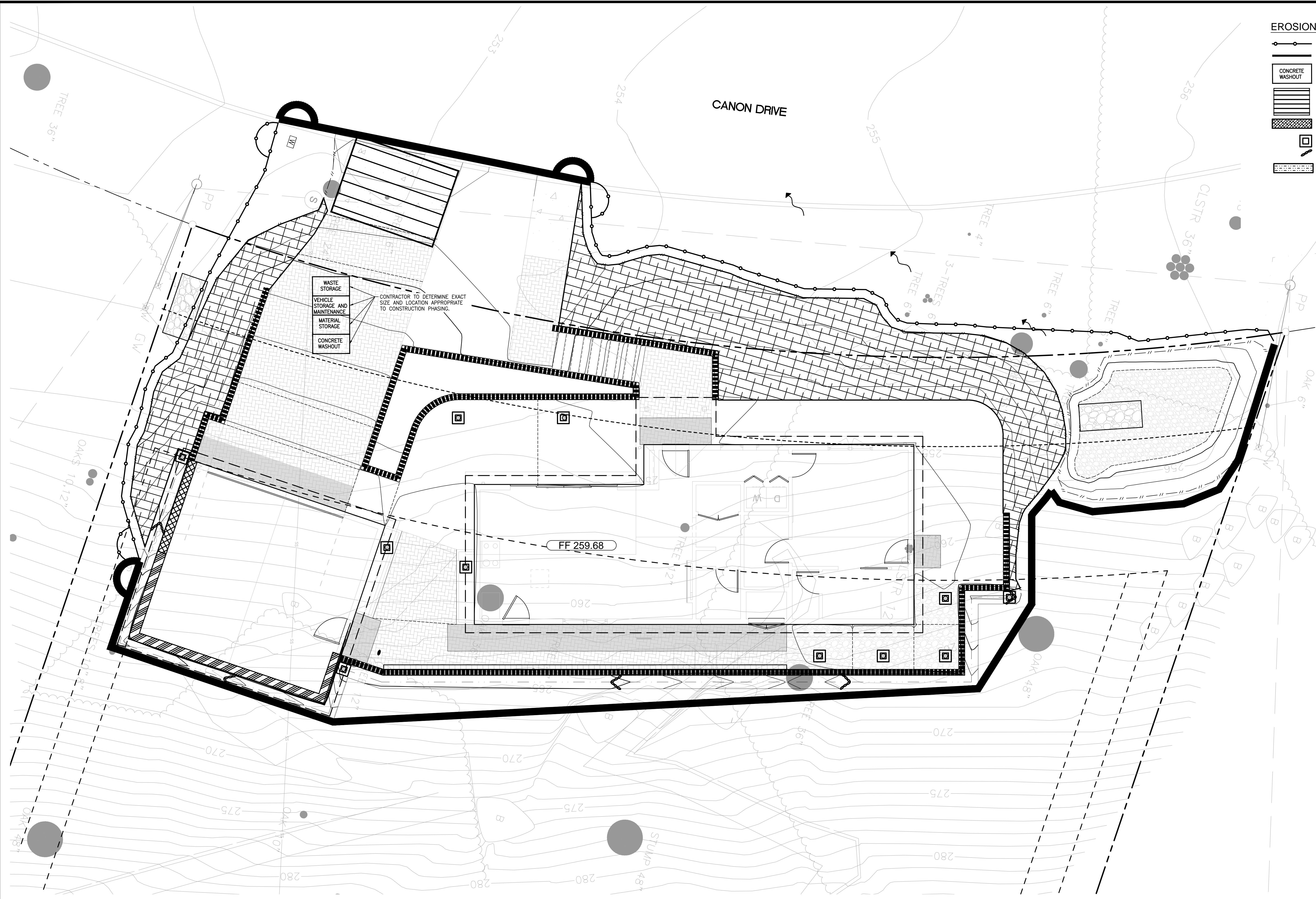


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**RETAINING WALL PLAN AND PROFILE**

SHEET  
**C6.0**

- EROSION CONTROL LEGEND**
-  SILT FENCE SEDIMENT CONTROL PER DETAIL 1 ON SHEET EC2.0.
  -  FIBER ROLL SEDIMENT CONTROL PER DETAIL 2 ON SHEET EC2.0.
  -  CONCRETE WASHOUT BMP PER DETAIL 4 ON SHEET EC2.0.
  -  RUMBLE STRIPS PER DETAIL 5 ON SHEET EC2.0.
  -  JUTE NETTING SEDIMENT CONTROL PER DETAIL 6 ON SHEET EC2.0.
  -  DROP INLET SEDIMENT CONTROL PER DETAIL 7 ON SHEET EC2.0.
  -  GRAVEL BAG CHECK DAM PER DETAIL 8 AND 9 ON SHEET EC2.0.
  -  STREET SWEEPING AND VACUUMING PER CASQA FACT SHEET SE-7



CONTRACTOR TO DETERMINE EXACT SIZE AND LOCATION APPROPRIATE TO CONSTRUCTION PHASING.

WASTE STORAGE  
VEHICLE STORAGE AND MAINTENANCE  
MATERIAL STORAGE  
CONCRETE WASHOUT

FF 259.68

0 5 10  
SCALE: 1" = 5'

**811**  
Know what's below. Call 811 before you dig.

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

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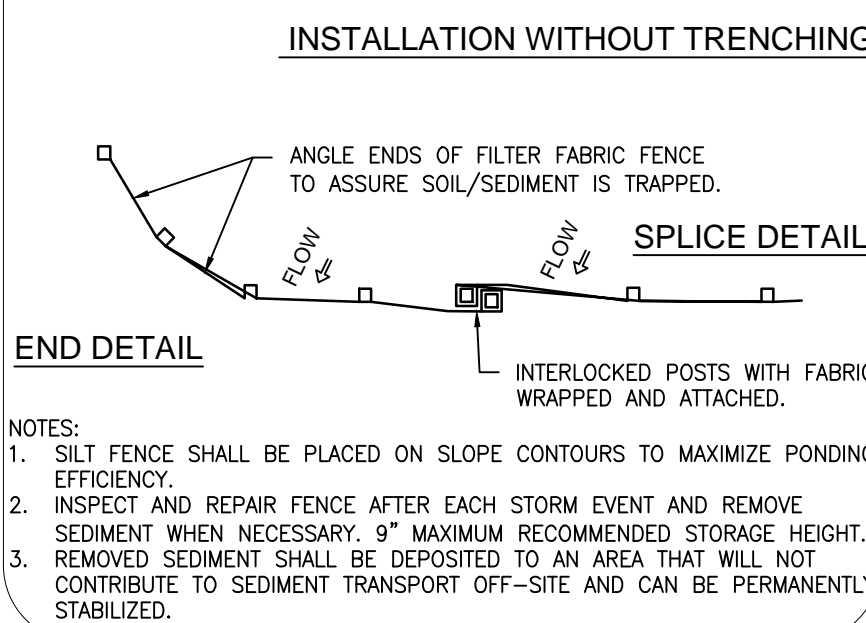
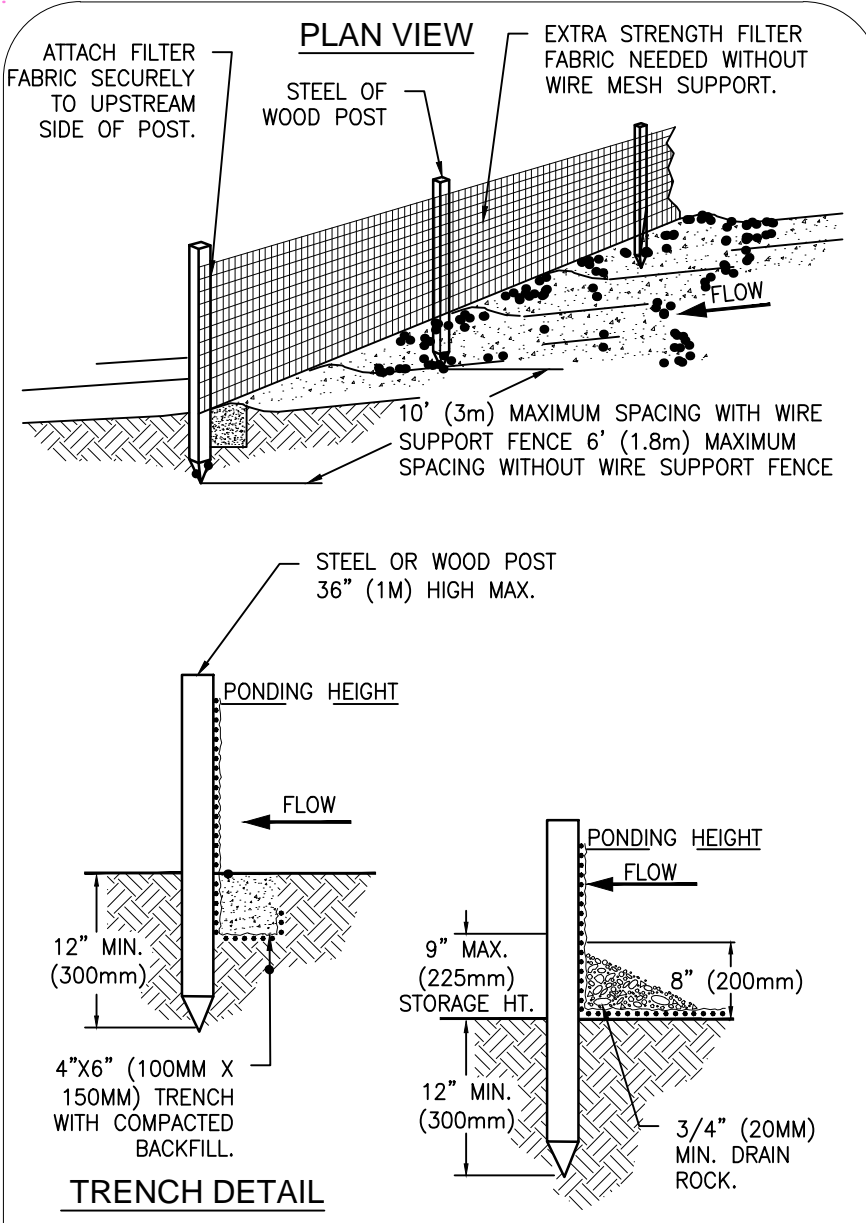
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 REGISTERED PROFESSIONAL ENGINEER  
 MATTHEW R. WALSH  
 C 79026  
 NOT FOR CONSTRUCTION  
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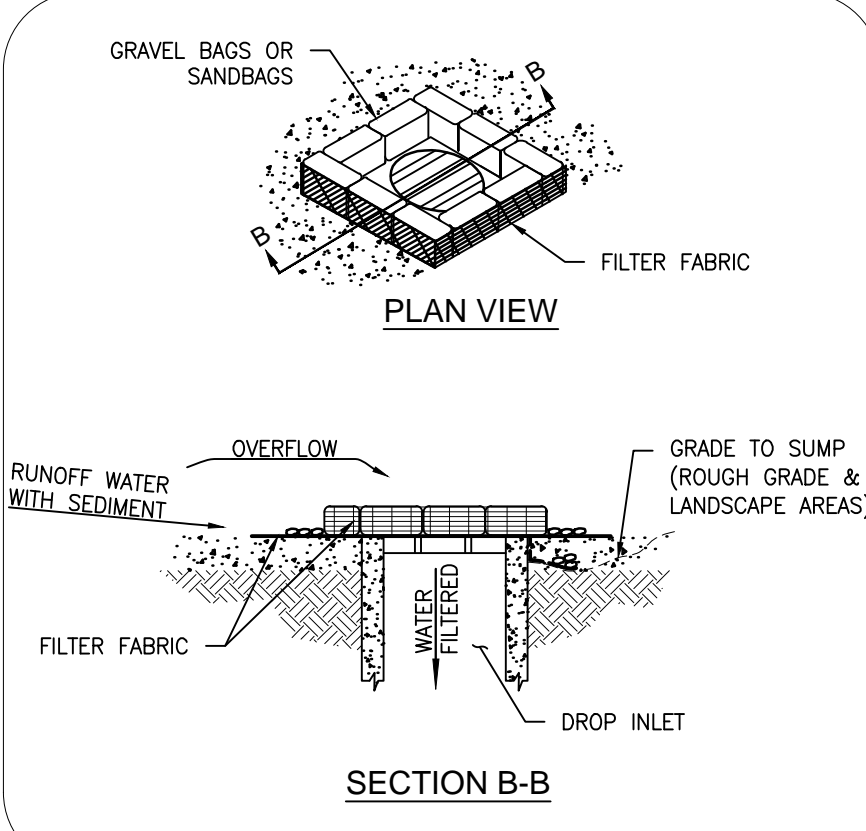
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**EROSION AND SEDIMENT CONTROL PLAN**

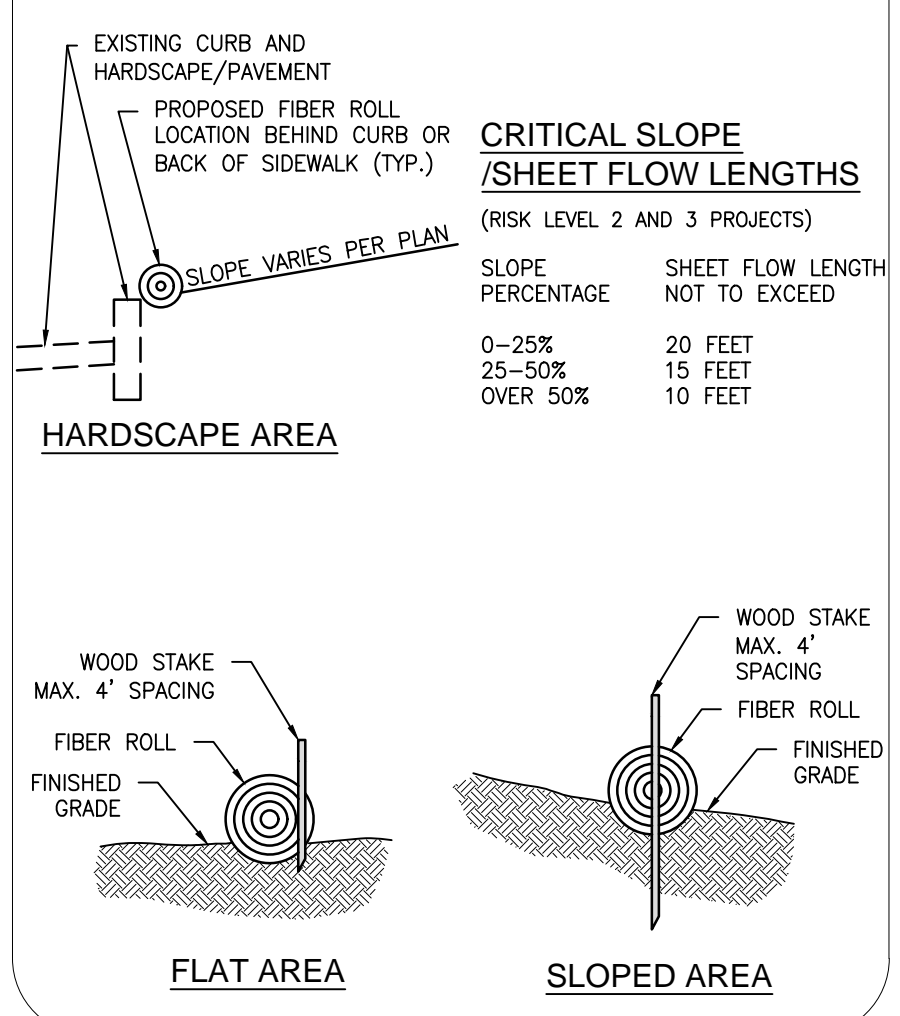
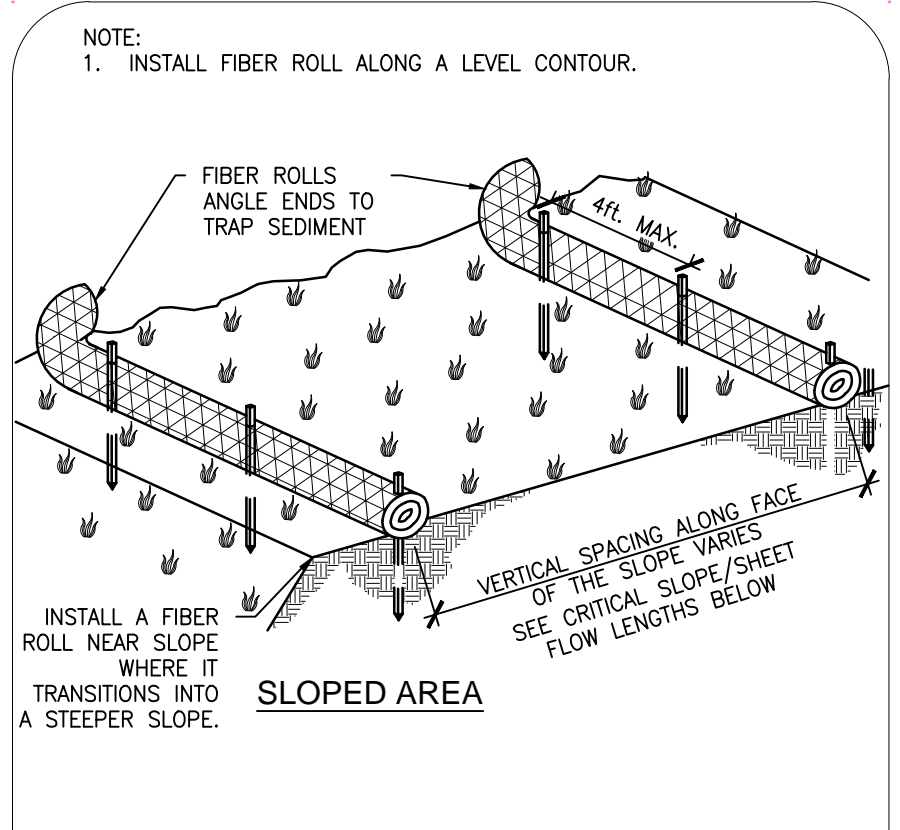
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**EC1.0**



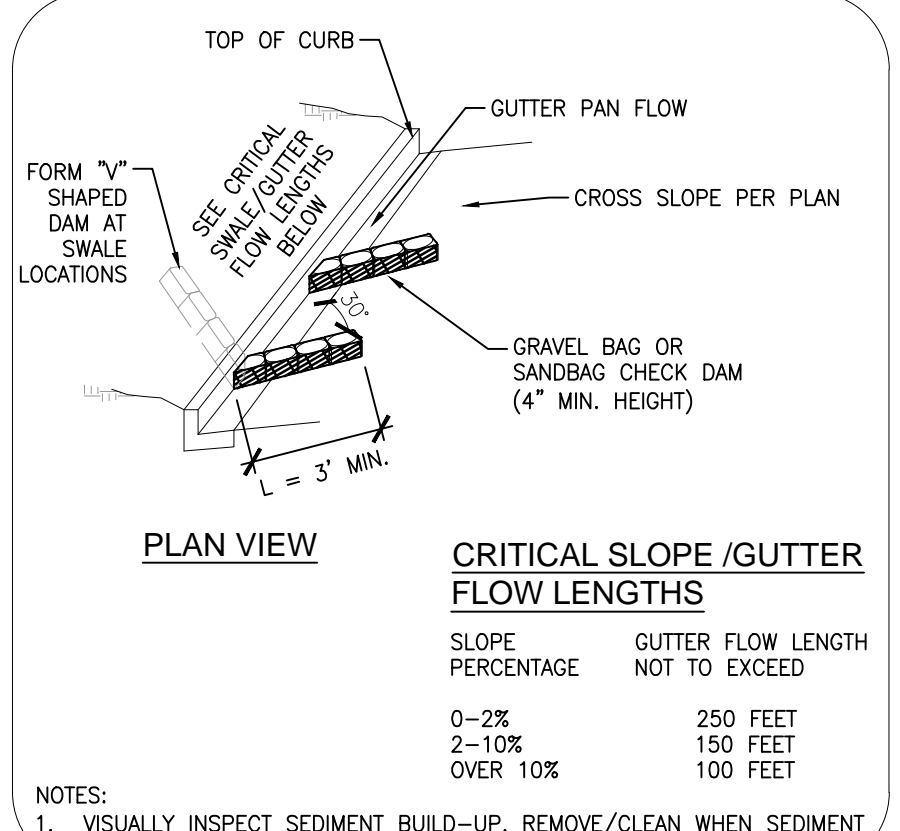
1 SILT FENCE NTS



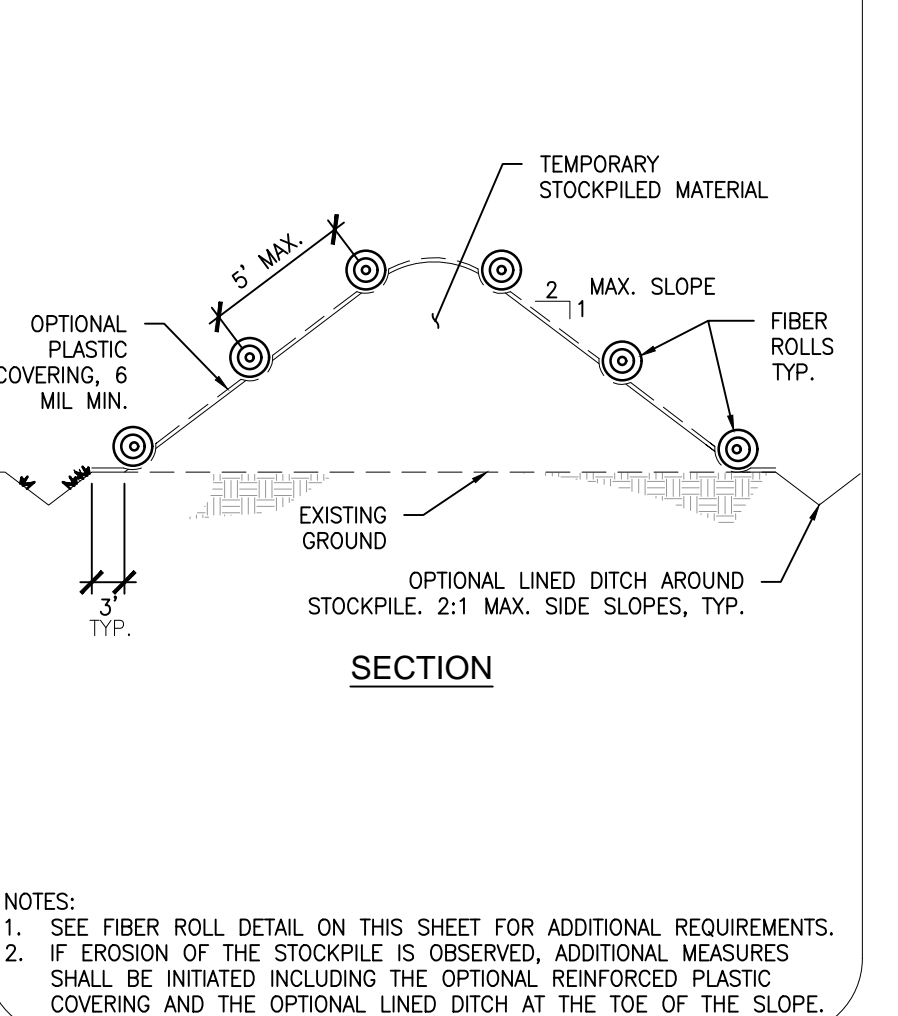
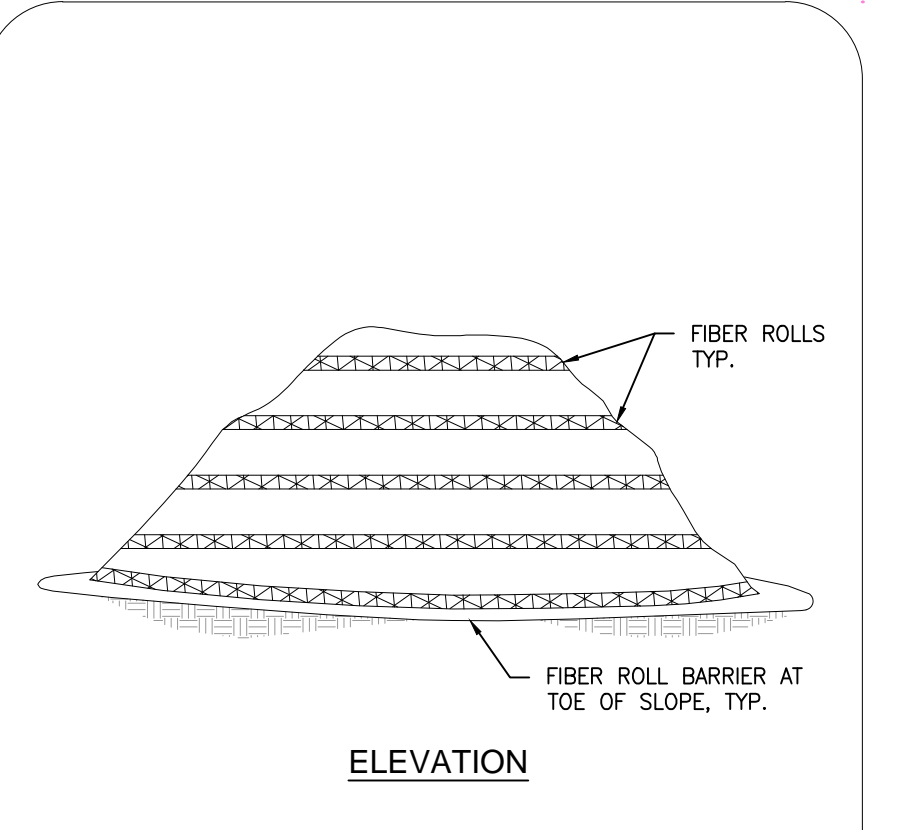
7 DROP INLET PROTECTION NTS



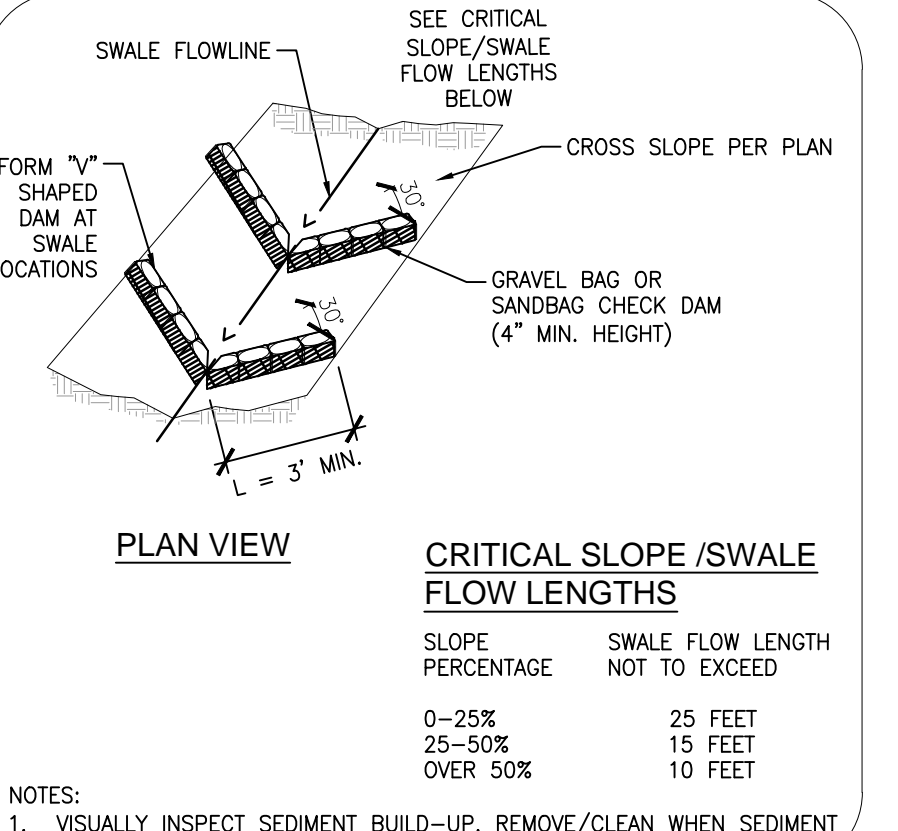
3 STOCKPILE PROTECTION NTS



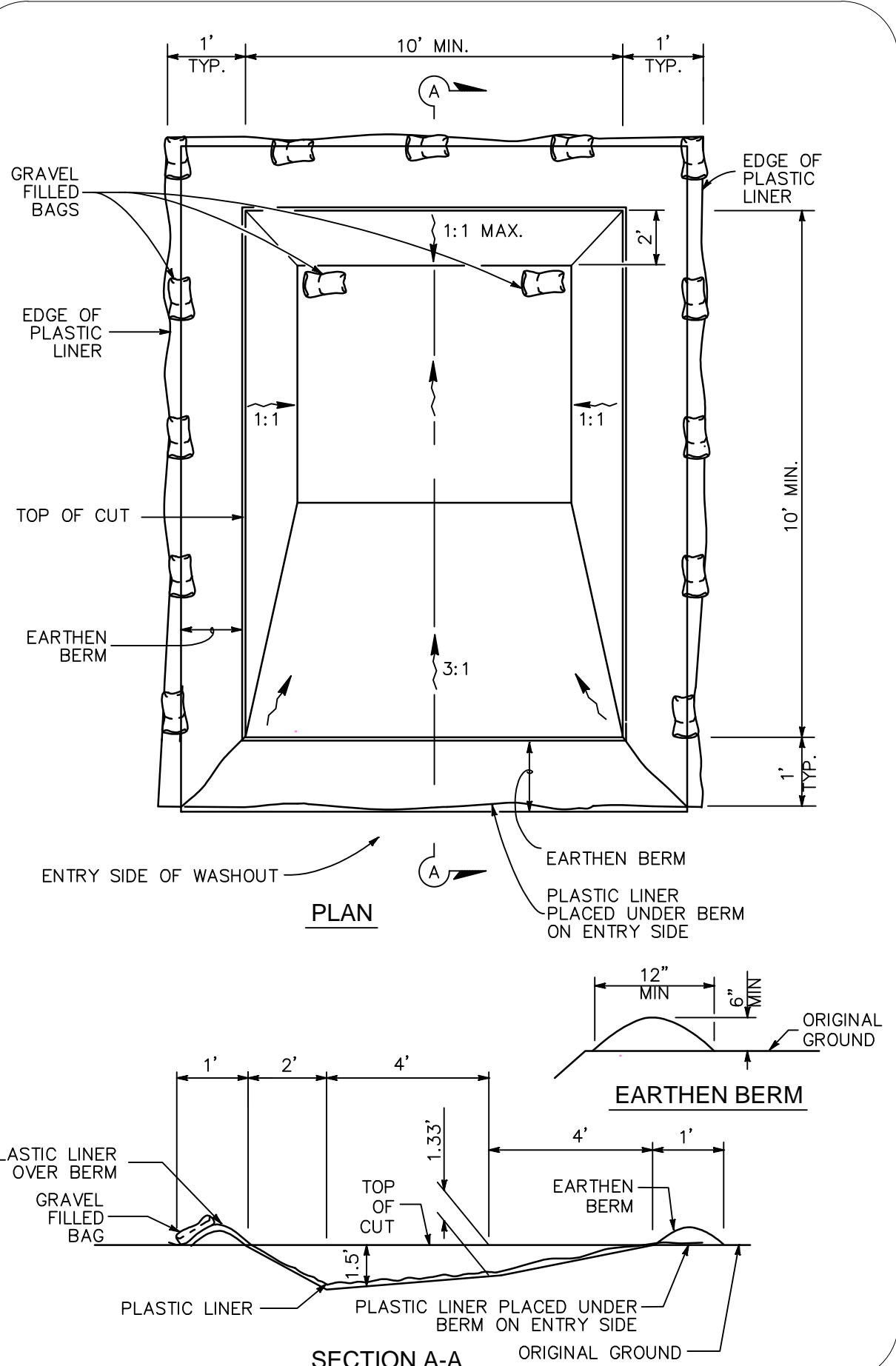
9 CHECK DAM FOR SWALE NTS



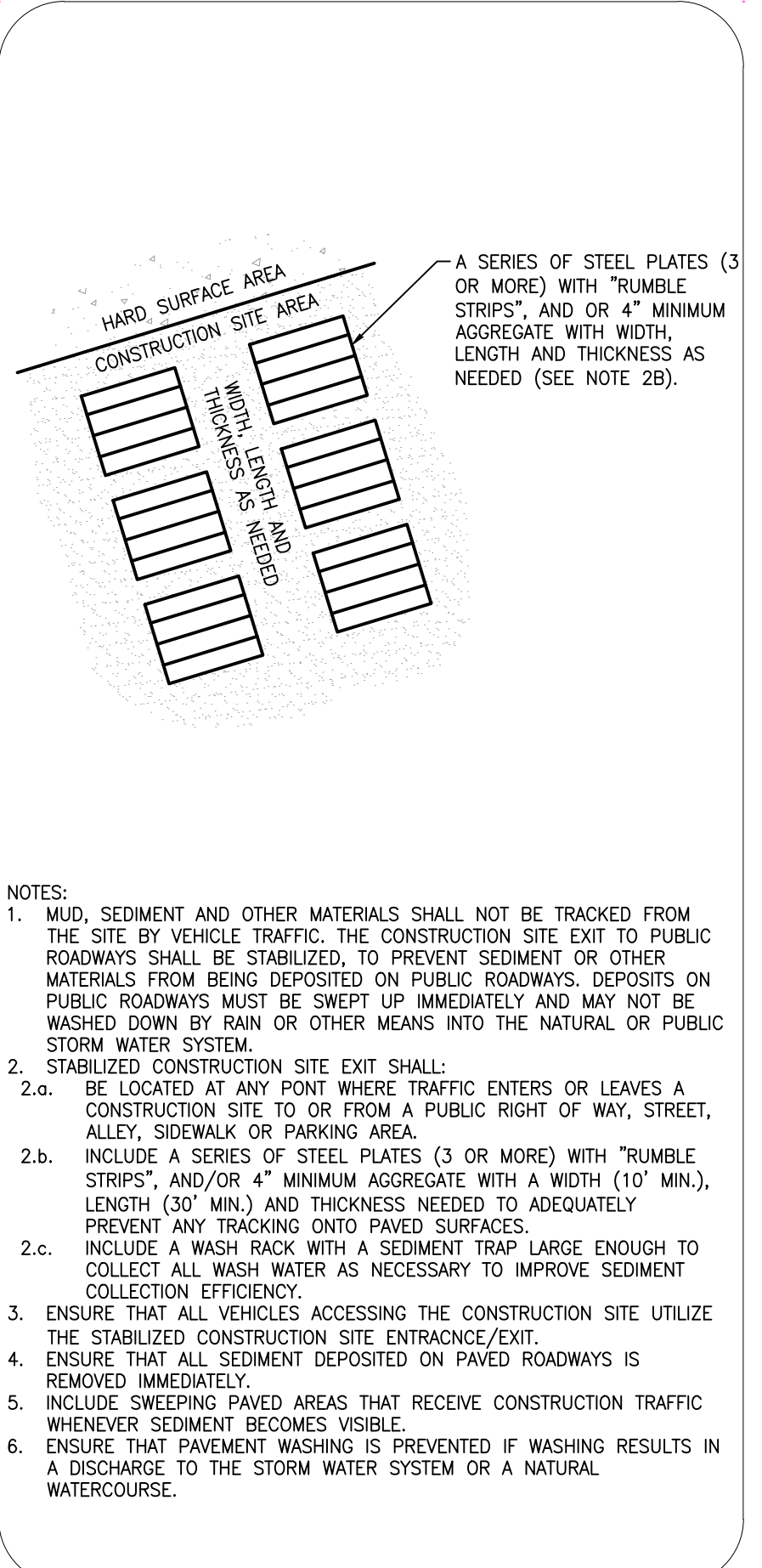
5 RUMBLE STRIPS NTS



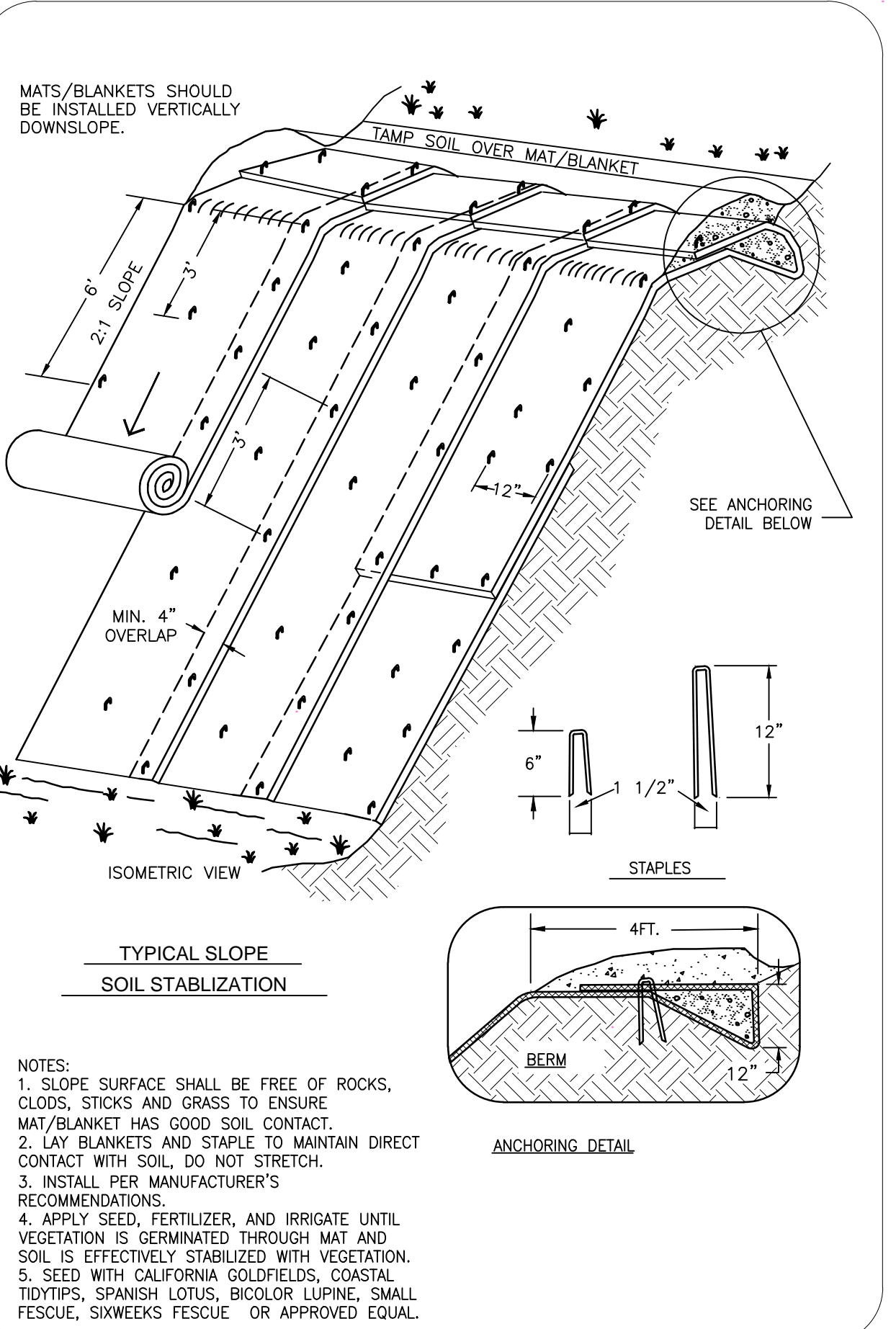
8 CHECK DAM FOR GUTTER NTS



9 CHECK DAM FOR SWALE NTS



10 ANCHORING DETAIL NTS



11 TYPICAL SLOPE SOIL STABILIZATION NTS

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**EROSION AND SEDIMENT CONTROL DETAILS**

SHEET  
**EC2.0**

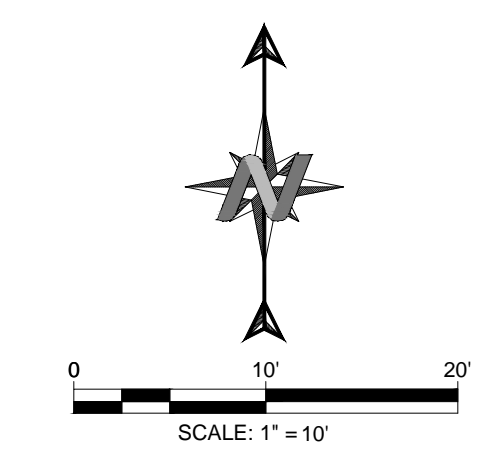
GENERAL LEGEND

- █ BMP AREA
- █ BUILDING
- █ HARDSCAPE
- █ PERVIOUS SURFACE
- █ PAVEMENT
- DIRECTION OF SURFACE FLOW
- DIRECTION OF PIPE FLOW

PROJECT AREAS	
	SQ.FT.
BUILDING	1,669
HARDSCAPE	325
PAVEMENT	0
PERVIOUS PAVERS	621
GRAVEL	101

BMP SIZING

IMPERVIOUS SURFACE AREA = 1,994 SF  
 PROJECT TIER = 2 (TABLE 1-1, SWMP GUIDANCE MANUAL)  
 TIER 2 REQUIREMENT: CAPTURE AND TREAT RUNOFF GENERATED FROM 1" STORM (0.623 GALLONS PER 1 SF OF IMPERVIOUS SURFACE).  
 BMP VOLUME REQUIRED = 1,242 GALLONS = 166 CF  
 BMP TYPE: DEPRESSED STORAGE WITH GRAVEL LAYER  
 BMP AREA: 150 SF  
 6" PONDING VOLUME = 75 CF  
 20" GRAVEL VOLUME (0.40 POROSITY) = 100 CF  
 TOTAL BMP VOLUME PROVIDED = 175 CF



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NO.	DATE	REVISIONS
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 APPROVED BY: MRW  
 DATE: 2/26/2024

**HYDROLOGY EXHIBIT**

SHEET  
**1 OF 1**

**JavaScript Decibel Calculators**  
 Inverse Square Law • Power Ratio • Voltage Ratio • T and H-Pads  
 Combining Decibels • Atmospheric Absorption

**Decibels and Distance**  
 This calculator requires a JavaScript capable browser

This calculation will give you the amount of attenuation, in decibels, you can expect with a change in receiver distance, in a free field (outdoors). For example if you were standing 10 feet from a noise source, and were to move 100 feet away from that noise source, you would expect to see a drop in level of 20dB. Sound that is radiated from a point source drops in level at 6dB per doubling of distance. If you start at 50 feet from the source and move to 100 feet from the source you will have a 6dB drop in level. If you move from 500 feet to 1000 feet, you will have a 6dB drop in level. For the record, the formula to calculate this level drop is:  $Decibels\ of\ Change = 20 \log(\text{distance } 1 / \text{distance } 2)$ , and you can calculate it on any scientific calculator.

Reference listening distance in feet or meters, from the noise source: 1  
 New receiver distance in feet or meters, from the source: 57  
 This is the number of decibels of level drop/rise you would find: -35.1171347021

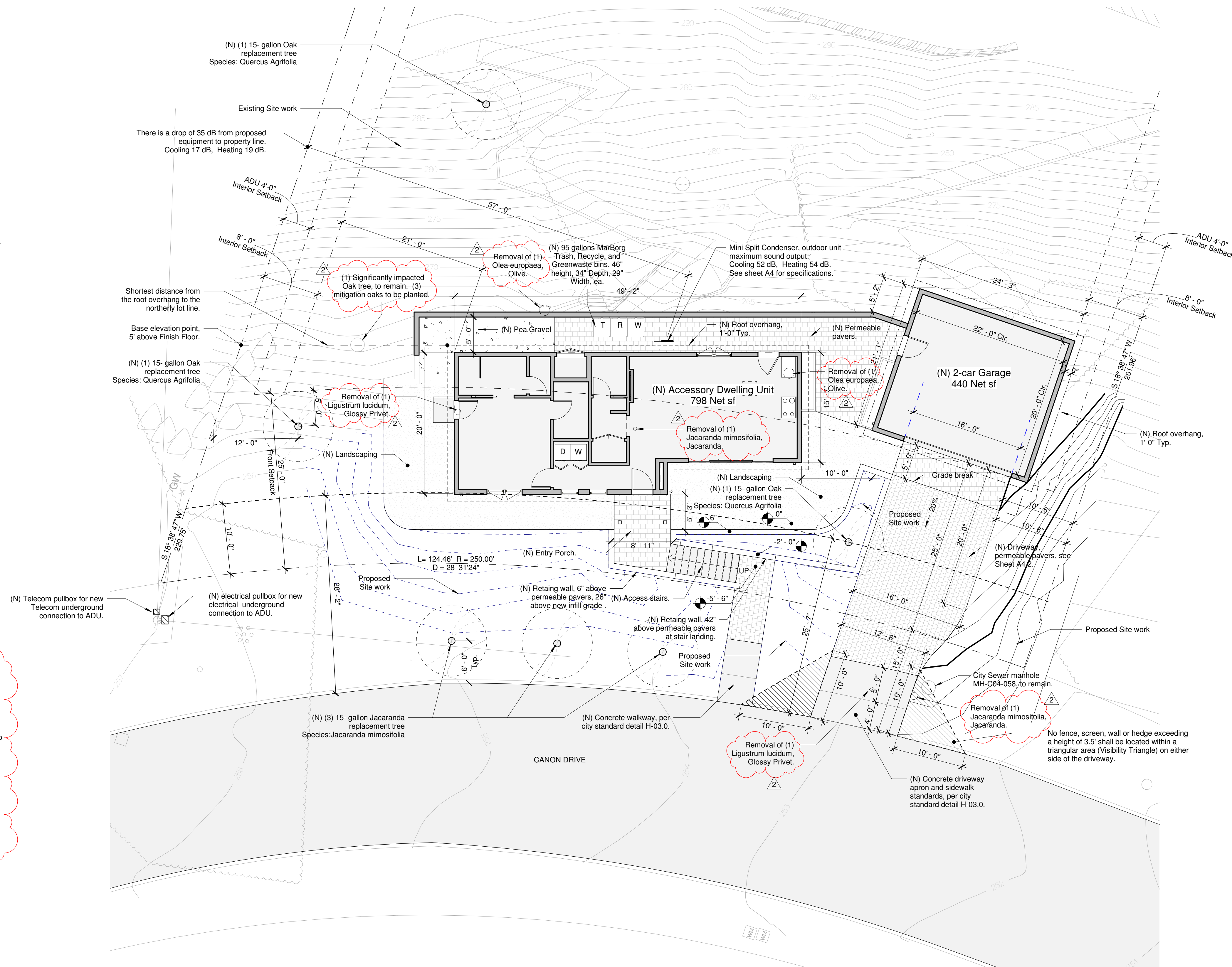
Calculate HELP JavaScript Help

This information is provided with no warranty of its accuracy, or applicability, and any use made of this information is done so at the sole risk of the user.

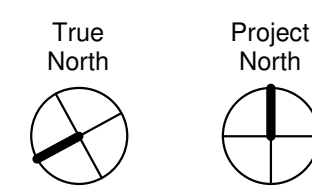
**MC<sup>2</sup>** System Design Group  
 118-550 Anderson Hwy, Vernon, BC V3T 2C4 Ph: 604-866-8181  
 403 - 1240 Kensington Rd NW, Calgary, AB T2N 3P7 Ph: 403-452-2263  
 951 King Street West, Suite 405, Toronto, ON M5V 3K5 Ph: 647-479-8661

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- Arborist Notes:**
- Arborist shall monitor excavation adjacent to the oaks identified in the Report (see pages 3, 4, and 5, of the Arborist Report. See Sheet A0.11)
  - Tree Mitigation Pinning:
    - Plant three-15 gallon oaks on site to mitigate the impact to one oak, (Tree # 6, Arborist Report, pages 3 and 6 of 16. See sheet A0.10)
    - Plant 3 other native or non-native trees in 15-gallon size, to mitigate the removal of set back trees. Based on City approval letter. See Sheet A4.2)
    - Newly planted trees must be of high quality and not have circling or girdling roots.
    - Trees must be structurally sound and free of pest and disease.



1 Site Plan - Proposed  
 1/8" = 1'-0"



**215 Canon**  
 215 Canon Drive  
 Santa Barbara, CA 93105

735 State Street, Suite 204  
 Santa Barbara, CA 93101  
 805.966.3966 office  
 805.715.7005 fax  
 vanguardsplanning.com



Stamp/Signature:  
**Sergio Ormachea**

**PLN2023-00393**

Planning Submittal	2023-09-15
Revisions:	
▲ Response to 1st Review	2024-03-14
▲ Response to 2nd review	2024.04.15
▲	
▲	
▲	
▲	

Sheet Title:  
**Site Plan - Accessory Dwelling Unit**

Sheet No.:  
**A0.1**

Main table containing building standards, sections (e.g., 301.1 SCOPE, 4.106 SITE DEVELOPMENT), and tables (e.g., TABLE H-2 STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALVES).

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS.

735 State Street, Suite 204 Santa Barbara, CA 93101 805.966.3966 office 805.715.7005 fax



Stamp/Signature: Sergio Ormachea

PLN2023-00393

Planning Submittal 2023-09-15

Revisions: [Grid of revision marks]

Sheet Title: Green Buildings Standards Code

Sheet No.: A0.2





Geotechnical Engineering Report  
For  
**Proposed Detached Accessory Dwelling Unit**  
**215 Cannon Drive**  
**Santa Barbara, California**

April 14, 2022

F-102975

Prepared For  
**Anne Martin**

By  
Beacon Geotechnical, Inc.  
P.O. Box 4814  
Paso Robles, California 93447



April 14, 2022

F-102975

**Anne Martin**  
215 Cannon Drive  
Santa Barbara, CA 93105

Project: Proposed Detached Accessory Dwelling Unit  
215 Cannon Drive  
Santa Barbara, California

Subject: Geotechnical Engineering Report

As authorized, we have performed a Geotechnical Study for the above referenced project. The accompanying Geotechnical Engineering Report presents the results of our subsurface exploration, laboratory-testing program and conclusions and recommendations for geotechnical engineering aspects of project design. Our services were performed using the standard of care ordinarily exercised in this locality at the time this report was prepared.

Based on our study, it is our opinion that the site is suitable for the proposed development from a geotechnical engineering standpoint provided the recommendations of this report are successfully implemented.

We have appreciated this opportunity to be of service to you on this project. Please call if you have any questions, or if we can be of further service.

Respectfully submitted,  
**Beacon Geotechnical, Inc.**

Greg McKay  
Project Manager

Copies: 3-Martin  
1-File



Nicholas A. McClure  
Geotechnical Engineer

P.O. Box 4814 • Paso Robles, CA 93447  
Phone: (805) 239-9457 • Fax: (805) 237-9098 • Email: beacongeotechnical@gmail.com

F-102975

April 14, 2022

Contents

1 INTRODUCTION .....2  
1.1 Description.....2  
2 SCOPE OF WORK .....2  
2.1 Purpose.....2  
2.2 Report Contents .....2  
3 SITE SETTING.....3  
3.1 Location.....3  
3.2 Site Description .....3  
4 SITE CONDITIONS.....3  
4.1 Soil Conditions.....3  
4.2 Groundwater.....3  
5 SEISMIC HAZARDS.....3  
5.1 Nearby Faults.....3  
5.2 Liquefaction.....4  
5.3 Landslide Hazards.....4  
5.4 Seismic Design Parameters.....4  
6 CONCLUSIONS AND RECOMMENDATIONS.....5  
6.1 General Grading.....5  
6.2 Specific Site Development, Grading Pads, and Foundation Excavations.....6  
6.3 Slope Construction.....7  
6.4 Utility Trenches.....8  
6.5 Structural Design – Foundations .....8  
6.6 Slabs on Grade.....9  
6.7 Structural Design – Lateral Resistance Parameters.....9  
6.8 Structural Design – Settlement Considerations .....9  
6.9 Structural Design – Retaining Walls.....10  
7 REFERENCES CITED.....11  
8 ADDITIONAL SERVICES.....11  
9 PROJECT LIMITATIONS AND UNIFORMITY OF CONDITIONS.....12

1

F-102975

April 14, 2022

1. INTRODUCTION

This report presents results of a Geotechnical Engineering Study performed for the proposed detached accessory dwelling unit to be located in Santa Barbara, California.

1.1 Description

- 1.1.1. It should be noted that grading and foundation plans were not provided for the purpose of this report. Prior to any construction, this firm should review the grading and foundation plans to verify or modify the recommendations offered herein. We anticipate that the site will be developed by building at or near existing grade.
- 1.1.2. The proposed structure is assumed to be one (1) or two (2) stories of wood framed construction.
- 1.1.3. Structural considerations for maximum wall loads of 1.65 kips per square foot and maximum point loads of 25.0 kips were used as a basis for the recommendations of this report. If actual loads vary significantly from these assumed loads, Beacon Geotechnical, Inc. should be notified as re-evaluation of the recommendations contained herein may be required.

2 SCOPE OF WORK

2.1 The purpose of the geotechnical investigation that led to this report was to evaluate the soil conditions of the site with respect to the proposed development. These conditions include surface and subsurface soil types, expansion potential, settlement potential, bearing capacity, and presence or absence of subsurface water. The scope of our work included:

- Reconnaissance of the site.
- Drilling, sampling, and logging of two (2) borings to investigate soils and groundwater conditions.
- Laboratory testing of soil samples obtained from subsurface exploration to determine their physical and engineering properties.
- Geotechnical analysis of the data obtained.
- Consultation with owner representatives and design professionals.
- Preparation of this report.

2.2 Contained in the report are:

- Discussions on local soil and groundwater conditions.
- Results of laboratory and field tests.
- Conclusions and recommendations pertaining to site grading and structural design.

2

F-102975

April 14, 2022

3 SITE SETTING

- 3.1 The site of the proposed development is located in Santa Barbara, California, with the approximate geographical coordinates 34°26'44.00" N and 119°44'09.50" W. See the Vicinity Map in Appendix A.
- 3.2 The proposed building site is relatively level to slightly sloping with scattered trees.

4 SITE CONDITIONS

4.1 Soil Conditions

- 4.1.1 Evaluation of the subsurface indicates that soils are generally light brown silty slightly clayey sand with gravel and cobbles overlain by light brown and brown silty slightly clayey sand.
- 4.1.2 Soils encountered at approximate bearing depths should be designed as Site Classification D in accordance with the local building code.
- 4.1.3 Expansion determination indicates that the bearing soils lie in the "Very Low" range.

4.2 Groundwater

- 4.2.1 Groundwater was not encountered to a maximum depth of twenty (20) feet.

5 SEISMIC HAZARDS

This portion of Central California is subject to significant seismic hazards from moderate to large earthquake events. Ground shaking resulting from earthquakes is the primary geologic hazard at the project site. Ground displacement resulting from faulting is a potential hazard at or near faults.

5.1 Nearby Faults

- 5.1.1 The site does not lie within an Earthquake Fault Zone identified on a State of California Earthquake Fault Zone Map.
- 5.1.2 Faults closest to the site, which would most affect the proposed project:

Nearby Active Faults	Approximate Distance (km)	Magnitude Mw
Mission Ridge Fault	0.6	6.8
Pitas Point Fault	7.3	7.3
Santa Ynez Fault	7.4	7.4
Red Mountain Fault	8.2	7.4

3

F-102975

April 14, 2022

5.2 Liquefaction

Earthquake-induced vibrations can be the cause of several significant phenomena, including liquefaction in fine sands and silty sands. Liquefaction results in a complete loss of strength and can cause structures to settle or even overturn if it occurs in the bearing zone. If liquefaction occurs beneath sloping ground, a phenomenon known as lateral spreading can occur. Liquefaction is typically limited to the upper 50 feet of the subsurface soils and to soils that have a relative density of less than 70%.

- 5.2.1 Based on the quality and conditions of the in-place soils and the absence of groundwater in our boring explorations, it is our opinion that the potential for liquefaction and/or lateral spreading is low at this site.

5.3 Landslide Hazards

- 5.3.1 The site topography and exposed soil types indicate that the potential for landslides is minimal at this site. Furthermore, no evidence of previous landslides was observed at the site.

5.4 Seismic Design Parameters

The following estimated ground motion parameters have been established using the methods outlined in the 2019 California Building Code with reference to the acceleration contour maps provided by the U.S. Geological Survey (USGS) and the National Earthquake Hazards Reduction Program (NEHRP-2015). These ground motion parameters represent the Maximum Considered Earthquake (MCE) spectral response of seismic events experiencing 5 percent damped acceleration and having a 2 percent probability of exceedance within a 50 year period.

Parameter	Value
Seismic Design Category	E
Site Class	D
Short Period Spectral Acceleration, S <sub>s</sub>	2.208
1-second period spectral acceleration, S <sub>1</sub>	0.792
Short period site coefficient, F <sub>a</sub>	1.000
1-second period site coefficient, F <sub>v</sub>	1.700
Adjusted short period spectral acceleration, S <sub>MS</sub>	2.208
Adjusted 1-second period spectral acceleration, S <sub>M1</sub>	1.347
Short period design spectral acceleration, S <sub>DS</sub>	1.472
1-second period design spectral acceleration, S <sub>D1</sub>	0.898

4

F-102975

April 14, 2022

6 CONCLUSIONS AND RECOMMENDATIONS

The site is suitable for the proposed development from a geotechnical engineering standpoint provided the recommendations contained herein are properly implemented into the project.

6.1 General Grading

- 6.1.1 Grading, at a minimum, should conform to Chapter 18, and any additional locally approved appendices relating to grading, of the 2019 California Building Code.
- 6.1.2 The existing ground surface should be initially prepared for grading by removing all vegetation, trees, large roots, debris, non-complying fill, and all other organic material. Voids created by removal of such material should not be backfilled unless the underlying soils have been observed by a representative of this firm.
- 6.1.3 **The bottom of all excavations should be observed by a representative of this firm prior to processing or placing fill.**
- 6.1.4 Fill and backfill placed at near optimum moisture in layers with loose thickness not greater than eight (8) inches should be compacted to a minimum of 90% of maximum dry density obtainable by the ASTM D 1557 Test Method.
- 6.1.5 Import soils used to raise site grade should be equal to or better than on-site soils in strength, expansion, and compressibility characteristics. Import soils can be evaluated, but will not be pre-qualified by the geotechnical engineering firm. Final comments on the characteristics of the import soils will be offered after the material is at the project site.
- 6.1.6 Roof draining systems should be designed so that water is not discharged onto bearing soils or near structures.
- 6.1.7 Final site grade should be such that all water is permanently diverted away from the structure and is not allowed to pond. The ground immediately adjacent to the building shall be sloped 5% for a minimum of ten (10) feet measured perpendicular to the face of the wall. All diverted water is to be directed to an approved drainage. Alternative grading methods can be found in 2019 California Building Code Section 1804.4.
- 6.1.8 It should be noted that uniform soil moisture conditions around the perimeter of the structure will help decrease the potential for differential swelling and heaving associated with expansive soils. Post-construction care should be taken to create long-term landscaping and irrigation solutions that do not allow for frequent changes in soil moisture content or irregular application of water around the perimeter of the structure.

5

F-102975

April 14, 2022

6.1.9 The above referenced site drainage conditions should be maintained over the course of the life of the structure. Proper long term performance of the foundation and building pad may be compromised if the surrounding site drainage and grading is adversely modified.

- 6.1.10 It is recommended that Beacon Geotechnical, Inc. be retained to provide intermittent geotechnical engineering services during site development, grading and foundation construction phases of the work to observe compliance with the design concepts, specifications, and recommendations, and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.
- 6.1.11 Should soils become unstable during grading due to excessive subsurface moisture, alternatives to correct instability may include aeration or the use of gravels and/or geotextiles as stabilizing measures. Recommendations for stabilization should be provided by this firm as needed during construction.
- 6.1.12 Plans and specifications should be provided to Beacon Geotechnical, Inc. prior to grading. Plans should include the grading plans, and foundation details. Structural loads should be shown on the foundation plans.
- 6.1.13 All water associated with drainage and runoff should not be discharged onto slope faces. All outflow of drainage structures and drainage facilities should be designed by the project Civil Engineer to minimize erosion.

6.2 Specific Site Development, Grading Pads, and Foundation Excavations

- 6.2.1 Due to the presence of low density near surface soils and a cut/fill situation at shallow bearing depths, overexcavation and recompaction of soils in the building area (including covered deck areas) will be necessary to decrease the potential for differential settlement and to provide more uniform bearing conditions. Soils should be overexcavated to a depth of two (2) feet below the bottom of footings, five (5) feet below existing grade, through the brown material (noted as soil type A1 in the project boring logs), or 75% of the deepest fill thickness, whichever is greater. The over-excavation should extend to a distance of five (5) feet beyond the building perimeter. The resulting surface should be scarified to a depth of one (1) foot, moisture conditioned and recompacted to a minimum of 90% of maximum dry density. The intent of these recommendations is to provide a minimum of two (2) feet of compacted soils below the bottom of all footings, and recompact the loose topsoil.

6

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Sheet Title:  
**Soils Report,  
Pages 1-6**

Sheet No.:  
**A0.4**

F-102975 April 14, 2022

- 6.2.2 Any excavated material from foundation and septic or drainage systems should be properly recompacted in accordance with all the recommendations for engineered fill. Alternatively, excavated soil may be hauled off site when adequate placement area is not available at the project location.
  - 6.2.3 Areas outside the building area to receive fill, exterior slabs-on-grade, sidewalks, and paving should be overexcavated to a depth of one (1) foot below finish subgrade or existing grade whichever is deeper. The exposed surface should be scarified, moisture conditioned and recompacted.
  - 6.2.4 On-site soils may be used for fill once they are cleaned of all organic material, rock, debris, and irreducible material larger than eight (8) inches.
  - 6.2.5 Although not encountered in our borings, should any trash, debris or subsurface structures be encountered during grading, removals will be necessary to adequate depths and horizontal limits as recommended by this firm at the time of grading.
  - 6.2.6 Grading inspections shall be performed in accordance with the 2019 California Building Code Table 1705.6. See Appendix B for project specific grading observation requirements.
- 6.3 Slope Construction**
- 6.3.1 All hillside grading and construction of fill slopes should conform to the minimum standards listed in Chapter 18 of the 2019 California Building Code. It is recommended that a representative of this firm review the grading plans prior to grading and site development.
  - 6.3.2 Fill slopes should be keyed and benched into firm natural ground when the existing slope to receive fill is 10:1, horizontal to vertical, or steeper. The keys should be tilted into the slope, should be a minimum of one equipment width wide, and should extend a minimum of three (3) feet deep at the outside edge.
  - 6.3.3 Fill slopes should be overfilled, compacted, and cut back to planned configurations. This will yield better compaction on the slope faces than other methods.
  - 6.3.4 Lined drainage swales and down drains should be provided at the tops of all cut and fill slopes to divert drainage away from the slope faces.
  - 6.3.5 Cut and fill slopes should not be constructed steeper than 2:1 (horizontal to vertical). Setbacks of structures from slopes should be maintained as per the 2019 California Building Code.

7

F-102975 April 14, 2022

- 6.9.6 The pressures listed above were based on the assumption that backfilled soils will be compacted to 90% of maximum dry density as determined by ASTM D 1557 Test Method.
- 6.9.7 The lateral earth pressure to be resisted by the retaining walls or similar structures should include the loads from any structures or temporary loads that influence the wall design.
- 6.9.8 A back drain or an equivalent system of backfill drainage should be incorporated into the retaining wall design. Backfill immediately behind the retaining structure should be a free-draining granular material. Alternatively, the back of the wall could be lined with a geodrain system.
- 6.9.9 Compaction on the uphill side of the wall within a horizontal distance equal to one wall height should be performed by hand-operated or other lightweight compaction equipment. This is intended to reduce potential "locked-in" lateral pressures caused by compaction with heavy grading equipment.
- 6.9.10 Water should not be allowed to pond near the top of the wall. To accomplish this, the final backfill site grade should be such that all water is diverted away from the retaining wall.

**7 REFERENCES CITED**

USGS, *Online*, Geologic Hazards Science Center, United States Geological Society, in Cooperation with California Geological Society (CGS), www.geohazards.usgs.gov/qfaults/ca/California.php

**8 ADDITIONAL SERVICES**

This report is based on the assumption that an adequate program of monitoring and testing will be performed by Beacon Geotechnical, Inc. during construction to check compliance with the recommendations given in this report. The recommended tests and observations include, but are not necessarily limited to the following:

- 8.1 Review of the building and grading plans during the design phase of the project.
- 8.2 Observation and testing during site preparation, grading, placing of engineered fill, and foundation construction.
- 8.3 Consultation as required during construction.

11

F-102975 April 14, 2022

**6.4 Utility Trenches**

- 6.4.1 Utility trench backfill should be governed by the provisions of this report relating to minimum compaction standards. In general, service lines inside of the property lines may be backfilled with native soils and compacted to a minimum of 90% of maximum dry density. Backfill of offsite service lines will be subject to the specifications of the jurisdictional agency or this report, whichever is more stringent.
- 6.4.2 A representative of this firm is to monitor compliance with these recommendations.

**6.5 Structural Design – Foundations**

- 6.5.1 Conventional continuous footings may be used for support of the structures.
- 6.5.2 Footings should bear entirely into firm recompacted soils.
- 6.5.3 Based on the project soil conditions, it is assumed that the footings will extend a minimum of eighteen (18) inches below lowest adjacent grade.
- 6.5.4 Conventional continuous footings may be designed based on an allowable bearing value of 1650 psf.
- 6.5.5 Allowable bearing values are net (weight of footing and soils surcharge may be neglected) and are applicable for dead plus reasonable live loads.
- 6.5.6 Bearing values may be increased by one-third when transient loads such as wind and/or seismicity are incorporated into designs using the alternate load combinations in 2019 California Building Code Section 1605.3.2.
- 6.5.7 Lateral loads may be resisted by soils friction on floor slabs and foundations and by passive resistance of the soils acting on foundation stem walls. Lateral capacity is based on the assumption that any required backfill adjacent to foundations and grade beams is properly compacted.
- 6.5.8 For structures to be constructed above slopes, the outside faces at the bottom of footings should provide a minimum horizontal distance of ten (10) feet from the slope face.
- 6.5.9 Conventional continuous footings for buildings where the ground surface slopes at 10:1, horizontal to vertical, or steeper should be stepped so that both top and bottom are level.
- 6.5.10 Reinforcement of footings bottomed in soils in the "Very Low" expansion range should be designed by the Project Structural Engineer to properly resist the structural design load reactions. Additionally, soils should be lightly moistened immediately prior to placement of concrete.

8

F-102975 April 14, 2022

**9 PROJECT LIMITATIONS AND UNIFORMITY OF CONDITIONS**

- 9.1 The analysis and recommendations submitted in this report are based in part upon the data obtained from the borings drilled on site. The nature and extent of variations between and beyond the borings may not become evident until construction. If variations then appear evident, it may be necessary to re-evaluate the recommendations of this report.
- 9.2 The scope of our services did not include environmental assessment or geological study. The scope of services did not include investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air. Any statements in this report or on the soil boring logs regarding odors, unusual or suspicious items or conditions observed are strictly for the information of the client.
- 9.3 Findings of this report are valid as of this date, however, changes in a condition of a property can occur with passage of time whether they be due to natural processes or works of man on this or adjacent properties. In addition, changes in applicable or appropriate standard may occur whether they result from legislation or broadening knowledge. Accordingly, findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of one (1) year.
- 9.4 In the event that any changes in the nature, design, or location of the structure and other improvements are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.
- 9.5 This report is issued with the understanding that it is the responsibility of the owner or his representatives to insure the information and recommendations offered herein are called to the attention of the project architect and engineers. It is also the responsibility of the owner or his representatives to insure the information and recommendations offered herein are incorporated into the project plans and specifications and the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
- 9.6 Beacon Geotechnical, Inc. has prepared this report for the exclusive use of the client and authorized agents. This report has been prepared in accordance with generally accepted geotechnical engineering practices. No other warranties, either expressed or implied, are made as to the professional advice provided under the terms of this agreement.

12

F-102975 April 14, 2022

**6.5.1 Foundation excavations should be observed by a representative of Beacon Geotechnical, Inc. after excavation, but prior to placing reinforcing steel or forms.**

**6.6 Slabs on Grade**

- 6.6.1 Concrete slabs shall be a minimum of four (4) inches thick, reinforced with a minimum of #3 bars spaced at eighteen (18) inches on center, each way.
- 6.6.2 Concrete slabs should be supported by compacted structural fill as recommended earlier in this report.
- 6.6.3 Reinforcement dowels shall be provided at the connection between concrete slabs on grade and continuous footings.
- 6.6.4 Slabs should be underlain with a minimum of four (4) inches of clean and free draining sand. Areas where floor wetness would be undesirable should be underlain with a 10mil moisture barrier to reduce moisture transmission from the subgrade soils to the slab. The membrane should be placed at mid-height in the clean sand.
- 6.6.5 Reinforcement and slab thickness should be determined by the Project Structural Engineer.
- 6.6.6 Soils underlying slabs in the "Very Low" expansion range, as a minimum, should be lightly moistened immediately prior to placement of concrete.

**6.7 Structural Design – Lateral Resistance Parameters**

- 6.7.1 Resistance to lateral loading may be provided by friction acting on the base of foundations. A coefficient of friction of 0.34 may be applied to dead load forces. This value does not include a factor of safety.
- 6.7.2 Passive resistance acting on the sides of foundation stems equal to 275 pcf of equivalent fluid weight may be included for resistance to lateral load. This value does not include a factor of safety.
- 6.7.3 A one-third increase in the quoted passive value may be used when considering transient loads such as wind and seismicity.

**6.8 Structural Design – Settlement Considerations**

- 6.8.1 Maximum expected settlements approximately 3/4 inches are anticipated for foundations and floor slabs designed as recommended.
- 6.8.2 Differential settlement between adjacent load bearing members should be less than one-half the total settlement.
- 6.8.3 The majority of settlement should occur during construction. Post construction settlement should be minimal.

9

F-102975 April 14, 2022

- 9.7 It is recommended that Beacon Geotechnical, Inc. be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications. If Beacon Geotechnical, Inc. is not accorded the privilege of making this recommended review, we can assume no responsibility for misinterpretation of our recommendations.

END OF TEXT  
Appendices

13

F-102975 April 14, 2022

**6.9 Structural Design – Retaining Walls**

- 6.9.1 Conventional cantilever retaining walls bearing in soils prepared in accordance with the "Grading Pads – Site Development and Foundation Excavations" section of this report and backfilled with compacted soils may be designed for the lateral pressures listed below:
 

Active Case	35 pcf
At Rest Case	55 pcf
Passive Case	275 pcf
Max. Toe Pressure	1650 psf
Coefficient of Sliding Friction	0.34
- 6.9.2 Retaining walls extending greater than six (6) feet in height should be designed for an additional seismic horizontal line load of 25H<sup>2</sup> (#/ft-of-wall) assumed to be acting at a height of 0.6H (ft) above the base of the wall, where H is the height of the wall in feet. This seismic surcharge should be added to an active pressure design utilizing an active pressure of 35 psf.
- 6.9.3 It should be noted that where structural retaining walls would otherwise be designed based on an at-rest pressure case, the seismic-and-active design results should be compared to the at-rest design results and the governing conditions should be used for the purpose of the project.
- 6.9.4 In addition to the static soil pressures described above, it is important to note that the active pressure condition will only fully develop if the retaining wall structure is allowed to move a sufficient distance. The necessary lateral movements required to establish the active pressure condition are shown below,
 

Non-Expansive Granular Soil	0.001H – 0.004H
Expansive Cohesive Soil	0.01H – 0.04H

 where H represents the height of the wall. At-rest pressures should be used for design purposes where retaining wall systems connected or adjacent to building structures would be adversely affected by the above referenced lateral displacements.
- 6.9.5 Design pressures noted above are applicable to a horizontally retained surface behind the wall. Walls having a retained surface that slopes upward from the wall should be designed for an additional equivalent fluid pressure of 1 pcf for the active case and 1.5 pcf for the at-rest case, for every two degrees of slope inclination. Walls positioned on or near descending slopes should be evaluated by this firm on an individual basis.

10

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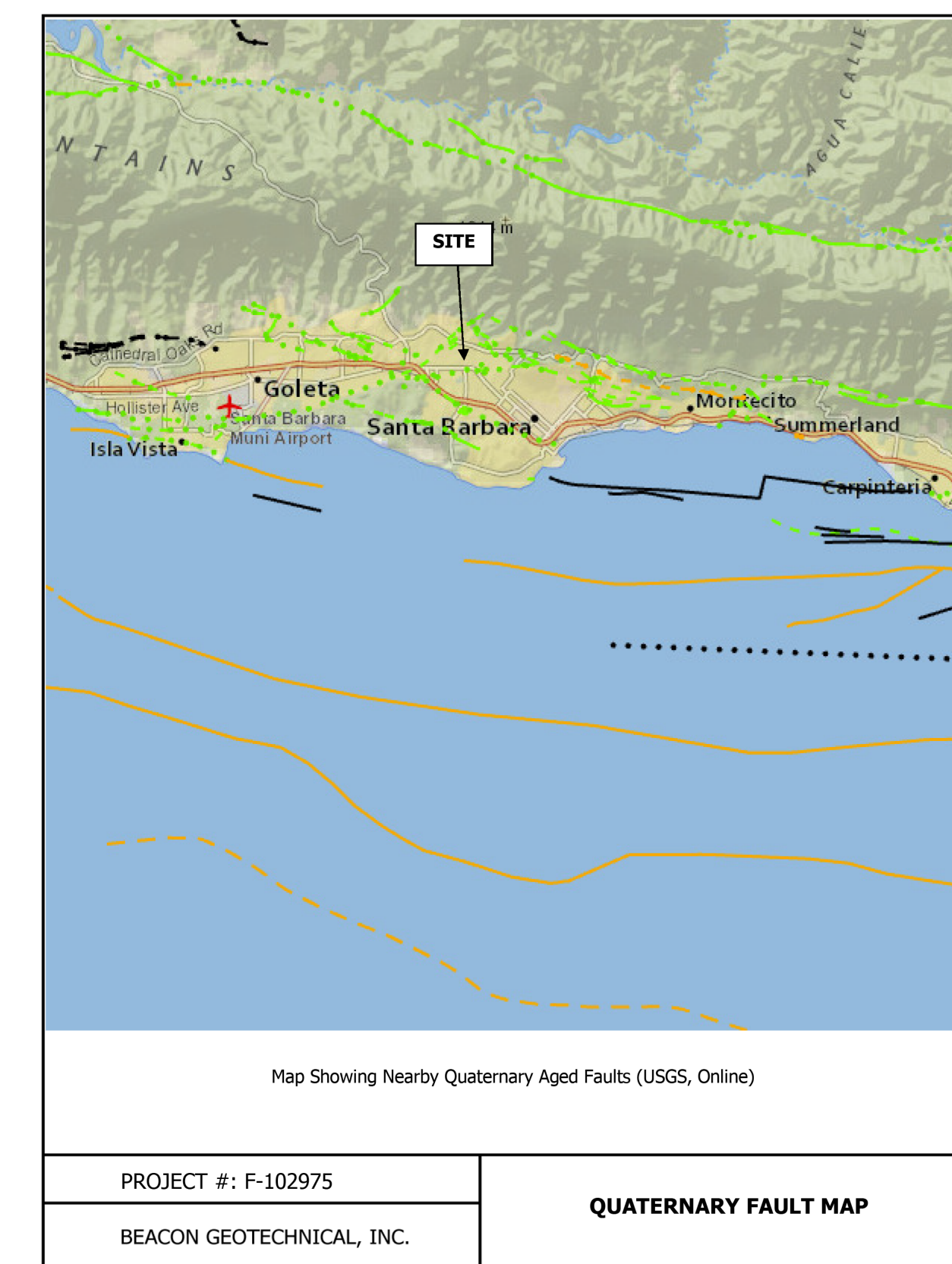
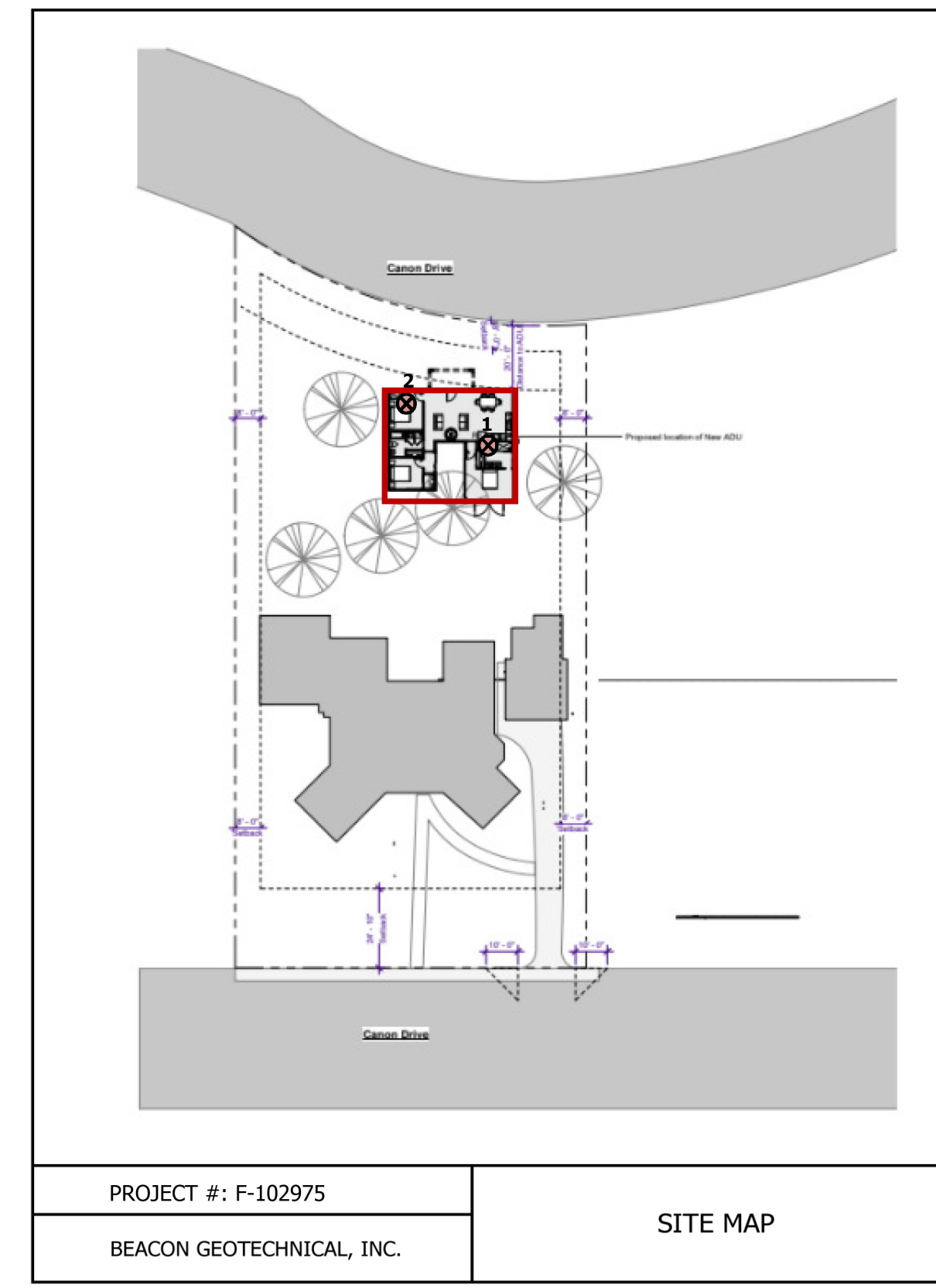
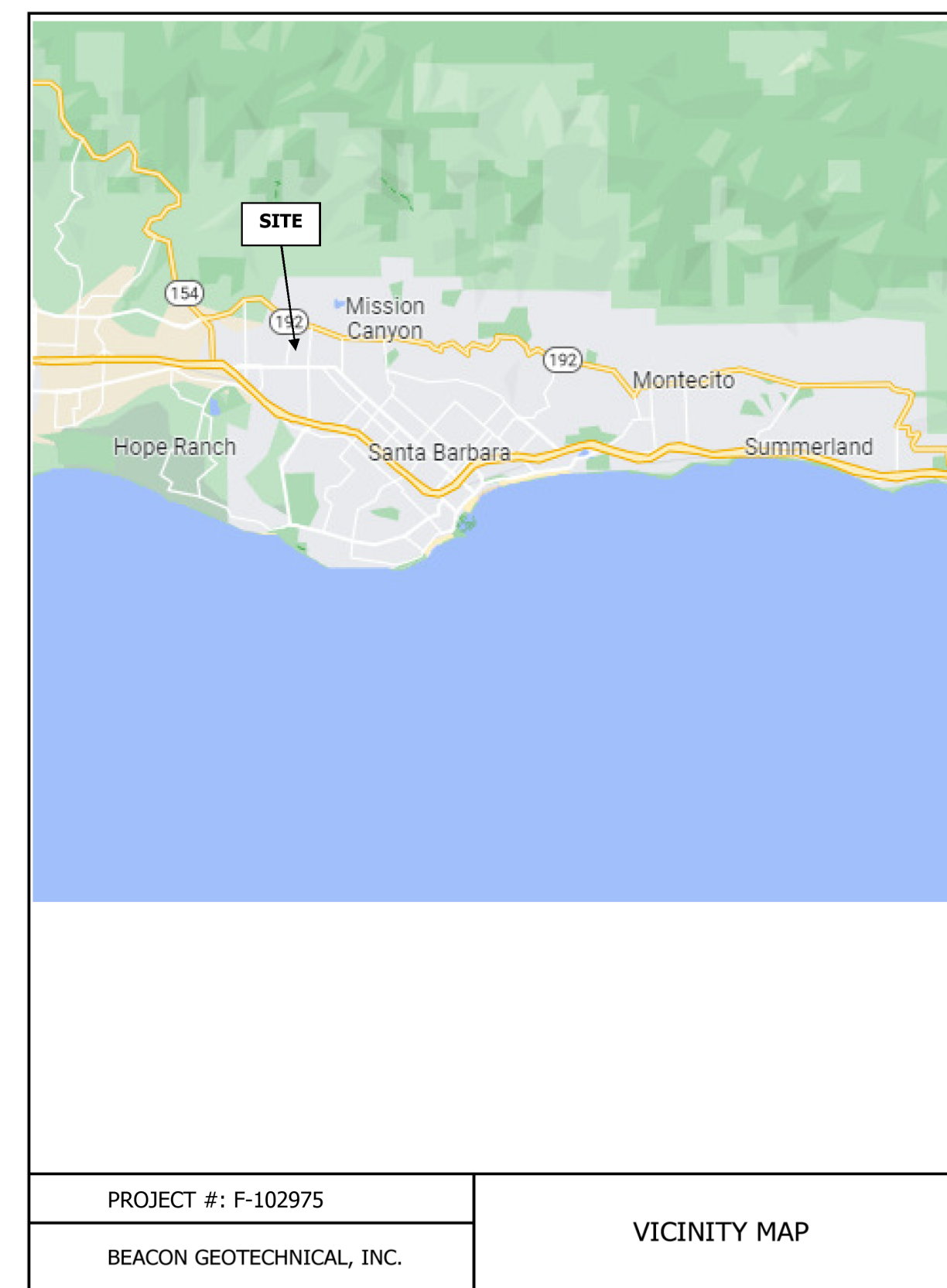
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**Soils Report,  
Pages 7-13**

Sheet No.:  
**A0.5**

**APPENDIX A**

- Vicinity Map
- Site Plan
- Quaternary Fault Map
- Investigation Parameters
- Unified Soil Classification Table
- Boring Logs



**INVESTIGATION PARAMETERS**

- The borings were drilled to a maximum depth of twenty (20) feet below the existing ground surface to observe the soil profile and to obtain samples for laboratory analysis. The borings were drilled on March 23, 2022 using a mobile drill rig and/or hand auguring equipment. The approximate locations of the borings were determined in the field by pacing and sighting, and are shown on the Site Plan in this Appendix.
- Blow counts were obtained within the test borings with Standard Penetration Test (S.P.T.) equipment. The blow counts were obtained by driving the sampler with a 140 pound hammer dropping thirty (30) inches in accordance with ASTM D 1586-11.
- Bulk samples of the soils encountered were gathered from the auger cuttings.
- The final logs of borings represent our interpretation of the contents of the field logs and the results of laboratory testing performed on the samples obtained during the subsurface investigation. The final logs are included in this Appendix.

UNITED SOIL CLASSIFICATION (ASTM D-2487)			
MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES		SOIL GROUP NAMES
COARSE-GRAINED SOILS (50% OR MORE SANDS AND GRAVELS)	GRAVELS	CLEAN GRAVELS <5% FINES	GW WELL-GRADED GRAVEL
	>50% OF COARSE FRACTION RETAINED ON NO. 4. SIEVE	GRAVELS WITH FINES >12% FINES	GM POORLY-GRADED GRAVEL
			GC CLAYEY GRAVEL
	SANDS	CLEAN SANDS <5% FINES	SW WELL-GRADED SAND
>50% OF COARSE FRACTION PASSES ON NO. 4. SIEVE	SANDS AND FINES >12% FINES	SM SILTY SAND	
		SC CLAYEY SAND	
FINE-GRAINED SOILS (50% OR MORE SILTS AND CLAYS)	SILTS AND CLAYS	INORGANIC	CL LEAN CLAY
	LIQUID LIMIT < 50	ORGANIC	ML SILT
			CH FAT CLAY
	LIQUID LIMIT > 50	INORGANIC	MH ELASTIC SILT
ORGANIC		OH ORGANIC CLAY OR SILT	
HIGHLY ORGANIC SOILS	PRINCIPALLY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR	PT PEAT	

PENETRATION RESISTANCE (RECORDED AS BLOWN / S.F.T.)			
SAND & GRAVEL		SILT & CLAY	
RELATIVE DENSITY	BLOW/FOOT	CONSISTENCY	COMPRESSION (SYMBOLIC TYPE)
VERY LOOSE	0-4	VERY SOFT	0-2 0-0.25
LOOSE	4-10	SOFT	2-4 0.25-0.50
MEDIUM DENSE	10-30	FIRM	4-8 0.50-1.00
DENSE	30-50	STIFF	8-15 1.0-2.00
VERY DENSE	OVER 50	VERY STIFF	OVER 15 OVER 2.00

\* NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. 1.318 INCHES I.D. (SPT) SAMPLER THROUGH THE LAST 12 INCHES OF AN 18-INCH DEPTH (ASTM D 1586) STANDARD PENETRATION TEST.

F-102975	UNITED SOIL CLASSIFICATION CHART
BEACON GEOTECHNICAL, INC.	

LOG OF BORING for 215 Canon Drive F-102975

Site Location: Santa Barbara, CA  
Driller/Helper:  
Rig Type: Goldings  
Auger Diameter: 4"  
Date: March 23, 2022

Depth (ft.)	Blow Type	Blows per ft.	Drilling comments	Voids	Moisture	Description	USCS	Beacon Soil ID
0	SPT	10	Loose		-3%	Brown Silty Slightly Clayey Sand	SM-SC	A1
	SPT	6			-2%			
5	SPT	9	Medium Dense		-1%	Light Brown Silty Slightly Clayey Sand	SM-SC	A2
	SPT	25			-4%	Light Brown Silty Slightly Clayey Sand with Gravel and Cobbles	SM-SC	A3
15						Total Depth @ 15.0'		
20								
25								
30								
35								
40								
45								
50								

GROUNDWATER Not Encountered  
Time Depth

SAMPLE TYPE SPT=Standard Penetration Test (uncorrected value, N/corrected value, N)

LOG OF BORING for 215 Canon Drive F-102975

Site Location: Santa Barbara, CA  
Driller/Helper:  
Rig Type: Hand Auger  
Auger Diameter: 4"  
Date: March 23, 2022

Depth (ft.)	Blow Type	Blows per ft.	Drilling comments	Voids	Moisture	Description	USCS	Beacon Soil ID
0			Loose			Brown Silty Slightly Clayey Sand	SM-SC	A1
5			Medium Dense			Light Brown Silty Slightly Clayey Sand Total Depth @ 6.0'	SM-SC	A2
10								
15								
20								
25								
30								
35								
40								
45								
50								

GROUNDWATER Not Encountered  
Time Depth

SAMPLE TYPE SPT=Standard Penetration Test (uncorrected value, N/corrected value, N)

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PLN2023-00393

Planning Submittal 2023-09-15

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**Soils Report, Appendix A**

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**APPENDIX B**

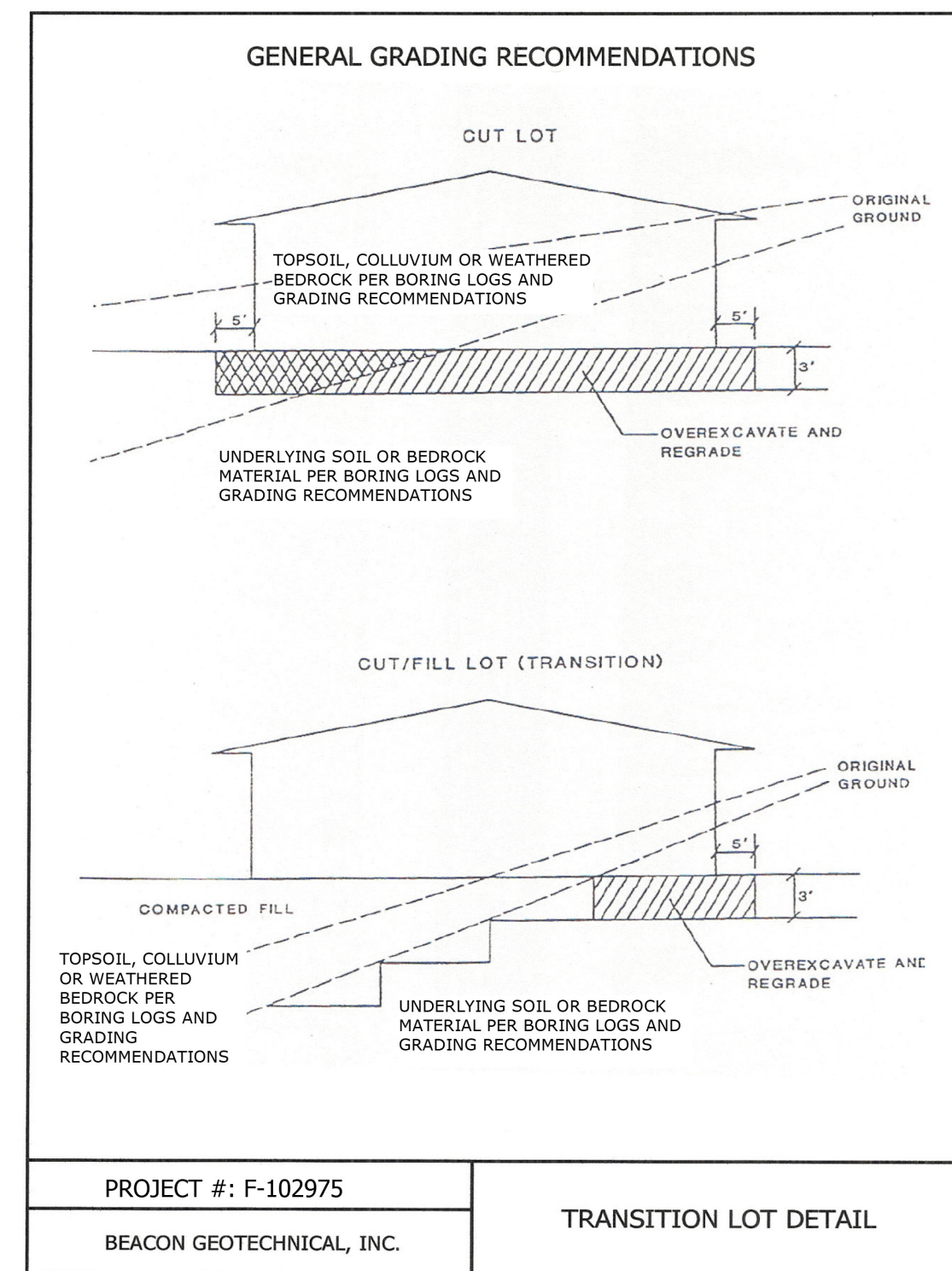
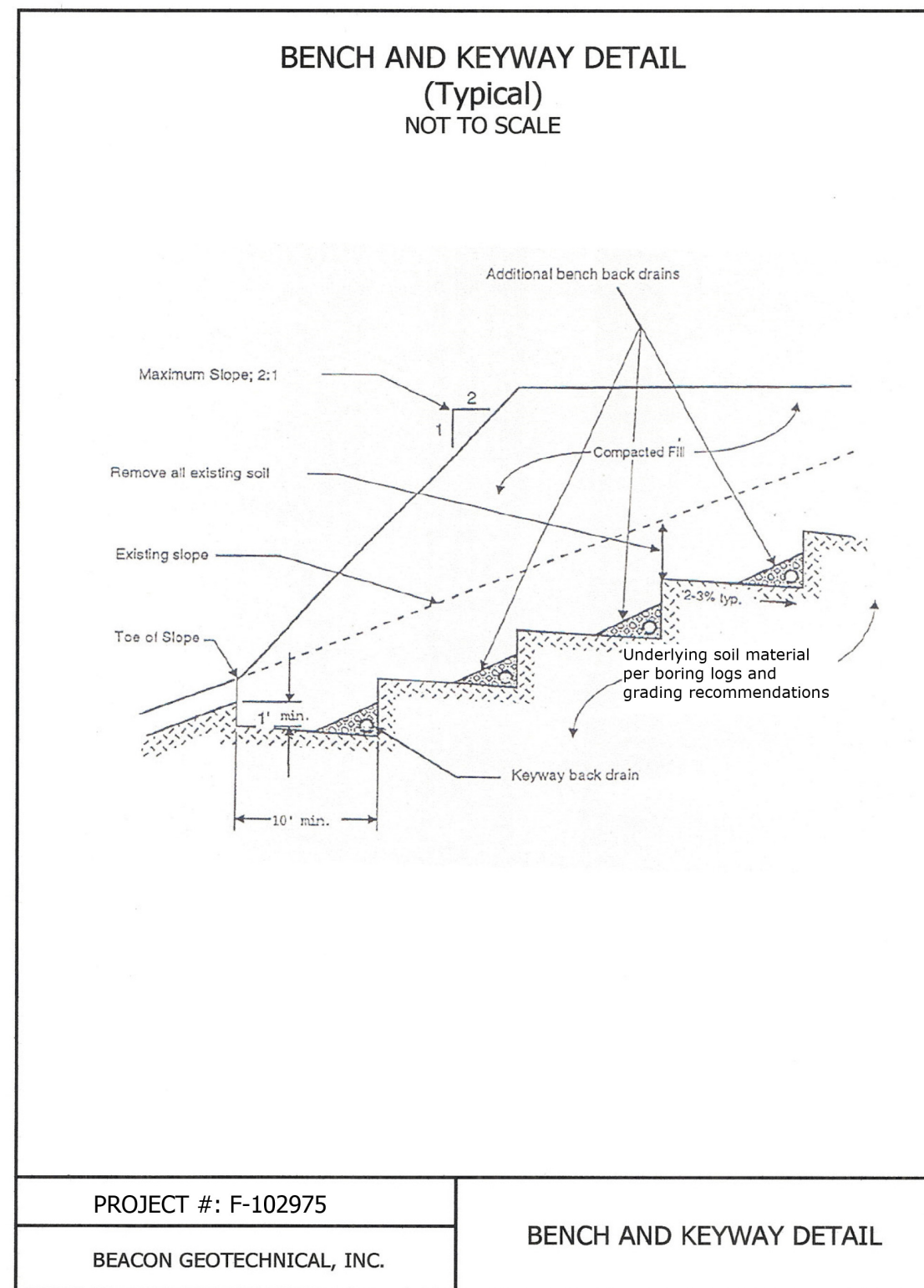
**Laboratory Testing Parameters**  
**Laboratory Results**  
**Bench & Keyway Detail**  
**Transition Lot Detail**  
**2019 CBC -- Table 1705.6**

**LABORATORY PARAMETERS**

- Samples were reviewed along with field logs to determine which would be analyzed further. Those chosen for laboratory analysis were considered representative of soils that would be exposed and/or used during grading, and those deemed to be within the influence of the proposed structure. Test results are presented in this Appendix.
- ASTM D2487-11 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- ASTM D1557-12e1 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
- ASTM D2216-10 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318-10e1 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D4829-11 Standard Test Method for Expansion Index of Soils

**LABORATORY RESULTS**

	Boring Depth	USCS	Max. Density (pcf)	Opt. Moisture (%)	E.I.	P.I.
Material A1	1@0'-6'	SM-SC	115.9	10.5	13	3
Material A2	1@6'-10'	SM-SC	116.5	10.6	5	NP
Material A3	1@10'-15'	SM-SC	120.8	10.2	0	NP



**TABLE 1705.6  
REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS**

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	—	X
2. Verify excavations are extended to proper depth and have reached proper material.	—	X
3. Perform classification and testing of compacted fill materials.	—	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	—
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	—	X

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**Sergio Ormachea**

**PLN2023-00393**

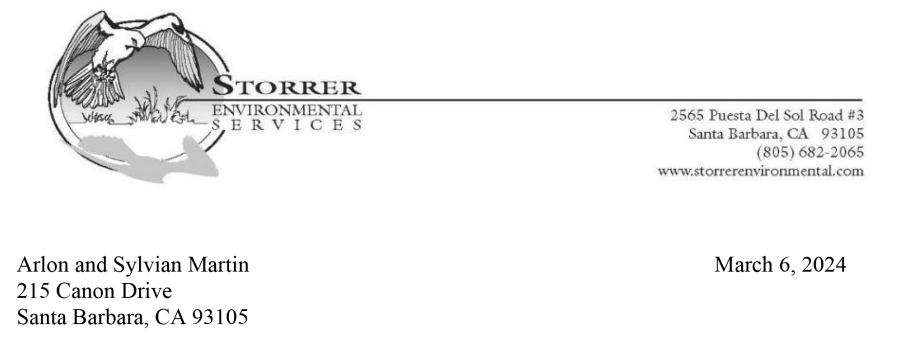
Planning Submittal 2023-09-15

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Sheet Title:  
**Soils Report, Appendix B**

Sheet No.:  
**A0.7**



Arlon and Sylvian Martin March 6, 2024  
215 Canon Drive  
Santa Barbara, CA 93105

**Re: Biological Site Assessment – 215 Canon Drive ADU Project (APN 053-161-002), Santa Barbara, California**

Mr. and Mrs. Martin,

This Biological Site Assessment (Assessment) was prepared by Storror Environmental Services, LLC for a 0.58-acre property located at 215 Canon Drive (APN 053-161-002) in the City of Santa Barbara, CA (Project Site) (Figure 1 – Project Site & Vicinity). The proposed Project includes construction of an 800 square foot accessory dwelling unit (ADU) with an attached two-car garage and driveway (Figure 2 – Site Plan). The purpose of the Assessment was to identify any significant biological resources that might be adversely affected by proposed development. This includes biological resources that are afforded special protection through local, state, or federal land use policies or regulations.

Due to the subject parcel's designation as riparian and wetland habitat in the City of Santa Barbara's Map Analysis and Printing System (MAPS) biological resources layers (City 2024), the Project's vicinity to San Roque Creek and its associated riparian corridor, and the City layer that a Biological Assessment of the property be conducted. The City later agreed that a less comprehensive letter report would suffice as long as no environmentally sensitive habitat would be impacted by the proposed Project. This Assessment is intended to satisfy that request.

**PROJECT SETTING & DESCRIPTION**

The Project Site is within a residential neighborhood in the incorporated City of Santa Barbara (Figure 1 – Project Site & Vicinity) on Canon Drive. Canon Drive loops around the block the subject property is situated on, meaning Canon Drive serves both the northern and southern ends of the property. San Roque Creek flows through the surrounding neighborhood, approximately 250-300 feet northwest of the Project Site. The City of Santa Barbara MAPS creeks and wetland habitat layer also depicts riparian and wetland habitat covering the majority of the subject parcel. This was field-verified to be inaccurate during the Assessment.

The southern portion of the property is already developed with a single-family residence, garage, and driveway (Figure 1 – Project Site & Vicinity). The northern portion of the property is currently undeveloped with the exception of an informal stairway and railings. For the purposes of this

Biological Site Assessment  
215 Canon Drive

protection measures for the other oaks are provided in the Arborist Report and in the avoidance, minimization, and mitigation measures below.

**SPECIAL-STATUS PLANT SPECIES**

No special-status plant species were observed during the survey. The following fourteen (14) special-status plant species are documented by the CNDDB in the USGS Santa Barbara 7.5-minute quadrangle (CNDDB 2024):

- Coulter's saltbush (*Atriplex confertifolia*) (CRPR 1B.2, G3, S1);
- Davidson's salscale (*Atriplex serotoma* var. *davidsonii*) (CRPR 1B.2, G5, S2);
- Late-flowered mariposa-lily (*Calochortus limbinatus*) (CRPR 1B.3, G3, S3);
- Santa Barbara morning-glory (*Calystegia septium* ssp. *hughandiana*) (CRPR 1A, G5, SX)<sup>1</sup>;
- Umbrella larkspur (*Delphinium umbroclavatum*) (CRPR 1B.3, G3, S3);
- Ojai fritillary (*Fritillaria ojaiensis*) (CRPR 1B.2, G3, S3);
- Mesa horkelia (*Horkelia conserta* var. *puberula*) (CRPR 1B.1, G4, S1);
- Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) (CRPR 1B.2, G5, S2);
- White-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*) (CRPR 1B.3, G4, S3);
- Gambel's water cress (*Nasturtium gambelii*) (FE, ST, G1, S1, CRPR 1B.1);
- Black-flowered bigwort (*Scrophularia atrata*) (CRPR 1B.2, G2, S2);
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*) (CRPR 2B.2, G5, S2); and,
- Santa Ynez false lupine (*Thermopsis macrophylla*) (CRPR 1B.3, G1, S1).

Table with 2 columns: Conservation Status and Species Name. Includes categories like '1 Listing Status' (FE, FT, FC, SE, ST, SC) and 'Global State Rarity Ranking' (G1-S3, G4-S4, G5-S5, GX-SX).

Storror Environmental Services, LLC - 5 -

Biological Site Assessment  
215 Canon Drive

non-native ornamental trees will be mitigated for by planting three (3) native or non-native trees in the City's front yard setback easement, per the City's letter dated January 25, 2024.

**Impacts to Nesting Birds**

Project implementation will result in the removal of five (5) non-native trees and multiple non-native and native shrubs. This reduction in nesting habitat is not considered significant as it is a relatively small reduction in vegetation. Additionally, six (6) trees will be planted in the Survey Area to mitigate for tree removals and impacts to the coast live oak tree. With implementation of the recommended avoidance, minimization, and mitigation measures outlined below, including pre-construction nesting bird surveys, potential direct and indirect impacts to sensitive raptors and other nesting birds would be reduced to less than significant.

**RECOMMENDED AVOIDANCE, MINIMIZATION, MITIGATION MEASURES**

**MITIGATION FOR IMPACTS TO COAST LIVE OAK TREE AND NON-NATIVE TREE REMOVAL**

1. Plant three (3) 15-gallon coast live oak trees to mitigate for the significant encroachment into the CRZ of one coast live oak tree, per the Arborist Report (Spiewak 2024).
2. Plant three (3) non-native or native trees to mitigate for the removal of five (5) non-native ornamental trees, per the City's letter dated January 25, 2024.

**AVOIDANCE AND MINIMIZATION MEASURES**

3. Follow all Tree Protection Measures outlined in the Arborist Report dated February 26, 2024 (Spiewak 2024).
4. If possible, schedule construction to take place outside of the nesting bird season and prior to the start of the rainy season (i.e., between September 1 and November 1).
5. If work is implemented during the nesting bird season (February 1 through August 31), a qualified biologist will conduct a pre-construction survey of the adjacent habitat and work areas within 7 days of construction commencement (i.e., mobilization, staging, or post-hole excavation). Surveys will be conducted in all areas within 500 feet of proposed disturbance areas, or a lesser distance if dense vegetation renders a 500-foot survey radius infeasible. If breeding birds with active nests are found prior to (or during) Project construction, a qualified biologist will oversee the establishment of a buffer (prescriptively 300 feet for passerines and 500 feet for raptors) around the nest; no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. The prescribed buffers may be adjusted by a qualified biologist to reflect existing conditions, including but not limited to ambient noise, topography, and level of disturbance. Consultation with CDFW may be necessary to implement reduced nest buffers.
6. Precautions shall be taken to prevent sediment transport into San Roque Creek. Erosion control measures (e.g., silt fencing, jute netting, fiber rolls, gravel bags, etc.) shall be used (as necessary and in consultation the Project biologist) where sediment runoff from exposed areas could enter the creek. All erosion control materials shall be free from plastic to prevent entanglement of wildlife.

Storror Environmental Services, LLC - 9 -

Biological Site Assessment  
215 Canon Drive

Assessment, the Survey Area was limited to the northern portion of the property, where the ADU development is proposed (Figure 1 – Project Site & Vicinity).

The proposed Project entails the construction of an 800 square foot ADU, garage, driveway, retaining wall, stairway, and associated hard (i.e., concrete and gravel walkways), and landscaping (Figure 2 – Site Plan). A small bioretention basin will be constructed in the northeast corner of the Project Site to aide in proper site drainage. The Project will also result in the removal of five (5) non-native ornamental trees and encroachment into the critical root zone (CRZ) of one native coast live oak tree. Three (3) of these mature ornamental trees and one (1) immature ornamental tree will be removed from the City's front yard setback easement off Canon Drive. Approval for tree removals in the City's easement was granted in a letter dated January 25, 2024. Mitigation for these tree removals and encroachment into the coast live oak CRZ will be implemented as part of the Project, per this letter and the Arborist Report (Spiewak 2024).

**REGULATORY CONTEXT**

Sensitive biological resources including special-status plant and wildlife species, sensitive plant communities, wildlife corridors, nesting birds, and jurisdictional waters and wetlands, may be protected under various federal, state, and local (City) laws, regulations, and land use policies. These include the following:

- Federal Endangered Species Act (16 U.S.C. § 1531 et seq.);
- Migratory Bird Treaty Act (MBTA);
- Clean Water Act – Sections 404 and 401;
- California Endangered Species Act (California Fish and Game Code § 2050, et seq.);
- California Fish and Game Code Section 1600 et seq.;
- Native Plant Protection Act (California Fish and Game Code §§ 1900 - 1913, § 2062 and § 2067);
- City of Santa Barbara General Plan (City 2011); and,
- City of Santa Barbara Municipal Code (City 2023).

**METHODS**

**LITERATURE REVIEW**

Prior to the field surveys, SES reviewed available public domain information including the City of Santa Barbara Map Analysis and Printing System (MAPS) biological resources layers (City 2024), NRCS Web Soil Survey of Southern Coastal Santa Barbara County, California (NRCS 2024), USGS CA 7.5-minute quadrangle maps (CNDDB 2024), the National Hydrography Dataset (NHD) (USGS 2024), National Wetlands Inventory (NWI) (USFWS 2024), California Native Diversity Data Base (CNDDB 2024), CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2024a), and weather data. The CNDDB query provided locations of special-status plant populations, sensitive natural communities, and special-status wildlife documented within the Santa Barbara USGS CA 7.5-minute quadrangle.

Storror Environmental Services, LLC - 2 -

Biological Site Assessment  
215 Canon Drive

Plant species dependent on coastal dune or marsh/swamp habitats (e.g., Coulter's saltbush, Davidson's salscale, Santa Barbara morning-glory, and Gambel's water cress) are not expected to occur due to the lack of suitable habitat and distance of the Survey Area from the coast (approximately 3 miles). The following special-status plants require specific soil types, elevation, or chaparral and scrub habitats that are not present in the Survey Area: late-flowered mariposa-lily and mesa horkelia, white-veined monardella, and Santa Ynez false lupine. These are not expected to occur in the Survey Area.

Special-status plant species that have potential to occur in the riparian habitat along San Roque Creek (i.e., umbrella larkspur, Ojai fritillary, and black-flowered bigwort) were not observed during the February 2024 surveys and are not expected to occur for the following reasons: Ojai fritillary blooms February to May and is not present; both umbrella larkspur and black-flowered bigwort are perennial herbs that would have been identifiable to genus but no *Delphinium* or *Scrophularia* species were observed. Although the February 2024 field survey was conducted outside the typical blooming period for many special-status plant species that have been documented in the vicinity of the Survey Area the remaining species that have the potential to occur (i.e., Sonoran maiden fern, Santa Barbara honeysuckle, and Nuttall's scrub oak) are perennial species or evergreen shrubs which are all identifiable year-round, and are not present in or adjacent to the Survey Area.

**GENERAL WILDLIFE HABITAT**

The field survey enabled a characterization of habitat quality and assessment of potential for occurrence of special-status wildlife species in the vegetation communities within and surrounding the Survey Area. Although the property is near San Roque Creek, habitat quality in the Survey Area is low to moderate as the creek is separated from the property by Canon Drive and existing development. The Survey Area is undeveloped, but its small footprint does not offer significant refuge for wildlife in a developed neighborhood. The ornamental and native trees/shrubs on the property do provide nesting habitat for raptor and passerine bird species.

Eleven (11) bird species were observed during the survey including red-shouldered hawk (*Buteo lineatus*), American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), dark-eyed junco (*Junco hyemalis*), house finch (*Haemorrhbus mexicanus*), and lesser goldfinch (*Spinus psaltria*). Other wildlife species observed include western gray squirrel (*Sciurus griseus*).

**SPECIAL-STATUS WILDLIFE SPECIES**

No special-status wildlife species were observed during the field survey. The following twenty-five (25) special-status wildlife species have been documented in the USGS Santa Barbara 7.5-minute quadrangle or are known to occur in Mission Creek (CNDDB 2024; Stoeker 2002):

- Crotch bumble bee (*Bombus crotchii*) (SC, G3, S1);
- Globose dune beetle (*Coleus globosus*) (G1, S1);
- Monarch butterfly – California overwintering population (*Danaus plexippus* pop. 1) (FC, G4, S2);
- Busck's gallmoth (*Eugnosta busckiana*) (G1, S2);
- Tidewater goby (*Eucyclogobius newberryi*) (FE, SSC, G3, S3);
- Southern California steelhead (*Oncorhynchus mykiss iridensis*) (FE, SSC, G5, S1);

Storror Environmental Services, LLC - 6 -

Biological Site Assessment  
215 Canon Drive

7. Dust generated by grading and excavation activities should be kept to a minimum with goal of reducing impacts to adjacent native habitat. A water truck or sprinkler system should be used to prevent excessive dust.
8. All motorized equipment used shall be maintained in proper working condition and shall be free of drips and leaks of coolant, hydraulic, and petroleum products. No equipment shall be used for the Project unless such equipment is free of leaks and drips.
9. Trash and food items will be kept in closed containers and removed daily.

Storror Environmental Services, LLC - 10 -

Biological Site Assessment  
215 Canon Drive

**FIELD SURVEY**

A field reconnaissance was conducted on February 15, 2024 by biologists Justine Cooper and Sophia Manning. The objective of the survey was to enable a characterization of the biological attributes within and adjacent to the Project Site, with emphasis on native vegetation and wildlife habitat. Vegetation communities and protected trees were mapped using an iPad tablet with ArcCollector, an EOS Arrow 100 Global Navigation Satellite System (GNSS) receiver, and aerial imagery from Google Earth (Figure 3 – Vegetation Communities & Biological Constraints).

**TRIED ARBORIST**

Certified arborist Bill Spiewak conducted a tree survey of the Survey Area in January 2024 to inventory, assess, and address potential impacts to mature specimen trees from the proposed Project (Spiewak 2024). Assessment included identifying species, measuring diameter at breast height (DBH), critical root zone (CRZ), assessing tree health/condition, and summarizing potential Project impacts and percent encroachment into the CRZ for native trees. A Tree Assessment, Protection, and Mitigation Plan (Arborist Report) prepared on February 26, 2024 summarized his findings. The Arborist Report also includes mitigation recommendations and Tree Protection Measures for pre-construction, during construction, post construction, and mitigation planting. The Arborist Report is included as Attachment B.

**EXISTING CONDITIONS**

The following sections describe environmental conditions in the Survey Area including vegetation communities, wildlife habitat, and special-status plant and wildlife species documented during the field survey. Representative photographs of existing conditions in the Survey Area are provided as Attachment A.

**HYDROLOGY**

As mentioned above, the closest drainage to the Survey Area is San Roque Creek which is approximately 250-300 feet northwest of the Survey Area and separated by Canon Drive and the single-family residences across the street (Figure 1 – Project Site & Vicinity). San Roque Creek is an intermittent drainage that is a U.S. Fish and Wildlife Service (USFWS)-designated critical habitat for southern California steelhead (*Oncorhynchus mykiss iridensis*). The City of Santa Barbara General Plan requires a 50-foot setback from top-of-bank (TOB) for new development (City 2011).

A large portion of the Survey Area consists of a relatively steep facing slope that flattens out at the northern extent of the Survey Area, adjacent to Canon Drive (see Attachment A). This slope directs stormwater runoff towards Canon Drive and presumably into San Roque Creek.

**VEGETATION COMMUNITIES**

There are two vegetation communities present in the Project Site: annual brome grassland and ornamental trees/landscape plantings. Descriptions of vegetation communities are adapted from *A Manual of California Vegetation, Second Edition* (MV-II) (Sawyer et al. 2009) and *A Manual of California Vegetation Online* (CNPS 2024b) and are described below. Protected trees (i.e.,

Storror Environmental Services, LLC - 3 -

Biological Site Assessment  
215 Canon Drive

- California red-legged frog (*Rana draytonii*) (FT, SSC, G2, S2);
- Coast range newt (*Taricha torosa*) (SSC, G4, S4);
- Northern California legless lizard (*Uta stansburiana pulchra*) (GS, S3);
- Westernstern pond turtle (*Emys marmorata*) (SSC, G3, S3);
- Coast horned lizard (*Phrynosoma blainvillii*) (SSC, G3, S3);
- Coast patch-nosed snake (*Salvadora hexalepis virgatae*) (SSC, G5, S2);
- Two-striped garter snake (*Thamnophis hammondi*) (SSC, G4, S3)
- Cooper's hawk (*Accipiter cooperii*) (GS, S4);
- Western snowy plover (*Charadrius nivosus nivosus*) (FT, SSC, G3, S2);
- Yellow rail (*Coronicorax noveboracensis*) (G4, S1);
- Snowy egret (*Egretta thula*) (GS, S4);
- White-tailed kite (*Elanus leucurus*) (FP, GS, S3);
- California black rail (*Lateralus jamaicensis cotternicus*) (ST, G3, S1);
- Black-crowned night heron (*Nycticorax nycticorax*) (GS, S4);
- California brown pelican (*Pelecanus occidentalis californicus*) (FP, G4, S3);
- Bank swallow (*Icthyophaga spiza*) (GS, S2);
- California least tern (*Sterna antillarum browni*) (FE, SE, G4, S2);
- Townsend's big-eared bat (*Corynorhinus townsendii*) (SSC, G3, S2); and,
- Big free-tailed bat (*Myotisotis macrootis*) (SSC, GS, S3).

Wildlife species dependent on coastal dune, beach, or brackish water, vernal pond, wetland habitats (e.g., globose dune beetle, Busck's gallmoth, tidewater goby, western snowy plover, yellow rail, snowy egret, California black rail, black-crowned night heron, California brown pelican, bank swallow bank swallow, and California least tern), are not expected to occur in the Survey Area due to the lack of suitable habitat and distance from the coast (approximately 3 miles).

The following special-status wildlife species require specific soil types, elevation ranges, open grassland, chaparral, scrub, or wind protected grove habitats that are not present in or adjacent to the Survey Area. Crotch's bumblebee, monarch butterfly, white-tailed kite, coast horned lizard, and coast patch-nosed snake. These species are not expected to occur in or adjacent to the Survey Area.

Nearby San Roque Creek is USFWS-designated critical habitat for Southern California steelhead and could also be inhabited by several special-status amphibious and/or reptilian species (i.e., California red-legged frog, coast range newt, southwestern pond turtle, and two-striped garter snake) (CNDDB 2024). Proposed development is 250-300 feet from the riparian corridor of San Roque Creek and is separated by Canon Drive and existing development. Project implementation will not result in impacts to fish and amphibious species that do or could occur in San Roque Creek. Potential temporary impacts are limited to water quality degradation from Project runoff which can be avoided by implementing proper erosion and sediment controls during construction.

Sensitive bat species (i.e., Townsend's big-eared bat, big free-tailed bat) have the potential to use habitat along San Roque Creek and structures in the residential neighborhoods around the Survey Area for roosting and nesting. Townsend's big-eared bat and big free-tailed bat have been documented roosting in buildings or other structures. Although, Townsend's big-eared bat is

Storror Environmental Services, LLC - 7 -

Biological Site Assessment  
215 Canon Drive

**LITERATURE CITED**

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Storror Environmental Services, LLC - 11 -

Biological Site Assessment  
215 Canon Drive

coast live oak) mixed in with the ornamental trees were mapped separately and discussed in more detail below.

Vegetation communities and tree canopies within the Survey Area were mapped based on field observations and are depicted in Figure 3.

**Annual Brome Grassland (*Bromus* spp. – Mixed Herbs Herbaceous Semi-Natural Alliance)**

Open areas in the Survey Area and the majority of the understory of coast live oak and ornamental trees is made up of annual brome grassland (see Attachment A, Figure 3 – Vegetation Communities & Biological Constraints). This community is dominated by non-native grasses and forbs such as brome (*Bromus* spp.), perennial veldt grass (*Ehrharta calycina*), Bermuda baretcup (*Cynodon pectinatus*), common southwile (*Sonchus oleraceus*), and common chickweed (*Cerastium fontanum*). Escaped herbaceous ornamental species such as calla lily (*Zantedeschia aethiopica*) and garden nasturtium (*Tropaeolum majus*) are also mixed in with this community.

**Ornamental Trees/Landscape Plantings**

Ornamental trees and landscape plantings are present throughout the Survey Area, but mainly occur adjacent to Canon Drive and in the middle portion of the Survey Area (see Attachment A, Figure 3 – Vegetation Communities & Biological Constraints). This vegetation type is not a recognized community in MV-II, as it consists of species not native to the region that have been planted and/or exotic species that typically don't occur in the natural landscape outside of urban/residential areas.

Ornamental trees/landscape plantings in the Survey Area include: jacaranda (*Lacaranda mimosifolia*), olive (*Olea europaea*), glossy privet (*Ligustrum lucidum*), Victorian box (*Pittosporum undulatum*), cotoneaster (*Cotoneaster* spp.), cape honeysuckle (*Tecoma capensis*), jade (*Crassula ovata*), and plumbago (*Plumbago* spp.). Several native shrubs and trees are mixed in with the ornamental trees including coast live oak (*Quercus agrifolia*), California bay (*Umbellularia californica*), toyon (*Heteromeles arbutifolia*), elderberry (*Sambucus mexicana*), and holyleaf cherry (*Prunus ilicifolia*). Mature ornamental trees to be removed for the Project include three (3) jacaranda and two (2) olive trees. Several immature to small ornamental and native shrubs/trees will also be removed. All inventoried ornamental trees were found to be in poor to fair condition (Spiewak 2024). The native shrubs/trees, excluding the coast live oak trees, were all relatively small and in fair to moderate health. City required mitigation for the removal of ornamental trees is provided in the avoidance, minimization, and mitigation measures below.

**Individual Coast Live Oak Trees**

There are seven (7) coast live oak trees in the Survey Area. Two of these trees are actually on the adjacent property to the southwest, but their canopies extend into the Survey Area (see Attachment A, Figure 3 – Vegetation Communities & Biological Constraints). The coast live oak trees are situated along the perimeter of the Survey Area with some canopies extending toward the central portion of the Survey Area. Individual coast live oak trees are protected per City policies.

The Project will not result in removal of coast live oak trees, but it will significantly encroach (i.e., greater than 20%) into the critical root zone (CRZ) of the large coast live oak tree on the eastern perimeter of the Survey Area (Spiewak 2024). Mitigation for this impact and recommended tree

Storror Environmental Services, LLC - 4 -

Biological Site Assessment  
215 Canon Drive

generally found near caves and big free-tailed bat roost mainly in crevices and rocks in cliff situations. Project implementation is not expected to result in impacts to sensitive bat species.

Northern California legless lizard could occur in Survey Area under coast live oak tree canopies, but it is unlikely as there is little refugia (i.e., leaf litter and woody detritus) amongst the grassland understory. Cooper's hawk and other raptors could nest in the large coast live oak trees in the Survey Area. Smaller trees and shrubs could provide habitat for passerine species as well.

**IMPACT DISCUSSION**

One of the primary objectives of this Assessment is to describe the Survey Area's biological resources and applicable federal, state, and local regulatory policies and development standards. The following sections summarize the biological constraints identified in the Survey Area and provide recommendations to assist with the planning and permitting process.

**SUMMARY OF PROJECT IMPACTS**

Project implementation will result mostly in impacts to annual brome grassland and ornamental trees/landscape plantings. Removal of native shrubs intermixed with the ornamental trees/landscape plantings is considered insignificant as many of these shrubs are young and together do not constitute a sensitive native vegetation community. It was verified in the field that there is no riparian or wetland habitat in the Survey Area, as depicted in the City of Santa Barbara MAPS creek and wetland habitats layer.

Impacts to sensitive biological resources are limited to impacts to one individual coast live oak tree and nesting birds. There is no ESH within the Survey Area and no special-status plant or wildlife species, excluding Cooper's hawk, are expected to occur within the Survey Area.

**Impacts to Native Trees**

No coast live oak trees will be removed as a result of the Project. However, Project implementation will result in significant encroachment into the CRZ of the large coast live oak tree on the eastern Survey Area perimeter (Spiewak 2024). This oak and the other six (6) oak trees in the Survey Area will be protected during construction per the Tree Protection Measures provided in the Arborist Report (Spiewak 2024).

Per City of Santa Barbara Municipal Code 22.10.060, any oak tree with a minimum trunk diameter of four inches measured four feet from the base of the trunk that is removed shall be replaced by five oak trees of the same species elsewhere on the lot. Replaced oak trees shall be effectively maintained. Significant encroachment into the CRZ of one coast live oak tree will be mitigated for by planting three (3) 15-gallon saplings, per the Arborist Report (Spiewak 2024). Considering the coast live oak tree that is being impacted is not being removed and the mitigation trees will be more developed, the arborist recommended 3:1 replacement ratio will provide adequate mitigation for Project impacts.

**Impacts to Non-native Trees**

Five (5) non-native ornamental trees will be removed as part of the Project: three (3) jacaranda and two (2) olive trees. These tree removals have been approved by the City. The removal of the

Storror Environmental Services, LLC - 8 -

Biological Site Assessment  
215 Canon Drive

Please contact me if you have any questions regarding our findings or recommendations.

Sincerely,

Justine Cooper  
Biologist  
Storror Environmental Services, LLC

Attachments: Figures  
Site Photographs  
Arborist Report

Storror Environmental Services, LLC - 12 -

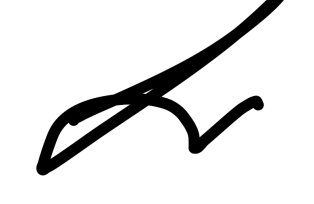
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Stamp/Signatory:

Sergio Ormachea



PLN2023-00393

Planning Submittal 2023-09-15

Table with 2 columns: Revisions and Dates. Includes revision 2: Response to 2nd review 2024.04.15.

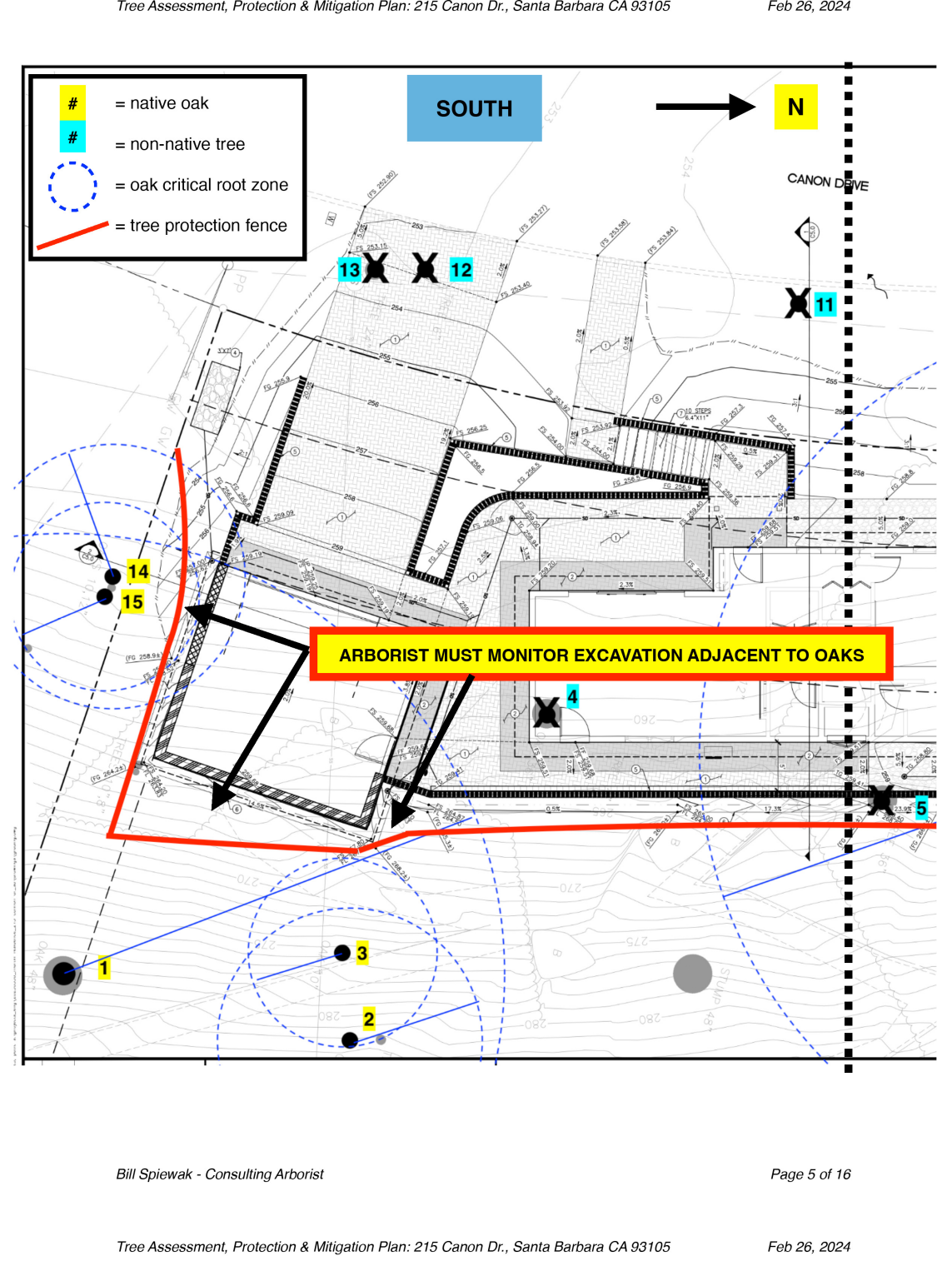
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Sergio Ormachea

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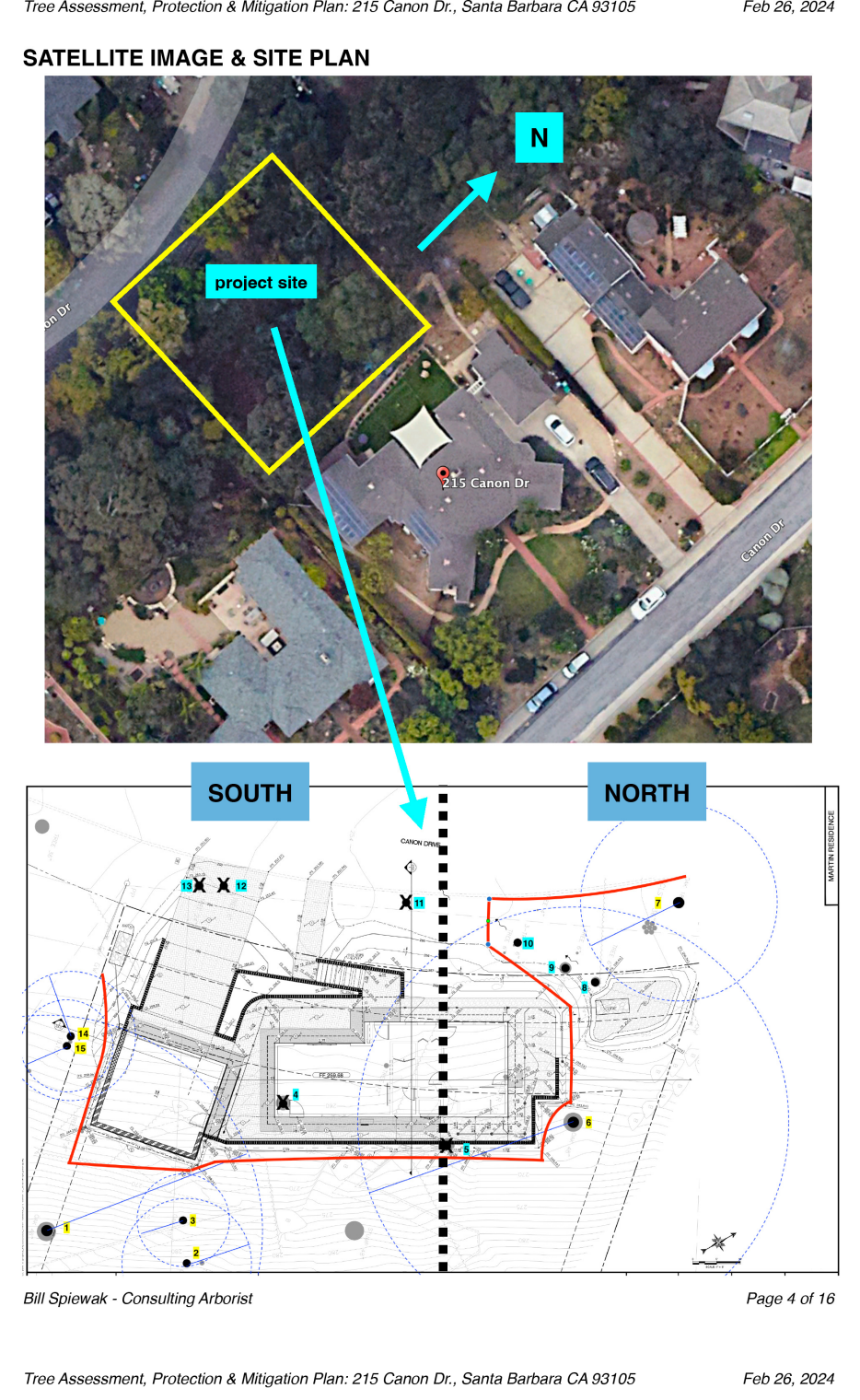
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Sheet Title:  
**Arborist Report**

Sheet No.:  
**A0.11**



Bill Spiewak - Consulting Arborist Page 5 of 16



Bill Spiewak - Consulting Arborist Page 6 of 16

**Landscaping Installation**

- Use smaller plants in sensitive root areas to avoid damage to protected trees.
- Avoid excess irrigation to protected trees as determined by species.
- Use plants compatible in water requirement with protected trees.
- Avoid digging trenches to install irrigation and lighting within TPZs. Look for direction from the project arborist if questions arise.
- If installing lighting on trees, avoid grinding trunks and limbs with permanent ties. Fasteners that screw into the trunk and limbs should be approved prior to installation.

**POST CONSTRUCTION Irrigation**

- The extent of irrigation is dependent upon root damage during construction, weather conditions, time of year, drought and potential pests and diseases. Each tree or group of trees should be assessed by the project arborist prior to recommending irrigation, if any.

**Pruning**

- Pruning is also dependent on tree condition, time of year, potential risks, and location.
- Pruning needs should be assessed at completion of the project.
- Pruning should be performed or supervised by a qualified Certified Arborist.
- The project arborist should review the goals with workers prior to commencement of any tree pruning.
- Tree workers should be knowledgeable of ISA Best Management Practices for Tree Pruning and ANSI A300 Pruning Standards.

**Pest and Disease**

- Oaks are susceptible to assorted pests and diseases, which vary during time of year.
- Potential pest and disease susceptibility and treatment should be assessed at completion of the project. Due to the nature of some treatments that use pesticides, options should be discussed rather than implementing a non-acceptable application of chemicals.

**TREE MITIGATION PLANTING**

- Plant three-15 gallon oaks on site to mitigate the impact to one oak.
- Plant 3 other native or non-native trees in 15-gallon size, to mitigate the removal of set back trees. This is based on a prior City approval letter.
- Newly planted trees must be of high quality and not have circling or girdling roots.
- Trees must be structurally sound and free of pest and disease.
- Refer to the Landscape Plan for the location of the trees.

Bill Spiewak - Consulting Arborist Page 9 of 16

**TREE INVENTORY**

- The numbers in the table below correspond with the numbers on the site plan.
- Note that DBH is diameter at breast height measured, in inches, at 54" above ground.
- CRZ is critical root zone and is a radius in feet and provided for only native trees.
- Condition is a rating of tree health and structure as good, fair, or poor.
- % of Encroachment into CRZ greater than 20% is considered a significant impact and requires mitigation planting at a ratio of 3:1 with 15 gallon oaks.
- Cells highlighted in yellow indicate the significant impact to the native oak.

#	Type	DBH	CRZ	Cond	Comment	% of Encroachment into CRZ	Potential Project Impact
1	Oak	48	48	F	Significant lean to northwest over proposed structure, approx 50' tall, very old tree	< 20% encroachment into west side of CRZ	No significant impact
2	Oak	14	14	F	Significant lean to west but much less massive than #1	no encroachment	None
3	Oak	10	10	F	Significant lean to west but much less massive than #2	no encroachment	None
4	Olive	5/4/3		F	Small volunteer in footprint	100%	Remove
5	Olive	12/10/6		F	Volunteer, topped, in footprint	100%	Remove
6	Oak	48	48	F	Massive tree with overhanging structure to south and west, trunk is mostly vertical	> 20% encroachment into south & west sides of CRZ	Significant impact
7	Oak	22	22	F	Topped under high voltage, ivy on trunk	< 20% encroachment into east side of CRZ	No significant impact
8	Olive	7/6/4		p	Decayed limbs, topped, in decline, very close to grading	Grading at trunk	Likely impact
9	Olive	12/7/6/5		F	Decayed limbs, topped, in decline, very close to grading	Grading at trunk	Likely impact
10	Olive	5/5/5		F	Decayed limbs, topped, in decline, very close to grading	Grading at trunk	Likely impact
11	Jacaranda	10		p	Topped below wires, not in path of project but very poor tree	None	Remove
12	Jacaranda	6		p	Topped below wires, in proposed driveway	100%	Remove
13	Jacaranda	11/14		p	Topped below wires, in proposed driveway	100%	Remove
14	Oak	14	14	F	Neighbors tree, significant lean to south	< 20% encroachment into west side of CRZ	No significant impact
15	Oak	10	10	F	Neighbors tree, significant lean to south	< 20% encroachment into west side of CRZ	No significant impact

**CONCLUSIONS**

- No oak trees will be removed for the project.
- One oak tree will be significantly impacted due to greater than 20% encroachment into its CRZ.
- Tree protection measures in this report must be followed to minimize impacts to retained trees.
- The significantly impacted oak will require mitigation planting at 3:1 with 15-gallon oak trees or nine trees. Refer to the Landscape Plan for the location of the 3 mitigation trees.
- The other tree removals should be mitigated by planting 3 natives or non-natives that are at least 15-gallon in size. This is based on a prior approval letter from the City of Santa Barbara.

Bill Spiewak - Consulting Arborist Page 2 of 16

**BACKGROUND**

The subject property owners are proposing to build a special accessory dwelling unit on the western portion of their property. There are multiple native and non-native trees on the site within the parameters of construction. I was retained to inventory the trees, assess their condition, and prepare a report with my analysis of potential impacts from construction along with protection and mitigation measures. I was on the site during January 2024.

**PROJECT SCOPE**

In order to fulfill my assignment, the following tasks were required:

- Compare the site plan with my actual field observations.
- Inventory the trees and assess their condition.
- Prepare a spreadsheet with all data and draw the critical root zones on the site plan.
- Prepare this preliminary report.

**LIMITS OF THIS REPORT**

I have included all oaks on the site that are 4" in diameter and greater and 7 non-native trees including three Jacarandas and four olive.

**OBSERVATIONS**

- The subject property is slightly larger than one half acre. The developed portion is on the eastern half of the site. The western half of the site is undeveloped portion and the location of the proposed project.
- The project site is on a relatively steep western facing slope that is bordered on its west side by the western leg of Canon Drive. (Note that Canon Drive is a large loop that also borders the property on the eastern side and provides access to the existing residence).
- On the project site there are multiple trees and shrubs. I've identified 7 native California Live oaks (*Quercus agrifolia*), including two along the adjacent southern neighbor's property. I also inventoried 5 olives and 3 Jacaranda trees, all non-natives and mostly in fair to poor condition. Several tree/shrubs including pottedporum and Catalina cherry (which were not inventoried). See the site plan and spreadsheet for the location and information on each tree.
- The trees on the site have been mostly unmanaged although two of the larger oaks were recently pruned and another rotten tree had been removed (stump remains).
- The non-native olives and Jacarandas have been severely pruned, likely by the utility contractors as they are close to the overhead high voltage wires.
- There are two very large and mature oaks in the upper northern and southern corners of the project site, which are concerning due to their mass, elevation above the roots, and some of their overhanging limbs. It is likely that additional pruning and possibly tree support systems will need to be installed to mitigate potential risks to the new structures, once completed.
- Other oaks are smaller and better positioned so as not to pose significant risks not be impacted from construction.
- Several of the non-native trees and shrubs are within the proposed building footprint and will be removed.
- In addition, permits have been obtained from the City of Santa Barbara to remove several olives and Jacarandas that are within the front yard set back and in conflict with the proposed driveway and structure.

Bill Spiewak - Consulting Arborist Page 3 of 16

**TREE PROTECTION MEASURES**

The objectives of tree protection measures include:

- Avoiding or minimizing physical loss of soil and roots that can affect the health and stability of trees.
- Avoiding compaction of soil in root zones that damages soil structure and can impact the growth of roots.
- Avoiding physical damage to the trunk and crown of trees.
- Minimizing changes in water flow to root zones.
- Directing roots and limbs away from infrastructure and potential conflicts.

Each of the subheadings below address the different phases of tree protection prior to, during, and after construction.

**PRE-CONSTRUCTION**

**Pre-Con Meeting, Fencing and Signage**

- The project arborist must be invited to the pre-construction meeting with contractors prior to commencement of construction to discuss tree protection measures.
- In designated areas, install fences to establish TPZs (tree protection zones).
- TPZs are necessary to keep out construction activities, equipment, storage of materials, and dumping of spoils.
- Chain-link fencing is necessary adjacent to oaks #1, #6 and #7.
- Orange construction fencing will be allowed adjacent all other retained trees.
- Fences must remain upright and secure throughout the duration of the project.

**Egress and Staging**

- There is adequate area on the site for ingress/egress and staging of materials that avoids the tree protection zones.

**Tree Care: Pruning & Irrigation**

- Prior to construction, any tree limbs that are in conflict with construction activities may be pruned under supervision of the project arborist. Be selective when pruning oak #6.
- Trees with roots that may be impacted from excavation, trenching, or any other construction activities, should be considered for irrigation, especially during summer months. The project arborist should make the determination of the irrigation quantity, frequency, and area.

**CONSTRUCTION**

**Site Monitoring**

- Activities within construction areas where trees are to be protected, must be monitored by the project arborist.

**Vegetation Removal**

- Vegetation within TPZs should be removed with manual tools. Stumps in close proximity to protected trees should be cut close to ground or turned to sawdust with a stump grinder. Do not put large slumps with heavy equipment in close proximity to protected trees.

Bill Spiewak - Consulting Arborist Page 7 of 16

**Bill Spiewak CONSULTING ARBORIST**  
Registered Consulting Arborist #381 • American Society of Consulting Arborists

February 26, 2024

**TREE ASSESSMENT, PROTECTION AND MITIGATION PLAN**  
Project Location: 215 Canon Dr., Santa Barbara CA 93105

prepared for:  
Sergio Ormachea - Vanguard Planning  
sergio.ormachea@vanguardplanning.com / (805) 320-6106

**SUMMARY**  
The subject property owners are proposing to build an accessory dwelling unit on the west side of their parcel. The project will include the new residence, a detached garage and a new driveway. There are 15 trees on the site including 7 native oaks (2 are on the southern neighbor's property) and 8 non-native trees. There are also several pottedporum and privet that were not included in this assessment.

I was retained to inventory, assess, and address potential impacts to trees from the proposed improvements. I was also asked to provide a report with my findings and recommendations.

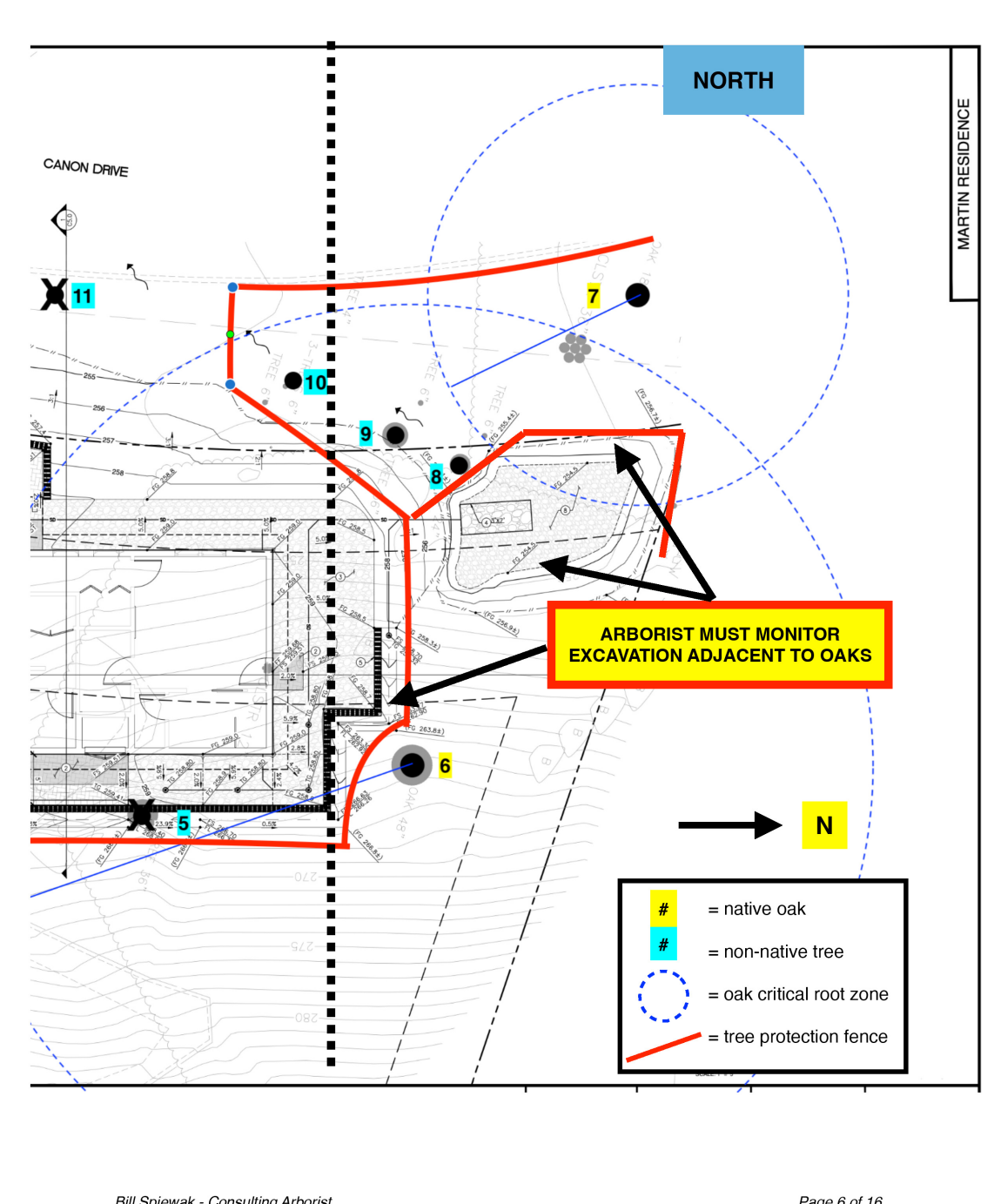
I determined that none of the oaks will be removed, but one will be significantly impacted. This tree must be mitigated by planting three 15-gallon oaks on site. The placement of these tree will be shown on the landscape plan. Two olives and three Jacaranda will also be removed for which a permit from the Parks Department was obtained. These trees will be mitigated by planting three additional native or non-native trees, as per prior city approval. Tree protection measures in this report will be required to protect the retained native and non-native trees.

**TABLE OF CONTENTS**

- BACKGROUND 2
- PROJECT SCOPE 2
- LIMITS OF THIS REPORT 2
- OBSERVATIONS 2
- TREE INVENTORY 3
- CONCLUSIONS 3
- SATELLITE IMAGE & SITE PLAN 4
- TREE PROTECTION MEASURES 7
- PRE-CONSTRUCTION 7
- CONSTRUCTION 9
- POST CONSTRUCTION 9
- TREE MITIGATION PLANTING 9
- REFERENCES 10
- ARBORIST'S DISCLOSURE AND CERTIFICATION OF PERFORMANCE 10
- PHOTOS 11

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Bill Spiewak - Consulting Arborist Page 6 of 16



Bill Spiewak - Consulting Arborist Page 8 of 16

**General Notes**

1. Install slab-on-grade to meet **R506.2.3 Vapor retarder**. A 6-mil (0.006 inch) polyethylene or approved vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where a base course does not exist.  
**Exception:** The vapor retarder is not required for the following:  
1. Garages, utility buildings and other unheated accessory structures.  
2. For unheated storage rooms having an area of less than 70 square feet (6.5 m2) and carports.  
3. Driveways, walks, patios and other flatwork not likely to be enclosed and heated at a later date.  
4. Where approved by the building official, based on local site conditions.  
**R506.2.3.1 Capillary break.** When a vapor retarder is required, a capillary break shall be installed in accordance with the California Green Building Standards Code, Chapter 4, Division 4.5.  
**CGBC 4.505.2.1 Capillary break.** A capillary break shall be installed in compliance as follows:  
A 4-inch-thick base of 1/2 inch (12.7 mm) or larger clean aggregate shall be provided with a vapor retarder in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Install new windows and exterior doors and hardware.
3. Install new interior doors, closet doors, and hardware.
4. Install new exposed concrete floor having a seamless transition to new concrete exterior walkways.
5. Install new window coverings.
6. Paint interior walls and painted doors throughout.
7. Install new ductless HVAC system distributed via flush ceiling cassettes. Equipment on roof.
8. Install interior and exterior lighting throughout with 2" can lighting.
9. Fixtures, finishes and casework to be specified by Interior Designer, Bailey Peace Design
10. Quality Insulation Installation is required. See A4.1 for QII information.
11. Sewer easement along west property line.
12. Provide water-conserving plumbing fixtures as noted in Keynotes per CGBC Section 4.303.
13. Lighting fixtures by <https://www.corelightingusa.com/>, coordinate with Owner and Architect in field
14. Exterior stairway illumination. Exterior stairways shall be provided with an artificial light source located at the top landing of the stairway. CRC R303.8

**Legends**

Electrical / Mechanical Legend		Wall Legend	
Light Fixture	⊕	Existing Wall	▬
Single gang Light Switch	⊕	Demolished Wall	- - -
Double gang Light Switch	⊕ <sub>2</sub>	New Wall	▬
Triple gang Light Switch	⊕ <sub>3</sub>		
Receptacle	⊕		
Receptacle w/ Ground Fault Interrupter	⊕GFI		
Exhaust Fan	⊕		
Smoke + Carbon Monoxide Alarm	⊕		
Supply Air Vent	⊕ <sub>S</sub>		
Return Air Vent	⊕ <sub>R</sub>		

**Window Notes**

1. Window Systems to match existing home, or equal system
2. Order & store all window screens, installation timing TBD by Owner
3. All windows are trimless
4. Window hardware specification by Interior Designer
5. NFRC thermal performance labels shall remain on the glazing until final inspection
6. All windows are dual-glazed, tempered glass meeting CRC R337.8.2.1, and R308.1 Safety Glazing

**Door Notes**

1. Western Window Systems, Performance Line, Bronze Anodized, or equal system
2. Order & store all sliding door screens, installation timing TBD by Owner
3. All interior doors are trimless
4. Door hardware specification by Interior Designer
5. NFRC thermal performance labels shall remain on the glazing until final inspection

Note	Comment
1	Install Smoke Detector + CO Alarm as required per CRC R314.3.1 & CRC R315.2.3
2	Install Entry door. Required egress door per CRC R311.2. Minimum clear width of 32 inches, minimum height of 78 inches and side hinged. Flush threshold conforms to CRC R311.3.1. (1.5" max. threshold)
3	Install Thermostat
4	Install GFCI receptacles at kitchen and bath counters
5	Install High efficacy lighting
6	Install Electric Range with exhaust hood venting directly to outside with an exhaust rate of 100 cfm minimum for intermittent exhaust or 5 air changes per hour if continuous. [California Energy Code Section 150(o)]
7	Install Floating Shelves
8	Install electric multi-zone heat pump system with three indoor ductless fan coils (ceiling-recessed), with condensate waste from each routed to and discharged at an approved location. (CMC 310)
9	Install Wall-mounted water closet, minimum 1.28 gallons of water per flush. Provide 30" min. width and 24" min. clear space in front per CPC 407.5. Install solid blocking for future grab bars in Bath 2.
10	Install Lavatory + Faucet, maximum flow rate of 1.2 gpm at 60 psi, Vanity by Owner
11	Install Shower + Showerhead, maximum 2.0 gpm at 80 psi. Install solid blocking for future grab bars in Bath 2.
12	Install 50 CFM Exhaust Fan with Humidistat
13	Install Refrigerator as required by CRC R304.5.3
14	Install Kitchen sink and faucet, maximum 1.8 gpm at 60 psi
15	Install Cabinets and solid surface countertop
16	Install Electrical panel sized for all electrical appliances, provide 30" wide x 3' deep working clearances at panel. CEC Sec. 110.26 (A) (1) (2) & Table 110.26 (A) (1). Provide 6"x6" headroom at service panel. CEC 110.26 (2) & (3).
17	Install Gas Tankless Water Heater, 0.96 uef, <= 200 kBtu/hr
18	Install Velux FCM 2234 Fixed Skylight, U-factor 0.48, SHGC 0.29, approved for high fire.
19	Install 16" wide Dishwasher
20	Install Broom + Mop rack
21	Install closet rod and shelf
22	Install Mini Split System, Mitsubishi Multi-Zone Heat Pump, SEER 14. Meet the requirements of ANSI/ASHRAE Standard 62.2 for whole-building mechanical ventilation, CGBC 4.507 and CA Energy Code 150(o). Provide 30" wide x 30" deep x 30" high working clearance.
23	Build Retaining Wall
24	Install Mirror above sink
25	Install Washer and Dryer with Gas and Electric connection options. Install water, waste and vent
26	Install Concrete Slab with vapor retarder providing capillary break per CGBC 4.505.2. See sheet A0.2.
27	Install built-in bar & BBQ
28	Finish Outdoor Shower in metal paneling
29	Install Electrical subpanel, min. 200 amps
30	Clothes dryer moisture exhaust ducts shall terminate outside the building and have a back-draft damper. Exhaust duct is limited to 14' with two elbows. This shall be reduced 2' for every elbow in excess of two. Minimum 4" diameter, smooth, metal duct.
31	Install Range with Gas and Electric connection options.
32	Roof Overhang above.
33	Install 36" Built-in Gas Fireplace.
34	Planter box, w/ area drain.

Type Mark	Description	Count	Door		Comments
			Width	Height	
01	Ext. Solid core, with glass	3	3' - 0"	6' - 8"	U-factor 0.42, SHGC 0.3, Aluminum extrusion, non-combustible.
02	Ext. Solid core, with glass and a doggie door.	1	2' - 8"	6' - 8"	
03	Ext. Double solid core	1	4' - 0"	6' - 8"	Utility door
04	Int. wood solid core	2	2' - 8"	6' - 8"	
05	Int. wood solid core	2	2' - 6"	6' - 8"	
06	Int. Double wood	1	4' - 6"	6' - 8"	
07	Int. Wood bifold - 4 panel	1	5' - 0"	7' - 0"	Louvered door, minimum opening of 100 in2 shall be provided.
08	Int. Wood Pocket	1	3' - 0"	6' - 8"	
09	Ext. Sliding Glass	2	6' - 0"	6' - 8"	
10	Garage door	1	16' - 0"	7' - 0"	
Grand total: 15					

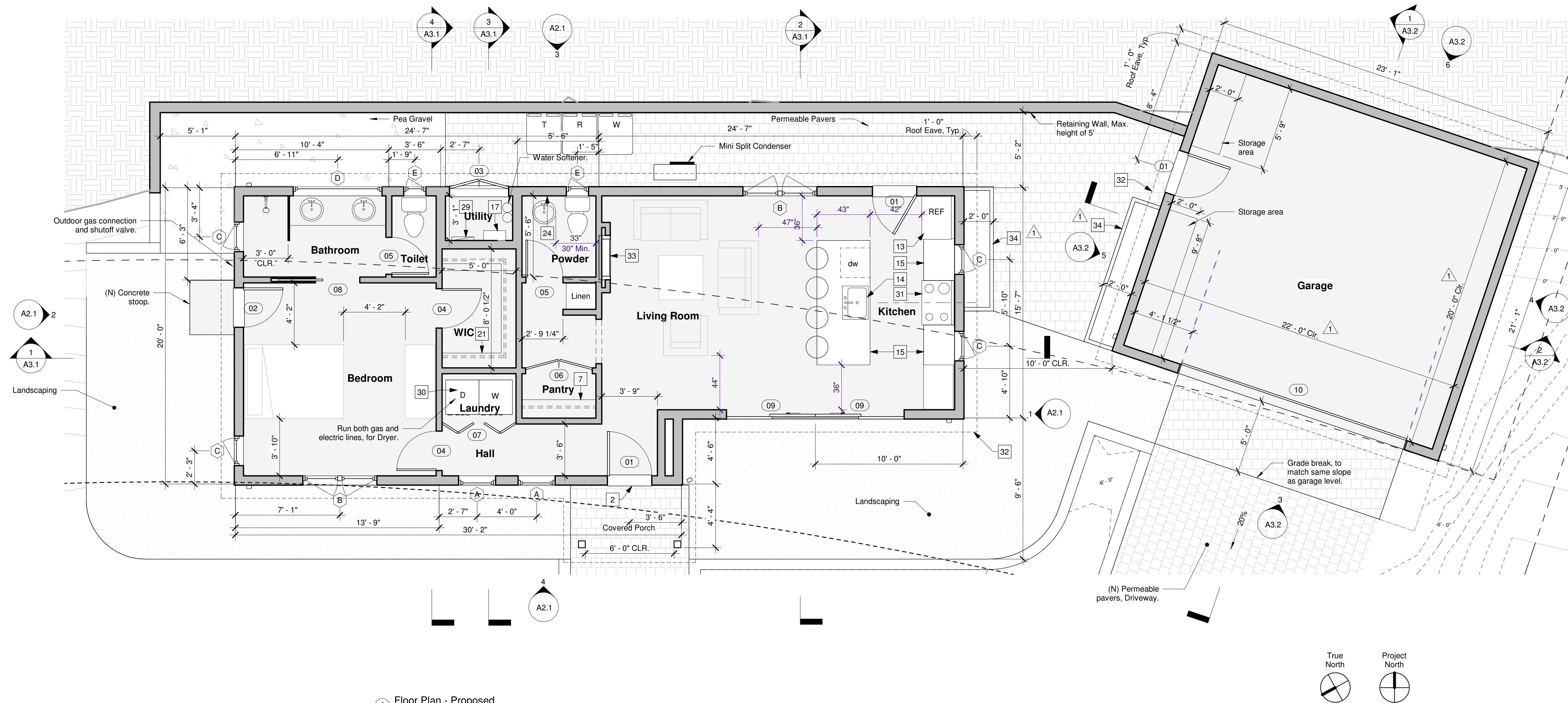
**Door Schedule Note:**

\*All exterior doors shall be solid core, all stile and rails shall not be less than 1-3/8 inches thick, raised panels shall not be less than 1-1/4 inches thick, except for the exterior perimeter of the raised panel that may taper to a tongue not less than 3/8 inch thick.

Type Mark	Description	Count	Size		Head Height	Comments
			Width	Height		
A	Fixed	2	2' - 6"	5' - 0"	6' - 8"	
B	Double Casement	2	5' - 0"	5' - 0"	6' - 8"	
C	Casement	4	2' - 0"	2' - 6"	6' - 8"	U-factor 0.42, SHGC 0.3
D	Awning	1	6' - 0"	2' - 0"	6' - 8"	
E	Casement	2	1' - 6"	2' - 0"	6' - 8"	U-factor 0.42, SHGC 0.3
Grand total: 11						

**Window Schedule Notes:**

1. All new and existing windows subject to CRC Section R337 are to be double pane glazing with a minimum of one tempered pane.
2. The NFRC thermal performance labels shall remain on the windows and/or doors until final inspection.



1 Floor Plan - Proposed  
1/4" = 1'-0"

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**Sergio Ormachea**

**PLN2023-00393**

Planning Submittal	2023-09-15
Revisions:	
▲ Response to 1st Review	2024-03-14
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Sheet Title:  
**Proposed Floor Plan**

Sheet No.:  
**A1.1**

### Fire Protection Systems Notes

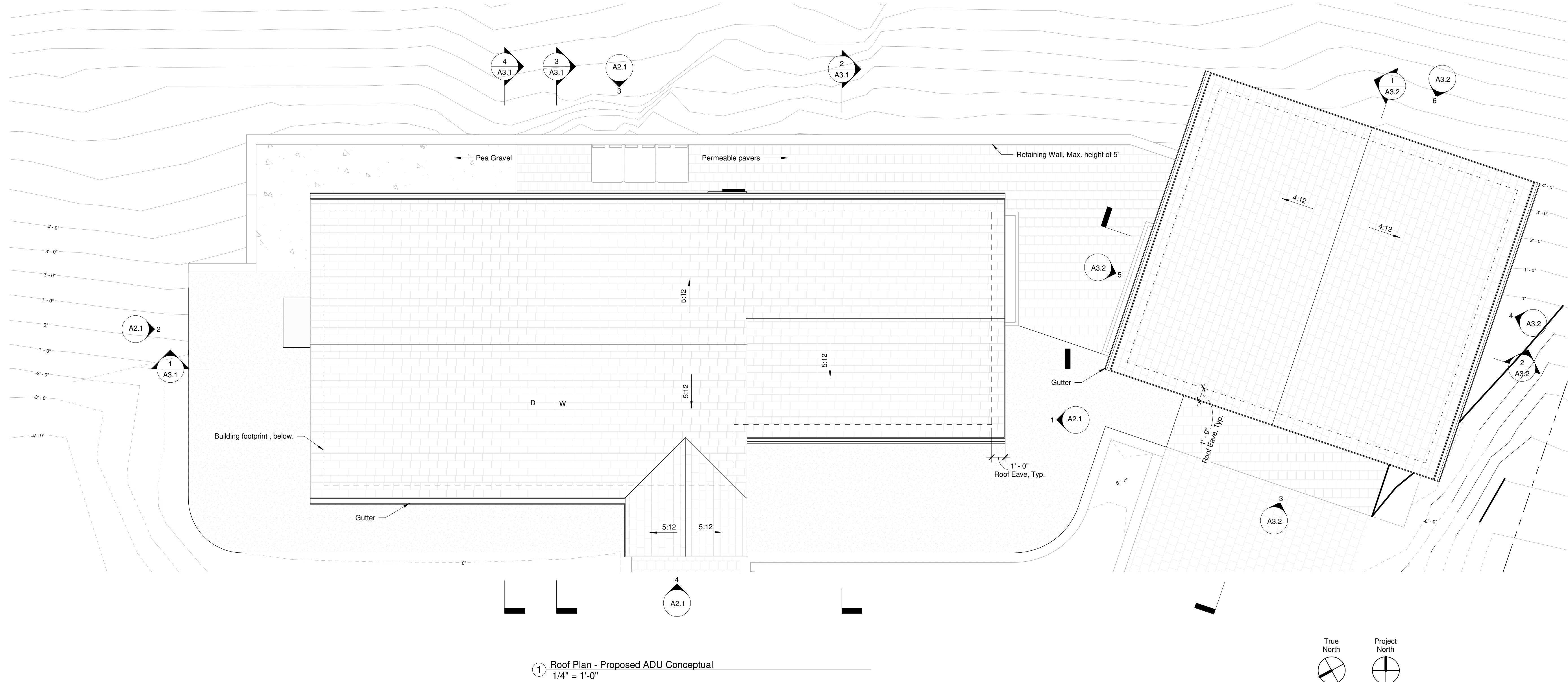
- Smoke alarms shall be installed in the following locations:
  - In each sleeping room.
  - Outside each separate sleeping area in the immediate vicinity of the bedrooms.
  - On each additional story of the dwelling, including basements and habitable attics and not including crawl spaces and uninhabitable attics, in dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
  - Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by Section R314.3.
- Required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection. (CRC R314.6)
- Smoke alarms shall be installed not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by CRC R314.3.
- The smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. (CRC R314.4)
- Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection. (CRC R315.5)
- Required carbon monoxide alarms shall be installed in the following locations per CRC R315.3:
  - Outside of each separate sleeping area in the immediate vicinity of the bedrooms.
  - On every occupiable level of a dwelling unit, including basements.
  - Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.
- Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217. (CRC R315.1.1)

### Roof Notes

- Chimneys, flues or stovepipes attached to any fireplace, stove, barbeque or other solid or liquid fuel burning equipment or device shall be equipped with an approved spark arrestor.
- Roof covering for structures in the Montecito Fire Protection District is the fire-retardant Class A roof covering. CRC R002; Montecito Fire Protection District Ordinance.
- Install R-38 spray foam insulation in roof framing. No air spaces = no roof ventilation.

### Title 24 Notes

- Residential Outdoor Lighting CEC 150 (k) 3: In addition to meeting the requirements of Section 150.0(k) 1A, luminaires providing residential outdoor lighting shall meet the following requirements:
  - Controlled by a manual ON and OFF switch.
  - Controlled by a photocell and motion sensor.
  - Controlled by one of the following methods:
    - Photocell and automatic time switch control
    - Astronomical time clock
    - Energy management control
- In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces shall be controlled by a vacancy sensor. CEC 150.0 Show the lighting control device on the plans.
- Exhaust fans must be switched separate from lighting or utilize a device where lighting can be turned OFF while the fan is running. The exhaust fans will achieve the minimum 31 CFM of IAQ specified in the Title 24 report.
- Dimmers or vacancy sensors shall control all luminaires required to have light sources compliant with Reference Joint Appendix JAB. Show lighting control device on the plans. Exception: Luminaires in closets less than 70 square feet.
- Luminaires that must use JAB-Certified Light Sources or Lamps; Sheet A 1.1, keynote 2, what type of high efficacy and show the type of lighting control device to be installed.
  - Light sources in ceiling recessed downlight luminaires
  - LED luminaires with integral sources
  - Screw-based LED lamps (A-lamps, PAR lamps, etc.)
  - Pin-based LED lamps (MR-16-AR-111, etc.)
  - GU-24 based LED light source



1 Roof Plan - Proposed ADU Conceptual  
1/4" = 1'-0"

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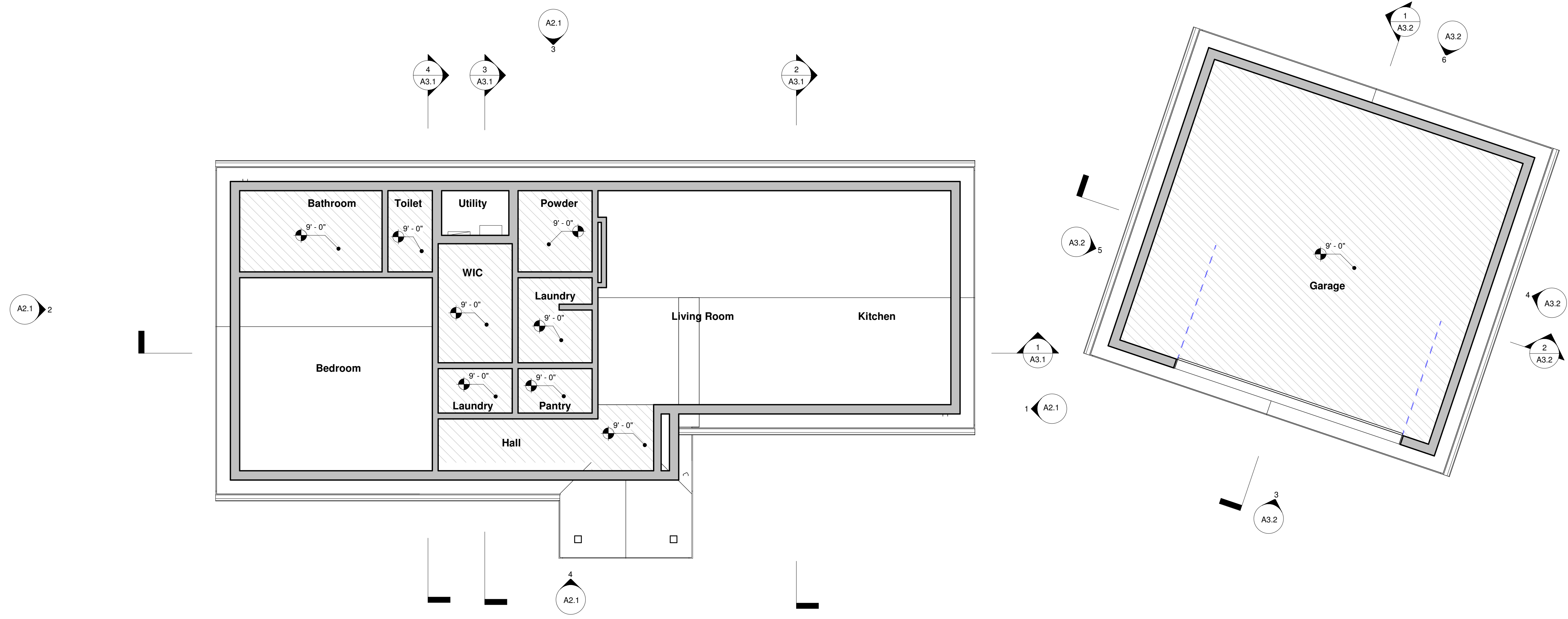
**PLN2023-00393**

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Revisions:	
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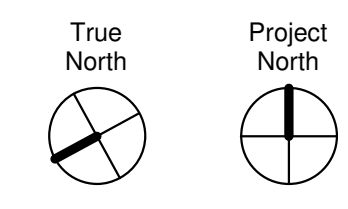
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**Proposed Roof Plan**

Sheet No.:  
  
**A1.2**





1 Reflected Ceiling Plan  
1/4" = 1'-0"



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**PLN2023-00393**

Planning Submittal	2023-09-15
Revisions:	
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Sheet Title:  
**Reflected Ceiling Plan**

Sheet No.:  
**A1.3**

**Plumbing Notes**

-All water closets shall have an effective flush volume of not more than 1.28 gallons per flush. Tank type water closet shall be certified to the performance criteria of the U.S. EPA Water Sense Specification for tank type toilets.  
 -Urinals shall have an effective flush volume not to exceed 0.5 gallons per flush.  
 -Single shower heads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Multiple shower heads when served by a single valve shall have a combined flow rate not to exceed 1.8 gallons per minute.  
 -Residential lavatory faucets shall have a maximum rate of 1.2 gallons per minute at 60 psi and a minimum flow rate of not less than 0.8 gallons per minute at 20 psi.  
 -Faucets in common and public areas (outside dwellings and sleeping units) in residential buildings must have a maximum flow rate of 0.5 gallons per minute at 60 psi.  
 -Metering faucets when installed in residential buildings must not deliver more than 0.25 gallons per cycle.  
 -Kitchen faucets shall have a maximum of flow rate of 1.8 gallons per minute at 60 psi.  
 -Kitchen faucets temporarily increase the flow rate to a maximum of 2.2 gallons at 60 psi but must default back to the 1.8 gallons per minute. (Section 4.303)  
 -The WC shall be located in a space of 30" min. width, and 24" min. clear space in front shall be provided. CPC 407.5  
 -A plumbing fixture certification must be completed and signed by either a licensed general contractor, or a plumbing subcontractor or the building owner certifying the flow rate of the fixtures installed.  
 -Joints and openings, annular spaces around pipes, electric cables, conduits, or other openings in plates of exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method accepted by agency. (Section 4.406.1)

**Fixture Unit Calculation**

Per 2022 California Plumbing Code 610.0 Size of Potable Water Piping.

**Table 610.3**  
Water Supply Fixture Units (WSFU) and Minimum Fixture Branch Pipe Sizes

Appliances, appurtenances or fixtures	Minimum Fixture Branch Pipe size (Inches)	Private	Count
Clothes Washer	1/2	4.0	1
Dishwasher	1/2	1.5	1
Lavatory	1/2	1.0	3
Kitchen sink	1/2	1.5	1
Shower, per head	1/2	2.0	1
Water closet, 1.6 GPF Gravity Tank	1/2	2.5	2

**Washer/Dryer Notes**

- CMC 504.4 Clothes Dryers. Moisture exhaust ducts terminate on the outside of the building and are equipped with a backdraft damper.
- CMC 504.4.1 Provisions for Makeup Air. The dryer is not in an enclosed area.
- CMC 504.4.2 Domestic Clothes Dryers. Moisture exhaust ducts are of metal and have smooth interior surfaces.
- CMC 504.4.2.1 Length Limitation. Moisture exhaust ducts are less than 14 feet long, with 2 or less 90 degree turns.
- CPC 703.0 Size of Drainage Piping. Drainage pipes are 2" in diameter.

**Bathroom Exhaust Fans**

Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control. Humidity controls shall be capable of adjustment between a relative humidity range of: 50 percent to a maximum of 80 percent. A humidity control may utilize manual or automatic means of adjustment. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in).

**Electrical Notes**

- All 125-volt, single phase, 15 and 20 ampere branch circuits supplying outlets or devices installed in dwelling unit kitchen, family room, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar rooms or areas shall be protected by a listed arc-fault/branch circuit interrupter, combination type, a branch/feeder type, a listed supplemental arc protection circuit breaker installed to provide protection of the branch circuit. A general note on the electrical plan is adequate. [CEC 210.12(A)(1) through (6)].
- All non-locking type 125-volt, 15 and 20 ampere receptacles in a dwelling unit shall be listed tamper-resistant receptacles. (Exceptions: (1) receptacles more than 5'-6" above the floor, (2) receptacles part of a luminaire or appliance, (3) a single receptacle or a duplex receptacle for two appliances that are not easily moved and located within dedicated space and are chord-and-plug connected as per CEC 400.10(A)(6), (A)(7) or (A)(8), and (4) non-grounding receptacles used for replacements as permitted in CEC 406.4 (D) (2) (a). A general note on the electrical plan is adequate. [CEC 406.12].
- All kitchen countertop receptacles are to be GFCI protected. Receptacles within 6 feet from the top inside edge of the bowl of the sink, receptacles within 6 feet of the outside edge of any bathtub or shower stall, and receptacles in laundry areas are to be GFCI protected. Please show on electrical floor plan (general note is not adequate). [CEC 210.8]
- Bathrooms and laundry room are to have manual on/automatic-off vacancy sensors. [C.En.C 150(k)2J]
- Bathroom Receptacles: Outlets shall be supplied by a least one 20-amp branch circuit. Such circuits shall have no other outlets. CEC 210.11 (C)(3)
- Arc-Fault Circuit Interrupter: All branch circuits that supply 120-volt, single phase, 15 and 20 ampere branch circuits supplying outlets or devices installed in dwelling unit kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry rooms or similar rooms or areas shall be protected by an arc-fault circuit interrupter(s). CEC 210.12(A) & (B).
- Laundry Branch Circuits: Provide a minimum of one 20-ampere branch circuit for laundry receptacles. CEC 210.52(F)
- Provide tamper resistant outlets in all remodeled and new areas. CEC 406.11.
- Small Appliance Branch Circuits: Provide two or more 20-ampere small appliance branch circuits in kitchen. CEC 210.52 (B)
- Provide arc-fault circuit interrupter protection for all outlets in the entire dwelling unit. 210.12 CEC
- Vent fans must be switched separately from lighting. 2019 California Energy Code 150(k)2B
- All 125-volt, 15-amp, and 20-amp receptacles shall be listed as tamper-resistant receptacles. [§ 406.12 CEC]
- In addition to meeting the requirements of Section 150.0(k)1A, luminaires providing residential outdoor lighting shall meet the following requirements, as applicable:
  - For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, shall meet the requirement in item i and the requirements in either item ii or item iii:
    - Controlled by a manual ON and OFF switch that permits the automatic actions of items ii or iii below; and
    - Controlled by a photocell and either a motion sensor or an automatic time switch control or
    - Controlled by an astronomical time clock control.
 Controls that override to ON shall not be allowed unless the override automatically returns the automatic control to its normal operation within 6 hours. An energy management control system that provides the specified lighting control functionality and complies with all requirements applicable to the specified controls may be used to meet these requirements.

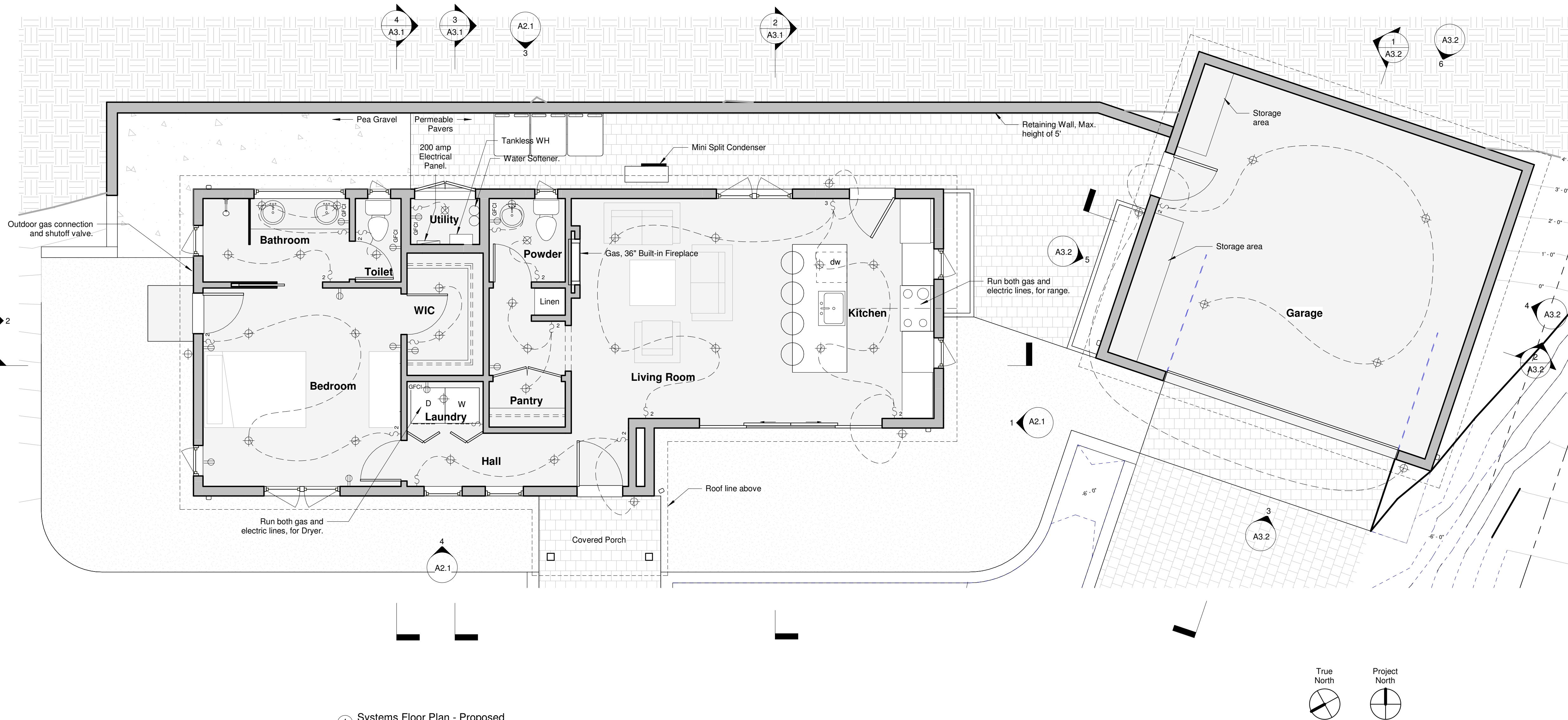
**Legends**

**Electrical / Mechanical Legend**

- Light Fixture
- Single gang Light Switch
- Double gang Light Switch
- Triple gang Light Switch
- Receptacle
- Receptacle w/ Ground Fault Interrupter
- Exhaust Fan
- Smoke + Carbon Monoxide Alarm
- Supply Air Vent
- Return Air Vent

**Wall Legend**

- Existing Wall
- Demolished Wall
- New Wall



1 Systems Floor Plan - Proposed  
1/4" = 1'-0"

**215 Canon**  
 215 Canon Drive  
 Santa Barbara, CA 93105

735 State Street, Suite 204  
 Santa Barbara, CA 93101  
 805.966.3966 office  
 805.715.7005 fax  
 vanguardsplanning.com

**VANGUARD PLANNING**  
 ACQUISITION | DESIGN | ENTITLEMENT

Stamp/Signature:  
**Sergio Ormachea**

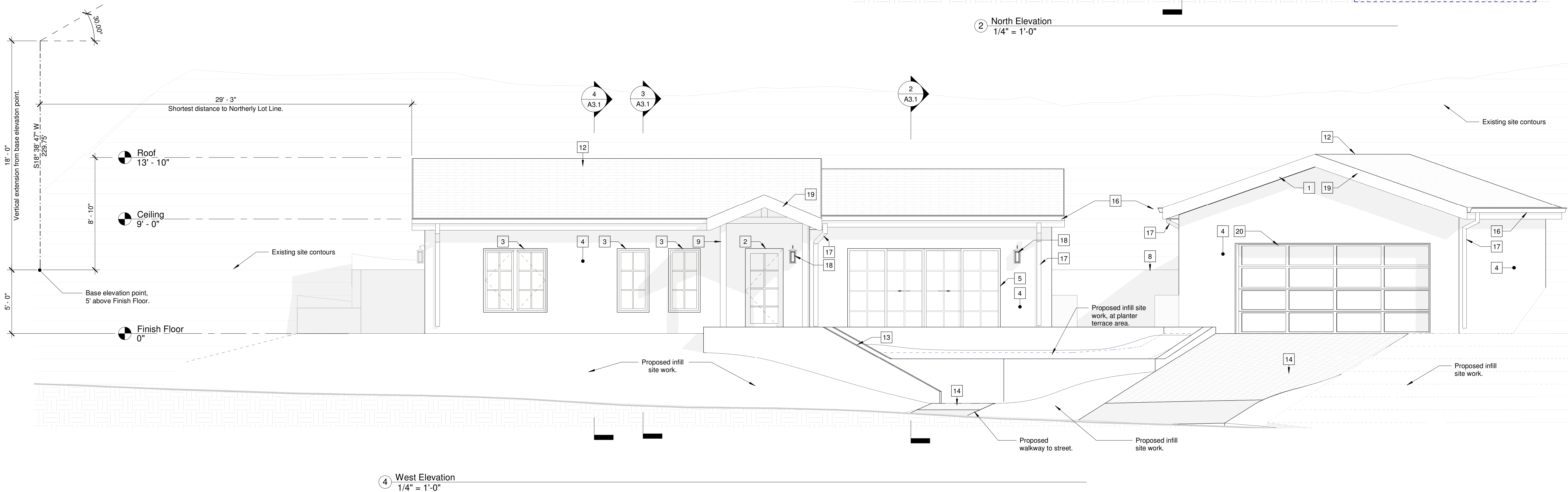
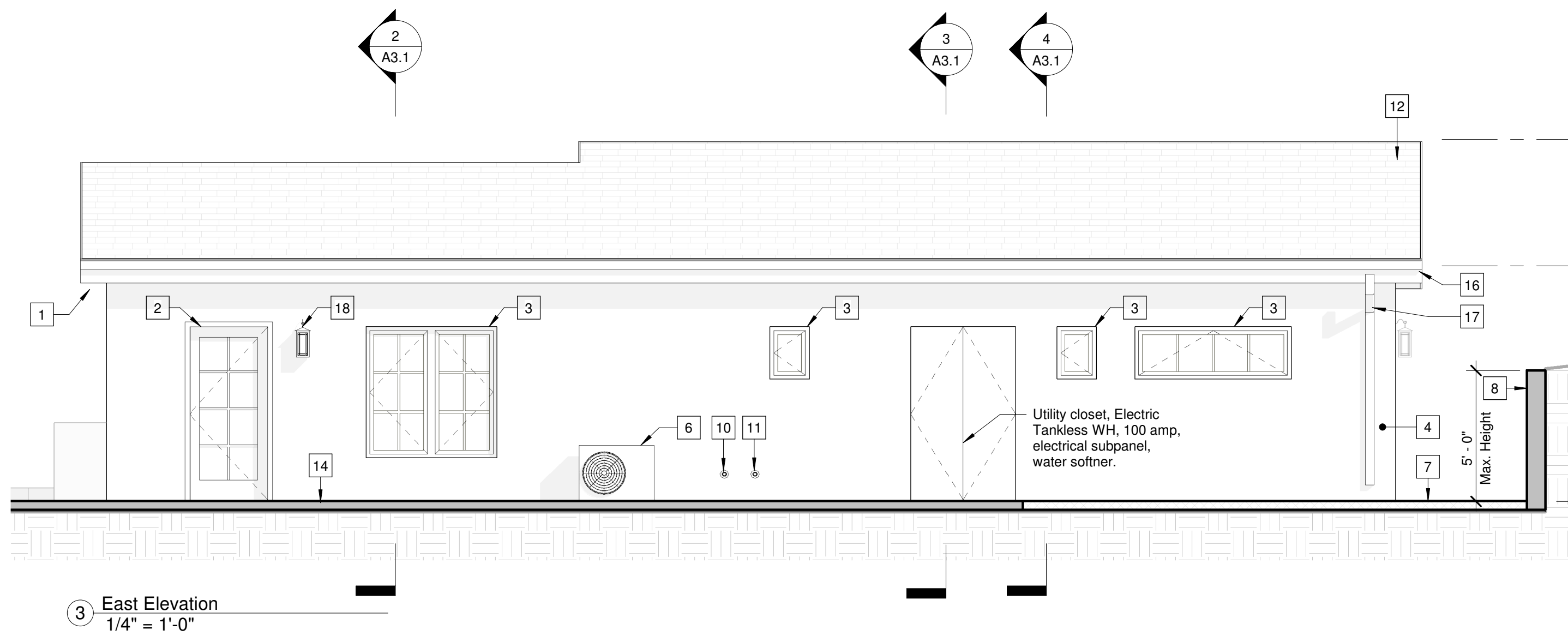
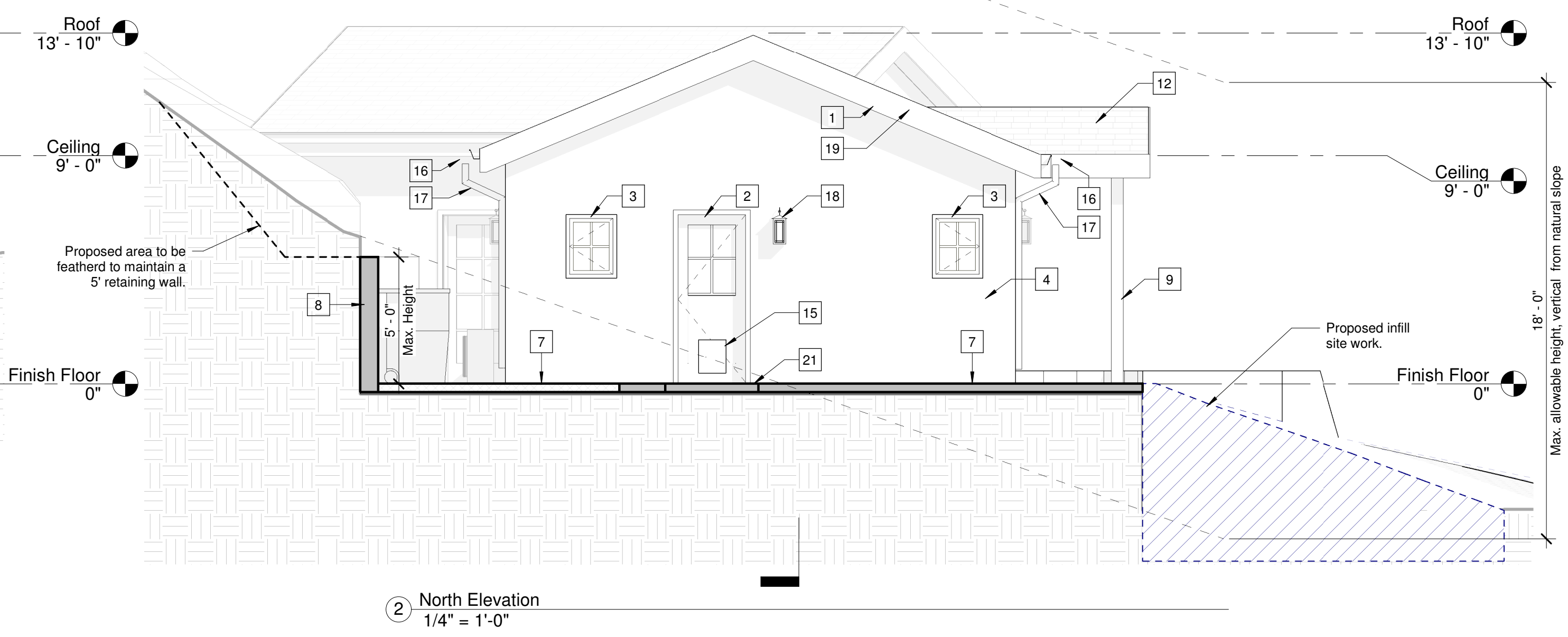
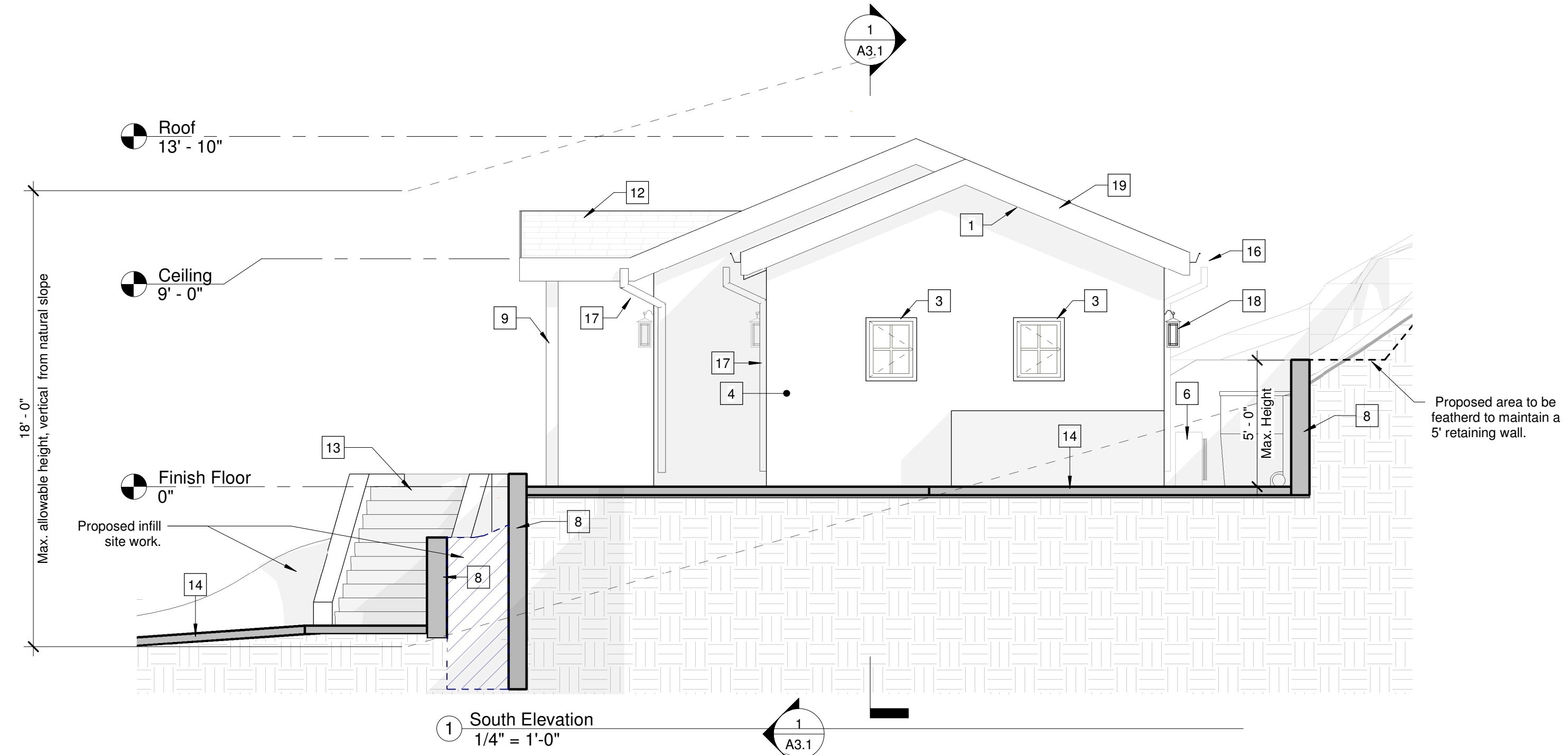
**PLN2023-00393**

Planning Submittal	2023-09-15
Revisions:	
▲ Response to 1st Review	2024-03-14
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Sheet Title:  
**Proposed Systems Plan**

Sheet No.:  
**A1.4**

Keynotes - Exterior Elevations	
Note	Comment
1	(N) Santa Barbara Smooth stucco finish on underside of soffit
2	(N) Exterior Door
3	(N) Window
4	(N) Santa Barbara Smooth stucco finish.
5	(N) Sliding door
6	(N) Mini Split Condenser
7	(N) Pea gravel, landscaping.
8	(N) Retaining Wall
9	(N) Exposed timber post.
10	(N) Gas shut-off valve
11	(N) Water shut-off valve
12	(N) Asphalt shingle roofing.
13	(N) Entry stair
14	(N) Permeable Pavers
15	(N) Dog door.
16	(N) Gutter
17	(N) Downspout
18	(N) Exterior light with motion sensor and photocell
19	(N) Fascia Board
20	(N) Garage Door
21	(N) Concrete stoop.



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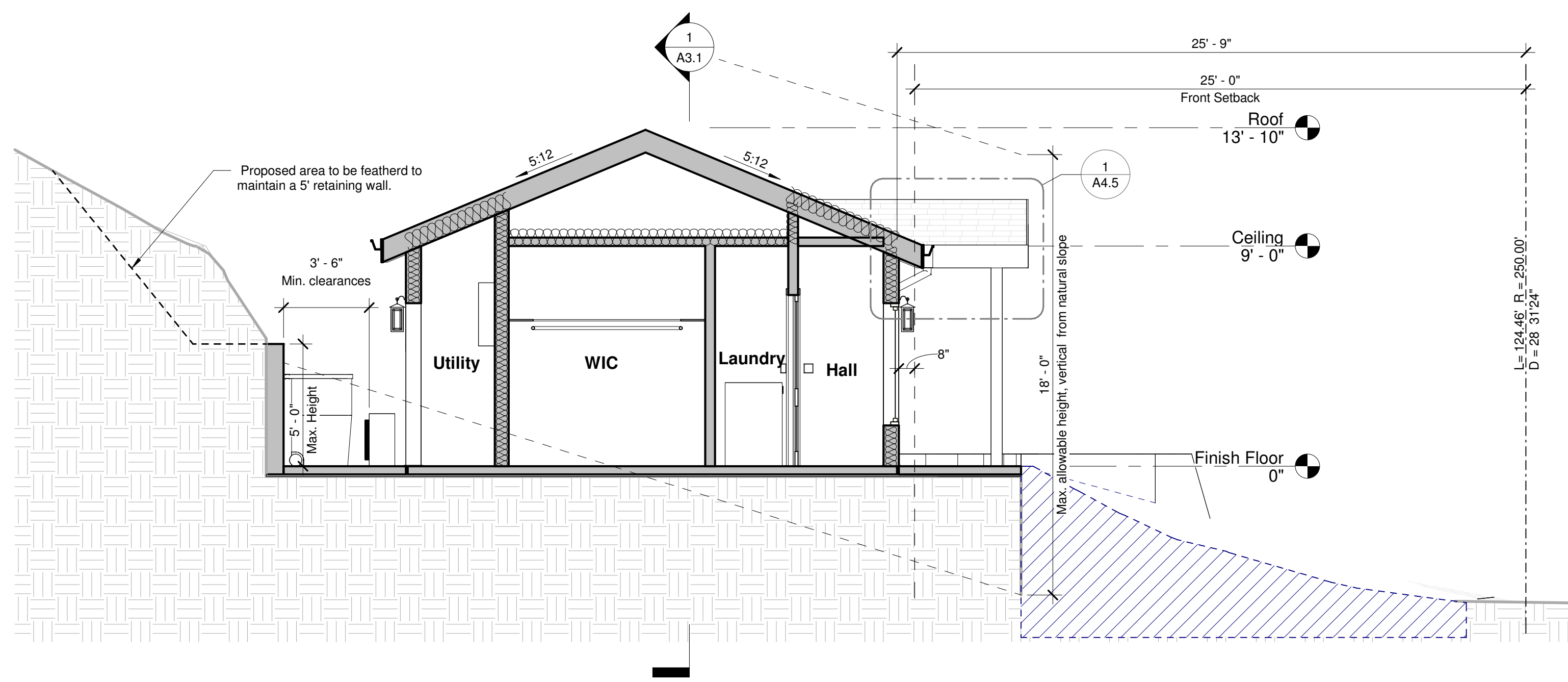
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Planning Submittal	2023-09-15
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Sheet Title:  
**Elevations**

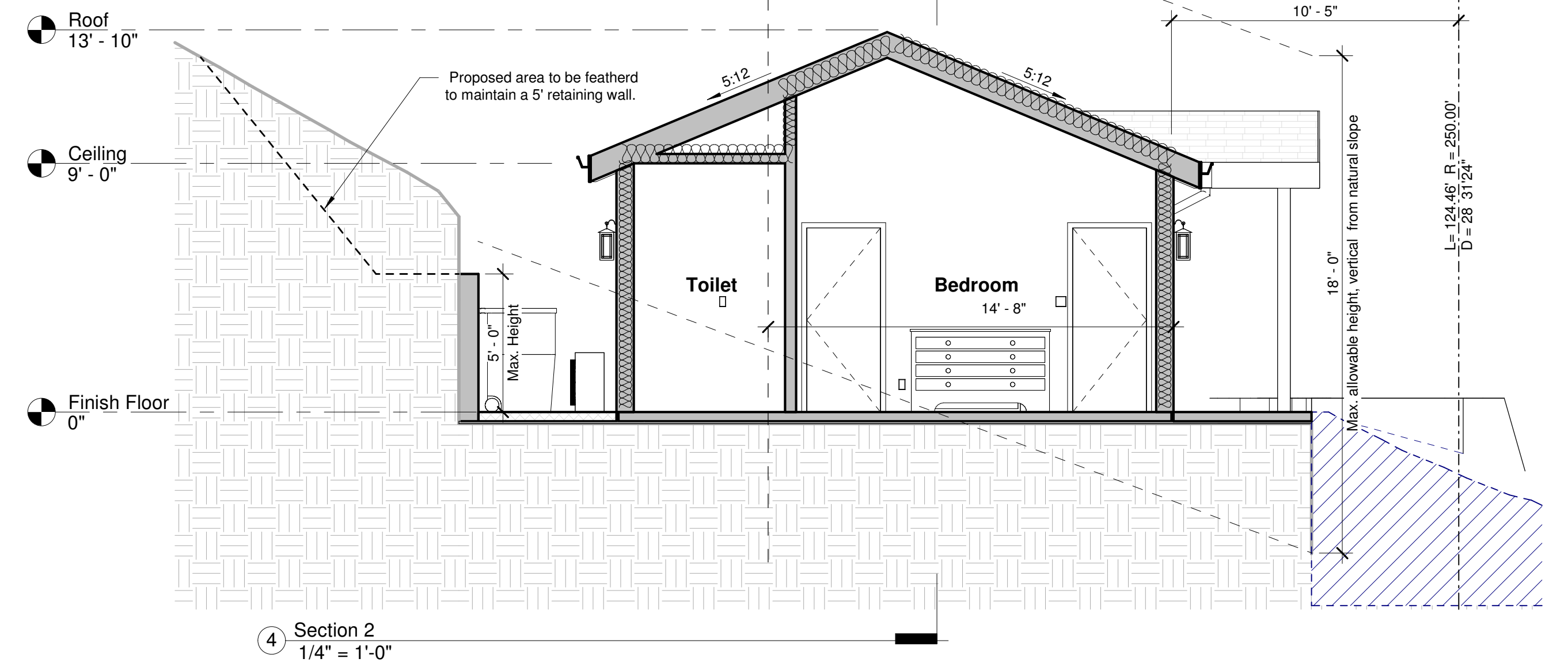
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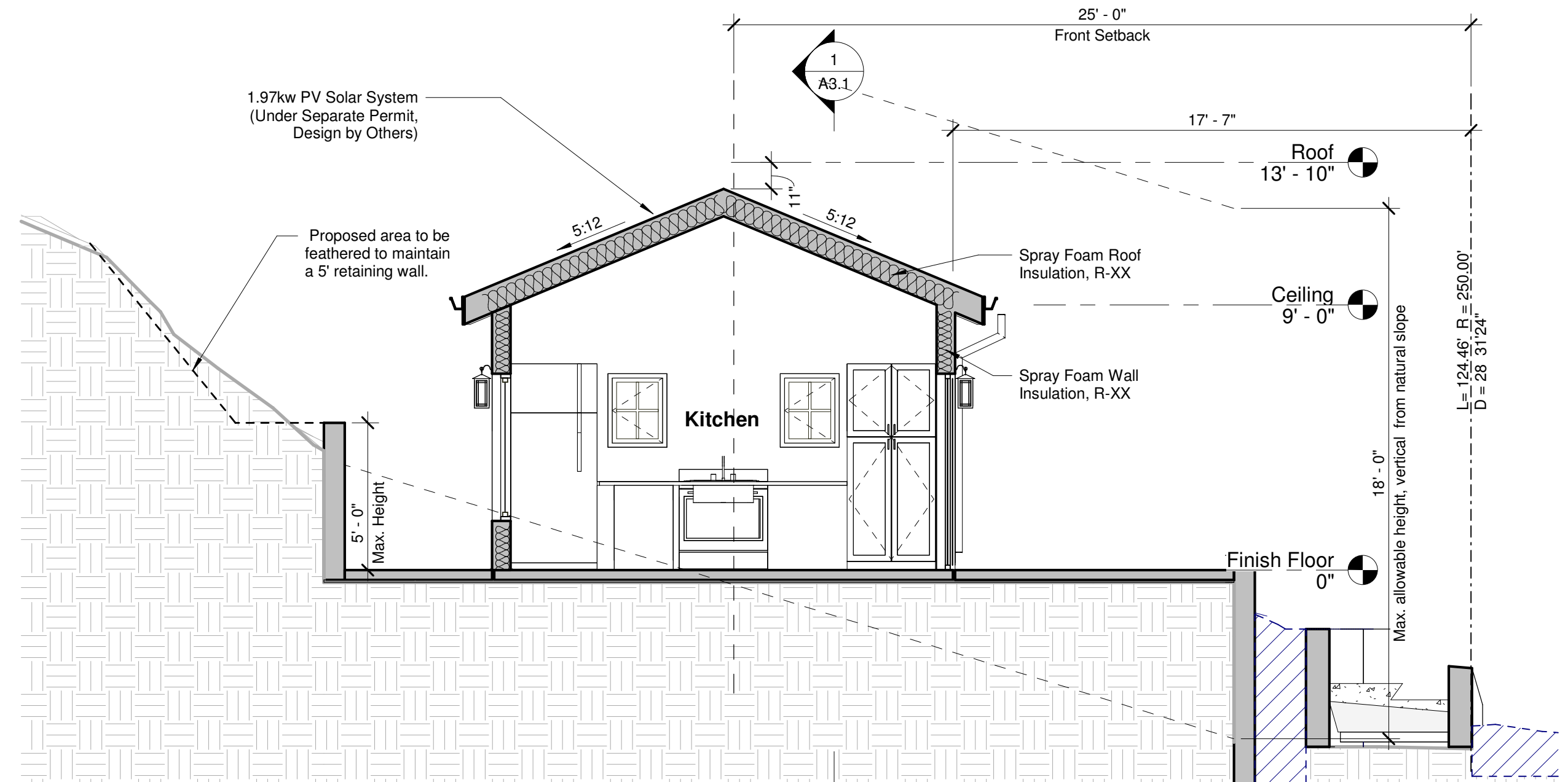
3 Section 3  
1/4" = 1'-0"



1 Section 1  
1/4" = 1'-0"



4 Section 2  
1/4" = 1'-0"



2 Cross-Section Copy 1  
1/4" = 1'-0"

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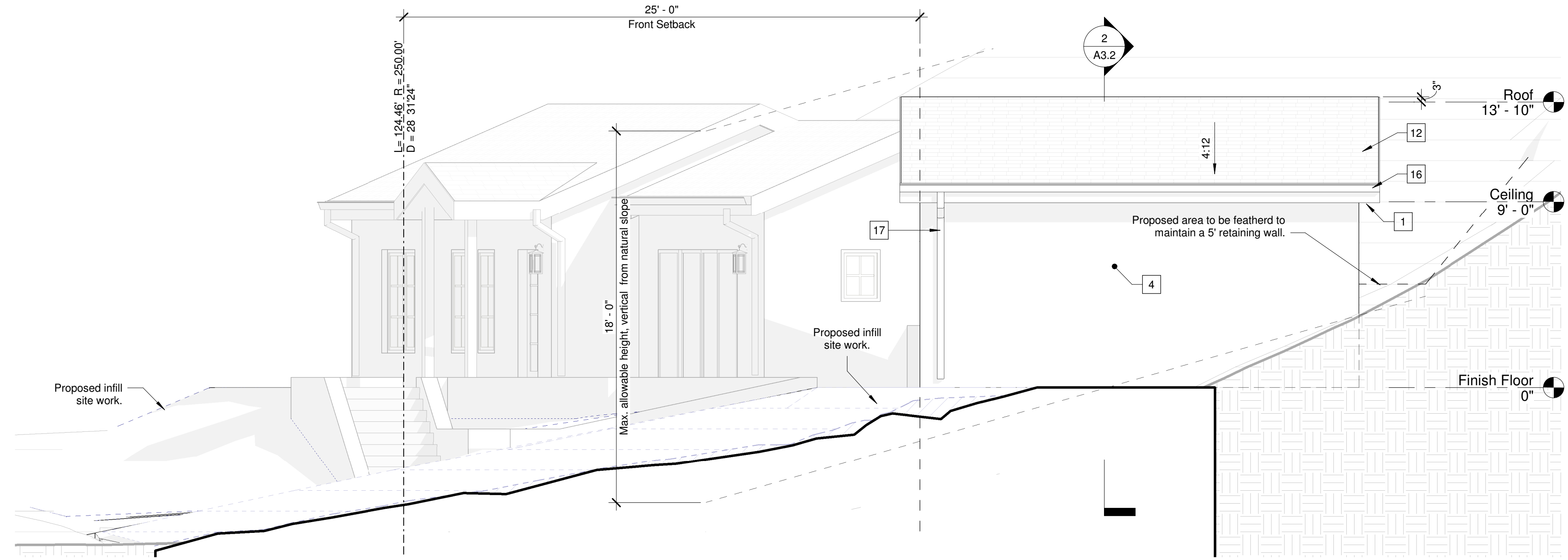
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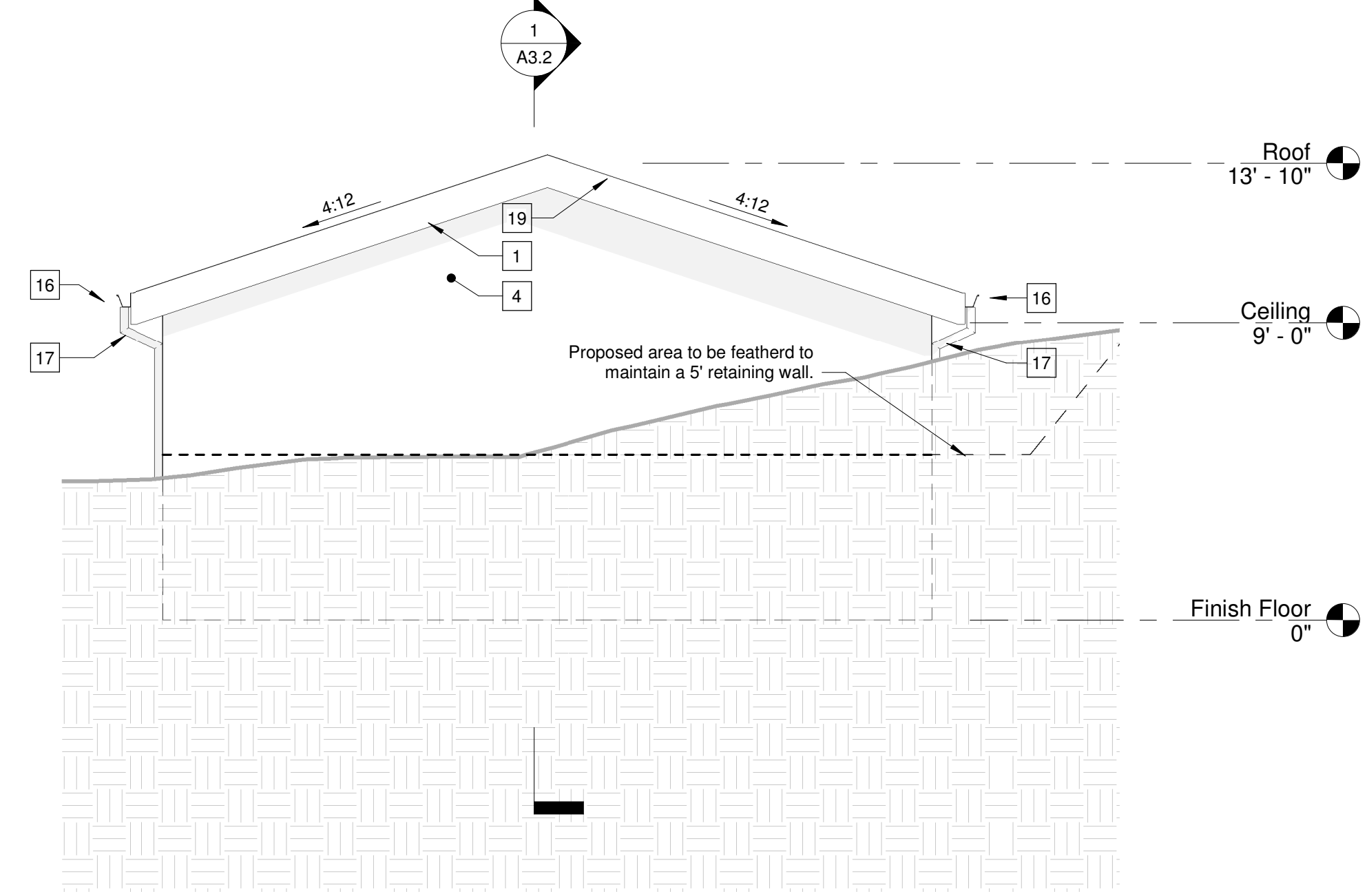
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Sheet Title:  
**Sections**

Sheet No.:  
**A3.1**

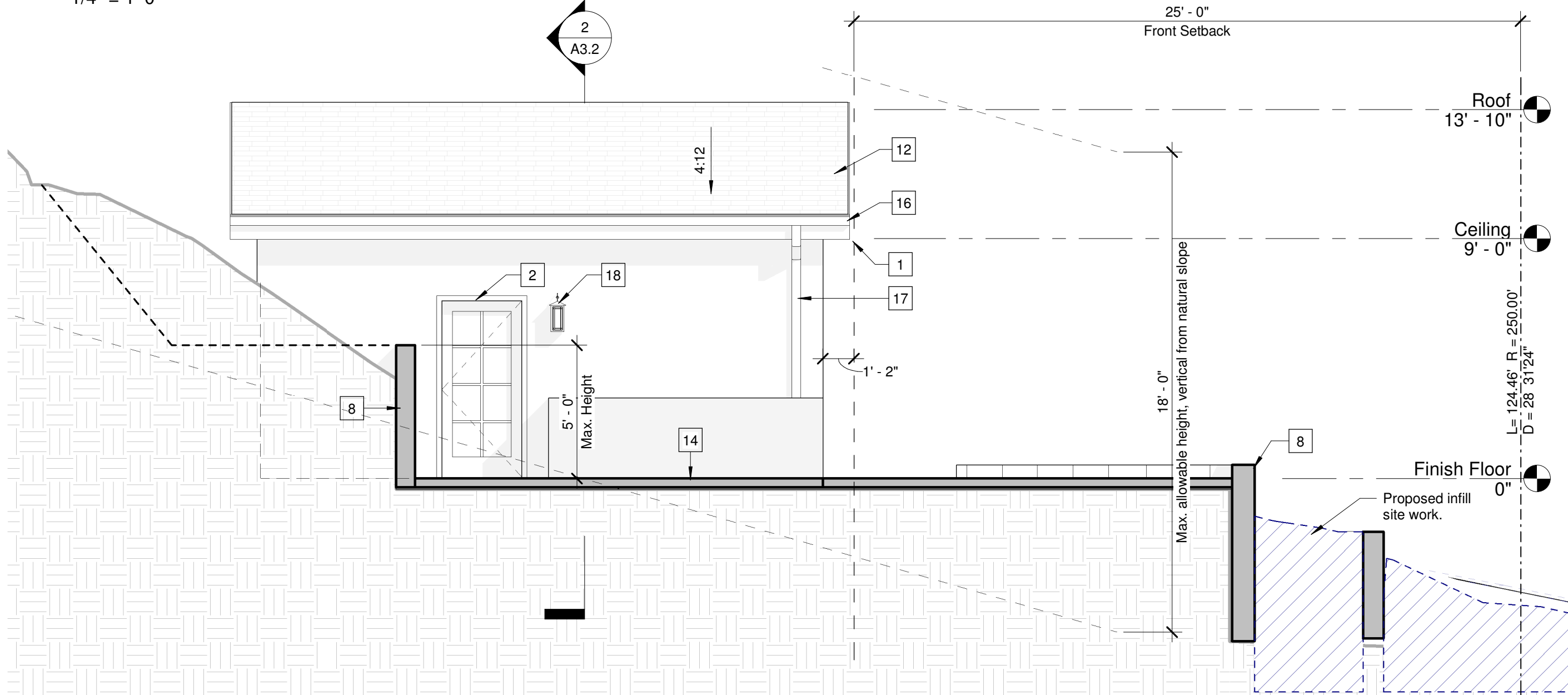


4 Elevation 2 - a  
1/4" = 1'-0"

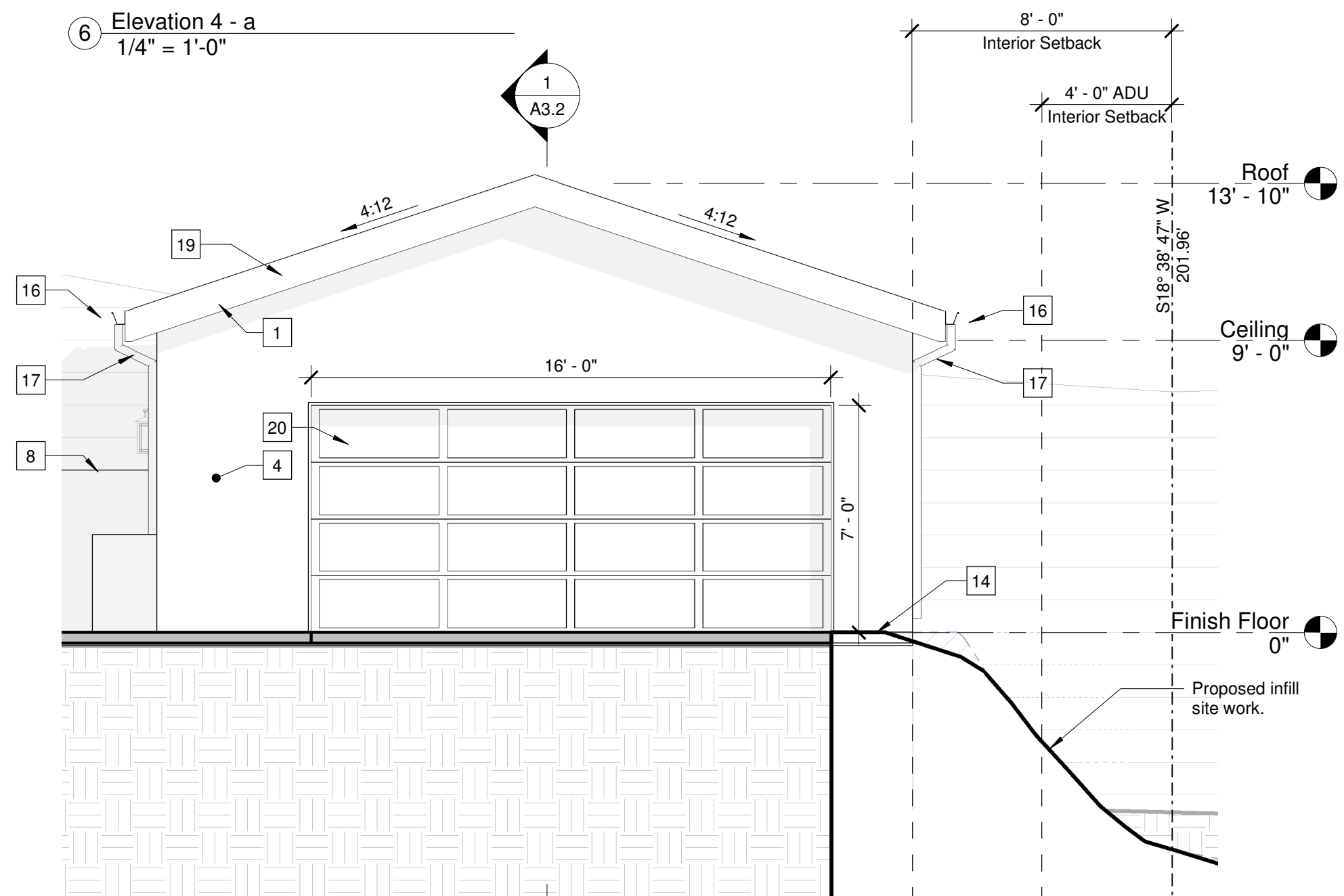


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1/4" = 1'-0"

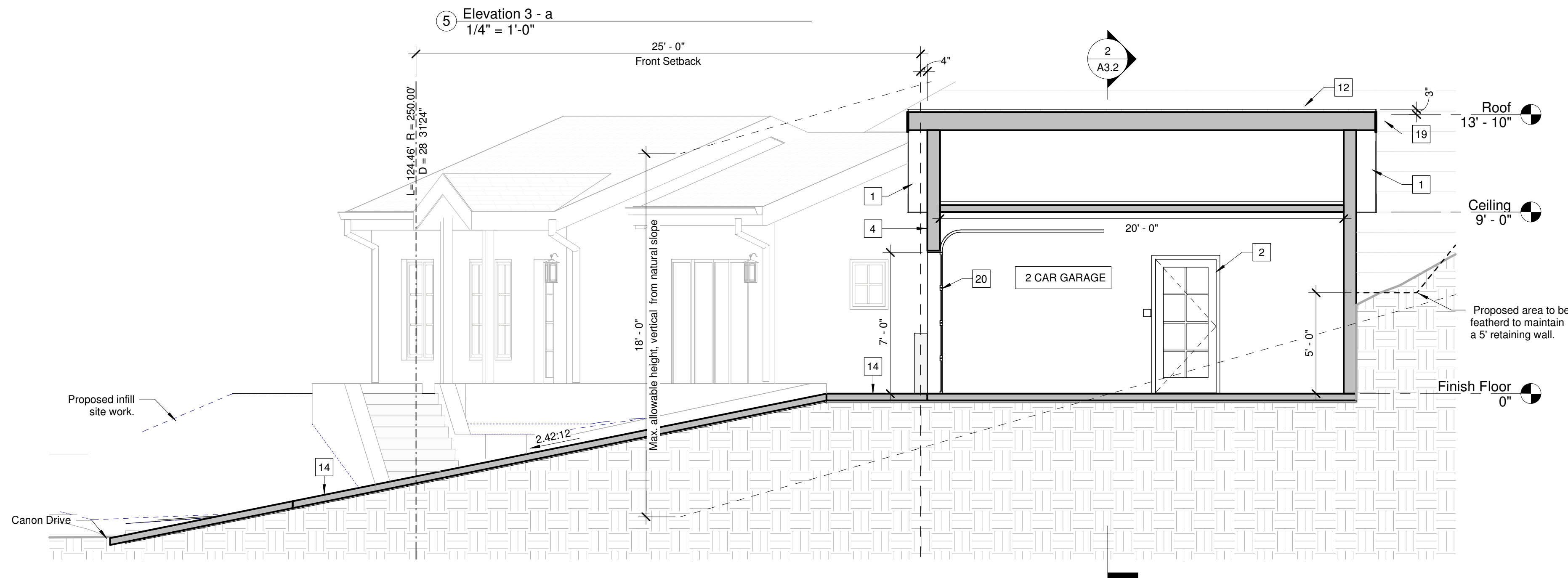
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Note	Comment
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2	(N) Exterior Door
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17	(N) Downspout
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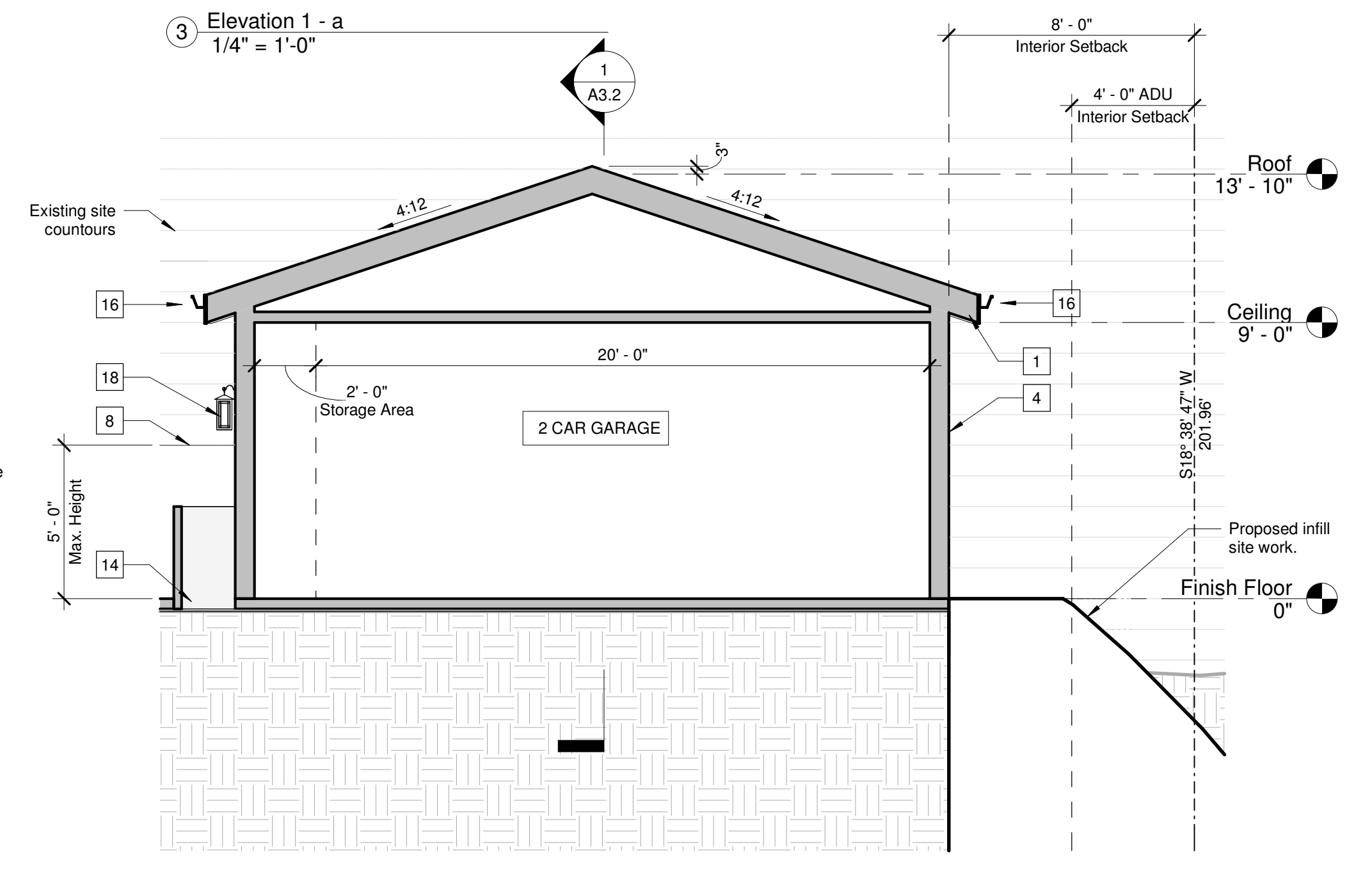
5 Elevation 3 - a  
1/4" = 1'-0"



3 Elevation 1 - a  
1/4" = 1'-0"



1 Section 5  
1/4" = 1'-0"



2 Section 6  
1/4" = 1'-0"

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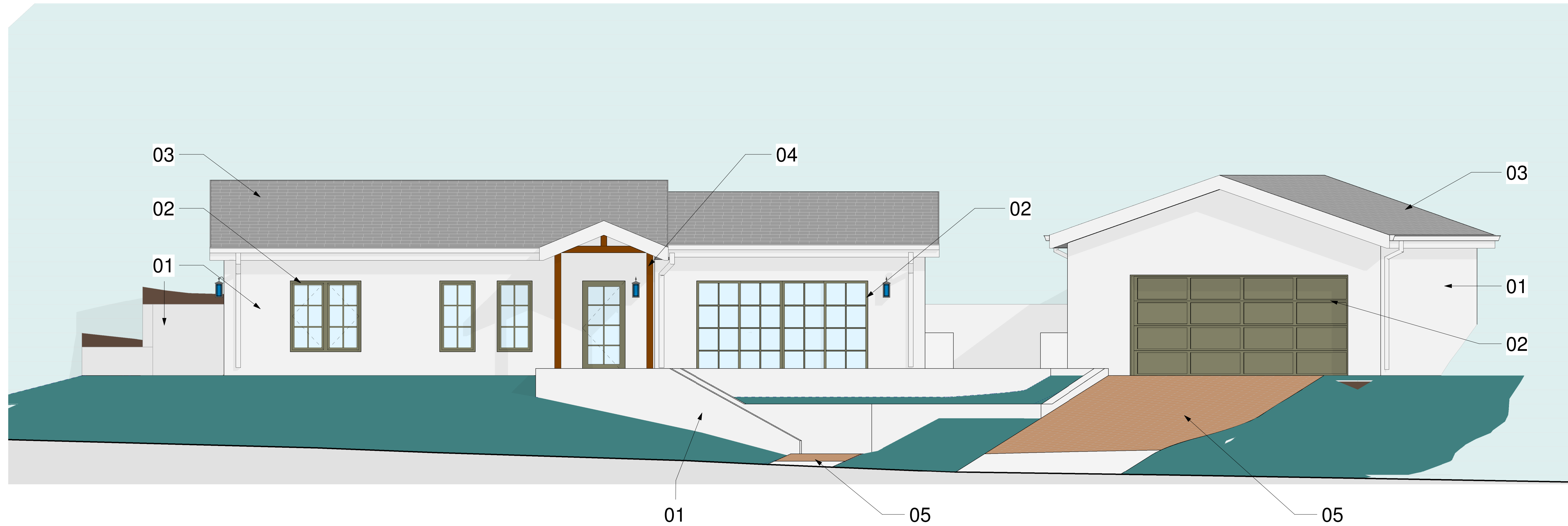
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Revisions:	
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Sheet Title:  
**Garage Sections / Elevations**

Sheet No.:  
**A3.2**



① West Elevation Render  
1/4" = 1'-0"

**Color Palette**



- 01** Exterior Stucco: Benjamin Moore Regal Select Exterior Flat - Swiss Coffee OC-45. Smooth trowel finish.
- 02** Window and Door Wood Trim Color: Benjamin Moore, Tate Olive (HC-112) To match Existing Structure
- 03** Asphalt Shingle Roofing: CertainTeed Landmark T.L. Shenandoah To match Existing Structure
- 04** Exposed Timber: Semi-transparent Mission Brown. To match Existing Structure
- 05** Permeable Pavers: Angelus, Permeable Slate concrete pavers. Sand Stone Mocha.
- 06** Exterior Lights: Cattleya Lighting, Motion Sensing Dusk to Dawn, Exterior Waterproof wall lantern.

**Exterior Lighting**



**Existing Residence**



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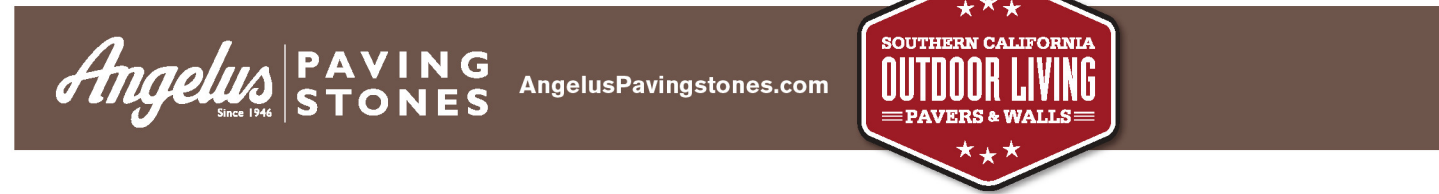
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Sheet Title:  
**Color and Materials Board**

Sheet No.:  
**A4.0**





**Permeable Slate**

The 80mm Permeable Slate concrete paver is an attractive permeable paver that mimics the look of cut flagstone. Installed in a random ashlar pattern, the Permeable Slate will provide years of durable, environmentally friendly performance for any residential or commercial application.

**Stocked Colors:**  
 Gray-Charcoal  
 Sand-Stone-Mocha



Shown: Sand-Stone-Mocha Permeable Slate in an ashlar pattern.



**Permeable Slate**  
 4-Stone Package  
 5.9x5.9"  
 5.9x6.9"  
 8.9x6.9"  
 8.9x11.9"

**Permeable Slate**  
 Size (in inches)  
 Sq Ft per Stone  
 Stones per Sq Ft  
 Sq Ft per Pallet  
 Stones per Pallet  
 Weight per Stone  
 Weight per Pallet

**80 mm**  
 (see left)  
 varies  
 varies  
 102  
 240  
 varies  
 3600 lbs

For custom color options contact your Angelus Sales Representative at:  
**(951) 328-9115** or  
**(805) 485-1137**

For more information on Related Pavers & Walls Products visit:  
 AngelusPavingstones.com

**NOTE: ALWAYS VIEW PRODUCT SAMPLES PRIOR TO INSTALLATION** The color and texture of Angelus products are not specific to any product or groups of products. Variation in color, shades of color, texture, and aggregate exposure is inherent in all concrete products and exact matches cannot be guaranteed. Not all products are stocked in all colors. Charts with more product related color availability are shown from product pages. Colors and textures represented in print and online are as close as possible to the actual product. Photographic techniques, printing techniques and viewing monitors – as well as actual viewing conditions – can alter perception of color.

**PERMEABLE SLATE**  
 Blended Colors (swatches shown in Permeable Slate)



GRAY - CHARCOAL



SAND-STONE-MOCHA



**City of Santa Barbara**  
 Parks and Recreation Department

www.sbparksandrecreation.com  
 www.SantaBarbaraCA.gov

Administration  
 Tel: 805.564.5431  
 Fax: 805.564.5480

Parks Division Office  
 Tel: 805.564.5433  
 Fax: 805.897.2524

Recreation Division Office  
 Tel: 805.564.5418  
 Fax: 805.564.5480

Creeks Division Office  
 Tel: 805.897.2658  
 Fax: 805.897.2626

620 Laguna St.  
 PO Box 1990  
 Santa Barbara, CA  
 93102-1990

Golf Course  
 Tel: 805.564.5547  
 Fax: 805.897.2644  
 3500 McCaw Ave.  
 PO Box 1990  
 Santa Barbara, CA  
 93102-1990

Neighborhood and Outreach Services  
 Tele: 805.897.2560  
 Fax: 805.963.7569  
 423 W. Victoria St.  
 P.O. Box 1990  
 Santa Barbara, CA  
 93102-1990

January 25, 2024

Sergio Ormachea  
[Sergio.ormachea@vanguardplanning.com](mailto:Sergio.ormachea@vanguardplanning.com)

**THIS IS NOT A PERMIT**

**Subject: (2) Jacaranda mimosifolia, Jacaranda, and (2) Ligustrum lucidum, Glossy Privet at 215 Canon Drive (Front Yard Setback Removal).**

Dear Mr. Ormachea:

Your request for removal of (2) *Jacaranda mimosifolia*, Jacaranda, and (2) *Ligustrum lucidum*, Glossy Privet in the front yard setback was presented at the Parks and Recreation Commission meeting on January 24, 2024. After an evaluation and discussion of the request, the Parks and Recreation Commissioners voted to approve the removals on the condition the applicant plant three trees with a minimum height of 25 feet at maturity. A minimum of two of the replacement trees shall be planted in the public right of way. The replacement trees in the public right of way will not be City trees and will be the adjacent property owner's responsibility to maintain.

Permits for this work are only valid for sixty (60) days, once obtained (SBMC15.20.120). Please contact Nathan Slack at 805-564-5592 to request a permit to proceed with the removals. Please note permits are not available until after the 10-day appeal period has passed.

Should you desire to appeal the Parks and Recreation Commission action denying your tree removal request to the City Council, a written notice thereof must be filed within 10 days of the Commission action. The appeal notice can be either hand delivered to the Clerk's office at City Hall or mailed to the City Clerk at P.O. Box 1990, Santa Barbara, CA 93102-1990. An appeal processing fee may apply and must be submitted with your written notice. Please contact the City Clerk's office at 564-5309 if you have any questions regarding the written notice or applicable fees. Please call me if you have questions about this Commission action.

Please kindly remove the notice posted on these trees.

Sincerely,

Nathan Slack  
 Urban Forest Superintendent  
 805-564-5592

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 215 Canon Drive  
 Santa Barbara, CA 93105

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 Santa Barbara, CA 93101  
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 805.715.7005 fax  
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Stamp/Signature:  
  
**Sergio Ormachea**

**PLN2023-00393**

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Sheet Title:  
**Specifications / Tree Removal Letter**

Sheet No.:  
**A4.2**





01



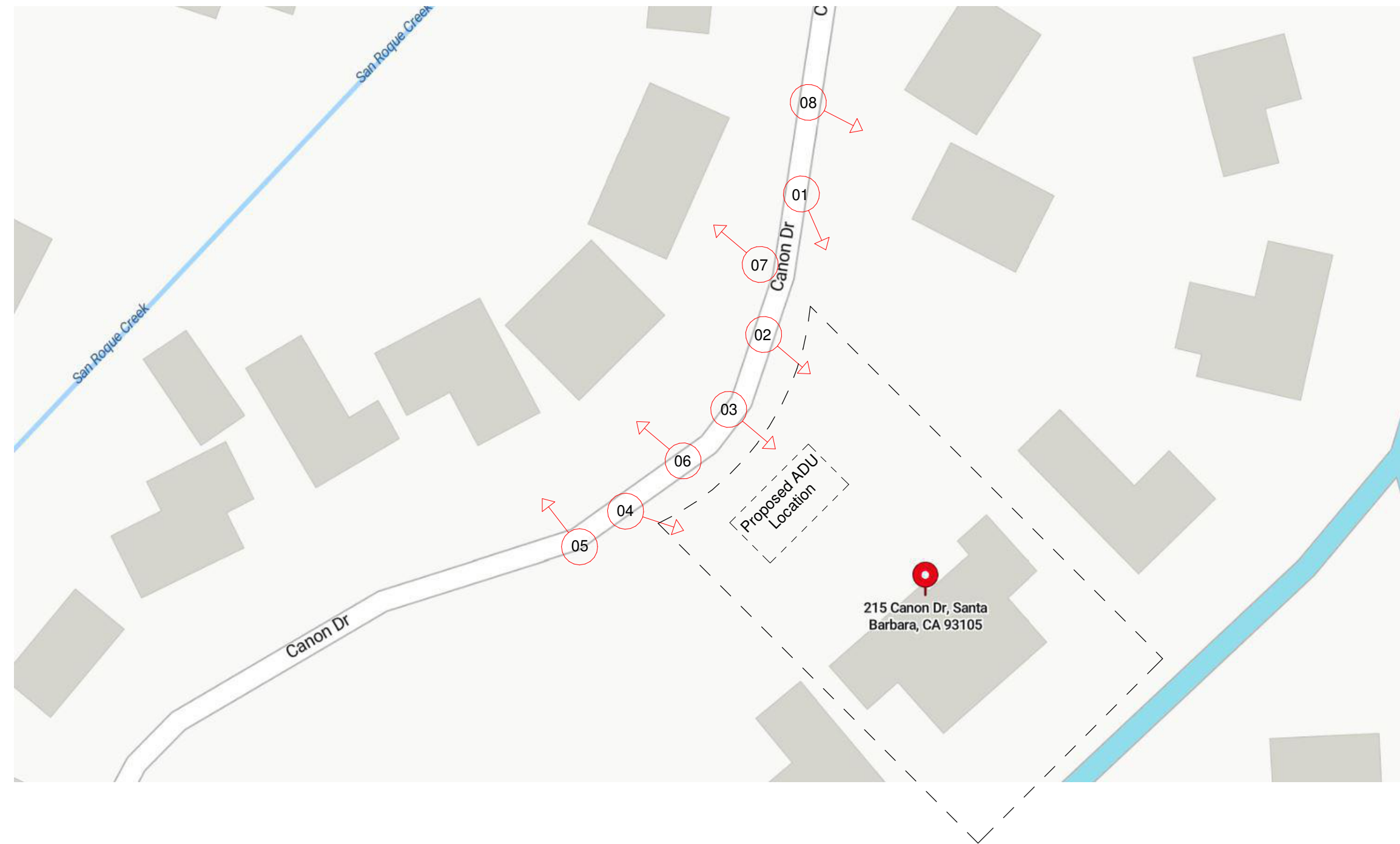
02



03



04



05



06



07



08

**215 Canon**

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Sheet Title:

**Surrounding Streetscape**

Sheet No.:

**A4.3**



GENERAL NOTES

- 1. The following notes, details, schedules & specifications shall apply to all phases of this project unless specifically noted otherwise. Notes and details on the structural plans shall take precedence over general notes and typical details. Where no details are given, construction shall be as shown for similar work.
2. All drawings are considered to be part of the contract documents. The Contractor shall be responsible for the review and coordination of all drawings and specifications prior to the start of construction. Any discrepancies shall be brought to the attention of the Engineer prior to the start of construction so that a clarification can be issued. Any work performed in conflict with the contract documents or any applicable code requirements shall be corrected by the Contractor at no expense to the Owner or Engineer.
3. All information on existing conditions shown on the structural plans are based on best present knowledge available, but without guarantee of accuracy. The Contractor shall be responsible for the verifications of all dimension and conditions at the site. Any discrepancies between actual site conditions and information shown on the drawings or in the specifications shall be brought to the attention of the EOR prior to the start of construction.
4. Refer to the Architectural plans for the following:
(a) Dimensions
(b) Size and location of all interior and exterior wall locations.
(c) Size and location of all floor, roof and wall openings
(d) Size and location of all drains, slopes, depressions, steps, etc.
(e) Specification of all finishes & waterproofing
(f) All other non-structural elements
5. Refer to the mechanical, electrical and plumbing plans for the following:
(a) Size and location of all equipment
(b) Pipe runs, sleeves, hangers and trenches
(c) All other mechanical, electrical or plumbing related elements
6. DO NOT scale structural plans. Contractor shall use all written dimensions on Architectural plans.
7. Construction materials shall be uniformly spread out if placed on floor or roof so as to not overload the framing. Load shall not exceed the design live load per square foot. It is the Contractor's responsibility to provide adequate shoring and/or bracing as required.
8. Specifications and detailing of all waterproofing and drainage items, while sometimes shown on the structural plans for general information purposes only, are solely the design responsibility of others.
9. The Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the construction delineated by these plans. It should be understood that the Contractor or his/her agent(s) shall supervise and direct all work and shall be solely and completely responsible for all construction means, methods, techniques, sequences, procedures and conditions on the job site, including safety of all persons and property during the entire period of construction. Periodic observations by the Engineer, his staff or representatives are not intended to include verification of dimensions or review the adequacy of the Contractor's safety measures on or near the construction site.
10. Modifications of the plans, notes, details and specifications shall not be permitted without prior approval from the Engineer.
11. All workmanship shall conform to the best practice prevailing in the various trades performing the work. The Contractor shall be responsible for coordinating the work of all trades.
12. It is the Contractor's responsibility to ensure that only approved structural plans are used during the course of construction. The use of unapproved documents shall be at the contractor's own risk. Corrections of all work based on such documents shall be performed at the Contractor's expense.
13. These plans and specifications represent the structural design only. No information nor warranty is provided for the work of any other Consultant (Architect, Mechanical, Electrical, etc.). This includes, but is not limited to, waterproofing, drainage, ventilation, accessibility, or dimensions.

TRUSSES

- 1. Refer to the structural and architectural plans for additional design loads and conditions. Bottom chords shall be designed to resist a minimum ceiling live load of 10 psf. Truss calculations and details shall be submitted to the Architect/Engineer and the building department for review and approval prior to fabrication.
2. All trusses shall be fabricated in the shop of a licensed fabricator approved by the governing building department.
3. Each truss shall be legibly branded, marked or otherwise have permanently affixed thereto the following information located within 2 feet of the center of the span on the face of the bottom chord:
(a) Identity of the company manufacturing the truss
(b) the design load, and
(c) the spacing of the trusses.
4. Walls:
(a) Trusses shall bear on exterior walls only unless specifically noted otherwise.
(b) All interior walls shall be non-bearing unless specifically noted otherwise.
(c) All approved interior bearing locations shall be specifically noted on the structural plans.
5. Bearing:
(a) Securing of bearing walls, unless noted otherwise, trusses shall be secured at all bearing points with Simpson seismic anchors (e.g. H1) .
(b) Interior non-bearing walls shall be isolated from the trusses with Simpson truss clips (e.g. STC, DTC, HTCC4) or approved equal.
(c) Trusses to be manufactured with necessary camber to account for dead load deflections and eliminate accidental bearing on interior non-bearing walls.
7. Blocking and bracing shall be installed per manufacturer's recommendations. As a minimum, the trusses shall be blocked at the following locations:
(a) All bearing points
(b) Along ridge
8. Erect trusses according to the approved shop drawings. Lift members only at designated lift points. Provide erection bracing to keep the members straight and plumb as required to assure adequate lateral support for individual members and the entire system until the sheathing is applied.

MASONRY

- 1. Special inspection is required, unless specifically noted otherwise. Special inspection services shall conform to the Governing Building Code, Chapter 17 and shall be provided by an ICC certified inspector or Building Department approved engineer. The Building Department reserves the right to waive or require special inspections. Nothing in these plans waives the Building Department's right to require special inspection at any point and on any material.
2. Concrete Masonry Units:
(a) shall have a minimum compressive strength of 2000 psi.
(b) shall conform to ASTM C90, Grade N, Type 1, medium-weight aggregate
(c) shall conform to the TMS 402/602-16, Table SC-3
3. Mortar:
(a) shall have a minimum compressive strength of 2000 psi.
(b) shall be Type M or Type S
(c) shall be proportioned in conformance with TMS 402/602-16, Table SC-1
(d) shall be prepared with potable water that is free from deleterious amounts of acids, salts, alkali and organic materials.
4. Grout:
(a) shall have a minimum 28 day compressive strength of 2000 psi.
(b) shall be proportioned in conformance with TMS 402/602-16, section 2.2
(c) shall be prepared with potable water that is free from deleterious amounts of acids, salts, alkali and organic materials.
(d) shall have a slump between 8" & 11" for walls less than 12'-8" and greater than 12'-8" shall have a slump between 10" & 11" inches.
5. Admixtures
(a) shall be submitted to Engineer for review and approval prior to use.
6. Construction:
(a) Masonry units shall be laid in a running bond pattern. Stack bond or mechanical anchorage shall not be used unless specifically detailed on the plans.
(b) All masonry units shall be free of excessive dirt and dust.
(c) All cells shall be filled solidly with grout. Grout shall be a workable mix suitable for pumping without segregation and shall be thoroughly mixed. Grout shall be placed by pumping and shall be placed before initial set or hardening occurs. Grout shall be consolidated by mechanical vibration during placing and reconsolidated after excess moisture has been absorbed but before workability has been lost. The grouting of any wall section shall be completed in one day with no interruptions greater than one hour.
(d) Maximum grout height and use of clean-outs shall conform to TMS 402/602-16, section 3.5C. When required, clean-outs shall be provided by openings in the face shells in the bottom course of each cell to be grouted. The clean-outs shall be sealed after inspection and before grouting.
(e) When grouting is stopped for more than one hour, horizontal construction joints shall be formed by stopping the grout pour approach 1'-1/2" abv/below a bed joint.
7. Reinforcement:
(a) Refer to Reinforcement section for material specifications.
(b) All openings exceeding 24" shall have a minimum of (2) #5 bars directly above, below, and on both sides. Bars shall extend a min of 24" past edge of opening.
(c) At the end of all walls, provide a min of (2) #5 bars vert. from foundation to TOW.
(d) At the TOW, provide a min of (2) #4 bars horiz. along entire length of wall, UNO.
(e) Walls shall have a minimum of #4 bars @ 24" oc horizontally and vertically, UNO.
(f) All wall corners, intersections, ends and jambs shall have (2) #5 bars vertically unless specifically noted otherwise on the plans.
(g) All jamb reinforcement shall dowel into foundations below with lap bars of the same diameter.
(h) The minimum lap splice length for all reinforcing steel shall be as noted in the typical details on sheet S-1.1. All lap splices to be staggered.
(i) All reinforcement shall be in place and secured prior to placement of grout. Reinforcement shall be placed in accordance with TMS 402/602-16, section 3.4.
(j) Reinforcement to have grout coverage of at least one bar diameter from inside face of shell. The clear distance from the outside face of masonry to the reinforcement shall not be less than 2" when unit is exposed to soil.
8. Unless specifically noted otherwise on the architectural or structural plans, vertical control joints shall be provided in all concrete masonry walls and spaced at a maximum distance of 32 feet oc Control joints shall extend the full height of the wall. Control joints are not required when the wall length does not exceed 1.5 times the wall height.
9. Waterproofing shall be provided for all walls exposed to earth. Refer to architectural plans and specifications for waterproofing requirements.
10. Concrete masonry retaining walls shall not be backfilled until grout has set a minimum of 14 days. Refer to Structural Design Parameters section on sheet S-1.1 for all soil design values used in calculations.
11. The Contractor is responsible for the design, installation, maintenance and removal of all bracing and shoring that may be required during the course of construction.

CONCRETE

- 1. All concrete shall have:
(a) a ultimate compressive strength (Fc) of 3,000 psi at 28 days (UNO).
(b) Truss calculations and details shall be submitted to the Architect/Engineer and the building department for review and approval prior to fabrication.
(c) a W/C ratio of 0.55 or less for all slabs, walls, and columns, and 0.60 or less for all foundations.
(d) a normal dry-weight density (UNO).
2. Special inspection is NOT required as the foundations have been designed with fc = 2,500 psi in accordance with the Governing Building Code, section 1705.3, exceptions 1, 2.1, and 2.3, unless explicitly specified herein, on the structural plans, or by the Building Department. At a minimum, special inspection is always required on:
(a) structural slabs, flat plates
(b) walls, columns, beams
(c) piles, caissons
(d) welding of reinforcement, installation of mechanical bar splice devices, epoxy application
When required or specified, special inspection services shall conform to the Governing Building Code, Chapter 17 and shall be provided by an ICC certified inspector or Building Department approved engineer. The Building Department reserves the right to waive or require special inspections. Nothing in these plans waives the Building Department's right to require special inspection at any point and on any material.
3. Testing of materials used in concrete construction must be performed as noted on structural plans or at the request of the Building Department to determine if materials are quality specified. Tests of materials and of concrete shall be made by an approved agency and at the deflection and eliminate accidental bearing on interior non-bearing walls.
4. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
5. All concrete work shall conform with the Governing Building Code, Chapter 19.
6. All cement shall be Portland Cement Type I or II and shall conform to ASTM C150.
7. All aggregates shall conform to ASTM C33. Maximum aggregate sizes:
(a) Footings: 1-1/2"
(b) All other work: 3/4"
8. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
(a) Permanent formwork to earth or weather
i. Cast against earth: 3"
ii. Cast against forms: 2"
(b) Not exposed to earth or weather
i. Slabs, walls, joists: 3/4"
ii. Beams, girders, columns: 1-1/2"
9. The minimum lap splice length for all reinforcing steel shall be as noted in the typical details on sheet S-1.1. All lap splices to be staggered.
10. All reinforcing steel, anchor bolts, dowels, inserts, and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
11. Locations of all construction joints, other than specified on the structural plans, shall be approved by the Architect and Engineer prior to forming. Construction joints shall be thoroughly air and water cleaned and heavily roughened so as to expose coarse aggregates. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement. Unless specifically detailed or otherwise noted, construction and control joints shall be provided in all concrete slabs-on-grade. Joints shall be located such that the area does not exceed 400 sq. feet.
12. The Architect, Engineer and appropriate inspectors shall be notified in a timely manner for a reinforcement inspection prior to the placement of any concrete.
13. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coting and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All piles or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
14. The Contractor is responsible for design, installation, maintenance and removal of all formwork. Forms shall be properly constructed, sufficiently tight to prevent leakage, sufficiently stiff to maintain their shape and alignment until no longer needed for concrete support. Joints in formwork shall be tightly fitted and blocked, and shall produce a finished concrete surface that is true and free from blemishes. Forms for exposed concrete shall be pre-approved by the Architect to ensure conformance with design intent.
15. Remove formwork in accordance with the following schedule:
(a) Forms at slab edge: 1 day
(b) Side forms at footings: 2 days
(c) All other vertical surfaces: 7 days
(d) Beams, columns, girders: 15 days
(e) Elevated slabs: 28 days
Engineer reserves the right to modify removal schedule above based on field observations, concrete conditions, and/or concrete test results.
16. Retaining walls shall not be backfilled until concrete has set a minimum of 14 days. Refer to structural plans for slab and/or framing installation sequencing.
17. All concrete shall be compacted and finished. All surfaces shall be mechanically vibrated as it is placed. Vibrator to be operated by experienced personnel. The vibrator shall be used to consolidate the concrete. The vibrator shall not be used to convey concrete, nor shall it be placed on reinforcing and/or forms.
18. Concrete shall be maintained in a moist condition for a min. of five (5) days after placement.
19. Concrete shall not be permitted to free fall more than six (6) feet. For heights greater than six (6) feet, use tremie, pump or other method consistent with applicable standards.
20. When specified ultimate strength is greater than 2500 psi, Contractor shall submit mix designs to Architect and Engineer for approval seven (7) days prior to placement. Mix designs shall be prepared by an approved testing laboratory. Sufficient data must be provided for all admixtures.
21. Refer to Architectural plans for locations of all dimensions, slab depressions, slopes, drains, curbs, and control joints.

FOUNDATIONS

- 1. Refer to Structural Design Parameters section on sheet S-1.1 for all soil design values used in calculations.
2. Soils values per geotechnical report (or "soils report") by Beacon Geotechnical, Inc., Project No. F-102975, dated April 14, 2022. This report and all recommendations contained therein are to be considered a part of these plans.
3. It is the Contractor's responsibility to obtain a copy of the soils report from the Owner. A copy of the soils report shall be on the job site during the course of construction.
4. Unexcavated Soil Conditions: Allowable values and subsequent foundation designs are based on soil conditions which are shown by test borings. Actual soil conditions which deviate appreciably from that shown in the test borings shall be reported to the EOR and/or soils engineer immediately.
5. A compaction, fill, backfilling and site preparation shall be performed in accordance with project soils or the Governing Building Code Chapter 18 & Appendix J. All such work shall be performed per the recommendations of the project soils engineer.
6. Excavate to required depths and dimensions (as indicated in the drawings), cut square and smooth with firm level bottoms. Care shall be taken to not over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation.
7. Foundations shall be poured in neat excavations.
8. Excavate all foundations to the required depths into compacted fill or natural soil (as per plans and details) and as verified by the building official and/or soils engineer.
9. All foundations shall be inspected and approved by the appropriate building official and/or a representative of the soils engineer prior to forming and placement of reinforcing or concrete.
10. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
11. It is the responsibility of the contractor in charge of framing to properly position all holdown bolts, anchor bolts, column bases, and all other cast-in-place hardware. Refer to typical details. All hardware to be secured prior to foundation inspections.
12. The sides and bottoms of dry excavations must be moistened to optimum moisture content or just above, just prior to placing concrete. Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
13. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and bracing. Provide adequate shoring, structures, shoring, shoring, shoring, shoring in accordance with federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

ROUGH CARPENTRY

- 1. Refer to latest edition of the Governing Building Code, Table 2304.10.2 for all minimum nailing requirements.
2. Refer to specifications for applicable material specifications.
3. Fabricate, size, install, connect, fasten, bore, notch, and cut wood and plywood with joints true, tight, and well-nailed, screwed or bolted as required, all members to have solid bearing without being shimmed, unless noted otherwise. Set horizontal members subject to bending with the crown up. Install framing plumb, square, true and cut for full bearing. Splices are not permitted between bearings. Use full lengths unless otherwise specified.
4. Metal framing angles, anchor, clips, straps, ties, holdowns, etc. shall be mfg by Simpson Strong-Tie. All connections shall be performed without prior approval of the Engineer.
5. All walls are to have continuous double 2x top plates spliced as followings unless specifically noted otherwise on the plans and details.
6. Wall Studs:
(a) Unless specifically noted on the plan and details, use the following guidelines for wall framing:
i. Use 2x4 studs at 16" oc for walls less than 9'-0" tall.
ii. Walls 9'-0" to 16'-0" tall shall be constructed of 2x6 studs at 16" oc
iii. Request specifically engineered wall details for walls greater than 16'-0" tall.
7. Blocking:
(a) Provide min. one row of nominal 2" thick blocking of same width as stud, fitted snugly and spiked into studs at mid-height of partitions or walls over 8' high.
(b) All foundation cripple walls (or "pony walls") less than 14" in height shall be solid blocking.
(c) The blocking/nm board to be 1-1/4" minimum width x full depth at bearing walls, UNO per plans and details. Refer to shearwall section for additional rim/blocking requirements.
8. Notching:
(a) Is not permitted of any structural member without prior approval
(b) In exterior and bearing walls, notches shall not exceed 25% of the stud depth.
(c) Non-bearing partition walls, notches shall not exceed 40% of the stud depth.
(d) Successive notches in the same member shall be spaced a min of 18" apart.
9. Boring:
(a) Is not permitted of any structural member without prior approval
(b) In exterior and bearing walls, holes shall not exceed 40% of the stud depth.
(c) Non-bearing partition walls, may be drilled not greater than 60% of stud depth.
(d) Successive holes in the same member shall be spaced a minimum of 18" apart.
10. Bearing:
(a) Provide a min. of 1-1/2" of bearing for all 2x joists and hrs 4x10 / 6x8 & smaller.
(b) Provide a min. of 3" of bearing for all beams and hrs 4x12 / 6x10 & larger, UNO on plans.
(c) Members bearing on prefabricated hangers are to have full bearing and nailing per manufacturer's specifications.
11. Posts:
(a) Posts inside walls shall bear on sill plates and shall be continuous between top and bottom plates.
(b) Provide posts under all beams, girders or double joists equal to the width of the posts on upper levels. are to be stacked on posts of equal size at levels below, unless a larger post is specified on the plans.
(d) Vertically oriented blocking ("squash blocking") shall be used to fully transfer the post area through floors to foundation. Vertical blocking shall be equal to floor thickness plus 1/4".
(e) Headers framing into continuous posts without trimmer studs shall be supported in Simpson HUC hangers unless noted otherwise on the plans.
(f) Posts when isolated, shall be seated in Simpson post or column bases, unless noted otherwise on the plans
12. Roof Framing:
(a) Provide wood joists, as specified, laid with the crown up and spaced as indicated.
(b) Provide a minimum of 1-1/2" end bearing unless otherwise shown.
(c) Provide full depth solid 2x blk/g or cross-bridging between the joists at 8' oc max.
(d) Provide all cricket framing required to achieve positive drainage per Arch.
(e) Install plywood panels with the face grain across the framing and close joints and nail at each support. Fully nail with common nails per the plans.
(f) Plywood panels shall not be less than 4' x 8' except at boundaries and changes in framing direction, where the minimum panel dimension shall be no less than 24", unless all edges of undersized panels are supported by and fastened to framing members or blocking.
(g) Provide Simpson "PSCl" clips at all plywood joints perpendicular to framing. Provide clips midway between framing members at the unsupported edges of plywood when members are spaced at 24" oc or greater. If clips are not used, provide solid blocking for joints perpendicular to framing.
13. Floor Framing:
(a) Provide wood joists, as specified, laid with the crown up and spaced as indicated.
(b) Provide a minimum of 1-1/2" end bearing unless otherwise shown.
(c) Provide full depth solid 2x blk/g or cross-bridging between the joists at 8' oc max. For floors framed with joists, refer to the mg's spec's for blk/g requirements.
(d) Provide full depth solid 2x blocking between the joists under all walls and partitions where the wall or partition is perpendicular to the floor framing (including floors framed with joists).
(e) Install plywood sheathing with the face grain across supports, end supports staggered, and the edges of sheets centered over supports. If T&G plywood is used, blocking need not be provided at all plywood edges (UNO per plan). If T&G plywood is not used, blocking shall be provided at all plywood edges. Glue plywood to joists and fully nail with common nails per the plans.
(f) Plywood panels shall not be less than 4' x 8' except at boundaries and changes in framing direction, where the minimum panel dimension shall be no less than 24", unless all edges of undersized panels are supported by and fastened to framing members or blocking.
14. Shear Walls:
(a) Refer to plans for all shearwall locations, length type and nailing.
(b) Refer to Shearwall Schedule on title sheet for additional information.
(c) Shear wall lengths specified on plans are minimum required.
(d) Shear walls to be nailed with common nails. All nails to have minimum 3/8" edge distance to panel or framing member.
(e) Where 3x framing is required per the shear wall schedule, stagger edge nailing.
(f) Oriented Strand Board (OSB) may be used in lieu of plywood.
(g) Typical Rim Board/Blocking at Shearwalls shall be 1-3/4" Min. LSL (refer to Engineered Lumber Section for Material Specifications). Refer to Shearwall Schedule per Plan for Min. Rim/Blk/Wdth Requirements per Transfer Fasteners.

TIMBER / LUMBER

- 1. All structural Lumber shall be Douglas Fir-Larch, S4S and shall conform to the Governing Building Code, section 2303.1.1.
2. The minimum lumber grade of each member shall be as follows (unless specifically noted otherwise on plans and details):
(a) 2x studs, blocking, plates:Stu1
(b) 2x joists #2 or better
(c) 4x4, 4x6, or 6x6 beams or posts #2 or better
(d) 4x8, 6x8, or larger beams or posts #1 or better
It is recommended (but not required) that all exposed members be Select Structural or better and free of heart center due to visual characteristics.
3. All lumber in contact with concrete or masonry shall be pressure treated Douglas Fir. Whenever it is necessary to cut, notch, bore or split pressure treated material, all newly cut surfaces shall be thoroughly painted with the same preservative.
4. Maximum moisture content for all structural members shall not exceed 19%.
5. All plywood sheathing shall be CDX grade (or better) Douglas Fir with exterior glue. All sheathing shall conform to the Governing Building Code and grade-marked by the American Plywood Association (APA). Panel index to be 40/20 for floors and 24/0 for roofs unless specifically noted otherwise on the plans and details.

REINFORCEMENT

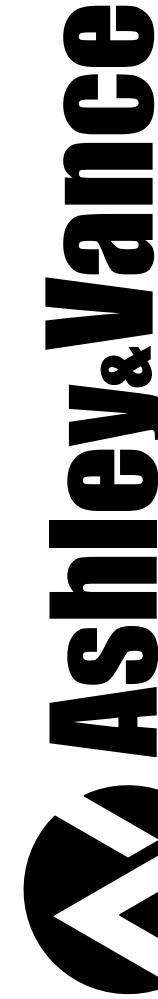
- 1. Reinforcing steel shall be deformed, clean, free of rust, grease or any other material likely to impair concrete bond.
2. All bars shall conform to ASTM A615, Grade 60 minimum (UNO on structural plans). All weld wire fabric (WWF) shall conform to ASTM A185.
3. Reinforcing steel that is to be welded shall conform to ASTM A706. All welding of reinforcement shall be subject to special inspection.
4. Contractor shall take necessary steps (standard ties, anchorage devices, etc.) to secure all reinforcing steel in their true position and prevent displacement during concrete placement.
5. Fabrication, placement and installation of reinforcing steel shall conform to:
(a) Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice
(b) the Governing Building Code.
6. Shop drawings for fabrication of reinforcing steel shall be approved by the Contractor and submitted to the Architect and Engineer for review and approval prior to fabrication. Shop drawings are not required for slabs-on-grade or foundations unless specifically noted on the structural plans.
7. Heating of reinforcing steel to aid in bending and shaping of bars is not permitted. All bends in reinforcing steel are to be made cold. All bend radii shall conform to CRSI Manual of Standard Practice.
8. Refer to Concrete and Masonry notes for specific minimum splice length and splice staggering requirements. Lap welded wire fabric (WWF) reinforcement two (2) modules minimum (UNO). All splices are to be staggered.

ENGINEERED LUMBER

- 1. Glu-laminated Beams (GLB):
(a) shall have the following properties:
Table 1: Properties of GLB
| Use | Combination Symbol | Species / Grade | Flexural Stress, Fb (ksi) | Modulus of Elasticity, E (ksi) | Horiz. Shear Stress, Fv (psi) | Compression Fc para. (psi) | Compression Fc perp. (psi) |
|---|---|---|---|---|---|---|---|
| Simple Span Bm. | 24F-V4 | DF | +2,400/-1,850 | 1,800 | 265 | 1,850 | 650 |
| Continuous or Cantilever Bm. | 24F-V8 | DF | +/- 2,400 | 1,800 | 265 | 1,850 | 650 |
(b) shall not be notched, cut or drilled without prior approval from the Engineer
(c) shall be protected from exterior glue and weather-treatment prior to installation.
(d) shall be fabricated by an approved manufacturer & in accordance with ANSI A 190.1
(e) shall have factory standard camber of 3,500-5,000 ft on beams UNO per Plan
2. Laminated Veneer Lumber (LVL):
(a) shall be 1-3/4" minimum thickness with the following minimum properties:
i. E = 2000 ksi
ii. Fb = 2600 psi
iii. Fv = 265 psi
iv. Fc (parallel) = 2500 psi
v. Fc (perp.) = 750 psi
vi. F1 (parallel) = 1500 psi
vii. Specific Gravity = 0.50
(b) shall be fabricated by an approved manufacturer
(c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
(d) shall be nailed in accordance with mgf's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
i. 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
ii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances.
(e) shall be, when comprised of multiple members, connected with 16d nail, 1/2" bolts or 1/4" lag screws in accordance with manufacturer's specifications.
(f) shall not be cut, notched or drilled without specific written approval of the EOR.
3. Laminated Strand Lumber (LSL):
(a) shall be 1-1/4" minimum thickness with the following minimum properties:
i. E = 1550 ksi
ii. Fb = 2325 psi
iii. Fv = 310 psi
iv. Fc (parallel) = 2500 psi
v. Fc (perp.) = 800 psi
vi. F1 (parallel) = 1070 psi
vii. Specific Gravity = 0.50
(b) shall be fabricated by an approved manufacturer
(c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
(d) shall be nailed in accordance with mgf's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
i. 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
ii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances.
(e) shall be, when comprised of multiple members, connected with 16d nail, 1/2" bolts or 1/4" lag screws in accordance with manufacturer's specifications.
(f) shall not be cut, notched or drilled without specific written approval of the EOR.
4. Parallel Strand Lumber (PSL):
(a) shall be 2-1/2" minimum thickness with the following minimum properties:
i. E = 2200 ksi
ii. Fb = 2900 psi
iii. Fv = 290 psi
iv. Fc (parallel) = 2500 psi
v. Fc (perp.) = 750 psi
vi. F1 (parallel) = 2025 psi
vii. Specific Gravity = 0.50
(b) shall be fabricated by an approved manufacturer
(c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
(d) shall be nailed in accordance with manufacturer's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
i. Narrow face: 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
ii. Wide Face: 16d @ 8" oc, and 10d & 8d @ 6" oc
iii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances
(e) shall not be cut, notched or drilled without specific written approval of the EOR.
5. Plywood Joists:
(a) type and manufacturer shall be clearly noted on the plans. Substitutions shall not be permitted without prior approval of the Engineer.
(b) shall be installed in accordance with applicable code approvals and mgf's spec's.
(c) shall bear a minimum of 1-3/4" at all end supports, and 3-1/2" at intermediate supports. Provide full depth solid blocking at all bearing points.
(d) shall be installed with intermediate blocking or bridging as specified by the Mfr. Only omit intermediate blocking when specifically allowed by the Mfr.
(e) shall not be cut, notched or drilled without specific written approval of the EOR.

FASTENERS

- 1. Nails:
(a) shall be with "common" nails unless noted otherwise.
(b) shall not be driven closer than 1/2 their length nor closer than 1/4 of their length to the edge or end of a member, except for sheathing.
(c) shall be installed in pre-drilled lead holes if necessary to avoid splitting.
(d) shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper when in contact with preservative-treated wood.
i. When used in exterior applications, nails shall have coating types and weights in accordance with the treated wood or bolt manufacturer's Recs. A Min. of ASTM A653, type G185 zinc-coated galvanized steel (or equiv.) shall be used.
ii. When used in interior, dry environment in SBX/DOT or zinc borate preservative-treated wood, plain carbon nails shall be permitted.
(e) All nailing shall conform to the Governing Building Code, Table 2304.10.2.
2. Lag screws:
(a) shall be installed into pre-drilled lead holes. Lubricant (or soap) shall be used to facilitate installation and prevent damage to the screws.
(b) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
3. Bolts:
(a) shall conform to ASTM A307, UNO specifically on plans and details.
(b) shall be installed in pre-drilled holes a max of 1/16" larger than the specified bolt dia.
(c) when installed against wood surfaces, shall have standard washers under the heads and nuts.
(d) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
4. Anchor Bolts:
(a) shall be installed at all exterior walls and all interior shear and/or bearing walls.
(b) shall be 5/8" diameter with 3x3x2 2/29" steel plate washers at shear walls.
(c) shall be 5/8" diameter with 2x2x3/16" steel plate washers at non-shear walls.
(d) shall have 7" minimum embedment. (Contractor to coordinate length of bolts with sill plate thicknesses).
(e) shall conform to ASTM F1554, Grade 36.
(f) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A653, type G185 zinc-coated galvanized steel (or equal) shall be used.
ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
(g) shall not be spaced greater than 72" oc Refer to shearwall schedule for specific anchor bolt spacing requirements.
(h) shall be placed a maximum of 12" from wall corners, wall ends, and sill plate splices (but not less than 7 dia.), and a min. of two bolts per piece of sill plate is required.
(i) shall be secured in place prior to foundation inspection.
5. Powder Actuated Steel Pins:
(a) shall be installed at all interior non-bearing, non-shearwalls.
(b) shall be 0.145x3" with 1.5" diameter steel washers.
(c) shall not be spaced greater than 32" o.c.



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Engineer of Record:



Martin ADU & Garage

215 Canon Drive
Santa Barbara, California 93105
Proj. Engr.: D. Webster Phone Ext.: 220
Proj. Mgr.: P. Belmont
Date: 08 Sep. 2023 Scale: NTS
A&V Job No.: 230915

STRUCTURAL SPECIFICATIONS

S-1.2

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

**STATEMENT OF SPECIAL INSPECTIONS**

- This Statement of Special Inspection is submitted in fulfillment of the requirements of the Governing Building Code, section 1704 and 1705.
- Special Inspections and Testings will be performed in accordance with the approved plans and specifications, this statement and the Governing Building Code, Section 1704, 1705, 1707, and 1708.
- The schedule of Special Inspections summarizes the Special Inspections and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.
- Interim reports will be submitted to the Building Official and the Registered Design Professional in Responsible Charge in accordance with the Governing Building Code Section 1704.2.4.
- A Final Report of Special Inspections documenting required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy (Section 1704.2.4). The Final Report will document:
  - Required special inspections.
  - Correction of discrepancies noted in inspections.
- The Owner recognizes his or her obligation to ensure that the construction complies with the approved permit documents and to implement this program of special inspections. In partial fulfillment of these obligations, the Owner will retain and directly pay for the Special Inspections as required in the Governing Building Code, Section 1704.2.
- 1704.4 Contractor responsibility. Each contractor responsible for the construction of a main wind- or seismic force-resisting system, designated seismic system or a wind- or seismic force-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the building official and the owner or the owner's authorized agent prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain acknowledgement of awareness of the special requirements contained in the statement of special inspection.

**SCHEDULE OF TESTING AGENCIES & SPECIAL INSPECTORS**  
 The following are the testing agencies and special inspectors that will be retained to conduct tests and inspection on this project.

Responsibility	Firm	Address, Telephone, Email
1. Special Inspection (Except for Geotechnical)		
2. Materials Testing		
3. Geotechnical Inspection		
*		

\* Additional inspections may be required at the discretion of the Building Official.

**SEISMIC REQUIREMENTS (Section 1705.13)**  
 Description of seismic-force-resisting system and designated seismic systems subject to special inspections per Section 1705.13:  
 Light-framed walls sheathed with wood structural panels rated for shear resistance or steel sheets (ASCE 7, Table 12.2-1, Line A.15)  
 The extent of the main seismic-force-resisting system is defined in more detail in the construction documents.

**WIND REQUIREMENTS (Section 1705.12)**  
 Description of main wind-force-resisting system and designated seismic systems subject to special inspections per Section 1705.12:  
 Not Applicable  
 The extent of the main wind-force-resisting system is defined in more detail in the construction documents.

**SCHEDULE OF SPECIAL INSPECTIONS**  
 Column Header Notation Used in Table:  
 C Indicates continuous inspection is required.  
 P Indicates periodic inspections are required. The notes and/or contract documents should clarify.  
 Box Entry Notation Used in Table:  
 X Is placed in the appropriate column to denote either "C" continuous or "P" periodic inspections.  
 -- Denotes a one-time activity or one whose frequency is defined in some other manner.  
 Additional details regarding inspections are provided in the project specifications or notes on the drawings.

Verification & Inspection	C	P	Notes
<b>1705.13.2 - Seismic Resistance - Structural Wood</b>			
2. Inspect nailing, bolting, anchoring, and other fastening of elements of the main seismic force-resisting system, including wood shear walls, wood diaphragms, collectors (drag struts), braces, shear panels, and hold-downs			X Inspection of shear walls and diaphragms with fasteners spaced greater than 4' oc is not required
<b>1705.6 - Soils</b>			
1. Verify materials below shallow footings are adequate to achieve the desired bearing capacity		X	
2. Verify excavations are extended to proper depth and have reached proper material		X	
3. Perform classification and testing of compacted fill materials		X	
4. Verify use of proper materials, densities, and lift thicknesses during placement and compaction of compacted fill	X		
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly		X	



**Ashley & Vance**  
ENGINEERING, INC.

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Santa Barbara, CA 93101  
(805) 962-9966  
www.ashleyvance.com

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Engineer of Record:



REGISTERED PROFESSIONAL ENGINEER  
R. PAUL BELMONT  
C76732  
PLAN REVIEW  
FOR CONSTRUCTION  
CIVIL  
STATE OF CALIFORNIA

**Martin ADU & Garage**

215 Canon Drive  
Santa Barbara, California 93105

Revision:


Proj. Engr.: D. Webster Phone Ext.: 220  
 Proj. Mngr.: P. Belmont  
 Date: 08 Sep. 2023 Scale: NTS  
 A&V Job No.: 230915

**SPECIAL INSPECTIONS**  
  
**S-1.3**

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Engineer of Record:



**Martin ADU & Garage**

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Revision:


Proj. Engr.: D. Webster Phone Ext.: 220

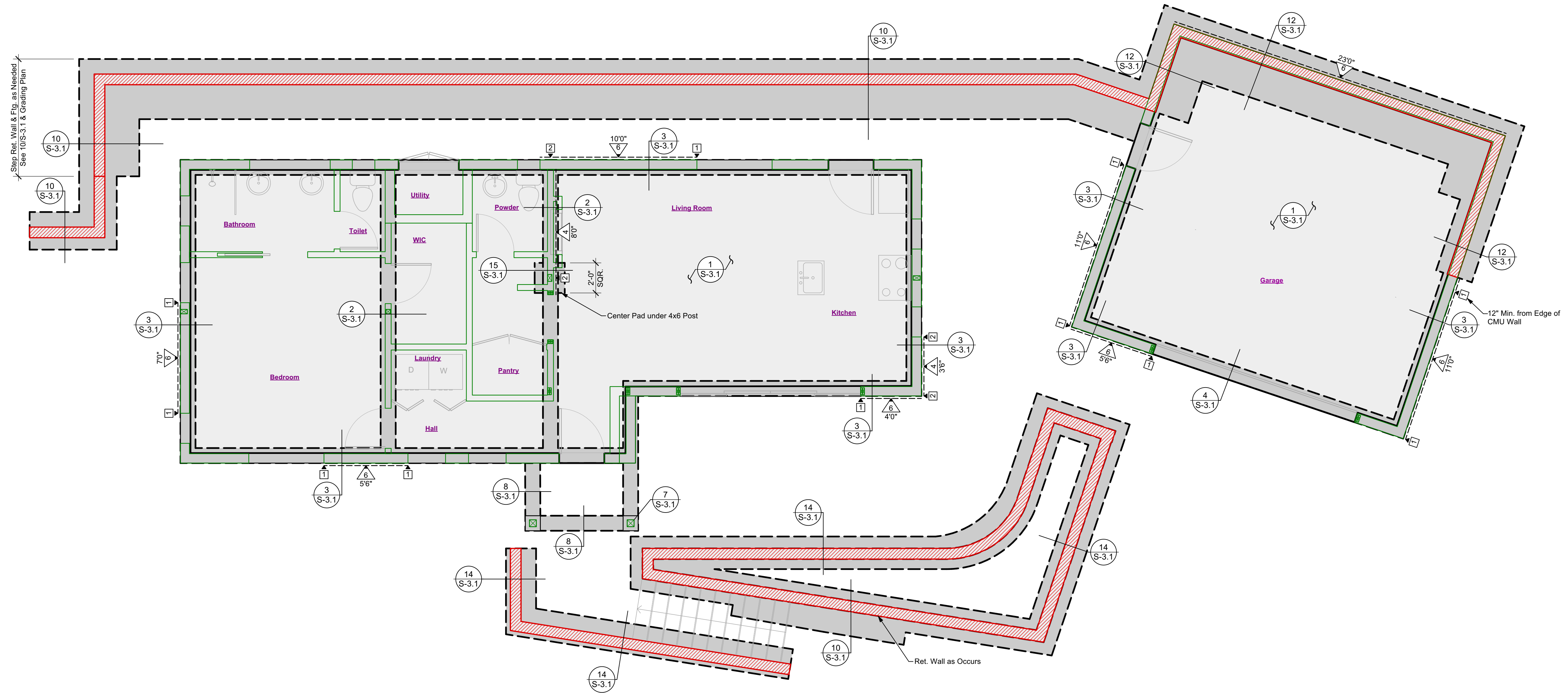
Proj. Mngr.: P. Belmont

Date: 08 Sep. 2023 Scale: 1/4"=1'-0"

A&V Job No.: 230915

**FOUNDATION PLAN**

**S-2.1**

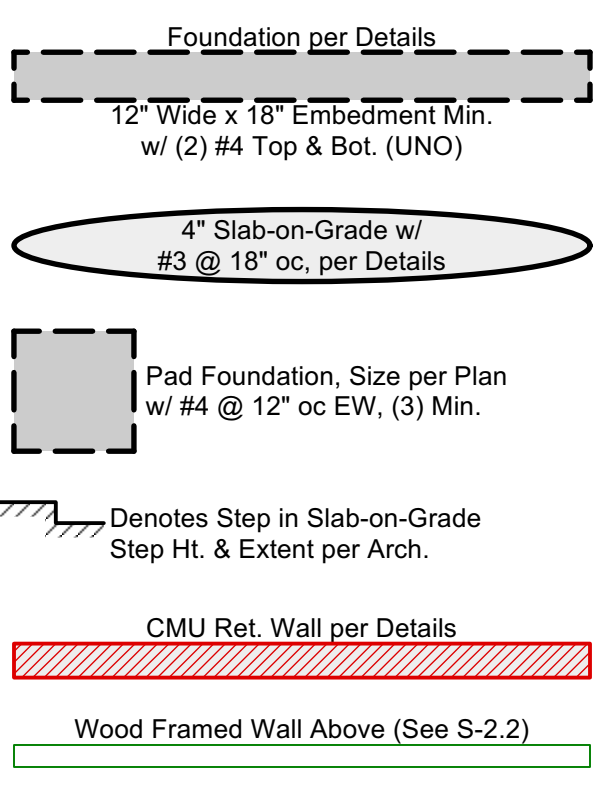


**GENERAL FOUNDATION NOTES**

Please see Soils Report for additional specifications and recommendations. It is the contractor's responsibility to obtain a copy of the soils report from the owner or owners representative. Prior to the contractor requesting a Building Department foundation inspection, the Soils Engineer shall advise the building inspector in writing that:

- Building pad was prepared in accordance with soils report
- Utility trenches have been properly backfilled and compacted, and
- Foundation excavations, the soil's expansive characteristics and bearing capacity conform to the soils report.

See General Notes & Specifications for additional requirements and material specifications.  
All dimensions per Architectural plans  
Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.



**HOLDOWN SCHEDULE**

TYPE	HOLDOWN <sup>1,2</sup>	MIN. POST	ANCHOR / EMBEDMENT	DETAILS
1	HDU4	(2) 2x	SSTB20 / 17\"/>	

FOOTNOTES:  
1. Shared holdowns to be installed per detail 10/S-1.1. Typical Shearwall Intersections. (UNO)  
2. All holdowns shown shall be continued down to the foundation with the same size holdowns and post. (UNO)

**SHEARWALL SCHEDULE**

NO.	DESCRIPTION	DBL SIDED	SILL PLATE	PANEL B'DRY	SIZE	SPCG	TRANSFERS <sup>2</sup>				
							5/8\"/>				

**FOOTNOTES:**

- All nails to be COMMONS. DO NOT use box type nails. All "field" nailing to be 12"oc. UNO. Penetration shall be 1-1/2" Min. in framing.
- All transfers to be installed into min. 1-1/2" thick members. UNO. Where clips are spaced less than 6" oc, stagger clips on each side of wall.
- All shear walls to have 5/8" anchor bolts, embedded 7" into concrete foundations, with 3"x3"x0.229" thick plate washers minimum. Washers may be slotted (slot length not to exceed 1-3/4") w/ standard cut washer placed between nut and plate washer. Washers shall extend within 1/2" of the edge of the bottom plate on the sheathed side. At walls sheathed on 2 sides, plate washers shall be alternated to each side of plate. [Governing Building Code, Section 2306.3.1] [AF&PA SDPWS 4.3.6.4.3]
- Simpson SDS 1/4"x5" Screws through 2x sill, or SDS 1/4"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ESR 2236]
- Simpson SDWS 0.22"x5" Screws through 2x sill, or SDWS 0.22"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ES A233.3]
- See details for permitted transfer clip types and locations.
- Orient LTP4 and LTP5 clips such that the long dimension is horizontal.
- Where LTP4 clips are installed over shear wall sheathing, fasten with full length 8d common nails.
- 16d common nails through the sill plate to rim member or blocking.
- Install screws into 3-1/2" wide continuous member, staggered 1-1/2" apart.
- Install screws into Glulams or solid sawn member. LSL, LVL, or PSL members are NOT acceptable. UNO.

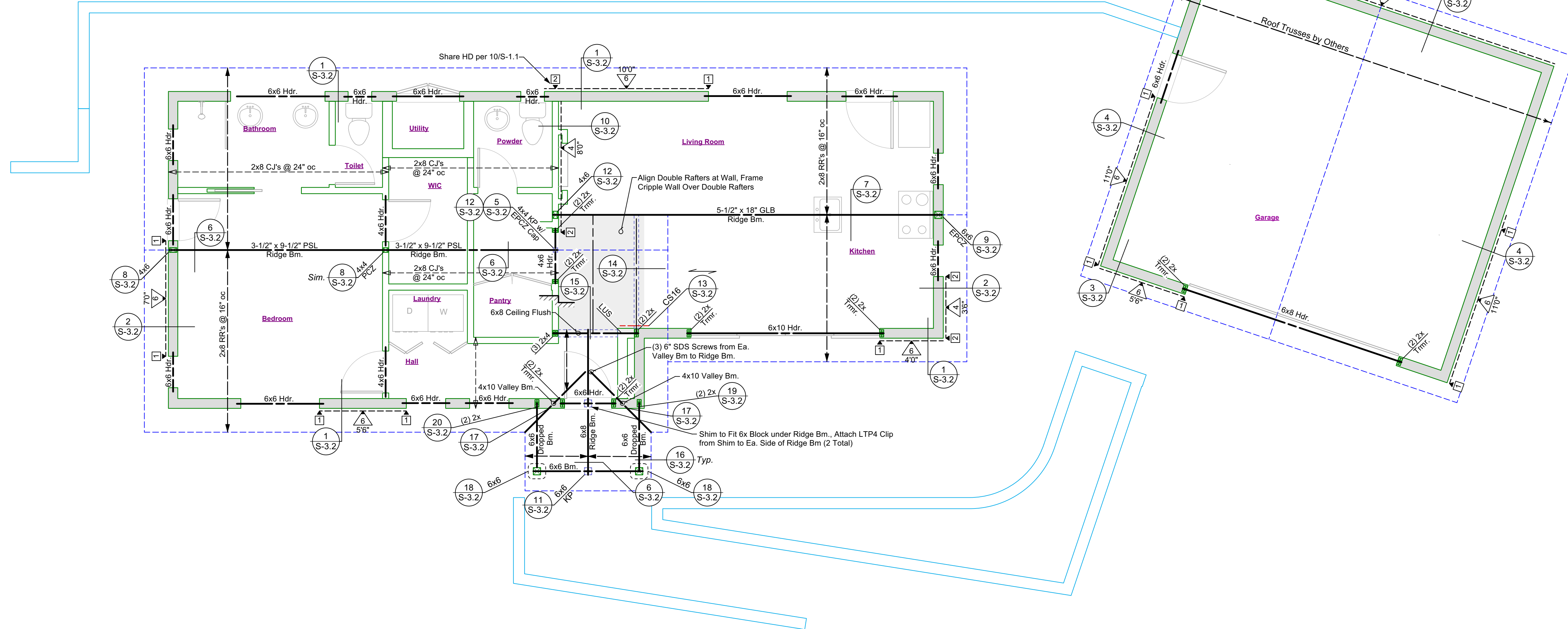
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Engineer of Record:



## Martin ADU & Garage

215 Canon Drive  
Santa Barbara, California 93105



Denotes Approximate Areas of Overbuild. Overbuild Framing Consists of 2x8 Ridge, 2x6 Rafters, with 2x4 Vertical Supports @ 48" o.c., Staggered.

**TRUSS DRAWINGS**  
Manufactured truss (i.e. prefabricated truss) drawings are required. Truss drawings must be received by the Architect (or designer) in time to ensure adequate coordination with Structural Engineer. Refer to the Material Specifications for additional requirements. Truss drawings shall include (but are not limited to) the following:  
1. All connections related to trusses (i.e. truss to truss, conventional framing to truss, truss to top plate, etc.  
2. All related bracing for trusses.  
3. Any camber needed to minimize excessive deflection.  
4. Adequate design to prevent any lateral movement.  
5. Adequate design to sustain any vertical load.  
6. The builder agrees to hold the Architect (or Designer) & the Engineer harmless for omissions due to delayed receipt of truss drawings.

All truss engineering, drawings, truss types, and detailed shop drawings shall be approved by the project engineer prior to the installation of the trusses.

### GENERAL FRAMING NOTES

Beams (per Call-out)

All Lumber 4x6, 6x6 and Smaller to be DF #2 UNO  
All Lumber 4x8, 6x8 and Larger to be DF #1 UNO  
All Beams to Bear on Plates w/ Indicated Post or Doubler Below UNO  
All Hangers Shall be Installed w/ Max. Nailing per Mfr. & Sized for Full Width & Depth of Supported Members, UNO  
Roof sheathing to be 1/2" plywood or OSB, PI 24/0, nailed w/ 10d commons at 6", 6", 12"

- Pre-Fabricated Roof Trusses (by Others) @ 24" oc  
All Truss to Truss Hangers per Mfr., Typ. (UNO)
- Roof Rafters -- 2x8 D.F. #2 @ 16" oc  
in Simpson LUS Hangers, Typ. (UNO)
- Ceiling Joists -- 2x8 D.F. #2 @ 24" oc  
in Simpson LUS Hangers. (UNO)

Denotes Step in Framing, Step Ht. & Extent per Arch.

Waterproofing, flashing, & finish details per Architecturals.

See General Notes & Specifications for additional requirements and material specifications.

All dimensions per Architectural plans  
Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.

### WALL SCHEDULE

Stud wall locations per Architecturals.

Wood-Framed Wall, Thk. per Arch.

2x4 D.F. Stud @ 16" oc, Min.

Wood-Framed Wall, Thk. per Arch.

2x6 D.F. Stud @ 16" oc, Min.

All Walls to have Continuous Double Top Plates,  
All Splices to be per Detail 7/S-1.1

Walls Above  
(shown for clarity)

Walls Low  
(shown for clarity)

### HOLDOWN SCHEDULE

TYPE	HOLDOWN 1-2	MIN. POST	ANCHOR / EMBEDMENT	DETAILS
1	HDU4	(2) 2x	SSTB20 / 17" Min.	HD at Ext. Fnd. 5/S-3.1
2	HDU8	4x	SSTB24 / 21" Min.	HD at Int. Fnd. 6/S-3.1

FOOTNOTES:  
1. Shared holdowns to be installed per detail 10/S-1.1. Typical Shearwall Intersections. (UNO)  
2. All holdowns shown shall be continued down to the foundation with the same size holdowns and post. (UNO)

### SHEARWALL SCHEDULE

NO.	DESCRIPTION	NAILING <sup>1</sup>		TRANSFERS <sup>2</sup>								
		DBL SIDED	SILL PLATE	SIZE	SPCG	5/8"Ø <sup>3</sup> AB Screw	SDS <sup>4</sup> Screw	SDWS <sup>5</sup> Screw	A35, LTP4, 6,7,8 or LTP5	RBC	16d <sup>9</sup>	
1	15/32" CDX Plywood	N	2x	2x	10d	6"	48"	10"	13"	17"	13"	5"
2	15/32" CDX Plywood	N	2x	3x	10d	4"	38"	7"	9"	12"	9"	3"

FOOTNOTES:  
1. All nails to be COMMONS. DO NOT use box type nails. All "field" nailing to be 12" oc. UNO. Penetration shall be 1-1/2" Min. in framing.  
2. All transfers to be installed into min. 1-1/2" thick members, UNO. Where clips are spaced less than 6" oc, stagger clips on each side of wall.  
3. All shear walls to have 5/8" anchor bolts, embedded 7" into concrete foundations, with 3"x3"x0.225" thick plate washers minimum. Washers may be slotted (slot length not to exceed 1-3/4") w/ standard cut washer placed between nut and plate washer. Washers shall extend within 1/2" of the edge of the bottom plate on the sheathed side. At walls sheathed on 2 sides, plate washers shall be alternated to each side of plate. [Governing Building Code, Section 2308.3.1] [AF&PA SDPWS 4.3.6.4.3]  
4. Simpson SDS 1/4"x5" Screws through 2x sill, or SDS 1/4"x6" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ESR 2236]  
5. Simpson SDWS 0.22"x5" Screws through 2x sill, or SDWS 0.22"x6" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ESR 2236]  
6. See details for permitted transfer clip types and locations.  
7. Orient LTP4 and LTP5 clips such that the long dimension is horizontal.  
8. Where LTP4 clips are installed over shear wall sheathing, fasten with full length 8d common nails.  
9. 16d common nails through the sill plate to rim member or blocking.  
10. Install screws into 3-1/2" wide continuous member, staggered 1-1/2" apart.  
11. Install screws into Glulams or solid sawn member. LSL, LVL, or PSL members are NOT acceptable, UNO.

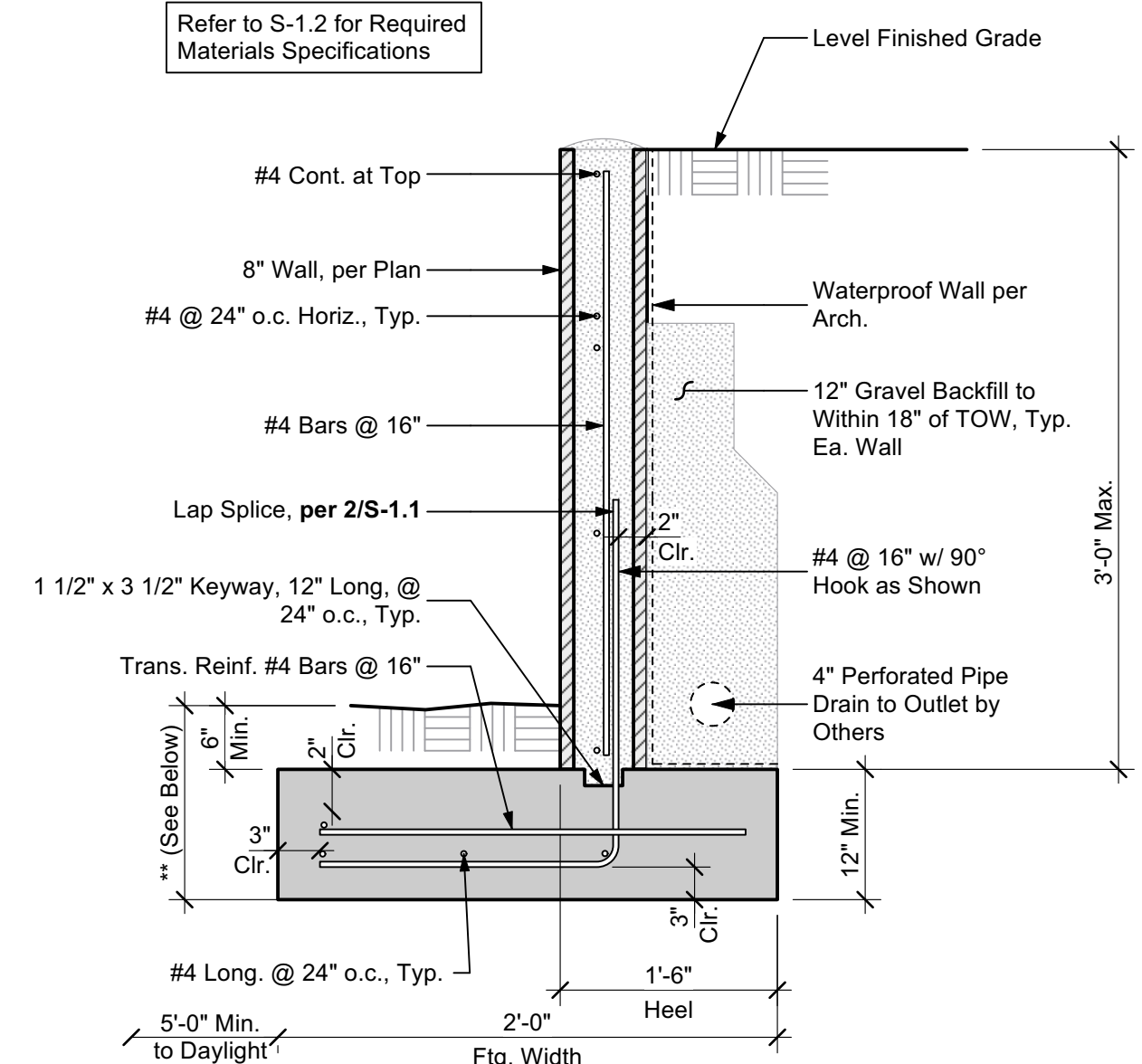
Revision:


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Proj. Mgr.: P. Belmont  
Date: 08 Sep. 2023 Scale: 1/4"=1'-0"  
A&V Job No.: 230915

# ROOF FRAMING PLAN

## S-2.2

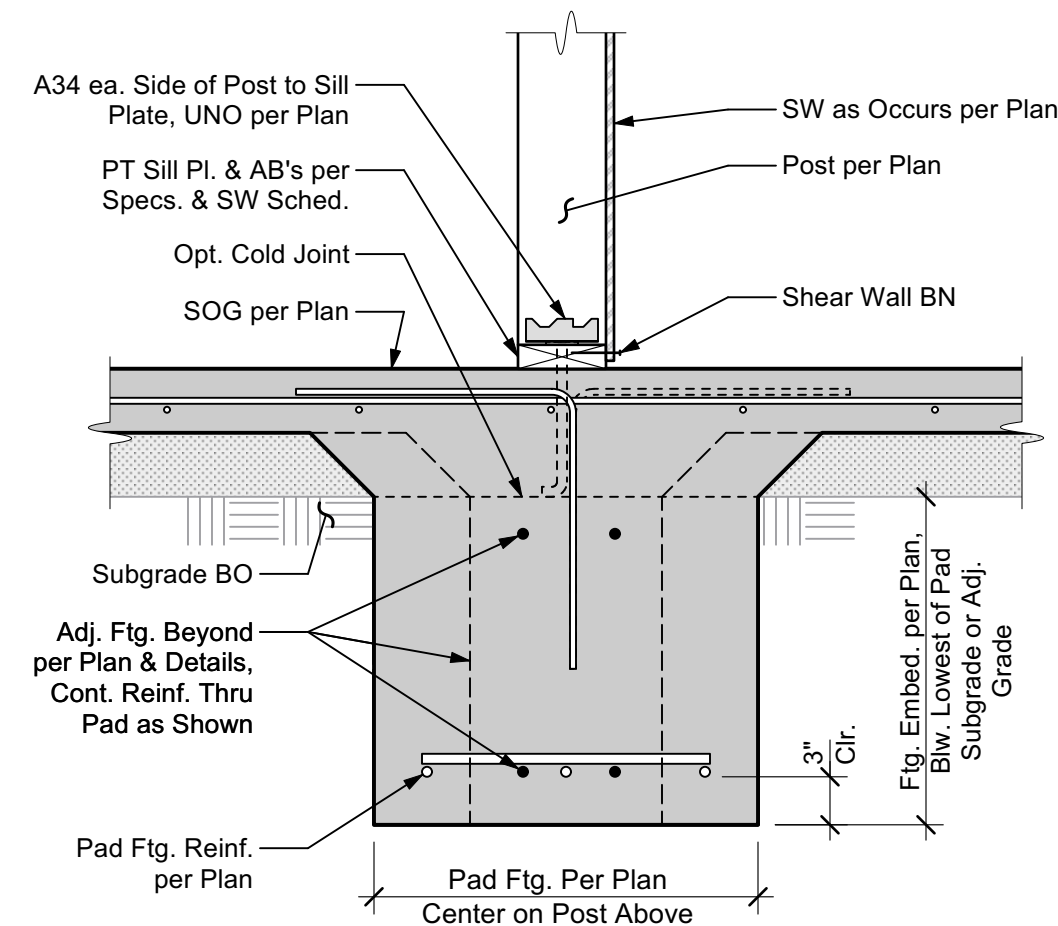
17 NOT USED



\*\* Embed Wall Footing into approved material per Soils Report. Contact EOR if retained heights exceed those on this schedule.

18 NOT USED

14 SITE WALL

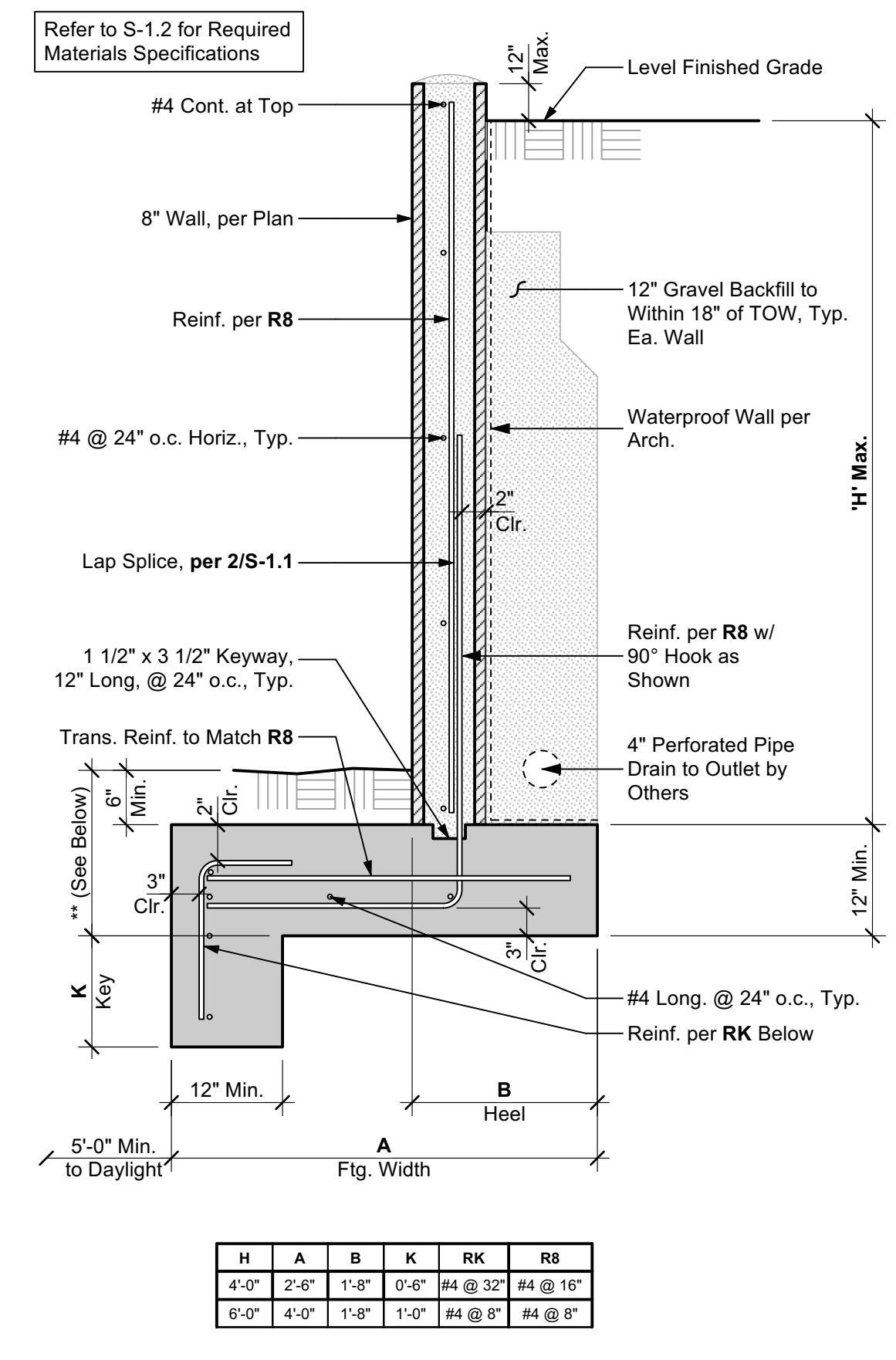


15 WOOD POST TO INTERIOR PAD FOOTING



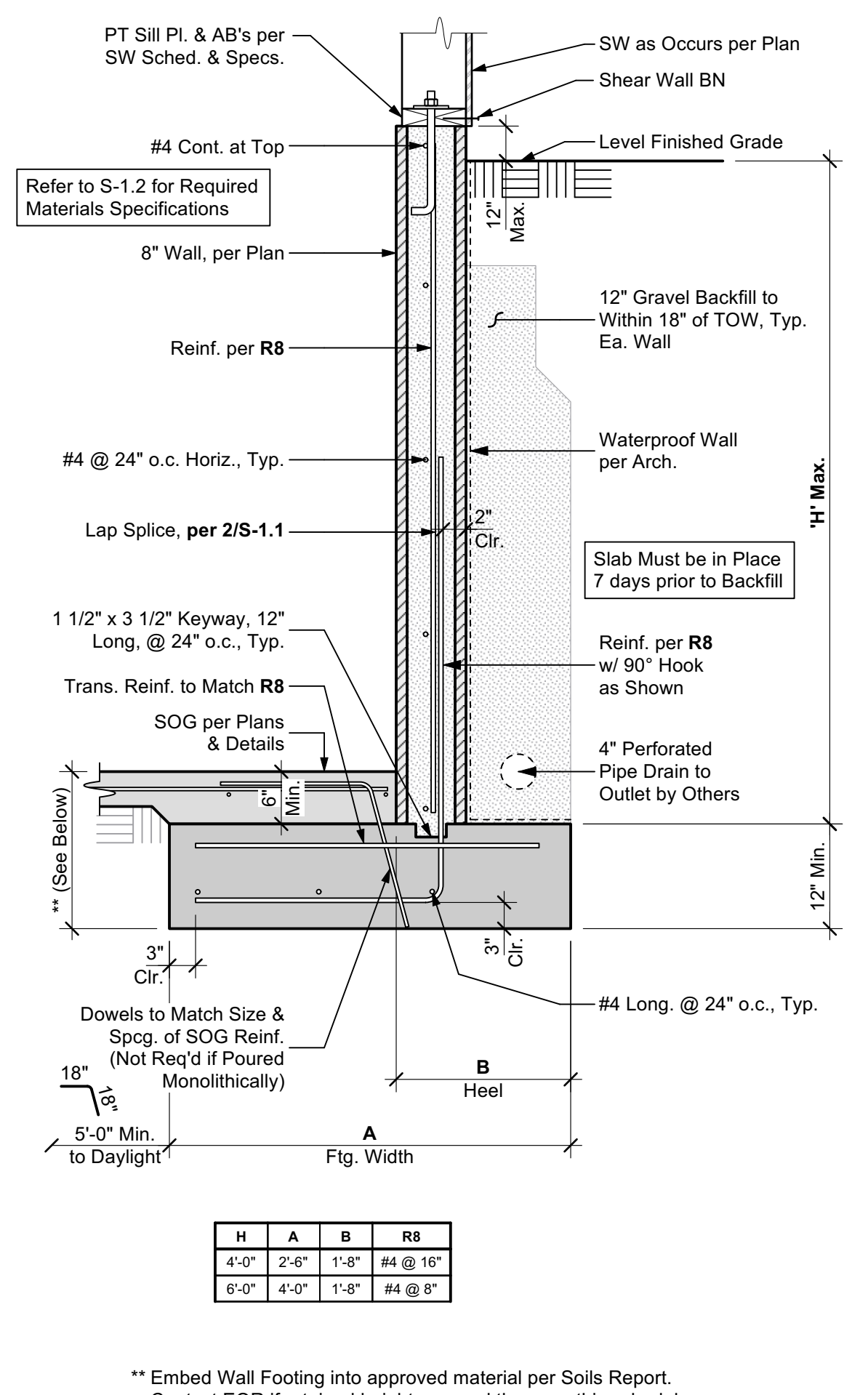
20 NOT USED

16 NOT USED



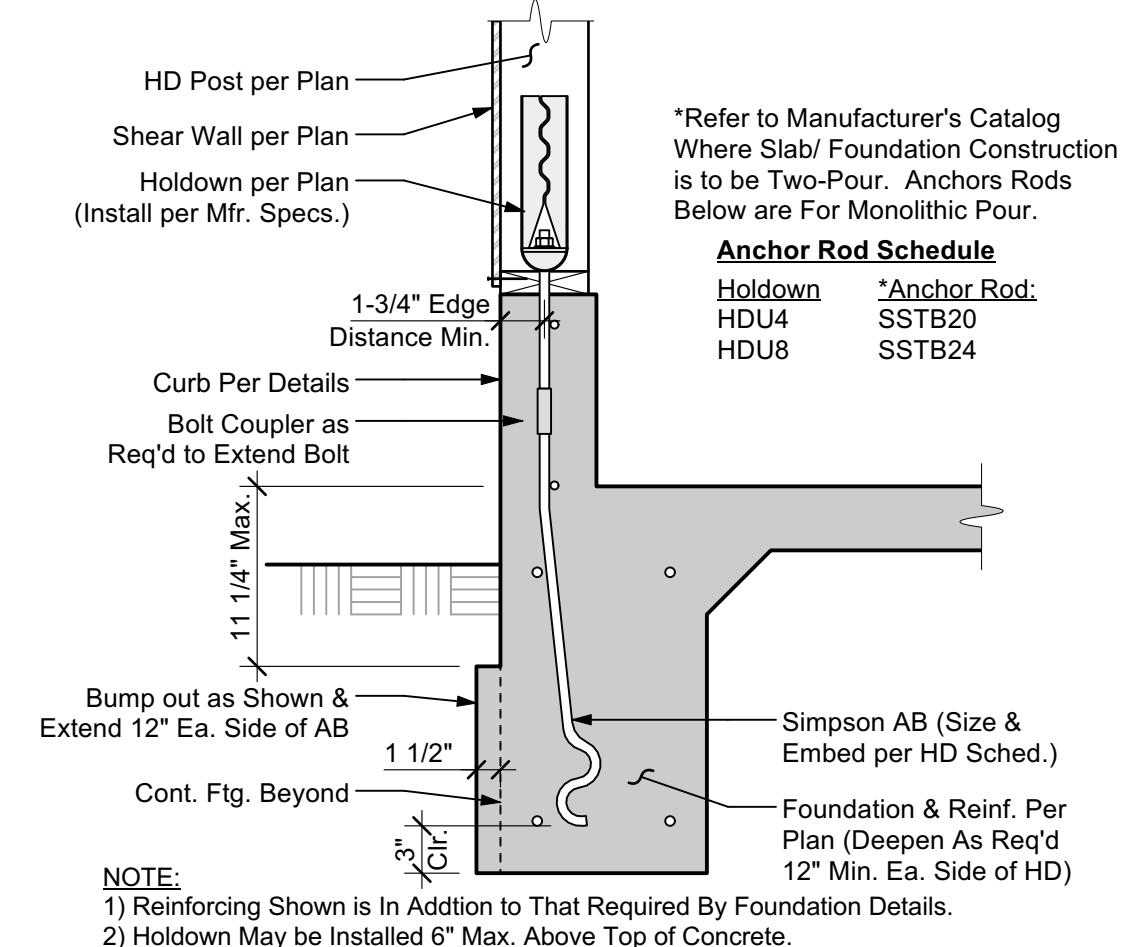
\*\* Embed Wall Footing into approved material per Soils Report. Contact EOR if retained heights exceed those on this schedule.

10 RETAINING WALL W/ KEY

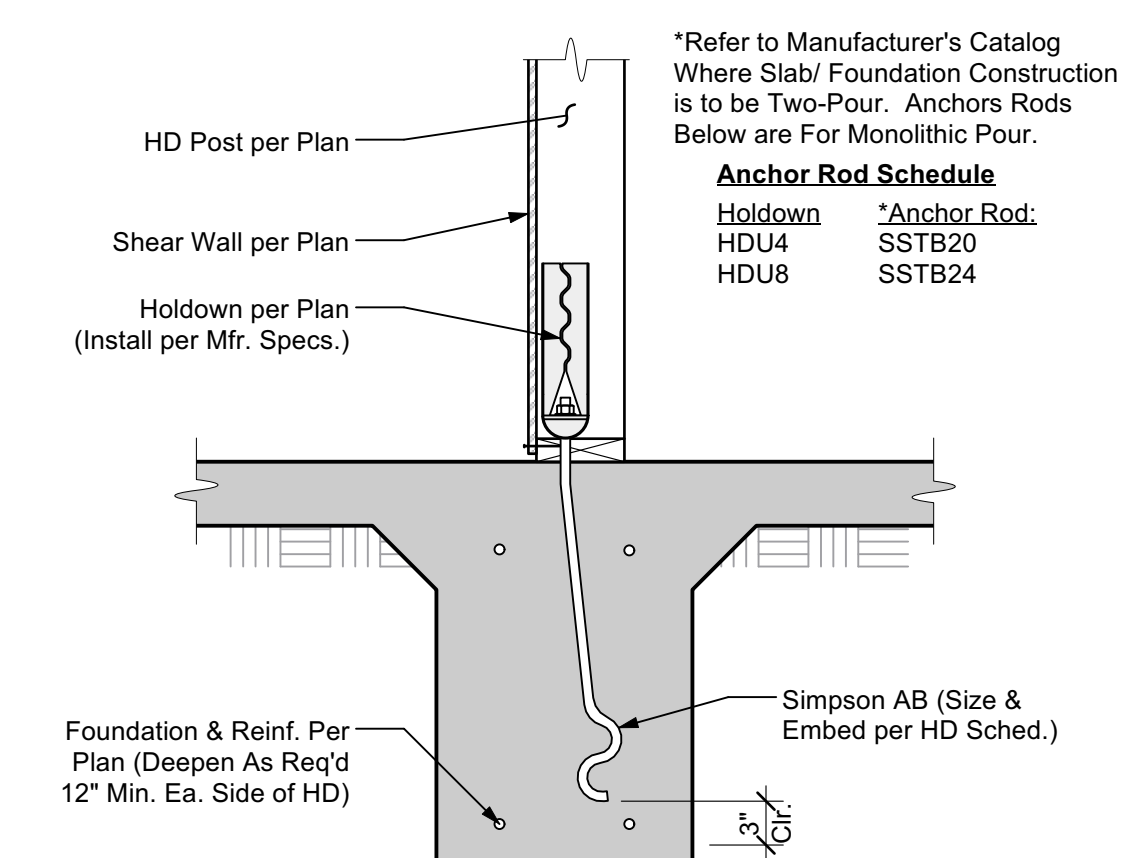


\*\* Embed Wall Footing into approved material per Soils Report. Contact EOR if retained heights exceed those on this schedule.

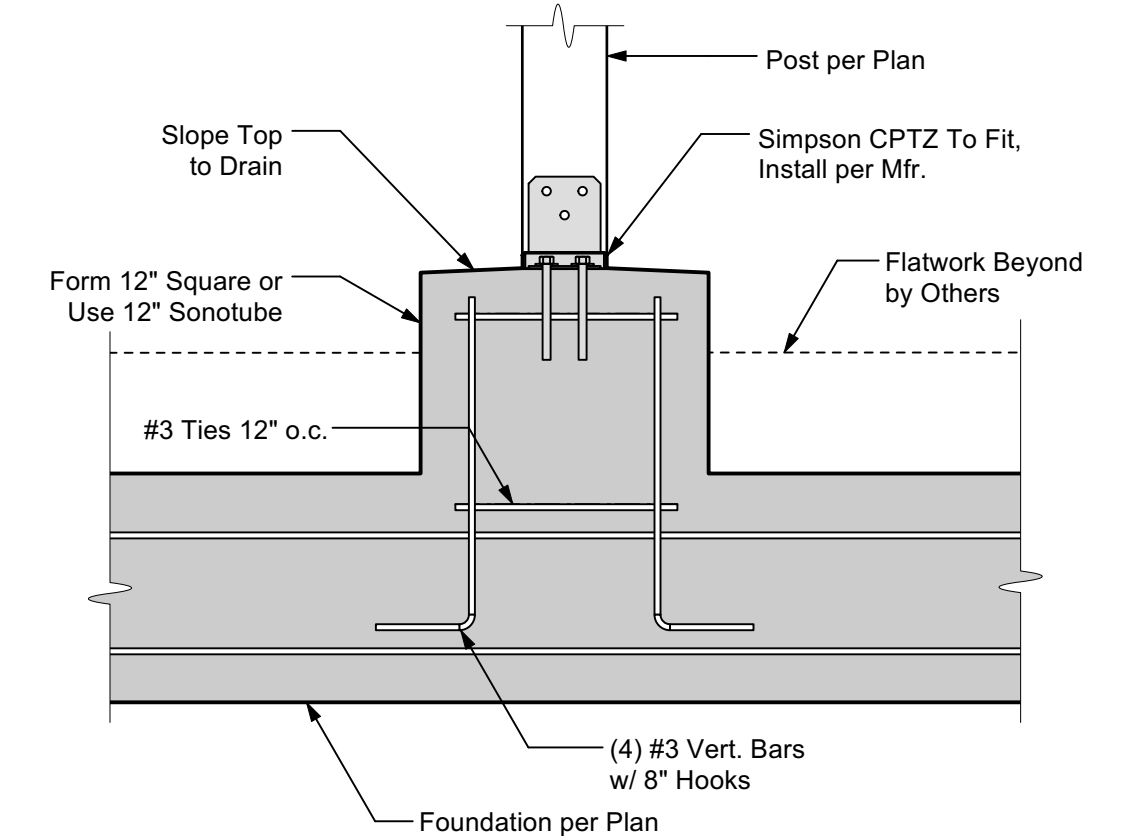
12 RETAINING WALL W/ SOG



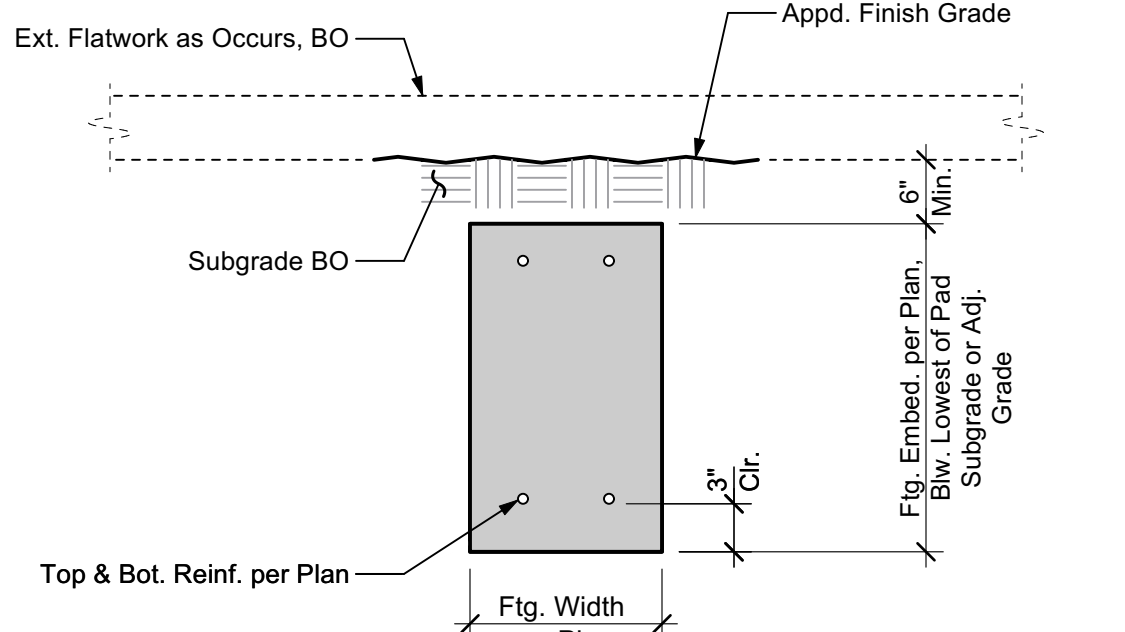
5 HOLDDOWN TO FOUNDATION W/ CURB



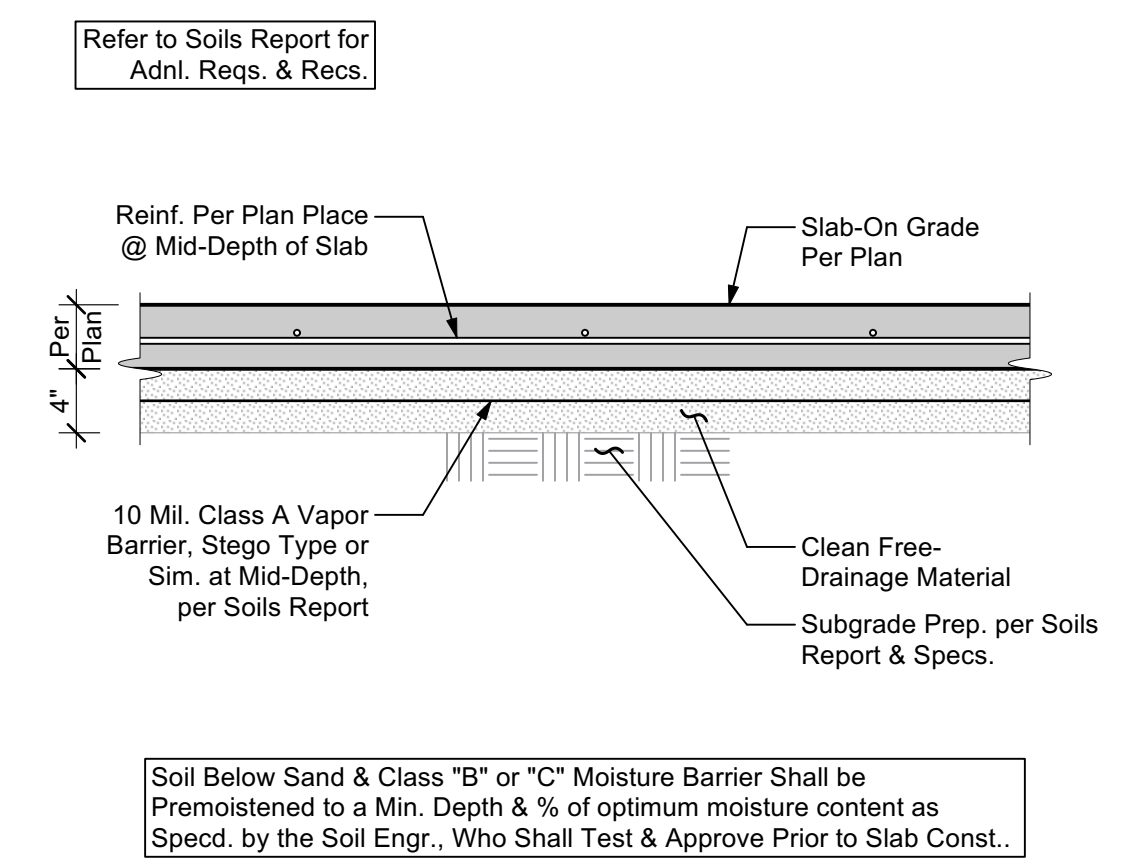
6 HOLDDOWN TO INTERIOR FOUNDATION



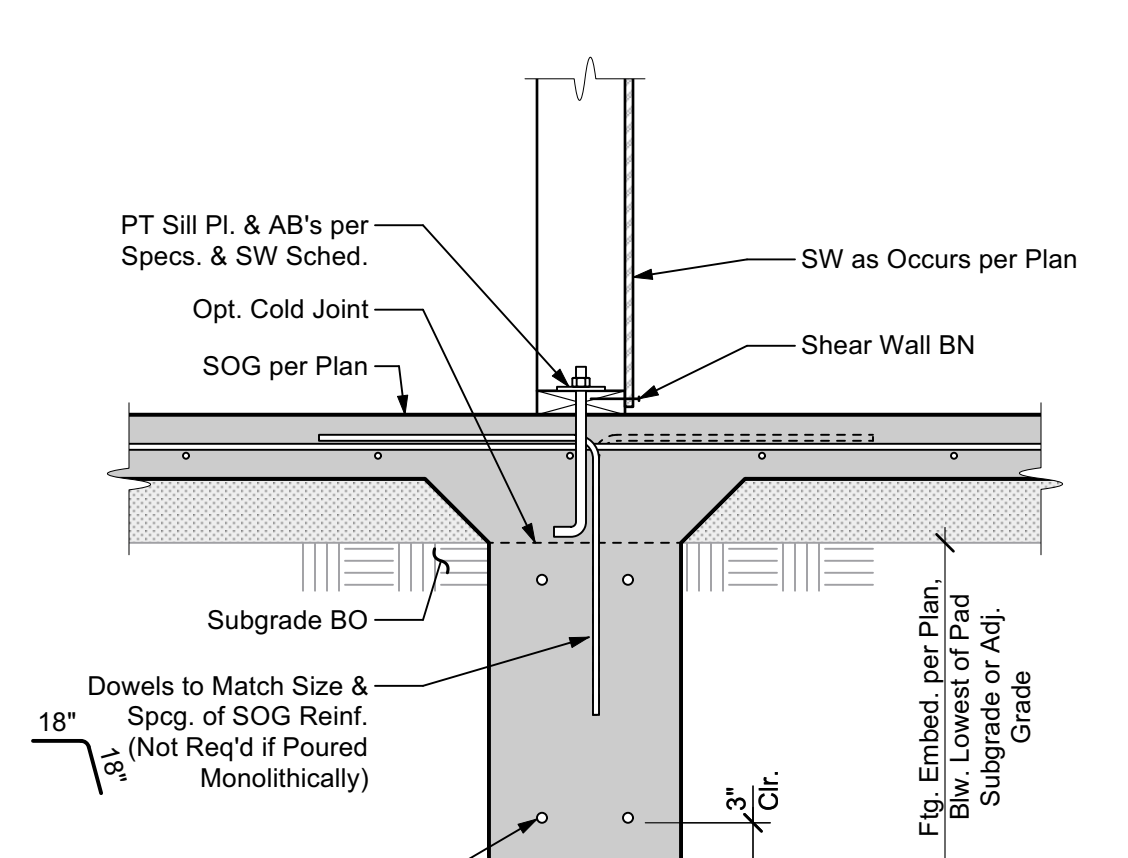
7 POST TO CONT. FOUNDATION



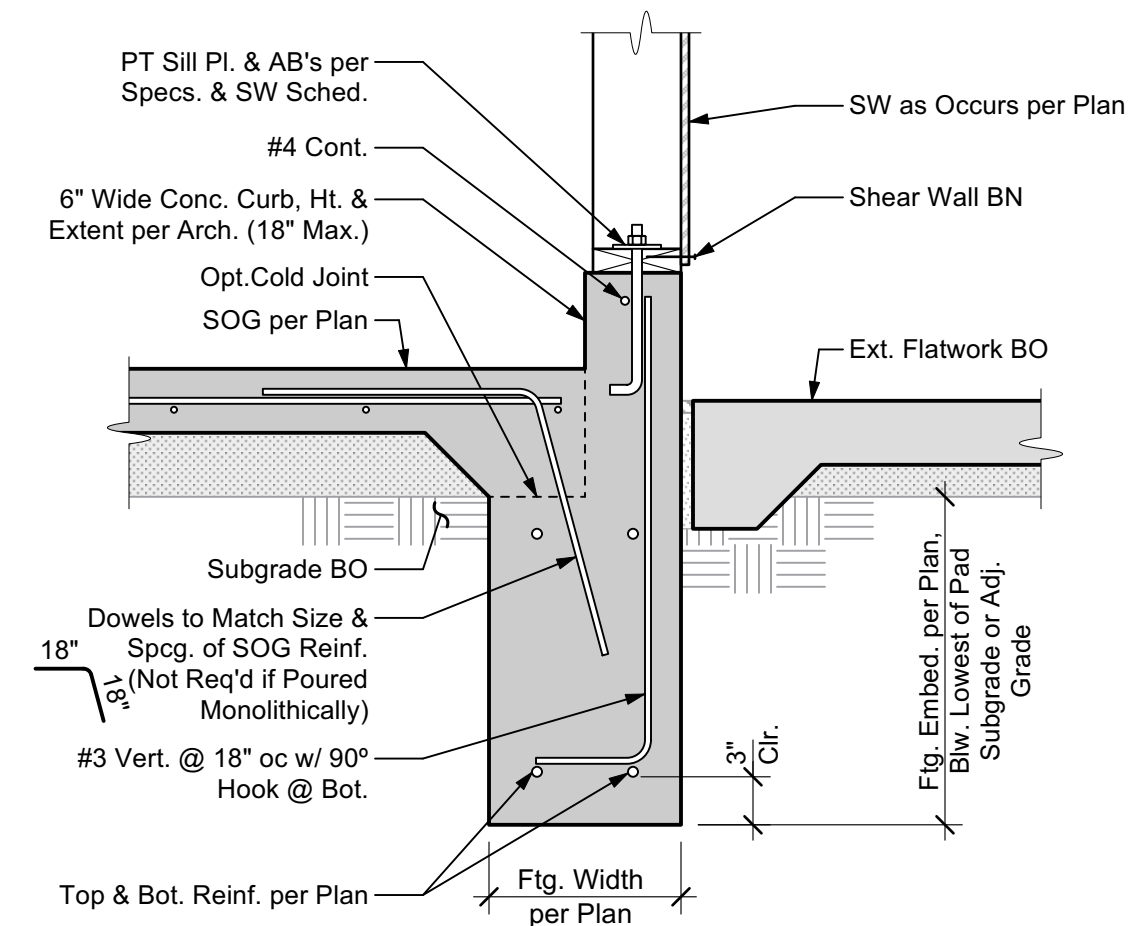
8 EXTERIOR GRADE BEAM



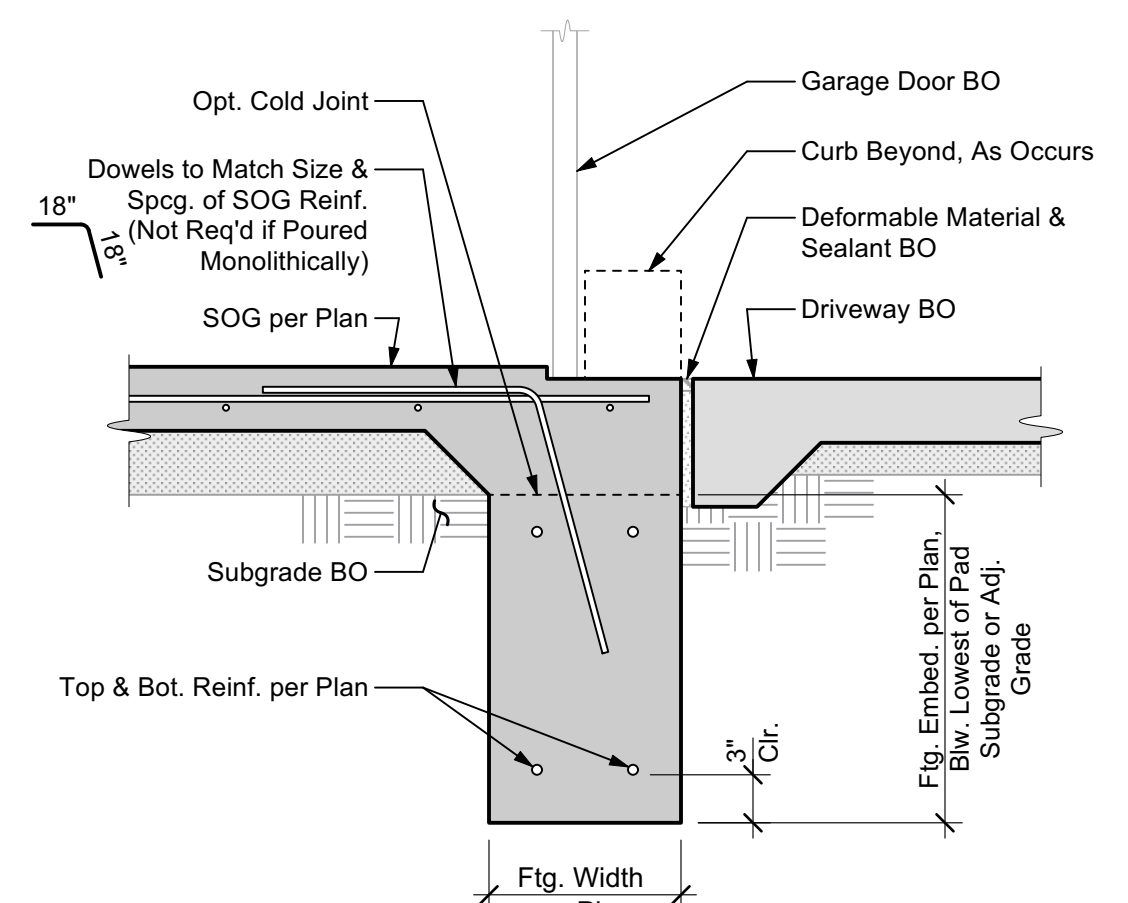
1 TYPICAL SLAB ON GRADE



2 TYPICAL INTERIOR FOUNDATION

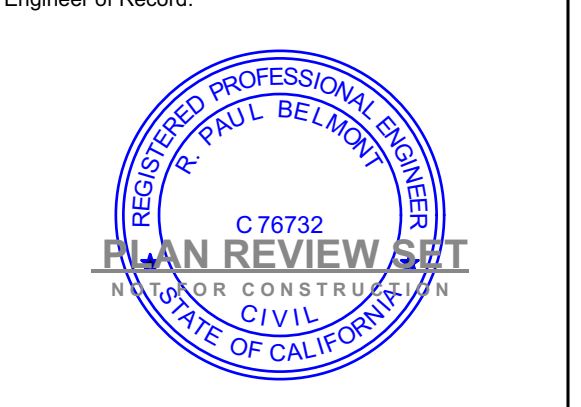


3 CURB AT EXTERIOR FOUNDATION



4 FOUNDATION AT GARAGE DOOR

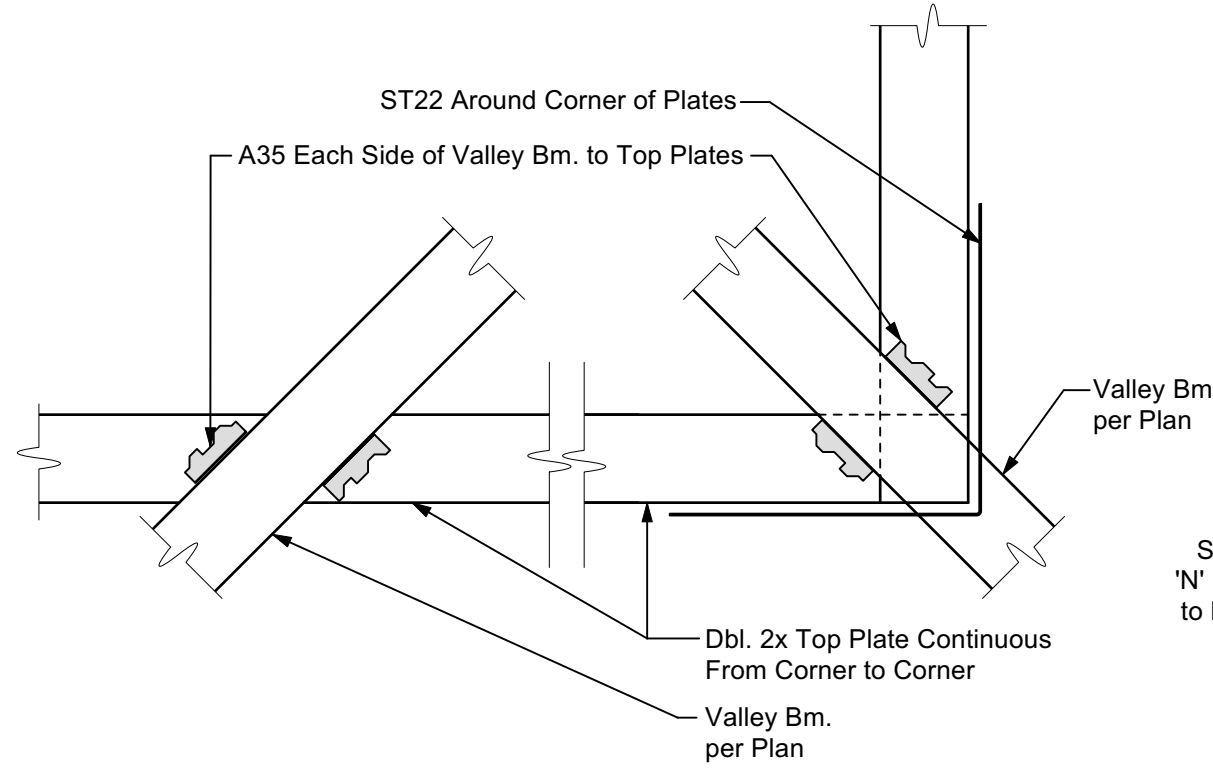
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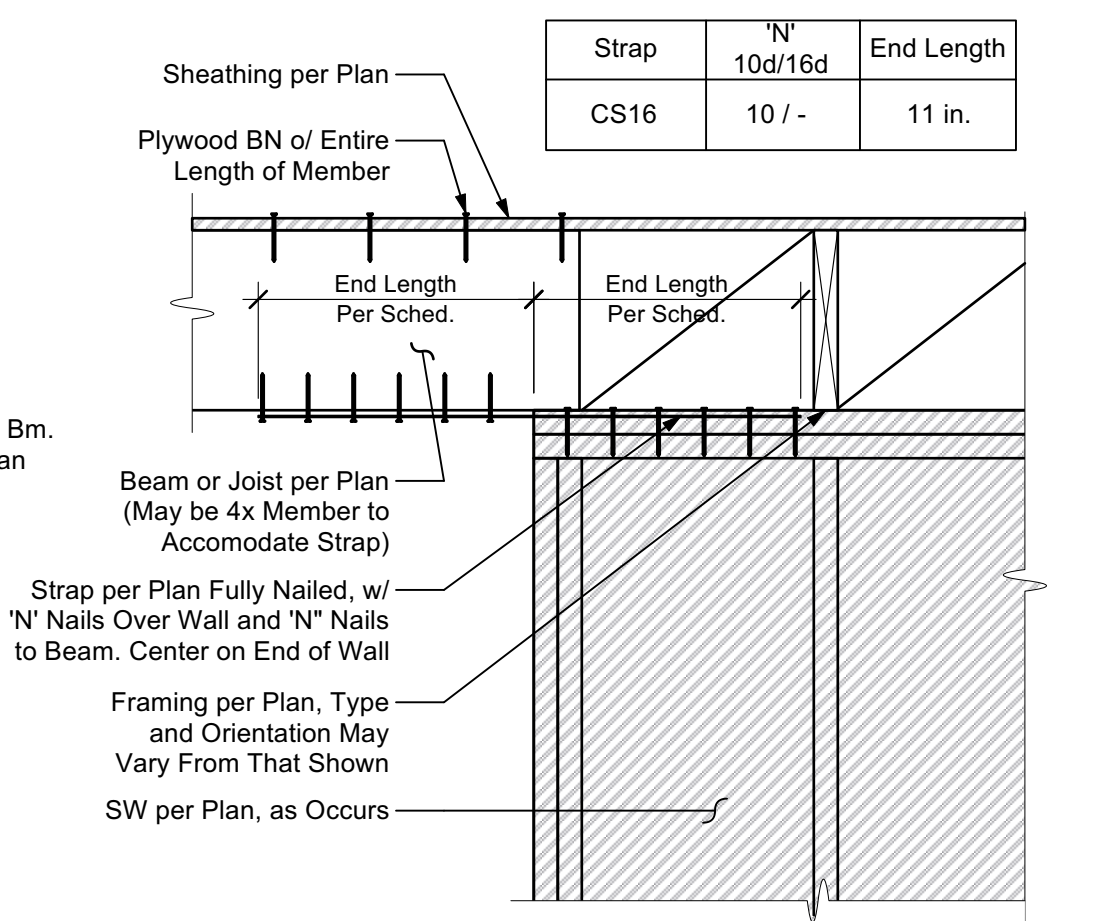
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215 Canon Drive  
Santa Barbara, California 93105

Revision:	By:	Date:

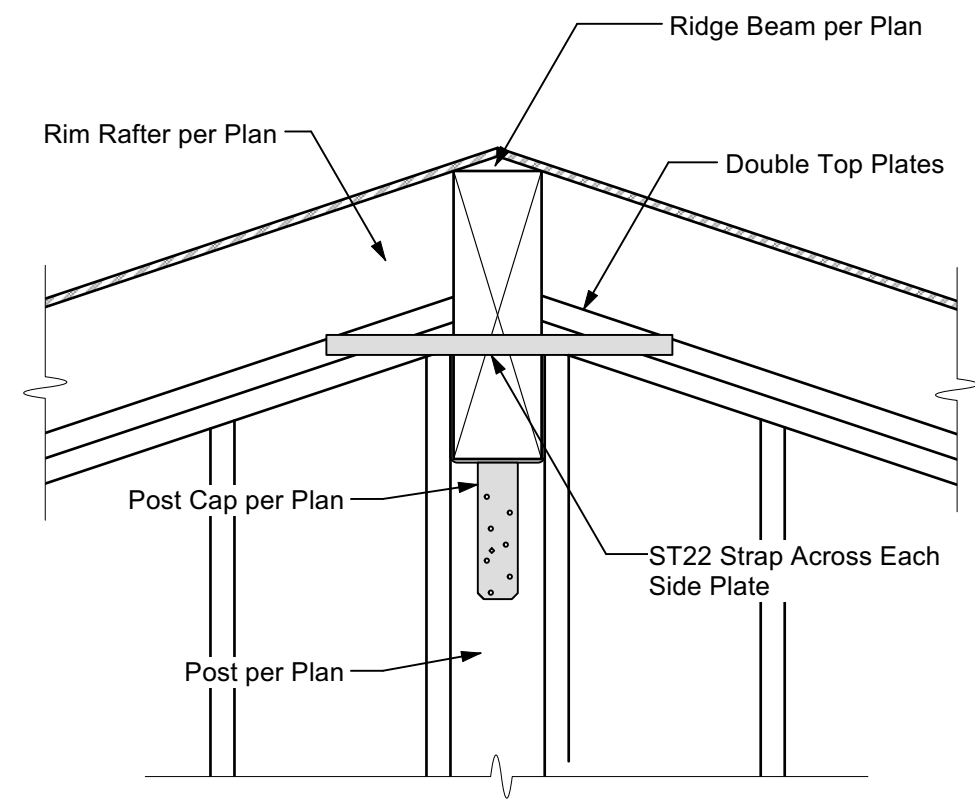
Proj. Engr.: D. Webster Phone Ext.: 220  
Proj. Mgr.: P. Belmont  
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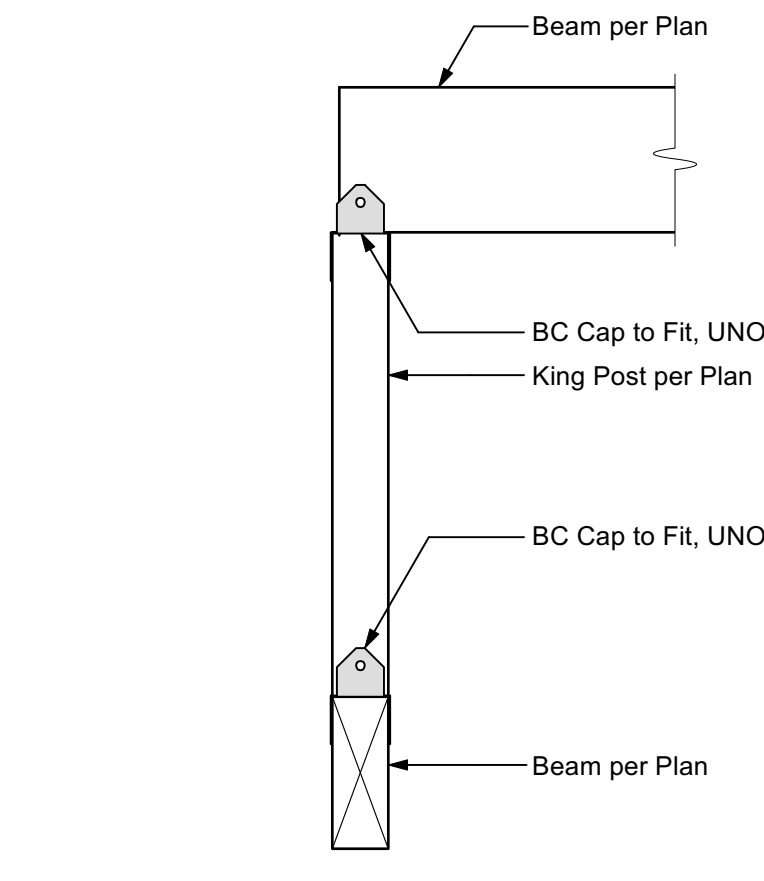
17 VALLEY BEAM TO WALL



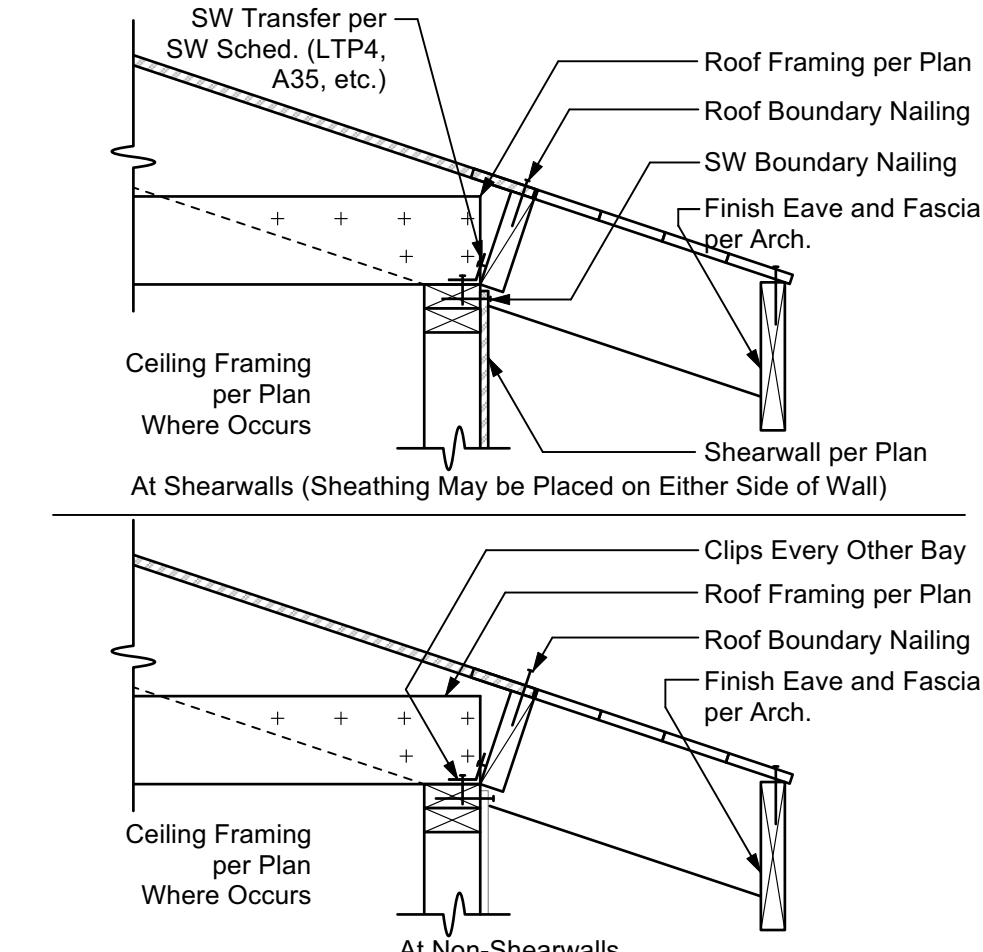
13 DRAG STRAP TO WALL



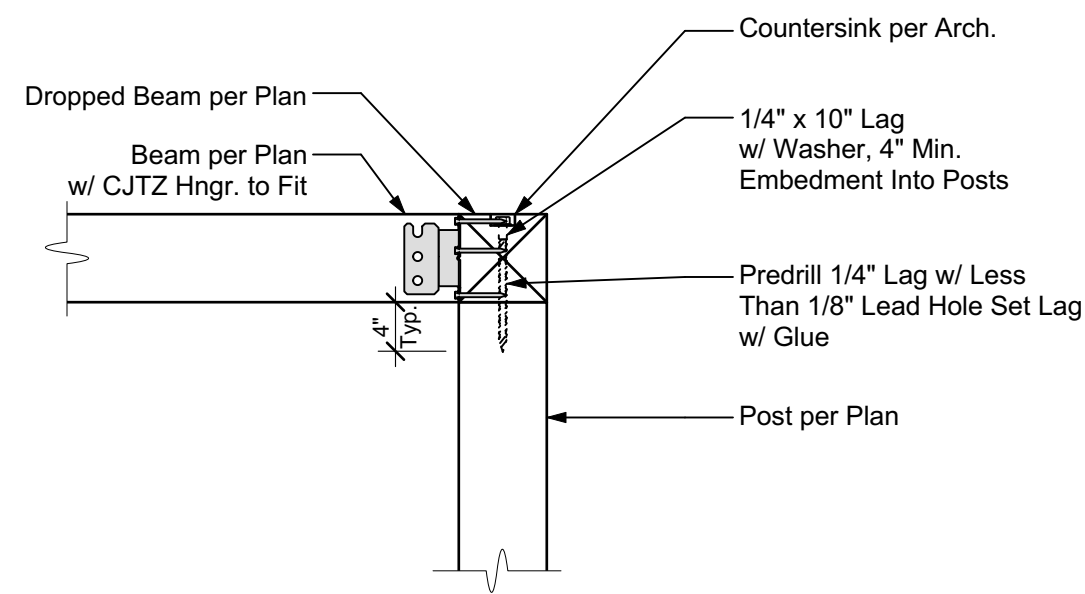
9 RIDGE BEAM TO WALL



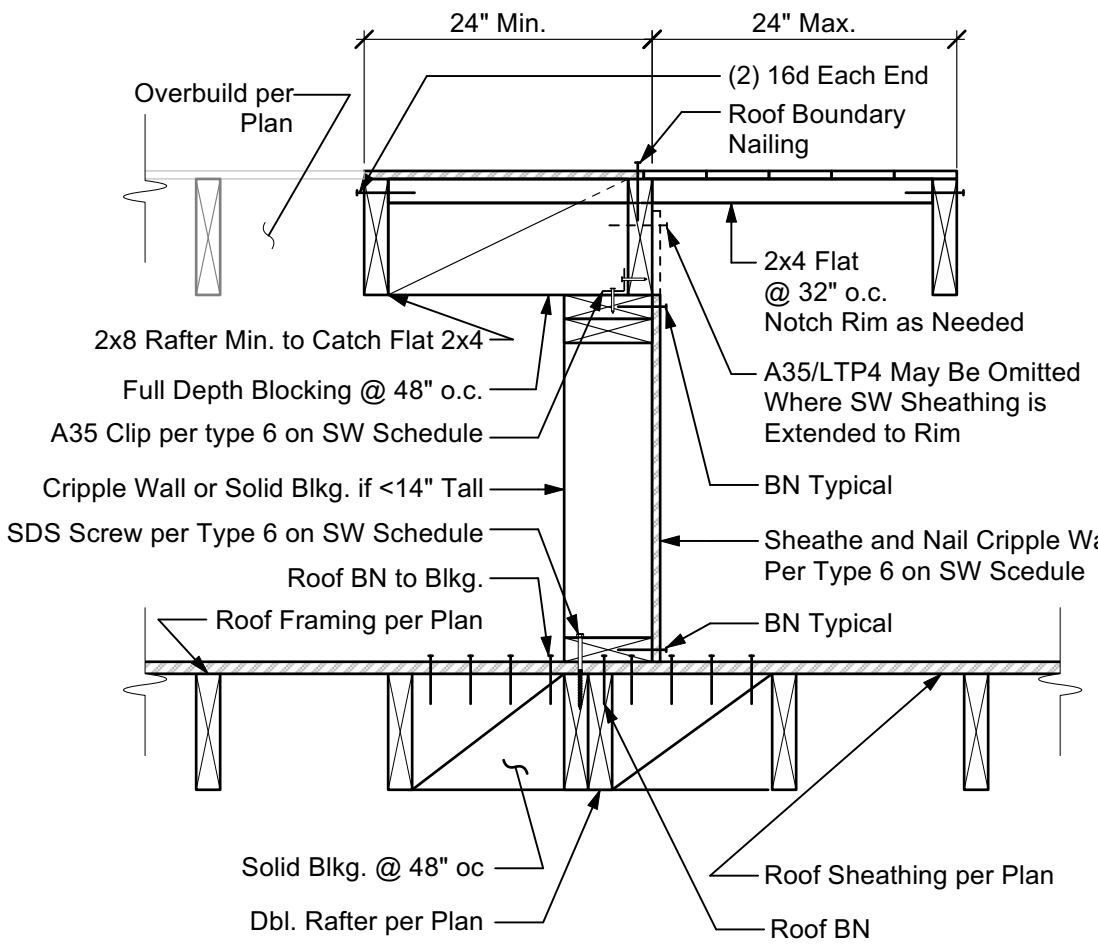
5 KING POST TO BEAM



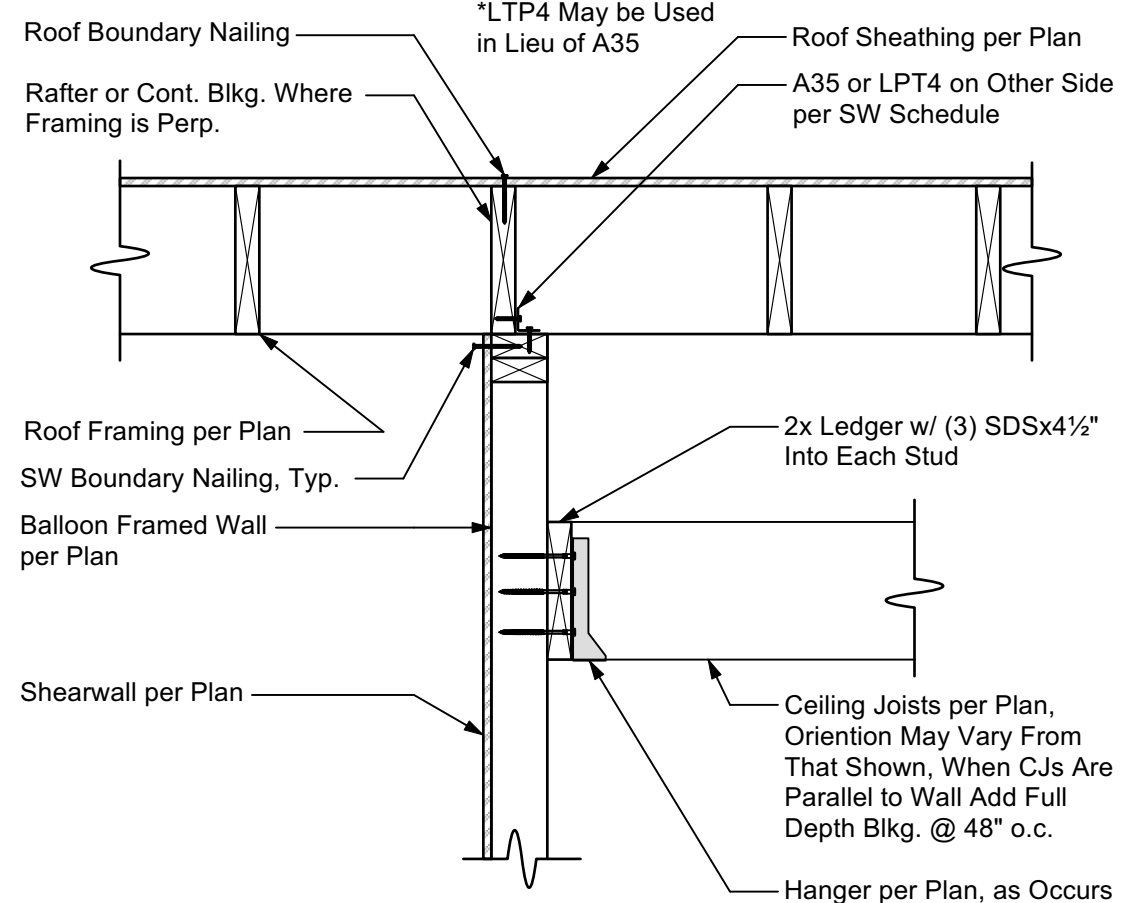
1 SHEAR TRANSFER TO RAFTERS



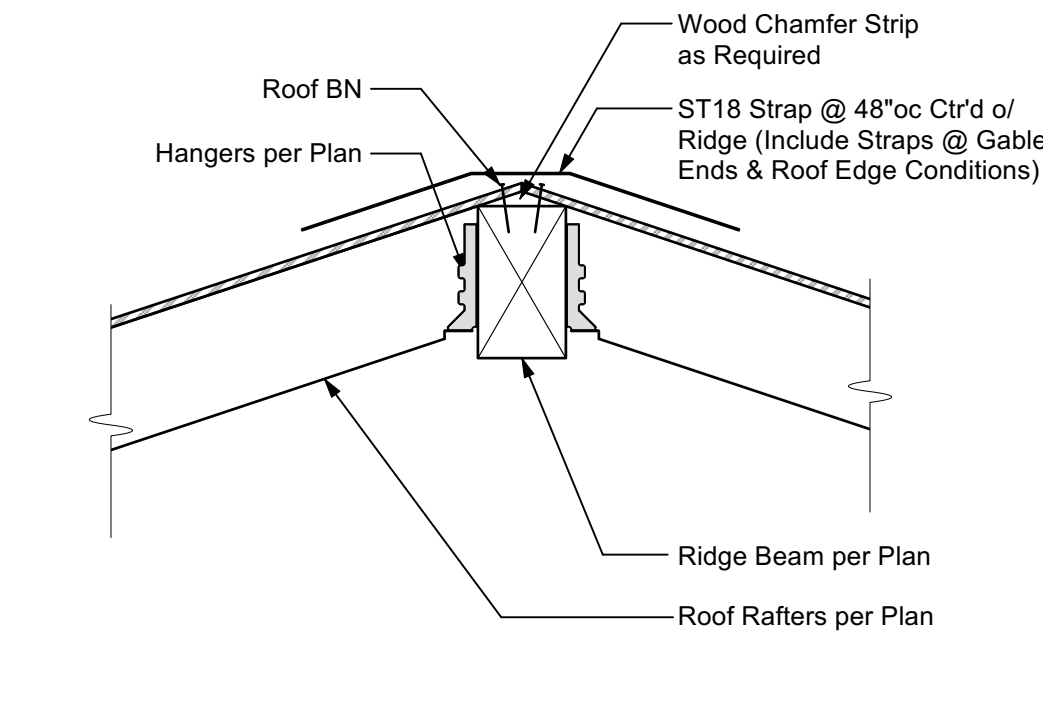
18 PORCH BEAM CONNECTION



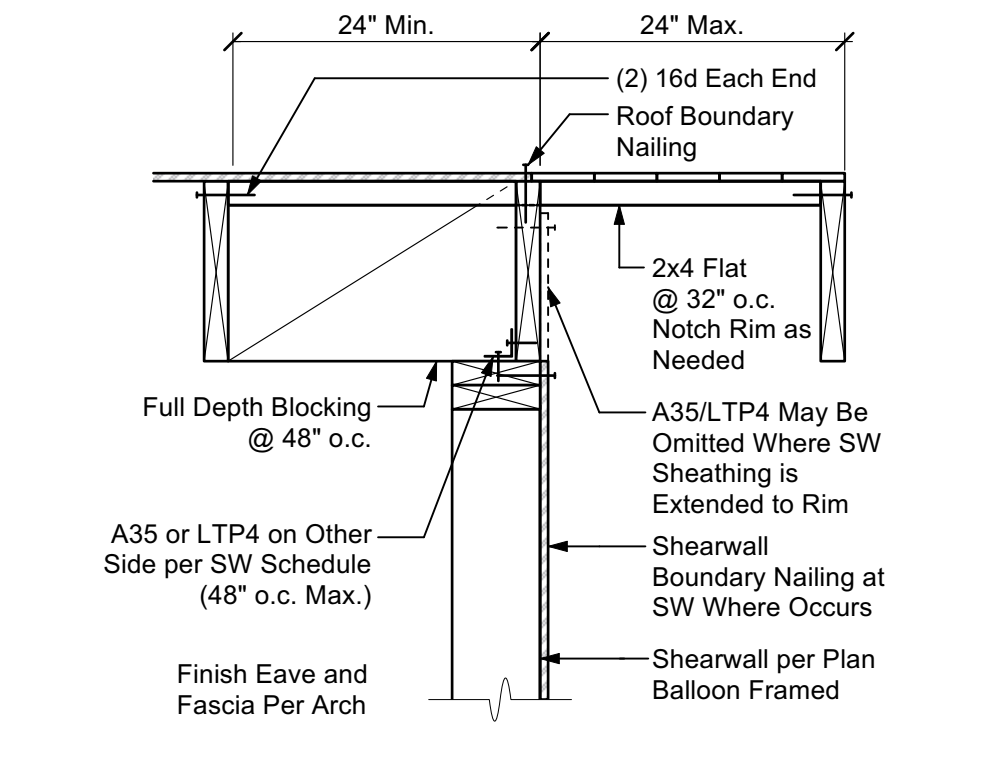
14 SHEAR TRANSFER AT ROOF OVERBUILD



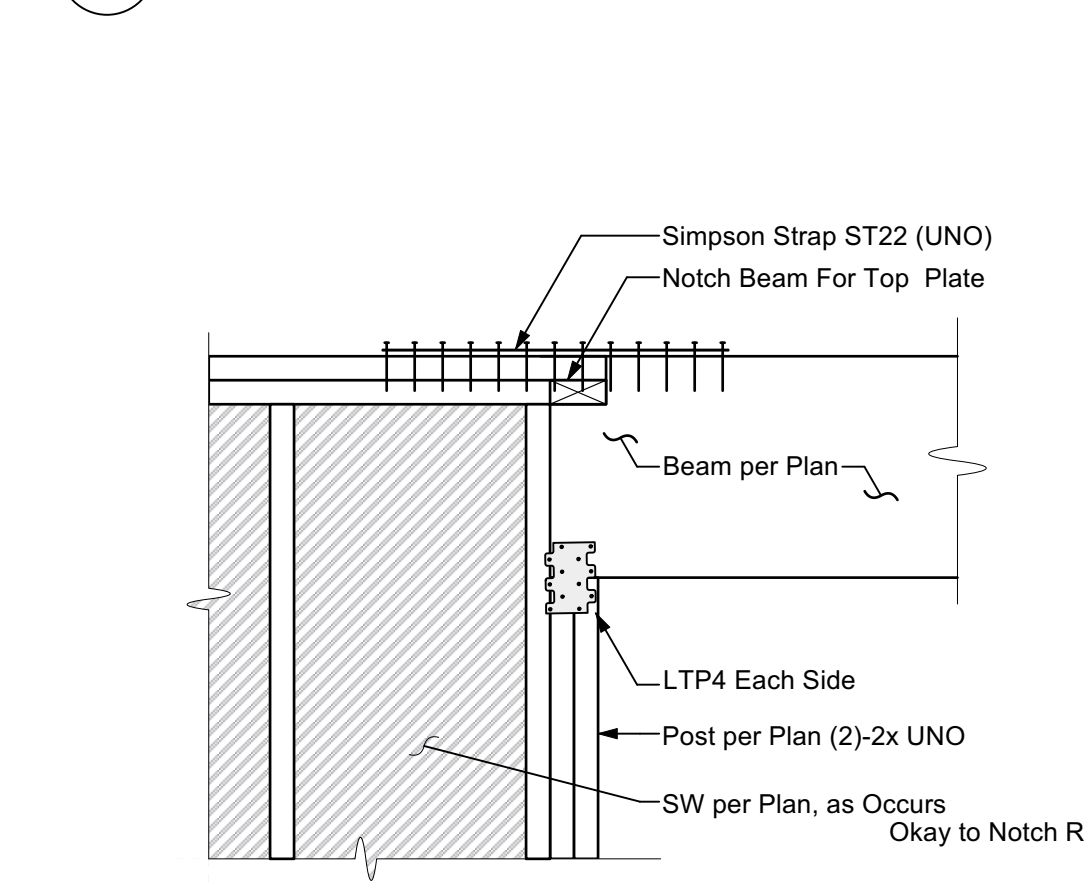
10 SHEAR TRANSFER AT CEILING



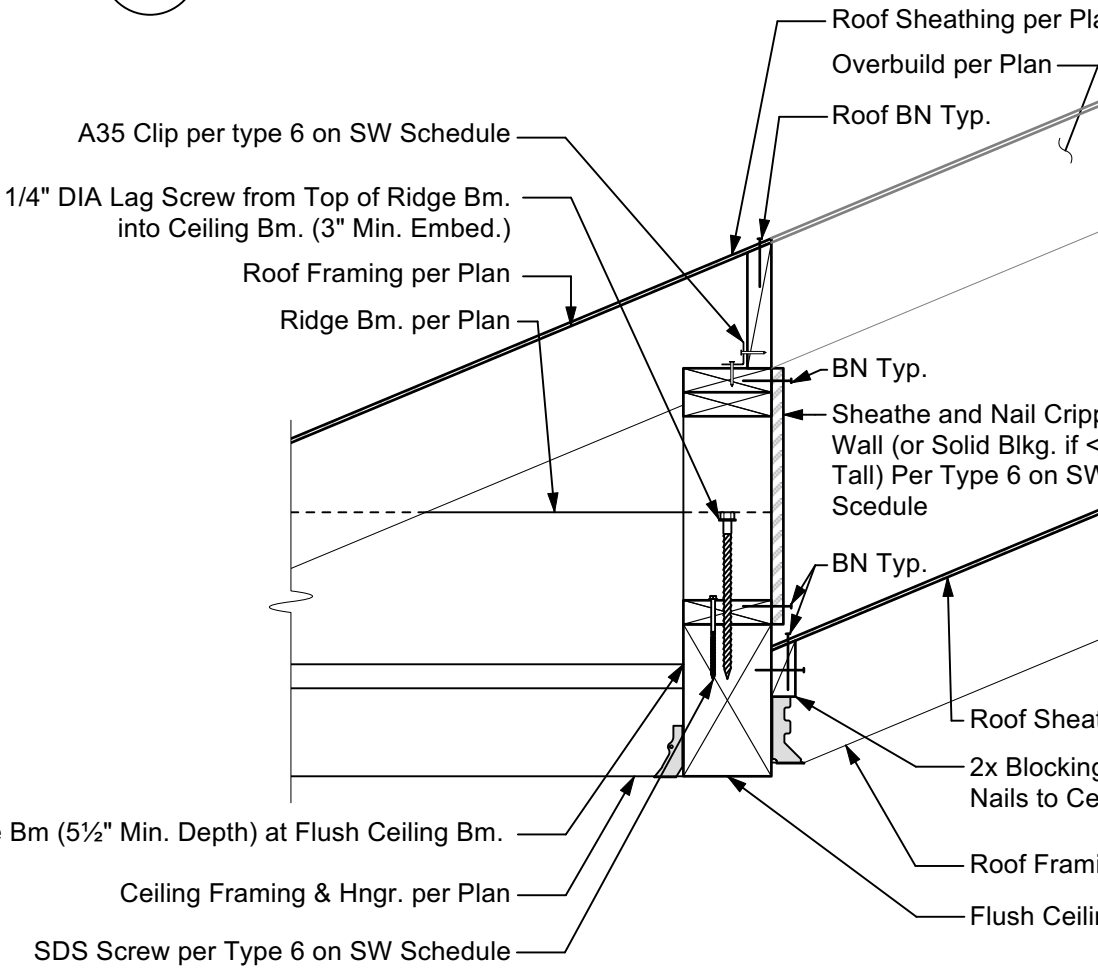
6 RAFTER TO RIDGE BEAM



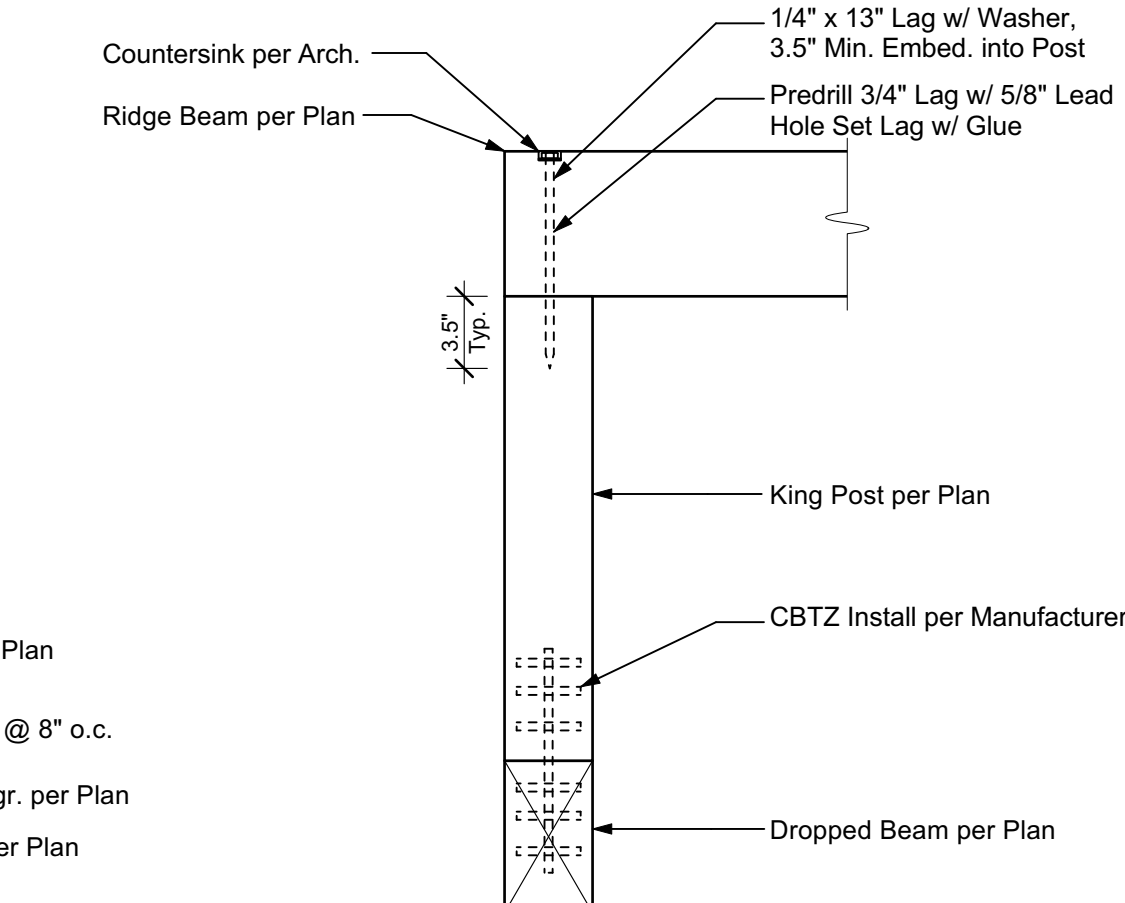
2 SHEAR TRANSFER AT GABLE END



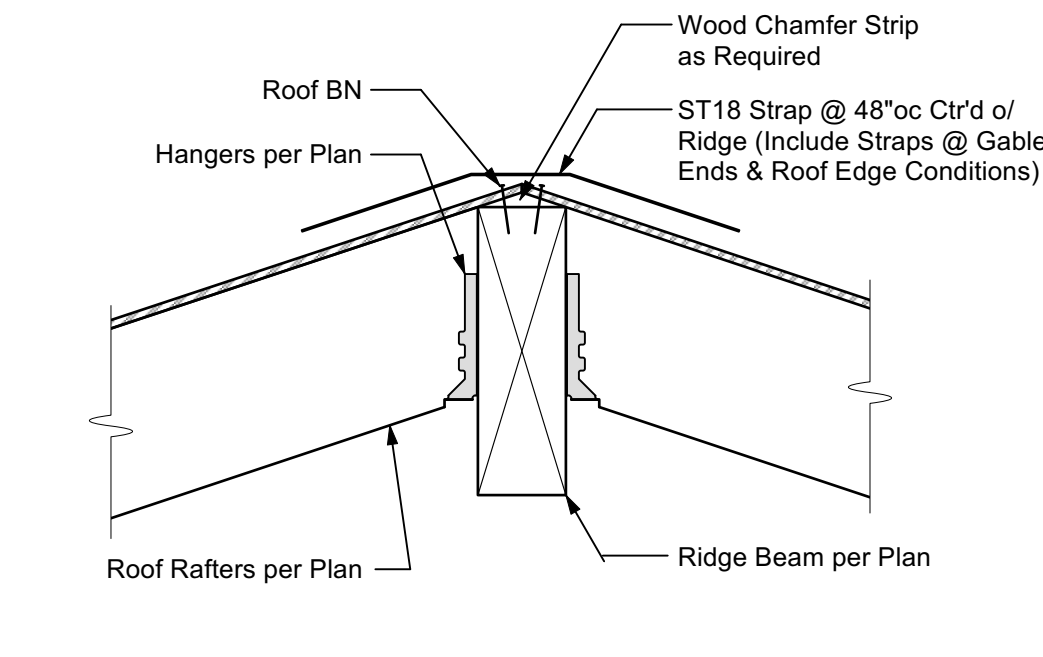
19 STRAP AT BEAM POCKET



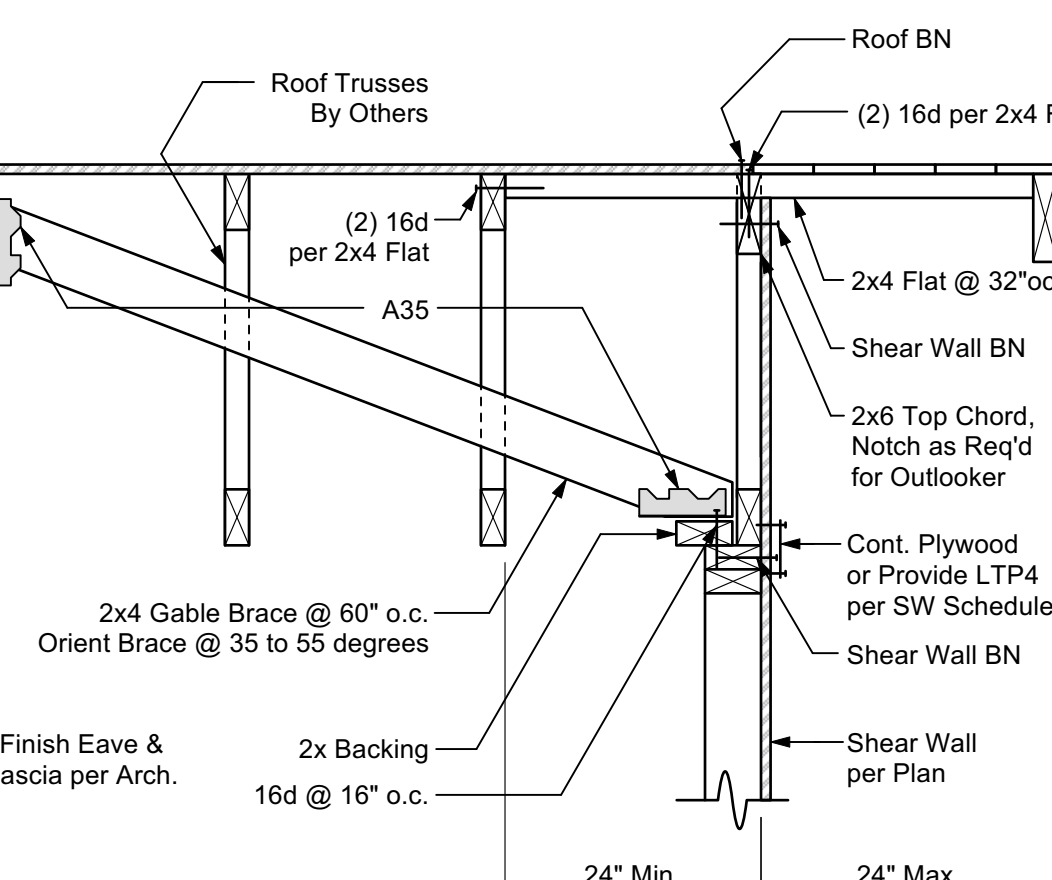
15 FRAMING AT CEILING BEAM



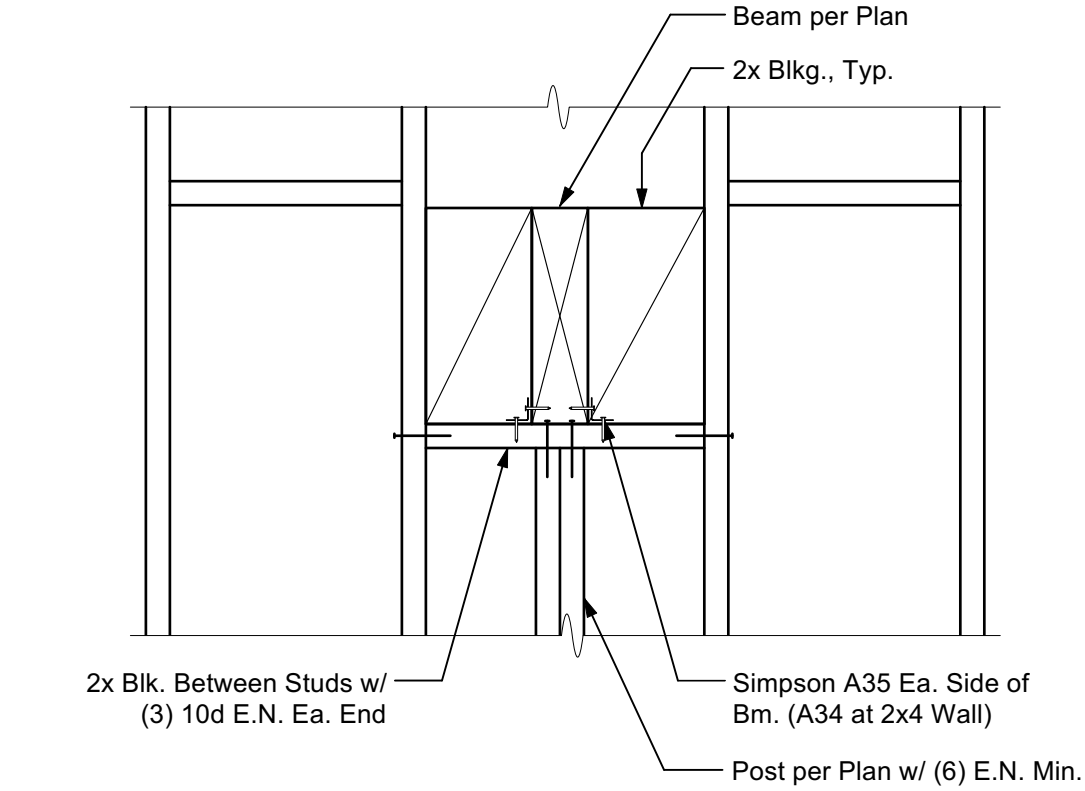
11 KING POST TO BEAM



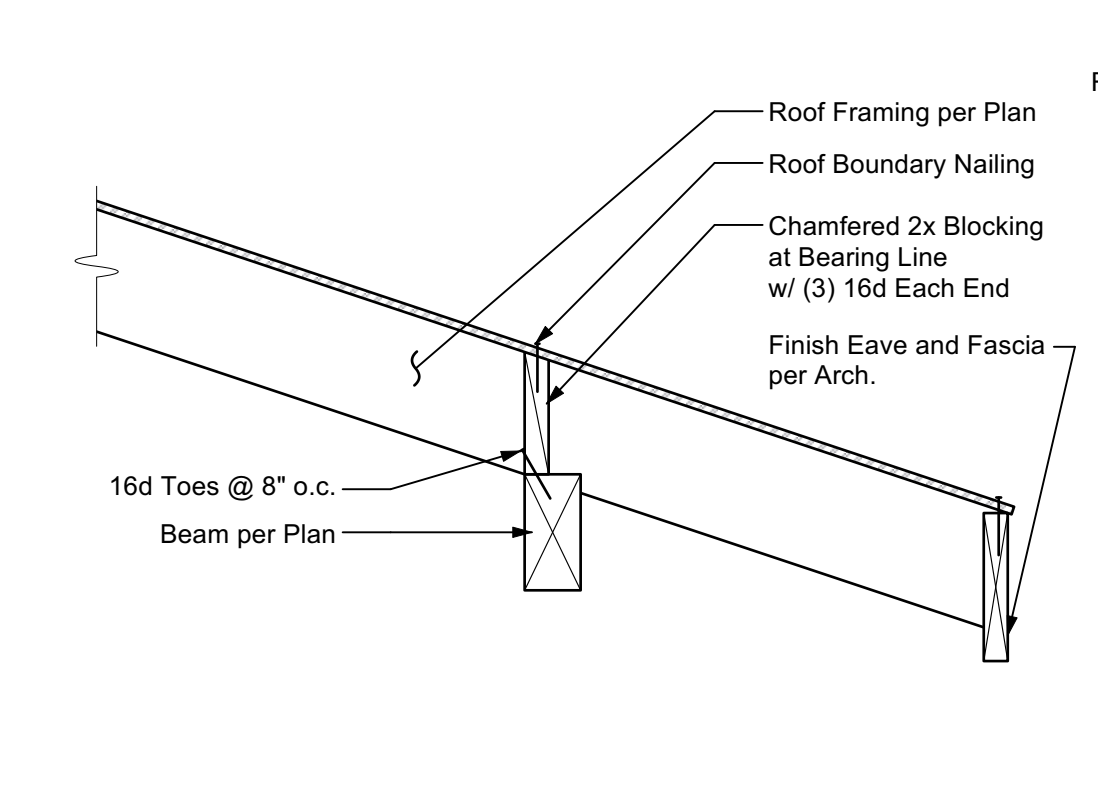
7 RAFTER TO RIDGE BEAM



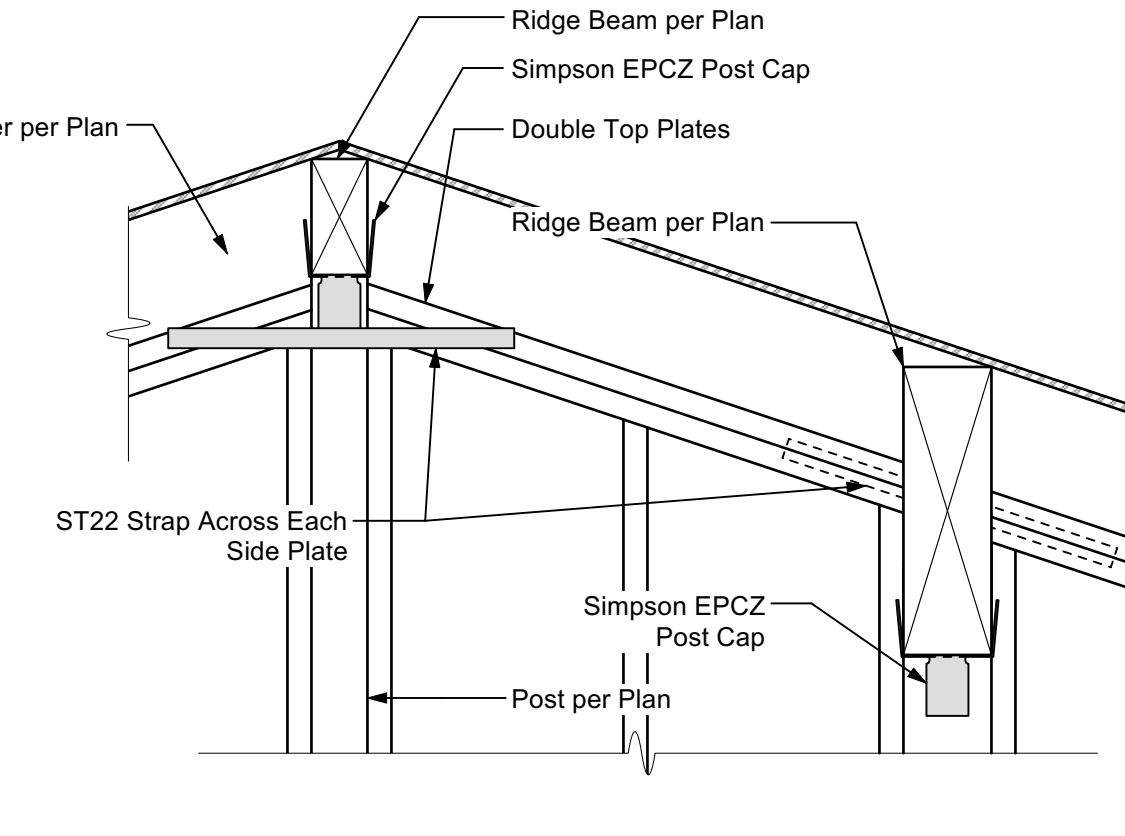
3 SHEARWALL AT GABLE END



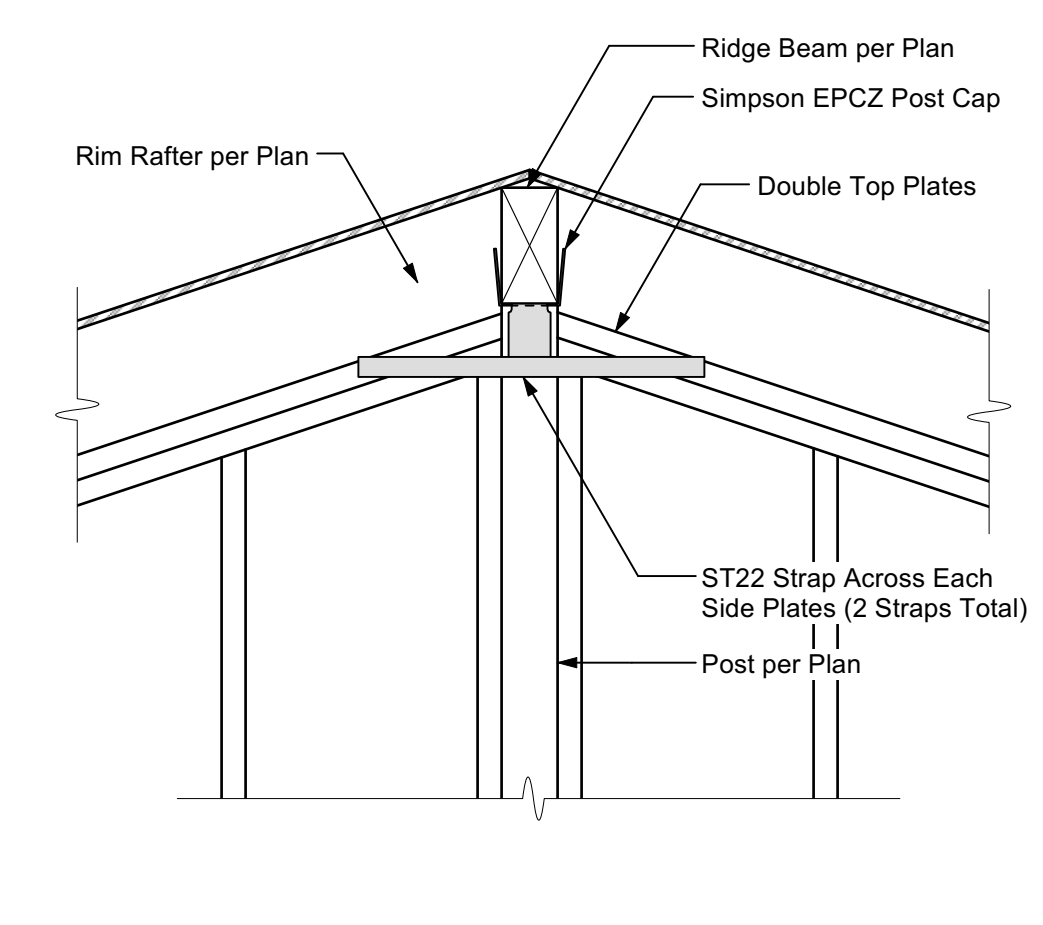
20 BEAM POCKET IN WALL



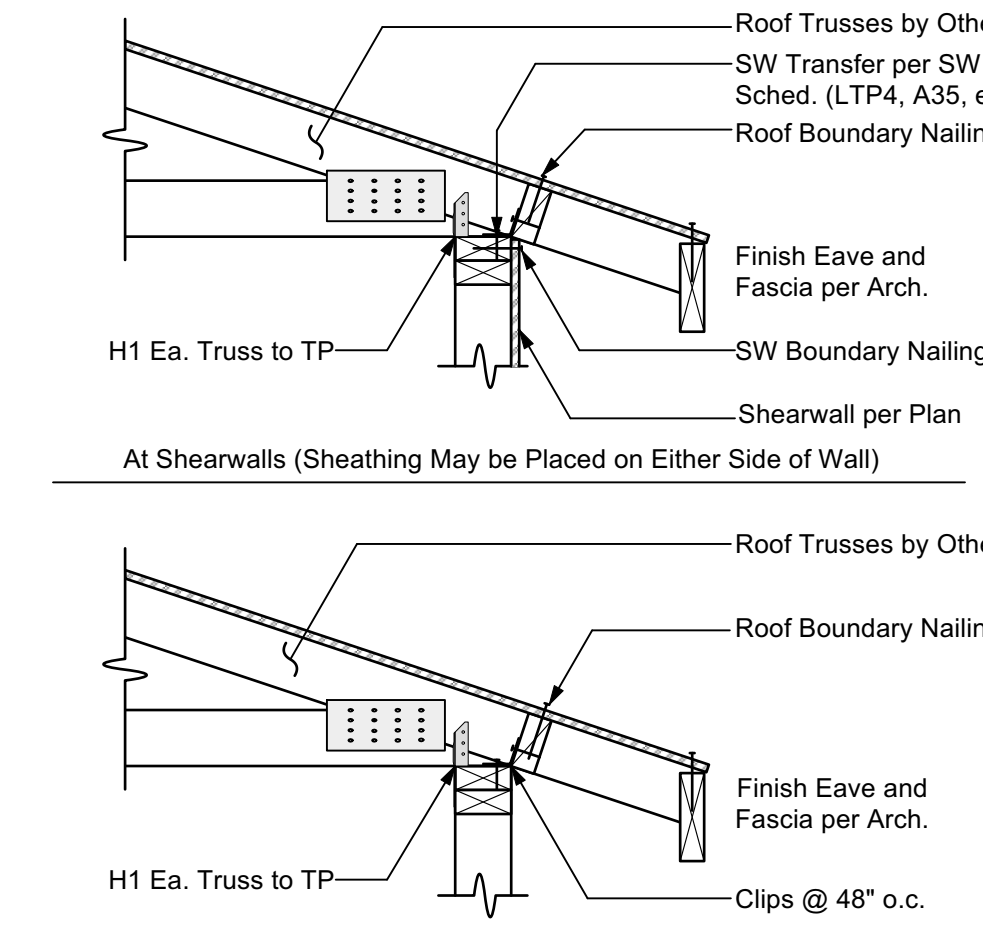
16 FRAMING AT PORCH BEAM



12 RIDGE BEAM TO WALL



8 RIDGE BEAM TO WALL



4 SHEAR TRANSFER TO TRUSSES

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Engineer of Record:



Revision:	By:	Date:

Proj. Engr.: D. Webster Phone Ext.: 220  
Proj. Mng.: P. Belmont  
Date: 08 Sep. 2023 Scale: NTS  
A&V Job No.: 230915



# 215 Canon Drive

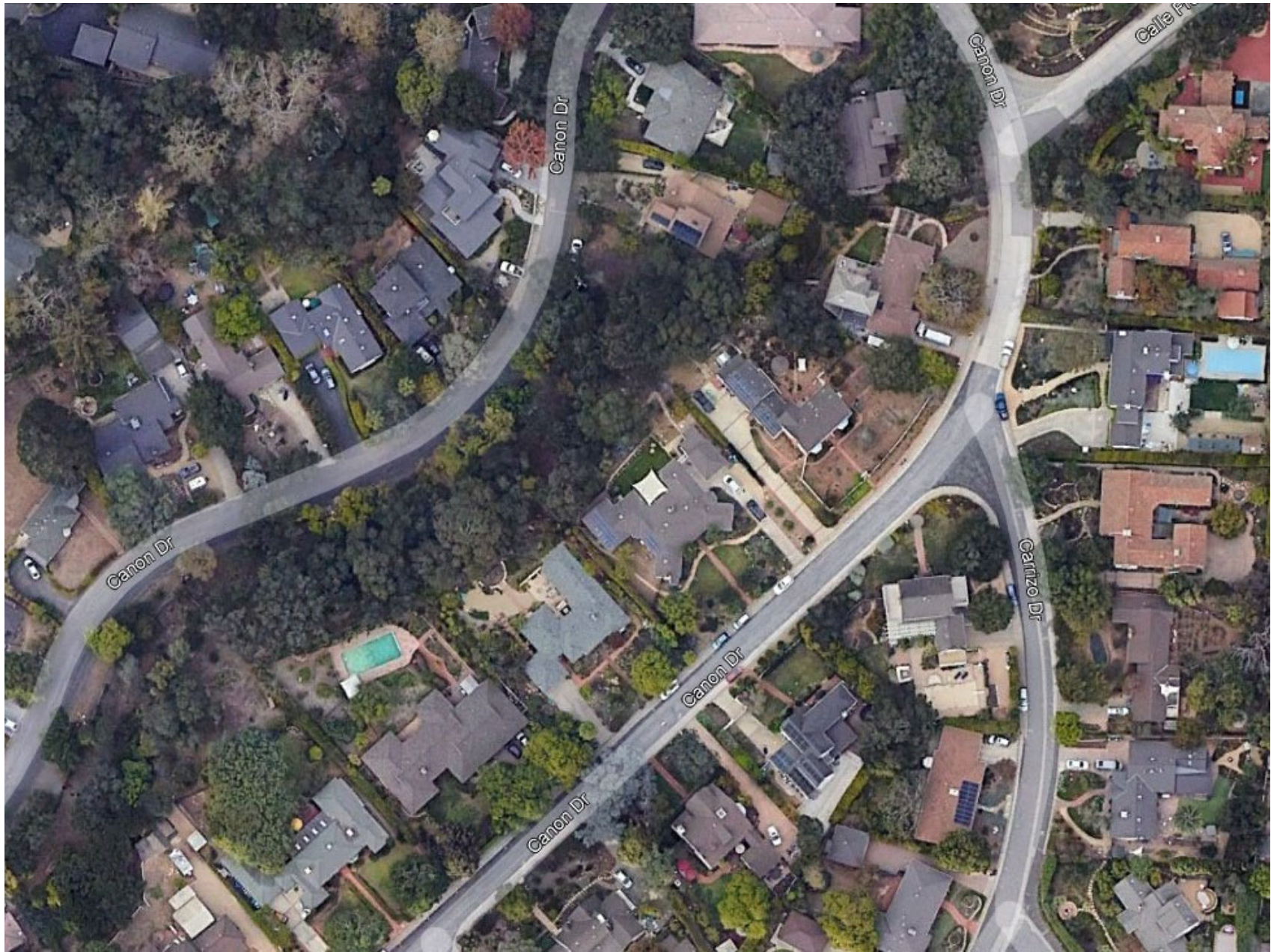


Photo 1 – Aerial View, Vicinity

# 215 Canon Drive



Photo 2 – Southeast Street View of Subject Property

# 215 Canon Dr



Photo 3 – Southeast Street View of Subject Property

# 215 Canon Drive



Photo 4 – Northwest Street View of Subject Property

# 215 Canon Drive



Photo 5 – Northern Street View of Subject Property

# 215 Canon Drive



Photo 6 – North Elevation of Subject Property

# 215 Canon Drive



Photo 7 – Northwest view of Subject Property

# 207 Eucalyptus Hill



Photo 8 – East Elevation of Subject Property



# 215 Canon Drive



Photo 9 – South Elevation of Subject Property

# 215 Canon Drive



Photo 10 – Neighborhood Context: 288 Canon Drive, North of Subject Property

# 215 Canon Drive



Photo 11 – Neighborhood Context: 225 Canon Drive, East of Subject Property

## 215 Canon Drive



Photo 12 – Neighborhood Context: 212 Canon Drive, South of Subject Property

# 215 Canon Drive



Photo 13 – Neighborhood Context: 205 Canon Drive, West of Subject Property