

Steinborn Residence

OWNERS:
Susan and Dan Steinborn
2011 19th Ave. E.
Seattle, WA 98112

PROJECT ADDRESS:
8435 SE 47th Pl.
Mercer Island, WA 98040

TAX PARCEL NUMBER:
3317500040

LEGAL DESCRIPTION:
LOT 4, HILL HIGH ESTATES AS RECORDED IN VOLUME 68 OF PLATS,
PAGE 28, RECORDS OF KING COUNTY, WASHINGTON.
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

PERMIT NUMBER:
Pre-App: PRE21-009
Building Permit: 2202-225
CAR2 : CAO22-006
Accessory Dwelling Unit: ADU22-005

PROJECT DESCRIPTION:
Clear and grade existing vacant lot. Provide protection for trees to remain as required.
Phase permanent nail shoring to enable hillside stability.
Build a new single family residence and related site work.

GOVERNING AUTHORITY:
City of Mercer Island, Development Services Group.

ZONING CODE INFORMATION:
Zone: R 9.6
Critical Area Review - 2 : See A1.3 and attached report
Lot Slope: 30% see sheet A1.1
Allowed Lot Coverage: 30% of lot area x 19,360sf = 5,808sf
Proposed Lot Coverage: 5,443sf (28% of lot area) see Sht. A1.2 for calculation
Side Yard Calculation: see Sht. A1.1
Allowed Height 30' above ABE
Allowed height limit: 305.2' See A1.2 for ABE Calculations & A3.1, A3.2, A3.3 A4.1 for representation
Allowed GFA: 40% x 19,360,24sf = 7744sf
Proposed GFA: 4390.5sf (22.7% of lot area) see Shts. A2.0, A2.1, A2.2 for GFA detail
Allowed Hardscape: 9% of lot area x 26,673sf = 2,400.6 sf
Proposed Hardscape: 624sf (3% of lot area). see Sht A1.2

BUILDING CODE INFORMATION:
Building Code: IRC 2018; WSBC Chptr. 51-51 WAC
Occupancy: Group R-3 - Single Family Residence & Group U Garage
Construction Type: V - Wood Frame (VR)
Fire Code Alternate: Approved FCA on file - NFPA 13R PLUS

ENERGY CODE INFORMATION: 2018 WSEC & IRC VENTILATION
Energy Conservation: Component Performance per WSEC Table R402.1.1:
A2.0, A2.1, A2.2, A3.1, A3.2, A3.3, A4.1, A5.1, A9.0, A9.1, E2.0, E2.1, E2.2
Energy Credits - 6.0: Outlined below.
Fuel Normalization option 2: Heat pump air to water radiant system. (A1.0, A2.0) 1.0 credit
EC 1.4 - Building Envelope: Vertical Penetration U=.25 (sht. A9.0/9.1); Wall R-21 plus R-4ci;
Floor R-38; Basement wall R-21 int plus R-5 ci; Slab on grade R-10 perimeter and under entire slab. 1.0 credit (shts. A3.1-3.3, A4.1, A5.1)
C 2.2 - Air leakage control 2.0 ach + HRV system with an efficiency of .65 (shts. A2.0, E2.0, E2.1, E2.2) 1.0 credit
EC4.2 - Efficient heating distribution system (hydronic piping) is 100% in conditioned space. (shts. A2.0, A2.1, A2.2, A3.2, A3.3, A4.1, A5.1) 1.0 credit
EC5.5 - Efficient water heating - Electric heat pump water heater. (sht. A2.0) 2.0 credits
Whole House Ventilation: Prescriptive Intermittent Whole House Ventilation per IRC M1507.3 with a Whole-House Ventilation Rate of 150 cfm each of (3) fans (see sheets E2.0, E2.1 & E2.2).

PROJECT DIRECTORY:
Architect: Ectypos Architecture
Contact: Lucia Pirzio-Biroli, Architect
4212 W. Mercer Way Phone: (206) 232-9147
Mercer Island, WA 98040 Fax: (206) 275-0312

Surveyor: Terrane
Contact: Dana Hall
10801 Main Street, Ste. 102 Phone: (425) 458-4488
Bellevue, WA 98004

Geotechnical Engineer: Geotech Consultants, Inc.
Contact: Mare McGinnes
2401 10th Ave. E. Phone: (425) 747-5618
Seattle, WA 98199

Civil Engineer: WR Consulting
Contact: John W. Rundall
3611 45th Ave. W. Phone: (206) 285-1593
Seattle, WA 98199 Fax: (206) 264-7769

Structural Engineer: Bykonen Carter Quinn
Contact: Nick Carter
2033 6th Ave, Suite 995
Seattle, WA 98121 Phone: (206) 264-7784

Shoring Engineer: Ground Support PLLC
Contact: Chris Wolschlag
16932 Woodinville-Redmond Rd NE, Ste. #210
Woodinville, WA 98072 Phone: (425) 922-1501

Arborist: Arborist NW LLC.
Contact: Neil Baker
1710 SW 318 Pl. 44D Phone: (206) 779-2579
Federal Way, WA 98023

General Contractor: Mercer Builders
Contact: Jeff Wenzel
3860 76th Ave SE Phone: (206) 275-1234
Mercer Island, WA 98040

DOCUMENT LIST :

City of Mercer Island Coversheet

Drawing schedule:
A0.1 Cover Sheet / Project Information
---- Site Survey

A1.1 Site Plan
A1.2 Site Calculations
A1.3 Critical Area Plan
A1.4 Excavation Grading Plan

SH1.0 Nail Shoring Cover Sheet
SH1.1 Notes
SH2.0 Wall Plan
SH3.0 Wall Elevations
SH4.0 Cross Sections
SH5.0 Details
SH5.1 Details
SH6.0 Nailing Sequence
SH7.0 Specifications
SH7.1 Specificationsm

C1 General Notes
C2 TESC Plan and Details
C3 Drainage Plan
C4 Detention Tank Details
C4.1 Drainage Details

AR1 Tree Removal, Replacement and Protection

A2.0 Lower Floor Plan / Crawl Space Diagram
A2.1 Main Floor Plan / Crawl Space Diagram
A2.2 Upper Floor Plan
A2.3 Roof Plan
A3.1 Elevations
A3.2 Elevations
A3.3 Elevations
A4.1 Building Section
A4.2 Building Sections
A5.1 Wall Section
A9.1 Window Schedule
A9.2 Door Schedule

E1.0 Site Electrical Plan
E2.0 Lower Floor Electrical Plan
E2.1 Main Floor Electrical Plan
E2.2 Upper Floor Electrical Plan

S1.0 Structural General Notes
S1.1 Structural General Notes
S2.0 Foundation Plan
S2.1 Main Floor Framing Plan
S2.2 Upper Floor Framing Plan
S2.3 Roof Framing Plan
S3.0 Concrete Details
S3.1 Concrete Details
S3.2 Concrete Details
S3.3 Concrete Details
S4.0 Steel Details
S5.0 Typical Wood Details
S5.1 Typical Wood Lateral Details
S5.2 Wood Details
S5.3 Wood Details
S5.4 Wood Details

Reports, Memos and City Forms:

Permit Application
Site Development Information (revised)
CAR 2 Report (revised)
WSEC Energy Code Compliance form
Fire Area Square Footage Calculation
Fire Code Alternate Request memo
Transportation Concurrence Application
Residential Water Meter Sizing Worksheet
ADU Application form
ADU Affidavit
Critical Area Disclosure - Notice on Title
Large lot - Real Covenant Limiting further Subdivision
Geotechnical Engineering Study and Critical Area Study / Plan Review Letter
Nail Shoring Design Calculations
Arborist Report and tree inventory/replacement form (revised)
Civil Engineer Drainage Report (revised)
Structural Calculations / Supplemental Calculations
Memo: Project 2202-225 Sub2 Ancillary Comments

SYMBOLS:

⊗ and
Ⓢ at
Ⓡ centerline
X by
∅ diameter
pound/number
degree
± plus or minus
Ⓢ revisions / window designation
Ⓢ door designation
◇ material designation
El. finish floor elevation

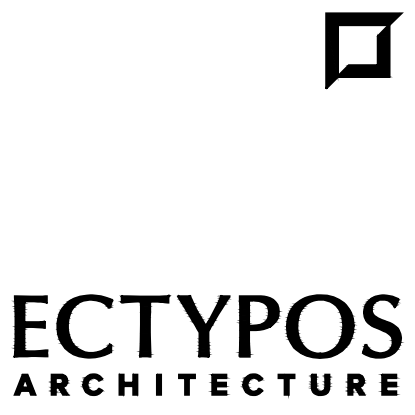
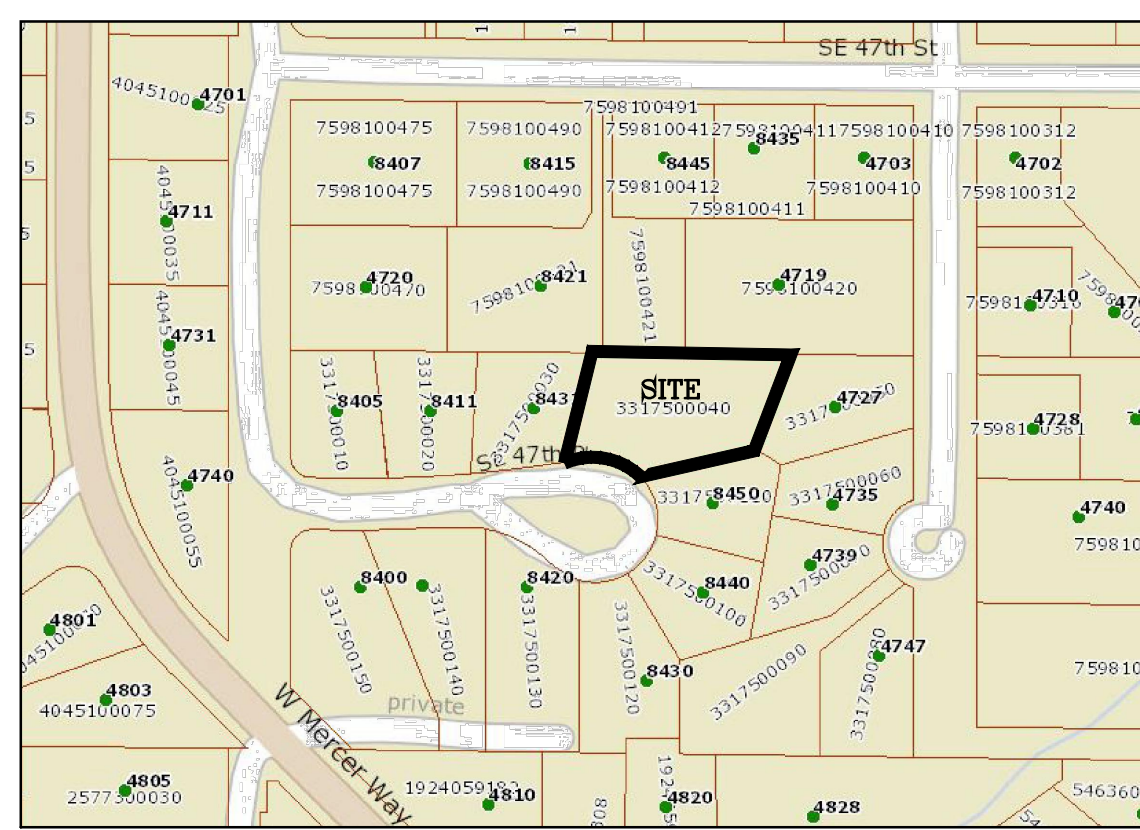
ABBREVIATIONS:

AB anchor bolt
ADJ adjustable
AFF above finish floor
ARCH architect/ural
BLDG building
BM beam
B.O. bottom of
B.O.F. bottom of footing
BTWN between
CB catch basin
CIP cast in place
CJ control joint
CLG ceiling
CMU concrete masonry unit
CO/SD combined carbon monoxide/
COL column
CONC concrete
CONT continuous
DIA diameter
DIM dimension
DN down
DR(S) door(s)
DS downspout
DWG drawing
EA each
ELEV elevation
ELEVC electrical elevations
EQ equal
EXIST existing
EXH exhaust
EXT exterior
FB flat bar
FD floor drain
FDC Fire Department Connection
FDN foundation
FE fire extinguisher
FIN finish
FOC face of conc.
FOS face of stud
FLR floor
FOIC furnished by owner installed
FPHB frost proof hose bib
FRT fire retardant treated
FS full size
FT foot
FTNG footing
GA gauge
GALV galvanized
GL glass
GWB gypsum wallboard
HB hose bib
HC hollow core
HM hollow metal
HOR horizontal
HP hot point
HR handrail
HT height
ID inside diameter
IN inch/inches
INSUL insulation
INT interior
JNT joint
KD kiln dried
LNDSPG landscaping
LP low point
LT light
MAX maximum
MDF medium density fiberboard
MDO medium density overlay
MECH mechanical
MGR manufacturer
MISC miscellaneous
MIN minimum
MTL metal
NIC not in contract
NO number
NOM nominal
NTS not to scale
OA overall
OC on center
OD outside diameter
OFD overflow drain
OPNG opening
OS overflow scupper
OVR over
PAV pavers, paving
PLYWD plywood
PR pair
PT paint/point
RAD radius
RB reinforcing bar
RD roof drain
REQ'D required
RES resilient
RL rain leader
RO rough opening
SCHED schedule(s)
SD smoke detector
SF square feet
SHT sheet
SIM similar
SPEC specification
SQ square
SS stainless steel
ST stone
STL steel
SAF self adhering flashing
TG tempered glass
T&G tongue and groove
THK thick
T.O. top of
TYP typical
V variable
VERT vertical
VG vertical grain
VIN vinyl
VTR vent through roof
W/ with
WP waterproof
W/O without
W/F welded wire fabric

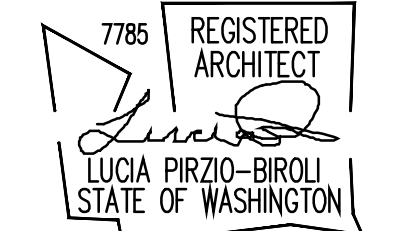
GENERAL NOTES:

- Contractor shall verify all dimensions and conditions shown on drawings at the job site and shall notify the Architect of any omissions, discrepancies and/or conflicts before proceeding with the work.
- General Contractor to coordinate pre-construction site meeting w/ Owner, Architect, Structural Engineer, Civil Engineer, Geotechnical Engineer and City of Mercer Island Building Inspector
- Plumbing, mechanical and electrical work shall be under separate permits according to prevailing codes. Contractor shall obtain such permits.
- Special Inspections that are required by the City of Mercer Island Development Services shall be coordinated by Contractor.
- Contractor shall verify existing grade conditions and height limits with Architect and surveyor on site prior to beginning work and shall notify Architect of any discrepancy in the site survey.
- Do not scale drawings, dimensions govern. Large scale dimensions govern over small scale dimensions. Notify Architect of discrepancies in dimensions prior to proceeding with work.
- Construction dimensions shown are to face of stud (F.O.S.) on exterior walls, top of (t.o.) slab or sub-floor at floor levels.
- Per approved Fire Code Alternate an NFPA "Chapter 29" Fire Alarm System shall be installed per City of Mercer Island standards. UL Listings: Devices – UL 268; Control Panel – UL 985; CO Detectors: UL 2075. FIRE DEPARTMENT REQUIREMENTS outlined below in notes 9-11. A separate permit is required and may be deferred and obtained by Contractor.
- DWELLING/GARAGE SEPARATION shall meet the requirements of IRC R302.6. All habitable rooms shall be separated on the garage side by not less than ½" Type "X" gwb or equivalent. DWELLING/GARAGE OPENING/PENETRATION PROTECTION shall meet the requirements of IRC R302.6. Doors shall be minimum 20 minute fire rated doors equipped with a self-closing device.
- FIRELOCKING shall meet the requirements of IRC R302.11. DRAFTSTOPPING shall meet the requirements of IRC R302.12. UNDER STAIR PROTECTION Enclosed under-stair space accessible by a door or panel shall be protected by a minimum of ½" type "x" gypsum wall board per IRC R302.7 and as indicated in approved Fire Code Alternate. SOLID CORE DOORS shall be installed on interior spaces except at closets. 1 HOUR TYPE "X" GWB throughout interior spaces as indicated in approved Fire Code Alternate
- SMOKE ALARMS & HEAT DETECTION See note 8 above, shall comply with IRC R314/WBC R314. Smoke alarms shall be listed and labeled in accordance with UL268. Combined smoke and carbon monoxide detectors shall be listed in accordance with UL268 AND UL 2075. Smoke alarms shall be located as follows: each sleeping room; outside each separate sleeping area in the immediate vicinity of the bedrooms; on each floor of the dwelling; stairs leading from the basement near the entry to the stair. Combination smoke alarms and carbon monoxide alarms shall be permitted in lieu of smoke alarms where carbon monoxide alarms are also required. CARBON MONOXIDE ALARMS shall meet the requirements of IRC R315. Carbon monoxide alarms shall be installed outside each separate sleeping area in the immediate vicinity of the bedrooms, on each floor level of the dwelling. HEAT ALARM/DETECTION shall be installed in garage per WAC R314.2.1
- EMERGENCY EGRESS WINDOWS shall meet the requirements of IRC R310. Each sleeping room shall have an operable rescue opening. Emergency Escape minimum dimension shall meet IRC R310.2 The sill height shall not be more than 44" from the finished floor to the bottom of the opening. Minimum net clear opening shall be 5.7 square feet; minimum clear width 20"; minimum clear height 24".
- STAIRWAYS shall meet the requirements of IRC R311.7. Stairways shall have a minimum clear width of 36" above handrail, and be not less than 3 ½" in width below handrail. Minimum headroom shall not be less than 6'-8". Maximum riser 7 ¾" / minimum tread 10". Handrails shall be not less than 34" or more than 38" above the slope of the plane of the stairs and shall be continuous for the full run of the flight and shall have a minimum space of 1 ½" between wall and railing.
- See specifications for required shop drawings. Contractor shall prepare and submit shop drawings to governing authority and Architect in a timely manner.
- Pressure mounting blocks at exterior walls behind all light fixtures, hose-bibs, structural steel connectors, guardrails and any other exterior mounted accessories. Verify type of mounting block with Architect prior to installation.
- Provide damp-proofing on all below grade foundation walls per IRC R406. Provide all accessories required for a completely watertight installation, including but not necessarily limited to: flashing, counter-flashing, sealant, and caulking at all roof and wall penetrations; interlocking weather-stripping at all doors and windows; water-stops and other concrete inserts at below grade cold joints.
- When a ventilated roof is required: Provide notching/ drilled holes according to Structural Engineer's recommendations or run roof furring strips perpendicular to roof joists to allow cross-ventilation of roof joist spaces. Maintain 1" minimum clear from top of insulation to bottom of decking where occurs.
- Pressure treated lumber typical at all exterior applications and concrete surfaces.
- Pursuant to MICC 19.02.020(F)(3)(d) all Japanese Knotweed and regulated Class A, B & C weeds identified on the King County Noxious Weed List as amended, shall be removed from the property. New landscaping associated with New Single Family Home shall not include any weeds identified on the KC Noxious Weed List.
- Any excavation or foundation work performed between October 1st and April 1st shall be subject to wet season moratorium requirements per MICC 19.07.060(D)(4)
- Per IRC R312 guards shall be installed on all open sided walking surfaces including stairs, ramps, landings, that are located more than 30 inches measured vertically to the floor or grade below. Guards shall have openings small enough that a 4" ball cannot pass. All guards shall have a minimum overturn resistance 200 lb. per IRC Table 301.5. See R311.7.8 for stair railing requirements.
- At moist locations provide water resistant gypsum wall board (green board) on walls and ceiling. Rating and thickness shall match gwb throughout rest of structure.

VICINITY MAP



4212 W. Mercer Way
Mercer Island, WA 98040
t. (206) 232-9147
f. (206) 275-0312



STEINBORN RESIDENCE

New Residence
8435 SE 47th Pl.
Mercer Island, WA 98040

Date: **3/15/2021 Pre-App**
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225
11/22/2022 Sub3-2202-225

Scale:
Sheet:

Project Information

A0.1

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

LOT 4, HILL HIGH ESTATES AS RECORDED IN VOLUME 68 OF PLATS, PAGE 28, RECORDS OF KING COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

A BEARING OF N 74°41'28" W CALCULATED PER R1 BETWEEN MONUMENTS SHOWN HEREON

REFERENCES

R1. HILL HIGH ESTATES, VOL. 68, PG. 28, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS

SURVEYOR'S NOTES

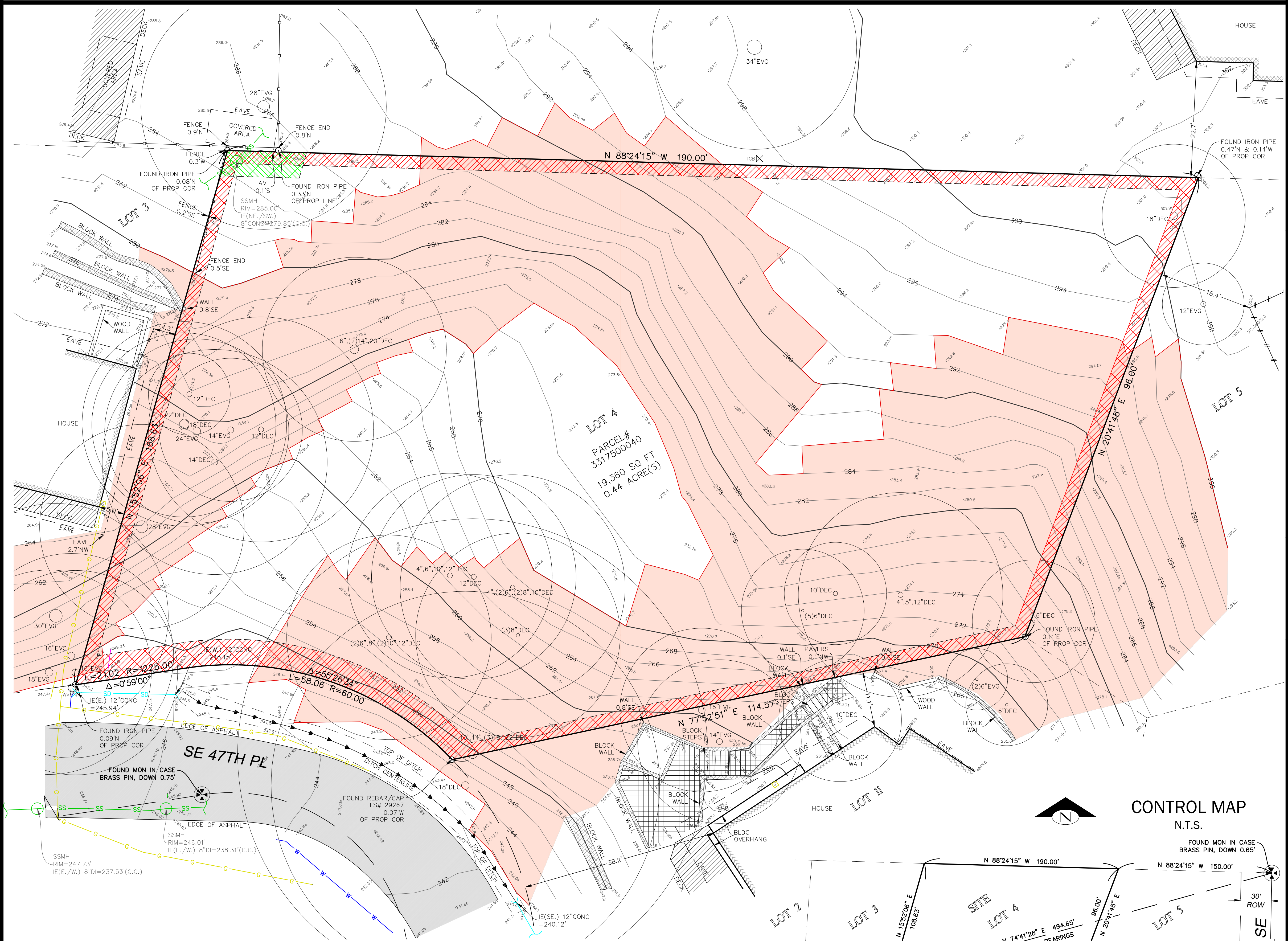
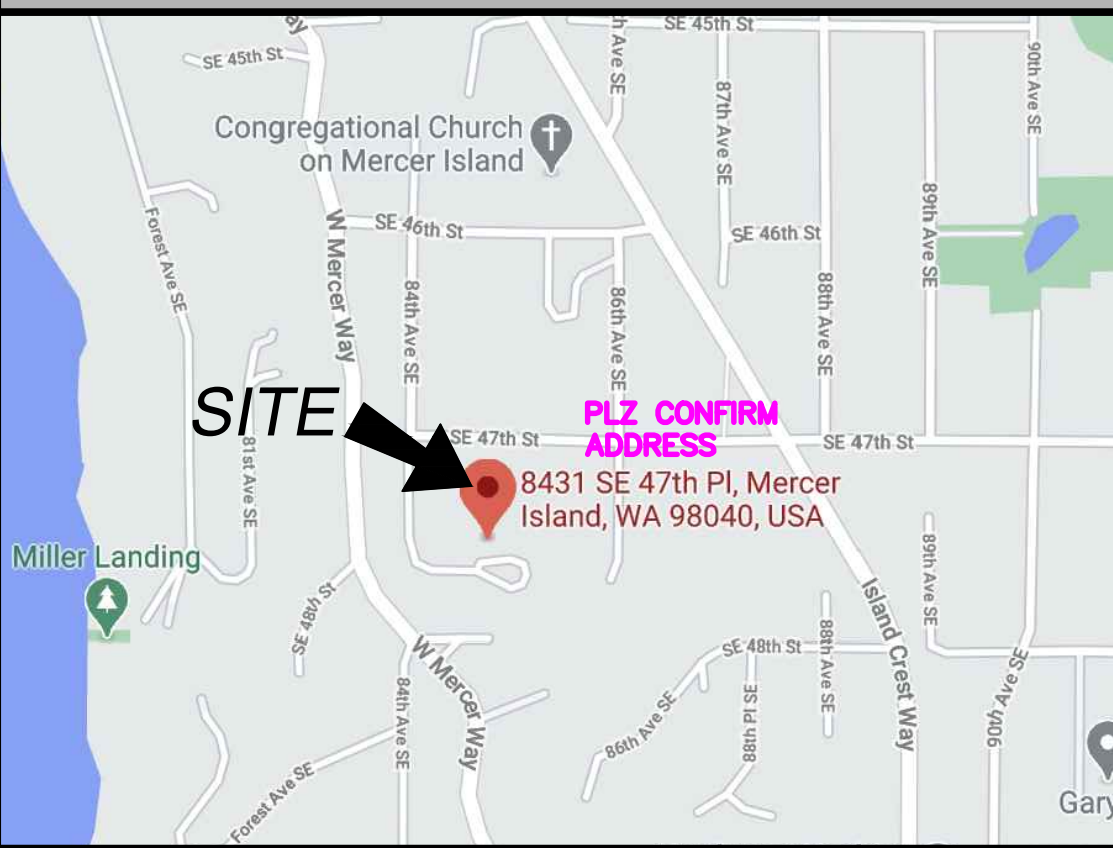
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN FEBRUARY OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 3317500040.
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 19,360± S.F. (0.44 ACRES)
6. THE PROPERTY DESCRIBED HEREON IS THE SAME AS THE PROPERTY DESCRIBED IN CHICAGO TITLE COMPANY OF WASHINGTON, COMMITMENT NO. 0164787-ETJ, WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2021 AND THAT ALL EASEMENTS, COVENANTS, AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE PROPERTY OR OTHERWISE KNOWN TO ME HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE PROPERTY.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

LEGEND

	ASPHALT SURFACE		PAVER SURFACE
	BUILDING		REBAR AS NOTED (FOUND)
	CENTERLINE ROW		SEWER LINE
	CULVERT PIPE		SEWER MANHOLE
	CONCRETE SURFACE		STORM DRAIN LINE
	RETAINING WALL		TREE (AS NOTED)
	DECK		UTILITY LINE
	DITCH (FLOWLINE)		WATER LINE
	FENCE LINE (WIRE)		WATER METER
	FENCE LINE (IRON)		FIRE HYDRANT
	FENCE LINE (WOOD)		WATER VALVE
	GAS LINE		IRRIGATION CONTROL BOX
	IRON PIPE (FOUND)		GAS METER
	MONUMENT IN CASE (FOUND)		STEEP SLOPE AREA 40% OR GREATER

VICINITY MAP

N.T.S.

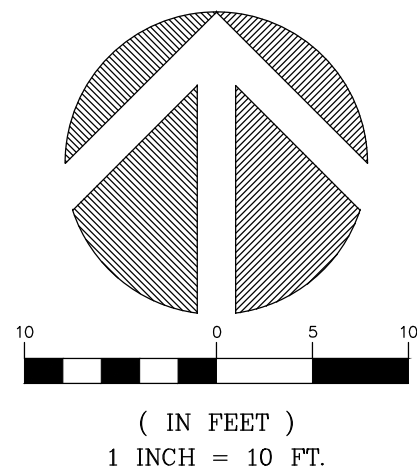


STEEP SLOPE/BUFFER DISCLAIMER:

THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.

SCHEDULE B ITEMS

- ITEM NO. 2 - SEWER EASEMENT, REC. NO. 5783155
- ITEM NO. 3 - ELECTRIC & TELEPHONE EASEMENT, REC. NO. 5918268



INDEXING INFORMATION

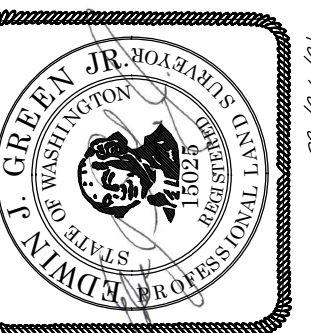
SW	1/4	SW	1/4
SECTION	18	TOWNSHIP	24N
RANGE	5E, W.M.	COUNTY	KING

measure success

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 3317500040

STEINBORN PROPERTY

84XX SE 47TH PL
MERCER ISLAND, WA 98040



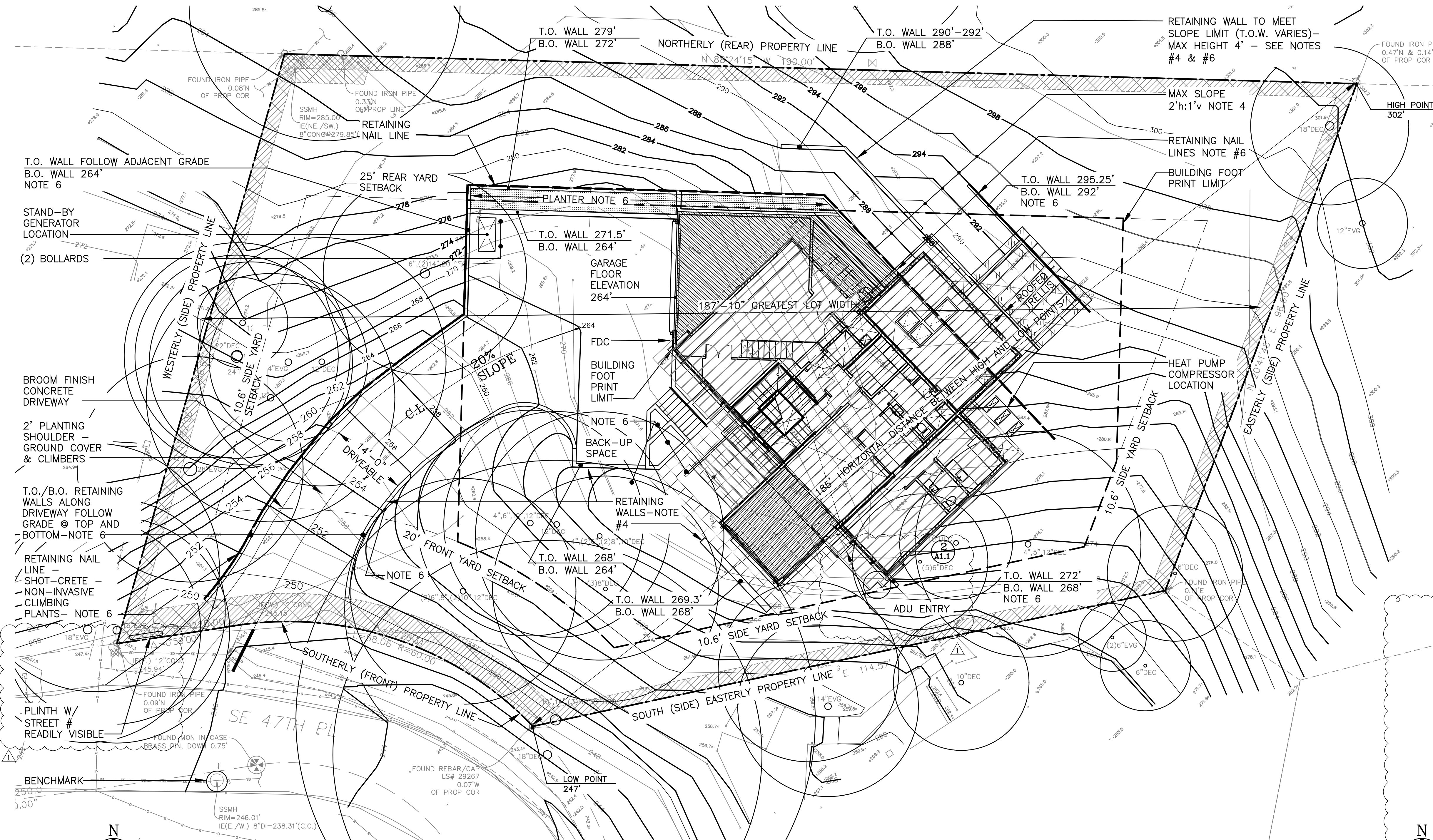
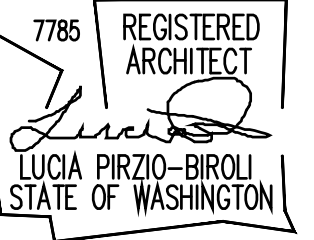
Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

JOB NUMBER: 210291
DATE: 02/21/2021
DRAFTED BY: RSN
CHECKED BY: EJG/TMM
SCALE: 1" = 10'

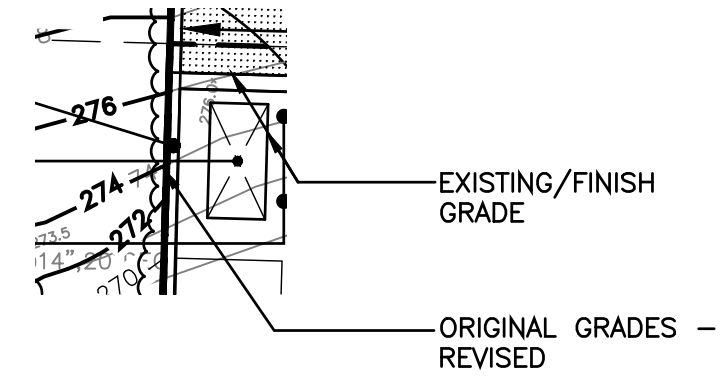
REVISION HISTORY

NO.	DATE	DESCRIPTION

SHEET NUMBER
1 OF 1

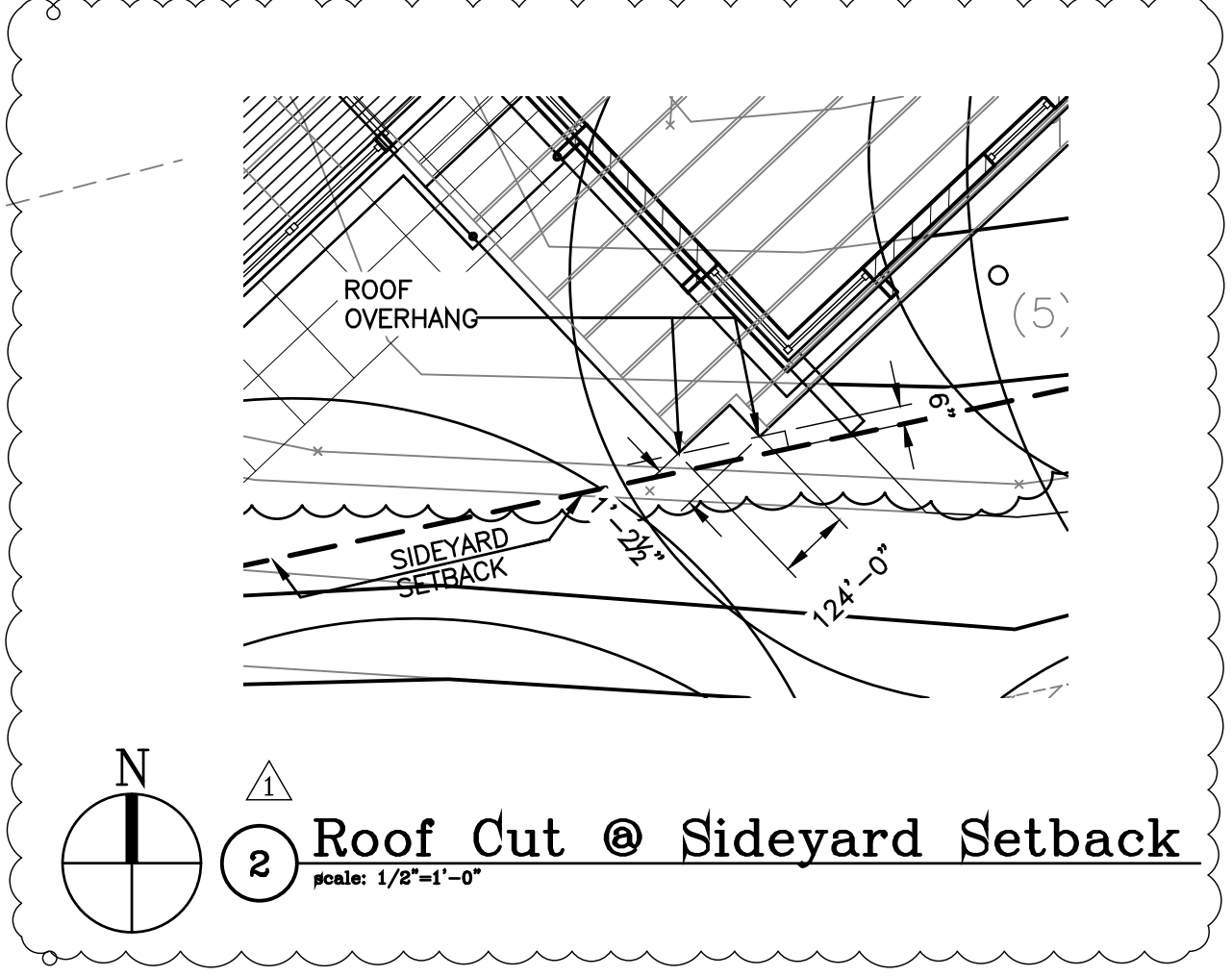


Grade Legend



Side Yard Calculation
REQUIRED SIDE YARD WIDTH SUM: 17% OF LOT WIDTH
LOT WIDTH: 187'-10"
SIDE YARD TOTAL WIDTH: 187'-10" x 17% = 31'-11"
(3) SIDE YARDS: 31'-11"/3 = 10.6'

Lot Slope
HIGH POINT: 302'
LOW POINT: 247'
DIFFERENCE: 56'
HORIZONTAL DIFFERENCE: 185'
LOT SLOPE: 30%
ALLOWED LOT COVERAGE: 30%
SEE SHEET A1.2 FOR LOT COVERAGE CALCULATIONS AND ABE CALCULATION



2 Roof Cut @ Sideyard Setback
Scale: 1/8"=1'-0"

1 Site Plan
Scale: 1"=10'

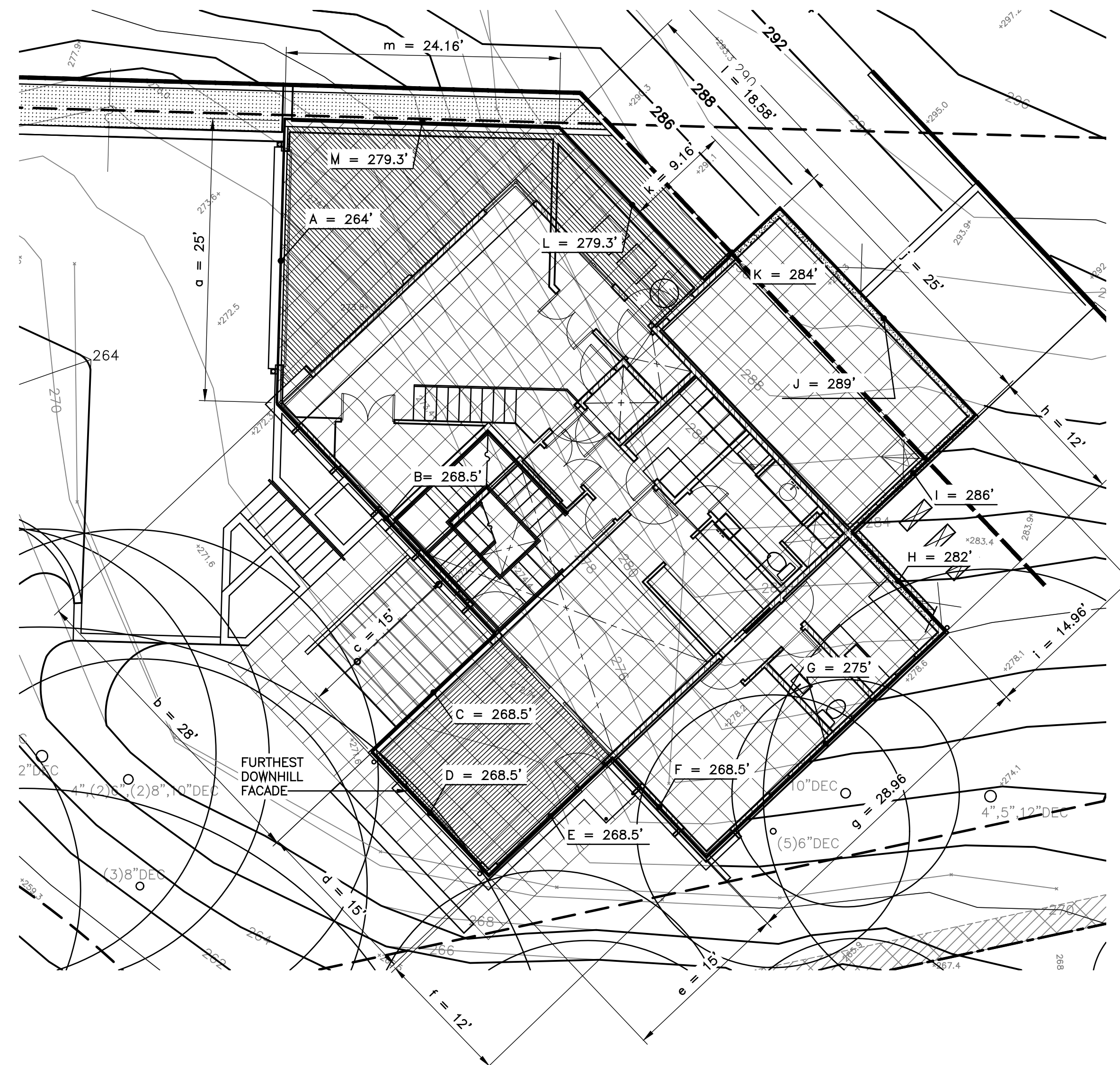
- Site Plan Notes**
1. See sheet AR1 (Tree Plan) for all tree information
 2. See sheet A1.4 (Grading Plan) for pre-foundation grading.
 3. T.O./B.O. retaining walls noted on this drawing are to address planning requirements. For permanent nail shoring retaining see sheet SH3.0.
 4. See 12/53.0 for Retaining Wall Schedule
 5. All graded slopes shall be protected during construction and heavily planted at completion there of.
 6. All planters/behind retaining walls shall be densely planted with no access as walking surfaces unless explicitly indicated. No guard required.
 7. See attached memo: Project 2202-225 Sub2 Ancillary Comments

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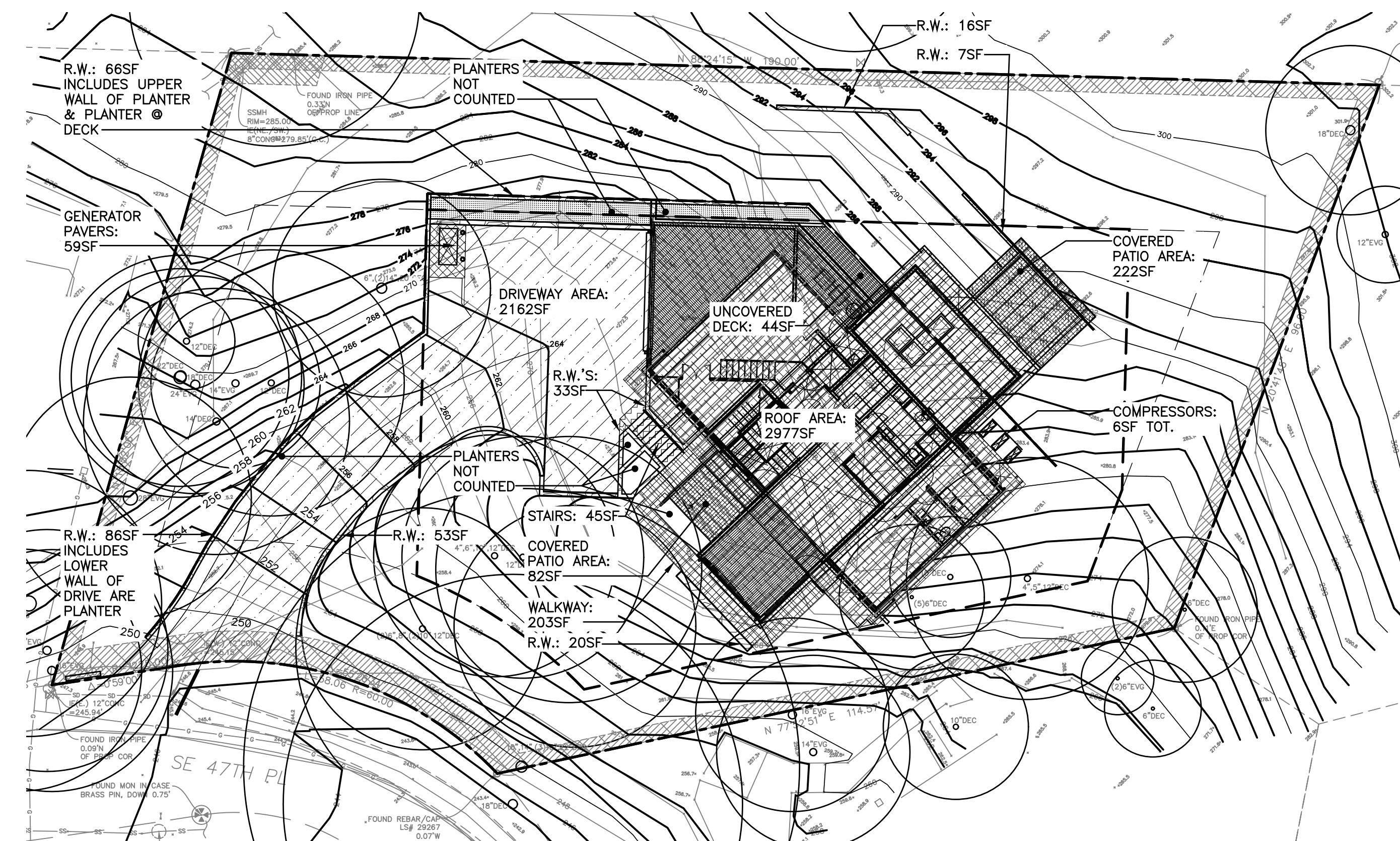
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AVERAGE BUILDING ELEVATION		
Mid-point Elev.	Wall Segment Length	Elev x Length
A= 264 ft	a= 25.0 ft	= 6600.0
B= 268.5 ft	b= 28.0 ft	= 7518.0
C= 268.5 ft	c= 15.0 ft	= 4027.5
D= 268.5 ft	d= 15.0 ft	= 4027.5
E= 268.5 ft	e= 15.0 ft	= 4027.5
F= 268.5 ft	f= 12.0 ft	= 3222.0
G= 275 ft	g= 29.0 ft	= 7964.0
H= 282 ft	h= 12.0 ft	= 3384.0
I= 286 ft	i= 15.0 ft	= 4278.6
J= 289 ft	j= 25.0 ft	= 7225.0
K= 284 ft	k= 9.2 ft	= 2601.4
L= 279.3 ft	l= 18.6 ft	= 5189.4
M= 279.3 ft	m= 24.2 ft	= 6747.9
	total=	total=
	242.8 ft.	66812.8
Avg. Building Elevation = 275.2 ft.		
Allowed Building Height = 305.2 ft.		

INDICATES FOOTPRINT OF FOUNDATION PERIMETER

1 Average Building Elevation Calculation
scale: 1/8"=1'-0"



Lot Coverage Calculation

GROSS/NET LOT AREA:	19360.24 SF
ALLOWED LOT COVERAGE:	5808 SF / 30%
EXISTING LOT COVERAGE:	0 SF

Proposed Areas:

- PROPOSED DRIVEWAY: 2118 SF
- PROPOSED MAIN STRUCTURE ROOF AREA: 2977 SF
- COVERED PATIOS AND DECKS: 304 SF

TOTAL LOT COVERAGE: 5228 SF (27%)

Hardscape Calculation

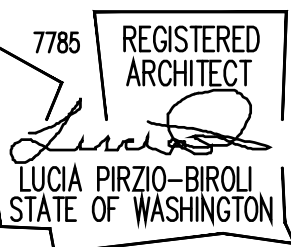
GROSS/NET LOT AREA:	19360.24 SF
ALLOWED HARDSCAPE:	1742 SF / 9%
EXISTING LOT COVERAGE:	0 SF

Proposed Hardscape Areas:

- WALKWAYS: 262 SF
- STAIRS: 45 SF
- RETAINING WALLS (R.W.): 281 SF
- UNCOVERED DECKS: 44 SF

TOTAL HARDSCAPE: 632 SF (3%)

3 Lot Coverage & Hardscape Calculations
scale: 1"=10'

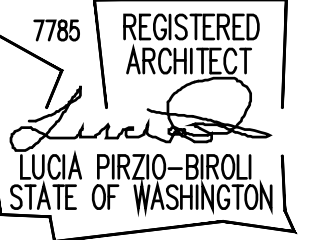


STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

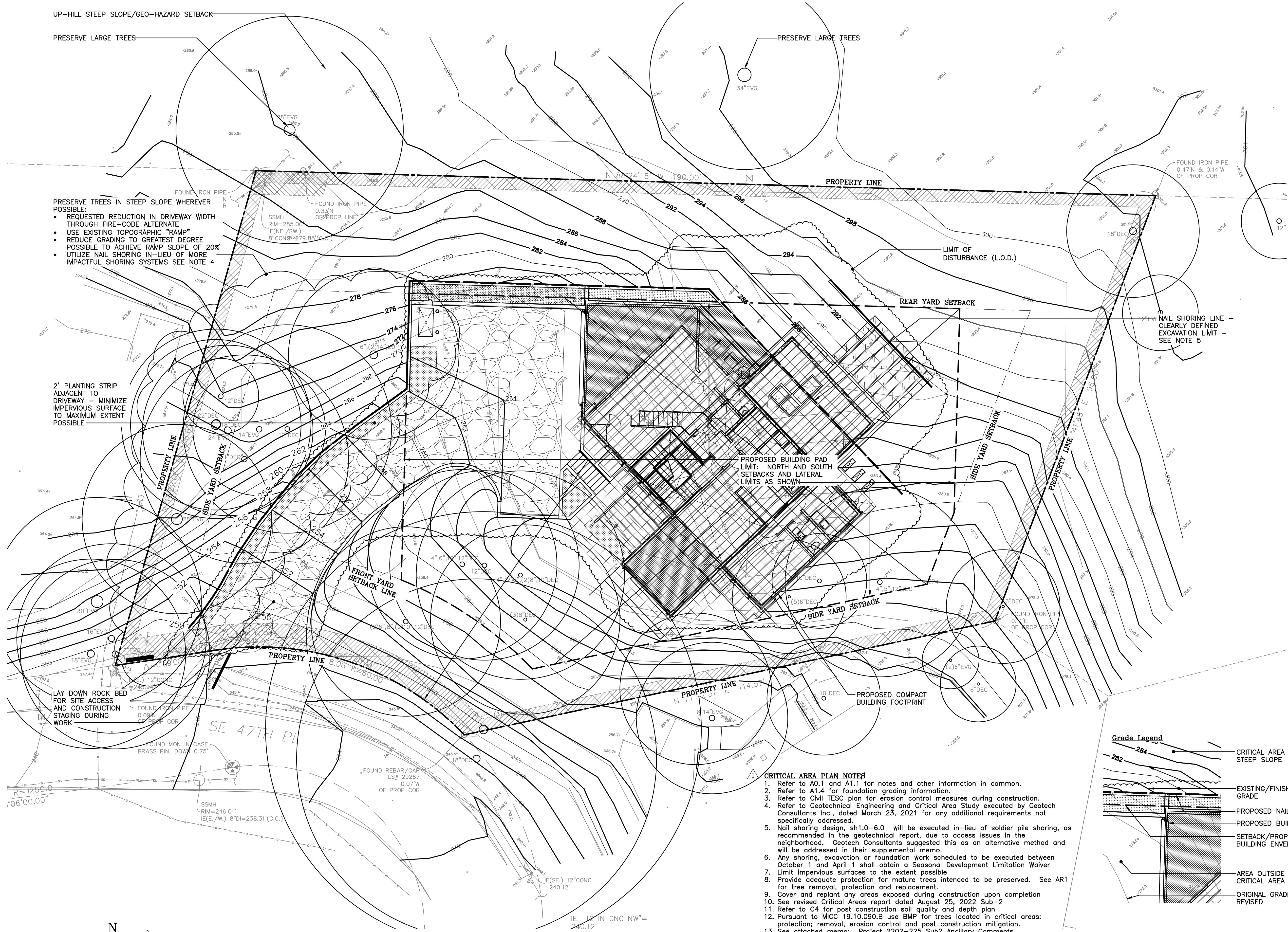
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UP-HILL STEEP SLOPE/GEO-HAZARD SETBACK

PRESERVE LARGE TREES

PRESERVE LARGE TREES

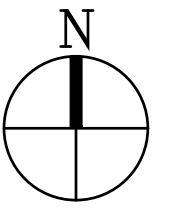
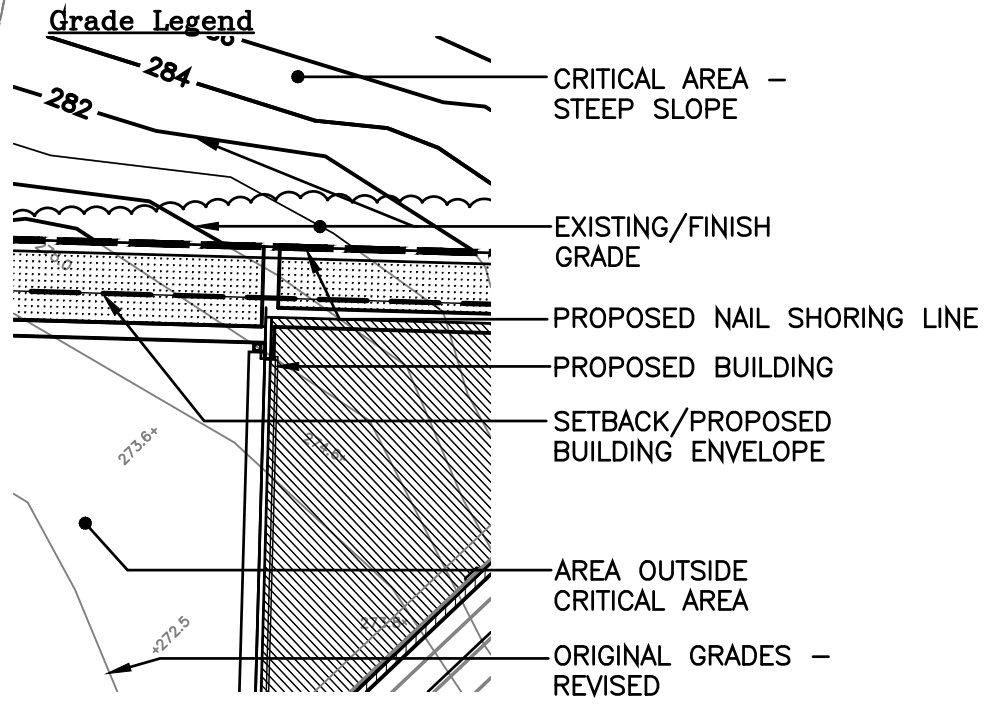
PRESERVE TREES IN STEEP SLOPE WHEREVER POSSIBLE:
• REQUESTED REDUCTION IN DRIVEWAY WIDTH THROUGH FIRE-CODE ALTERNATE
• USE EXISTING TOPOGRAPHIC "RAMP"
• REDUCE GRADING TO GREATEST DEGREE POSSIBLE TO ACHIEVE RAMP SLOPE OF 20%
• UTILIZE NAIL SHORING IN-LIEU OF MORE IMPACTFUL SHORING SYSTEMS SEE NOTE 4

2' PLANTING STRIP ADJACENT TO DRIVEWAY - MINIMIZE IMPERVIOUS SURFACE TO MAXIMUM EXTENT POSSIBLE

LAY DOWN ROCK BED FOR SITE ACCESS AND CONSTRUCTION STAGING DURING WORK

CRITICAL AREA PLAN NOTES

1. Refer to A0.1 and A1.1 for notes and other information in common.
2. Refer to A1.4 for foundation grading information.
3. Refer to Civil TESC plan for erosion control measures during construction.
4. Refer to Geotechnical Engineering and Critical Area Study executed by Geotech Consultants Inc., dated March 23, 2021 for any additional requirements not specifically addressed.
5. Nail shoring design, sh1.0-6.0 will be executed in-lieu of soldier pile shoring, as recommended in the geotechnical report, due to access issues in the neighborhood. Geotech Consultants suggested this as an alternative method and will be addressed in their supplemental memo.
6. Any shoring, excavation or foundation work scheduled to be executed between October 1 and April 1 shall obtain a Seasonal Development Limitation Waiver
7. Limit impervious surfaces to the extent possible
8. Provide adequate protection for mature trees intended to be preserved. See AR1 for tree removal, protection and replacement.
9. Cover and replant any areas exposed during construction upon completion
10. See revised Critical Areas report dated August 25, 2022 Sub-2
11. Refer to C4 for post construction soil quality and depth plan
12. Pursuant to MICC 19.10.090.B use BMP for trees located in critical areas: protection; removal, erosion control and post construction mitigation.
13. See attached memo: Project 2202-225 Sub2 Ancillary Comments



1 Critical Area Review 2 Plan

Scale: 1"=10'

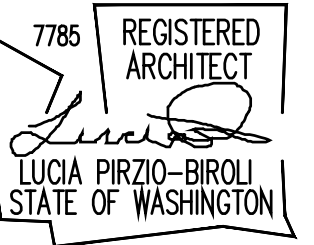
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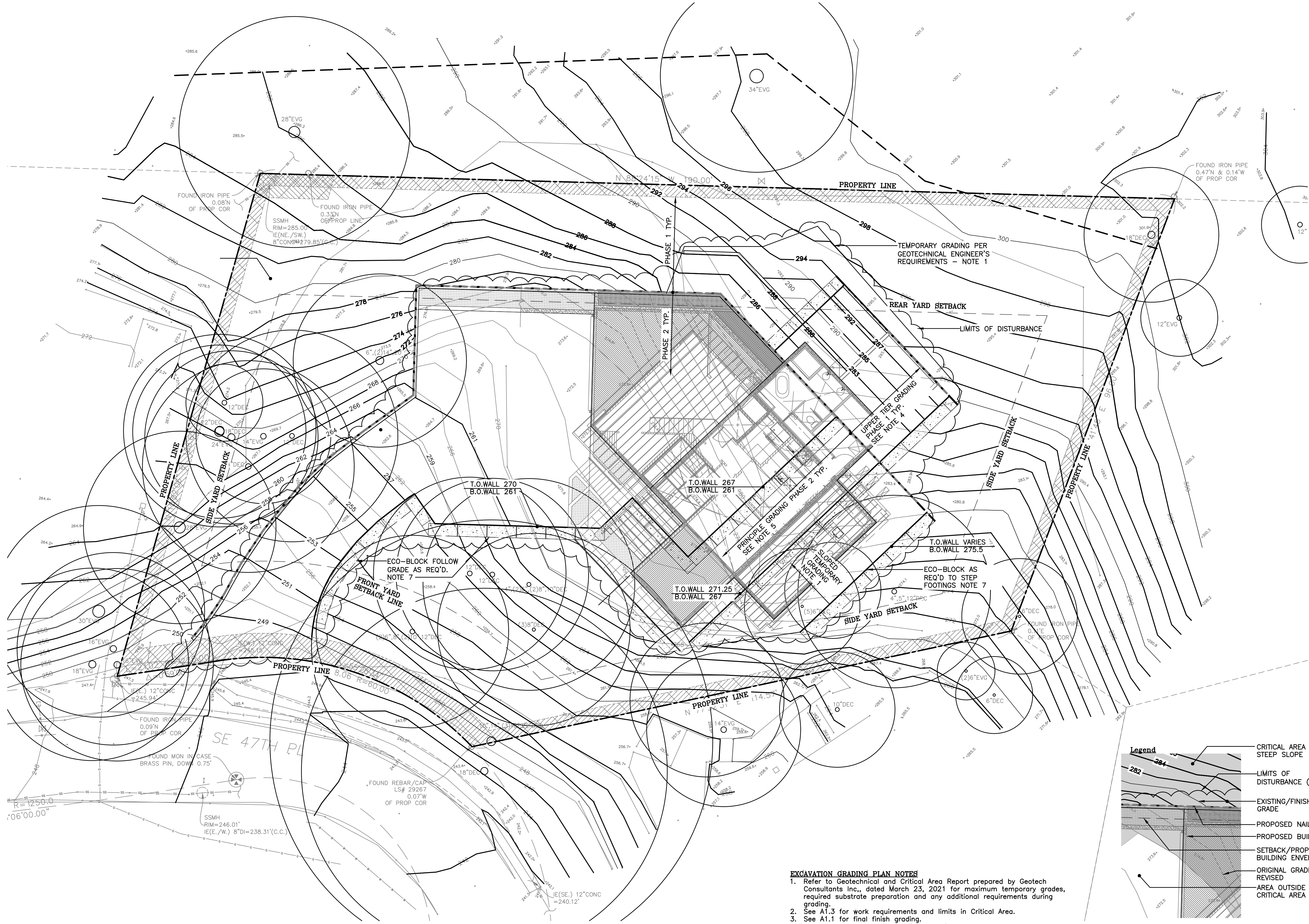
CAR 2
Plan

NEW NUMBER - REVISED LOCATION IN SET
A1.3

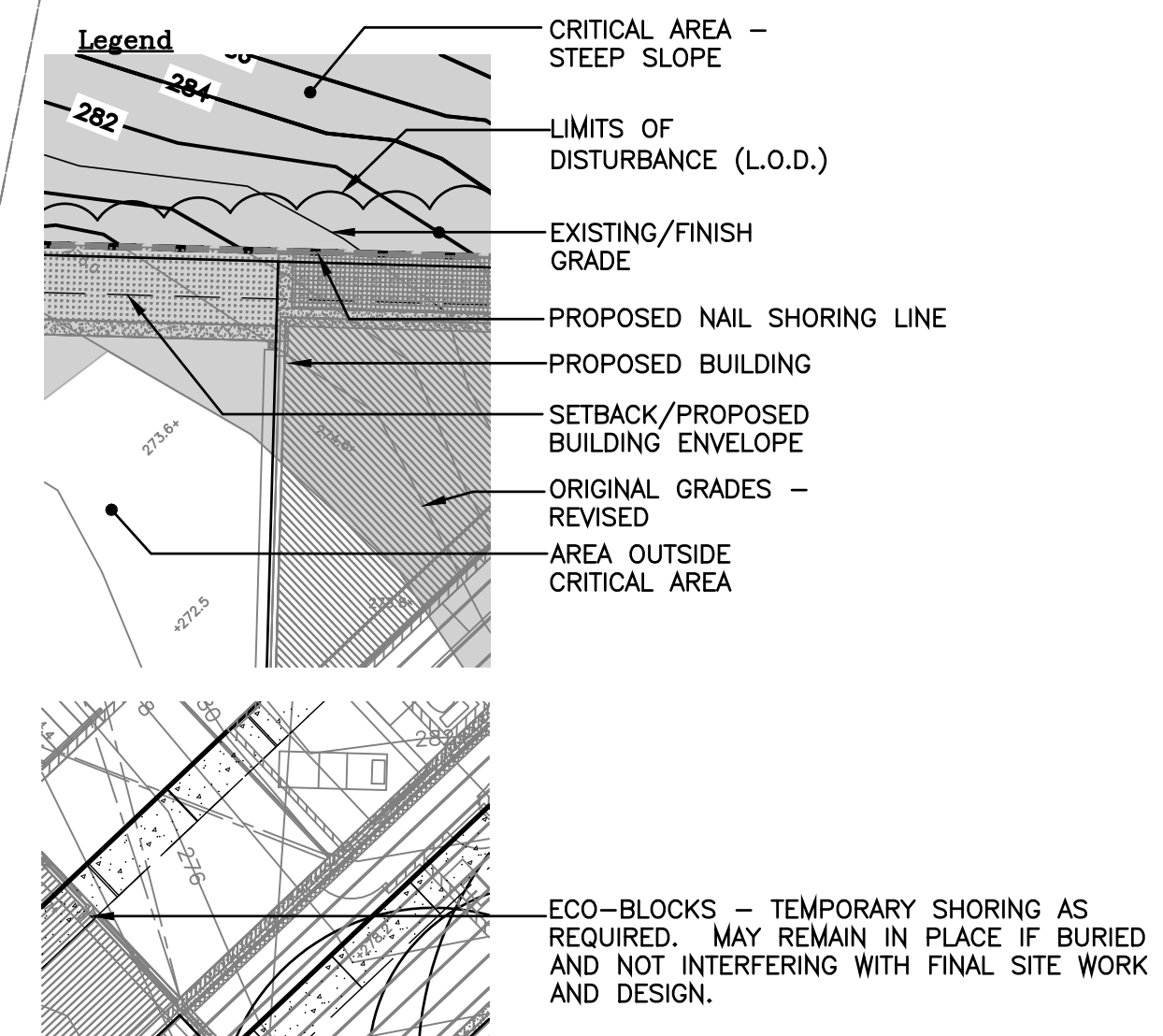


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- EXCAVATION GRADING PLAN NOTES**
- Refer to Geotechnical and Critical Area Report prepared by Geotech Consultants Inc., dated March 23, 2021 for maximum temporary grades, required substrate preparation and any additional requirements during grading.
 - See A1.3 for work requirements and limits in Critical Area.
 - See A1.1 for final finish grading.
 - Refer to Nail Shoring design (SH series) for requirements during execution of shoring.
 - Phase 1: Complete nail shoring, excavation, foundation work and final grading work at Upper Tier prior to start of phase 2
 - Phase 2: Begin work AFTER completion of Phase 1, including final grading. No heavy equipment above Phase 2 after phase 1 is complete.
 - Install Eco-Blocks as required for temporary shoring for foundation work. Blocks may remain in place if completely buried during final grading.
 - Any shoring, excavation or foundation work scheduled to be executed between October 1 and April 1 shall obtain a Seasonal Development Limitation Waiver
 - See attached memo: Project 2202-225 Sub2 Ancillary Comments



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Excavation Grading Plan
A1.4

1 Excavation Grading Plan
Scale: 1"=10'

DAN AND SUSAN STEINBORN

8435 SE 47TH PLACE

MERCER ISLAND, WASHINGTON

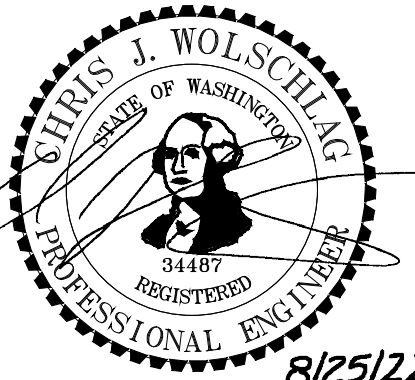
PERMANENT SOIL NAIL RETAINING WALL PLANS

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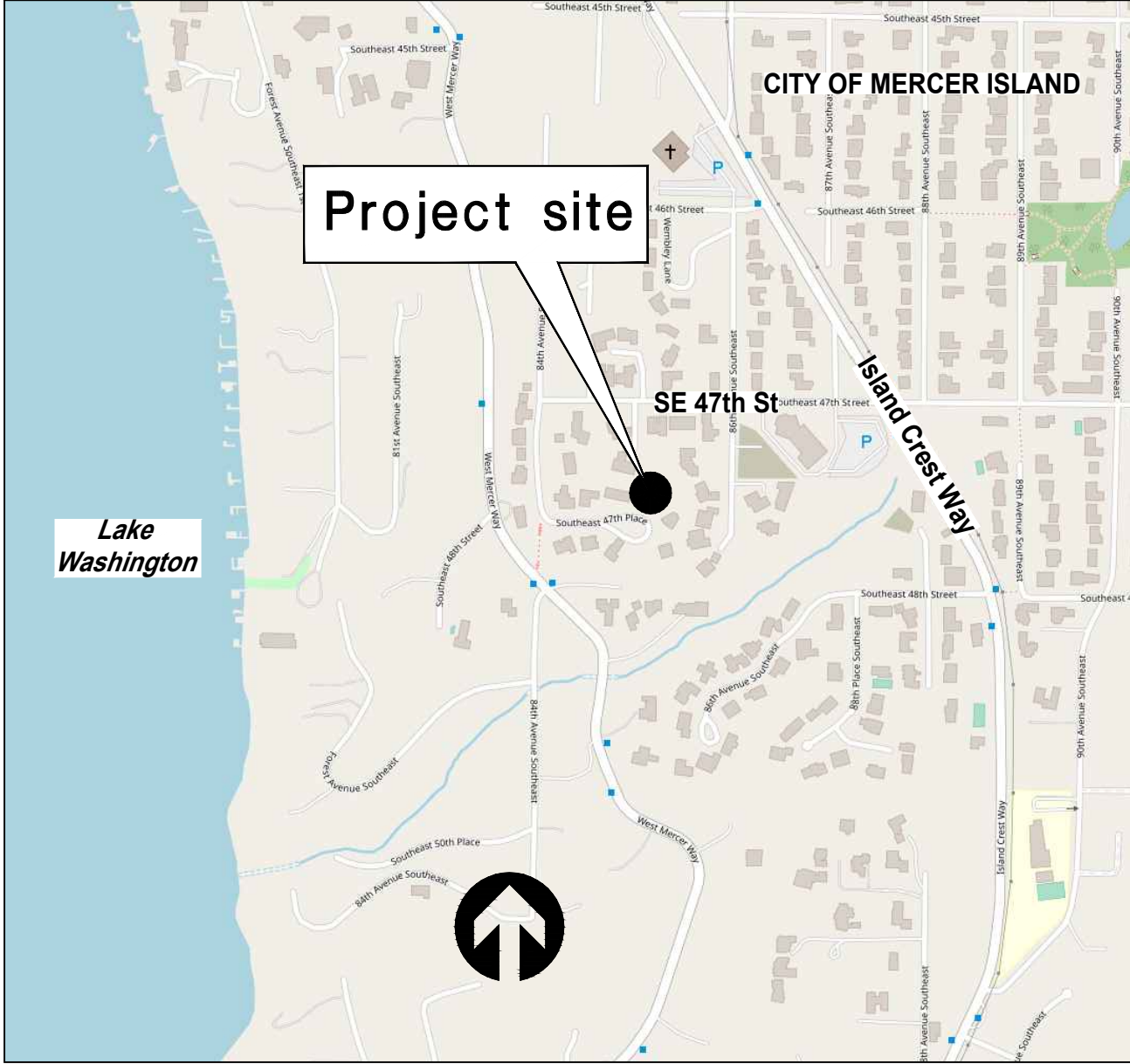
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Cover Sheet
and Notes
SH1.0

SHEET NUMBER	SHEET TITLE
SH1.0-1.1	COVER SHEET AND NOTES
SH2.0	WALL PLAN
SH3.0	WALL ELEVATION
SH4.0	CROSS-SECTIONS
SH5.0-5.1	DETAILS
SH6.0	SOIL NAILING SEQUENCE
SH7.0-7.1	SPECIFICATIONS



VICINITY MAP

GENERAL:
THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING DIMENSIONS AND SITE CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS AND THOSE UTILITIES OR UNDERGROUND OBSTRUCTIONS NOT SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL ABANDONED UTILITIES, OR OTHER UNDERGROUND OBSTRUCTIONS THAT INTERFERE WITH THE NEW CONSTRUCTION.

THE CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE FOR THE CONSTRUCTION PROCESS AND THE SAFETY OF THE WORKERS. THIS INCLUDES BUT IS NOT LIMITED TO, THE CONSTRUCTION SEQUENCE, TEMPORARY HANDRAILS, EXCAVATION ACCESS, AND BARRIERS. IT ALSO INCLUDES LIFTING OF MATERIALS AND CONSTRUCTION EQUIPMENT INTO AND OUT OF THE EXCAVATION, TEMPORARY BRACING OF SINGLE-SIDED FORMWORK, TEMPORARY SHORING OF EXCAVATIONS, AND STABILITY OF ALL TEMPORARY CUT SLOPES.

REFERENCE DATA:
THE EXISTING SITE, TOPOGRAPHICAL, AND UTILITY DATA; THE PROPOSED GRADES, TOP AND BOTTOM OF WALL, AND THE WALL LOCATIONS, ARE ALL BASED ON THE FOLLOWING:
• THE AUTOCAD DRAWING FILES NAMED: "LOWER-LEVEL-PERMIT.DWG", DATED JULY 19, 2022, "SITEPLAN-PERMIT.DWG", DATED AUGUST 9, 2022, AND "ELEVATIONS-PERMIT-PANEL.DWG", DATED AUGUST 9, 2022, ALL PREPARED BY ECTYPOS ARCHITECTURE.

BUILDING CODES, DESIGN MANUALS, AND SPECIFICATIONS:
2018 INTERNATIONAL BUILDING CODE
PUBLICATION NO. FHWA-IF-03-017, GEOTECHNICAL ENGINEERING CIRCULAR NO. 1, SOIL NAIL WALLS

DESIGN LIVE LOADS:
FOR ALL THE WALLS, A UNIFORM SURCHARGE OF 250 PSF WAS CONSIDERED ON THE SLOPES BEHIND THE WALLS, EVEN THOUGH SURCHARGE IS UNLIKELY THERE. THE EXCEPTION IS IN NAIL SCHEDULE D (SEE WALL ELEVATION) WHERE A 500 PSF SURCHARGE WAS CONSIDERED TO ACCOUNT FOR THE FOOTING LOADS FROM THE STRUCTURE BEARING BEHIND THE WALL.

SEISMIC LOADING CONSIDERATIONS:
FOR THE PERMANENT SOIL NAIL WALLS, SEISMIC SLOPE STABILITY ANALYSES WERE PERFORMED FOR THE FINAL CONFIGURATION, BY CONSIDERING A PSEUDO-STATIC ACCELERATION OF 0.36 (CORRESPONDING TO AN MCE OF 0.678G). SEISMIC LOADING WAS FOUND TO BE MORE CRITICAL TO THE DESIGN THAN THE PERMANENT STATIC LOADING CONDITION FOR THE DETERMINATION OF UPPER ROW NAIL LENGTHS ONLY, BUT NAIL BAR SIZES AND FACING LOADS WERE GOVERNED BY STATIC LOADING.

WALL TYPES/SCOPE:
ALL OF THE SOIL NAILS ARE PERMANENT, AND AS SUCH, EPOXY-COATED. ALL OF THE SHOTCRETE FACING IS ALSO PERMANENT, BEING 1" THICK, AND CONNECTED TO THE NAILS. SOME FACING AREAS RECEIVE A SPECIAL FLOAT FINISH AND WILL BE VISIBLE; WHILE OTHERS ARE NOT GOING TO BE VISIBLE AND THE FINISH CAN BE LESS SMOOTH.

DESIGN CALCULATIONS:
THE PERMANENT RETAINING WALL DESIGN CALCULATIONS ARE CONTAINED IN THE REPORT TITLED: "PERMANENT RETAINING WALL DESIGN CALCULATIONS AND PLANS, 8435 SE 47TH PLACE, MERCER ISLAND, WA", PREPARED BY GROUND SUPPORT PLLC FOR DAN AND SUSAN STEINBORN, DATED AUGUST 25, 2022.

SUBSURFACE DESIGN PARAMETERS:
THE SUBSURFACE CHARACTERIZATION USED TO DESIGN THE RETAINING WALLS IS BASED ON THE REPORT TITLED: "GEOTECHNICAL ENGINEERING STUDY, PROPOSED STEINBORN RESIDENCE, VACANT LOT EAST OF 8435 SE 47TH PLACE, PARCEL #831500040, MERCER ISLAND, WASHINGTON", PREPARED BY GEOTECH CONSULTANTS, INC., DATED MARCH 23, 2021. THE FOLLOWING SOIL PROPERTIES WERE USED TO DESIGN THE SOIL NAIL RETAINING WALLS:

SUBSURFACE UNIT	UNIT WEIGHT (PCF)	SOIL FRICTION (DEG)	SOIL COHESION (PSF)	SERVICE NAIL PULLOUT (K/FT)
FILL	125	32	50	1.5
GLACIAL SOILS	135	40	100	3.5

FOR THE PURPOSES OF DESIGN OF THE RETAINING WALLS, THE WATER TABLE HAS BEEN ASSUMED TO OCCUR AT OR BENEATH THE BASE OF THE EXCAVATION, IN ACCORDANCE WITH THE FINDINGS FROM THE GEOTECHNICAL INVESTIGATION.

HOWEVER, SIGNIFICANT LOCALIZED WET ZONES AND/OR PERCHED POCKETS AND STRINGERS OF WATER-BEARING SOILS MAY BE ENCOUNTERED. THESE AREAS WILL REQUIRE SPECIAL ATTENTION TO DEWATERING USING METHODS SUCH AS INCREASED DRAIN BOARD COVERAGE, ADDITIONAL WEEP AND HEADER PIPES THROUGH THE SHOTCRETE WALL, AND SUMP PUMPS AS REQUIRED TO PREVENT THE WATER FROM CAUSING FACE INSTABILITY OR WATER PRESSURES FROM DEVELOPING BEHIND THE SHOTCRETE WALL DURING CONSTRUCTION.

RETAINING WALL STABILITY ANALYSES:
IN ACCORDANCE WITH THE REFERENCED FHWA PUBLICATION, THE FOLLOWING PARTIAL FACTORS OF SAFETY WERE USED IN THE ANALYSIS OF INTERNAL AND EXTERNAL RETAINING WALL STABILITY:

DESIGN COMPONENT	PARTIAL F.O.S. (TEMP)	PARTIAL F.O.S. (PERM)	PARTIAL F.O.S. (SEISMIC)
SOIL FRICTION	1.35	1.50	1.10
SOIL COHESION	1.35	1.50	1.10
SOIL-GROUT ADHESION	2.00	2.00	1.50
NAIL BAR YIELD	1.82	1.82	1.35
FACING CAPACITY	1.50	1.50	1.10

FOR THE INTERIM CONSTRUCTION CONDITIONS WHERE EXCAVATION FOR A LIFT HAS OCCURRED YET THE CORRESPONDING NAIL ROW HAS NOT BEEN INSTALLED, THE REQUIRED PARTIAL FACTORS OF SAFETY FOR SOIL FRICTION AND SOIL COHESION ARE REDUCED TO 1.20 IN ACCORDANCE WITH THE REFERENCED FHWA PUBLICATION.

SOIL NAIL THREADED BARS AND GROUT:
SOIL NAIL THREADED BARS SHALL CONFORM TO EITHER ASTM A615 / AASHTO M31, GRADE 75 OR ASTM A722 / AASHTO M215, GRADE 150, AS INDICATED ON THE PLANS.
SOIL NAIL GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI, AND A MINIMUM 3-DAY COMPRESSIVE STRENGTH OF 1500 PSI. SOIL NAIL GROUT MAY BE NEAT-CEMENT GROUT OR READY-MIX SAND-CEMENT GROUT. TYPE I/II PORTLAND CEMENT CONFORMING TO ASTM C150 / AASHTO M85 SHALL BE USED.

SHOTCRETE:
ALL SHOTCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI, AND A MINIMUM 3-DAY COMPRESSIVE STRENGTH OF 2000 PSI. SEE THE SPECIFICATIONS PLAN SHEETS FOR SPECIFIC REQUIREMENTS.

TYPE I/II PORTLAND CEMENT CONFORMING TO ASTM C150 / AASHTO M85 SHALL BE USED FOR SHOTCRETE. SUBMIT MIX DESIGNS IN ACCORDANCE WITH THE SPECIFICATIONS.
TEMPORARY SHOTCRETE MAY BE LEFT WITH A SCREEDED FINISH. PERMANENT SHOTCRETE SHALL RECEIVE A SMOOTH FLOAT FINISH.

REINFORCING STEEL:
ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 / AASHTO M31, GRADE 60 FOR DEFORMED BARS, AND ASTM A105 / AASHTO M55 FOR WELDED WIRE FABRIC. ALL REINFORCING DETAILS IN ACCORDANCE WITH ACI 315 MANUAL OF STANDARD PRACTICE.

WELDED WIRE FABRIC (WWF) LAPS SHALL BE 2 SQUARES. ALL DEFORMED REINFORCING BAR LAPS SHALL BE CLASS B, IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE, OR AS SUMMARIZED IN THE FOLLOWING TABLE:

BAR SIZE	TENSILE DEVELOP LENGTH (IN)	LAP SPLICE LENGTH (IN)
#4	12	16
#5	15	20
#6	22	28
#7	36	48
#8	48	62

STRUCTURAL STEEL:
ALL STRUCTURAL STEEL WIDE FLANGE AND OTHER ROLLED SHAPES SHALL CONFORM TO ASTM A572 / AASHTO M270, GRADE 50; ALL STRUCTURAL STEEL PLATES SHALL CONFORM TO ASTM A36 / AASHTO M270, GRADE 36; ALL RECTANGULAR STEEL TUBE WALLERS SHALL CONFORM TO ASTM A500, GRADE B; AND ALL PIPES SHALL CONFORM TO ASTM A53 GRADE B, UNLESS SHOWN OTHERWISE ON THE PLANS, OR APPROVED OTHERWISE BY THE ENGINEER.

STRUCTURAL WELDING:
MINIMUM WELD SIZE 1/4" CONTINUOUS FILLET. MINIMUM WELD LENGTH 2 INCHES. ALL WELDING TO BE PERFORMED BY NABO-CERTIFIED WELDERS PER AWS STANDARD SPECIFICATIONS. USE ETOXX ELECTRODES.

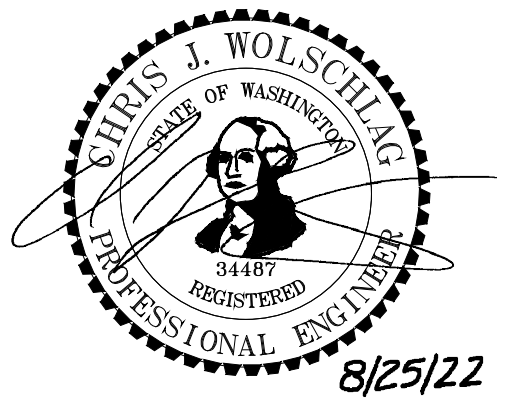


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HEADED STUDS:
ALL HEADED STUDS SHALL CONFORM TO ASTM A108 UNO. HEADED STUDS SHALL BE "NELSON STUDS" BY NELSON DIVISION OF TRM, INC. OR AN APPROVED EQUAL, AUTOMATICALLY END WELDED.

GEOCOMPOSITE WALL DRAINAGE BOARD:
ALL GEOCOMPOSITE WALL DRAINAGE BOARD SHALL BE AMERDRAIN 500, MIRAFI 6100, OR AN APPROVED EQUAL.

SPECIAL INSPECTION OF THE SHORING WALLS:
IN ACCORDANCE WITH SECTION 1704 OF IBC (2018), SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING SHORING ITEMS OR PROCESSES: SOIL NAIL INSTALLATION, SOIL NAIL TESTING, AND SHOTCRETE FACING/LAGGING MATERIALS TESTING AND PLACEMENT.

SHORING MONITORING:
SURVEY MONITORING OF THE SHORING WALLS, SHALL BE PERFORMED TO DETERMINE THE VERTICAL AND HORIZONTAL MOVEMENT OF THE MONITORING POINTS. THE MEASURING SYSTEM SHALL HAVE AN ACCURACY OF AT LEAST 0.01 FEET.
THE MONITORING PROGRAM SHALL BE DETERMINED BY THE GEOTECHNICAL SPECIAL INSPECTOR BUT, AT A MINIMUM, SHALL INCLUDE THE FOLLOWING:
- MONITORING POINTS SHALL CONSIST OF RODS OR BOLTS EMBEDDED INTO THE OBJECT OF INTEREST OR CROSS-HAIRS INSCRIBED ONTO A PLATE THAT IS ATTACHED TO THE OBJECT OF INTEREST.
- MONITORING POINTS SHALL BE ESTABLISHED: (1) A MAXIMUM OF 25 FEET ON CENTER AT THE TOP OF THE SHOTCRETE WALLS, (2) A MAXIMUM OF 25 FEET ON CENTER A DISTANCE OF 5 FEET BEHIND THE SHORING WALLS WHERE THERE ARE NO ADJACENT BUILDINGS, (3) A MAXIMUM OF 25 FEET ON CENTER A DISTANCE BEHIND THE SHORING WALLS WHERE THERE ARE NO ADJACENT BUILDINGS EQUAL TO THE EXCAVATION HEIGHT OF THE WALL, AND (4) ON ANY ADJACENT STRUCTURES THAT ARE LOCATED WITHIN A HORIZONTAL DISTANCE EQUAL TO THE WALL HEIGHT ALONG THE SHORING WALLS.
- READINGS SHALL BE TAKEN AND REPORTED AT LEAST TWICE A WEEK, ONE TIME OF WHICH MUST BE BY A LICENSED SURVEYOR.
MONITORING DATA SHALL BE DISTRIBUTED TO THE GEOTECHNICAL ENGINEER, THE SHORING DESIGN ENGINEER, AND THE GENERAL CONTRACTOR FOR REVIEW.
THE EXPECTED LATERAL SHORING WALL MOVEMENT IS ON THE ORDER OF 1/2". IF MOVEMENTS EXCEED 1/2", THE EXCAVATION SHALL BE HALTED UNTIL FURTHER REVIEW BY GROUND SUPPORT PLLC.

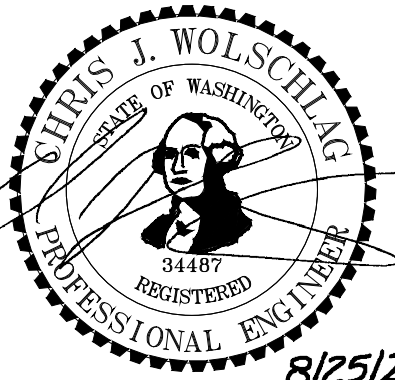


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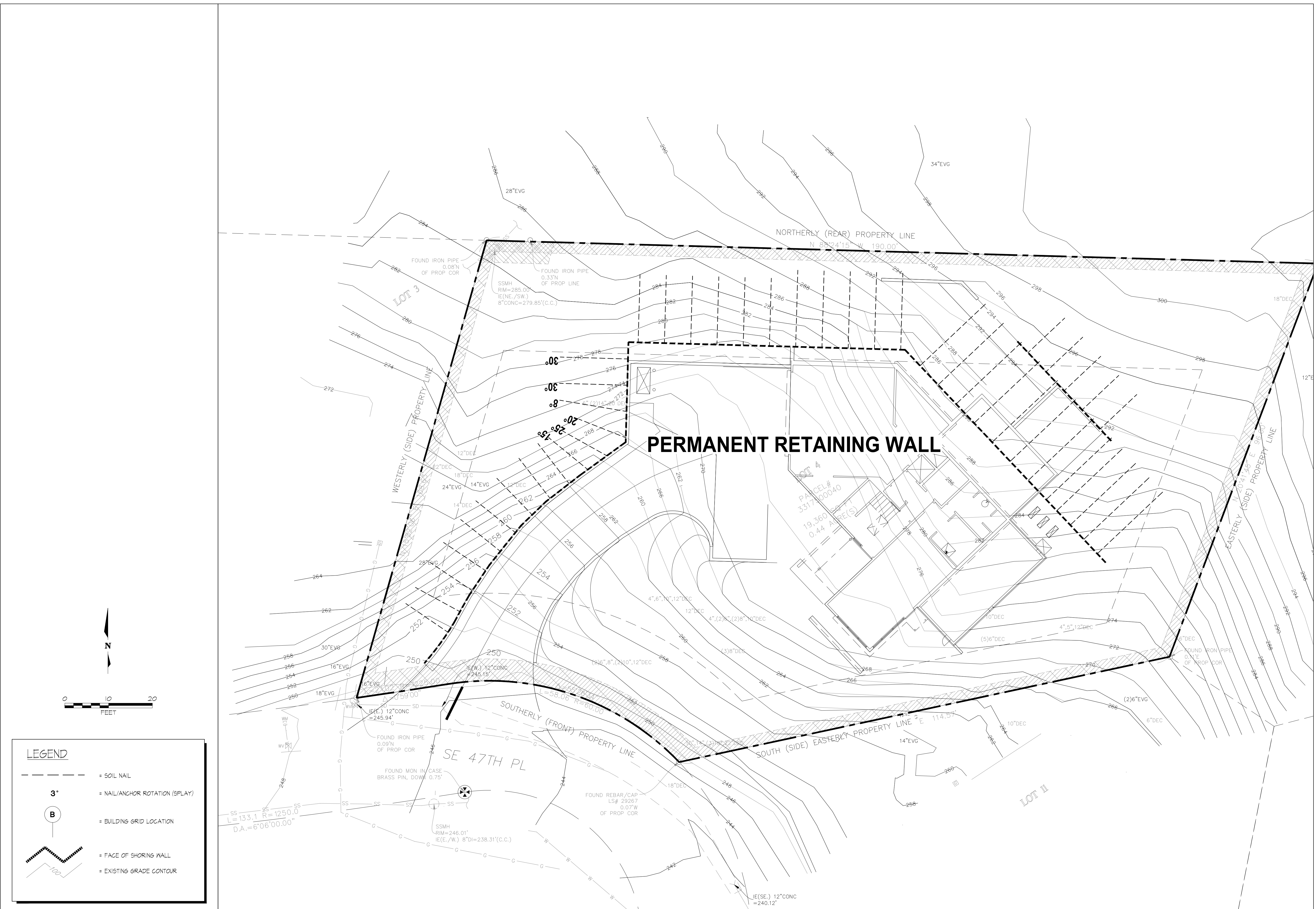
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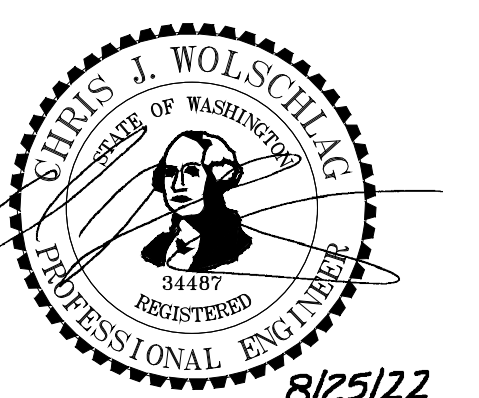
Wall Plan

SH2.0



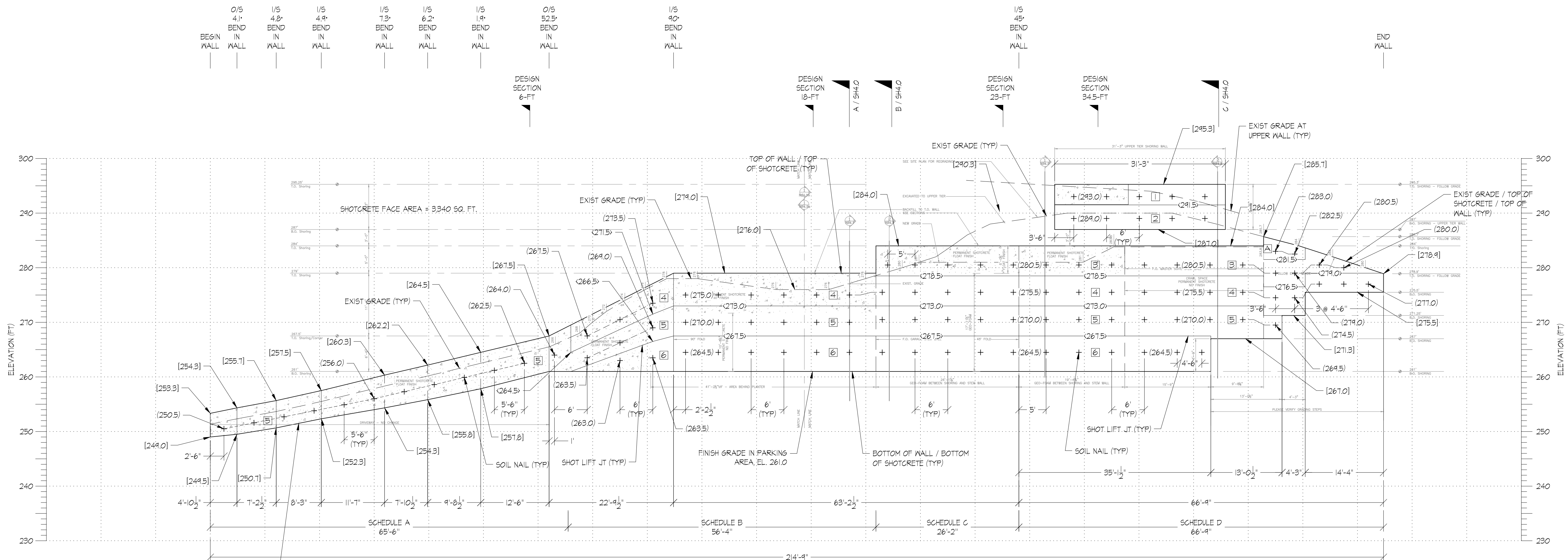
LEGEND

- = SOIL NAIL
- = NAIL/ANCHOR ROTATION (SPLAY)
- = BUILDING GRID LOCATION
- = FACE OF SHORING WALL
- = EXISTING GRADE CONTOUR



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PERMANENT SOIL NAIL WALL						
SCHEDULE A						
ROW	BAR	GRADE	L (UNO)	α (UNO)	Q_p	FACING
5	#8	T5	12	15	3.5	F40

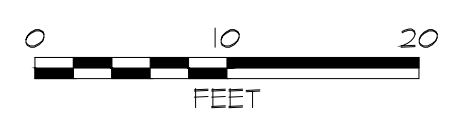
PERMANENT SOIL NAIL WALL						
SCHEDULE B						
ROW	BAR	GRADE	L (UNO)	α (UNO)	Q_p	FACING
4	#8	T5	16	15	3.5	F40
5	#8	T5	16	15	3.5	F40
6	#8	T5	12	15	3.5	F40

PERMANENT SOIL NAIL WALL						
SCHEDULE C						
ROW	BAR	GRADE	L (UNO)	α (UNO)	Q_p	FACING
3	#8	T5	18	15	3.5	F40
4	#8	T5	18	15	3.5	F40
5	#8	T5	18	15	3.5	F40
6	#8	T5	12	15	3.5	F40

PERMANENT SOIL NAIL WALL						
SCHEDULE D						
ROW	BAR	GRADE	L (UNO)	α (UNO)	Q_p	FACING
1	#8	T5	12	15	3.5	F40
2	#8	T5	12	15	3.5	F40
3	#8	T5	21	15	3.5	F40
4	#8	T5	21	15	3.5	F40
5	#8	T5	18	15	3.5	F40
6	#8	T5	12	15	3.5	F40

LEGEND

	NAIL ROW	BAR	SIZE OF NAIL BAR
+	NAIL	GRADE	STEEL GRADE OF NAIL BAR
[21.0]	GRADE ELEVATION	L	MIN DRILLED LENGTH (FT)
(42.5)	NAIL ROW ELEVATION	α	NAIL DECLINATION ANGLE FROM HORIZONTAL (DEGREES)
38.0	SHOTCRETE JOINT ELEVATION	Q_p	DESIGN NAIL PULLOUT RESISTANCE (K/FT)
20°	SPECIFIC NAIL DECLINATION	NI	ANALYSIS SECTION LOCATION AND IDENTIFICATION
	CROSS SECTION LOCATION AND IDENTIFICATION		



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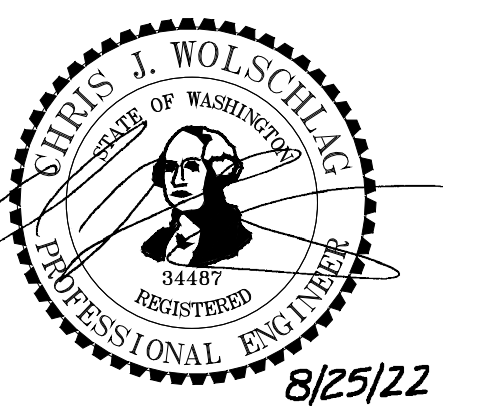


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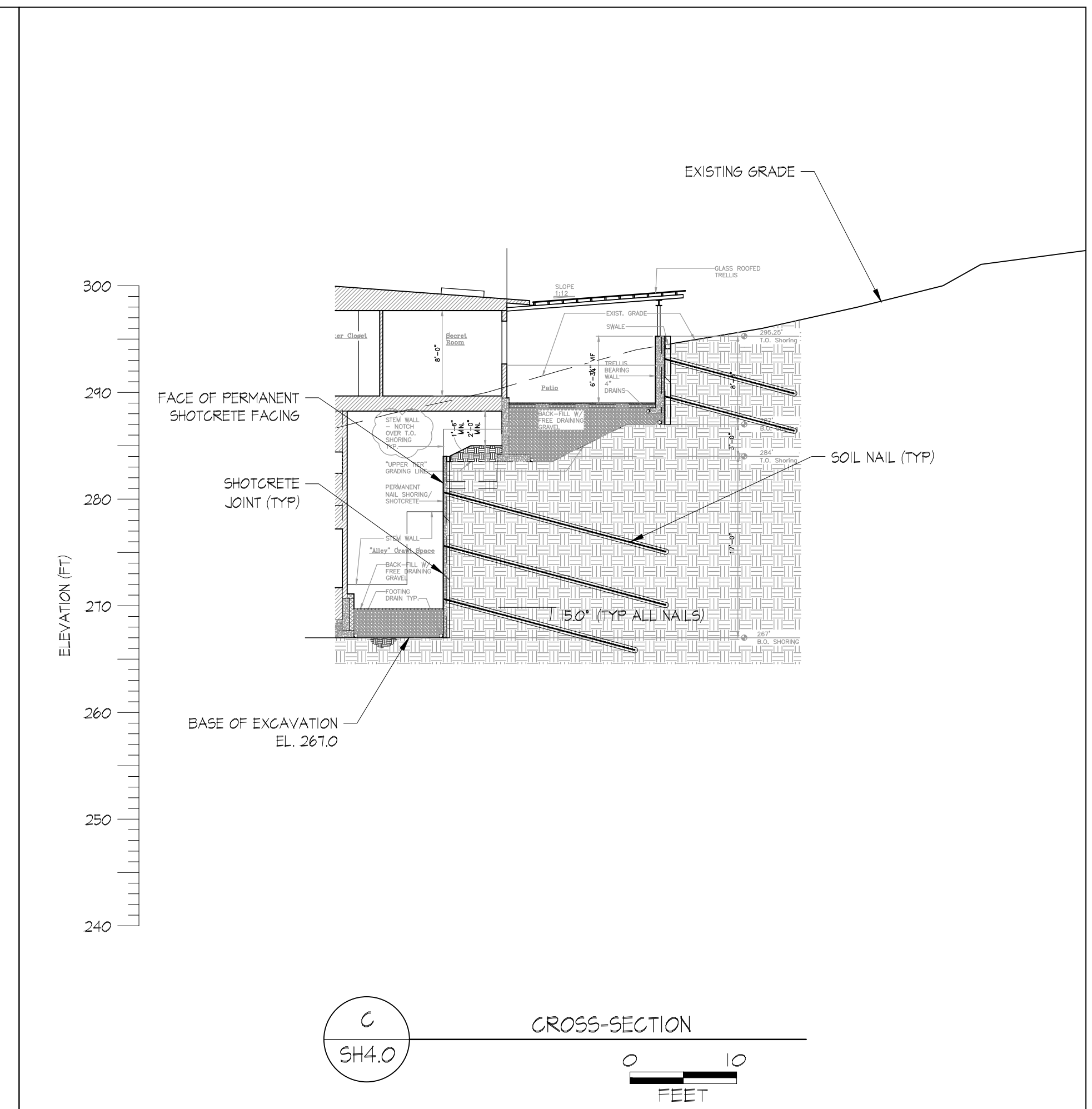
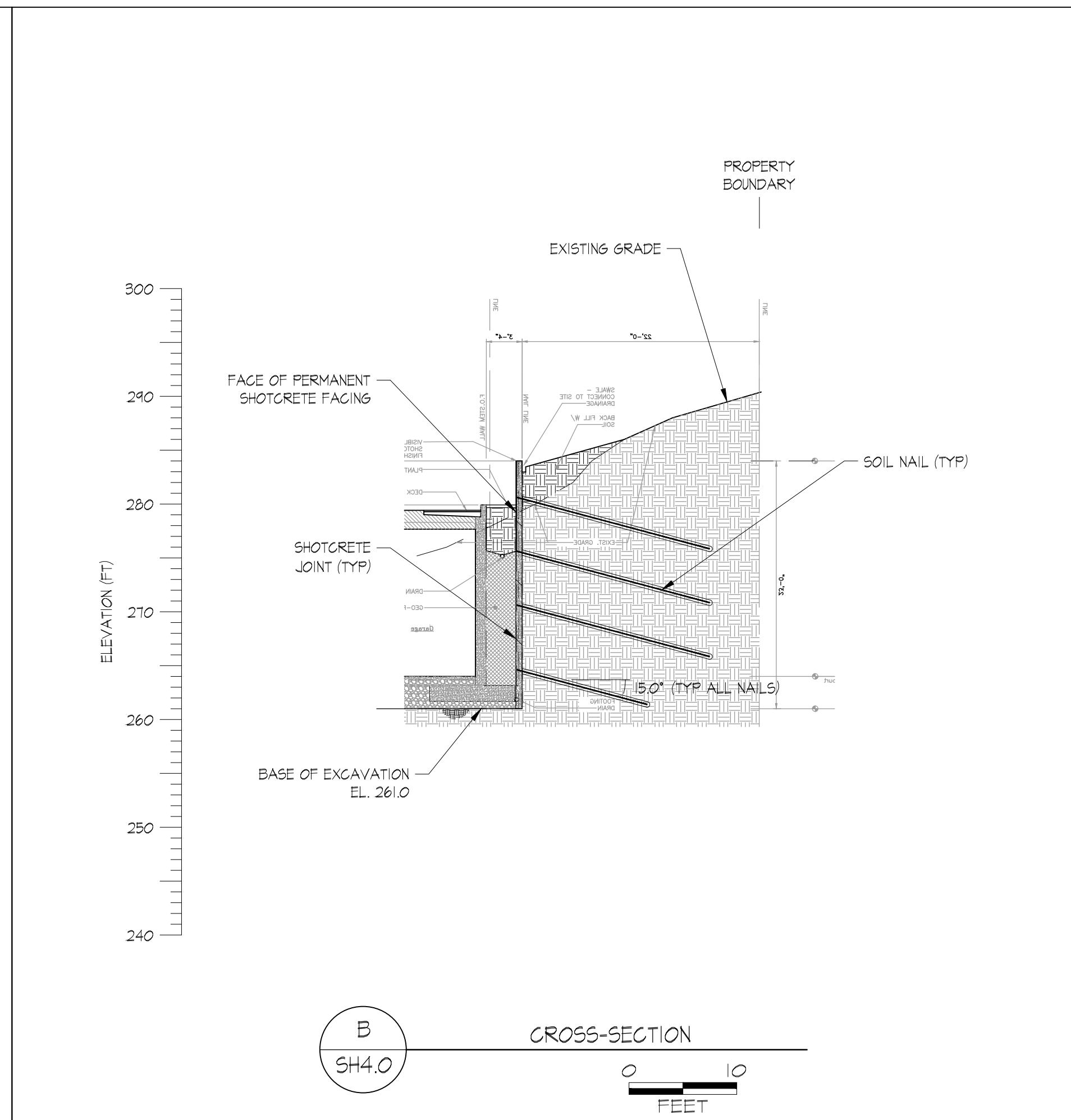
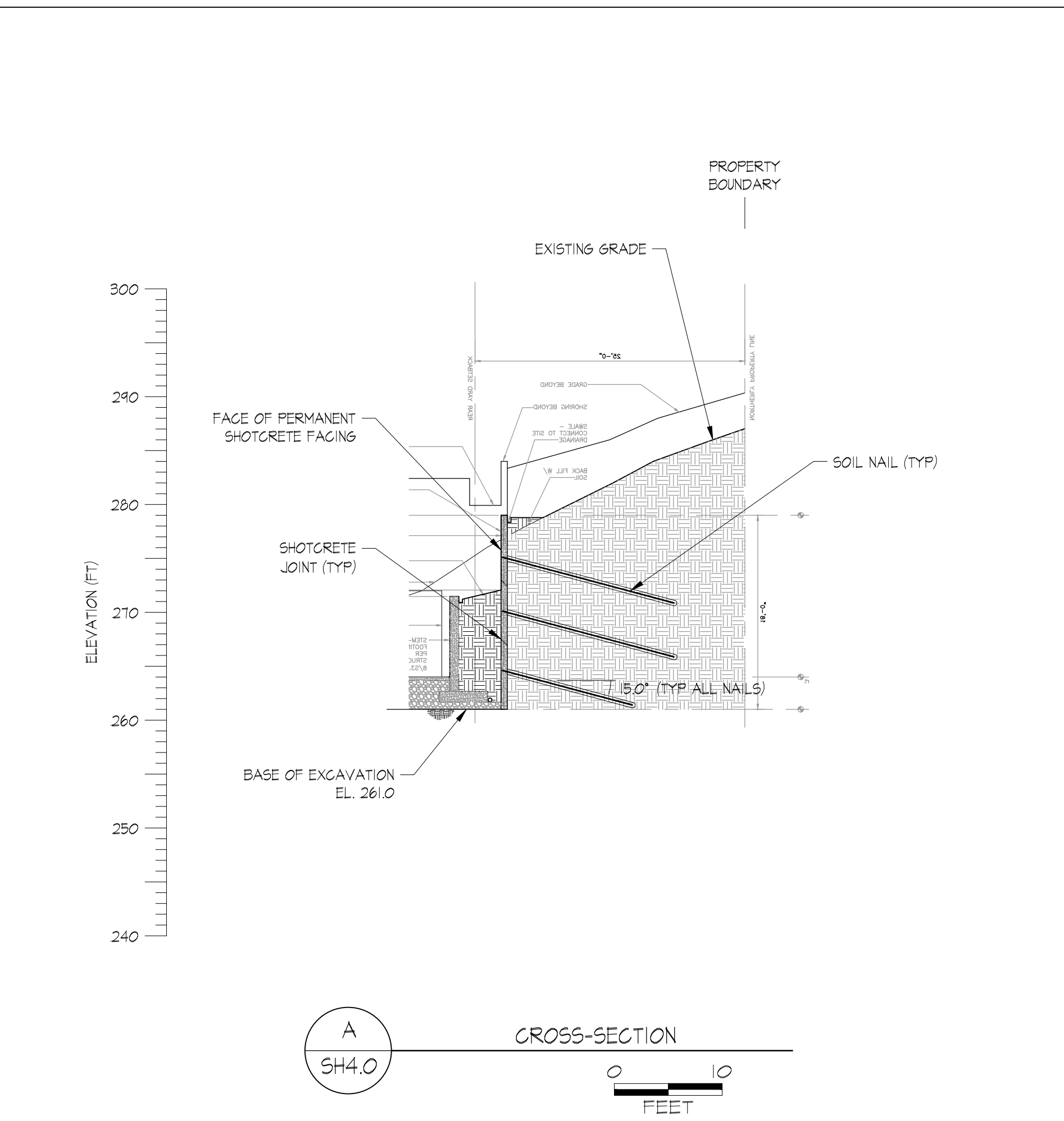
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Cross-Sections

SH4.0





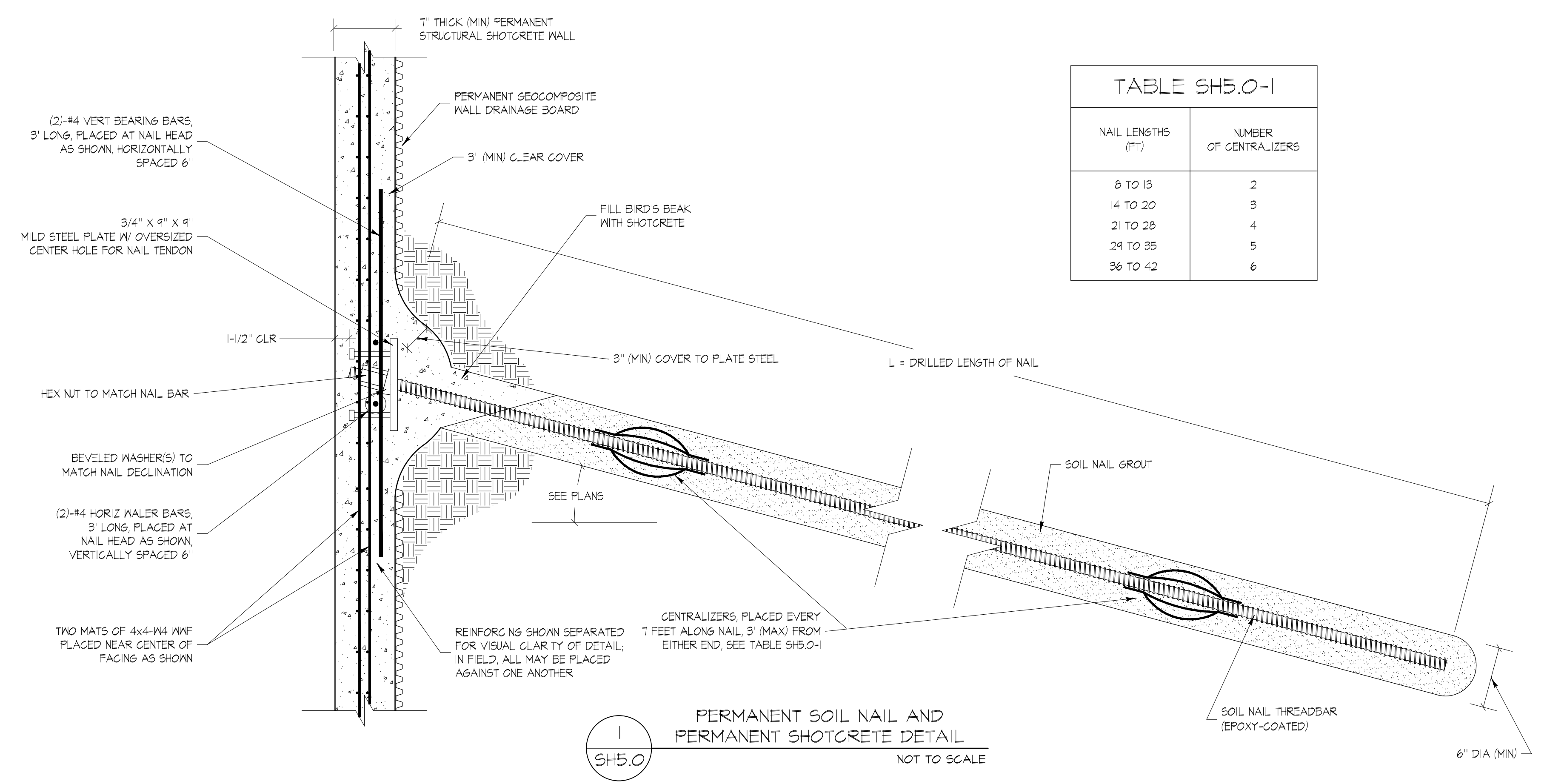
STEINBORN RESIDENCE
New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

Date: **3/15/2021 Pre-App**
2/14/2022 Permit Submittal
2202-225-SUB2 August 25th, 2022

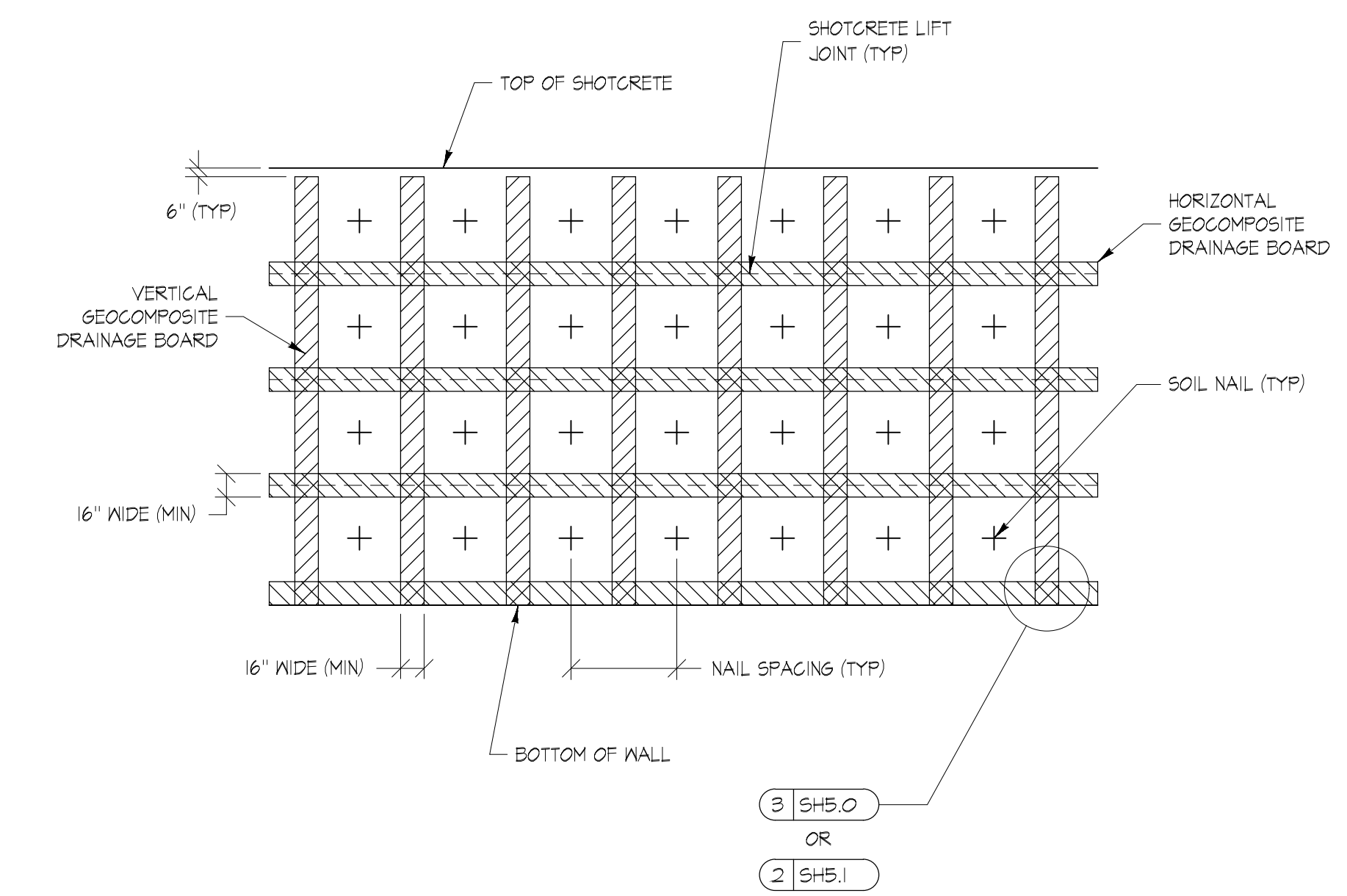
Scale:
Sheet:

TABLE SH5.0-1

NAIL LENGTHS (FT)	NUMBER OF CENTRALIZERS
8 TO 13	2
14 TO 20	3
21 TO 28	4
29 TO 35	5
36 TO 42	6

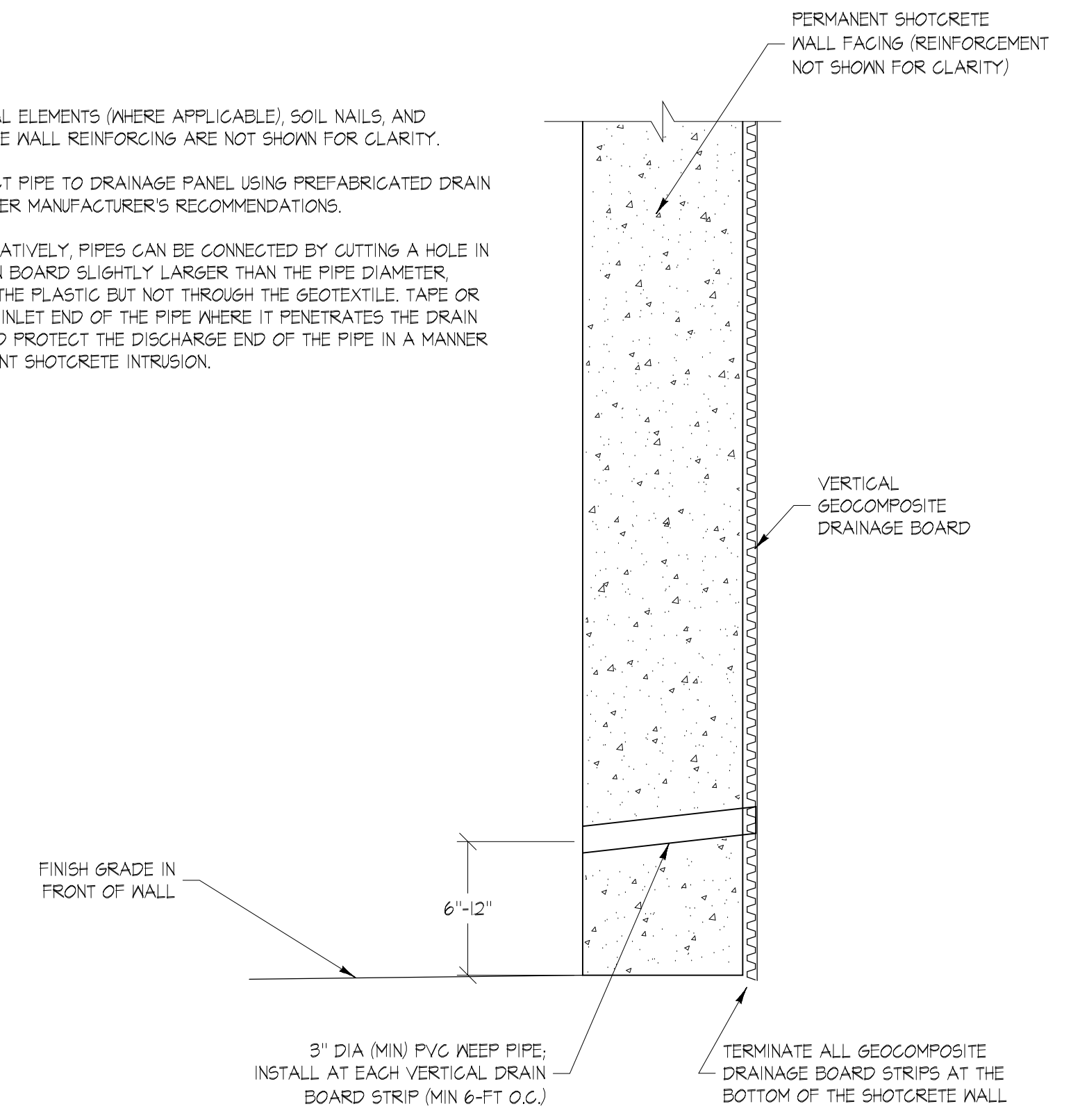


1
SH5.0
PERMANENT SOIL NAIL AND PERMANENT SHOTCRETE DETAIL
NOT TO SCALE

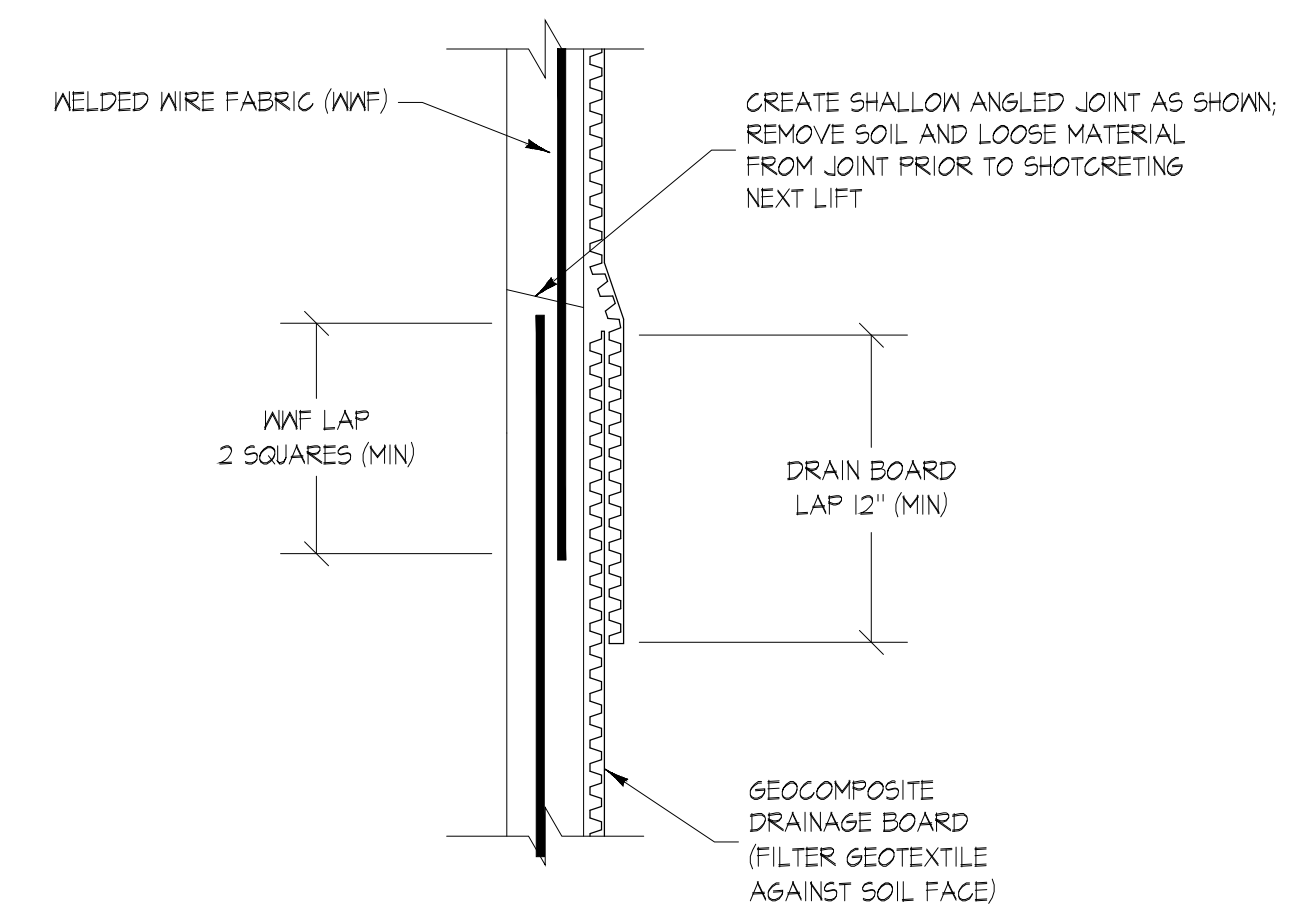


2
SH5.0
WALL FACE DRAINAGE DETAIL
NOT TO SCALE

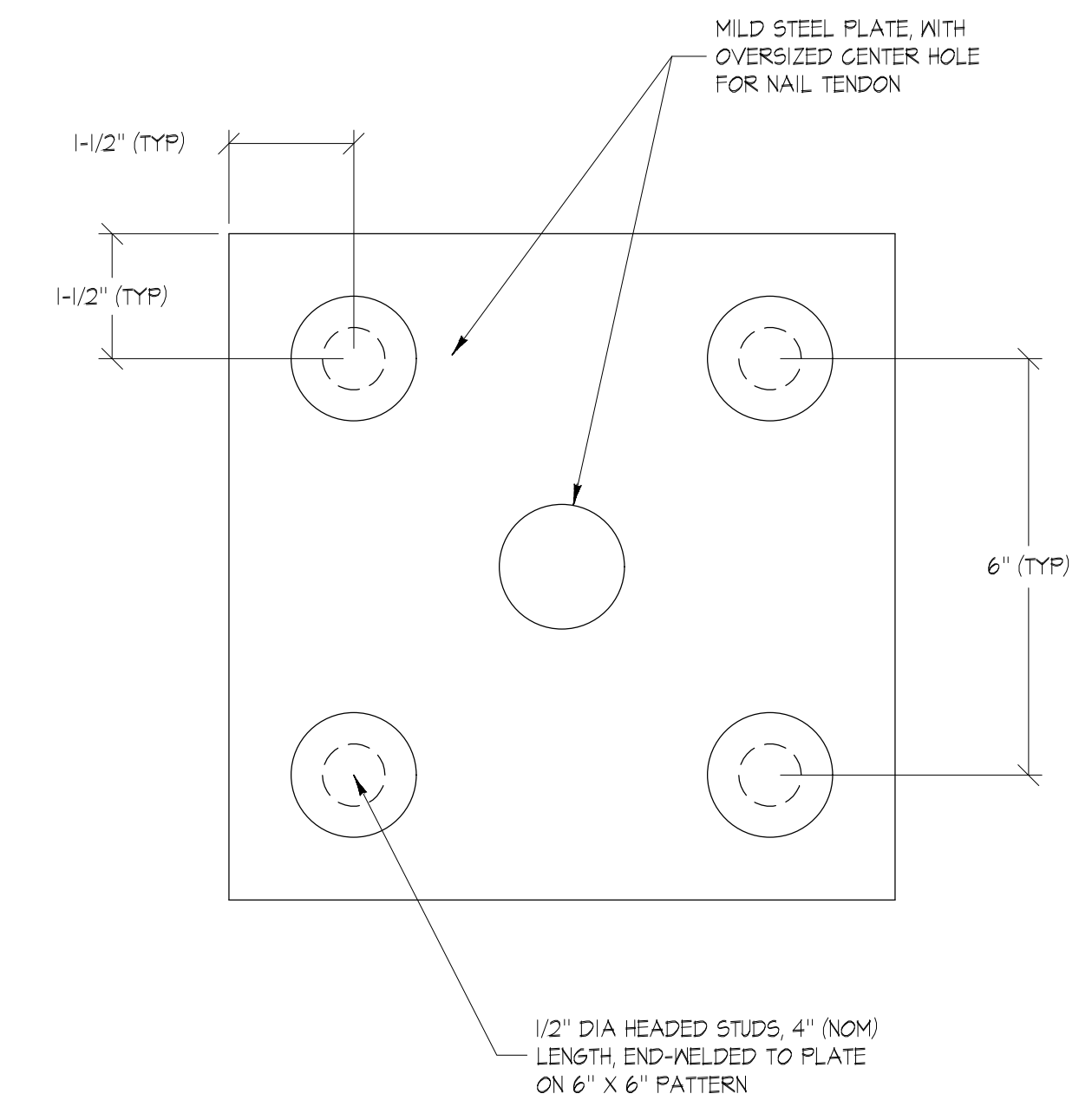
- NOTES:**
1. VERTICAL ELEMENTS (WHERE APPLICABLE), SOIL NAILS, AND SHOTCRETE WALL REINFORCING ARE NOT SHOWN FOR CLARITY.
 2. CONNECT PIPE TO DRAINAGE PANEL USING PREFABRICATED DRAIN GRATES PER MANUFACTURER'S RECOMMENDATIONS.
 3. ALTERNATIVELY, PIPES CAN BE CONNECTED BY CUTTING A HOLE IN THE DRAIN BOARD SLIGHTLY LARGER THAN THE PIPE DIAMETER, THROUGH THE PLASTIC BUT NOT THROUGH THE GEOTEXTILE, TAPE OR SEAL THE INLET END OF THE PIPE WHERE IT PENETRATES THE DRAIN STRIP, AND PROTECT THE DISCHARGE END OF THE PIPE IN A MANNER TO PREVENT SHOTCRETE INTRUSION.



3
SH5.0
BOTTOM OF WALL DETAIL (WHERE WEEPS ARE EXPOSED)
NOT TO SCALE



4
SH5.0
WALL FACING JOINT AND LAP DETAIL
NOT TO SCALE



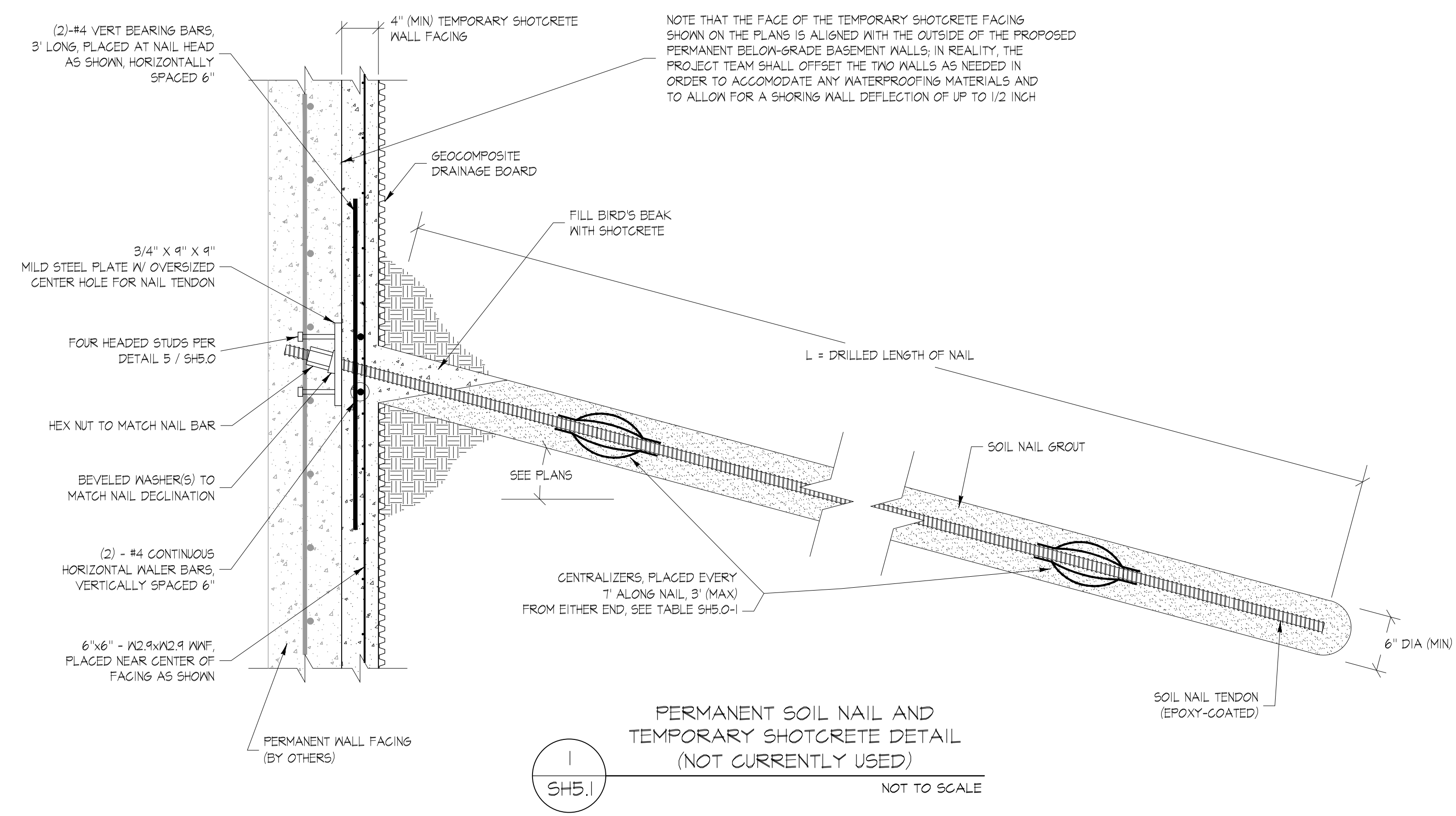
5
SH5.0
HEADED STUD AND BEARING PLATE DETAIL
NOT TO SCALE



STEINBORN RESIDENCE
New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

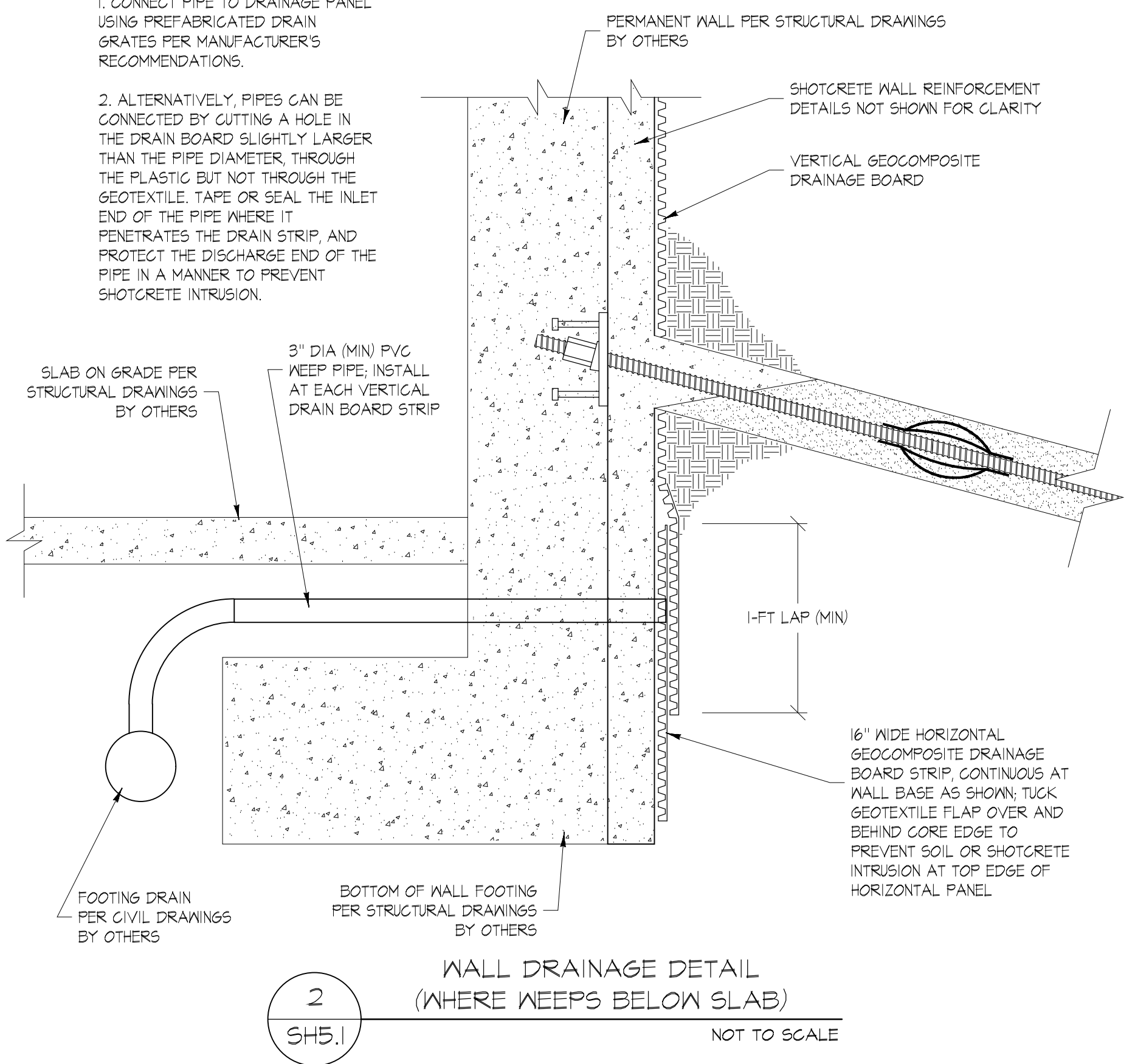
Date: **3/15/2021 Pre-App**
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2202-225-SUB2 August 25th, 2022

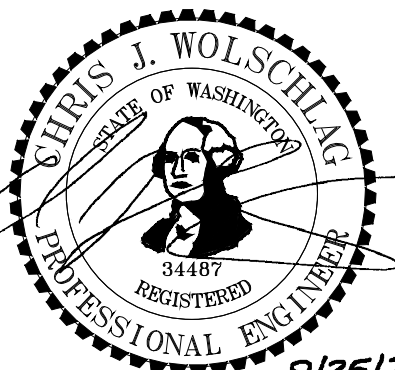
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NOTES:

1. CONNECT PIPE TO DRAINAGE PANEL USING PREFABRICATED DRAIN GRATES PER MANUFACTURER'S RECOMMENDATIONS.
2. ALTERNATIVELY, PIPES CAN BE CONNECTED BY CUTTING A HOLE IN THE DRAIN BOARD SLIGHTLY LARGER THAN THE PIPE DIAMETER, THROUGH THE PLASTIC BUT NOT THROUGH THE GEOTEXTILE. TAPE OR SEAL THE INLET END OF THE PIPE WHERE IT PENETRATES THE DRAIN STRIP AND PROTECT THE DISCHARGE END OF THE PIPE IN A MANNER TO PREVENT SHOTCRETE INTRUSION.

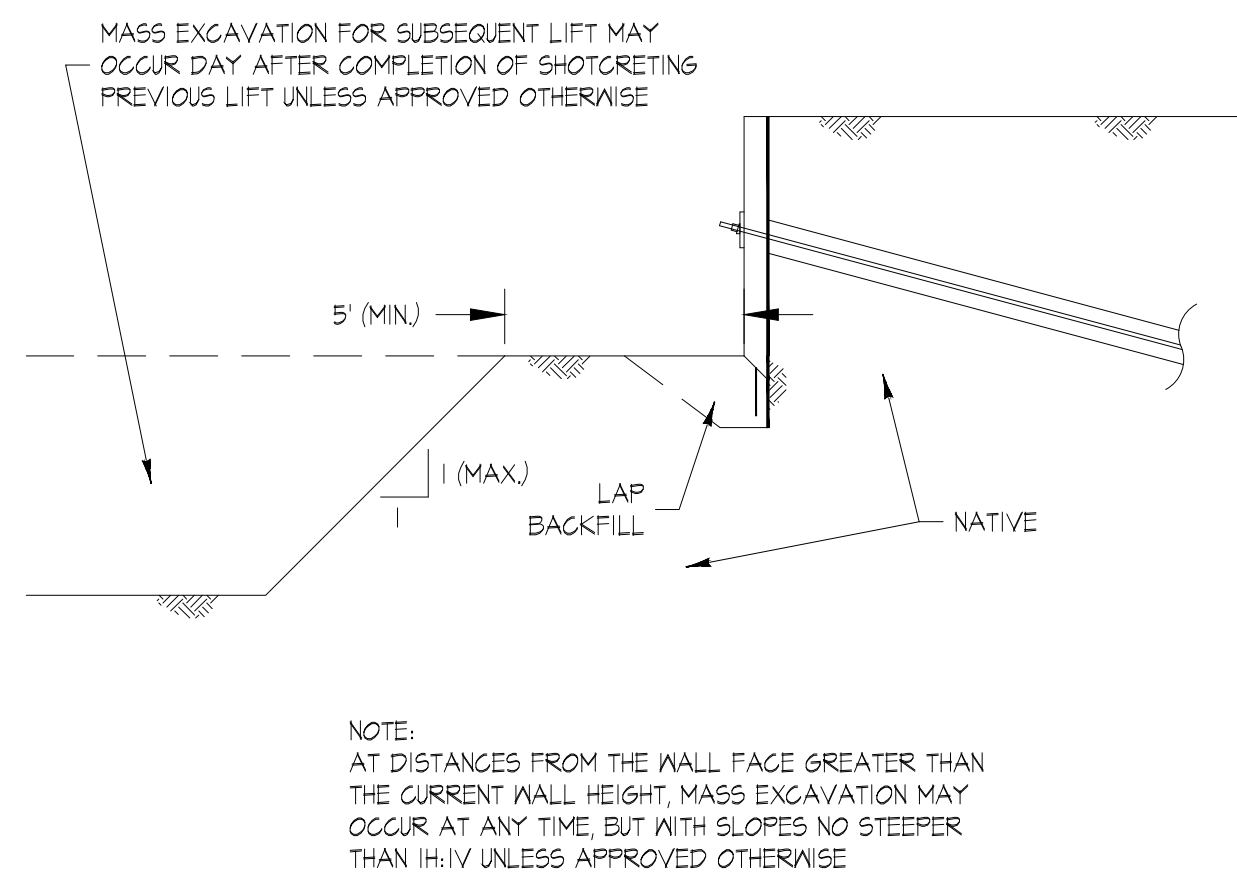




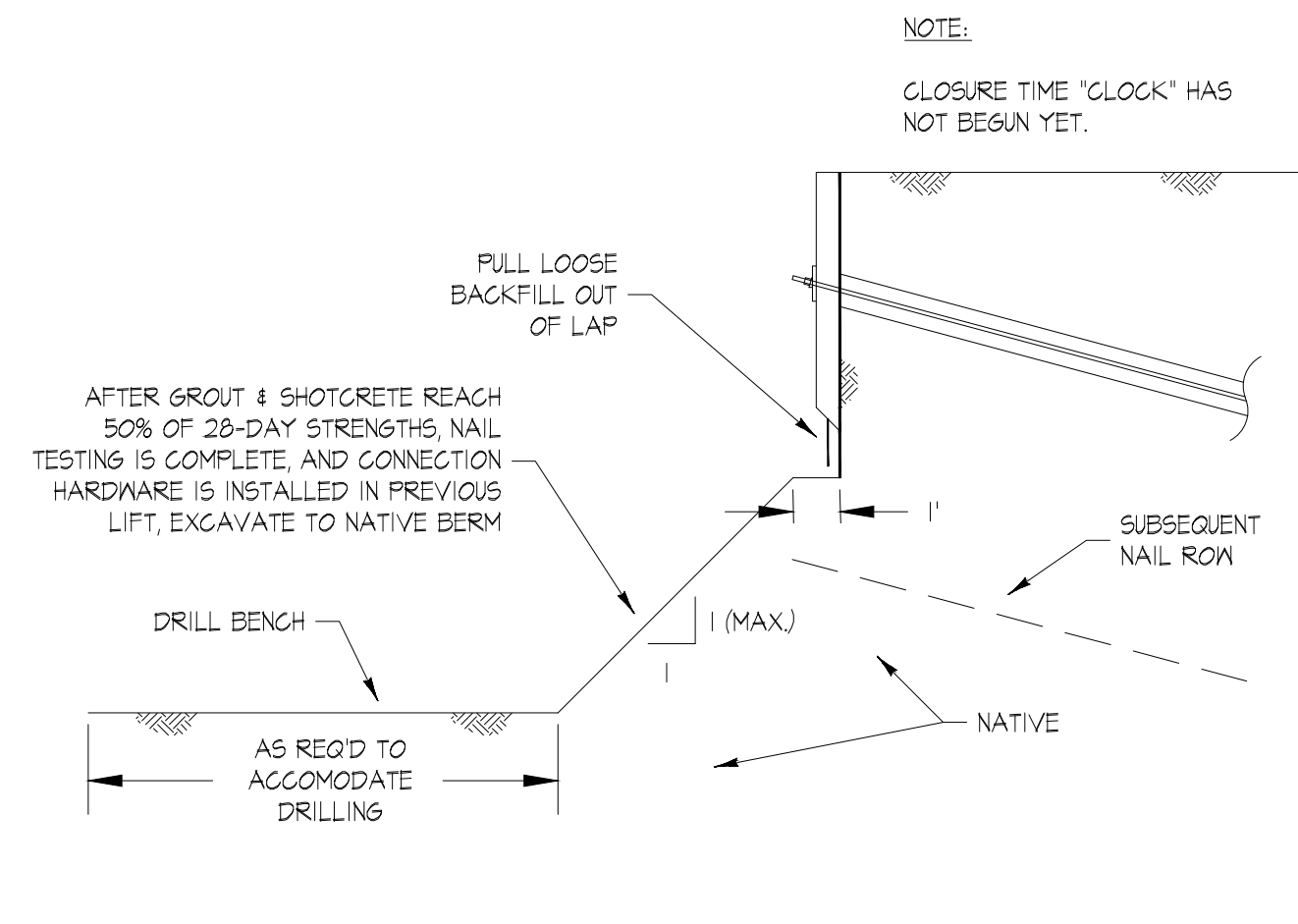
8/25/22

STEINBORN RESIDENCE

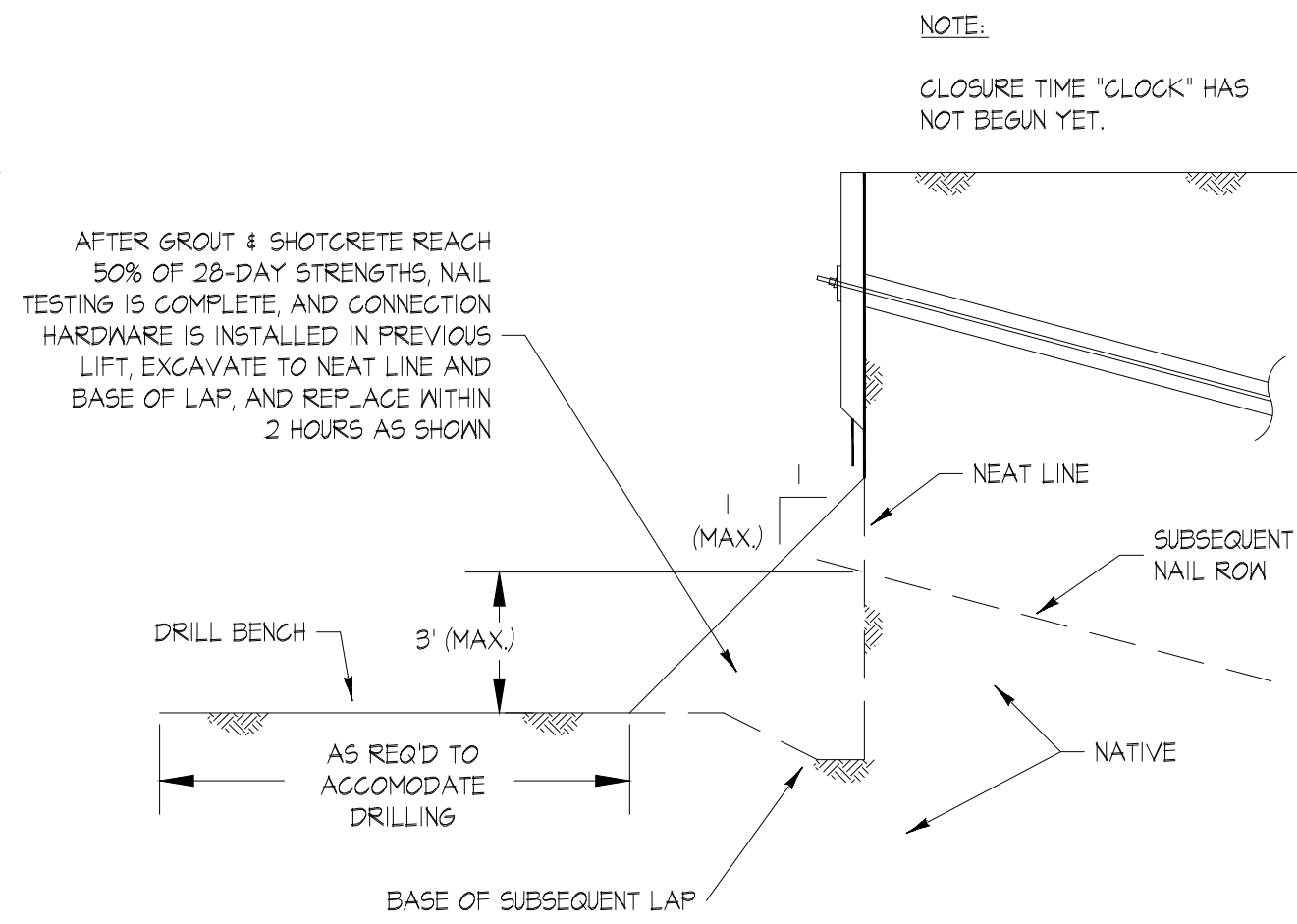
New Residence
8435 SE 47th PL.
Mercer Island, WA 98040



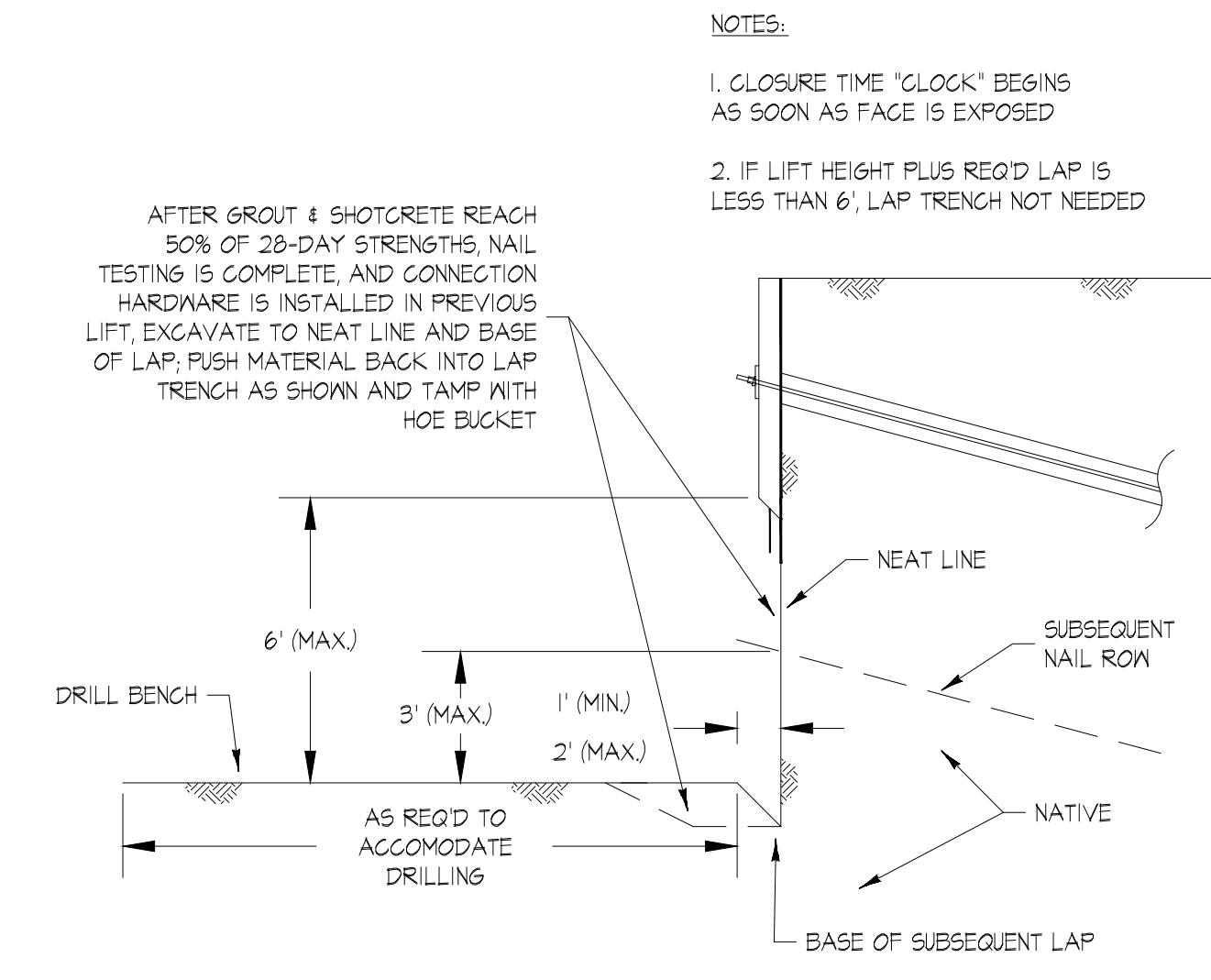
1
SH6.0
STEP 1
MASS EXCAVATION FOR SUBSEQUENT LIFT
NOT TO SCALE



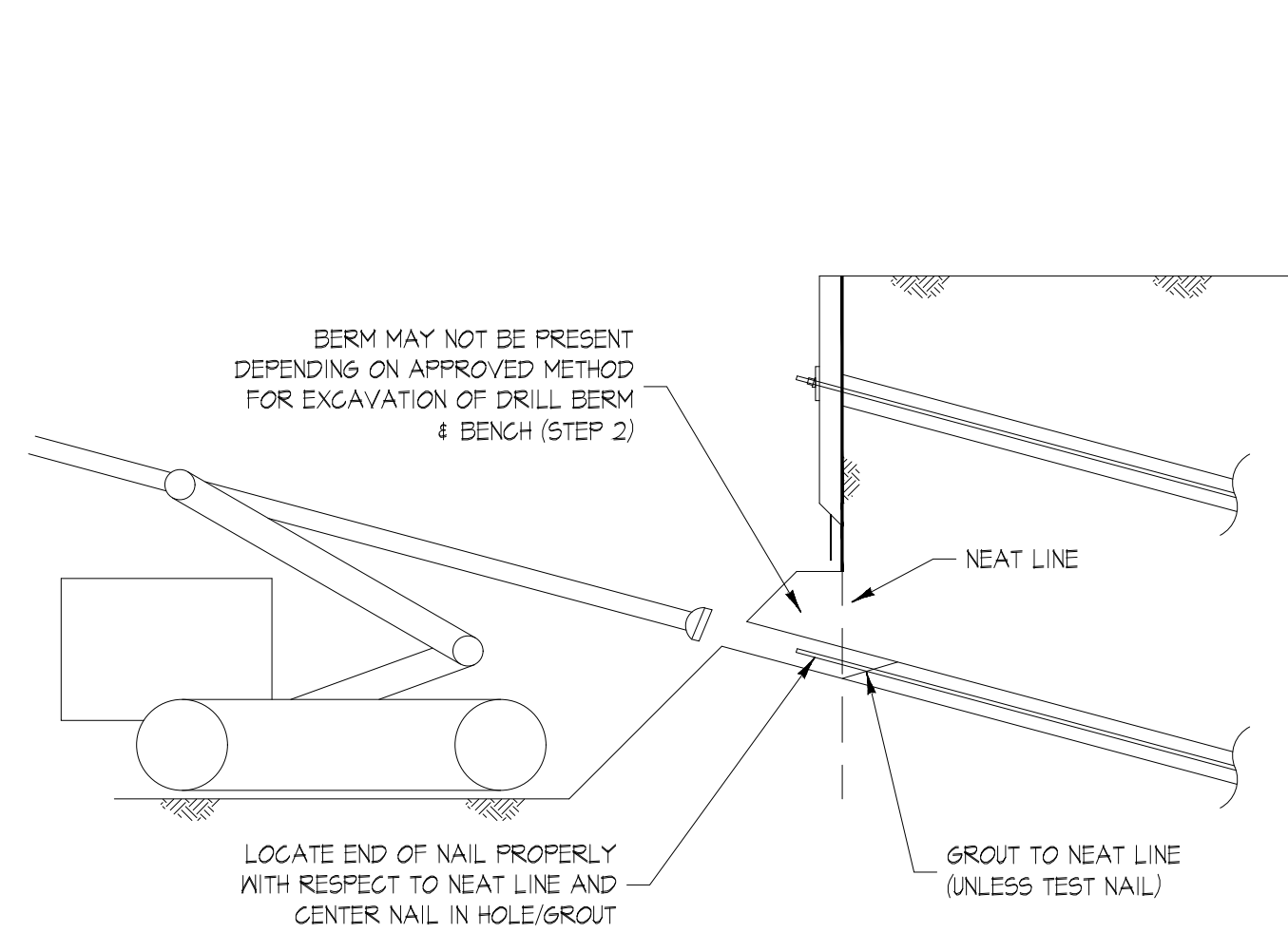
2-A
SH6.0
STEP 2
EXCAVATION FOR DRILL BENCH AND BERM
METHOD A - NATIVE BERM
NOT TO SCALE



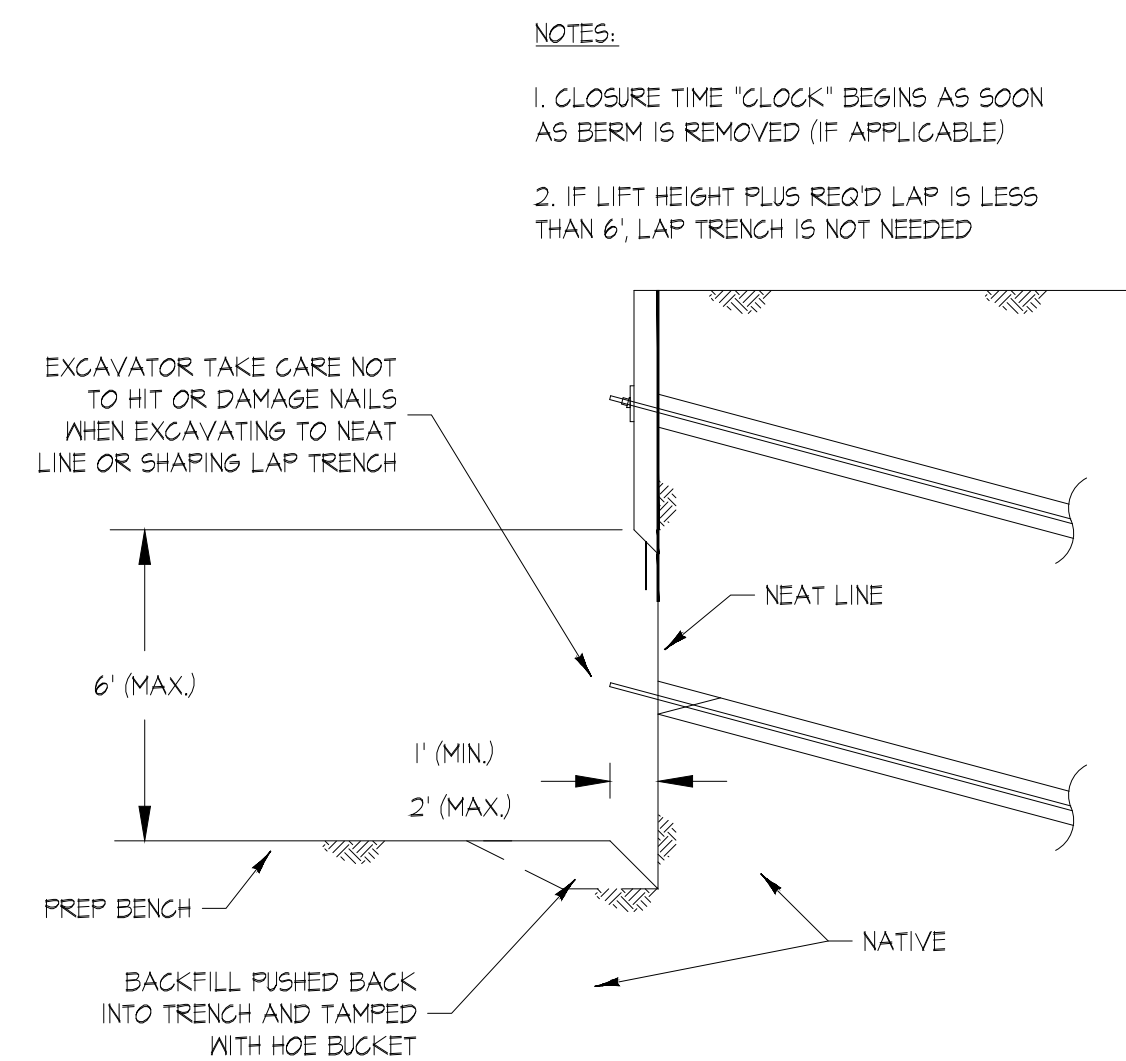
2-B
SH6.0
STEP 2
EXCAVATION FOR DRILL BENCH AND BERM
METHOD B - SOFT/FILL BERM
NOT TO SCALE



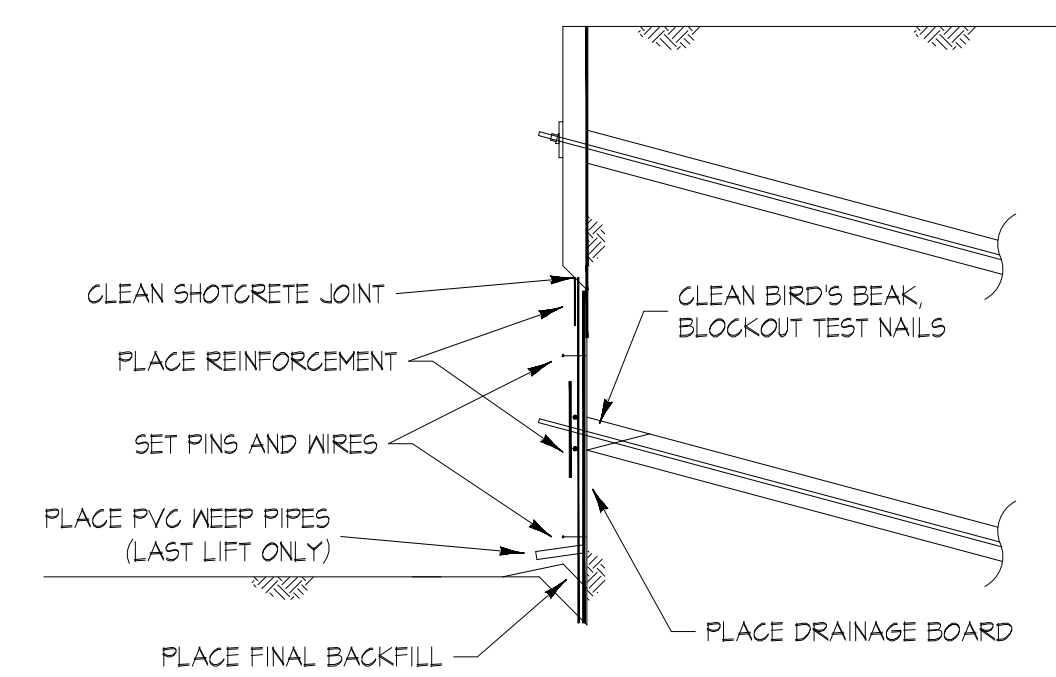
2-C
SH6.0
STEP 2
EXCAVATION FOR DRILL BENCH AND BERM
METHOD C - NEAT CUT
NOT TO SCALE



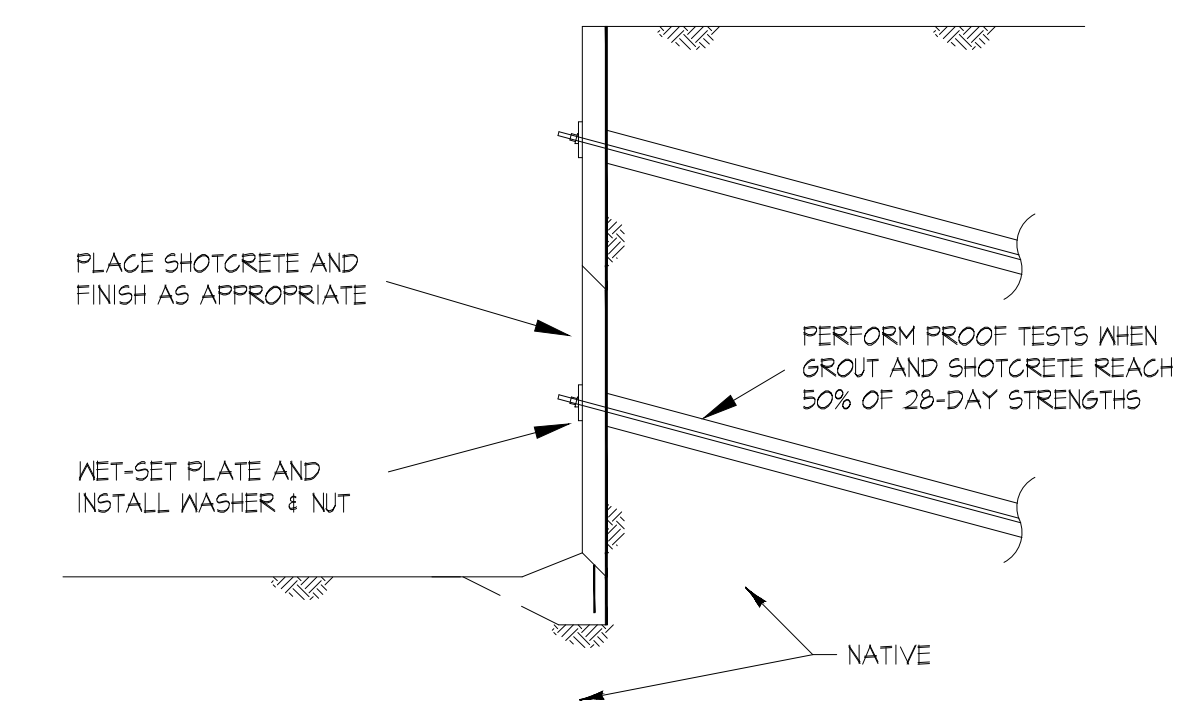
3
SH6.0
STEP 3
DRILL AND GROUT NAILS
NOT TO SCALE



4
SH6.0
STEP 4
EXCAVATE NEAT LINE AND PREP BENCH
NOT TO SCALE



5
SH6.0
STEP 5
PREPARE WALL FACING COMPONENTS
NOT TO SCALE



6
SH6.0
STEP 6
SHOTCRETE, WET SET CONNECTION, TEST NAILS
NOT TO SCALE

CONSTRUCTION NOTES:

BASED ON THE REFERENCED GEOTECHNICAL REPORT, THE SUBSURFACE CONDITIONS AT THE PROJECT SITE GENERALLY CONSIST OF A THIN VENEER OF FILL LESS THAN ABOUT 5-FT THICK, UNDERLAIN BY VERY DENSE GLACIAL TILL.

FOR STEP 2, IF LESS COMPETENT SOILS ARE ENCOUNTERED, ONLY METHOD A IS APPROVED BY THE ENGINEER.

FOR STEP 2, FOR THE UPPERMOST LIFT ALONG ANY WALL, WHEN VERY DENSE NATIVE SOIL IS ENCOUNTERED, METHOD B IS APPROVED BY THE ENGINEER.

FOR STEP 2, FOR LIFTS OTHER THAN THE UPPERMOST LIFT ALONG ANY WALL, WHEN VERY DENSE NATIVE SOIL IS ENCOUNTERED, METHOD C IS APPROVED BY THE ENGINEER, BUT METHOD B IS HIGHLY RECOMMENDED.

IF AT ANY TIME DURING CONSTRUCTION THE SOIL FACE APPEARS TO BE DISTRESSED IN SUCH A WAY AS TO CAUSE POTENTIAL FOR SLOUGHING, FALLOUT, OR LARGE OVERBREAKS, THEN EITHER METHOD A OR B WILL BE REQUIRED BY THE OWNER'S REPRESENTATIVE AS NECESSARY TO LIMIT SOIL DISTURBANCE AT THE FACE.

CLOSURE TIME, DEFINED AS THE TIME DURATION BETWEEN EXCAVATION OF THE NEAT CUT FACE AND PLACEMENT OF SHOTCRETE, SHALL BE NO GREATER THAN A SINGLE WORKSHIFT UNLESS APPROVED OTHERWISE BY THE ENGINEER OR THE OWNER'S REPRESENTATIVE.

METHODS OF CONSTRUCTION AND CLOSURE TIMES THAT ARE APPROVED BY THE ENGINEER OR THE OWNER'S REPRESENTATIVE DO NOT RELIEVE THE CONTRACTOR OF ALL RESPONSIBILITY FOR STABILITY OF THE TEMPORARY CUT FACE UNTIL IT IS CLOSED WITH HARDENED SHOTCRETE AND THE NAIL CONNECTION IS COMPLETELY INSTALLED.

SEE THE SOIL NAIL SHORING WALL SPECIFICATION SHEETS FOR SPECIFIC REQUIREMENTS FOR MATERIALS AND CONSTRUCTION.

Date: **3/15/2021 Pre-App**
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Scale:

Sheet:

GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MERCER ISLAND STANDARD SPECIFICATIONS, AND WSDOT/APWA STANDARD SPECIFICATIONS, LATEST EDITION. THE CITY OF MERCER ISLAND RESERVES THE RIGHT TO REJECT ANY DAMAGED AND/OR NON-COMPLIANT CONSTRUCTION MATERIAL.
- PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF MERCER ISLAND CONSTRUCTION INSPECTION PERSONNEL.
- AN APPROVED PLAN SET MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- ALL SITE WORK IMPROVEMENTS SHALL BE CONSTRUCTED TO OBTAIN STREET USE AND ANY OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND ANY OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- ANY APPROVED CUTS OF EXISTING PUBLIC ROADWAYS SHALL BE BACK FILLED AND COMPACTED IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS. ALL CUTS INTO EXISTING ASPHALT SHALL BE ALONG NEAT, CONTINUOUS, SAWED, OR WHEEL CUT LINES. A TEMPORARY COLD MIX PATCH MUST BE PLACED IMMEDIATELY AFTER BACKFILL AND COMPACTION. THIS EXISTING ROAD CUT SHALL BE REPLACED WITH AT LEAST THREE (3) INCHES OF COMPACTED CL "B" ASPHALT CONCRETE, SIX (6) INCH CRUSHED ROCK SURFACING TOP COURSE (5/8 INCH MINUS), AS REQUIRED DEPENDENT UPON A SOILS ENGINEER'S RECOMMENDATION AND TESTS. IN NO CASE SHALL THE REPLACEMENT BE LESS THAN THE EXISTING SECTION.
- PAVED SURFACES INCLUDING ROADWAYS, SIDEWALKS, AND CURBS THAT ARE DAMAGED BY NEW CONSTRUCTION SHALL BE REPAIRED AS REQUIRED BY THE CITY OF MERCER ISLAND INSPECTOR.
- ALL LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- THE CONTRACTOR SHALL LOCATE AND PROTECT ALL CASTINGS AND UTILITIES DURING CONSTRUCTION AND SHALL CONTACT THE UNDERGROUND UTILITIES LOCATOR SERVICE (1-800-424-5555) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURE LIDS, VALVE BOXES, AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS.
- UTILITY SERVICE CONNECTIONS SHOWN ON THIS PLAN ARE TO BE MAINTAINED PRIVATELY AND NOT BY THE CITY MERCER ISLAND.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY SEDIMENTATION COLLECTION FACILITIES TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE NATURAL OR PUBLIC DRAINAGE SYSTEM. AS CONSTRUCTION PROGRESSES AND UNEXPECTED (SEASONAL) CONDITIONS DICTATE, MORE SILTATION CONTROL FACILITIES MAY BE REQUIRED TO INSURE COMPLETE SILTATION CONTROL OF THE PROJECT. THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES THAT MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES.
- THE CONTRACTOR SHALL KEEP OFF-SITE STREETS CLEAN AT ALL TIMES BY SWEEPING. WASHING OF THESE STREETS WILL NOT BE ALLOWED WITHOUT PRIOR CITY OF MERCER ISLAND APPROVAL.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL MANUAL.
- CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR EXISTING CHARGED WATER MAINS.

SURVEY NOTE:

UNDERGROUND UTILITIES AND EXISTING IMPROVEMENTS SHOWN ARE BASED UPON THE SURVEY "TOPOGRAPHIC AND BOUNDARY SURVEY, STEINBORN PROPERTY, BY TERRANE, DATED FEBRUARY 21, 2021 AND RECORD DRAWINGS. NO WARRANTY OR GUARANTEE OF ACCURACY OR COMPLETENESS IS EITHER IMPLIED OR EXPRESSED. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS HAVE BEEN SHOWN ON THIS DRAWING FOR THE PURPOSE OF ASSISTING THE CONTRACTOR IN LOCATING SAID UTILITIES AND IMPROVEMENTS IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING WITH APPROPRIATE AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES AND IMPROVEMENTS WITHIN THE PROJECT LIMITS AND FOR CHECKING LOCATIONS IN THE FIELD. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGE TO UNDERGROUND UTILITIES AND IMPROVEMENTS RESULTING FROM HIS OPERATION.

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS

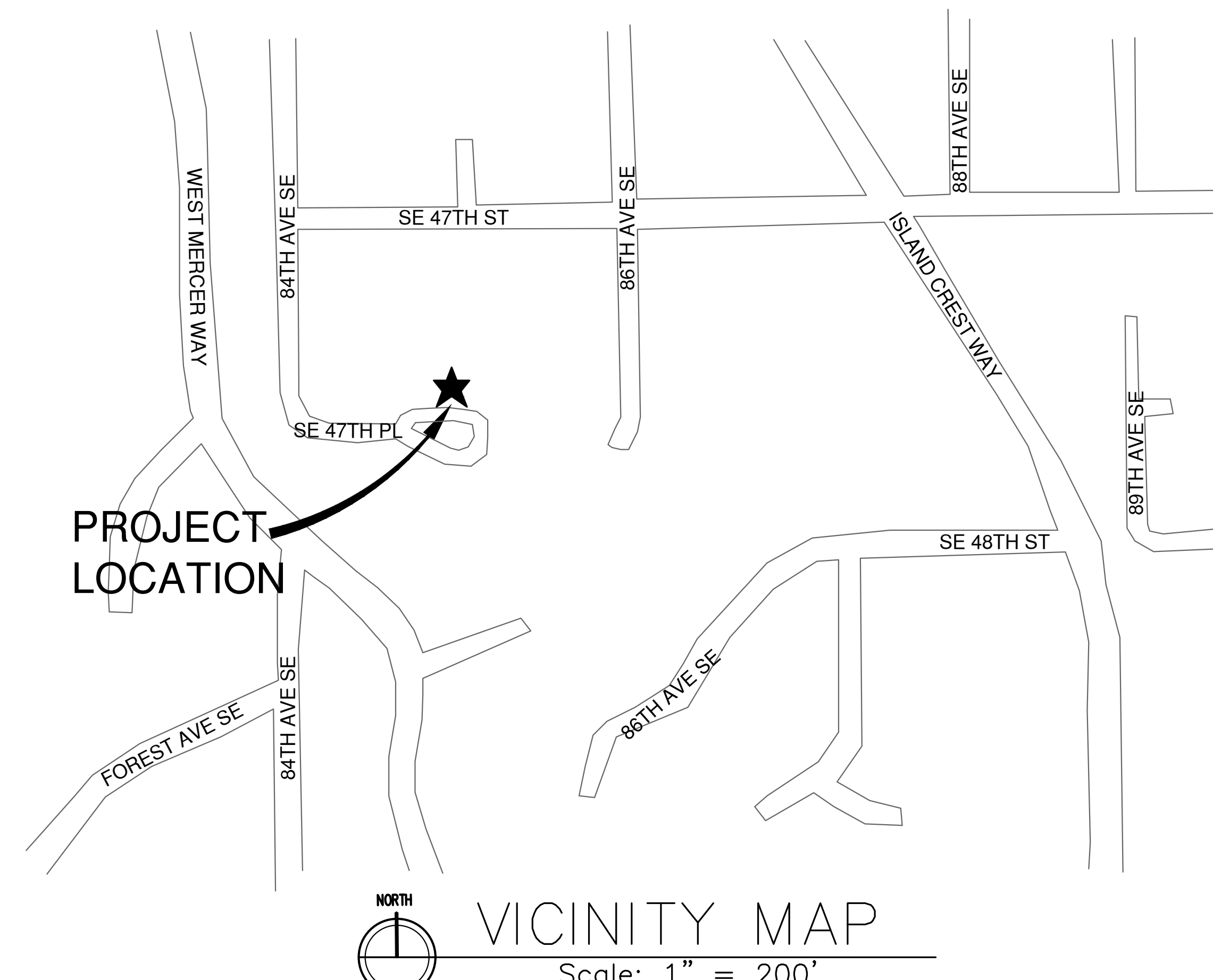
FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

GENERAL DRAINAGE NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MERCER ISLAND STANDARD SPECIFICATIONS AND WSDOT/APWA STANDARD SPECIFICATIONS, LATEST EDITION AND THE REQUIREMENTS OF THE DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON.
- PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH CITY OF MERCER ISLAND CONSTRUCTION INSPECTION PERSONNEL.
- ALL STORM DRAINAGE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE APPROVED PLANS. ANY DEVIATION FROM THESE PLANS WILL REQUIRE APPROVAL FROM THE OWNER, ENGINEER AND APPROPRIATE PUBLIC AGENCIES.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND ANY OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- ALL STORM DRAIN PIPE MAY BE CONSTRUCTED OF ONE OF THE FOLLOWING MATERIALS UNLESS OTHERWISE SPECIFIED IN THE PLANS. ALL PIPE JOINTS MUST BE GASKETED WATERTIGHT AND MUST BE OF THE SAME MATERIAL AS THE PIPE. ALL PIPE SHALL HAVE A MINIMUM COVER AS SPECIFIED AND SHALL BE ADEQUATELY PROTECTED DURING CONSTRUCTION (REFER TO THE MANUFACTURE'S RECOMMENDATIONS FOR MINIMUM COVER FOR HEAVY EQUIPMENT LOADINGS). THE CITY OF MERCER ISLAND PUBLIC WORKS DEPARTMENT SHALL EXERCISE THE OPTION TO ACCEPT OR REJECT ALL DAMAGED OR NON-COMPLIANT CONSTRUCTION MATERIAL. THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REJECTED OR SUBSTITUTED CONSTRUCTION MATERIAL.
- PIPE SHALL BE AS FOLLOWS: PVC - FOUR (4) INCH THROUGH EIGHTEEN (18) INCH DIAMETER PIPE, WITH TWENTY FOUR (24) INCH TO THIRTY SIX (36) INCH OF COVER SHALL BE IN ACCORDANCE WITH ASTM D3034 SDR 21. FOUR (4) INCH THROUGH EIGHTEEN (18) INCH DIAMETER PIPE, WITH ASTM D3034 SDR 35 SHALL HAVE THIRTY SIX (36) INCHES MINIMUM COVER. ALL JOINTS SHALL BE PUSH-ON WITH RUBBER GASKETS. PVC STORM PIPE REQUIRES SAND COLLARS MEETING ASTM D-3034-78 SDR 35 SPECIFICATIONS (I.E. CATCH BASIN CONNECTION) OR KOR-N-SEAL BOOTS.
- ALL PIPE BEDDING SHALL BE APWA TYPE "F" FOR FLEXIBLE PIPE (I.E. PVC, SMP OR ADS). BEDDING MATERIAL SHALL BE 5/8 INCH MINUS CRUSHED ROCK ONLY.
- ALL TRENCH BACKFILL IN AREAS OF FUTURE PAVEMENT OR STRUCTURAL LOADING SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY PER ASTM D 1557-70 (MODIFIED PROCTOR). ALL OTHER AREAS SHALL BE COMPACTED TO 90 PERCENT MINIMUM).
- CONSTRUCTION OF DEWATERING (GROUNDWATER INTERCEPTION) SYSTEMS SHALL BE IN ACCORDANCE WITH THE APWA STANDARD SPECIFICATIONS, SECTION 61-3.02.
- THE CONTRACTOR SHALL KEEP OFF-SITE STREETS CLEAN AT ALL TIMES BY SWEEPING. WASHING THESE STREETS WILL NOT BE ALLOWED WITHOUT PRIOR CITY OF MERCER ISLAND APPROVAL.
- ALL STORMWATER FACILITIES WILL BE INSTALLED AND IN OPERATION PRIOR TO OR IN CONJUNCTION WITH ALL CONSTRUCTION ACTIVITY UNLESS THAT ACTIVITY EXCEEDS THE CAPACITY AND INTENT OF THE EROSION/SEDIMENTATION CONTROL FACILITY OR UNLESS OTHERWISE APPROVED BY THE CITY.
- RELAY EXISTING SERVICE DRAINS AND SIDE SEWERS TO CLEAR OVER OR UNDER THE NEW UTILITY AS APPROVED BY THE INSPECTOR.

EROSION CONTROL/CONSTRUCTION SEQUENCE

- ARRANGE AND ATTEND PRE-CONSTRUCTION MEETING WITH BETWEEN OWNER OR OWNER'S REPRESENTATIVE AND CITY OF MERCER ISLAND SITE INSPECTOR.
- CONTRACTOR'S SURVEYOR TO ESTABLISH AND STAKE OUT CONTROL POINTS FOR WORK.
- INSTALL STRAW WATTLE BARRIERS AND GRATE INLET PROTECTION.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (IF REQUIRED).
- CLEAR AND GRUB AREA.
- CONSTRUCT OR INSTALL SOIL STABILIZATION MEASURES.
- COORDINATE REMOVAL AND CAPPING OF EXISTING UTILITY LINES WITH APPROPRIATE PURVEYOR.
- GRADE SITE PER PLAN. STABILIZE GRADED AREAS WITH TEMPORARY EROSION CONTROL MEASURES AS REQUIRED.
- CONSTRUCT SITE IMPROVEMENTS.
- HYDROSEED REMAINING DISTURBED AREAS.
- RETURN SILTATION CONTROL AREAS TO ORIGINAL GROUND CONDITIONS.
- REMOVE REMAINING TEMPORARY EROSION/SEDIMENTATION CONTROL ONLY AFTER SITE HAS BEEN STABILIZED AND CITY OF MERCER ISLAND SITE INSPECTOR HAS APPROVED THE REMOVAL.



PROJECT LOCATION

VICINITY MAP
Scale: 1" = 200'

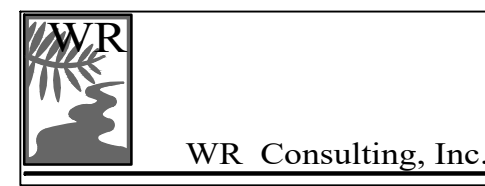
CONSTRUCTION SEDIMENT CONTROL (CSC) NOTES

- APPROVAL OF THIS CONSTRUCTION SEDIMENT CONTROL PLAN (CSC) DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- THE IMPLEMENTATION OF THESE CSC AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE CSC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE CSC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
- THE CSC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE CSC FACILITIES SHALL BE UPGRADED (E.G. ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS AND AS THE CITY REQUIRES.
- THE CSC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING AND OPERATION.
- ANY AREA STRIPPED OF VEGETATION, INCLUDING ROADWAY EMBANKMENTS, WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF TWO (2) DAYS, SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED CSC METHODS (E.G. SEEDING, MULCHING, NETTING, EROSION BLANKETS, ETC.) GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH OCTOBER INCLUSIVE.
- ANY AREA NEEDING CSC MEASURE, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
- THE CSC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT AND AS THE CITY DEEMS NECESSARY.
- AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCES AND WASH PADS PER CITY STANDARDS, SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- DURING THE TIME PERIOD OF NOVEMBER 1ST THROUGH MARCH 31ST, ALL PROJECT DISTURBED AREAS THAT ARE TO BE LEFT UNWORKED FOR MORE THAN TWO (2) DAYS SHALL BE COVERED BY ONE OF THE FOLLOWING COVER MEASURES: MULCH, SODDING OR PLASTIC COVERING.
- WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE (E.G. ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
- WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF THREE (3) INCHES OR 3,000 LBS/ACRE.
- AS CONSTRUCTION PROGRESSES AND UNEXPECTED SEASONAL CONDITIONS DICTATE, AND AS THE CITY REQUIRES, THE PERMITTEE SHOULD ANTICIPATE THAT MORE CSC MEASURES WILL BE NECESSARY TO PROTECT ADJACENT PROPERTIES AND ENSURE MINIMUM WATER QUALITY FOR SITE RUNOFF. IT SHALL BE THE RESPONSIBILITY OF THE PERMITTEE TO ADDRESS DEFICIENT CSC CONDITIONS AND PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE MINIMUM REQUIREMENTS OUTLINED ON THE APPROVED PLANS.
- FILTER FABRIC FENCE SHALL BE USED WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE CITY.

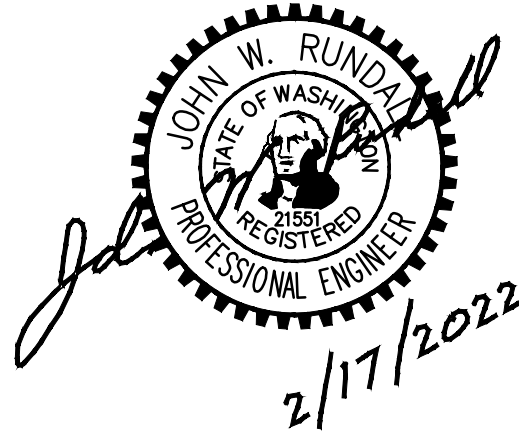
CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
OR CALL 8-1-1



4212 W. Mercer Way
Mercer Island, WA 98040
t. (206) 232-9147
f. (206) 275-0312



Civil Engineer:
WR Consulting, Inc.
3611 45th Ave W.
Seattle, WA 98199
P: 206.285.1593



STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

PROJECT ADDRESS:
8435 SE 47th Place, Mercer Island, WA 98040

LEGAL DESCRIPTION:
LOT 4, HILL HIGH ESTATES AS RECORDED IN VOLUME 68 OF PLATS, PAGE 28, RECORDS OF KING COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

PARCEL NUMBER:
331750-0040

LOT AREA:
19,361 SF

Date:
2/17/2022 Permit Set
3/14/2022 Permit Set
7/22/2022 Permit Rev. Set
11/18/2022 Permit Rev. Set
2/6/2023 Permit Rev. Set

Project No.: 2205-225
Scale: As Noted
Sheet: 1 of 5

GENERAL NOTES
C1

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
OR CALL 8-1-1

ECTYPOS ARCHITECTURE

4212 W. Mercer Way
Mercer Island, WA 98040
t. (206) 232-9147
f. (206) 275-0312



Civil Engineer:
WR Consulting, Inc.
3611 45th Ave W.
Seattle, WA 98199
P: 206.285.1593



TREE PROTECTION NOTES:

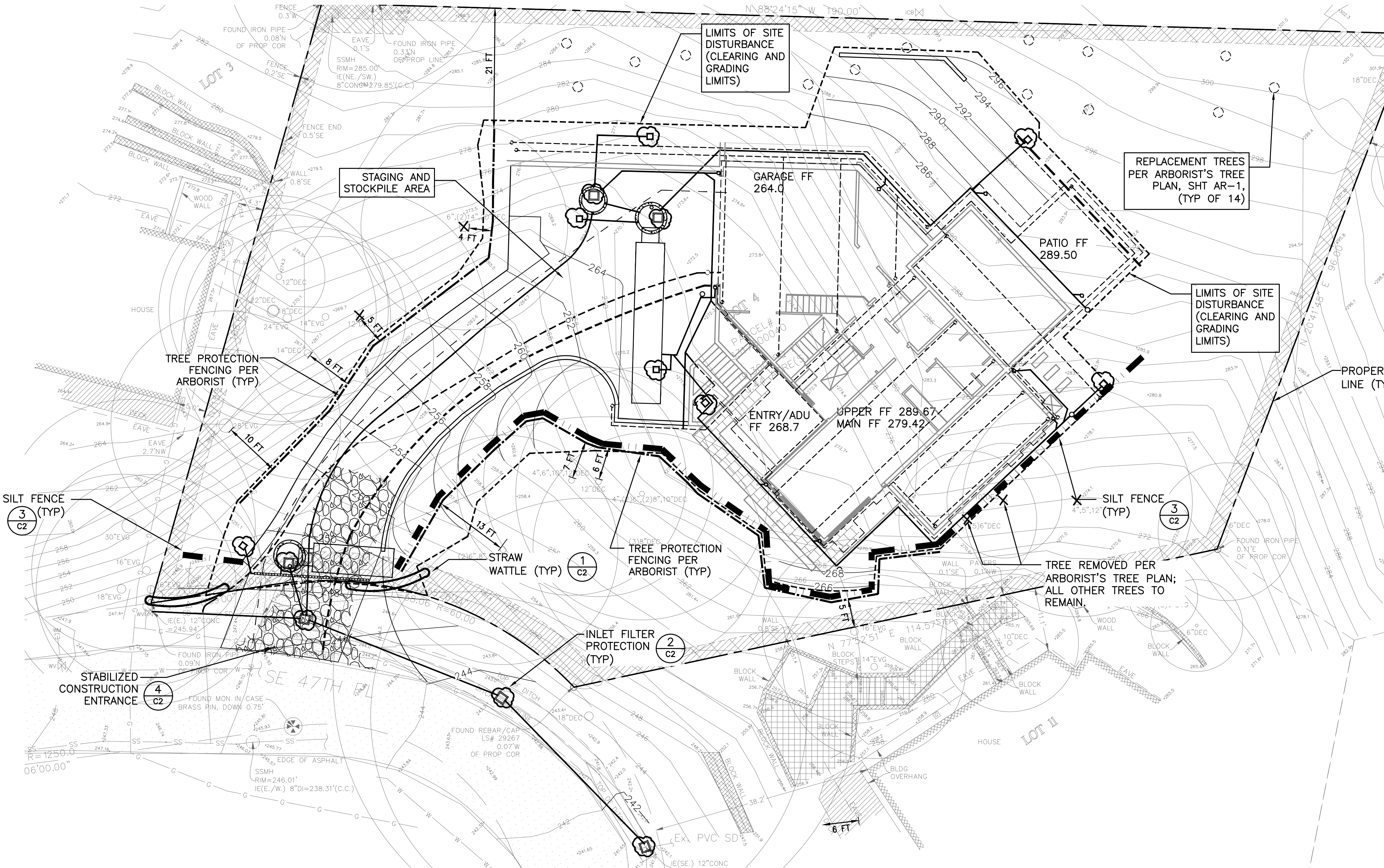
1. ALL TREES NOT INDICATED FOR REMOVAL SHALL REMAIN UNDISTURBED.
2. INSTALL ADDITIONAL TREE PROTECTION FENCING AS NEEDED TO PREVENT DAMAGE TO EXISTING TREES.
3. EXCESS EXCAVATED MATERIALS SHALL NOT BE DISPOSED OF ON-SITE OR PLACED ON ANY ROOT ZONE OF EXISTING TREES TO REMAIN.
4. SPOILS, EXCESS MATERIALS AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE HILLSIDE AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
5. ALL INFORMATION ABOUT TREES, PLANTINGS, MAINTENANCE, ETC. ARE IN ACCORDANCE WITH THE ARBORIST'S TREE PLAN (AR-1) AND CITY OF MERCER ISLAND REQUIREMENTS. THEY ARE SHOWN ON THIS SHEET IN RESPONSE TO CITY OF MERCER ISLAND REVIEW REQUIREMENTS. THE ENGINEERING SEAL AFFIXED TO THIS PLAN DOES NOT ADDRESS ANY ASPECT OF TREES OR PLANTINGS FOR THIS PROJECT.
6. REPLACEMENT TREES SHALL BE MAINTAINED FOR A MINIMUM OF 5 YEARS FOR PLANT ESTABLISHMENT.

LEGEND

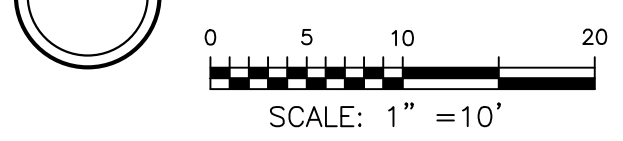
- INLET PROTECTION
- REMOVE TREE
- SILT FENCE
- STRAW WATTLE/COIR LOG
- STABILIZED CONSTRUCTION ENTRANCE
- TREE PROTECTION FENCE

TESC SEASONAL WAIVER NOTES:

1. DURING CONSTRUCTION OF DETENTION SYSTEM OR OTHER SITE WORK, A STORMWATER MANAGEMENT FACILITY INCLUDING STORAGE (EG. BAKER TANKS), PUMPS, TREATMENT COMPONENTS AND SETTLING MEASURES SHALL BE IN PLACE AS NEEDED TO CONTROL SEDIMENT WHEN DISCHARGING STORMWATER TO THE STORM DRAIN SYSTEM.
2. THE STORMWATER MANAGEMENT FACILITY SHALL BE MAINTAINED AND OPERATED AS REQUIRED TO PREVENT THE DISCHARGE OF SEDIMENT LADEN SOILS FROM THE SITE.

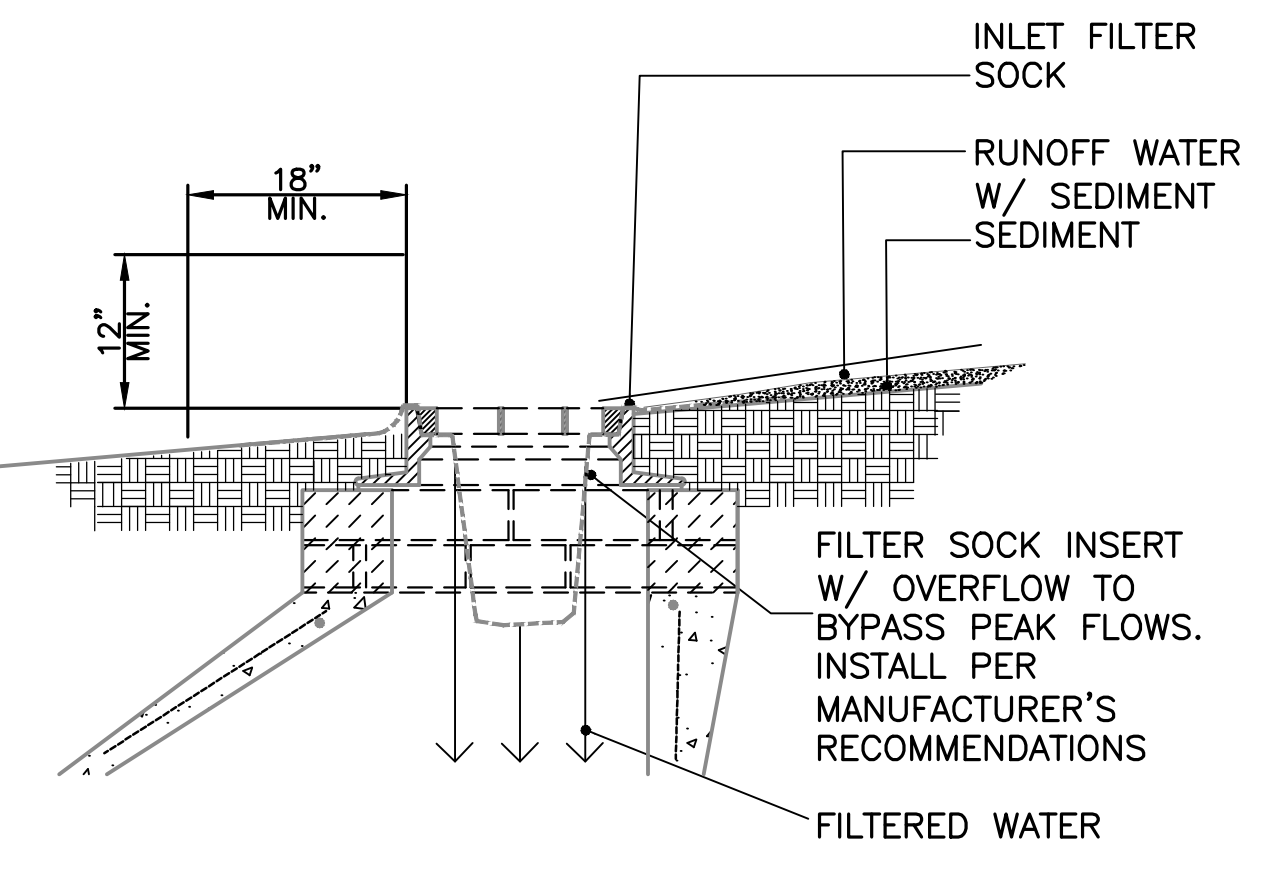
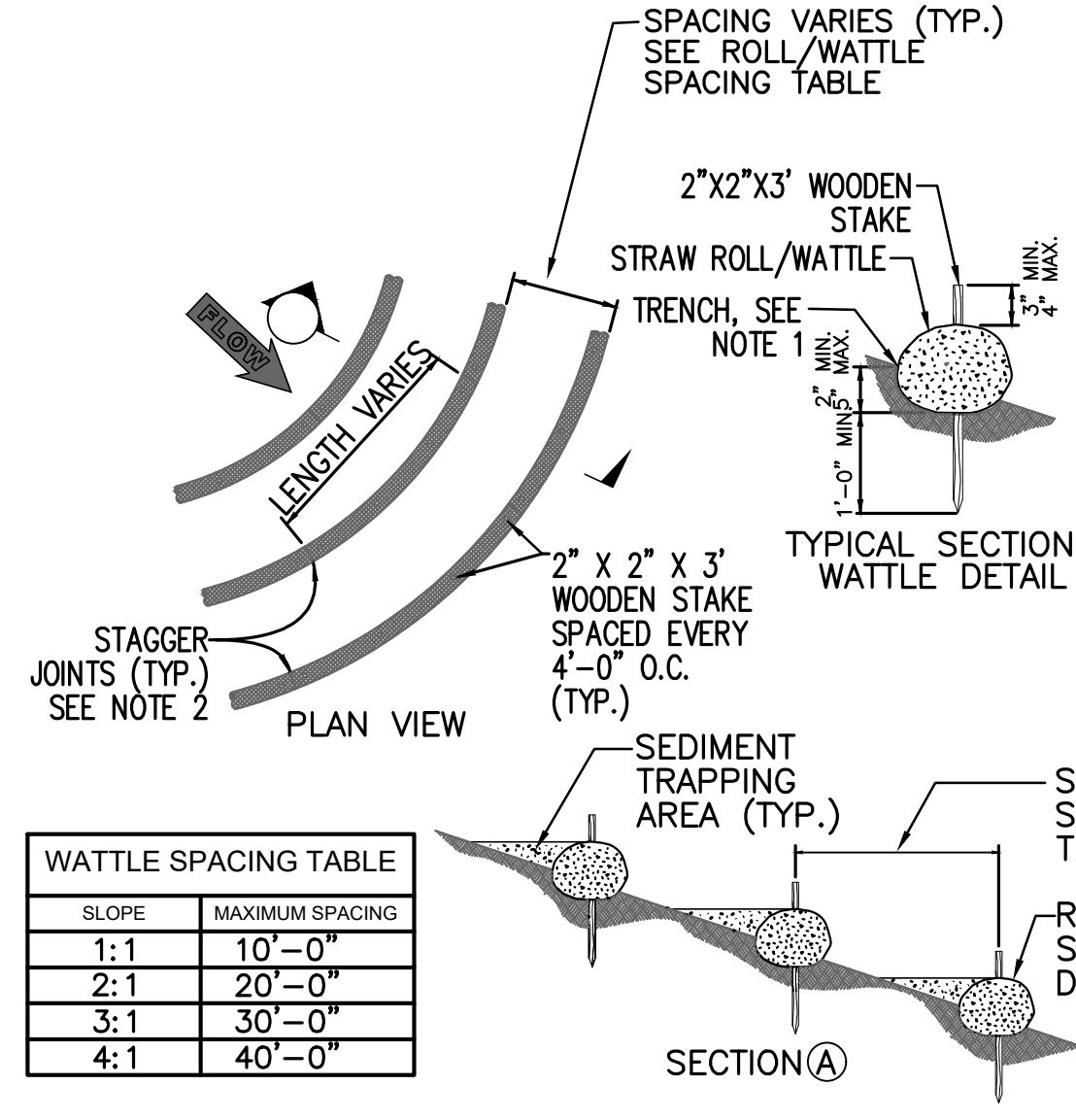


CONSTRUCTION SEDIMENT CONTROL (CSC) PLAN

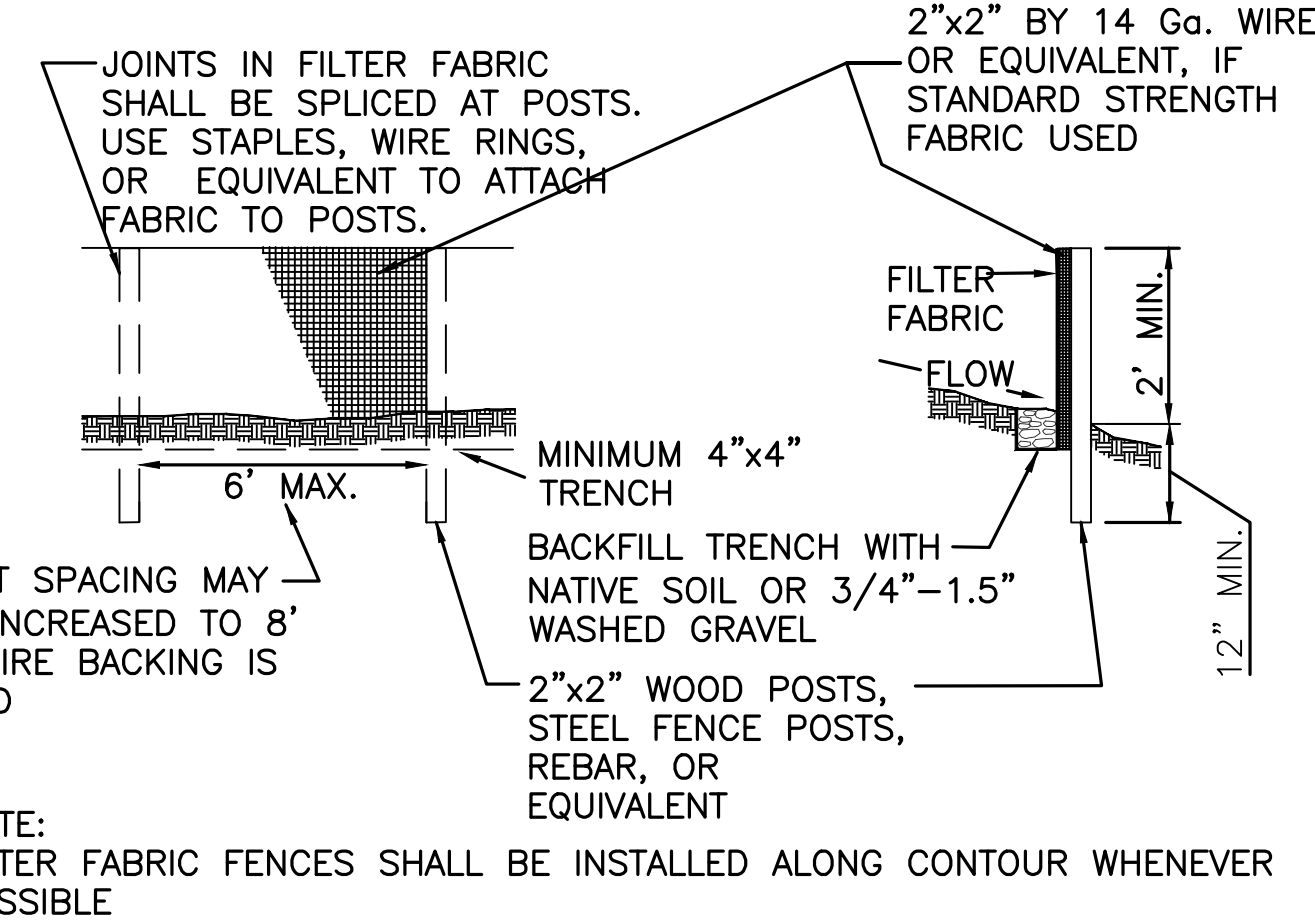


WATTLE DETAIL NOTES

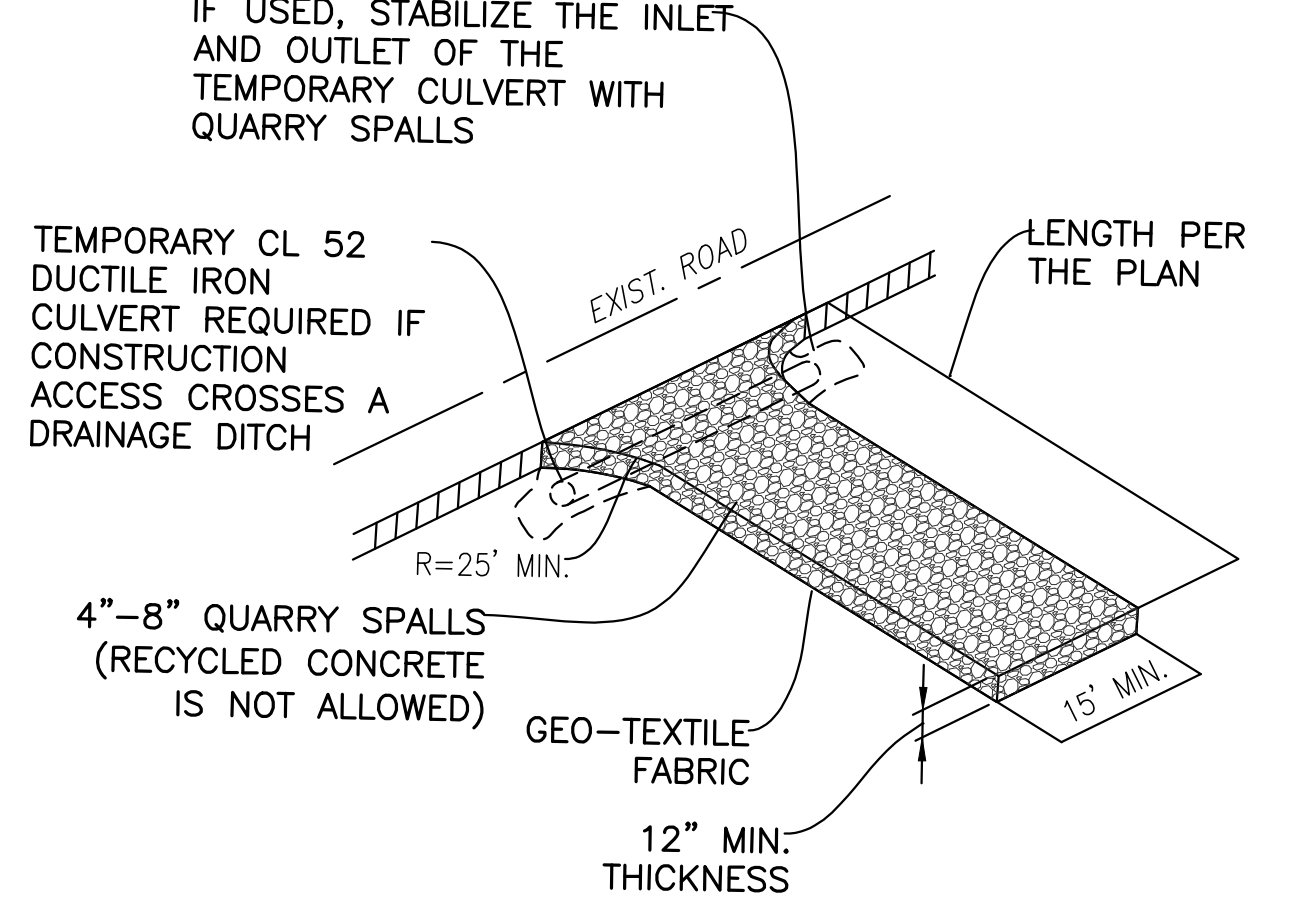
1. Install Wattles along contours. Installation shall be in accordance with Standard Specification 8-01.3(10).
2. Securely knot each end of Wattle. Abut adjacent Wattles tightly, end to end, without overlapping the ends.
3. Pilot holes may be driven through the Wattles and into the soil when soil conditions require.
4. Live stakes may be used for Permanent installation and shall be in accordance with Standard Specification 9-14.6.
5. Wattles shall be inspected regularly, and immediately after a rainfall produces runoff, to ensure they remain thoroughly entrenched and in contact with the soil.



2 INLET PROTECTION DETAIL
SCALE: N.T.S.



3 SILT FENCE DETAIL
SCALE: N.T.S.



4 STABILIZED CONSTRUCTION ACCESS
SCALE: N.T.S.

STEINBORN RESIDENCE

New Residence
8435 SE 47th Pl.
Mercer Island, WA 98040

Date:
2/17/2022 Permit Set
3/14/2022 Permit Set
7/22/2022 Permit Rev. Set
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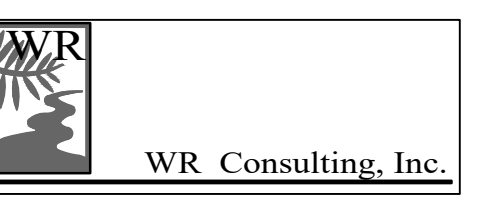
Project No.: 2205-225
Scale: 1" = 10'
Sheet: 2 of 5

CSC PLAN AND DETAILS

C2

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
OR CALL 8-1-1

4212 W. Mercer Way
Mercer Island, WA 98040
t. (206) 232-9147
f. (206) 275-0312



Civil Engineer:
WR Consulting, Inc.
3611 45th Ave W.
Seattle, WA 98199
P: 206.285.1593



DETENTION TANK CONSTRUCTION SEQUENCING NOTES:

1. DETENTION TANK AND ASSOCIATED STRUCTURES SHALL BE INSTALLED ONLY AFTER SOIL NAILING STABILIZATION IMPROVEMENTS ARE COMPLETE.
2. EXCAVATION FOR DETENTION TANKS AND OTHER UTILITIES SHALL BE A SINGLE VERTICAL WALL TRENCH WITH TEMPORARY SHORING AND SAFETY SYSTEMS AS REQUIRED.
3. EXCAVATION FOR DETENTION FACILITIES SHALL BE REVIEWED AND APPROVED BY CITY OF MI INSPECTOR PRIOR TO FURTHER CONSTRUCTION.
4. THE DETENTION TANKS SHALL BE LOWERED INTO PLACE AND BACKFILLED AS INDICATED. EXCESS SPOILS SHALL BE REMOVED FROM THE SITE IMMEDIATELY.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ALL TRANSITION COUPLINGS (FERNCO REDUCERS AND COUPLINGS) AS NEEDED FOR CONNECTIONS TO BLDG UTILITIES
2. INVERT ELEVATIONS ARE APPROXIMATE. ADJUST INVERT ELEVATIONS AS NEEDED TO COORDINATE WITH BLDG UTILITIES AND EXISTING GRADES.
3. SEE ARCHITECTURE PLANS FOR BUILDING AND SITE FURNISHINGS DETAILS.
5. FOUNDATION DRAINS FOR THE STRUCTURES ARE SHOWN ALONG THE BUILDING PERIMETER OR WALL FOR CLARITY. ADJUST LOCATION TO INTERIOR OF WALL TO DRAIN GROUNDWATER FROM RETAINED SOIL AT THE WALLS AND RELIEVE HYDROSTATIC PRESSURE AGAINST THE STRUCTURE AS INDICATED ON SHORING AND STRUCTURAL PLANS.

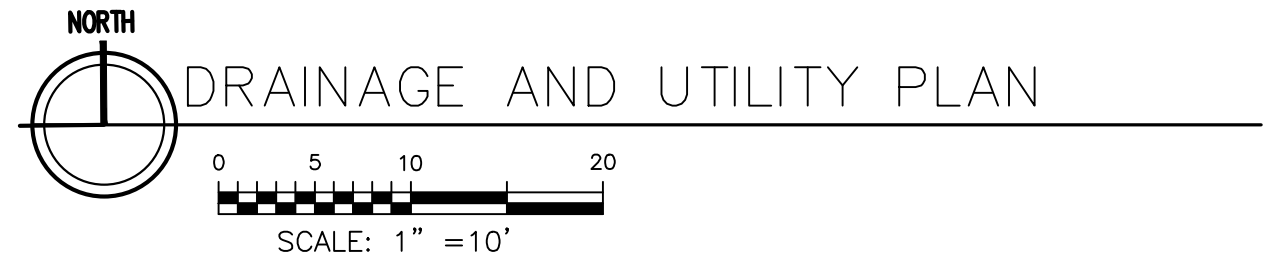
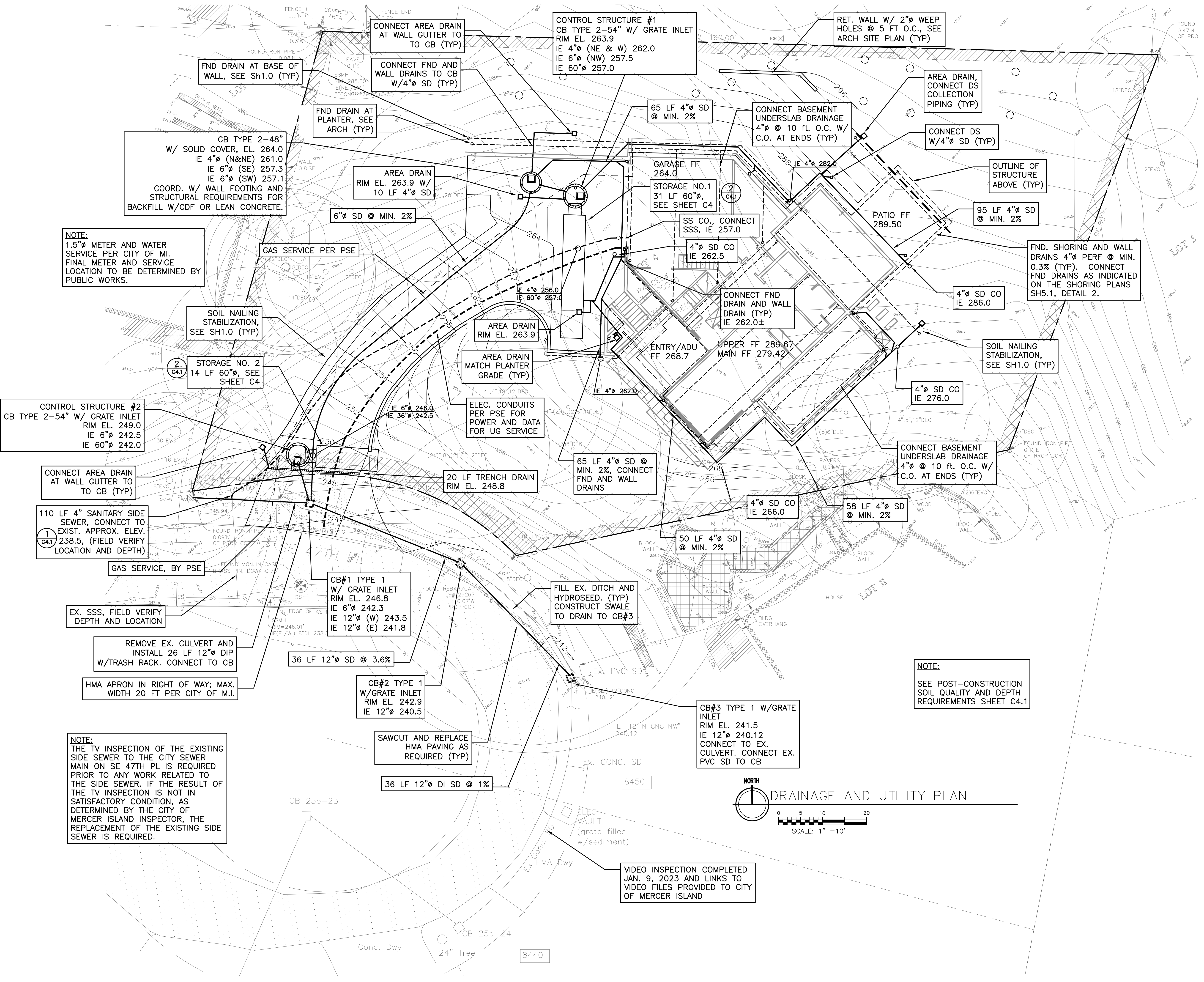
LEGEND

- AREA DRAIN (NDS 9" x 9" Polypropylene Catch Basin w/ Galv. Steel Grate)
- CATCH BASIN, TYPE 1
- ⊕ CATCH BASIN, TYPE 2-48"
- ⊕ CATCH BASIN, TYPE 2-54"
- CLEAN OUT
- DOWNSPOUT CONNECTION
- FOUNDATION DRAIN
- FOUNDATION DRAIN CLEANOUT
- NATURAL GAS
- SANITARY SIDE SEWER
- STORM DRAIN
- WATER SERVICE

Date:
2/17/2022 Permit Set
3/14/2022 Permit Set
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Project No.: 2205-225
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DRAINAGE AND UTILITY PLAN



VIDEO INSPECTION COMPLETED JAN. 9, 2023 AND LINKS TO VIDEO FILES PROVIDED TO CITY OF MERCER ISLAND

NOTE:
SEE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SHEET C4.1

NOTE:
THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN ON SE 47TH PL IS REQUIRED PRIOR TO ANY WORK RELATED TO THE SIDE SEWER. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED.

NOTE:
1.5"Ø METER AND WATER SERVICE PER CITY OF MI. FINAL METER AND SERVICE LOCATION TO BE DETERMINED BY PUBLIC WORKS.

CB TYPE 2-48" W/ SOLID COVER, EL. 264.0
IE 4"Ø (N&E) 261.0
IE 6"Ø (SE) 257.3
IE 6"Ø (SW) 257.1
COORD. W/ WALL FOOTING AND STRUCTURAL REQUIREMENTS FOR BACKFILL W/CDF OR LEAN CONCRETE.

CONTROL STRUCTURE #1
CB TYPE 2-54" W/ GRATE INLET
RIM EL. 263.9
IE 4"Ø (NE & W) 262.0
IE 6"Ø (NW) 257.5
IE 60"Ø 257.0

RET. WALL W/ 2"Ø WEEP HOLES @ 5 FT O.C., SEE ARCH SITE PLAN (TYP)

AREA DRAIN, CONNECT DS COLLECTION PIPING (TYP)

CONNECT BASEMENT UNDERSLAB DRAINAGE 4"Ø @ 10 FT. O.C. W/ C.O. AT ENDS (TYP)

CONNECT DS W/4"Ø SD (TYP)

OUTLINE OF STRUCTURE ABOVE (TYP)

95 LF 4"Ø SD @ MIN. 2%

FND. SHORING AND WALL DRAINS 4"Ø PERF @ MIN. 0.3% (TYP). CONNECT FND DRAINS AS INDICATED ON THE SHORING PLANS SH5.1, DETAIL 2.

SOIL NAILING STABILIZATION, SEE SH1.0 (TYP)

CONNECT BASEMENT UNDERSLAB DRAINAGE 4"Ø @ 10 FT. O.C. W/ C.O. AT ENDS (TYP)

58 LF 4"Ø SD @ MIN. 2%

50 LF 4"Ø SD @ MIN. 2%

65 LF 4"Ø SD @ MIN. 2%, CONNECT FND AND WALL DRAINS

ELEC. CONDUITS PER PSE FOR POWER AND DATA FOR UG SERVICE

AREA DRAIN MATCH PLANTER GRADE (TYP)

6"Ø SD @ MIN. 2%

GAS SERVICE PER PSE

SOIL NAILING STABILIZATION, SEE SH1.0 (TYP)

STORAGE NO. 2
14 LF 60"Ø, SEE SHEET C4

CONTROL STRUCTURE #2
CB TYPE 2-54" W/ GRATE INLET
RIM EL. 249.0
IE 6"Ø 242.5
IE 60"Ø 242.0

CONNECT AREA DRAIN AT WALL GUTTER TO TO CB (TYP)

110 LF 4" SANITARY SIDE SEWER, CONNECT TO EXIST. APPROX. ELEV. 238.5. (FIELD VERIFY LOCATION AND DEPTH)

GAS SERVICE, BY PSE

EX. SSS, FIELD VERIFY DEPTH AND LOCATION

REMOVE EX. CULVERT AND INSTALL 26 LF 12"Ø DIP W/TRASH RACK. CONNECT TO CB

HMA APRON IN RIGHT OF WAY; MAX. WIDTH 20 FT PER CITY OF M.I.

CB#1 TYPE 1 W/ GRATE INLET
RIM EL. 246.8
IE 6"Ø 242.3
IE 12"Ø (W) 243.5
IE 12"Ø (E) 241.8

36 LF 12"Ø SD @ 3.6%

CB#2 TYPE 1 W/GRATE INLET
RIM EL. 242.9
IE 12"Ø 240.5

SAWCUT AND REPLACE HMA PAVING AS REQUIRED (TYP)

36 LF 12"Ø DI SD @ 1%

FILL EX. DITCH AND HYDROSEED. (TYP) CONSTRUCT SWALE TO DRAIN TO CB#3

CB#3 TYPE 1 W/GRATE INLET
RIM EL. 241.5
IE 12"Ø 240.12
CONNECT TO EX. CULVERT. CONNECT EX. PVC SD TO CB

NOTE: SEE ADDITIONAL DETENTION PIPE DETAILS SHEET C4

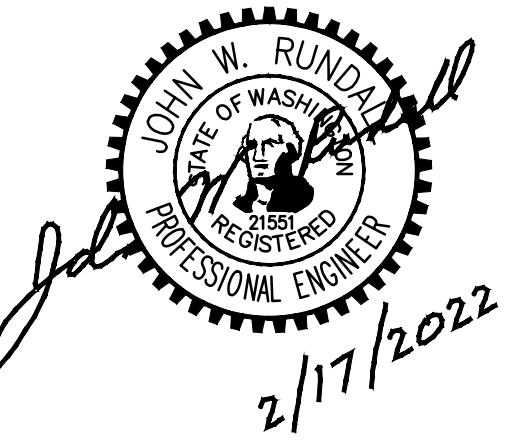
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1-800-424-5555
OR CALL 8-1-1

ECTYPOS
ARCHITECTURE

4212 W. Mercer Way
Mercer Island, WA 98040
t. (206) 232-9147
f. (206) 275-0312



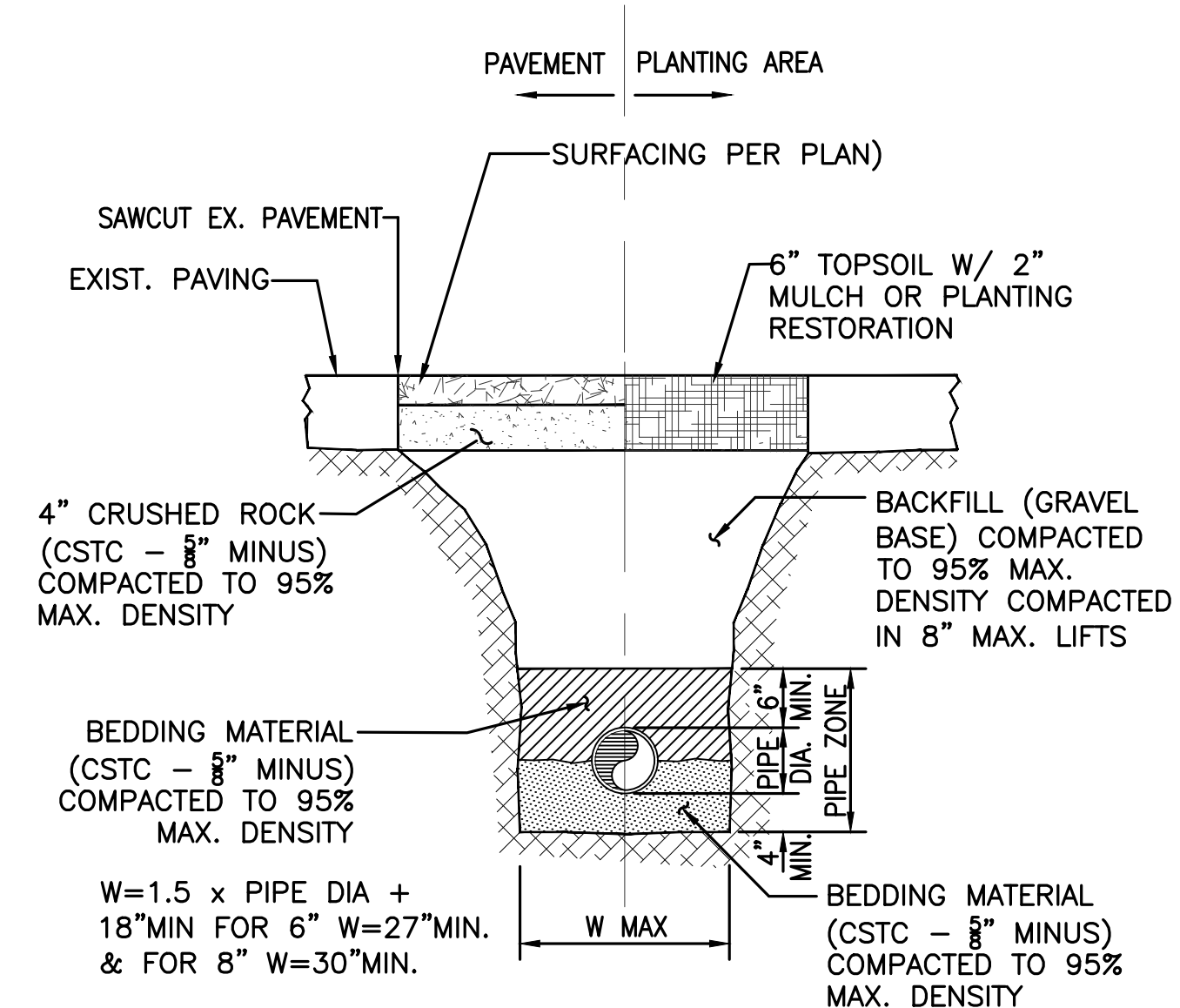
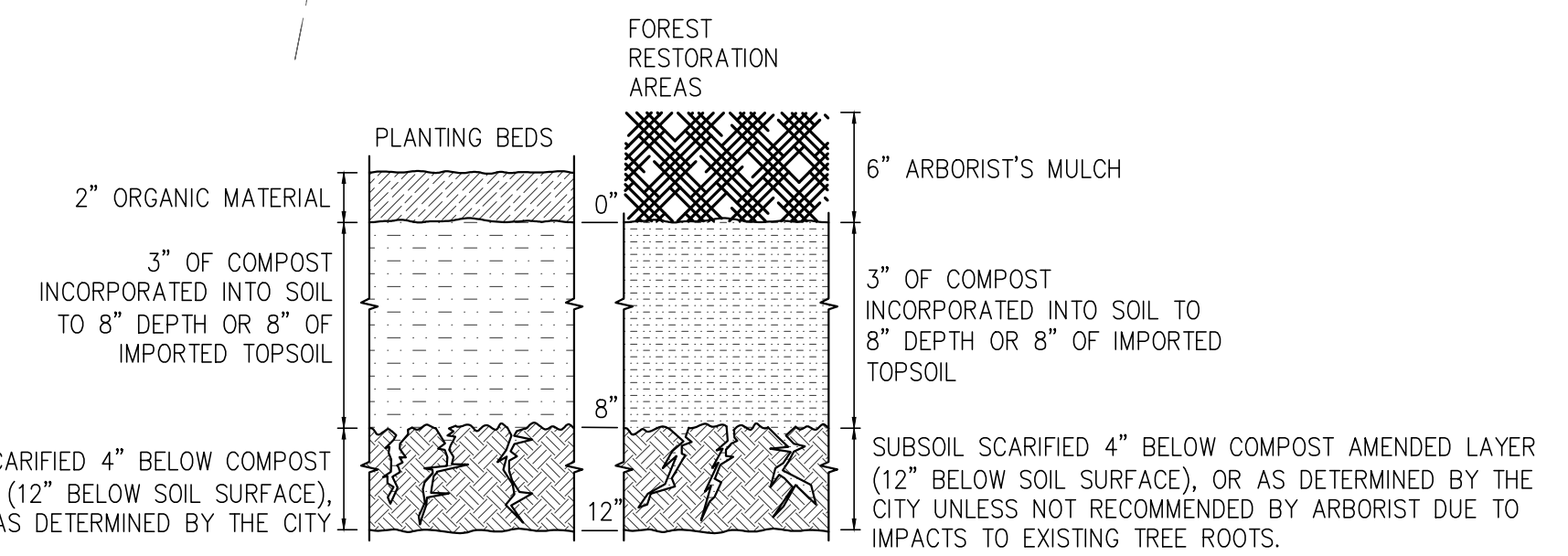
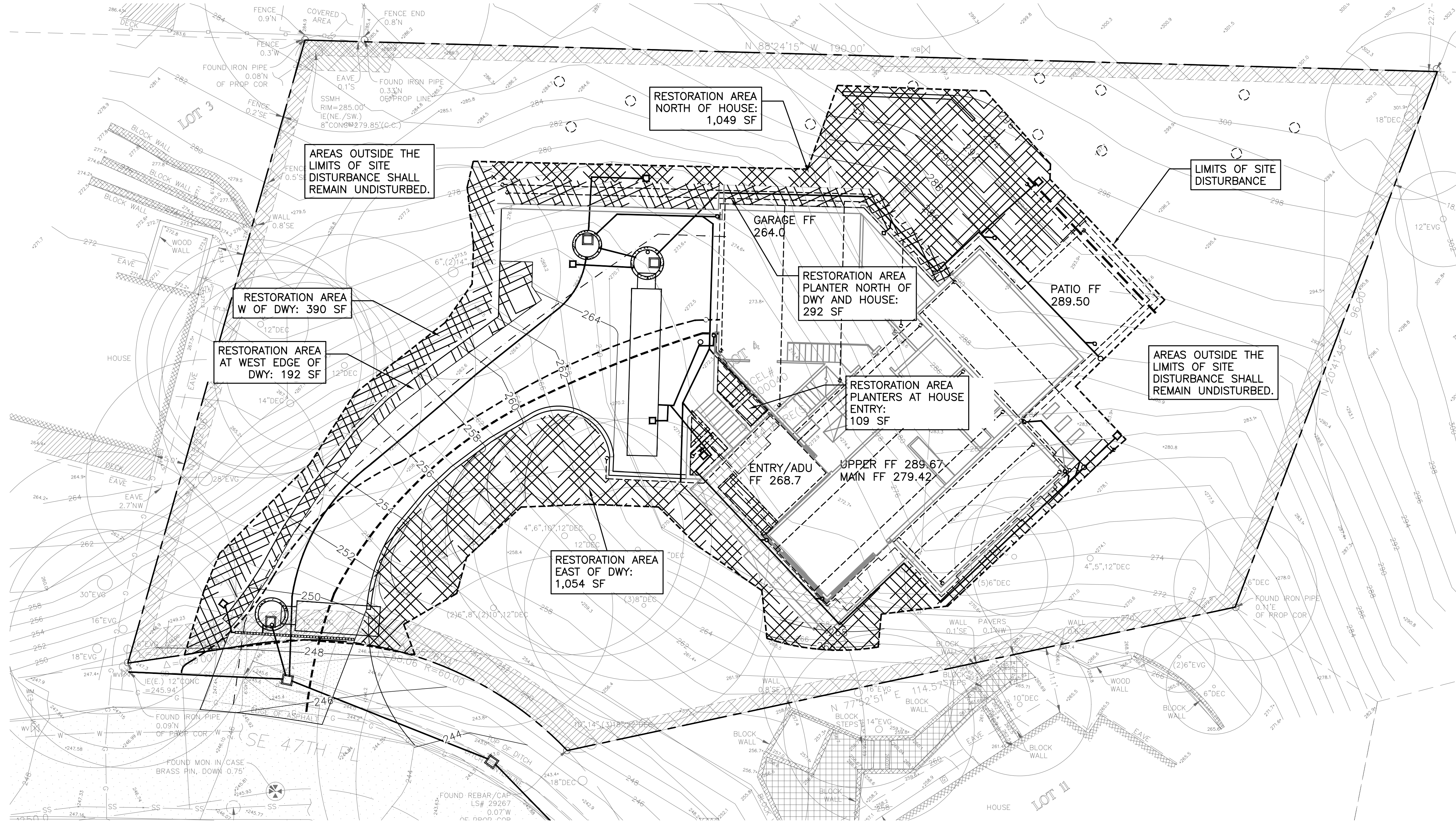
Civil Engineer:
WR Consulting, Inc.
3611 45th Ave W.
Seattle, WA 98199
P: 206.285.1593



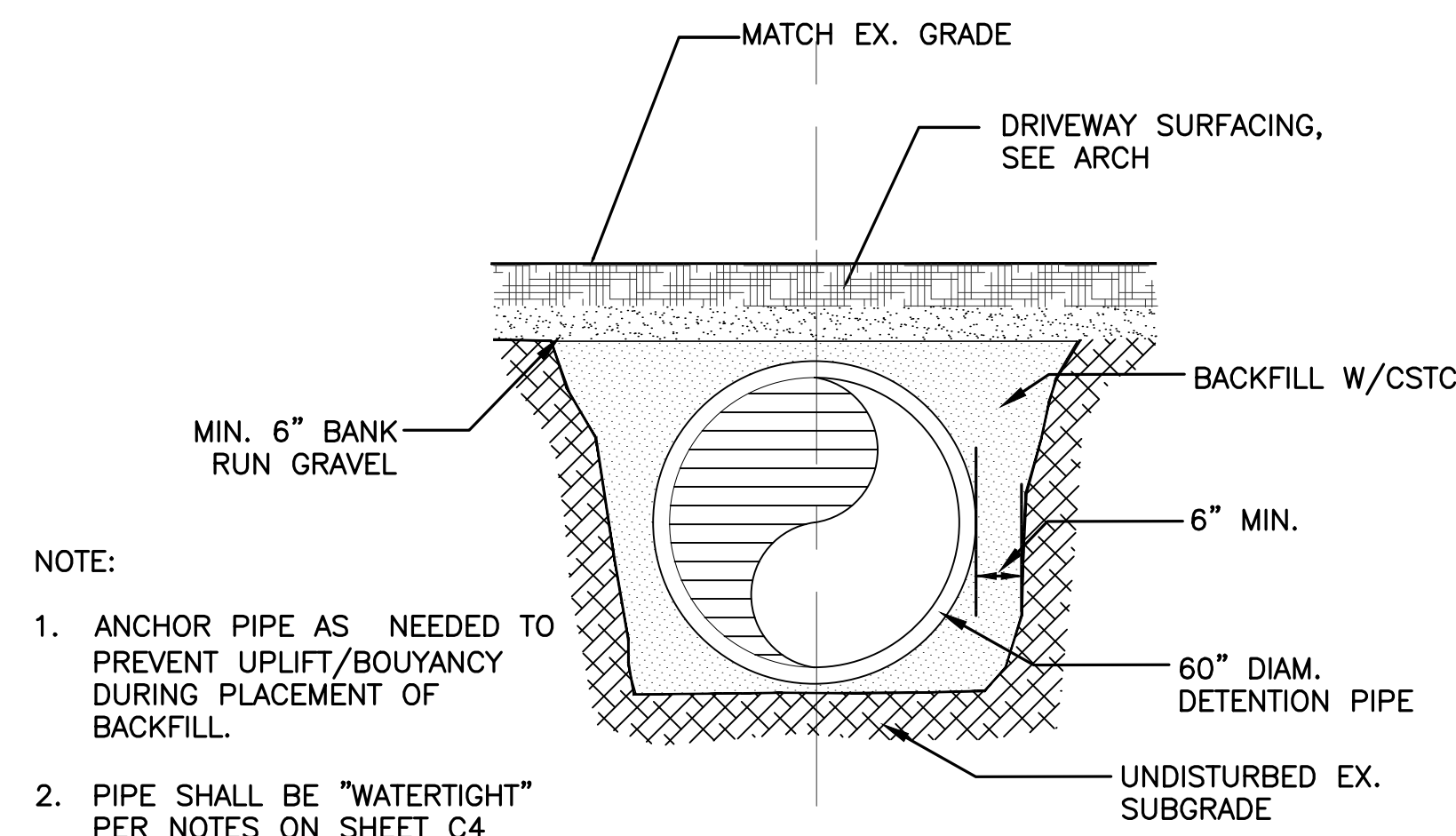
RESTORATION AREAS	AREA(SF)
NORTH OF HOUSE	1,049 SF
WEST OF DRIVEWAY	390 SF
EAST OF DRIVEWAY	1,054 SF
PLANTER AT WEST EDGE OF DWY	192 SF
PLANTER N. OF DWY AND HOUSE	292 SF
PLANTERS AT ENTRY	109 SF

SOIL RESTORATION REQUIREMENTS:

- IN ALL AREAS DISTURBED BY CONSTRUCTION AND IN NEW PLANTERS AND PLANTING BEDS AS INDICATED ON THE PLAN.
- SOIL RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF MERCER ISLAND POST-CONSTRUCTION SOIL-MANAGEMENT MINIMUM REQUIREMENT #5, BMP T5.13
- SOIL RESTORATION SHALL BE AS FOLLOWS: TILL IN 3" COMPOST OR IMPORT 8" OF COMPOST AMENDED TOPSOIL



1 UTILITY TRENCH DETAIL
C4.1 NTS



- NOTE:
- ANCHOR PIPE AS NEEDED TO PREVENT UPLIFT/BOUYANCY DURING PLACEMENT OF BACKFILL.
 - PIPE SHALL BE "WATERTIGHT" PER NOTES ON SHEET C4

2 DETENTION PIPE DETAIL
C4.1 NTS

NOTES:

- POST CONSTRUCTION SOIL AMENDMENT IS REQUIRED ON ALL AREAS NOT COVERED BY HARD SURFACE WHERE SOIL IS DISTURBED DURING CONSTRUCTION.
- SOIL AMENDMENT MUST PASS A 12 INCH MINIMUM PROBE TEST.
- IMPORTED AMENDMENT AND TOPSOIL SHALL BE IN ACCORDANCE WITH CITY OF MERCER ISLAND REQUIREMENTS AND BMP T5.13 AS FOLLOWS:
 - THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE.
 - THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1.
 - THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
 - CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING AS NOTED ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.

IMPLEMENTATION OPTIONS:

- THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:
- LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
 - AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
 - STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
 - IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED

STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

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DRAINAGE
DETAILS

C4.1

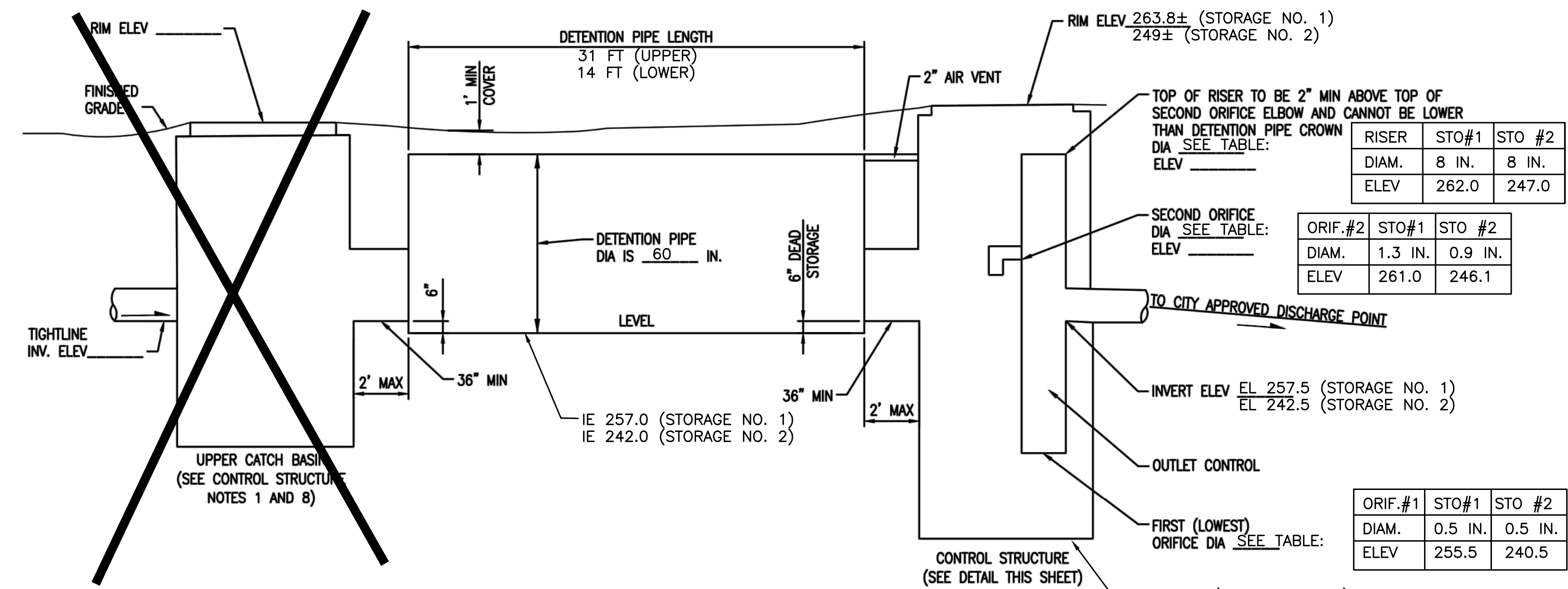
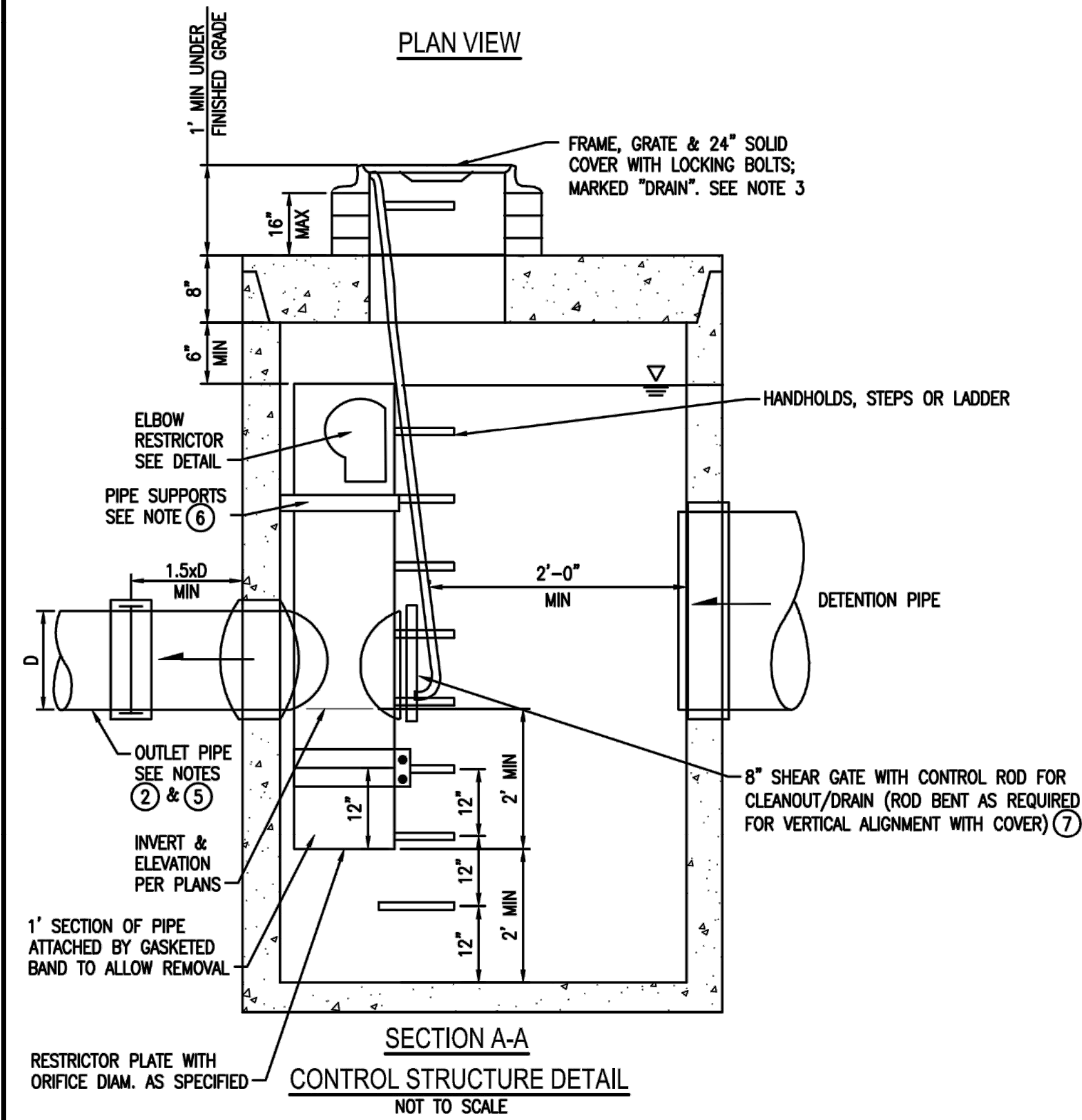
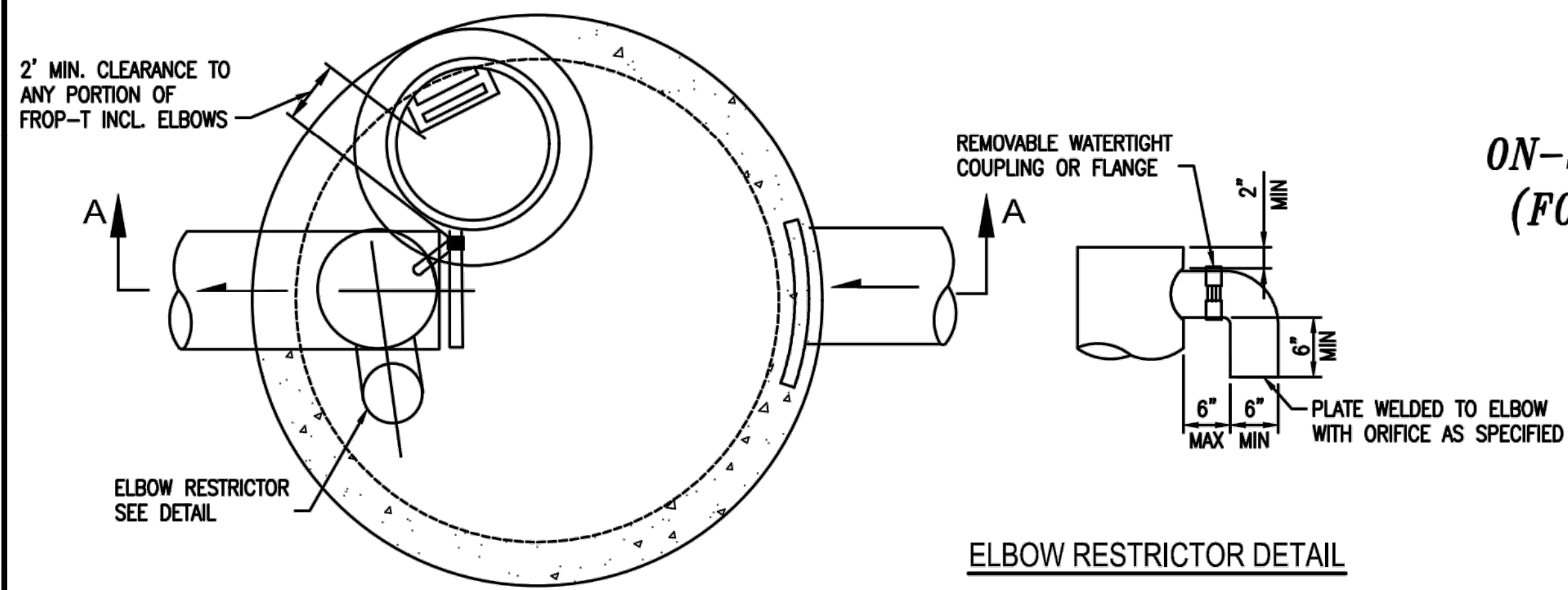


ATTACHMENT 1
CITY OF MERCER ISLAND
ON-SITE DETENTION SYSTEM WORKSHEET
(FOR NEW PLUS REPLACED IMPERVIOUS
AREA OF 9,500 SF OR LESS)

DETENTION TANK NOTES:

1. THE DETENTION PIPE MATERIAL SHALL BE WATERTIGHT AS OPPOSED TO "SOIL TIGHT".
2. THE DETENTION TANKS SHALL BE ADS N-12 WT (WATERTIGHT) IB PIPE WITH JOINTS IN ACCORDANCE WITH ASTM D3212 LAB TEST AND ASTM F1417 WATERTIGHT FIELD TEST.
3. THE PIPE MATERIAL SELECTED SHALL CONFORM TO THE TESTING REQUIREMENTS IN SECTION 7-17.3(2)F OF THE 2020 WSDOT STANDARD SPECIFICATIONS EXCEPT THE DETENTION PIPE SHALL BE TESTED IN ITS ENTIRETY RATHER THAN ONE JOINT AT A TIME.

OWNER: Dan and Susan Steinborn ADDRESS: 8435 SE 47th PLACE PREPARED BY: JOHN W. RUNDALL, P.E.
 PERMIT #: _____ MERCER ISLAND, WA PHONE: 206-850-1686
 DATE: JUNE 10, 2022
 NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 5,795 SF DETENTION PIPE DIA (INCH): 60" Ø DETENTION PIPE LENGTH (FT): 45 ORIFICE #1 DIA SEE TABLES BELOW:
 SOIL TYPE: TYPE D PIPE MATERIAL: ADS N-12 WT IB PIPE W/WATERTIGHT JOINTS ORIFICE #2 DIA



NOTE:
1. UPPER CATCH BASIN NOT REQUIRED FOR EITHER STORAGE TANK PER CONTROL STRUCTURE NOTES, NOTE #8.
ON-SITE DETENTION SYSTEM
NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

CONTROL STRUCTURE NOTES:

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
 - A. CLEANOUT GATE IS VISIBLE FROM TOP;
 - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
 - C. FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.

6. PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION ZG32A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

1. CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTANANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

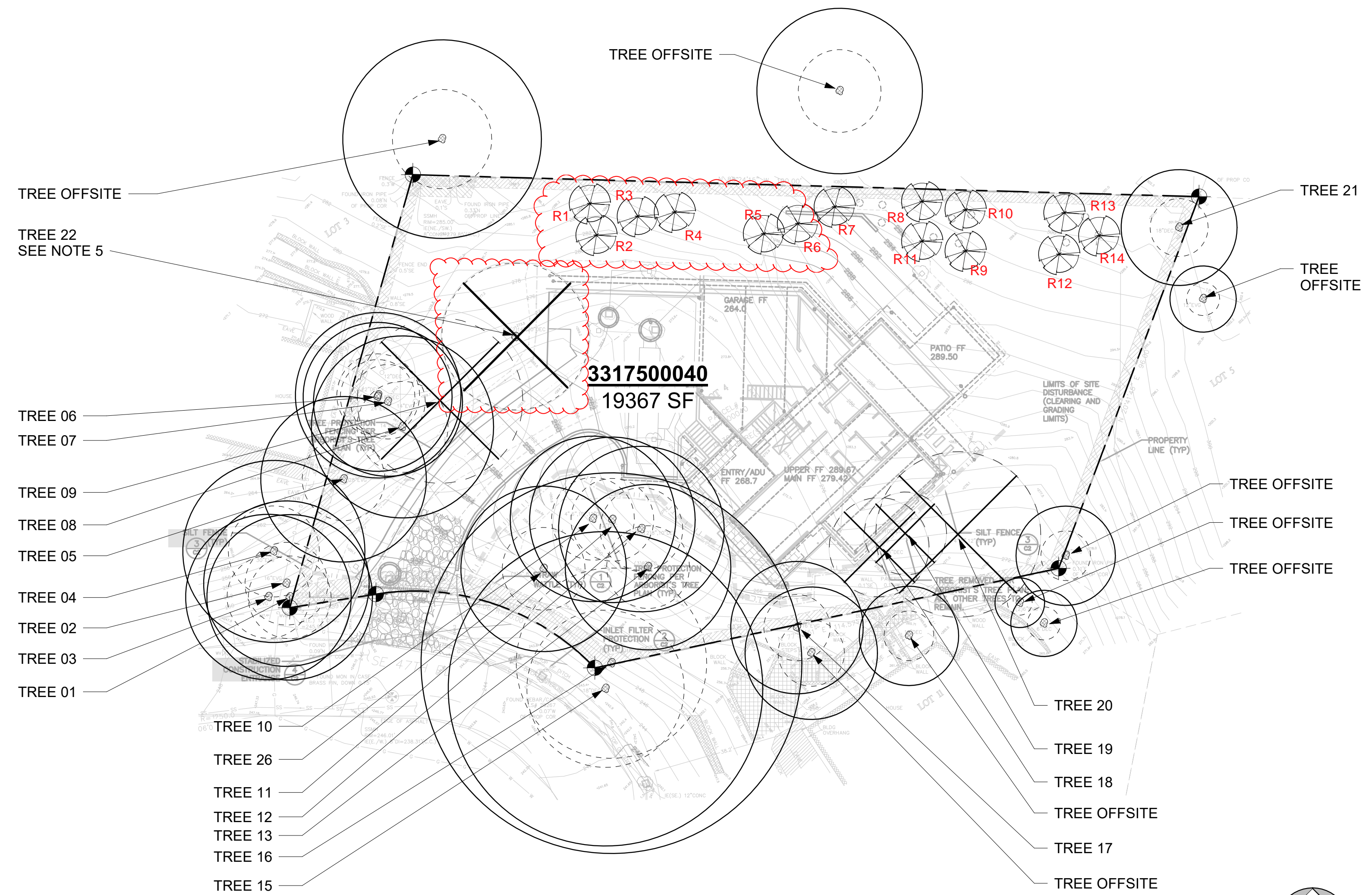
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Project No.: 2205-225
Scale: As Noted
Sheet: 4 of 5

DETENTION
TANK DETAILS

No.	Description	Date

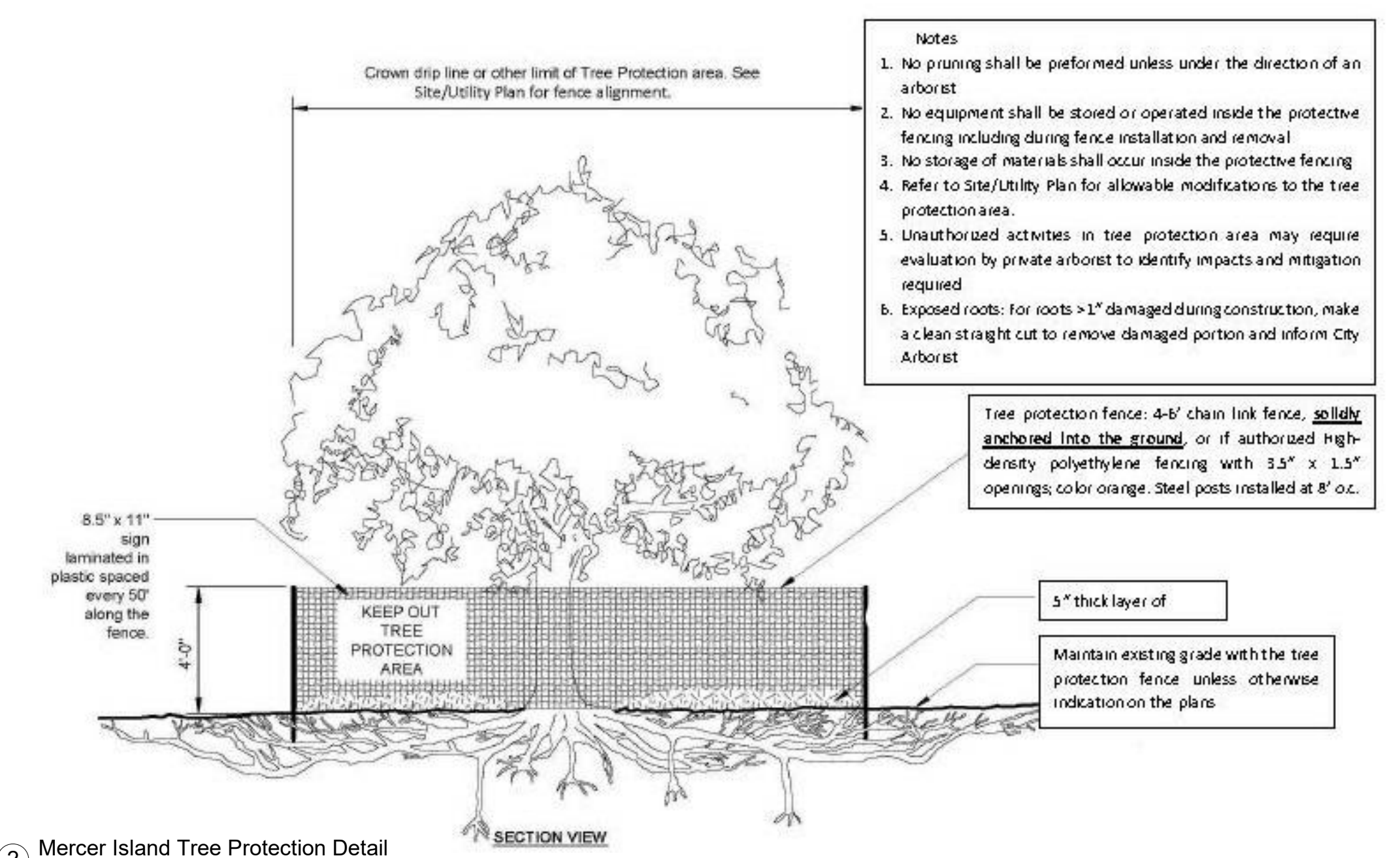
EXISTING TREE SCHEDULE								
Arborists NW Tree Inventory								
Tree Number	Common name	Scientific Name	# of Trunks	DBH (Inches)	Dripline (Feet)	Condition	Retain	Notes
1	DOUGLAS FIR	Pseudotsuga menziesii	1	14	19	FAIR	YES	
2	DOUGLAS FIR	Pseudotsuga menziesii	1	15	12	FAIR	YES	
3	DOUGLAS FIR	Pseudotsuga menziesii	1	18	12	FAIR	YES	
4	DOUGLAS FIR	Pseudotsuga menziesii	1	25	19	FAIR	YES	
5	DOUGLAS FIR	Pseudotsuga menziesii	1	21	20	FAIR	YES	
6	CHERRY	Prunus avium	1	16	12	FAIR	YES	
7	DOUGLAS FIR	Pseudotsuga menziesii	1	15	14	FAIR	YES	
8	BIG LEAF MAPLE	Acer macrophyllum	1	14	18	FAIR	YES	
9	BIG LEAF MAPLE	Acer macrophyllum	1	12	14	FAIR	NO	
10	BIG LEAF MAPLE	Acer macrophyllum	4	17.2	18	FAIR	YES	STUMP SPROUTED
11	BIG LEAF MAPLE	Acer macrophyllum	1	12	12	FAIR	YES	
12	BIG LEAF MAPLE	Acer macrophyllum	6	17.7	18	FAIR	YES	STUMP SPROUTED
13	BIG LEAF MAPLE	Acer macrophyllum	3	13.8	14	FAIR	YES	STUMP SPROUTED
14	BIG LEAF MAPLE	Acer macrophyllum	6	20.6	18	FAIR	YES	STUMP SPROUTED
15	BIG LEAF MAPLE	Acer macrophyllum	1	18	27	FAIR	YES	STUMP SPROUTED
16	BIG LEAF MAPLE	Acer macrophyllum	6	31	20	FAIR	YES	STUMP SPROUTED
17	DOUGLAS FIR	Pseudotsuga menziesii	1	16	14	FAIR	YES	
18	BIG LEAF MAPLE	Acer macrophyllum	5	17.4	14	FAIR	NO	STUMP SPROUTED
19	BIG LEAF MAPLE	Acer macrophyllum	1	10	18	FAIR	NO	
20	BIG LEAF MAPLE	Acer macrophyllum	3	13.6	18	FAIR	NO	STUMP SPROUTED
21	DOUGLAS FIR	Pseudotsuga menziesii	1	18	14	FAIR	YES	
22	SCOULEERS WILLOW	Salix scouleriana	4	28.7	16	FAIR	YES	CLINGING TO STEEP EDGE
23	BIG LEAF MAPLE	Acer macrophyllum	1	10	12	FAIR	YES	STUMP SPROUTED - OFF SITE
24	DOUGLAS FIR	Pseudotsuga menziesii	1	14	14	GOOD	YES	OFF SITE
25	BIG LEAF MAPLE	Acer macrophyllum	1	6	10	FAIR	YES	OFF SITE
26	BIG LEAF MAPLE	Acer macrophyllum	4	18.2	14	FAIR	YES	STUMP SPROUTED
27	DOUGLAS FIR	Pseudotsuga menziesii	1	8.4	10	FAIR	YES	OFF SITE
28	BIG LEAF MAPLE	Acer macrophyllum	1	6	10	FAIR	YES	OFF SITE
29	DOUGLAS FIR	Pseudotsuga menziesii	1	12	12	FAIR	YES	OFF SITE
30	DOUGLAS FIR	Pseudotsuga menziesii	1					
31	DOUGLAS FIR	Pseudotsuga menziesii	1	34	26	FAIR	YES	OFF SITE
		Total DBH		492.6				
		Retained DBH		439.6				
		Retained Percentage		89.2%				



REPLACEMENT TREE SCHEDULE				
TREE (R#)	COMMON NAME	LATIN NAME	SIZE	QTY
R1	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R2	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R3	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R4	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R5	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R6	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R7	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R8	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R9	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R10	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R11	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R12	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R13	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1
R14	EXCELSA CEDAR	Thuja Plicata Excelsa	8'-10"	1

- GENERAL ARBORISTS NOTES:
- PROJECT ARBORIST MUST BE ON-SITE DURING EXCAVATION ALONG THE DRIVEWAY. THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP T5.13. THE PROJECT ARBORIST MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT.
 - PURSUANT TO MICC 19.10.070.D, TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION FOR 5 YEARS. DEAD OR DEPRESSED TREES SHALL BE REPLACED.
 - REFER TO C4 FOR THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH PLAN.
 - REFER TO ATTACHED ARCHITECT'S MEMO
 - REFER TO C2 FOR LIMITS OF DISTURBANCE

ARBORISTS SITE PLAN
1" = 20'-0"



Mercer Island Tree Protection Detail
1/4" = 1'-0"

	TREE DRIP LINE (DL)
	DIAMETER STANDARD HEIGHT (DSH)
	EVERGREEN TREE
	DECIDUOUS TREE
	TREE TO BE REMOVED
	NEW TREE (R#)

Revised by: Ectypos Architects 2/6/23

PREPARED BY:
 NEAL BAKER
 ARBORISTS NW.COM
 ISA CERT. PN1075A
 TRAQ ISA (TREE RISK ASSESSMENT QUALIFIED)
 MEMBER AREA & SOCA
 PH: 206 779 2579

STEINBORN AR-1

8435 SE 47TH PL, MERCER ISLAND, WA 98040

STEINBORN AR-1

ARBORIST TREE PLAN

Project number	21029
Date	--
Drawn by	CW
Checked by	NB

AR-1

Scale As indicated

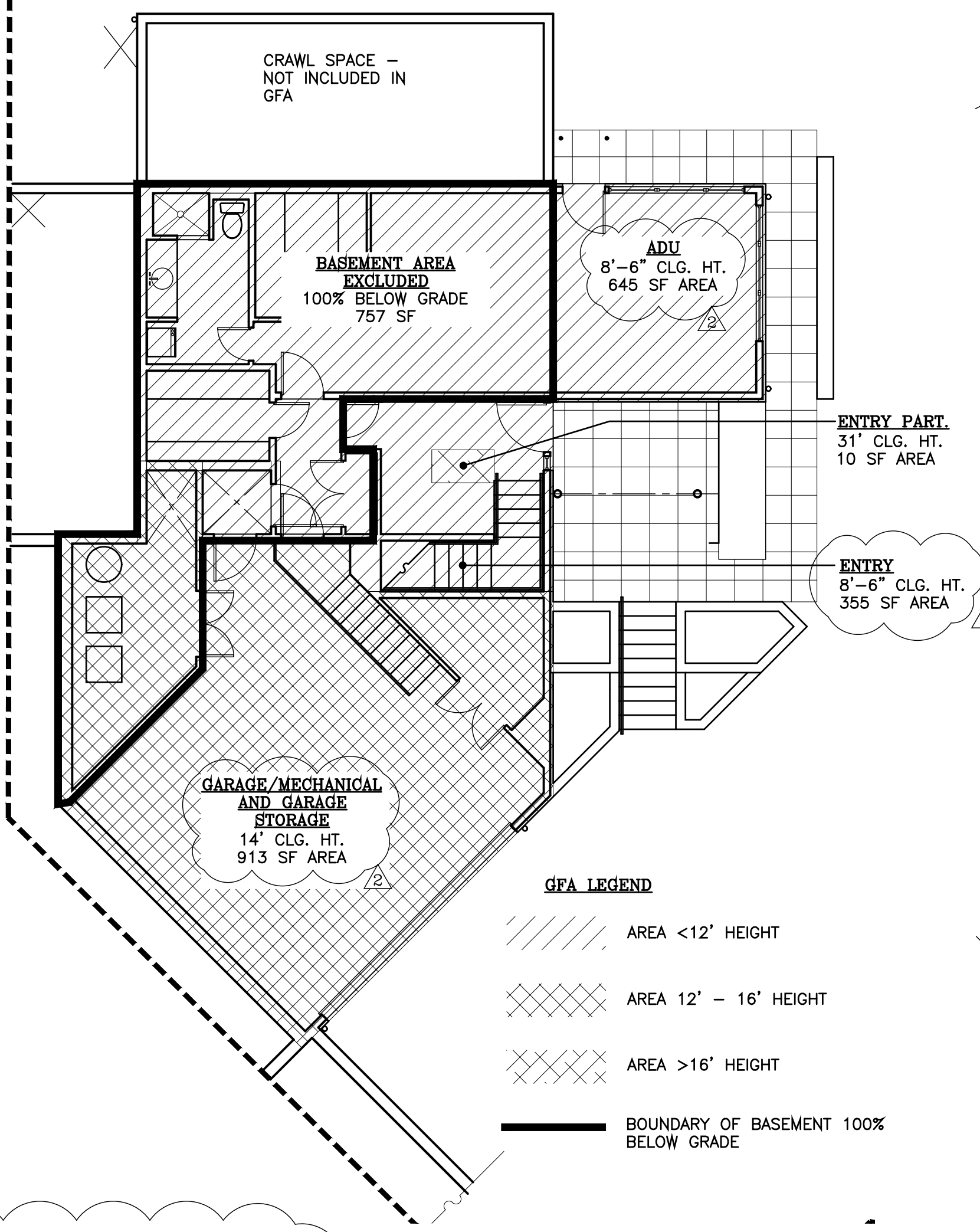
STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

Date: 3/15/2021 Pre-App
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225
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Scale:
Sheet:

Lower Floor Plan
A2.0



Garage/Entry/ADU GFA Calculation:

<12'	1,000 SF
12'-16'	913 SF
>16'	10 SF
BASEMENT AREA EXCLUDED	757 SF

1 Lower Floor Plan GFA Calculation
scale: 1/8"=1'-0"

Enclosed Crawl Space Ventilation Under Heated

TOTAL AREA: 318 SF

VENTILATION REQUIRED W/ CLASS I VAPOR BARRIER: 1 SF/300 SF

REQUIRED VENTILATION: 1.06 SF OR 152.64 SI

PROVIDED VENTILATION @ EXTERIOR WALLS: 186 SI

NOTE: NFVA - NET FREE VENT AREA

Conditioned Space Square Footage: 1107.6SF

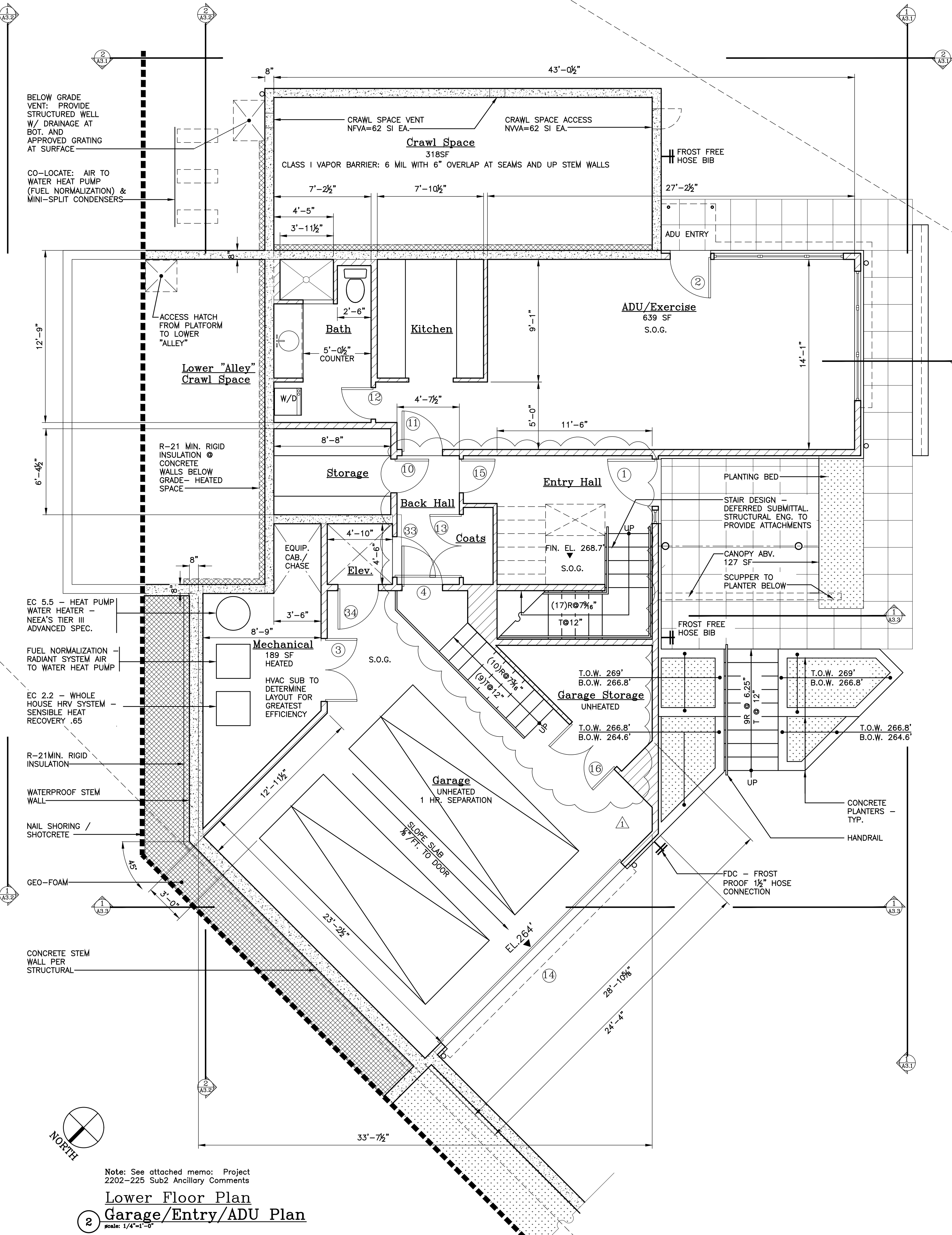
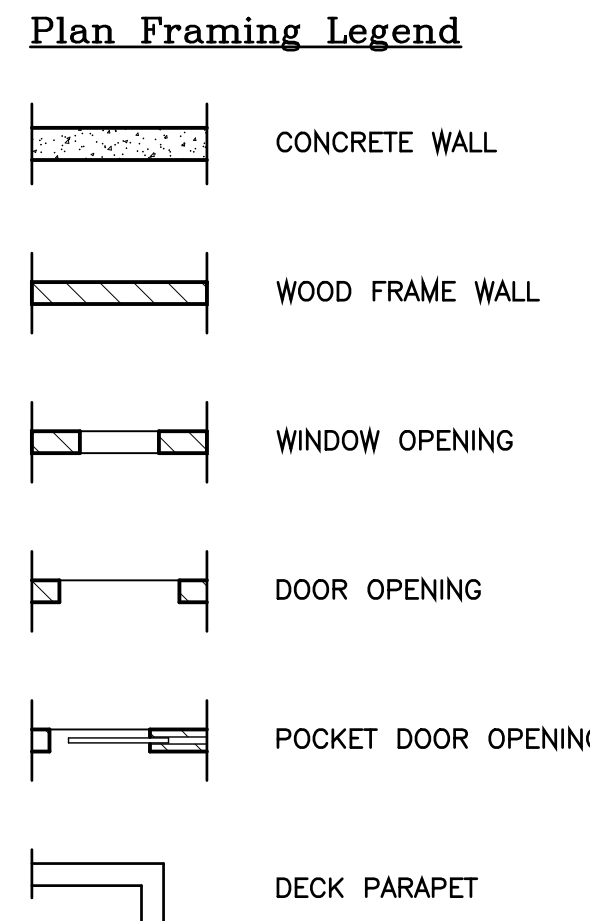
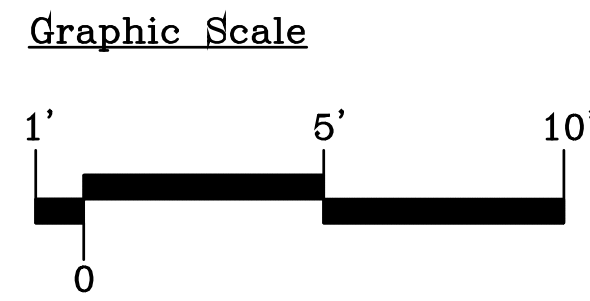
Fire Area Square Footage

ATTACHED GARAGE/MECHANICAL ROOM/ELEVATOR: 932.7 SF

ADU / ENTRY HALL: 800.0 SF

ENTRY CANOPY: 117.3 SF

- Floor Plan Notes**
- Stair design deferred submittal. Structural Engineer to provide connection specifications.
 - See Sheet A0.1 for General Notes in common.
 - Fire Code Alternate minimum requirements:
13R Sprinkler System Plus - Design Build per 2016 NFPA
1 HR 5/8" GWB throughout
Solid core doors throughout except at closets.
 - Energy Performance Requirements:
EC 2.2 - Air Leakage Control and Efficient Ventilation: Reduce tested air leakage to 2.0 air changes per hour maximum @ 50 Pascals
EC 4.2 - High Efficiency HVAC Distribution System: Hydronic in-floor piping throughout all conditioned spaces.
 - Vapor Retarder Required - Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7



2 Lower Floor Plan Garage/Entry/ADU Plan
scale: 1/4"=1'-0"

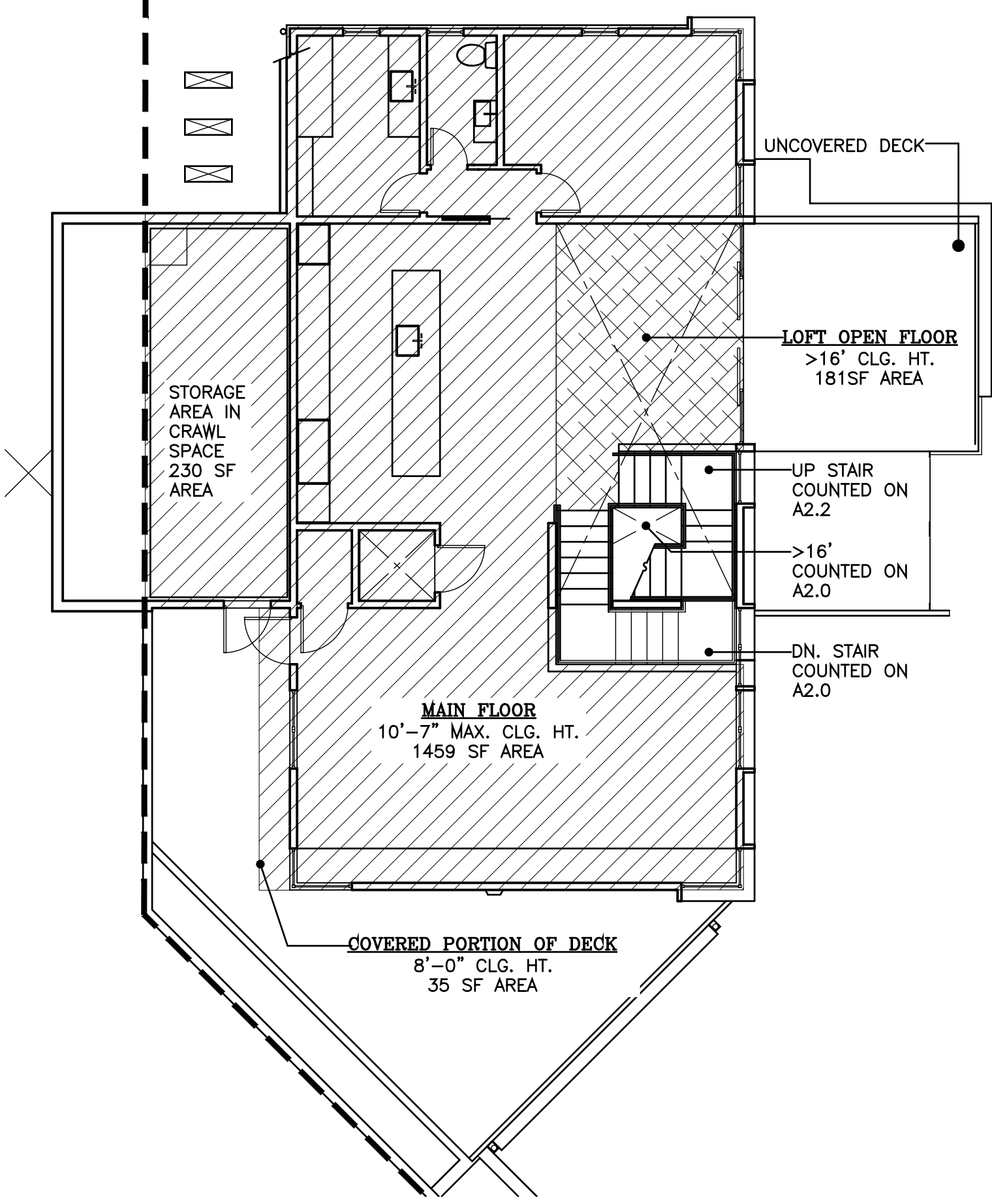
STEINBORN RESIDENCE

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8435 SE 47th PL.
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Scale:
Sheet:

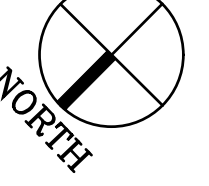
Main Floor Plan
A2.1



Main Floor GFA Calculation:

MAIN FLOOR*	1459 SF
COVERED DECK	69 SF
ACCESSORY (STORAGE)	229 SF
>16'	181 SF

*MAIN FLOOR IS, FOR THE MOST PART, <12' IN HEIGHT. THE AREA >16' IS INCLUDED IN THE AREA OF MAIN FLOOR AND WILL BE LISTED ON THE FORM AT 200% AS WELL.



1 Main Floor GFA Calculation
note: 1/8"=1'-0"

Enclosed Crawl Space Ventilation Under Heated

TOTAL AREA: 344 SF

VENTILATION REQUIRED W/ CLASS I VAPOR BARRIER: 1 SF/300 SF

REQUIRED VENTILATION: 1,146 SF OR 165 SI

PROVIDED VENTILATION @ EXTERIOR WALLS: 186 SI

NOTE: NFVA - NET FREE VENT AREA

Conditioned Space Square Footage: 1446 SF

Fire Area Square Footage

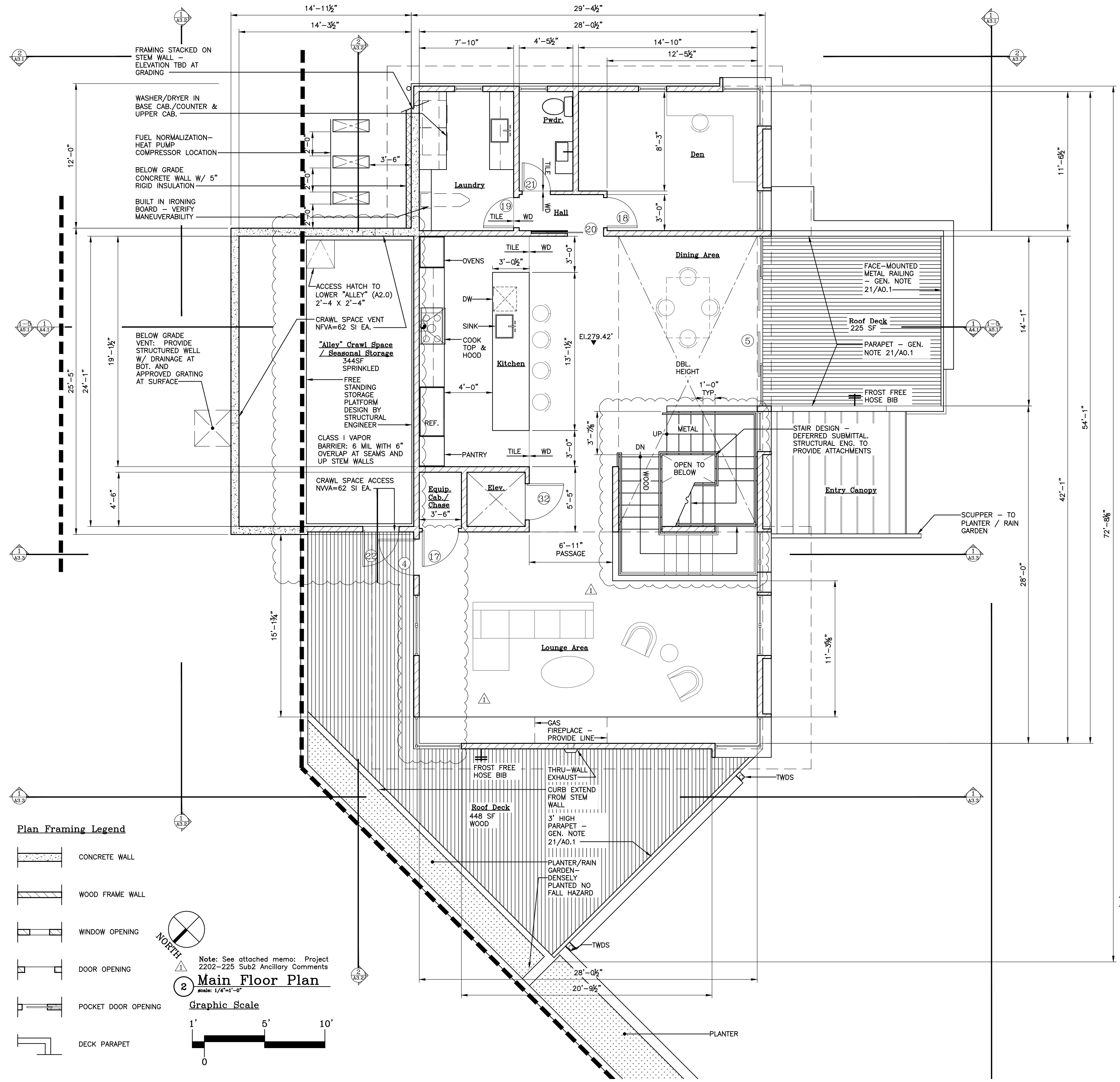
MAIN FLOOR AREA NOT INCLUDING STAIRS: 1421.5 SF

STORAGE ARE (PORTION OF CRAWL SPACE): 230.0 SF

COVERED DECK: 69.0 SF

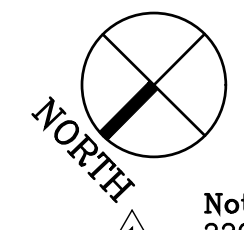
Roof Deck Square Footage: 673.0 SF

- Floor Plan Notes**
- Stair design deferred submittal. Structural Engineer to provide connection specifications.
 - See Sheet A0.1 for General Notes in common.
 - Fire Code Alternate minimum requirements:
13R Sprinkler System Plus - Design Build per 2016 NFPA
1 HR 5/8" GWB throughout
Solid core doors throughout except at closets.
 - Energy Performance Requirements:
EC 2.2 - Air Leakage Control and Efficient Ventilation: Reduce tested air leakage to 2.0 air changes per hour maximum @ 50 Pascals
EC 4.2 - High Efficiency HVAC Distribution System: Hydronic in-floor piping throughout all conditioned spaces.
Vapor Retarder Required - Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7

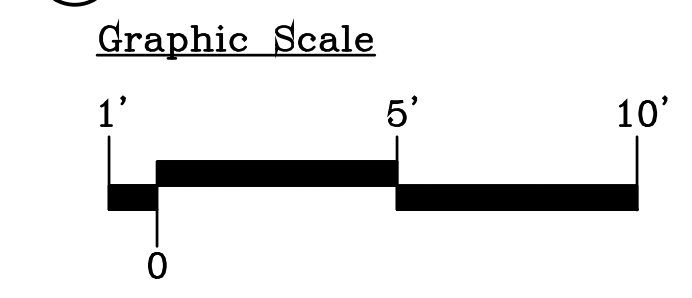


Plan Framing Legend

- CONCRETE WALL
- WOOD FRAME WALL
- WINDOW OPENING
- DOOR OPENING
- POCKET DOOR OPENING
- DECK PARAPET

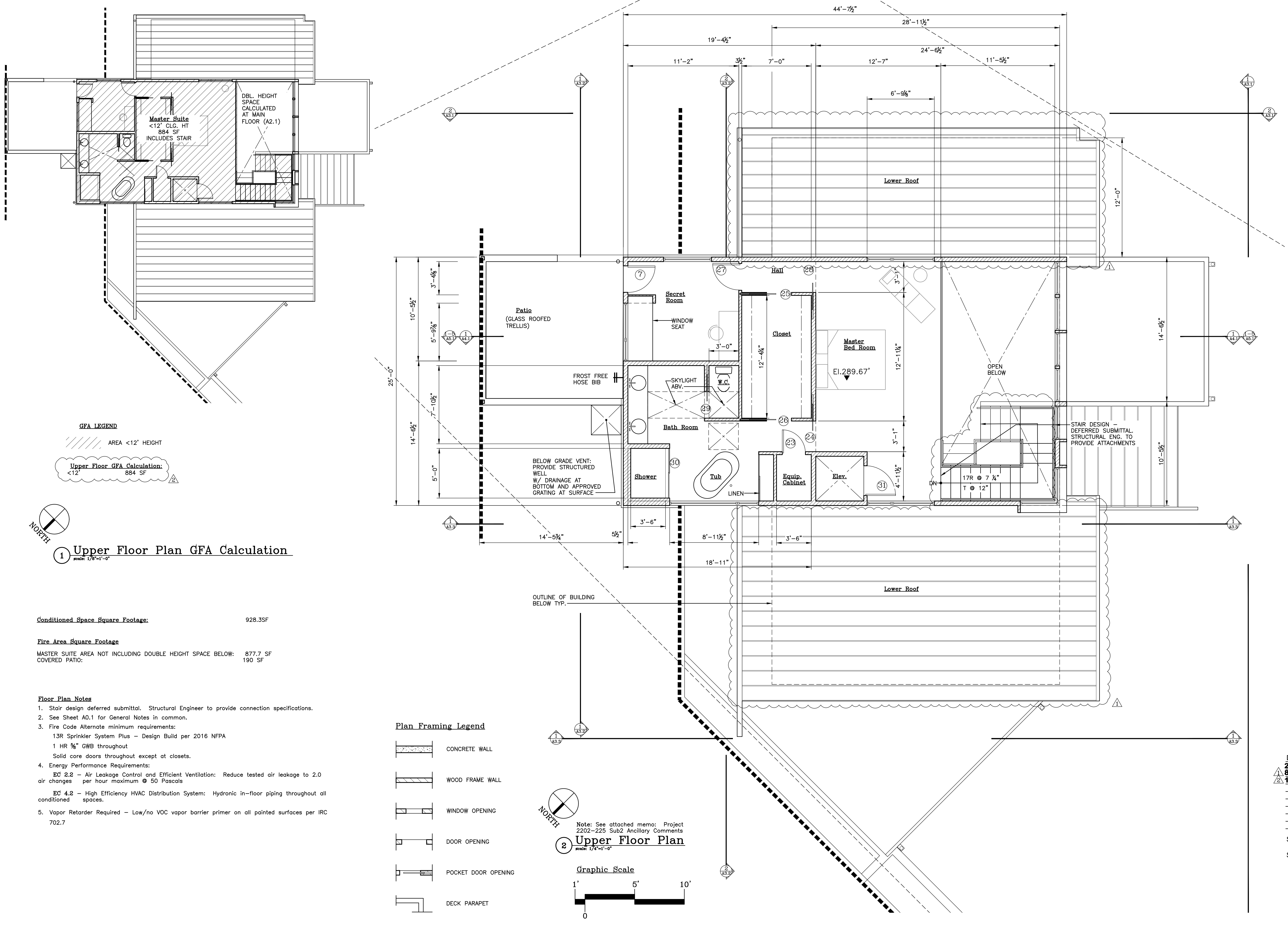


2 Main Floor Plan
note: 1/4"=1'-0"



STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040



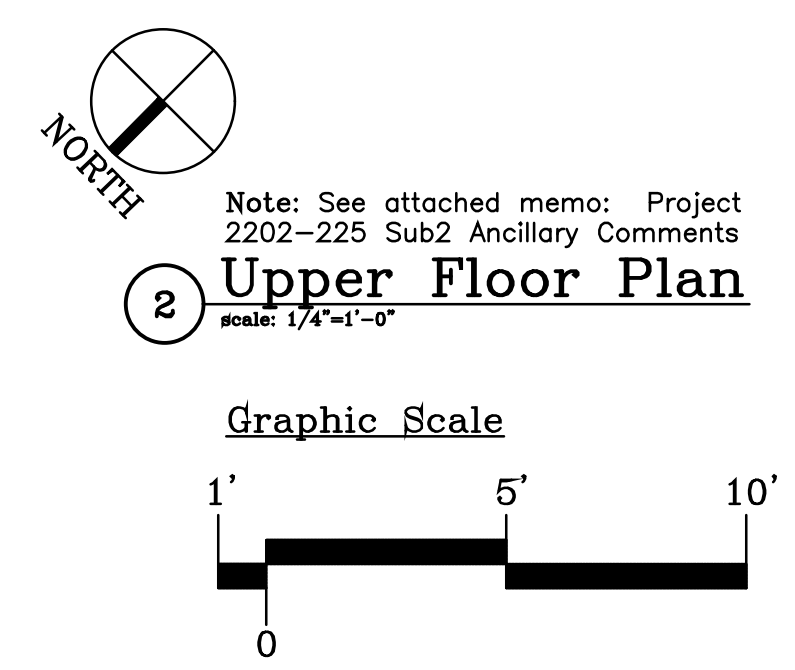
GFA LEGEND
AREA <12' HEIGHT
Upper Floor GFA Calculation:
<12' 884 SF

1 Upper Floor Plan GFA Calculation
scale: 1/8"=1'-0"

Conditioned Space Square Footage: 928.35SF
Fire Area Square Footage:
MASTER SUITE AREA NOT INCLUDING DOUBLE HEIGHT SPACE BELOW: 877.7 SF
COVERED PATIO: 190 SF

- Floor Plan Notes**
1. Stair design deferred submittal. Structural Engineer to provide connection specifications.
 2. See Sheet A0.1 for General Notes in common.
 3. Fire Code Alternate minimum requirements:
13R Sprinkler System Plus - Design Build per 2016 NFPA
1 HR 5/8" GWB throughout
Solid core doors throughout except at closets.
 4. Energy Performance Requirements:
EC 2.2 - Air Leakage Control and Efficient Ventilation: Reduce tested air leakage to 2.0 air changes per hour maximum @ 50 Pascals
EC 4.2 - High Efficiency HVAC Distribution System: Hydronic in-floor piping throughout all conditioned spaces.
 5. Vapor Retarder Required - Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7

- Plan Framing Legend**
- CONCRETE WALL
 - WOOD FRAME WALL
 - WINDOW OPENING
 - DOOR OPENING
 - POCKET DOOR OPENING
 - DECK PARAPET

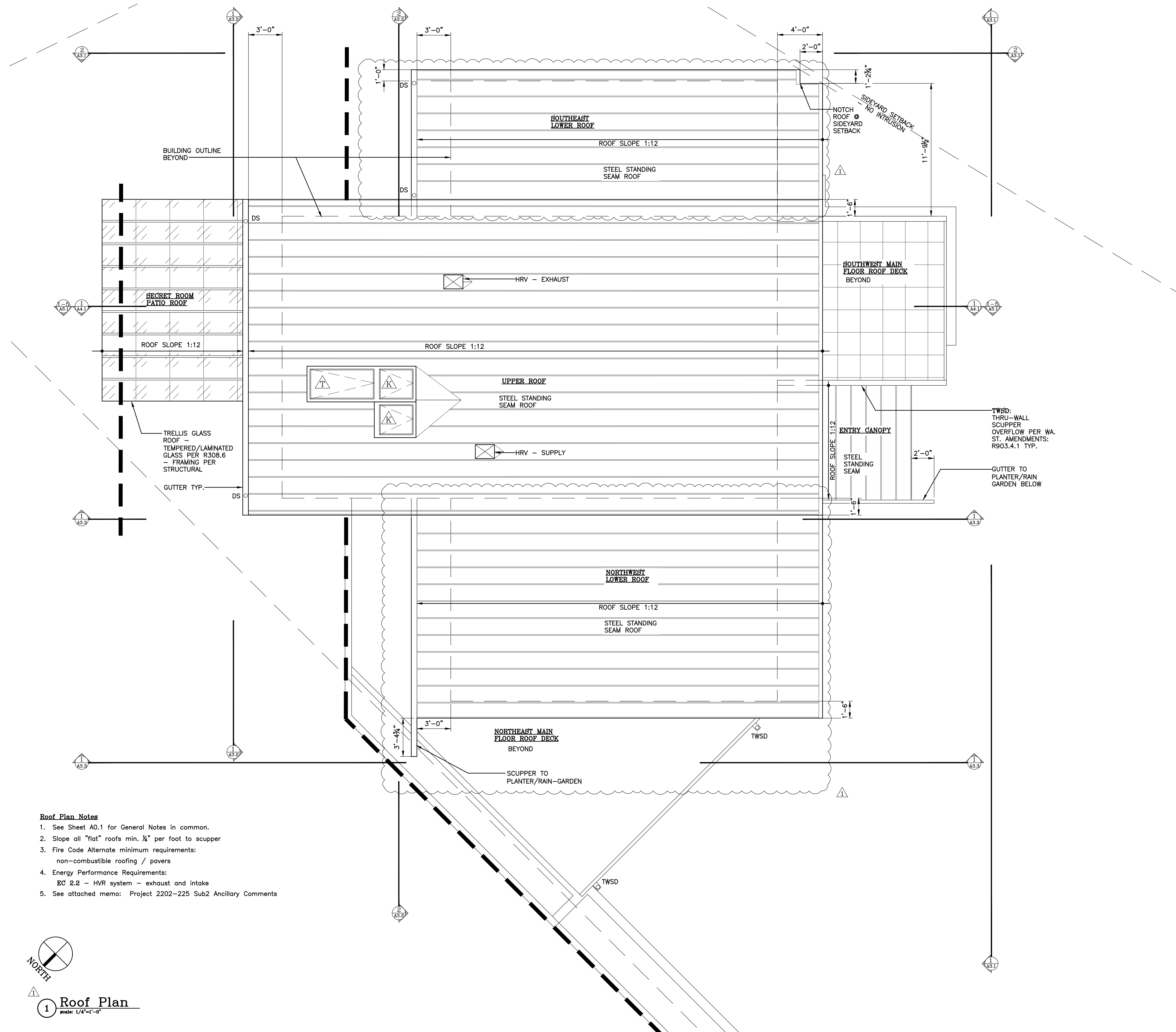


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Scale:
Sheet:
Upper Floor Plan
A2.2

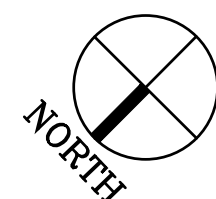
STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040



Roof Plan Notes

1. See Sheet A0.1 for General Notes in common.
2. Slope all "flat" roofs min. 1/4" per foot to scupper
3. Fire Code Alternate minimum requirements:
non-combustible roofing / pavers
4. Energy Performance Requirements:
EC 2.2 - HVR system - exhaust and intake
5. See attached memo: Project 2202-225 Sub2 Ancillary Comments



1 Roof Plan
scale: 1/4"=1'-0"

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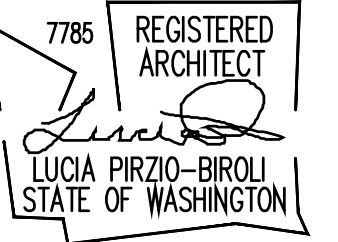
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Roof Plan
A2.3



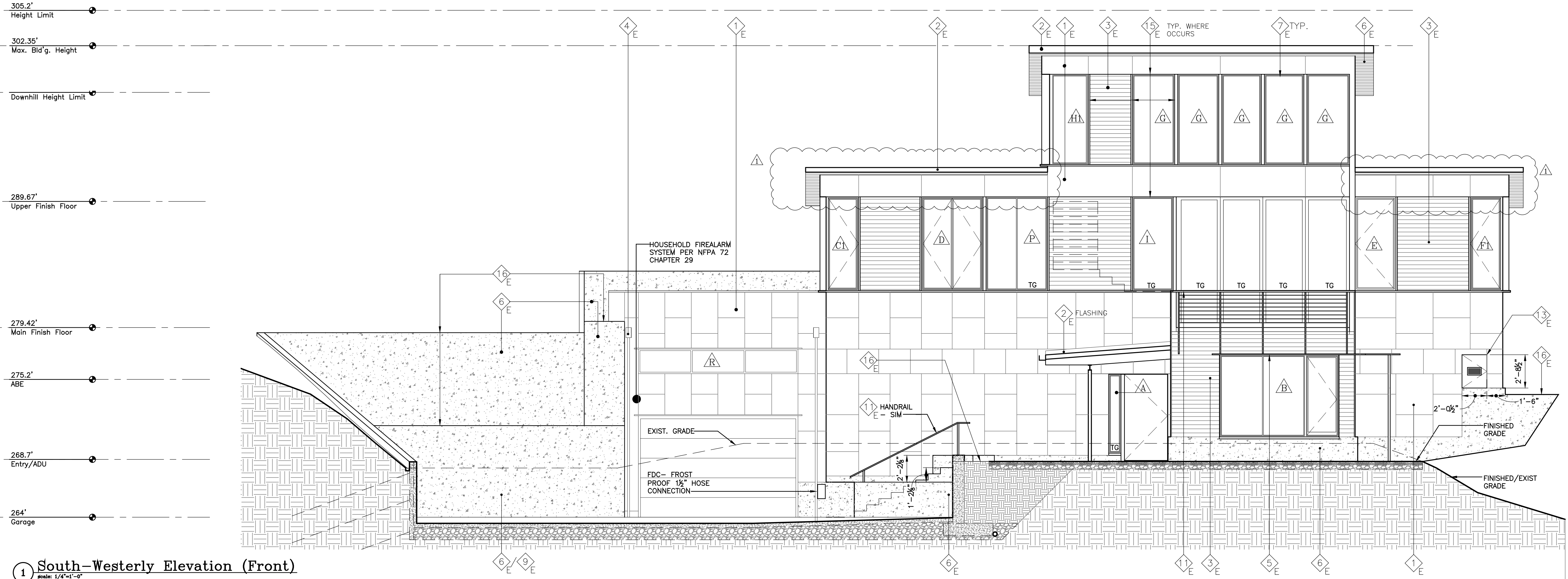
ECTYPOS
ARCHITECTURE

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f. (206) 275-0312

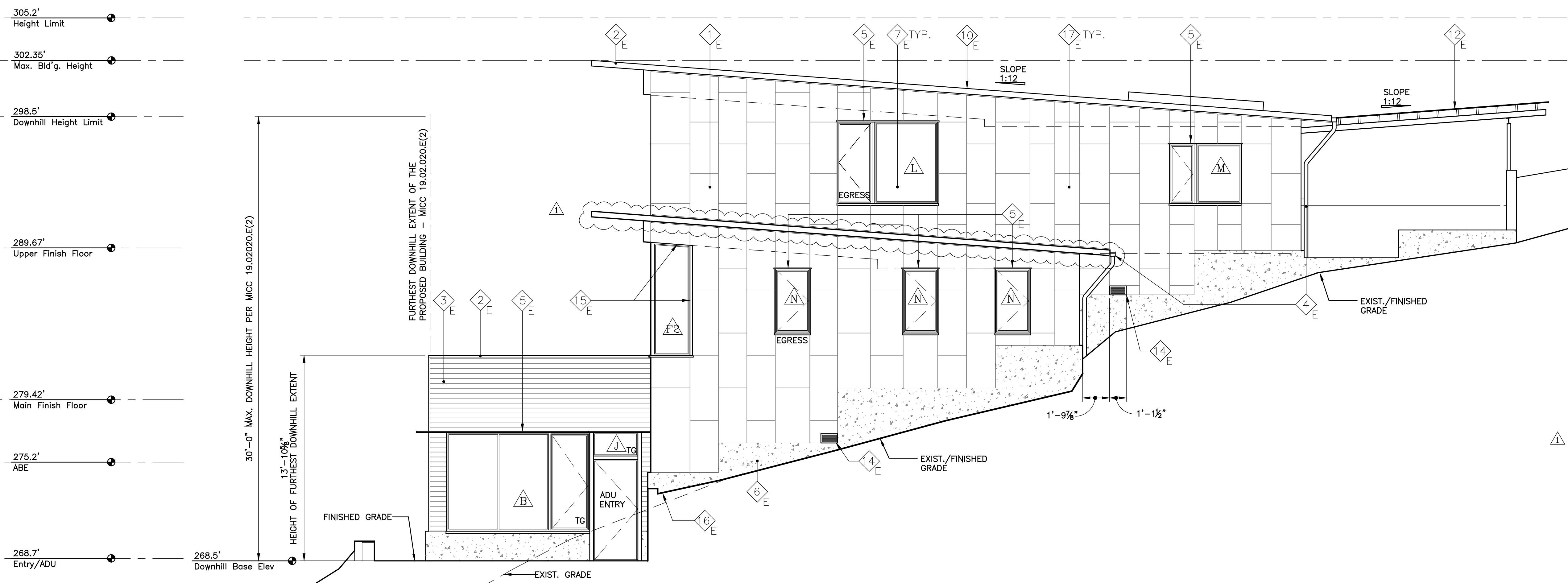


STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040



1 South-Westerly Elevation (Front)
Scale: 1/4"=1'-0"



2 South-Easterly Elevation (Side)
Scale: 1/4"=1'-0"

- EXTERIOR MATERIAL LEGEND:**
Note: See attached memo: Project 2202-225 Sub2 Ancillary Comments
- 1 E EQUITONE FIBER CEMENT PANEL W/ EXPOSED FASTENERS - COLOR TBD
 - 2 E METAL TRIM/COPING/FLASHING/SILL - COLOR TO COMPLEMENT FIBER CEMENT PANEL
 - 3 E HORIZONTAL CLEAR CEDAR SHIPLAP SIDING - STAIN COLOR TBD
 - 4 E METAL GUTTER/OVERFLOW SCUPPER/DOWNSPOUT METAL - COLOR TO MATCH METAL TRIM/GUTTERS ETC.
 - 5 E STEEL EYEBROW - 14 GAUGE - COLOR TO MATCH METAL TRIM/GUTTERS ETC.
 - 6 E CONCRETE STEM WALLS/PLANTERS - ARCHITECTURAL APPEARANCE GRADE WHERE EXPOSED
 - 7 E FIBERGLASS WINDOWS
 - 8 E CLEAR CEDAR T&G SOFFIT - STAIN TBD
 - 9 E ESPALIER GREEN WALL - STEEL WIRE ROPE & HARDWARE
 - 10 E STANDING SEAM METAL ROOF AND RELATED METAL TRIM - COLOR TBD.
 - 11 E STAINLESS STEEL GUARDRAIL WITH WOOD TOP RAIL-FACE MOUNTED. SEE GENERAL NOTE #21 ON A0.1
 - 12 E STEEL/WOOD/GLASS PERGOLA - OVERHEAD GLAZING PER IRC 308.6
 - 13 E 18"x24" ACCESS OPENING W/ CRAWL SPACE VENT NFVA: 62SI PER IRC R408.4/WAC 51-51 R408
 - 14 E CRAWL SPACE VENT NFVA: 62SI - PER WAC 51-51 R408 AT BELOW GRADE VENTS PROVIDE STRUCTURED WELL WITH GRAVEL 6" BELOW VENT & DRAIN TO CONNECTED DRAINAGE SYSTEM.
 - 15 E ELECTRIC ROLLER SHADES W/ LATERAL TRACK "FINS"
 - 16 E DENSELY PLANTED VEGETATION - NO FALL RISK
 - 17 E MEET OR EXCEED EC 1.4 - EFFICIENT BUILDING ENVELOPE

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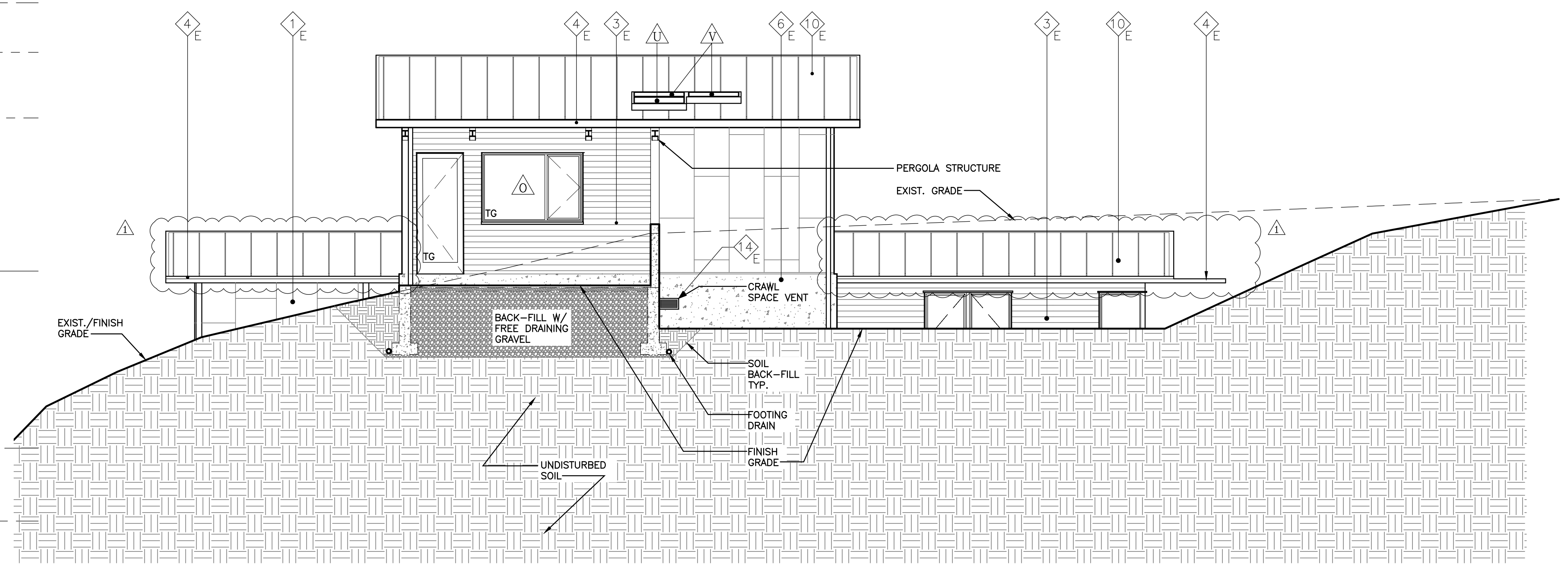
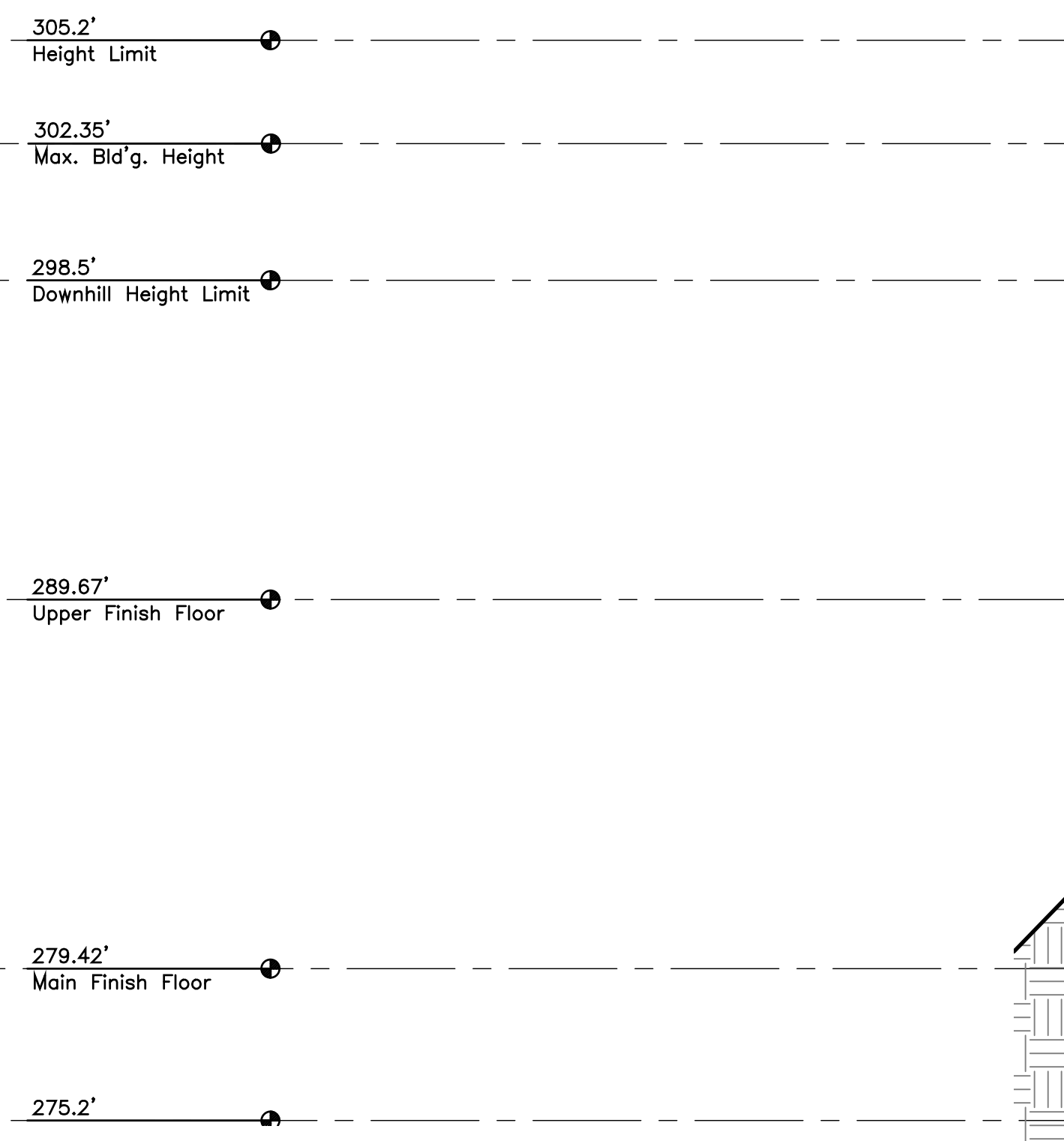
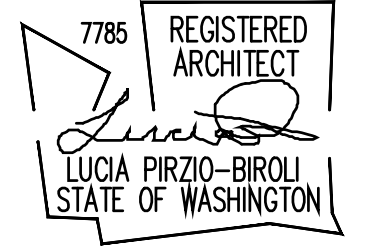
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Elevations
A3.1

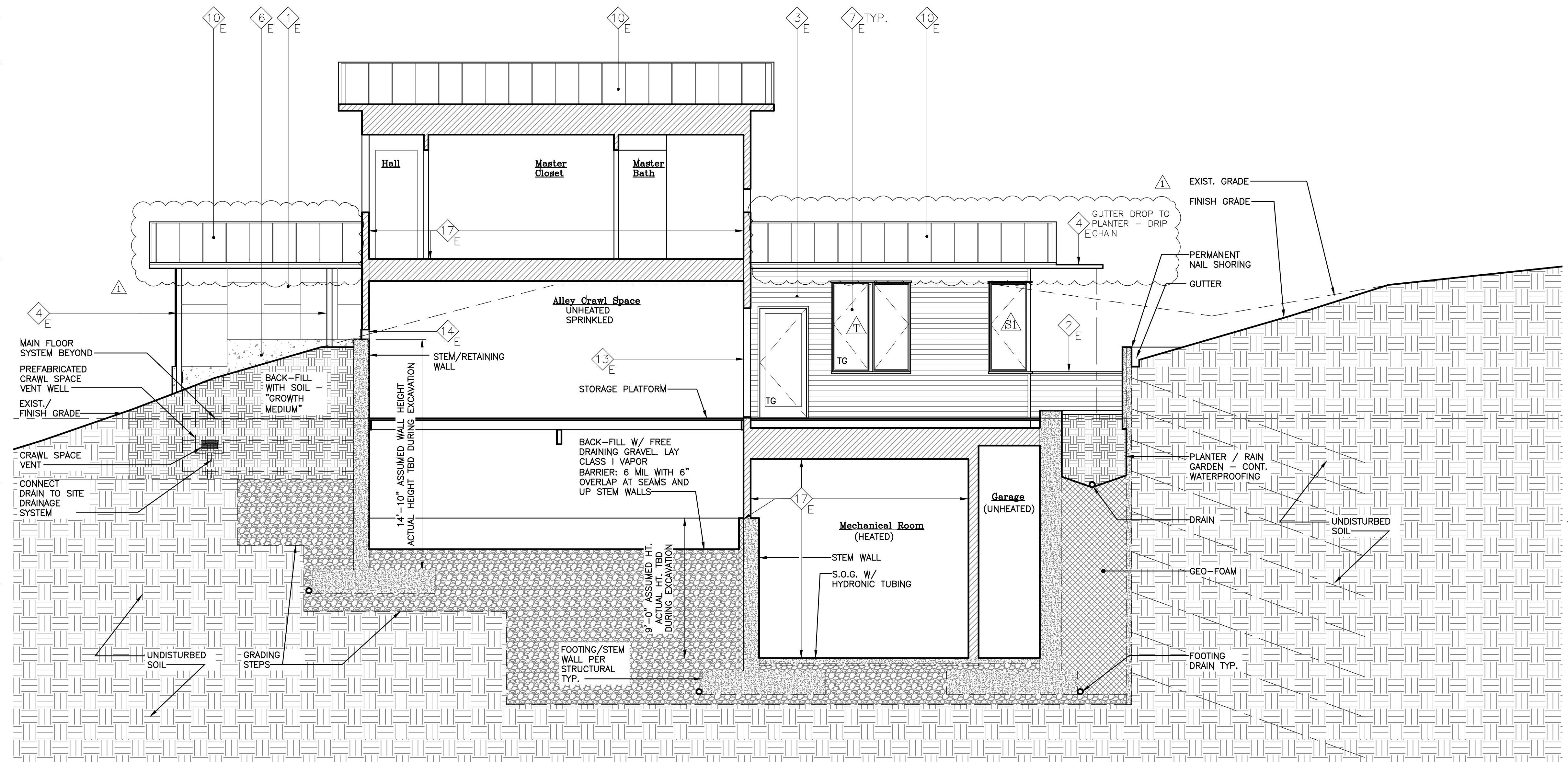
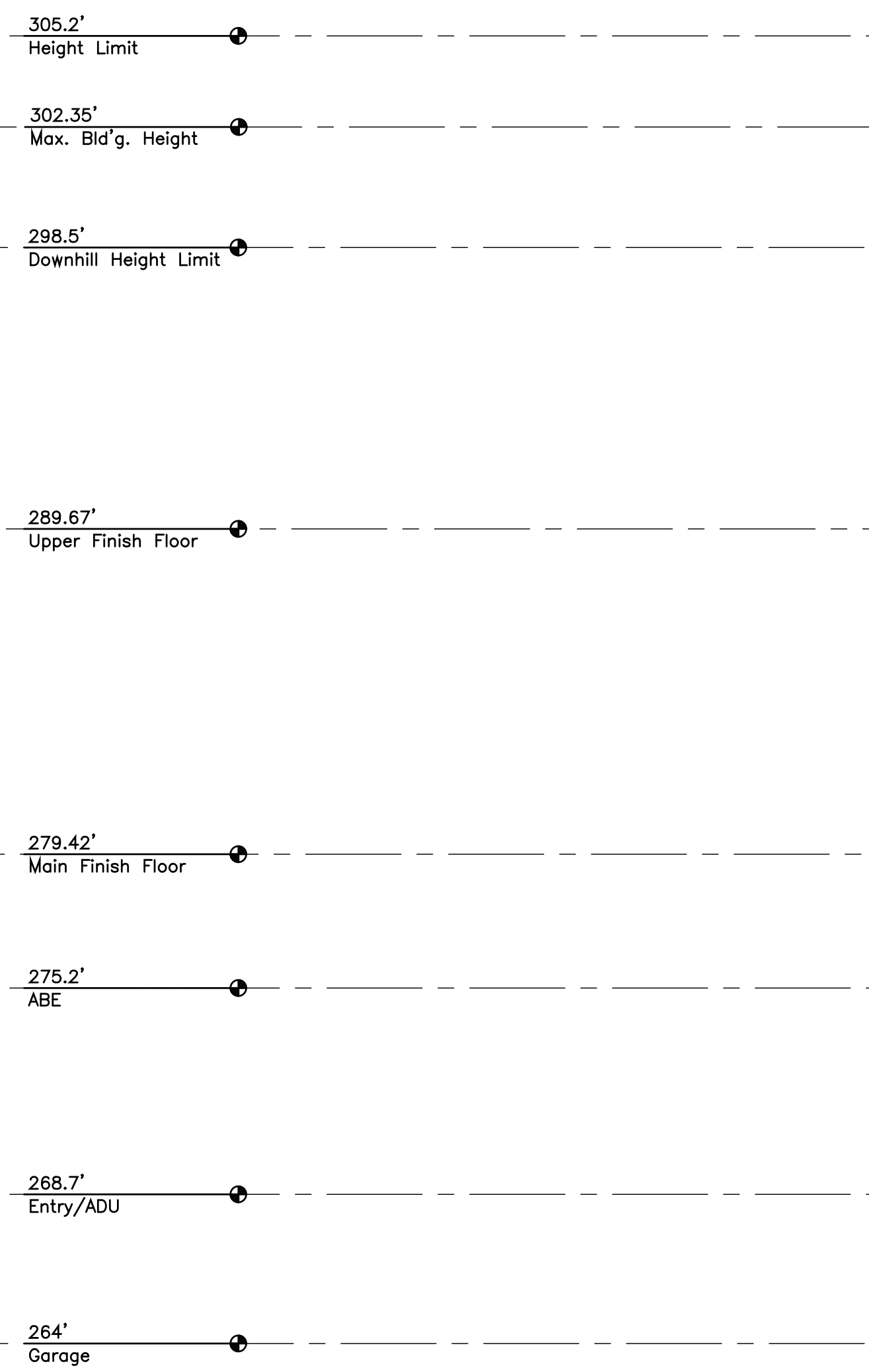


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1 North-Easterly Elevation (Rear)
Scale: 1/4"=1'-0"



2 Building Section / Partial Elevation
Scale: 1/4"=1'-0"

STEINBORN RESIDENCE

New Residence
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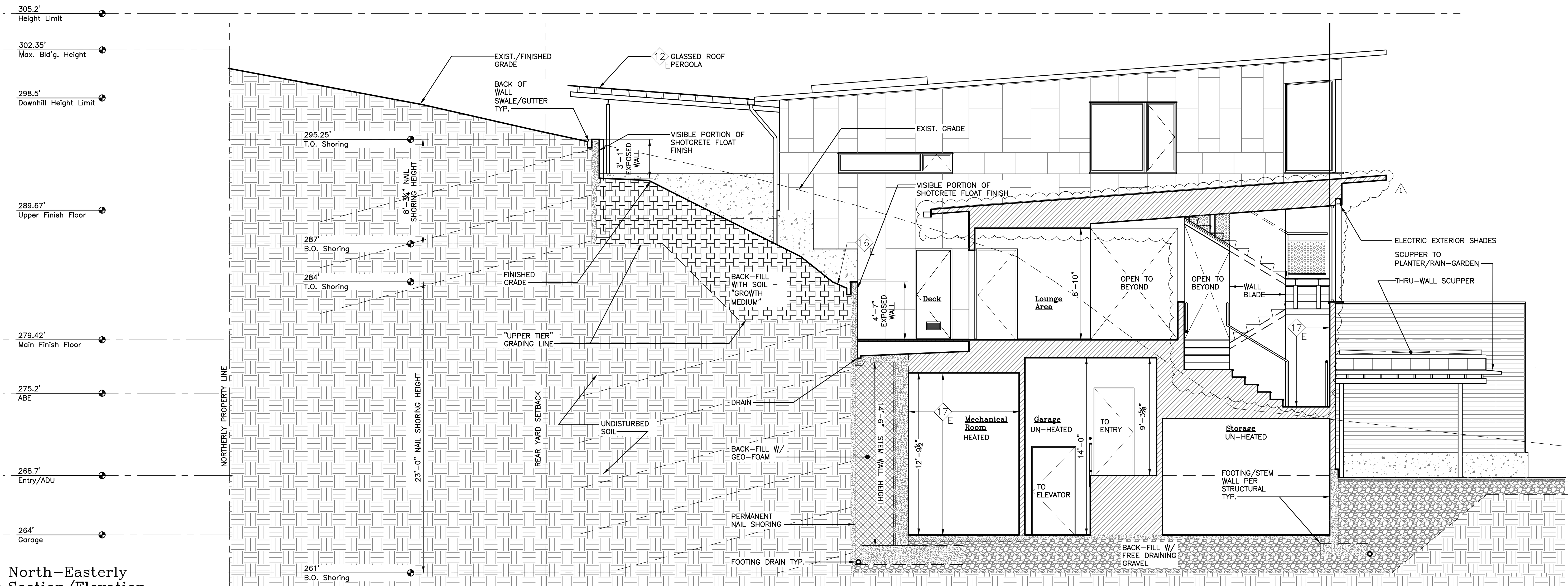
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Elevations/
Sections
A3.2



STEINBORN RESIDENCE

New Residence
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Mercer Island, WA 98040



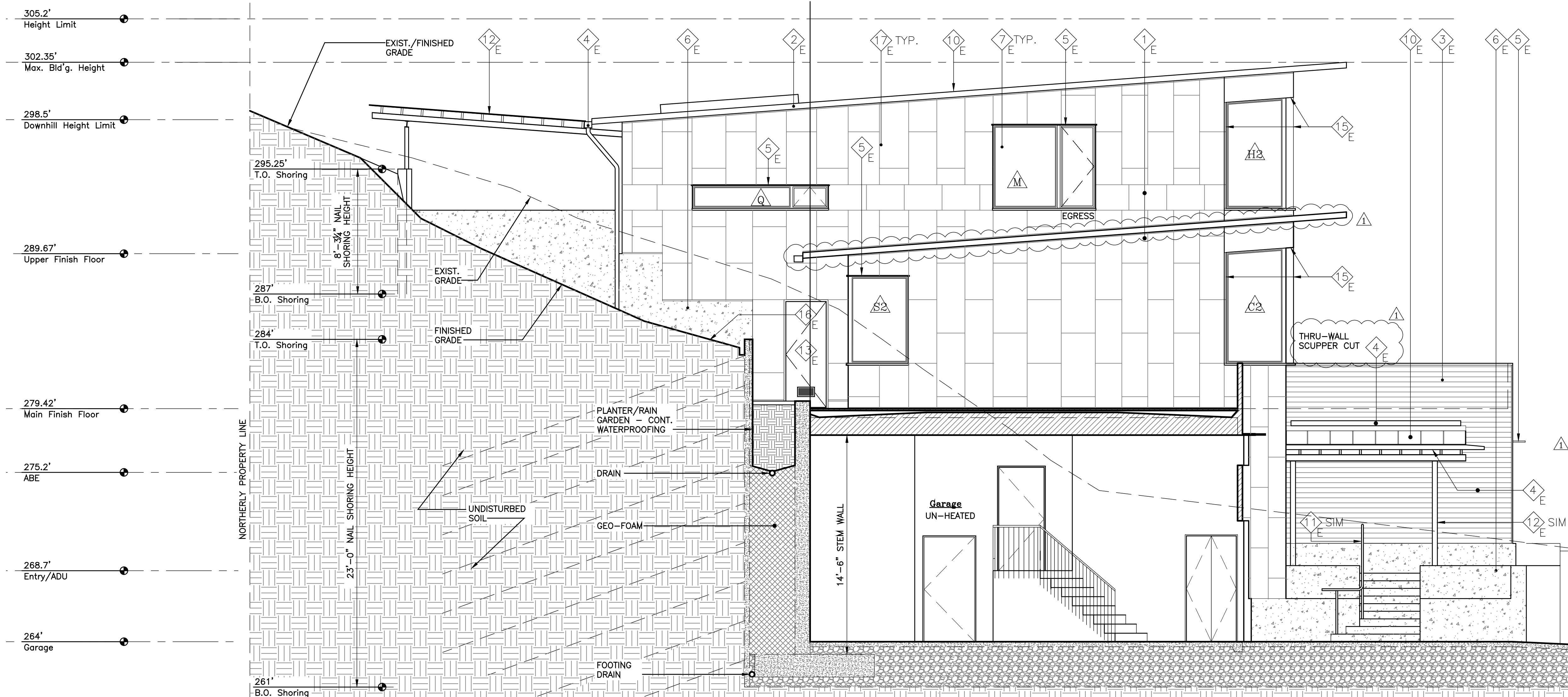
1 North-Easterly Section/Elevation
Scale: 1/4"=1'-0"

EXTERIOR MATERIAL LEGEND:

Notes: See attached memo: Project 2202-225 Sub2 Ancillary Comments

- 1 E EQUITONE FIBER CEMENT PANEL W/ EXPOSED FASTENERS - COLOR TBD
- 2 E METAL TRIM/COPING/FLASHING/SILL - COLOR TO COMPLEMENT FIBER CEMENT PANEL
- 3 E HORIZONTAL CLEAR CEDAR SHIPLAP SIDING - STAIN COLOR TBD
- 4 E METAL GUTTER/OVERFLOW SCUPPER/DOWNSPOUT METAL - COLOR TO MATCH METAL TRIM/GUTTERS ETC.
- 5 E STEEL EYEBROW - 14 GAUGE - COLOR TO MATCH METAL TRIM/GUTTERS ETC.
- 6 E CONCRETE STEM WALLS/PLANTERS - ARCHITECTURAL APPEARANCE GRADE WHERE EXPOSED
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- 10 E STANDING SEAM METAL ROOF AND RELATED METAL TRIM - COLOR TBD.
- 11 E STAINLESS STEEL GUARDRAIL WITH WOOD TOP RAIL - FACE MOUNTED. SEE GENERAL NOTE #21 ON A0.1
- 12 E STEEL/WOOD/GLASS PERGOLA - OVERHEAD GLAZING PER IRC 308.6
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- 14 E CRAWL SPACE VENT NFVA: 62SI - PER WAC 51-51 R408 AT BELOW GRADE VENTS PROVIDE STRUCTURED WELL WITH GRAVEL 6" BELOW VENT & DRAIN TO CONNECTED DRAINAGE SYSTEM.
- 15 E ELECTRIC ROLLER SHADES W/ LATERAL TRACK "FINS"
- 16 E DENSELY PLANTED VEGETATION - NO FALL RISK
- 17 E MEET OR EXCEED EC 1.4 - EFFICIENT BUILDING ENVELOPE

2 North-Easterly Section/Elevation
Scale: 1/4"=1'-0"



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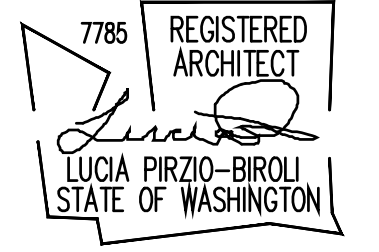
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Elevations/
Sections
A3.3



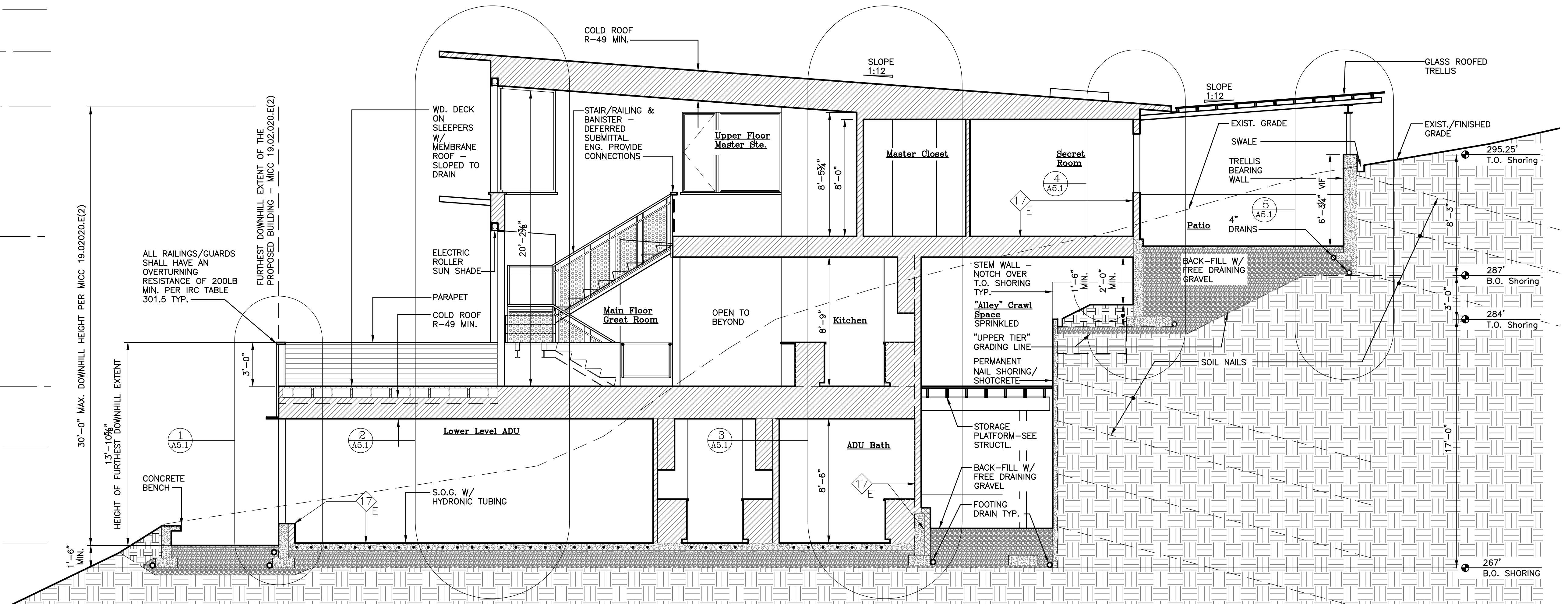
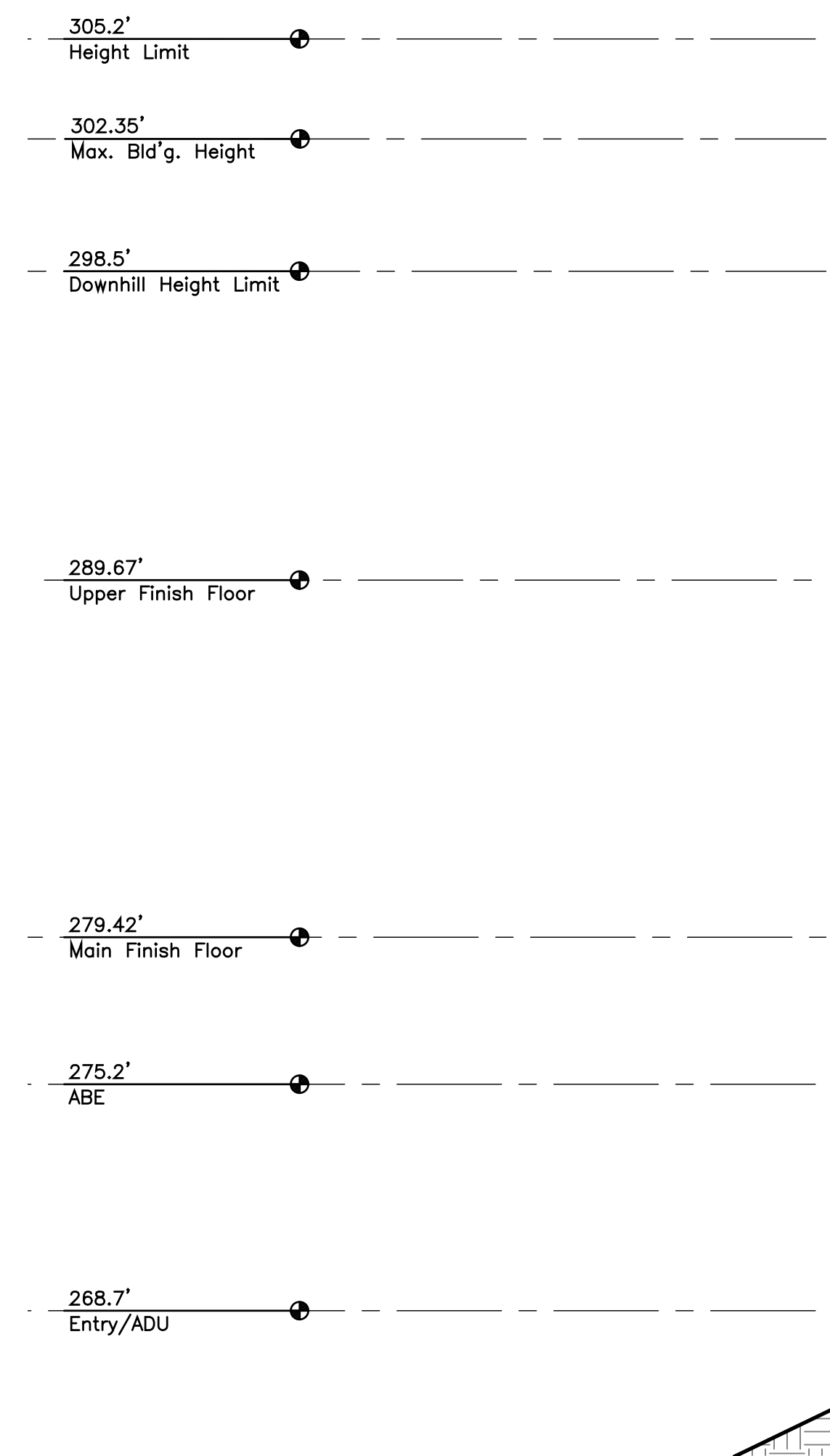
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STEINBORN RESIDENCE

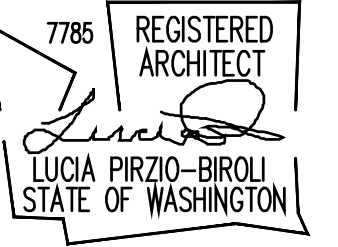
New Residence
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Mercer Island, WA 98040



1 General Building Section
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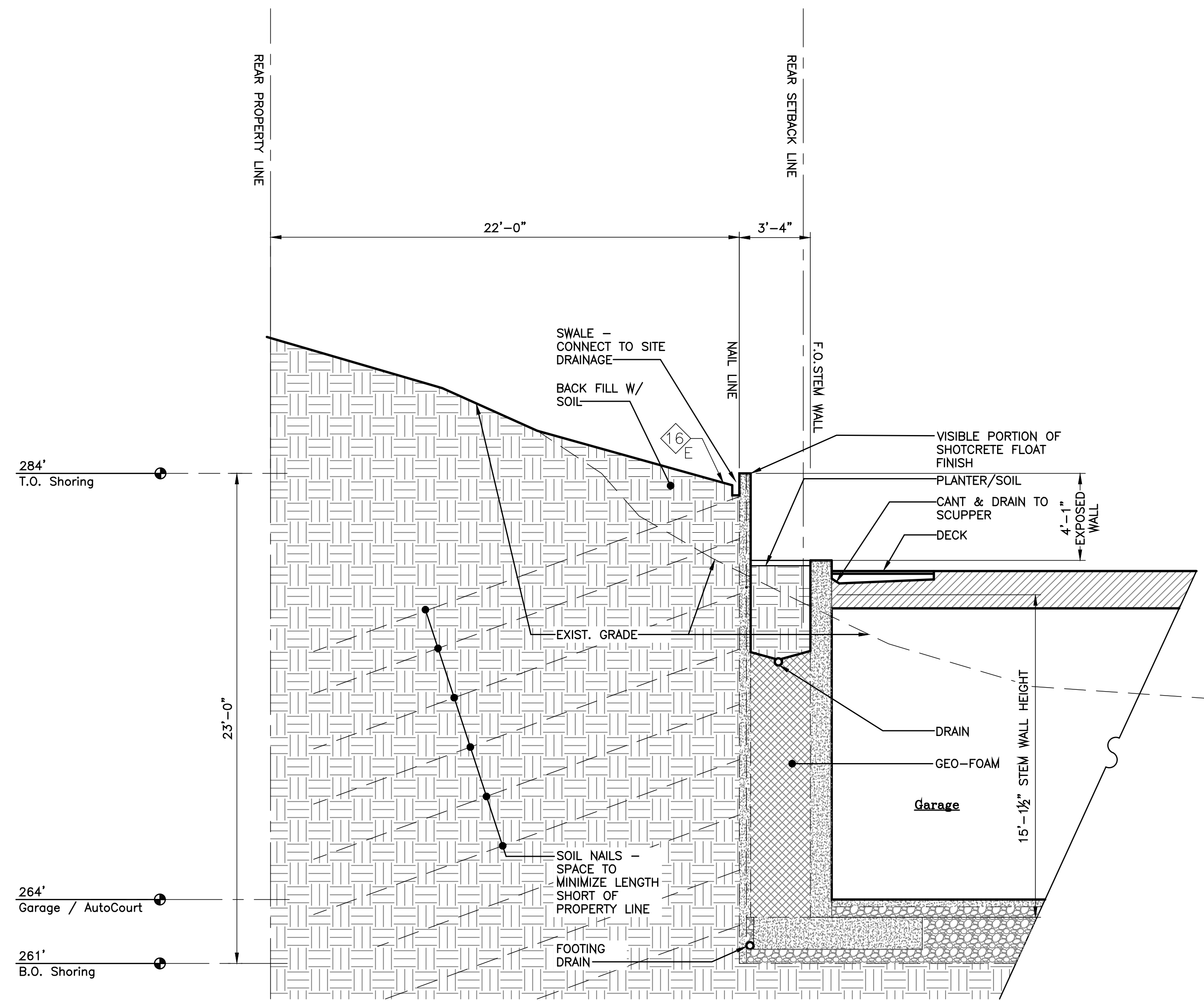
Date: 3/15/2021 Pre-App
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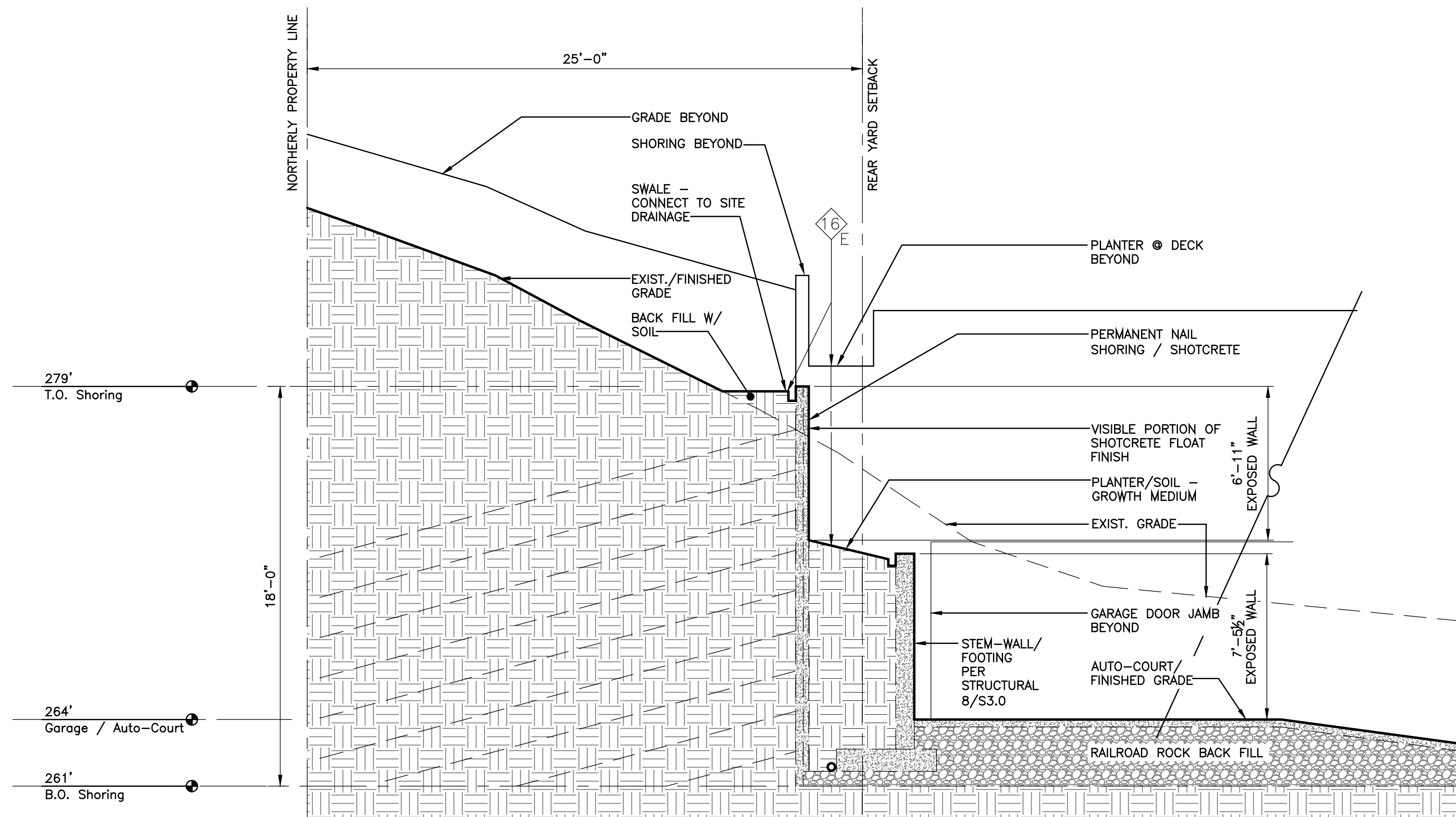


STEINBORN RESIDENCE

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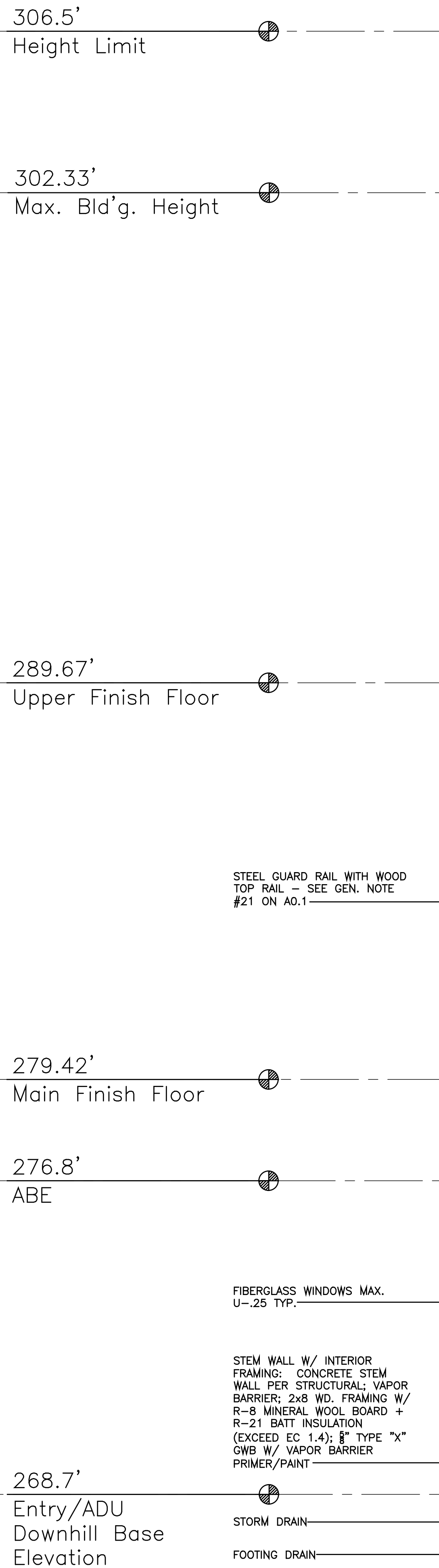
1 General Section @ Shoring/Deck Planter
Scale: 1/4"=1'-0"



2 General Section @ Shoring/Driveway Planter
Scale: 1/4"=1'-0"

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Scale:
Sheet:



EXTERIORLY APPLIED SPRAY FOAM AT ALL STRUCTURAL BAYS

T&G CEDAR SOFFIT

COLD ROOF (R-49 MIN INSULATION); STANDING SEAM METAL ROOFING; UNDERLAYMENT/WATER PROOFING; PLYWD. SHEATHING PER STRUCTURAL FRAMING; 3" CLOSED CELL SPRAY FOAM (R7.2 PER INCH); R-30 BATT INSULATION; FRAMING PER STRUCTURAL; FURRING AS REQUIRED; 5/8" TYPE "X" GWB; VAPOR BARRIER PAINT

CURTAIN WALL- U-20

TYP. RAINDSCREEN WALL @ FIBER CEMENT PANEL (CAVITY WHERE ROLLER SHADES OCCUR); VERTICAL FURNING; R-4 MIN. CI; VB; SHEATHING; 2X WD. FRAMING; R-21 MIN. INSULATION; 5/8" TYPE "X" GWB W/ VAPOR BARRIER PRIMER/PAINT

ELECTRIC ROLLER SHADE

TYP. ROOF DECK: WOOD DECKING ON SLEEPERS; TPO MEMBRANE & UNDERLAYMENT; 3" PLYWD.; RIPPED FRAMING TO SLOPE W/ CLOSED CELL SPRAY FOAM INSULATION; SHT'G PER STRUCTURAL; FRM'G PER STRUCTURAL W/ 3" SPRAY FOAM INSULATION & BATT. INSULATION; 5/8" TYPE "X" GWB W/ VB PAINT/PRIMER

STEEL GUARD RAIL WITH WOOD TOP RAIL - SEE GEN. NOTE #21 ON A0.1

FIBERGLASS WINDOWS MAX. U--25 TYP.

STEM WALL W/ INTERIOR FRAMING: CONCRETE STEM WALL PER STRUCTURAL; VAPOR BARRIER; 2x8 WD. FRAMING W/ R-8 MINERAL WOOL BOARD + R-21 BATT INSULATION (EXCEED EC 1.4); 5/8" TYPE "X" GWB W/ VAPOR BARRIER PRIMER/PAINT

STORM DRAIN

FOOTING DRAIN

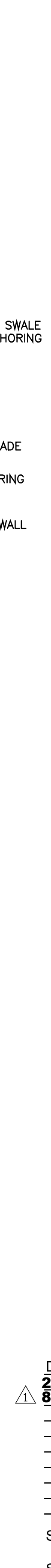
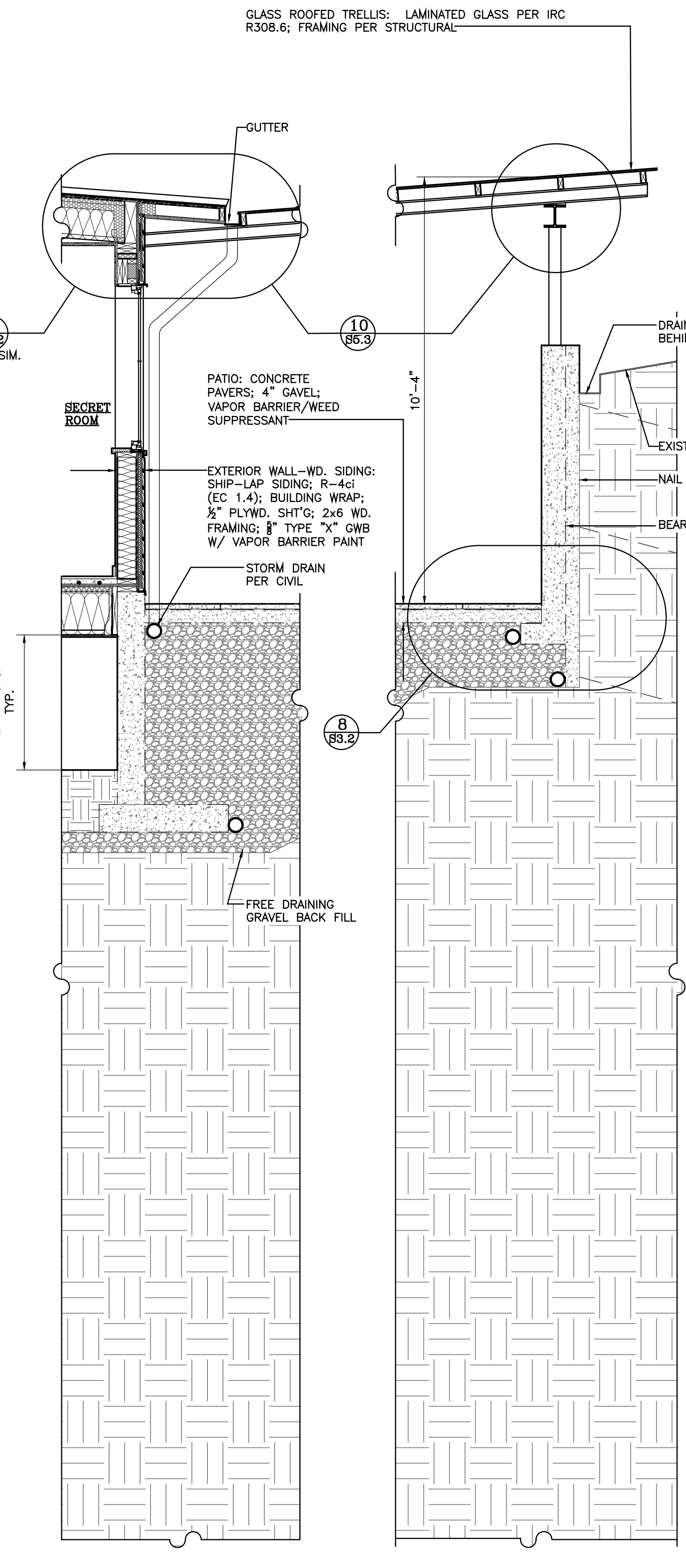
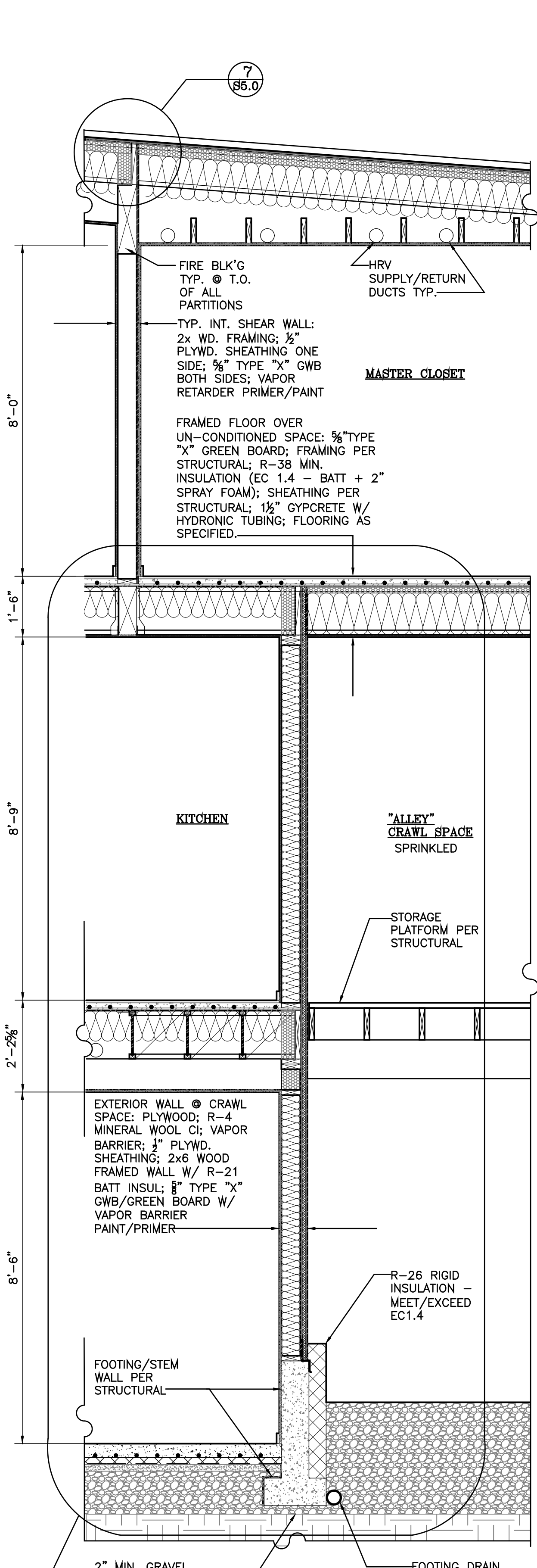
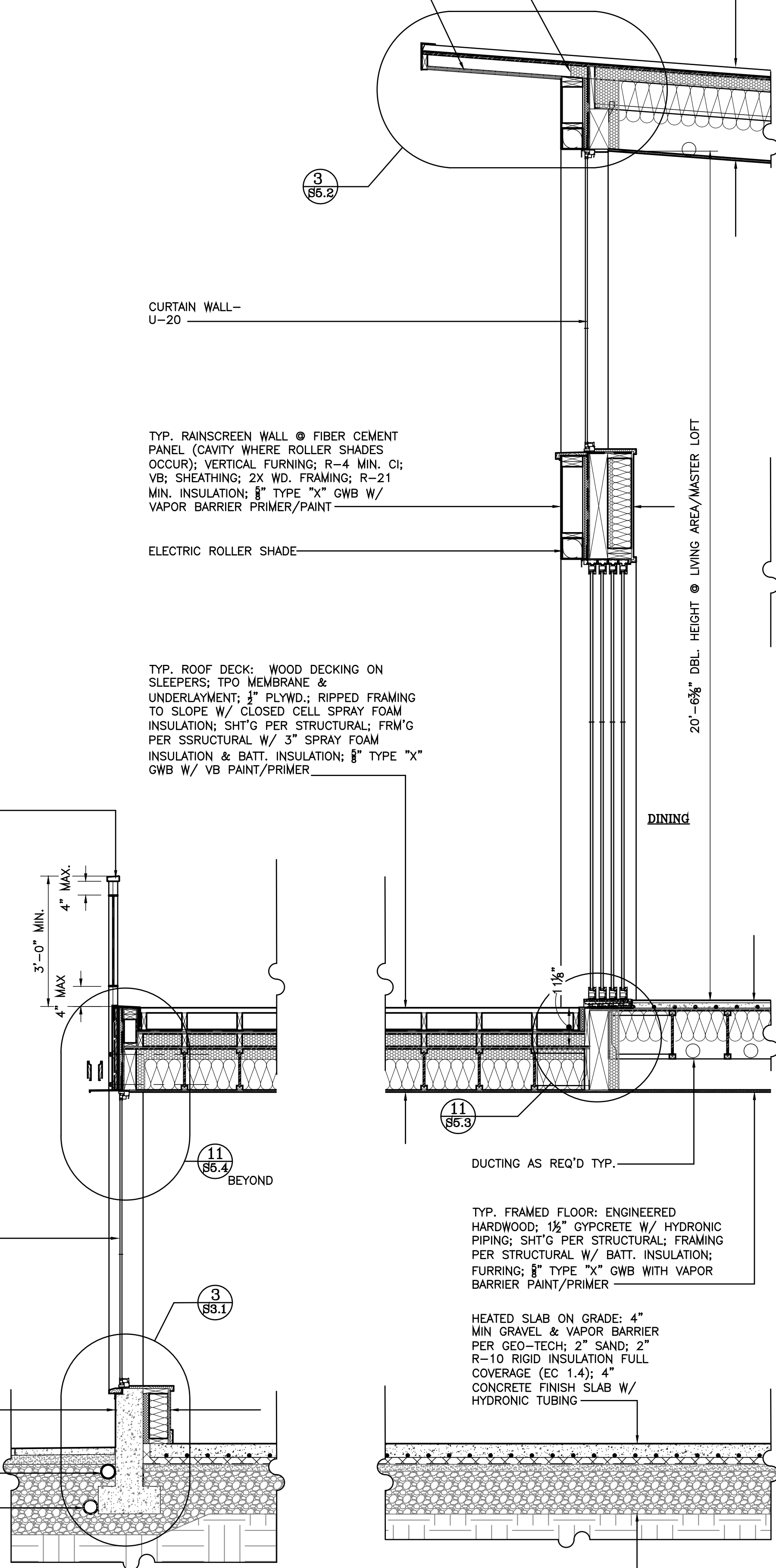
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2 Wall Section
scale: 1/8"=1'-0"

3 Wall Section
scale: 1/8"=1'-0"

4 Wall Section
scale: 1/8"=1'-0"

5 Wall Section
scale: 1/8"=1'-0"



Wall Section
A5.1

STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

Date: 3/15/2021 Pre-App
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225

Scale:
Sheet:

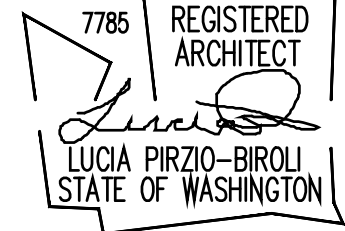


Window Schedule

TAG	WINDOW R.O.		UNIT AREA	QTY.	TOTAL	MAX U-VALUE NOTE 6	UA VALUE	HEAD HEIGHT (AFF)	TYPE OPERATION	SCREEN	TYPE	FRAME / FINISH	GLASS	MANUF.	NOTES
	Notes 1, 2 & 9												square ft.		
	width	height													
A	1'-0"	x 6'-4"	6.3 SQ. FT.	1	6.3 SQ. FT.	0.25	1.6 SQ. FT.	7'-0"	FIX			FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON/LAM	MARVIN	COORDINATE W/ ADJ. DOOR & CONCRETE
B	9'-8"	x 6'-8"	64.4 SQ. FT.	2	128.9 SQ. FT.	0.25	32.2 SQ. FT.	8'-6"	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	SEE ELEVATIONS/COORD. RAILING STANCHIONS
C1	2'-6"	x 7'-7 1/2"	19.1 SQ. FT.	1	19.1 SQ. FT.	0.25	4.8 SQ. FT.	10'-7 1/2"	CASE	X	CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ "C2"
C2	3'-10"	x VARIES	29.6 SQ. FT.	1	29.6 SQ. FT.	0.25	7.4 SQ. FT.	FOLLOW ROOF	FIX		CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ "C1"
D	5'-0"	x 7'-7 1/2"	38.1 SQ. FT.	1	38.1 SQ. FT.	0.25	9.5 SQ. FT.	10'-7 1/2"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	
E	2'-6"	x 7'-7 1/2"	19.1 SQ. FT.	1	19.1 SQ. FT.	0.25	4.8 SQ. FT.	10'-7 1/2"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	EGRESS
F1	2'-6"	x 7'-7 1/2"	19.1 SQ. FT.	1	19.1 SQ. FT.	0.25	4.8 SQ. FT.	10'-7 1/2"	CASE	X	CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE W/ "F2"
F2	3'-10"	x VARIES	29.6 SQ. FT.	1	29.6 SQ. FT.	0.25	7.4 SQ. FT.	FOLLOW ROOF	FIX		CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE W/ "F1"
G	3'-4"	x 7'-4"	24.4 SQ. FT.	5	122.2 SQ. FT.	0.25	30.6 SQ. FT.	10'-4"	FIX			FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE WITH DOOR PANELS BELOW
H1	3'-8"	x 7'-4"	26.9 SQ. FT.	1	26.9 SQ. FT.	0.25	6.7 SQ. FT.	10'-4"	FIX		CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE W/ "H2"
H2	3'-10"	x VARIES	28.3 SQ. FT.	1	28.3 SQ. FT.	0.25	7.1 SQ. FT.	FOLLOW ROOF	FIX		CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE W/ "H1"
I	3'-4"	x 7'-7 1/2"	25.4 SQ. FT.	1	25.4 SQ. FT.	0.25	6.4 SQ. FT.	10'-7 1/2"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE W/ OVERHEAD DOOR
J	5'-0"	x 7'-7 1/2"	38.1 SQ. FT.	1	38.1 SQ. FT.	0.25	9.5 SQ. FT.	10'-7 1/2"	CASE	X				MARVIN	
K	3'-0"	x 1'-6"	4.5 SQ. FT.	3	13.5 SQ. FT.	0.25	3.4 SQ. FT.		FIX		TRANSOM	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE W/ DOOR
L	6'-9"	x 5'-6"	37.1 SQ. FT.	1	37.1 SQ. FT.	0.25	9.3 SQ. FT.	8'-6"	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	EGRESS/ALIGN SILL W/ "K" / MIRROR "M"
M	6'-9"	x 5'-6"	37.1 SQ. FT.	1	37.1 SQ. FT.	0.25	9.3 SQ. FT.	8'-6"	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	EGRESS/MIRROR "L"
N	2'-4"	x 4'-4"	10.1 SQ. FT.	3	30.3 SQ. FT.	0.25	7.6 SQ. FT.	8'-10"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	EGRESS AS SHOWN ON 2/A3.1
O	4'-10"	x 4'-0"	19.3 SQ. FT.	1	19.3 SQ. FT.	0.25	4.8 SQ. FT.	7'-0"	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	
P	5'-10"	x 4'-0"	23.3 SQ. FT.	1	23.3 SQ. FT.	0.25	5.8 SQ. FT.	7'-0"	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	
Q	8'-11 1/2"	x 1'-6"	13.4 SQ. FT.	1	13.4 SQ. FT.	0.25	3.4 SQ. FT.	4'-6" VIF	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	VERIFY SILL W/ ADJACENT TUB HEIGHT
R	2'-0"	x 13'-4"	26.7 SQ. FT.	1	26.7 SQ. FT.	0.25	6.7 SQ. FT.	13'-8" VIF	FIX			FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ GARAGE DOOR AND TRACKS
S1	2'-6"	x 5'-9"	14.4 SQ. FT.	1	14.4 SQ. FT.	0.25	3.6 SQ. FT.	8'-9"	CASE	X	CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	ALIGN WITH "C1" OPPOSITE / COORD. W/ "S2"
S2	3'-10"	x 5'-9"	22.0 SQ. FT.	1	22.0 SQ. FT.	0.25	5.5 SQ. FT.	8'-9"	FIX		CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ "S1"
T	5'-0"	x 5'-9"	28.8 SQ. FT.	1	28.8 SQ. FT.	0.25	7.2 SQ. FT.	8'-9"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	ALIGN W/ "D" OPPOSITE
U	2'-10 5/8"	x 4'-2 5/8"	12.2 SQ. FT.	1	12.2 SQ. FT.	0.48	5.8 SQ. FT.	NA	"FRESH AIR"	X	SKYLIGHT	FIBERGLASS/BLACK	LO-E366/TG/LAM	VELUX	ELECTRIC/SHADE
V	2'-10 5/8"	x 2'-10 5/8"	8.3 SQ. FT.	2	16.7 SQ. FT.	0.48	8.0 SQ. FT.	NA	"FRESH AIR"	X	SKYLIGHT	FIBERGLASS/BLACK	LO-E366/TG/LAM	VELUX	ELECTRIC/SHADE
WINDOW UA:			WINDOW AREA		825.5 SQ. FT.	TOTAL UA	213.0 SQ. FT.								

ECTYPOS
ARCHITECTURE

4212 W. Mercer Way
Mercer Island, WA 98040
t. (206) 232-9147
f. (206) 275-0312



STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

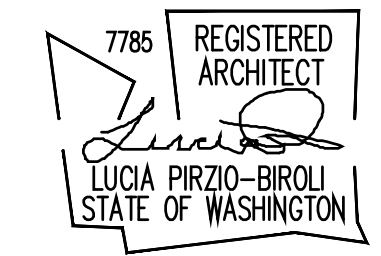
- WINDOW NOTES:**
- CONTRACTOR SHALL MEASURE ACTUAL FRAMED OPENINGS PRIOR TO ORDERING UNITS. ROUGH OPENING PER MANUFACTURER'S REQUIREMENTS.
 - WINDOW MANUFACTURER: MARVIN EXCEPT AS NOTED OTHERWISE
 - WINDOW MANUFACTURER TO VERIFY OPERATION AND WIDTH OPENING - COORDINATE WITH ARCHITECT WHERE DIFFERS FROM DRAWINGS
 - TEMPERED GLASS: WITHIN TWO FEET OF ALL EXTERIOR DOORS, WITHIN 18" OF FLOOR, IN SHOWERS AND OTHER HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC R308.4. SEE ELEVATIONS FOR TEMPERED LIGHTS.
 - EGRESS WINDOWS AT SLEEPING ROOMS SHALL MEET IRC R310
 - EC 1.4: EFFICIENT BUILDING ENVELOPE ALL NEW EXTERIOR WINDOWS SHALL MEET MINIMUM U-25 MINIMUM COMPLIANCE.
 - OBSCURED GLASS AS NOTED.
 - SCREENS ON ALL OPERABLE WINDOWS. CONNECT SCREENS TO SECURITY SYSTEM.
 - ALL OPERABLE WINDOWS CONNECTED TO WHOLE-HOUSE SECURITY SYSTEM

- ABBREVIATIONS**
- AWN AWNING
 - CASE CASEMENT
 - CLR CLEAR
 - DBL DOUBLE GLAZING
 - FIX FIXED
 - HC HOLLOW CORE
 - LAM LAMINATED
 - LO-E LOW-EMISSIVITY
 - MIN MINUTE
 - OBS OBSCURE
 - R.O. ROUGH OPENING
 - SC SOLID CORE
 - SLD SLIDING
 - SL SKYLIGHT
 - STORE STOREFRONT
 - TBD TO BE DETERMINED
 - TG TEMPERED GLASS
 - UA U-VALUE AREA
 - WD WOOD

Date: 3/15/2021 Pre-App
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225

Scale:
Sheet:

Window
Schedule
A9.1



Exterior Door to Conditioned Space

TAG	PANEL SIZE		UNIT AREA square ft.	PANEL QTY.	TOTAL door area	MAX U-VALUE	UA VALUE	Thickness	Location	TYPE	HARDWARE NOTE 3	MATERIAL/FINISH	FRAME/FINISH	GLASS	MANUF.	COLOR	NOTES
	width	height															
1	3'-6"	x 7'-0"	24.5 SQ. FT.	1	24.5 SQ. FT.	.46	11.3 SQ. FT.	0'-1 3/4"	ENTRY	SC/INSULATED/SLAB	DEADBOLT/TBD	WD/TBD	WD./TBD	NA	CUSTOM	TBD	COORD W/ SIDELIGHT WINDOW "A"
2	3'-0"	x 7'-0"	21.0 SQ. FT.	1	21.0 SQ. FT.	.46	9.7 SQ. FT.	0'-1 3/4"	ADU ENTRY	SC/FLUSH/INSULATED	DEADBOLT/LEVER	WD/STAIN	WD./STAIN	NA	TBD	TBD	COORD. W/ TRANSOM "K"
3	2'-4"	x 7'-0"	16.3 SQ. FT.	2	32.7 SQ. FT.	.46	15.0 SQ. FT.	0'-1 3/4"	GARAGE/MECH.	SC/FLUSH/INSULATED	SELF-CLOSING/LEVER	WD/STAIN	WD./STAIN	NA	TBD	MATCH INT. DOORS	20 MINUTE
4	3'-0"	x 7'-0"	21.0 SQ. FT.	1	21.0 SQ. FT.	.46	9.7 SQ. FT.	0'-1 3/4"	GARAGE/ENTRY	SC/FLUSH/INSULATED	SELF-CLOSING/LEVER	WD./STAIN	WD./STAIN	NA	TBD	MATCH INT. DOORS	20 MINUTE
5	3'-6"	x 10'-7"	37.0 SQ. FT.	4	148.2 SQ. FT.	.25	37.0 SQ. FT.	0'-1 3/4"	MAIN DINING/DECK 1	STORE/MULTI-SLIDE	TRACK/3 PT. LOCK	FIBERGLASS/MATCH WINDOWS	FIBERGLASS/FACTORY	LO-E3/LO-ERS/ARGON/TG	MARVIN	BLACK	NOTE 4
6	3'-0"	x 7'-0"	21.0 SQ. FT.	1	21.0 SQ. FT.	.25	5.3 SQ. FT.	0'-1 3/4"	MAIN LOUNGE/DECK 2	STORE/INSULATED	DEADBOLT/LEVER	FIBERGLASS/MATCH WINDOWS	FIBERGLASS/FACTORY	LO-E3/LO-ERS/ARGON/TG	MARVIN	BLACK	
7	2'-8"	x 7'-0"	18.7 SQ. FT.	1	18.7 SQ. FT.	.25	4.7 SQ. FT.	0'-1 3/4"	SECRET ROOM/PATIO	STORE/INSULATED	DEADBOLT/LEVER	FIBERGLASS/MATCH WINDOWS	FIBERGLASS/FACTORY	LO-E3/LO-ERS/ARGON/TG	MARVIN	BLACK	
31	3'-0"	x 7'-0"	21.0 SQ. FT.	1	21.0 SQ. FT.	.46	9.7 SQ. FT.	0'-1 3/4"	ELEVATOR/MASTER STE	SC/FLUSH/INSULATED	SELF-CLOSING/LEVER	WD./STAIN	WD./STAIN	NA	TBD	MATCH INT. DOORS	20 MINUTE
32	3'-0"	x 7'-0"	21.0 SQ. FT.	1	21.0 SQ. FT.	.46	9.7 SQ. FT.	0'-1 3/4"	ELEVATOR/MAIN FLOOR	SC/FLUSH/INSULATED	SELF-CLOSING/LEVER	WD./STAIN	WD./STAIN	NA	TBD	MATCH INT. DOORS	20 MINUTE
33	3'-0"	x 7'-0"	21.0 SQ. FT.	1	21.0 SQ. FT.	.46	9.7 SQ. FT.	0'-1 3/4"	ELEVATOR/ENTRY	SC/FLUSH/INSULATED	SELF-CLOSING/LEVER	WD./STAIN	WD./STAIN	NA	TBD	MATCH INT. DOORS	20 MINUTE
34	3'-0"	x 7'-0"	21.0 SQ. FT.	1	21.0 SQ. FT.	.46	9.7 SQ. FT.	0'-1 3/4"	ELEVATOR/GARAGE	SC/FLUSH/INSULATED	SELF-CLOSING/LEVER	WD./STAIN	WD./STAIN	NA	TBD	MATCH INT. DOORS	20 MINUTE
AREA DOORS IMPACTING UA:			EXT. DOOR AREA	268.3 SQ. FT.	TOTAL UA	87.9 SQ. FT.											

ELEVATOR DOORS
NOTE 13

EXTERIOR DOOR NOTES:

- CONTRACTOR SHALL MEASURE ACTUAL FRAMED OPENINGS PRIOR TO ORDERING UNITS. ROUGH OPENING PER MANUFACTURER'S REQUIREMENTS.
- UNIT BREAK DOWN W/ IN ROUGH OPENING
- (3) MINIMUM HEAVY DUTY CONCEALED HINGES MIN. AT ALL EXTERIOR SWING DOORS
- 3 POINT LOCKING SYSTEM MINIMUM
- MANUFACTURER: MARVIN EXCEPT AS NOTED OTHERWISE
- MANUFACTURER TO VERIFY OPERATION AND WIDTH OPENING - COORDINATE WITH ARCHITECT WHERE DIFFERS FROM DRAWINGS
- TEMPERED GLASS: WITHIN TWO FEET OF ALL EXTERIOR DOORS, WITHIN 18" OF FLOOR, IN SHOWERS AND OTHER HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC R308.4
- GLASS - LO-E3/LOW ERS/ARGON FILLED AT ALL WINDOWS AND STOREFRONT DOORS
- EGRESS WINDOWS AT SLEEPING ROOMS SHALL MEET IRC R310. NOTED ON ELEVATIONS
- EC 1.4: EFFICIENT BUILDING ENVELOPE ALL NEW EXTERIOR WINDOWS AND GLAZED DOORS SHALL MEET MINIMUM U-25 MINIMUM COMPLIANCE.
- OBSCURED GLASS AS NOTED.
- SCREENS ON ALL OPERABLE WINDOWS, SLIDING GLASS DOORS AND SWING DOORS AS NOTED.
- ALL EXTERIOR DOORS AND SCREENS CONNECTED TO WHOLEHOUSE SECURITY SYSTEM.
- ELEVATOR DOORS: 20 MINUTE WITH SELF-CLOSING HARDWARE

ABBREVIATIONS

- AWN AWNING
- CASE CASEMENT
- CLR CLEAR
- DBL DOUBLE GLAZING
- FIX FIXED
- HC HOLLOW CORE
- LAM LAMINATED
- LO-E LOW-EMISSIVITY
- MIN MINUTE
- OBS OBSOLETE
- R.C. ROLLER CATCH
- R.O. ROUGH OPENING
- SC SOLID CORE
- SLD SLIDING
- SL SKYLIGHT
- STORE STOREFRONT
- TBD TO BE DETERMINED
- TG TEMPERED GLASS
- TRPL TRIPLE
- UA U-VALUE AREA
- WD WOOD

Interior Door Schedule & Doors From Un-conditioned Space to Exterior

TAG	PANEL SIZE (NOTE #4)		PANEL QTY.	UNIT AREA square ft.	Thickness	TYPE	LOCATION	MATERIAL/ FINISH	GLASS	HARDWARE NOTES 2&3	MANUF.	NOTES
	width	height										
10	2'-6"	x 7'-0"	1	17.5 SQ. FT.	0'-1 3/8"	HC/SLAB	ENTRY HALL/STORAGE	WOOD/TBD	NA	PULL/RC	TBD.	NOTE 4
11	3'-0"	x 7'-0"	1	21.0 SQ. FT.	0'-1 3/8"	SC/SLAB	ENTRY HALL/ADU	WOOD/TBD	NA	SELF-CLOSING/LEVER/DEADBOLT	TBD	20 MIN. DOOR/PROVIDE SEPARATE LOCKS BOTH SIDES
12	2'-4"	x 7'-0"	1	16.3 SQ. FT.	0'-1 3/8"	SC/SLAB	ADU/BATH	WOOD/TBD	NA	LEVER/PRIVACY	TBD	NOTE 4
13	2'-4"	x 7'-0"	2	16.3 SQ. FT.	0'-1 3/8"	HC/SLAB	ENTRY COATS	WOOD/TBD	N/A	PULLS/RC	TBD	NOTE 4
14	18'-0"	x 8'-0"	1	144.0 SQ. FT.	0'-1 3/4"	SECTIONAL	GARAGE	WD. FACED/STAIN	N/A	MOTORIZED TRACK	TBD	MATCH CEDAR SIDING FINISH
16	3'-0"	x 7'-0"	1	21.0 SQ. FT.	0'-1 3/8"	SC/SLAB/PKT	ENTRY HALL	WOOD/TBD	N/A	FLUSH PULL	TBD	SEE NOTE 4/PART OF FLUSH PANEL SYSTEM
16	2'-6"	x 7'-0"	2	17.5 SQ. FT.	0'-1 3/8"	HC/SLAB	GARAGE STORAGE	WOOD/TBD	N/A	PULL/RC	TBD	NOTE 4
17	3'-0"	x 7'-0"	1	21.0 SQ. FT.	0'-1 3/8"	HC/SLAB	LOUNGE/EQUIP.	WOOD/TBD	N/A	PULL/RC	TBD	NOTE 4
18	2'-6"	x 7'-0"	1	17.5 SQ. FT.	0'-1 3/8"	SC/SLAB	HALL/DEN-GUEST	WOOD/TBD	N/A	LEVER/PRIVACY	TBD	NOTE 4
19	2'-6"	x 7'-0"	1	17.5 SQ. FT.	0'-1 3/8"	SC/SLAB	HALL/LAUNDRY	WOOD/TBD	N/A	LEVER/PASS	TBD	NOTE 4
20	3'-0"	x 7'-0"	1	21.0 SQ. FT.	0'-1 3/8"	STORE/PKT	GREAT ROOM/HALL	WOOD/TBD	OBS/TG	FLUSH PULL	TBD	NOTE 4
21	2'-4"	x 7'-0"	1	16.3 SQ. FT.	0'-1 3/8"	SC/SLAB	HALL/GUEST BATH	WOOD/TBD	N/A	LEVER/PRIVACY	TBD	NOTE 4
22	3'-0"	x 7'-0"	1	21.0 SQ. FT.	0'-1 3/4"	SC/SLAB	DECK/"ALLEY"	MATCH ADJ. SIDING	N/A	LEVER/DEADBOLT	TBD	MATCH SIDING/PROVIDE GRILL W/ MIN. NWA=62SI
23	2'-4"	x 7'-0"	1	16.3 SQ. FT.	0'-1 3/8"	SC/SLAB	MASTER BATH/EQUIP CABINET	WOOD/TBD	N/A	PULL/RC	TBD	NOTE 4
24	3'-0"	x 7'-0"	1	21.0 SQ. FT.	0'-1 3/8"	SC/PKT	MASTER BED/BATH	WOOD/TBD	N/A	FLUSH PULL	TBD	NOTE 4
25	2'-6"	x 7'-0"	1	17.5 SQ. FT.	0'-1 3/8"	SC/SLAB	CLOSET/HALL	WOOD/TBD	N/A	FLUSH PULL	TBD	NOTE 4
26	2'-6"	x 7'-0"	1	17.5 SQ. FT.	0'-1 3/8"	SC/SLAB	CLOSET/HALL	WOOD/TBD	N/A	FLUSH PULL	TBD	NOTE 4
27	2'-8"	x 7'-0"	1	18.7 SQ. FT.	0'-1 3/8"	STORE	SECRET ROOM/HALL	WOOD/TBD	OBS/TG	LEVER/PRIVACY	TBD	NOTE 4
28	3'-0"	x 7'-0"	1	21.0 SQ. FT.	0'-1 3/8"	SC/PKT	MASTER BED/HALL	WOOD/TBD	N/A	FLUSH PULL	TBD	NOTE 4
29	2'-6"	x 7'-0"	1	17.5 SQ. FT.	0'-1 3/8"	SC/SLAB	MSTR. BATH/W.C.	WOOD/TBD	N/A	LEVER/PRIVACY	TBD	NOTE 4
30	3'-0"	x 6'-8"	1	20.0 SQ. FT.	0'-0 3/8"	SHOWER	MASTER BATH	FRAMELESS SHOWER	LAMINATED/TG	CHROME TRACK/PULL	TBD	4" UNDER-CUT/COORD. W/ SHOWER ENCLOSURE

INTERIOR DOOR NOTES:

- ALL NON-CLOSET FLUSH DOORS - SOLID CORE
- (3) HINGES MINIMUM
- HANDLE LEVER UNO
- UNDERCUT DOORS 1/2" TO HABITABLE SPACES AS NECESSARY TO MEET WHOLE HOUSE VENTILATION REQUIREMENTS
- MEASURE PRIOR TO ORDERING DOORS.

Date: 3/15/2021 Pre-App
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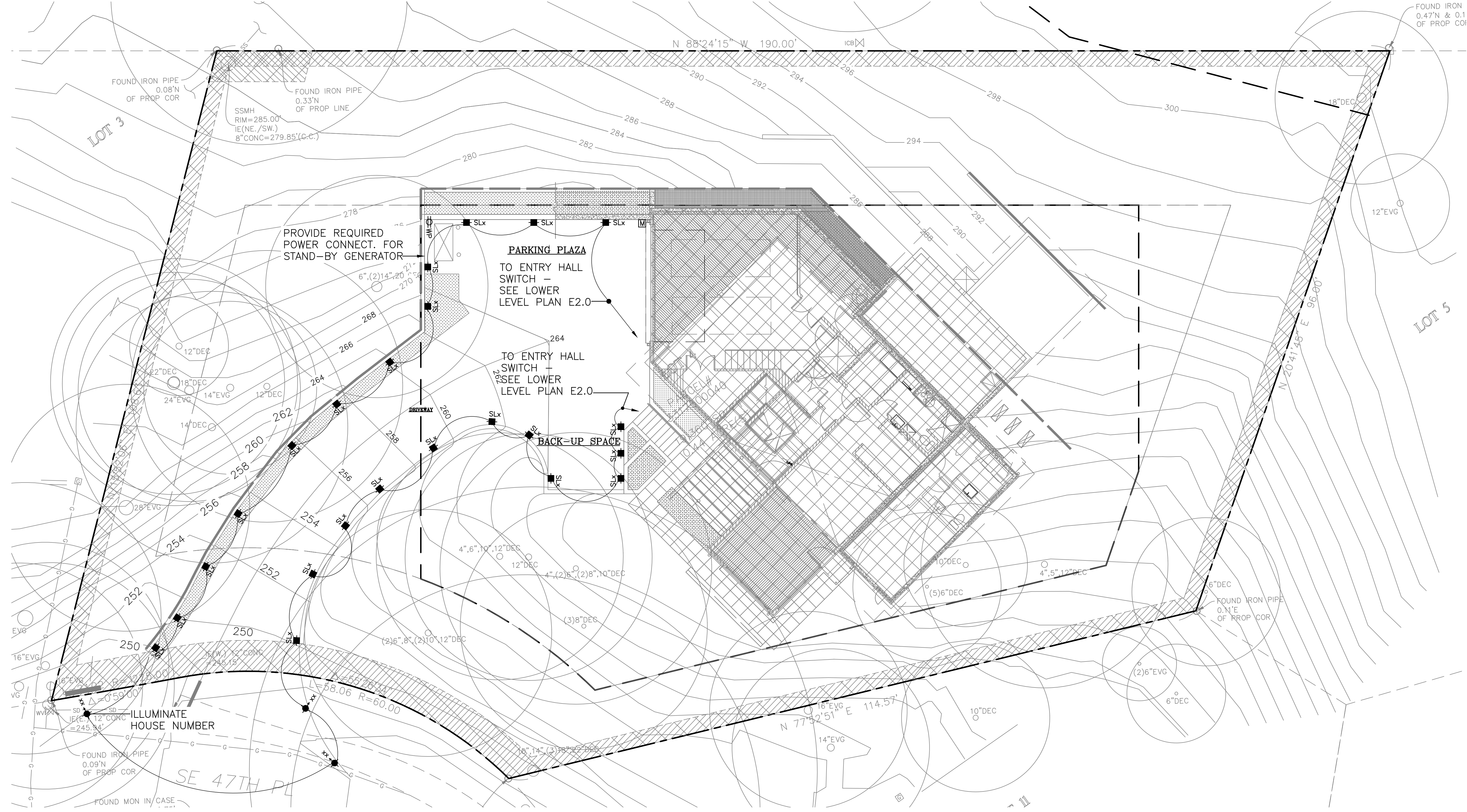
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Mercer Island, WA 98040



STEINBORN RESIDENCE

New Residence
8435 SE 47th Pl.
Mercer Island, WA 98040



1 Site Electrical Plan
Scale: 1/8"=1'-0"

Power and Lighting Legend

- ☐ CFM Recessed Ceiling Mounted Exhaust Fan
- ☐ SC Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
- ☐ HD Heat Detector / Heat Alarm
- ☐ C Cable Connection
- ☐ FC Floor Mounted Cable Connection
- ☐ D Dedicated Data Outlet (CatV)
- ☐ S Switch
- ☐ S Multi-way Switch, Multi-way
- ☐ S Dimmer Switch, Dimmer
- ☐ S Dimmer/Multi-way Switch, Dimmer/Multi-way
- ☐ Dr. Act. Switch, Door Activated
- ☐ Duplex Outlet Duplex Outlet
- ☐ GFI Ground Fault Circuit Interrupter
- ☐ WP Exterior Duplex Outlet
- ☐ Four-plex Outlet Four-plex Outlet
- ☐ Floor Mounted Duplex Outlet Floor Mounted Duplex Outlet

- ☐ Strip Outlets
- ☐ 220V 220 V Outlet
- ☐ P Breaker Panel
- ☐ M Meter
- ☐ S Security Panel
- ☐ xx Recessed Ceiling Mounted LED Downlight
- ☐ xx Recessed Ceiling Mounted LED Wallwasher
- ☐ xx Surface Ceiling Mounted LED Downlight
- ☐ Sxx Surface Mounted Wall LED Sconce
- ☐ TLxx Surface Mounted Track LED Lighting
- ☐ UCxx Surface Mounted Undercabinet Strip LED Lighting
- ☐ RLxx Ribbon LED linear light
- ☐ Pxx Pendant Fixture
- ☐ Pxx Cluster Pendant Fixture
- ☐ SDLx Surface Mounted Downlight

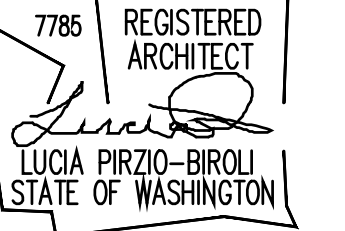
- ☐ xx Surface Mounted LED Batten Fixture
- ☐ xx Recessed Mounted Wall LED Washer
- ☐ xx Recessed Wall LED Light
- ☐ xx Exterior Recessed Ceiling Mounted LED Downlight
- ☐ xx Exterior Ground LED Light
- ☐ Sxx Exterior Surface Mounted Wall LED Sconce
- ☐ SLx Exterior Recessed Wall LED Step Light
- ☐ DBx Exterior Direct Burial Uplight
- ☐ xx Pool Light
- ☐ Waste Disposal
- ☐ Level 2 240V EV Charger
- ☐ Ceiling Fan with Light
- ☐ SC Security Camera w/ Night Vision Capability

NOTES:
1- INSTALL HOUSEHOLD FIRE ALARM
2- INSTALL COMPREHENSIVE SECURITY

Date: 3/15/2021 Pre-App
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225

Scale:
Sheet:

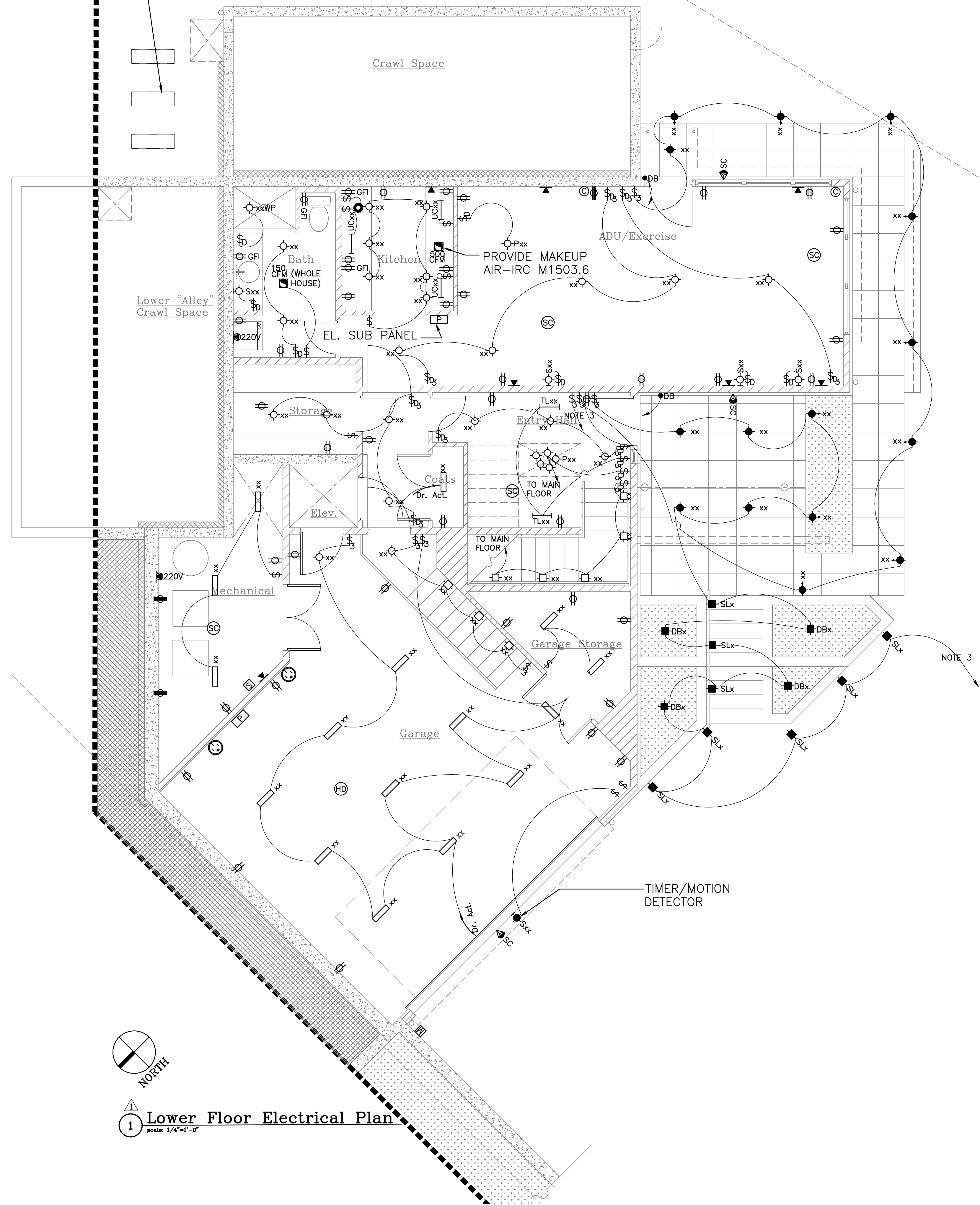
Site Electrical Plan
E1.0



STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

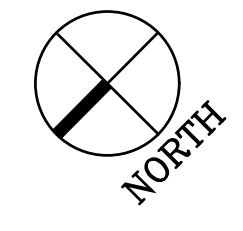
PROVIDE REQUIRED POWER:
MINI-SPLIT & AIR TO WATER
CONDENSER



Power and Lighting Legend

- Recessed Ceiling Mounted Exhaust Fan
- Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
- Heat Detector / Heat Alarm
- Cable Connection
- Floor Mounted Cable Connection
- Dedicated Data Outlet (CatVI)
- Switch
- Switch, Multi-way
- Switch, Dimmer
- Switch, Dimmer/Multi-way
- Switch, Door Activated
- Duplex Outlet
- Ground Fault Circuit Interrupter
- Exterior Duplex Outlet
- Four-plex Outlet
- Floor Mounted Duplex Outlet
- Strip Outlets
- 220 V Outlet
- Breaker Panel
- Meter
- Security Panel
- Recessed Ceiling Mounted LED Downlight
- Recessed Ceiling Mounted LED Wallwasher
- Surface Ceiling Mounted LED Downlight
- Surface Mounted Wall LED Sconce
- Surface Mounted Track LED Lighting
- Surface Mounted Undercabinet Strip LED Lighting
- Ribbon LED linear light
- Pendant Fixture
- Cluster Pendant Fixture
- Surface Mounted Downlight
- Surface Mounted LED Batten Fixture
- Recessed Step LED Light
- Exterior Recessed Ceiling Mounted LED Downlight
- Exterior Ground LED Light
- Exterior Surface Mounted Wall LED Sconce
- Exterior Recessed Wall LED Step Light
- Exterior Direct Burial Uplight
- Pool Light
- Waste Disposal
- Level 2 240V EV Charger
- Security Camera w/ Night Vision Capability
- DOOR BELL

- Notes:**
1. Install household fire alarm system as outlined in General Notes on A0.1
 2. Install comprehensive security system as specified.
 3. To parking plaza and driveway lighting – see E1.0 for site electrical plan.

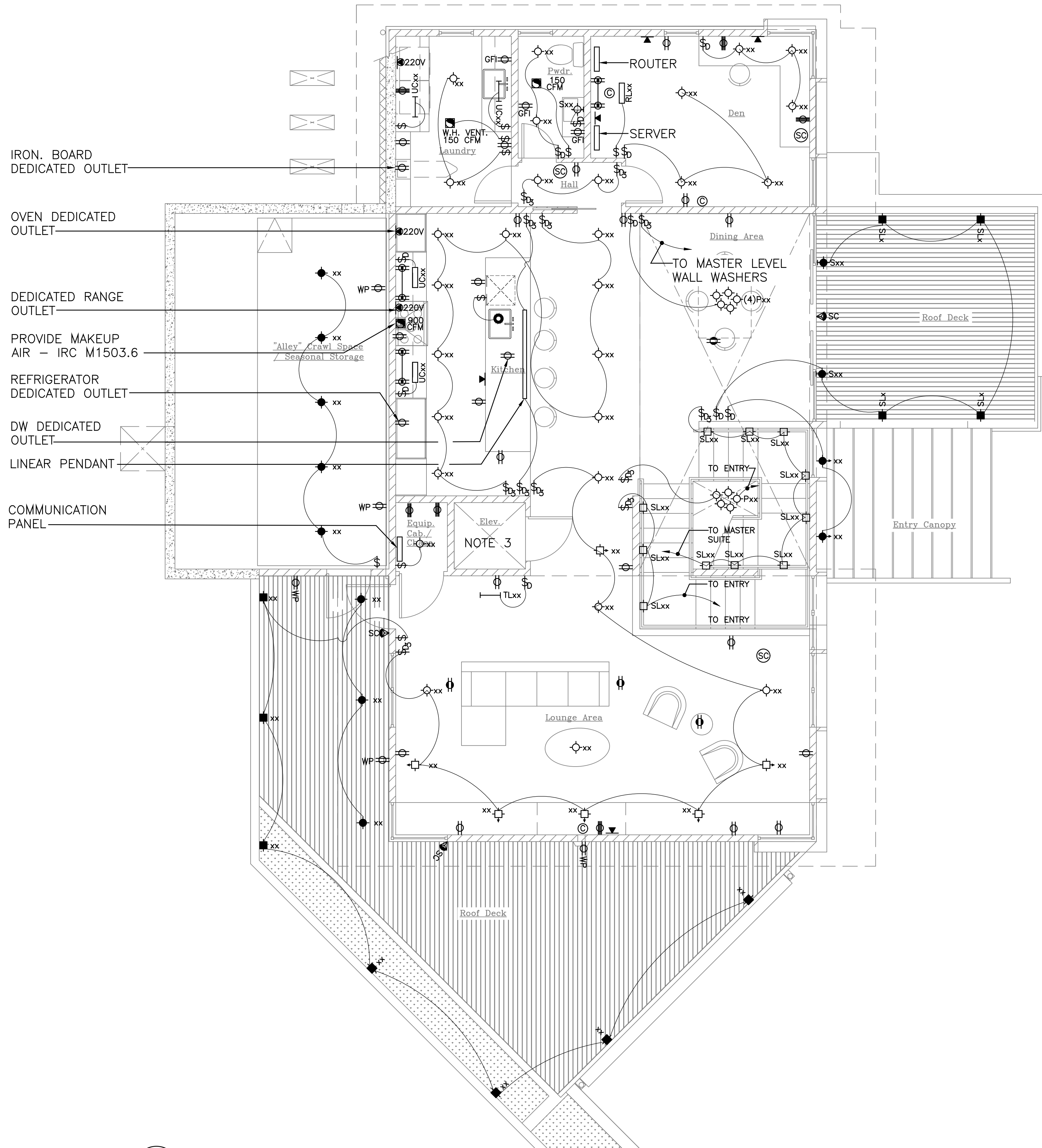
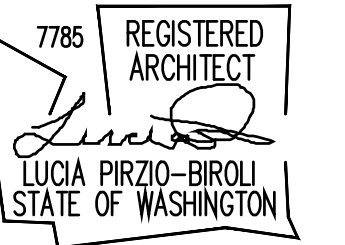


1 Lower Floor Electrical Plan
Scale: 1/4"=1'-0"

Date: 3/15/2021 Pre-App
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225

Scale:

Sheet:



IRON. BOARD
DEDICATED OUTLET

OVEN DEDICATED
OUTLET

DEDICATED RANGE
OUTLET

PROVIDE MAKEUP
AIR - IRC M1503.6

REFRIGERATOR
DEDICATED OUTLET

DW DEDICATED
OUTLET

LINEAR PENDANT

COMMUNICATION
PANEL

Power and Lighting Legend

- Recessed Ceiling Mounted Exhaust Fan
- Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
- Heat Detector / Heat Alarm
- Cable Connection
- Floor Mounted Cable Connection
- Dedicated Data Outlet (CatV)
- Switch
- Switch, Multi-way
- Switch, Dimmer
- Switch, Dimmer/Multi-way
- Switch, Door Activated
- Duplex Outlet
- Ground Fault Circuit Interupter
- Exterior Duplex Outlet
- Four-plex Outlet
- Floor Mounted Duplex Outlet
- Strip Outlets
- 220 V Outlet
- Breaker Panel
- Meter
- Security Panel
- Recessed Ceiling Mounted LED Downlight
- Recessed Ceiling Mounted LED Wallwasher
- Surface Ceiling Mounted LED Downlight
- Surface Mounted Wall LED Sconce
- Surface Mounted Track LED Lighting
- Surface Mounted Undercabinet Strip LED Lighting
- Ribbon LED linear light
- Pendant Fixture
- Cluster Pendant Fixture
- Surface Mounted Downlight
- Surface Mounted LED Batten Fixture
- Recessed Wall LED Light
- Exterior Recessed Ceiling Mounted LED Downlight
- Exterior Ground LED Light
- Exterior Surface Mounted Wall LED Sconce
- Exterior Recessed Wall LED Step Light
- Exterior Direct Burial Uplight
- Pool Light
- Waste Disposal
- Level 2 240V EV Charger
- Security Camera w/ Night Vision Capability
- DOOR BELL

- Notes:**
1. Install household fire alarm system as outlined in General Notes on A0.1
 2. Install comprehensive security system as specified.
 3. Provide all necessary power for elevator

STEINBORN RESIDENCE

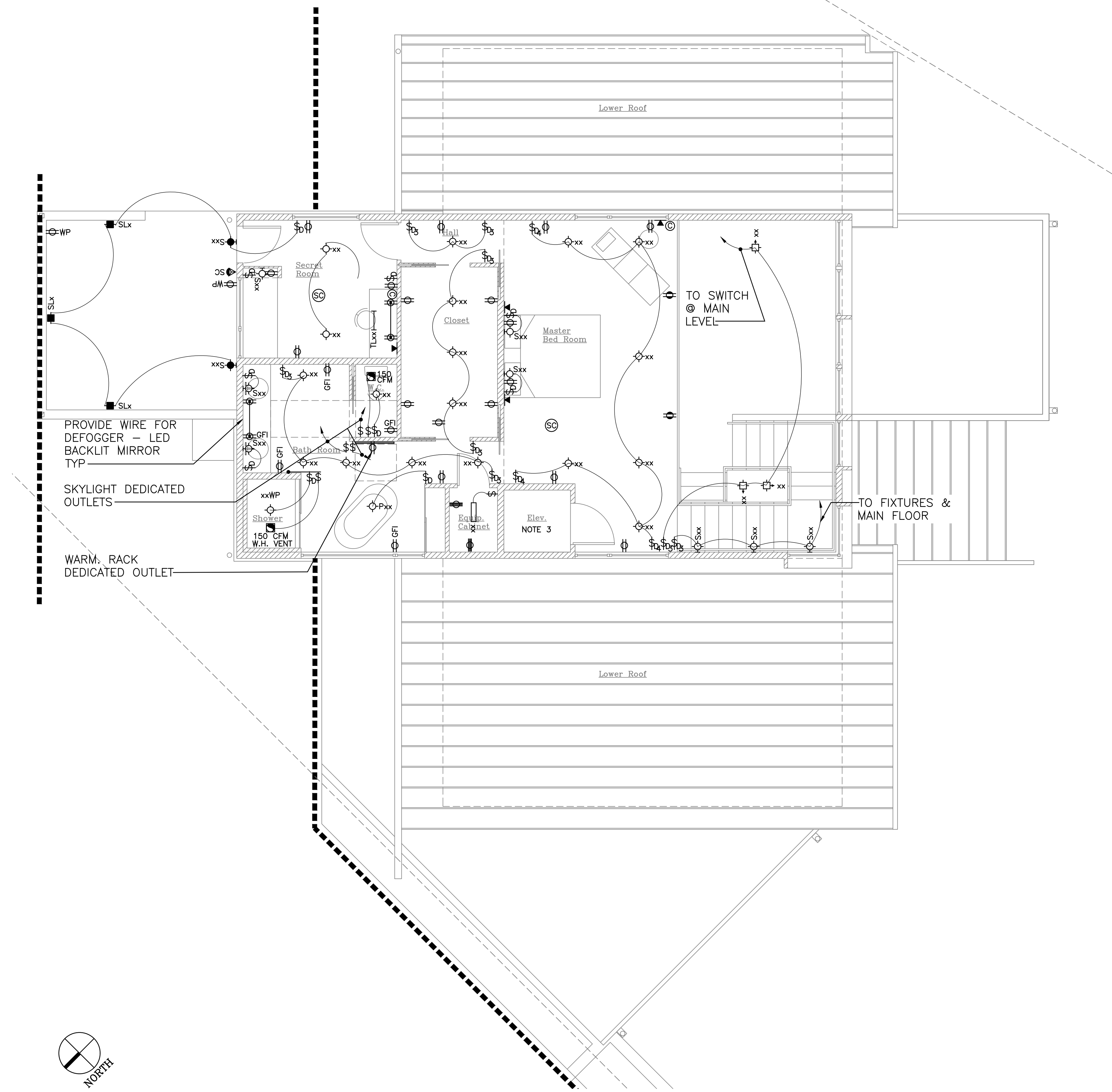
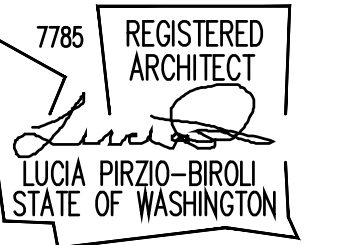
New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

1 Main Floor Electrical Plan
Scale: 1/4"=1'-0"

Date: 3/15/2021 Pre-App
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225

Scale:

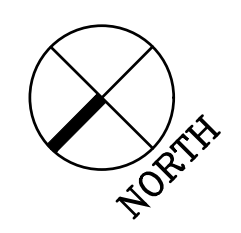
Sheet:
**Main Floor
Electrical Plan
E2.1**



Power and Lighting Legend

	Recessed Ceiling Mounted Exhaust Fan
	Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
	Heat Detector / Heat Alarm
	Cable Connection
	Floor Mounted Cable Connection
	Dedicated Data Outlet (CatVI)
	Switch
	Switch, Multi-way
	Switch, Dimmer
	Switch, Dimmer/Multi-way
	Switch, Door Activated
	Duplex Outlet
	Ground Fault Circuit Interrupter
	Exterior Duplex Outlet
	Four-plex Outlet
	Floor Mounted Duplex Outlet
	Strip Outlets
	220 V Outlet
	Breaker Panel
	Meter
	Security Panel
	Recessed Ceiling Mounted LED Downlight
	Recessed Ceiling Mounted LED Wallwasher
	Surface Ceiling Mounted LED Downlight
	Surface Mounted Wall LED Sconce
	Surface Mounted Track LED Lighting
	Surface Mounted Undercabinet Strip LED Lighting
	Ribbon LED linear light
	Pendant Fixture
	Cluster Pendant Fixture
	Surface Mounted Downlight
	Surface Mounted LED Batten Fixture
	Recessed Mounted Wall LED Washer
	Recessed Wall LED Light
	Exterior Recessed Ceiling Mounted LED Downlight
	Exterior Ground LED Light
	Exterior Surface Mounted Wall LED Sconce
	Exterior Recessed Wall LED Step Light
	Exterior Direct Burial Uplight
	Pool Light
	Waste Disposal
	Level 2 240V EV Charger
	Ceiling Fan with Light
	Security Camera w/ Night Vision Capability

- Notes:**
1. Install household fire alarm system as outlined in General Notes on A0.1
 2. Install comprehensive security system as specified.
 3. Provide all necessary power for elevator



1 Upper Floor Electrical Plan
Scale: 1/4"=1'-0"

STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

Date: 3/15/2021 Pre-App
2/14/2022 Permit Submittal
8/25/2022 Sub2-2202-225

Scale:
Sheet:
Upper Floor
Electrical Plan
E2.2

WOOD

35. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17, LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS.

JOISTS: (2X, 3X, AND 4X MEMBERS)	HEM-FIR NO. 2 (UNLESS NOTED OTHERWISE ON PLANS)
BEAM AND STRINGERS: (6 X AND LARGER MEMBERS)	MINIMUM BASE VALUE, F _b = 850 PSI
POSTS AND TIMBERS: (6 X AND LARGER MEMBERS)	DOUGLAS FIR LARCH NO. 1
STUDS PLATES & MISCELLANEOUS LIGHT FRAMING	MINIMUM BASIC DESIGN STRESS, F _b = 1,350 PSI
	DOUGLAS FIR LARCH NO. 1
	MINIMUM BASIC DESIGN STRESS, F _b = 1,200 PSI, F _c = 1,000 PSI
	DOUGLAS FIR LARCH OR HEM-FIR NO. 2,
	MINIMUM BASIC DESIGN STRESS F _b = 850 PSI, F _c = 1,300 PSI
2X AND 3X TONGUE AND GROOVE DECKING	HEM-FIR COMMERCIAL DEX, F _b = 1,350 PSI

36. PARALLEL STRAND LUMBER (PSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F_b = 2900 PSI, E = 2000,000 PSI, F_v = 290 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

37. LAMINATED VENEER LUMBER (LVL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F_b = 2600 PSI, F_v = 285 PSI, E = 2,000,000 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

38. LAMINATED STRAND LUMBER (LSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F_b = 2325 PSI, F_v = 310 PSI, E = 1,550,000 PSI.

LSL RIM JOISTS SHALL CONFORM TO ANSI/APA PRR 410 AND SHALL BE MARKED IN ACCORDANCE WITH THE STANDARD.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

39. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOIST MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

40. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1-09 OR PS 2-18 AND AMERICAN PLYWOOD ASSOCIATION PERFORMANCE STANDARD PRP-108. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS. EACH PANEL SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY.

41. ALL WOOD PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE, PROVIDE 2 LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC. AND CONCRETE OR MASONRY.

PRESSURE TREATED LUMBER SHALL COMPLY WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1, COMMODITY SPECIFICATION A AS INDICATED BELOW OR HAVE EQUIVALENT ICC-ES APPROVAL.

PROPOSED USE		AWPA USE CATEGORY
RESIDENTIAL DECKS	DECKING	3B
	JOISTS ABOVE GROUND	3B
	POSTS	4A
	RAILING	3B
	LEDGERS	3B
SAWN LUMBER PLYWOOD	ABOVE GROUND	3B
	DAMP ABOVE GROUND	2
	EXTERIOR ABOVE GROUND	3B
SILL PLATES	IN CONTACT WITH CONCRETE OR MASONRY	2
	INTERIOR LEDGERS	IN CONTACT WITH CONCRETE OR MASONRY

ALL TREATED LUMBER SHALL BEAR THE QUALITY MARK OF AN ACCREDITED INSPECTION AGENCY. THE QUALITY MARK SHALL INCLUDE:

- A. IDENTIFICATION OF TREATING MANUFACTURER
- B. TYPE OF PRESERVATIVE USED
- C. MINIMUM PRESERVATIVE RETENTION (PCF)
- D. END USE FOR WHICH THE PRODUCT IS TREATED
- E. IDENTITY OF THE ACCREDITED INSPECTION AGENCY
- F. STANDARD TO WHICH THE PRODUCT IS TREATED

42. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER TO ACHIEVE THE MAXIMUM PUBLISHED ALLOWABLE LOAD. ALL CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. SHIMS, WHERE REQUIRED, SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL LAG SCREWS SHALL BE INSTALLED IN PRE-DRILLED HOLES.

UNLESS NOTED OTHERWISE ALL SAWN LUMBER JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS AND ALL PREFABRICATED PLYWOOD WEB JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "IUS" SERIES JOIST HANGERS.

ALL CONNECTIONS/FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD, SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. HOT DIPPED GALVANIZED FASTENERS SHOULD CONFORM TO ASTM STANDARD 153, AND HOT DIPPED GALVANIZED CONNECTORS SHOULD CONFORM TO ASTM STANDARD A653 (CLASS G-185). STAINLESS STEEL FASTENERS AND CONNECTORS SHOULD BE TYPE 304 OR 316. NOTE: ELECTROPLATED GALVANIZED FASTENERS AND CONNECTORS ARE NOT TO BE USED WITH PRESSURE TREATED WOOD. SIMPSON PRODUCT FINISHES CORRESPONDING TO THE ABOVE REQUIREMENTS ARE ZMAX (HOT DIPPED GALVANIZED) AND SST300 (STAINLESS STEEL). STAINLESS STEEL HARDWARE AND FASTENERS SHALL NOT BE COMBINED WITH UNTREATED OR GALVANIZED MATERIAL.

43. **WOOD FASTENERS:**

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d	3-1/2"	0.162"

DESIGN IS BASED ON COMMON STEEL WIRE NAILS MEETING THE REQUIREMENTS OF ASTM F1667. USE OF ALTERNATE FASTENERS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

B. NAILS — PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

44. **WOOD FRAMING NOTES** — THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1 OF THE INTERNATIONAL BUILDING CODE. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE AS SPECIFIED ABOVE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF BOLTS AND LAG SCREWS SHALL CONFORM TO SECTIONS 12.1.3 AND 12.1.4 OF THE 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. NATURALLY DURABLE OR PRESSURE TREATED WOOD SHALL BE PROVIDED WHERE REQUIRED BY SECTION 2304.12 OF THE INTERNATIONAL BUILDING CODE.

B. WALL FRAMING: ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2X6 AT 16" O.C. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. TWO 2 x 8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED AND SHALL BEAR FULLY ON A MINIMUM OF TWO STUDS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE SOLID BLOCKING BETWEEN STUDS AT MID_HEIGHT OF ALL STUD WALLS OVER 10' IN HEIGHT.

STUDS MAY BE NOTCHED, CUT, OR PENETRATED WITH ROUND BORED HOLES AS FOLLOWS:

STUD SIZE	MAXIMUM NOTCH / CUT	MAXIMUM BORED HOLE
2X4	7/8"	1-3/8"
2X6	1-3/8"	2-1/8"

BORED HOLES SHALL NOT BE LOCATED WITH 5/8" FROM THE EDGE OF THE STUD OR AT THE SAME LOCATION AS A NOTCH OR CUT.

WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d AT 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS AT 4" O.C. EACH SIDE OF JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 12" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS (WITH 7" MINIMUM EMBEDMENT) @ 4'-0" O.C. UNLESS INDICATED OTHERWISE. PROVIDE 3"x3" x1/4" HOT-DIPPED GALVANIZED PLATE WASHERS AT ALL ANCHOR BOLTS. INDIVIDUAL MEMBERS OF BUILT UP POSTS SHALL BE NAILED TO EACH OTHER WITH 16d NAILS @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES NAILED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH NAILS AT 7" O.C. USE 5d COOLER NAILS FOR 1/2" GWB AND 6d COOLER NAILS FOR 5/8" GWB. PROVIDE 15/32" APA RATED SHEATHING (SPAN RATING 24(0)) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES), TOP AND BOTTOM PLATES WITH 8d NAILS @ 6" O.C. AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH NAILS @ 12" O.C. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS.

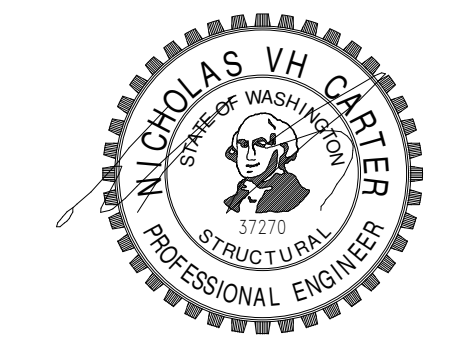
NOTCHES AT THE END OF JOISTS AND RAFTERS SHALL NOT EXCEED 1/4 THE DEPTH OF THE MEMBER. NOTCHES IN THE TOP OR BOTTOM SHALL NOT EXCEED 1/6 THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN THE MIDDLE 1/3 OF THE SPAN. THE DIAMETER OF ROUND HOLES BORED IN JOISTS AND RAFTERS SHALL NOT EXCEED 1/3 OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN 2" FROM THE TOP OR BOTTOM EDGE.

TOENAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS OF 16d @ 12" O.C. ATTACH RAFTERS AND ROOF TRUSSES AT BEARING LINES WITH H2.5 @ 24" O.C. UNLESS OTHER METAL CONNECTIONS ARE INDICATED.

UNLESS OTHERWISE NOTED ON THE PLANS, APA RATED ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND ATTACHED WITH 10d NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE AND GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF ALL ROOF AND FLOOR SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d NAILS @ 12" O.C. UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND FASTEN SHEATHING TO FRAMING/BLOCKING AS SPECIFIED.

TONGUE AND GROOVE STRUCTURAL ROOF AND FLOOR DECKING SHALL BE INSTALLED AS FOLLOWS:

- A. 2X DECKING SHALL BE TOENAILED THROUGH THE TONGUE AND FACE NAILED WITH ONE 16d NAIL PER PIECE PER SUPPORT.
- B. 3X AND 4X DECKING SHALL BE TOENAILED WITH ONE 40d NAIL AND FACE NAILED WITH ONE 60d NAIL PER SUPPORT. COURSES SHALL BE SPIKED TOGETHER WITH 8" SPIKES AT 30" O.C. (MAXIMUM) AND AT 10" (MAXIMUM) FROM EACH END OF EACH PIECE. SPIKES SHALL BE INSTALLED IN PREDRILLED EDGE HOLES



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General Structural Notes

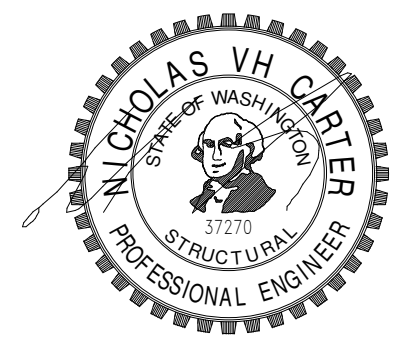
Foundation Plan Notes

- All slabs-on-grade shall be 4" reinforced with WWF6x6 W1.4xW1.4 u.n.o. Provide minimum 6-mil visqueen vapor barrier under all slabs. Slabs shall be supported on a minimum 4 inches of free draining material.
- At holddowns provide the following anchor bolts:

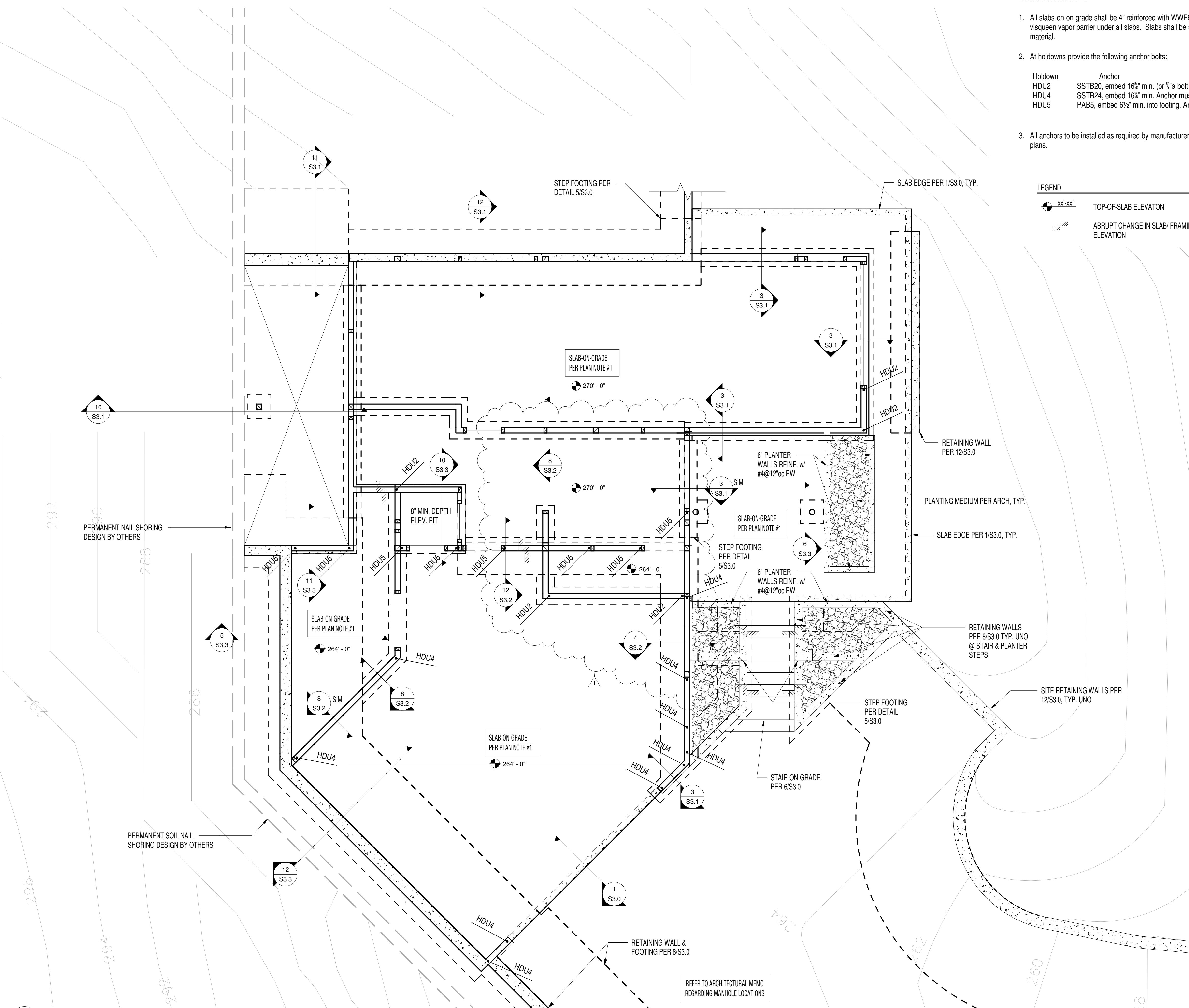
Holddown	Anchor
HDU2	SSTB20, embed 16 1/4" min. (or 1/2" bolt, SET-XP epoxy embed 10 min.)
HDU4	SSTB24, embed 16 1/4" min. Anchor must be cast-in-place.
HDU5	PAB5, embed 6 1/2" min. into footing. Anchor must be cast-in-place.
- All anchors to be installed as required by manufacturer. Minimum (2) 2x studs unless otherwise noted on plans.

LEGEND

- xx'-xx" TOP-OF-SLAB ELEVATION
- ABRUPT CHANGE IN SLAB/ FRAMING ELEVATION



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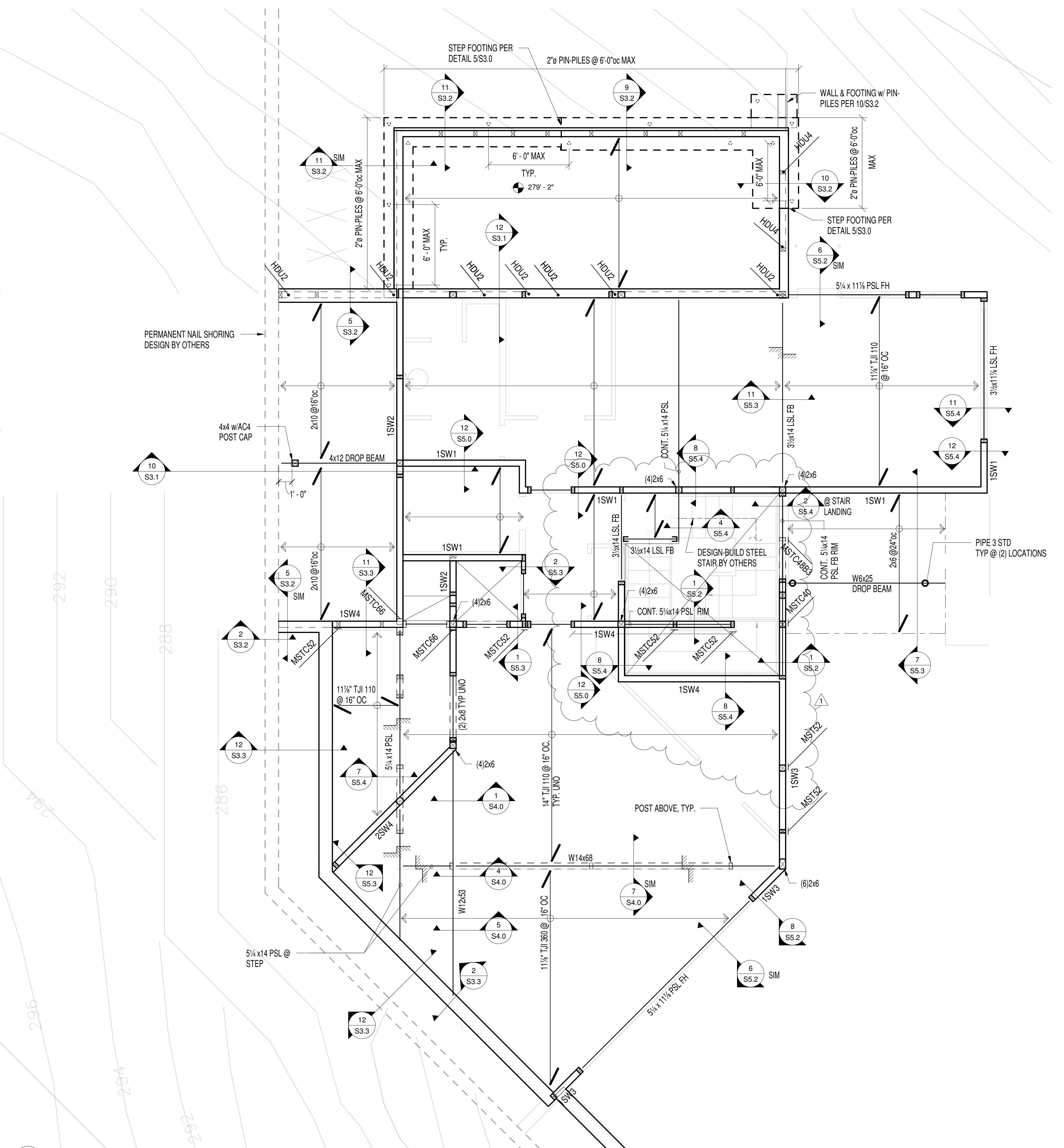
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Foundation Plan

S2.0

1 Foundation Plan
1/4" = 1'-0"

REFER TO ARCHITECTURAL MEMO REGARDING MANHOLE LOCATIONS

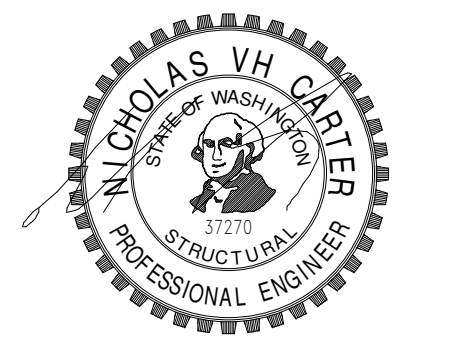


Floor Framing Plan Notes

1. Floor sheathing shall be 23/32" APA, Sturd-I-Floor with a panel index of 40/20. Nail to framing with 10d common nails at 6" oc at panel edges and 12" oc in field unless noted otherwise on plans.
2. All headers and beams shall be (2) 2x8 minimum, u.n.o. Refer to note 3 for support requirements.
3. All columns shall be double stud minimum, u.n.o., with the beam or header bearing fully on the column. Individual studs shall be nailed together per the general structural notes.
4. Exterior wall sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0 (Oriented strand board of equivalent thickness, exposure rating, and panel index may be used in lieu of plywood at contractors' option).
5. Attach LVL plies w/ (2) SDS25600 @16"oc.

LEGEND

- HANGER
- WALL/ COLUMN BELOW
- WALL/ COLUMN ABOVE
- ABRUPT CHANGE IN SLAB/ FRAMING ELEVATION
- FB INDICATES FLUSH BEAM
- FH INDICATED FLUSH HEADER
- UNO UNLESS NOTED OTHERWISE
- SPAN AND EXTENTS
- SPAN AND EXTENTS THRU-OUT



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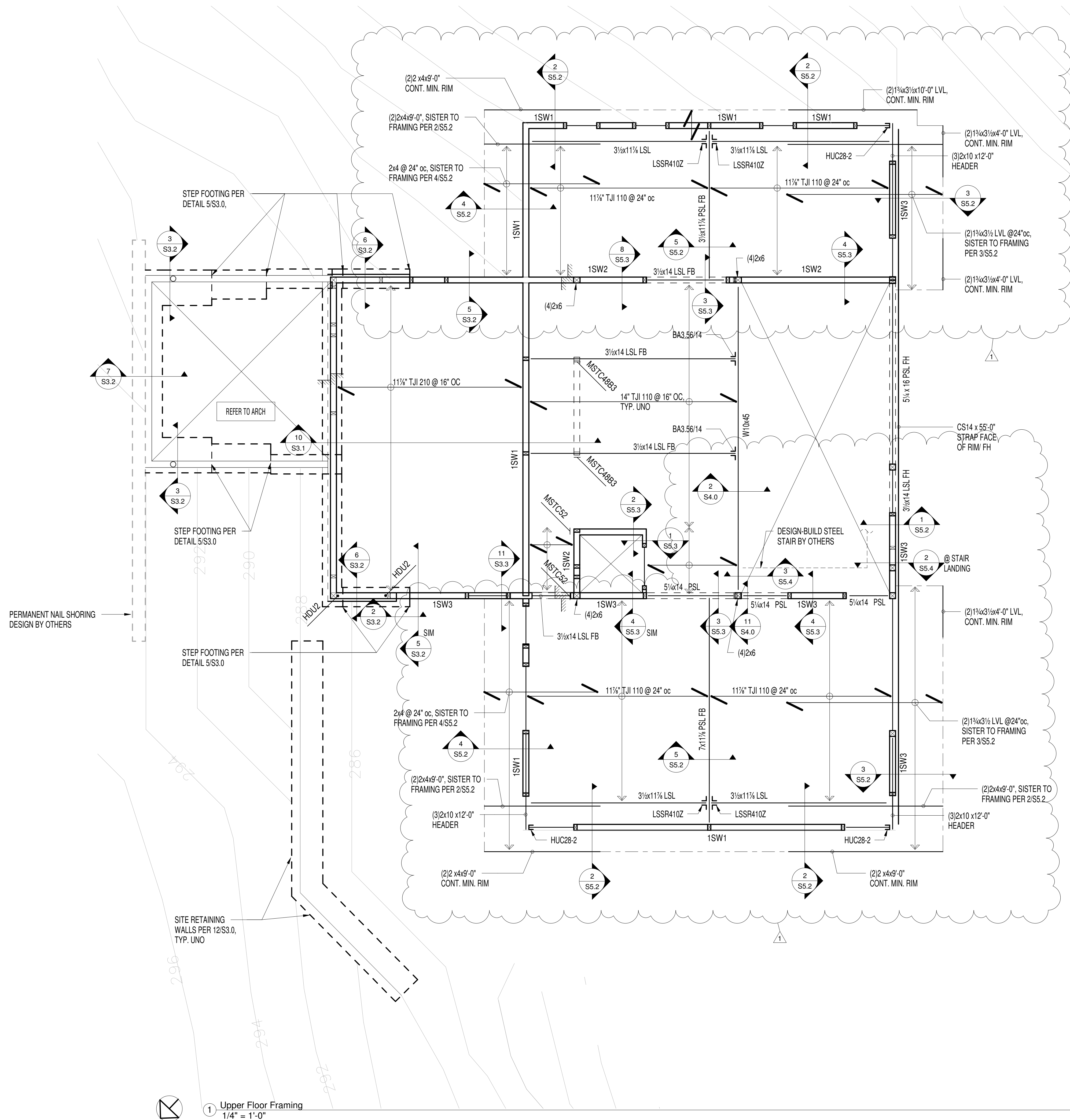
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Main Floor Framing Plan

1 Main Floor Framing
1/4" = 1'-0"

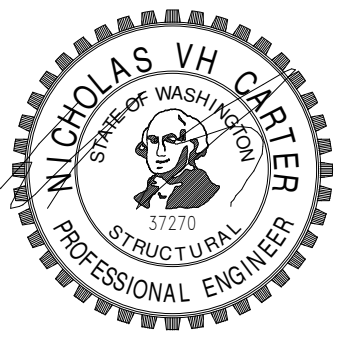


Floor Framing Plan Notes

1. Floor sheathing shall be 23/32" APA, Sturd-I-Floor with a panel index of 40/20. Nail to framing with 10d common nails at 6" oc at panel edges and 12" oc in field unless noted otherwise on plans.
2. All headers and beams shall be (2) 2x8 minimum, u.n.o. Refer to note 3 for support requirements.
3. All columns shall be double stud minimum, u.n.o., with the beam or header bearing fully on the column. Individual studs shall be nailed together per the general structural notes.
4. Exterior wall sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0 (Oriented strand board of equivalent thickness, exposure rating, and panel index may be used in lieu of plywood at contractors' option).
5. Attach LVL plies w/ (2) SDS25600 @ 16" oc.

LEGEND

- HANGER
- WALL/ COLUMN BELOW
- WALL/ COLUMN ABOVE
- ABRUPT CHANGE IN SLAB/ FRAMING ELEVATION
- FB INDICATES FLUSH BEAM
- FH INDICATED FLUSH HEADER
- UNO UNLESS NOTED OTHERWISE
- SPAN AND EXTENTS
- SPAN AND EXTENTS THRU-OUT



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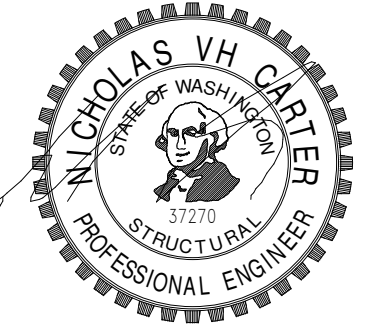
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Upper Floor Framing Plan

S2.2

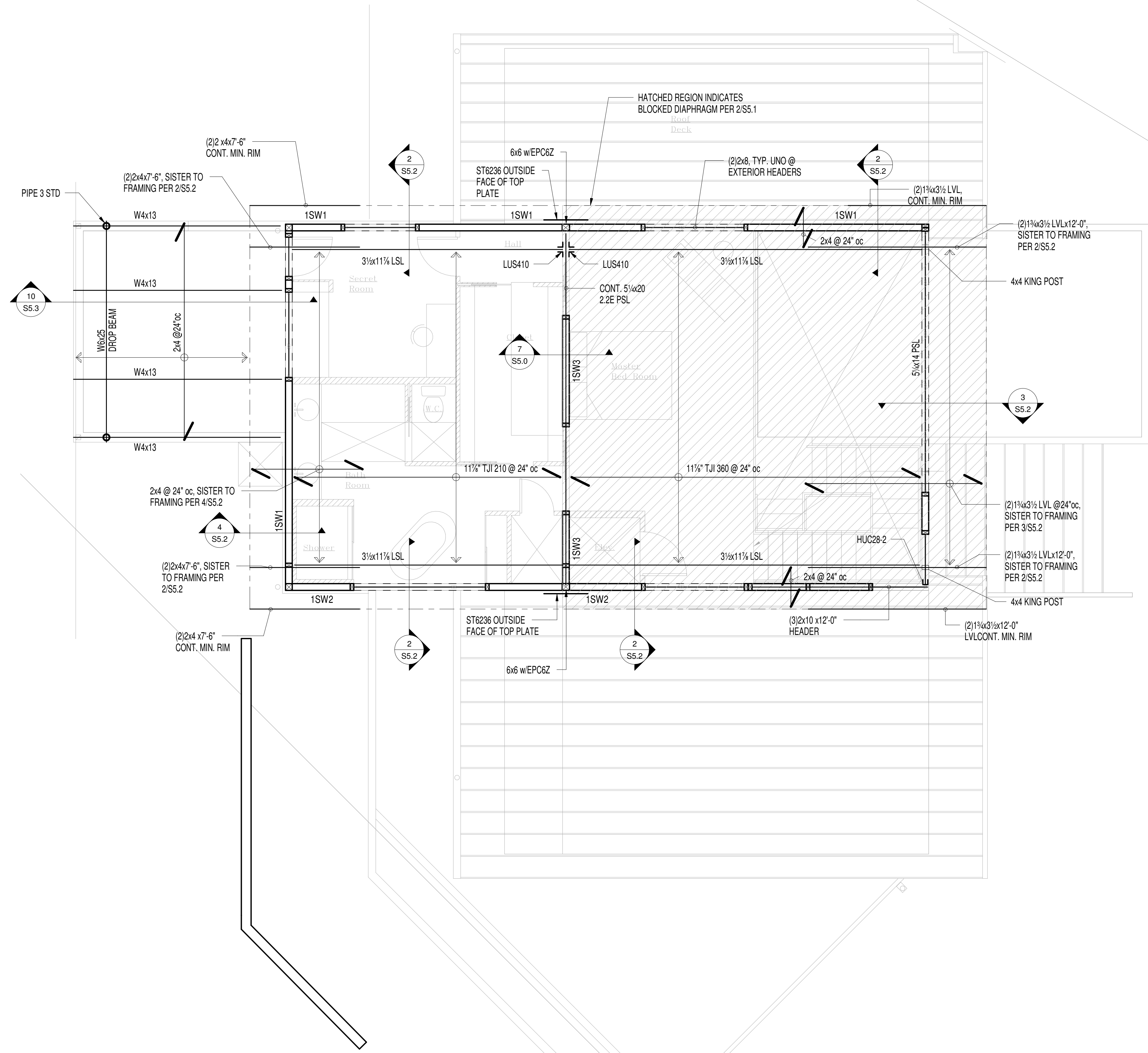
1 Upper Floor Framing
1/4" = 1'-0"



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Roof Framing Plan Notes

1. Roof sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0. Nail to framing with 8d common nails at 6" oc at panel edges and 12" oc in field unless noted otherwise on plans. Where noted on the plans all panel edges shall be block with minimum 2x material.
2. All headers and beams shall be (2) 2x8 minimum, u.n.o. Refer to note 3 for support requirements.
3. All columns shall be double stud minimum, u.n.o., with the beam or header bearing fully on the column. Individual studs shall be nailed together per the general structural notes.
4. Exterior wall sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0 (Oriented strand board of equivalent thickness, exposure rating, and panel index may be used in lieu of plywood at contractors' option).

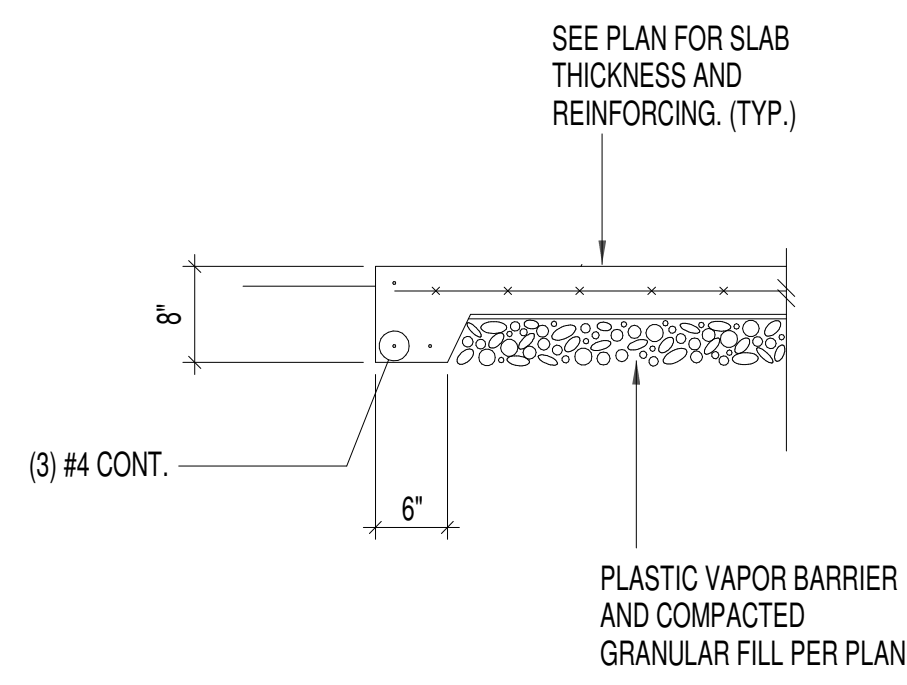
LEGEND

	HANGER
	WALL / COLUMN BELOW
	WALL / COLUMN ABOVE
	ABRUPT CHANGE IN SLAB/ FRAMING ELEVATION
	FB INDICATES FLUSH BEAM
	FH INDICATED FLUSH HEADER
	UNO UNLESS NOTED OTHERWISE
	SPAN AND EXTENTS
	SPAN AND EXTENTS THRU-OUT

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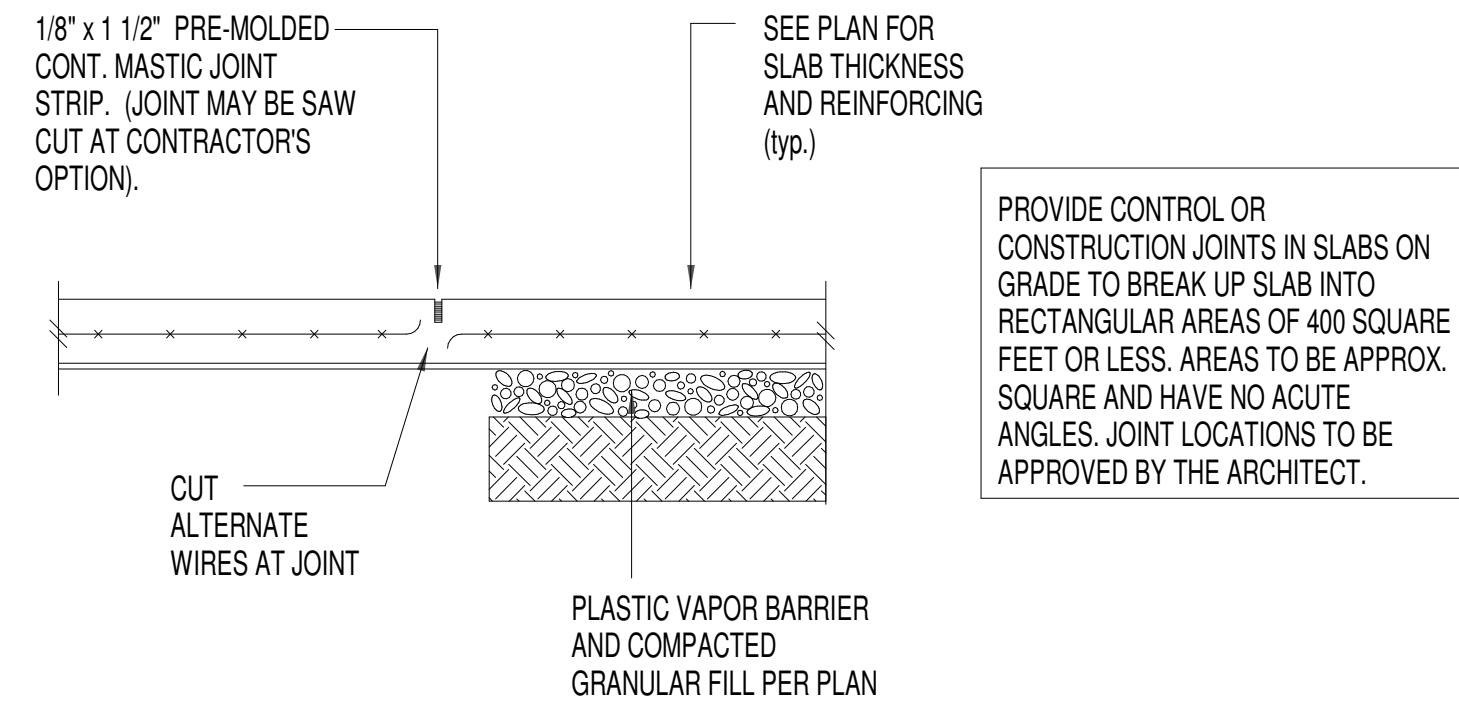
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Roof Framing Plan

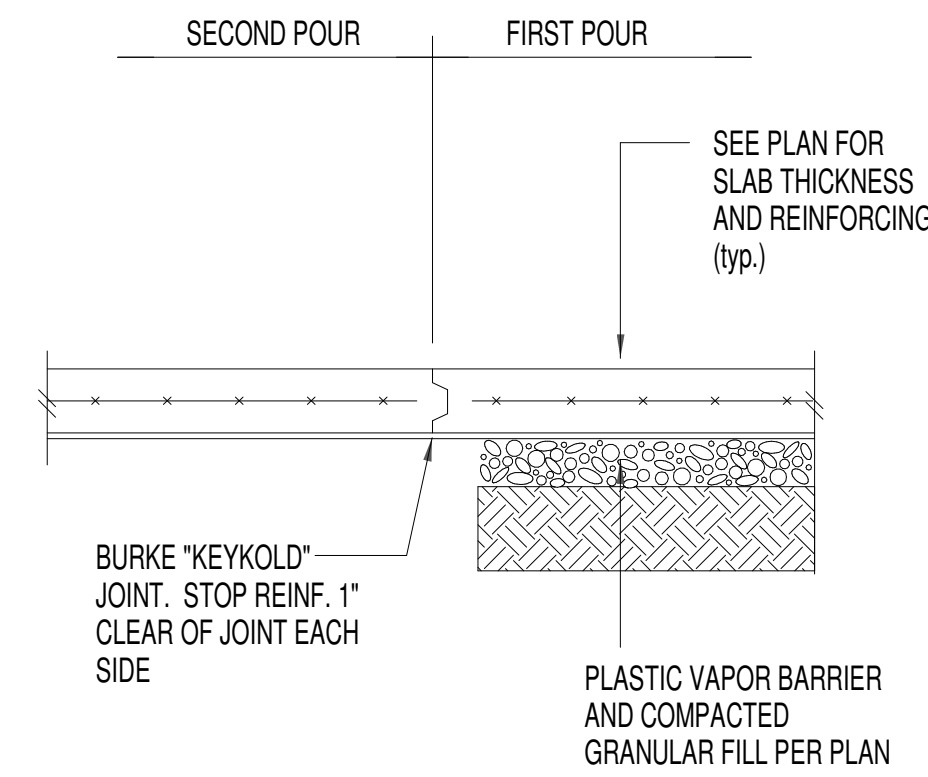


Typical Slab Edge

1



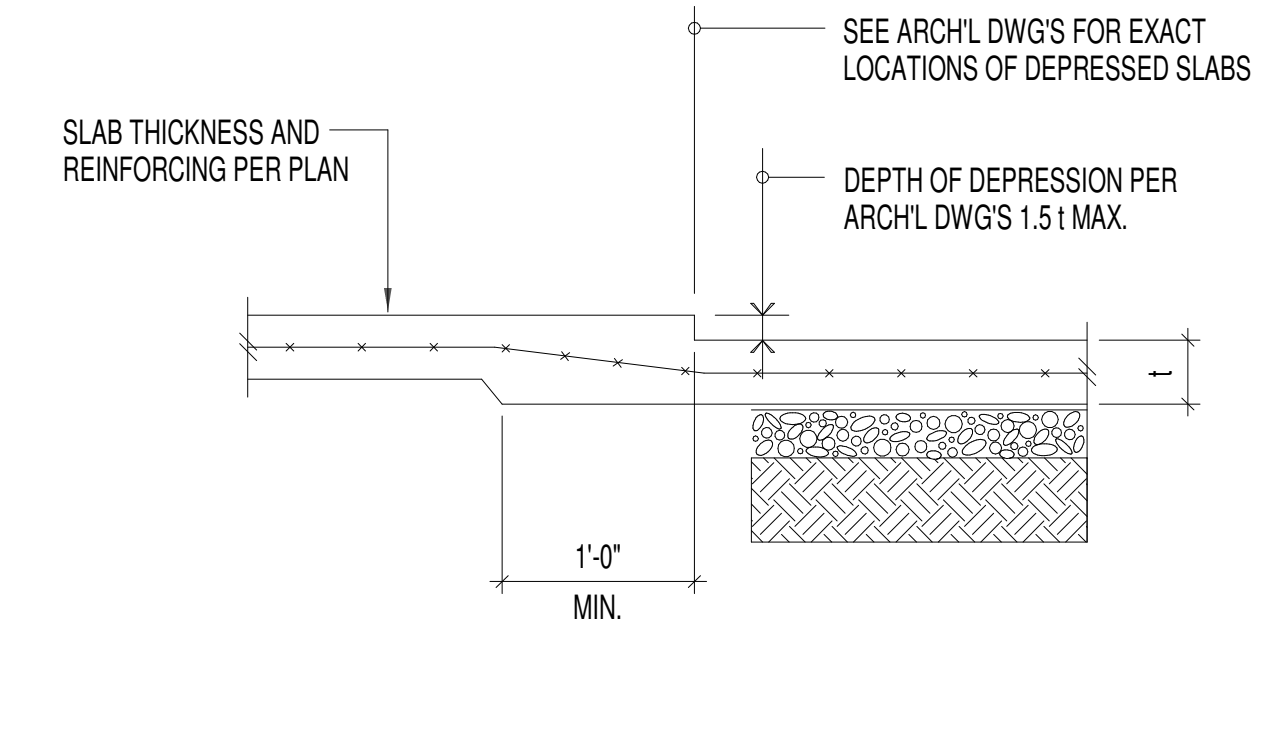
Control Joint



Construction Joint

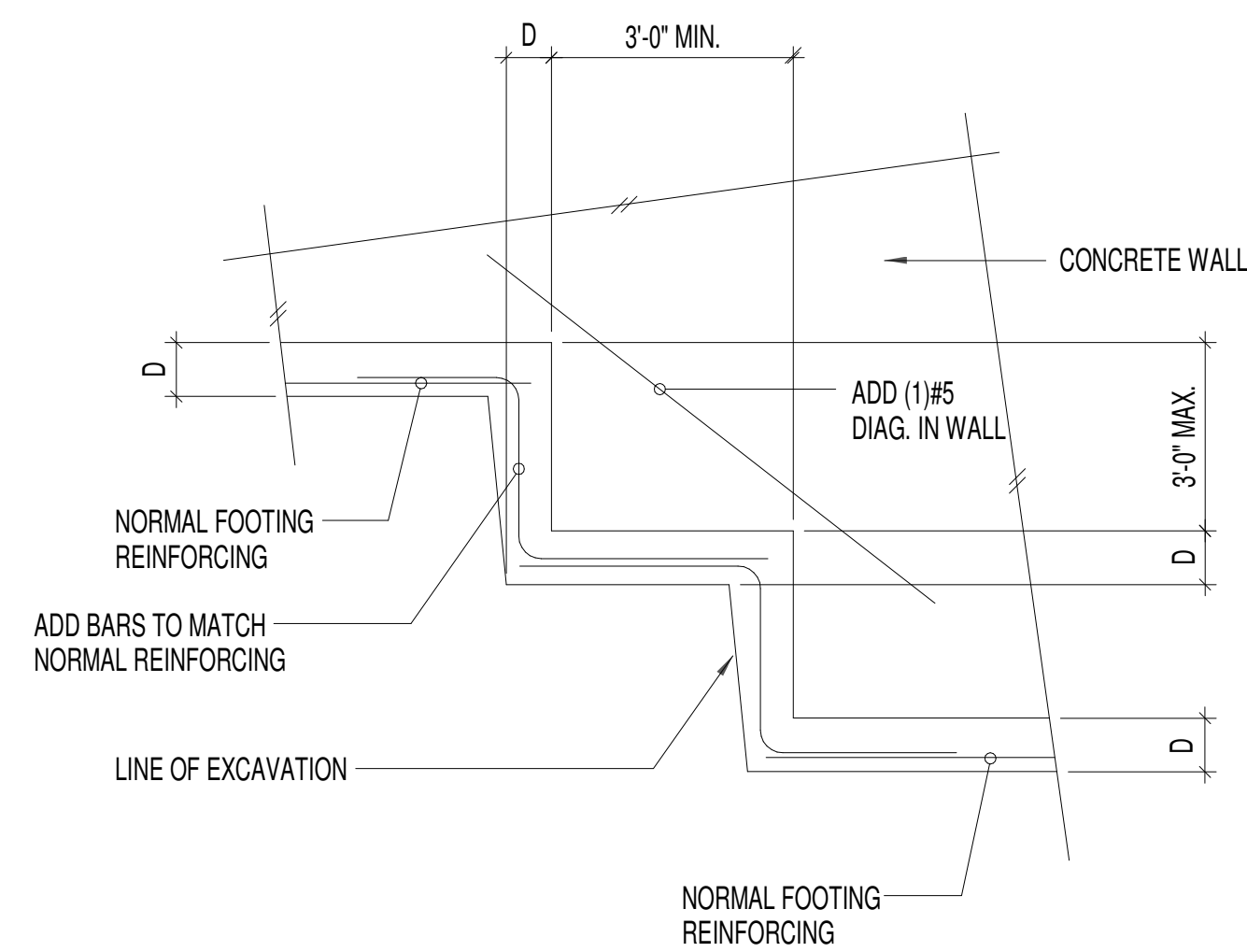
Typical Slab Joints

3



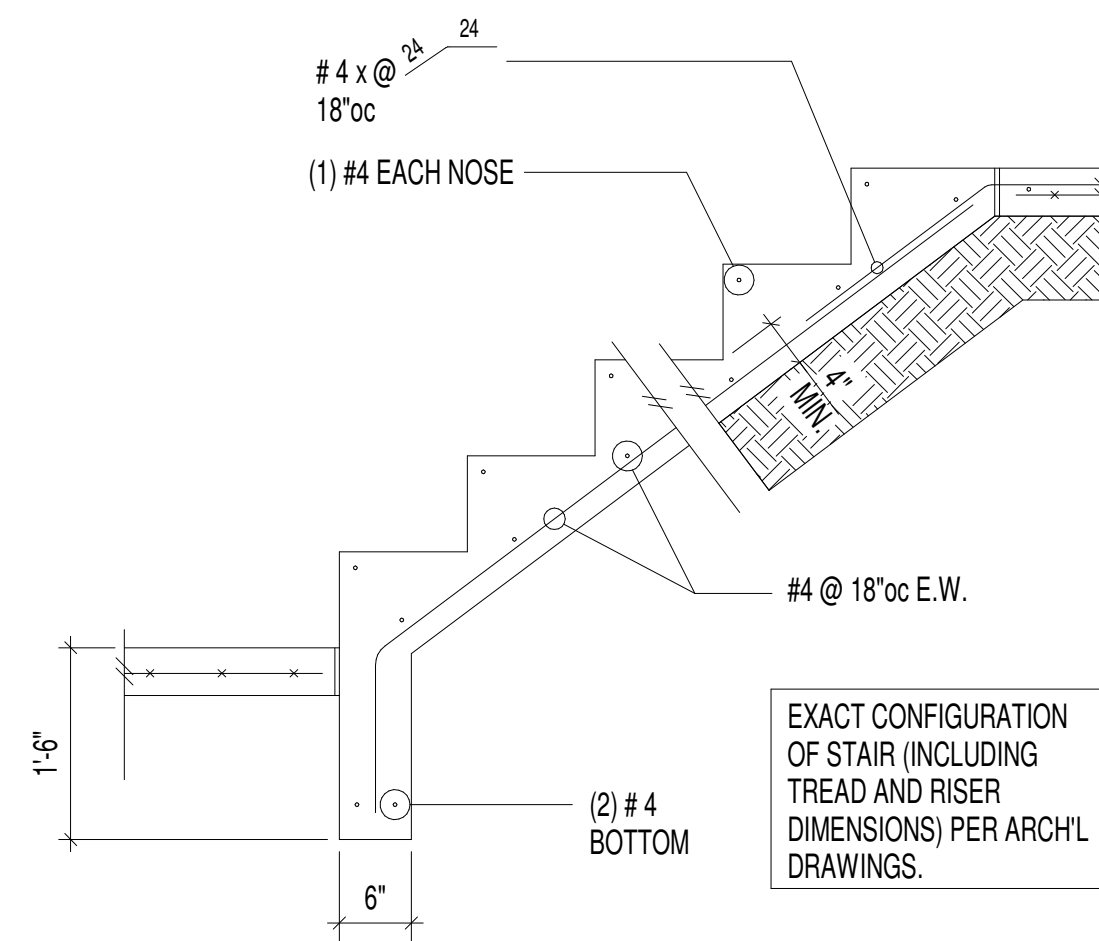
Typical Depressed Slab

4



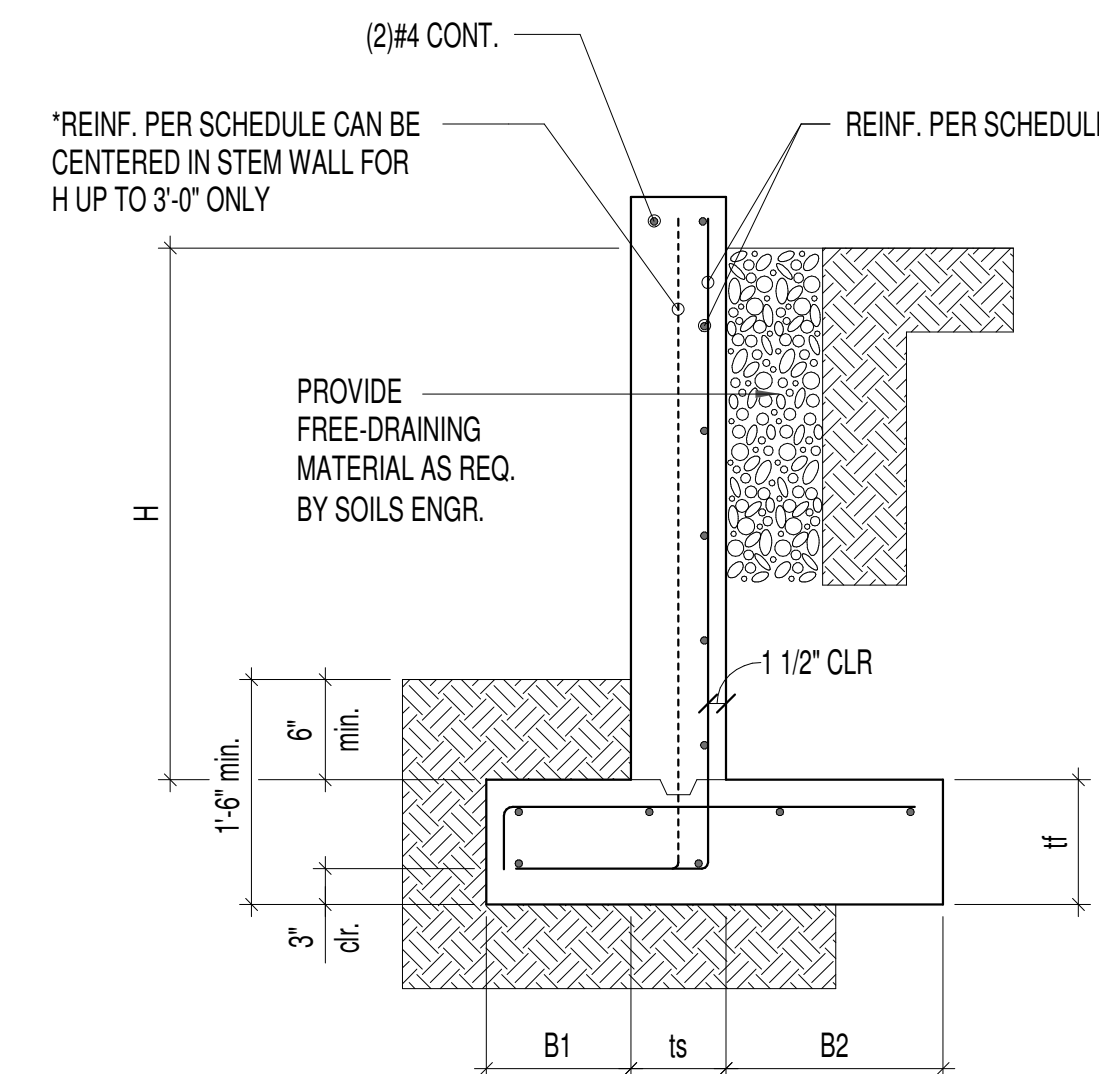
Typical Stepped Footing

5



Stair On Grade

6

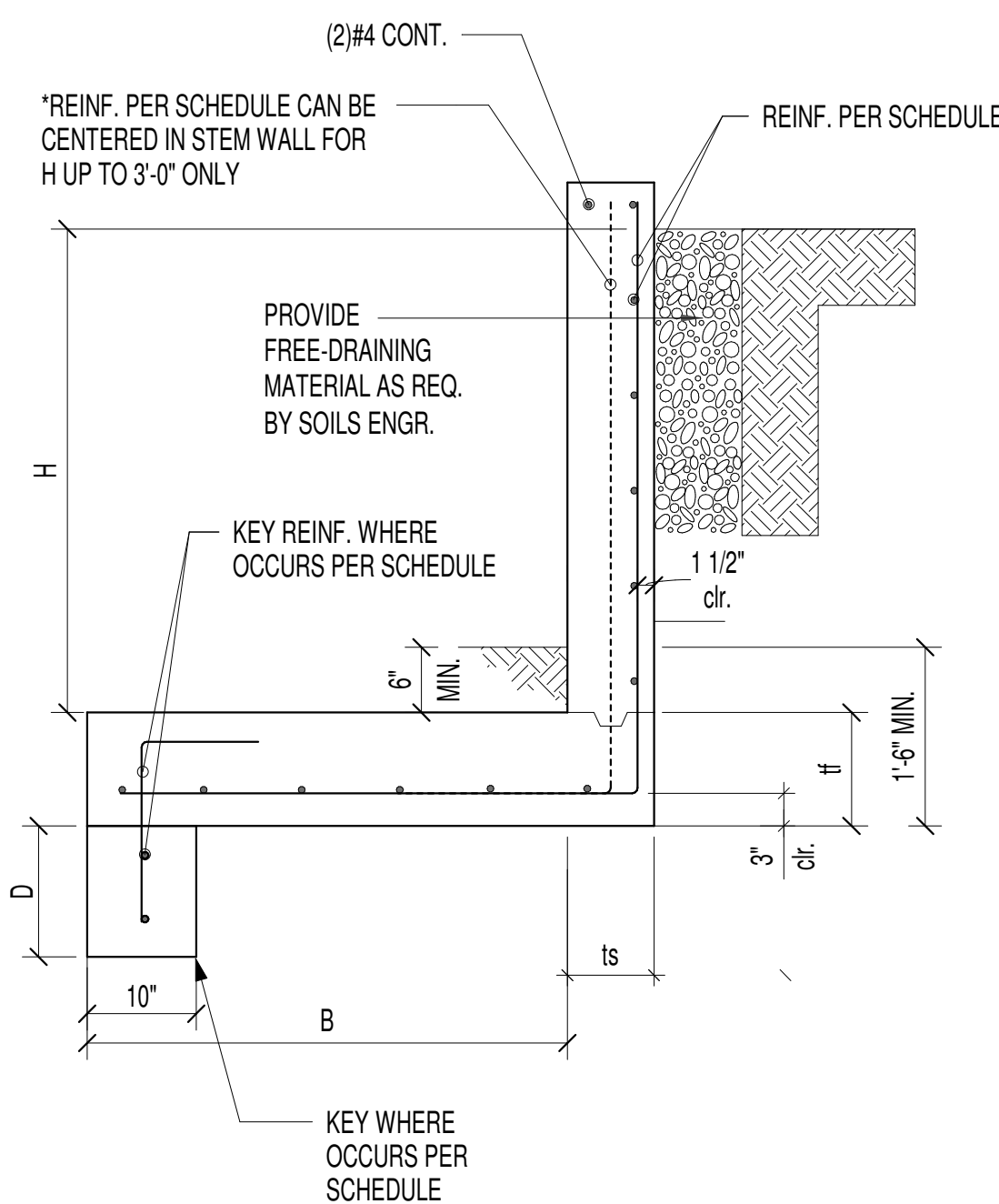


H	tf	B1	ts	B2	RETAINING WALL SCHEDULE DATA			
					Stem Reinforcement		Footing Reinforcement	
					VERT.	HORIZ.	TOP	LONGIT.
*UP TO 3'-0"	10"	5"	8"	5"	#4 @12"oc	#4 @12"oc	#4 @10"oc	(2)#4
4'-0"	10"	5"	8"	16"	#4 @12"oc	#4 @12"oc	#4 @10"oc	(3)#4
5'-0"	10"	5"	8"	22"	#4 @12"oc	#4 @12"oc	#4 @10"oc	(4)#4
6'-0"	12"	9"	8"	28"	#4 @12"oc	#4 @12"oc	#5 @12"oc	(5)#4
7'-0"	12"	12"	10"	32"	#5 @12"oc	#5 @12"oc	#5 @10"oc	(6)#4
8'-0"	12"	12"	10"	35"	#5 @12"oc	#5 @12"oc	#5 @10"oc	(7)#4

EQUIVALENT FLUID PRESSURE = 40 PCF
 MINIMUM ALLOWABLE BEARING = 4000 PSF
 COEFFICIENT OF FRICTION = 0.45 (ULTIMATE)
 PASSIVE RESISTANCE = 300 PCF (ULTIMATE)
 LATERAL SEISMIC SURCHARGE = 9H (ULTIMATE)

Retaining Wall Schedule

8



H	tf	ts	B	D	RETAINING WALL SCHEDULE DATA - SITE WALLS					
					Stem Reinforcement		Footing Reinforcement		Key Reinf.	
					VERT.	HORIZ.	TOP	LONGIT.		
*UP TO 3'-0"	10"	8"	15"	-	#4 @10"oc	#4 @12"oc	#4 @10"oc	(2)#4	-	-
4'-0"	10"	8"	21"	-	#4 @10"oc	#4 @12"oc	#4 @10"oc	(2)#4	-	-
5'-0"	12"	8"	44"	-	#4 @9"oc	#4 @12"oc	#4 @9"oc	(5)#4	-	-
6'-0"	14"	8"	44"	8"	#5 @12"oc	#4 @12"oc	#5 @12"oc	(6)#5	#4 @12"oc	(1)#4
7'-0"	14"	12"	60"	8"	#5 @12"oc	#5 @12"oc	#5 @10"oc	(6)#5	#4 @12"oc	(1)#4
8'-0"	14"	12"	84"	12"	#5 @10"oc	#5 @12"oc	#5 @10"oc	(8)#5	#4 @12"oc	(1)#4
9'-0"	14"	12"	99"	16"	#5 @8"oc	#5 @12"oc	#5 @8"oc	(9)#5	#4 @10"oc	(2)#4
10'-0"	16"	12"	123"	18"	#6 @10"oc	#5 @12"oc	#6 @10"oc	(12)#5	#4 @10"oc	(2)#4

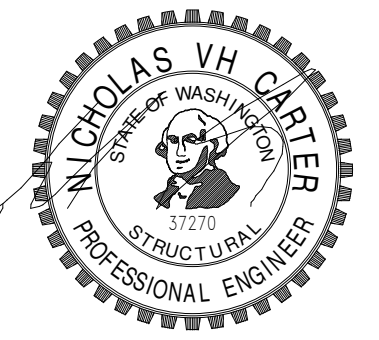
EQUIVALENT FLUID PRESSURE = 40 PCF
 MINIMUM ALLOWABLE BEARING = 4000 PSF
 COEFFICIENT OF FRICTION = 0.45 (ULTIMATE)
 PASSIVE RESISTANCE = 300 PCF (ULTIMATE)
 LATERAL SEISMIC SURCHARGE = 9H (ULTIMATE)

Retaining Wall Schedule - Site Walls

12

9

10



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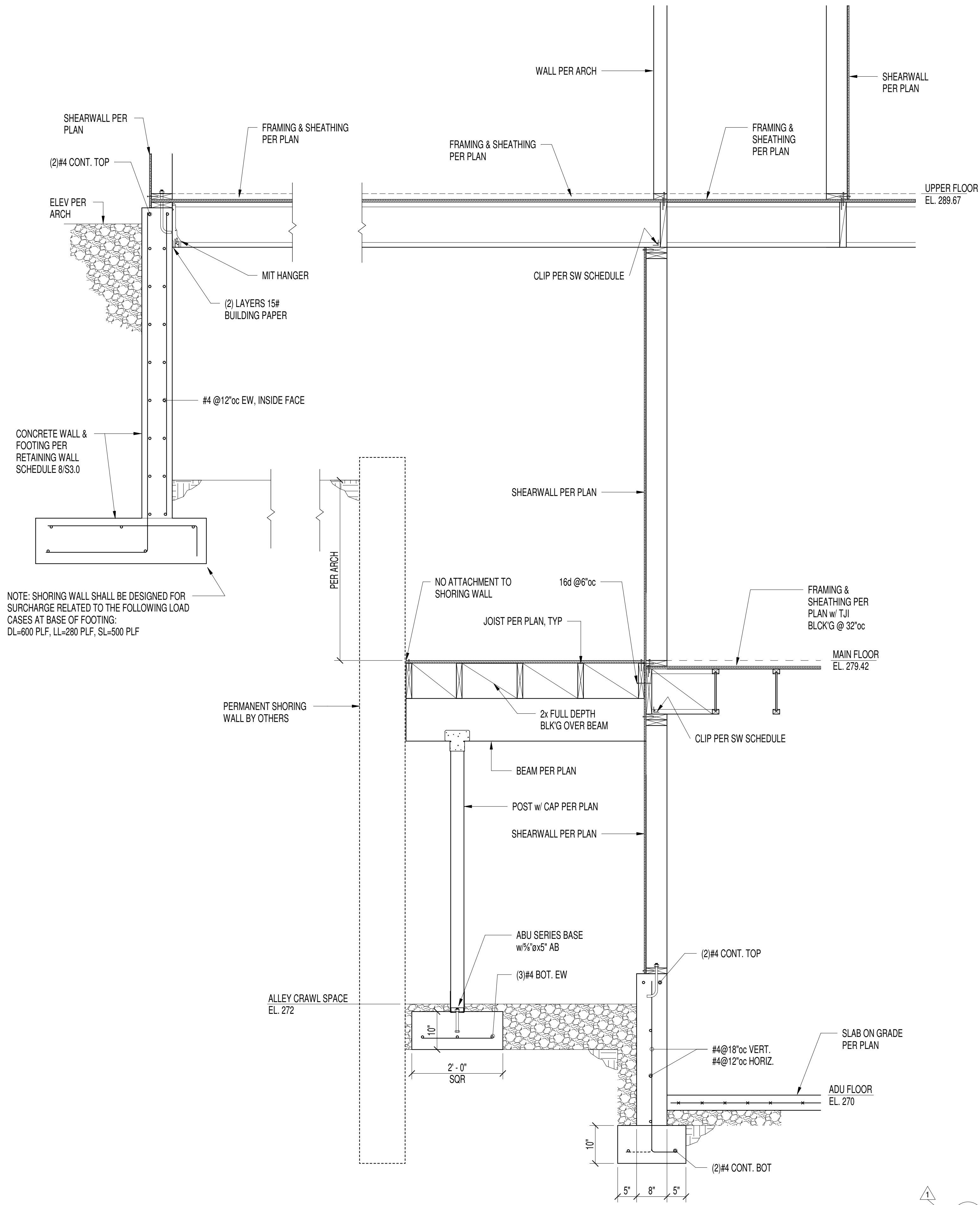
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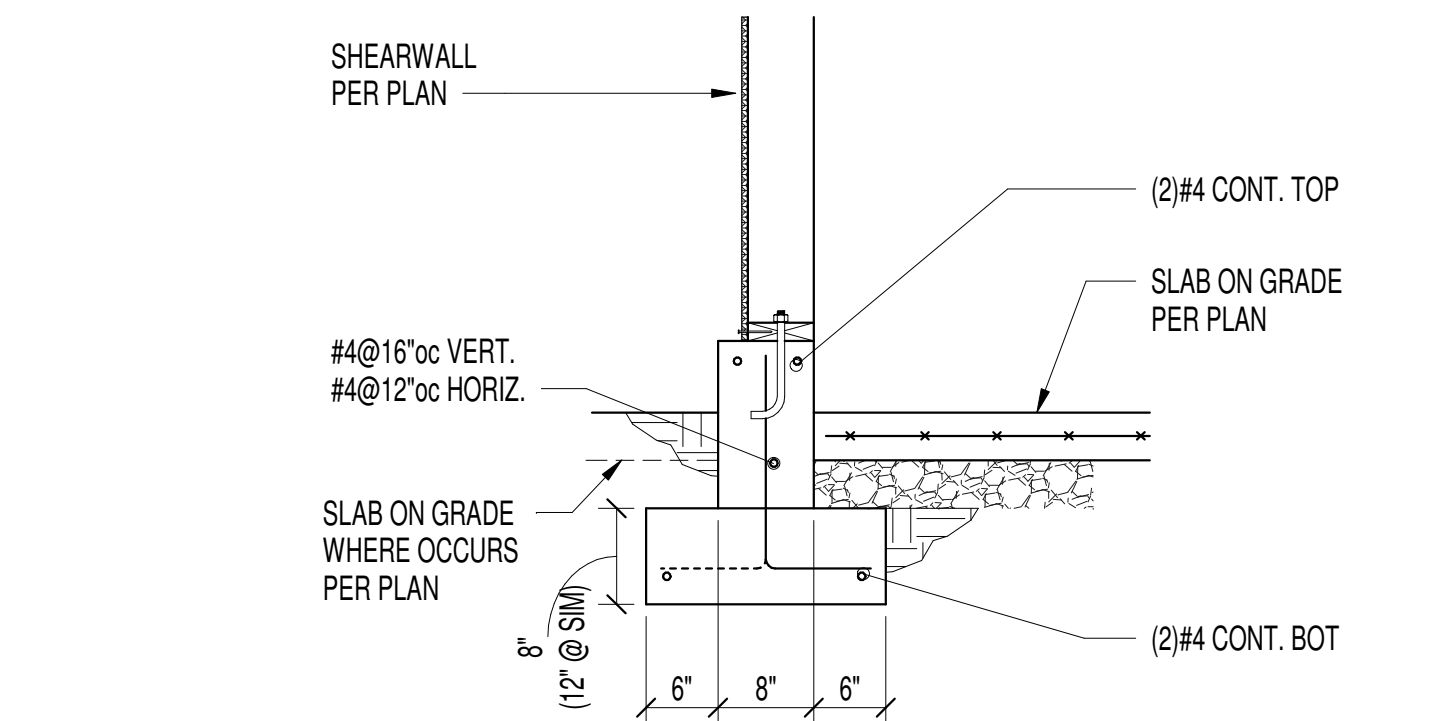
Concrete Details

S3.0



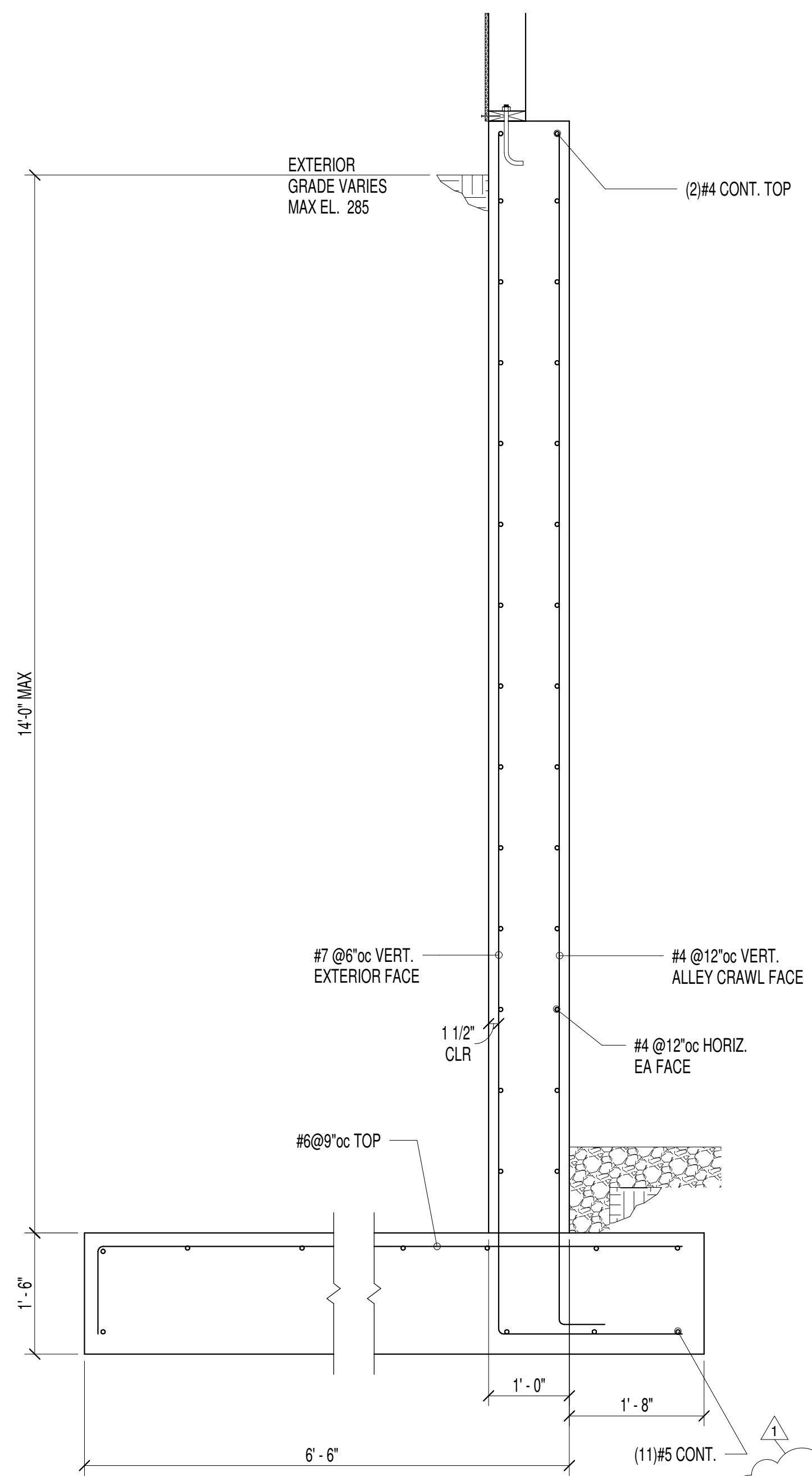
Section thru NE wall @ Stair

10



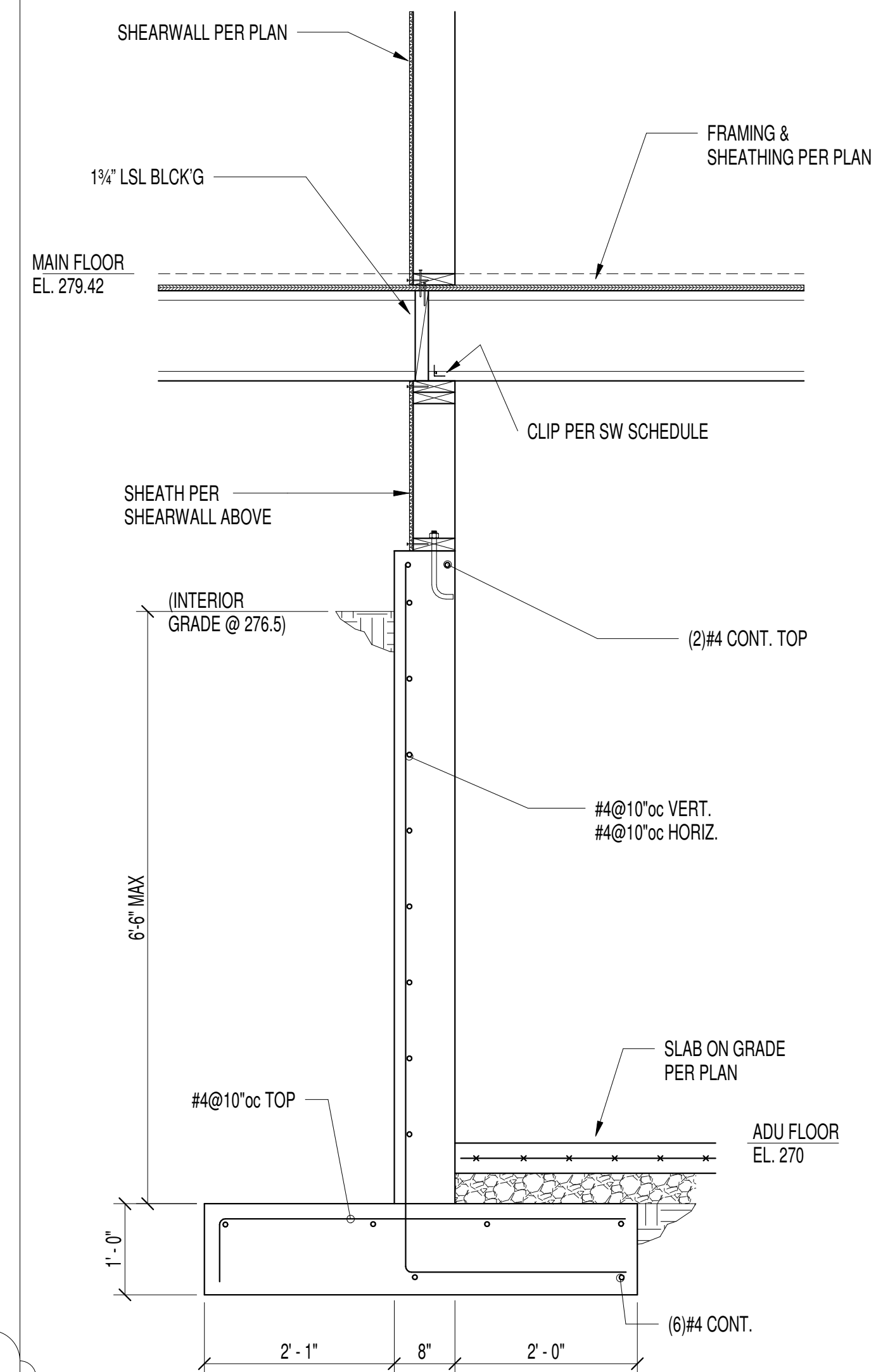
Section SW ADU/Entry 3

4



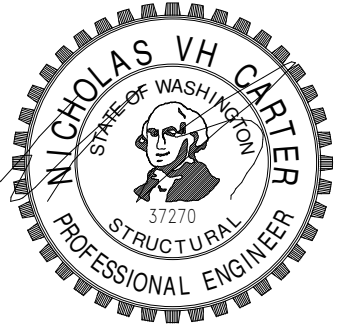
Section thru SE elevation @ ADU/Laundry

11



Section thru SE elevation @ ADU/Laundry

12



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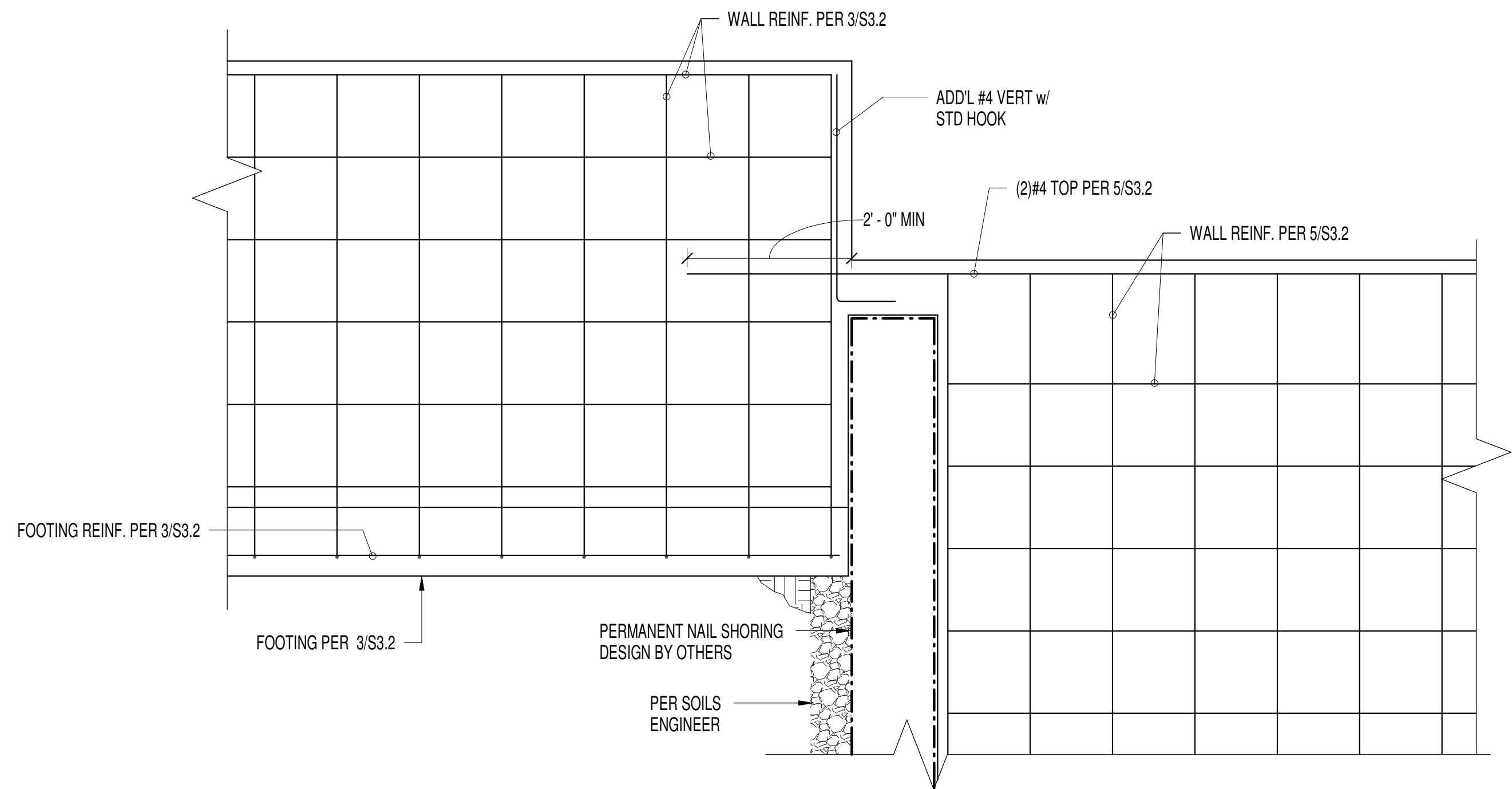
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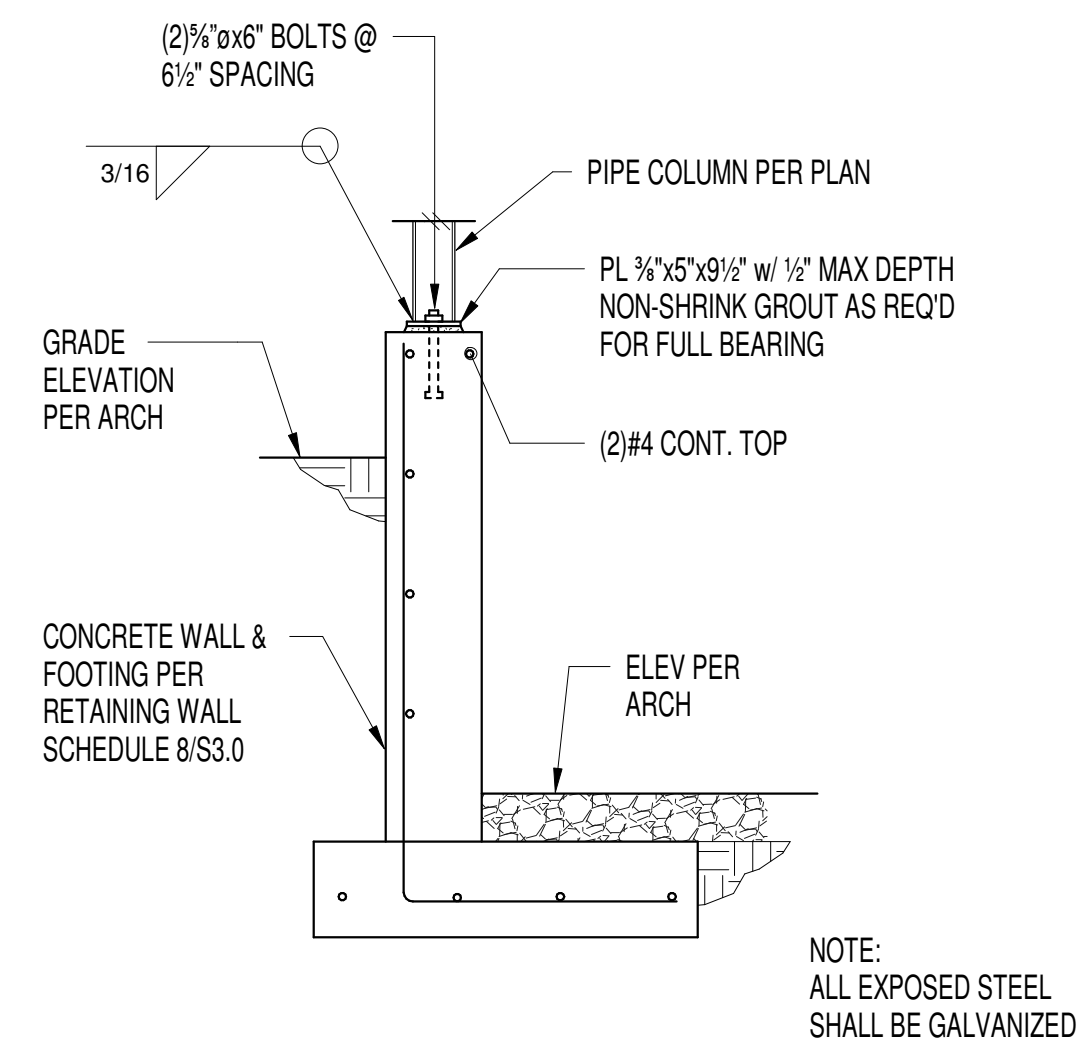
Concrete Details

S3.1



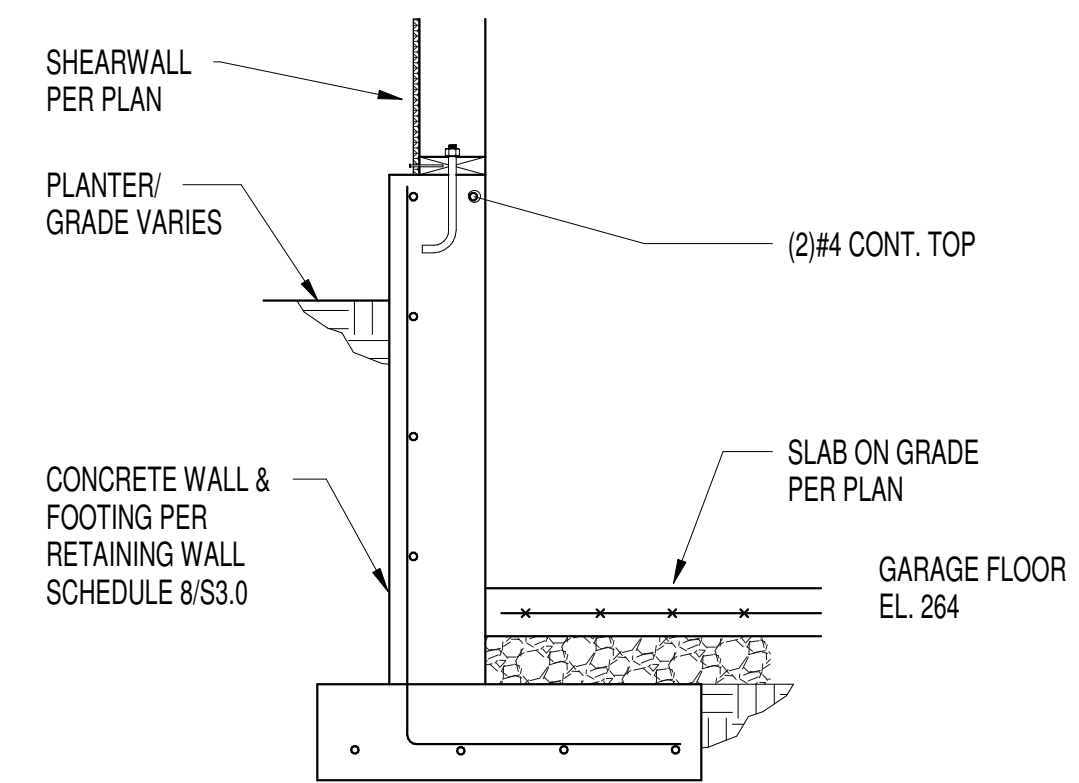
Wall Elevation

2



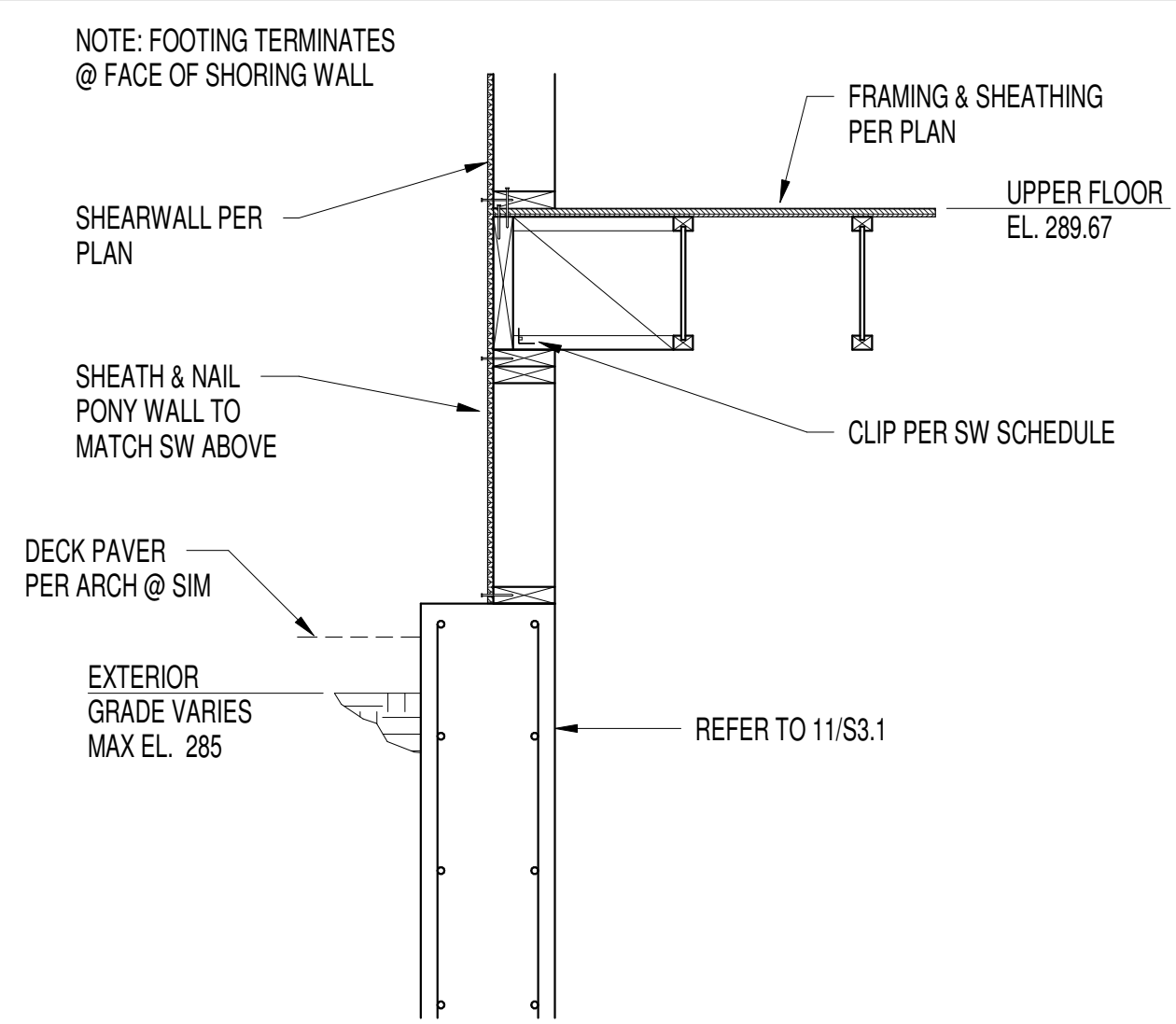
Trellis Post Base

3



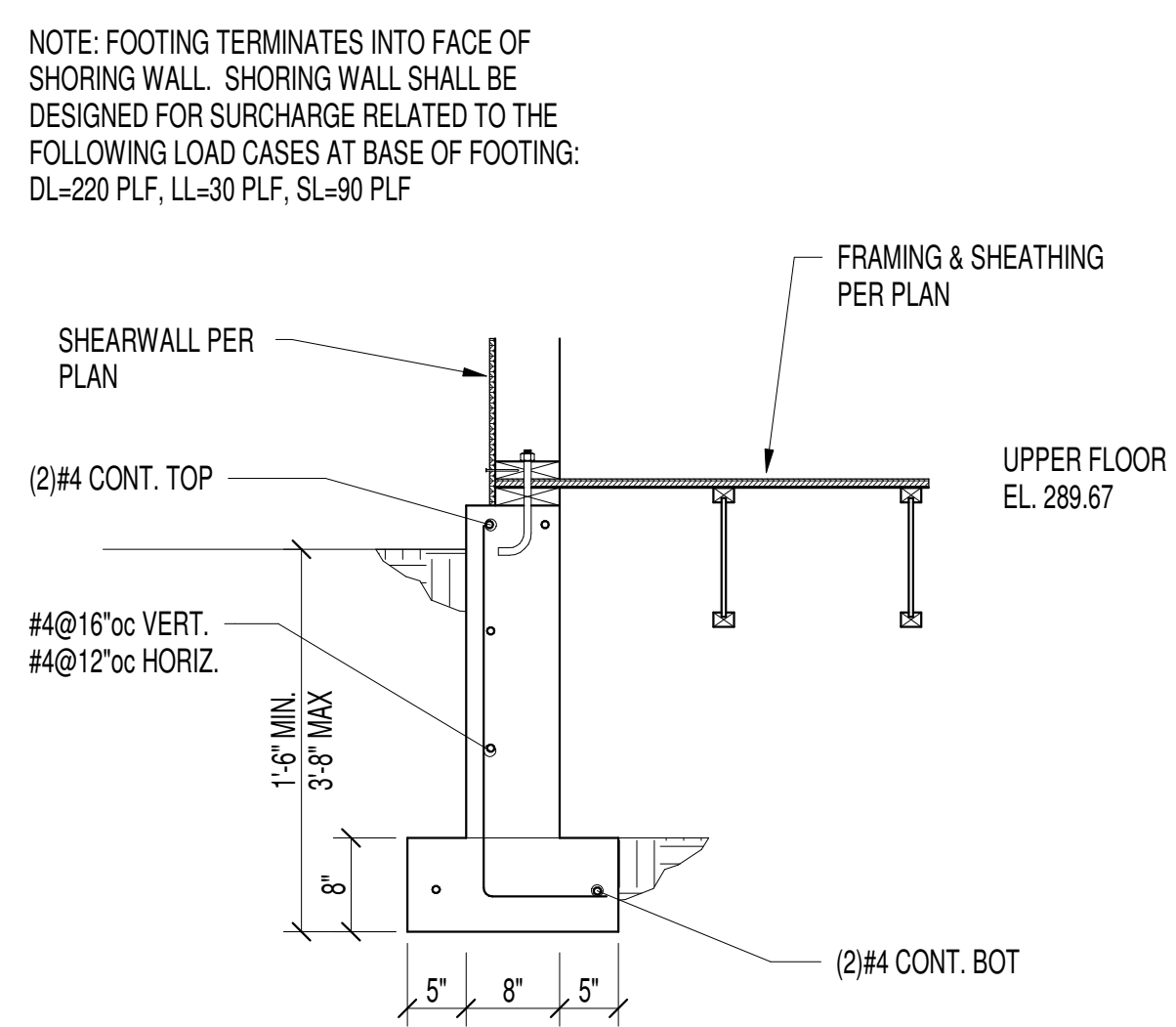
Garage SW @ Entry Planters

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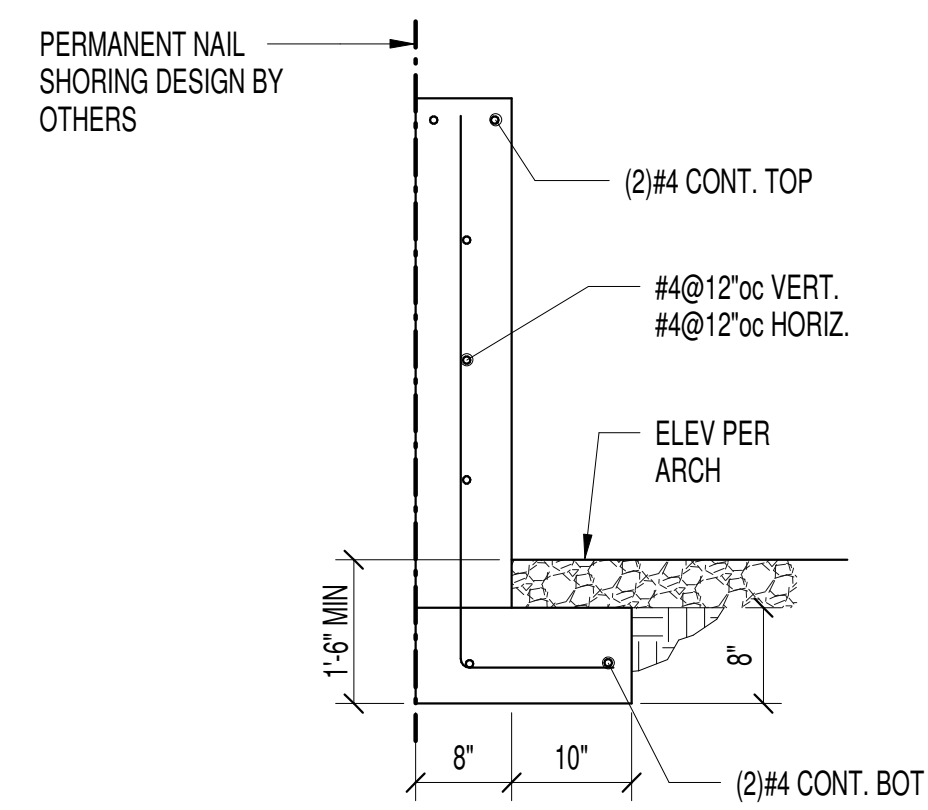
Section thru SW & NE elevations @ Secret Room/Bath

5

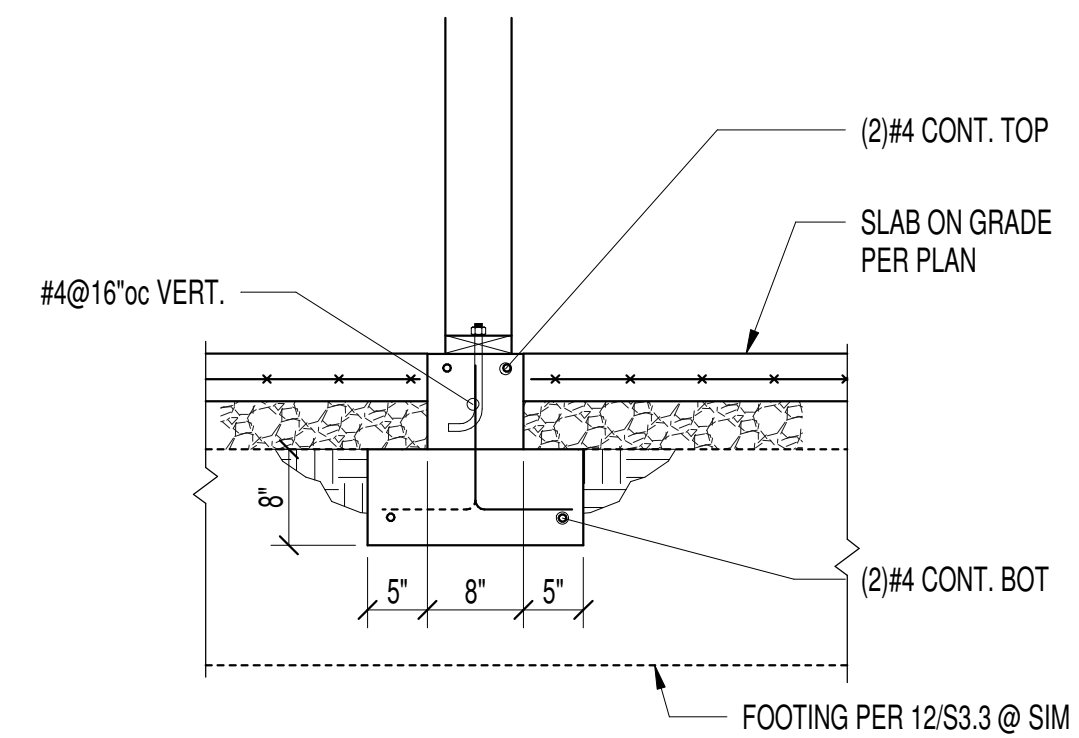


SE/NW @ Secret Room/Bath (NE of Shoring Wall)

6

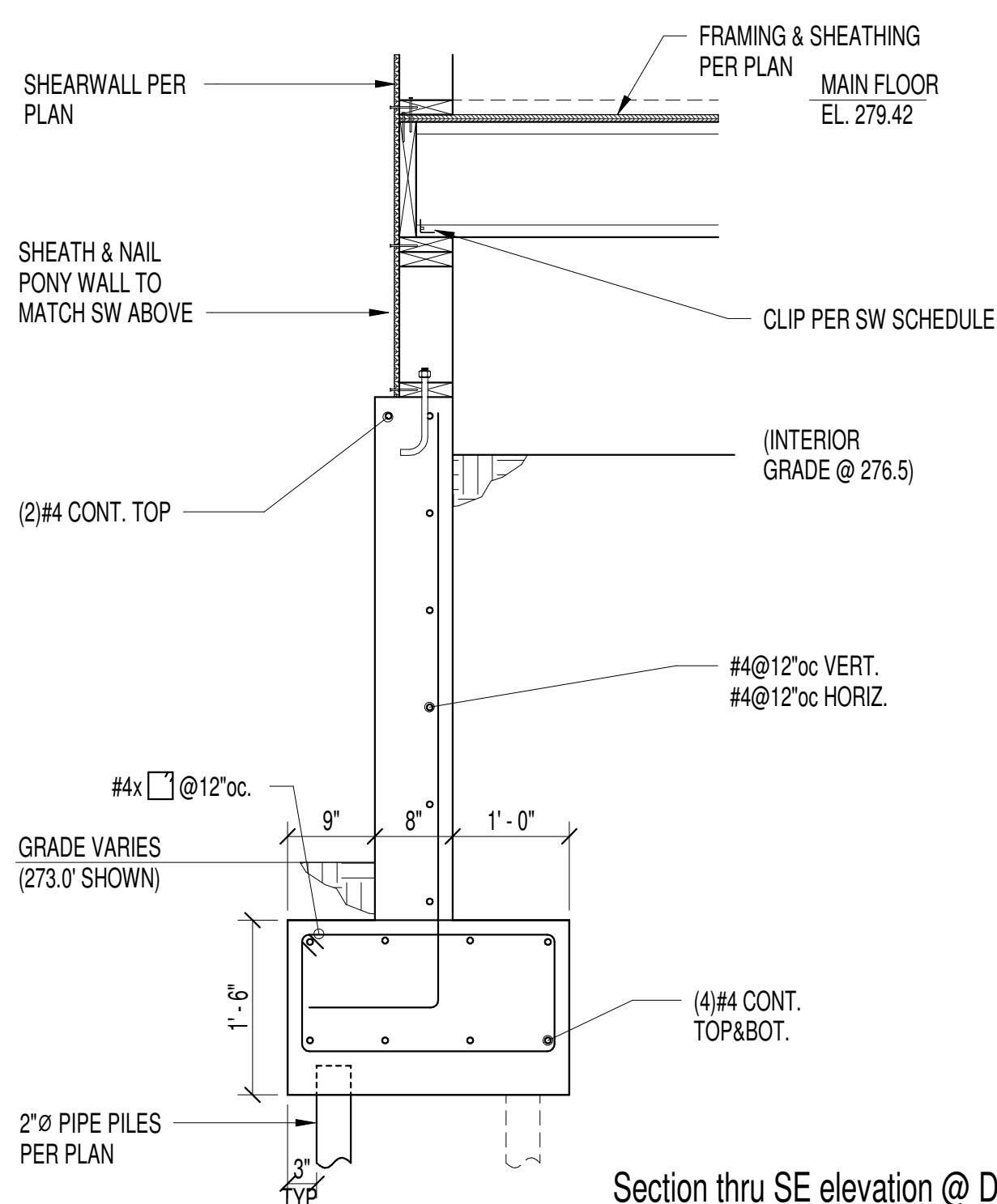


7



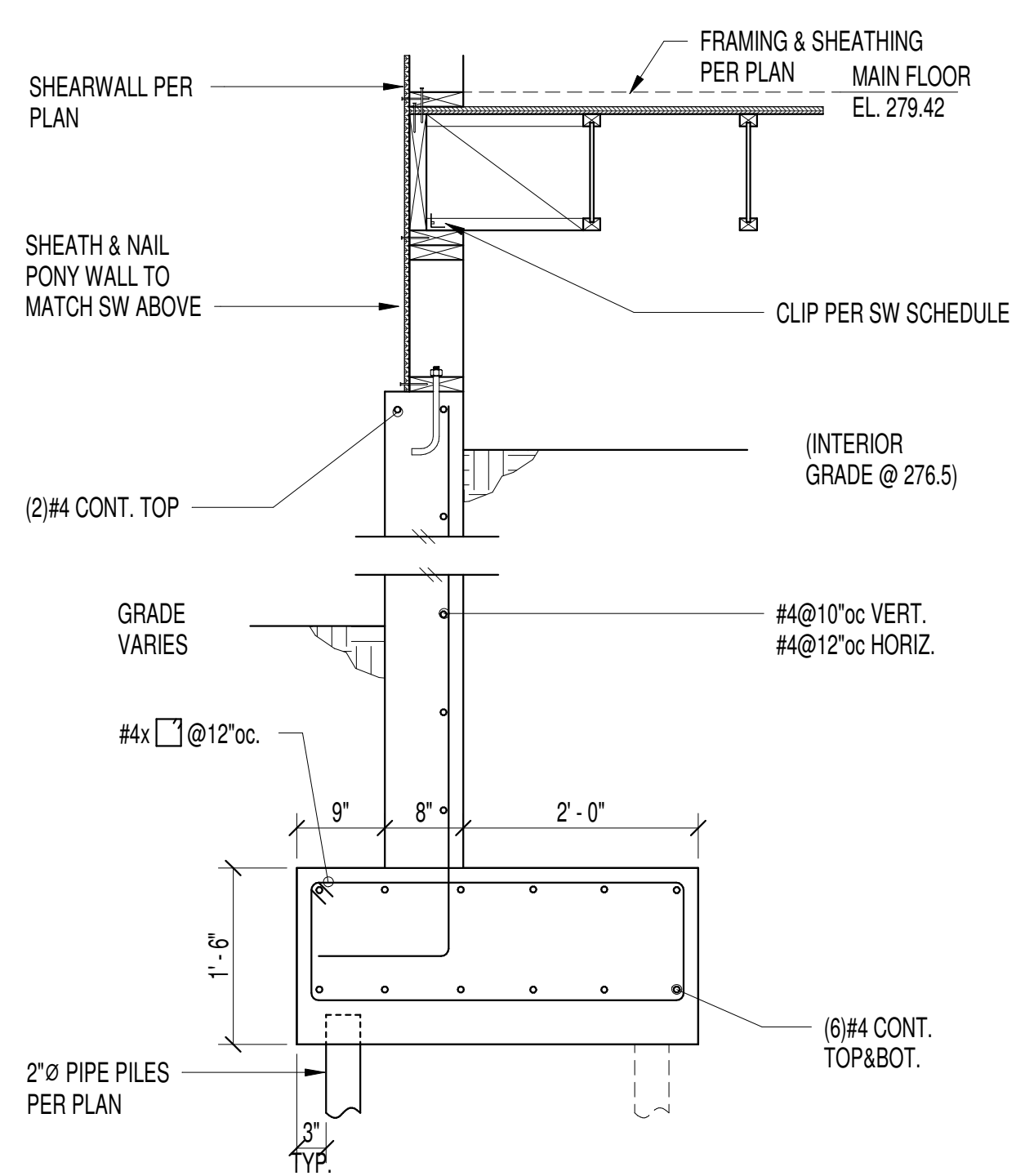
Interior Bearing Stem Wall

8



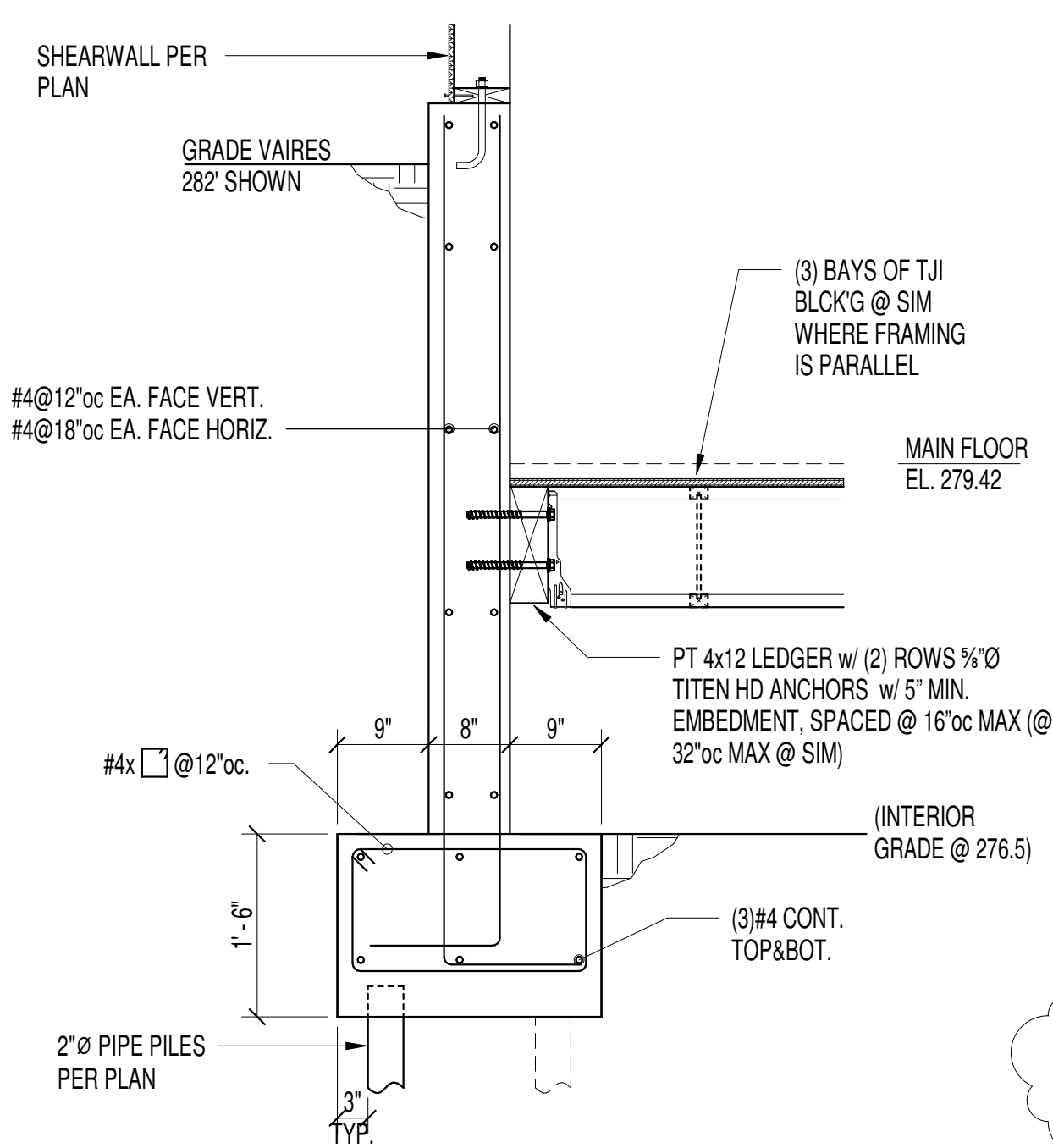
Section thru SE elevation @ Den/Laundry

9



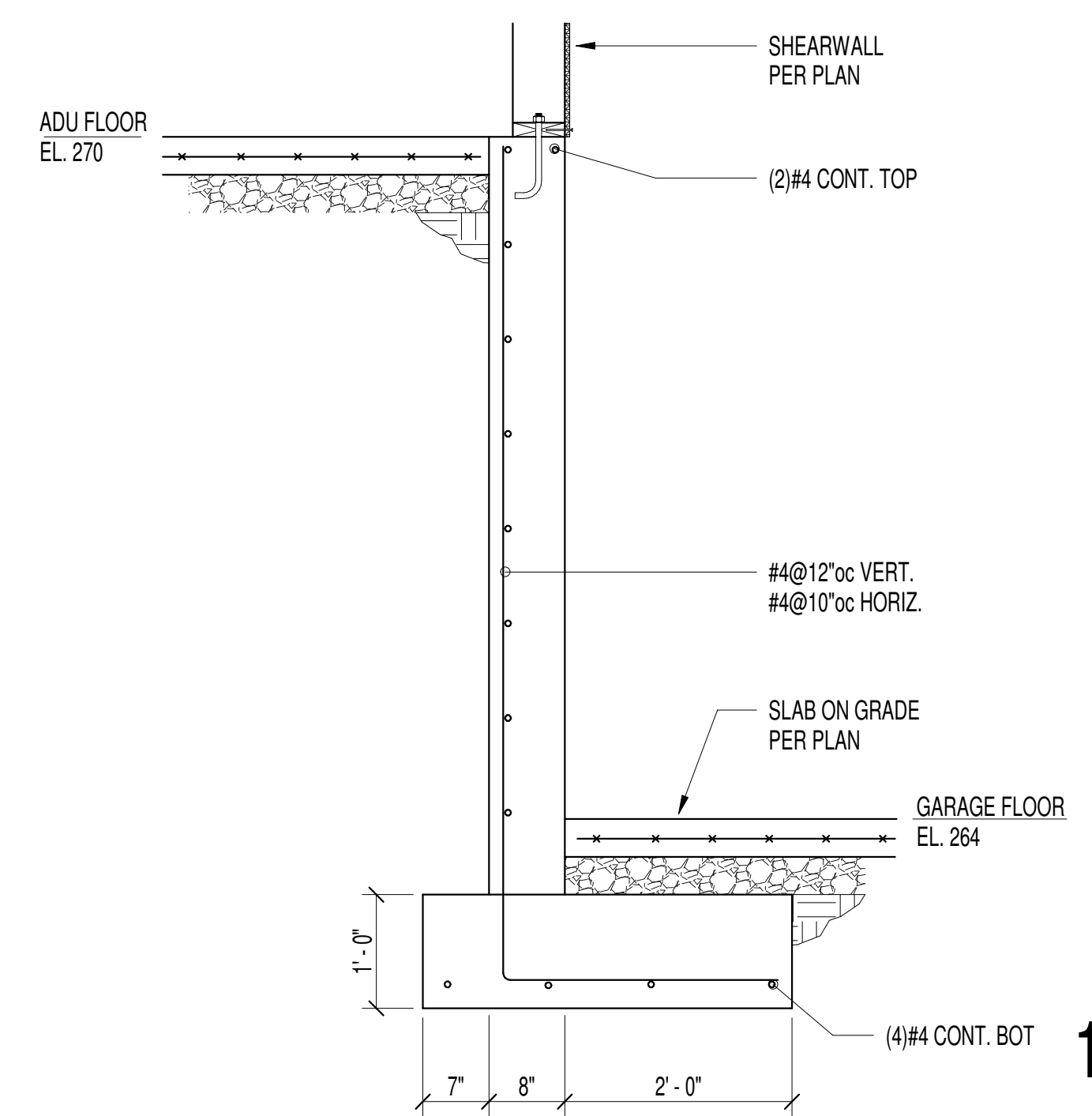
Section thru SW elevation @ Den/Laundry

10



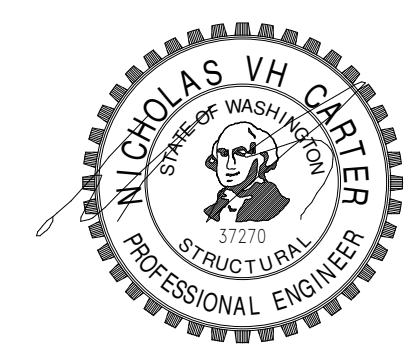
Section thru NE/SE elevation @ Laundry

11



Garage/ADU step

12



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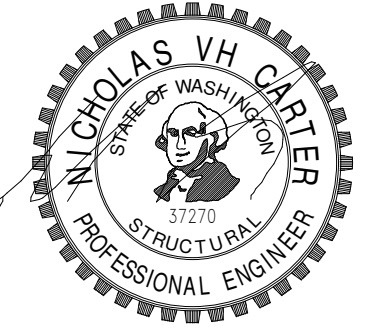
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Concrete Details

S3.2



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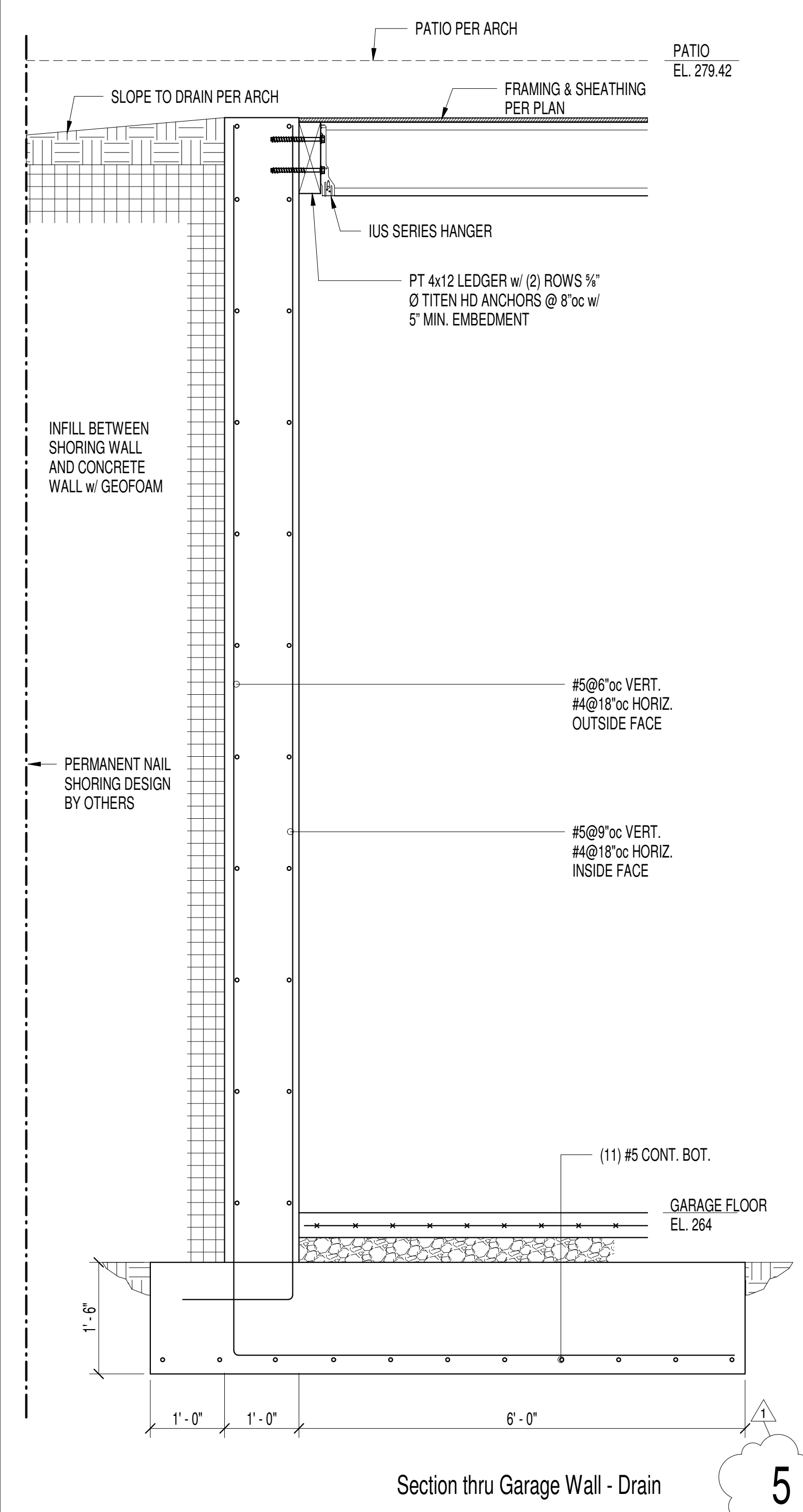
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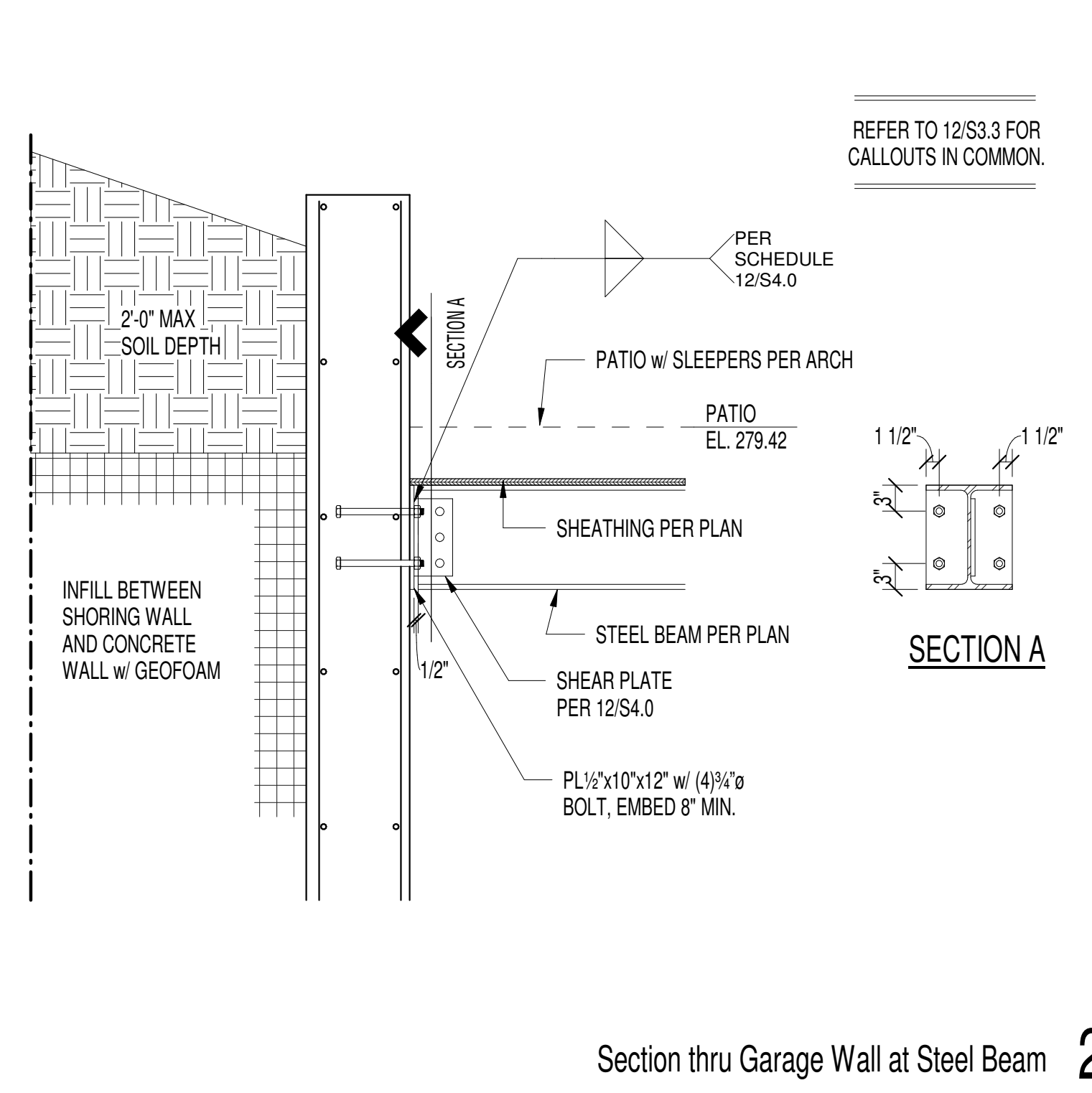
Concrete Details

S3.3



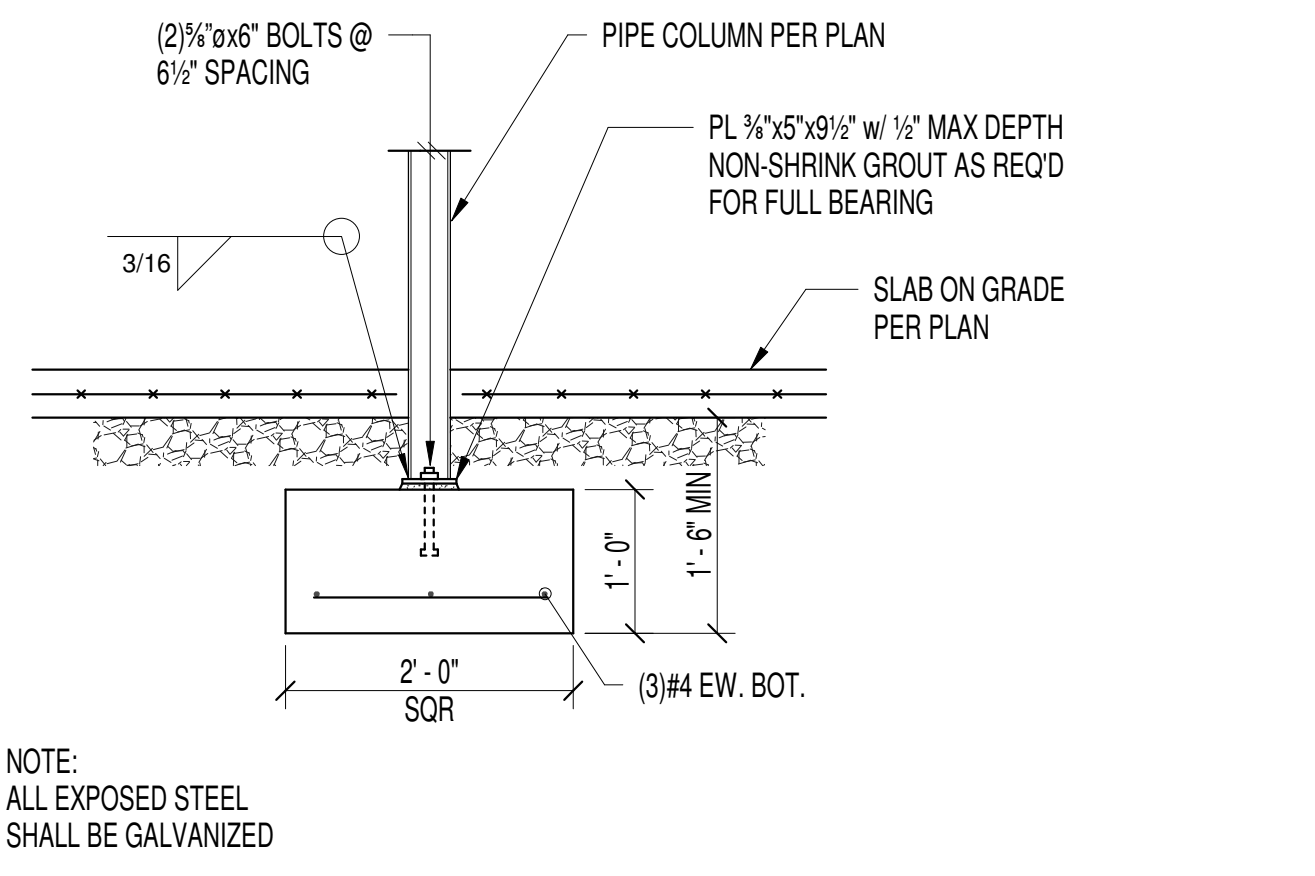
Section thru Garage Wall - Drain

5



Section thru Garage Wall at Steel Beam

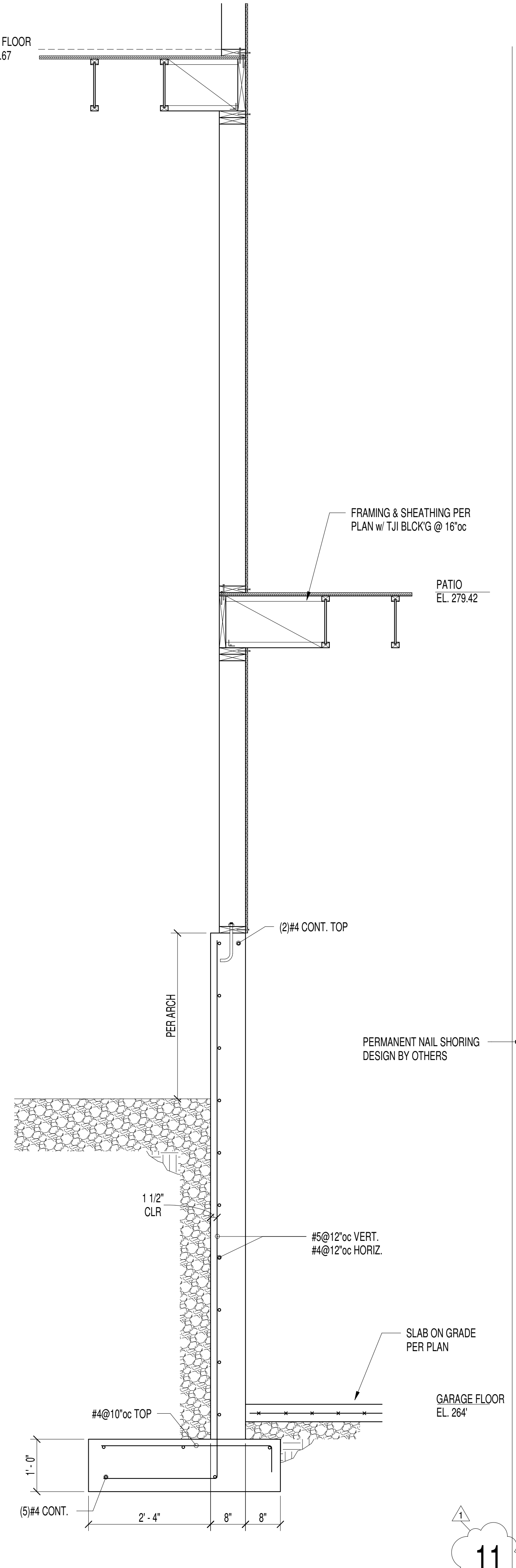
2



Entry Canopy Post Base

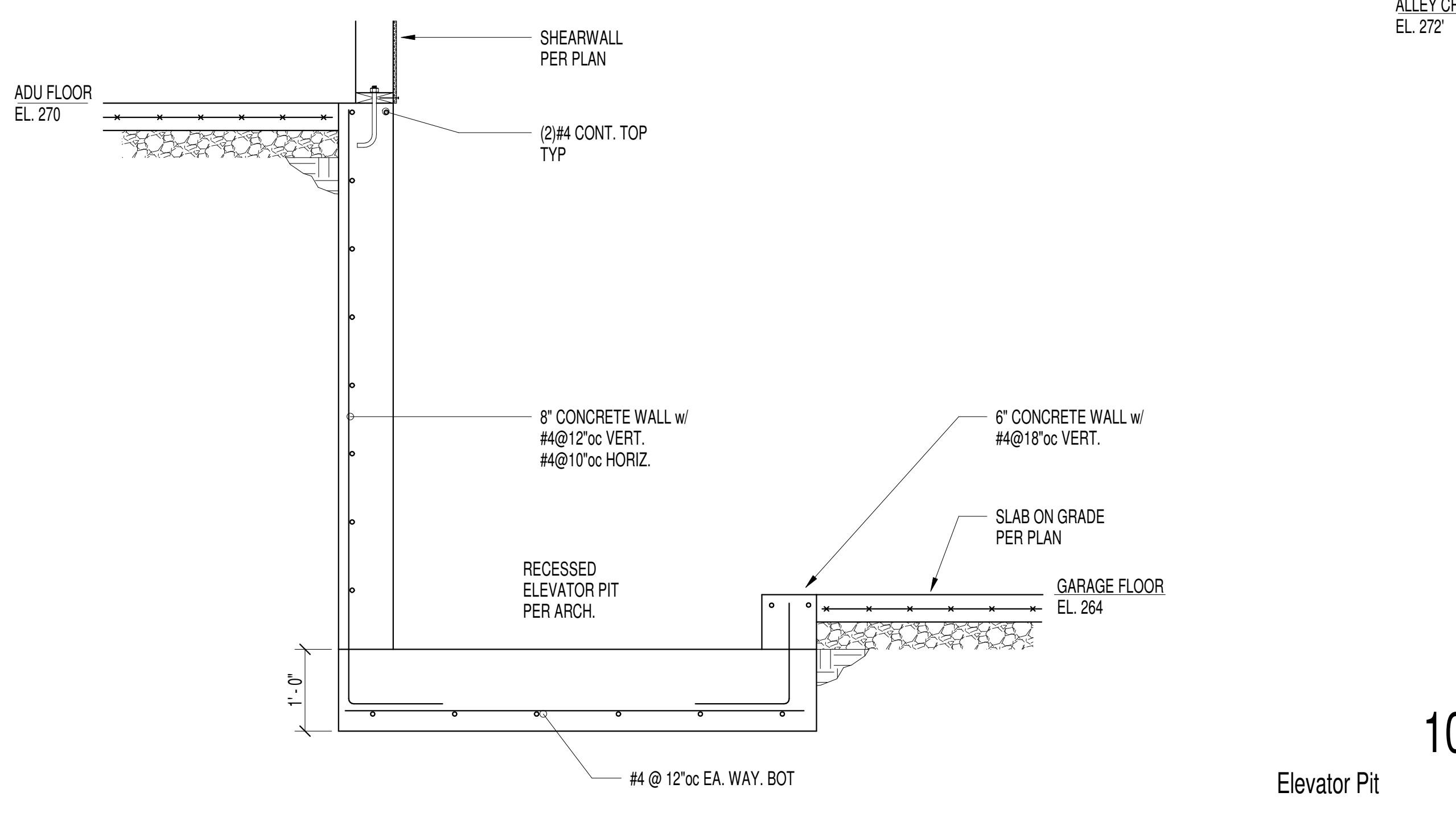
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ALLEY CRAWL SPACE
EL. 272'



Section thru Garage Wall

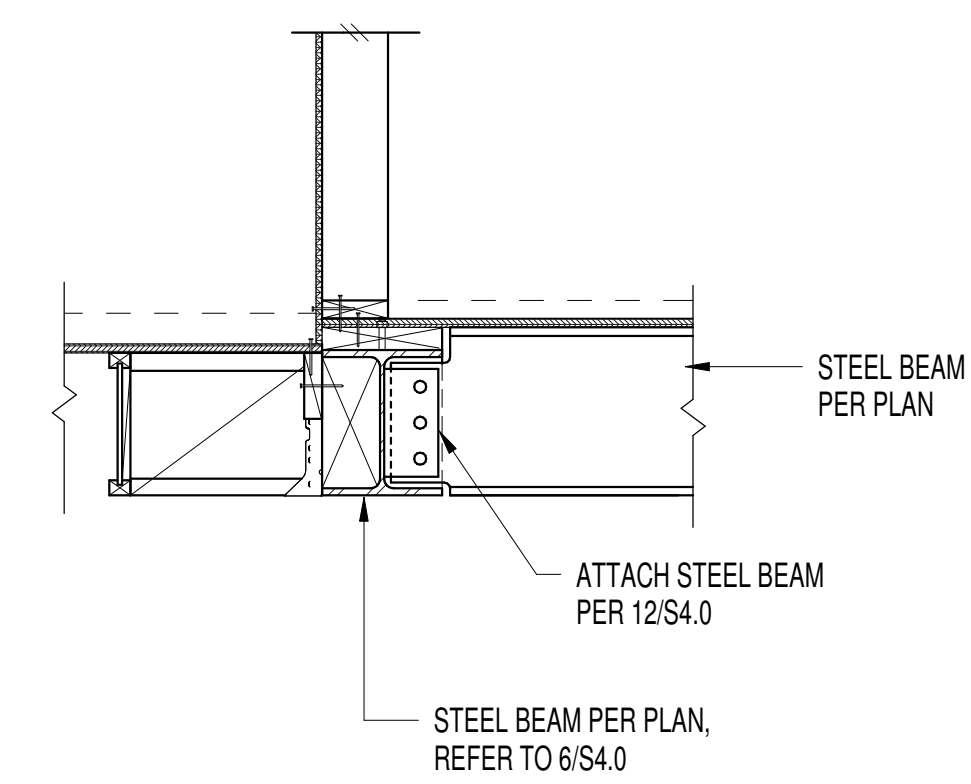
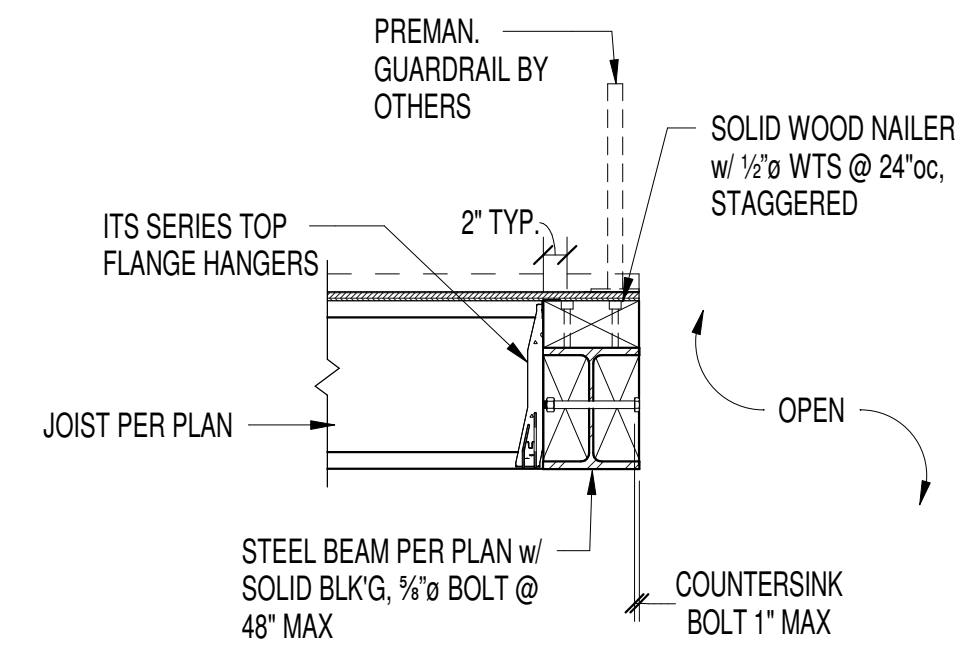
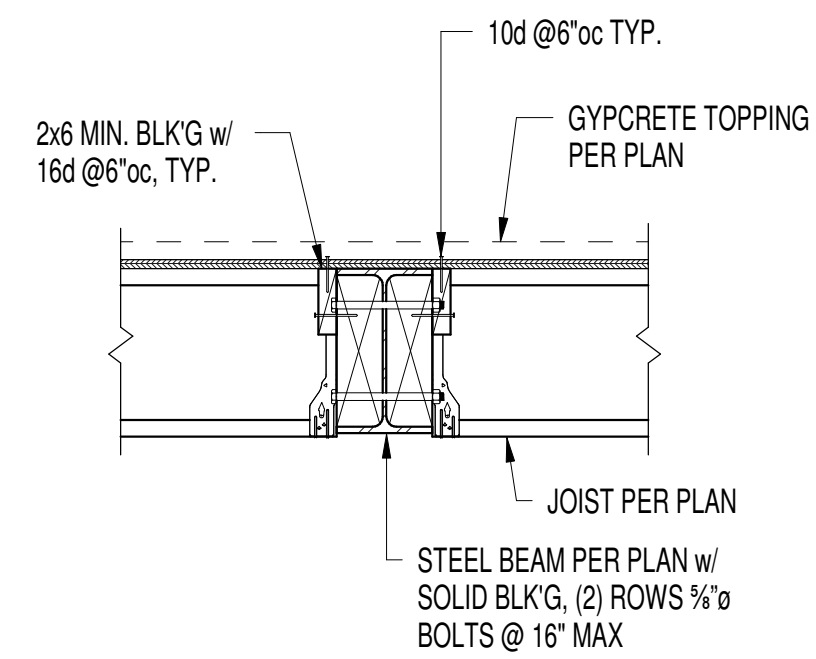
12



Elevator Pit

10

11

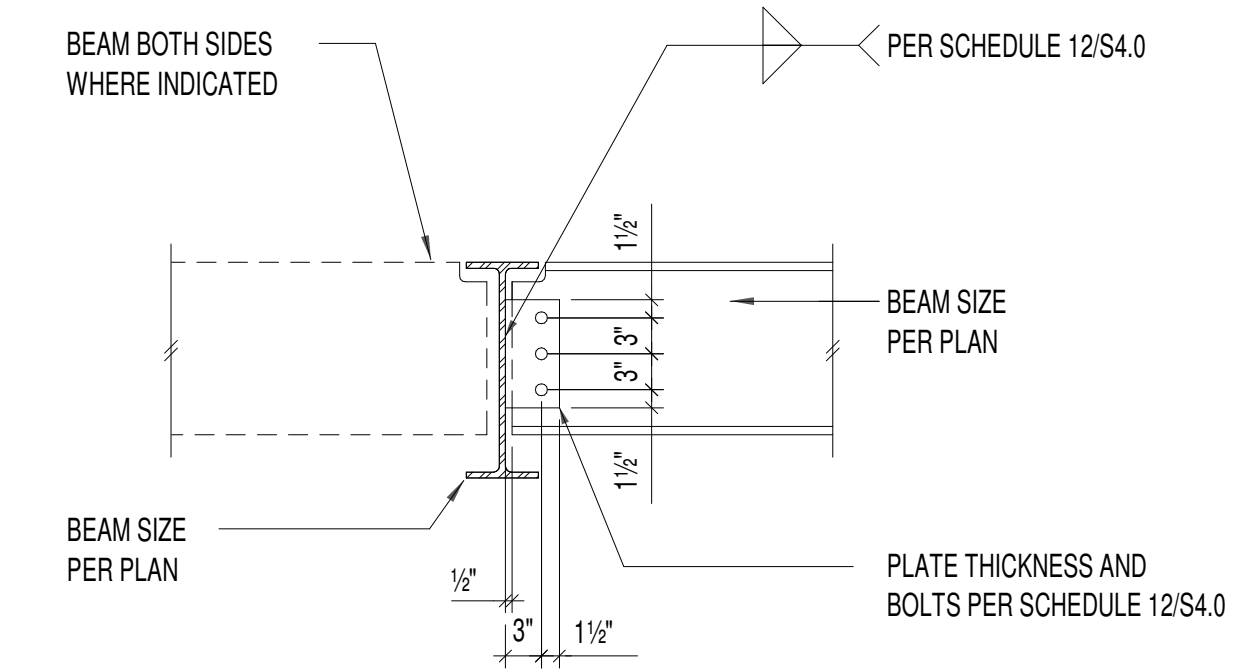
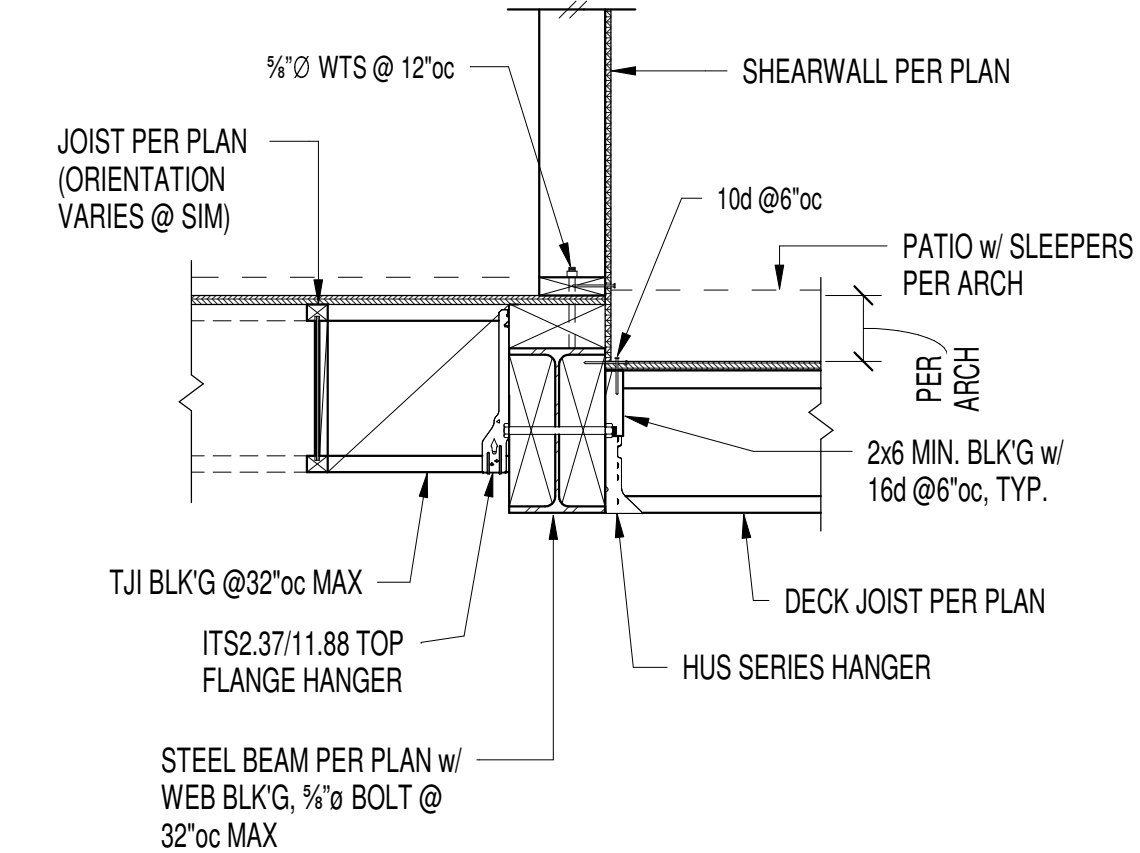
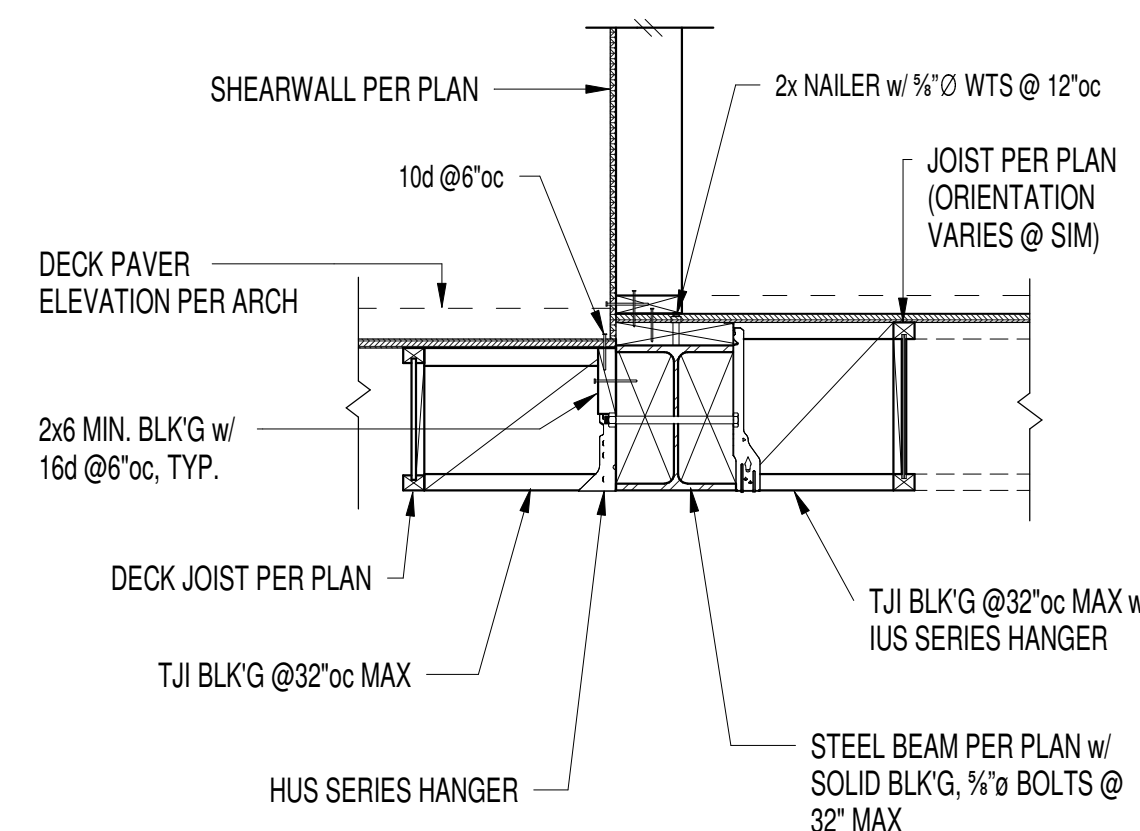
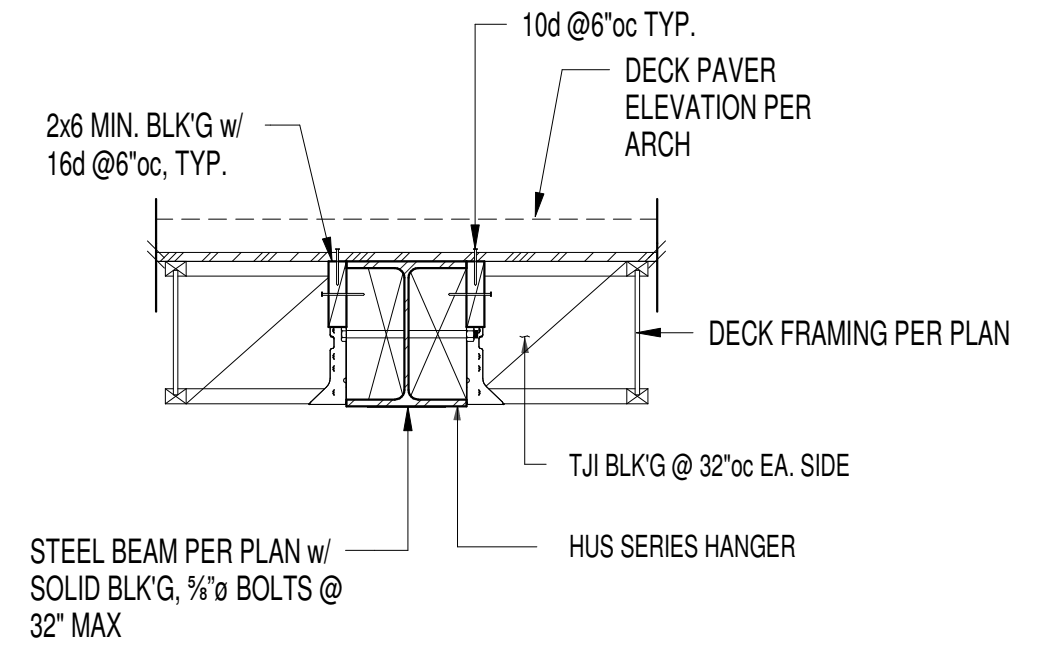


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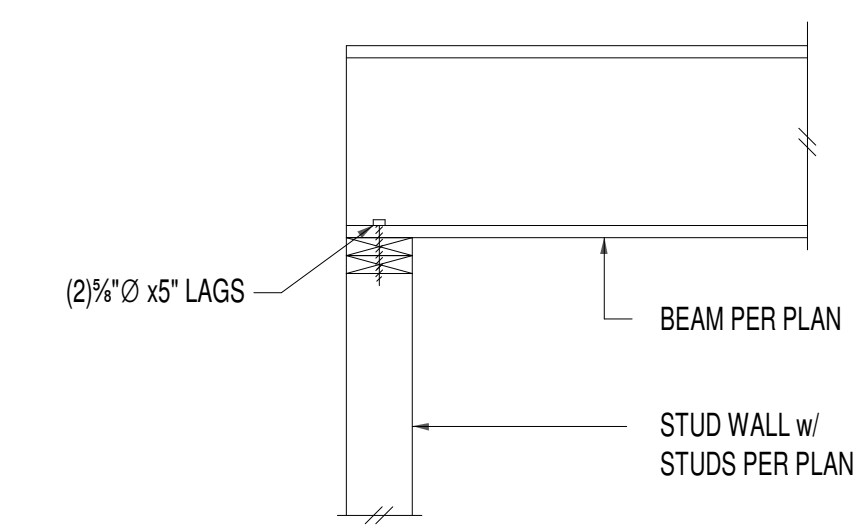
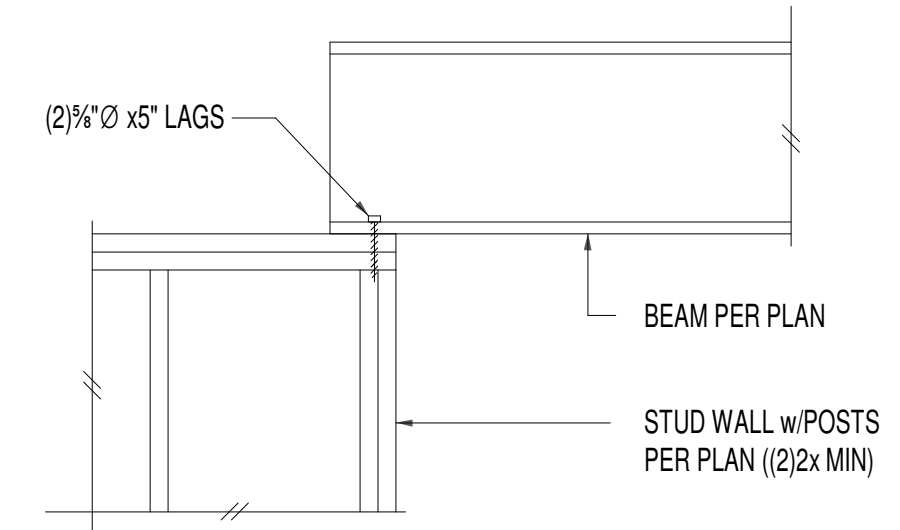
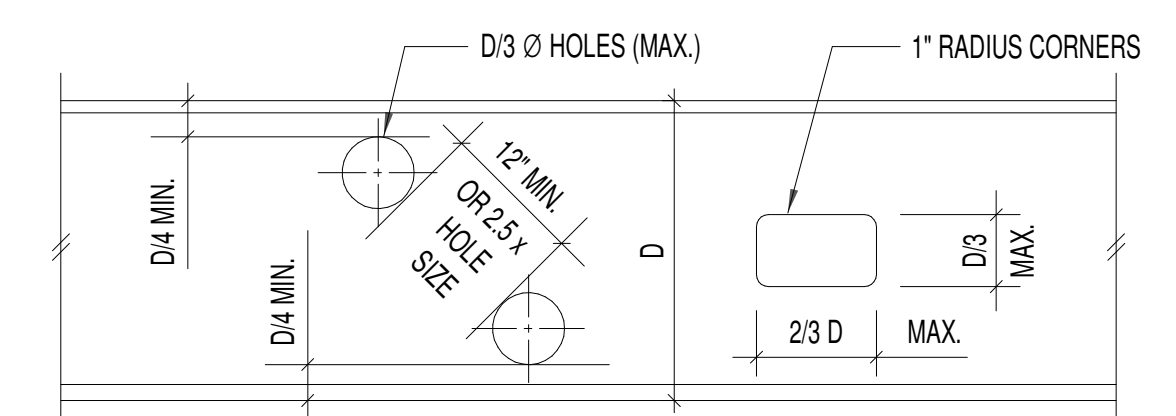
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Typical Beam To Beam Connection

8



1. CONTRACTOR SHALL COORDINATE SIZES AND LOCATIONS OF ALL BEAM PENETRATIONS, ALL PENETRATIONS LARGER THAN 2'Ø SHALL BE SHOWN ON SHOP DRAWINGS OR SKETCHES AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. FIELD CUTTING NOT PERMITTED WITHOUT APPROVAL.
2. OPENINGS MAY OCCUR IN MIDDLE HALF OF BEAM LENGTH ONLY.
3. NO CUTTING MAY OCCUR IN TOP OR BOTTOM QUARTER OF BEAM DEPTH.
4. ADJACENT OPENINGS MUST BE SPACED AT THE LESSER OF, 12" OR 2.5 x LARGER OPENING SIZE, EDGE TO EDGE.
5. MAXIMUM SIZES OF OPENINGS SHALL BE D/3 Ø OR D/3 x 2D/3 AS SHOWN.
6. NO OPENINGS SHALL OCCUR WITHIN 12" OF AN ADJACENT BEAM CONNECTION.
7. REQUIRED OPENINGS NOT MEETING ABOVE CRITERIA SHALL BE SUBMITTED TO ENGINEER FOR REINFORCING DESIGN.

SHEAR PLATE SCHEDULE					
BEAM SIZE	NO. OF BOLTS	BOLT SIZE	PLATE THICKNESS	WELD SIZE	CAPACITY
W10	2	1"Ø	1/2"	1/4"	37.0k
W12, W14	3	1"Ø	1/2"	1/4"	53.3k

* BOLT TYPE = A325X
PL MATERIAL = A36

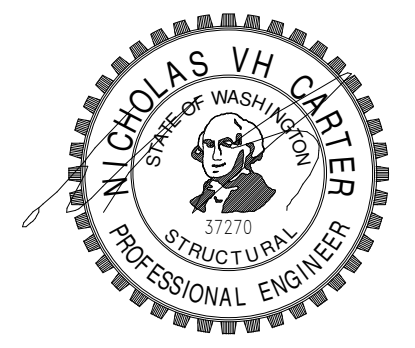
Steel Beam Openings

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12



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STEINBORN RESIDENCE

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Mercer Island, WA 98040

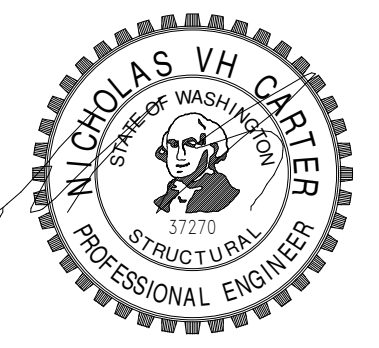
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IF SHEET IS NOT 24"x36" IT HAS BEEN RESCALED

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Steel Details

S4.0



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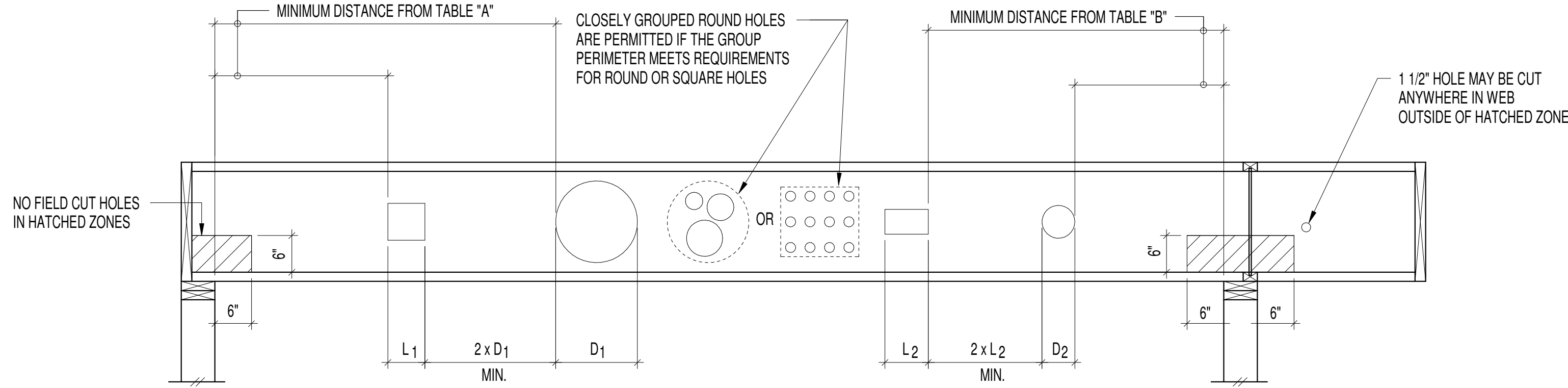
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Mercer Island, WA 98040

Date: 2/14/2022 Permit Submittal
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Typical Wood Details

S5.0



DO NOT CUT HOLES LARGER THAN 1 1/2" IN CANTILEVER

TABLE A - END SUPPORT
MINIMUM DISTANCE FROM EDGE OF HOLE TO INSIDE FACE OF NEAREST END SUPPORT

DEPTH	TJI	○ ROUND HOLE SIZE									□ SQUARE OR RECTANGULAR HOLE SIZE									
		2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"	2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"	
9 1/2"	110	1'-0"	1'-6"	2'-0"	3'-0"	5'-0"	-	-	-	-	1'-0"	1'-6"	2'-6"	3'-6"	4'-6"	-	-	-	-	
	210	1'-0"	1'-6"	2'-6"	3'-0"	5'-6"	-	-	-	-	1'-0"	2'-0"	2'-6"	4'-0"	5'-0"	-	-	-	-	
	230	1'-6"	2'-0"	2'-6"	3'-6"	5'-6"	-	-	-	-	1'-0"	2'-0"	3'-0"	4'-6"	5'-0"	-	-	-	-	
11 7/8"	110	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-6"	-	-	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	5'-0"	6'-0"	-	-	
	210	1'-0"	1'-6"	2'-0"	2'-0"	3'-0"	3'-6"	6'-0"	-	-	1'-0"	1'-6"	2'-6"	3'-0"	5'-0"	5'-6"	6'-6"	-	-	
	230	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	6'-6"	-	-	1'-0"	2'-0"	2'-6"	3'-6"	5'-6"	5'-6"	7'-0"	-	-	
	360	1'-6"	2'-0"	3'-0"	3'-6"	4'-6"	5'-0"	7'-0"	-	-	1'-6"	2'-6"	3'-6"	4'-6"	6'-6"	6'-6"	7'-6"	-	-	
14"	110	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	3'-0"	5'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	4'-0"	6'-0"	8'-0"	-	-
	210	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-6"	6'-0"	-	1'-0"	1'-0"	2'-0"	2'-6"	4'-0"	4'-6"	6'-6"	8'-6"	-	-
	230	1'-0"	1'-0"	1'-0"	1'-6"	2'-6"	2'-6"	4'-0"	7'-0"	-	1'-0"	1'-0"	2'-0"	3'-0"	4'-0"	5'-0"	7'-0"	9'-0"	-	-
	360	1'-0"	1'-0"	1'-6"	2'-6"	3'-6"	4'-0"	5'-6"	8'-0"	-	1'-0"	1'-6"	2'-6"	4'-0"	6'-0"	6'-6"	8'-0"	9'-6"	-	-
560	1'-0"	1'-0"	2'-0"	3'-0"	4'-6"	5'-0"	6'-6"	9'-0"	-	1'-6"	3'-0"	4'-0"	5'-0"	7'-0"	7'-6"	9'-0"	10'-0"	-	-	

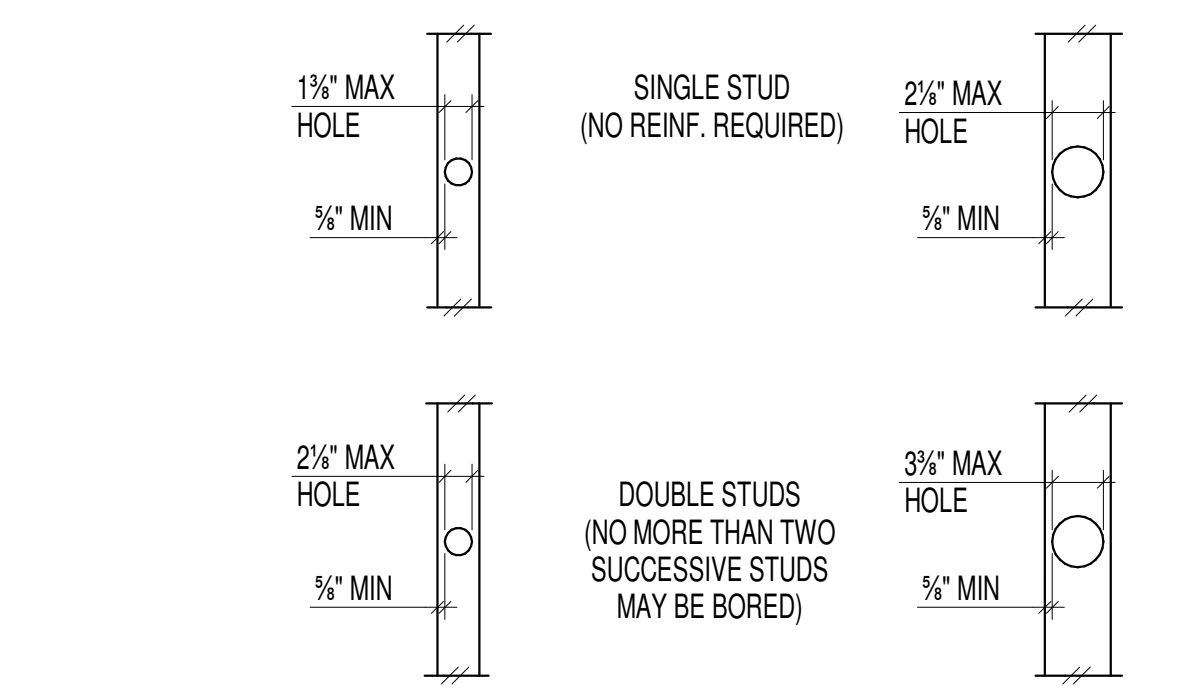
TABLE B - INTERMEDIATE OR CANTILEVER SUPPORT
MINIMUM DISTANCE FROM EDGE OF HOLE TO INSIDE FACE OF NEAREST INTERMEDIATE OR CANTILEVER SUPPORT

DEPTH	TJI	○ ROUND HOLE SIZE									□ SQUARE OR RECTANGULAR HOLE SIZE									
		2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"	2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"	
9 1/2"	110	2'-0"	2'-6"	3'-6"	4'-6"	7'-6"	-	-	-	-	1'-6"	2'-6"	3'-6"	5'-6"	6'-6"	-	-	-	-	
	210	2'-0"	2'-6"	3'-6"	5'-0"	8'-0"	-	-	-	-	2'-0"	3'-0"	4'-0"	6'-6"	7'-6"	-	-	-	-	
	230	2'-6"	3'-0"	4'-0"	5'-6"	8'-6"	-	-	-	-	2'-0"	3'-6"	4'-6"	6'-6"	7'-6"	-	-	-	-	
11 7/8"	110	1'-0"	1'-0"	1'-6"	2'-6"	4'-0"	4'-6"	8'-6"	-	-	1'-0"	1'-6"	2'-6"	4'-0"	7'-0"	7'-0"	9'-6"	-	-	
	210	1'-0"	1'-0"	2'-0"	3'-0"	4'-6"	5'-0"	9'-0"	-	-	1'-0"	2'-0"	3'-0"	4'-6"	8'-0"	8'-0"	10'-0"	-	-	
	230	1'-0"	2'-0"	2'-6"	3'-6"	5'-0"	5'-6"	10'-0"	-	-	1'-0"	2'-6"	3'-6"	5'-0"	8'-6"	9'-0"	10'-6"	-	-	
	360	2'-0"	3'-0"	4'-0"	5'-6"	7'-0"	7'-6"	11'-0"	-	-	2'-0"	3'-6"	5'-0"	7'-0"	9'-6"	9'-6"	11'-0"	-	-	
14"	110	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	2'-6"	4'-6"	8'-6"	-	1'-0"	1'-0"	1'-0"	2'-6"	5'-0"	6'-0"	9'-0"	12'-0"	-	-
	210	1'-0"	1'-0"	1'-0"	1'-0"	2'-6"	3'-0"	5'-6"	9'-6"	-	1'-0"	1'-0"	2'-0"	3'-6"	6'-0"	7'-0"	10'-0"	13'-0"	-	-
	230	1'-0"	1'-0"	1'-0"	2'-0"	3'-6"	4'-0"	6'-0"	10'-6"	-	1'-0"	1'-0"	2'-6"	4'-0"	6'-6"	7'-6"	11'-0"	13'-6"	-	-
	360	1'-0"	1'-0"	2'-0"	3'-6"	5'-6"	6'-0"	8'-6"	12'-6"	-	1'-0"	2'-0"	4'-0"	5'-6"	9'-0"	10'-0"	12'-0"	14'-0"	-	-
560	1'-0"	1'-0"	1'-6"	3'-6"	5'-6"	6'-6"	9'-6"	13'-6"	-	1'-0"	3'-0"	5'-0"	7'-0"	10'-0"	11'-0"	13'-6"	15'-0"	-	-	

- GENERAL NOTES:
- HOLES MAY BE LOCATED VERTICALLY ANYWHERE WITHIN THE WEB. LEAVE 1/8" OF WEB (MINIMUM) AT TOP AND BOTTOM OF HOLE.
 - KNOCKOUTS ARE LOCATED IN WEB AT APPROXIMATELY 12" ON-CENTER; THEY DO NOT AFFECT HOLE PLACEMENT AND MAY BE LOCATED IN THE HATCHED ZONE.
 - FOR SIMPLE SPAN (5' MINIMUM) UNIFORMLY LOADED JOISTS MEETING THE REQUIREMENTS OF THIS GUIDE, ONE MAXIMUM SIZE ROUND HOLE MAY BE LOCATED AT THE CENTER OF THE JOIST SPAN PROVIDED THAT NO OTHER HOLES OCCUR IN THE JOIST.
 - DISTANCES ARE BASED ON THE MAXIMUM UNIFORM LOADS SHOWN IN THIS GUIDE. FOR OTHER LOAD CONDITIONS OR HOLE CONFIGURATIONS, USE FORTE SOFTWARE OR CONTACT YOUR WEYERHAEUSER REPRESENTATIVE.
 - DO NOT CUT OR NOTCH FLANGE.

Allowable TJI Joist Penetrations

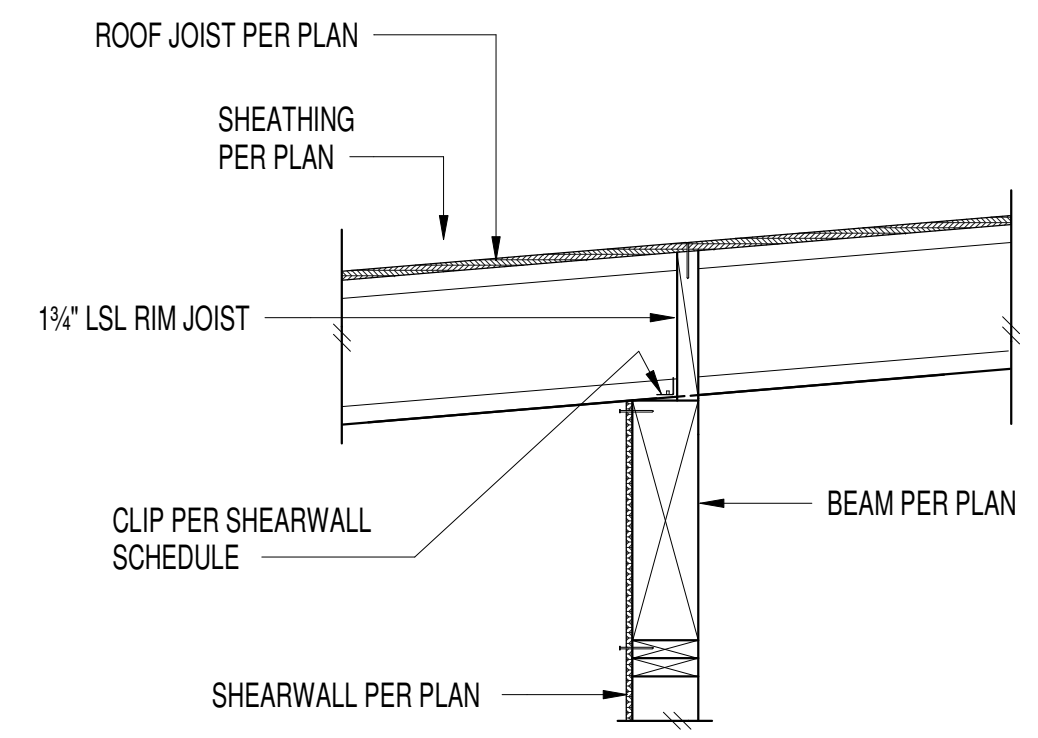
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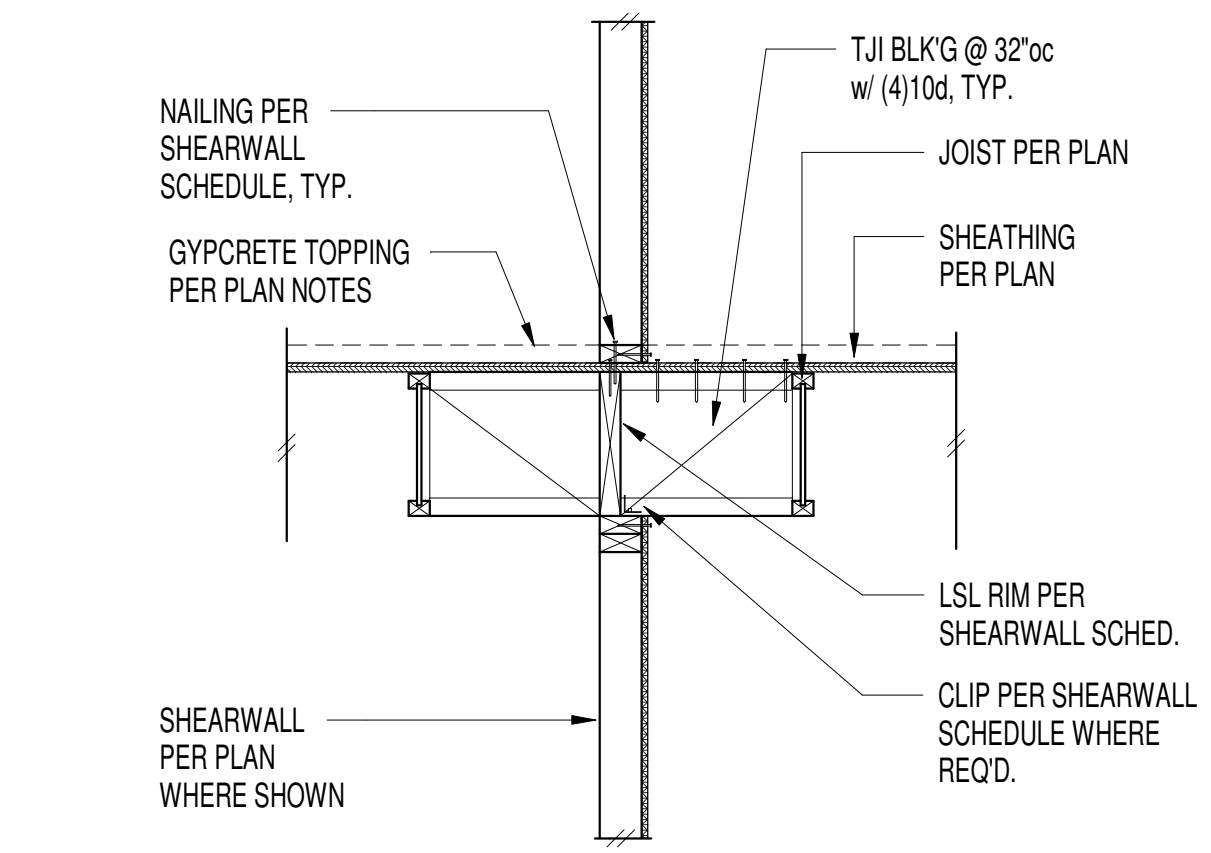
NOTE: BORED HOLES SHALL NOT BE LOCATED @ THE SAME SECTION OF STUD AS A NOTCH.

Holes Allowed Through Studs

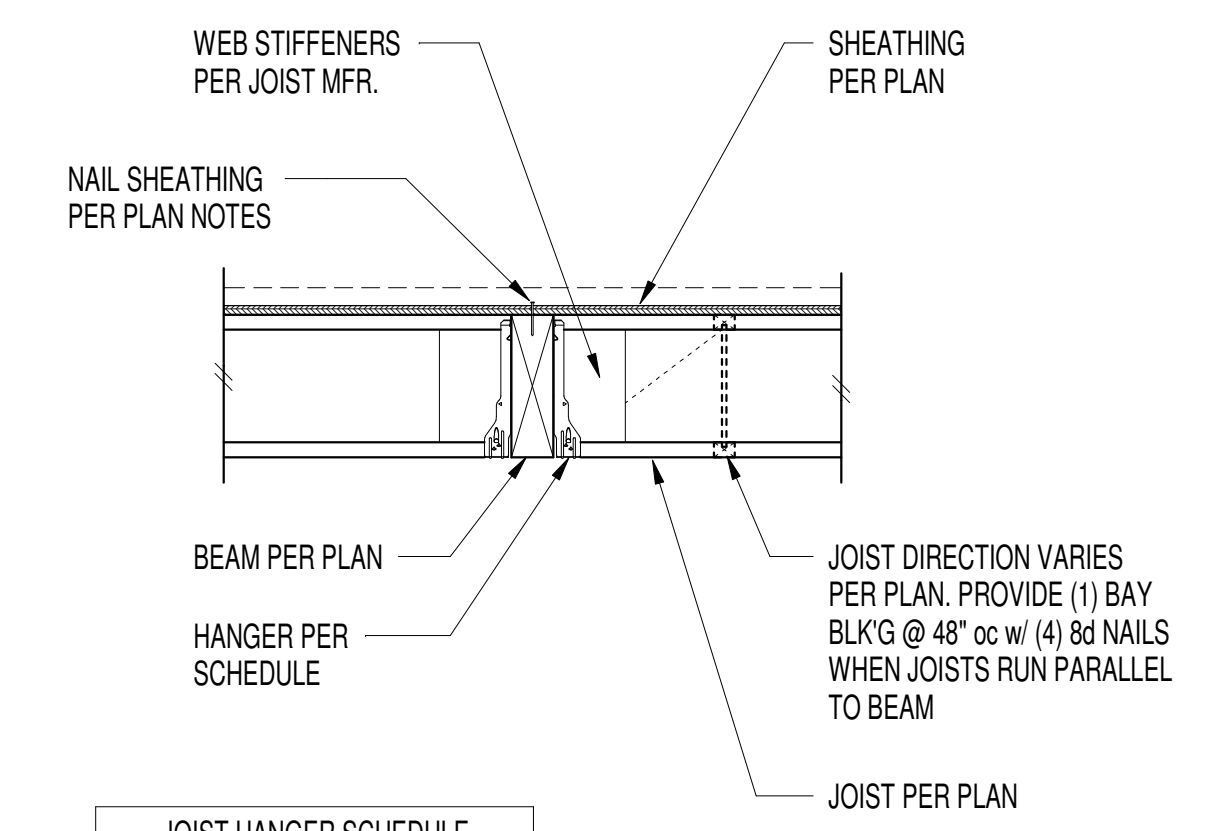
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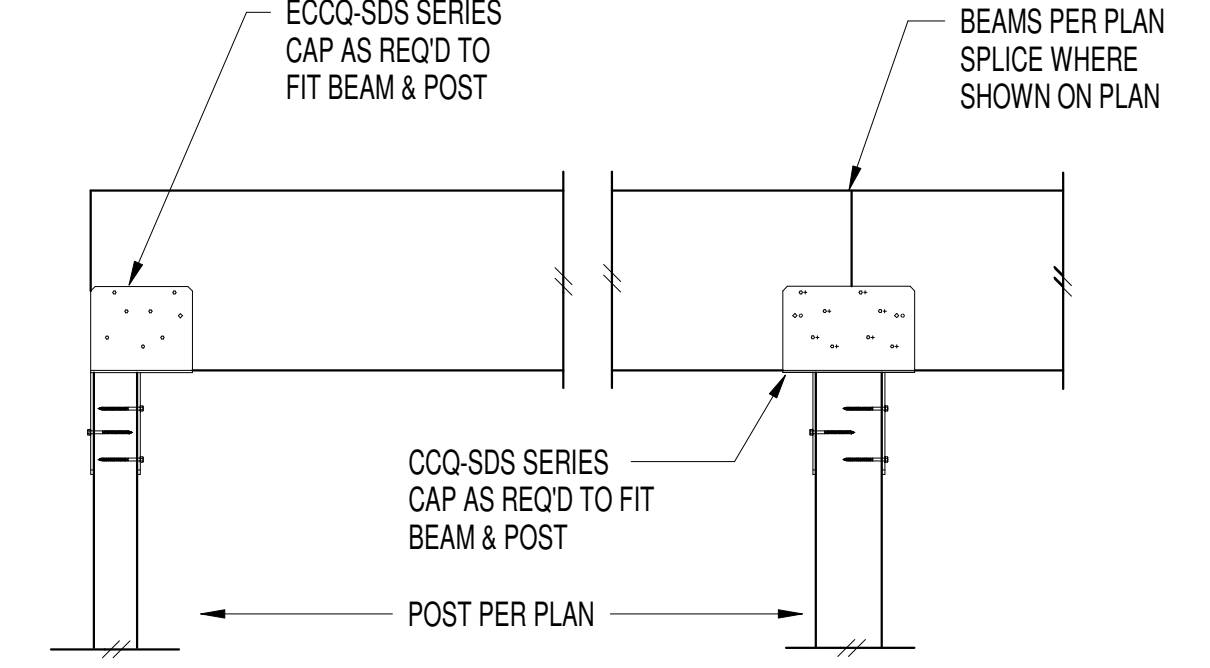
11



JOIST HANGER SCHEDULE	
JOIST	HANGER
11 1/2" TJI 110	HUS1.81/11
11 1/2" TJI 360	HU3511
14" TJI 110	IUS1.81/14

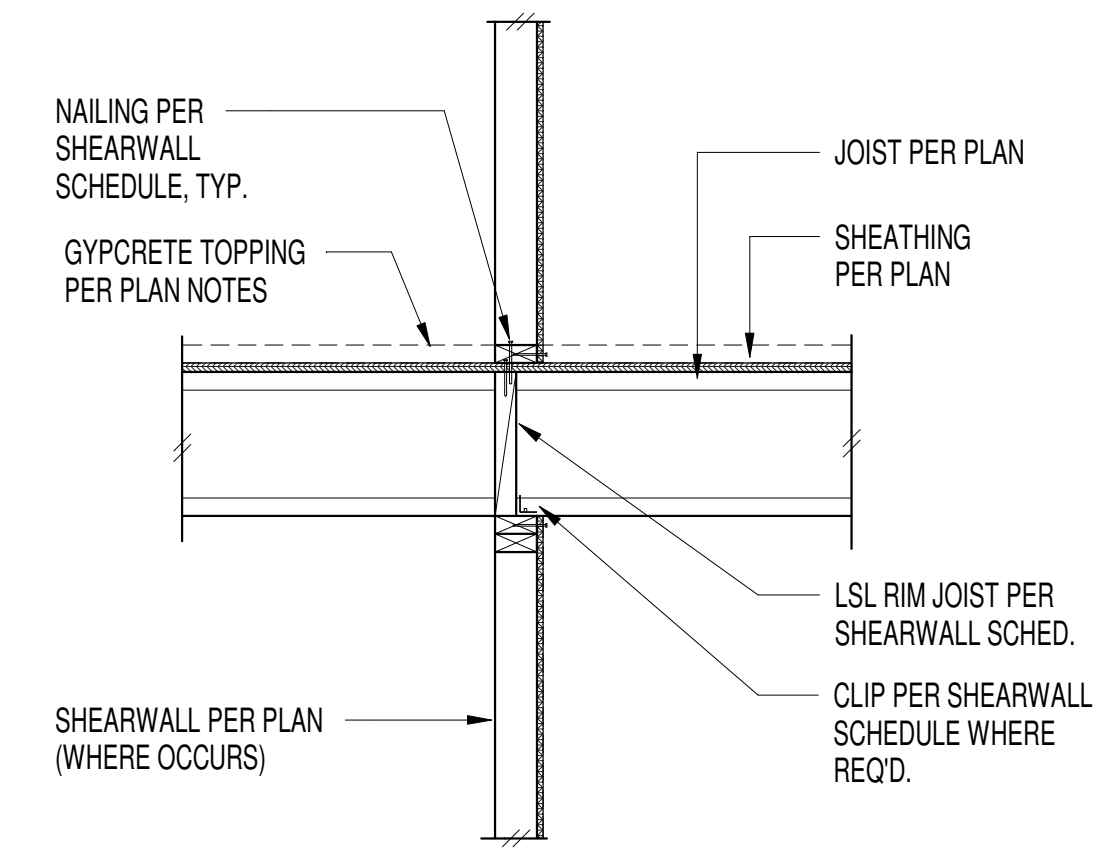
Typical Beam

4

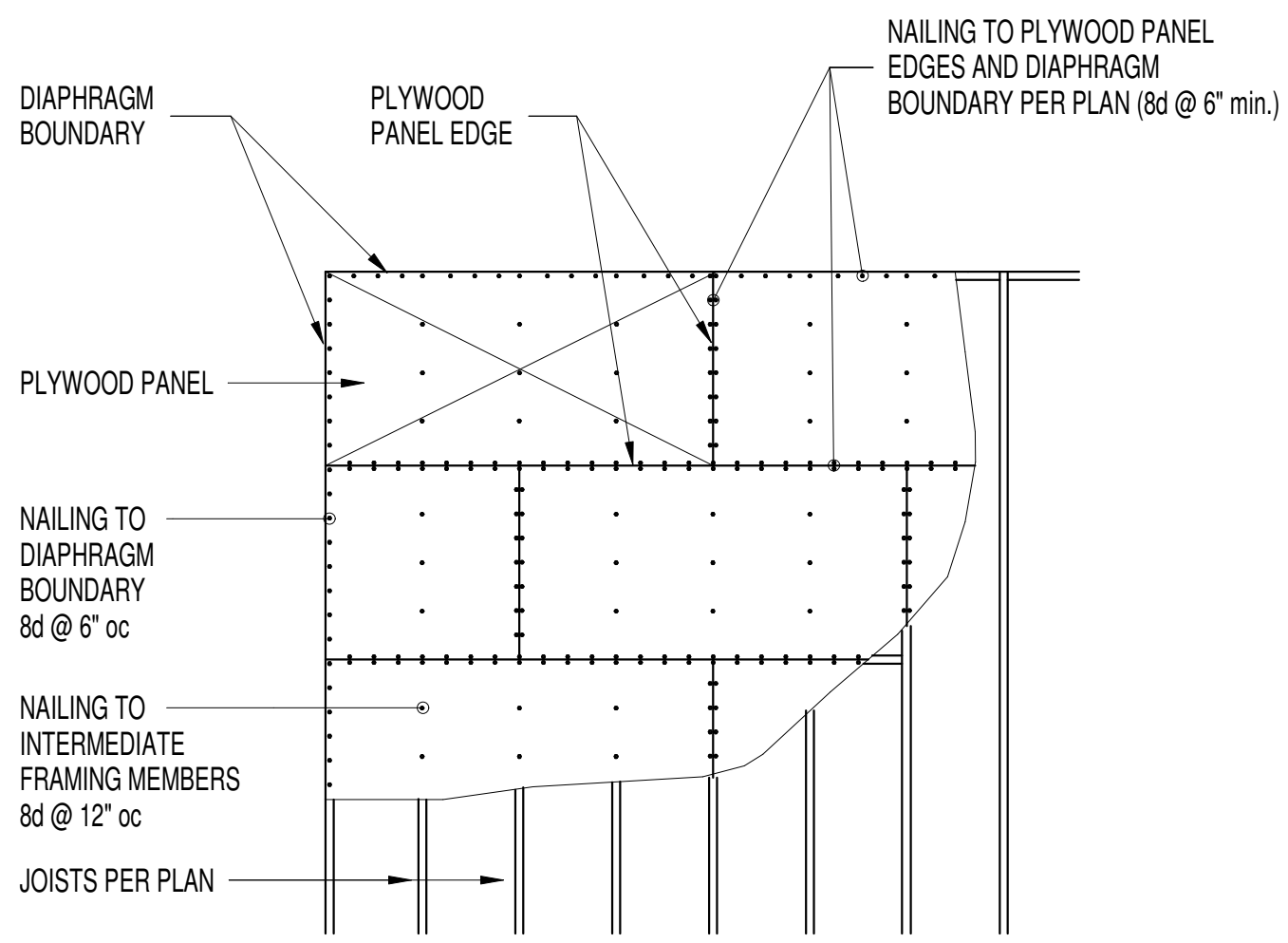


Typical Beam To Isolated Post Connection

8



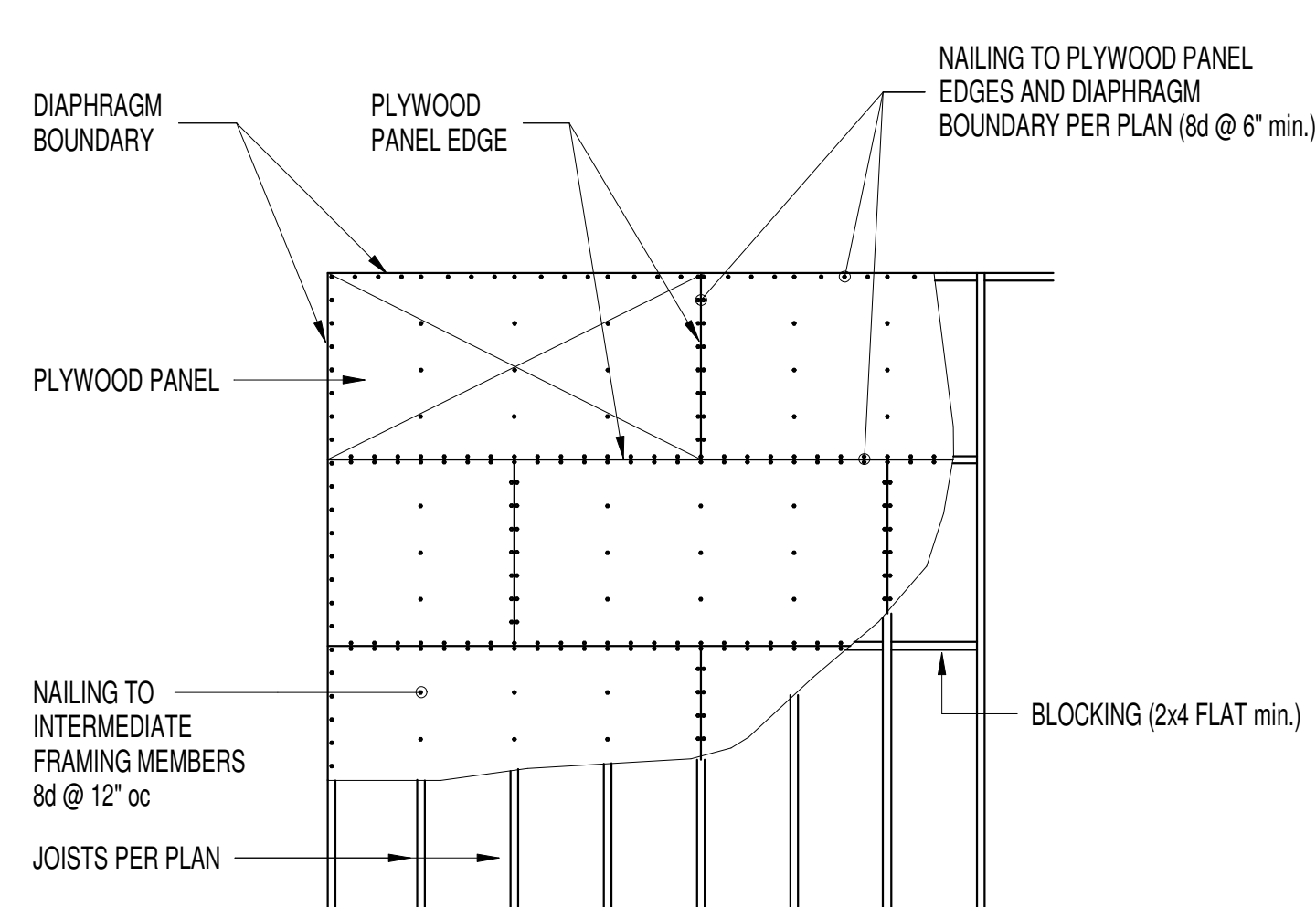
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NOTE:
BEARING AND SHEAR WALL INTERSECTIONS SHALL BE CONSIDERED DIAPHRAGM BOUNDARIES, TYP

Typical Un-Blocked Plywood Roof/Floor Sheathing Layout

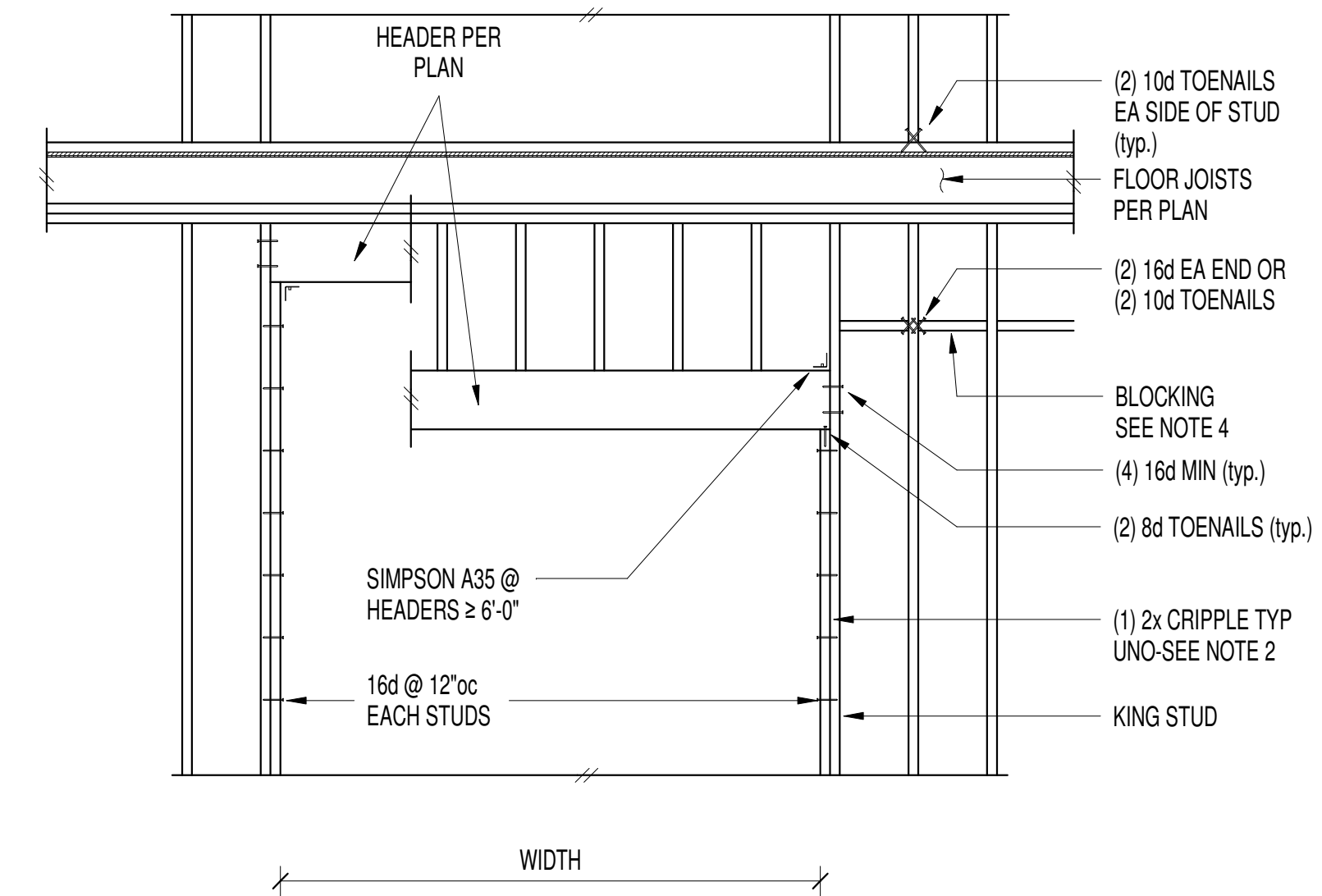
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NOTE:
BEARING AND SHEAR WALL INTERSECTIONS SHALL BE CONSIDERED DIAPHRAGM BOUNDARIES, TYP

Typical Blocked Sheathing Layout

2



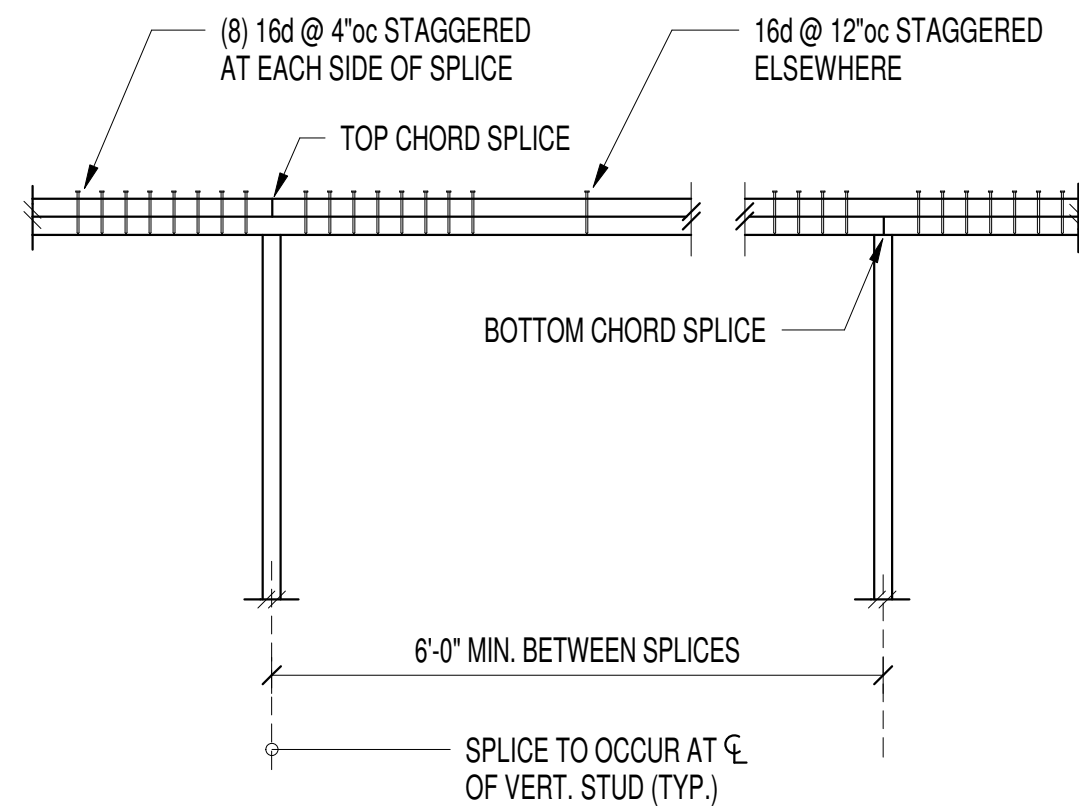
Scale : N.T.S.

NOTES:

- HEADERS PER PLAN
- PROVIDE (1) 2x CRIPPLE STUDS MINIMUM TYPICAL, U.O.N.
- SEE ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS
- 2x SOLID BLOCKING REQUIRED AT CEILING LINE, ALL PANEL EDGES, AND @ 8'-0" MAX.

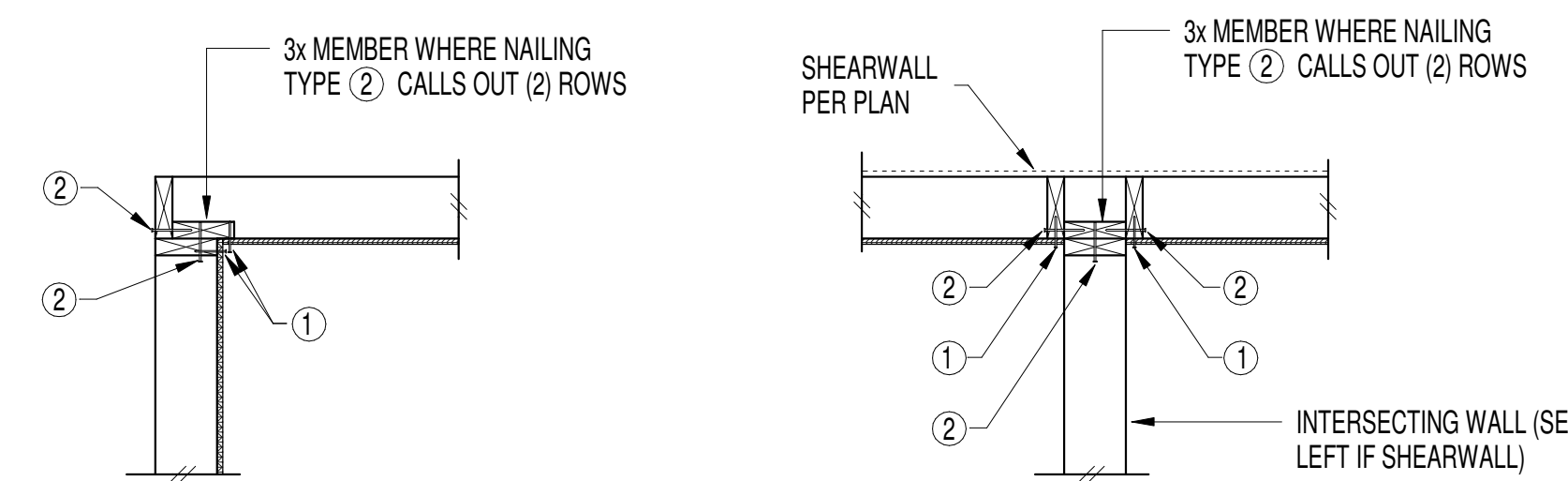
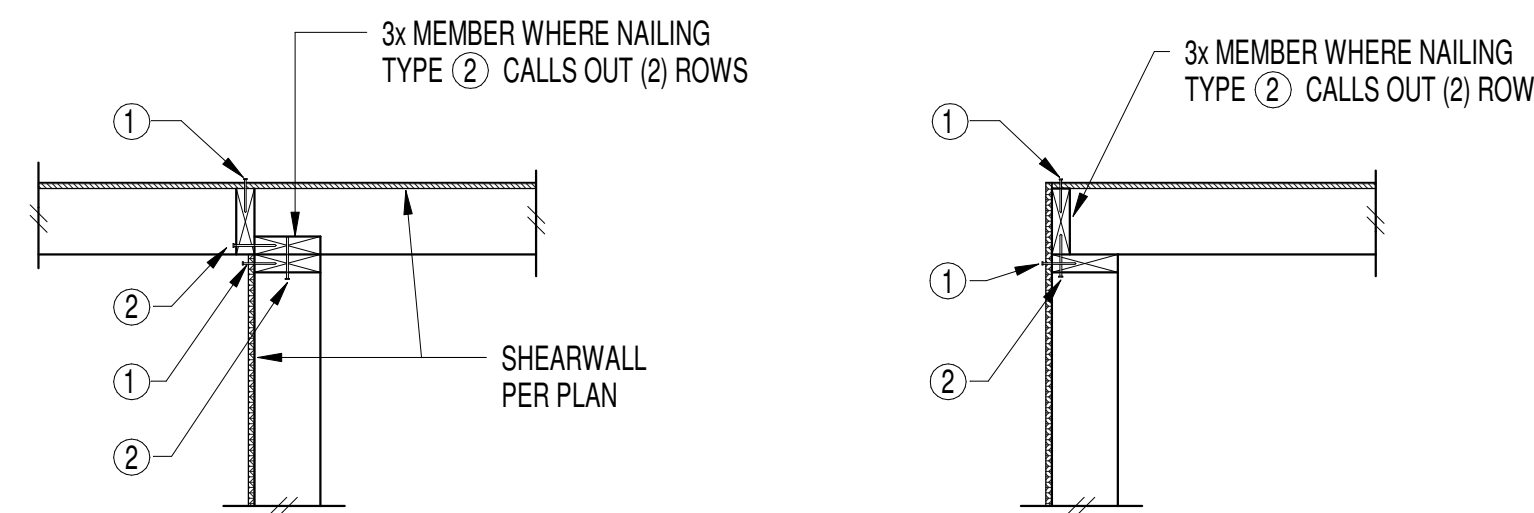
Typical Wall Opening Framing Elevation

4

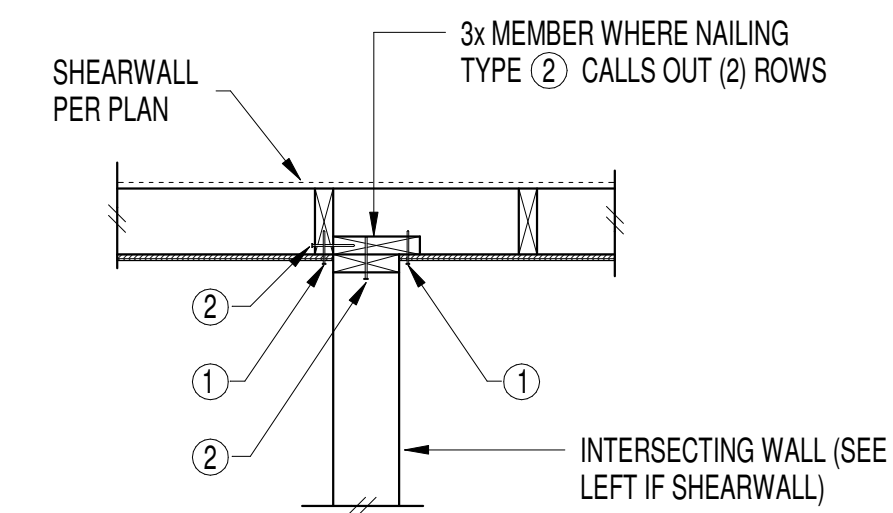


Typical Top Plate Splice - Side View

5

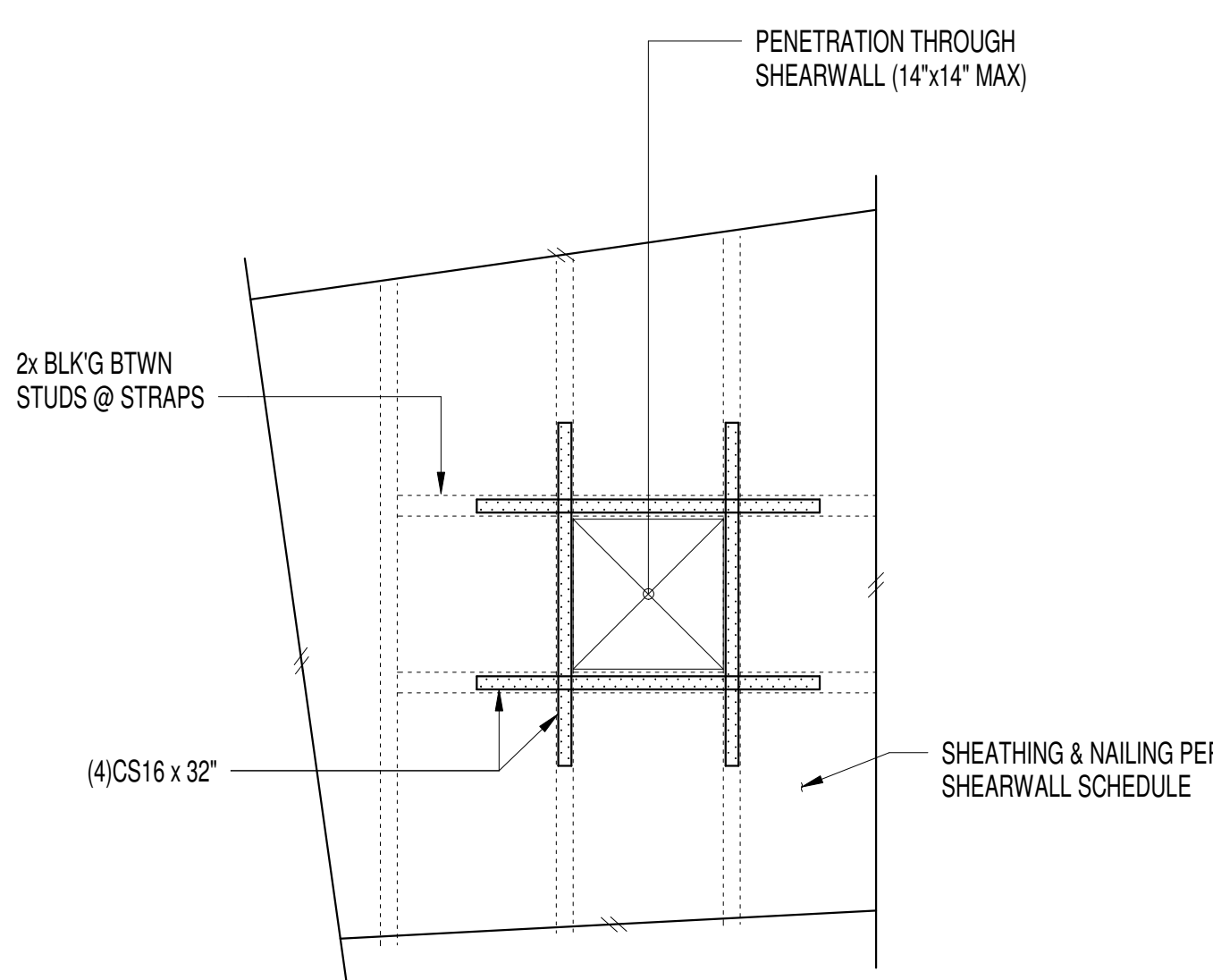


- PLYWOOD PANEL EDGE NAILING PER SHEARWALL SCHEDULE TO MATCH BOTTOM PLATE
- NAILING PER SHEARWALL SCHEDULE



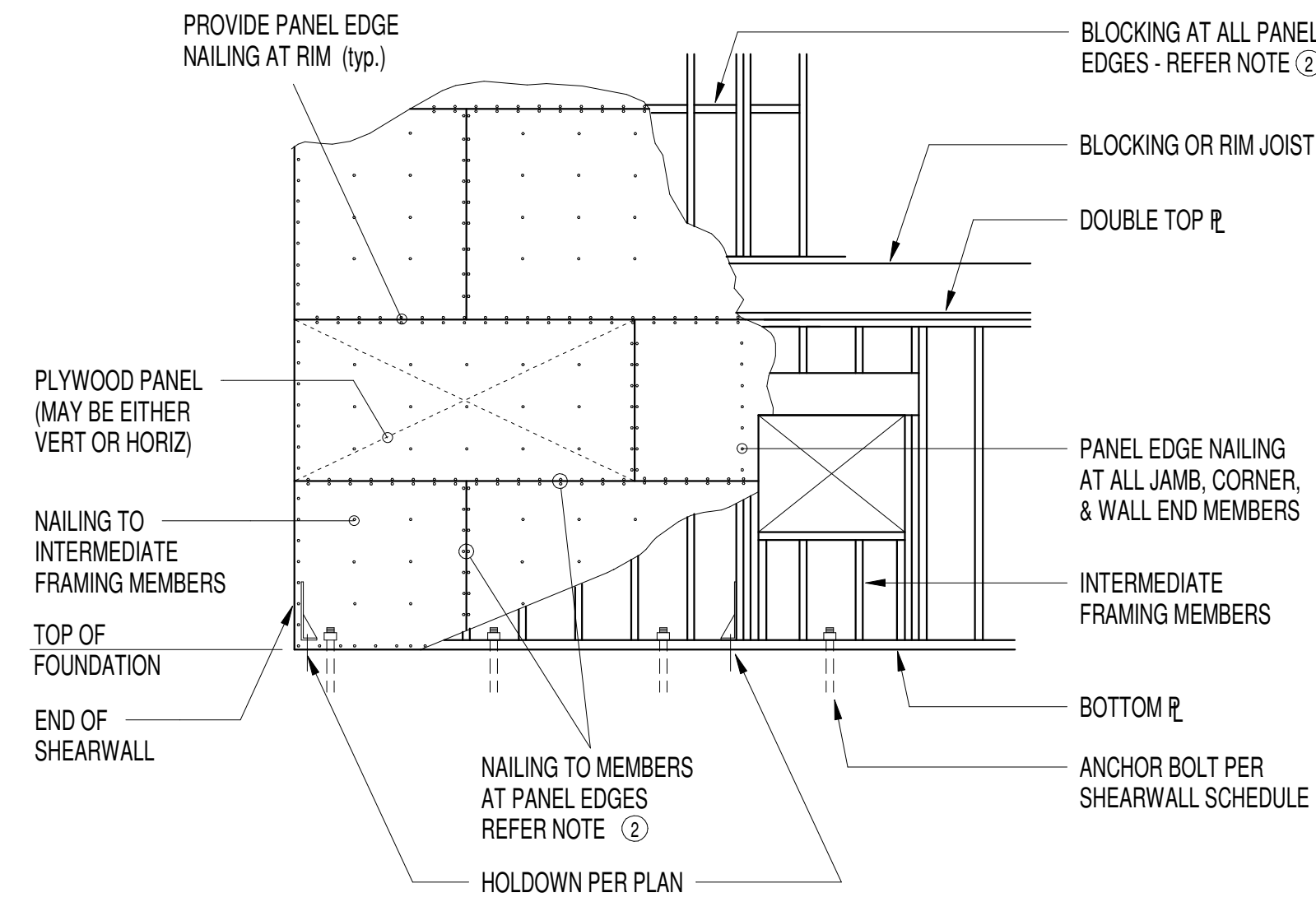
Shearwall Intersection

8



Penetration Through Shearwall

9



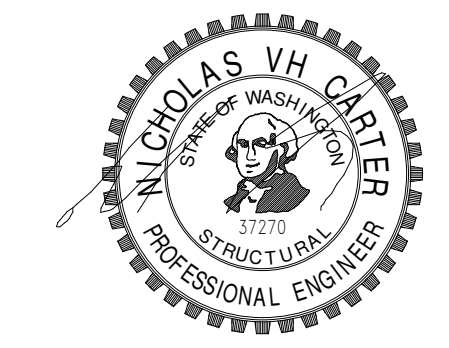
Typical Shearwall Panel Elevation

SHEAR WALL SCHEDULE

#SW#	SHEATHING	BLOCKING	PANEL EDGE NAILING	ATTACHMENT TO TOP PLATE	BOTTOM PLATE ATTACHMENT			CAPACITY (pl) SEISMIC
					LSL RIM JOIST REQ'D.	FACENAILING TO WOOD BELOW	ANCHOR BOLTING TO CONC. BELOW	
1SW1	15/32" APA RATED SHEATHING	YES	10d @ 6"oc	CLIP @ 16"oc	1 3/4" LSL	NAILS @ 6"oc	5/8" @ 48"oc	280 PLF
1SW2	15/32" APA RATED SHEATHING	YES	10d @ 4"oc	CLIP @ 16"oc	1 3/4" LSL	NAILS @ 4 3/4"oc	5/8" @ 48"oc	380 PLF
1SW3	15/32" APA RATED SHEATHING	YES	10d @ 2"oc	CLIP @ 12"oc	3 1/2" LSL	(2) ROWS NAILS @ 5 1/2"oc	5/8" @ 24"oc	640 PLF
2SW4	15/32" APA RATED SHEATHING EA SIDE	YES	10d @ 4"oc	CLIP @ 10"oc	3 1/2" LSL	(2) ROWS NAILS @ 4 3/4"oc	5/8" @ 24"oc	760 PLF

- NAILS SHALL BE 10d COMMON. NAILING APPLIES TO ALL PANEL EDGES (BLOCK ALL UNSUPPORTED PANEL EDGES), TOP & BOTTOM PLATES AND BLOCKING. NAIL TO INTERMEDIATE FRAMING MEMBERS w/ 10d @ 12"oc. (NOTE: WHERE STUD SPACING IS 24" oc, NAIL TO INTERMEDIATE FRAMING MEMBERS w/ 10d @ 6" oc)
- FRAMING AT ADJOINING PANEL EDGES SHALL BE 3 INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED.
- CLIP SHALL BE EITHER A35 OR LTP4, CLIP MAY BE OMITTED WHEN ADJOINING PANEL EDGES OCCUR @ RIM JOIST AS SHOWN IN ELEVATION.
- ROWS MUST BE OFFSET AT LEAST 1/2" AND STAGGERED.
- NAILS SHALL BE 10d COMMON (0.1480 x 3 1/2") SCREWS SHALL BE SIMPSON SDS25500 (1/4"Ø x 5" MIN.)

- PROVIDE 3"x3"x0.229" PLATE WASHER AT ALL ANCHOR BOLTS. ANCHOR BOLTS SHALL BE POSITIONED SUCH THAT PLATE EDGE OF PLATE WASHER IS WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE (PLATE WASHER MAY BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 13/16" AND A LENGTH NOT TO EXCEED 1 3/4")
- ALTERNATE PLATE WASHERS TO PROVIDE 1/2" DIMENSION ON EACH SIDE OF THE SHEARWALL



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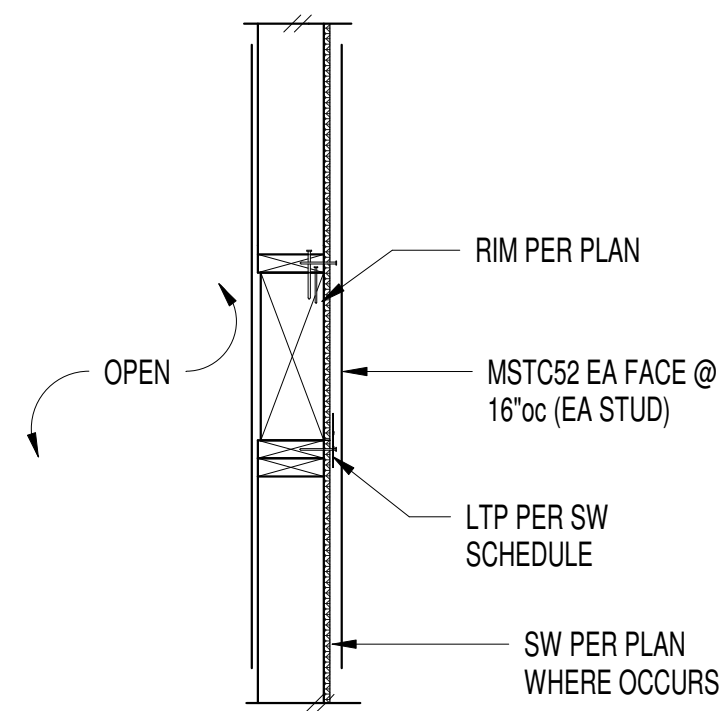
Date:
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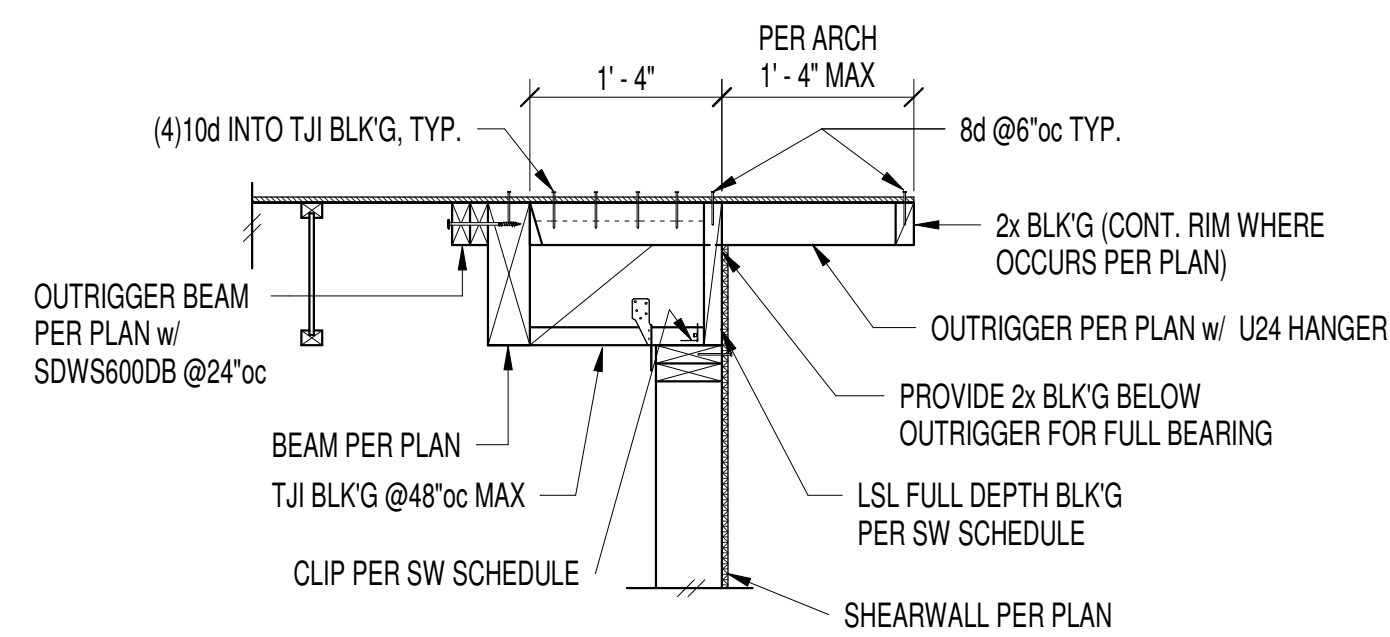
Typical Wood Lateral Details

S5.1

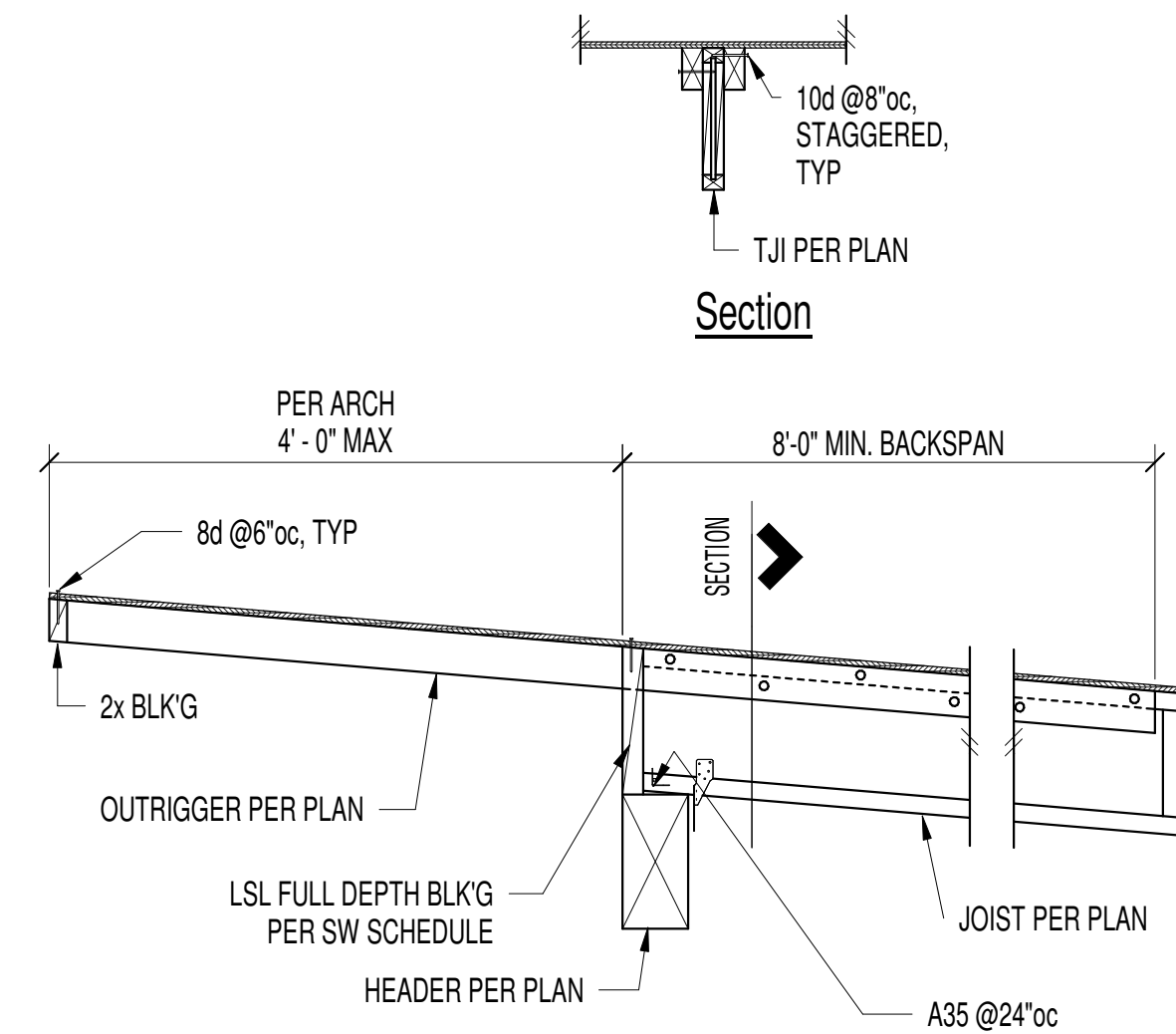
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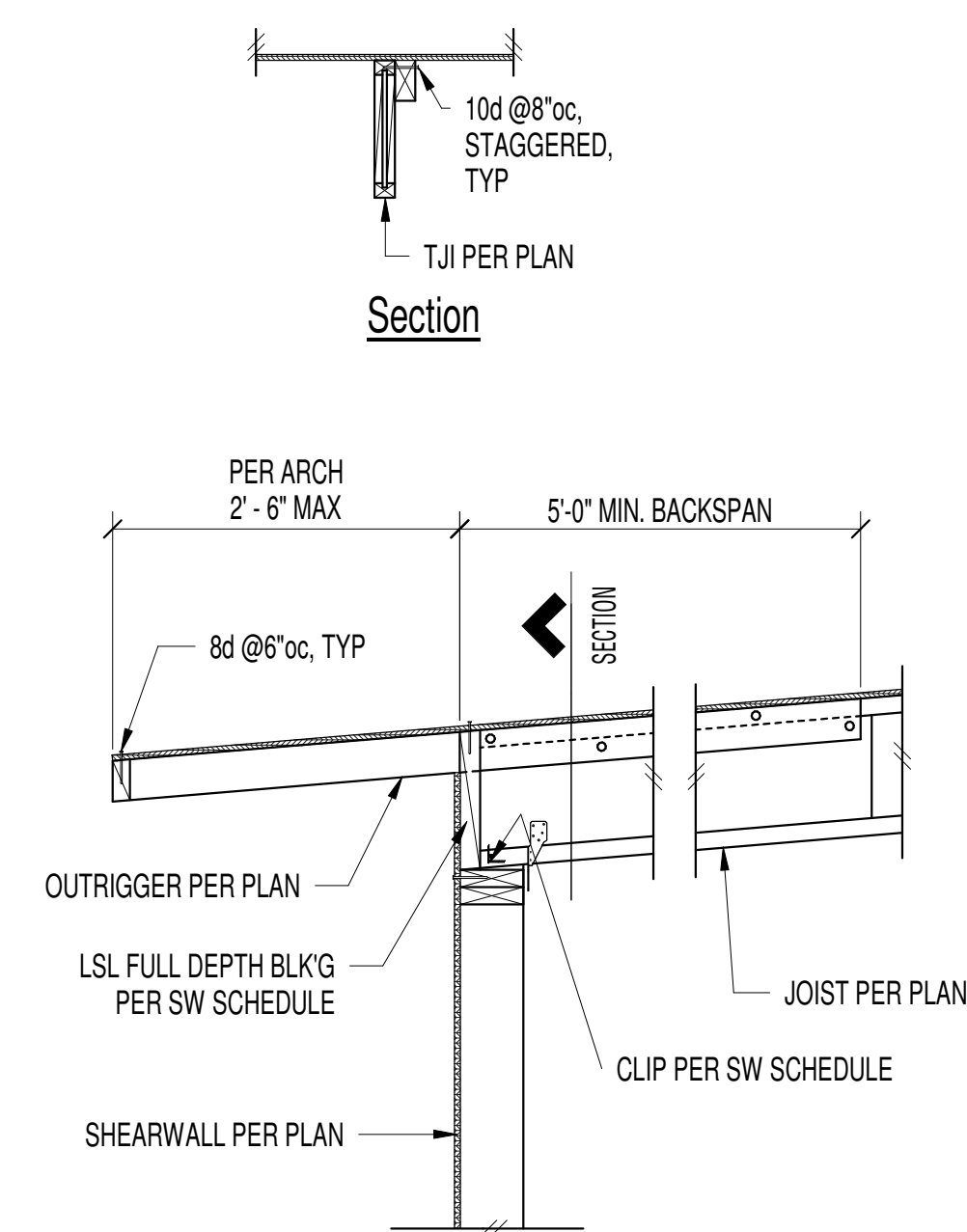
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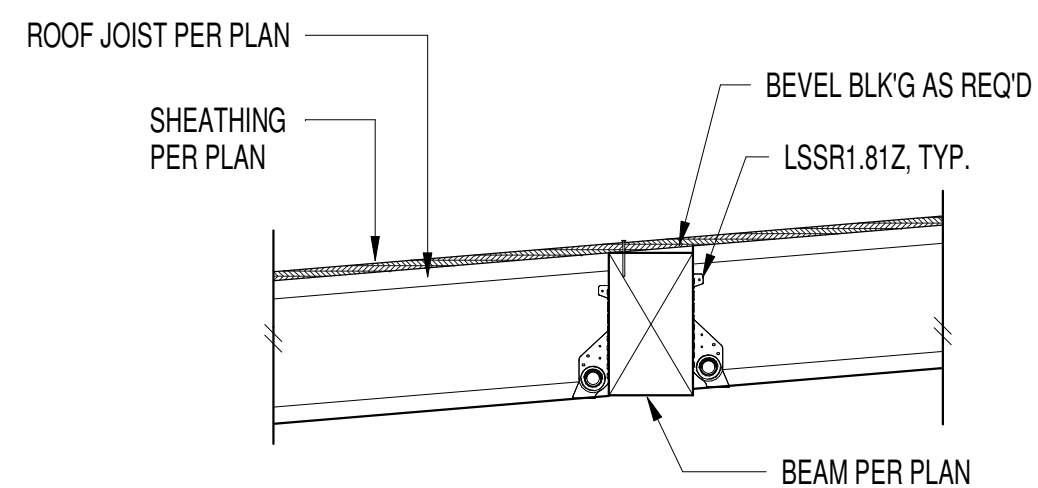
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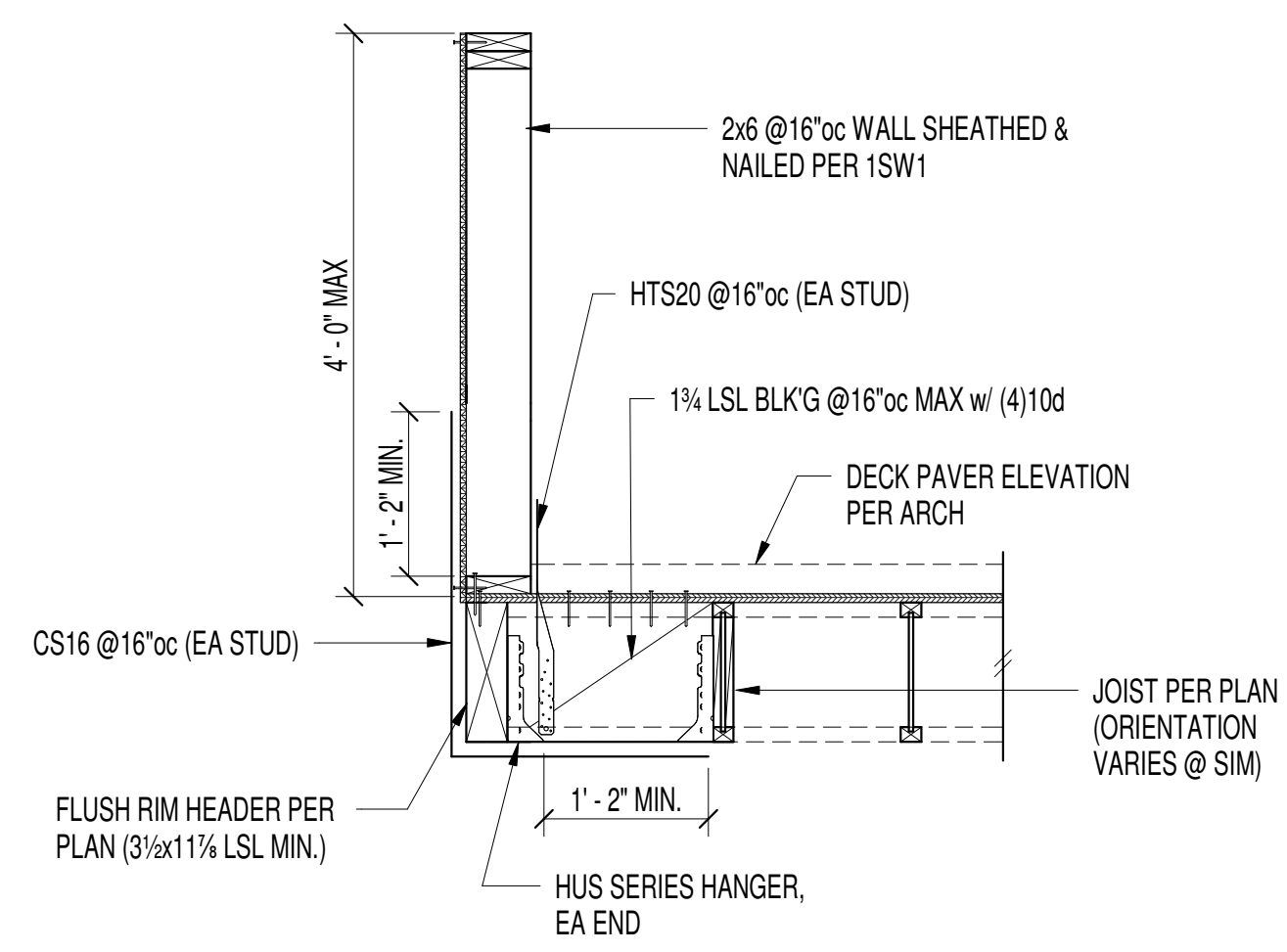
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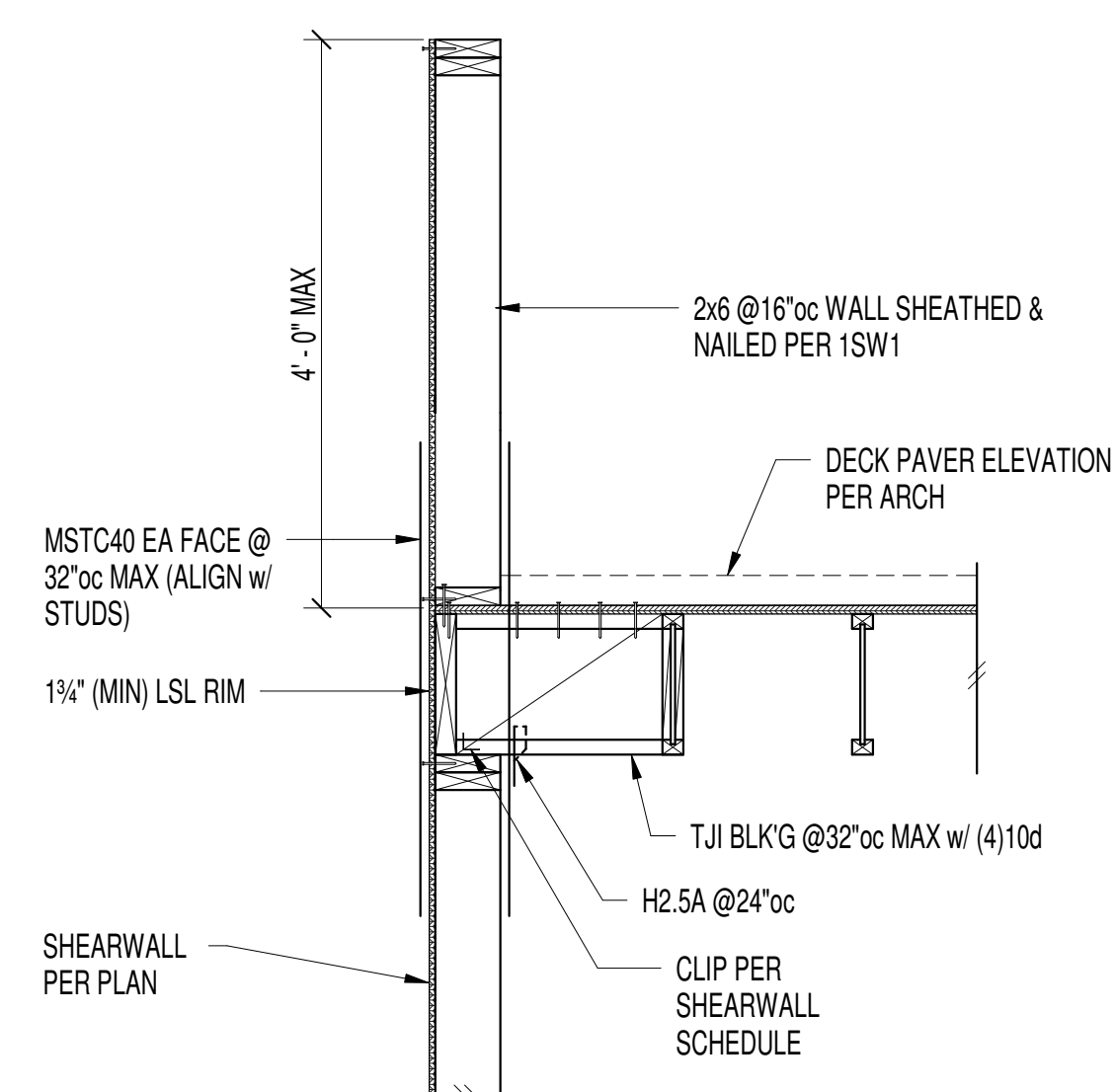


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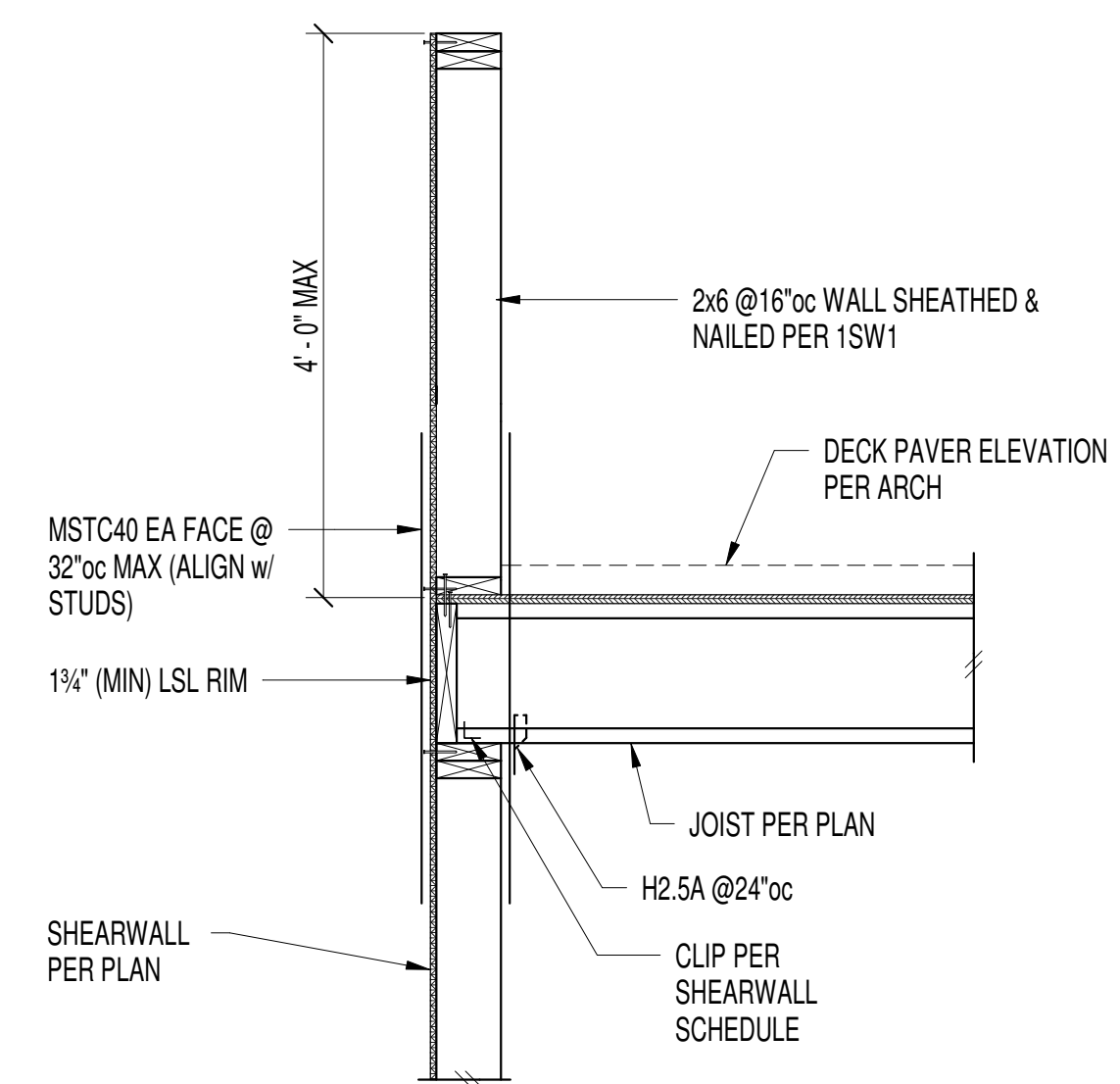
Deck Parapet - Flush Rim Header

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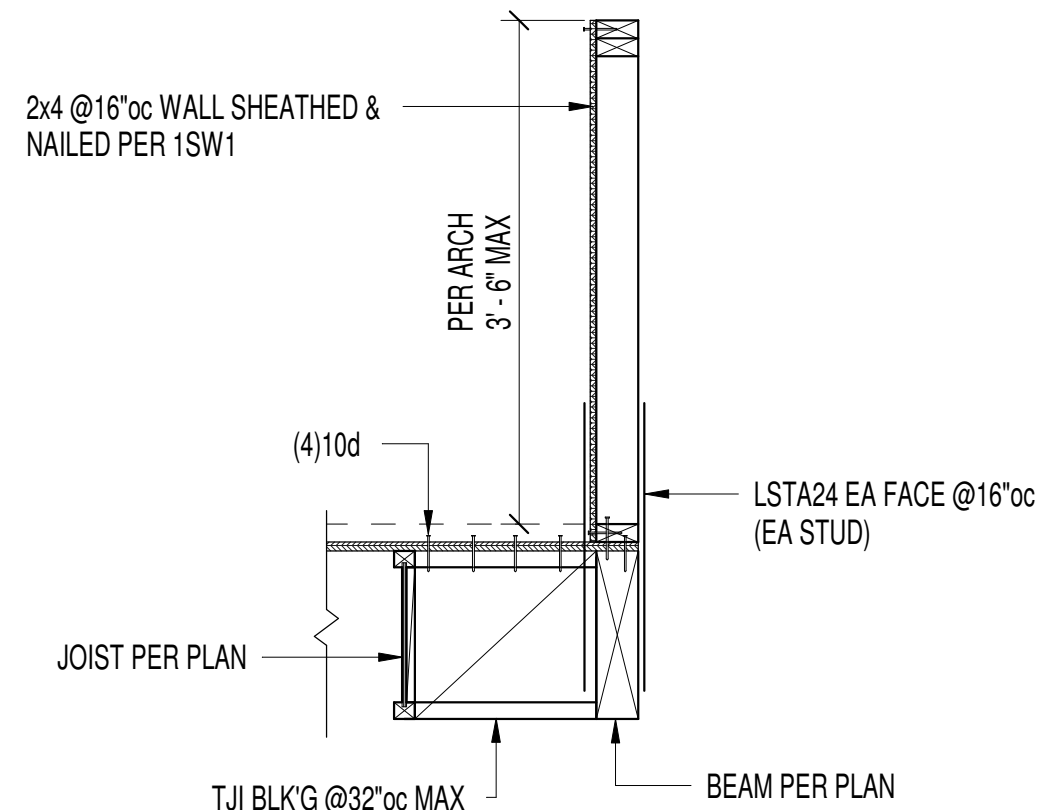
Deck Parapet - Parallel framing

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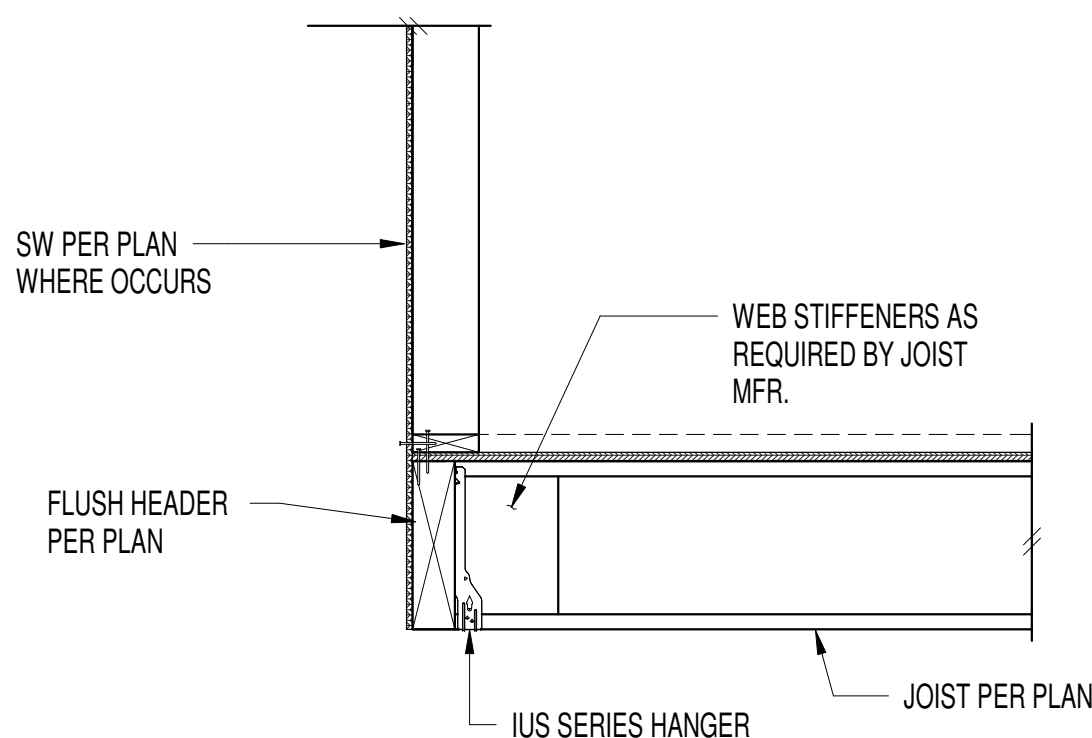
Deck Parapet - Perpendicular Framing

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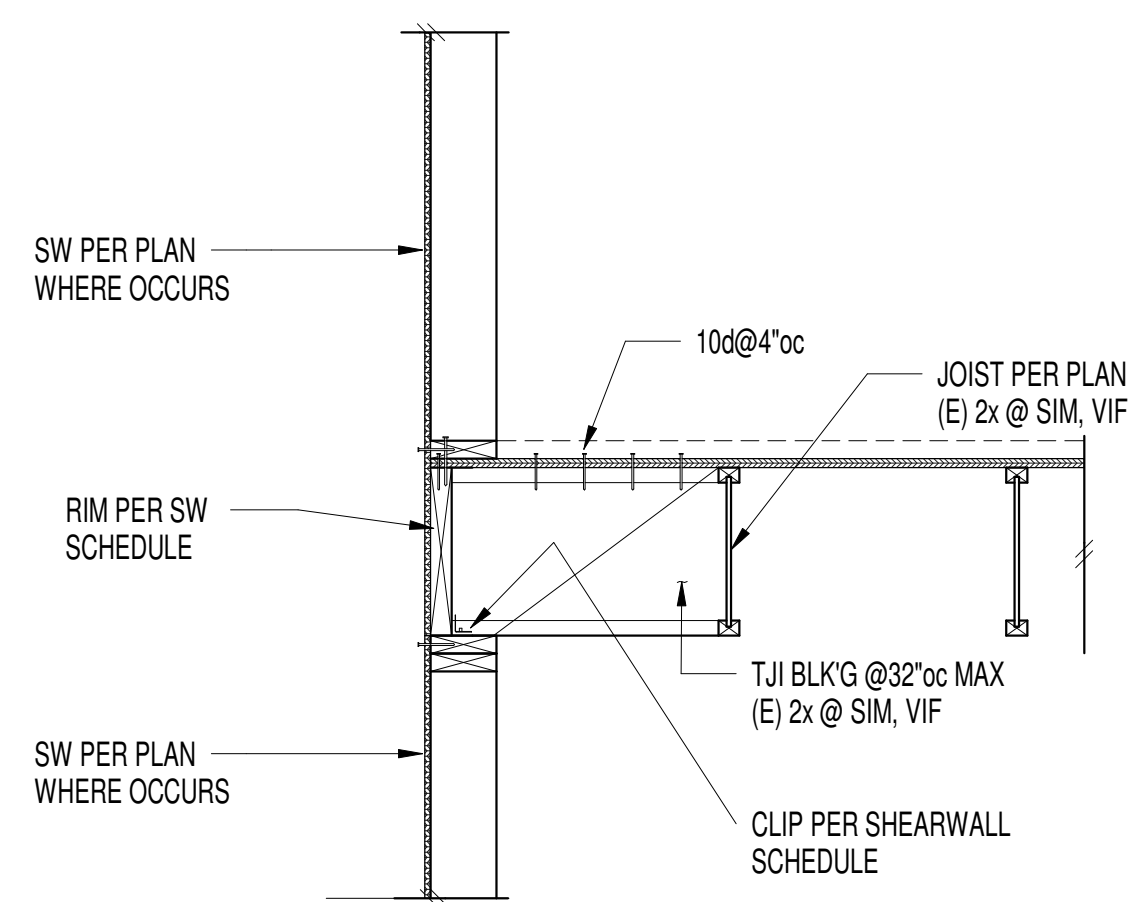


Knee-wall - Flush Beam

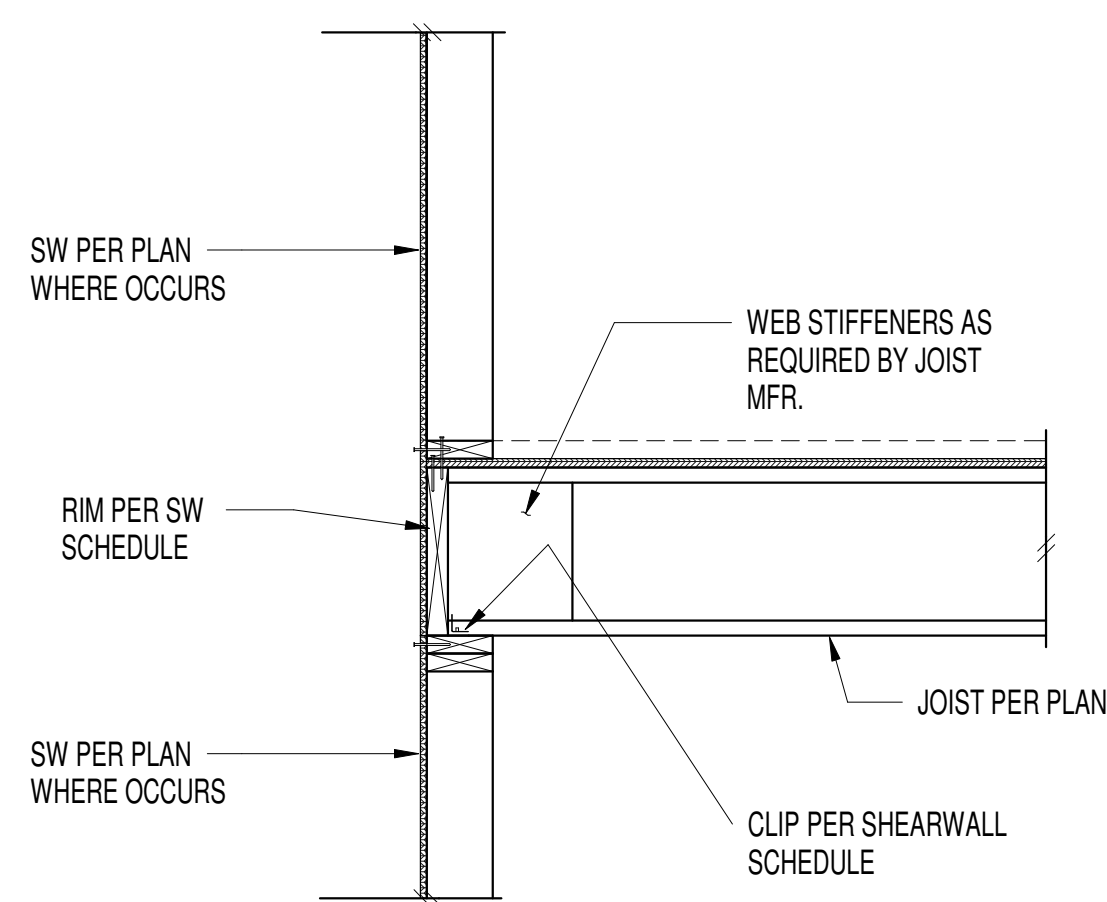
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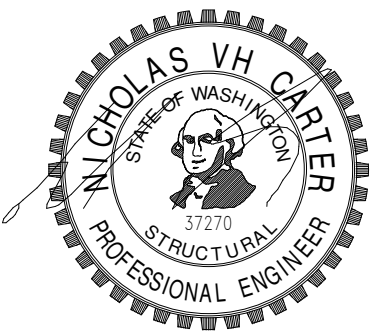
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11



12



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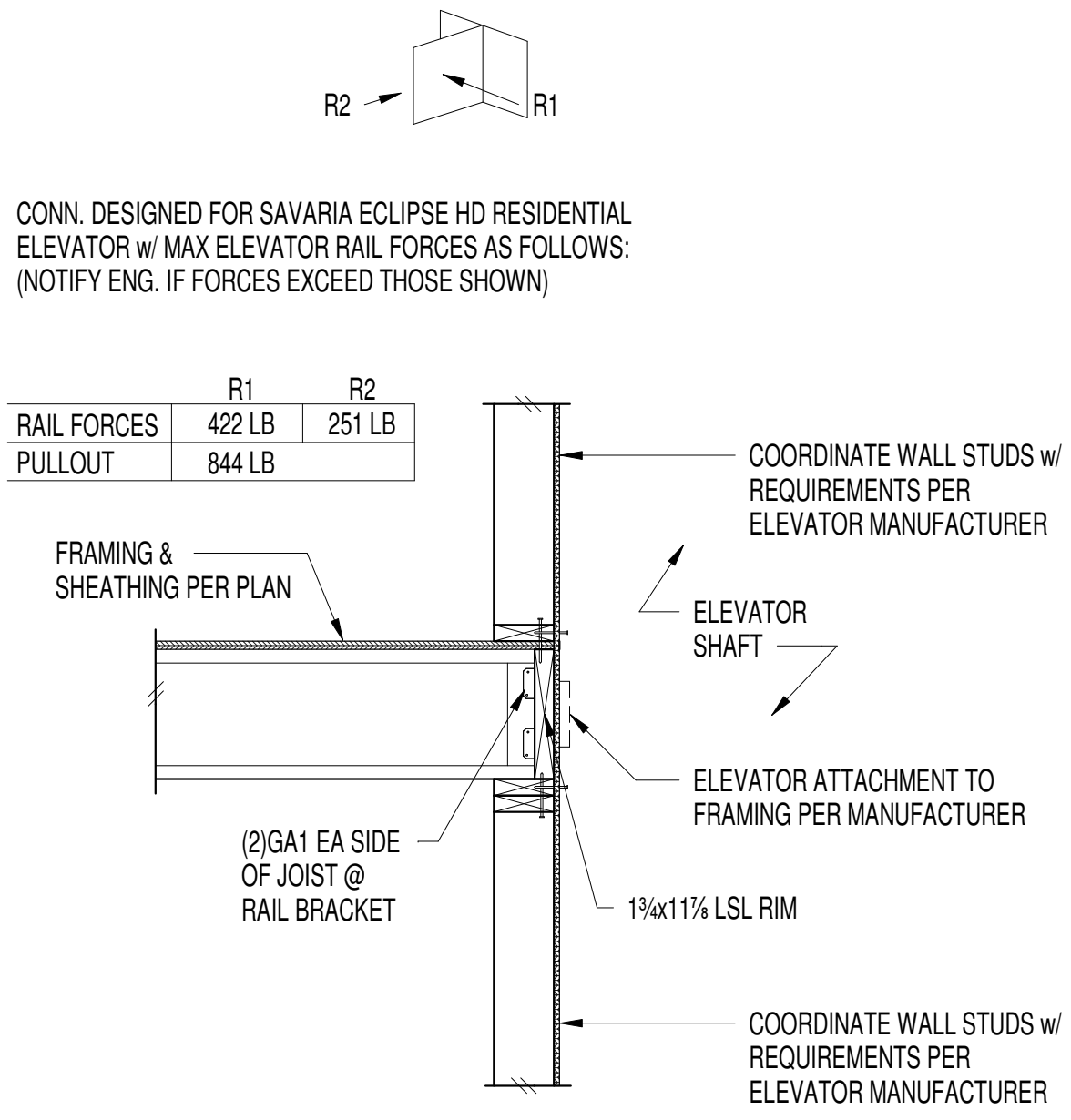
STEINBORN RESIDENCE

New Residence
8435 SE 47th PL.
Mercer Island, WA 98040

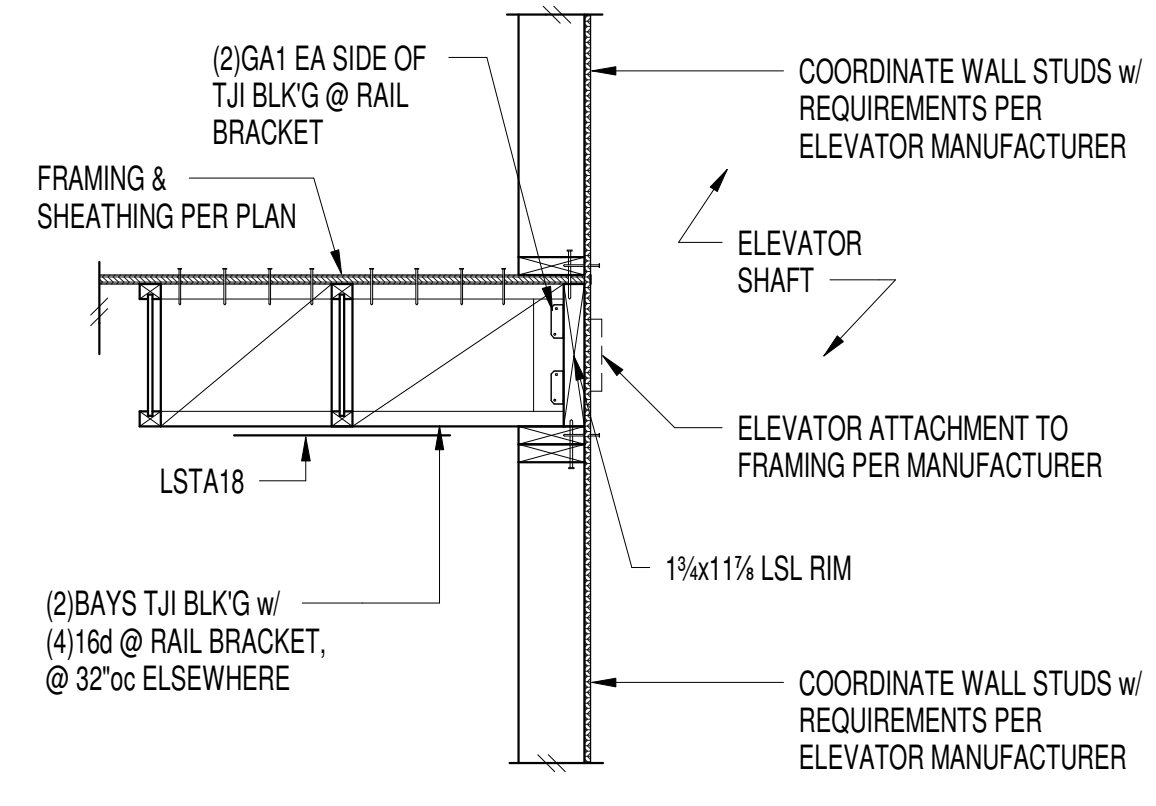
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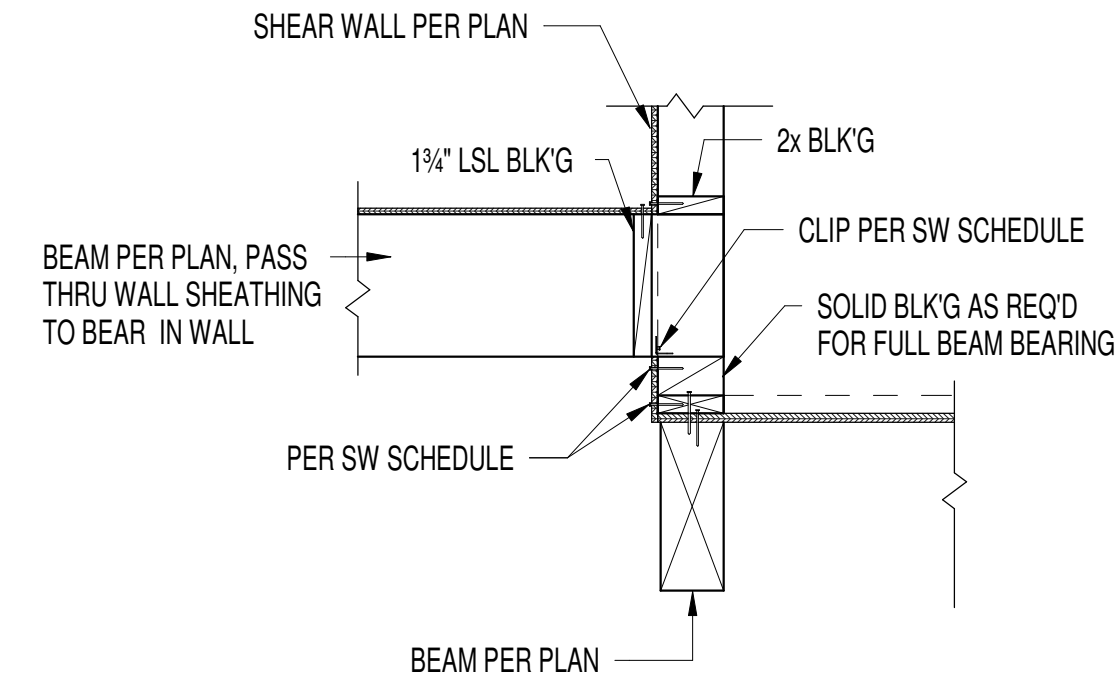
Wood Details



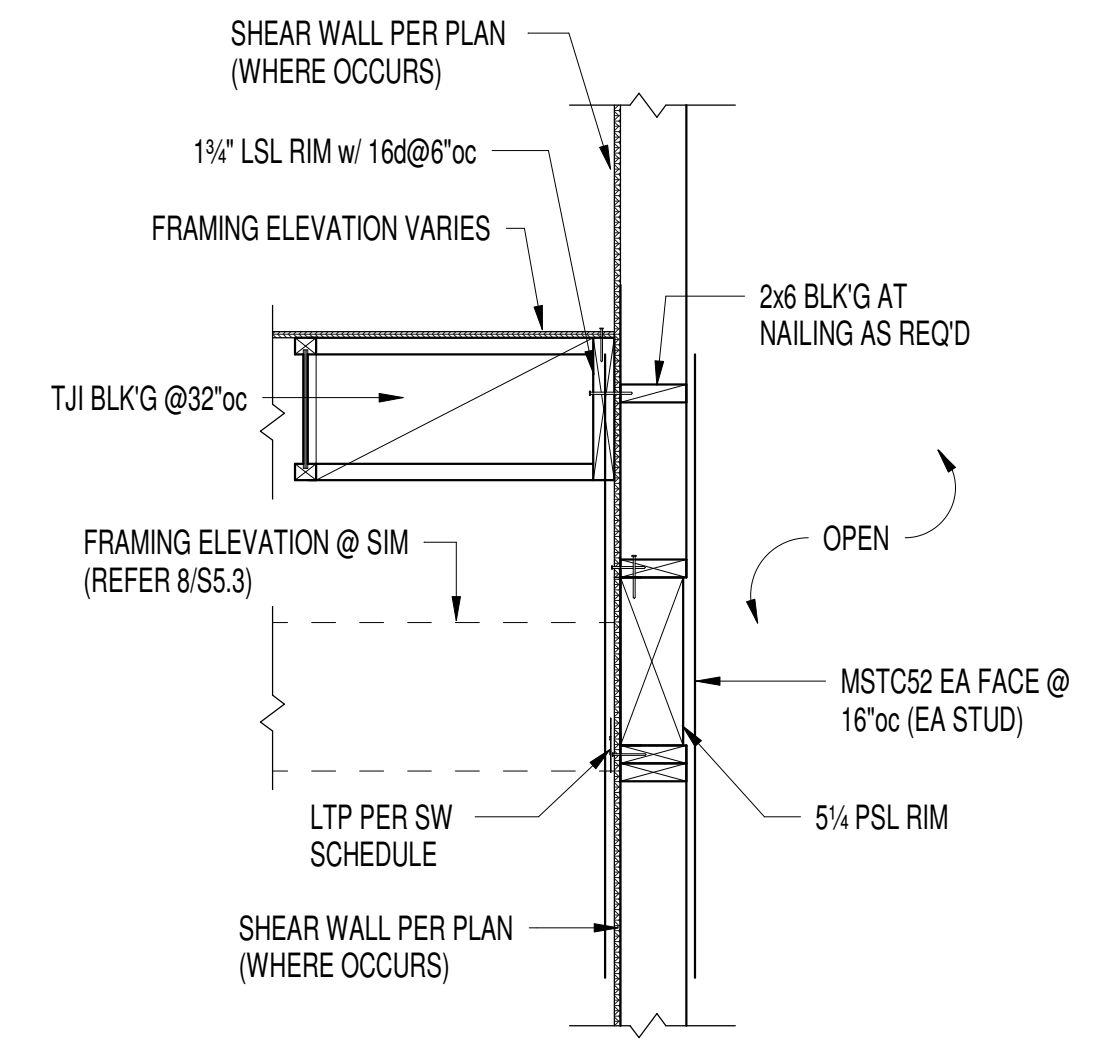
Elevator Bracket w/ Perpendicular Framing 1



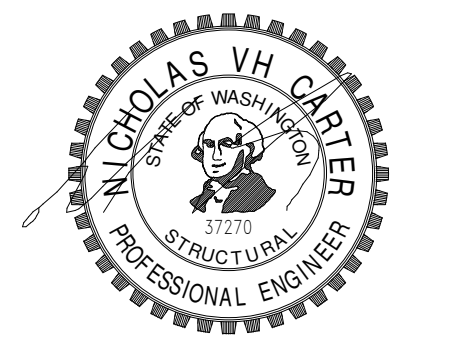
Typ. Elevator Bracket w/ Parallel Framing 2



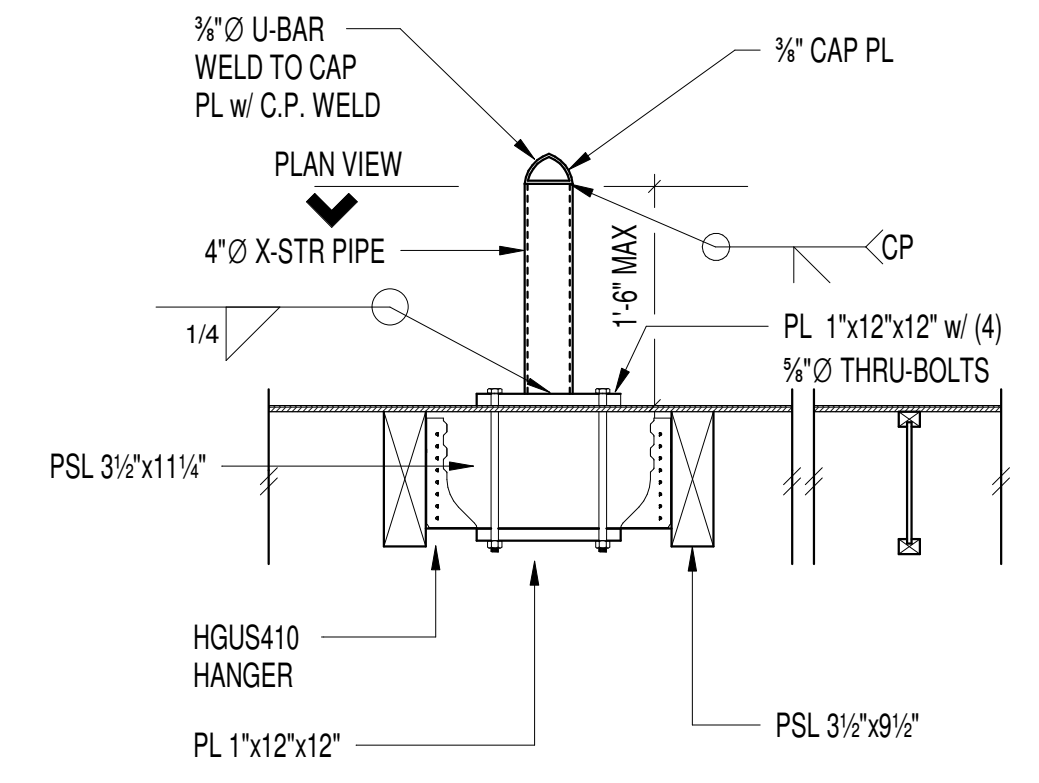
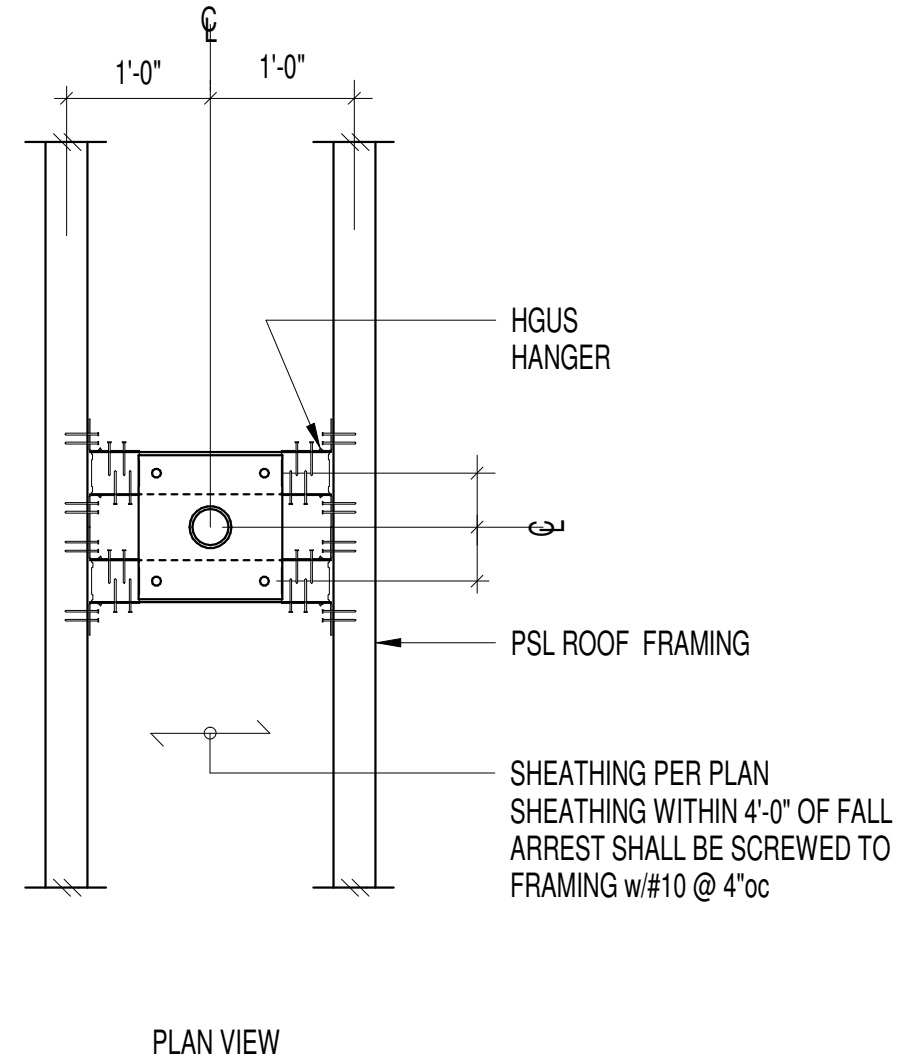
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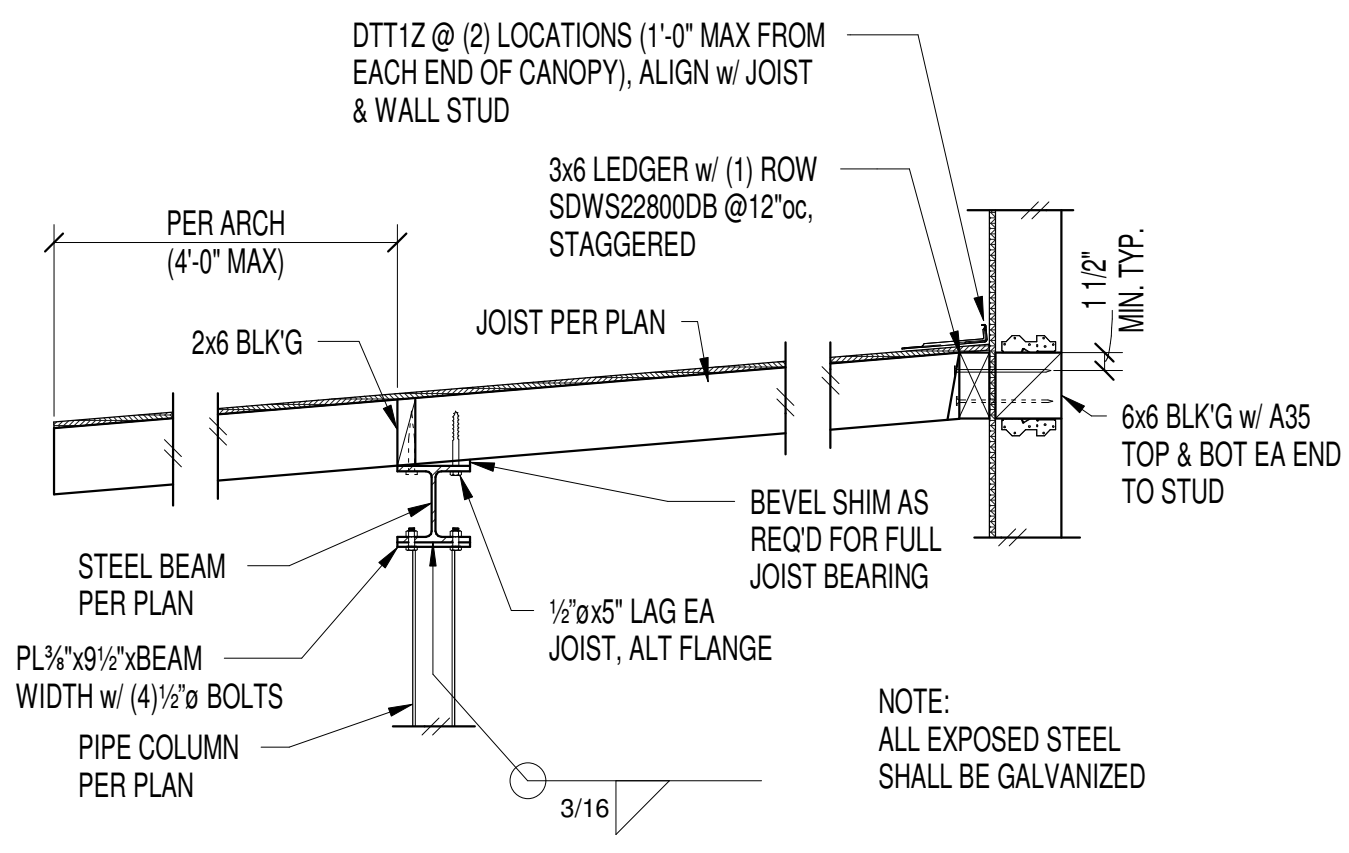
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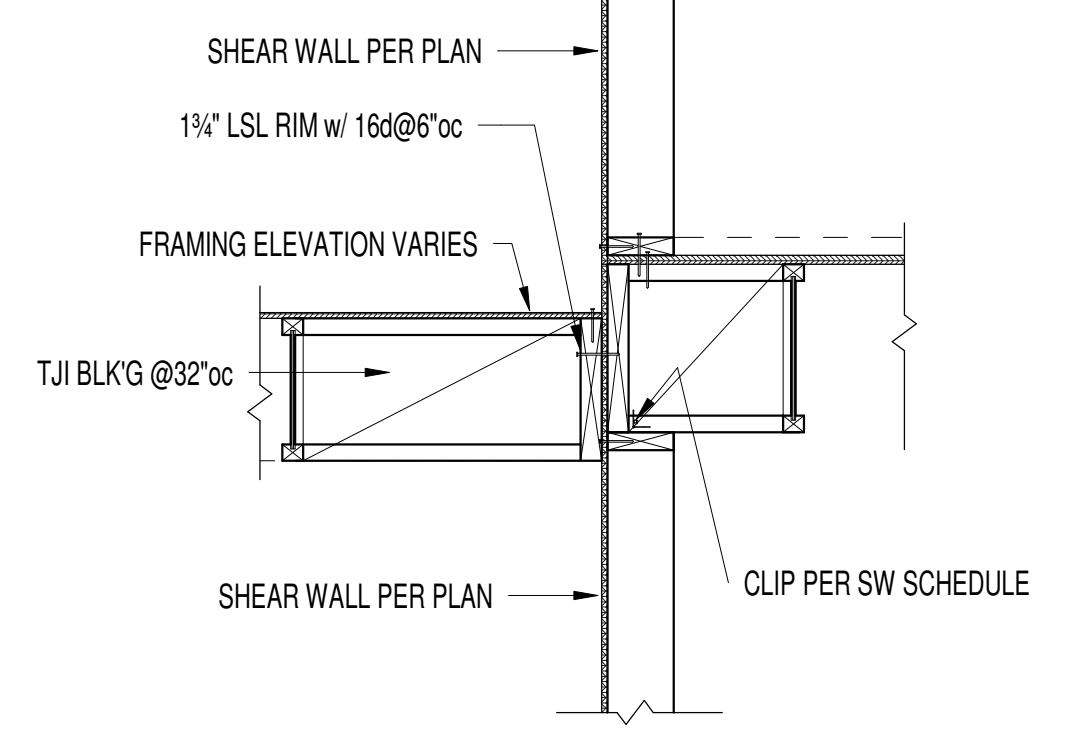
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QUINN
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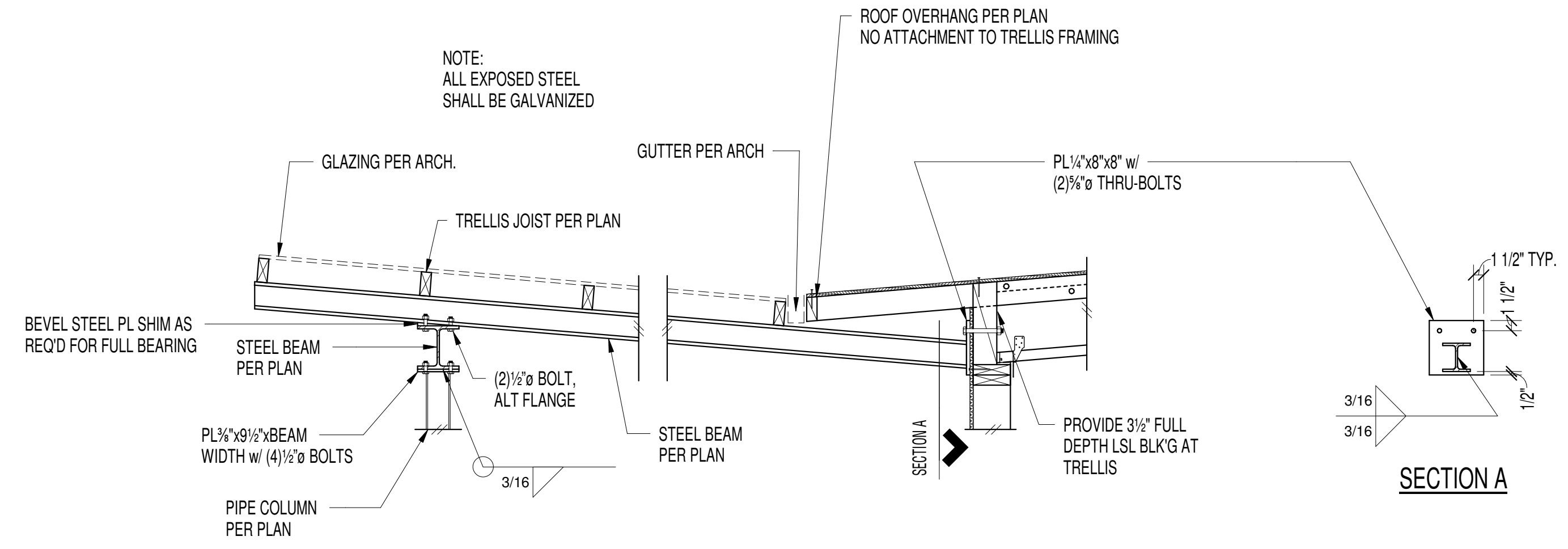
Fall Arrest Anchor 6



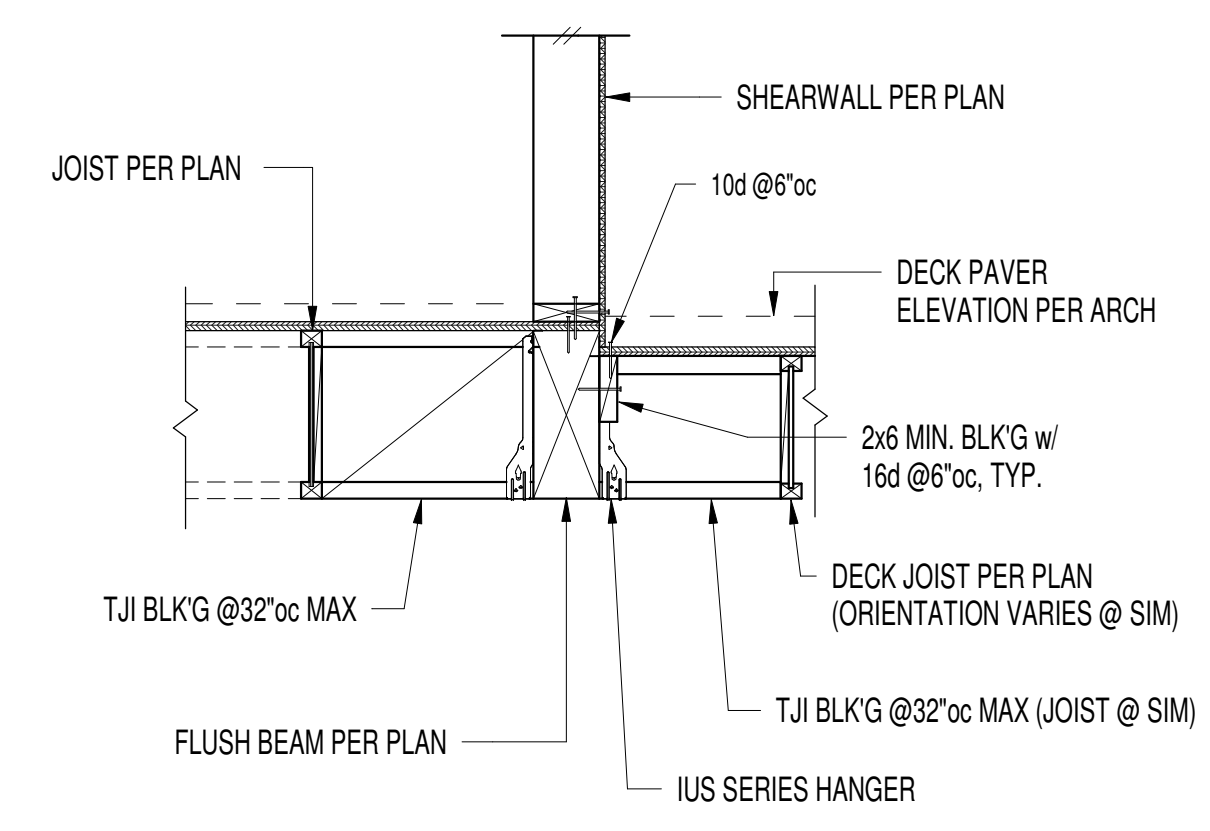
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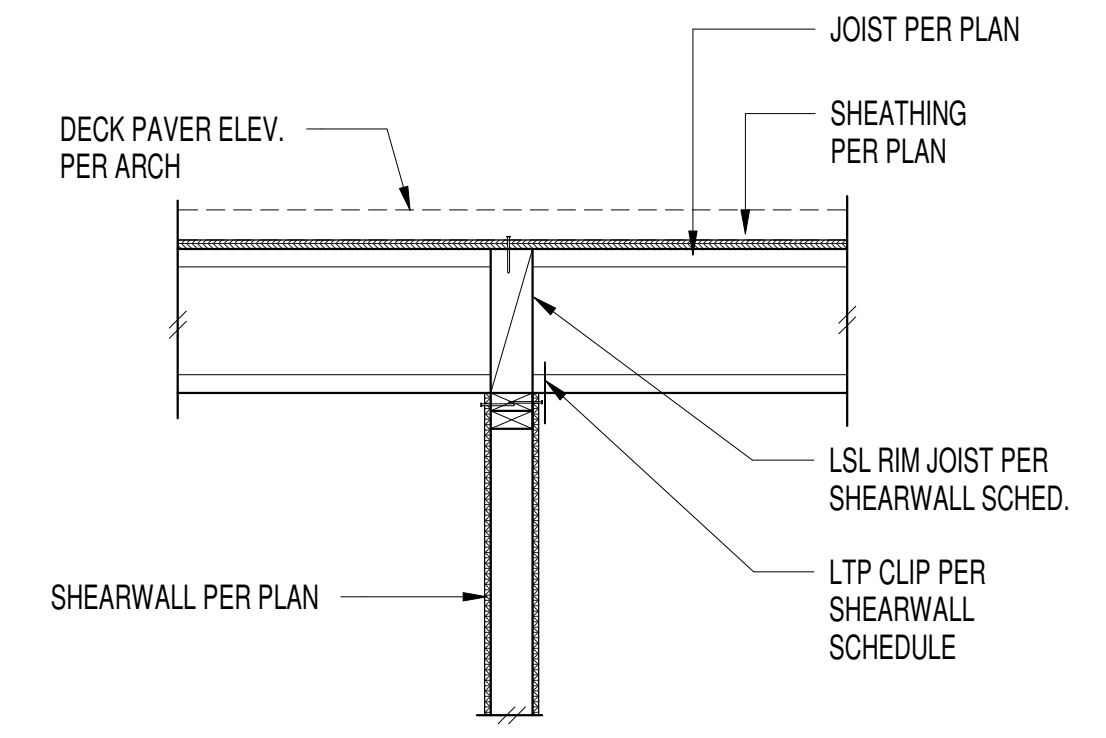
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11



12

STEINBORN RESIDENCE

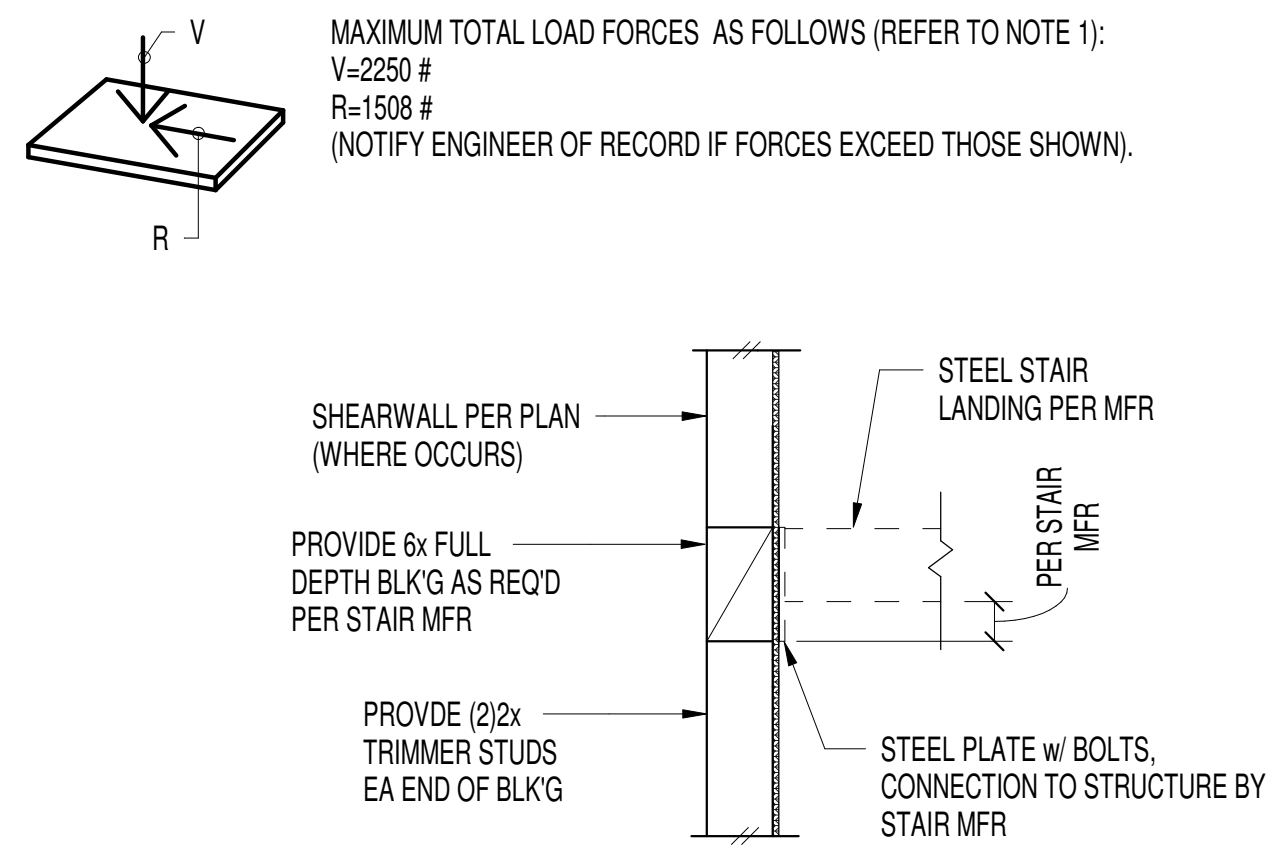
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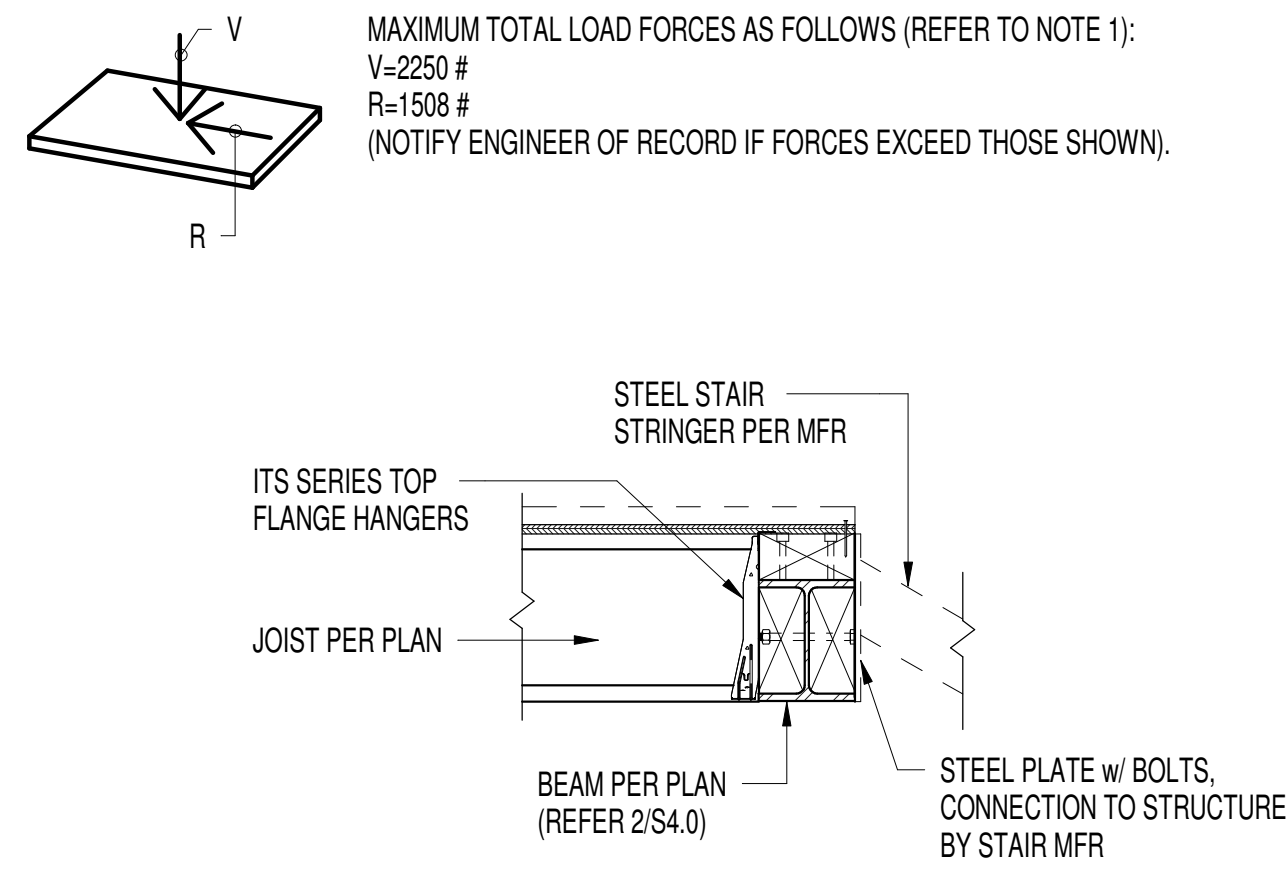
Wood Details

- NOTES:
 1. STRUCTURE IS DESIGNED FOR FORCES IMPOSED BY PREFABRICATED STEEL STAIR. LOADING ASSUMES SINGLE STRINGER. NOTIFY ENGINEER OF RECORD IF FORCES EXCEED THOSE SHOWN.
 2. STEEL PLATE CONNECTION IS BY MANUFACTURER AND SHALL BE PER MANUFACTURER SHOP DRAWINGS AND CALCULATIONS.



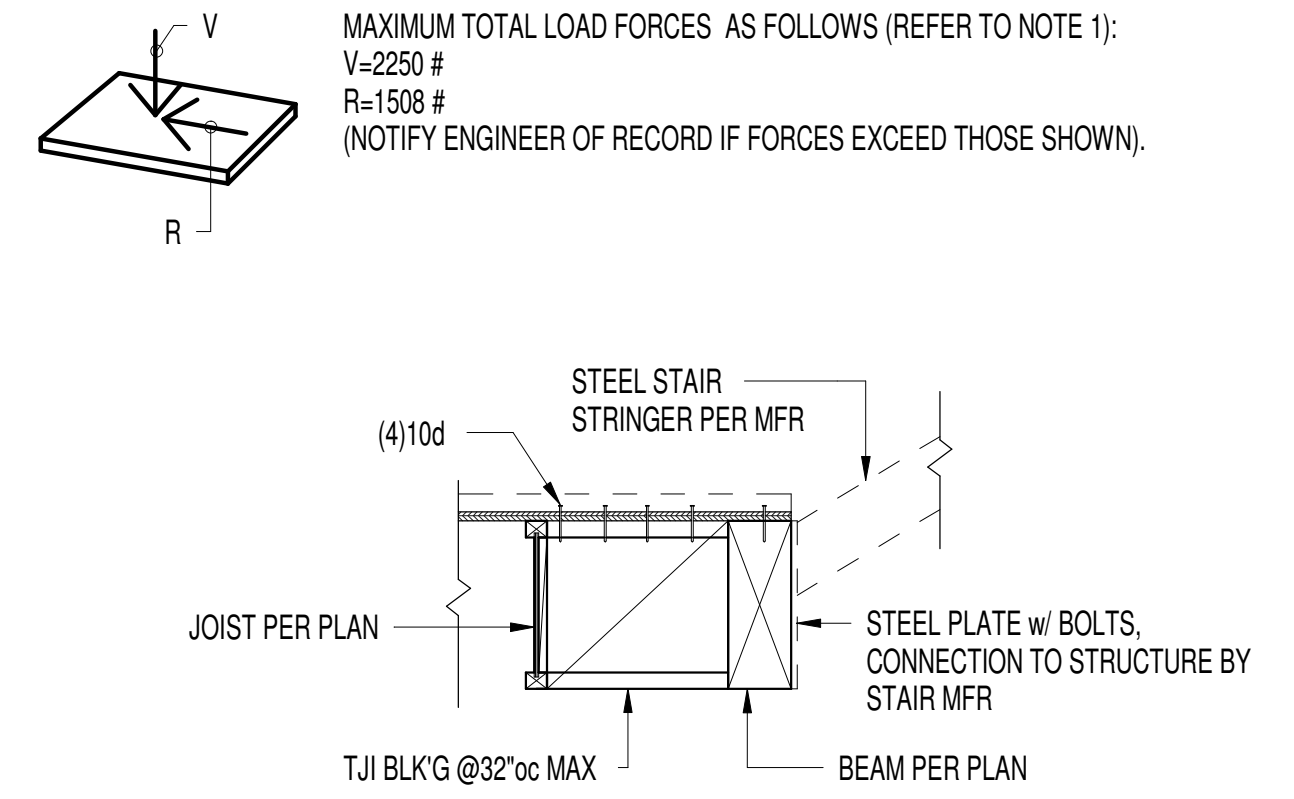
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- NOTES:
 1. STRUCTURE IS DESIGNED FOR FORCES IMPOSED BY PREFABRICATED STEEL STAIR. LOADING ASSUMES SINGLE STRINGER. NOTIFY ENGINEER OF RECORD IF FORCES EXCEED THOSE SHOWN.
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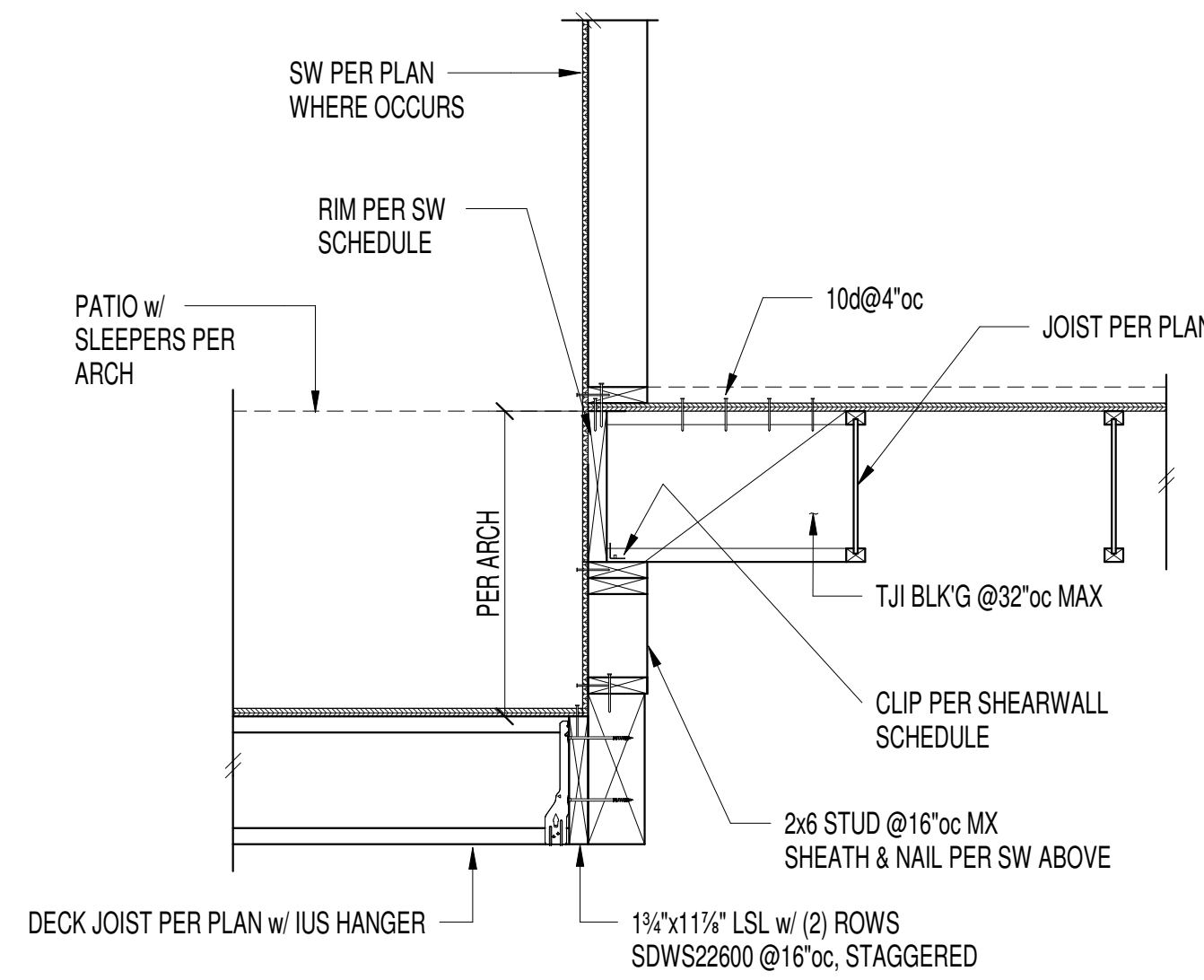


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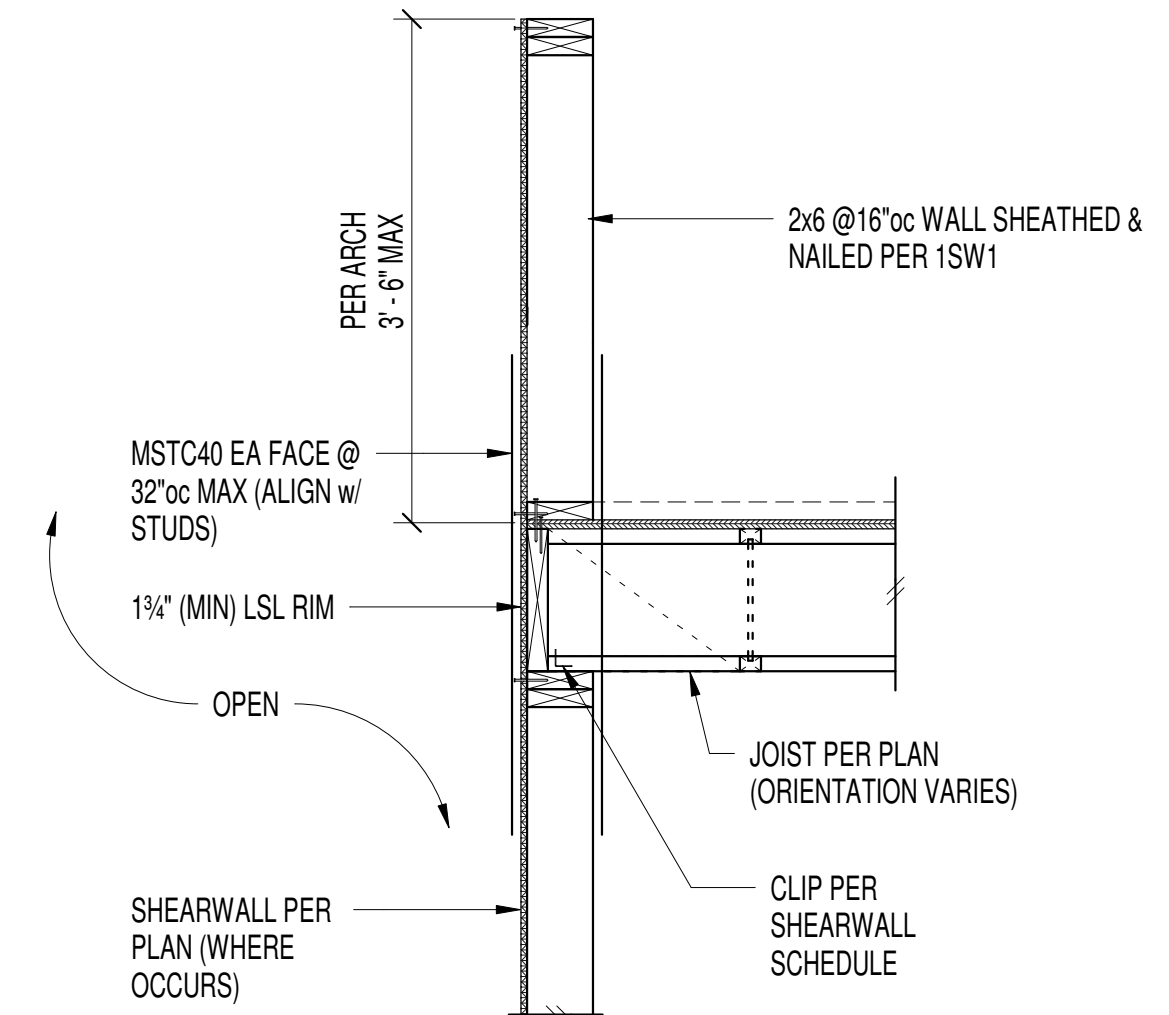
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 1. STRUCTURE IS DESIGNED FOR FORCES IMPOSED BY PREFABRICATED STEEL STAIR. LOADING ASSUMES SINGLE STRINGER. NOTIFY ENGINEER OF RECORD IF FORCES EXCEED THOSE SHOWN.
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3

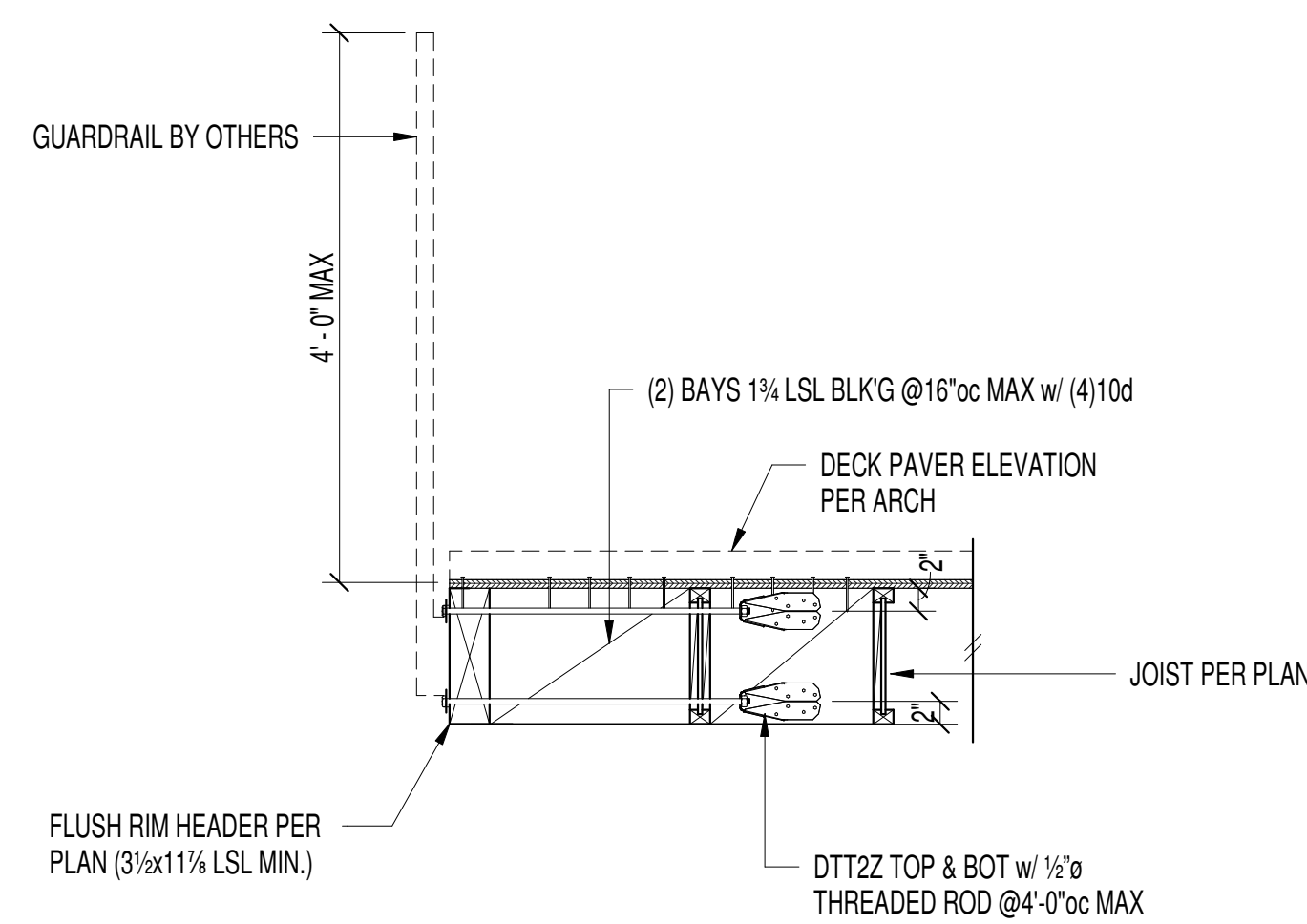


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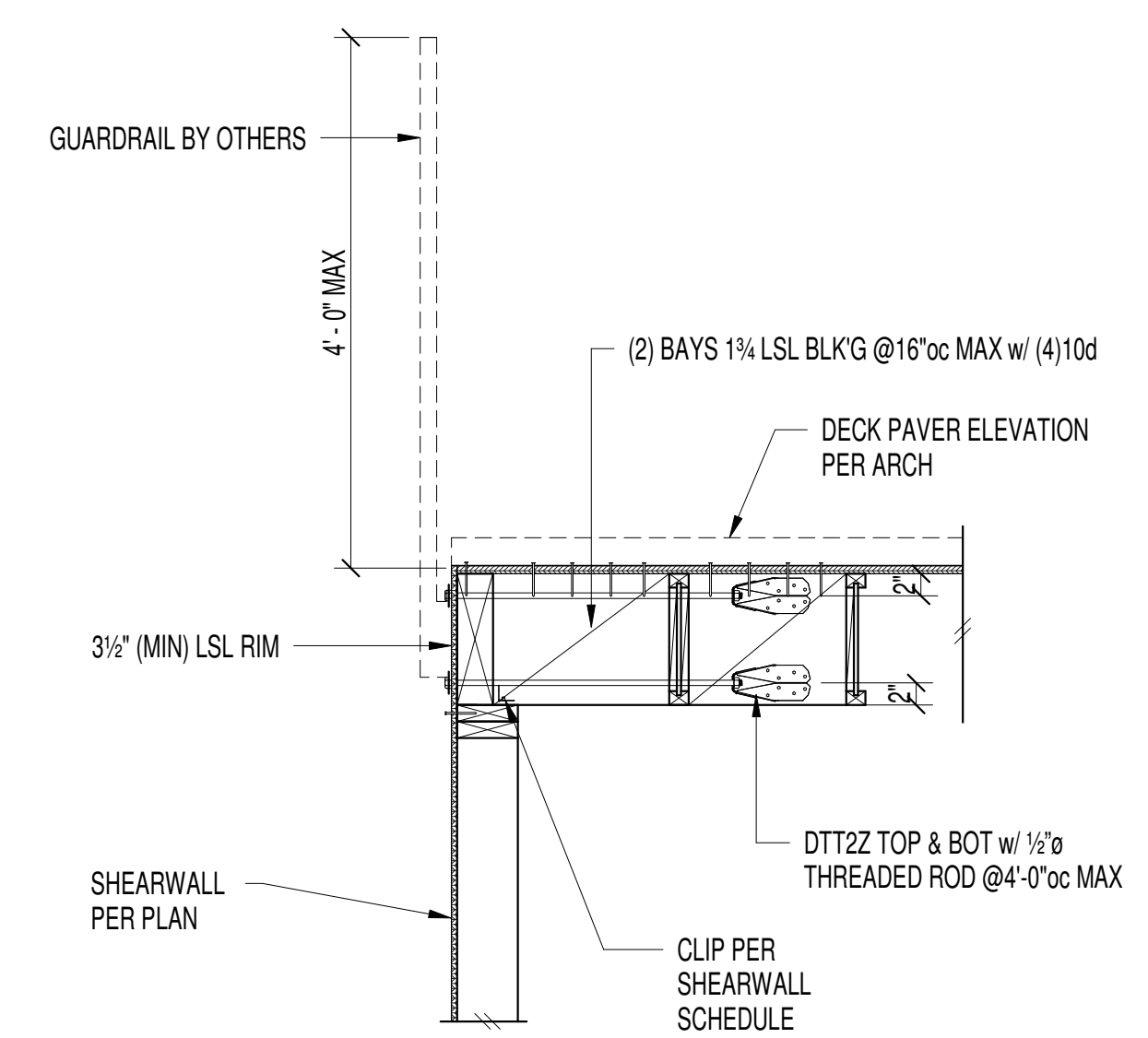
Stair Partial height wall

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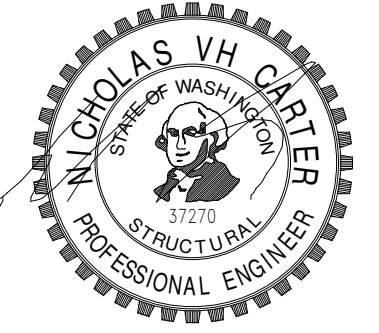
Deck Rail - Flush Rim Header

10



Deck Rail - Parallel framing

12



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Wood Details

S5.4