

Average Building Elev. Calc.

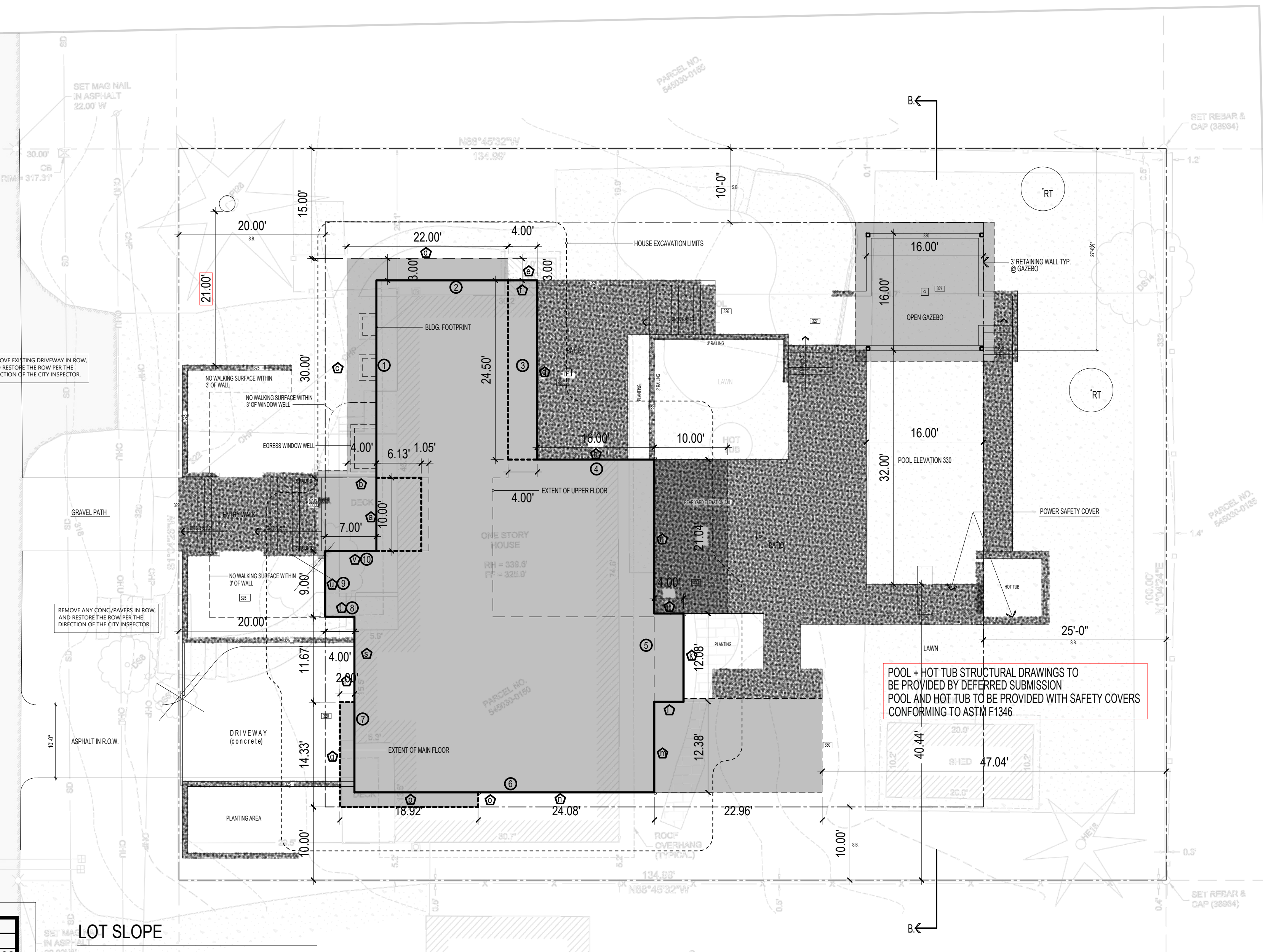
segment	length	elev @ mid	wtd segment
a	10	324.5	3245
b	4	324.5	1298
c	30	324	9720
d	22	324.5	7139
e	3	324.5	973.5
f	4	324.5	1298
g	24.5	320	7840
h	16	320	5120
i	20.04	325	6513
j	4	325.5	1302
k	12.08	325.5	3932.04
l	4	325.5	1302
m	12.36	325.5	4023.18
n	24.08	325	7826
o	2	325	650
p	18.92	324.5	6139.54
q	14.25	320	4560
r	2	320	640
s	11.66	320	3731.2
t	4	324.5	1298
u	9	324.5	2920.5
v	7	324.5	2271.5
perim=	258.89		83742.46
avg el =	323.4673		

BOLD elevations lower than existing grade

Basement FAR exception Calc.

segment	length	beginning elev.	end elev.	begin cov	end cover	avg cover	%cover	wtd
a	10	324.5	324.5	4.50	4.50	4.5	50.0%	5.00
b	4	324.5	324.5	4.50	4.50	4.5	50.0%	2.00
c	30	324.5	324.5	4.50	4.50	4.5	50.0%	15.00
d	22	324.5	325	4.50	5.00	4.75	52.8%	11.61
e	3	325	325	5.00	5.00	5	55.6%	1.67
f	4	325	325	5.00	5.00	5	55.6%	2.22
g	24.5	325	320	5.00	0.00	2.5	27.8%	6.81
h	16	320	325.5	0.00	5.50	2.75	30.6%	4.89
i	20.04	325.5	325.5	5.50	5.50	5.5	61.1%	12.25
j	4	325.5	325.5	5.50	5.50	5.5	61.1%	2.44
k	12.08	325.5	325.5	5.50	5.50	5.5	61.1%	7.38
l	4	325.5	325.5	5.50	5.50	5.5	61.1%	2.44
m	12.36	325.5	325	5.50	5.00	5.25	58.3%	7.21
n	24.08	325	325	5.00	5.00	5	55.6%	13.38
o	2	324.5	324.5	4.50	4.50	4.5	50.0%	1.00
p	18.92	324.5	324.5	4.50	4.50	4.5	50.0%	9.46
q	14.25	324.5	324.5	4.50	4.50	4.5	50.0%	7.13
r	2	324.5	324.5	4.50	4.50	4.5	50.0%	1.00
s	11.66	324.5	324.5	4.50	4.50	4.5	50.0%	5.83
t	4	324.5	324.5	4.50	4.50	4.5	50.0%	2.00
u	9	324.5	324.5	4.50	4.50	4.5	50.0%	4.50
v	7	324.5	324.5	4.50	4.50	4.5	50.0%	3.50
perim=	258.89							128.72
raw FAR	2403					avg.	49.7%	
basement slab elev =	320							
full cover =	9							
excepted area =	1194.724							

BOLD elevations are lower than existing grade
segment is footprint on the ground or projected overhanging living space



LOT SLOPE

HIGH POINT = 332'
LOW POINT = 320'
LOT SLOPE = 12'/168' = 7.14%

FAR CALCULATION

Main Floor = 2354.6 sf
Lower Floor = 2403 (with gar) sf
Upper Floor = 1938 sf

excepted FAR = (-1194.7) sf
stairs = (-110)

TOTAL = 5390.9 sf
allowable = 13,499 x .4 = 5399.6 sf

LOT COVERAGE

House Roof to eaves (shaded) = 3276.09 sf
Accessory Struct to eaves (shaded) = 361 sf
driveway = 383.66

TOTAL = 4020.75 sf
allowable = 13,499 x .4 = 5399.6 sf
amount available for hardscape = 1378.85 sf

HARDSCAPE

POOL + hot tub = 583.4 sf
PATIOS AND RETAINING = 1596.8 sf

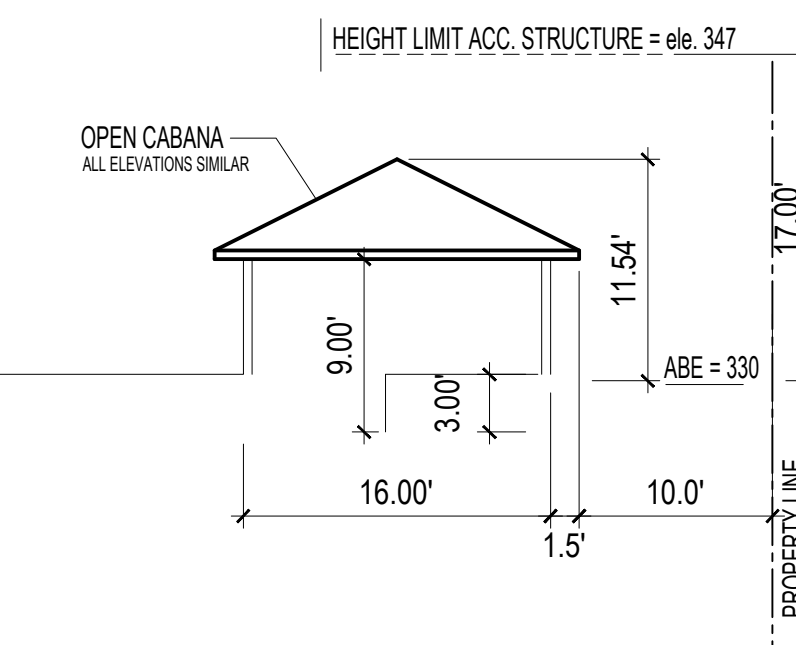
TOTAL = 2180.2sf
allowable = 13,499 x .09 = 1214.9 sf
extra lot cov. = 1378.85
TOTAL allow. = 2593.75 sf

A. SITE PLAN

- 1/10" = 1'-0"
- = SPOT ELEVATION, FINAL
 - ⊙ = WALL SEGMENT TAG FOR BASEMENT FAR EXCEPTION
 - ⊕ = WALL SEGMENT TAG FOR HEIGHT CALCULATION
 - = EAVE/ROOF LINE
 - = EXTENT OF MAIN FLOOR
 - = BUILDING FOOTPRINT (FOUNDATION EXTENTS)
 - = EXTENT OF UPPER FLOOR
 - SHADED AREA = BLDG EXTENTS TO EAVE
 - EXISTING HOUSE, DRIVEWAY AND ALL HARDSCAPE ON PROPERTY TO BE REMOVED
 - = EXISTING TOPOGRAPHY
 - RT = REPLACEMENT TREE PER ARBORIST'S REPORT

B. SITE SECTION

1/10" = 1'-0"
POOL + HOT TUB STRUCTURAL DRAWINGS TO BE PROVIDED BY DEFERRED SUBMISSION
ALL 4 CORNERS OF CABANA ARE AT ELEV. 330, BOTH FINISH AND FINAL GRADE, THEREFOR ABE = 330



NFPA 13D and NFPA 72 Monitored Fire Alarm System (per Chapter 29) Required.

All Japanese knotweed (*Polygonum cuspidatum*) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, shall be removed from the property.

development proposals for a new single-family home shall remove japanese knotweed (*polygonum cuspidatum*) and regulated class a, regulated class b, and regulated class c weeds identified on the king county noxious weed list, as amended, from required landscaping areas established pursuant to subsection 19.02.020(f)(3)(a). new landscaping associated with new single-family home shall not incorporate any weeds identified on the king county noxious weed list, as amended, provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion.

Civil Engineer

Duffy Ellis
CES Civil Engineering
102 NW Canal St Seattle WA 98107
206.930.0342

Structural Engineer

Javid Abdi, PE, SE Atlas Consulting Structural Engineers
6810 NE 149th St Kenmore WA 98028
Phone: (206) 427-7233

Contractor

Aspen Homes NW
Mike Yeganeh
P.O. BOX # 1056
Mercer Island, WA 98040
Lic # ASPPENHN870MK

Project Description

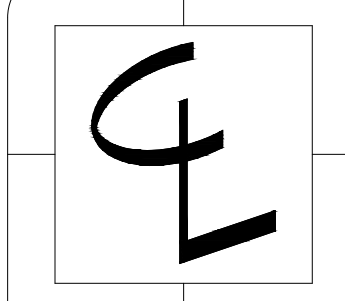
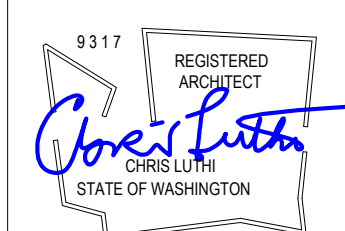
Demolish existing and build new single family residence.

Parcel Number/Legal

Parcel # = 5450300150
Legal Description:
MERCER CREST ADD
Plat Block: B
Plat Lot: 6
ZONING = R-9.6
lot size = 13,499 sf

Owner

SAHIL KUMAR
4034 85TH AVE SE 98040



CENTERLINE DESIGN
4737 37th AVE SW
SEATTLE
206.935.4654
www.Centerline-Design.com

Kumar Residence
4034 85th Ave SE

CONTENTS

Site Plan

DRAWN BY

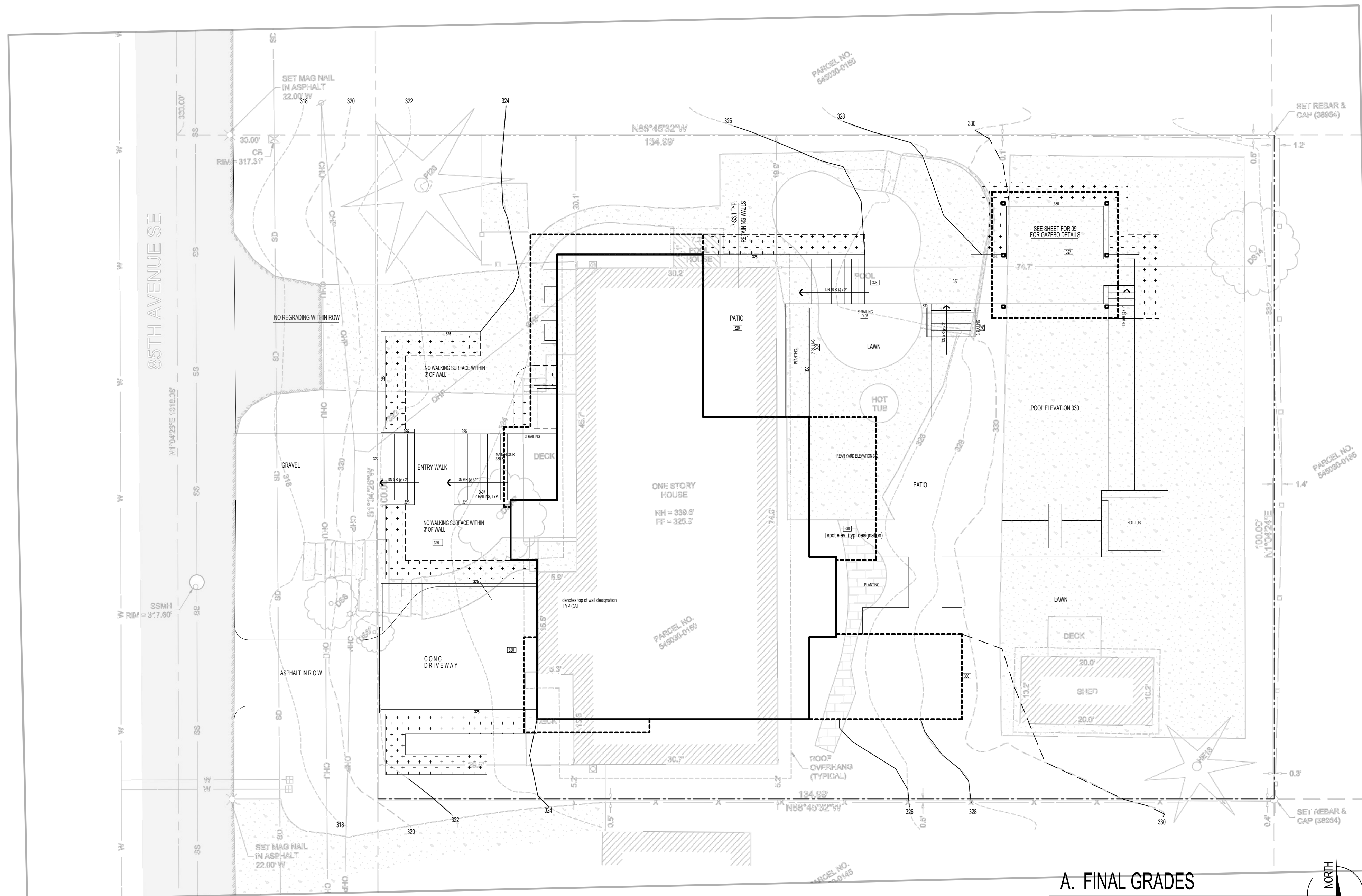
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DATE

5.21.21
9.15.21
1.12.22
2.28.22

3.25.22

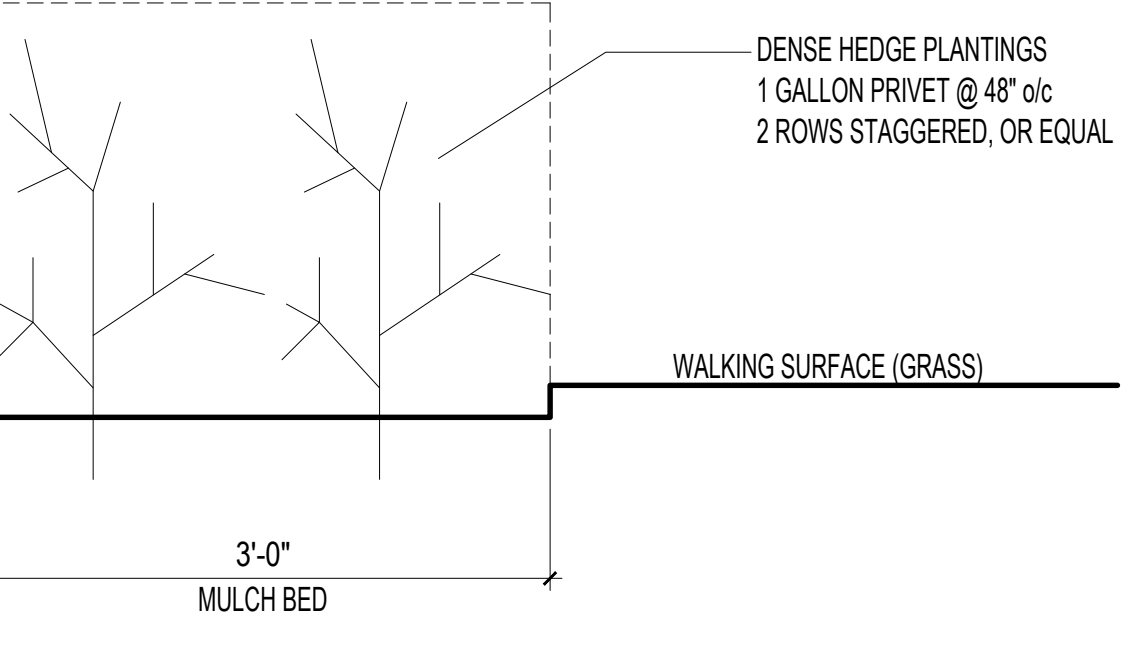
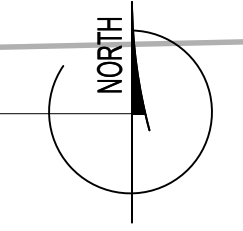
1a



POOL + HOT TUB STRUCTURAL DRAWINGS TO BE PROVIDED BY DEFERRED SUBMISSION
 POOL AND HOT TUB TO BE PROVIDED WITH SAFETY COVERS CONFORMING TO ASTM F1346

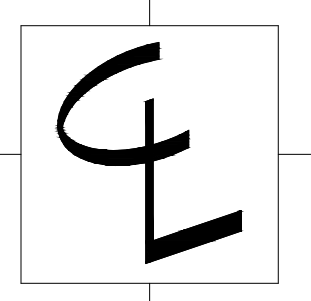
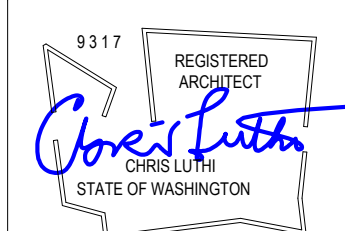
A. FINAL GRADES

- 1/10" = 1'-0"
- = SPOT ELEVATION, FINAL
- = CANTILEVER/EAVE/ROOF LINE
- = BUILDING FOOTPRINT
- EXISTING HOUSE, DRIVEWAY AND ALL HARDSCAPE ON PROPERTY TO BE REMOVED
- - - = EXISTING TOPOGRAPHY
- = REVISED TOPO (FINISHED GRADES)
- = 3' MIN WIDTH OF DENSE HEDGE PLANTINGS SEE DETAIL B THIS PAGE



B. WALKING SURFACE OFFSET

NTS



CENTERLINE DESIGN
 4737 37th AVE SW
 SEATTLE
 206.935.4684
 www.Centerline-Design.com

Kumar Residence
 4034 85th Ave SE

CONTENTS

Site Plan

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DATE

5.21.21

1.12.22

2.28.22

3.25.22

1b

NOTES

- SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
- CO = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP

DOORS ARE 3-0 x 6-8 (r.o. = 3'-2" x 6'-10") unless otherwise indicated
 Ⓢ = FAN, 50 CFM UNLESS OTHERWISE INDICATED
 FOR SHEAR WALL INFORMATION SEE STRUCTURAL PLANS
 ALL INTERIOR WALLS TO BE 2x4, EXTERIOR WALLS 2x6, EXCEPT AS INDICATED, OR EXISTING

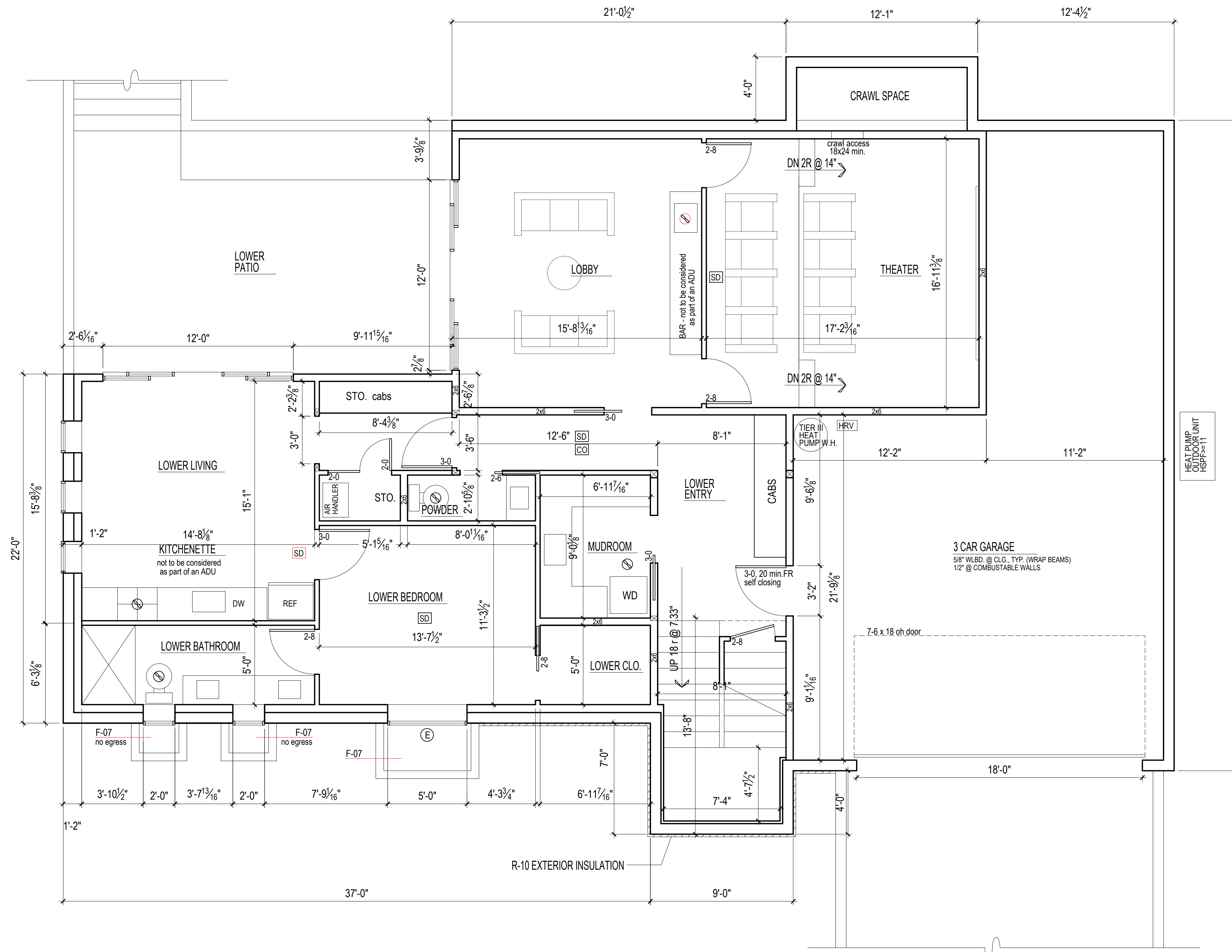
E = EGRESS WINDOWS

Contractor shall verify to Inspector all guards and railings shall be capable of resisting 200 lb load on top rail acting in any direction as required by IRC Table R301.5.

ALL WALLS FULL HEIGHT UNLESS OTHERWISE INDICATED

T = TEMPER/SAFETY GLAZE WINDOWS

ALL GAS F.P. TO BE APPROVED DIRECT VENT



LOWER FLOOR PLAN

1/4" = 1'-0"
 FLOOR AREA = 2403sf
 GARAGE = 758sf



Kumar Residence
 4034 85th Ave SE

CONTENTS

Lower Floor

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DATE

6.7.21
 1.12.22

NOTES

- SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
- CO = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP

DOORS ARE 3-0 x 6-8 (r.o. = 3'-2" x 6'-10") unless otherwise indicated

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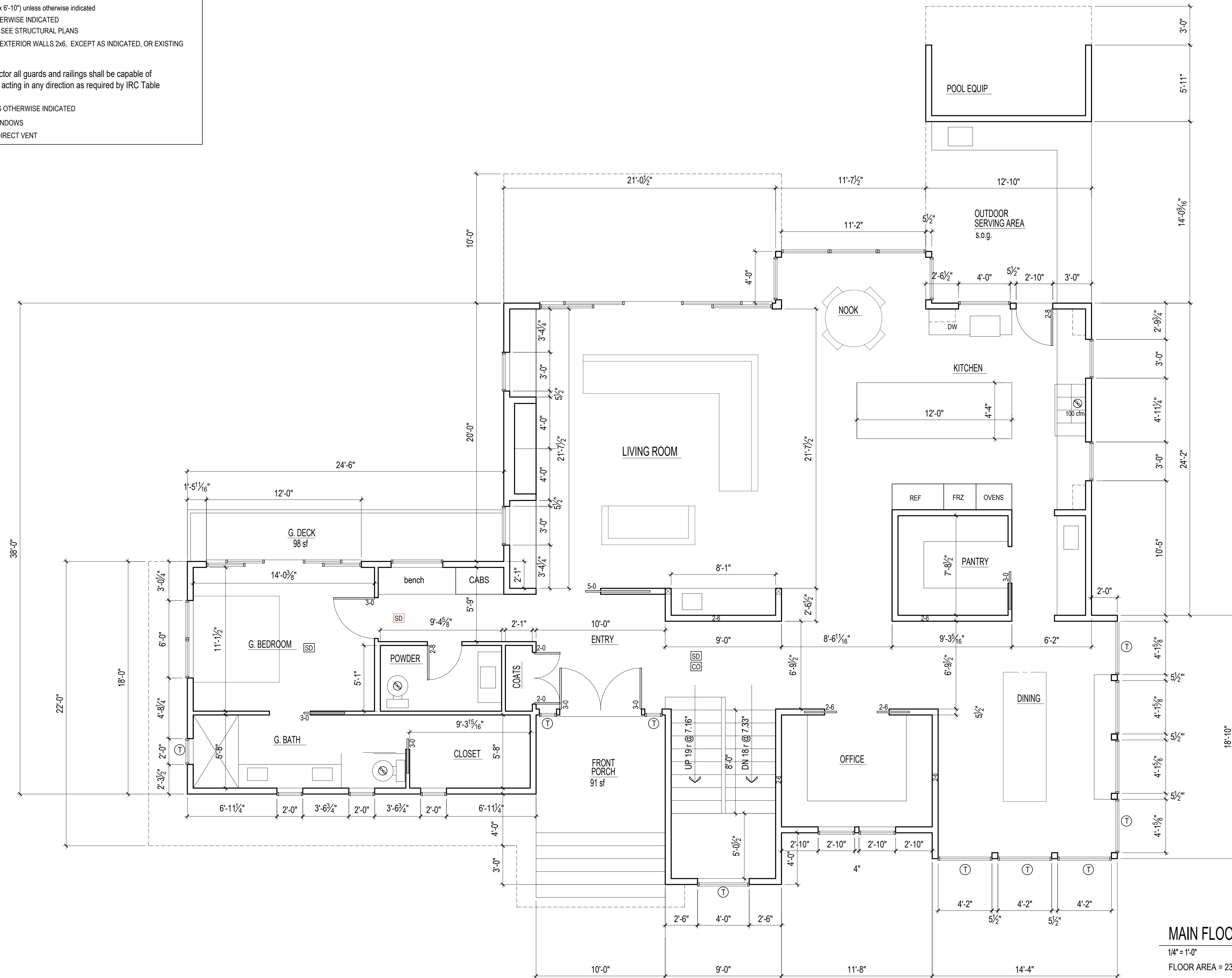
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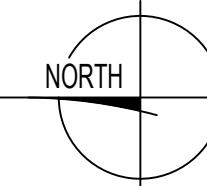
T = TEMPER/SAFETY GLAZE WINDOWS

ALL GAS F.P. TO BE APPROVED DIRECT VENT



MAIN FLOOR PLAN

1/4" = 1'-0"
FLOOR AREA = 2354.6sf



CONTENTS

Main Floor

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DATE

6.7.21

1.12.22

NOTES

- SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
- CO = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP

DOORS ARE 3-0 x 6-8 (r.o. = 3'-2" x 6'-10") UNLESS OTHERWISE INDICATED

F = FAN, 50 CFM UNLESS OTHERWISE INDICATED

FOR SHEAR WALL INFORMATION SEE STRUCTURAL PLANS

ALL INTERIOR WALLS TO BE 2x4, EXTERIOR WALLS 2x6, EXCEPT AS INDICATED, OR EXISTING

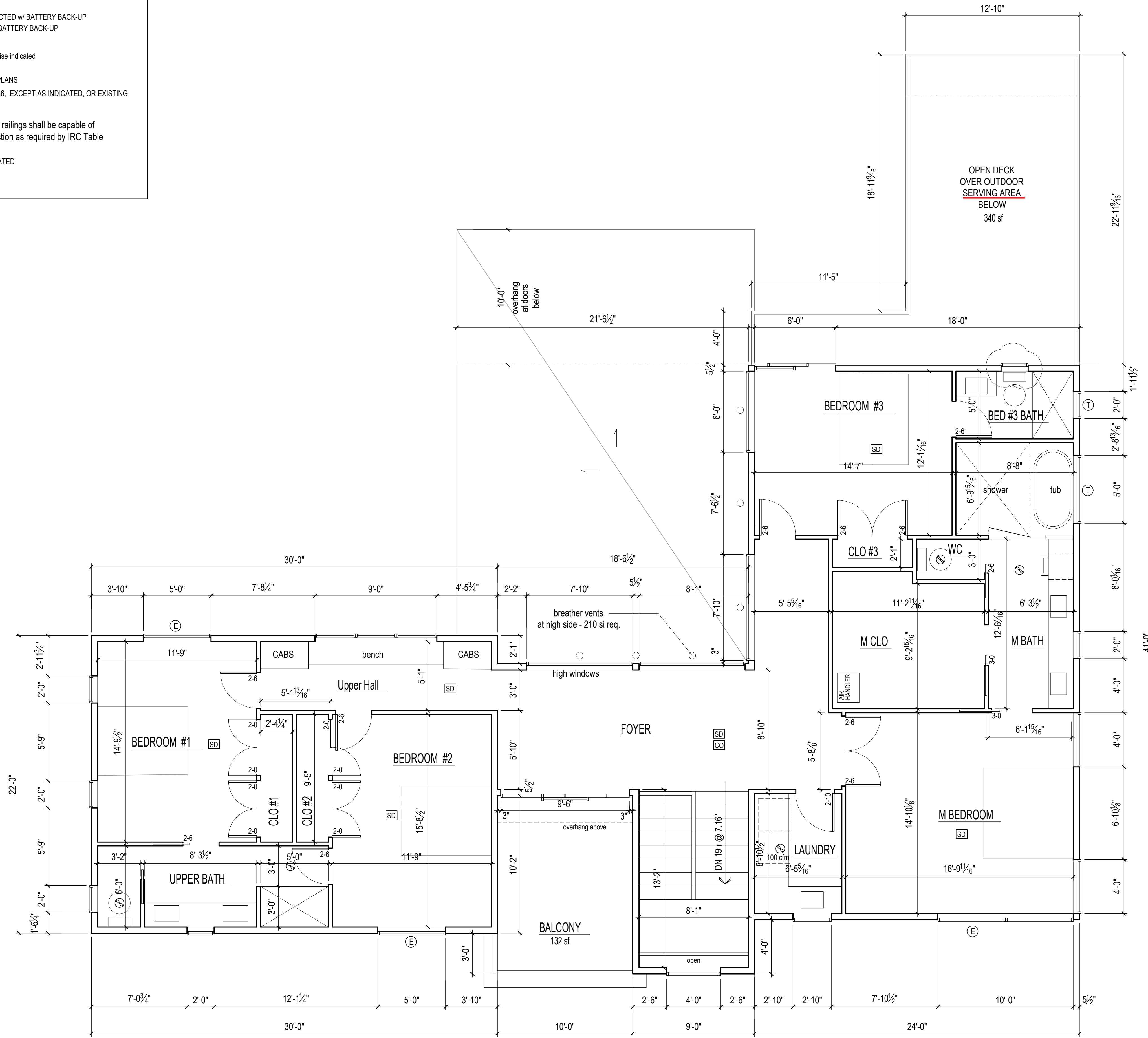
E = EGRESS WINDOWS

Contractor shall verify to Inspector all guards and railings shall be capable of resisting 200 lb load on top rail acting in any direction as required by IRC Table R301.5.

ALL WALLS FULL HEIGHT UNLESS OTHERWISE INDICATED

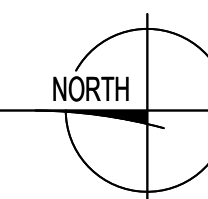
T = TEMPER/SAFETY GLAZE WINDOWS

ALL GAS F.P. TO BE APPROVED DIRECT VENT



UPPER FLOOR PLAN

1/4" = 1'-0"
FLOOR AREA = 1938sf



CONTENTS

Upper Floor

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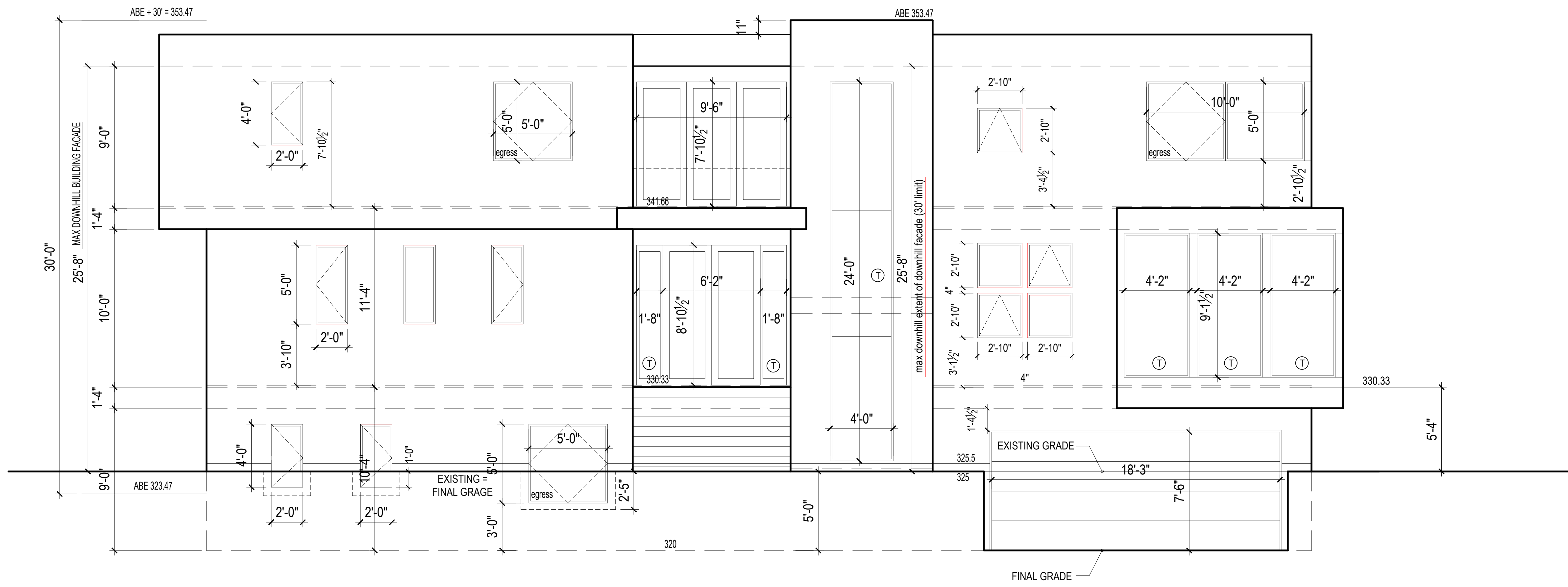
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DATE

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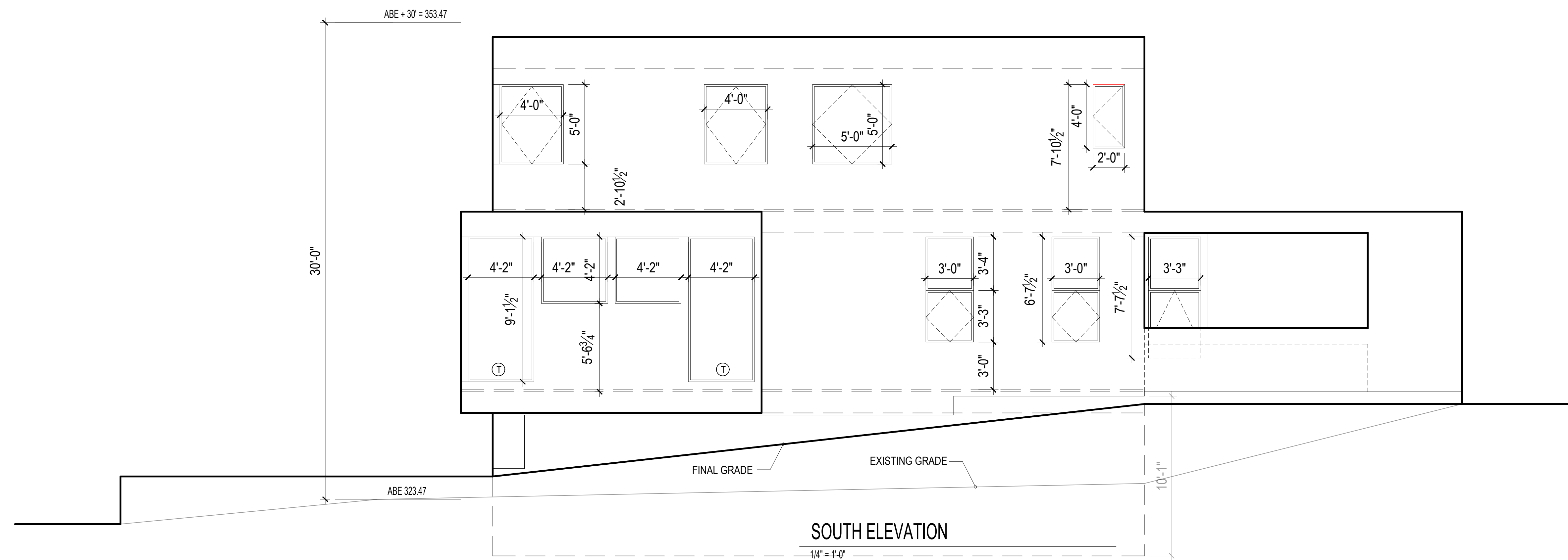
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2.28.22



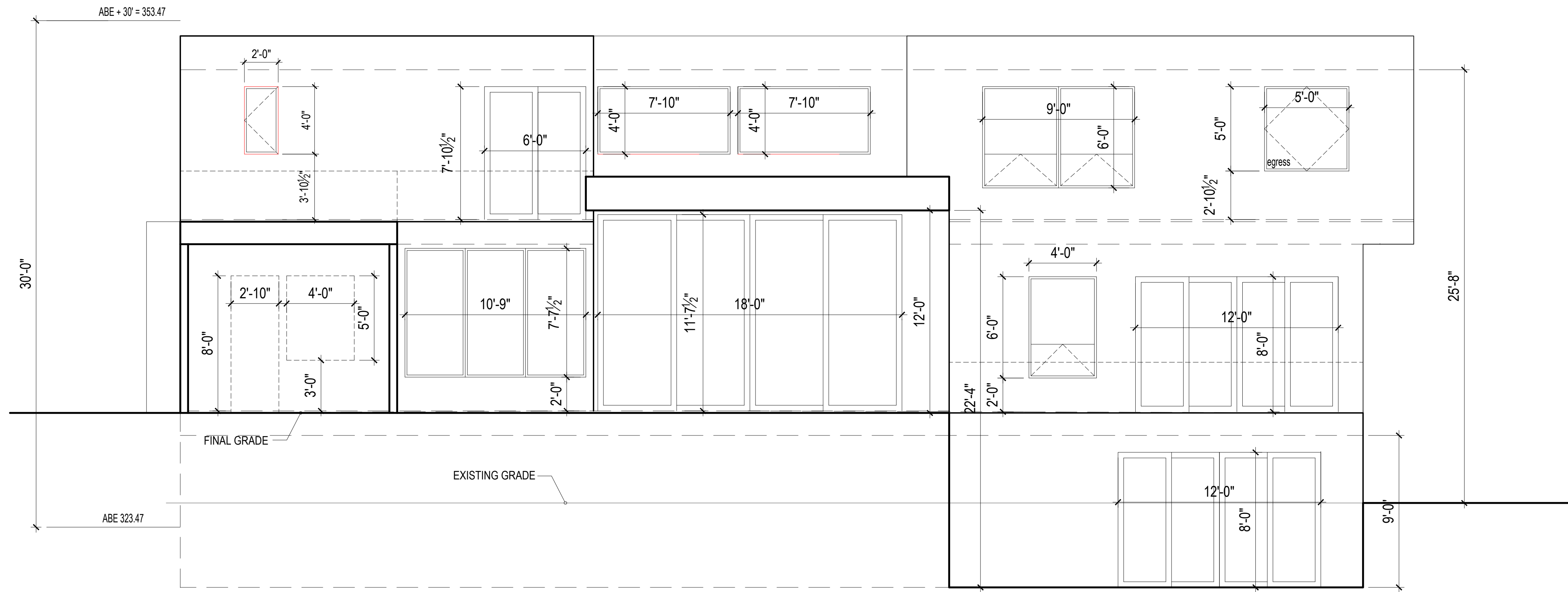
WEST ELEVATION

1/4" = 1'-0"



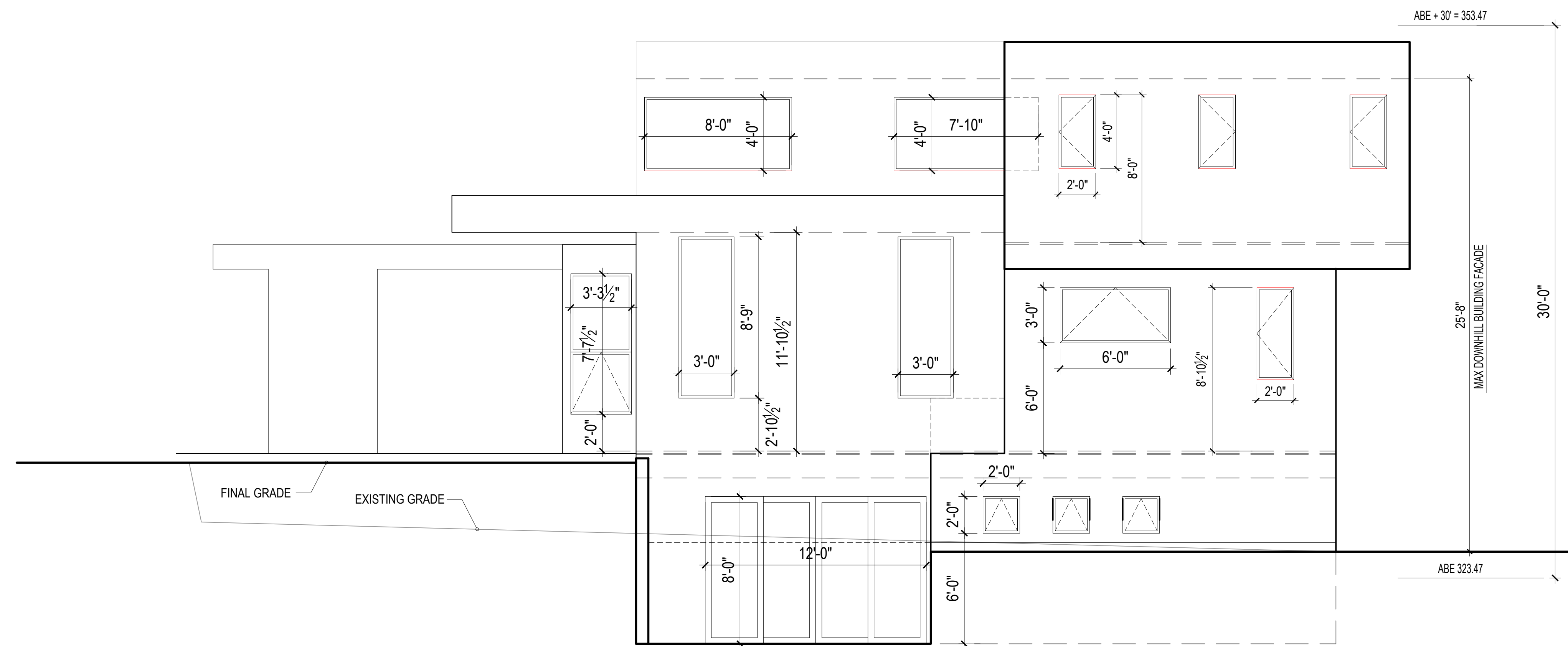
SOUTH ELEVATION

1/4" = 1'-0"



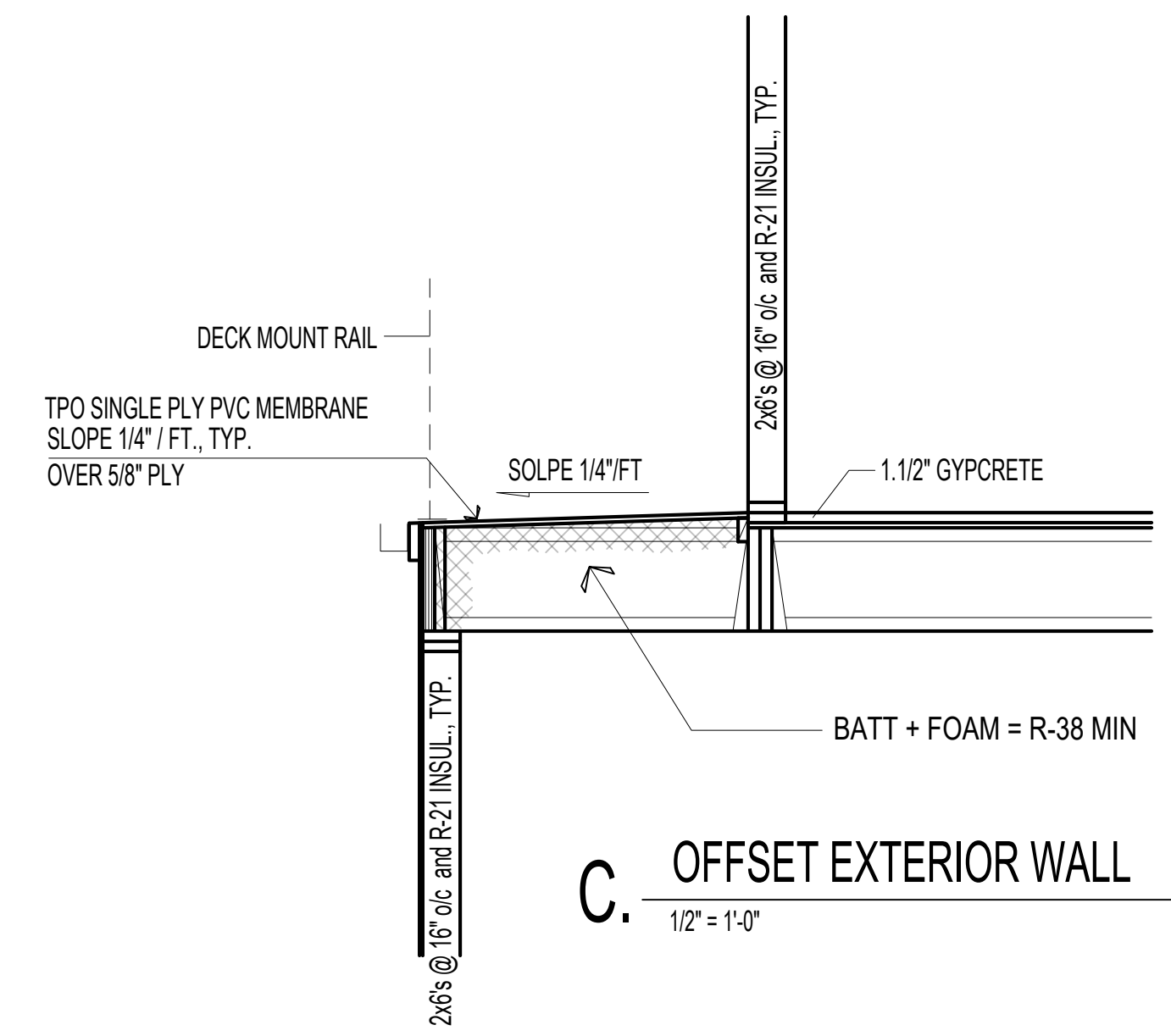
EAST ELEVATION

1/4" = 1'-0"



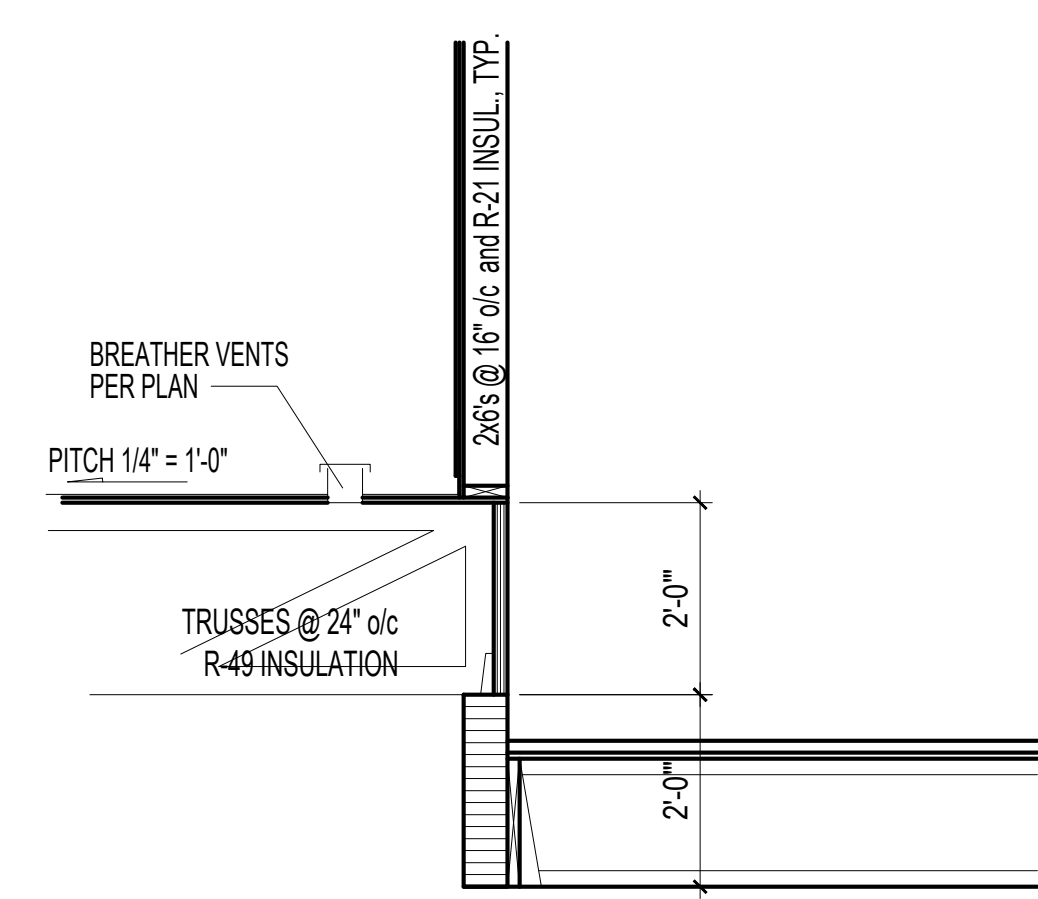
NORTH ELEVATION

1/4" = 1'-0"

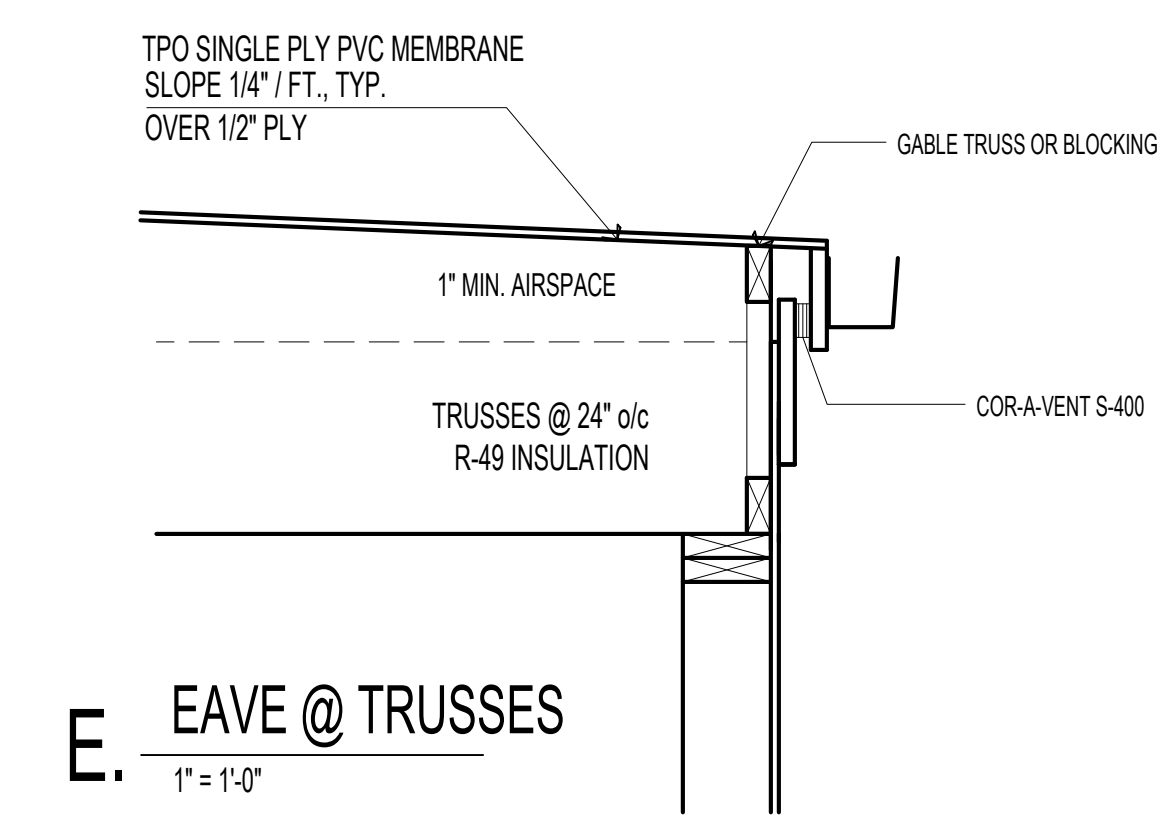


C. OFFSET EXTERIOR WALL
 1/2" = 1'-0"

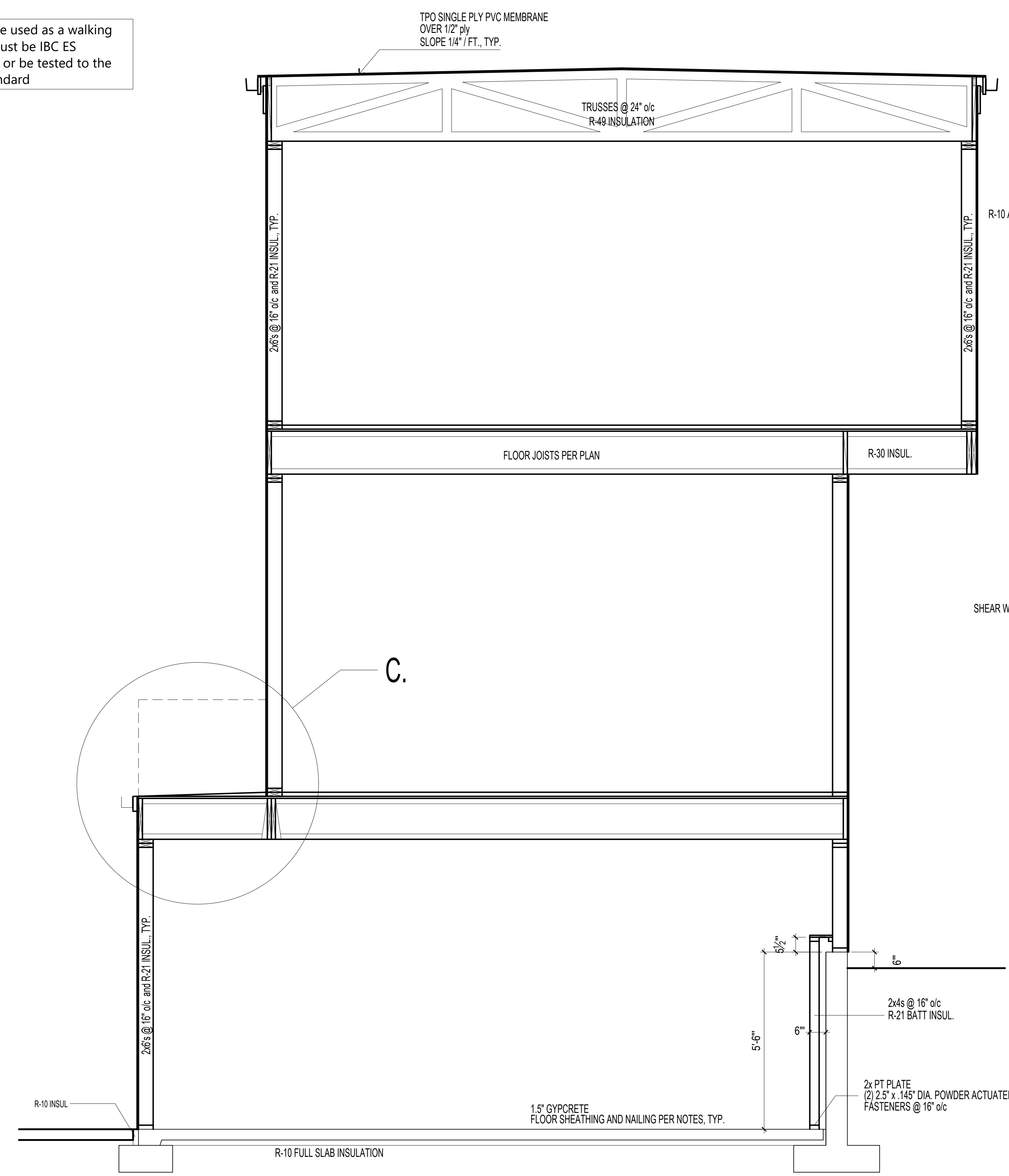
Membrane used as a walking surface must be IBC ES approved or be tested to the AC39 standard



D. UPPER FLOOR TO L.R. ROOF
 1/2" = 1'-0"

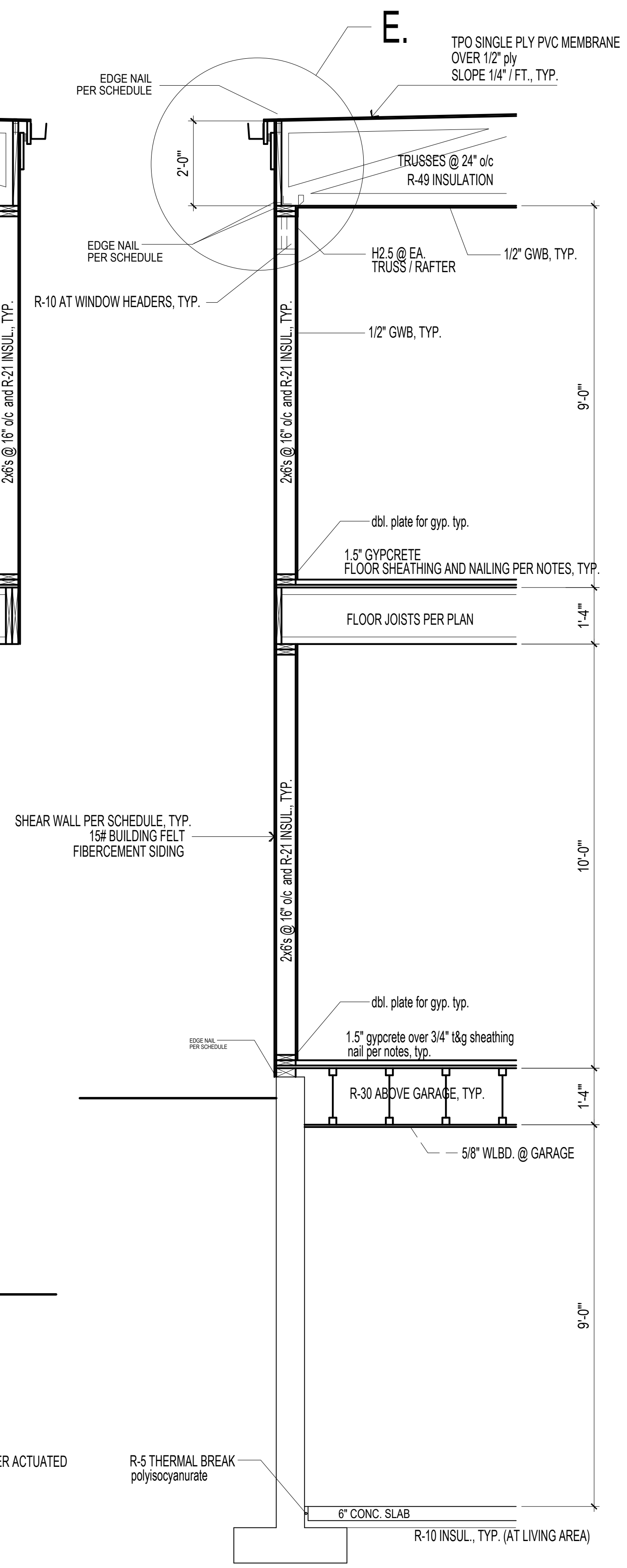


E. EAVE @ TRUSSES
 1" = 1'-0"

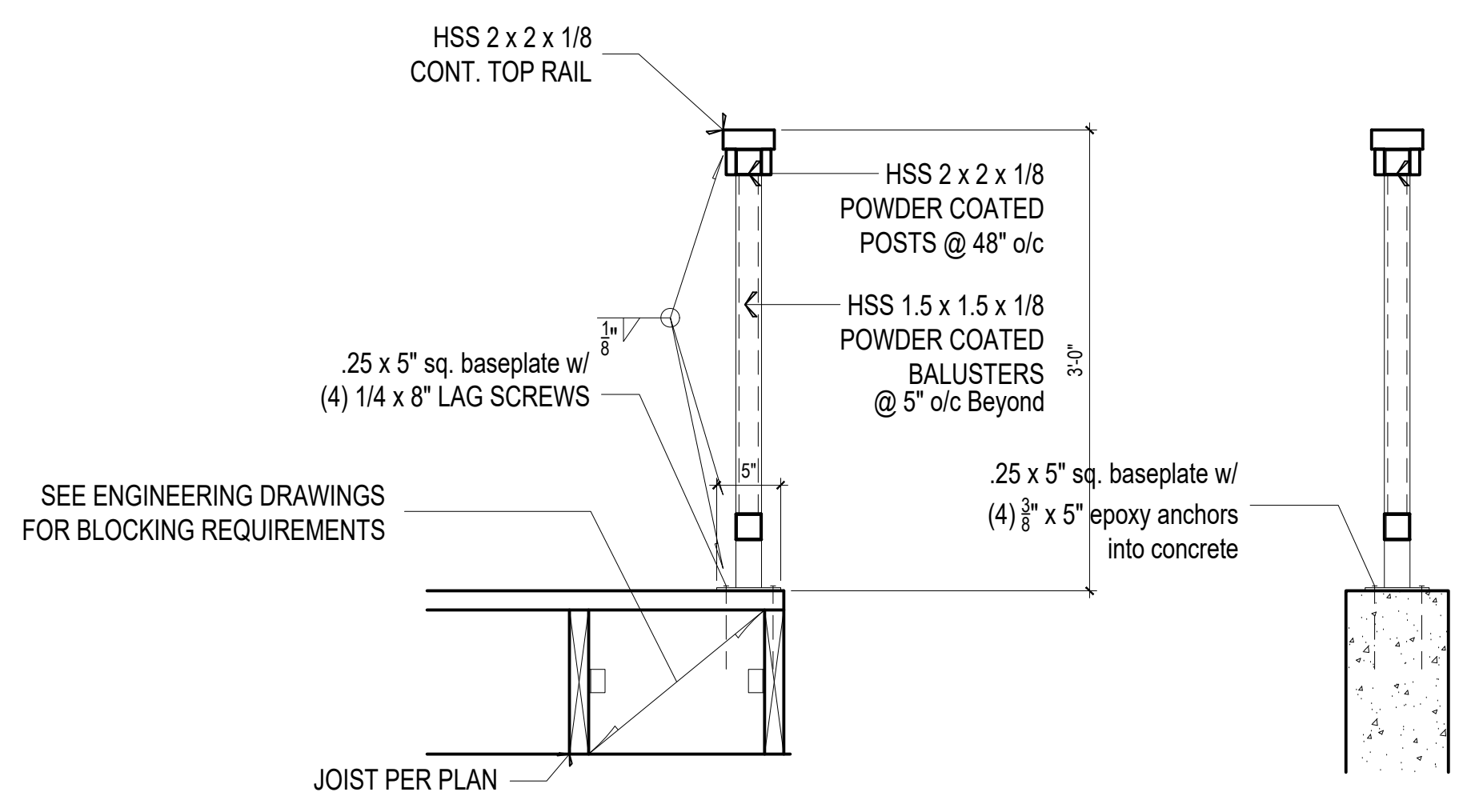


B. BUILDING SECTION
 1/2" = 1'-0"

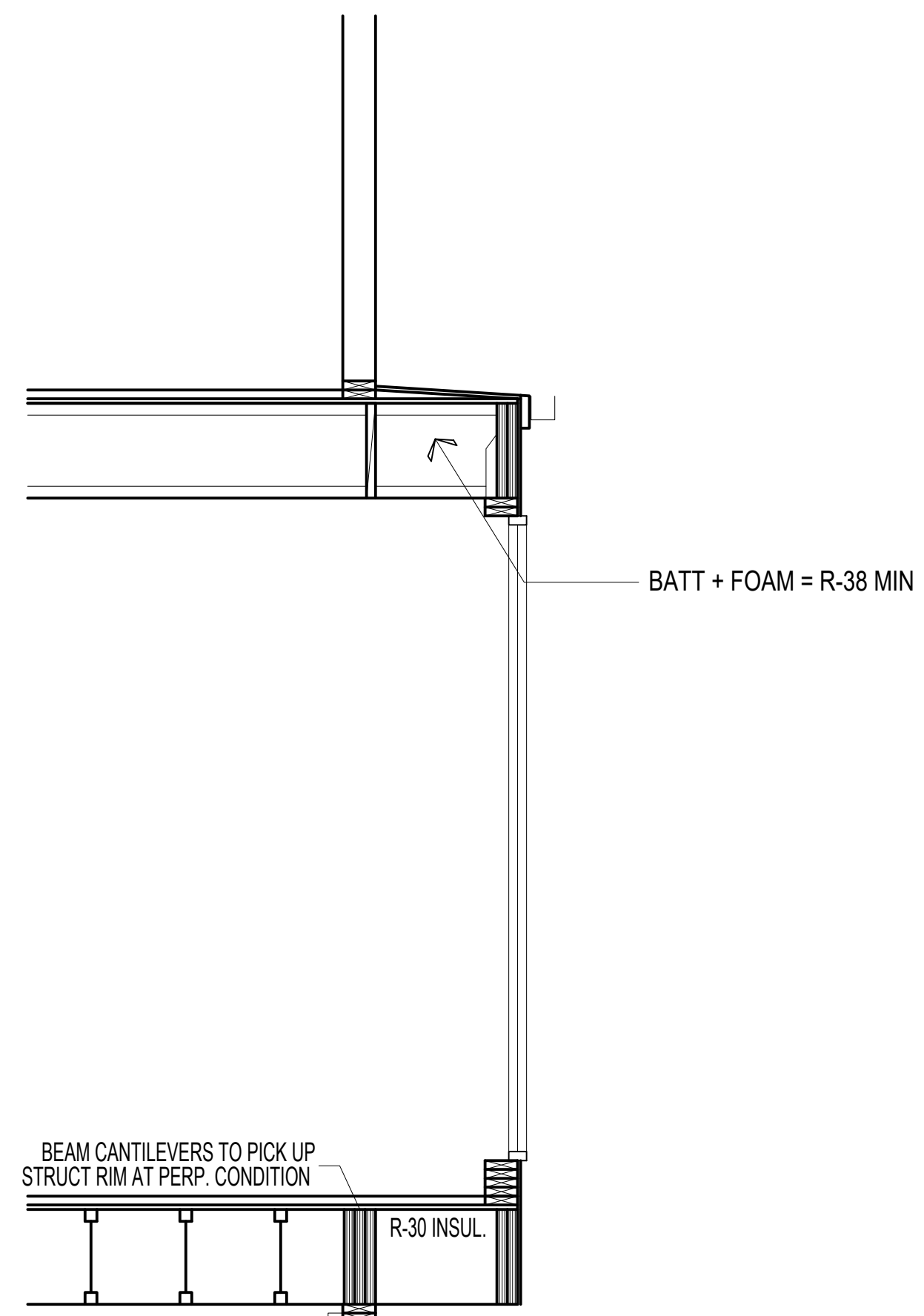
FOAM INSULATION NOTES
 Closed cell spray foam directly applied to underside of sheathing (min R-10) + batts to = r-49 (R-38 min. @ vaulted areas)
 Spray foam product to be "Spraytite 178" as manufactured by BASF (ESR-2642), or equal.
 Spray foam insulation shall be installed per IRC 806.5.1.3.
 A copy of the ICC ESR report for the product used must be provided on the job site for field inspector verification
 The applied spray foam must be installed by a certified installer.



A. TYPICAL SECTION
 1/2" = 1'-0"



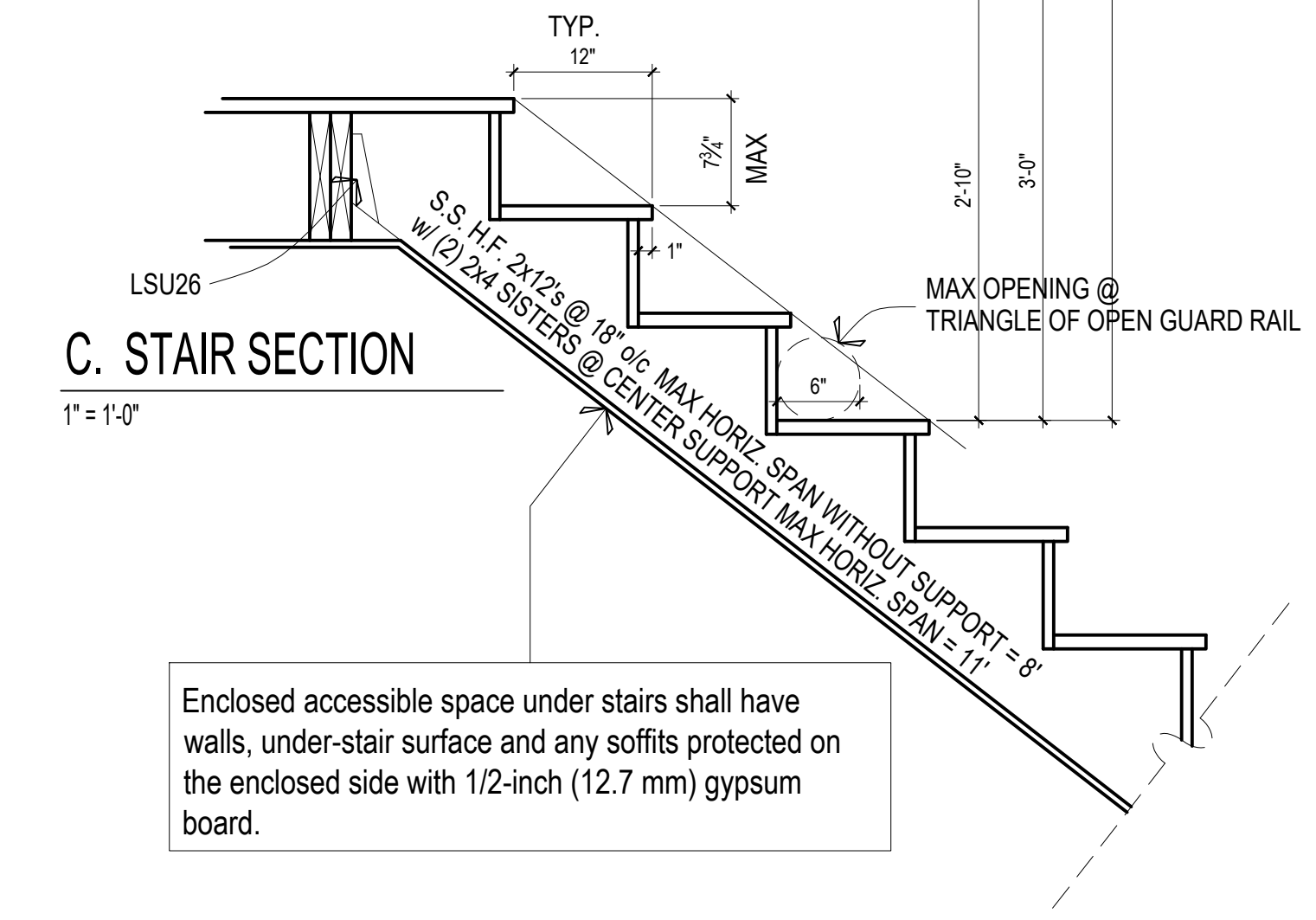
D. RAILING DETAIL
 1" = 1'-0"



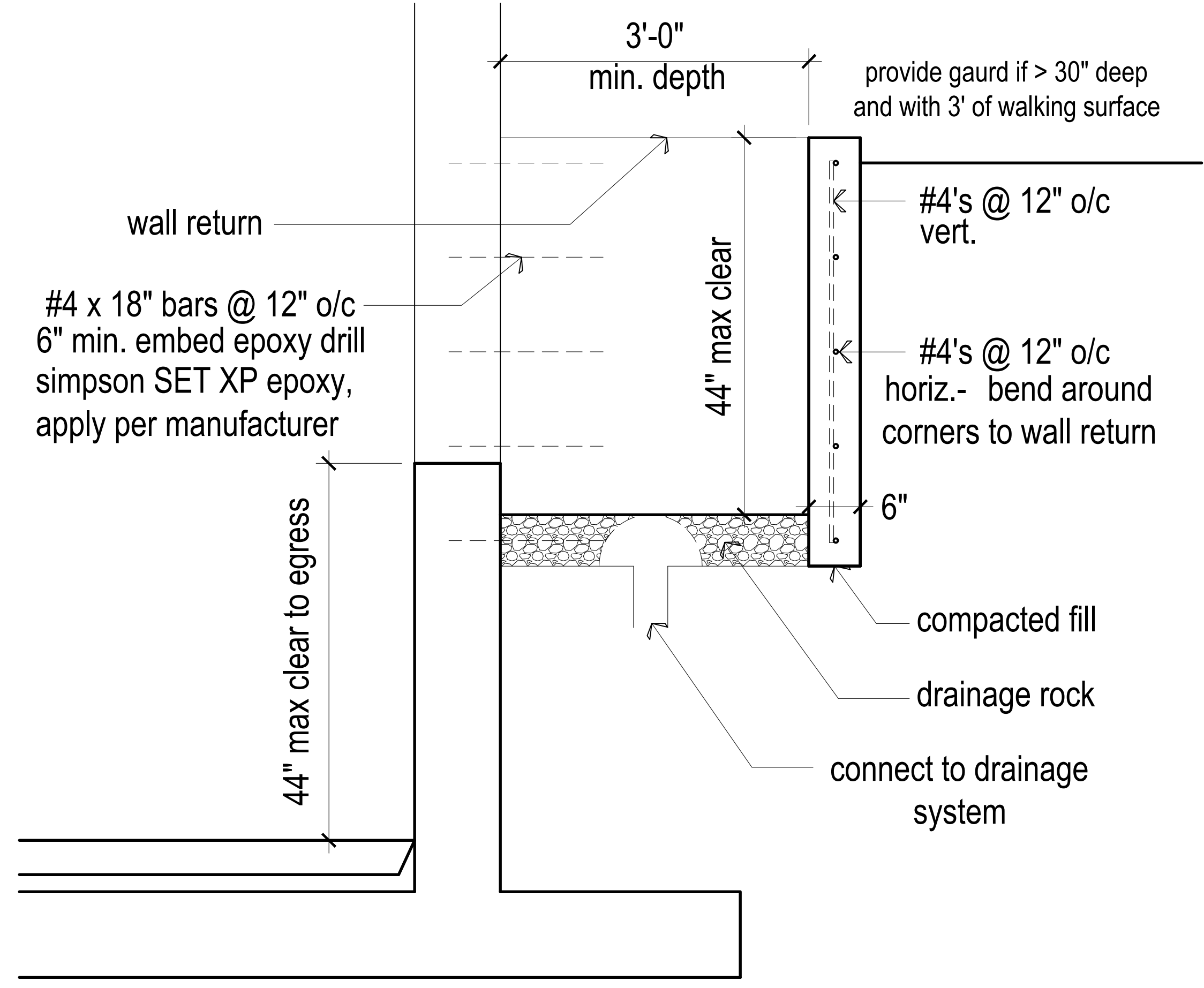
E. DINING ROOM POP-OUT
 1/2" = 1'-0"

MIN. STAIRWAY WIDTH = 3'-0" CLEAR
 STAIR RISE, RUN AND NOSING CANNOT VARY BY MORE THAN 3/8"
 HANDRAIL TERMINATIONS MUST RETURN TO WALL

MIN. STAIRWAY WIDTH = 3'-0" CLEAR
 STAIR RISE, RUN AND NOSING CANNOT VARY BY MORE THAN 3/8"
 HANDRAIL TERMINATIONS MUST RETURN TO WALL



C. STAIR SECTION
 1" = 1'-0"



F. WINDOW WELL DETAIL
 1" = 1'-0"

Energy Code Info

2018 WA STATE PRESCRIPTIVE PATH

energy credit option	credit value	summary
1.7	0.5	ins. over wall, .28 windows
2	1	heat pump
2.2	1	2.0 ACH + HRV
3.5	1.5	central HP, HSPF>=11
4.1	0.5	AH in heated space
5.5	2	elec. HP WH
7.1	0.5	appliance package
total credits		7

PRIMARY RESIDENCE HVAC NOTES

DUCTED HEAT PUMP (HSPF>11.0) INT. AIR HANDLER
HEAT RECOVERY VENTILATION
REQUIRED VENTING = CONTINUOUS 120CFM
SET TO OPERATE AT 240 CFM FOR 2 HOURS IN EA. 4 HR PERIOD (50%)
PROVIDED BY VARIABLE SPEED HIGH EFF. FAN (MAX. 35 WATTS/CFM)
CONTROLLED TO OPERATE AT LOW SPEED IN VENTILATION MODE ONLY.

design professional or builder shall complete and post an "Insulation Certificate for Residential Construction" within 3' of the electrical panel prior to final inspection.

Maximum flow rates for shower heads and kitchen sink - 1.75 GPM or less. All other lavatory faucets - 1.0 GPM or less.

Per WSEC R402.4, The building thermal Envelope shall be constructed to limit air leakage to 2.0 air changes per hour maximum. The results of the test shall be signed by the party conducting the test and provided to the code official (R402.4.1.2). Per WSEC R403.1.1, at least one thermostat per dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule. Per WSEC R403.2.2, Ducts, air handlers, and filter boxes shall be sealed. Per WSEC R404.1, A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.

All Climate Zones (Table R402.1.1)		
	R-Value ^a	U-Factor ^a
Fenestration U-Factor ^b	n/a	0.30 0.28
Skylight U-Factor ^b	n/a	0.50
Glazed Fenestration SHGC ^{b,e}	n/a	n/a
Ceiling ^e	49	0.026
Wood Frame Wall ^{e,h}	21 int	0.056
Floor	30	0.029
Below Grade Wall ^{c,h}	10/15/21 int + TB	0.042
Slab ^{d,f} R-Value & Depth	10, 2 ft	n/a

^a R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity that is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.

^b The fenestration U-factor column excludes skylights.

^c "10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.

^d R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.

^e For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.

^f R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.

^g For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.

^h Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.

ENERGY CREDIT DESCRIPTIONS

1.7

Advanced framing and raised heel trusses or rafters
Vertical Glazing U-0.28
R-49 Advanced (U-0.020) as listed in Section A102.2.1, Ceilings below a vented attic and R-49 vaulted ceilings with full height of uncompressed insulation extending over the wall top plate at the eaves.

2.2

Compliance based on Section R402.4.1.2: Reduce the tested air leakage to 2.0 air changes per hour at maximum 50 Pascals or
For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.25 cfm/sf maximum at 50 Pascals and
All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code or Section 403.8 of the International Mechanical Code shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of 0.65.

3.5

Air-source, centrally ducted heat pump with minimum HSPF of 11.0.

4.1

All supply and return ducts located in an unconditioned attic shall be deeply buried in ceiling insulation in accordance with Section R403.3.7.

For mechanical equipment located outside the conditioned space, a maximum of 10 linear feet of return duct and 5 linear feet of supply duct connections to the equipment may be outside the deeply buried insulation. All metallic ducts located outside the conditioned space must have both transverse and longitudinal joints sealed with mastic. If flex ducts are used, they cannot contain splices.

Duct leakage shall be limited to 3 cfm per 100 square feet of conditioned floor area. Air handler(s) shall be located within the conditioned space.

5.5

Water heating system shall include one of the following: Electric heat pump water heater meeting the standards for Tier III of NEEA's advanced water heating specification or For R-2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier III of NEEA's advanced water heating specification, shall supply domestic hot water to all units. If one water heater is serving more than one dwelling unit, all hot water supply and recirculation piping shall be insulated with R-8 minimum pipe insulation.

7.1

All of the following appliances shall be new and installed in the dwelling unit and shall meet the following standards:
Dishwasher Energy Star rated
Refrigerator (if provided) Energy Star rated
Washing machine Energy Star rated
Dryer Energy Star rated, ventless dryer with minimum CEF rating of 5.2

To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall show the appliance type and provide documentation of Energy Star compliance. At the time of inspection, all appliances shall be installed and connected to utilities. Dryer ducts and exterior dryer vent caps are not permitted to be installed in the dwelling unit.

Window, Skylight and Door Schedule										
Project Information					Contact Information					
Kumar										
Exempt Swinging Door (24 sq. ft. max.)					Ref.	U-factor	Width	Height	Area	UA
Exempt Glazed Fenestration (15 sq. ft. max.)							Qt.	Feet	0.00	0.00
							Feet	Feet		
							Inch	Inch		
Vertical Fenestration (Windows and doors)										
Component Description	Ref.	U-factor	Qt.	Width	Height	Area	UA			
entry		0.28	1	6	8	54.7	15.32			
entry		0.28	2	1	8	29.6	8.28			
stairs		0.28	1	4	24	96.0	26.88			
office		0.28	1	2	2	6.3	1.75			
dining		0.28	5	4	9	190.1	53.23			
dining		0.28	2	4	4	34.7	9.72			
kitchen		0.28	2	3	6	39.8	11.13			
kitchen		0.28	1	2	8	22.7	6.35			
kitchen		0.28	1	4	5	20.0	5.60			
nook		0.28	1	10	7	82.0	22.95			
nook		0.28	2	3	7	50.2	14.06			
lr		0.28	1	18	11	209.3	58.59			
lr		0.28	2	3	8	52.5	14.70			
hall		0.28	1	4	6	24.0	6.72			
g bed		0.28	1	12	8	96.0	26.88			
g bed		0.28	1	6	3	18.0	5.04			
g bath		0.28	4	2	5	40.0	11.20			
laundry		0.28	1	2	2	8.0	2.25			
m bed		0.28	1	10	5	50.0	14.00			
m bed		0.28	2	4	5	40.0	11.20			
m bath		0.28	1	5	5	25.0	7.00			
bed3 bath		0.28	2	2	4	16.0	4.48			
bed3		0.28	1	6	7	47.3	13.23			
bed3		0.28	1	8	4	32.0	8.96			
foyer		0.28	1	9	7	74.8	20.95			
foyer		0.28	3	7	4	94.0	26.32			
up hall		0.28	1	9	6	54.0	15.12			
bed1		0.28	1	5	5	25.0	7.00			
bed1		0.28	2	2	4	16.0	4.48			
up bath		0.28	2	2	4	16.0	4.48			
bed2		0.28	1	5	5	25.0	7.00			
low bed		0.28	1	5	5	25.0	7.00			
low bath		0.28	2	2	4	16.0	4.48			

low liv		0.28	3	2	2	12.0	3.36		
low liv		0.28	1	12	8	96.0	26.88		
lobby		0.28	1	12	8	96.0	26.88		
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		

Sum of Vertical Fenestration Area and UA
Vertical Fenestration Area Weighted U = UA/Area

1833.8 513.47
0.28

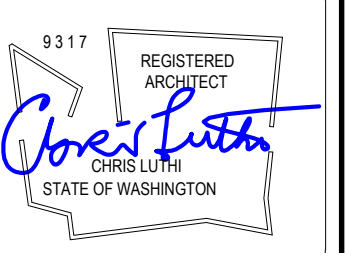
Overhead Glazing (Skylights)									
Component Description	Ref.	U-factor	Qt.	Width	Height	Area	UA		
				Feet	Feet				
				Inch	Inch				
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		
						0.0	0.00		

Sum of Overhead Glazing Area and UA
Overhead Glazing Area Weighted U = UA/Area

0.0 0.00
0.00

Total Sum of Fenestration Area and UA (for heating system sizing calculations)

1833.8 513.47

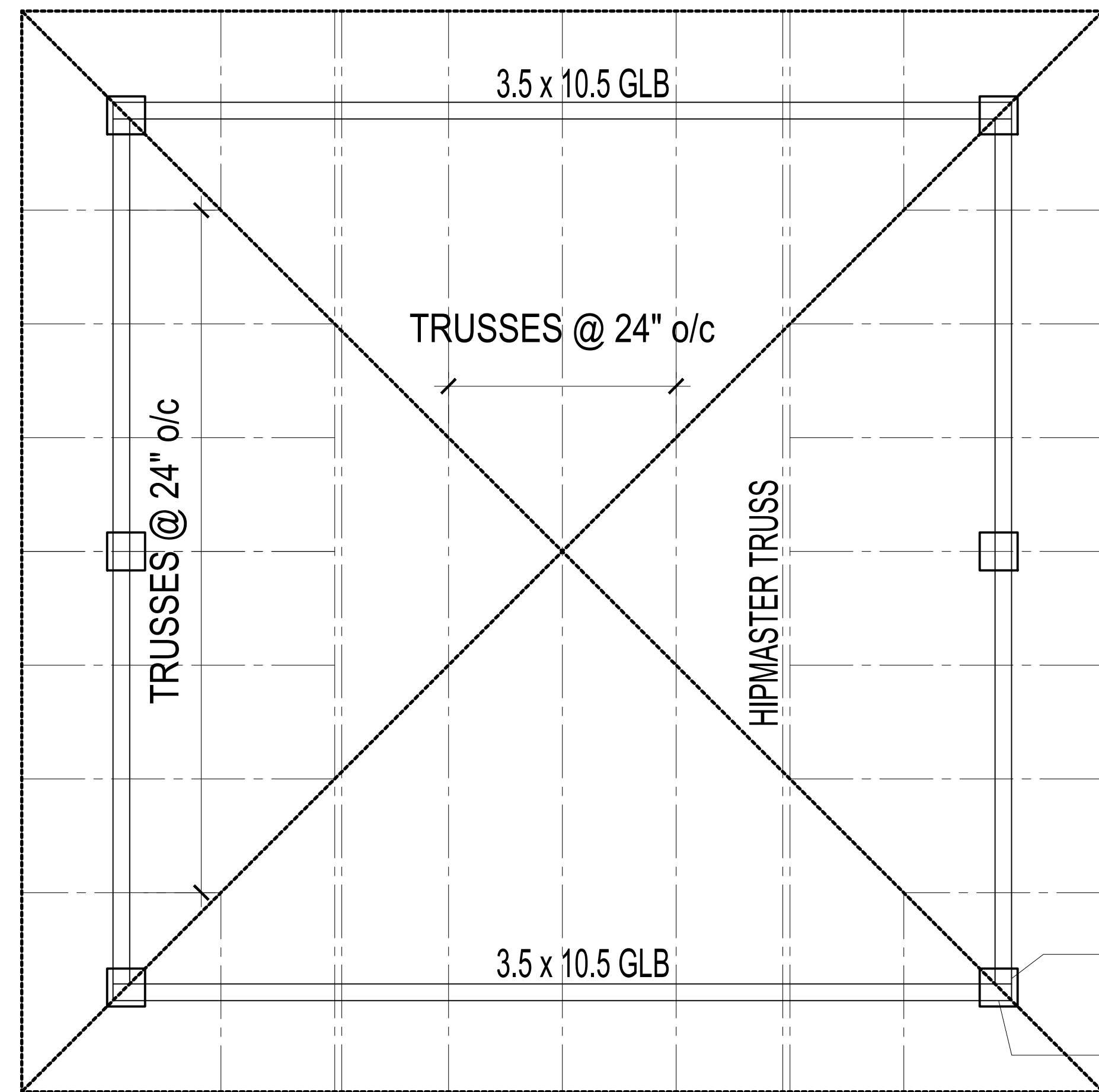


Kumar Residence
4034 85th Ave SE

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Upper Floor

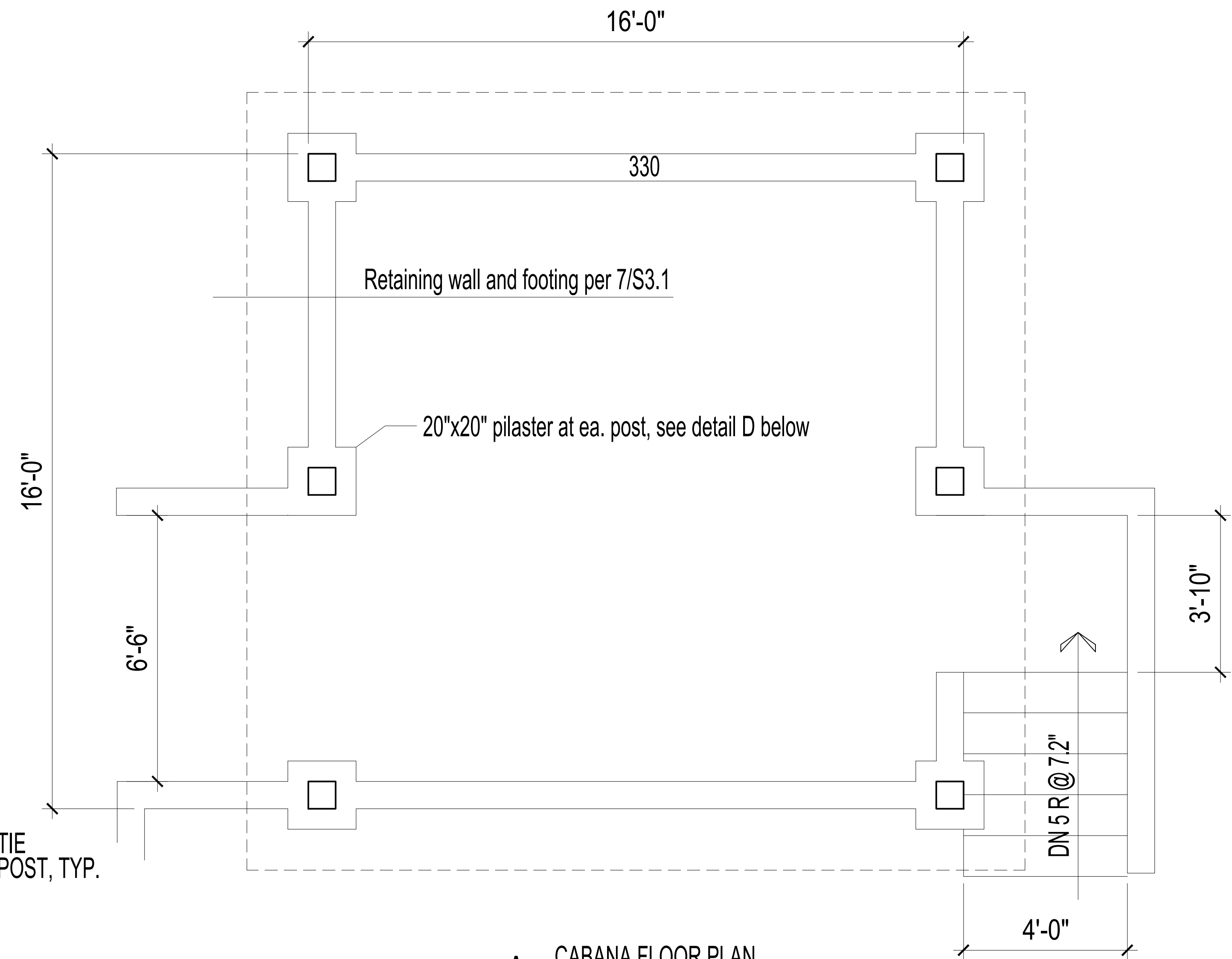
DRAWN BY
CRL
DATE
6.7.21

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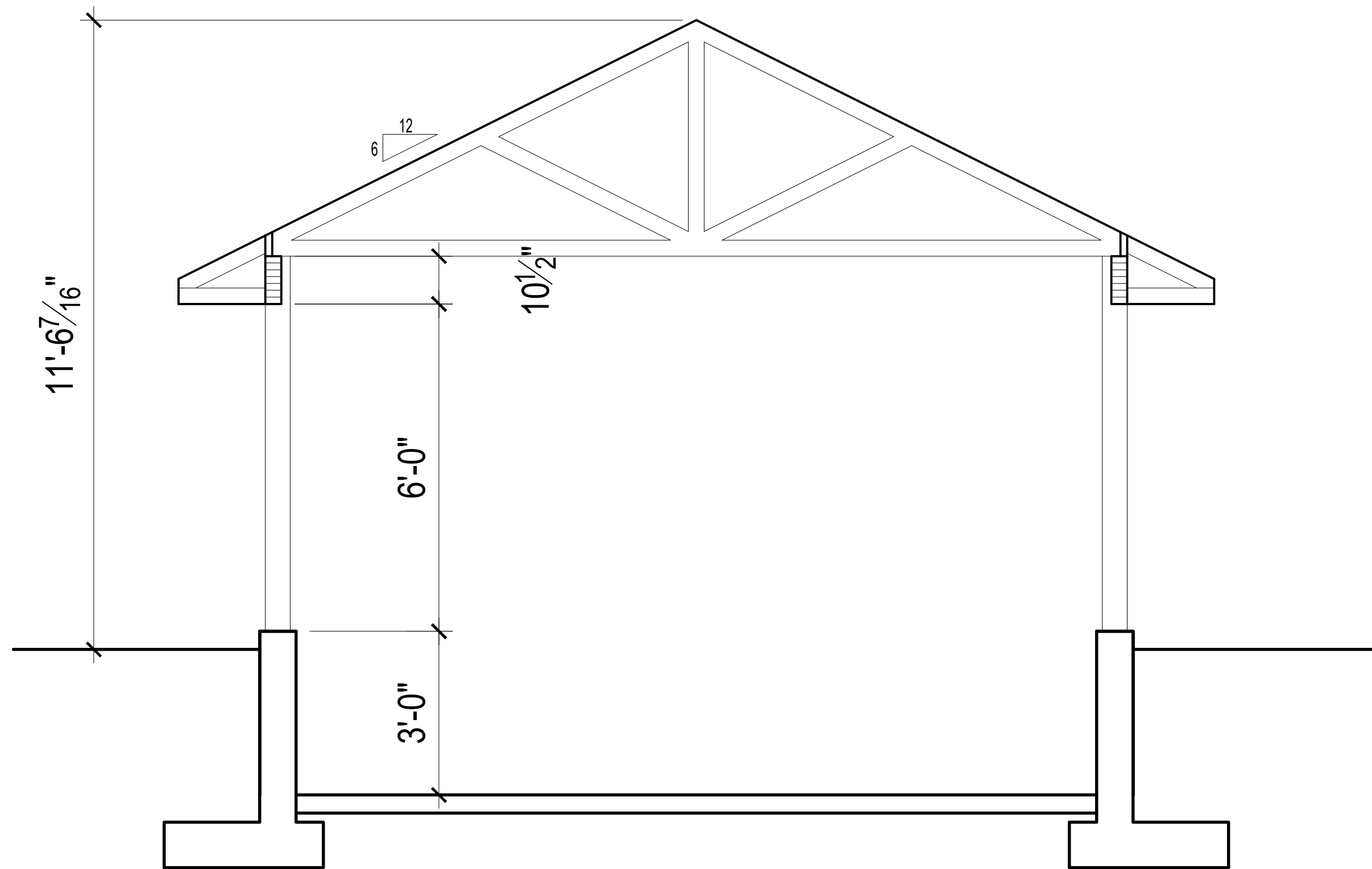


HUC412, TYP.
 CBT42 CONCEALED BEAM TIE FOR PRIMARY BEAM INTO POST, TYP.

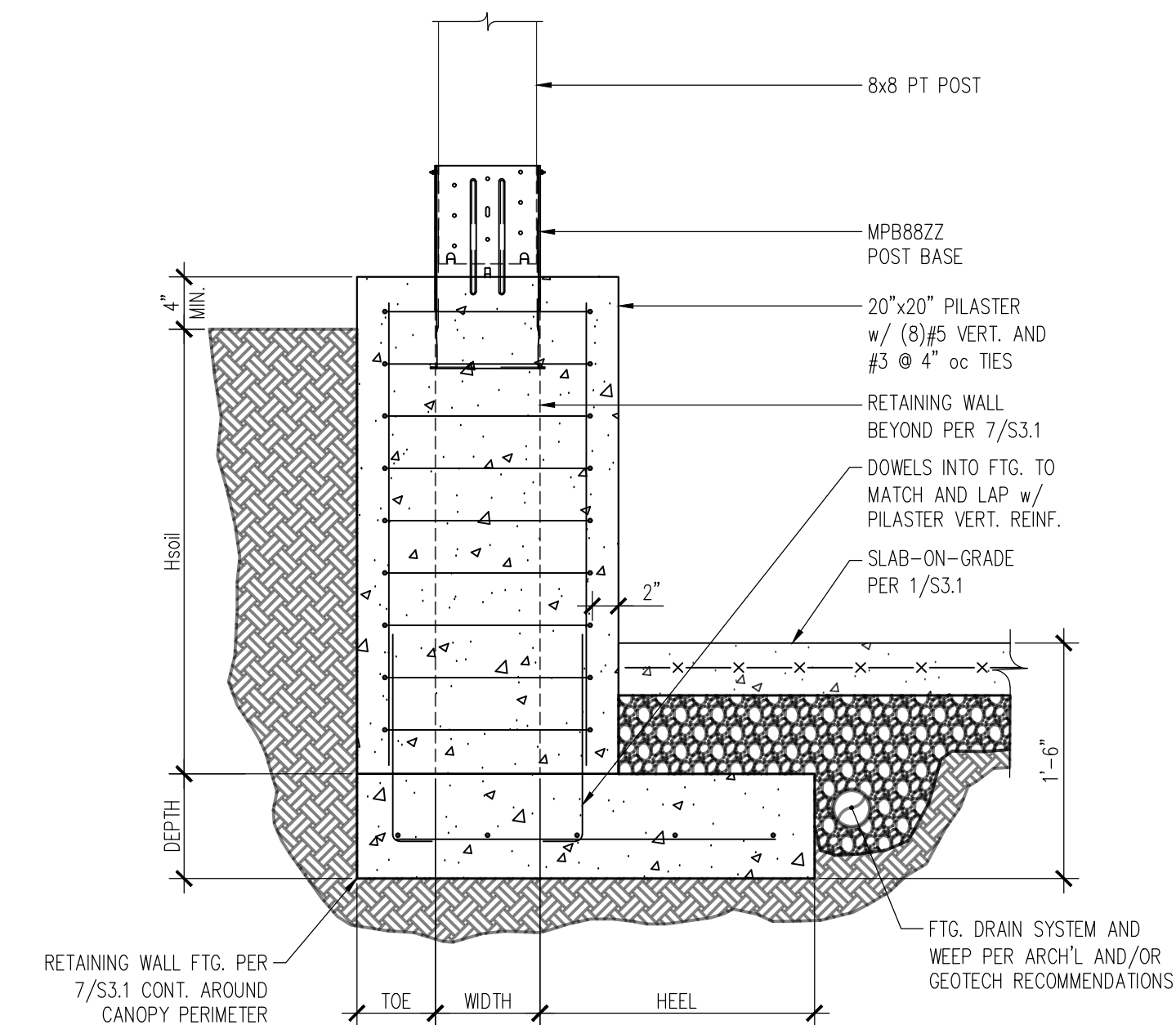
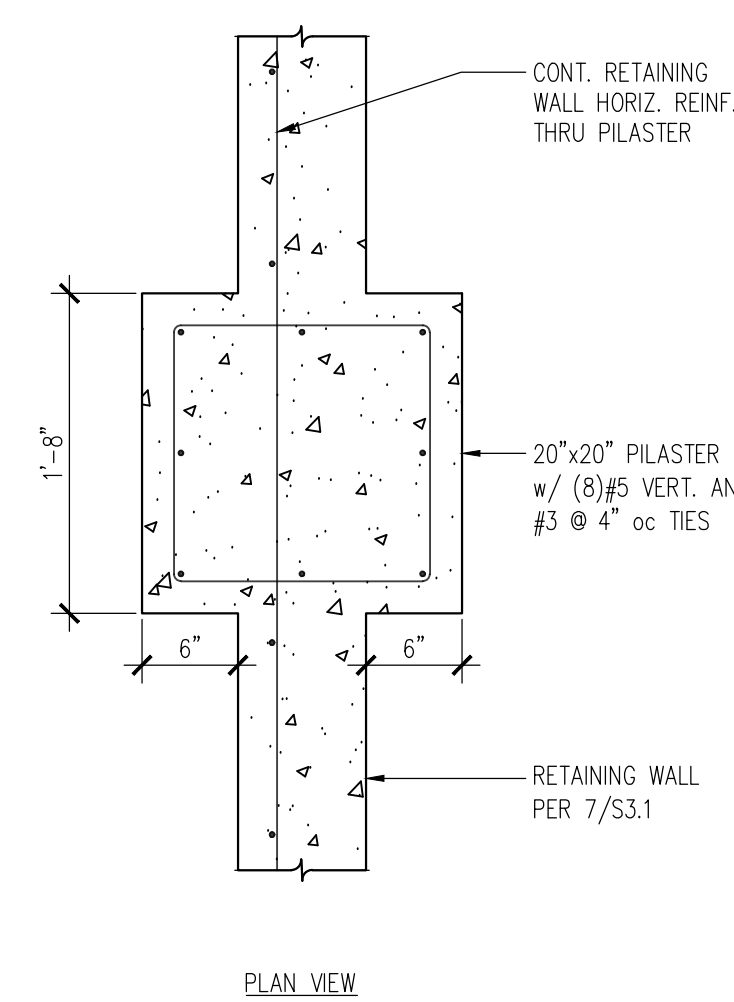
B. CABANA ROOF FRAMING PLAN
 1/2" = 1'-0"



A. CABANA FLOOR PLAN
 1/2" = 1'-0"

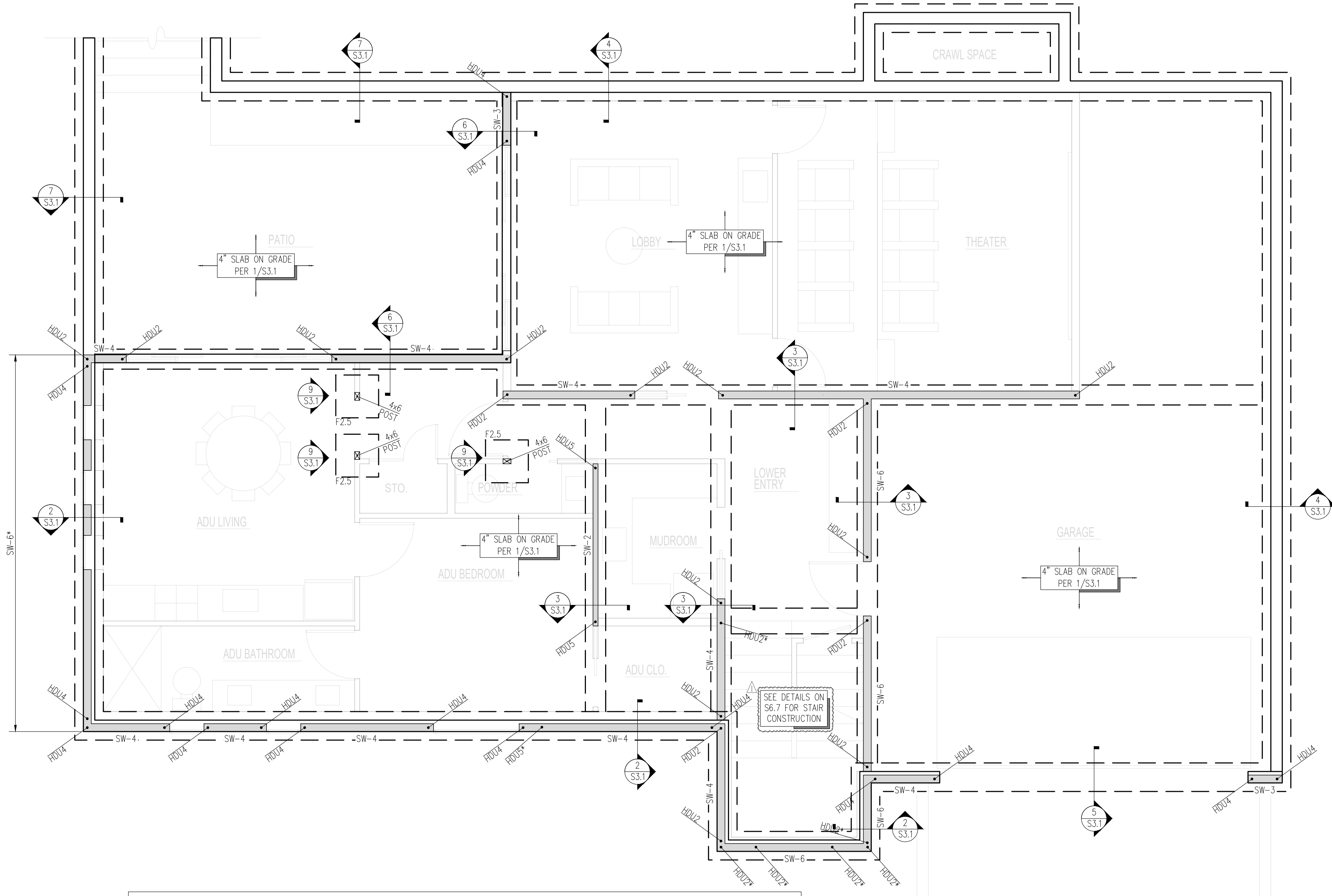


C. CABANA SECTION
 1/2" = 1'-0"



D. PILASTER DETAIL
 1" = 1'-0"

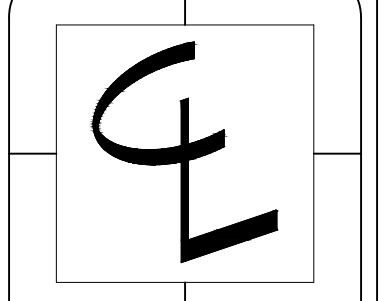
LEGEND	
	REINFORCED CONCRETE WALL
	REINFORCED CONCRETE FOOTING
	EXISTING CONCRETE FOOTING
	STRUCTURAL WOOD STUDWALL ABOVE
	EXISTING STRUCTURAL WOOD STUDWALL ABOVE
	POST ABOVE
	EXISTING POST ABOVE
	DENOTES EXTENT OF SHEARWALL TYPE SW- <u> </u> PER 1/S6.5
	DENOTES STRAPPED SHEARWALL PER 7/S6.5, WITH * DENOTING LOCATION OF STRAP ABOVE & BELOW OPENING
	DENOTES SHEARWALL TENSION TIE PER 4/S6.5
	* - DENOTES TRANSFER TIE FROM TIE ABOVE
	^ - DENOTES TIE ATOP FRAMING MEMBER
	⊕ - DENOTES TIE AT EXIST. CONC. w/ EPOXY
	DENOTES CUSTOM TENSION TIE INTO EXIST. CONC. w/ EPOXY PER 6/S6.5
	DENOTES BOTTOM OF FOOTING ELEVATION



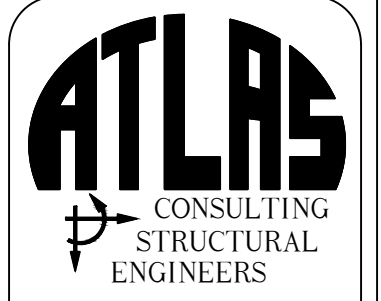
FOUNDATION AND LOWER FLOOR PLAN NOTES

- SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE LOWER FLOOR LEVEL (FROM LOWER FLOOR TO MAIN FLOOR).
- EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 24" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.1, 5/S6.1, AND 2/S6.1 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
- SEE STRUCTURAL GENERAL NOTES #11 - 16 FOR CONCRETE AND CONCRETE REINFORCING REQUIREMENTS.
- ALL HEADERS ABOVE (SEE 1/S2.2) SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/S6.0 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.0 AT LOAD BEARING EXTERIOR WALLS

1 LOWER FLOOR AND FOUNDATION PLAN
 S2.1 1/4" = 1'-0"
 NORTH



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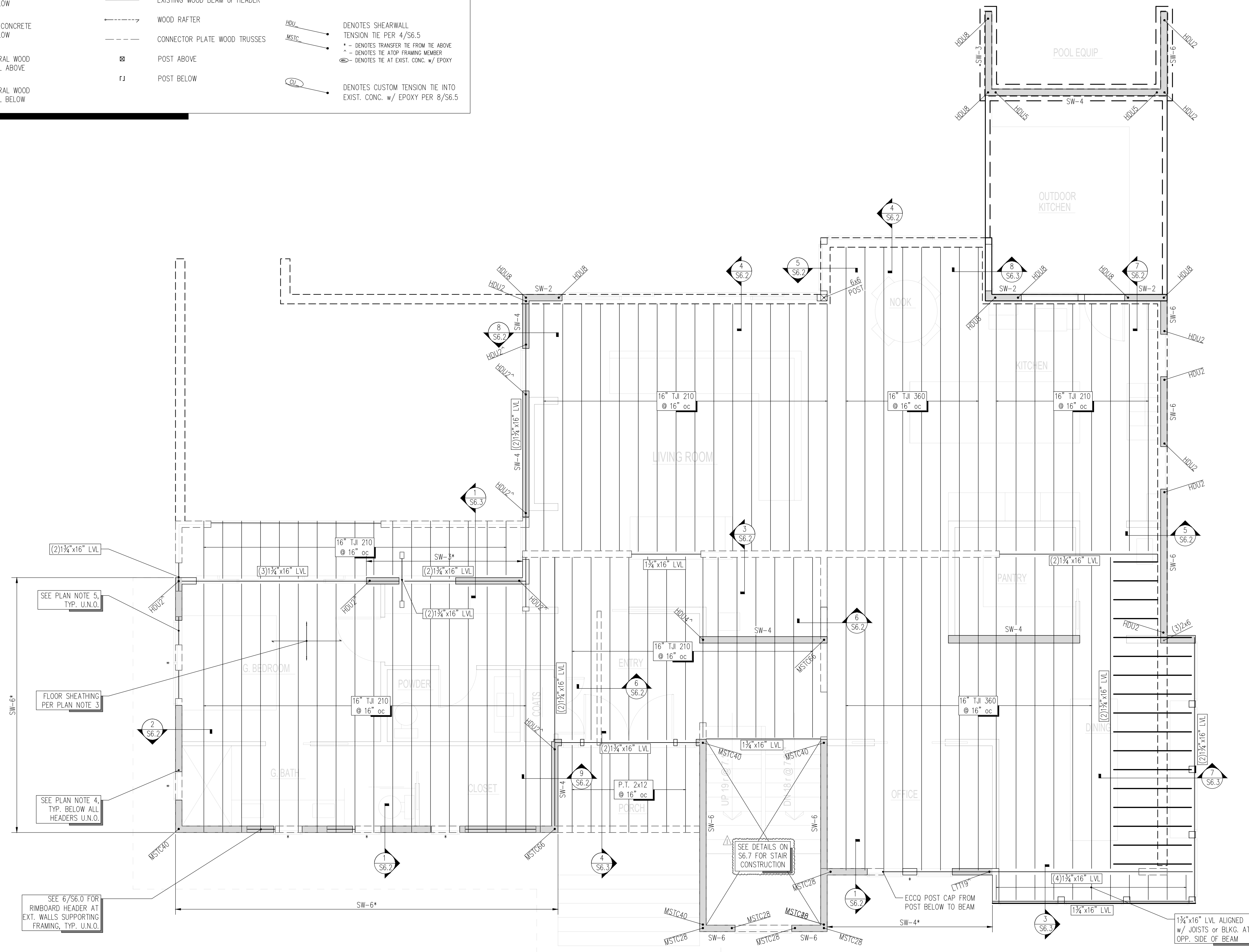
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 Foundation and Lower Floor Plan

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 08.04.2021
 01.04.2022

S2.1

LEGEND

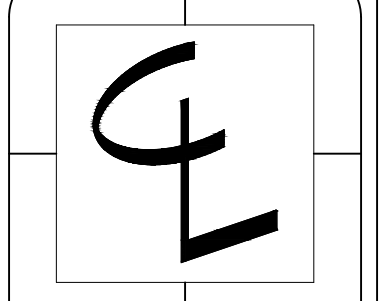
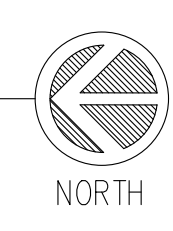
	REINFORCED CONCRETE WALL		WOOD JOIST		DENOTES EXTENT OF SHEARWALL TYPE SW- PER 1/S6.5
	REINFORCED CONCRETE WALL BELOW		EXISTING WOOD JOIST		DENOTES STRAPPED SHEARWALL PER 7/S6.5, WITH * DENOTING LOCATION OF STRAP ABOVE & BELOW OPENING
	EXISTING CONCRETE WALL BELOW		WOOD BEAM or HEADER		DENOTES SHEARWALL TENSION TIE PER 4/S6.5
	STRUCTURAL WOOD STUDWALL ABOVE		EXISTING WOOD BEAM or HEADER		* - DENOTES TRANSFER TIE FROM TIE ABOVE + - DENOTES TIE AT OP. FRAMING MEMBER - - DENOTES TIE AT EXIST. CONC. w/ EPOXY
	STRUCTURAL WOOD STUDWALL BELOW		WOOD RAFTER		DENOTES CUSTOM TENSION TIE INTO EXIST. CONC. w/ EPOXY PER 8/S6.5
			CONNECTOR PLATE WOOD TRUSSES		



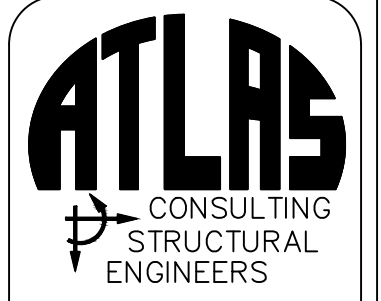
MAIN FLOOR PLAN NOTES

- SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE MAIN FLOOR LEVEL (FROM MAIN FLOOR TO UNDERSIDE OF UPPER FLOOR). DASHED WALLS SHOWN IN PLAN ARE BELOW MAIN FLOOR FRAMING ELEVATION (FROM LOWER FLOOR TO MAIN FLOOR).
- EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 24" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.1, 5/S6.1, AND 2/S6.1 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
- FLOOR SHEATHING SHALL CONSIST OF 3/4" T&G SHEATHING (PANEL SPAN RATING 48/24). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING, AND SHEAR WALLS w/ 10d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" oc (SEE 3/S6.1). NAIL SHEATHING TO ALL STRUTS AND SHEAR WALLS BELOW w/ TWO ROWS OF 10d @ 6" oc (STAGGER ROWS). GLUE SHEATHING AT ALL SUPPORTS w/ ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498.
- ALL HEADERS ABOVE (SEE 1/S2.3) SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/S6.0 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.0 AT LOAD BEARING EXTERIOR WALLS
- HEADERS IN EXTERIOR WALLS NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/S6.0 U.N.O. IN PLAN.

1 MAIN FLOOR FRAMING PLAN
S2.2 1/4" = 1'-0"



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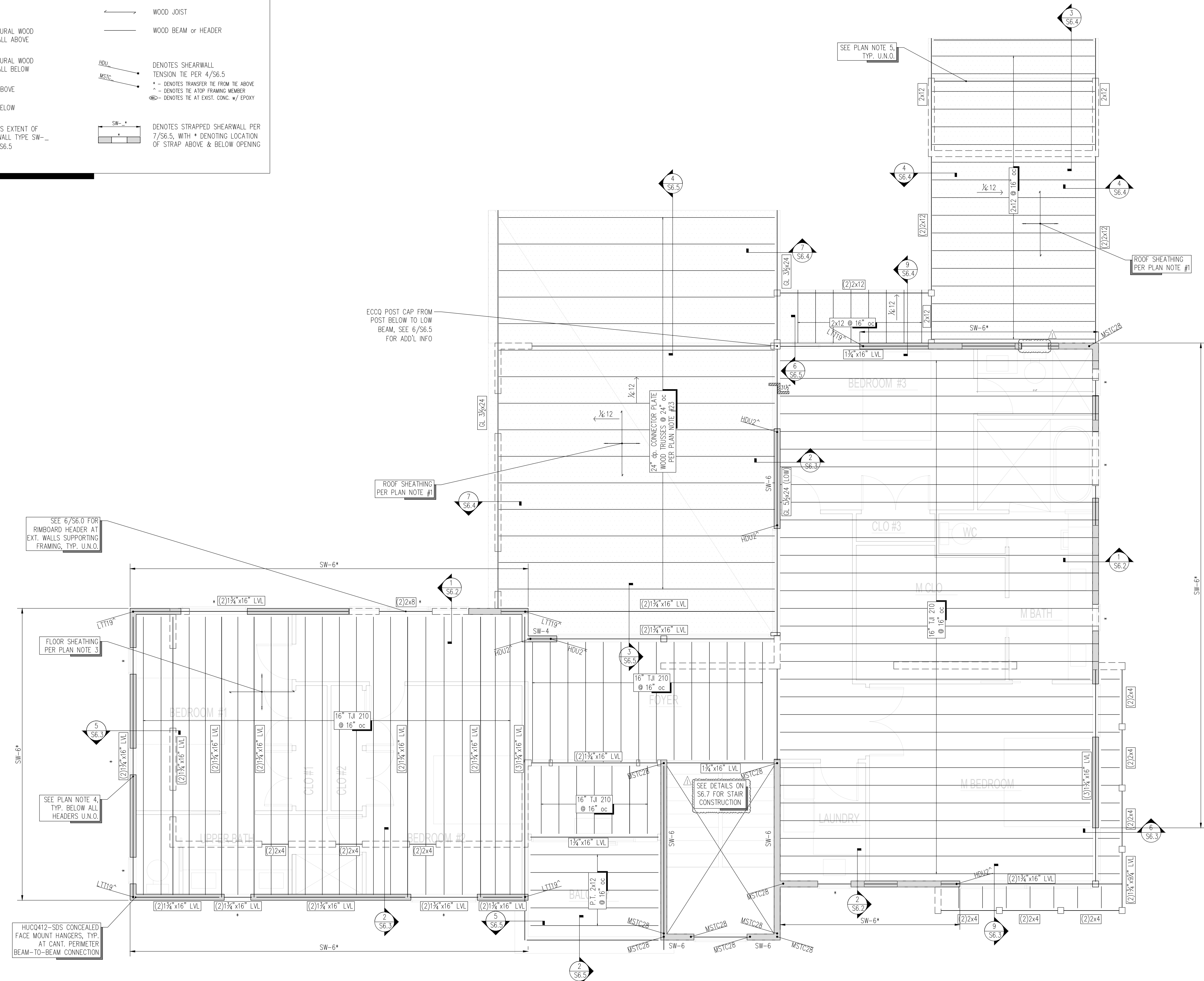
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Main Floor Framing Plan

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01.04.2022

S2.2

LEGEND

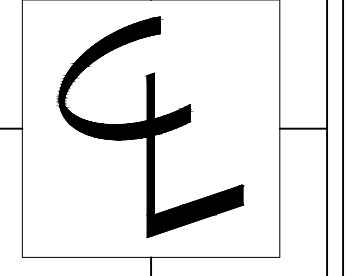
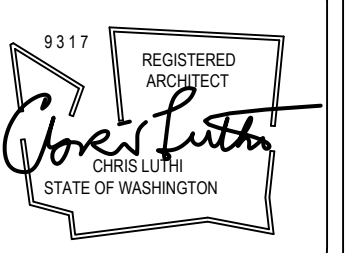
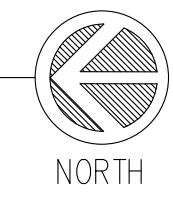
	STRUCTURAL WOOD STUDWALL ABOVE		WOOD JOIST
	STRUCTURAL WOOD STUDWALL BELOW		WOOD BEAM or HEADER
	POST ABOVE		DENOTES SHEARWALL TENSION TIE PER 4/56.5
	POST BELOW		* - DENOTES TRANSFER TIE FROM TIE ABOVE ^ - DENOTES TIE AT TOP FRAMING MEMBER @ - DENOTES TIE AT EXIST. CONC. w/ EPOXY
	DENOTES EXTENT OF SHEARWALL TYPE SW-- PER 1/56.5		DENOTES STRAPPED SHEARWALL PER 7/56.5, WITH * DENOTING LOCATION OF STRAP ABOVE & BELOW OPENING



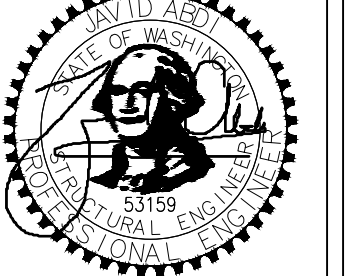
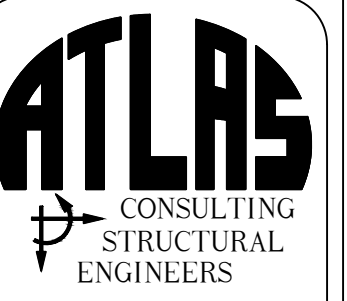
UPPER FLOOR PLAN NOTES

- SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE UPPER FLOOR LEVEL (FROM UPPER FLOOR TO UNDERSIDE OF ROOF). DASHED WALLS SHOWN IN PLAN ARE BELOW UPPER FLOOR FRAMING ELEVATION (FROM MAIN FLOOR TO UPPER FLOOR).
- EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 24" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.1, 5/56.1, AND 2/56.1 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
- FLOOR SHEATHING SHALL CONSIST OF 3/4" T&G SHEATHING (PANEL SPAN RATING 48/24). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING, AND SHEAR WALLS w/ 10d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" oc (SEE 3/56.1). NAIL SHEATHING TO ALL STRUTS AND SHEAR WALLS BELOW w/ TWO ROWS OF 10d @ 6" oc (STAGGER ROWS). GLUE SHEATHING AT ALL SUPPORTS w/ ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498.
- ALL HEADERS ABOVE (SEE 1/52.4) SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/56.0 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/56.0 AT LOAD BEARING EXTERIOR WALLS
- HEADERS IN EXTERIOR WALLS NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/56.0 U.N.O. IN PLAN.

1 UPPER FLOOR FRAMING PLAN
S2.3 1/4" = 1'-0"



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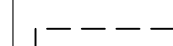

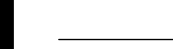

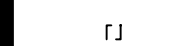
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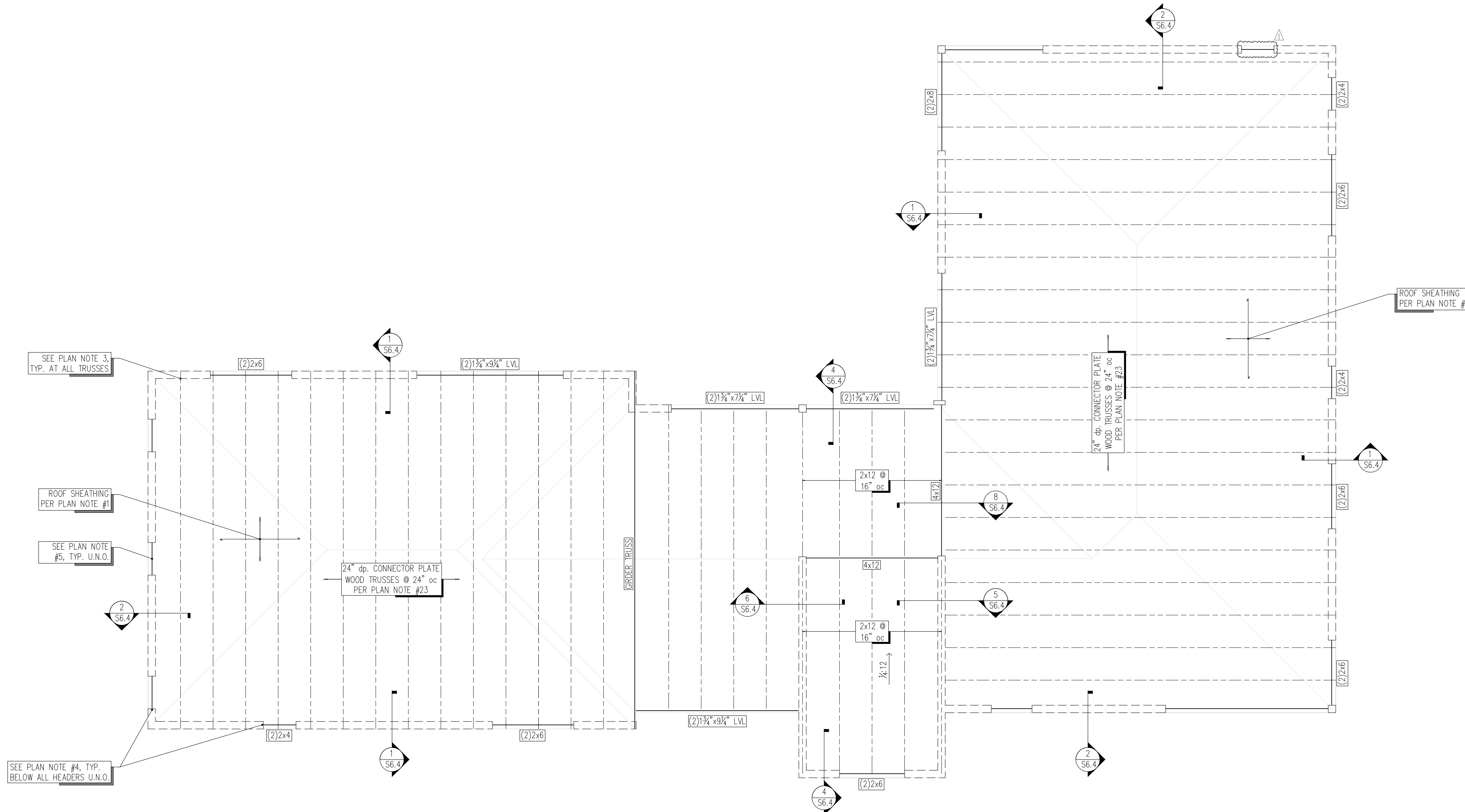
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Upper Floor Framing Plan

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01.04.2022

S2.3

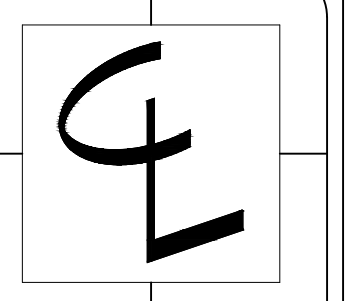
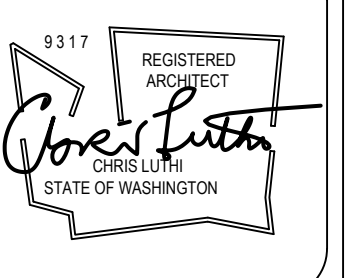
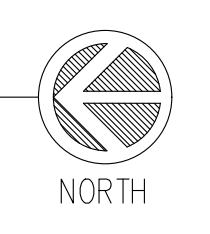
LEGEND

-  STRUCTURAL WOOD STUDWALL BELOW
-  WOOD JOIST
-  WOOD BEAM or HEADER
-  CONNECTOR PLATE WOOD TRUSSES
-  POST BELOW

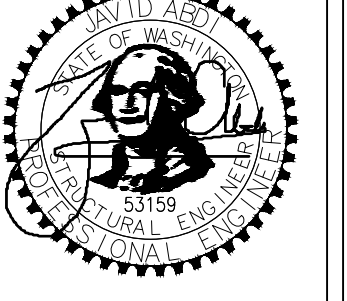
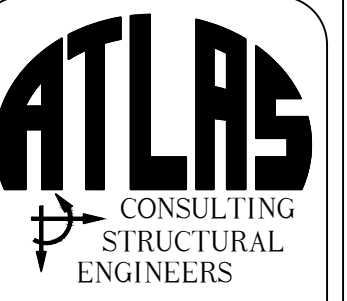


- ROOF PLAN NOTES**
1. ROOF SHEATHING SHALL CONSIST OF 5/8" SHEATHING (PANEL SPAN RATING 32/16) NAILED AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING, AND SHEAR WALLS w/ 10d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" oc (SEE 3/S6.1). NAIL SHEATHING TO ALL STRUTS AND SHEAR WALLS BELOW w/ TWO ROWS OF 10d @ 6" oc (STAGGER ROWS).
 2. DASHED WALLS AND SHEARWALLS SHOWN IN PLAN ARE BELOW ROOF FRAMING ELEVATION (i.e. FROM UPPER FLOOR TO UNDERSIDE OF ROOF DECK).
 3. PROVIDE H2.5A HURRICANE TIES AT END OF ALL JOISTS.
 4. ALL HEADERS SHALL HAVE A MINIMUM OF POSTS PER 4/S6.0 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.0 AT LOAD BEARING EXTERIOR WALLS.
 5. HEADERS IN EXTERIOR WALLS NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/S6.0 U.N.O. IN PLAN.

1 ROOF FRAMING PLAN
S2.4 1/4" = 1'-0"



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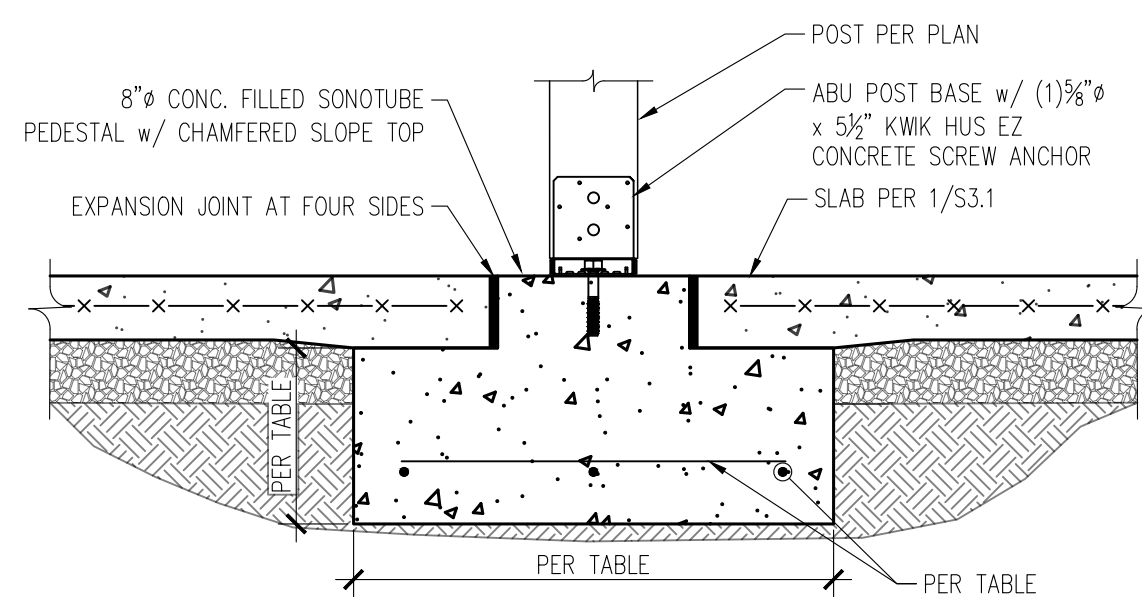
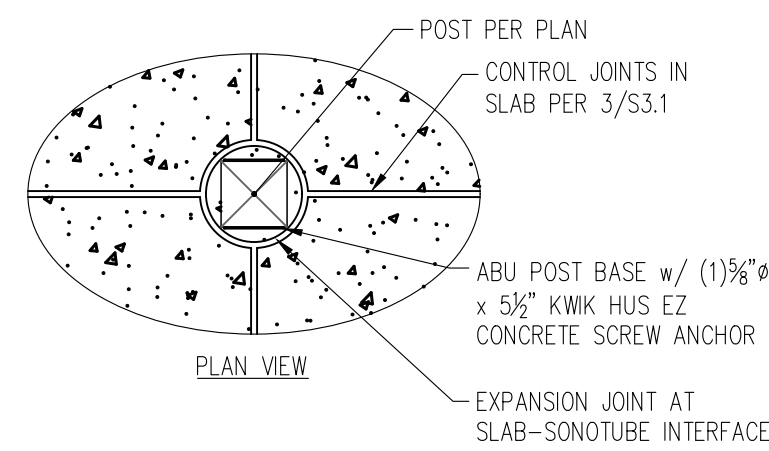
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Roof Deck Framing Plan

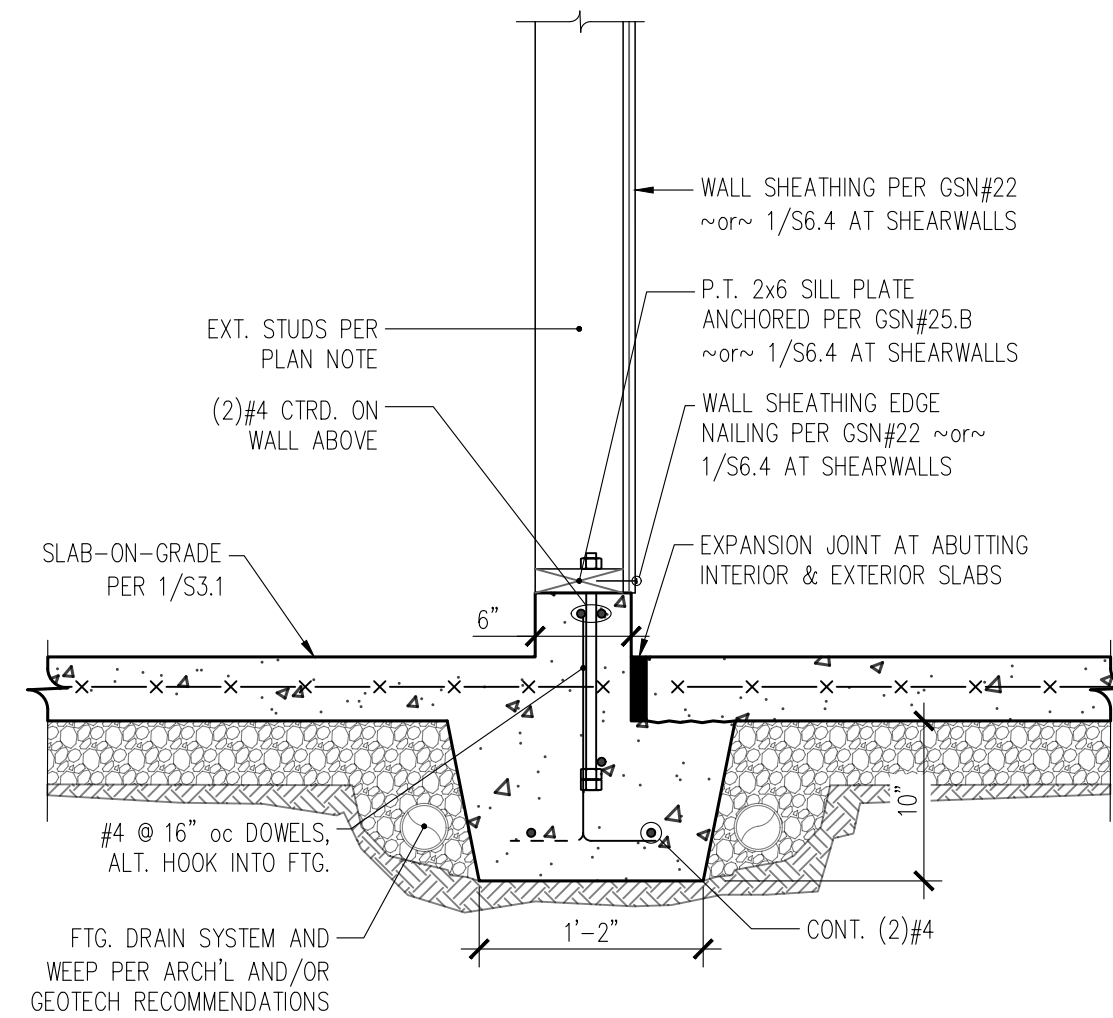
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01.04.2022

S2.4

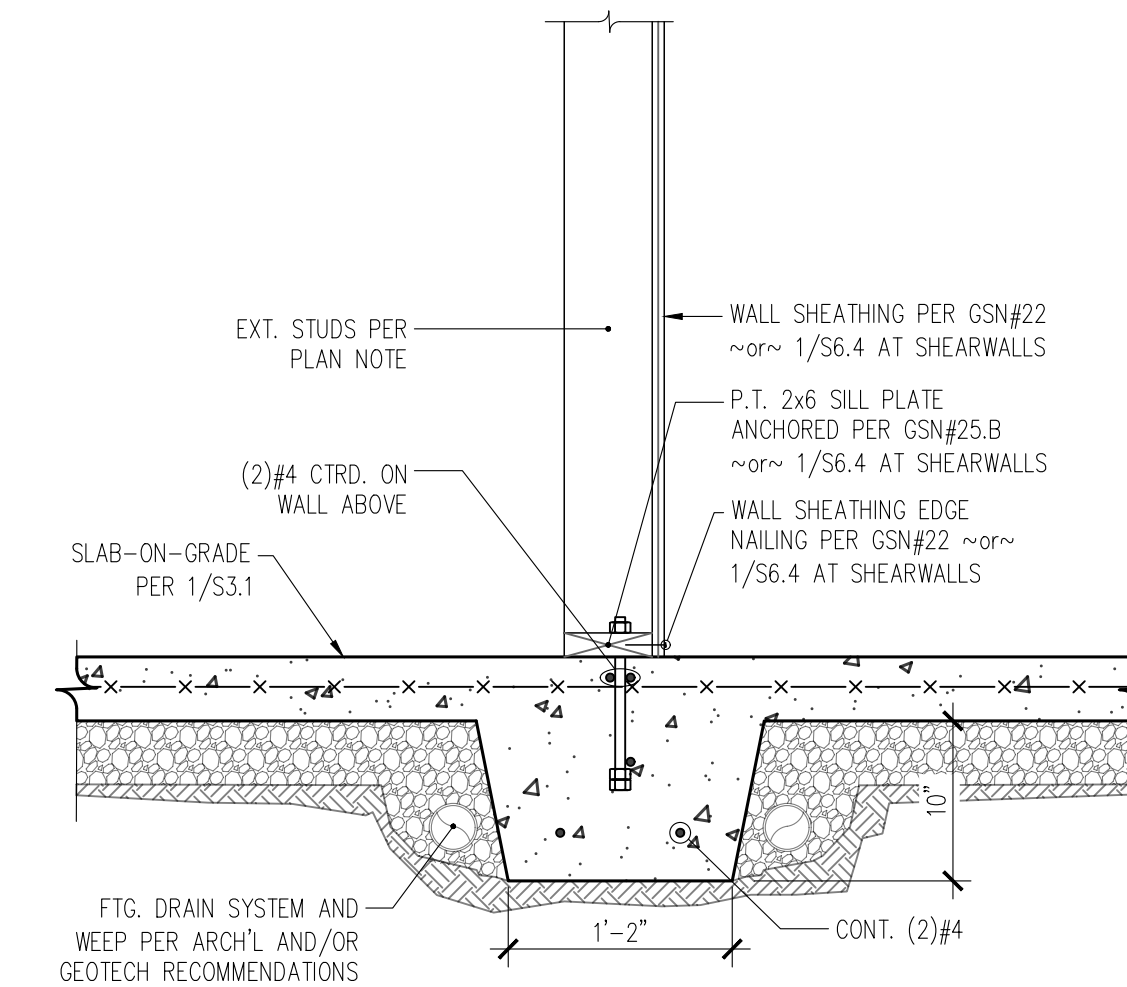
FTG. MARK	DIMENSIONS			REINFORCING DIRECTION	
	LENGTH	WIDTH	DEPTH	SHORT	LONG
F2.5	2'-6"	2'-6"	10"	(3)#4	(3)#4



9 SPREAD FOOTING
S3.1 1" = 1'-0"



6 SECTION THROUGH THICKENED SLAB AT CONCRETE STEM AND EXTERIOR STRUCTURAL WALL
S3.1 1" = 1'-0"

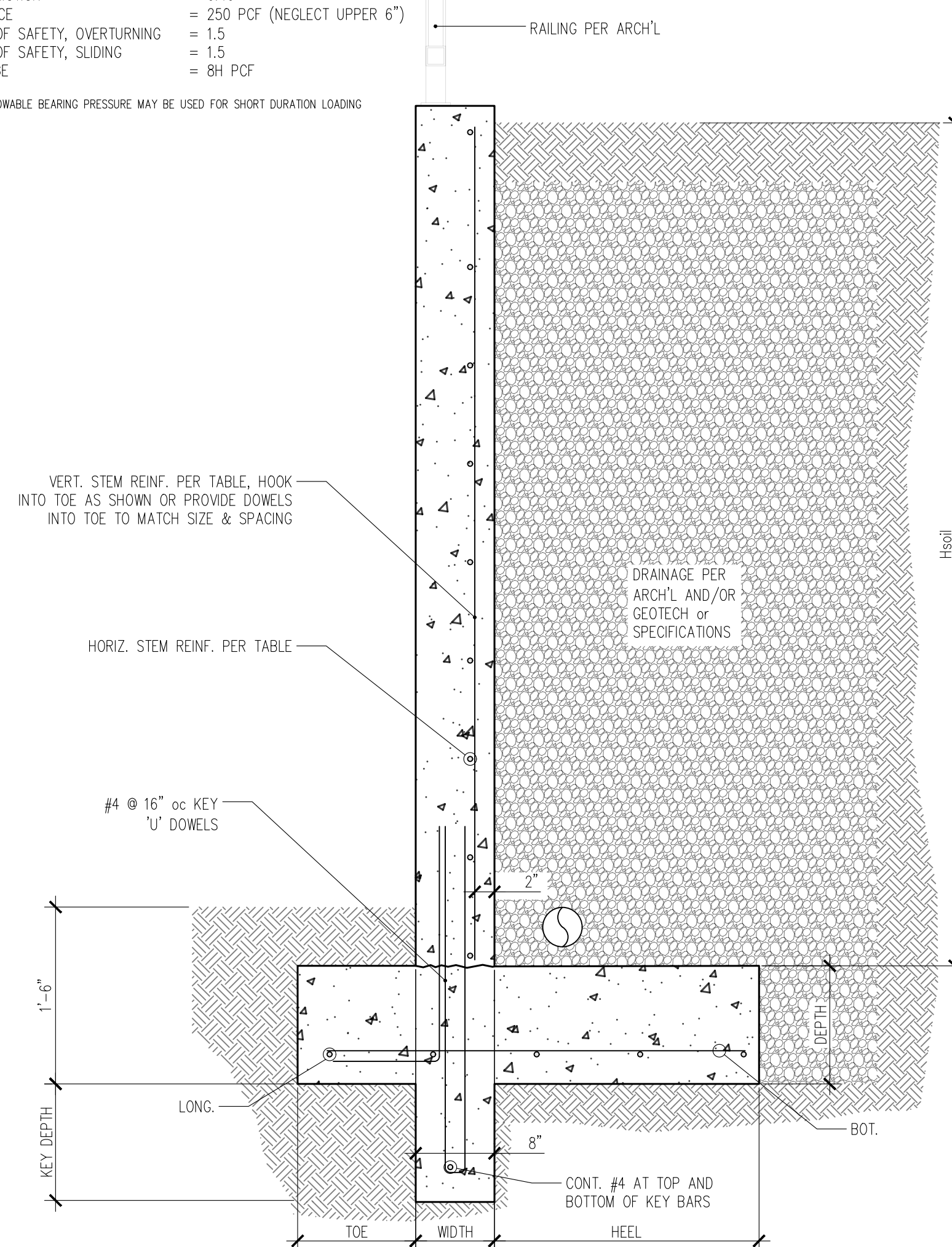


3 SECTION THROUGH THICKENED SLAB AT STRUCTURAL WALL
S3.1 1" = 1'-0"

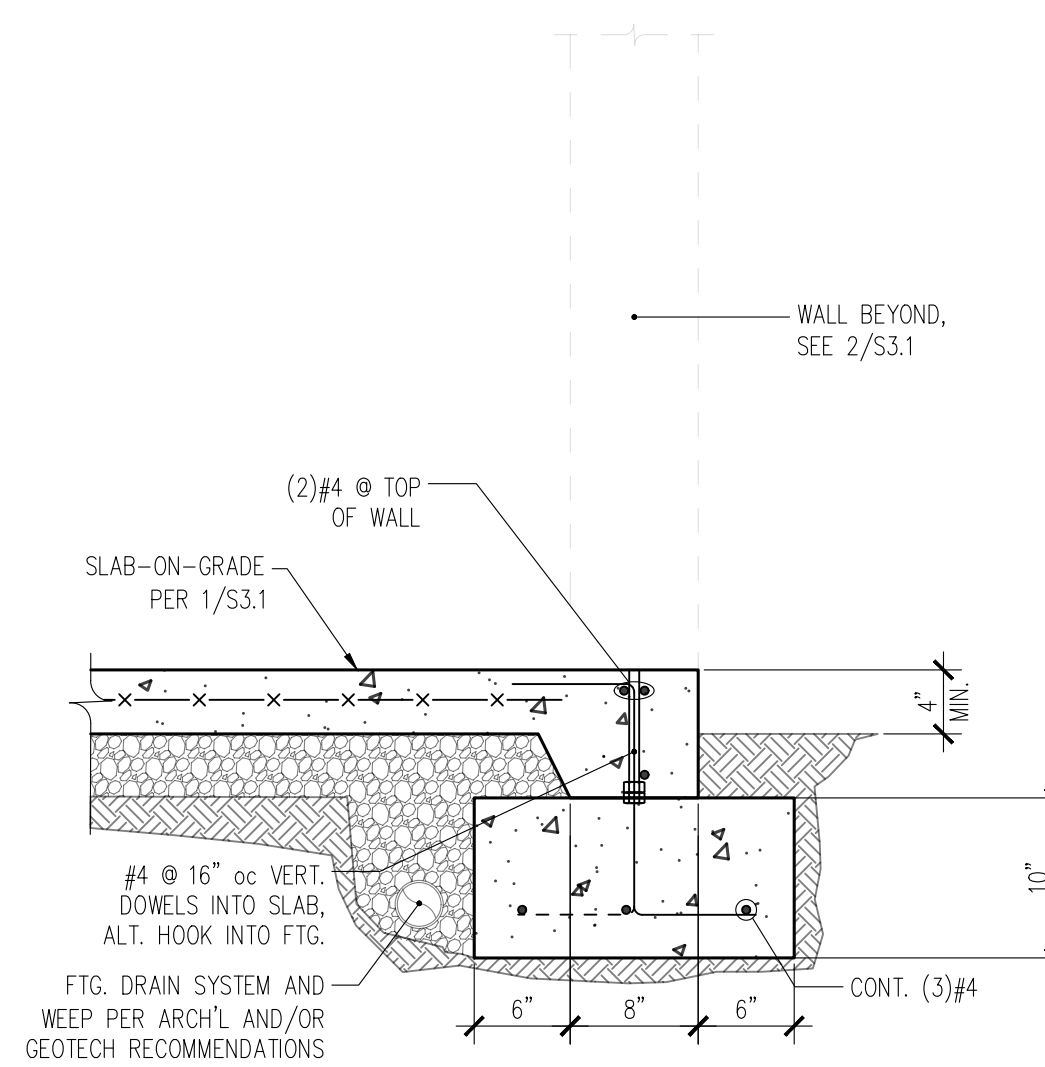
Hsoil	TOE	WIDTH	HEEL	DEPTH	STEM REINF.		FTG. REINF.		KEY DEPTH
					VERT.	HORIZ.	LONG.	BOT.	
$H_{soil} < 4'-6"$	0'-6"	8"	1'-9"	10"	#4 @ 12" oc	#4 @ 12" oc	(4) #4	#4 @ 10" oc	-
$4'-6" \leq H_{soil} \leq 5'-6"$	0'-6"	8"	2'-3"	10"	#4 @ 12" oc	#4 @ 12" oc	(5) #4	#4 @ 10" oc	-
$5'-6" < H_{soil} \leq 6'-6"$	0'-6"	8"	2'-9"	10"	#4 @ 12" oc	#4 @ 12" oc	(5) #4	#4 @ 10" oc	-
$5'-6" < H_{soil} \leq 7'-6"$	0'-6"	8"	3'-3"	10"	#5 @ 16" oc	#4 @ 12" oc	(4) #5	#5 @ 12" oc	-
$7'-6" < H_{soil} \leq 8'-6"$	0'-6"	8"	4'-0"	12"	#5 @ 12" oc	#4 @ 12" oc	(6) #5	#5 @ 12" oc	-
$8'-6" < H_{soil} \leq 9'-6"$	1'-0"	8"	4'-3"	12"	#5 @ 9" oc	#4 @ 12" oc	(6) #5	#5 @ 10" oc	-
$9'-6" < H_{soil} \leq 10'-6"$	1'-0"	8"	5'-3"	12"	#5 @ 8" oc	#4 @ 12" oc	(9) #5	#5 @ 8" oc	-

NOTE
MAXIMUM HORIZONTAL DESIGN PRESSURE = 35 PCF
MINIMUM ALLOWABLE BEARING PRESSURE = 2,000 PSF*
COEFFICIENT OF FRICTION = 0.40
PASSIVE RESISTANCE = 250 PCF (NEGLECT UPPER 6")
MINIMUM FACTOR OF SAFETY, OVERTURNING = 1.5
MINIMUM FACTOR OF SAFETY, SLIDING = 1.5
SEISMIC SURCHARGE = 8H PCF

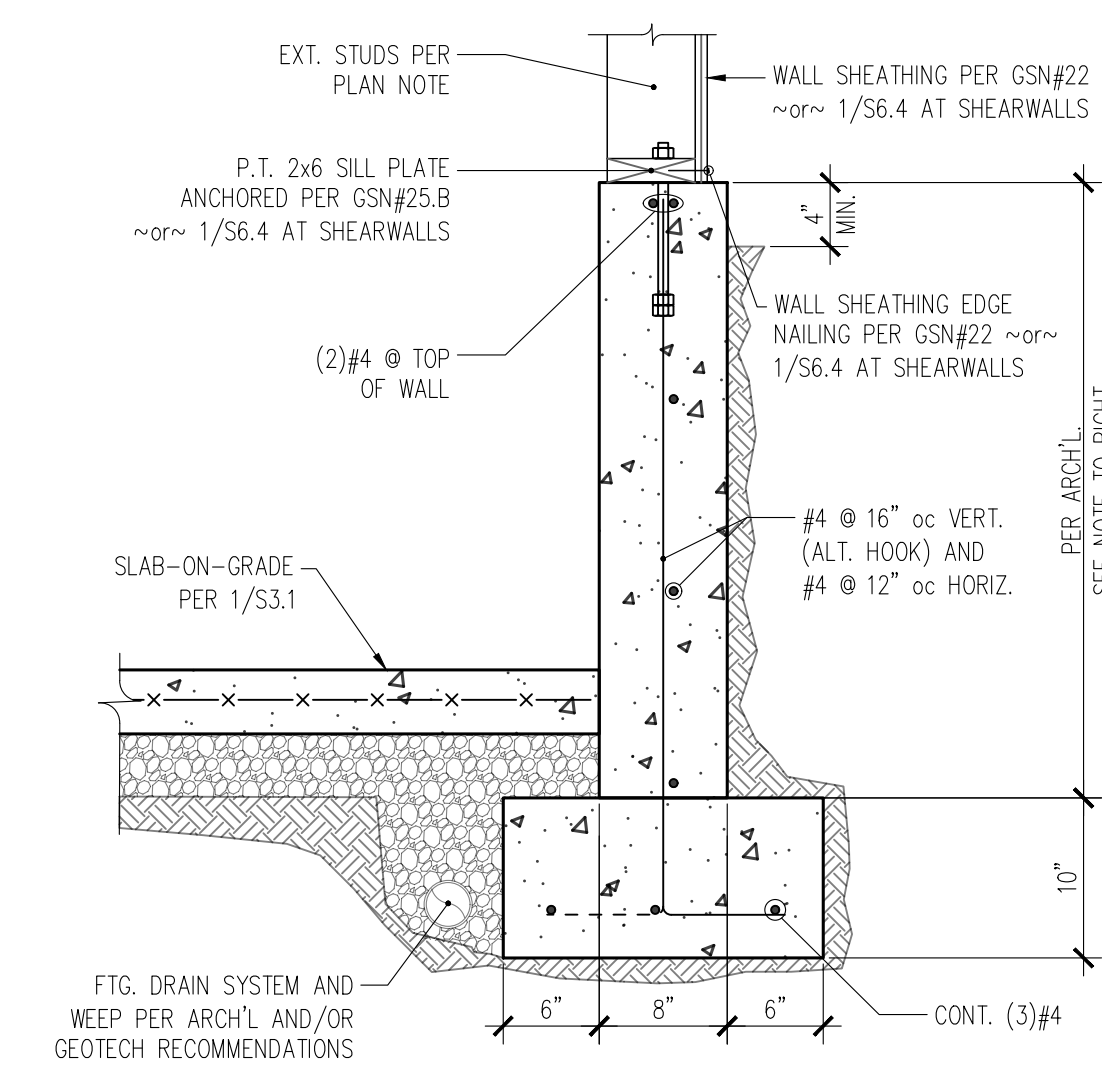
* A 1/2 INCREASE IN ALLOWABLE BEARING PRESSURE MAY BE USED FOR SHORT DURATION LOADING (i.e. SEISMIC & WIND)



7 RETAINING WALL
S3.1 1" = 1'-0"

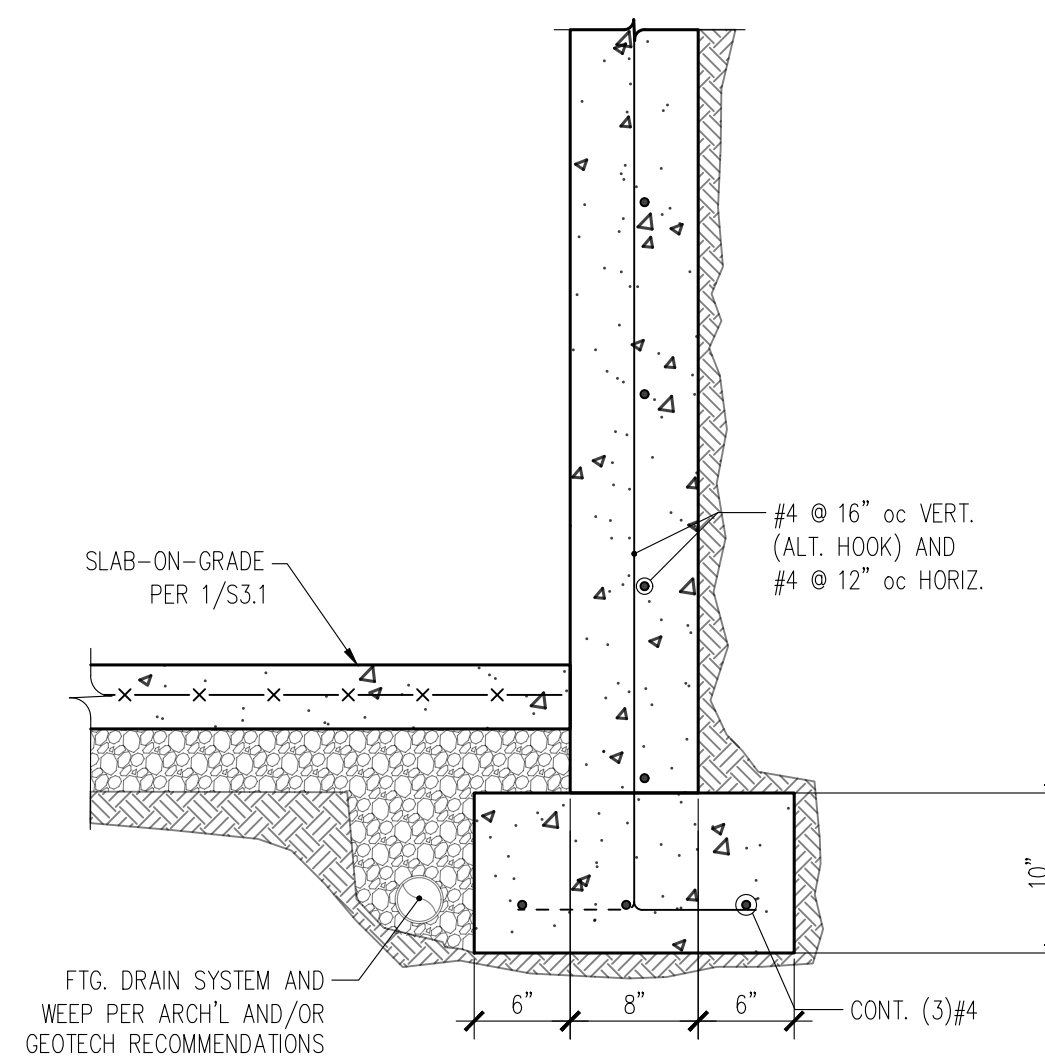


5 SECTION THROUGH FOUNDATION WALL AT NO STEM
S3.1 1" = 1'-0"



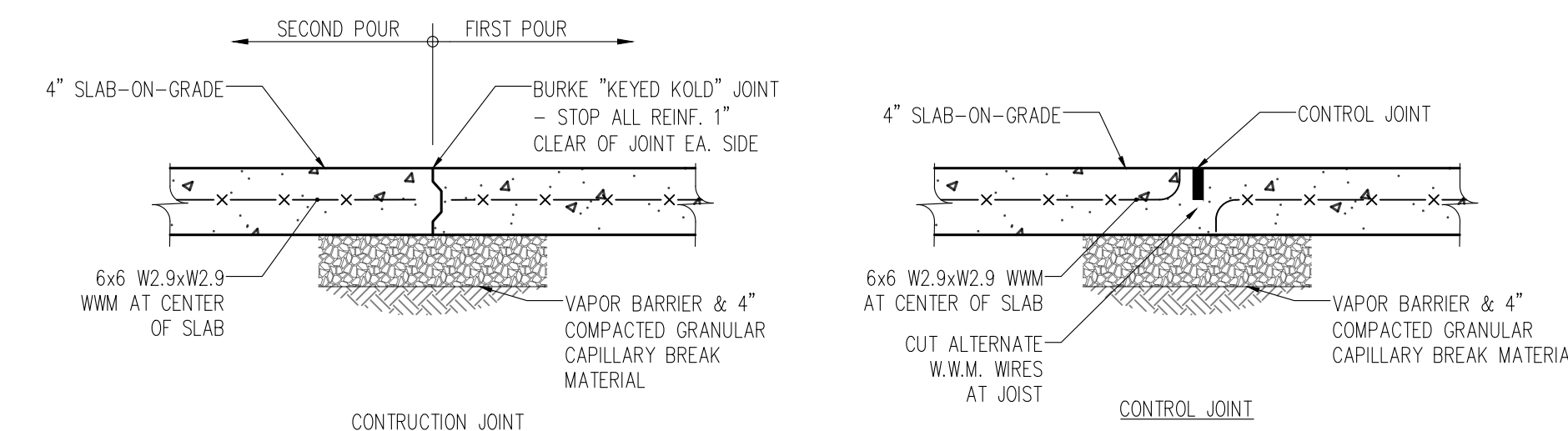
2 SECTION THROUGH PARTIAL HEIGHT FOUNDATION WALL
S3.1 1" = 1'-0"

MAX HEIGHT OF SOIL ALLOWED AT FACE OF CONCRETE WALL PRIOR TO STUDWALL/FRAMING BEING SET AND WALL CURING TO 75% OF DESIGN STRENGTH IS 4'-6". PROVIDE BRACING OR SHORING WALL IF MAX SOIL HEIGHT IS EXCEEDED.



4 SECTION THROUGH FULL HEIGHT FOUNDATION WALL AT HIGH STEM
S3.1 1" = 1'-0"

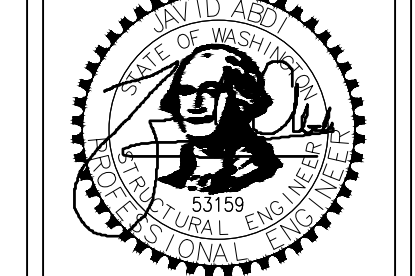
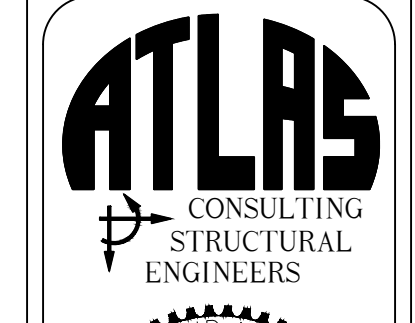
MAX HEIGHT OF SOIL ALLOWED AT FACE OF CONCRETE WALL PRIOR TO STUDWALL/FRAMING BEING SET AND WALL CURING TO 75% OF DESIGN STRENGTH IS 4'-6". PROVIDE BRACING OR SHORING WALL IF MAX SOIL HEIGHT IS EXCEEDED.



1 TYPICAL SLAB-ON-GRADE JOINTING
S3.1 1" = 1'-0"



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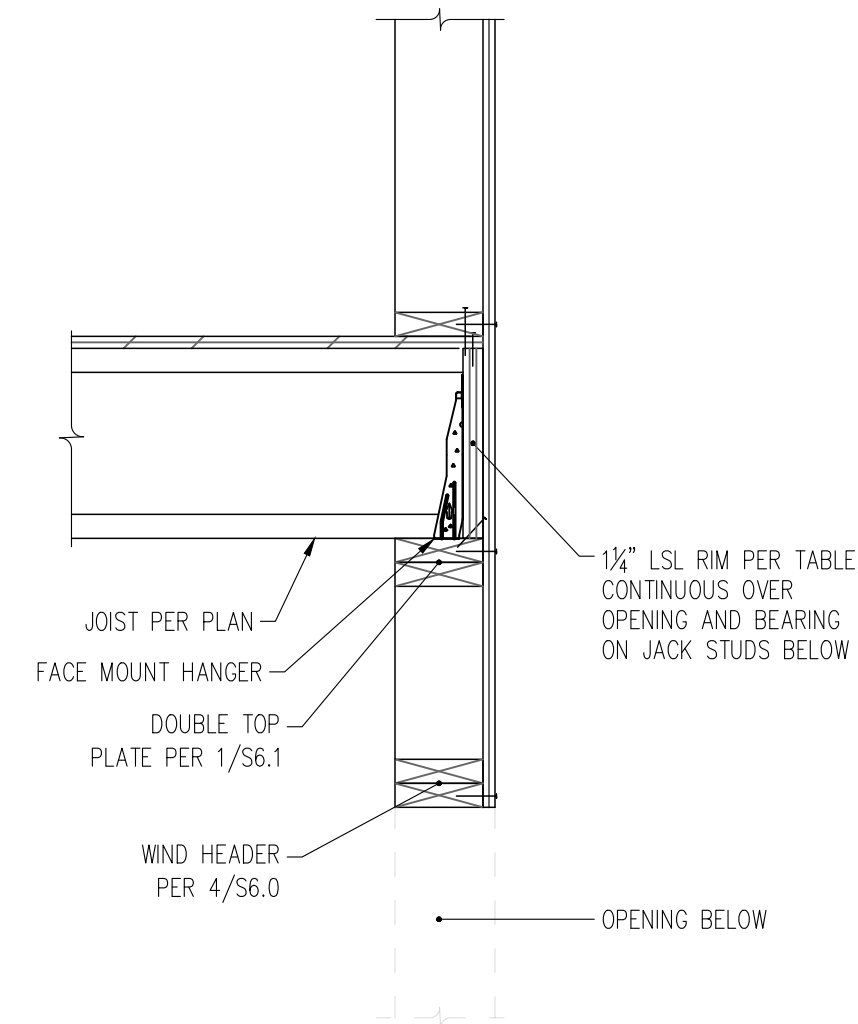
Foundation Details
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DATE 08.04.2021
01.04.2022

S3.1

ROOF DECK		
OPENING WIDTH, L	RIM/HEADER SIZE	MINIMUM No. OF STUD
L ≤ 3'-0"	1 3/4" x 24" LVL	(1)2x6
L ≤ 5'-0"	1 3/4" x 24" LVL	(2)2x6
L ≤ 8'-0"	1 3/4" x 24" LVL	(3)2x6

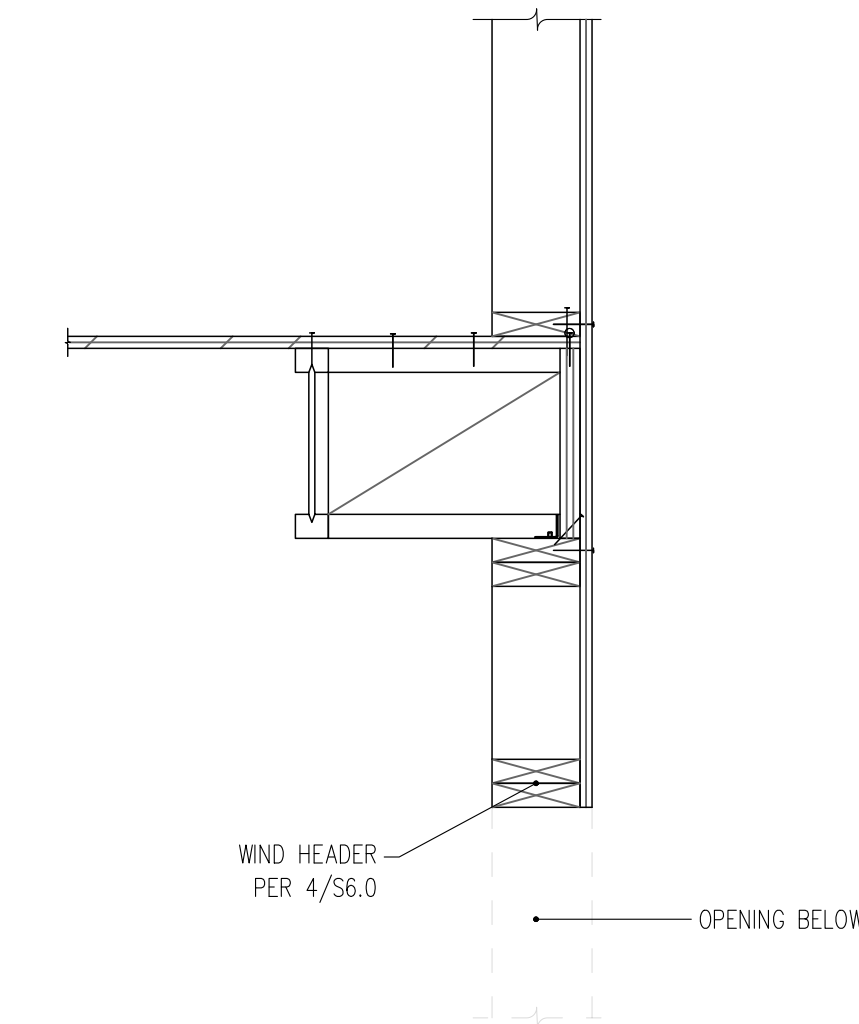
UPPER		
OPENING WIDTH, L	RIM/HEADER SIZE	MINIMUM No. OF STUD
L ≤ 3'-6"	1 1/2" x 11 3/8" LSL	(2)2x6
L ≤ 6'-0"	1 1/2" x 11 3/8" LSL	(4)2x6
L ≤ 7'-0"	(2)1 1/2" x 11 3/8" LSL	(3)2x6
L ≤ 10'-0"	(2)1 1/2" x 11 3/8" LSL	(4)2x6

MAIN		
OPENING WIDTH, L	RIM/HEADER SIZE	MINIMUM No. OF STUD
L ≤ 3'-6"	1 1/2" x 11 3/8" LSL	(2)2x6
L ≤ 6'-0"	1 1/2" x 11 3/8" LSL	(4)2x6
L ≤ 7'-0"	(2)1 1/2" x 11 3/8" LSL	(3)2x6
L ≤ 10'-0"	(2)1 1/2" x 11 3/8" LSL	(4)2x6



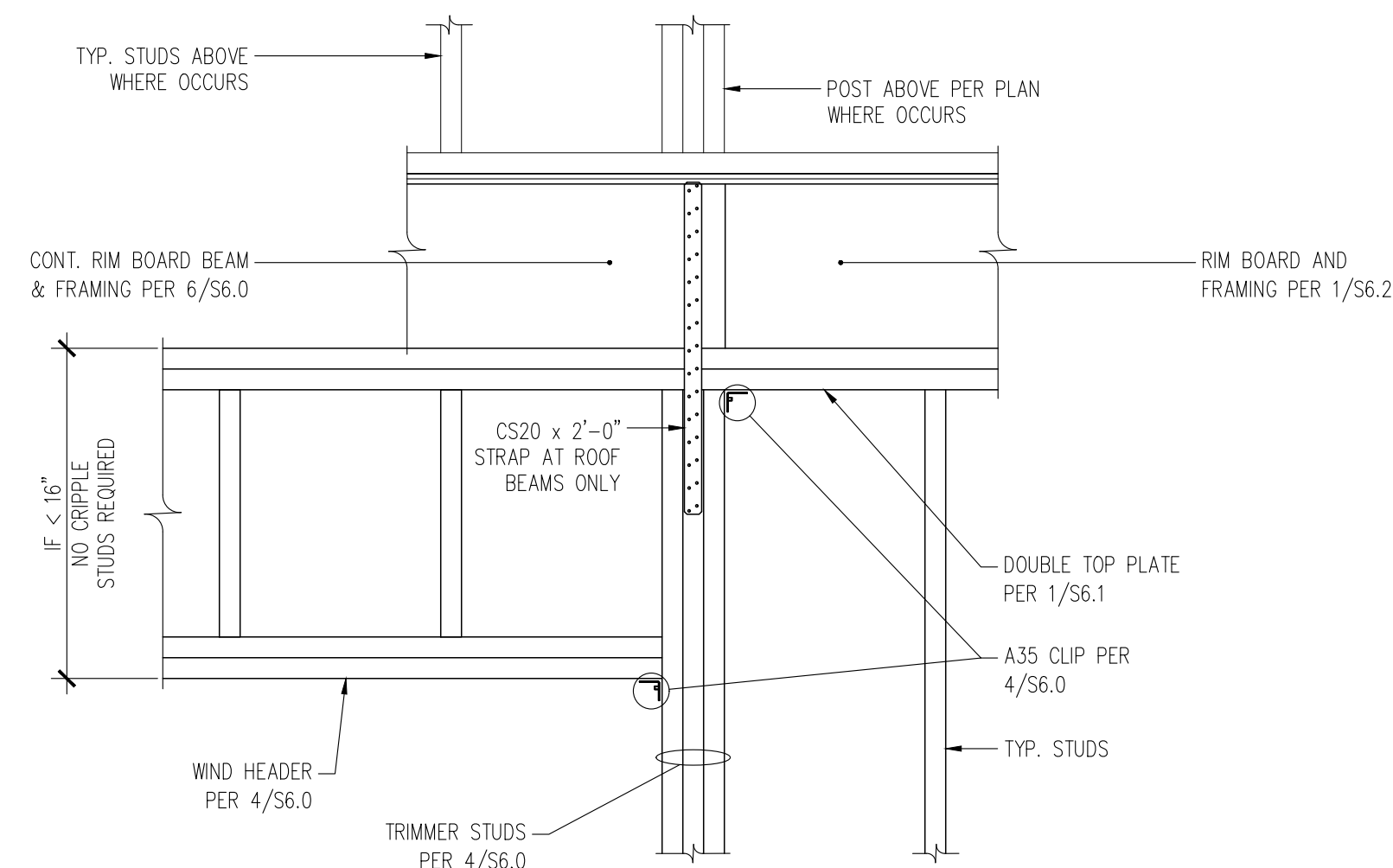
6 TYPICAL RIMBOARD HEADER & WIND HEADER IN LOAD BEARING EXTERIOR WALL
S6.0 NTS

SEE DETAIL 1/S6.2 FOR CALL OUTS IN COMMON

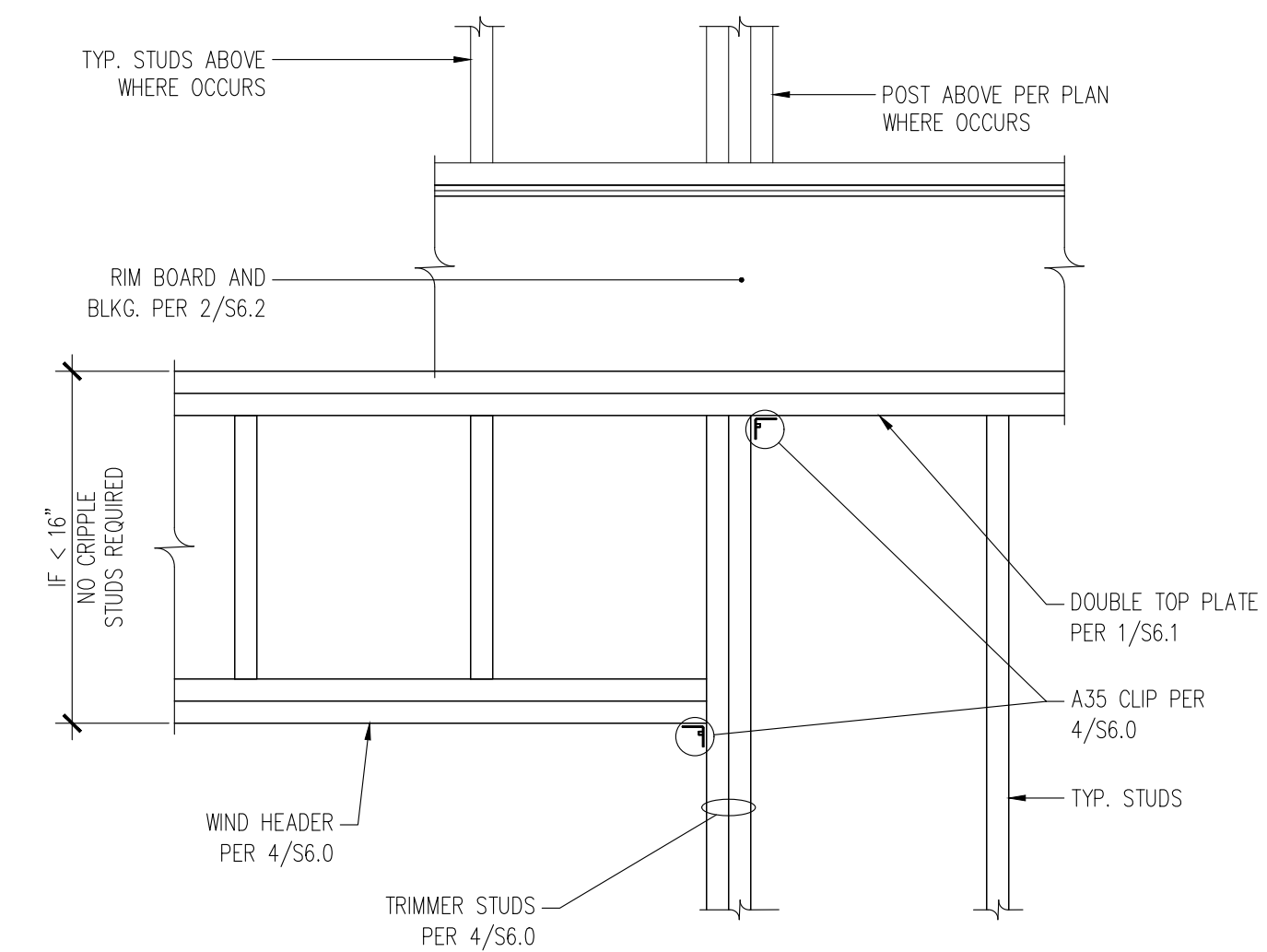


3 TYPICAL WIND HEADER IN NON-LOAD BEARING EXTERIOR WALL
S6.0 NTS

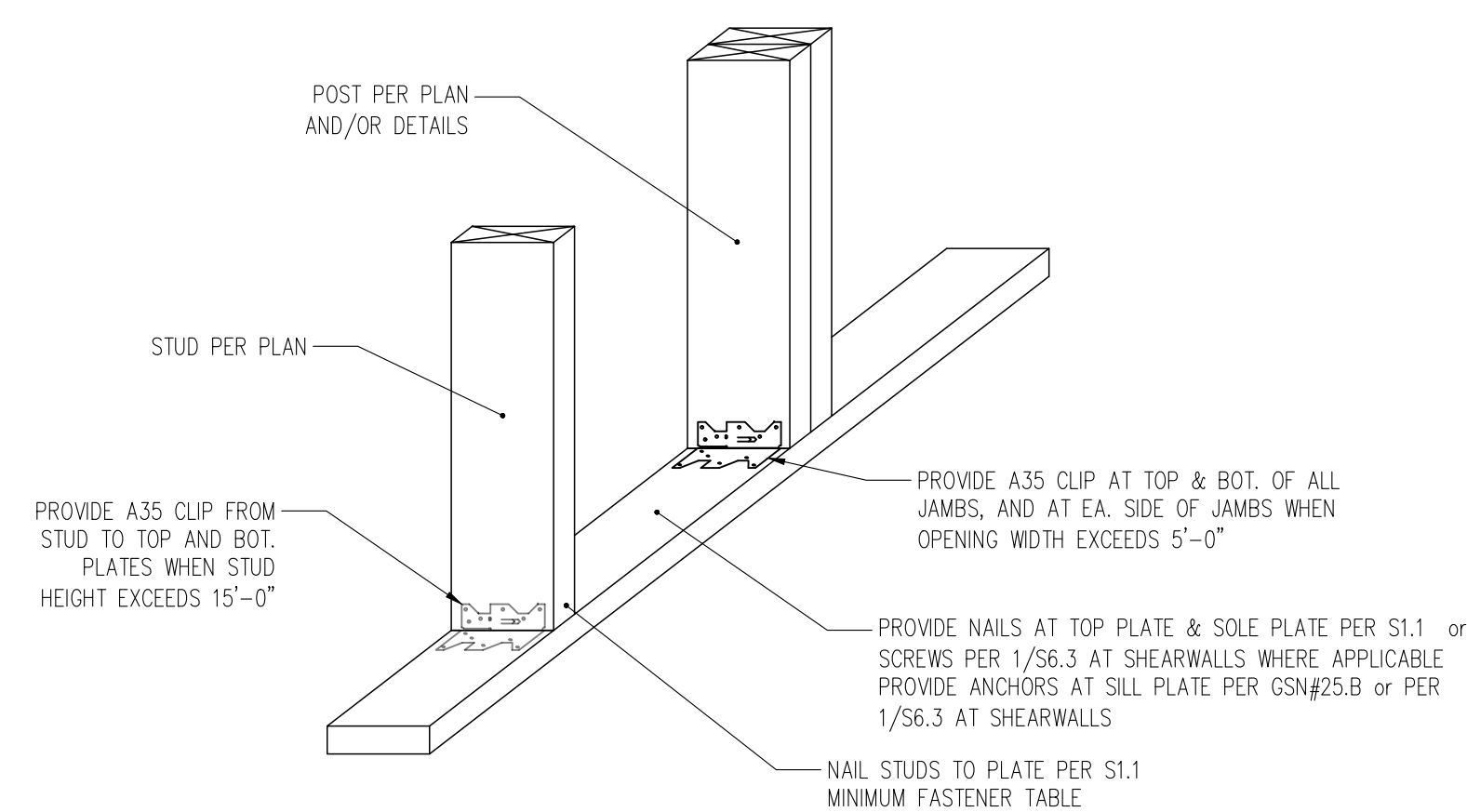
SEE DETAIL 2/S6.2 FOR CALL OUTS IN COMMON



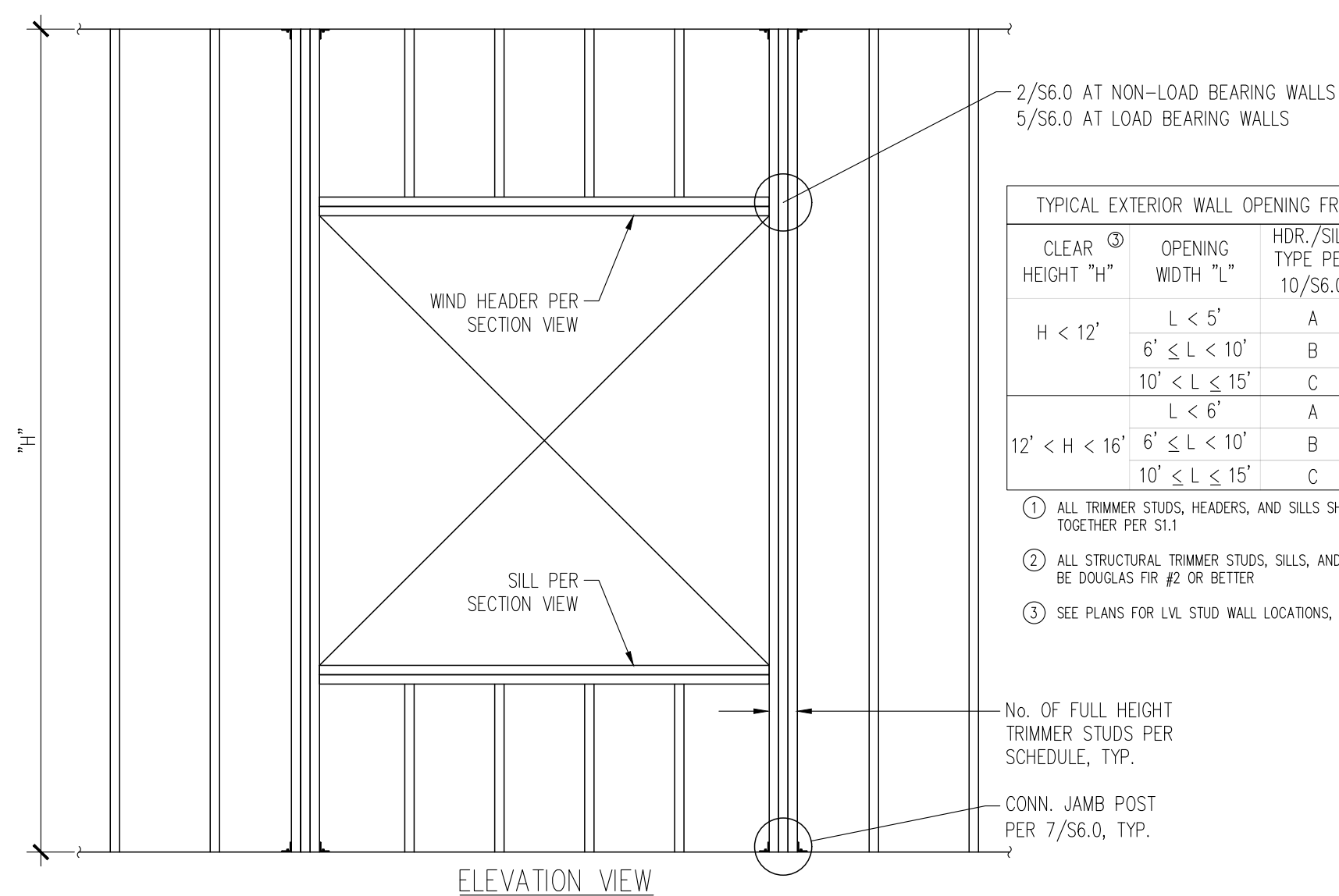
5 TYPICAL FLUSH BEAM/HEADER IN EXTERIOR WALL
S6.0 NTS



2 TYPICAL WIND HEADER DETAIL
S6.0 NTS



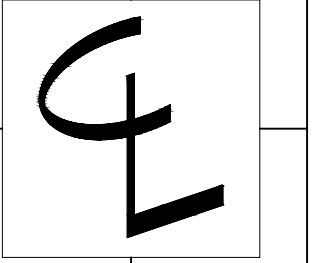
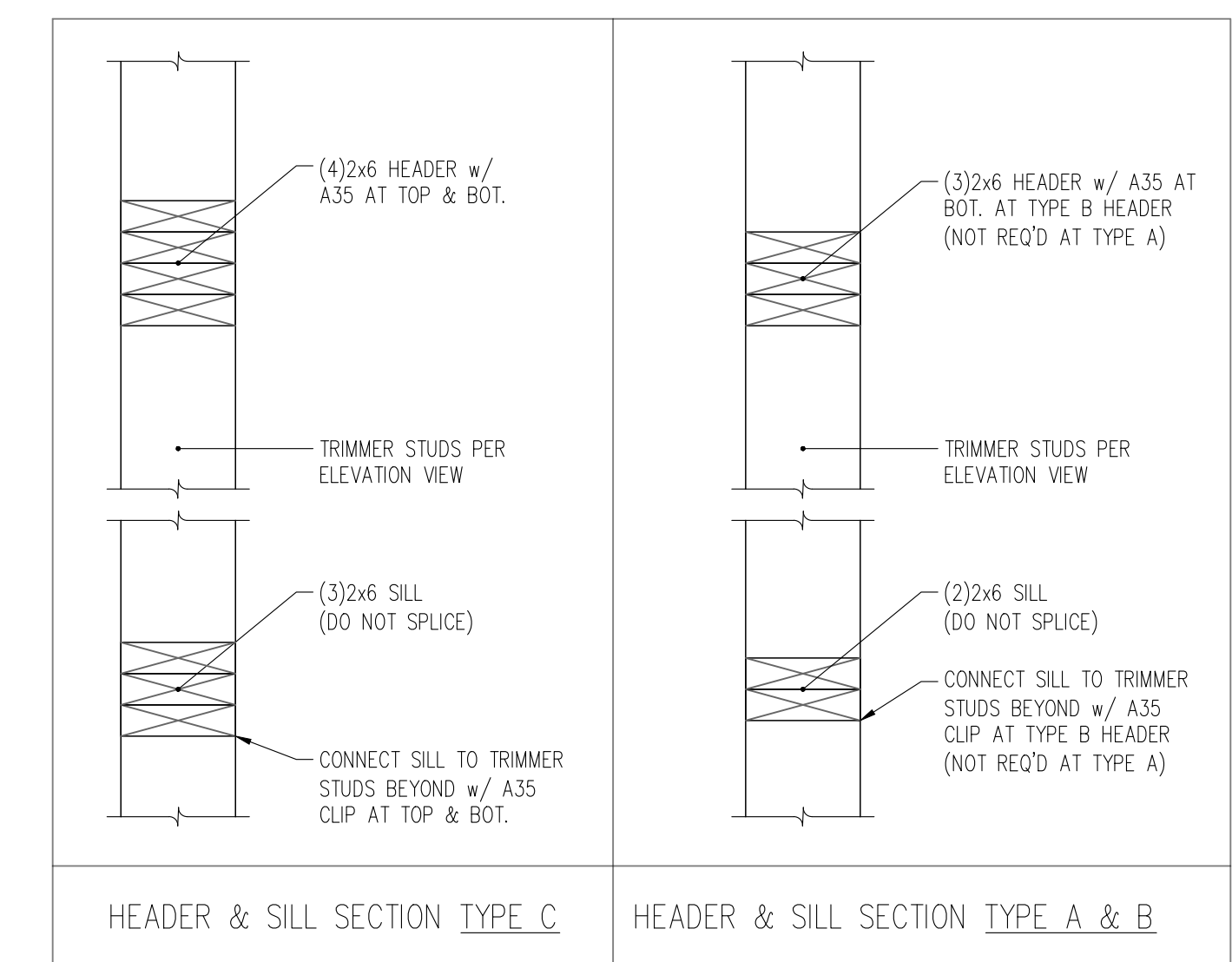
7 CONNECTION OF EXTERIOR STUDS AT TOP & BOTTOM PLATES
S6.0 NTS



4 TYPICAL WIND HEADER
S6.0 NTS

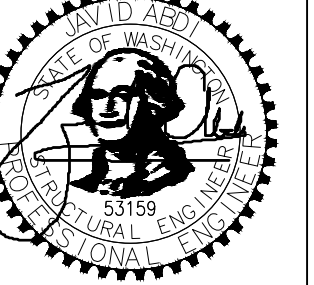
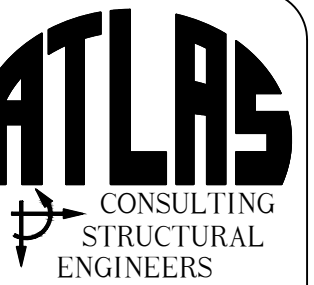
TYPICAL EXTERIOR WALL OPENING FRAMING SCHEDULE			
CLEAR HEIGHT "H"	OPENING WIDTH "L"	HDR./SILL TYPE PER 10/S6.0	No. OF FULL HEIGHT TRIMMER STUDS
H < 12'	L < 5'	A	2
	6' ≤ L < 10'	B	2
	10' ≤ L ≤ 15'	C	3
12' < H < 16'	L < 6'	A	2
	6' ≤ L < 10'	B	3
	10' ≤ L ≤ 15'	C	6x8

- ALL TRIMMER STUDS, HEADERS, AND SILLS SHALL BE NAILED TOGETHER PER S1.1
- ALL STRUCTURAL TRIMMER STUDS, SILLS, AND HEADERS SHALL BE DOUGLAS FIR #2 OR BETTER
- SEE PLANS FOR LVL STUD WALL LOCATIONS, WHERE APPLICABLE



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S6.0

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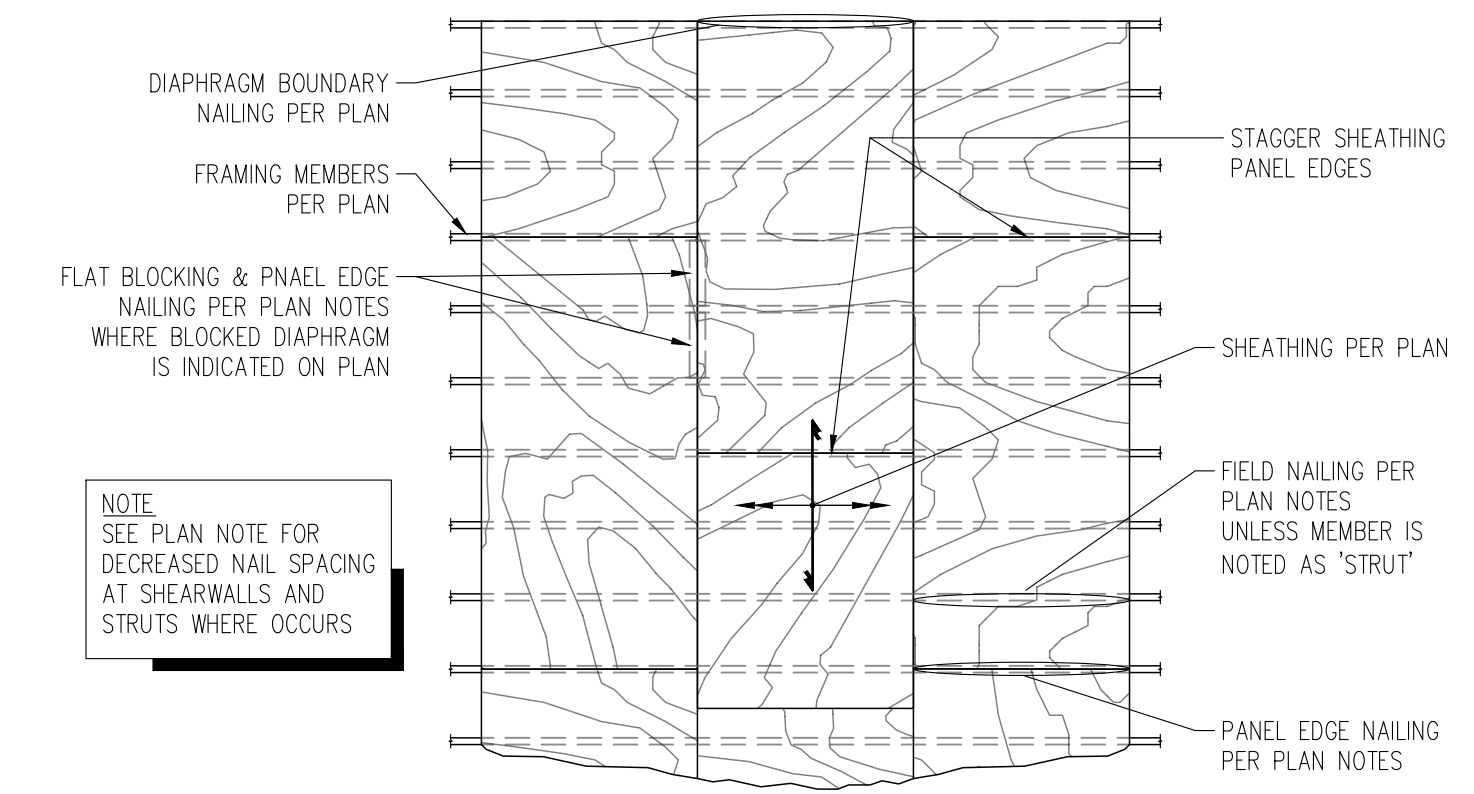
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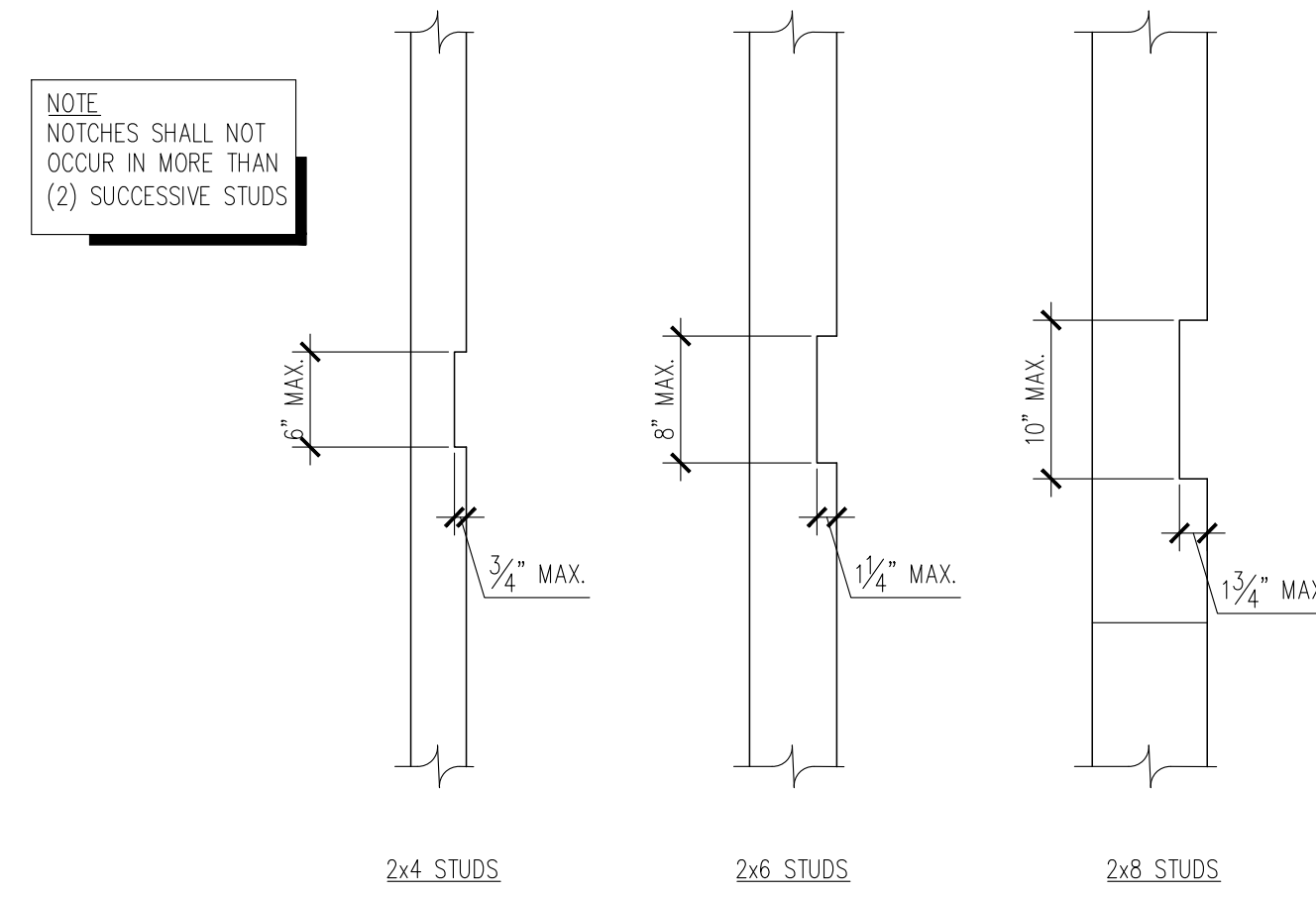
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S6.1



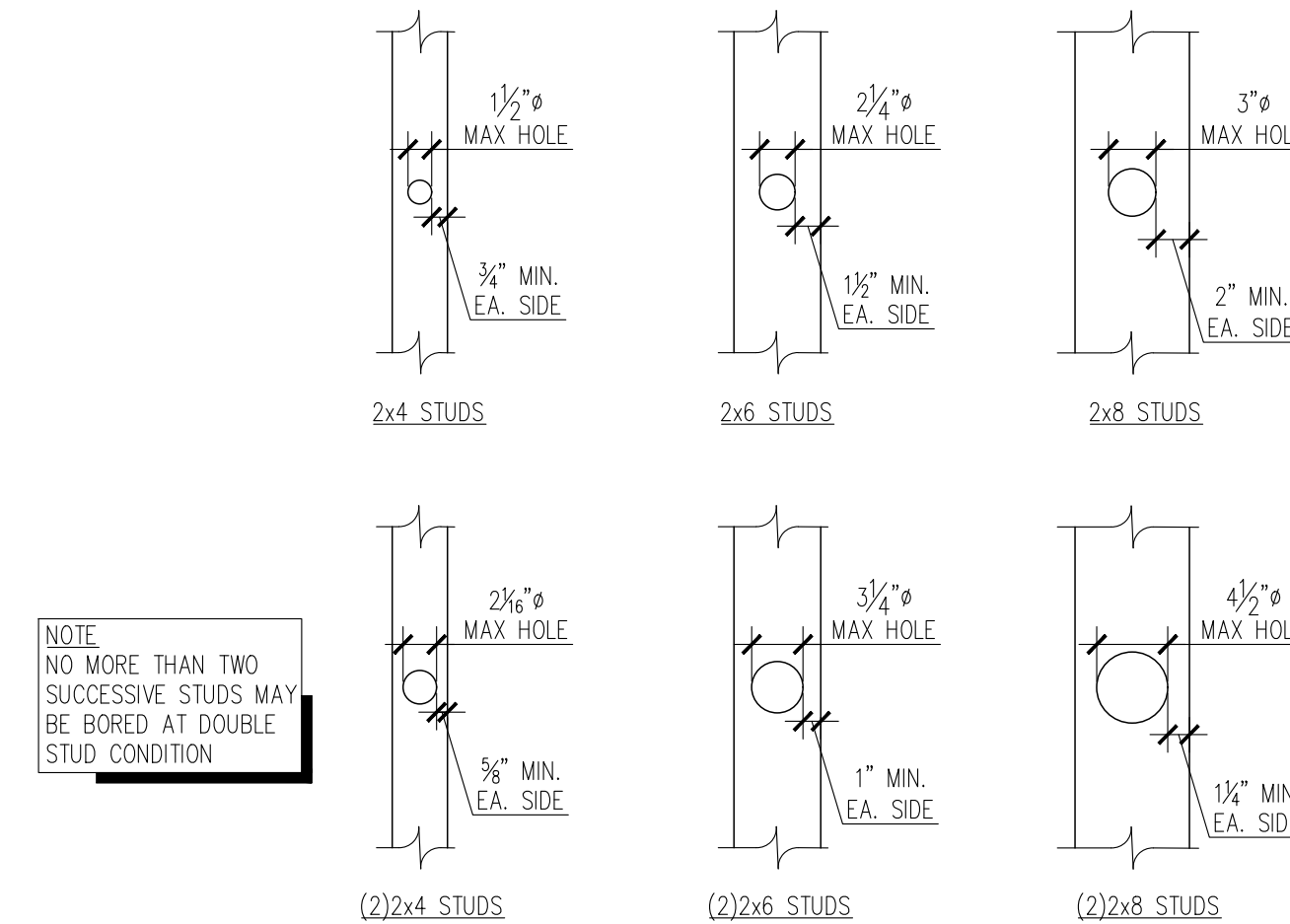
3 TYPICAL DIAPHRAGM NAILING
S6.1 NTS



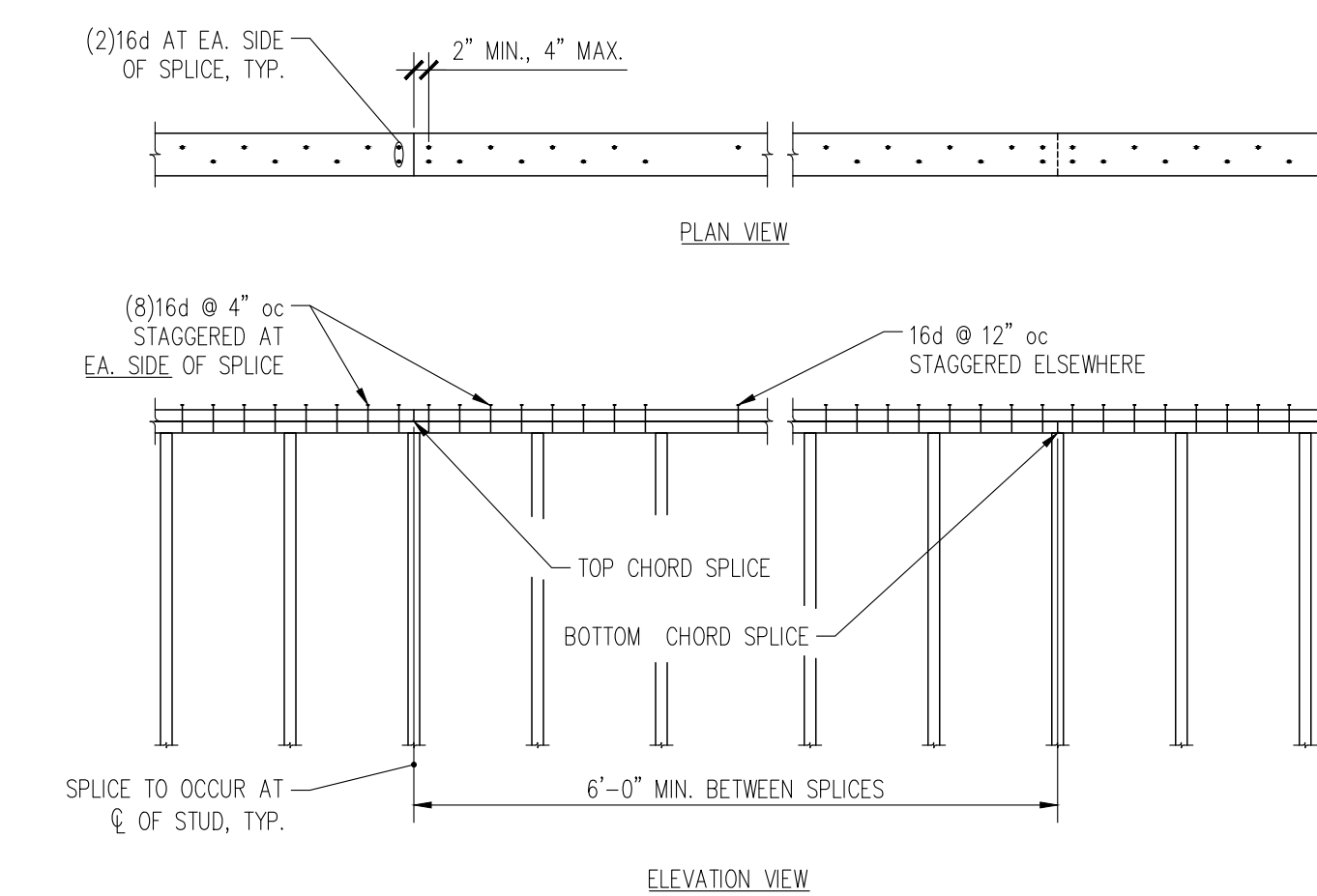
6 ALLOWABLE HOLES IN STUDWALL STUDS
S6.1 NTS

	NO REINF. REQUIRED	STRAP REINF. REQUIRED
2x4 PLATES		
2x6 PLATES		
2x8 PLATES		

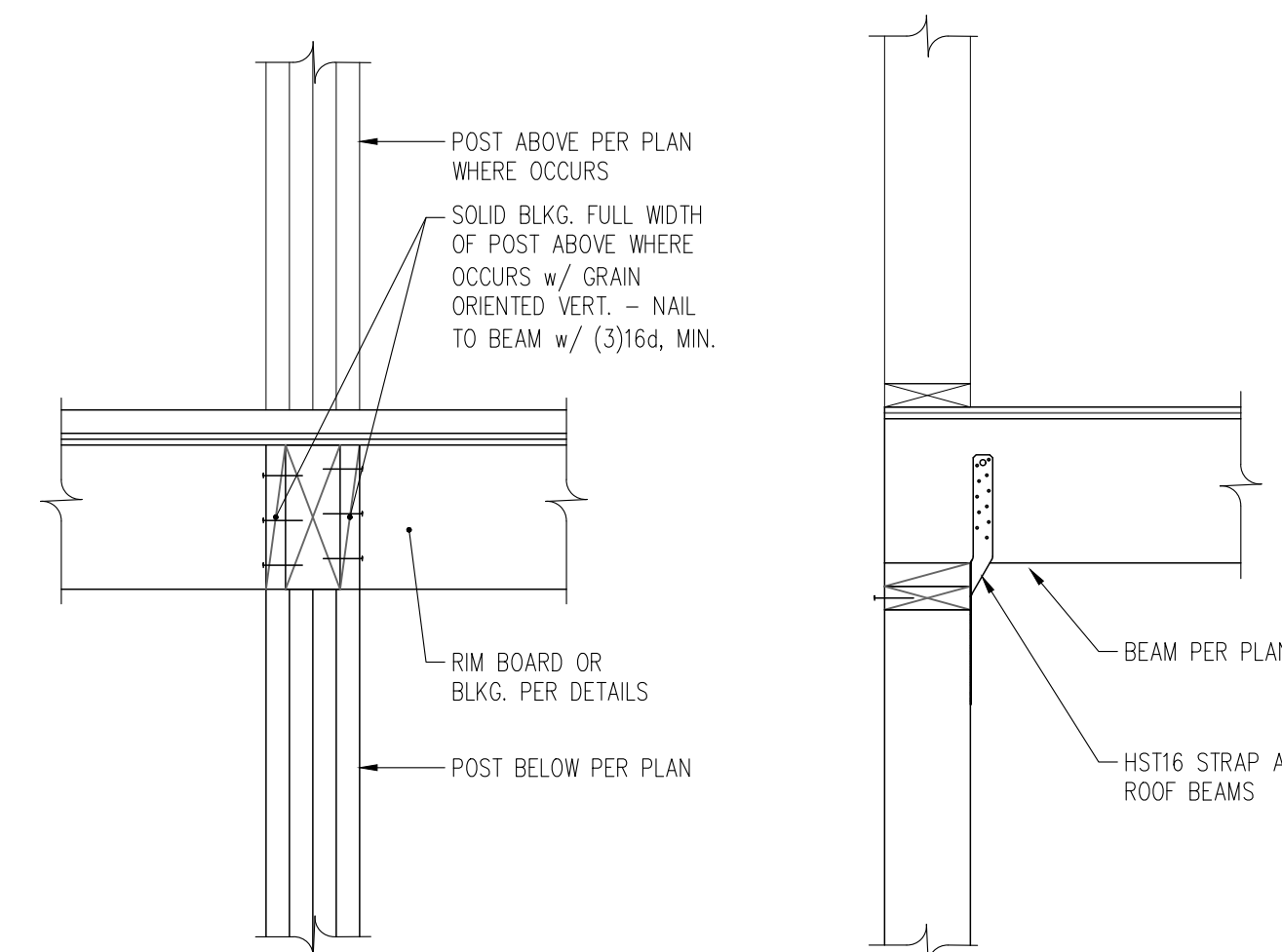
2 ALLOWABLE HOLES THROUGH TOP PLATES
S6.1 NTS



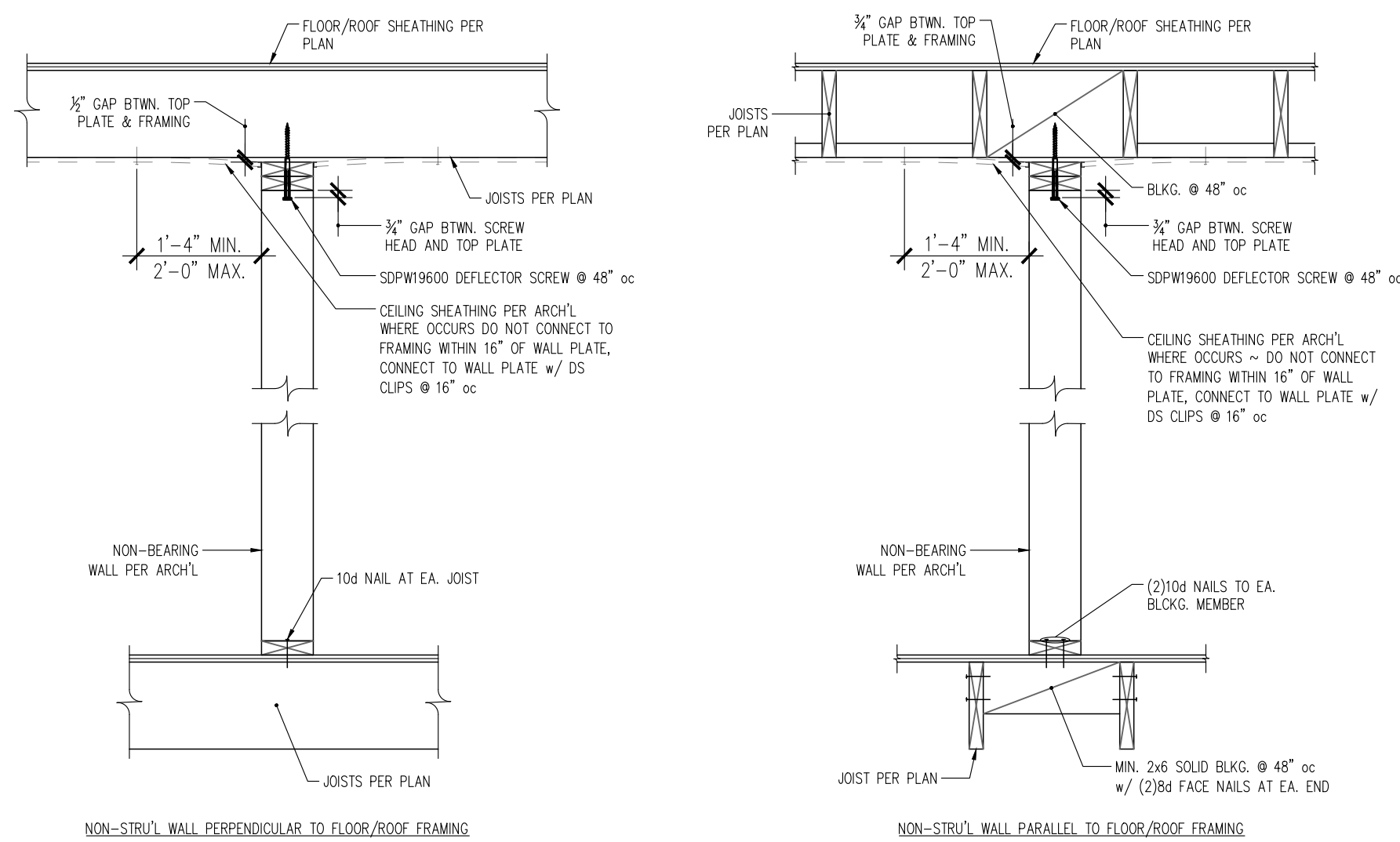
5 ALLOWABLE HOLES IN STUDWALL STUDS
S6.1 NTS



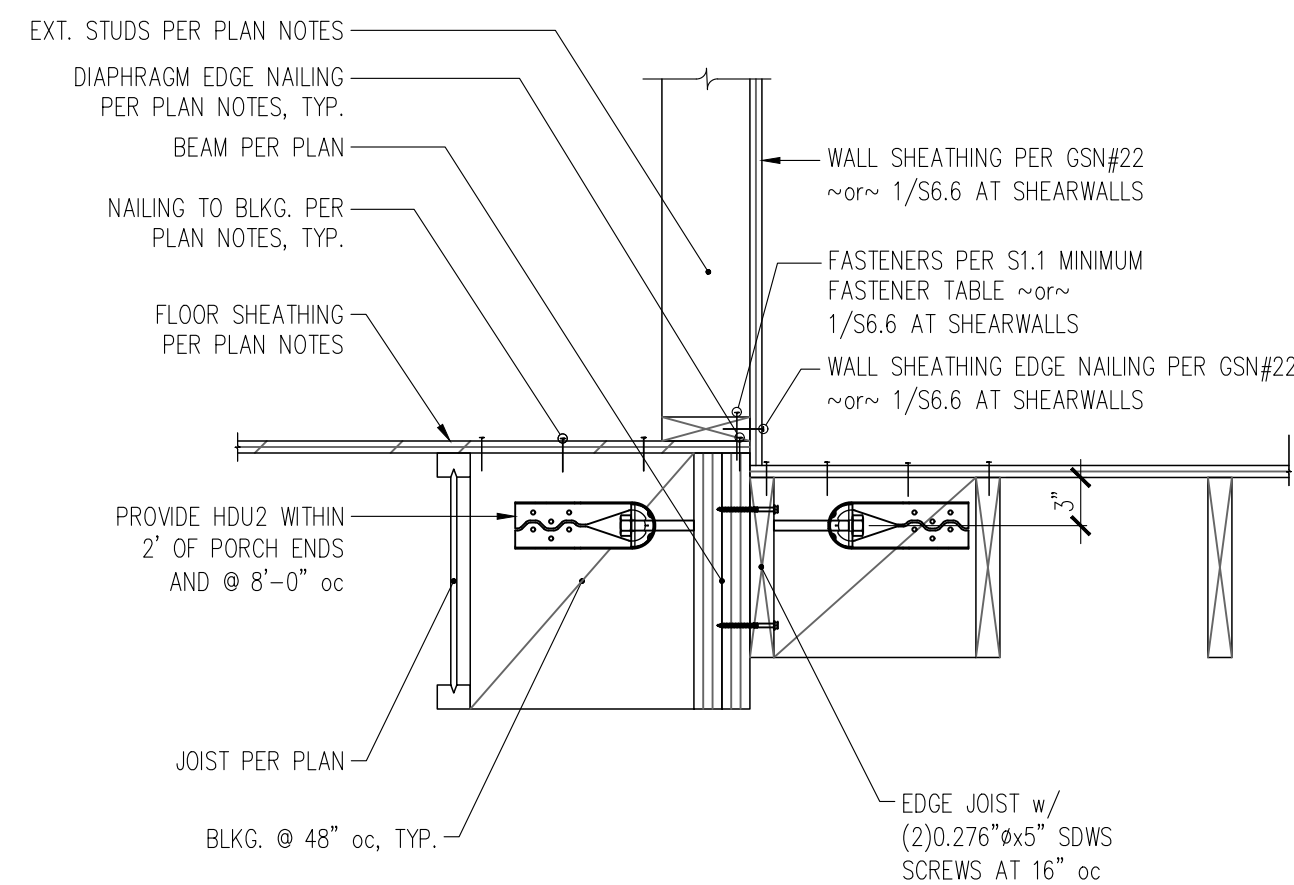
1 TOP PLATE SPLICE
S6.1 NTS



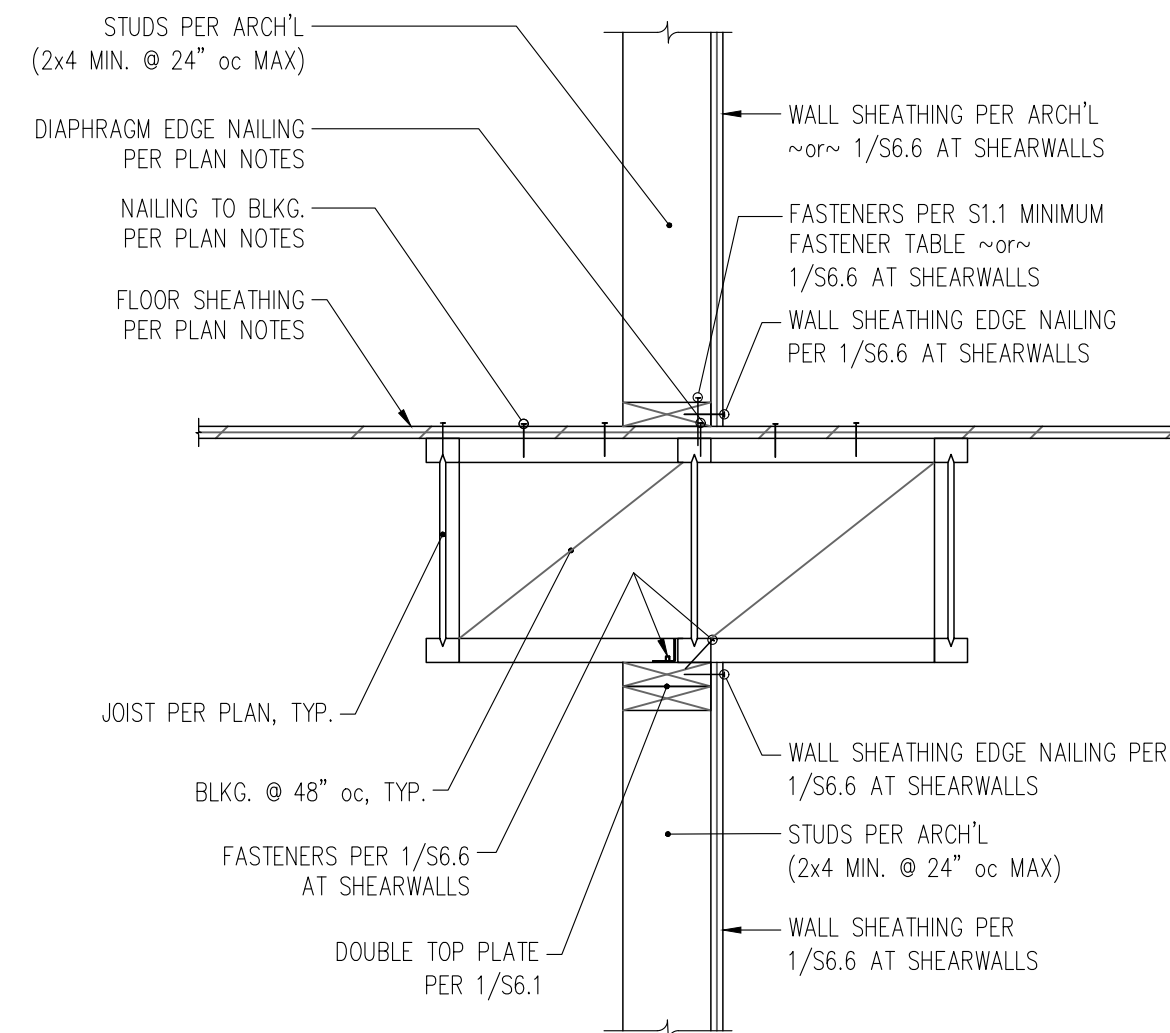
4 TYPICAL BEAM PERPENDICULAR TO WALL
S6.1 NTS



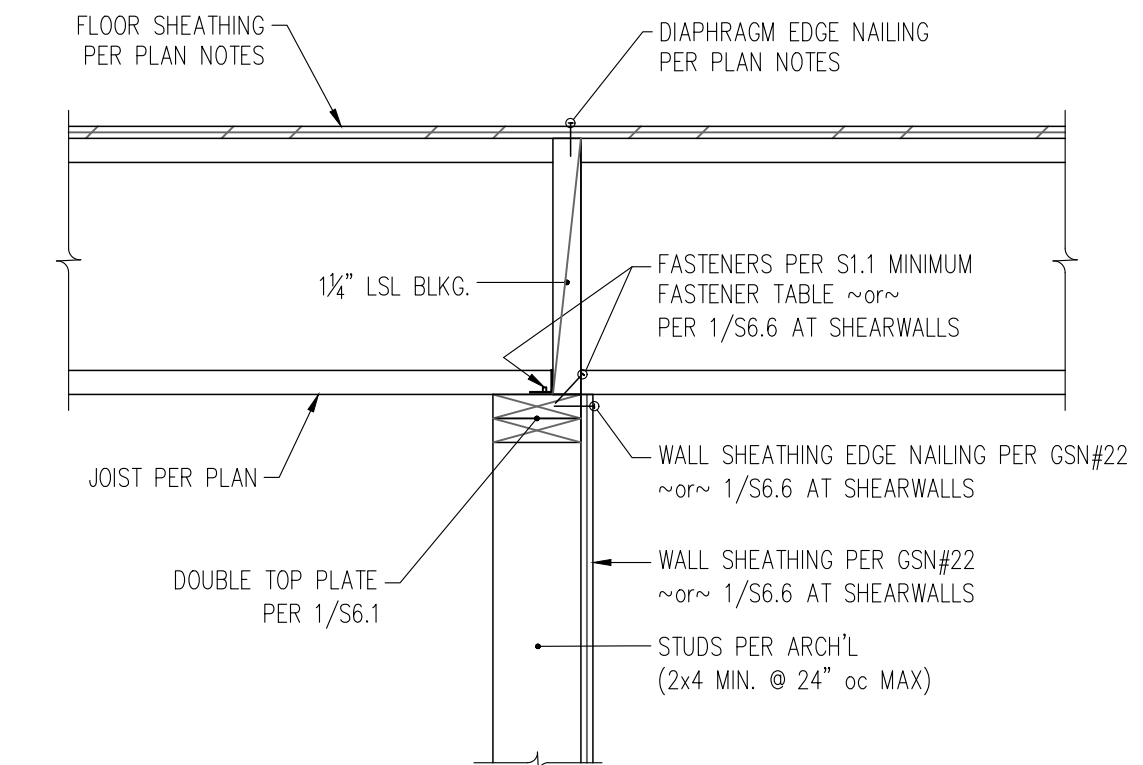
7 CONNECTION OF NON-STRUC'L PARTITION WALL TO STRUCTURE
S6.1 NTS



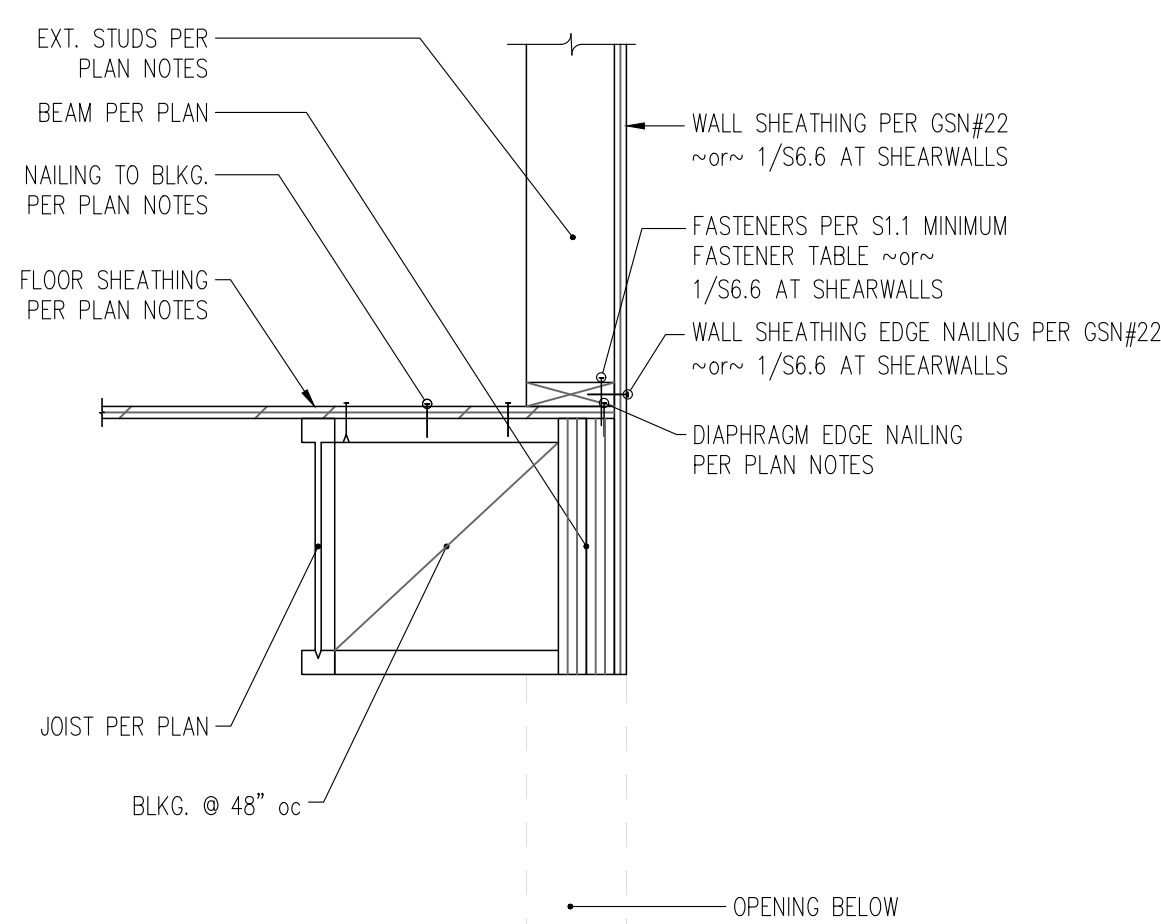
9 SECTION THROUGH PARALLEL JOISTS AND EXTERIOR WALL ABOVE BEAM AT PORCH AREA
S6.2 3/4" = 1'-0"



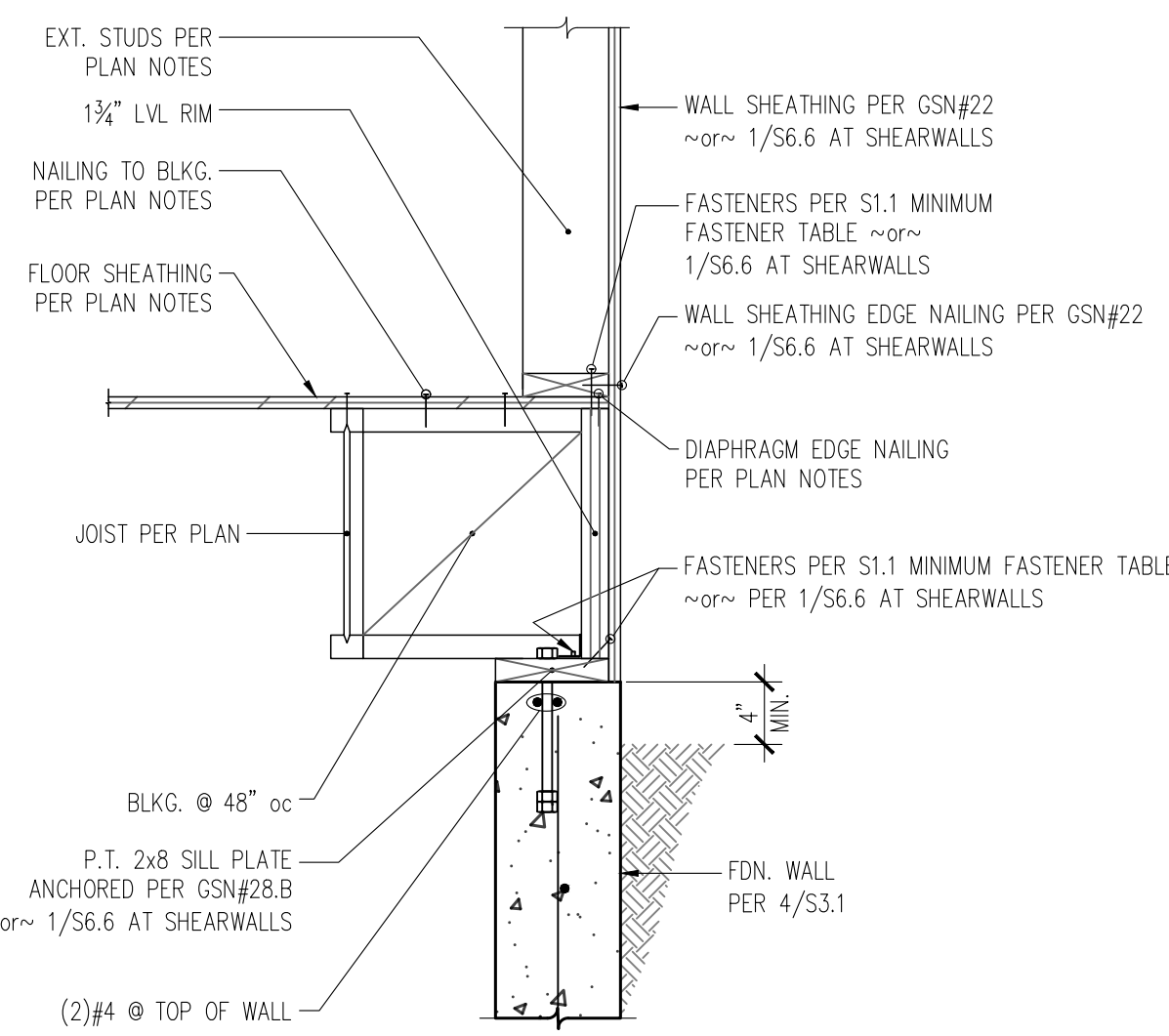
6 SECTION THROUGH INTERIOR SHEAR WALL w/ PERPENDICULAR JOISTS AT EA. SIDE
S6.2 1" = 1'-0"



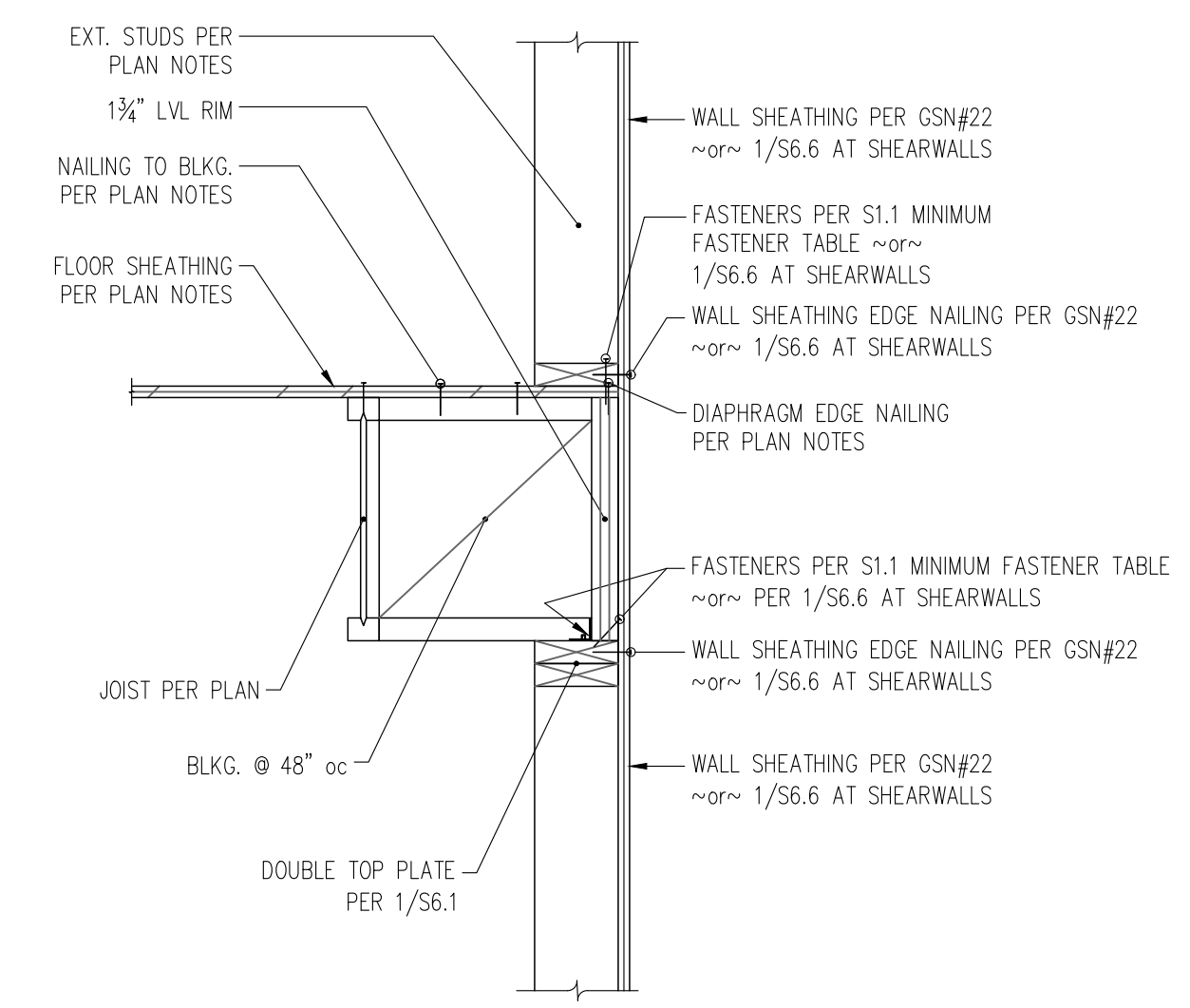
3 SECTION THROUGH INTERIOR BEARING WALL w/ PERPENDICULAR JOISTS AT EA. SIDE
S6.2 1" = 1'-0"



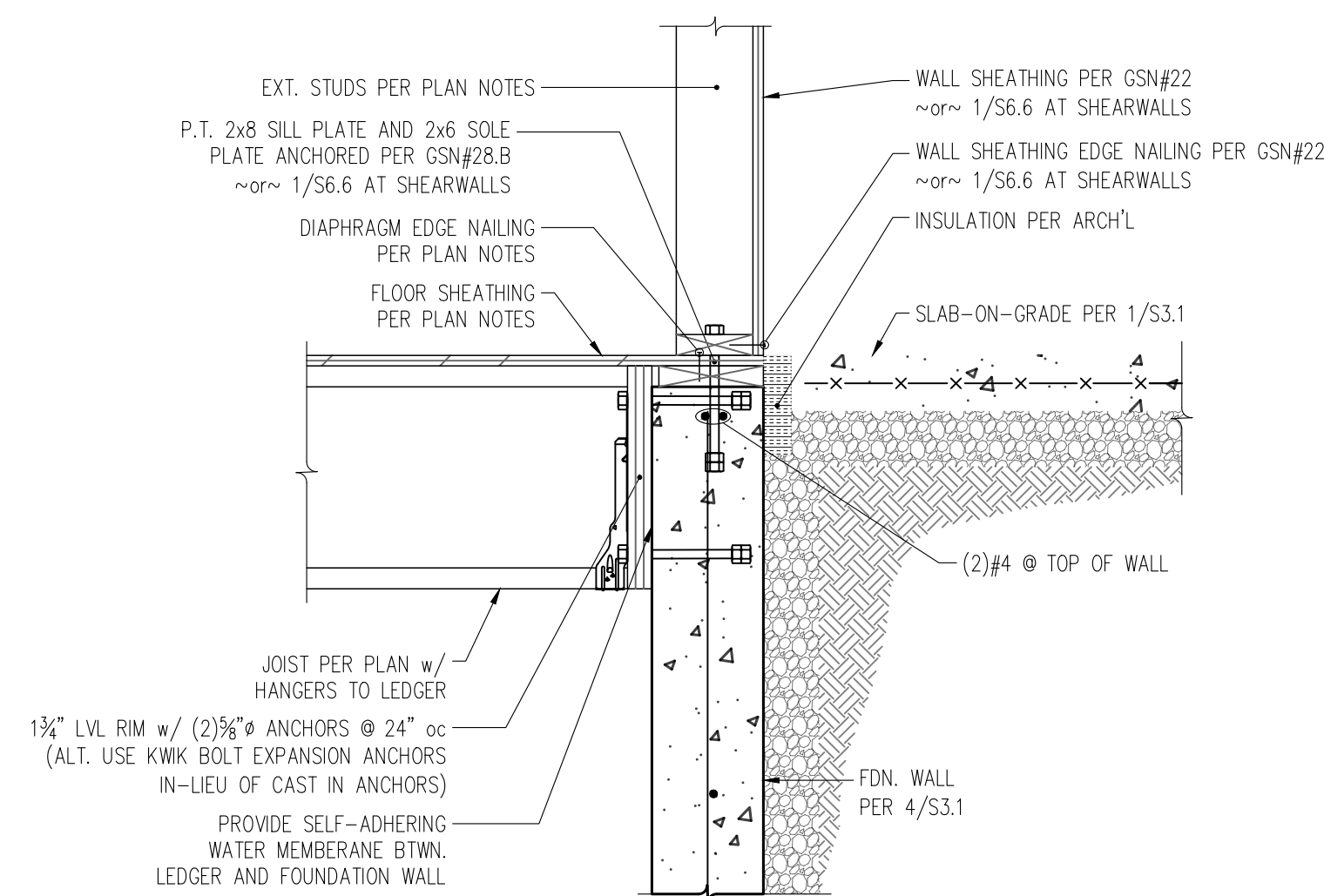
8 SECTION THROUGH EXTERIOR WALL ABOVE BEAM AND PARALLEL JOISTS
S6.2 1" = 1'-0"



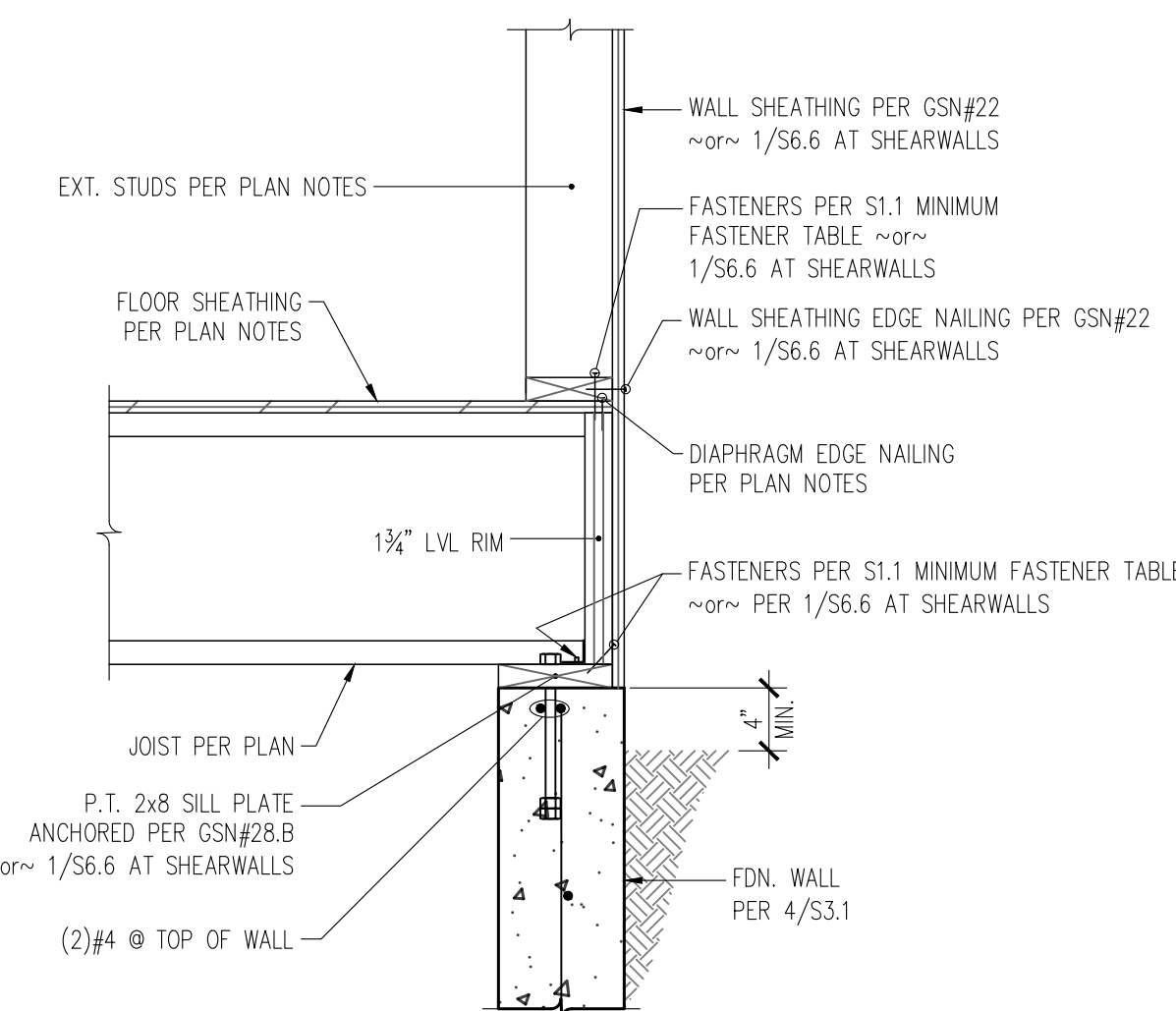
5 SECTION THROUGH FOUNDATION WALL AT PARALLEL JOISTS
S6.2 1" = 1'-0"



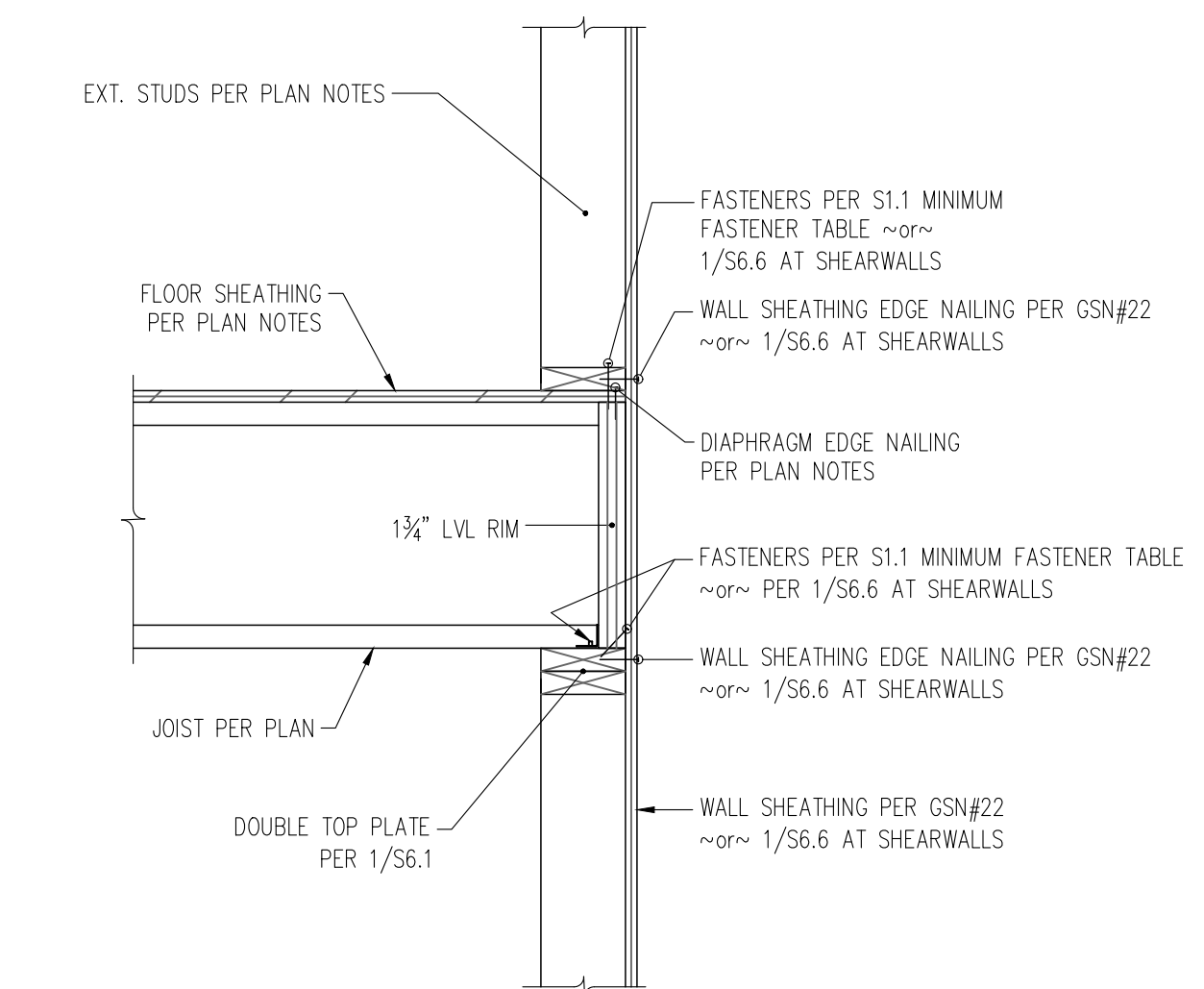
2 SECTION THROUGH EXTERIOR WALL AT PARALLEL JOISTS
S6.2 1" = 1'-0"



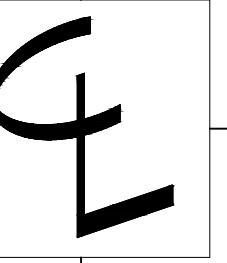
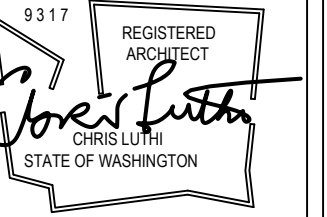
7 SECTION THROUGH FOUNDATION WALL AT PERPENDICULAR JOISTS AND OUTDOOR KITCHEN SLAB
S6.2 1" = 1'-0"



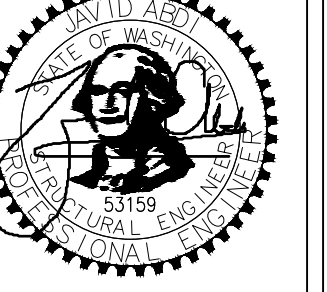
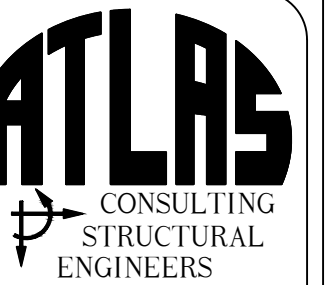
4 SECTION THROUGH FOUNDATION WALL AT PERPENDICULAR JOISTS
S6.2 1" = 1'-0"



1 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR JOISTS
S6.2 1" = 1'-0"



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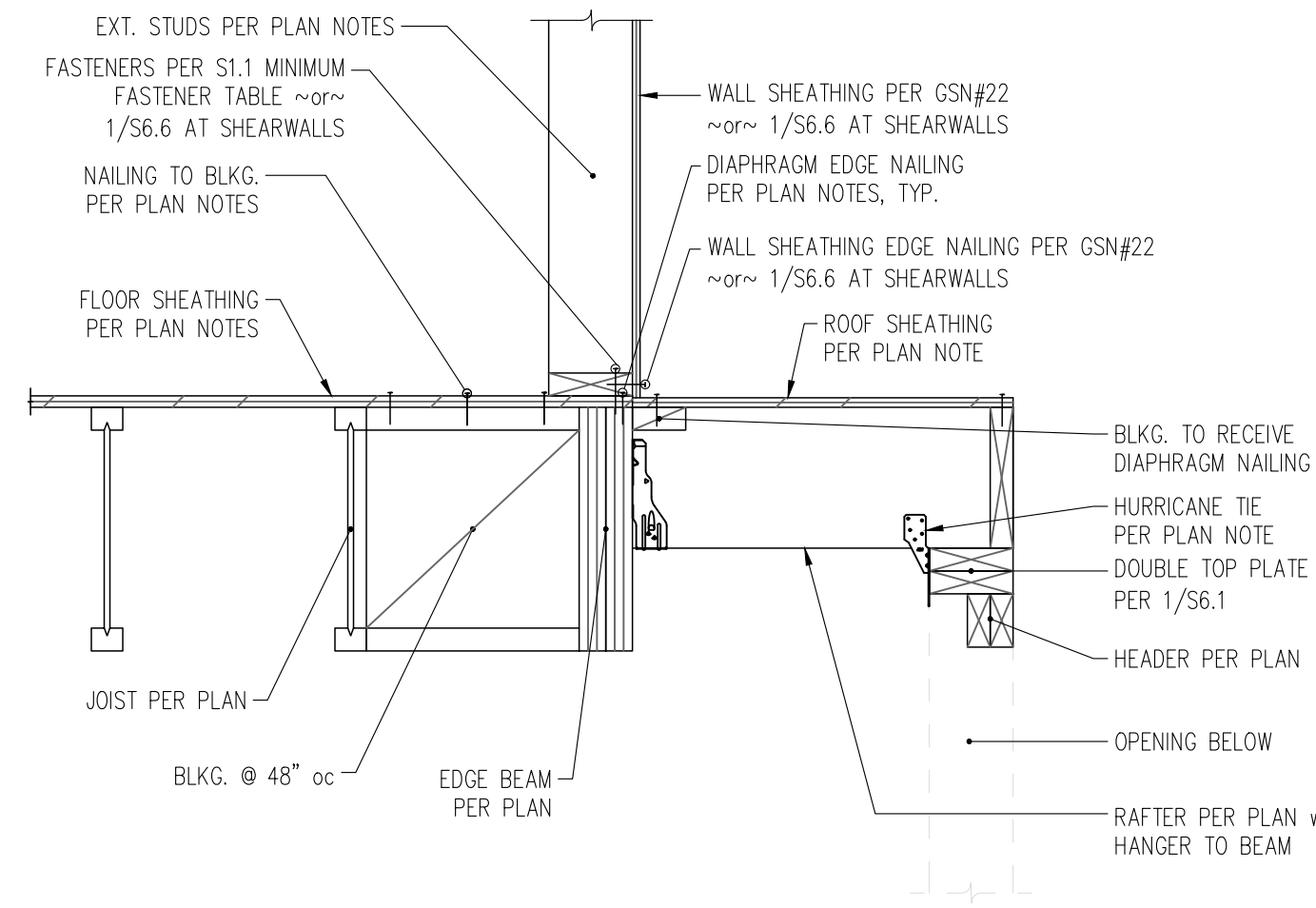
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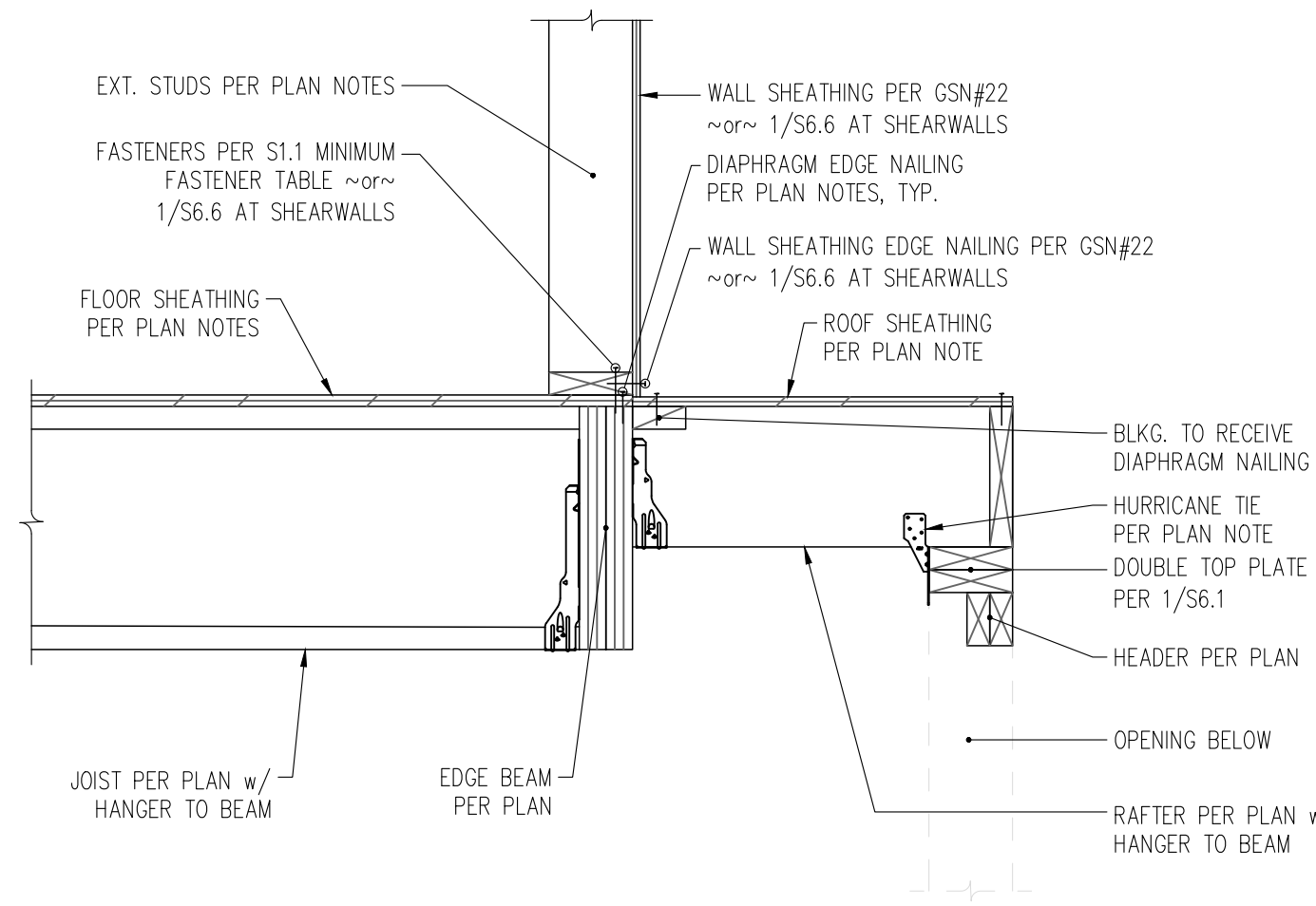
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08.04.2021

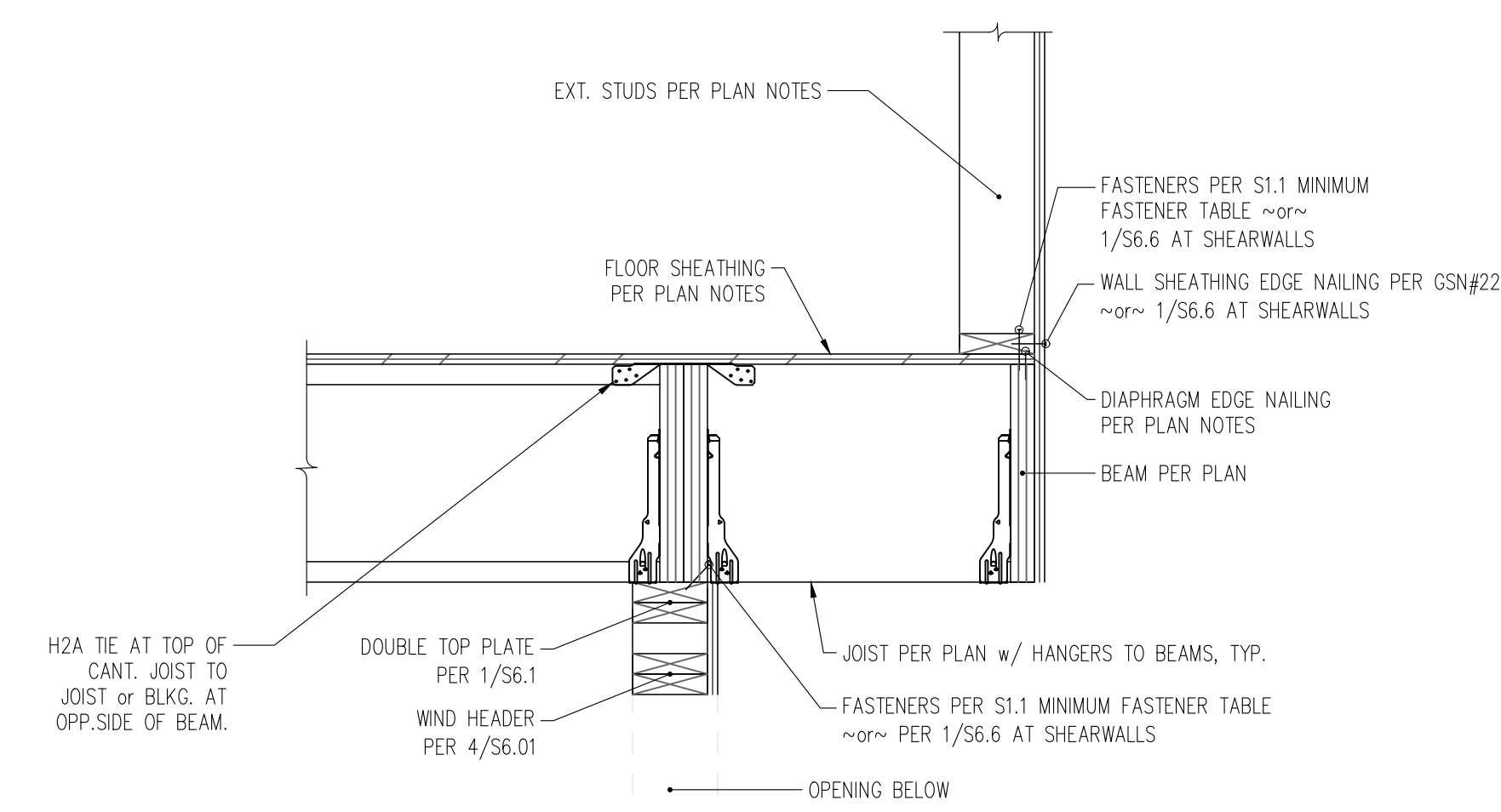
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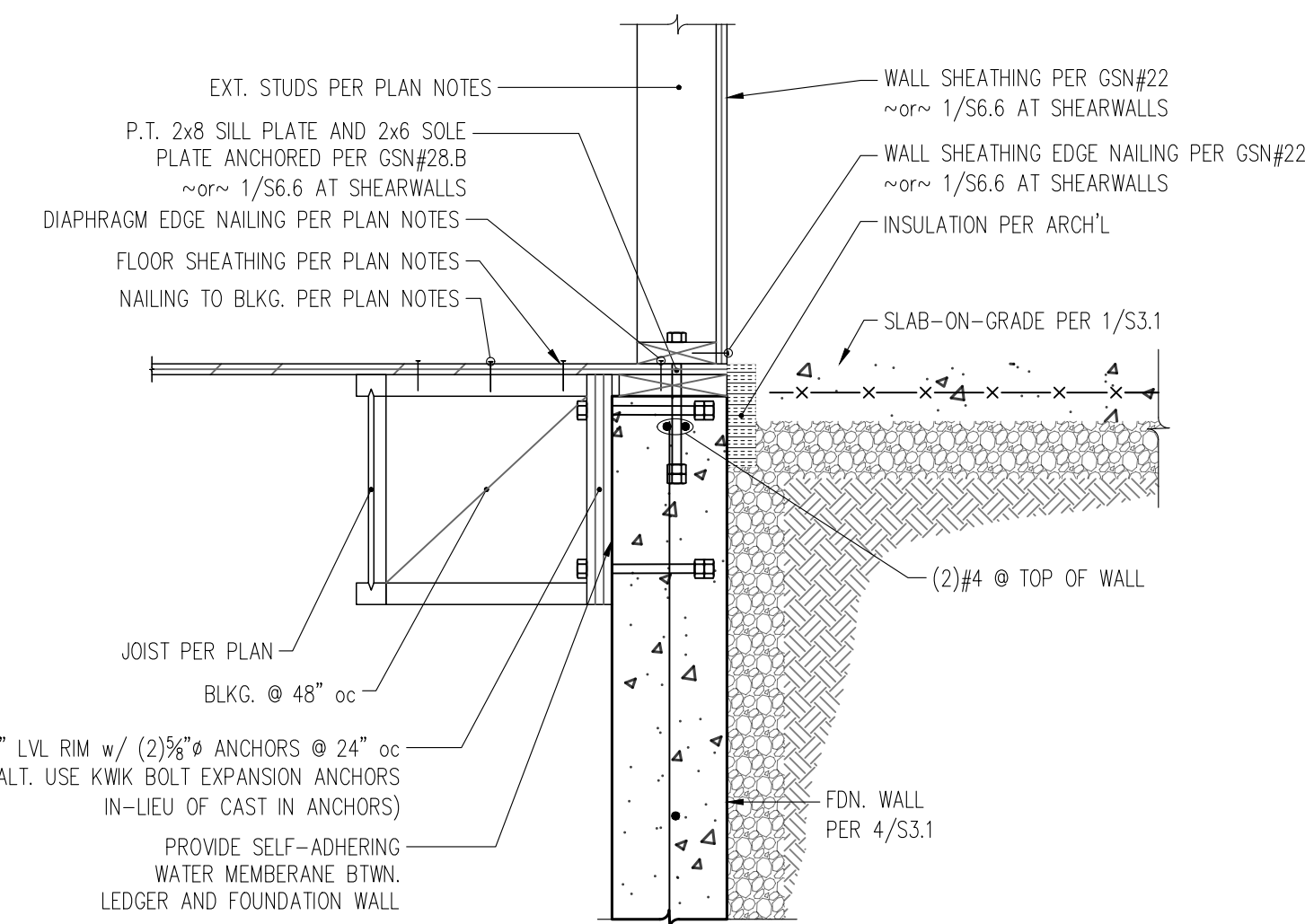
9 SECTION THROUGH EXTERIOR WALL AT EDGE BEAM, PARALLEL JOISTS & PERPENDICULAR RAFTERS
S6.3 1" = 1'-0"



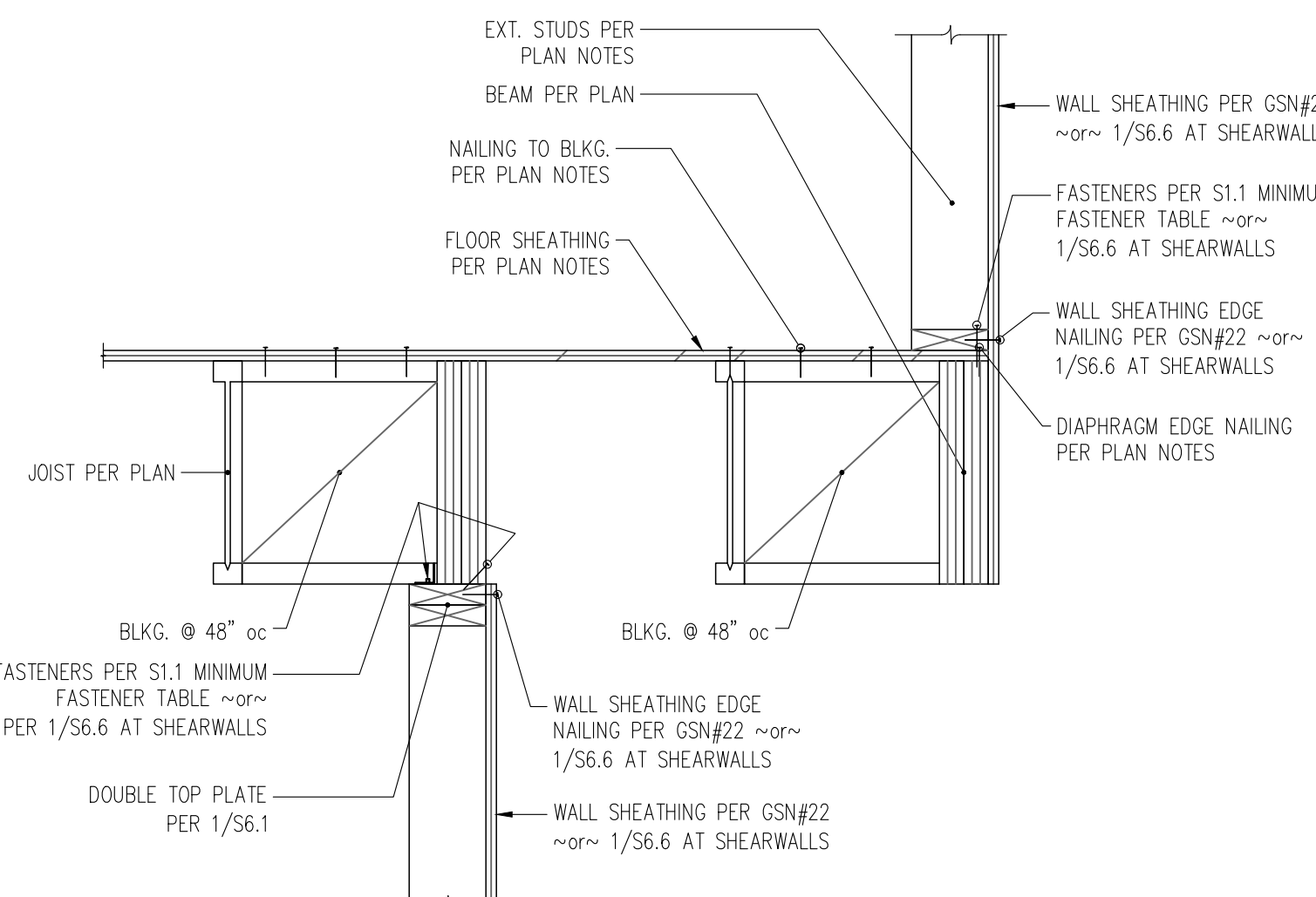
6 SECTION THROUGH EXTERIOR WALL AT EDGE BEAM, PERPENDICULAR JOISTS & RAFTERS
S6.3 1" = 1'-0"



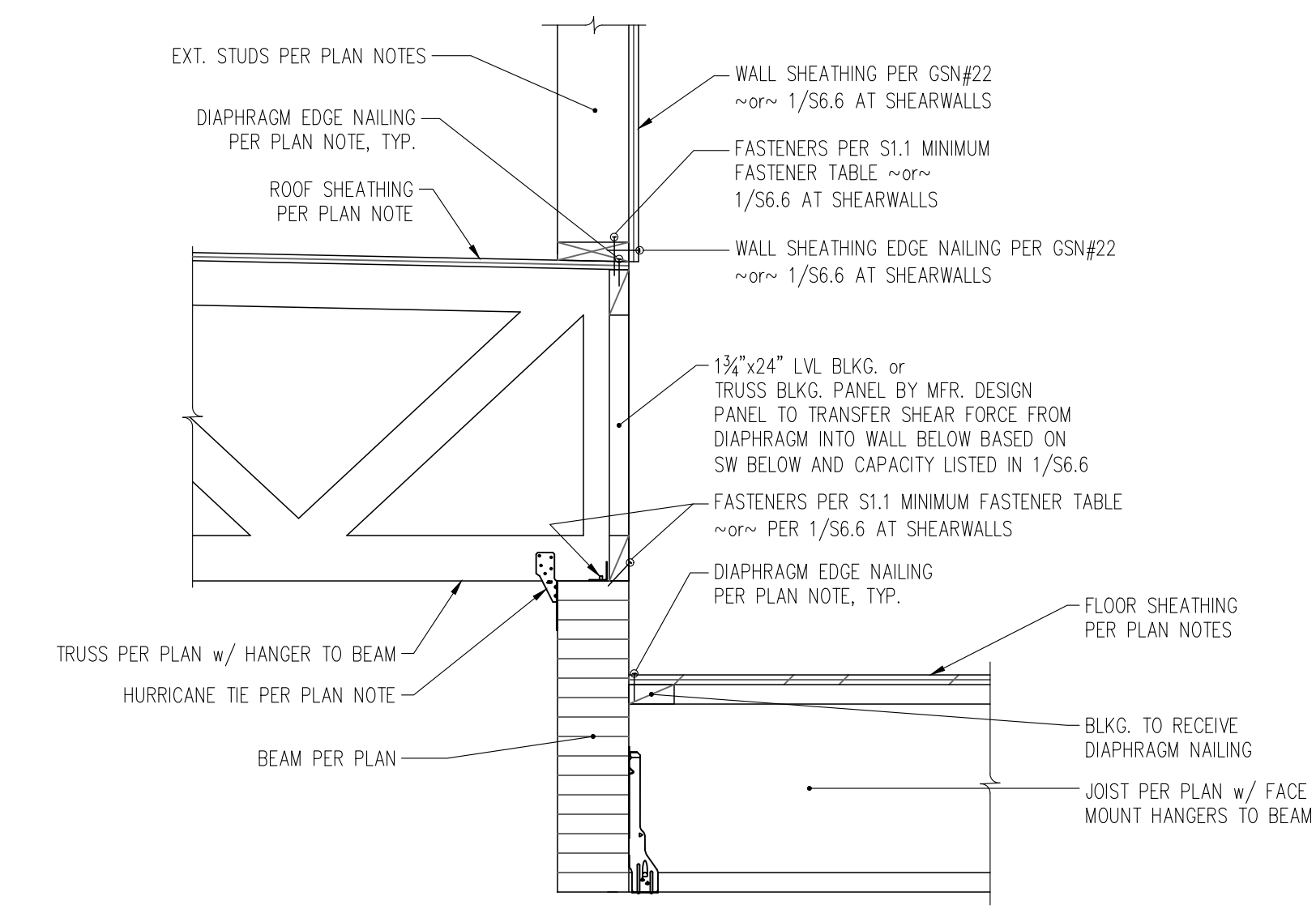
3 SECTION THROUGH CANTILEVERED MAIN FLOOR VOLUME AT PERPENDICULAR JOISTS
S6.3 1" = 1'-0"



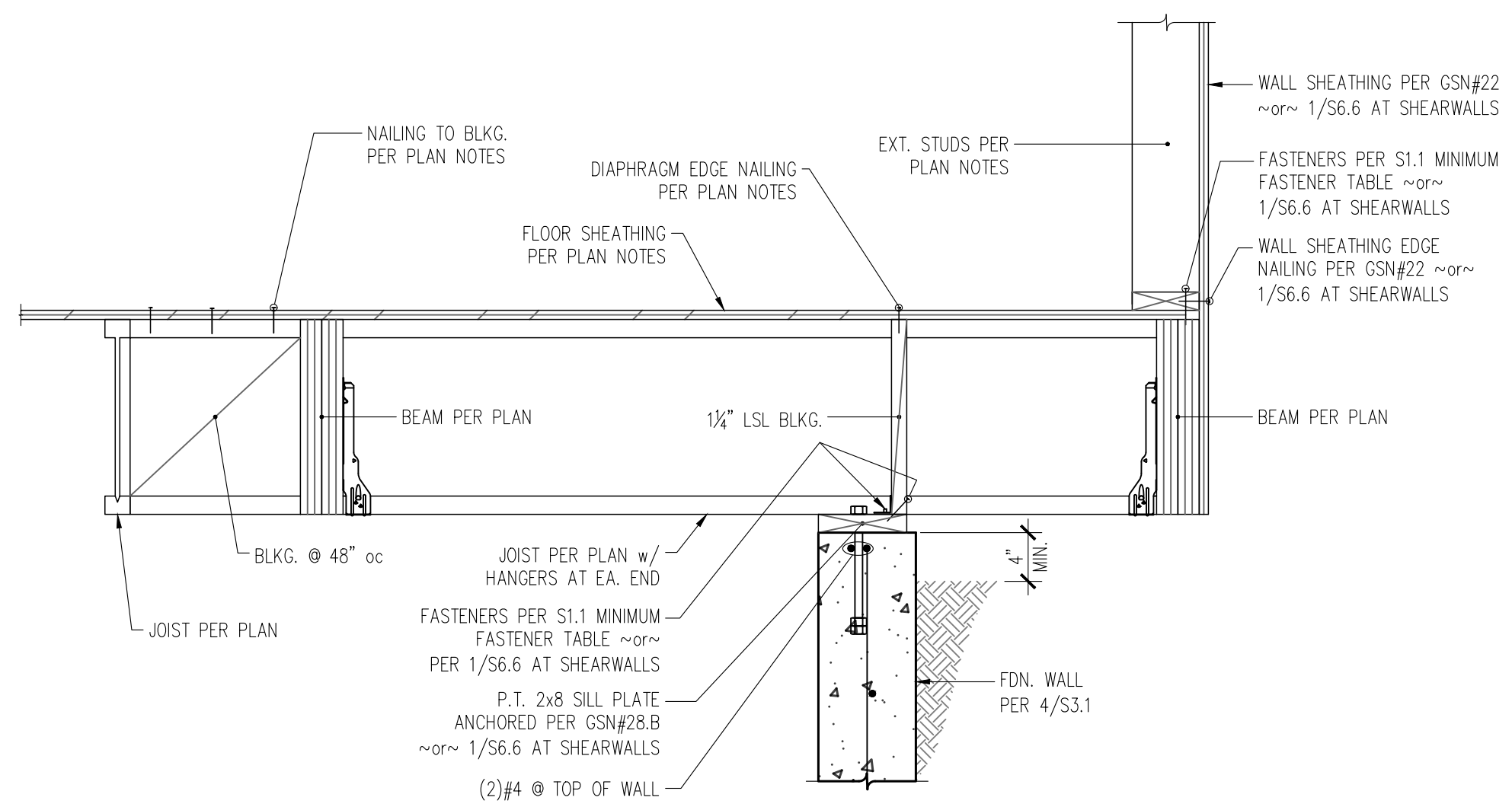
8 SECTION THROUGH FOUNDATION WALL AT PARALLEL JOISTS AND OUTDOOR KITCHEN SLAB
S6.3 1" = 1'-0"



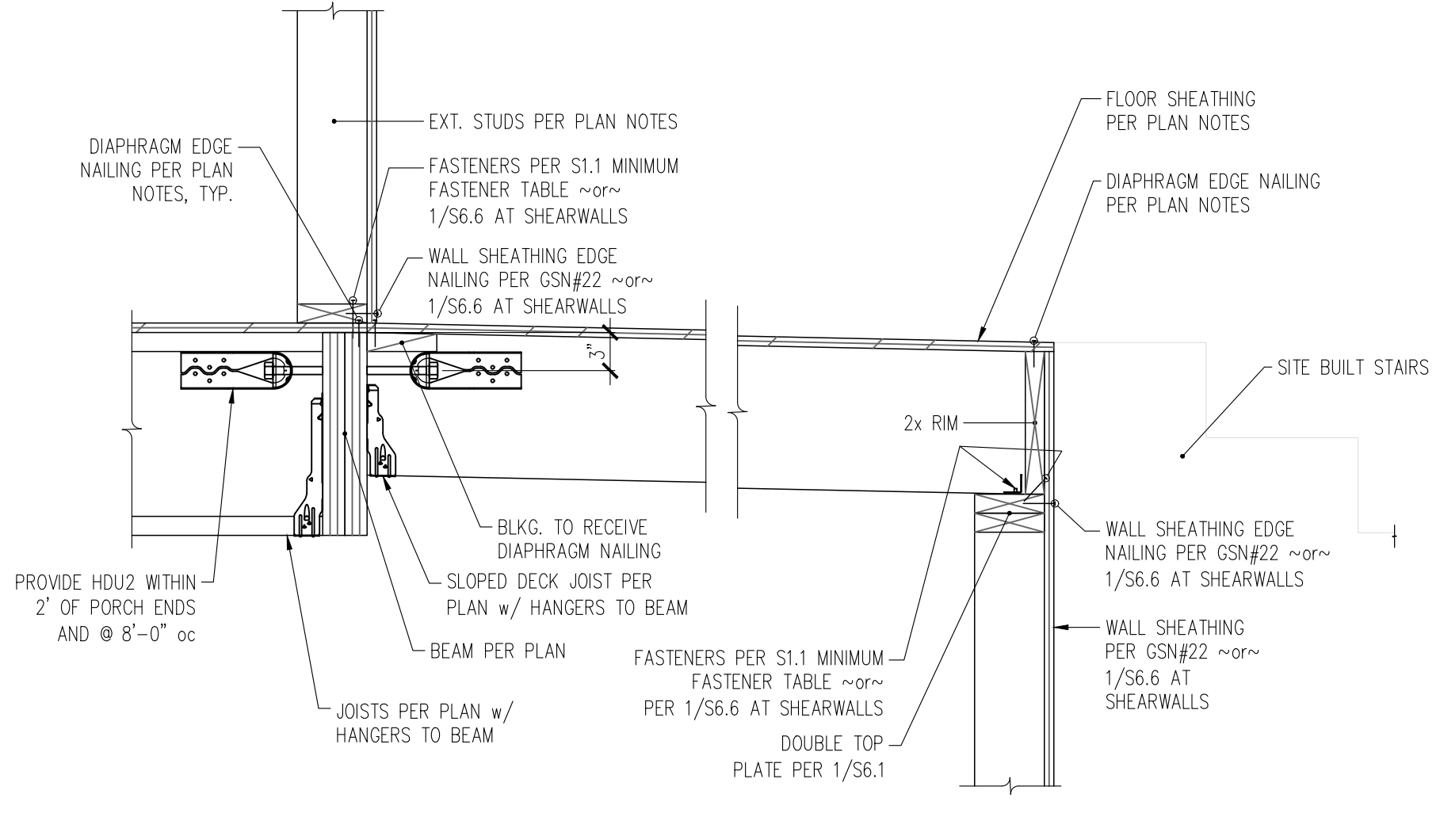
5 SECTION THROUGH CANTILEVERED JOISTS AND OFFSET WALL
S6.3 1" = 1'-0"



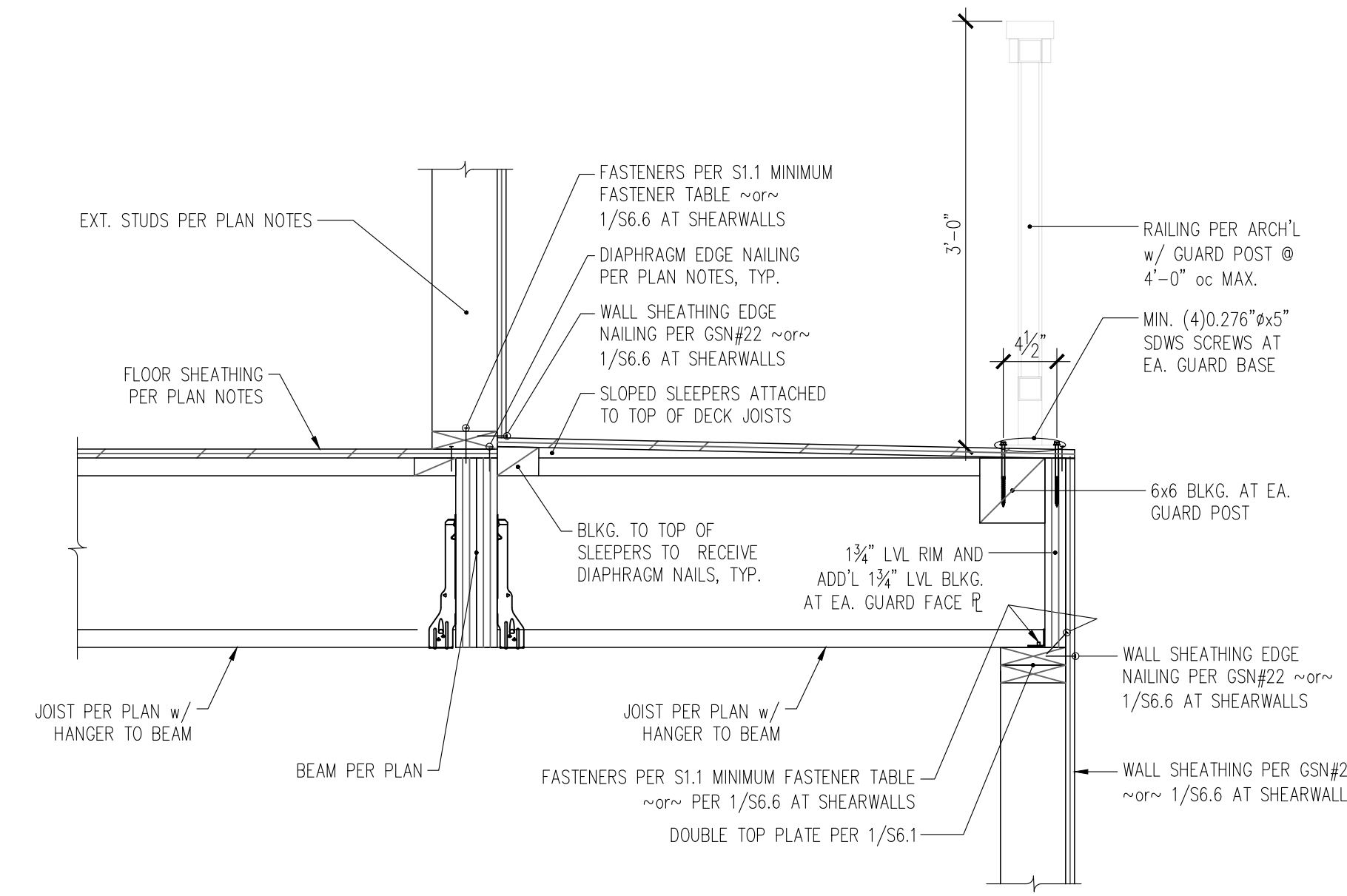
2 SECTION THROUGH ROOF BEAM AT PERPENDICULAR ROOF TRUSSES AND FLOOR JOISTS
S6.3 1" = 1'-0"



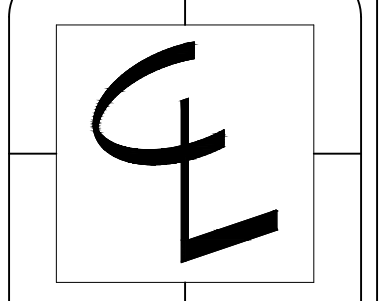
7 SECTION AT CANTILEVERED JOISTS ABOVE FOUNDATION WALL
S6.3 1" = 1'-0"



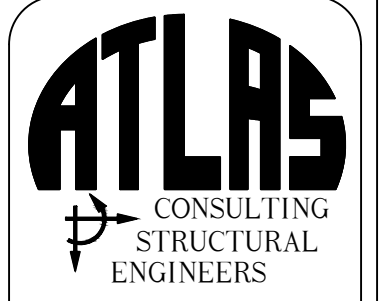
4 SECTION THROUGH PORCH AT PERPENDICULAR JOISTS
S6.3 1" = 1'-0"



1 SECTION THROUGH OFFSET EXTERIOR WALL AT PERPENDICULAR JOISTS
S6.3 1" = 1'-0"



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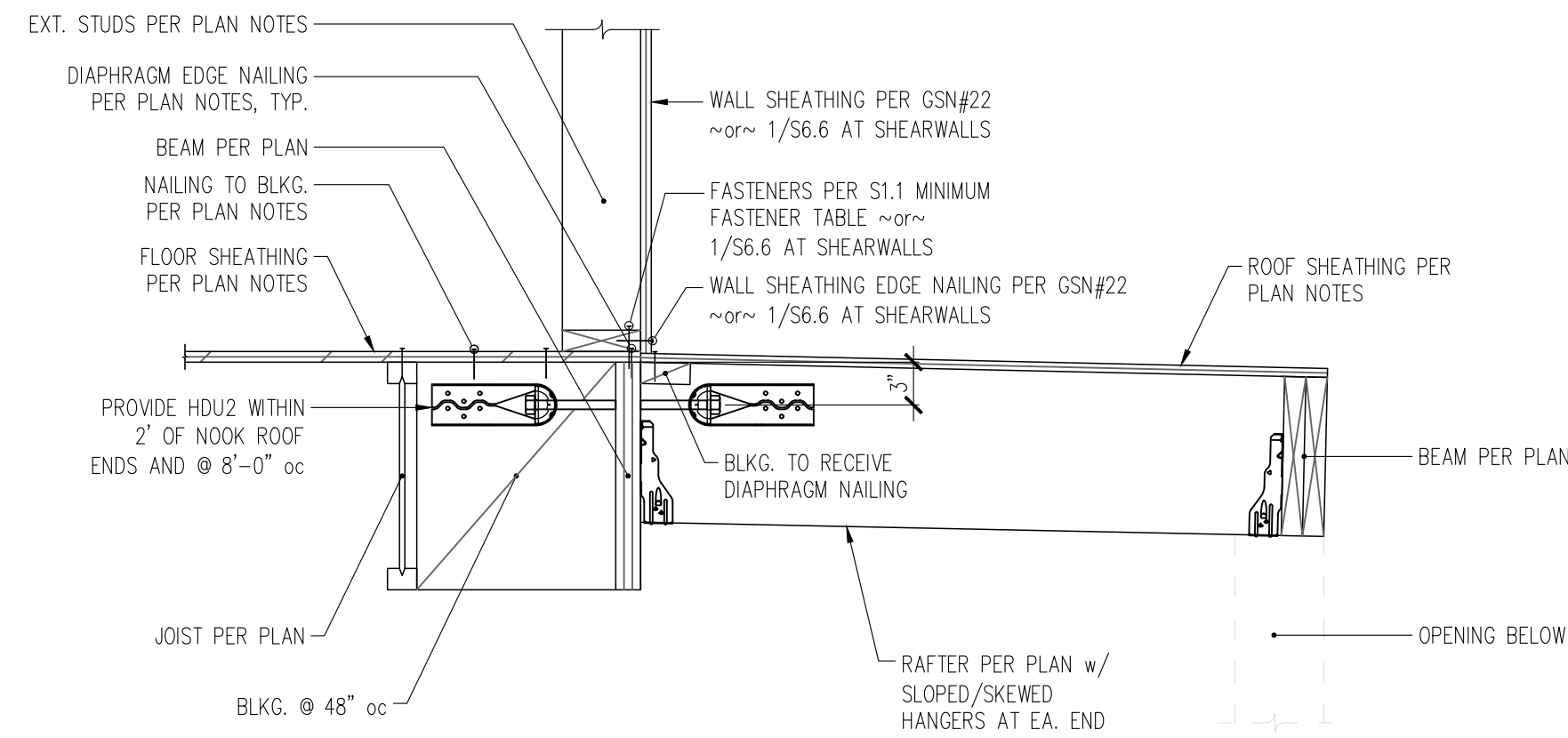


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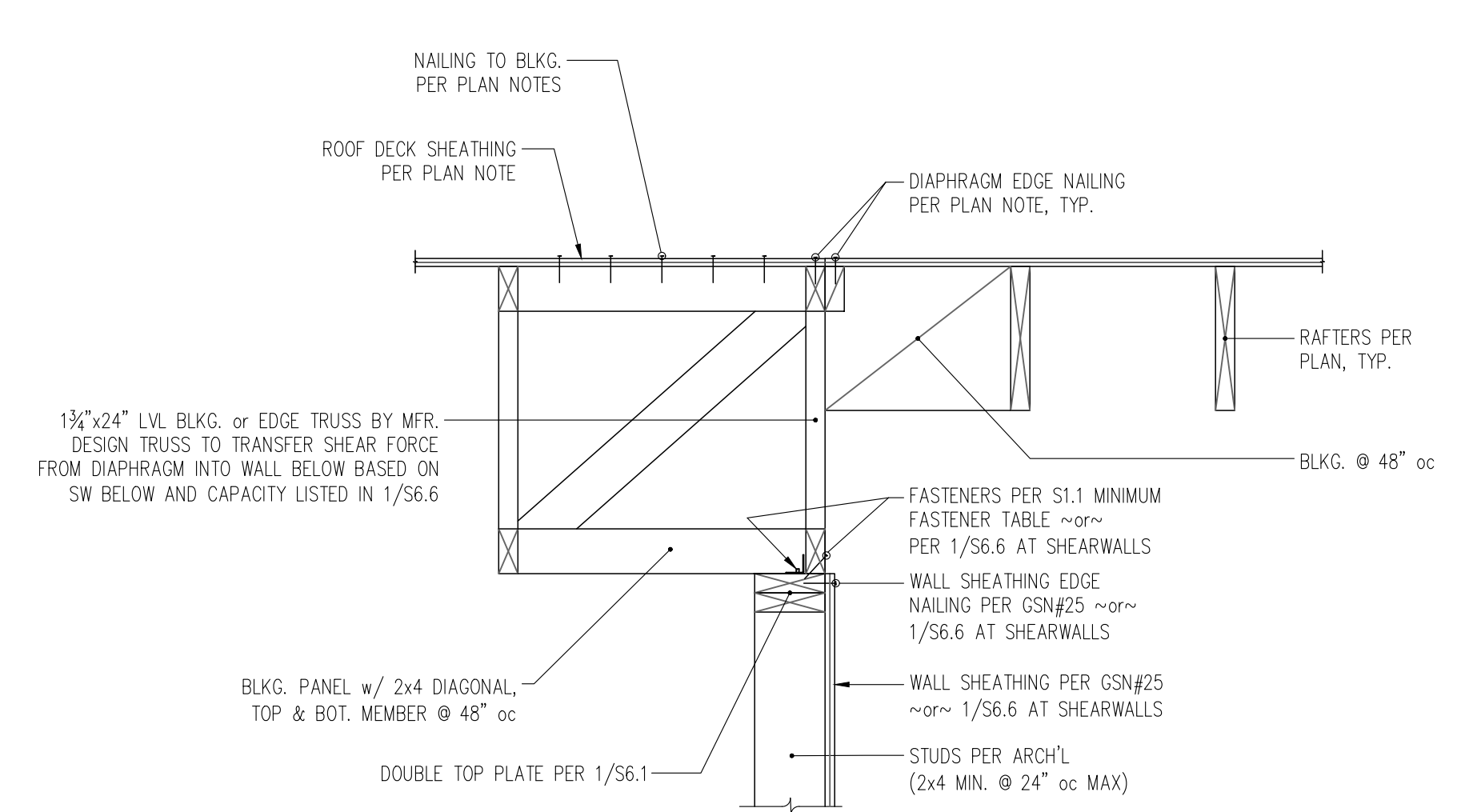
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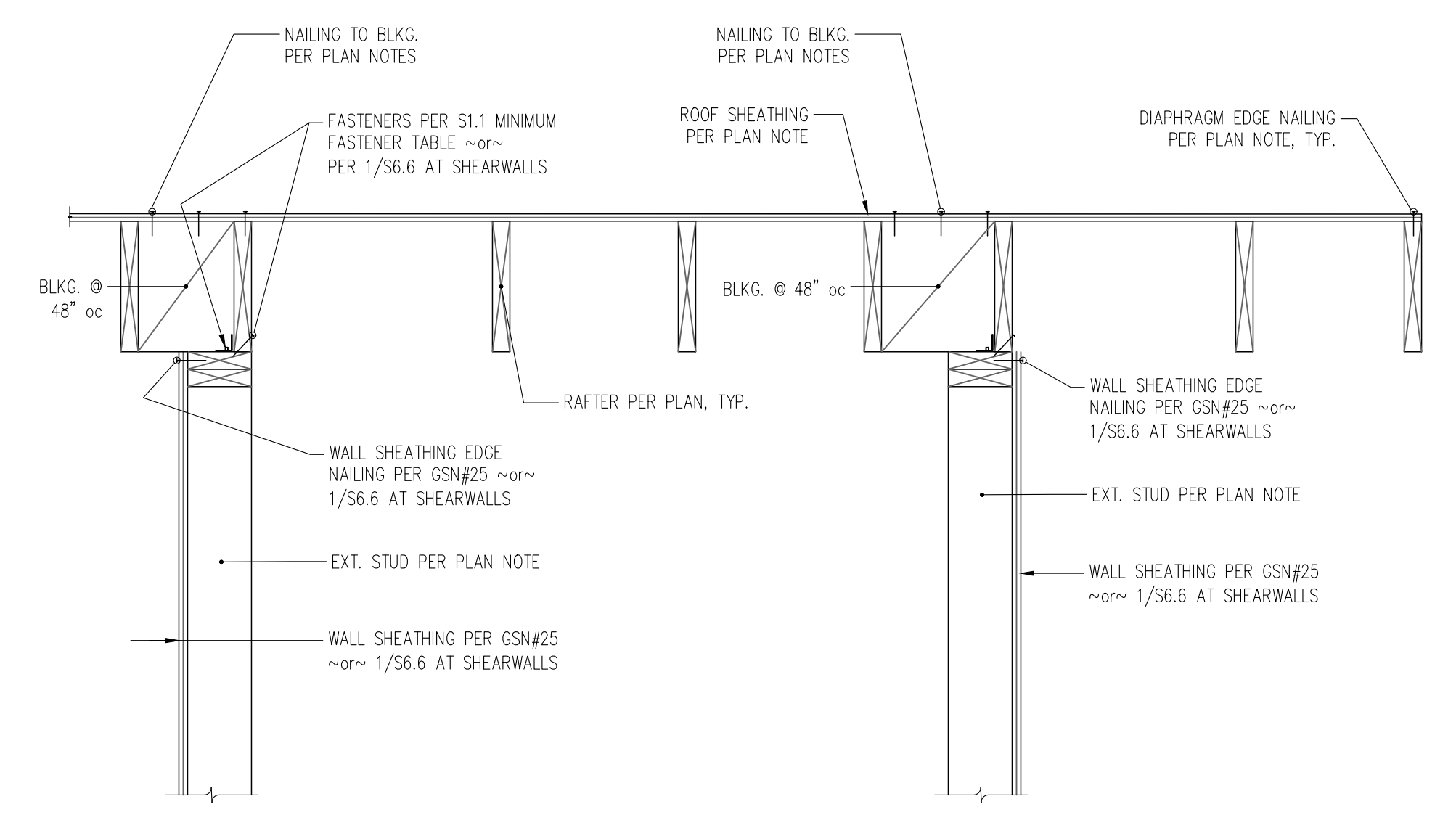
S6.3



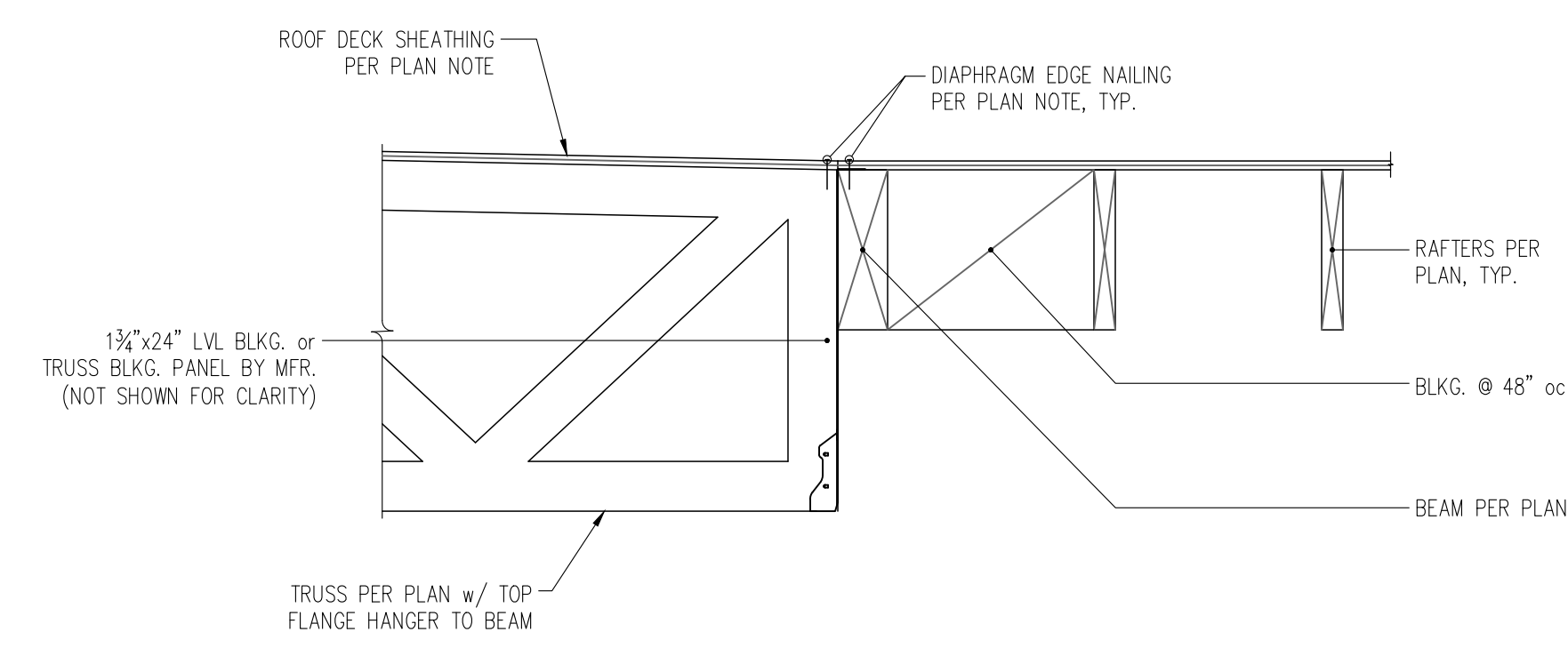
9 SECTION THROUGH NOOK ROOF
S6.4 1" = 1'-0"



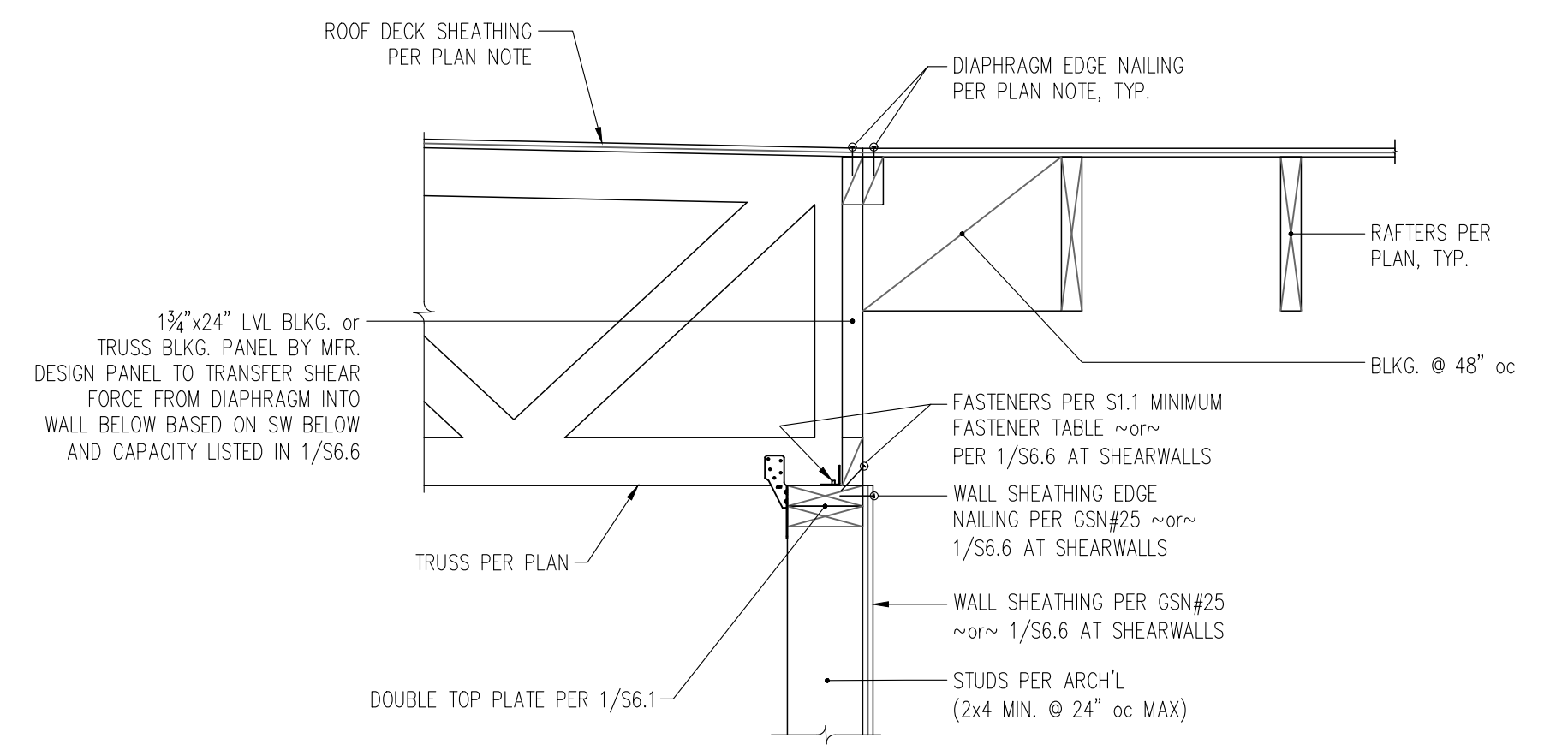
6 SECTION THROUGH INTERIOR WALL AT PARALLEL TRUSSES & PARALLEL RAFTERS
S6.4 1" = 1'-0"



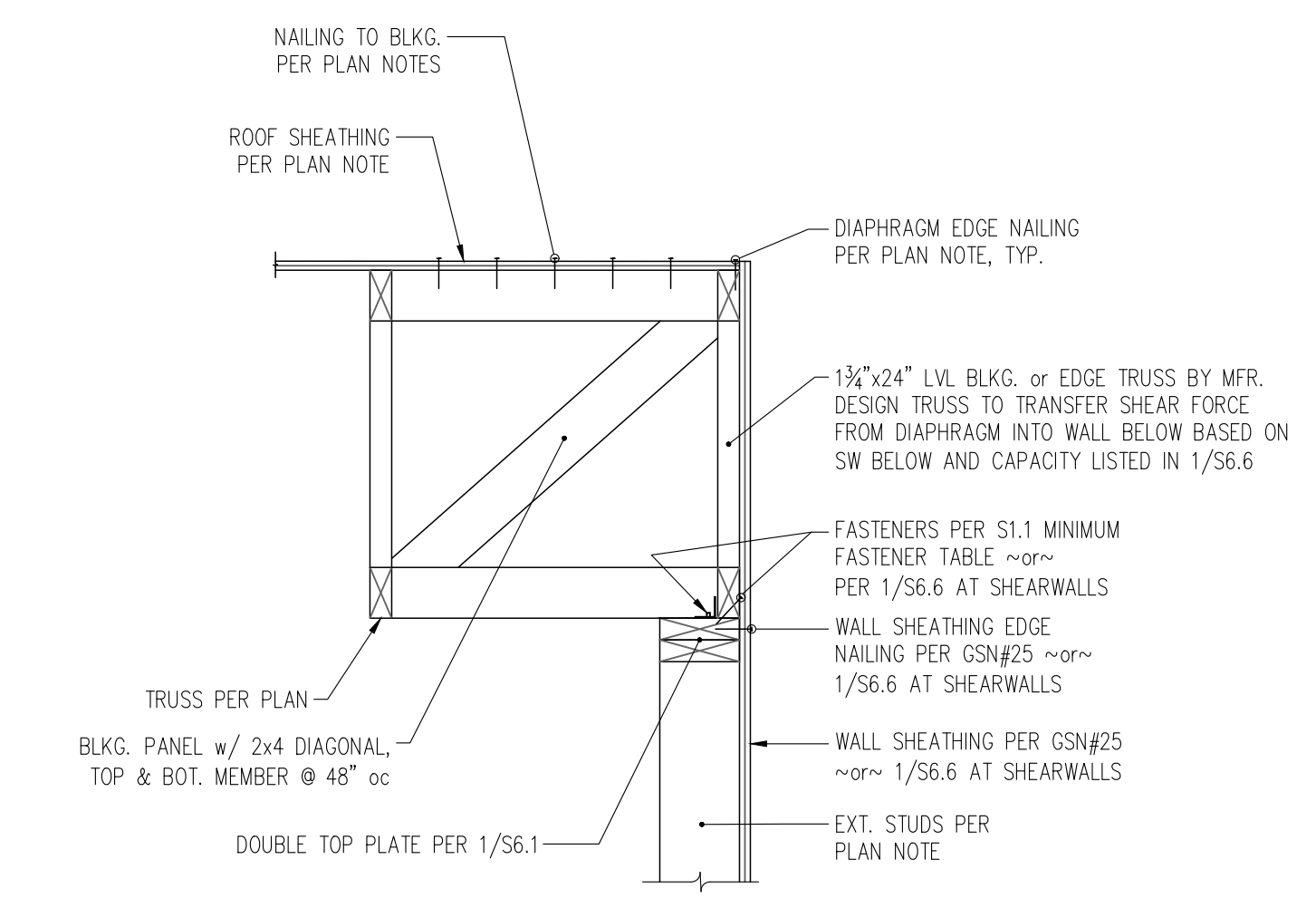
3 SECTION THROUGH DIMENSIONAL LUMBER CANTILEVERED LOW ROOF VOLUME
S6.4 1" = 1'-0"



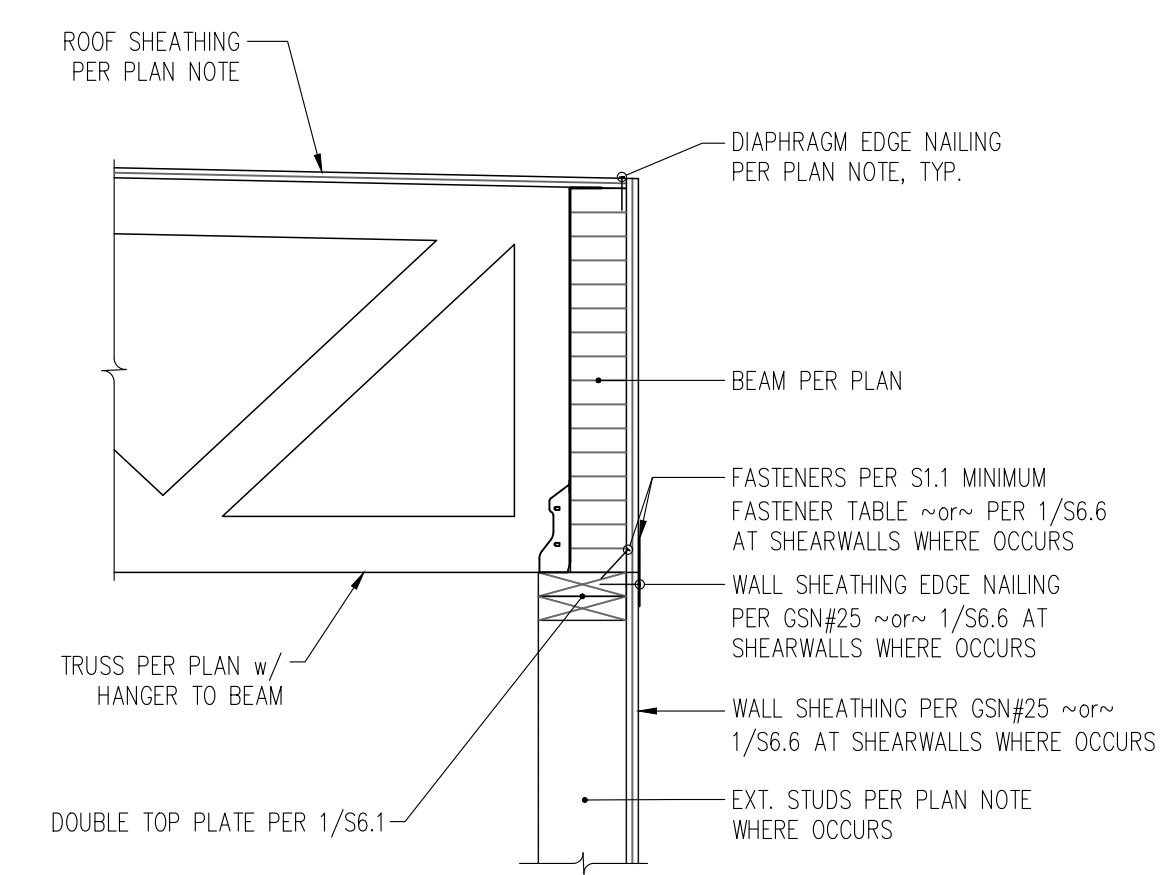
8 SECTION THROUGH INTERIOR WALL AT PERPENDICULAR TRUSSES & PARALLEL RAFTERS
S6.4 1" = 1'-0"



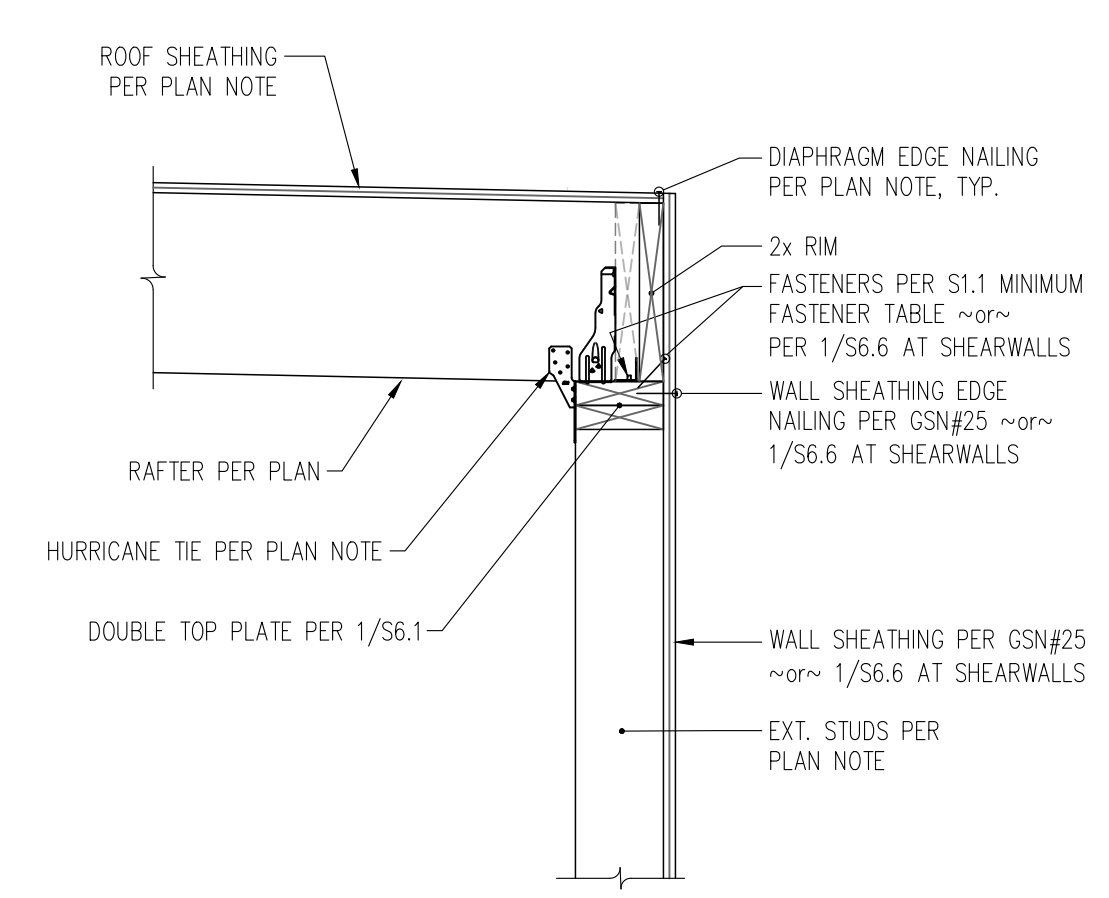
5 SECTION THROUGH INTERIOR WALL AT PERPENDICULAR TRUSSES & PARALLEL RAFTERS
S6.4 1" = 1'-0"



2 SECTION THROUGH EXTERIOR WALL AT PARALLEL TRUSSES
S6.4 1" = 1'-0"

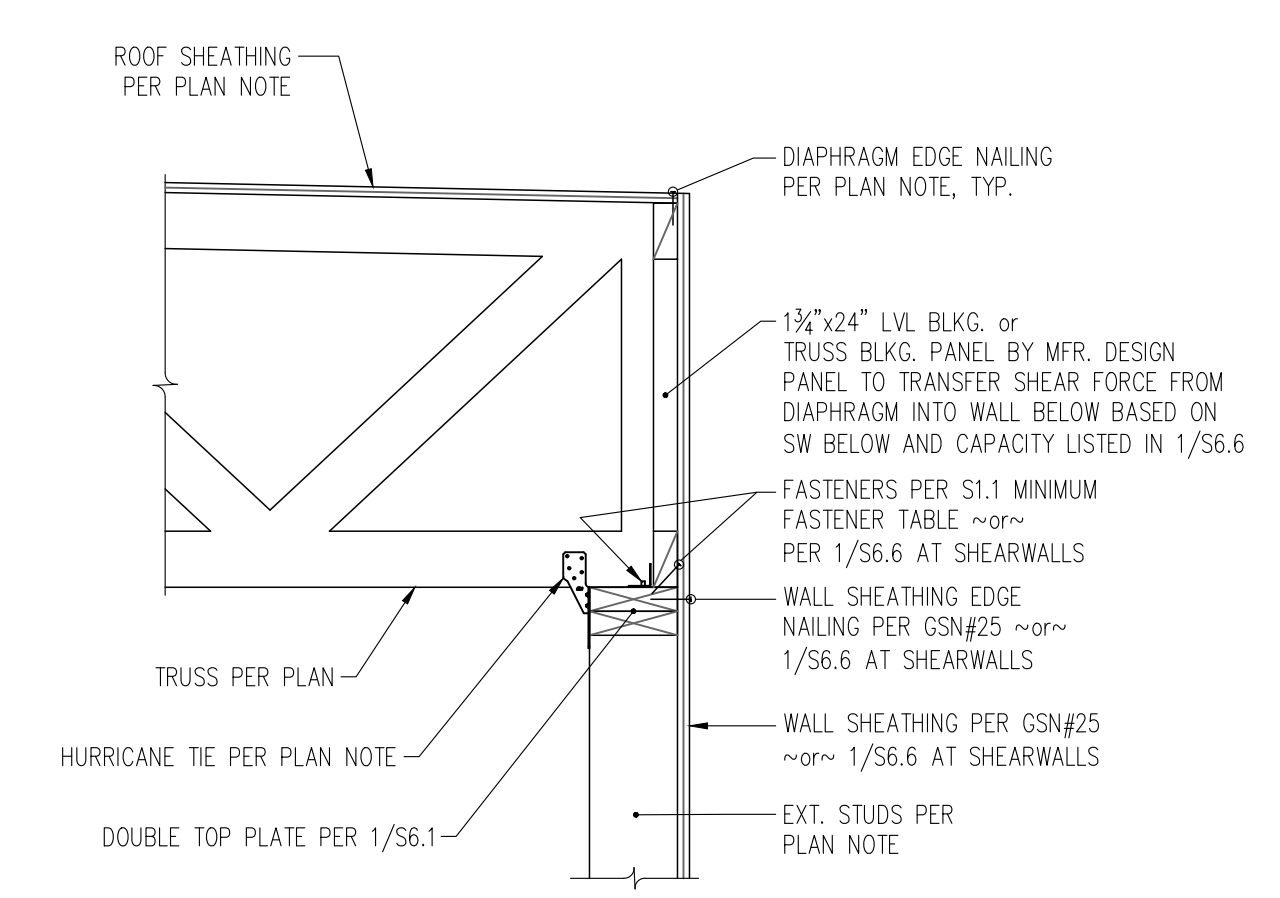


7 SECTION AT CANTILEVERED EDGE BEAM AND PERPENDICULAR ROOF TRUSSES
S6.4 1" = 1'-0"

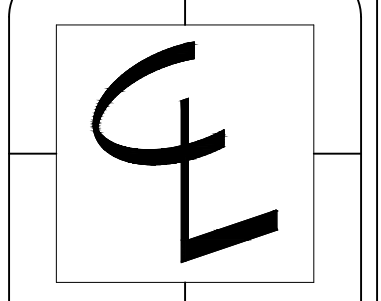


4 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR RAFTERS
S6.4 1" = 1'-0"

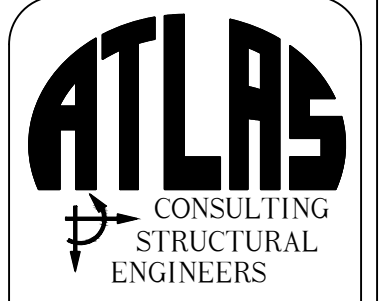
PROVIDE FLUSH BEAM PER PLAN AND SLOPED HANGERS FROM RAFTER AT OPENINGS BELOW



1 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR TRUSSES
S6.4 1" = 1'-0"



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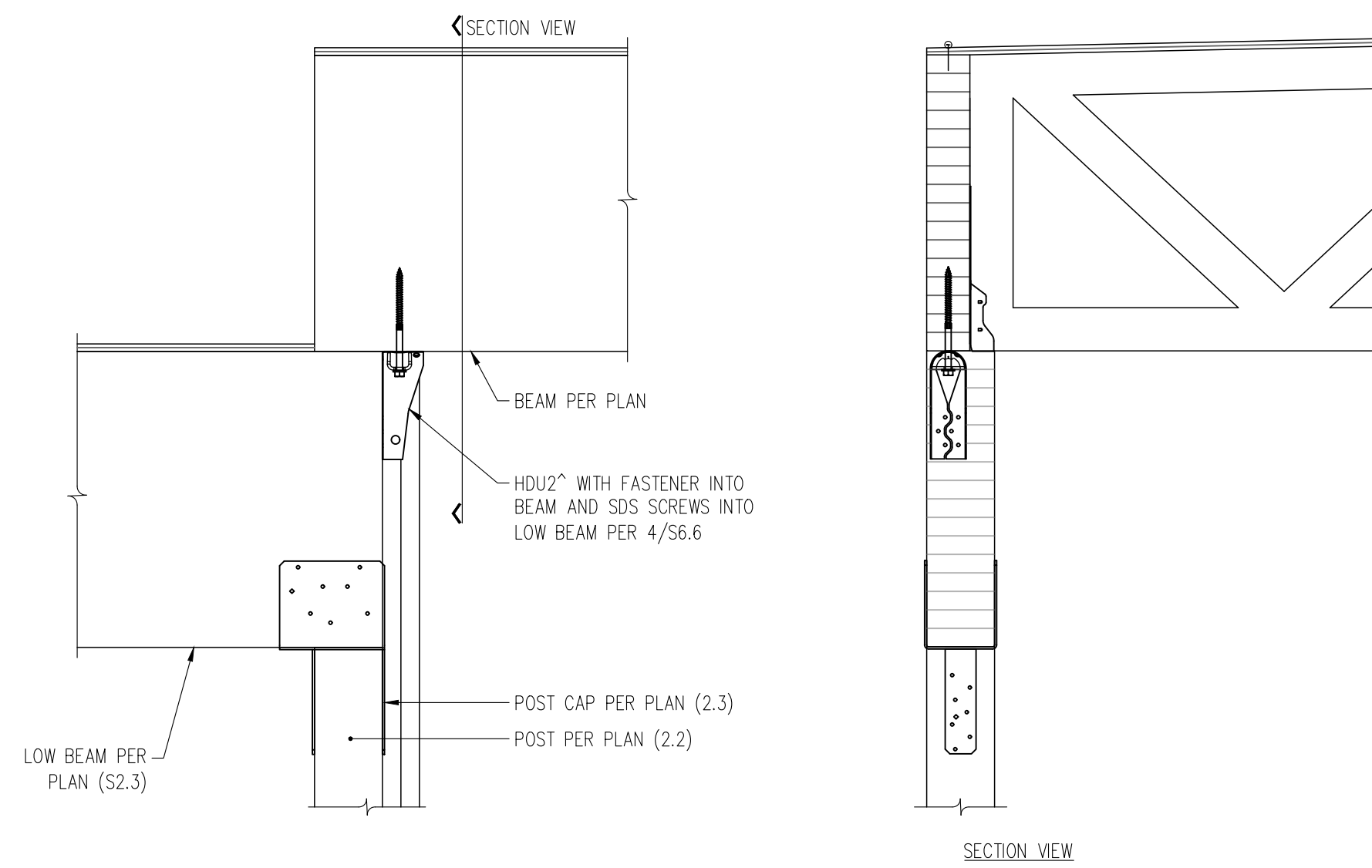


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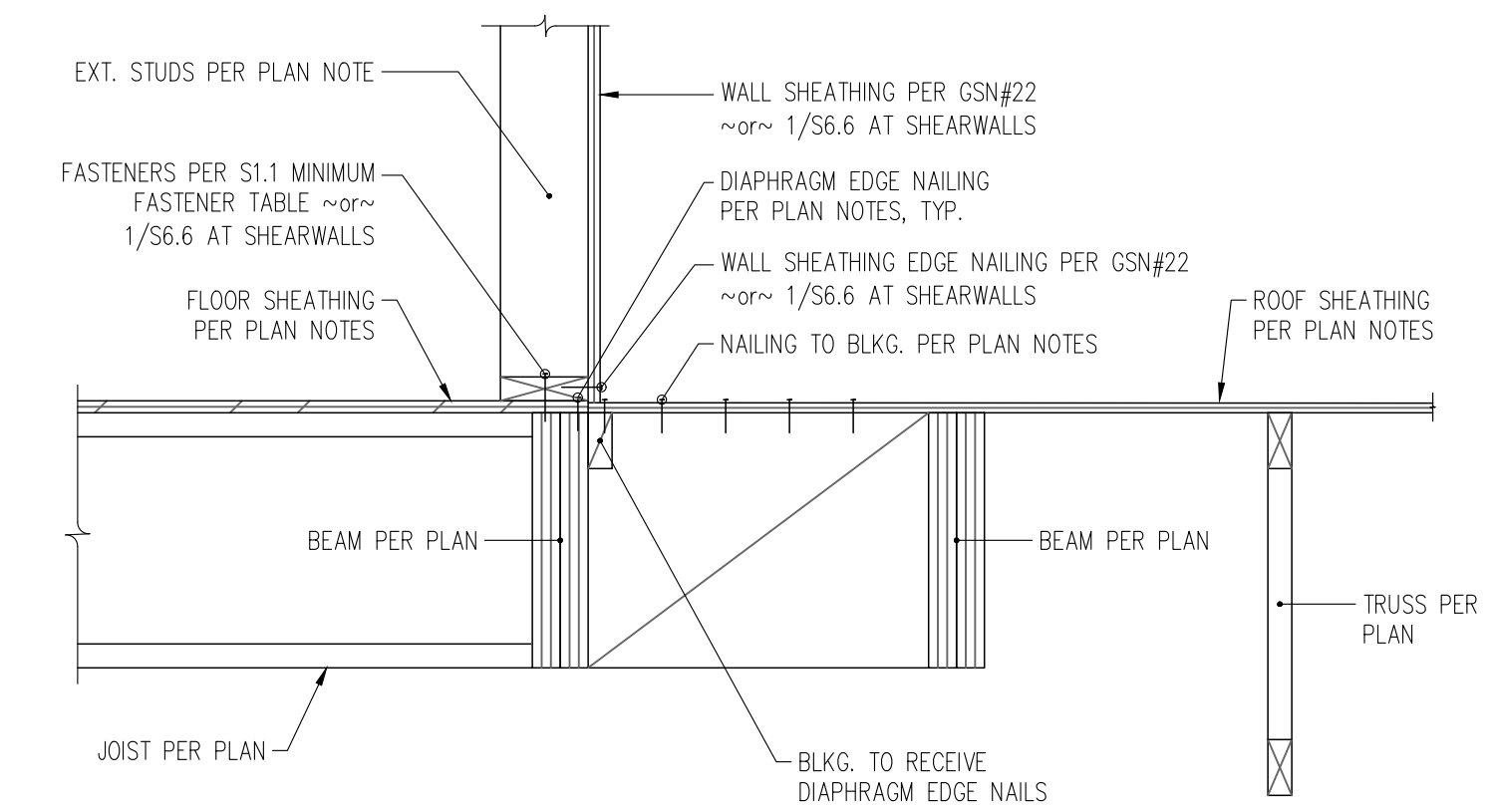
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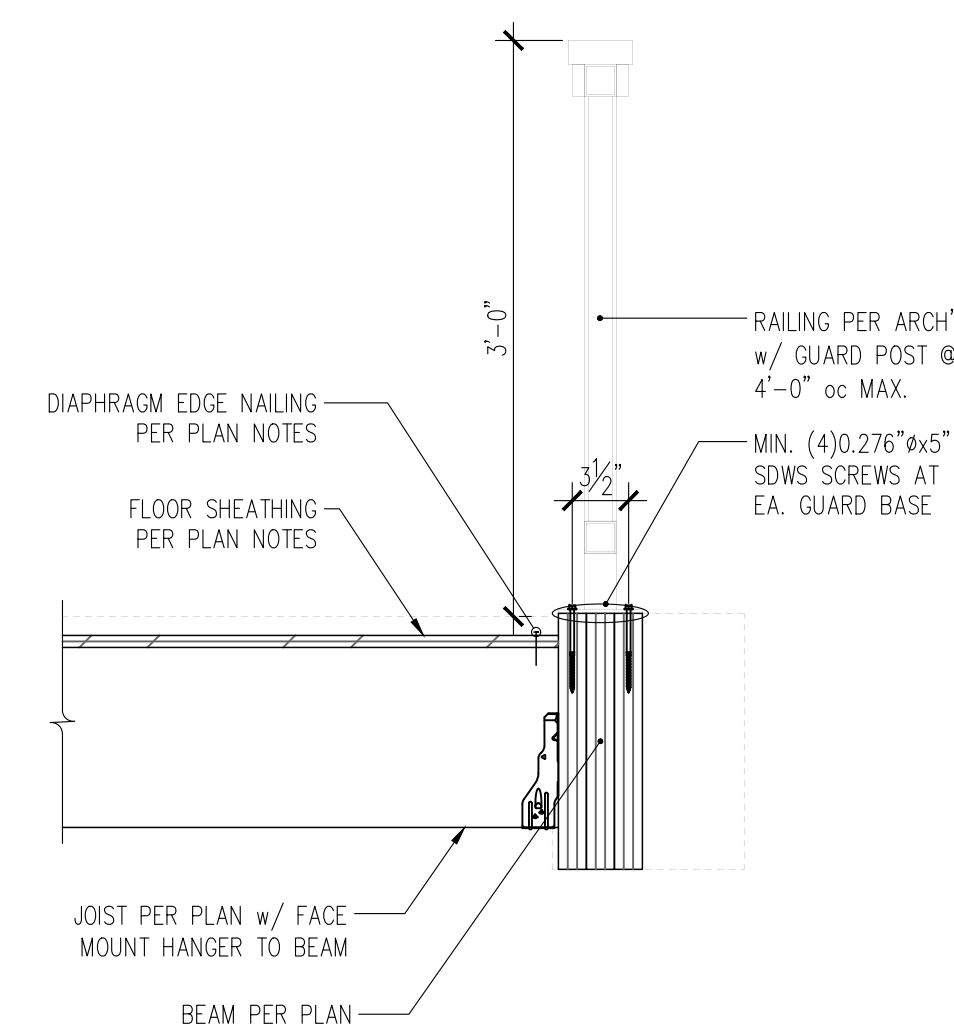
S6.4



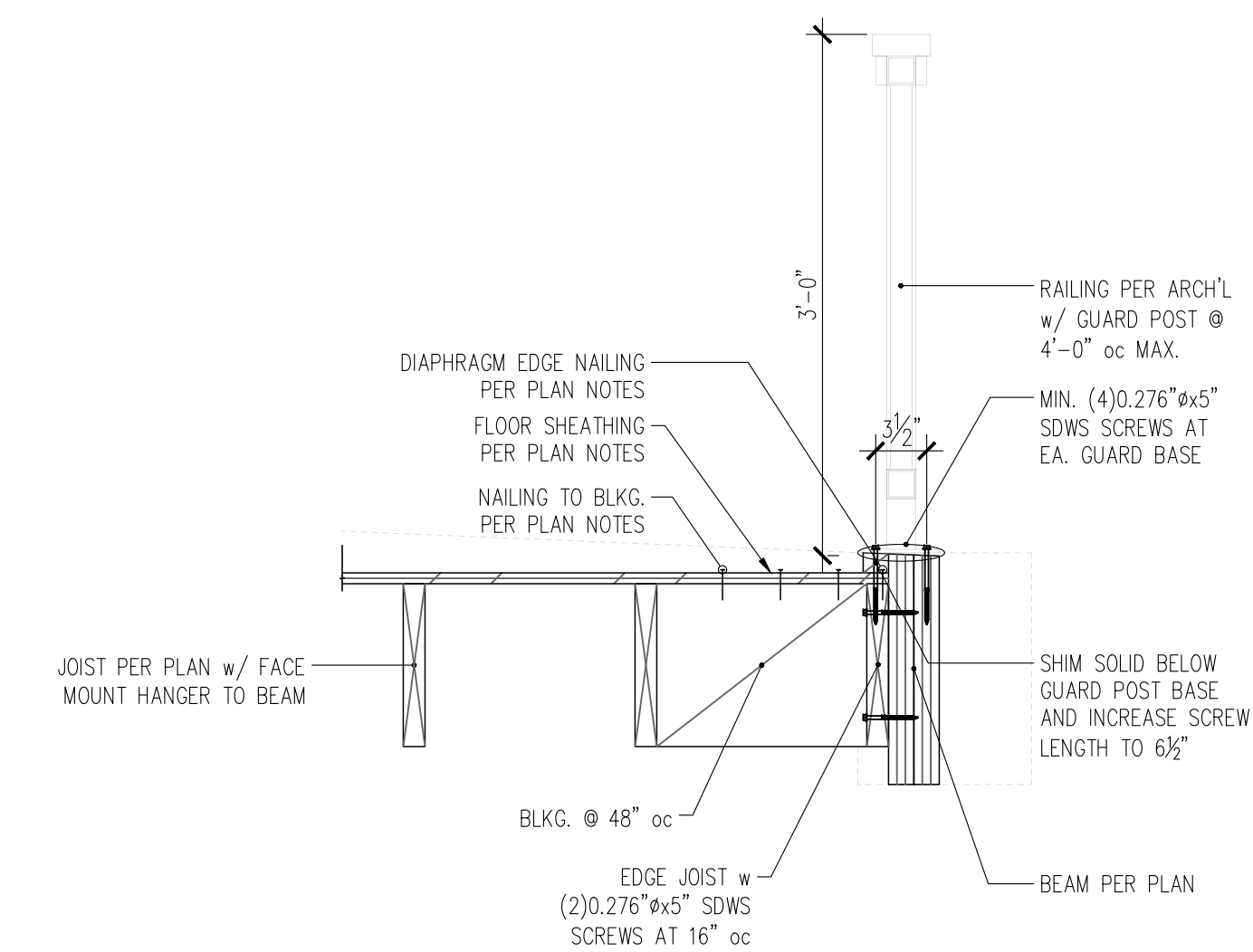
6 SECTION AT EXTERIOR WALL ABOVE BEAM, PERPENDICULAR JOISTS, AND PARALLEL ROOF TRUSSES
S6.5



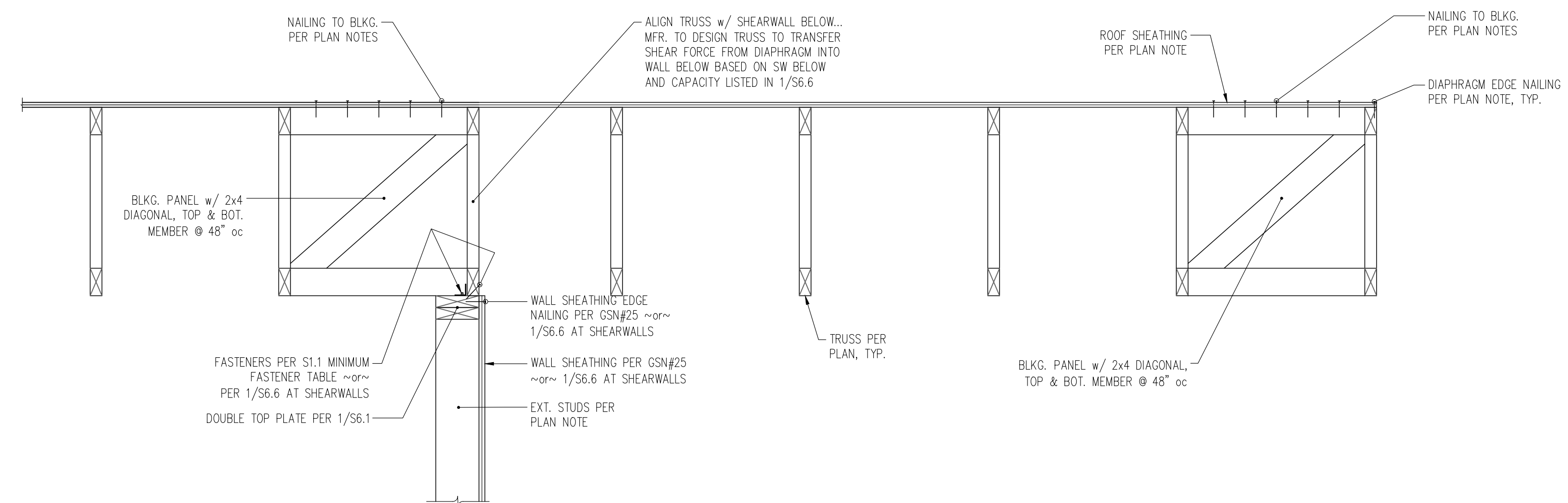
3 SECTION AT EXTERIOR WALL ABOVE BEAM, PERPENDICULAR JOISTS, AND PARALLEL ROOF TRUSSES
S6.5



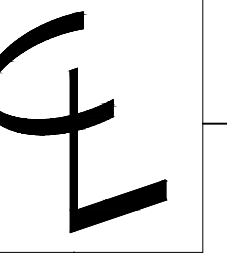
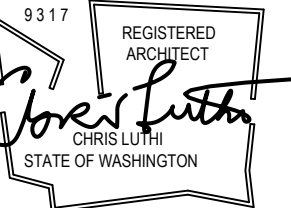
5 SECTION THROUGH EDGE OF BALCONY AT PERPENDICULAR JOISTS AND EXTERIOR WALL ABOVE
S6.5



2 SECTION AT EDGE OF BALCONY AND PARALLEL JOISTS
S6.5

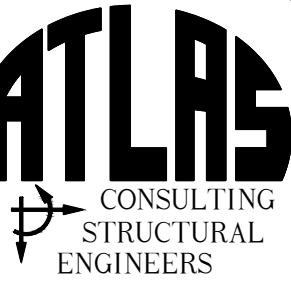


4 SECTION THROUGH TRUSS CANTILEVERED LOW ROOF VOLUME
S6.5 1" = 1'-0"



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Wood Framing Details

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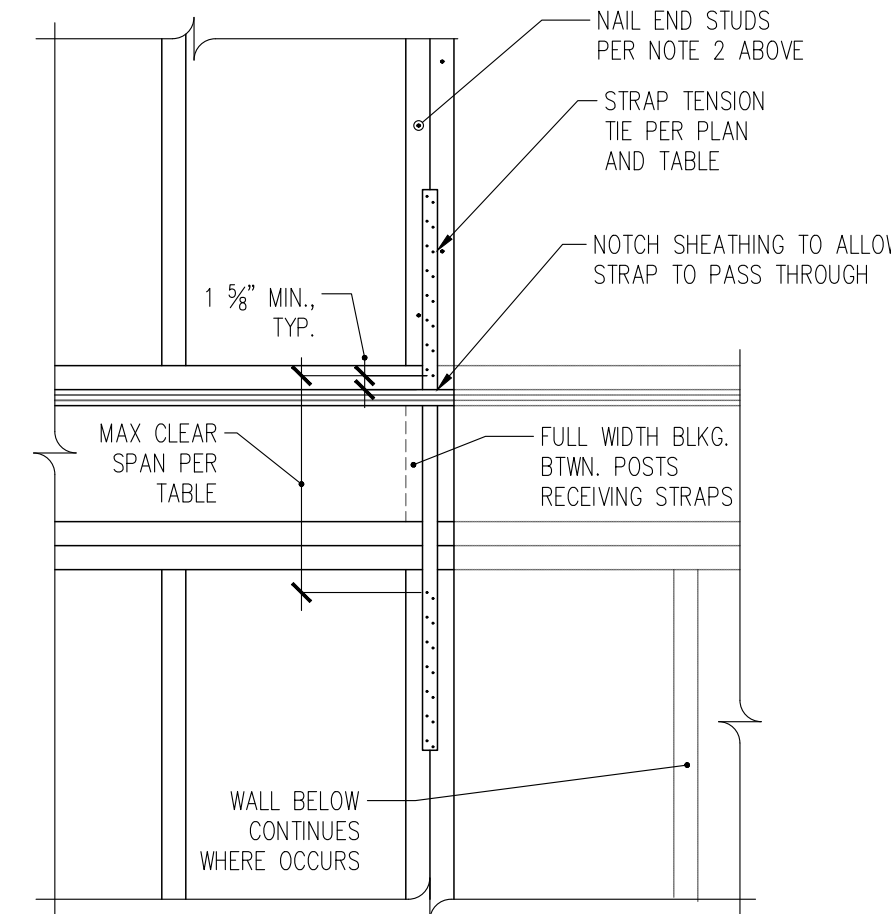
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S6.5

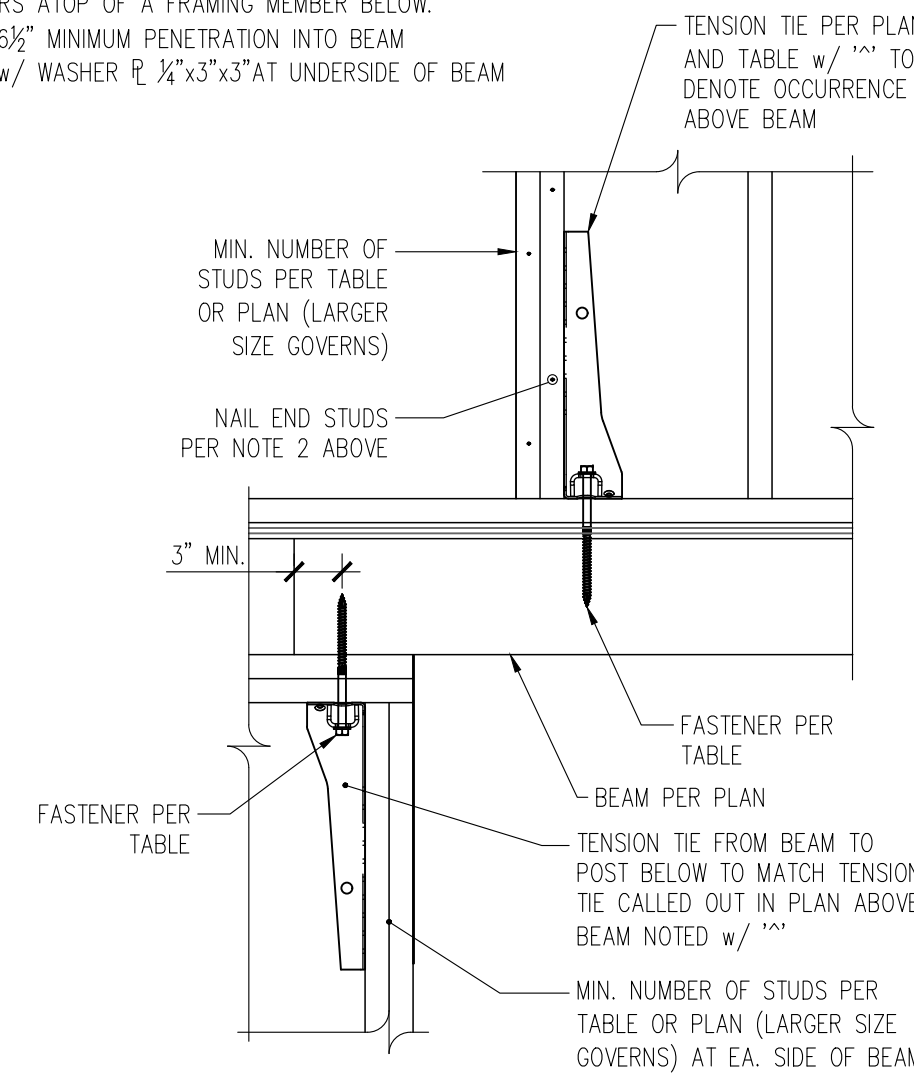
STRAP TENSION TIE SCHEDULE

TIE MARK	MIN. NUMBER OF STUDS	CLEAR SPAN - TOTAL FASTENERS	ASD CAPACITY
MSTC28	(2)2x	16" - (16)0.148" x 3/4" NAILS	1,330#
MSTC40	(2)2x	16" - (32)0.148" x 3/4" NAILS	2,655#
MSTC66	(2)2x	16" - (68)0.148" x 3/4" NAILS	5,850#
LTT19"	(2)2x	N/A - (8)0.148" x 3" NAILS	750#
HDU2"	(2)2x	N/A - (6)1/4"x2 1/2" SDS SCREWS	3,100#
HDU4"	(2)2x	N/A - (10)1/4"x2 1/2" SDS SCREWS	3,500#

- TENSION TIE TYPES REFER TO SIMPSON STRONG-TIE CATALOG CALLOUTS. NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLDOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.
- FASTENERS NOTED IN TABLE ABOVE REPRESENT THE TOTAL AMOUNT. FOR STRAPS, HALF OF THE FASTENERS SHALL BE PROVIDED INTO EACH STUD.
- ^ DENOTES TENSION TIE THAT OCCURS ATOP OF A FRAMING MEMBER BELOW.
HDU2"...3/8" LAG SCREW w/ 6 1/2" MINIMUM PENETRATION INTO BEAM
HDU4"...3/8" THREADED ROD w/ WASHER & 1/4"x3"x3" AT UNDERSIDE OF BEAM



ELEVATION VIEW - TYPICAL CONDITION

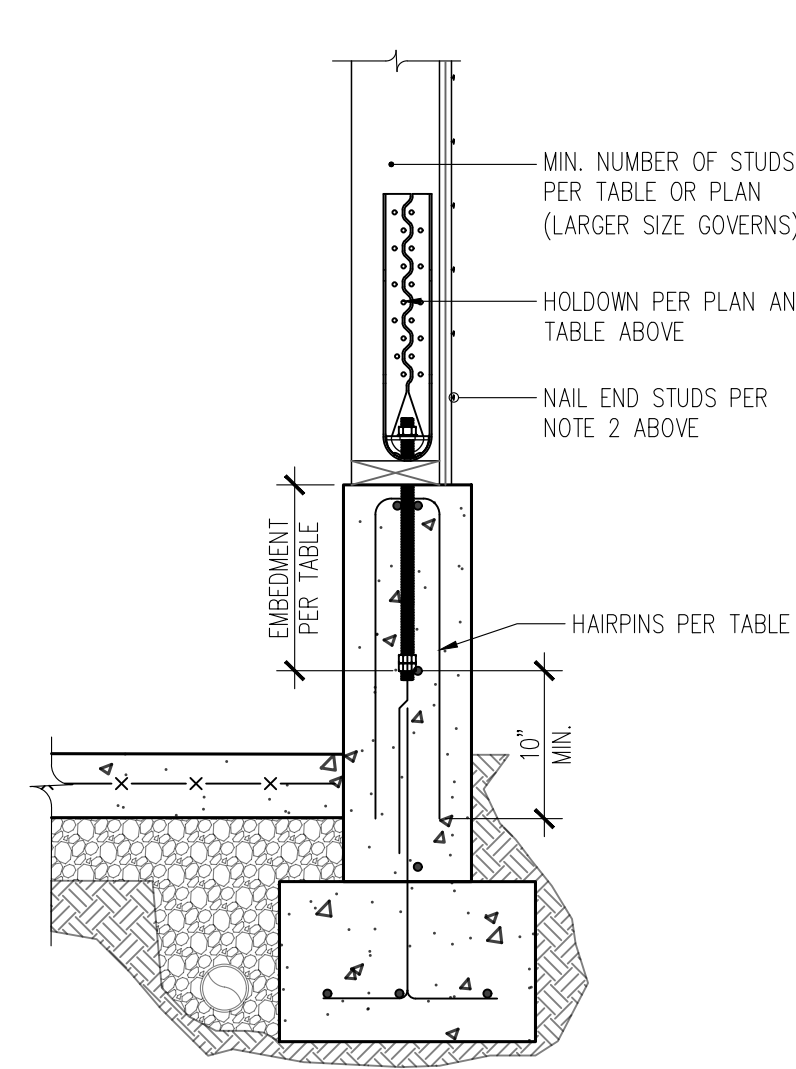


ELEVATION VIEW - TENSION TIE ABOVE BEAM

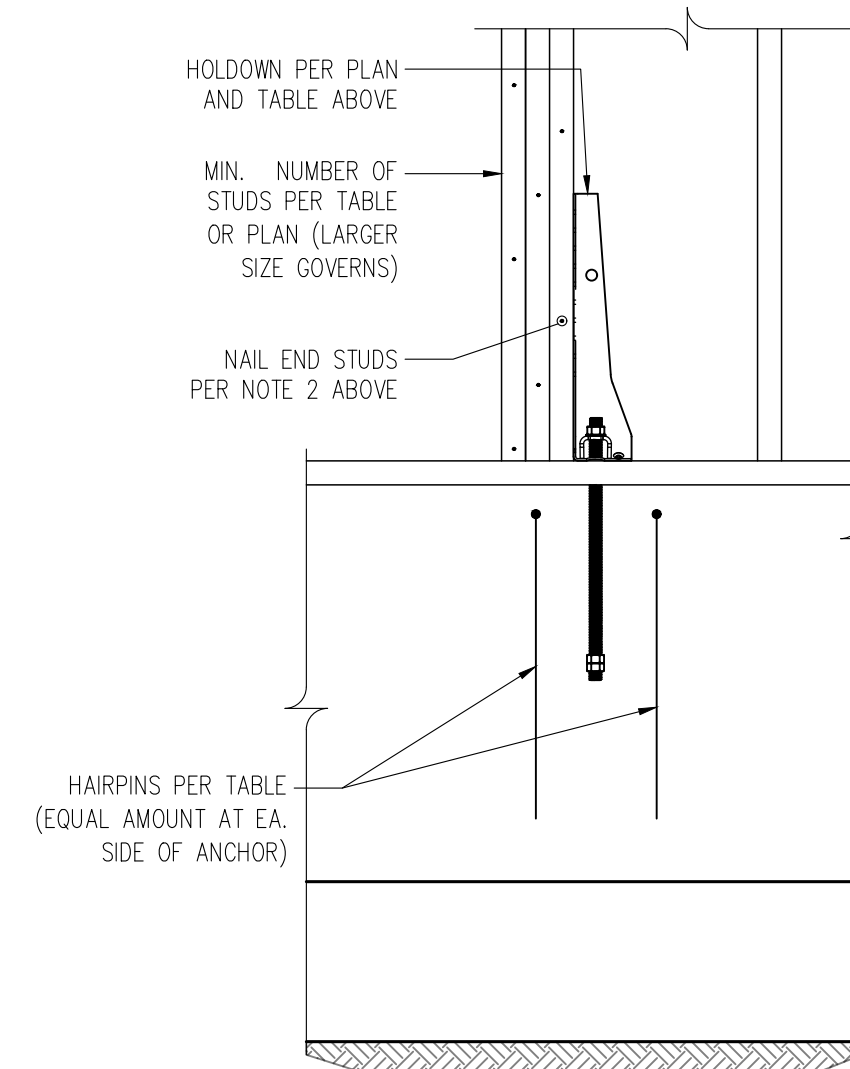
HOLDOWN TENSION TIE SCHEDULE

TIE MARK	MIN. NUMBER OF STUDS	ANCHOR (Ø x EMBEDMENT) and No. OF HAIRPIN DOWELS	FASTENERS FROM TIE TO STUD	ASD CAPACITY
HDU2	(2)2x	3/8"Ø x 20" - (2)#4 HAIRPIN	(6)1/4"Ø x 2 1/2" SDS SCREWS	3,075#
HDU4	(2)2x	3/8"Ø x 20" - (2)#4 HAIRPIN	(10)1/4"Ø x 2 1/2" SDS SCREWS	4,565#
HDU5	(3)2x	3/8"Ø x 20" - (2)#4 HAIRPIN	(14)1/4"Ø x 2 1/2" SDS SCREWS	5,645#
HDU8	(4)2x	3/8"Ø x 20" - (4)#4 HAIRPIN	(20)1/4"Ø x 2 1/2" SDS SCREWS	7,870#
HDU19	6x6	1 1/2"Ø x 20" - (4)#4 HAIRPIN	(5)1"Ø BOLTS	19,070#

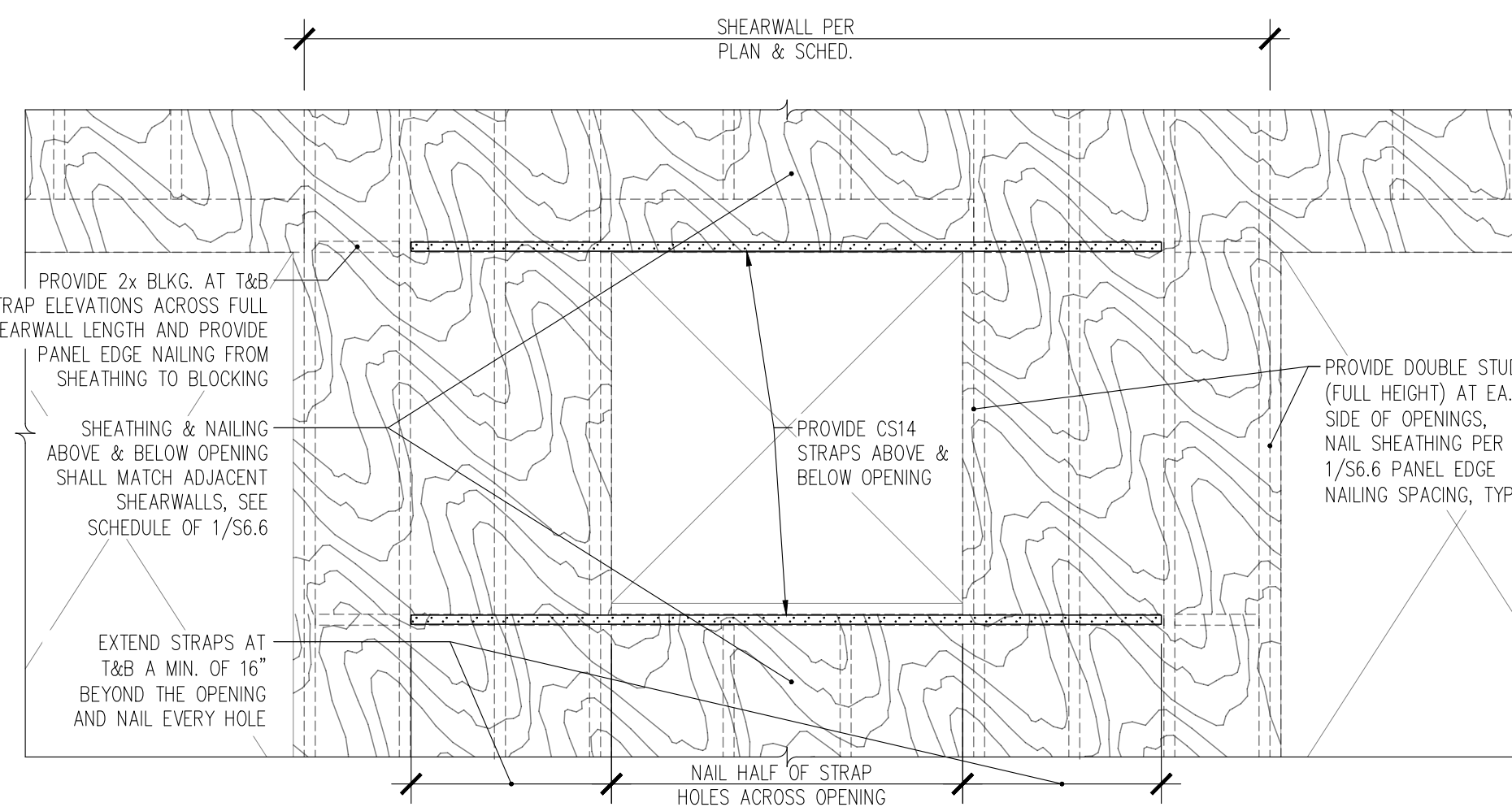
- TENSION TIE TYPES REFER TO SIMPSON STRONG-TIE CATALOG CALLOUTS.
- NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLDOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.
- ANCHORS SHALL BE HEAVY HEX HEAD WITH DOUBLE NUT CAST INTO CONCRETE.
ASTM F 1554 Gr. 36 FOR 3/8"Ø ANCHOR
ASTM F 1554 Gr. 55 FOR 1"Ø ANCHOR



SECTION VIEW



ELEVATION VIEW

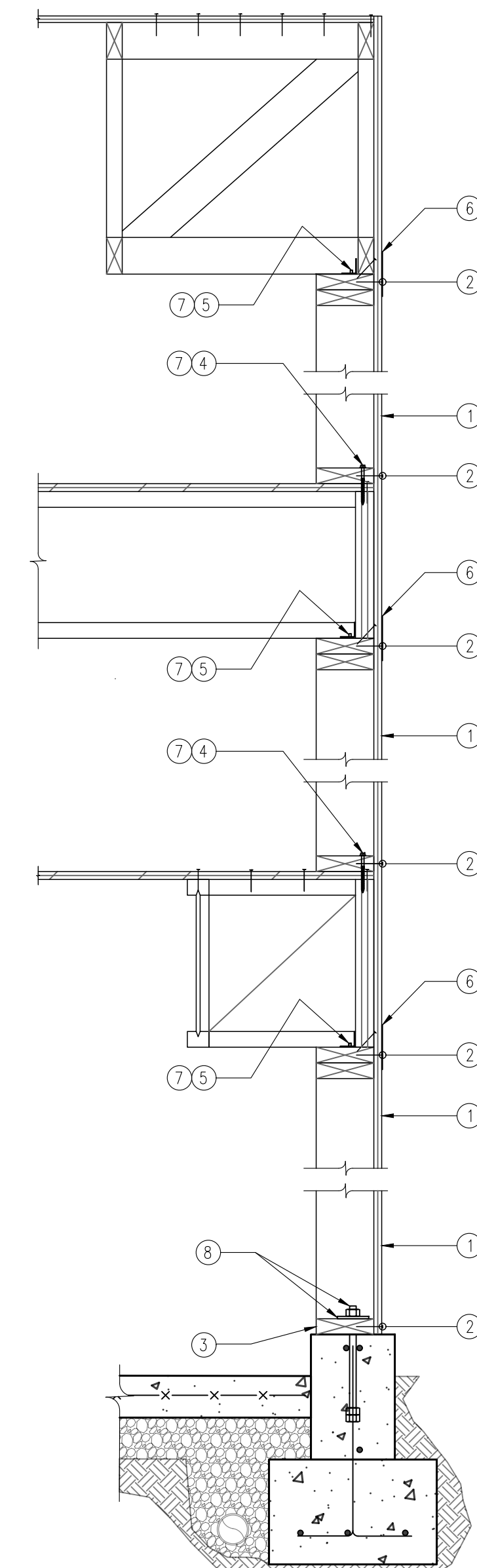


7 STRAPPED SHEARWALL DETAIL
S6.6 N.T.S.

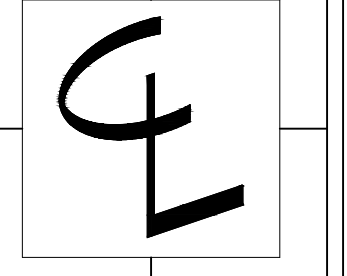
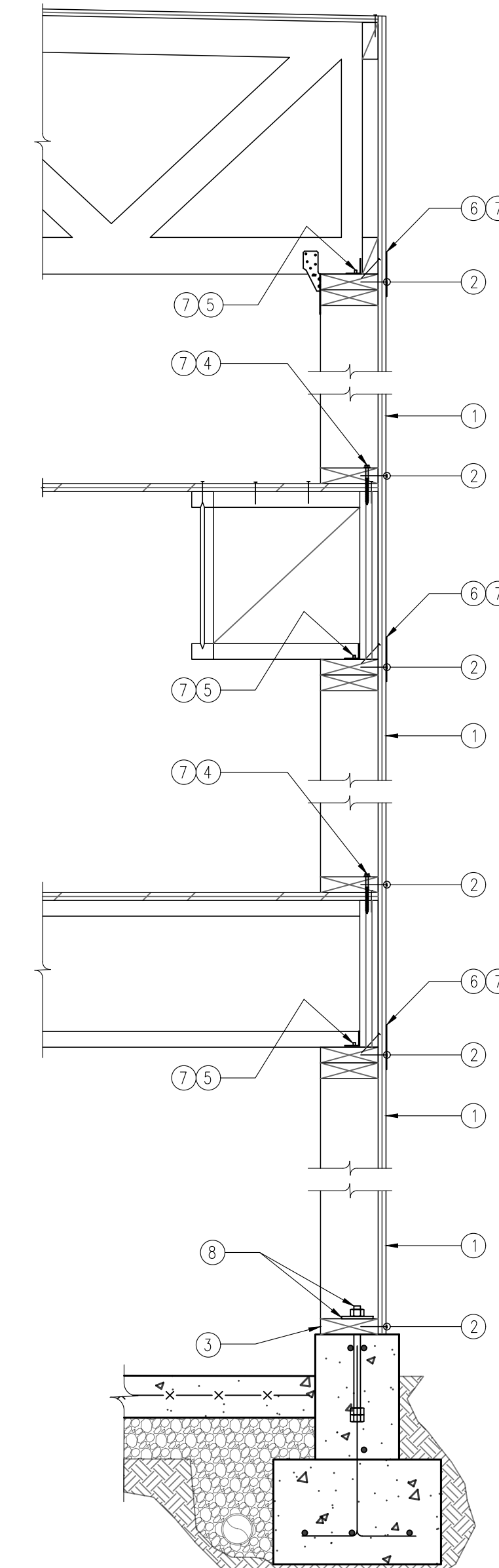
4 HOLDOWN DETAIL AND SCHEDULE
S6.6 1" = 1'-0"

SHEARWALL PANEL TYPE	① SHEATHING THICKNESS	② 0.148" x 2 1/2" (10#) PANEL NAILING	③ STUD/BLKG. AT ABUTTING PANEL EDGES & SILL PLATE THICKNESS	④ CONN. OF BLKG. OR FRAMING TO TOP PLATE; AND SOLE PLATE TO SILL FLOOR			⑤ ANCHOR BOLTS TO CONC.		⑥ ASD CAPACITY, PLF
				④ 1/2"Ø x 3 1/2" SDS SCREWS	⑤ A35 CLIPS	⑥ LTP4 PLATES	5/8"Ø	3/4"Ø	
SW-6	1/2"	6" oc	2x	15" oc	25" oc	24" oc	48" oc	48" oc	310
SW-4	1/2"	4" oc	3x	10" oc	16" oc	16" oc	38" oc	48" oc	460
SW-3	1/2"	3" oc	3x	8" oc	13" oc	12" oc	29" oc	40" oc	600
SW-2	1/2"	2" oc	3x	6" oc	10" oc	9" oc	23" oc	31" oc	770
SW-33	1/2"	3" oc EA. SIDE	3x	4" oc	6" oc	6" oc	14" oc	20" oc	1200

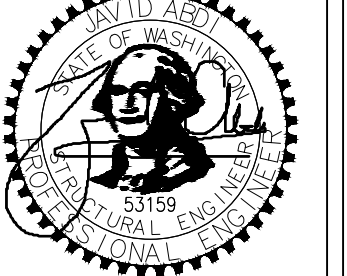
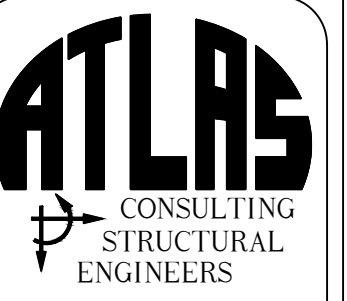
- SHEATHING SHALL CONSIST OF 1/2" PLYWOOD AND HAVE A MINIMUM SPAN RATING OF 2#
- PANEL NAILING APPLIES TO ALL SHEATHING PANEL EDGES. IF RE-USING EXISTING SHEATHING PER NOTE 1 ABOVE, PROVIDE ADDITIONAL FASTENERS AS REQUIRED TO MEET SPACING REQUIREMENTS. INSTALL BLOCKING AT ALL UNFRAMED PANEL EDGES. ENSURE SHEATHING IS NAILED TO EXISTING INTERMEDIATE FRAMING WITH PANEL NAILS AT 12" oc.
- DOUBLE 2x MEMBERS MAY BE SUBSTITUTED FOR 3x MEMBERS AT WALLS WITH ONLY ONE LAYER OF SHEATHING. 2x MEMBERS SHALL BE NAILED TOGETHER WITH 10d FACE: Ø 5 1/2" oc FOR SW-6, Ø 3 1/2" oc FOR SW-4, (2) Ø 5" oc FOR SW-3, (2) Ø 4" oc FOR SW-2, AND (2) Ø 2 1/2" oc FOR SW-2 (148#/NAIL)
- ROWS OF NAILS AND SDS SCREWS SHALL BE OFFSET AT LEAST 1/2" AND STAGGERED. MINIMUM EDGE DISTANCE FOR NAILS AND SDS SCREWS INTO EDGE OF MEMBERS SHALL BE 3/8" (400#/SCREW)
- A35 CLIPS SHALL BE INSTALLED w/ (12)0.131 x 1 1/2" NAILS (650#/CLIP)
- LTP4 LATERAL TIE PLATES MAY BE INSTALLED OVER SHEATHING w/ (12)0.131 x 2 1/2" NAILS (625#/CLIP)
- CONTRACTOR SHALL USE A35 or LTP4 CLIPS TO CONNECT ROOF TO DOUBLE TOP PLATE AND SDS SCREWS or LTP4 CLIPS TO CONNECT SOLE PLATE TO RM BOARD AT MAIN FLOOR. EXTEND SHEATHING TO BOTTOM OF SOLE PLATE AT MAIN FLOOR FOUNDATION WALL AND PROVIDE EDGE FASTENING AS NOTED IN TABLE.
- PLATE WASHERS IN 2x4 STUD WALLS AND ALL SINGLE SIDED SHEAR WALLS SHALL BE 3"x3"x0.229". DOUBLE SIDED 2x6 SHEAR WALLS SHALL HAVE 4 1/2"x3"x0.229" PLATE WASHERS. THE EDGE OF PLATE WASHERS SHALL BE LOCATED WITHIN 1/2" OF THE EDGE OF BOTTOM PLATE ON THE SIDE WITH SHEATHING.
- CAST ANCHORS A MINIMUM OF 7" INTO CONCRETE. INSTALL ADDITIONAL ANCHOR BOLTS AT EACH SIDE OF PLATE BREAKS AND PENETRATIONS EXCEEDING THE "NO REINFORCING" HOLE SIZE PER 2/S6.1.



1 SHEARWALL SECTION AND SCHEDULE
S6.6 1" = 1'-0"



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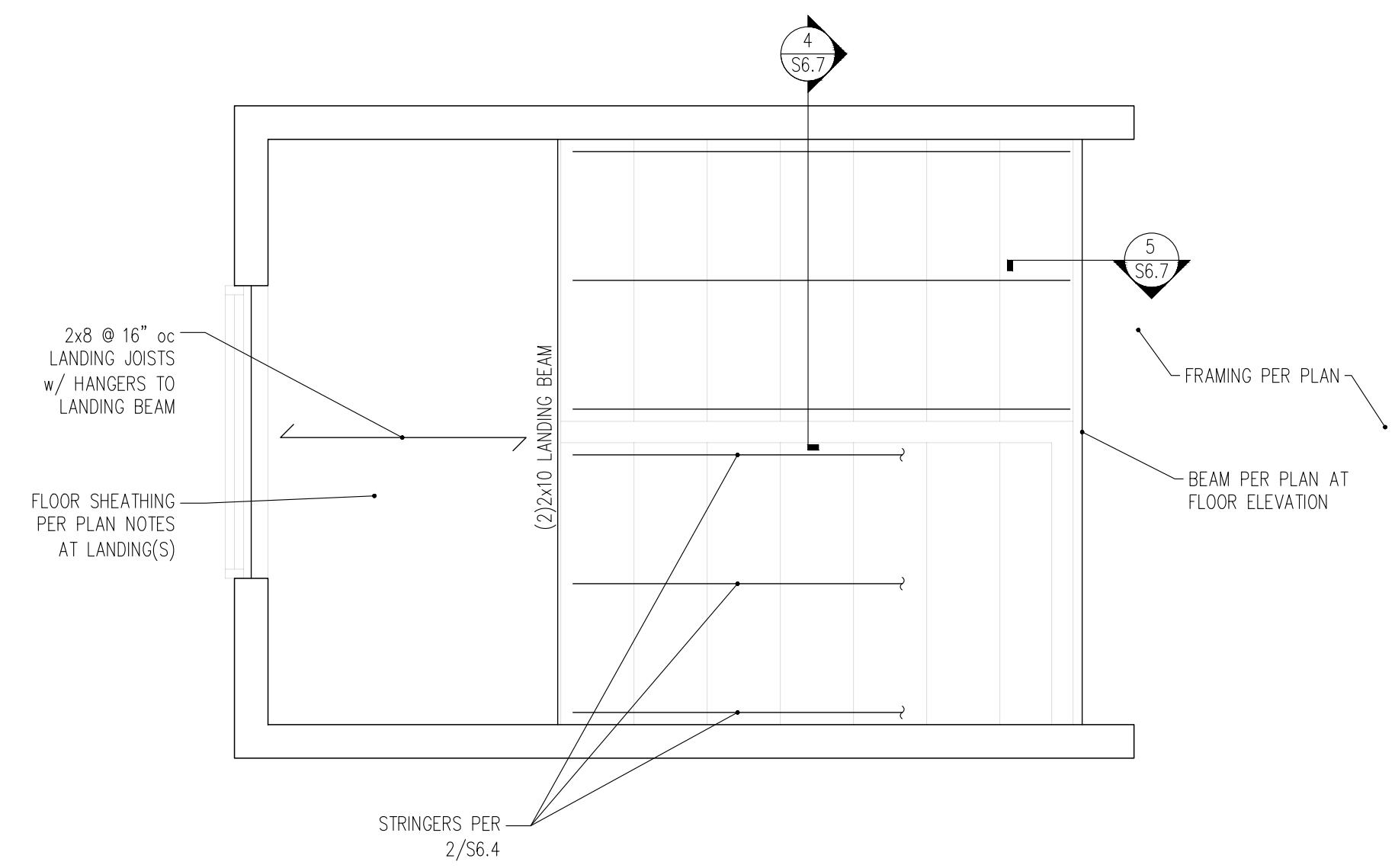
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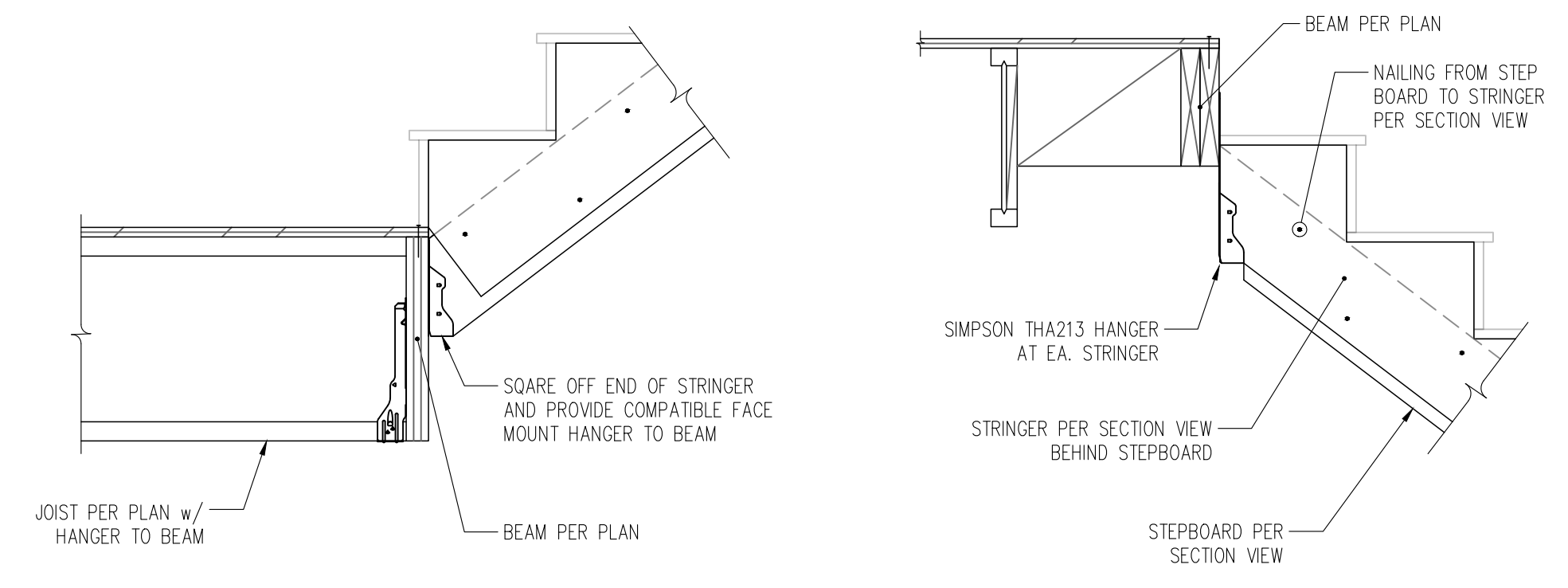
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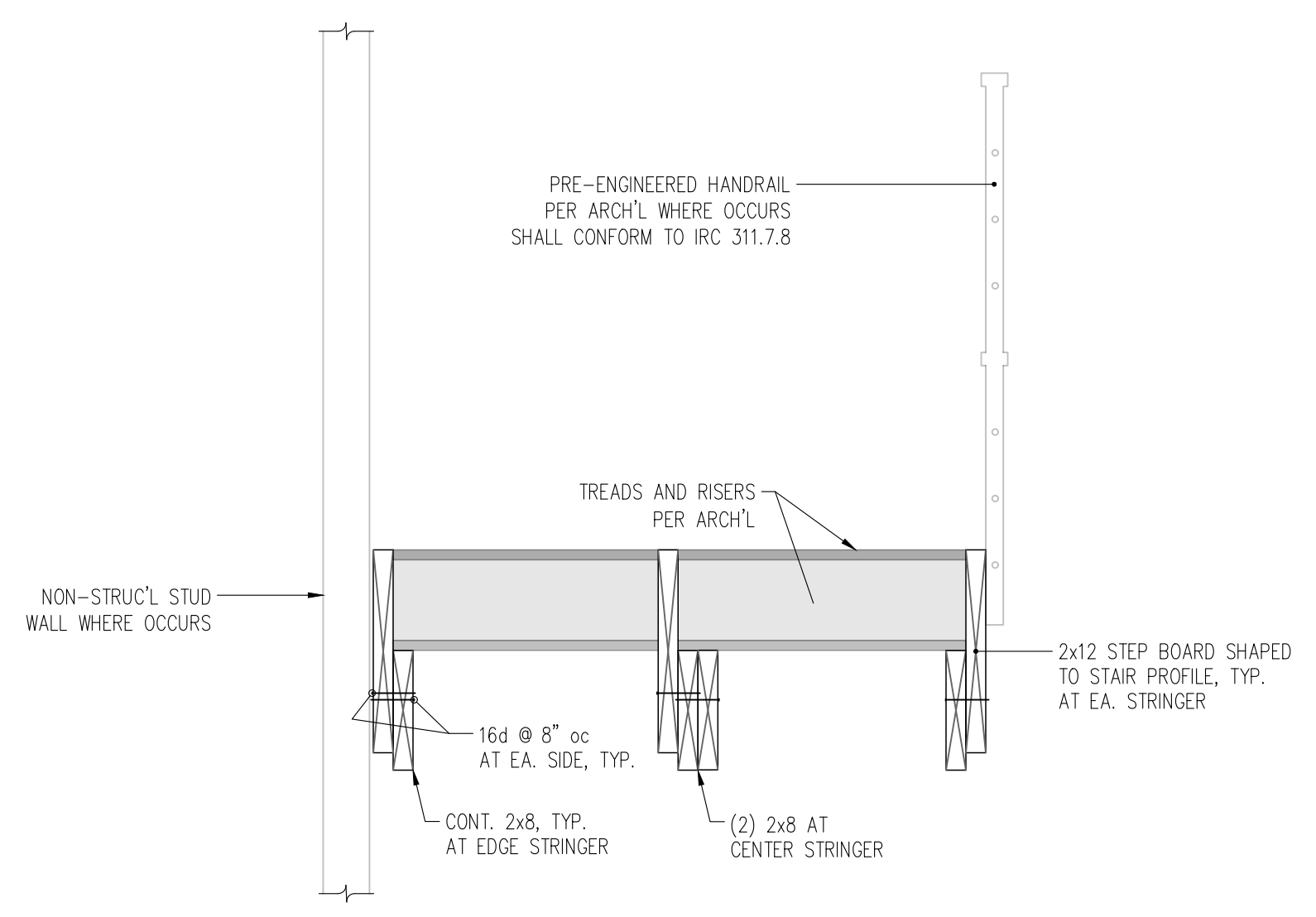
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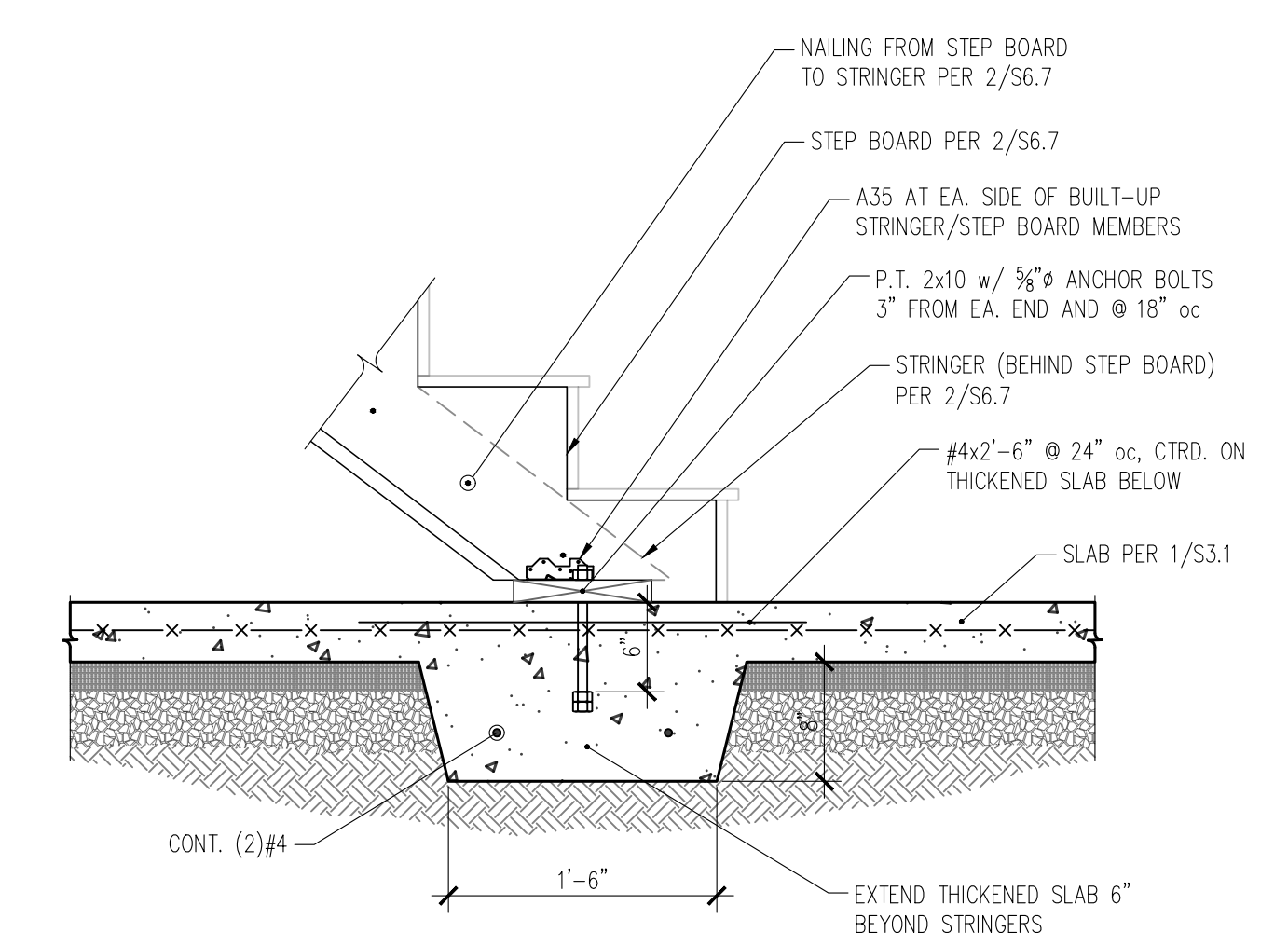
3 TYPICAL STAIR FRAMING/LANDING PLAN VIEW
S6.7 N.T.S.



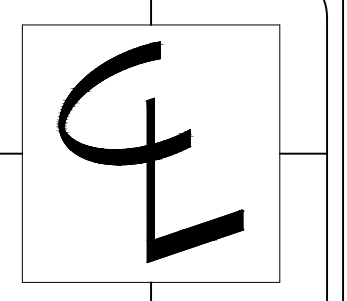
5 SECTION THROUGH LANDING
S6.7 1" = 1'-0"



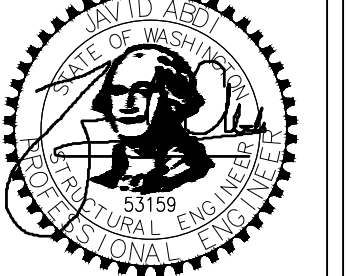
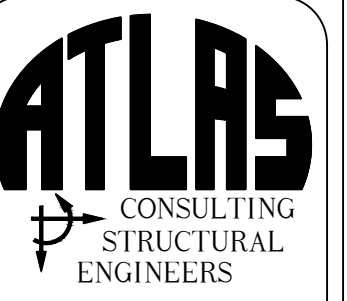
2 SECTION THROUGH STAIR FRAMING
S6.7 1" = 1'-0"



1 SECTION THROUGH THICKENED SLAB-ON-GRADE AT STAIR STRINGERS
S6.7 1" = 1'-0"



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Typical
Stair
Details

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01.04.2022

S6.7

ORGANIC SOIL REQUIREMENT

MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED

SOIL AMENDMENT REQUIRED

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

SOIL INSPECTION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

TREE PROTECTION

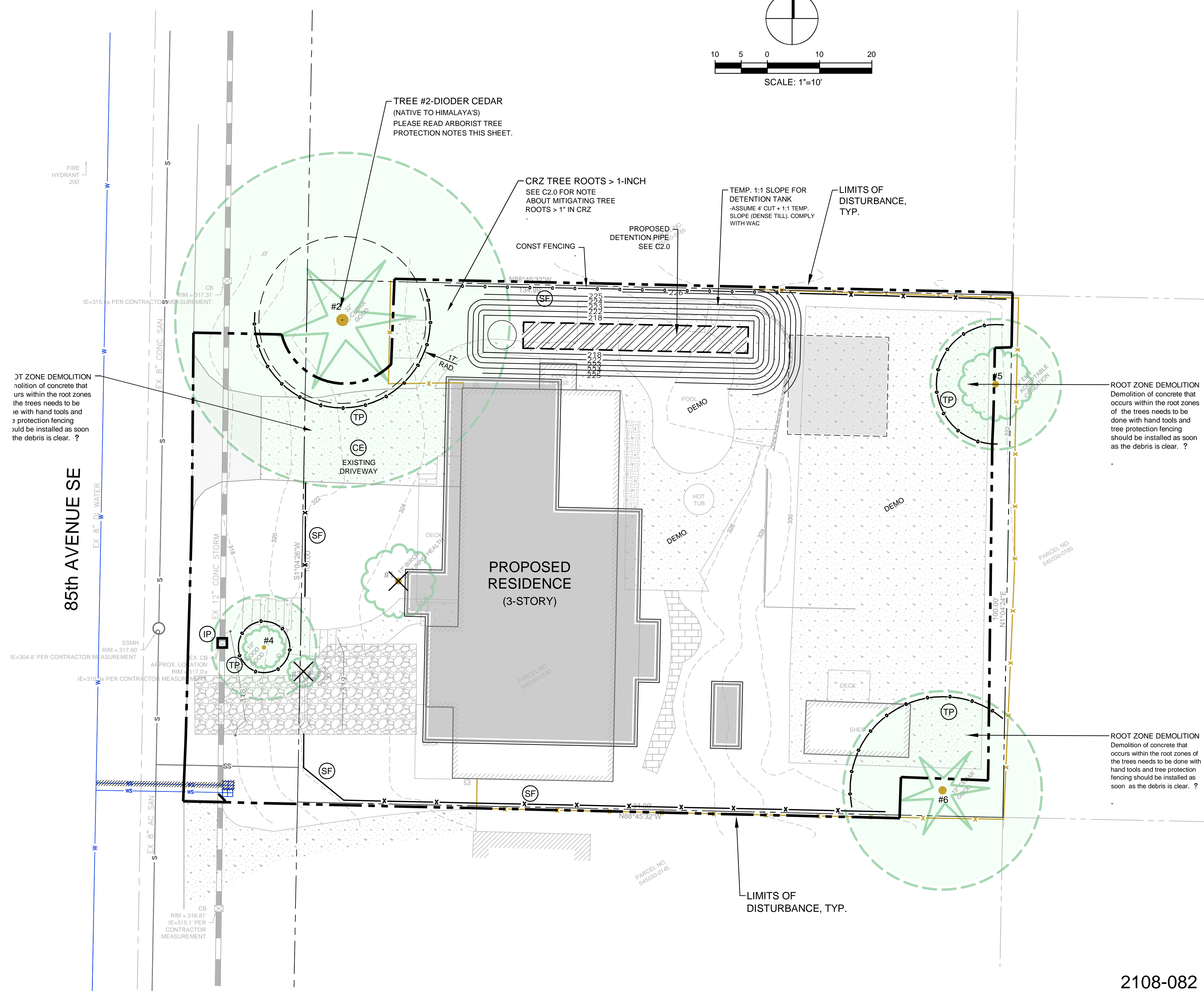
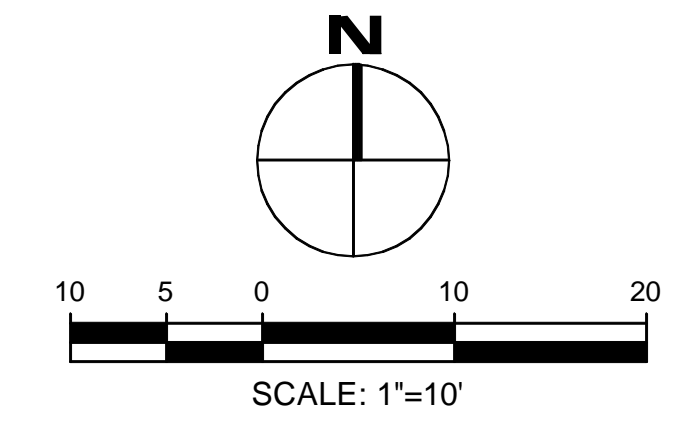
TPCHAIN LINK FENCE REQ FOR TREE PROTECTION

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	
FILTER FABRIC FENCE (SILT FENCE)	(SF) ——— X ——— X ———
STABILIZED CONSTRUCTION ENTRANCE	(CE) [Pattern]
CATCH BASIN INLET PROTECTION	(IP) [Symbol]
INTERCEPTOR SWALE SEE COR DWG 504. TYPE A TEMPORARY SWALE	(IS) [Symbol]
TREE PROTECTION FENCING	(TP) [Symbol]
CHECK DAM	(CD) [Symbol]
STRAW WATTLES	(SW) [Symbol]
	USE AS NEEDED

TREE PROTECTION NOTES (SOURCED FROM ARBORIST)

- (REF: SEATTLE TREE CONSULTING, DOUGLAS SMITH, CERTIFIED ARBORIST)
- FOR THE TREES BEING RETAINED, TREE PROTECTION FENCING SHOULD BE INSTALLED AT THE OUTER EDGE OF THE DRIP LINE OR AS CLOSE TO IT AS IS PRACTICALLY POSSIBLE.
- FENCING SHOULD BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES AND REMAIN IN PLACE FOR THE DURATION OF THE PROJECT. FENCING SHOULD ONLY BE MOVED TEMPORARILY IF MINOR DISTURBANCES MUST OCCUR WITHIN THE DRIP LINE AND THE FENCING SHOULD BE REPLACED IMMEDIATELY ONCE THAT PORTION OF THE WORK IS COMPLETED.
- THE TREE PROTECTION AREA IS DESIGNATED TO BE AN AREA OF NO IMPACT, NO STORING OF MATERIALS, NO ENCROACHMENT AND NO STAGING OF DEBRIS.
- THE TREE PROTECTION FENCING SHOULD HAVE SIGNS EVERY 8' FACING ACCESS THAT INDICATE THE AREA IS A TREE PROTECTION ZONE.
- TRENCHING THROUGH THE CRZ FOR UTILITIES IS NOT PERMITTED (TUNNELING IS THE PREFERRED METHOD).
- GRADE CHANGES IN THE CRZ ARE NOT PERMITTED.
- VEHICLE MAINTENANCE AND WASHING OF EQUIPMENT (ESPECIALLY CONCRETE), IS NOT PERMITTED.
- NO ATTACHING ANYTHING TO THE TREE WITH CINCHING KNOTS OR HARDWARE.
- ROOT FLARE SHOULD BE PROTECTED WITH CHIPS SO THAT LAWN MAINTENANCE EQUIPMENT DOES NOT HAVE TO WORK CLOSE TO THE SYSTEM.
- PROPER CLEARANCES SHOULD BE MONITORED.
- THE CRZ OR CRITICAL ROOT ZONE NEEDS TO BE PROTECTED. THE INNER CRZ IS 50 % OF THE RADIUS OF THE CRZ AND THERE SHOULD BE ZERO DISTURBANCE IN THIS ZONE. A DISTURBANCE OF UP TO 33 % OF THE OUTER CRZ IS PERMISSIBLE PROVIDED THAT ANY HEAVY DIGGING EQUIPMENT WORKS TOWARD THE TREE, AND THAT ANY ROOTS ENCOUNTERED THAT ARE OVER 1" IN DIAMETER ARE EXCAVATED AROUND WITH HAND TOOLS AND CUT CLEAN WITH A SHARP SAW BEHIND THE EXCAVATION ZONE SO THAT THE ROOT CAN BIFURCATE AND CONTINUE TO GROW. IN SOME CASES, IF EXCESSIVE PRUNING HAS BEEN DONE, THE CRZ CAN BE LARGER THAN THE DRIP LINE RADIUS.



ROOT ZONE DEMOLITION
Removal of concrete that occurs within the root zones of the trees needs to be done with hand tools and a protection fencing should be installed as soon as the debris is clear. ?

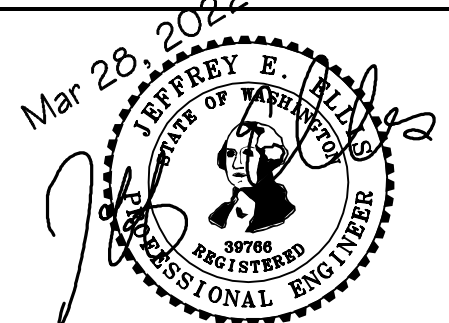
ROOT ZONE DEMOLITION
Removal of concrete that occurs within the root zones of the trees needs to be done with hand tools and tree protection fencing should be installed as soon as the debris is clear. ?

ROOT ZONE DEMOLITION
Removal of concrete that occurs within the root zones of the trees needs to be done with hand tools and tree protection fencing should be installed as soon as the debris is clear. ?

NO.	DATE	BY	REVISIONS

APPLICANT
MIKE YEGENAH
ASPEN HOMES

DATE: Mar 28, 2022
JOB#: 1989
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE



CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET SEATTLE, WA 98107
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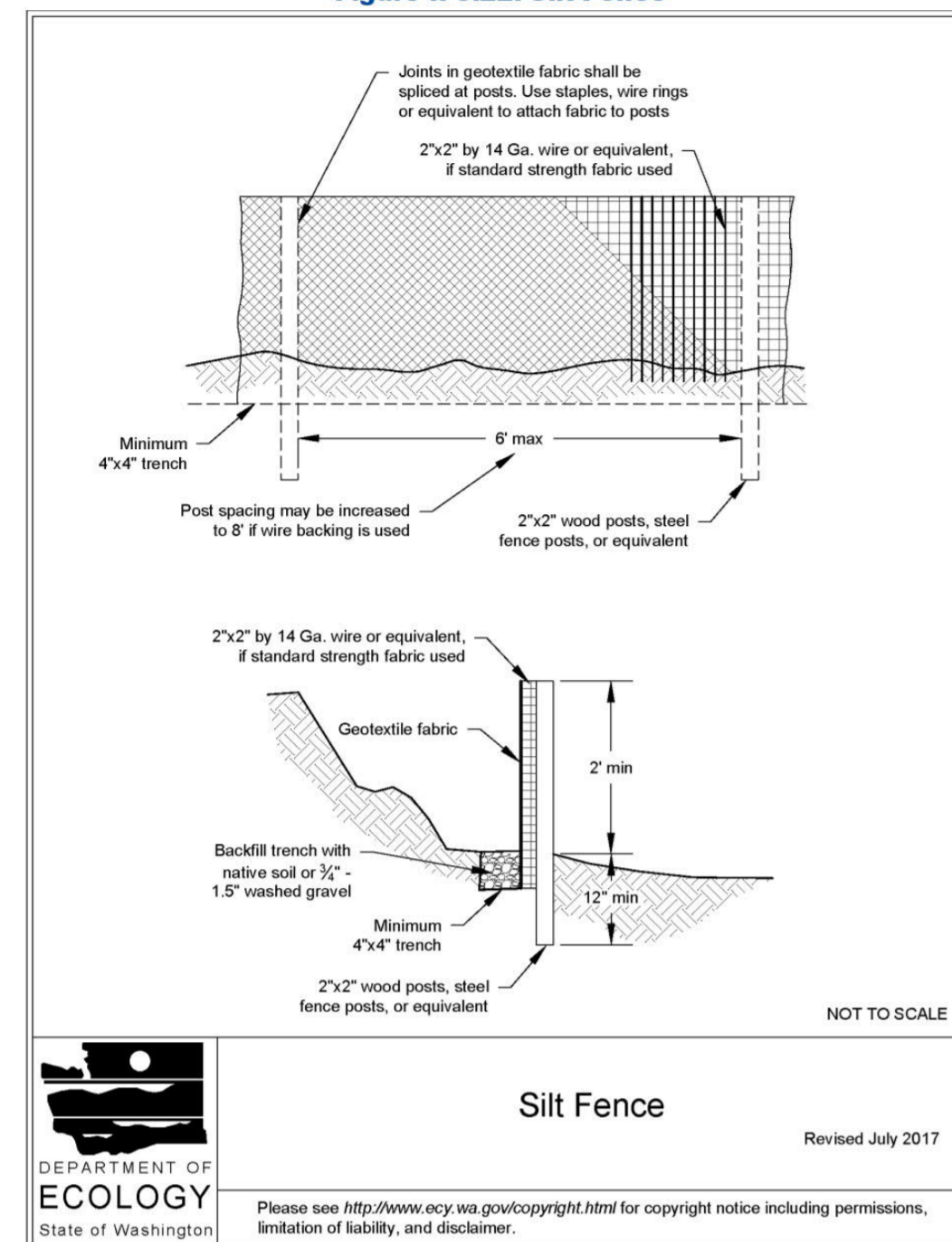
TESC PLAN TREE RETENTION PLAN
KUMAR RESIDENCE
4034 85th AVENUE SE, MERCER ISLAND, WA 98040

2108-082
DRAWING NO: C1.0
APN 545030-0150
2108-082

SILT FENCE DETAIL

DOE

Figure II-3.22: Silt Fence



Silt Fence

Revised July 2017

2019 Stormwater Management Manual for Western Washington
Volume II - Chapter 3 - Page 371

RECOMMENDED CONSTRUCTION SEQUENCE

A DETAILED CONSTRUCTION SEQUENCE IS NEEDED TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE APPLIED AT THE APPROPRIATE TIMES. A RECOMMENDED CONSTRUCTION SEQUENCE IS PROVIDED BELOW:

- HOLD AN ONSITE PRE-CONSTRUCTION MEETING.
- POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).
- FLAG OR FENCE CLEARING LIMITS.
- INSTALL CATCH BASIN PROTECTION, IF REQUIRED.
- GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
- INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
- CONSTRUCT SEDIMENT PONDS AND TRAPS.
- GRADE AND STABILIZE CONSTRUCTION ROADS.
- CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
- MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- RELOCATE SURFACE WATER CONTROLS OR TESC MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE TESC IS ALWAYS IN ACCORDANCE WITH CITY OF MERCER ISLAND TESC REQUIREMENTS.
- COVER ALL AREAS THAT WILL BE UN-WORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) OR TWO DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
- STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
- SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPs IF APPROPRIATE.

EROSION CONTROL NOTES

- D.8.2 STANDARD ESC PLAN NOTES
THE STANDARD ESC PLAN NOTES MUST BE INCLUDED ON ALL ESC PLANS. AT THE APPLICANT'S DISCRETION, NOTES THAT IN NO WAY APPLY TO THE PROJECT MAY BE OMITTED; HOWEVER, THE REMAINING NOTES MUST NOT BE RENUMBERED. FOR EXAMPLE, IF ESC NOTE #3 WERE OMITTED, THE REMAINING NOTES SHOULD BE NUMBERED 1, 2, 4, 5, 6, ETC.
- APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN 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 ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
 - THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
 - STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.
 - THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
 - THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY CITY OF MERCER ISLAND.
 - THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.
 - ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
 - ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
 - THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH DURING THE DRY SEASON, BI-MONTHLY DURING THE WET SEASON, OR WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.
 - 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.
 - ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
 - COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL
 - PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDING IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDING WITH ONE WEEK OF THE BEGINNING OF THE WET SEASON.

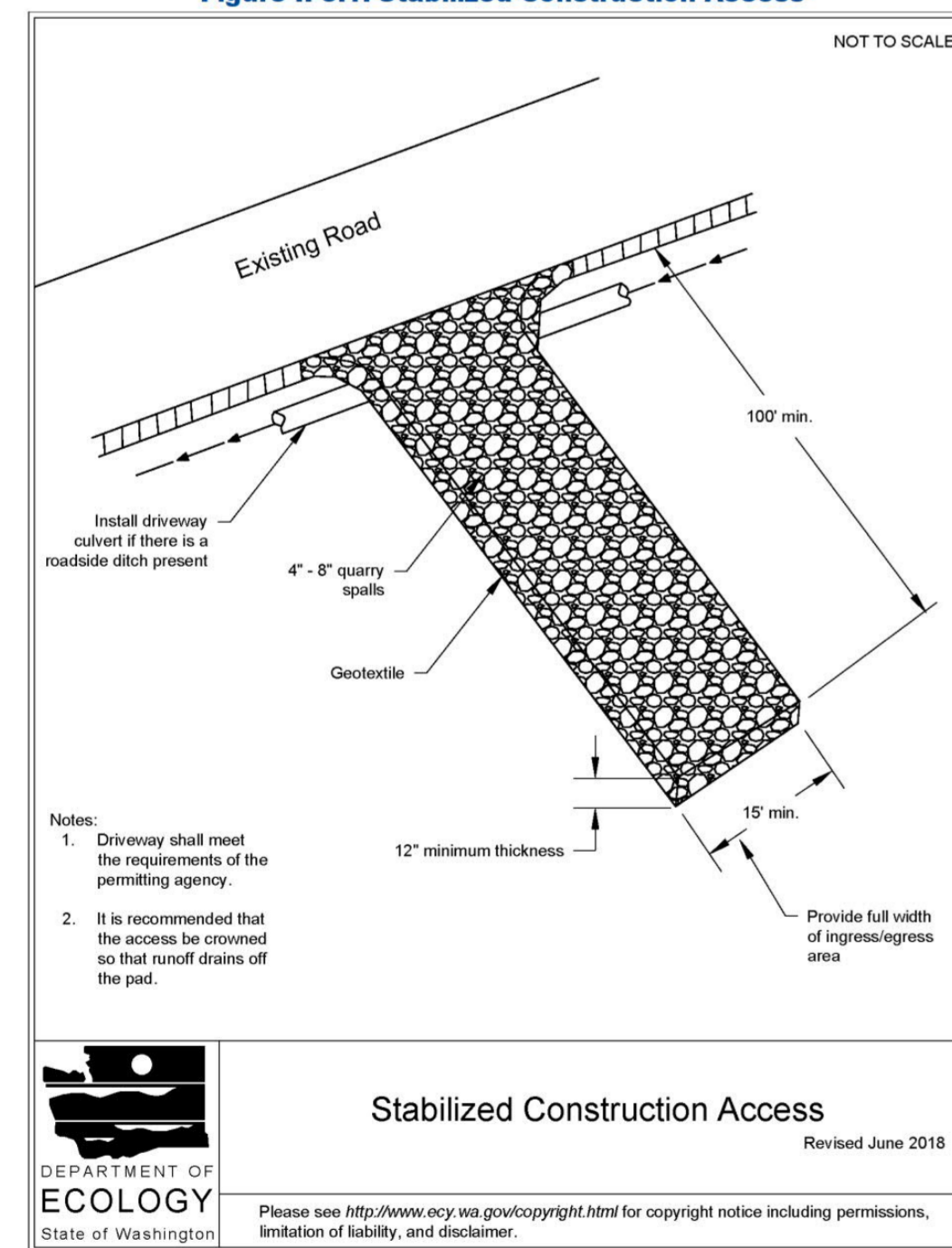
CITY NOTES

- ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.
- APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.
- CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.
- CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITIES.
- AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555
- DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED
- EROSION CONTROL: ALL "LAND DISTURBING ACTIVITY" IS SUBJECT TO PROVISIONS OF MERCER ISLAND ORDINANCE 95C-118 "STORM WATER MANAGEMENT." SPECIFIC ITEMS TO BE FOLLOWED AT YOUR SITE:
- PROTECT ADJACENT PROPERTIES FROM ANY INCREASED RUNOFF OR SEDIMENTATION DUE TO THE CONSTRUCTION PROJECT THROUGH THE USE OF APPROPRIATE "BEST MANAGEMENT PRACTICES" (BMP) EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT TRAPS, SEDIMENT PONDS, FILTER FABRIC FENCES, VEGETATIVE BUFFER STRIPS OR BIOENGINEERED SWALES.
- CONSTRUCTION ACCESS TO THE SITE SHOULD BE LIMITED TO ONE ROUTE. STABILIZE ENTRANCE WITH QUARRY SPALLS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING THE STORM DRAINS.
- PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.
- ALL EXPOSED SOILS SHALL REMAIN DENUDED FOR NO LONGER THAN SEVEN (7) DAYS AND SHALL BE STABILIZED WITH MULCH, HAY, OR THE APPROPRIATE GROUND COVER. ALL EXPOSED SOILS SHALL BE COVERED IMMEDIATELY DURING ANY RAIN EVENT.
- INSTALLATION OF CONCRETE DRIVEWAYS, TREES, SHRUBS, IRRIGATION, BOULDERS, BERMS, WALLS, GATES, AND OTHER IMPROVEMENTS ARE NOT ALLOWED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL AND AN ENCROACHMENT AGREEMENT AND RIGHT OF WAY PERMIT FROM THE SENIOR DEVELOPMENT ENGINEER.
- OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THIS PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.
- POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
- REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.
- ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.
- SILENT FENCE: CLEAN AND PROVIDE REGULAR MAINTENANCE OF THE SILT FENCE. THE FENCE IS TO REMAIN VERTICAL AND IS TO FUNCTION PROPERLY THROUGHOUT THE TERM OF THE PROJECT.
- WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.
- REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.
- THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. 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. ALTERNATELY, A PRESSURE TEST OF THE SIDE SEWER, FROM SEWER MAIN TO POINT OF CONNECTION, MAY BE SUBSTITUTED FOR THE VIDEO INSPECTION.
- NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.
- POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
- THE LIMITS AND EXTENDS OF THE PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY ENGINEER PRIOR TO FINALIZE THE PROJECT.

CONSTRUCTION ENTRANCE

DOE

Figure II-3.1: Stabilized Construction Access



Stabilized Construction Access

Revised June 2018

2019 Stormwater Management Manual for Western Washington
Volume II - Chapter 3 - Page 279

DENUDED AREAS REQUIREMENTS

APRIL 1 TO SEPT 30
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF CONSTRUCTION. PLEASE READ ALL CITY TESC NOTES ON SHEET C1.2.

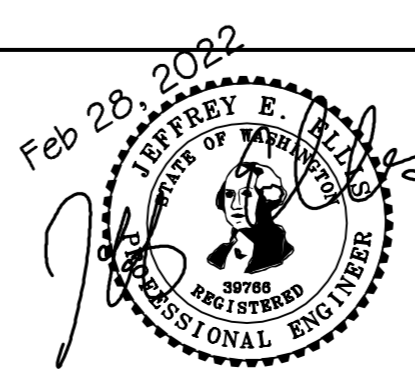
OCT 1 TO MARCH 31
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING. IF AN EROSION PROBLEM ALREADY EXISTS ON THE SITE, OTHER COVER PROTECTION AND EROSION CONTROL WILL BE REQUIRED.

2108-082

NO.	DATE	BY	REVISIONS

APPLICANT
MIKE YEGENAH
ASPEN HOMES

DATE: Feb 28, 2022
JOB# 1989
DRAFTED: SS DESIGN: DE
DIGITAL SIGNATURE



CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

TESC & CITY NOTES
TESC DETAILS
KUMAR RESIDENCE
4034 85th AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C1.2
APN 545030-0150
2108-082

SANITARY SEWER IMPROVEMENTS

- ① -
- ② - 6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %
- ③ -
- ④ -
- ⑦ -

WATER IMPROVEMENTS

- ⑩ - RESIDENTIAL WATER SERVICE & METER PIT. CONFIRM REQUIRED SIZE WITH BUILDING PERMIT REVIEW. INSTALL PER MERCER ISLAND DETAIL W-13, W-14, OR W-14A DEPENDING ON SIZE REQUIREMENT.
- ⑪ - 1.5" 250 PSI PRIVATE HDPE WATER (ASTM D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER.
- ⑫ -
- ⑭ -

STORM DRAIN

- ⑳ - 4" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE
- ㉑ - 4" FOUNDATION DRAIN (3034 PVC) @ MIN 1 % GRADE
- ㉒ - 6" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE
- ㉓ -
- ㉔ -
- ㉕ -
- ㉖ -
- ㉘ -
- ㉙ -

STORM DRAIN STRUCTURES

- ㉚ - TYPE 1 CB WITH STANDARD GRATE. MAX 5' RIM TO FL DEPTH.
- ㉛ -
- ㉜ -
- ㉝ -
- ㉞ -
- ㉟ - 18" YARD DRAIN (OR EQUAL)
- ㊱ - 6" WIDE NDS DURASLOPE CHANNEL DRAIN KIT OR EQUAL. VEHICLE RATED. GALVANIZED STEEL GRATE
- ㊲ -
- ㊳ -
- ㊴ -
- ㊵ - 54" ID TYPE 2 MH CONTROL STRUCTURE WITH SOLID LID. SEE ALL DETAILS AND PROFILE C4.0.
- ㊶ -
- ㊷ -
- ㊸ -
- ㊹ -
- ㊺ -
- ㊻ -
- ㊼ -
- ㊽ -
- ㊾ -
- ㊿ -

STORM BMP's

- ⑥① -
- ⑥② -
- ⑥③ -
- ⑥④ -
- ⑥⑤ -
- ⑥⑥ -
- ⑥⑦ - PERMEABLE PAVEMENT SURFACE (DRIVEWAY) PER DOE DETAIL. MIN. 4" DEEP RESERVOIR COURSE. SEE DETAIL ON C3.5.
- ⑥⑧ -

TREE PROTECTION

- (ALSO SEE SHEET TESC SHEET C1.0 FOR TREE PROTECTION)
- ①P CHAIN LINK FENCE TREE PROTECTION AT DRIPLINE / CRZ

SURVEYOR

TOPOGRAPHIC & BOUNDARY SURVEY BY:
 SITE SURVEYING, INC.
 21923 NE 11th STREET
 SAMMAMISH, WA 98074
 PHONE 425-298-4412
 www.sitesurveymapping.com

VERTICAL DATUM

NAVD 88 PER POINT ID NO. 2150
 SEE SURVEY

LEGAL DESCRIPTION

LOT 6 IN BLOCK B OF MERCER CREST, AS PER PLAT RECORDED IN VOLUME 42 OF PLATS, PAGE 26, RECORDS OF KING COUNTY AUDITOR;
 SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED

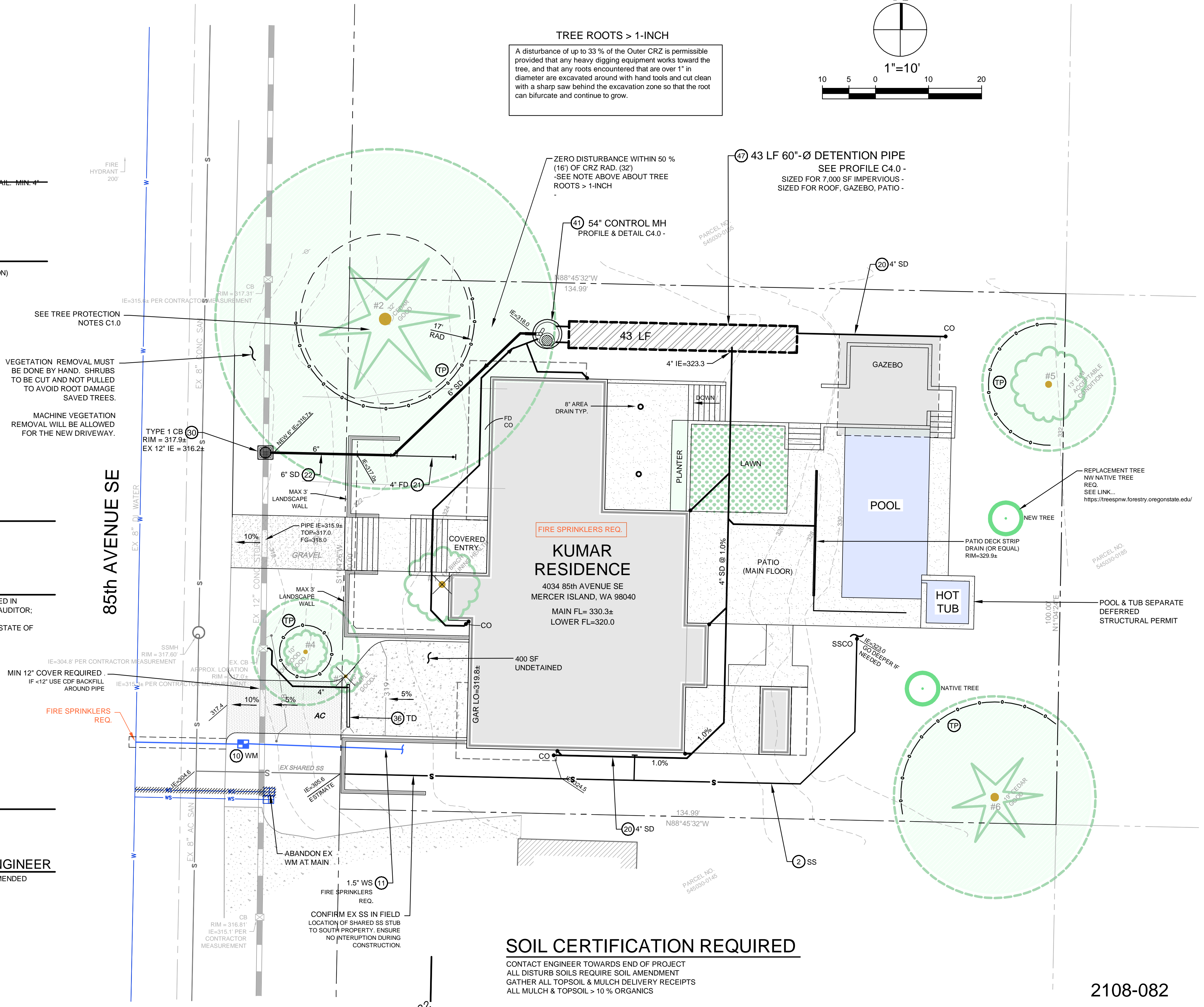
SOIL AMENDMENT REQUIRED

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

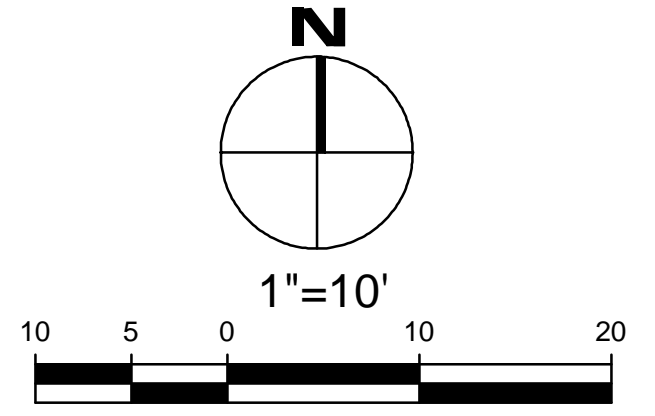
SOIL INSPECTION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

85th AVENUE SE



TREE ROOTS > 1-INCH
 A disturbance of up to 33% of the Outer CRZ is permissible provided that any heavy digging equipment works toward the tree, and that any roots encountered that are over 1" in diameter are excavated around with hand tools and cut clean with a sharp saw behind the excavation zone so that the root can bifurcate and continue to grow.



SOIL CERTIFICATION REQUIRED

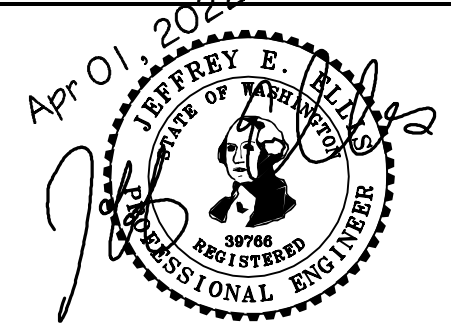
CONTACT ENGINEER TOWARDS END OF PROJECT
 ALL DISTURB SOILS REQUIRE SOIL AMENDMENT
 GATHER ALL TOPSOIL & MULCH DELIVERY RECEIPTS
 ALL MULCH & TOPSOIL > 10 % ORGANICS

2108-082

NO.	DATE	BY	REVISIONS

APPLICANT MIKE YEGENAH ASPEN HOMES	DATE: Apr 01, 2022
	JOB# 1989
	DRAFTED: DE DESIGN: DE
	DIGITAL SIGNATURE

DATE: Apr 01, 2022
 JOB# 1989
 DRAFTED: DE DESIGN: DE
 DIGITAL SIGNATURE



CIVIL ENGINEERING SOLUTIONS
 102 NW CANAL STREET SEATTLE, WA 98107
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.WS

DRAINAGE / CIVIL PLAN
 KUMAR RESIDENCE
 4034 85th AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C2.0
 APN 545030-0150
 2108-082

10% MIN ORGANICS REQUIRED FOR TOPSOIL & MULCH

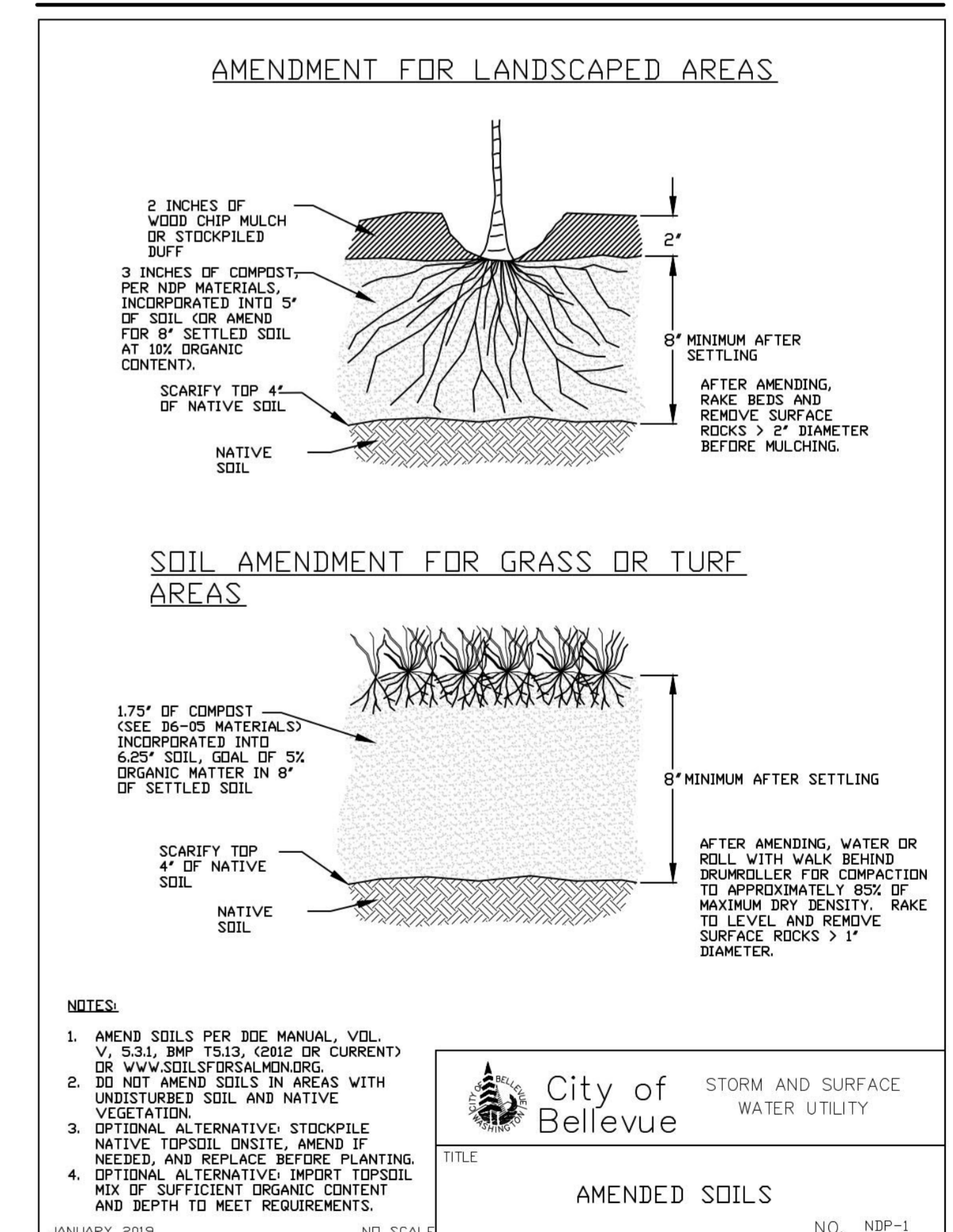
SOIL AMENDMENT REQUIRED

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL BELOW.

SOIL CERTIFICATION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

COMPOST AMENDED SOIL SPEC

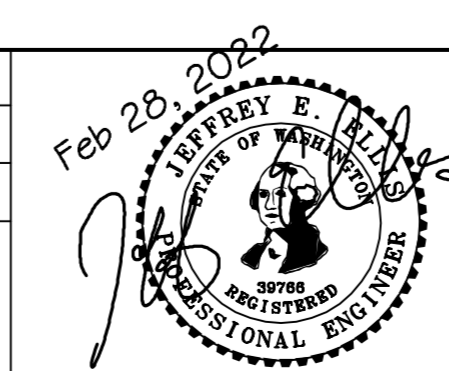


2108-082

NO.	DATE	BY	REVISIONS

APPLICANT
 MIKE YEGENAH
 ASPEN HOMES

DATE: Feb 28, 2022
 JOB# 1989
 DRAFTED: SS DESIGN: SS
 DIGITAL SIGNATURE



CIVIL ENGINEERING SOLUTIONS
 102 NW CANAL STREET SEATTLE, WA 98107
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

BMP DETAILS
 KUMAR RESIDENCE
 4034 85th AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C3.5
 APN 545030-0150
 2108-082

MERCER ISLAND DETENTION "TABLE 1"

Table 1
ON-SITE DETENTION DESIGN FOR PROJECTS BETWEEN 500 SF AND 9,500 SF NEW PLUS REPLACED IMPERVIOUS SURFACE AREA

New and Replaced Impervious Surface Area (sf)	Detention Pipe Diameter (in)	Detention Pipe Length (ft)		Lowest Orifice Diameter (in) ⁽¹⁾		Distance from Outlet Invert to Second Orifice (ft)		Second Orifice Diameter (in)	
		B soils	C soils	B soils	C soils	B soils	C soils	B soils	C soils
500 to 1,000 sf	36"	30	22	0.5	0.5	2.2	2.0	0.5	0.8
	48"	18	11	0.5	0.5	3.3	3.2	0.9	0.8
	60"	11	7	0.5	0.5	4.2	3.4	0.5	0.6
1,001 to 2,000 sf	36"	66	43	0.5	0.5	2.2	2.3	0.9	1.4
	48"	34	23	0.5	0.5	3.2	3.3	0.9	1.2
	60"	22	14	0.5	0.5	4.3	3.6	0.9	0.9
2,001 to 3,000 sf	36"	90	66	0.5	0.5	2.2	2.4	0.9	1.9
	48"	48	36	0.5	0.5	3.1	2.8	0.9	1.5
	60"	30	20	0.5	0.5	4.2	3.7	0.9	1.1
3,001 to 4,000 sf	36"	120	78	0.5	0.5	2.4	2.2	1.4	1.6
	48"	62	42	0.5	0.5	2.8	2.9	0.8	1.3
	60"	42	26	0.5	0.5	3.8	3.9	0.9	1.3
4,001 to 5,000 sf	36"	134	91	0.5	0.5	2.8	2.2	1.7	1.5
	48"	73	49	0.5	0.5	3.6	2.9	1.6	1.5
	60"	46	31	0.5	0.5	4.6	3.5	1.6	1.3
5,001 to 6,000 sf	36"	162	109	0.5	0.5	2.7	2.2	1.8	1.6
	48"	90	59	0.5	0.5	3.5	2.9	1.7	1.5
	60"	54	37	0.5	0.5	4.6	3.6	1.6	1.4
6,001 to 7,000 sf	36"	192	128	0.5	0.5	2.7	2.2	1.9	1.8
	48"	102	68	0.5	0.5	3.7	2.9	1.9	1.6
	60"	64	43	0.5	0.5	4.6	3.6	1.8	1.5
7,001 to 8,000 sf	36"	216	146	0.5	0.5	2.8	2.2	2.0	1.9
	48"	119	79	0.5	0.5	3.8	2.9	2.2	1.7
	60"	73	49	0.5	0.5	4.5	3.6	2.0	1.6
8,001 to 8,500 sf ⁽¹⁾	36"	228	155	0.5	0.5	2.8	2.2	2.1	1.9
	48"	124	84	0.5	0.5	3.7	2.9	1.9	1.8
	60"	77	53	0.5	0.5	4.6	3.6	2.0	1.6
8,501 to 9,000 sf	36"	NA ⁽¹⁾	164	0.5	0.5	NA ⁽¹⁾	2.2	NA ⁽¹⁾	1.9
	48"	NA ⁽¹⁾	89	0.5	0.5	NA ⁽¹⁾	2.9	NA ⁽¹⁾	1.9
	60"	NA ⁽¹⁾	55	0.5	0.5	NA ⁽¹⁾	3.6	NA ⁽¹⁾	1.7
9,001 to 9,500 sf ⁽²⁾	36"	NA ⁽¹⁾	174	0.5	0.5	NA ⁽¹⁾	2.2	NA ⁽¹⁾	2.1
	48"	NA ⁽¹⁾	94	0.5	0.5	NA ⁽¹⁾	2.9	NA ⁽¹⁾	2.0
	60"	NA ⁽¹⁾	58	0.5	0.5	NA ⁽¹⁾	3.7	NA ⁽¹⁾	1.7

Notes:

- Minimum Requirement #7 (Flow Control) is required when the 100-year flow frequency causes a 0.15 cubic feet per second increase (when modeled in WWHM with a 15-minute timestep). Breakpoints shown in this table are based on a flat slope (0-5%). The 100-year flow frequency will need to be evaluated on a site-specific basis for projects on moderate (5-15%) or steep (> 15%) slopes.
- Soil type to be determined by geotechnical analysis or soil map.
- Sizing includes a Volume Correction Factor of 120%.
- Upper bound contributing area used for sizing.
- On Type B soils, new plus replaced impervious surface areas exceeding 8,500 sf trigger Minimum Requirement #7 (Flow Control)
- On Type C soils, new plus replaced impervious surface areas exceeding 9,500 sf trigger Minimum Requirement #7 (Flow Control)

Basis of Sizing Assumptions:

- Sized per MR#5 in the Stormwater Management Manual for Puget Sound Basin (1992 Ecology Manual)
- SBUH, Type 1A, 24-hour hydrograph
- 2-year, 24-hour storm = 2 in; 10-year, 24-hour storm = 3 in; 100-year, 24-hour storm = 4 in
- Predeveloped = second growth forest (CN = 72 for Type B soils, CN = 81 for Type C soils)
- Developed = impervious (CN = 98)
- 0.5 foot of sediment storage in detention pipe
- Overland slope = 5%

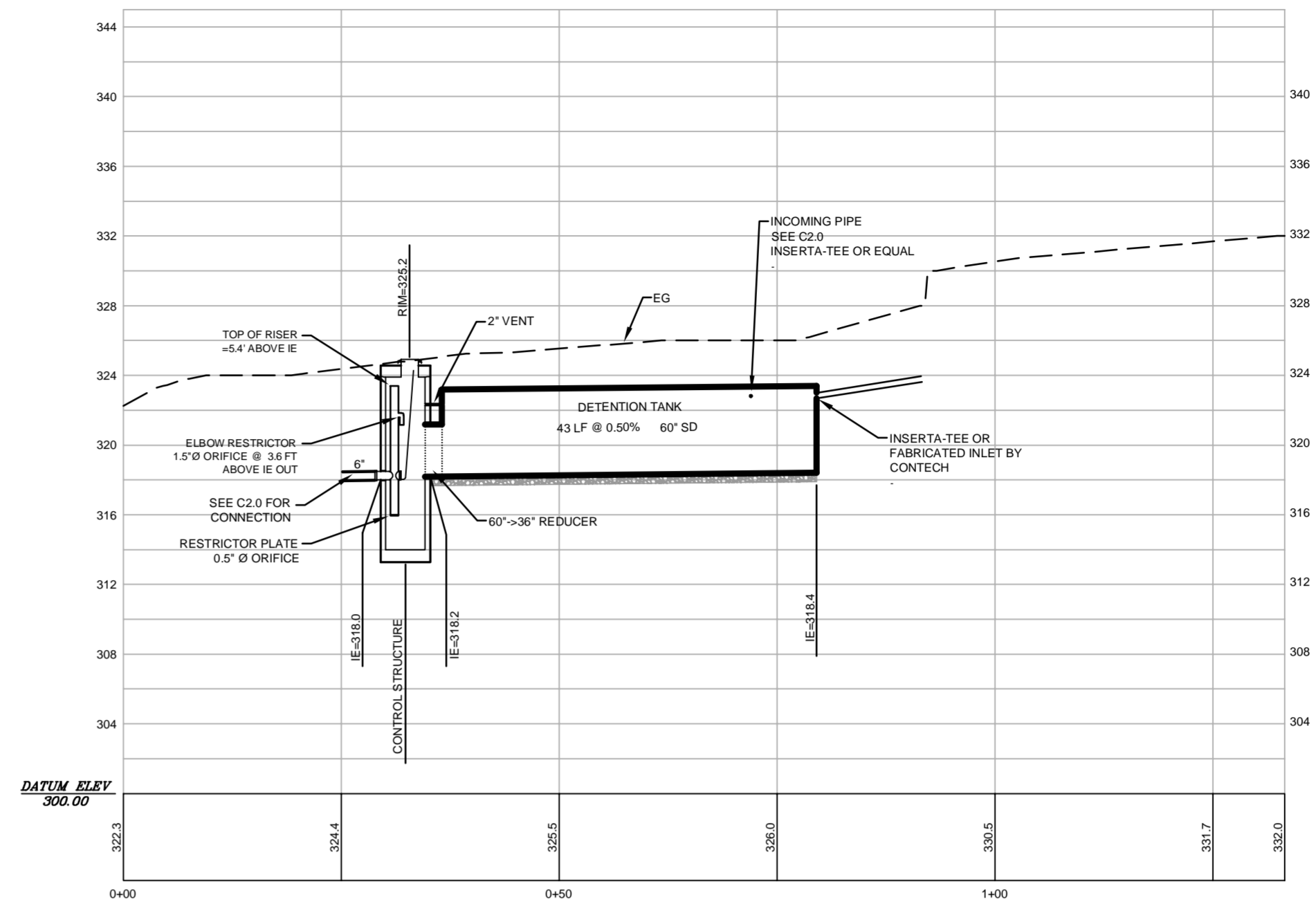
⁽¹⁾ Minimum orifice diameter = 0.5 inches
⁽²⁾ in = inch
 ft = feet
 sf = square feet

IMPERVIOUS TABLE

Impervious Area Spreadsheet	
Kumar Residence - 4034 85th Avenue SE, Mercer Island, WA 98040	
Gross Site area	13,499 sf
	0.310 acres
Existing Impervious Area	8,712 sf
total existing impervious area =	8,712 sf
total existing vegetated area =	4,787 sf
Proposed Impervious Area (on-site)	
Proposed house roof	3,276 sf
Proposed gazebo roof	361 sf
Proposed pool/hardscape, exposed	2,154 sf
Proposed driveway, on-site, exposed	381 sf
total on-site proposed =	6,172 sf
total new + replaced impervious =	(2,540) sf
new impervious area =	(2,540) sf
total proposed vegetated area =	7,327 sf

DETENTION PROFILE

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



MERCER ISLAND DETENTION DETAIL

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

OWNER: ASPEN HOMES ADDRESS: 4034 85th AVENUE SE PREPARED BY: DUFFY ELLIS, P.E.
 PERMIT #: Mercer Island, WA 98040 PHONE: 206.930.0342
 DATE: AUGUST 2021

NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 6,615 SF DETENTION PIPE DIA (INCH): 60" DIA DETENTION PIPE LENGTH (FT): 43 LF ORIFICE #1 DIA: * INCH ELEV: *
 SOIL TYPE: Type C per Geologic Map of Mercer Island PIPE MATERIAL: CMP OR HDPE ORIFICE #2 DIA: * INCH ELEV: *

*SEE TABLE 1, THIS SHEET

CONTROL STRUCTURE NOTES:

- USE A MINIMUM OF A 5/8 IN. DIA. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
- OUTLET PIPE: MIN. 6 INCH.
- METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
- FRAME AND LADDER OR STEPS OFFSET 50".
- CLEANOUT GATE IS VISIBLE FROM TOP.
- CLAMP-DOWN SPRING IS CLEAR OF RISER AND CLEANOUT GATE.
- FRAME IS CLEAR OF CURB.
- 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.
- 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).
- THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 204 AND ASTM B 275, DESIGNATION 2223A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LEFT 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 RESILIENT RUBBER GASKET IS REQUIRED BETWEEN THE RISER WEARING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE WEARING SURFACES OF THE LEV AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
- THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

- CALL DEVELOPMENT SERVICES (206-275-7800) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE SHOVELLING AND FOR FINAL INSPECTIONS.
- RESPONSIBILITY FOR OPERATION AND MAINTENANCE 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.
- PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 7.02 OF THE MOST RECENT SPECIFICATION FOR RURAL, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING: LINED CORRUGATED POLYETHYLENE PIPE (LCP), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (METALS ARCH) DESIGNATING M24 AND M30, CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
- FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

NO.	DATE	BY	REVISIONS

APPLICANT
MIKE YEGENAH
ASPEN HOMES

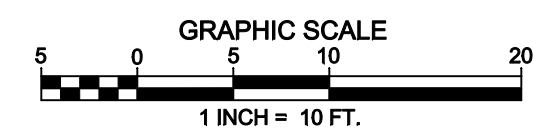
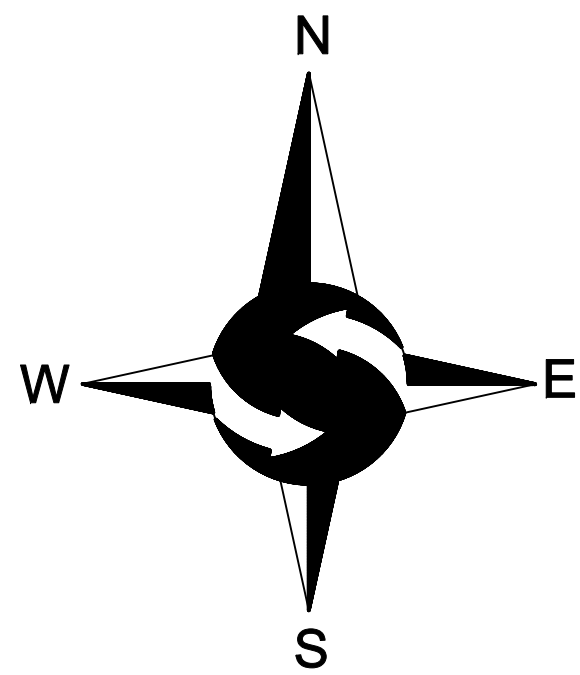
DATE: Feb 28, 2022
 JOB#: 1989
 DRAFTED: SS DESIGN: SS
 DIGITAL SIGNATURE



CIVIL ENGINEERING SOLUTIONS
 102 NW CANAL STREET SEATTLE, WA 98107
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

DETENTION PROFILE AND DETAIL
 KUMAR RESIDENCE
 4034 85th AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C4.0
 APN 545030-0150
 2108-082



LEGEND

- FOUND MONUMENT AS DESCRIBED
- SET MAG NAIL AS DESCRIBED
- SET 5/8" X 24" IRON ROD WITH YELLOW PLASTIC CAP
- POWER METER
- UTILITY POLE
- GAS METER
- CATCH BASIN
- YARD LIGHT
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- SS — APPROXIMATE LOCATION SANITARY SEWER LINE
- SD — APPROXIMATE LOCATION STORM DRAIN LINE
- W — APPROXIMATE LOCATION UNDERGROUND WATER LINE
- OHP — OVERHEAD POWER
- OHU — OVERHEAD UTILITIES
- X — CHAINLINK FENCE
- □ — WOOD FENCE
- ▨ CONCRETE WALL
- ▨ ASPHALT SURFACE
- ▨ CONCRETE SURFACE
- ▨ BRICK SURFACE
- DS DECIDUOUS
- HE HEMLOCK
- PI PINE
- * INDICATES MULTI-TRUNK

LEGAL DESCRIPTION

LOT 8 IN BLOCK B OF MERCER CREST, AS PER PLAT RECORDED IN VOLUME 42 OF PLATS, PAGE 26, RECORDS OF KING COUNTY AUDITOR, SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

RECORD OF SURVEY BY TERRANE FOR DAVID COLEMAN, AS RECORDED UNDER RECORDING NO. 20160718900008, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

SURVEYOR: SITE SURVEYING, INC.
21923 NE 11TH ST
SAMMAMISH, WA 98074
PHONE: 425.298.4412

PROPERTY OWNER: WILLIAM AND JENNISE TURNER
4034 85TH AVENUE SE
MERCER ISLAND, WA 98040

TAX PARCEL NUMBER: 545030-0150

PROJECT ADDRESS: 4034 85TH AVENUE SE
MERCER ISLAND, WA 98040

ZONING: R-9.6

JURISDICTION: CITY OF MERCER ISLAND

PARCEL ACREAGE: 13,499 S.F. (0.310 ACRES) AS SURVEYED

GENERAL NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS SS TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN APRIL 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

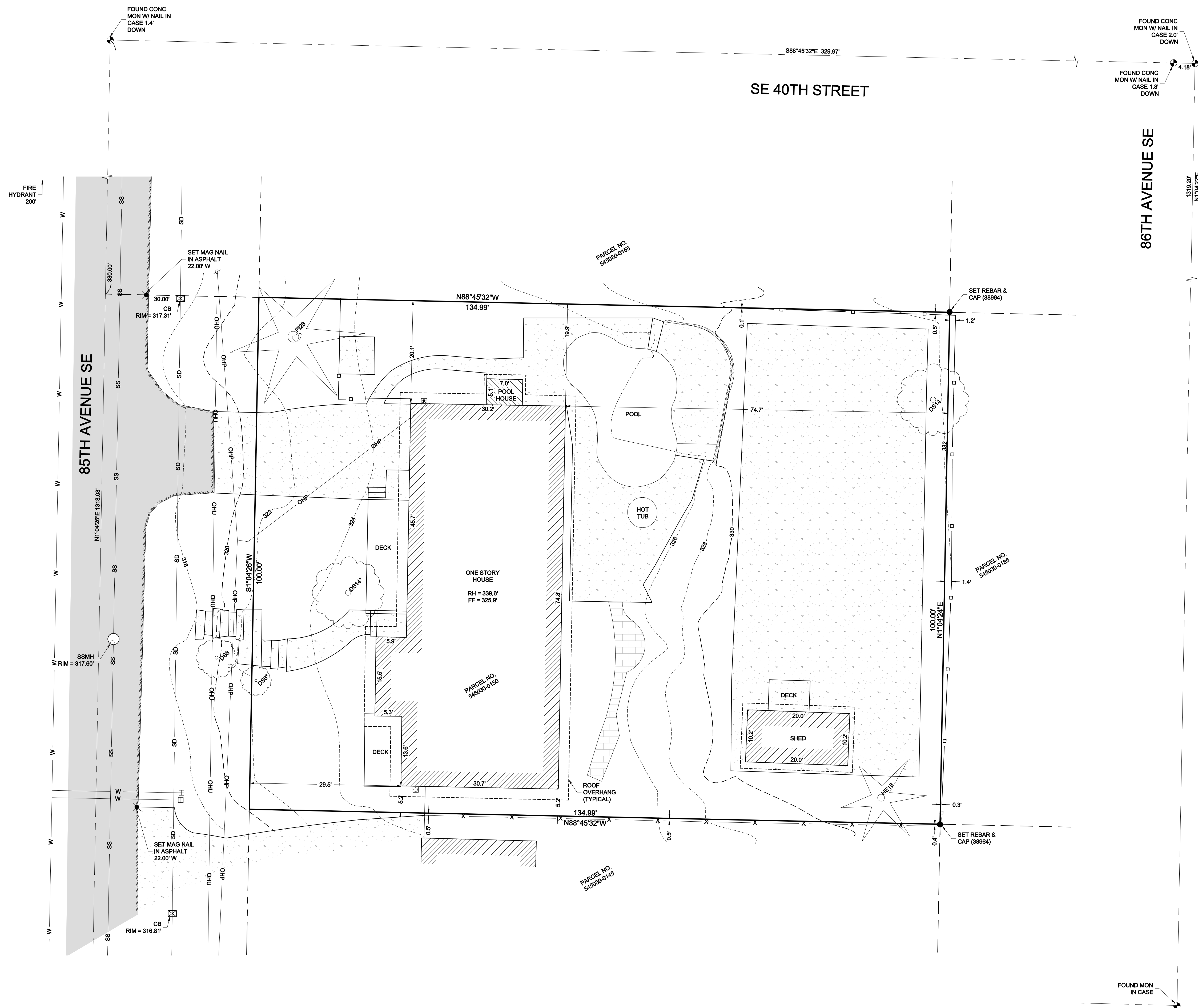
VERTICAL DATUM & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A BRASS NAIL IN CONCRETE MONUMENT IN CASE AT THE INTERSECTION OF SE 40TH STREET AND 86TH AVENUE SE.

POINT ID NO. 2160;
ELEVATION: 325.718 FEET (99.279 METERS) NAVD 88

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.



NW 1/4, NW 1/4, SEC 18, TWP 24N, RNG 5E, W.M.



TOPOGRAPHIC SURVEY
ASPEN HOMES
4034 85TH AVENUE SE
MERCER ISLAND, WA 98040

PROJECT NO. 21-211
DRAWN BY: MTS
CHECKED BY: TNW
DATE: 4/8/2021
SHEET 1 OF 1