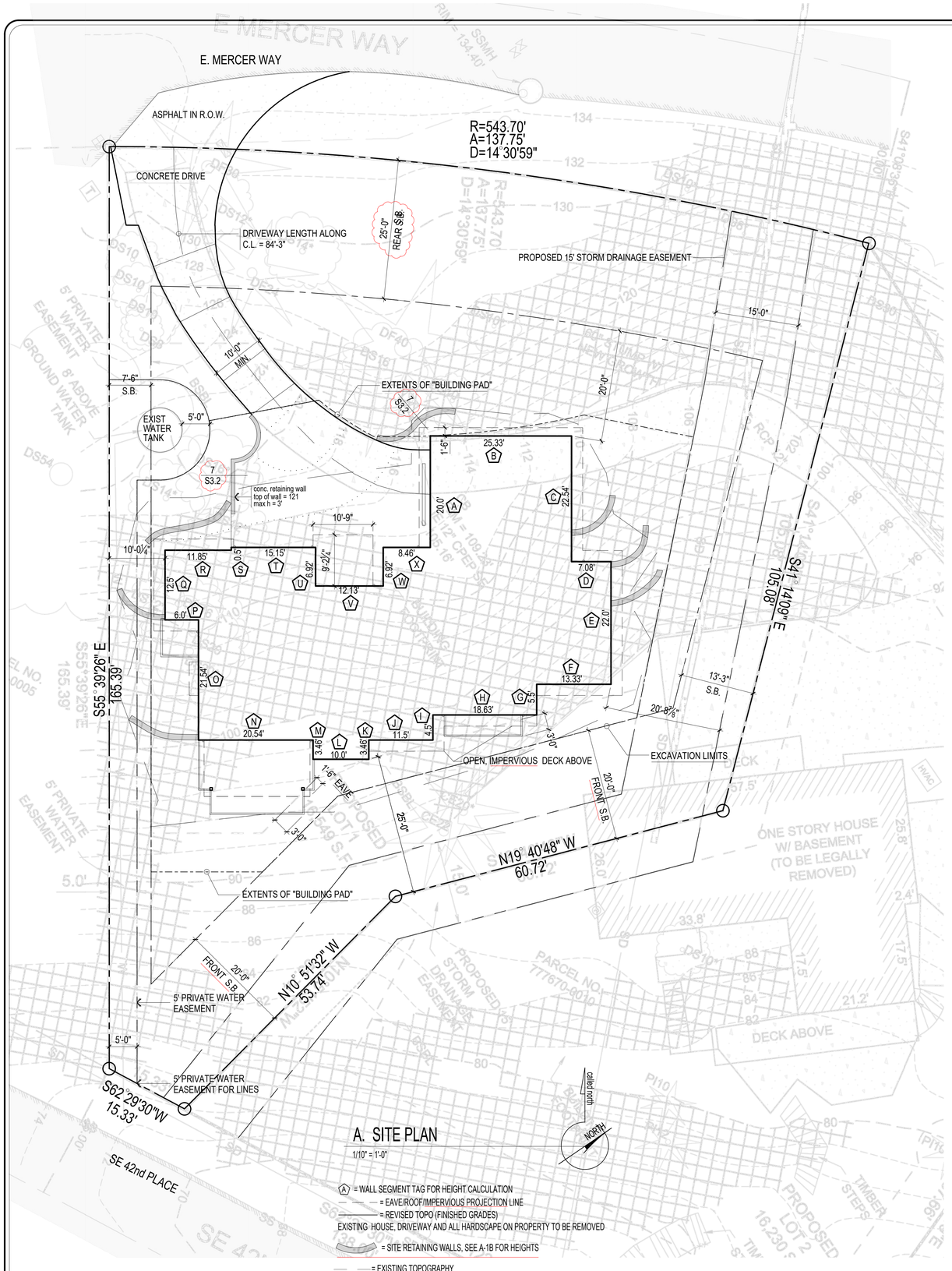

A. SITE PLAN

1/10" = 1'-0"

Ⓐ = WALL SEGMENT TAG FOR HEIGHT CALCULATION
= EAVE/ROOF/IMPERVIOUS PROJECTION LINE
= REVISED TOPO (FINISHED GRADES)
EXISTING HOUSE, DRIVEWAY AND ALL HARDSCAPE ON PROPERTY TO BE REMOVED
= SITE RETAINING WALLS, SEE A-1B FOR HEIGHTS
= EXISTING TOPOGRAPHY

Owner

Millad V LLC
7683 SE 27th St #187
Mercer Island WA 98040

contact = Farzad Ghazvinian
206.972.4140

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

Millad Homes LLC
7683 SE 27th St #187
206.498.6045
LIC # MILLAHL836LI

Project Description

New single family residence

CONTINUOUS GEOTECHNICAL INSPECTION IS REQUIRED DURING EXCAVATION.

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.

ABE CALCULATION

	EL @ MIDPOINT	segment	wtd sgmnt
A	115	20	2300.00
B	113	25.33	2862.29
C	108	22.54	2434.32
D	101.9	7.08	721.45
E	95	22	2090.00
F	92.5	13.33	1233.03
G	94	5.5	517.00
H	97	18.63	1807.11
I	98.1	4.5	441.45
J	97.2	11.5	1117.80
K	96.8	3.46	334.93
L	96.7	10	967.00
M	97.8	3.46	338.39
N	99	20.54	2033.46
O	105	21.54	2261.70
P	110.6	6	663.60
Q	112.7	12.5	1408.75
R	115.4	11.85	1367.49
S	114.8	0.5	57.40
T	114	15.15	1727.10
U	111.9	6.92	774.35
V	110.3	12.13	1337.94
W	112	6.92	775.04
X	113.3	8.46	958.52
Y			
		289.84	30530.11

AVG. EL = 105.3343
all midpoints are existing grade
all final grades same or higher than existing

Parcel Number/Legal

Parcel # 7776700010 (parent lot)

Lot Size = 16,549 sf
RELATED PERMITS = LOT 1 PER 01-PSP18-142

ZONING = R-15

LEGAL DESCRIPTION LOT 1

THAT PORTION OF LOT 2, SHORERIDGE ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 49 OF PLATS, PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS;
BEGINNING AT THE MOST SOUTHERLY POINT OF SAID LOT 2; THENCE N55°39'26"W 165.39 FEET TO THE SOUTHEAST MARGIN OF EAST MERCER WAY; THENCE, ALONG SAID SOUTHEAST MARGIN, ALONG A CURVE TO THE LEFT, THE RADIUS OF WHICH BEARS S55°39'35"E 543.70 FEET, WITH A CENTRAL ANGLE OF 14°30'59" AND AN ARC DISTANCE OF 137.75; THENCE S41°14'09"E 105.08 FEET; THENCE S19°40'48"W 60.72 FEET; THENCE S10°51'52"E 53.74 FEET' THENCE S62°29'30"W 15.33 FEET, TO THE POINT OF BEGINNING.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

FAR CALCULATION

Main Floor = 2280.5 sf
Lower Floor = 1893.8 sf
Upper Floor = 414 sf
Garage = 570 sf
12'16" clg = 301 sf
covered decks = 220 sf
stairs = (-88)

TOTAL = 5591.3 sf
allowable = 16,549 x .4 = 6619.6 sf

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CONTENTS
Site Plan

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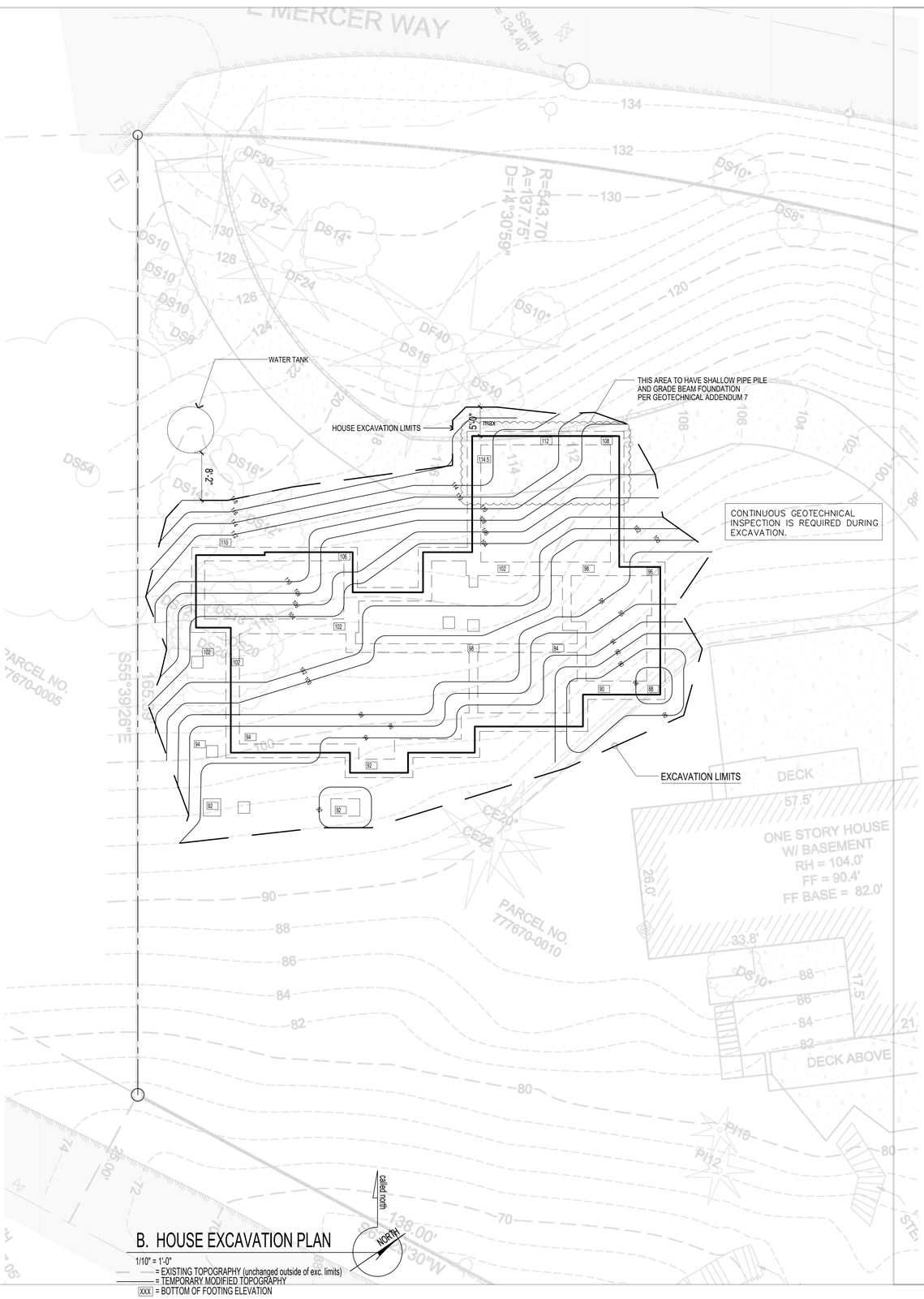
3.17.21
1.14.22

1A



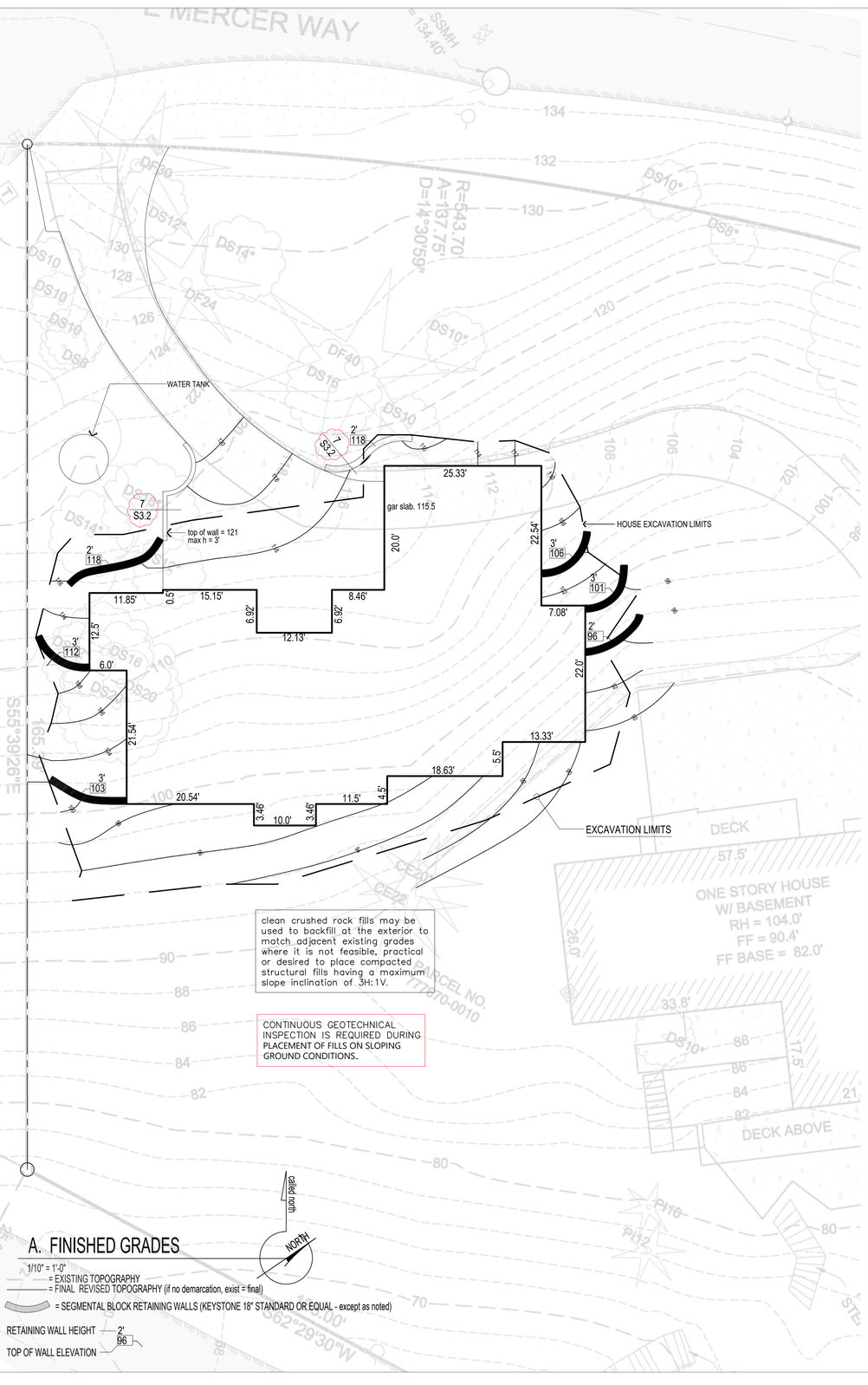
B. HOUSE EXCAVATION PLAN

1/10" = 1'-0"

= EXISTING TOPOGRAPHY (unchanged outside of exc. limits)

= TEMPORARY MODIFIED TOPOGRAPHY

XXX = BOTTOM OF FOOTING ELEVATION



A. FINISHED GRADES

1/10" = 1'-0"

= EXISTING TOPOGRAPHY

= FINAL REVISED TOPOGRAPHY (if no demarcation, exist = final)

= SEGMENTAL BLOCK RETAINING WALLS (KEYSTONE 18" STANDARD OR EQUAL - except as noted)

RETAINING WALL HEIGHT — 2'

TOP OF WALL ELEVATION — 96

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7.6.21
8.2.21
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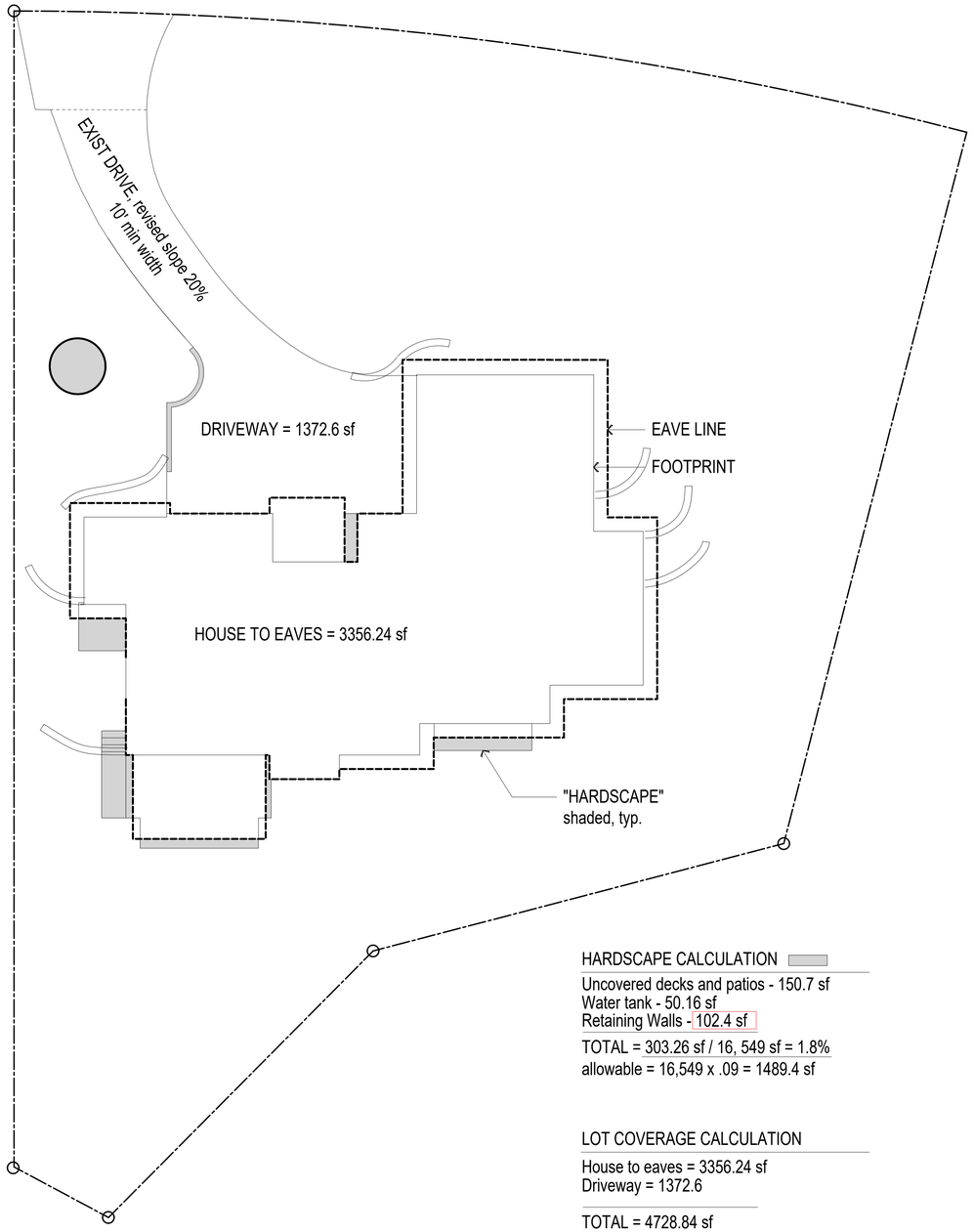
1B



HARDSCAPE CALCULATION

Uncovered decks and patios - 150.7 sf
Water tank - 50.16 sf
Retaining Walls - 102.4 sf

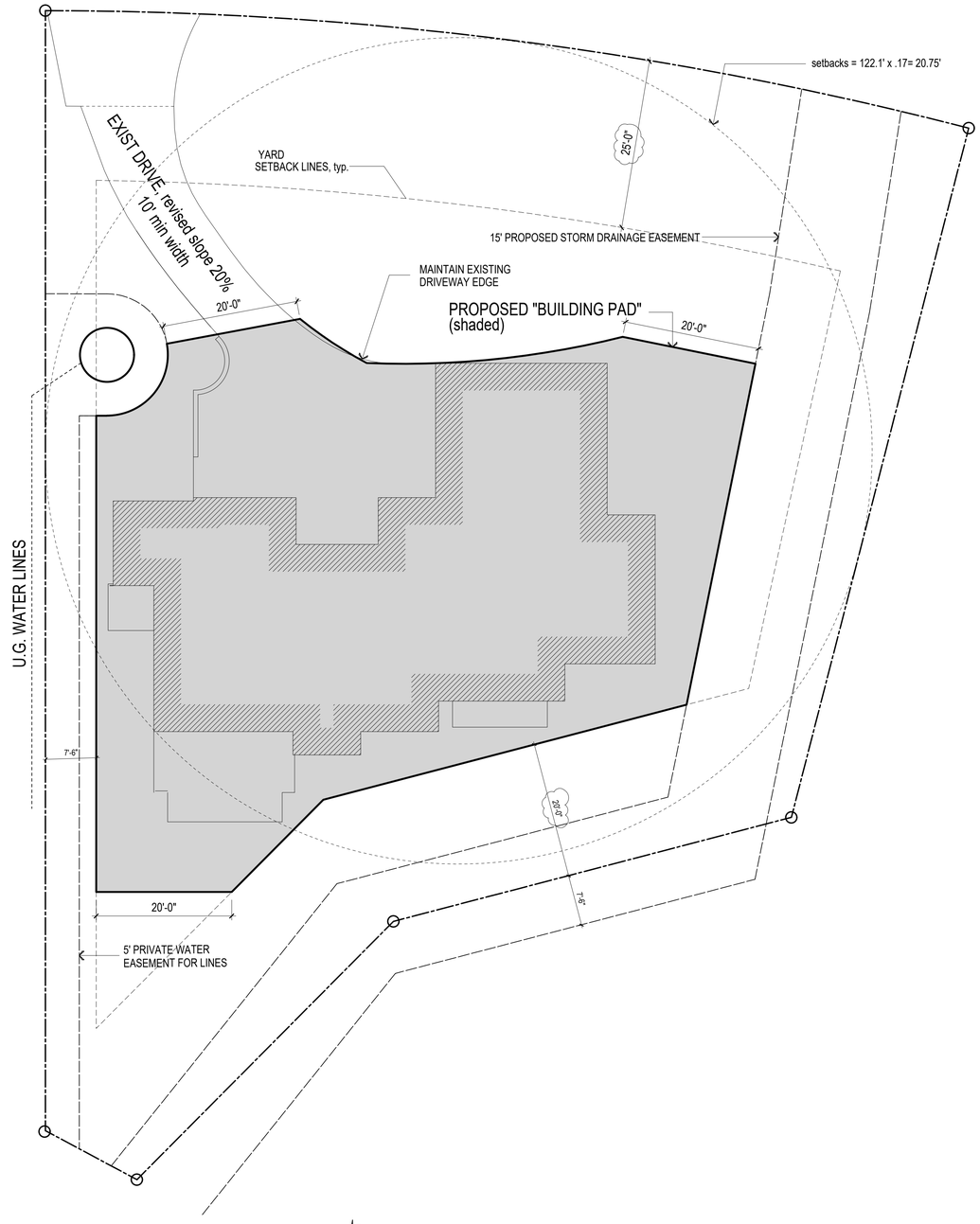
TOTAL = 303.26 sf / 16, 549 sf = 1.8%
allowable = 16,549 x .09 = 1489.4 sf

LOT COVERAGE CALCULATION

House to eaves = 3356.24 sf
Driveway = 1372.6

TOTAL = 4728.84 sf
allowable = 16,549 x .3 = 4964.7 sf

B. LOT COVERAGE / HARDSCAPE
1/10" = 1'-0"



A. "BUILDING PAD" DIAGRAM
1/10" = 1'-0"

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1C

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 HIEGHT UNLESS OTHERWISE INDICATED
(T) =TEMPER/SAFETY GLAZE WINDOWS
ALL GAS F.P. TO BE APPROVED DIRECT VENT

Energy Code Info

2018 WA STATE PRESCRIPTIVE PATH FOR ALL CLIMATE ZONES
ENERGY CREDIT OPTIONS =
2(1),2.2(1),3.5(1.5),5.5(2),7.1(.5) = 6 CREDITS
Vertical fenestration U = 0.30
Floor R-30

SEE SHEET 04 FOR ENERGY CREDIT DESCRIPTION

PRIMARY RESIDENCE HVAC NOTES

DUCTED HEAT PUMP (HSPF>9.0) INT. AIR HANDLER
INTEGRATED VENTILATION
REQUIRED VENTILATION = 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)
CONTOLLED 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.

A minimum of 75 percent of permanently installed lamps in lighting fixtures shall be high-efficacy lamps.

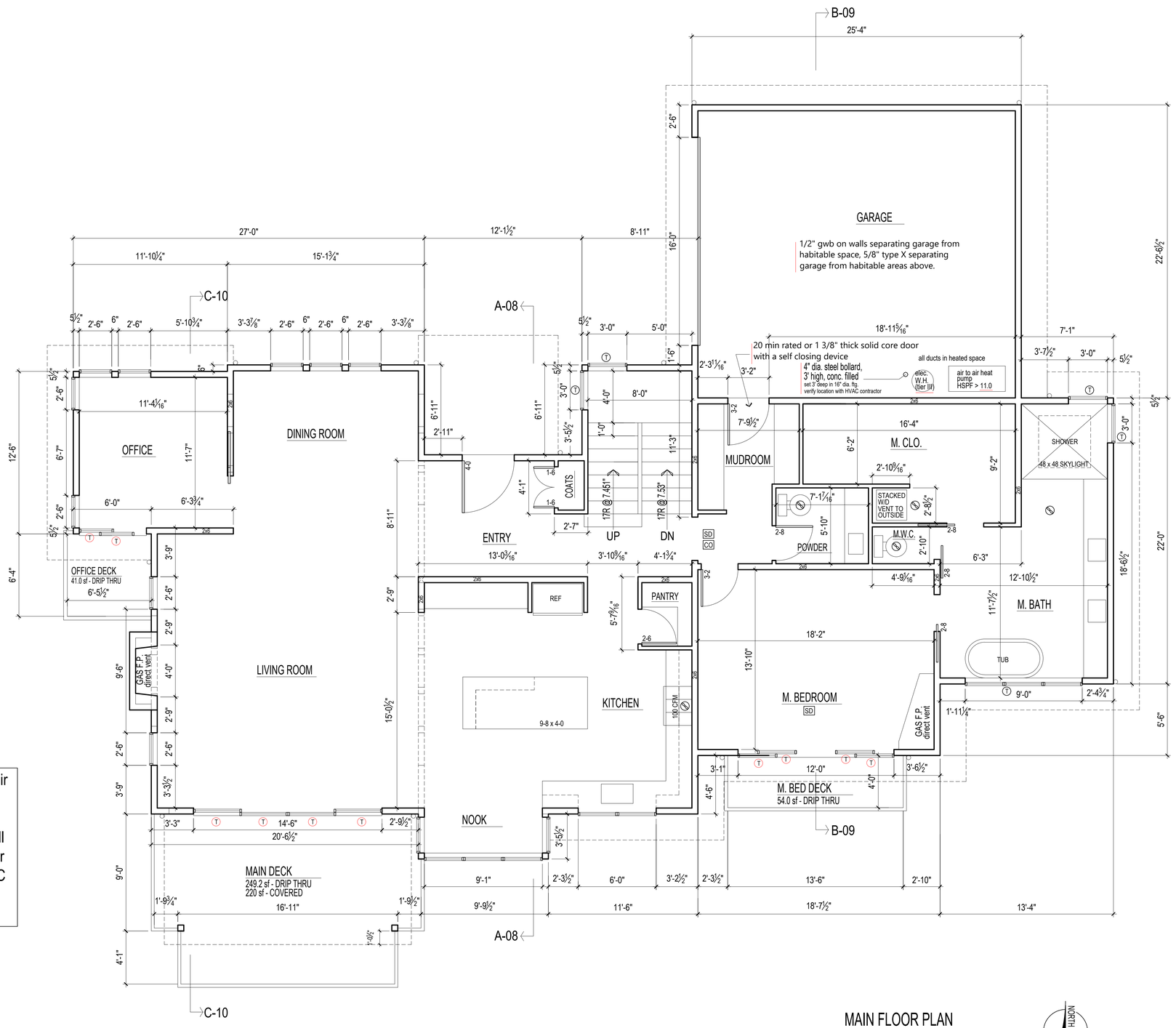
Maximum flow rates for shower heads and kitchen sink - 1.75 GPM or less. All other lavatory faucets - 1.0 GPM or less.

Air leakage shall not exceed 2 air changes/ hour and shall be tested as such. A written report of the test results, shall be signed by the testing party and provided to the building inspector, prior to call for final inspection.

Per WSEC R402.4, The building thermal Envelope shall be constructed to limit air leakage to 3.0 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		
	R-Value[a]	U-Factor[a]
Fenestration U-Factor[b]	n/a	0.30
Skylight U-Factor	n/a	0.50
Glazed Fenestration SHGC[b,e]	n/a	n/a
Ceiling[k]	49[j]	0.026
Wood Frame Wall[g,m,n]	21 int	0.056
Mass Wall R-Value[i]	21/21[h]	0.056
Floor	30[g]	0.029
Below Grade Wall[c,m]	10/15/21 int + TB	0.042
Slab[d] R-Value & Depth	10, 2 ft	n/a

*Table R402.1.1 and Table R402.1.3 Footnotes included on Page 2.



MAIN FLOOR PLAN

1/4" = 1'-0"
GARAGE = 570 (gross)
LIVING = 2280.5 sf (gross)
interior LIVING = 2156.6 sf (net)
= SHEAR WALL PE STRUCTURAL PLANS, SEE S2.2

NORTH

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Main Floor

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02

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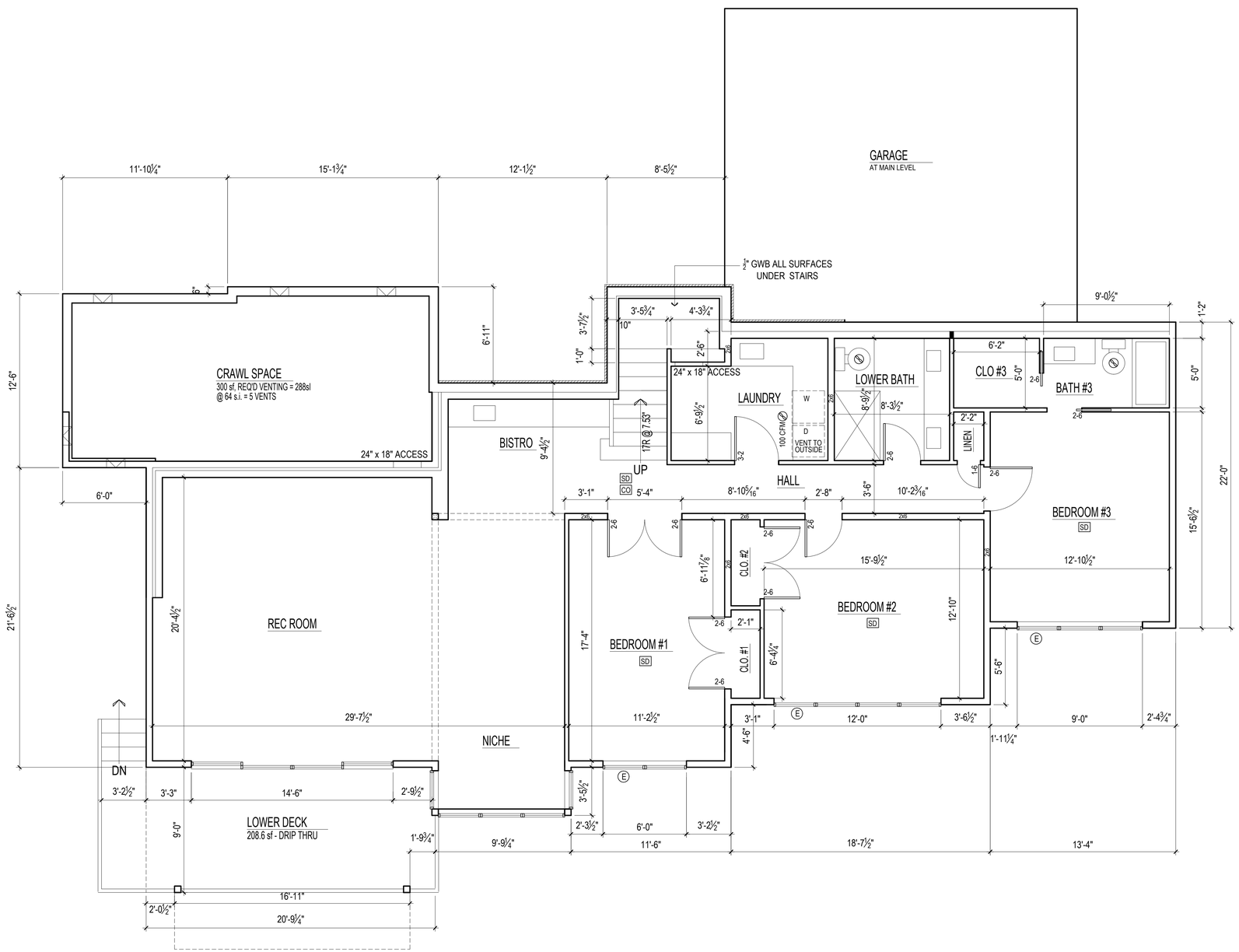
SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
CO CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP

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 HIEGHT UNLESS OTHERWISE INDICATED
(T) =TEMPER/SAFETY GLAZE WINDOWS
ALL GAS F.P. TO BE APPROVED DIRECT VENT



LOWER FLOOR PLAN

1/4" = 1'-0"
LIVING = 1893.8 sf (gross)
interior LIVING = 1783.5 sf (gross)
▭ = SHEAR WALL PE STRUCTURAL PLANS, SEE S2.2

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Lower Floor

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Energy Credit Descriptions (2018)

2.0 (1 CR)

Heat Pump

2.2 (1 CR)

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 (1.5 CR)

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

5.5 (2 CR)

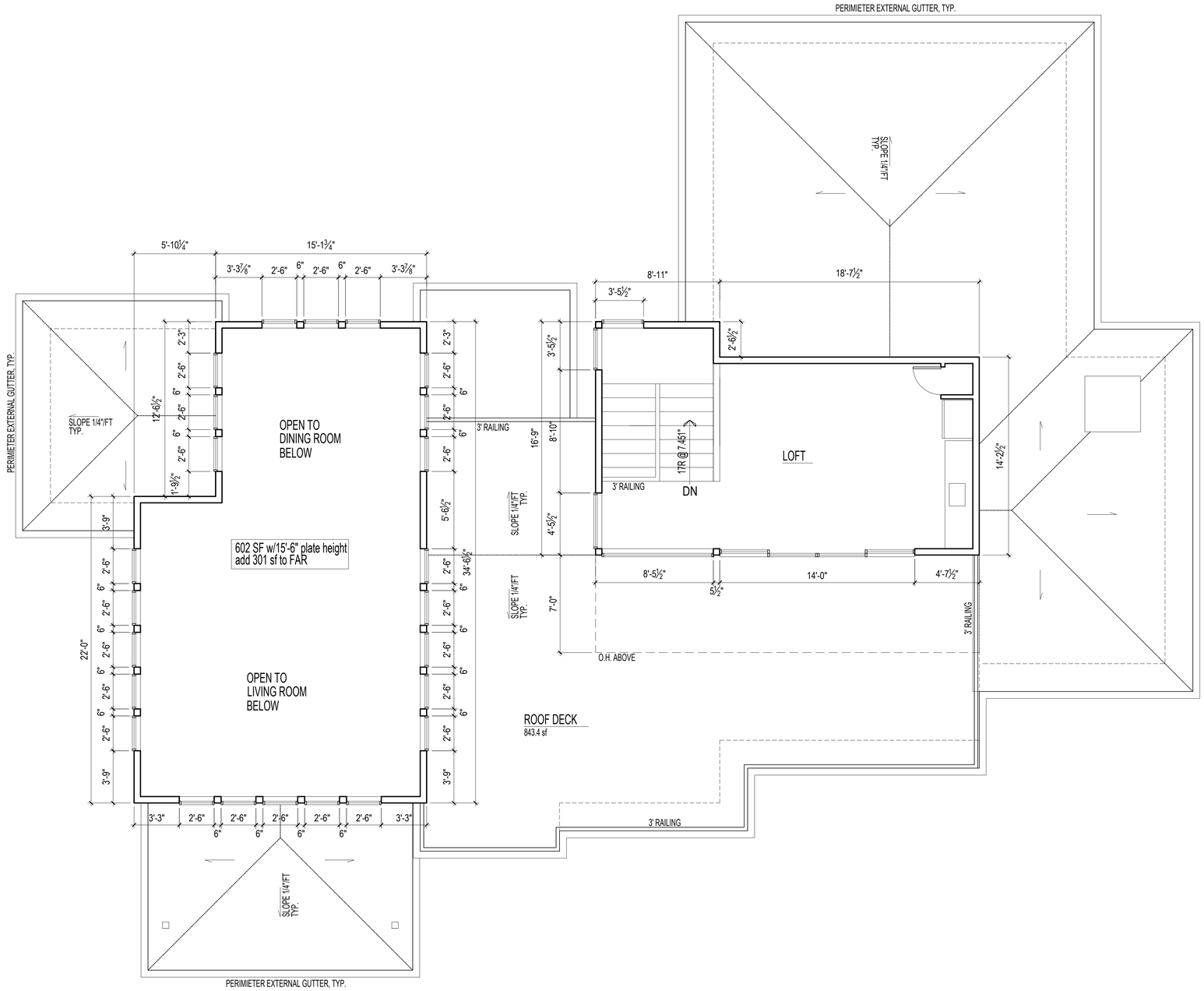
Water heating system shall include one of the following: Electric heat pump water heater meeting the standards for Tier III of NEEA's advanced water heating specification or For R–2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier III of NEEA's advanced water heating specification, 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 (.5 CR)

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.

Dishwasher - Cafe' Model CDT845P2NS1
Refrigerator - Cafe' Model CWE23SP2MS1
Washing Machine - LG Model WM4200HWA
Dryer - LG Model DLEX4200HW



UPPER FLOOR PLAN

1/4" = 1'-0"

LIVING = 414 sf (gross)
interior LIVING = 370.7 sf (gross)

= SHEAR WALL PE STRUCTURAL PLANS, SEE S2.2

NORTH

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Upper Floor

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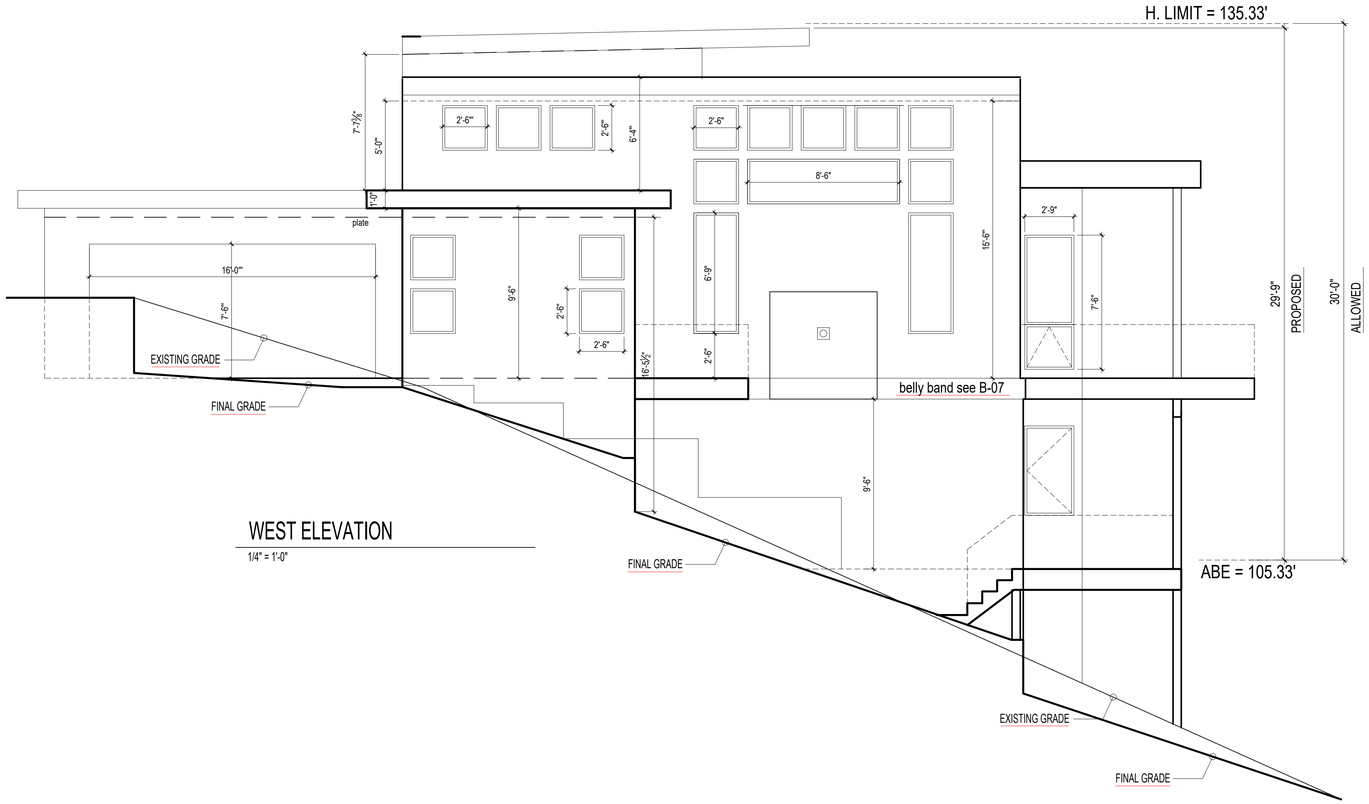
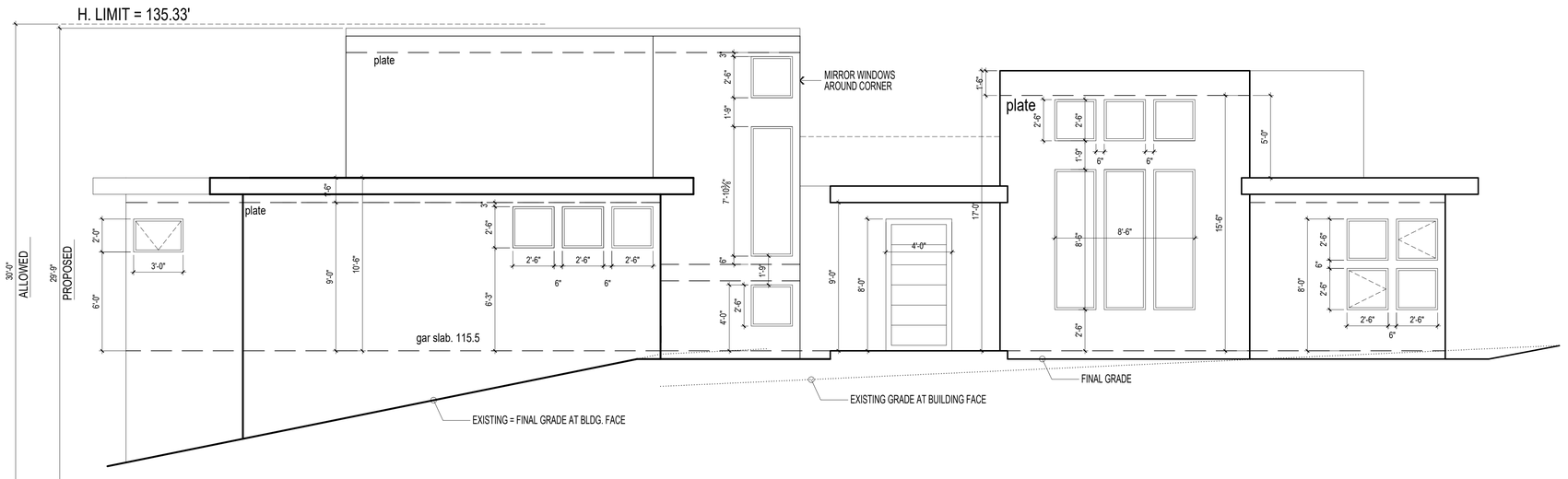


WEST ELEVATION

1/4" = 1'-0"



NORTH ELEVATION

1/4" = 1'-0"

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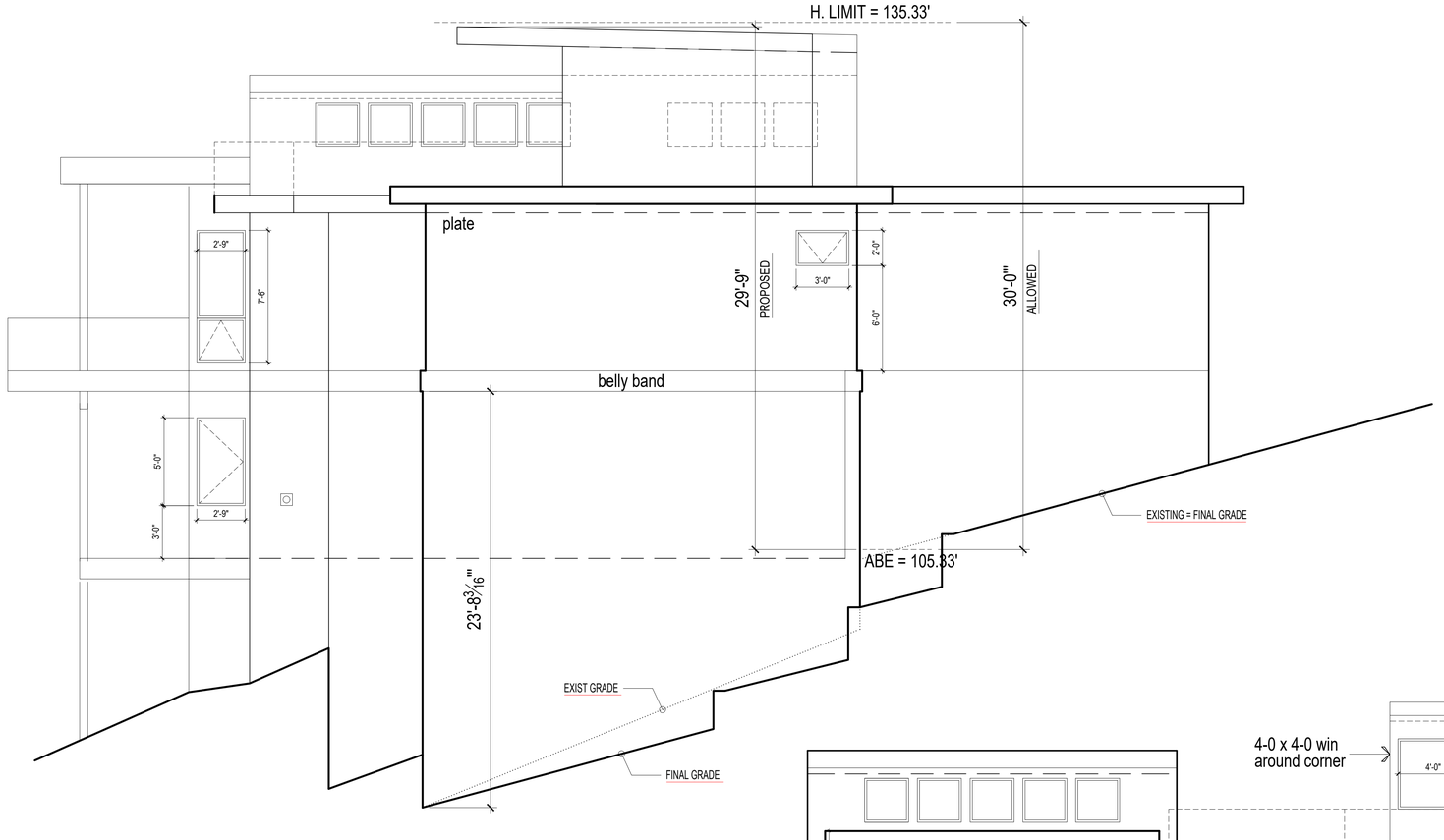
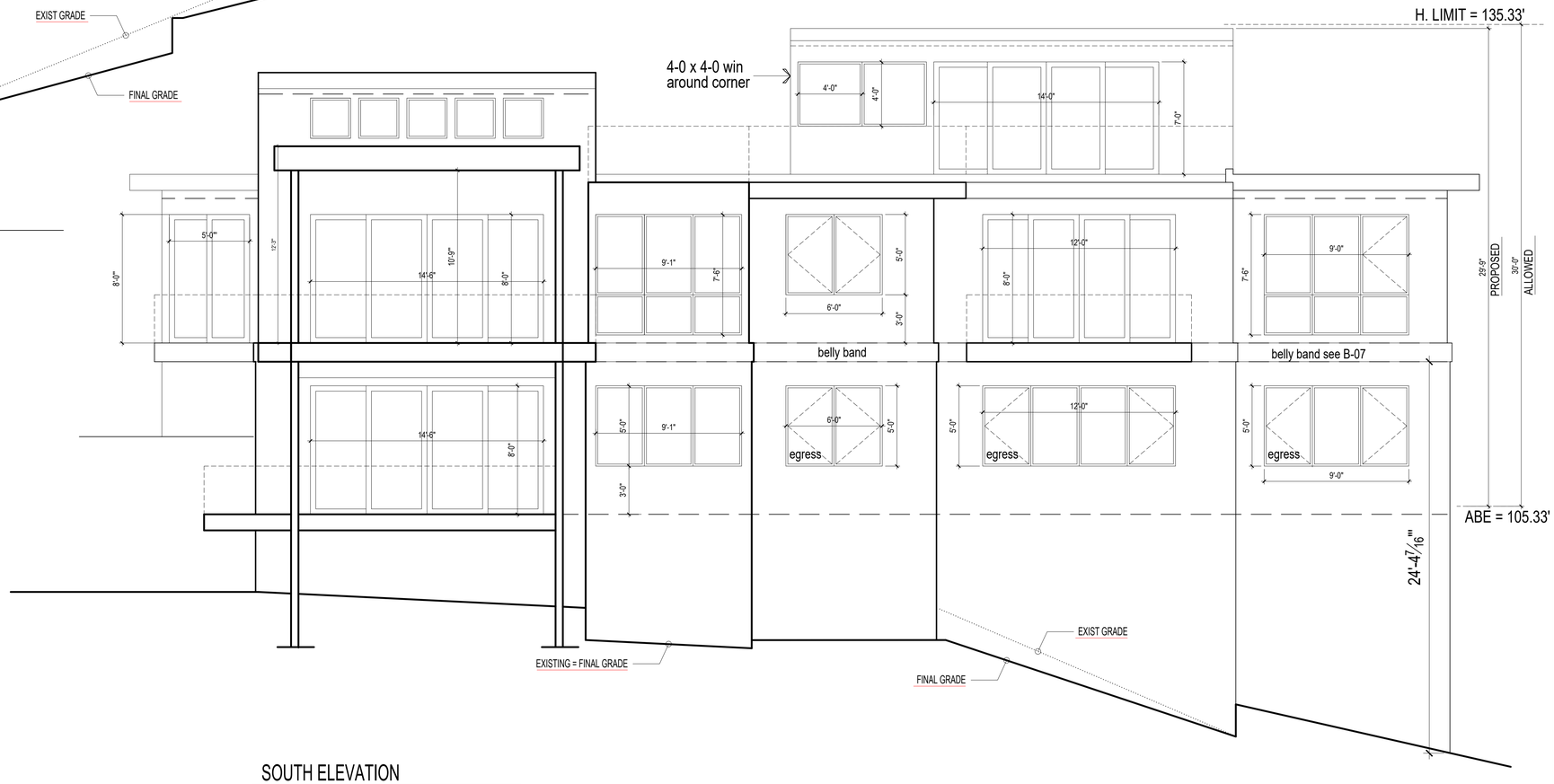


EAST ELEVATION

1/4" = 1'-0"



SOUTH ELEVATION

1/4" = 1'-0"

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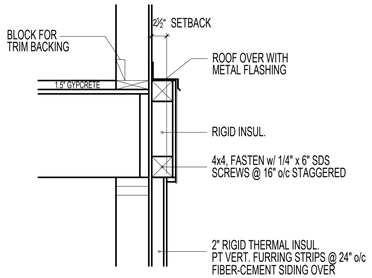
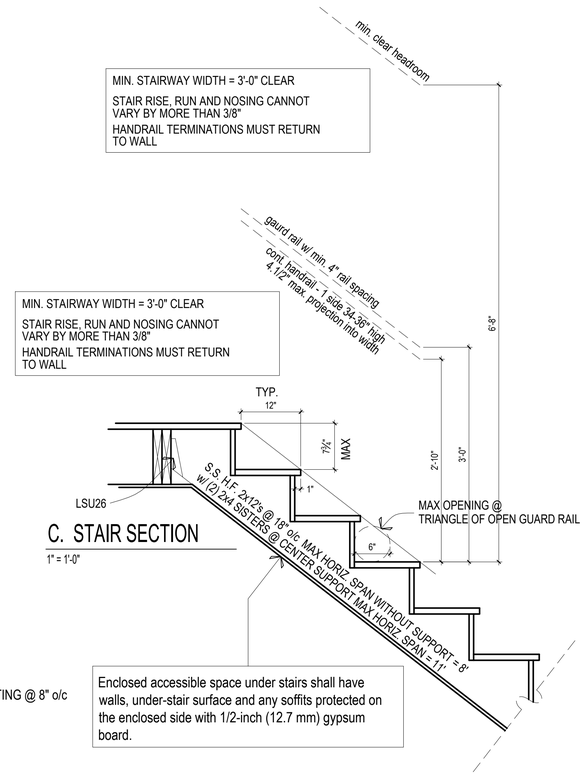
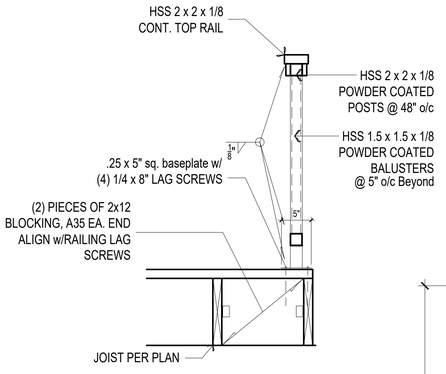


B. BELLY BAND
1" = 1'-0"

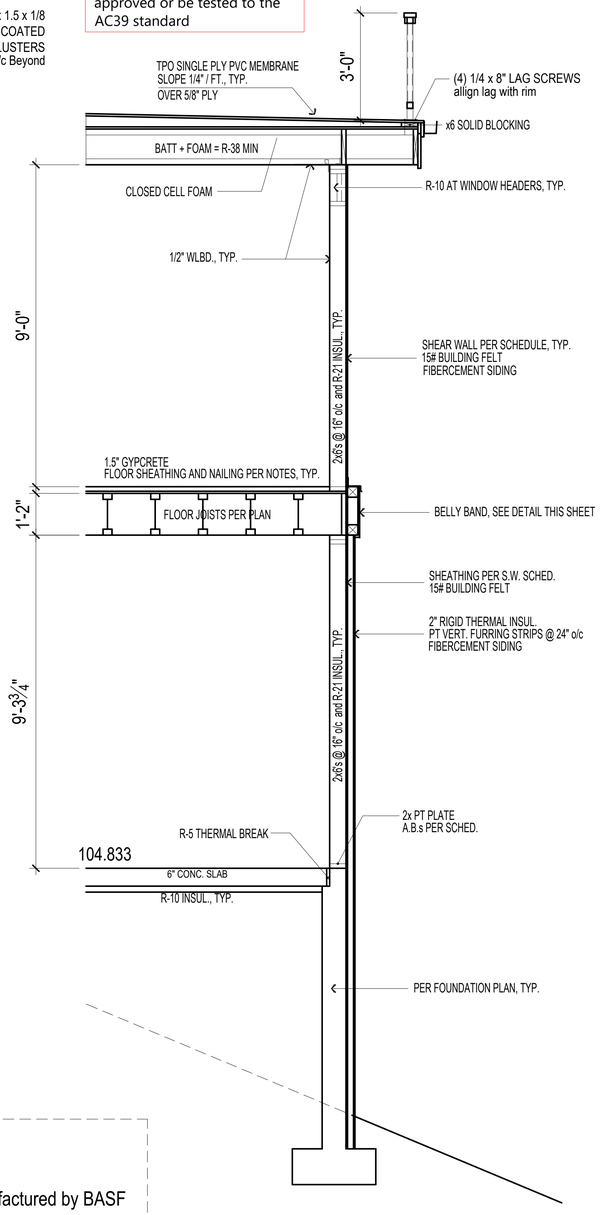


C. STAIR SECTION
1" = 1'-0"

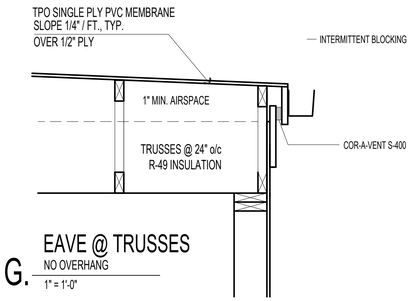


D. RAILING DETAIL
NO OVERHANG, perp to jsts.
1" = 1'-0"

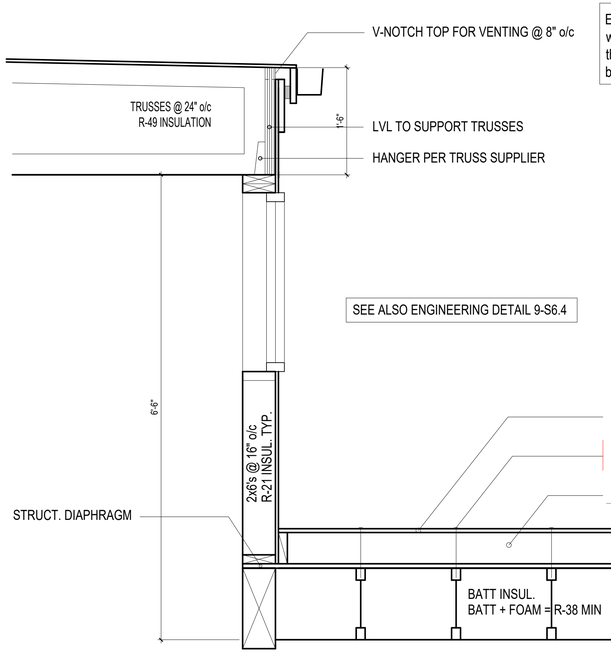
Membrane used as a walking surface must be IBC ES approved or be tested to the AC39 standard



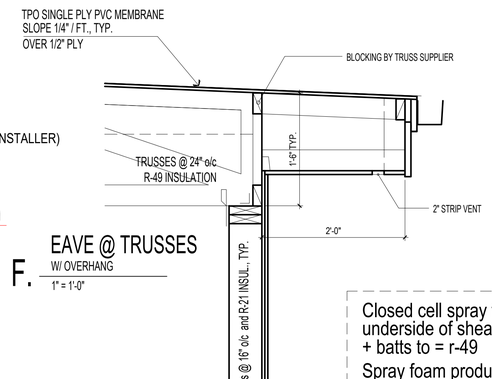
A. TYPICAL SECTION
1/2" = 1'-0"



G. EAVE @ TRUSSES
NO OVERHANG
1" = 1'-0"



E. LOW/HIGH ROOF SECTION
1" = 1'-0"



F. EAVE @ TRUSSES
W/ OVERHANG
1" = 1'-0"

Closed cell spray foam directly applied to underside of sheathing (min R-10) + batts to = r-49

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.

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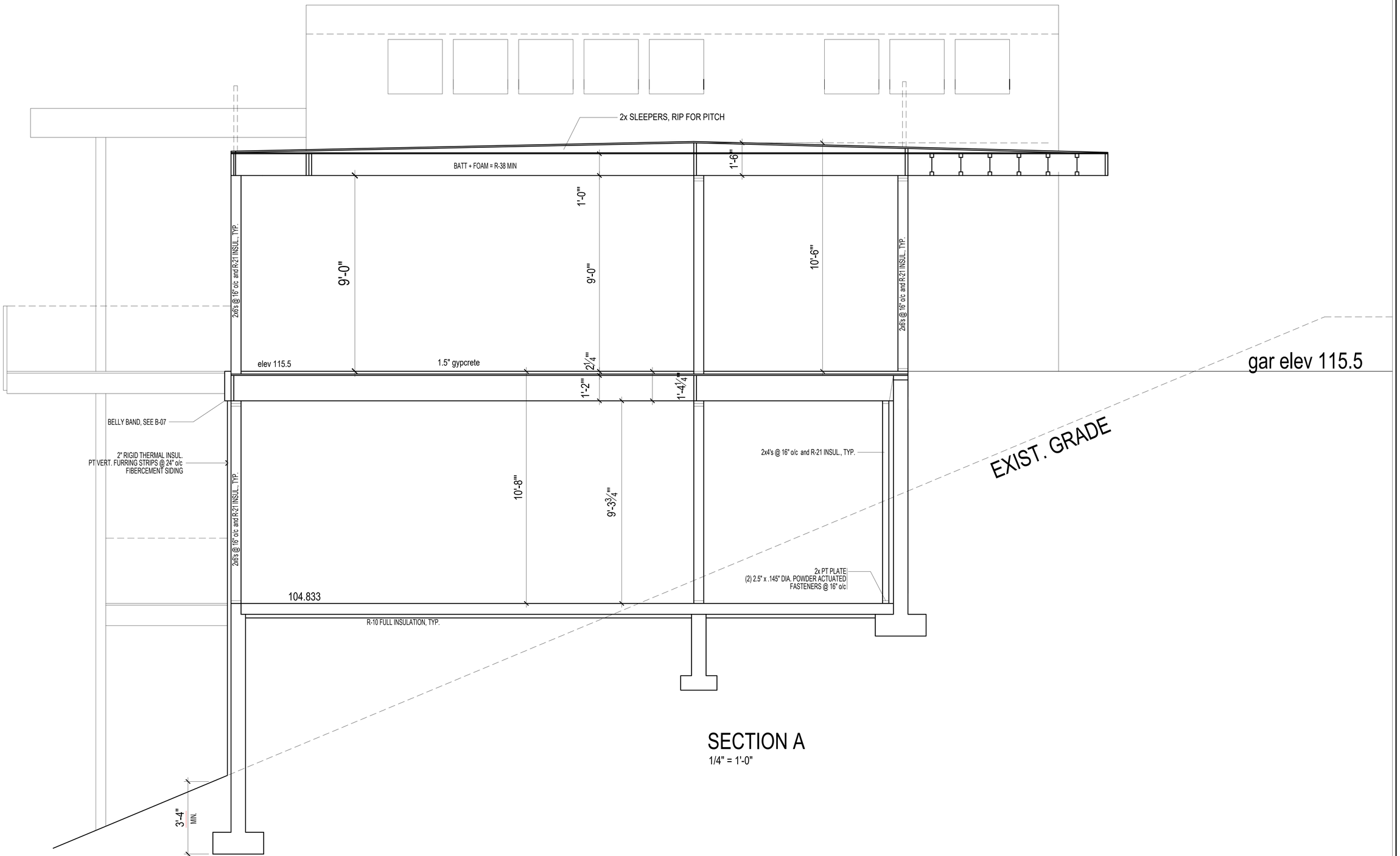

SECTION A

1/4" = 1'-0"

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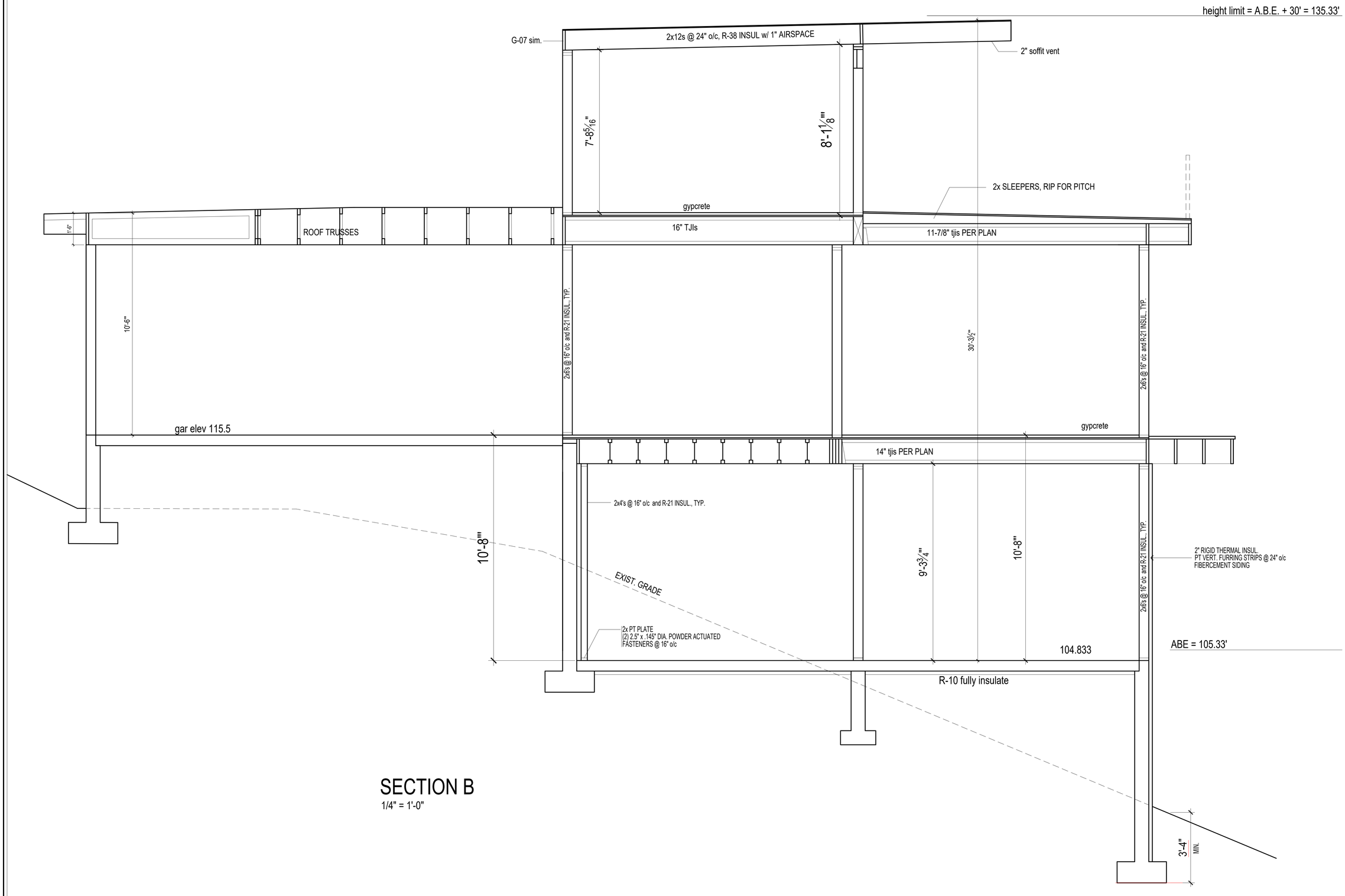

SECTION B

1/4" = 1'-0"

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CHRIS LUTHI
STATE OF WASHINGTON

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Section B

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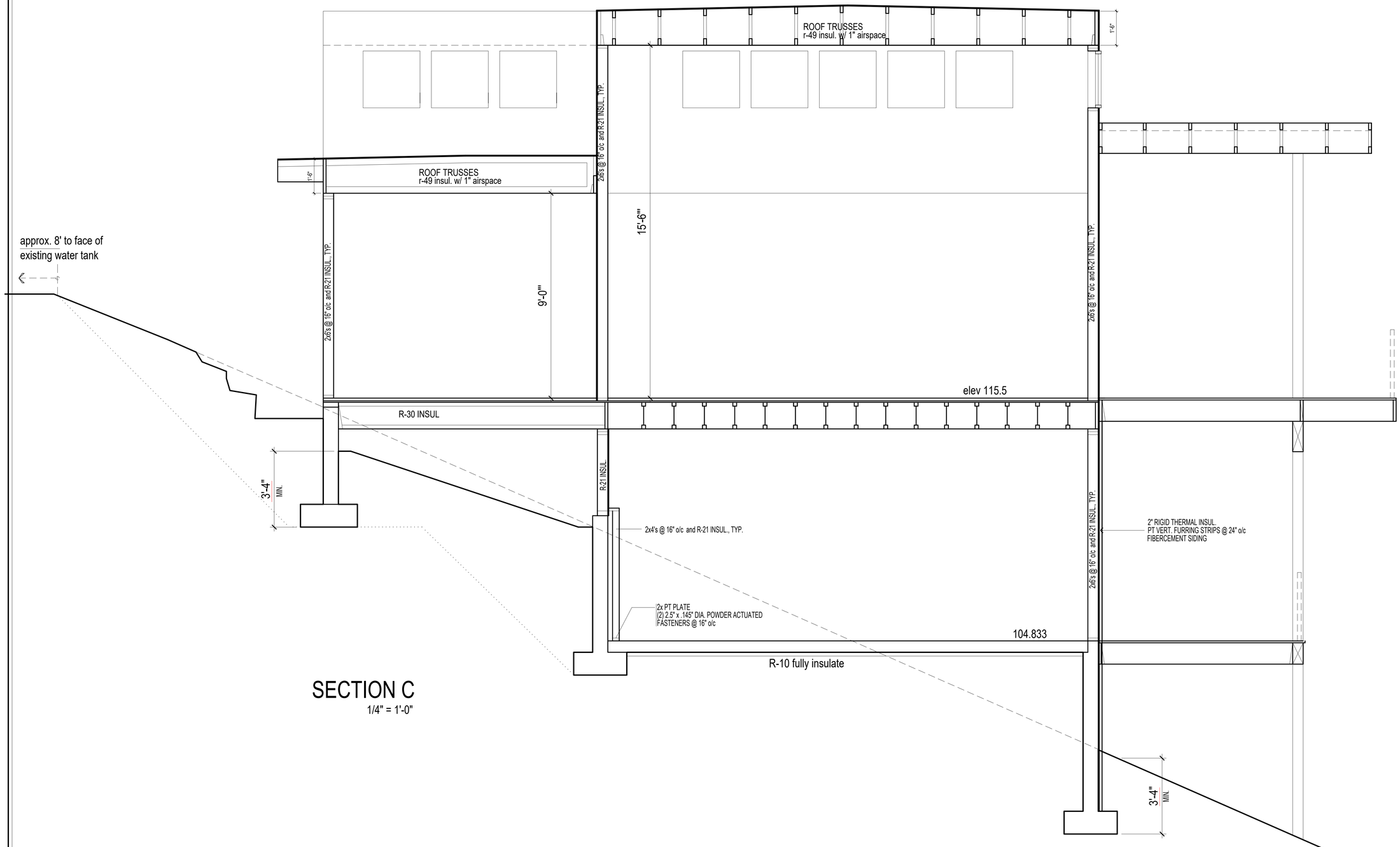
3.15.22

09



SECTION C

1/4" = 1'-0"

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ARCHITECT
CHRIS LUTHI
STATE OF WASHINGTON

CENTERLINE
DESIGN
4737 37th AVE SW
SEATTLE
206.932.8706
www.Centerline-Design.com

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CONTENTS

Section C

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General Structural Notes (GSN's)

CRITERIA:

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC) WITH WASHINGTON STATE ADMINISTRATIVE CODE AMENDMENTS, 2015 EDITION.

2. DESIGN LOADING CRITERIA
   RISK CATEGORY IBC TABLE 1604.5 II
   ROOF SNOW LOAD . . . . 25 PSF (I_S = 1.0)
   ROOF DEAD LOAD . . . . 20 PSF
   LIVE LOAD . . . . 40 PSF
   DECK LIVE LOAD . . . . 60 PSF
   FLOOR DEAD LOAD . . . . .25 PSF (ACCOUNTS FOR 1½" GYPCRETE)

   EARTHQUAKE . . . . SEISMIC DESIGN CATEGORY D
   S_S = 1.43, S_1 = 0.496, S_{DS} = 0.953, S_{D1} = 0.547
   EQUIVALENT LATERAL FORCE PROCEDURE
   LIGHT FRAME (WOOD) WALLS AND ROOFS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR
   R = 6.5, Ω_0 = 2½, I_E = 1.0, C_d = 4, C_s = 0.147
   BASE SHEAR V = 42.0 K – LRFD
   WIND . . . . 110 MPH, EXPOSURE "C", Kzt = 1.15
   COMPONENTS & CLADDING . . . . –34.4/–20.7 PSF MAX. AT WALLS (LRFD/ASD)
   –58.3/–35.0 GROSS UPLIFT AT ROOF (LRFD/ASD)
   WIND PRESSURES BASED ON LESS THAN 10 SQUARE FOOT TRIBUTARY AREAS NEAR WALL CORNERS OR ROOF EDGES (EXCLUDING CORNER ZONES AT ROOF). REDUCED DESIGN PRESSURES MAY BE CALCULATED IN ACCORDANCE WITH ASCE 7–10 CHAPTER 30.

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ENGINEER OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BUILDING LAYOUT DIMENSIONS (GRID LAYOUTS, SITE COORDINATES, ETC.) AMONGST ALL TRADES, INCLUDING SHOP FABRICATED ITEMS.

4. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, BOTH FOR VERTICAL LOADS AND LATERAL STABILITY, FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.

6. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

7. ALL STRUCTURAL SYSTEMS COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

8. SEISMIC BRACING AND/OR GRAVITY SUPPORT AND ANCHORAGE OF ALL MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON, EXCEPT FOR ELEMENTS SPECIFICALLY SHOWN AND DETAILED ON THE STRUCTURAL DRAWINGS. THE MECHANICAL/ELECTRICAL CONTRACTOR MUST HIRE THE ENGINEER AND IS RESPONSIBLE FOR ALL COSTS RELATED TO THE PURCHASE AND INSTALLATION OF NECESSARY SUPPORTS, BRACING AND ANCHORAGE. SEISMIC BRACING AND ANCHORAGE DESIGN AND CONSTRUCTION SHALL COMPLY WITH CHAPTER 13 OF ASCE 7–10.

9. SHOP DRAWING REVIEW: SHOP DRAWINGS FOR TRUSSES SHALL BE SUBMITTED TO THE CONTRACTOR, ARCHITECT, AND ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, AND THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY. THE REPRODUCIBLE SHALL BE MARKED AND RETURNED. SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

10. DEFERRED SUBMITTALS SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF WASHINGTON. THE COMPONENT DESIGNER SHALL BE A REGISTERED STRUCTURAL ENGINEER IF REQUIRED BY THE BUILDING OFFICIAL OF THE LOCAL JURISDICTION. BUILDING COMPONENT SUBMITTALS SHALL INCLUDE THE DESIGNING PROFESSIONAL ENGINEER'S STAMP AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE INCLUDING ACCOMMODATION FOR STRUCTURAL DISPLACEMENT PER ASCE 7–10 SECTION 13.3.2. AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. DEFERRED SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE INCLUDED IN THE SUBMITTAL. THE CONTRACTOR SHALL FORWARD DEFERRED SUBMITTALS TO THE BUILDING OFFICIAL AND HAVE THE DEFERRED SUBMITTALS ON SITE FOR THE GOVERNING JURISDICTIONS INSPECTORS USE AND REFERENCE. THE FOLLOWING BUILDING COMPONENTS SHALL BE DEFERRED SUBMITTALS FOR THIS PROJECT:
    PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES (SEE NOTE 23)

GEOTECHNICAL:

11. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH THE RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE OWNER APPOINTED GEOTECHNICAL ENGINEER. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH OR CONTROLLED, COMPACTED STRUCTURAL FILL AT LEAST 40" BELOW LOWEST ADJACENT FINISHED GRADE WHERE FOOTINGS ARE LOCATED ADJACENT TO PERMANENT SLOPES OF 3H:1V (SLOPES AT SIDES AND BELOW); AND AT LEAST 24" BELOW LOWEST ADJACENT FINISHED GRADE AT OTHER LOCATIONS. THE OWNER APPOINTED GEOTECHNICAL ENGINEER SHALL APPROVE FOOTING EXCAVATION/PREPARATION PRIOR TO PLACEMENT OF ALL FOOTINGS. FOOTING DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS SHALL BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND GEOTECHNICAL ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE GEOTECHNICAL REPORT.

    ALLOWABLE SOIL PRESSURE . . . . 2,000 PSF
    LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED) . . . . 40/30 PCF
    w/ sloped earth against wall no steeper than 2H:1V . . . . 60/50 PCF
    PASSIVE EARTH PRESSURE . . . . 350 PCF
    SEISMIC SURCHARGE . . . . 8H PSF (UNIFORM)
    BASE COEFFICIENT OF FRICTION 0.35
    SOIL PROFILE TYPE . . . . SITE CLASS D

11b. PIPE PILES SHALL BE 3"ø SCHEDULE 40, ASTM A–53 GRADE A STEEL WITH AN ALLOWABLE COMPRESSIVE LOAD OF 6–TONS. INSTALLATION, FINAL PENETRATION RATE, FINISH, CONNECTION, ETC. SHALL CONFORM STRICTLY WITH THE RECOMMENDATIONS GIVEN IN THE ABOVE GEOTECHNICAL REPORT REFERENCE. PIPES SHALL BE DRIVEN TO A REFUSAL CRITERIA OUTLINED IN THE MAY 21, 2021 GEOTECHNICAL ADDENDUM REPORT (12 SECONDS PER INCH). PILES SHALL BE DRIVEN IN NOMINAL SECTIONS AND CONNECTED WITH COMPRESSION FITTED SLEEVE COUPLERS OR WELDED TOGETHER AS THE PILE IS ADVANCED. A LOAD TEST (ASTM QUICK TEST – MINIMUM REQUIREMENT) SHALL BE PERFORMED ON AT LEAST 3 PERCENT OF THE PILES (5 PILES MAXIMUM AND 1 PILE MINIMUM). THE PROJECT GEOTECHNICAL ENGINEER SHALL BE RETAINED TO BE ON–SITE TO VERIFY THE PROPER INSTALLATION OF PIPE PILES INCLUDING MONITORING PILE DEPTHS, REFUSAL VERIFICATION, AND PILE LOAD TESTING.

11c. EXPANDED POLYSTYRENE (EPS) GEOFOAM MAY BE USED AS BACKFILL MATERIAL AND SHALL MEET ASTM D6817 STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE GEOFOAM. WHERE GEOFOAM WILL SUPPORT SLAB ON GRADE LOADING, A MINIMUM EPS15 SHALL BE USED WITH THE FOLLOWING PROPERTIES: DENSITY OF 0.90 PCF; COMPRESSIVE RESISTANCE OF 3.6 PSI @ 1% DEFORMATION, 8.0 PSI AT 5% DEFORMATION, AND 10.2 PSI @ 10 DEFORMATION; AND FLEXURAL STRENGTH OF 25.0 PSI. PEA GRAVEL OR FREE–DRAINING SAND FILLER MAY BE PLACED AT MINOR (<1–INCH WIDE) GAPS BETWEEN GEOFOAM BLOCKS. AT ANY LOCATION WHERE THERE IS A POTENTIAL FOR FUEL SPILLS (SUCH AS GARAGES), GEOFOAM SHALL BE PROPERLY PROTECTED VIA THE USE OF A PVC LINER.

GEOTECHNICAL REPORT REFERENCE: "GEO Group Northwest – Geotechnical Report – Project #G–4638" 4 dated 7/13/18 and with 12/27/18, 8/16/19, 10/18/19, 11/4/19, 2/3/20, 5/21/21, 7/22/21, 12/2/21, AND 8/25/23 addendums.

ANCHORAGE:

12. DRIVE PINS AND OTHER POWDER–ACTUATED FASTENERS SHALL BE ONE OF THE FOLLOWING INSTALLED IN STRICT ACCORDANCE WITH THE ICC–ES REPORTS INDICATED AND MANUFACTURER'S INSTRUCTIONS INCLUDING MINIMUM EMBED REQUIREMENTS: "TE SERIES" (0.157" DIAMETER) AS MANUFACTURED BY ITW RAMSET (ICC–ES NO. 1799); OR "X–U" (0.157" DIAMETER) AS MANUFACTURED BY HILTI, INC. (ICC–ES NO. 2269); OR "STRONG–TIE PDPA" (0.157" DIAMETER) AS MANUFACTURED BY SIMPSON STRONG–TIE COMPANY, INC. (ICC–ES NO. 2138); OR "CSI PIN" (0.157" DIAMETER) AS MANUFACTURED BY DEWALT/POWERS (ICC–ES NO. 2024); OR AN APPROVED EQUIVALENT IN STRENGTH AND EMBEDMENT. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3–1/2" TO NEAREST CONCRETE EDGE.

CONCRETE:

13. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318–14 CHAPTER 26 AND ACI 301. CONCRETE SHALL ATTAIN A 28–DAY STRENGTH OF f'c = 4,000 PSI (4,500 PSI AT ALL CONCRETE EXPOSED TO WEATHER). MAXIMUM WATER–CEMENTITIOUS MATERIAL RATIO FOR INTERIOR SLABS SHALL BE BETWEEN 0.40 AND 0.44. ALL CONCRETE SHALL BE EXPOSURE CLASSES F0, S0, W0, AND C0 PER ACI 318–14 TABLES 19.3.1.1 AND 19.3.2.1 EXCEPT AS NOTED BELOW.
    ALL CONCRETE EXPOSED TO EARTH (FOUNDATIONS, ETC.): (F0, S0, W0, C1)
    ALL CONCRETE EXPOSED TO WEATHER: (F1, S0, W0, C1)
    SEE SPECIFICATIONS FOR SHRINKAGE REDUCING CONCRETE MIX CRITERIA WHERE INDICATED ON DRAWINGS. CONCRETE MIXES SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFIED ABOVE. MIXES SHALL BE SUBMITTED TO THE ENGINEER AND BUILDING OFFICIAL FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE AND SHALL INCLUDE THE AMOUNTS OF CEMENT, CEMENTITOUS MATERIAL, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES, AS WELL AS THE WATER–CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 318–14, CHAPTER 26 AND 27. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

14. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, fy = 60,000 PSI. GRADE 60 REINFORCING BARS WHICH ARE TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCEMENT COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D1.4 ARE SUBMITTED. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.

15. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315–99 AND 318–14. LAP ALL CONTINUOUS REINFORCEMENT IN ACCORDANCE WITH "REINFORCEMENT SPLICE AND DEVELOPMENT LENGTH SCHEDULE" OF 10/S3.1. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 12" AT SIDES AND ENDS. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

16. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
    FOOTINGS AND OTHER UNFORMED SURFACES
    CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . 3"
    FORMED SURFACES EXPOSED TO EARTH
    (i.e. WALLS BELOW GROUND)OR WEATHER (#5 BARS OR SMALLER). . . . . 1½"

17. BONDING AGENT SHALL BE "MASTEREMACO ADH 326" BY BASF CORPORATION. OR EQUIVALENT, AND SHALL BE USED WHERE NEW CONCRETE IS PLACED AGAINST HARDENED CONCRETE. PLACE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, INCLUDING PREPARATION OF EXISTING SURFACES. CONCRETE SHALL BE CONSIDERED HARDENED AFTER 56 DAYS.

18. NON–SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (6,000 PSI MINIMUM).

WOOD:

19. FRAMING LUMBER SHALL BE KILN DRIED OR MC–19, AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17 OR W.W.P.A. WESTERN LUMBER GRADING RULES. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:
    PLATES, LEDGERS & MISC. — DOUGLAS FIR NO. 3 OR STUD GRADE
    LIGHT FRAMING: — MIN. BASIC DESIGN STRESS, F_b = 525 PSI, E = 1400 KSI, F_c = 775 PSI, F_t = 325 PSI
    JOISTS, BEAMS & POSTS: — DOUGLAS FIR NO. 1, MIN. BASIC DESIGN STRESS, F_b = 1000 PSI, E = 1700 KSI, F_c = 1500 PSI, F_t = 1000 PSI

20. MANUFACTURED LUMBER SHALL BE AS MANUFACTURED BY TRUS JOIST OR APPROVED EQUAL. REQUESTS FOR APPROVAL AS EQUAL WILL REQUIRE SUBMITTAL OF ICC REPORT EQUIVALENT TO ESR–1387 FOR LAMINATED VENNER LUMBER (LVL, LAMINATED STRAND LUMBER (LSL), OR PARALLEL STRAND LUMBER (PSL). THE MINIMUM ALLOWABLE DESIGN VALUES ARE AS FOLLOWS:
    LVL – F_b = 2,600 F_v = 290 PSI E = 2,000,000 PSI
    LSL – F_b = 1,900 F_v = 150 PSI E = 1,300,000 PSI

21. ENGINEERED WOOD I–JOISTS SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH ENGINEERED WOOD I–JOISTS PROVIDED. DESIGN SHOWN ON THE DRAWINGS IS BASED ON RESIDENTIAL JOISTS MANUFACTURED BY WEYERHAUSER IN ACCORDANCE WITH ICC–ES REPORT NO. ESR–1153. ALTERNATE ENGINEERED WOOD I–JOISTS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD

22. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND A.I.T.C. STANDARDS IN ACCORDANCE WITH IBC SECTION 2303.1.3. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. HORIZONTAL MEMBERS AND INCLINED MEMBERS OF LESS THAN 1:1 SLOPE SHALL HAVE A RADIUSED CAMBER OF 3,500 FT. UNLESS OTHERWISE NOTED.
    SIMPLE SPAN BEAMS — DOUGLAS FIR COMBINATION 24F–VR, F_b = 2400 PSI; F_v = 265 PSI; E = 1,800,000 PSI
    GLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON–CORROSIVE, APPROVED PRESERVATIVE.

23. PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH ANSI/TPI I–2007 AND IBC SECTION 2303.4 FOR THE SPANS AND CONDITIONS SHOWN ON THE DRAWINGS.
    DESIGN LOADS SHALL BE AS FOLLOWS:
    TOP CHORD LIVE LOAD — 25 PSF, SNOW
    BOTTOM CHORD LIVE LOAD — 0 PSF
    TOP CHORD DEAD LOAD — 15 PSF
    BOTTOM CHORD DEAD LOAD — 5 PSF
    WIND UPLIFT (TOP CHORD) — SEE NOTE#2 COMPONENTS & CLADDING ROOF LOADS

    THE TRUSS MANUFACTURER SHALL COORDINATE LOCATIONS AND SUPPORT CONFIGURATIONS OF PLUMBING, MECHANICAL UNITS, DUCTS, AND/OR OTHER MISCELLANEOUS ITEMS WITH THE CONTRACTOR PRIOR TO TRUSS FABRICATION. THE TRUSS MANUFACTURER SHALL DESIGN TRUSSES TO SUPPORT ALL LOADS ASSOCIATED WITH SUCH ITEMS. THE TRUSS SHOP DRAWINGS SHALL INCLUDE ALL DESIGN LOADS AND APPROVED HANGER CONNECTION DETAILS TO TRUSS CHORDS FOR SUPPORT OF HUNG MECHANICAL SYSTEM COMPONENTS AS APPLICABLE.

    WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SHOP DRAWINGS AND CALCULATIONS SHALL BE PROVIDED AS A DEFERRED SUBMITTAL TO THE CONTRACTOR AND STRUCTURAL ENGINEER OF RECORD PER GENERAL STRUCTURAL NOTE 13. SHOP DRAWINGS SHALL INDICATE SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP–DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS OTHERWISE NOTED ON THE DRAWINGS. THE TRUSS MANUFACTURER SHALL PROVIDE ALL TRUSS–TO–TRUSS BEAM/JOIST CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. THE TRUSS MANUFACTURER SHALL DESIGN AND PROVIDE DETAILS FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

24. ROOF & WALL SHEATHING SHALL BE APA RATED, EXTERIOR OR EXPOSURE 1 PLYWOOD OR ORIENTED STRAND BOARD (OSB) IN CONFORMANCE WITH IBC SECTION 2303.1.5. SHEATHING SHALL BE MANUFACTURED UNDER THE PROVISIONS OF VOLUNTARY PRODUCT STANDARDS DOC PS 1–09, PS 2–10, OR APA PRP–108 PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL USE PANELS. SEE DRAWINGS FOR THICKNESS, SPAN RATING, AND NAILING REQUIREMENTS.

25. AT NON–SHEAR WALL EXTERIOR WALLS, UNLESS OTHERWISE NOTED, WALL SHEATHING SHALL BE ½" (NOMINAL) WITH SPAN RATING OF 24/0; WITH 8d @ 6" oc PANEL NAILING (APPLIES TO ALL SHEATHING PANEL EDGES); AND 8d @ 12" oc TO INTERMEDIATE FRAMING.

26. ALL PRESSURE–TREATED (P.T.) WOOD MEMBERS SPECIFIED ON THE DRAWINGS THAT OCCUR ABOVE GROUND AND CONTINUOUSLY PROTECTED FROM MOISTURE (INTERIOR LOCATIONS) SHALL BE PRESSURE–TREATED WITH DOT SODIUM BORATE (SBX) WITHOUT $NaSiO_2$. AT LOCATIONS PERMANENTLY EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, WOOD MEMBERS SHALL BE PRESSURE–TREATED WITH ALKALINE COPPER QUAT (ACQ–C FOR DOUGLAS–FIR) PRESERVATIVE UNLESS OTHERWISE NOTED. AMMONIACAL COPPER ZINC ARSENATE (ACZA) PRESERVATIVE OR OTHER PRESERVATIVES WITH AMMONIA CARRIERS, SHALL NOT BE USED. GLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON–CORROSIVE, APPROVED PRESERVATIVE. SEE NOTE #27 FOR MATERIAL REQUIREMENTS OF CONNECTORS AND FASTENERS IN CONTACT WITH PRESSURE–TREATED MEMBERS.

27. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG–TIE" BY SIMPSON COMPANY, AS SPECIFIED N THEIR WOOD CONSTRUCTION CONNECTORS CATALOG NO. C–C–2017–18. INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, CENTER STRAP ON JOINT AND INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER, WITH EQUAL NUMBER AND SIZE OF FASTENERS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

    ALL TIMBER CONNECTORS IN CONTACT WITH PRESSURE–TREATED WOOD THAT USED PRESERVATIVE CHEMICALS OTHER THAN DOT SODIUM BORATE (SBX) WITHOUT $NaSiO_2$ SHALL BE MANUFACTURED FROM Z_{MAX} STEEL BY SIMPSON (G185 STEEL PER ASTM A653), OR TYPE 304 OR 316 STAINLESS STEEL. ALTERNATIVELY, CONNECTORS CAN BE POST HOT DIP GALVANIZED PER ASTM A123 OR MECHANICALLY GALVANIZED PER ASTM B695, CLASS 55 OR GREATER. STAINLESS STEEL FASTENERS SHALL BE USED WITH STAINLESS STEEL CONNECTORS, AND HOT DIP GALVANIZED FASTENERS PER ASTM A153 SHALL BE USED WITH GALVANIZED CONNECTORS.

28. WOOD FRAMING NOTES: THE FOLLOWING SHALL APPLY UNLESS OTHERWISE NOTED ON THE DRAWINGS:
    A. ALL WOOD FRAMING DETAILS SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC. MINIMUM NAILING SHALL CONFORM TO IBC TABLE 2304.9.1 OR CURRENT ICC–ES REPORT NER–272. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF LAG SCREWS SHALL CONFORM TO 2012 NDS SECTION 11.1.4, AND INSTALLATION OF BOLTS SHALL CONFORM TO 2012 NDS SECTION 11.1.3.

    B. WALL FRAMING: TWO STUDS MINIMUM SHALL BE INSTALLED AT THE ENDS OF ALL WALLS, UNLESS NOTED OTHERWISE NOTED. INSTALL SOLID BLOCKING FOR WOOD COLUMN THROUGH FLOOR SPACES TO SUPPORTS BELOW.

    ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS @ 12" oc STAGGERED OR BOLTED TO CONCRETE WITH ⅝"ø ANCHOR BOLTS @ 4'–0" oc PER IBC SECTION 2308.6 (EMBED 7"), UNLESS OTHERWISE NOTED. 3" x 3" x 0.229" PLATE WASHERS SHALL BE USED WITH ALL SILL PLATE ANCHOR BOLTS AND INSTALLED PER AF&PA SDPWS–2008 SECTION 4.3.6.4.3. INDIVIDUAL MEMBERS OF BUILT–UP STUD POSTS SHALL BE NAILED TO EACH OTHER WITH 16d @ 12" oc STAGGERED.

    C. FLOOR AND ROOF FRAMING: INSTALL SOLID BLOCKING AT ALL BEARING POINTS. TOENAIL JOISTS TO SUPPORTS WITH (2)16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI–JOIST BEAMS TOGETHER WITH 16d@12"oc STAGGERED.

    ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AS SHOWN ON THE DRAWINGS. INSTALL APPROVED PANEL EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE–AND–GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING ALLOW ⅛" SPACING AT ALL PANEL EDGES AND ENDS OF LOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d@12"oc. IN ACCORDANCE WITH IBC SECTION 1604.8.3, DECKS SHALL BE POSITIVELY ANCHORED TO THE STRUCTURE BY MEANS OTHER THAN NAILS SUBJECT TO WITHDRAWAL. ANCHOR WITH MINIMUM (1) CS16 STRAP AT EACH END ATTACHED TO DECK JOISTS AND TO A SOLID BLOCKING MEMBER WITHIN THE BUILDING.

POST–INSTALLED ANCHORS AND EPOXY ADHESIVE

29. EPOXY–GROUTED RODS OR REBAR TO CONCRETE SPECIFIED ON THE DRAWINGS SHALL BE ONE OF THE FOLLOWING INSTALLED IN STRICT ACCORDANCE WITH THE ICC–ES REPORTS INDICATED AND MANUFACTURER'S INSTRUCTIONS INCLUDING MINIMUM EMBED REQUIREMENTS: "SET–XP" AS MANUFACTURED BY SIMPSON STRONG–TIE COMPANY, INC. (ICC–ES NO. 2508); OR "HIT–HY 200" AS MANUFACTURED BY HILTI, INC. (ICC–ES NO. 3187), "SAFE–SET" INSTALLATION WITH HOLLOW CARBIDE DRILL BIT IS PERMITTED; OR "PURE110+" AS MANUFACTURED BY DEWALT/POWERS (ICC–ES NO. 3298). SUBSTITUTES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH ICC–ES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. IN ADDITION, SUBSTITUTIONS SHALL MEET ICC–ES ACCEPTANCE CRITERIA AC308. SPECIAL INSPECTION OF EPOXY–GROUTED ANCHOR INSTALLATION IS REQUIRED. EPOXY GROUTED RODS OR REBAR SHALL NOT BE USED AS SUBSTITUTES FOR CAST–IN–PLACE ANCHOR BOLTS OR REINFORCING STEEL UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER. NOTIFY ENGINEER IF ANCHOR LOCATIONS CONFLICT WITH REINFORCING STEEL – DO NOT CUT REINFORCING OR REDUCE EMBEDMENT DEPTHS WITHOUT PRIOR APPROVAL. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY CERTIFIED PERSONNEL IN CONFORMANCE TO ACI 318–14 SECTION 17.8.2.2. HOLES SHALL BE HAMMER DRILLED AND DRY.

30. EXPANSION ANCHORS SHALL BE ONE OF THE APPROVED PRODUCTS BELOW:
    – KWIK BOLT TZ ANCHORS AS MANUFACTURED BY HILTI, INC. AND INSTALLED IN STRICT ACCORDANCE WITH ICC–ES REPORT NO. 1917, OR
    – STRONG–BOLT 2 AS MANUFACTURED BY SIMPSON STRONG–TIE COMPANY, INC. AND INSTALLED IN STRICT ACCORDANCE WITH ICC–ES REPORT NO. 3037
    AND INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

Minimum Connectors and Fasteners for Wood Members per IBC 2015

DESCRIPTION OF BUILDING ELEMENT	NUMBER AND TYPE OF FASTENERS	SPACING & LOCATION
ROOF		
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS, OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3–8d COMMON (2½" x 0.131"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2–8d COMMON (2½" x 0.131") 2–3" x 0.131" NAILS 2–3" x 14 GAGE STAPLES	EACH END, TOENAIL
	2–16d COMMON (3½" x 0.162") 3–3" x 0.131" NAILS 3–3" x 14 GAGE STAPLES	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON (3½" x 0.162") @ 6" oc 3" x 0.131" NAILS @ 6" oc 3" x 14 GAGE STAPLES @ 6" oc	FACE NAIL
2. CEILING JOISTS TO TOP PLATE	3–8d COMMON (2½" x 0.131"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST, TOENAIL
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITION (NO THRUST) (SEE 2308.7.3.1, TABLE 2308.7.3.1)	3–16d COMMON (3½" x 0.162"); or 4–10d BOX (3" x 0.128"); or 4–3" x 0.131" NAILS; or 4–3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	PER TABLE 2308.7.3.1	FACE NAIL
5. COLLAR TIE TO RAFTER	3–10d COMMON (3" x 0.148"); or 4–10d BOX (3" x 0.128"); or 4–3" x 0.131" NAILS; or 4–3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE (SEE 2308.7.5, TABLE 2308.7.5)	3–10d COMMON (3" x 0.148"); or 3–16d BOX (3½" x 0.135"); or 4–10d BOX (3" x 0.128"); or 4–3" x 0.131" NAILS; or 4–3" x 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2" RIDGE BEAM	2–16d COMMON (3½" x 0.162"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131 NAILS; or 3–3" x 14 GAGE STAPES, 7/16" CROWN	END NAIL
	3–10d COMMON (3½" x 0.148"); or 3–16d BOX (3½" x 0.135"); or 4–10d BOX (3" x 0.128"); or 4–3" x 0.131 NAILS; or 4–3" x 14 GAGE STAPES, 7/16" CROWN	TOENAIL
WALL		
8. STUD TO STUD (NOT AT SHEARWALL CHORDS)	16d COMMON (3½" x 0.162")"	24" oc FACE NAIL
	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	16" oc FACE NAIL
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTION WALL CORNERS	16d COMMON (3½" x 0.162")"; or	16" oc FACE NAIL
	16d BOX (3½" x 0.135")"; or	12" oc FACE NAIL
	3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	12" oc FACE NAIL
10. BUILT–UP HEADER (2" TO 2" HDR.)	16d COMMON (3½" x 0.162")"; or	16" oc EA. EDGE, FACE NAIL
	16d BOX (3½" x 0.135")	12" oc EA. EDGE, FACE NAIL
11. CONTINUOUS HEADER TO STUD	4–8d COMMON (2½" x 0.131"); or 4–10d BOX (3" x 0.128")	TOENAIL
12. TOP PLATE TO TOP PLATE	16d COMMON (3½" x 0.162"); or	16" oc FACE NAIL
	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 7/16" CROWN	12" oc FACE NAIL
13. TOP PLATE TO TOP PLATE, AT END JOINTS	8–16d COMMON (3½" x 0.162"); or 12–10d BOX (3" x 0.128"); or 12–3" x 0.131" NAILS; or 12–3" x 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EA. SIDE OF END JOINT
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING NOT AT SHEARWALL	16d COMMON (3½" x 0.162")"; or	16" oc FACE NAIL
	16d BOX (3½" x 0.135")"; or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 7/16" CROWN	12" oc FACE NAIL
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING AT SHEARWALL	2–16d COMMON (3½" x 0.162"); or 3–16d BOX (3½" x 0.135"); or 4–3" x 0.131" NAILS; or 4–3" x 14 GAGE STAPLES, 7/16" CROWN	16" oc FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4–8d COMMON (2½" x 0.131"); or 4–10d BOX (3" x 0.128"); or 4–3" x 0.131" NAILS; or 4–3" x 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
	2–16d COMMON (3½" x 0.162"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	END NAIL
17. TOP OR BOTTOM PLATE TO STUD	2–16d COMMON (3½" x 0.162"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	END NAIL
18. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2–16d COMMON (3½" x 0.162"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
19. 1" BRACE TO EACH STUD AND PLATE	2–8d COMMON (2½" x 0.131"); or 2–10d BOX (3" x 0.128"); or 2–3" x 0.131" NAILS; or 2–3" x 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
20. 1" x 6" SHEATHING TO EACH BEARING	2–8d COMMON (2½" x 0.131"); or 2–10d BOX (3" x 0.128"); or	FACE NAIL
21. 1" x 8" AND WIDER SHEATHING TO EACH BEARING	3–8d COMMON (2½" x 0.131"); or 3–10d BOX (3" x 0.128"); or	FACE NAIL

DESCRIPTION OF BLDG. ELEMENT	NUMBER AND TYPE OF FASTENERS	SPACING & LOCATION
FLOOR		
22. JOIST TO SILL, TOP PLATE, OR GIRDER	3–8d COMMON (2½" x 0.131"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
23. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL, OR OTHER FRAMING BELOW	8d COMMON (2½" x 0.131"); or 10d BOX (3" x 0.128"); or 3" x .131" NAILS; r 3" x 14 GAGE STAPLES, 7/16" CROWN	6" o.c., TOENAIL
24. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2–8d COMMON (2½" x 0.131"); or 2–10d BOX (3" x 0.128")	FACE NAIL
25. 2" SUBFLOOR TO JOIST OR GIRDER	2–16d COMMON (3½" x 0.162")	FACE NAIL
26. 2" PLANKS (PLANK & BEAM – FLOOR & ROOF)	2–16d COMMON (3½" x 0.162")"	EA. BEARING, FACE NAIL
27. BUILT–UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4" x 0.192")	32" o.c., FACE NAIL TOP & BOT. STAGGERED ON OPPOSITE SIDES
	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 7/16" CROWN	24" o.c., FACE NAIL AT TOP & BOT. STAGGERED ON OPP. SIDES
	AND: 2–20d COMMON (4" x 0.192"); or 3–10d BOX (3" x 0.128"); or 3–3" x 0.131" NAILS; or 3–3" x 14 GAGE STAPLES, 7/16" CROWN	ENDS AND AT EACH SPLICE, FACE NAIL
28. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3–16d COMMON (3½" x 0.162"); or 4–10d BOX (3" x 0.128"); or 4–3" x 0.131" NAILS; or 4–3" x 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST OR RAFTER, FACE NAIL
29. JOIST TO BAND JOIST OR RIM JOIST	3–16d COMMON (3½" x 0.162"); or 4–10d BOX (3" x 0.128"); or 4–3" x 0.131" NAILS; or 4–3" x 14 GAGE STAPLES, 7/16" CROWN	END NAIL
30. BRIDGING OR BLOCKING TO JOIST, RAFTER, OR TRUSS	2–8d COMMON (2½" x 0.131"); or 2–10d BOX (3" x 0.128"); or 2–3" x 0.131" NAILS; or 2–3" x 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL

IBC TABLE 1705.3 REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

REQUIRED?	VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC	REF STD.	IBC REF.
N*	1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS AND VERIFY PLACEMENT.	---	X	ACI 318 CH. 20, 25.2, 25.3, 26.5.1–26.5.3	1908.4
N	2. REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706. B. INSPECT SINGLE–PASS FILLET WELDS, MAXIMUM 5/16"; AND C. INSPECT ALL OTHER WELDS	--- X	X X	AWSD1.4 ACI 318 26.5.4	---
YES	3. INSPECT ANCHORS CAST IN CONCRETE.	---	X	ACI 318: 17.8.2	---
YES	4. INSPECT ANCHORS POST–INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A	X	X	ACI 318: 17.8.2.4 ACI 318:17.8.2	---
N*	5. VERIFY USE OF REQUIRED DESIGN MIX.	---	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
N*	6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	---	ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12	1908.10
N*	7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	---	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
N*	8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	---	X	ACI 318: 26.4.7–26.4.9	1908.9
N	9. INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES; AND B. GROUTING OF BONDED PRESTRESSING TENDONS	X X	--- ---	ACI 318: 26.9.2.1 ACI 218: 26.9.2.3	---
N	10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	---	X	ACI 318: CH. 26.8	---
N*	11. VERIFY IN–SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST–TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	---	X	ACI 318: 26.10.2	---
N*	12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	---	X	ACI318: 26.10.1(b)	---

* EXCEPTIONS 2 PER IBC SECTION 1705.3 APPLIES TO CONCRETE WORK ON THIS PROJECT.

9317 REGISTERED ARCHITECT
CHRIS LUTHI
STATE OF WASHINGTON

CENTERLINE DESIGN
4737 37th AVE SW
SEATTLE
206.932.8706
www.Centerline-Design.com

ATLAS CONSULTING STRUCTURAL ENGINEERS

Upper House
4276 East Mercer Way
Mercer Island, WA - 98040

CONTENTS
General Structural Notes

DRAWN BY
JDA

DATE
02.25.21
08.10.21
12.24.21
03.14.22
09.03.23 4

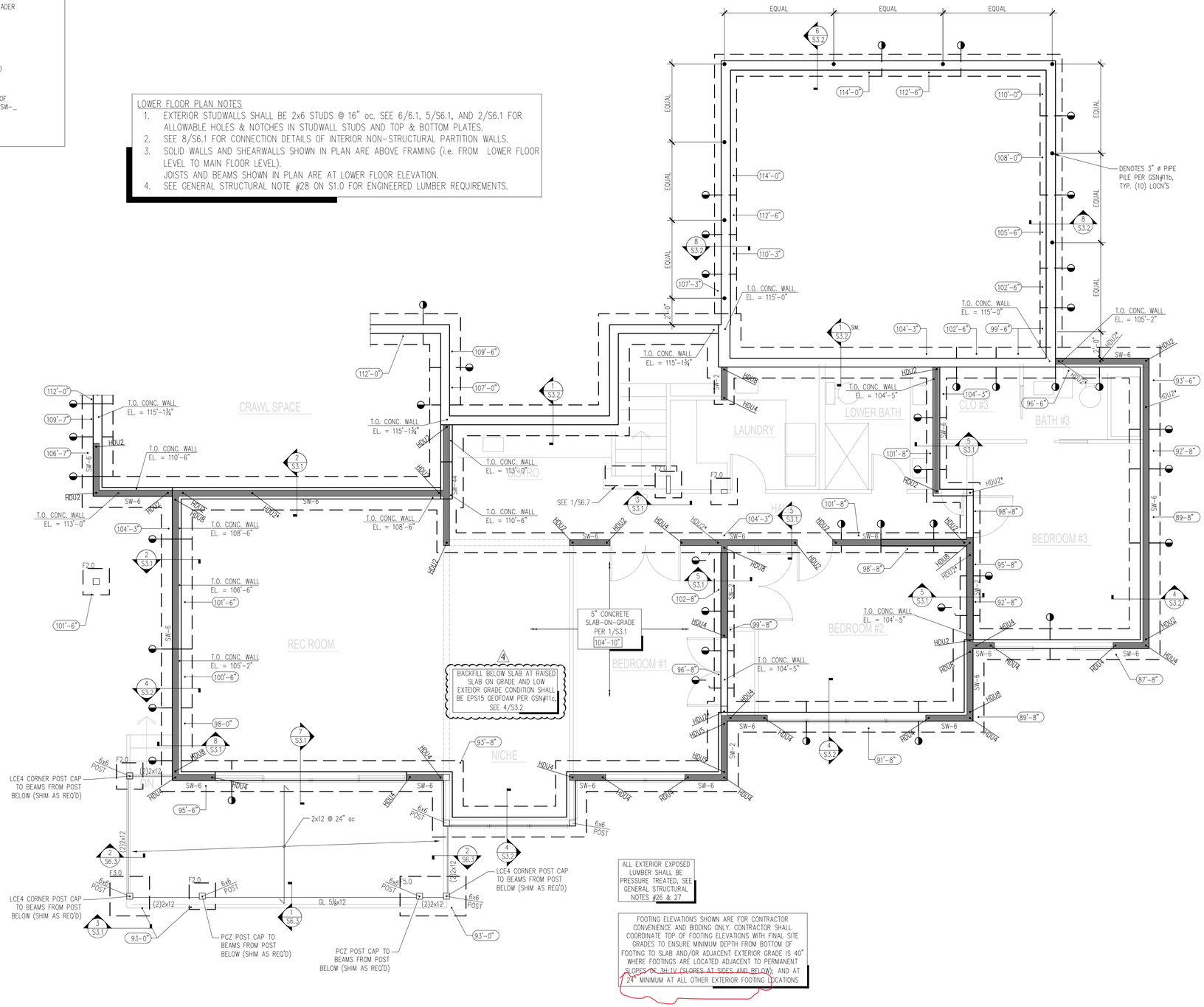
S1.1

LEGEND

- REINFORCED CONCRETE WALL
- REINFORCED CONCRETE FOOTING
- STEP IN FOOTING PER 4/S3.1 (high / low)
- XX'-XX" — DENOTES TOP OF FOOTING ELEVATION
- TENSION TIE — DENOTES SHEARWALL TENSION TIE PER 4/S6.6
  - * – DENOTES TRANSFER TIE FROM TIE ABOVE
  - ^ – DENOTES TIE OCCURRING ATOP FRAMING MEMBER
- WOOD JOIST
- WOOD BEAM or HEADER
- POST ABOVE
- POST BELOW
- STRUCTURAL WOOD STUDWALL ABOVE
- SW-_ — DENOTES EXTENT OF SHEARWALL TYPE SW-_ PER 1/S6.6

LOWER FLOOR PLAN NOTES

1. EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc. SEE 6/6.1, 5/S6.1, AND 2/S6.1 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
2. SEE 8/S6.1 FOR CONNECTION DETAILS OF INTERIOR NON-STRUCTURAL PARTITION WALLS.
3. SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE FRAMING (i.e. FROM LOWER FLOOR LEVEL TO MAIN FLOOR LEVEL). JOISTS AND BEAMS SHOWN IN PLAN ARE AT LOWER FLOOR ELEVATION.
4. SEE GENERAL STRUCTURAL NOTE #28 ON S1.0 FOR ENGINEERED LUMBER REQUIREMENTS.



1 S2.1 FOUNDATION, LOWER FLOOR, AND LOWER DECK FRAMING PLAN

1/4" = 1'-0"

9317 REGISTERED ARCHITECT
CHRIS LUTH
STATE OF WASHINGTON

CENTERLINE DESIGN
4737 37th AVE SW
SEATTLE
206.932.8706
www.Centerline-Design.com

ATLAS CONSULTING STRUCTURAL ENGINEERS

Upper House
4276 East Mercer Way
Mercer Island, WA - 98040

CONTENTS

Foundation & Lower Deck Framing Plan

DRAWN BY
JDA

DATE
02.25.21
08.10.21
03.14.22
09.03.23 (4)

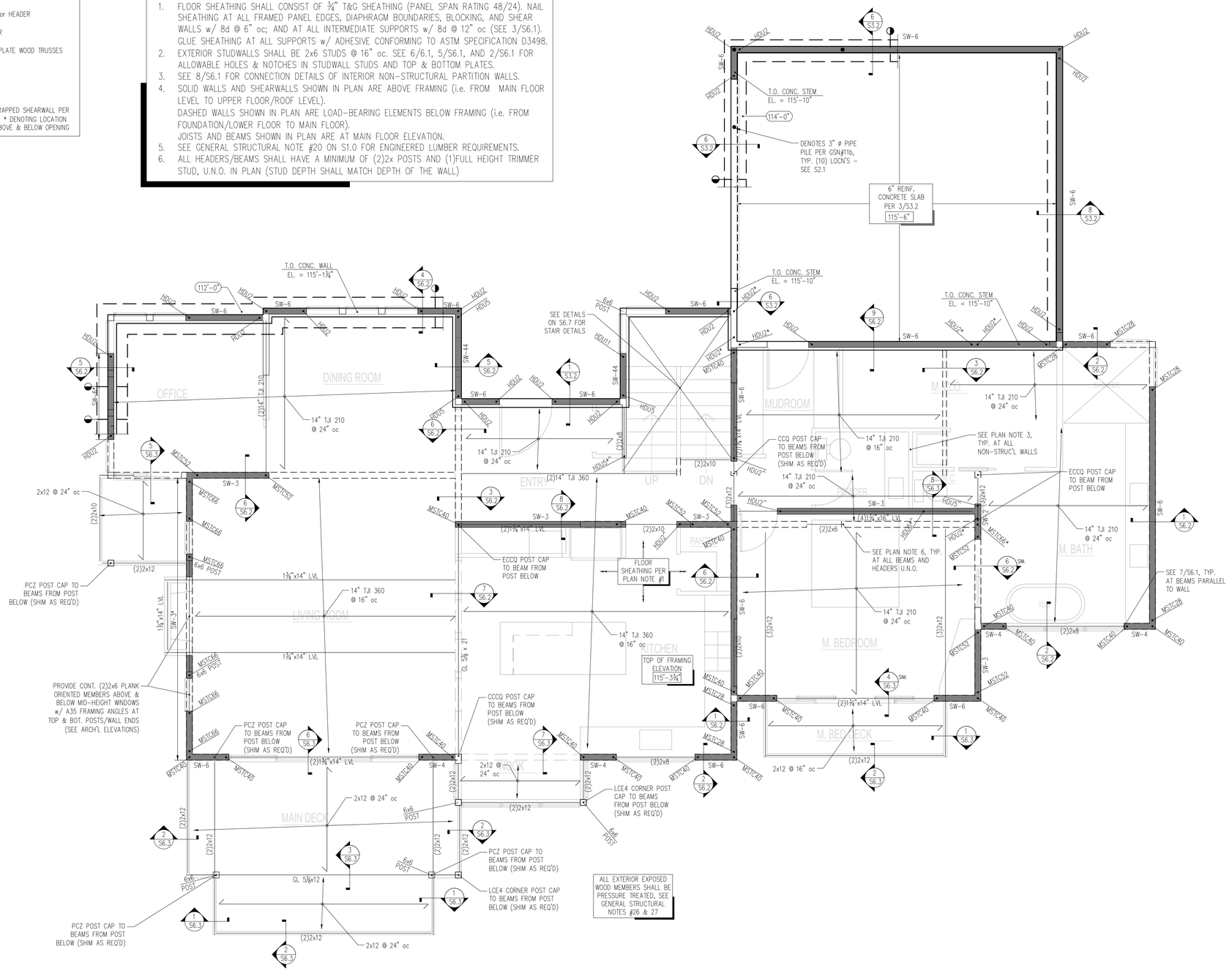
S2.1

LEGEND

- REINFORCED CONCRETE WALL
- REINFORCED CONCRETE WALL BELOW
- STRUCTURAL WOOD STUDWALL ABOVE
- STRUCTURAL WOOD STUDWALL BELOW
- SW-_ : DENOTES EXTENT OF SHEARWALL TYPE SW-_ PER 1/S6.6
- TENSION TIE : DENOTES SHEARWALL TENSION TIE PER 4/S6.6
  - * – DENOTES TRANSFER TIE FROM TIE ABOVE
  - ^ – DENOTES TIE OCCURRING ATOP FRAMING MEMBER
- WOOD JOIST
- WOOD BEAM or HEADER
- WOOD RAFTER
- CONNECTOR PLATE WOOD TRUSSES
- POST ABOVE
- POST BELOW
- SW-_* : DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH * DENOTING LOCATION OF STRAP ABOVE & BELOW OPENING

MAIN FLOOR PLAN NOTES

1. FLOOR SHEATHING SHALL CONSIST OF ¾" T&G SHEATHING (PANEL SPAN RATING 48/24). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING, AND SHEAR WALLS w/ 8d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 8d @ 12" oc (SEE 3/S6.1). GLUE SHEATHING AT ALL SUPPORTS w/ ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498.
2. EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc. SEE 6/6.1, 5/S6.1, AND 2/S6.1 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
3. SEE 8/S6.1 FOR CONNECTION DETAILS OF INTERIOR NON-STRUCTURAL PARTITION WALLS.
4. SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE FRAMING (i.e. FROM MAIN FLOOR LEVEL TO UPPER FLOOR/ROOF LEVEL).
   DASHED WALLS SHOWN IN PLAN ARE LOAD-BEARING ELEMENTS BELOW FRAMING (i.e. FROM FOUNDATION/LOWER FLOOR TO MAIN FLOOR).
   JOISTS AND BEAMS SHOWN IN PLAN ARE AT MAIN FLOOR ELEVATION.
5. SEE GENERAL STRUCTURAL NOTE #20 ON S1.0 FOR ENGINEERED LUMBER REQUIREMENTS.
6. ALL HEADERS/BEAMS SHALL HAVE A MINIMUM OF (2)2x POSTS AND (1)FULL HEIGHT TRIMMER STUD, U.N.O. IN PLAN (STUD DEPTH SHALL MATCH DEPTH OF THE WALL)



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

NORTH

ALL EXTERIOR EXPOSED WOOD MEMBERS SHALL BE PRESSURE TREATED, SEE GENERAL STRUCTURAL NOTES #26 & 27

9317 REGISTERED ARCHITECT
CHRIS LUTTH
STATE OF WASHINGTON

CENTERLINE DESIGN
4737 37th AVE SW
SEATTLE
206.932.8706
www.Centerline-Design.com

ATLAS CONSULTING STRUCTURAL ENGINEERS

Upper House
4276 East Mercer Way
Mercer Island, WA - 98040

CONTENTS
Main Floor Framing Plan

DRAWN BY
JDA

DATE
02.25.21
07.08.21
03.14.22

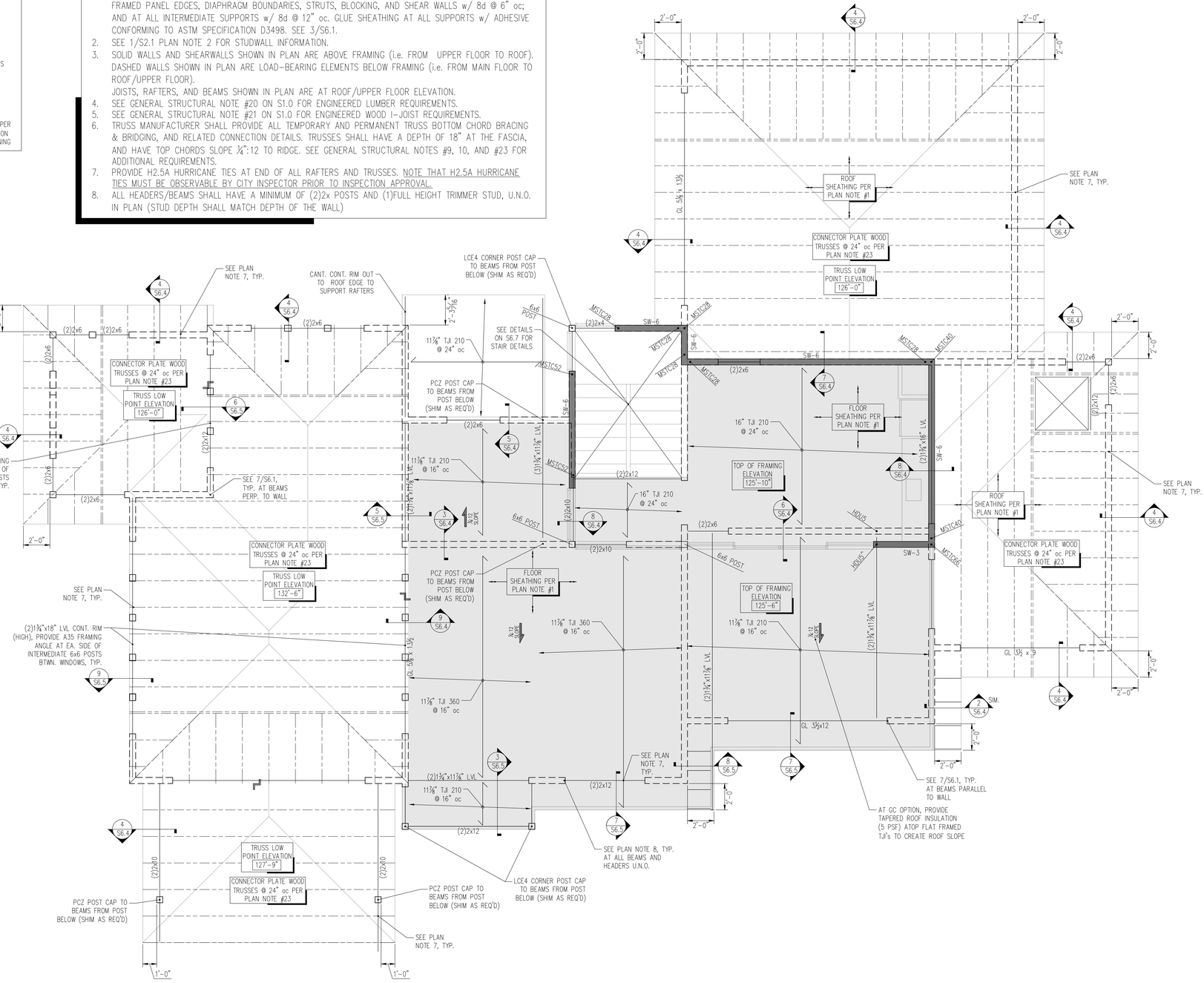
S2.2

LEGEND

- REINFORCED CONCRETE WALL
- REINFORCED CONCRETE WALL BELOW
- STRUCTURAL WOOD STUDWALL ABOVE
- STRUCTURAL WOOD STUDWALL BELOW
- SW-_ — DENOTES EXTENT OF SHEARWALL TYPE SW-_ PER 1/S6.6
- TENSION TIE — DENOTES SHEARWALL TENSION TIE PER 4/S6.6
  - * – DENOTES TRANSFER TIE FROM TIE ABOVE
  - ^ – DENOTES TIE OCCURRING ATOP FRAMING MEMBER
- WOOD JOIST
- WOOD BEAM or HEADER
- WOOD RAFTER
- CONNECTOR PLATE WOOD TRUSSES
- POST ABOVE
- POST BELOW
- SW-_* — DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH * DENOTING LOCATION OF STRAP ABOVE & BELOW OPENING

UPPER FLOOR & ROOF PLAN NOTES

1. SEE 1/S2.1 PLAN NOTE 1 FOR FLOOR SHEATHING AND FASTENING REQUIREMENTS. ROOF SHEATHING SHALL CONSIST OF 5/8" SHEATHING (PANEL SPAN RATING 32/16). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, STRUTS, BLOCKING, AND SHEAR WALLS w/ 8d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 8d @ 12" oc. GLUE SHEATHING AT ALL SUPPORTS w/ ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498. SEE 3/S6.1.
2. SEE 1/S2.1 PLAN NOTE 2 FOR STUDWALL INFORMATION.
3. SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE FRAMING (i.e. FROM UPPER FLOOR TO ROOF). DASHED WALLS SHOWN IN PLAN ARE LOAD-BEARING ELEMENTS BELOW FRAMING (i.e. FROM MAIN FLOOR TO ROOF/UPPER FLOOR). JOISTS, RAFTERS, AND BEAMS SHOWN IN PLAN ARE AT ROOF/UPPER FLOOR ELEVATION.
4. SEE GENERAL STRUCTURAL NOTE #20 ON S1.0 FOR ENGINEERED LUMBER REQUIREMENTS.
5. SEE GENERAL STRUCTURAL NOTE #21 ON S1.0 FOR ENGINEERED WOOD I-JOIST REQUIREMENTS.
6. TRUSS MANUFACTURER SHALL PROVIDE ALL TEMPORARY AND PERMANENT TRUSS BOTTOM CHORD BRACING & BRIDGING, AND RELATED CONNECTION DETAILS. TRUSSES SHALL HAVE A DEPTH OF 18" AT THE FASCIA, AND HAVE TOP CHORDS SLOPE 1/4":12 TO RIDGE. SEE GENERAL STRUCTURAL NOTES #9, 10, AND #23 FOR ADDITIONAL REQUIREMENTS.
7. PROVIDE H2.5A HURRICANE TIES AT END OF ALL RAFTERS AND TRUSSES. NOTE THAT H2.5A HURRICANE TIES MUST BE OBSERVABLE BY CITY INSPECTOR PRIOR TO INSPECTION APPROVAL.
8. ALL HEADERS/BEAMS SHALL HAVE A MINIMUM OF (2)2x POSTS AND (1)FULL HEIGHT TRIMMER STUD, U.N.O. IN PLAN (STUD DEPTH SHALL MATCH DEPTH OF THE WALL)



1/S2.3 — UPPER FLOOR & ROOF FRAMING PLAN

1/4" = 1'-0"

NORTH

9317 REGISTERED ARCHITECT CHRIS LUTH STATE OF WASHINGTON

CENTERLINE DESIGN
4737 37th AVE SW
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ATLAS CONSULTING STRUCTURAL ENGINEERS

Upper House
4276 East Mercer Way
Mercer Island, WA - 98040

CONTENTS

Upper Floor and Roof Framing Plan

DRAWN BY: JDA

DATE: 02.25.21, 08.10.21

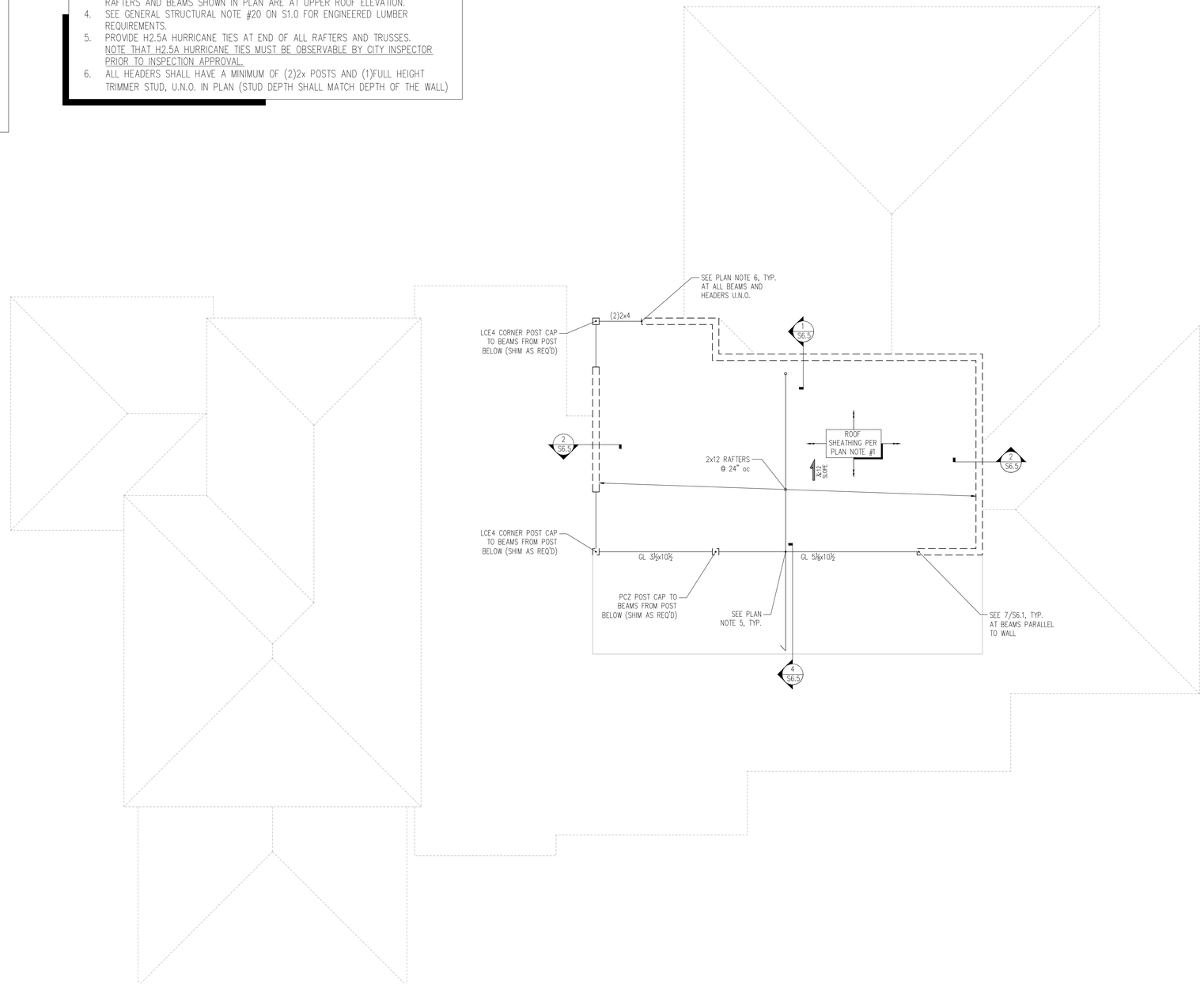
S2.3

LEGEND

- REINFORCED CONCRETE WALL
- REINFORCED CONCRETE WALL BELOW
- STRUCTURAL WOOD STUDWALL ABOVE
- STRUCTURAL WOOD STUDWALL BELOW
- SW-_ — DENOTES EXTENT OF SHEARWALL TYPE SW-_ PER 1/S6.6
- TENSION TIE — DENOTES SHEARWALL TENSION TIE PER 4/S6.6
  - * – DENOTES TRANSFER TIE FROM TIE ABOVE
  - ^ – DENOTES TIE OCCURRING ATOP FRAMING MEMBER
- WOOD JOIST
- WOOD BEAM or HEADER
- WOOD RAFTER
- CONNECTOR PLATE WOOD TRUSSES
- POST ABOVE
- POST BELOW
- SW-_* — DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH * DENOTING LOCATION OF STRAP ABOVE & BELOW OPENING

ROOF PLAN NOTES

1. SEE 1/S2.2 PLAN NOTE 1 FOR ROOF SHEATHING AND FASTENING REQUIREMENTS.
2. SEE 1/S2.1 PLAN NOTE 2 FOR STUDWALL INFORMATION BELOW.
3. DASHED WALLS SHOWN IN PLAN ARE LOAD-BEARING ELEMENTS BELOW FRAMING (i.e. FROM UPPER FLOOR TO UPPER ROOF). RAFTERS AND BEAMS SHOWN IN PLAN ARE AT UPPER ROOF ELEVATION.
4. SEE GENERAL STRUCTURAL NOTE #20 ON S1.0 FOR ENGINEERED LUMBER REQUIREMENTS.
5. PROVIDE H2.5A HURRICANE TIES AT END OF ALL RAFTERS AND TRUSSES. NOTE THAT H2.5A HURRICANE TIES MUST BE OBSERVABLE BY CITY INSPECTOR PRIOR TO INSPECTION APPROVAL.
6. ALL HEADERS SHALL HAVE A MINIMUM OF (2)2x POSTS AND (1)FULL HEIGHT TRIMMER STUD, U.N.O. IN PLAN (STUD DEPTH SHALL MATCH DEPTH OF THE WALL)



1 S2.4 UPPER ROOF FRAMING PLANE

1/4" = 1'-0"

NORTH

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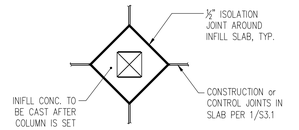
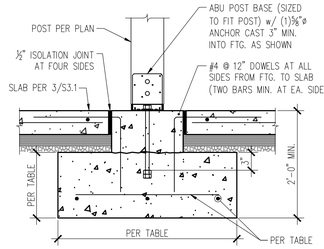
S2.4

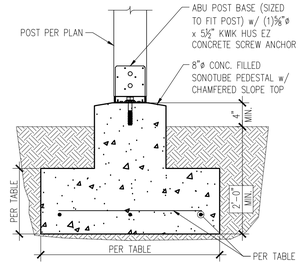


PLAN VIEW

MARK	DIMENSION	DEPTH	REINFORCING
F2.0	2'-0"x2'-0"	10"	(3)#4 EA. WAY
F3.0	3'-0"x3'-0"	12"	(4)#4 EA. WAY
F5.0	3'-0"x5'-0"	12"	(4)#4, (6)#4

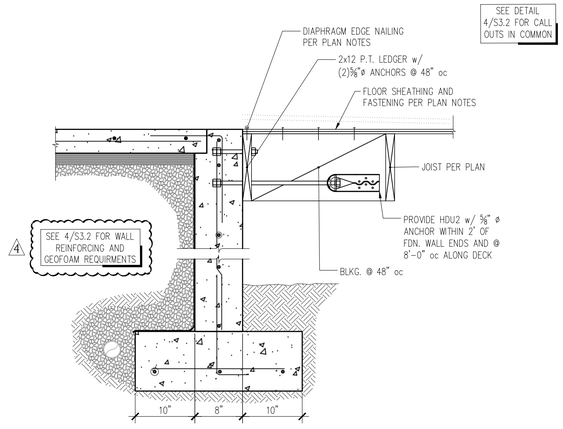


INTERIOR CONDITION



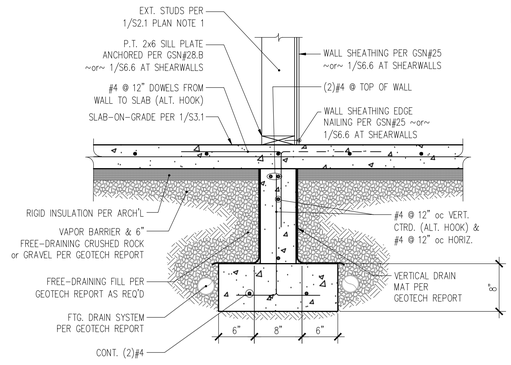
EXTERIOR CONDITION

3 / S3.1 POST ATOP SPREAD FOOTING
1" = 1'-0"



8 / S3.1 SECTION THROUGH FOUNDATION WALL AT PARALLEL DECK FRAMING
1" = 1'-0"

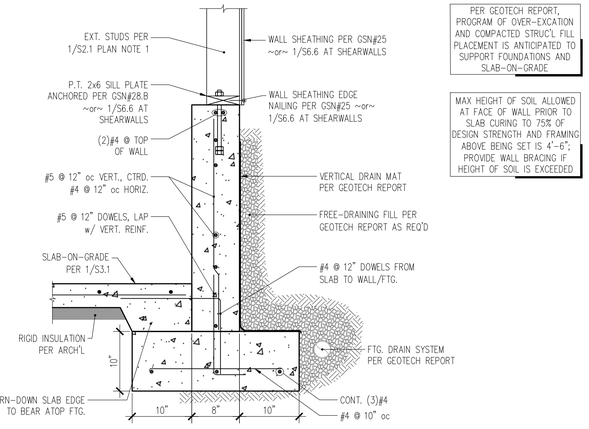
PER GEOTECH REPORT, PROGRAM OF OVER-EXCATION AND COMPACTED STRUC'L FILL PLACEMENT IS ANTICIPATED TO SUPPORT FOUNDATIONS AND SLAB-ON-GRADE



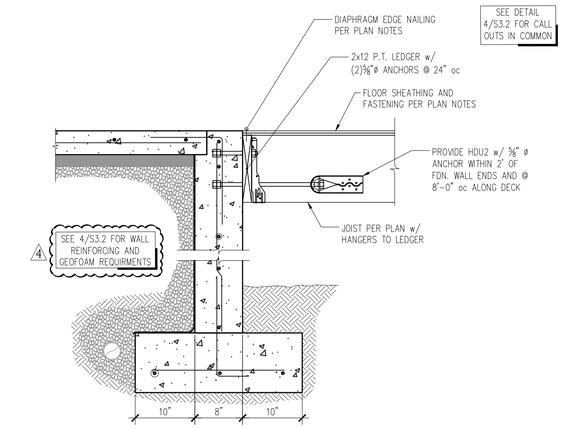
5 / S3.1 SECTION THROUGH INTERIOR WALL AT SLAB ON GRADE
1" = 1'-0"

PER GEOTECH REPORT, PROGRAM OF OVER-EXCATION AND COMPACTED STRUC'L FILL PLACEMENT IS ANTICIPATED TO SUPPORT FOUNDATIONS AND SLAB-ON-GRADE

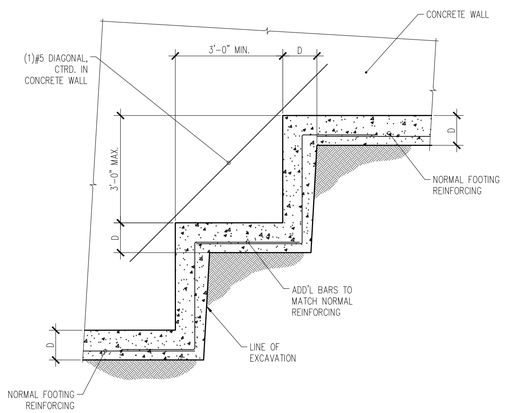
MAX HEIGHT OF SOIL ALLOWED AT FACE OF WALL PRIOR TO SLAB CURING TO 75% OF DESIGN STRENGTH AND FRAMING ABOVE BEING SET IS 4'-6". PROVIDE WALL BRACING IF HEIGHT OF SOIL IS EXCEEDED



2 / S3.1 SECTION THROUGH FOUNDATION WALL AT SLAB ON GRADE AND PARTIAL HEIGHT CONCRETE WALL
1" = 1'-0"

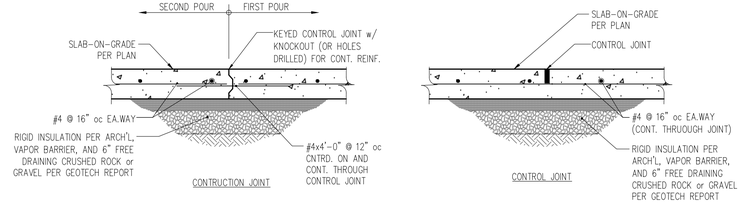


7 / S3.1 SECTION THROUGH FOUNDATION WALL AT PERPENDICULAR DECK FRAMING
1" = 1'-0"



4 / S3.1 TYPICAL STEPPED FOOTING
N.T.S.

PER GEOTECH REPORT, PROGRAM OF OVER-EXCATION AND COMPACTED STRUC'L FILL PLACEMENT IS ANTICIPATED TO SUPPORT SLAB-ON-GRADE



CONTRUCTION JOINT

CONTROL JOINT

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

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JDA

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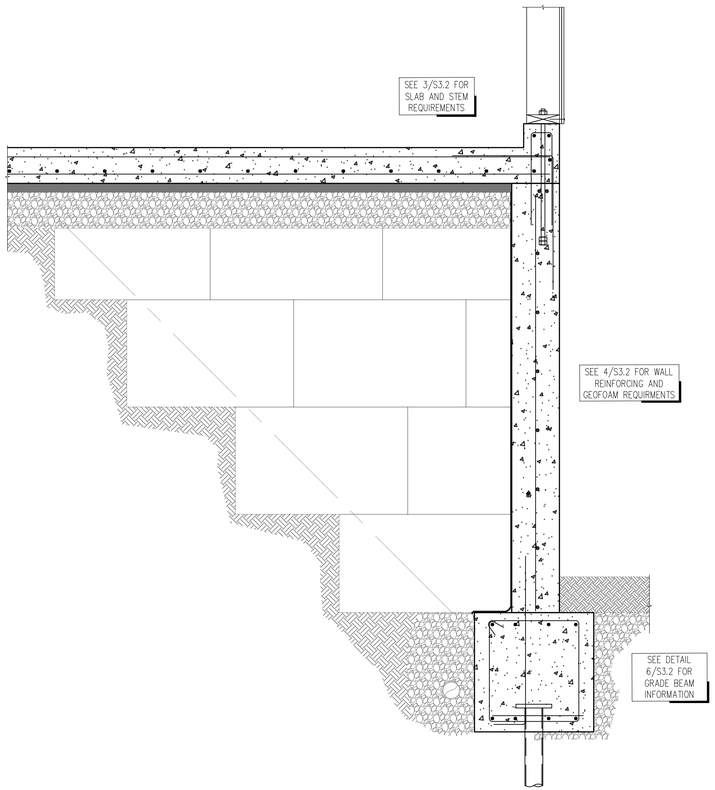
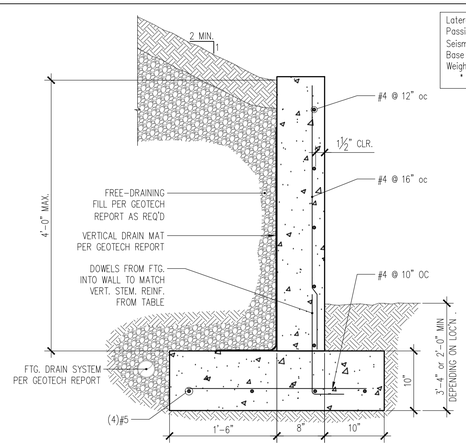
02.25.21
08.10.21
12.24.21
02.24.22
09.03.23 4

S3.1



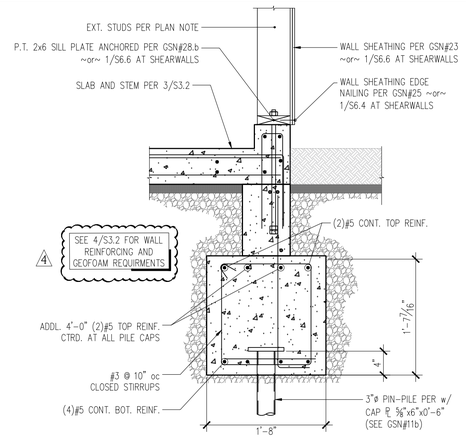
8 / S3.2 SECTION THROUGH PIPE PILE SUPPORTED GARAGE GRADE BEAM AT LOW GRADE
1" = 1'-0"



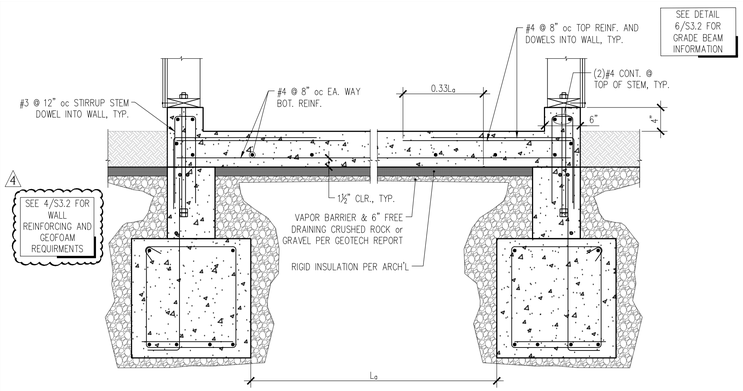
Lateral Earth Pressure*	50 pcf
Passive Earth Pressure	350 pcf
Seismic Surcharge	8h (uniform)
Base Coefficient of Friction	0.35
Weight of Soil	125 pcf

* sloped earth against wall no steeper than 2h:1v

7 / S3.2 SITE RETAINING WALL
1" = 1'-0"



6 / S3.2 SECTION THROUGH PIPE PILE SUPPORTED GARAGE GRADE BEAM
1" = 1'-0"

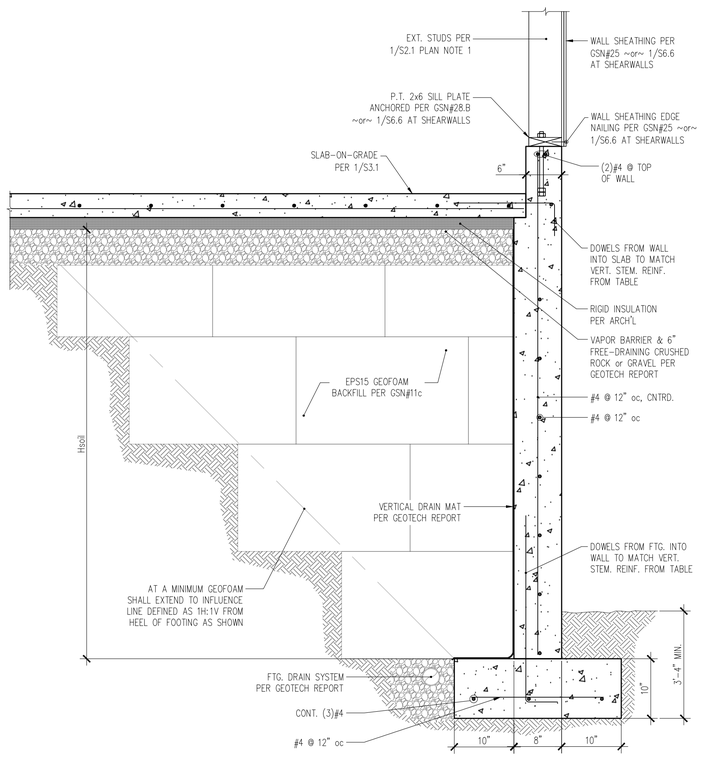


3 / S3.2 TYPICAL REINFORCING OF GARAGE SLAB
1" = 1'-0"

Lateral Earth Pressure*	5 psf
Passive Earth Pressure	350 pcf
Seismic Surcharge	N/A
Base Coefficient of Friction	0.35
Weight of Soil	125 pcf

* WALLS AND FOUNDATION SYSTEM HAVE BEEN DESIGNED FOR PRESSURE EXERTED BY GEOFOAM BACKFILL AGAINST WALL WITHIN INFLUENCE ZONE DEFINED AS 1H:1V FROM HEEL OF FOOTING. WALLS WILL ACT AS CANTILEVERED RETAINING WALL DURING TEMPORARY CONSTRUCTION CONDITION, AND BRACED BY SLAB ON GRADE IN PERMANENT CONDITION.

PER GEOTECH REPORT, PROGRAM OF OVER-EXCATION AND COMPACTED STRUC'L FILL PLACEMENT IS ANTICIPATED TO SUPPORT FOUNDATIONS AND SLAB-ON-GRADE



4 / S3.2 SECTION THROUGH FOUNDATION WALL AT RAISED SLAB ON GRADE AND LOW GRADE
1" = 1'-0"

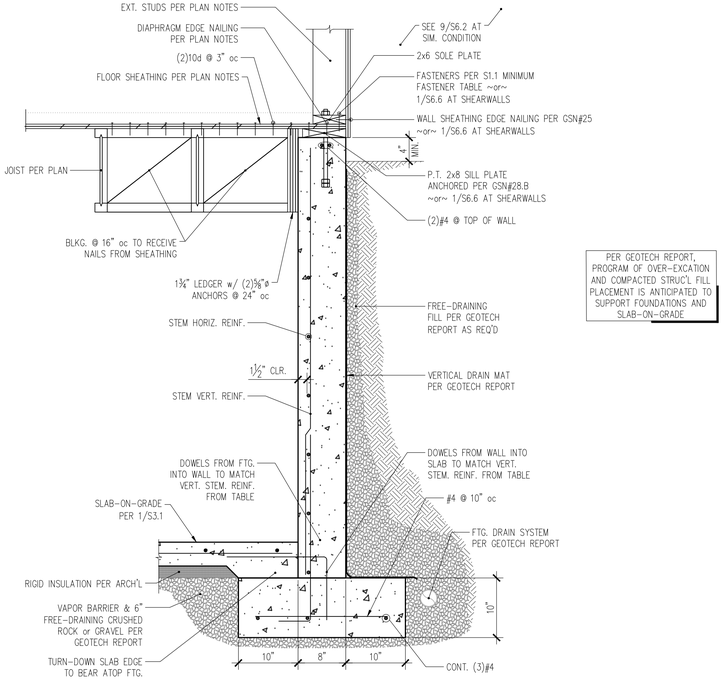
Hsoil	STEM REINF. VERT.	STEM REINF. HORIZ.	BRACING FORCE*
$H_{SOIL} \le 4.5'$	#4 @ 16" oc^	#4 @ 12" oc^	–
$4.5' < H_{SOIL} \le 6'$	#4 @ 12" oc	#4 @ 12" oc	720 plf
$6' < H_{SOIL} \le 8'$	#4 @ 12" oc	#4 @ 12" oc	1,280 plf
$8' < H_{SOIL} \le 10'$	#4 @ 10" oc	#4 @ 12" oc	2,000 plf

* WALLS AND FOUNDATION SYSTEM HAS BEEN DESIGNED TO BE BRACED BY THE SLAB WHERE SOIL HEIGHT EXCEEDS 4'-6". CONTRACTOR SHALL BRACE WALLS FOR LRFD FORCE SHOWN IN TABLE, AND LEAVE BRACING IN PLACE UNTIL CONCRETE SLAB ON GRADE HAS ATTAINED 75% OF ITS DESIGN STRENGTH.

^ FOR WALLS WITH HEIGHT OF SOIL LESS THAN OR EQUAL TO 4'-6" AND WHERE THE WALL WILL NOT BE BRACED DURING CONSTRUCTION, CENTER THE REINFORCING WITHIN THE WALL THICKNESS AS SHOWN IN 2/S3.1.

Lateral Earth Pressure*	60 pcf
Passive Earth Pressure	350 pcf
Seismic Surcharge	8h (uniform)
Base Coefficient of Friction	0.35
Weight of Soil	125 pcf

* sloped earth against wall no steeper than 2h:1v



1 / S3.2 SECTION THROUGH FOUNDATION WALL AT SLAB ON GRADE
1" = 1'-0"

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DATE
02.25.21
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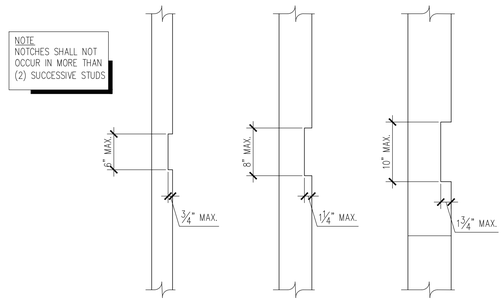
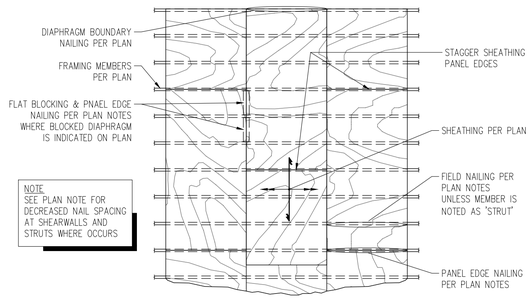
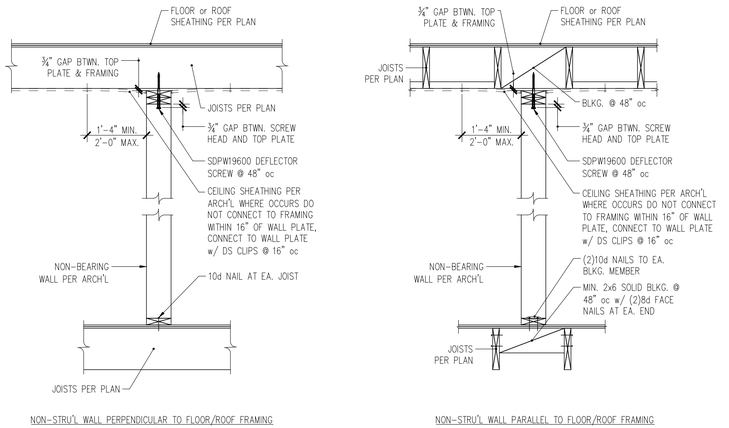
S3.2



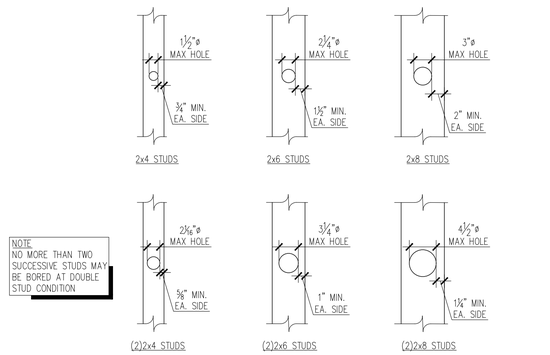
6 S6.1 ALLOWABLE HOLES IN STUDWALL STUDS
NTS



3 S6.1 TYPICAL DIAPHRAGM NAILING
NTS



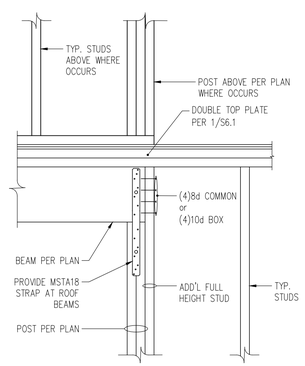
8 S6.1 CONNECTION OF NON-STRUC'L PARTITION WALL TO STRUCTURE
NTS



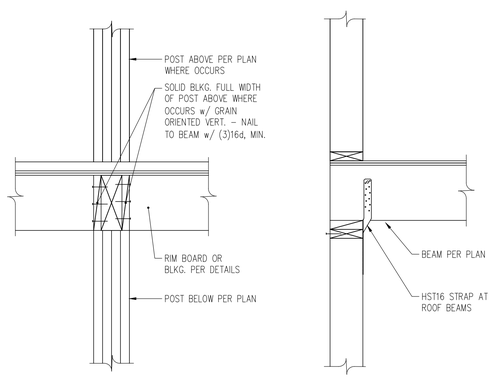
5 S6.1 ALLOWABLE HOLES IN STUDWALL STUDS
NTS

	NO REINF. REQUIRED	STRAP REINF. REQUIRED
2x4 PLATES	1½"ø MAX. HOLE ¾" MIN. EA. SIDE	2⅝"ø MAX. HOLE CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES) ⅜" MIN. EA. SIDE
2x6 PLATES	2¼"ø MAX. HOLE 1½" MIN. EA. SIDE	3¾"ø MAX. HOLE CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES) ¾" MIN. EA. SIDE
2x8 PLATES	3¼"ø MAX. HOLE 2" MIN. EA. SIDE	5"ø MAX. HOLE CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES) 1¼" MIN. EA. SIDE

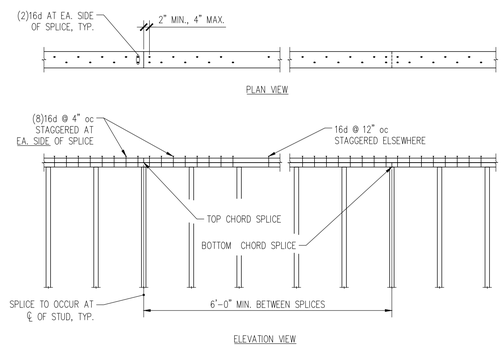
2 S6.1 ALLOWABLE HOLES THROUGH TOP PLATES
NTS



7 S6.1 TYPICAL BEAM PARALLEL TO WALL
NTS



4 S6.1 TYPICAL BEAM PERPENDICULAR TO WALL
NTS



1 S6.1 TOP PLATE SPLICE
NTS

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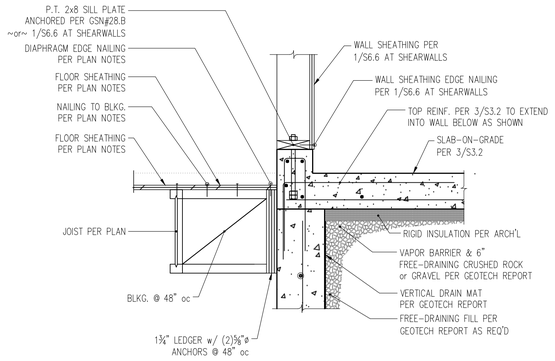
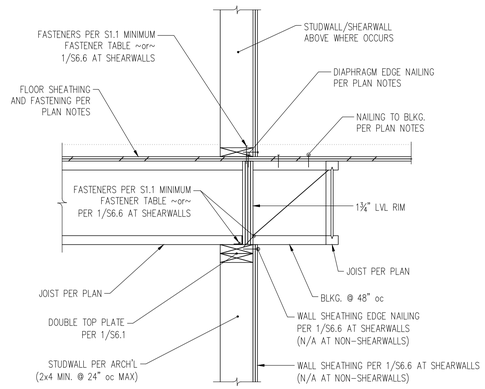
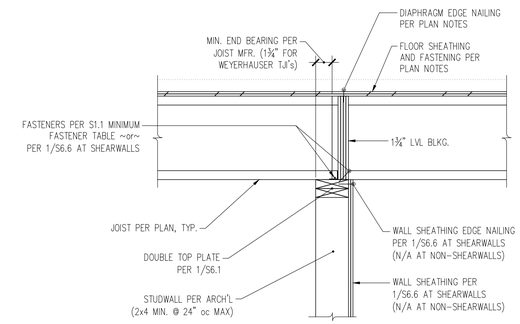
S6.1



9 S6.2 SECTION THROUGH WALL AT PARALLEL JOISTS AND SLAB-ON-GRADE
1" = 1'-0"



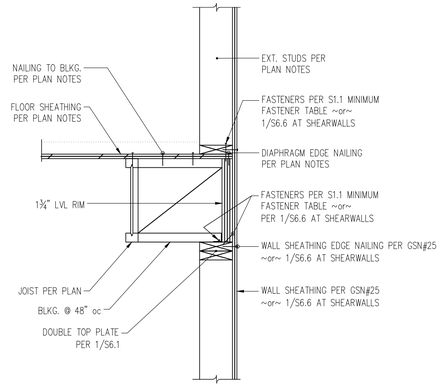
6 S6.2 SECTION THROUGH INTERIOR BEARING WALL w/ PERPENDICULAR & PARALLEL JOISTS
1" = 1'-0"



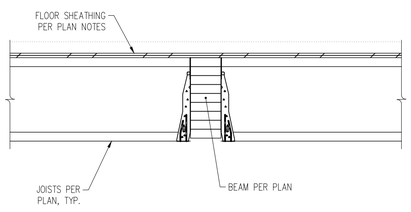
3 S6.2 SECTION THROUGH INTERIOR BEARING WALL w/ PERPENDICULAR JOISTS AT EA. SIDE
1" = 1'-0"

8 S6.2 SECTION THROUGH BEAM SUPPORTING SHEARWALL ABOVE
1" = 1'-0"

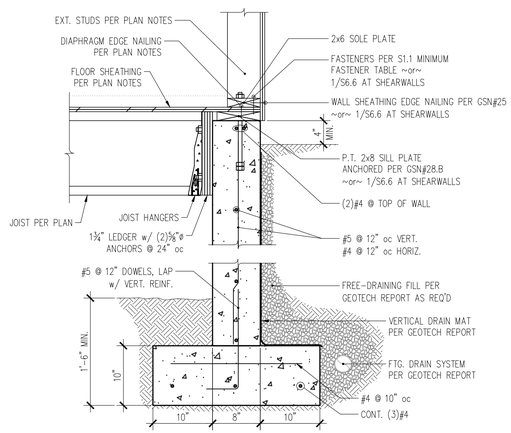
5 S6.2 SECTION THROUGH CRAWLSPACE FOUNDATION WALL AT PARALLEL JOISTS
1" = 1'-0"



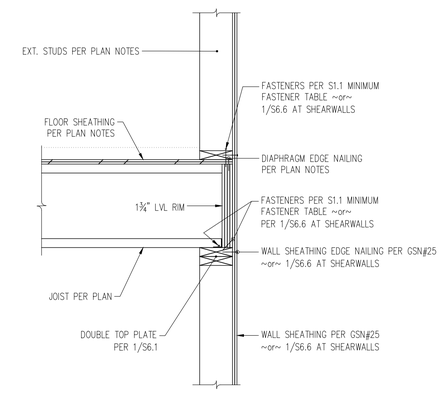
2 S6.2 SECTION THROUGH EXTERIOR WALL AT PARALLEL JOISTS
1" = 1'-0"



7 S6.2 SECTION THROUGH BEAM SUPPORTING JOISTS
1" = 1'-0"



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



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

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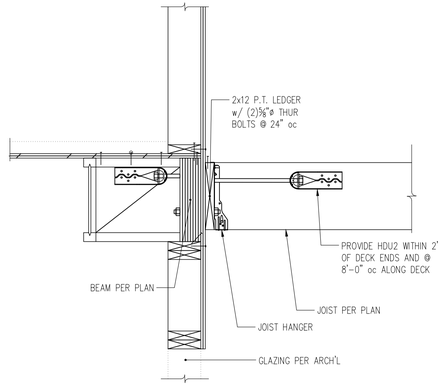
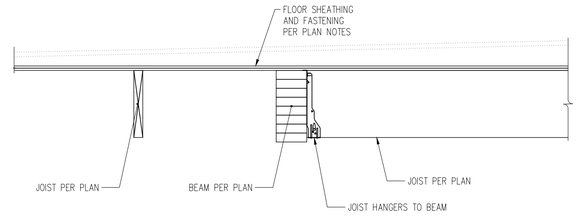
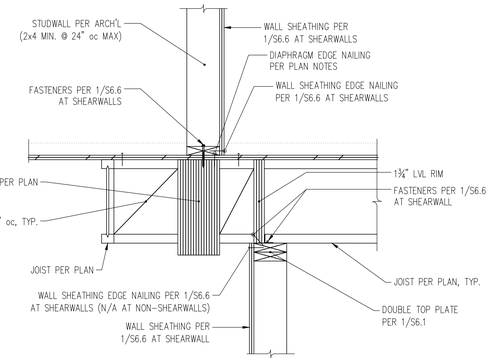
S6.2



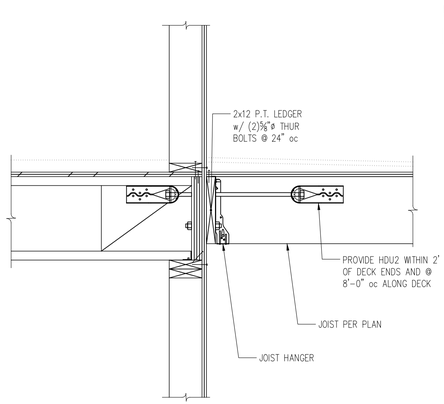
6 S6.3 SECTION THROUGH EXTERIOR BEAM AT PARALLEL JOISTS AND PARALLEL DECK JOISTS
1" = 1'-0"



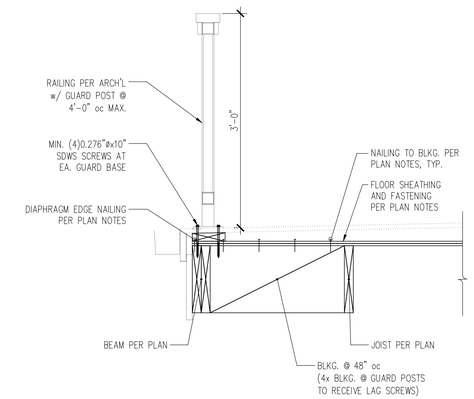
3 S6.3 SECTION THROUGH DECK BEAM
1" = 1'-0"



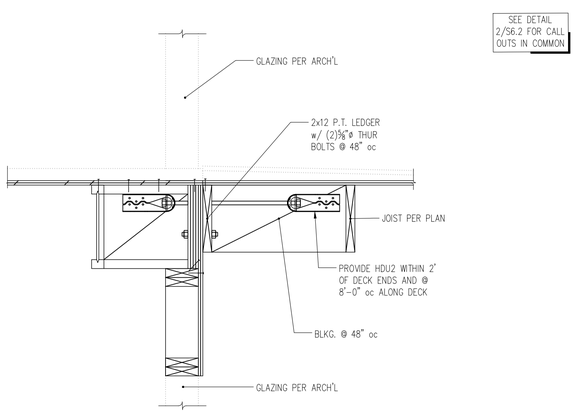
8 S6.3 SECTION THROUGH BEAM SUPPORTING SHEARWALL ABOVE
1" = 1'-0"



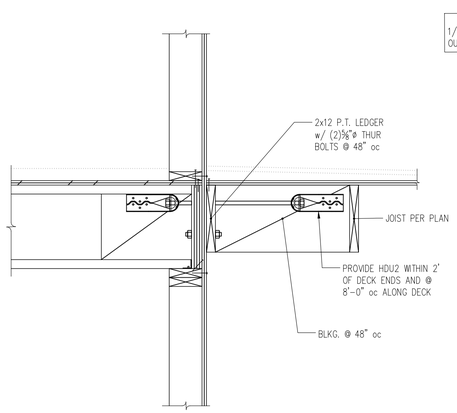
5 S6.3 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR JOISTS AND PERPENDICULAR DECK JOISTS
1" = 1'-0"



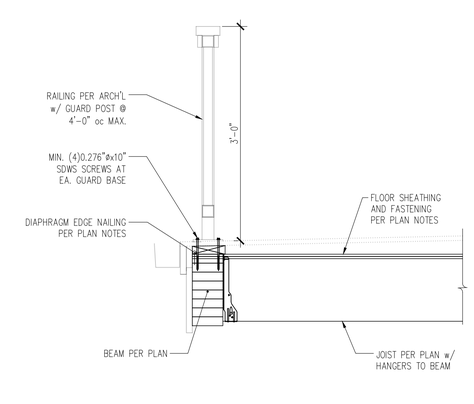
2 S6.3 SECTION THROUGH DECK EDGE AT PARALLEL JOISTS
1" = 1'-0"



7 S6.3 SECTION THROUGH EXTERIOR WALL AT PARALLEL JOISTS AND PARALLEL DECK JOISTS
1" = 1'-0"



4 S6.3 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR JOISTS AND PARALLEL DECK JOISTS
1" = 1'-0"



1 S6.3 SECTION THROUGH DECK EDGE AT PERPENDICULAR JOISTS
1" = 1'-0"

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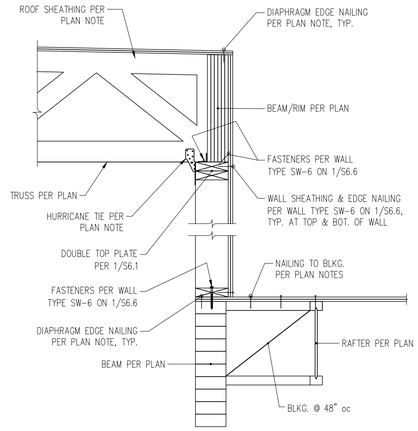
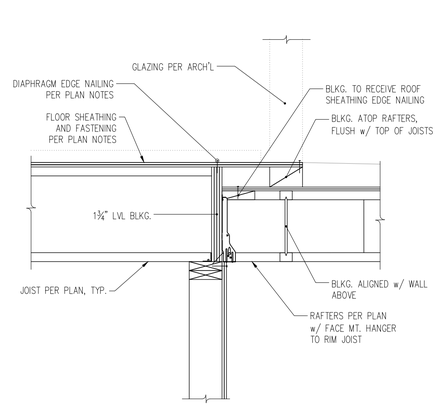
S6.3



9 S6.4 SECTION THROUGH BEAM SUPPORTING TRUSSES
1" = 1'-0"



6 S6.4 SECTION THROUGH INTERIOR BEARING WALL AT INTERIOR-TO-EXTERIOR INTERFACE
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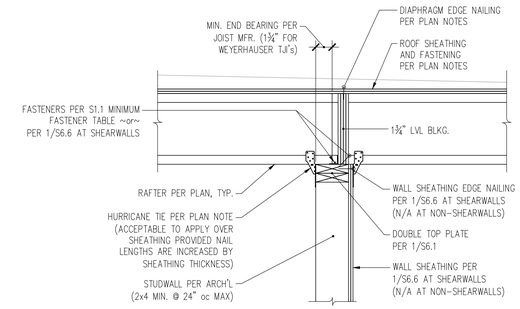


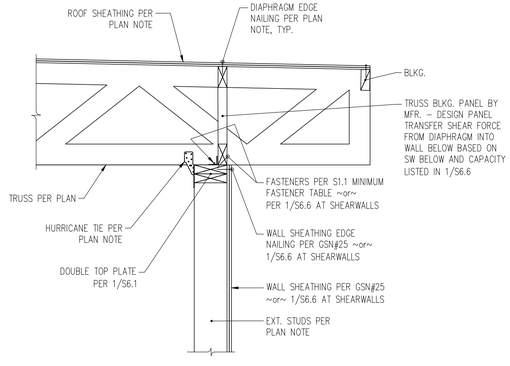
3 S6.4 SECTION THROUGH INTERIOR BEARING WALL w/ PERPENDICULAR RAFTERS AT EA. SIDE
N.T.S.

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

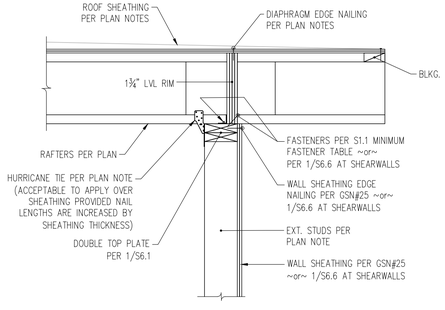
5 S6.4 SECTION THROUGH EXTERIOR WALL AT EXTENDED ROOF OVERHANG
1" = 1'-0"

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

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



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



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

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4737 37th AVE SW
SEATTLE
206.932.8706
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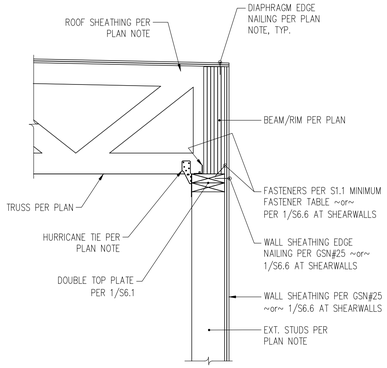

9 S6.5 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR TRUSSES
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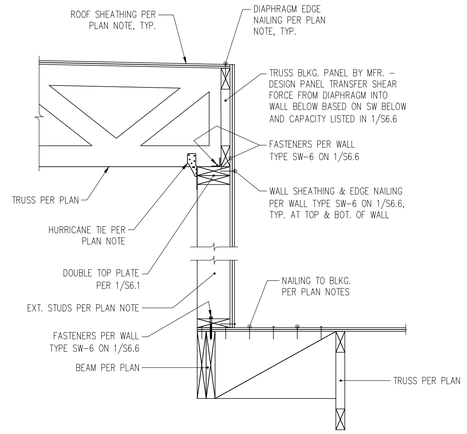
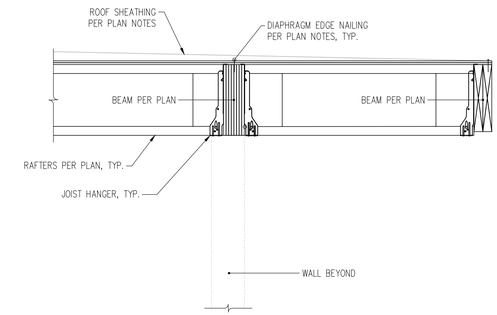
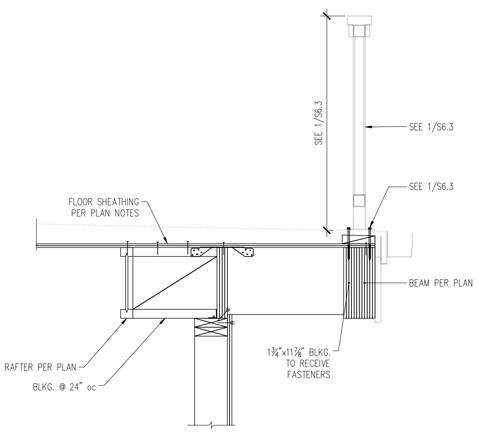


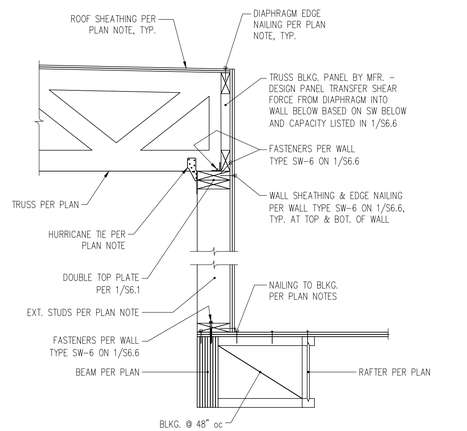
6 S6.5 SECTION THROUGH ROOF BREAK AT INTERIOR WALL
1" = 1'-0"



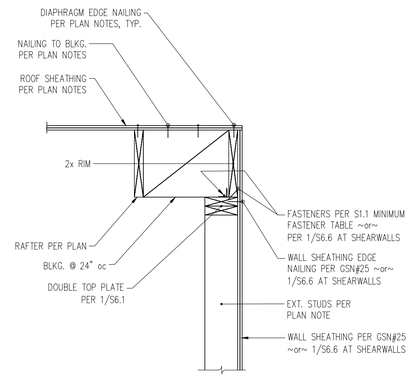
3 S6.5 SECTION THROUGH INTERIOR BEARING WALL w/ PERPENDICULAR RAFTERS AT EA. SIDE
1" = 1'-0"



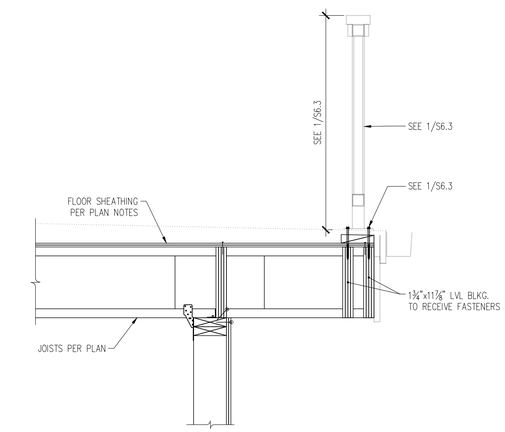
8 S6.5 SECTION THROUGH EXTERIOR WALL AT PARALLEL ROOF DECK JOISTS
1" = 1'-0"



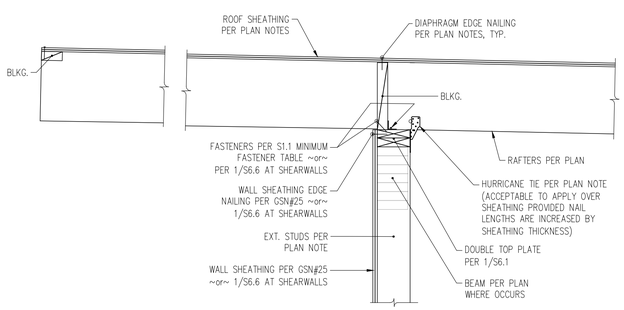
5 S6.5 SECTION THROUGH ROOF BREAK AT INTERIOR WALL
1" = 1'-0"



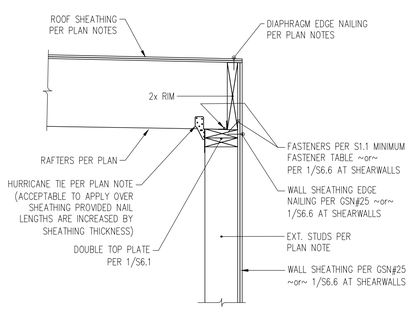
2 S6.5 SECTION THROUGH EXTERIOR WALL AT PARALLEL HIGH ROOF RAFTERS
1" = 1'-0"



7 S6.5 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR ROOF DECK JOISTS
1" = 1'-0"



4 S6.5 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR HIGH ROOF CANTILEVERED RAFTERS
1" = 1'-0"



1 S6.5 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR HIGH ROOF RAFTERS
1" = 1'-0"

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4737 37th AVE SW
SEATTLE
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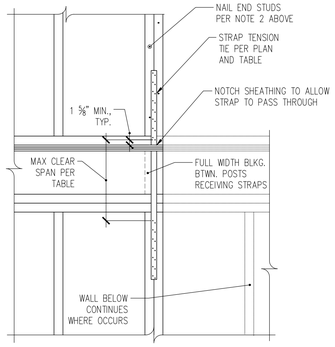
S6.5

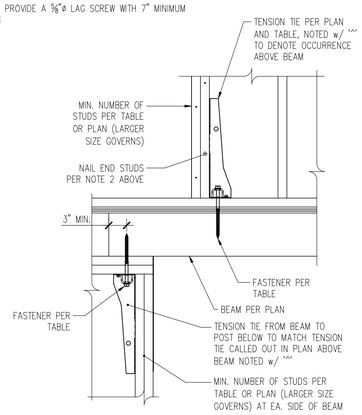
STRAP TENSION TIE SCHEDULE

TIE ① MARK	MIN. NUMBER② OF STUDS	CLEAR SPAN – TOTAL FASTENERS ③	ASD CAPACITY
HDU2^	(2)2x	(6)¼"ø x 2½" SDS SCREWS	1,500#
HDU5^	(3)2x	(14)¼"ø x 2½" SDS SCREWS	4,923#
MSTC28	(2)2x	16" – (16)0.148"ø x 3¼"	1,330#
MSTC40	(3)2x	16" – (32)0.148"ø x 3¼"	2,655#
MSTC52	(3)2x	16" – (48)0.148"ø x 3¼"	3,985#
MSTC66	(4)2x	16" – (68)0.148"ø x 3¼"	5,850#

① TENSION TIE TYPES REFER TO SIMPSON STRONG–TIE CATALOG CALLOUTS.
② NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLDOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.
③ 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. FOR HDU2^, PROVIDE A ⅝"ø LAG SCREW WITH 3" MINIMUM PENETRATION INTO THE BEAM; FOR HDU5^, PROVIDE A ⅝"ø LAG SCREW WITH 7" MINIMUM PENETRATION INTO THE BEAM



ELEVATION VIEW – TYPICAL CONDITION

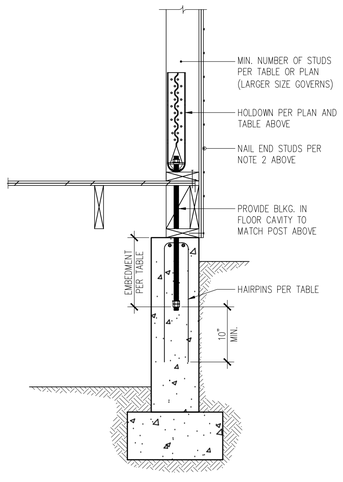


ELEVATION VIEW – TENSION TIE ABOVE BEAM

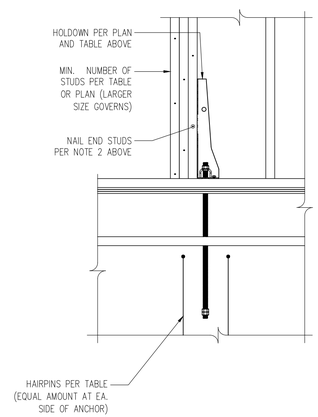
HOLDOWN TENSION TIE SCHEDULE

TIE ① MARK	MIN. NUMBER② OF STUDS	ANCHOR (ø x EMBEDMENT) and No. OF HAIRPIN DOWELS ③	FASTENERS FROM TIE TO STUD	ASD CAPACITY
HDU2	(2)2x	⅝"ø x 20" – (2)#4 HAIRPIN	(6)¼"ø x 2½" SDS SCREWS	3,075#
HDU4	(2)2x	⅝"ø x 20" – (2)#4 HAIRPIN	(10)¼"ø x 2½" SDS SCREWS	4,565#
HDU5	(3)2x	⅝"ø x 20" – (2)#4 HAIRPIN	(14)¼"ø x 2½" SDS SCREWS	5,645#
HDU8	(4)2x	⅞"ø x 20" – (4)#4 HAIRPIN	(20)¼"ø x 2½" SDS SCREWS	7,870#
HDU11	(5)2x	1"ø x 20" – (4)#4 HAIRPIN	(30)¼"ø x 2½" SDS SCREWS	11,175#

① TENSION TIE TYPES REFER TO SIMPSON STRONG–TIE CATALOG CALLOUTS.
② NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLDOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.
③ ANCHORS SHALL BE HEAVY HEX HEAD WITH DOUBLE NUT CAST INTO CONCRETE.
ASTM F 1554 Gr. 36 FOR ⅝"ø ANCHOR
ASTM F 1554 Gr. 105 FOR ⅞"ø ANCHOR
ASTM F 1554 Gr. 55 FOR 1"ø ANCHOR



SECTION VIEW



ELEVATION VIEW

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

SHEARWALL PANEL TYPE	① SHEATHING THICKNESS	② 0.131" x 2½" PANEL NAILING	③ STUD/BLKG. AT ABUTTING PANEL EDGES & SILL PLATE THICKNESS	⑦ CONN. OF BLKG. OR FRAMING to TOP PLATE; AND SOLE PLATE TO SILL PLATE			⑧ ⑨ ANCHOR BOLTS TO CONC.		ASD CAPACITY, PLF
				④ ¼"ø x 3½" SDS SCREWS	⑤ A35 CLIPS	⑥ LTP4 PLATES	⅝"ø	¾"ø	
SW–6	½"	6" oc	2x	18" oc	30" oc	28" oc	48" oc	48" oc	260
SW–4	½"	4" oc	3x	12" oc	20" oc	19" oc	46" oc	48" oc	380
SW–3	½"	3" oc	3x	9" oc	15" oc	14" oc	36" oc	48" oc	490
SW–2	½"	2" oc	3x	7" oc	12" oc	11" oc	27" oc	38" oc	640
SW–44	½"	4" oc EA. SIDE	3x	6" oc	10" oc	9" oc	23" oc	32" oc	760

① SHEATHING SHALL CONSIST OF ½" PLYWOOD AND HAVE A MINIMUM SPAN RATING OF 24/0

② PANEL NAILING APPLIES TO ALL SHEATHING PANEL EDGES. 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.

③ DOUBLE 2x MEMBERS MAY BE SUBSTITUTED FOR 3x MEMBERS AT WALLS WITH ONLY ONE LAYER OF SHEATHING. 2x MEMBERS SHALL BE NAILED TOGETHER WITH 8d FACE: @ 3½" oc FOR SW–6, AND @ 2" oc FOR SW–2 (116#/NAIL)

④ ROWS OF NAILS AND SDS SCREWS SHALL BE OFFSET AT LEAST ½" AND STAGGERED. MINIMUM EDGE DISTANCE FOR NAILS AND SDS SCREWS INTO EDGE OF MEMBERS SHALL BE ⅝" (400#/SCREW)

⑤ A35 CLIPS SHALL BE INSTALLED w/ (12)0.131 x 1½ " NAILS (650#/CLIP)

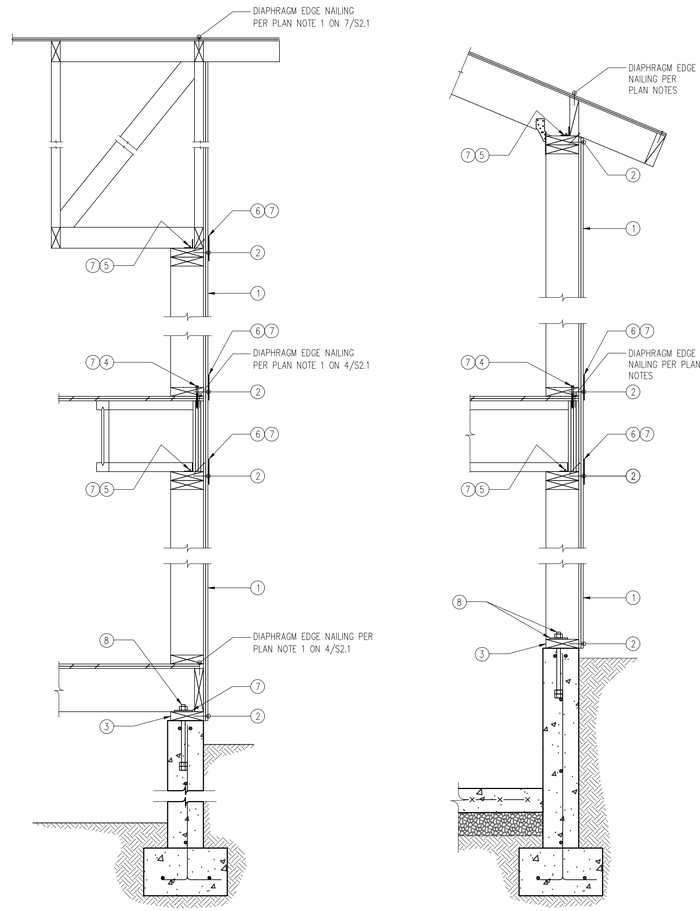
⑥ LTP4 LATERAL TIE PLATES MAY BE INSTALLED OVER SHEATHING w/ (12)0.131 x 2½" NAILS (625#/CLIP)

⑦ CONTRACTOR SHALL USE A35 or LT4P CLIPS TO CONNECT ROOF AND UPPER FLOOR FRAMING TO DOUBLE TOP PLATE; AND SDS SCRWS or LTP4 CLIPS TO CONNECT SOLE PLATE TO RIM BOARD AT UPPER FLOOR. EXTEND SHEATHING TO BOTTOM OF RIM AT MAIN FLOOR AND PROVIDE EDGE FASTENING AS NOTED IN TABLE.

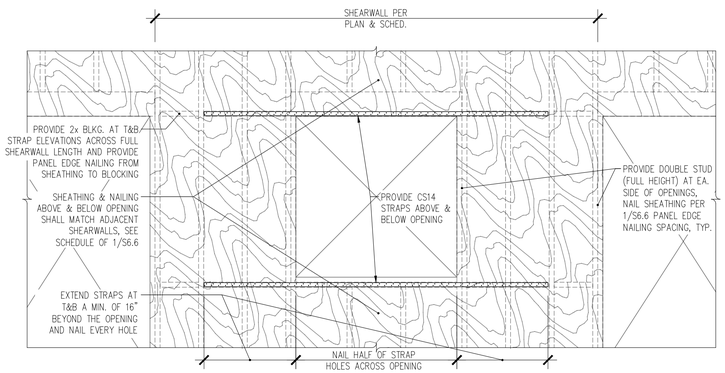
⑧ PLATE WASHERS IN 2x4 STUD WALLS, AND ALL SINGLE SIDED SHEAR WALLS, SHALL BE 3"x3"x0.229". THE EDGE OF PLATE WASHERS SHALL BE LOCATED WITHIN ½" OF THE EDGE OF BOTTOM PLATE ON THE SIDE WITH SHEATHING.

⑨ 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.

NOTE THAT ALL FRAMING SHALL BE DOUG–FIR PER NOTE 21 ON S1.1



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



7 S6.6 STRAPPED SHEARWALL DETAIL
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CENTERLINE DESIGN
4737 37th AVE SW
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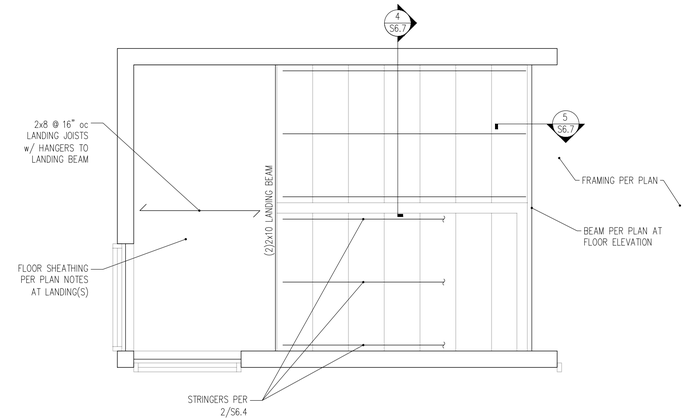
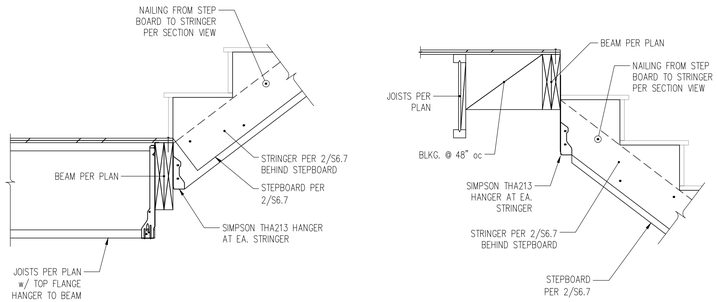
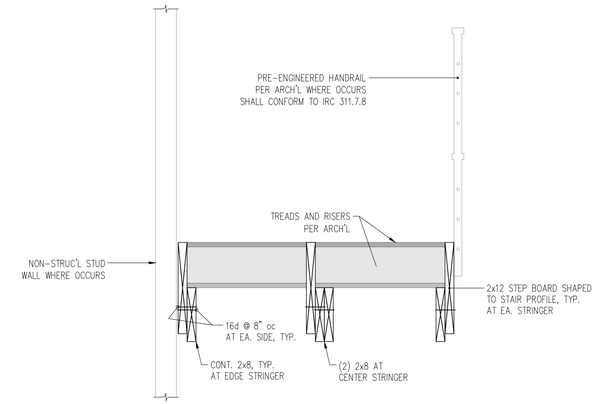


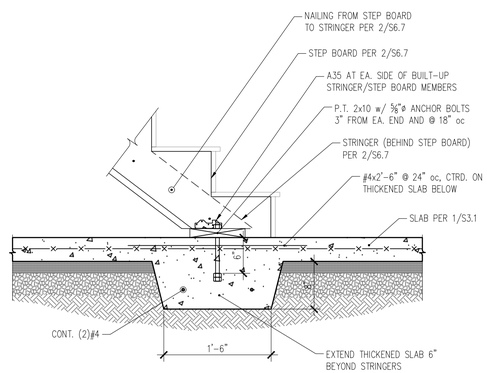
3 / S6.7 TYPICAL STAIR FRAMING/LANDING PLAN VIEW
1" = 1'-0"



5 / S6.7 SECTION THROUGH ROOF BREAK AT INTERIOR WALL
1" = 1'-0"



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



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

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CENTERLINE
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4737 37th AVE SW
SEATTLE
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Upper House
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Mercer Island, WA - 98040

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08.10.21

S6.7

EROSION CONTROL NOTES
SHEET C1.2

EROSION CONTROL DETAILS
SHEET C1.2

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

MAX TEMP SLOPES
1:1 TEMP SLOPE (NO SEEPAGE)
2:1 TEMP SLOPE (WITH SEEPAGE)

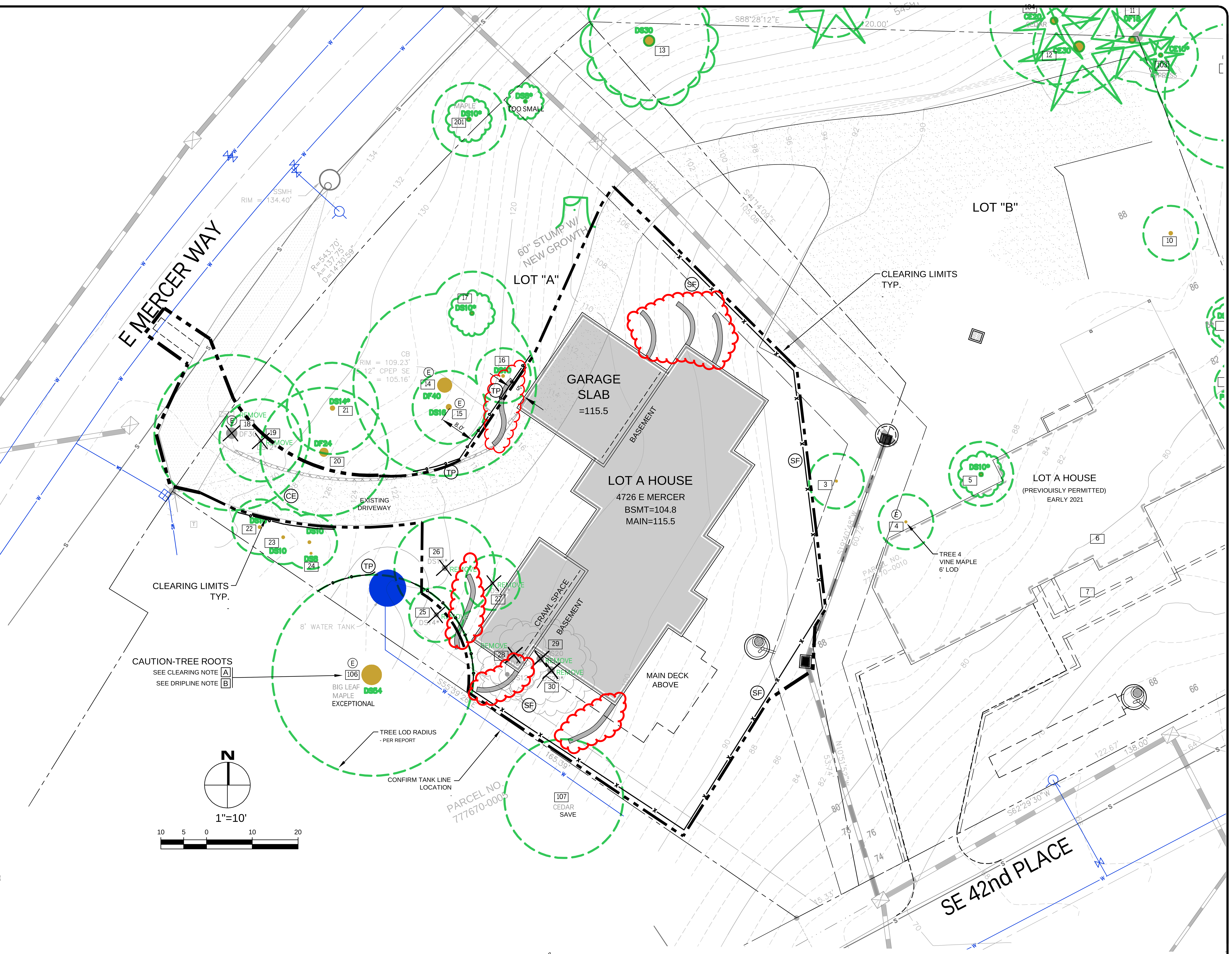
A CLEARING LIMIT NOTE
ALL SELECTIVE CLEARING, TRENCHING AND OTHER WORK WITHIN THE DRIPLINES OF SIGNIFICANT TREES SHALL BE BY LOW IMPACT/HAND METHODS ONLY AND WORK SHALL BE ADJUSTED AS POSSIBLE TO MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED TREES AND PROTECTED UNDERSTORY. CONSTRUCTION MATERIALS AND VEHICLES SHALL NOT BE STORED OUTSIDE THE CLEARING LIMITS.

B TREE DRIPLINE NOTE
WORK WITHIN THE DRIPLINE OF TREES TO BE SAVED MUST BE UNDER THE DIRECTION OF A CERTIFIED ARBORIST (TYP.) SEE ALSO CLEARING LIMIT NOTE ON THIS SHEET.

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE		▬ ▪ ▪ ▬
FILTER FABRIC FENCE (SILT FENCE)	(SF)	
STABILIZED CONSTRUCTION ENTRANCE	(CE)	
CATCH BASIN INLET PROTECTION	(IP)	○
INTERCEPTOR SWALE SEE COR DWG 504, TYPE A TEMPORARY SWALE	(IS)	◀
TREE PROTECTION FENCING	(TP)	
STOCKPILE	(ST)	▨
STRAW WATTLES	(SW)	USE AS NEEDED
PLASTIC COVERING	(PC)	COVER EXPOSED AREAS WITHIN MERCER ISLAND TIME LIMIT
COMPOST SOCK	(CS)	SEDIMENT CONTROL OPTION RECOMMENDED IN LIEU OF SILT FENCE

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.



NO.	DATE	BY	REVISIONS
			Jan 14-added landscape walls per Architect instructions.

APPLICANT:
MILLAD HOMES, LLC

DATE: Jan 14, 2022
JOB# 1766
DRAFTED: SS DESIGN: DE
DIGITAL SIGNATURE

Jan 14, 2022
[illegible]
JEFFREY E. ELLIS
STATE OF WASHINGTON
39766
REGISTERED
PROFESSIONAL ENGINEER

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

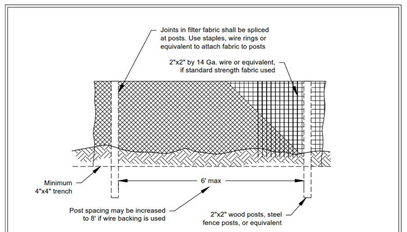
EROSION CONTROL PLAN
WEST RESIDENCE
4276 EAST MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C1.0

APN 777670-0010

SILT FENCE DETAIL — DOE

Figure II-4.2.12 Silt Fence



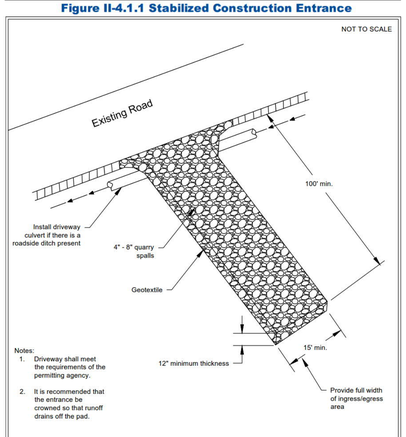
DEPARTMENT OF ECOLOGY State of Washington

Figure II-4.2.12
Silt Fence

Revised October 2014

CONSTRUCTION ENTRANCE — DOE

Figure II-4.1.1 Stabilized Construction Entrance



DEPARTMENT OF ECOLOGY State of Washington

Figure II-4.1.1
Stabilized Construction Entrance

Revised June 2015

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:

1. HOLD AN ONSITE PRE-CONSTRUCTION MEETING.

2. POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).

3. FLAG OR FENCE CLEARING LIMITS.

4. INSTALL CATCH BASIN PROTECTION, IF REQUIRED.

5. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).

6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).

7. CONSTRUCT SEDIMENT PONDS AND TRAPS.

8. GRADE AND STABILIZE CONSTRUCTION ROADS.

9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.

10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

11. RELOCATE SURFACE 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.

12. 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.

13. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.

14. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.

15. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPS IF APPROPRIATE.

TREE INVENTORY TABLE FROM ARBORIST

Proposed Action	Tree No.	DBH	QMD	Category	>24" DBH	Viable Tree	Species	Dripline	Health	Structure	Comments on Condition	Tree Type	LOD Radius
RETAIN	1	12, 24"	26"	Large	Yes		Lawson cypress	16'	1	2	Asymmetric	E	13'
RETAIN	2	25"	25"	Large	Yes		Lawson cypress	15'	1	2	Asymmetric	E	13'
RETAIN	3	5, 6"	7"	Small			Vine maple	8'	1	2	Growth obstruction, asymmetric	D	6'
RETAIN	4	4.5, 4.5, 5"	8"	Exceptional			Vine maple	8'	1	2	Growth obstruction, asymmetric	D	6'
RETAIN	5	6, 7, 7, 7"	13"	Significant			Japanese maple	14'	1	2	Growth obstruction	D	7'
RETAIN	6	12"	12"	Significant			Colorado blue spruce	11'	1	1		E	6'
RETAIN	7	17"	17"	Significant			Colorado blue spruce	12'	1	2	Asymmetric	E	8'
RETAIN	8	10"	10"	Significant			Scots pine	12'	1	1		C	6'
RETAIN	9	9, 10"	13"	Significant			Portugal laurel	11'	1	2	Double leader	BE	6'
RETAIN	10	8, 8, 8"	13"	Significant			Thread cypress	12'	1	2	Multiple leader	C	6'
RETAIN	11	20"	20"	Dead		NO	Douglas-fir	0'	3	3	Dead, topped at 40 feet	E	10'
RETAIN	12	21"	21"	Significant			Western red-cedar	16'	1	2	Asymmetric, perched on shoulder	C	10'
RETAIN	13	26"	26"	Large	Yes	NO	Bigleaf maple	20'	3	3	Ivy, Kretzschmaria, decay	D	13'
RETAIN	14	42"	42"	Exceptional	Yes		Douglas-fir	20'	1	1		E	20'
RETAIN	15	15"	15"	Exceptional			Pacific madrone	12'	2	2	Lean, diseased, asymmetric	BE	8'
RETAIN	16	9"	9"	Hazardous		NO	Pacific madrone	8'	3	3	Lean, diseased, minuscule canopy, ivy	BE	6'
RETAIN	17	6, 8, 8, 9, 10"	18"	Significant			Bigleaf maple	20'	1	2	Stumpsprout	D	9'
Remove	18	34"	34"	Exceptional	Yes		Douglas-fir	20'	1	2	Previously topped, hazard	E	17'

Proposed Action	Tree No.	DBH	QMD	Category	>24" DBH	Viable Tree	Species	Dripline	Health	Structure	Comments on Condition	Tree Type	LOD Radius
											beam over street		
Remove	19	13, 14"	19"	Significant			Bigleaf maple	18'	2	2	Suppressed, asymmetric, double leader	D	9'
RETAIN	20	29"	29"	Large	Yes		Douglas-fir	20'	1	2	Sweep in trunk	E	14'
RETAIN	21	9, 11, 16"	21"	Significant			Bigleaf maple	20'	1	2	Multiple leader	D	10'
RETAIN	22	12"	12"	Significant			European birch	16'	1	2	Lean west toward street, slender	D	6'
RETAIN	23	12"	12"	Significant			Bigleaf maple	16'	1	2	Asymmetric	D	6'
RETAIN	24	13"	13"	Significant			Bigleaf maple	16'	1	2	Slender	D	6'
Remove	25	10, 10, 13"	19"	Significant		NO	Bigleaf maple	16'	2	3	Suppressed, stumpsprout	D	9'
Remove	26	16, 17"	23"	Significant		NO	Bigleaf maple	20'	3	3	Decline, chlorotic, slender, stumpsprout	D	11'
Remove	27	10, 10 "	14"	Significant		NO	Bigleaf maple	20'	2	3	Suppressed, asymmetric, stumpsprout	D	6'
Remove	28	9, 14, 15"	22"	Significant		NO	Bigleaf maple	6'	3	3	Decline, suppressed, stumpsprout, decay	D	11'
Remove	29	19"	19"	Significant		NO	Bigleaf maple	20'	1	3	Suppressed, asymmetric, over-extended branches	D	9'
Remove	30	13, 19, 35"	41"	Hazardous		NO	Bigleaf maple	25'	1	3	Crack, decay	D	20'
RETAIN	31	60"	60"	Hazardous		NO	Bigleaf maple	20'	3	3	Topped at 8 feet, multiple water sprout, Kretzschmaria	D	16'
OFFSITE	101	38"	38"	Exceptional	Yes		Giant redwood	18'			Topped at 40 feet	E	16'
OFFSITE	102	38"	38"	Exceptional	Yes		Giant redwood	18'			Topped at 40 feet	E	16'
OFFSITE	103	9, 13"	15"	Significant			Lawson cypress					E	8'
OFFSITE	104	12, 18, 20"	29"	Large	Yes		Western red-cedar	16'			Multiple leader	C	14'

Proposed Action	Tree No.	DBH	QMD	Category	>24" DBH	Viable Tree	Species	Dripline	Health	Structure	Comments on Condition	Tree Type	LOD Radius
OFFSITE	105	15"	15"	Significant			Western red-cedar	16'				C	8'
OFFSITE	106	54"	54"	Exceptional	Yes		Bigleaf maple	40'			Double leader, chlorotic, declining foliage, ivy	D	22'
OFFSITE	107	26"	26"	Large	Yes		Western red-cedar	18'				C	13'
ROW	201	11, 11"	15"	Significant			Bigleaf maple	20'	1	2	Double leader	D	8'

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.

1. 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.).

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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.).

9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.

10. 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.

11. 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.

12. 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.

13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL

14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

CITY NOTES

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.

2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.

3. 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.

4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITES.

5. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555

6. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED

7. 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:

8. 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.

9. 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.

10. PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.

11. 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.

12. 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.

13. 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.

14. 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.

15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.

16. ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.

17. 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.

18. WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.

19. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.

16. 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.

20. NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.

21. 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.

22. 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.

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.

NO.	DATE	BY	REVISIONS

APPLICANT:
MILLAD HOMES, LLC

DATE: Jul 07, 2021
JOB# 1766
DRAFTED: SS DESIGN: DE
DIGITAL SIGNATURE

Jul 07, 2021
JEFFREY E. RALPH
STATE OF WASHINGTON
39708
REGISTERED
PROFESSIONAL ENGINEER

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

TESC & CITY NOTES
TESC DETAILS
WEST RESIDENCE
4276 EAST MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C1.2

APN 777670-0010

SANITARY SEWER IMPROVEMENTS

1. -6" PVC SIDE SEWER PER MERCER ISLAND STANDARD DETAIL S-17
2. -6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %.
3. -
4. -
7. -

WATER IMPROVEMENTS

10. -NEW SF 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. -MIN 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. -
31. -
32. -
33. -
34. -
35. -PRIVATE 18" YARD DRAIN / CB (OR EQUAL) WITH SOLID LID. CONCRETE TYPE 40 OR 1 CB OK (OR PVC BASIN WITH DURAFIBER LID)
36. -6" WIDE NDS DURASLOPE CHANNEL DRAIN KIT (OR EQUAL). GALVANIZED STEEL, CLASS B VEHICLE RATED GRATE OR EQUAL.
39. -
40. -TYPE 40 CATCH BASIN OR EQUAL.
41. 54" ID TYPE 2 MH CONTROL STRUCTURE WITH SOLID LID. SEE ALL DETAILS AND PROFILE C4.0.
43. -
46. -
47. DETENTION PIPE: ALUMINIZED CMP @ 0.5 % GRADE. SEE PLAN FOR SIZE AND CONFIGURATION. SEE PROFILE, NOTES, AND DETAILS ON C4.0.
48. -

STORM BMP's

COMPOSTED AMENDED SOIL IS REQUIRED FOR DISTURBED AREAS. SEE DETAIL ON C3.5.

STORM BMP'S ARE NOT PROPOSED FOR PROJECT. SEE STORM REPORT.

DETENTION IS PROPOSED PER THIS BUILDING PERMIT.

SURVEYOR

TOPOGRAPHIC SURVEY BY:
SITE SURVEYING, INC.
21923 NE 11th STREET
SAMMAMISH, WA. 98074
PHONE 425.298.4412

VERTICAL DATUM

NAVD 88 PER SURVEY

LEGAL DESCRIPTION

PENDING

SOILS

SITE IS IN AN AREA MAPPED "INFILTRATING LID FACILITIES ARE NOT PERMITTED" ON THE "LOW IMPACT DEVELOPMENT INFILTRATION FEASIBILITY ON MERCER ISLAND" MAP.
INFILTRATION IS NOT PROPOSED.

SOIL AMENDMENT REQUIRED

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

SOIL INSPECTION REQUIRED

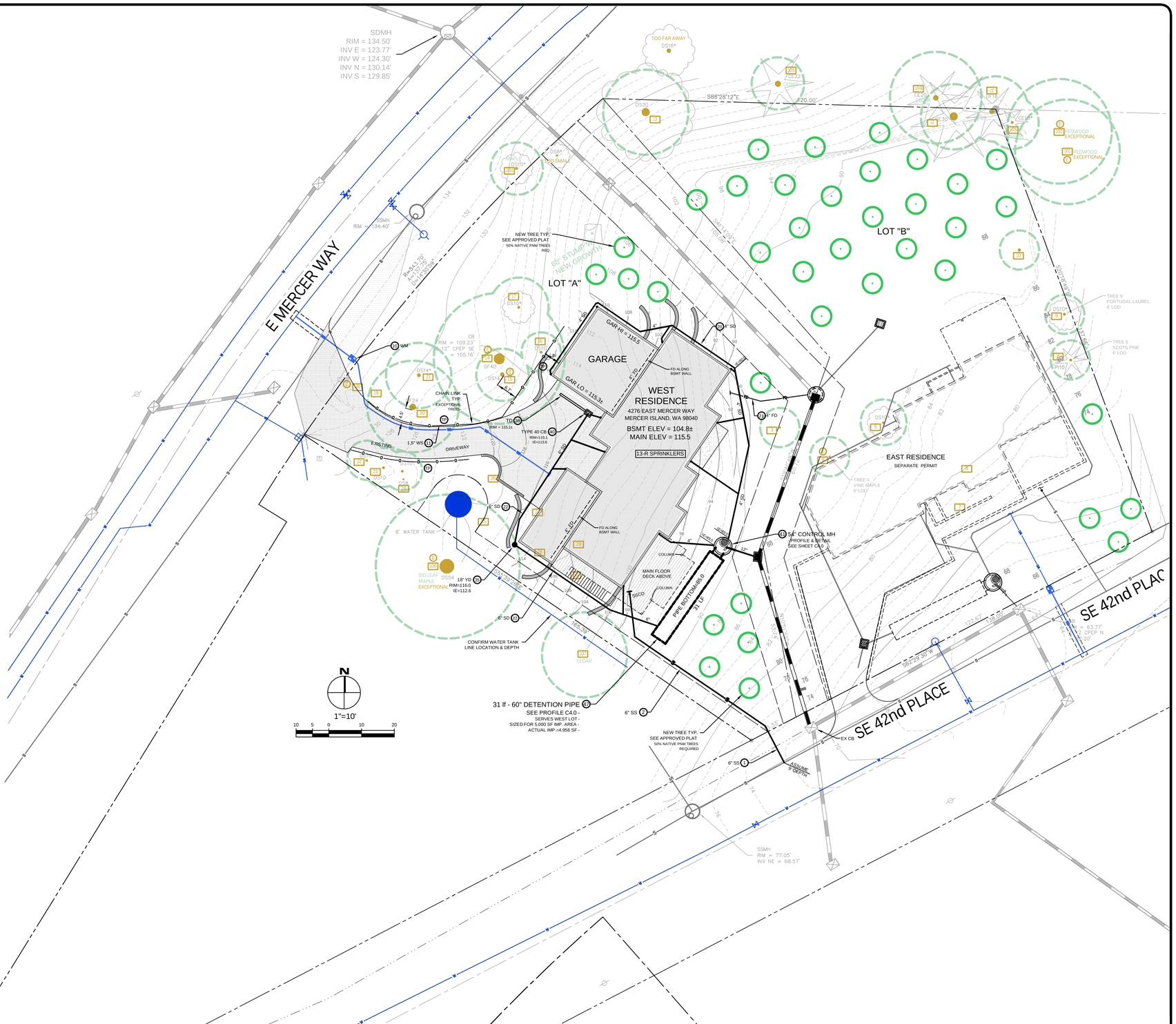
A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

TREE PLANTING

SEE C4.0

TREE REMOVALS

SEE C1.0



NO.	DATE	BY	REVISIONS

APPLICANT:
MILLAD HOMES, LLC

DATE: Jan 14, 2022
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Jan 14, 2022
JEFFREY E. DUFFY
STATE OF WASHINGTON
39756
REGISTERED
PROFESSIONAL ENGINEER

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

DRAINAGE/CIVIL/TREE PLAN

WEST RESIDENCE
4276 EAST MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C2.0

APN 777670-0010

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.

STORM DRAIN INSTALLATION SPECIAL REQUIREMENTS

REF: OCTOBER 18, 2019 MEMORANDUM FROM GEO Group NW

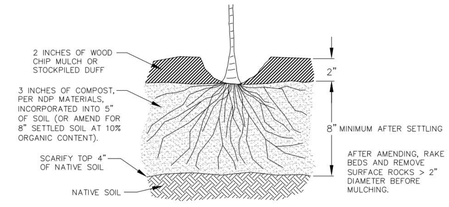
Conclusions and Recommendations – New Stormwater Piping

Significant portions of the existing and proposed stormwater piping are located at steep slope areas. We recommend that where piping is removed that temporary shoring is installed as necessary for safety and to mitigate trench collapse risks. From our point of view it is not necessary to remove the existing underground piping at all steep slope areas provided that the upstream end of the existing piping is disconnected from the working drainage system and capped. The downstream section of piping may then be abandoned in place. Of course, where existing piping intercepts the new development then the pipe must be removed.

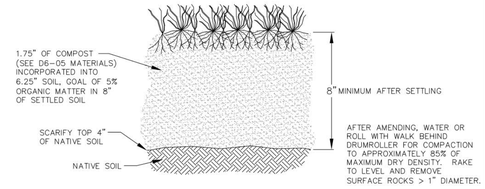
For the installation of new stormwater piping through the steep slope areas we recommend that the pipe consist of heat-welded HDPE pipe and that the pipe is anchored at the top of each section which traverses steep slopes. There are various methods for anchoring piping such as anchoring to catchbasin structures and/or constructing concrete anchor blocks which surround the pipe and derive resistance to movement by pouring neat against the existing firm soils or compacted structural fills. The designer may assume passive earth pressure of 350 pcf (equivalent fluid weight) and a coefficient of friction = 0.35 for compacted structural fill and undisturbed native site soils ("neat" pour) in contact with the pipe anchor system. We recommend that individual anchors are installed to restrain sloping pipe sections having a fall of not greater than 30-feet. Fills placed at the stormwater piping trenches located at slope areas which are steeper than 25 percent shall consist of clean crushed rock. At less steep trench areas we recommend that fills are compacted in accordance with the recommendations for structural fill noted in the geotechnical report. It is recommended that all piping is properly bedded for the selected pipe type and diameter based upon WSDOT or Mercer Island standard specifications.

COMPOST AMENDED SOIL SPEC

AMENDMENT FOR LANDSCAPED AREAS



SOIL AMENDMENT FOR GRASS OR TURF AREAS



NOTES:

1. AMEND SOILS PER DOE MANUAL, VOL. V, 5.3.1, BMP T5.13, (2012 OR CURRENT) OR WWW.SOILSFORSALMON.ORG.
2. DO NOT AMEND SOILS IN AREAS WITH UNDISTURBED SOIL AND NATIVE VEGETATION.
3. OPTIONAL ALTERNATIVE: STOCKPILE NATIVE TOPSOIL ONSITE, AMEND IF NEEDED, AND REPLACE BEFORE PLANTING.
4. OPTIONAL ALTERNATIVE: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET REQUIREMENTS.

JANUARY 2017 NO SCALE

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: AMENDED SOILS

NO. NDP-1

NO.	DATE	BY	REVISIONS

APPLICANT:
MILLAD HOMES, LLC

DATE: Jul 07, 2021
JOB# 1766
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Jul 07, 2021 — JEFFREY E. HALL — STATE OF WASHINGTON — 39766 — REGISTERED — PROFESSIONAL ENGINEER

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

STORMWATER BMP DETAILS

WEST RESIDENCE
4276 EAST MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO: C3.5

APN 777670-0010

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)[3]		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

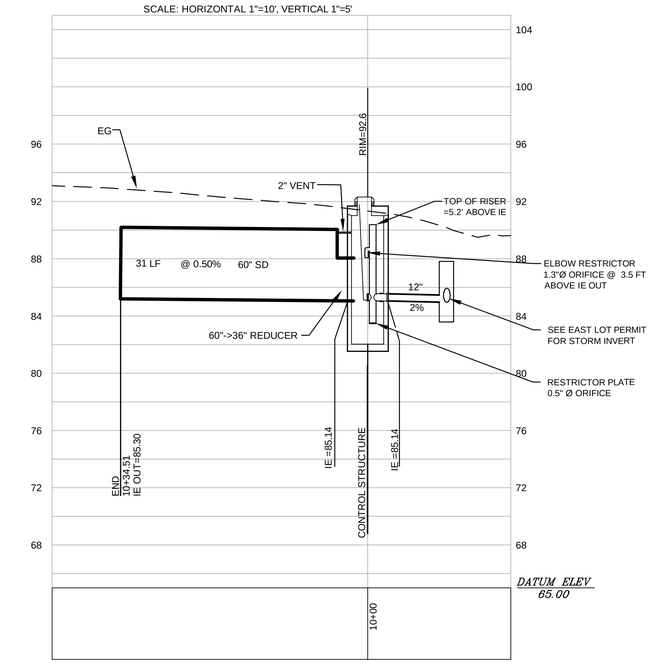
Notes:

• 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.

[1] On Type B soils, new plus replaced impervious surface areas exceeding 8,500 sf trigger Minimum Requirement #7 (Flow Control)
[2] On Type C soils, new plus replaced impervious surface areas exceeding 9,500 sf trigger Minimum Requirement #7 (Flow Control)
[3] Minimum orifice diameter = 0.5 inches
in = inch
ft = feet
sf = square feet

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%

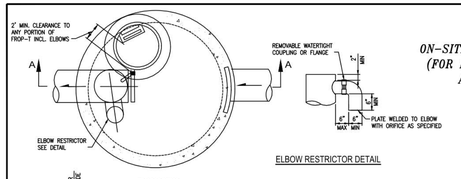
DETENTION PROFILE



IMPERVIOUS TABLE

Impervious Area Spreadsheet		
West Residence - 42xx East Mercer Way, Mercer Island, WA 98040 - CES #1766-W		
Gross Site area	16,549	sf
	0.380	acres
Existing Impervious Area to be demolished		
Ex roof, rockery	740	sf
Ex Driveway, on-site	1,604	sf
total existing, to be demolished =	**2,344**	**sf**
Proposed Impervious Area (on-site) (new + replaced)		
Roof	3,583	sf
Exposed driveway, exposed, on-site	1,373	sf
total on-site (new + replaced) proposed =	**4,956**	**sf**
total replaced impervious =	**2,344**	**sf**
total new impervious =	**2,612**	**sf**
total new + replaced impervious =	**4,956**	**sf**
total proposed lawn/landscape =	**11,593**	**sf**
Proposed Impervious Area into detention pipe		
Roof	3,583	sf
Driveway, exposed, on-site	1,373	sf
Impervious area into detention pipe =	**4,956**	**sf**

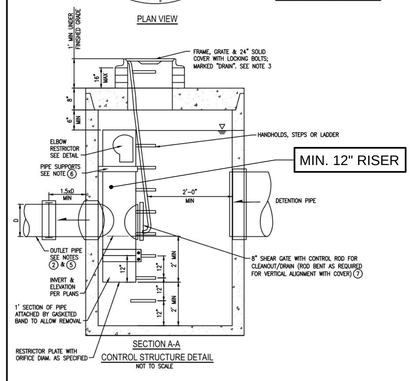
MERCER ISLAND DETENTION DETAIL

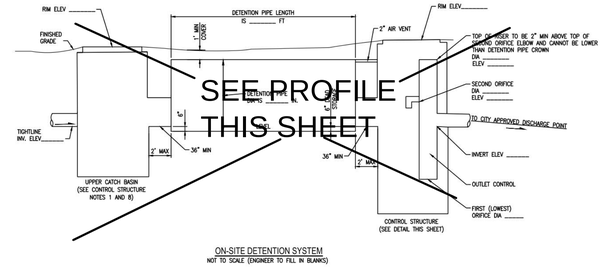


ATTACHMENT 1
CITY OF MERCER ISLAND
ON-SITE DETENTION SYSTEM WORKSHEET
(FOR NEW PLUS REPLACED IMPERVIOUS AREA OF 9,500 SF OR LESS)

OWNER: MILLAD
PERMIT #: _____
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 4,956
SOIL TYPE: Type C per "Geologic Map of Mercer Island"
ADDRESS: 42xx EAST MERCER WAY
Mercer Island, WA 98040
PREPARED BY: DUFFY ELLIS, P.E.
PHONE: 206.930.0342
DATE: FEB 2021
DETENTION PIPE DIA (INCH): 60" DIA
DETENTION PIPE LENGTH (FT): 31 LF
PIPE MATERIAL: CMP OR HDPE
ORIFICE #1 DIA ★ INCH, ELEV ★
ORIFICE #2 DIA ★ INCH, ELEV ★

*SEE TABLE 1, THIS SHEET





CONTROL STRUCTURE NOTES

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
   A. CLEANOUT GATE IS VISIBLE FROM TOP;
   B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
   C. FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
6. PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION 2033A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B.
   THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED.
   A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED.
   THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT.
   ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

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

NO.	DATE	BY	REVISIONS

APPLICANT:
MILLAD HOMES, LLC

DATE: Jul 07, 2021
JOB# 1766
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Jul 07, 2021
JEFFERY E. ELLIS
STATE OF WASHINGTON
20766
REGISTERED PROFESSIONAL ENGINEER

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

DETENTION PROFILE AND DETAIL

WEST RESIDENCE
4276 EAST MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C4.0

APN 777670-0010

E MERCER WAY

LOT "A"

LOT "B"

60" STUMP W/ NEW GROWTH

SSMH
RIM = 134.40'

CB
RIM = 109.23'
12" CPEP SE = 105.16'

8' WATER TANK

MAPLE DS10* 201

DS8* TOO SMALL

102 REDWOOD EXCEPTIONAL

101 REDWOOD EXCEPTIONAL

103 CYPRESS

106 BIG LEAF MAPLE EXCEPTIONAL DS54

107 CEDAR

PARCEL NO. 777670-0005

PARCEL NO. 777670-0010

TREE 9
PORTUGAL LAUREL
6' LOD

TREE 8
SCOTS PINE
6' LOD

TREE 4
VINE MAPLE
6' LOD

SE 42nd PLACE

SE 42nd PLACE

PLANT LIST

	QUANTITY	DESC
T	12	THUJA P. 'GREEN GIANT' 6-7'
	12	THUJA P. EXCELSA 6-7'
	12	ACER CIRCINATUM 7-8'
	2	ACER P. 'BLOODGOOD' 7-8' / 15 GAL
	1	ACER D. 'ORANGEOLA' 42-48" 35 GAL
T	6	TAXUS B. 'REPANDENS' 5 GAL
	25	FERN POLYSTICKHUM MUNITUM 2 GAL
S	40	SPIRAEA X B. 'LIME MOUND' 2 GAL
RP	14	ROSA FC RED 2 GAL

LANDSCAPING TYPICAL SEE PLANT LIST

THIS PROJECT INVOLVES THE ALTERATION OF A STEEP SLOPE AND LANDSLIDE HAZARD AREAS. MICC 19.07.160(B)(2)(D) REQUIRES THAT SUCH PROJECTS INCLUDE THE LANDSCAPING OF ALL DISTURBED AREAS OUTSIDE OF BUILDING FOOTPRINTS AND INSTALLATION OF HARDSCAPE PRIOR TO FINAL INSPECTION.

9825 ADDRESS

SEE ARBORIST REPORT
GREENFOREST INCORPORATED

NO.	DATE	BY	REVISIONS

APPLICANT:
MILLAD HOMES, LLC

DATE: Jul 09, 2021
JOB# 1766
DRAFTED: DE DESIGN: DE
DIGITAL SIGNATURE

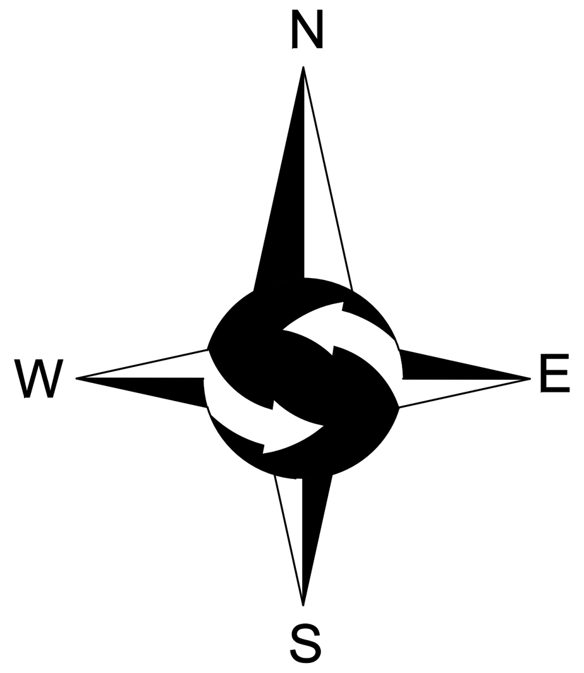
CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

SLOPE LANDSCAPE PLAN

WEST RESIDENCE
4276 EAST MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C5.0

APN 777670-0010



GRAPHIC SCALE
10 0 10 20 40
1INCH = 20 FT.

LEGEND

◕	FOUND MONUMENT AS DESCRIBED	—OHP—	OVERHEAD POWER
○	FOUND REBAR AS DESCRIBED	—OHU—	OVERHEAD UTILITIES
⌧	TACK IN LEAD FOUND	—X—	CHAINLINK FENCE
●	SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP	—□—	WOOD FENCE
Ⓟ	POWER METER	▨	CONCRETE WALL
⌀	UTILITY POLE	▢	ROCKERY
◎	GAS METER	▩	ASPHALT SURFACE
◙	SANITARY SEWER CLEANOUT	▢	CONCRETE SURFACE
◯	SANITARY SEWER MANHOLE	▦	SLOPE > 40%
⋈	WATER VALVE	CE	CEDAR
⚲	FIRE HYDRANT	DS	DECIDUOUS
⊞	WATER METER	SP	SPRUCE
—o—	SIGN	BI	BIRCH
—SS—	APPROXIMATE LOCATION SANITARY SEWER LINE	PI	PINE
—SD—	APPROXIMATE LOCATION STORM DRAIN LINE		* INDICATES MULTI-TRUNK

LEGAL DESCRIPTION

LOT 2, SHORERIDGE ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 49 OF PLATS, PAGE 2, RECORDS OF KING COUNTY, WASHINGTON;

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

THE PLAT OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 49 OF PLATS, PAGE 2, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

SURVEYOR:	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412
PROPERTY OWNER:	MILLAD V LLC 4270 E MERCER WAY MERCER ISLAND, WA 98040
TAX PARCEL NUMBER:	777670-0010
PROJECT ADDRESS:	4270 E MERCER WAY MERCER ISLAND, WA 98040
ZONING:	R-15
JURISDICTION:	CITY OF MERCER ISLAND
PARCEL ACREAGE:	32,779 S.F. (± 0.753 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 NIKON NIVO 5.C 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 2018 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.

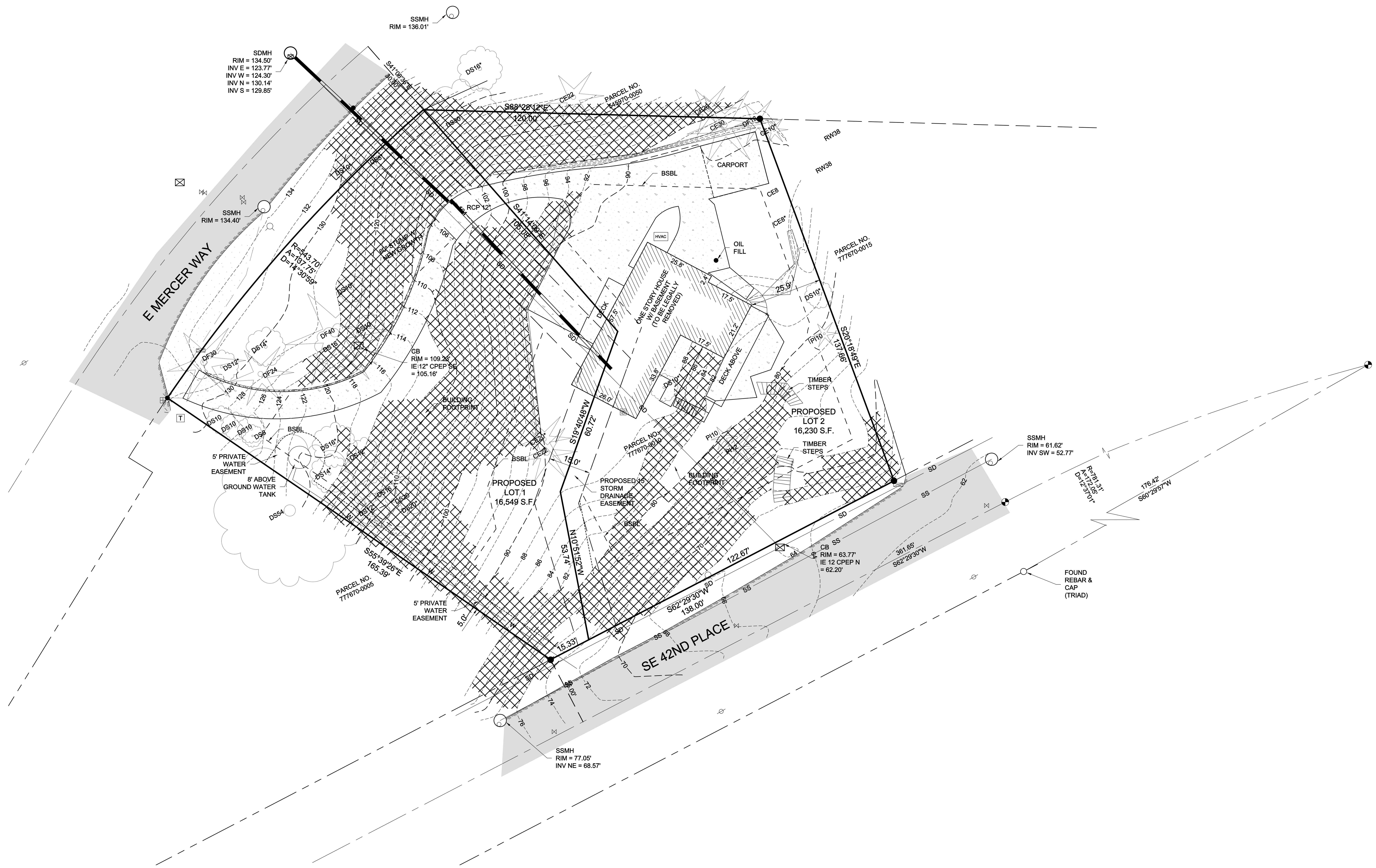
VERTICAL DATUM & CONTOUR INTERVAL

DATUM

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

POINT ID NO. CASC57
MONUMENT IN CASE AT THE END OF THE CUL-DE-SAC OF 42ND PLACE SE, MERCER ISLAND.
ELEVATION: 52.72 FEET (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.



VICINITY MAP
NTS

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

Site Surveying, Inc.
www.sitesurveymapping.com 21923 NE 11th Street Sammamish, WA 98074 Phone: 425.298.4412

THOMAS N. WOLDENDORP STATE OF WASHINGTON REGISTERED PROFESSIONAL LAND SURVEYOR
7/6/20

DATE	REVISION	DRN

PRELIMINARY SHORT PLAT
MILLAD V LLC
4270 E MERCER WAY
MERCER ISLAND, WA 98040

PROJECT NO. 18-142

DRAWN BY: EFJ
CHECKED BY: TNW
DATE: 4/16/2020
SHEET 1 OF 1