

SCALE: 1"=10'  
0 5 10 20

**NOTES NORTH**

- THIS SURVEY WAS PERFORMED BY FIELD TRAVERSE USING A 10 SECOND "TOTAL STATION" THEODOLITE SUPPLEMENTED WITH A 100 FT. STEEL TAPE. THIS SURVEY MEETS OR EXCEEDS THE STANDARDS FOR LAND BOUNDARY SURVEYS AS SET FORTH IN WAC CHAPTER 332-130-090.
- CONTOUR INTERVAL = 1 FT.
- VERTICAL DATUM = NAVD'88, AS PER DIRECT OBSERVATIONS USING GPS EQUIPMENT ON NOV. 15, 2021.  
HORIZONTAL DATUM = NAD 83/91
- PARCEL AREA = 18,817 SQ. FT.
- THIS SURVEY IS RELIANT UPON THE INFORMATION CONTAINED WITHIN CHICAGO TITLE COMPANY TITLE ORDER NO. 0208804-ETU, DATED JULY 01, 2021.
- UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS APPROXIMATE ONLY AND IS BASED UPON TIES TO ABOVE GROUND STRUCTURES.
- TAX PARCEL NO(S). 9365700382, 3210900051 & 3210900061
- TREE DIAMETERS AND DRILINES DISPLAYED HEREON ARE APPROXIMATE. FOR SPECIFIC GENUS AND DIAMETER, TREES SHOULD BE EVALUATED BY A CERTIFIED ARBORIST.
- THE AREA OF ON-SITE STEEP SLOPES 40% OR GREATER = 2,004 SQ. FT. OR 10% OF TOTAL PARCEL AREA.
- THE LOCATION AND AREA OF STEEP SLOPES AS DISPLAYED HEREON ARE APPROXIMATE AND HAVE BEEN DETERMINED TO THE BEST OF OUR ABILITY FROM FIELD DATA COLLECTED BY US DURING THE COURSE OF THIS SURVEY. FINAL DETERMINATION OF THE LOCATION OF STEEP SLOPES, AND ANY ASSOCIATED BUFFERS, IS DEPENDENT UPON REVIEW AND APPROVAL BY THE CITY OF SEATTLE.
- WE HAVE DETERMINED TO THE BEST OF OUR ABILITY THE OVERHEAD HIGH VOLTAGE POWERLINE WHICH IS CLOSEST TO THE PROJECT SITE AND HAVE DISPLAYED ITS HORIZONTAL AND VERTICAL LOCATION HEREON. HOWEVER, ADDITIONAL OVERHEAD SERVICE LINES MAY EXIST WHICH ARE NOT OBVIOUS TO US BY FIELD OBSERVATION AND POTENTIALLY IMPACT PROJECT DESIGN. THEREFORE, PRIOR TO DESIGN AND CONSTRUCTION WE RECOMMEND THAT SEATTLE CITY LIGHT BE CONSULTED REGARDING THE POSSIBLE EXISTANCE OF ADDITIONAL SERVICE LINES NOT DISPLAYED HEREON WHICH SHOULD BE CONSIDERED FOR PROJECT DESIGN.

**LEGAL DESCRIPTION:**

THAT PORTION OF TRACT 25, HARRY WHITE'S PLAT OF EAST SEATTLE ACRE TRACTS, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 3 OF PLATS, PAGE(S) 36, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTH LINE OF SAID TRACT 25, DISTANT 216.37 FEET SOUTH 84°58'30" WEST FROM THE NORTHWEST CORNER THEREOF; THENCE CONTINUING SOUTH 84°58'30" WEST 195 FEET, MORE OR LESS, TO A POINT ON THE EAST MARGINAL LINE OF WEST MERCER WAY AS NOW ESTABLISHED; THENCE SOUTHERLY ALONG SAID EAST MARGINAL LINE OF WEST MERCER WAY, A DISTANCE OF 93.64 FEET; THENCE NORTH 86°38'10" EAST 170.86 FEET, MORE OR LESS, TO A POINT WHICH BEARS SOUTH 4°52'41" WEST FROM THE POINT OF BEGINNING; THENCE NORTH 4°52'41" EAST 103.23 FEET TO THE POINT OF BEGINNING; ALSO

THAT PORTION OF TRACT 5, HEATHER BRAE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 81 OF PLATS, PAGE(S) 56, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

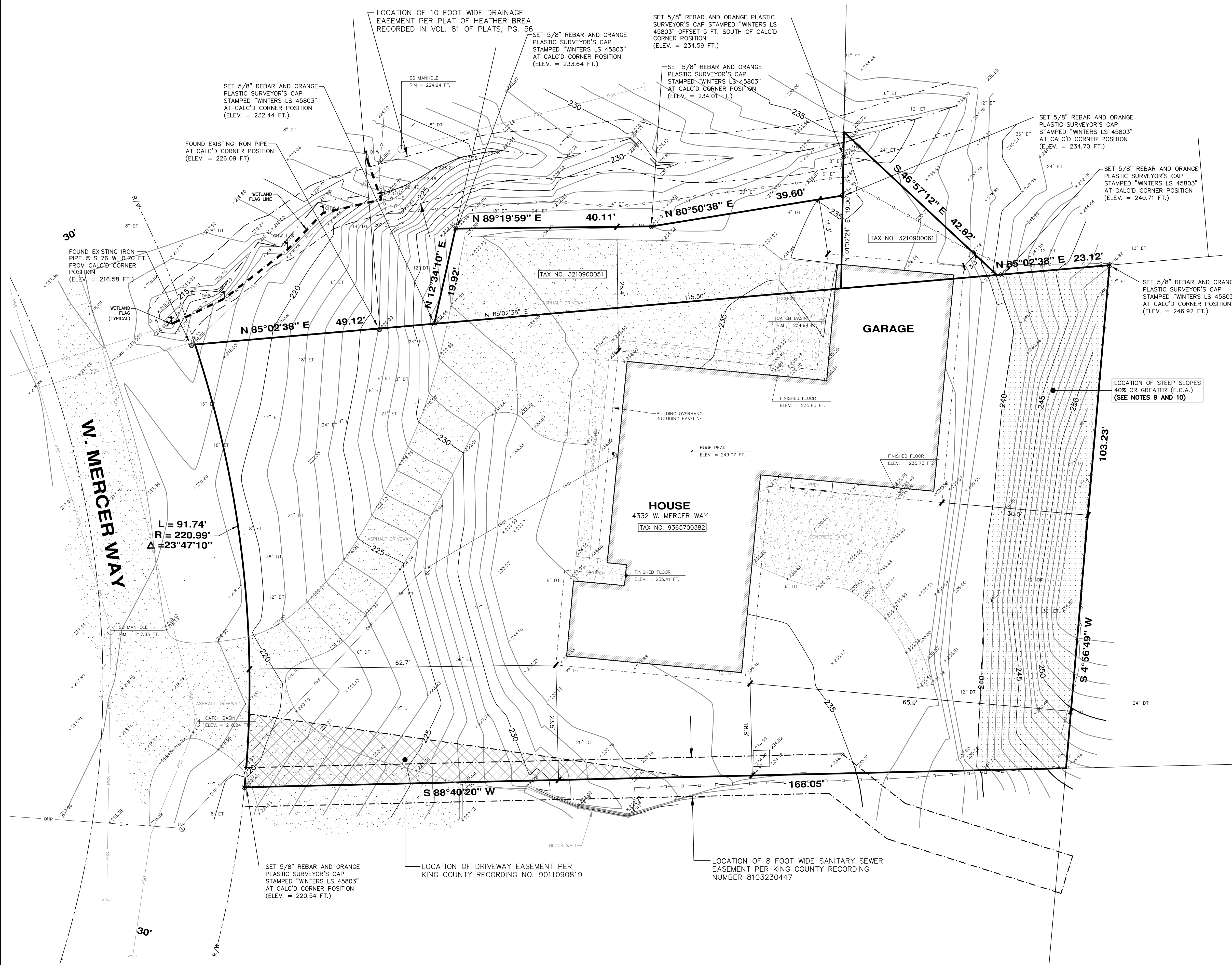
BEGINNING AT THE SOUTHEAST CORNER OF SAID TRACT 5; THENCE SOUTH 83°53'45" WEST ALONG THE SOUTH LINE THEREOF 83.50 FEET; THENCE NORTH 11°25'17" EAST 19.92 FEET; THENCE NORTH 88°11'06" EAST 40.11 FEET; THENCE NORTH 79°41'45" EAST 39.60 FEET TO THE EAST LINE OF SAID TRACT 5; THENCE SOUTH 0°05'56" EAST 19.00 FEET TO THE POINT OF BEGINNING;

AND THAT PORTION OF LOT 6 OF SAID PLAT OF HEATHER BRAE LYING SOUTHWESTERLY OF A LINE EXTENDING FROM A POINT ON THE WESTERLY LINE OF SAID LOT WHICH IS 32 FEET NORTHERLY OF THE SOUTHWEST CORNER THEREOF, TO A POINT ON THE SOUTHERLY LINE OF SAID LOT WHICH IS 32 FEET EASTERLY OF SAID SOUTHWEST CORNER.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**LEGEND:**

	GAS METER		ROCKERY		UTILITY POLE
	ELECTRIC METER		CONCRETE PAVING		OVERHEAD POWER LINE
	WATER VALVE		ASPHALT PAVING		OVERHEAD COMMUNICATIONS LINE
	FIRE HYDRANT		CHAIN LINK FENCE		UNDERGROUND COMMUNICATIONS LINE
	MANHOLE COVER		WOODEN FENCE		UNDERGROUND POWER LINE
	CATCH BASIN		GAS VALVE		UNDERGROUND GAS LINE
			POWER POLE		UNDERGROUND WATER LINE
					UNDERGROUND SANITARY SEWER
					X" DIAMETER STORM MAIN
					X" DIAMETER SEWER MAIN
					X" DIAMETER WATER MAIN



**TOPOGRAPHIC SURVEY**  
**4332 WEST MERCER WAY**  
**MERCER ISLAND, WASHINGTON**

**CHADWICK WINTERS**  
 LAND SURVEYING AND MAPPING  
 1422 N.W. 85TH ST., SEATTLE, WA 98117  
 PHONE: 206.297.0996  
 FAX: 206.297.0997  
 WEB: WWW.CHADWICKWINTERS.COM

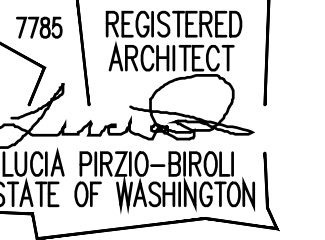
PROJECT #: 21-7329  
 DRAWING: 21-7329 TOPO.DWG  
 CLIENT: KEN CHU  
 DATE: 05/9/2024  
 DRAWN BY: RCS





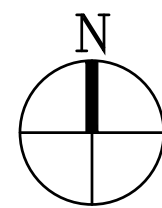
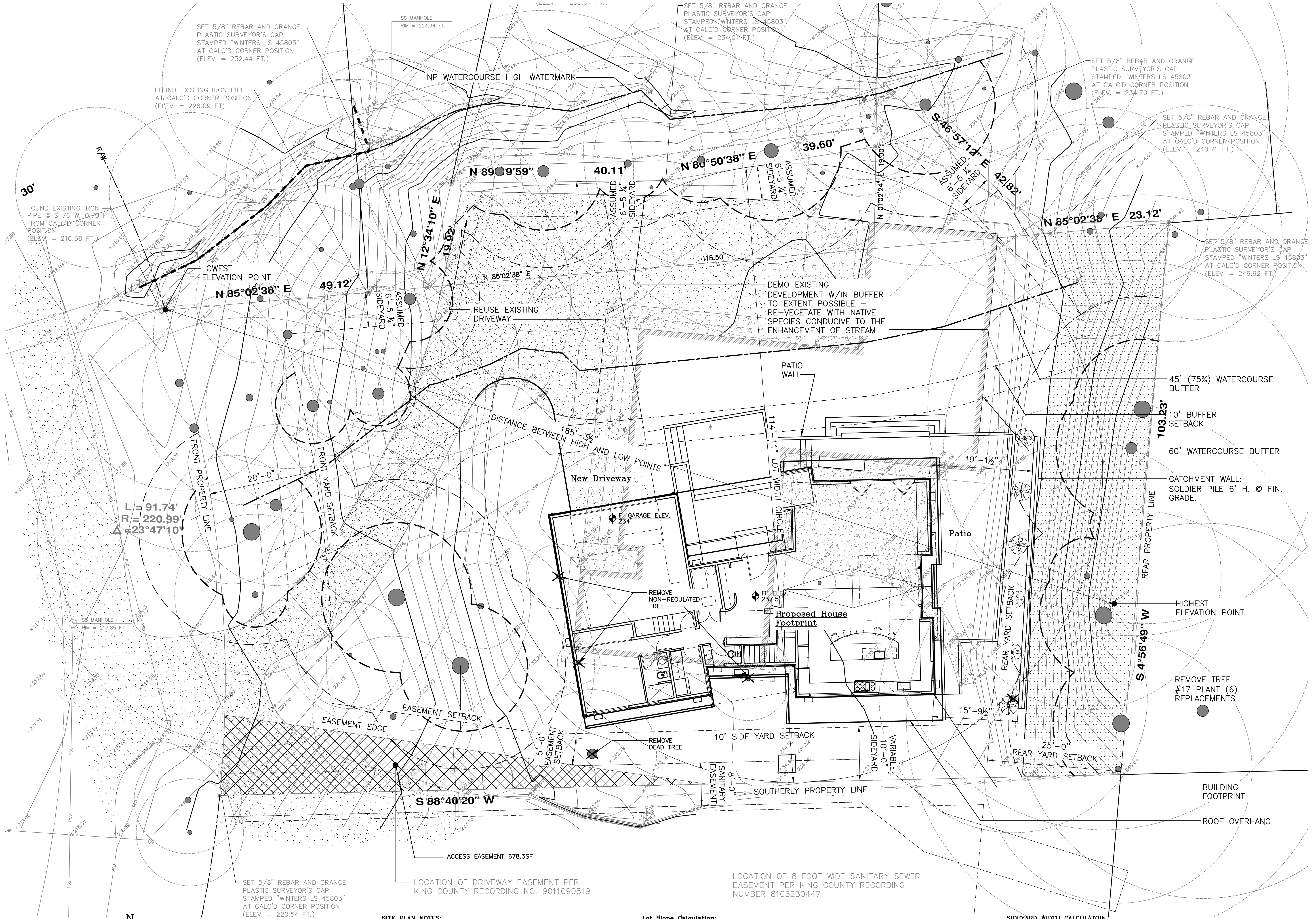
ECTYPOS  
ARCHITECTURE

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



**CHU RESIDENCE**

New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040



**1 Proposed Site Plan**  
scale: 1/8"=1'-0"

- SITE PLAN NOTES:**
1. CONTOURS ARE @ 1' INTERVALS.
  2. SEE A1.1 FOR ABE, LOT COVERAGE AND HARDSCAPE CALCULATIONS
  3. SEE A1.2 FOR CAR 2 SITE PLAN
  4. SEE CIVIL SET FOR STORM WATER CONTROL; UTILITY LAYOUT; REGRADING; & TREE REQUIREMENTS

**Lot Slope Calculation:**

HIGHEST ELEVATION:	254.8'
LOWEST ELEVATION:	216.5'
ELEVATION DIFFERENCE:	38.3'
HORIZONTAL DISTANCE BETWEEN HIGH AND LOW	
185'-3 1/2" (185.29')	
LOT SLOPE: ELEV. DIFFERENCE/DISTANCE x 100=	
20.6%	

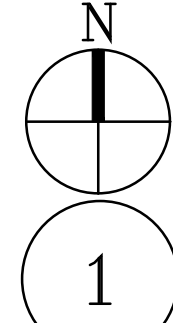
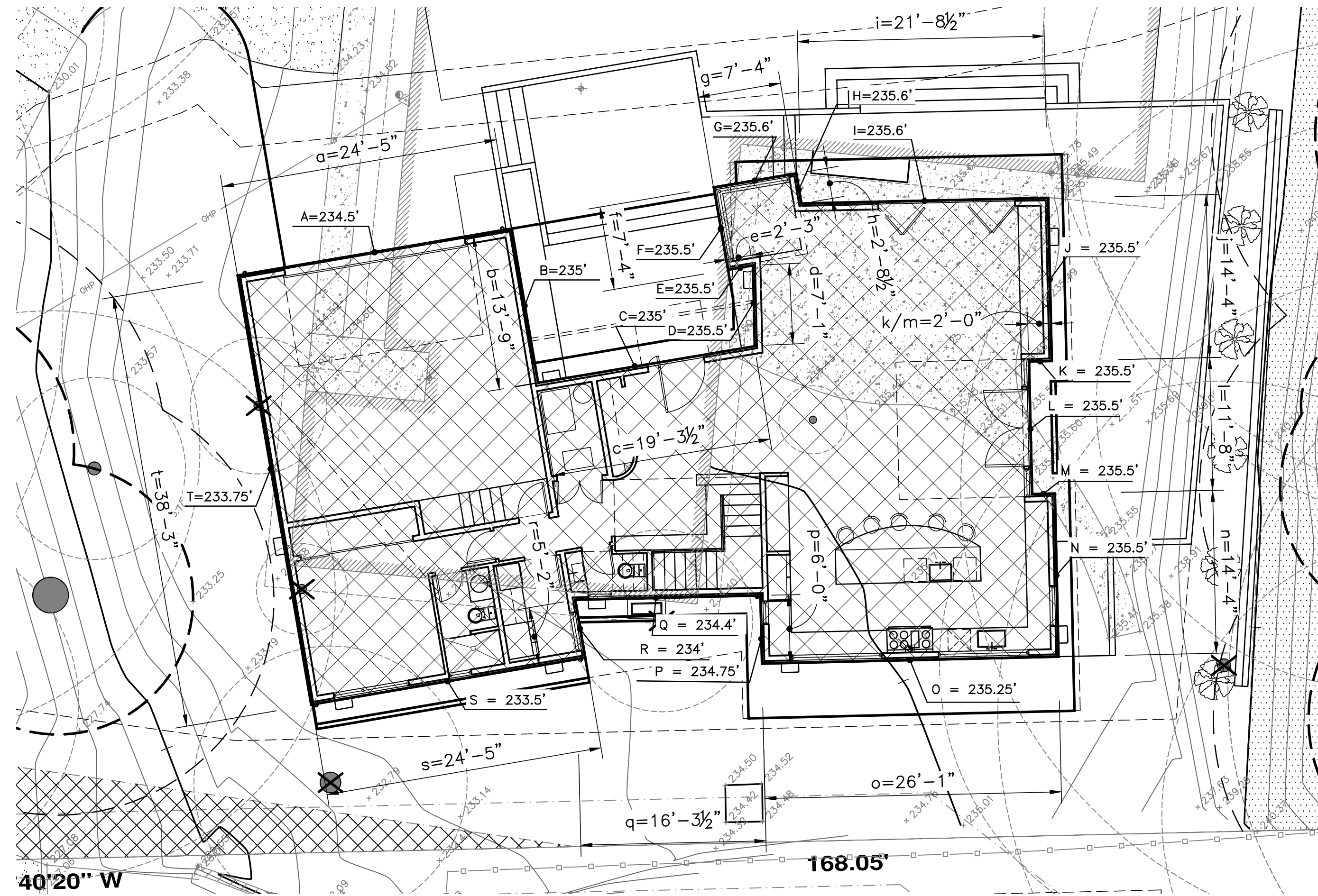
**SIDEYARD WIDTH CALCULATION:**

LOT WIDTH CIRCLE:	114'-11" (114.91')
TOTAL SIDEYARD WIDTH: LOT WIDTH x 17%	19.53'
MINIMUM SIDEYARD WIDTH: TOTAL SIDEYARD WIDTH x 33%	6.44' (6'-5 1/4")

Date:

5/11/2022 Pre-App
5/14/2024 Sub 1

Scale:  
Sheet: Proposed Site Plan  
**A1.0**



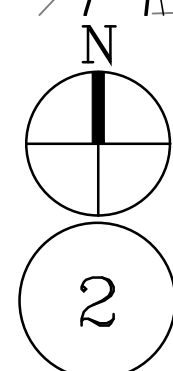
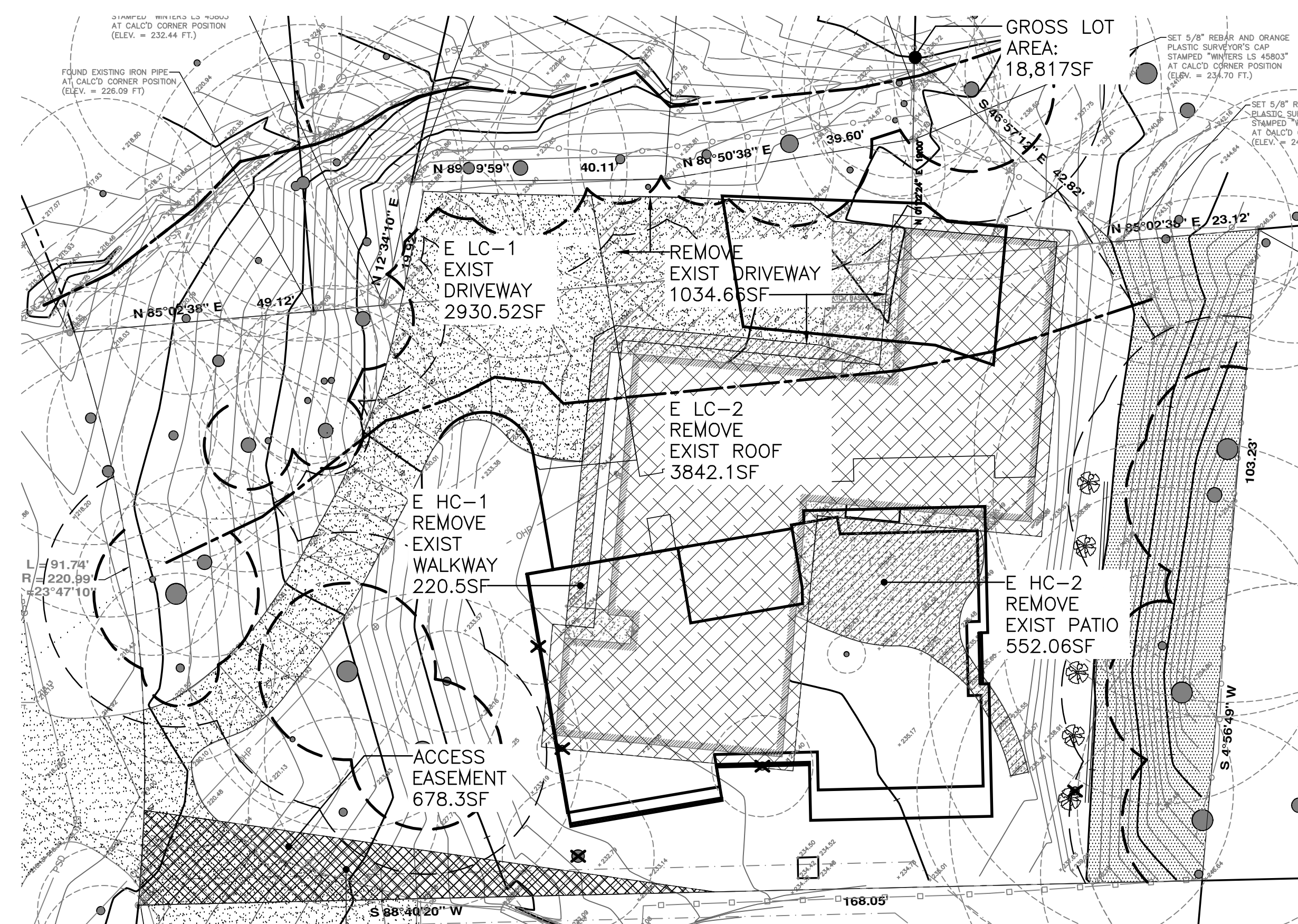
**1 Average Building Elevation Calculation**  
scale: 1/8"=1'-0"

AVERAGE BUILDING ELEVATION		
Mid-point Elev.	Wall Segment Length	Elev x Length
A= 234.5 ft	* a= 24.4 ft	= 5721.8
B= 235 ft	* b= 13.8 ft	= 3231.3
C= 235.0 ft	* c= 19.3 ft	= 4535.5
D= 235.5 ft	* d= 7.1 ft	= 1672.1
E= 235.5 ft	* e= 2.3 ft	= 529.9
F= 235.5 ft	* f= 7.3 ft	= 1719.2
G= 235.6 ft	* g= 7.3 ft	= 1719.9
H= 235.6 ft	* h= 2.7 ft	= 636.1
I= 235.6 ft	* i= 21.7 ft	= 5112.5
J= 235.5 ft	* j= 14.3 ft	= 3367.7
K= 233.5 ft	* k= 2.0 ft	= 467.0
L= 235.5 ft	* l= 11.6 ft	= 2731.8
M= 235.5 ft	* m= 2.0 ft	= 471.0
N= 235.5 ft	* n= 14.3 ft	= 3367.7
O= 235.25 ft	* o= 26.1 ft	= 6140.0
P= 234.75 ft	* p= 6.0 ft	= 1408.5
Q= 234.4 ft	* q= 16.3 ft	= 3820.7
R= 234 ft	* r= 5.2 ft	= 1207.4
S= 233.5 ft	* s= 24.4 ft	= 5697.4
T= 233.75 ft	* t= 38.3 ft	= 8940.9
	total=	total=
	133.7 ft.	31444.6
Avg. Building Elevation = 235.2 ft.		
Allowed Building Height = 265.2 ft.		

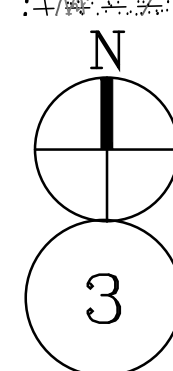
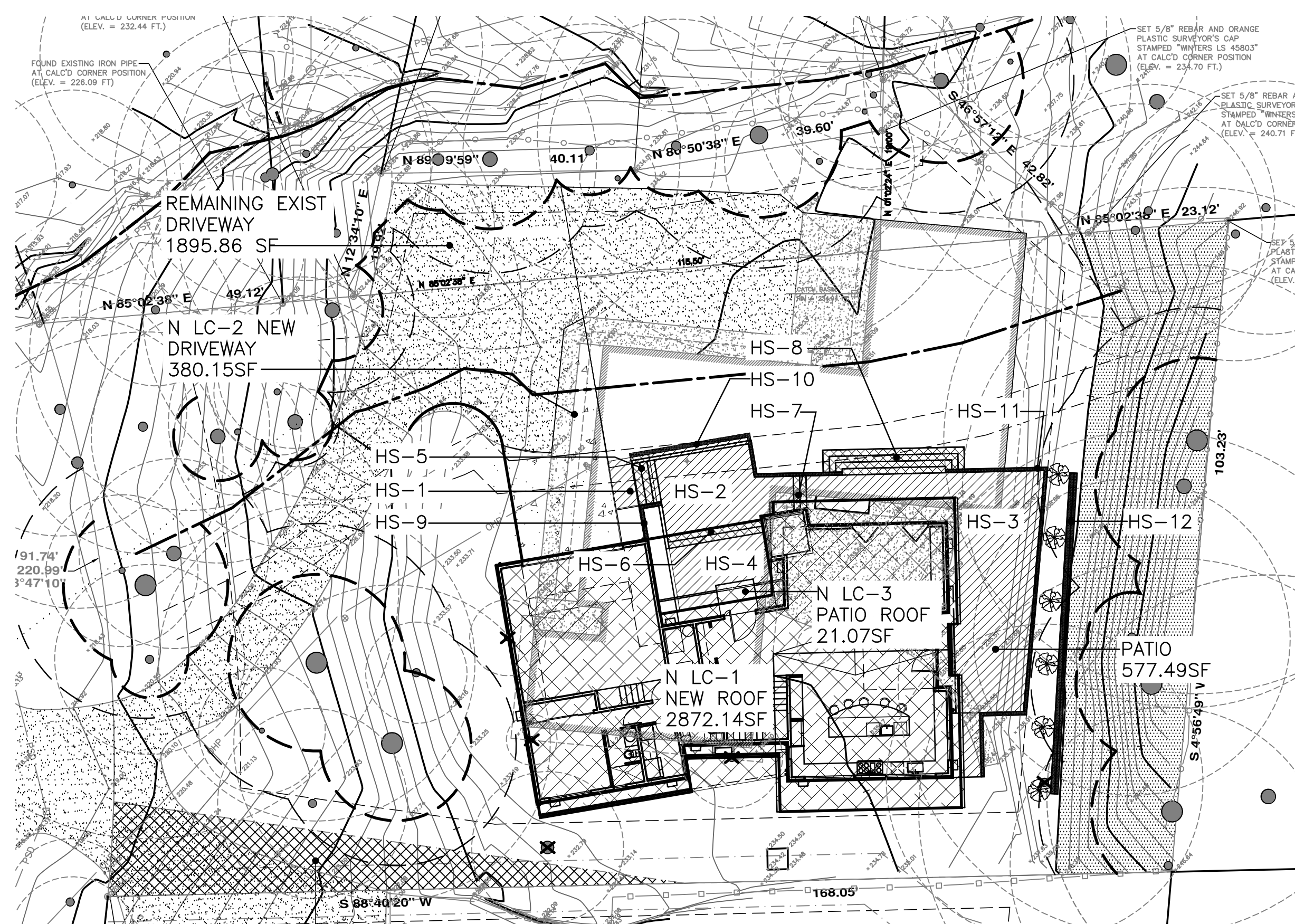
LOT AREA:  
GROSS LOT AREA: 18,817.00 SF  
ACCESS EASEMENT: 678.00 SF  
NET LOT AREA: GROSS - EASEMENT: 18,139.70 SF

Lot Coverage Calculation			
EXISTING			
ID	TYPE	AREA (SF)	STATUS
E LC-1	VEHICULAR USE (TOTAL)	2930.52	RECONFIGURE
	VEHICULAR USE (REMOVE FROM TOTAL)	1034.66	REMOVE
E LC-2	MAIN STRUCT. ROOF (HOUSE)	3842.10	REMOVE
TOTAL EXISTING LOT COVERAGE:		6772.62	
TOTAL EXISTING LOT REMOVED:		4876.76	
TOTAL DRIVEWAY TO REMAIN:		1895.86	
NEW			
ID	TYPE	AREA (SF)	STATUS
N LC-1	MAIN STRUCTURE ROOF	2872.14	
N LC-2	VEHICULAR USE	380.15	ADD TO EXIST
N LC-3	PATIO ROOF	21.07	
TOTAL NEW LOT COVERAGE		3273.36	
TOTAL PROJECT LOT COVERAGE		5169.22	
% OF LOT: LC/NET LOT AREA X 100		28.50%	
ALLOWED LOT COVERAGE		56%	

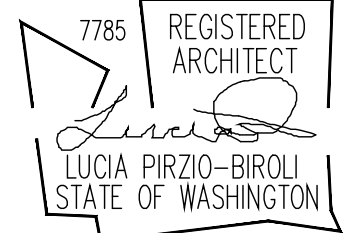
Hardscape Calculation			
EXISTING			
ID	TYPE	AREA (SF)	STATUS
E HS-1	PATIO	552.06	REMOVE
E HS-2	WALKWAY	220.50	REMOVE
TOTAL EXISTING HARDSCAPE:		772.56	REMOVED
NEW			
ID	TYPE	AREA (SF)	STATUS
HS-1	PATIO	26.90	
HS-2	PATIO	231.74	
HS-3	PATIO	576.28	
HS-4	PATIO	132.40	
HS-5	STAIRS	22.88	
HS-6	STAIRS	30.26	
HS-7	STAIRS	8.00	
HS-8	STAIRS	86.23	
HS-9	WALLS	5.71	
HS-10	WALLS	22.78	
HS-11	WALLS	35.69	
HS-12	OTHER	58.19	SOLDIER PILE CATCHMENT WALL
TOTAL NEW HARDSCAPE		1238.23	
TOTAL PROJECT HARDSCAPE		1238.23	
% OF LOT: HS/NET LOT AREA X 100		6.8%	
ALLOWED LOT COVERAGE		9%	



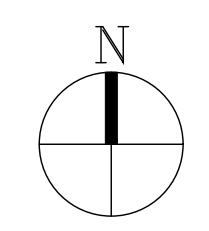
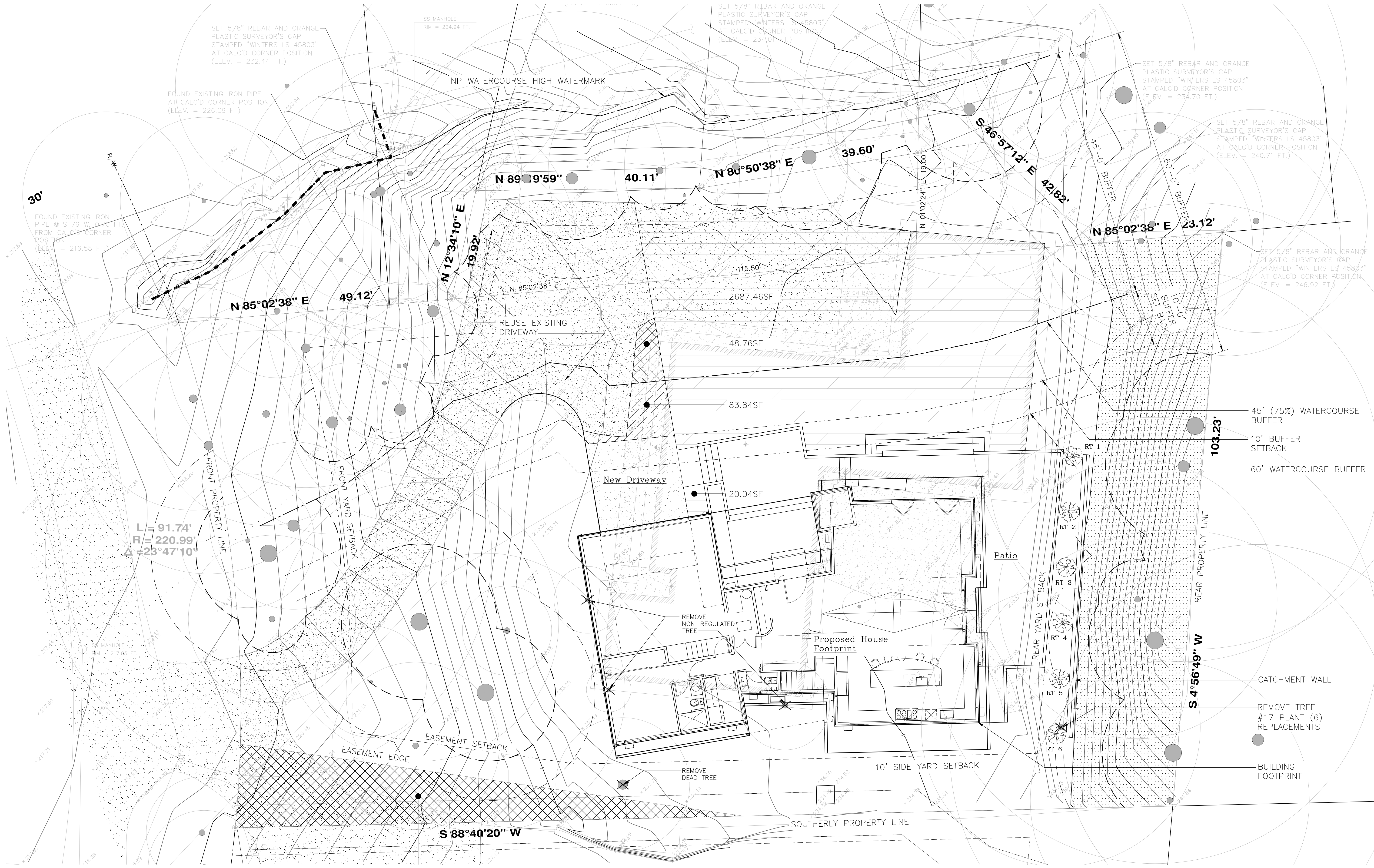
**2 Existing Lot Coverage and Hardscape**  
scale: 1/16"=1'-0"



**3 Proposed Lot Coverage and Hardscape**  
scale: 1/16"=1'-0"

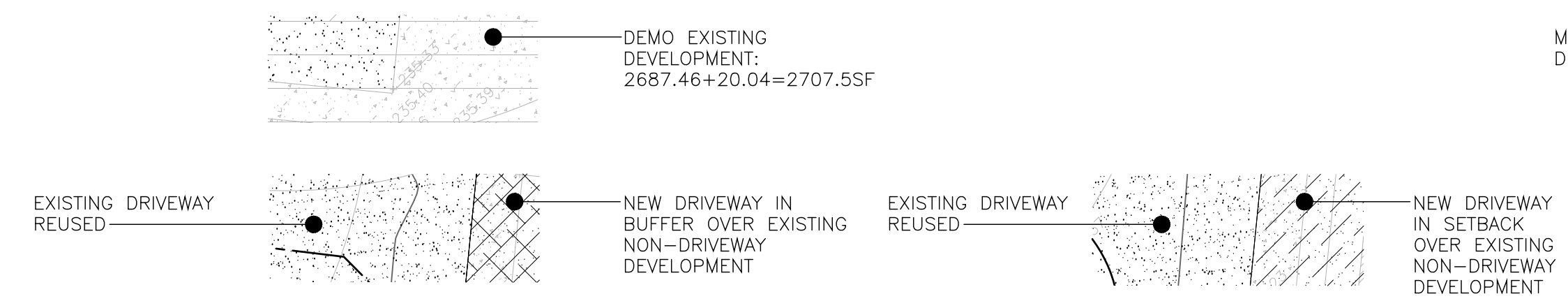


**CHU RESIDENCE**  
New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040

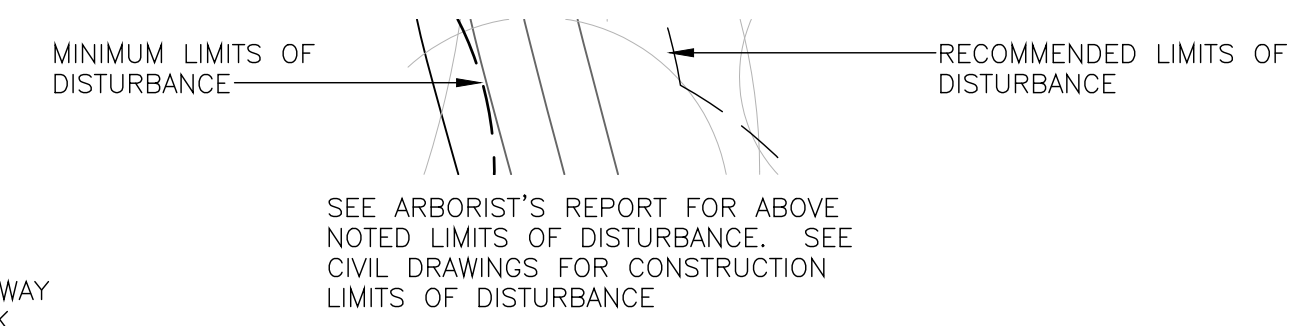


**1 Proposed CAR 2 Site Plan**  
scale: 1/8"=1'-0"

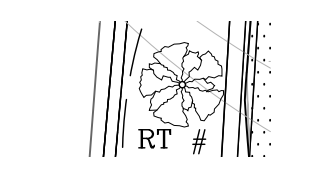
**Existing Development Legend**



**LOD Legend**



**Replacement Trees**



**CAR 2 PLAN NOTES**

1. TO BE REVIEWED IN CONJUNCTION WITH ATTACHED MEMO, GEOTECHNICAL, AND ECOLOGIST REPORTS
2. FOR DRAWINGS REFERRED TO BELOW AND NOT INCLUDED IN "CAR SET" SEE ATTACHED DEVELOPMENT SET
3. SEE A1.0 FOR NOTES IN COMMON
4. SEE A1.1 FOR EXISTING AND PROPOSED LOT COVERAGE AND HARDSCAPE (IMPERVIOUS SURFACES) CALCULATIONS.
5. SEE ARBORIST'S REPORT FOR TREE EVALUATIONS
6. SEE CIVIL DRAWINGS AND REPORT FOR L.O.D., TREE INFORMATION, UTILITY LOCATION AND TESC DETAILS
7. SEE STRUCTURAL DRAWINGS FOR IMPLEMENTATION OF GEOTECHNICAL REQUIREMENTS.
8. RESTORATION PLAN BY ECOLOGIST.

Date:  
**5/11/2022 Pre-App**  
**5/14/2024 Sub 1**

Scale:

Sheet:

Proposed CAR 2  
Site Plan

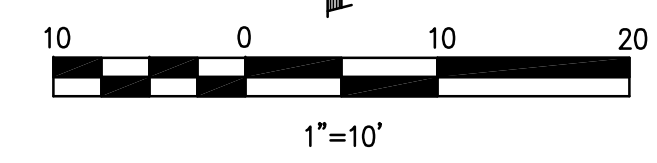
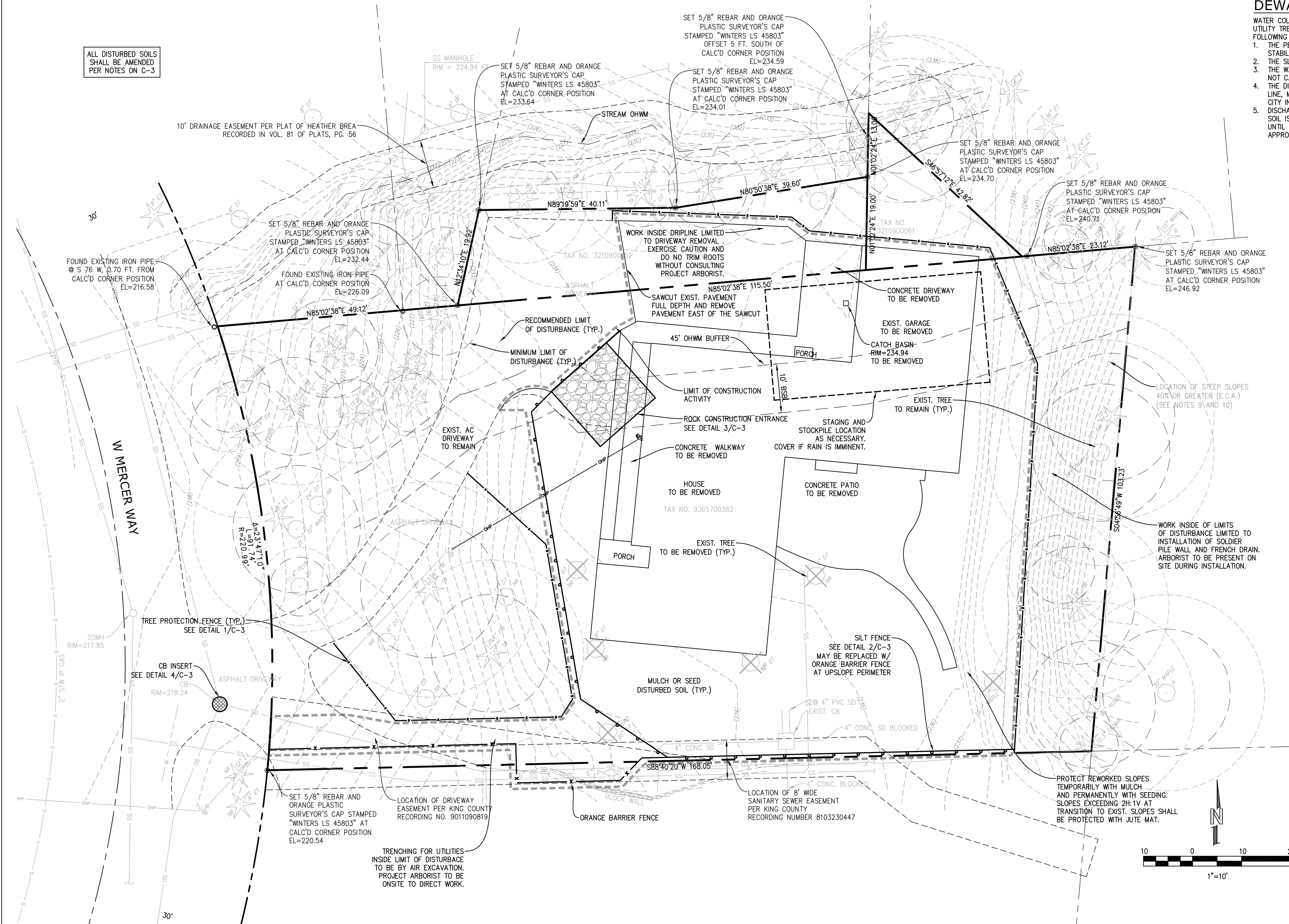
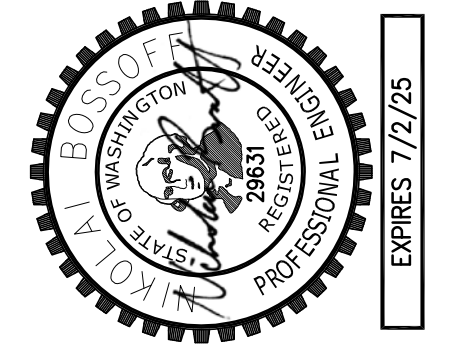
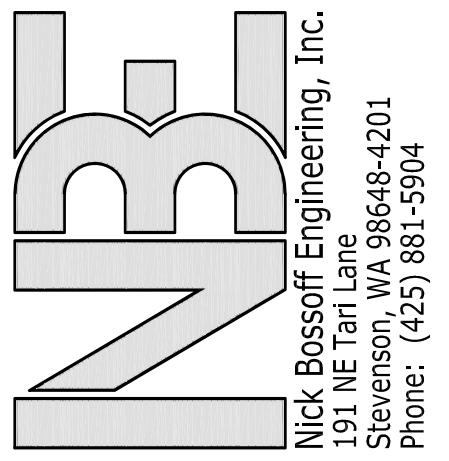
**A1.2**

NE 1/4 SEC. 13, TWP. 24 N., RGE. 4 E., W.M.

ALL DISTURBED SOILS SHALL BE AMENDED PER NOTES ON C-3

**DEWATERING**

- WATER COLLECTED IN THE BUILDING EXCAVATION, DETENTION FACILITY TRENCH, OR UTILITY TRENCHES MAY BE DISPERSED OVER ONSITE PERVIOUS AREAS SUBJECT TO THE FOLLOWING RESTRICTIONS:
1. THE PERVIOUS AREAS SHALL BE AMENDED PER THE NOTES ON SHEET C-3, AND STABILIZED WITH VEGETATION OR MULCH.
  2. THE SLOPE OF THE PERVIOUS SURFACE SHALL NOT EXCEED 5%.
  3. THE WATER SHALL BE DISCHARGED ONTO THE SURFACE IN A DISPERSED MANNER TO NOT CAUSE EROSION NOR CREATE RUNOFF THAT HAS POTENTIAL TO FLOW OFFSITE.
  4. THE DISCHARGE LOCATION SHALL BE A MINIMUM OF 25 FEET FROM A PROPERTY LINE, MEASURED ALONG THE LINE OF FALL, UNLESS OTHERWISE APPROVED BY THE CITY INSPECTOR.
  5. DISCHARGE TO PERVIOUS AREAS SHALL CEASE IF THE ABSORPTION CAPACITY OF THE SOIL IS EXCEEDED CREATING POTENTIAL FOR RUNOFF. DEWATERING SHALL CEASE UNTIL A SATISFACTORY ALTERNATIVE, SUCH AS TRANSPORTING OFFSITE TO AN APPROVED DUMP SITE, IS APPROVED BY THE CITY INSPECTOR.



**DATUM**  
 VERTICAL DATUM  
 NAVD'88, AS PER DIRECT OBSERVATIONS USING GPS EQUIPMENT ON NOV. 15, 2021.  
 HORIZONTAL DATUM  
 NAD 83/91

NO.	DATE	REVISION
1	05/14/24	PERMIT SUBMITTAL

N. BOSSOFF, P.E.
PROJECT MANAGER:
DESIGNED: NB
TKB
DRAWN: ECTY-2301
JOB NUMBER: ECTY-2301
FILE NAME: ECTY-2301.pln.dwg

**CHU RESIDENCE**  
**4332 W MERCER WAY**

WASHINGTON

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MERCER ISLAND

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TITLE:  
**T.E.S.C. PLAN**

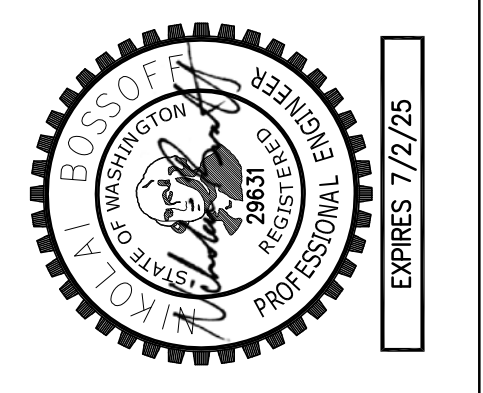
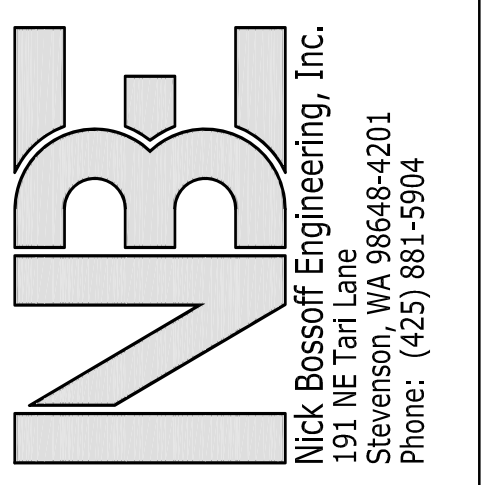
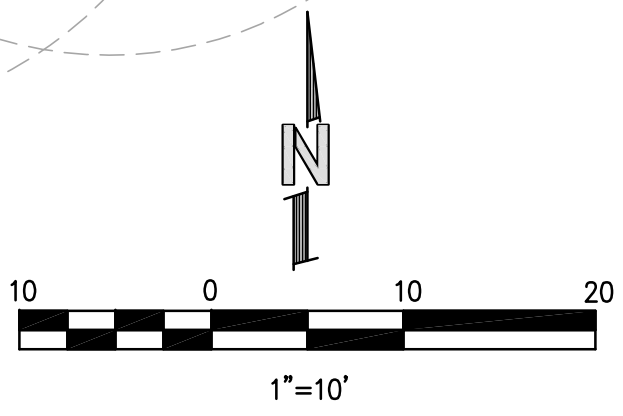
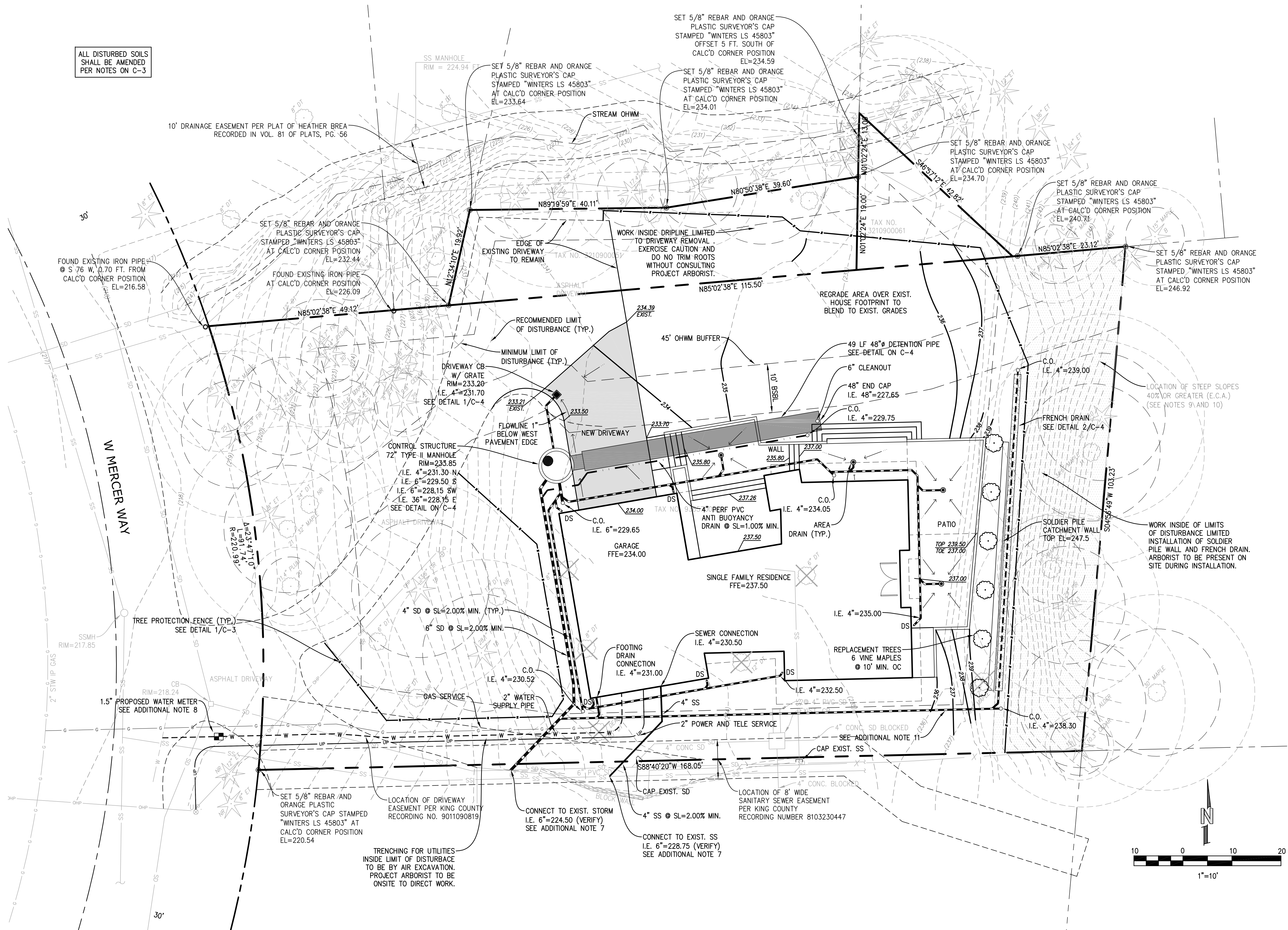
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SHEET:  
**C-1**

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

NE 1/4 SEC. 13, TWP. 24 N., RGE. 4 E., W.M.

ALL DISTURBED SOILS SHALL BE AMENDED PER NOTES ON C-3



NO.	REVISION
DATE	PERMIT SUBMITTAL
NO.	DATE
NO.	DATE
NO.	DATE
NO.	DATE
NO.	DATE
NO.	DATE
N. BOSSOFF, P.E.	
PROJECT MANAGER:	
DESIGNED:	
TKB	
DRAWN:	
ECTY-2301	
JOB NUMBER:	
ECTY-2301pin.dwg	
FILE NAME:	

WASHINGTON

CHU RESIDENCE  
4332 W MERCER WAY

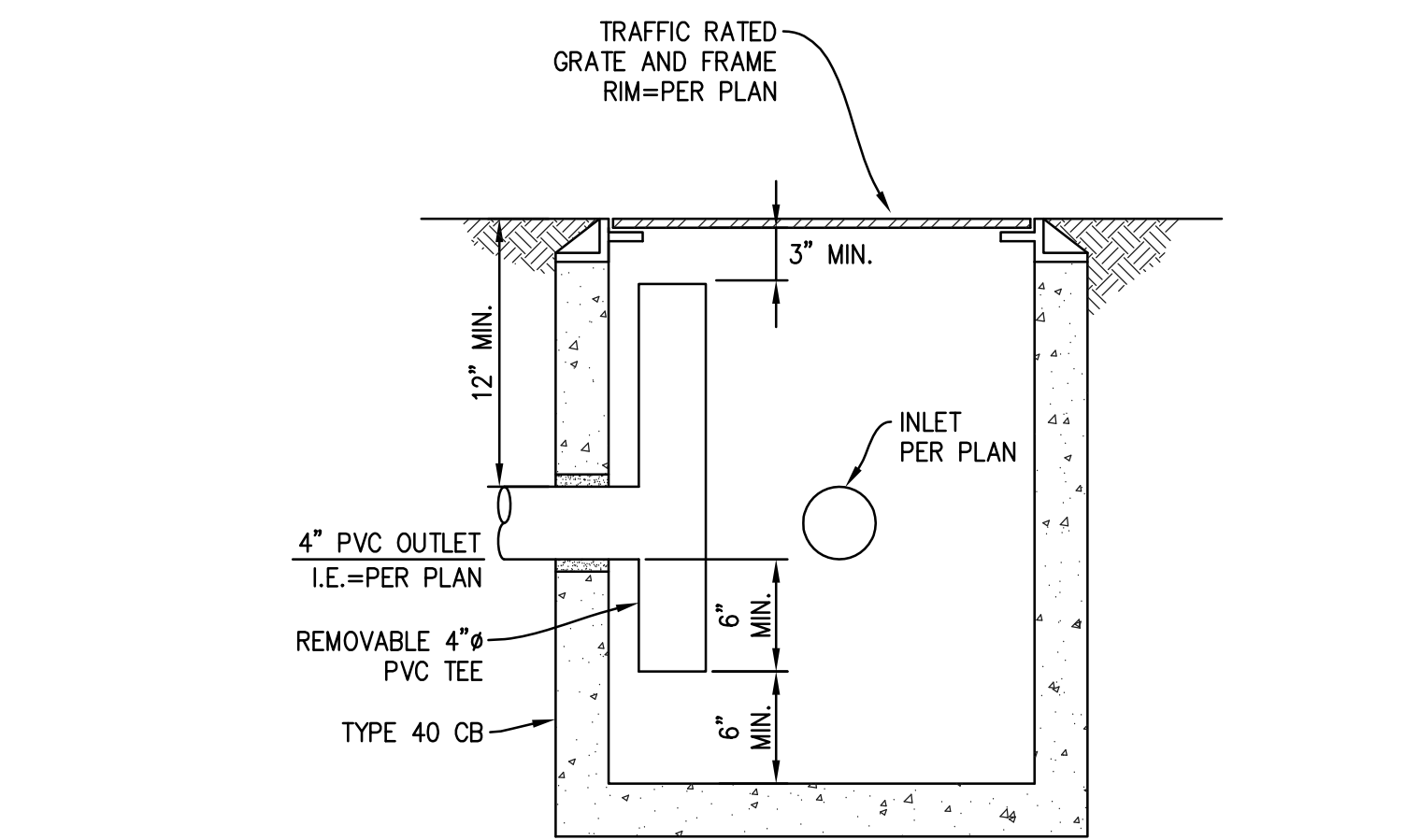
MERCER ISLAND

TITLE:  
CIVIL PLAN

SHEET:  
C-2



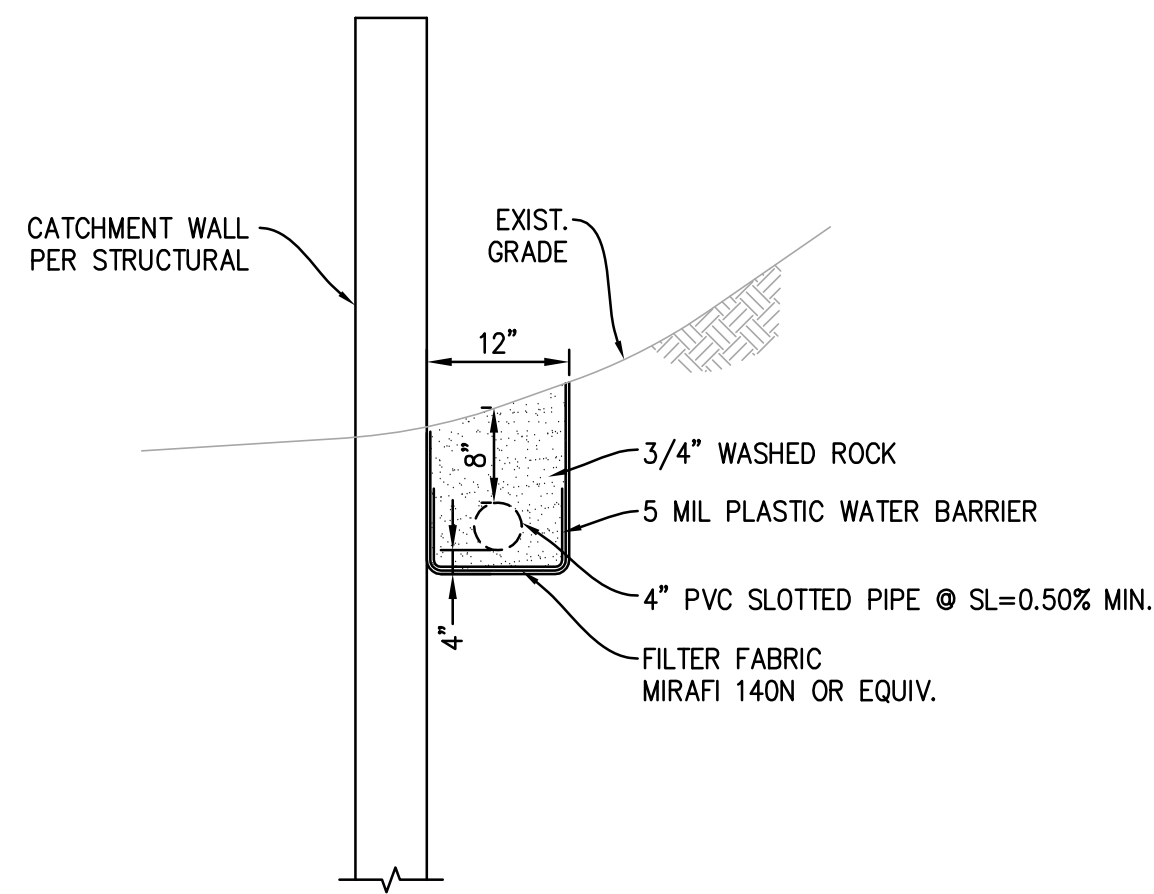




OIL SEPARATOR CB

SCALE: NTS

1



FRENCH DRAIN

SCALE: NTS

2

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

OWNER: CHU	ADDRESS: 4332 W MERCER WAY	PREPARED BY: NICK BOSSOFF ENG
PERMIT #:	MERCER ISLAND	PHONE: (425) 881-5904
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 4,616	DETENTION PIPE DIA (INCH): 48"	DETENTION PIPE LENGTH (FT): 49
SOIL TYPE: C	PIPE MATERIAL: CMP	ORFICE #1 DIA 0.50 INCH, ELEV 226.15
		ORFICE #2 DIA 1.50 INCH, ELEV 231.05

2" MIN. CLEARANCE TO ANY PORTION OF PROP-T INCL. ELBOWS  
REMOVABLE WATER TIGHT COUPLING OR FLANGE  
ELBOW RESTRICTOR SEE DETAIL  
PLAN VIEW

ELBOW RESTRICTOR DETAIL  
8" PLATE WELDED TO ELBOW WITH ORFICE AS SPECIFIED

ON-SITE DETENTION SYSTEM  
NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

SECTION A-A  
CONTROL STRUCTURE DETAIL  
NOT TO SCALE

**CONTROL STRUCTURE NOTES:**

- USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
- OUTLET PIPE: MIN. 6 INCH.
- METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
- FRAME AND LADDER OR STEPS OFFSET SO:
  - CLEANOUT GATE IS VISIBLE FROM TOP;
  - CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
  - FRAME IS CLEAR OF CURB.
- 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.
- PROVIDE AT LEAST ONE 3 X 0.080 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
- THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 286 AND ASTM B 275, DESIGNATION 3032A, 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.
- THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

**ON-SITE DETENTION SYSTEM NOTES:**

- CALL DEVELOPMENT SERVICES (206-275-7805) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
- RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORFICE MUST BE KEPT OPEN AT ALL TIMES.
- PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 8.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION. LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING: LINED CORRUGATED POLYETHYLENE PIPE (LOPE), 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.
- FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

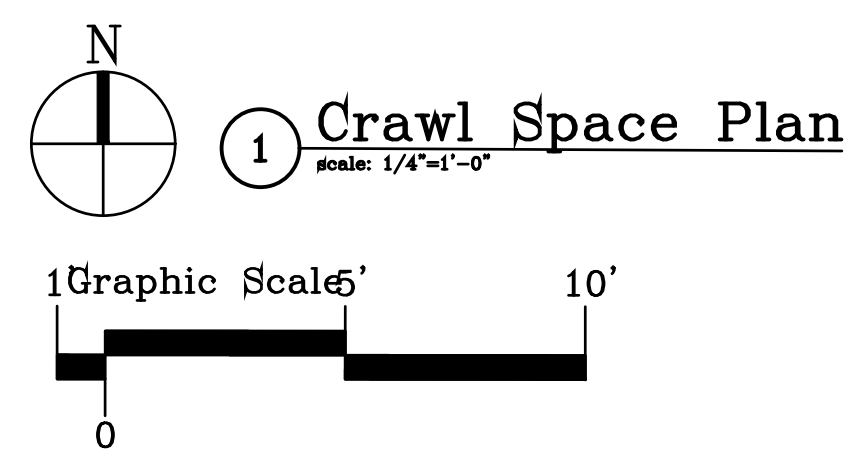
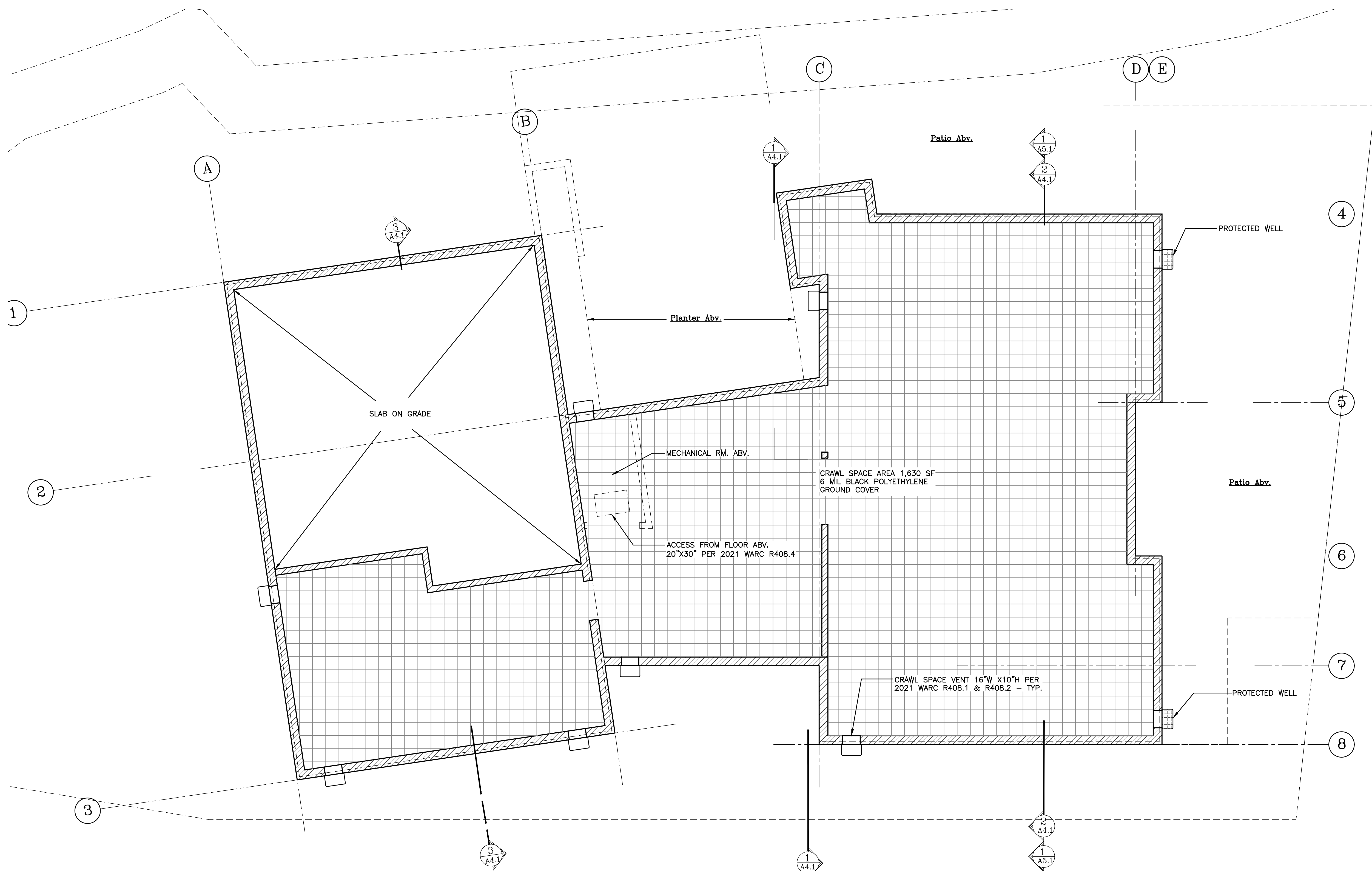
NO.	DATE	REVISION
1	05/14/24	PERMIT SUBMITTAL

N. BOSSOFF, P.E.	PROJECT MANAGER:
NB	DESIGNED:
TKB	DRAWN:
ECTY-2301	JOB NUMBER:
ECTY-2301pin.dwg	FILE NAME:

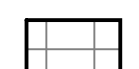

**CHU RESIDENCE  
4332 W MERCER WAY**

MERCER ISLAND  
WASHINGTON

**CHU RESIDENCE**  
New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040



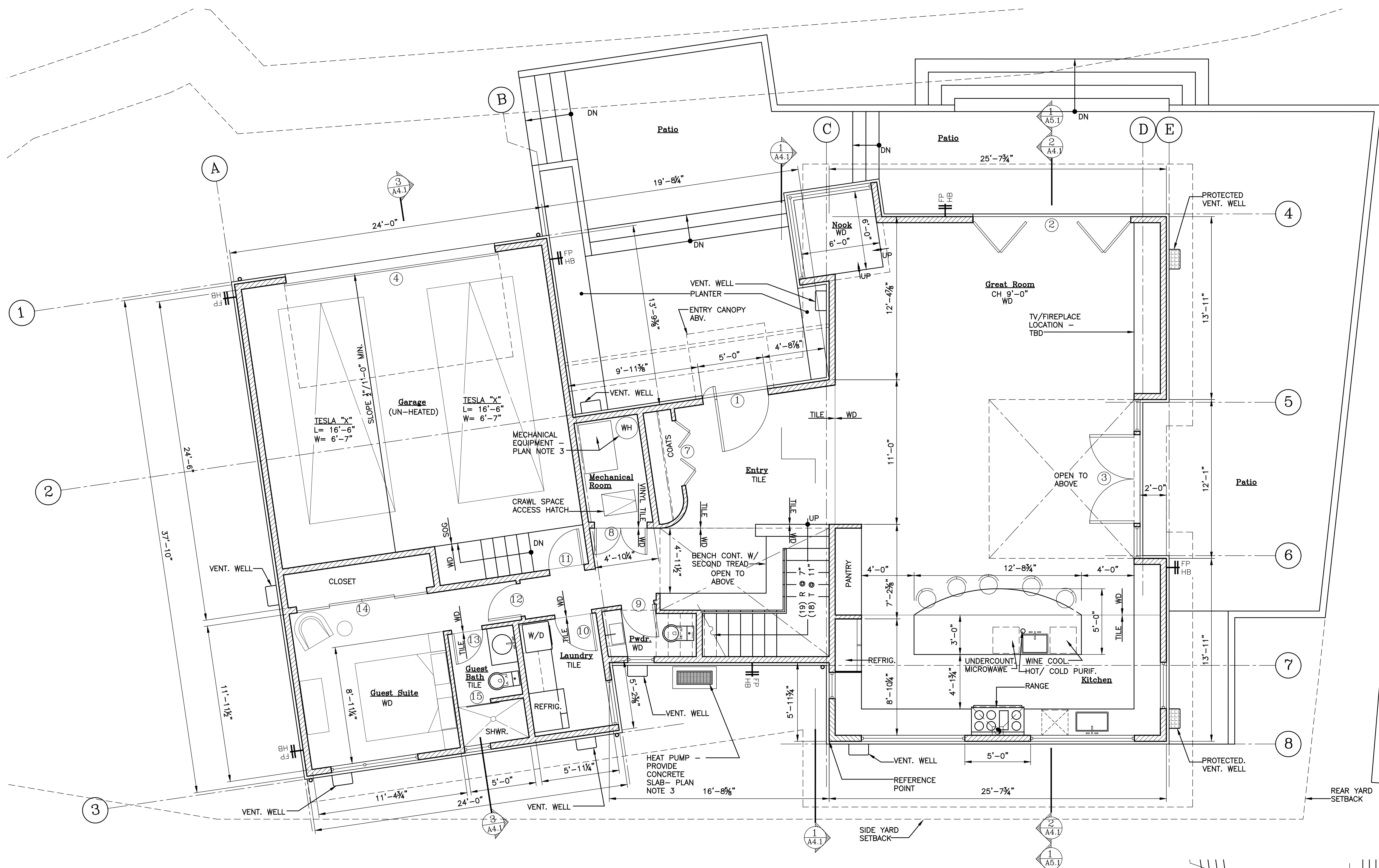
**UNDER-FLOOR VENTILATION CALCULATION**  
CRAWL SPACE AREA: 1,630 SF  
1,630 SF/300 SF = 5.4  
(9) VENTS OF 16"x10" (TOTAL 10 SF) TO BE INSTALLED

**UNDER-FLOOR VENTILATION LEGEND**  
CRAWL SPACE TO BE VENTED   
VENTILATION OPENINGS 

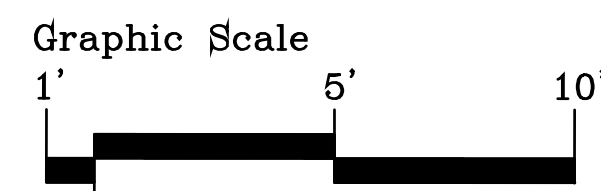
Date:  
5/11/2022 Pre-App  
5/14/2024 Sub 1  
\_\_\_\_\_  
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Scale:  
Sheet:  
Crawl Space Plan  
A2.0

**CHU RESIDENCE**  
New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040



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



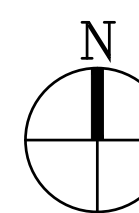
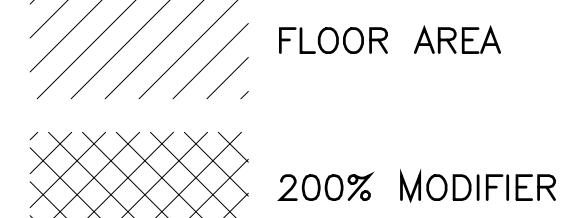
**Floor Plan Notes**

- See Sheet A0.1 for General Notes in common.
- Fire Protection: NFPA 13R Sprinkler System throughout & NFPA 72 Monitored Fire Alarm. See General Note A0.1.
- Energy Compliance: See sht. A0.1 For General Comments.  
WSEC 2021 TABLE 402.1.3 With the following exception: Minimum ceiling insulation R-38 with full depth insulation extending over top plate.  
ENERGY EQUALIZATION OPTION 4: Air to water heat pump configured to provide both heating and cooling and are rated in accordance with AHRI 550/590  
EC 1.2 - Efficient Building Envelope: R-10 at perimeter and under entire slab.  
EC 3.6 - Centrally ducted air source cold climate variable capacity heat pump: Deferred submittal. HVAC Sub-Contractor shall acquire permit, provide all components and perform installation of a complete and functional system outlined by this selection in WSEC Table 406.3  
EC 5.7 - Efficient Water Heating: Deferred submittal. HVAC Sub-Contractor in conjunction with Plumbing Sub-Contractor shall acquire permit, provide all components and perform installation of a complete and functional system outlined by this selection in WSEC Table 406.3.
- Vapor Retarder Required - Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7

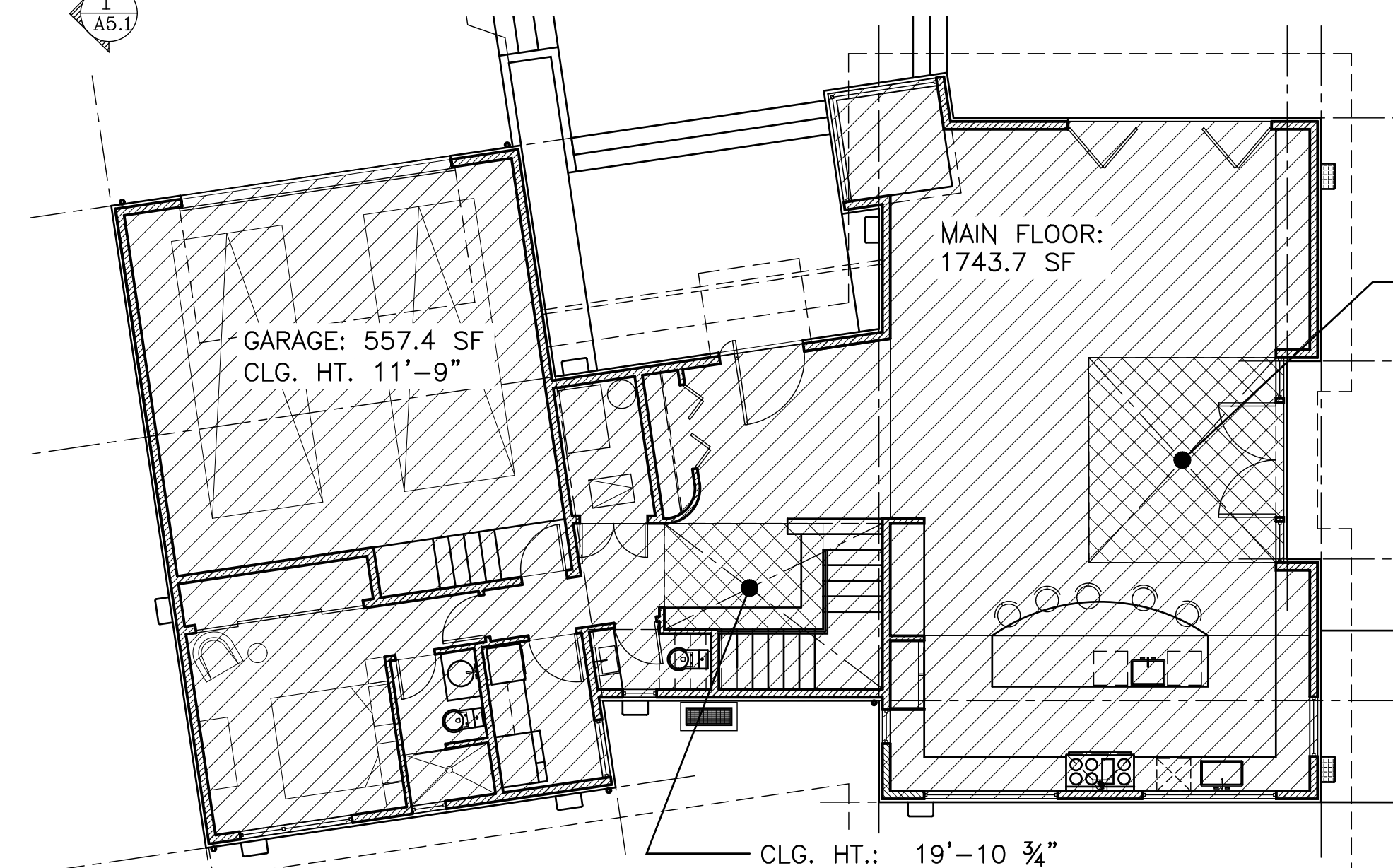
**MAIN FLOOR GFA BREAKDOWN:**

FLOOR PLAN AREA	
MAIN FLOOR:	1743.68SF
GARAGE:	557.40SF
SUB-TOTAL	2301.08SF
DOUBLE HEIGHT MODIFIER	
STAIR:	58.40SF
GREAT ROOM:	138.70SF
SUB-TOTAL	197.10SF
TOTAL	2498.18SF

**GFA DIAGRAM LEGEND**



**2 GFA DIAGRAM**  
Scale: 1/8"=1'-0"



CLG. HT.: 19'-10 3/4"  
200% GFA MODIFIER:  
58.4 SF

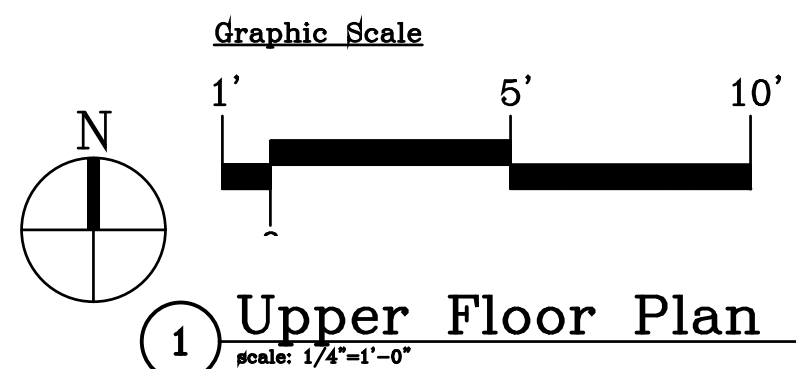
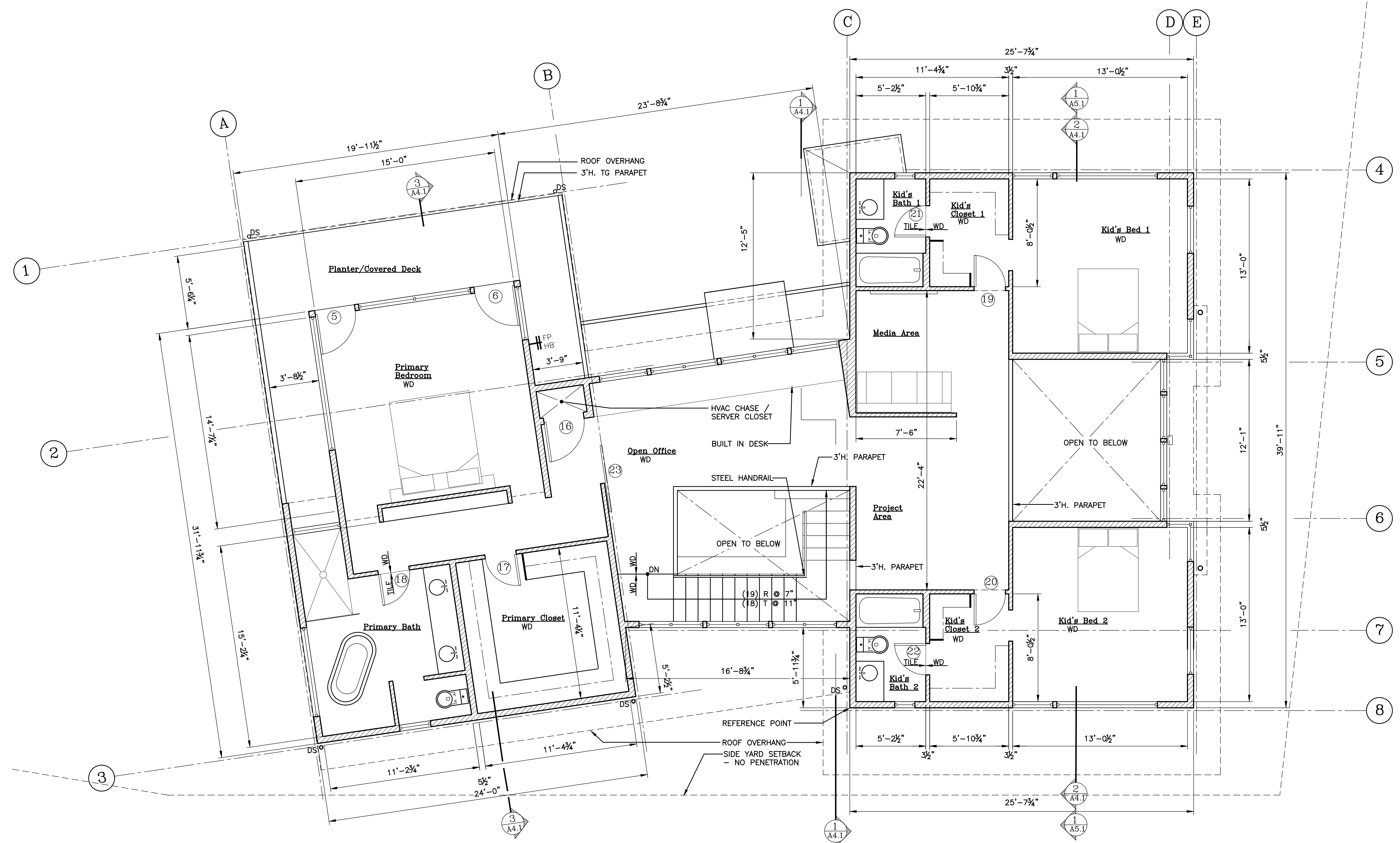
CLG. HT.: 20'-7"  
200% GFA MODIFIER: 138.7 SF

Date:  
5/11/2022 Pre-App  
5/14/2024 Sub 1

Scale:  
Sheet:

**CHU RESIDENCE**

New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040

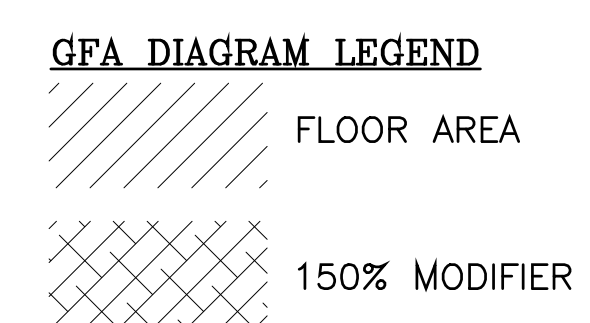


- Floor Plan Notes**
- See Sheet A0.1 for General Notes in common.
  - Fire Protection:** NFPA 13R Sprinkler System throughout & NFPA 72 Monitored Fire Alarm. See General Note A0.1.
  - Energy Compliance:** See sht. A0.1 For General Comments.  
WSEC 2021 TABLE 402.1.3 With the following exception: Minimum ceiling insulation R-38 with full depth insulation extending over top plate.  
**ENERGY EQUALIZATION OPTION 4:** Air to water heat pump configured to provide both heating and cooling and are rated in accordance with AHRI 550/590  
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EC 5.7 - Efficient Water Heating: Deferred submittal. HVAC Sub-Contractor in conjunction with Plumbing Sub-Contractor shall acquire permit, provide all components and perform installation of a complete and functional system outlined by this selection in WSEC Table 406.3.  
4. Vapor Retarder Required - Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7

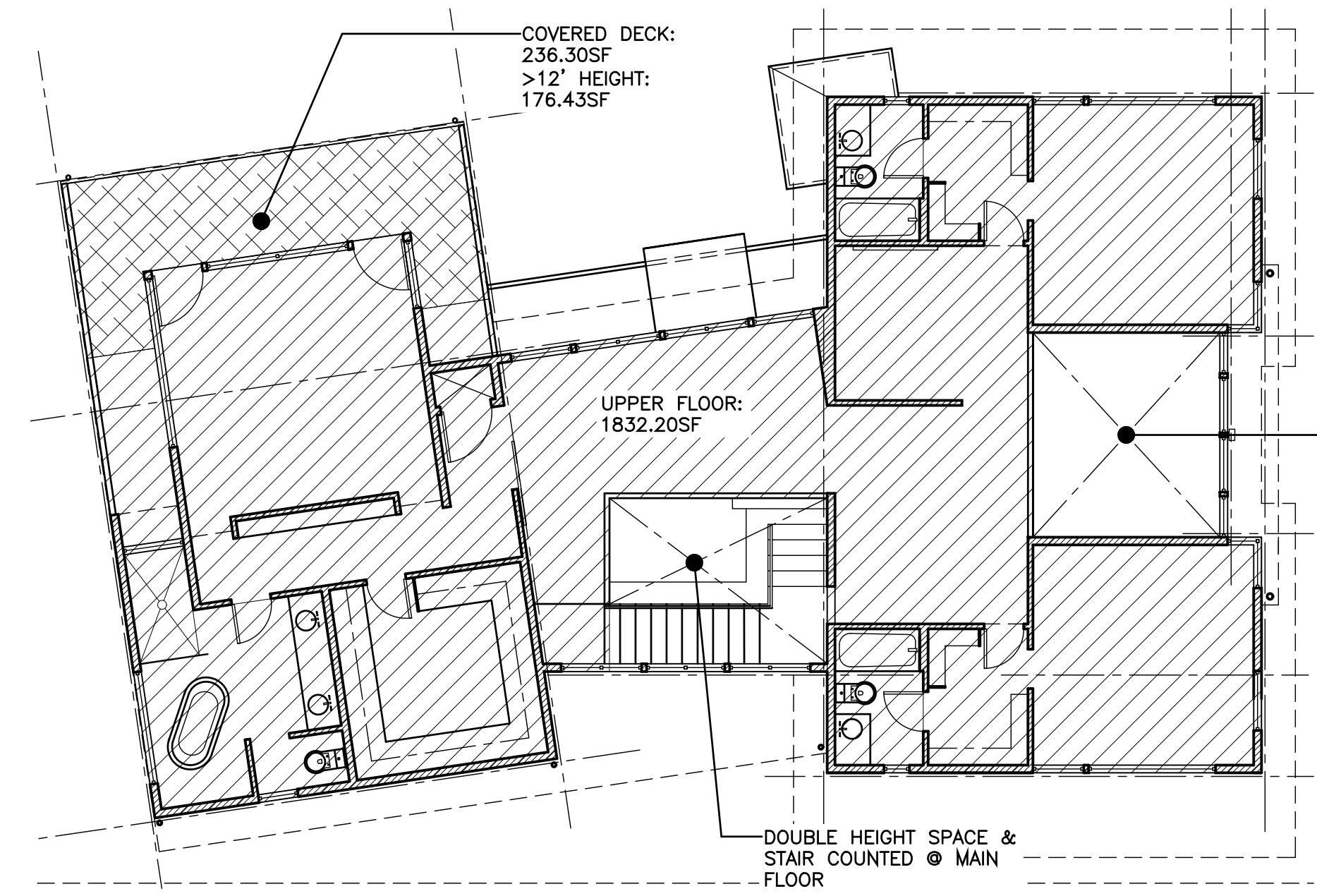
**UPPER FLOOR GFA BREAKDOWN:**

FLOOR PLAN AREA	
UPPER FLOOR:	1832.20SF
COVERED DECK	236.30SF
SUB-TOTAL	2068.50SF
<b>150% HEIGHT MODIFIER</b>	
DECK:	176.43SF
MODIFIER:	x.75
SUB-TOTAL	132.32SF
<b>TOTAL</b>	<b>2569.14SF</b>

NOTE: "COVERED DECK AREA" INCLUDES AREA GREATER THAN 12' HEIGHT.

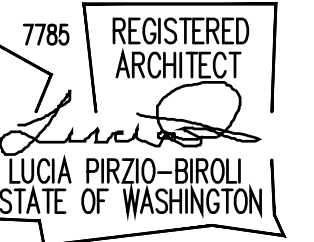


2 GFA DIAGRAM  
scale: 1/8"=1'-0"



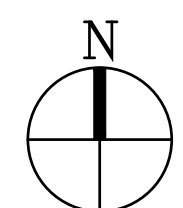
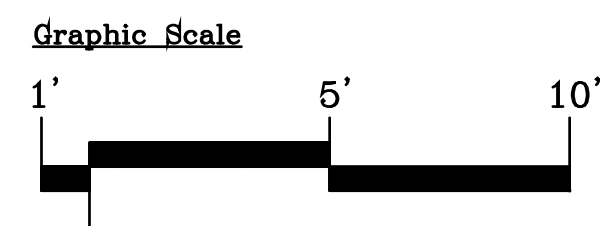
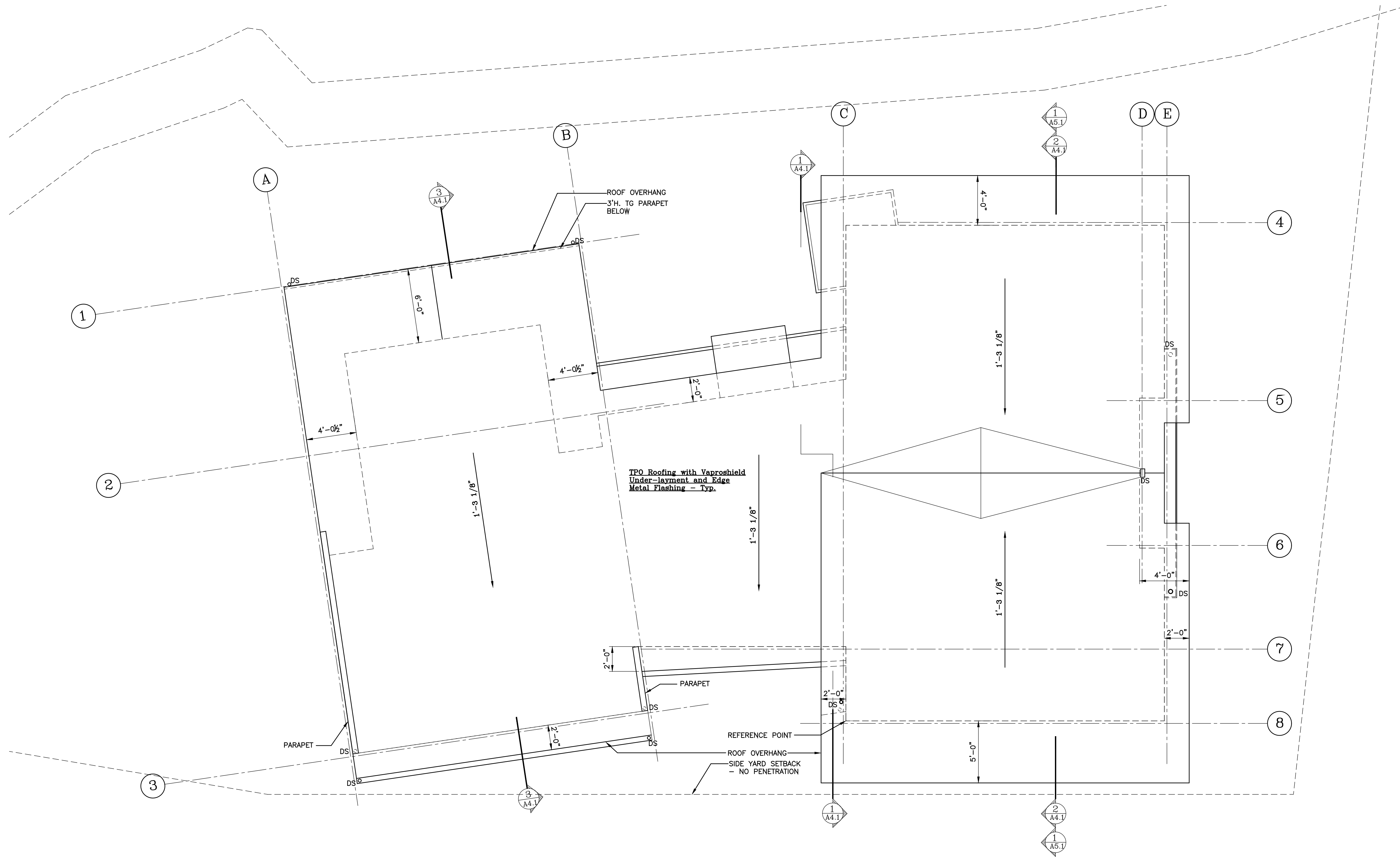
Date:  
5/11/2022 Pre-App  
5/14/2024 Sub 1

Scale:  
Sheet:



**CHU RESIDENCE**

New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040



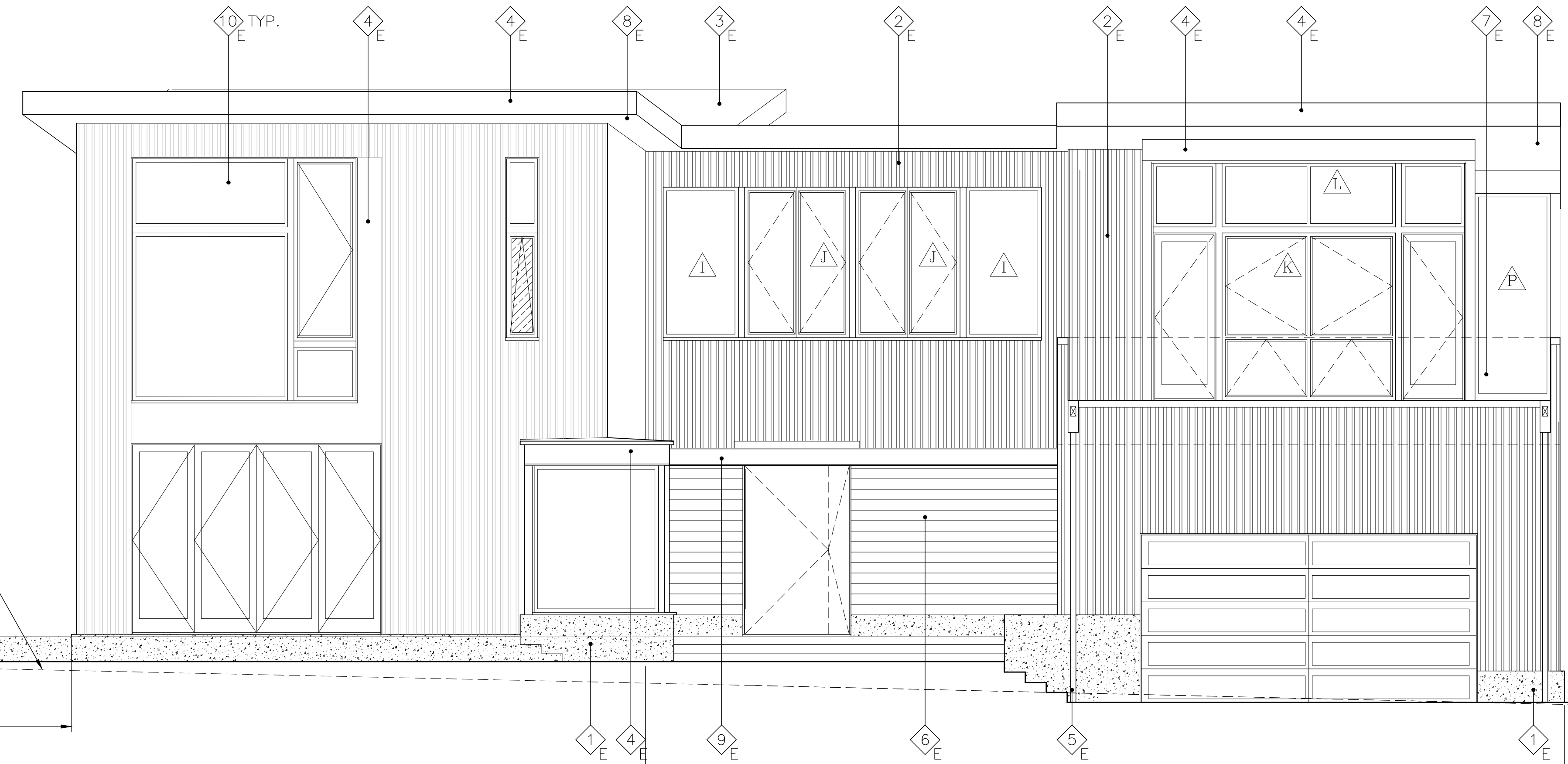
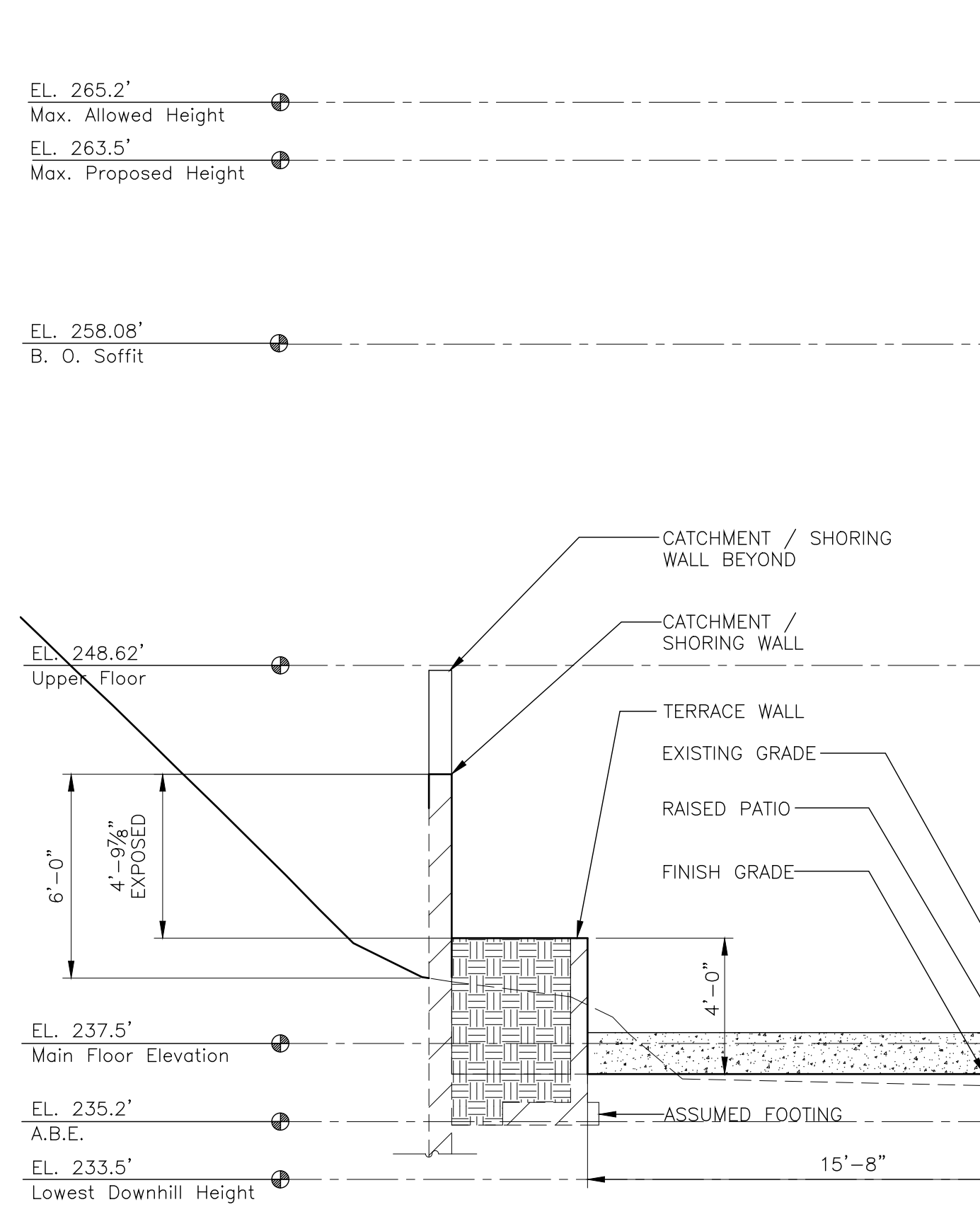
**1 Roof Plan**  
Scale: 1/4"=1'-0"

Date:  
5/11/2022 Pre-App  
5/14/2024 Sub 1

Scale:

Sheet: Roof Plan

A2.3

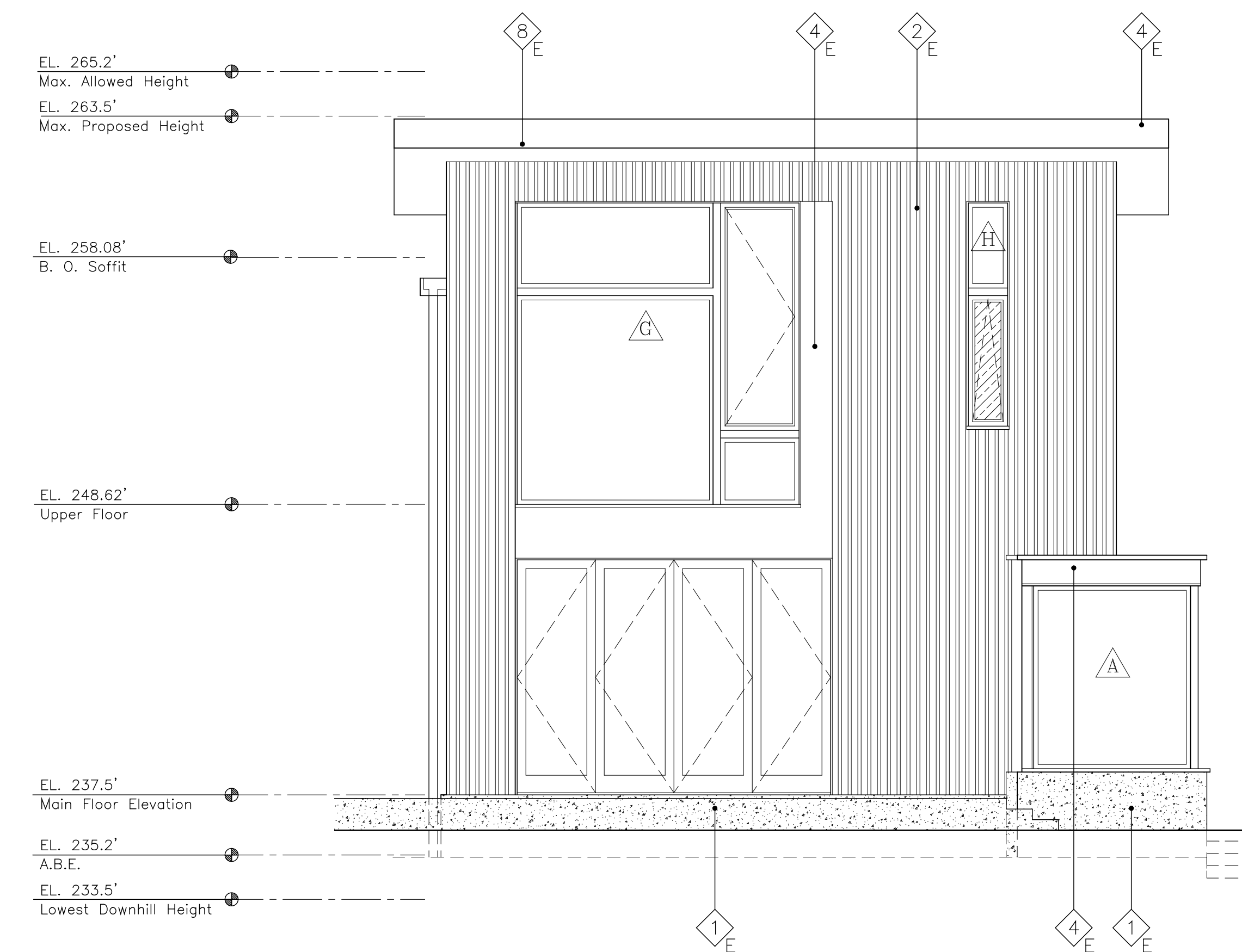


1 North Elevation  
 scale: 1/4"=1'-0"  
 Orthographic North Elevation

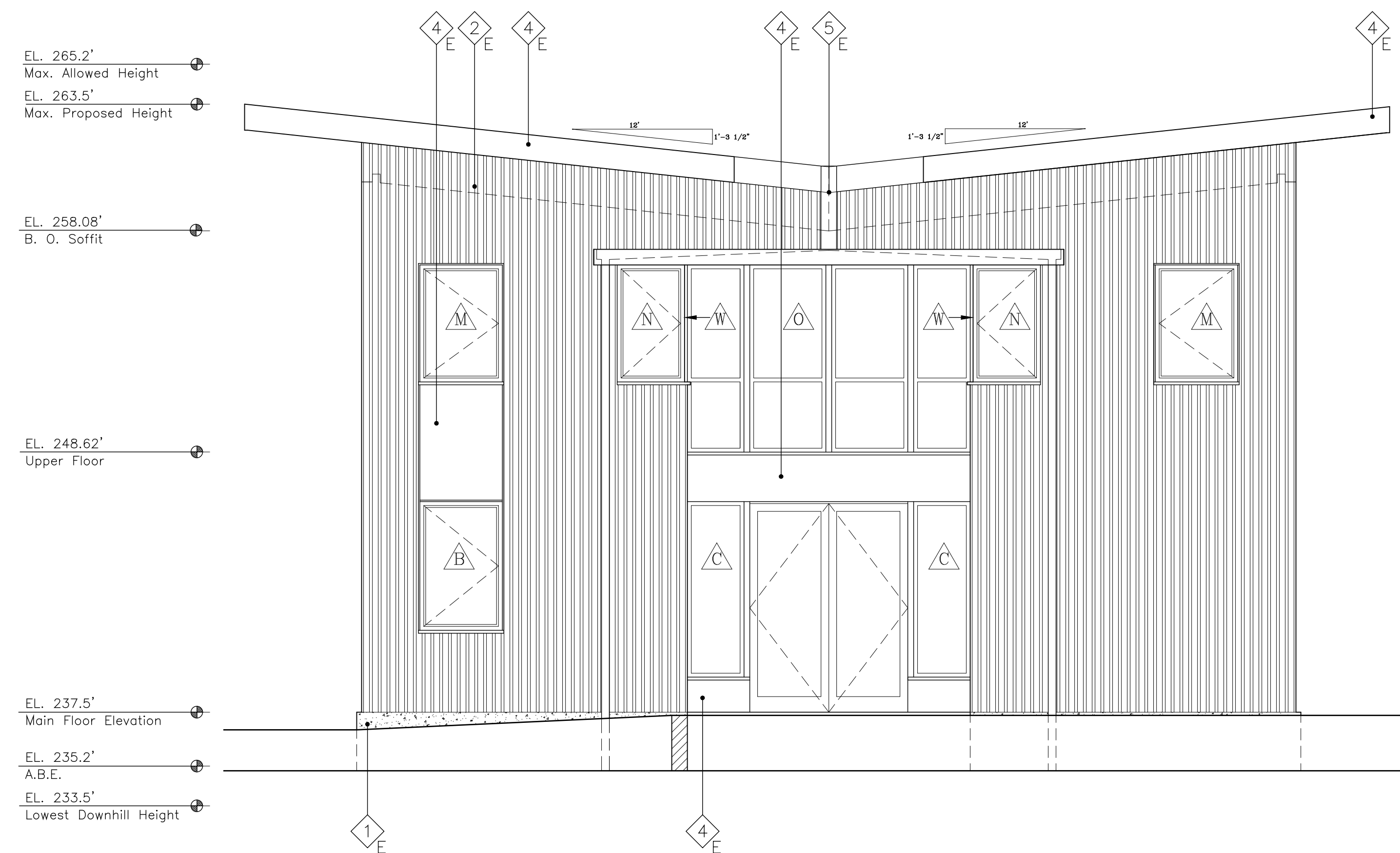
EXTERIOR MATERIAL LEGEND:

- 1 E ARCHITECTURAL GRADE, WHERE EXPOSED, CAST IN PLACE (CIP) CONCRETE FOUNDATION STEM WALL
- 2 E BOARD & BATT RAIN-SCREEN (HARD-PANEL/CEDAR) - NON EXP. FASTENERS - SMOOTH FINISH - COLOR TBD
- 3 E TPO MEMBRANE ROOFING - COLOR GRAY EXPOSED
- 4 E METAL FASCIA/TRIM/COPING/FLASHING/SILL/STEEL EYEBROW/PANELLING - COLOR TO MATCH WINDOWS FRAME
- 5 E METAL GUTTER/OVERFLOW SCUPPER/DOWNSPOUT METAL - COLOR TO MATCH WINDOWS FRAME
- 6 E HORIZ. T/N SHIP-LAP CEDAR SIDING OVER RAIN-SCREEN - STAIN COLOR TBD
- 7 E TG GUARDRAIL/STAINLESS STEEL FASTENERS/ANCHORS
- 8 E APPEARANCE GRADE SOFFIT PANELLING PLYWOOD - STAIN COLOR TBD
- 9 E METAL PORCH CANOPY ROOFING & FRAMING - COLOR TO MATCH METAL ROOFING
- 10 E FIBERGLASS WINDOWS - COLOR BLACK
- 11 E 16"x24" ACCESS OPENING W/ 1 SF. CRAWL SPACE VENT
- 12 E 1 SF. CRAWL SPACE VENT

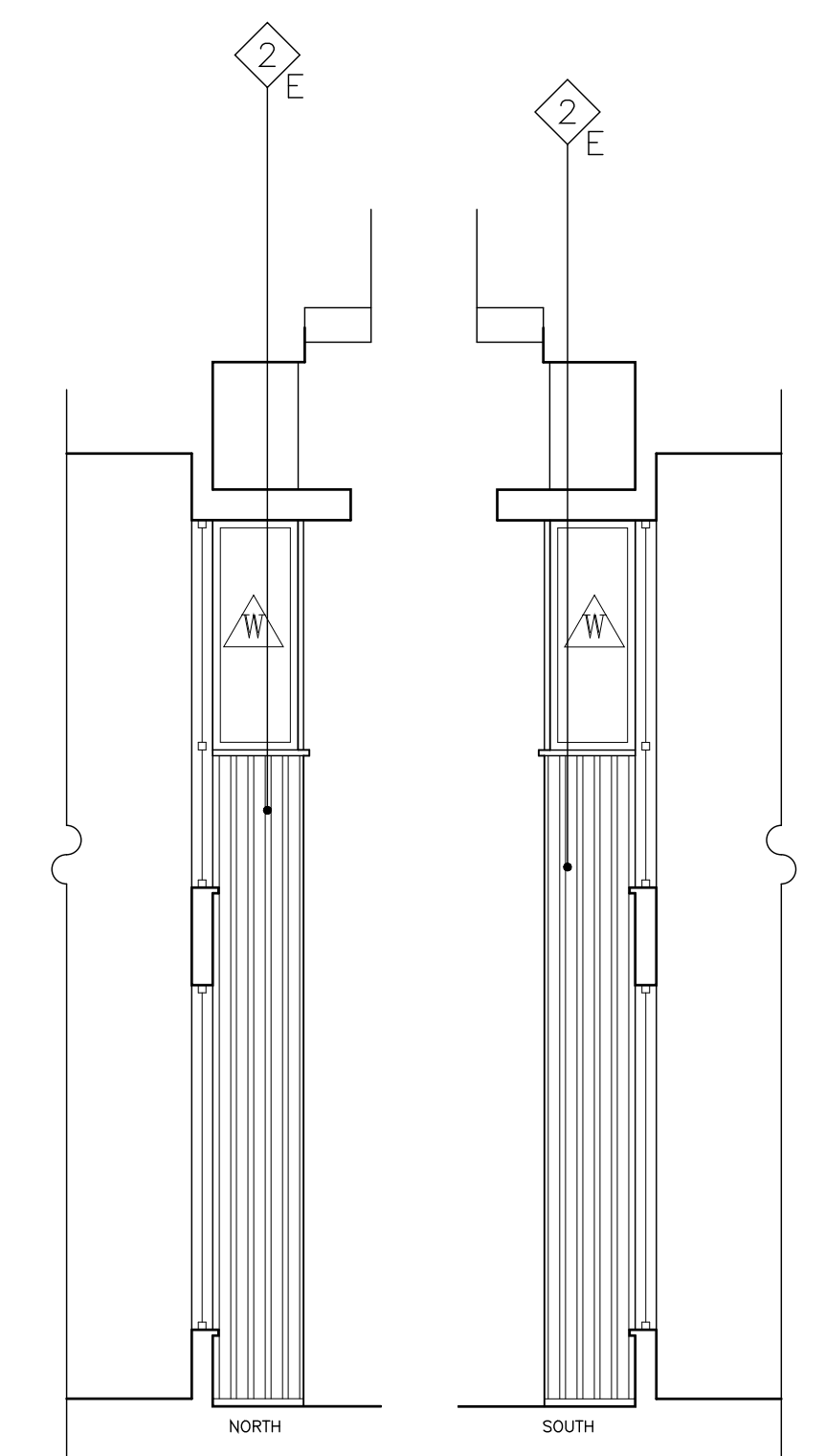
**ECTYPOS**  
 ARCHITECTURE  
 4212 W. Mercer Way  
 Mercer Island, WA 98040  
 t. (206) 232-9147  
 f. (206) 275-0312



2 Orthographic Elevation of North Living Wing  
 scale: 1/4"=1'-0"



3 East Elevation  
 scale: 1/4"=1'-0"



4/5 North & South Elevs.  
 scale: 1/4"=1'-0"

**CHU RESIDENCE**  
 New Residence  
 4332 W. Mercer Way  
 Mercer Island, WA 98040

Date:  
 5/11/2022 Pre-App  
 5/14/2024 Sub 1

Scale:  
 Sheet:  
 Elevations  
 A3.1

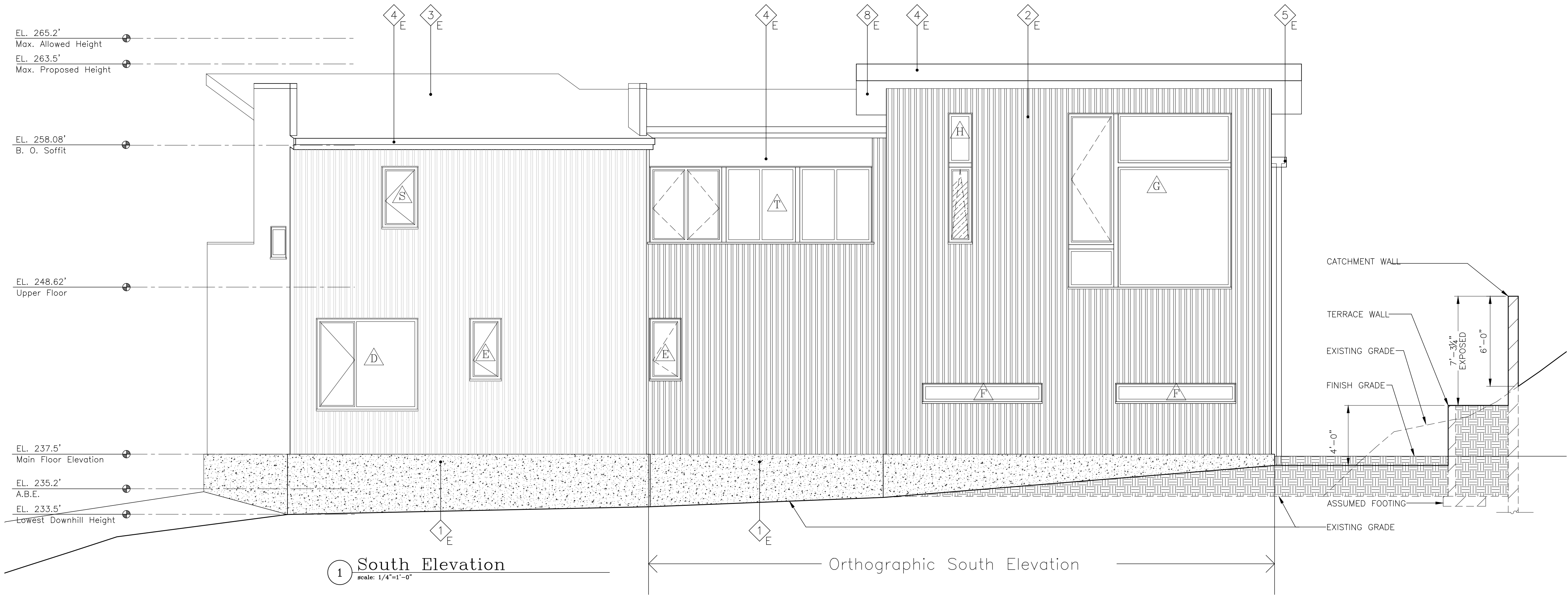


# ECTYPOS ARCHITECTURE

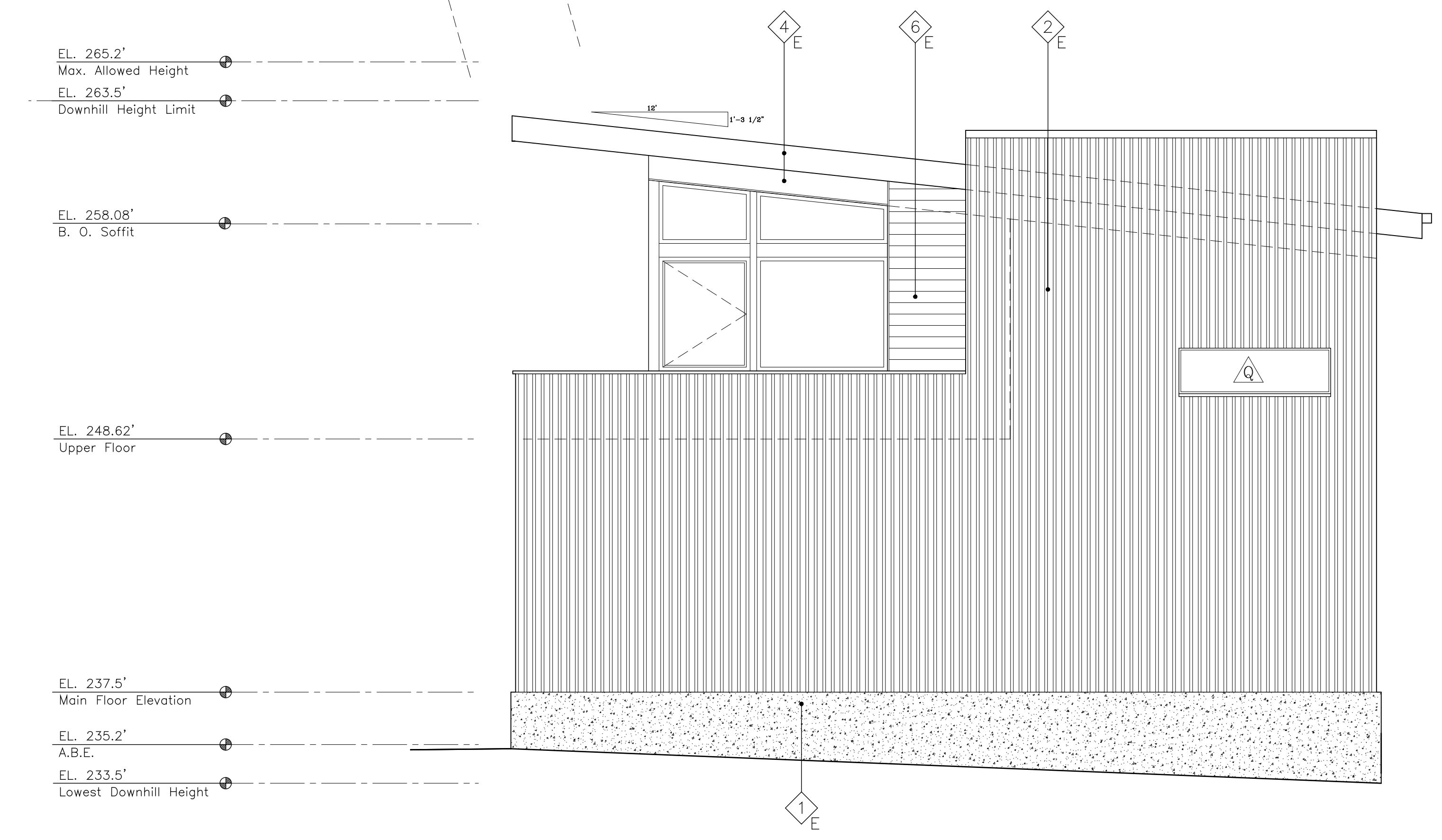
4212 W. Mercer Way  
Mercer Island, WA 98040  
t. (206) 232-9147  
f. (206) 275-0312

### EXTERIOR MATERIAL LEGEND:

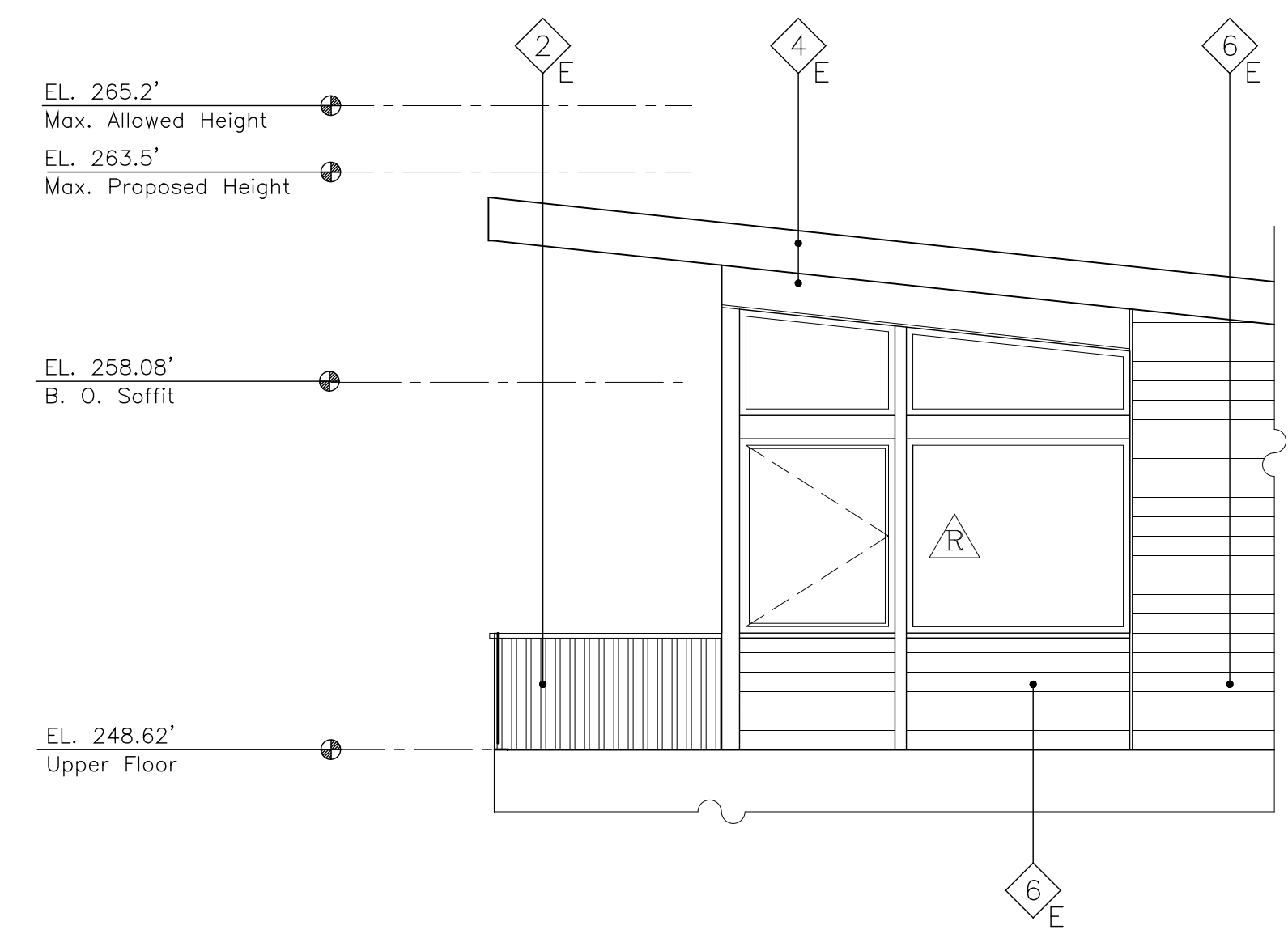
- 1 E ARCHITECTURAL GRADE, WHERE EXPOSED, CAST IN PLACE (CIP) CONCRETE FOUNDATION STEM WALL
- 2 E BOARD & BATT RAIN-SCREEN (HARDI-PANEL/CEDAR) - NON EXP. FASTENERS - SMOOTH FINISH - COLOR TBD
- 3 E TPO MEMBRANE ROOFING - COLOR GRAY EXPOSED
- 4 E METAL FASCIA/TRIM/COPING/FLASHING/SILL/STEEL EYEBROW/PANELLING - COLOR TO MATCH WINDOWS FRAME
- 5 E METAL GUTTER/OVERFLOW SCUPPER/DOWNSPOUT METAL - COLOR TO MATCH WINDOWS FRAME
- 6 E HORIZ. T/N SHIP-LAP CEDAR SIDING OVER RAIN-SCREEN - STAIN COLOR TBD
- 7 E TG GUARDRAIL/STAINLESS STEEL FASTENERS/ANCHORS
- 8 E APPEARANCE GRADE SOFFIT PANELLING PLYWOOD - STAIN COLOR TBD
- 9 E METAL PORCH CANOPY ROOFING & FRAMING - COLOR TO MATCH METAL ROOFING
- 10 E FIBERGLASS WINDOWS - COLOR BLACK
- 11 E 16"x24" ACCESS OPENING W/ 1 SF. CRAWL SPACE VENT
- 12 E 1 SF. CRAWL SPACE VENT



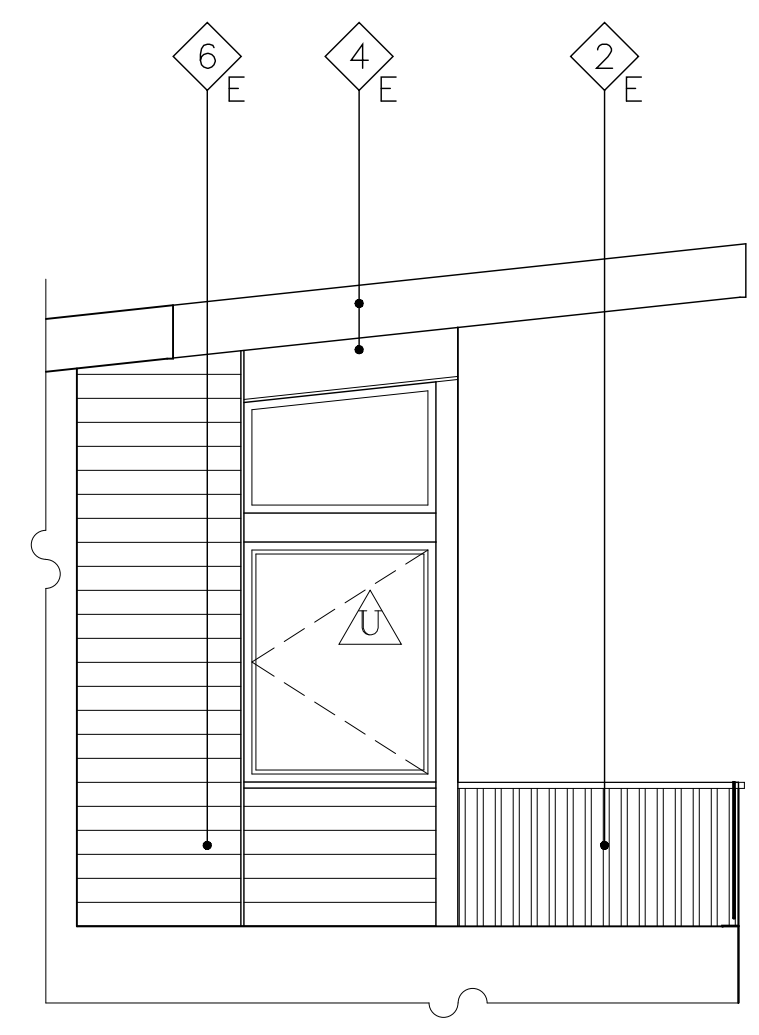
1 South Elevation scale: 1/4"=1'-0" Orthographic South Elevation



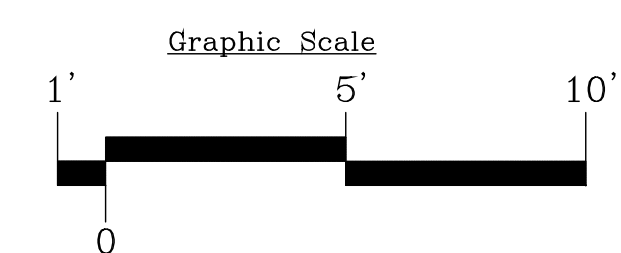
2 West Elevation scale: 1/4"=1'-0"



3 Part West Elev. w/Primary Bedrm.Wall scale: 1/4"=1'-0"



4 Part East Elev. w/Primary Bedrm.Wall scale: 1/4"=1'-0"



# CHU RESIDENCE

New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date:  
5/11/2022 Pre-App  
5/14/2024 Sub 1

Scale:  
Sheet:  
Elevations  
A3.2



**ECTYPOS**  
ARCHITECTURE

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

EL. 265.2'  
Max. Allowed Height

EL. 263.5'  
Max. Proposed Height

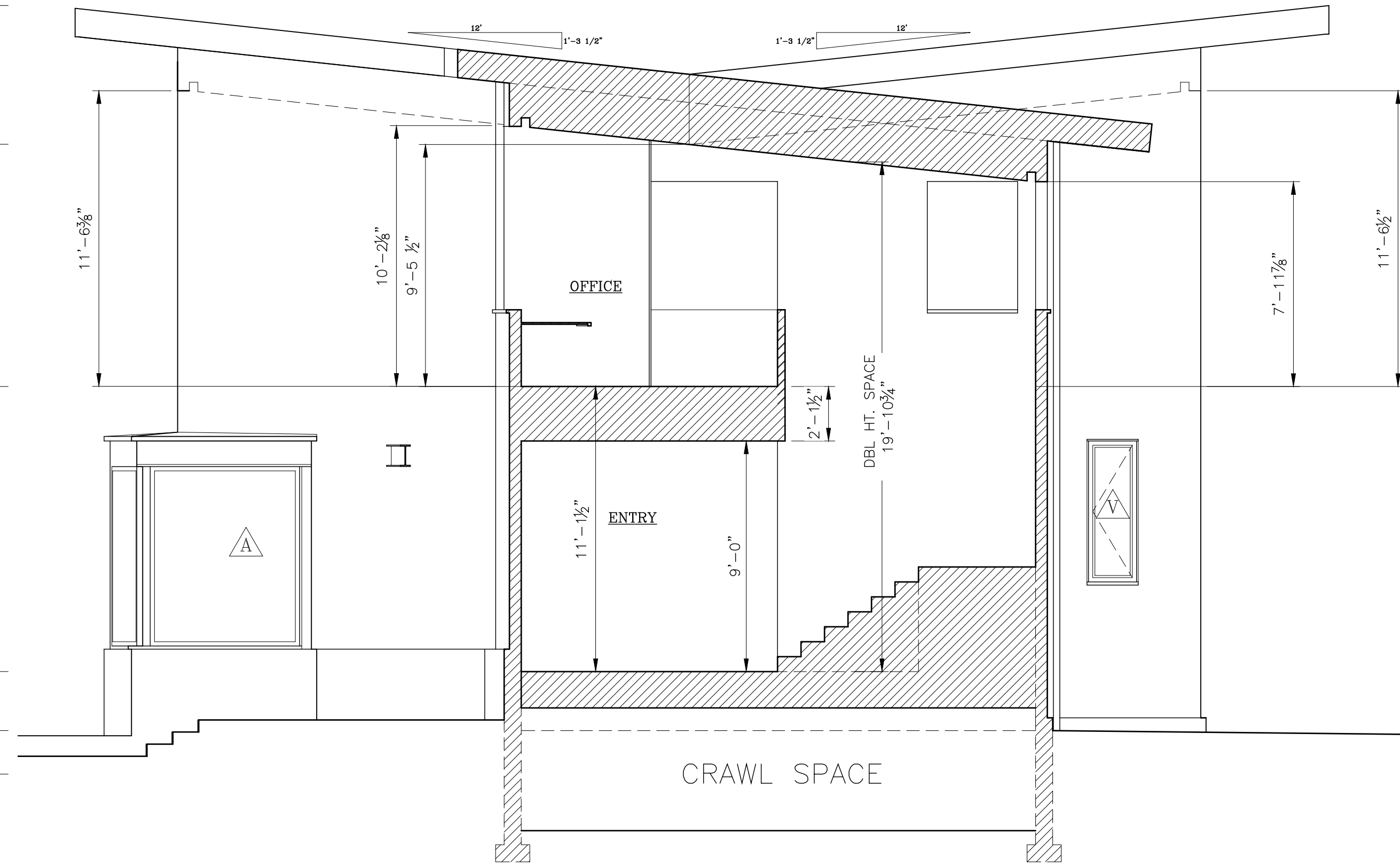
EL. 258.08'  
B. O. Soffit

EL. 248.62'  
Upper Floor

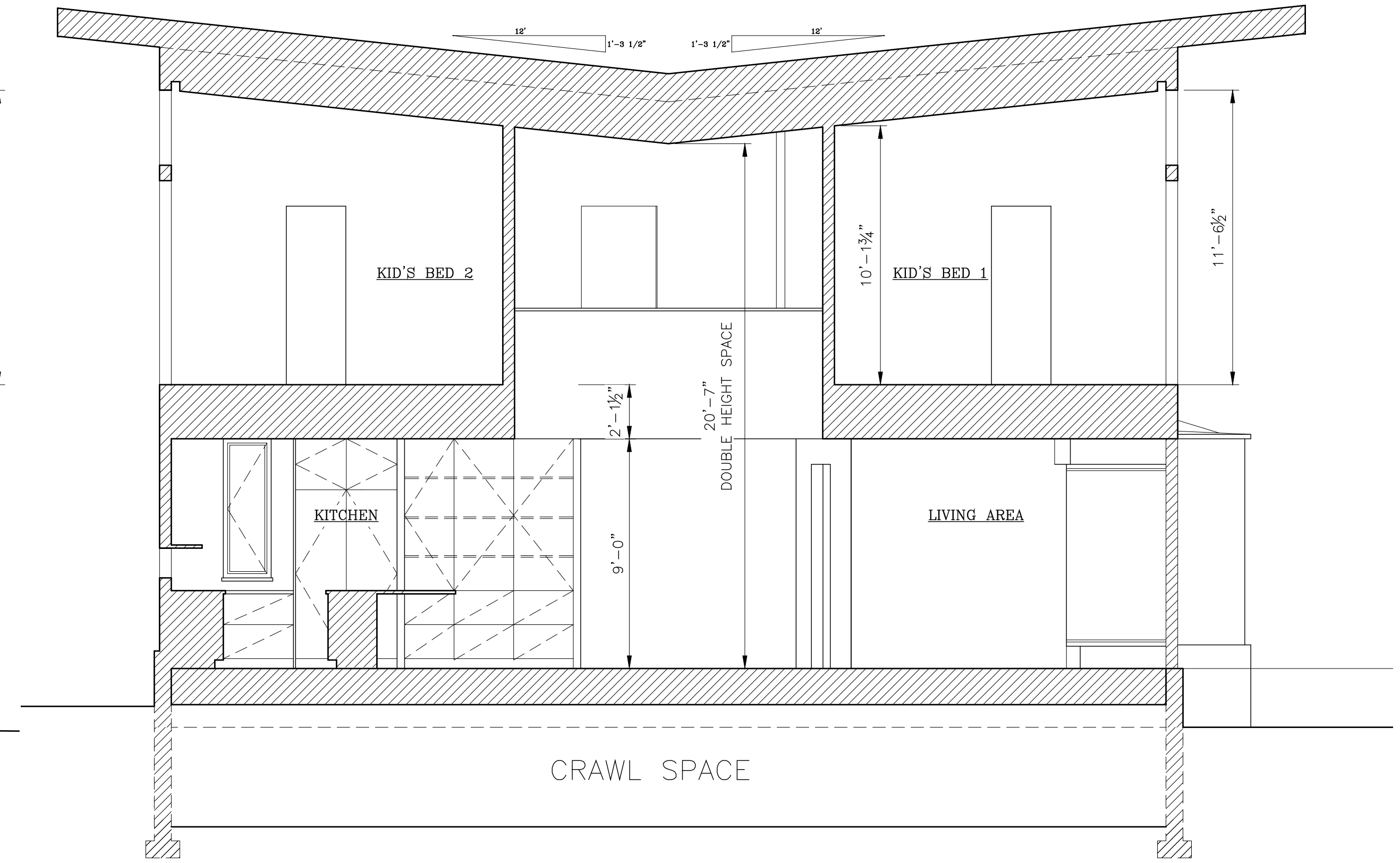
EL. 237.5'  
Main Floor Elevation

EL. 235.2'  
A.B.E.

EL. 233.5'  
Lowest Downhill Height



1 Section @ Entry  
scale: 1/4"=1'-0"



2 Section @ Kid's Bedrooms  
scale: 1/4"=1'-0"

EL. 265.2'  
Max. Allowed Height

EL. 263.5'  
Max. Proposed Height

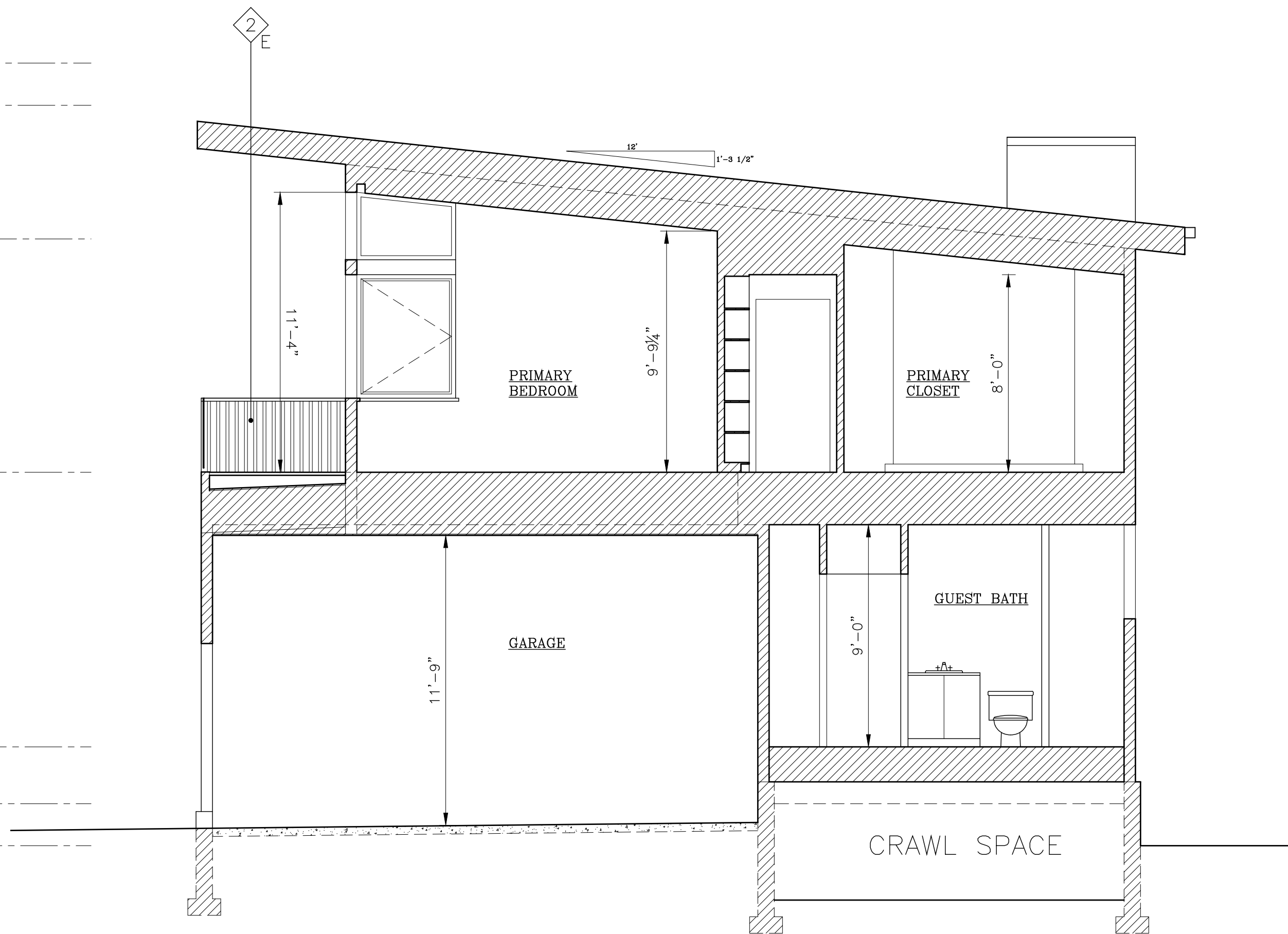
EL. 258.08'  
B. O. Soffit

EL. 248.62'  
Upper Floor

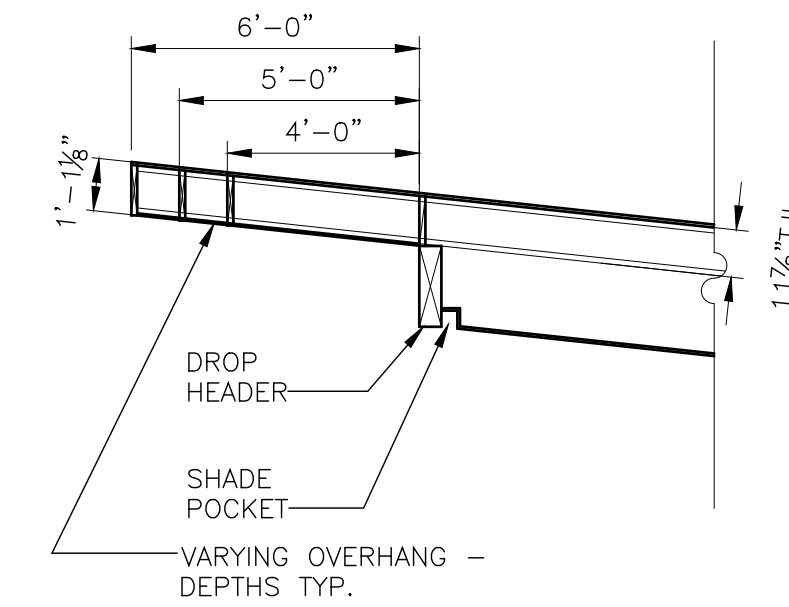
EL. 237.5'  
Main Floor Elevation

EL. 235.2'  
A.B.E.

EL. 233.5'  
Lowest Downhill Height

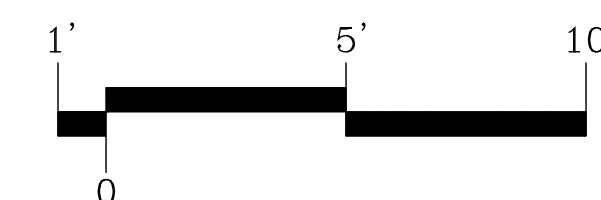


3 Section @ Primary Suite  
scale: 1/4"=1'-0"



4 Roof Framing/Overhang Layout  
scale: 1/4"=1'-0"

Graphic Scale



**CHU RESIDENCE**  
New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date:  
5/11/2022 Pre-App  
5/14/2024 Sub 1

Scale:  
Sheet: Building Sections  
A4.1

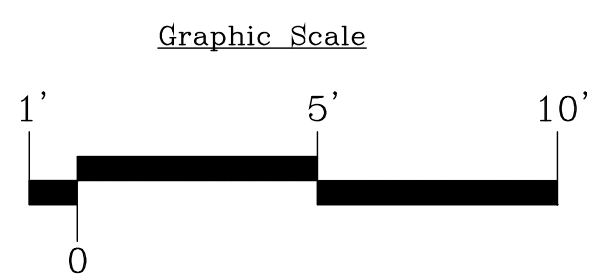
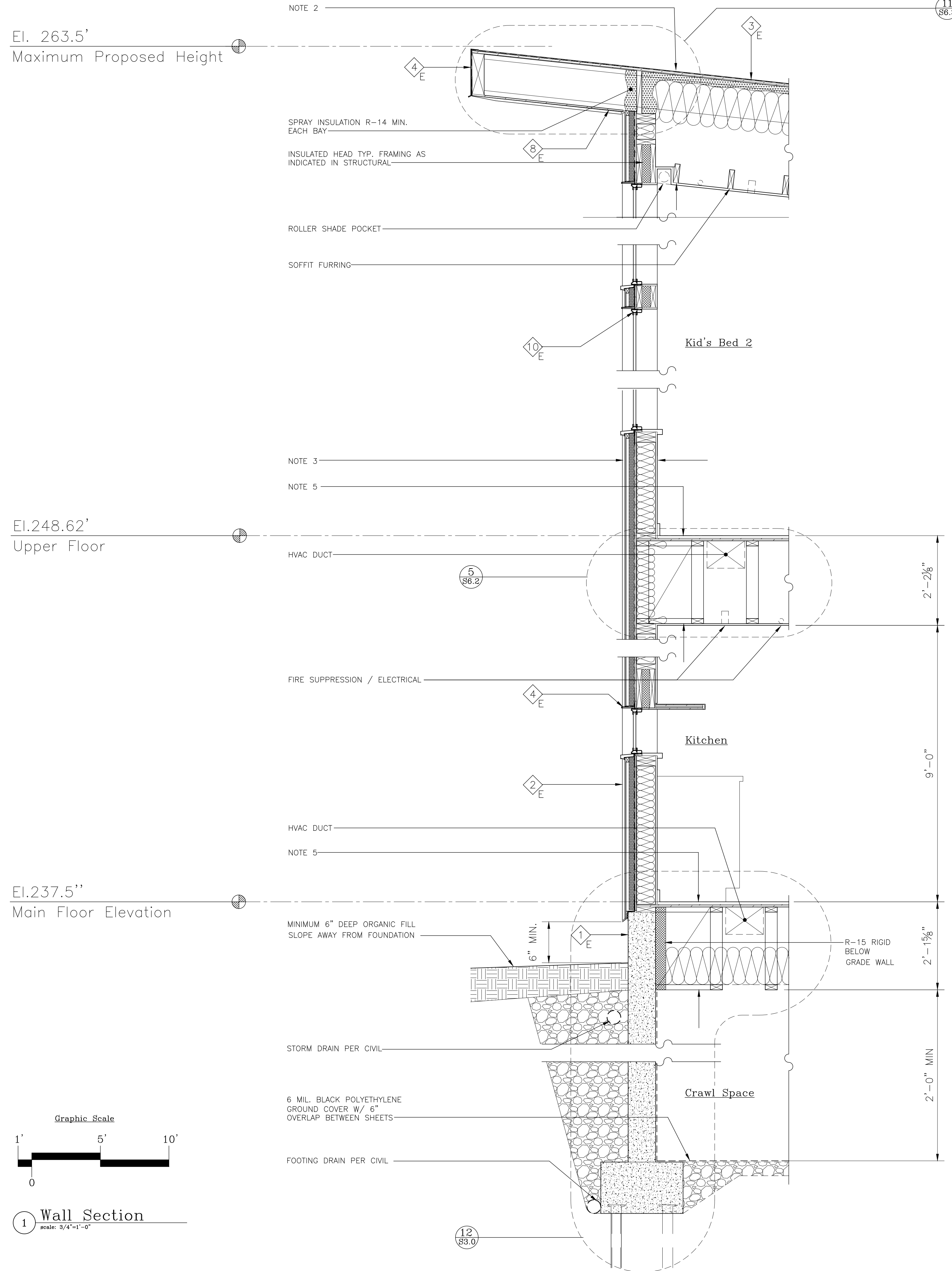




**ECTYPOS**  
ARCHITECTURE

4212 W. Mercer Way  
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f. (206) 275-0312

**CHU RESIDENCE**  
New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040



1 Wall Section  
scale: 3/4"=1'-0"

**Wall Section Notes:**

- SEE "S" SERIES DRAWINGS FOR STRUCTURAL REQUIREMENTS
- COLD ROOF: MEMBRANE ROOF; UNDERLAYMENT; SHEATHING PER STRUCTURAL; FRAMING PER STRUCTURAL W/ 2" SPRAY FOAM INSULATION (R-7 PER INCH) & BATT INSULATION MIN. R-30 TOTAL R-VALUE R-48. NOTE PER WSEC TABLE 402.1.3 R-38 MIN REQ. W/ FULL R-VALUE OVER TOP PLATE.
- TYPICAL EXTERIOR RAINSCREEN WALL: HARDI PANEL W/ 1X BATTS @ +/- 4" O.C. PAINTED; 3/4" VERTICAL FURRING/AIR GAP; 1 1/2" ROCKWOOL COMFORT BOARD 110 (R-VALUE 4.0/INCH) CI; VAPOR BARRIER - VAPROSHIELD SA SELF-ADHERED; SHEATHING PER STRUCTURAL; FRAMING W/ R-21 BATT; 5/8" GWB W/ LOW VOC VB TINTED PRIMER; LATEX PAINT.
- UPPER FLOOR SYSTEM: WOOD FLOOR; PLYWOOD SHEATHING PER STRUCTURAL; MANUFACTURED TRUSS; 5/8" GWB W/ LOW VOC VB TINTED PRIMER; LATEX PAINT. MAIN FLOOR SYSTEM OVER CRAWL SPACE: FLOORING AS INDICATED ON DRAWINGS; SHEATHING PER STRUCTURAL; MANUFACTURED TRUSS SYSTEM; MINIMUM R-38 AT BOTTOM OF FLOOR TRUSSES. ALL HVAC DUCTS RUN IN CONDITIONED SPACE EC 1.2
- SEE "C" SERIES DRAWINGS FOR CIVIL REQUIREMENTS

**EXTERIOR MATERIAL LEGEND:**

- 1 E ARCHITECTURAL GRADE, WHERE EXPOSED, CAST IN PLACE (CIP) CONCRETE FOUNDATION STEM WALL
- 2 E BOARD & BATT RAIN-SCREEN (HARDI-PANEL/CEDAR) - NON EXP. FASTENERS - SMOOTH FINISH - COLOR TBD
- 3 E TPO MEMBRANE ROOFING - COLOR GRAY EXPOSED
- 4 E METAL FASCIA/TRIM/COPING/FLASHING/SILL/STEEL EYEBROW/PANELLING - COLOR TO MATCH WINDOWS FRAME
- 5 E METAL GUTTER/OVERFLOW SCUPPER/DOWNSPOUT METAL - COLOR TO MATCH WINDOWS FRAME
- 6 E HORIZ. T/N SHIP-LAP CEDAR SIDING OVER RAIN-SCREEN - STAIN COLOR TBD
- 7 E TG GUARDRAIL/STAINLESS STEEL FASTENERS/ANCHORS
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- 10 E FIBERGLASS WINDOWS - COLOR BLACK
- 11 E 16"x24" ACCESS OPENING W/ 1 SF. CRAWL SPACE VENT
- 12 E 1 SF. CRAWL SPACE VENT

Date:  
5/11/2022 Pre-App  
5/14/2024 Sub 1

Scale:

Sheet: Wall Sections  
A5.1

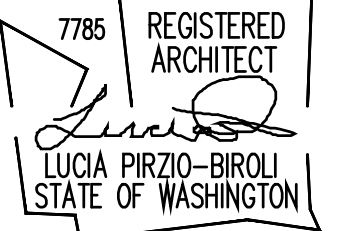


# Window Schedule

TAG	WINDOW R.O.		UNIT AREA	QTY.	TOTAL	MAX U-VALUE NOTE 6	UA VALUE	HEAD HEIGHT (AFF)	TYPE OPERATION		TYPE	FRAME / FINISH	GLASS		MANUF.	NOTES
	Notes 1, 2 & 9								square ft.	window area			NOTES 3&5	NOTE 8		
	width	height														
A	6'-4"	x 7'-0"	44.2 SQ. FT.	2	88.4 SQ. FT.	0.25	22.1 SQ. FT.	8'-0"	FIX		CORNER	FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	ASSEMBLY-CORNER WINDOWS/TG	
B	3'-6 1/4"	x 5'-6"	19.4 SQ. FT.	1	19.4 SQ. FT.	0.25	4.8 SQ. FT.	9'-0"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ WINDOW M	
C	2'-5"	x 7'-6"	18.1 SQ. FT.	2	36.3 SQ. FT.	0.25	9.1 SQ. FT.	9'-0"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ DOORS 3/TG	
D	6'-8"	x 6'-0"	40.0 SQ. FT.	1	40.0 SQ. FT.	0.25	10.0 SQ. FT.	9'-0"	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	EGRESS	
E	2'-0"	x 4'-0"	8.0 SQ. FT.	1	8.0 SQ. FT.	0.25	2.0 SQ. FT.	9'-0"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN		
F	7'-10 1/2"	x 1'-2"	9.2 SQ. FT.	2	18.4 SQ. FT.	0.25	4.6 SQ. FT.	4'-8"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORDINATE W/ "F2"	
G	10'-9 1/2"	x 11'-6 1/2"	124.6 SQ. FT.	2	249.1 SQ. FT.	0.25	62.3 SQ. FT.	11'-6 1/2"	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	ASSEMBLY/TG	
H	1'-6"	x 8'-6 1/2"	12.8 SQ. FT.	2	25.6 SQ. FT.	0.25	6.4 SQ. FT.	11'-6 1/2"	FIX/AWN	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	FROSTED @ AWNING	
I	3'-7"	x 7'-2 1/4"	25.8 SQ. FT.	2	51.5 SQ. FT.	0.25	12.9 SQ. FT.	10'-2 1/4"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	ASSEMBLY-COORDINATE W/ WINDOWS J	
J	5'-0"	x 7'-2 1/4"	35.9 SQ. FT.	2	71.9 SQ. FT.	0.25	18.0 SQ. FT.	10'-2 1/4"	DBL. CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	ASSEMBLY-COORDINATE W/ WINDOWS I	
K	8'-3 1/2"	x 8'-0"	66.3 SQ. FT.	1	66.3 SQ. FT.	0.25	16.6 SQ. FT.	8'-0"	AWN/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ DOORS 5 & 6 AND WINDOW ASSEMBLY L/TG	
L	14'-10 1/2"	x 2'-9"	40.6 SQ. FT.	1	40.6 SQ. FT.	0.25	10.1 SQ. FT.	11'-4"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ ASSEMBLY BELOW	
M	3'-6 1/4"	x 5'-0"	17.6 SQ. FT.	2	35.2 SQ. FT.	0.25	8.8 SQ. FT.	8'-0"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	EGRESS	
N	2'-10 1/2"	x 5'-0"	14.4 SQ. FT.	2	28.8 SQ. FT.	0.25	7.2 SQ. FT.	8'-0"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ WINDOW W	
O	12'-1"	x 8'-0"	96.7 SQ. FT.	1	96.7 SQ. FT.	0.25	24.2 SQ. FT.	18'-5"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. MULLION W/ WINDOWS N & V SILL	
P	3'-7"	x 9'-11"	35.6 SQ. FT.	1	35.6 SQ. FT.	0.25	8.9 SQ. FT.	9'-10 1/2"	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	TG	
Q	6'-8"	x 2'-0"	13.3 SQ. FT.	1	13.3 SQ. FT.	0.25	3.3 SQ. FT.	4'-6" VIF	FIX	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN		
R	10'-0 1/2"	x 7'-10"	78.2 SQ. FT.	1	78.2 SQ. FT.	0.25	19.6 SQ. FT.	11'-4" TOP	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	TG	
S	2'-4"	x 4'-0"	9.3 SQ. FT.	1	9.3 SQ. FT.	0.25	2.3 SQ. FT.	8'-0"	CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN		
T	14'-8 1/2"	x 5'-0"	73.5 SQ. FT.	1	73.5 SQ. FT.	0.25	18.4 SQ. FT.	-	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN		
U	4'-8"	x 8'-1 1/2"	37.9 SQ. FT.	1	37.9 SQ. FT.	0.25	9.5 SQ. FT.	-	FIX/CASE	X		FIBERGLASS/BLACK	LO-E3/LOW ERS/ARGON	MARVIN	COORD. W/ WINDOW L AND DOOR 5 & 6/TG	
V	1'-10 1/2"	x 5'-6"	10.3 SQ. FT.	1	10.3 SQ. FT.	0.25	2.6 SQ. FT.	10'-5"	CASE	X		FIBERGLASS/BLACK	LO-E/LOW ERS/ARGON	MARVIN		
W	1'-10 1/4"	x 5'-0"	9.3 SQ. FT.	2	18.5 SQ. FT.	0.25	4.6 SQ. FT.	8'-0"	CASE	X		FIBERGLASS/BLACK	LO-E/LOW ERS/ARGON	MARVIN	COORD. W/ WINDOW N	
WINDOW UA:			WINDOW AREA	1152.8 SQ. FT.	TOTAL UA	288.2 SQ. FT.										

**ECTYPOS**  
ARCHITECTURE

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



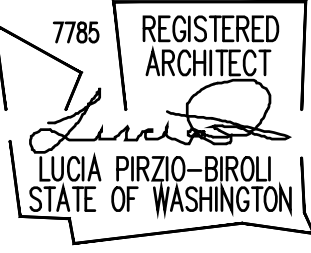
**CHU RESIDENCE**  
New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040

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

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

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**5/11/2022 Pre-App**  
**5/14/2024 Sub 1**

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### Exterior Door to Conditioned Space

TAG	PANEL SIZE		UNIT AREA square ft.	PANEL QTY.	TOTAL door area	MAX U-VALUE	UA VALUE	Thickness	Location	TYPE	HARDWARE NOTE 3	MATERIAL/FINISH	FRAME/FINISH	GLASS	MANUF.	COLOR	NOTES
	width	height															
1	5'-0"	x 8'-0"	40.0 SQ. FT.	1	40.0 SQ. FT.	.46	18.4 SQ. FT.	0'-1 3/4"	ENTRY	PIVOT/SC/INSULATED/SLAB	DEADBOLT/TBD	WD./TBD	WD./TBD	NA	CUSTOM	TBD	
2	3'-0"	x 8'-0"	24.0 SQ. FT.	4	96.0 SQ. FT.	.25	24.0 SQ. FT.	0'-1 3/4"	GREAT ROOM	STORE/BI-FOLD	TRACK/3 PT. LOCK	FIBERGLASS/MATCH WINDOWS	FIBERGLASS/FACTORY	LO-E3/LO-ERS/ARGON/TG	MARVIN	BLACK	NOTE 4
3	3'-4 1/2"	x 8'-0"	27.0 SQ. FT.	2	54.0 SQ. FT.	.25	13.5 SQ. FT.	0'-1 3/4"	GREAT ROOM	FRENCH DOORS/IN SWING	LEVER	FIBERGLASS/MATCH WINDOWS	FIBERGLASS/FACTORY	LO-E3/LO-ERS/ARGON/TG	MARVIN	BLACK	
5	3'-0"	x 8'-0"	24.0 SQ. FT.	1	24.0 SQ. FT.	.25	6.0 SQ. FT.	0'-1 3/4"	PRIMARY BED ROOM	STORE/RH IN SWING	LEVER	FIBERGLASS/MATCH WINDOWS	FIBERGLASS/FACTORY	LO-E3/LO-ERS/ARGON/TG	MARVIN	BLACK	
6	3'-0"	x 8'-0"	24.0 SQ. FT.	1	24.0 SQ. FT.	.25	6.0 SQ. FT.	0'-1 3/4"	PRIMARY BED ROOM	STORE/LH IN SWING	LEVER	FIBERGLASS/MATCH WINDOWS	FIBERGLASS/FACTORY	LO-E3/LO-ERS/ARGON/TG	MARVIN	BLACK	
11	3'-0"	x 6'-10"	20.5 SQ. FT.	1	20.5 SQ. FT.	.46	9.4 SQ. FT.	0'-1 3/4"	GARAGE/ENTRY	STORE/INSULATED/SLAB/LH IN SWING	DEADBOLT/LEVER	WD./STAIN/MATCH INT. DOORS	WD./STAIN/MATCH INT. DOORS	NA	TBD	MATCH INT. DOORS	20 MINUTES
AREA DOORS IMPACTING UA:			EXT. DOOR AREA		258.5 SQ. FT.	TOTAL UA	77.3 SQ. FT.										

**EXTERIOR DOOR NOTES:**

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

**ABBREVIATIONS**

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

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

TAG	PANEL SIZE (NOTE #4)		PANEL QTY.	UNIT AREA square ft.	Thickness	TYPE	LOCATION	MATERIAL/ FINISH	GLASS	HARDWARE NOTES 2&3	MANUF.	NOTES
	width	height										
4	16'-0"	x 8'-0"	1		0'-1 3/4"	SECTIONAL	GARAGE	STL/PAINT	TG	MOTORIZED TRACK	TBD	
7	1'-3"	x 6'-10"	4		0'-1 3/8"	SC/SLAB/OUTSWING	ENTRY COATS	BIRCH/STAIN	N/A	PULLS	TBD	NOTE 4
8	2'-0"	x 6'-10"	2		0'-1 3/8"	SC/SLAB/OUTSWING	MECHANICAL ROOM	BIRCH/STAIN	N/A	PULLS	TBD	NOTE 4
9	2'-6"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/LH/IN SWING	POWDER ROOM	BIRCH/STAIN	N/A	LEVER PRIVACY	TBD	NOTE 4
10	3'-0"	x 6'-10"	1		0'-1 3/4"	SC/SLAB/LH/IN SWING	LAUNDRY	BIRCH/STAIN	N/A	LEVER	TBD	NOTE 4
12	2'-6"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/LH/IN SWING	GUEST SUITE	BIRCH/STAIN	N/A	LEVER PRIVACY	TBD	NOTE 4
13	2'-4"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/RH/IN SWING	GUEST BATH	BIRCH/STAIN	N/A	PULL/RC	TBD	NOTE 4
14	2'-6"	x 6'-10"	4		0'-1 3/8"	HC/SLAB	GUEST SUITE CLOSET	BIRCH/STAIN	N/A	FLUSH PULLS	TBD	NOTE 4
15	TBD	x TBD	1		0'-1 3/8"	SC/SLAB	GUEST BATH SHWR	CHROME	TG/LAM	PULLS/BARN DOOR TRACK SYST.	TBD	-
16	3'-0"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/LH/OUTSWING	SERVER CLOSET	BIRCH/STAIN	OBS/TG	LEVER	TBD	NOTE 4
17	2'-4"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/LH/IN SWING	PRIMARY SUITE CLOSET	BIRCH/STAIN	N/A	LEVER	TBD	NOTE 4
18	2'-4"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/RH/IN SWING	PRIMARY SUITE BATH	BIRCH/STAIN	N/A	LEVER/PRIVACY	TBD	NOTE 4
19	2'-4"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/LH/IN SWING	KID'S BED 1 ENTRY	BIRCH/STAIN	N/A	LEVER/PRIVACY	TBD	NOTE 4
20	2'-4"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/RH/IN SWING	KID'S BED 2 ENTRY	BIRCH/STAIN	N/A	LEVER/PRIVACY	TBD	NOTE 4
21	2'-4"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/LH/IN SWING	KID'S BATH 1	BIRCH/STAIN	N/A	LEVER/PRIVACY	TBD	NOTE 4
22	2'-4"	x 6'-10"	1		0'-1 3/8"	SC/SLAB/RH/IN SWING	KID'S BATH 2	BIRCH/STAIN	N/A	LEVER/PRIVACY	TBD	NOTE 4
23	5'-0"	x 6'-10"	1		0'-1 3/8"	SHOJI SCREEN/HC/SLAB/LH	OPEN OFFICE	BIRCH/STAIN	N/A	FLUSH PULLS/FLUSH TRACKS	TBD	-

**INTERIOR DOOR NOTES:**

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

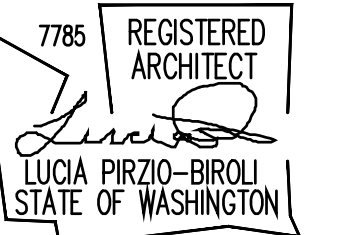
# CHU RESIDENCE

New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040

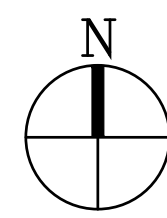
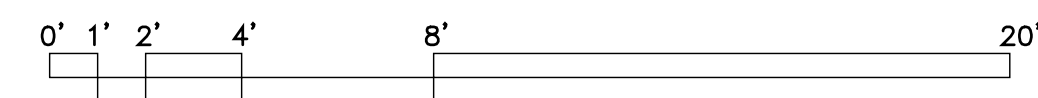
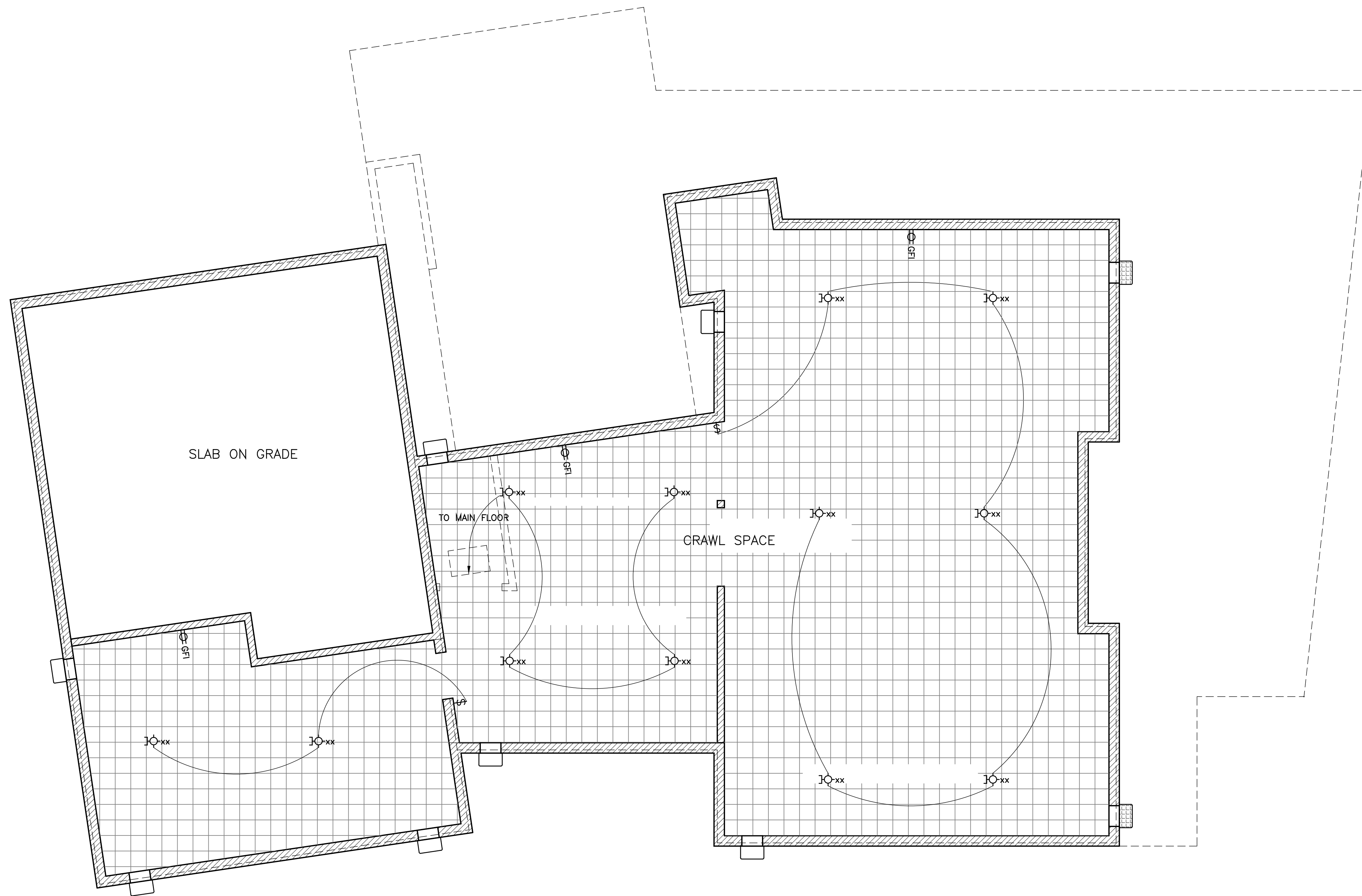
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**CHU RESIDENCE**  
New Residence  
4332 W. Mercer Way  
Mercer Island, WA 98040



**1** Crawl Space Plan  
scale: 1/4"=1'-0"

**Power and Lighting Legend**

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

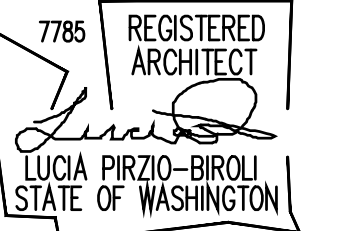
**NOTES:**

- 1- Fire Protection: NFPA 72 --"Chapter 29" Fire Alarm System shall be installed per City of Mercer Island standards throughout the residence. UL Listings: Devices - UL 268; Control Panel - UL 985; CO Detectors: UL 2075.
- 2- INSTALL COMPREHENSIVE SECURITY SYSTEM PER SPECIFICATIONS
- 3- A BALANCED WHOLE-HOUSE VENTILATION SYSTEM MEETING THE REQUIREMENTS OF 2021 WSRC 1505.4.1.4 SHALL BE INSTALLED. A BALANCED HRV SYSTEM SHALL BE INSTALLED AND MEET REQUIREMENTS OF HVI 920. DEFERRED SUBMITTAL BY HVAC SUB-CONTRACTOR.
- 4- BALANCED WHOLE HOUSE VENTILATION CALCULATIONS TO BE DEFERRED SUBMITTAL BY HVAC SUB-CONTRACTOR.
- 5- EXHAUST HOOD SYSTEM GREATER THAN A CFM OF 400 SHALL MEET THE REQUIREMENTS OF 2021 WSRC M1503.6 FOR MAKE UP AIR.
- 6- PROVIDE @ KITCHEN AND LAUNDRY OUTLETS ACCORDING TO APPLIANCES MANUFACTURER SPECIFICATIONS
- 7- ALL PERMANENTLY INSTALLED LIGHTING FIXTURES, EXCLUDING KITCHEN APPLIANCE LIGHTING FIXTURES, SHALL CONTAIN ONLY HIGH-EFFICIENCY LIGHTING SOURCES. (WAC 51-11R-R404.1)
- 8- CONTRACTOR TO COORDINATE (2) WALK-THROUGHS: PRIOR TO LOCATING FIXTURES, OUTLETS AND SWITCHES AND PRIOR TO FINALIZATION

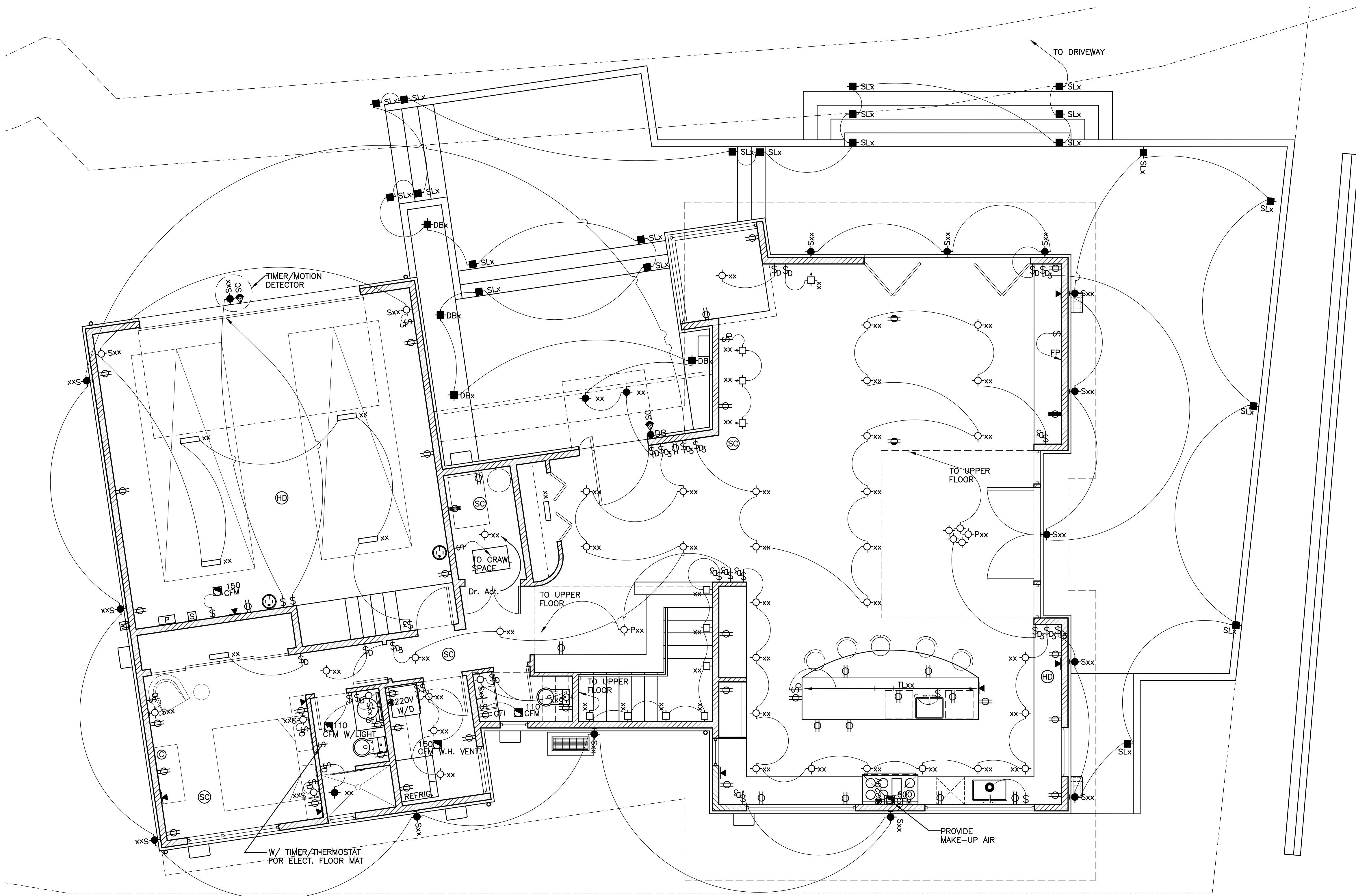
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**CHU RESIDENCE**  
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**Power and Lighting Legend**

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

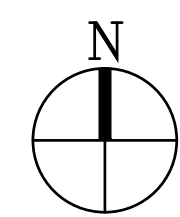
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- 3- A BALANCED WHOLE-HOUSE VENTILATION SYSTEM MEETING THE REQUIREMENTS OF 2021 WSRC 1505.4.1.4 SHALL BE INSTALLED. A BALANCED HRV SYSTEM SHALL BE INSTALLED AND MEET REQUIREMENTS OF HVI 920. DEFERRED SUBMITTAL BY HVAC SUB-CONTRACTOR.
- 4- BALANCED WHOLE HOUSE VENTILATION CALCULATIONS TO BE DEFERRED SUBMITTAL BY HVAC SUB-CONTRACTOR.
- 5- EXHAUST HOOD SYSTEM GREATER THAN A CFM OF 400 SHALL MEET THE REQUIREMENTS OF 2021 WSRC M1503.6 FOR MAKE UP AIR.
- 6- PROVIDE KITCHEN AND LAUNDRY OUTLETS ACCORDING TO APPLIANCES MANUFACTURER SPECIFICATIONS
- 7- ALL PERMANENTLY INSTALLED LIGHTING FIXTURES, EXCLUDING KITCHEN APPLIANCE LIGHTING FIXTURES, SHALL CONTAIN ONLY HIGH-EFFICIENCY LIGHTING SOURCES. (WAC 51-11R-R404.1)
- 8- CONTRACTOR TO COORDINATE (2) WALK-THROUGHS: PRIOR TO LOCATING FIXTURES, OUTLETS AND SWITCHES AND PRIOR TO FINALIZATION

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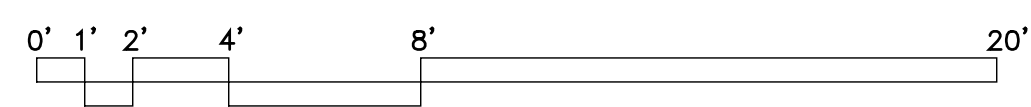
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**Main Floor Plan**

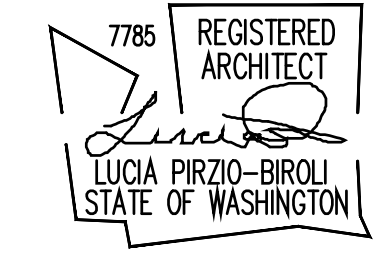
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# ECTYPOS ARCHITECTURE

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## CHU RESIDENCE

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Mercer Island, WA 98040

### Power and Lighting Legend

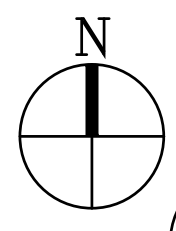
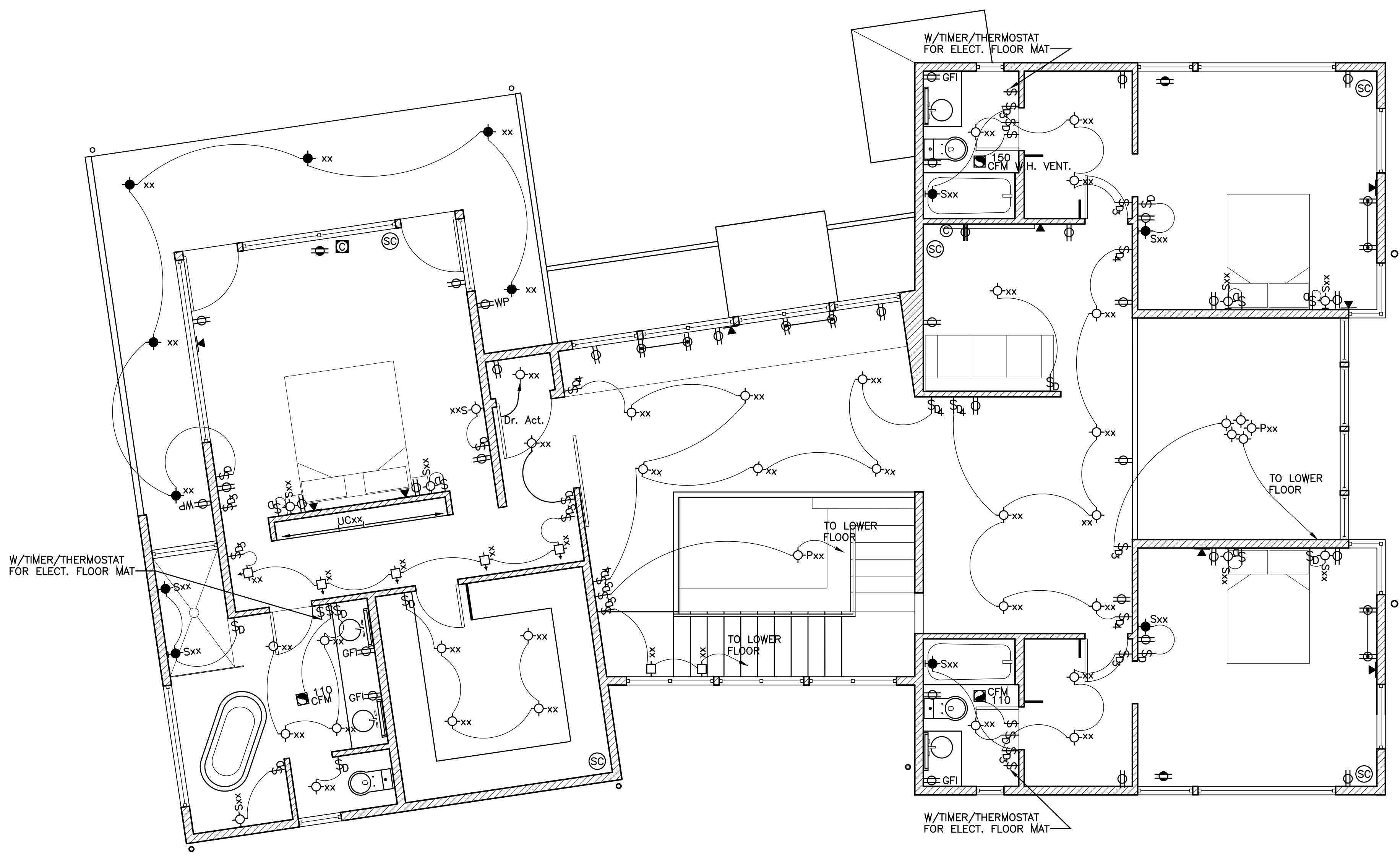
	Recessed Ceiling Mounted Exhaust Fan
	Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
	Heat Detector / Heat Alarm
	Cable Connection
	Floor Mounted Cable Connection
	Dedicated Data Outlet (CatV)
	Switch
	Switch, Multi-way
	Switch, Dimmer
	Switch, Dimmer/Multi-way
	Switch, Door Activated
	Duplex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

### NOTES:

- 1- Fire Protection: NFPA 72 - "Chapter 29" Fire Alarm System shall be installed per City of Mercer Island standards throughout the residence. UL Listings: Devices - UL 268; Control Panel - UL 985; CO Detectors: UL 2075.
- 2- INSTALL COMPREHENSIVE SECURITY SYSTEM PER SPECIFICATIONS
- 3- A BALANCED WHOLE-HOUSE VENTILATION SYSTEM MEETING THE REQUIREMENTS OF 2021 WSRC 1505.4.1.4 SHALL BE INSTALLED. A BALANCED HRV SYSTEM SHALL BE INSTALLED AND MEET REQUIREMENTS OF HVI 920. DEFERRED SUBMITTAL BY HVAC SUB-CONTRACTOR.
- 4- BALANCED WHOLE HOUSE VENTILATION CALCULATIONS TO BE DEFERRED SUBMITTAL BY HVAC SUB-CONTRACTOR.
- 5- EXHAUST HOOD SYSTEM GREATER THAN A CFM OF 400 SHALL MEET THE REQUIREMENTS OF 2021 WSRC M1503.6 FOR MAKE UP AIR.
- 6- PROVIDE @ KITCHEN AND LAUNDRY OUTLETS ACCORDING TO APPLIANCES MANUFACTURER SPECIFICATIONS
- 7- ALL PERMANENTLY INSTALLED LIGHTING FIXTURES, EXCLUDING KITCHEN APPLIANCE LIGHTING FIXTURES, SHALL CONTAIN ONLY HIGH-EFFICIENCY LIGHTING SOURCES. (WAC 51-11R-R404.1)
- 8- CONTRACTOR TO COORDINATE (2) WALK-THROUGHS: PRIOR TO LOCATING

Date:	5/11/2022 Pre-App
	5/14/2024 Sub 1

Scale:  
Sheet:



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

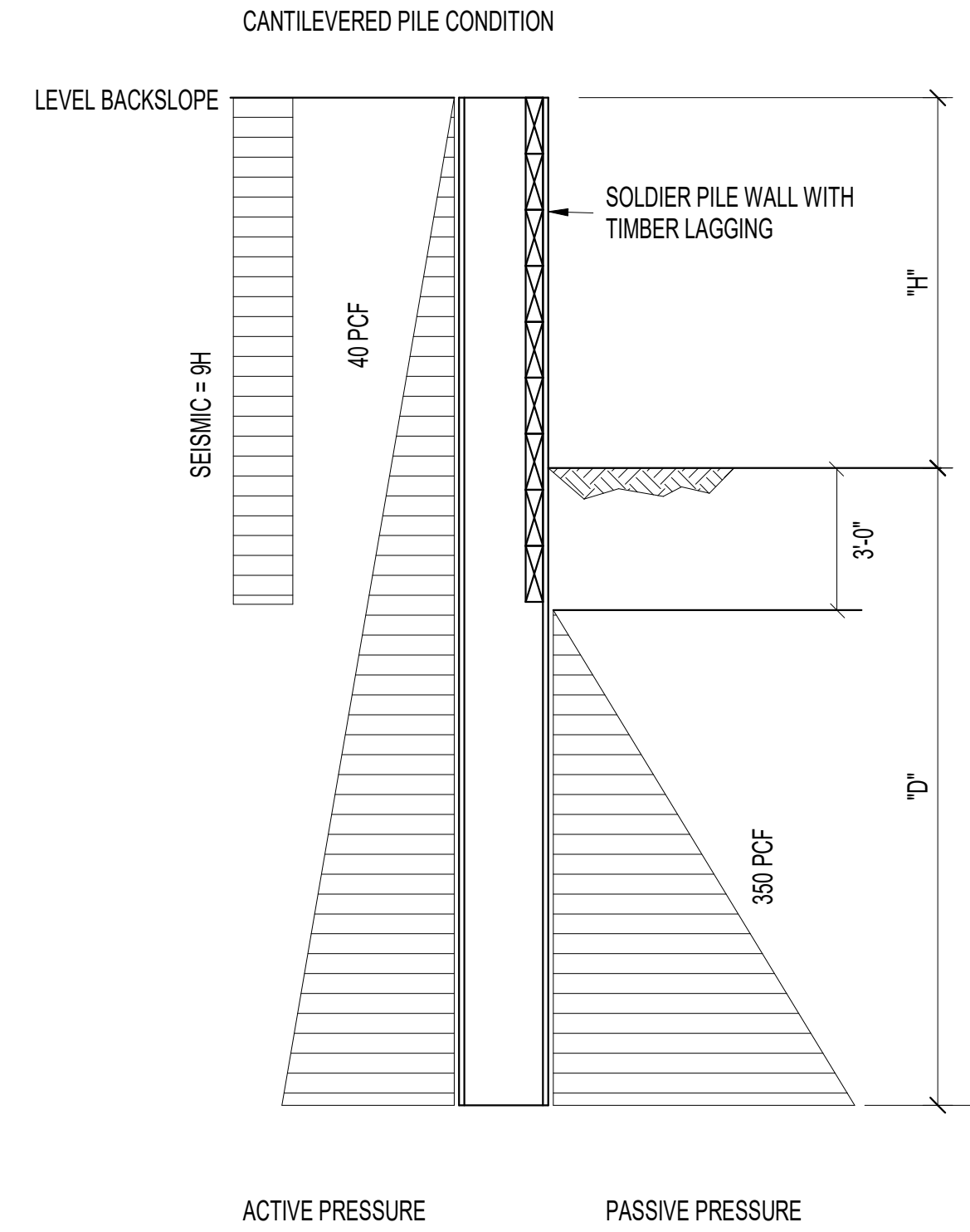
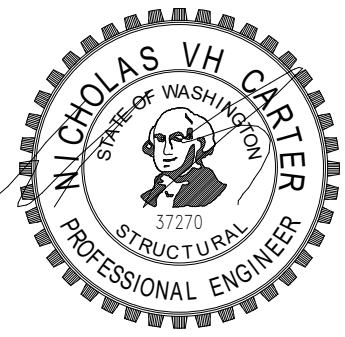






# GENERAL STRUCTURAL NOTES

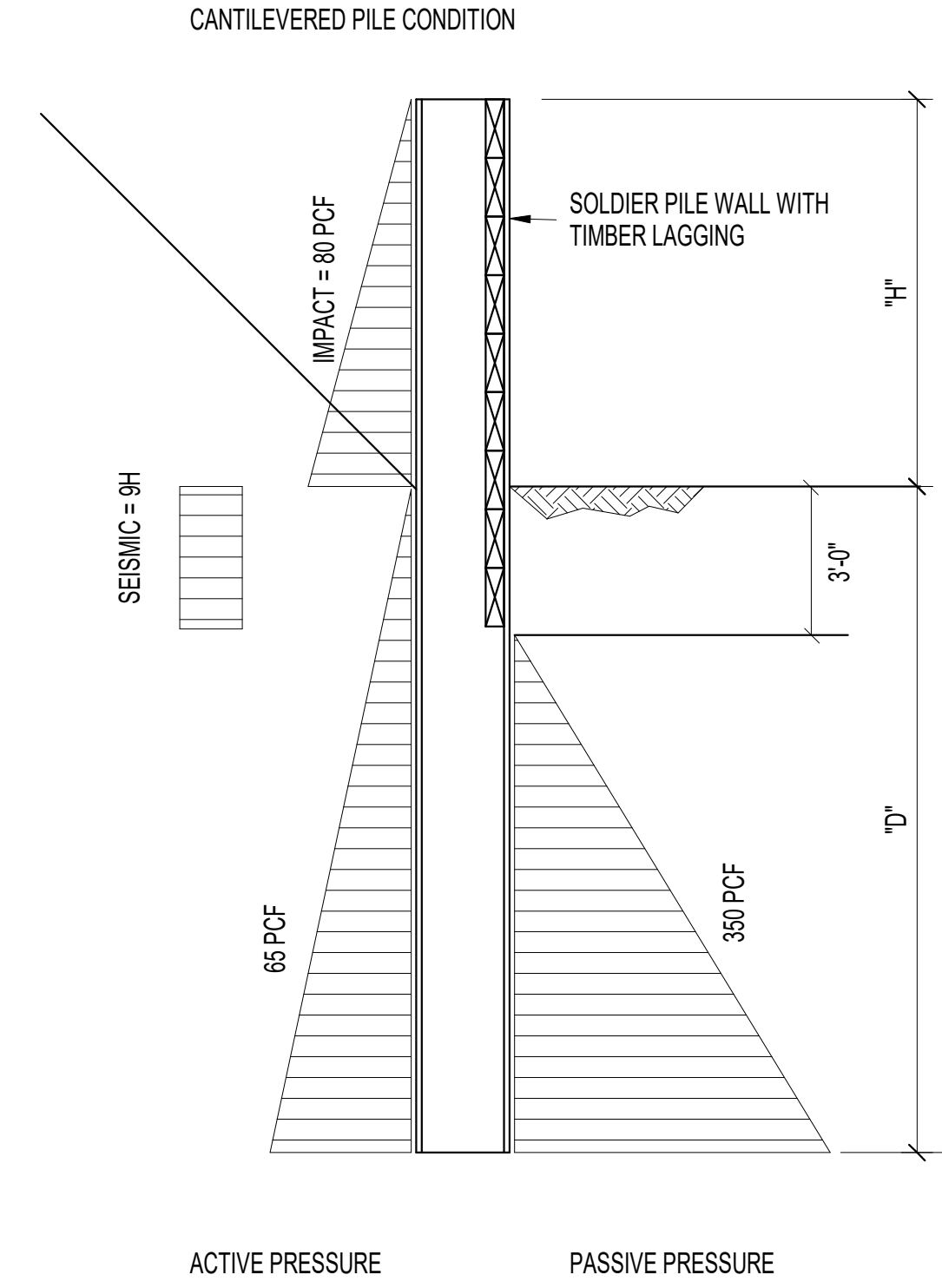
(The following apply unless shown otherwise on the plans)



**NOTES:**

1. MINIMUM EMBEDMENT SHOULD BE AT LEAST 10 FEET BELOW OF EXCAVATION.
2. ACTIVE PRESSURES SHOULD BE APPLIED OVER THE FULL WIDTH OF THE PILE SPACING ABOVE THE BASE OF THE EXCAVATION, AND OVER ONE PILE DIAMETER BELOW THE BASE OF THE EXCAVATION.
3. PASSIVE PRESSURE SHOULD BE APPLIED TO THREE TIMES THE DIAMETER OF THE SOLDIER PILES.
4. USE 50% OF THE ACTIVE AND SURCHARGE PRESSURES FOR LAGGING DESIGN WITH SOLDIER PILES SPACED AT 8' OR LESS.
5. REFER TO GEOTECHNICAL REPORT TEXT FOR ADDITIONAL DISCUSSIONS.

PILE LOADING DIAGRAM - SUSTAINED LOAD



**NOTES:**

1. MINIMUM EMBEDMENT SHOULD BE AT LEAST 10 FEET BELOW OF EXCAVATION.
2. ACTIVE PRESSURES SHOULD BE APPLIED OVER THE FULL WIDTH OF THE PILE SPACING ABOVE THE BASE OF THE EXCAVATION, AND OVER ONE PILE DIAMETER BELOW THE BASE OF THE EXCAVATION.
3. PASSIVE PRESSURE SHOULD BE APPLIED TO TWO TIMES THE DIAMETER OF THE SOLDIER PILES.
4. USE 50% OF THE ACTIVE AND SURCHARGE PRESSURES FOR LAGGING DESIGN WITH SOLDIER PILES SPACED AT 8' OR LESS.
5. REFER TO GEOTECHNICAL REPORT TEXT FOR ADDITIONAL DISCUSSIONS.

PILE LOADING DIAGRAM - IMPACT LOAD

**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date: \_\_\_\_\_  
\_\_\_\_\_  
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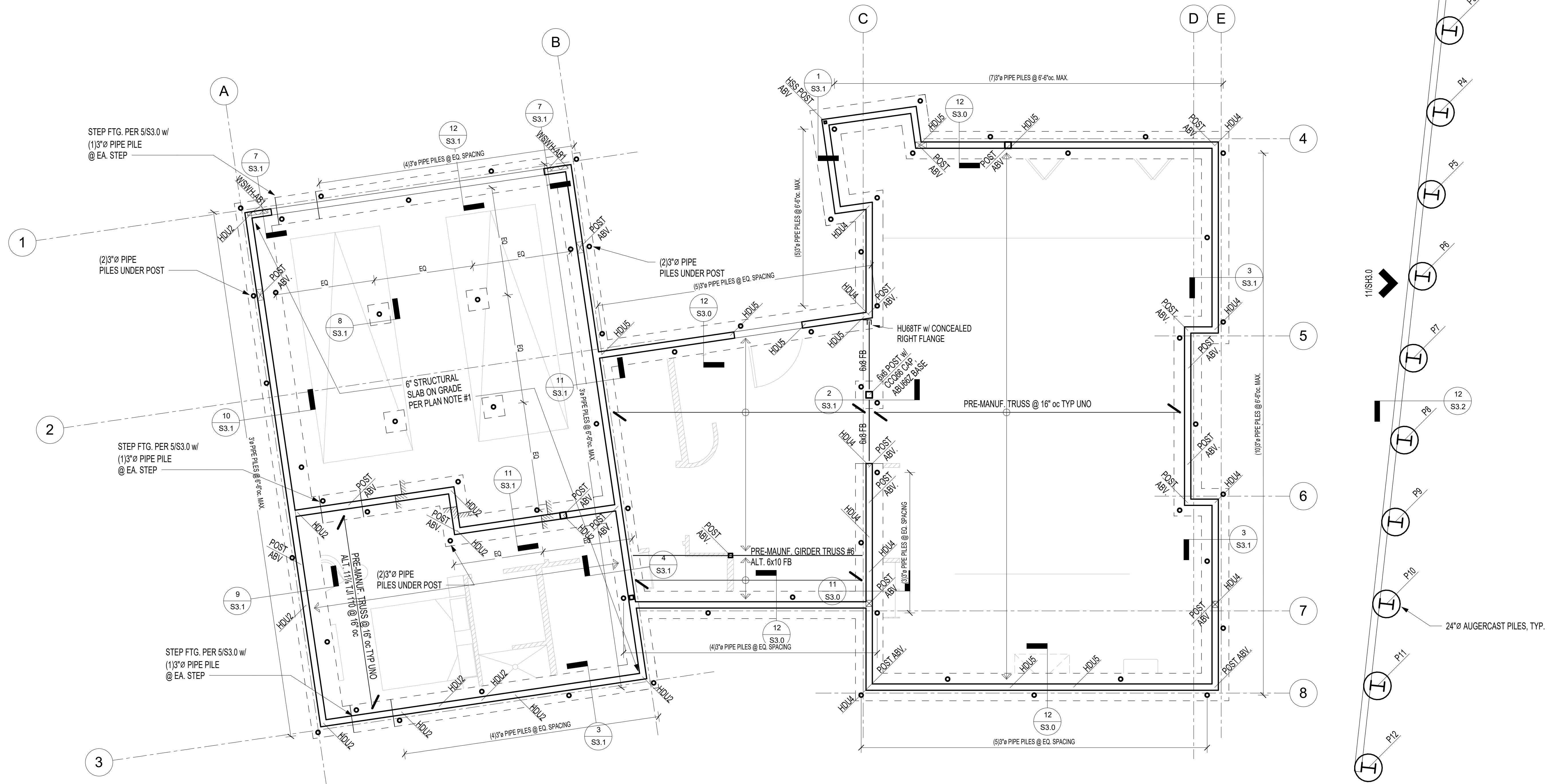
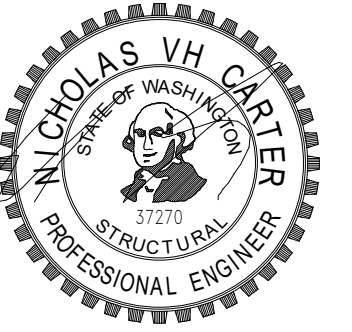
General Structural Notes

**S1.2**

FOUNDATION PLAN NOTES

1. SLAB ON GRADE ELEVATION VARIES PER ARCHITECTURAL PLAN. SLAB SHALL BE 6" THICK WITH #4@18"oc. E.W. CTR'D. PREPARE SOILS AND PROVIDE MINIMUM 6-MIL VISQUEEN VAPOR BARRIER UNDER ALL SLABS. SLABS SHALL BE SUPPORTED ON MINIMUM 4 INCHES OF FREE DRAINING MATERIAL.
2. AT HOLDOWNS PROVIDE THE FOLLOWING ANCHOR BOLTS REFER TO DETAIL 8/S3.0 FOR BOLT SIZE AND DIAMETER. ALL HOLDOWN ANCHOR BOLTS SHALL BE CAST IN PLACE UNLESS OTHERWISE NOTED IN DETAIL 8/S3.0.
3. ALL ANCHORS TO BE INSTALLED AS REQUIRED BY MANUFACTURER. MINIMUM (2) 2X STUDS UNLESS OTHERWISE NOTED ON PLANS.
4. REFER TO S6.4 FOR GIRDER TRUSS LOADING DIAGRAMS

PERMANENT SHORING-PILE SCHEDULE			
PILE MARK	WIDE FLANGE SIZE	MAX RETAINED HEIGHT "H" w/ FREEBOARD (ft)	MIN. EMBED. "D" (ft)
P1	W12x40	6'-0"	18'-8"
P2	W12x40	6'-0"	18'-8"
P3	W12x40	6'-0"	18'-8"
P4	W12x40	6'-0"	18'-8"
P5	W12x40	6'-0"	18'-8"
P6	W12x40	6'-0"	18'-8"
P7	W12x40	6'-0"	18'-8"
P8	W12x40	6'-0"	18'-8"
P9	W12x40	6'-0"	18'-8"
P10	W12x40	6'-0"	18'-8"
P11	W12x40	6'-0"	18'-8"
P12	W12x40	6'-0"	18'-8"



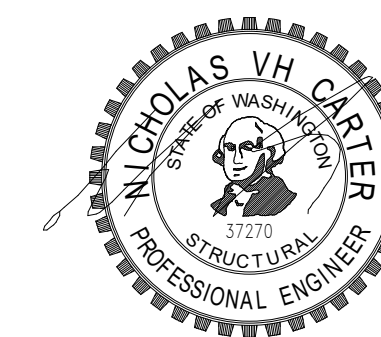
1 Main Level Framing/ Foundation Plan  
1/4" = 1'-0"

**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date: \_\_\_\_\_  
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Main Level Framing/ Foundation Plan

**S2.0**

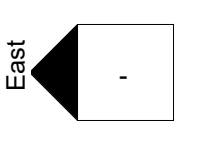
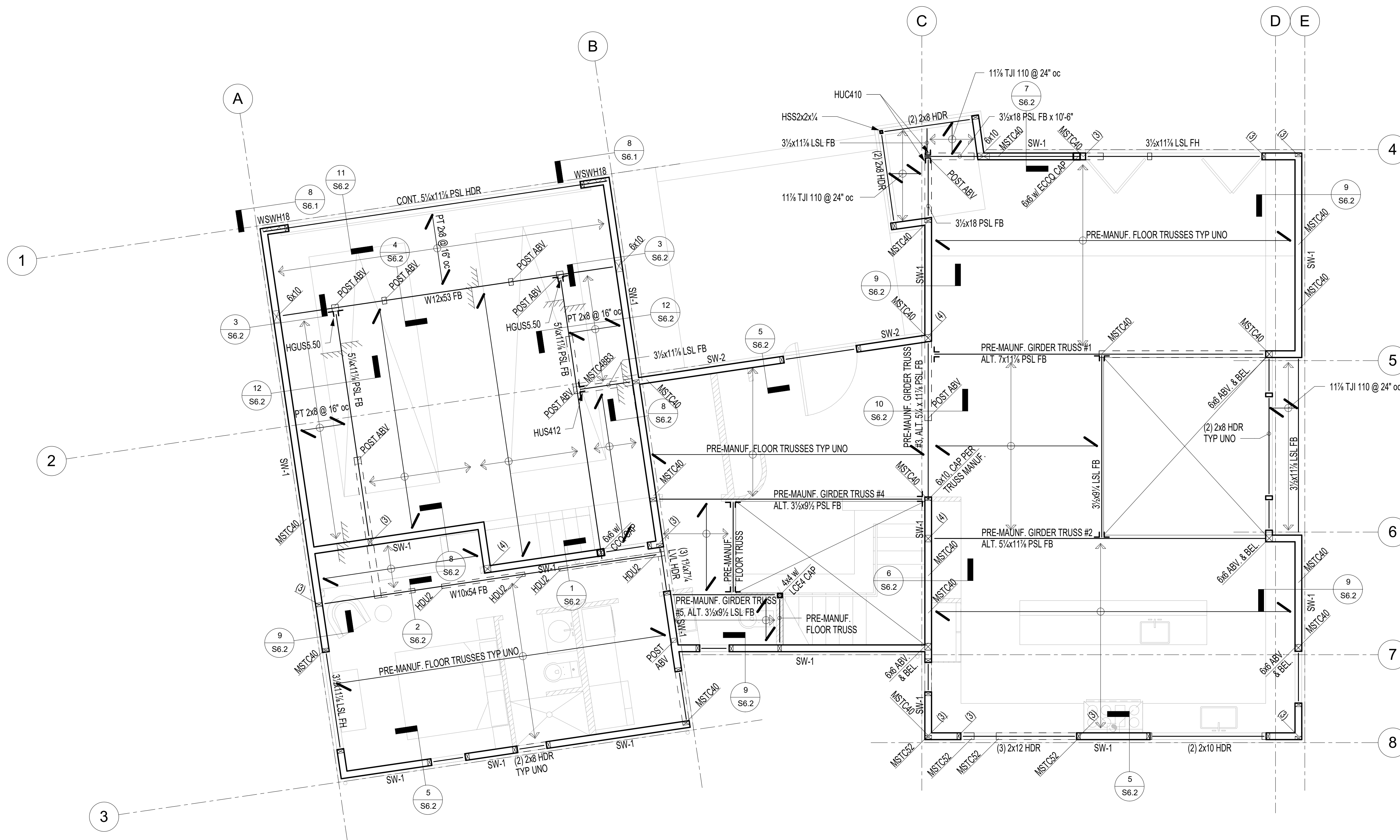


FRAMING PLAN NOTES: (TYPICAL UNLESS NOTED OTHERWISE)

- FLOOR SHEATHING SHALL BE 23/32" TONGUE AND GROOVE APA RATED SHEATHING (SPAN RATING 40/20). NAIL @ ALL FRAMED PANEL EDGES AND OVER SHEARWALLS w/10d @ 6"oc AND 12"oc TO ALL INTERMEDIATE FRAMING.
- DECK SHEATHING SHALL BE 23/32" TONGUE AND GROOVE APA RATED SHEATHING (SPAN RATING 40/20). NAIL @ ALL FRAMED PANEL EDGES AND OVER SHEARWALLS w/10d @ 6"oc AND 12"oc TO ALL INTERMEDIATE FRAMING. DECK DESIGN LOADS INDICATED ON PLANS.
- ALL HEADERS AND BEAMS SHALL BE (2) 2x8 MINIMUM, U.N.O. REFER NOTE 5 FOR SUPPORT REQUIREMENTS.
- COLUMNS SHALL BE DOUBLE STUDS MINIMUM, U.N.O., WITH BEAM OR HEADER BEARING FULLY ON COLUMN.
- REFER TO S6.4 FOR GIRDER TRUSS LOADING DIAGRAMS

LEGEND

	HANGER PER TRUSS MANUF. U.N.O. ON PLAN	SW-x	INDICATES SHEARWALL PER SCHEDULE 12/S6.0
	COLUMNS BELOW	HOLD	INDICATES SIMPSON HOLDOWN. REFER DETAIL 8/S3.0 FOR REQUIRED NUMBER OF STUDS, THREADED ROD CALLOUT & EMBEDMENT INTO CONCRETE.
	COLUMNS ABOVE	MSTC-1	INDICATES SIMPSON STRAP HOLDOWN
	ABRUPT CHANGE IN SLAB/FRAMING ELEVATION		
FB	INDICATES FLUSH BEAM		
DB	INDICATES DROPPED BEAM		
FH	INDICATES FLUSH HEADER		
	SPAN AND EXTENTS		



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

**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date: \_\_\_\_\_

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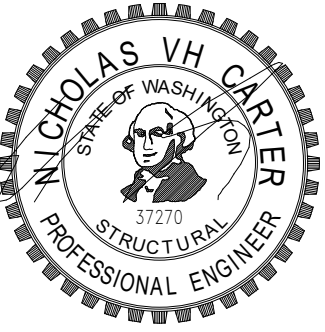
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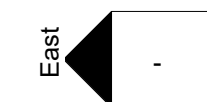
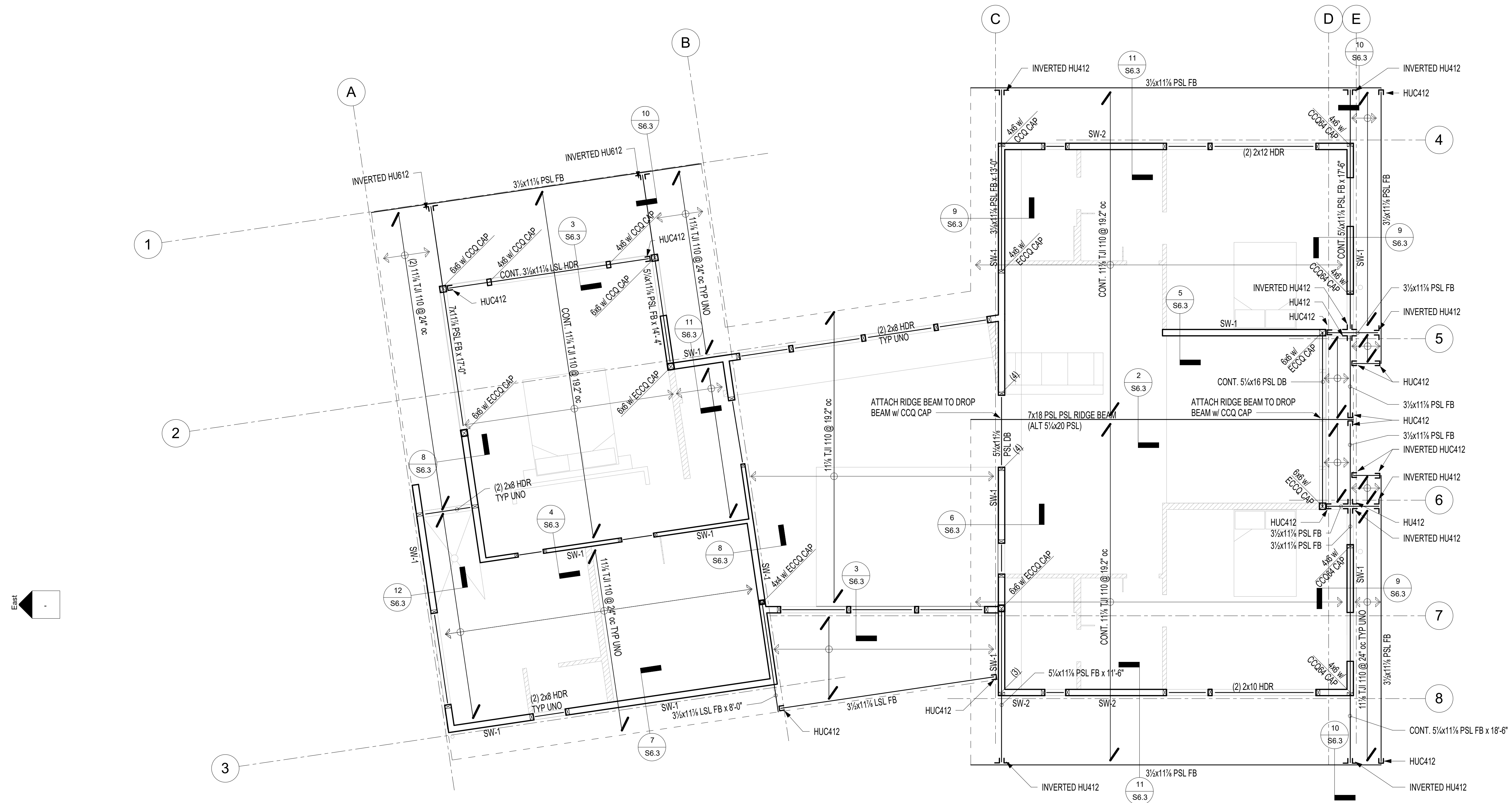
Upper Floor Framing Plan



FRAMING PLAN NOTES: (TYPICAL UNLESS NOTED OTHERWISE)

- ROOF SHEATHING SHALL BE 1/2" APA RATED SHEATHING (SPAN RATING 240) NAIL @ ALL FRAMED PANEL EDGES AND OVER SHEARWALLS w/ 8d @ 6" oc AND 12" oc TO ALL INTERMEDIATE FRAMING. ROOF FRAMING HAS BEEN DESIGNED TO SUPPORT PHOTO-VOLTAIC PANELS. (SDL = 5 PSF)
- ALL HEADERS AND BEAMS SHALL BE (2) 2x8 MINIMUM, U.N.O. REFER NOTE 3 FOR SUPPORT REQUIREMENTS.
- COLUMNS SHALL BE DOUBLE STUDS MINIMUM, U.N.O., WITH BEAM OR HEADER BEARING FULLY ON COLUMN.

LEGEND			
	HANGER PER TRUSS MANUF. U.N.O. ON PLAN	SW-x	INDICATES SHEARWALL PER SCHEDULE 12/S6.0
	COLUMNS BELOW		INDICATES SIMPSON HOLDOWN. REFER DETAIL 8/S3.0 FOR REQUIRED NUMBER OF STUDS, THREADED ROD CALLOUT & EMBEDMENT INTO CONCRETE.
	COLUMNS ABOVE		INDICATES SIMPSON STRAP HOLDOWN
	ABRUPT CHANGE IN SLAB/FRAMING ELEVATION		
	INDICATES FLUSH BEAM		
	INDICATES DROPPED BEAM		
	INDICATES FLUSH HEADER		
	SPAN AND EXTENTS		



**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

1 Roof Framing Plan  
1/4" = 1'-0"

Date: \_\_\_\_\_

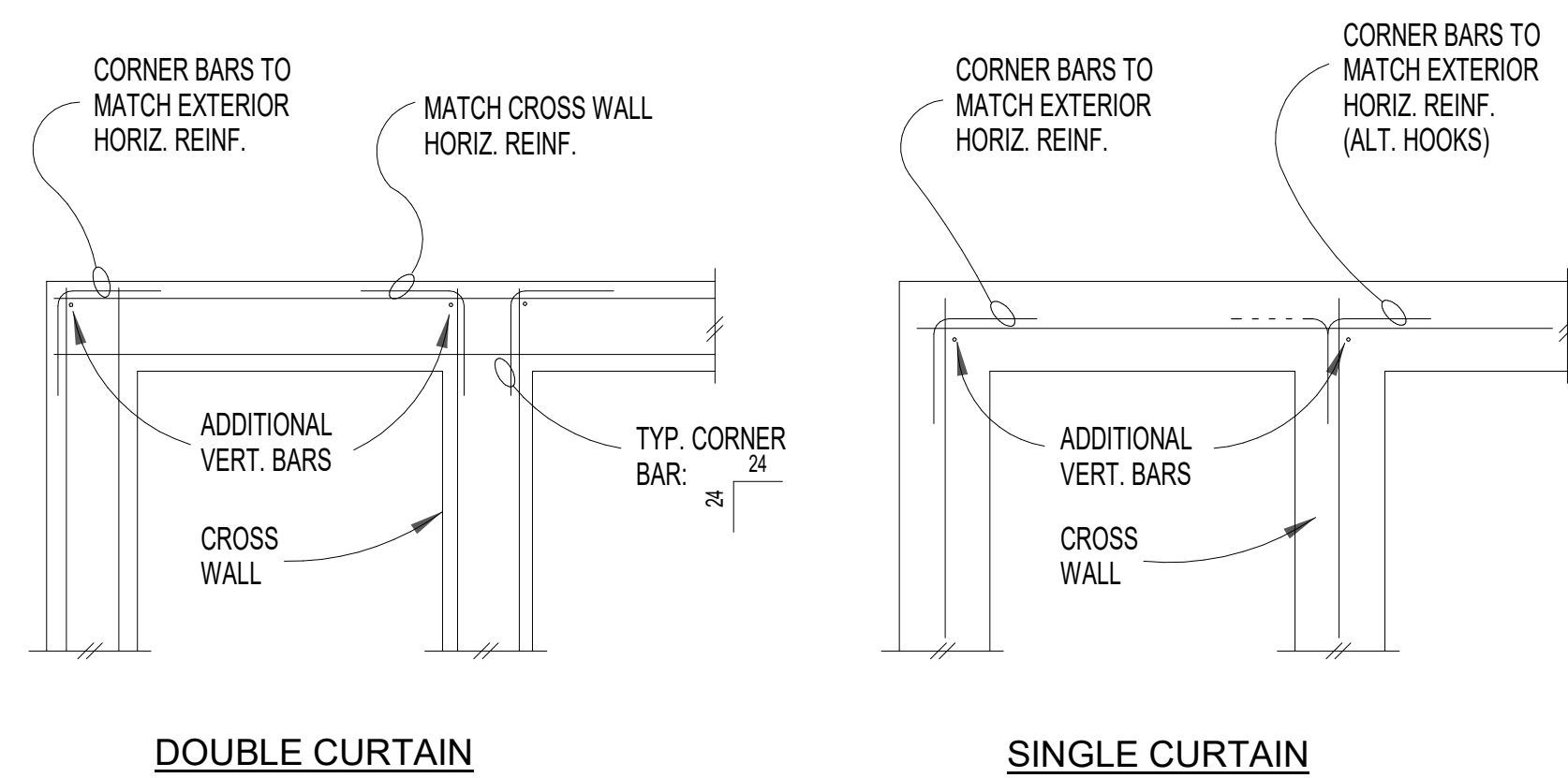
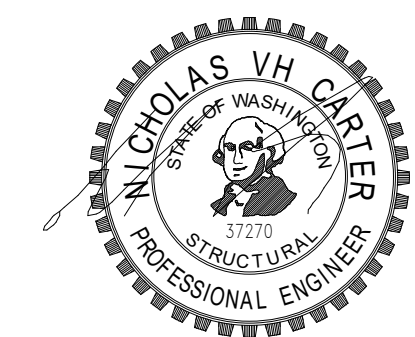
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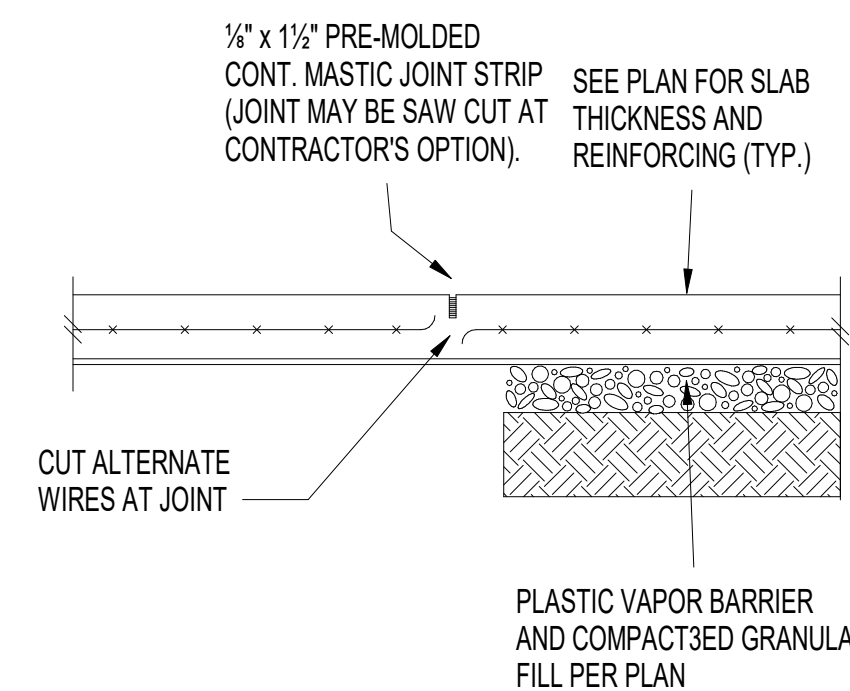
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Roof Framing Plan

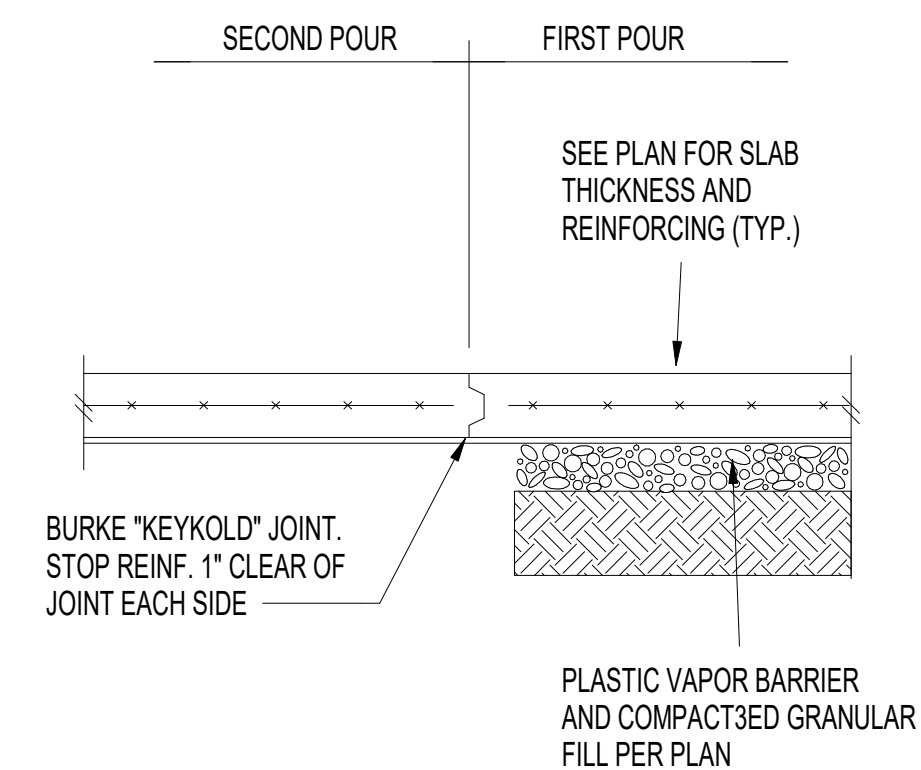
S2.2



Typical Corner Bars at Concrete Walls 2

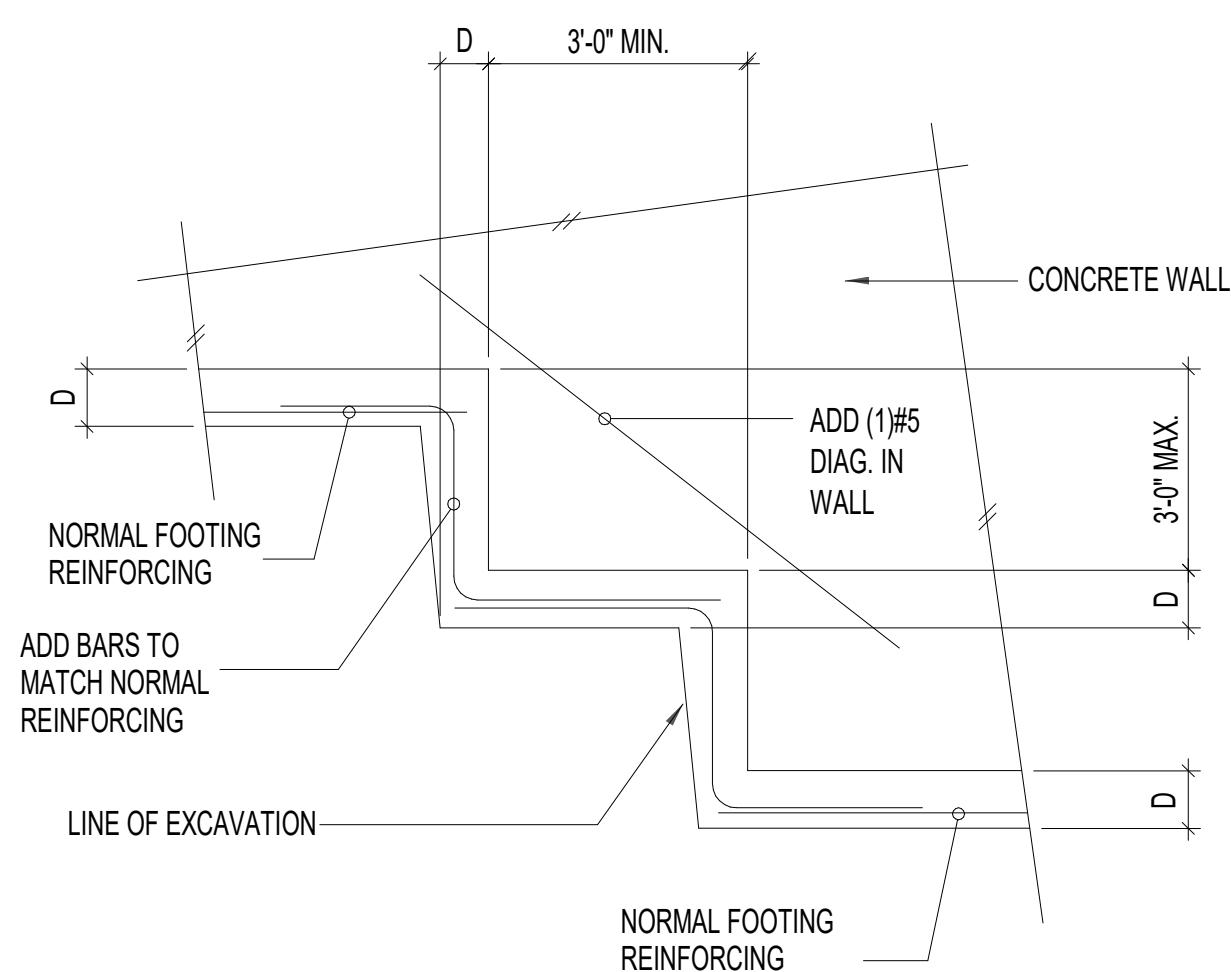


PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK OF 400 SQUARE FEET OR LESS. BREAKS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

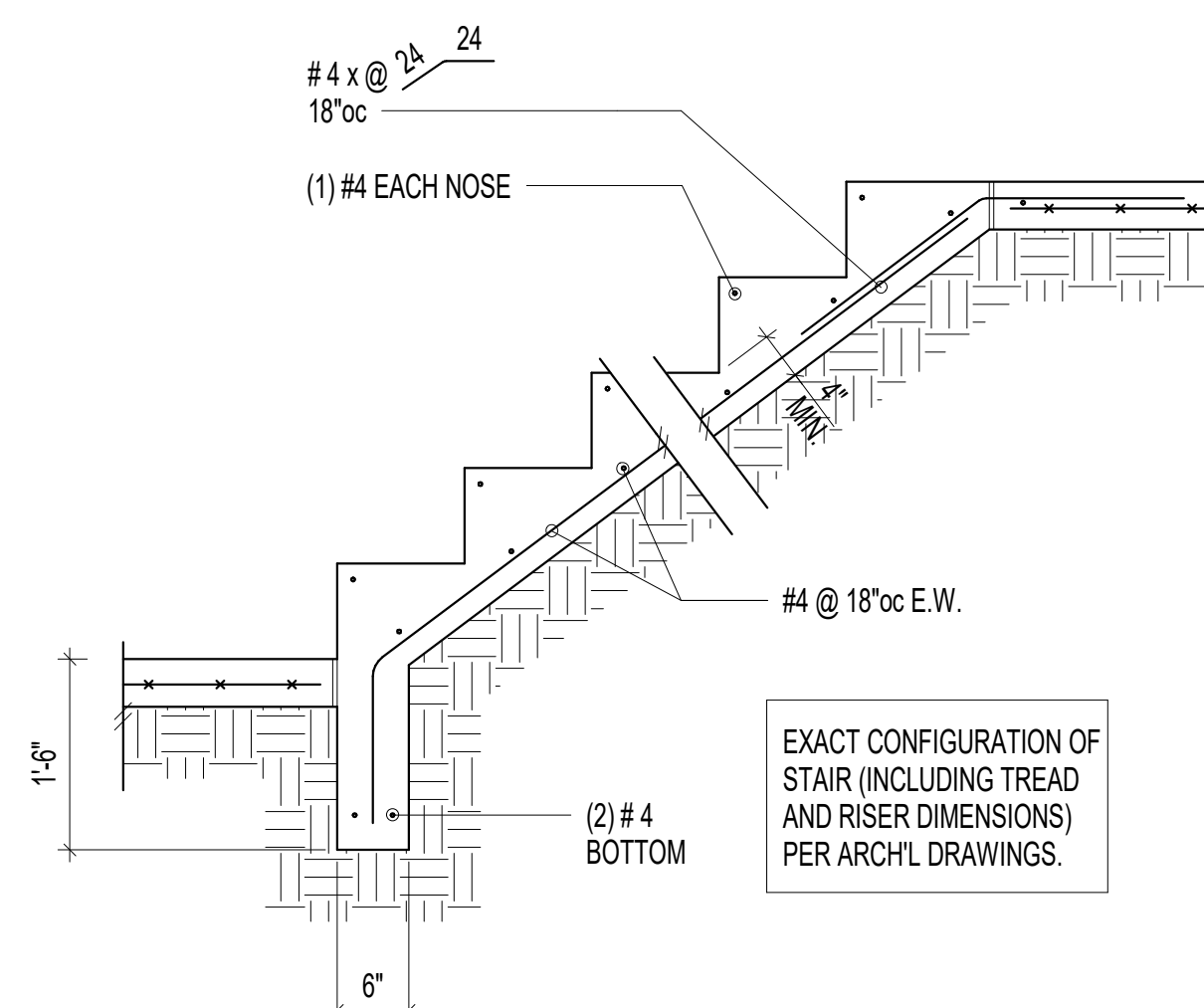


Construction Joint

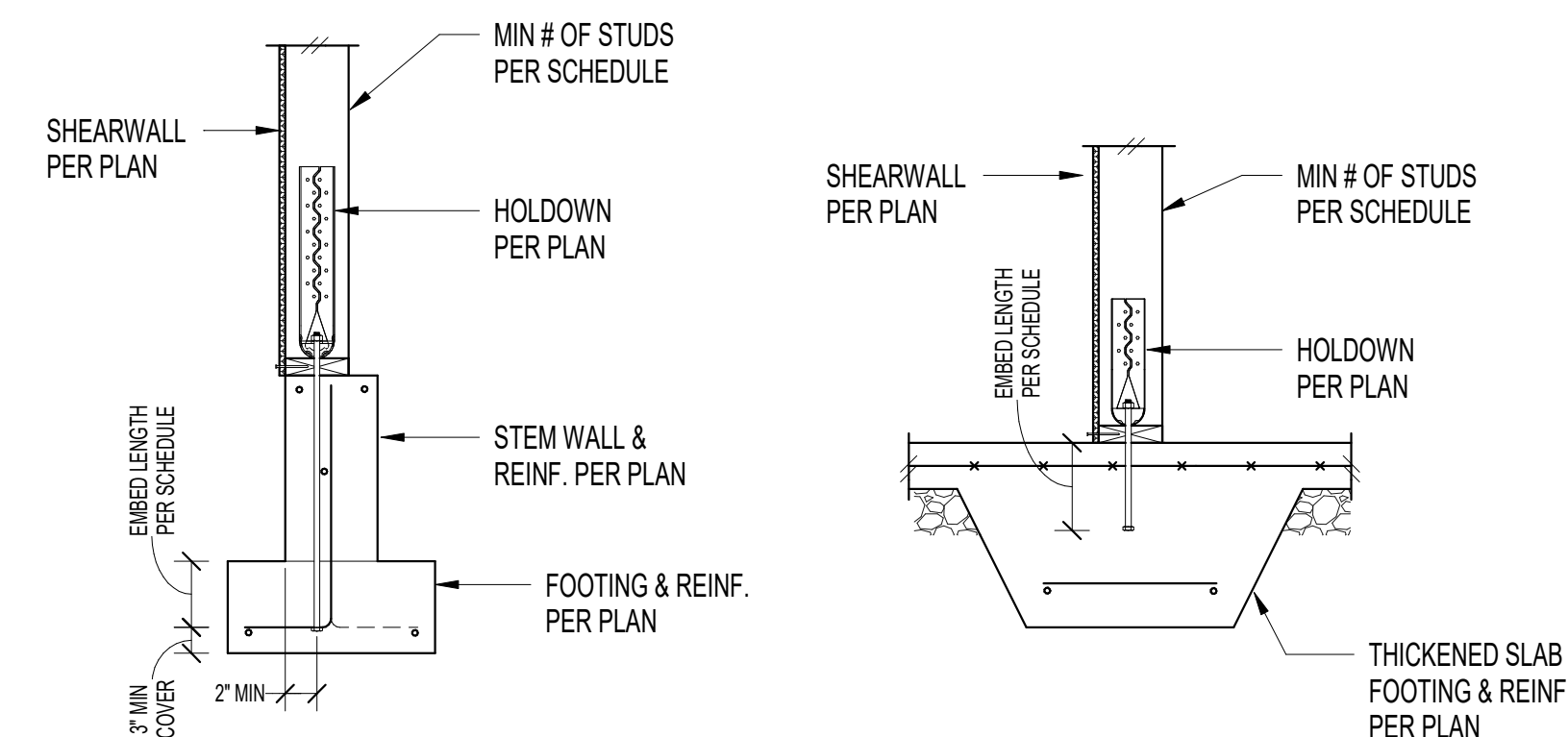
Typical Non-Structural Slab On Grade Joints 4



Typical Stepped Footing 5



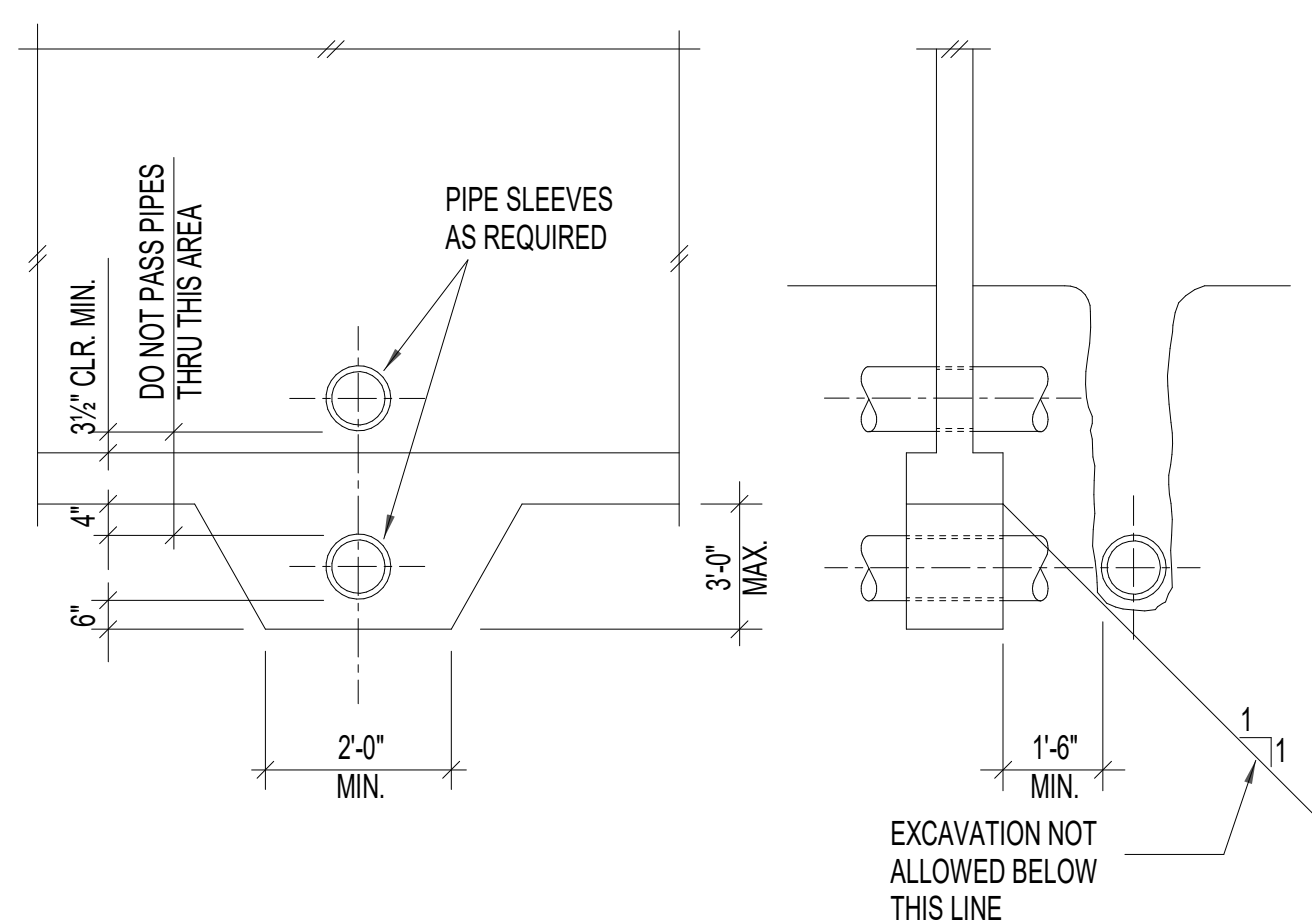
Stair On Grade 6



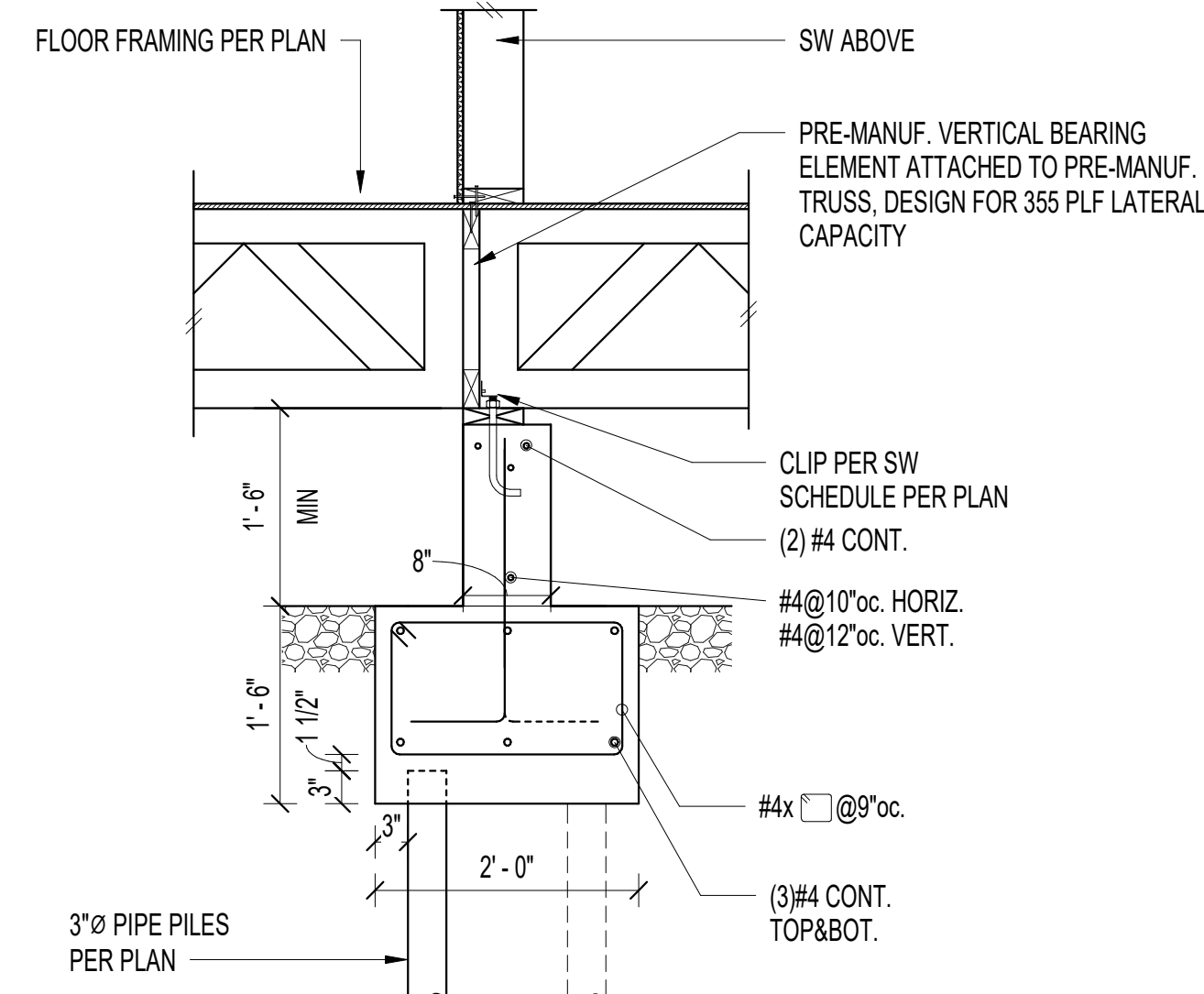
HOLDOWN SCHEDULE				
PLAN MARK	ANCHOR BOLT	EPOXY EMBED ③	CAST-IN-PLACE ②	MIN. NO. OF END STUDS ①
HDU2	5/8"Ø	7"	-	2
HDU4	5/8"Ø	7"	-	2
HDU5	SBS5/8x24	- ④	18"	3

- MINIMUM NO. OF STUDS AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS
- INSTALL ANCHOR BOLT PER MANUFACTURER
- ANCHOR MAY BE POST INSTALLED w/ EPOXY PER GENERAL NOTES AND 5/8"Ø ANCHOR BOLT
- ANCHOR BOLT CANNOT BE POST-INSTALLED AND MUST BE CAST-IN-PLACE AS INDICATED

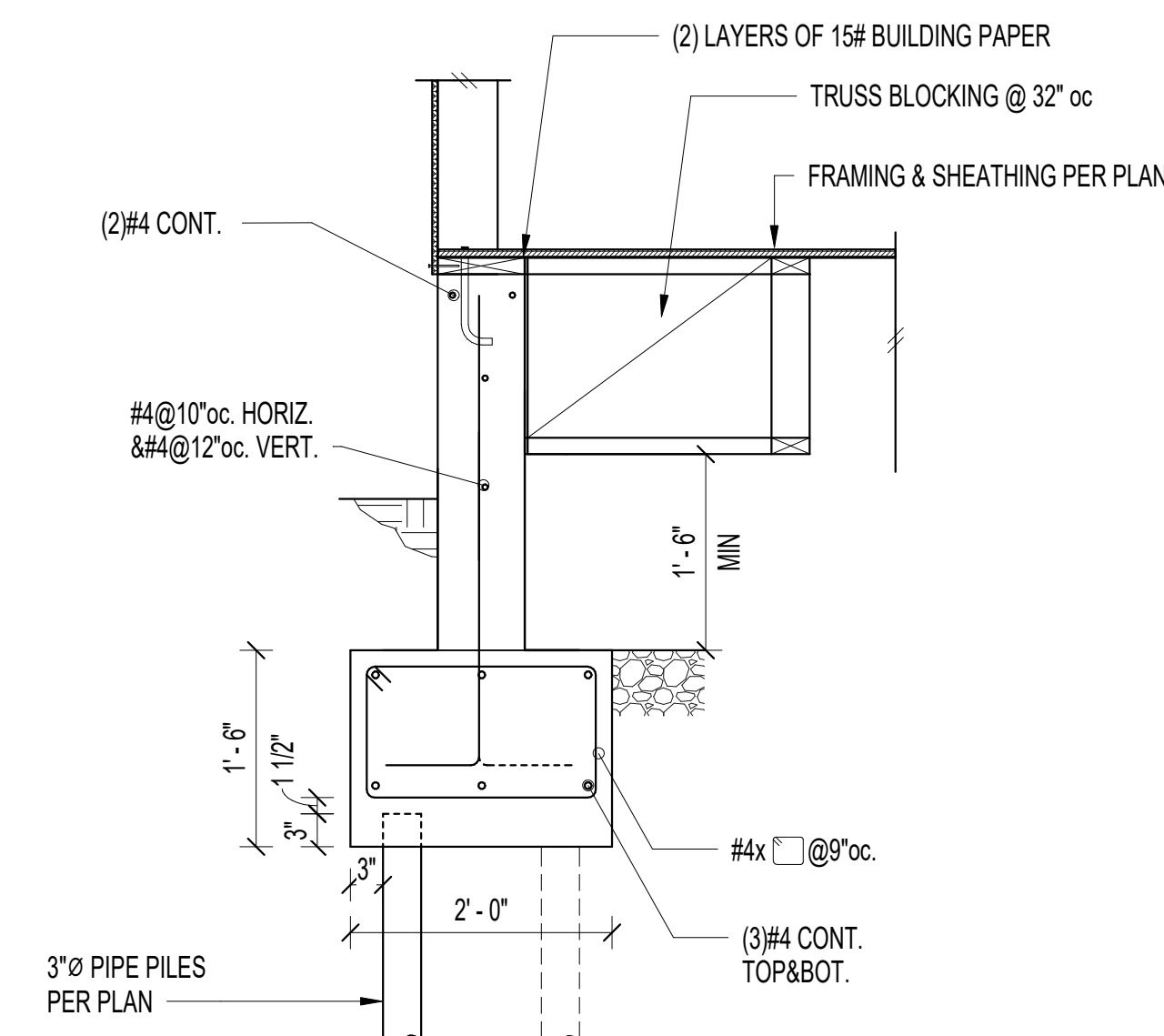
Holdown Schedule 8



Pipe and Trench Location Conditions 9



11

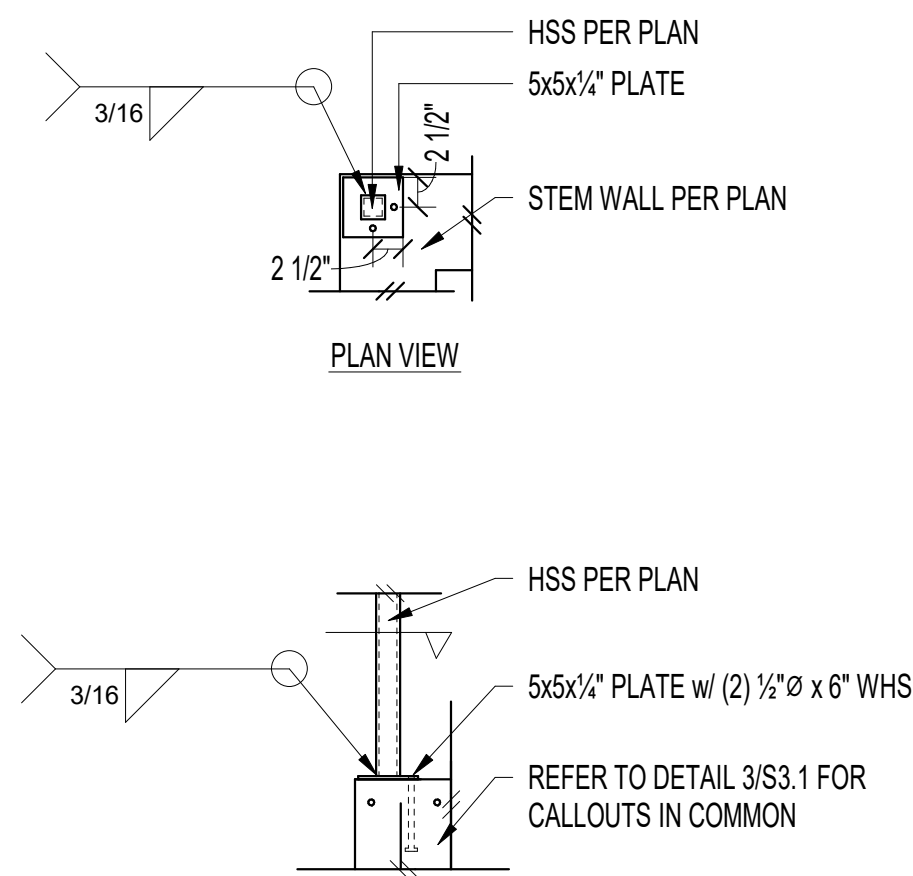


12

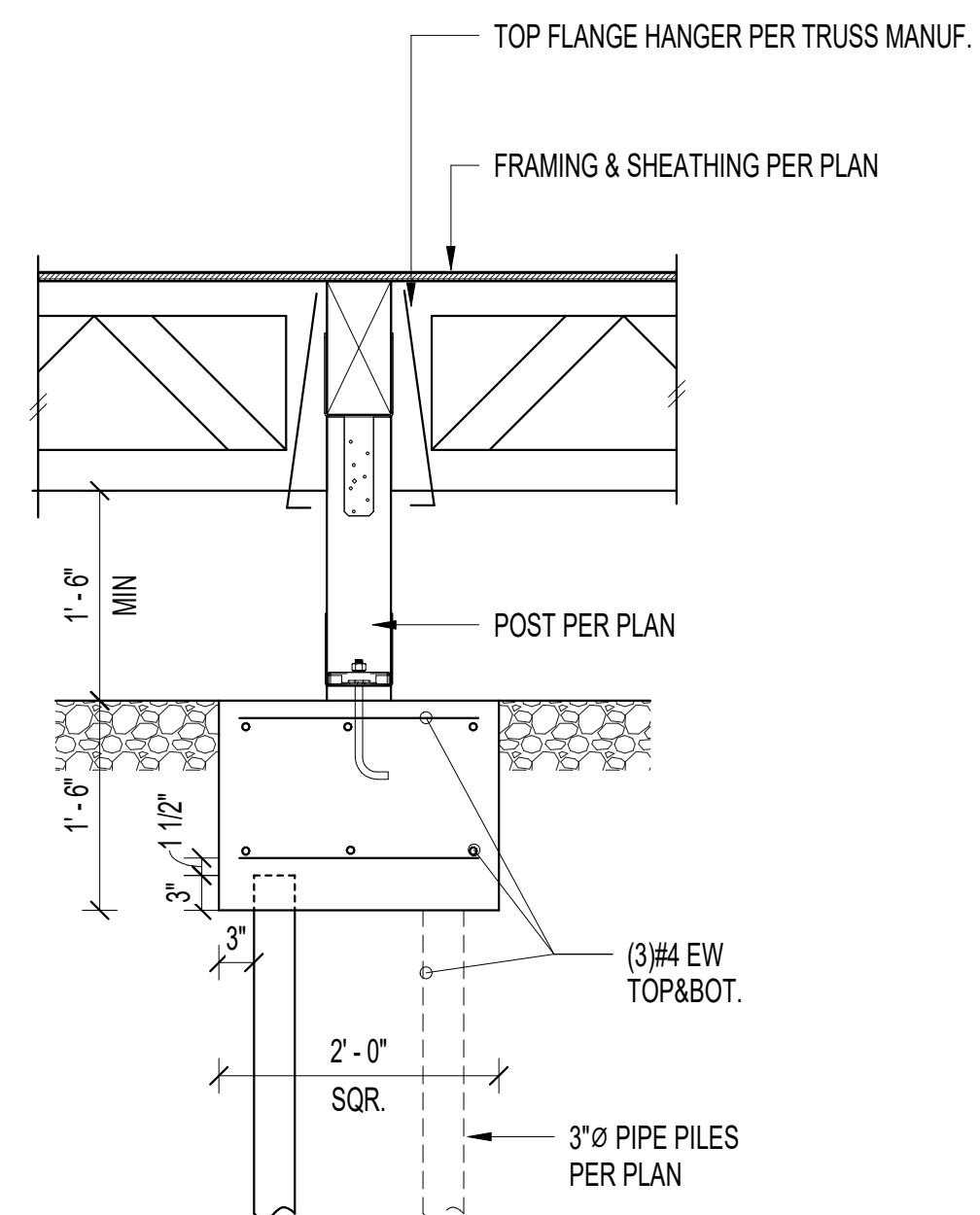
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Concrete Details

**S3.0**

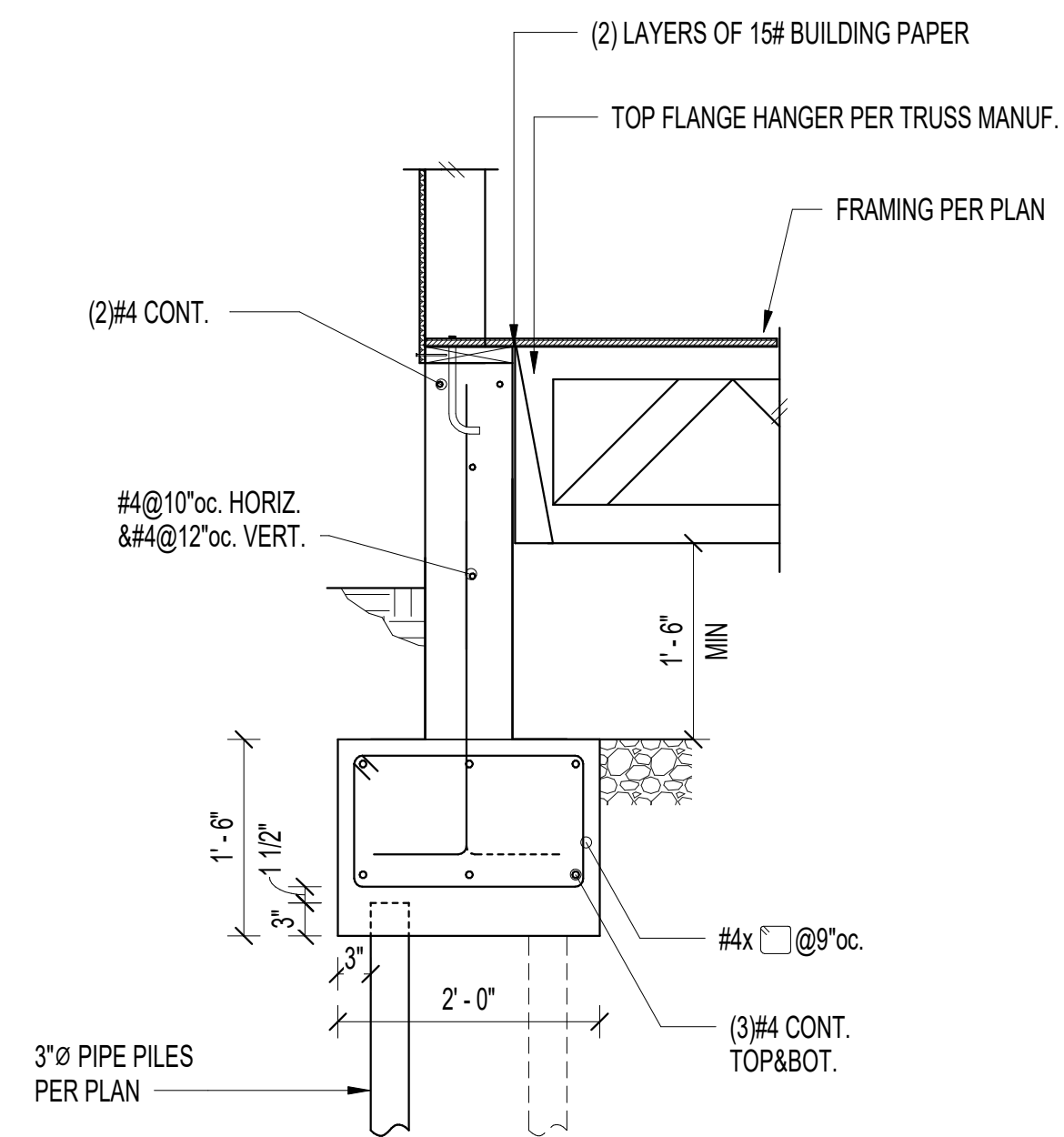
**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040



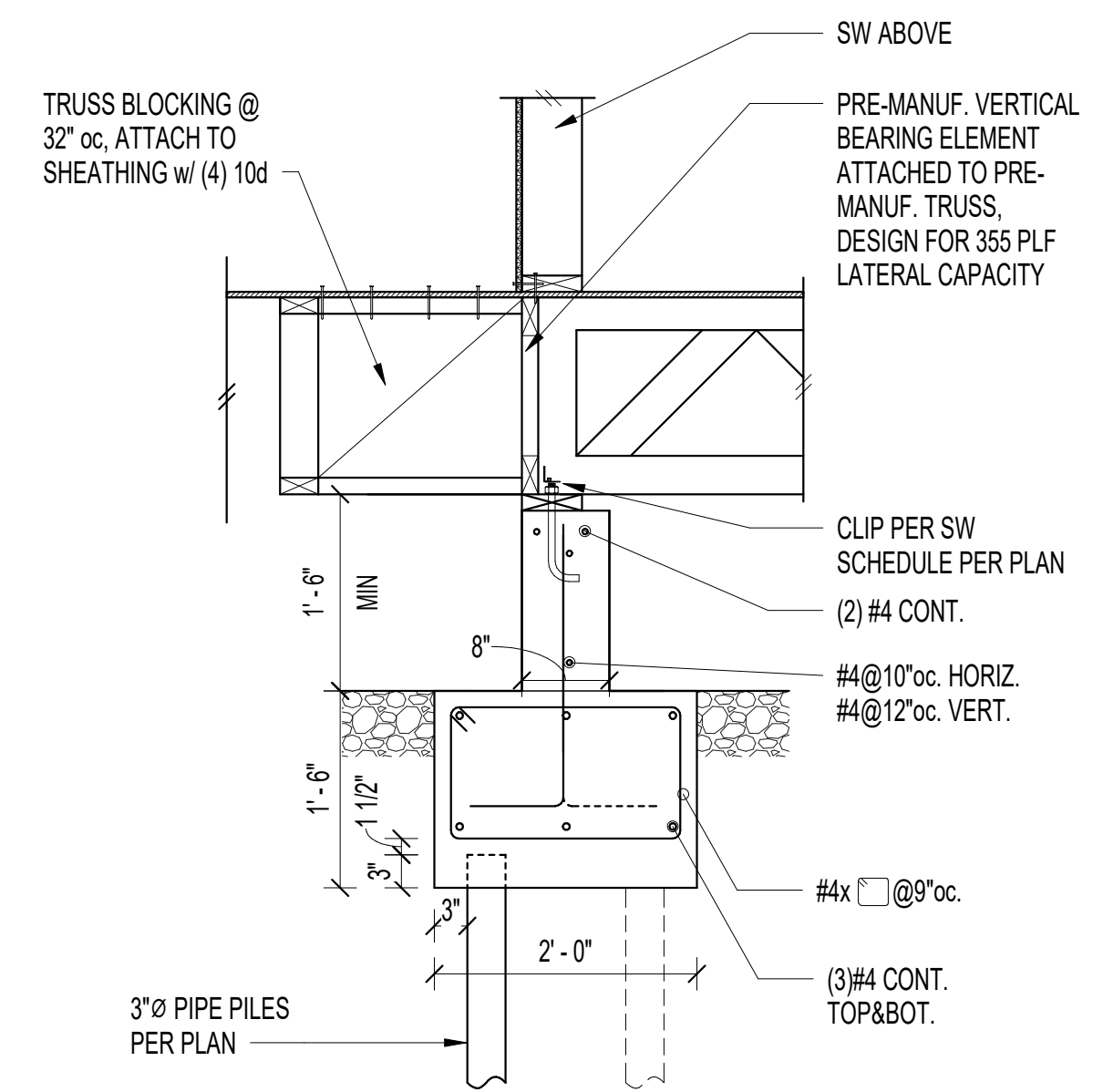
HSS Post Base 1



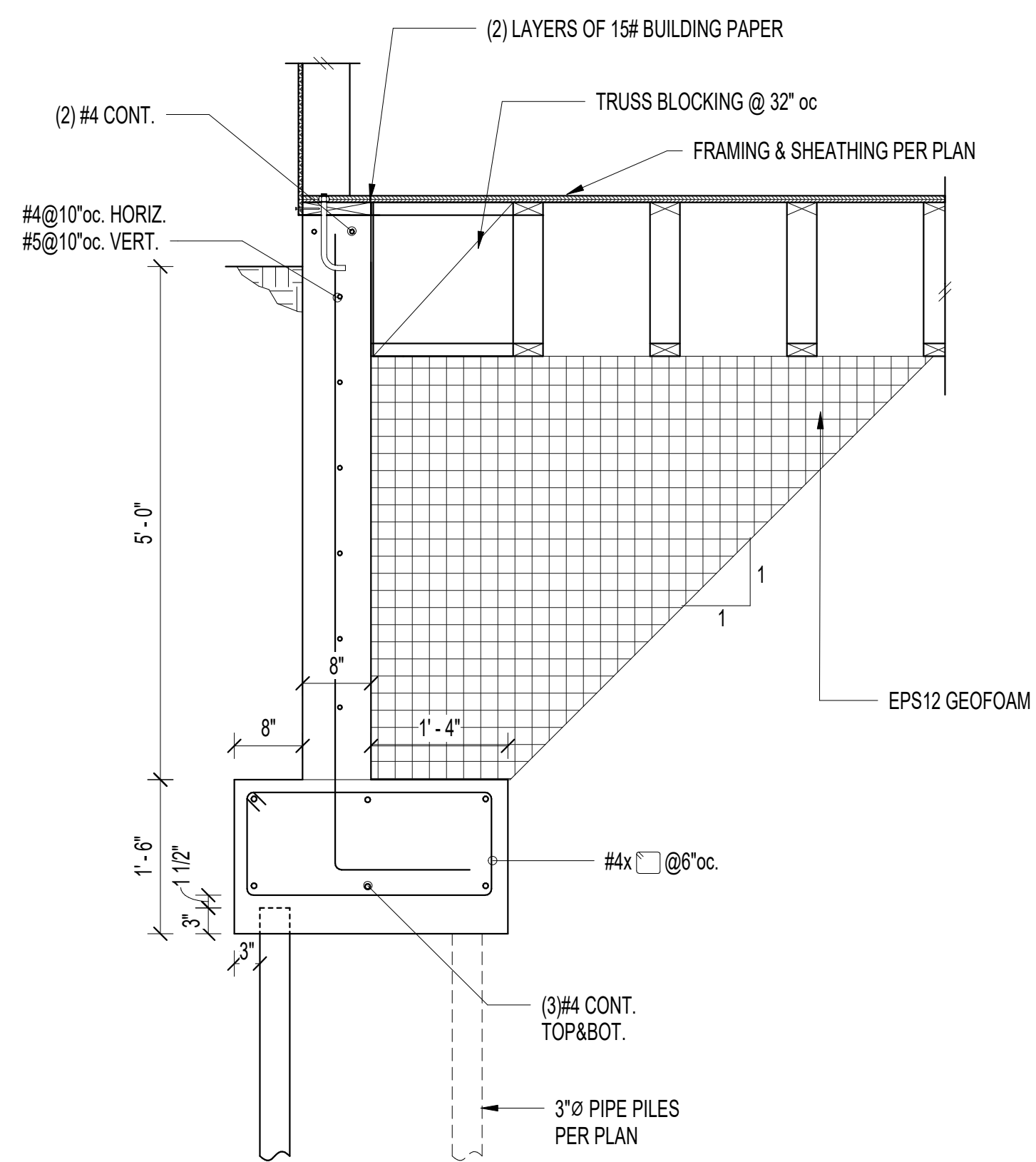
Interior Footing w/ Post & Beam 2



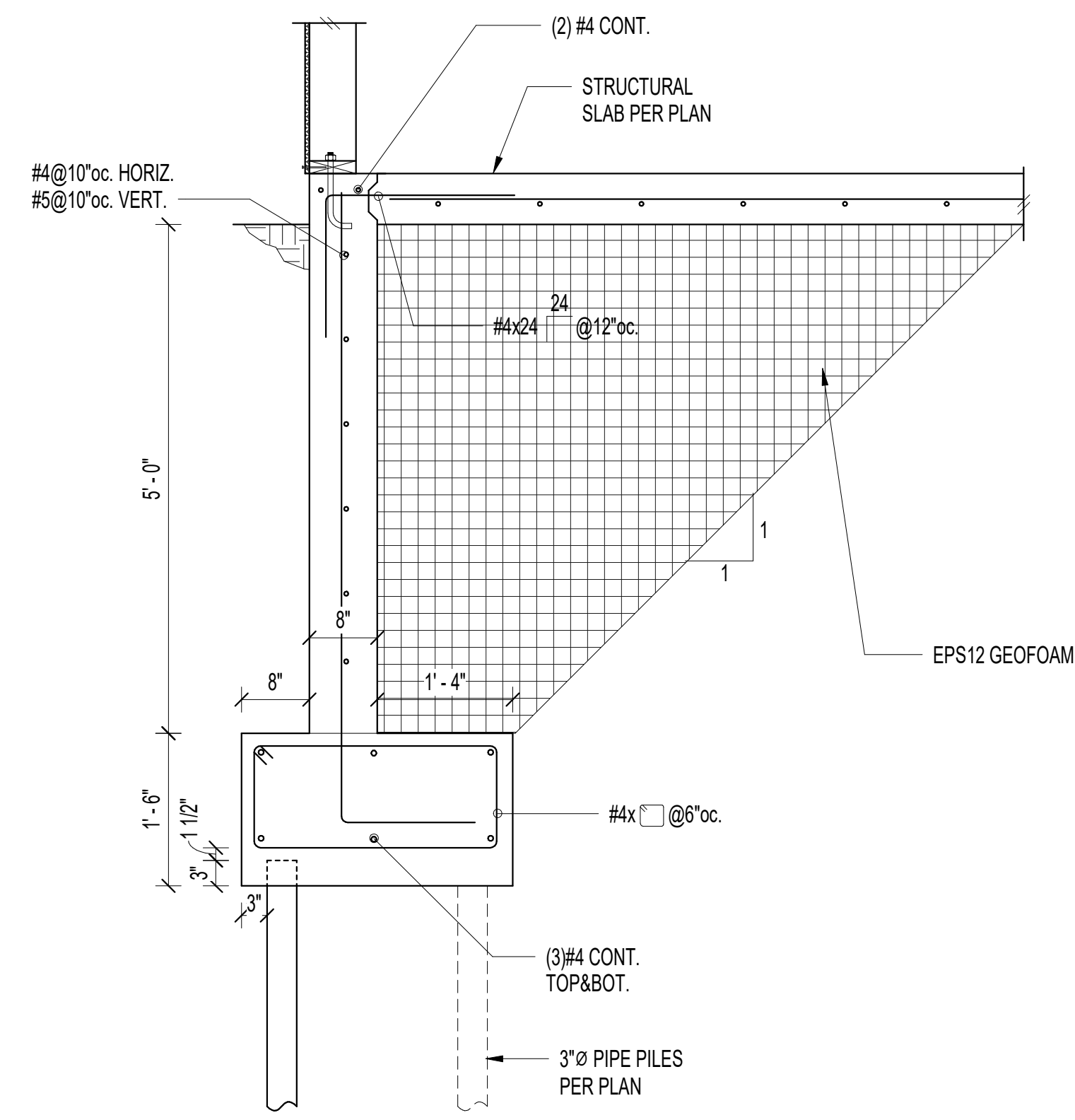
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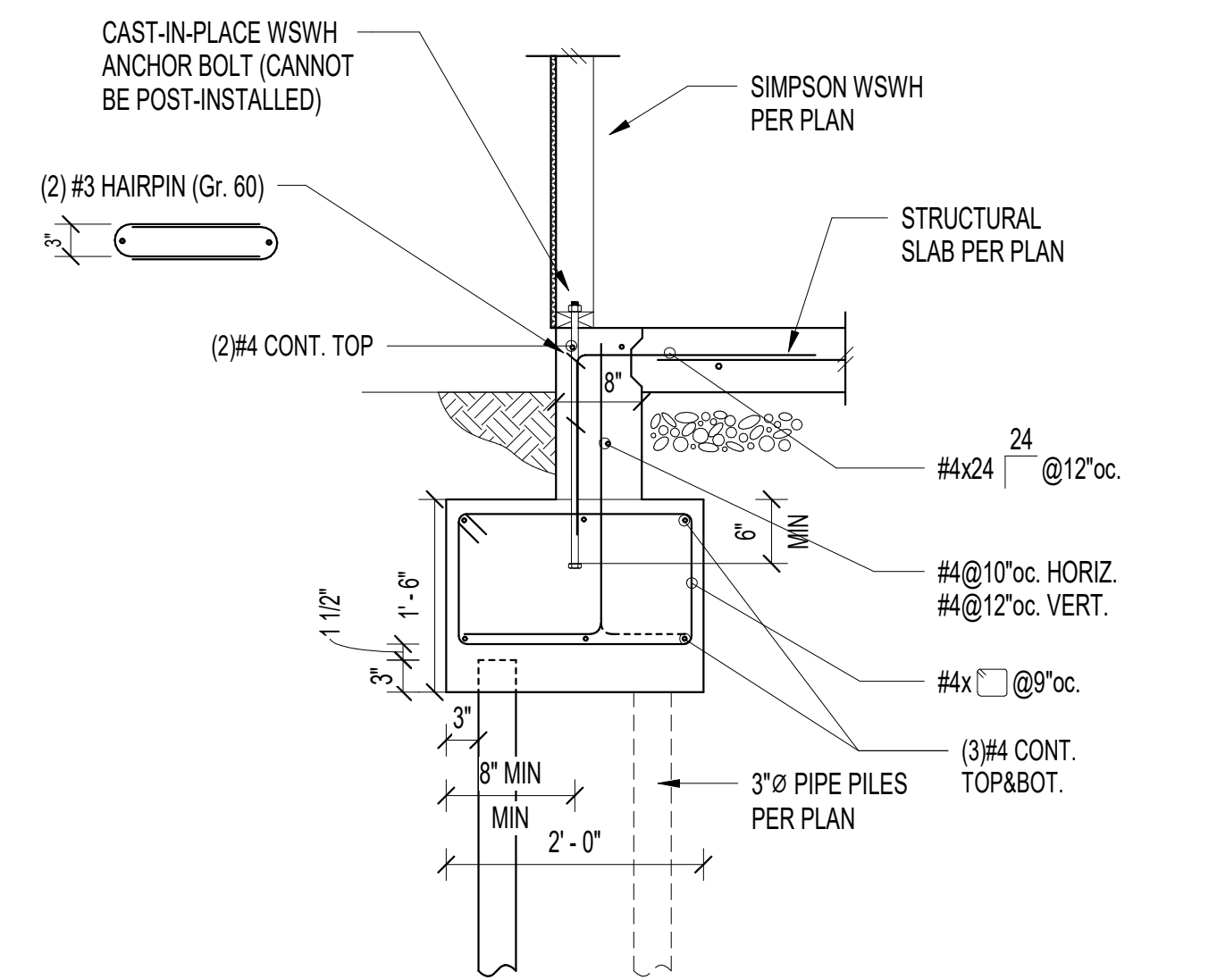
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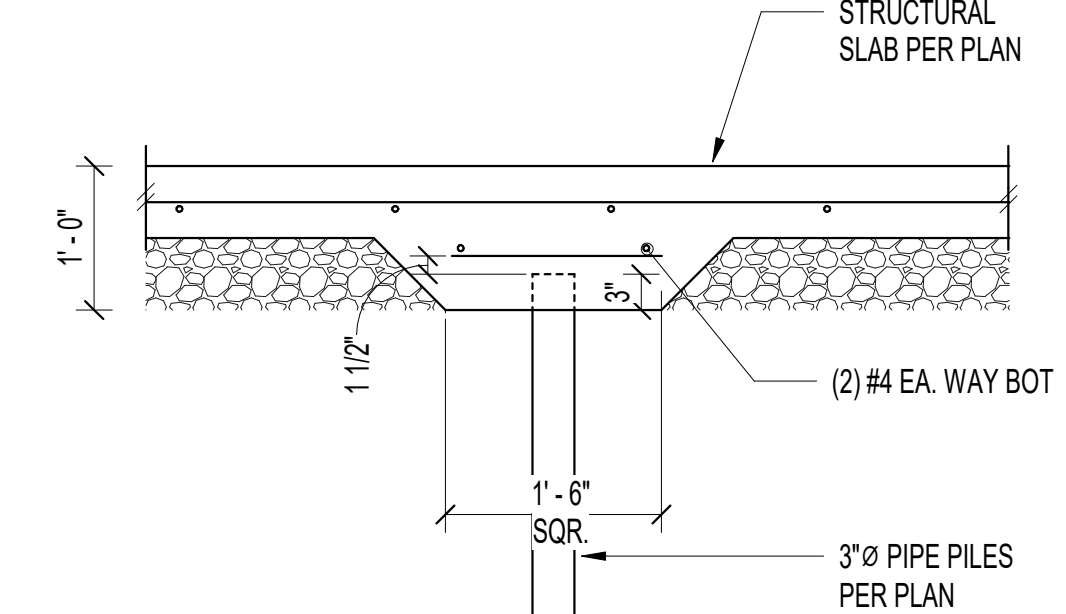
Retaining Wall Grade Beam @ GL-A 9



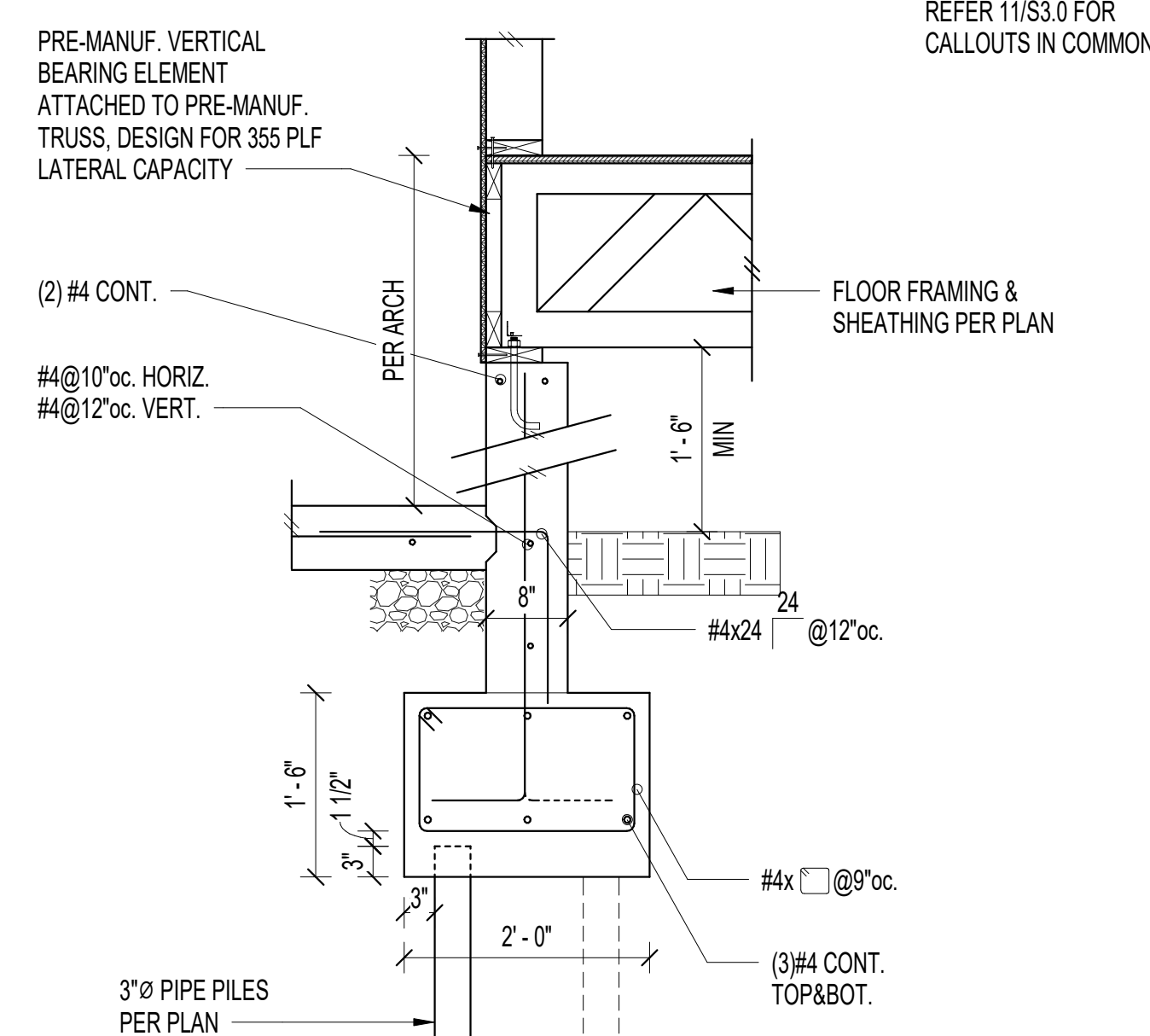
Retaining Wall Grade Beam @ GL-A 10



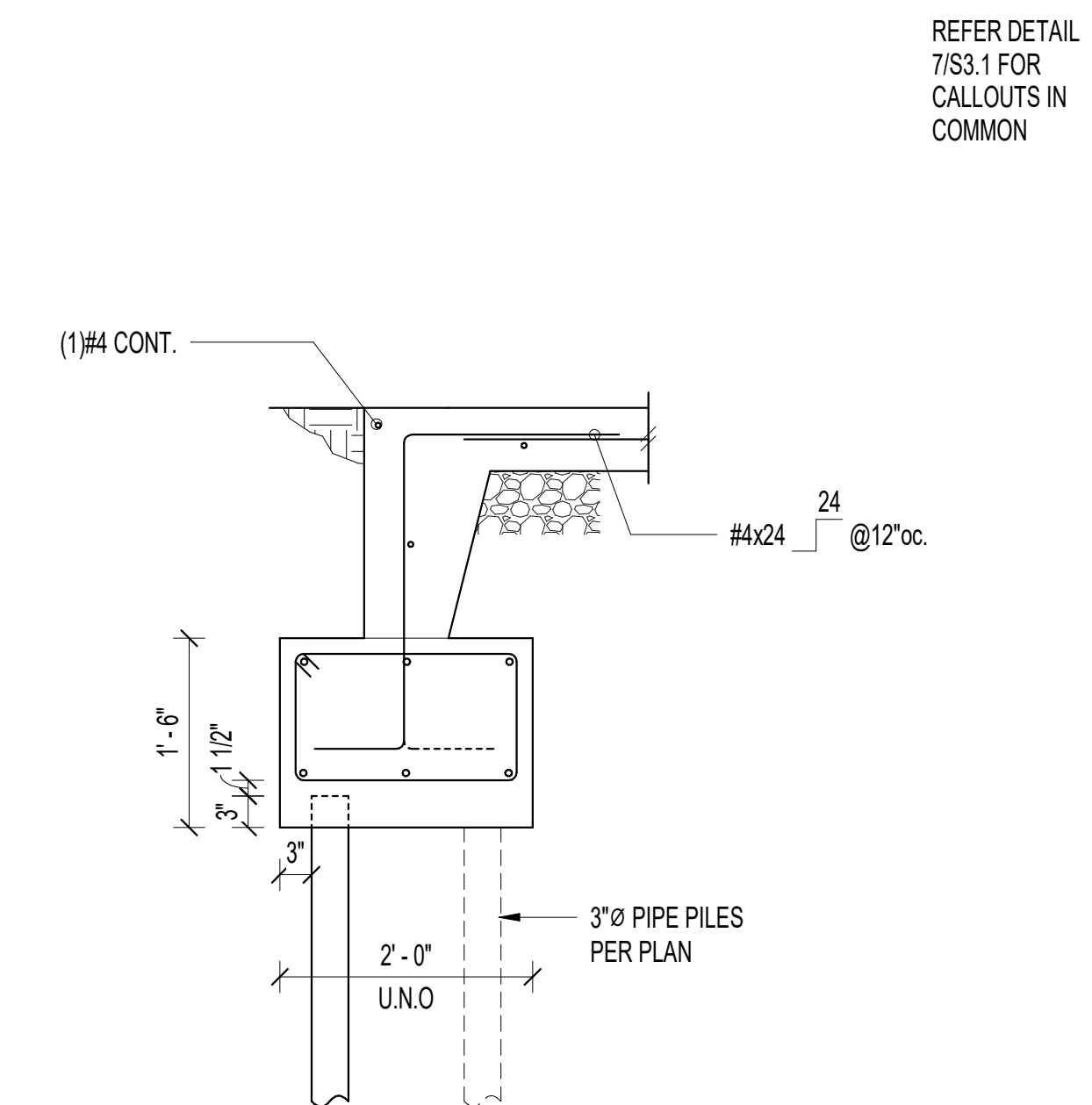
Grade Beam @ WSWH 7



Pile Supported Structural Slab 8



Interior Grade Beam w/Shearwall 11



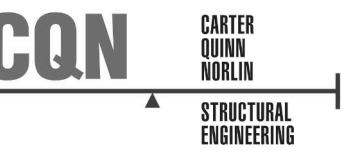
Grade Beam @ Garage Entry 12

**CHU RESIDENCE**  
SITE ANALYSIS  
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Mercer Island, WA 98040

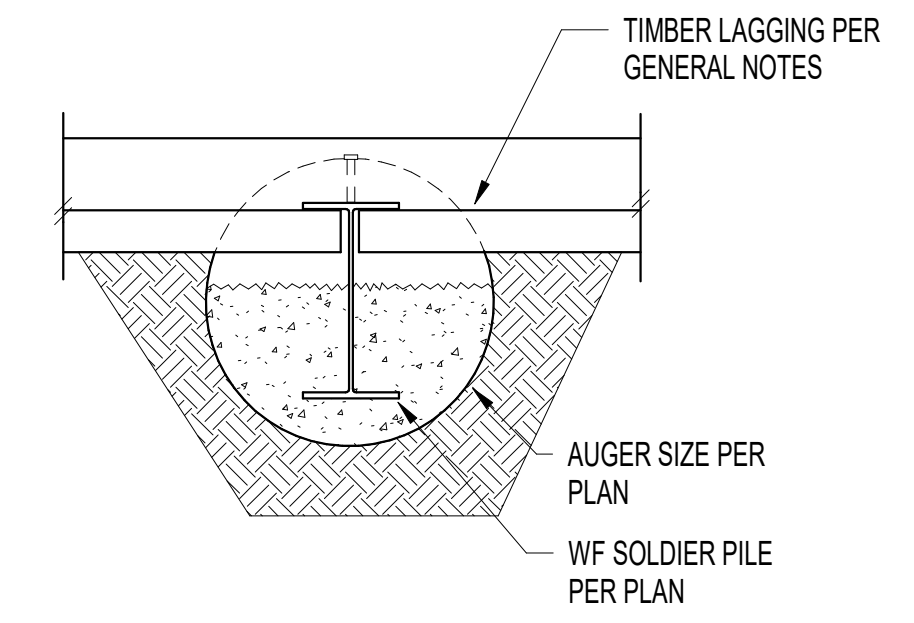
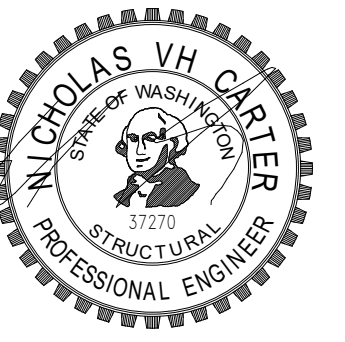
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Concrete Details

**S3.1**

REFER 12/SH3.0 FOR  
CALLOUTS IN COMMON



2033 Sixth Ave #995  
Seattle, WA 98121  
206-264-7784  
www.CQ-N-SE.com

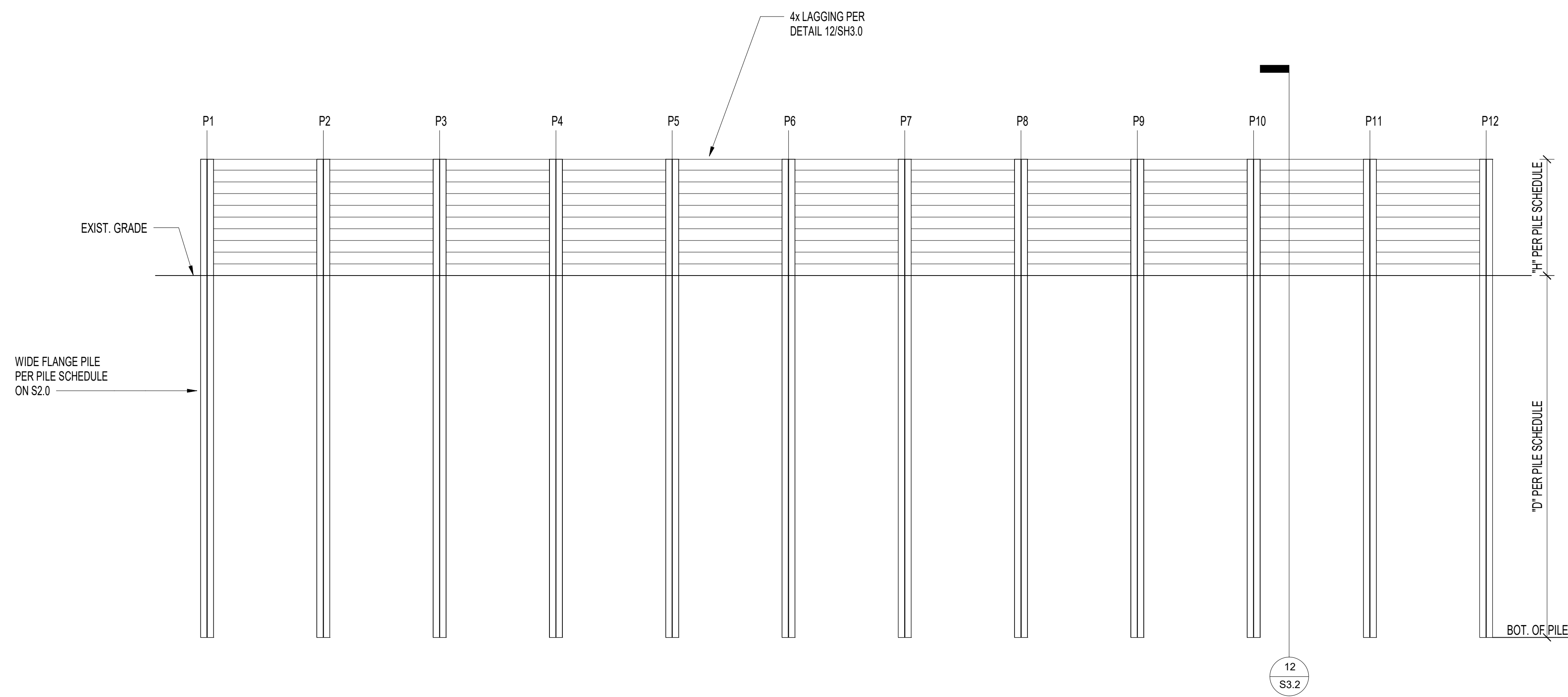


Typical Pile Section 4

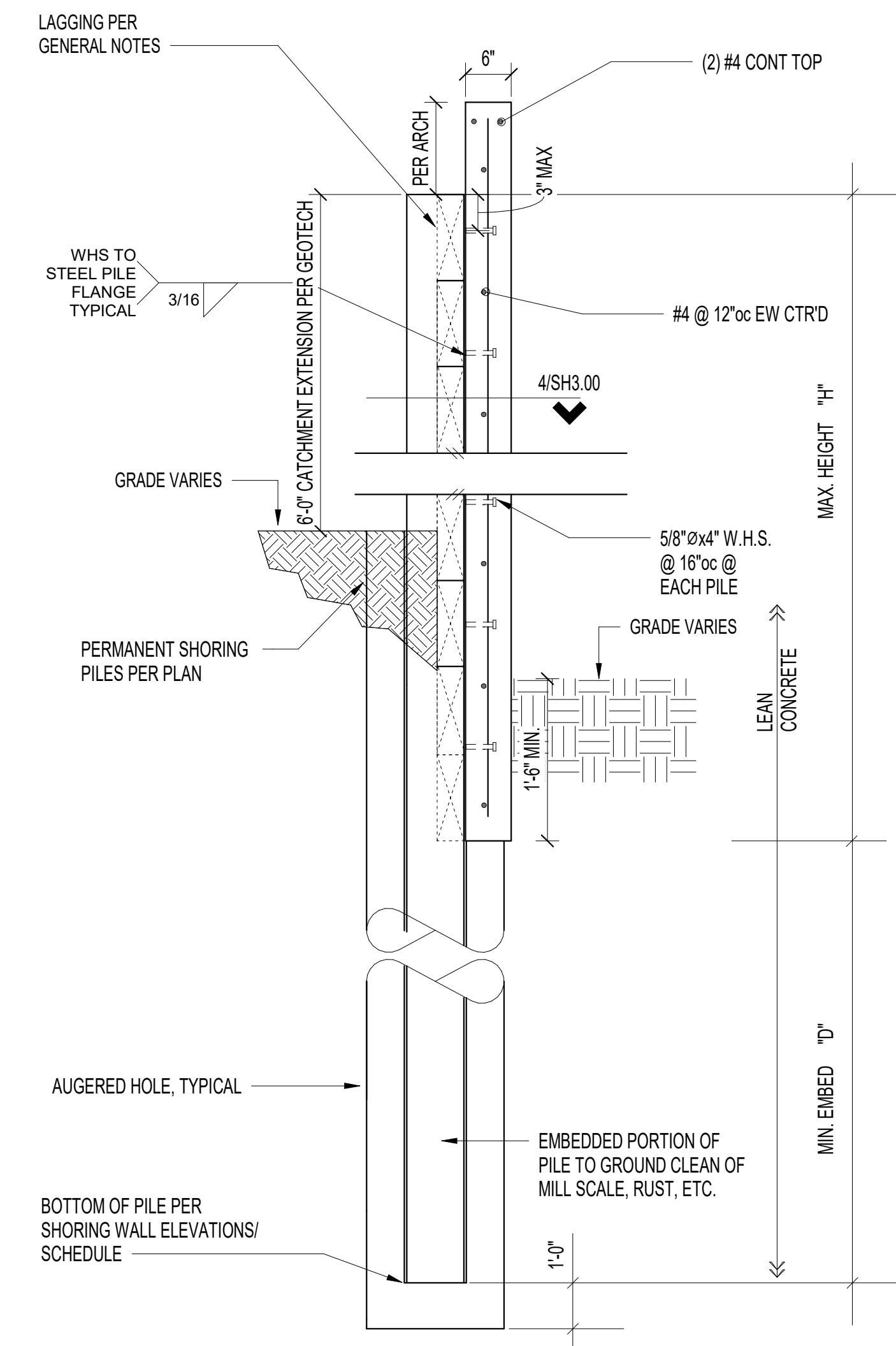
1

2

3



Shoring Elevation 11



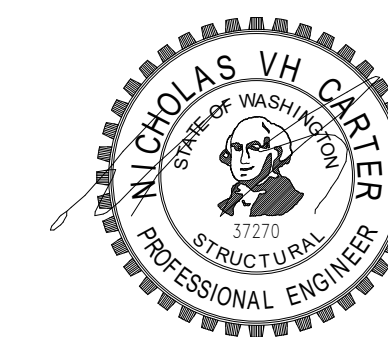
Augercast Shoring Pile Elevation 12

**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

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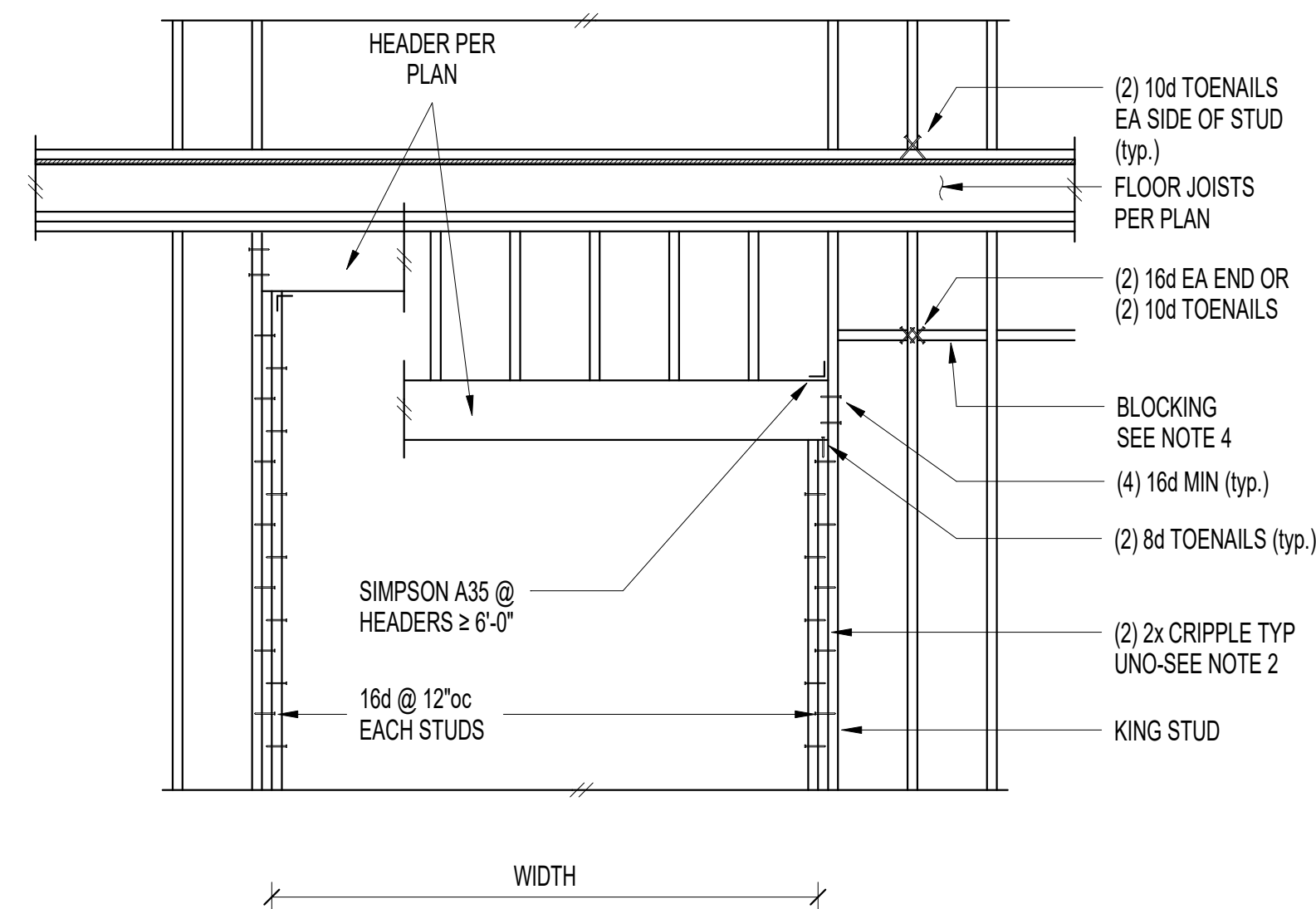
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Shoring Details

**S3.2**



NOTES:

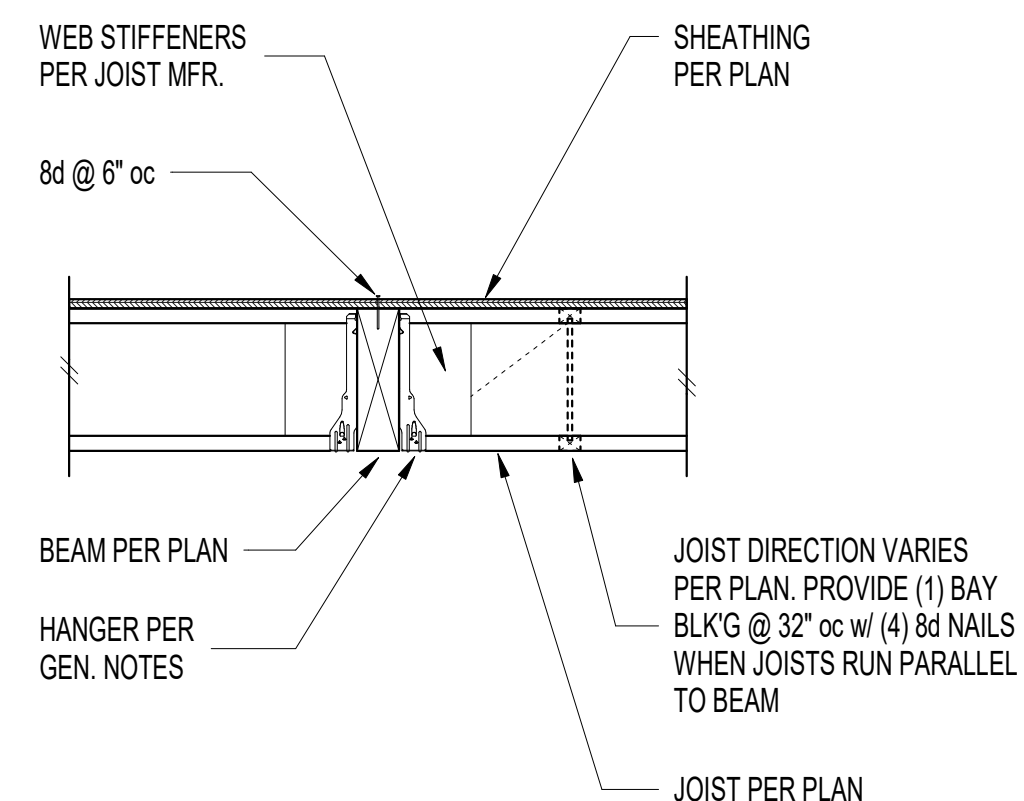
1. HEADERS PER PLAN
2. PROVIDE (2) 2x CRIPPLE STUDS MINIMUM TYPICAL, U.O.N.
3. SEE ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS
4. 2x SOLID BLOCKING REQUIRED AT CEILING LINE, ALL PANEL EDGES, AND @ 8'-0" MAX.



Scale : N.T.S. Typical Wall Opening Framing Elevation 4

1

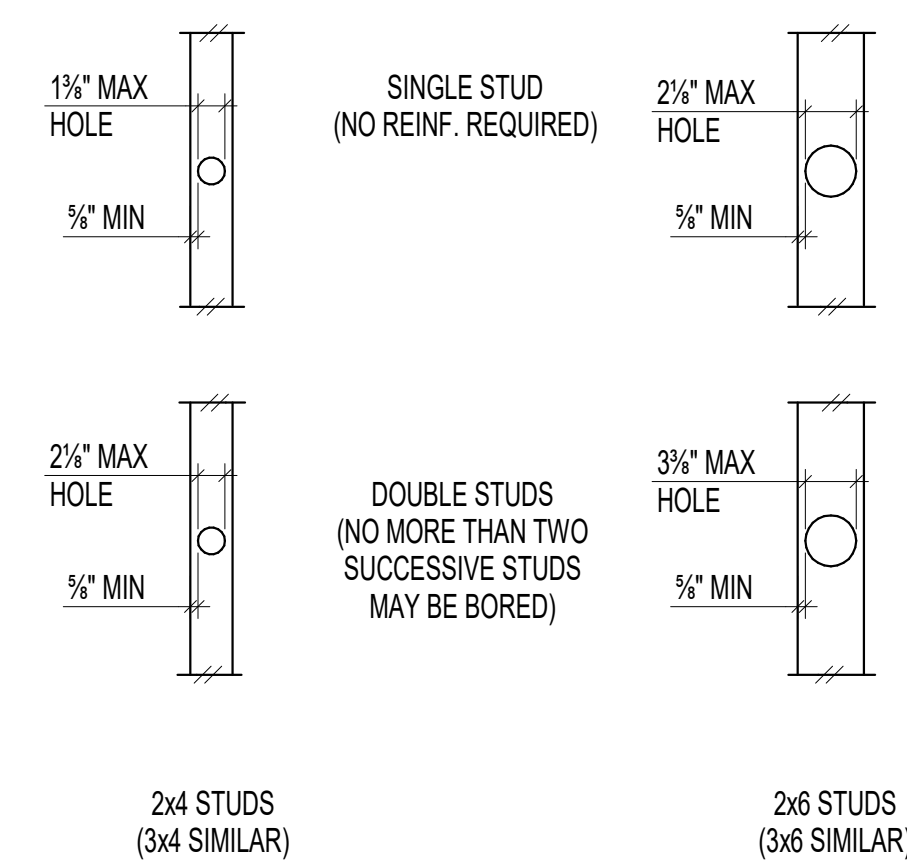
2



5

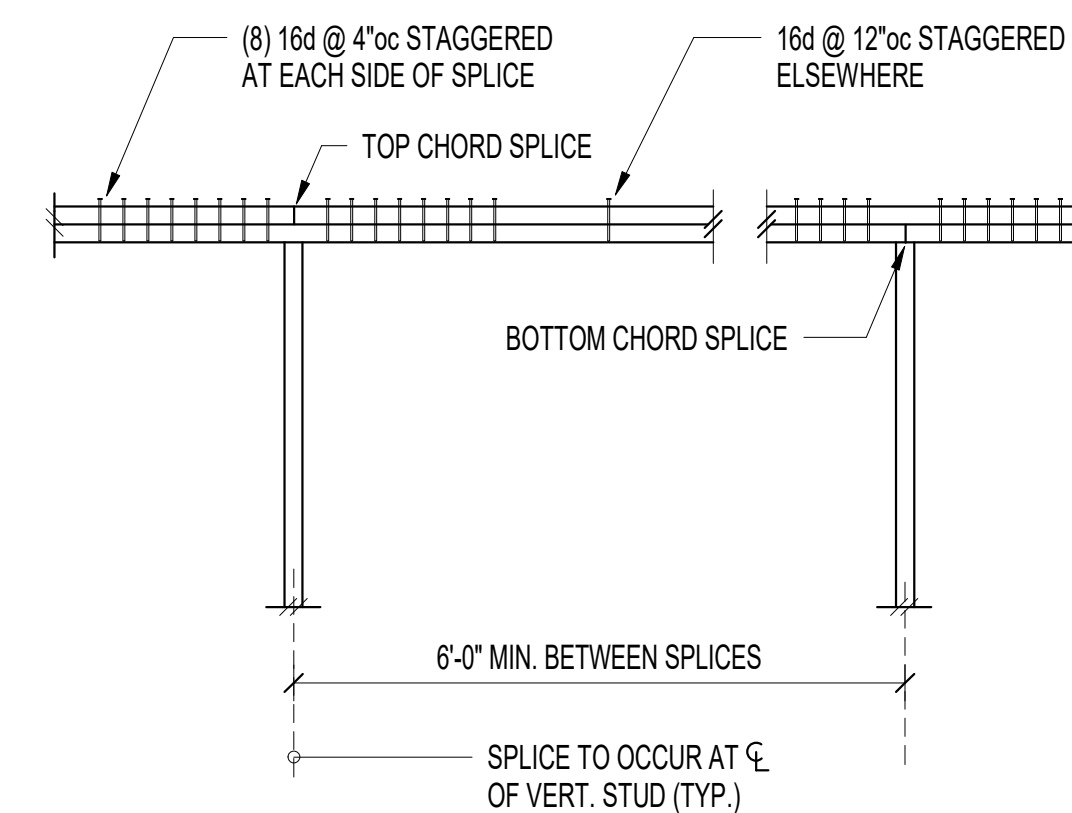
Typical Beam 6

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

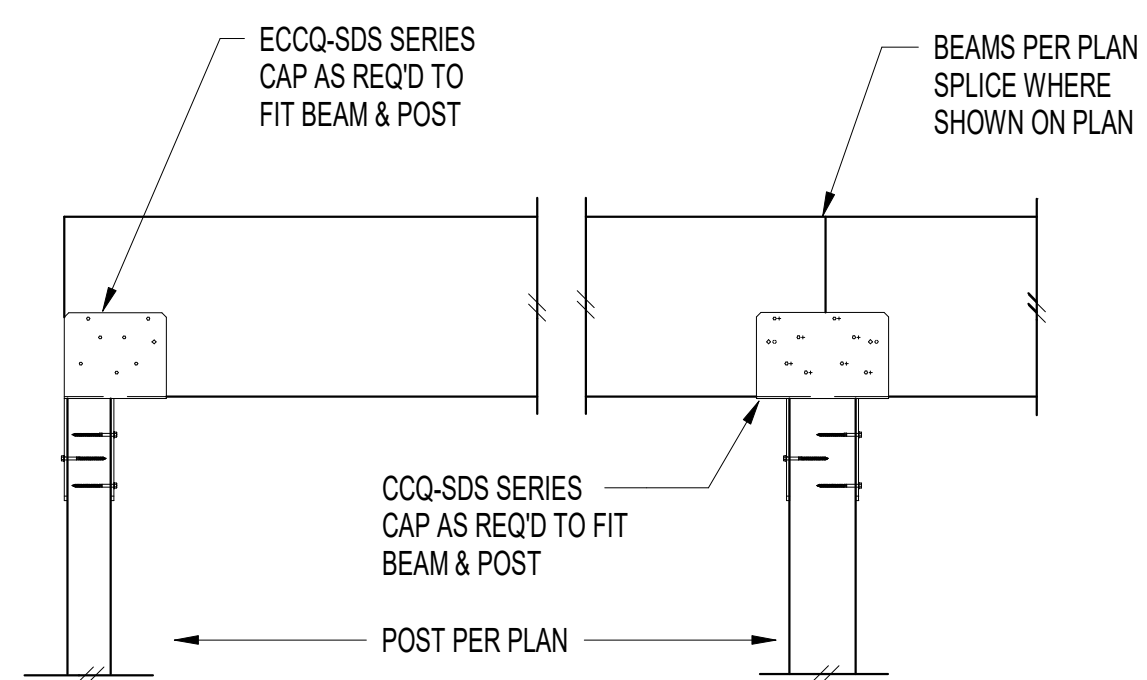


NOTE: BORED HOLES SHALL NOT BE LOCATED @ THE SAME SECTION OF STUD AS A NOTCH.

Holes Allowed Through Studs 7



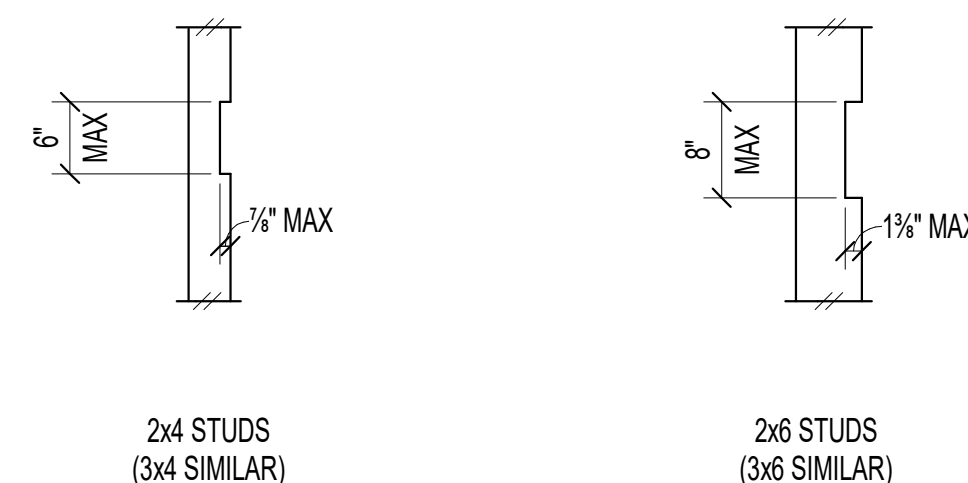
Typical Top Plate Splice - Side View 8



9

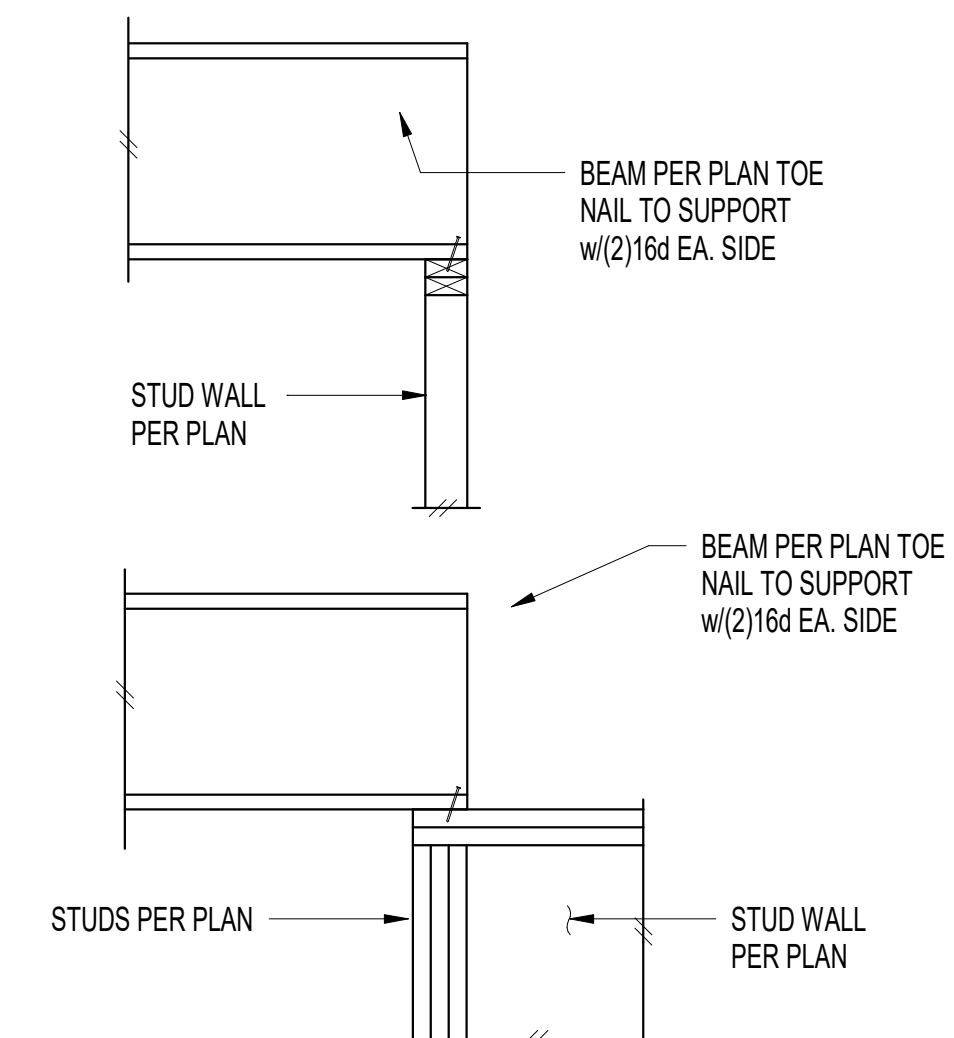
Typical Beam To Isolated Post Connection 10

NOTE: NOTCHES SHALL NOT OCCUR IN MORE THAN (2) SUCCESSIVE STUDS



ANY NOTCH OR HOLE THRU STUDS EXCEEDING ABOVE DETAIL SHALL GET E.O.R. APPROVAL FOR POSSIBLE REINFORCING REQUIREMENTS PRIOR TO DRILLING/NOTCHING

Allowable Notches In Studs 11



Typical Beam To Stud Connection 12

**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date: \_\_\_\_\_

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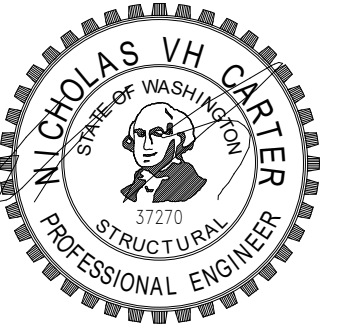
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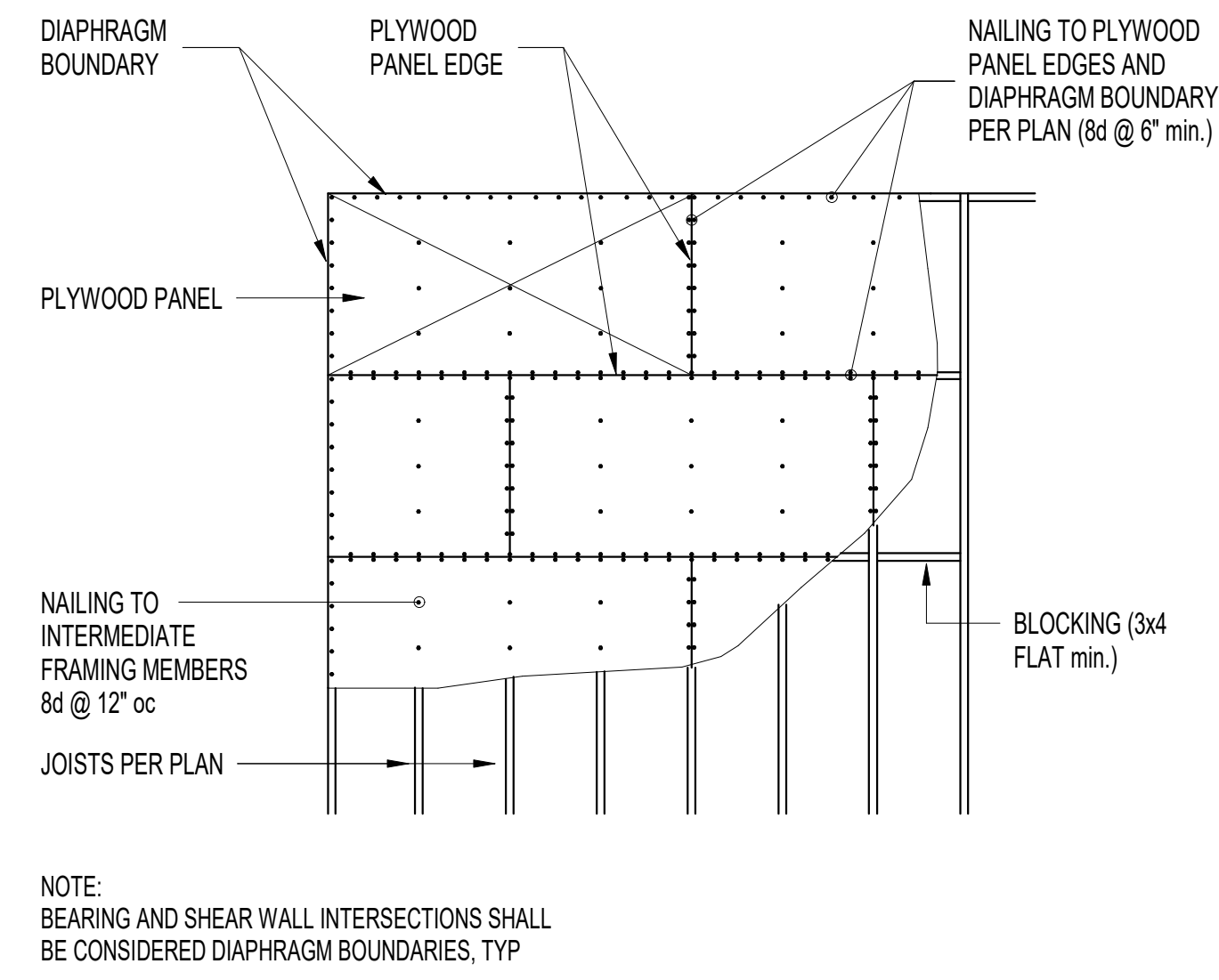
Typical Wood Details

**S6.0**



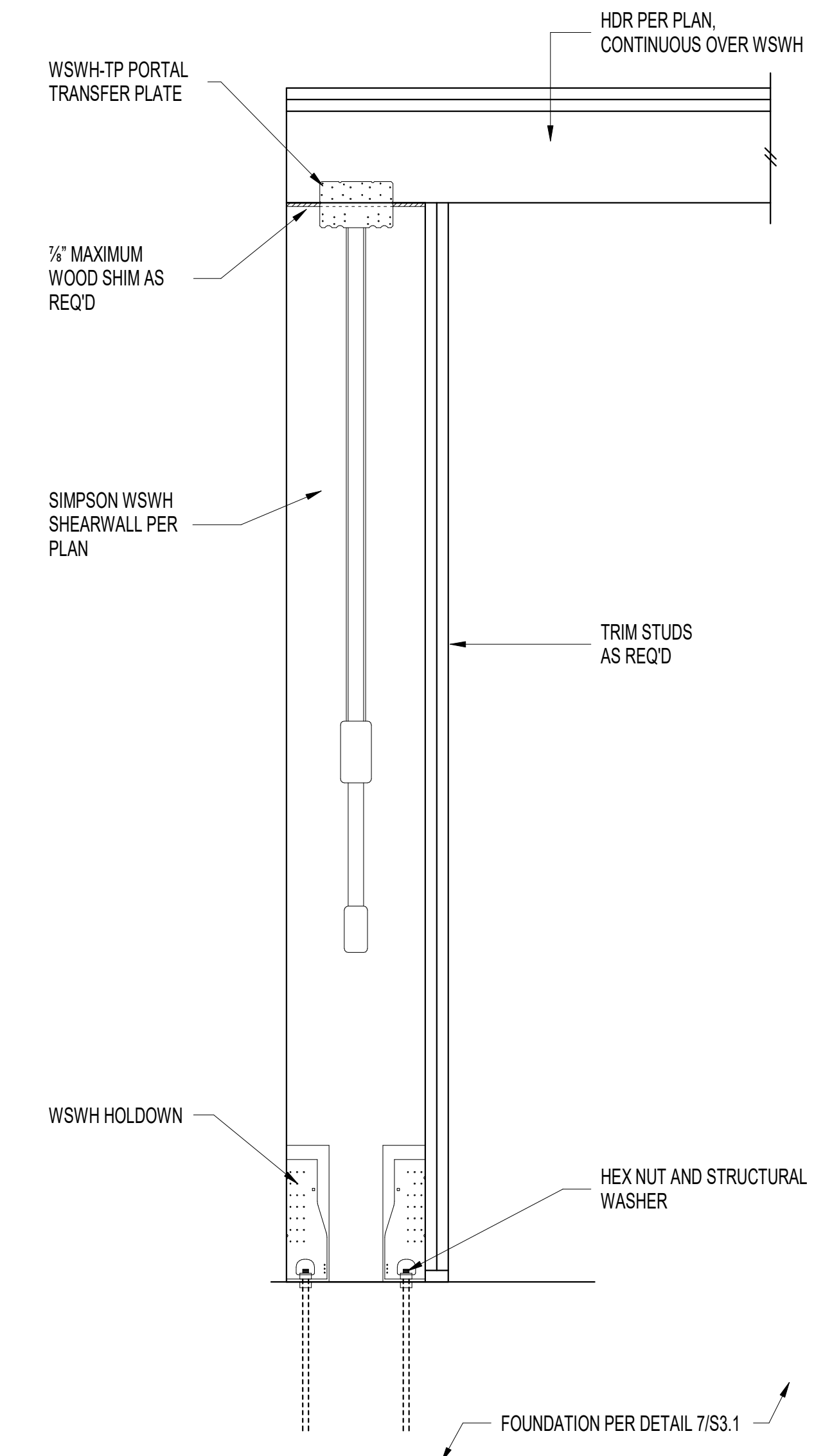


**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

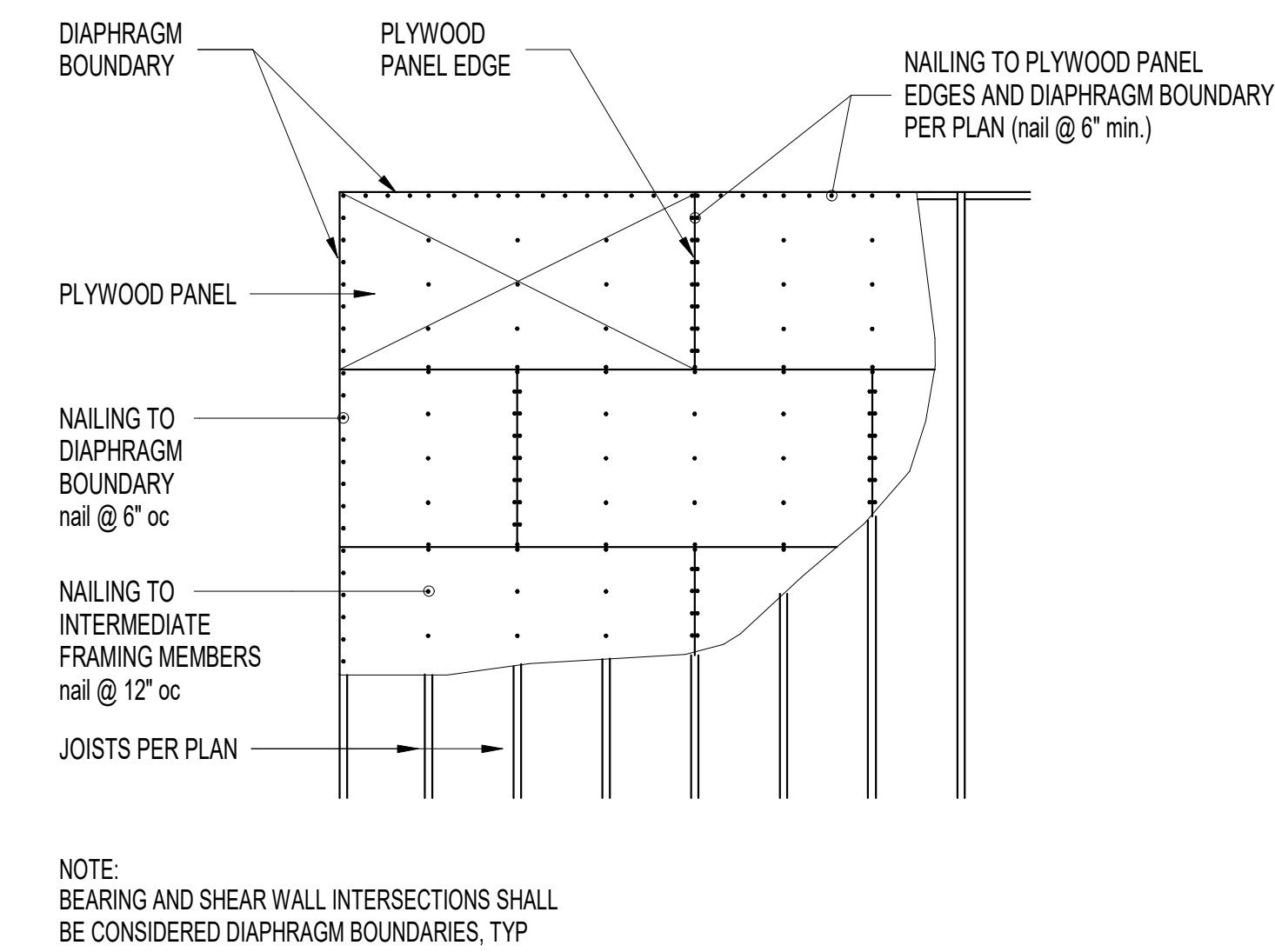


NOTE:  
BEARING AND SHEAR WALL INTERSECTIONS SHALL BE CONSIDERED DIAPHRAGM BOUNDARIES, TYP

Typical Blocked Floor Sheathing Layout 2

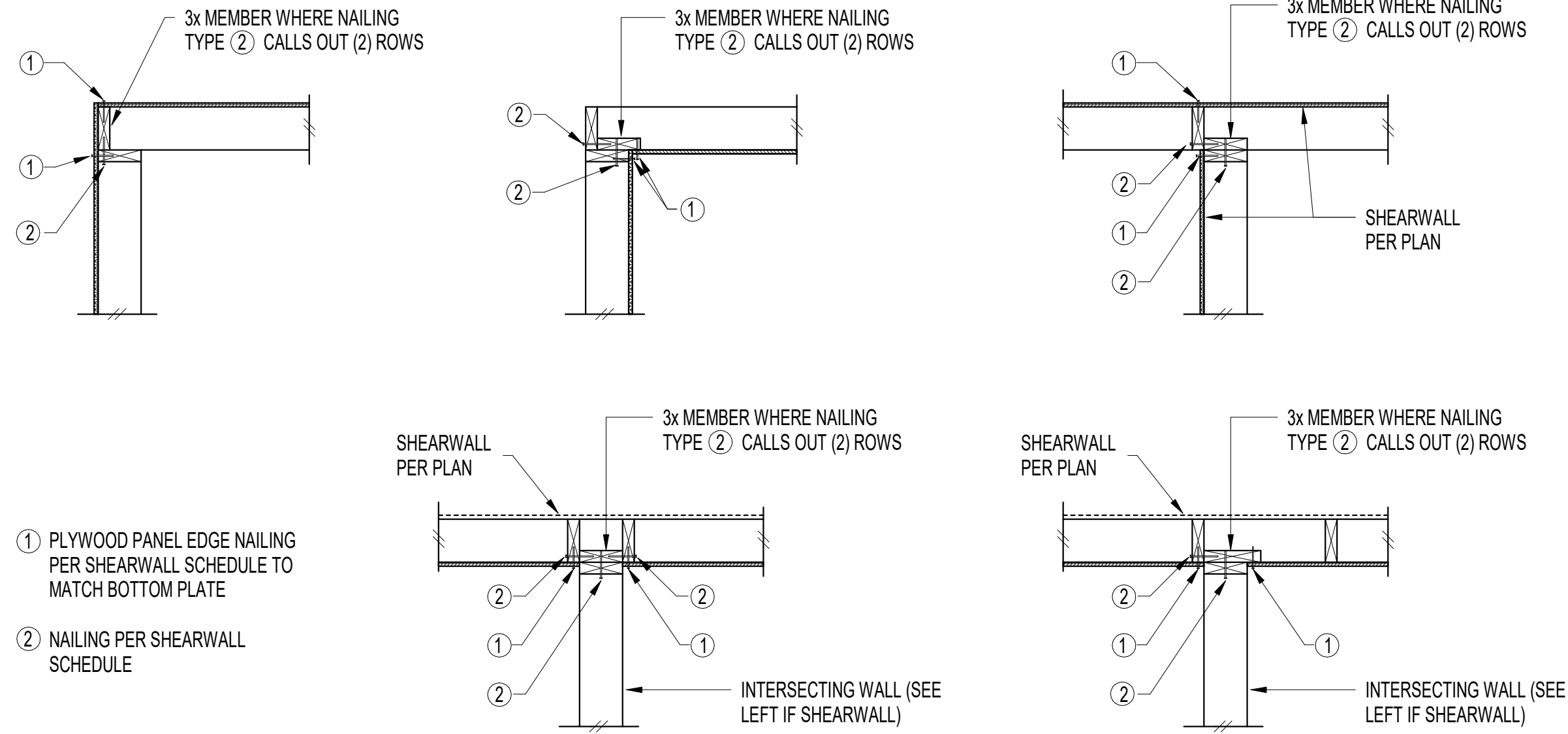


Simpson WSWH Elevation 8

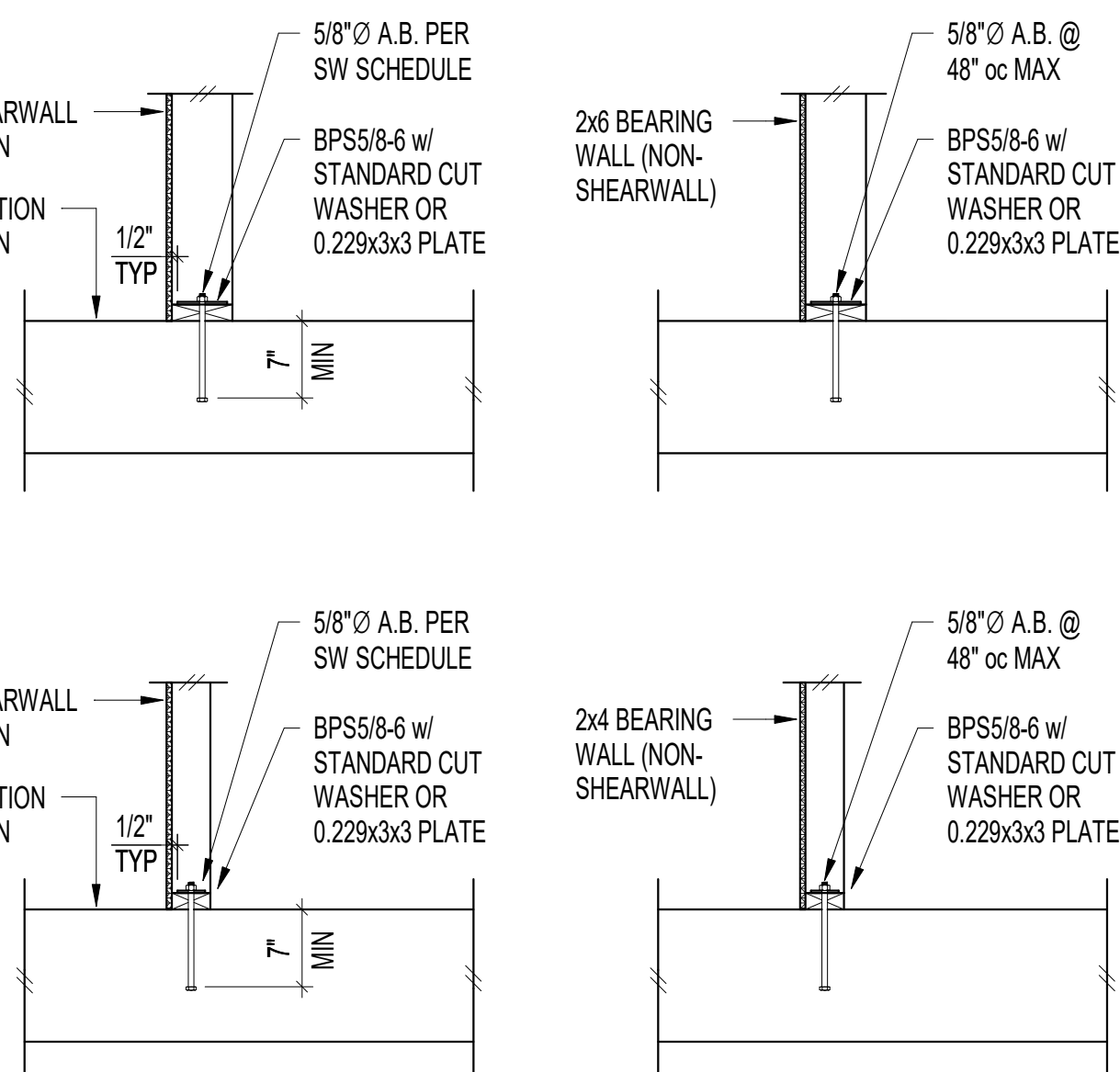


NOTE:  
BEARING AND SHEAR WALL INTERSECTIONS SHALL BE CONSIDERED DIAPHRAGM BOUNDARIES, TYP

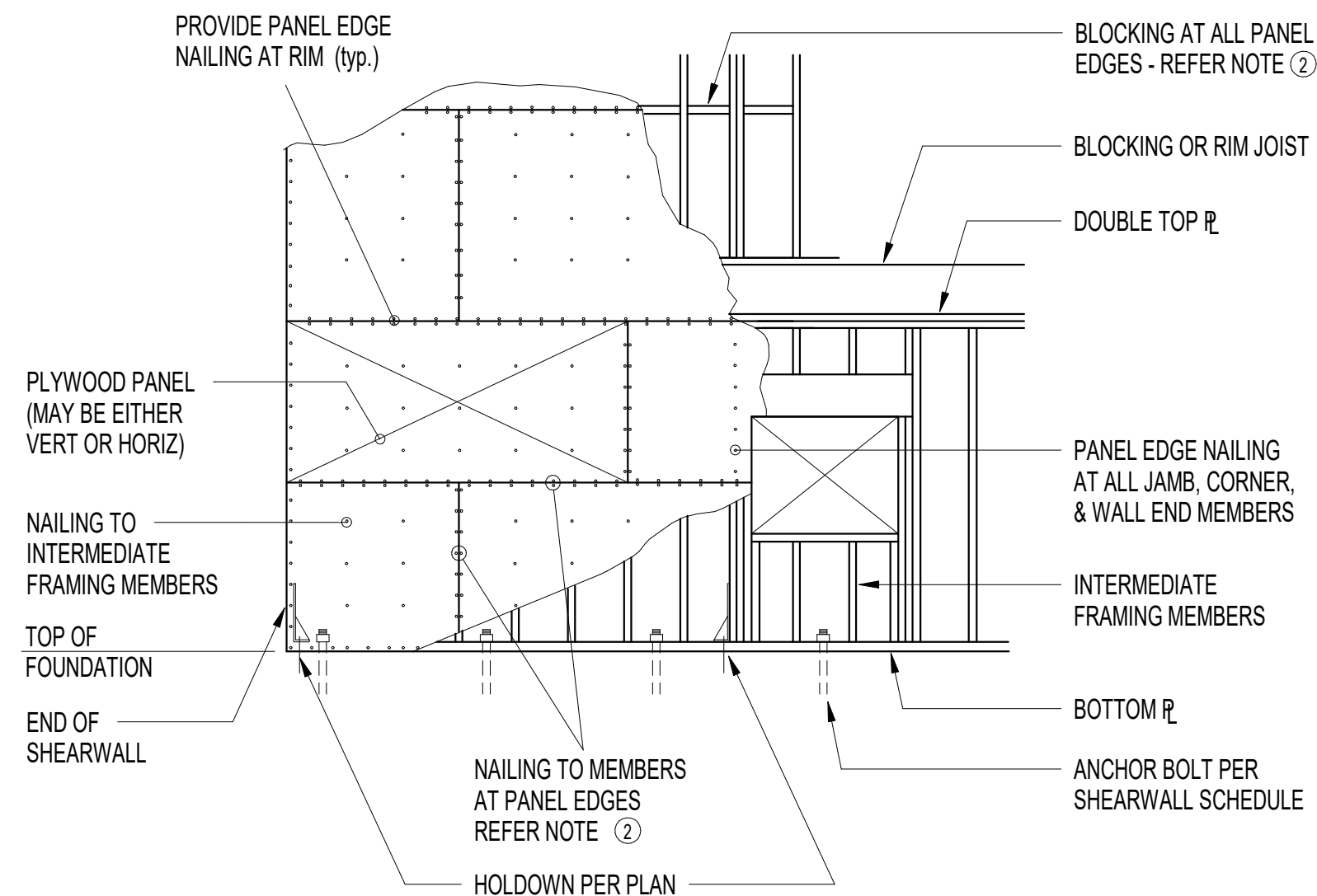
Typical Un-Blocked Plywood Roof/Floor Sheathing Layout 7



Shearwall Intersection 6



Typical Wood Bearing Plate 9



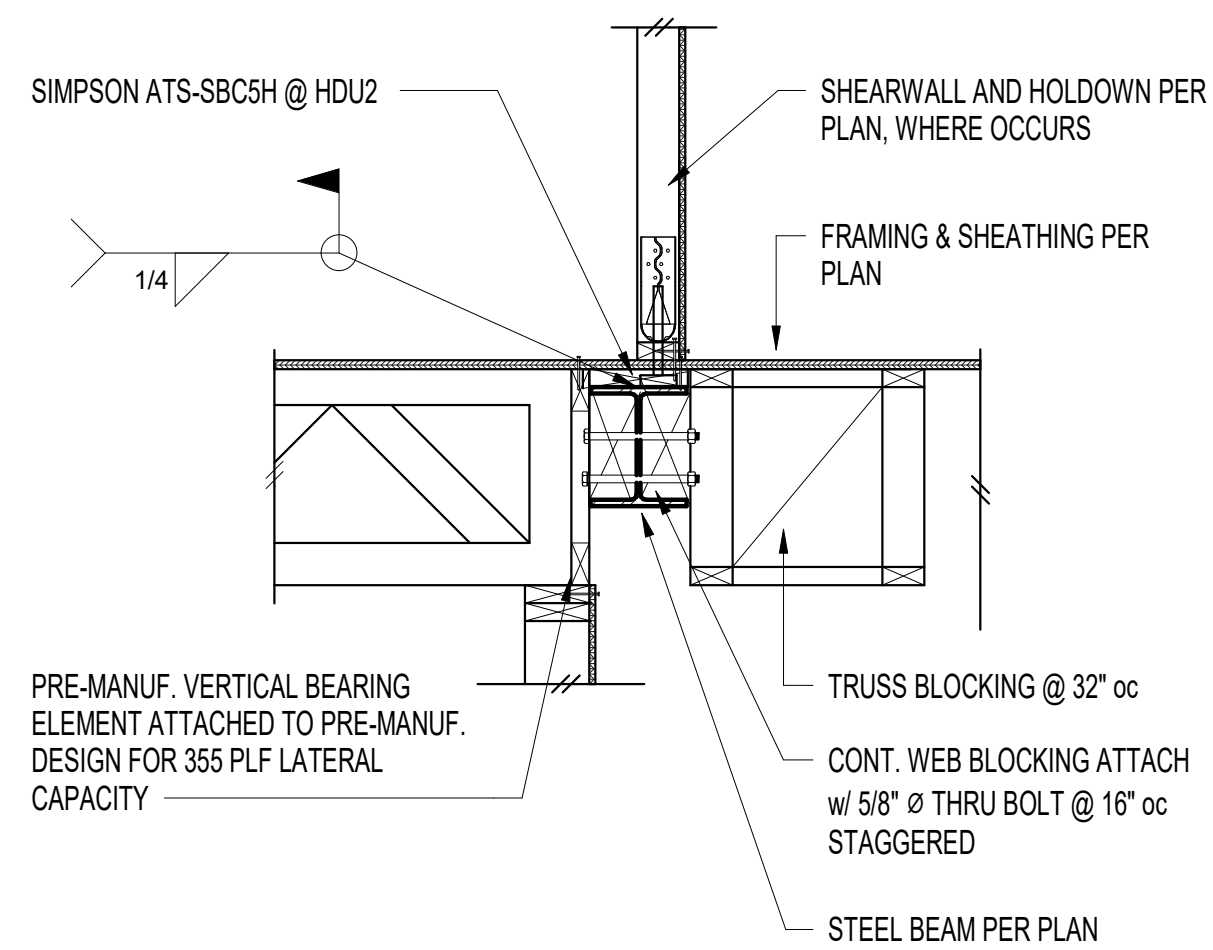
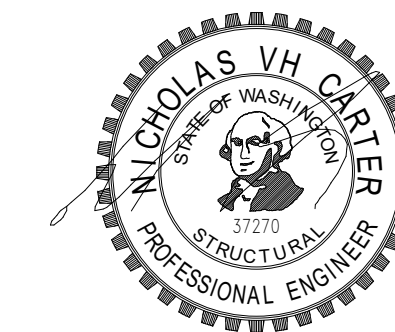
SW#	SHEATHING	BLOCKING	PANEL EDGE NAILING (1)	ATTACHMENT TO TOP PLATE (3)	BOTTOM PLATE ATTACHMENT			CAPACITY (plf) SEISMIC
					LSL RIM JOIST REQ'D	FACENAILING TO WOOD BELOW (4)	ANCHOR BOLTING TO CONC. BELOW (5)	
SW1	15/32" APA RATED SHEATHING	YES	8d @ 6" oc	CLIP @ 24" oc	1 3/4" LSL	16d @ 6" oc	5/8" @ 48" oc	240 PLF
SW2	15/32" APA RATED SHEATHING	YES	8d @ 4" oc (2)	CLIP @ 20" oc	1 3/4" LSL	16d @ 4 1/2" oc	5/8" @ 48" oc	355 PLF

- (1) NAILS SHALL BE 8d COMMON. NAILING APPLIES TO ALL PANEL EDGES (BLOCK ALL UNSUPPORTED PANEL EDGES), TOP & BOTTOM PLATES AND BLOCKING. NAIL TO INTERMEDIATE FRAMING MEMBERS w/ 8d @ 12" oc.
- (2) FRAMING AT ADJOINING PANEL EDGES SHALL BE 3 INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED.
- (3) CLIP SHALL BE EITHER A35, LTP4

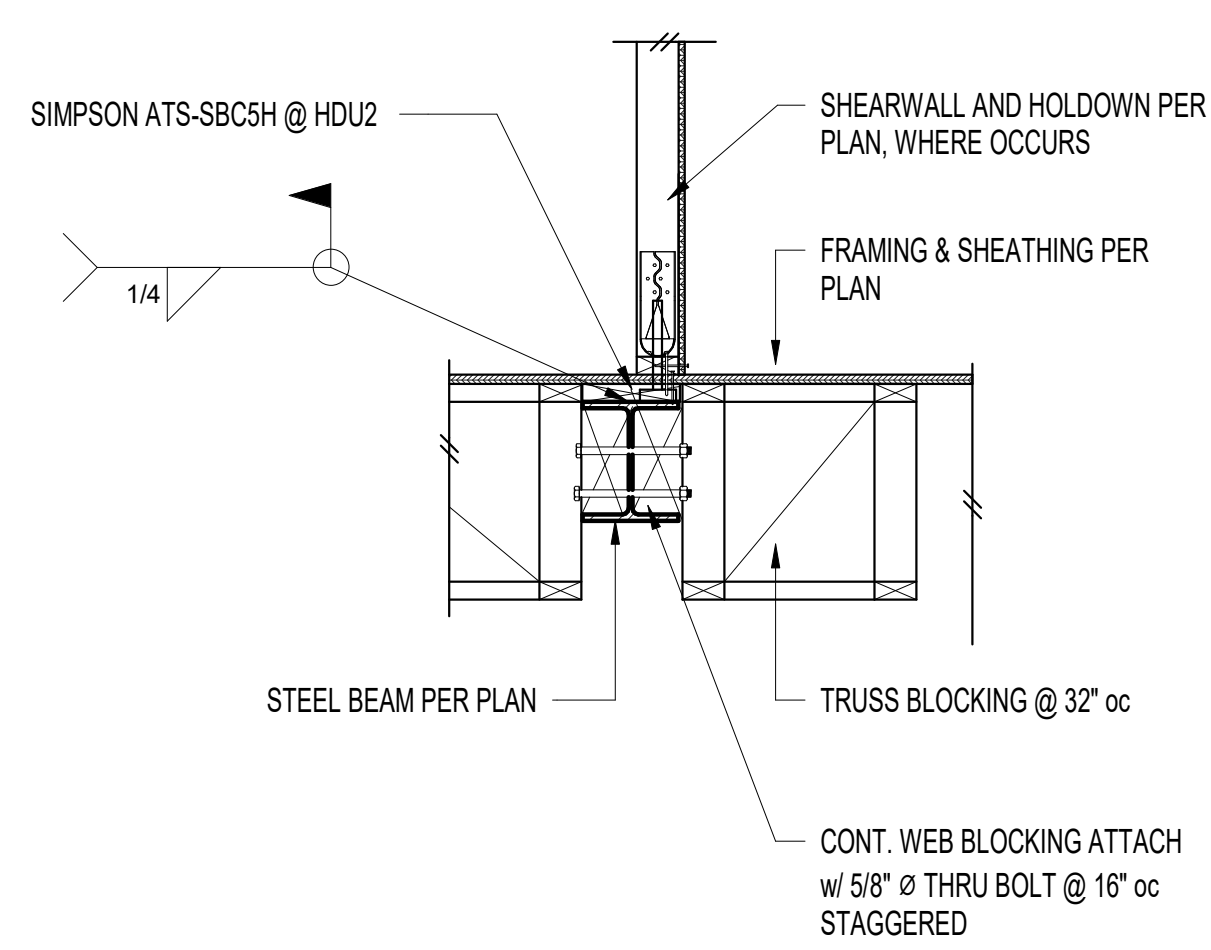
- (4) NAILS SHALL BE 16d BOX (0.1350x3 1/2") OR 10d COMMON (0.1480x3 1/2") SCREWS SHALL BE SIMPSON SDS25500 (1/4" x 5" min)
- (5) PROVIDE 3"x3"x0.229" PLATE WASHER AT ALL ANCHOR BOLTS. ANCHOR BOLTS SHALL BE POSITIONED SUCH THAT PLATE EDGE OF PLATE WASHER IS WITH 1/2" OF THE EDGE OF THE BOTTOM PLATE. (PLATE WASHERS MAY BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 13/16" AND A LENGTH NOT TO EXCEED 1 1/2")

Date: \_\_\_\_\_  
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Scale: \_\_\_\_\_  
Sheet: \_\_\_\_\_  
Typical Wood Details

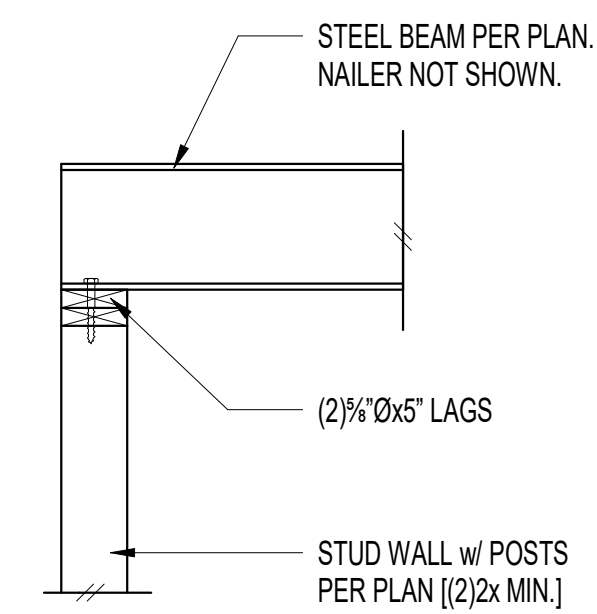
**S6.1**



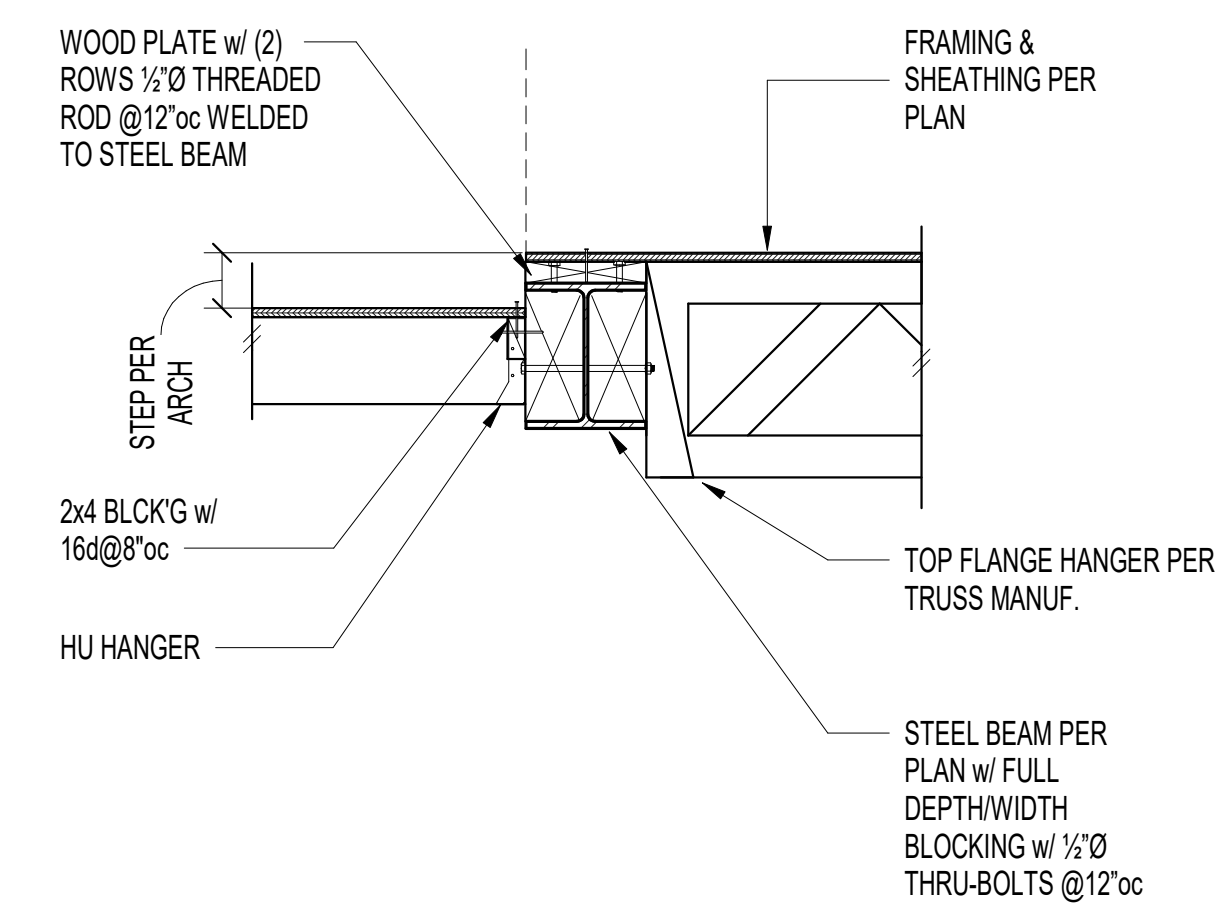
Steel Beam Holdown Transfer 1



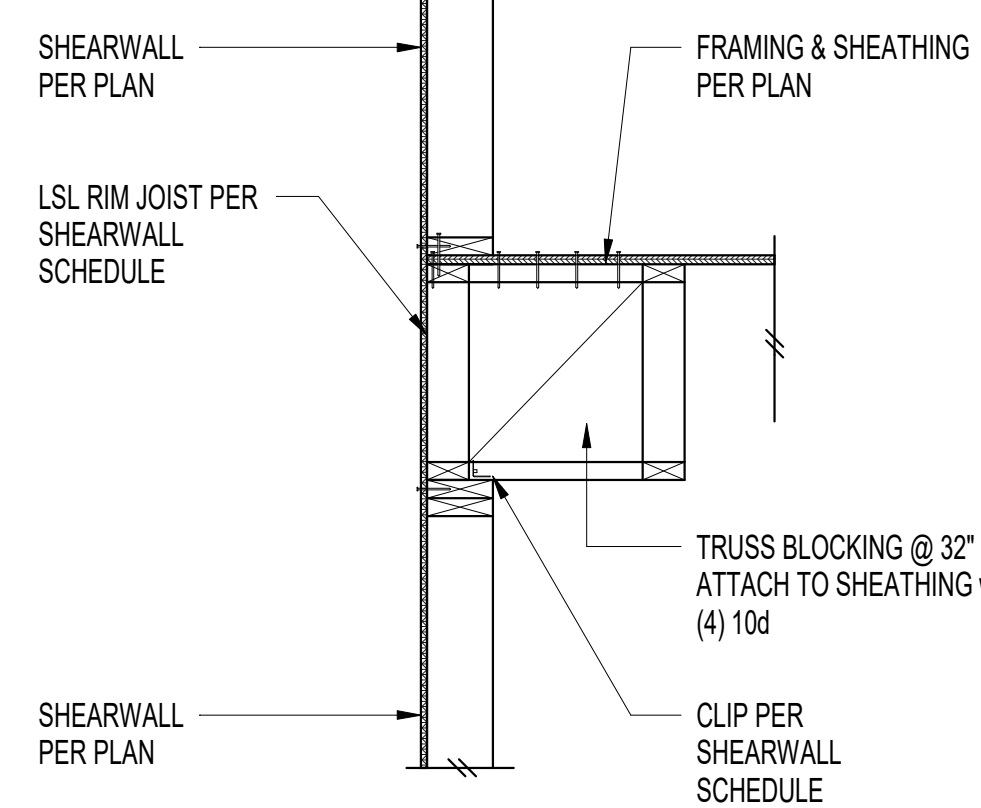
Steel Beam Holdown Transfer 2



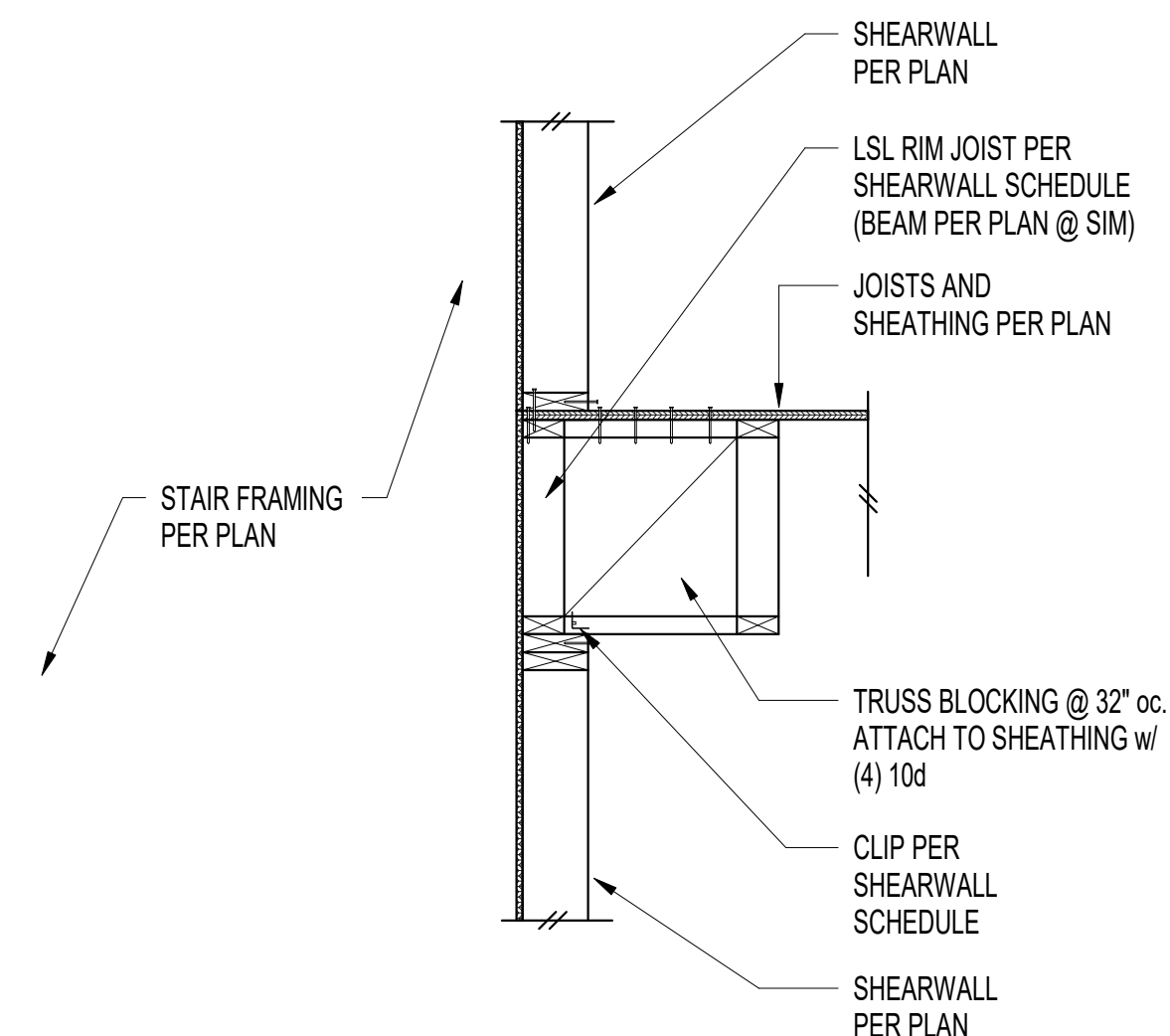
Steel Beam to Wood Wall 3



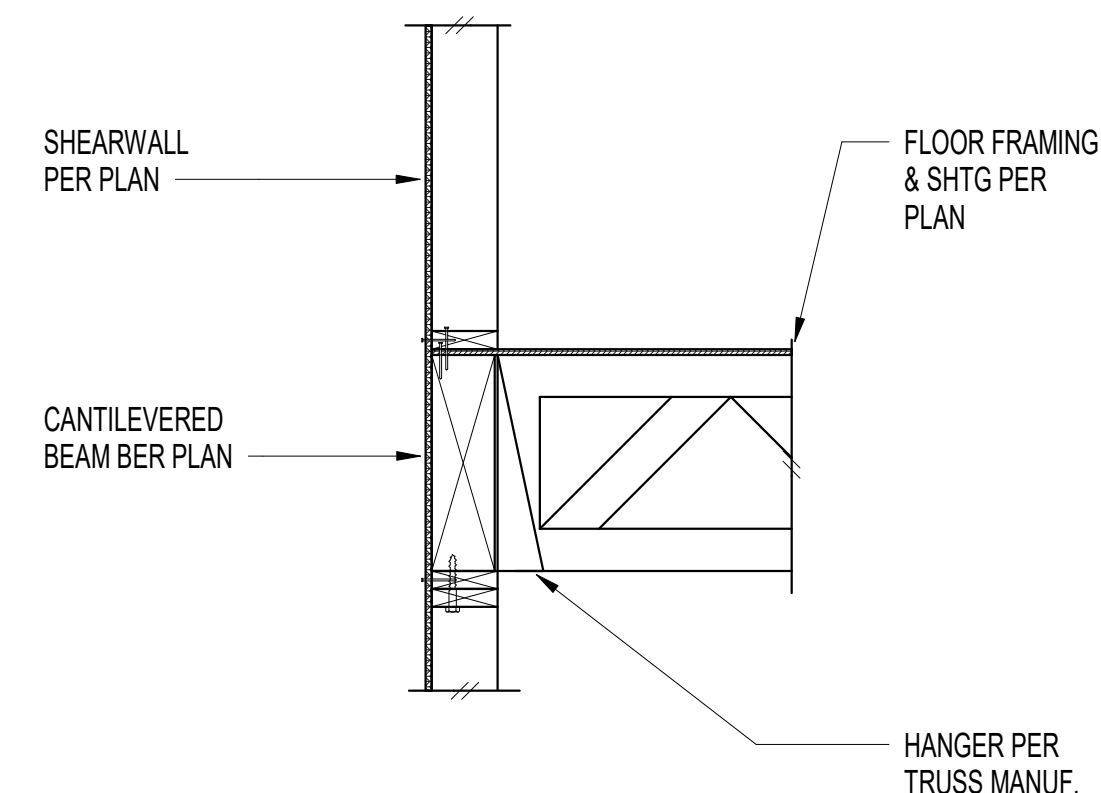
Deck Framing @ WF Beam 4



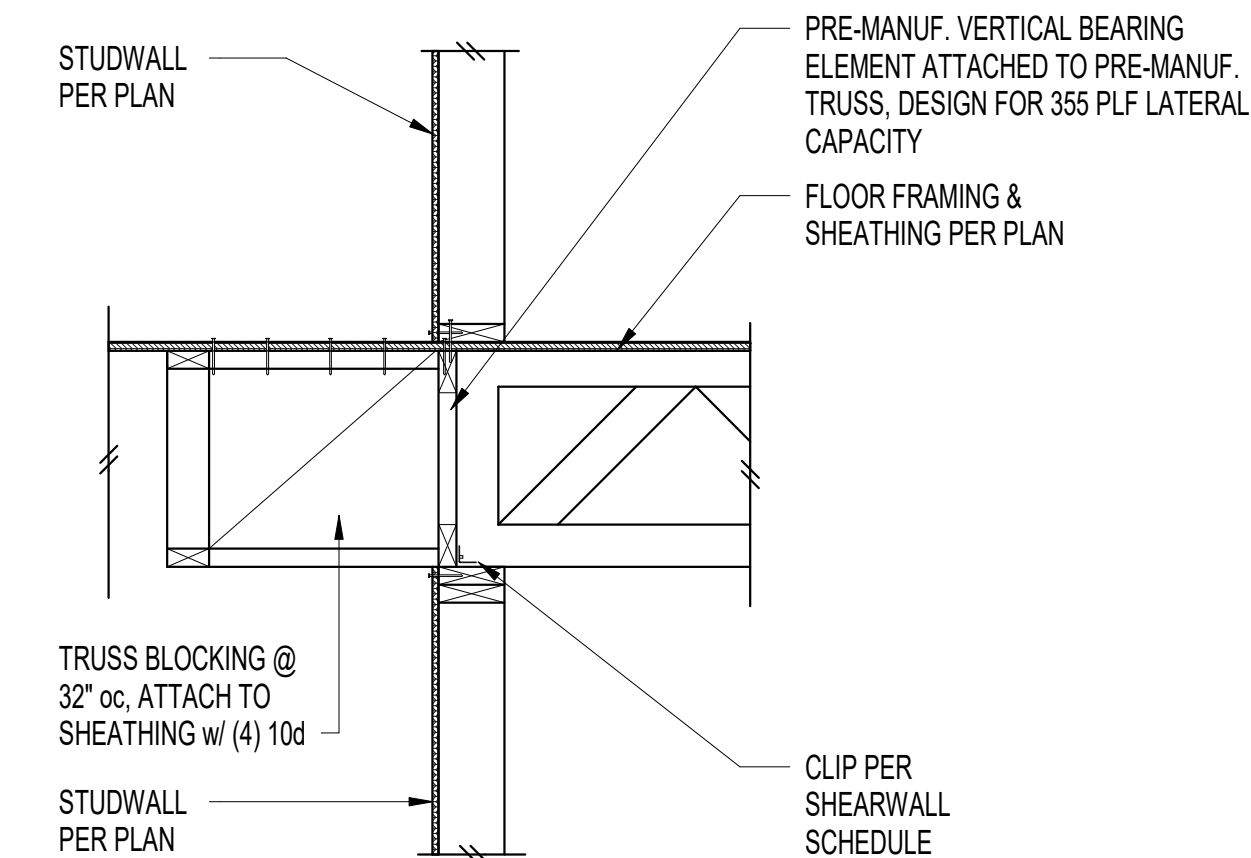
Exterior Wall Framing - Parallel 5



Stair Wall - Parallel 6

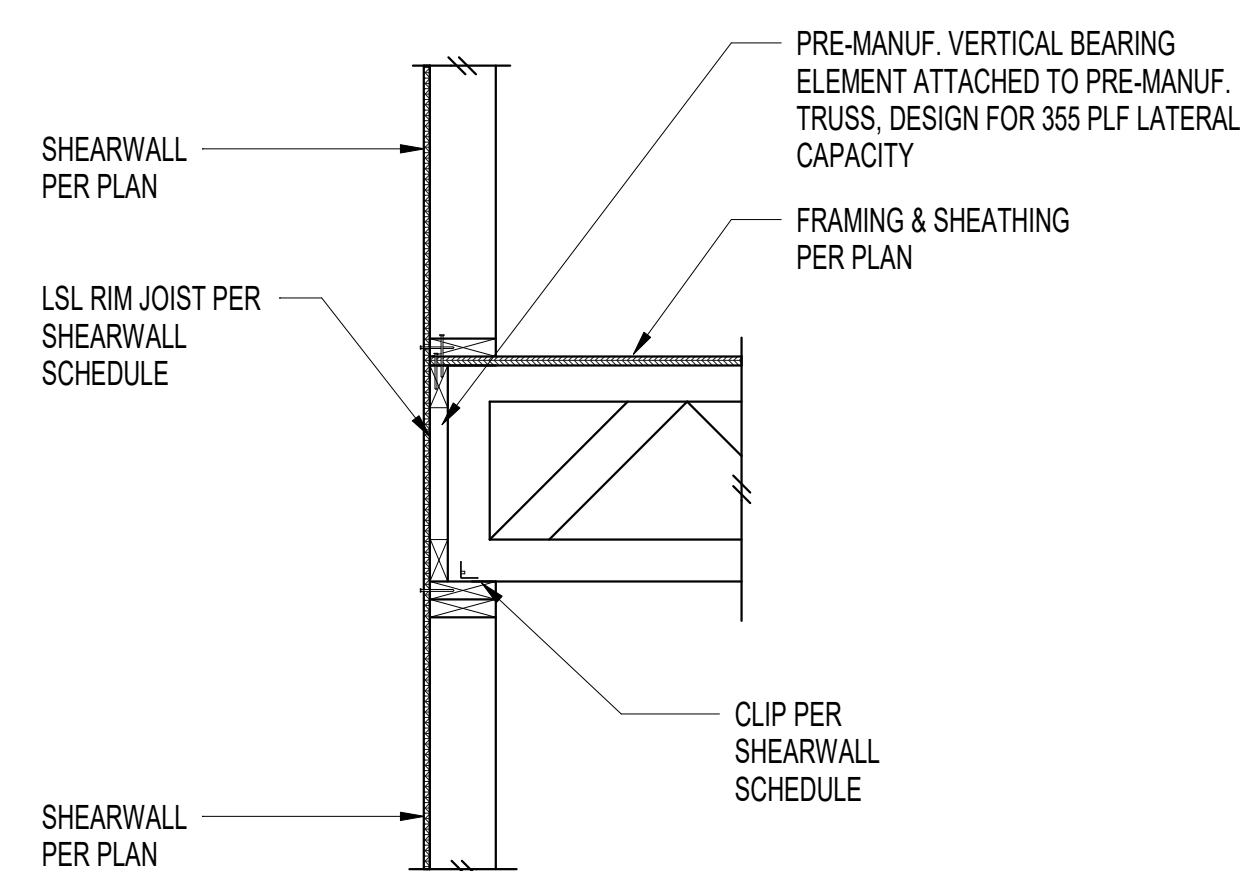


Cantilever Rim Beam 7

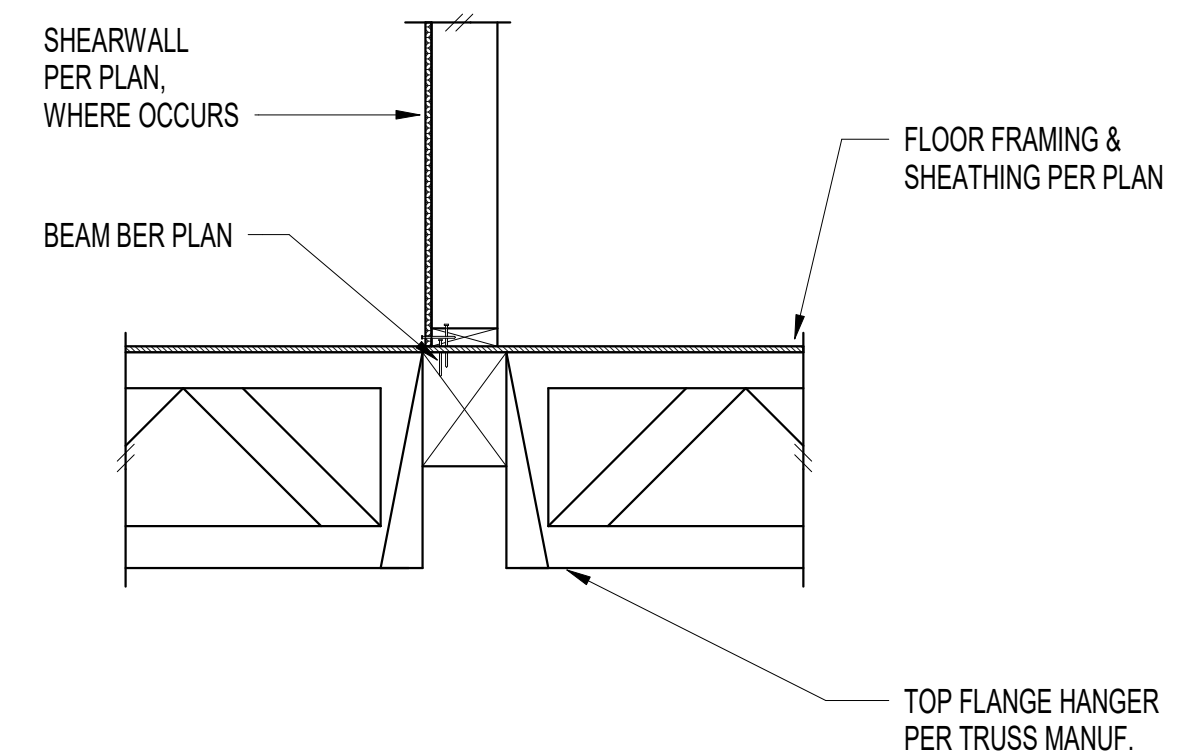


Non-Bearing Interior Wall

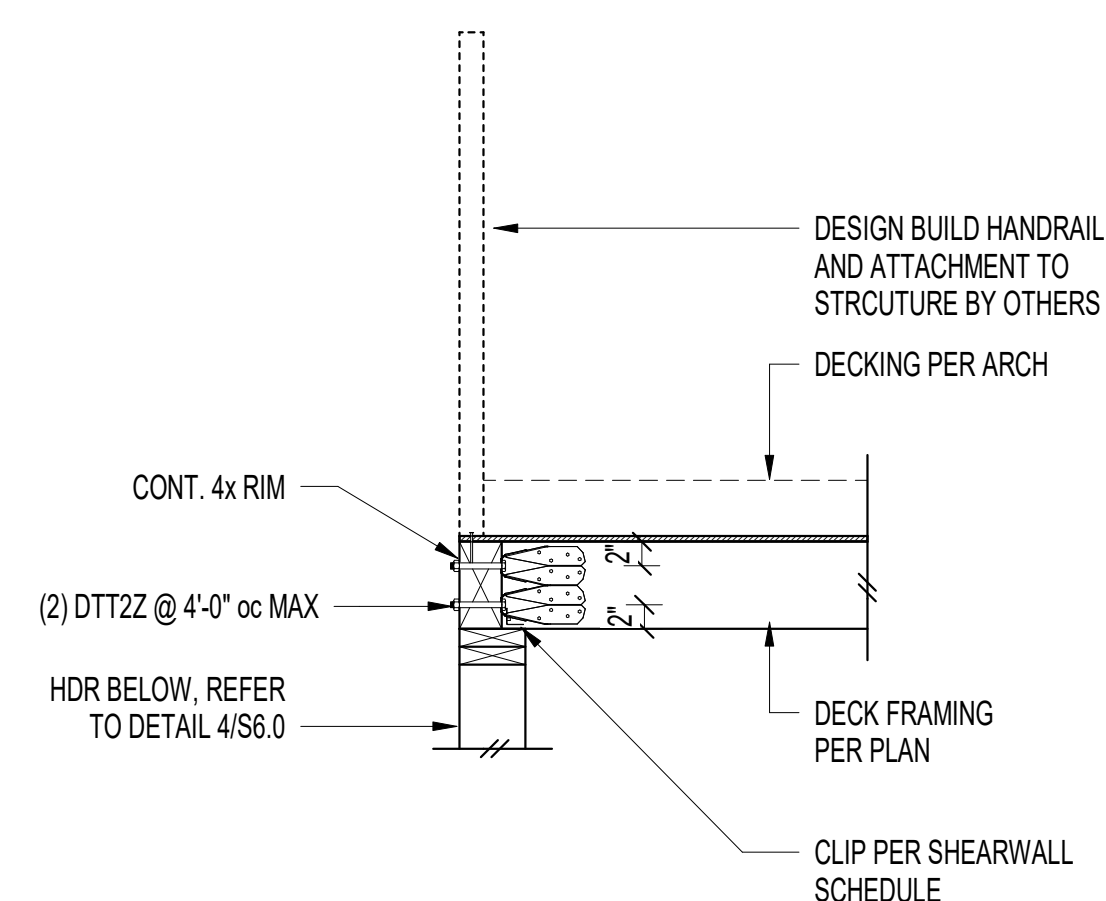
8



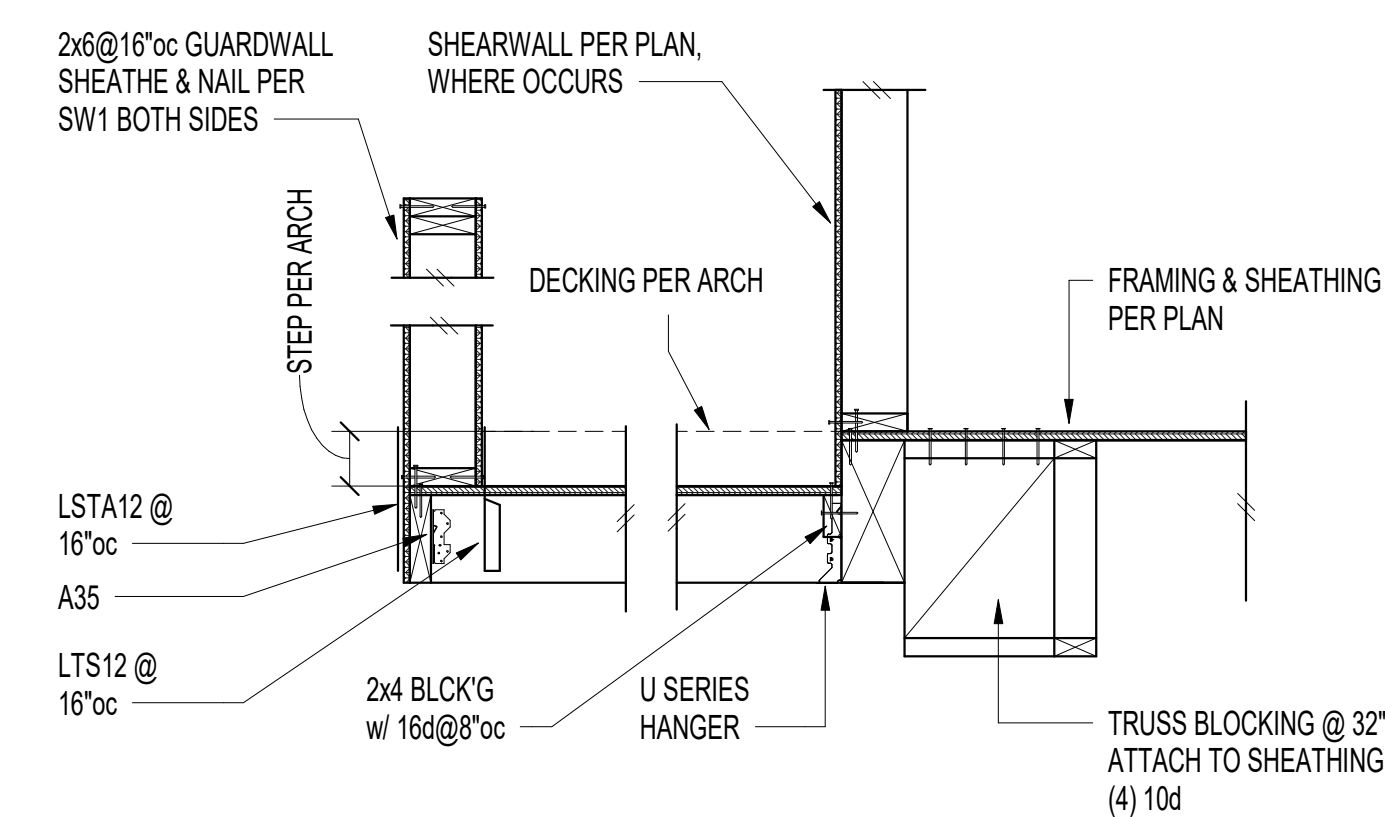
Exterior Wall Framing - Perpendicular 9



Shearwall Transfer to Wood Beam 10



Deck - Design Build Railing 11

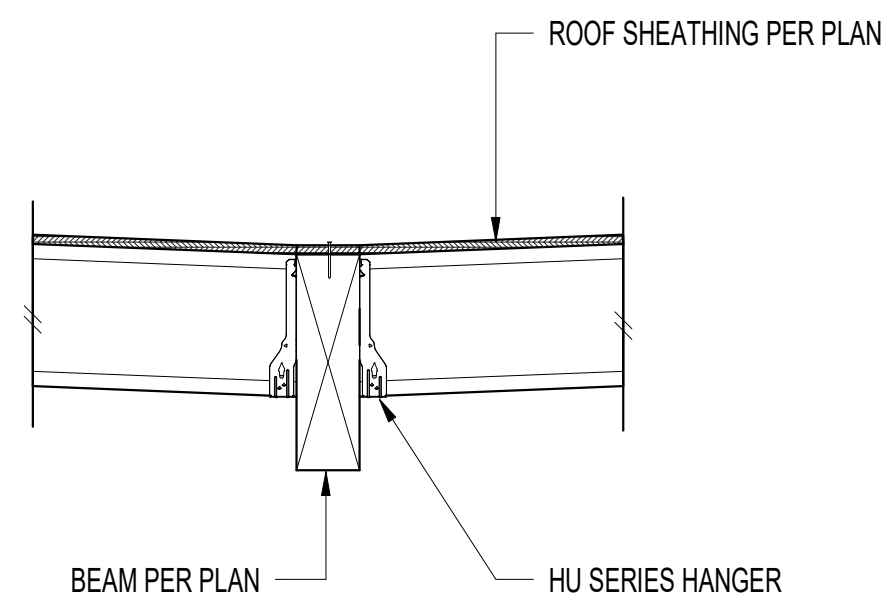
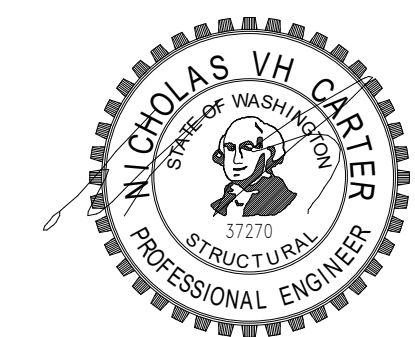


Deck Step Perp 12

**CHU RESIDENCE**  
SITE ANALYSIS  
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Mercer Island, WA 98040

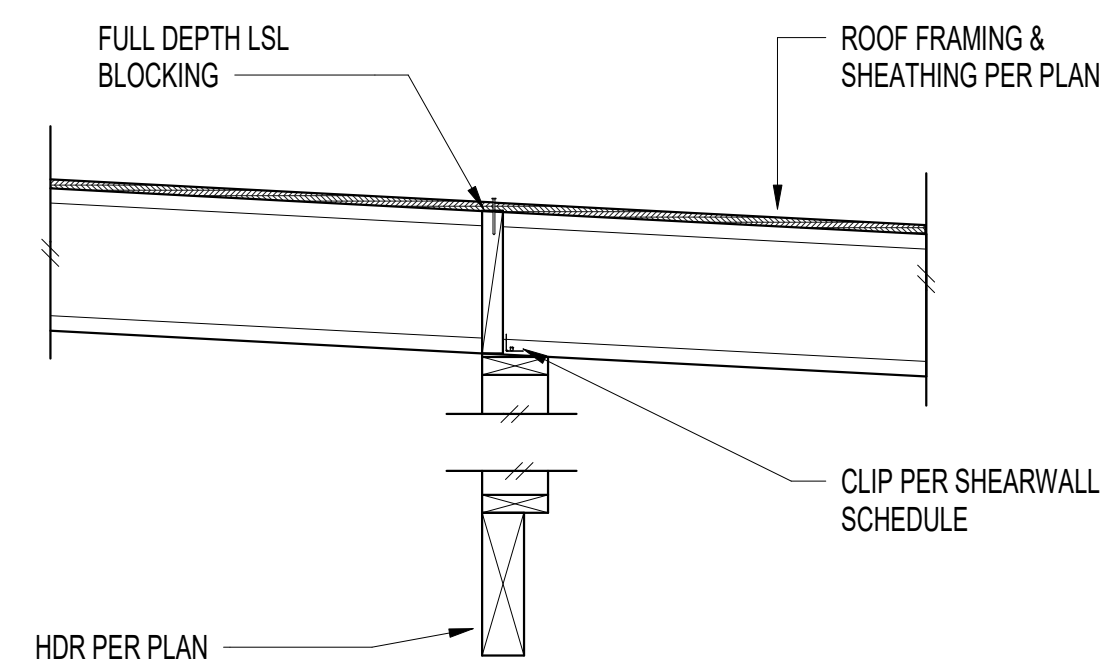
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Sheet: \_\_\_\_\_  
Wood/Steel Details

**S6.2**

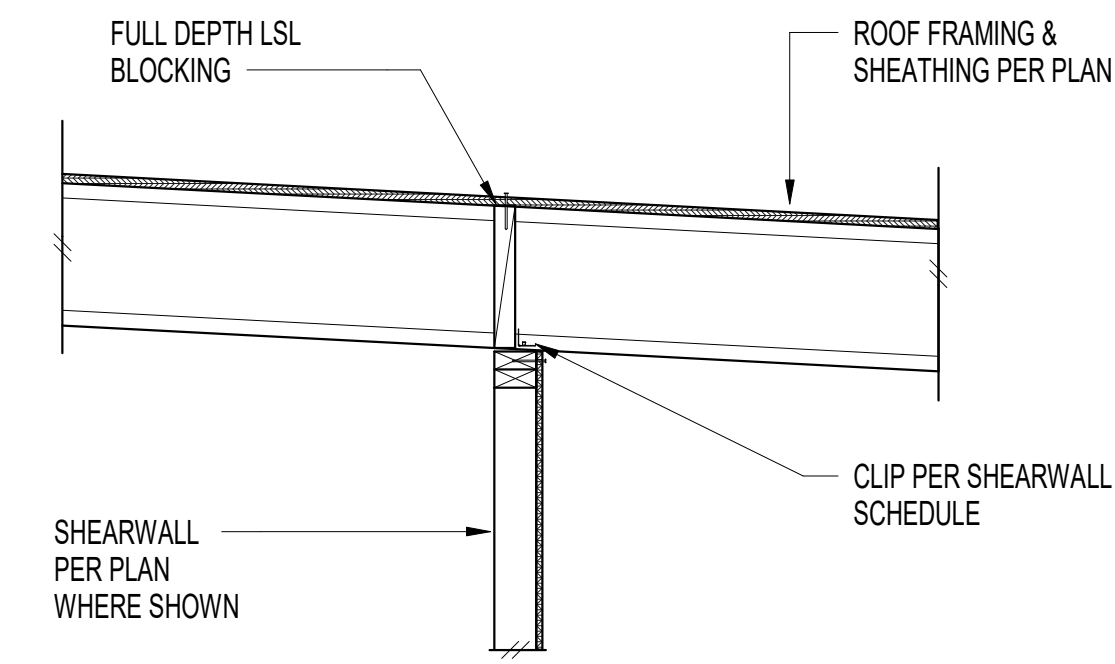


1

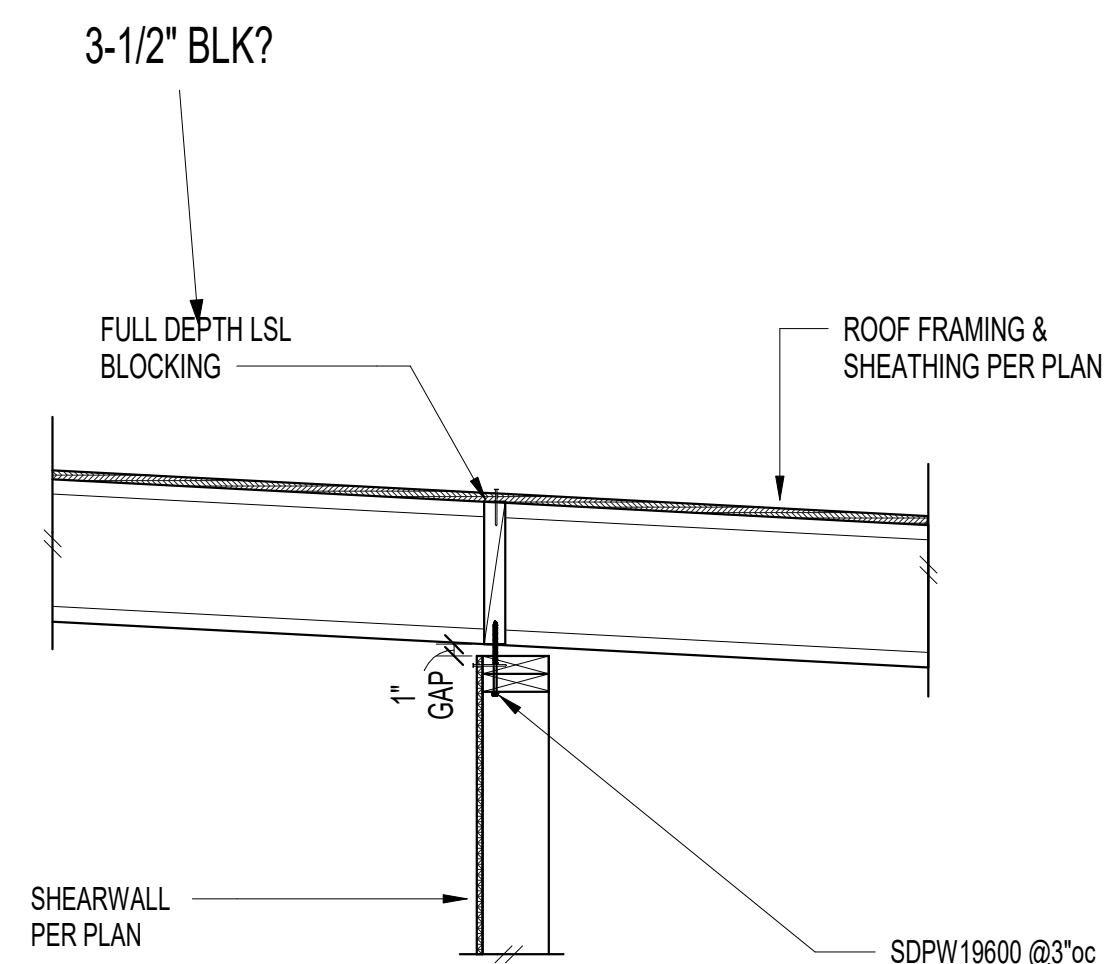
Valley Ridge Beam 2



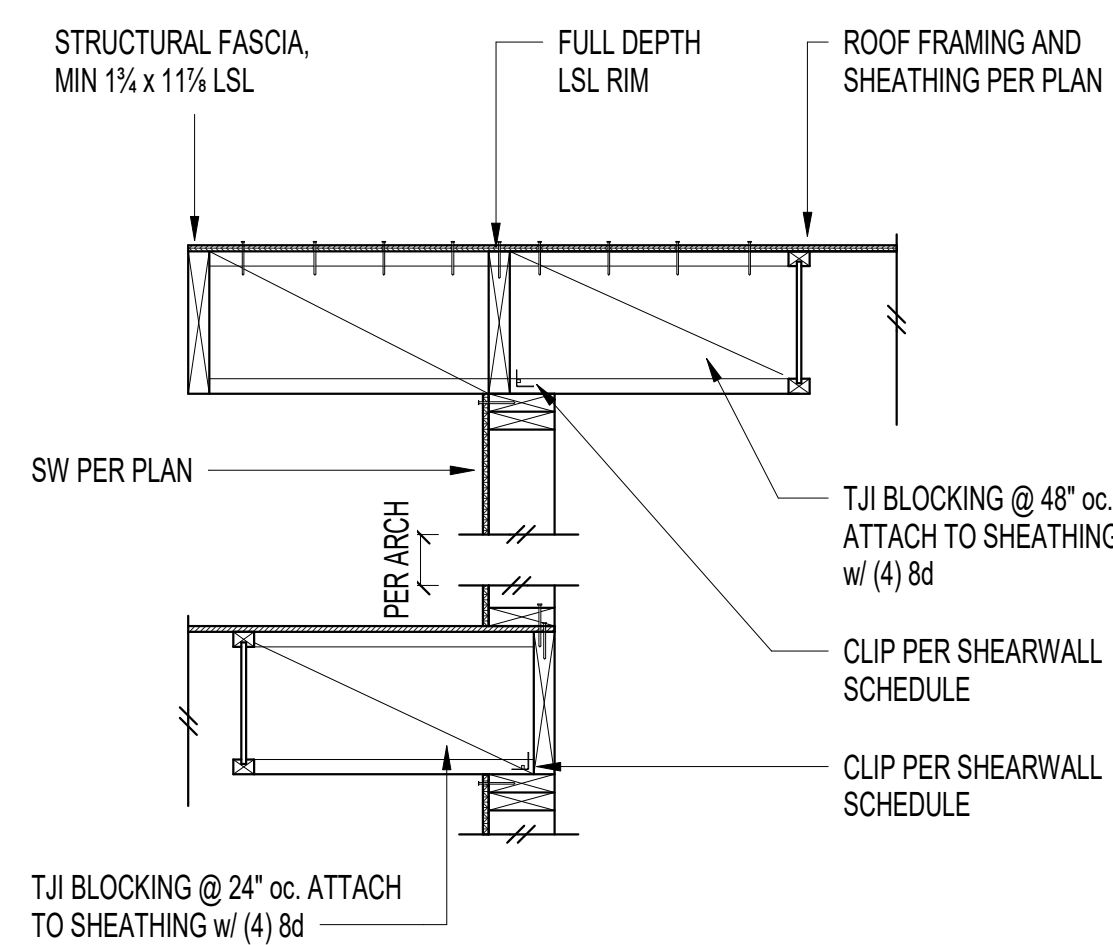
HDR 3



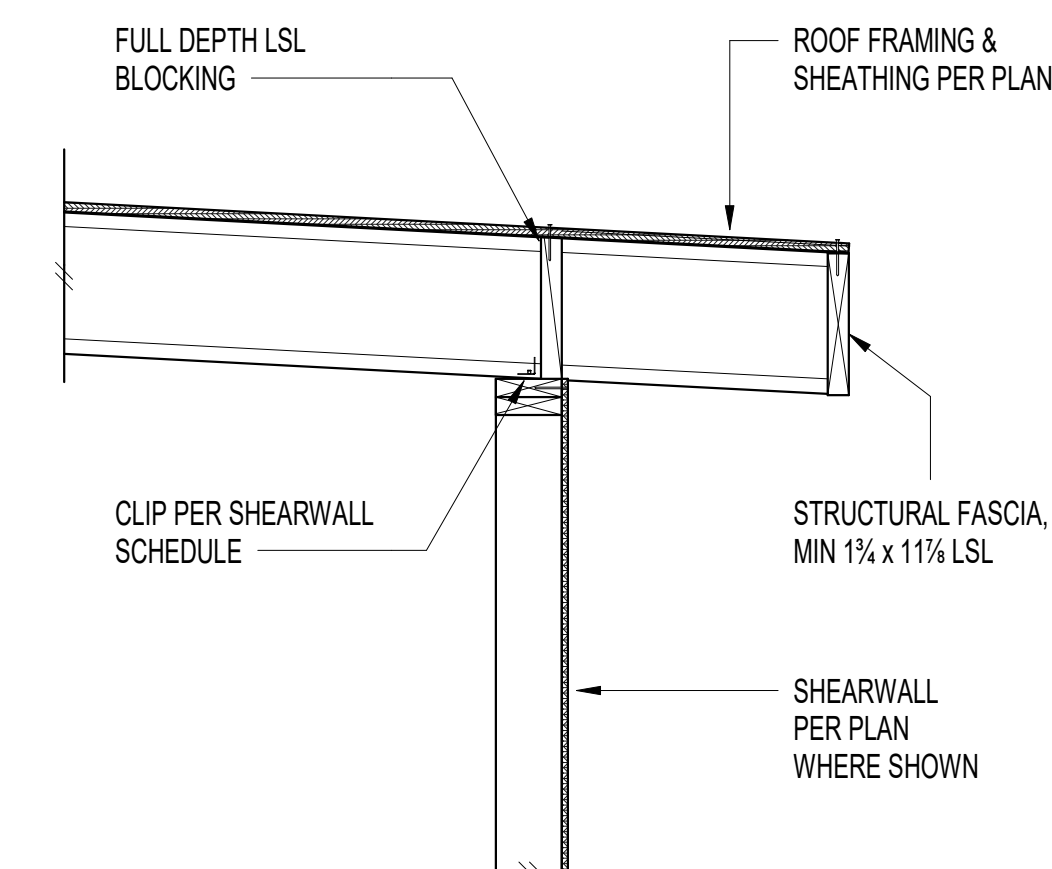
Interior Bearing Wall 4



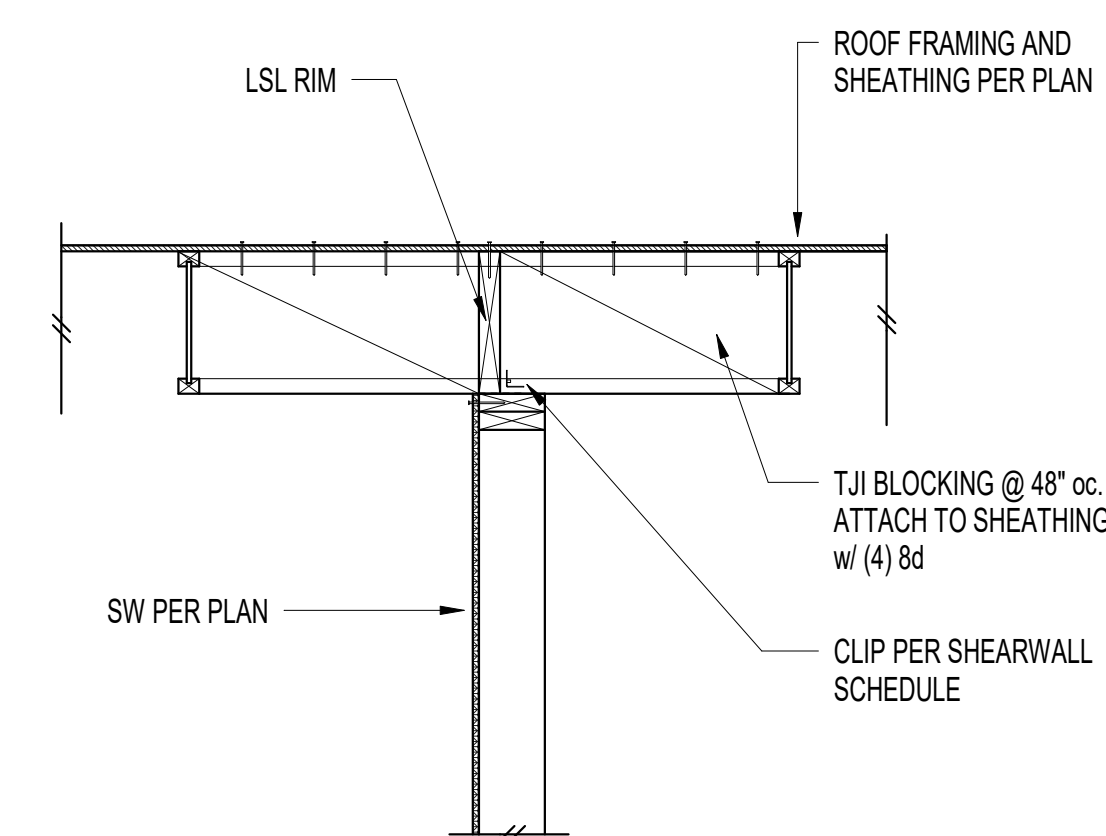
Non-Bearing Shearwall 5



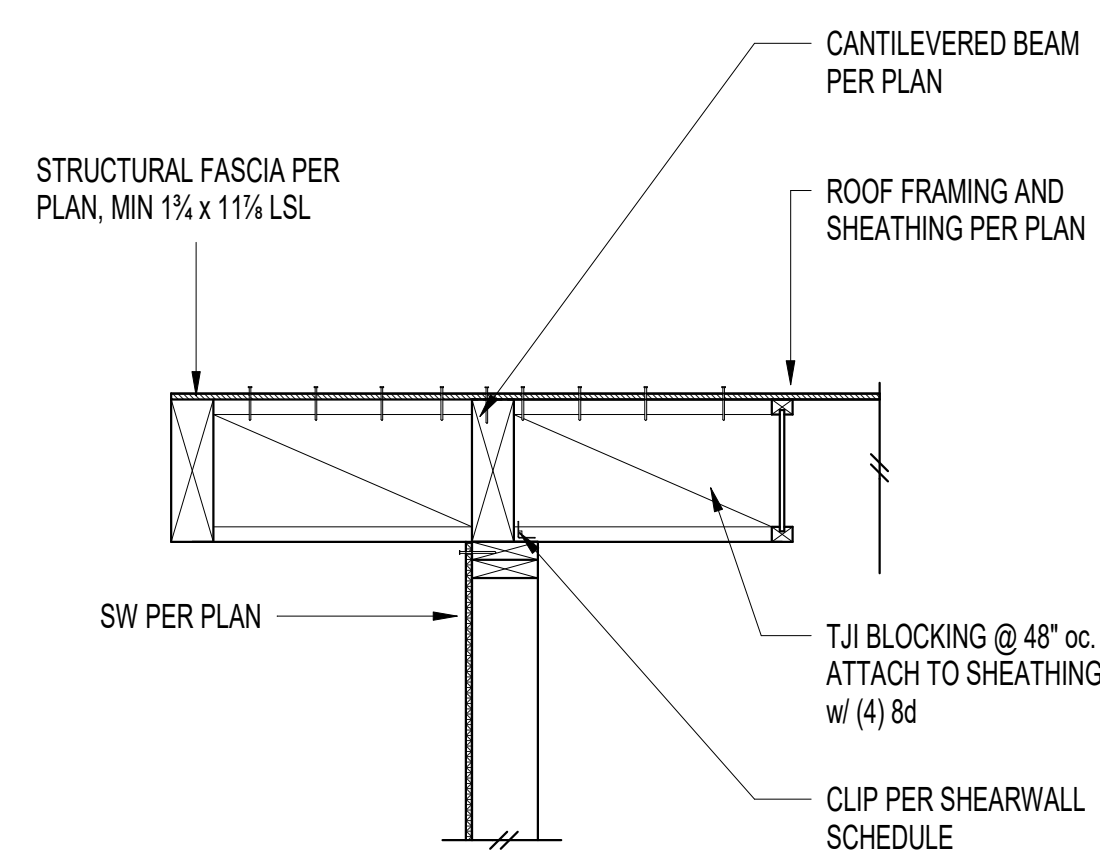
Roof Transfer - Parallel 6



Roof Framing @ Bearing Wall 7

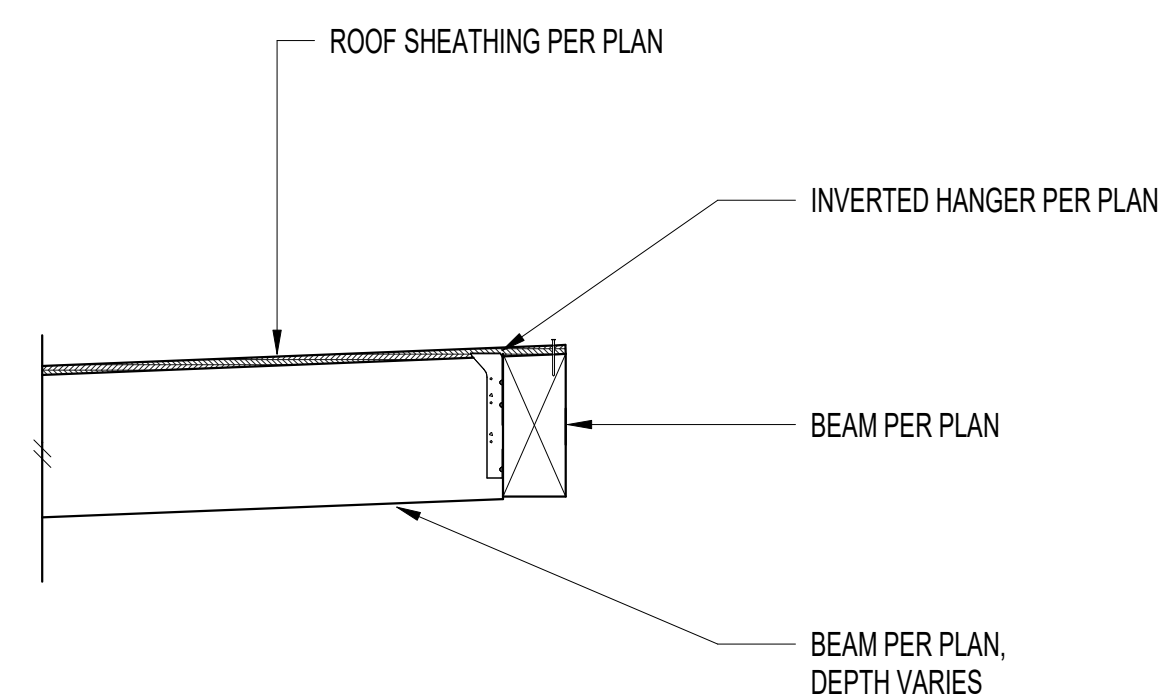


Roof Framing - Parallel 8

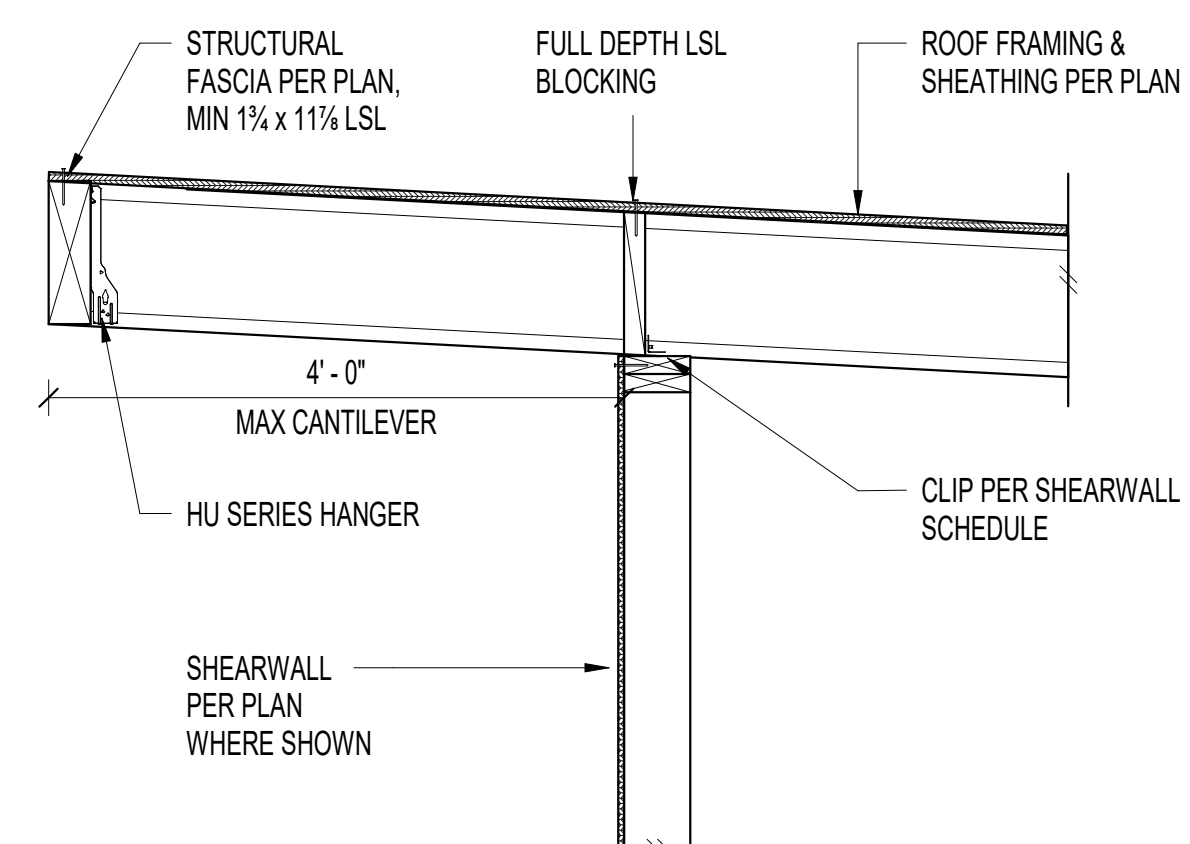


Roof Framing - Parallel

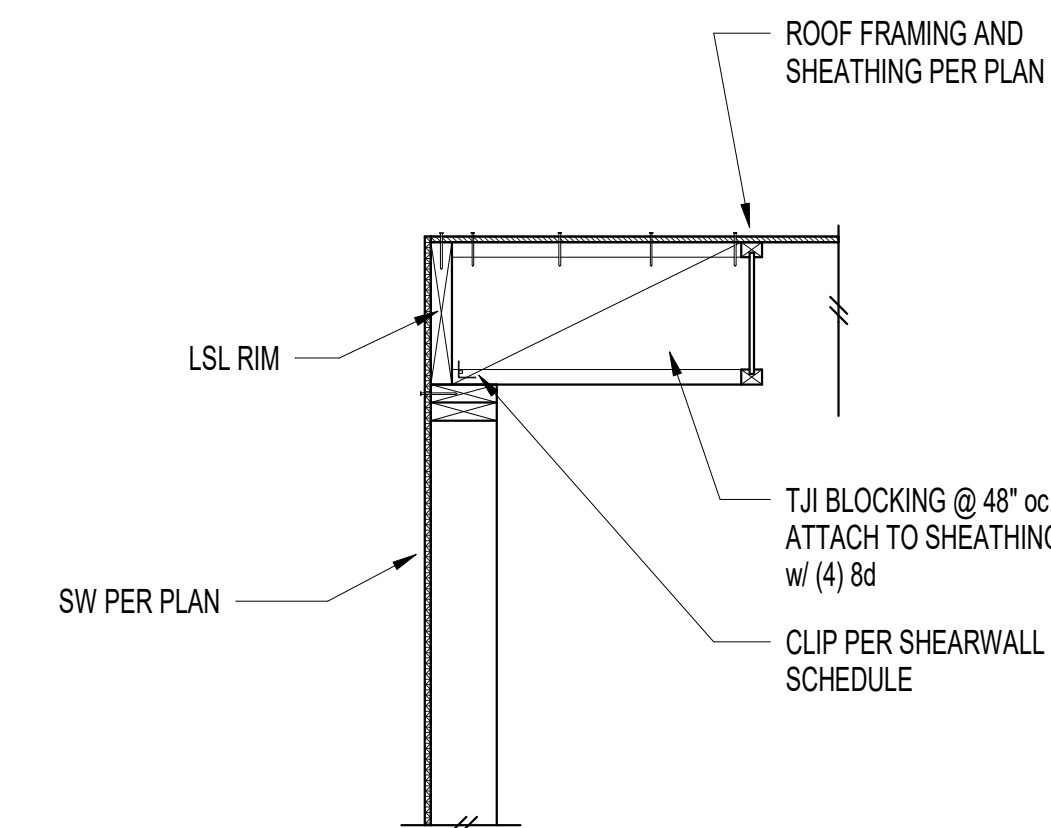
9



Roof Edge Beam 10



Roof Framing @ Bearing Wall 11

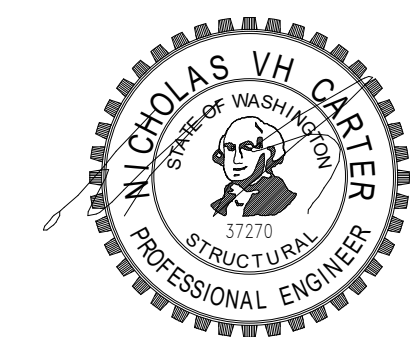


Roof Framing - Parallel 12

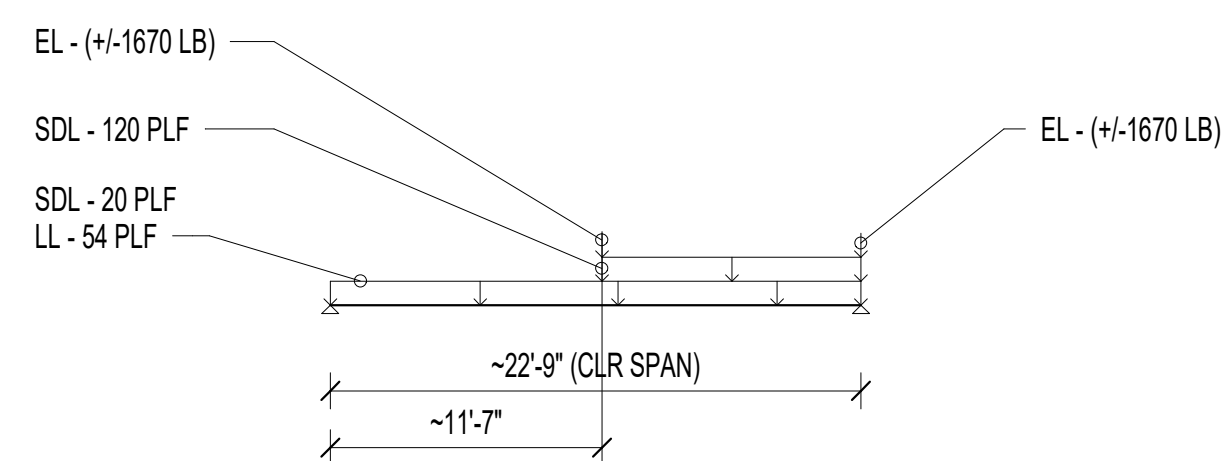
**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date: \_\_\_\_\_  
Scale: \_\_\_\_\_  
Sheet: \_\_\_\_\_  
Wood Details

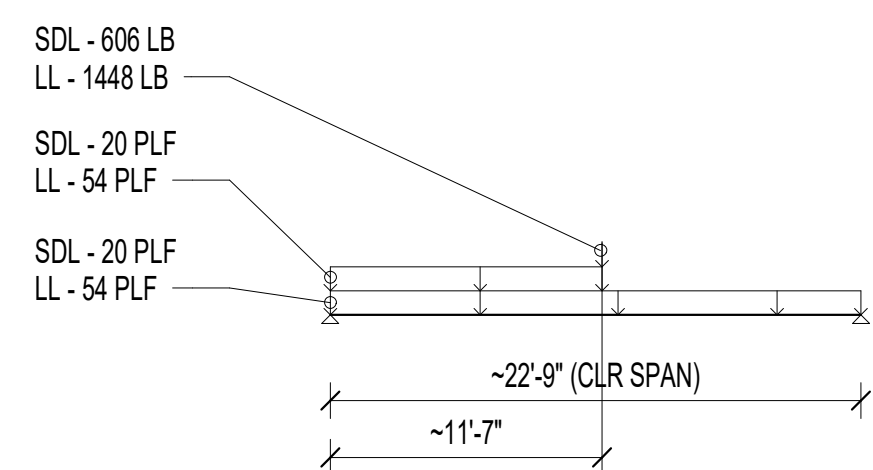
**S6.3**



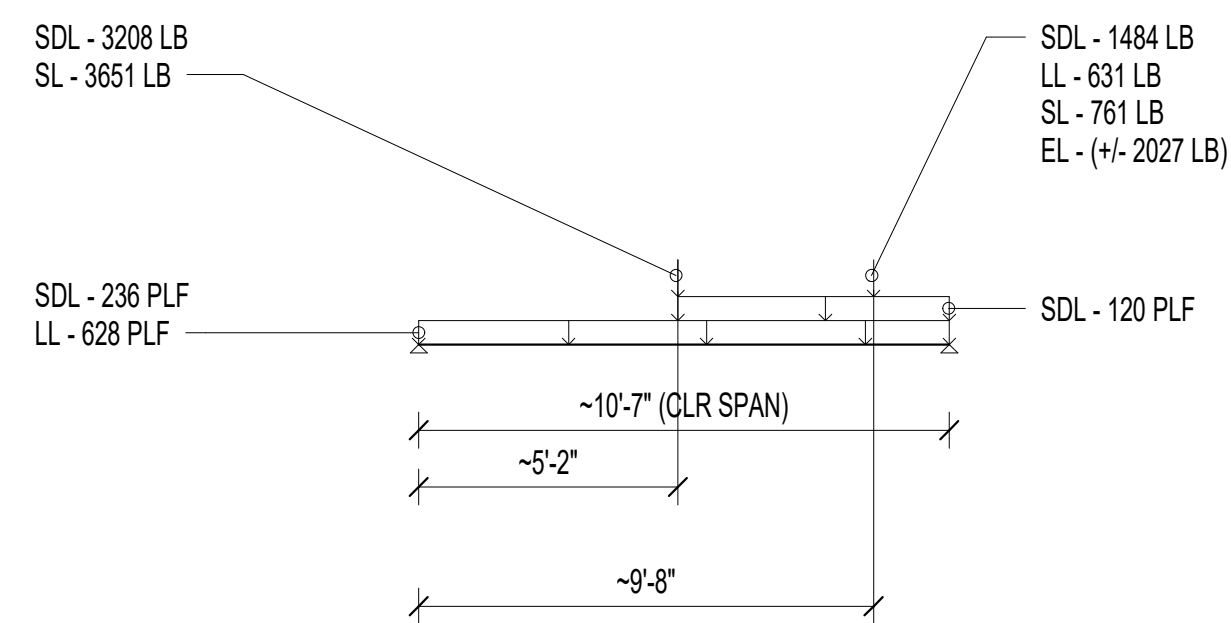
UPPER FLOOR GIRDER TRUSSES



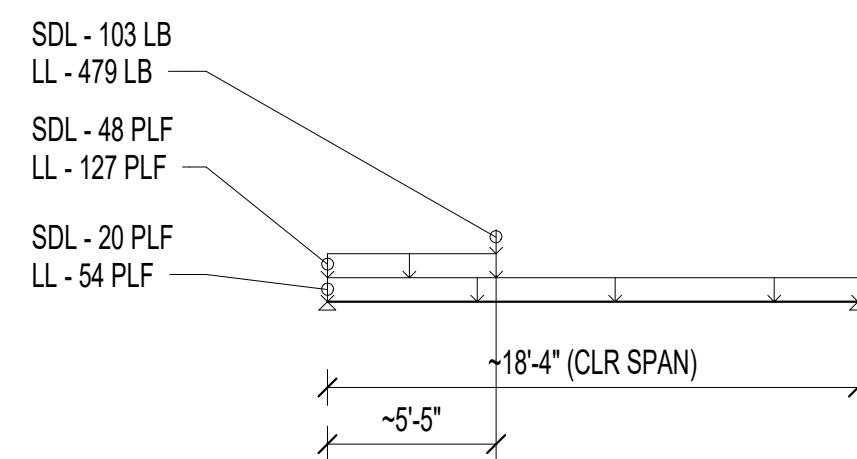
GIRDER TRUSS #1



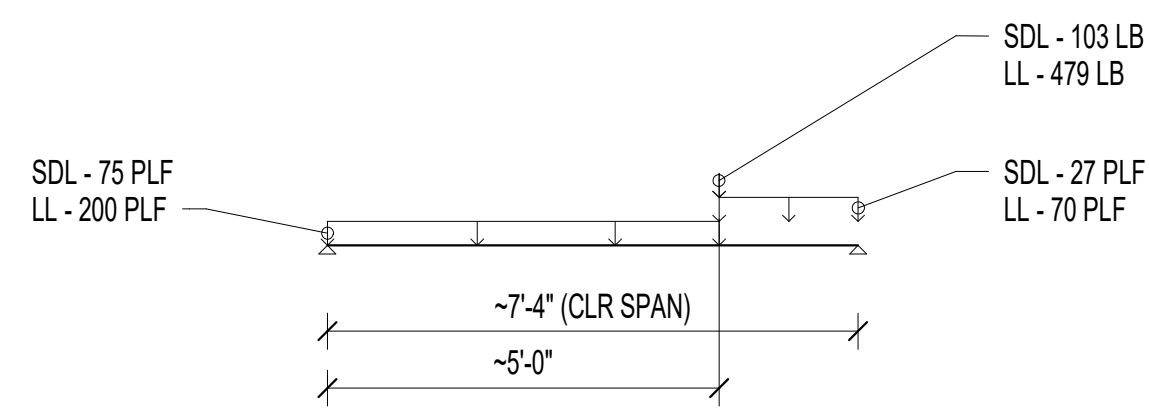
GIRDER TRUSS #2



GIRDER TRUSS #3

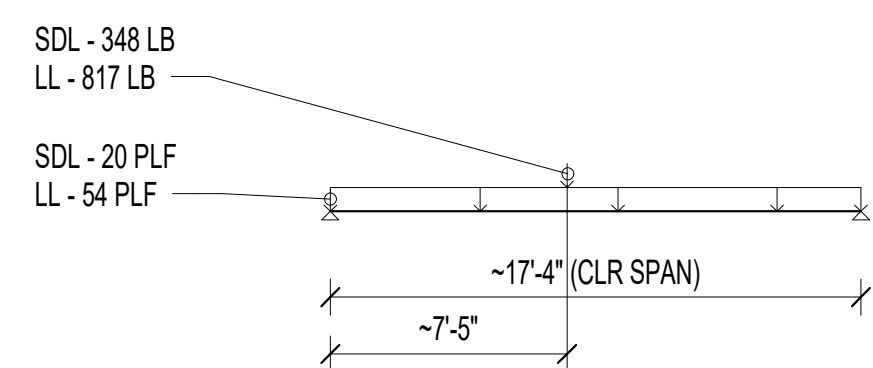


GIRDER TRUSS #4



GIRDER TRUSS #5

MAIN LEVEL GIRDER TRUSSES



GIRDER TRUSS #6

**CHU RESIDENCE**  
SITE ANALYSIS  
4332 W. Mercer Way  
Mercer Island, WA 98040

Date: \_\_\_\_\_  
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GIRDER TRUSS LOADING  
DIAGRAMS

**S6.4**