

AVERAGE BUILDING ELEVATION

(PRIMARY HOUSE)

#	WALL LENGTH	EXIST. GRADE	FINISHED GRADE
A	9.3	278.6	278.2
B	45.6	277.6	277.6
C	32.5	279.7	280.0
D	16.0	281.0	280.5
E	3.0	281.0	280.5
F	15.0	280.6	280.5
F1	6.5	280.8	280.5
F2	2.0	281.0	280.5
G	25.2	281.4	280.5
H	21.0	281.8	280.5
I	22.0	282.2	281.0
J	8.9	281.2	280.5
K	6.1	280.8	280.5
L	2.7	280.4	280.0
M	14.0	279.8	279.8
N	4.9	279.4	279.4
O	9.7	279.2	279.2
P	7.0	279.4	279.4
A.B.E. (USE EACH LOWER NUMBER) 279.7			

(*ORIGINAL GRADE 277.6' IS USED FOR 'B')

A.B.E. = (W1 x E1 + W2 x E2 + ...) / (W1 + W2 + ...) = 279.7

MAX. STRUCTURAL HT. ALLOWED = 279.7 + 30 = 309.7' (SEE SHEET A5, A6)

AVERAGE BUILDING ELEVATION

(ADU)

#	WALL LENGTH	EXIST. GRADE	FINISHED GRADE
W	21.5	281.5	280.5
X	19.8	282.0	280.5
Y	21.5	281.5	280.5
Z	19.8	280.5	280.5
A.B.E. (USE EACH LOWER NUMBER) 280.5			

A.B.E. = (W1 x E1 + W2 x E2 + ...) / (W1 + W2 + ...) = 280.5

MAX. STRUCTURAL HT. ALLOWED = 280.5 + 30 = 310.5' (SEE SHEET A9)

LEGAL DESCRIPTION

LOTS 20, 21 AND 22 IN BLOCK 9 OF EAST SEATTLE ADDITION, AS PER PLAT RECORDED IN VOLUME 3 OF PLATS, PAGE 22 AND 23, IN KING COUNTY, WASHINGTON.

CODE COMPLIANCE

- 2018 INTERNATIONAL RESIDENTIAL CODE
- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 UNIFORM PLUMBING CODE
- 2018 INTERNATIONAL FIRE CODE
- 2018 NATIONAL ELECTRICAL CODE
- 2018 WASHINGTON STATE ENERGY CODE

(ALL CODES ABOVE INCLUDE WASHINGTON STATEWIDE AMENDMENTS)

ABBREVIATIONS

BLKG	BLOCKING	HORIZ	HORIZONTAL
CL	CLEAR	MAX	MAXIMUM
CLR	CLEAR	MFR	MANUFACTURER
CONT	CONTINUOUS	MIN	MINIMUM
CS	CASEMENT WINDOW	OV	OVER
DBL	DOUBLE	O.C.	ON CENTER
DS	DOWNSPOUT	SD	SMOKE DETECTOR
EL	ELEVATION	SG	SAFETY GLASS
EQ	EQUAL	SF	SQUARE FEET
EXIST	EXISTING	SIM	SIMILAR
FTG	FOOTING	SLD	SLIDING WINDOW
FX	FIXED WINDOW	TYP	TYPICAL
HDR	HEADER	UNO	UNLESS NOTED OTHERWISE
HWD	HARDWOOD	W	WITH
HGR	HANGER		

PROJECT INFORMATION

ZONING DISTRICT	R-8.4
PROPERTY OWNER	YU HAN TSENG
PARCEL NUMBER	217450-1915
LOT AREA	8,942 S.F.
OCCUPANCY CLASSIFICATION	R-3/U
CONSTRUCTION TYPE	V-B

LOT SLOPE CALCULATION

HIGHEST ELEVATION POINT	284.5'
LOWEST ELEVATION POINT	273.5'
ELEVATION DIFFERENCE	11'
HORIZ. DISTANCE BETWEEN HIGH AND LOW POINTS	124.5'

LOT SLOPE (11 / 124.5) = 8.8%

LOT COVERAGE

MAX. LOT COVERAGE	40%
ROOF (PRIMARY RESIDENCE)	2,515 S.F.
ROOF (ADU)	554 S.F.
DRIVEWAY	330 S.F.
TOTAL LOT COVERAGE AREA	3,399 S.F.
LOT COVERAGE	38.0% (OK)

HARDSCAPE

MAX. HARDSCAPE AREA	9%
WALKWAY	74 S.F.
WINDOW WELLS	112 S.F.
TOTAL HARDSCAPE AREA	186 S.F. (2.1% -> OK)

GROSS FLOOR AREA (GFA)

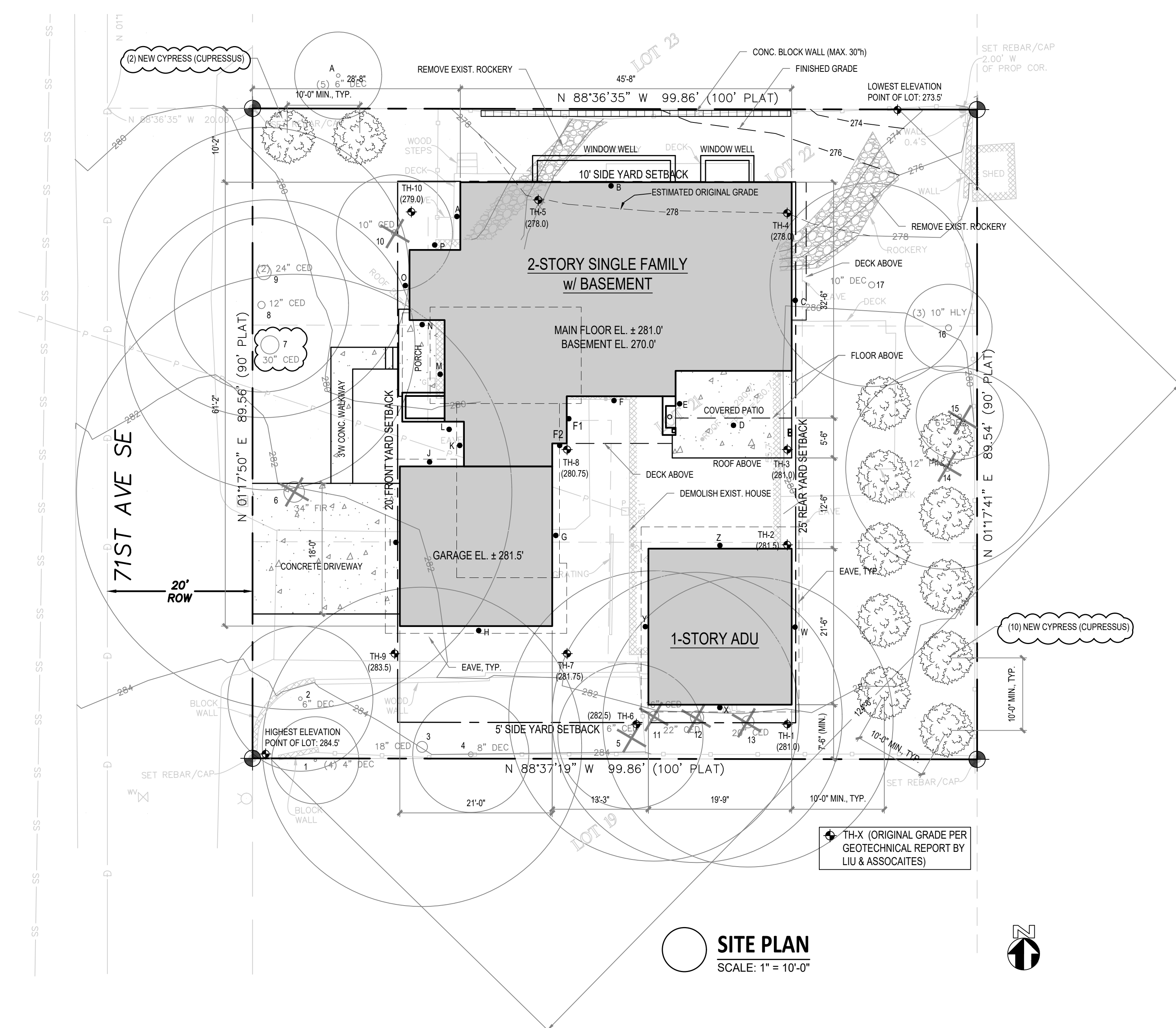
MAX. GROSS FLOOR AREA	45% (40% + 5% ADU)
BASEMENT	1,520 S.F.
BASEMENT (EXCLUDED FROM GFA. SEE SHEET A1)	-1,140 S.F.
MAIN FLOOR	1,520 S.F.
UPPER FLOOR	1,537 S.F.
ADU	424 S.F.
GARAGE	462 S.F.
TOTAL ABOVE GROUND FLOOR AREA	4,023 S.F.
PROPOSED GFA	44.9% (OK)
TOTAL FINISHED FLOOR AREA OF PRIMARY RESIDENCE	4,510 S.F.
ADU	424 S.F.
TOTAL FINISHED FLOOR AREA	4,961 S.F.

NFPA 13D FIRE SPRINKLER SYSTEM AND SEPARATE PERMIT ARE REQUIRED.

NFPA 72 CHAPTER 29 MONITORED FIRE ALARM REQUIRED DUE TO ROAD WIDTH. SEPARATE PERMIT REQUIRED.

DEFERRED SUBMITTAL

EXTERIOR METAL STAIR ON UPPER DECK



SITE PLAN
SCALE: 1" = 10'-0"

Tree Assessment Form														
Site: Tseng Residence, 2720 71st Ave SE, Mercer Island											Date: 8/11/2017			
Tree #	Species	DBH (inches)	Height (feet)	Crown Ratio (%)	Vigor	Viable	LOD**				Defects	Status***	NUMBER OF REPLACEMENT TREES REQUIRED	
							N	S	E	W				
On Site Trees														
1	Plum	9*	35	90	Good	Yes	15	13	4	18	6			
2	Cherry	10	35	40	Fair	Yes	12	2	2	12	6		Gumosis	
3	Ash	20	71	80	Good	Yes	15	15	12	18	6			
4	Red cedar	9	28	70	Fair	Yes	8	2	10	4	4		Dead limb tips	
5	Douglas-fir	7	43	40	Good	Yes	8	4	0	14	4			
6	Douglas-fir	25	103	60	Good	Yes	20	22	24	25	10		Two spike knots	Remove
7	Sequoia	22	66	60	Good	Yes	4	12	12	12	10		Forks at 6-feet with included bark	Remove
8	Sequoia	14	70	60	Good	Yes	0	2	8	12	10			
9	Sequoia	30*	70	60	Good	Yes	14	6	12	12	10		Included bark 0-4-feet	Remove
10	Red cedar	12	40	70	Good	Yes	8	9	12	9	4			Remove
11	Red cedar	13	58	60	Good	Yes	15	18	4	14	4			Remove
12	Red cedar	23	76	70	Good	Yes	12	15	10	6	4			Remove
13	Red cedar	21	70	70	Good	Yes	15	12	16	8	4			Remove
14	Austrian pine	15	62	40	Fair	Yes	3	19	12	11	4			Remove
15	Vine maple	7*	14	40	Poor	No	6	5	4	9	4		Severe decay	R. Remove
16	Holly	19*	16	80	Good	Yes	6	6	2	10	4			
17	Plum	100	20	70	Fair	Yes	14	9	8	14	4		Bole decay	
Off Site Trees														
A	Japanese maple	14*	16	80	Good	Yes	14	16	14	14	10			
B	Red cedar	28	70	80	Good	Yes	16	14	16	18	10			
*DBH Multiple Trunks converted to equivalent DBH per ISA Guide														
**LOD Limit of Disturbance; Face to side of disturbance, recommended														
*** Status "Remove as per plan"---"R. Remove", recommended														
											TOTAL: 12			
											PROPOSED NEW TREES: 12			

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8666 REGISTERED ARCHITECT
CHAOHUA CHANG
STATE OF WASHINGTON

2720 RESIDENCE
2720 71ST AVENUE SE
MERCER ISLAND WA 98040

NUMBER	DATE	DESCRIPTION OF REVISIONS
08-05-2021	PERMIT PLANS	
01-22-2022	RESPONSE TO CITY COMMENT #1	
03-23-2022	RESPONSE TO CITY COMMENT #2	

SHEET TITLE
SITE PLAN

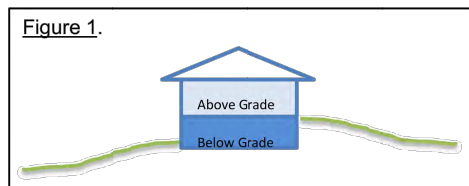
JOB NUMBER
SHEET NUMBER

Simple Heating System Size: Washington State

This heating system sizing calculator is based on the Prescriptive Requirements of the 2018 Washington State Energy Code (WSEC) and ACCA Manuals J and S. This tool will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads. Please complete the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please contact the WSU Energy Program at energycode@energy.wsu.edu or (360) 956-2042 for assistance.

Project Information		Contact Information	
2720 Residence (Primary Residence)		Chaochua Chang	
2720 71st Ave SE Mercer Island WA 98040		13301 SE 79th Pl Unit A205 Newcastle WA 98059	
Heating System Type: <input type="radio"/> All Other Systems <input checked="" type="radio"/> Heat Pump			
To see detailed instructions for each section, place your cursor on the word "Instructions"			
Design Temperature		Design Temperature Difference (ΔT)	
Instructions: <input type="text" value="Mercer Island"/>		45	
Area of Building			
Conditioned Floor Area		Conditioned Volume	
Instructions: Conditioned Floor Area (sq ft)		47,796	
Average Ceiling Height		Average Ceiling Height (ft)	
Instructions: <input type="text" value="10.8"/>		<input type="text" value="4.552"/>	
Glazing and Doors			
U-Factor X Area = UA		Conditioned Volume	
Instructions: <input type="text" value="U-0.24"/>		47,796	
U-Factor X Area = UA		47,796	
Instructions: <input type="text" value="0.50"/>		47,796	
Skylights			
U-Factor X Area = UA		47,796	
Instructions: <input type="text" value="0.50"/>		47,796	
Insulation			
Attic		U-Factor X Area = UA	
Instructions: <input type="text" value="R-38 Vented"/>		47,796	
U-Factor X Area = UA		47,796	
Instructions: <input type="text" value="R-38 Vented"/>		47,796	
Single Rafter or Joist Vaulted Ceilings			
U-Factor X Area = UA		47,796	
Instructions: <input type="text" value="R-38 Vented"/>		47,796	
Above Grade Walls (see Figure 1)			
U-Factor X Area = UA		47,796	
Instructions: <input type="text" value="R-21 Intermediate"/>		47,796	
Floors			
U-Factor X Area = UA		47,796	
Instructions: <input type="text" value="R-21 Interior"/>		47,796	
Below Grade Walls (see Figure 1)			
U-Factor X Area = UA		47,796	
Instructions: <input type="text" value="R-21 Interior"/>		47,796	
Slab Below Grade (see Figure 1)			
F-Factor X Length = UA		47,796	
Instructions: <input type="text" value="R-10 Perimeter"/>		47,796	
Slab on Grade (see Figure 1)			
F-Factor X Length = UA		47,796	
Instructions: <input type="text" value="R-10 Perimeter"/>		47,796	
Location of Ducts			
Duct Leakage Coefficient		47,796	
Instructions: <input type="text" value="Conditioned Space"/>		47,796	

Sum of UA	707.70
Envelope Heat Load	31,847 Btu / Hour
Sum of UA x ΔT	31,847
Air Leakage Heat Load	23,229 Btu / Hour
Volume x 0.6 x ΔT x 0.018	23,229
Building Design Heat Load	55,075 Btu / Hour
Air leakage + envelope heat loss	55,075
Building and Duct Heat Load	55,075 Btu / Hour
Ducts in unconditioned space: sum of building heat loss x 1.10	55,075
Ducts in conditioned space: sum of building heat loss x 1	55,075
Maximum Heat Equipment Output	68,844 Btu / Hour
Building and duct heat loss x 1.40 for forced air furnace	68,844
Building and duct heat loss x 1.25 for heat pump	68,844



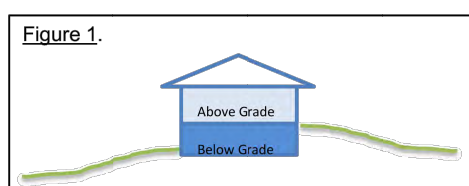
(07/01/13)

Simple Heating System Size: Washington State

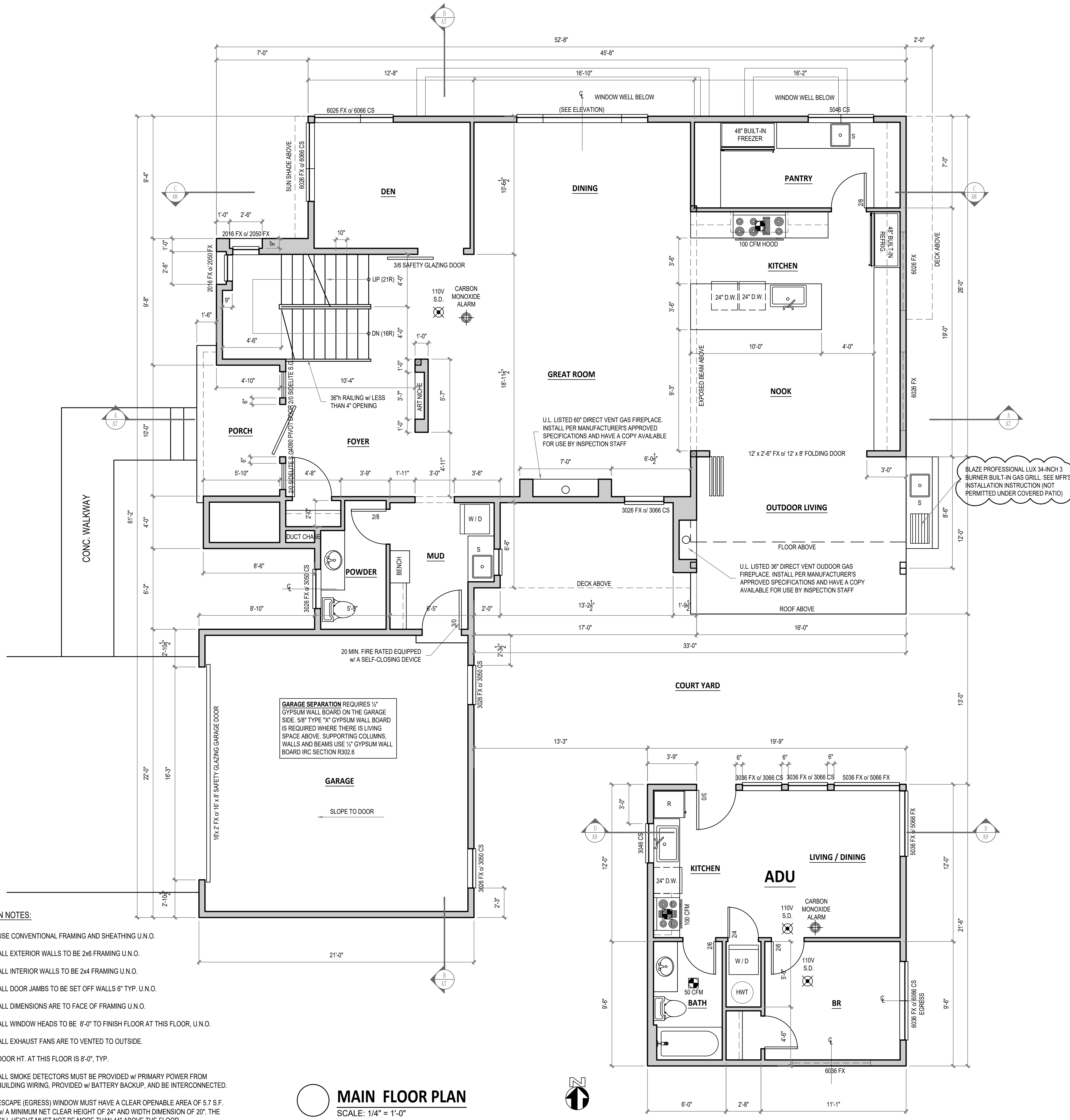
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Project Information		Contact Information	
2720 Residence (ADU)		Chaochua Chang	
2720 71st Ave SE Mercer Island WA 98040		13301 SE 79th Pl Unit A205 Newcastle WA 98059	
Heating System Type: <input type="radio"/> All Other Systems <input checked="" type="radio"/> Heat Pump			
To see detailed instructions for each section, place your cursor on the word "Instructions"			
Design Temperature		Design Temperature Difference (ΔT)	
Instructions: <input type="text" value="Mercer Island"/>		45	
Area of Building			
Conditioned Floor Area		Conditioned Volume	
Instructions: Conditioned Floor Area (sq ft)		5,313	
Average Ceiling Height		Average Ceiling Height (ft)	
Instructions: <input type="text" value="11.0"/>		<input type="text" value="58.3"/>	
Glazing and Doors			
U-Factor X Area = UA		Conditioned Volume	
Instructions: <input type="text" value="U-0.24"/>		5,313	
U-Factor X Area = UA		5,313	
Instructions: <input type="text" value="0.50"/>		5,313	
Skylights			
U-Factor X Area = UA		5,313	
Instructions: <input type="text" value="0.50"/>		5,313	
Insulation			
Attic		U-Factor X Area = UA	
Instructions: <input type="text" value="R-38 Vented"/>		5,313	
U-Factor X Area = UA		5,313	
Instructions: <input type="text" value="R-38 Vented"/>		5,313	
Single Rafter or Joist Vaulted Ceilings			
U-Factor X Area = UA		5,313	
Instructions: <input type="text" value="R-38 Vented"/>		5,313	
Above Grade Walls (see Figure 1)			
U-Factor X Area = UA		5,313	
Instructions: <input type="text" value="R-21 Intermediate"/>		5,313	
Floors			
U-Factor X Area = UA		5,313	
Instructions: <input type="text" value="R-21 Interior"/>		5,313	
Below Grade Walls (see Figure 1)			
U-Factor X Area = UA		5,313	
Instructions: <input type="text" value="R-21 Interior"/>		5,313	
Slab Below Grade (see Figure 1)			
F-Factor X Length = UA		5,313	
Instructions: <input type="text" value="R-10 Perimeter"/>		5,313	
Slab on Grade (see Figure 1)			
F-Factor X Length = UA		5,313	
Instructions: <input type="text" value="R-10 Perimeter"/>		5,313	
Location of Ducts			
Duct Leakage Coefficient		5,313	
Instructions: <input type="text" value="Conditioned Space"/>		5,313	

Sum of UA	374.07
Envelope Heat Load	16,833 Btu / Hour
Sum of UA x ΔT	16,833
Air Leakage Heat Load	2,582 Btu / Hour
Volume x 0.6 x ΔT x 0.018	2,582
Building Design Heat Load	19,415 Btu / Hour
Air leakage + envelope heat loss	19,415
Building and Duct Heat Load	19,415 Btu / Hour
Ducts in unconditioned space: sum of building heat loss x 1.10	19,415
Ducts in conditioned space: sum of building heat loss x 1	19,415
Maximum Heat Equipment Output	24,269 Btu / Hour
Building and duct heat loss x 1.40 for forced air furnace	24,269
Building and duct heat loss x 1.25 for heat pump	24,269



(07/01/13)



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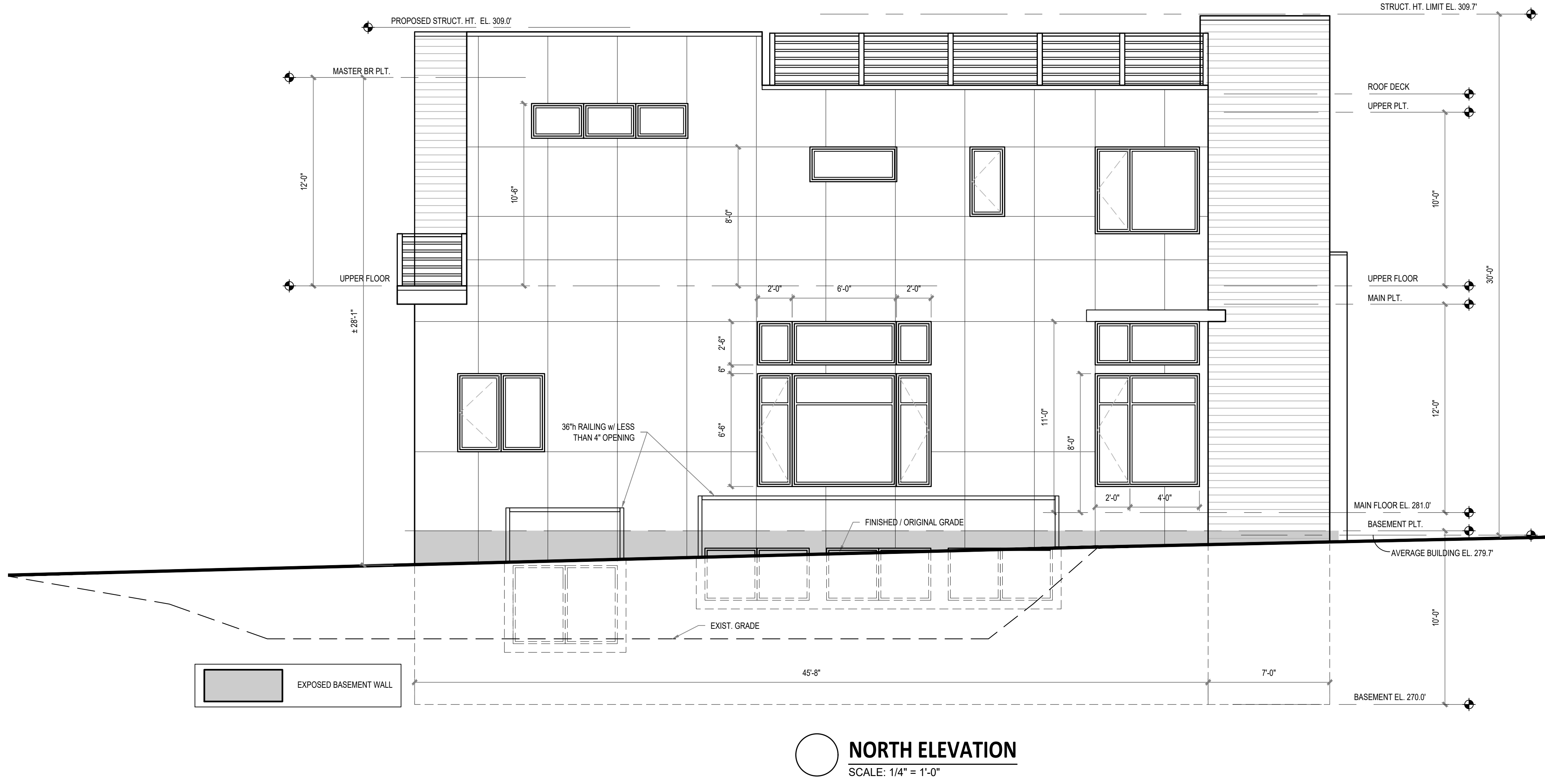
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2720 71ST AVENUE SE
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NUMBER	DATE	DESCRIPTION OF REVISIONS
01	08-05-2021	PERMIT PLANS
02	01-23-2022	RESPONSE TO CITY COMMENT #1
03	03-23-2022	RESPONSE TO CITY COMMENT #2

SHEET TITLE
MAIN FLOOR PLAN

JOB NUMBER

SHEET NUMBER



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8666 REGISTERED ARCHITECT
 CHAOHUA CHANG
 STATE OF WASHINGTON

2720 RESIDENCE
 2720 71ST AVENUE SE
 MERCER ISLAND WA 98040

NUMBER	DATE	DESCRIPTION OF REVISIONS
	09-05-2021	PERMIT PLANS
	01-23-2022	RESPONSE TO CITY COMMENT #1
	03-23-2022	RESPONSE TO CITY COMMENT #2

SHEET TITLE
ELEVATIONS

JOB NUMBER

SHEET NUMBER

GENERAL STRUCTURAL NOTES:

(THE FOLLOWING NOTES APPLIES TO THE PROPOSED PROJECT UNLESS OTHERWISE NOTED ON THE PLANS AND DETAILS)

ALL DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE

DESIGN LOADING CRITERIA:

1. DESIGN LOADS:	ROOF SNOW LOAD:	25 PSF
	ROOF PV PANEL:	4 PSF
	ROOF DECK PAVERS W/ PEDESTAL:	10 PSF
	FLOOR LIVE LOAD:	40 PSF
	DECK LIVE LOAD:	60 PSF
	WIND:	98-MPH (3-SECOND GUST), EXPOSURE B, Kzt=1.90
	SEISMIC:	SEISMIC USER GROUP I, I=1.0, SITE CLASS SD
		Ss=1.480; S1=0.500,
		Fa=1.000; Fv=1.500,
		S100=0.980; S30=0.500
		R=6.5 (WOOD SHEAR WALL)
		Ωo=3.0
		Cd=4.0

FOUNDATION DESIGN:

1500 PSF MAXIMUM DEAD+LIVE LOAD WITH A ONE-THIRD INCREASE ALLOWED UNDER THE SHORT-TERM WIND OR SEISMIC LOADS. CAST FOOTING ON NATIVE SITE SOILS OR STRUCTURAL FILL THAT EXTENDS DOWN TO THESE SOILS.

COEFFICIENT OF FRICTION FOR FOUNDATIO BASE FRICTION	0.40 (SF=1.5)
EQUIVALENT PASSIVE FLUID PRESSURE	400 PCF (SF=1.5)
EARTH PRESSURE FOR YIELDING/ACTIVE CONDITION WALLS	35 PCF
EARTH PRESSURE FOR NON-YIELDING/AT-REST CONDITION WALLS	55 PCF
SEISMIC EARTH PRESSURE FOR BASEMENT WALLS	7H; WHERE H: BURIED DEPTH OF WALL

CONCRETE AND FOUNDATION CONSTRUCTIONS:

1. ALL CONCRETE Fc=3,000 PSI (2,500 PSI USED FOR THE DESIGN), MAXIMUM WATER/CEMENT RATIO =0.45, MINIMUM 5-1/2 SACKS OF CEMENT PER CUBIC YARD. NO SPECIAL INSPECTION REQUIRED. CONCRETE BATCH TICKET OR DELIVERY RECEIPT FOR 3,000 PSI MINIMUM CONCRETE ON SITE FOR BUILDING INSPECTOR VERIFICATION. CONCRETE SHALL BE AIR ENTRAINED. TOTAL AIR CONTENT (PERCENT BY VOLUME OF CONCRETE) SHALL NOT BE LESS THAN 5 PERCENT OR MORE THAN 7 PERCENT.

2. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. NO SPECIAL INSPECTION REQUIRED. ASTM A706, GRADE 60, REINFORCING STEEL SHALL BE USED FOR WELDED OR FIELD-BENT BARS. SHEAR WALL BOUNDARY MEMBER REINFORCING, MAIN REINFORCING, SPIRALS, TIES AND STIRRUPS IN THE FRAME MEMBERS (BEAMS AND COLUMNS) COMPRISING THE LATERAL FORCE RESISTING SYSTEM.

3. WELDED WIRE FABRIC PER ASTM A185. FURNISH IN FLAT SHEETS, NOT ROLLS. LAP EDGES 1-1/2 MESH MINIMUM.

4. PROVIDE CONCRETE COVER AS FOLLOWS: FOOTINGS 3", WALLS 1-1/2", AND SLAB ON GRADE 1-1/2".

5. PROVIDE #4 LONGITUDINAL BOTTOM BARS IN WALL FOOTINGS. PROVIDE CORNER BARS OF SAME SIZE AND NUMBER AT CORNERS AND INTERSECTIONS. 42 BAR DIAMETERS EACH LEG. PROVIDE VERTICAL DOWELS OF SAME SIZE, NUMBER AND SPACING AS CONCRETE STEM WALL VERTICAL BARS WITH A 90 DEGREE STANDARD HOOK AT THE BOTTOM OF THE FOOTING.

6. REINFORCING CONCRETE WALLS AS FOLLOWS"
 6" WALLS, #4 @ 12" HORIZONTAL AND VERTICAL AT CENTER OF WALL.
 8" WALLS, #5 @ 15" OR #4 @ 12" HORIZONTAL AND VERTICAL AT CENTER OF WALL.
 10" WALLS, #4 @ 16" HORIZONTAL AND VERTICAL AT EACH FACE.
 12" WALLS, #4 @ 12" HORIZONTAL AND VERTICAL AT EACH FACE.

AT OPENINGS OVER 12" SQUARE, PROVIDE 2#5 BARS AT CENTER OF WALL ALL FOUR SIDES, EXCEPT 10" WALLS OR OVER PROVIDE 1#6 BAR EACH FACE ALL FOUR SIDES, EXTENDING 42 BAR DIAMETERS PAST OPENING. PROVIDE 1#5X4" DIAGONAL BAR AT CENTER OF WALL ALL FOUR CORNERS.

AT CORNERS, PROVIDE CORNER BARS IN OUTSIDE FACE OF SAME SIZE AND SPACING AS HORIZONTAL BARS, 42 BAR DIAMETER EACH LEG.

AT INTERSECTIONS, PROVIDE CORNER BARS OF SAME SIZE, NUMBER AND SPACING AS HORIZONTAL BARSOF INTERSECTING WALL, 42 BAR DIAMETER EACH LEG.

PROVIDE #4 LONGITUDINAL BARS AT TOP OF WALLS. PROVIDE KEYWAY OR ROUGHENED SURFACE AT CONSTRUCTION JOINTS.

PROVIDE VERTICAL DOWELS OF SAME SIZE, NUMBER AND SPACING AS VERTICAL BARS.

7. GROUT - 5000 PSI MINIMUM 7-DAY CUBE STRENGTH PER ASTM C1157-00. GROUT TO BE PREMIXED, NON-SHRINK "MASTERFLOW 928 GROUT" BY MASTER BUILDERS OR APPROVED EQUAL. ICC CERTIFICATION REQUIRED. USE SPECIFIC GROUT MIX RECOMMENDED BY MANUFACTURER FOR EACH GROUT APPLICATION AND FOLLOW MANUFACTURER'S INSTRUCTIONS.

8. ANCHOR BOLTS, ASTM A307. NO SPECIAL INSPECTION REQUIRED. SET ALL ANCHOR BOLTS BY TEMPLATE WHEREVER POSSIBLE.

9. DRILL-IN EXPANSION BOLTS, "KWIK-BOLT 1Z" BY HILTI FASTENING SYSTEMS BY HILTI FASTENING SYSTEM OR APPROVED EQUAL. ICC CERTIFICATION REQUIRED (ERS-1917). SPECIAL INSPECTION REQUIRED.

10. DRILL-IN ADHESIVE BOLTS, "HIT RE-500" ADHESIVE ANCHOR SYSTEM BY HILTI FASTENING SYSTEM OR APPROVED EQUAL. ICC CERTIFICATION REQUIRED (ESR-2322). SPECIAL INSPECTION REQUIRED.

CONSTRUCTION REQUIREMENTS:

1. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN IN THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL BRING ALL DISCREPANCIES TO THE OWNER.

2. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDING WITH THE PLANS AND DETAILS. THIS INCLUDES EXISTING STRUCTURE.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY AND HEALTH PRECAUTIONS INCLUDING HAZARDOUS CONDITIONS AND MATERIALS EXISTED OR CREATED BY OTHER PARTIES THAT WORKING ON THE PROJECT. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR CONSTRUCTION METHODS, TECHNIQUES, AND SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL EXISTING COMPONENTS, WHICH ARE REQUIRED TO REMAIN, IN THEIR ORIGINAL CONDITION. THIS INCLUDES WEATHER PROTECTIONS FOR THESE COMPONENTS UNTIL SUCH TIME THAT THE ENTIRE DWELLING INCLUDING THE NEW ADDITION ITSELF IS WEATHER PROTECTED.

5. CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE OWNER FOR APPROVAL PRIOR FABRICATION OR CONSTRUCTION. CHANGES SHOWN IN SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

6. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURAL. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING CEILING FACING TO 10 PSF AND ON EXISTING FLOOR FRAMING TO 40 PSF. PROVIDE TEMPORARY PLANKS OR STRUCTURAL SHEATHING OVER THE EXISTING CEILING JOISTS AS REQUIRED TO PROTECT THE EXISTING SOFFIT.

7. CONTRACTOR SHALL CHECK FOR DRY-ROT FOR ALL EXISTING STRUCTURAL COMPONENTS AT EXTERIOR WALLS, EXISTING TOILET ROOM FLOORS AND WALLS, AREAS SHOWN WATER STAINS, WOOD IN CONTACT WITH EARTH AND CONCRETE, AND ALL WOOD MEMBERS IN CRAW SPACES. ALL ROTTEN WOOD SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE OWNER.

8. 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 OWNER.

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

10. THE MANUFACTURER'S INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION, FOR THE INSPECTOR'S USE AND REFERENCE.

STRUCTURAL FRAMING REQUIREMENTS:

1. ALL LUMBER SHALL BE KILN DRIED OR MC-19 WITH WWPA GRADED OR APPROVED EQUAL. ALL STRUCTURAL FLOOR, ROOF, AND SHEAR WALL SHALL BE APA RATED. ALL SPECIFIED INDUSTRIAL LUMBERS, NAMELY PARALLAM PSL, MICROLLAM LVL, TIMBERSTRAND LSL, AND TJI SHALL BE MADE BY TRUS-JOIST CORPORATION OR OWNER APPROVED EQUAL.
 ALL GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN ACCORDANCE WITH AITC 110, AITC 117 AND ANSIIATC A190.1. EACH MEMBER SHALL BEAR AN AITC IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AITC CERTIFICATE OF CONFORMANCE. USE EXTERIOR TYPE ADHESIVES. BEAMS SHALL BE INDUSTRIAL APPEARANCE GRADE, UON BY THE ARCHITECT. SINGLE SPAN BEAMS SHALL BE COMBINATION 24F-V4, Fb=2400 PSI, Fv=265 PSI, E=1,800,000 PSI; CANTILEVERED SPAN BEAMS SHALL BE COMBINATION 24F-V8, Fb=2400 PSI, Fv=265 PSI, E=1,800,000 PSI.

2. MINIMUM NAILING SHALL COMPLY WITH TABLE 2304.10.1 OF THE 2018 IBC.

3. ALL NAILS SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

NAIL SIZE, LENGTH, AND DIAMETER
 6D 2" 0.113" 8D 2-1/2" 0.131 10D 3" 0.148 16D BOX 3" 0.131
 THE FOLLOWING STAPLES MAY BE SUBSTITUTED FOR NAILING OF PLYWOOD
 NAIL SIZE, EQUIVALENT STAPLE, AND MINIMUM LENGTH
 6D 16GA 1-3/4" 8D 15GA 1-3/4" 10D 13GA 1-3/4"

4. GALVANIZED METAL TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY INCLUDING SIMPSON STRONG WALLS AND SIMPSON GARAGE PORTAL WALLS (WHERE OCCUR) OR OWNER APPROVED EQUAL. IF NO SPECIFIC HANGER IS CALLED OUT, ANY HANGER MADE FOR THE SPECIFIED BEAM OR JOIST CAN BE USED.

5. ALL EXTERIOR WALL STUDS ARE 2X6 DOUGLAS FIR NO.2 STUDS AT 16" ON CENTER. ALL INTERIOR BEARING AND SHEAR WALL STUDS ARE 2X4 DOUGLAS FIR NO.2 STUDS AT 16" ON CENTER. PROVIDE ONE EACH STUD AND ONE FULL HEIGHT STUD AT EACH SIDE OF DOOR AND WINDOW OPENINGS WHEN THEIR ROUGH OPENING WIDTH IS EQUAL OR LESS THAN 3'-0". PROVIDE TWO BEARING STUDS AND TWO FULL HEIGHT STUDS AT EACH SIDE OF DOOR AND WINDOW OPENINGS WHEN THEIR ROUGH OPENING WIDTH IS GREATER THAN 3'-0" OR WALL IS FRAMED WITH (2)2X6 AT 16" ON CENTER. PROVIDE MULTIPLE STUDS UNDER ALL BEAM AND KING-TRUSS BEARING LOCATIONS WITH THEIR TOTAL WIDTH/DEPTH EQUAL OR WIDER/DEEPER THAN THE BEAM/KING-TRUSS WIDTH. THESE MULTIPLE STUDS NEED TO EXTEND DOWN TO THE TOP OF CONCRETE. PROVIDE EQUAL AMOUNT OF MULTIPLE VERTICAL BLOCKING AT JOIST SPACING TO ALLOW CONTINUITY. THIS ALSO APPLIES TO ALL HOLDOWN STUDS FOR THE SHEAR WALLS. FACE NAIL WALL TOP DOUBLE PLATE WITH 16D @ 12" AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE (6) 16D @ 4" ON CENTER EACH SIDE OF JOINT. FACE NAIL WALL SILL PLATE THROUGH FLOOR SHEATHING TO DOUBLE PLATES, BEAM, OR SUPPORTING MEMBER BELOW WITH 16D @ 6" ON CENTER. MULTIPLE STUD SHALL BE NAILED TOGETHER WITH 16D @ 12" ON CENTER STAGGERED EACH FACE. PROVIDE SOLID BLOCKING BETWEEN STUDS AT MID-HEIGHT FOR ALL STUD WALLS OVER 10FT IN HEIGHT.

6. PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENING IN FLOOR. FLOOR JOISTS SHALL BE BLOCKED PER THE JOIST MANUFACTURER'S INSTRUCTIONS.

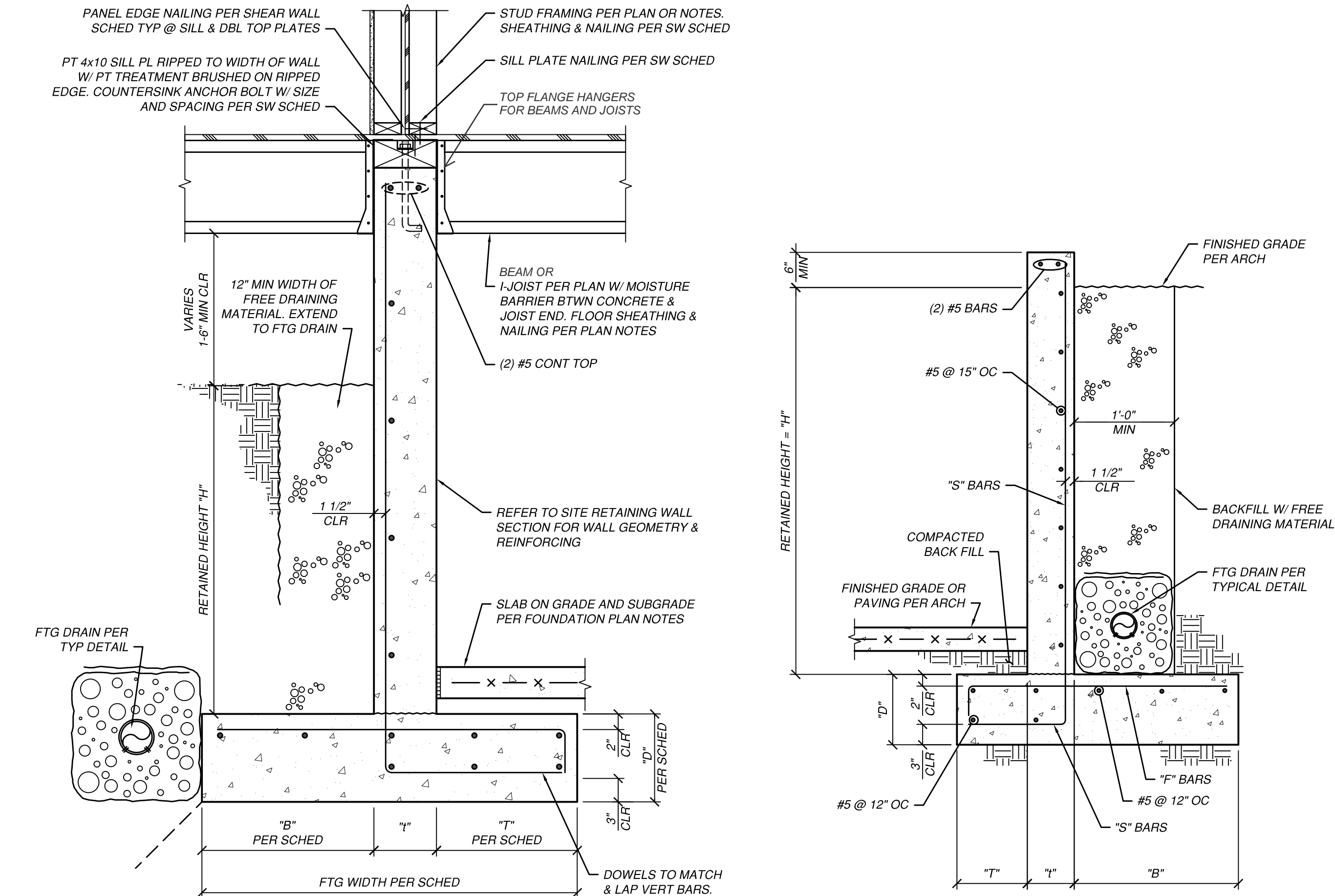
7. ALL FLOOR FRAMING LUMBERS: DOUGLAS FIR NO.2
 ALL HEADERS: DOUGLAS FIR NO.2. TYPICAL HEADER 4X8 MINIMUM UNLESS OTHERWISE SHOWN ON THE PLANS.
 ALL POSTS: DOUGLAS FIR NO.2 UNLESS OTHERWISE SHOWN ON THE PLANS
 STUDS, PLATES, AND MISCELLANEOUS LIGHT NON-STRUCTURAL FRAMING: HEM-FIR NO.2

8. METAL PLATE CONNECTED WOOD TRUSSES: WOOD TRUSSES SHALL BE DESIGNED, MANUFACTURED AND INSTALLED PER TRUSS PLATE INSTITUTE (ANSI/TPI 1) SPECIFICATIONS. TPI SPECIFICATIONS SHALL NOT REVISE TRUSS ENGINEER'S AND TRUSS MANUFACTURER'S RESPONSIBILITY NOTED BELOW. WEB AND CHORD SIZES INDICATED ON PLANS AND NOTES ARE MINIMUM ONLY. ROOF DESIGN LIVE LOAD PER DESIGN LOADING CRITERIA. ROOF DESIGN DEAD LOAD 10 PSF MINIMUM TOP CHORD AND 7 PSF MINIMUM BOTTOM CHORD WITH LIVE LOAD OF 40 PSF MINIMUM AT ATTIC FLOOR WHERE APPLICABLE. USE 2X6 MINIMUM BOTTOM CHORD FOR ATTIC FLOOR. ROOF DESIGN WIND UPLIFT 15 PSF MINIMUM TYPICAL, EXCEPT USE 30 PSF MINIMUM WITHIN 10 FEET OF ROOF EAVES OR RAKES. DESIGN TRUSSES FOR SUPPORT OF DEAD, LIVE, SNOWDRIFT, AND WIND LOADS AND MECHANICAL/ELECTRICAL EQUIPMENT, PIPING, ETC AS REQUIRED. SNOW DRIFT LOADING LOCATIONS AND VALUES TO BE DETERMINED BY TRUSS ENGINEER. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS SHOWING TRUSSES, TRUSS TO TRUSS AND TRUSS TO SUPPORTING STRUCTURE CONNECTIONS, ERECTION AND PERMANENT BRACING SIZES AND CONNECTIONS. PROVIDE STANDARD TRUSS CAMBER. PROVIDE ERECTION BRACING PER MANUFACTURE'S INSTRUCTIONS. PROVIDE AND INSTALL PERMANENT BRACING FOR LATERAL SUPPORT OF INDIVIDUAL WEB AND CHORD MEMBERS AS DESIGNED BY THE TRUSS ENGINEER. PROVIDE AND INSTALL ALL TRUSS TO TRUSS AND TRUSS TO SUPPORTING STRUCTURE CONNECTIONS. TRUSS ALTERATIONS SHALL NOT OCCUR UNLESS THE APPROVAL OF A DESIGN PROFESSIONAL.

9. VENT BLOCKINGS CALLED OUT IN THE DRAWINGS ARE 2X WOOD BLOCKING WITH (3) EQUAL SPACED 1-1/2" DIAMETER HOLES ON EACH BLOCKING WITH MASH INSTALLED.

10. ROOF SHEATHING: 15/32"(1/2") MINIMUM CDX PLYWOOD OR STRUCTURAL PANEL WITH SPAN RATING OF 32/16, UNBLOCKED, LAID UP WITH FACE GRAIN PERPENDICULAR TO FRAMING BELOW, STAGGER END JOINTS. INSTALL PLYCLIPS AS REQUIRED. NAILING IS AS FOLLOWS: 10D @ 6" DIAPHRAGM BOUNDARIES, OVER EXTERIOR WALLS, AND INTERIOR SHEAR WALLS, 10D @ 6" ALL SUPPORTED EDGES, AND 10D @ 12" FIELD.

11. FLOOR AND ROOF DECK SHEATHING: 23/32"(3/4") MINIMUM CDX TONGUE AND GROOVE PLYWOOD WITH SPAN RATING OF 40/20, UNBLOCKED FOR FLOOR JOIST SPACED AT 16" ON CENTER; 7/8" MINIMUM CDX TONGUE AND GROOVE PLYWOOD WITH SPAN RATING OF 40/20 UNBLOCKED FOR FLOOR JOIST SPACED AT 24" ON CENTER; LAID UP WITH FACE GRAIN PERPENDICULAR TO FRAMING BELOW, STAGGER END JOINTS. GLUE FLOOR SHEATHING TO ALL SUPPORTS WITH A CONTINUOUS 3/16" DIAMETER BEAD MINIMUM. PROVIDE TWO BEADS AT PANEL JOINTS. NAILING IS AS FOLLOWS: 10D @ 6" DIAPHRAGM BOUNDARIES, OVER EXTERIOR WALLS, AND INTERIOR SHEAR WALLS, 10D @ 6" ALL SUPPORTED EDGES, AND 10D @ 10" FIELD.



1 SECTION SCALE: NTS

2 SITE RETAINING WALL SECTION SCALE: 3/4" = 1'-0"

RETAINING WALL SCHEDULE								
WALL TYPE	WALL GEOMETRY				WALL REINFORCING			
	MAX "H"	"T"	"B"	"D"	"S" BARS	"F" BARS		
1	4'-0"	0'-8"	1'-2"	8"	12"	#5 @ 15"	#5 @ 18"	
2	6'-0"	1'-0"	1'-10"	8"	12"	#5 @ 12"	#5 @ 18"	
3	8'-0"	1'-9"	2'-1"	8"	12"	#5 @ 10"	#5 @ 12"	
4	10'-0"	2'-6"	2'-4"	8"	15"	#6 @ 9"	#5 @ 12"	

NOTES:
 1. FOUNDATION SHALL BEAR ON UNDISTURBED COMPETENT BEARING SOIL PER GEOTECHNICAL REPORT.

DHS ENGINEERS
 1201 3RD AVE, 2200 SEATTLE, WA 98101
 (206) 734-5858



2720 RESIDENCE
 2720 71ST AVENUE SE
 MERCER ISLAND WA 98040

NUMBER	DATE	DESCRIPTION OF REVISIONS
00	07.29.21	PERMIT SET
01	01.18.22	PERMIT REVIEW-1

SHEET TITLE
GENERAL NOTES

JOB NUMBER

SHEET NUMBER

S0.1

CITY STAMP



2720 RESIDENCE
 2720 71ST AVENUE SE
 MERCER ISLAND WA 98040

NUMBER	DATE	DESCRIPTION OF REVISIONS
00	07.29.21	PERMIT SET
01	01.18.22	PERMIT REVIEW-1

SHEET TITLE
MAIN FLOOR FRAMING PLAN

JOB NUMBER

SHEET NUMBER

S2.1

CITY STAMP

COLOR PRINT REQD

NEW CONC WALL

NEW WOOD BEARING & SHEAR WALL

OTHER LINES & COLORS AS NOTED

LEGEND

ALL BEARING/SHEAR WALLS SHOWN IN PLANS ARE FOR WALLS BELOW. TYPICAL UNO.

X LINEAR FT OF TYPE Y SHEAR WALL; REFER TO 8/S5.5 FOR SCHEDULE AND DETAILS.

Y TYPE Y PERFORATED SHEAR WALL; REFER TO 6/S5.5 FOR DETAIL.

A-HOLDOWN STRAP TIES AT TOP (DASHED WHERE OCCURS) AND BOT OF SHEAR WALL PANEL BELOW; REFER TO 1/S5.2 FOR SCHEDULE. CENTER TOP AND BOT STRAPS TO BOT AND TOP OF RIM JOIST RESPECTIVELY & WRAP AROUND RIM JOIST AND/OR BM/HEADER ABOVE & BELOW WHEN TOO LONG

A-1-HOLDOWN STRAP TIES AT TOP (DASHED WHERE OCCURS) AND HOLDOWN ANCHOR IN CONC AT BOT OF SHEAR WALL PANEL BELOW; REFER TO 1/S5.2 & 1/S5.5 FOR SCHEDULES; CENTER TOP STRAP TO BOT OF RIM JOIST & WRAP AROUND RIM JOIST AND/OR BM ABOVE WHEN TOO LONG

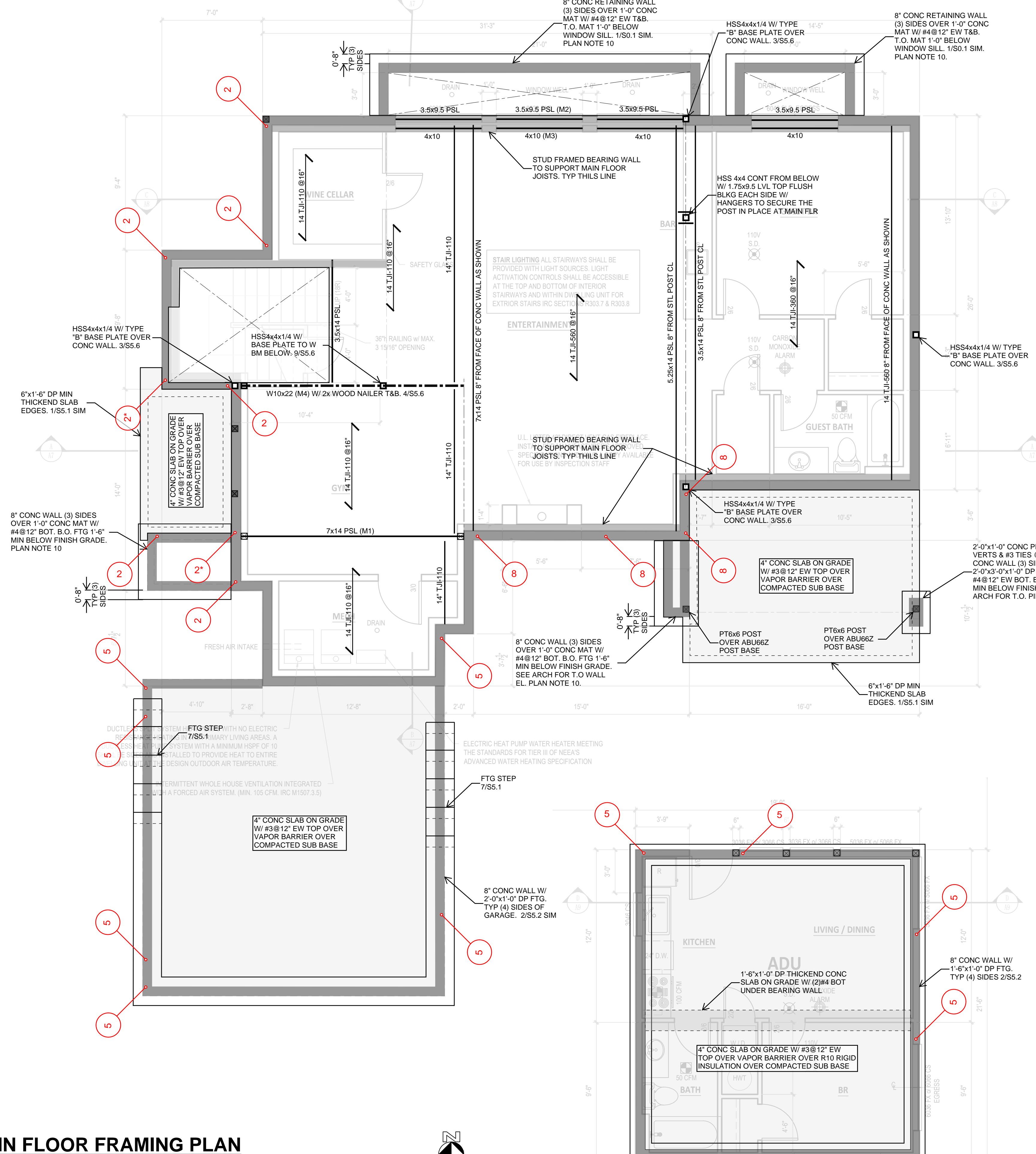
STEP IN FLR OR SLAB

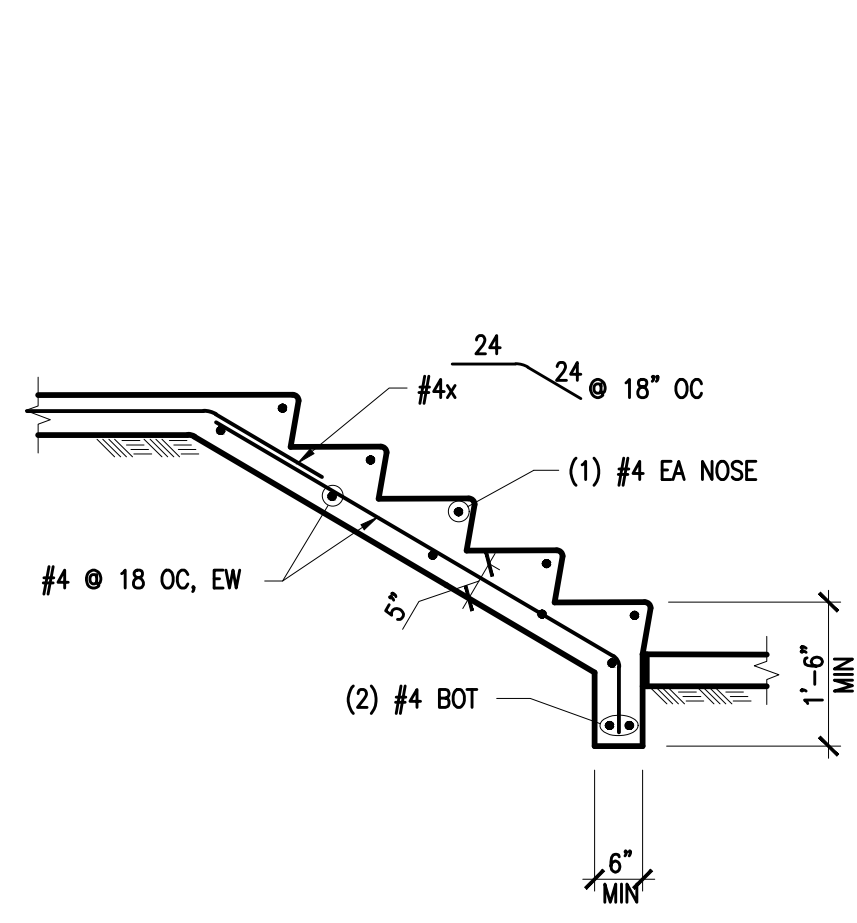
* COMBINED HOLDOWN ANCHOR FOR SHEAR WALLS PERPENDICULAR TO EACH OTHER SEE 4/S5.5

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

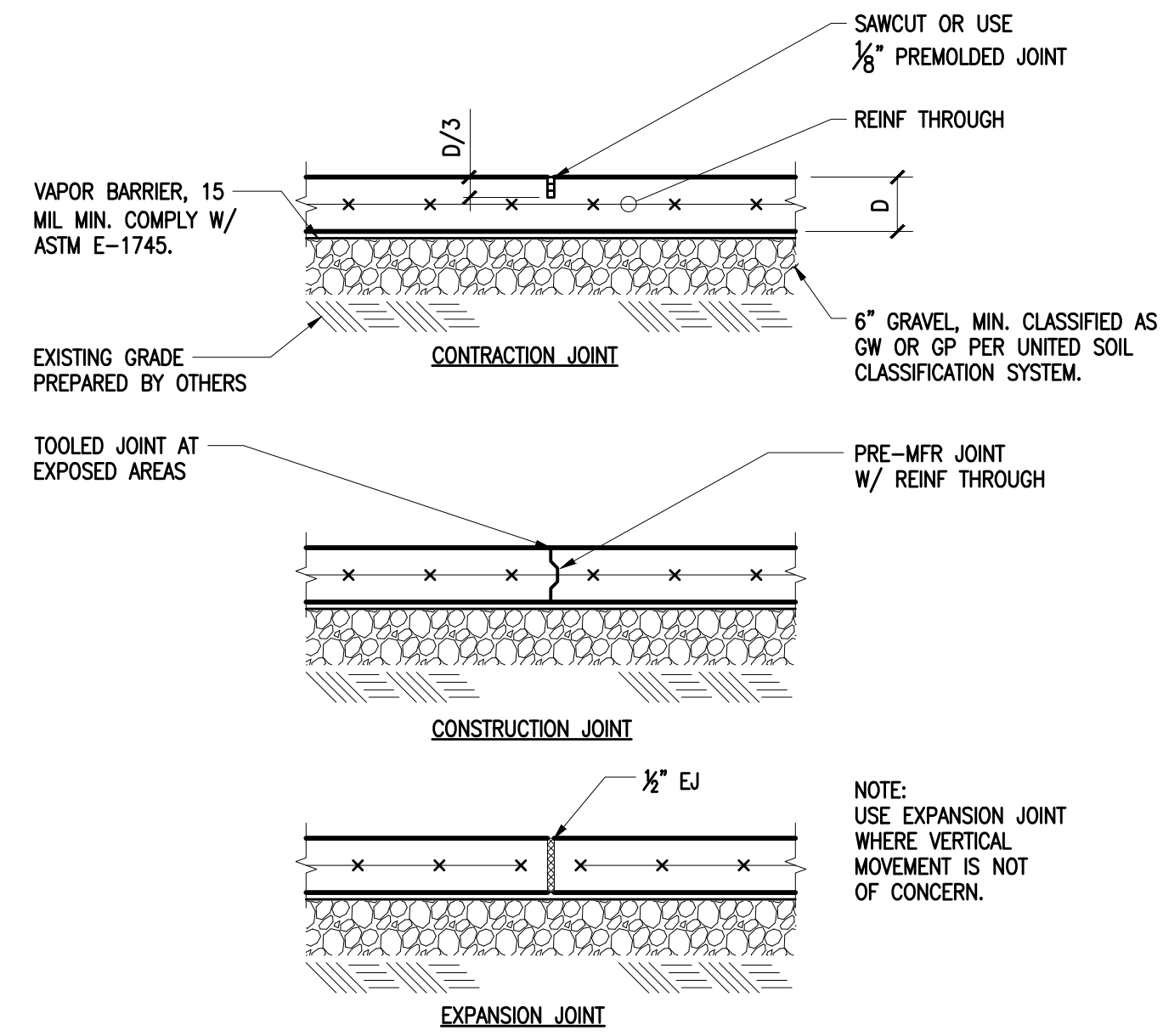
MAIN FLOOR FRAMING PLAN NOTES:

- ALL HEADERS ARE 4x8 UNO; ALL POSTS ARE 4x4/4x6 AND 6x6 IN 2x4 AND 2x6 STUD WALLS RESPECTIVELY UNO.
- " E " INDICATES FACE MOUNTED BEAM HANGER WITH SDS FASTENERS UNO.
- " * " INDICATES SHARED HOLDOWN FOR SHEAR WALLS PERPENDICULAR TO EACH OTHER. SEE 4/S5.5.
- EXCEPT IN-WALL HEADERS, ALL FLOOR BEAMS ARE TOP FLUSH. UNO.
- SEE 7 & 8/S5.2 FOR FLOOR FRAMING DETAILS.
- SEE 7&12/S5.3 FOR STAIR FRAMING DETAILS.
- UNO ALL SHEAR WALLS SHOWN ARE TYPE "6" FOR SOLID WALL PANELS & TYPE "4P" FOR PANELS WITH WINDOW OPENINGS.
- PROVIDE/INSTALL BC OR BCS OR AC (2-PIECE) OR LCE (2-PIECE) OR LPCZ (2-PIECE) POST CAPS AT ALL BEAM ENDS AT POSTS/WALLS; PROVIDE/INSTALL BC POST BASES FOR ALL POSTS OVER WOOD FRAMING.
- HOLDOWNS SHOWN ARE A REPEAT OF WHAT ARE SHOWN ON THE FLOOR FRAMING ABOVE.
- INSTALL #4x1'-4" EPOXY DOWELS @18" (4" EMBED) TO BASEMENT WALLS ALONG FTG/WALL LENGTH FOR LATER INSTALLED SITE WALLS/FTGS. EPOXY DOWELS AT WALL CENTER AND FTG MID DEPTH.

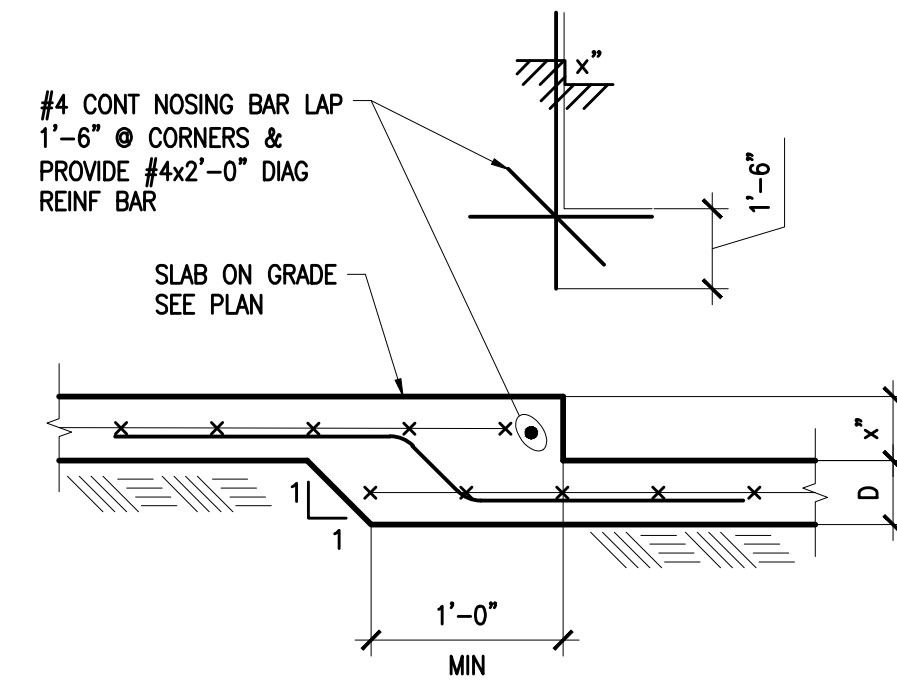




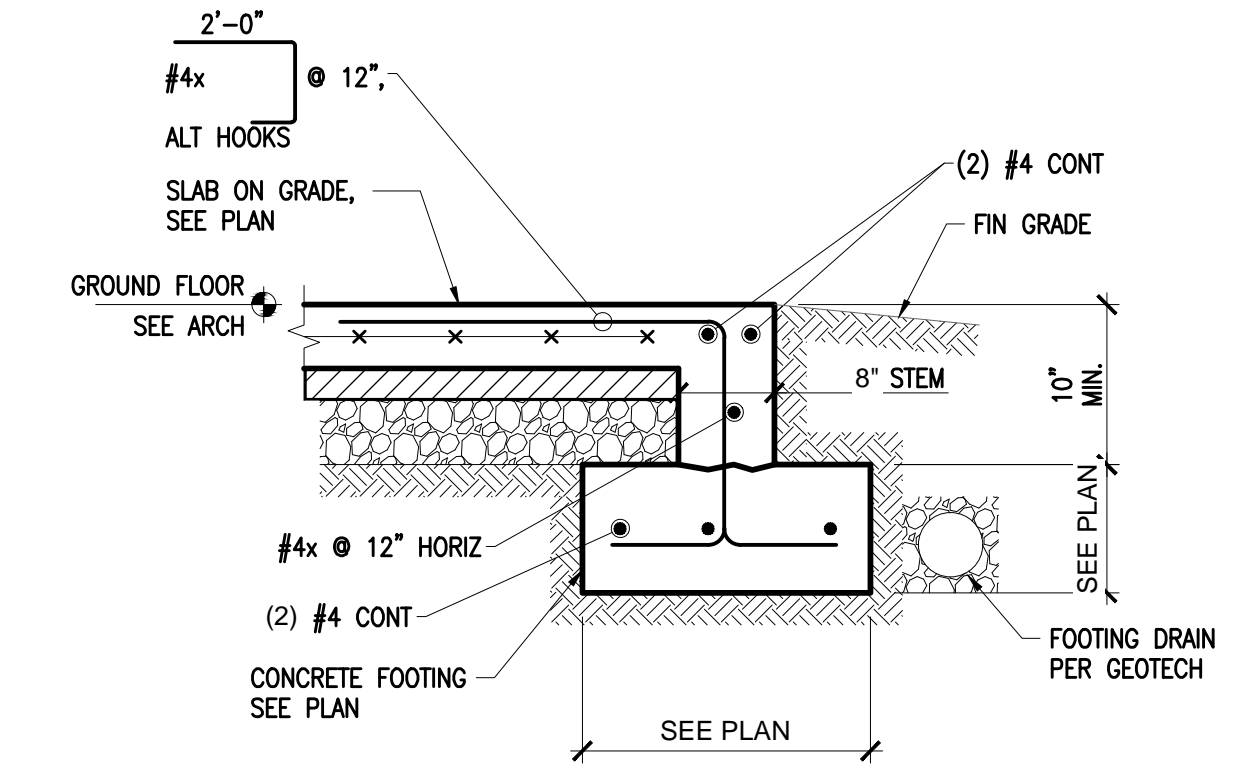
NOTES:
1. SEE ARCH FOR STAIR DIMENSIONS AND CONFIGURATION.



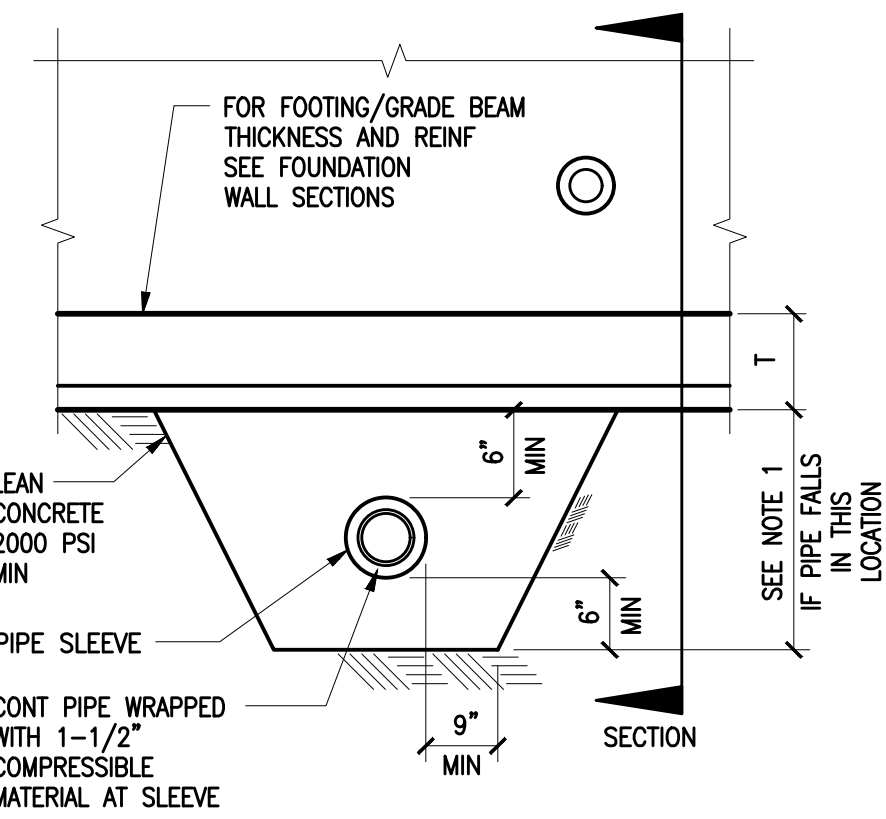
2 SLAB JOINT DETAILS
1"=1'-0"



3 DEPRESSED SLAB ON GRADE
1"=1'-0"

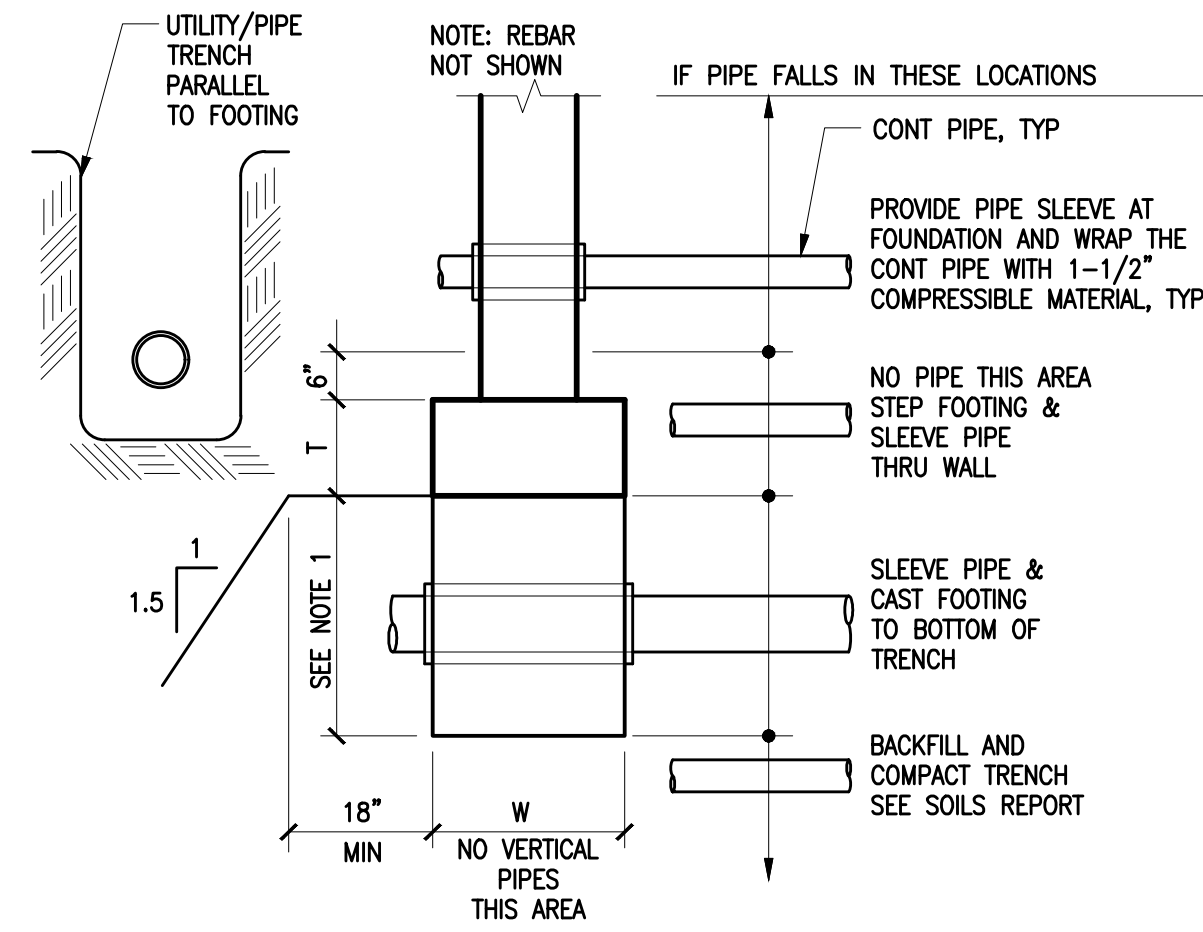


4 SLAB EDGE AT GARAGE DOOR
1"=1'-0"

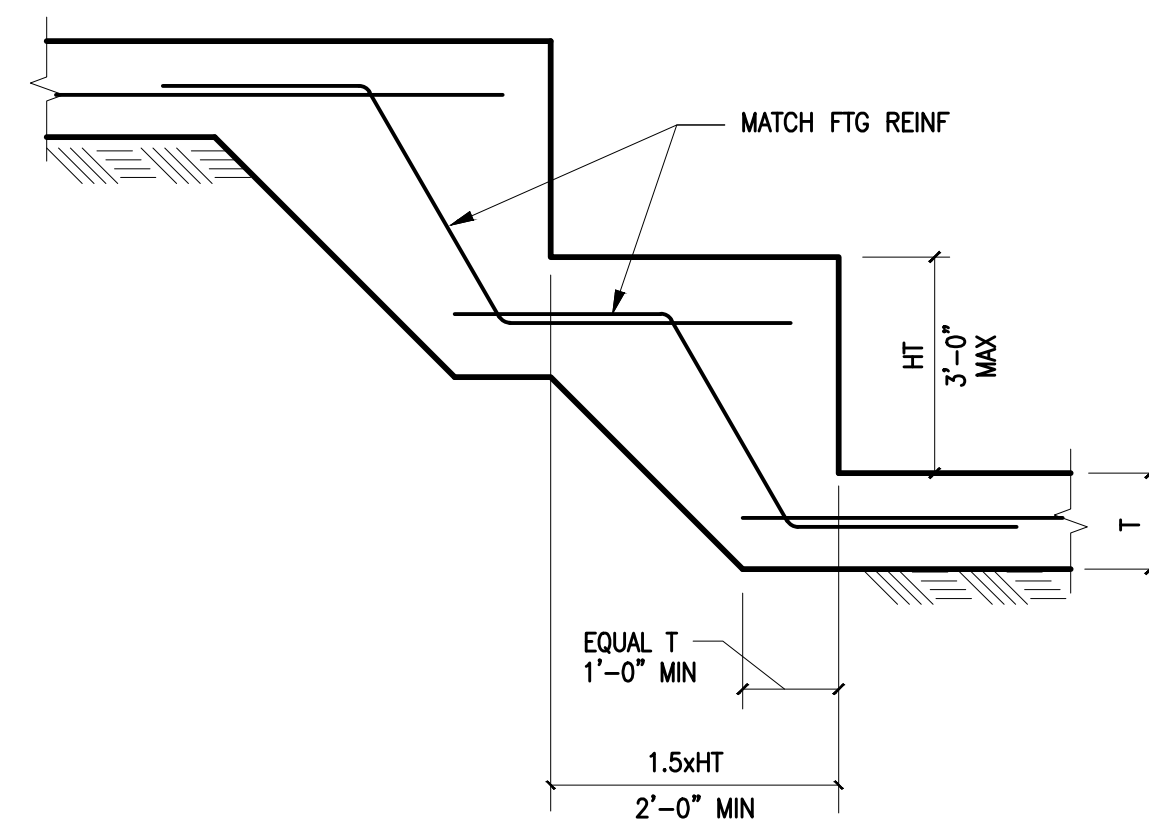


NOTES:
1. SINGLE PIPES 8" OR LESS PERPENDICULAR TO AND GREATER THAN 24" CLEAR BELOW FOOTINGS DO NOT REQUIRE CONCRETE ENCASUREMENT. (PIPE GROUPINGS BELOW 24" SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER).
2. PIPES LARGER THAN 8" SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER.

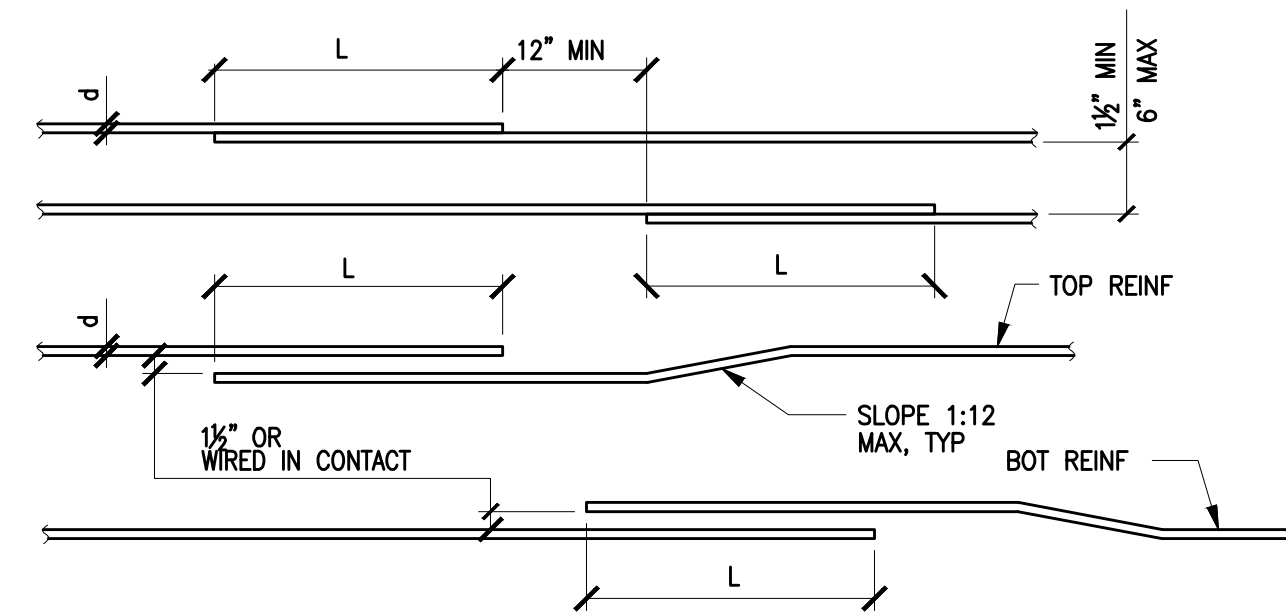
5 PIPE CLEARANCE AT STRIP FOOTING/GRADE BEAM
1/2"=1'-0"



7 STEPPED FOOTING
1/2"=1'-0"



8 OPENING IN CONCRETE SLAB
1"=1'-0"



NOTES:
1. SCHEDULE APPLIES TO UNCOATED GRADE 60 BARS IN NORMAL WEIGHT CONCRETE.
2. FOR LIGHTWEIGHT CONCRETE MULTIPLY LENGTH IN SCHEDULE BY 1.3.
3. ALL SPLICES SHALL BE CLASS B SPLICES UNLESS INDICATED OTHERWISE.
4. TOP BARS (INDICATED WITH "T" IN SCHEDULE) ARE HORIZONTAL TOP BARS WITH MORE THAN 12" OF CONC CAST BLW THE BARS.
5. BOTTOM BARS (INDICATED WITH "B" IN SCHEDULE) ARE ALL VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE CAST BELOW HORIZONTAL BARS.
6. ANY PORTION OF A STRAIGHT BAR EMBEDMENT LENGTH NOT WITHIN THE CONFINED CORE SHALL BE INCREASED BY A FACTOR OF 1.6.
7. ALL HORIZONTAL SPLICES SHALL BE STAGGERED AS SHOWN. IF MORE THAN 50% OF VERTICAL REINFORCING IS LAP SPICED WITHIN THE REQUIRED LAP SPLICE LENGTH, THE LAP SPLICE LENGTH SHALL BE INCREASED BY 33%.
8. LAP SPLICES LISTED IN THE SCHEDULE ARE CLASS B SPLICES. CLASS B SPLICES, FOR CLASS A SPLICES REDUCE LENGTH BY 25%.
9. FOR $f'_c=4500$ psi USE VALUES FOR 4000psi.

10 REINFORCING SPLICE SCHEDULE
3/4"=1'-0"

		SPLICE OR DEVELOPMENT LENGTH (INCHES)																	
		"CLASS B" TENSION LAP SPLICE SCHEDULE																	
NORMAL WT. CONCRETE f'_c (psi)		0.375"		0.500"		0.625"		0.750"		0.875"		1.000"		1.128"		1.270"		1.410"	
		T	B	T	B	T	B	T	B	T	B	T	B	T	B	T	B	T	B
3000		28	22	38	29	47	36	56	43	81	63	93	72	105	81	116	90	128	98
4000		25	19	33	25	41	31	49	37	71	54	81	62	91	70	101	78	111	85
5000		22	17	29	23	36	28	44	34	63	49	72	56	81	63	90	69	99	76
6000		20	16	27	21	33	26	40	31	58	45	66	51	74	57	82	63	90	70
		DEVELOPMENT LENGTH "Ld" SCHEDULE																	
3000		22	17	29	22	36	28	43	33	63	48	72	55	81	62	90	69	98	76
4000		19	15	25	19	31	24	37	29	54	42	62	48	70	54	78	60	85	66
5000		17	13	23	17	28	22	34	26	49	38	56	43	63	48	69	54	76	59
6000		16	12	21	16	26	20	31	24	45	34	51	39	57	44	63	49	70	54



NUMBER	DATE	DESCRIPTION OF REVISIONS
00	07.29.21	PERMIT SET
01	01.18.22	PERMIT REVIEW-1

SHEET TITLE
TYPICAL CONCRETE DETAIL

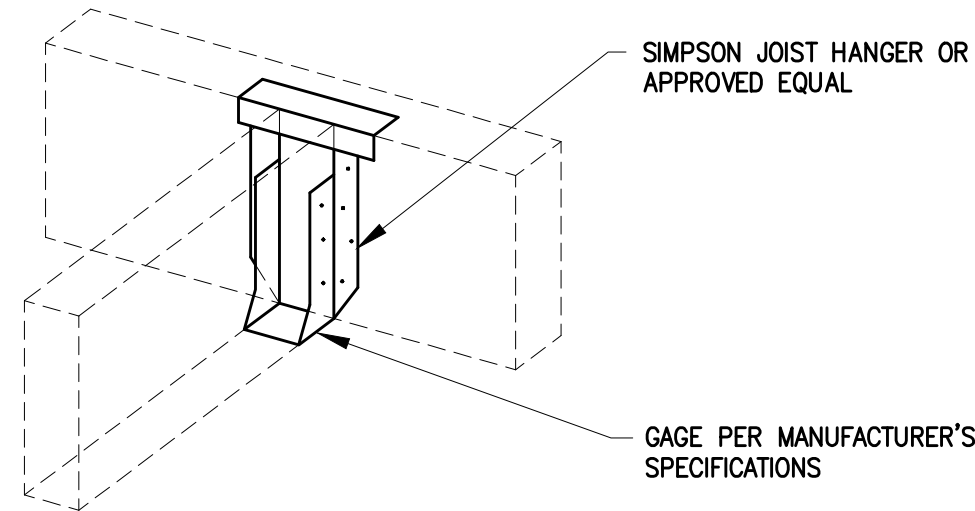
JOB NUMBER

SHEET NUMBER

S5.1

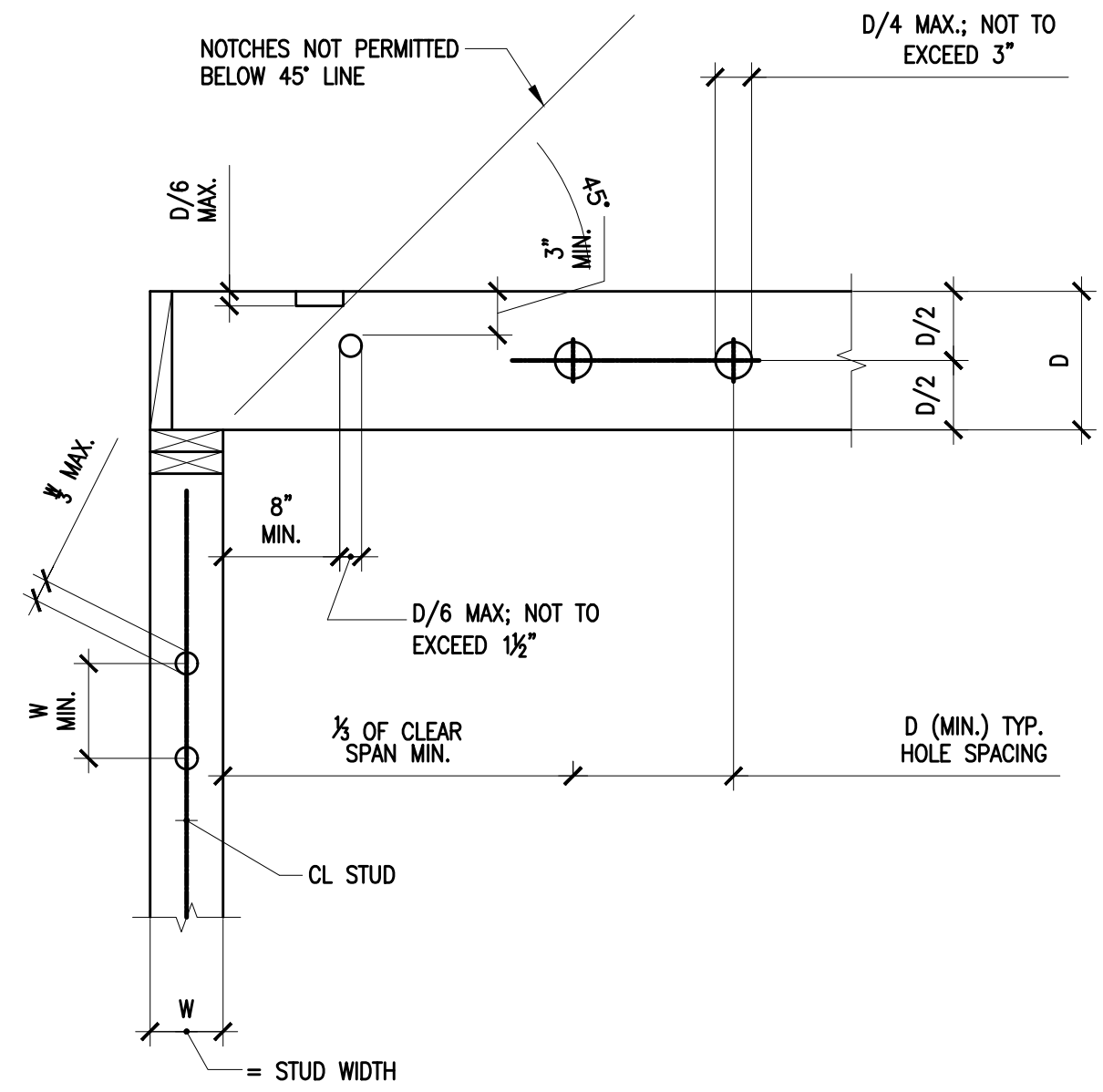
CITY STAMP

HANGER SCHEDULE	
JOIST/BEAM	TYP HANGER
2x12	JB212A
1 1/4" TJI210	ITS2.06/11.88
1 1/4" TJI360	ITS2.37/11.88
(2) 1 1/4" TJI210	MIT4.28/11.88
1 3/4x1 1/2 LVL	BA1.81/11.88 (MIN)
3/4x1 1/2 PSL	BA3.56/11.88 (MAX)
5/4x1 1/2 PSL	HB5.50/11.88
5/4x16 PSL	HGLTV5.516

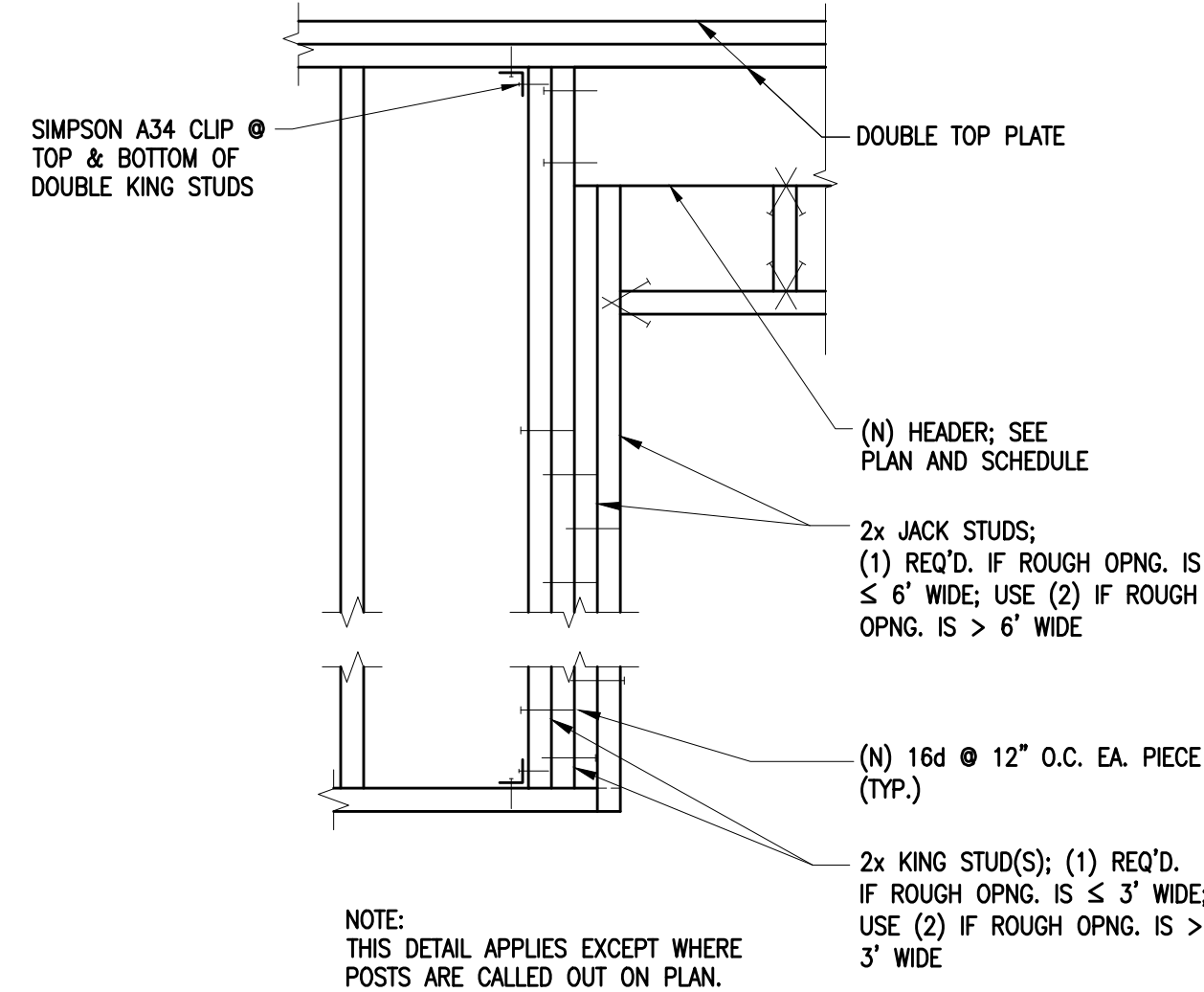


NOTE: THIS TYPE OF HANGER TO BE USED TYPICAL WHERE APPLICABLE UNLESS NOTED OR SHOWN OTHERWISE ON THE PLANS AND DETAILS. USE SIZE AND TYPE OF NAILS AS REQUIRED BY MANUFACTURER AND FULLY DRIVE IN ALL NAILS.

1 HANGER DETAIL AND SCHEDULE
NTS



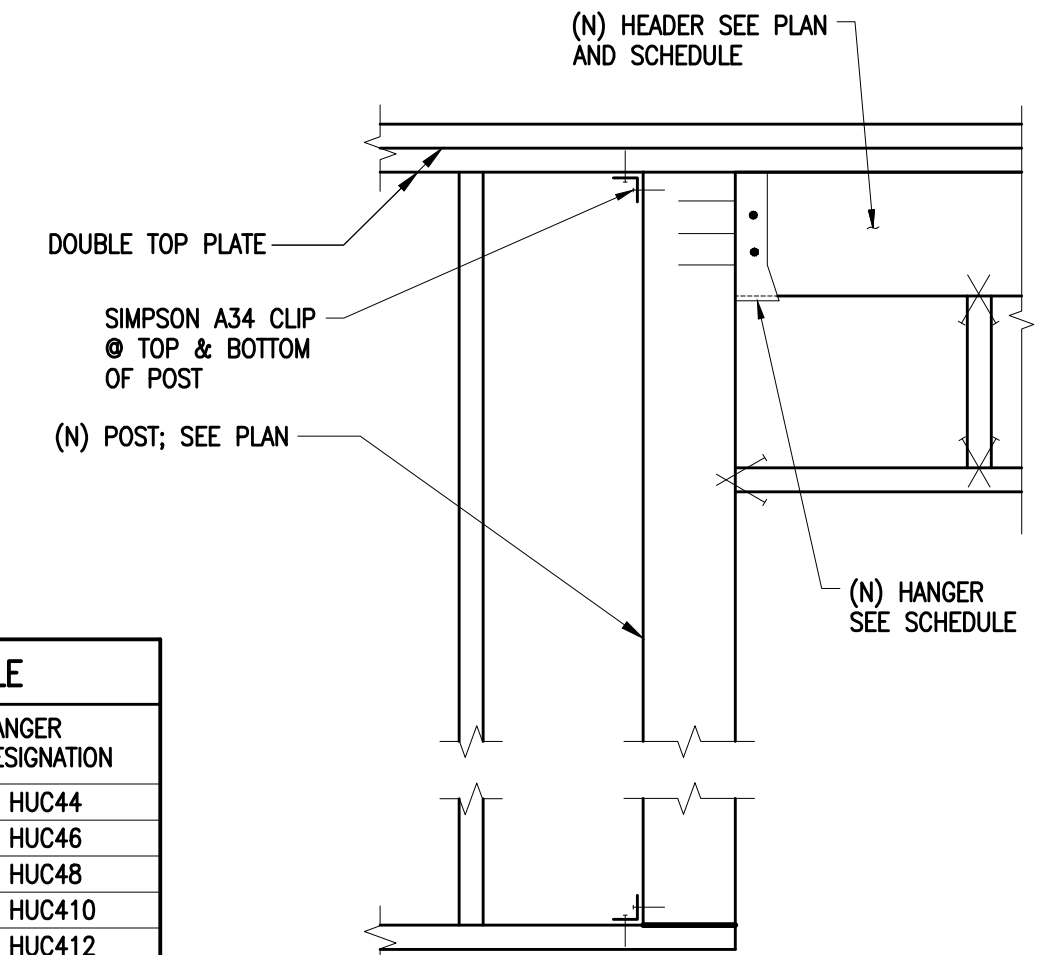
2 ALLOWABLE HOLES & NOTCHES IN JOISTS & STUDS
1"=1'-0"



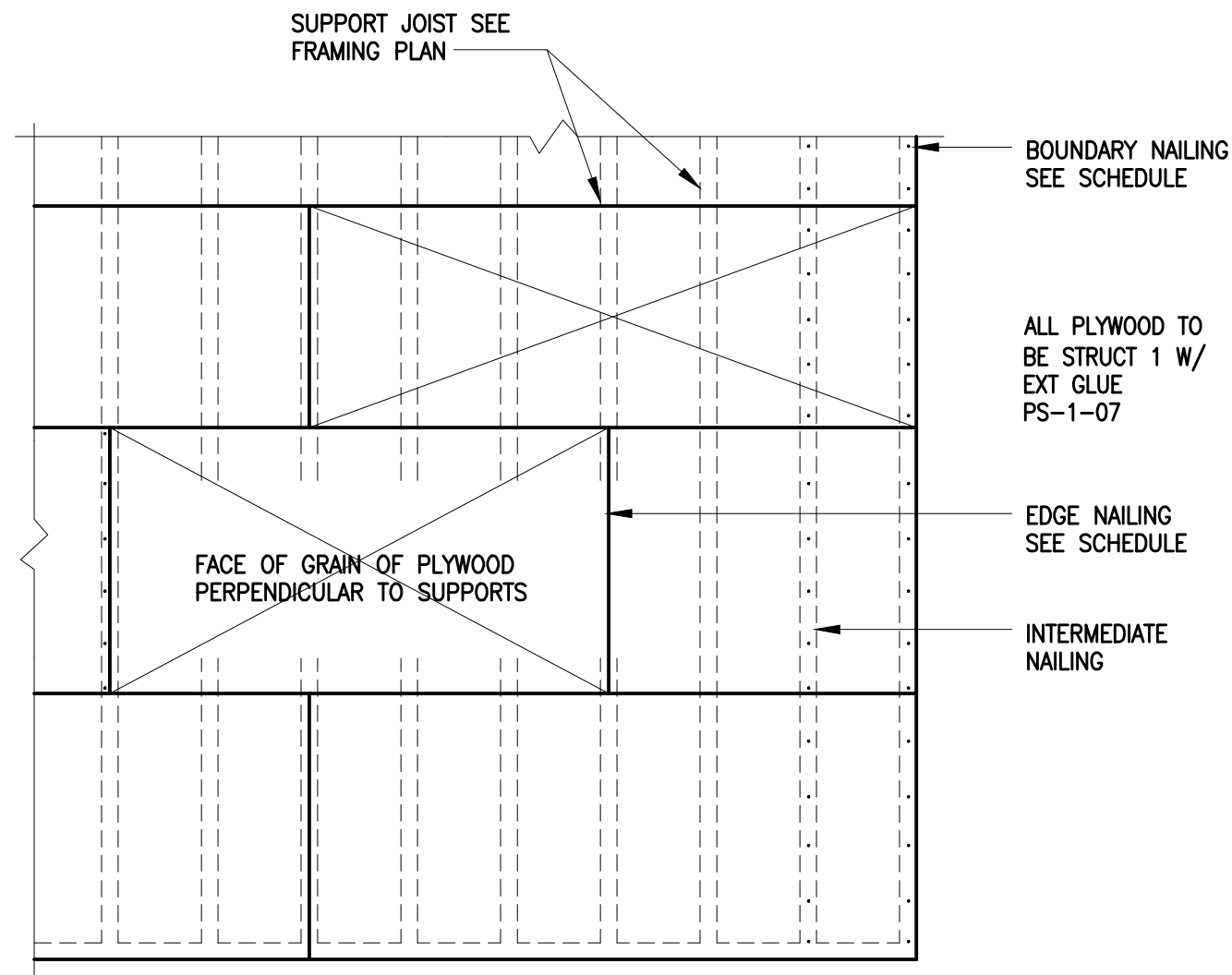
TRADITIONAL HEADER DETAILS

3 TYPICAL HEADER DETAILS
1"=1'-0"

HEADER SCHEDULE		
PLAN DESIGNATION	HEADER SIZE	HANGER DESIGNATION
H44	4x4	HUC44
H46	4x6	HUC46
H48	4x8	HUC48
H410	4x10	HUC410
H412	4x12	HUC412
H414	3/4x14 PSL	HUC414
H66	6x6	HUC66
H68	6x8	HUC68
H610	6x10	HUC610
H612	6x12	HUC612
H614	5/4x14 PSL	HUC614



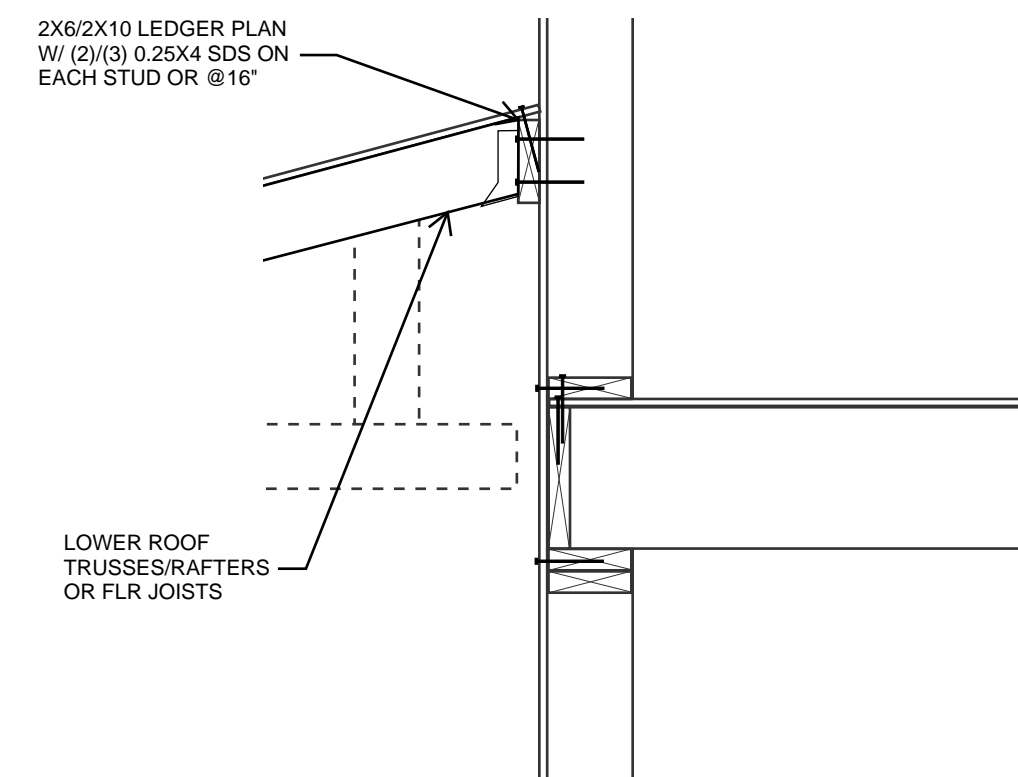
HEADER DETAILS AT POSTS
NOTE: THIS DETAIL APPLIES EXCEPT WHERE (N) POSTS ARE CALLED OUT ON PLAN AT HEADER LOCATIONS.



DIAPHRAGM SCHEDULE					
LOCATION	PLYWOOD	PANEL ID	BOUN. NAILS	EDGE NAILS	INTER. NAILS
FLAT ROOF DECK	3/4" STRUCT 1 T&G OSB	40/20	10d @ 4"	10d @ 6"	10d @ 12"
SLOPED ROOF	3/4" STRUCT 1 T&G OSB	40/20	10d @ 4"	10d @ 6"	10d @ 12"
FLOOR	3/4" STRUCT 1 T&G OSB	40/20	10d @ 4"	10d @ 6"	10d @ 12"

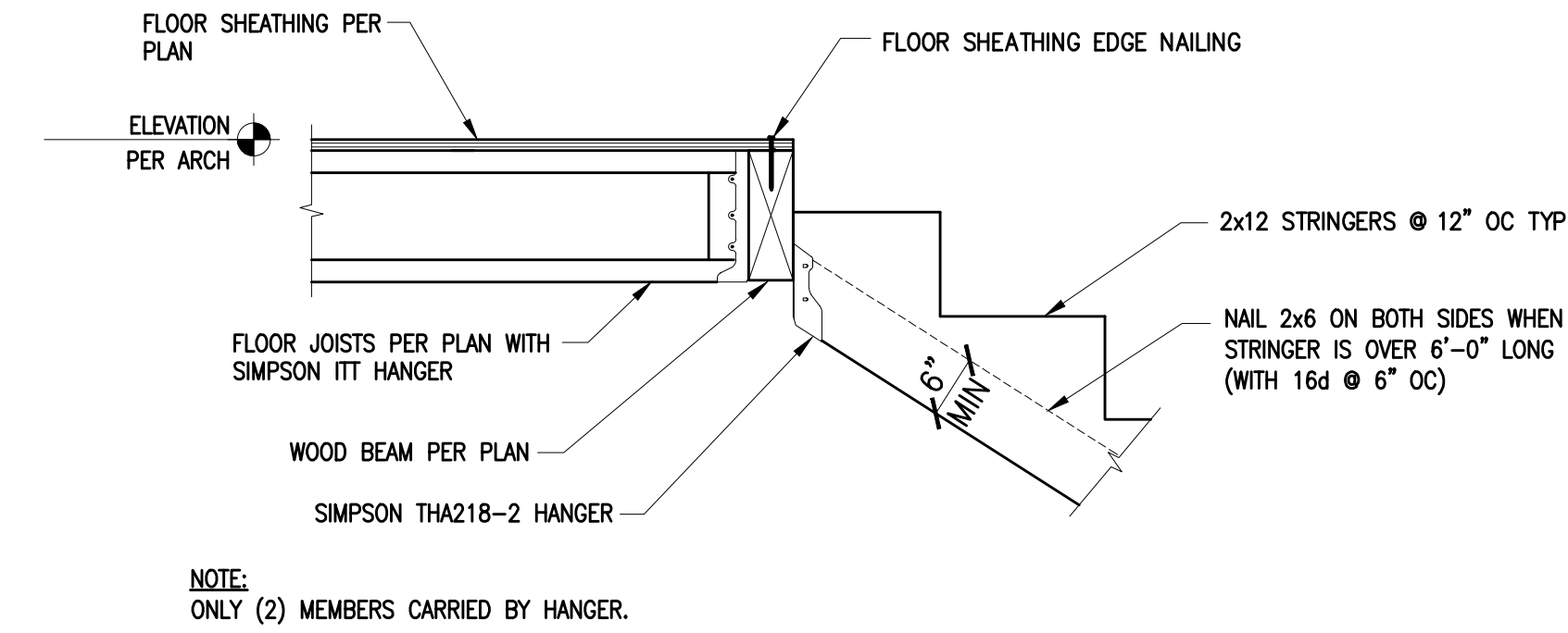
- NOTES:
- USE BOUNDARY NAILING AT ALL HIP, RIDGES, VALLEYS AND OPENINGS.
 - USE COMMON NAIL FOR ALL DIAPHRAGM NAILING.
 - PLYWOOD SHALL BE GLUED (SUB-FLOOR ADHESIVE) FOR FLOORS.
 - USE 3/4" PLYWOOD T & G AT FLAT ROOF.
 - MIN EDGE DISTANCE FOR NAILS SHALL BE 3/8".
 - MIN SHEATHING SHEET SIZE SHALL BE 2'-0" x 4'-0".
 - NAILS SHALL NOT BE OVERDRIVEN. OPERATOR TO ADJUST AIR PRESSURE OF PNEUMATIC NAILER AS REQUIRED TO AVOID HEAD OF NAIL PENETRATING SKIN OF PLYWOOD SHEATHING.
 - NAILS SHALL BE COMMON WIRE TYPE.
 - SEE PLANS FOR AREAS OF BLOCKED DIAPHRAGMS.
 - USE BOUNDARY NAILING AT ALL CONNECTIONS TO SHEAR WALLS.

9 ROOF & FLOOR DIAPHRAGM
NTS



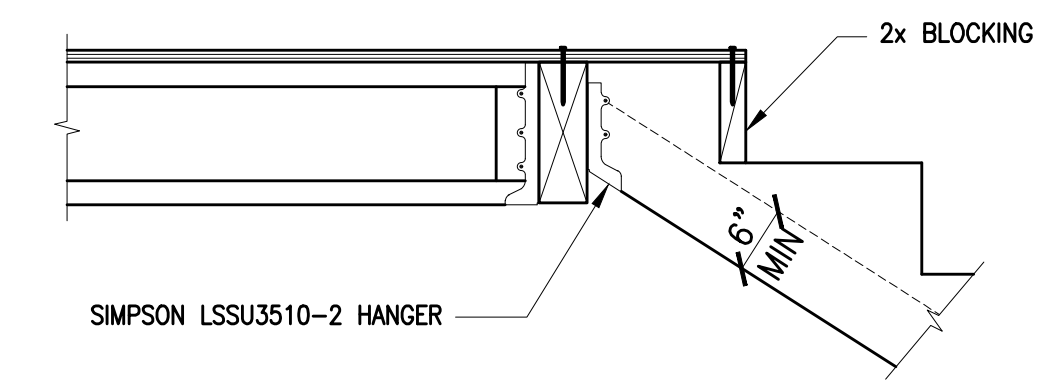
NOTE: SEE GN & TYPICAL FRAMING DETAILS FOR ALL OTHER FRAMING INFO

10 LOWER ROOF FRAMING AT EXTERIOR WALL

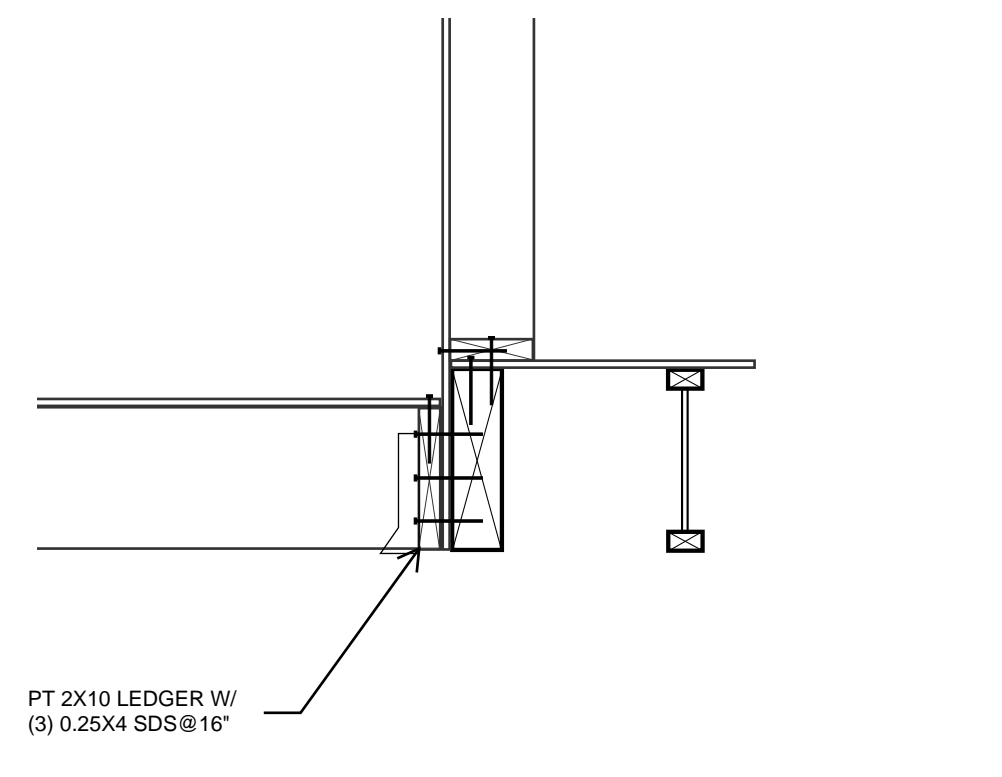


ALTERNATE 1

7 TYPICAL STAIR STRINGER CONN.
SCALE: 1"=1'-0"

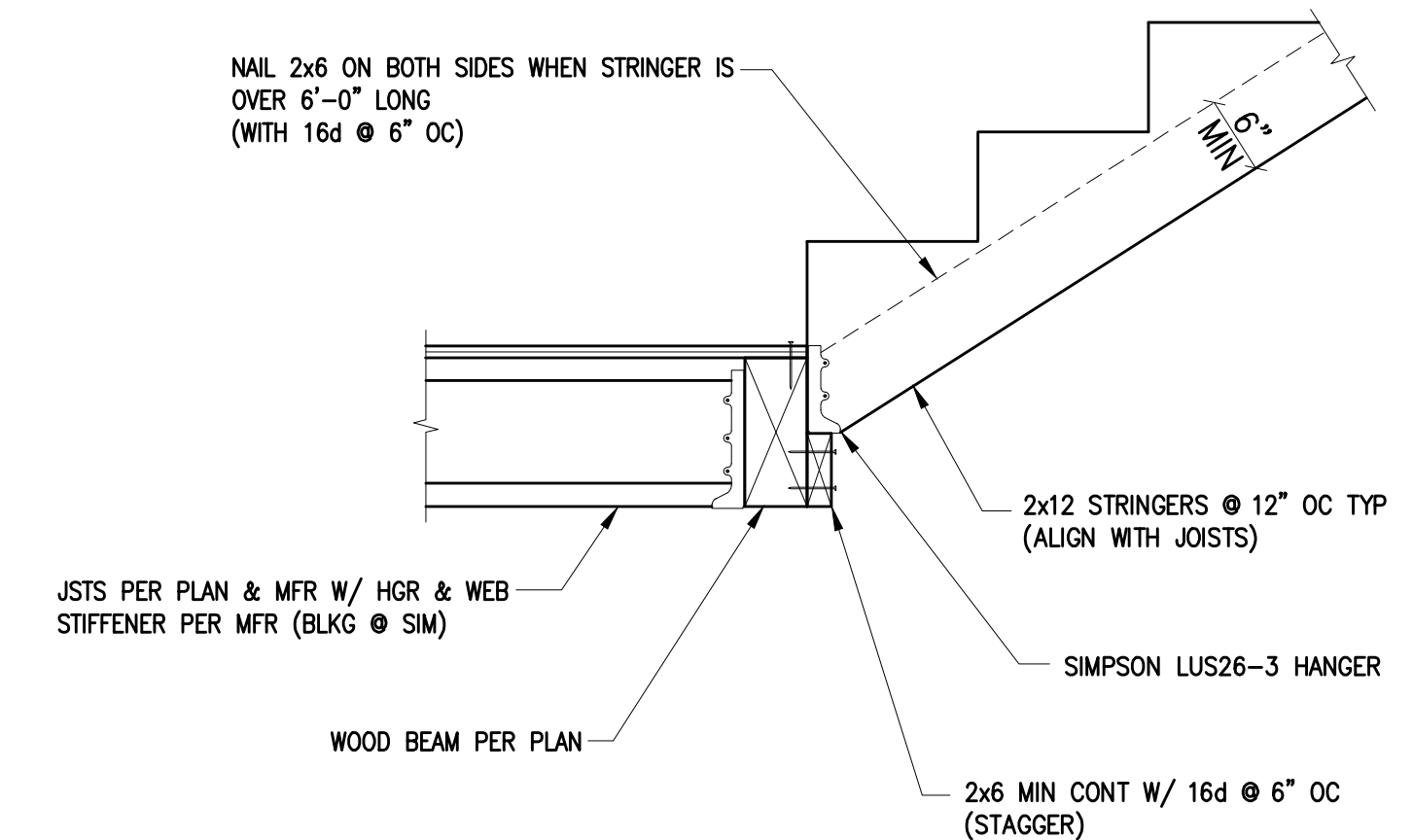


ALTERNATE 2



NOTE: SEE GN & TYPICAL FRAMING DETAILS FOR ALL OTHER FRAMING INFO

11 DECK FRAMING AT FLOOR & EXTERIOR WALL



12 TYPICAL STRINGER CONNECTION
SCALE: 1"=1'-0"

DHS ENGINEERS



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SEATTLE, WA 98101
(206) 734-5858



2720 RESIDENCE
2720 71ST AVENUE SE
MERCER ISLAND WA 98040

NUMBER	DATE	DESCRIPTION OF REVISIONS
00	07.29.21	PERMIT SET
01	01.18.22	PERMIT REVIEW-1

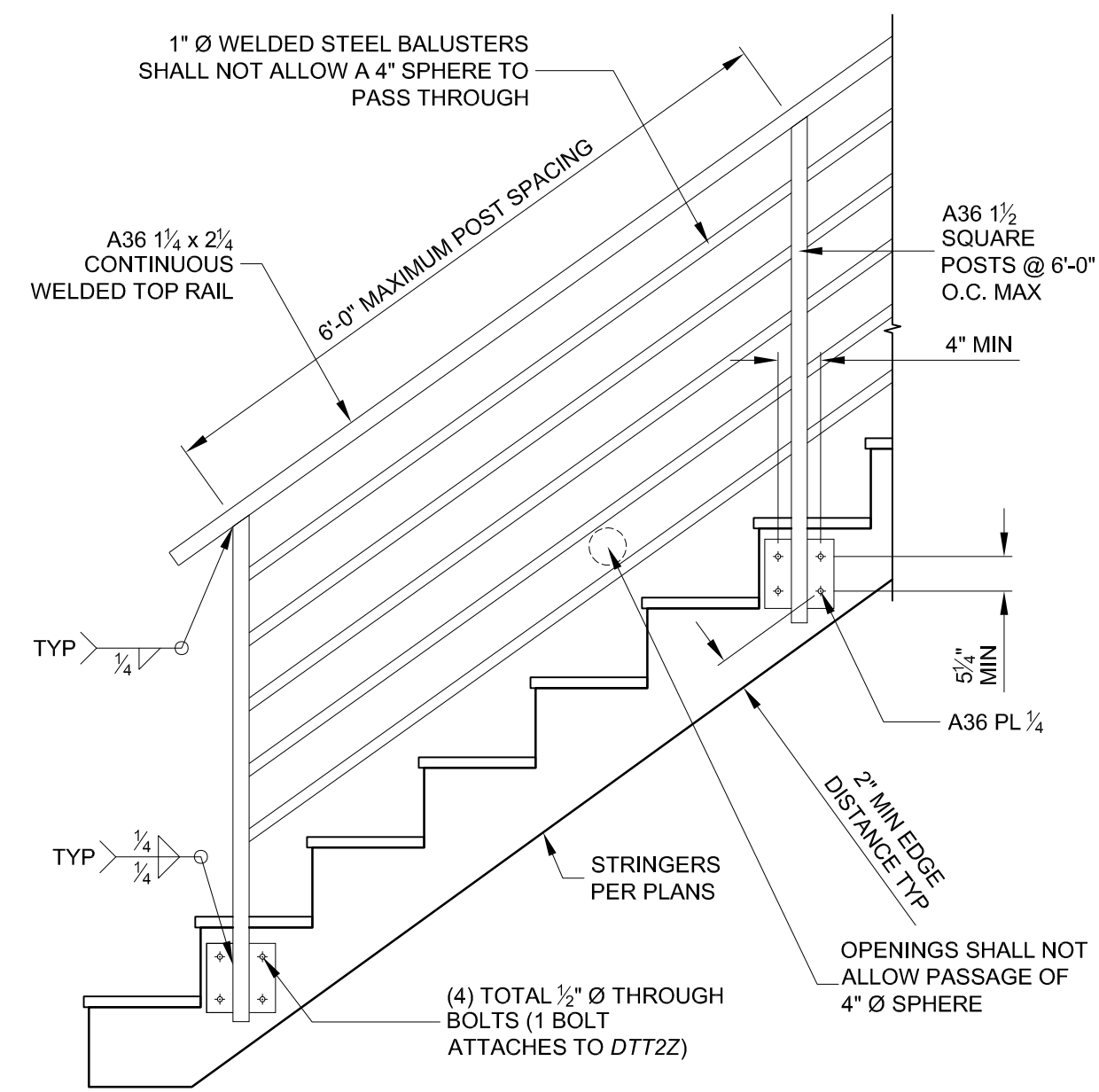
SHEET TITLE
TYPICAL FRAMING DETAIL

JOB NUMBER

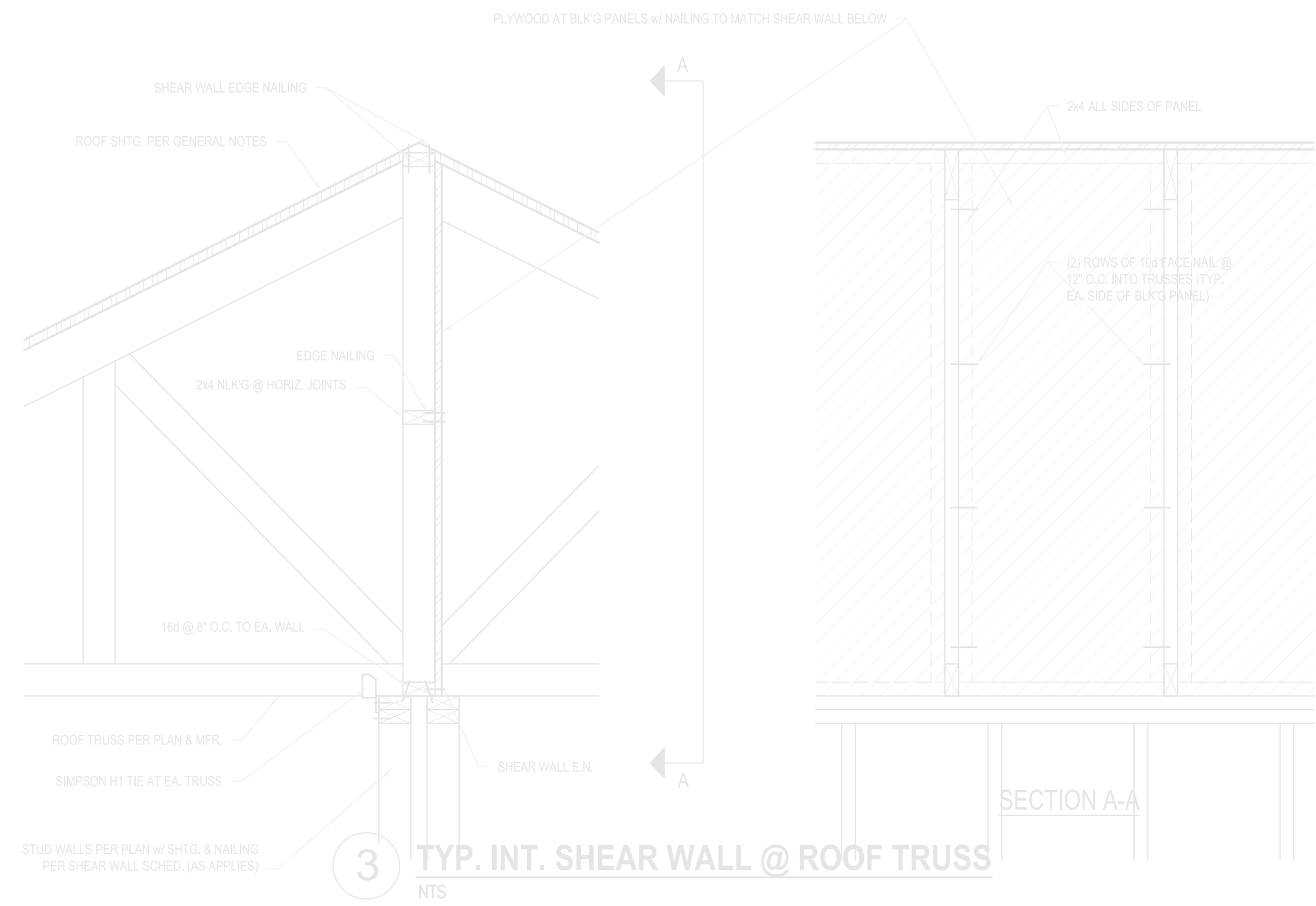
SHEET NUMBER

S5.3

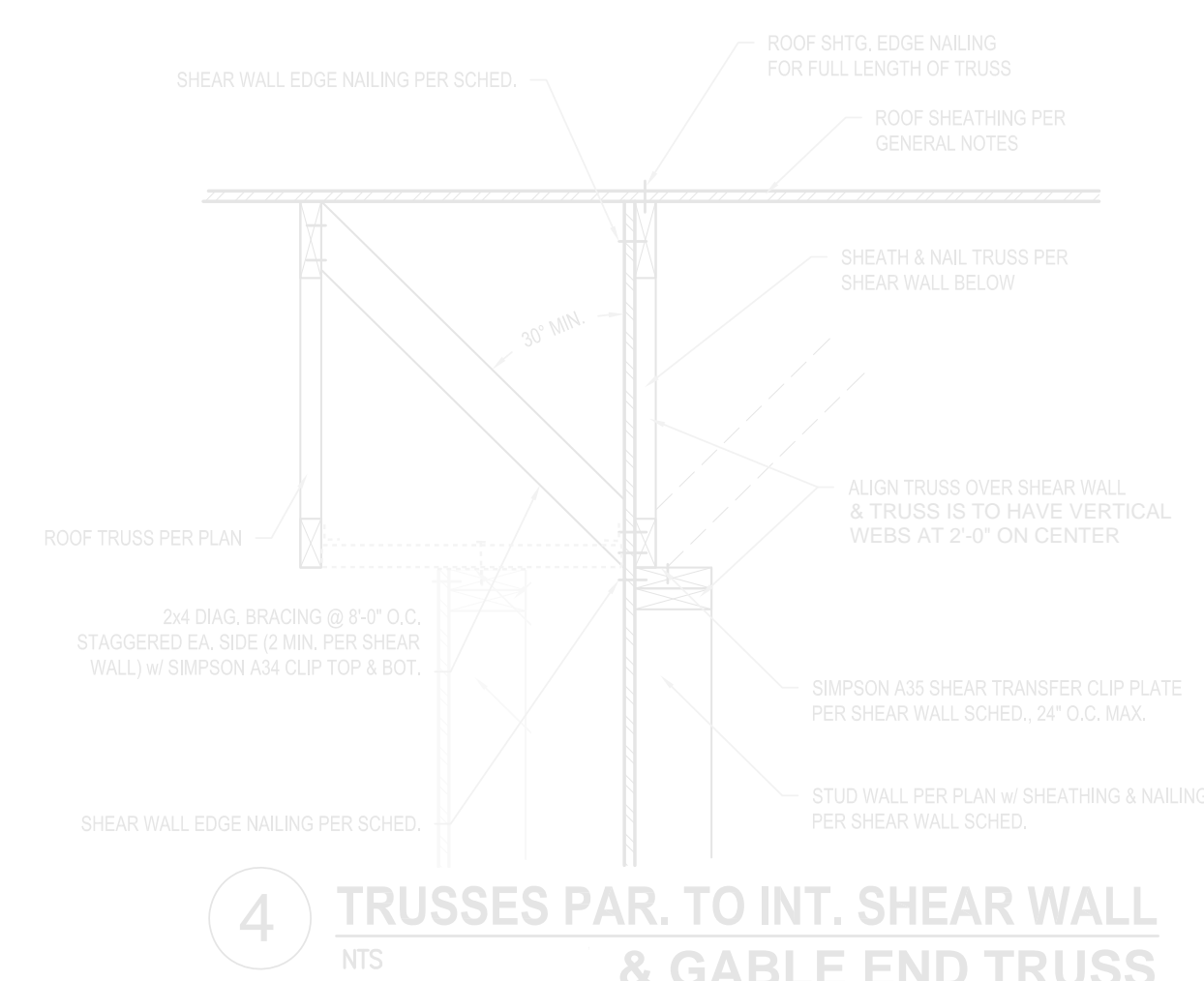
CITY STAMP



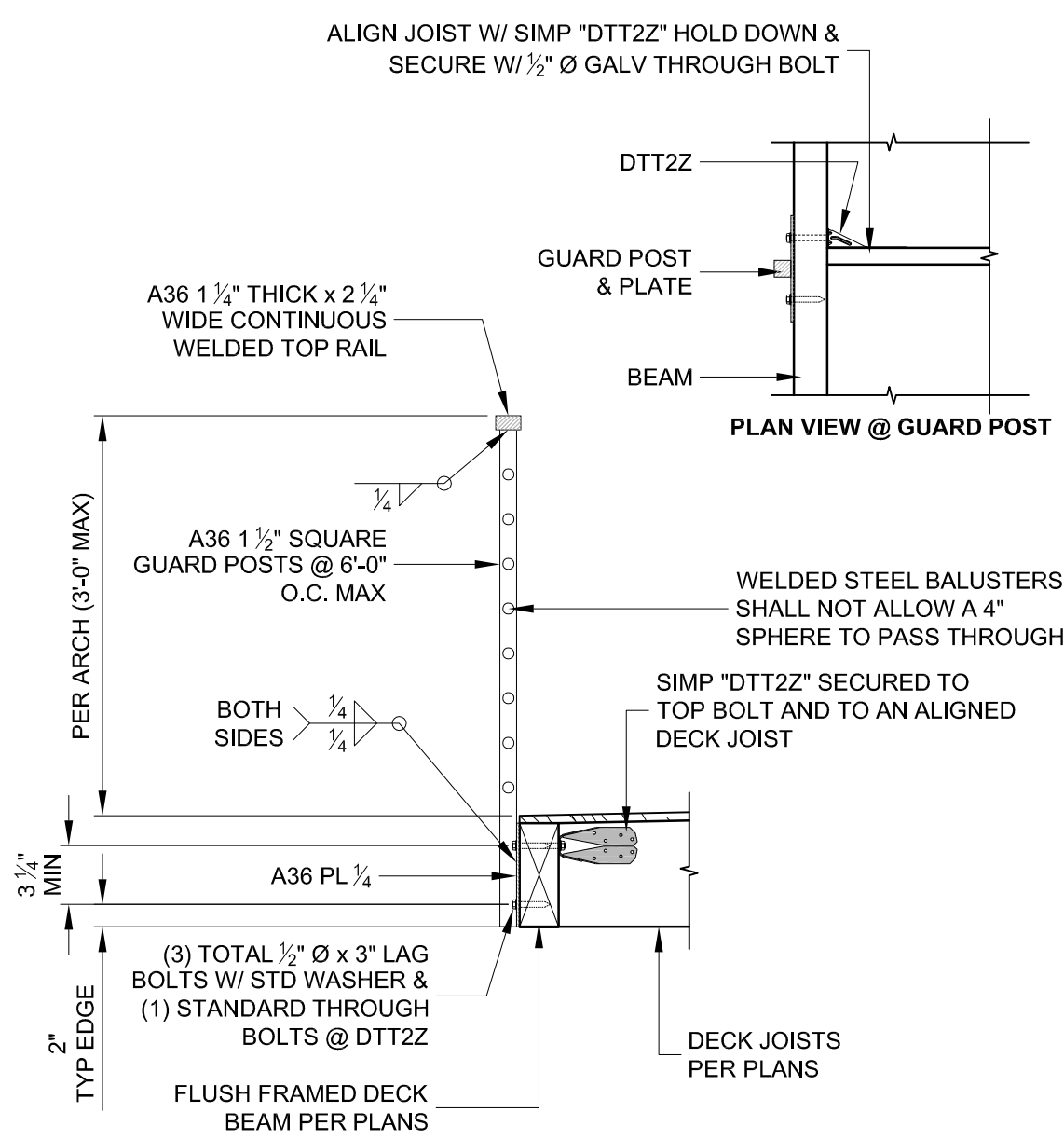
TYPICAL STAIR GUARD ELEVATION
SCALE: 3/4" = 1'-0"



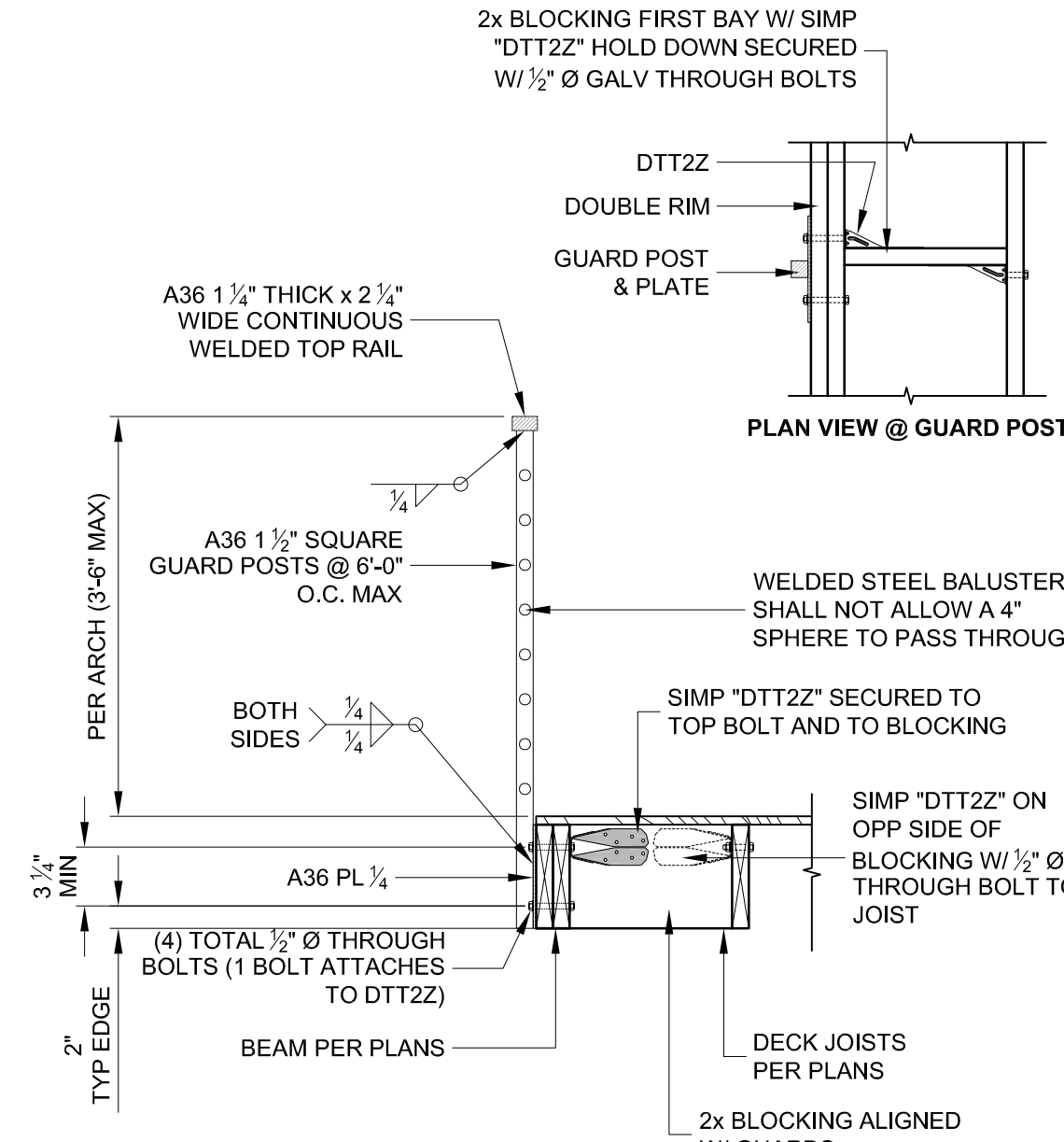
3 TYP. INT. SHEAR WALL @ ROOF TRUSS
NTS



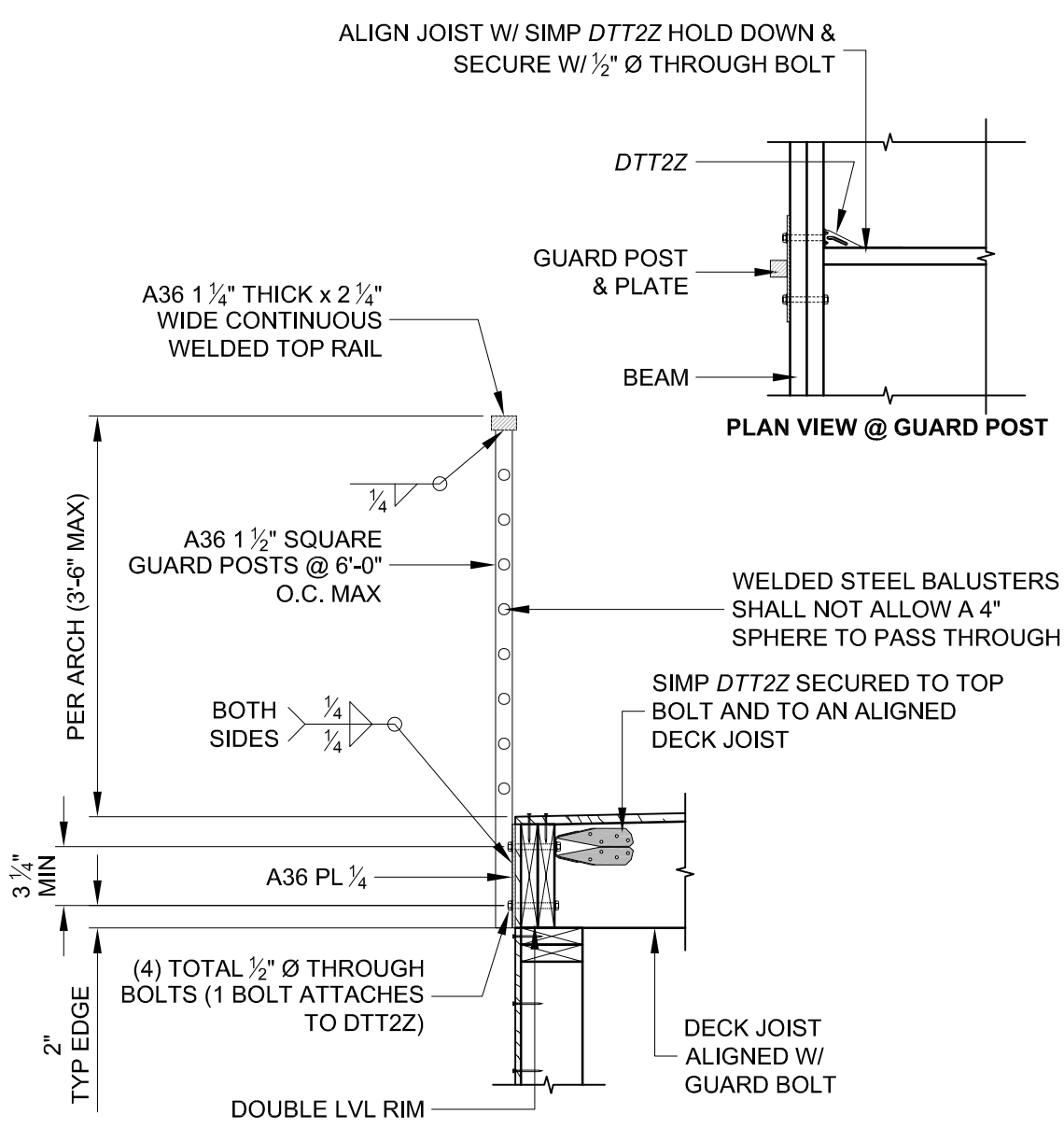
4 TRUSSES PAR. TO INT. SHEAR WALL & GABLE END TRUSS
NTS



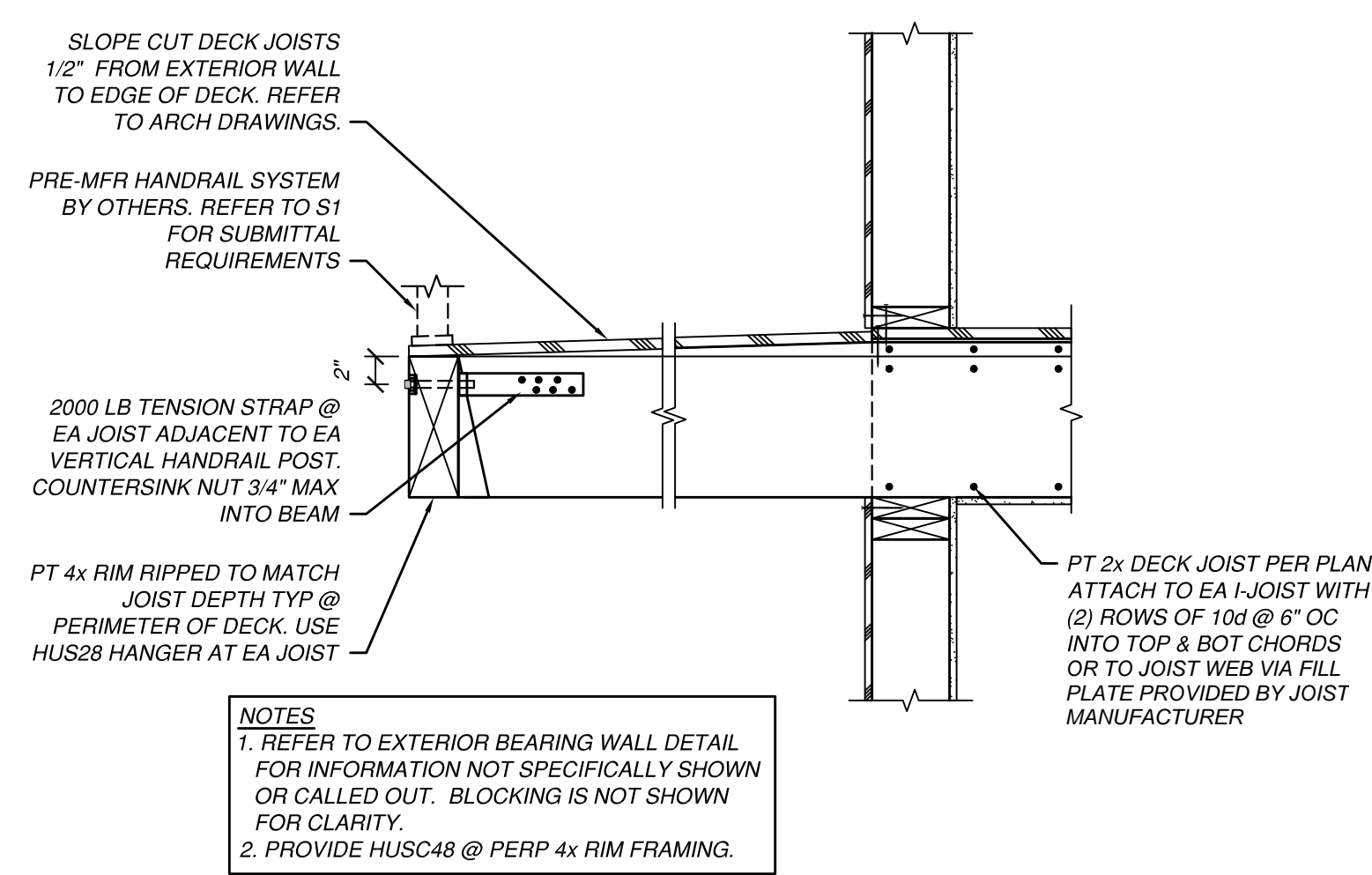
GUARD RAIL TO BEAM
SCALE: 3/4" = 1'-0"



GUARD RAIL TO RIM @ PARALLEL
SCALE: 3/4" = 1'-0"



GUARDRAIL TO JOIST
SCALE: 3/4" = 1'-0"



NOTES
1. REFER TO EXTERIOR BEARING WALL DETAIL FOR INFORMATION NOT SPECIFICALLY SHOWN OR CALLED OUT. BLOCKING IS NOT SHOWN FOR CLARITY.
2. PROVIDE HUSC48 @ PERP 4x RIM FRAMING.

9 DECK DETAIL
SCALE: 1" = 1'-0"

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SHEET TITLE
DECK AND RAILING DETAILS

JOB NUMBER
SHEET NUMBER

S5.4

CITY STAMP

HOLDOWN SCHEDULE					
TYPE	SIMPSON HARDWARE	WALL STUD SIZE; SEE PLAN	STUD SIZE AT HOLDOWN	ANCHOR ROD	
				DIA.	EMBEDMENT (SEE 2/S5.5)
②	HDU2	4" STUDS 6" STUDS	4x4* 4x6*	5/8"	8"
④	HDU4	4" STUDS 6" STUDS	4x4* 4x6*	5/8"	9"
⑤	HDU5	4" STUDS 6" STUDS	4x4 4x6	5/8"	10"
⑧	HDU8	4" STUDS 6" STUDS	4x4 4x6	7/8"	12"
⑪	HDU11	4" STUDS 6" STUDS	4x4 4x6	1"	14"
⑭	HDU14	4" STUDS 6" STUDS	4x4 4x6	1"	14"

- NOTES:
- SEE PLAN FOR HODOWN TYPES AND LOCATIONS.
 - SEE PLAN FOR TYPICAL STUD SIZES IN SHEARWALLS.
 - REFER TO DETAIL 2/S5.5 FOR TYPICAL HOLDOWN INSTALLATION DETAILS.
 - ALT. USE (2) 2x STUDS.

1 HOLDOWN SCHEDULE

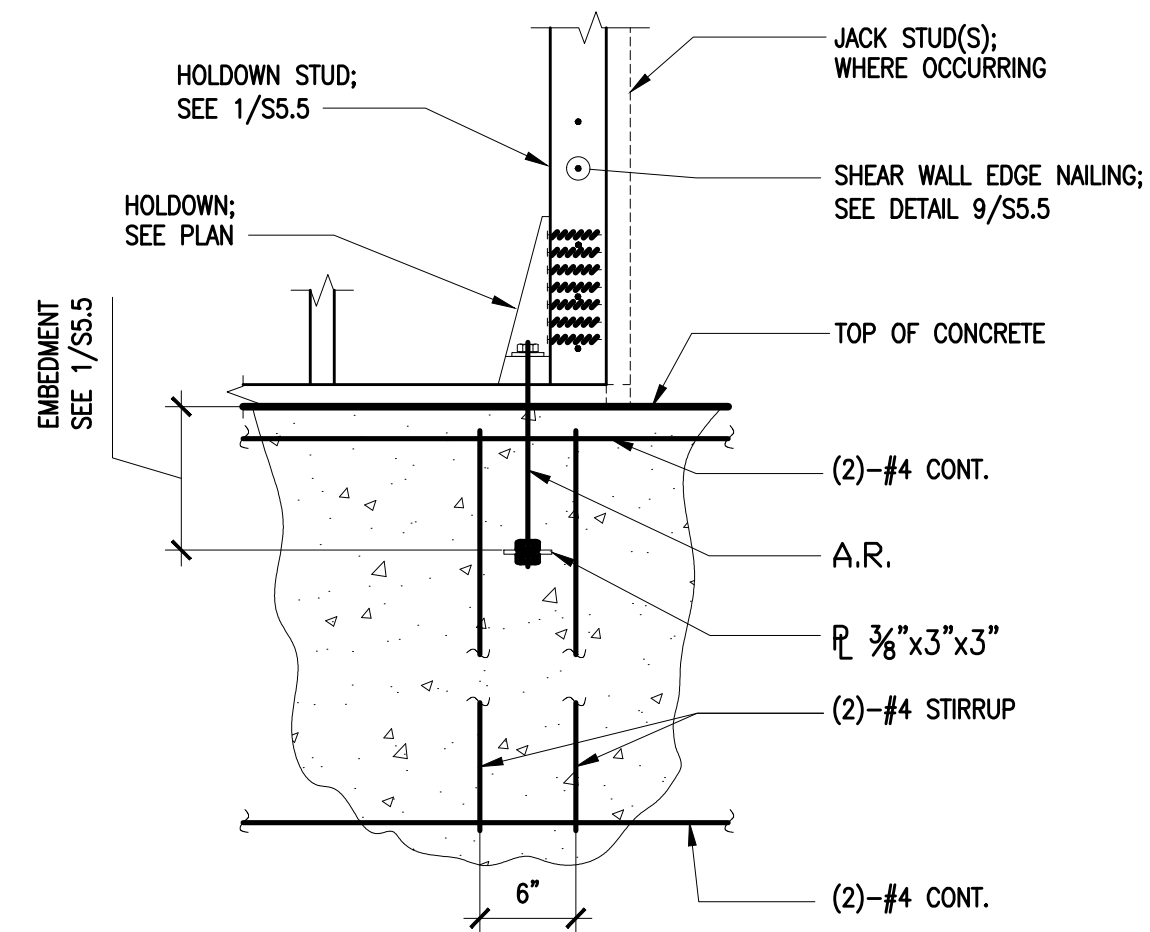
NTS

SHEAR WALL SCHEDULE						
TYPE	STUD SIZE AND SPACING*	PLYWOOD ^① SHEATHING	EDGE NAILS ^② FIELD NAILS	FRAMING CLIPS ^③	SOLE PLATE NAILING ^④	SILL PLATE BOLTS ^⑤
②	2x STUDS @ 16" O.C. PER PLAN	1 5/32" PLYWOOD	10d @ 2" O.C. 10d @ 12" O.C.	(2)-A35 @ 12" O.C.	16d @ 2 1/2" O.C.	5/8" ⌀ BOLTS @ 16" O.C.
③	2x STUDS @ 16" O.C. PER PLAN	1 5/32" PLYWOOD	10d @ 3" O.C. 10d @ 12" O.C.	A35 @ 9" O.C.	16d @ 3" O.C.	5/8" ⌀ BOLTS @ 24" O.C.
④	2x STUDS @ 16" O.C. PER PLAN	1 5/32" PLYWOOD	10d @ 4" O.C. 10d @ 12" O.C.	A35 @ 12" O.C.	16d @ 4" O.C.	5/8" ⌀ BOLTS @ 32" O.C.
⑥	2x STUDS @ 16" O.C. PER PLAN	1 5/32" PLYWOOD	10d @ 6" O.C. 10d @ 12" O.C.	A35 @ 18" O.C.	16d @ 6" O.C.	5/8" ⌀ BOLTS @ 48" O.C.

- NOTES:
- SEE PLANS FOR SHEAR WALL TYPE, LOCATIONS, AND HOLDOWNS.
 - REFER TO SHEET S5.2 FOR TYPICAL SHEAR WALL CONSTRUCTION DETAILS.
 - REFER TO DETAIL 9/S5.5 FOR TYPICAL SHEAR WALL ELEVATION.
 - REFER TO DETAIL 2/S5.5 FOR TYPICAL HOLDOWN INSTALLATION DETAILS.
 - PLYWOOD SHALL BE PLACED ON THE SIDE OF THE WALL WHERE THE SYMBOL \diamond OCCURS ON THE PLAN.
 - ALL INFORMATION IN THE ABOVE SCHEDULE RELATES TO THE ITEMS SHOWN IN THE WALL SECTIONS ON SHEET S5.2. ALL COMPONENTS FOR EACH SHEAR WALL TYPE OCCUR IN THE WALLS BETWEEN THE LEVEL REPRESENTED BY THE FRAMING PLAN, WHERE THE SHEAR WALL TYPES AND LOCATIONS ARE SHOWN, AND THE LEVEL ABOVE.
 - EXAMPLE: A SHEAR WALL SHOWN ON THE GROUND FLOOR PLAN WITH A MARK \diamond NEXT TO IT SHALL HAVE ALL REQUIRED COMPONENTS FOR TYPE \diamond SHEAR WALL INSTALLED IN THE WALL BETWEEN THE GROUND FLOOR AND THE FIRST FLOOR.
 - AT CONCRETE FOOTINGS, USE 5/8" DIAMETER SILL PLATE BOLTS WITH MINIMUM 7" EMBEDMENT INTO THE CONCRETE. REFER TO THE SCHEDULE ABOVE FOR BOLT SPACING. SEE GENERAL NOTES FOR INFORMATION ABOUT ANCHOR RODS AND EPOXY BOLTS.
 - BLOCK ALL UNSUPPORTED PLYWOOD EDGES WITH MINIMUM 2x LAID FLAT BEHIND EDGES OF PLYWOOD.
 - SEE GENERAL NOTES FOR PLYWOOD GRADES AND SPECIFICATIONS.
 - AT WALLS WITH 2x STUDS, DOUBLE THE STUDS AT PLYWOOD JOINTS PER DETAIL 9/S5.5.

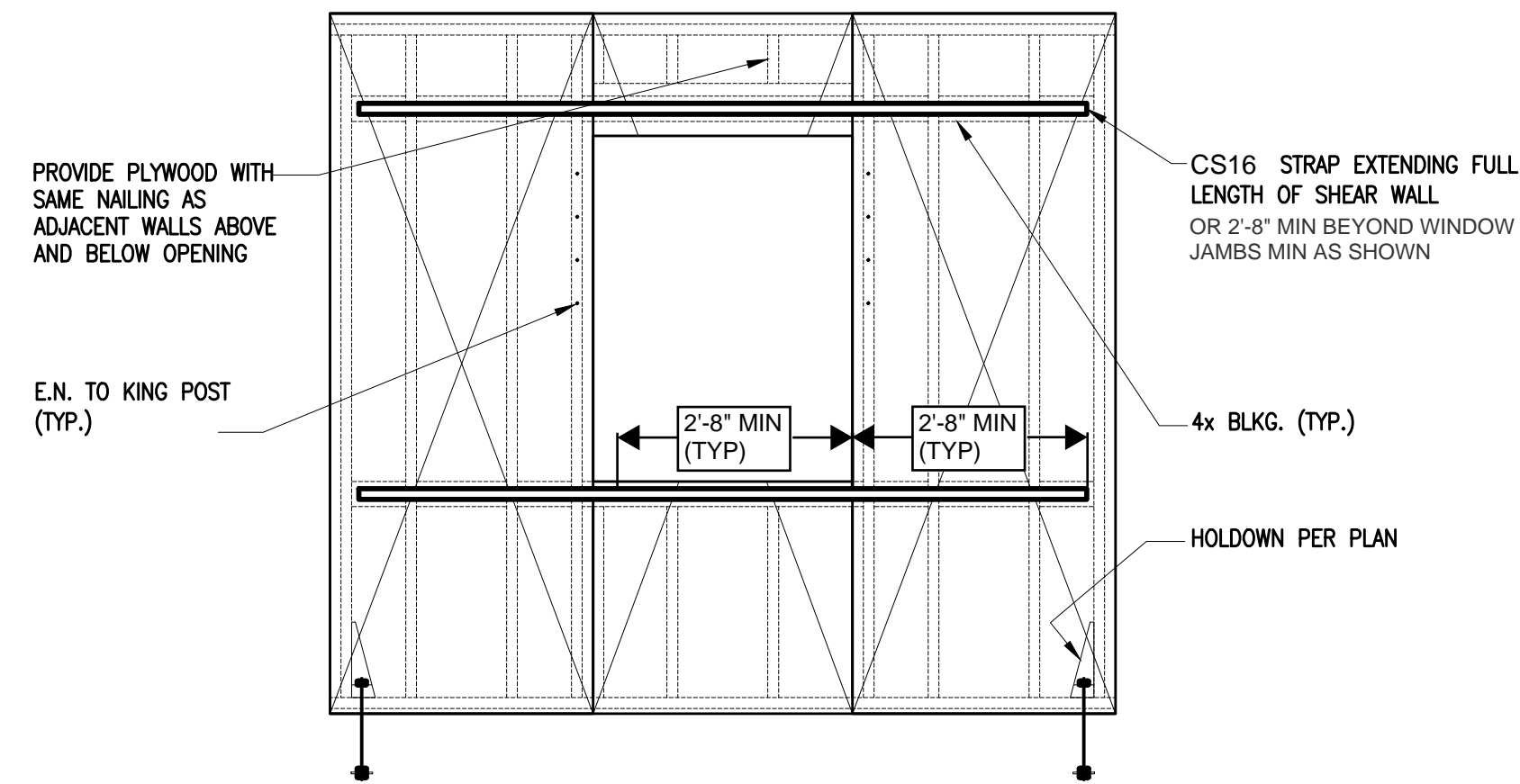
8 SHEARWALL SCHEDULE

NTS



2 TYPICAL HOLDOWN DETAIL

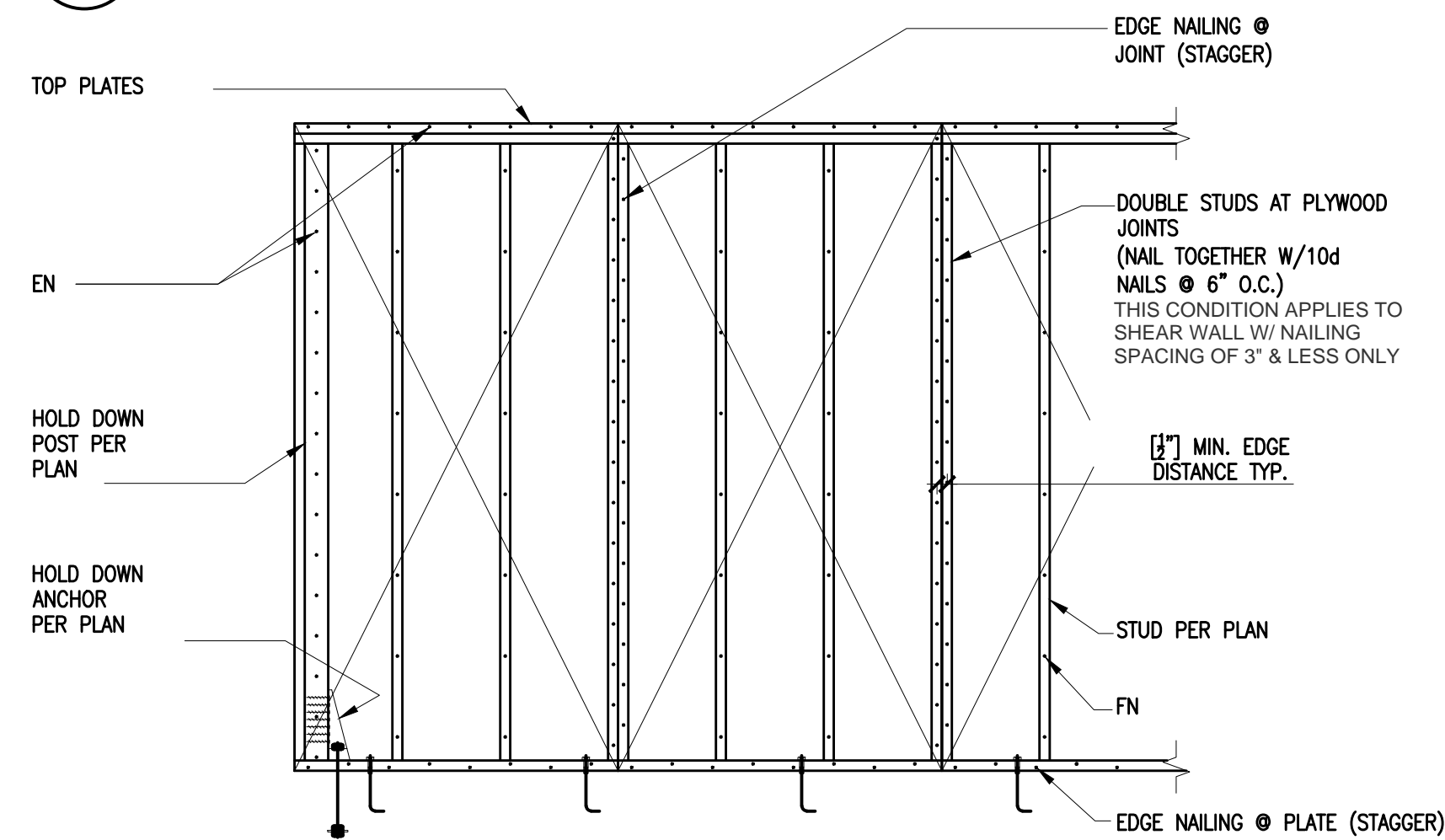
SCALE: 1"=1'-0"



NOTE: HOLDOWN LOCATIONS NOT SHOWN FOR CLARITY.

6 PERFORATED SHEARWALL ELEVATION

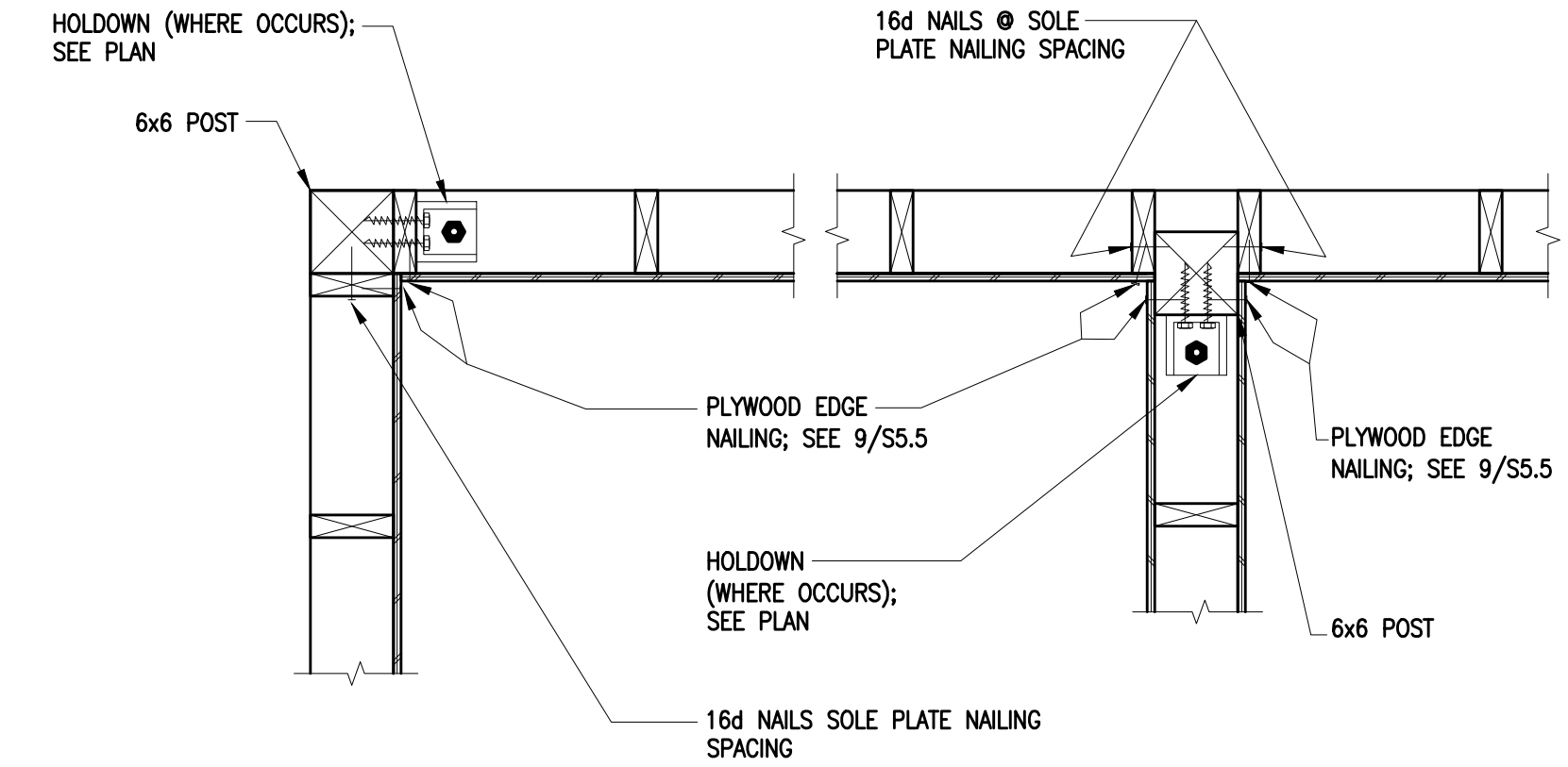
1/2"=1'-0"



- NOTES:
- FOR ITEMS NOT NOTED SEE PLAN & SHEAR WALL SCHED.
 - MINIMUM PANEL DIMENSION IS 1'-0".
 - USE FULL SIZE PANELS WHERE POSSIBLE.
 - FIELD NAILING (FN) @ 12" UON.
 - [2x] SOLID BLOCKING @ HORIZONTAL JOINTS.

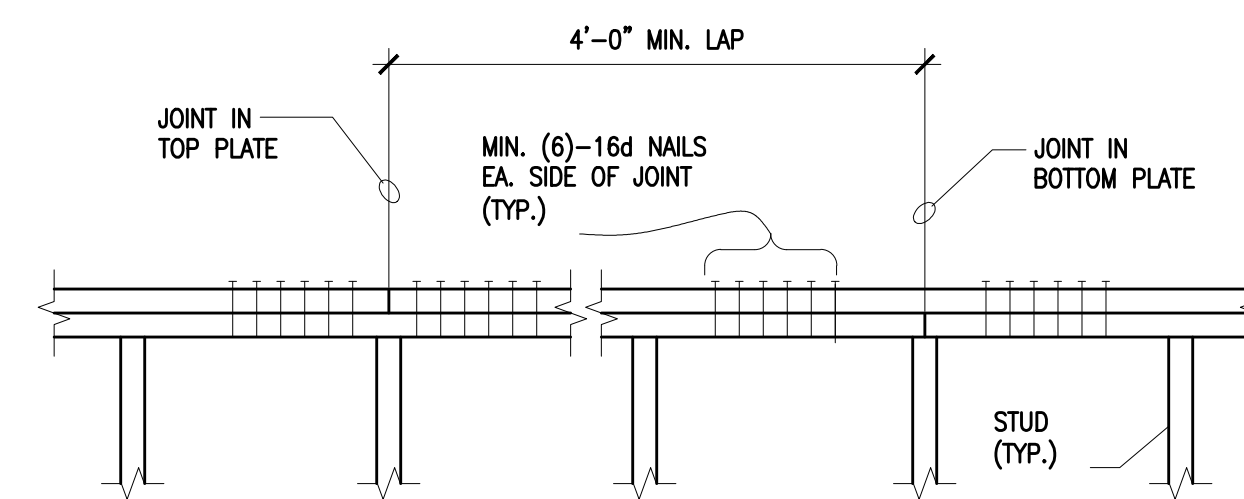
9 TYPICAL SHEARWALL ELEVATION

1/2"=1'-0"



4 SHEARWALL DETAILS AT WALL INTERSECTIONS

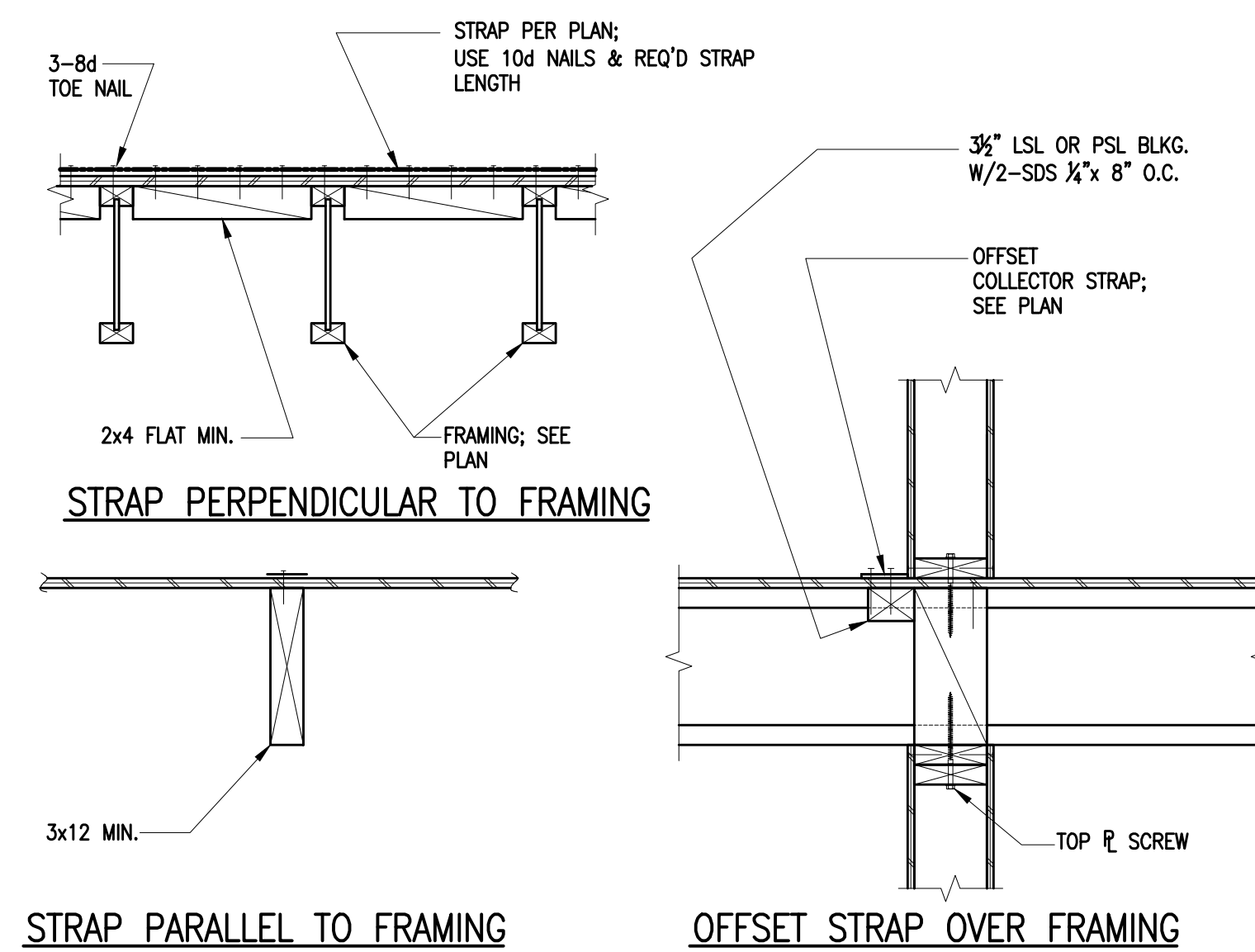
SCALE: 1"=1'-0"



NOTE: SEE PLAN AND DETAILS FOR SIZE OF STUDS AND DOUBLE TOP PLATE.

7 TYPICAL STUD WALL TOP PLATE SPLICE

1"=1'-0"



12 HORIZONTAL STRAP DETAIL

NTS

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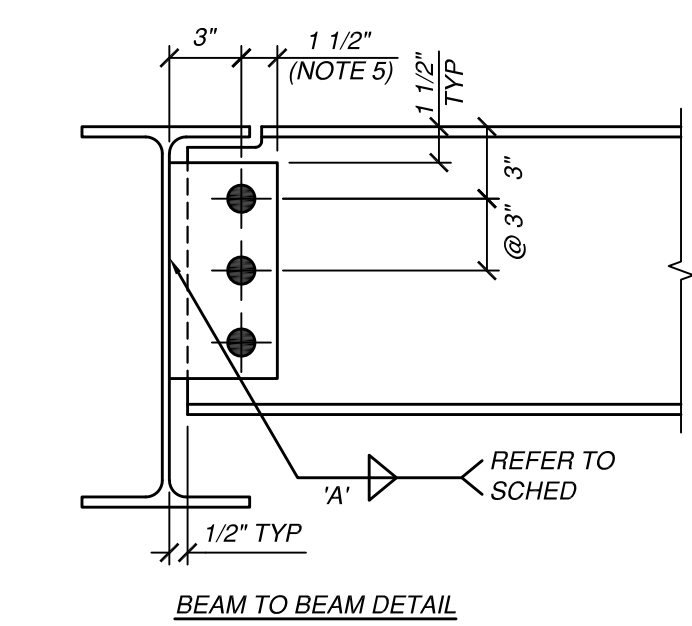
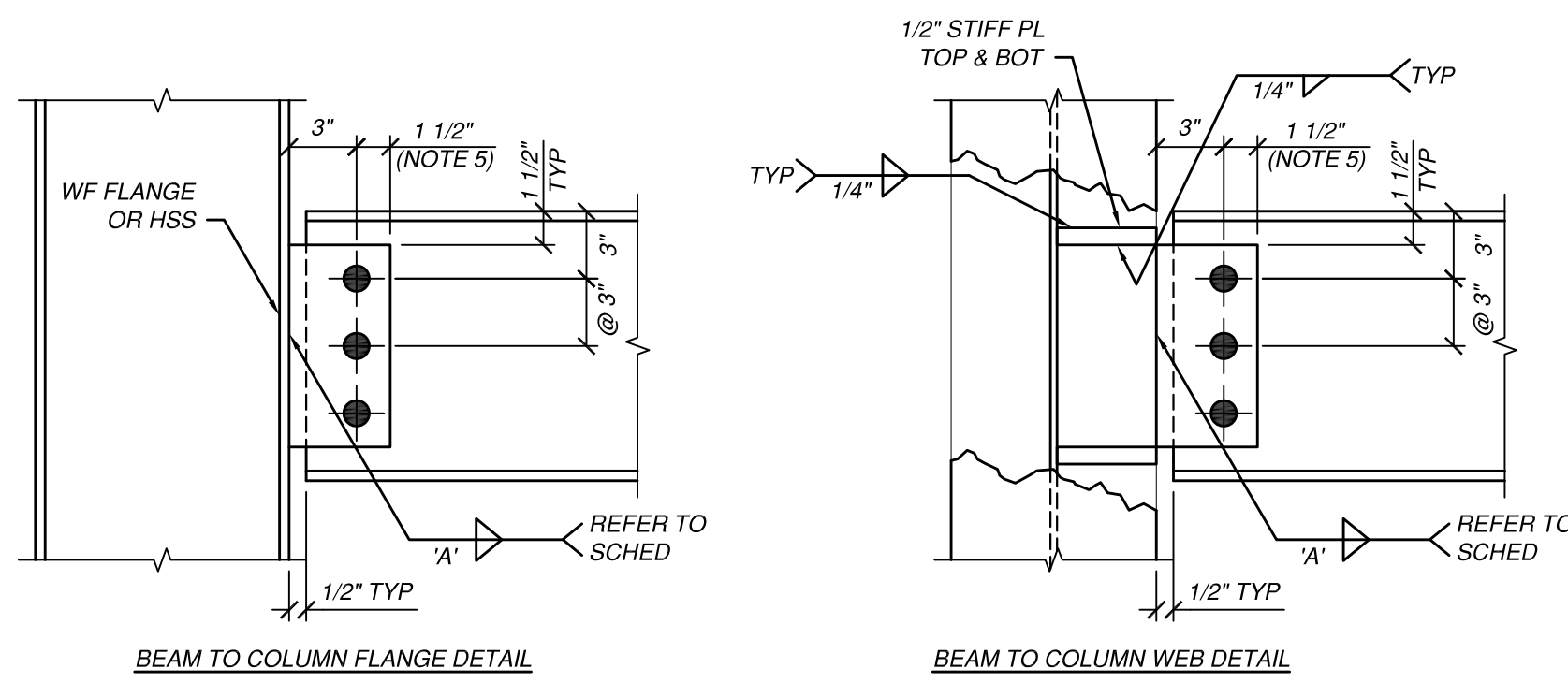
SHEET TITLE
LATERAL DETAIL AND SCHEDULE

JOB NUMBER

SHEET NUMBER

S5.5

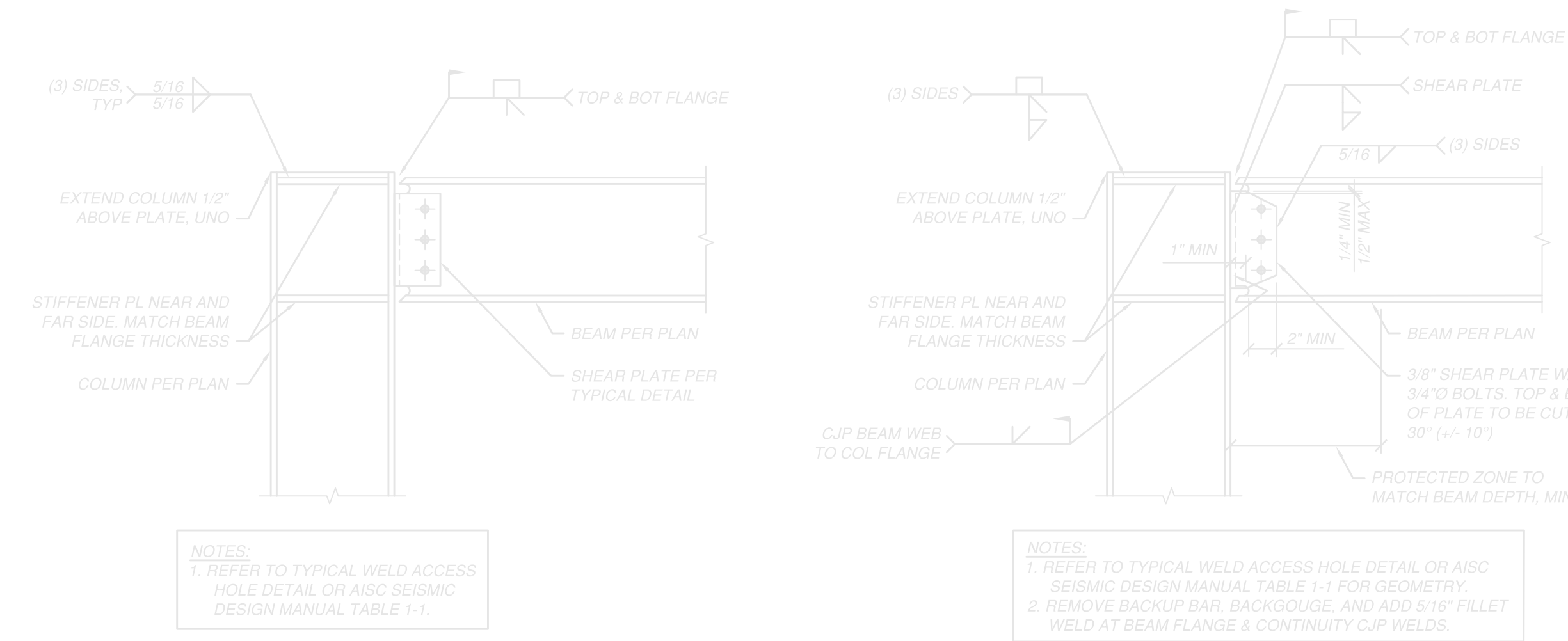
CITY STAMP



SHEAR PLATE SCHEDULE			
BEAM SIZE	SHEAR PLATE		BOLTS REQ'D
	THICK	WELD 'A'	
W8	3/8"	5/16"	(2) 3/4"Ø
W10	3/8"	5/16"	(2) 3/4"Ø
W12	3/8"	5/16"	(3) 3/4"Ø
W14	3/8"	5/16"	(3) 3/4"Ø
W16	3/8"	5/16"	(4) 3/4"Ø
W18	3/8"	5/16"	(5) 3/4"Ø
W21	1/2"	3/8"	(5) 1"Ø
W24	1/2"	3/8"	(6) 1"Ø
W27	1/2"	3/8"	(7) 1"Ø

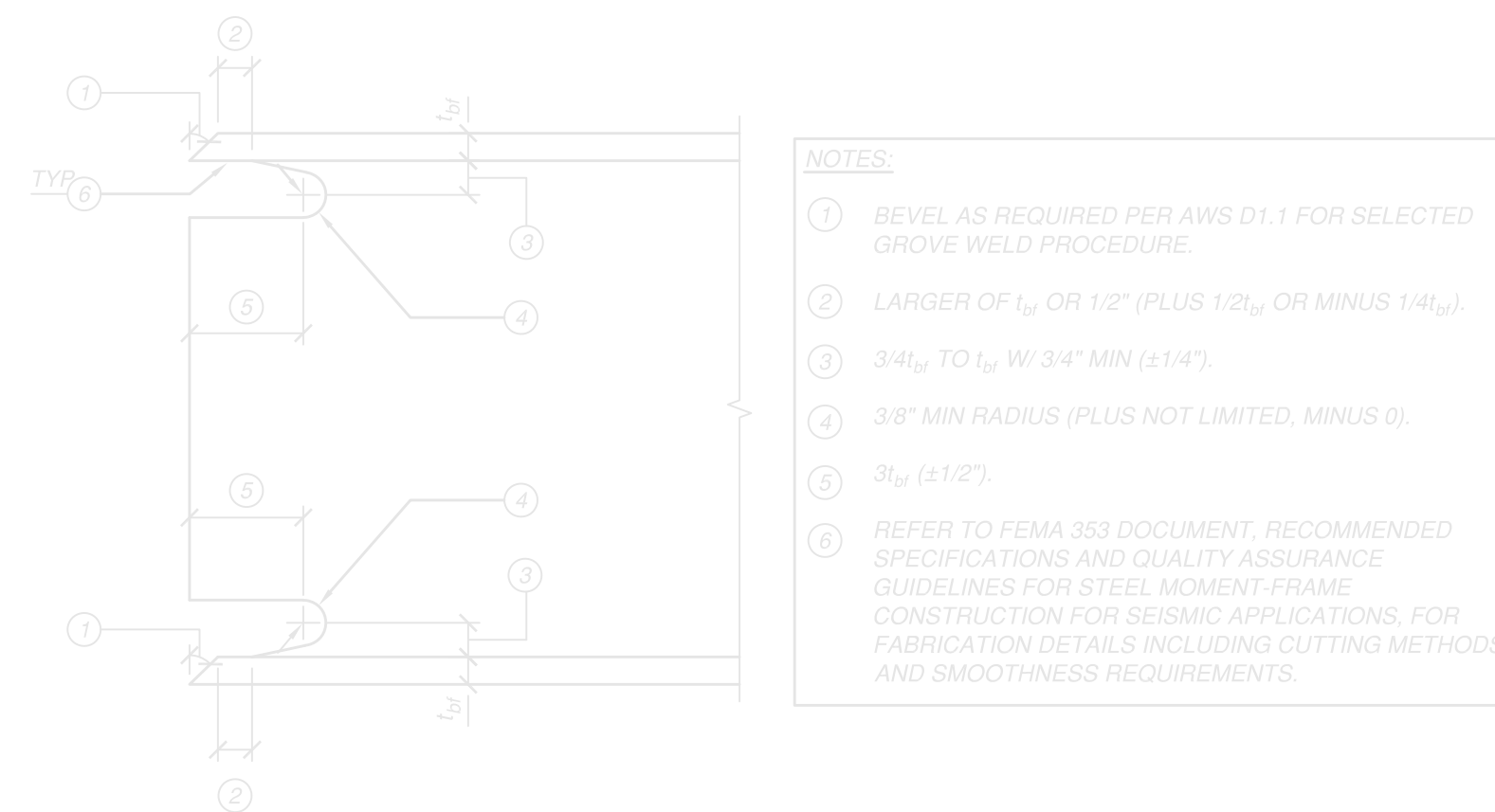
NOTES:
 1. ALL CONNECTION PLATES SHALL BE A36 STEEL.
 2. ALL BOLTS SHALL BE A325-N AND SHALL BE INSTALLED PER AISC SPECIFICATIONS.
 3. BOLT HOLES SHALL BE STANDARD SIZE. OVERSIZED HOLES ARE NOT PERMITTED.
 4. SCHEDULE APPLIES TO ALL SHEAR CONNECTIONS UNO.
 5. INCREASE TO 1.3/4" FOR 1"Ø BOLTS

1 TYPICAL SHEAR PLATE CONNECTION DETAIL
SCALE: NTS

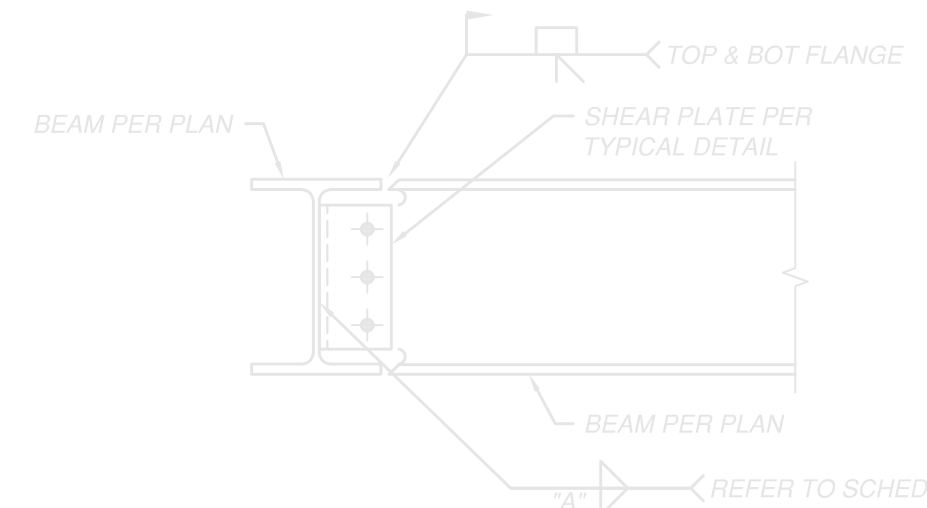


5 TYPICAL MOMENT CONNECTION
SCALE: 1" = 1'-0"

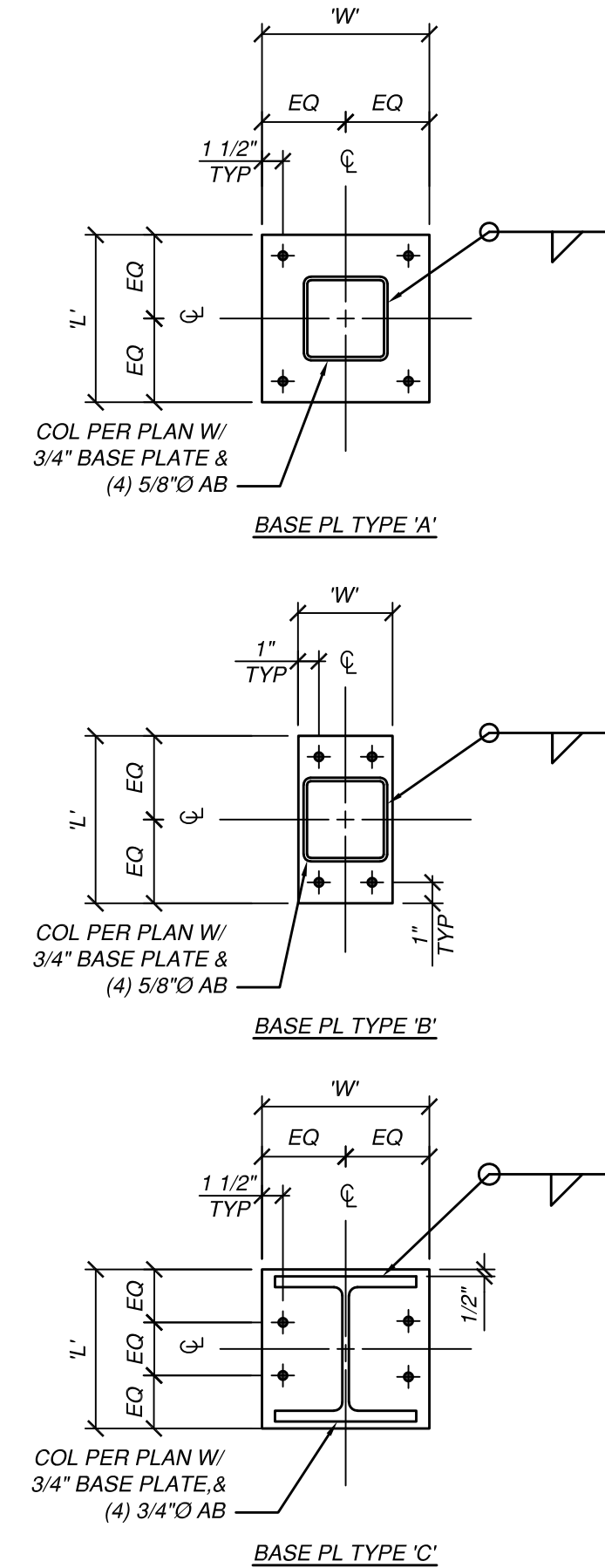
6 SEISMIC MOMENT CONNECTION
SCALE: 1" = 1'-0"



7 TYPICAL WELD ACCESS HOLE

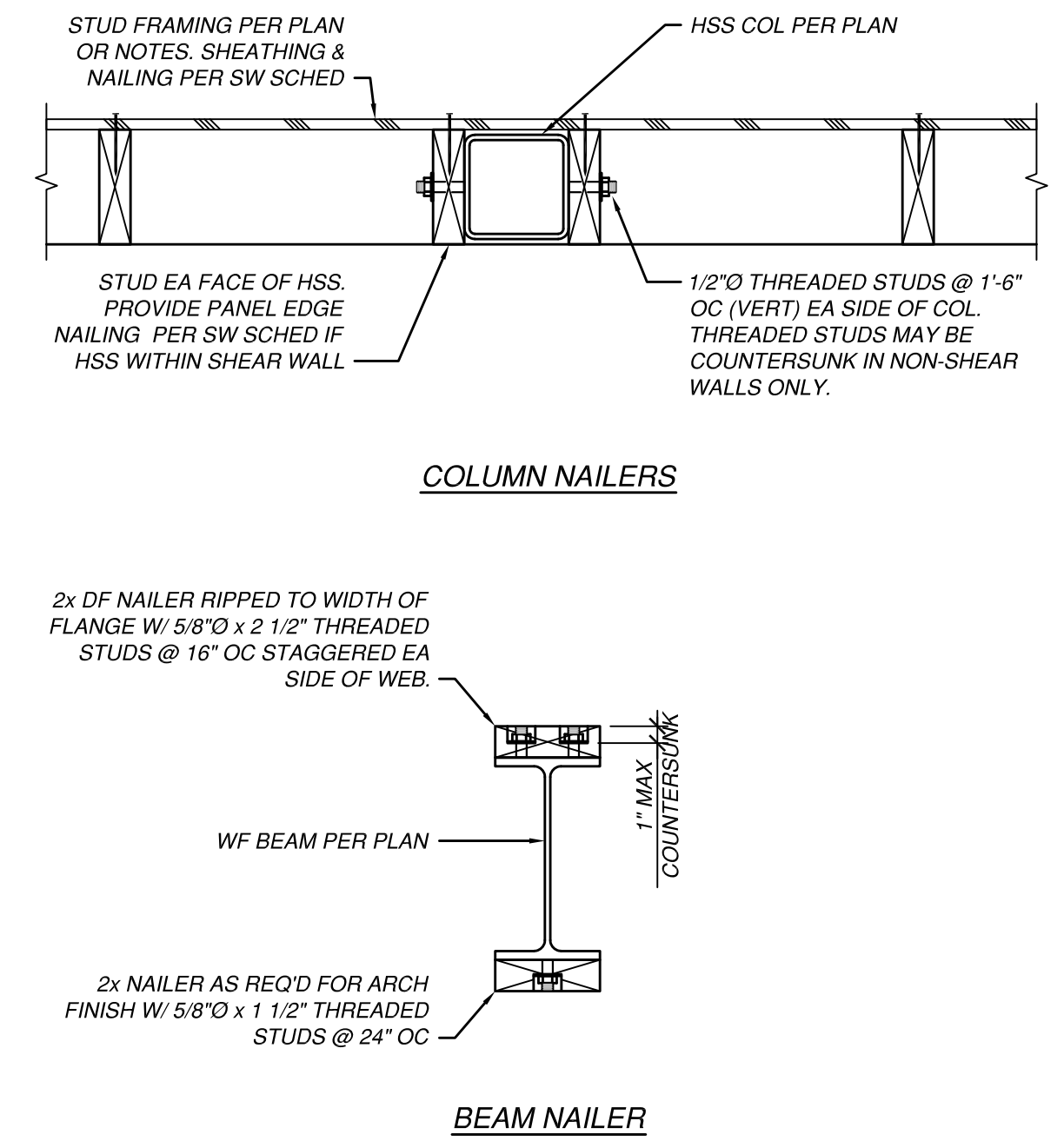


11 SECTION
SCALE: 1" = 1'-0"

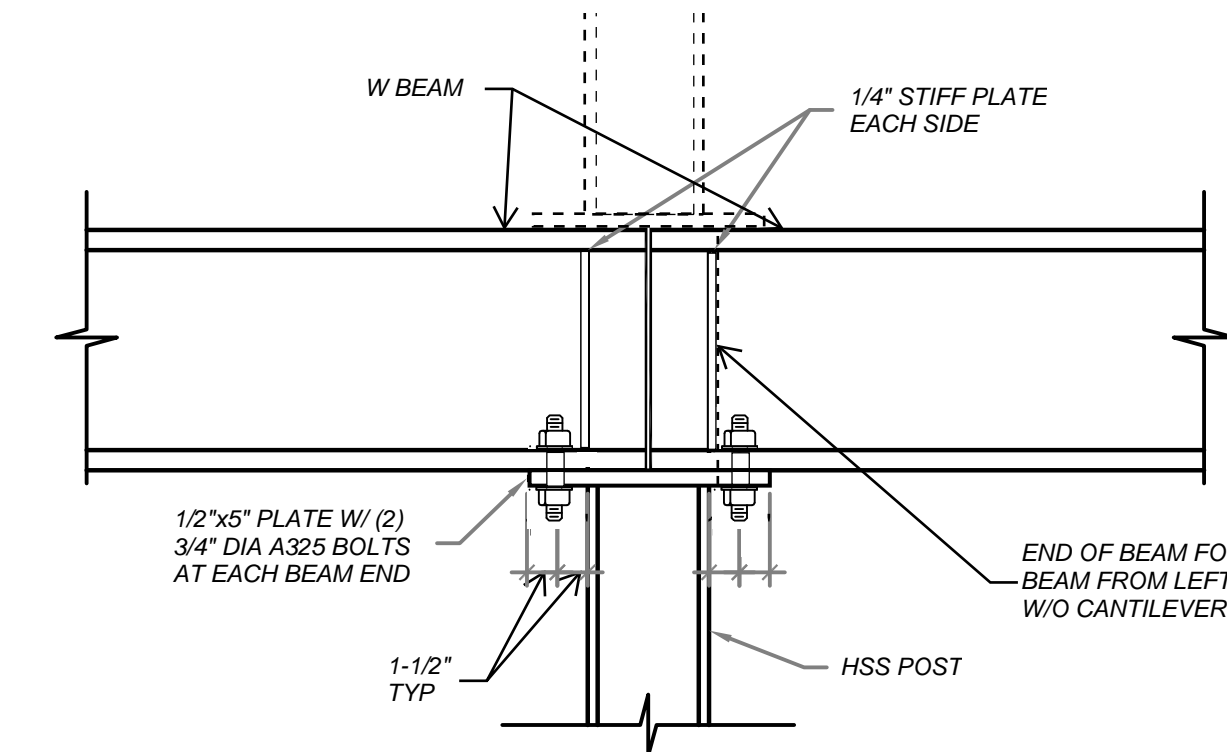


3 TYPICAL BASE PLATE DETAILS
SCALE: NTS

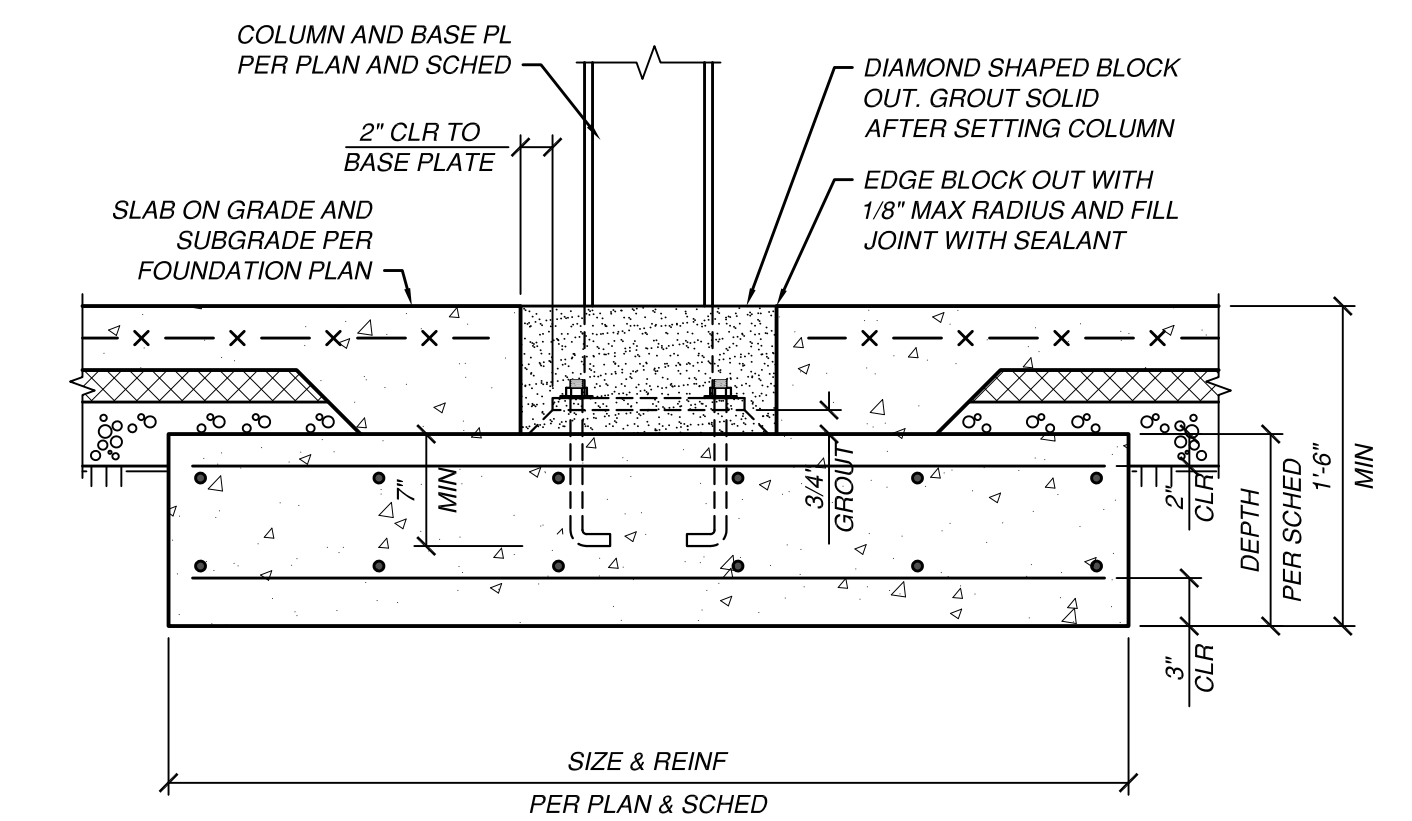
NOTES:
 1. WELD ALL THREADED STUDS PER NELSON STUD WELDING REQUIREMENTS.
 2. ALL THREADED STUDS SHALL HAVE WASHERS



4 TYPICAL WOOD NAILERS TO STEEL FRAMING
SCALE: 1 1/2" = 1'-0"



9 W BEAM TO HSS POST CONNECTION
SCALE: 1" = 1'-0"



10 ISOLATED FOOTING DETAIL
SCALE: 1" = 1'-0"

DHS ENGINEERS



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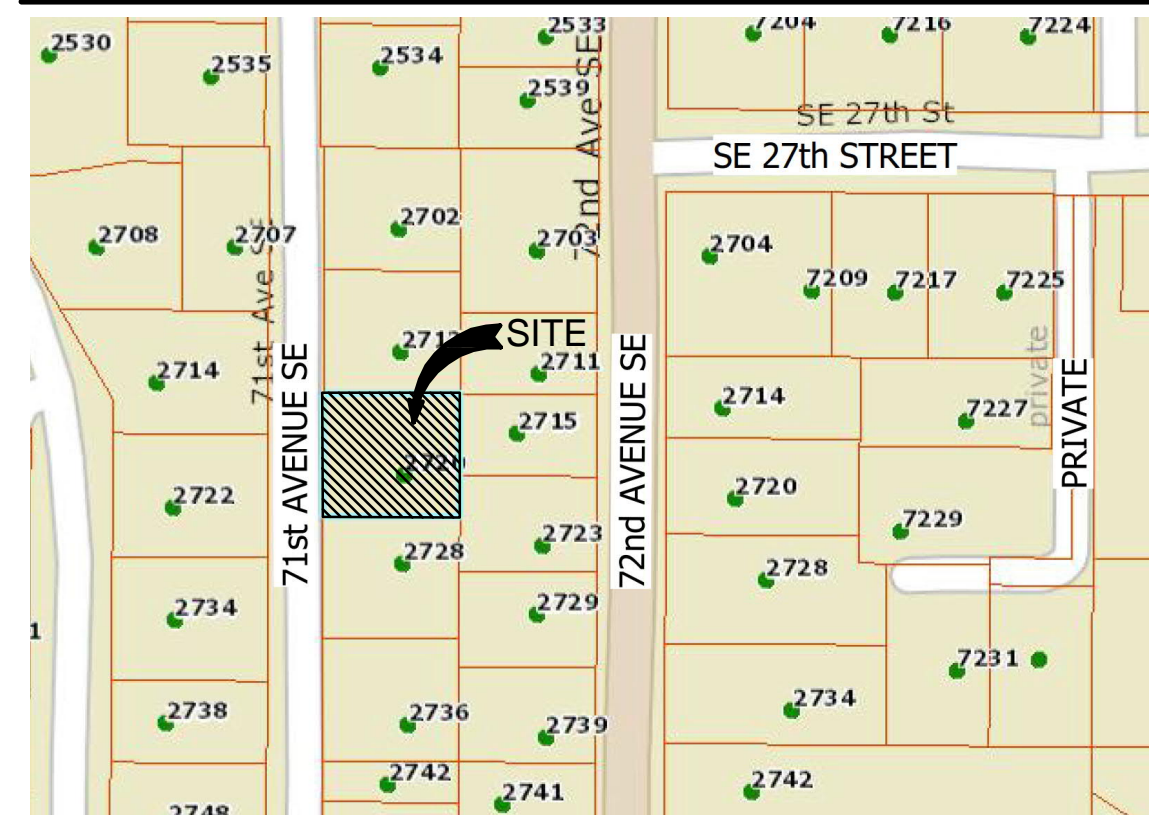
SHEET TITLE
STEEL DETAILS

JOB NUMBER
SHEET NUMBER

S5.6

CITY STAMP

VICINITY MAP



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

SHEET C1.2

EROSION CONTROL NOTES

SHEET C1.2

ORGANIC SOIL REQUIREMENT

MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED

SOIL AMENDMENT REQUIRED

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

SOIL INSPECTION REQUIRED BY ENGINEER

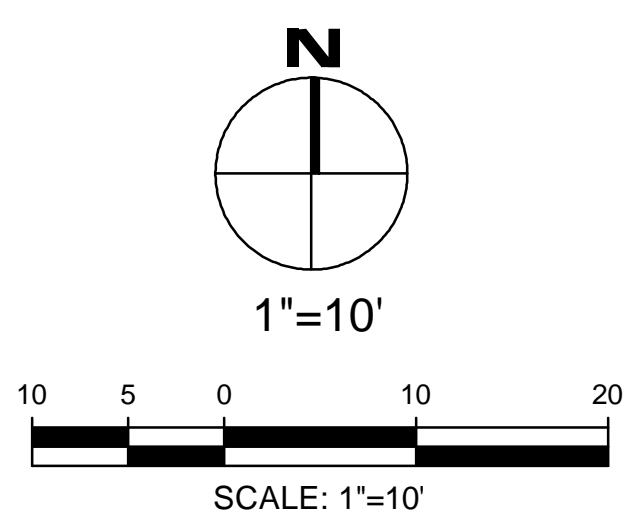
A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

TREE PROTECTION

TPCHAIN LINK FENCE REQ FOR TREE PROTECTION

TREE PROTECTION NOTES

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



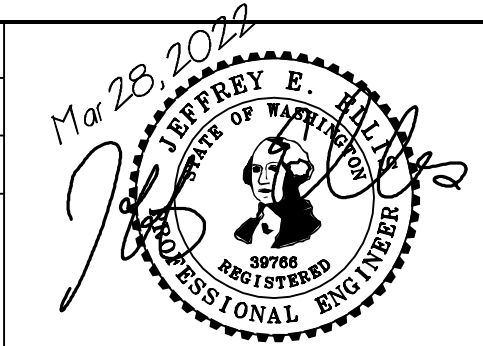
NO SEDIMENT IN ROW
CONTRACTOR USE WHATEVER MEANS NECESSARY TO LIMIT TRACKING OF SEDIMENT ONTO RIGHT OF WAY DURING COURSE OF CONSTRUCTION

NO.	DATE	BY	REVISIONS

APPLICANT:
SHERRY



DATE: Mar 28, 2022
JOB#: 1643
DRAFTED: CH DESIGN: DE
DIGITAL SIGNATURE



CIVIL ENGINEERING SOLUTIONS
2244 NW MARKET STREET, SUITE B SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**EROSION CONTROL PLAN
TREE PROTECTION PLAN**
2720 RESIDENCE
2720 71st AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C1.0
APN 217450-1915

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE		
FILTER FABRIC FENCE (SILT FENCE)		
STABILIZED CONSTRUCTION ENTRANCE		
CATCH BASIN INLET PROTECTION		
INTERCEPTOR SWALE SEE COR DWG 504, TYPE A TEMPORARY SWALE		
TREE PROTECTION FENCING		
CHECK DAM		
STRAW WATTLES		USE AS NEEDED
PLASTIC COVERING		COVER EXPOSED AREAS WITHIN MERCER ISLAND TIME LIMIT
COMPOST SOCK		SEDIMENT CONTROL OPTION RECOMMENDED IN LIEU OF SILT FENCE
COMPOST BERM		SEDIMENT CONTROL OPTION RECOMMENDED IN LIEU OF SILT FENCE

RECOMMENDED CONSTRUCTION SEQUENCE

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

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

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.

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

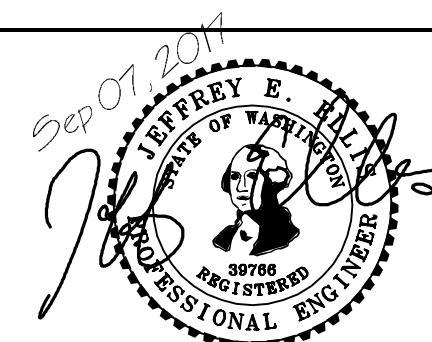
- ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.
- APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.
- CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION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

NO.	DATE	BY	REVISIONS

APPLICANT:
SHERRY



DATE: Sep 07, 2017
JOB#: 1643
DRAFTED: CH DESIGN: DE
DIGITAL SIGNATURE



2244 NW MARKET STREET, SUITE B SEATTLE, WA 98107
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

NOTES

2720 RESIDENCE
2720 71st AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:
C1.2

APN 217450-1915

SANITARY SEWER IMPROVEMENTS

- 1 -
- 2 6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %.
- 3 -
- 4 6" SEWER CLEANOUT PER MERCER ISLAND DETAIL S-19.
- 7 LOCATE AND VIDEO CONDITION OF EXISTING SANITARY SIDE SEWER. REPLACE LINE IF FOUND DEFECTIVE AS DETERMINED BY CITY INSPECTOR.
- 8 -

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 1 % GRADE.
- 21 4" FOUNDATION DRAIN (3034 PVC) @ MIN 1 % GRADE.
- 22 6" STORM DRAIN (3034 PVC) @ MIN 1 % GRADE.
- 23 -
- 24 -
- 25 -1 1/2" FOOTING DRAIN FORCE MAIN @ MIN. 36" DEPTH.
- 26 -

STORM DRAIN STRUCTURES

- 30 -
- 31 -TYPE 1 CB WITH VANED LID. MAX 5' RIM TO FL DEPTH.
- 32 -
- 33 -
- 34 -
- 35 -
- 36 6" WIDE NDS DURASLOPE CHANNEL DRAIN KIT OR EQUAL. USE TRAFFIC RATED, GALVANIZED STEEL GRATE OR EQUAL.
- 39 -
- 40 -TYPE 40 CATCH BASIN. IN DRIVEWAY INCLUDE OIL/WATER TURNED DOWN ELBOW OR RISER TEE
- 41 -
- 43 -
- 46 -

48 -FOOTING DRAIN SUMP PUMP: USE 1/3 HP HYDROMATIC SUMP PUMP OR EQUAL. 120V, 1/3 HP, SINGLE PHASE, 8.0 AMP 1-1/2" DISCHARGE. PLACE IN 24" GREEN ULTRA-RIB PVC PIPE OR EQUAL. FIELD LOCATE FOOTING DRAIN SUMP PUMP. RECOMMEND 12V BATTERY BACKUP AND WI-FI CONNECTIVITY.

SURVEYOR

TOPOGRAPHIC & BOUNDARY SURVEY BY:
TERRANE LAND SURVEYING
10801 MAIN STREET, SUITE 102
BELLEVUE, WA 98004
PHONE 425.458.4488
WWW.TERRANE.NET

BENCHMARK

CONTACT SURVEYOR FOR BENCHMARK.

VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS

A CLEARING LIMIT NOTE

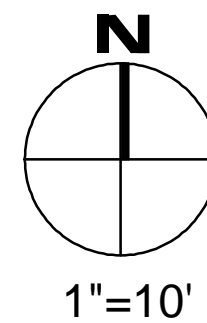
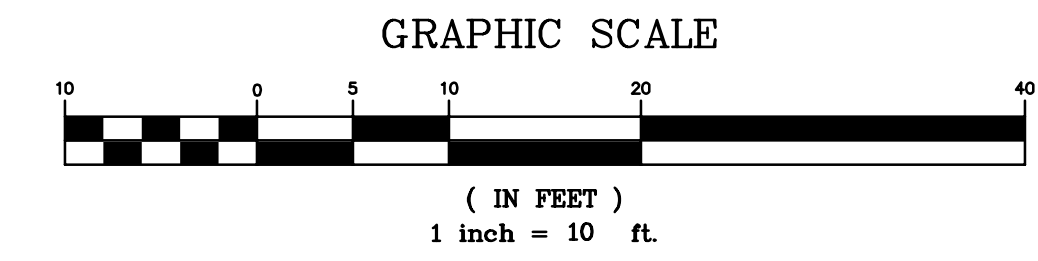
ALL SELECTIVE CLEARING, TRENCHING AND OTHER WORK WITHIN THE DRIPLINES OF SIGNIFICANT TREES SHALL BE BY LOW IMPACT/HAND METHODS ONLY AND WORK SHALL BE ADJUSTED AS POSSIBLE TO MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED TREES AND PROTECTED UNDERSTORY. CONSTRUCTION MATERIALS AND VEHICLES SHALL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

B TREE DRIPLINE NOTE

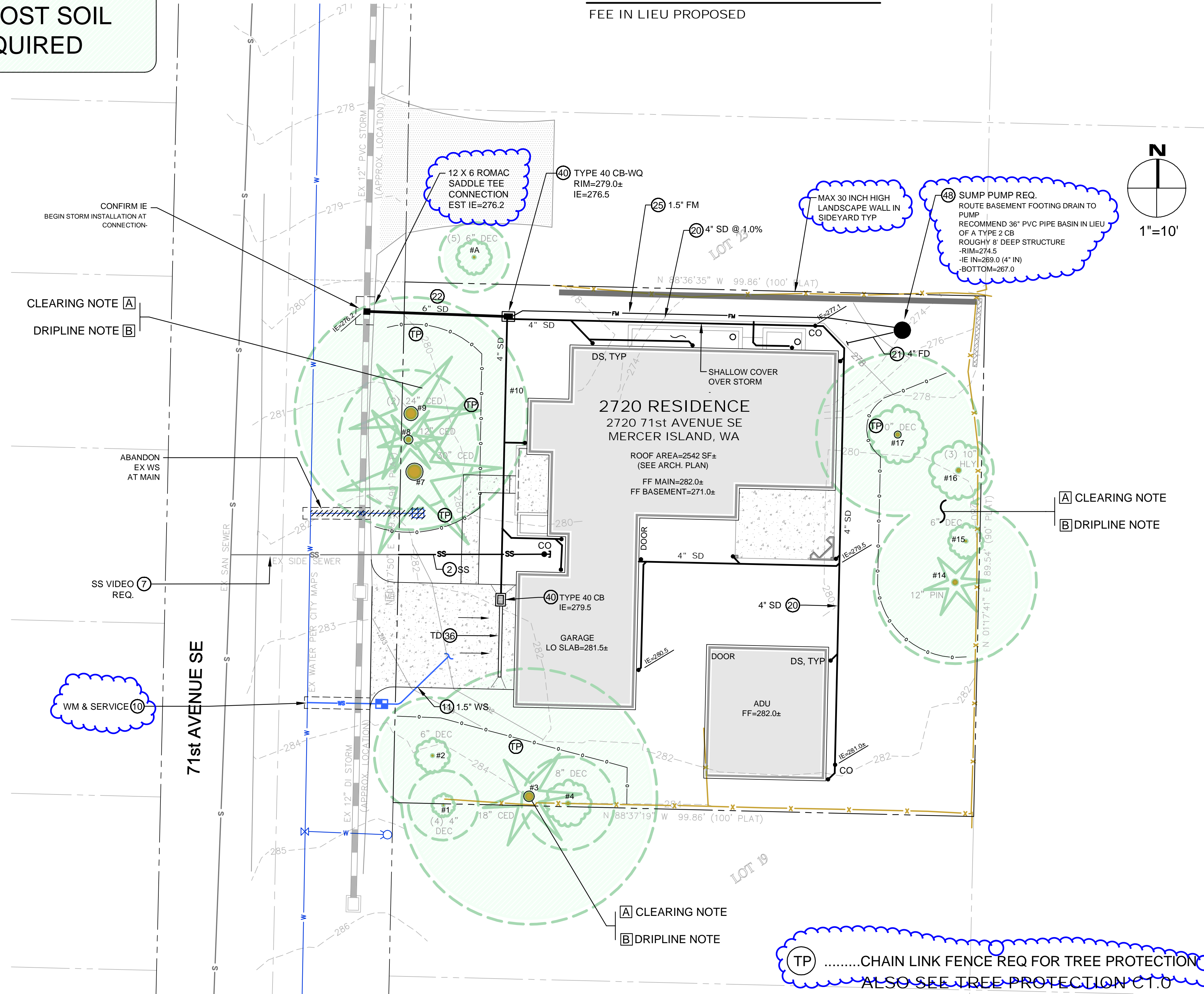
WORK WITHIN THE DRIPLINE OF TREES TO BE SAVED MUST BE UNDER THE DIRECTION OF A CERTIFIED ARBORIST (TYP.) SEE ALSO CLEARING LIMIT NOTE ON THIS SHEET.

STORM DETENTION

FEE IN LIEU PROPOSED



MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED



CLEARING NOTE A
DRIPLINE NOTE B

A CLEARING NOTE
B DRIPLINE NOTE

A CLEARING NOTE
B DRIPLINE NOTE

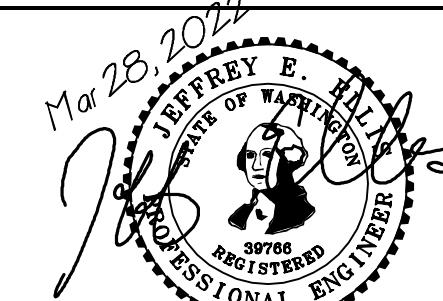
TPCHAIN LINK FENCE REQ FOR TREE PROTECTION
ALSO SEE TREE PROTECTION C.T.O

NO.	DATE	BY	REVISIONS

APPLICANT:
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DATE: Mar 28, 2022
JOB# 1643
DRAFTED: CH DESIGN: DE
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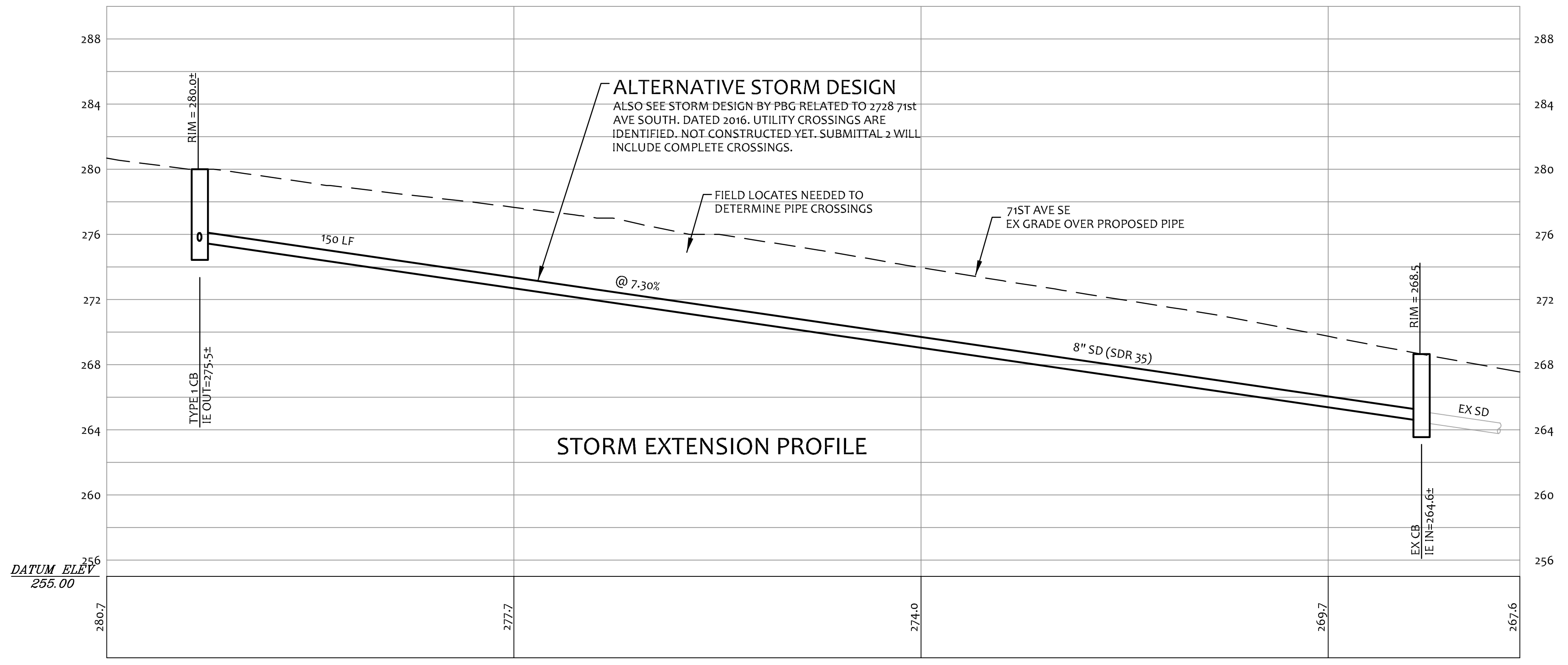
DRAINAGE PLAN

2720 RESIDENCE
2720 71st AVENUE SE, MERCER ISLAND, WA 98040

DRAWING NO:

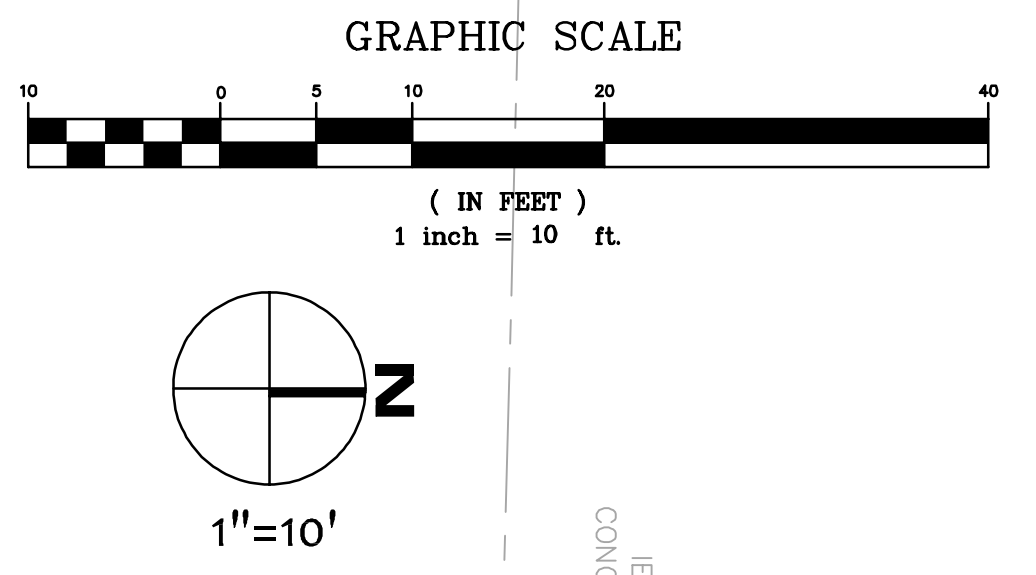
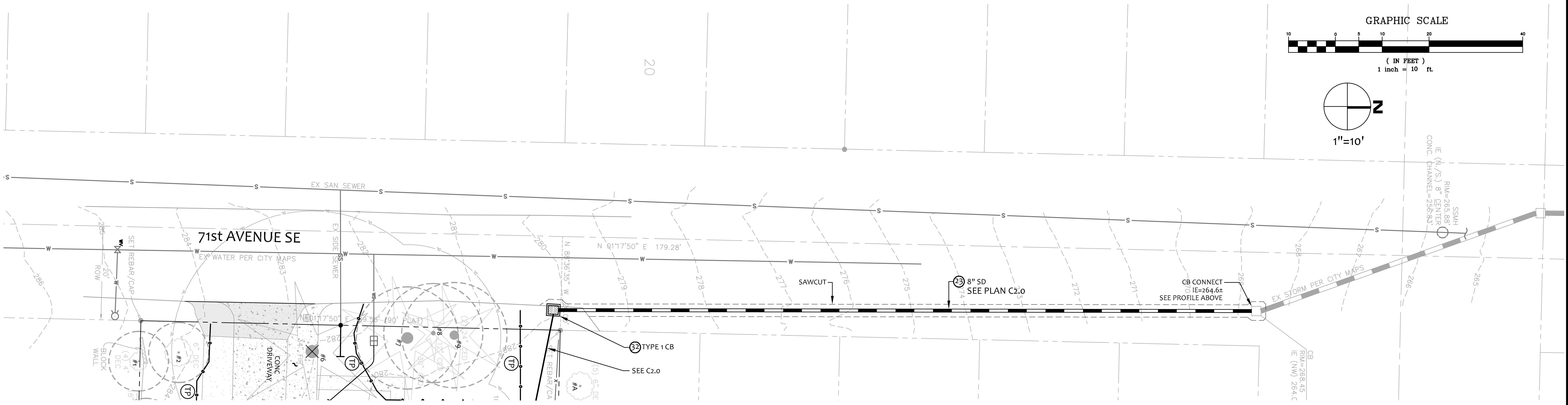
C2.0

APN 217450-1915



71ST AVE SE STORM DRAIN

SCALE: H 1"=10'
SCALE: V 1"=5'

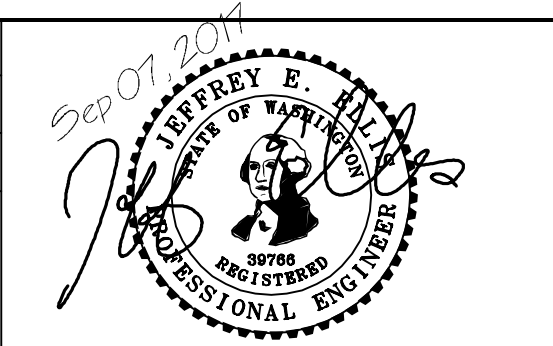


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SHERRY




DATE: Sep 07, 2017
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DRAFTED: DE DESIGN: DE
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