

STRUCTURAL ABBREVIATIONS		STRUCTURAL ABBREVIATIONS	
#	POUND(S), NUMBER	HSS	HOLLOW STRUCTURAL SECTION
&	AND	INT	INTERIOR
(E)	EXISTING	JBRG	JOIST BEARING
@	AT	JG	JOIST GIRDER
AB	ANCHOR BOLT	JGBR/G	JOIST GIRDER BEARING
ADDL	ADDITIONAL	JST	JOIST
ALT	ALTERNATE	JT	JOINT
APPROX	APPROXIMATE(LY)	kip	1,000 POUNDS
ARCH	ARCHITECT(URAL)	ksi	kips PER SQUARE INCH
B/FTG	BOTTOM OF FOOTING	LB	POUND
BLDG	BUILDING	LLH	LONG LEG HORIZONTAL
BLKG	BLOCKING	LLV	LONG LEG VERTICAL
BM	BEAM	MAX	MAXIMUM
BMD	BOTTOM OF METAL DECK	MECH	MECHANICAL
BOT	BOTTOM	MEZZ	MEZZANINE
BP	BASE PLATE	MFR	MANUFACTURER
BRG	BEARING	MIN	MINIMUM
BTWN	BETWEEN	MISC	MISCELLANEOUS
C-C	CENTER TO CENTER	MTL	METAL
CANT	CANTILEVER(ED)	NTS	NOT TO SCALE
CFS	COLD-FORMED STEEL	OC	ON CENTER
CIP	CAST-IN-PLACE	OPNG	OPENING
CJ	CONTROL OR CONST JOINT	PAF	POWER-ACTUATED FASTENER
CL	CENTER LINE	PARA	PARAPET
CLR	CLEAR	PEMB	PRE-ENGINEERED METAL BUILDING (MANUFACTURER)
CMU	CONCRETE MASONRY UNIT	PIL	PILASTER
COL	COLUMN	PL	PLATE
CONC	CONCRETE	PLYWD	PLYWOOD
CONN	CONNECTION	psf	POUNDS PER SQUARE FOOT
CONST	CONSTRUCTION	PTDF(L)	PRESSURE TREATED DOUGLAS FIR (LARCH)
CONT	CONTINUOUS	PTSYP	PRESSURE TREATED SOUTHERN YELLOW PINE
CTR	CENTER	REINF	REINFORCED, REINFORCING
DBL	DOUBLE	REQD	REQUIRED
deg	DEGREE	SCHED	SCHEDULE
DF (L)	DOUGLAS FIR (LARCH)	oc/DO	SHEATHING
dia	DIAMETER	SIM	SIMILAR
DIM	DIMENSION	SPF	SPRUCE PINE FIR
DITTO	DIMENSION	STD	STANDARD
DWG	DRAWING	STL	STEEL
DWL	DOWEL	STRUC	STRUCTURAL
EA	EACH	SYP	SOUTHERN YELLOW PINE
EF	EACH FACE	T&B	TOP AND BOTTOM
EL	ELEVATION	EQUAL	TONGUE AND GROOVE
ELEV	ELEVATOR	TBRG	TRUSS BEARING
EMB	EMBEDMENT	T/CONC	TOP OF CONCRETE
EQ	EQUAL	T/FTG	TOP OF FOOTING
ETC	ET CETERA	T/PARA	TOP OF PARAPET
EW	EACH WAY	T/PIL	TOP OF PILASTER
EXP	EXPANSION	T/S	TOP OF SLAB
EXT	EXTERIOR	T/STL	TOP OF STEEL
FDN	FOUNDATION	TYO	TYPICAL
FF	FINISH FLOOR	UNO	UNLESS NOTED OTHERWISE
FLR	FLOOR	USGS	US GEOLOGICAL SURVEY
FRMG	FRAMING	VAR	VARIES
FTG	FOOTING	VERT	VERTICAL
FV	FIELD VERIFY	w/	WITH
ga	GAUGE	WHS	WELDED HEADED STUD(S)
GALV	GALVANIZE(D)	WP	WORK POINT
GLB	GLUE-LAMINATED BEAM	WWR	WELDED WIRE REINFORCEMENT
HGR	HANGER		
HK	HOOK		
HORIZ	HORIZONTAL		

BUILDING CODES AND STANDARDS USED FOR DESIGN

1.	INTERNATIONAL BUILDING CODE 2009 EDITION	
	OCCUPANCY CATEGORY: II	
DESIGN LOADS		
1.	DESIGN LOADS	
	2ND FLOOR LIVE LOAD:	100 psf
	2ND FLOOR DEAD LOAD:	60 psf
	ROOF LIVE LOAD:	20 psf
	ROOF DEAD LOAD:	20 psf
2.	SNOW LOAD DESIGN CRITERIA	
	SNOW LOAD IMPORTANCE FACTOR, I:	1.00
	GROUND SNOW LOAD, Pg:	20 psf
	FLAT ROOF SNOW LOAD, Pf:	14 psf
	THERMAL FACTOR, Ct:	1.00 (STL JST); 1.20 (MANSARD TRUSS)
	EXPOSURE FACTOR, Ce:	1.00
	FROST DEPTH:	2'-6"
3.	WIND LOAD DESIGN CRITERIA	
	WIND IMPORTANCE FACTOR, I:	1.00
	BASIC WIND SPEED:	90 MPH (3 SEC GUST)
	WIND EXPOSURE CATEGORY:	B
	Gz:	+/- 0.18
	POSITIVE WIND ROOF PRESSURES (ASD VALUES):	
	- ZONE 1 (STL JST)	10 psf
	- ZONE 2 & 3 (STL JST)	12 psf
	NET UPLIFT VALUES (ASD VALUES):	
	- ZONE 1 (STL JST)	9 psf
	- ZONE 2 (STL JST)	12 psf
	- ZONE 3 (STL JST)	12 psf
	- g DIMENSION	7.5 ft
4.	SEISMIC LOAD DESIGN CRITERIA	
	SEISMIC IMPORTANCE FACTOR, I:	1.00
	SITE CLASS:	D
	SPECTRAL RESPONSE ACCELERATION:	Ss=0.540g, S1=0.180g
	SPECTRAL RESPONSE COEFFICIENTS:	Sds=0.492g, Sd1=0.250g
	SEISMIC DESIGN CATEGORY:	D
	BASIC SEISMIC-FORCE RESISTING SYSTEM:	D SPECIAL STEEL CONCENTRICALLY BRACED FRAMES/DUAL SYSTEM w/ INTERMEDIATE STEEL MOMENT FRAMES RESISTING MIN OF 25% SEISMIC FORCES
		0.082/0.062
	SEISMIC RESPONSE COEFFICIENT, Cs:	6/6
	RESPONSE MODIFICATION FACTOR, R:	2/2.5
	SYSTEM OVER-STRENGTH FACTOR, OMEGAo:	2/2.5
	DEFLECTION AMPLIFICATION FACTOR, Cd:	2/2.5
	ANALYSIS PROCEDURE USED:	EQUIVALENT LATERAL FORCE

SHOP DRAWING NOTES

- SHOP DRAWINGS, UNLESS OTHERWISE NOTED, SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- PRIOR SUBMITTAL, THE CONTRACTOR AND ARCHITECT SHALL REVIEW THE SHOP DRAWINGS AND MAKE ANY CORRECTIONS REQUIRED. THE CONTRACTOR AND ARCHITECT SHALL STAMP AND SIGN THE DRAWINGS, INDICATING THAT THEY HAVE REVIEWED THEM, PRIOR TO SUBMITTAL TO ENGINEER.
- SHOP DRAWINGS SHALL BE FURNISHED FOR ALL STRUCTURAL COMPONENTS.
- STRUCTURAL DRAWINGS ARE THE SOLE PROPERTY OF AEDIFICA CASE ENGINEERING. REPRODUCTION OF STRUCTURAL DRAWINGS FOR USE IN SHOP DRAWING SUBMITTALS IS NOT ACCEPTABLE WITHOUT OUR WRITTEN AGREEMENT.
- SCHEDULE SHALL ALLOW A MINIMUM OF 2 WEEKS FROM RECEIPT OF SHOP DRAWINGS FOR AEDIFICA CASE ENGINEERING TO PROVIDE RESPONSE.

GENERAL REVIT NOTES

- FOR ARCHITECTURAL, MEP, & STRUCTURAL COORDINATION: MODELED ELEMENTS SHOWN ON STRUCTURAL DRAWINGS SUCH AS TRUSSES, OPEN-WEB JOISTS, AND JOIST GIRDERS, ARE NOT THE FINAL DESIGN AND ALL FINAL COORDINATION SHOULD BE DONE BY THE VARIOUS CONSTRUCTION TRADES PER SHOP DRAWINGS FOR THESE ELEMENTS OF THE STRUCTURE.

GENERAL STRUCTURAL NOTES

- THIS DRAWING SET IS TO BE VIEWED AS A WHOLE AND COORDINATED WITH ARCHITECTURAL, MECHANICAL, CIVIL, AND OTHER DISCIPLINES. ALL WORK PERTAINING TO A SPECIFIC CONTRACTOR MAY OR MAY NOT BE INDICATED ON SPECIFIC DRAWING SECTIONS. IT IS EACH SUBCONTRACTOR'S RESPONSIBILITY TO PREPARE HIS BID FROM A COMPLETE SET OF PLANS.
- THE CONTRACTOR SHALL FOLLOW WRITTEN DIMENSIONS ONLY. DO NOT SCALE DRAWINGS. DIMENSIONS NOT SHOWN ON PLAN TO BE COORDINATED WITH ARCHITECTURAL PLANS.
- ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY AT ANY SIMILAR SITUATION ELSEWHERE ON THE JOB, EXCEPT WHERE A DIFFERENT DETAIL OR SECTION IS SHOWN.
- THE STRUCTURE SHALL BE ADEQUATELY BRACED AND SHORED DURING ERECTION AGAINST WIND AND ERECTION LOADS. STRUCTURAL MEMBERS ARE DESIGNED FOR "IN-PLACE" LOADS ONLY. BRACE ALL BELOW GRADE WALLS UNTIL FLOOR STRUCTURE IS IN PLACE & CONCRETE OR PLYWOOD FLOOR DIAPHRAGM IS IN PLACE.
- THE GENERAL CONTRACTOR SHALL VERIFY ALL OPENING SIZES, PAD SIZES, AND LOCATIONS WITH THE RESPECTIVE CONTRACTORS.
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND ACTUAL FIELD CONDITIONS.
- THE VARIOUS SUBCONTRACTORS ARE RESPONSIBLE FOR PLACING SLEEVES, OUTLET BOXES, ANCHORS, VENT OPENINGS, ETC. THAT MAY BE REQUIRED IN FOUNDATION WALLS. CONSTRUCTION MANAGER SHALL COORDINATE ALL PLACEMENT OF ITEMS IN FOUNDATION WALLS.
- SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS AND INFORMATION.
- ALL ELEVATIONS GIVEN ARE REFERENCED TO FINISHED FLOOR ELEVATIONS AT 100'-0", UNLESS SHOWN AS USGS ELEVATIONS.
- WHERE GENERAL NOTES OR TYPICAL DETAILS CONTRADICT INFORMATION PROVIDED IN BUILDING SECTIONS, THE BUILDING SECTIONS TAKE PRECEDENCE.
- ALL HOLES THROUGH CONSTRUCTION SHALL BE CORE DRILLED OR SAWCUT.
- ALL STAIR STRINGERS, LANDINGS, AND HANDRAILS TO BE DESIGNED AND FABRICATED BY STAIR FABRICATOR.
- WHERE INFORMATION PROVIDED IN THESE STRUCTURAL DRAWINGS CONTRADICTS INFORMATION PROVIDED IN BUILDING SPECIFICATIONS, THE SPECIFICATIONS SHALL TAKE PRECEDENCE.

DEFERRED SUBMITTALS

THE FOLLOWING DESIGN ELEMENTS MUST BE SIGNED & SEALED BY A PROFESSIONAL ENGINEER (PE/SE) REGISTERED IN THE STATE WHERE THIS PROJECT IS LOCATED, AND SUBMITTED TO THE ENGINEER OF RECORD. DESIGNED DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW AND RECORD.

- STRUCTURAL STEEL CONNECTION CALCULATIONS AND SHOP FABRICATION DRAWINGS FOR CONNECTIONS.
- STEEL JOIST CALCULATIONS AND FABRICATION DRAWINGS (INCLUDING ACCESSORIES).
- LIGHT GAUGE COLD-FORMED STEEL FRAMING:
 - STUDS, JOISTS, HEADERS, AND CONNECTIONS NOT SHOWN ON DRAWINGS.
 - STRUCTURAL CALCULATIONS INCLUDING MEMBER SIZES, LAYOUT, SPAN, SPACING, DEFLECTION, AND TYPICAL & SPECIAL CONNECTIONS.
- PRE-FABRICATED COLD-FORMED STEEL TRUSS CALCULATIONS, AND FABRICATION DRAWINGS INCLUDING:
 - ALL TRUSS-TO-TRUSS CONNECTIONS
 - ALL TRUSS CONNECTIONS
 - PLAN AND DETAILS FOR THE LOCATIONS OF ALL ERECTION/TEMPORARY AND PERMANENT LATERAL AND DIAGONAL BRACING AND/OR BLOCKING.
 - FRAMING PLAN LAYOUT (DIMENSIONED AND TO SCALE)
 - IDENTITY OF THE COMPANY MANUFACTURING THE TRUSS
 - DESIGN LOADS
 - TRUSS SPACING
- STEEL STAIR CALCULATIONS AND DRAWINGS FOR MEMBERS AND CONNECTIONS INCLUDING STRINGERS, LANDINGS, AND HANDRAIL MEMBERS AND CONNECTION DESIGN.
- CANOPY STRUCTURAL STEEL DRAWINGS & CALCULATIONS FOR MEMBER SIZES & CONNECTIONS.

SPECIAL INSPECTIONS

- REFER TO THE "STATEMENT OF SPECIAL INSPECTIONS" FOR THE LIST OF ELEMENTS OF CONSTRUCTION THAT SHALL REQUIRE SPECIAL INSPECTION. THIS SHALL BE CONSIDERED A GUIDE, AND THE CONTRACTOR AND INSPECTOR SHALL REFER TO THE IBC FOR COMPLETE REQUIREMENTS, QUALIFICATIONS, EXCEPTIONS, AND SUBMITTALS. REFER TO IBC SECTION 1704 FOR 2003-2009 CODES, AND SECTION 1705 FOR 2012-2015 CODES. THE OWNER SHALL BE RESPONSIBLE FOR EMPLOYING THE SPECIAL INSPECTION AGENCY. ANY "OBSERVATIONS" BY THE EOR WILL NOT BE TO PERFORM SPECIAL INSPECTIONS AND SHALL NOT BE INTERPRETED AS SUCH.
- COPIES OF ALL INSPECTION REPORTS THAT REPORT COMPLIANCE SHALL BE SUBMITTED TO THE ARCHITECT OF RECORD, STRUCTURAL ENGINEER OF RECORD, AND BUILDING INSPECTOR WITHIN 7 CALENDAR DAYS OF COMPLETION OF THAT PORTION OF WORK. A MINIMUM OF ONE (1) PROGRESS REPORT PER MONTH FOR EACH TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD.
- SPECIAL INSPECTOR SHALL INFORM ENGINEER OF RECORD IMMEDIATELY OF NON-COMPLIANCE WITH CONSTRUCTION DOCUMENTS OR APPROVED SUBMITTALS. S. CONSTRUCTION OF RECORD THE SAME DAY NON-COMPLIANCE IS DISCOVERED AND FOLLOW UP WITH AN OFFICIAL REPORT WITHIN 2 BUSINESS DAYS.
- THE SPECIAL INSPECTIONS IDENTIFIED ON THE PLANS ARE IN ADDITION TO, AND NOT A SUBSTITUTE FOR, THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A BUILDING INSPECTOR.
- SPECIAL INSPECTIONS ARE NOTED AS EITHER "CONTINUOUS" OR "PERIODIC". A "CONTINUOUS" INSPECTION REQUIRES THE PRESENCE OF A QUALIFIED INSPECTOR IN THE VICINITY OF THE WORK BEING PERFORMED FOR 100% OF THAT WORK. A "PERIODIC" INSPECTION REQUIRES PART-TIME OBSERVATION OF THE WORK BEING PERFORMED. THE INSPECTOR SHALL ALSO OBSERVE THE FINAL CONDITION OF THE WORK BEFORE IT IS CLOSED FROM VIEW.
- WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED, IT SHALL BE THE RESPONSIBILITY OF THE AGENT TO EMPLOY A SUFFICIENT NUMBER OF SPECIAL INSPECTORS TO ASSURE THAT ALL WORK IS CONTINUOUSLY INSPECTED IN ACCORDANCE WITH THOSE PROVISIONS.

EXCAVATION AND EARTHWORK NOTES

- WATER LEVELS INDICATED ON THE BORING LOGS MAY BE SUBJECT TO SEASONAL AND/OR ANNUAL VARIATIONS. A DEWATERING SYSTEM OF SUFFICIENT CAPACITY SHALL BE INSTALLED AND OPERATED TO MAINTAIN DRY CONSTRUCTION AREA FREE OF WATER AT ALL TIMES.
- THE BEARING VALUE AND LATERAL EARTH PRESSURES OF THE SOILS IS PER REPORT BY: MIDWEST TESTING, DATED APRIL 4, 2018. THE FOUNDATION DESIGN IS BASED ON THE FOLLOWING NET ALLOWABLE BEARING AND LATERAL EARTH PRESSURES (ALLOWABLE BEARING PRESSURES MAY BE INCREASED BY 33 PERCENT FOR WIND AND SEISMIC LOADS):
 - SREAD FOOTINGS 3,500 psf
 - CONT. WALL FOOTINGS 3,500 psf
- ALL FOOTING EXCAVATIONS SHALL BE INSPECTED, PRIOR TO CONCRETE PLACEMENT, BY A SOILS ENGINEER TO VERIFY SUITABLE BEARING MATERIAL OF CAPACITY AS SPECIFIED.
- NOTIFY THE OWNER'S REPRESENTATIVE WHEN ADDITIONAL EXCAVATION IS REQUIRED TO REACH SUITABLE BEARING MATERIAL.
- THE SOILS ENGINEER SHALL CERTIFY IN WRITING THAT ALL FOUNDATIONS WERE PLACED ON SOIL WITH THE BEARING VALUE AS SPECIFIED.
- WITHIN THE EXCAVATION AREA OF FOUNDATIONS, ALL VEGETATION, TOPSOIL, PREVIOUSLY PLACED FILL AND UNSUITABLE SOILS SHALL BE REMOVED. ALL FOOTINGS TO BEAR ON VIRGIN SOIL OR PROPERLY PLACED AND COMPACTED ENGINEERED FILL.
- FOUNDATION DESIGN DOES NOT ACCOUNT FOR WINTER CONSTRUCTION. ANY UNENCLOSED/UNHEATED SPACES SHALL BE ADEQUATELY PROTECTED AGAINST FROST DURING WINTER CONSTRUCTION BY THE CONTRACTOR.
- IF ANY SOFT SPOTS OR AREAS QUESTIONABLE FOR ANY REASONS ARE ENCOUNTERED BY THE CONTRACTOR, ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY SO THAT ANY REQUIRED ACTION MAY BE TAKEN PRIOR TO CONTINUATION OF CONSTRUCTION IN THAT AREA.

POST-INSTALLED ANCHOR NOTES

POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER OF RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED ON THESE DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING, AT A MINIMUM, THE PERTINENT EQUIVALENT PERFORMANCE VALUES OF THE SPECIFIED PRODUCT USING THE BUILDING CODE.

- TYPICAL POST-INSTALLED ANCHORS IN CONCRETE AND CMU SHALL COMPLY WITH THE LATEST OF THEIR RESPECTIVE ICC EVALUATION REPORTS.
- WHEN INSTALLING ANCHORS IN CONCRETE AND CMU, CONTRACTOR SHALL LOCATE EXISTING REINFORCING STEEL, CONDUITS, ETC, PRIOR TO DRILLING FOR ANCHORS. CONTRACTOR SHALL USE CARE AND CAUTION TO PREVENT DAMAGE TO EXISTING REINFORCING BARS.
- CONTRACTOR SHALL PROVIDE 1" MINIMUM CLEARANCE BETWEEN EDGES OF ANY HOLES FOR POST-INSTALLED ANCHORS AND EXISTING REINFORCING STEEL.
- CONTRACTOR SHALL PROVIDE INSPECTION AND TESTING AS REQUIRED PER THE "SPECIAL INSPECTIONS" SECTION OF THESE GENERAL STRUCTURAL NOTES.

CONCRETE NOTES

- ALL CONCRETE WORK INCLUDING FORMING, REINFORCING, MIXING, PLACING, AND CURING SHALL BE DONE IN ACCORDANCE WITH THE ACI MANUAL OF CONCRETE PRACTICE INCLUDING "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318, AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE", ACI 301 LATEST EDITIONS.
- IT SHALL BE THE RESPONSIBILITY OF THE MIX DESIGN SUPPLIER TO PROPORTION MIXES APPROPRIATELY TO REACH THE REQUIRED DESIGN STRENGTH NOTED, AND SHALL BE APPROPRIATE FOR THEIR INTENDED USE. ADMIXTURES ARE OPTIONAL. HOWEVER, AIR-ENTRAINING ADMIXTURES SHALL BE USED FOR CONCRETE EXPOSED TO THE EXTERIOR OR FREEZE-THAW CYCLES.
- CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR EACH INTENDED USE ON THE PROJECT FOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD. CONTENTS OF THE MIX DESIGN SHALL COMPLY WITH, AND INCLUDE ALL INFORMATION REQUIRED BY, ACI 318, CHAPTER 5. THIS INCLUDES, BUT IS NOT LIMITED TO NUMBER OF TESTS AND AGE OF TESTS INCLUDED IN THE MIX DESIGN REPORT.
- ALL CONCRETE DENSITY SHALL BE NORMAL WEIGHT (145 pcf +/- 5) UNLESS OTHERWISE INDICATED. LIGHT WEIGHT CONCRETE SHALL BE 110 pcf +/- 5, UNO.
- FLY ASH ALLOWANCES:
 - 20% MAXIMUM BY WEIGHT IN FOOTINGS
 - 15% MAXIMUM BY WEIGHT IN SLABS
- COORDINATE CONCRETE WORK WITH THAT OF OTHER TRADES TO ALLOW FOR SETTING OF SLEEVES, ACCESSORIES, ETC.
- ALL REINFORCING STEEL, ANCHOR RODS, DOWELS, AND INSETS SHALL BE WELL-SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- TEST CYLINDERS WILL BE REQUIRED (4 MINIMUM), AND RECORDS OF RESULTS SHALL BE SUBMITTED TO ENGINEER OF RECORD (1 AT 7 DAYS, AND 2 AT 28 DAYS). SLUMP TESTS ARE RECOMMENDED.
- CONSTRUCTION JOINTS IN CONCRETE INDICATED WITH A ROUGH, CLEAN SURFACE SHALL HAVE A 1/4" AVERAGE AMPLITUDE.
- ALL COLD JOINTS SHALL BE ROUGHENED AND CLEANED PRIOR TO PLACING CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH IN ACCORDANCE WITH THE FOLLOWING:
 - (A) TOTAL AIR CONTENT LIMITS INCLUDE BOTH ENTRAINED AND ENTRAPPED AIR +/- 1 1/2%. "N" IN COLUMN INDICATES THE ADDITION OF ENTRAINED AIR IS NOT REQUIRED, BUT IS PERMITTED.

CONCRETE TABLE			
INTENDED USE	MINIMUM 28 DAY STRENGTH f _c	MAX WATER-CEMENT RATIO	TOTAL AIR LIMITS (MAX % RATIO) (A)
INTERIOR SLAB ON GRADE	4 ksi	0.50	N
FOOTINGS/FOUNDATION WALLS	4 ksi	0.48	6 (WHERE EXPOSED TO EXT.)
CONCRETE EXPOSED TO DEICERS	4 ksi	0.40	6
SLABS ON METAL DECK	3.5 ksi	0.50	-
ALL CONCRETE NOT OTHERWISE SPECIFIED	4 ksi	0.40	6

REINFORCING STEEL NOTES

- NON-WELDED STEEL BAR REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60. WELDED STEEL BAR REINFORCING SHALL CONFORM TO ASTM A706.
- WELDING OF REINFORCING STEEL SHALL BE PERFORMED BY A W.S. QUALIFIED WELDERS IN CONFORMANCE WITH A.W.S. D1.1 USING E60 ELECTRODES FOR ASTM A615 REBAR, AND E80 ELECTRODES FOR ASTM A706 REBAR UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- MINIMUM CONCRETE COVER FOR REINFORCING STEEL IN CAST-IN-PLACE (NON-PRESTRESSED) CONCRETE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE DRAWINGS:
 - CONCRETE CAST AGAINST EARTH = 3"
 - CONCRETE EXPOSED TO WEATHER:
 - #6 BAR AND LARGER = 2"
 - #5 BAR AND SMALLER = 1 1/2"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER (SLABS, WALLS, & JOISTS):
 - #14 BARS AND LARGER = 1 1/2"
 - #11 BARS AND SMALLER = 3/4"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER (BEAMS & COLUMNS):
 - PRIMARY REINFORCEMENT, TIES, STIRRUPS, & SPIRALS = 1 1/2"
- ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE LATEST EDITION OF ACI315, DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.
- LAP SPICE LENGTHS FOR BARS INSTALLED IN CONCRETE AND CMU SHALL BE IN ACCORDANCE WITH THE TABLE.

COMPRESSION LAP SPICE LENGTH IN CONCRETE NOTES

- VALUES IN TABLE ARE BASED ON 60 ksi OR 80 ksi REBAR. THERE SHALL BE NO ADJUSTMENT PERMITTED FOR REBAR EXCEEDING 80 ksi IN YIELD STRENGTH.
- MULTIPLY LENGTHS IN TABLE BY 1.33 FOR f_c LESS THAN 3,000 psi.
- WHERE BARS OF DIFFERENT SIZES ARE SPLICED, PROVIDE THE LAP LENGTH OF THE LARGER BAR.
- VALUES IN THE TABLE CAN BE MULTIPLIED BY 0.75 WHERE LAP OCCURS WITHIN A SPIRAL IN A SPIRALLY REINFORCED COLUMN, BUT SHALL NOT BE LESS THAN 12".
- REBAR IN ALL CONCRETE MEMBERS SHALL BE SPLICED IN ACCORDANCE WITH THE "TENSION LAP SPICE LENGTH" TABLE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.

COMPRESSION LAP SPICE LENGTH IN CONCRETE (INCHES) f_c = 3,000 psi OR GREATER TABLE

BAR SIZE	f _y = 60 ksi	f _y = 80 ksi
#3	12	18
#4	15	24
#5	19	30
#6	23	36
#7	27	42
#8	30	48
#9	34	55
#10	39	61
#11	43	68

TENSION LAP SPICE LENGTH IN CONCRETE NOTES

- FOR HORIZONTAL BARS, VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.3 WHERE MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST BELOW THE BAR.
- VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.5 FOR EPOXY COATED BARS WITH CLEAR COVER LESS THAN 3 BAR DIAMETERS OR CLEAR SPACING LESS THAN 6 BAR DIAMETERS. MULTIPLY VALUES IN TABLE BY 1.2 FOR ALL OTHER EPOXY COATED BARS.
- VALUES IN TABLE NEED NOT TO BE MULTIPLIED BY MORE THAN 1.7 DUE TO THE INCREASE FROM NOTES 1 AND 2.
- VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.33 WHERE LIGHT WEIGHT CONCRETE IS USED.
- LAP SPLICES IN TENSION ARE NOT PERMITTED FOR BAR LARGER THAN #11. A FULL MECHANICAL OR FULL WELDED SPICE SHALL DEVELOPE AT LEAST 1.25x of the bar.
- WHERE CLEAR SPACING OF BARS BEING SPLICED IS AT LEAST 2 BAR DIAMETERS AND CLEAR COVER AT LEAST 1 BAR DIAMETER, USE CASE 1. FOR ALL OTHER BAR ARRANGEMENTS, USE CASE 2.
- VALUES IN THE TABLE ARE BASED ON 60ksi REBAR. FOR OTHER REBAR YIELD STRENGTHS, MULTIPLY VALUES IN THE TABLE BY THE SPECIFIED YIELD STRENGTH DIVIDED BY 60.
- WHERE BARS OF DIFFERENT SIZES ARE SPLICED, PROVIDED THE LAP LENGTH OF THE LARGER BAR.
- WELDED WIRE REINFORCEMENT (DEFORMED OR PLAIN WIRE) SHALL BE LAPPED ONE FULL MESH SQUARE PLUS 2 INCHES MINIMUM, BUT NOT LESS THAN 8 INCHES.
- REBAR IN ALL CONCRETE MEMBERS SHALL BE SPLICED IN ACCORDANCE WITH "TENSION LAP SPICE LENGTH" TABLE, UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.

TENSION LAP SPICE LENGTH IN CONCRETE (INCHES) - 60 KSI REBAR TABLE

f _c =	3,000psi	3,000psi	3,500psi	3,500psi	4,000psi	4,000psi	5,000psi	5,000psi
BAR SIZE	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
#3	22	33	20	30	19	28	17	25
#4	29	43	27	40	25	37	23	34
#5	36	54	33	50	31	47	28	42
#6	43	65	40	60	37	56	34	50
#7	63	94	58	87	54	81	49	73
#8	72	107	66	99	62	93	56	83
#9	81	121	75	112	70	105	63	94
#10	91	136	84	126	79	118	71	106
#11	101	151	93	140	87	131	78	117

DEVELOPMENT LENGTH OF STANDARD HOOKS IN CONCRETE NOTES

- VALUES IN TABLE ARE BASED ON 60ksi REBAR. FOR OTHER REBAR YIELD STRENGTHS, MULTIPLY VALUES IN THE TABLE BY THE SPECIFIED YIELD STRENGTH DIVIDED BY 60.
- SEE ACI 318 SECTION 12.5 FOR ALLOWABLE REDUCTIONS IN DEVELOPMENT LENGTH. IT SHALL NOT BE LESS THAN 8 BAR DIAMETERS OR 6 INCHES.
- VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.2 FOR EPOXY COATED BARS.
- VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.33 WHERE LIGHT WEIGHT CONCRETE IS USED.
- HOOKEED BARS ARE NOT CONSIDERED EFFECTIVE IN DEVELOPING BARS IN COMPRESSION.

DEVELOPMENT LENGTH OF STANDARD HOOKS IN CONCRETE (INCHES) - 60 ksi REBAR TABLE

BAR SIZE	f _c = 3,000 psi	f _c = 3,500 psi	f _c = 4,000 psi	f _c = 5,000 psi
#3	9	8	8	7
#4	11	11	10	9
#5	14	13	12	11
#6	17	16	15	13
#7	20	18	17	15
#8	22	21	19	17
#9	25	23	22	20
#10	28	26	25	22
#11	31	29	27	24

REINFORCED MASONRY NOTES

- MASONRY CONSTRUCTION SHALL CONFORM TO THE APPLICABLE PORTIONS OF TMS 602. "SPECIFICATION FOR MASONRY CONSTRUCTION" CONCRETE MASONRY UNITS SHALL BE CLASSIFIED AS NORMAL WEIGHT DENSITY AND CONFORM TO ASTM C90. THE MASONRY ASSEMBLY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH, f_m = 2,000 psi.
- GROUT IN ACCORDANCE WITH ASTM C476 MAY BE FINE OR COARSE, SELF-CONSOLIDATING OR CONVENTIONAL (AT CONTRACTOR'S OPTION), AND SHALL BE PROPORTIONED TO ACHIEVE THE MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF MASONRY. GROUT SHALL HAVE A DRY DENSITY OF [103/135] +/- 3pcf. [NORMAL WEIGHT AGGREGATES IN GROUT SHALL COMPLY WITH ASTM C404/LIGHTWEIGHT AGGREGATES IN GROUT SHALL COMPLY WITH ASTM S30.] LIGHT WEIGHT AGGREGATES FOR STRUCTURAL CONCRETE] MORTAR SHALL COMPLY WITH PROPORTION SPECIFICATION REQUIREMENTS OF ASTM C270.
- ALL MASONRY WALLS SHALL HAVE LADDER TYPE HORIZONTAL JOINT REINFORCING CONSISTING OF GALVANIZED EXTRA HEAVY 220 LADDER MESH BY HOHMANN & BARNARD, INC OR EQUAL. LOCATE AT 16"oc UNLESS NOTED OTHERWISE ON PLAN AND/OR SECTIONS. VERTICAL REINFORCEMENT IS PER FOUNDATION PLAN.
- SUPPLY VERTICAL REINFORCING IN MINIMUM LENGTHS EQUAL TO 4'-0" PLUS LAP SPICE LENGTH PER TABLE.
- WALL CONSTRUCTION LIFTS FOR REINFORCING BARS AND INSULATION FILL SHALL BE PER ACI 530.
- TYPE "S" MORTAR IS REQUIRED FOR ALL WALLS UNLESS NOTED OTHERWISE.
- SEE ARCHITECTURAL PLANS FOR LOCATION AND DETAIL OF CONTROL JOINTS AND EXPANSION JOINTS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF DOOR AND WINDOW OPENINGS FOR SPECIAL COURSING AND OTHER MASONRY DETAILS. THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS IS INTENDED TO DEFINE THE STRUCTURAL REQUIREMENTS ONLY.
- ALL BOLTS, ANCHORS, ETC., INSERTED IN THE WALLS SHALL BE WEIGHTED SOLD INTO POSITION WITH MINIMUM EDGE DISTANCE FROM ANCHOR TO EDGE OF GROUTED PORTION OF CMU IN ALL DIRECTIONS AS NOTED ON DRAWINGS.
- REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED ON DRAWINGS. REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A706.
- WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL BLOCK CORE, IT SHALL NOT BE SLOPED MORE THAN (ONE HORIZONTAL IN 6 VERTICAL), OR 10 DEGREES. DOWEL MAY BE GROUTED INTO CELL IN VERTICAL ALIGNMENT. EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL WALL REINFORCING, AS LONG AS THE CENTER-TO-CENTER SPACE BETWEEN THE WALL REINFORCING AND THE DOWEL DOES NOT EXCEED 8 INCHES. DOWELS SHALL NOT BE BENT INTO ALIGNMENT AFTER CONCRETE HAS BEEN CAST.
- SPLICED REINFORCING SHALL BE LAPPED ACCORDING TO "MASONRY LAP SPICE LENGTH" TABLE. SPLICED BARS SHALL BE WIRED TOGETHER. CONTRACTOR MAY OPT TO STAGGER SPLICES.
- VERT

STEEL JOIST NOTES

- ALL STEEL JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS. JOIST FABRICATOR SHALL BE A MEMBER OF THE SJI.
- BRIDGING FOR STEEL JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS.
- PROVIDE BOTTOM CHORD CEILING EXTENSIONS AS SHOWN ON ARCHITECTURAL DRAWINGS OR AS NOTED OTHERWISE.
- HEADER ANGLES FOR STEEL JOISTS SHALL BE DESIGNED AND FURNISHED BY THE JOIST FABRICATOR AS NOTED ON THE DRAWINGS.
- ALL STEEL BAR JOISTS SHALL BE SPACED AND SIZED AS SHOWN ON PLANS.
- TOP AND BOTTOM CHORDS OF ALL JOISTS SHALL BE IN STRAIGHT ALIGNMENT BEFORE WELDING OR FINAL-BOLTING ANY BRIDGING IN PLACE.
- THE ENDS OF ALL BRIDGING TERMINATING AT CONCRETE OR MASONRY WALLS SHALL BE ANCHORED THERETO AT TOP AND BOTTOM CHORDS PER TYPICAL DETAILS.
- ALL BAR JOISTS AT COLUMN CENTERLINES (OR ADJACENT TO COLUMN CENTERLINES) TO HAVE BOTTOM CHORD EXTENDED TO COLUMN OR BEAM. DO NOT WELD UNLESS SPECIFICALLY NOTED AS SUCH.
- ALL STEEL JOISTS SHALL BE SHOP PAINTED WITH MANUFACTURER'S STANDARD SHOP PRIMER COMPLYING TO SSPC-PAINT 15.
- REFER TO "DEFERRED SUBMITTALS" FOR ADDITIONAL REQUIREMENTS.

STEEL FLOOR & ROOF DECK NOTES

- DECK SHALL SPAN A MINIMUM 3 SUPPORT SPACES. LOCATE JOINTS OVER SUPPORTING MEMBERS ONLY, AND LAP 2" MINIMUM.
- METAL DECK SHALL NOT BE INSTALLED UNTIL THE JOISTS HAVE BEEN ALIGNED, AND ALL BRACING AND BRIDGING IS INSTALLED.
- METAL DECK TO BE FINISHED AND INSTALLED IN ACCORDANCE WITH ALL CURRENT PROVISIONS, RECOMMENDED PRACTICES, AND STANDARDS OF THE STEEL DECK INSTITUTE.
- FURNISH AND INSTALL SHEET METAL CLOSURES, JOINT COVERS, CONCRETE STOPS AND OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
- DO NOT SUSPEND PIPES OR DUCTS DIRECTLY FROM DECK.
- METAL DECK SHALL COMPLY WITH THE REQUIREMENTS OF THE STEEL DECK INSTITUTE. SEE PLAN FOR TYPES AND GAUGES.
- DECKING MANUFACTURER SHALL COORDINATE SIZE AND LOCATIONS OF OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- ROOF AND FLOOR DECK SHALL BE GALVANIZED WITH G60 COATING MINIMUM UNLESS NOTED OTHERWISE.
- METAL ROOF AND FLOOR DECK HAS BEEN DESIGNED TO FUNCTION AS A DIAPHRAGM FOR THE TRANSMISSION OF LATERAL LOADS. ATTACH DECK UNITS TO EACH OTHER PER PLAN NOTES. CONNECT DECK UNITS TO EXTERIOR SUPPORTS AND ALL OTHER DECK BOUNDARIES PER PLAN NOTES. ALL METAL DECK SHALL BE FASTENED TO JOIST SUPPORTS AND AT SIDE LAPS PER PLAN NOTES AND TYPICAL DETAILS.

PRE-FABRICATED COLD-FORMED STEEL TRUSS NOTES

- DESIGN REQUIREMENTS:
 - DESCRIPTION OF DESIGN CRITERIA.
 - ENGINEERING ANALYSIS DEPICTING MEMBER STRESSES AND OVERALL TRUSS DEFLECTION.
 - TRUSS MEMBER SIZES, THICKNESS, AND CONNECTIONS AT TRUSS JOINTS.
 - TRUSS SUPPORT REACTIONS.
 - TOP CHORD, BOTTOM CHORD, AND WEB BRACING REQUIREMENTS.
 - BLOCKING TRUSSES AS REQUIRED.
- PERFORMANCE REQUIREMENTS:
 - CALCULATE STRUCTURAL CHARACTERISTICS OF COLD-FORMED STEEL TRUSS MEMBERS ACCORDING TO AMERICAN IRON AND STEEL INSTITUTE "NORTH AMERICAN SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.
 - DESIGN, FABRICATE, AND ERECT COLD-FORMED STEEL TRUSSES TO WITHSTAND SPECIFIED DESIGN LOADS WITHIN LIMITS AND UNDER CONDITIONS REQUIRED PER TABLE.
- NO FIELD MODIFICATIONS OF TRUSSES ARE PERMITTED UNLESS FABRICATOR PROVIDES CALCULATIONS AND DRAWINGS DETAILING THE MODIFICATION. CALCULATIONS AND DRAWINGS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
- REFER TO "DEFERRED SUBMITTALS" FOR ADDITIONAL REQUIREMENTS.

PRE-FABRICATED COLD-FORMED STEEL TRUSSES - DESIGN CRITERIA TABLE	
TOP CHORD:	20 psf LIVE LOAD 10 psf DEAD LOAD SNOW LOAD/ WIND LOAD PER ROOF PLAN AND NOTES
BOTTOM CHORD:	0 psf LIVE LOAD 5 psf DEAD LOAD
WIND UPLIFT:	PER "DESIGN LOADS" ON THESE GENERAL NOTES & ROOF PLAN
TRUSS SPACING:	PER PLAN
CAMBER:	75 PERCENT OF DEAD LOAD (USE 5 PSF ONLY)
DEFLECTION LIMITS:	AS SHOWN BELOW
ROOF TRUSSES:	TOTAL LOAD =L/240 LIVE LOAD = L/360
LOCAL DEFLECTION LIMITS BETWEEN PANEL POINTS	AS SHOWN BELOW
TOP CHORD TOTAL LOAD:	L/180
TOP CHORD LIVE LOAD:	L/240
BOTTOM CHORD TOTAL LOAD:	L/240
BOTTOM CHORD LIVE LOAD:	L/360

STRUCTURAL STEEL NOTES

- FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS IS TO BE IN ACCORDANCE WITH "AISC CODE OF STANDARD PRACTICE", LATEST EDITION.
- IT IS THE RESPONSIBILITY OF THE STEEL FABRICATOR TO DESIGN THE CONNECTIONS. CONNECTIONS ARE TO BE IN ACCORDANCE WITH CURRENT AND APPLICABLE GOVERNMENT CODES. ALL CONNECTIONS SHALL BE BOLTED OR WELDED AND SHALL DEVELOPE 60% OF THE ALLOWABLE UNIFORM LOAD TABULATED IN THE AISC "MANUAL OF STEEL CONSTRUCTION" FOR ALLOWABLE STRESS DESIGN, 10k (ASD), OR SHEAR REACTION SHOWN ON THE DRAWINGS, WHICHEVER IS GREATER. PROVIDE MINIMUM NUMBER OF ASTM F3125 GRADE A325 OR A490 BOLTS AS SHOWN IN THE "STRUCTURAL STEEL BOLTED CONNECTIONS" TABLE.
- ANCHOR RODS TO BE ASTM F1554, GRADE 36 FULLY THREADED RODS WITH PLATE WASHERS AND NUTS ON THE BOTTOM UNLESS NOTED OTHERWISE-SEE TYPICAL ANCHOR BOLT DETAIL.
- BOLT HOLES SHALL BE 1/16" OVERSIZE UNLESS OTHERWISE NOTED ON THE DRAWINGS. FIELD BURNING OF BOLT HOLES SHALL NOT BE PERMITTED.
- WELDING SHALL BE PERFORMED BY A.W.S. QUALIFIED WELDERS IN CONFORMANCE WITH A.W.S. D.1 USING E70 SERIES ELECTRODES UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL STEEL SHALL BE SHOP PAINTED WITH A STANDARD ALKYD PRIMER (GRAY), FOR HARSH ENVIROMENTS USE A GRAY ZINC ORGANIC OR INORGANIC PRIMER.
- FABRICATE ALL BEAMS WITH THE MILL CAMBER UP.
- CONNECTION NOTATION IS AS FOLLOWS. SEE PLAN NOTES TO DETERMINE IF LOADS SHOWN ON PLAN/DETAILS ARE ALLOWABLE (ASD) OR ULTIMATE (LRFD):
 - AXIAL FORCE = P
 - SHEAR = V OR []
 - MOMENT = M
 - TORSION = T
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS AND GRADES:
 - WIDE FLANGE = A992, fy = 50ksi
 - ANGLES, CHANNELS, PLATES, BARS, AND RODS = A36, fy = 36ksi
 - RECTANGULAR = A500 GRADE B, fy = 46ksi
 - ROUND HSS = A500 GRADE B, fy = 42ksi
 - STRUCTURAL PIPE = A53 GRADE B, fy = 35ksi
- REFER TO "DEFERRED SUBMITTALS" FOR ADDITIONAL REQUIREMENTS.

STRUCTURAL STEEL BOLTED CONNECTIONS TABLE	
NOMINAL MEMBER DEPTH	MINIMUM NUMBER OF BOLTS
8" - 10"	2
12" - 14"	3
16" - 18"	4
21" - 24"	5
27" OR DEEPER	6

COMPOSITE STEEL BEAM NOTES

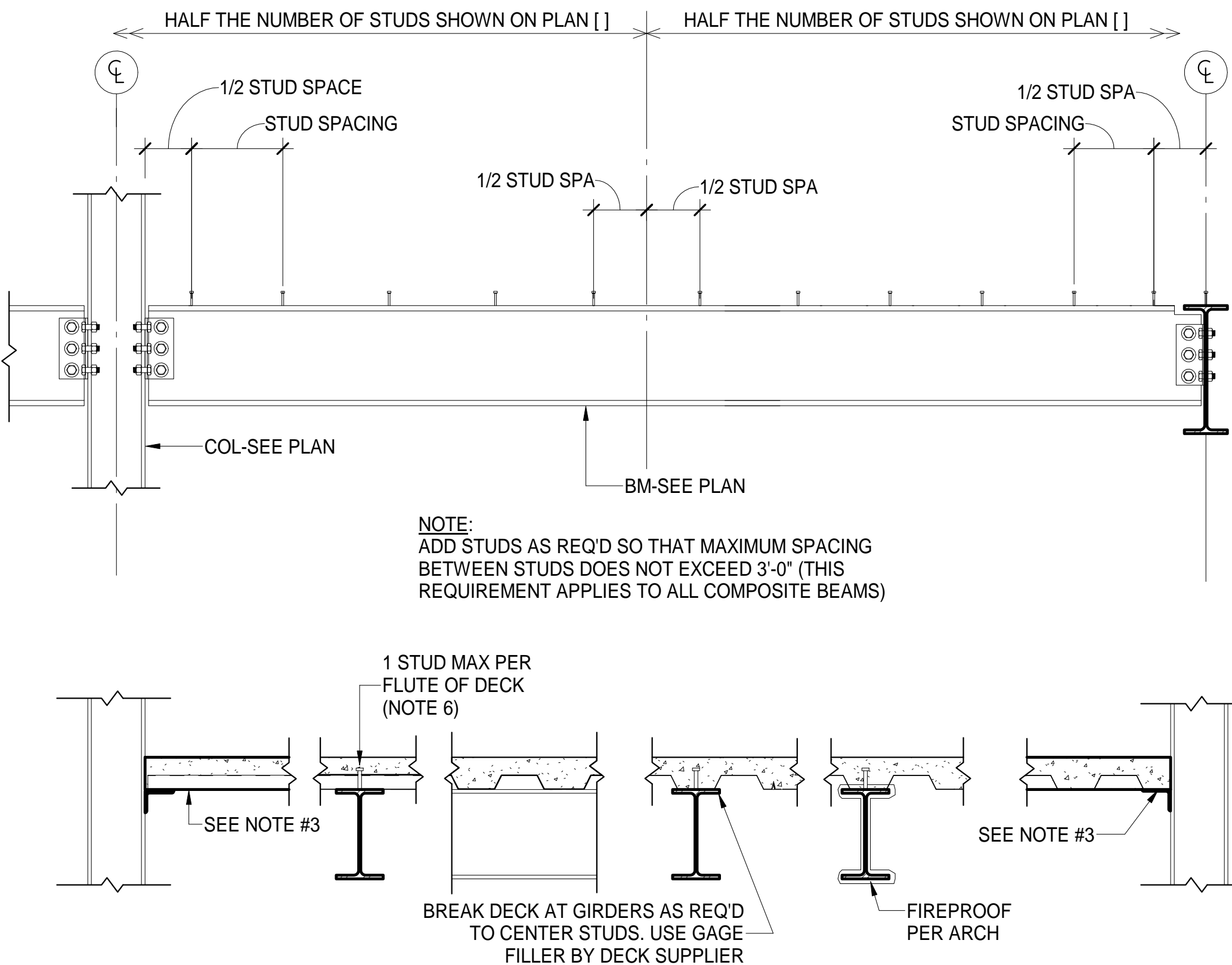
- SHEAR CONNECTORS SHALL BE HEADED STUDS MEETING ASTM A108, Fu=65ksi.
- SHEAR CONNECTOR TYPE, LENGTH, SHEAR VALUE, AND DETAILED LAYOUT SHALL BE SUBMITTED WITH THE COMPOSITE METAL DECK SHOP DRAWINGS PER COMPOSITE METAL DECK NOTES.
- MAXIMUM HEIGHT OF SHEAR CONNECTORS SHALL NOT EXCEED THE SLAB DEPTH MINUS 1/2".
- SPACING OF SHEAR CONNECTORS WITHIN ANY GIVEN LENGTH SHALL BE AS UNIFORM AS POSSIBLE.
- UNLESS NOTED OTHERWISE NON-COMPOSITE AND COMPOSITE BEAMS DO NOT REQUIRE TEMPORARY SHORING.
- NO PAINT SHALL BE APPLIED ON SHEAR CONNECTORS OR ON THE TOP SURFACE OF THE BEAMS THAT RECEIVE FIELD WELDED SHEAR CONNECTORS.
- FLOOR FRAMING WILL DEFLECT UNDER WEIGHT OF WET CONCRETE PROVIDE ALLOWANCE FOR FLOOR LEVELING AS NEEDED AFTER CONCRETE HAS CURED.

SPECIAL INSPECTIONS - CONCRETE TABLE		
ITEM	INSPECTION FREQUENCY	SCOPE
REINFORCEMENT	PERIODIC	INSPECT REINFORCEMENT (INCLUDING PRESTRESSING TENDONS) AND PLACEMENT; VERIFY CONFORMANCE WITH CONSTRUCTION DOCUMENTS, AND THAT BARS ARE FREE FROM MATERIALS THAT COULD PREVENT BOND, ARE ADEQUATELY LAPPED, SPICED, TIED, AND SUPPORTED
REINFORCEMENT	PERIODIC	VERIFY WELDABILITY OF REBAR OTHER THAN ASTM A 706; INSPECT SINGLE PASS FILLET WELDS NOT GREATER THAN 5/16"
REINFORCEMENT	CONTINUOUS	INSPECT ALL OTHER WELDS (SEE ALSO "STEEL" SPECIAL INSPECTIONS TABLE)
ANCHOR INSTALLATION	PERIODIC	INSPECT CAST-IN-PLACE ANCHORS AND BOLTS
ANCHOR INSTALLATION	PERIODIC	INSPECT POST-INSTALLED MECHANICAL AND ADHESIVE ANCHORS NOT OTHERWISE SPECIFIED
ANCHOR INSTALLATION	CONTINUOUS	INSPECT POST-INSTALLED MECHANICAL AND ADHESIVE ANCHORS PER THE REQUIREMENTS IN THEIR RESPECTIVE ICC-ES REPORTS
MIX DESIGN	PERIODIC	VERIFY USE OF APPROVED MIX DESIGN
SAMPLING AND TESTING	CONTINUOUS	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTING; PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF THE CONCRETE
CONCRETE PLACEMENT	PERIODIC	VERIFY MAINTENANCE OF CURING TEMPERATURE AND TECHNIQUES
CONCRETE PLACEMENT	PERIODIC	INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF CONCRETE MEMBER BEING FORMED
CONCRETE PLACEMENT	CONTINUOUS	CONCRETE PLACEMENT

SPECIAL INSPECTIONS - STEEL TABLE		
ITEM	INSPECTION FREQUENCY	SCOPE
MATERIAL VERIFICATION	PERIODIC	HIGH STRENGTH BOLTS, NUTS, AND WASHERS: REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE; IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE CONSTRUCTION DOCUMENTS
MATERIAL VERIFICATION	PERIODIC	STRUCTURAL STEEL: REVIEW MANUFACTURER'S CERTIFIED MILL TEST REPORTS; IDENTIFICATION MARKINGS ON STEEL SHAPES TO CONFORM TO AISC STANDARDS SPECIFIED IN THE CONSTRUCTION DOCUMENTS
MATERIAL VERIFICATION	PERIODIC	WELD FILLER MATERIALS: REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE; IDENTIFICATION MARKINGS TO CONFORM WITH AWS SPECIFICATIONS IN THE CONSTRUCTION DOCUMENTS
MATERIAL VERIFICATION	PERIODIC	COLD-FORMED STEEL DECK: REVIEW MANUFACTURER'S CERTIFIED TEST REPORTS; IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE CONSTRUCTION DOCUMENTS
HIGH-STRENGTH BOLTING	PERIODIC	BEARING-TYPE CONNECTIONS: VERIFY BOLTS, NUTS, WASHERS, PAINT, INSTALLATION, AND TIGHTENING CONFORM TO THEIR RESPECTIVE STANDARDS
WELDING	PERIODIC	SINGLE PASS FILLET WELDS NOT GREATER THAN 5/16"
WELDING	PERIODIC	VERIFY WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706; ALL REINFORCING STEEL NOT REQUIRING CONTINUOUS INSPECTION
WELDING	CONTINUOUS	COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS; MULTIPASS FILLET WELDS; SINGLE PASS FILLET WELDS > 5/16"
STRUCTURAL DETAILS	PERIODIC	INSPECT STEEL FRAME FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS FOR MEMBER SIZES AND LOCATIONS, BRACING, AND CONNECTIONS
METAL DECK	PERIODIC	INSPECT PUDDLE WELDING, SCREW ATTACHMENTS, AND SIDELAP FASTENING OF ROOF AND FLOOR DECK
OPEN WEB STEEL JOISTS	PERIODIC	INSPECT JOIST AND JOIST GIRDERS FOR WELDED OR BOLTED END CONNECTIONS; HORIZONTAL AND DIAGONAL BRIDGING; BRIDGING THAT DIFFERS FROM SJI SPECIFICATIONS

SPECIAL INSPECTIONS - SOILS AND FOUNDATIONS TABLE		
ITEM	INSPECTION FREQUENCY	SCOPE
SOILS	PERIODIC	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY; VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL; PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS; PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY
SOILS	CONTINUOUS	VERIFY USE OF PROPER MATERIALS, DENSITIES, LIFT THICKNESSES, AND COMPACTION OF FILL; VERIFY MATERIALS AND PROCEDURES COMPLY WITH THE GEOTECHNICAL REPORT

SPECIAL INSPECTIONS - OFF-SITE FABRICATION (INCLUDING PRE-MANUFACTURED WOOD STRUCTURAL ELEMENTS AND ASSEMBLIES, AND STEEL FABRICATING)		
ITEM	INSPECTION FREQUENCY	SCOPE
FABRICATION AND IMPLEMENTATION PROCEDURES	PERIODIC	VERIFY THAT FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS; REVIEW PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK
NOTE	-	SPECIAL INSPECTION FOR OFF-SITE FABRICATION IS NOT REQUIRED FOR FABRICATORS APPROVED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THE CODE



PERPENDICULAR

NOTES:

1. W16 x 36 [38]

2. ATTACHMENT OF STEEL DECK

3. DECK SUPPORT AT STEEL COLUMN:

4. CONTINUITY OF DECK:

5. BEARING OF DECK:

6. SPACING OF STUDS:

7. DEFLECTION OF DECK SLAB:

8. COMPOSITE STUD SIZES:

[XX] INDICATES NUMBER OF END WELDED STUDS EQUALLY SPACED ON TOP FLANGE OF BEAM. COMPOSITE BEAM IS DESIGNED UNSHORED.

AT EACH SUPPORT & SIDELAPS PER PLAN NOTES. STUD WELDING THROUGH DECKING CAN BE CONSIDERED AS ONE ATTACHMENT. DO NOT PRIME TOP FLANGE OF STEEL BEAMS.

USE 3 1/2" x 3 1/2" x 16 ga ANGLE WELDED AT PERIMETER OF STEEL COLUMN

MINIMUM 2 SPAN CONTINUOUS - UNSHORED.

MINIMUM 3" AT ENDS BEARING ON CONCRETE AND 2" ON STEEL.

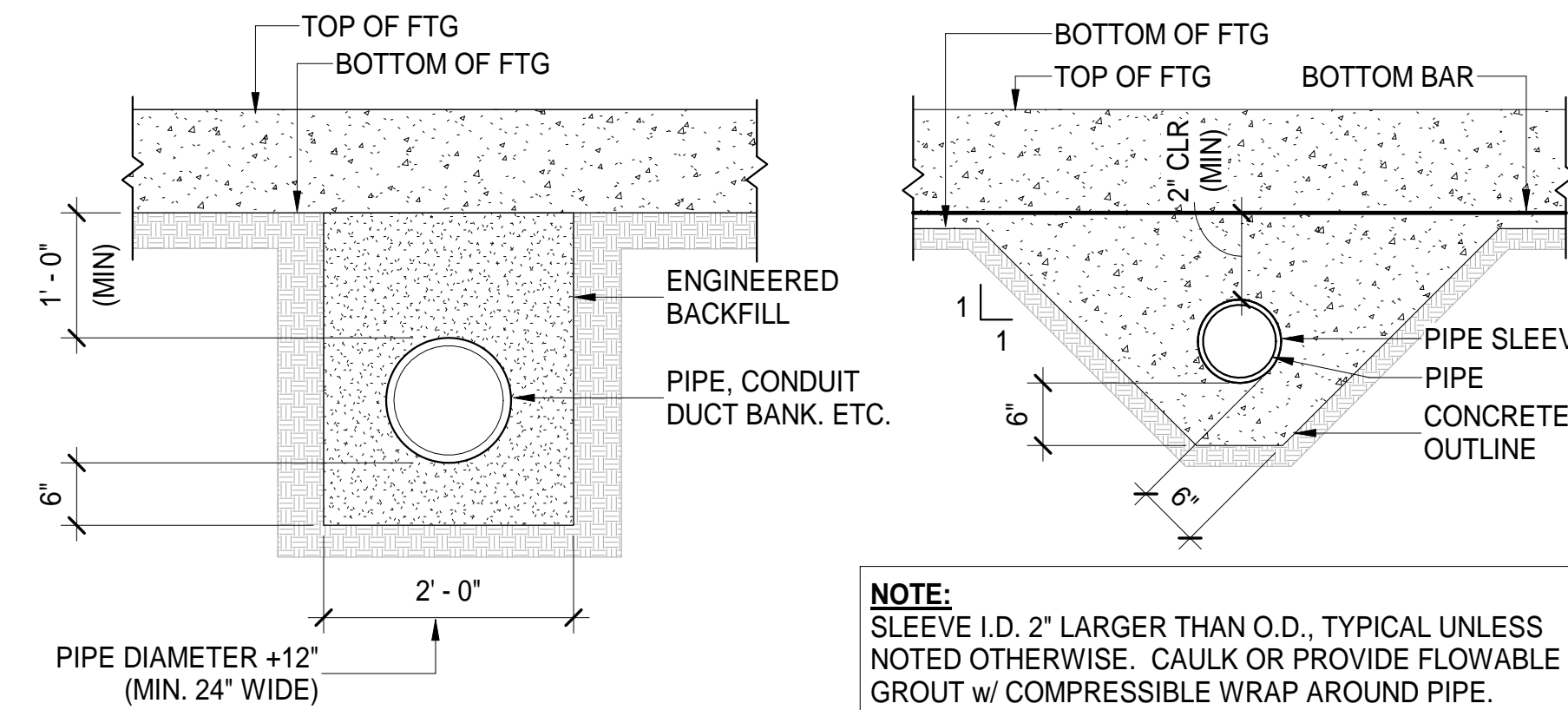
MINIMUM SPACING FOR STUDS IS 12"oc; MAXIMUM SPACING IS 36"oc DO NOT PLACE STUDS ON CANTILEVER SPAN OF BEAM.

FLOOR FRAMING WILL DEFLECT UNDER WEIGHT OF WET CONCRETE. PROVIDE ALLOWANCE FOR FLOOR LEVELING AS NEEDED AFTER CONCRETE HAS CURED.

ALL COMPOSITE STUDS ARE 3/4" dia. USE 3" STUDS FOR 1 1/2" DECK, 3 1/2" STUDS FOR 2" DECK, AND 5 1/2" STUDS FOR 3" DECK.

PARALLEL

C TYPICAL COMPOSITE SLAB CONSTRUCTION DETAIL

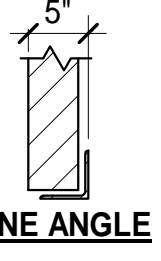


BELOW BOTTOM OF FOOTING

CLOSE TO BOTTOM OF FOOTING

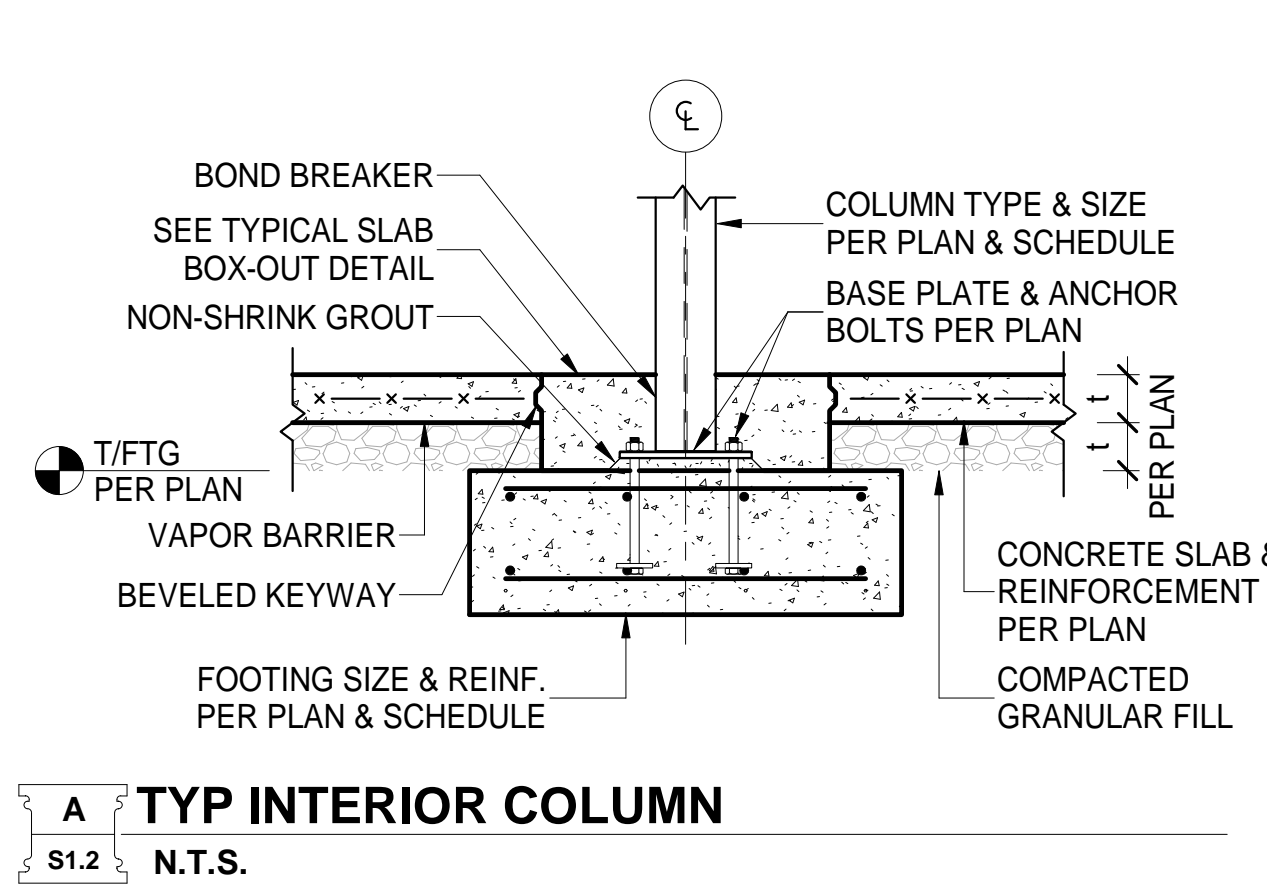
E TYPICAL FOUNDATION PIPE PENETRATION DETAILS

S1.2 N.T.S.

STEEL LINTEL SCHEDULE		KEY
FOR LINTELS NOT SHOWN IN THE DOOR OR WINDOW SCHEDULE OR ON THE ARCHITECT'S DRAWINGS, USE THE ANGLE SIZE SHOWN IN THE TABLE BELOW.		
OPENING SIZE	BRICK VENEER	
	ANGLE SIZE	
UP TO 1'-0"	N/A	
1'-1" TO 4'-8"	L 6"x3 1/2"x5/16" LLH	
4'-9" TO 6'-0"	L 6"x3 1/2"x3/8" LLH	
6'-1" TO 7'-4"	L 6"x4"x7/16" LLH	
7'-5" TO 12'-0"	L 8"x6"x7/16" LLV	
NOTES		
1. ALL ANGLES MUST HAVE 8" OF BEARING AT EACH END.		
2. THIS SCHEDULE DOES NOT INCLUDE EFFECT OF FLOOR OR ROOF FRAMING LOADS.		
3. ALL ANGLES TO BE GALVANIZED.		
4. WELD ANGLES TOGETHER, BACK-TO-BACK, w/ 3/16" WELDS, 2" EVERY 12", TOP & BOTTOM.		

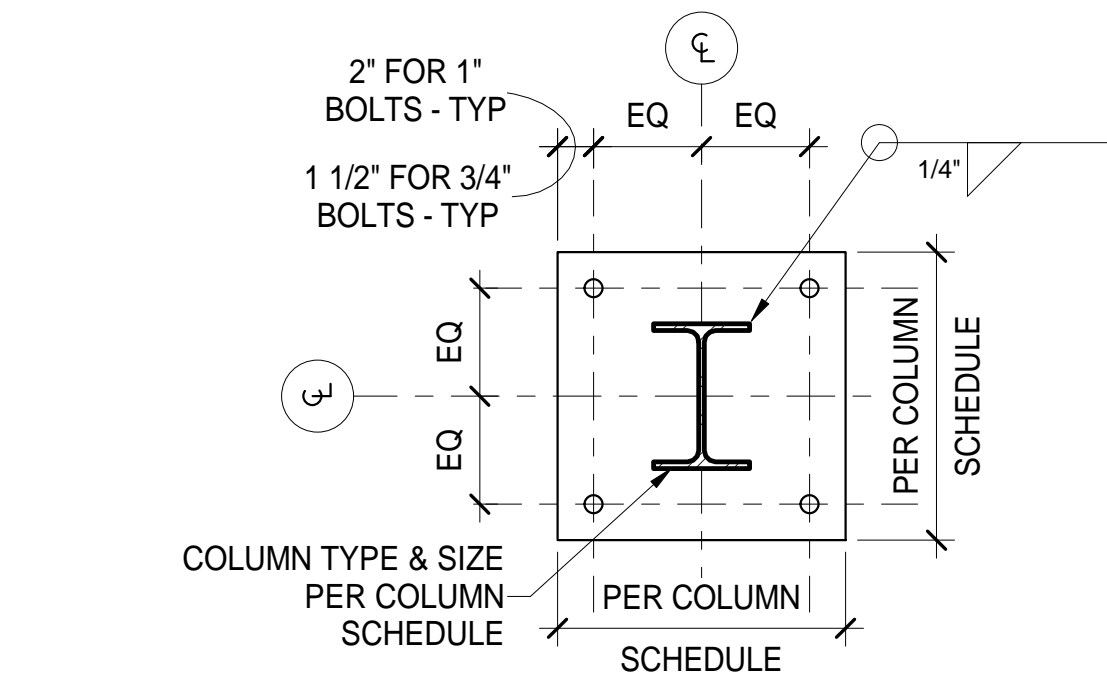
G TYP ANCHOR ROD DETAIL

S1.2 N.T.S.



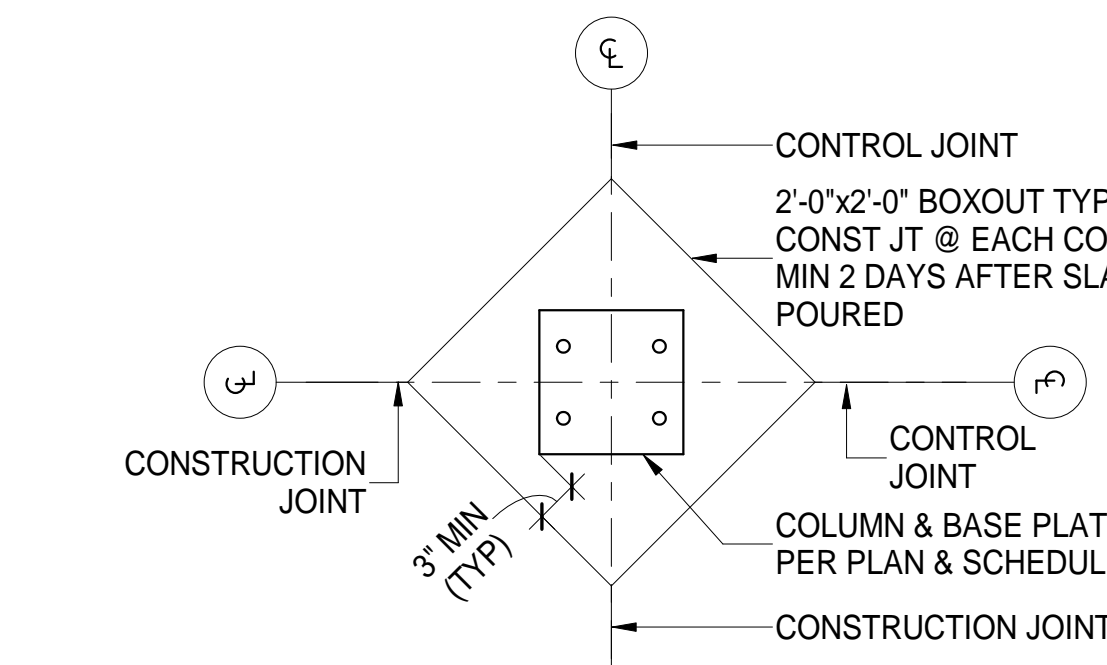
A TYP INTERIOR COLUMN

S1.2 N.T.S.



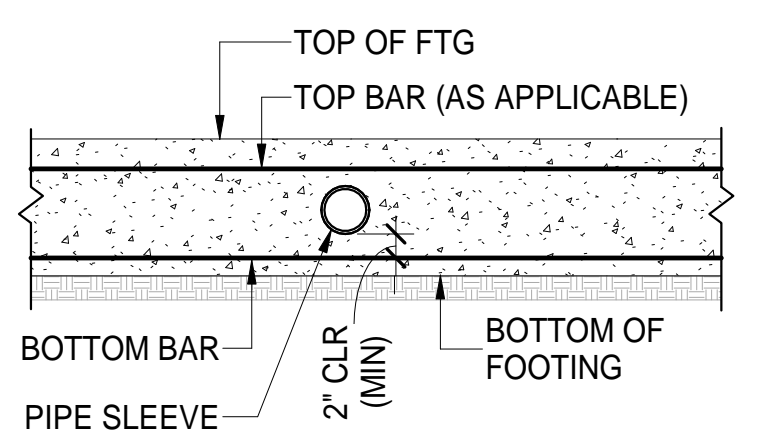
B TYP BASE PLATE DETAIL

S1.2 N.T.S.

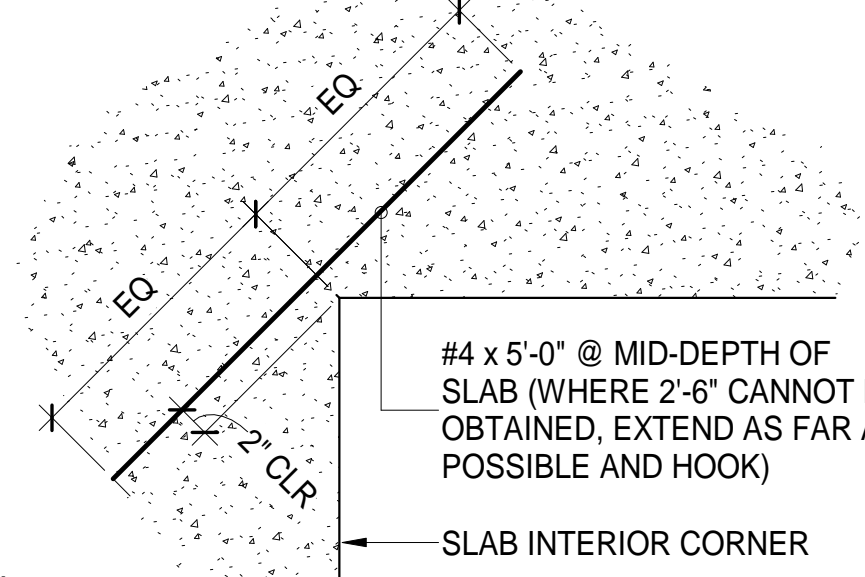


D TYP SLAB BOX-OUT @ COL

S1.2 N.T.S.



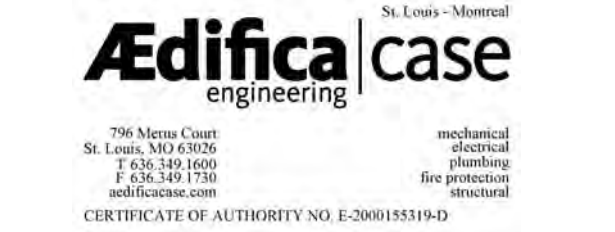
CLEAR OF TOP & BOTTOM BAR IN FOOTING OR FOUNDATION WALL (OR TRENCH FOOTING/GRADE BM.)



F REINF @ INTERIOR CORNERS

S1.2 N.T.S.

CLIENT	ARCHITECT	STRUCTURAL ENGINEER	CIVIL ENGINEER	MECHANICAL ENGINEER	PLUMBING ENGINEER	ELECTRICAL ENGINEER
Paradigm Financial Advisors, LLC	TRI Architects	Aedifica Case Engineering	Stock & Associates	DESIGNBUILD	DESIGNBUILD	DESIGNBUILD



Paradigm Office Building

12818 DAYLIGHT CIRCLE
ST. LOUIS COUNTY, MISSOURI



DATE:	07-09-18
REVISIONS	
1 Rev #1	07-09-18

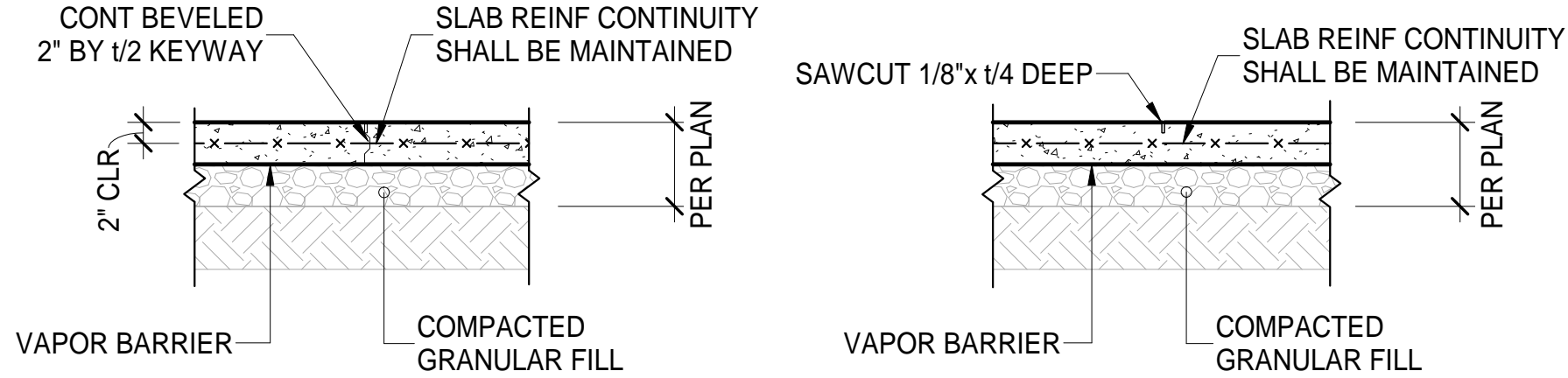
DWG BY	DLP
PROJECT NO.	TRPO-07-01-18
SHEET NO.	

S1.2

GENERAL NOTES, SCHEDULES, AND TYPICAL DETAILS

NOTES:

1. SAW-CUT CONTROL JOINTS TO BE CUT AS SOON AS SURFACE WILL NOT BE TORN, ABRADED, OR OTHERWISE DAMAGED BY CUTTING ACTION. (WITHIN 8 TO 10 HR. OF BURNISHING)
2. SPACE CONTROL JOINTS AT 15'-0" MAX. FOR INTERIOR SLABS UNO ON PLANS.
3. CONSTRUCTION JOINTS TO BE USED AT END OF EACH POUR.



CONSTRUCTION JOINT

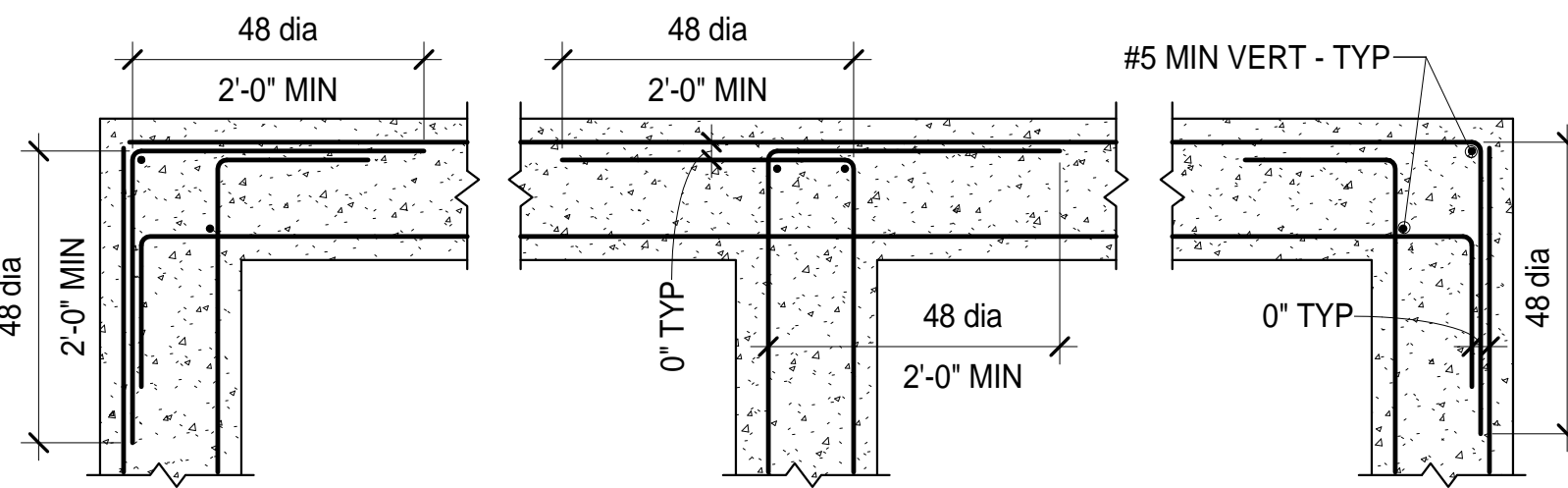
CONTROL JOINT

A TYPICAL CONSTRUCTION & CONTROL JOINT DETAILS

S1.3 N.T.S.

NOTES:

1. WHERE SINGLE CURTAIN OF REINFORCING OCCURS, BEND BARS AS SHOWN FOR OUTSIDE BARS.
2. FOR MORE THAN 2 BARS PER LAYER, EXTEND INNER BARS 12" INTO PERPENDICULAR FOOTING.
3. CORNER BARS TO MATCH WALL REINFORCEMENT.



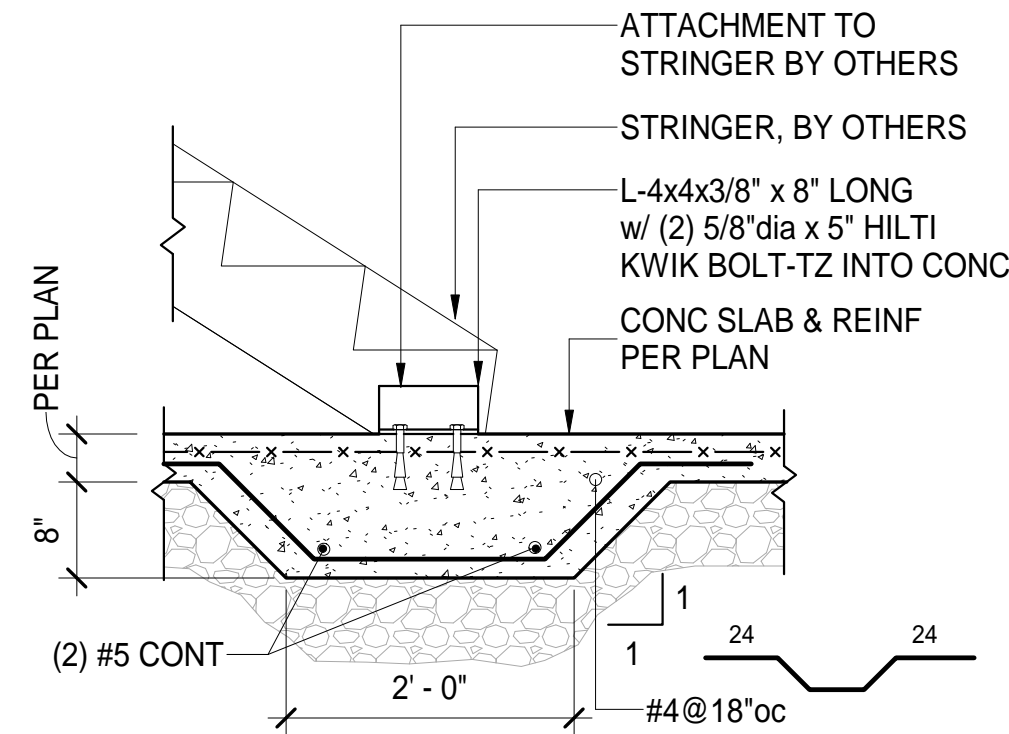
PLAN OF ALT CORNER

PLAN OF INTERSECTION

PLAN OF TYPICAL CORNER

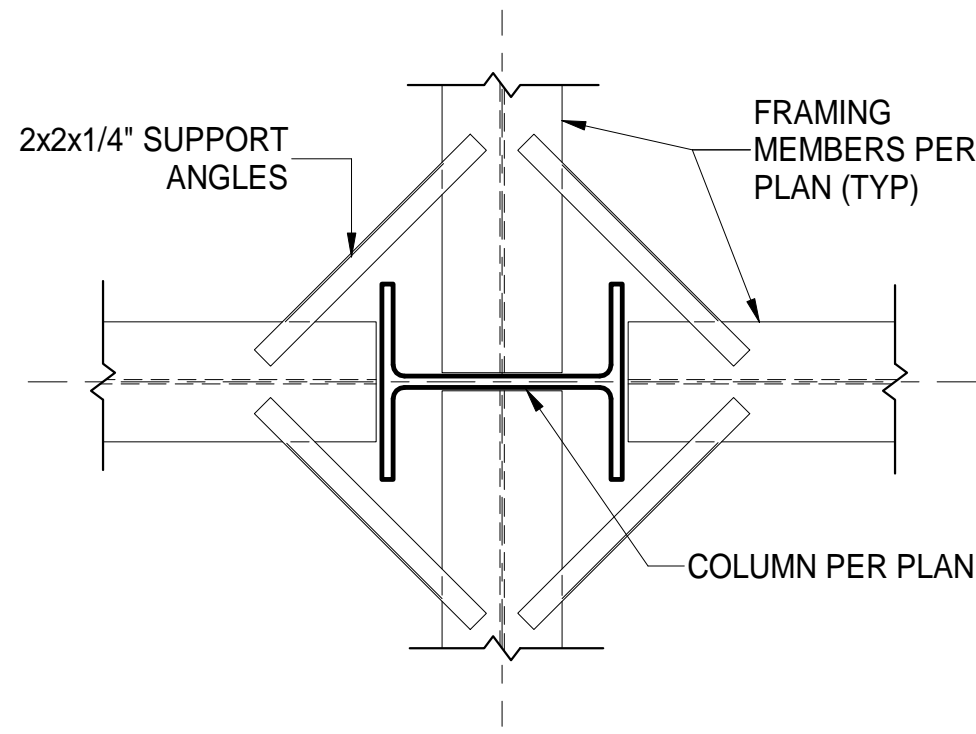
B TYP CONCRETE WALL REINFORCEMENT

S1.3 N.T.S.



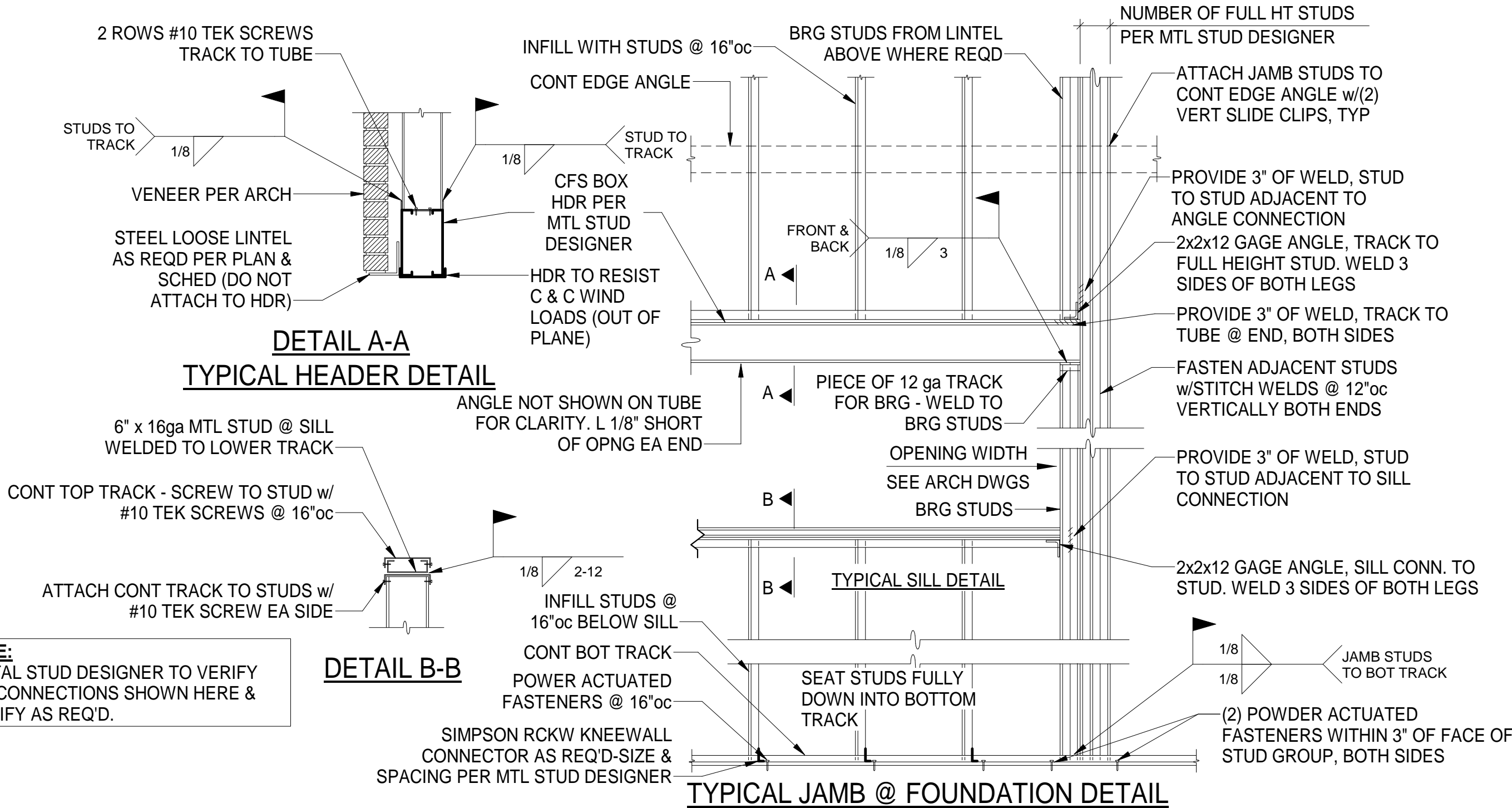
C TYP THICKENED SLAB @ STRINGERS

S1.3 N.T.S.



D TYP DECK SUPPORT @ COLUMN

S1.3 N.T.S.



DETAIL A-A

TYPICAL HEADER DETAIL

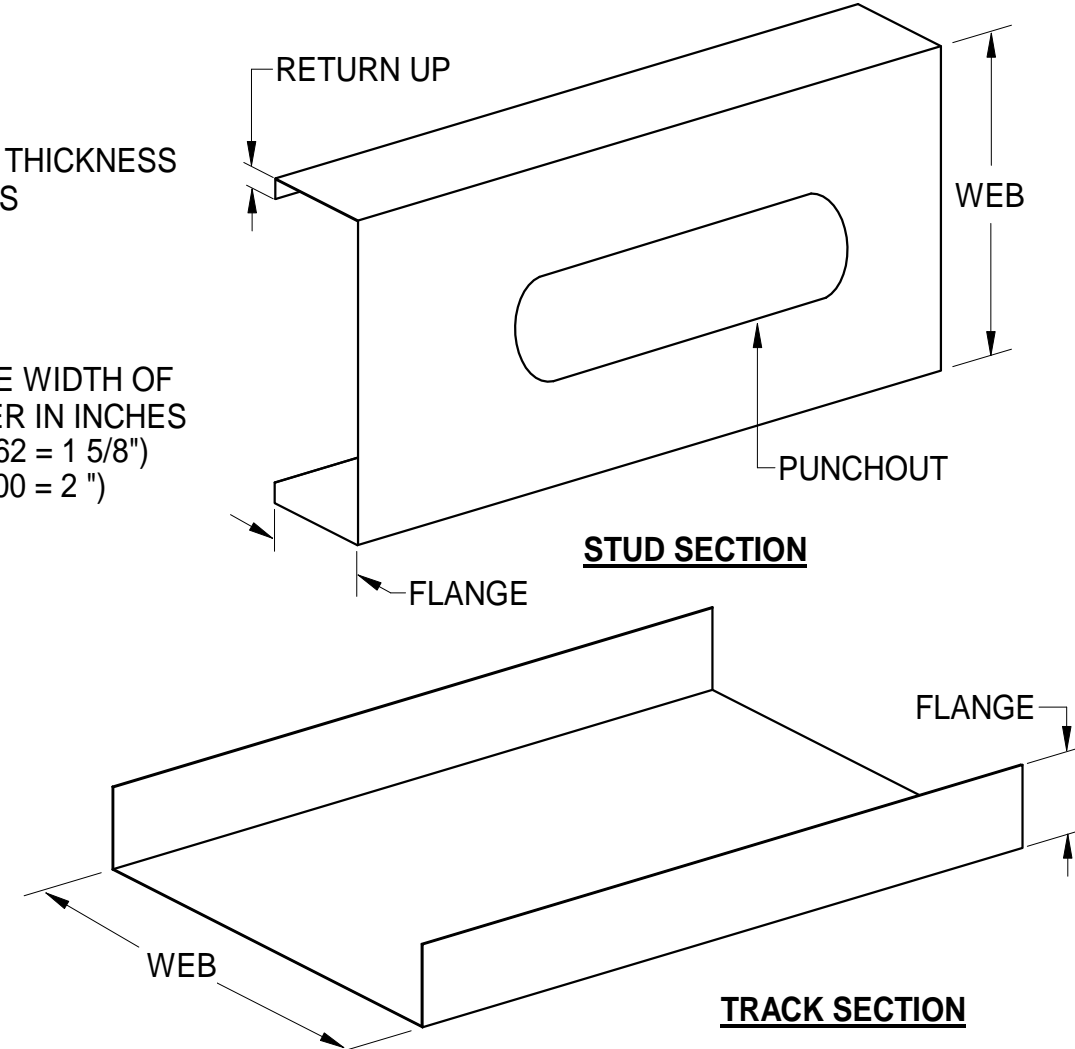
DETAIL B-B

TYPICAL JAMB @ FOUNDATION DETAIL

MEMBER DEPTH
IN INCHES
(I.E. - 600 = 6")
(I.E. - 362 = 3 5/8")
(I.E. - 250 = 2 1/2")

MEMBER TYPE
S = STUD
T = TRACK

MILS TO GAUGE CONVERSION CHART	
MILS	GAUGE
33 MILS	20 GA.
43 MILS	18 GA.
54 MILS	16 GA.
68 MILS	14 GA.
97 MILS	12 GA.

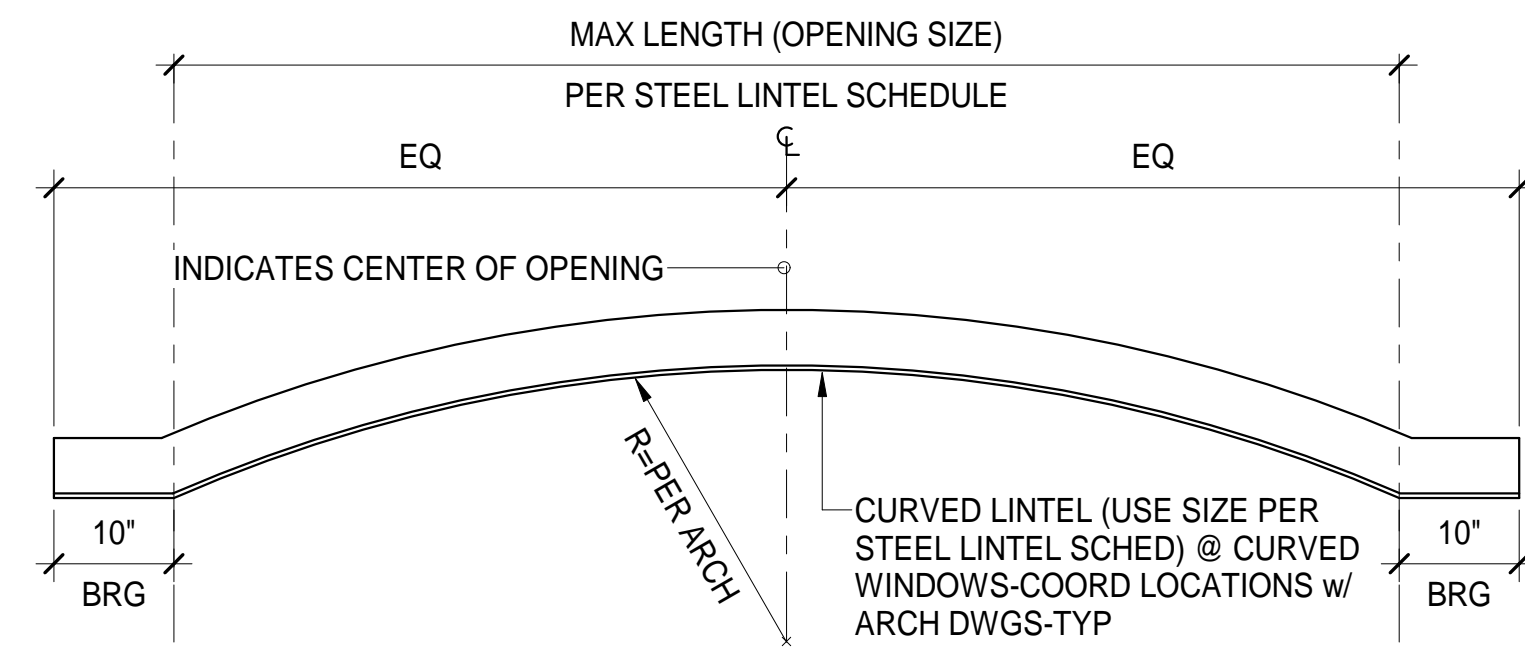


STUD SECTION

TRACK SECTION

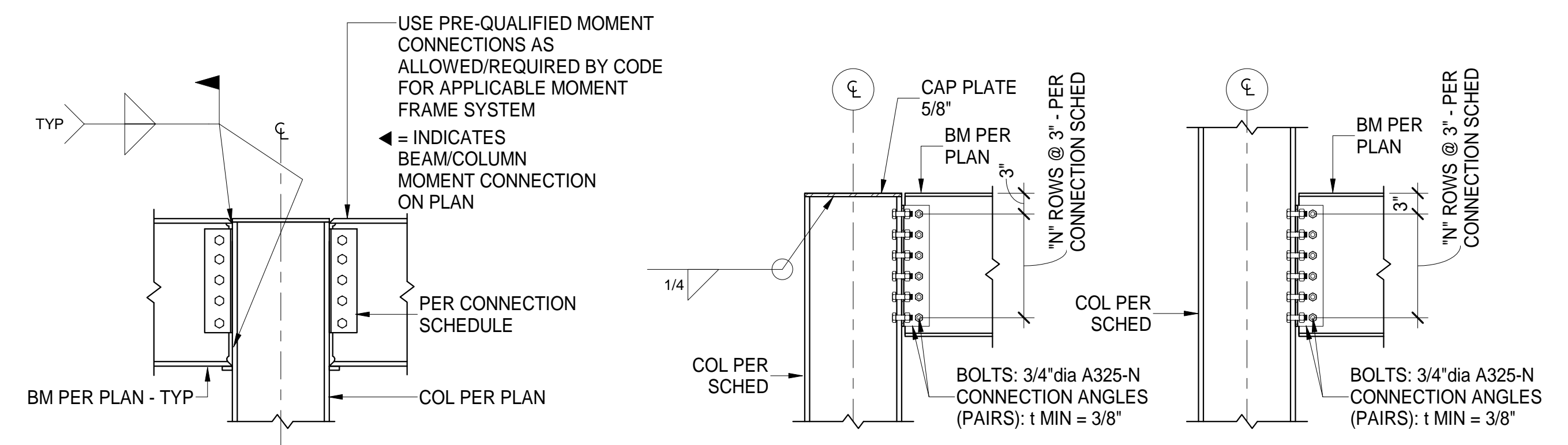
F LT GAUGE STEEL CONVERSION CHART

S1.3 N.T.S.



G RADIUSED LINTEL DETAIL

S1.3 N.T.S.

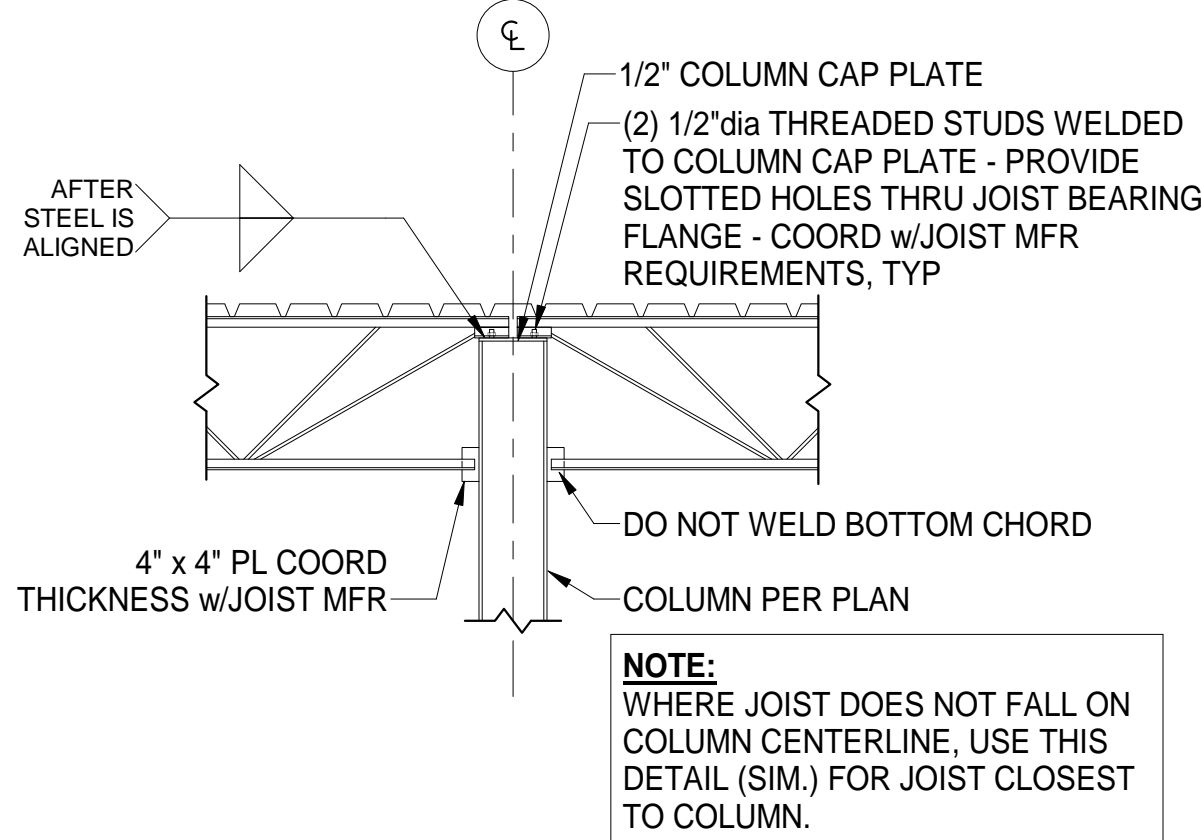


H MOMENT CONNECTION

S1.3 N.T.S.

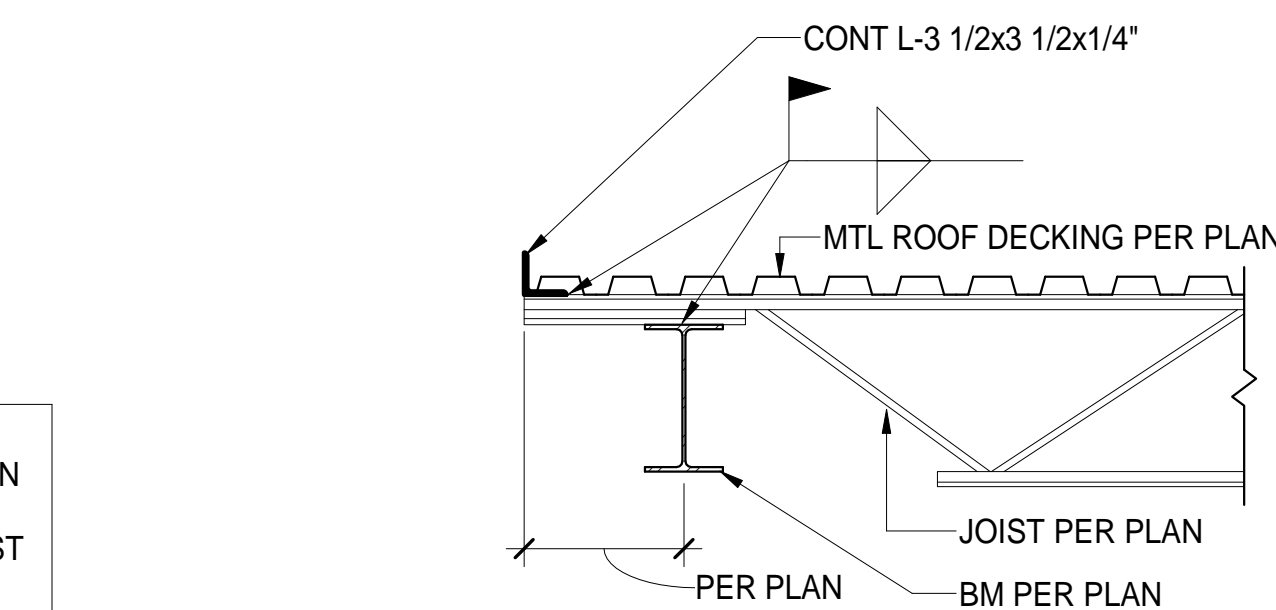
J TYPICAL FLANGE CONNECTION DETAIL

S1.3 N.T.S.



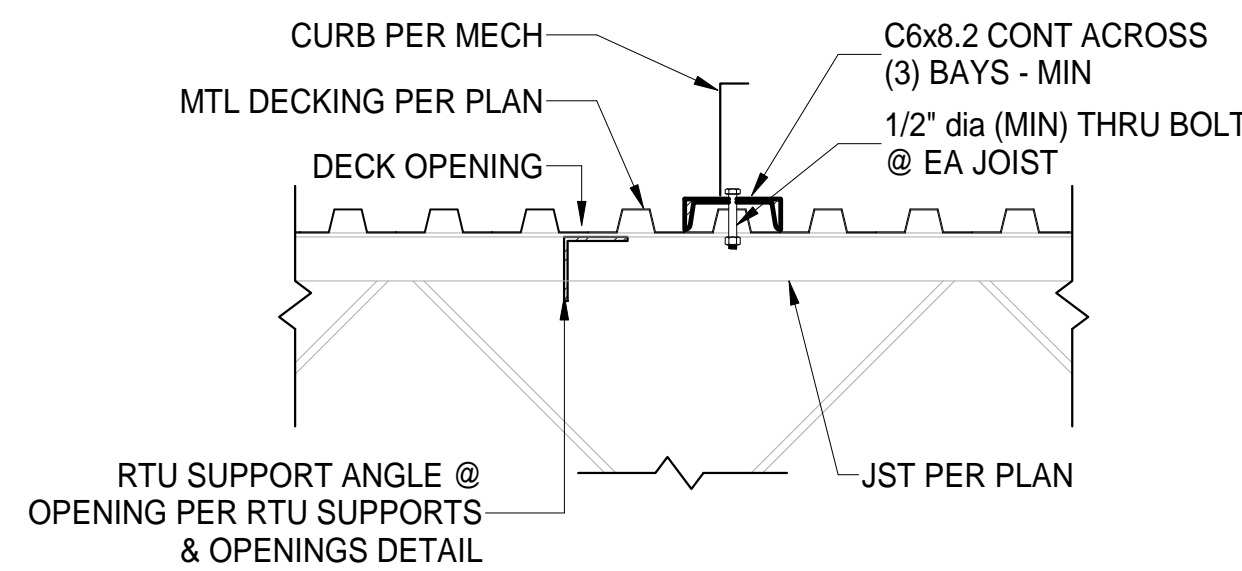
K TYP STRUT END JOIST DETAIL

S1.3 N.T.S.



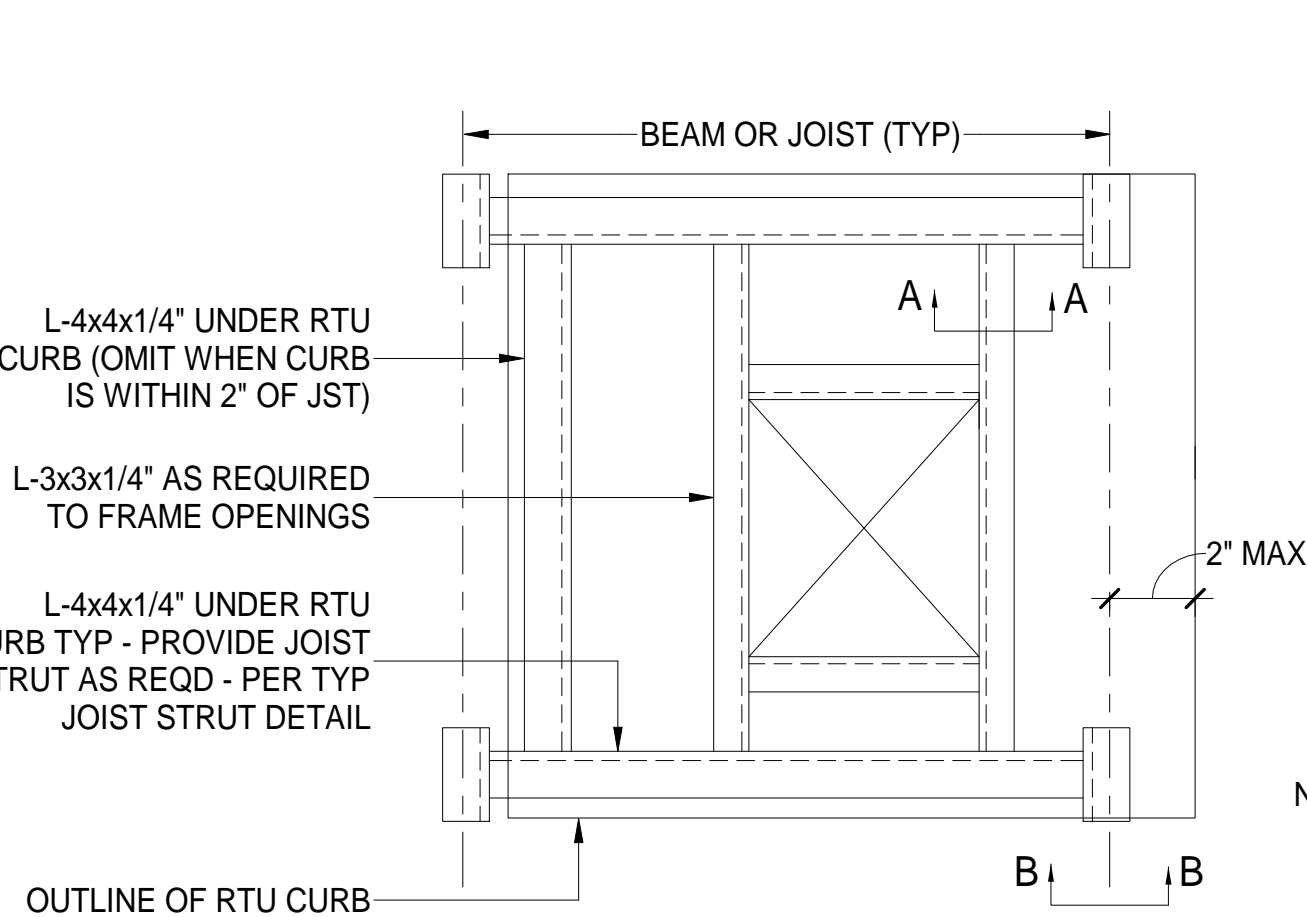
L TYP SECTION @ JST EXT

S1.3 N.T.S.



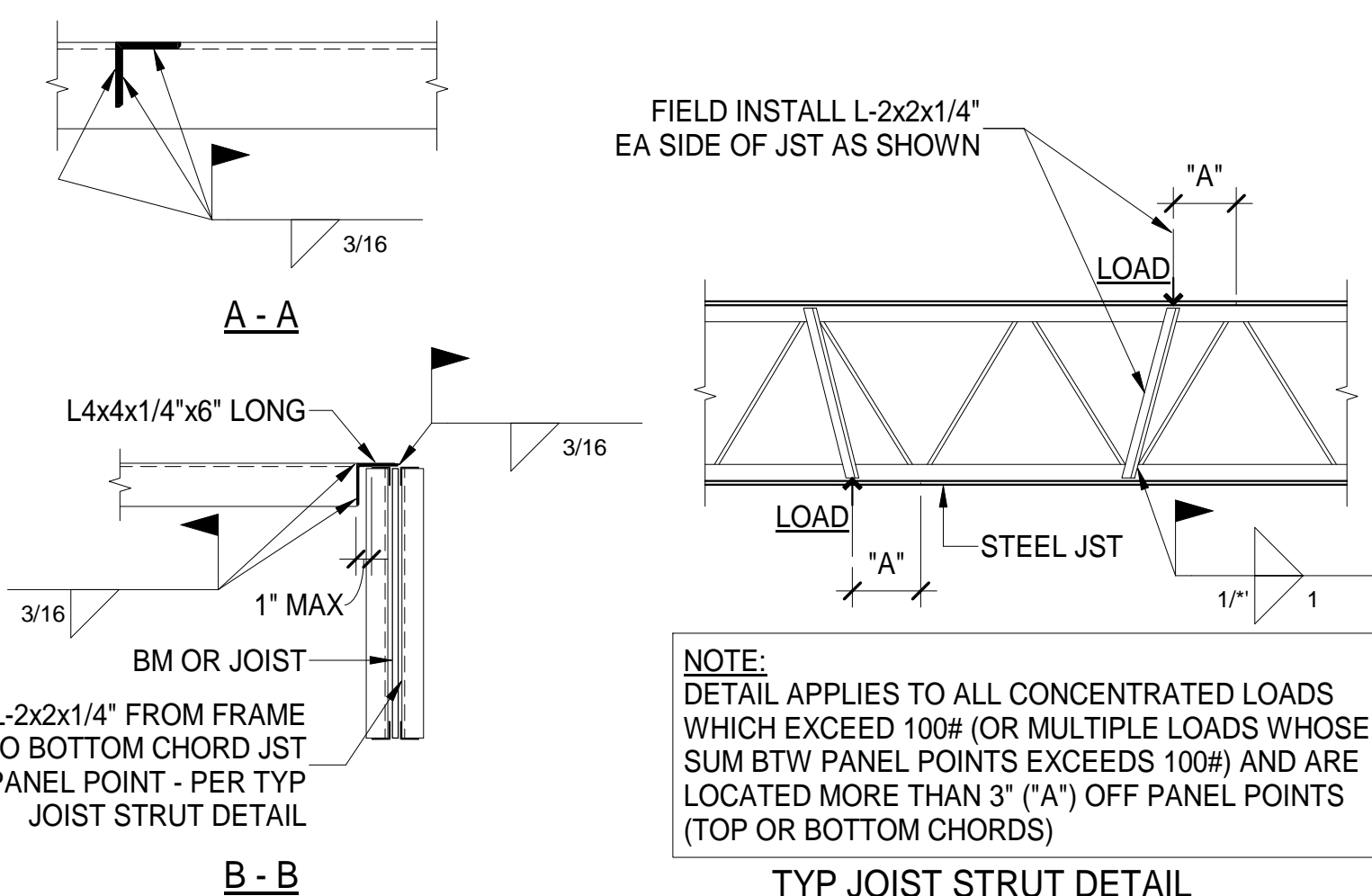
M STRUCTURAL DETAIL (CHANNEL)

S1.3 N.T.S.

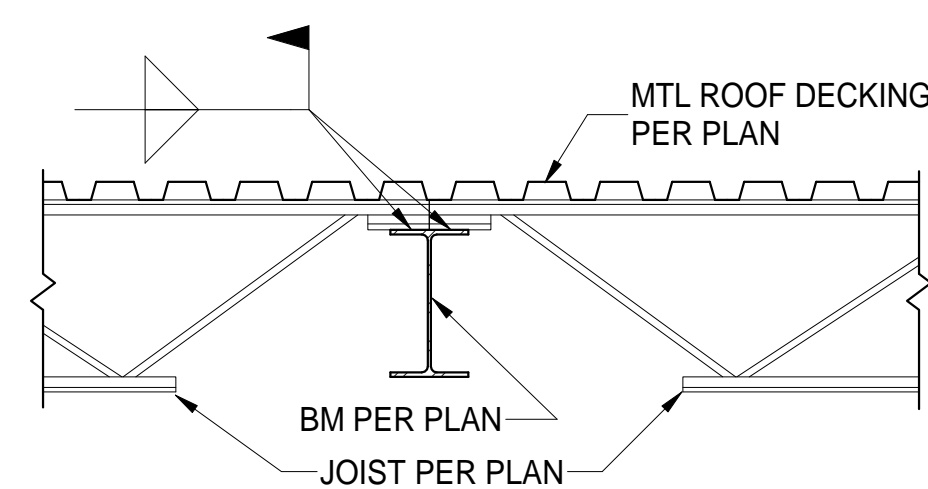


P RTU SUPPORTS & OPENINGS

S1.3 N.T.S.

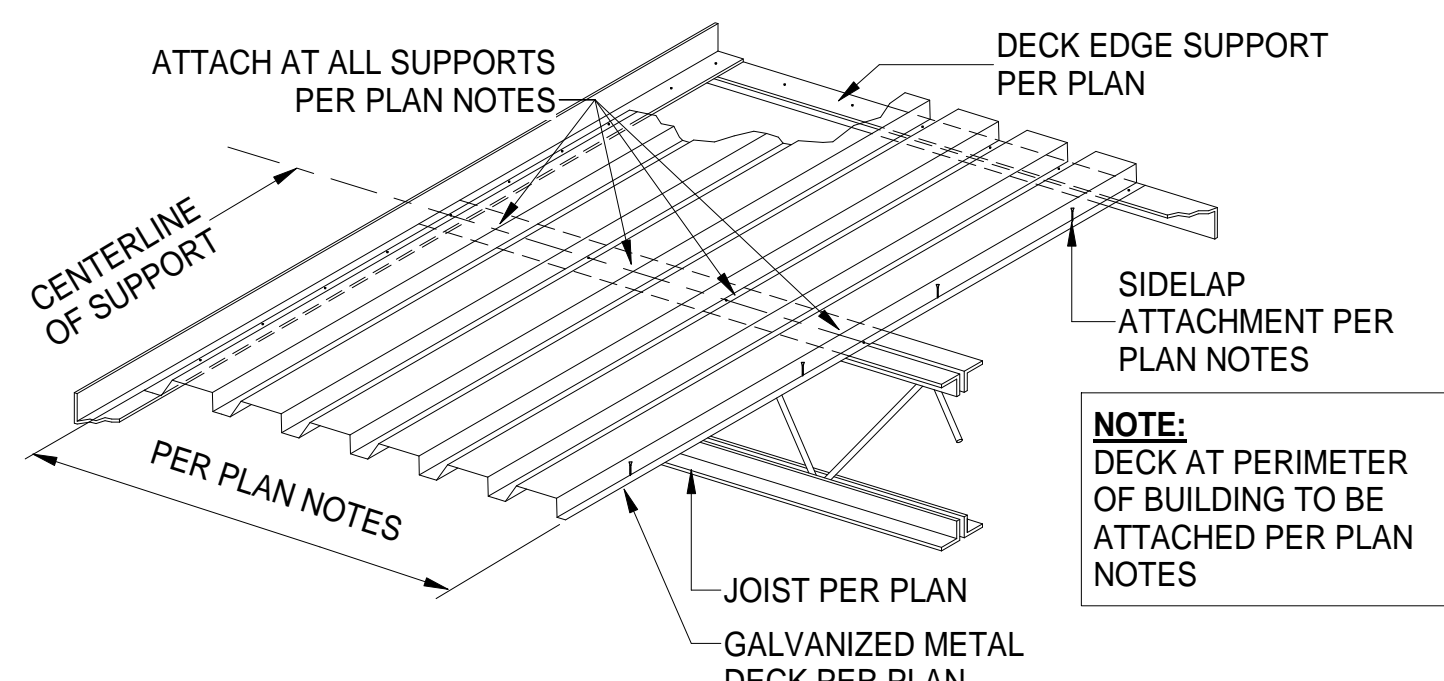


TYP JOIST STRUT DETAIL



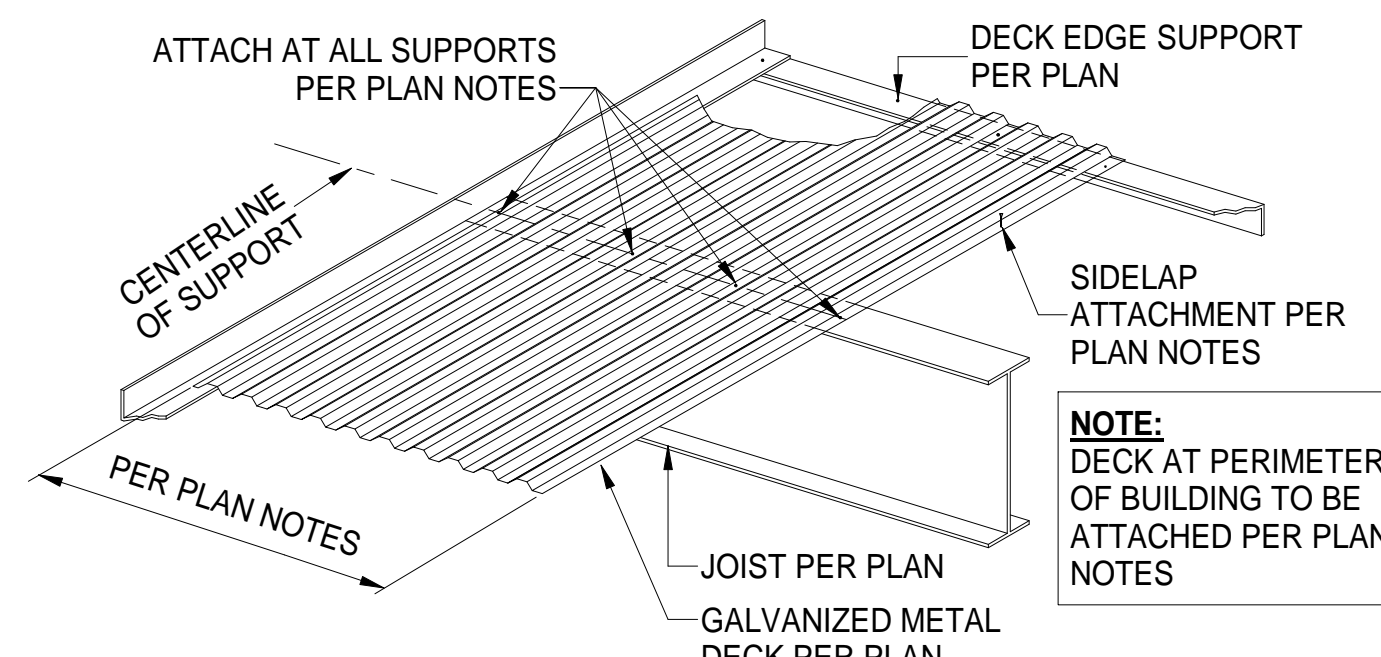
N TYP JOIST BEARING ON BEAM

S1.3 N.T.S.



Q TYP ROOF DECK ATTACHMENT

S1.3 N.T.S.



R TYP FLOOR DECK ATTACHMENT

S1.3 N.T.S.

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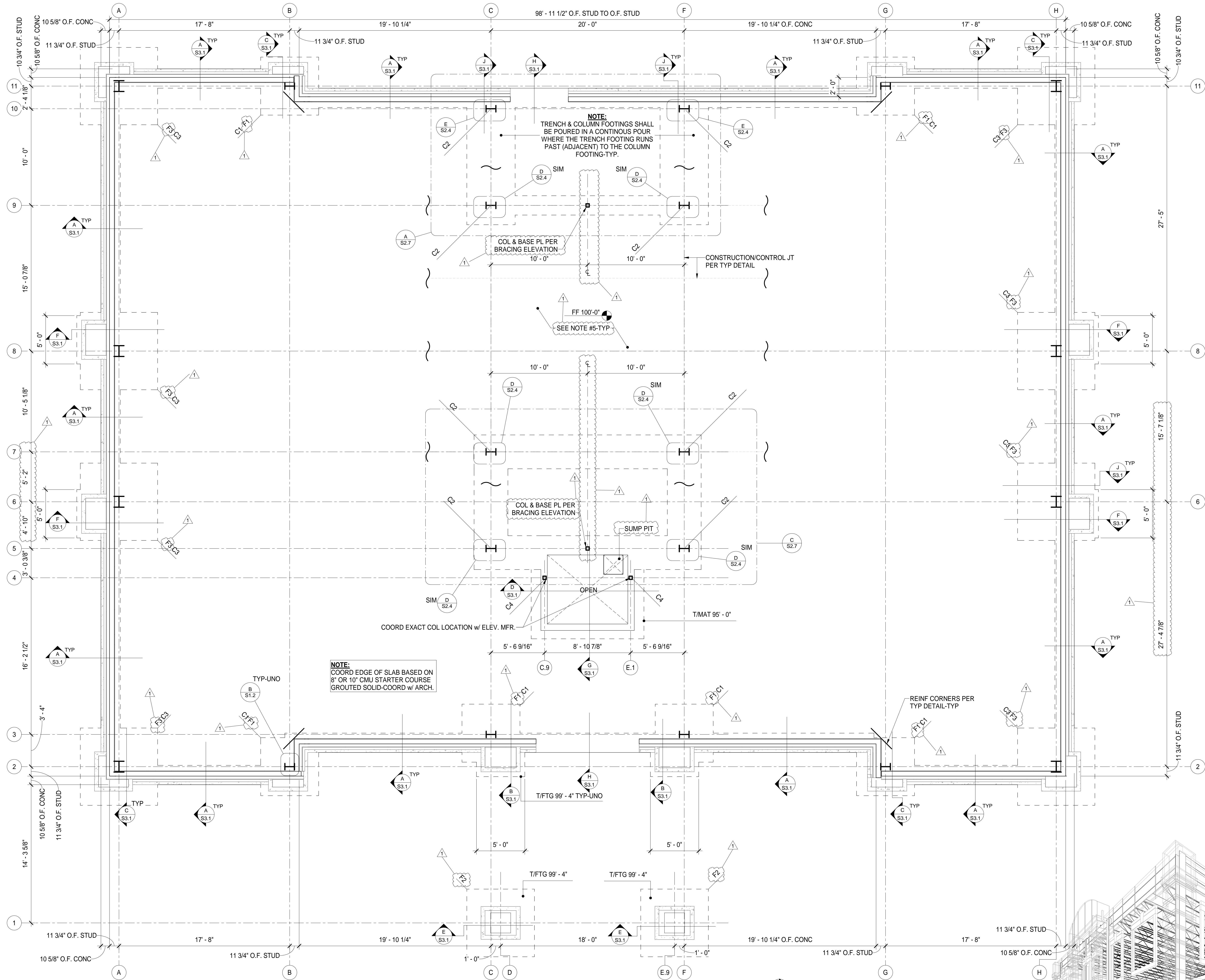
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SHEET NO.

S1.3

TYPICAL DETAILS



FOUNDATION PLAN

SHEET NOTES

- SEE SHEETS S1.1-S1.3 FOR GENERAL NOTES AND TYPICAL DETAILS.
- SEE ARCHITECTURAL DRAWINGS FOR STAIR DIMENSIONS, SECTIONS, AND ELEVATIONS.
- COORDINATE SIZE AND LOCATION OF ROUGH OPENINGS IN CONCRETE WALLS WITH ARCHITECTURAL DRAWINGS.
- PILASTER SIZES ARE MEASURED FROM OUTSIDE FACE OF CONCRETE WALL TO INSIDE FACE OF CONCRETE - UNO
- 4" CONCRETE SLAB REINFORCED WITH ONE LAYER OF 6x6 - W1.4xW1.4 WWR ON 10 MIL. POLY VAPOR BARRIER OVER 4" MINIMUM COMPACTED GRANULAR FILL. REINFORCEMENT TO BE LOCATED IN THE MIDDLE OF THE SLAB.
- ALL ELEVATIONS ARE REFERENCED FROM FINISHED MAIN FLOOR = 100'-0"
- T/FTG = TOP OF FOOTING = PER PLAN
T/CONC = TOP OF CONCRETE = PER PLAN
- ALL EXTERIOR WALL SHEATHING NOT SPECIFIED AS "SHEAR WALL SHEATHING" IS TO BE 5/8" FIRE RETARDANT TREATED PLYWOOD SHEATHING AND ATTACHED PER IBC TABLE 2304.9.1 UNLESS OTHERWISE INDICATED BY ARCHITECT.

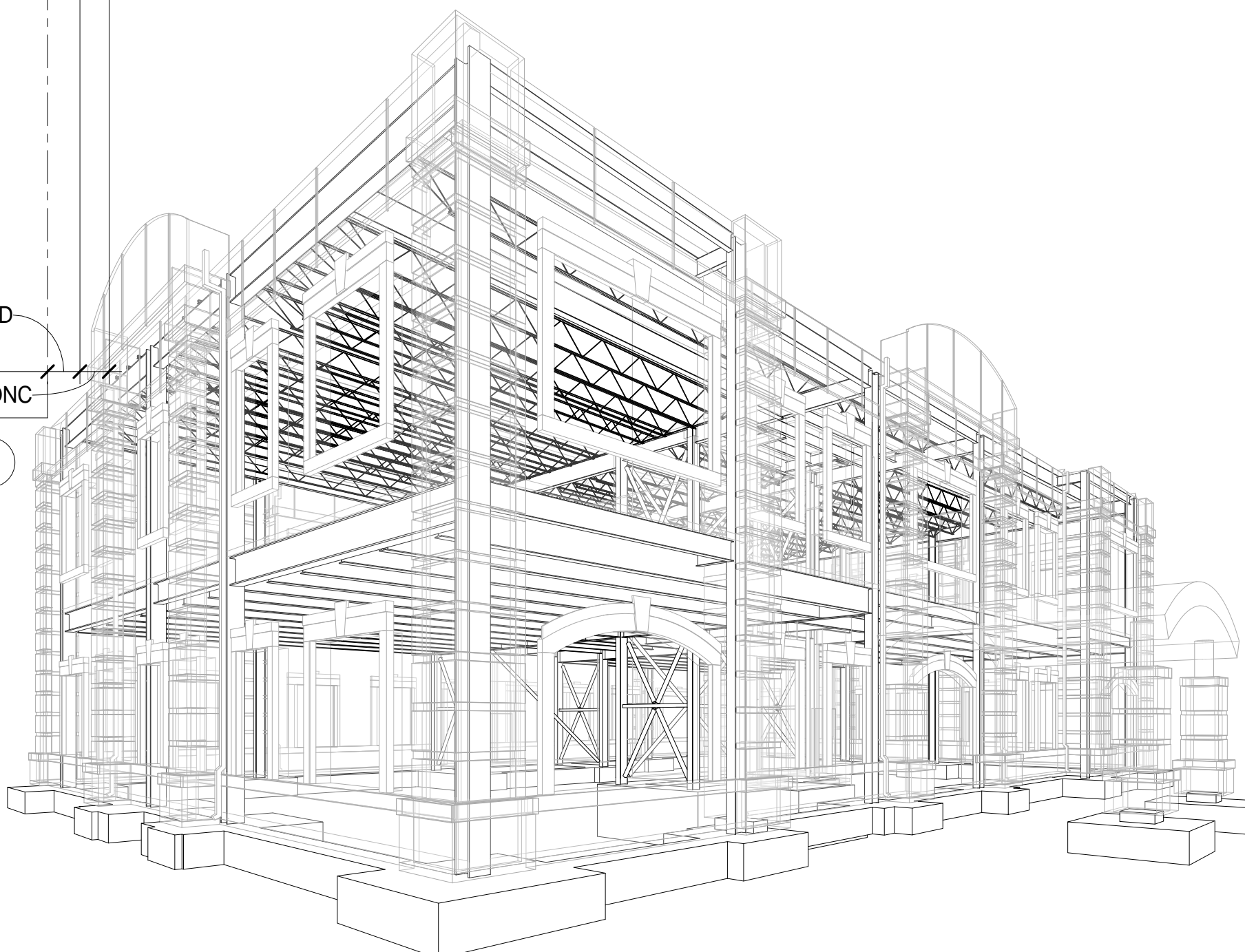
SCALE: 1/4" = 1'-0"

FOOTING SCHEDULE

Type Mark	SIZE	REINFORCING
F1	6' - 0"x6' - 0"x2' - 0"	#5 BARS @ 12"oc-EW, T & B
F2	7' - 0"x7' - 0"x2' - 0"	#5 BARS @ 12"oc-EW, T & B
F3	8' - 0"x8' - 0"x2' - 0"	#5 BARS @ 12"oc-EW, T & B

COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	W12x40	3/4"x16"x16"	4-3/4"dia w/ 12" EMB MIN
C2	W12x50	1 1/4" THICK-REFER TO SHEET S2.4	12 OR 8 3/4"dia w/ 12" EMB MIN (SEE SHEET S2.4)
C3	W12x136	1 1/2"x20"x20"	6-3/4"dia w/ 12" EMB MIN
C4	HSS4x4x3/8"	PER SECTION	PER SECTION



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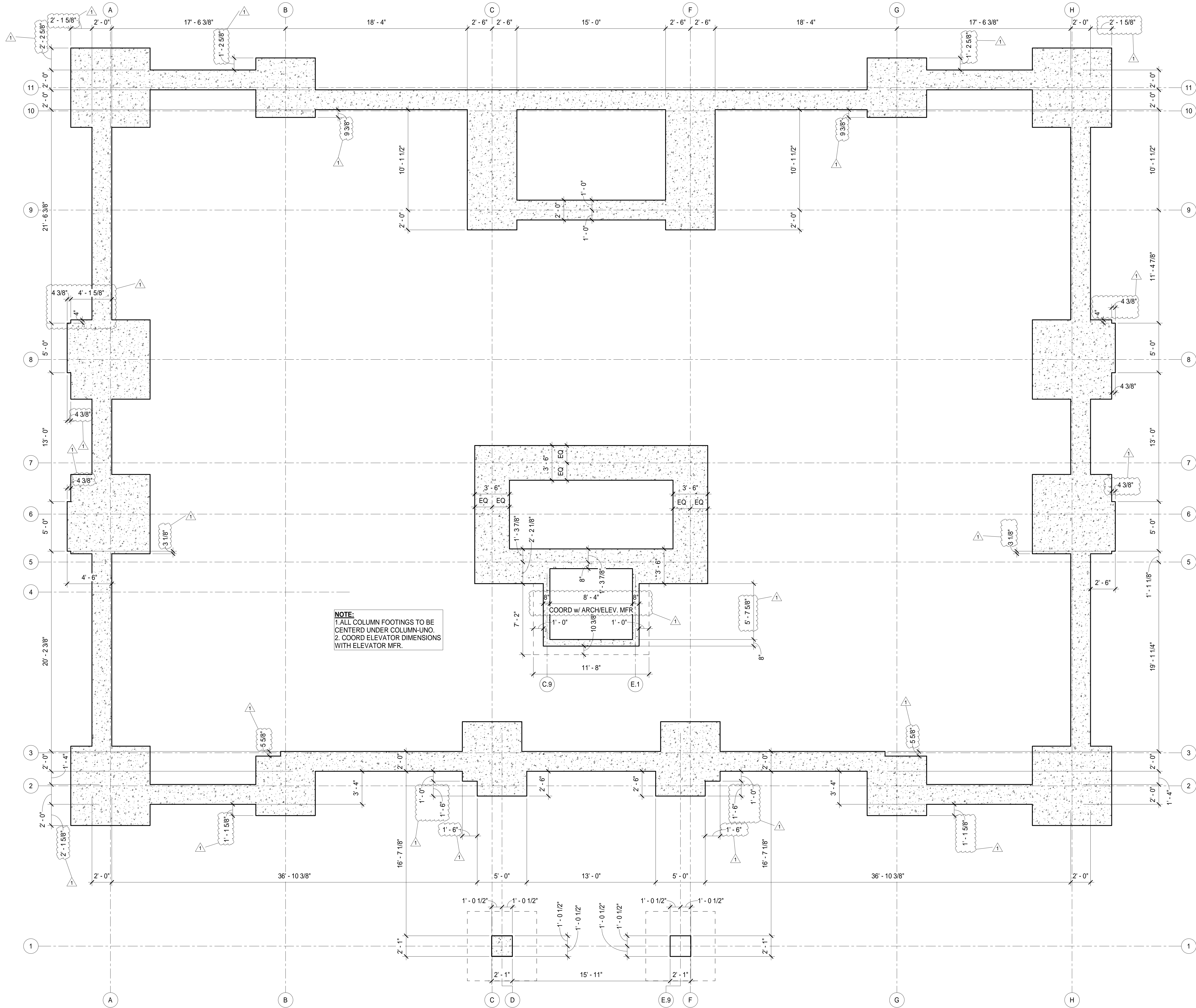
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SHEET NO.

S2.1
FOUNDATION PLAN

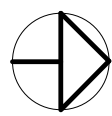


DIMENSIONED FOUNDATION PLAN

SHEET NOTES

- SEE SHEETS S1.1-S1.3 FOR GENERAL NOTES AND TYPICAL DETAILS.
- REFER TO SHEET S2.1 FOR BALANCE OF INFORMATION.

SCALE: 1/4" = 1'-0"



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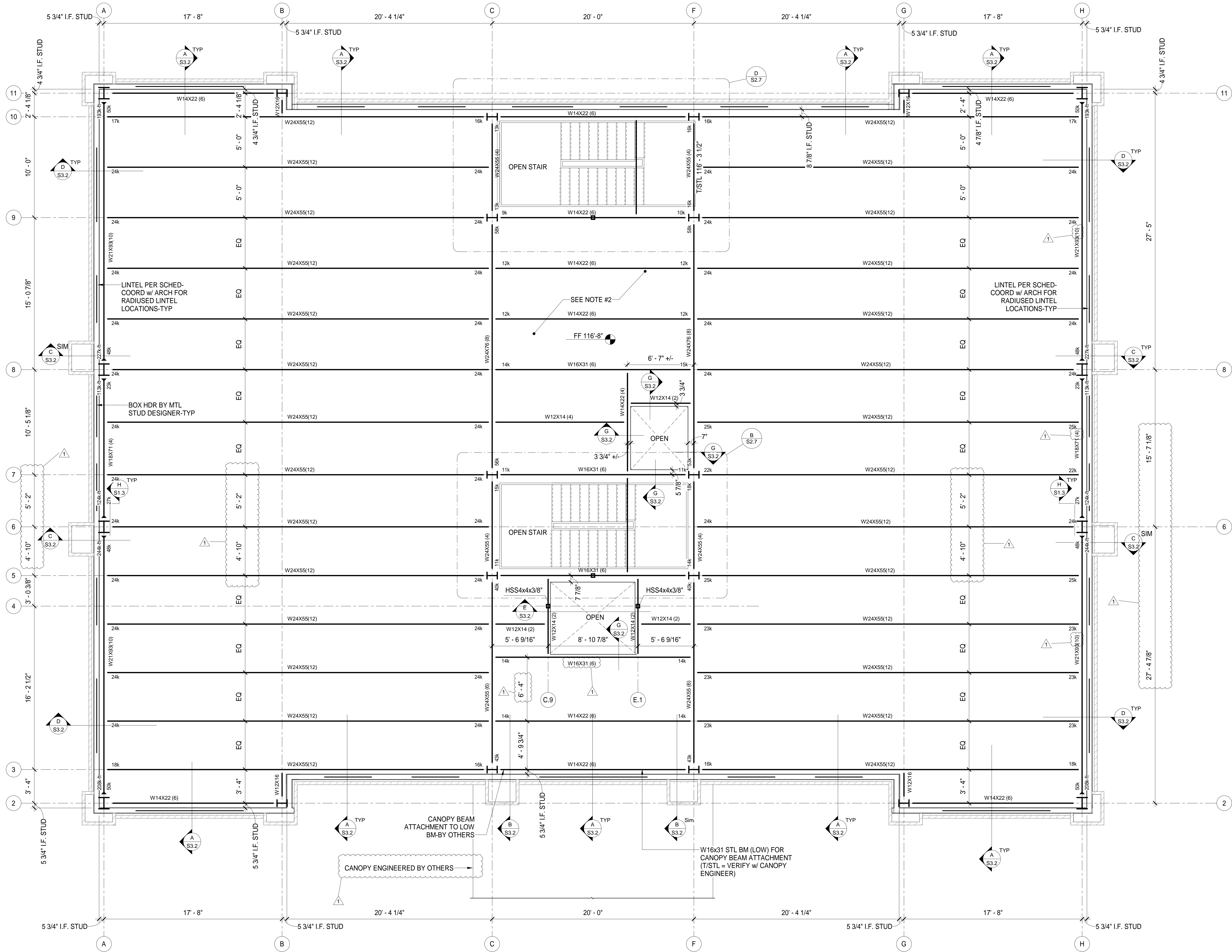
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SHEET NO.

S2.1A

DIMENSIONED FOUNDATION PLAN



NOTE TO STEEL CONNECTION DESIGNER:
1. REACTIONS SHOWN HERE ARE FACTORED ULTIMATE (LRFD) VALUES.
2. MOMENT FRAME BEAM-TO-COLUMN CONNECTIONS REQUIRE CONTINUITY PLATES AND/OR DOUBLER PLATES. DESIGN AS REQUIRED BY CODE.
3. REACTIONS LESS THAN 10k NOT SHOWN. DESIGN FOR 10k MIN OR AS REQUIRED BY CODE.

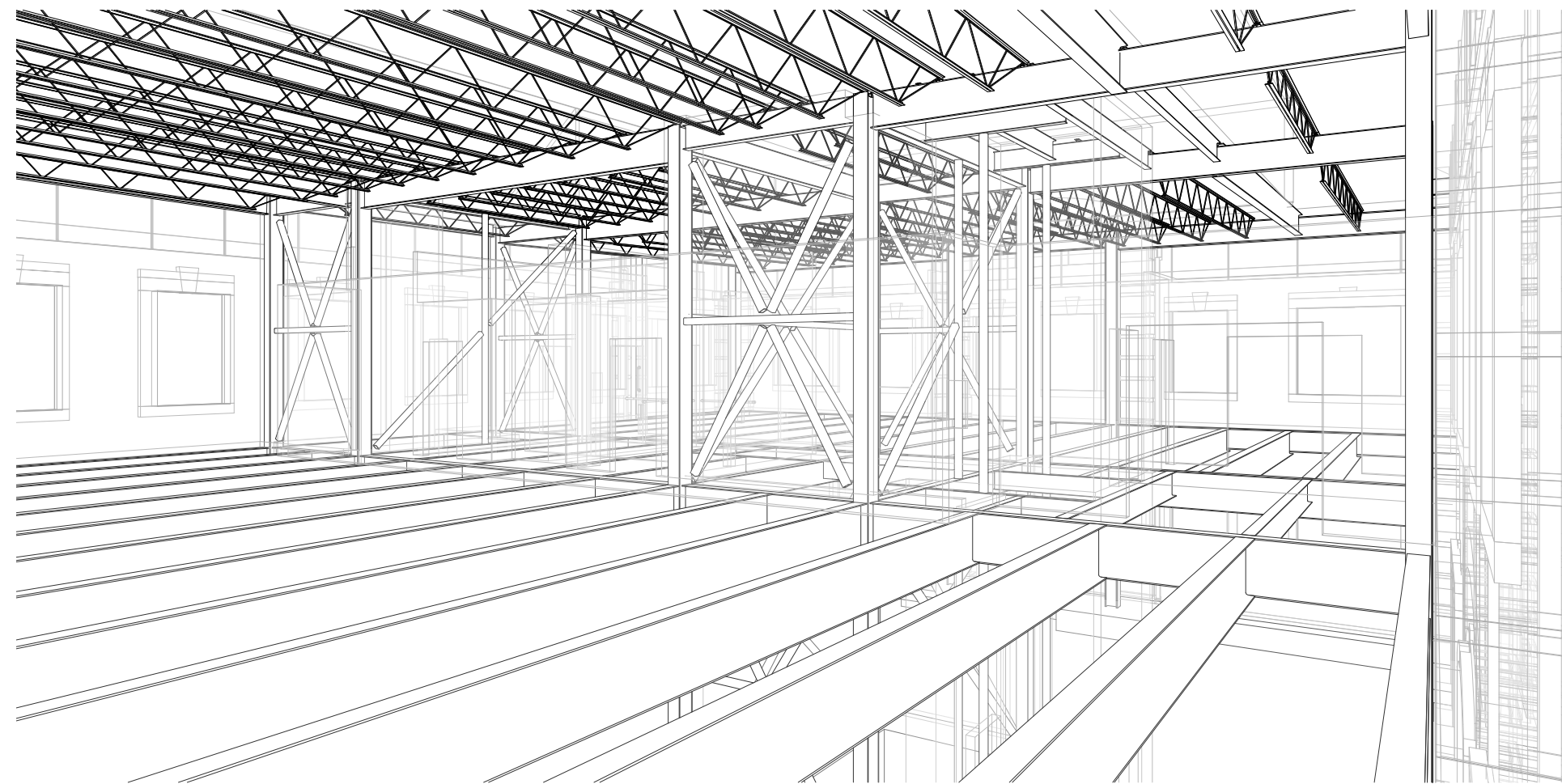
MOMENT FRAME CONNECTION DESIGN:
(LRFD-NO FURTHER INCREASE REQUIRED)
V_U REQ=162k
M_U REQ=1320k-ft

SECOND FLOOR FRAMING PLAN

SHEET NOTES

- SEE SHEETS S1.1-S1.3 FOR GENERAL NOTES AND TYPICAL DETAILS.
- FLOOR CONSTRUCTION: 2 1/2" NORMAL WEIGHT CONCRETE SLAB REINFORCED WITH ONE LAYER OF 6x6-W1.4XW1.4 WWF (REINFORCEMENT TO BE LOCATED HALFWAY BETWEEN TOP OF SLAB AND TOP OF DECK) ON 2"x20ga GALVANIZED, COMPOSITE (4 1/2" TOTAL SLAB THICKNESS) TYPE "VL" STEEL DECK OVER STEEL BEAMS. ATTACH DECK TO SUPPORTS WITH #14 TEK SCREWS OR 5/8" dia PUDDLE WELDS, AND AT SIDELAPS WITH #10 TEK SCREWS OR WELDS. ATTACH IN A 36" ATTACHMENT PATTERN WITH (5) SIDELAPS PER DECK SPAN FOR ENTIRE FLOOR. SEE TYPICAL DETAILS FOR ATTACHMENT.
- (#) INDICATES NUMBER OF SHEAR STUDS ON EA. BEAM. SHEAR STUDS SHALL BE PER GEN. NOTES & TYPICAL DETAILS (VERIFY w/ SHOP DRAWINGS).
- SEE ARCHITECTURAL DRAWINGS FOR STAIR DIMENSIONS, SECTIONS, AND ELEVATIONS.
- MAXIMUM BEAM SPACING ± 6'-6" oc
- ALL ELEVATIONS ARE REFERENCED FROM FINISHED MAIN FLOOR = 100'-0"
 - T/STL = TOP OF STEEL ELEVATION = 116'-3 1/2"
 - DENOTES MOMENT CONNECTION.

SCALE: 1/4" = 1'-0"



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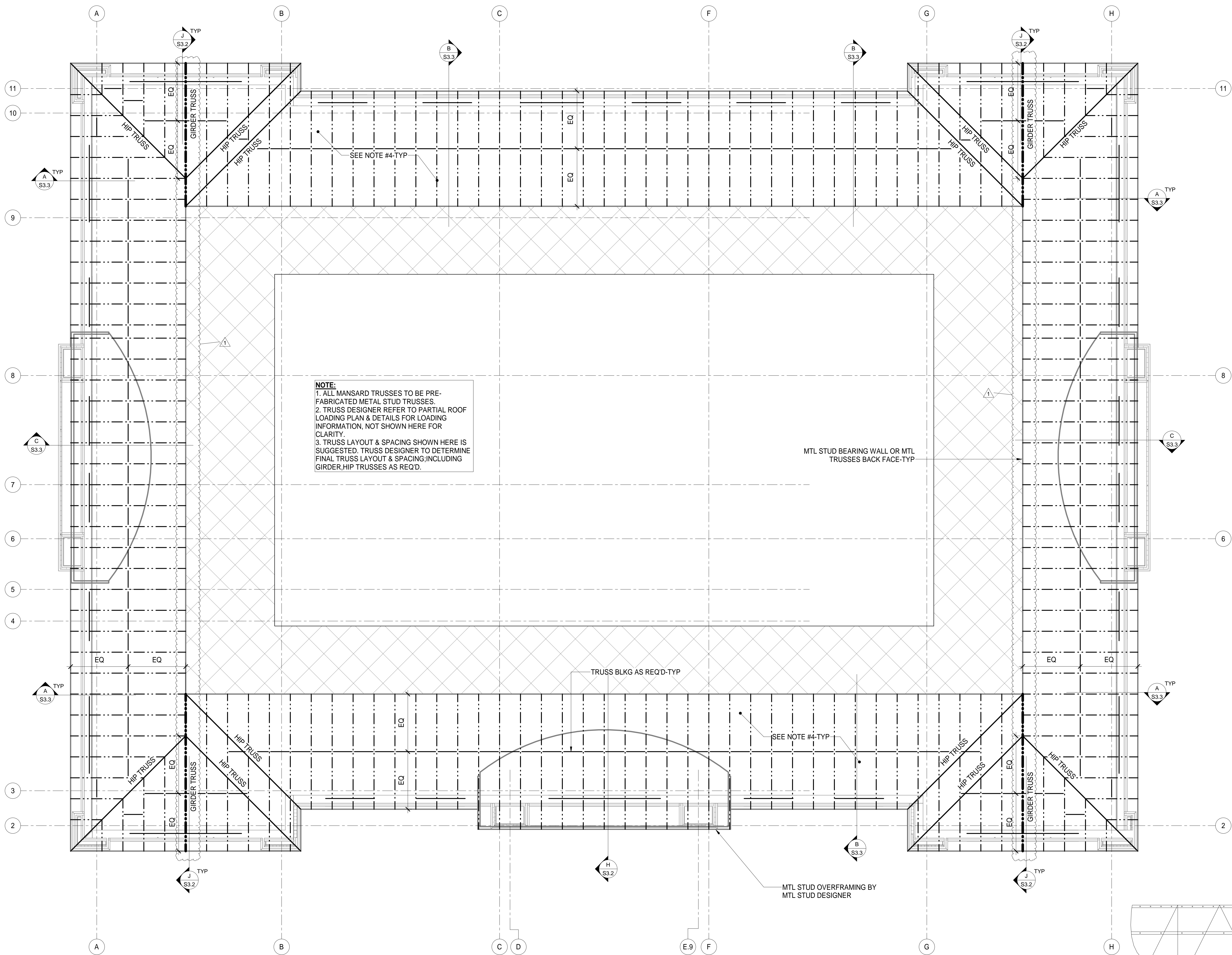
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SHEET NO.

S2.2

SECOND FLOOR FRAMING PLAN



NOTE:
1. ALL MANSARD TRUSSES TO BE PRE-FABRICATED METAL STUD TRUSSES.
2. TRUSS DESIGNER REFER TO PARTIAL ROOF LOADING PLAN & DETAILS FOR LOADING INFORMATION, NOT SHOWN HERE FOR CLARITY.
3. TRUSS LAYOUT & SPACING SHOWN HERE IS SUGGESTED. TRUSS DESIGNER TO DETERMINE FINAL TRUSS LAYOUT & SPACING INCLUDING GIRDER, HIP TRUSSES AS REQ'D.

MANSARD TRUSS FRAMING PLAN

SHEET NOTES

- SEE SHEETS S1.1-S1.3 FOR GENERAL NOTES AND TYPICAL DETAILS.
- ALL ELEVATIONS ARE REFERENCED FROM FINISHED MAIN FLOOR = 100'-0"
 - TRUSS/BRG = TRUSS BEARING ELEVATION = VARIES-SEE SECTIONS
- MAXIMUM TRUSS SPACING UNLESS NOTED OTHERWISE: 2'-0"
- ROOF SHEATHING PER MARK R1 OF TYPICAL MANSARD ROOF SHEATHING DETAIL.
- REFER TO SHEET S2.3 FOR BALANCE OF INFORMATION.

SCALE: 1/4" = 1'-0"

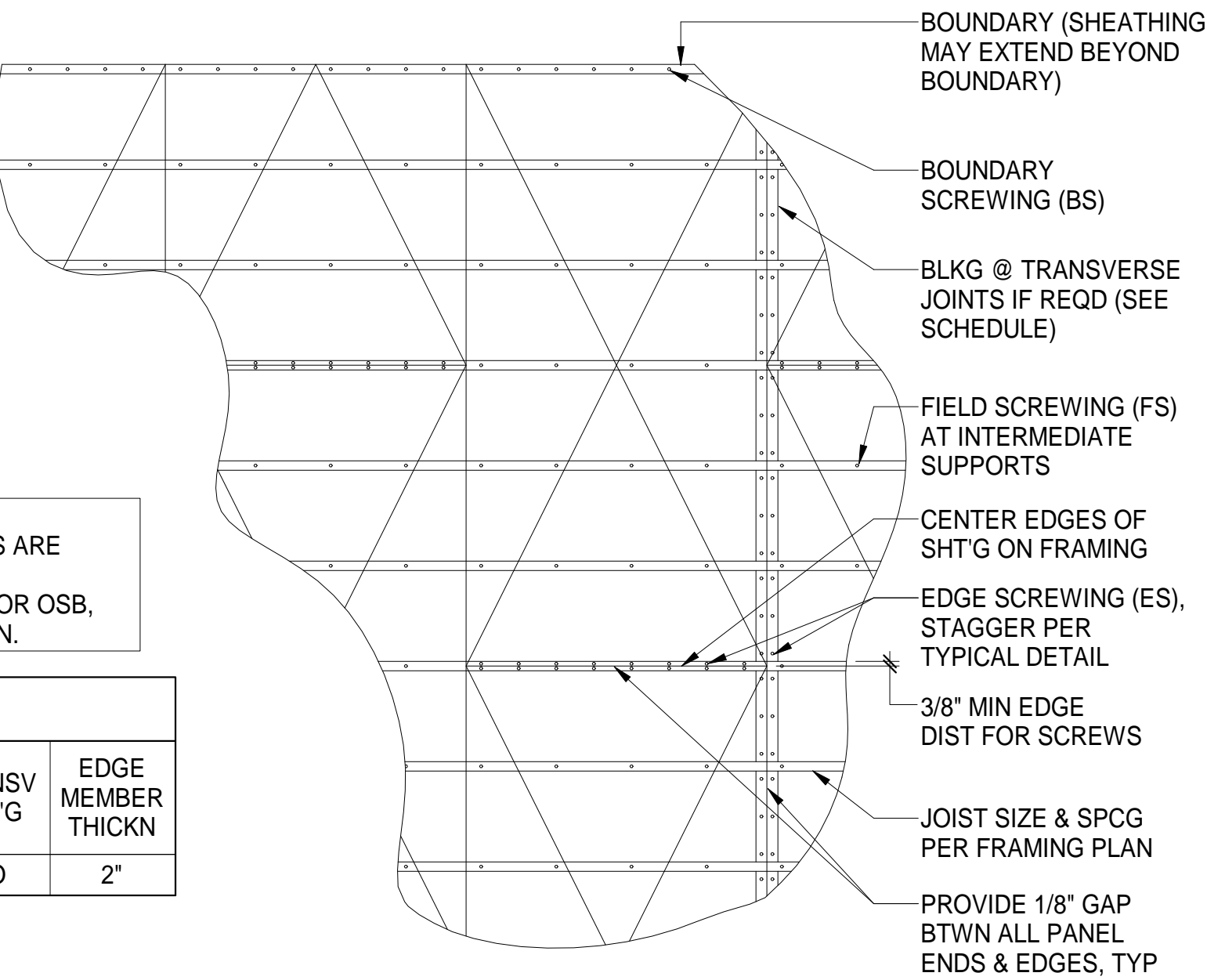
NOTE:
1. SHEATHING SCREWS SHALL BE DRIVEN SO THAT THEIR HEADS ARE FLUSH WITH THE SURFACE OF THE SHEATHING.
2. SHEATHING SHALL BE FIRE-RETARDANT TREATED PLYWOOD OR OSB, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

SHEATHING & SCREWING SCHEDULE						
MARK	SHT'G THICK	SCREW SIZE	BS SPACING	ES SPACING	FS SPACING	TRANSV BLKG PER FRAMING PLAN
R1	19/32"	#12	6"	6"	12"	NO

(PLYWOOD OR OSB EXTERIOR RATED)

A TYPICAL MANSARD ROOF SHEATHING DETAIL

S2.3B N.T.S.



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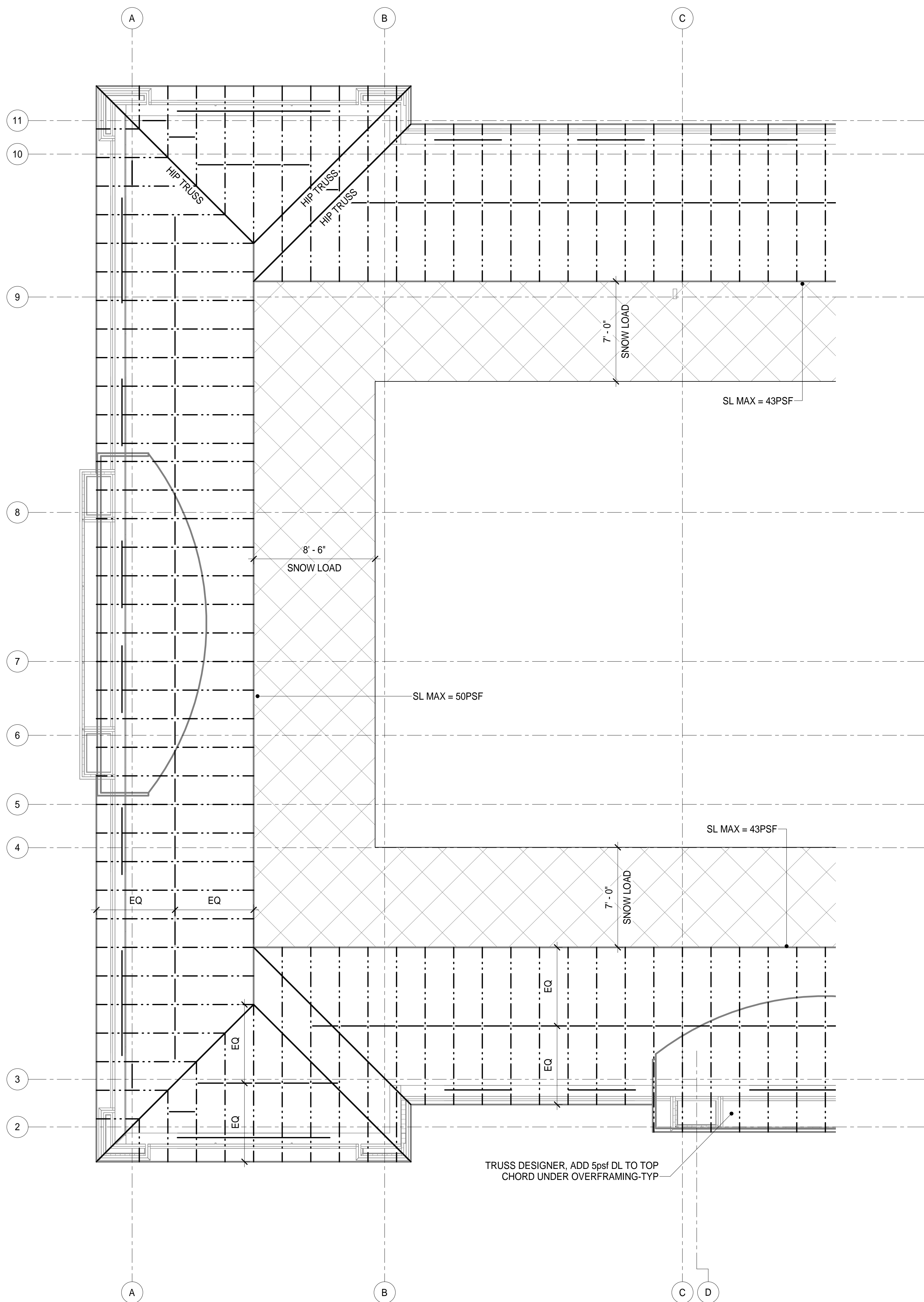
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S2.3B
MANSARD ROOF FRAMING

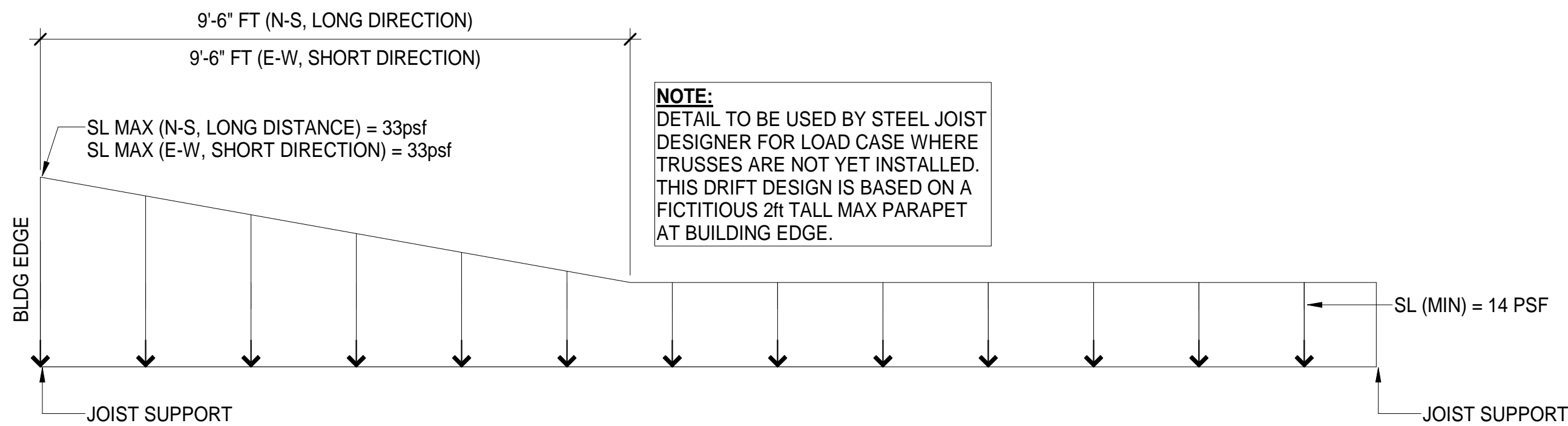


PARTIAL ROOF LOADING PLAN

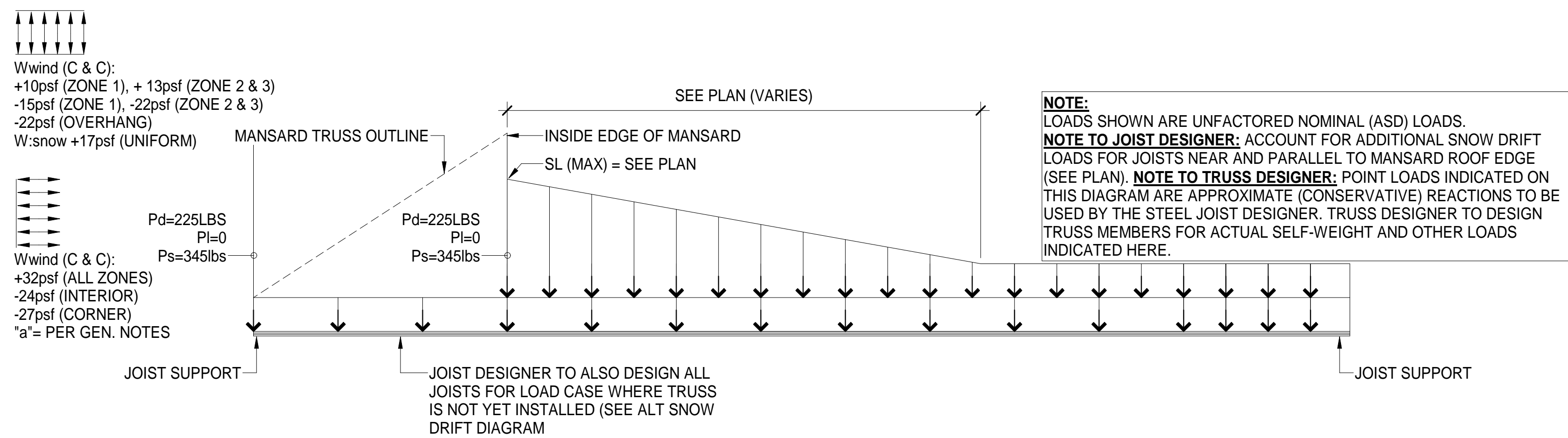
SHEET NOTES

- SEE SHEETS S1.1-S1.3 FOR GENERAL NOTES AND TYPICAL DETAILS.
- REFER TO SHEET S2.3 & S2.3B FOR BALANCE OF INFORMATION.

SCALE: 1/4" = 1'-0"



ALT SNOW DRIFT LOAD DIAGRAM (STL JST DIAGRAM)



TYPICAL STEEL JOIST & MANSARD TRUSS LOAD DIAGRAM

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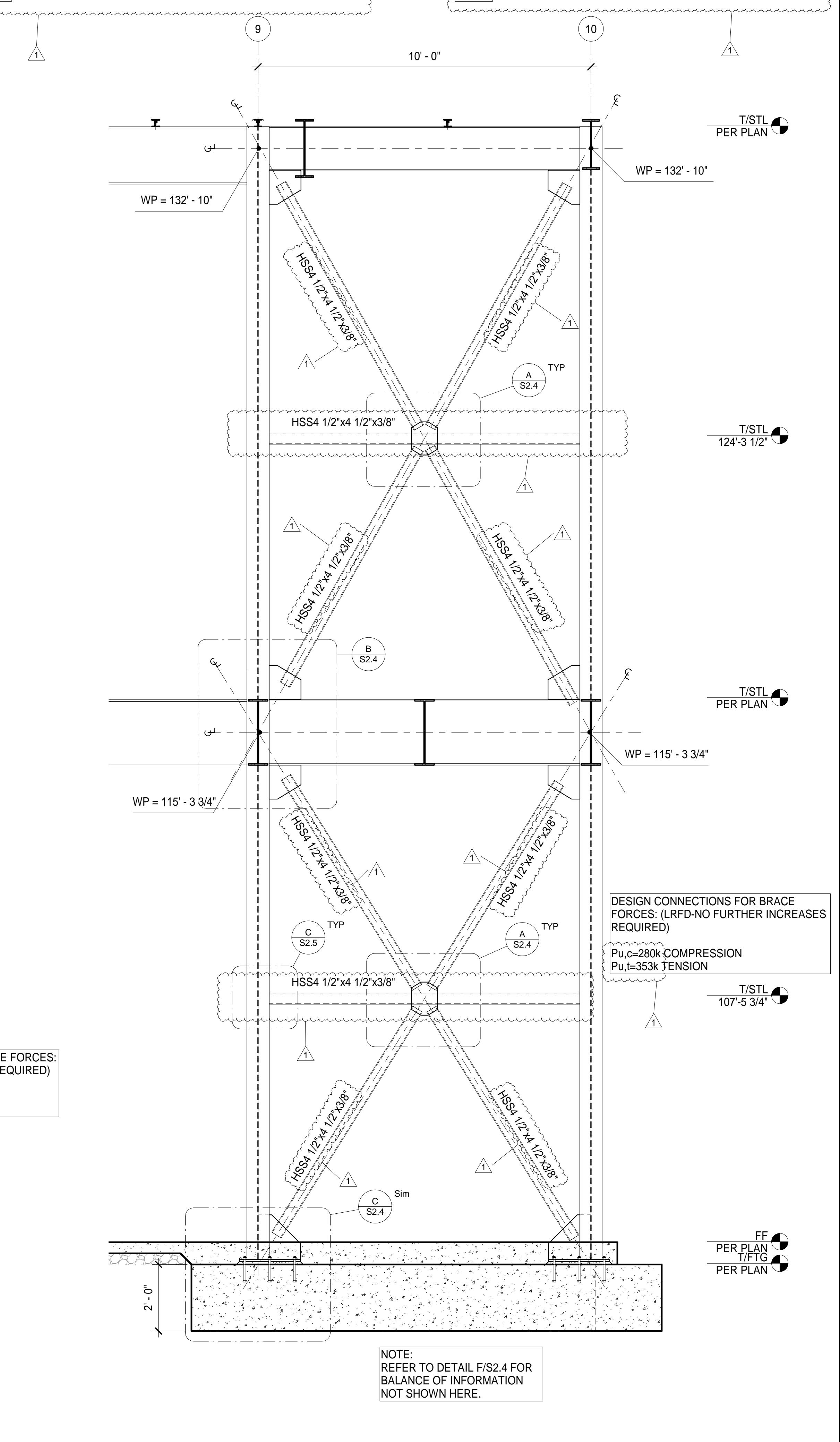
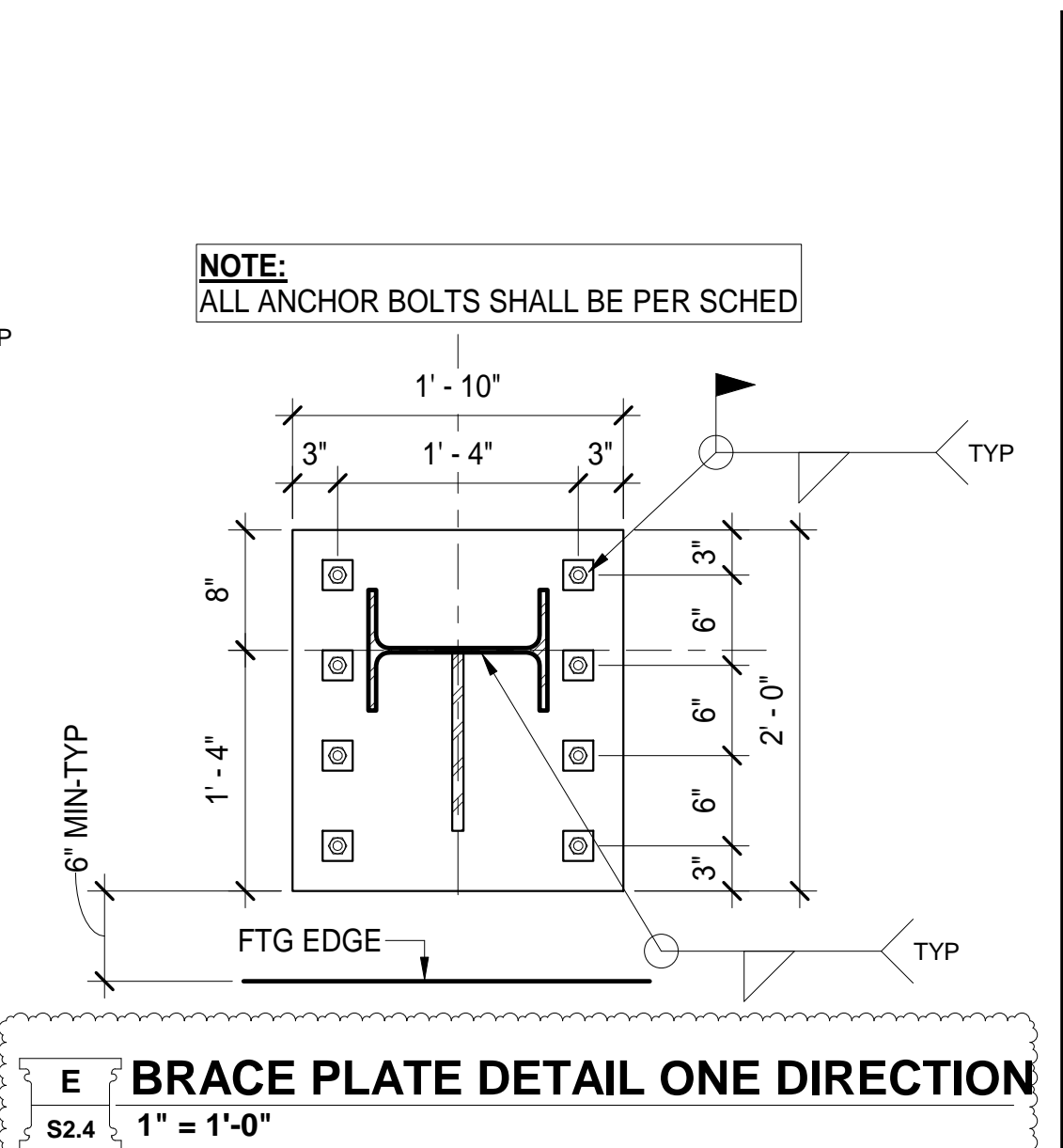
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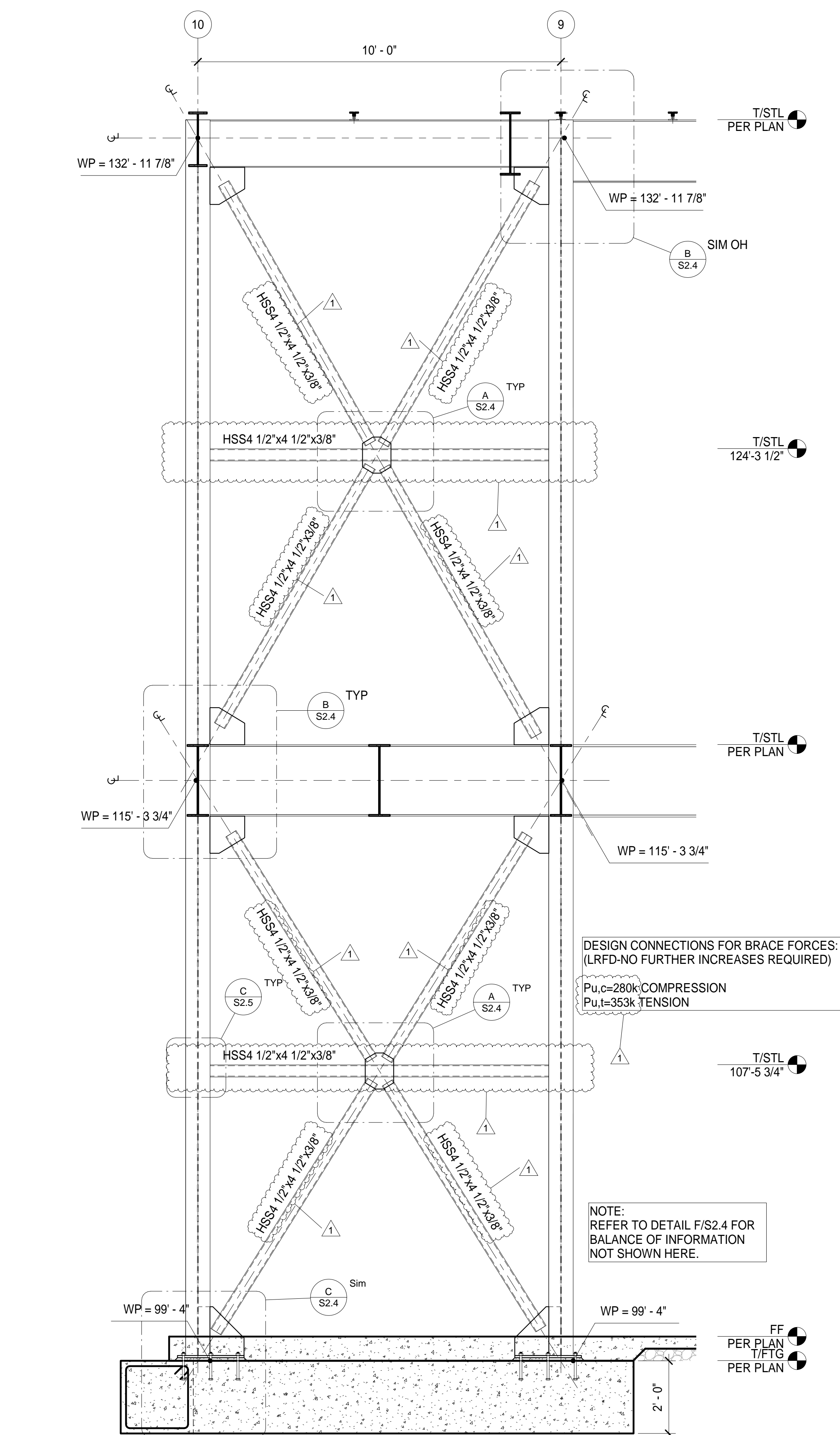
SHEET NO.

S2.3C

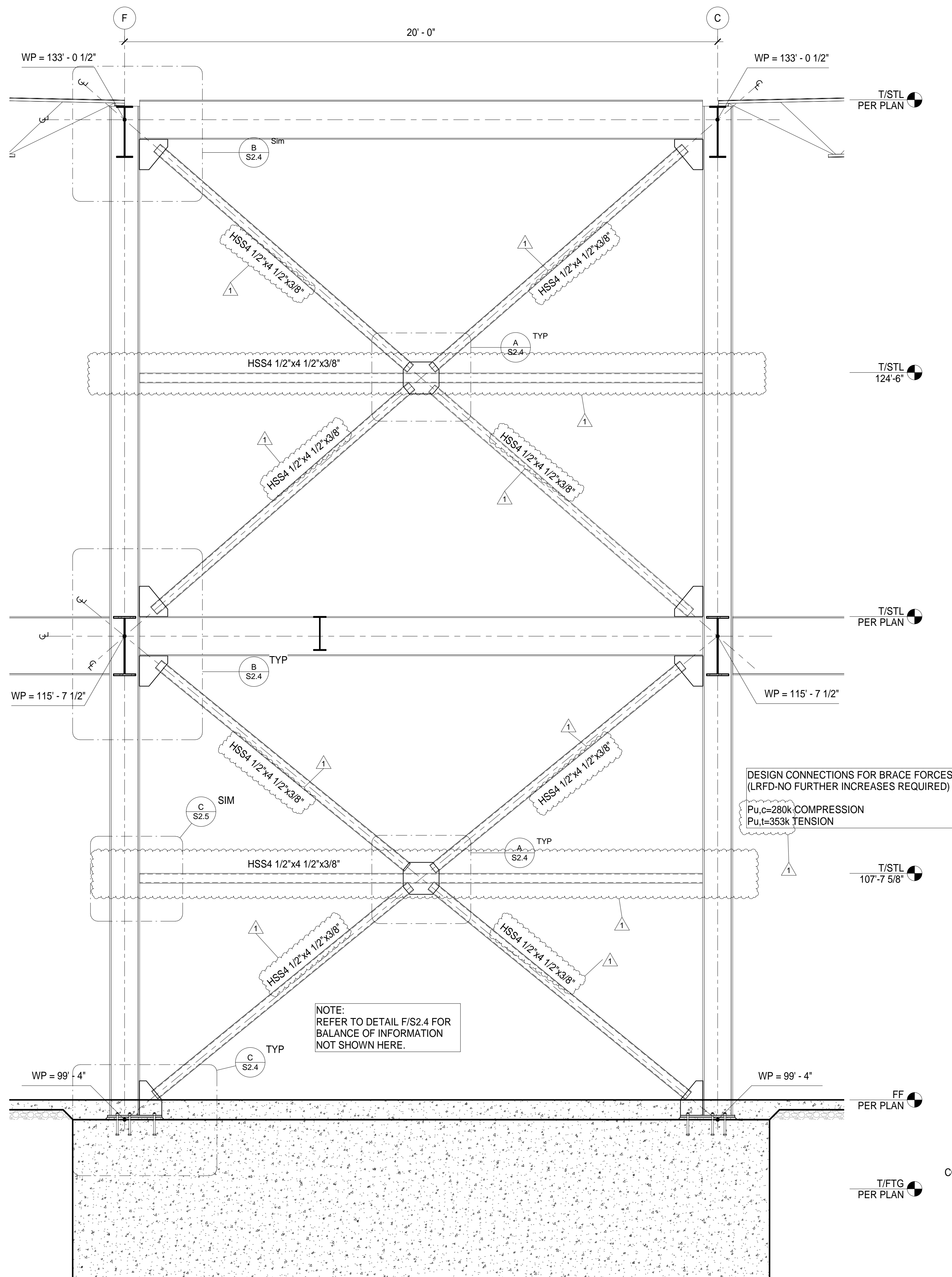
PARTIAL ROOF LOADING PLAN



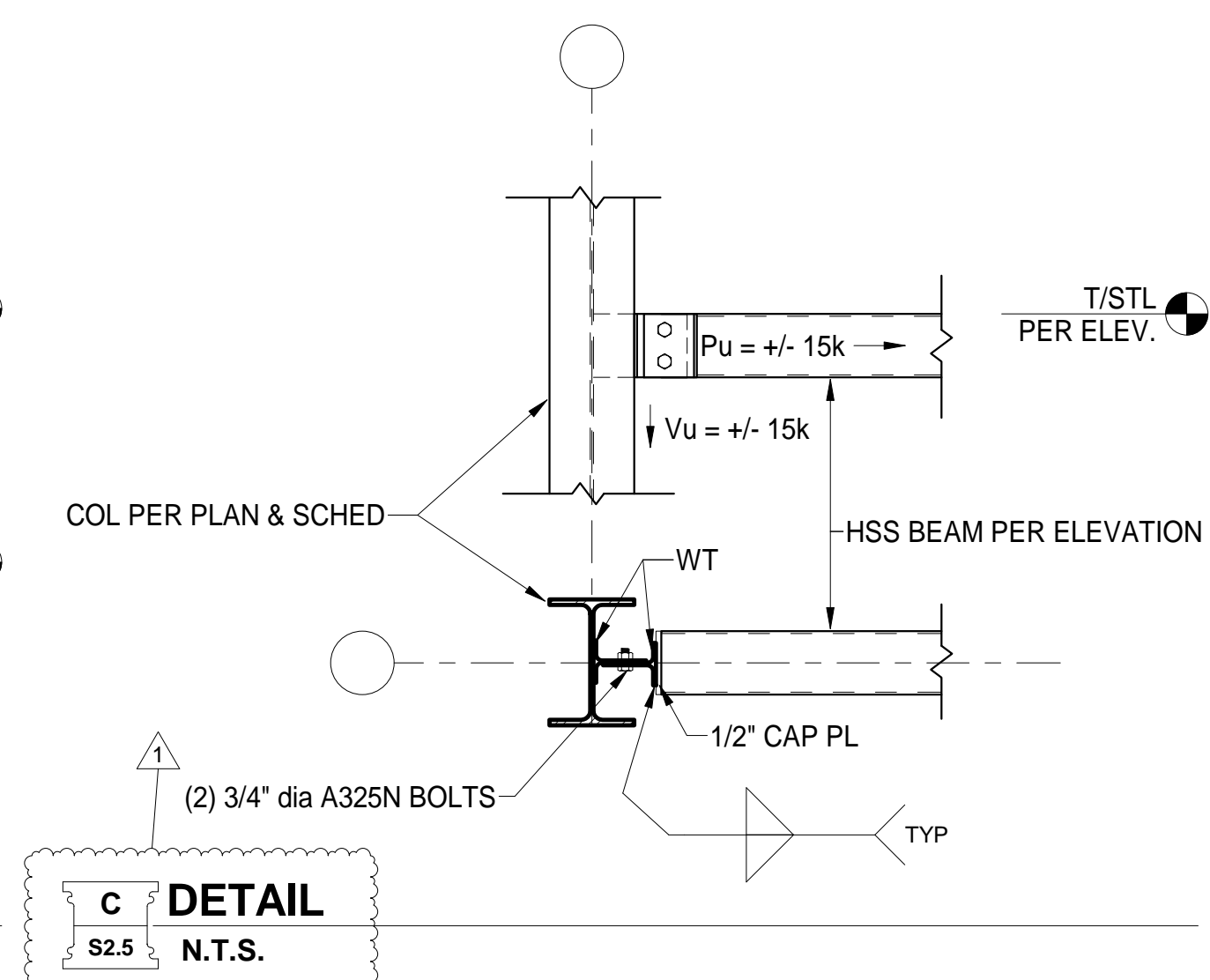
H FRAMING ELEVATION
S2.4 N.T.S.



A FRAMING ELEVATION
S2.5 1/2" = 1'-0"



B FRAMING ELEVATION
S2.5 N.T.S.



C DETAIL
S2.5 N.T.S.

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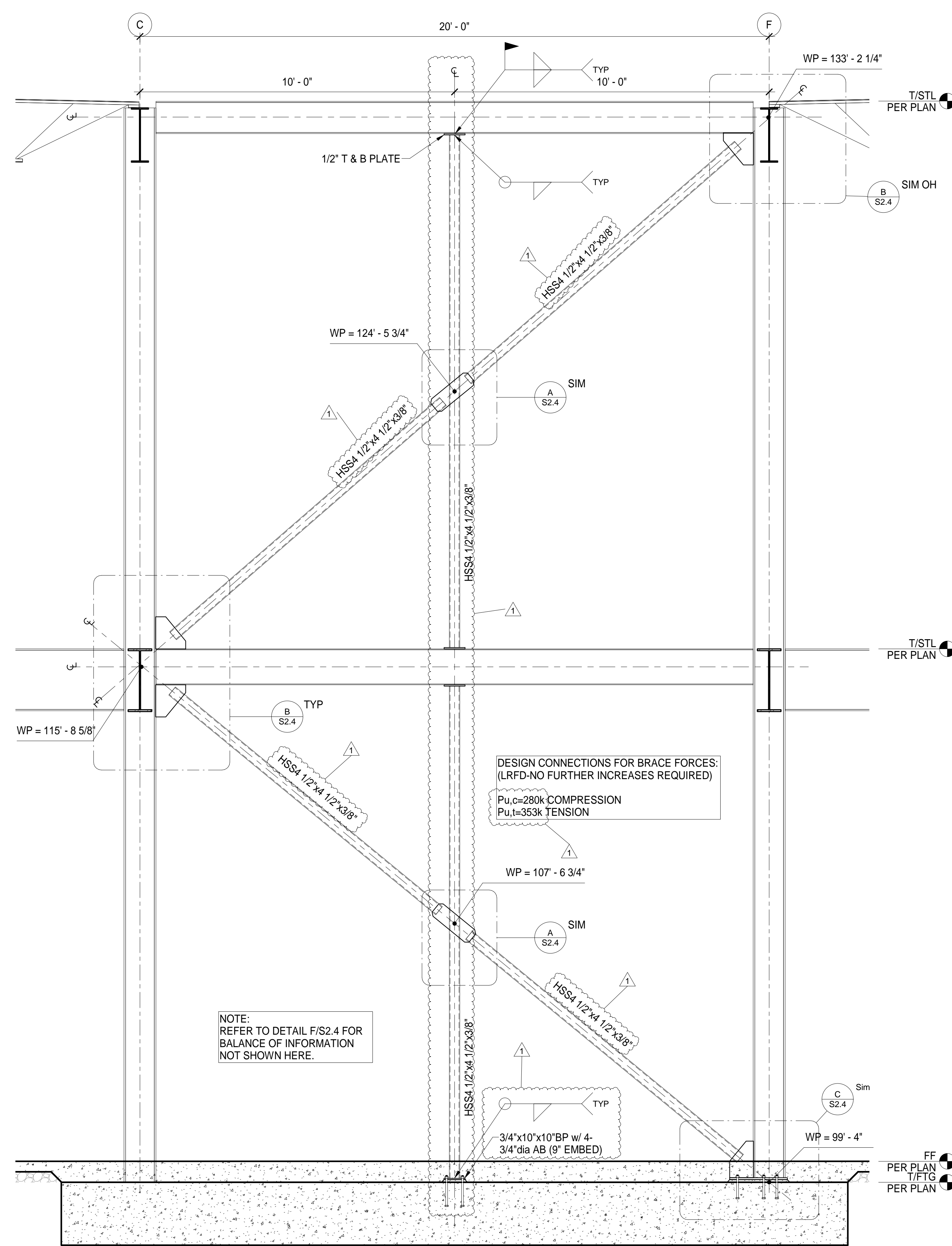
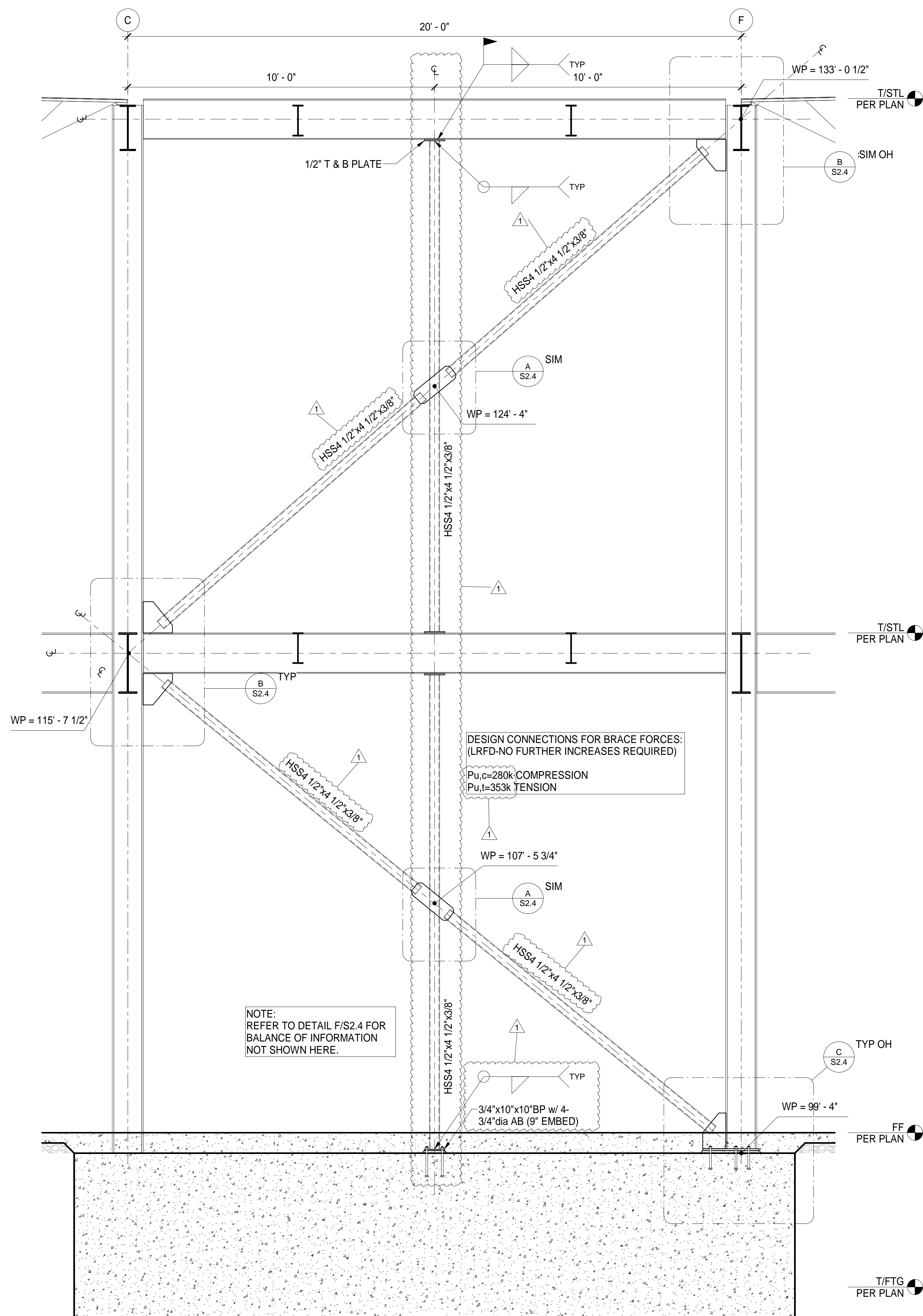
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S2.5
BRACING ELEVATIONS



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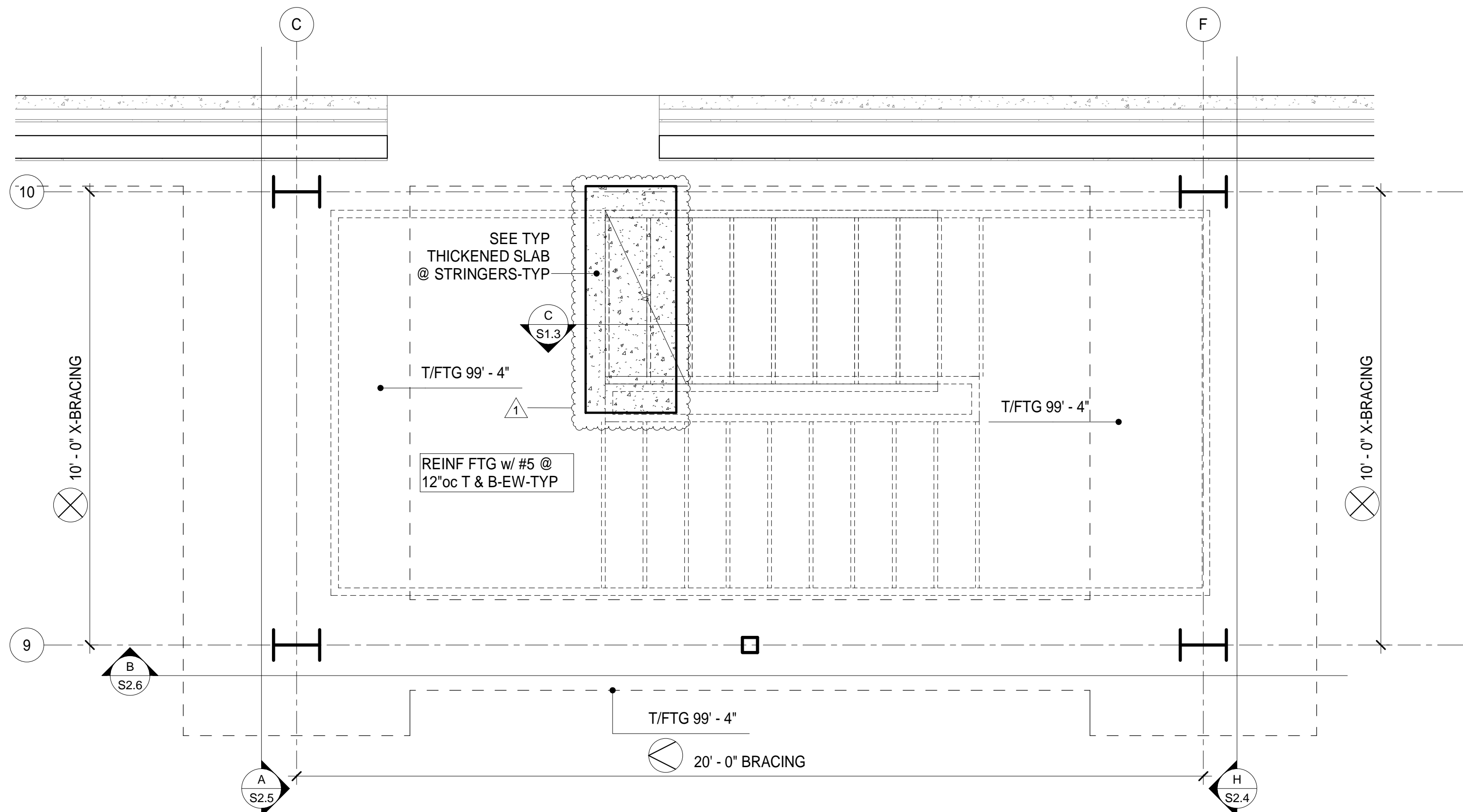
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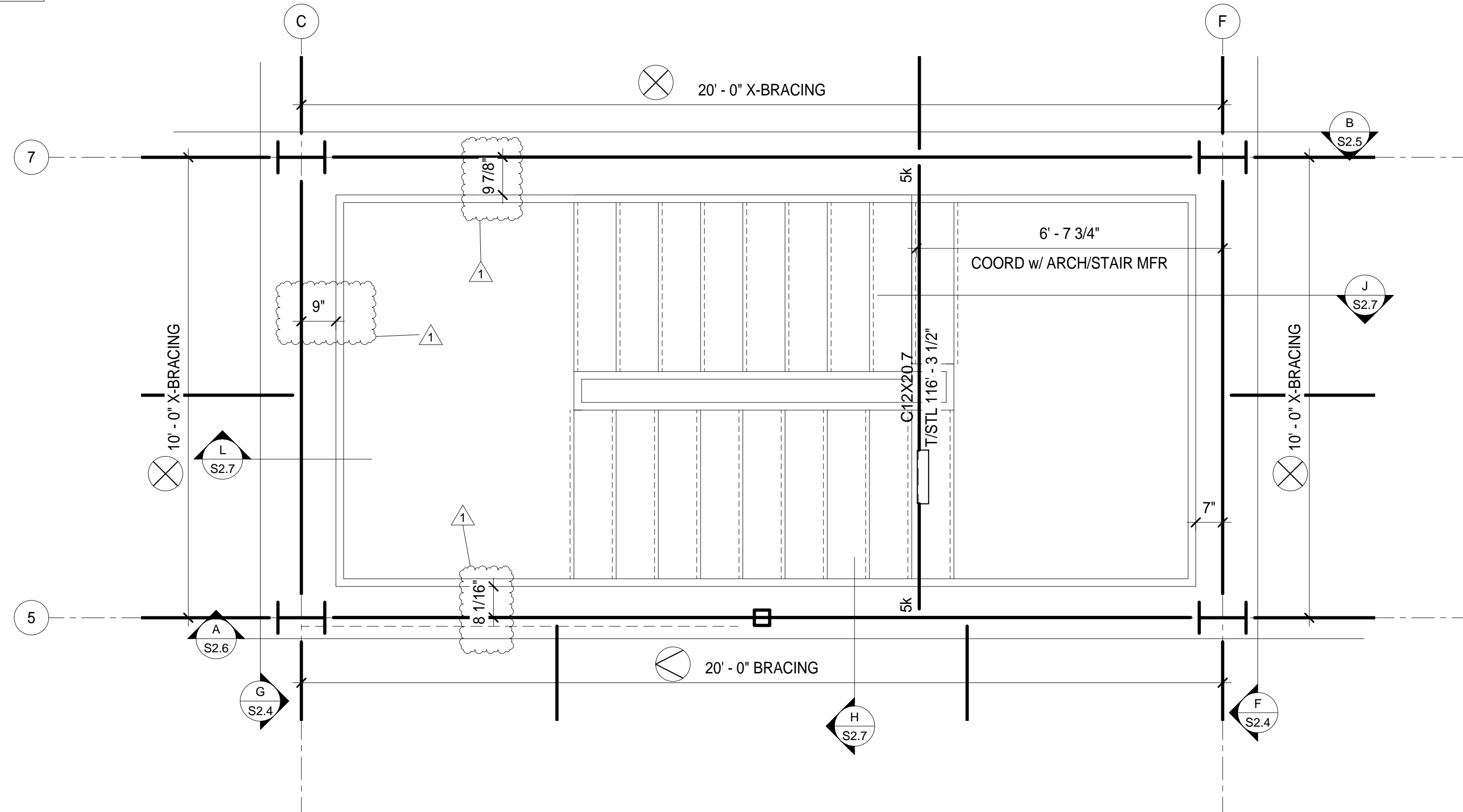
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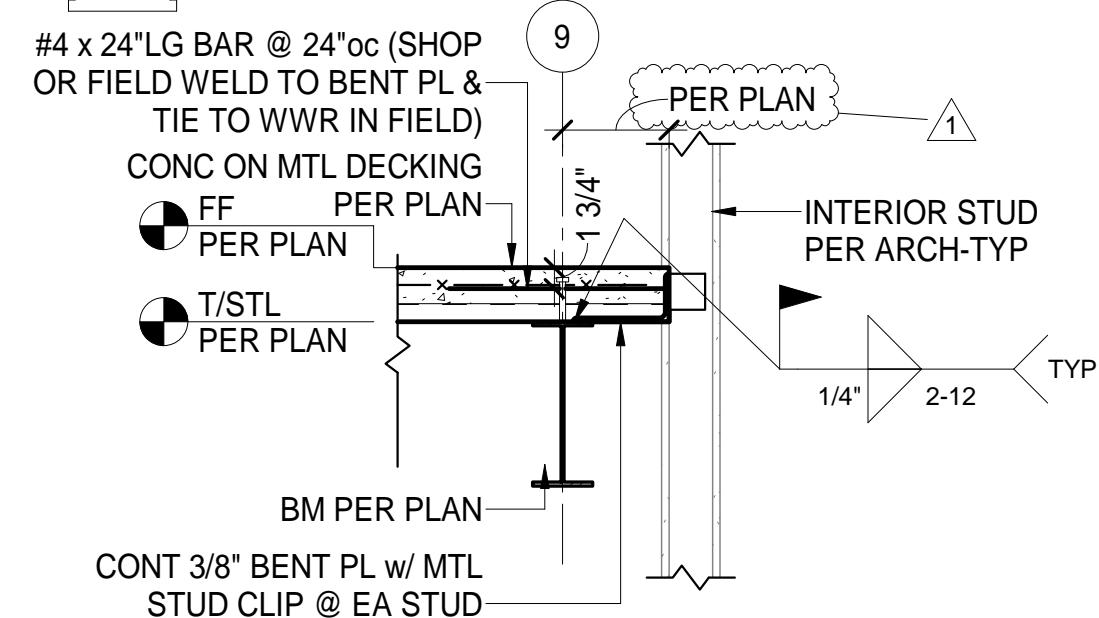
S2.6
BRACING ELEVATIONS



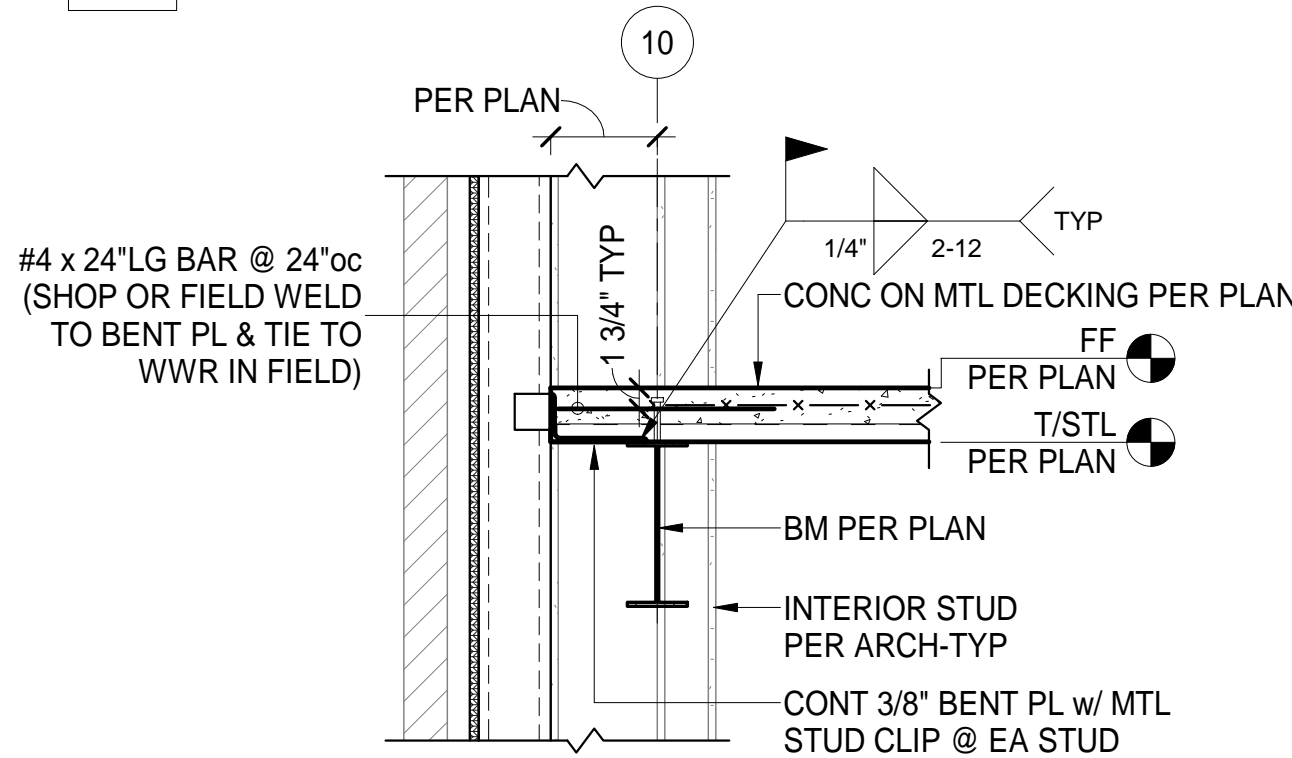
A STAIR FOUNDATION CALLOUT
S2.7 1/2" = 1'-0"



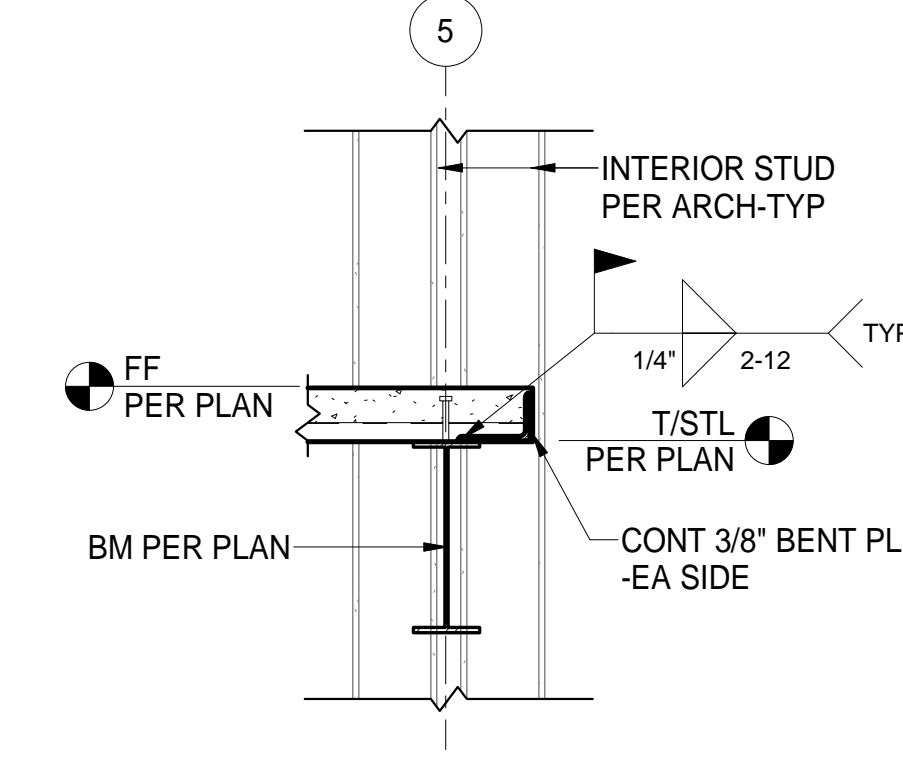
B STAIR FRAMING CALLOUT
S2.7 1/2" = 1'-0"



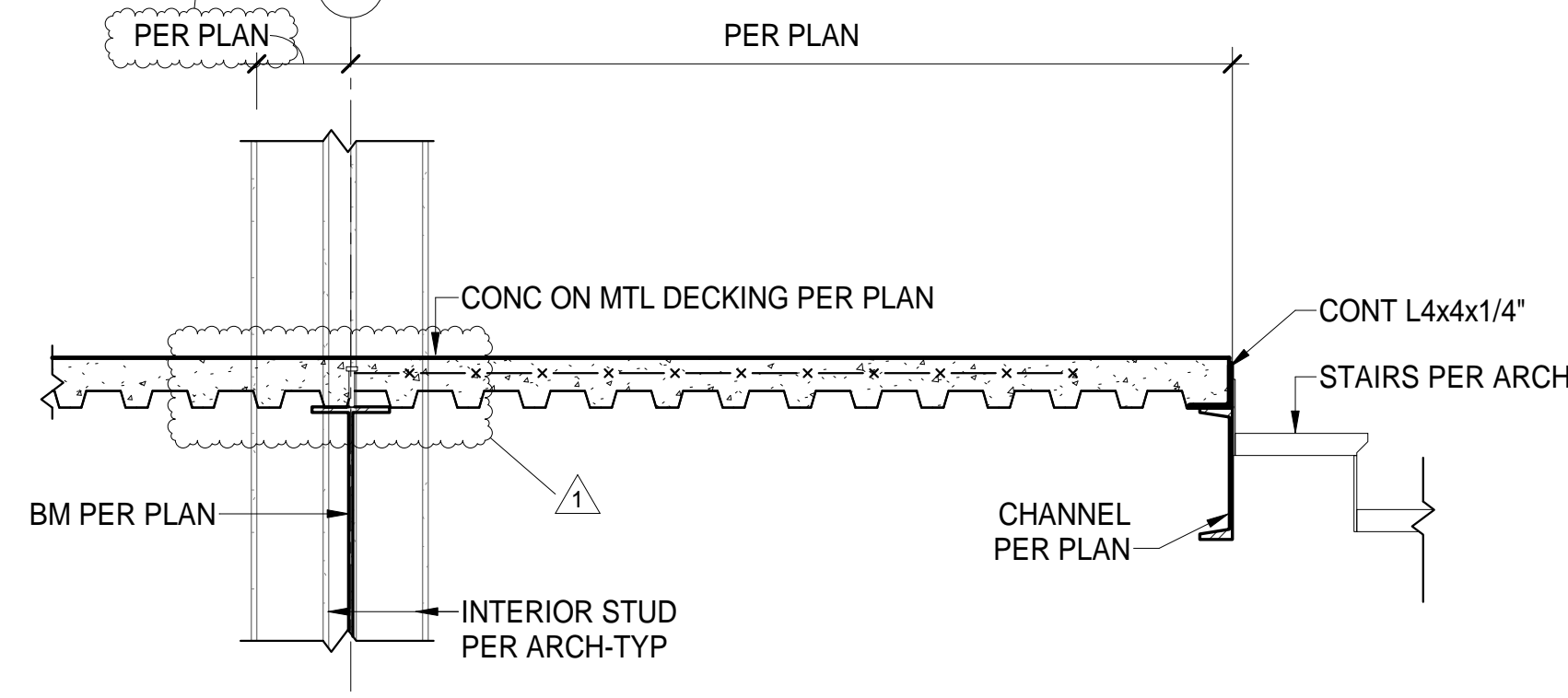
E FRAMING SECTION
S2.7 3/4" = 1'-0"



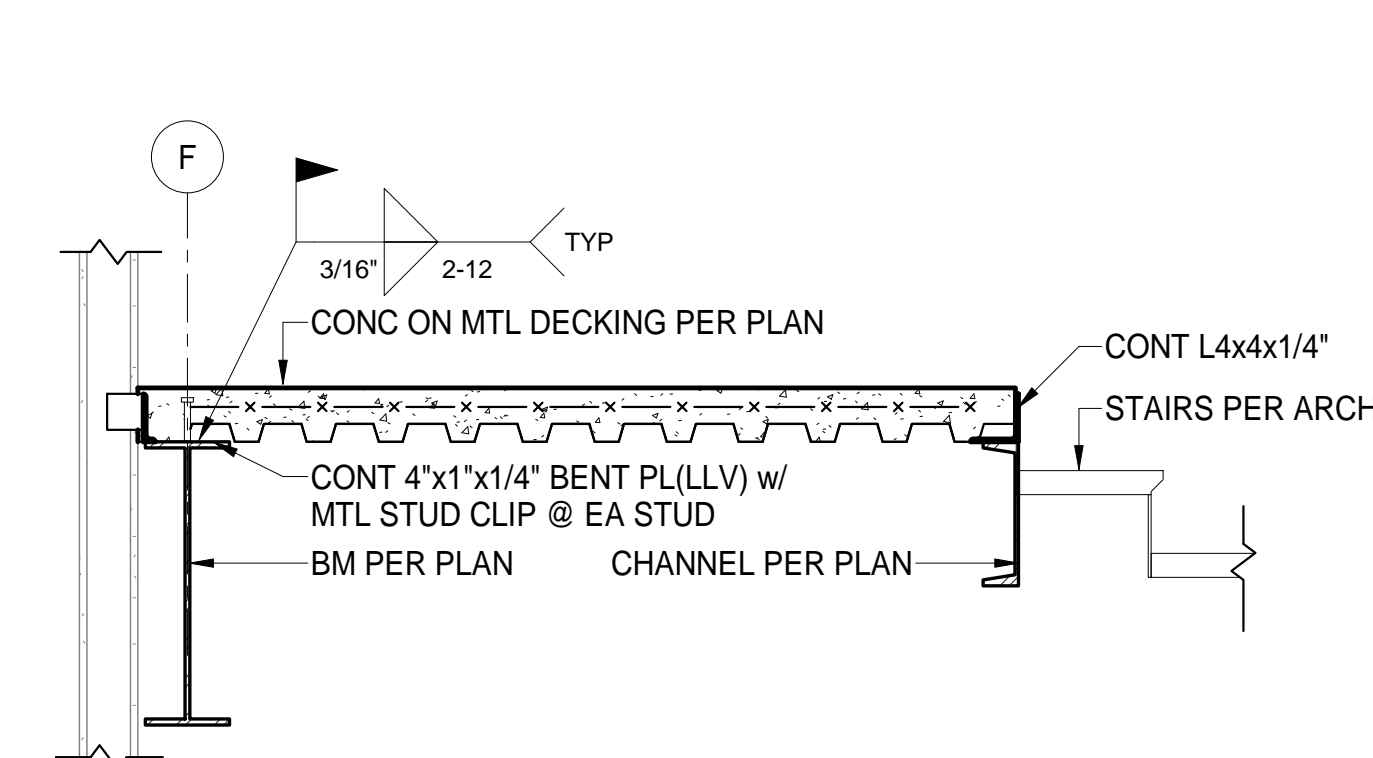
G FRAMING SECTION
S2.7 3/4" = 1'-0"



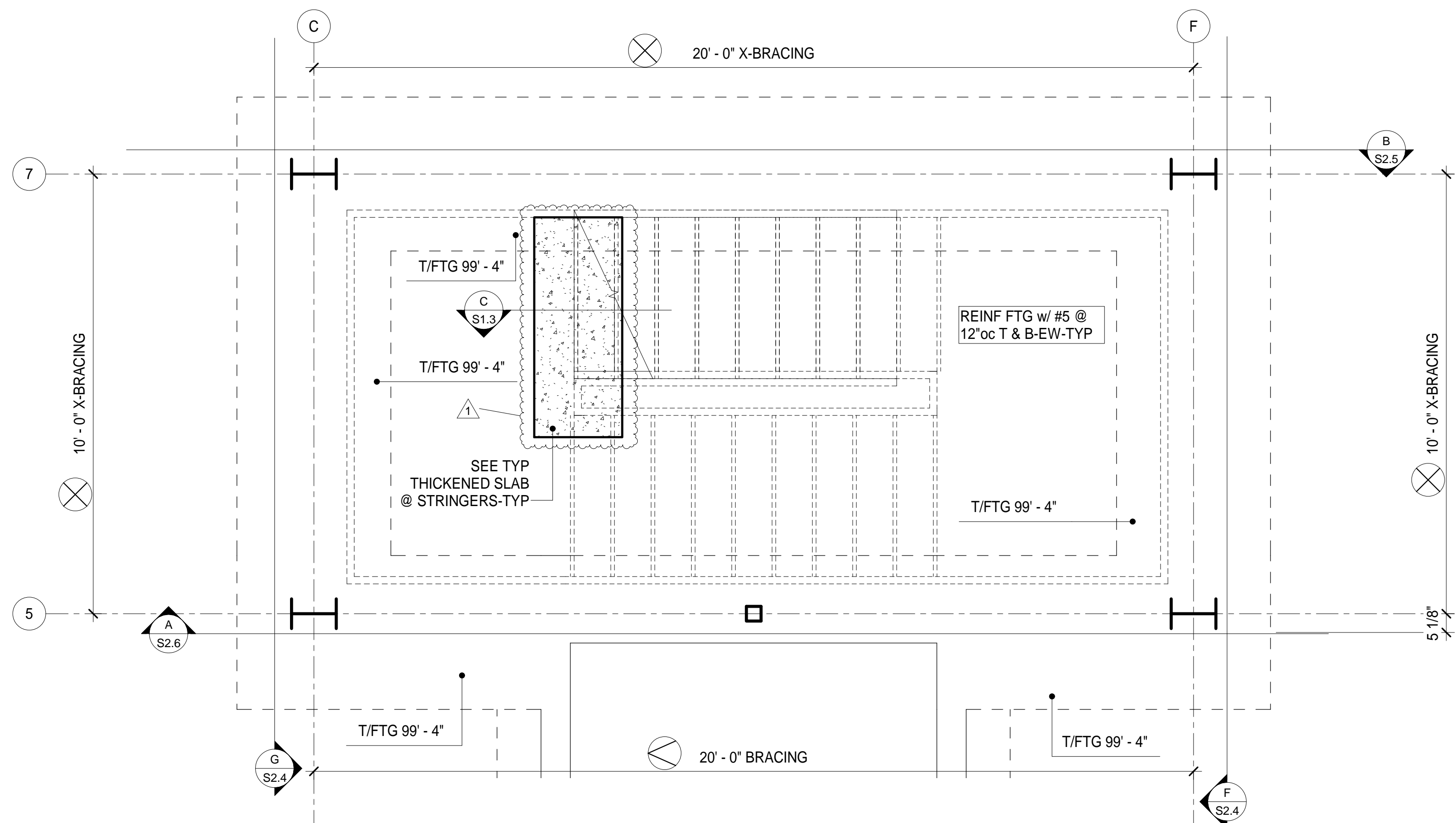
H FRAMING SECTION
S2.7 3/4" = 1'-0"



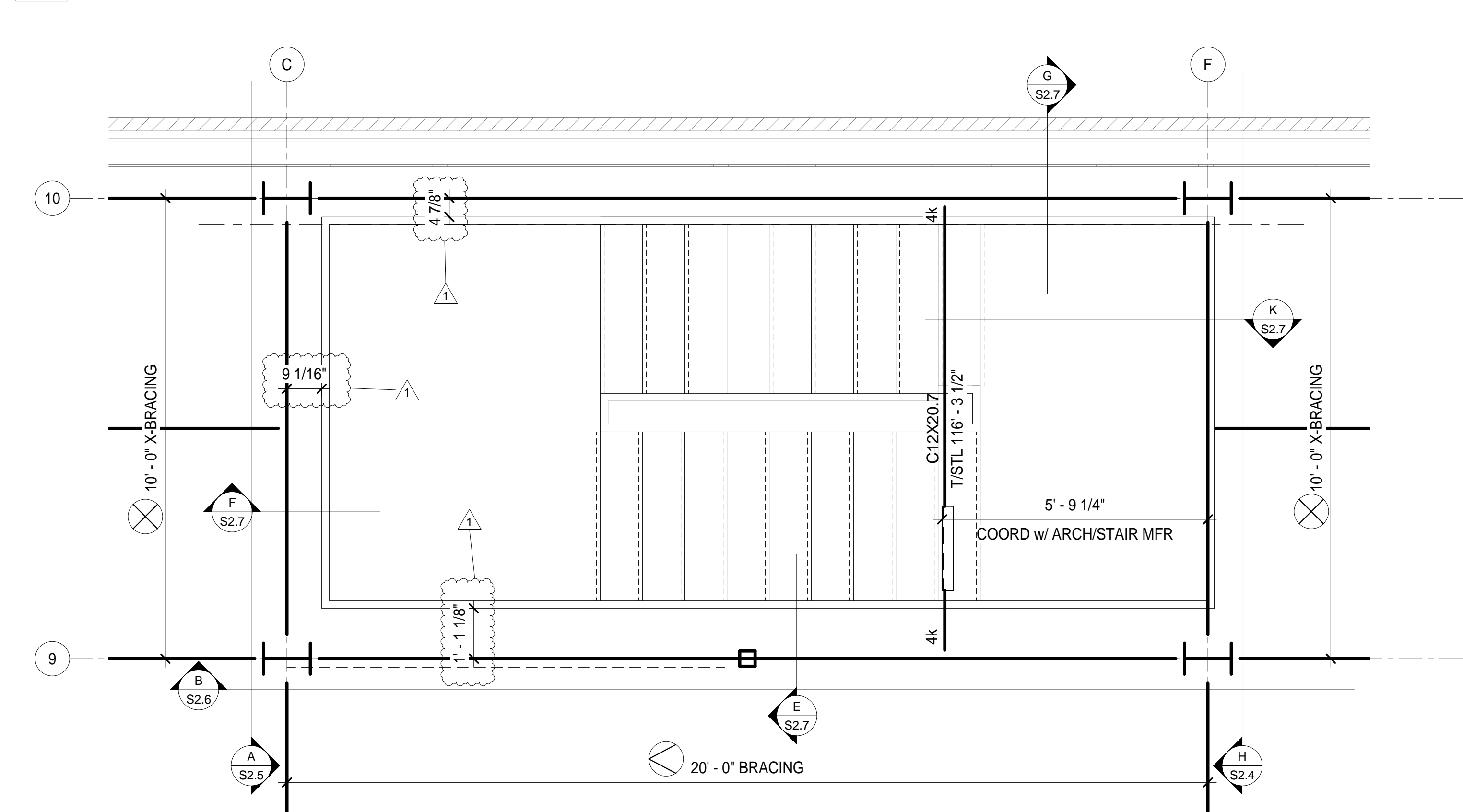
J FRAMING SECTION
S2.7 3/4" = 1'-0"



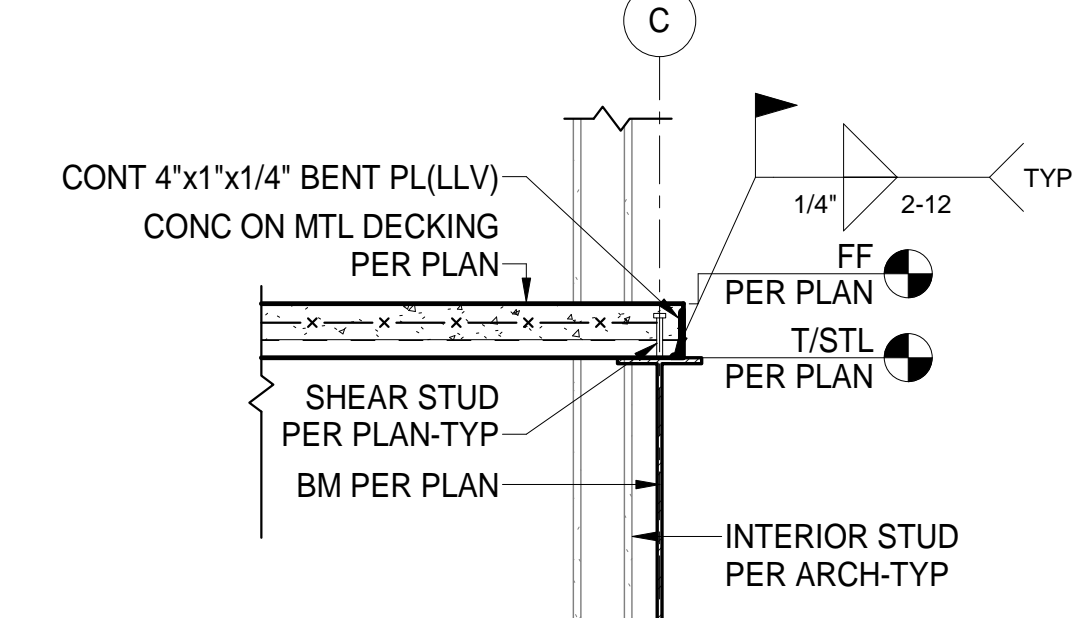
K FRAMING SECTION
S2.7 3/4" = 1'-0"



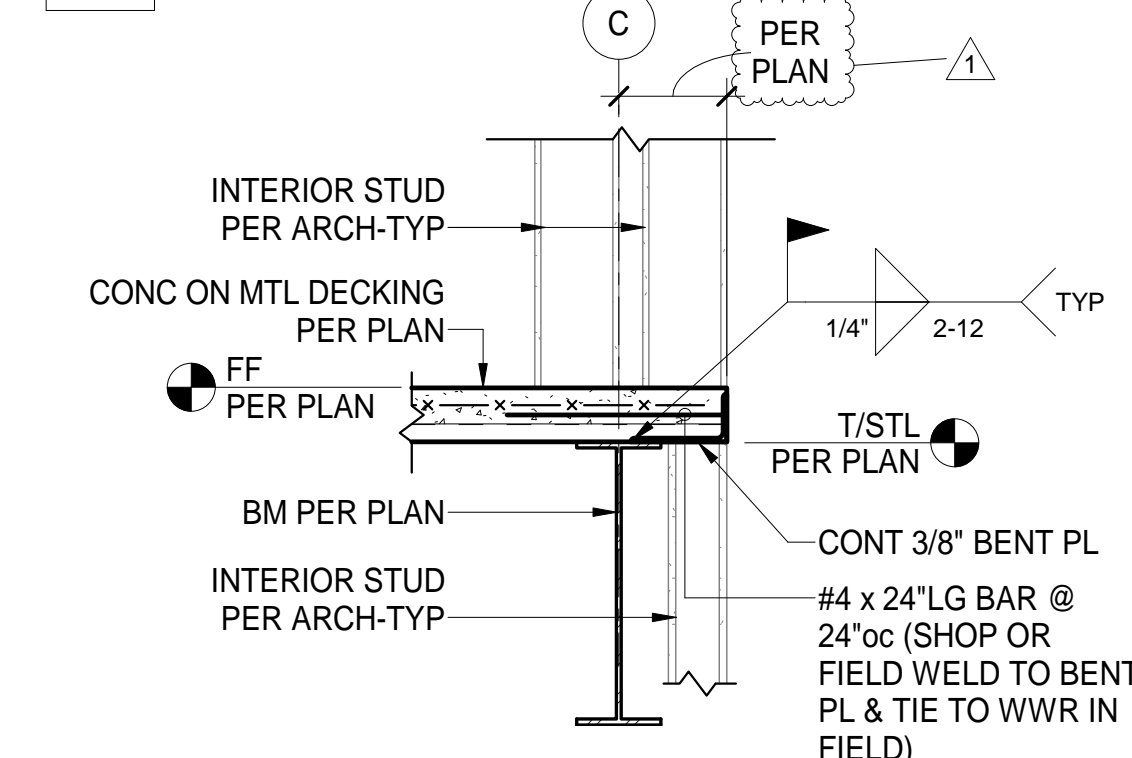
C STAIR FOUNDATION CALLOUT
S2.7 1/2" = 1'-0"



D STAIR FRAMING CALLOUT
S2.7 1/2" = 1'-0"



F FRAMING SECTION
S2.7 3/4" = 1'-0"



L FRAMING SECTION
S2.7 3/4" = 1'-0"

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REVISIONS
1 Rev #1 07-09-18

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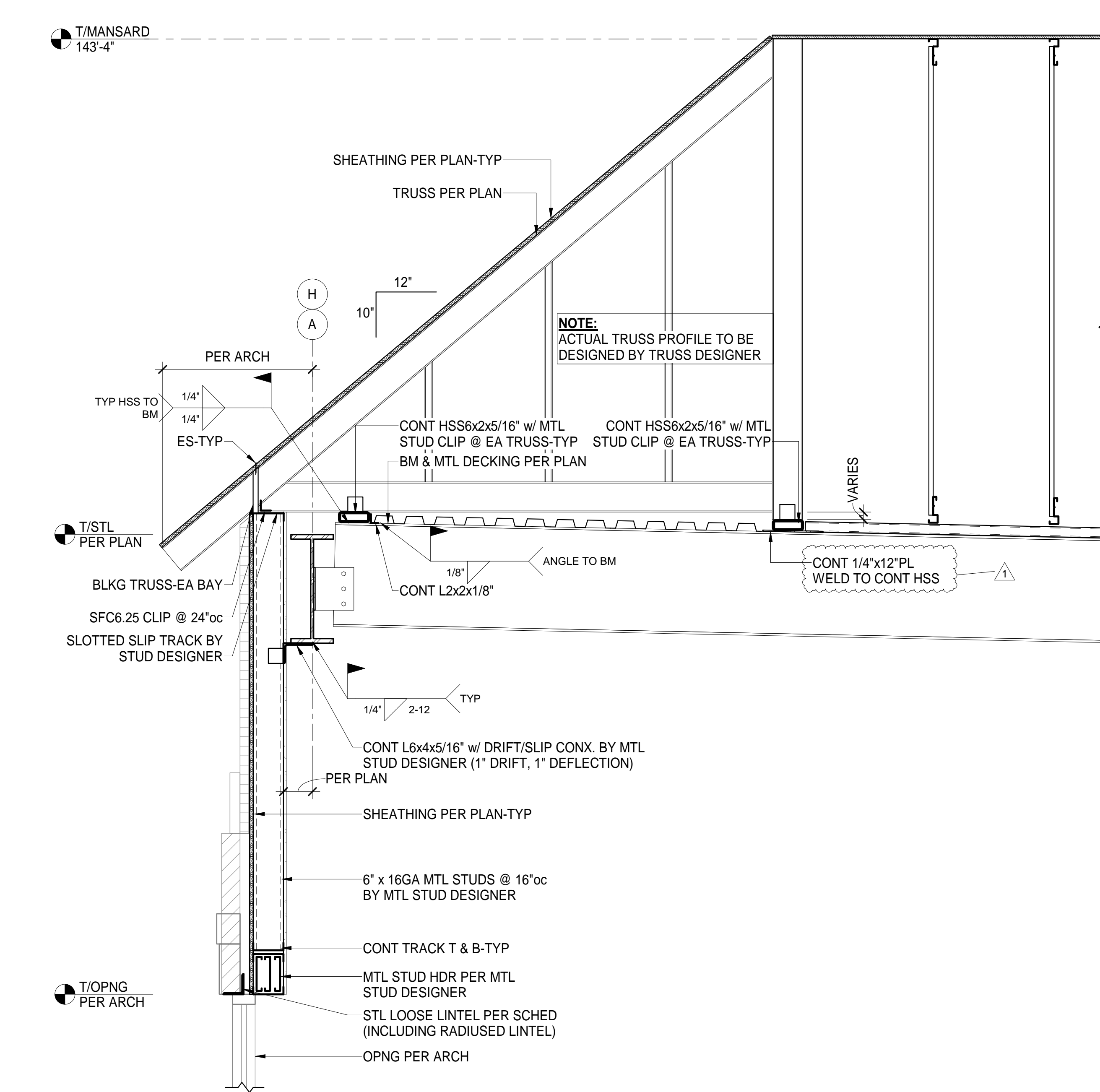
SHEET NO.

S2.7

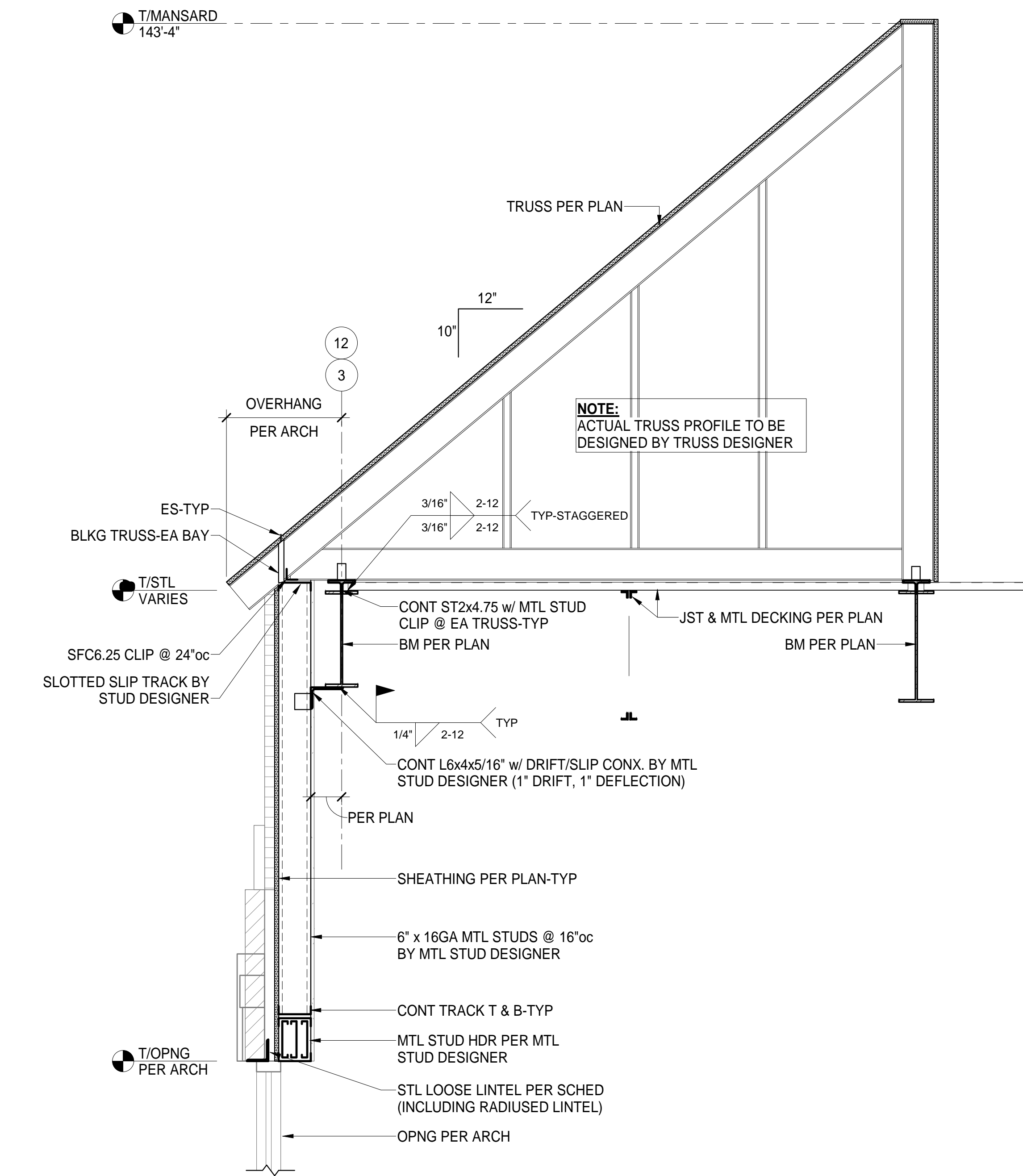
CALL OUTS @ STAIRWELL
LOCATIONS



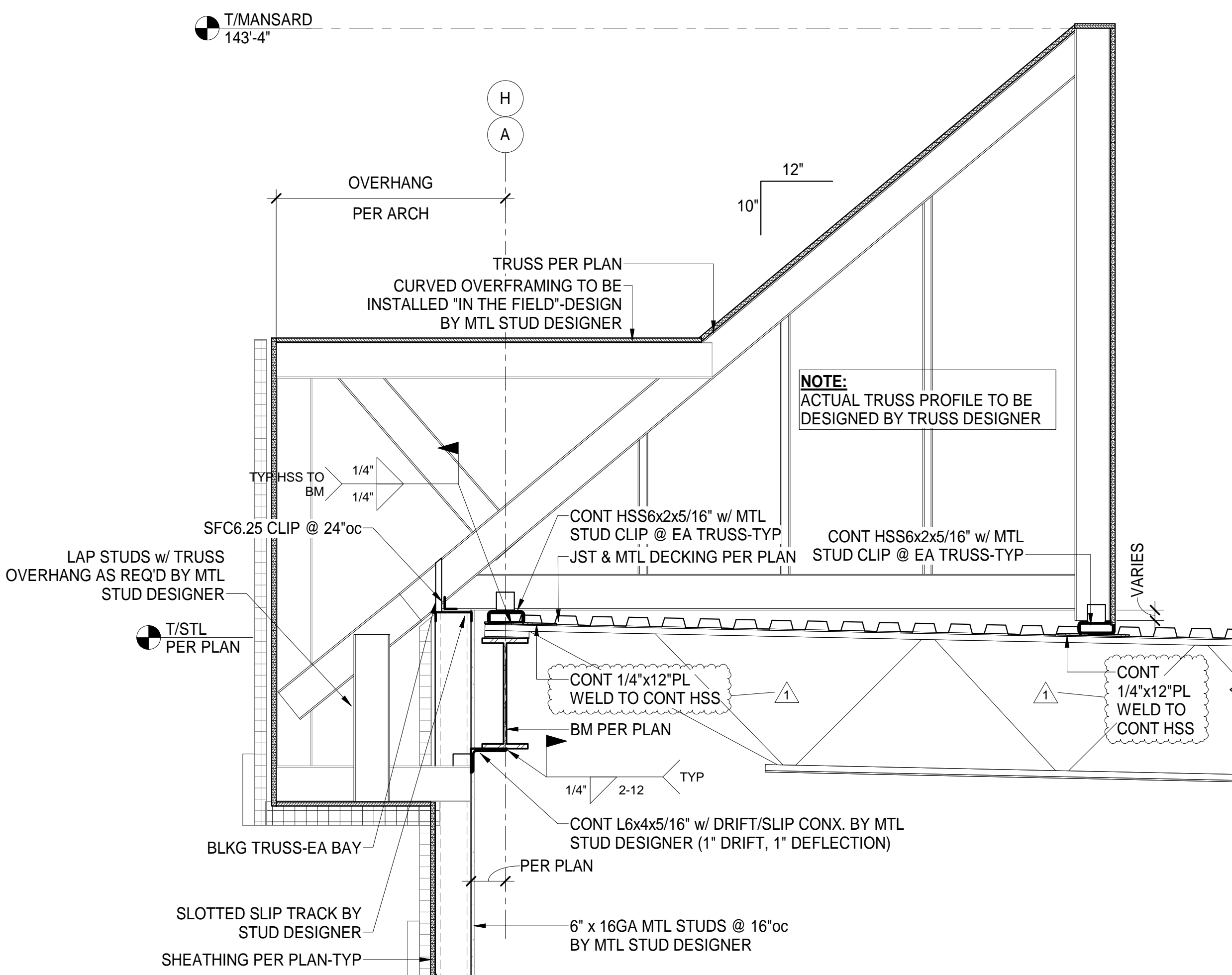




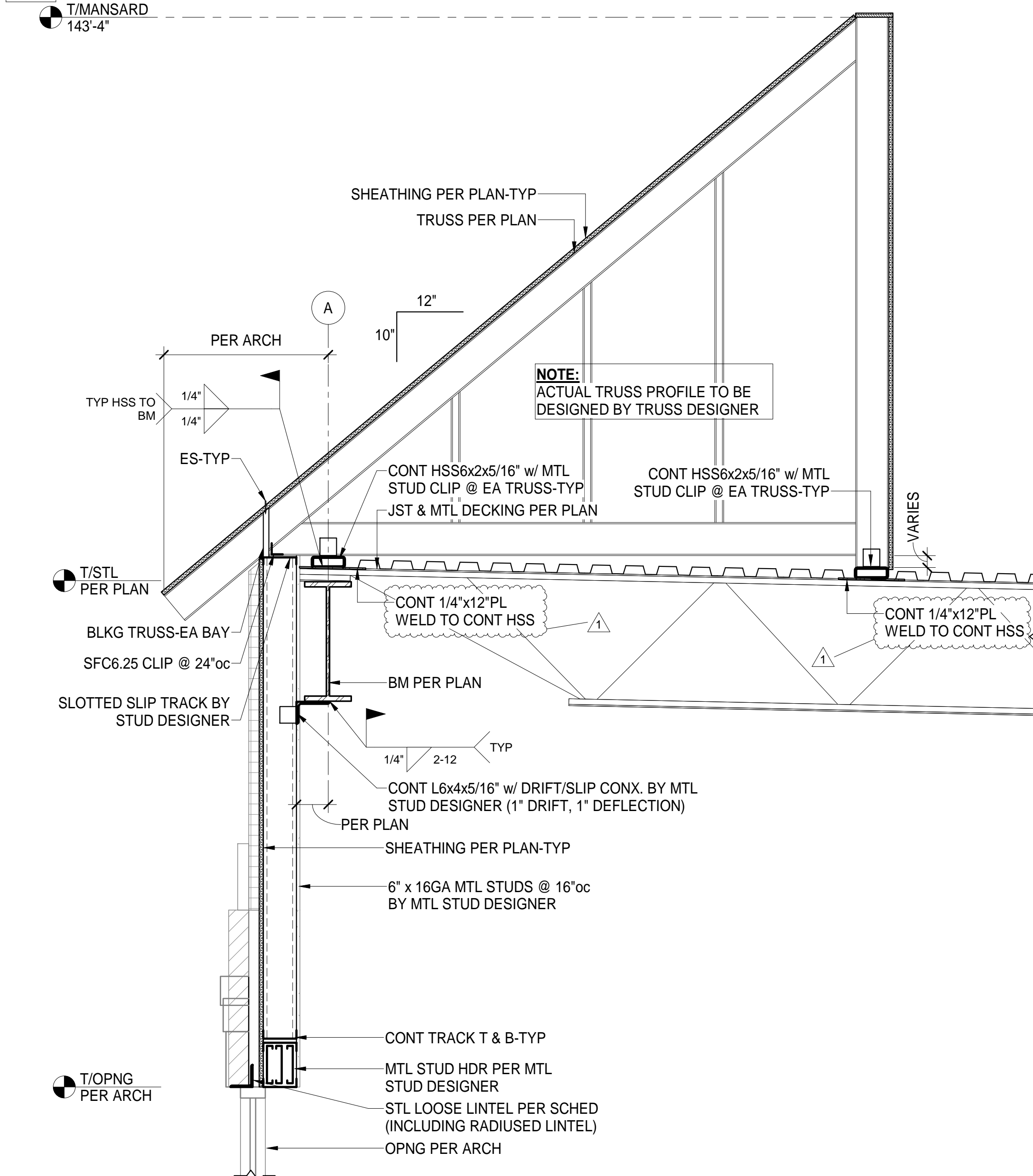
A FRAMING SECTION
S3.3 3/4" = 1'-0"



B FRAMING SECTION
S3.3 3/4" = 1'-0"



C FRAMING SECTION
S3.3 3/4" = 1'-0"



D FRAMING SECTION
S3.3 3/4" = 1'-0"

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SHEET NO.

S3.3
SECTIONS