GENERAL NOTES

GENERAL

1. THE STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2018 EDITION, AND ALL APPLICABLE REGULATIONS OF THE CITY OF LEE'S SUMMIT, MO.

2. THE LOADS THAT HAVE BEEN USED IN THE STRUCTURAL DESIGN INCLUDE THE FOLLOWING:

LIVE LOAD AT MEZZANINE PLATFORM	100 PSF
LIVE LOAD AT ROOF	20 PSF
SNOW LOAD DESIGN DATA:	PER ASCE 7-16
1. GROUND SNOW LOAD:	20 PSF
2. FLAT -ROOF SNOW LOAD	16 PSF
3. SNOW EXPOSURE FACTOR	1.0
4. SNOW LOAD IMPORTANCE FACTOR	1.1
5. DRIFT LOADING	REF. 2/S1.2
WIND LOADS DESIGN DATA (ULTIMATE):	PER ASCE 7-16
1. BASIC WIND SPEED	117 MPH
2. RISK CATEGORY	III
3. WIND EXPOSURE	C
4. INTERNAL PRESSURE COEFFICIENT (ENCLOSED)	± 0.18
5. COMPONENTS AND CLADDING PRESSURES	REF. 3/S1.2
EARTHQUAKE LOAD DESIGN DATA:	PER ASCE 7-16
1. RISK CATEGORY:	III
2. SEISMIC IMPORTANCE FACTOR, I_E:	1.25
3. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER	
Ss:	0.100
S1:	0.068
4. SITE CLASS	D
5. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER	
Sds:	0.106
Sd1:	0.109
6. SEISMIC DESIGN CATEGORY:	B
7. BASIC SEISMIC FORCE RESISTING SYSTEM(S):	STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
8. RESPONSE MODIFICATION COEFFICIENT(S), R:	3.00
9. ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE

ALL LIVE LOADS HAVE BEEN REDUCED BASED ON TRIBUTARY AREAS IN ACCORDANCE WITH CODE PROVISIONS AND HAVE BEEN APPLIED TO BOTH ALTERNATE AND ADJACENT SPANS WHERE APPROPRIATE TO DERIVE GOVERNING CONDITIONS.

DEAD LOADS HAVE BEEN CALCULATED TO INCLUDE THE ACTUAL WEIGHT OF ALL WORK SHOWN ON THE STRUCTURAL, MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS. NO OTHER EQUIPMENT SHALL BE PLACED ON OR HUNG FROM THE ROOF SYSTEM WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER. ROOF-MOUNTED HVAC UNITS SHALL BE PLACED WITHIN THE DESIGNATED AREAS SHOWN ON THE FRAMING PLANS.

3. COMPLETE SHOP DRAWINGS FOR THE STRUCTURAL WORK SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION, IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH REVIEW BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR CORRECT FABRICATION AND CONSTRUCTION OF THE WORK. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR MATERIALS PURCHASED PRIOR TO REVIEW OF SHOP DRAWINGS. THE CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMITTING THE DRAWINGS TO THE ARCHITECT/ENGINEER.

4. THE USE OF ELECTRONIC FILES OR REPRODUCTION OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SHALL NOT BE PERMITTED.

5. ANY DEVIATION FROM, ADDITION TO, SUBSTITUTION FOR, OR MODIFICATION TO THE STRUCTURE OR ANY PART OF THE STRUCTURE DETAILED ON THESE DRAWINGS SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN-WRITING" UNLESS IT IS CLEARLY NOTED THAT SPECIFIC CHANGES ARE BEING SUGGESTED.

6. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS OF ALL ARCHITECTURAL DETAILS. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL AND ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMPLETION OF THE SHOP DRAWINGS.

7. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.

8. PRINCIPAL OPENINGS ARE SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND OTHER OPENINGS NOT SHOWN. THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS, WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT. SIZE AND LOCATION OF ALL OPENINGS SHALL BE VERIFIED BY THE CONTRACTOR. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR APPROVAL PRIOR TO CONSTRUCTION.

9. THE STRUCTURAL DRAWINGS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.

10. THE GENERAL CONTRACTOR SHALL OBTAIN ALL CONTRACT DOCUMENTS & LATEST ADDENDA AND SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS OR FABRICATION OF ANY STRUCTURAL MEMBERS.

11. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE WORKMEN AND OTHER PERSONS DURING CONSTRUCTION.

12. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SHORING OF ALL STRUCTURAL WORK AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITION WHICH, IN HIS OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS IN THE STRUCTURE.

13. CONSTRUCTION MATERIALS SHALL NOT BE STORED ON FLOORS OR ROOFS IN EXCESS OF THE DESIGN LIVE LOADS WHICH ARE INDICATED ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENFORCE THIS REQUIREMENT. IMPACT SHALL BE AVOIDED WHEN PLACING MATERIALS ON FLOORS OR ROOFS.

14. CONSTRUCTION SEQUENCE SHALL BE COORDINATED BY THE CONTRACTOR AS REQUIRED FOR INSTALLATION OF ALL STRUCTURAL COMPONENTS.

15. FIELD INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER AS OUTLINED IN THE SPECIFICATIONS. INSPECTIONS SHALL BE PROVIDED BY A QUALIFIED AGENCY HIRED BY THE OWNER.

EARTHWORK AND FOUNDATIONS

1. THE FOUNDATION DESIGN IS BASED ON A SUBSURFACE EXPLORATION AND REPORT BY CFS ENGINEERS (PROJECT NO. 21-5355) DATED MAY 21, 2021. THE CONTRACTOR SHALL OBTAIN A COPY OF THIS REPORT, AND THE REPORT SHALL BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS.

2. A GEOTECHNICAL ENGINEER SHALL VERIFY THAT SOILS OF THE DESIGN BEARING CAPACITY HAVE BEEN ENCOUNTERED AND THAT THE BUILDING PAD IS SUITABLE FOR CONSTRUCTION.

3. THE FOUNDATION DESIGN IS BASED ON POTENTIAL SLAB TOTAL AND DIFFERENTIAL MOVEMENTS OF ONE (1) INCH AND ONE-HALF (1/2) INCH, RESPECTIVELY. THE SLAB/FOUNDATION DESIGN IS BASED ON THE "GEOTECHNICAL ENGINEERING RECOMMENDATIONS" SECTION OF THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL PREPARE THE SUBGRADE AS OUTLINED IN THE REPORT/SECTION.

4. CONTINUOUS AND ISOLATED FOOTINGS ARE DESIGNED FOR AN ALLOWABLE NET BEARING PRESSURE OF 2,500 PSF FOR TOTAL LOAD. THESE VALUES ARE APPLICABLE FOR FOOTINGS BEARING ON FAT CLAY OR LVC AS OUTLINED IN THE GEOTECHNICAL REPORT. ALL FOOTINGS MUST BEAR A MINIMUM OF 36 INCHES BELOW FINISH GRADE.

5. A QUALIFIED SOIL TECHNICIAN SHALL PERFORM SUFFICIENT IN- PLACE DENSITY TESTS DURING FILL OPERATIONS TO VERIFY THAT PROPER LEVELS OF COMPACTION ARE ATTAINED AND THAT FOOTINGS ARE BEARING ON THE PROPER MATERIAL. THE CONTRACTOR/OWNER SHALL USE THE SAME GEOTECHNICAL ENGINEER THAT PREPARED THE GEOTECHNICAL REPORT FOR FOUNDATION INSPECTIONS.

6. AFTER THE FOOTINGS HAVE BEEN EXCAVATED AND BEFORE REINFORCING STEEL PLACEMENT, A GEOTECHNICAL ENGINEER SHALL VERIFY SOILS OF THE DESIGN BEARING CAPACITY HAVE BEEN ENCOUNTERED. A WRITTEN REPORT, INCLUDING REMEDIAL ACTION, SHALL BE PROVIDED TO THE STRUCTURAL ENGINEER OF RECORD.

7. ALL GRADE BEAMS AND FOUNDATION WALLS SHALL BE FORMED OVER THEIR ENTIRE HEIGHT. EARTH FORMING IS NOT PERMITTED.

8. CONCRETE FOR SLABS ON FILL SHALL BE PLACED OVER A CONTINUOUS 15 MIL. MOISTURE BARRIER OVER A 4 INCH LAYER OF GRAVEL. ALL SEAMS SHALL BE LAPPED 12 INCHES AND TAPED. VAPOR BARRIER SHALL CONFORM TO ASTM E 1745 CLASS A AND ASTM E 96 WITH A PERMEANCE RATING OF 0.01 PERMS OR LOWER.

9. POSITIVE SITE DRAINAGE SHALL BE MAINTAINED TO DIVERT WATER AWAY FROM THE BUILDING AREAS. WEATHER PERIODS WILL PRODUCE PROBLEMS DUE TO SOIL SATURATION. CONSULT THE GEOTECHNICAL ENGINEER REPORT OR GEOTECHNICAL ENGINEER FOR METHODS OF IMPROVING HIGHLY SATURATED SOILS.

10. THE ABOVE REQUIREMENTS ARE A SUMMARY OF THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. CONTRACTOR SHALL NOT BE ABSOLVED FROM THE RESPONSIBILITY OF REVIEWING AND COMPLYING WITH THE ENTIRE GEOTECHNICAL REPORT.

CAST IN PLACE REINFORCED CONCRETE

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

2. STEEL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT WELDED REINFORCEMENT WHICH SHALL CONFORM TO ASTM A706, GRADE 60. REINFORCEMENT SHALL NOT BE WELDED UNLESS SHOWN ON THE DRAWINGS. ALL HOOKS SHALL BE STANDARD ACI 90 DEGREE UNLESS NOTED OTHERWISE.

3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185, GRADE 65. ALL WELDED WIRE FABRIC SHALL BE SUPPLIED IN FLAT SHEETS, NOT IN ROLLS. LAP WELDED WIRE FABRIC A MINIMUM OF 2 CROSSWIRE SPACINGS.

4. ALL CONCRETE SHALL UTILIZE NORMAL WEIGHT AGGREGATE UNLESS NOTED OTHERWISE.

5. CONCRETE SHALL MEET THE FOLLOWING PERFORMANCE CRITERIA:

LOCATION	28 DAY COMP. STRENGTH (f'c)	SLUMP (A)	MAX. W/C RATIO
FOOTINGS	3000 PSI	3" - 5"	-
GRADE BEAMS	3000 PSI	3" - 5"	0.45
SLAB ON GRADE (b, c)	3000 PSI	3" - 5"	0.50

NOTES:
a. CONCRETE SLUMPS GIVEN ARE AT THE POINT OF PLACEMENT.
b. ALL EXTERIOR SLABS SHALL CONTAIN 3%-6% OF AIR ENTRAINMENT.
c. MAXIMUM SLAB POUR SHALL NOT EXCEED A LENGTH OF 150 FEET IN EITHER DIRECTION NOR AN AREA OF 10,000 SQUARE FEET.

6. THE TESTING LABORATORY SHALL BE NOTIFIED AFTER THE MILD STEEL REINFORCEMENT AND EMBEDS ARE POSITIONED PRIOR TO EACH CONCRETE PLACEMENT. NO CONCRETE SHALL BE PLACED UNTIL THESE ITEMS ARE CHECKED AND APPROVED BY THE TESTING LABORATORY.

7. PERFORM SAWCUTS AS INDICATED ON THE FOUNDATION PLANS AS QUICKLY AS POSSIBLE AFTER PLACING CONCRETE WITHOUT DISLODGING AGGREGATE. ALL SAWCUTS SHALL BE COMPLETED WITHIN 8 HOURS OF CONCRETE PLACEMENT. SUSPENDED SLABS AND POST TENSION SLABS ON GRADE SHALL NOT HAVE SAWCUTS.

STEEL

1. STRUCTURAL STEEL SHALL BE NEW STEEL AND SHALL CONFORM TO THE AISC "SPECIFICATION FOR STRUCTURAL STEEL FOR BUILDINGS". BOLTED CONNECTIONS (UNLESS NOTED OTHERWISE) SHALL CONFORM TO THE REQUIREMENTS OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".

2. STEEL SHAPES AND FASTENERS SHALL CONFORM TO THE ASTM SPECIFICATIONS BELOW:

SHAPE	ASTM
WIDE FLANGE	A992
CHANNELS	A36
ANGLES	A36
HSS	A500 Gr. B
PIPE	A53 Gr. B
PLATES	A36 (or A572 Gr. 50)
BASE PLATES	REF. SCHED.

BOLTS	ASTM
HIGH STRENGTH BOLTS	A325 N
ANCHOR BOLTS	F1554, GRADE 55 (WELDABILITY PER F1554 SUPPLEMENT)

3. ALL STRUCTURAL STEEL CONNECTIONS AND DETAILS SHALL CONFORM TO THE AISC "CODE OF STANDARD PRACTICE FOR STEEL, BUILDINGS AND BRIDGES."

4. WELDED CONSTRUCTION SHALL CONFORM TO AWS D-1.1, "STRUCTURAL WELDING CODE." WELDING PROCESSES AND OPERATORS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATIONS PROCEDURE." ELECTRODES FOR FIELD AND SHOP WELDS SHALL BE E70XX, U.N.O.

5. SHEAR STUDS SHALL CONFORM TO ASTM A108, HEADED ANCHORS.

6. STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT AS SHOWN ON THE DRAWINGS.

7. ALL STEEL BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.

8. ALL CONNECTIONS OF NON-COMPOSITE BEAMS SHALL BE DESIGNED BY THE FABRICATOR UNLESS OTHERWISE INDICATED. CONNECTIONS SHALL BE DESIGNED TO RESIST A FORCE OF 55% OF THE AISC ALLOWABLE BEAM LOAD, OR THE REACTION SPECIFIED, WHICHEVER IS GREATER. ALL CONNECTION DESIGN REACTIONS SHALL BE NOTED ON THE SHOP DRAWINGS.

9. ALL EXTERIOR STEEL EXPOSED TO WEATHER, INCLUDING LINTELS, SHALL BE HOT-DIPPED GALVANIZED. FABRICATOR TO PREPARE MATERIAL TO BE GALVANIZED TO MEET THE GALVANIZER'S REQUIREMENTS AND THE SPECIFICATIONS.

10. CONNECTION DETAILS SHALL TAKE INTO CONSIDERATION CONSTRUCTION SEQUENCING AND POSSIBLE OBSTRUCTIONS FROM ADJACENT COMPONENTS SUCH AS RETAINING WALLS.

11. GROUT AT STEEL COLUMN BASE PLATES SHALL BE NON-SHRINK, NON-METALLIC AGGREGATE TYPE, COMPLYING WITH ASTM C1107 AND CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI AT 28 DAYS.

STEEL JOISTS

1. FABRICATION AND ERECTION OF ALL OPEN WEB STEEL JOISTS, JOIST GIRDERS, AND BRIDGING SHALL CONFORM TO THE STANDARDS OF THE STEEL JOIST INSTITUTE.

2. JOIST MANUFACTURER SHALL PROVIDE CAMBER IN COMFORMANCE WITH SJI SPECIFICATIONS.

3. ALL BRIDGING SHALL BE WELDED OR BOLTED AT THE ENDS. ALL JOISTS SHALL BE WELDED AT THE ENDS, UNLESS SHOWN OTHERWISE. ALL JOIST GIRDERS SHALL BE BOLTED AT THE ENDS, UNLESS SHOWN OTHERWISE. BRIDGING SHALL BE DESIGNED FOR A NET WIND UPLIFT AS NOTED.

4. ANY HANGERS SUPPORTED FROM JOISTS SHALL BE LOCATED AT TOP OR BOTTOM CHORD PANEL POINTS AND SHALL BE CONNECTED WITHOUT FIELD WELDING OR DRILLING HOLES IN JOISTS.

5. MECHANICAL DUCTS, ELECTRICAL EQUIPMENT, CONDUIT, LIGHTING FIXTURES, AND PIPING SHALL NOT BE SUPPORTED FROM JOIST BRIDGING.

6. ALL PIPING LARGER THAN 4" DIAMETER RUNNING PARALLEL TO JOISTS SHALL BE SUPPORTED FROM A MINIMUM OF 2 JOISTS AND SUPPORTED AT PANEL POINTS ONLY.

7. ALL PIPING LARGER THAN 4" DIAMETER RUNNING PERPENDICULAR TO JOISTS SHALL BE SUPPORTED AT PANEL POINTS FROM AT LEAST EVERY SECOND JOIST.

8. PIPING LOADS EXCEEDING 4 PSF SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

CURTAINWALL & STOREFRONT CONNECTIONS / SUPPORT

1. GLAZED CURTAINWALL MANUFACTURER SHALL PROVIDE ALL BRACING AND CONNECTIONS TO THE STRUCTURE. CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MISSOURI SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW.

METAL DECKING

1. ALL METAL DECKING SHALL COMPLY WITH THE SPECIFICATIONS OF THE STEEL DECK INSTITUTE FOR DESIGN AND ERECTION. GALVANIZED DECKS SHALL CONFORM TO ASTM A653. PAINTED DECKS SHALL CONFORM TO ASTM A1008.

2. METAL DECKING SHALL BE INSTALLED CONTINUOUSLY ACROSS 3 OR MORE SPANS. IF LESS THAN THREE SPANS ARE UTILIZED TEMPORARY SHORING MAY BE REQUIRED PER MANUFACTURER'S RECOMMENDATIONS. DECKING SHALL BE ATTACHED TO STEEL, JOISTS AND FRAMEWORK IMMEDIATELY AFTER ALIGNMENT.

3. UNLESS NOTED OTHERWISE, ROOF DECK SHALL BE 22 GAUGE, 1-1/2" WIDE RIB DECK (TYPE B), ASTM A1008 STRUCTURAL QUALITY, MINIMUM YIELD POINT OF 33,000 PSI, WITH MANUFACTURER'S STANDARD BAKED ON COATING. REF. 1/S1.2 FOR DECK ATTACHMENT. PROVIDE 5/8" DIA. PUDDLE WELDS AT 6" O.C. AT PERIMETER.

4. ALL DECK IS TO BE FABRICATED TO RUN CONTINUOUSLY OVER ALL OPENINGS. DO NOT CUT OPENING IN DECK PRIOR TO INSTALLING SUPPORT FRAMING BELOW.

5. SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.

6. FLOOR DECK REINFORCING SHALL BE SUPPORTED AT MID-DEPTH OF CONCRETE ABOVE FLUTES.

7. DECK FINISH SHALL BE REPAIRED WITH TOUCH-UP PAINT IMMEDIATELY AFTER WELDING TO PREVENT CORROSION.

COLD FORMED METAL FRAMING

1. COLD FORMED METAL FRAMING MANUFACTURER SHALL DESIGN THE COMPLETE METAL FRAMING SYSTEM, INCLUDING BUT NOT LIMITED TO BRACING AND CONNECTIONS TO THE METAL STRUCTURE, UNLESS SHOWN ON STRUCTURAL DRAWINGS. CALCULATIONS AND SHOP DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MISSOURI SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW. GENERAL CONTRACTOR SHALL PROVIDE ALL COLD FORMED METAL FRAMING AS REQUIRED.

2. WITH EACH TYPE OF METAL FRAMING REQUIRED, PROVIDE MANUFACTURER'S STANDARD STEEL RUNNERS (TRACKS), BLOCKING LINTELS, CLIP ANGLES, SHOES, REINFORCEMENTS, FASTENERS, AND ACCESSORIES AS RECOMMENDED BY MANUFACTURER FOR APPLICATIONS INDICATED, AS NEEDED TO PROVIDE A COMPLETE METAL FRAMING SYSTEM.

3. FOR 16 GAUGE AND HEAVIER STUDS AND JOISTS, FABRICATE COMPONENTS OF STEEL SHEET WITH A MINIMUM YIELD POINT OF 50,000 PSI, CONFORMING TO ASTM A653 AND C955.

4. FOR 16 GAUGE AND HEAVIER TRACK, FABRICATE COMPONENTS OF STEEL SHEET WITH A MINIMUM YIELD POINT OF 33,000 PSI, CONFORMING TO ASTM A653 AND C955.

5. FOR 18 GAUGE AND LIGHTER STUDS, JOISTS, AND TRACK, FABRICATE COMPONENTS OF STEEL SHEET WITH A MINIMUM YIELD POINT OF 33,000 PSI, CONFORMING TO ASTM A653 AND C955.

6. PROVIDE MANUFACTURER'S STANDARD GALVANIZED FINISH TO METAL FRAMING COMPONENTS COMPLYING WITH ASTM A653.

7. THE COLD FORMED FRAMING DESIGN SHALL INCLUDE BUT SHALL NOT BE LIMITED TO THE FOLLOWING DESIGN ELEMENTS:
   - WALL STUDS INCLUDING JAMB LOCATIONS
   - HEADERS DESIGNED FOR GRAVITY AND LATERAL LOADING
   - TOP AND BOTTOM TRACKS INCLUDING ATTACHMENTS AT SLIP TRACKS
   - ALL CONNECTIONS SHALL SPECIFY SIZE AND QUANTITY OF FASTENERS
   - ANY BRACING OF METAL STUDS REQUIRED THAT IS NOT INDICATED ON THE STRUCTURAL DRAWINGS

8. MAXIMUM ALLOWABLE DEFLECTION FOR VERTICAL LIGHT GAUGE MEMBERS BACKING BRICK IS L/600 (L/360 FOR OTHER MATERIALS). DEFLECTION CALCULATIONS SHALL BE BASED ON ABSOLUTE DEFLECTIONS (NOT RELATIVE DEFLECTIONS).

9. DEFLECTION OF VERTICAL STUDS WITH PARAPET SHALL BE CALCULATED BASED ON ABSOLUTE DEFLECTION, NOT RELATIVE DEFLECTION.

REINFORCED MASONRY

1. ALL REINFORCED MASONRY SHALL CONFORM TO THE PROVISIONS OF ACI 530.1/ASCE 6 (WITH EXCEPTIONS NOTED IN THE SPECIFICATIONS). CONSTRUCTION SHALL BE RUNNING BOND UNLESS NOTED OTHERWISE.

2. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 NORMAL WEIGHT UNITS WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 1900 PSI.

3. MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR S. AGGREGATES FOR MORTAR SHALL CONFORM TO ASTM C144. MORTAR SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.

4. GROUT SHALL CONFORM TO ASTM C476. AGGREGATES FOR GROUT SHALL CONFORM TO ASTM C-404. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.

5. MASONRY CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'm) OF 1900 PSI AT 28 DAYS.

6. SPECIAL INSPECTION SHALL BE PROVIDED AS PRESCRIBED IN THE SPECIAL INSPECTION NOTES.

7. BOND BEAMS SHALL BE CONSTRUCTED WITH PORTLAND CEMENT GROUT HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS, AND A MAXIMUM AGGREGATE SIZE OF 3/4".

8. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT WELDED REINFORCEMENT SHALL CONFORM TO ASTM A706, GRADE 60.

9. HORIZONTAL JOINT REINFORCEMENT SHALL BE FACTORY FABRICATED, LADDER TYPE, 9 GAGE WIRE CONFORMING TO ASTM A82, AND PLACED AT 16" ON CENTER (TYPICAL U.N.O.).

10. ALL CELLS CONTAINING REINFORCEMENT, BOLTS, OR OTHER METAL ANCHORS SHALL BE GROUTED SOLID. ANY CELLS AT OR BELOW GRADE SHALL BE GROUTED SOLID, WHETHER REINFORCED OR NOT.

11. BOND BEAM REINFORCING SHALL CONTINUE THROUGH CONTROL JOINTS AT ALL FLOOR AND ROOF LEVELS AS WELL AS AT ALL LINTEL LOCATIONS.

12. ALL WALLS AND LINTELS SHALL BE TEMPORARILY BRACED/SHORED AS REQUIRED UNTIL CONSTRUCTION IS COMPLETE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING/SHORING.

13. CONTROL JOINTS SHALL NOT BE PLACED ABOVE OR WITHIN 2'-0" OF OPENINGS OR WITHIN A BOND BEAM. NOTIFY THE STRUCTURAL ENGINEER OF ANY CONTROL JOINTS VIOLATING THESE CRITERIA PRIOR TO STARTING WALL CONSTRUCTION.

14. CONTRACTOR SHALL PROVIDE CONTROL JOINTS IN CMU CONSTRUCTION. JOINT SPACING SHALL NOT EXCEED 1.5 TIMES THE WALL HEIGHT (1.5 x H) OR 25 FEET, WHICHEVER IS LESS. PROVIDE A JOINT WITHIN 10 FEET OF ALL WALL CORNERS. COORDINATE ALL JOINT LOCATIONS WITH ARCHITECTURE AND SUBMIT A JOINT LAYOUT PLAN TO ARCHITECT/ENGINEER FOR REVIEW & APPROVAL.

WELDING NOTES

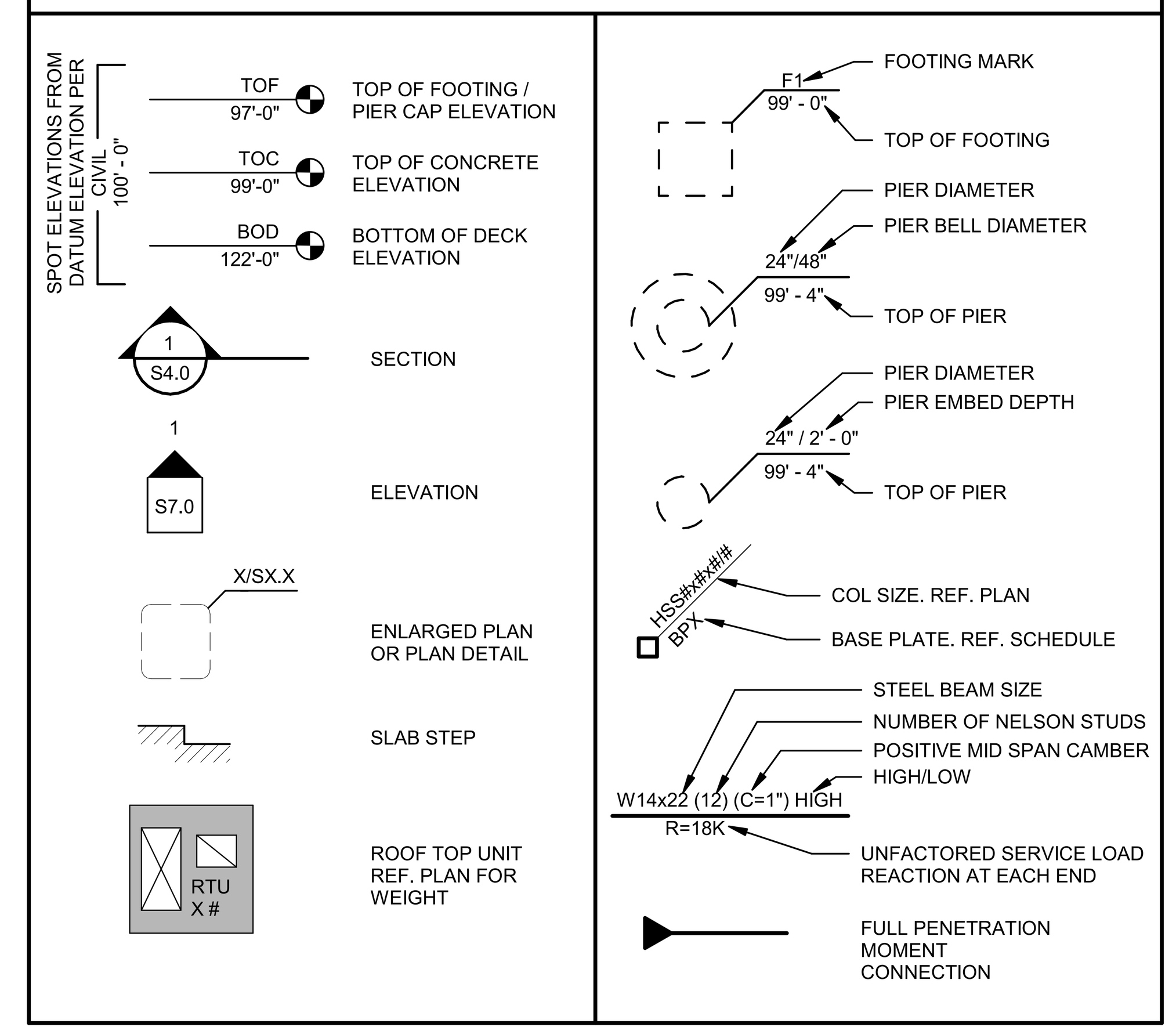
1. WHEN WELDS ARE NOT CALLED OUT ON THE DRAWINGS, THEY ARE MINIMUM SIZE CONTINUOUS FILLET WELDS IN ACCORDANCE WITH AWS D1.1. FILLET WELDS NOT SPECIFIED AS TO LENGTH SHALL BE CONTINUOUS.

2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL GROOVE WELD SHALL BE FULL PENETRATION.

3. PROVIDE FILLET WELDS AT ALL CONTACT JOINTS BETWEEN STEEL MEMBERS SUFFICIENT TO DEVELOP THAT ALLOWABLE TENSILE STRENGTH OF THE SMALLER MEMBER AT THE JOINT UNLESS NOTED OTHERWISE ON THE DRAWINGS.

4. WELDING OF METAL FORM DECK SHALL CONFORM TO AWS D1.3.

SYMBOL LEGEND



STANDARD ABBREVIATIONS

ABBREV.	MEANING	ABBREV.	MEANING
&	AND	H.R.	HAND RAILS
@	AT	HT.	HEIGHT
#	POUNDS (LBS.)	I.D.	INSIDE DIAMETER
A.B.	ANCHOR BOLT	I.F.	INSIDE FACE
A/C	AIR CONDITIONING	IN.	INCH
ADD.	ADDENDUM	INSUL.	INSULATION
ADD'L	ADDITIONAL	INT.	INTERIOR
AESS	ARCH. EXPOSED STRUCT. STL.	JNT.	JOINT
AFF	ABOVE FINISH FLOOR	JST.	JOIST
AHU	AIR HANDLING UNIT	K	KIP (1000 LB.)
ALT.	ALTERNATE	KSF	KIPS PER SQUARE FOOT
ARCH.	ARCHITECT	LAM.	LAMINATED
B.L.	BRICK LEDGE	LBS.	POUNDS
BLDG.	BUILDING	LDG.	LANDING
BLKG.	BLOCKING	LGTH.	LENGTH
BM.	BEAM	LOC.	LOCATION
BO	BOTTOM OF	LT.	LIGHT
BOC	BOTTOM OF CONCRETE	L.W.C.	L.W.CONCRETE
BOD	BOTTOM OF DECK	MAT'L.	MATERIAL
BOS	BOTTOM OF STEEL	MAX.	MAXIMUM
BOT.	BOTTOM	MECH.	MECHANICAL
BOW	BOTTOM OF WALL	MFR.	MANUFACTURER
BRDG.	BRIDGING	M.O.	MASS OPENING
BRG.	BEARING	MTL.	METAL
BTWN.	BETWEEN	N/A	NOT APPLICABLE
C/C	CENTER TO CENTER	N.I.C.	NOT IN CONTRACT
C.I.P.	CAST IN PLACE	NO.	NUMBER (#)
C.J.	CONTROL JOINT	N.T.S.	NOT TO SCALE
C.J.	CONSTRUCTION JOINT	O.A.	OVERALL
CHAN.	CHANNEL	O.C.	ON CENTER
CL.	CENTER LINE	O.D.	OUTSIDE DIA.
CLG.	CEILING	O.F.	OUTSIDE FACE
CLR.	CLEAR	O.F.D.	OVERFLOW DRAIN
CMU.	CONC. MAS. UNIT	O.H.	OPPOSITE HAND
COL.	COLUMN	OPNG.	OPENING
CONC.	CONCRETE	O.S.B.	ORIENTED STRAND BOARD
CONN.	CONNECTION	PAF	POWDER ACTUATED FASTENER
CONS.	CONSTRUCTION	P.C.	PRECAST
CONT.	CONTINUOUS	PEMB	PRE-ENGINEERED MTL. BLDG.
CONTR.	CONTRACTOR	PG.	PAGE
CTR.	CENTER	P.L.	PROPERTY LINE
d	PENNY	PL.	PLATE
DBA	DEFORMED BAR ANCHOR	PLBG.	PLUMBING
DEP.	DEPRESSION	PLWD	PLYWOOD
DIA.	DIAMETER (D)	PNL.	PANEL
DIAG.	DIAGONAL	PRELIM.	PRELIMINARY
DIM.	DIMENSION	PSF	LBS. PER SQ. FT.
DN.	DOWN	PSI	LBS. PER SQ. IN.
DTL.	DETAIL	P.T.	POST TENSION
DWG.	DRAWING	PTD.	PAINTED
DWL.	DOWEL	RAD.	RADIUS (R)
EA.	EACH	R.C.P.	REINF. CONC. PIPE
E.F.	EACH FACE	R.D.	ROOF DRAIN
E.J.	EXPANSION JOINT	REINF.	REINFORCING(ED)
EL.	ELEVATION	REQ'D.	REQUIRED
ELEV.	ELEVATOR	REV.	REVISION
EMBED	EMBEDMENT (OR EMBEDDED)	RND.	ROUND
ENG.	ENGINEER	RTU	ROOF TOP UNIT
ESC.	ESCALATOR	SECT.	SECTION
EQ.	EQUAL	SHT.	SHEET
EQUIP.	EQUIPMENT	SIM.	SIMILAR
E.W.	EACH WAY	SPA.	SPACE(S)(ING)
EXIST.	EXISTING	SPEC.	SPECIFICATION
EXH.	EXHAUST	STD.	STANDARD
EXP.	EXPANSION	STIFF.	STIFFENER
EXT.	EXTERIOR	STL.	STEEL
F.D.	FLOOR DRAIN	STRUCT.	STRUCTURE
F.F.	FINISHED FLOOR	SQ.	SQUARE
FIN.	FINISH	SUSP.	SUSPENDER
FK	FOOT KIPS	TO	TOP OF
FLR.	FLOOR	TOC	TOP OF CONCRETE
FND.	FOUNDATION	TOF	TOP OF FOOTING
FT.	FEET	TOP	TOP OF PIER
FTG.	FOOTING	TOS	TOP OF STEEL
F.V.	FIELD VERIFY	TOW	TOP OF WALL
GA.	GAUGE	U.N.O.	UNLESS NOTED OTHERWISE
GALV.	GALVANIZED	VERT.	VERTICAL
GRDR.	GIRDER	w/	WITH
GYP.	GYPSUM	WD	WOOD
GYP.BD.	GYPSUM BOARD	W.F.	WIDE FLANGE
HCA	HEADED CONCRETE ANCHOR	w/o	WITHOUT
HORIZ.	HORIZONTAL	W.W.F.	WELDED WIRE FABRIC
H.P.	HIGH POINT		

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REVISIONS

STATE OF MISSOURI
JOHN EDWARD KIMBLE
NUMBER PE-2007011069
PROFESSIONAL ENGINEER
08/19/21

Drawing Title
GENERAL NOTES

Job No. 204530
Drawn CRS
Scale AS NOTED
Date 08/19/2021
Sheet No. S1.0

SPECIAL INSPECTIONS PER IBC 2018

1. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER IBC SECTION 1704. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING INSPECTION.
2. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN IBC SECTION 110.
3. REPORTS:

   A. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT THE WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS.

   B. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.

   C. A FINAL REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PERIODICALLY AT A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF THE WORK.
4. INSPECTIONS REQUIRED:

REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION (SECTION 1705.3 AND TABLE 1705.3)

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD(A)	IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318 CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. REINFORCING BAR WELDING:				
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706	-	X	AWS D1.4 ACI 318: 26.6.4	-
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND	X	-		
C. INSPECT ALL OTHER WELDS	-	X		
3. INSPECT ANCHORS CAST IN CONCRETE	-	X	ACI 318: 17.8.2	
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.(B)				
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	-	ACI 318: 17.8.2.4	-
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	-	X	ACI 318: 17.8.2	
5. VERIFY USE OF REQUIRED MIX DESIGN	-	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.5.3-26.5.5	1908.9
9. INSPECT PRESTRESSED CONCRETE FOR:				
A. APPLICATION OF PRESTRESSING FORCES; AND	X	-	ACI 318: 26.10	-
B. GROUTING OF BONDED PRESTRESSING TENDONS	X	-		
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: CH. 26.9	-
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 26.11.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 26.11.1(B)	-

(A) WHERE APPLICABLE, SEE ALSO SECTION 1705.10, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.
(B) SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH IN ACI 355.2, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF WORK.

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION (SECTION 1705.2)

STRUCTURAL STEEL (SECTION 1705.2.1 & AISC 360-16)

SPECIAL INSPECTIONS OF STEEL ELEMENTS SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360

TYPE	QUALITY CONTROL	QUALITY ASSURANCE
QA AGENCY PROVIDING SPECIAL INSPECTIONS SHALL PROVIDE PERSONNEL MEETING THE MINIMUM QUALIFICATION REQUIREMENTS FOR INSPECTION AND NONDESTRUCTIVE TEST NDT PER AISC 360-10 SECTION N4.		
VERIFY FABRICATOR AND ERECTOR QUALITY CONTROL PROGRAM PER AISC 360 SECTION N2.		
VISUAL WELDING INSPECTION OF WELDS BY BOTH QC AND QA PERSONNEL SHALL BE PER TABLES LISTED IN AISC 360 SECTION N5.		
INSPECTION TASK FOR WELDING • PRIOR TO WELDING PER AISC 360 TABLE N5.4-1. • DURING WELDING PER AISC 360 TABLE N5.4-2. • AFTER WELDING PER AISC 360 TABLE N5.4-3.	X	X
INSPECTION TASKS FOR BOLTING • PRIOR TO BOLTING PER AISC 360 TABLE N5.6-1. • DURING BOLTING PER AISC 360 TABLE N5.6-2. • AFTER BOLTING PER AISC 360 TABLE N5.6-3.	X	X
NONDESTRUCTIVE TESTING FOR WELDS • NON-DESTRUCTIVE TESTING (NDT) OF WELDING JOINTS PER AISC 360 N.5 • RISK CATEGORY FOR DETERMINATION OF EXTENT OF NDT PER ASCI 360 N5.5b IS NOTED IN THE DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL REQUIREMENTS. • NDT PERFORMED SHALL BE DOCUMENTED AND REPORTS SHALL IDENTIFY THE TESTED WELD BY PIECE MARK AND LOCATION IN THE PIECE • FOR FIELD WORK, NDT REPORT SHALL IDENTIFY THE TESTED WELD BY LOCATION IN THE STRUCTURE, PIECE MARK AND LOCATION IN THE PIECE	X	X

COLD-FORMED STEEL DECK (SECTION 1705.2.2 & SDI)

SPECIAL INSPECTIONS OF COLD-FORMED STEEL DECK SHALL BE IN ACCORDANCE WITH QUALITY ASSURANCE INSPECTION REQUIREMENTS OF SDI

TYPE	QUALITY CONTROL	QUALITY ASSURANCE
INSPECTION TASKS FOR COLD-FORMED METAL DECK • INSPECTION TASKS FOR DECK PLACEMENT: REFER TO SDI-QA/QC-2017 TABLE 1.1-1.2 • INSPECTION TASKS FOR DECK WELDING: REFER TO SDI-QA/QC-2017 TABLE 1.3-1.5 • INSPECTION TASKS FOR MECHANICAL DECK FASTENERS: REFER TO SDI-QA/QC-2017 TABLE 1.6-1.8	X	X

STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (1705.2.3 AND TABLE 1705.2.3)

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODICAL SPECIAL INSPECTION
1. INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS		
A. END CONNECTIONS - WELDING OR BOLTED	-	X
B. BRIDGING - HORIZONTAL OR DIAGONAL	-	
1. STANDARD BRIDGING	-	X
2. BRIDGING THAT DIFFERS FROM THE SJI SPECIFICATIONS LISTED IN SECTION 2207.1	-	X

LEVEL B QUALITY ASSURANCE FOR MASONRY CONSTRUCTION BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES TMS 402/ACI 530/ASCE 5 (TABLE 1.19.2)

MINIMUM TESTS

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5 B.1.B.3 FOR SELF-CONSOLIDATING GROUT.

VERIFICATION OF f'_m AND f'_{ACC} IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE.

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY (A)		REFERENCE FOR CRITERIA	
	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	TMS 402/ ACI 530/ ASCE 5	TMS 602/ ACI 530.1/ ASCE 6
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS.	-	X		ART. 1.5
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR.	-	X		ART. 2.1, 2.6A
B. CONSTRUCTION OF MORTAR JOINTS.	-	X		ART. 3.3B
C GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.	-	X		ART. 2.4B, 2.4H
D. LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.	X	-		ART. 3.4, 3.6A
E. PRESTRESSING TECHNIQUE.	-	X		ART. 3.6B
F. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X(B)	X (C)		ART. 2.1C
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE.	X	-		ART. 3.2.D, 3.2F
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES.	X	-	SEC. 1.16	ART. 2.4, 2.4
C PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.	X	-	SEC. 1.16	ART. 3.2E, 3.4, 3.6A
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.	-	X		ART. 2.6B, 2.4G.1.B
E. CONSTRUCTION OF MORTAR JOINTS.	-	X		ART. 3.3B
4. VERIFY DURING CONSTRUCTION:				
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	-	X		ART. 3.3F
B. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.	X	-	ACI 318: 5.9, 5.10	
C WELDING OF REINFORCEMENT.	X	-	SEC. 2.1.8.7.2, 3.3.3.4(C), 8.3.3.4(B)	
D. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURE ABOVE 90°F (32.2°C))	-	X		ART 1.8.C, 1.8D
E. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.	-	X		ART 3.6B
F. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE.	-	X		ART.3.5.3.6C
G. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS.	X(B)	X (C)		ART. 3.3B.9, 3.3F.1.B
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	-	X		ART. 1.4B.2.A.3, 1.4B.2.B.3, 1.4B.2.C.3,1.4B.3, 1.4B.4

(A) FREQUENCY REFERS TO THE FREQUENCY OF SPECIAL INSPECTION, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODIC DURING THE LISTED TASK, AS DEFINED IN THE TABLE.
(B) REQUIRED FOR THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.
(C) REQUIRED AFTER THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS (SECTION 1705.6 AND TABLE 1705.6)

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODICAL SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X

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No	Date	Remarks
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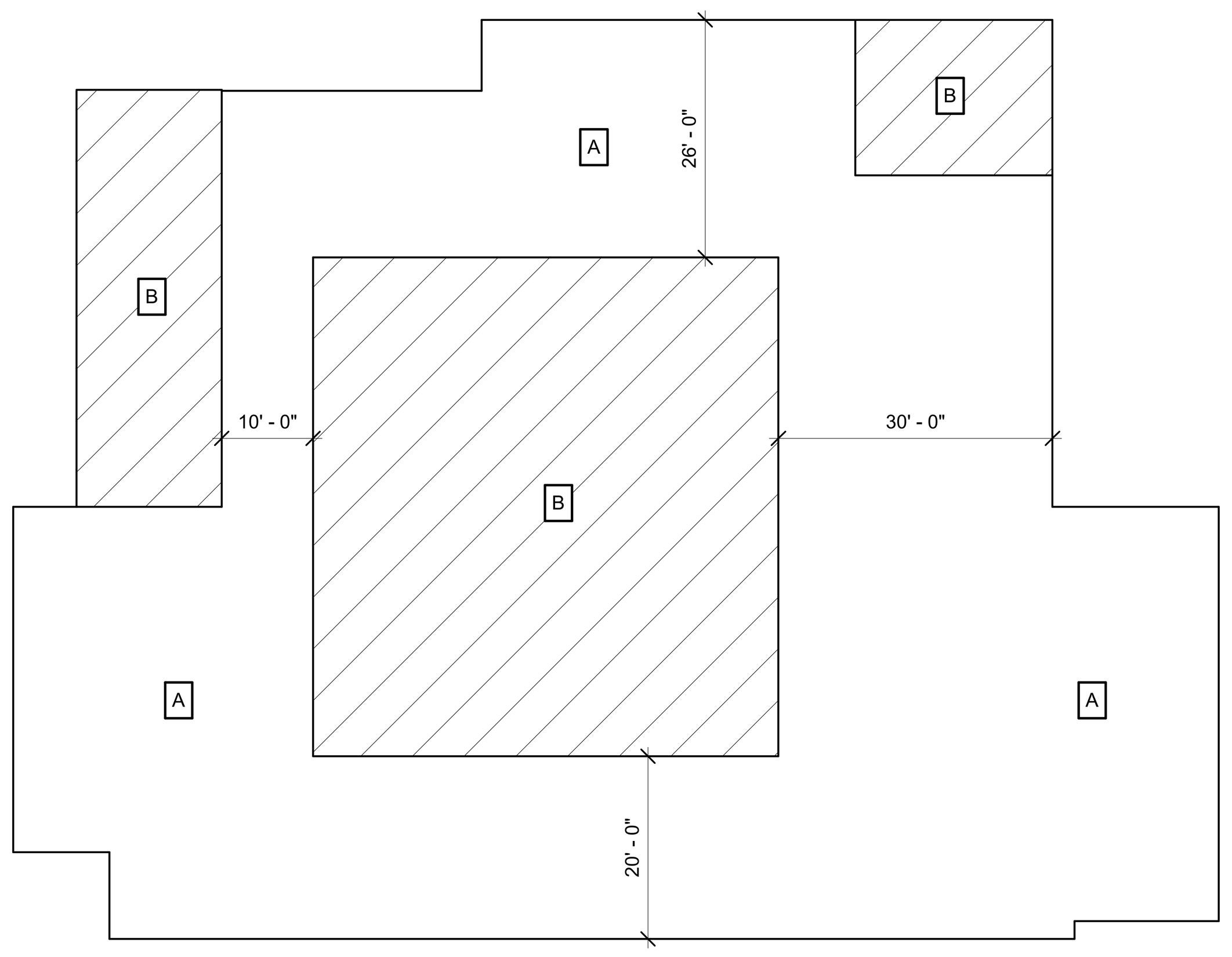
REVISIONS

STATE OF MISSOURI
JOHN EDWARD KIMBLE
NUMBER PE-2007011069
PROFESSIONAL ENGINEER
08/19/21

Drawing Title
SPECIAL INSPECTIONS

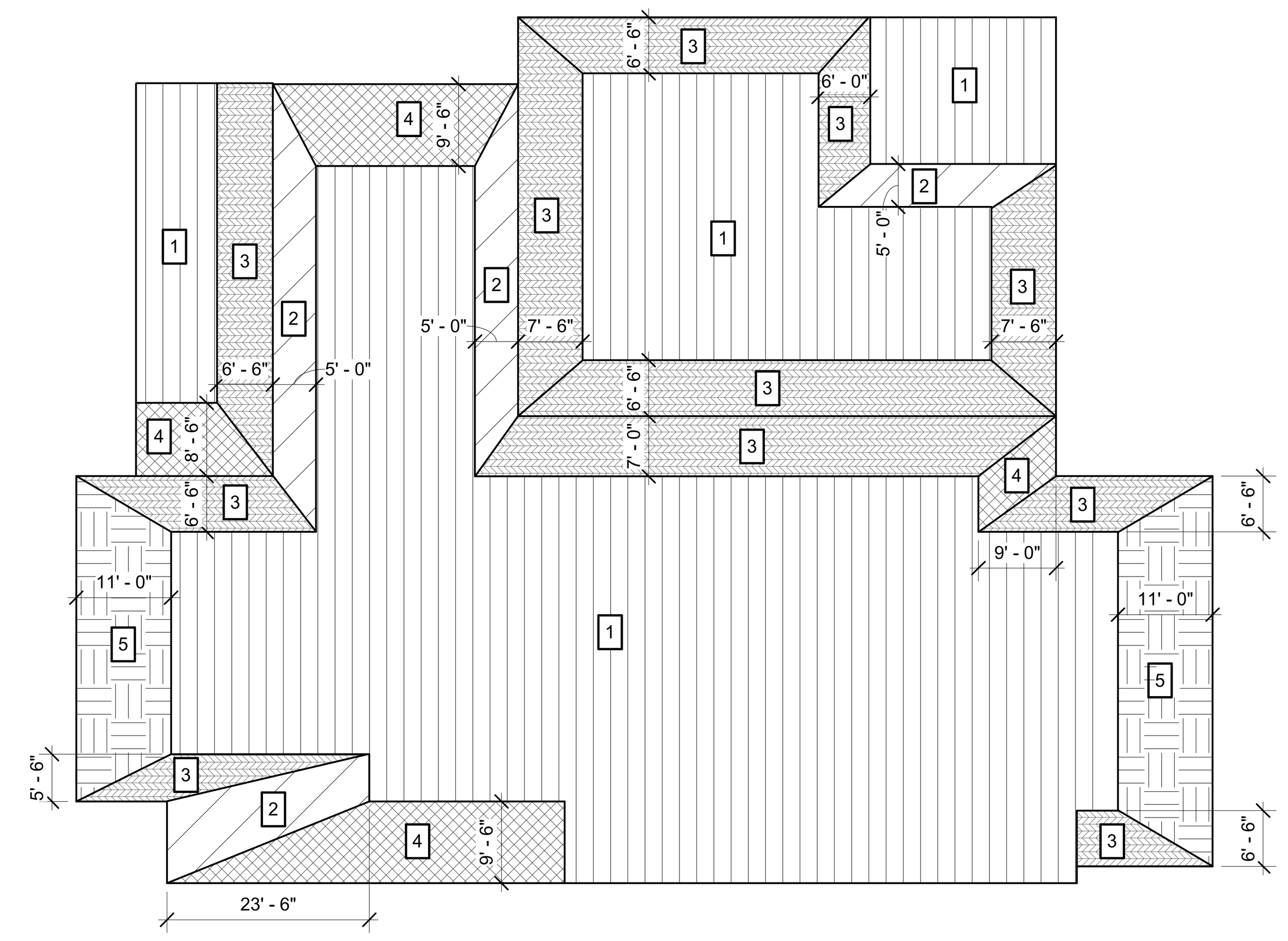
Job No. 204530
Drawn CRS
Scale AS NOTED
Date 08/19/2021
Sheet No. S1.1



1 DECK ATTACHMENT DIAGRAM
1/16" = 1'-0"

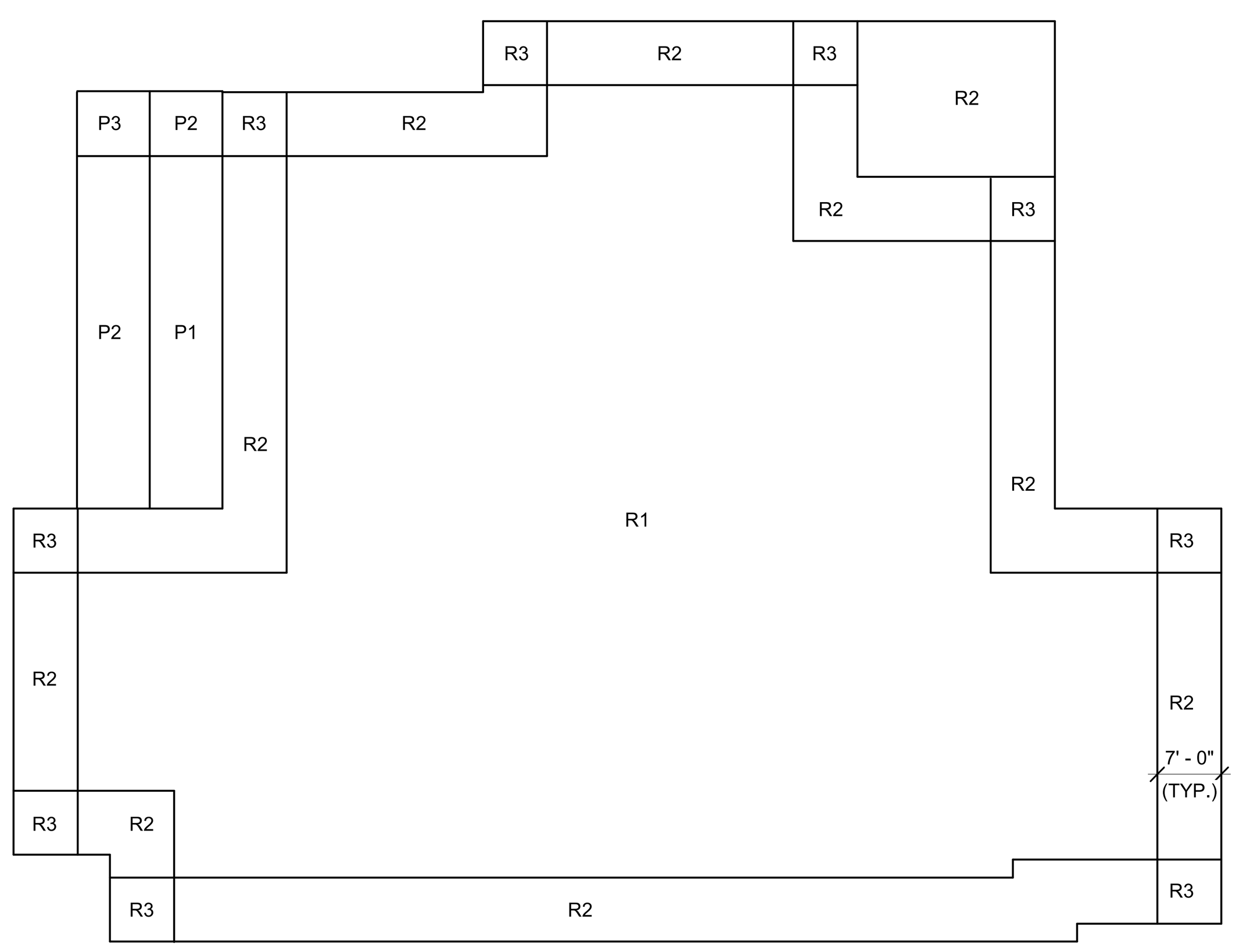
DECK NOTES:

1. TYPE A: PROVIDE 1 1/2" - 22 GA. METAL DECK . ATTACH TO SUPPORTS w/ 5/8" PUDDLE WELDS IN 36/7 PATTERN. FASTEN SIDELAPS w/ (6)-#10 TEK SCREWS.
2. TYPE B: PROVIDE 1 1/2" - 22 GA. METAL DECK . ATTACH TO SUPPORTS w/ 5/8" PUDDLE WELDS IN 36/4 PATTERN. FASTEN SIDELAPS w/ (5)-#10 TEK SCREWS.



2 SNOW DRIFT DIAGRAM
1/16" = 1'-0"

1 UNIFORM SNOW LOAD = 14 PSF
2 TOTAL DRIFT SNOW LOAD = 35 PSF
3 TOTAL DRIFT SNOW LOAD = 45 PSF
4 TOTAL DRIFT SNOW LOAD = 55 PSF
5 TOTAL DRIFT SNOW LOAD = 60 PSF



3 WIND UPLIFT PRESSURE DIAGRAM
1/16" = 1'-0"

ULTIMATE WIND PRESSURE FOR COMPONENTS & CLADDING

ZONE R	DESCRIPTION	POSITIVE PRESSURE (PSF)			NEGATIVE PRESSURE (PSF)		
		EFF. WIND AREA (FT^2)			EFF. WIND AREA (FT^2)		
		10	100	500	10	100	500
R1	TYP. ROOF INTERIOR	12	10	10	48	38	30
R2	TYP. ROOF EDGE	12	10	10	64	50	41
R3	TYP. ROOF CORNER	12	10	10	87	60	41
R4	TYP. WALL INTERIOR	28	24	21	30	26	23
R5	TYP. WALL EDGE	28	24	21	37	29	23

ZONE P (OPEN)	DESCRIPTION	POSITIVE PRESSURE (PSF)			NEGATIVE PRESSURE (PSF)		
		EFF. WIND AREA (FT^2)			EFF. WIND AREA (FT^2)		
		20	80	200	20	80	200
P1	TYP. ROOF INTERIOR	11	10	10	29	27	27
P2	TYP. ROOF EDGE	11	10	10	44	33	32
P3	TYP. ROOF CORNER	11	10	10	61	36	32

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/14/2021

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JOHN EDWARD KIMBLE
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08/19/21

Drawing Title
TYPICAL DIAGRAMS

Job No. 204530
Drawn CRS
Scale AS NOTED
Date 08/19/2021

Sheet No.
S1.2

FOOTING SCHEDULE

FOOTING MARK	FOOTING DIM.	BOT. REINF. (EA. WAY, U.N.O.)	COMMENTS
F4	4'-0"x4'-0"x1'-4"	4- #7	-
F5	5'-0"x5'-0"x1'-4"	5- #7	-
F6	6'-0"x6'-0"x1'-6"	7- #7	NOTE 2
F7	7'-0"x7'-0"x1'-6"	8- #7	NOTE 2

NOTE:

1. CENTER FOOTINGS ON COL'S, TYP. U.N.O.
2. TOP REINF. TO MATCH BOTTOM REINF.

1 SCHEDULE

BASE PLATE SCHEDULE

BASE PLATE MARK	BASE PLATE T x D x W	BASE PLATE TYPE	BASE PLATE GRADE	ANCHOR BOLT NO., DIA., EMBEDMENT	COLUMN WELD SIZE (F)	COMMENTS
BP1	3/4" x 10" x 0'-10"	A	36 KSI	(4) - 3/4" x 1'-0"	5/16	E = 1 1/2"
BP2	3/4" x 12" x 1'-0"	A	36 KSI	(4) - 3/4" x 1'-0"	5/16	E = 1 1/2"
BP3	1" x 16" x 2'-0"	B	50 KSI	(4) - 1 1/4" x 1'-2"	5/16	E = 2 1/4"
BP4	1" x 14" x 1'-2"	A	50 KSI	(4) - 1 1/4" x 1'-2"	5/16	E = 2 1/4"
BP5	1 1/2" x 16" x 2'-4"	A	50 KSI	(4) - 1 1/4" x 1'-2"	7/16	E = 2 1/4"

NOTES:

1. REF. 4/S1.3 FOR TYPICAL BASE PLATE DETAILS
2. F- MIN. FILLET WELD SIZE COLUMN TO BASE PLATE.

2 SCHEDULE

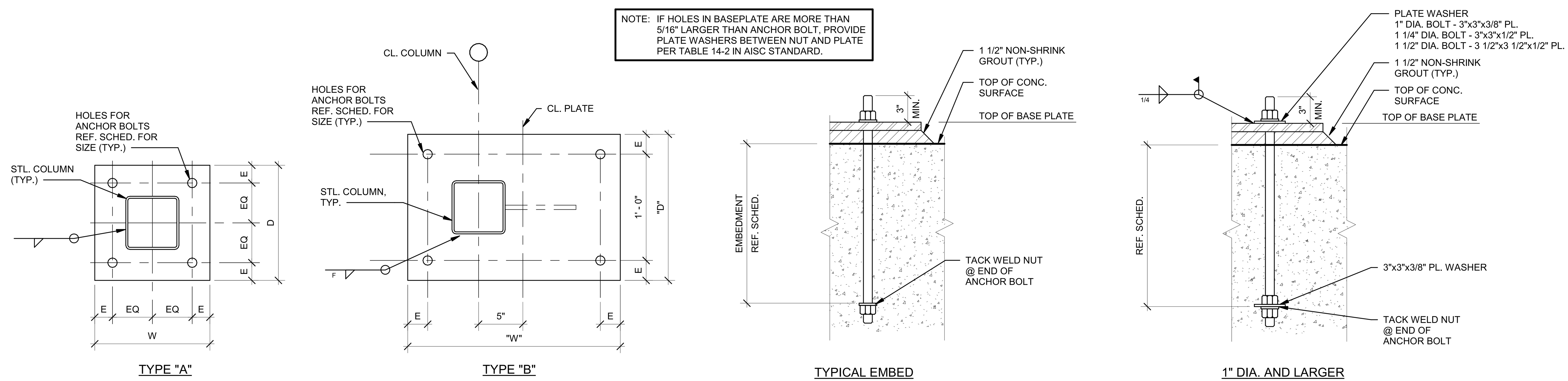
BAR SPLICE SCHEDULE

f'c	SPLICE CLASS	BAR SIZE #3	#4	#5	#6	#7	#8	#9	#10	#11
3000	CLASS A 1.0 Ld	17	22	28	33	48	55	62	70	78
	CLASS B 1.3 Ld	23	29	37	43	63	72	81	91	102
4000	CLASS A 1.0 Ld	15	19	24	29	42	48	54	61	67
	CLASS B 1.3 Ld	20	25	32	38	55	63	71	80	88
5000	CLASS A 1.0 Ld	13	17	22	26	38	43	48	54	60
	CLASS B 1.3 Ld	17	23	29	34	50	56	63	71	78
6000	CLASS A 1.0 Ld	12	16	20	24	34	39	44	50	55
	CLASS B 1.3 Ld	16	21	26	32	45	51	58	65	72

NOTES:

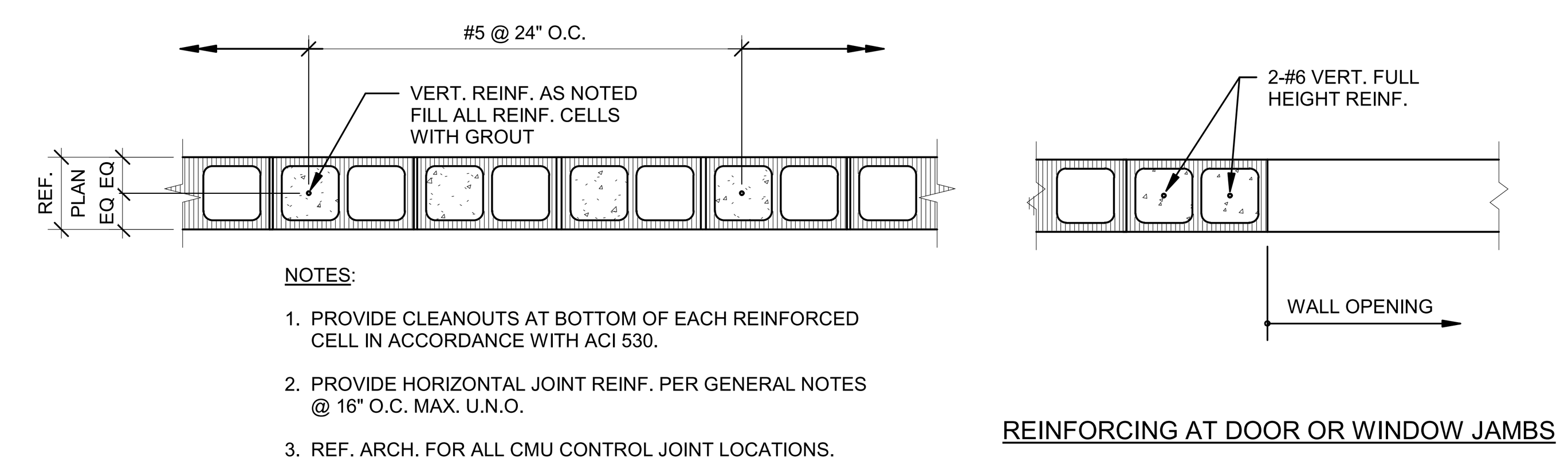
1. USE THE DEVELOPMENT LENGTH AND LAP SPLICE TABLE FOR BEAMS, JOISTS COLUMNS, WALLS, SLABS, ETC. WHEN THE CLEAR SPACING OF BARS IS GREATER THAN 2 BAR DIAMETERS AND THE CLEAR COVER IS NOT LESS THAN 1 BAR DIAMETER.
2. WHEN THE CLEAR SPACING OF BARS IS LESS THAN OR EQUAL TO 2 BAR DIAMETERS, OR WHEN THE CLEAR COVER IS LESS THAN 1 BAR DIAMETER, MULTIPLY DEVELOPMENT AND SPLICE LENGTHS LISTED IN THE TABLE BY 1.50.
3. TENSION DEVELOPMENT LENGTH = Ld. LENGTHS LISTED IN THE TABLE ARE IN INCHES.
4. PROVIDE LAP SPLICE LENGTH BASED ON THE LARGER BAR BEING OVERLAPPED WHEN BARS OF DIFFERENT SIZES ARE SPLICED. 5. FOR TOP BARS, MULTIPLY THE DEVELOPMENT AND SPLICE LENGTHS BY 1.3. TOP BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

3 SCHEDULE



4 BASE PLATES

1 1/2" = 1'-0"



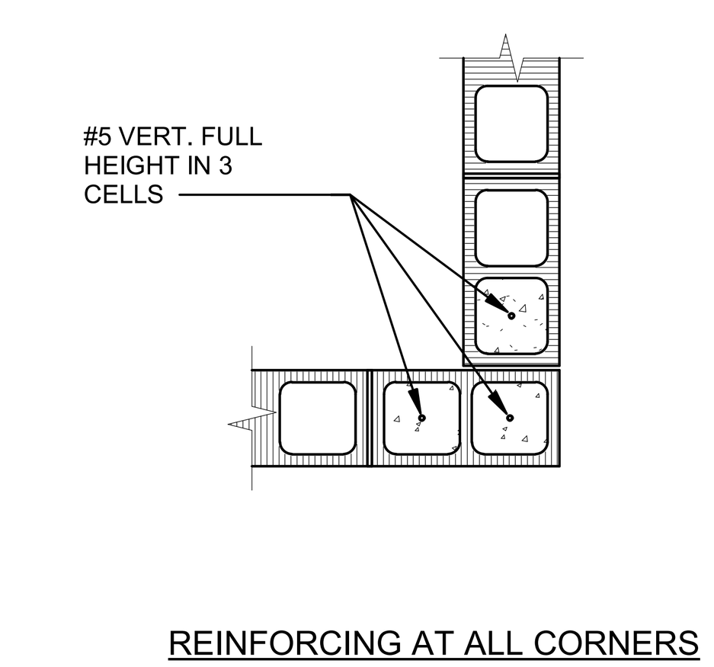
NOTES:

1. PROVIDE CLEANOUTS AT BOTTOM OF EACH REINFORCED CELL IN ACCORDANCE WITH ACI 530.
2. PROVIDE HORIZONTAL JOINT REINF. PER GENERAL NOTES @ 16" O.C. MAX. U.N.O.
3. REF. ARCH. FOR ALL CMU CONTROL JOINT LOCATIONS.

REINFORCING AT DOOR OR WINDOW JAMBS

MASONRY REINF. LAP LENGTH			
BAR SIZE	HORIZ. REINF.	VERT. REINF. 1 BAR	VERT. REINF. 2 BARS
4	3'-6"	3'-6"	3'-6"
5	5'-6"	4'-5"	4'-5"
6	11'-1"	7'-5"	7'-5"
7	15'-0"	8'-7"	9'-0"

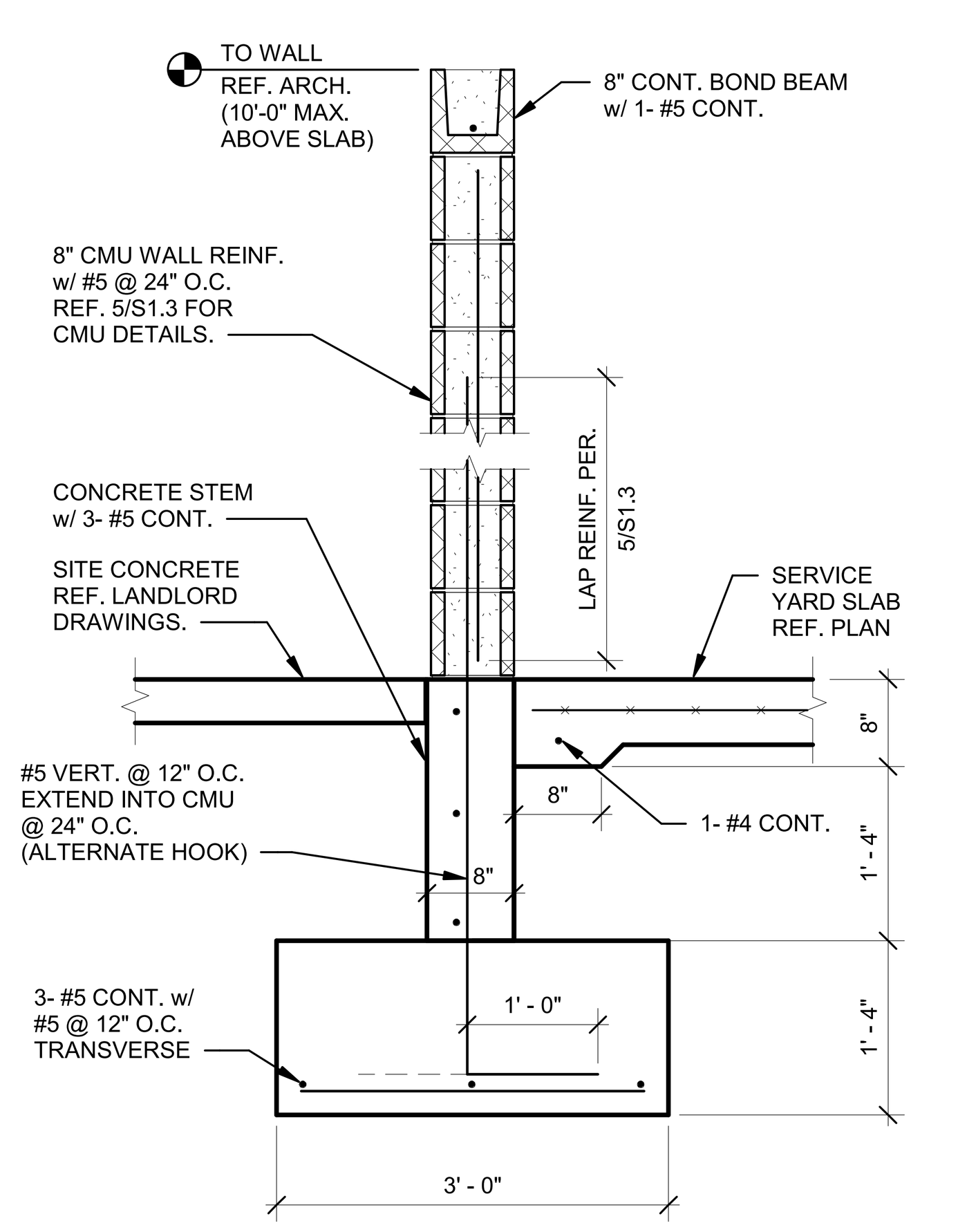
REINFORCING AT EXT. & INT. WALLS



REINFORCING AT ALL CORNERS

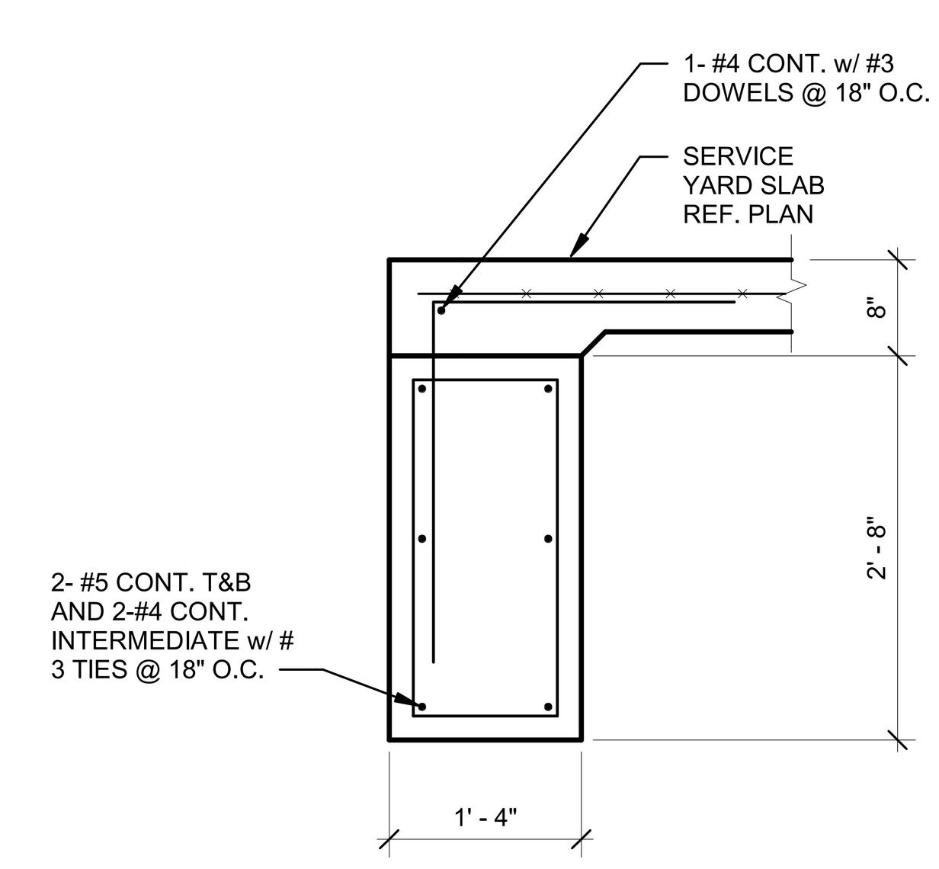
5 TYPICAL DETAIL

3/4" = 1'-0"



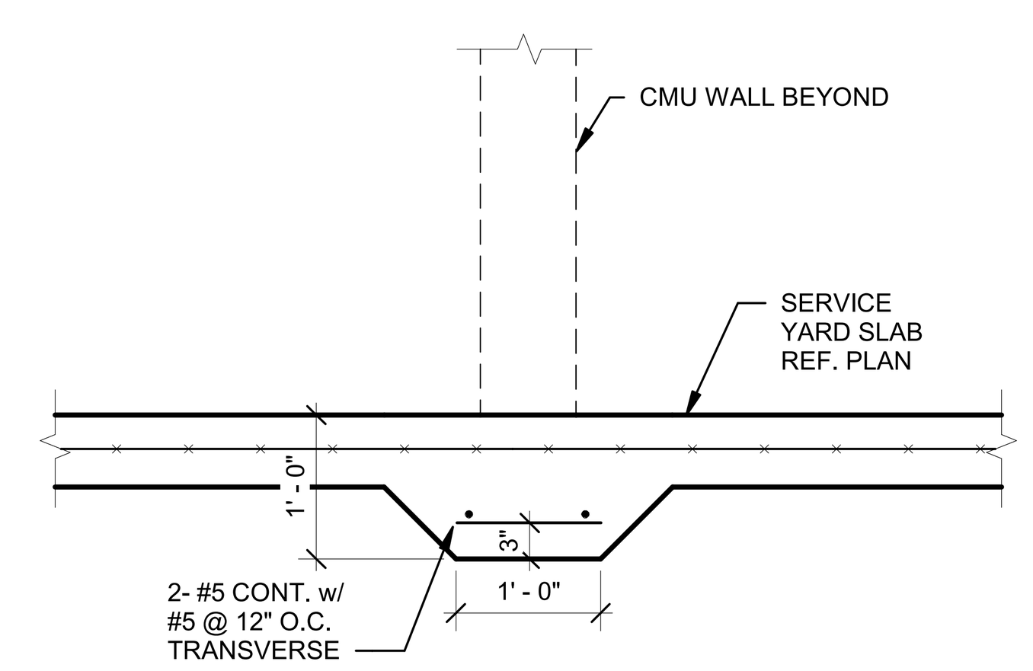
6 SECTION

3/4" = 1'-0"



7 SECTION

3/4" = 1'-0"

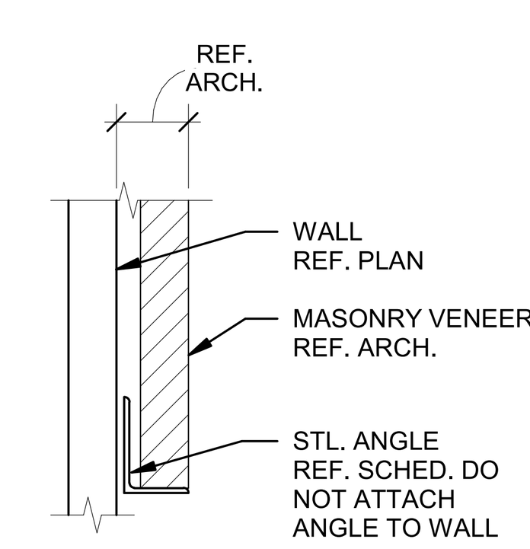


8 SECTION

3/4" = 1'-0"

LOOSE LINTEL SCHEDULE

MASONRY OPENING (MAX.)	ANGLE SIZE	MINIMUM END BEARING
_< 4'-0"	L4x4x1/4	6"
4'-0" TO 6'-0"	L5x5x5/16	8"
6'-0" TO 8'-0"	L6x4x5/16 (LLV)	12"
8'-0" TO 10'-2"	L7x4x3/8 (LLV)	12"



9 SCHEDULE

1 : 1

RELEASE FOR CONSTRUCTION
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10/14/2021

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WINERY & RESTAURANT
540 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086

No	Date	Remarks
	2021/08/19	ISSUED FOR PERMIT

REVISIONS

STATE OF MISSOURI
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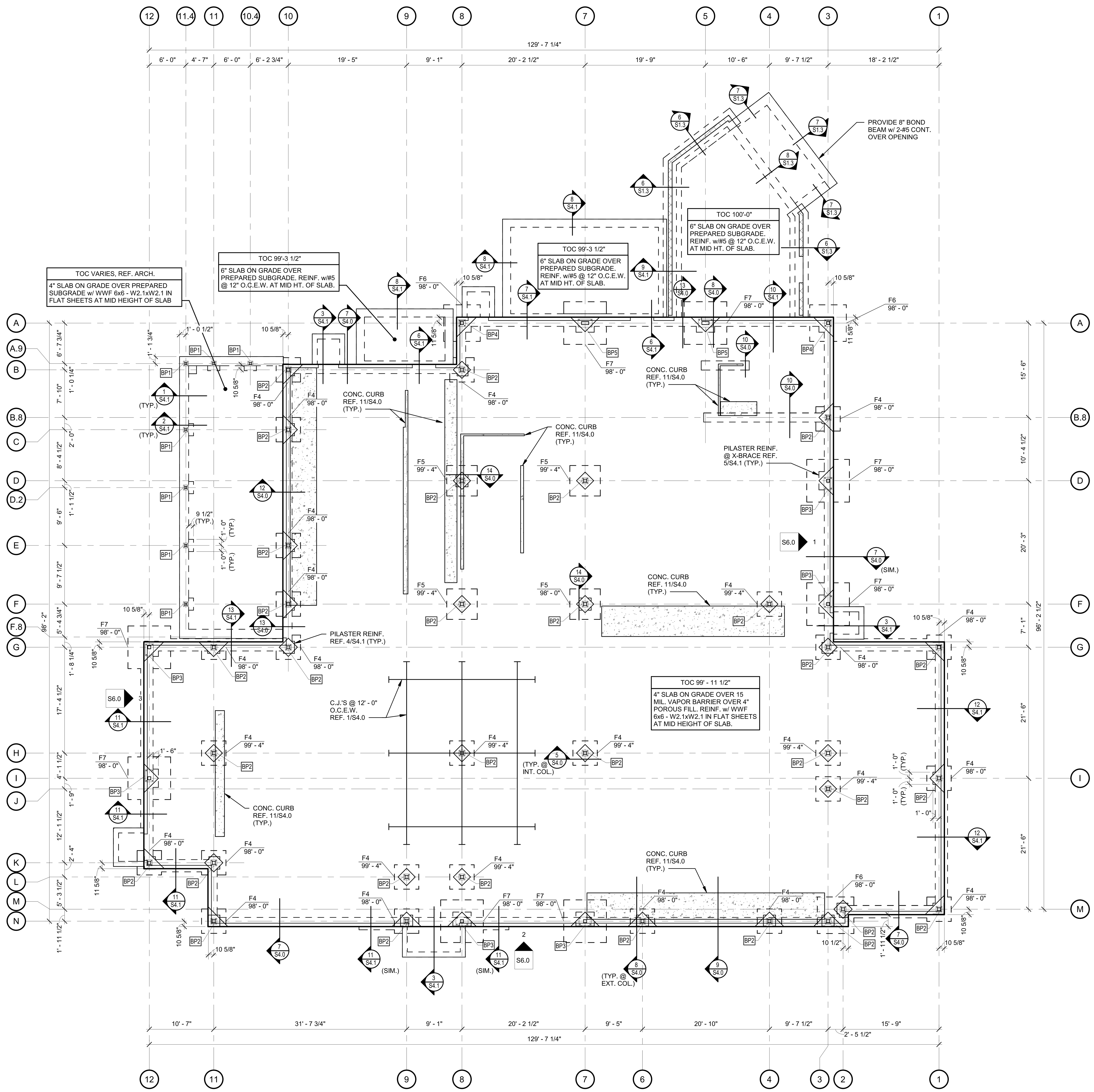
PROFESSIONAL ENGINEER
08/19/21

Drawing Title
TYPICAL SCHEDULES AND DETAILS

Job No. 204530 | Drawn CRS
Scale AS NOTED | Date 08/19/2021

Sheet No.
S1.3



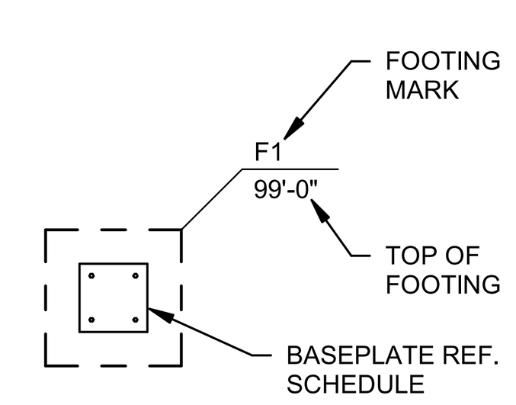
PLAN NORTH

1 FOUNDATION PLAN

1/8" = 1'-0"

FOUNDATION PLAN NOTES:

1. DATUM ELEVATION =100'-0", REF. CIVIL FOR ACTUAL ELEVATION.
2. REFER TO SHEET S1.3 FOR FOOTING SCHEDULE.
3. REFER TO SHEET S1.3 FOR BASEPLATE SCHEDULE.
4. PROVIDE SLAB CONTROL/CONSTRUCTION JOINTS @ 12'-0" O.C. MAX. REFER TO 1/S4.0.
5. COORDINATE COOLER SLAB AND SERVICE YARD EXTENTS WITH ARCH./CIVIL



FOOTING LEGEND

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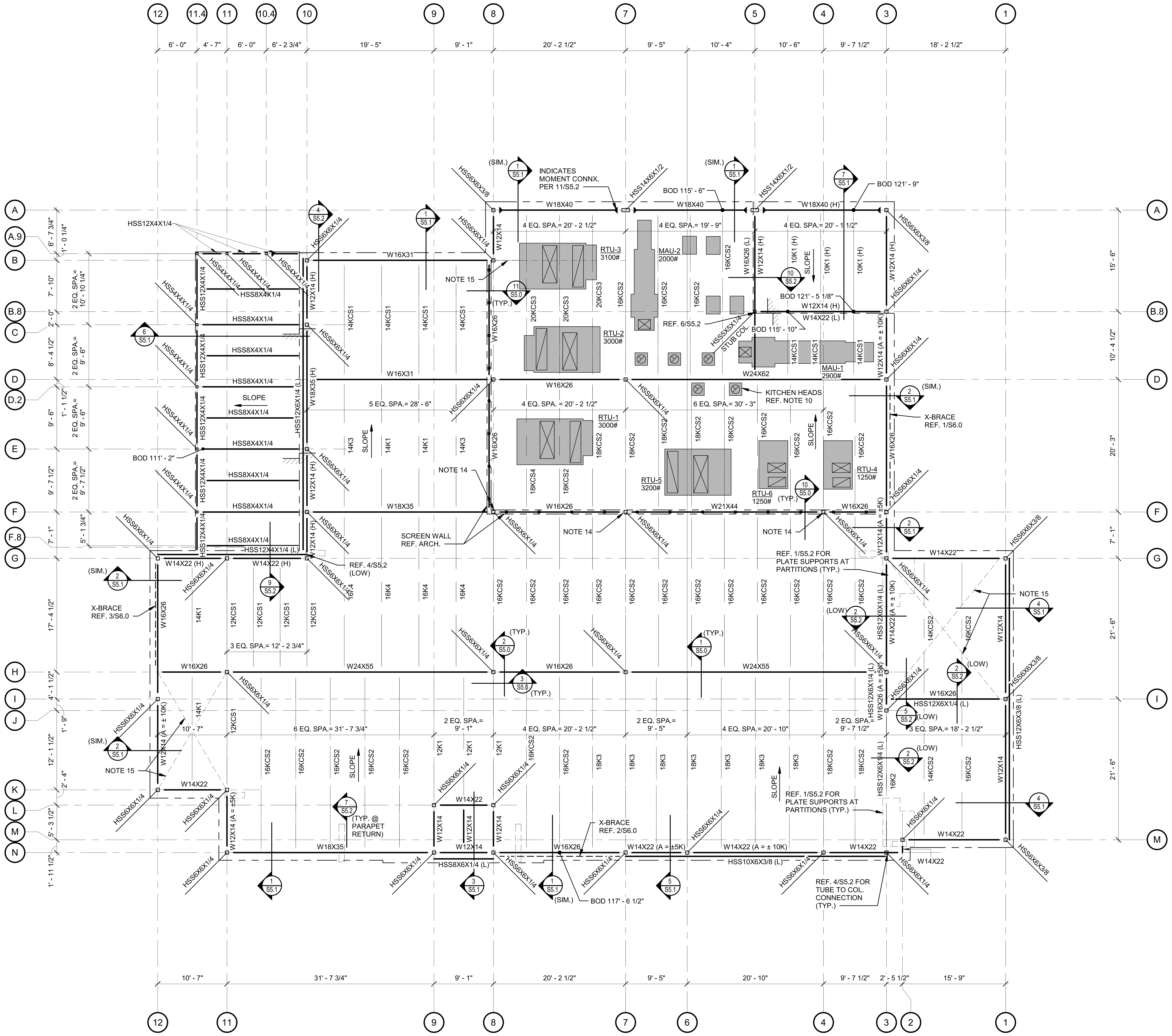
Drawing Title
FOUNDATION PLAN

Job No.	Drawn
204530	CRS
Scale	Date
AS NOTED	08/19/2021

Sheet No.
S2.0



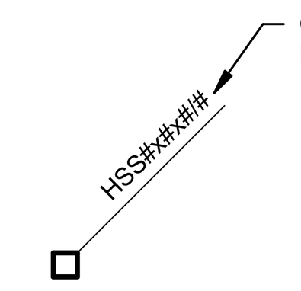
1 ROOF FRAMING PLAN

1/8" = 1'-0"

PLAN NORTH

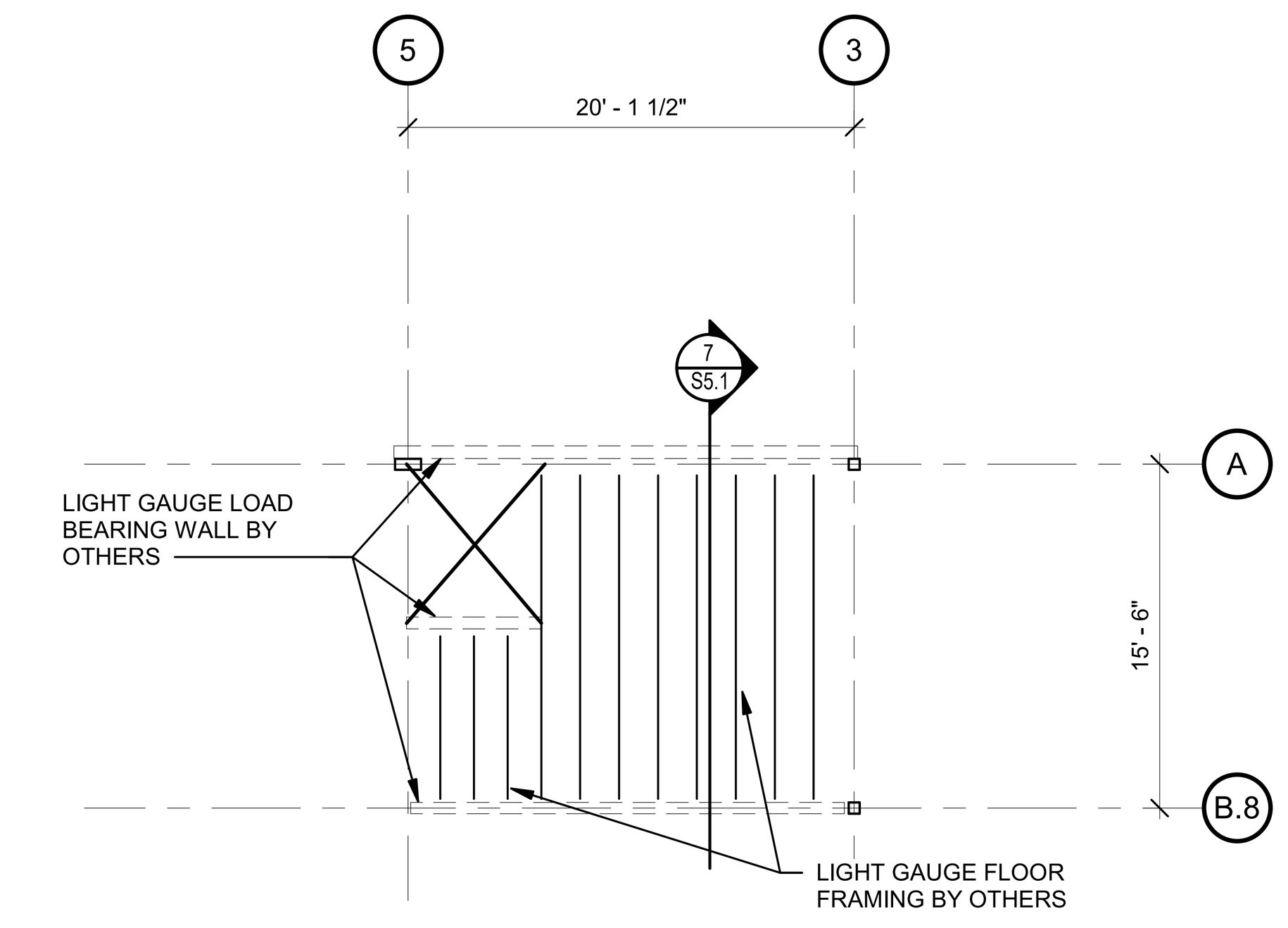
ROOF FRAMING PLAN NOTES:

1. BOD INDICATES BOTTOM OF DECK BEARING ELEVATION.
2. OPENINGS FOR ROOF DRAINS SHALL BE LOCATED PER ARCHITECTURAL ROOF PLAN.
3. REFER TO GENERAL NOTES ON S1.0 FOR STEEL CONSTRUCTION.
4. JOIST MANUFACTURER SHALL DESIGN JOIST BRIDGING TO RESIST NET UPLIFT FORCES AS SHOWN ON 3/S1.2.
5. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT AND ROOF OPENING SIZES AND LOCATIONS WITH THE MECHANICAL CONTRACTOR.
6. ALL HSS TUBES ARE LLV UNLESS NOTED OTHERWISE
7. FOR BASE PLATE SCHEDULE REFER TO 2/S1.3
8. EDGES OF ALL RTU FAN CURBS SHALL BE SUPPORTED BY ANGLES FRAMED BELOW ROOF DECK, REF. 5/S5.0 AT LOCATIONS WHERE CURBS ARE NOT SUPPORTED BY STEEL BEAMS OR JOISTS. TOTAL WEIGHT OF RTU'S, CHILLERS, ETC. INCLUSIVE OF CURB, SHALL NOT EXCEED THE AMOUNT NOTED ON PLAN.
9. REF. 6/S5.0 FOR ROOF FRAMING AT ROOF OPENINGS.
10. REF. 8/S5.0 FOR KITCHEN HOOD HANGING SUPPORT DETAIL. REF. ARCH. AND MECH. DRAWINGS FOR LOCATION AND WEIGHTS ON ALL HOODS.
11. (A=XXK) DONOTES THE SERVICE AXIAL LOAD THAT THE BEAM TO COLUMN TO COLLECTOR SHALL BE DESIGNED FOR IN ADDITION TO THE SHEAR DENOTED ON S1.0.
12. LT. GA. KICKER TO NEAREST STUD WALL FOR BRACING.
13. FOR SUSPENDED BARREL SUPPORT REF. 12/S5.0 REF. ARCH. FOR LOCATIONS.
14. EXTEND TOP OF COLUMN TO TOP OF SCREEN WALL STEEL WHERE NOTED.
15. L5x5X3/8 DRAG STRUT CONT. OVER JOISTS. COPE VERTICAL LEG AT EACH JOIST & ATTACH TO DECK w/ 5/8" DIA. PUDDLE WELDS @ 6" O.C.



COL. SIZE REF. PLAN

COLUMN LEGEND



2 MEZZANINE FRAMING PLAN

1/8" = 1'-0"

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Drawing Title
ROOF FRAMING PLAN

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Sheet No.
S3.0

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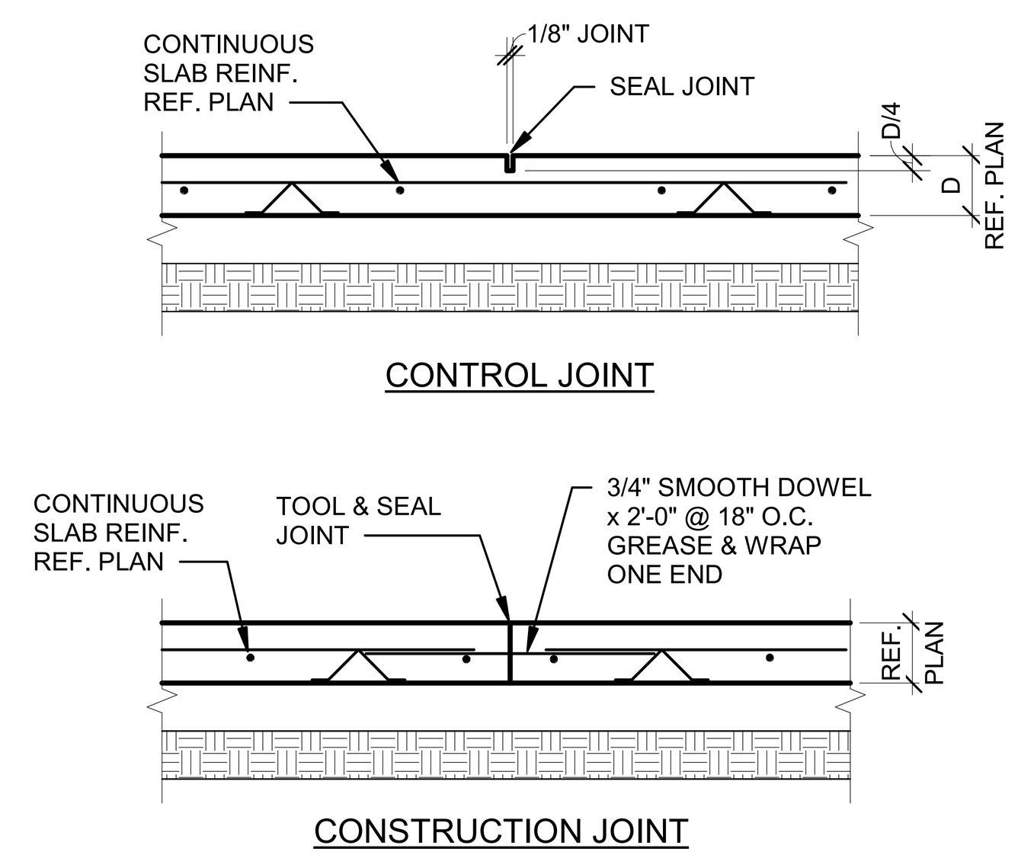

1 TYPICAL SECTION
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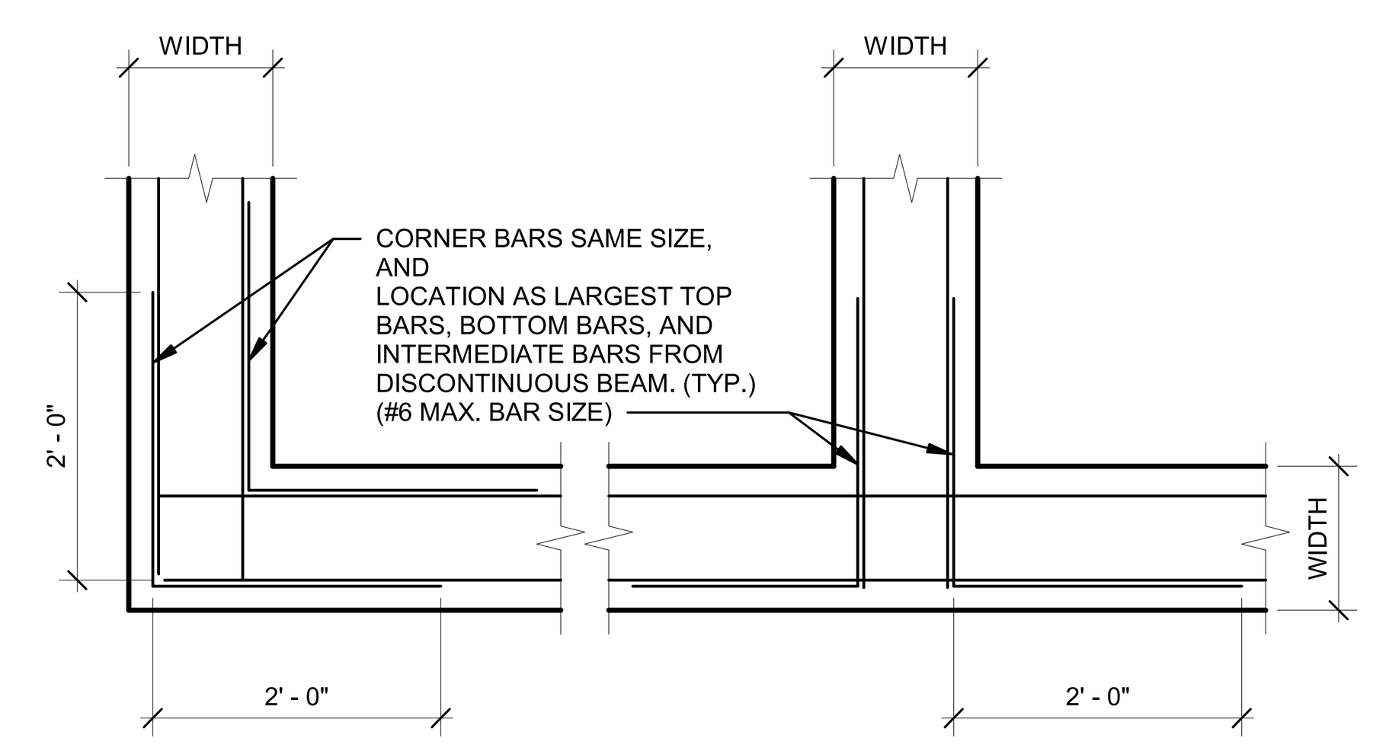
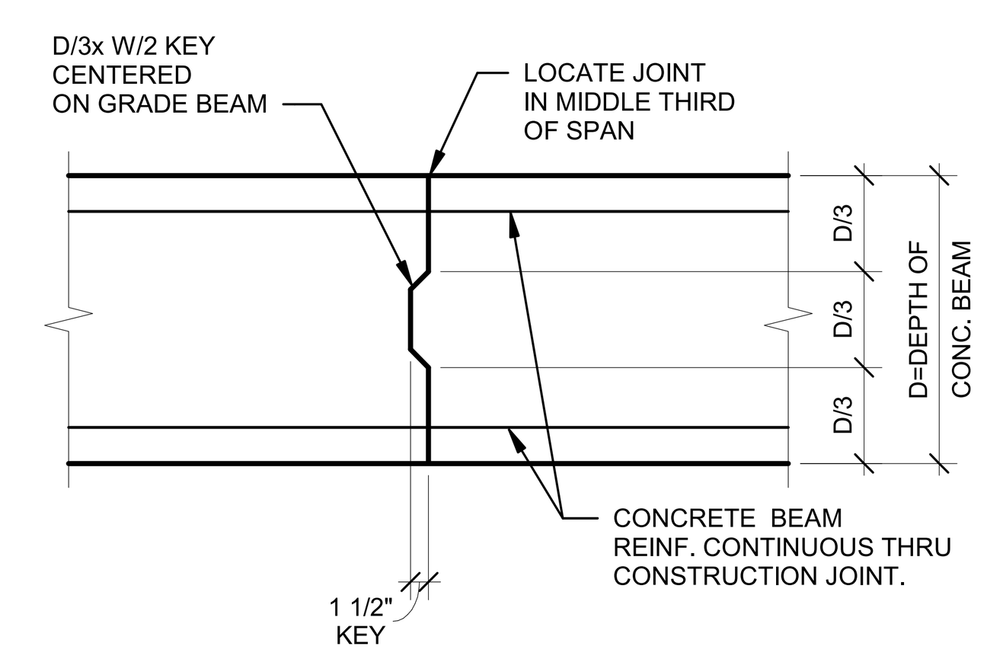


2 TYPICAL DETAIL
3/4" = 1'-0"



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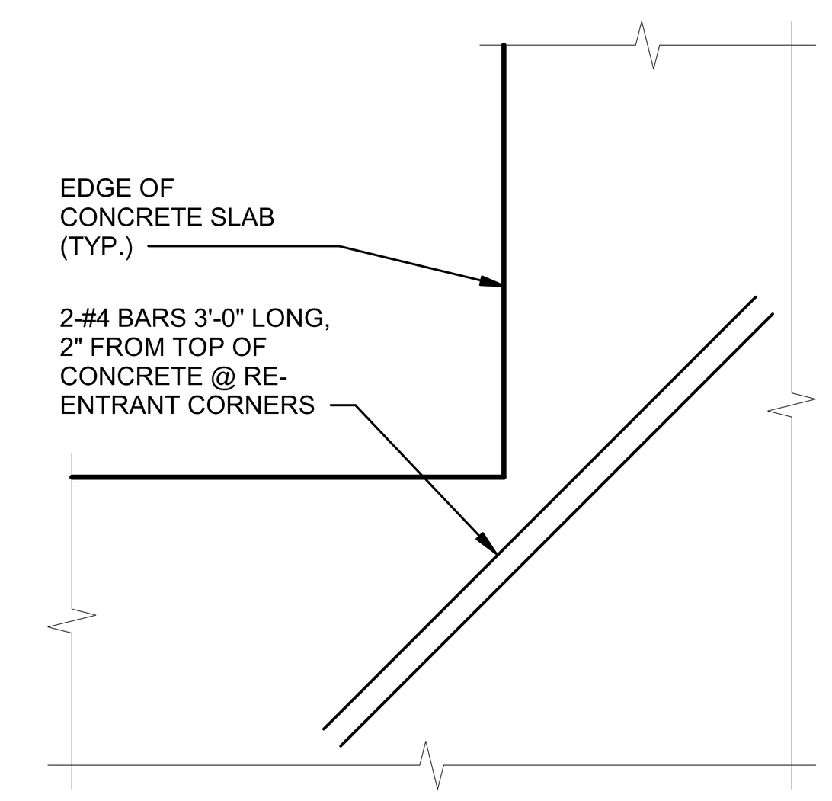

4 TYPICAL DETAIL
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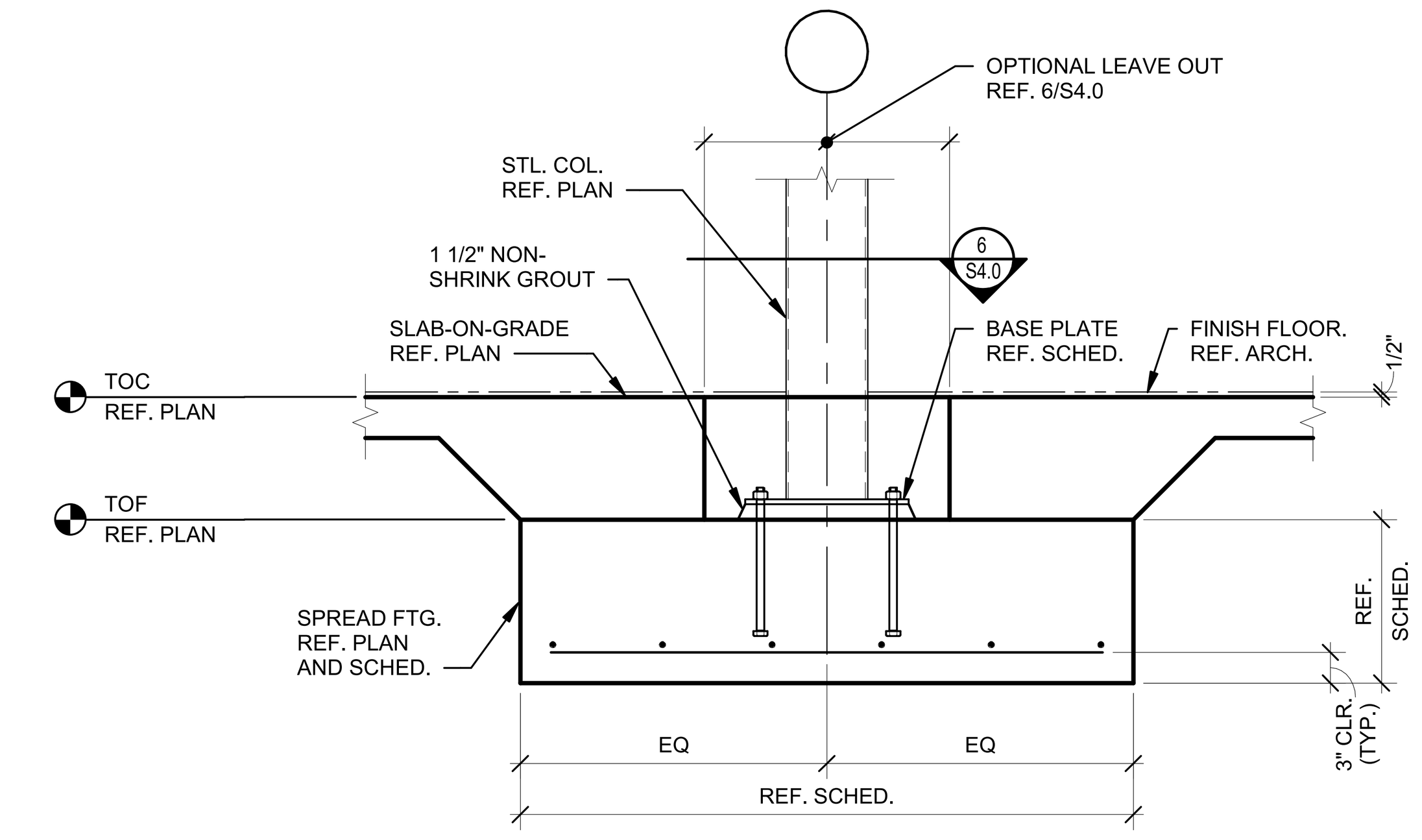
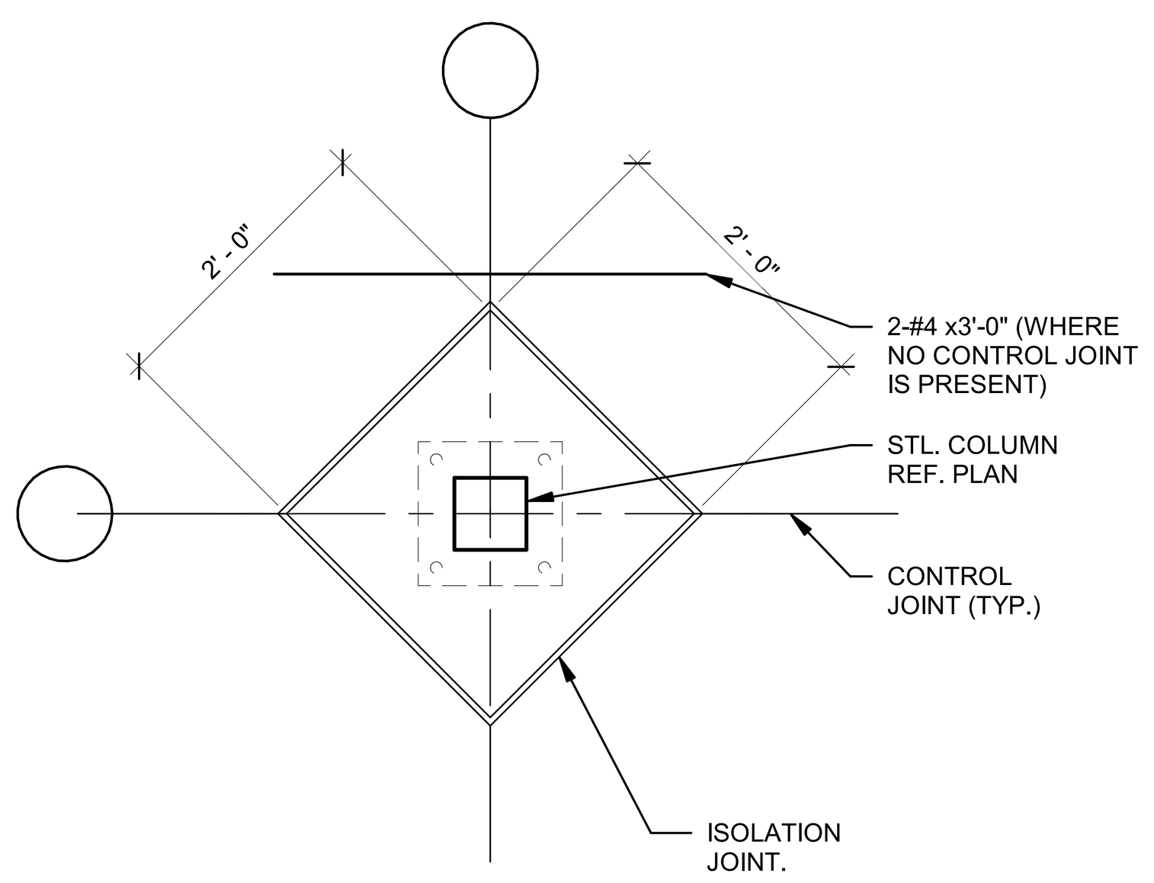
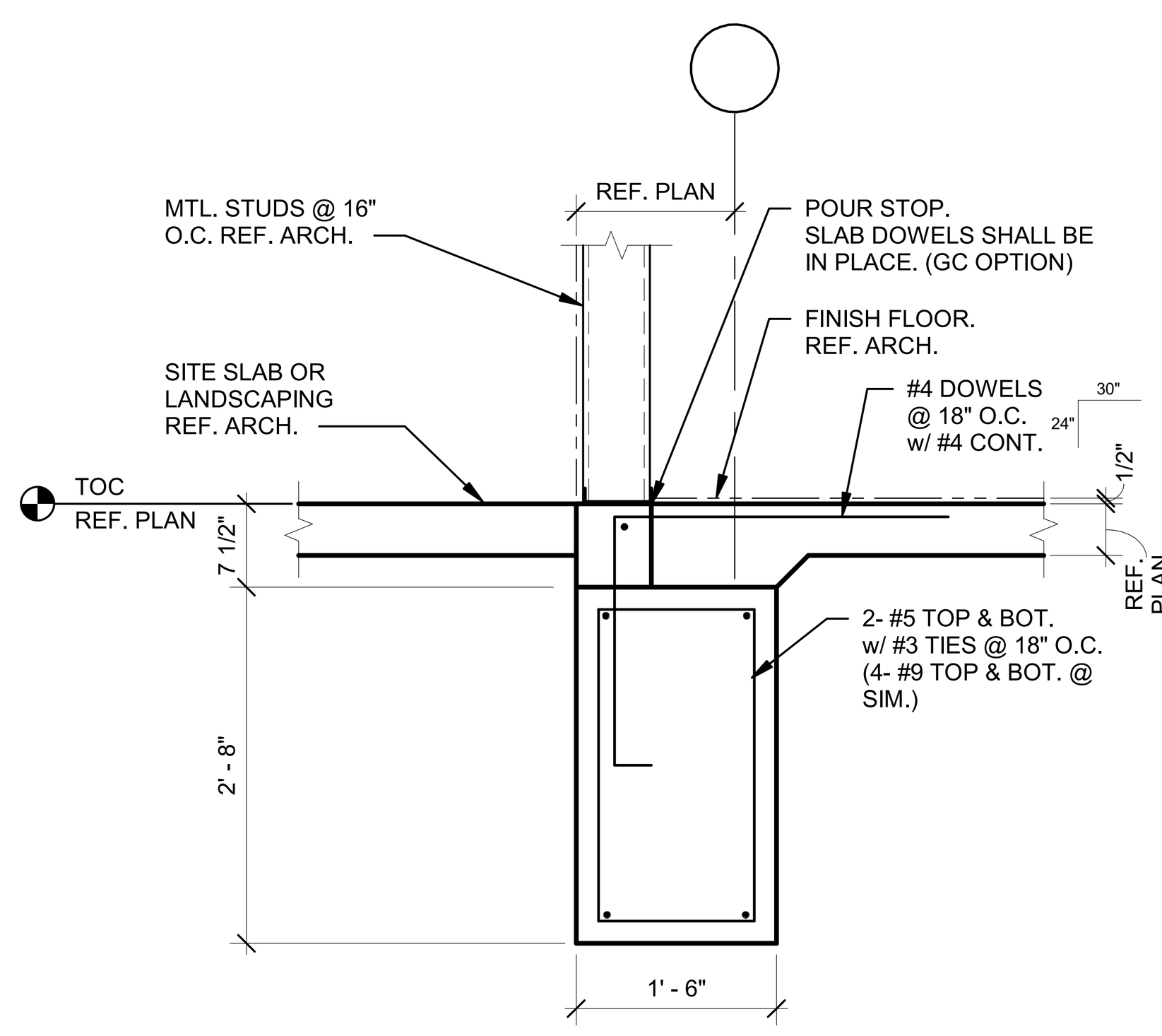


5 SECTION
3/4" = 1'-0"



6 TYPICAL DETAIL
3/4" = 1'-0"



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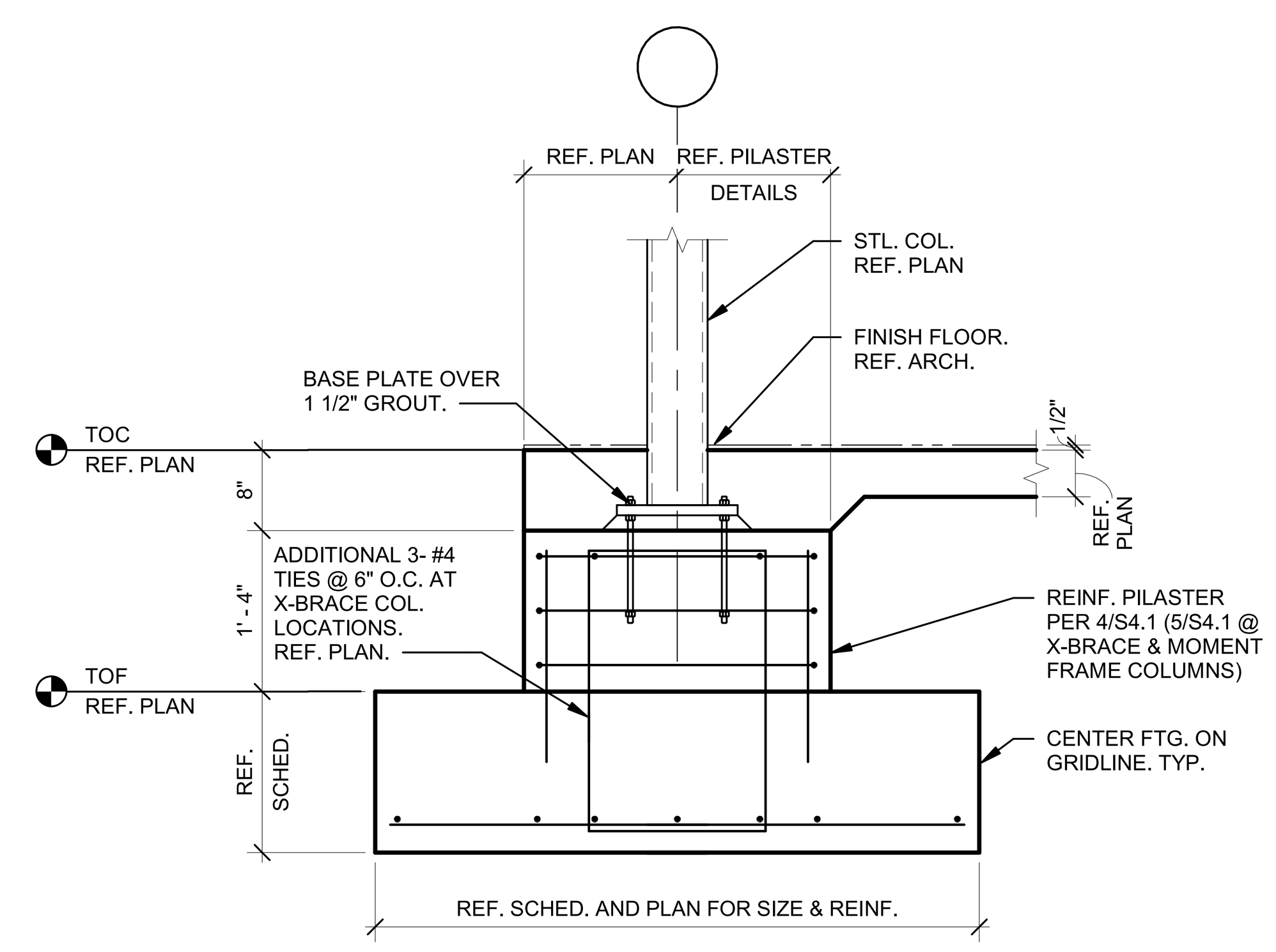
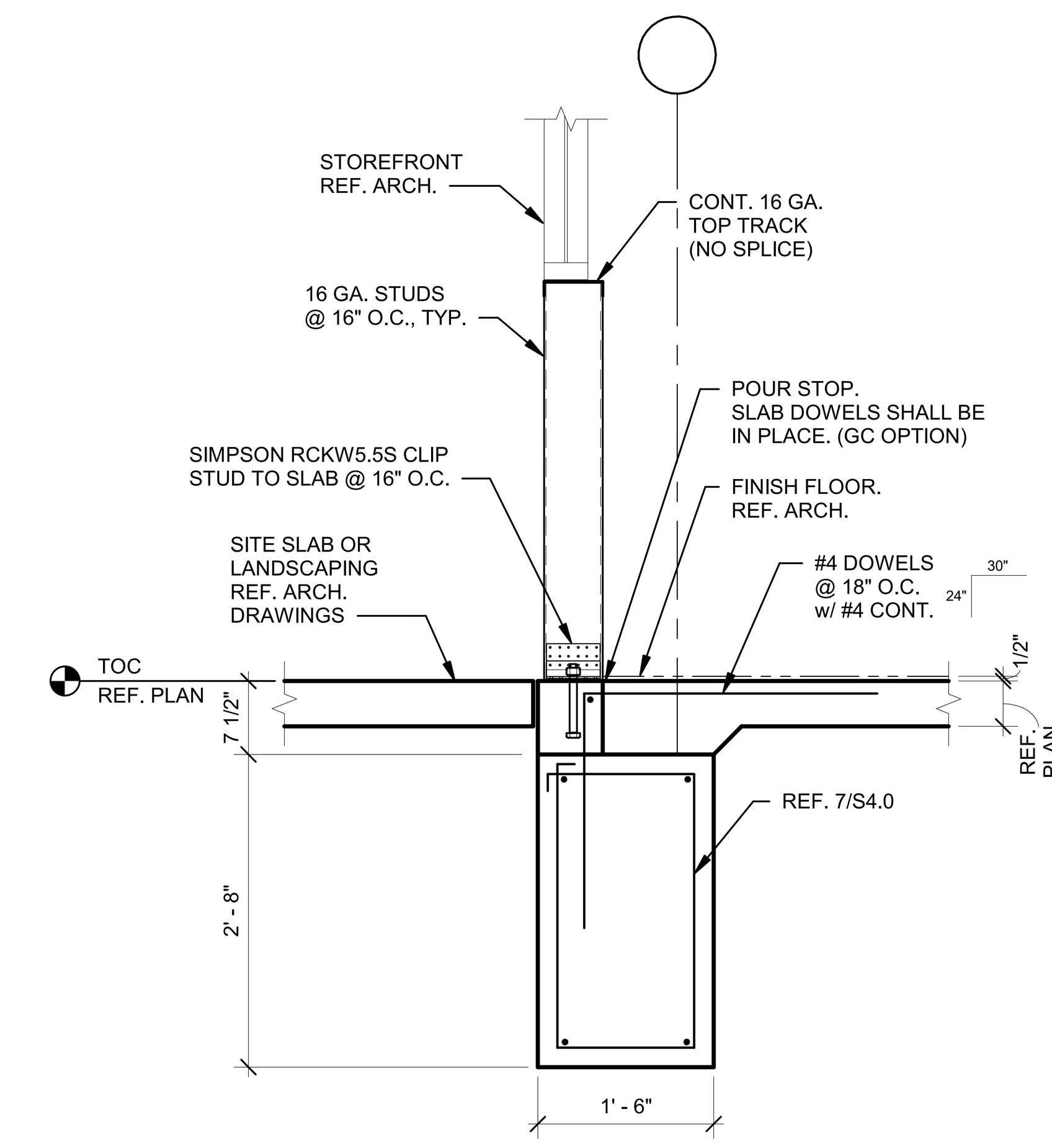
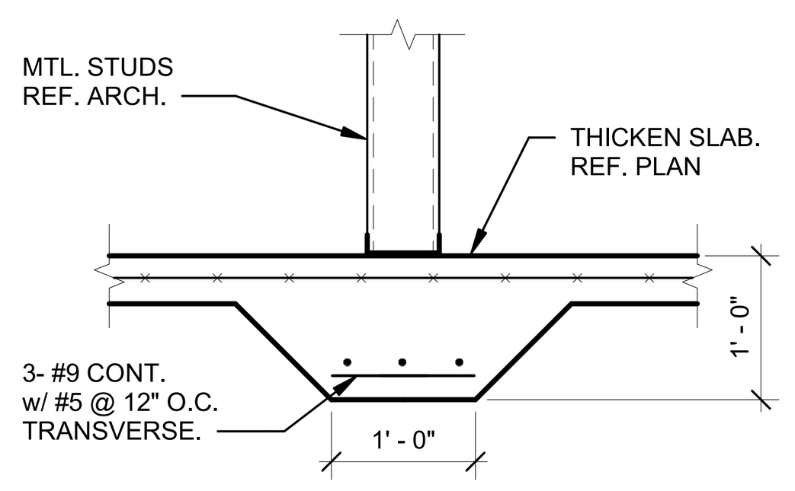
3/4" = 1'-0"



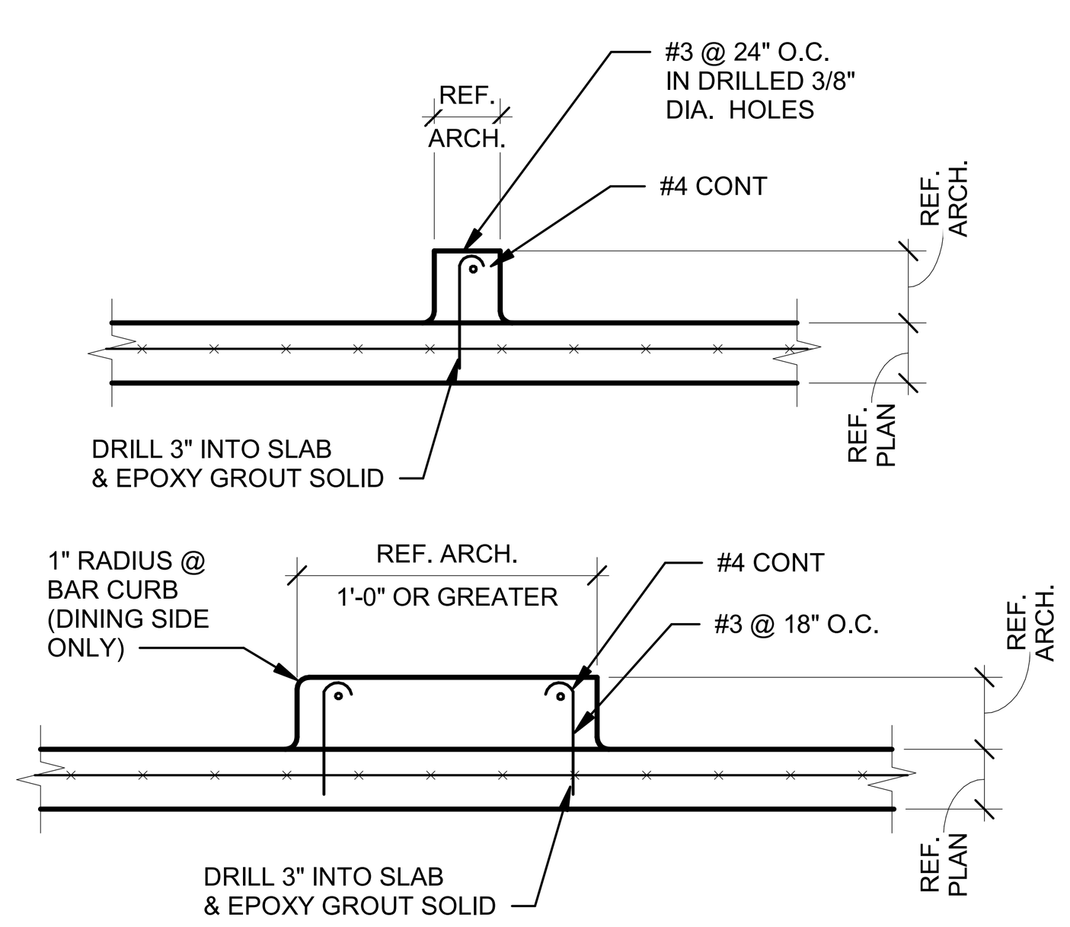
8 TYPICAL SECTION
3/4" = 1'-0"



9 TYPICAL SECTION
3/4" = 1'-0"



10 TYPICAL SECTION
3/4" = 1'-0"



11 TYPICAL CURB DETAIL
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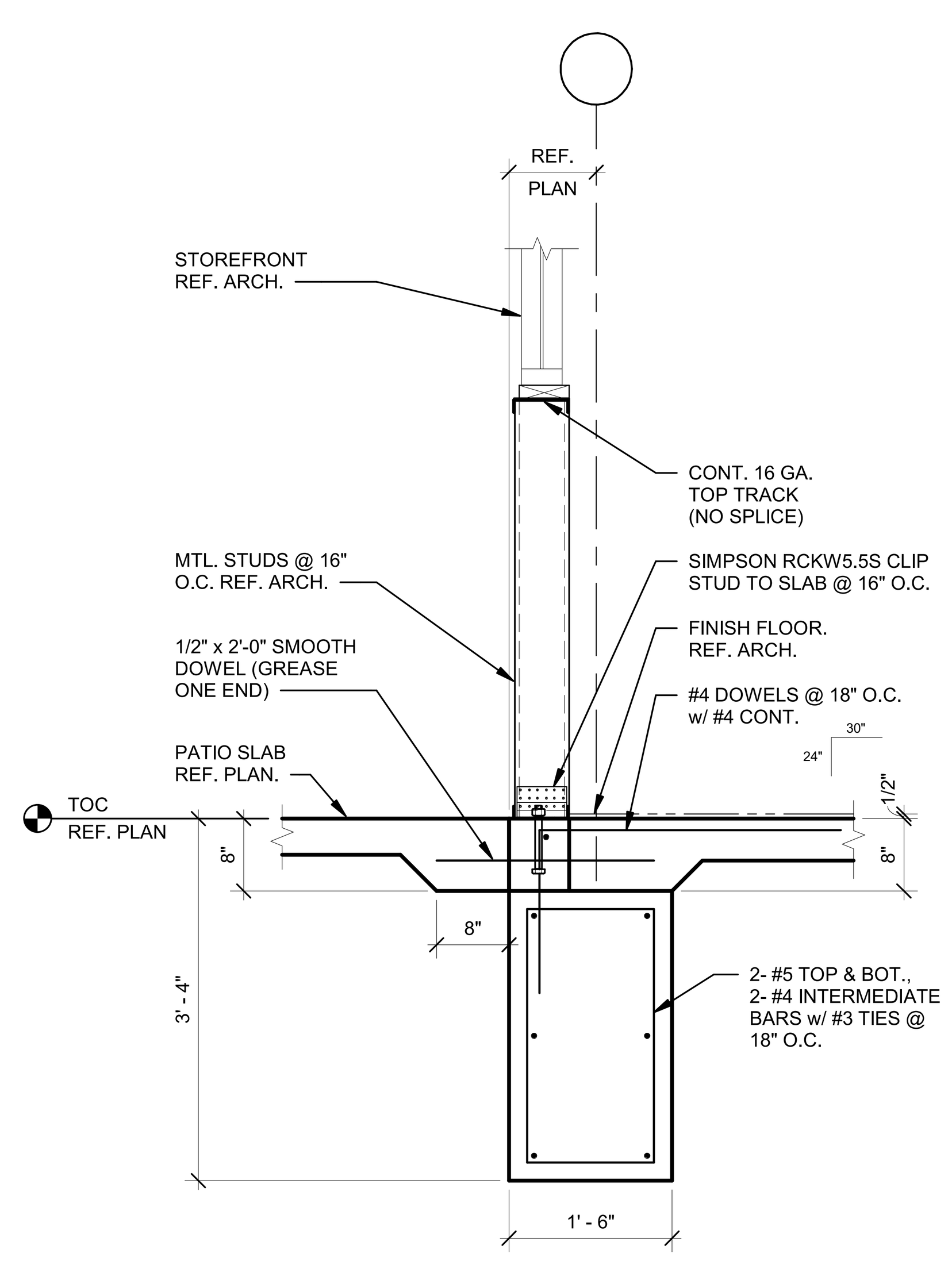

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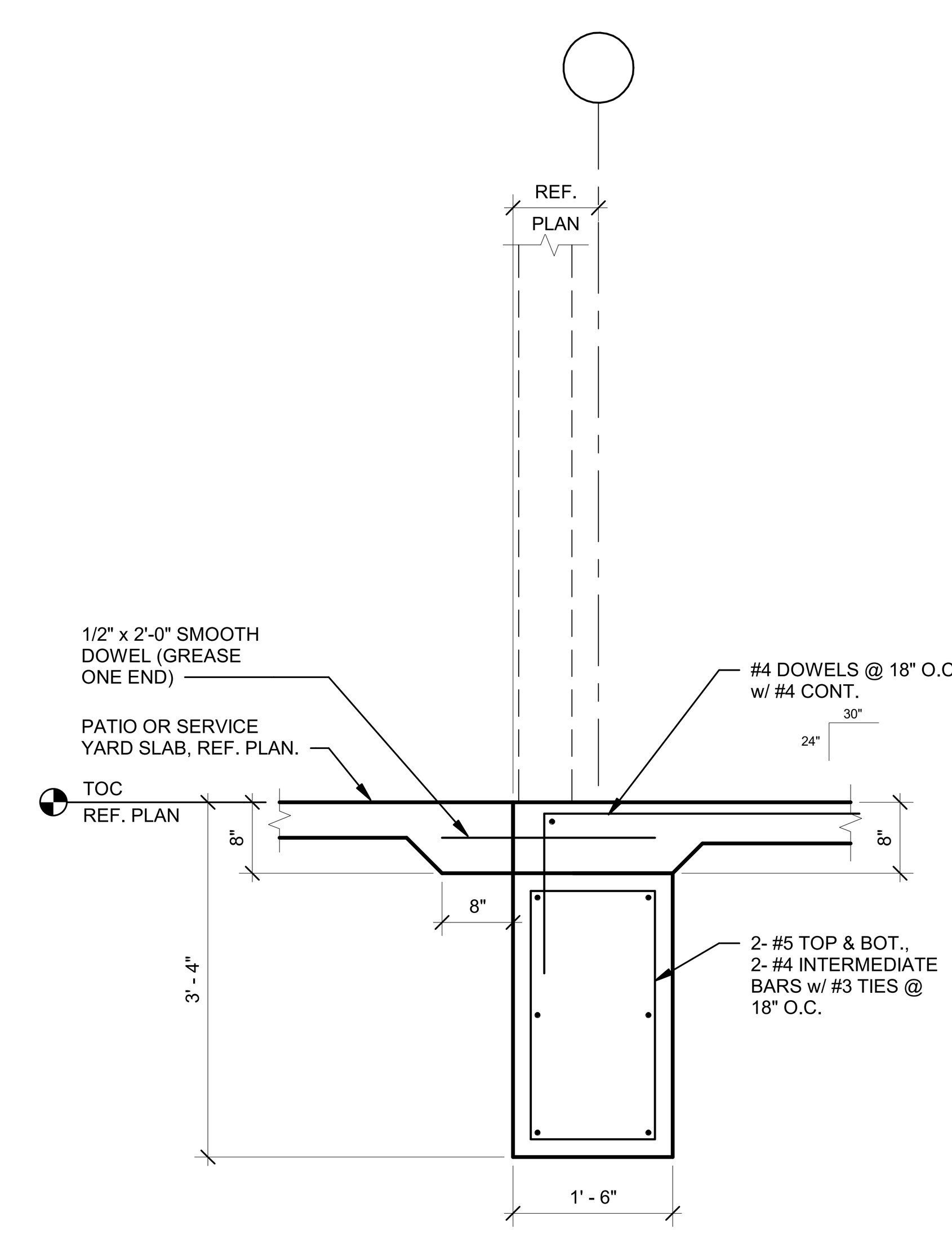

13 TYPICAL SECTION
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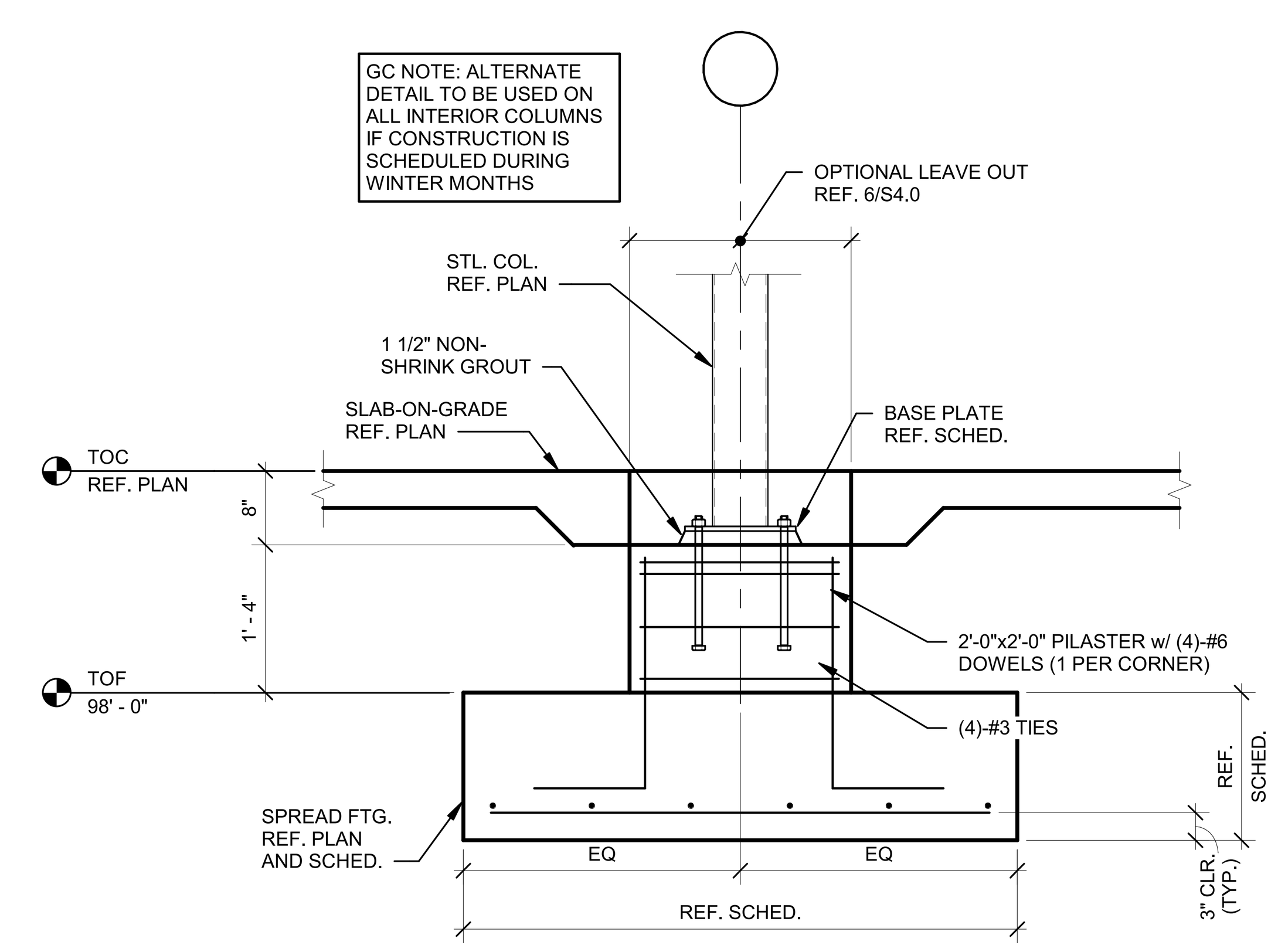

14 ALTERNATE INT. FOOTING DETAIL
3/4" = 1'-0"

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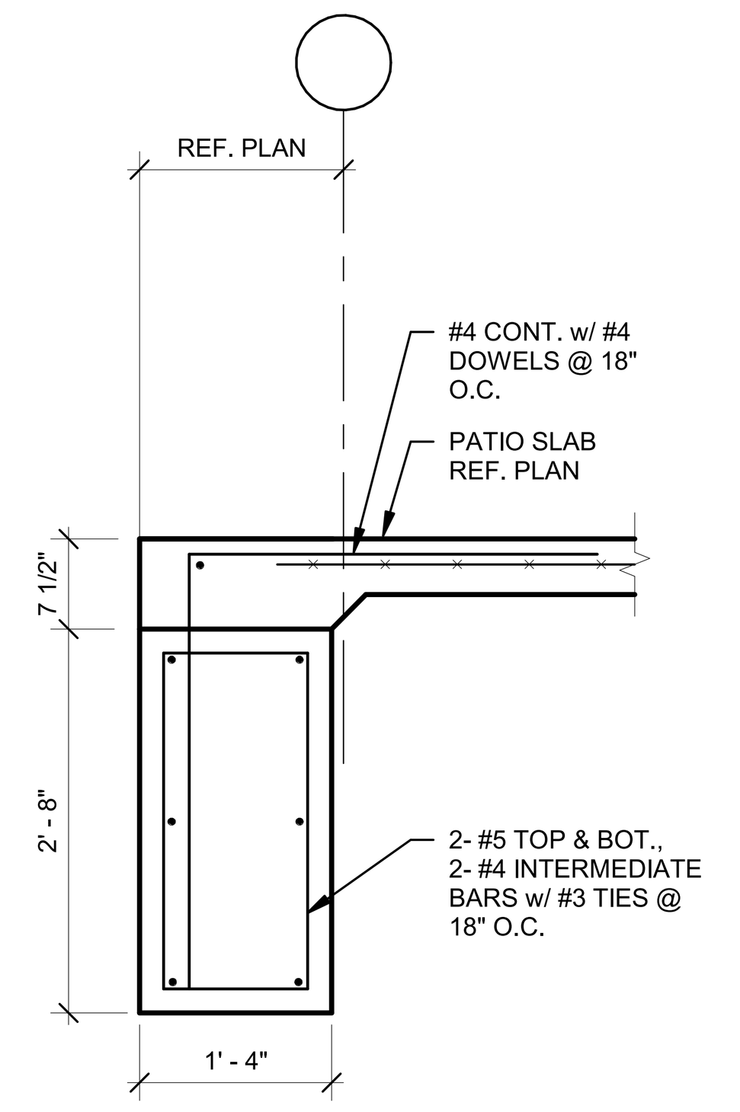
S4.0



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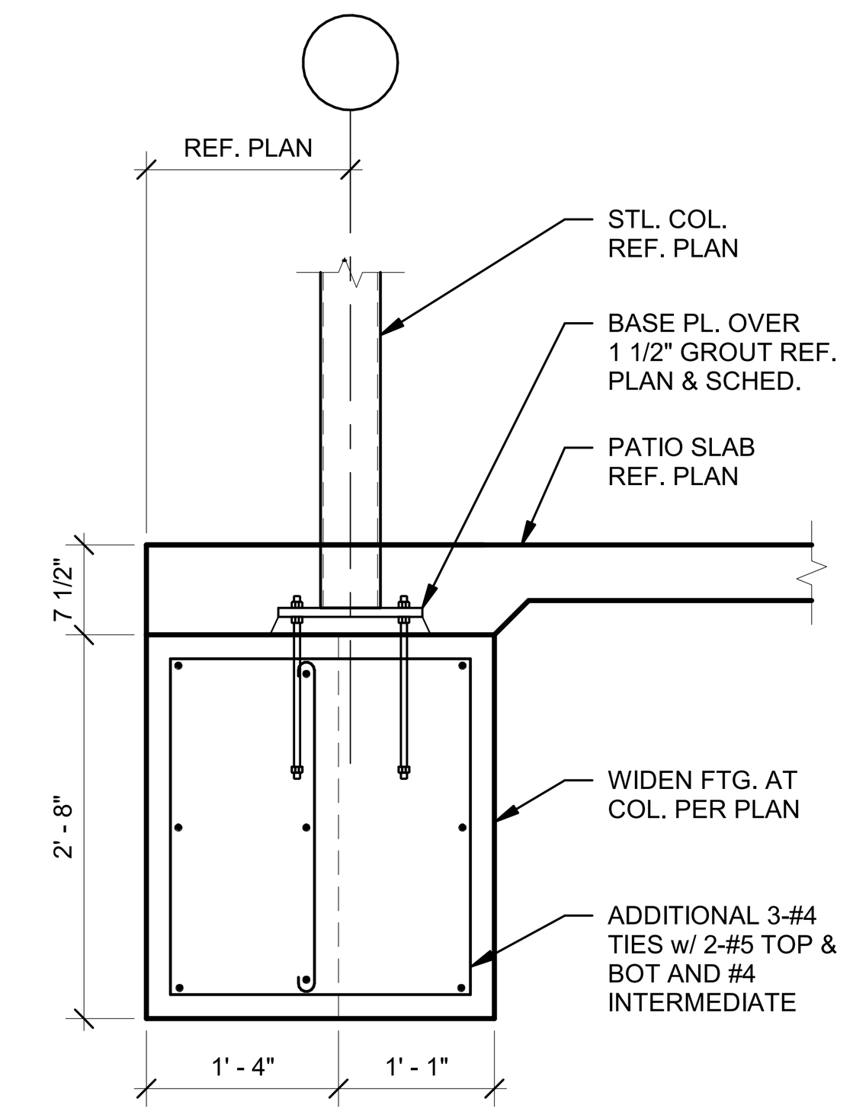

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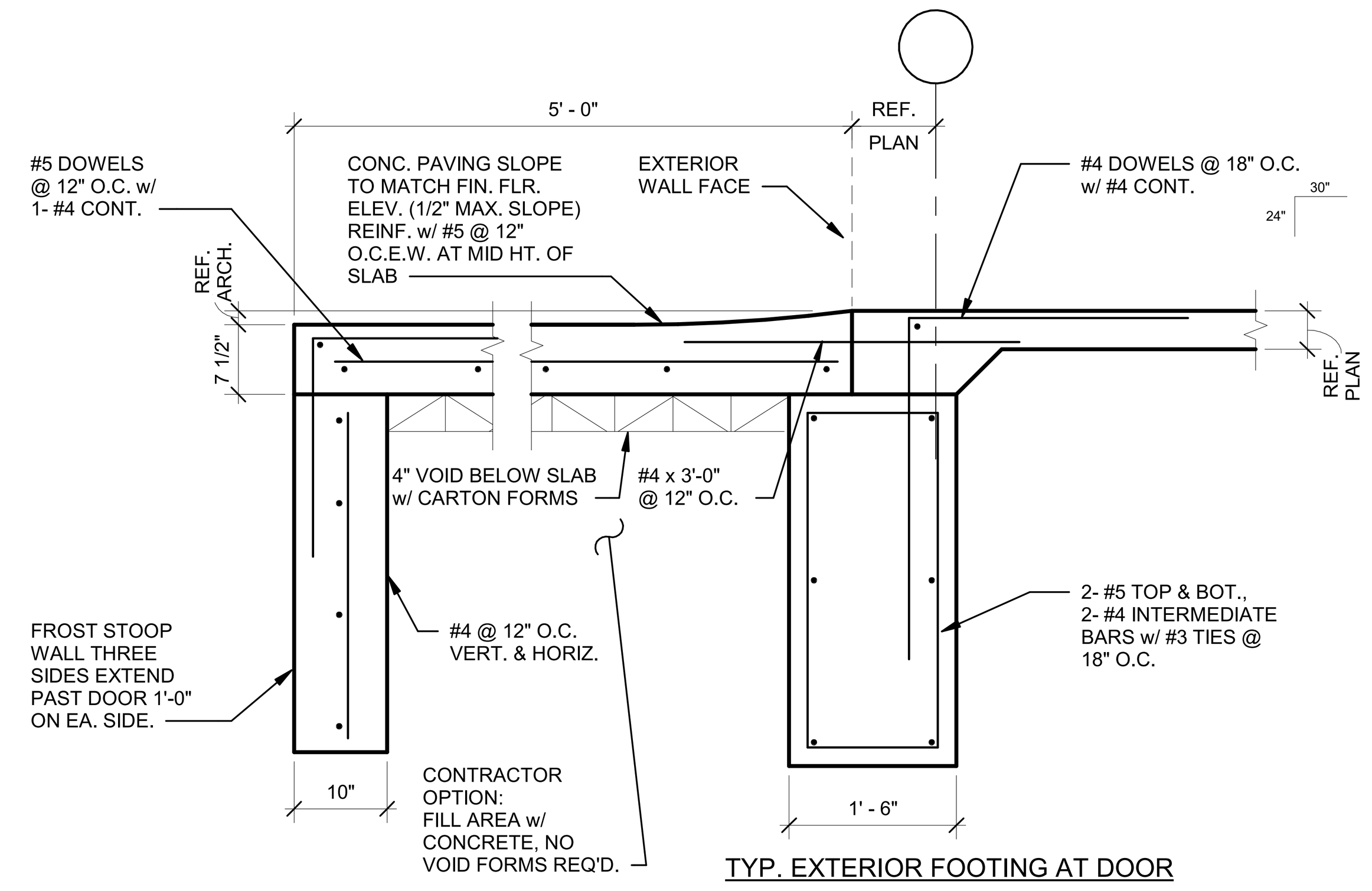

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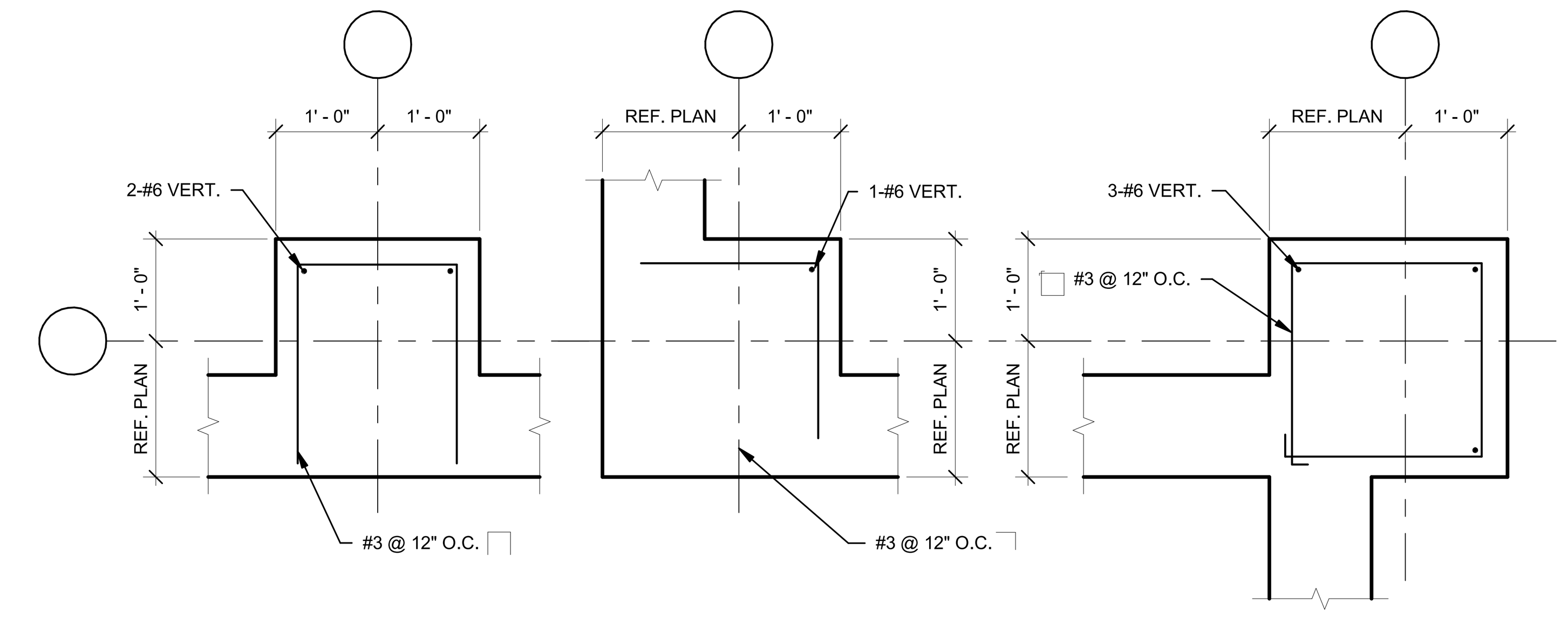

4 TYPICAL DETAIL
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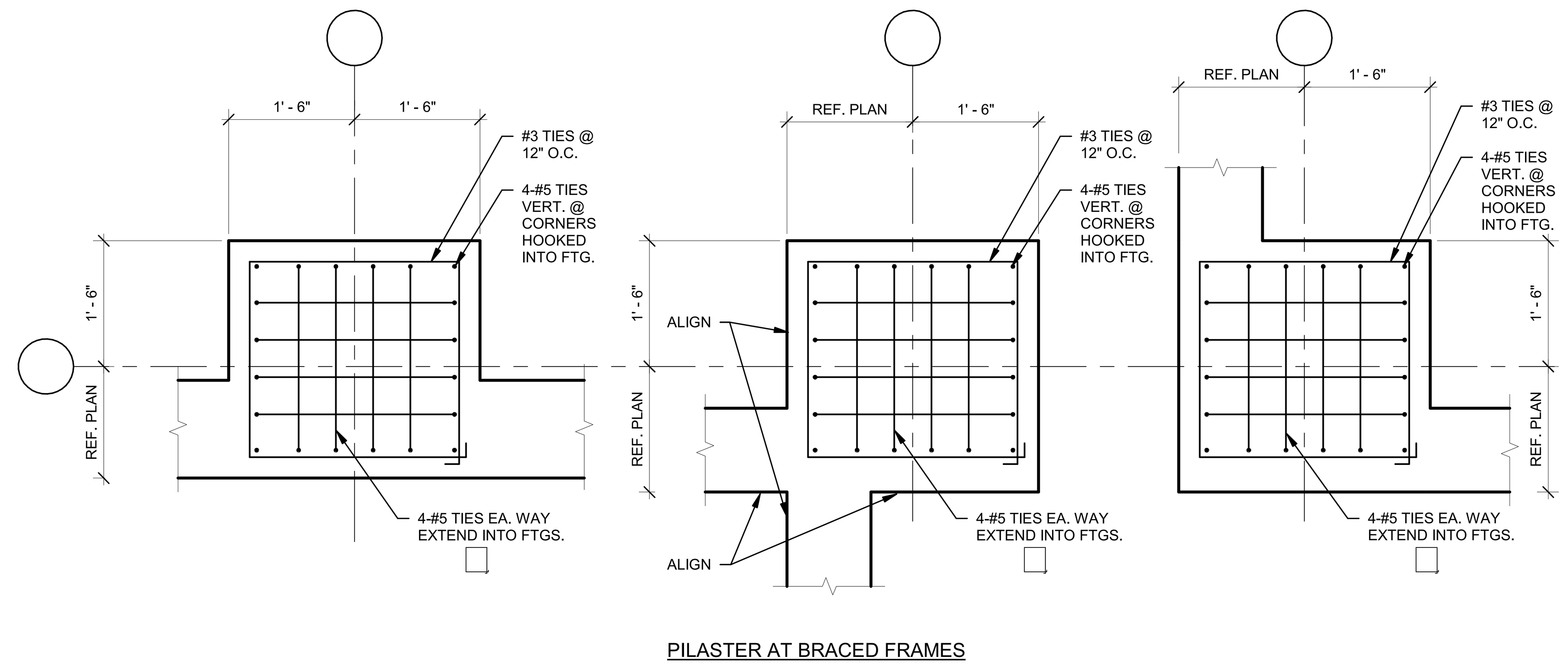
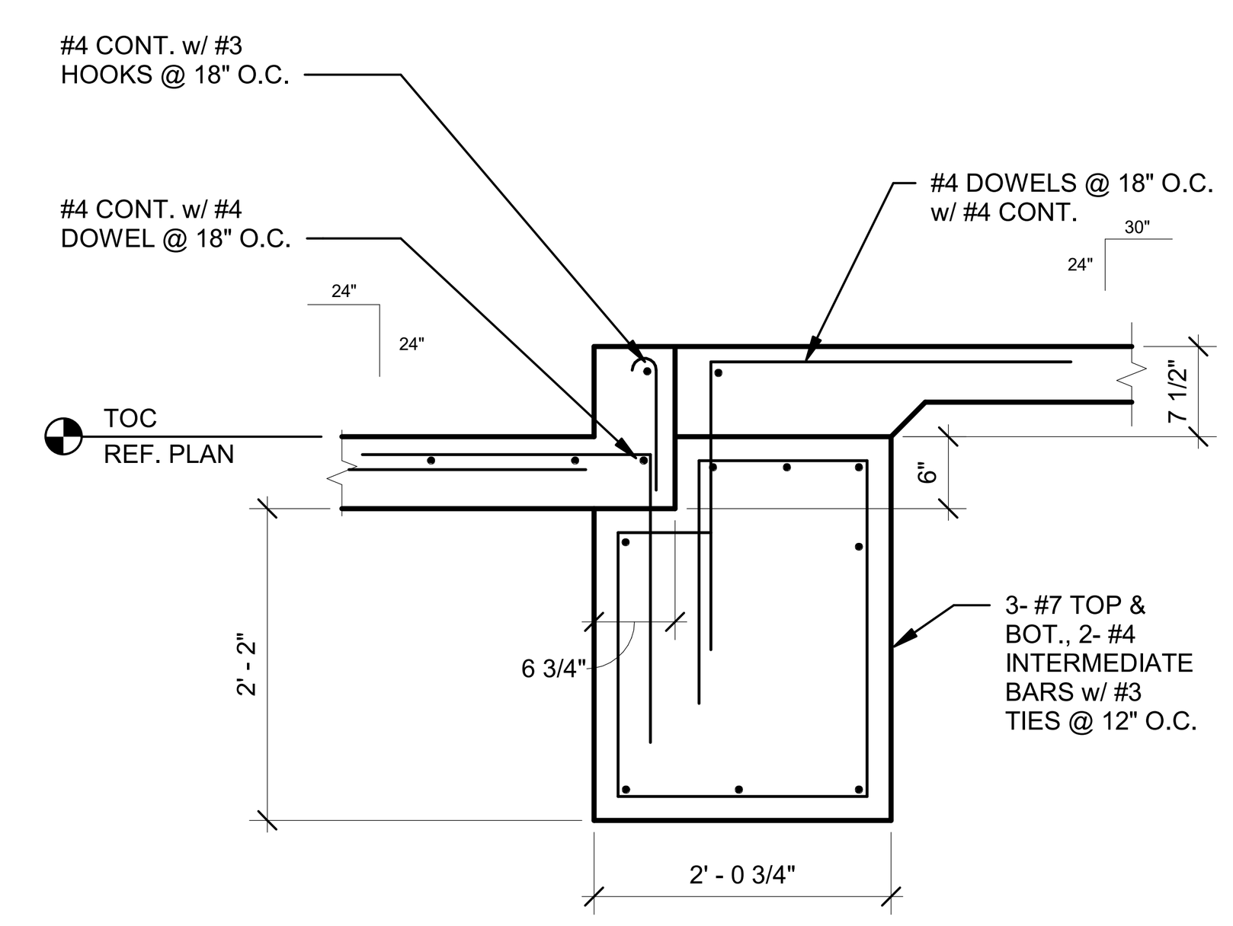


5 TYPICAL DETAIL
3/4" = 1'-0"



6 SECTION AT DOOR
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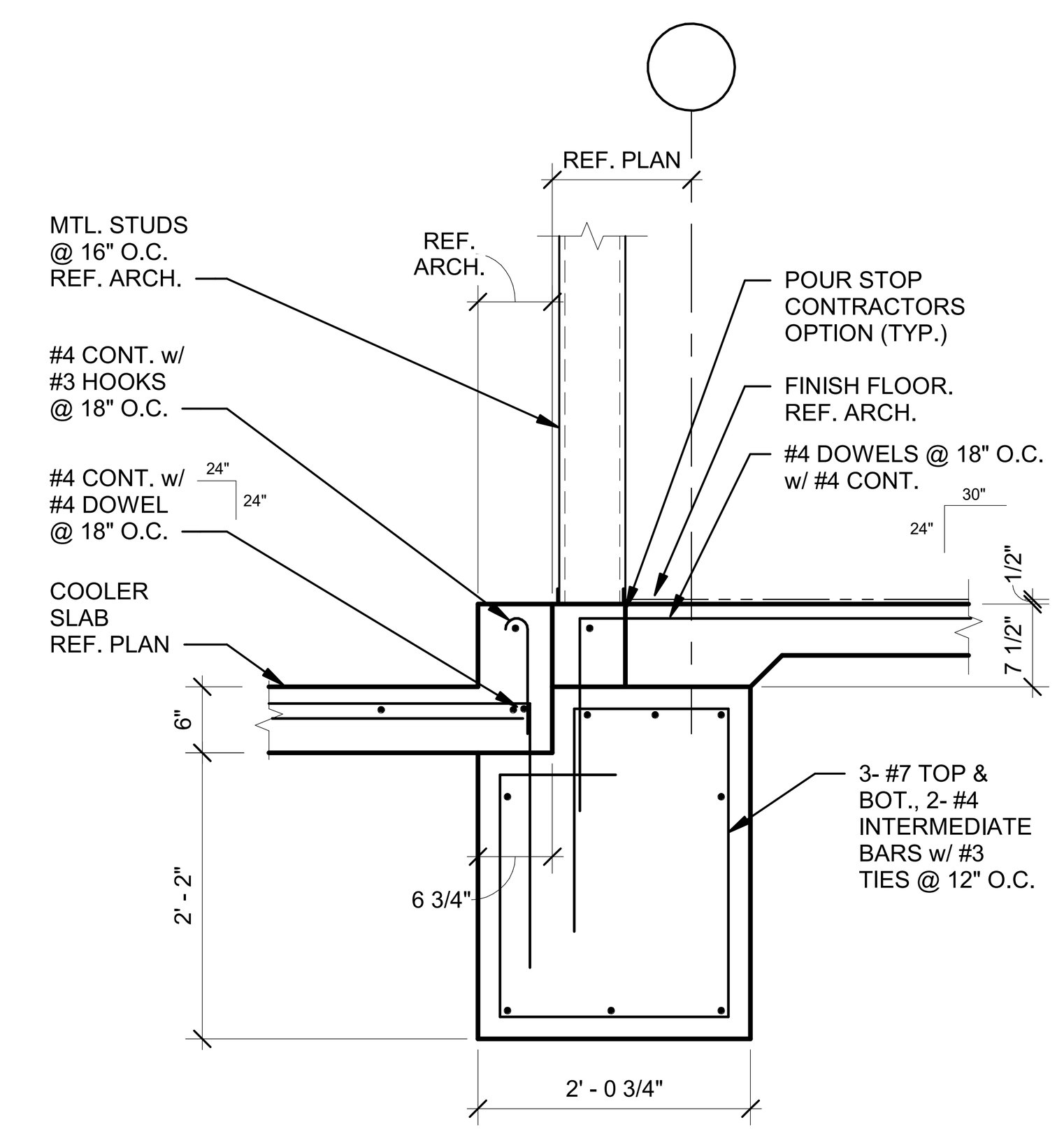

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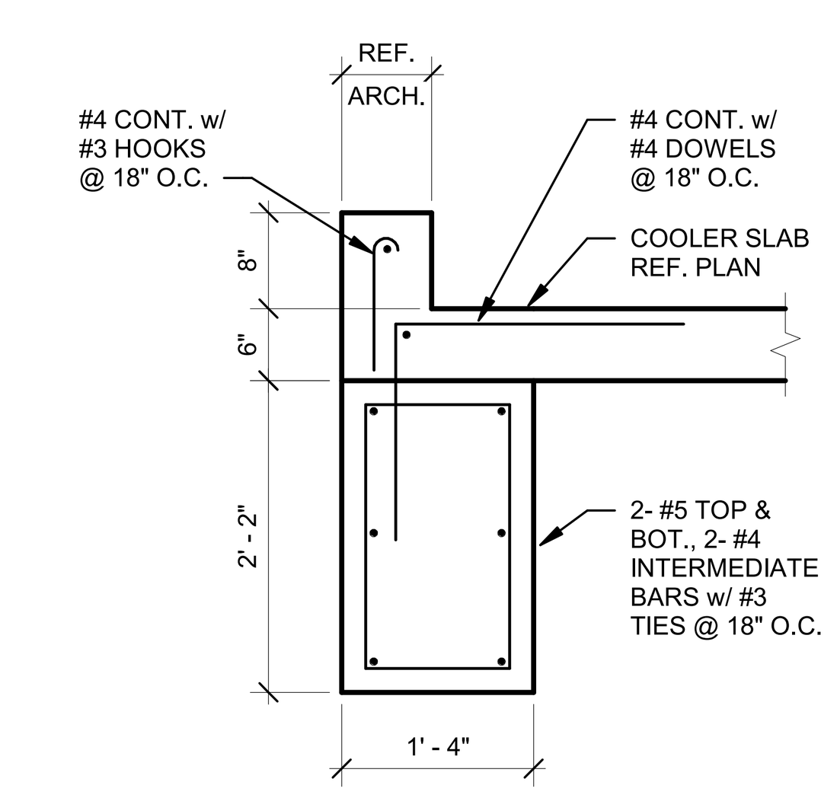

8 TYPICAL SECTION
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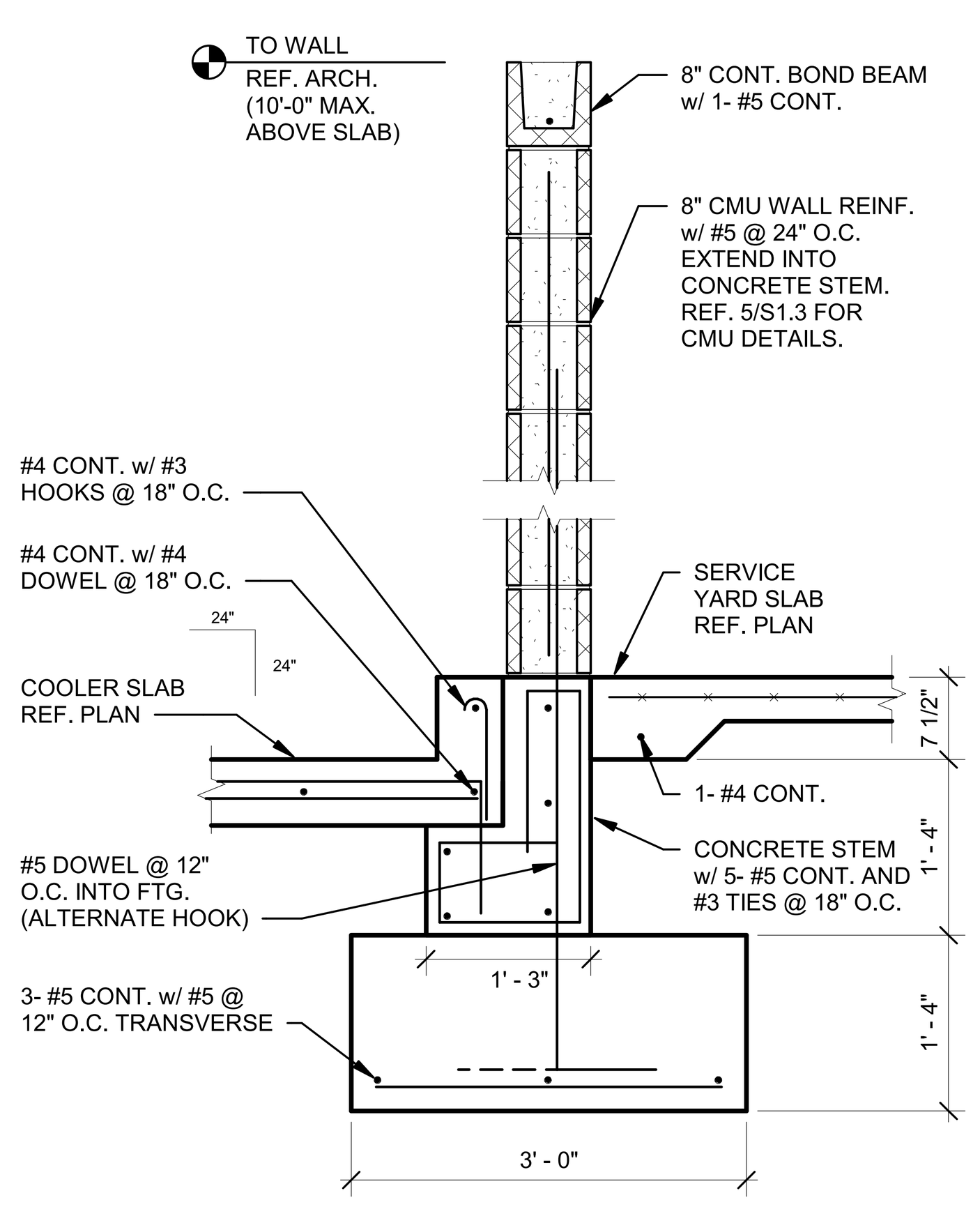

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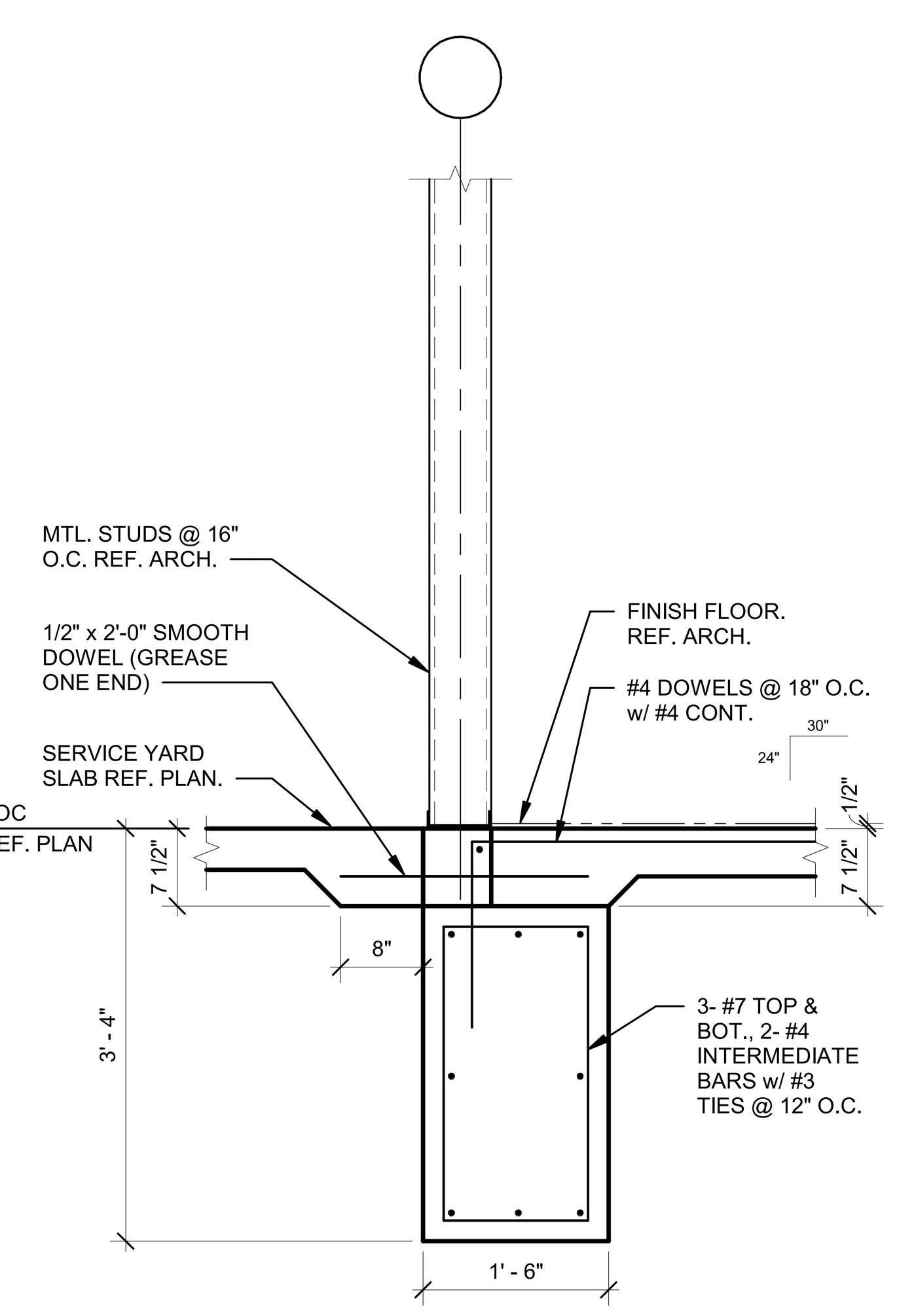

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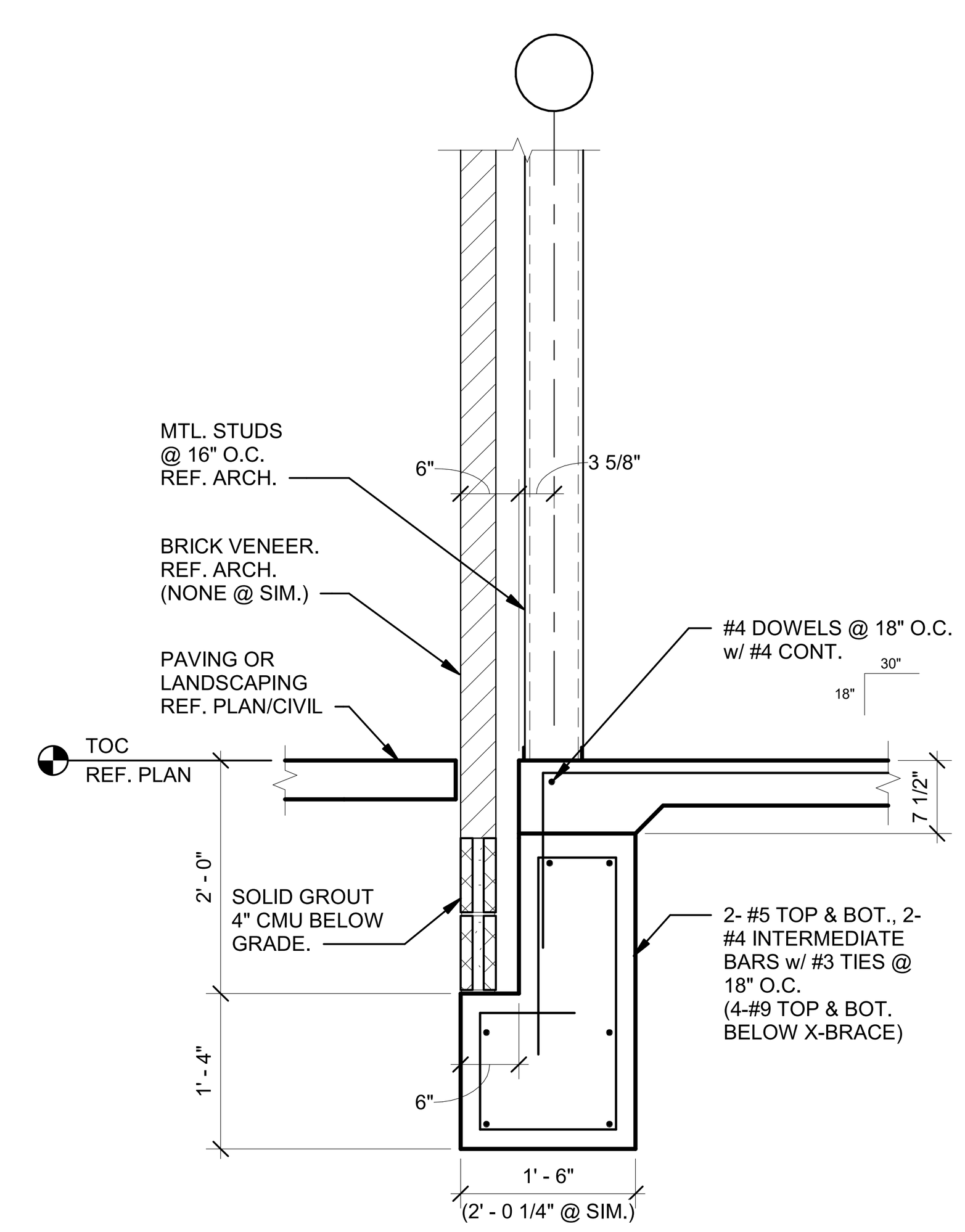

11 TYPICAL SECTION
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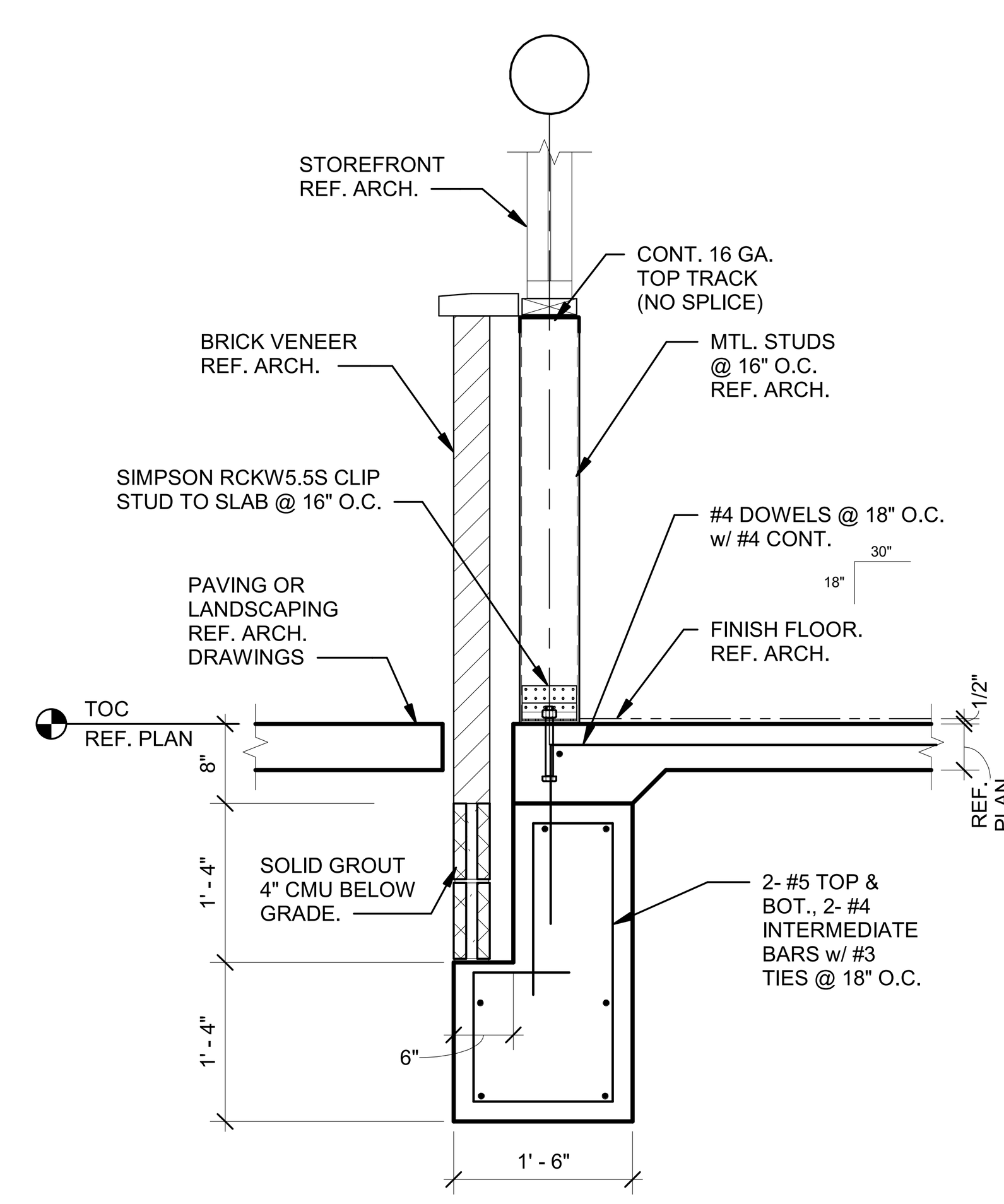

12 TYPICAL SECTION
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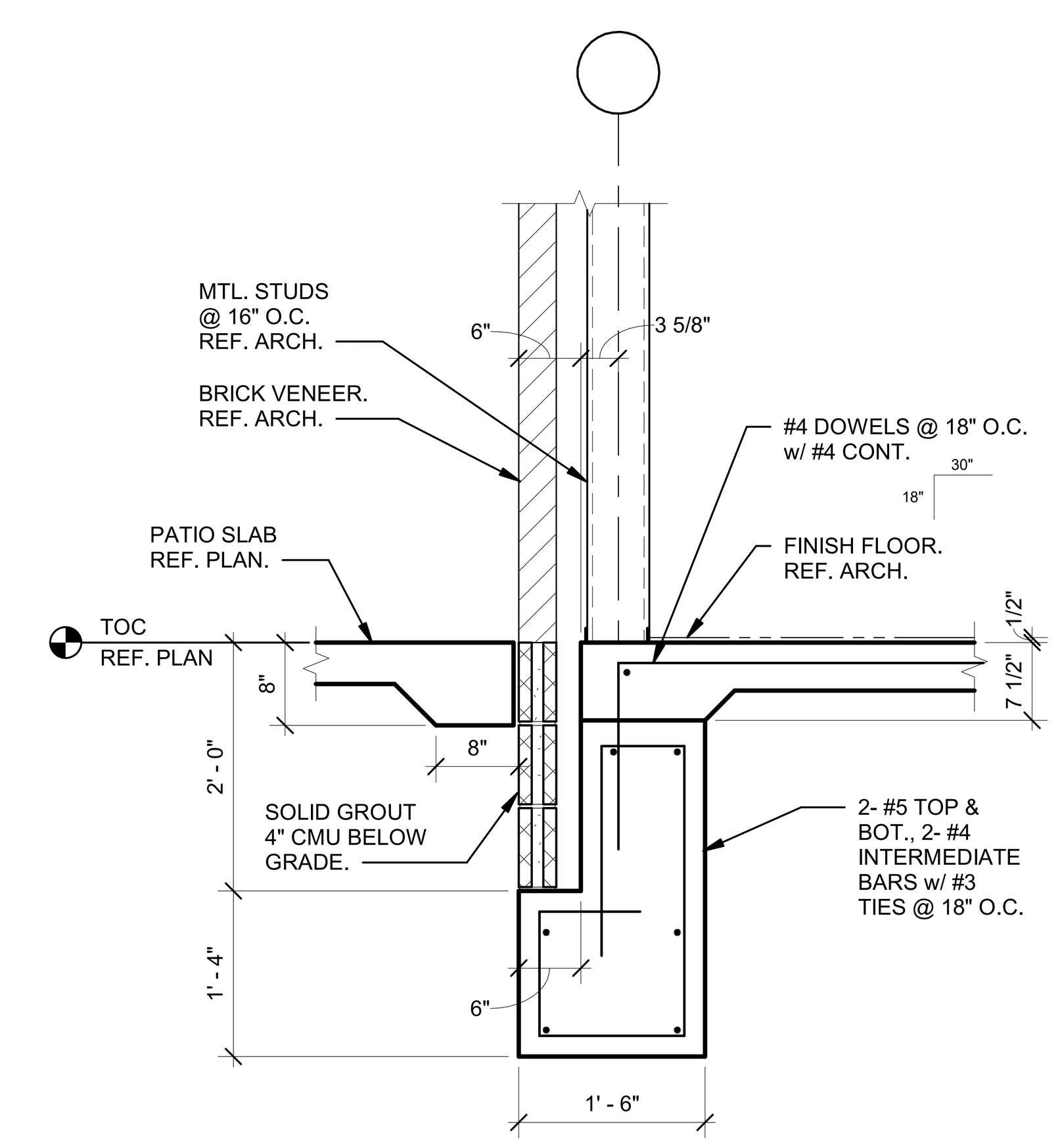

13 TYPICAL SECTION
3/4" = 1'-0"

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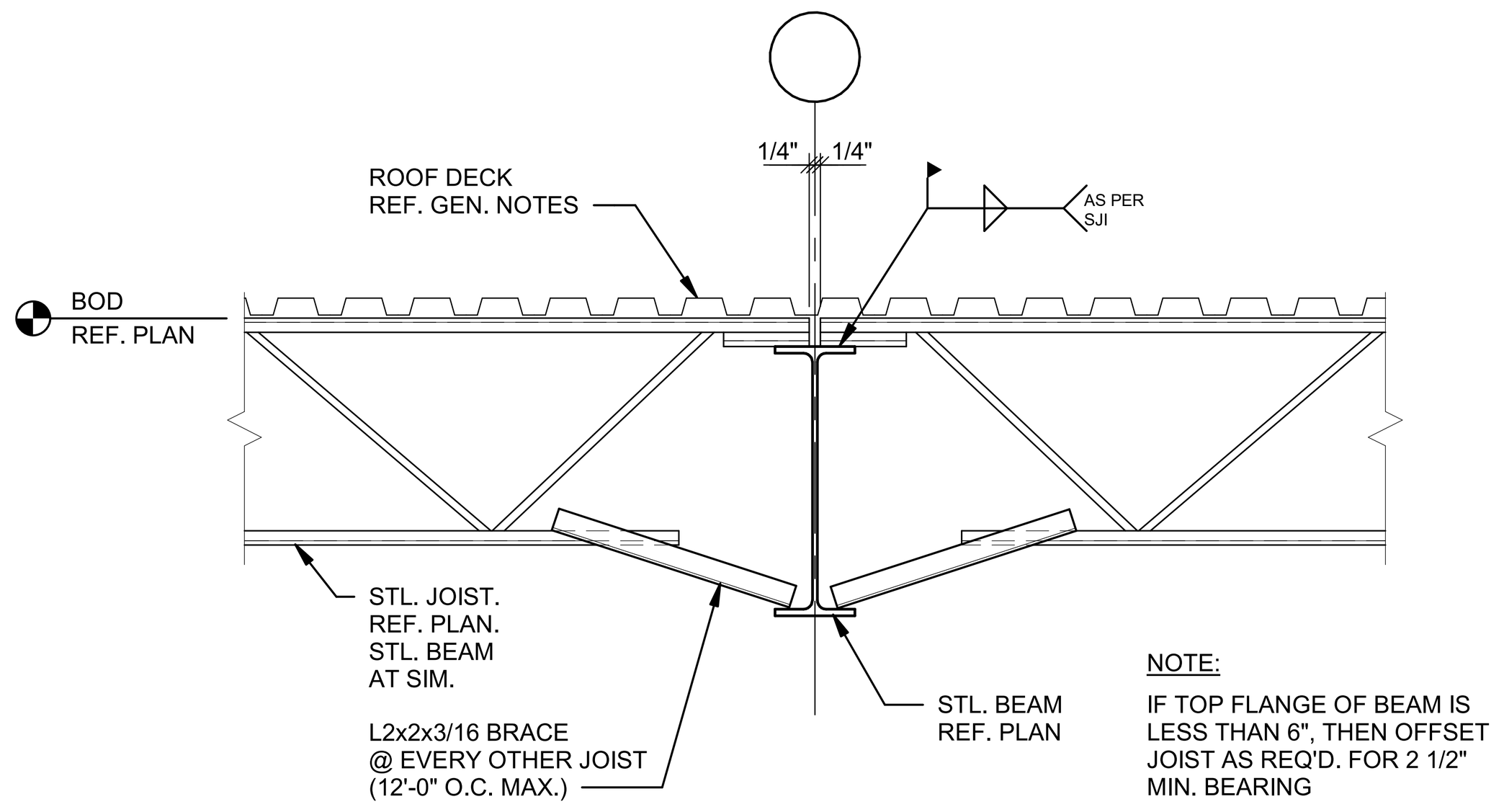
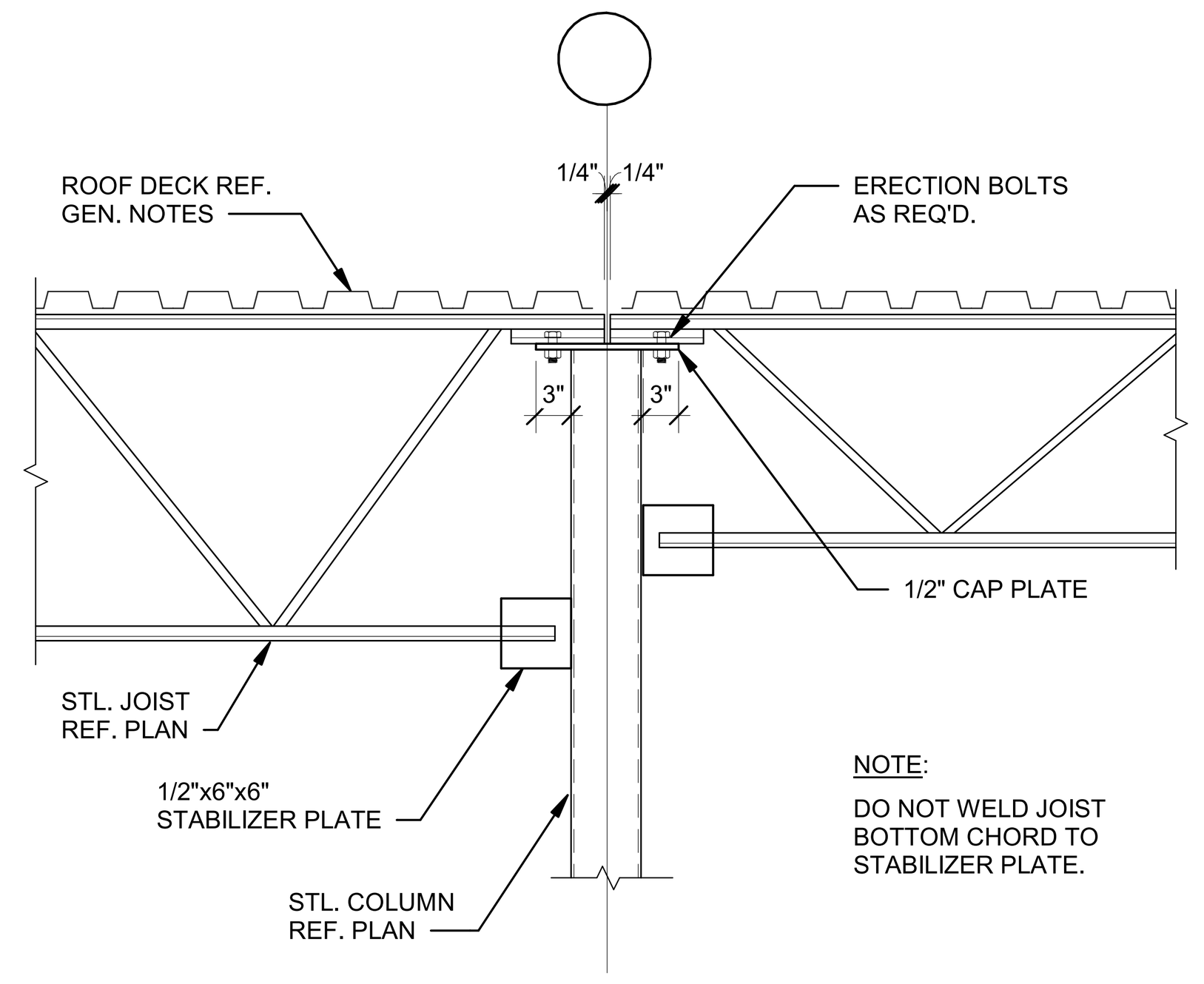
S4.1



TYP. JOIST TO BEAM

1 TYPICAL SECTION
3/4" = 1'-0"



TYP. JOIST TO COLUMN

2 TYPICAL SECTION
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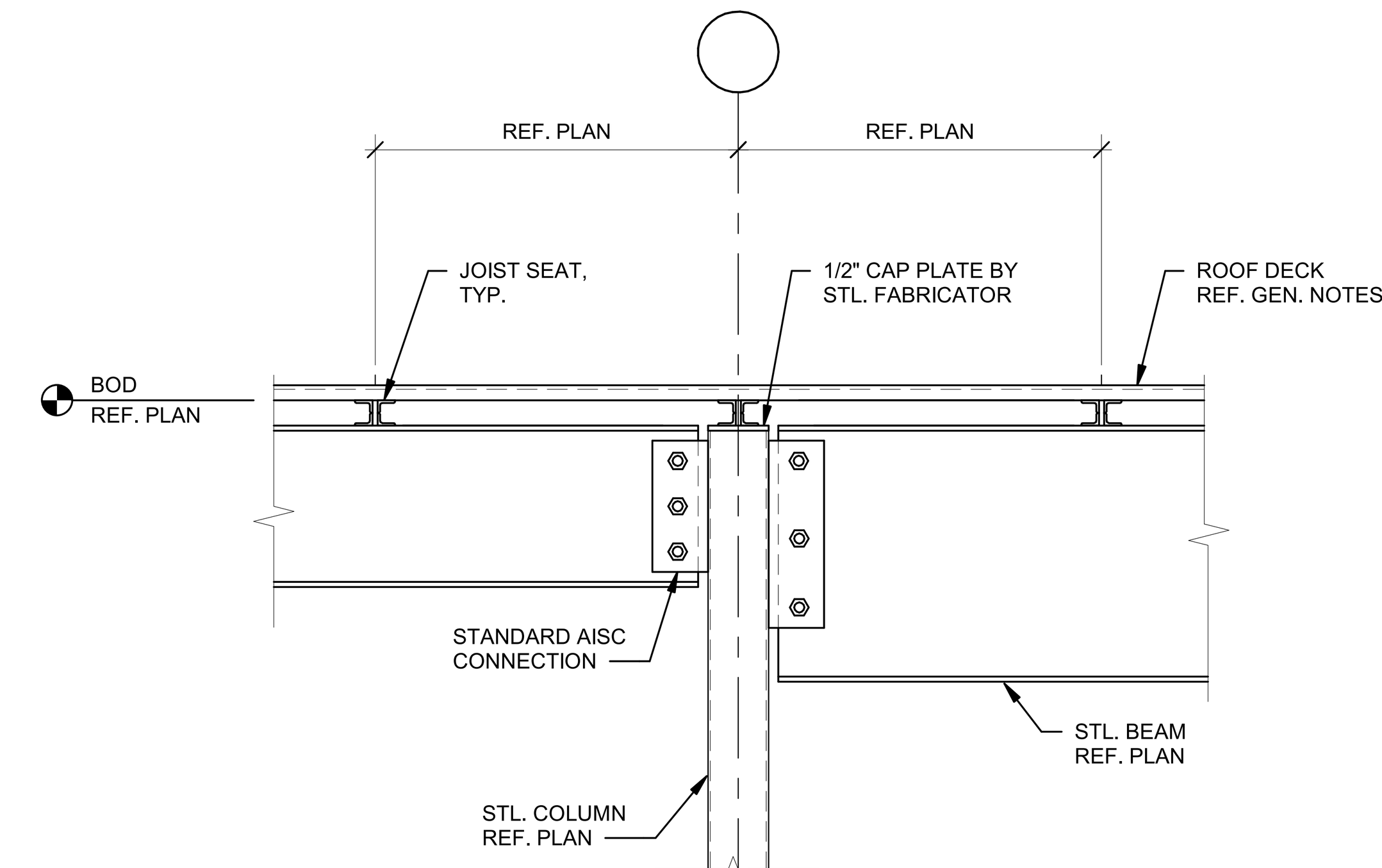

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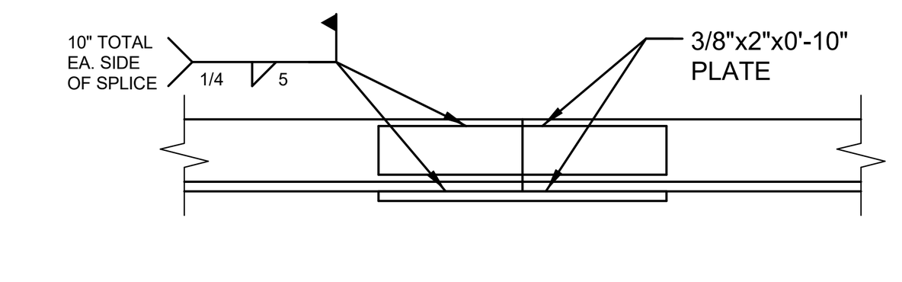
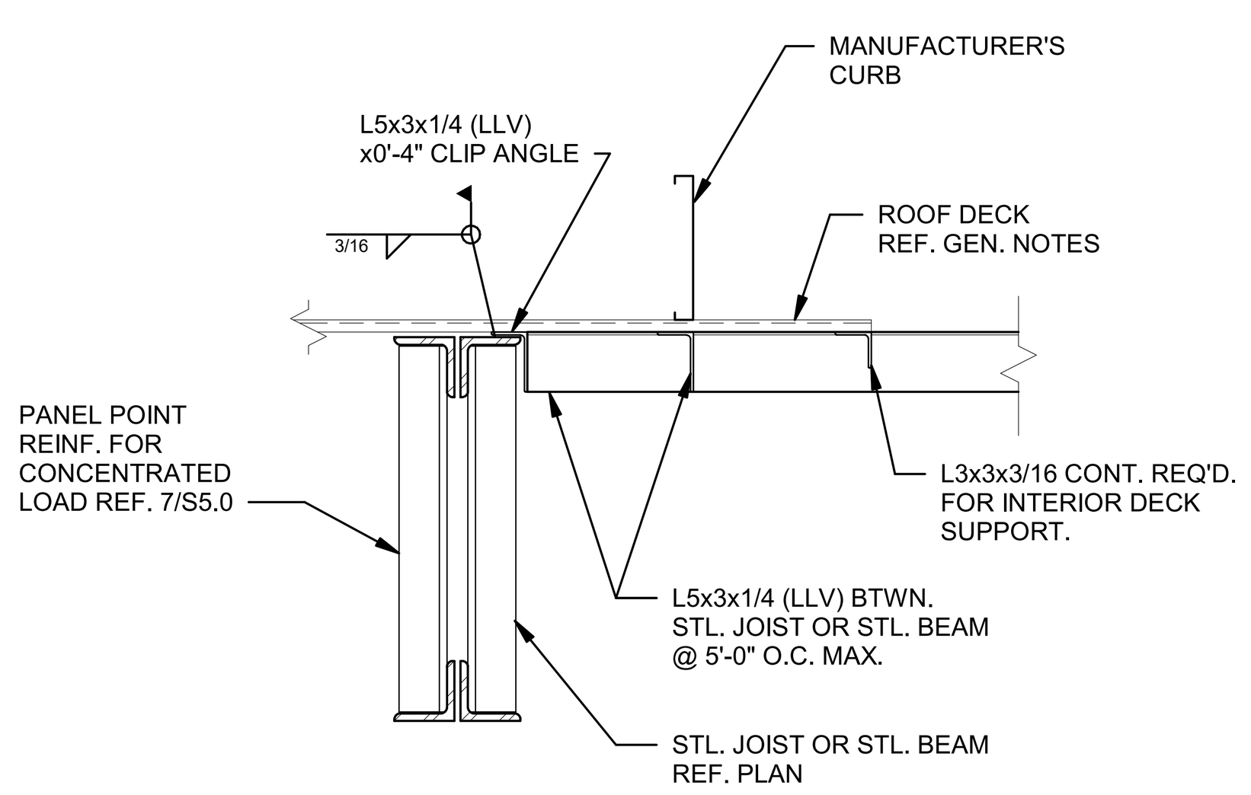


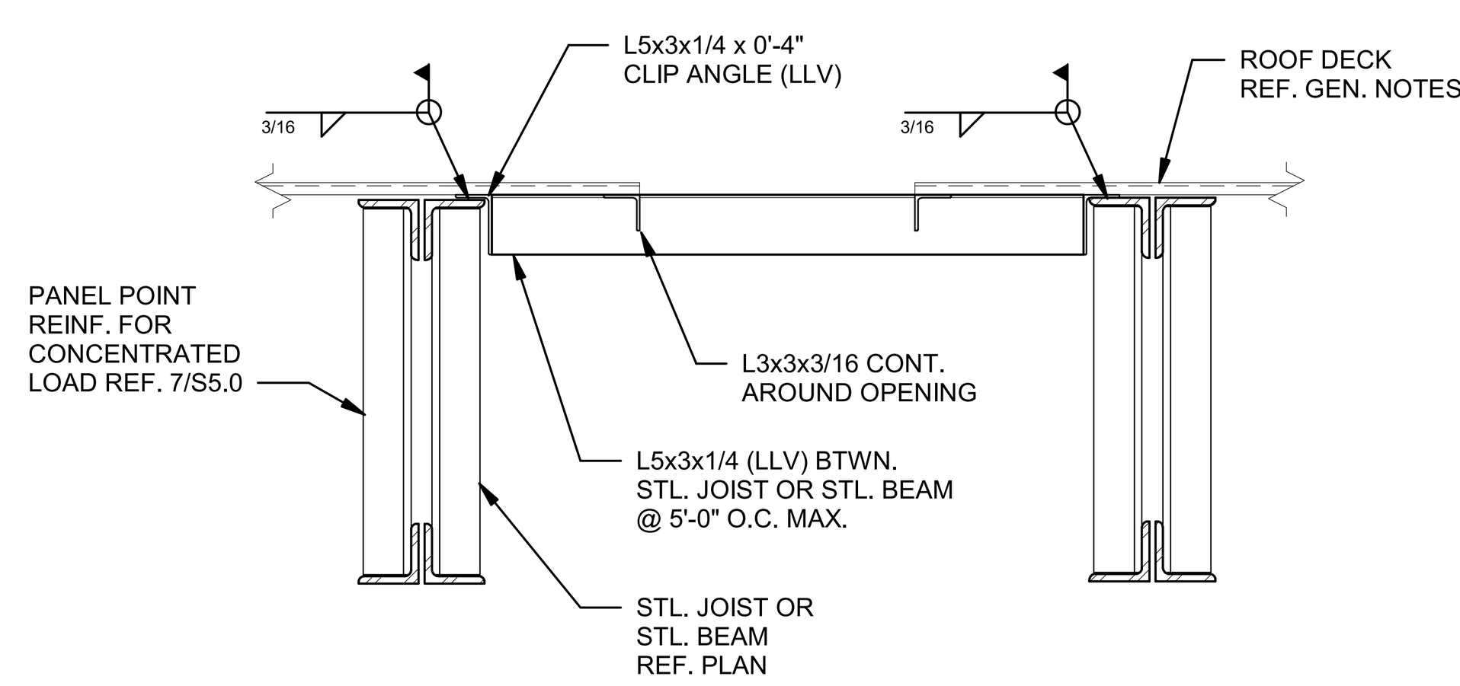
TYP. SPLICE OF EDGE ANGLE

4 TYPICAL SECTION
3/4" = 1'-0"



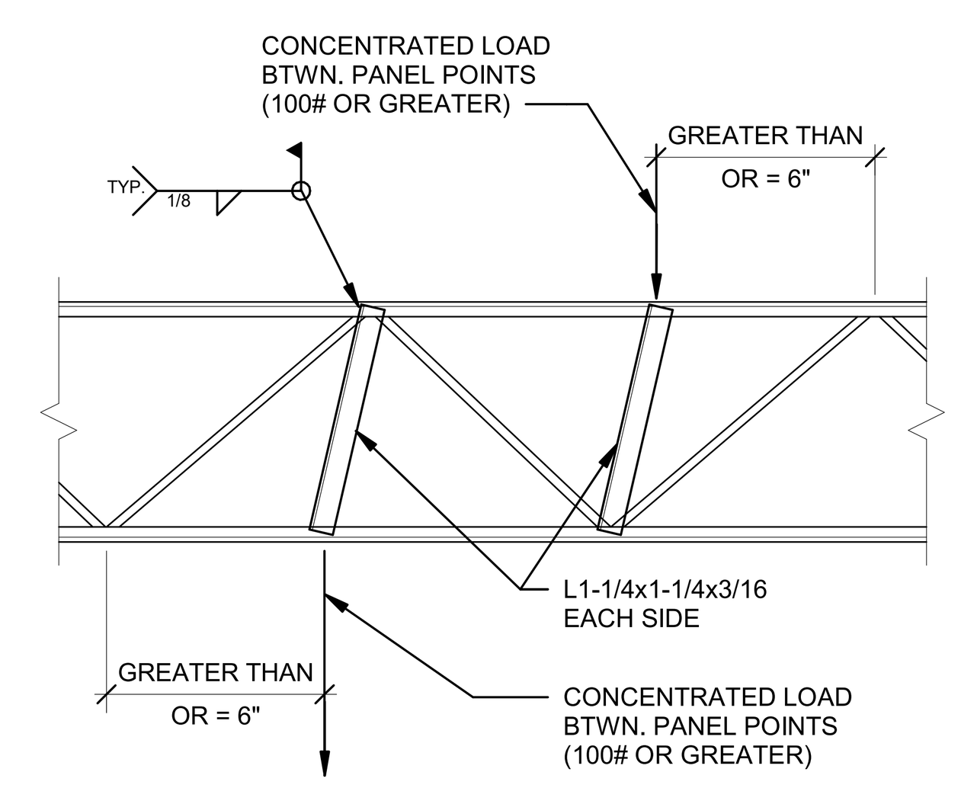
TYPICAL UNIT FRAMING

5 TYPICAL SECTION
3/4" = 1'-0"



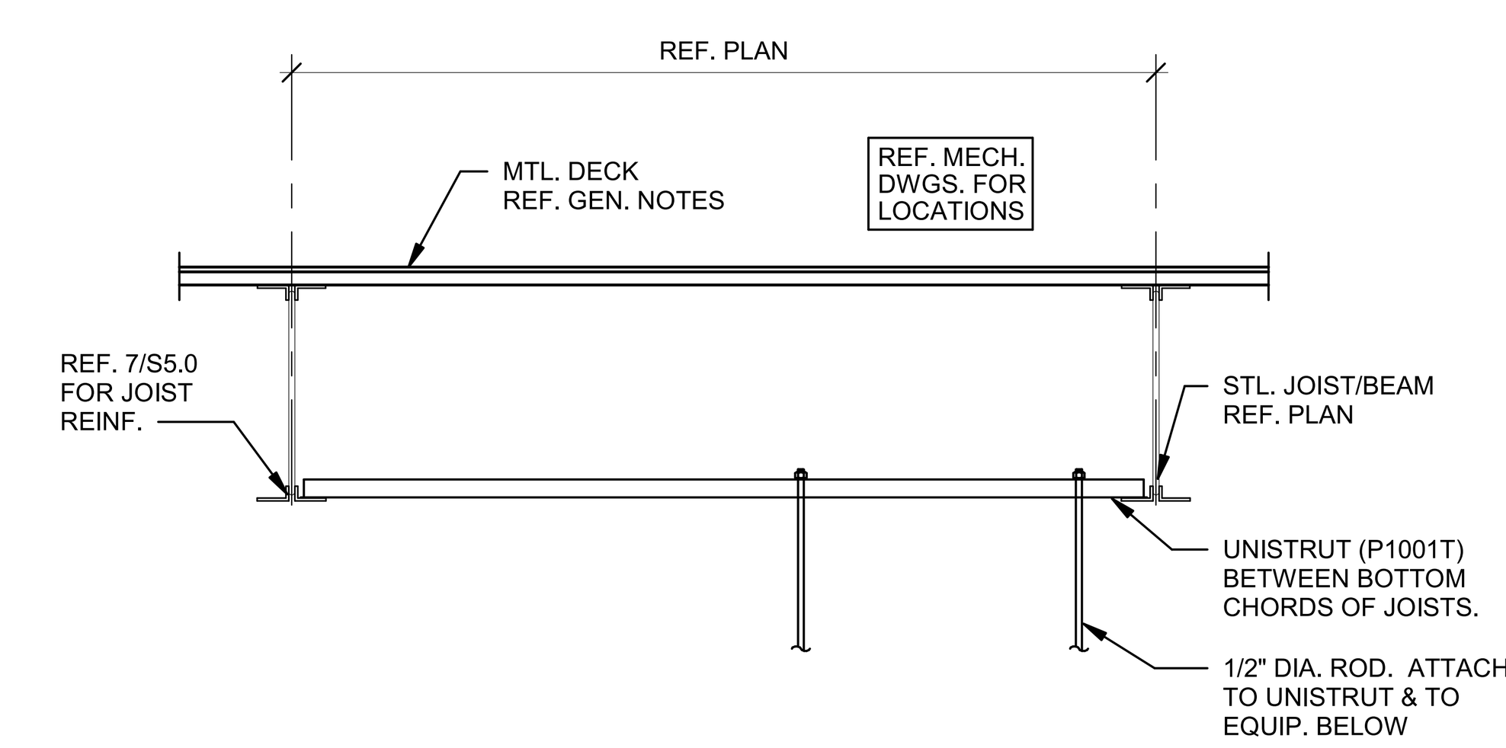
TYPICAL ROOF OPENING FRAME

6 TYPICAL SECTION
3/4" = 1'-0"



PANEL POINT REINFORCING AT JOIST

7 TYPICAL SECTION
3/4" = 1'-0"



8 TYP. SECTION AT HANGING EQUIPMENT
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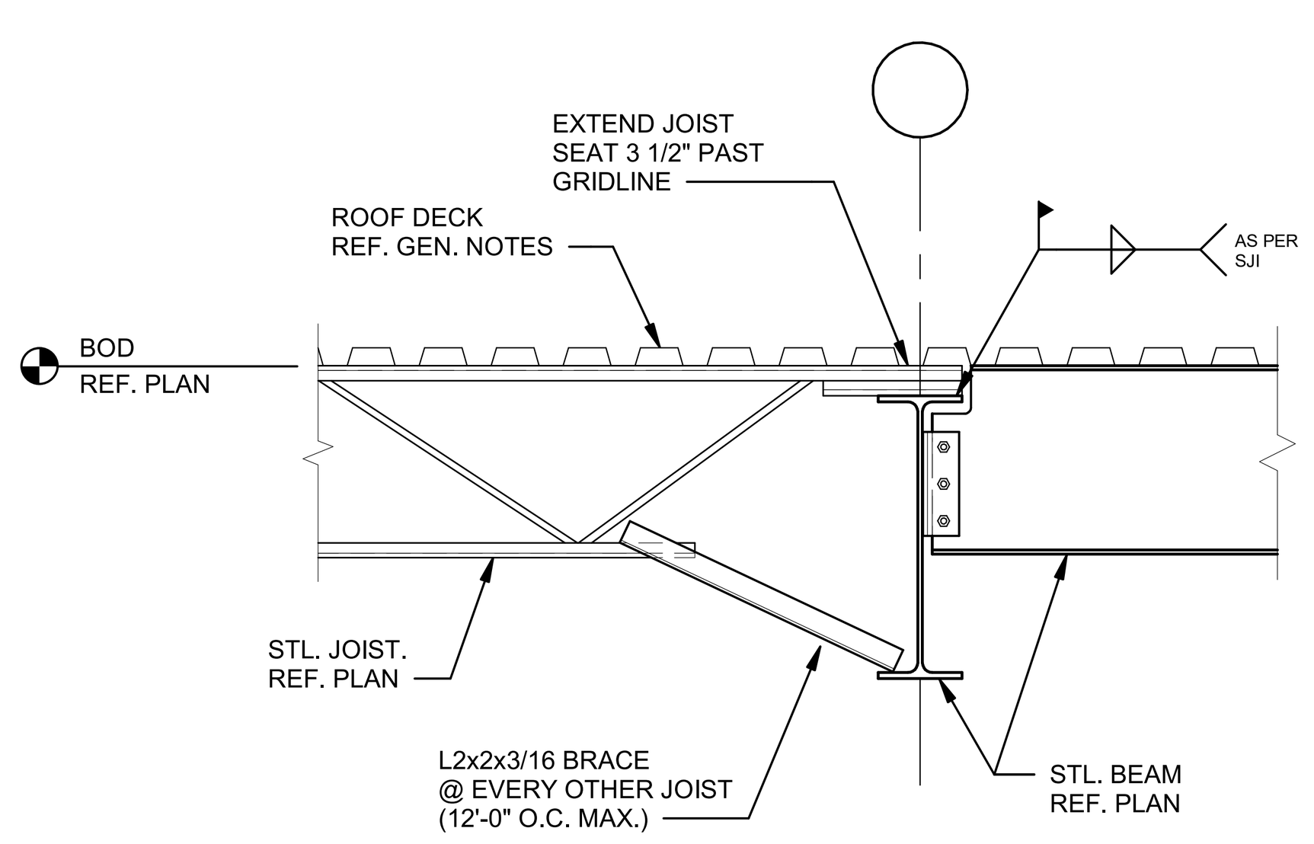

9 TYPICAL SECTION
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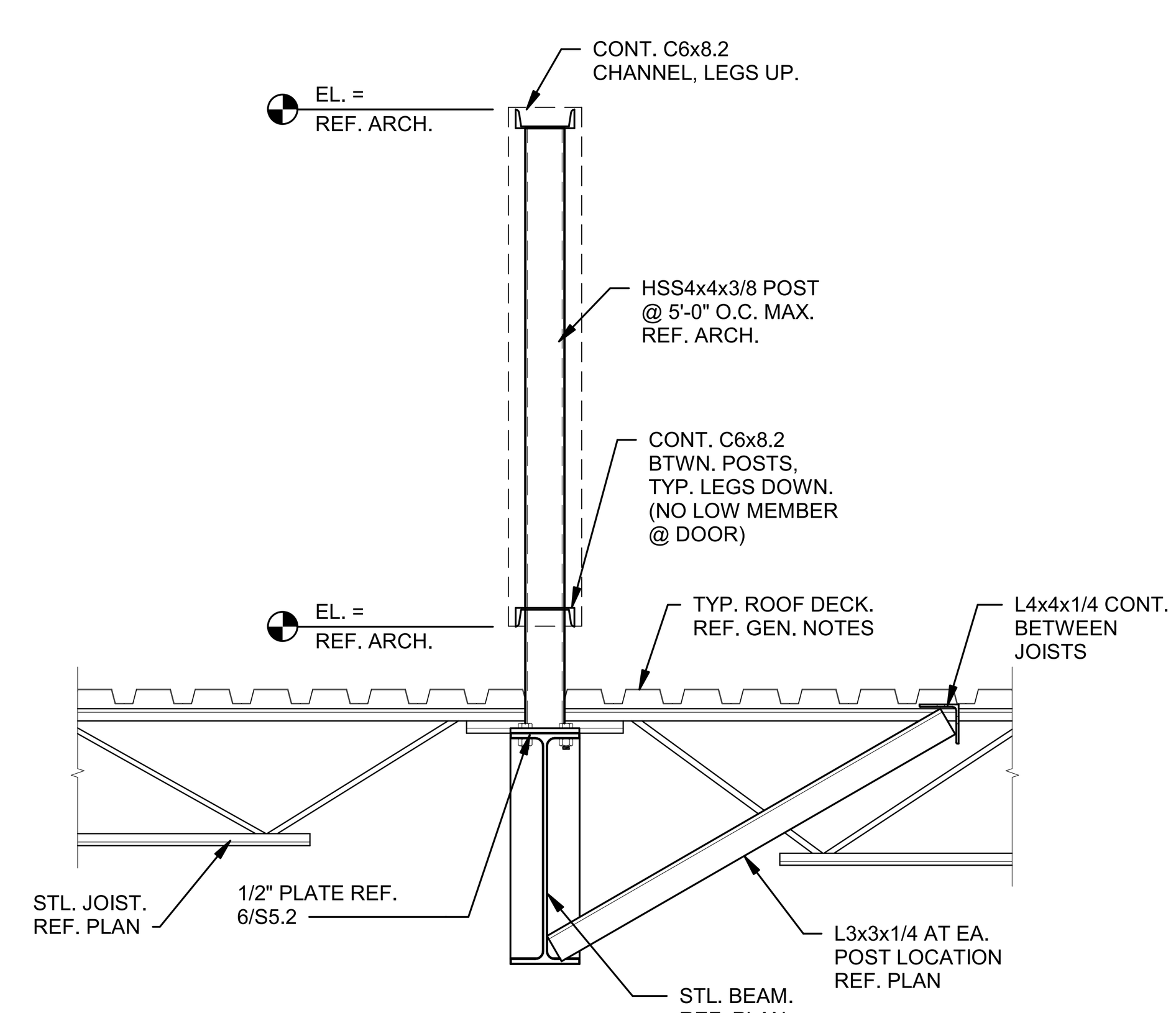

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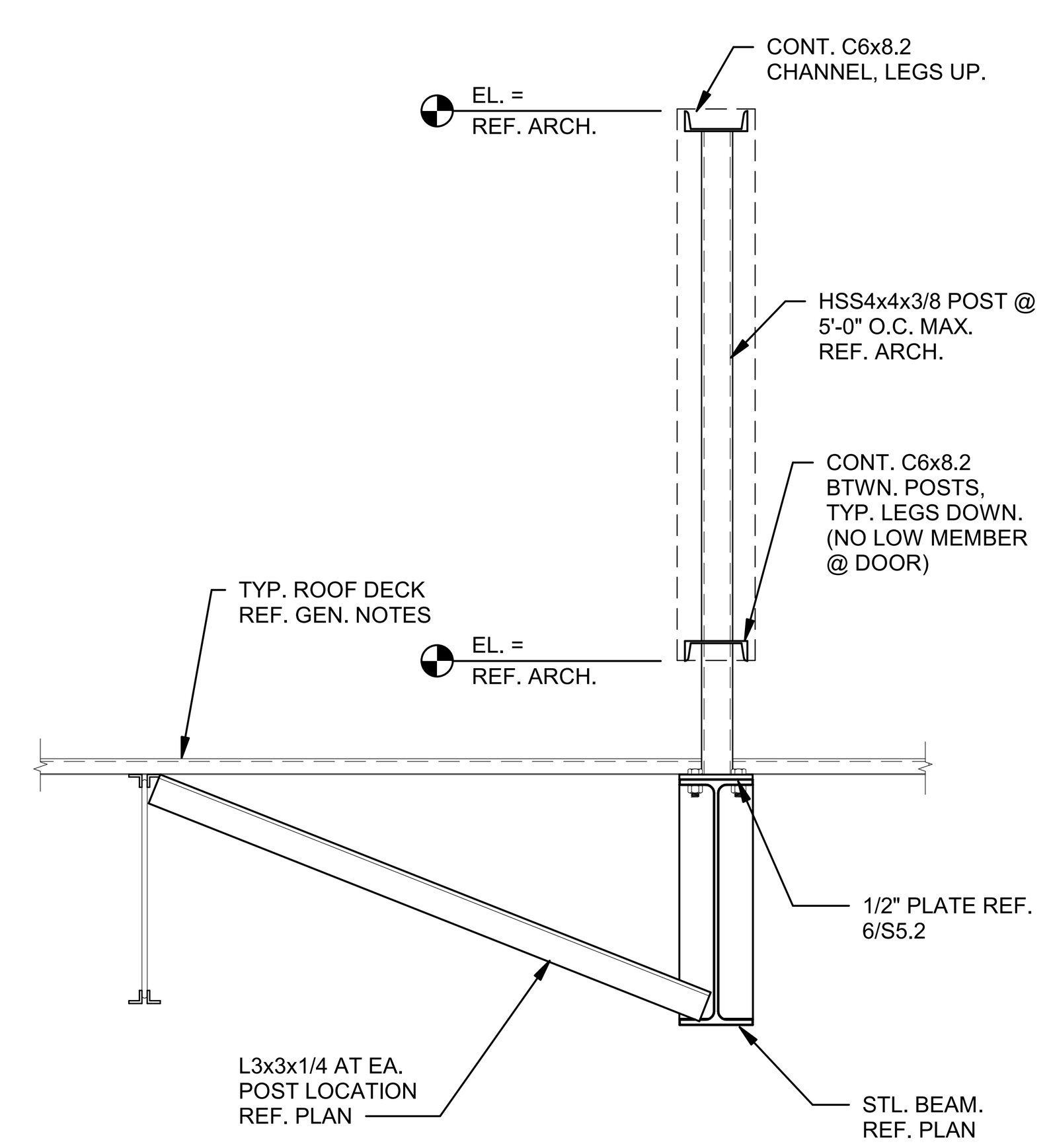
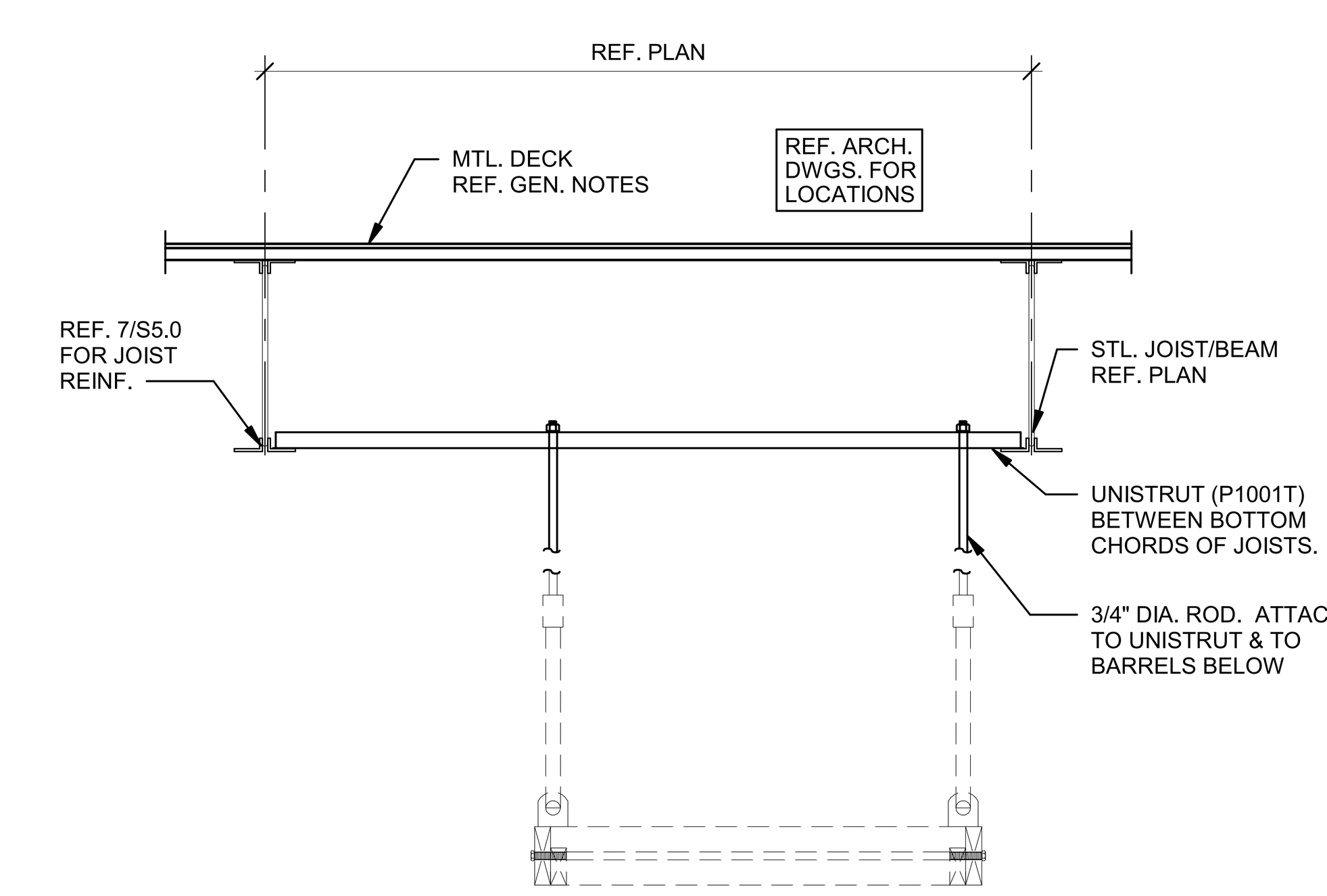


11 TYPICAL SECTION
3/4" = 1'-0"



12 TYP. SECTION AT BARREL SUPPORT
3/4" = 1'-0"

HART GAUGLER + ASSOCIATES
DRAWN CRS
DESIGN SMW
HGA JOB # 221130

COOPER'S HAWK
WINERY & RESTAURANT
540 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086

No	Date	Remarks
	2021/08/19	ISSUED FOR PERMIT

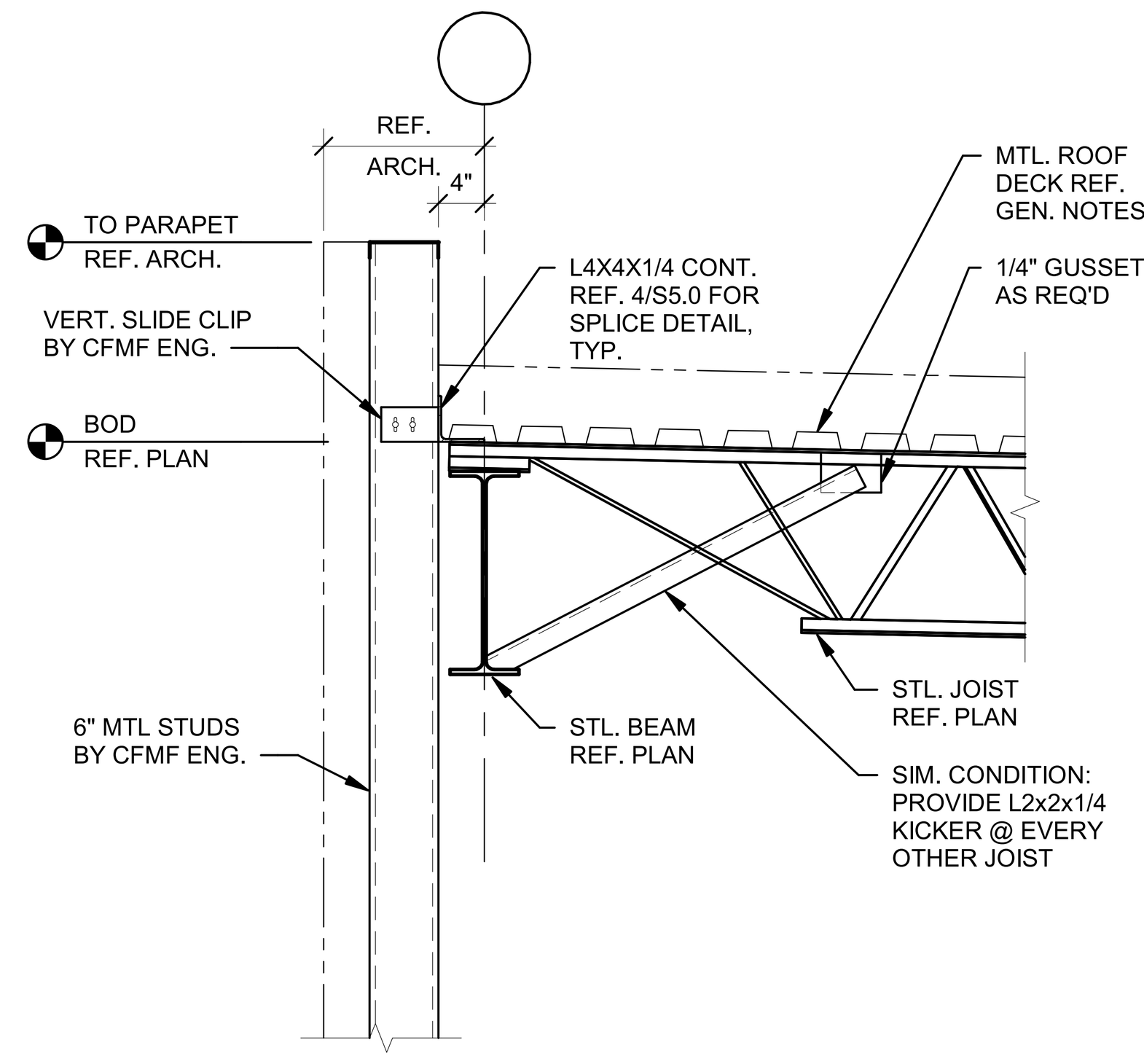
REVISIONS

STATE OF MISSOURI
JOHN EDWARD KIMBLE
NUMBER PE-2007011068
PROFESSIONAL ENGINEER
08/19/21

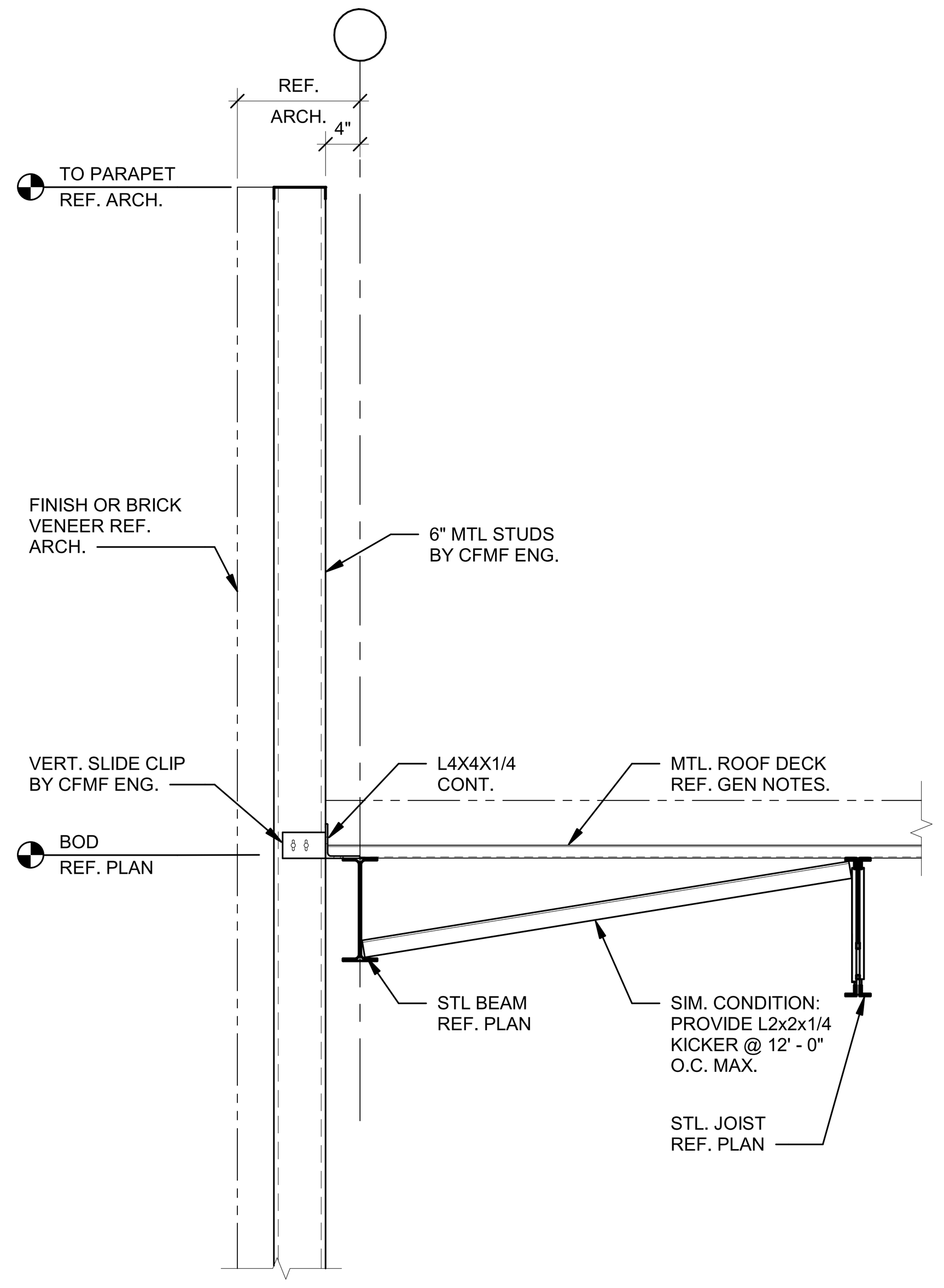
Drawing Title
ROOF FRAMING DETAILS

Job No.	Drawn
204530	CRS
Scale	Date
AS NOTED	08/19/2021

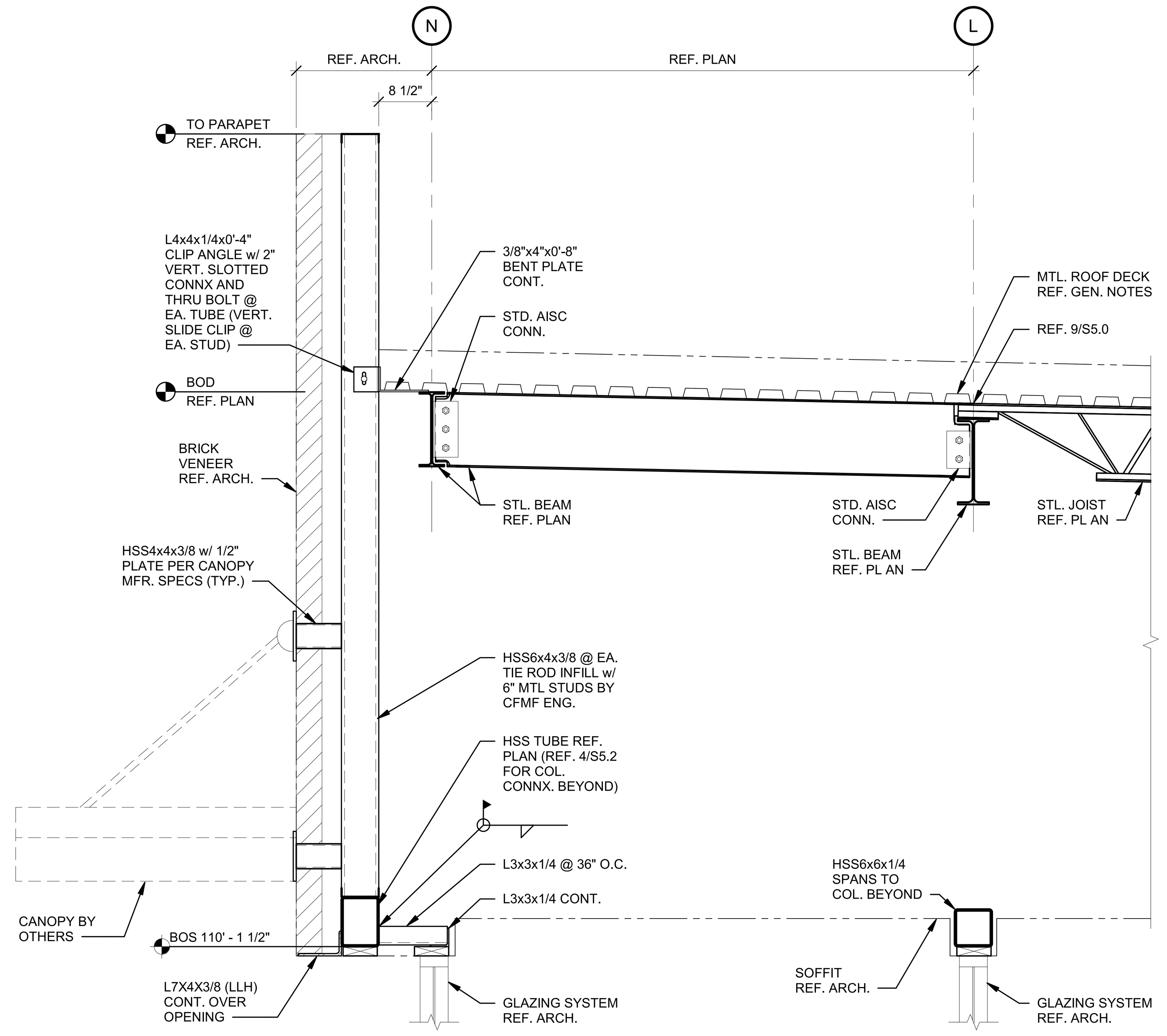
Sheet No.
S5.0



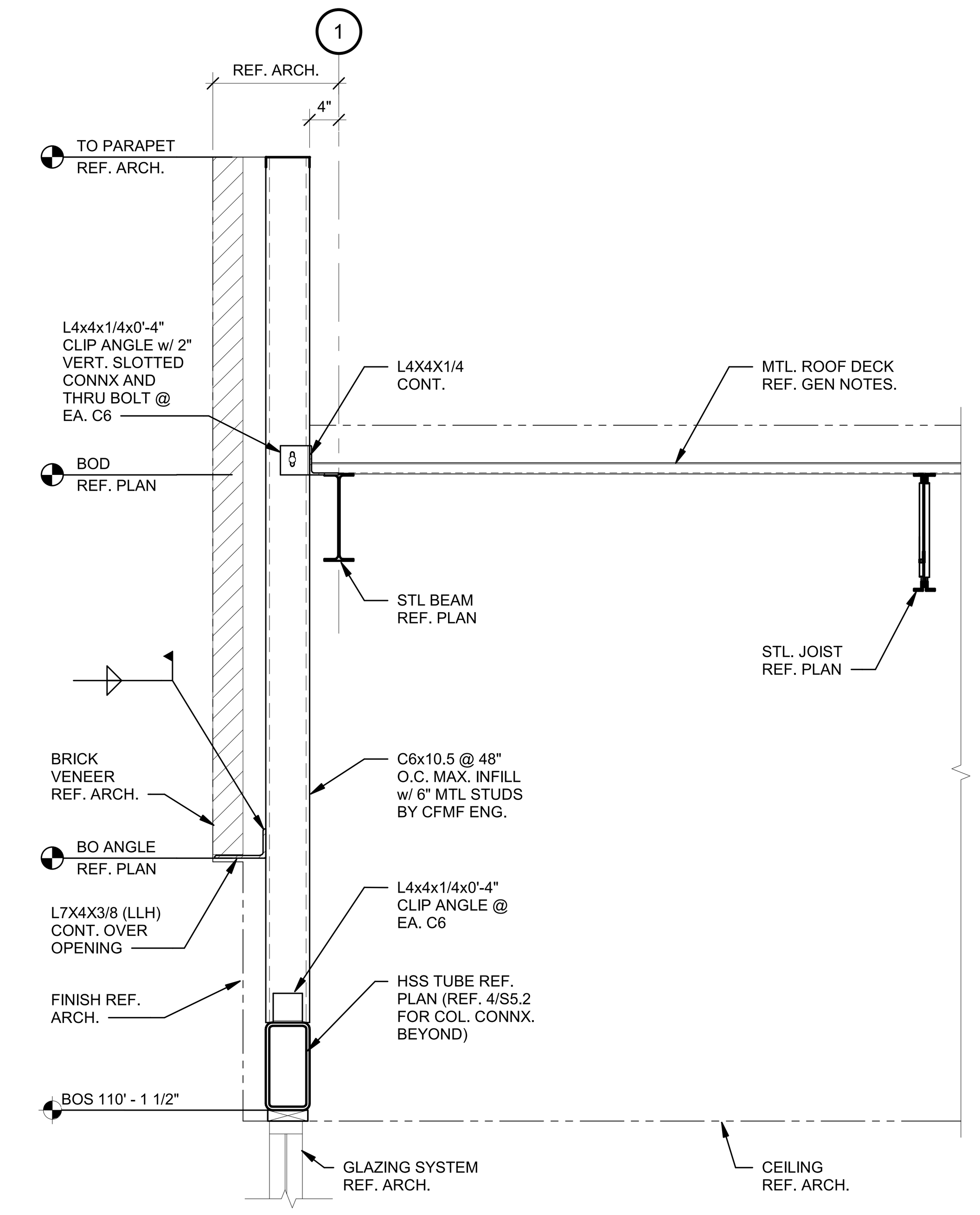
1 TYPICAL SECTION
3/4" = 1'-0"



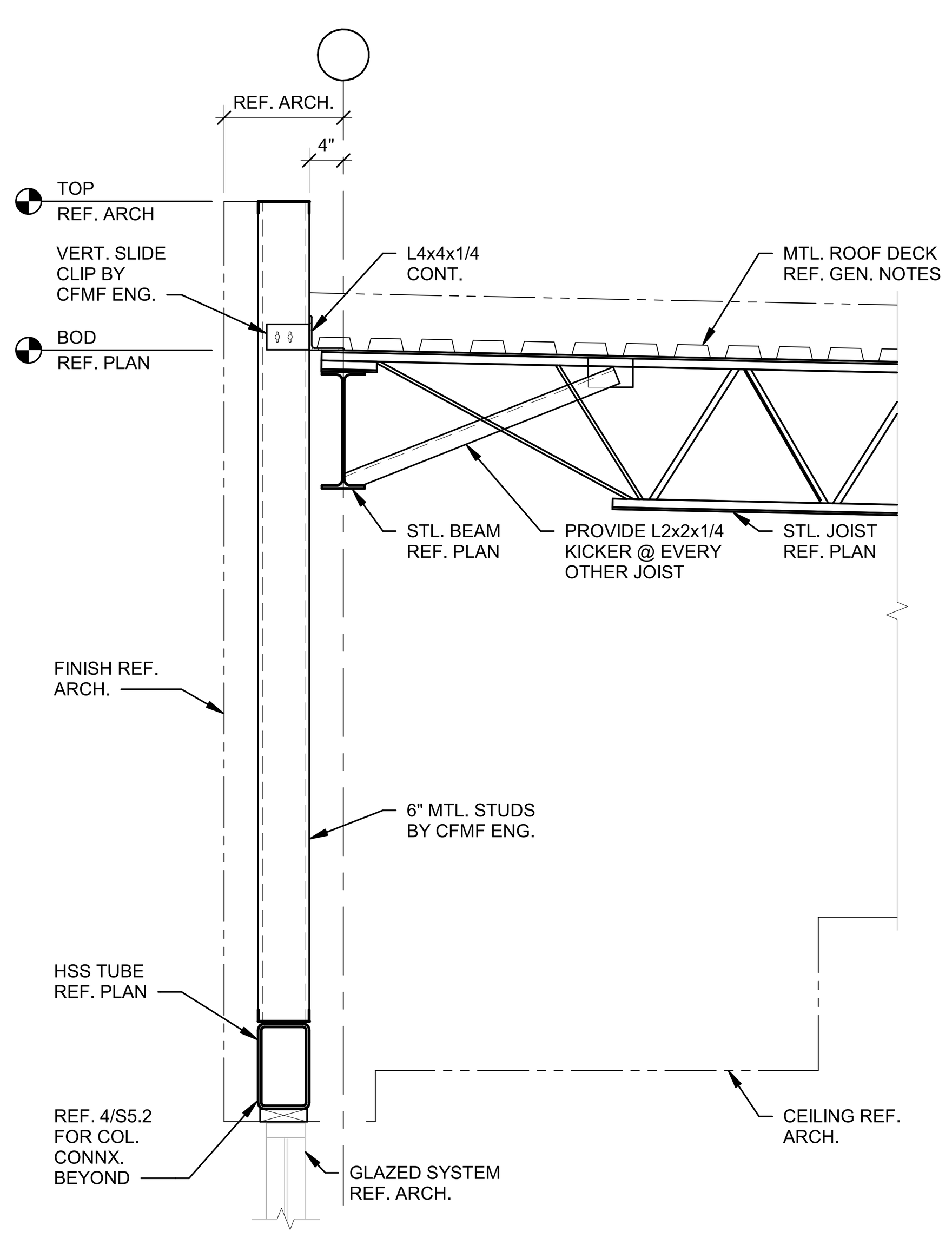
2 SECTION
3/4" = 1'-0"



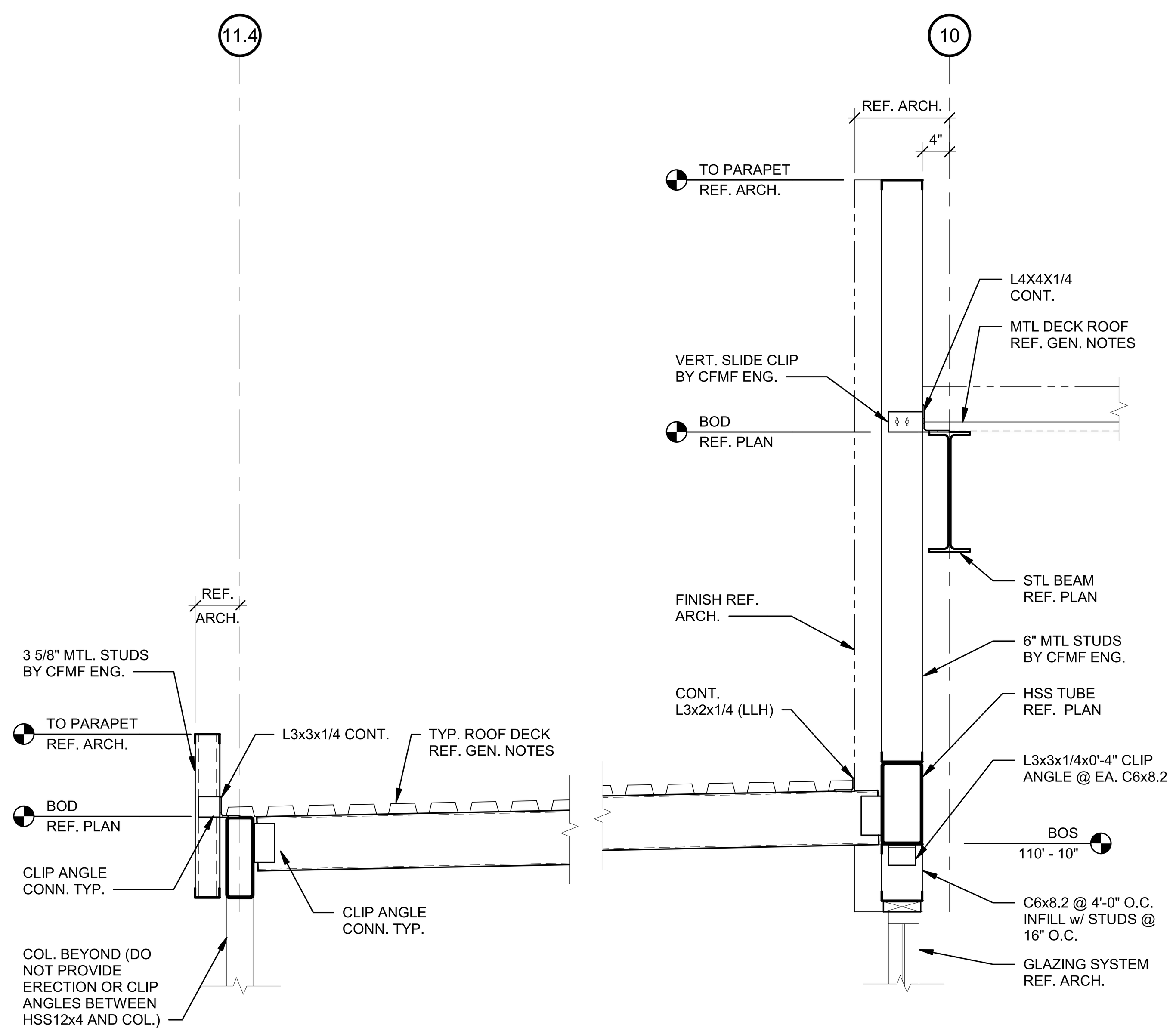
3 SECTION
3/4" = 1'-0"



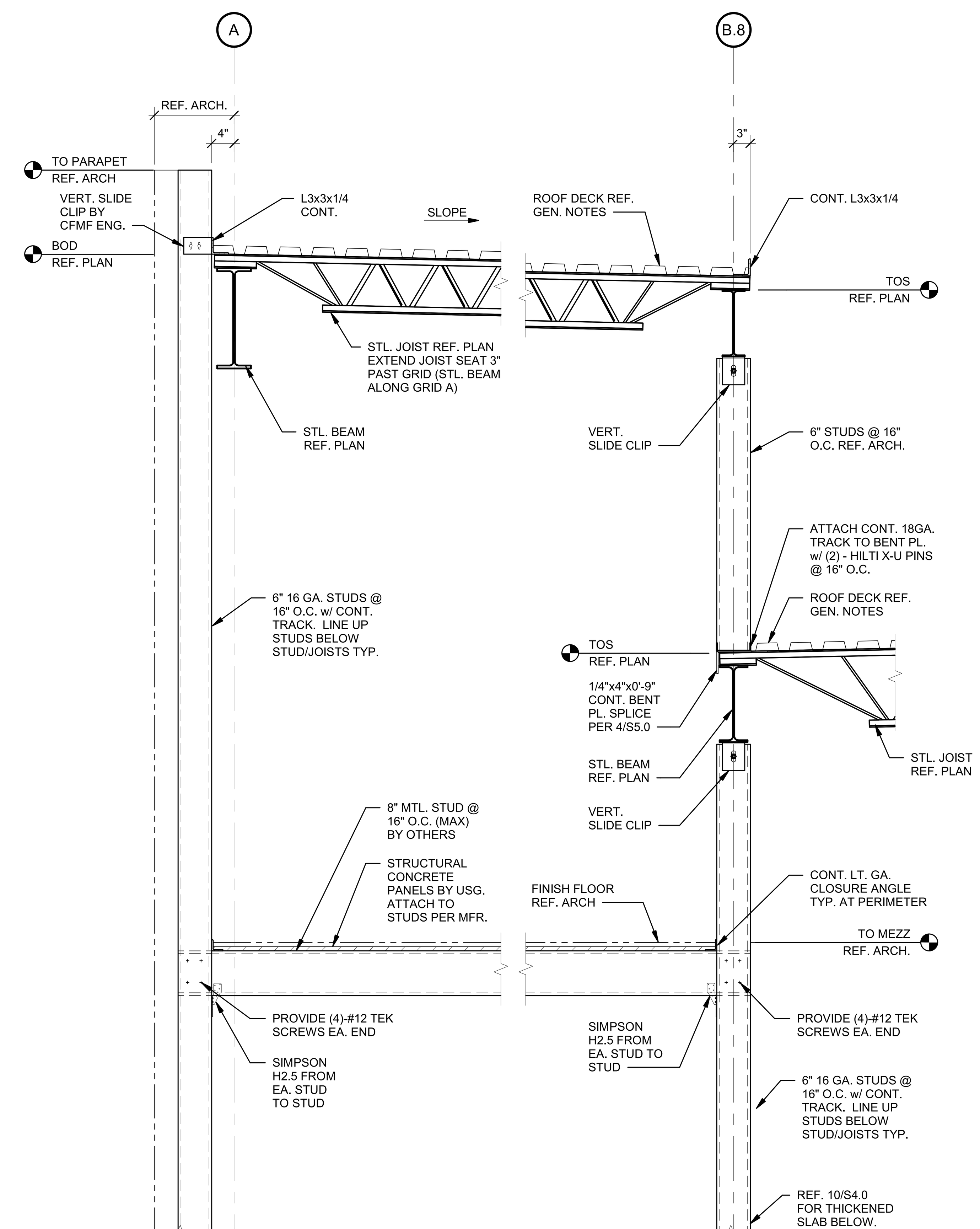
4 SECTION
3/4" = 1'-0"



5 SECTION
3/4" = 1'-0"



6 SECTION
3/4" = 1'-0"



7 SECTION
3/4" = 1'-0"

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/14/2021

HART GAUGLER + ASSOCIATES

Drawn	Design	HGA Job #
CRS	SMW	221130

COOPER'S HAWK
WINERY & RESTAURANT

540 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086

No	Date	Remarks
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REVISIONS

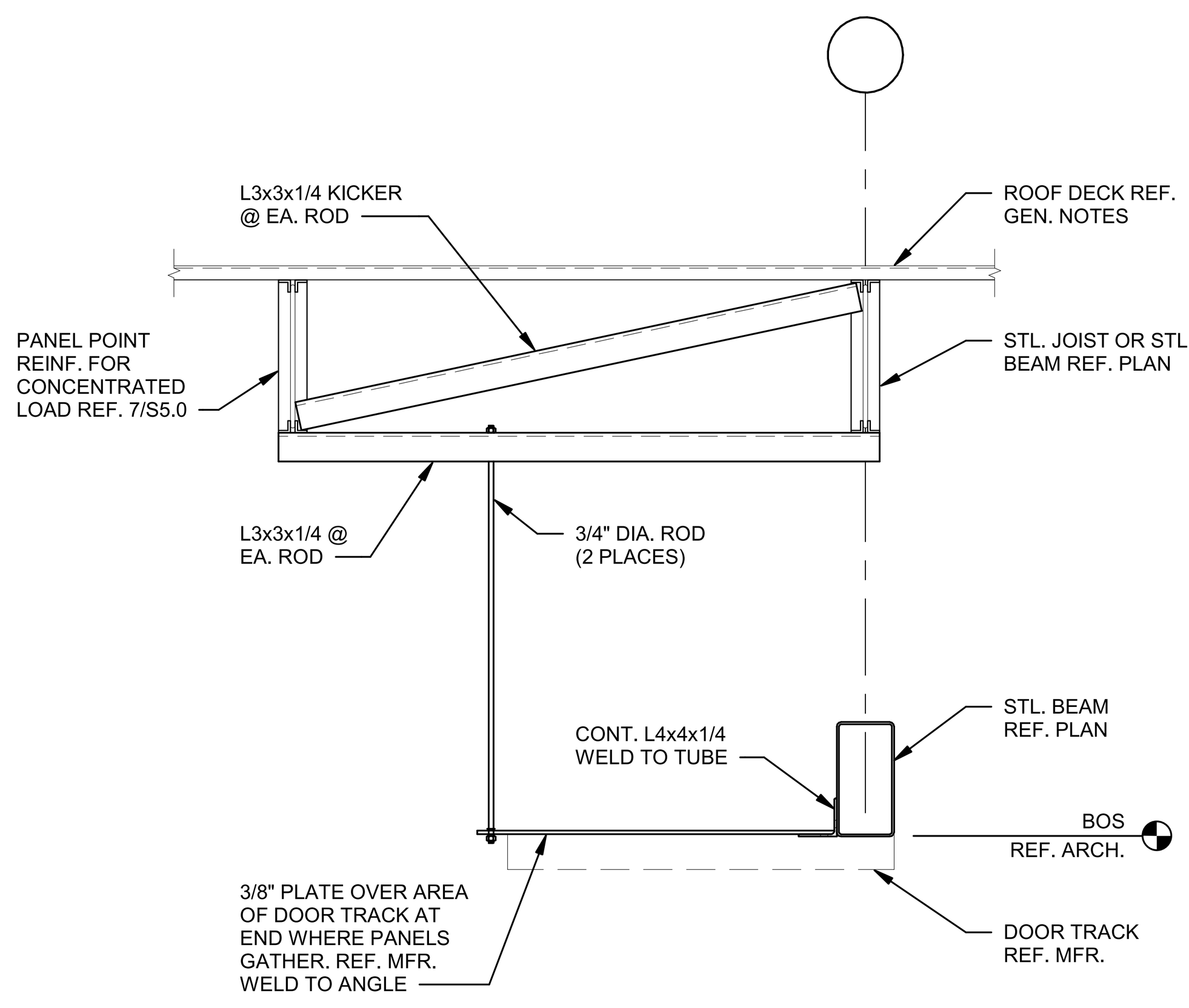
STATE OF MISSOURI
JOHN EDWARD KIMBLE
NUMBER PE-2007011069
PROFESSIONAL ENGINEER
08/19/21

Drawing Title
FRAMING SECTIONS

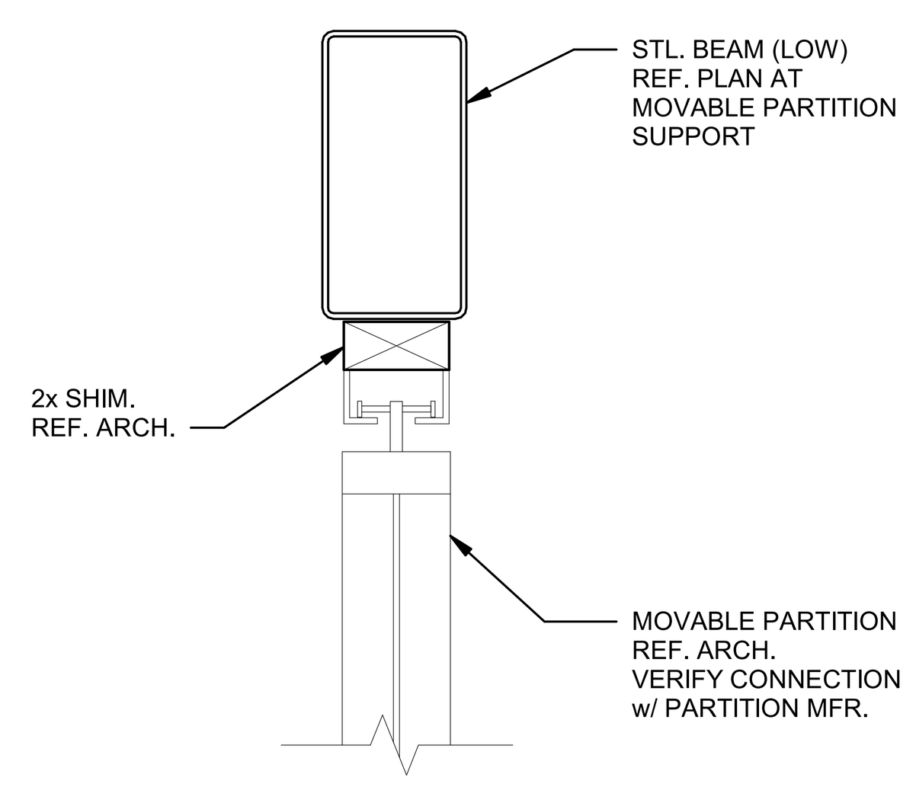
Job No.	Drawn
204530	CRS

Scale	Date
AS NOTED	08/19/2021

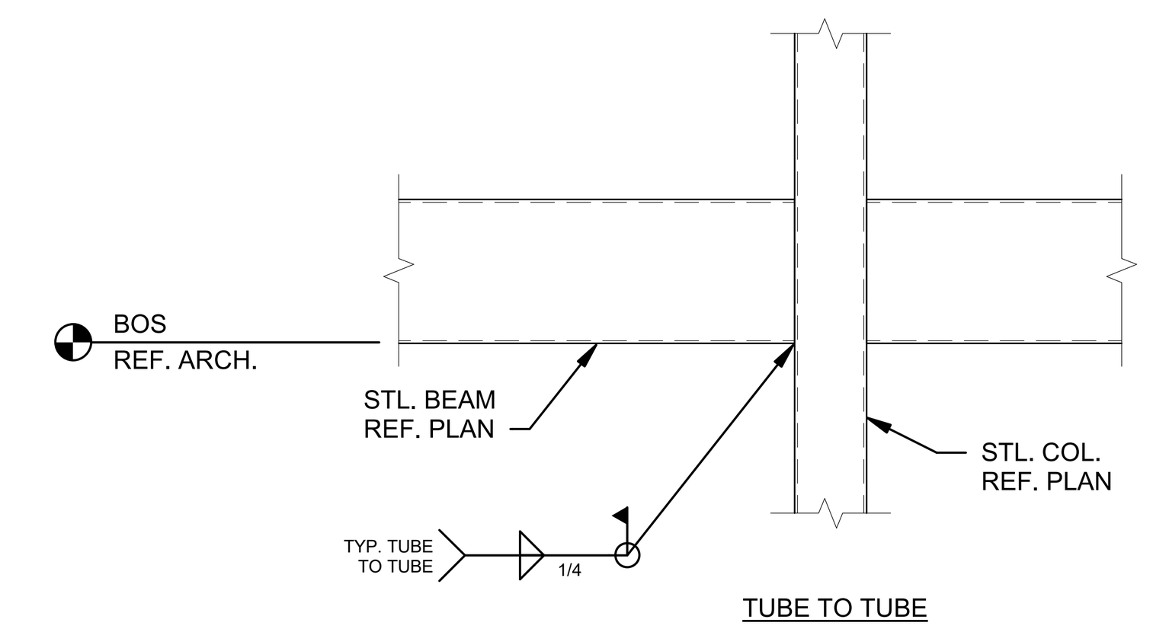
Sheet No.
S5.1



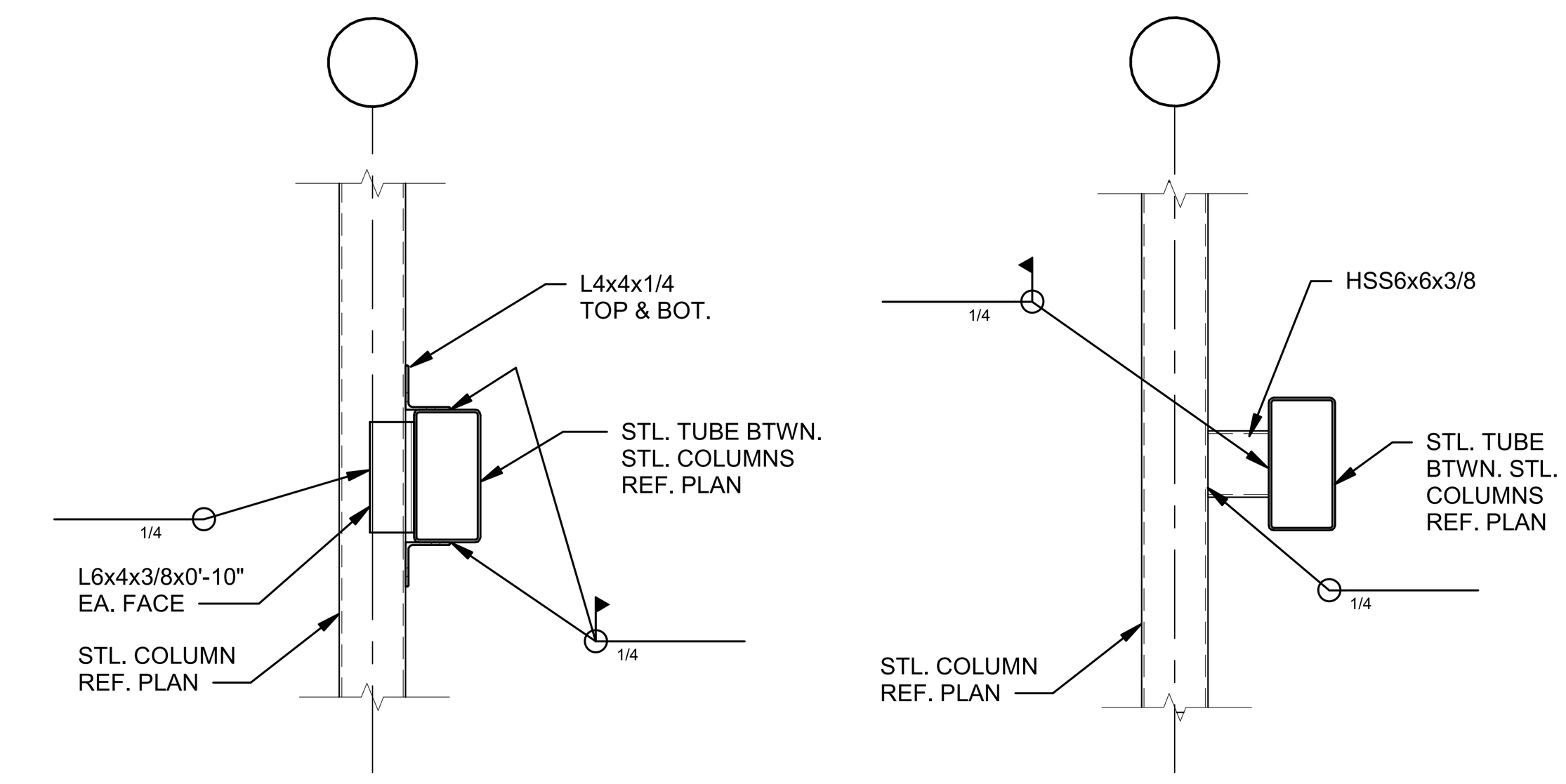
1 DOOR TRACK DETAIL
3/4" = 1'-0"



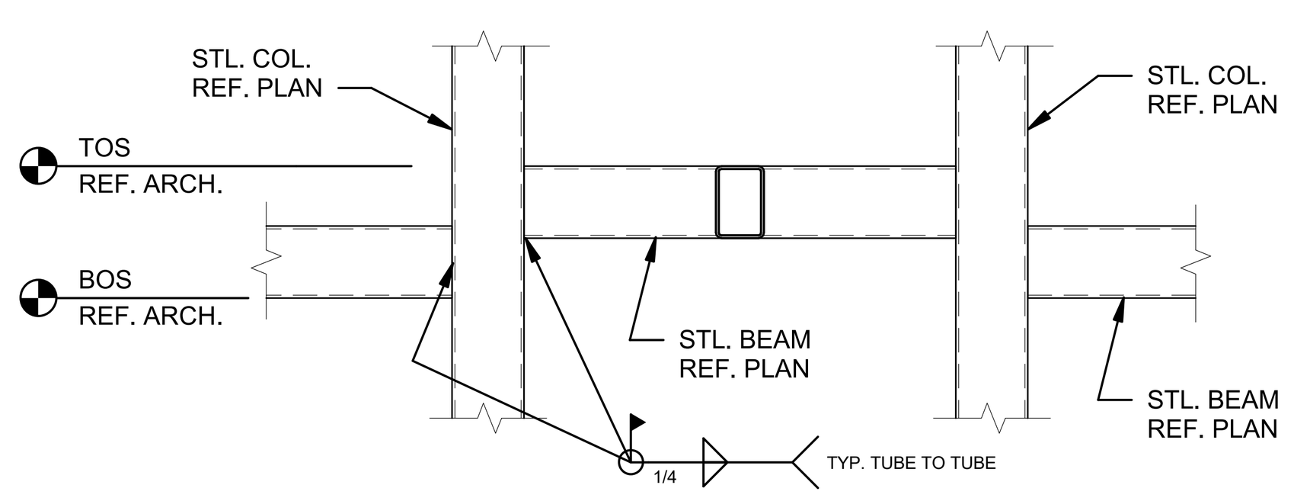
2 TYPICAL SECTION
1 1/2" = 1'-0"



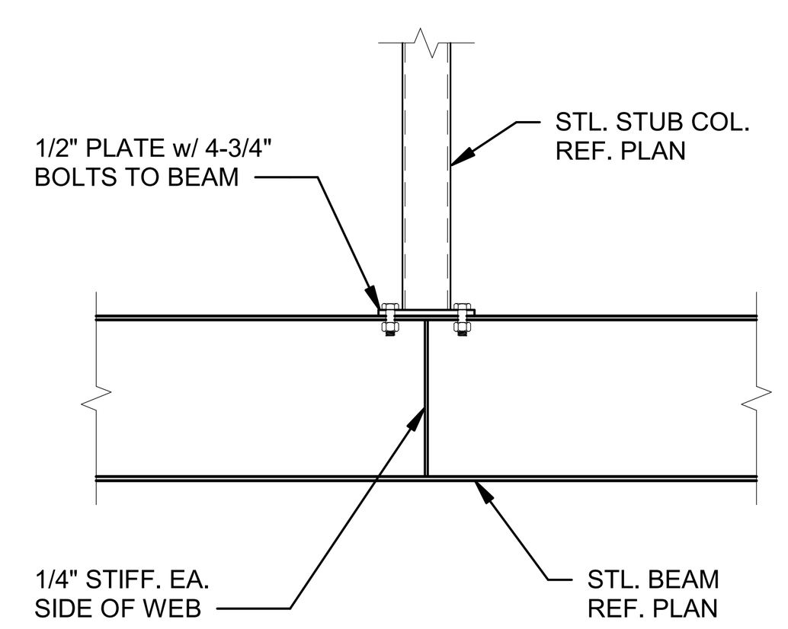
3 TYPICAL SECTION
3/4" = 1'-0"



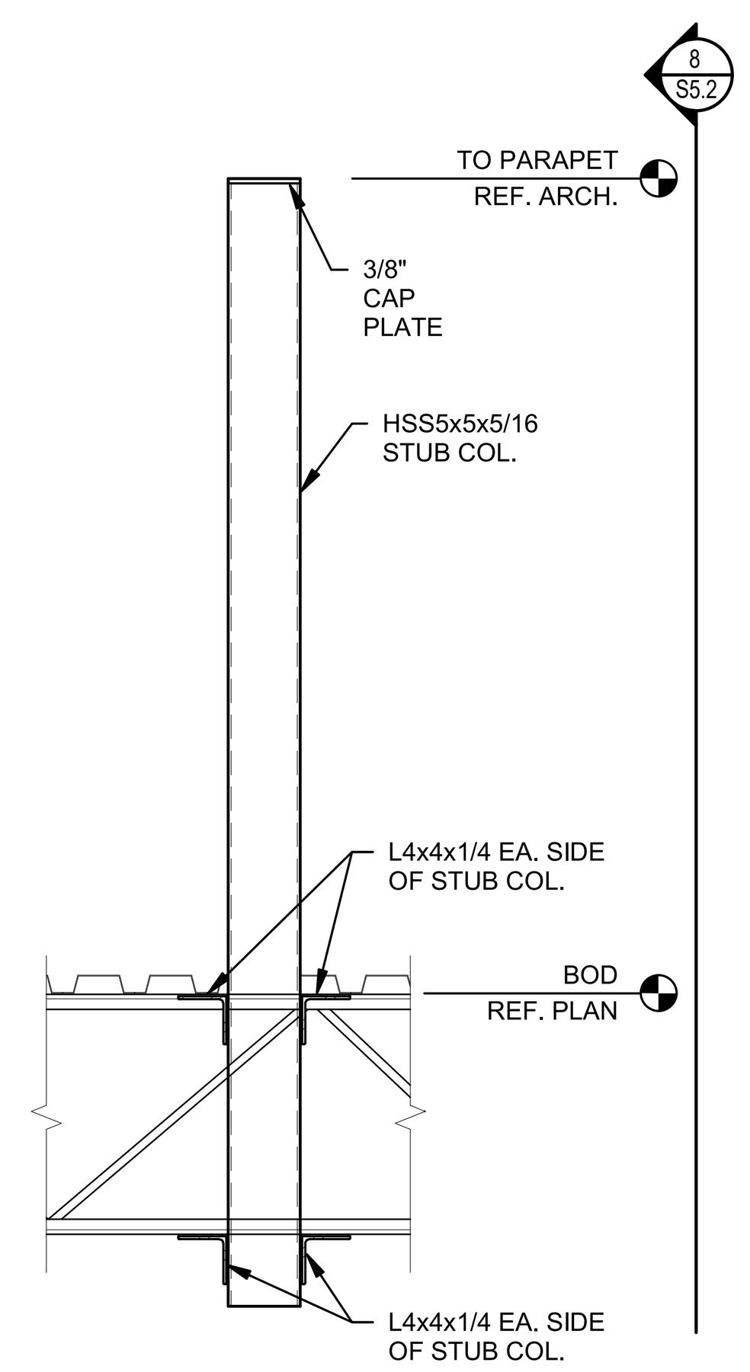
4 SECTION
3/4" = 1'-0"



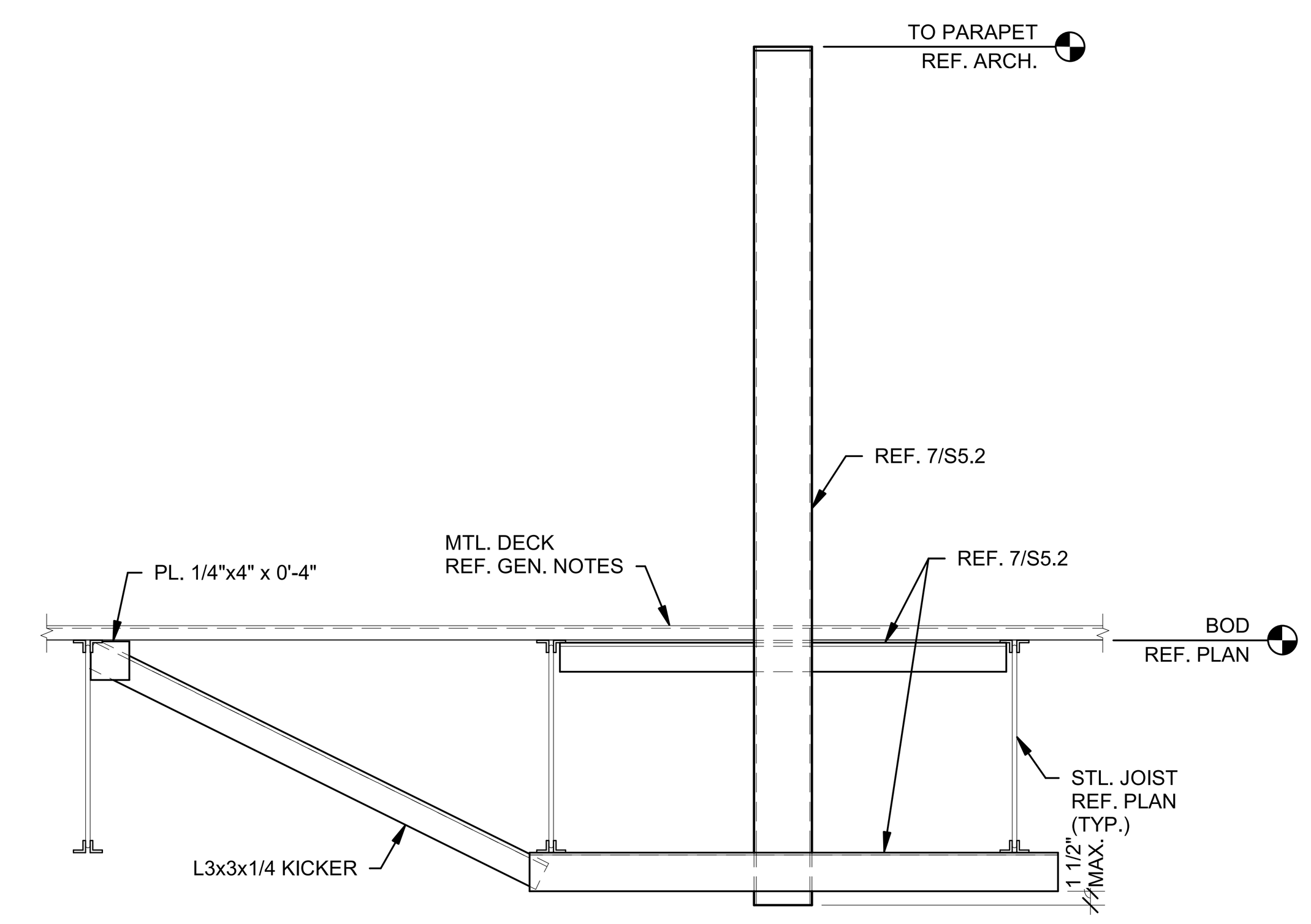
5 SECTION
3/4" = 1'-0"



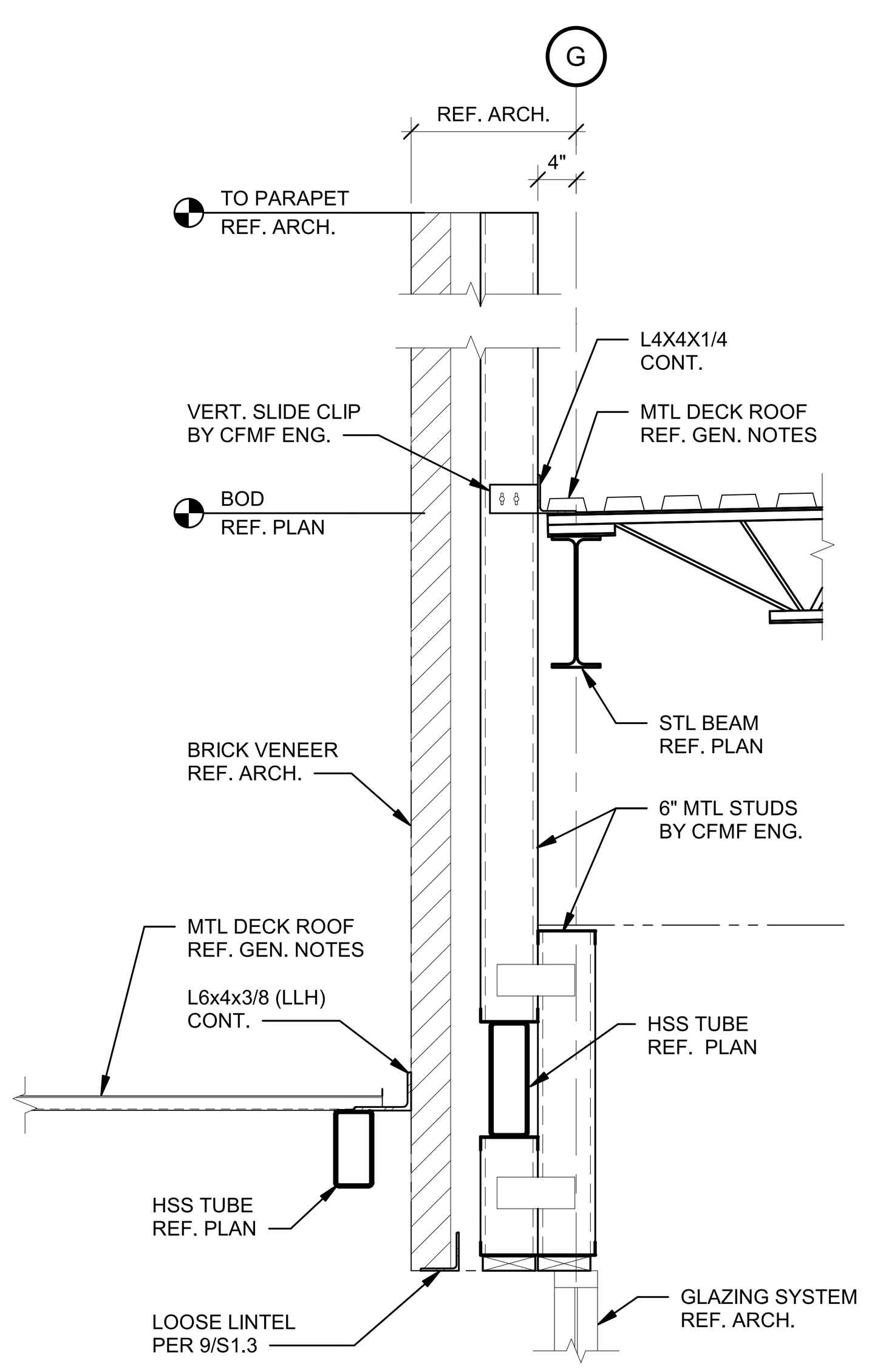
6 TYPICAL SECTION
3/4" = 1'-0"



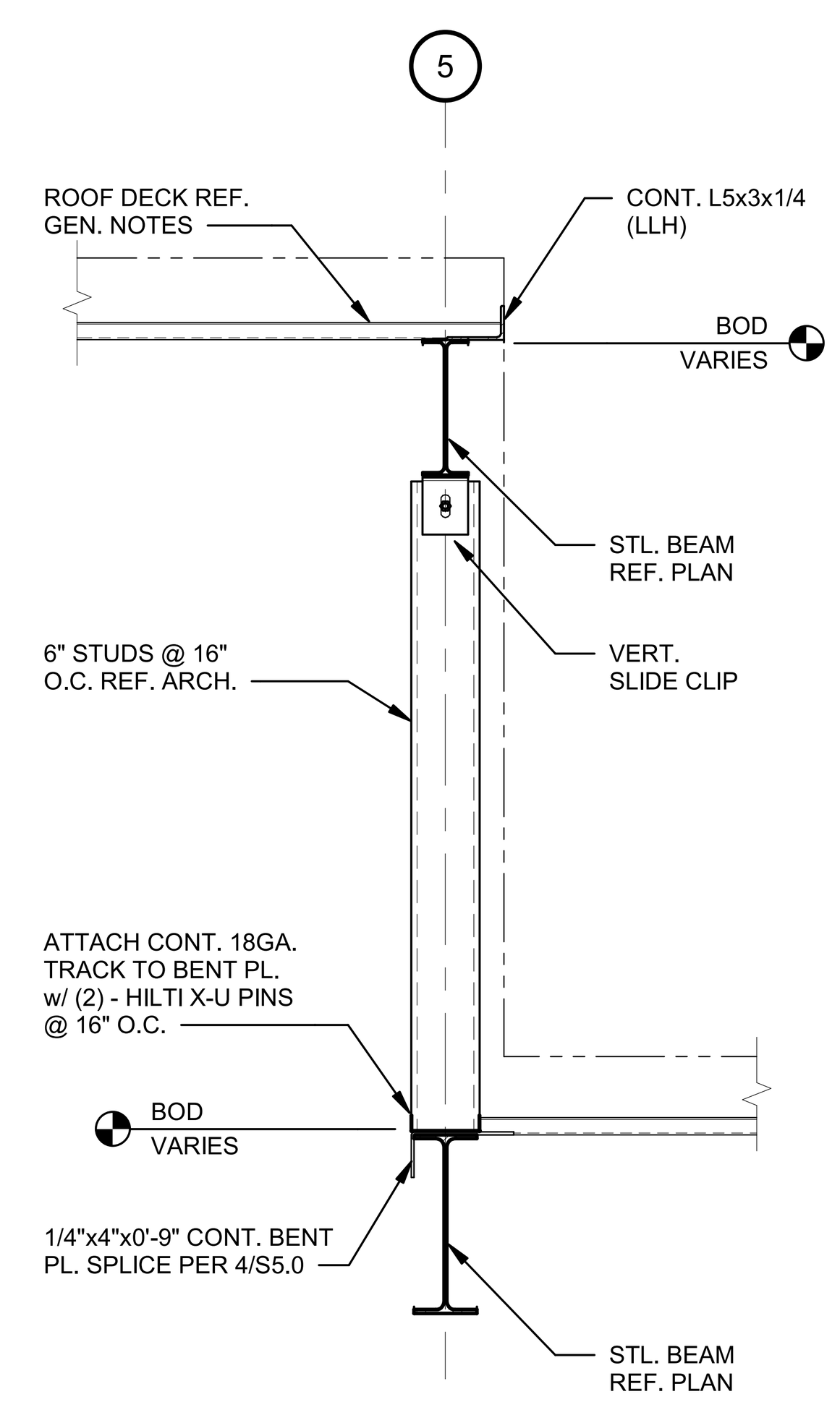
7 SECTION
3/4" = 1'-0"



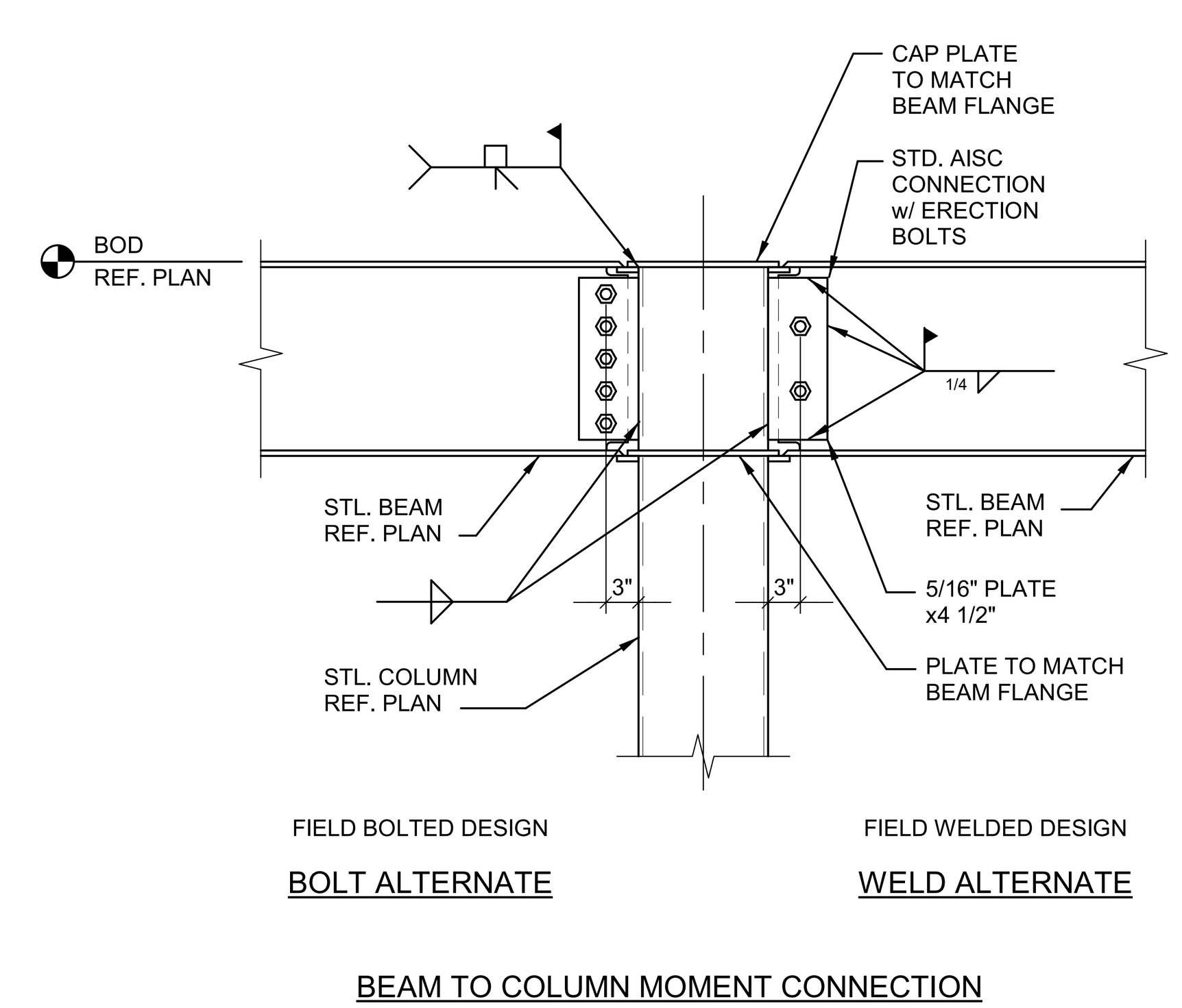
8 SECTION
3/4" = 1'-0"



9 SECTION
3/4" = 1'-0"



10 SECTION
3/4" = 1'-0"



11 TYPICAL SECTION
3/4" = 1'-0"

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/14/2021

HART GAUGLER + ASSOCIATES

COOPER'S HAWK WINERY & RESTAURANT
540 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086

No	Date	Remarks
	2021/08/19	ISSUED FOR PERMIT

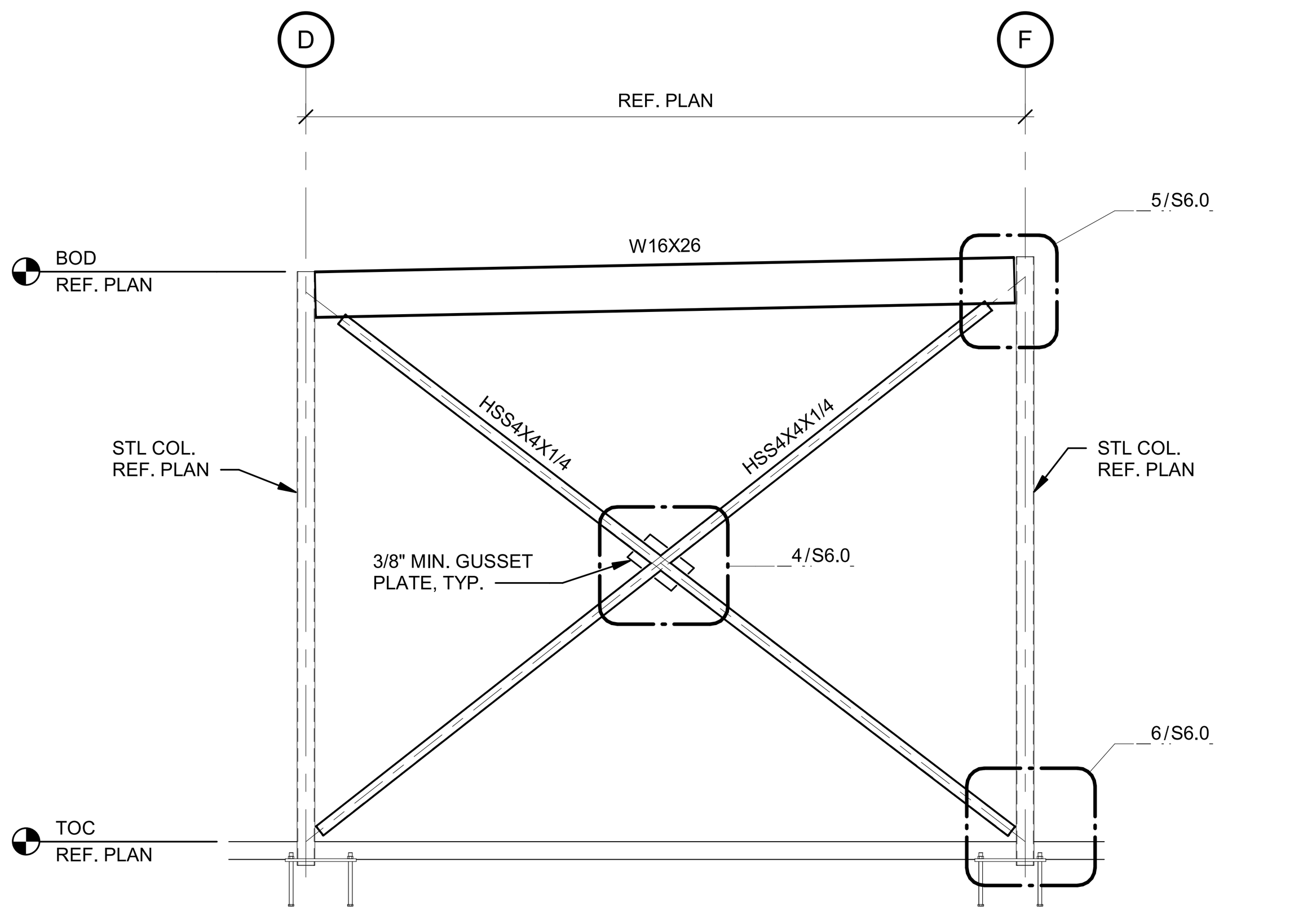
REVISIONS

STATE OF MISSOURI
JOHN EDWARD KIMBLE
NUMBER PE-2007011069
PROFESSIONAL ENGINEER
08/19/21

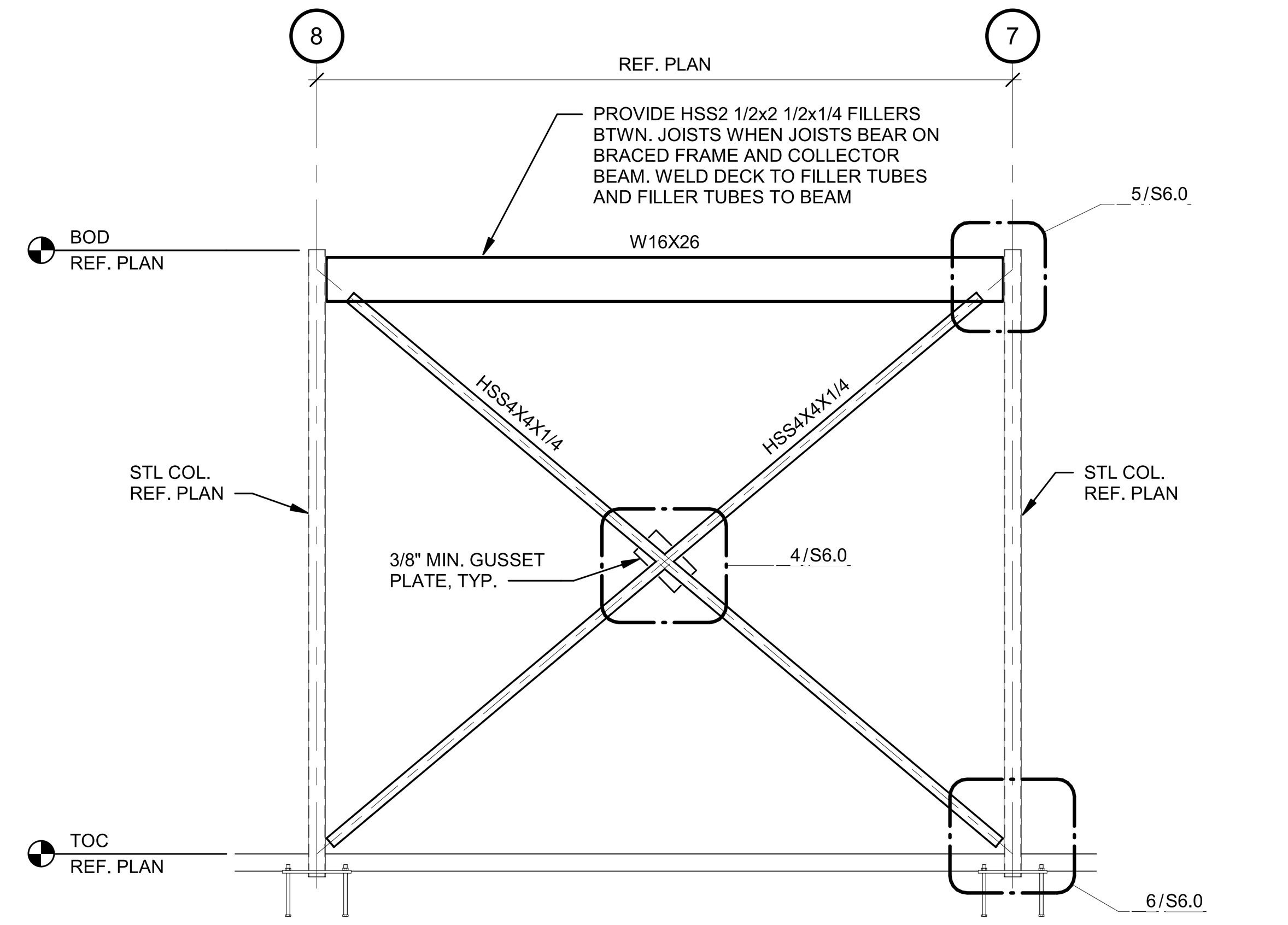
Drawing Title
FRAMING SECTIONS

Job No.	Drawn
204530	CRS
Scale	**Date**
AS NOTED	08/19/2021

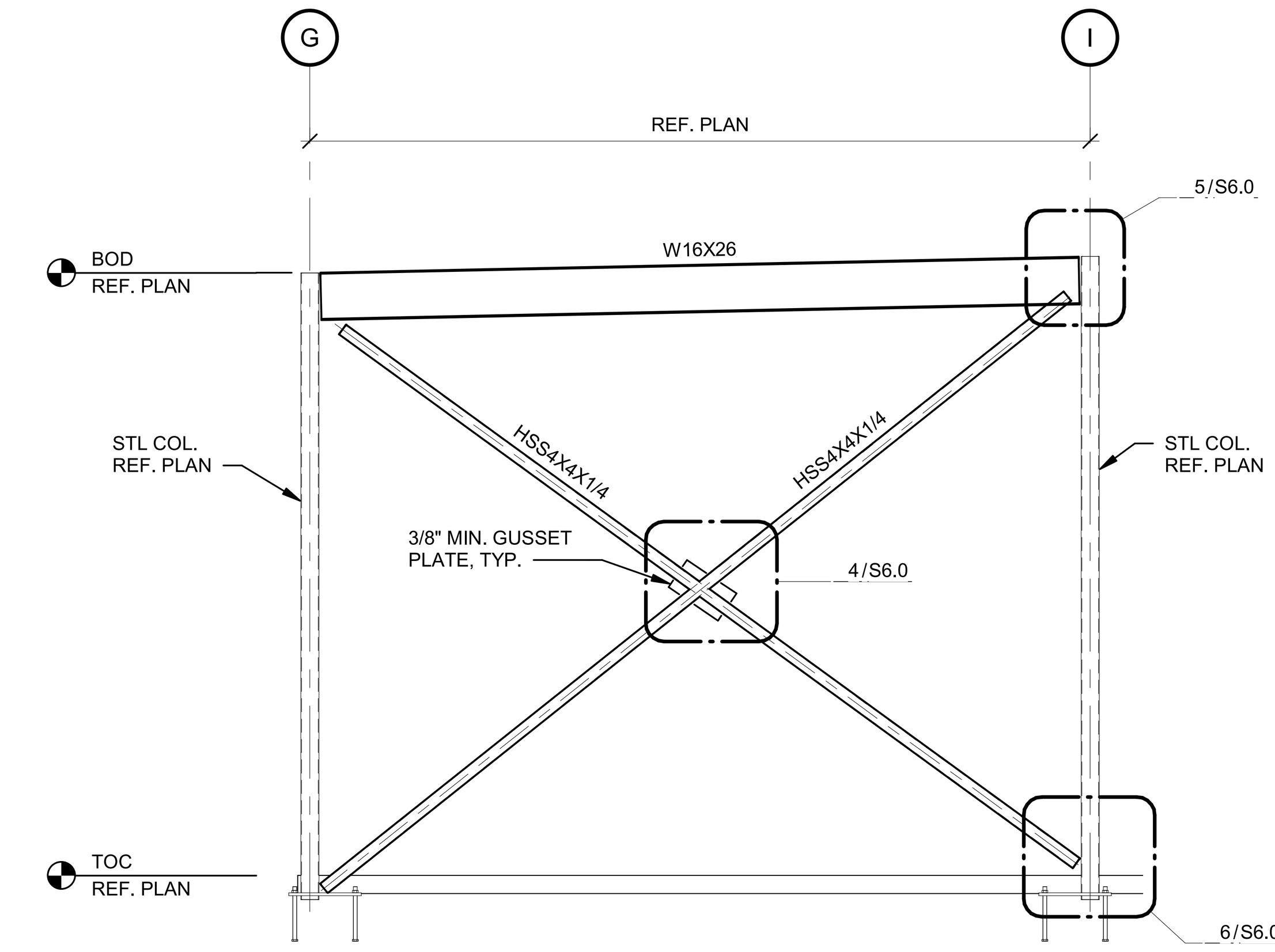
Sheet No.
S5.2



1 X-BRACE - GRID 3
1/4" = 1'-0"



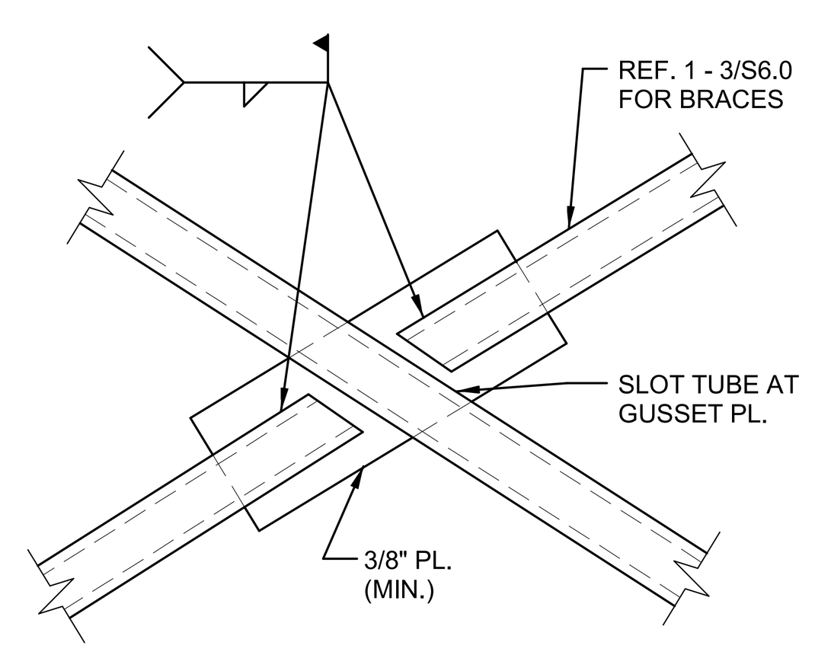
2 X-BRACE - GRID N
1/4" = 1'-0"



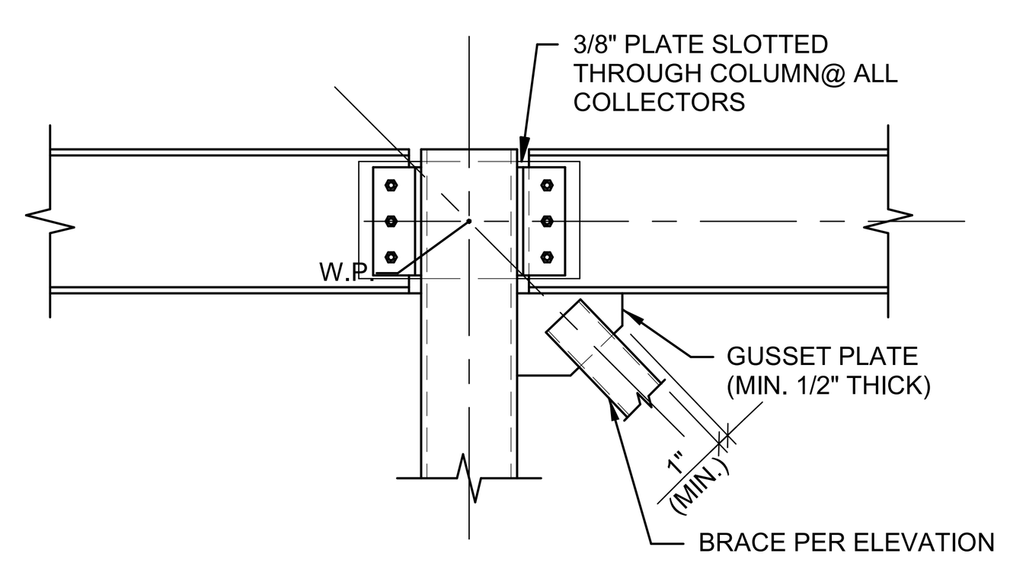
3 X-BRACE - GRID 12
1/4" = 1'-0"

BRACED FRAME CONNECTION DESIGN NOTES:

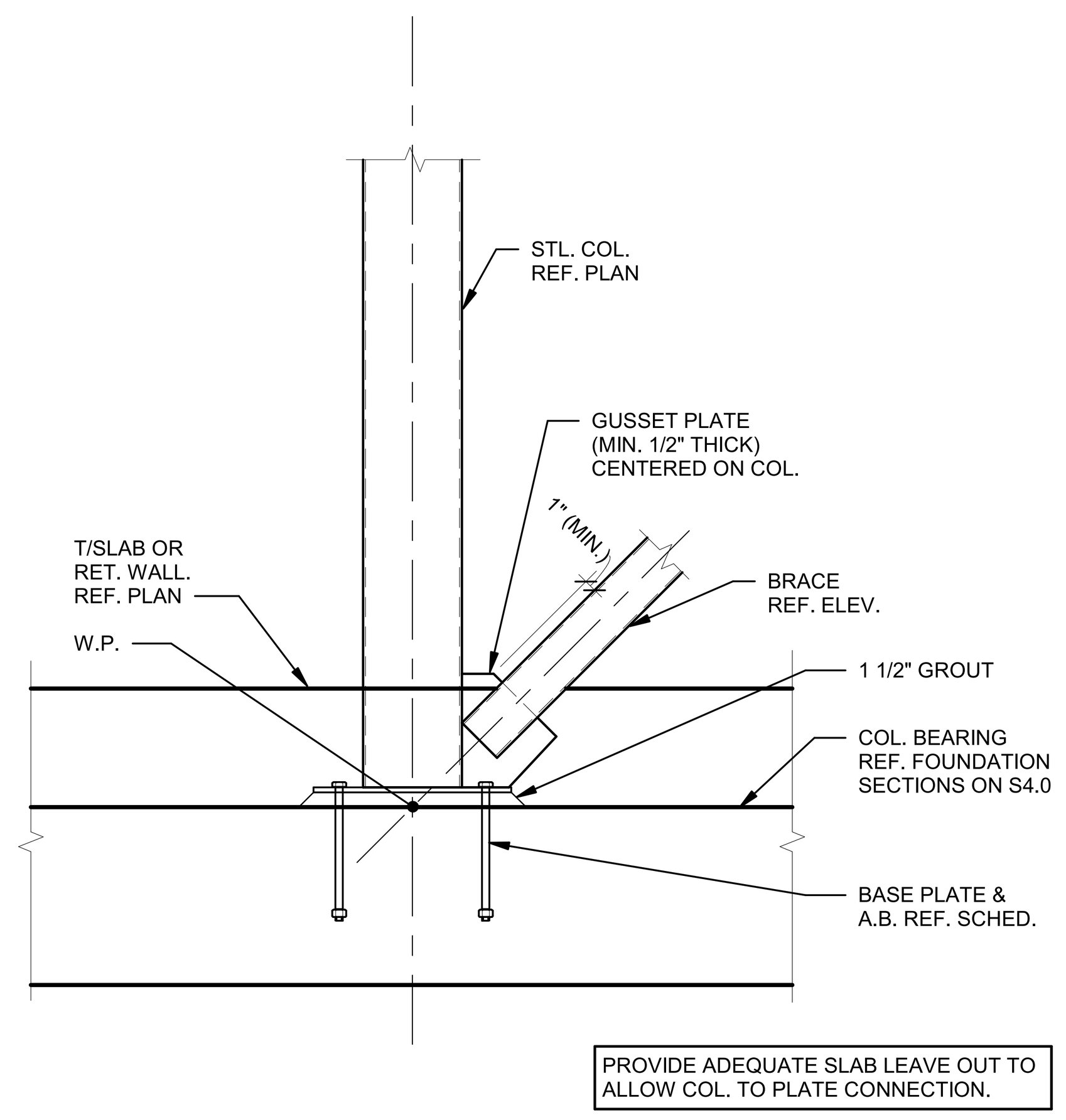
1. THE CONTRACTOR SHALL DESIGN THE CONNECTIONS FOR THE BRACED FRAMES UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER.
2. BRACE TO GUSSET PLATE CONNECTIONS SHALL BE DESIGNED FOR THE ULTIMATE WIND BRACE FORCES IN NOTE 6. IF NO FORCES ARE SHOWN, THE CONNECTIONS SHALL BE DESIGNED TO DEVELOP THE FULL TENSION CAPACITY OF THE BRACE MEMBER.
3. BEAM TO COLUMN CONNECTIONS SHALL BE DESIGNED FOR THE TYPICAL SHEAR REQUIRED BY STEEL NOTES ON SHEET S1.0 IN ADDITION TO THE VERTICAL AND HORIZONTAL COMPONENTS OF THE BRACE FORCE.
4. ALL CONNECTIONS IN BRACED FRAMES SHALL BE DESIGNED AS WELDED CONNECTIONS OR SLIP CRITICAL BOLTED CONNECTIONS DUE TO LOAD REVERSALS.
5. CONNECTION DESIGNS SHALL CONSIDER ALL CONCENTRIC AND ECCENTRIC FORCES.
6. ALL BRACE CONNECTIONS ARE TENSION-ONLY AND SHALL BE DESIGNED FOR MAXIMUM OF 55 KIPS IN ULTIMATE TENSION.



4 TYPICAL DETAIL
3/4" = 1'-0"



5 TYPICAL DETAIL
3/4" = 1'-0"



PROVIDE ADEQUATE SLAB LEAVE OUT TO ALLOW COL. TO PLATE CONNECTION.

6 TYPICAL DETAIL
3/4" = 1'-0"

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
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LEE'S SUMMIT, MISSOURI
10/14/2021

HART GAUGLER + ASSOCIATES
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www.hartgaugler.com

HGA JOB # 221130
DESIGN SMW
DRAWN CRS

540 NW CHIPMAN ROAD
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REVISIONS

STATE OF MISSOURI
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08/19/21

Drawing Title
BRACE FRAME ELEVATIONS

Job No. 204530
Drawn CRS
Scale AS NOTED
Date 08/19/2021

Sheet No.
S6.0