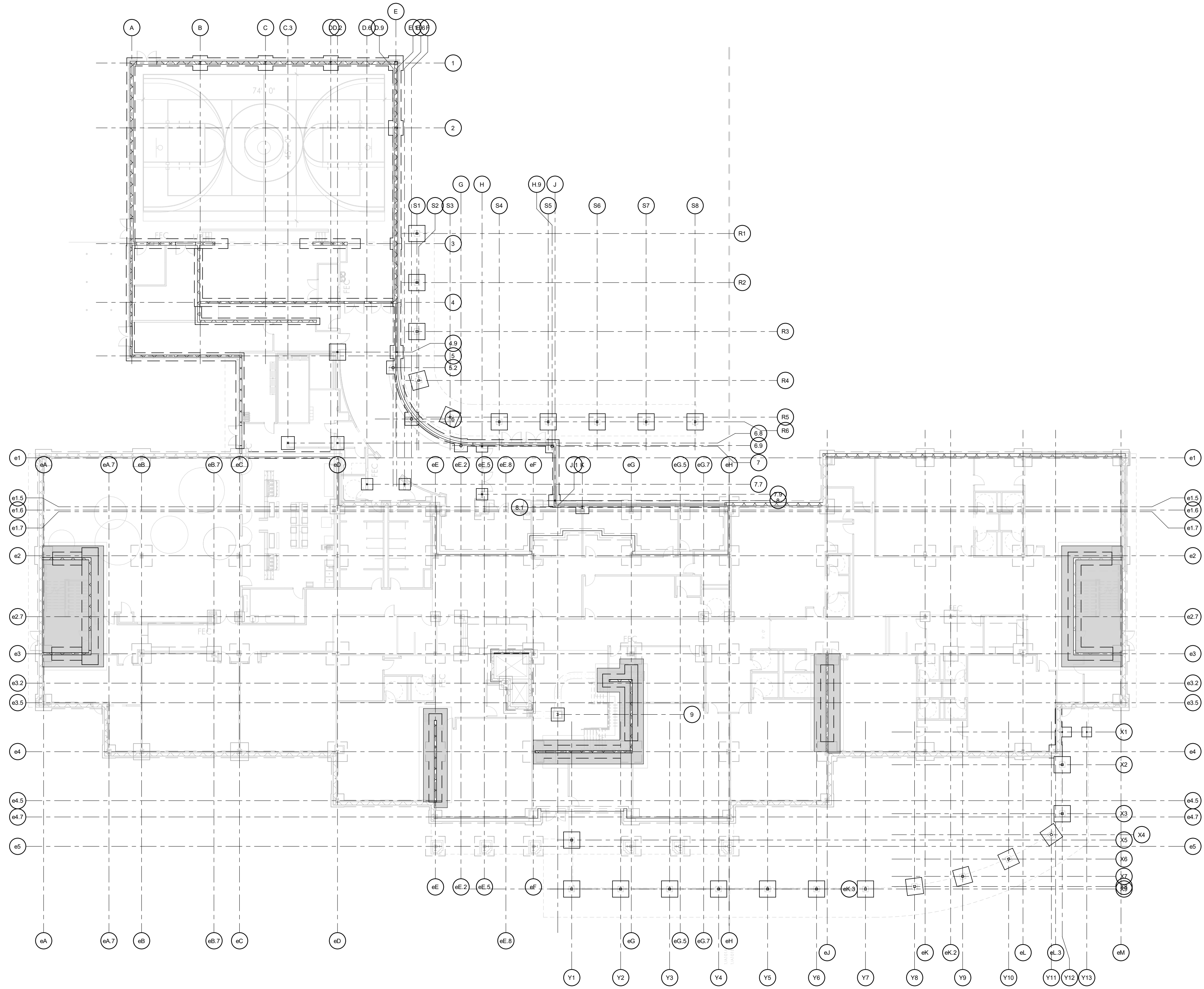
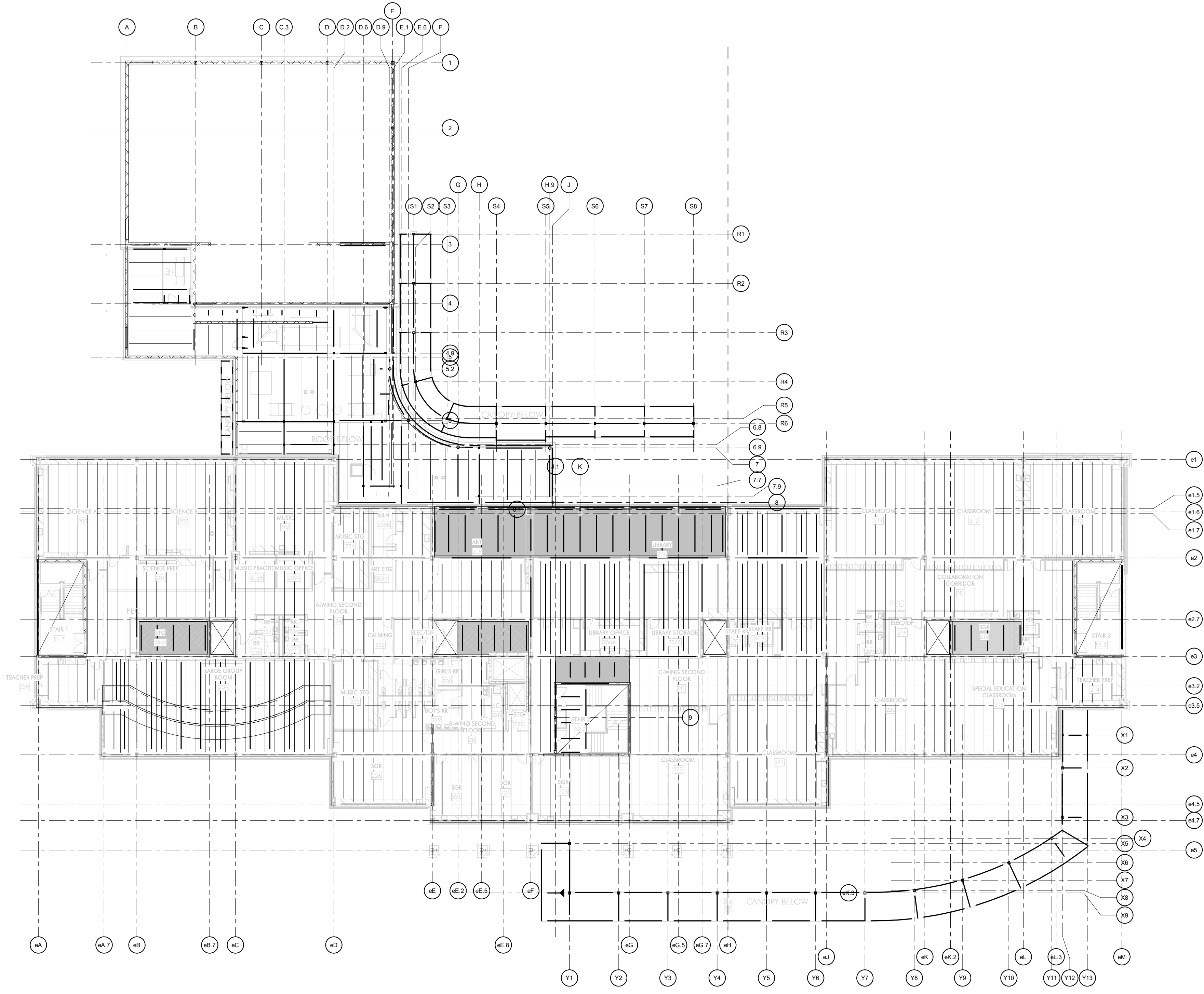


HECKENDORN SHILES ARCHITECTS ASSOCIATES, INC. 1200 W. SWEDSFORD RD. BERWYN, PA 19312. TEL: 610-994-3500. FAX: 610-994-3501. WWW.HECKENDORN-SHILES-ARCHITECTS.COM. THIS DOCUMENT IS THE PROPERTY OF HECKENDORN SHILES ARCHITECTS ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF HECKENDORN SHILES ARCHITECTS ASSOCIATES, INC.

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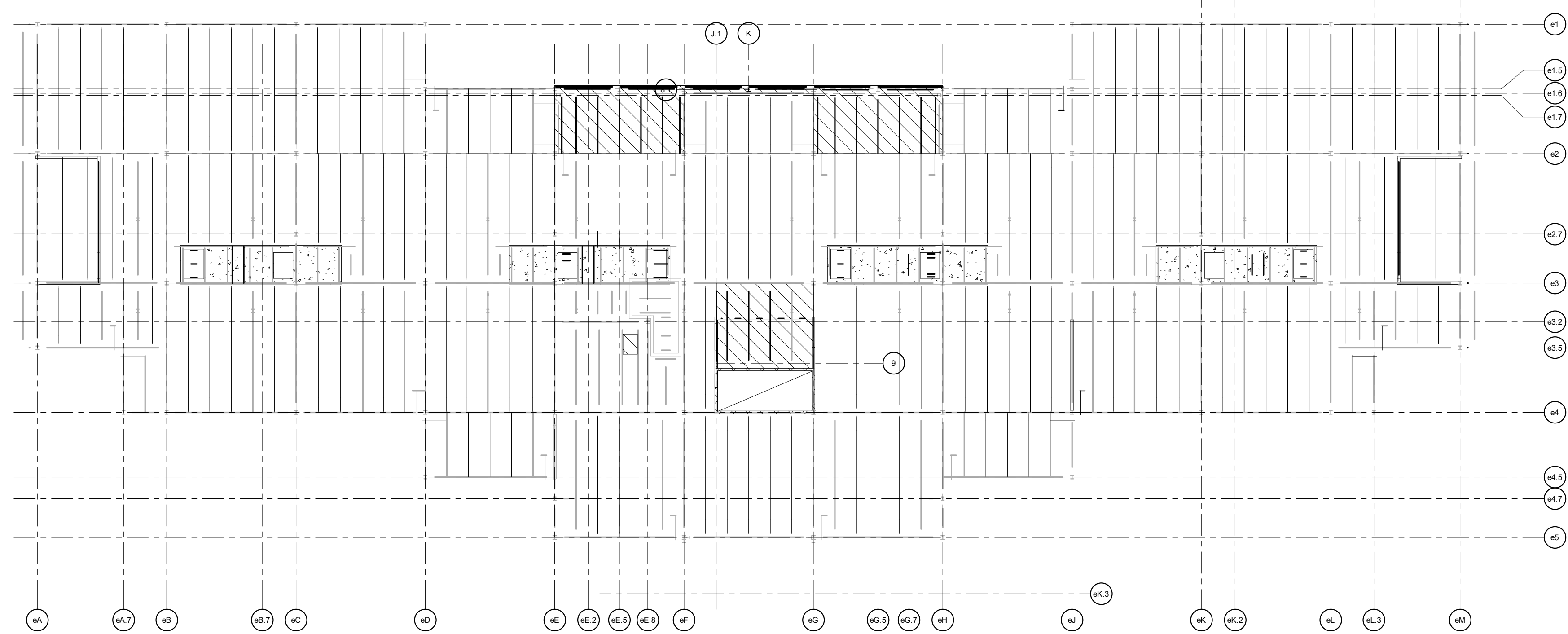
1 OVERALL FOUNDATION PLAN
S100 1" = 20'-0"



2 OVERALL SECOND FLOOR FRAMING PLAN
S100 1" = 20'-0"



3 OVERALL THIRD FLOOR FRAMING PLAN
S100 1" = 20'-0"



4 OVERALL ROOF FRAMING PLAN
S100 1" = 20'-0"

TE NEW ELEMENTARY SCHOOL

1200 W. Swedesford Rd
Berwyn, PA 19312

HSA PROJECT # :24-037



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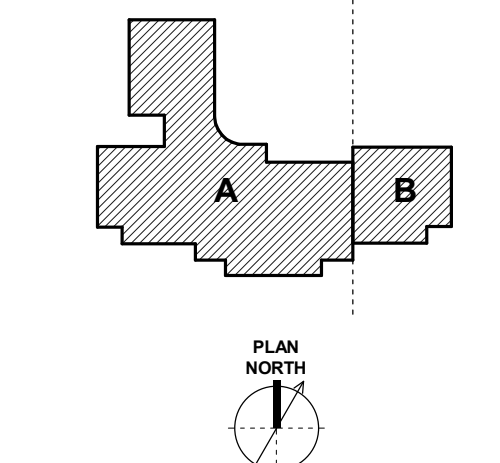
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NOT FOR
CONSTRUCTION

KEY PLAN



LEGEND

--- SECTOR DESIGNATION

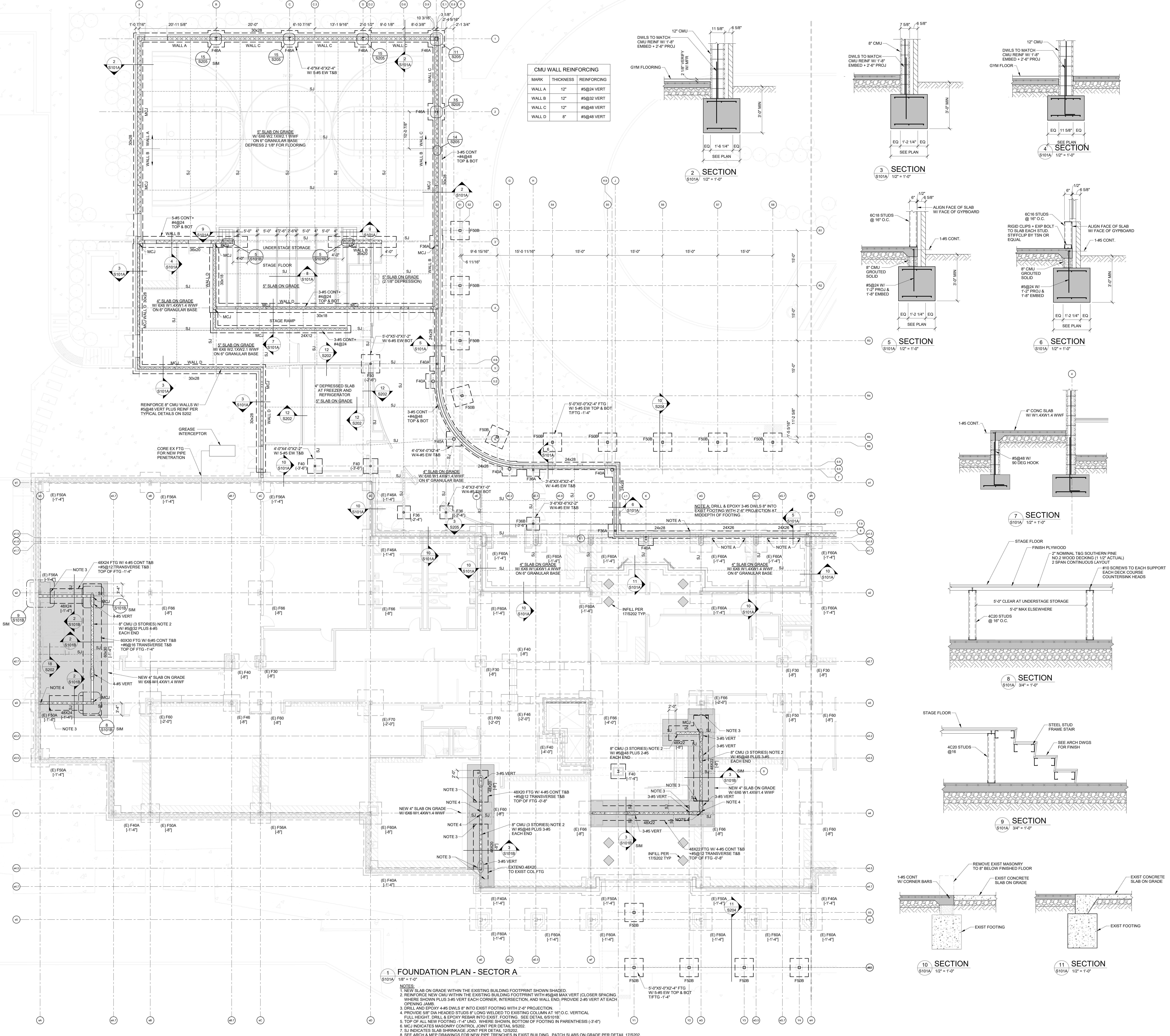
ISSUE HISTORY

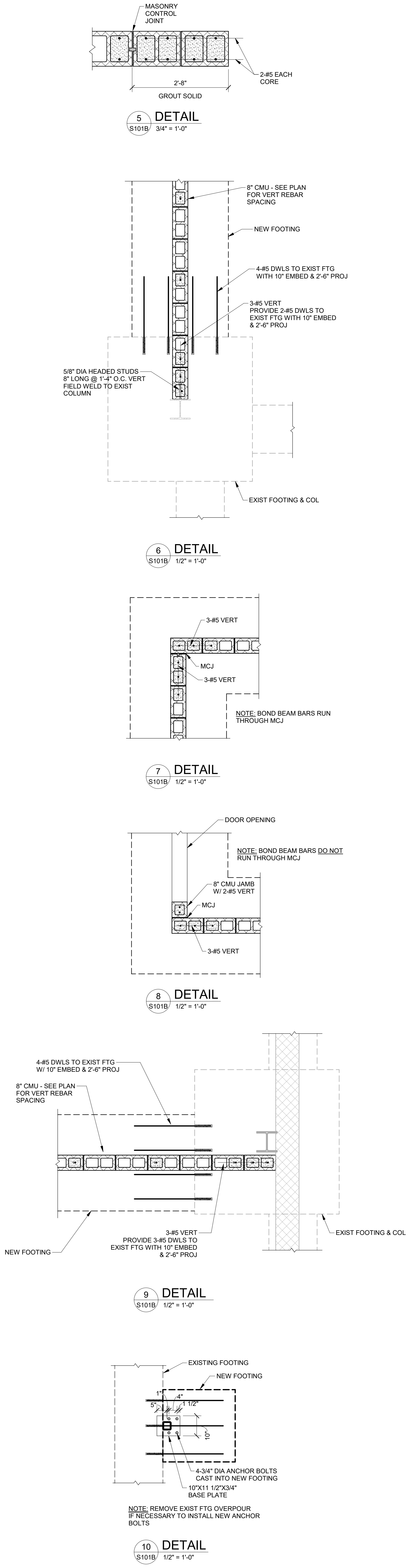
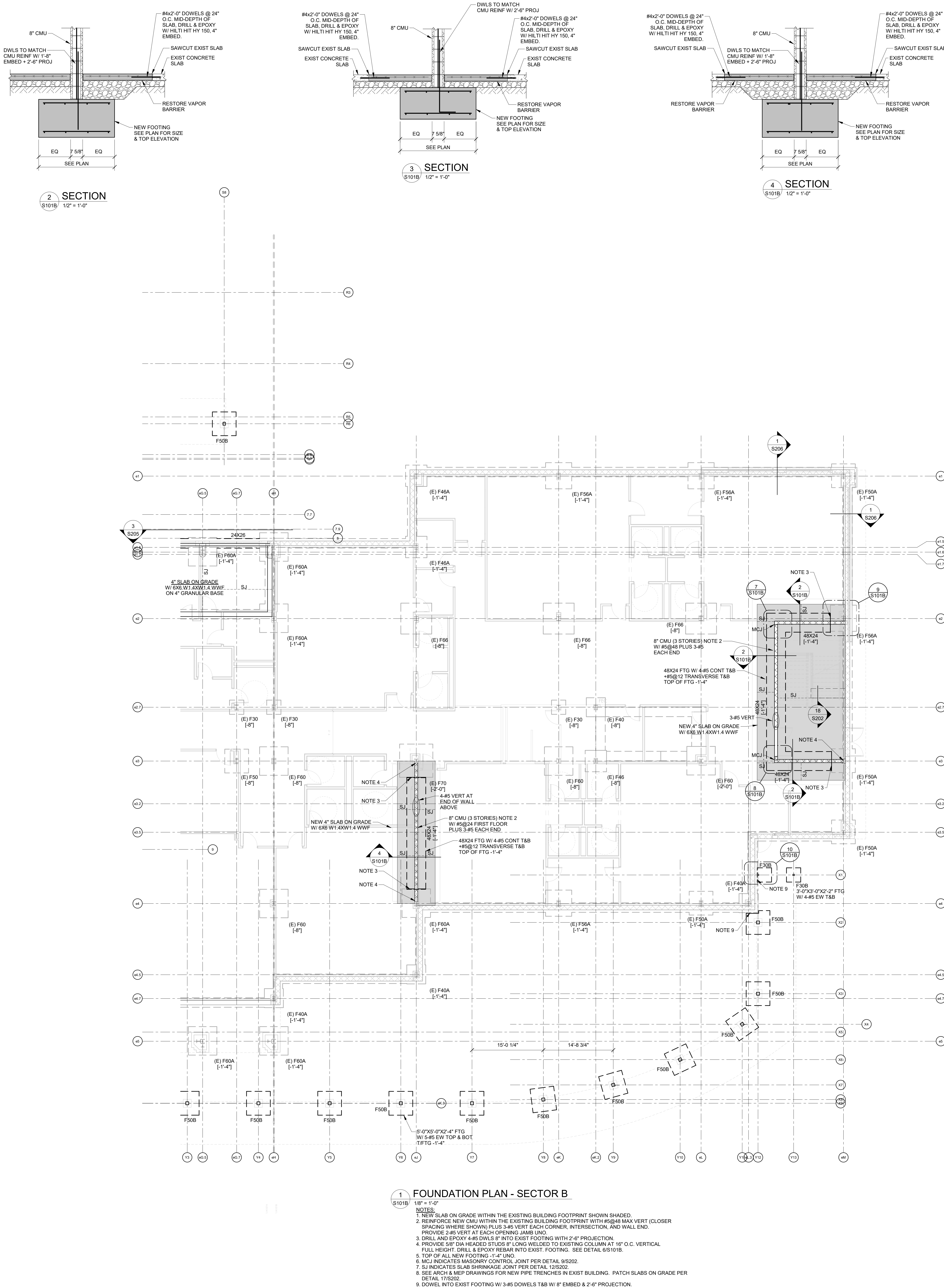
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2025-03-28	BID ISSUE

SHEET TITLE
OVERALL FOUNDATION
AND FRAMING PLANS

DRAWING NUMBER

S100





THE NEW
ELEMENTARY
SCHOOL

1200 W. Swedesford Rd
Berwyn, PA 19312

HSA PROJECT # :24-037

Heckendorn Shiles Architects

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CONSTRUCTION

KEYPLAN

LEGEND

--- SECTOR DESIGNATION

ISSUE HISTORY

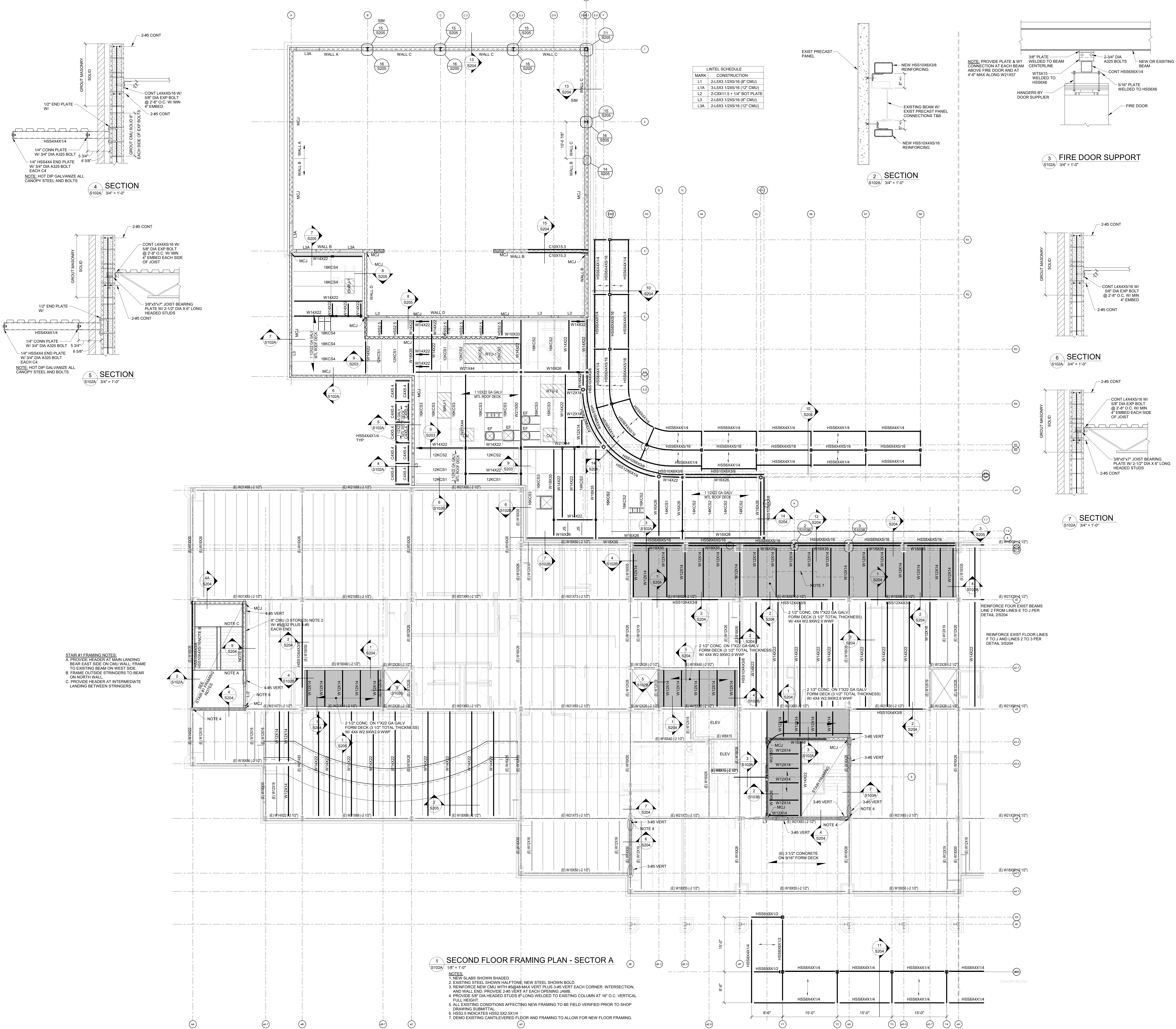
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SHEET TITLE

FOUNDATION PLAN -
SECTOR B

DRAWING NUMBER

S101B



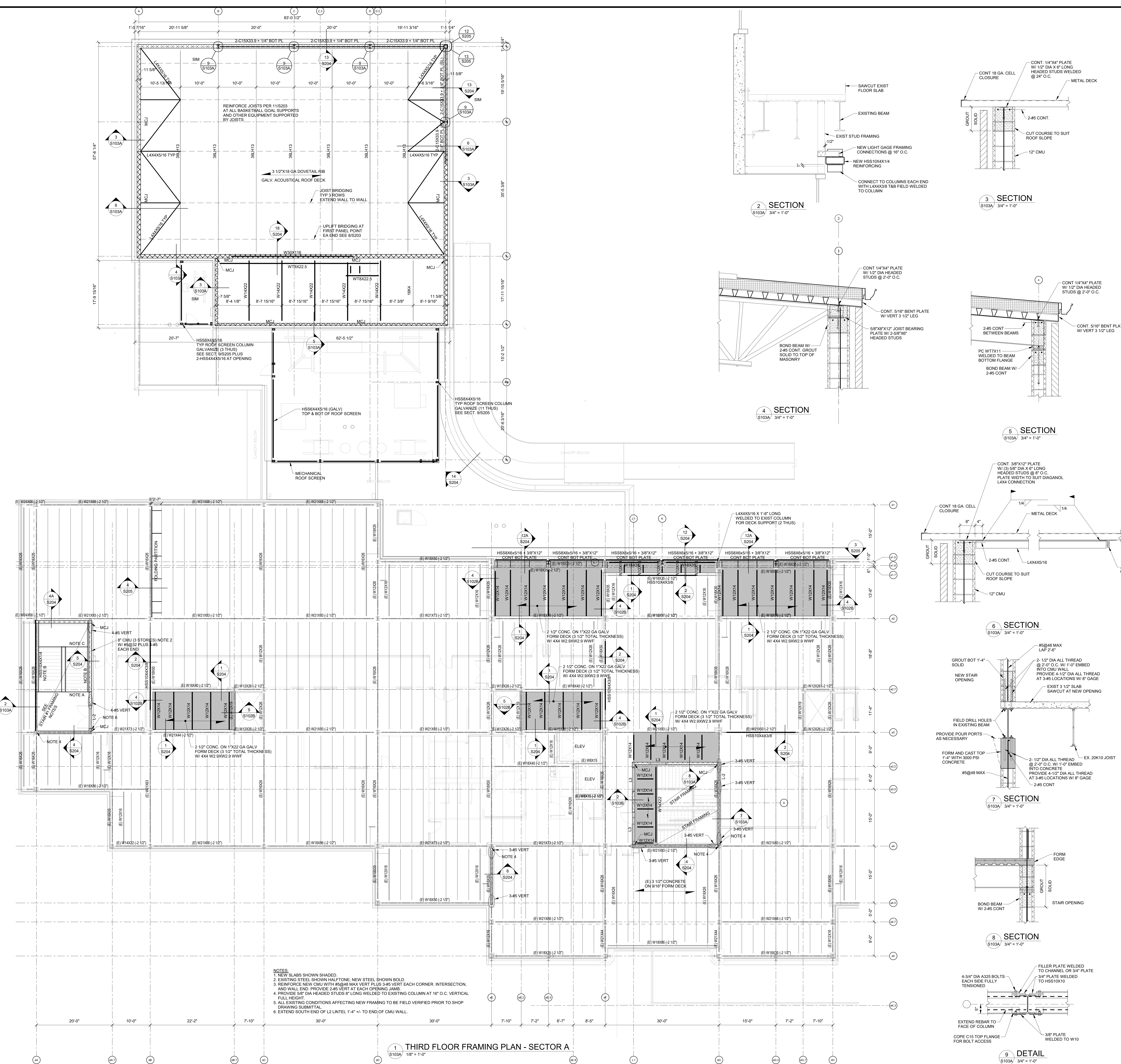
MARK	CONSTRUCTION
L1	2-LX3 12X516 (8" CMU)
L1A	3-LX3 12X516 (12" CMU)
L2	2-CBX11.5 + 1/4" BOT PLATE
L3	2-LX3 12X516 (8" CMU)
L3A	2-LX3 12X516 (12" CMU)

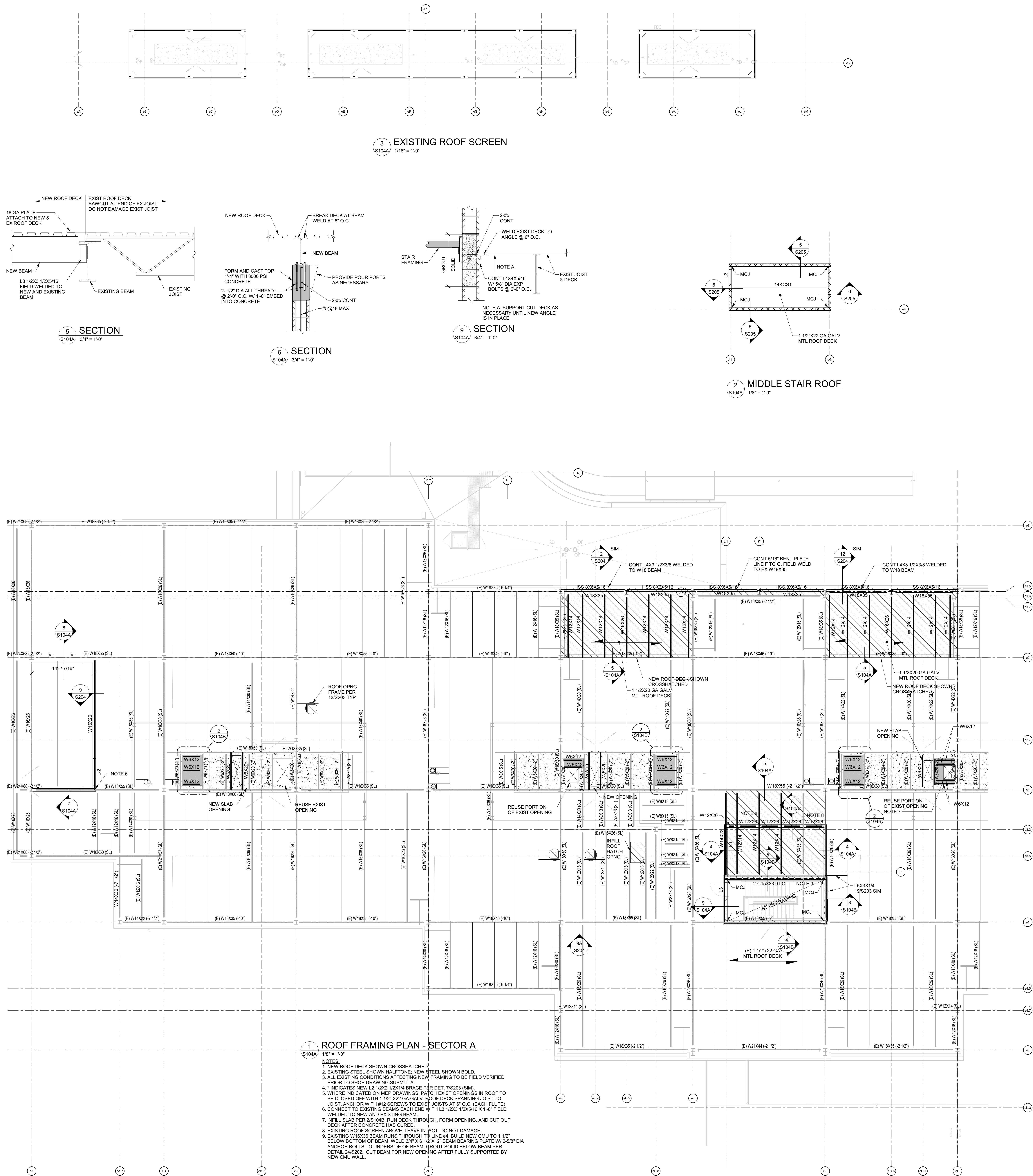
STAIR #1 FRAMING NOTES:
A. PROVIDE HEADER AT MAIN LANDING
BEAR EAST SIDE ON CMU WALL, FRAME
TO EXISTING BEAM ON WEST SIDE.
B. FRAME OUTSIDE STRINGERS TO BEAR
ON NORTH WALL.
C. PROVIDE HEADER AT INTERMEDIATE
LANDING BETWEEN STRINGERS.

1 SECOND FLOOR FRAMING PLAN - SECTOR A

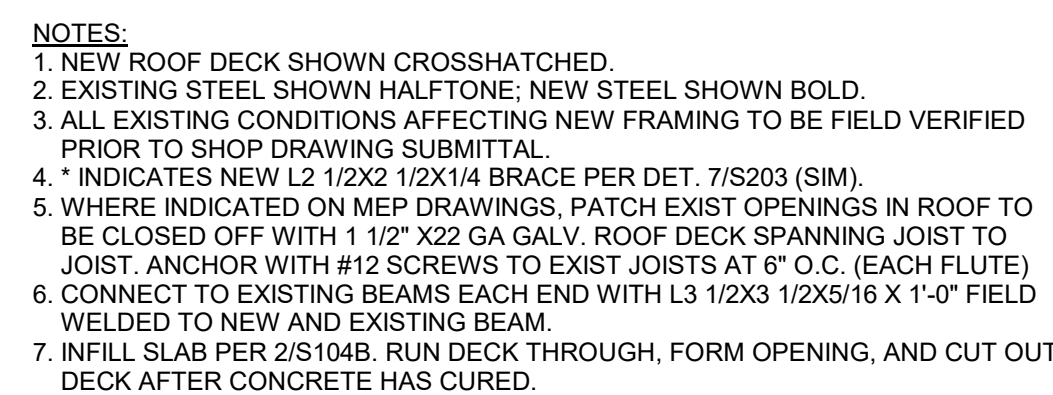
- NOTES:
- NEW SLABS SHOWN SHADED
 - EXISTING STEEL SHOWN HALFTONE; NEW STEEL SHOWN BOLD.
 - REINFORCE NEW CMU WITH #5@8" MAX VERT PLUS 3-#5 VERT EACH CORNER, INTERSECTION, AND WALL END. PROVIDE 2-#5 VERT AT EACH OPENING JAMB.
 - PROVIDE 5/8" DIA HEADED STUDS 8" LONG WELDED TO EXISTING COLUMN AT 16" O.C. VERTICAL FULL HEIGHT.
 - ALL EXISTING CONDITIONS AFFECTING NEW FRAMING TO BE FIELD VERIFIED PRIOR TO SHOP DRAWING SUBMITTAL.
 - HSS#2 INDICATES HSS2.XX2.XX14
 - DEMO EXISTING CANTILEVERED FLOOR AND FRAMING TO ALLOW FOR NEW FLOOR FRAMING.







S104B



GENERAL NOTES

GENERAL: ALL WORK TO CONFORM TO 2018 INTERNATIONAL BUILDING CODE AND ALL OTHER GOVERNING FEDERAL, STATE AND LOCAL REGULATIONS.

VERIFY AND/OR ESTABLISH ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE BEFORE SUBMITTING SHOP DRAWINGS, ORDERING ANY MATERIAL OR COMMENCEMENT OF ANY WORK.

SHOP DRAWINGS FOR CONCRETE AND MASONRY REINFORCING, STRUCTURAL STEEL, STEEL JOISTS, STEEL DECK, AND EXTERIOR AND LOAD BEARING STRUCTURAL STEEL STUDS TO BE SUBMITTED AND REVIEWED PRIOR TO START OF FABRICATION.

CONTACT PROPER AUTHORITIES TO LOCATE EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION.

EXISTING BUILDING INFORMATION SHOWN WAS OBTAINED FROM ORIGINAL BUILDING DRAWINGS AND HAS NOT BEEN FIELD VERIFIED. CONTRACTOR SHALL CONTACT OWNER TO OBTAIN ACCESS TO AND REVIEW EXISTING BUILDING DRAWINGS. CONTACT A/E FOR DIRECTION IF EXISTING CONDITIONS DIFFER FROM AS SHOWN.

REMOVE AND RELOCATE ALL EXISTING UTILITIES, DUCTS, CONDUITS, ETC. THAT INTERFERE WITH INSTALLATION OF NEW FRAMING ELEMENTS.

SPECIAL STRUCTURAL INSPECTIONS: SPECIAL TESTING AND INSPECTIONS OF THE FABRICATION, INSTALLATION, ERECTION, AND PLACEMENT OF THE FOLLOWING BUILDING ELEMENTS ARE TO BE PROVIDED IN ACCORDANCE WITH CHAPTER 17 OF THE BUILDING CODE. SEE NOTES AND SPECIFICATIONS FOR ADDITIONAL TESTING AND INSPECTIONS REQUIRED.

- PREPARED FILL: SITE PREPARATION, FILL PLACEMENT, AND EVALUATION OF IN PLACE DENSITY.
- CONCRETE CONSTRUCTION: MATERIALS, REINFORCING STEEL, FOUNDATION SUBGRADE, AND CONCRETING OPERATIONS.
- MASONRY CONSTRUCTION: MATERIALS, STRENGTH, AND CONSTRUCTION OPERATIONS.
- STEEL CONSTRUCTION: FABRICATION, MATERIALS, AND ERECTION, INCLUDING BOLTING AND WELDING.

NO PROVISIONS FOR FUTURE EXPANSION HAVE BEEN INCORPORATED IN THIS STRUCTURE.

DESIGN GRAVITY LIVE LOADS:

ROOFS	30 PSF MINIMUM
STAIRS	100 PSF
CORRIDORS	100 PSF
CLASSROOMS	40 PSF

DESIGN SNOW LOADS:

GROUND SNOW LOAD	30 PSF
SNOW IMPORTANCE FACTOR	1.10
THERMAL FACTOR	1.0
EXPOSURE FACTOR	1.0

DESIGN WIND LOADS:

WIND SPEED	120 MPH
MEAN BUILDING HEIGHT	38 FT
WIND EXPOSURE CATEGORY	B

DESIGN SEISMIC LOADS:

SPECTRAL ACCELERATIONS	Ss = 0.184 S1 = 0.048, SDS = 0.16, SD1 = 0.048
OCCUPANCY CATEGORY	III
SEISMIC DESIGN CATEGORY	A
SITE CLASS	C
SEISMIC IMPORTANCE FACTOR	1.25
RESPONSE MODIFICATION FACTOR	3.0

FOUNDATIONS: FOUNDATION WORK HAS BEEN DESIGNED AND ELEVATIONS ESTABLISHED ON THE BASIS OF THE REPORT OF PENNOI ASSOCIATES, INC. DATED APRIL 11, 2024 AND REVISED SEPTEMBER 10, 2024 WRITTEN FOR THE USE OF THE OWNER, ARCHITECT AND ENGINEER. FOOTINGS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED RESIDUAL SOILS OR COMPACTED STRUCTURAL FILL CAPABLE OF SAFELY SUPPORTING A NET PRESSURE OF 3000 PSF. IF FOUNDATION CONDITIONS PROVE UNACCEPTABLE AT ELEVATIONS SHOWN, FOOTING SHALL BE CARRIED DEEPER OR OTHER REDESIGN OF FOUNDATIONS WILL BE REQUIRED AT THE DIRECTION OF THE ARCHITECT. BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 3'-0" BELOW FINISHED GRADE.

THE OWNER WILL EMPLOY A TESTING AGENCY TO PERFORM INSPECTIONS AND TESTING OF FOOTING BEARING ELEVATIONS WITH REGARD TO THE DESIGN SOIL BEARING PRESSURE NOTED ABOVE.

NOTIFY THE TESTING AGENCY WITHIN 24 HOURS WHEN EXCAVATION OF THE BOTTOM OF FOOTINGS HAVE BEEN COMPLETED. DO NOT POUR FOOTINGS UNTIL THE INSPECTION AGENCY HAS VERIFIED THE BEARING VALUE.

BOTTOM OF NEW FOOTINGS ADJACENT TO EXISTING FOUNDATIONS SHALL BE AT THE SAME ELEVATION AS THE EXISTING FOUNDATION UNLESS A 2:1 MAXIMUM SLOPE (HORIZONTAL TO VERTICAL) IS MAINTAINED BETWEEN BOTTOM OF FOOTINGS.

EARTHWORK: ALL EARTHWORK, INCLUDING EXCAVATIONS, FILLS, PROOFROLLING, TESTING, COMPACTION, ETC., TO BE PERFORMED IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED IN SOILS REPORT PREPARED BY PENNOI ASSOCIATES, INC. DATED APRIL 11, 2024 AND REVISED SEPTEMBER 10, 2024 AND THE SPECIFICATIONS. ALL EARTHWORK, INCLUDING FOUNDATION BEARING SHALL BE INSPECTED FOR CONFORMANCE WITH THE SOILS REPORT AND CONTRACT DOCUMENTS AS REQUIRED BY THE SPECIFICATIONS.

CONTROLLED COMPACTED FILL: ALL INSITU SOFT MATERIAL THAT CANNOT BE COMPACTED AND MATERIAL THAT CANNOT SUPPORT THE REQUIRED THICKNESSES OF CONTROLLED COMPACTED FILL AND/OR FOUNDATION LOADS WITHOUT DETRIMENTAL SETTLEMENT MUST BE REMOVED PRIOR TO PROOFROLLING. ALL EXISTING FILL WITHIN THE ADDITION FOOTPRINT IS TO BE REMOVED AND REPLACED WITH CONTROLLED COMPACTED FILL.

AFTER STRIPPING AND GENERAL EXCAVATIONS, THE ENTIRE BUILDING AREA SHALL BE PROOFROLLED WITH A HEAVY SMOOTH DRUM ROLLER (MINIMUM 15-TON STATIC WEIGHT) TO DETECT CAVITIES, SINKHOLES, SOFT SPOTS OR IRREGULARITIES IN THE SUBGRADE. TESTING LABORATORY REPRESENTATIVE TO OBSERVE AND MAKE RECOMMENDATIONS DURING PROOFROLLING OPERATION.

AFTER PROOFROLLING AND ALL CORRECTIVE MEASURES AS REQUIRED BY THE TESTING LABORATORY ARE ACCOMPLISHED, GENERAL FILL WITHIN THE BUILDING SHALL BE PLACED PRIOR TO CONSTRUCTION OF FOUNDATIONS. ALL FILL WITHIN AND 5'-0" BEYOND THE BUILDING LINES SHALL BE MAINTAINED NOMINALLY AT OPTIMUM MOISTURE CONTENT, AND PLACED AND COMPACTED TO A MINIMUM OF 98% OF PROCTOR DENSITY (ASTM D698). FILL SHALL BE PLACED IN LAYERS OF APPROPRIATE THICKNESSES REQUIRED BY THE NATURE OF THE SOIL OR AS DIRECTED SO THAT THE MATERIAL WILL BE COMPACTED THROUGHOUT THE ENTIRE LAYER. LIFTS SHALL NOT EXCEED 8 INCHES (LOOSE THICKNESS) UNLESS OTHERWISE DIRECTED BY THE OWNER'S TESTING AND INSPECTION AGENCY. SPECIAL CARE SHALL BE TAKEN TO ADEQUATELY COMPACT FILL AND BACKFILL IN AREAS EXCAVATED FOR PIPE TRENCHES, FOOTINGS AND FOUNDATION WALLS.

SINKHOLE MITIGATION: THE SITE IS SUSCEPTIBLE TO SINKHOLES. THE CONTRACTOR IS TO TAKE MEASURES TO REDUCE THE POSSIBILITY OF SINKHOLES INCLUDING:

- PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING AREAS AND EXPOSED ROCK AT ALL TIMES DURING CONSTRUCTION.
- AVOID PONDING OF WATER OR CONCENTRATION OF SURFACE FLOW WHICH COULD RESULT IN SERIOUS EROSION AND OFFER CHANNELS OF RUNOFF TO ENTER THE SUBGRADE.
- CONSTRUCTION SCHEDULING IS TO PROVIDE FOR CLOSING OF EXCAVATIONS SUCH AS FOR FOOTINGS AND UTILITIES AS SOON AS POSSIBLE AFTER EXPOSURE. BACKFILL IS TO BE PLACED IN LAYERS AND COMPACTED, AND SHOULD BE NO MORE PERMEABLE THAN THE ADJACENT SOILS.

THE OWNER WILL RETAIN THE SERVICES OF A SOILS CONSULTANT TO TEST PROPOSED FILL MATERIALS, ESTABLISH COMPACTION PROCEDURES, OBSERVE CONTROLLED COMPACTED FILL PLACEMENT ON A FULL-TIME BASIS WHENEVER FILL IS BEING PLACED, AND PERFORM IN-PLACE DENSITY TESTS TO CONFIRM THE ADEQUACY OF COMPACTION.

DEWATERING: PROVIDE FOR ANY DEWATERING AS REQUIRED DURING EXCAVATION AND CONSTRUCTION.

CONCRETE: MINIMUM 28 DAY CYLINDER STRENGTH, MAXIMUM SLUMP (PRIOR TO ADDITION OF SUPERPLASTICIZER) AND MAXIMUM WATER/CEMENT RATIO AS FOLLOWS:

	F'c (PSI)	SLUMP	W/C RATIO
FOOTINGS (5-7% AE)	3000	4"	0.50
WALLS AND PIERS (5-7% AE)	4000	3"	0.48
INTERIOR SLABS ON GROUND	4000	3"	0.48
SLABS ON METAL DECK	3500	3"	0.48
WORK EXPOSED TO WEATHER (5-7% AE)	4500	4"	0.45
OTHER WORK	3000	4"	

BEFORE PLACING ANY CONCRETE, SUBMIT MIX DESIGNS, ADMIXTURES, CURING COMPOUNDS, ETC. FOR REVIEW. MIX DESIGN TO BE IN ACCORDANCE WITH ACI 318, CHAPTER 5. NO CALCIUM CHLORIDE OR ADMIXTURE CONTAINING CHLORIDES SHALL BE USED IN ANY CONCRETE. ALL PUMPED CONCRETE AND CONCRETE FOR SLABS SHALL CONTAIN SUPERPLASTICIZER.

COARSE AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33 SIZE #57. COARSE AGGREGATE FOR SLABS LESS THAN 3" THICK SHALL CONFORM TO ASTM C33 SIZE #67.

REINFORCING STEEL ASTM A615, GRADE 60. WELDED WIRE FABRIC ASTM A185. LAPS 48 DIAMETERS UNLESS NOTED. ALL BARS SECURELY HELD IN ACCURATE POSITION BY SUITABLE ACCESSORIES, TIE BARS, SUPPORT BARS, ETC. ALL CONCRETE WORK TO COMPLY WITH ACI BUILDING CODE (ACI-318) AND DETAILING MANUAL (ACI-309). SHOP DRAWINGS SHOWING REINFORCING DETAILS INCLUDING BAR SIZES, SPACING, AND PLACEMENT SHALL BE SUBMITTED AND REVIEWED PRIOR TO FABRICATION.

SHOP DRAWINGS SHOWING ALL WALL REINFORCING SHALL BE SUBMITTED AND REVIEWED PRIOR TO FABRICATION.

ALL FOOTINGS TO HAVE DOWELS THE SAME SIZE AND NUMBER AS VERTICAL REINFORCING IN WALLS, PIERS OR COLUMNS ABOVE, AND EXTEND A MINIMUM OF 48 BAR DIAMETERS ABOVE THE TOP OF FOOTING UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS IN EXTERIOR CORNERS OF WALLS, TO MATCH HORIZONTAL REINFORCING PER TYPICAL DETAILS.

THE OWNER WILL EMPLOY A TESTING AGENCY TO PERFORM INSPECTIONS AND TESTING OF CONCRETE AND REINFORCING STEEL. MAKE ONE SET OF FOUR CONCRETE CYLINDERS FROM EACH 50 CUBIC YARDS WITH A MINIMUM OF ONE SET FROM EACH DAYS OPERATION FOR EACH CLASS OF CONCRETE. TEST SPECIMENS SHALL BE MADE IN ACCORDANCE WITH ASTM C31. MAKE ONE SLUMP TEST ON THE CONCRETE AT THE BEGINNING OF THE POUR AND FOR EACH SET OF CYLINDERS TAKEN IN ACCORDANCE WITH ASTM C143. MAKE ONE ENTRAINED AIR TEST WITH EACH SLUMP TEST IN ACCORDANCE WITH ASTM C31. CYLINDER SHALL BE TESTED IN ACCORDANCE WITH ASTM C39, TWO CYLINDERS AT 7 DAYS AND TWO AT 28 DAYS OLD. THE TESTING AGENCY SHALL SUBMIT, WITHIN 48 HOURS, THE RESULTS OF THEIR INSPECTIONS AND TESTS TO THE ARCHITECT FOR REVIEW.

CURE FLATWORK AS SPECIFIED USING AN APPROVED CURING COMPOUND WITH 25% MINIMUM SOLIDS, OR BY MOIST CURING 7 DAYS MINIMUM. CURE FORMED SURFACES BY LEAVING FORMS IN PLACE 7 DAYS MINIMUM, BY MOIST CURING OR BY APPLYING AN APPROVED CURING COMPOUND IF FORMS ARE REMOVED IN LESS THAN 7 DAYS.

SLAB ON GROUND: CONSTRUCTION AND SHRINKAGE JOINTS AS SHOWN. EXCEPT AS SHOWN, MINIMUM SLAB THICKNESS TO BE 4". SEE PLAN FOR CRUSHED STONE OR GRAVEL BASE COURSE THICKNESS AND SLAB REINFORCEMENT.

CONTRACTOR TO RECOGNIZE THE POTENTIAL PROBLEM OF CURLING AND SHRINKAGE CRACKING WHEN CASTING SLABS ON VAPOR BARRIER AND/OR SUBGRADE. EVERY EFFORT MUST BE MADE TO USE PROPER MIX, ADMIXTURES WITH LOW SHRINKAGE POTENTIAL AND SLUMP AS SPECIFIED. AFTER CASTING, CURE SLABS TO MAINTAIN THE MOISTURE CONTENT OF THE SLAB AS UNIFORM AS POSSIBLE, AND DO NOT ALLOW THE TOP OF THE SLAB TO BECOME DRIER THAN THE BOTTOM.

SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS ITEMS OF CONCRETE WORK. SHOP DRAWINGS TO BE SUBMITTED AND APPROVED PRIOR TO FABRICATING MATERIAL.

SLABS ON METAL DECK: THE STEEL DECK AND FRAMING WILL DEFLECT AS CONCRETE SLABS ARE POURED, THE FLOOR IS TO BE CAST LEVEL AT THE SPECIFIED FLOOR ELEVATION. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THAT THE CONCRETE VOLUME IS AFFECTED BY THE COMBINED DEFLECTION OF THE DECK, BEAMS, AND GIRDERS AND PROVIDE AN ALLOWANCE OF 10% ADDITIONAL CONCRETE TO MEET THE FLATNESS & LEVELNESS REQUIREMENTS OF THE SPECIFICATION.

UNIT MASONRY: CONSTRUCT ALL LOAD BEARING WALLS TO COMPLY WITH SPECIFICATION FOR MASONRY STRUCTURES, ACI 530.1. SEE SPECIFICATIONS FOR COLD AND HOT WEATHER CONSTRUCTION AND WALL PROTECTION REQUIREMENTS. SUBMIT FOR REVIEW PROPOSED MORTAR MIX DESIGNS, GROUT MIX DESIGNS, PRE-CONSTRUCTION TEST DATA, PRODUCT DATA, AND STEEL REINFORCING SHOP DRAWINGS PRIOR TO START OF CONSTRUCTION.

MASONRY WALLS HAVE BEEN DESIGNED ON THE BASIS OF THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH OF MATERIALS:

MINIMUM 28-DAY COMPRESSIVE STRENGTH (PSI)			
CMU	MORTAR	PRISM	
(NET AREA)	TYPE & STRENGTH	GROUT	STRENGTH F'w
2150	S - 1800	3000	2000

ALL CONCRETE MASONRY UNITS, INCLUDING SPECIAL SHAPES, SHALL CONFORM TO ASTM C90 NORMAL WEIGHT AND SHALL MEET SCHEDULED COMPRESSIVE STRENGTH REQUIREMENTS. MASONRY UNITS SHALL BE STEAM CURED, A MINIMUM OF 28 DAYS OLD AT THE TIME OF DELIVERY AND CONTINUOUSLY PROTECTED FROM EXPOSURE TO RAIN OR OTHER SOURCES OF WATER FROM TIME OF CASTING TO FINAL PLACEMENT IN WALL. MASONRY UNITS SHALL BE DRY, FREE FROM SOIL, ICE AND FROST WHEN LAID IN WALL.

MORTAR: MORTAR SHALL CONFORM TO ASTM C-270 PROPORTION SPECIFICATION. MORTAR SHALL BE PROPORTIONED (BY VOLUME) AS FOLLOWS: ONE PART PORTLAND CEMENT, 1/4 TO 1/2 PARTS HYDRATED LIME OR LIME PUTTY, AND FINE AGGREGATE NOT LESS THAN 2-1/4 AND NOT MORE THAN 3 TIMES THE SUM OF THE VOLUMES OF CEMENT AND LIME USED. NO ADMIXTURES ARE PERMITTED. ADD WATER AS REQUIRED FOR PROPER CONSISTENCY.

GROUT: GROUT SHALL CONFORM TO ASTM C476 PROPORTION SPECIFICATION AND SHALL MEET SCHEDULED COMPRESSIVE STRENGTH REQUIREMENTS. USE FINE GROUT FOR FILLING OPENINGS OR CORE OPENINGS SMALLER THAN 4 INCHES IN LEAST DIMENSION. FINE GROUT SHALL CONSIST OF PORTLAND CEMENT, LIME OR LIME PUTTY, WATER, AND FINE AGGREGATE. USE COARSE GROUT FOR FILLING OPENINGS OR CORES WHERE LEAST DIMENSION OF OPENING IS 4 INCHES OR MORE. COARSE GROUT SHALL CONSIST OF PORTLAND CEMENT, HYDRATED LIME OR LIME PUTTY, WATER, FINE AGGREGATE AND COARSE AGGREGATE.

LOW LIFT GROUTING: WALLS SHALL BE CONSTRUCTED TO 5 FEET MAXIMUM HEIGHT BETWEEN GROUT POURS. GROUT POUR HEIGHT SHALL NOT EXCEED 5 FEET. CONSOLIDATE GROUT AT TIME OF PLACEMENT BY MECHANICAL VIBRATION AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.

ALL MASONRY WALLS BELOW THE SLAB ON GRADE TO BE GROUTED 100% SOLID UNLESS OTHERWISE NOTED.

REINFORCEMENT: ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. MINIMUM LAP SHALL BE 48 BAR DIAMETERS. REINFORCING, METAL TIES AND ANCHORS SHALL BE PROTECTED FROM CONTACT WITH SOIL AND BEFORE BEING PLACED SHALL BE FREE FROM LOOSE RUST AND OTHER COATINGS THAT WILL DESTROY OR REDUCE THE BOND.

UNLESS OTHERWISE NOTED, REINFORCE WALLS WITH TWO VERTICAL #5 BARS AT CORNERS AND ENDS OF WALLS. A MINIMUM OF TWO HORIZONTAL BARS SHALL BE PLACED AT EACH FLOOR AND ROOF LEVEL. OPENINGS TO BE REINFORCED WITH TWO #5 MINIMUM AT HEAD, SILL, AND JAMBS, EXTENDING 2 FEET MINIMUM BEYOND EDGE OF OPENING.

SHOP DRAWINGS SHOWING ALL REINFORCEMENT IN ELEVATION (1/8" TO 1'-0" MINIMUM SCALE) SHALL BE SUBMITTED AND REVIEWED PRIOR TO FABRICATION.

PROVIDE, INSTALL AND REMOVE TEMPORARY BRACING REQUIRED TO ENSURE STABILITY DURING CONSTRUCTION.

OPENINGS: UNLESS OTHERWISE SHOWN OR DETAILED, PENETRATIONS, OPENINGS, AND RECESSES IN MASONRY WALLS ARE PERMITTED SUBJECT TO THE FOLLOWING:

- THOSE INTERFERING WITH REINFORCING, OR THOSE WHOSE LARGEST DIMENSION IS 6" OR GREATER, OR THOSE IN AREAS SCHEDULED TO BE 100% SOLID ARE TO BE APPROVED BY ARCHITECT'S REPRESENTATIVE PRIOR TO CONSTRUCTION OF AFFECTED WALL.
- ARCHITECT MAY REQUIRE OFFSETS IN REINFORCING, ADDITIONAL REINFORCING AND/OR GROUTING, OR RELOCATION AS REQUIRED.
- THOSE WHOSE LARGEST DIMENSION IS LESS THAN 6" AND ARE LOCATED IN HOLLOW BEARING WALLS AND DO NOT INTERFERE WITH REINFORCING, MAY BE PLACED IN BEARING WALLS IF SPACING IS 2'-0" OR GREATER.

LINTELS: UNLESS OTHERWISE DETAILED, PROVIDE LINTELS OVER DOOR, WINDOW, AND OTHER MASONRY OPENINGS FOR EACH 4" OF WALL THICKNESS, AS FOLLOWS:

ORG. WIDTH	BRICK (1-L)	* CONCRETE BLOCK
TO 4'-0"	14X4X5/16	P/C UNIT, 1-#4 T8B
4'-1" TO 5'-8"	16X4X5/16	P/C UNIT, 1-#4 T8B
5'-9" TO 6'-8"	16X4X3/8	P/C UNIT, 1-#5 T8B

* PLACE 4" LEG HORIZONTALLY.

PROVIDE 1" OF SOLID BEARING FOR EACH FOOT OF OPENINGS WIDTH (6" MIN.) EACH END. PROVIDE LINTELS FOR OPENINGS GREATER THAN 6'-8" AS ELSEWHERE DETAILED. STEEL LINTELS IN EXTERIOR MASONRY TO BE HOT-DIP GALVANIZED.

NOTE: WHERE CMU WALL THICKNESS IS 6", USE (1) 6" WIDE P/C LINTEL UNIT.

THE OWNER WILL EMPLOY AN APPROVED TESTING AND INSPECTION AGENCY TO INSPECT AND TEST SAMPLES OF ALL STRUCTURAL MASONRY WORK. TESTING AGENCY SHALL INSPECT EACH ASPECT OF MASONRY CONSTRUCTION INCLUDING LAYING OF CMU, PLACEMENT OF REINFORCING BARS, GROUTING AND PROTECTION OF REINFORCED MASONRY WALLS.

DURING CONSTRUCTION THE FOLLOWING MATERIALS SHALL BE TESTED FOR COMPLIANCE WITH MINIMUM STRENGTH REQUIREMENTS:

- ONE MORTAR TEST PER ASTM C780 FOR EACH TYPE OF MORTAR INDICATED. PREPARE 3 SPECIMENS AND TEST 1 AT 7 DAYS AND 2 AT 28 DAYS.
- ONE GROUT TEST PER ASTM C1019 FOR EACH STRENGTH OF GROUT INDICATED. PREPARE 3 SPECIMENS AND TEST 1 AT 7 DAYS AND 2 AT 28 DAYS.

TESTING FREQUENCY AND REPORTS: SPECIMENS SHALL BE PREPARED AND TESTS CONDUCTED FOR EACH TYPE AND STRENGTH OF MATERIAL AND FOR EACH 5000 SQUARE FOOT OF WALL AREA OR EACH STORY, WHICHEVER IS MORE FREQUENT. THE TESTING AGENCY SHALL SUBMIT WITHIN 24 HOURS, THE RESULTS OF THEIR INSPECTIONS AND TESTS TO THE OWNER, ARCHITECT, ENGINEER AND CONTRACTOR.

STRUCTURAL STEEL: ALL FABRICATION AND ERECTION SHALL CONFORM TO AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", AND AWS "CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION". WIDE FLANGE AND TEE SECTIONS ASTM A992. STEEL ANGLES, CHANNELS, PLATES AND THREADED RODS ASTM A36. HEADED AND UNHEADED ANCHOR RODS ASTM F1554 GRADE 36. RECTANGULAR AND SQUARE HOLLOW STRUCTURAL SECTIONS (HSS) ASTM A500 GRADE B. ROUND HSS ASTM A500 GRADE B OR ASTM A501. WELDING ELECTRODES E70XX. SHOP CONNECTIONS BOLTED OR WELDED. FIELD CONNECTIONS BOLTED WITH A325-N BOLTS, INSTALLED SNUG TIGHT, UNLESS FULLY TENSIONED (F-T), SLIP-CRITICAL (S-C) OR WELDED CONNECTIONS ARE NOTED ON DRAWINGS.

SUBMIT FOR REVIEW WELDING PROCEDURE SPECIFICATIONS (WPSs) AND PROCEDURE QUALIFICATION RECORDS (PQRs) ACCORDING TO AWS D1.1 FOR EACH WELDED JOINT, WHETHER PREQUALIFIED OR QUALIFIED BY TESTING. SUBMIT WELDER'S CERTIFICATIONS FOR ALL PERSONNEL INVOLVED WITH FIELD WELDING.

ALL BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS SHALL BE DESIGNED FOR ASD SERVICE LOAD REACTIONS INDICATED ON PLAN USING ASD METHODOLOGY. WHERE NOT INDICATED, SIZE CONNECTION FOR 10 KIPS MINIMUM.

ALL STEEL SHALL BE CLEANED OF RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS, AND RECEIVE ONE SHOP COAT OF PRIMER PAINT AS REQUIRED BY SPECIFICATIONS. DO NOT PAINT TOP FLANGE OF COMPOSITE BEAMS, STEEL TO RECEIVE SPRAYED ON FIREPROOFING, OR STEEL WITHIN 3" OF BOLT HOLES AT SLIP-CRITICAL CONNECTIONS. STEEL AND HARDWARE EXPOSED TO THE ELEMENTS SHALL BE HOT DIP GALVANIZED PER ASTM A123 AND ASTM A153 AS APPLICABLE, UNLESS OTHERWISE NOTED TO BE PAINTED.

GUYS AND OTHER BRACING REQUIRED TO PROVIDE LATERAL STABILITY TO THE BUILDING SHALL BE ADEQUATELY SIZED AND ANCHORED. THIS BRACING SHALL REMAIN UNTIL THE PERMANENT BRACING SYSTEM IS IN PLACE.

THE FABRICATOR SHALL FURNISH CHECKED SHOP AND ERECTION DRAWINGS, AND OBTAIN APPROVAL PRIOR TO FABRICATING ANY STRUCTURAL STEEL.

THE OWNER WILL EMPLOY A TESTING AGENCY TO PERFORM SHOP AND FIELD INSPECTIONS OF STRUCTURAL STEEL CONNECTIONS, ERECTION, METAL DECK ATTACHMENT AND JOIST INSTALLATION. INSPECTING AGENCY SHALL PERFORM VISUAL OBSERVATIONS TO CONFIRM THAT WORK IS FABRICATED AND ERECTED IN ACCORDANCE WITH APPROVED SHOP DRAWINGS AND CONTRACT DOCUMENTS. PERFORM VISUAL OBSERVATIONS OF ALL SHOP/FIELD WELDS AND BOLTS, ULTRASONICALLY TEST ALL FULL-PENETRATION WELDS, TORQUE TEST AT LEAST 10% OF ALL BOLTS AND ALL SLIP CRITICAL BOLTS. SUBMIT WRITTEN REPORTS OF OBSERVATIONS AND RESULTS OF TESTS WITHIN TWO DAYS TO ARCHITECT AND ENGINEER. IMMEDIATELY NOTIFY ENGINEER WHEN DEVIATION FROM THE CONTRACT DOCUMENTS IS OBSERVED.

MISCELLANEOUS: SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS ITEMS OF STRUCTURAL WORK. SHOP DRAWINGS TO BE SUBMITTED AND REVIEWED PRIOR TO FABRICATING MATERIAL.

STEEL JOISTS: JOISTS TO BE OPEN WEB STEEL JOISTS, LH OR K-SERIES AS SHOWN, COMPLYING WITH LATEST SPECIFICATIONS OF SJI. FURNISH AND INSTALL ANGLE BRIDGING IN ACCORDANCE WITH SJI SPECIFICATIONS. DESIGN ALL JOISTS AND BRIDGING TO RESIST A NET UPLIFT FORCE OF 10 PSF TYPICALLY (ZONE 1) AND 14 PSF AT LOCATIONS WITHIN 12 FEET OF BUILDING EDGES (ZONE 2) AND BUILDING CORNERS (ZONE 3).

ATTACH JOISTS ON COLUMN LINES WITH ERECTION BOLTS EACH END AND WELD AFTER PLUMBING AND ALIGNING. ATTACH ALL OTHER JOISTS TO STEEL BEAMS AND BEARING PLATES BY WELDING. PROVIDE ANGLE EXTENSIONS AT BOTTOM CHORDS OF JOISTS FRAMING INTO COLUMNS AND GIRDERS AS DETAILED. ALL JOISTS TO RECEIVE SHOP COAT OF PAINT AS REQUIRED BY SPECIFICATIONS.

ERECTION OF JOISTS SHALL COMPLY WITH LATEST EDITION OF SJI STANDARD SPECIFICATIONS CONCERNING ERECTION STABILITY AND HANDLING, ESPECIALLY AS FOLLOWS: ONE END OF ALL JOISTS SHALL BE ATTACHED TO ITS SUPPORT BEFORE ALLOWING THE WEIGHT OF AN ERECTOR ON THE JOISTS. WHEN BOLTED CONNECTIONS ARE USED, THE BOLTS MUST BE SNUG TIGHTENED.

STEEL DECK: ALL MATERIALS AND INSTALLATION SHALL CONFORM TO AISI SPECIFICATION FOR THE "DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" AND TO RECOMMENDATIONS OF THE STEEL DECK INSTITUTE'S (SDI) DESIGN MANUAL FOR FORM DECKS AND ROOF DECKS.

STEEL ROOF DECK TO BE 1-1/2 INCH DEEP, 22 GAUGE, GALVANIZED WIDE RIB DECK COMPLYING WITH LATEST SPECIFICATION OF SDI. SHEETS TO BE AS LARGE AS POSSIBLE, SPANNING A MINIMUM OF 4 SUPPORTS. ATTACH TO SUPPORTS BY WELDING 6" O.C. AT ENDS AND END LAPS, AND 12" O.C. AT INTERMEDIATE SUPPORTS. SIDE LAPS TO BE SCREW-FASTENED AT MID-SPAN, 36" ON CENTER, MAXIMUM.

ACOUSTICAL STEEL ROOF DECK TO BE 3 1/2" DEEP, DOVETAIL R18 18 GAUGE GALVANIZED EPICORE ROOF DECK. SHEETS TO BE AS LARGE AS POSSIBLE, SPANNING A MINIMUM OF 3 SUPPORTS. ATTACH TO SUPPORTS PER TYPICAL DETAIL ON S203.

STEEL FLOOR DECK TO BE 1 INCH DEEP, 22 GAUGE GALVANIZED FORM DECK COMPLYING WITH LATEST SPECIFICATION OF SDI. SHEETS TO BE AS LARGE AS POSSIBLE SPANNING A MINIMUM OF 3 SUPPORTS. ATTACH TO EACH SUPPORT BY WELDING AT 12" O.C. SIDE LAPS TO BE SCREW FASTENED AT NESTING TYPE DECK AND BUTTON PUNCHED AT INTERLOCKING DECK AT 36" ON CENTER, MAXIMUM.

STEEL DECK AT INFILL OF ROOFTOP MECHANICAL CONCRETE PADS TO BE 2 INCH DEEP, 22 GAUGE GALVANIZED COMPOSITE DECK COMPLYING WITH LATEST SPECIFICATION OF SDI. SHEETS TO BE AS LARGE AS POSSIBLE SPANNING A MINIMUM OF 3 SUPPORTS. ATTACH TO EACH SUPPORT BY WELDING AT 12" O.C. SIDE LAPS TO BE SCREW FASTENED AT NESTING TYPE DECK AND BUTTON PUNCHED AT INTERLOCKING DECK AT 36" ON CENTER, MAXIMUM.

THE OWNER WILL EMPLOY A TESTING AGENCY TO PERFORM FIELD INSPECTIONS OF METAL DECK INSTALLATION. INSPECTION AGENCY SHALL VISUALLY INSPECT TYPE AND GAGE OF DECK, BEARING LENGTHS, SIDELAP FASTENING AND FASTENINGS TO SUPPORTS. DO NOT PLACE CONCRETE OR INSTALL ROOFING MATERIALS UNTIL ALL CORRECTIONS REQUIRED BY THE INSPECTION AGENCY HAVE BEEN MADE AND HAVE BEEN RE-INSPECTED.

EXTERNAL AND LOAD BEARING METAL STUDS: ALL MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO ASTM STANDARDS A-653, C-955, C-1007, AND AISI "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS."

ALL STUDS, JOISTS AND ACCESSORIES 16 GA. OR HEAVIER SHALL BE FORMED FROM STEEL WITH A MINIMUM YIELD STRENGTH OF 50 KSI. 18 GA. MEMBERS SHALL BE FORMED FROM STEEL WITH A MINIMUM YIELD STRENGTH OF 33 KSI. ALL STUDS, JOISTS, AND ACCESSORIES SHALL BE GALVANIZED PER ASTM A-924, CLASS G-60, EXCEPT STUDS BACKING UP BRICK VENEER AND THIN BRICK TO BE CLASS G-90.

PROVIDE METAL STUDS AND JOISTS WITH 1 5/8" MINIMUM STIFFENED FLANGES AND MINIMUM PROPERTIES CALCULATED IN ACCORDANCE WITH LATEST AISI SPECIFICATION.

SUBMIT MANUFACTURER'S PRODUCT DATA, SHOP DRAWINGS AND FIELD PLACEMENT DRAWINGS FOR REVIEW FOR ALL STUDS AND ACCESSORIES PRIOR TO ORDERING ANY MATERIAL. DRAWINGS SHALL INDICATE ALL FASTENING DETAILS, BRACING, AND PANELIZATION, IF USED.

PREPARE AND SUBMIT DESIGN ENGINEERING CALCULATIONS FOR ALL EXTERIOR WALL METAL STUDS AND CONNECTIONS WITH SHOP AND FIELD PLACEMENT DRAWINGS. CALCULATIONS SHALL BE SEALED BY REGISTERED PROFESSIONAL ENGINEER. DESIGN OF METAL STUDS SHALL COMPLY WITH GRAVITY, WIND, AND SEISMIC LOADS IN ACCORDANCE WITH BUILDING CODE USING PARAMETERS DEFINED ABOVE UNDER DESIGN LOADS.

MAXIMUM PERMISSIBLE DEFLECTION OF STUDS UNDER WIND LOADS SHALL BE LIMITED TO L/600 FOR WALL CONSTRUCTION WITH MASONRY VENEER, AND L/360 ELSEWHERE.

STUDS SHALL BE INSTALLED SEATED SQUARELY (WITHIN 1/8") AGAINST THE WEB PORTION OF THE TOP AND BOTTOM TRACKS. TRACKS SHALL REST ON A CONTINUOUS, UNIFORM BEARING SURFACE. BRACE STUDS AT 4'-0" MAXIMUM VERTICALLY ON CENTER PER MANUFACTURER'S STANDARD BRIDGING DETAILS.

CUTTING OF STEEL FRAMING MEMBERS MAY BE ACCOMPLISHED WITH A SAW OR SHEAR. TORCH CUTTING OF LOAD BEARING MEMBERS IS NOT PERMITTED. SPLICING OF MEMBERS IS NOT PERMITTED.

TEMPORARY BRACING SHALL BE PROVIDED AS NECESSARY AND LEFT IN PLACE UNTIL WORK IS PERMANENTLY STABILIZED.

UNLESS NOTED OTHERWISE, ALL CONNECTIONS SHALL BE MADE USING #12-14 SELF TAPPING SCREWS. WELDED CONNECTIONS MAY BE USED IN LIEU OF SCREWS AT CONTRACTOR'S OPTION PROVIDED ALL WELDS ARE INDICATED ON SHOP AND FIELD DRAWINGS. ALL WELDS SHALL CONFORM TO AWS D1.3-8 AND SHALL BE MADE BY OPERATORS QUALIFIED IN ACCORDANCE WITH SECTION 6.0 OF AWS CODE. TOUCH UP ALL WELDS WITH ZINC RICH PAINT.

METAL STAIRS, HANDRAILS, AND GUARDS: METAL STAIRS SHALL BE DESIGNED FOR A MINIMUM UNIFORM LIVE LOAD OF 100 PSF, OR A MINIMUM CONCENTRATED LIVE LOAD OF 300 LBS, WHICHEVER PRODUCES THE GREATER LOAD EFFECT. MAXIMUM LIVE LOAD DEFLECTION OF FRAMING ELEMENTS SHALL BE LIMITED TO SPAN/360, OR 1/4 INCH, WHICHEVER IS LESS.

METAL GUARDS AND HANDRAILS AND THEIR ANCHORAGES SHALL BE DESIGNED FOR UNIFORM AND CONCENTRATED FORCES AS DEFINED IN IBC 2018.

SUBMIT FOR REVIEW CHECKED SHOP AND ERECTION DRAWINGS AND OBTAIN APPROVAL PRIOR TO FABRICATING METAL STAIR FRAMING, HANDRAILS, AND GUARDS. DRAWINGS SHALL INDICATE ALL BOLTS, WELDS, AND CONNECTIONS TO SUPPORTING ELEMENTS.

SUBMIT FOR REVIEW DESIGN ENGINEERING CALCULATIONS WITH SHOP AND ERECTION DRAWINGS. CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN PENNSYLVANIA.

WOOD DECKING:

WOOD DECKING AT THE STAGE FLOOR TO BE 2" NOMINAL TONGUE AND GROOVE WOOD DECKING, SOUTHERN YELLOW PINE NO.2 OR BETTER. INSTALL IN TWO SPAN CONTINUOUS PATTERN. GLUE AND NAIL JOINTS. SLANT NAIL EACH COURSE OF DECKING TO THE TONGUE OF THE ADJACENT COURSE AT 30" O.C., WITHIN 12" OF THE END OF THE UNIT, AND AT THE SUPPORT. STAGGER NAILING 15 INCHES IN ADJACENT COURSES. USE 60 NAILS.

WOOD DECKING AT THE CANOPIES TO BE 2" OR 3" NOMINAL GLUED-LAMINATED WOOD ROOF DECKING. SEE SPECIFICATIONS FOR SPECIES, FACE GRADE, SEALER, FABRICATION, AND INSTALLATION REQUIREMENTS.

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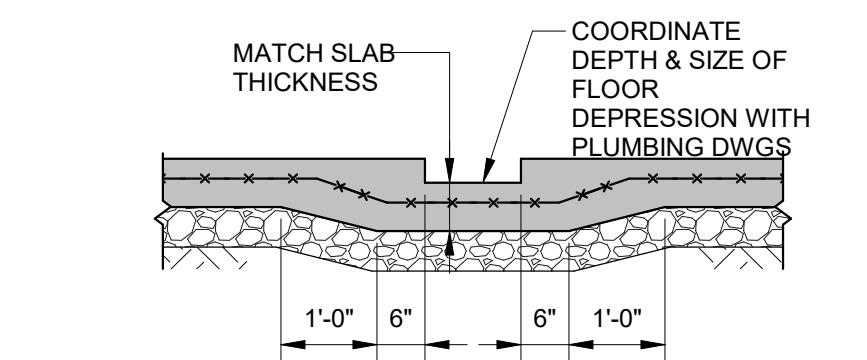
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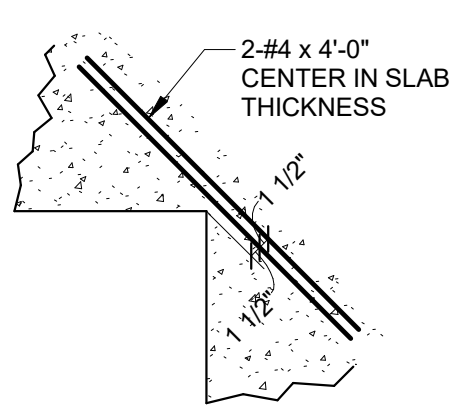
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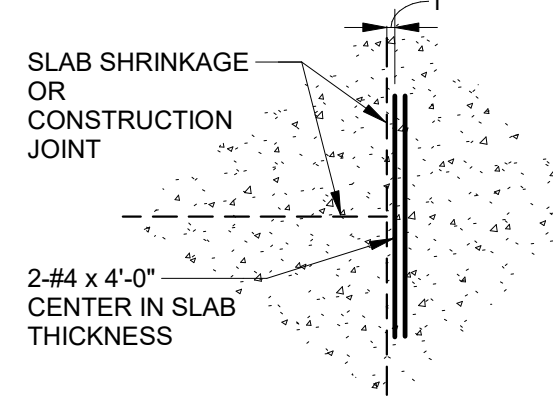
MINIMUM CLEAR COVER ON REINFORCING BARS IN CAST-IN-PLACE CONCRETE		
EXPOSURE	BAR SIZE OR ELEMENT	CONCRETE COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	ALL BAR SIZES	3"
	#6 THROUGH #18 BARS	2"
CONCRETE EXPOSED TO EARTH OR WEATHER	#5 BAR, W31 OR D31 WIRE, AND SMALLER	1-1/2"
	SLABS, WALLS, JOISTS, #11 BARS AND SMALLER	3/4"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	BEAMS, COLUMNS, PRIMARY REINFORCEMENT, TIES, AND SPIRALS	1-1/2"



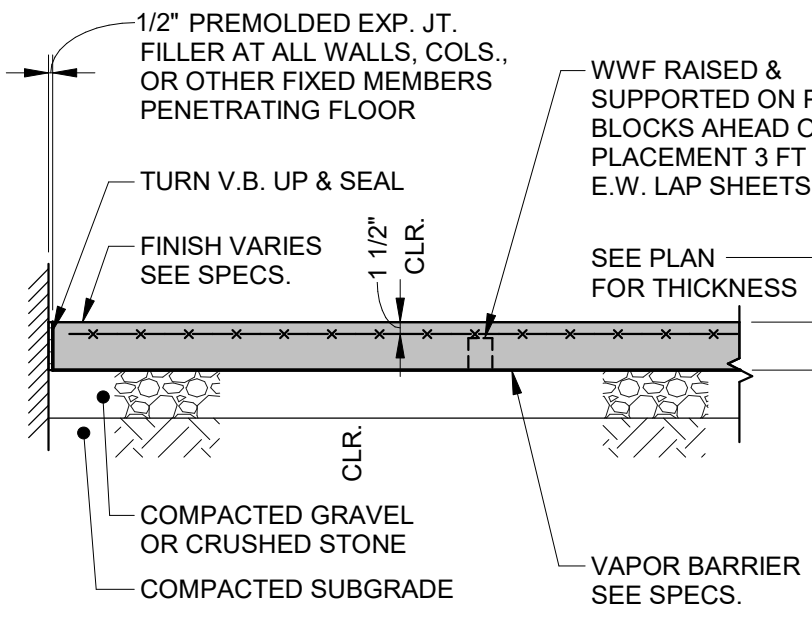
14 TYPICAL SLAB FLOOR DRAIN
S202 1/2" = 1'-0"



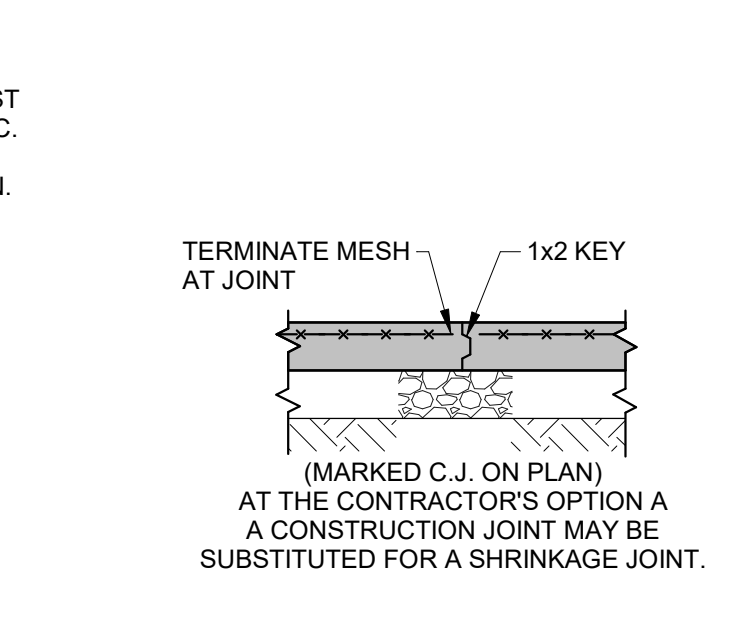
15 TYPICAL SLAB REINF. AT RE-ENTRANT CORNER
S202 NO SCALE



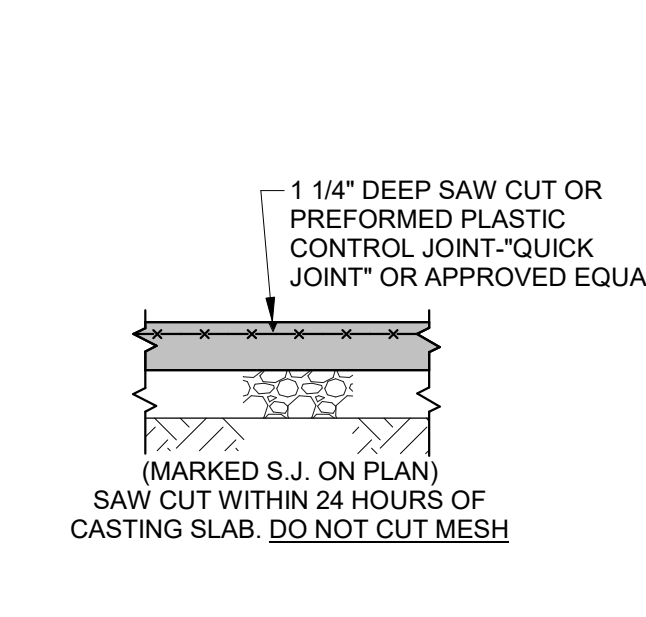
16 TYPICAL SLAB REINF. AT TERMINATED JOINTS
S202 NO SCALE



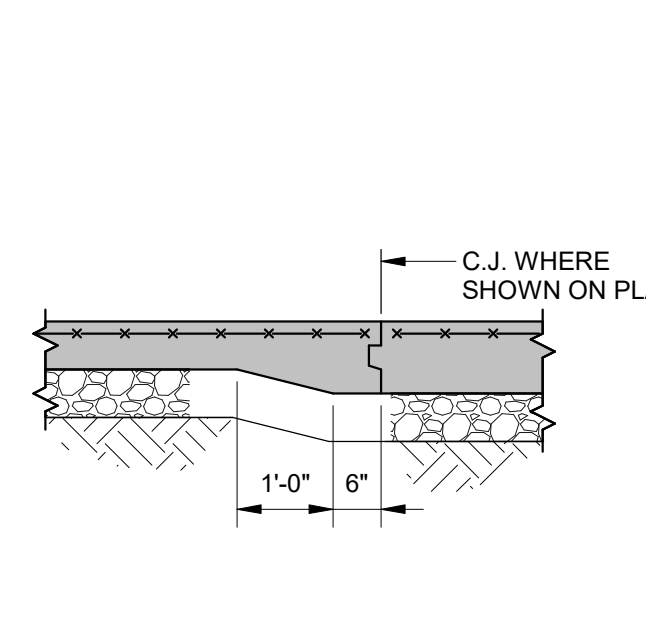
8 TYPICAL SLAB ON GRADE
S202 NO SCALE



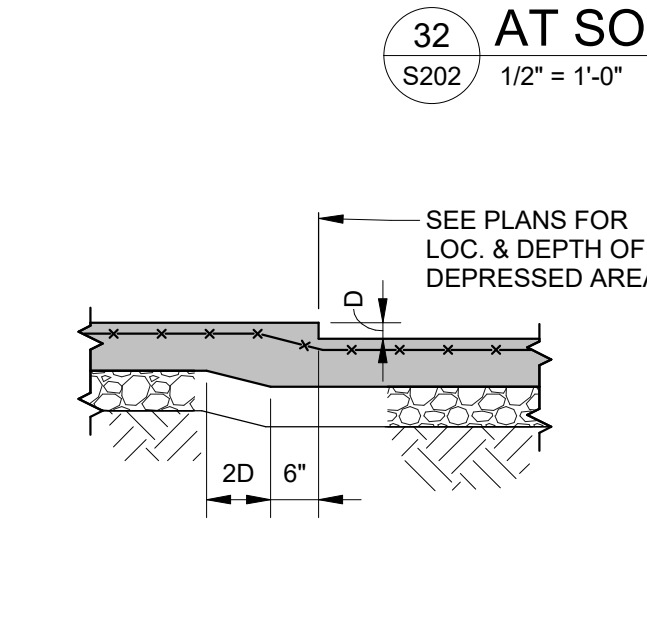
9 TYPICAL SLAB CONSTRUCTION JOINT
S202 NO SCALE



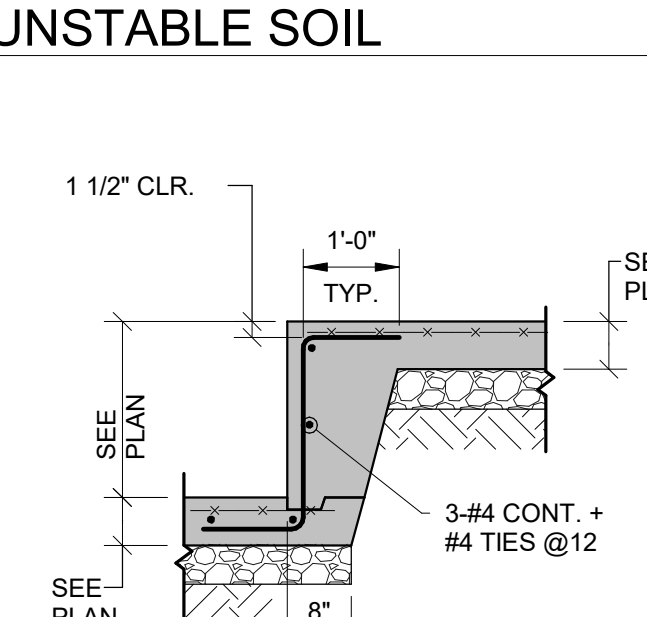
10 TYPICAL SLAB SHRINKAGE JOINT
S202 NO SCALE



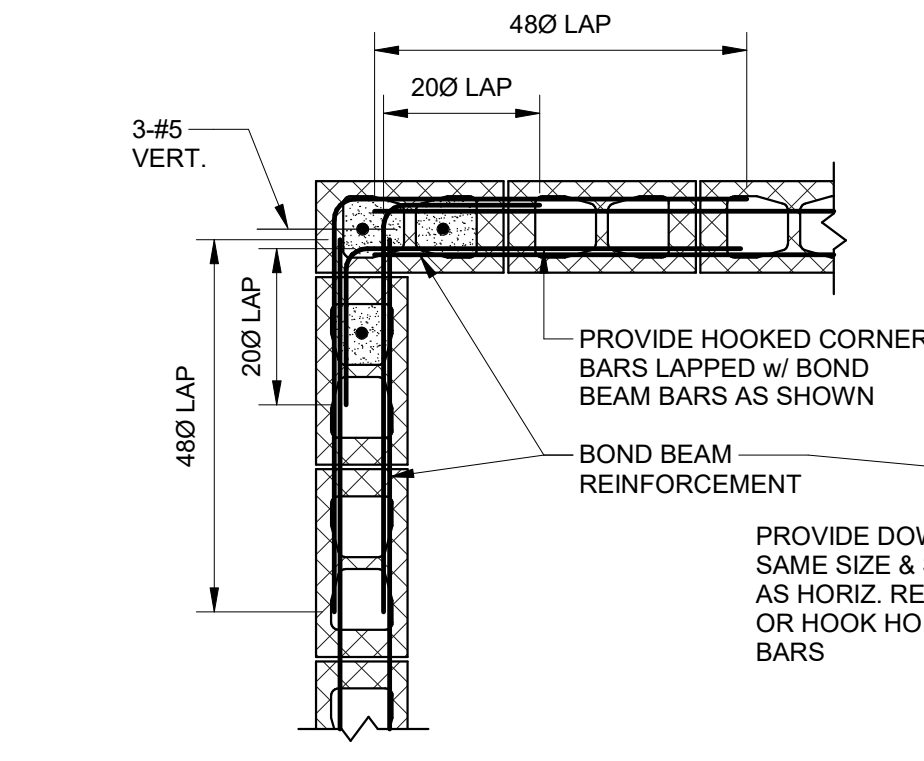
11 TYPICAL SLAB CHANGE IN THICKNESS
S202 NO SCALE



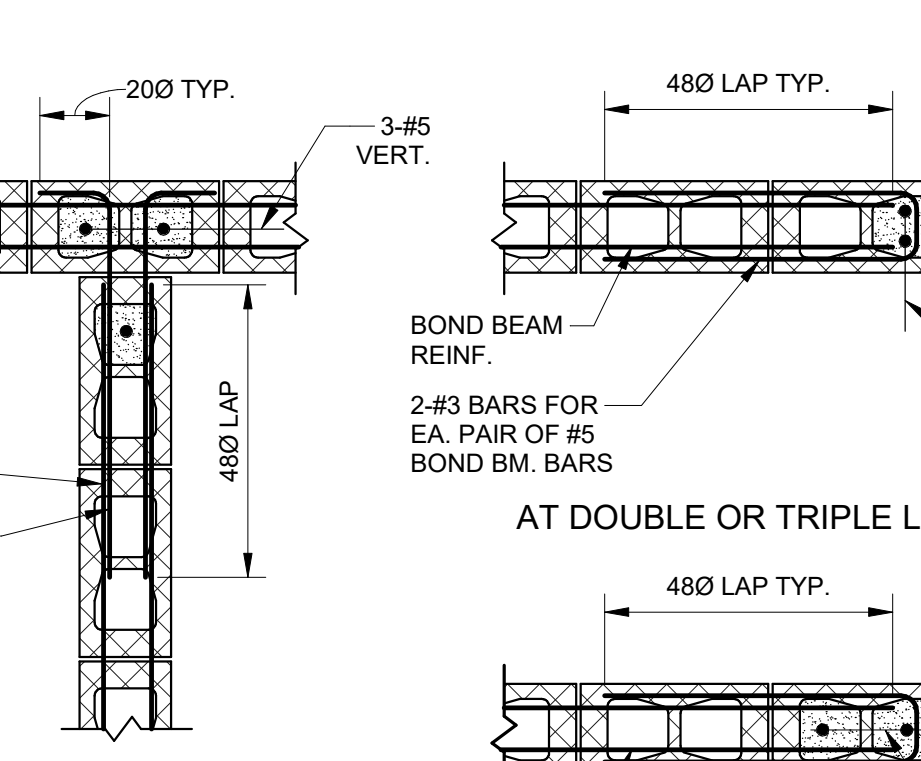
12 TYPICAL SLAB DEPRESSION
S202 NO SCALE



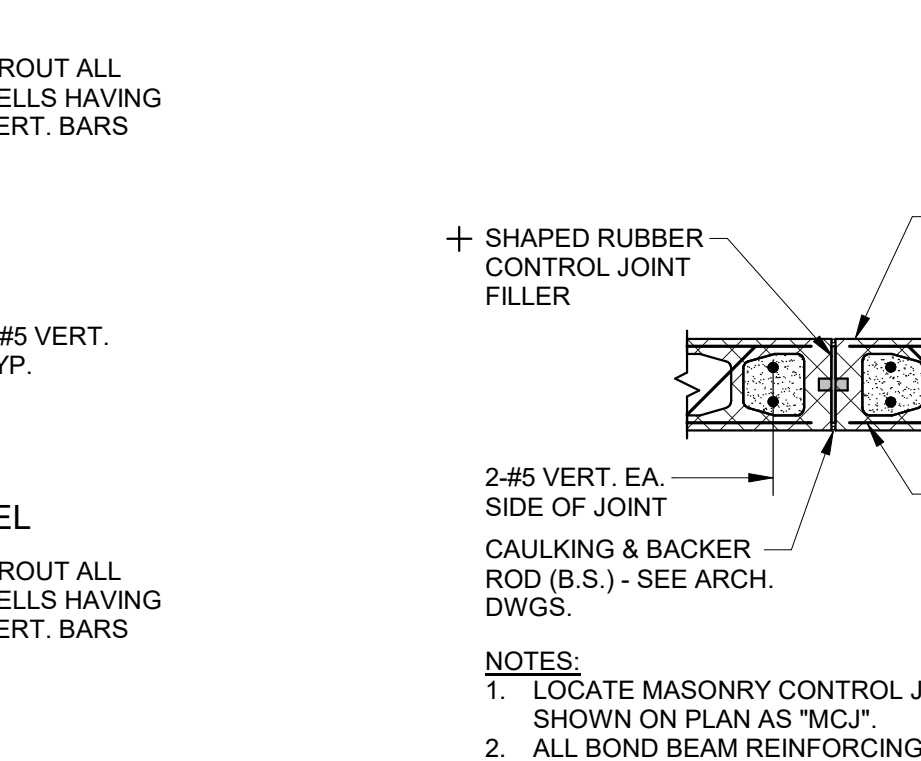
13 TYPICAL SLAB CHANGE IN ELEVATION
S202 NO SCALE



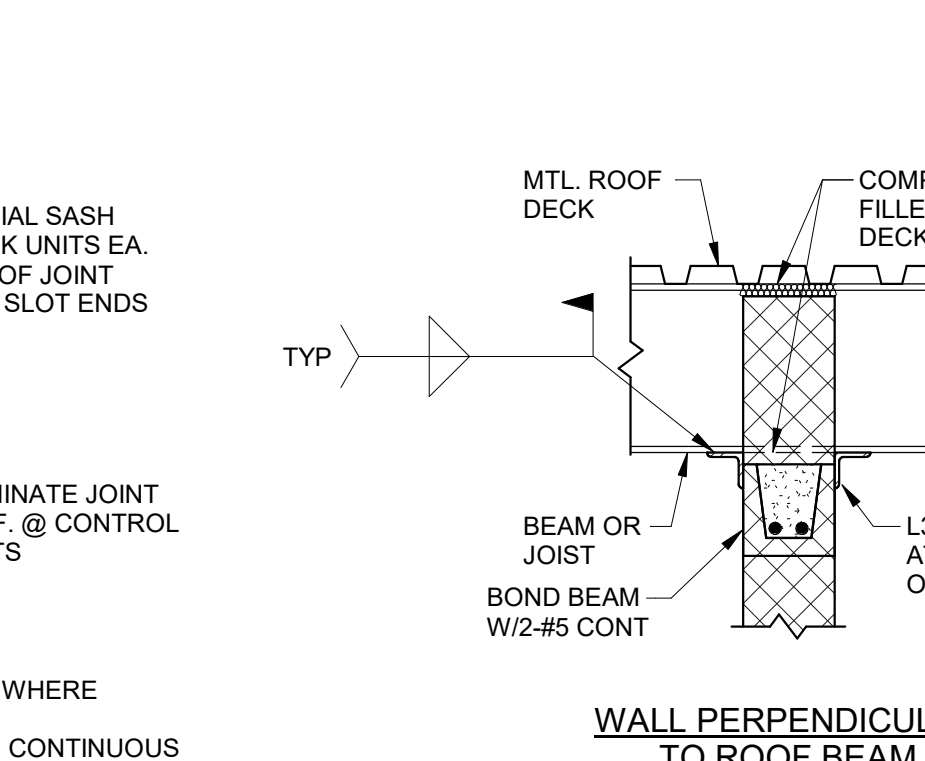
21 TYPICAL CMU WALL DETAILS (8" OR 12" CMU)
S202 3/4" = 1'-0"



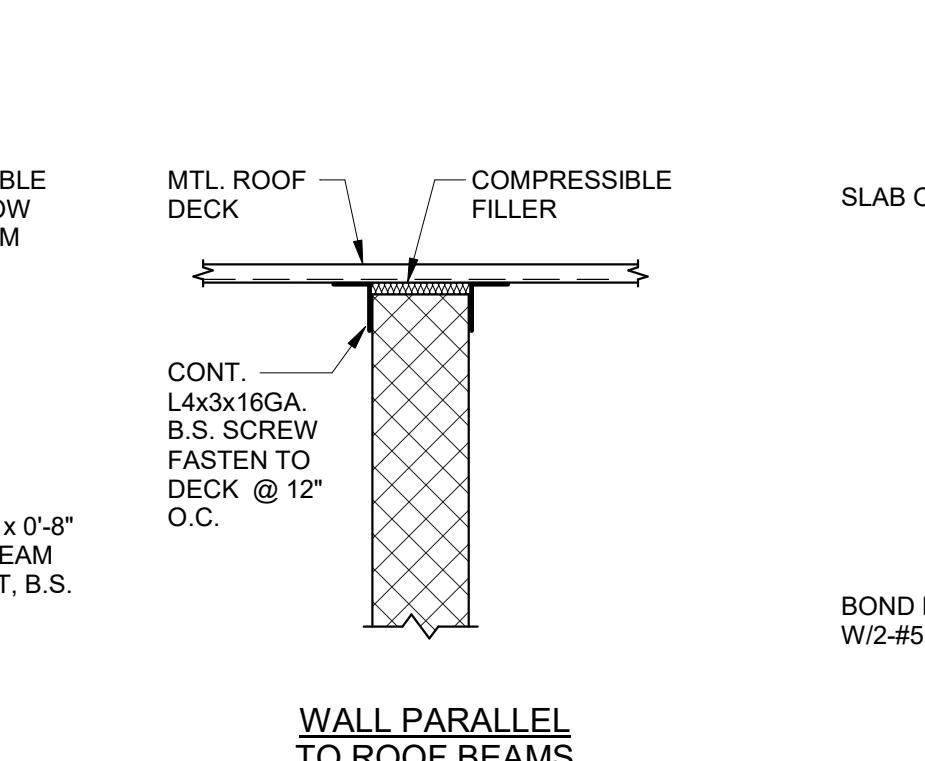
22 TYPICAL MASONRY CONTROL JOINT (8" OR 12" CMU)
S202 3/4" = 1'-0"



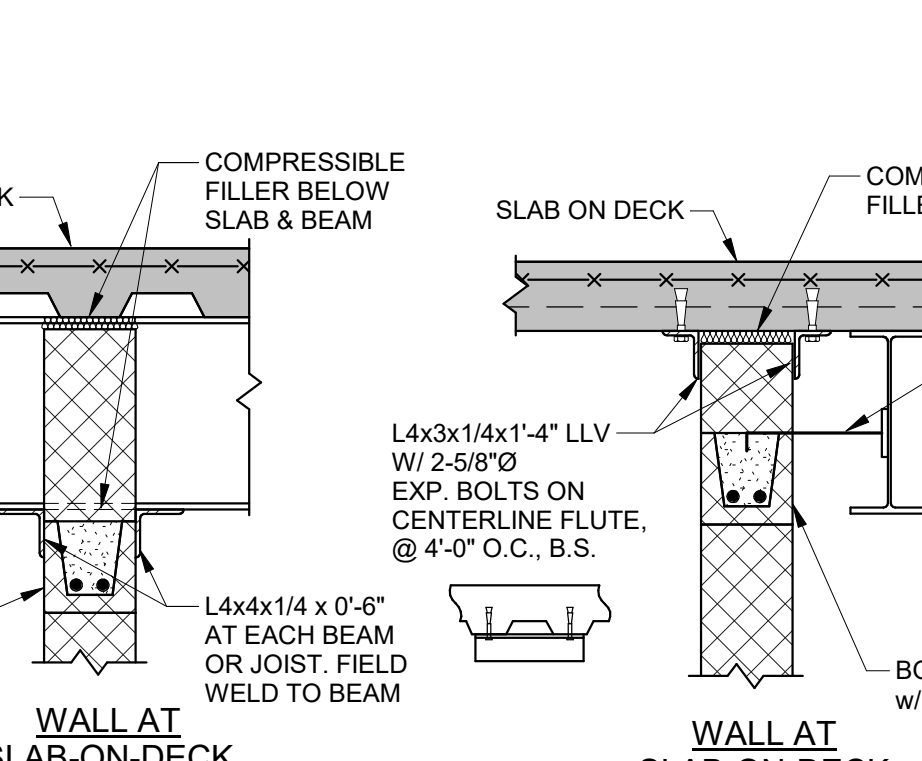
23 TYPICAL DETAILS AT TOP OF MASONRY PARTITIONS
S202 NO SCALE



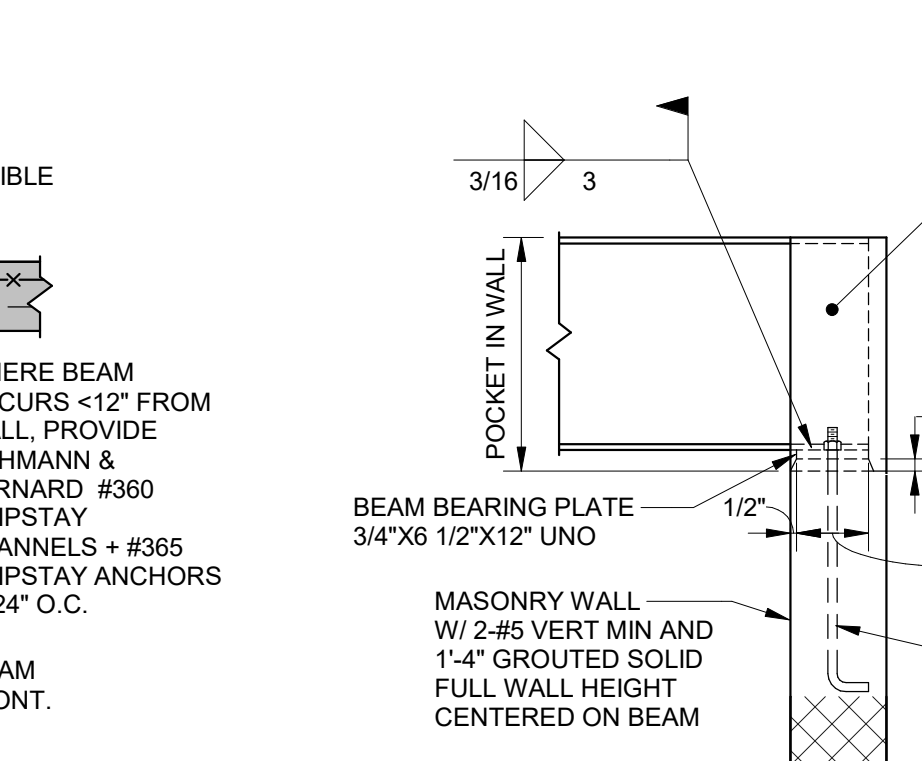
24 TYPICAL BEAM BEARING ON CMU WALL
S202 3/4" = 1'-0"



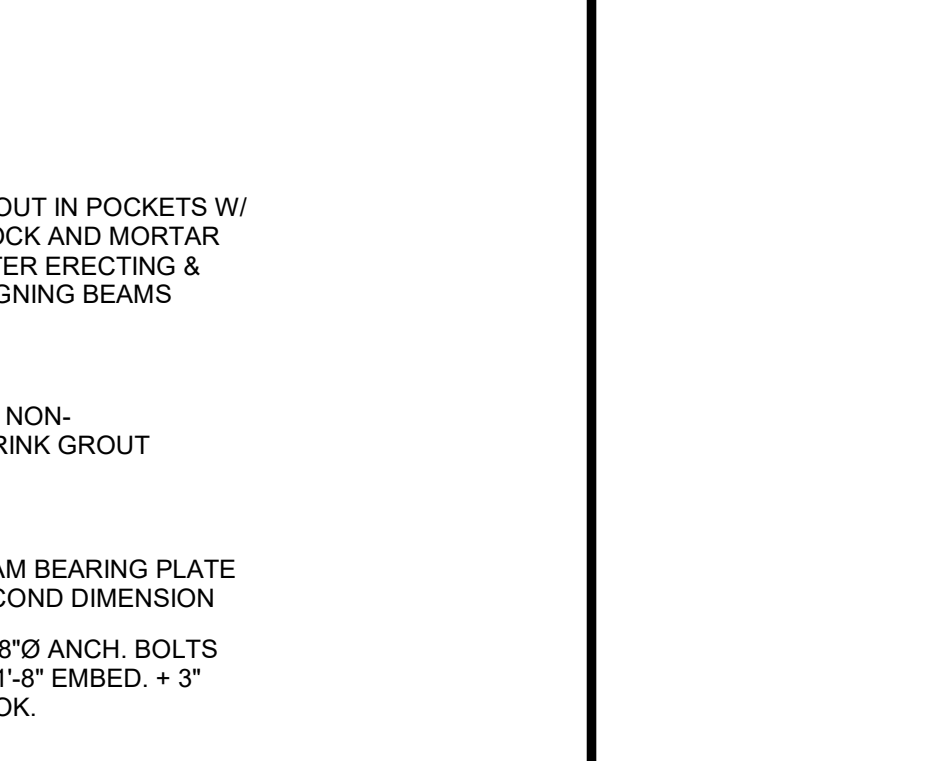
25 TYPICAL DOUBLE ANGLE LINTEL BEARING ON CMU
S202 3/4" = 1'-0"



26 TYPICAL DOUBLE CHANNEL LINTEL BEARING ON CMU
S202 3/4" = 1'-0"



27 TYPICAL REINFORCEMENT AT CMU WALL OPENING
S202 1/2" = 1'-0"



28 TYPICAL ANGLE LINTEL PROFILES
S202 3/4" = 1'-0"



29 TYPICAL DOUBLE CHANNEL LINTEL
S202 3/4" = 1'-0"

CONCRETE EXPOSED TO EARTH OR WEATHER

CONCRETE NOT EXPOSED TO EARTH OR WEATHER

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

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CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

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NOT FOR CONSTRUCTION

ISSUE HISTORY

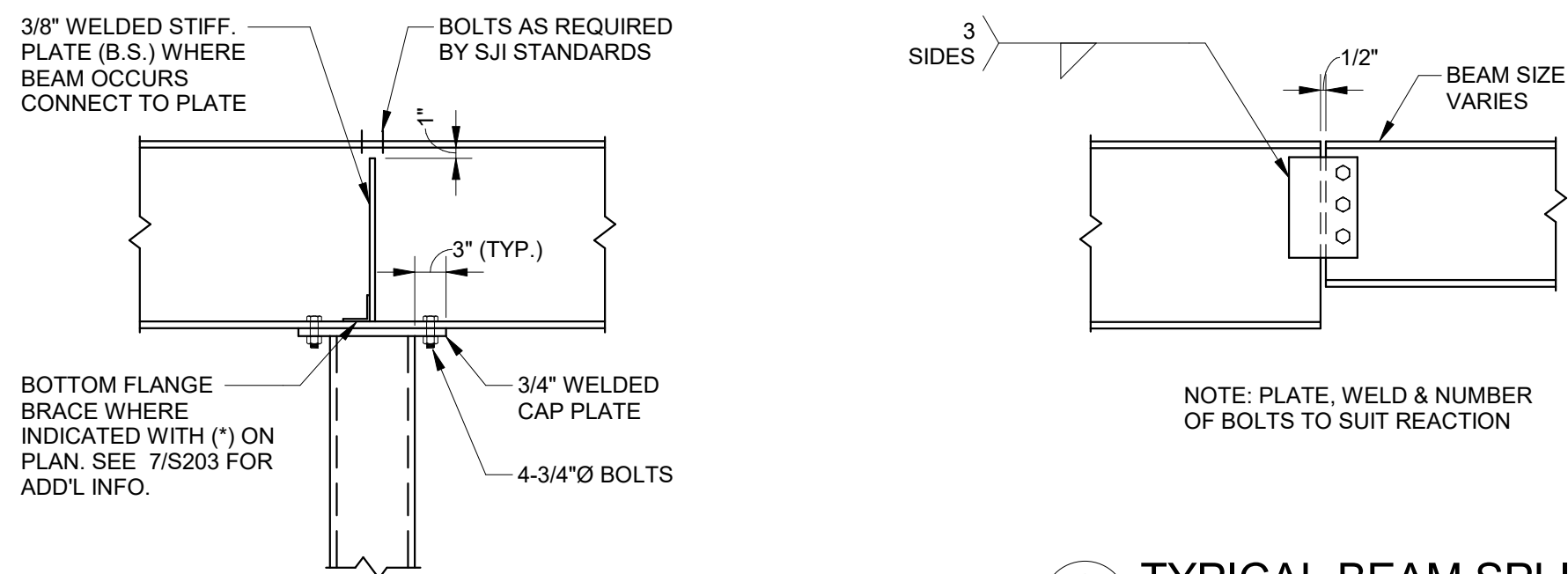
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DRAWING NUMBER

S202

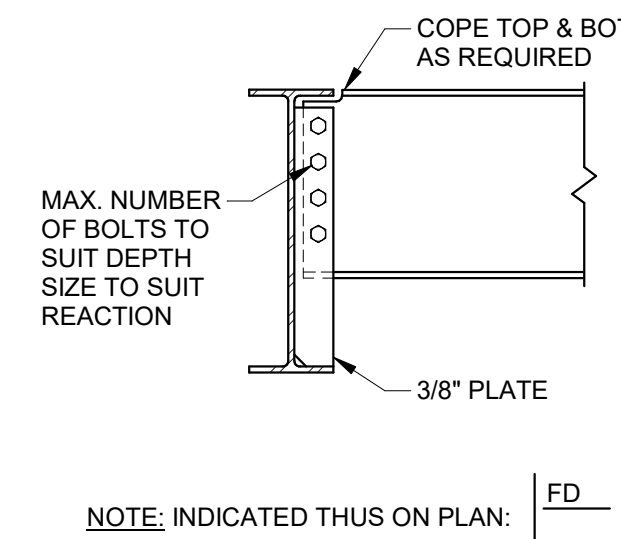
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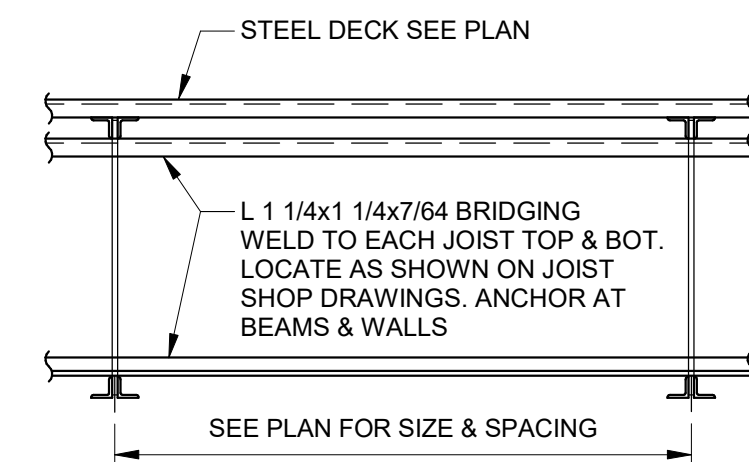


1
S203 / NO SCALE
TYPICAL ROOF BEAM OVER COLUMN

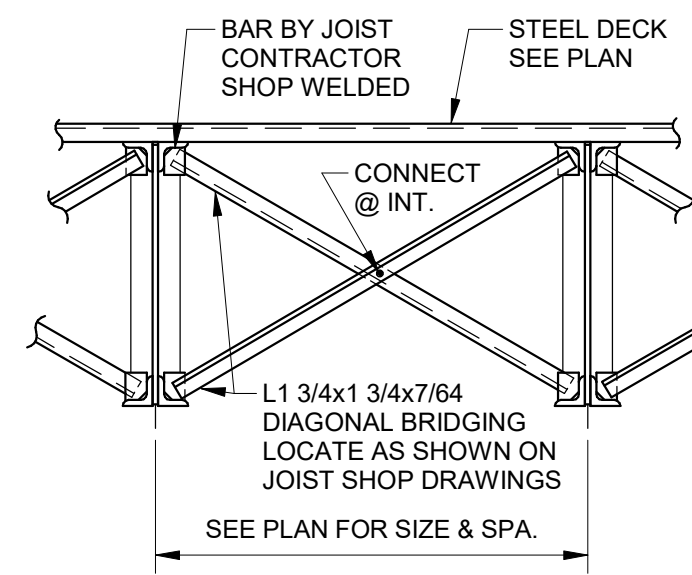
2
S203 / NO SCALE
TYPICAL BEAM SPLICE



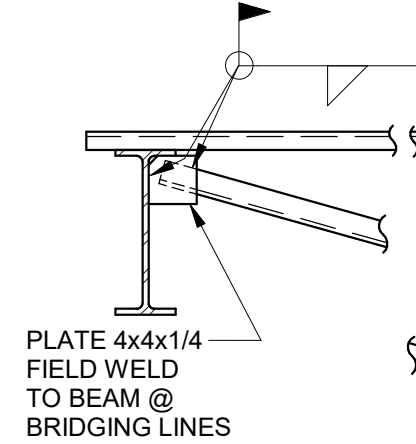
3
S203 / NO SCALE
TYPICAL FULL DEPTH CONNECTION WHERE BEAM DEPTHS VARY



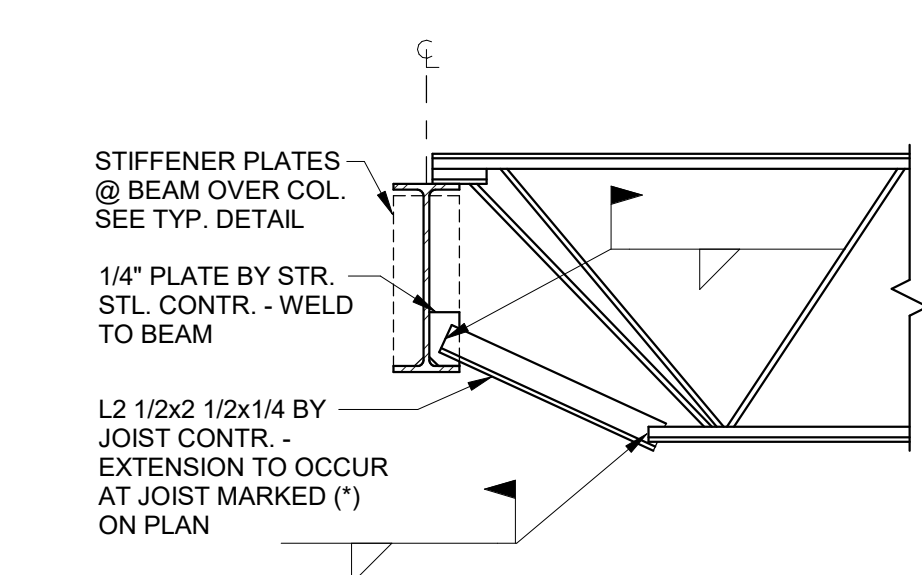
4
S203 / 3/4" = 1'-0"
TYPICAL ROOF CONSTRUCTION K-SERIES JOIST



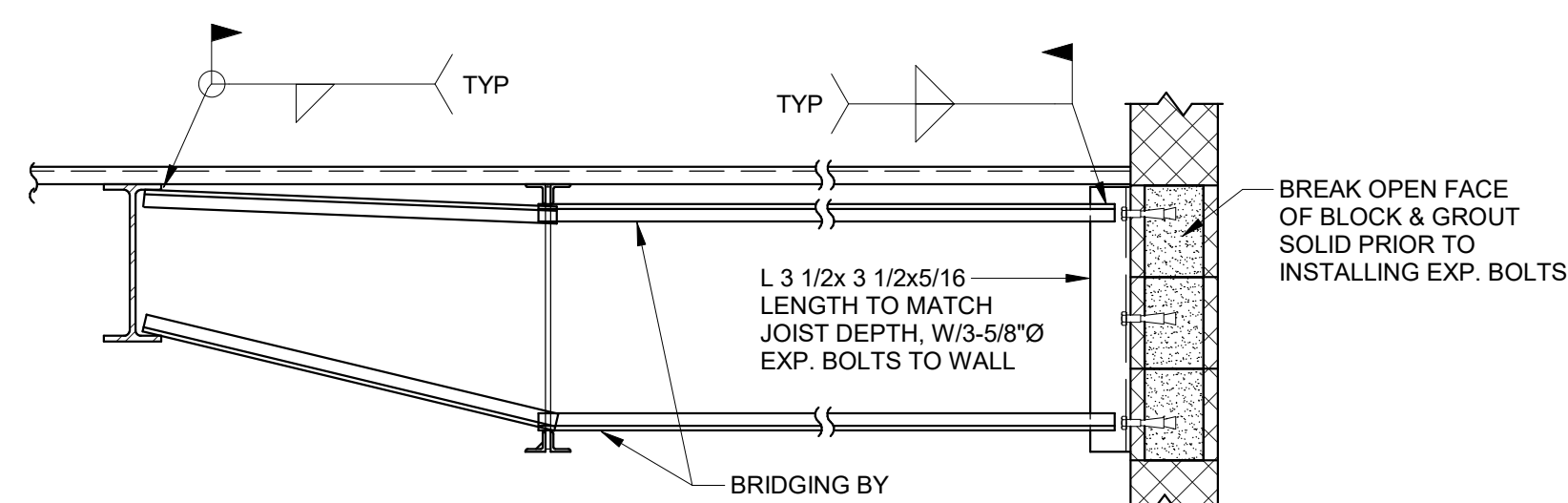
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TYPICAL ROOF CONSTRUCTION LH-SERIES JOISTS



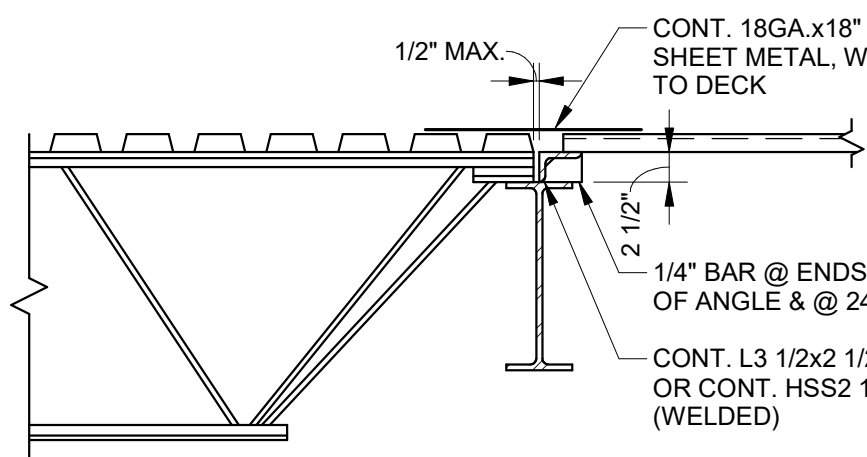
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S203 / NO SCALE
TYPICAL UPLIFT BRIDGING



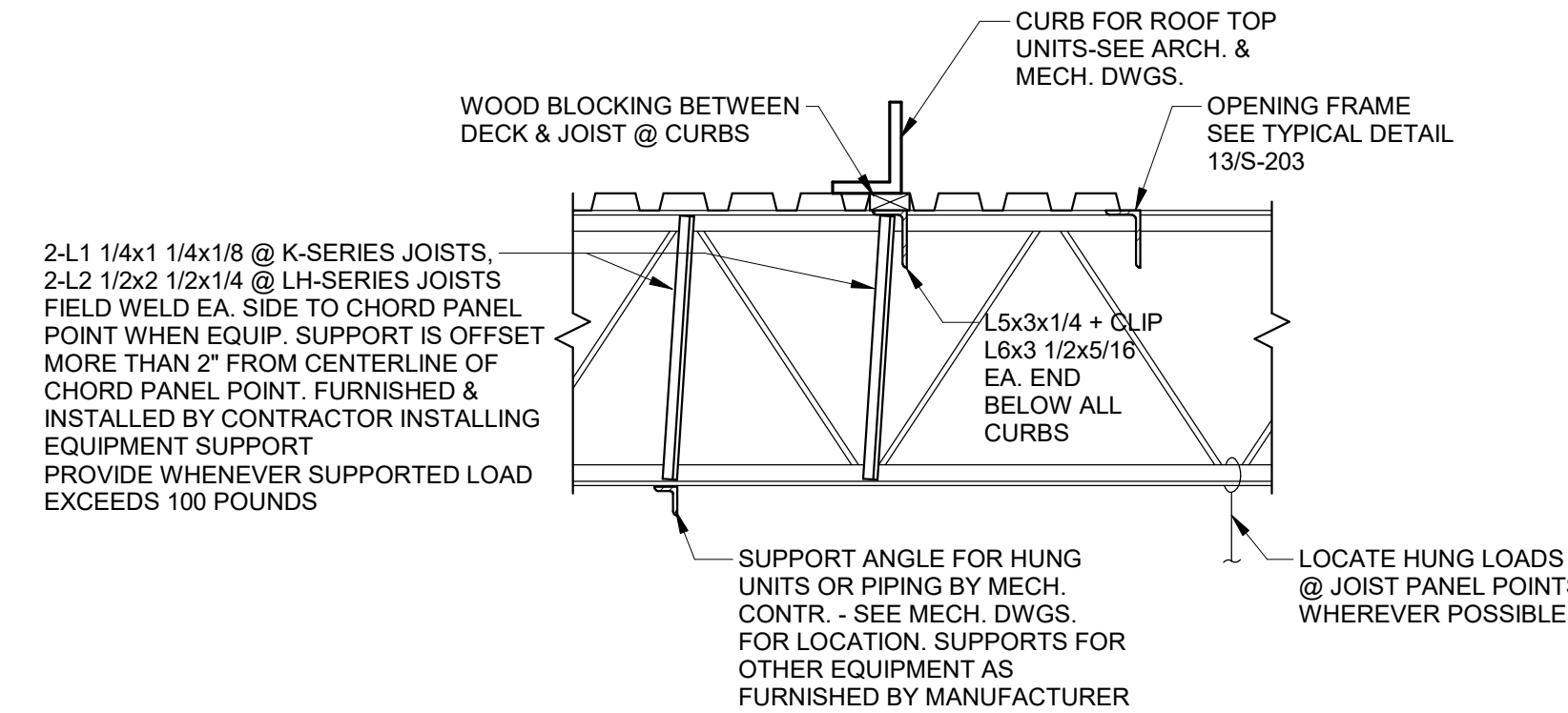
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S203 / NO SCALE
TYPICAL BOTTOM FLANGE BRACE



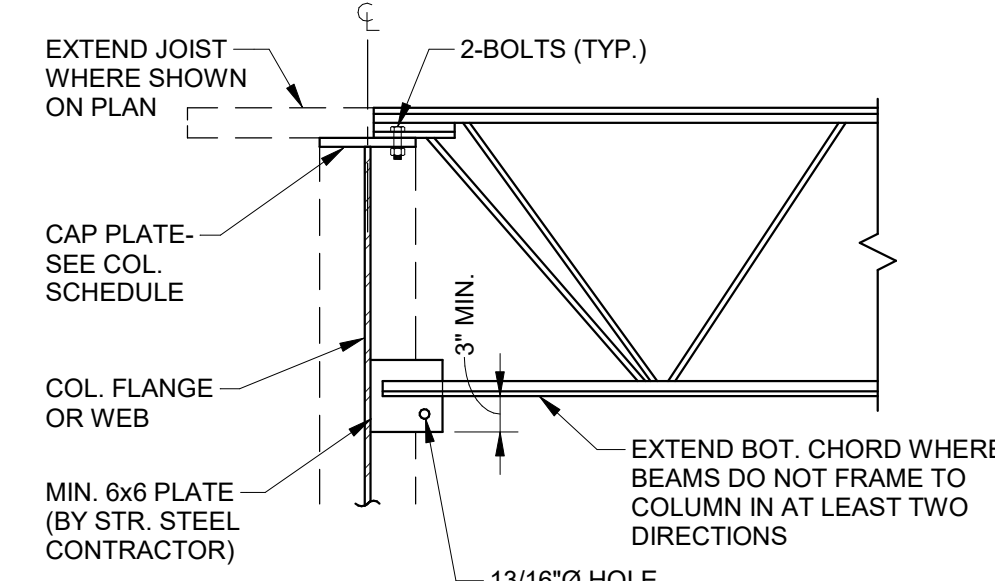
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TYPICAL JOIST BRIDGING DETAIL



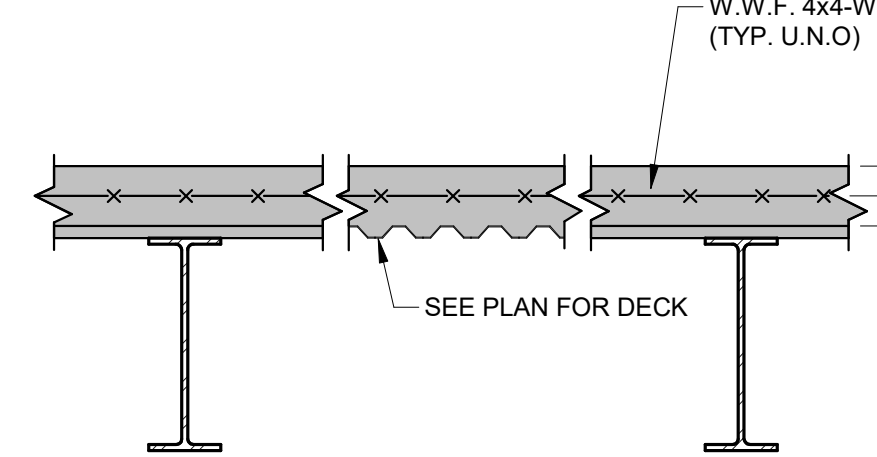
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S203 / NO SCALE
TYPICAL CHANGE IN ROOF DECK DIRECTION



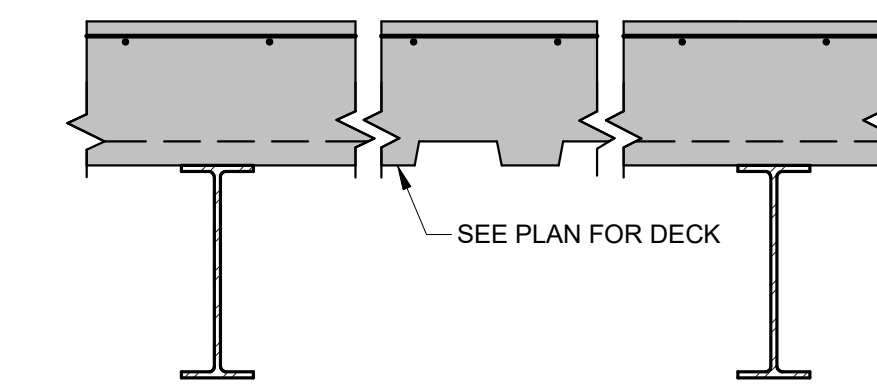
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S203 / NO SCALE
TYPICAL JOIST REINFORCING AT MECHANICAL & OTHER EQUIPMENT



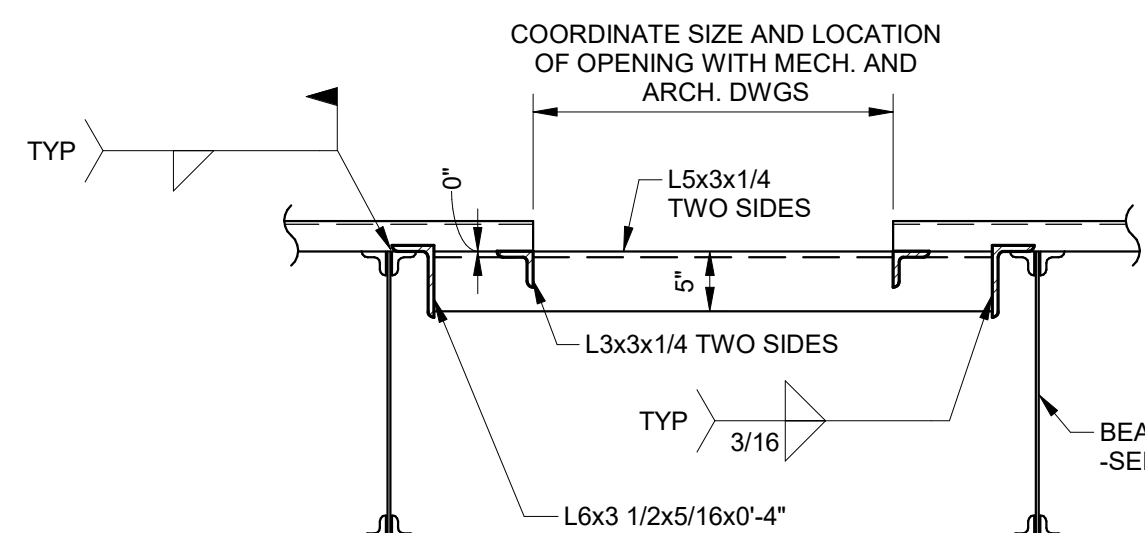
11
S203 / NO SCALE
TYPICAL JOIST TO COLUMN CONNECTION



12
S203 / 3/4" = 1'-0"
TYPICAL FORM DECK SLAB CONSTRUCTION

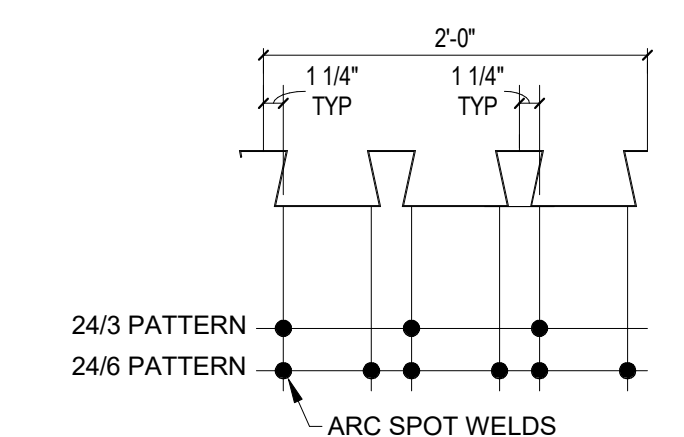


12A
S203 / NO SCALE
TYPICAL COMPOSITE DECK SLAB CONSTRUCTION

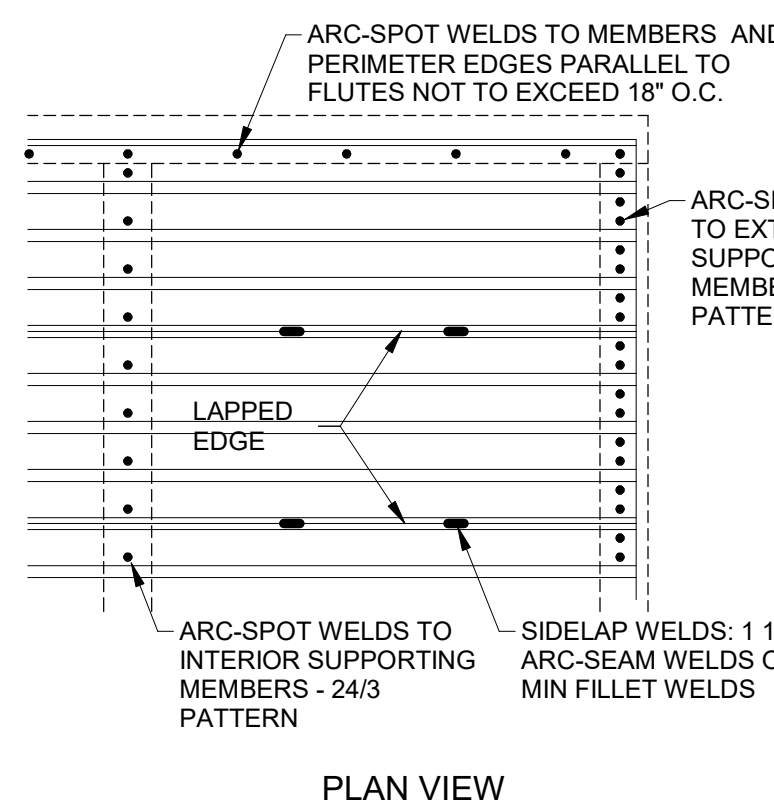


- NOTES:
1. FRAMES REQ'D AT ALL OPENINGS EXCEEDING 12" IN ANY DIMENSION AND AT TWO OR MORE SMALLER OPENINGS SPACED LESS THAN 36" ON CENTER.
 2. INCLUDE UNIT PRICE OF 24"x24" OPG. FRAME W/ BID.

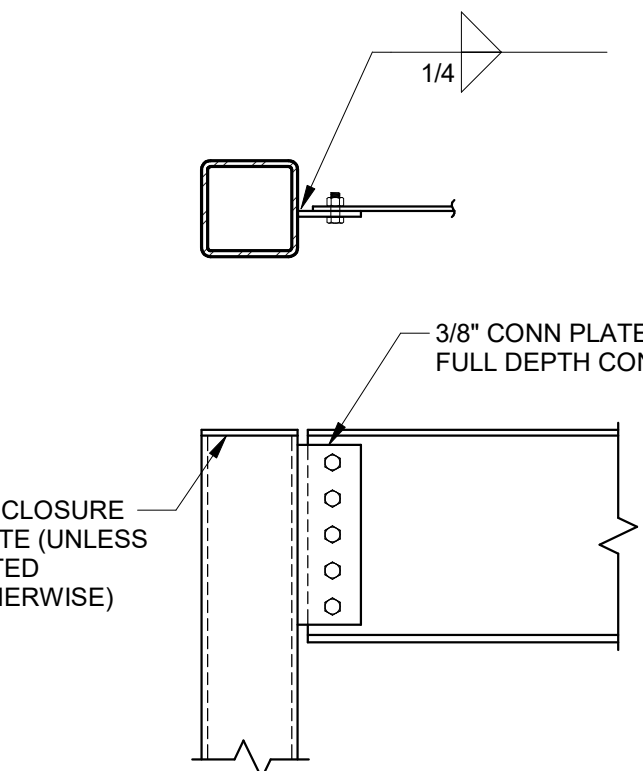
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S203 / NO SCALE
TYPICAL FRAME AT OPENING IN JOIST & METAL DECK ROOF



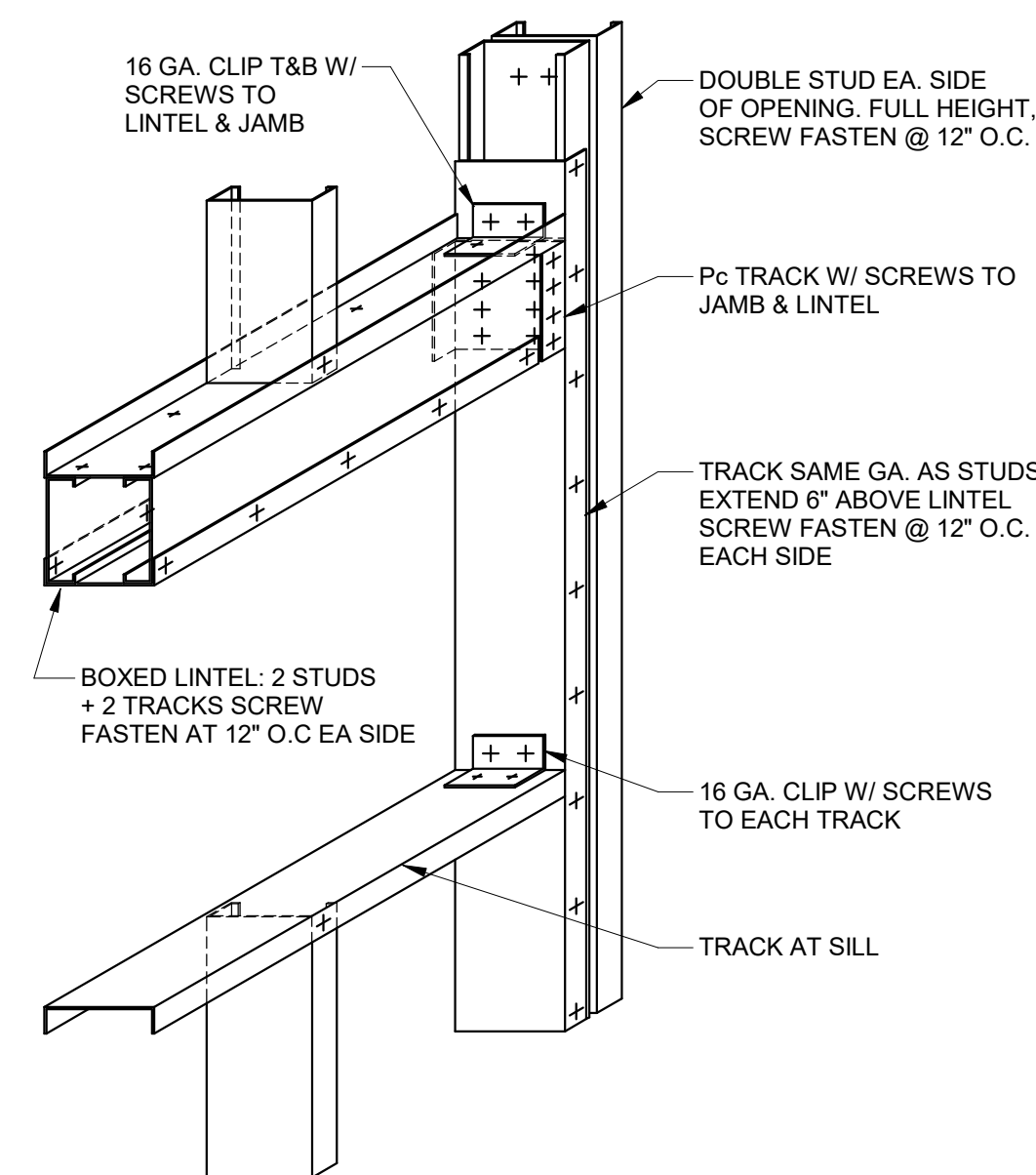
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S203 / 1" = 1'-0"
TYPICAL WELD PATTERN FOR ACOUSTIC ROOF DECK



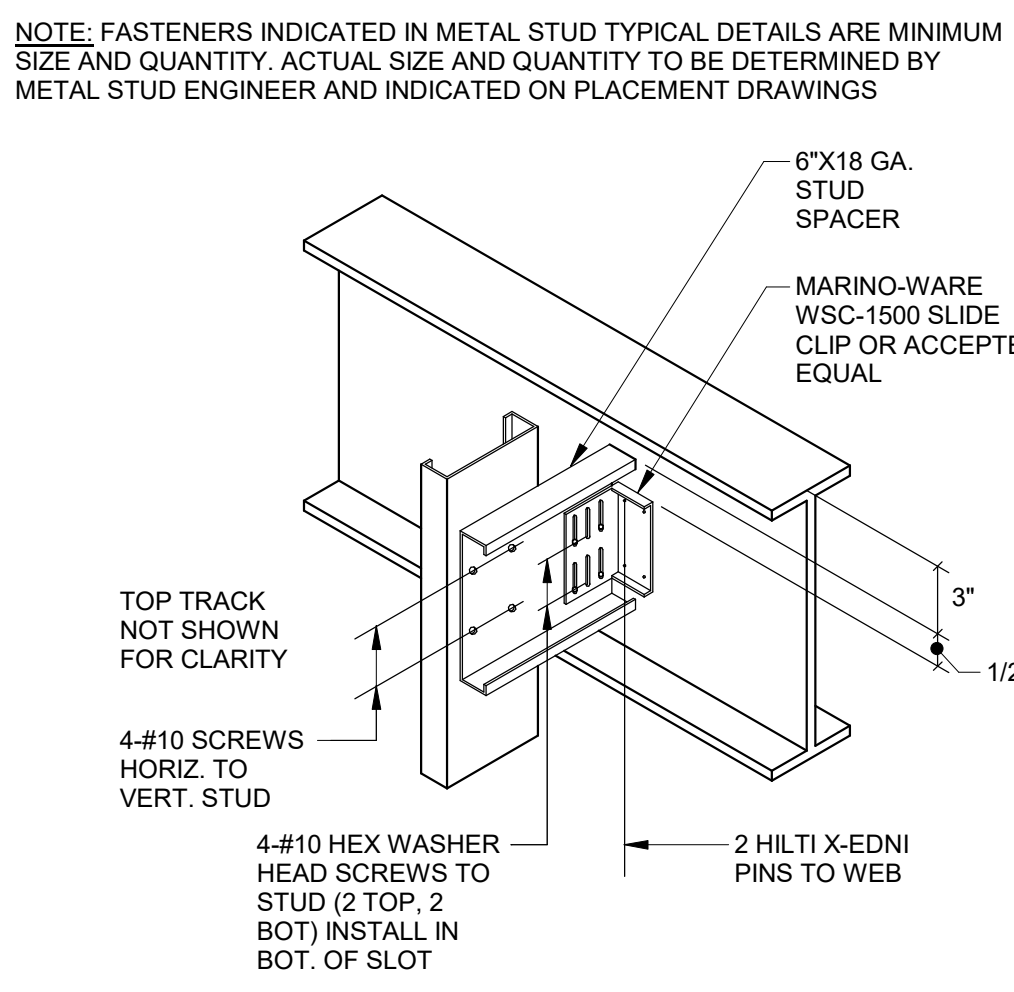
- NOTES:
1. ARC SPOT WELDS TO SUPPORTING MEMBERS SHALL HAVE 3/4" MIN EFF. DIA.
 2. SPACE SIDELAP WELDS 36" O.C. MAX.



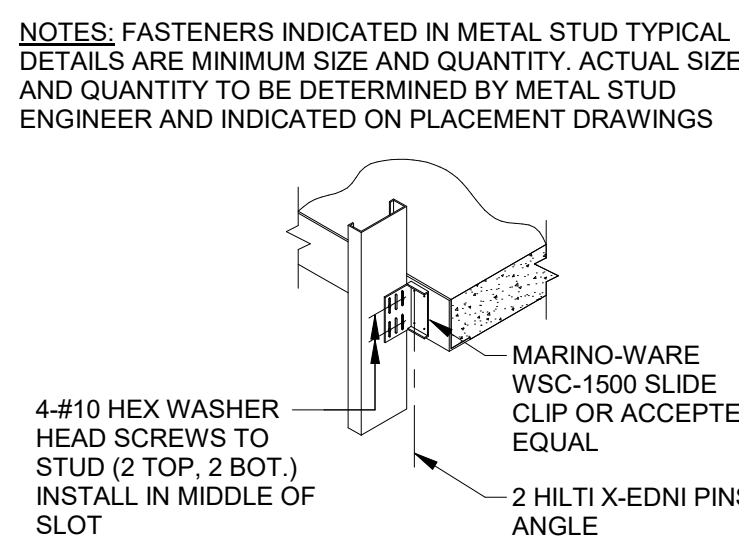
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S203 / 3/4" = 1'-0"
TYPICAL TUBE OR PIPE COLUMN CONNECTION



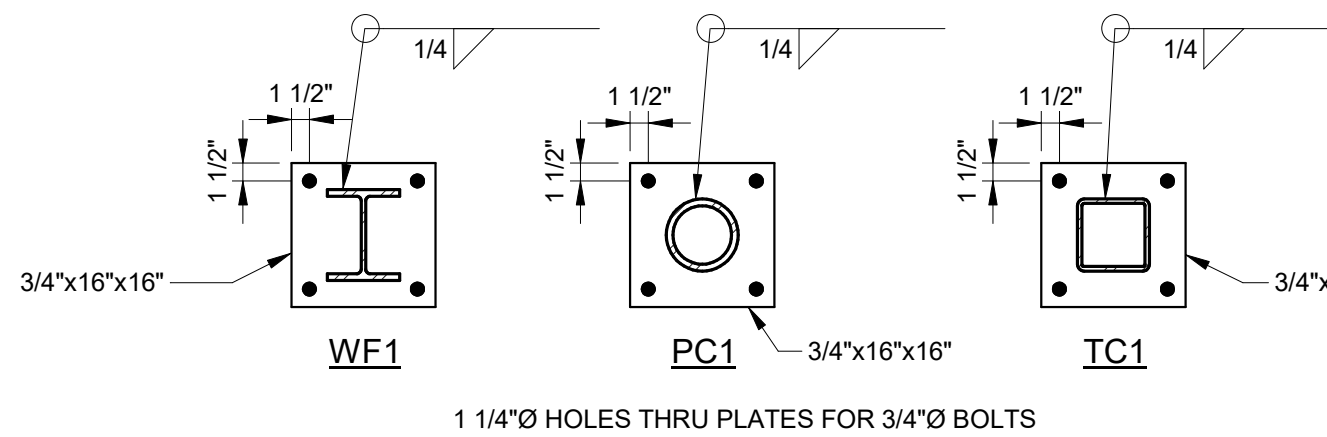
18
S203 / 1" = 1'-0"
TYPICAL FRAMING AT OPENING IN METAL STUD WALL



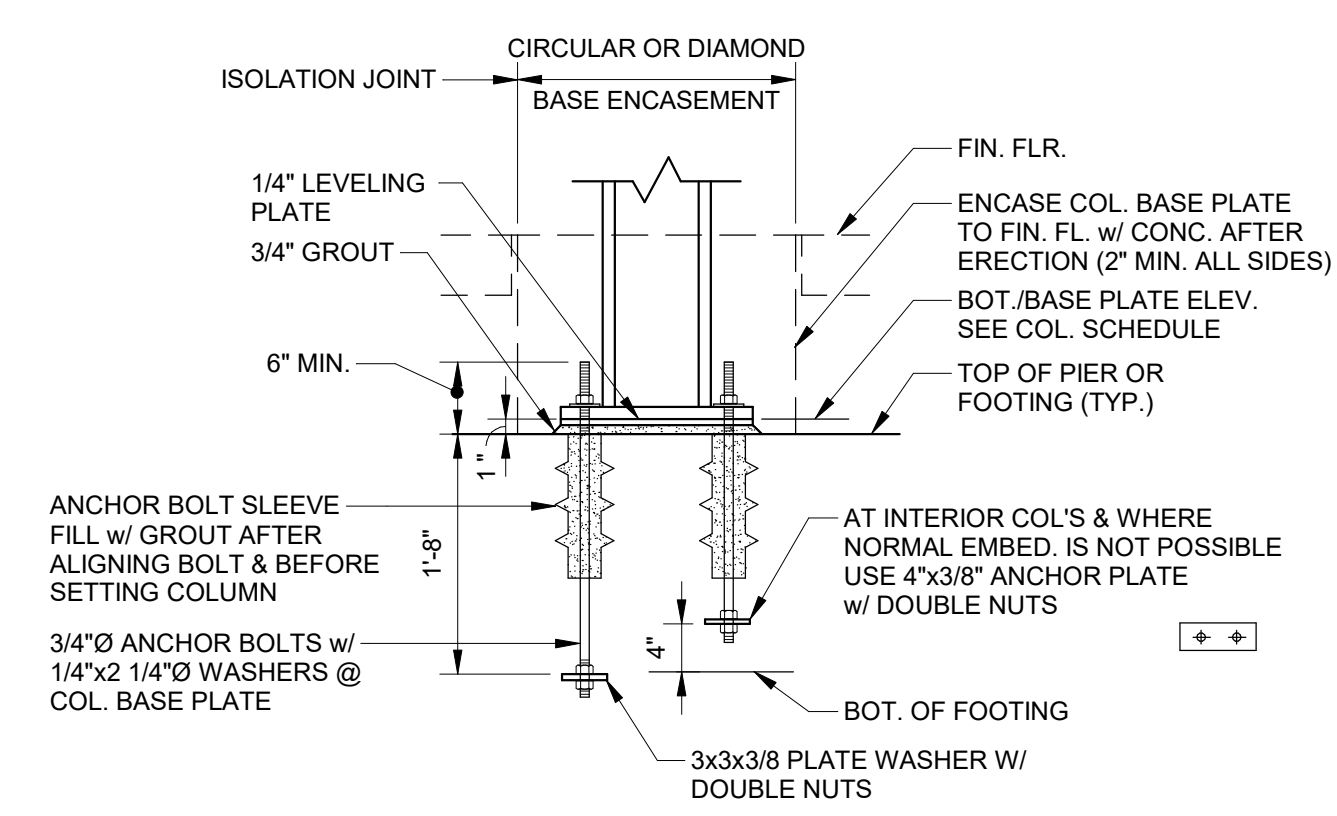
19
S203 / 1" = 1'-0"
TYPICAL METAL STUD SLIDE CLIP TO ROOF BEAM



20
S203 / 1/16" = 1'-0"
TYPICAL METAL STUD SLIDE CLIP TO EDGE ANGLE



16
S203 / 3/4" = 1'-0"
TYPICAL BASE PLATE TYPES



- NOTES:
1. SEE TYP. BASE PLATE DETAILS FOR ADD'L INFO.
 2. GROUT TO BE FLOWABLE, NON-SHRINK. SUBMIT PRODUCT DATA FOR REVIEW.

17
S203 / 3/4" = 1'-0"
TYPICAL COLUMN BASE

MINIMUM DESIGN WIND PRESSURES (ULT.) FOR EXTERIOR WALL CLADDING (PSF)		
TRIBUTARY AREA (SQ. FT.)	TYPICAL	CORNER
< 20	25.7	31.6
21 - 50	24.6	29.5
51 - 100	23.3	26.7
101 - 200	22.2	24.6
201 - 500	21.1	22.5
> 500	19.8	19.8

- NOTES:
1. CORNER PRESSURES APPLY WITH IN 12'-0" OF EVERY EXTERIOR BUILDING CORNER.
 2. DEFLECTION OF METAL STUD BACKUP WALLS WITH MASONRY VENEER SHALL BE LIMITED TO L/600 BASED ON STUDS ALONE, WITHOUT BENEFIT OF DIAPHRAGM ACTION OF SHEATHING.

STEEL COLUMN SCHEDULE																		
ROOF T/STEEL 36'-8"																	ROOF T/STEEL 36'-8"	
THIRD FLOOR T/STEEL 23'-10 1/2"																	THIRD FLOOR T/STEEL 23'-10 1/2"	
LOW ROOF STEEL 12'-9 1/2"	W10X29	W10X29	W10X29	HSS10X10X5/16	HSS10X10X5/16	HSS10X10X5/16	W10X29	HSS10X10X5/16	HSS10X10X5/16	HSS10X10X3/5	HSS10X10X3/5	HSS10X10X5/16	HSS10X10X3/5	HSS10X10X5/16	HSS10X10X3/5	W10X24	W10X29	LOW ROOF STEEL 12'-9 1/2"
FIRST FLOOR 0"																		FIRST FLOOR 0"
Column Locations	B-1	C-1	D-1	D.2-4.9	D.9-5.2	E-1	E-2	E.1-4.9	E.6-7.7	F-6	G-6.9	H-7	H-7.9	H.9-7	J-8	J.1-9	K-8.1	

- NOTES:
1. SEE TYPICAL DETAILS AND SECTIONS FOR CAP PLATES.
 2. SEE TYPICAL COLUMN BASE AND BASE PLATE DETAILS FOR BASE PLATE AND ANCHOR BOLT SIZES AND LAYOUT.
 3. BOTTOM OF BASE PLATE -1'-3" UNLESS NOTED OTHERWISE.

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ISSUE HISTORY

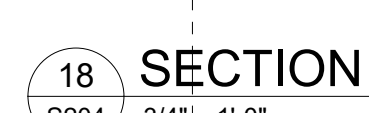
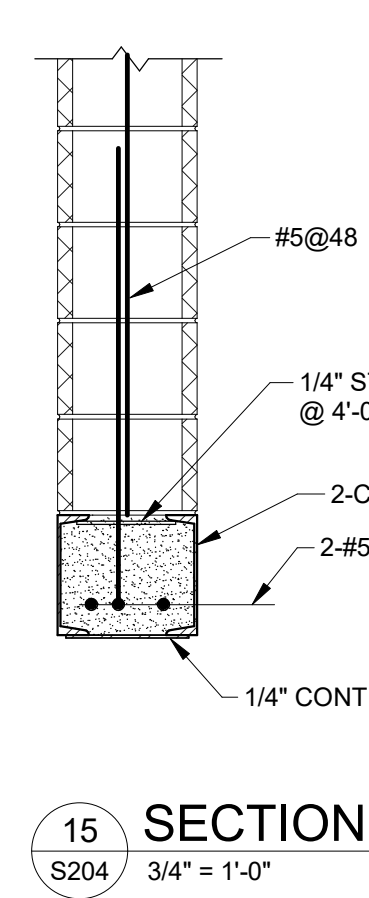
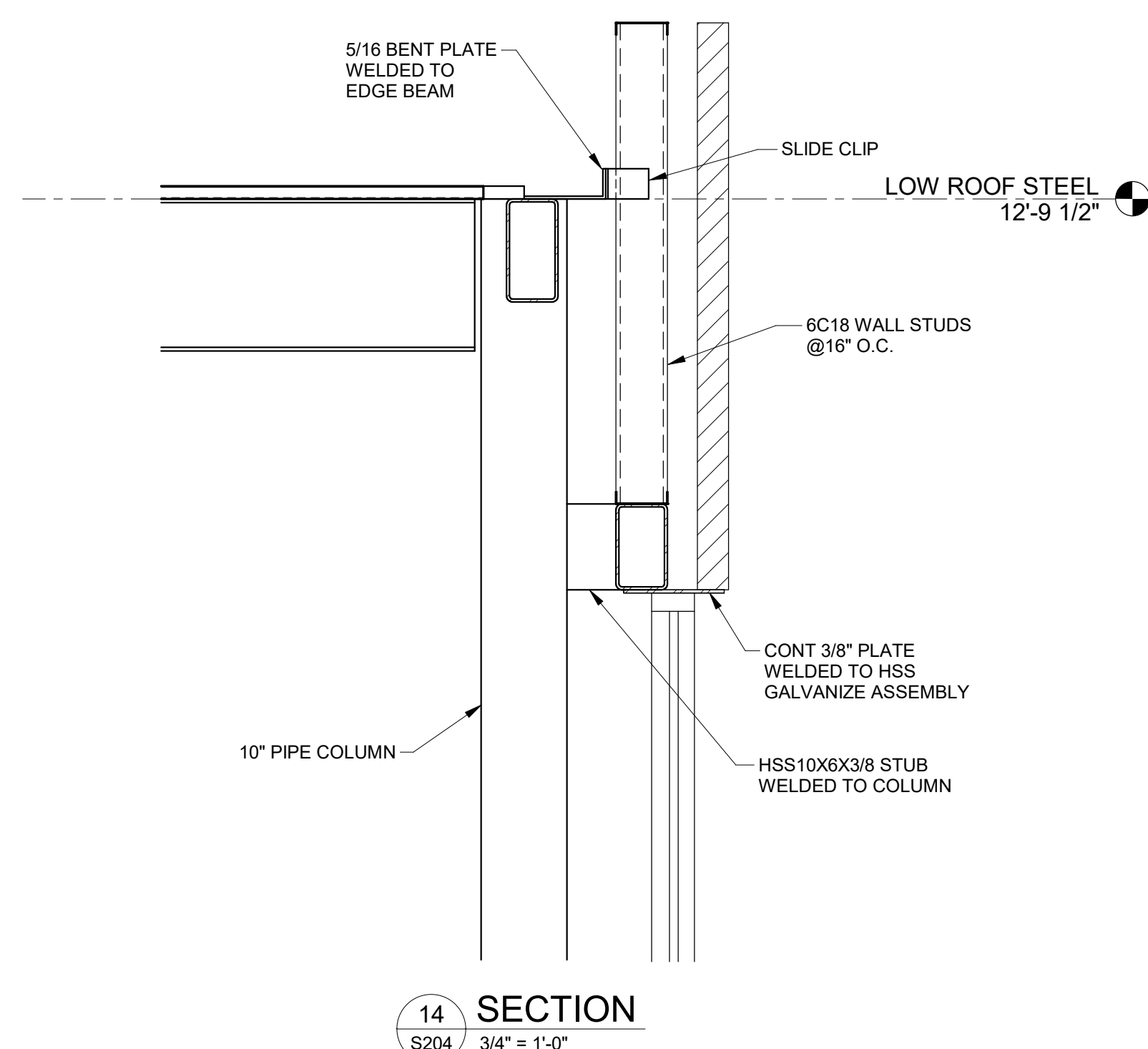
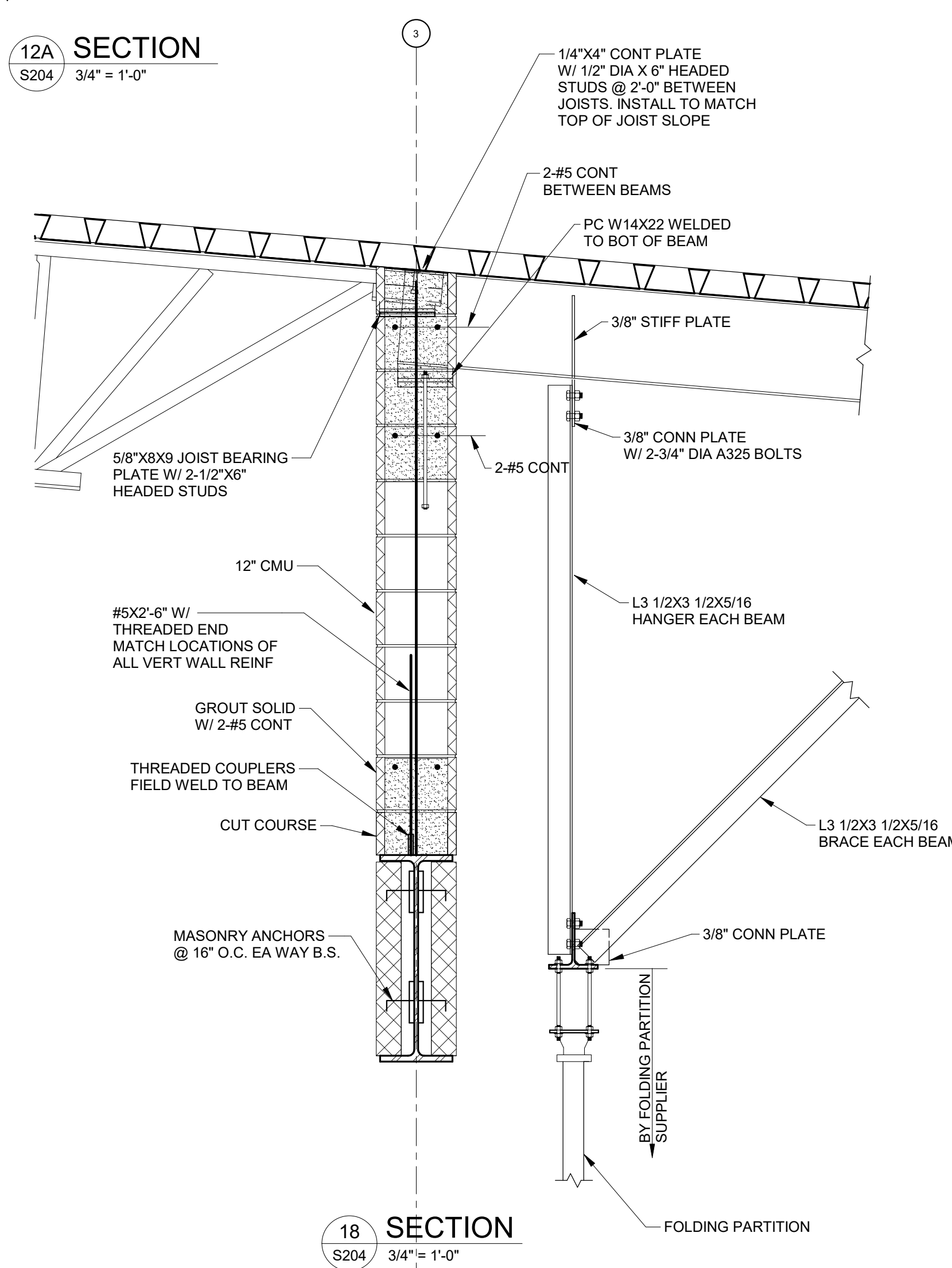
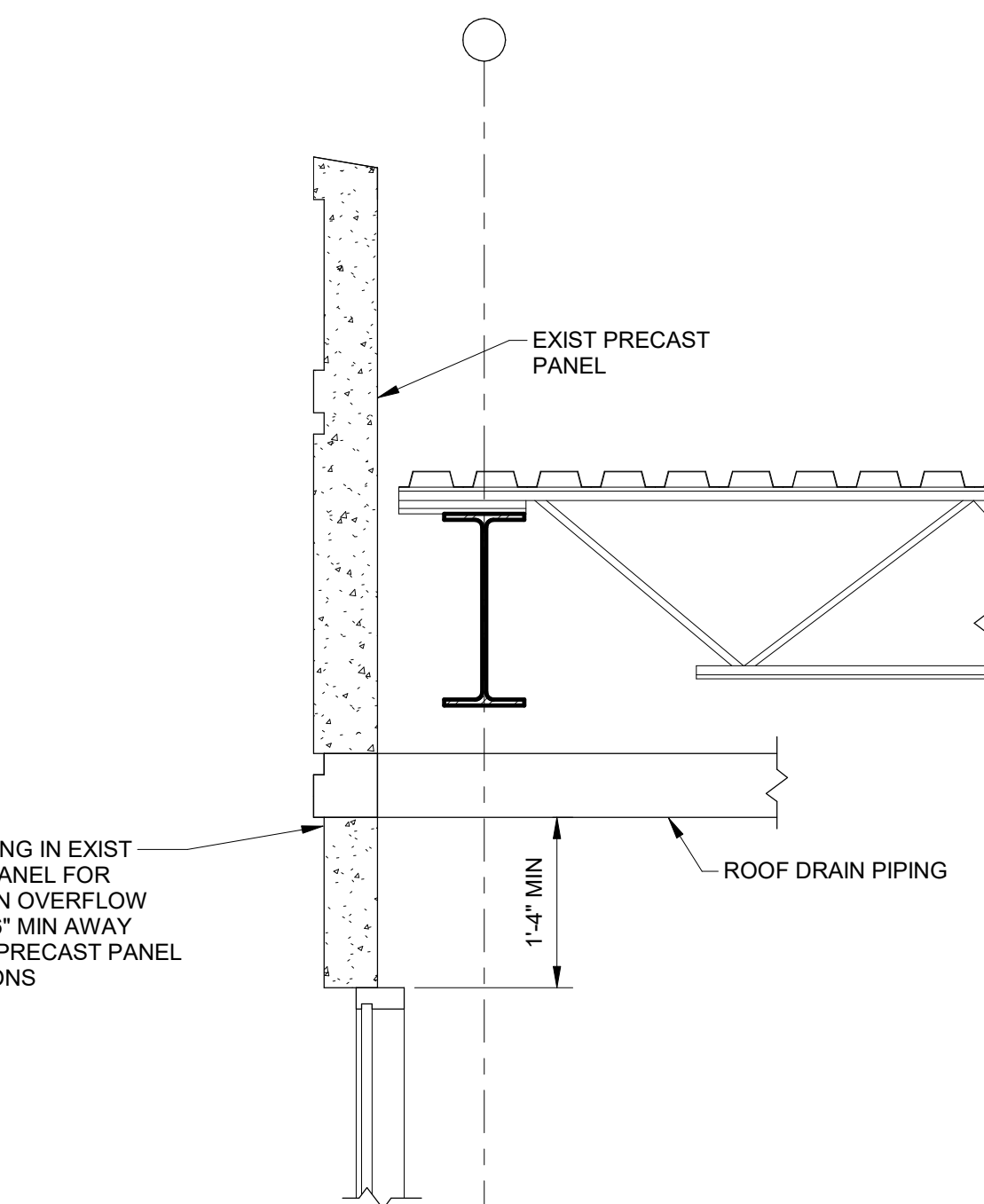
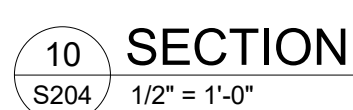
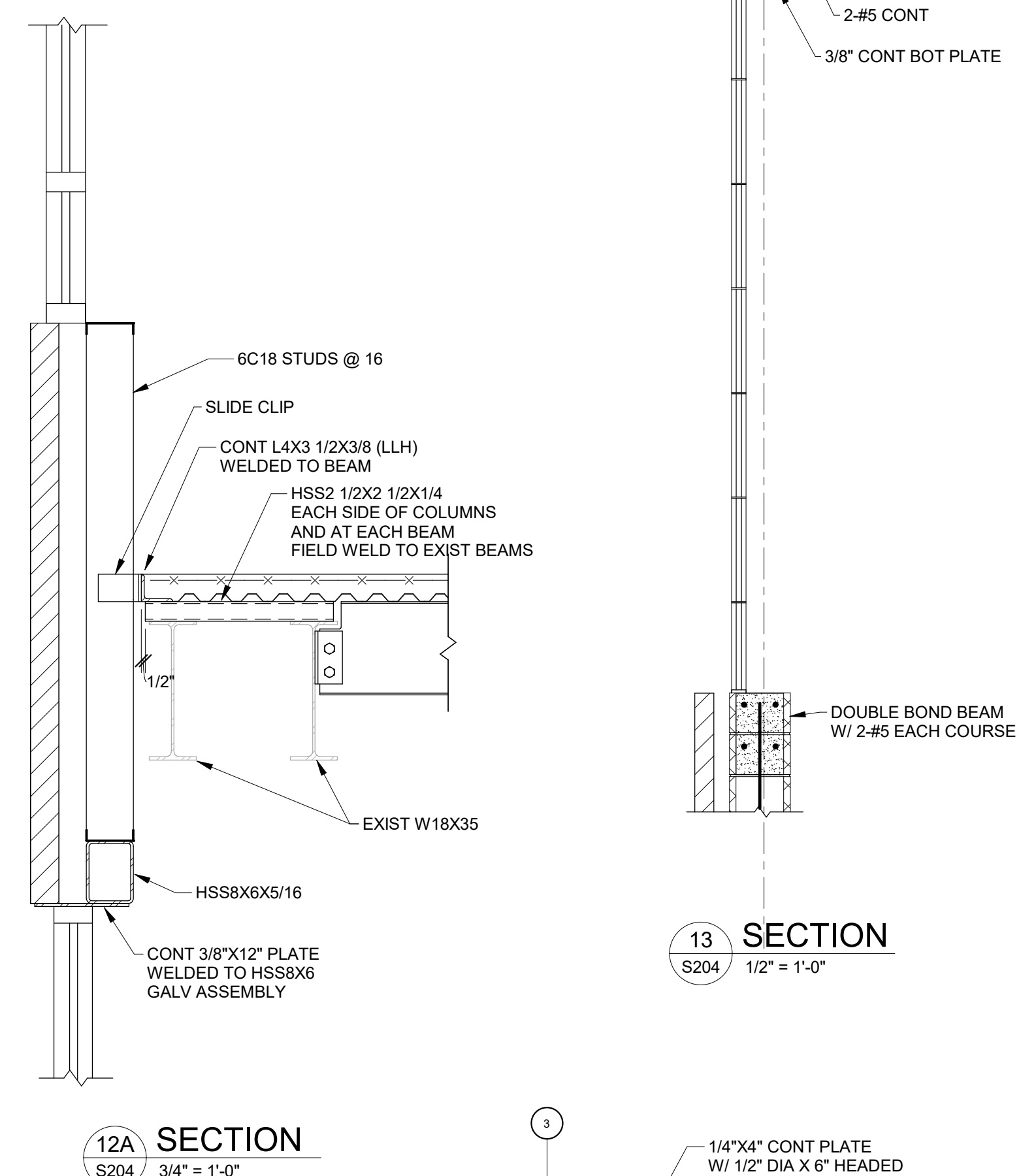
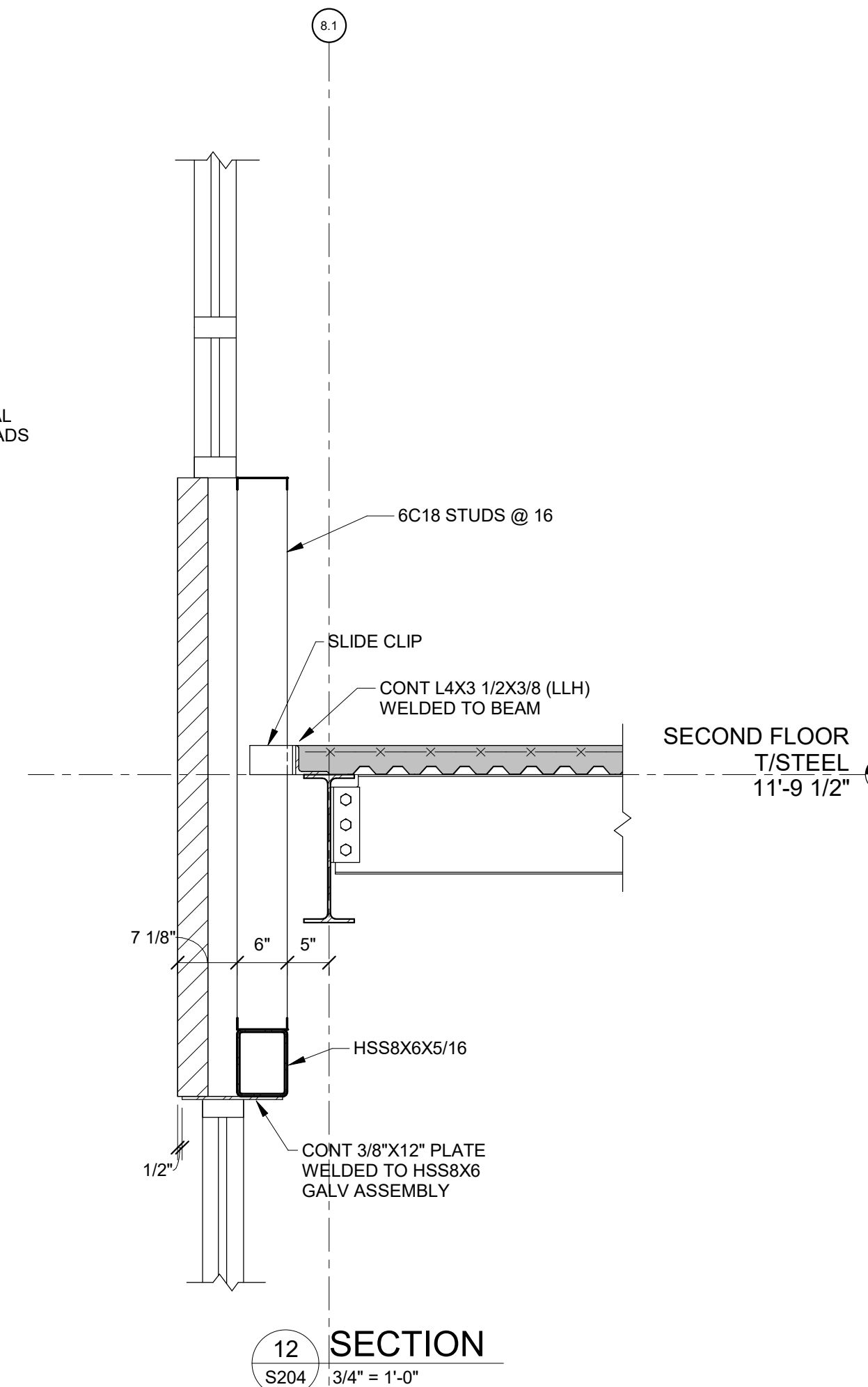
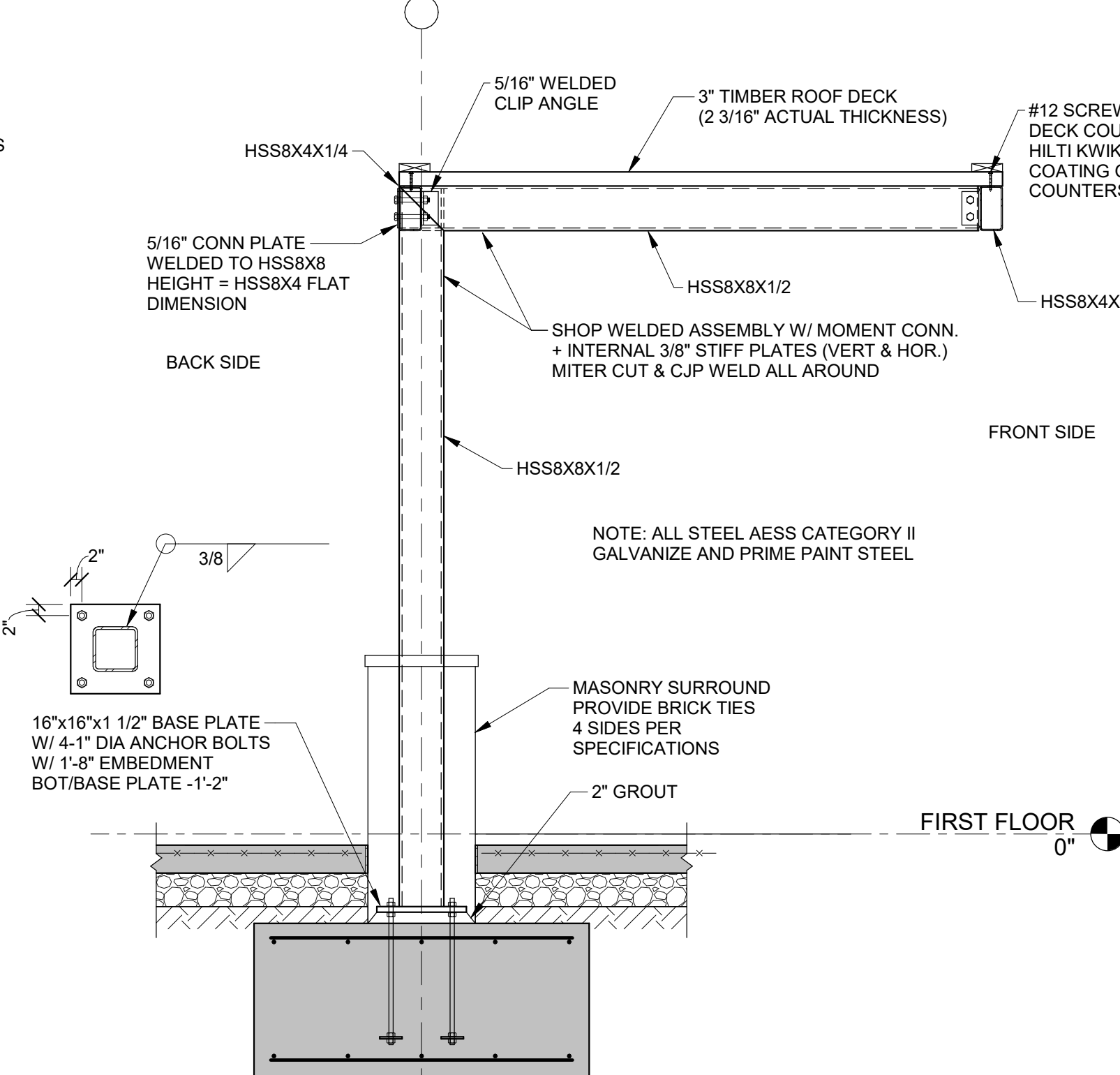
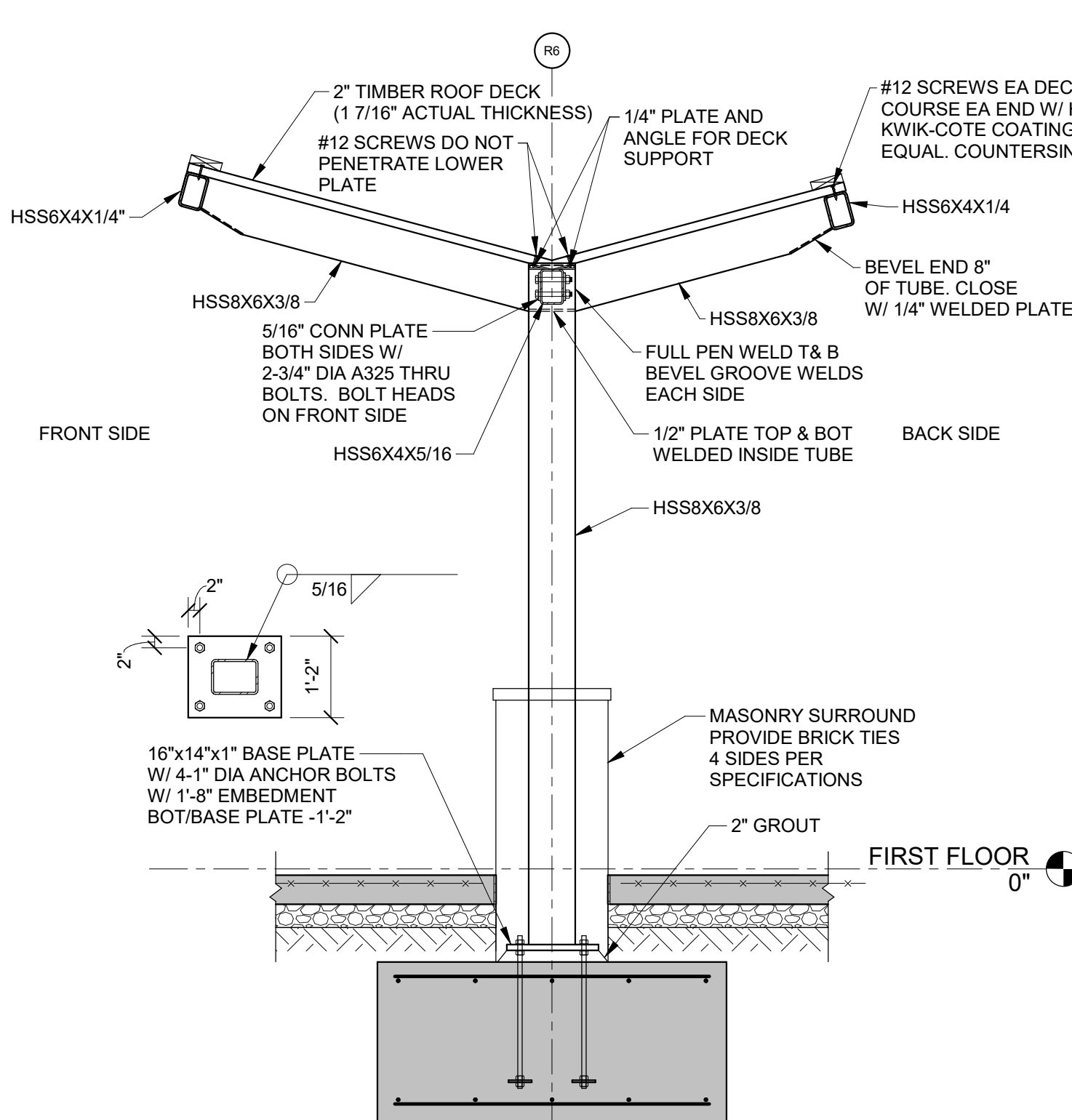
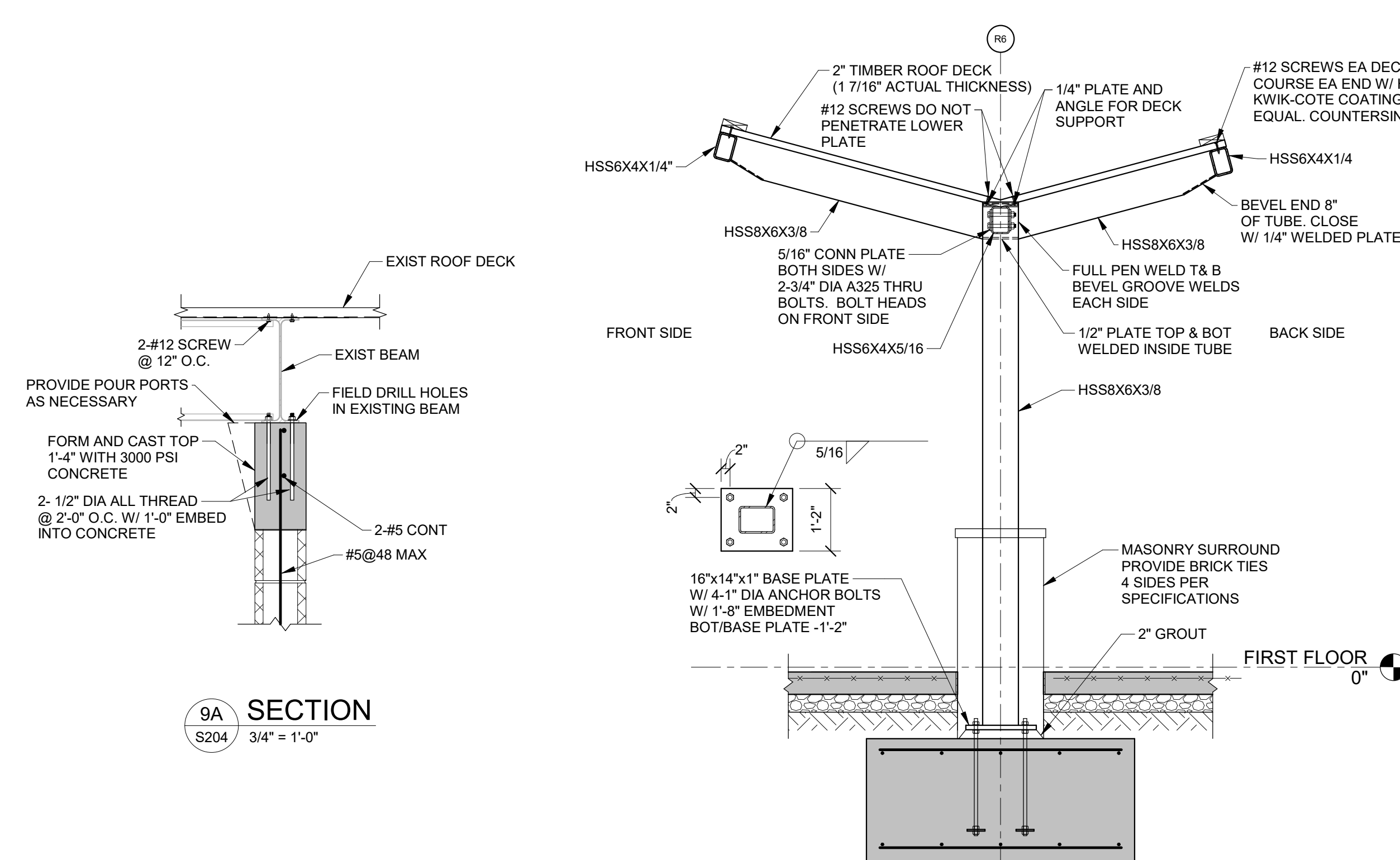
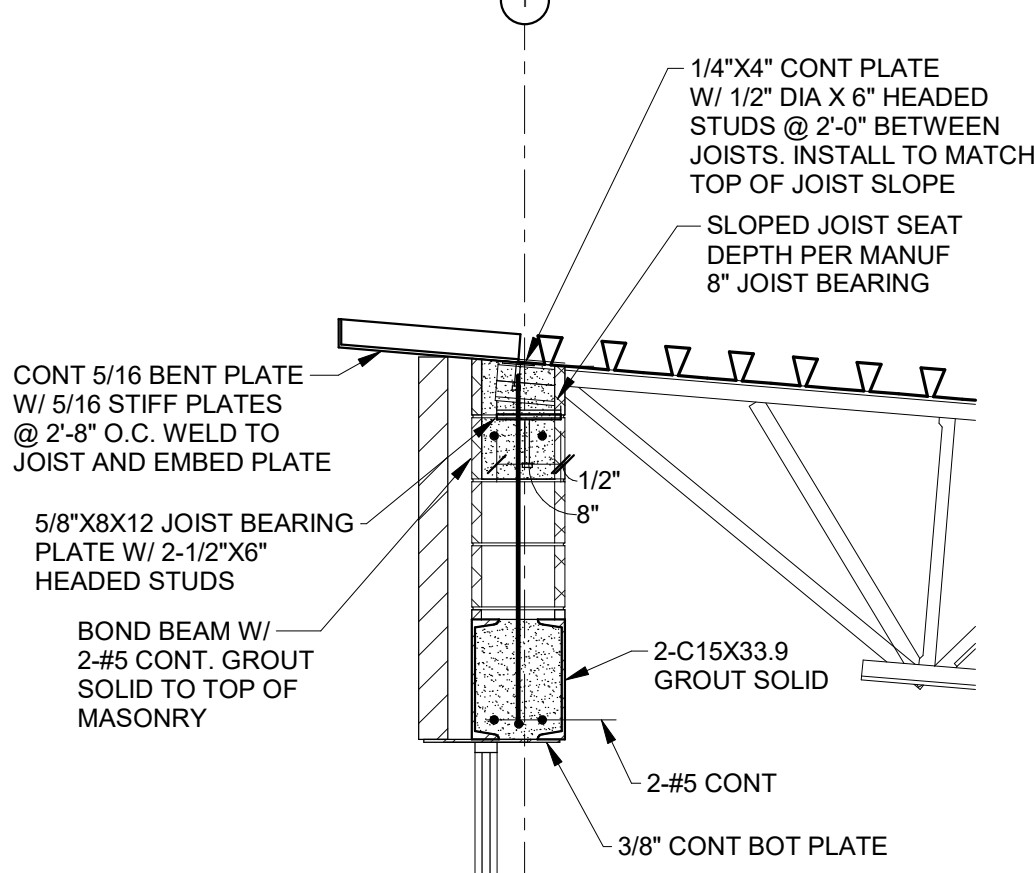
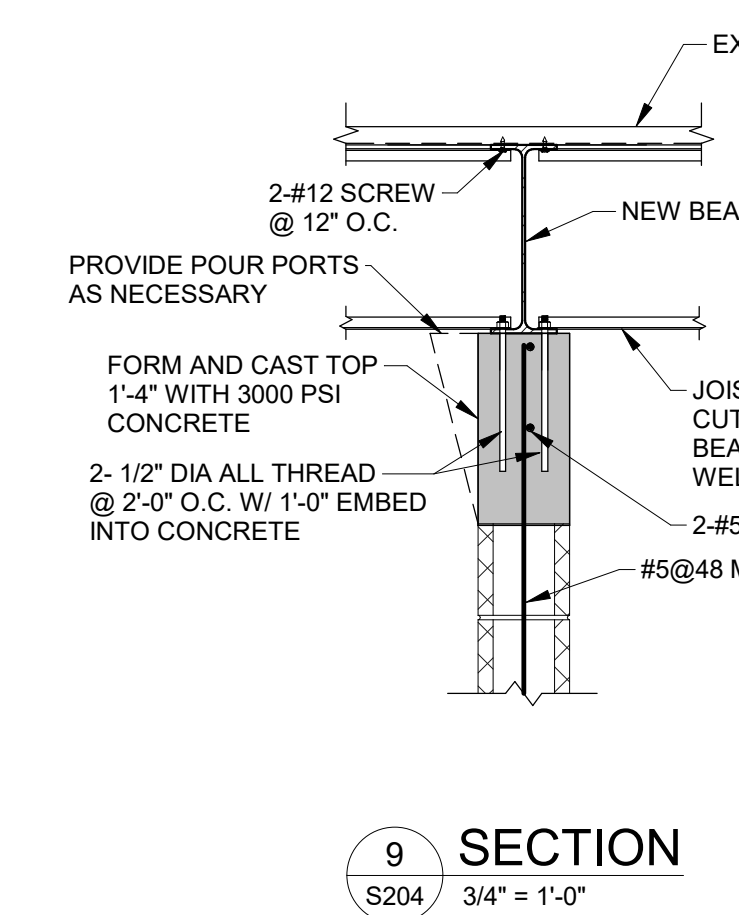
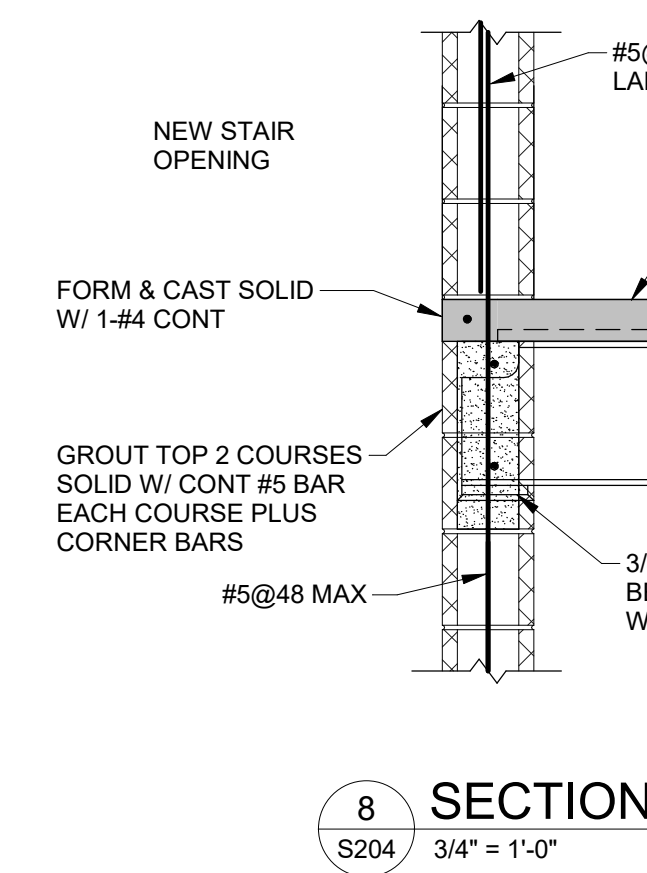
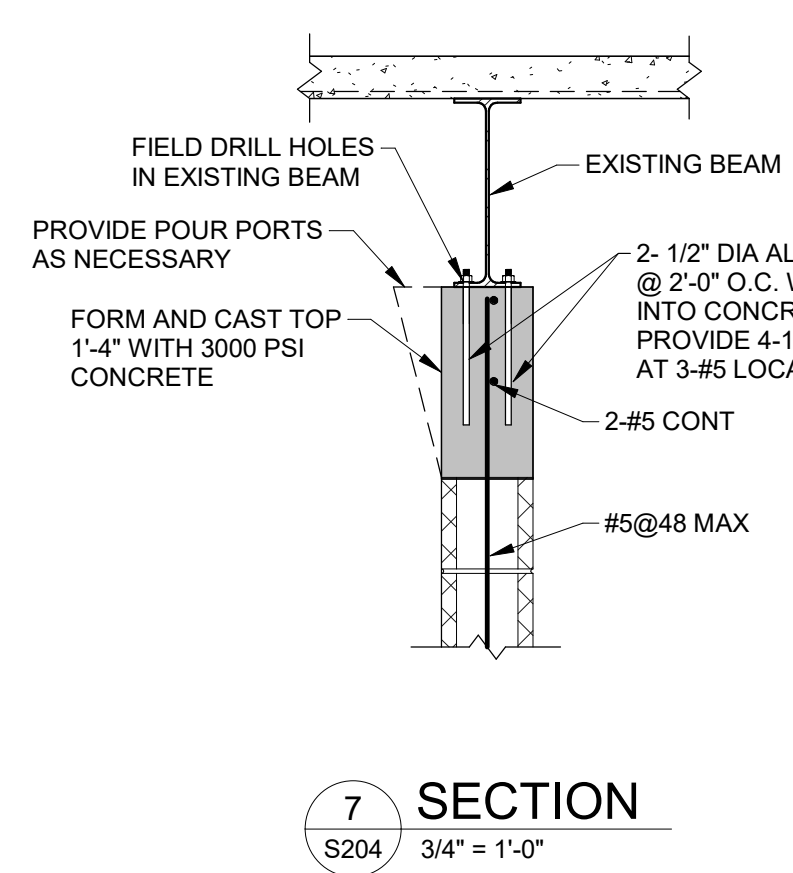
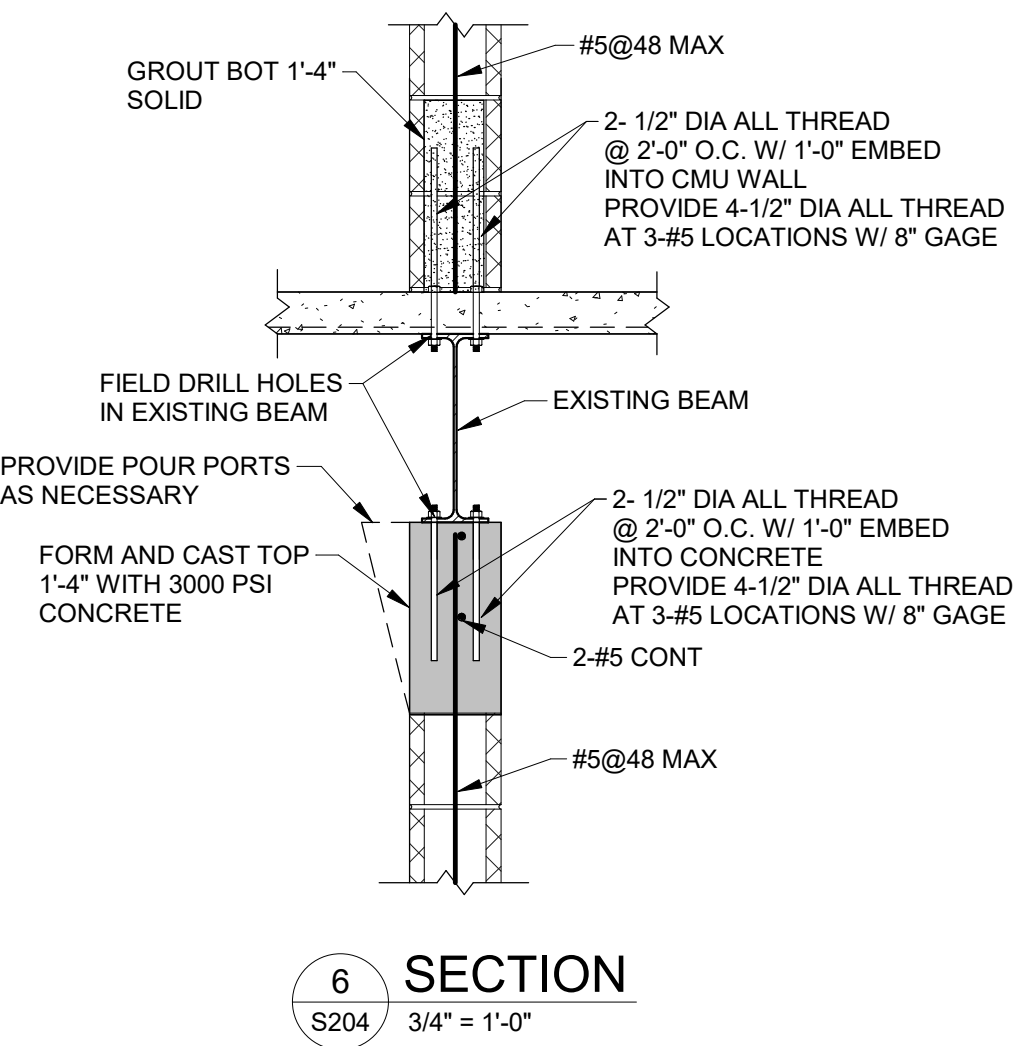
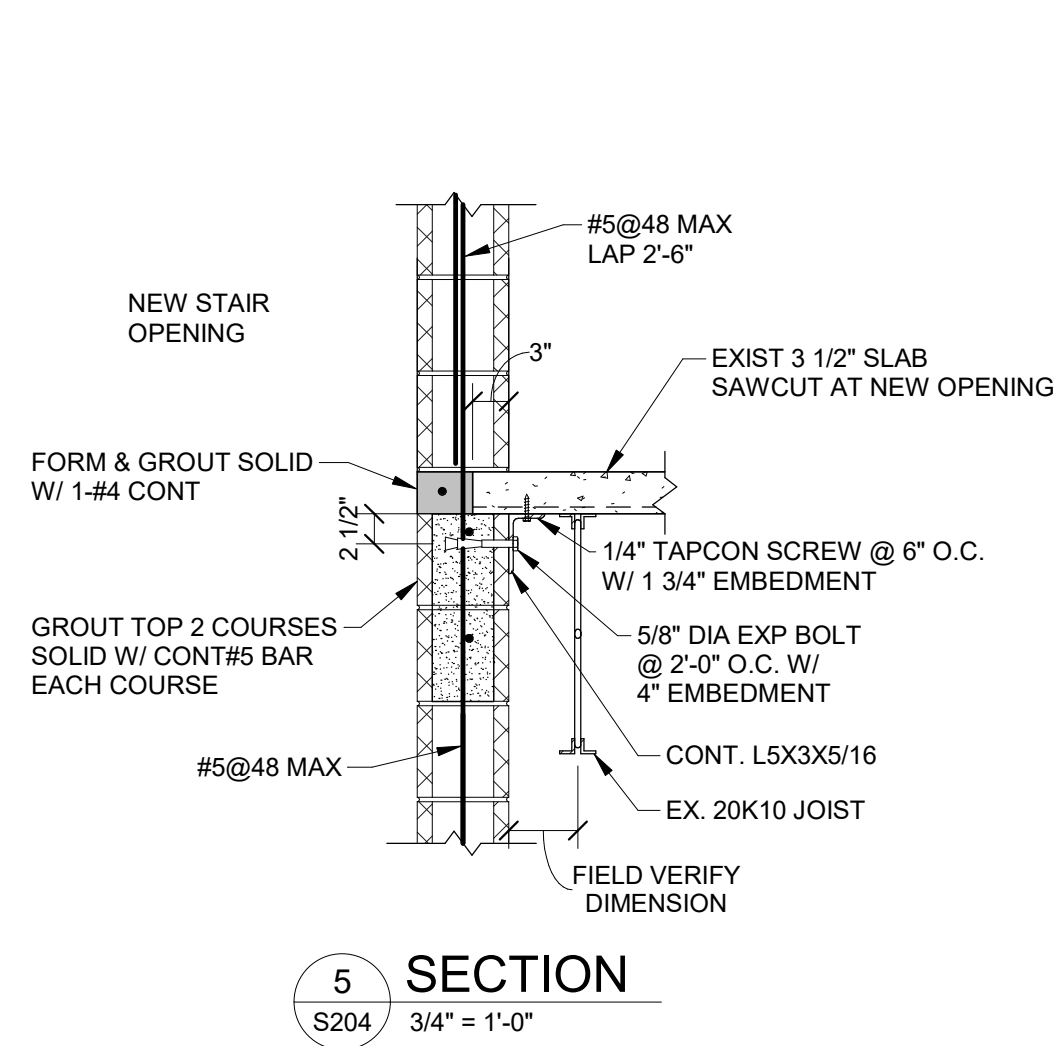
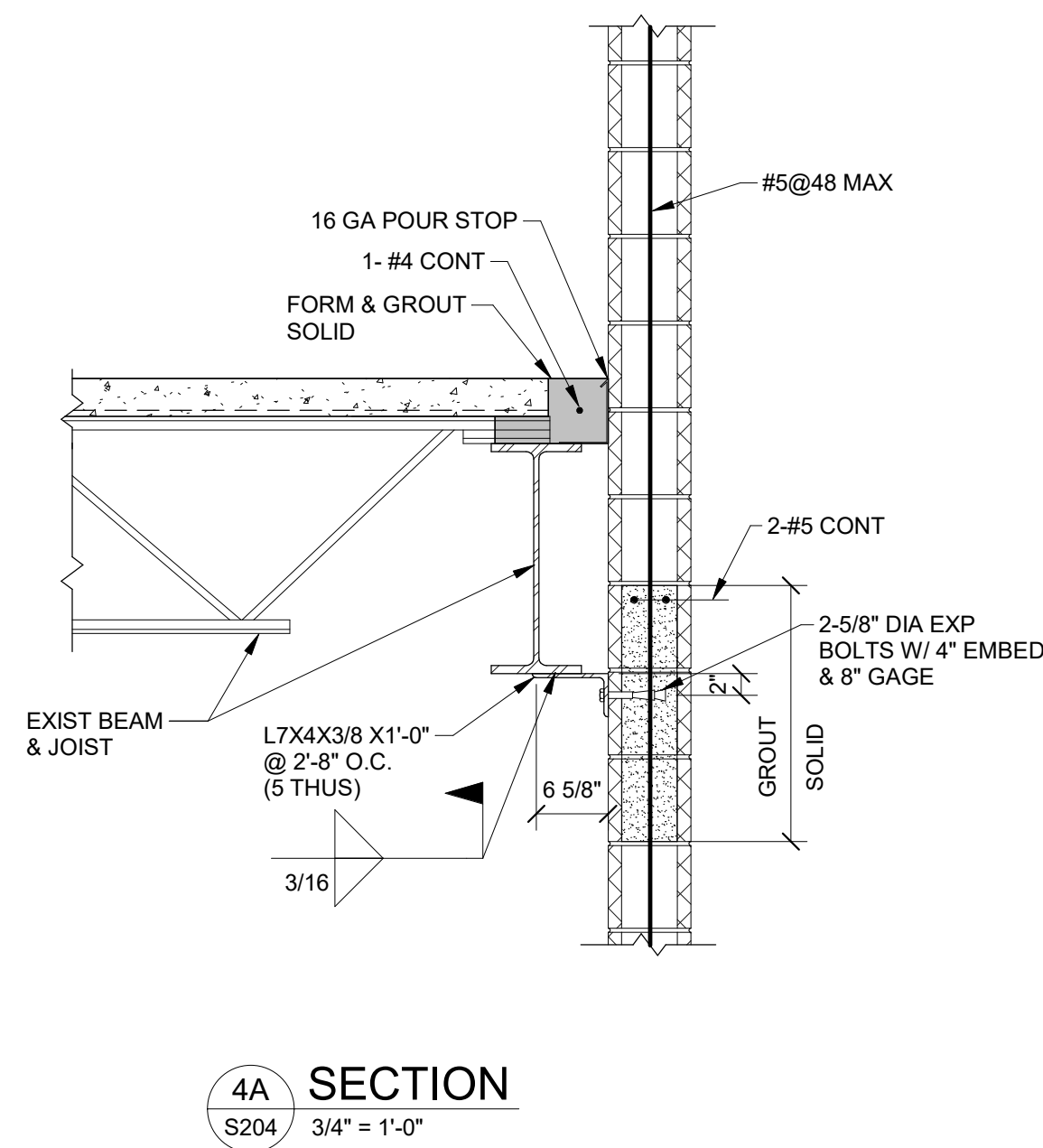
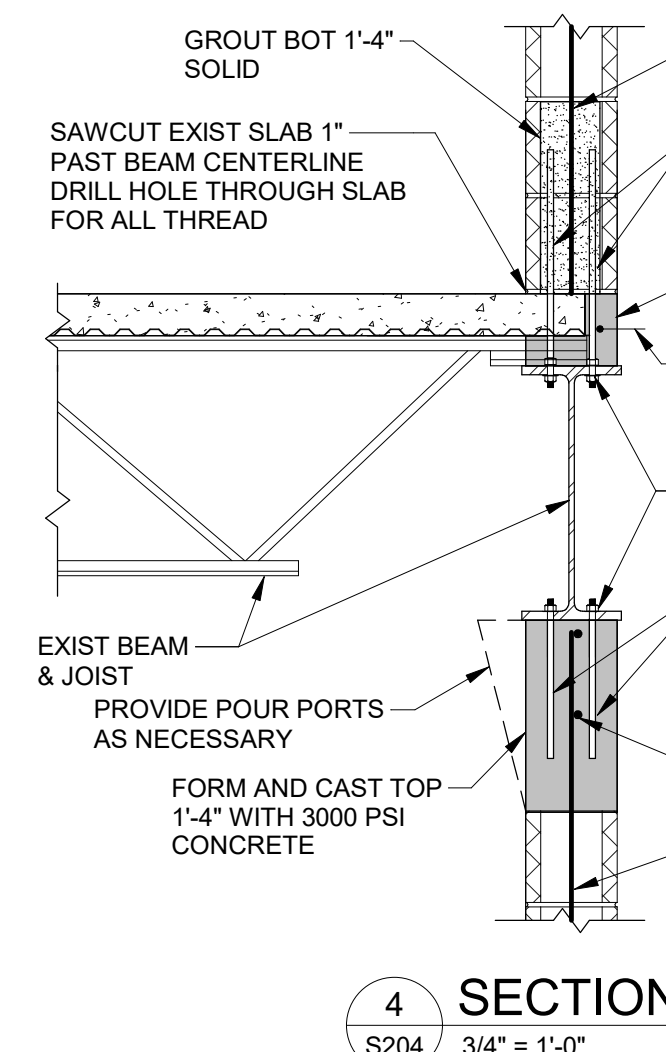
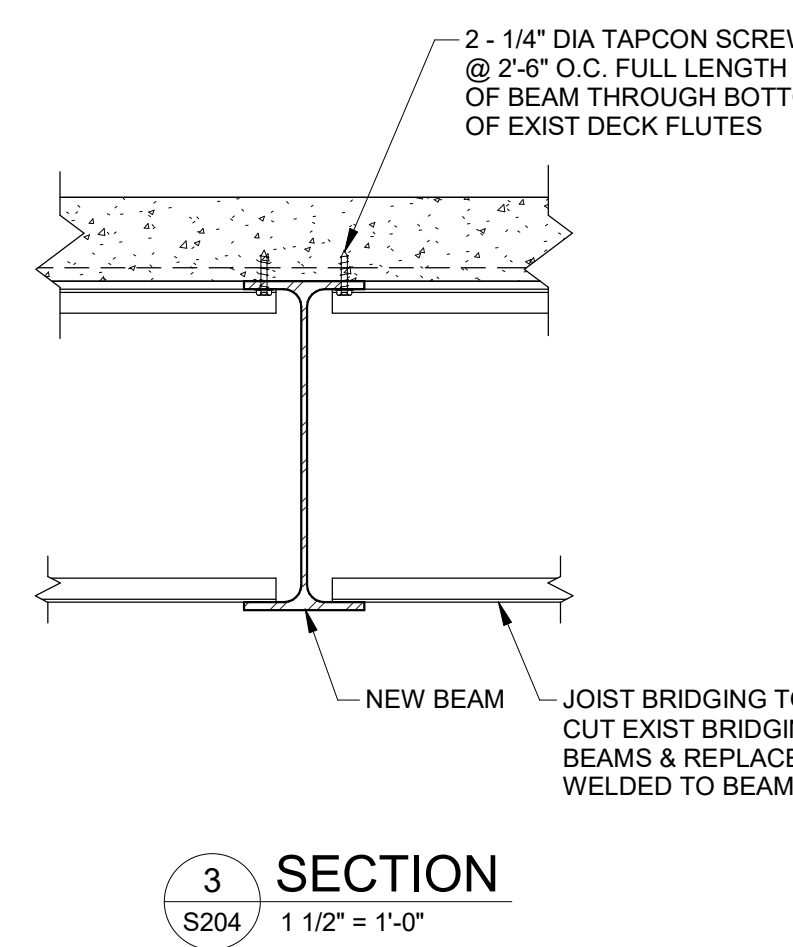
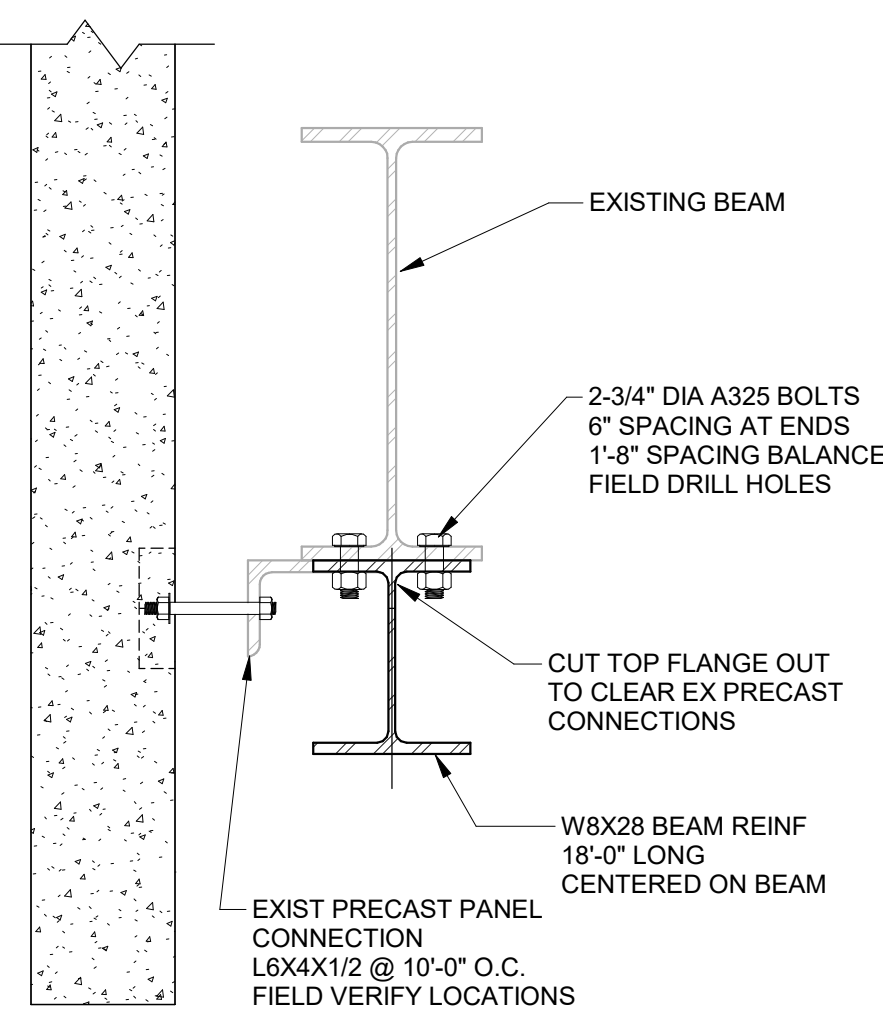
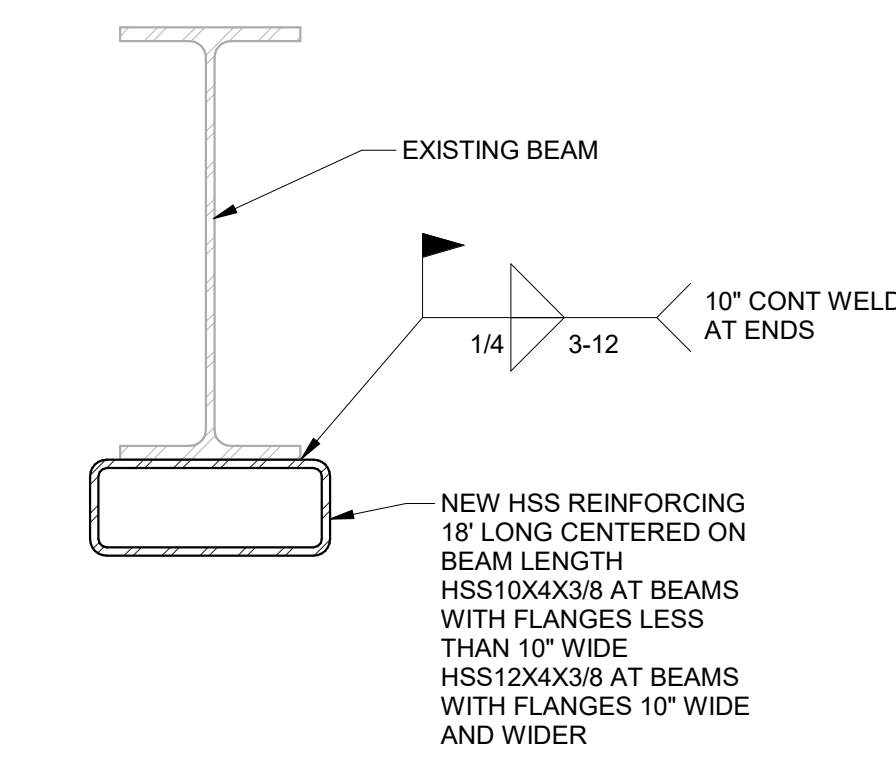
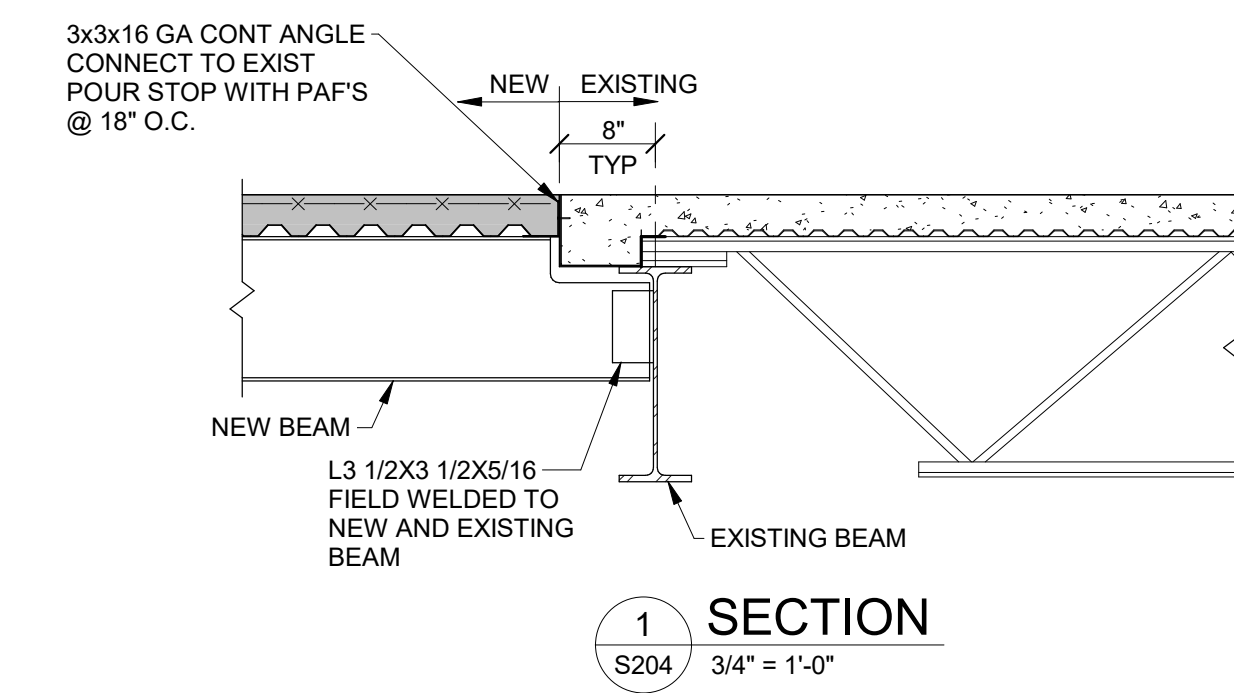
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1	2025-03-28	BID ISSUE

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TYPICAL DETAILS AND
COLUMN SCHEDULE

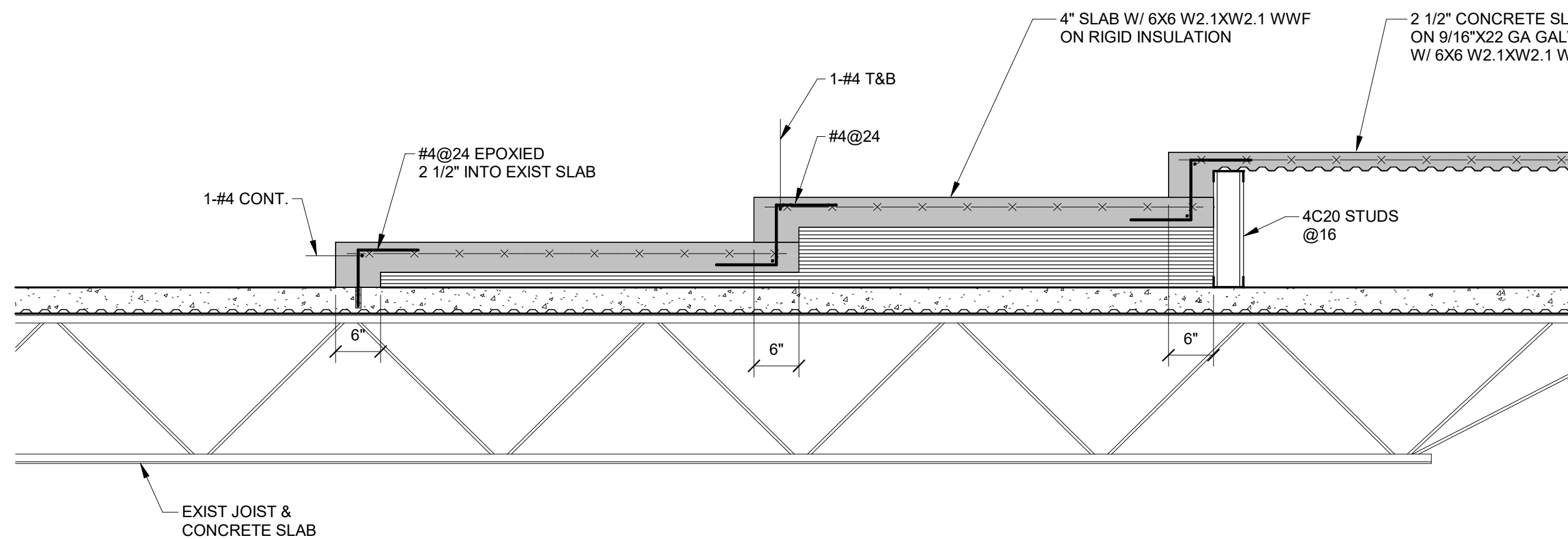
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S203

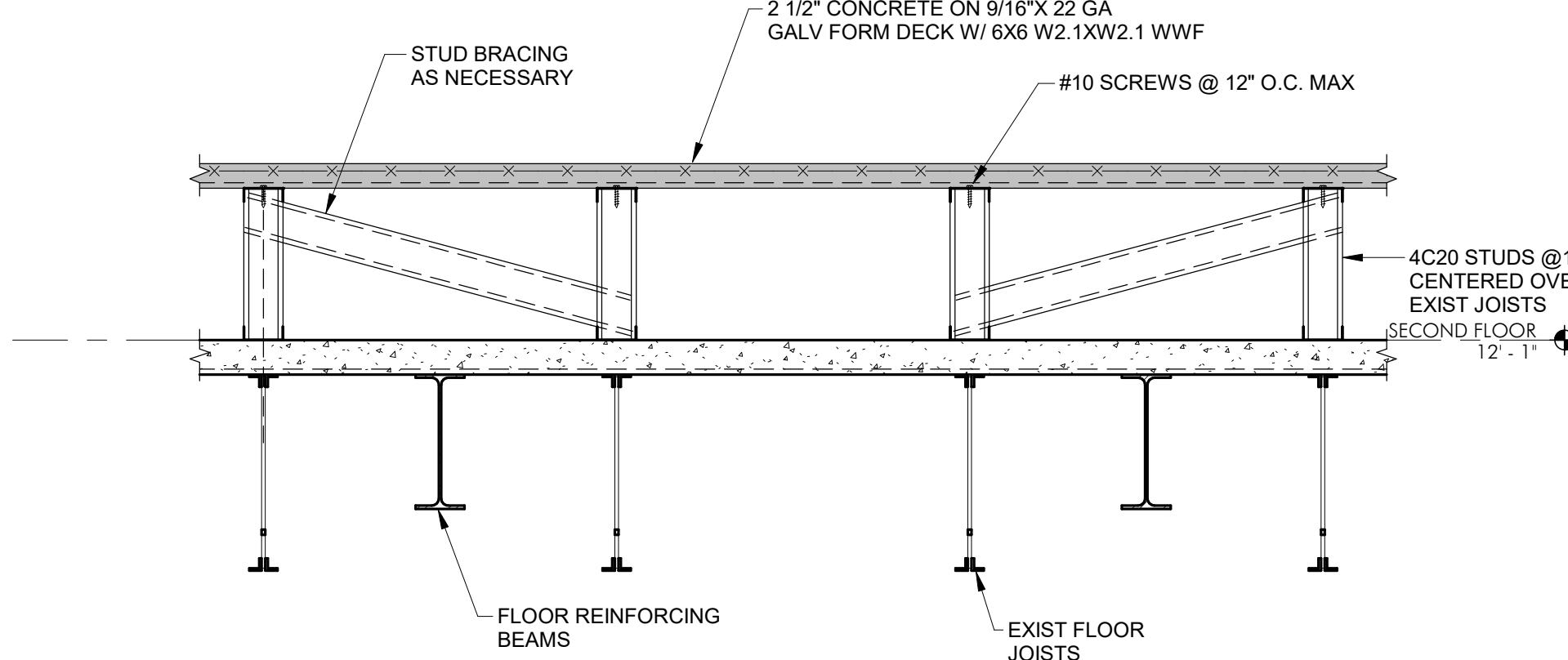


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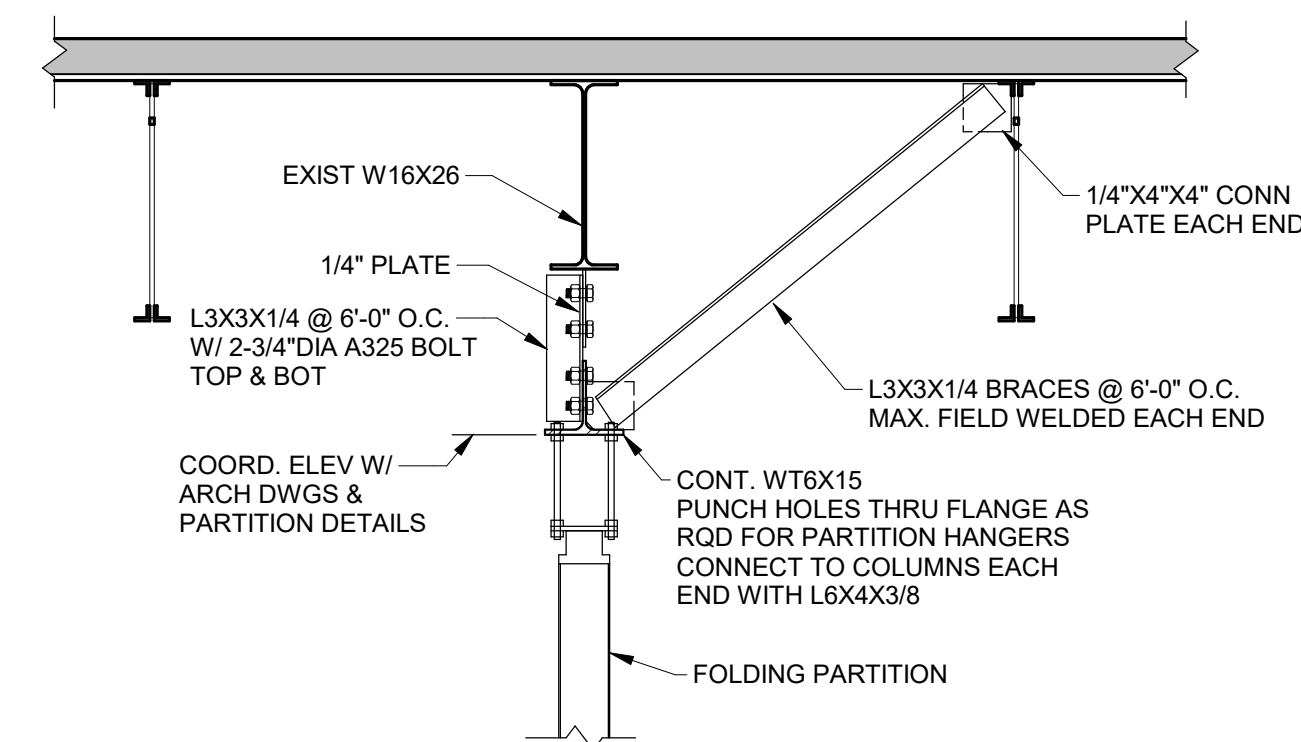
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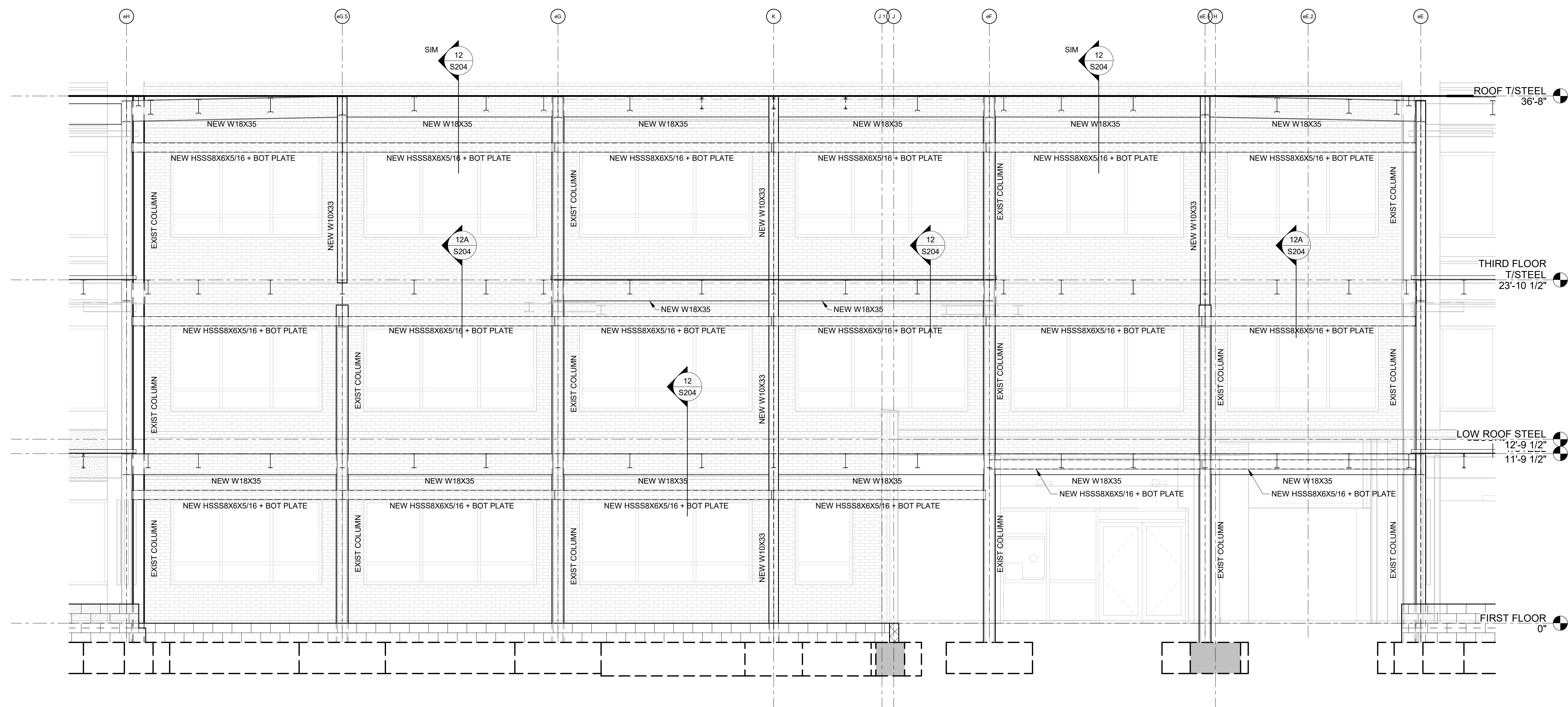
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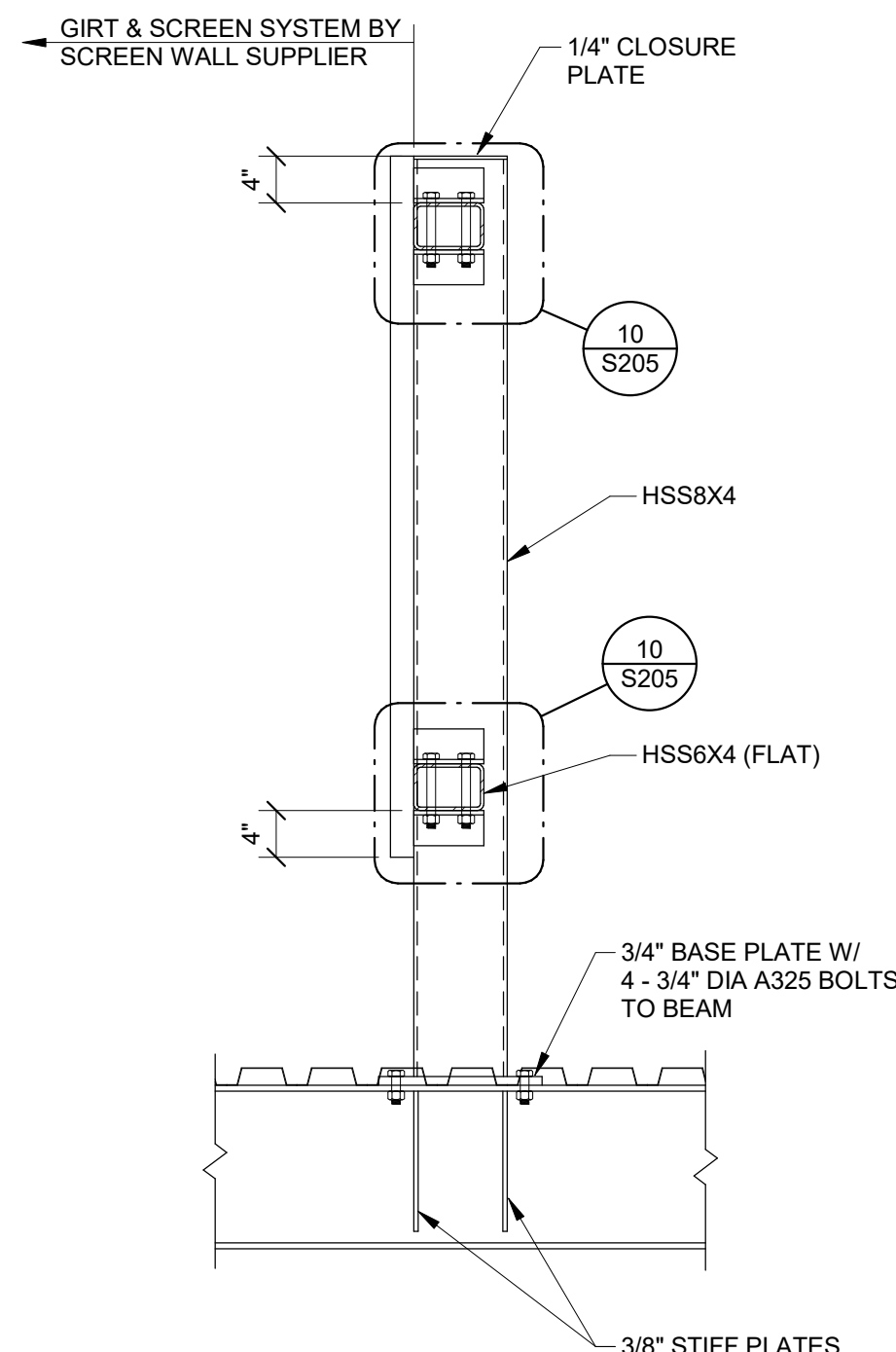
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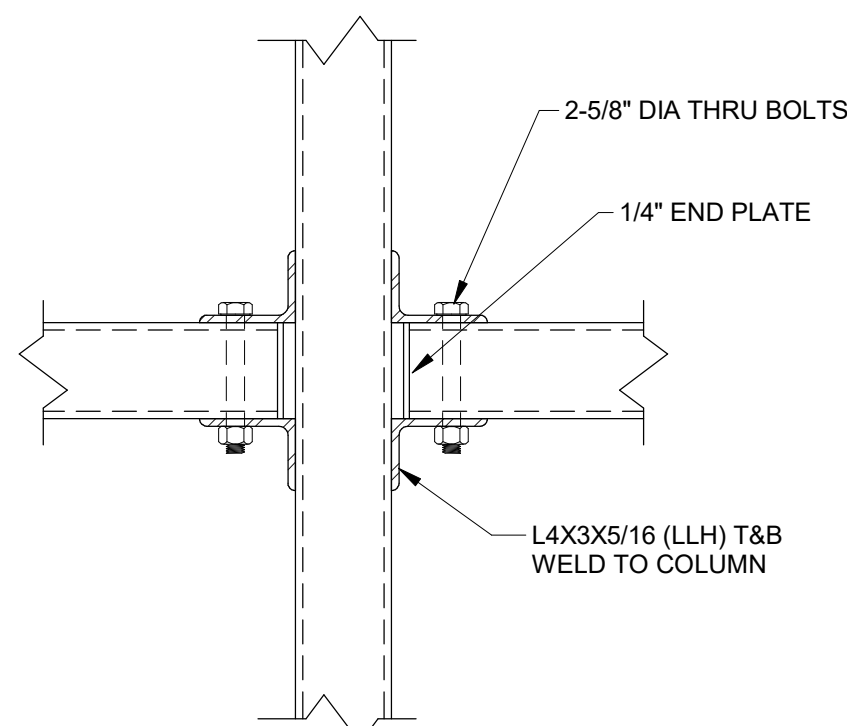
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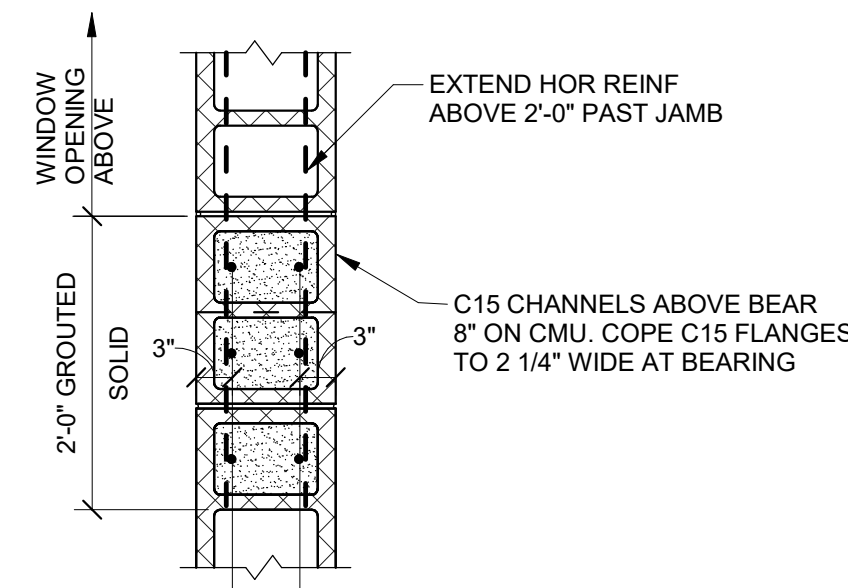
3 ELEVATION
S205 / 1/4" = 1'-0"



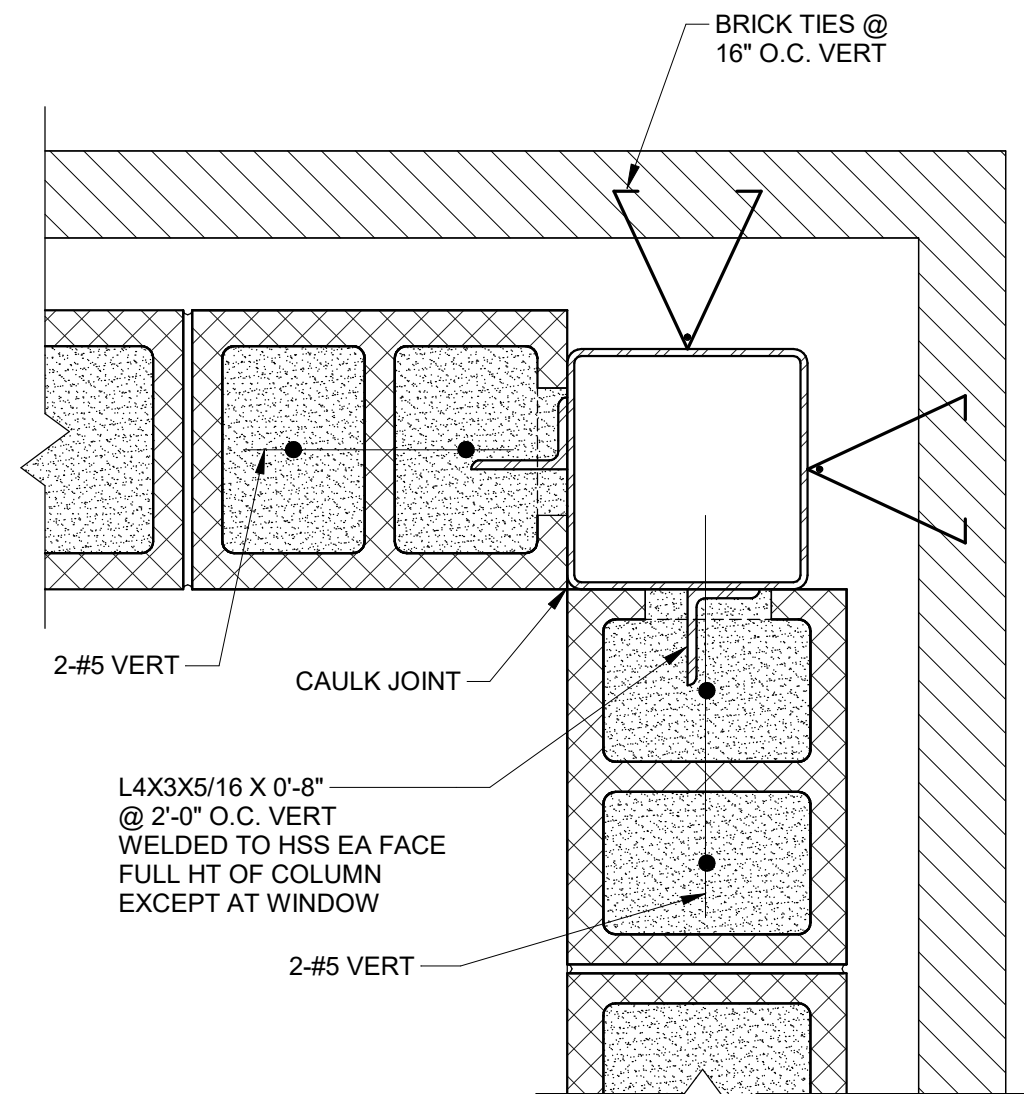
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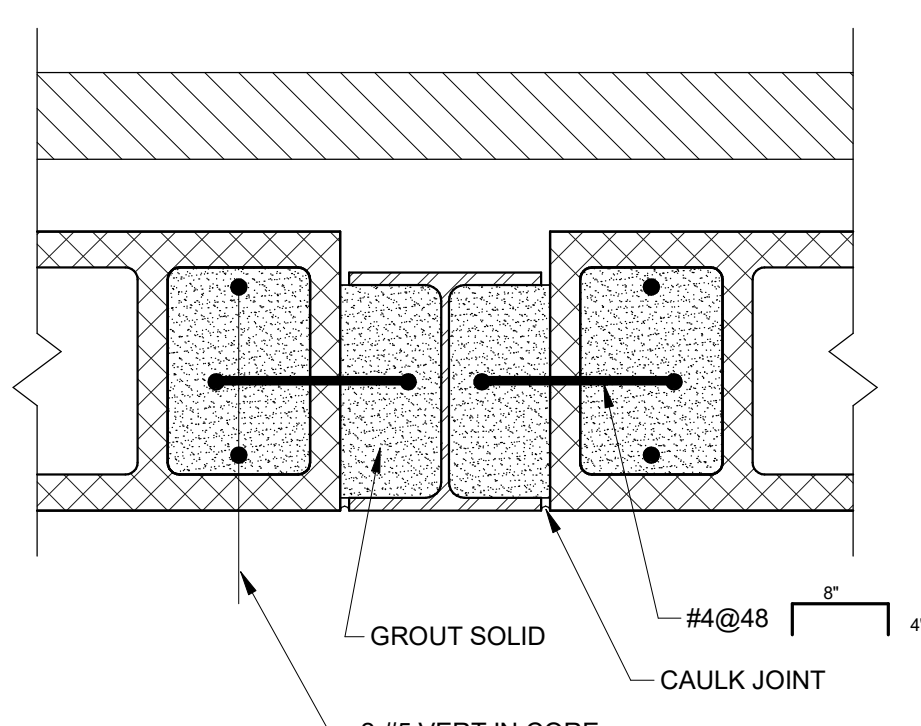
10 DETAIL
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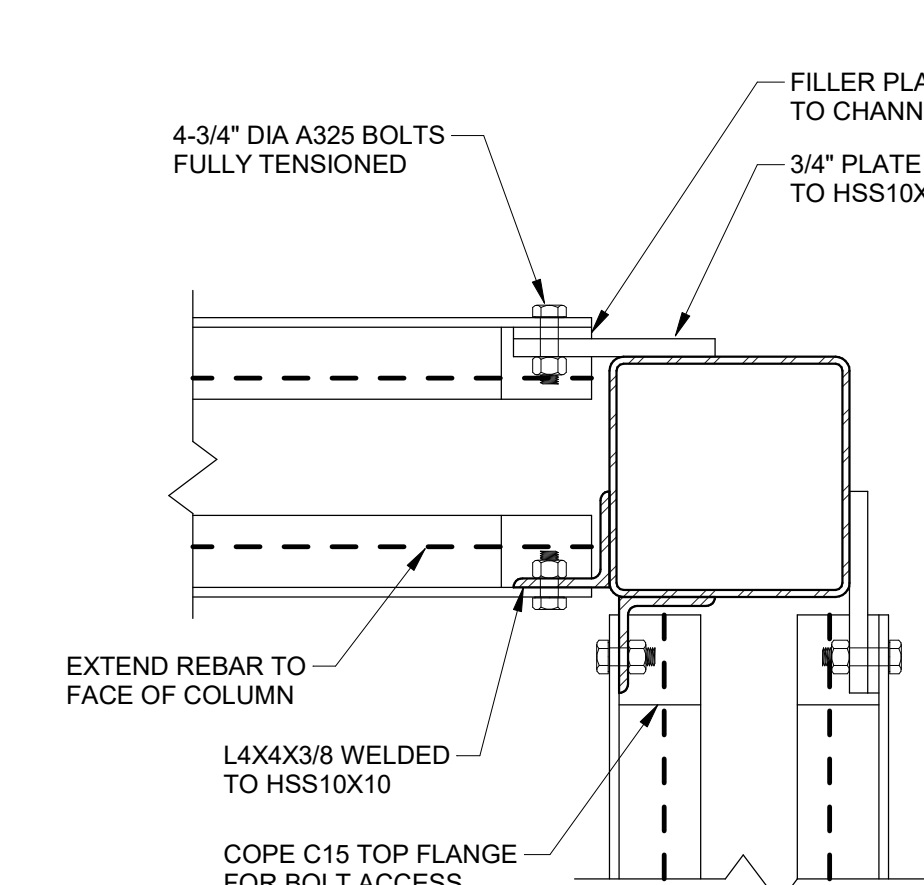
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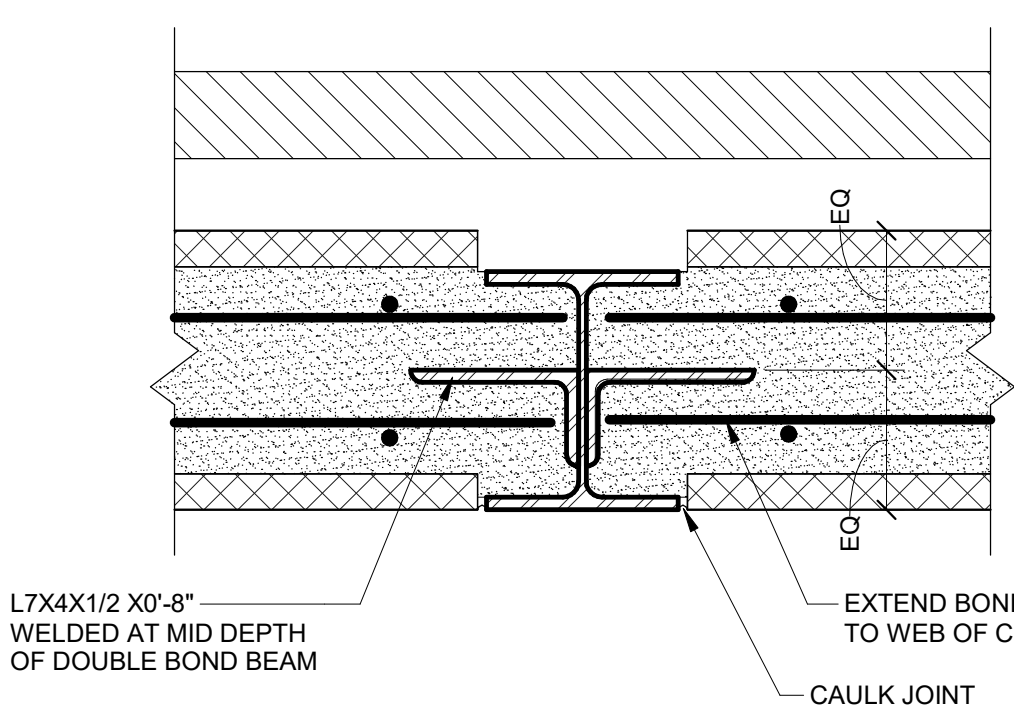
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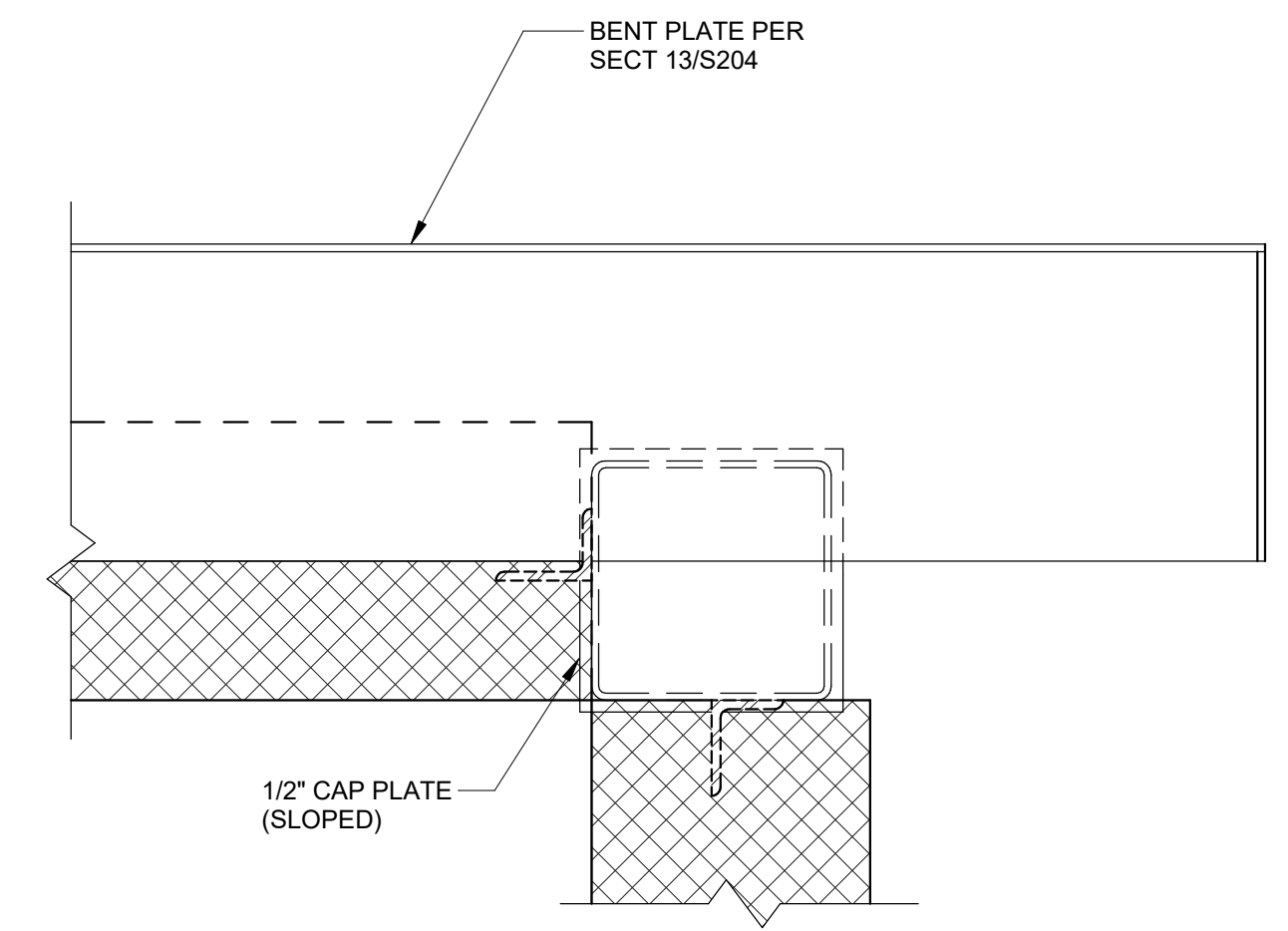
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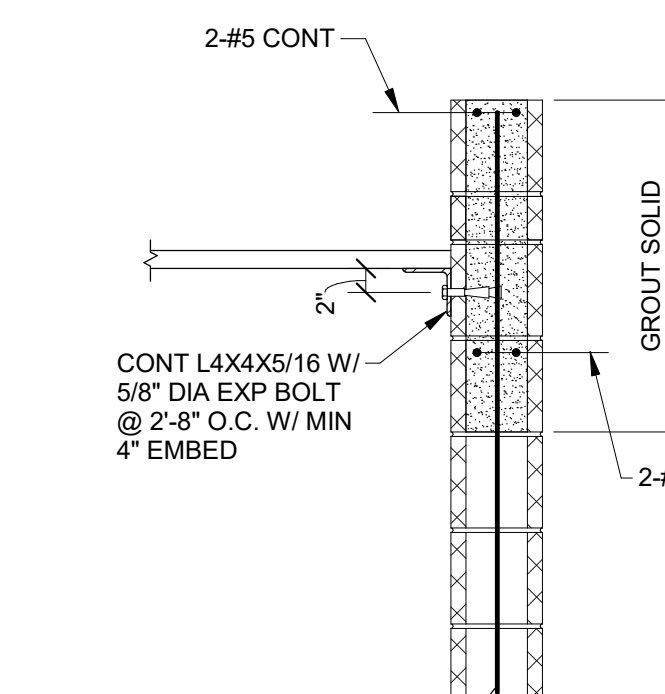
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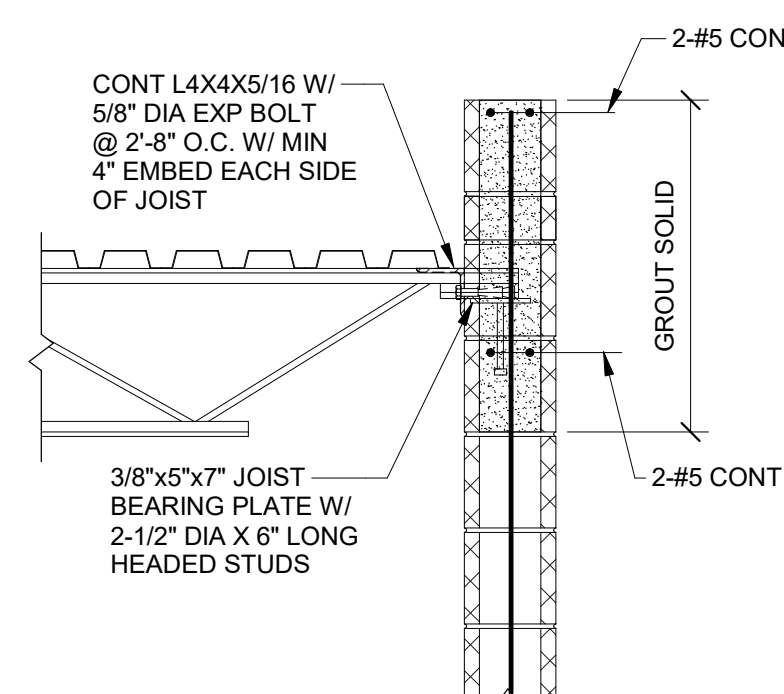
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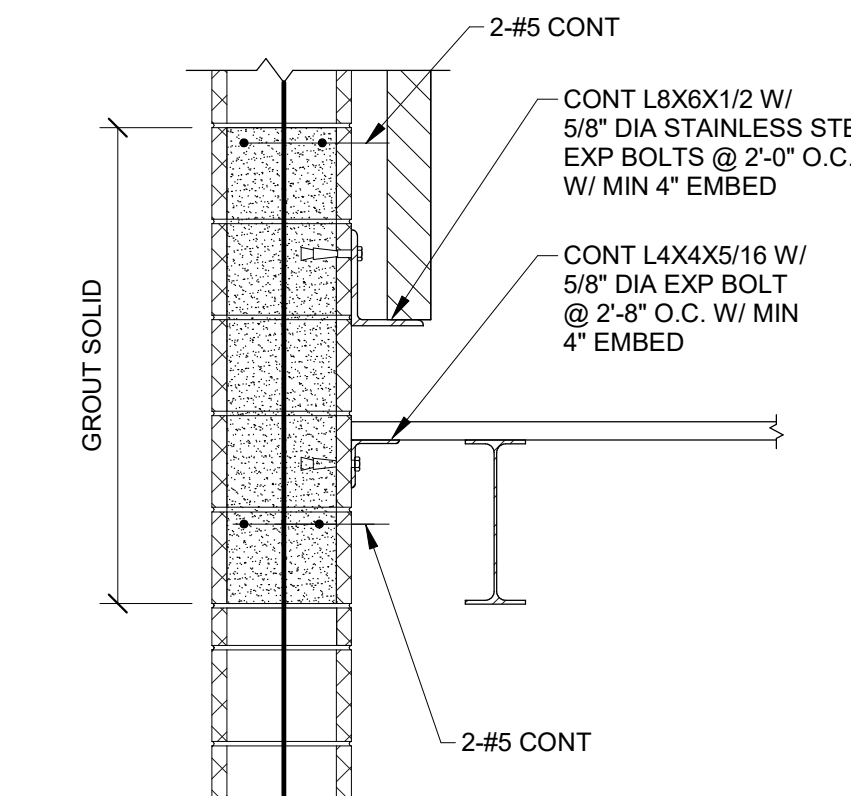
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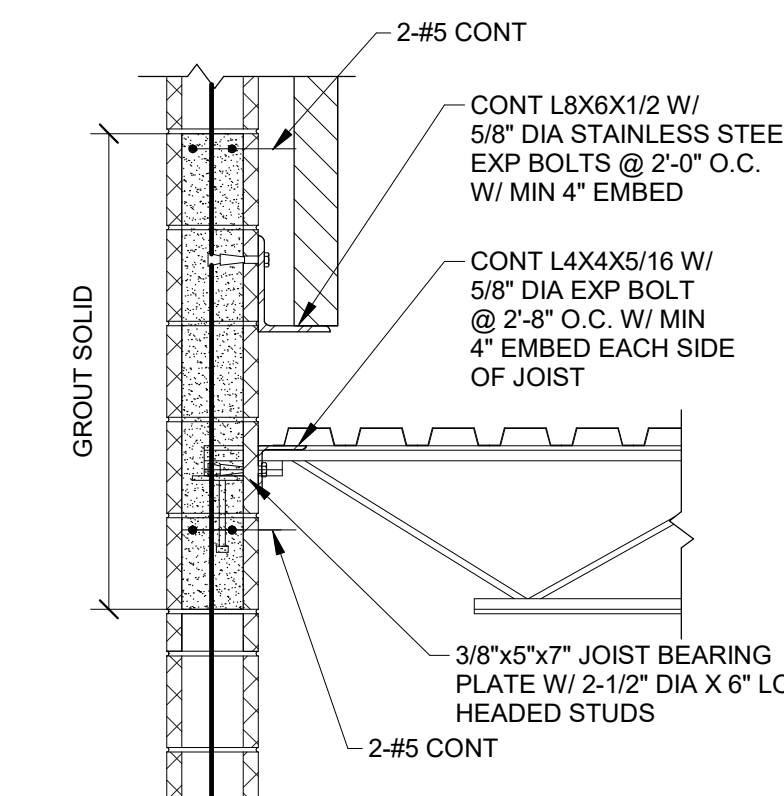
5 SECTION
S205 / 3/4" = 1'-0"



6 SECTION
S205 / 3/4" = 1'-0"

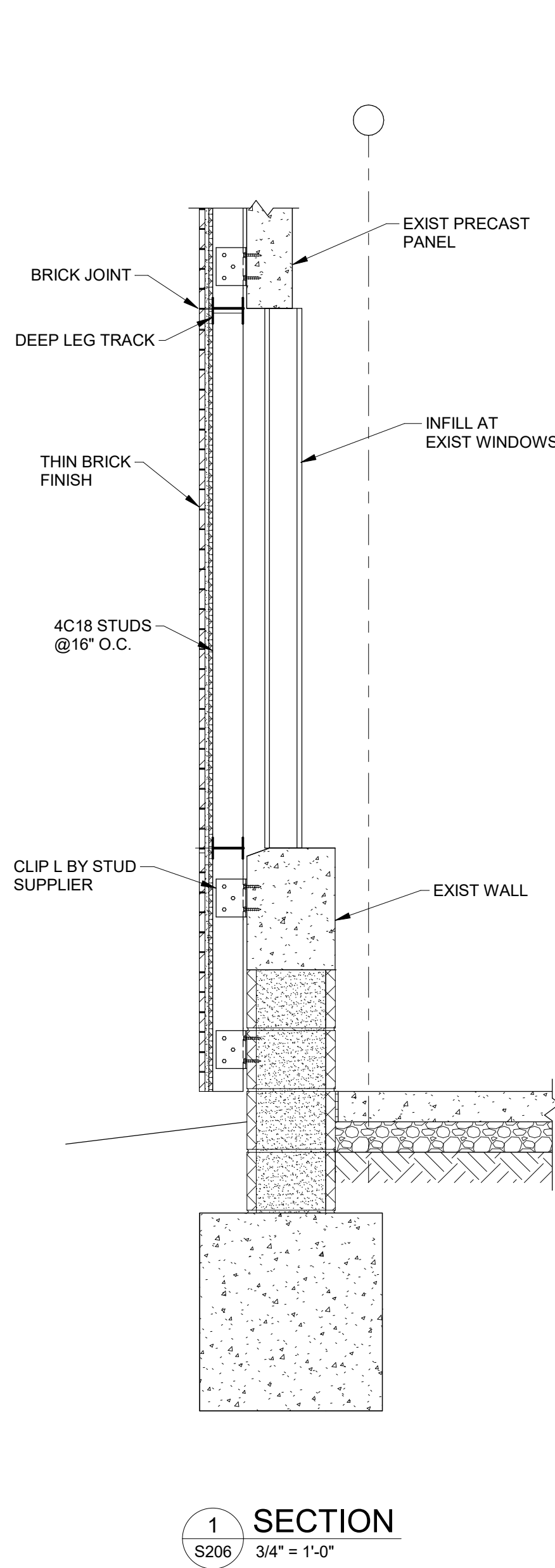


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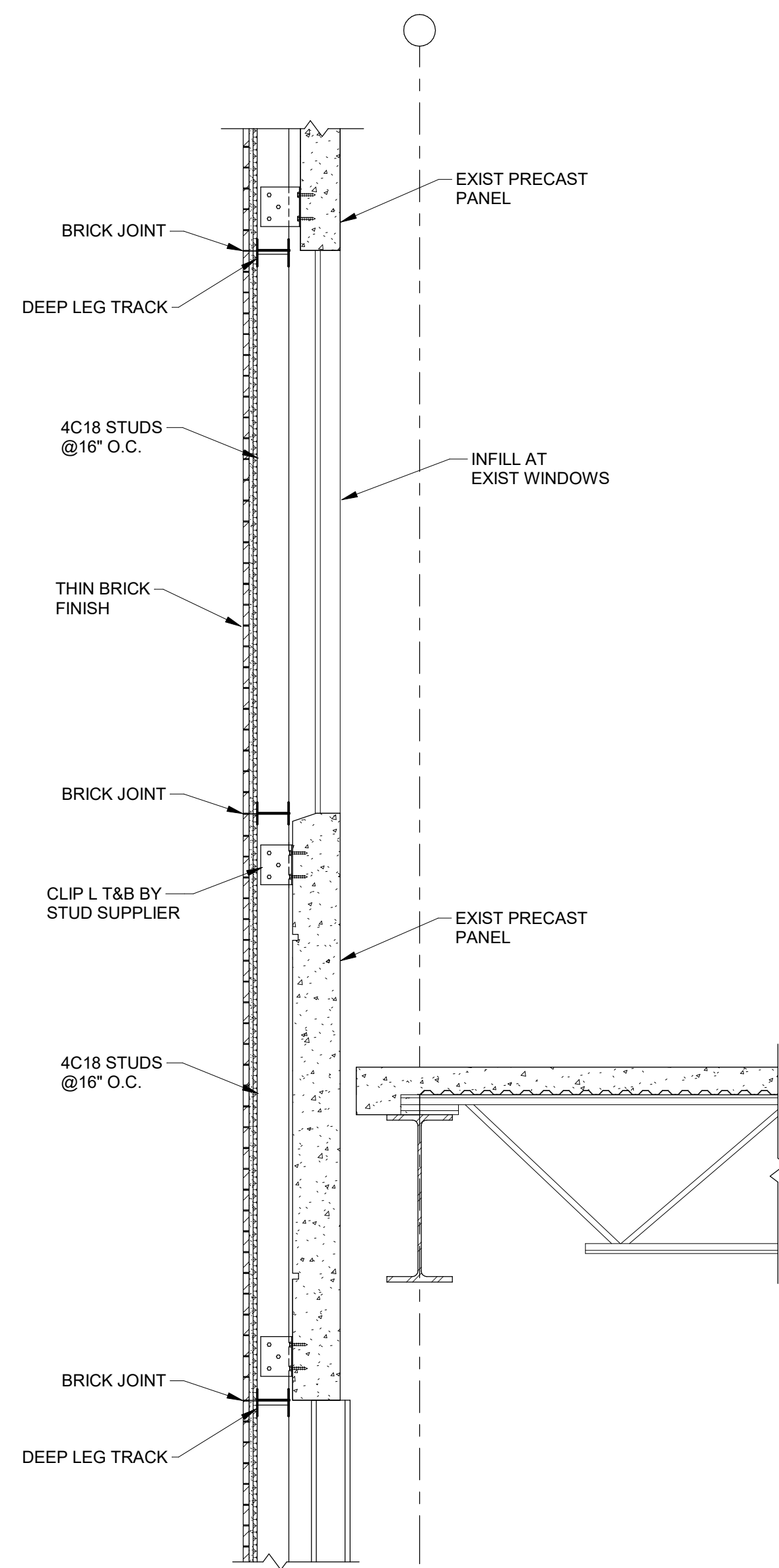


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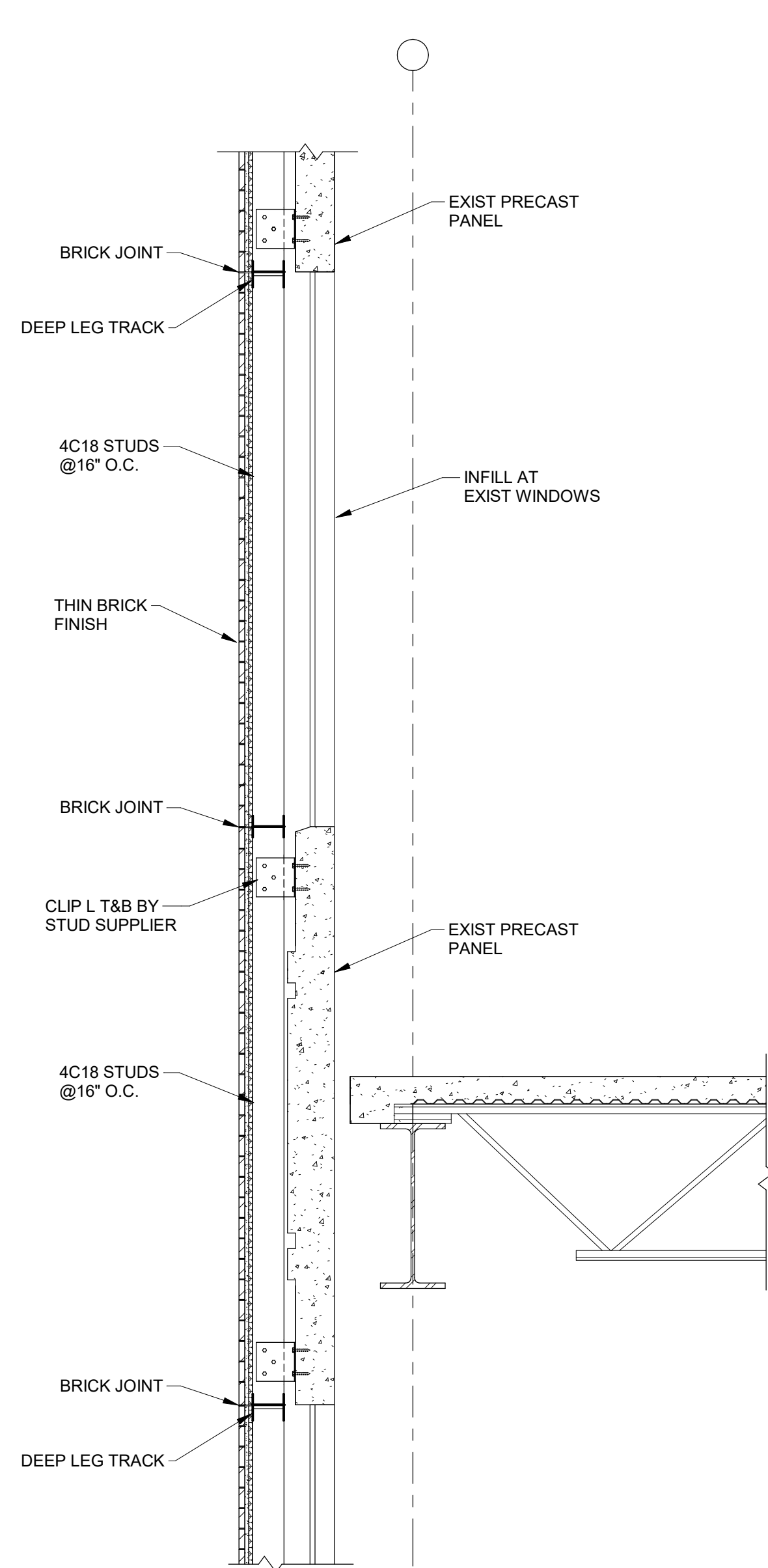
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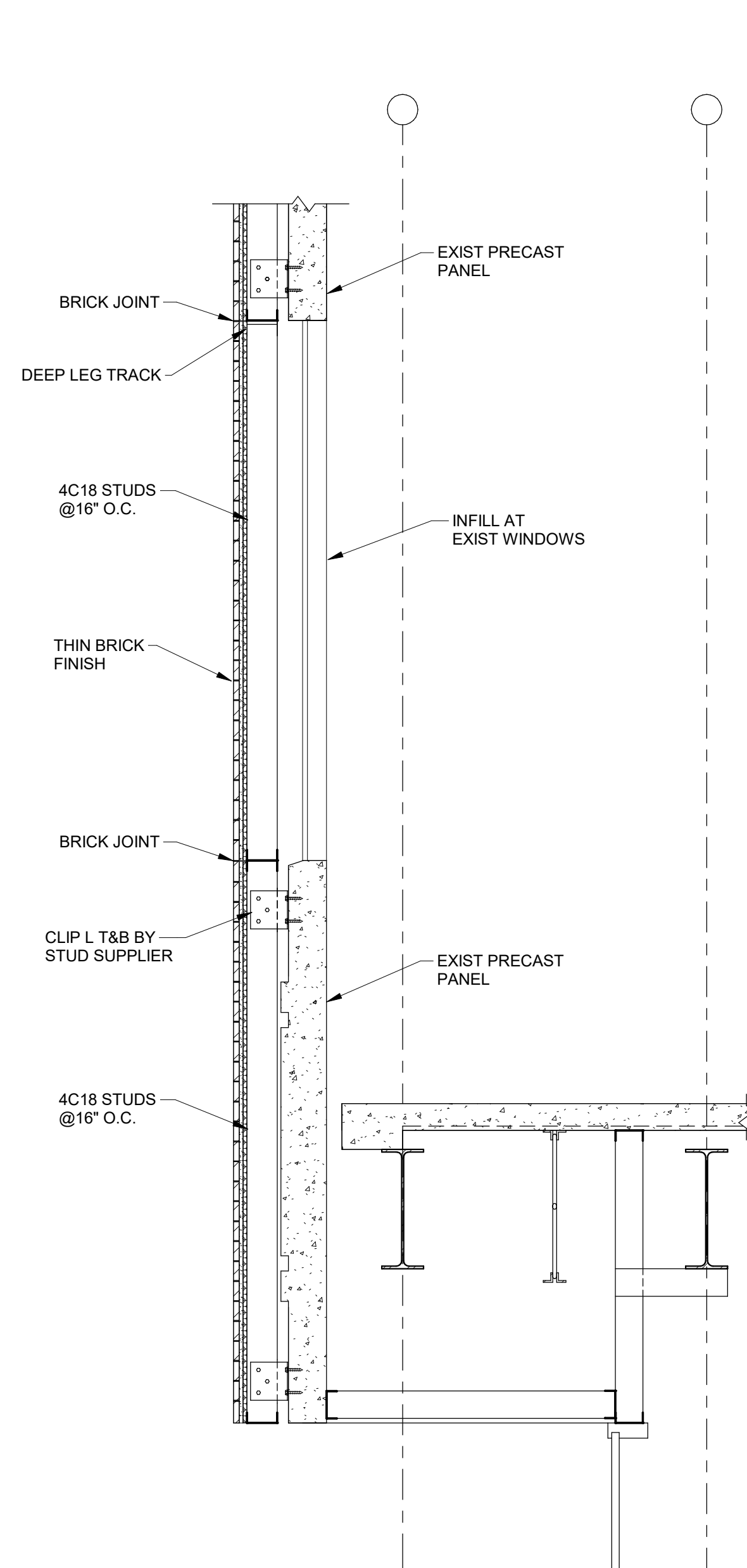
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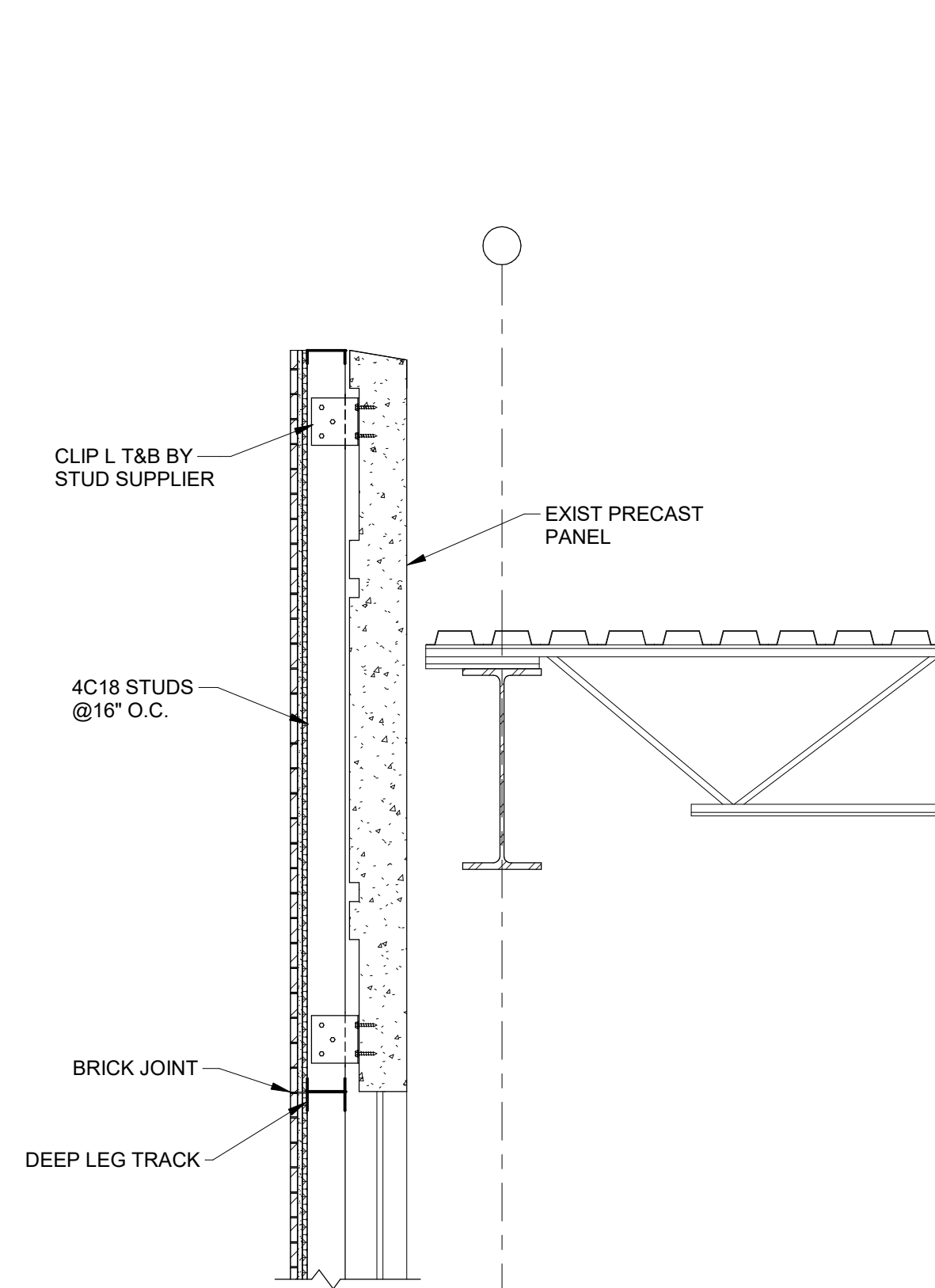
2 SECTION
S206 3/4" = 1'-0"



3 SECTION
S206 3/4" = 1'-0"



4 SECTION
S206 3/4" = 1'-0"



5 SECTION
S206 3/4" = 1'-0"

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HSA PROJECT # :24-037

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CONSTRUCTION

ISSUE HISTORY		
A	DATE	ISSUED FOR
1	2025-03-28	BD ISSUE

SHEET TITLE
SECTIONS AND
DETAILS

DRAWING NUMBER
S206