

**MARYSVILLE HIGH SCHOOL AG SHOP ADDITION
1908.03**

**CONTRACT ADDENDUM NO. 2
DECEMBER 12, 2019**

To All Bidders:

The following are changes in the previously issued plans and specifications and supersede conflicting information so included.

When a change is made affecting a part of a drawing or specification, the balance of that drawing or specification shall remain unchanged.

Bidders must acknowledge receipt of this addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

GENERAL:

Article 2-01: The Start Date for the Project will be pending on City of Marysville Planning Commission approval of the Project on January 9, 2020. It is anticipated Building Permits will be available immediately following Commission approval.

Article 2-02: The district has indicated they would like to have a ground breaking ceremony at a time and location TBD, but currently anticipate it being mid day for two hours on January 15. The district has also indicated they would like to have a ribbon cutting ceremony during summer, at a time TBD. The general contractor shall anticipate accommodating these social engagements by allowing staff and media on the site during these times. The contractor shall provide a safe and clean jobsite throughout construction, especially during these times.

SPECIFICATIONS:

Article 2-03: Specification Section 012900 PAYMENT PROCEDURES

2-03a: ADD: A construction schedule shall be provided with each Payment Application. Failure to provide an updated construction schedule may result in delay of processing the payment application.

Article 2-04: Specification Section 072726 FLUID APPLIED MEMBRANE AIR BARRIERS

2-04a: Paragraph 2.3A.1: Add Carlisle Coating & Waterproofing; Barrithane VP

2-04b: Paragraph 2.3A.1: Add Carlisle Coating & Waterproofing; Barritech VP

Article 2-05: Specification Section 098436 SOUND ABSORBING CEILING UNITS

2-05a: Paragraph 2.3A.1: Add G&S Acoustics; Serenade Cloud 1” thick Sq. Hardened Edges Anchorage Fabric Suspended with TCI-HS

Article 2-06: Specification Section 101423 PANEL SIGNAGE

2-06a: ADD: Specification Section.

Article 2-07: Specification Section 131230 GREENHOUSE SYSTEMS

2-07a: American Cool Air shall be an approved equal manufacturer to Acme products. United Greenhouse Systems shall be an approved equal internal retractable shade system. Micro Grow Procom shall be an approved equal environmental control system.

2-07b: Paragraph 1.3, D. Wind Exposure is category B. Three second gust speed is 115 mph.

2-07c: Paragraph 2.4, A., 2. One (1) Acme **DCA36G** one speed Exhaust Fan - ½ hp, 115 volt, single phase.

2-07d: Paragraph 2.4, A., 4. The inlet air entrance for first stage ventilation via one (1) **WAAC333MAT** motorized shutter in the upper truss.

2-07e: Paragraph 2.4, B., 1. Conley Pad Vent System: **3** foot by 30 foot.

2-07f: Remove Paragraph 2.4, C.

2-07g: Paragraph 2.4, G. change size of shade system to be 30 feet by 40 feet. Remove reference to LS XLS15 Revolux.

2-07h: Paragraph 2.5, A., 1. Two (2) Modine Model **PTP150** High Efficiency Stainless Steel Unit Heaters.

2-07i: Paragraph 2.8, D., 1. & D., 1. benches to have expanded metal tops.

2-07j: Paragraph 2.9, G., Include materials for **4** runs of hanging baskets.

Article 2-08 133419 METAL BUILDING SYSTEMS

2-08a: Paragraph 2.3B: The Owner provided crane system will be supported from the PEMB frame.

2-08b Paragraph 2.7D.2: Facing of insulation over AG Shop 101 to be White. Facing over the remainder of the roof to be Black.

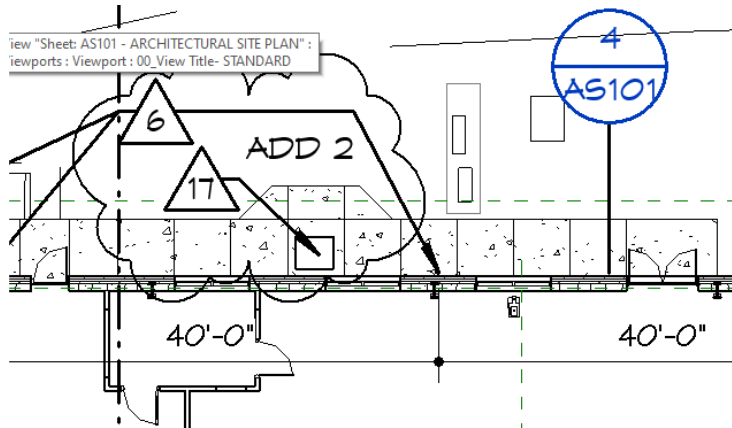
DRAWINGS:

Article 2-09: ALLIANCE STEEL INC. PRELIMINARY DRAWINGS (10 Pages):

2-09a: These drawings are for informational purposes only. They do not constitute a complete design for construction.

Article 2-10: SHEET AS101

2-10a: Detail 1: Move the DOAS and note 17 to be against the building and notch the sidewalk for 5' clear around the DOAS. Partial plan, not to scale below.



Article 2-11: SHEET D101

2-11a: DEMOLITION PLAN NOTES: Change Note #2 to read: Shot-Put Equipment and Pad to remain; protect.

Article 2-12: SHEET A101 – Replace Sheet

2-12a: Provide an 8'-0" markerboard on the exterior east wall, north of column line 2.

2-12b: ARCHITECTURAL PLAN NOTES: Change Note #3 to read: S.S. Corner guard on Gyp. Partition outside corners, 5'-0" AFF, 102600-1

Article 2-13: SHEET A201 – Replace Sheet

2-13a: Detail 1, 2, 3 & 4: Add exterior masonry veneer control joints

Article 2-14: SHEET S101 – Replace Sheet

2-14a: Omit bridge crane foundations. Crane to be supported by PEMB framing.

2-14b: Add beam pocket note at north stair.

2-14c: Add section cut 23/S300 at central stair.

Article 2-15: SHEET S300 – Replace Sheet

2-15a: Revised Section 16 and 21.

2-15b: Add Section 23.

Article 2-16: Sheet 301 – Replace Sheet

2-16a: Add Section 7.

Article 2-17 SHEET M101 – Replace Sheet

2-17a: Added the existing location of the fire sprinkler line.

2-17b: Gas pipe load and sizing was added to plans, 1,524 MBH

2-17c: Fore sprinkler notes were added to plans.

2-17d: Added gas for future ranges.

Article 2-18: SHEET M201 – Replace Sheet

2-18a: Correct the call out for the exhaust fan in the shop. It is EF-2.

2-18b: Modified Ductwork in Mech 107, Equip 107b and Closet 106.

2-18c: Add exhaust fan to Equip 107b.

Article 2-19: SHEET E101 – Replace Sheet

2-19a: Added (2) floor boxes in Kitchen 206 and (5) floor boxes in Ag Lab 205.

2-19b: Added 94) junction boxes for cord reel in the lower shop area.

2-19c: Moved receptacles for sump pump closer to sump pump.

2-19d: Add power for EF-6.

Article 2-20: SHEET E301 – Replace Sheet

2-20a: Added Cable tray locations to plan.

Article 2-21: SHEET E401 – Replace Sheet

2-21a: Updated panelboard schedules P1 and P2.

2-21b: INFORMATION TECHNOLOGY NOTES:

1. The existing Siemens fire alarm system in the school shall be extended into this new Ag Shop as indicated on the plans. Electrical contractor shall contact Dan Petersen at ECC 402-466-8274 for pricing to be included in this project. Coordinate all wiring and installation with ECC.
2. The existing Carehawk intercom with class bell system shall be extended into this new Ag Shop as indicated on the plans. Electrical contractor shall contact Dan Petersen at ECC 402-466-8274 for pricing to be included in this project. Coordinate all wiring and installation with ECC.
3. Clocks will be furnished by the owner, and installed by the electrical contractor. Coordinate all work and scheduling with Brad Dressman, District Director of Technology 785-562-5386 ext 4
4. The data and phone system wiring, rack, access points, data outlets, equipment, etc. in the school shall be extended into this new Ag Shop. Electrical contractor shall contact Twotrees Technology 800-364-5700, Michael Dannel or Susie Smith for pricing to be included in this project. Coordinate all wiring and installation with Twotrees and their cable installation vendor.
5. Cameras and cabling back to the IT room are to be furnished and installed by the electrical contractor complete. Contact DH Pace, Dan Martin 816-480-2601 to purchase the cameras.
6. The existing access control system in the school shall be extended into this new Ag Shop as indicated on the plans. Electrical contractor shall contact Jasen Walker from CBS in Manhattan, KS 785-220-2995 for pricing to be included in this project. Coordinate all wiring and installation with CBS.

END OF ADDENDUM NO. 2

SECTION 101423 - PANEL SIGNAGE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes: Panel signs.
- B. Related Requirements: Section 01 5000 "Temporary Facilities and Controls" for temporary Project identification signs and for temporary informational and directional signs.

1.3 DEFINITIONS

- A. Accessible: In accordance with the accessibility standard.

1.4 COORDINATION

- A. Furnish templates for placement of sign-anchorage devices embedded in permanent construction by other installers.
- B. Furnish templates for placement of electrical service embedded in permanent construction by other installers.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For panel signs.
 - 1. Include fabrication and installation details and attachments to other work.
 - 2. Show sign mounting heights, locations of supplementary supports to be provided by other installers, and accessories.
 - 3. Show message list, typestyles, graphic elements, including raised characters and Braille, and layout for each sign at least quarter scale.
- C. Samples for Verification: For each type of sign assembly showing all components and with the required finishes, in manufacturer's standard size unless otherwise indicated and as follows:
 - 1. Panel Signs: Full-size Sample.
 - 2. Full-size Samples, if approved, will be returned to Contractor for use in Project.
- D. Product Schedule: For panel signs. Use same designations indicated on Drawings or specified.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Sample Warranty: For special warranty.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For signs to include in maintenance manuals.

1.8 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Tools: One set of specialty tools for assembling signs and replacing variable sign components.

1.9 FIELD CONDITIONS

- A. Field Measurements: Verify locations of anchorage devices embedded in permanent construction by other installers by field measurements before fabrication and indicate measurements on Shop Drawings.

1.10 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Deterioration of finishes beyond normal weathering.
 - b. Deterioration of embedded graphic image.
 - c. Separation or delamination of sheet materials and components.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design".
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.2 PANEL SIGNS

- A. Panel Sign FE201: Sign with smooth, uniform surfaces; with message and characters having uniform faces, sharp corners, and precisely formed lines and profiles; and as follows:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. ACE Sign Systems, Inc..

- b. ASI Sign Systems, Inc.
 - c. Best Sign Systems, Inc..
 - d. Seton Identification Products.
 - e. APCO Signs (Basis of Design)
2. Basis of Design Product: Subject to compliance with requirements, provide product indicated by APCO signs, Atlanta, GA.
 - a. Sign Series: Arcadia 1000
 - b. Type: Wall mounted, manufacturer's standard method for substrates indicated.
 - c. Size, legends, and features: As indicated on the Drawings, and as standard with the manufacturer.
 - d. Materials: Manufacturer's standard for the sign series, and as indicated on the Drawings.
 3. Solid-Sheet Sign, Returns, and Back: Acrylic sheet with finish specified in "Surface Finish and Applied Graphics" Subparagraph and as follows:
 - a. Thickness: Manufacturer's standard for size of sign.
 - b. Surface-Applied, Raised Graphics: Applied polymer characters and Braille.
 4. Engraved Plastic-Laminate Sign: Plastic-laminate face laminated to contrasting phenolic core to produce composite sheet.
 - a. Core Color: Manufacturer's standard dark color.
 5. Sign-Panel Perimeter: Finish edges smooth.
 - a. Edge Condition at Vertical Edges and at Horizontal Edges: Square cut.
 - b. Corner Condition in Elevation: As indicated on Drawings.
 6. Frame: Vertical retainers to hold changeable sign panel.
 - a. Material: Aluminum.
 - b. Material Thickness: Manufacturer's Standard thickness.
 - c. Frame Depth: As indicated on Drawings.
 - d. Profile: Beveled.
 - e. Corner Condition in Elevation: Square.
 - f. Finish and Color: As selected by Architect from manufacturer's full range.
 7. Mounting
 - a. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signage, compatible with each material joined, and complying with the following:
 - b. Two-face Tape: Manufacturer's standard high-bond, foam-core tape, 0.045 inch thick, with adhesive on both sides.
 8. Surface Finish and Applied Graphics:
 - a. Integral Aluminum Finish: Clear anodized.
 - b. Integral Stainless-Steel Finish: No. 4.
 - c. Integral Acrylic Sheet Color: As selected by Architect from full range of industry colors.
 9. Text and Typeface: Accessible raised characters and Braille. Finish raised characters to contrast with background color, and finish Braille to match background color.
 10. Flatness Tolerance: Sign shall remain flat or uniformly curved under installed conditions as indicated on Drawings and within a tolerance of plus or minus 1/16 inch measured diagonally from corner to corner.

2.3 PANEL-SIGN MATERIALS

- A. Aluminum Sheet and Plate: ASTM B 209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.

- B. Aluminum Extrusions: ASTM B 221, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.
- C. Acrylic Sheet: ASTM D 4802, category as standard with manufacturer for each sign, Type UVF (UV filtering).
- D. Paints and Coatings for Sheet Materials: Inks, dyes, and paints that are recommended by manufacturer for optimum adherence to surface and are UV and water resistant for colors and exposure indicated.

2.4 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signs, noncorrosive and compatible with each material joined, and complying with the following unless otherwise indicated:
 - 1. Use concealed fasteners and anchors.
 - 2. Sign Mounting Fasteners:
 - a. Concealed Studs: Concealed (blind), threaded studs welded or brazed to back of sign material or screwed into back of sign assembly unless otherwise indicated.
 - b. Projecting Studs: Threaded studs with sleeve spacer, welded or brazed to back of sign material or screwed into back of sign assembly, unless otherwise indicated.
 - c. Through Fasteners: Exposed metal fasteners matching sign finish, with type of head indicated, and installed in predrilled holes.

2.5 FABRICATION

- A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.
 - 1. Preassemble signs in the shop to greatest extent possible. Disassemble signs and assemblies only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation; apply markings in locations concealed from view after final assembly.
 - 2. Mill joints to a tight, hairline fit. Form assemblies and joints exposed to weather to resist water penetration and retention.
 - 3. Comply with AWS for recommended practices in welding and brazing. Provide welds and brazes behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded and brazed connections of flux, and dress exposed and contact surfaces.
 - 4. Conceal connections if possible; otherwise, locate connections where they are inconspicuous.
 - 5. Internally brace signs for stability, to meet structural performance loading without oil-canning or other surface deformation, and for securing fasteners.
 - 6. Provide rabbets, lugs, and tabs necessary to assemble components and to attach to existing work. Drill and tap for required fasteners. Use concealed fasteners where possible; use exposed fasteners that match sign finish.

2.6 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Directional Finishes: Run grain with long dimension of each piece and perpendicular to long dimension of finished trim or border surface unless otherwise indicated.

- D. Organic, Anodic, and Chemically Produced Finishes: Apply to formed metal after fabrication but before applying contrasting polished finishes on raised features unless otherwise indicated.

2.7 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, Class II, 0.010 mm or thicker.

2.8 STAINLESS-STEEL FINISHES

- A. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
- B. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
 - 1. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
 - 2. Directional Satin Finish: No. 4.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify that sign-support surfaces are within tolerances to accommodate signs without gaps or irregularities between backs of signs and support surfaces unless otherwise indicated.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

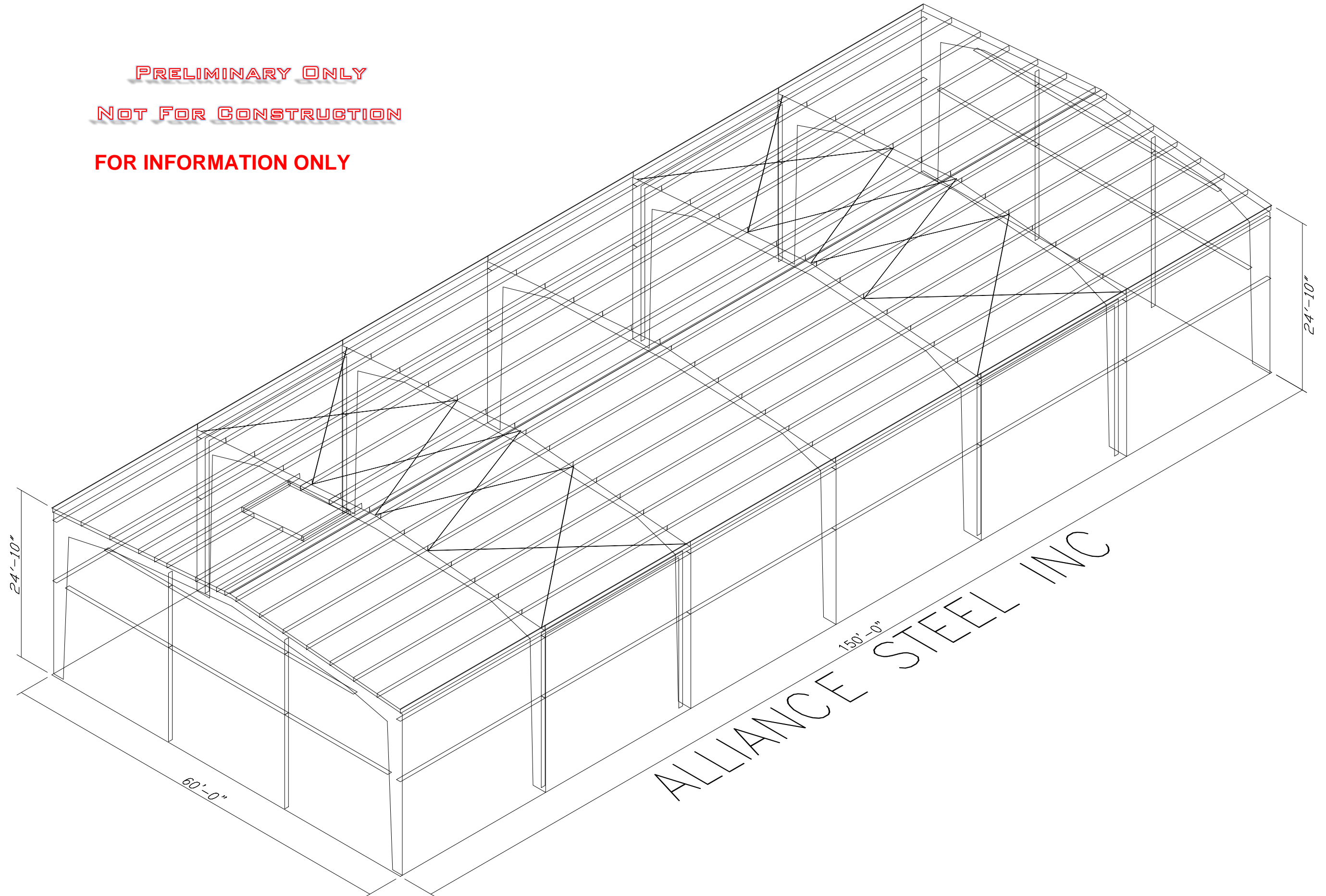
- A. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.
 - 1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
 - 2. Install signs so they do not protrude or obstruct according to the accessibility standard.
 - 3. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.
 - 4. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.
- B. Accessible Signage: Install in locations on walls as indicated on Drawings and according to the accessibility standard.
- C. Mounting Methods:
 - 1. Two-Face Tape: Clean bond-breaking materials from substrate surface and remove loose debris. Apply tape strips symmetrically to back of sign and of suitable quantity to support weight of sign without slippage. Keep strips away from edges to prevent visibility at sign edges. Place sign in position and push to engage tape adhesive.
- D. Signs Mounted on Glass: Provide opaque sheet matching sign material and finish onto opposite side of glass to conceal back of sign.

3.3 ADJUSTING AND CLEANING

- A. Remove and replace damaged or deformed signs and signs that do not comply with specified requirements. Replace signs with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures.
- B. Remove temporary protective coverings and strippable films as signs are installed.
- C. On completion of installation, clean exposed surfaces of signs according to manufacturer's written instructions and touch up minor nicks and abrasions in finish. Maintain signs in a clean condition during construction and protect from damage until acceptance by Owner.

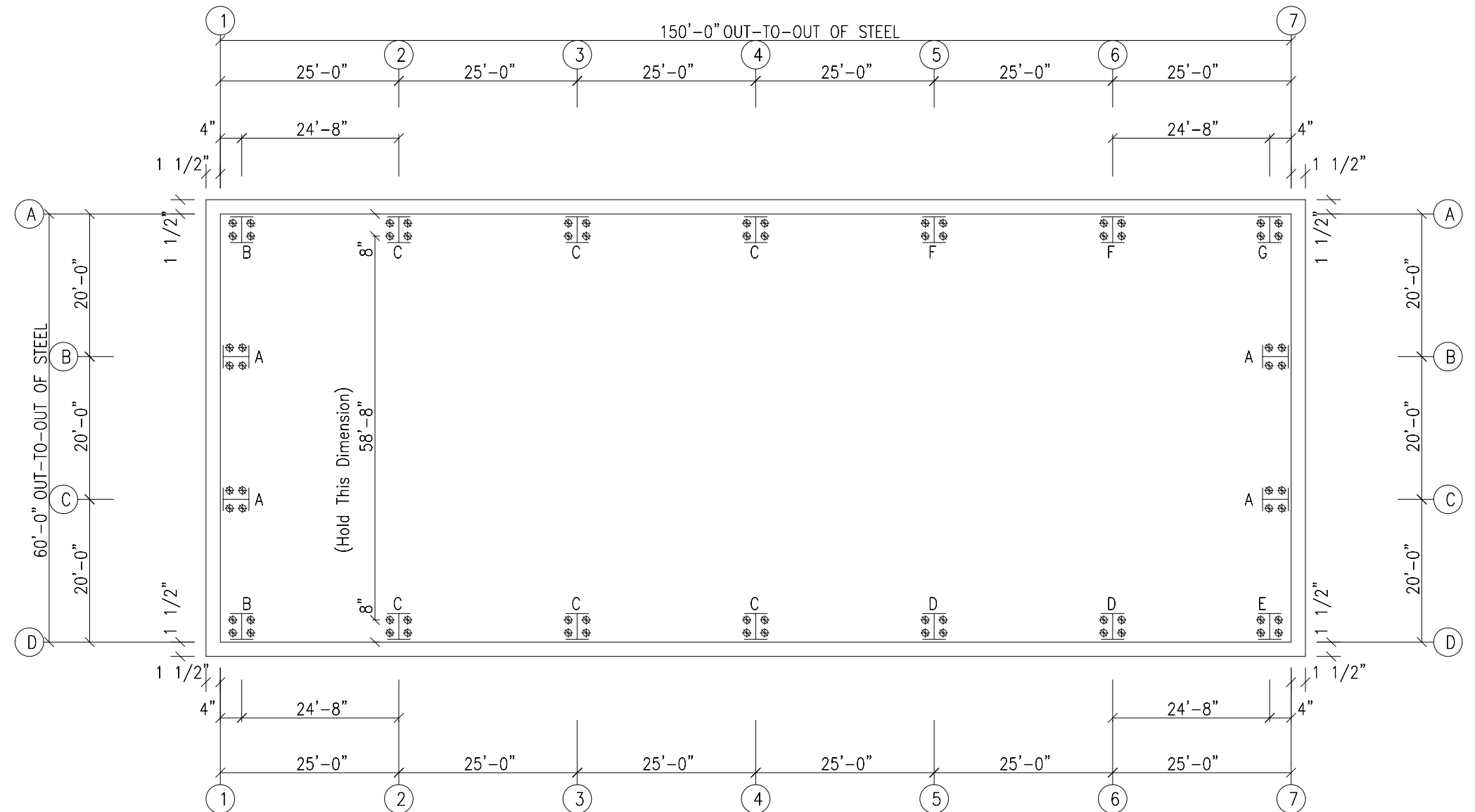
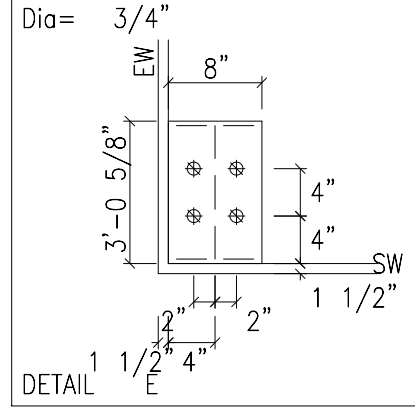
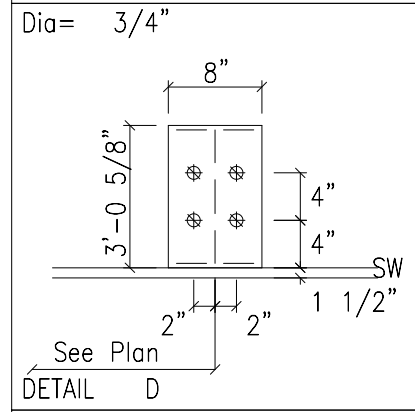
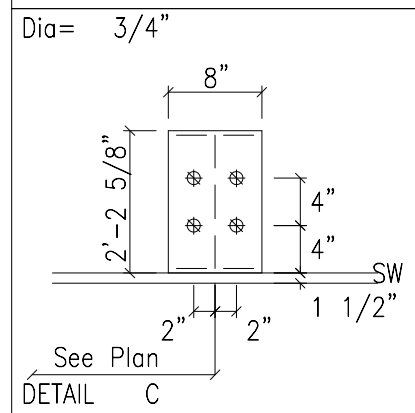
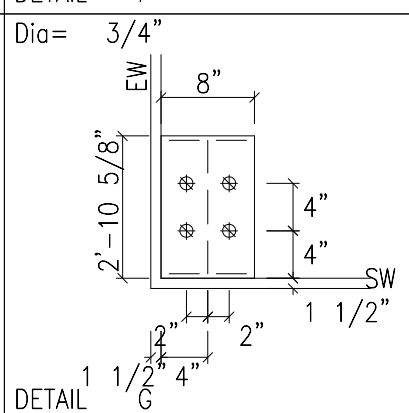
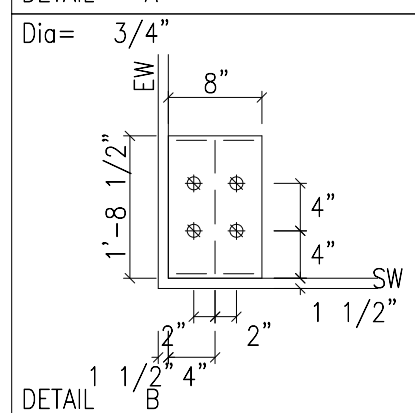
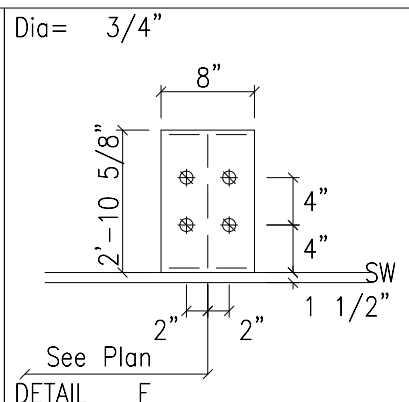
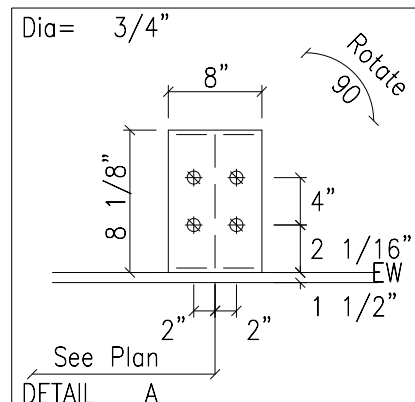
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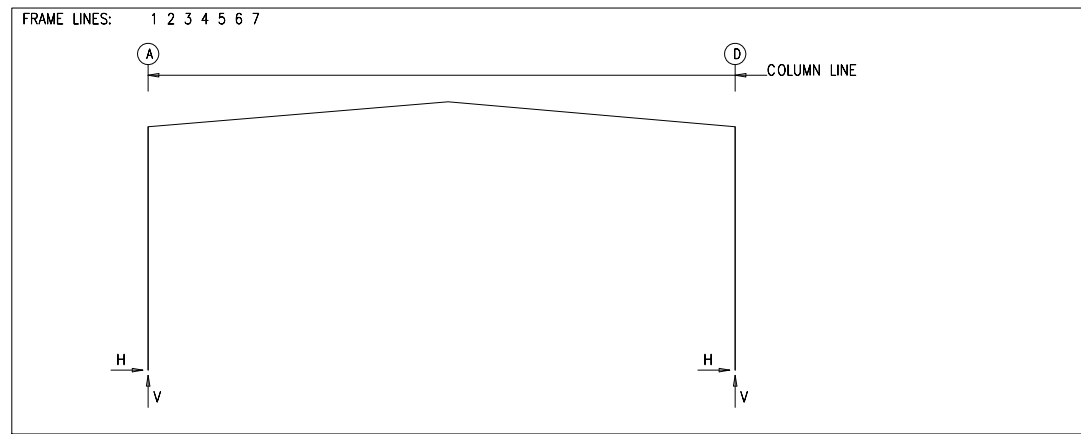


ALLIANCE STEEL INC

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ANCHOR BOLT PLAN
 NOTE: All Base Plates @ 100'-0" (U.N.)



RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column_Reactions(k)						Bolt(in) Qty	Dia	Base_Plate(in)			BP Elev. (in)
		Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin			Width	Length	Thick	
1	A	7	5.6	13.7	1	-4.4	-6.5	4	0.750	8.000	20.50	0.500	0.0
1	D	2 7	4.3 -5.6	-6.4 13.6	7 2	-5.6 4.3	-6.4	4	0.750	8.000	20.50	0.500	0.0

RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column_Reactions(k)						Bolt(in) Qty	Dia	Base_Plate(in)			BP Elev. (in)
		Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin			Width	Length	Thick	
2*	A	7	9.6	25.6	3	-6.0	-5.0	4	0.750	8.000	26.63	0.500	0.0
2*	D	4 7	5.9 -9.5	-4.9 25.5	7 6	-9.5 -0.6	25.5 -10.6	4	0.750	8.000	26.63	0.500	0.0
2*	Frame lines: 2 3 4												

RIGID FRAME: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column_Reactions(k)						Bolt(in) Qty	Dia	Base_Plate(in)			BP Elev. (in)
		Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin			Width	Length	Thick	
5*	A	7	10.1	25.7	3	-6.0	-5.0	4	0.750	8.000	34.63	0.500	0.0
5*	D	4 9	6.0 -8.0	-4.9 29.1	7 6	-10.1 -0.5	25.8 -10.4	4	0.750	8.000	36.63	0.500	0.0
5*	Frame lines: 5 6 7												

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Wind Press		Wind Suct	
			Horz	Vert	Horz	Vert
1	B	0.4	-6.2	6.9		
1	C	0.4	-6.3	6.9		
7	C	0.4	-6.2	6.8		
7	B	0.4	-6.2	6.8		

ENDWALL COLUMN: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm Line	Col Line	Column_Reactions(k)						Bolt(in) Qty	Dia	Base_Plate(in)			BP Elev. (in)
		Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin			Width	Length	Thick	
1	B	10 12	4.1 3.1	0.3 0.4	11	-3.7	0.3	4	0.750	8.000	8.125	0.500	0.0
1	C	10 12	4.2 3.1	0.3 0.4	11	-3.8	0.3	4	0.750	8.000	8.125	0.500	0.0
7	C	10 13	4.1 3.1	0.3 0.4	11	-3.7	0.3	4	0.750	8.000	8.125	0.500	0.0
7	B	10 13	4.1 3.1	0.3 0.4	11	-3.7	0.3	4	0.750	8.000	8.125	0.500	0.0

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type	Total Len (in)	Bend Len (in)	Proj (in)
16	Endwall	3/4"	A307	18.0	5.00	2.50
56	Frame	3/4"	A307	18.0	5.00	2.50

BUILDING BRACING REACTIONS

Wall Loc	Line	Col Line	± Reactions(k)				Panel_Shear (lb/ft)		Note
			Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Wind	Seis	
L_EW	1							(h)	
F_SW	D	2,3 5,6	2.2 2.2	4.0 4.0	2.8 2.8	5.2 5.2		(b)	
R_EW	7							(b)	
B_SW	A	5,6 2,3	2.2 2.2	4.0 4.0	2.8 2.8	5.2 5.2		(b)	

(b) Wind bent in bay, base above finish floor
(h) Rigid frame at endwall

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	---Dead---		---Collateral---		---Live---		---Snow---		---Wind_Left1---		---Wind_Right1---	
		Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert	Horz	Vert
1	A	0.8	2.4	1.2	2.7	3.3	7.6	2.5	5.9	-8.1	-13.2	0.3	-7.1
1	D	-0.8	2.4	-1.2	2.7	-3.3	7.6	-2.5	5.9	-0.2	-7.2	8.0	-13.1
1	A	-8.0	-9.2	0.4	-3.0	-1.2	-11.4	-1.6	-8.9	-2.0	-1.5	2.0	1.5
1	D	-0.3	-3.2	7.9	-9.1	1.7	-9.1	1.2	-11.3	-2.0	1.5	2.0	-1.5
1	A	3.7	8.6	2.2	6.0	2.2	3.4						
1	D	-3.7	8.6	-2.2	3.5	-2.1	5.9						
2*	A	1.1	3.7	2.0	5.3	5.8	15.0	4.5	11.5	-10.9	-20.0	1.1	-11.3
2*	D	-1.1	3.7	-2.0	5.3	-5.8	15.0	-4.5	11.5	-1.1	-11.4	10.9	-19.9
2*	A	-11.1	-12.1	1.0	-3.3	-0.2	-21.3	-0.6	-18.0	-1.4	-1.2	1.4	1.2
2*	D	-0.9	-3.5	11.0	-11.9	0.8	-18.2	0.0	-21.1	-1.5	1.2	1.5	-1.2
2*	A	0.0	-5.2	6.4	16.6	3.8	11.6	3.7	6.5				
2*	D	0.0	-5.2	-6.4	16.6	-3.8	6.7	-3.6	11.5				
5*	A	1.2	3.8	2.1	5.3	6.1	15.0	4.7	11.5	-11.3	-20.0	0.8	-11.2
5*	D	-1.2	3.9	-2.1	5.3	-6.1	15.0	-4.7	11.6	-0.7	-11.4	11.2	-19.9
5*	A	-11.3	-12.1	0.8	-3.3	-0.4	-21.3	-0.9	-18.0	-2.9	-2.3	2.9	2.3
5*	D	-0.7	-3.5	11.2	-12.0	1.0	-18.2	0.3	-21.2	-2.9	2.3	2.9	-2.3
5*	A	0.0	-5.2	6.8	16.6	-0.3	14.2	1.5	15.0	-0.3	5.8	1.5	6.6
5*	D	0.0	-5.2	-6.7	16.6	-1.5	6.6	0.3	5.9	-1.5	15.0	0.3	14.3
5*	A	4.0	11.6	3.9	6.4								
5*	D	-4.0	6.7	-3.8	11.5								
2*	Frame lines: 2 3 4												
5*	Frame lines: 5 6 7												

NOTES FOR REACTIONS

Building reactions are based on the following building data:

- Width (ft) = 60.0
- Length (ft) = 150.0
- Eave Height (ft) = 24.8 / 24.8
- Roof Slope (rise/12) = 1.0 / 1.0
- Dead Load (psf) = 3.0
- Collateral Load (psf) = 7.0
- Live Load (psf) = 20.0
- Snow Load (psf) = 15.4
- Wind Speed (mph) = 120.0
- Wind Code = IBC 12
- Exposure = C
- Closed/Open = C
- Importance Wind = 1.00
- Importance Seismic = 1.25
- Seismic Zone = B
- Seismic Coeff (Fa*Sa) = 0.20

ID Description

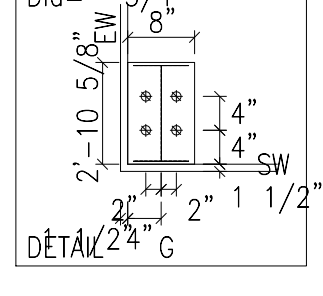
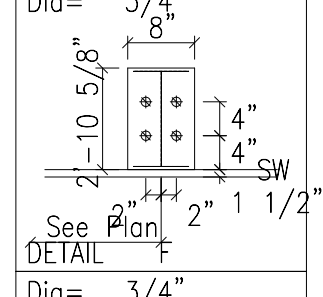
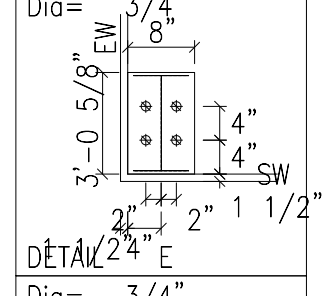
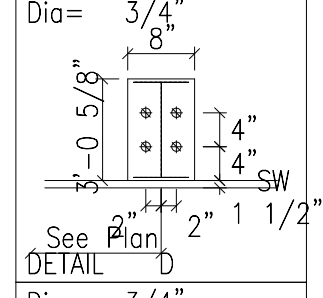
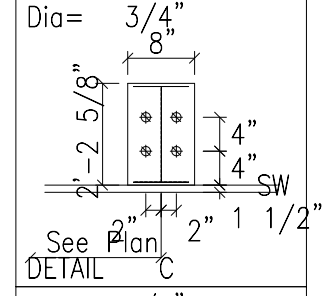
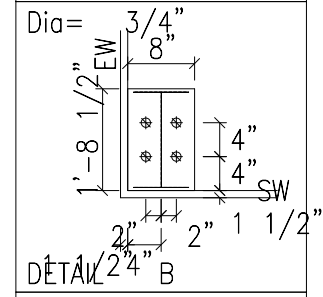
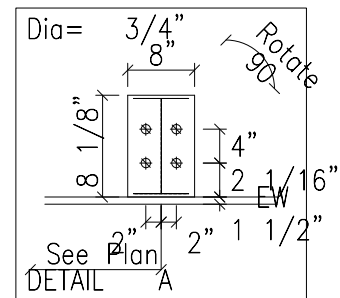
- 0.6Dead+0.6Wind_Left1
- 0.6Dead+0.6Wind_Right1
- 0.6Dead+0.6Wind_Left2
- 0.6Dead+0.6Wind_Right2
- 0.6Dead+0.6Wind_Long1L
- 0.6Dead+0.6Wind_Long2L
- Dead+Collateral+MIN_SNOW
- Dead+Collateral+0.75Snow+0.75Slide_Snow+0.75F3CRANEA6
- Dead+Collateral+0.75Snow+0.75Slide_Snow+0.75F3CRANEA7
- 0.6Dead+0.6Wind_Right2+0.6Wind_Suction
- 0.6Dead+0.6Wind_Pressure+0.6Wind_Long2L
- Dead+Collateral+0.45Wind_Right2+0.45Wind_Suction+0.75E1UNB_SL_R
- Dead+Collateral+0.45Wind_Right2+0.45Wind_Suction+0.75E2UNB_SL_R

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SPLICE PLATE & BOLT TABLE									
Mark	Qty		Int	Type	Dia	Length	Width	Thick	Length
	Top	Bot							
SP-1	4	4	2	A325	0.750	2.00	6"	1/2"	3'-1 15/16"
SP-2	2	4	0	A325	0.750	2.00	6"	3/8"	1'-6"

STIFFENER TABLE				
Mark	Stiff Mark	Plate Size		
		Width	Thick	Length
RF1-1	St- 1	2 7/8	3/16	31"
RF1-4	St- 1	2 7/8	3/16	31"

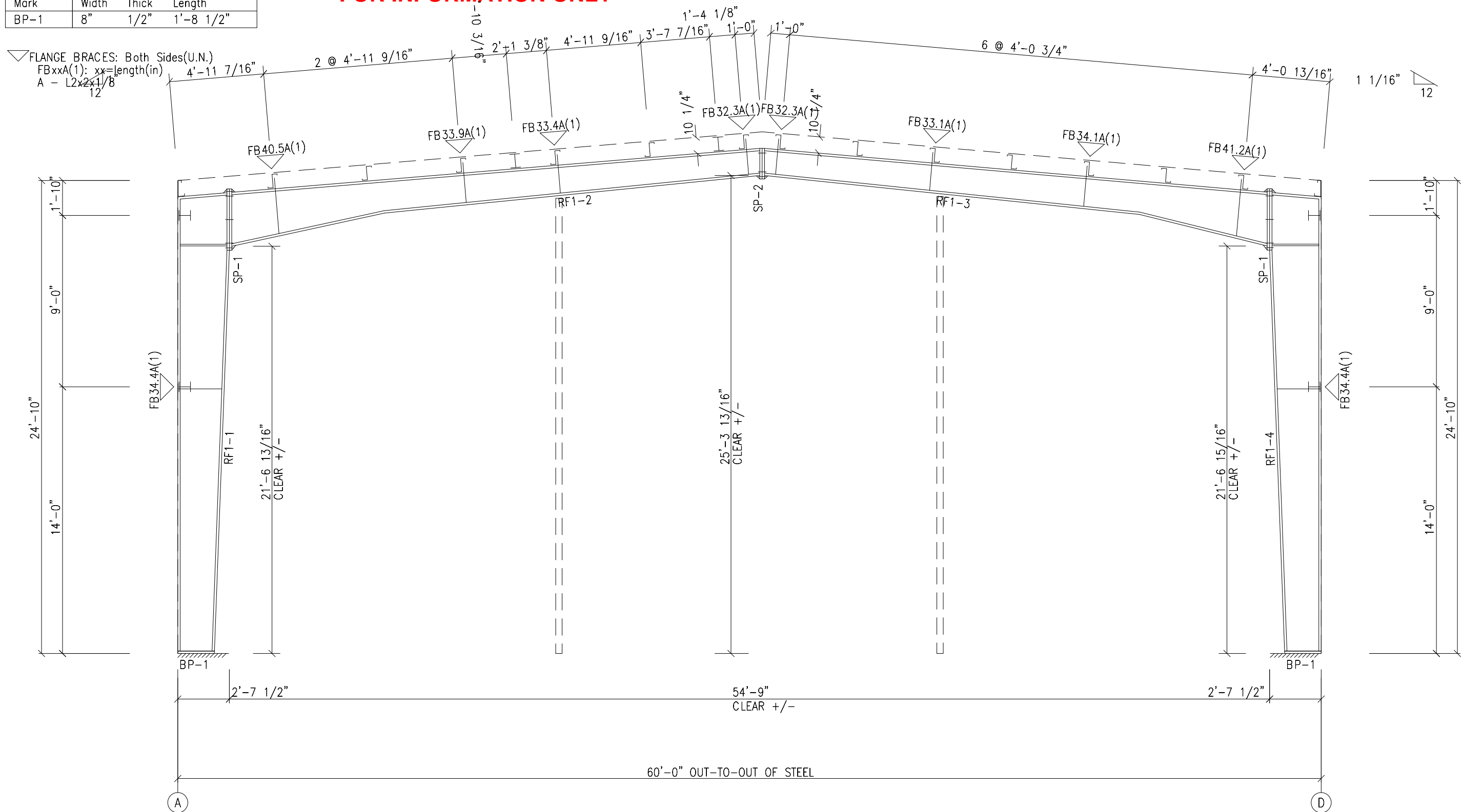
BASE PLATE TABLE			
Col Mark	Plate Size		
	Width	Thick	Length
BP-1	8"	1/2"	1'-8 1/2"

MEMBER TABLE									
Mark	Weight	Web Depth		Web Plate		Outside Flange		Inside Flange	
		Start/End	Thick	Length	W x Thk x Length	W x Thk x Length			
RF1-1	720	20.0/22.1	0.188	4'-1 9/16"	6 x 1/4" x 23'-10 15/16"	6 x 1/4" x 23'-10 15/16"	6 x 1/4" x 21'-2 7/8"		
RF1-2	685	22.1/31.0	0.188	20'-0"	6 x 1/4" x 2'-7 5/16"	6 x 1/4" x 28'-0 1/2"	6 x 1/4" x 8'-3 15/16"	6 x 1/4" x 19'-10 13/16"	
RF1-3	653	31.0/18.0	0.188	8'-3 1/8"	20'-0"	6 x 1/4" x 26'-8 9/16"	6 x 1/4" x 19'-10 13/16"	6 x 1/4" x 7'-0 5/16"	
RF1-4	720	18.0/14.0	0.188	20'-0"	6 x 1/4" x 2'-7 3/8"	6 x 1/4" x 23'-10 15/16"	6 x 1/4" x 21'-3"		
		14.0/18.0	0.188	20'-0"					
		18.0/31.0	0.188	6'-11 5/16"					
		31.0/22.1	0.188	20'-0"					
		22.1/20.0	0.188	4'-1 11/16"					

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RIGID FRAME ELEVATION: FRAME LINE 1

SPLICE PLATE & BOLT TABLE									
Mark	Qty		Int	Type	Dia	Length	Width	Thick	Length
	Top	Bot							
SP-1	4	4	2	A325	0.750	2.25	6"	5/8"	3'-3"
SP-2	2	4	0	A325	0.750	2.25	6"	5/8"	2'-3 1/16"

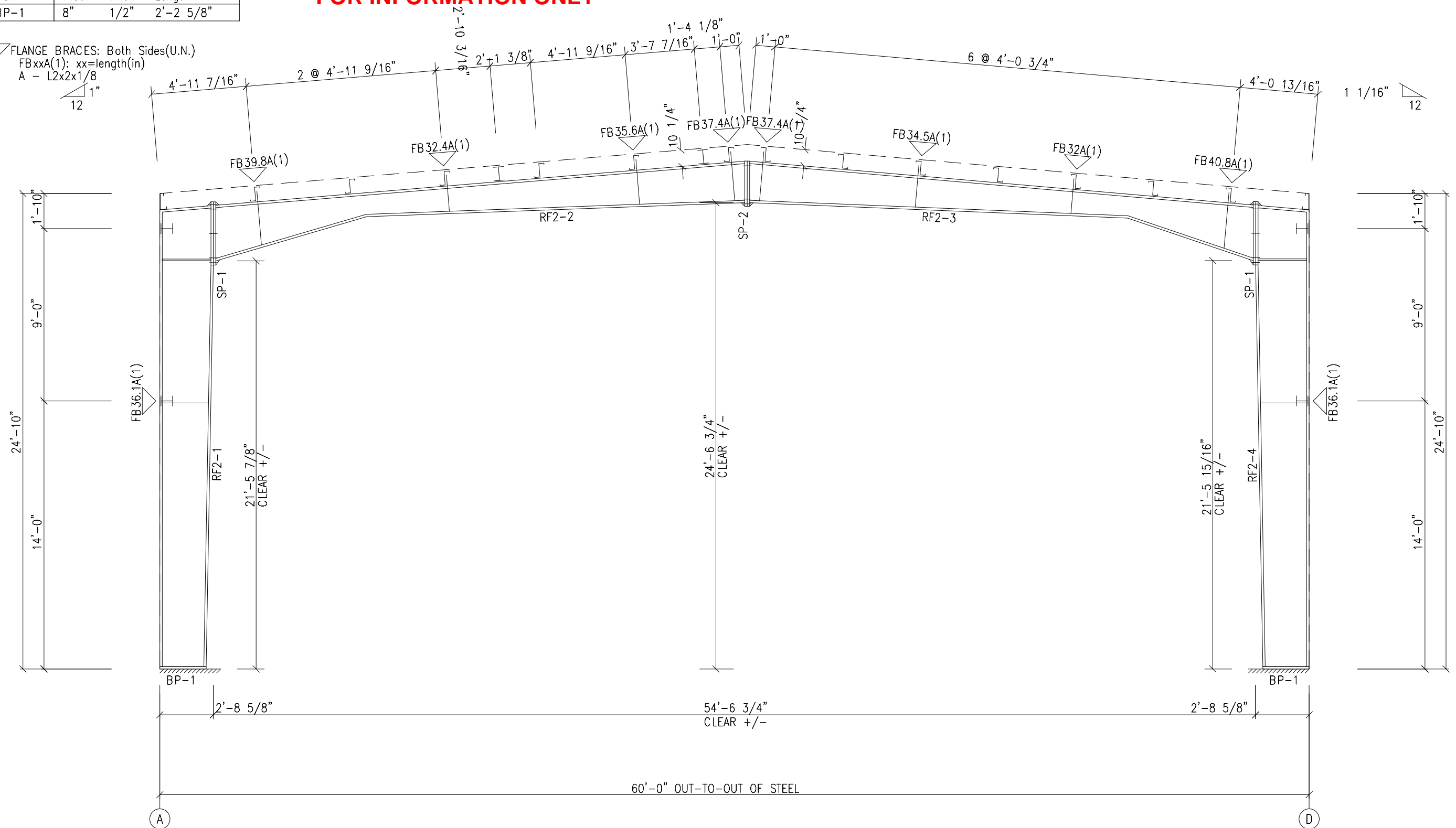
STIFFENER TABLE				
Mark	Stiff Mark	Plate Size		
		Width	Thick	Length
RF2-1	St- 1	2 7/8	3/16	23 3/4"
RF2-4	St- 1	2 7/8	3/16	23 3/4"

BASE PLATE TABLE			
Col Mark	Plate Size		
	Width	Thick	Length
BP-1	8"	1/2"	2'-2 5/8"

MEMBER TABLE							
Mark	Weight	Web Depth		Web Plate		Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
		Start/End	Thick	Thick	Length		
RF2-1	876	26.0/26.6	0.188	2'-0"	2'-0"	6 x 1/4" x 23'-10 15/16" 6 x 1/4" x 2'-8 5/16"	6 x 3/8" x 10'-0" 6 x 1/2" x 5'-0" 6 x 3/8" x 6'-1 3/4"
		26.6/31.9	0.188	18'-7 11/16"	18'-7 11/16"		
		31.9/32.0	0.250	3'-5 15/16"	3'-5 15/16"		
RF2-2	750	32.0/12.0	0.250	8'-1 11/16"	8'-1 11/16"	6 x 1/4" x 27'-11"	6 x 1/4" x 8'-3 11/16"
RF2-3	736	12.0/23.0	0.188	20'-0"	20'-0"	6 x 1/4" x 26'-7 1/16"	6 x 1/4" x 19'-10 5/16" 6 x 1/4" x 9'-10 1/8"
		23.0/12.0	0.188	20'-0"	20'-0"		
RF2-4	876	32.0/31.9	0.250	3'-5 15/16"	3'-5 15/16"	6 x 1/4" x 2'-8 3/8" 6 x 1/4" x 23'-10 15/16"	6 x 5/16" x 10'-0 1/16" 6 x 5/16" x 7'-0 1/4" 6 x 3/8" x 6'-1 13/16"
		31.9/26.6	0.188	18'-7 13/16"	18'-7 13/16"		
		26.6/26.0	0.188	2'-0"	2'-0"		

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▽ FLANGE BRACES: Both Sides(U.N.)
FBxxA(1): xx=length(in)
A - L2x2x1/8



RIGID FRAME ELEVATION: FRAME LINE 2 3 4

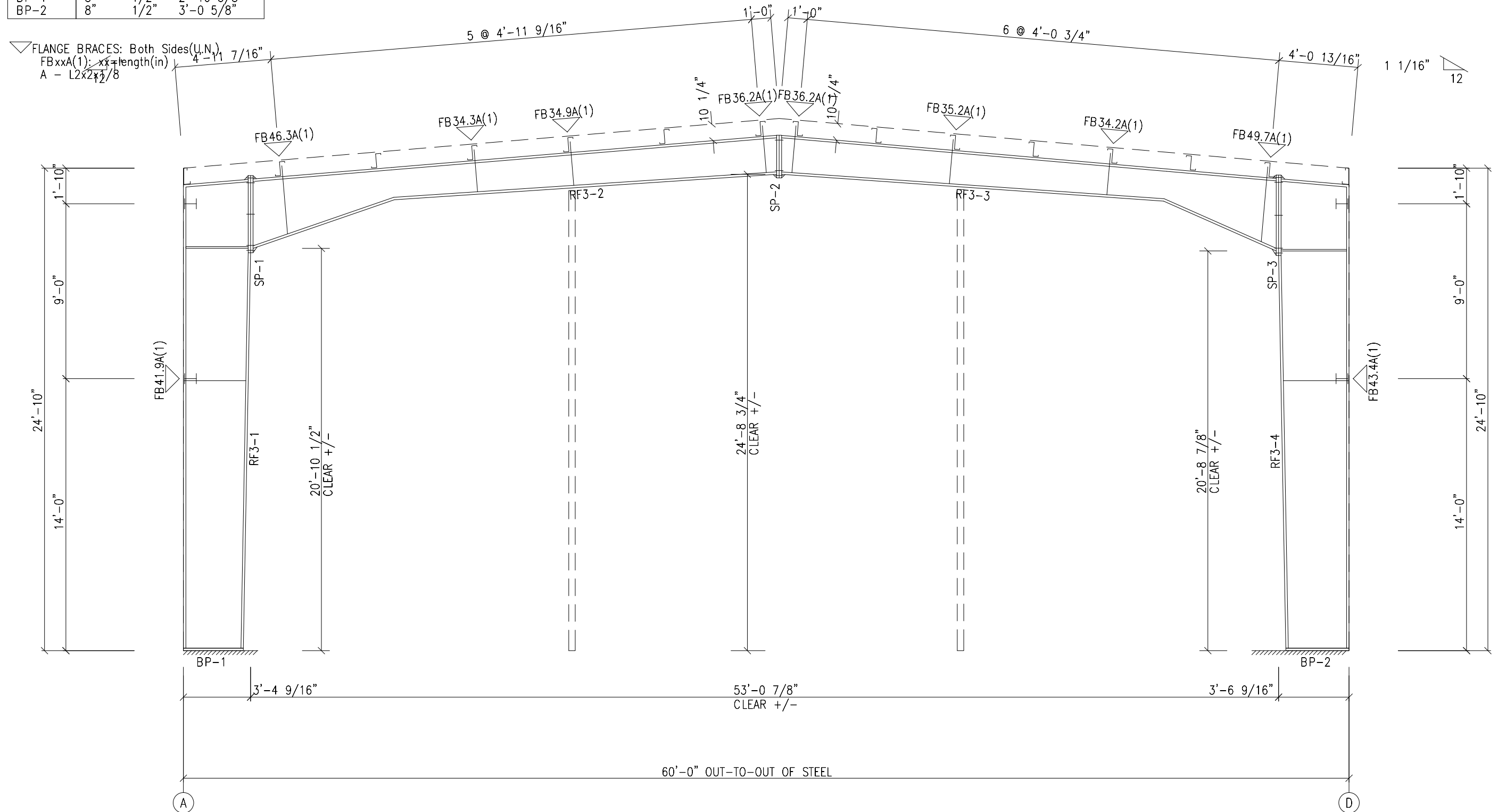
SPLICE PLATE & BOLT TABLE									
Mark	Qty		Int	Type	Dia	Length	Width	Thick	Length
	Top	Bot							
SP-1	4	4	2	A325	0.750	2.00	6"	1/2"	3'-11"
SP-2	2	4	0	A325	0.750	2.00	6"	3/8"	2'-1 1/16"
SP-3	4	4	2	A325	0.750	2.00	6"	1/2"	4'-1 1/16"

STIFFENER TABLE				
Mark	Stiff Mark	Plate Size		
		Width	Thick	Length
RF3-1	St- 1	2 7/8	3/16	31 3/4"
RF3-4	St- 1	2 7/8	3/16	33 3/4"

BASE PLATE TABLE			
Col Mark	Plate Size		
	Width	Thick	Length
BP-1	8"	1/2"	2'-10 5/8"
BP-2	8"	1/2"	3'-0 5/8"

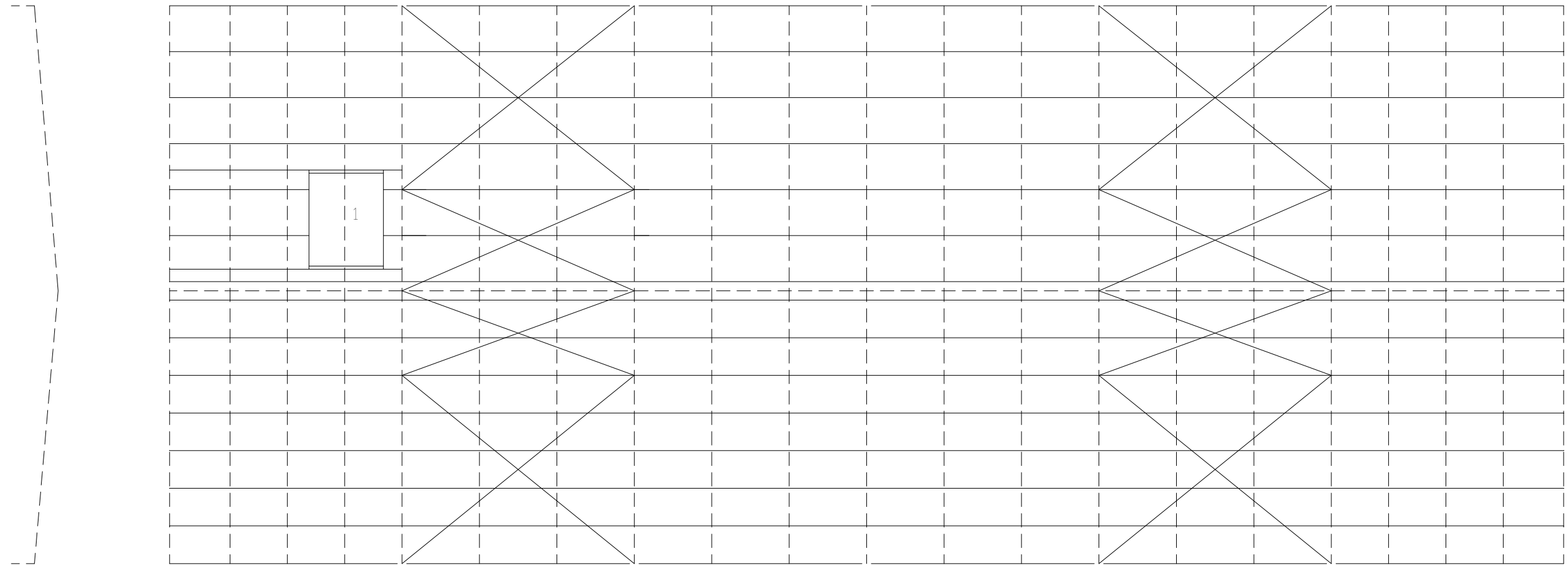
MEMBER TABLE						
Mark	Weight	Web Depth		Web Plate		Outside Flange
		Start/End	Thick	Thick	Length	W x Thk x Length
RF3-1	1017	34.0/34.6	0.188	2'-0"	2'-0"	6 x 1/4" x 23'-10 15/16"
		34.6/39.9	0.188	18'-0 3/8"	3'-0 3/8"	6 x 1/4" x 3'-4 3/8"
		39.9/40.0	0.250	4'-1 15/16"	15'-16"	6 x 5/16" x 5'-6 3/8"
RF3-2	782	40.0/17.0	0.250	7'-6 13/16"	7'-6 13/16"	6 x 1/4" x 27'-3 7/16"
RF3-3	753	17.0/21.0	0.188	20'-0"	20'-0"	6 x 1/4" x 19'-10 1/4"
		21.0/17.0	0.188	20'-0"	20'-0"	6 x 1/4" x 9'-10 3/16"
RF3-4	1056	17.0/42.0	0.250	6'-1 1/4"	6'-1 1/4"	6 x 5/16" x 9'-11 15/16"
		42.0/41.9	0.250	4'-4"	4'-4"	6 x 1/4" x 3'-6 3/8"
		41.9/36.0	0.188	19'-10 5/8"	19'-10 5/8"	6 x 1/4" x 23'-10 15/16"
						6 x 5/16" x 5'-4 5/8"
						6 x 1/2" x 5'-0"
						6 x 3/8" x 10'-0"

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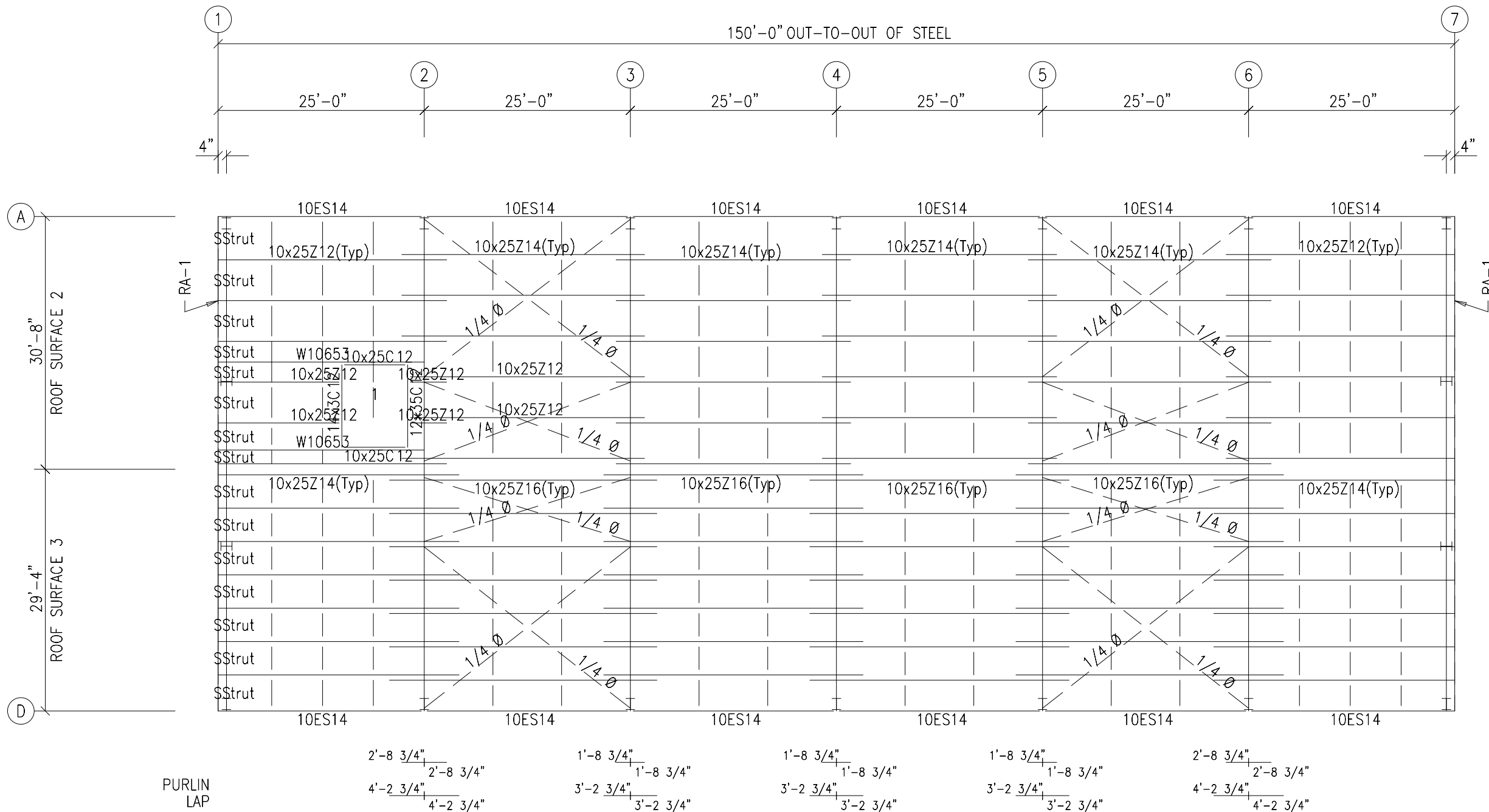
RIGID FRAME ELEVATION: FRAME LINE 5 6 7

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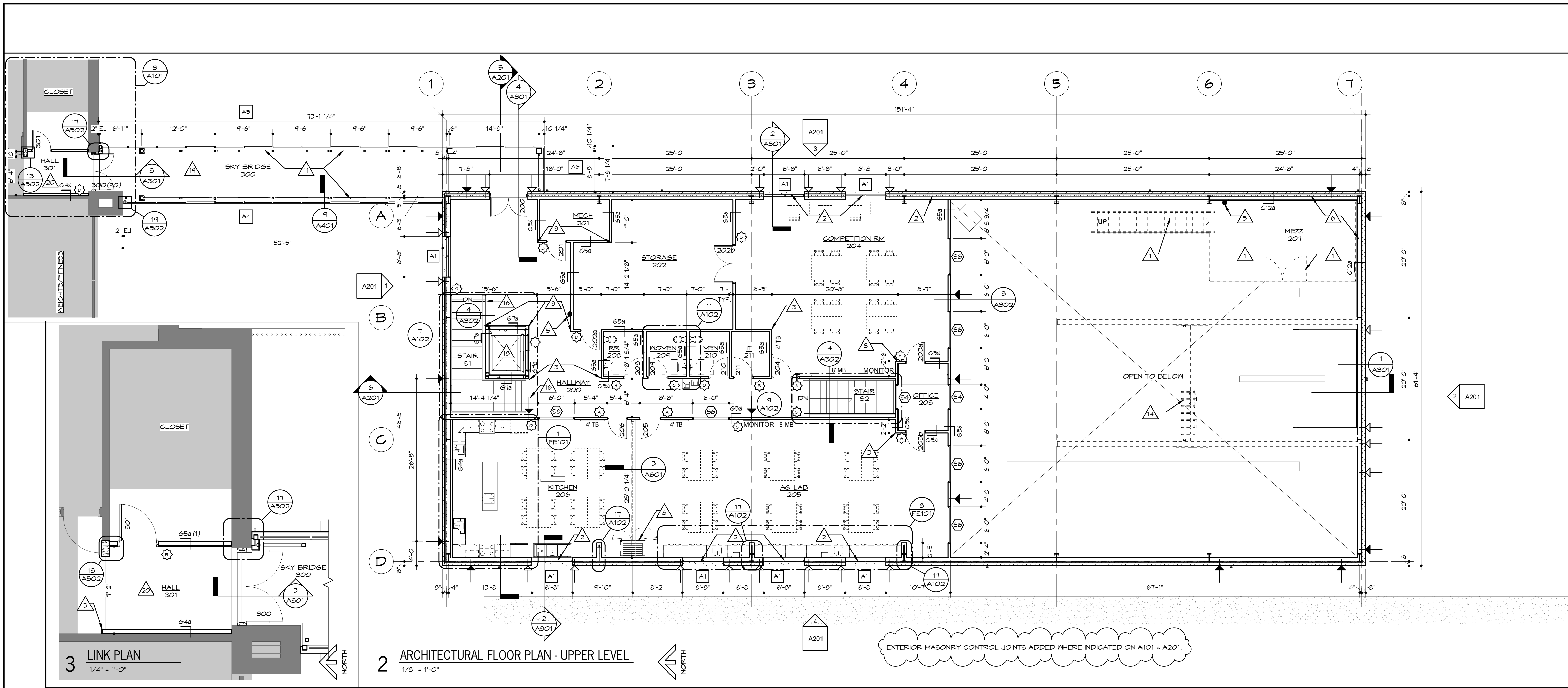


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MEMBER TABLE		
ROOF PLAN		
MARK	PART	LENGTH
RO-1	14x3C 12	10'-0 7/16"
RO-2	12x35C 12	10'-0 7/16"
RO-3	10x25C 12	8'-0"
P-1	10x25Z12	27'-8 1/2"
P-2	10x25Z12	14'-7 3/4"
P-3	10x25Z12	4'-4 3/4"
P-4	10x25Z14	29'-5 1/2"
P-5	10x25Z12	28'-4 3/4"
P-6	10x25Z14	28'-5 1/2"
P-7	10x25Z14	29'-5 1/2"
P-8	10x25Z12	27'-8 1/2"
P-9	10x25Z14	29'-2 1/2"
P-10	10x25Z16	32'-5 1/2"
P-11	10x25Z16	31'-5 1/2"
P-12	10x25Z16	32'-5 1/2"
P-13	10x25Z14	29'-2 1/2"
P-14	W10653	24'-11 3/4"
P-15	W10653	24'-11 3/4"
E-1	10ES14	24'-11 1/2"
E-2	10ES14	24'-11 1/2"
E-3	10ES14	24'-11 1/2"
E-4	10ES14	24'-11 1/2"
E-5	10ES14	24'-11 1/2"
E-6	10ES14	24'-11 1/2"
CB-1	1/4 Ø	29'-3"
CB-2	1/4 Ø	25'-0"
CB-3	1/4 Ø	24'-5"
CB-4	1/4 Ø	29'-6"
S\$trut	SAGSTR	1'-11 15/16"



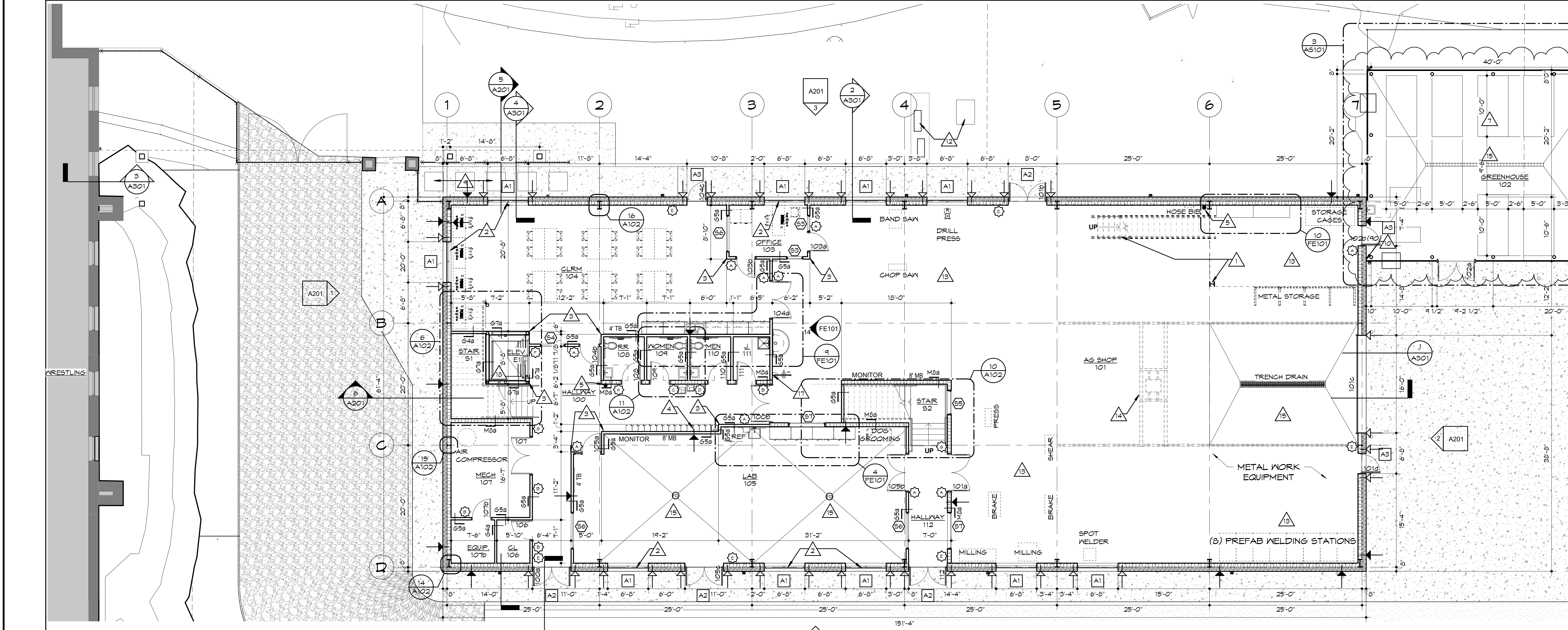
ROOF FRAMING PLAN



2 ARCHITECTURAL FLOOR PLAN - UPPER LEVEL
1/8" = 1'-0"

EXTERIOR MASONRY CONTROL JOINTS ADDED WHERE INDICATED ON A101 & A201.

- ### ARCHITECTURAL PLAN NOTES
- GENERAL: COORDINATE WITH WORK SHOWN ON STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS, REF. FE SHEET FOR EQUIP. COORDINATION
- ◻ EXISTING TO REMAIN
 - ◻ SIGNAGE, REF. SCHEDULE
 - △ OWNER PROVIDED MEZZANINE, STAIR, RAILING, & SUPPORT.
 - △ ROLLER WINDOW SHADES
 - △ S.S. CORNER GUARD ON EA GYP. PARTITION OUTSIDE CORNERS, 102600-1
 - △ EXISTING METAL LOCKERS WITH NEW PAINT FINISH. REF. SPEC SECTION 091123 FOR FINISH REQUIREMENTS.
 - △ FIRE EXTINGUISHER CABINET, REF. 13A102
 - △ 2-HR. RATED GYP. AND METAL STUD WALL BETWEEN COLUMNS
 - △ GREENHOUSE 131230-1
 - △ OPERABLE PARTITION #102234
 - △ CONDENSER, REF. MECH.
 - △ SOAP DISPENSER & TOWEL DISPENSER
 - △ DIAGONAL BRACING, REF. STRUCTURE
 - △ EXISTING TRANSFORMER
 - △ OWNER EQUIPMENT DASHED & LABELED FOR REFERENCE.
 - △ BRIDGE CRANE PROVIDED BY OWNER.
 - △ SLOPE SLAB TO DRAIN.
 - △ GUARD RAIL, REF. 0A102.
 - △ EYEWASH, REF. PLUMBING
 - △ SHAFT STEEL STRUCTURE FURNISHED BY OWNER. CONTRACTOR INSTALLED.
 - △ BRIDGE STEEL STRUCTURE FURNISHED BY OWNER. CONTRACTOR INSTALLED.
 - △ WORK ON EXISTING BUILDING SHALL START DURING SUMMER 2020 TO AVOID CONSTRUCTION DURING SCHOOL.

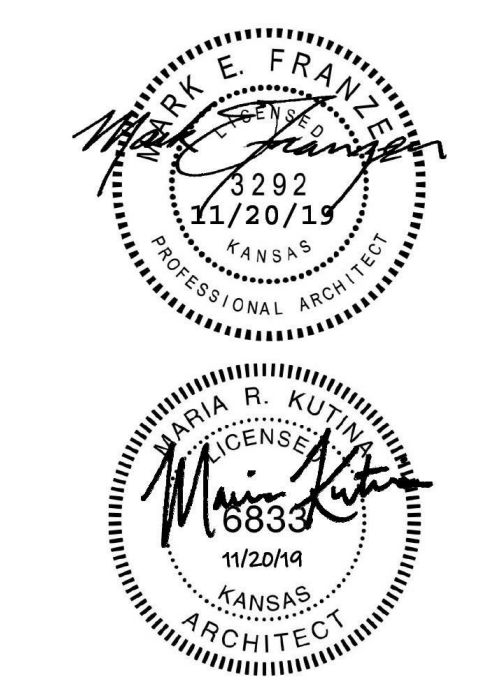


1 ARCHITECTURAL FLOOR PLAN - MAIN LEVEL
1/8" = 1'-0"

EXTERIOR MASONRY CONTROL JOINTS ADDED WHERE INDICATED ON A101 & A201.

- NOTE: REFER TO ALL SECTIONS & DETAILS (SECTIONS & DETAILS LOCATED ON THIS SHEET, PRECEDING SHEETS AND FOLLOWING SHEETS) FOR APPLICABLE NOTES NOT SHOWN.
- ◻ EXISTING TO REMAIN

3 LINK PLAN
1/4" = 1'-0"



DATE: November 20, 2019

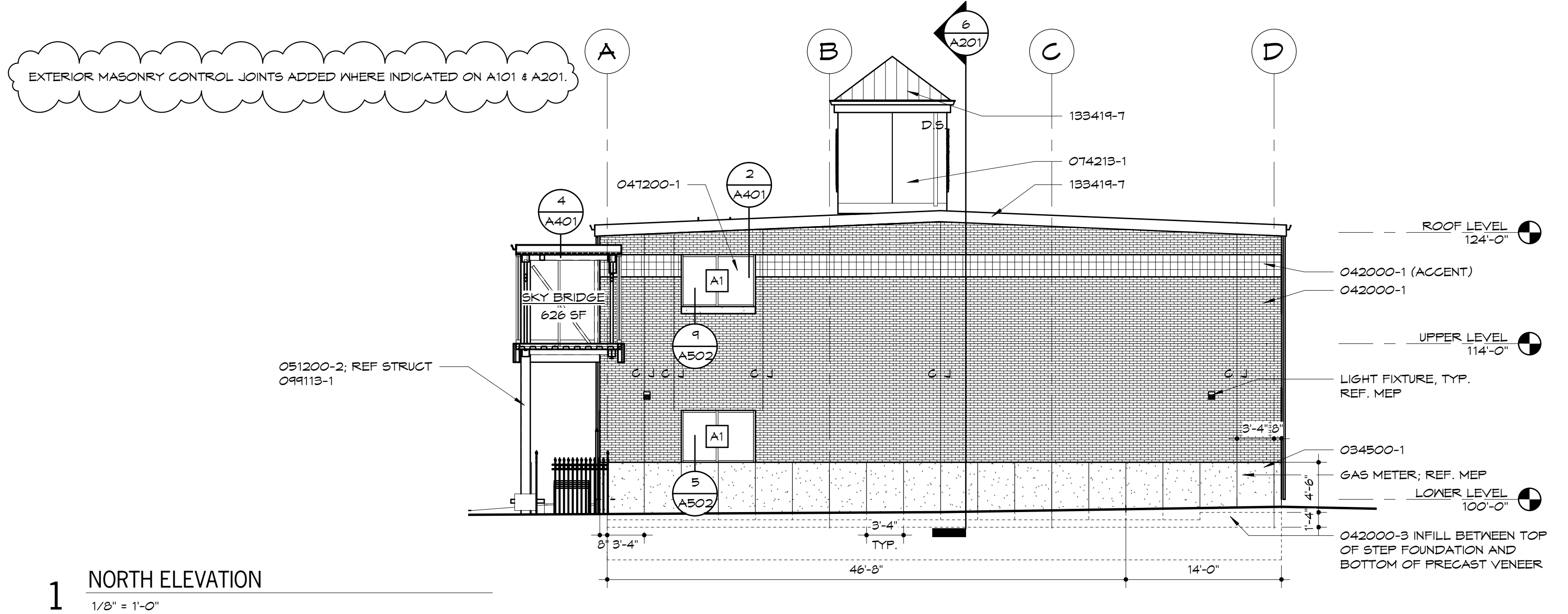
REVISED DATE:

SHEET CONTENTS:
 ARCHITECTURAL FLOOR PLANS

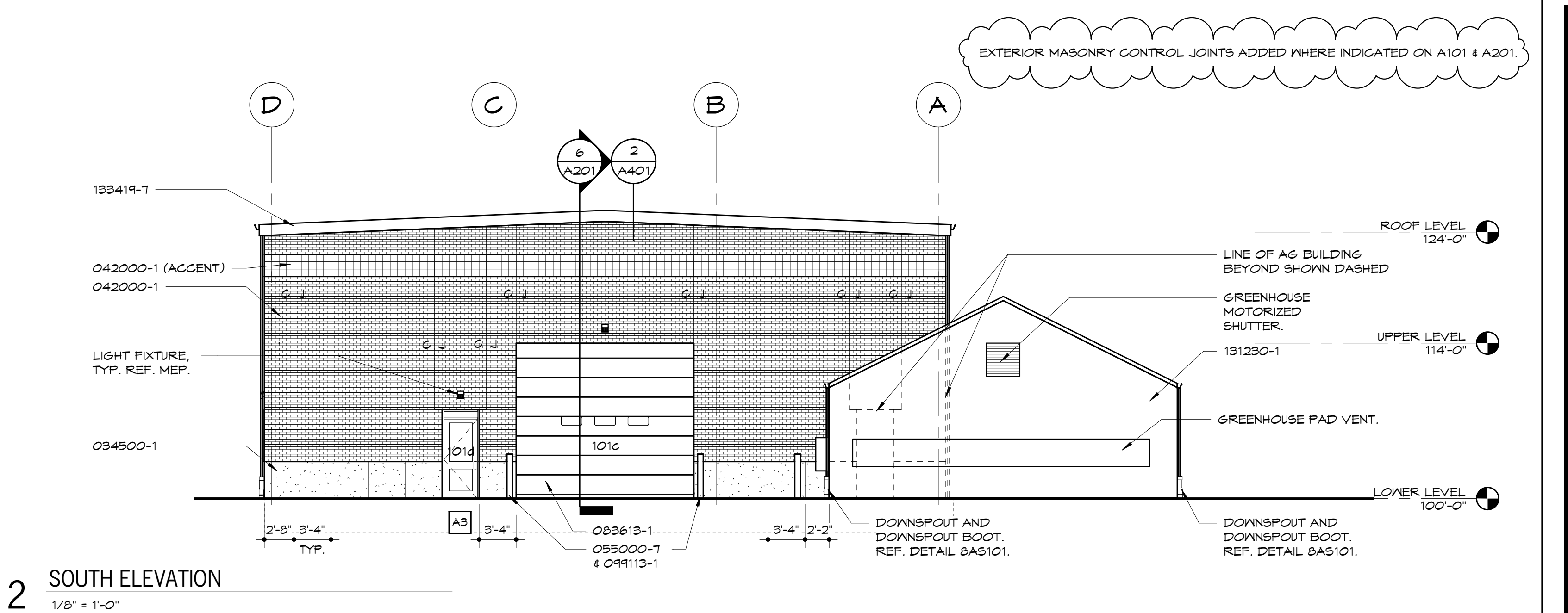
HTK PROJECT NUMBER:
 1908.03

SHEET NUMBER:

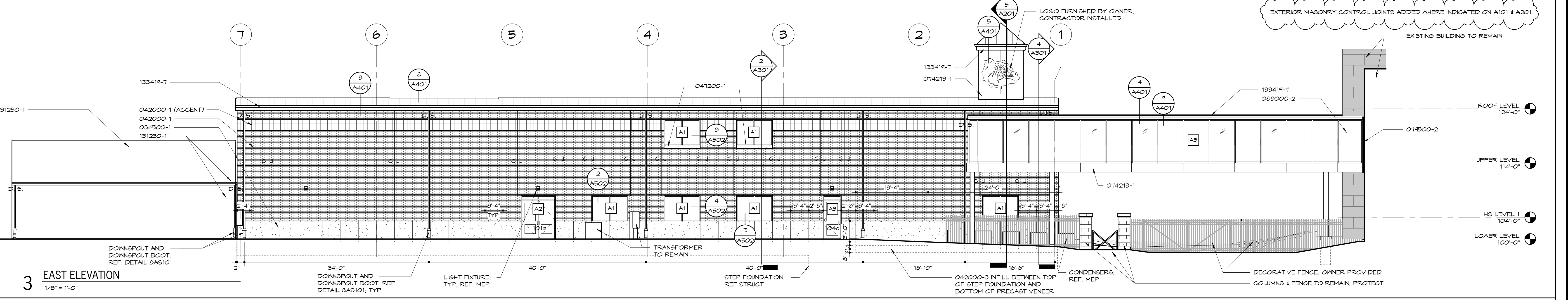
A101



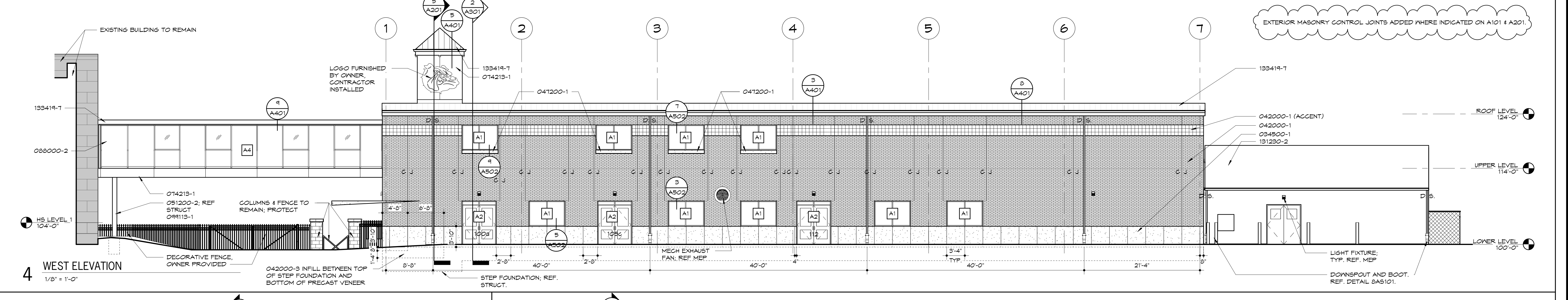
1 NORTH ELEVATION
1/8" = 1'-0"



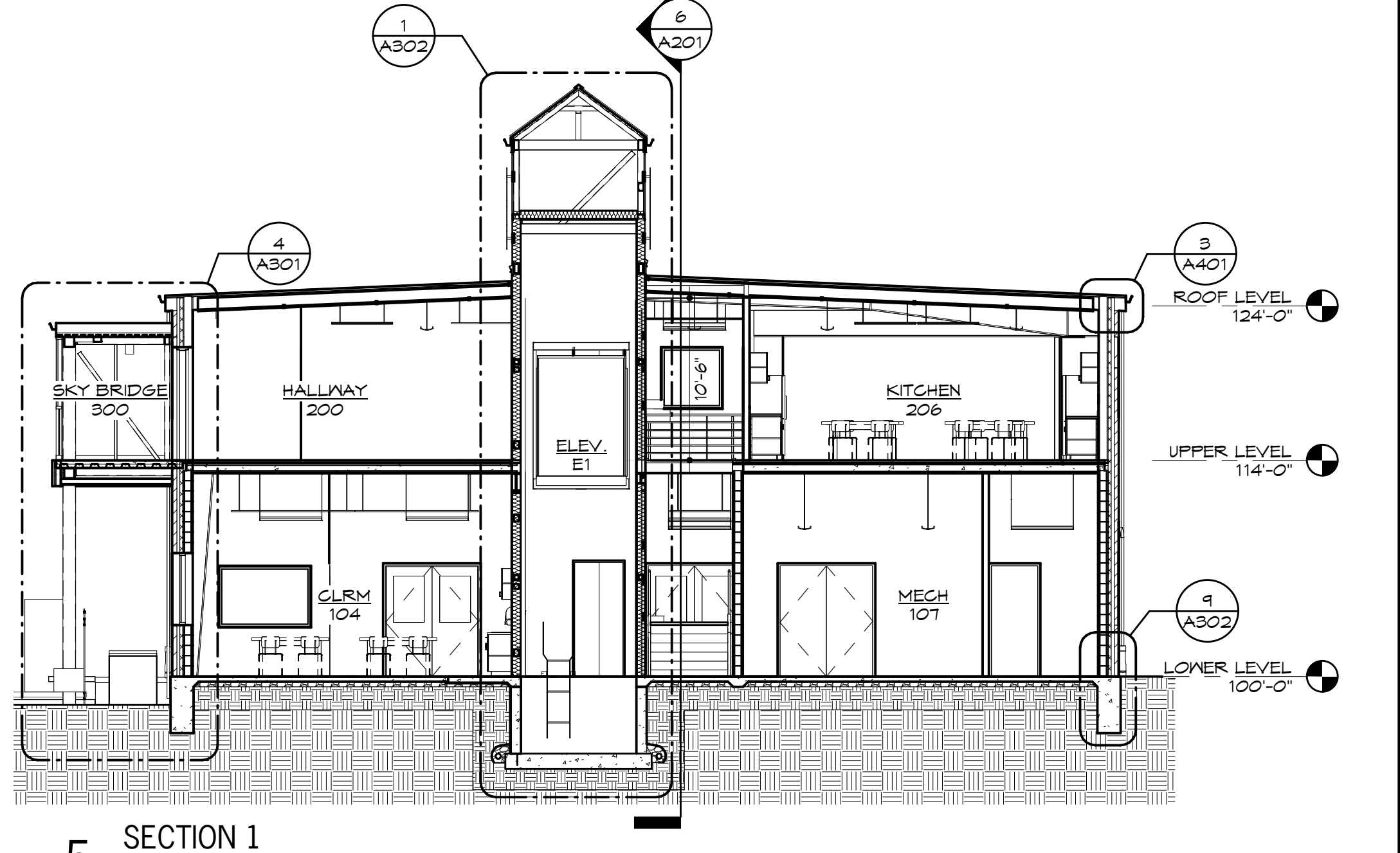
2 SOUTH ELEVATION
1/8" = 1'-0"



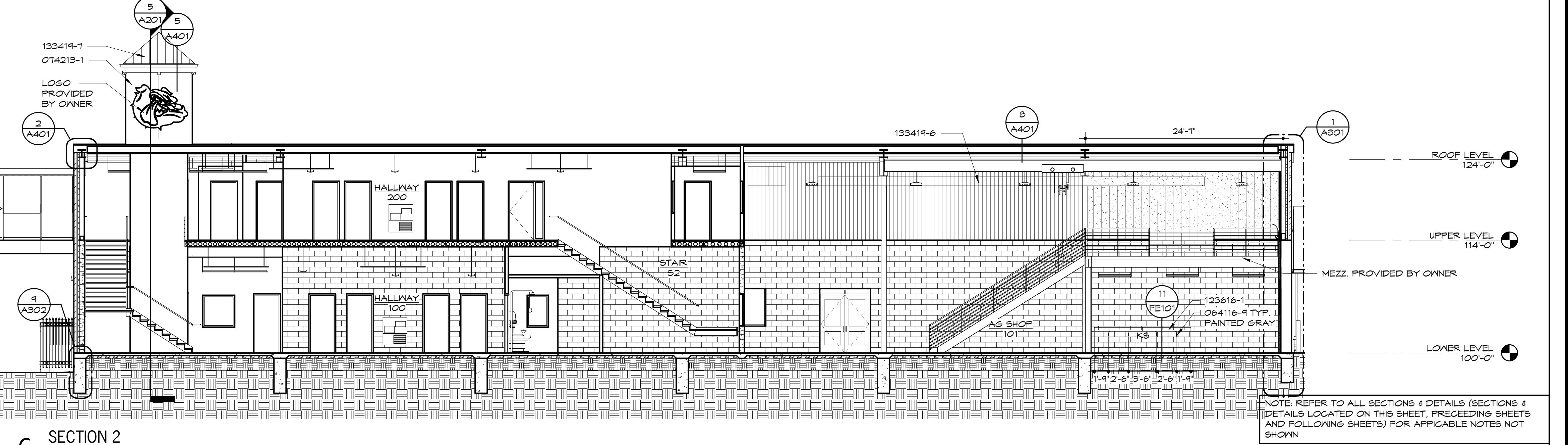
3 EAST ELEVATION
1/8" = 1'-0"



4 WEST ELEVATION
1/8" = 1'-0"



5 SECTION 1
1/8" = 1'-0"



6 SECTION 2
1/8" = 1'-0"



DATE: November 20, 2019
 REVISED DATE:



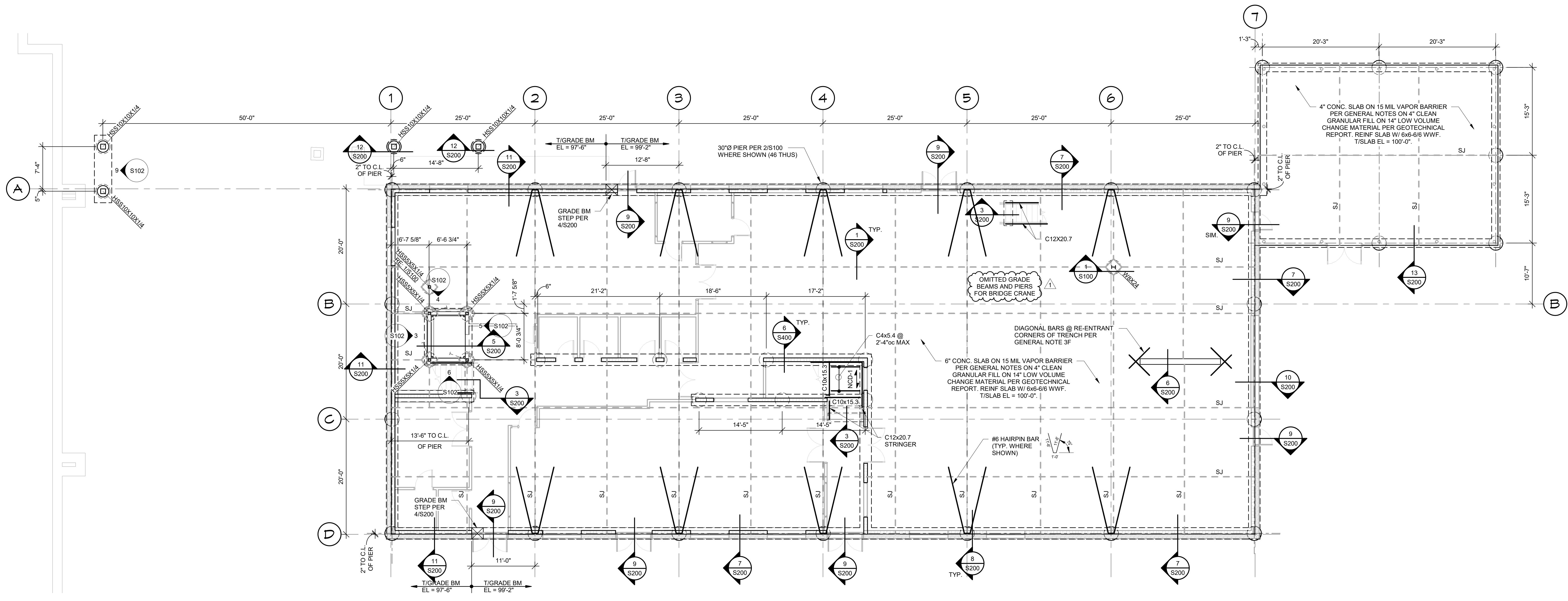
DATE: November 20, 2019
 REVISED DATE:

MARYSVILLE HIGH SCHOOL AG SHOP

SHEET CONTENTS:
 FOUNDATION AND FRAMING PLANS

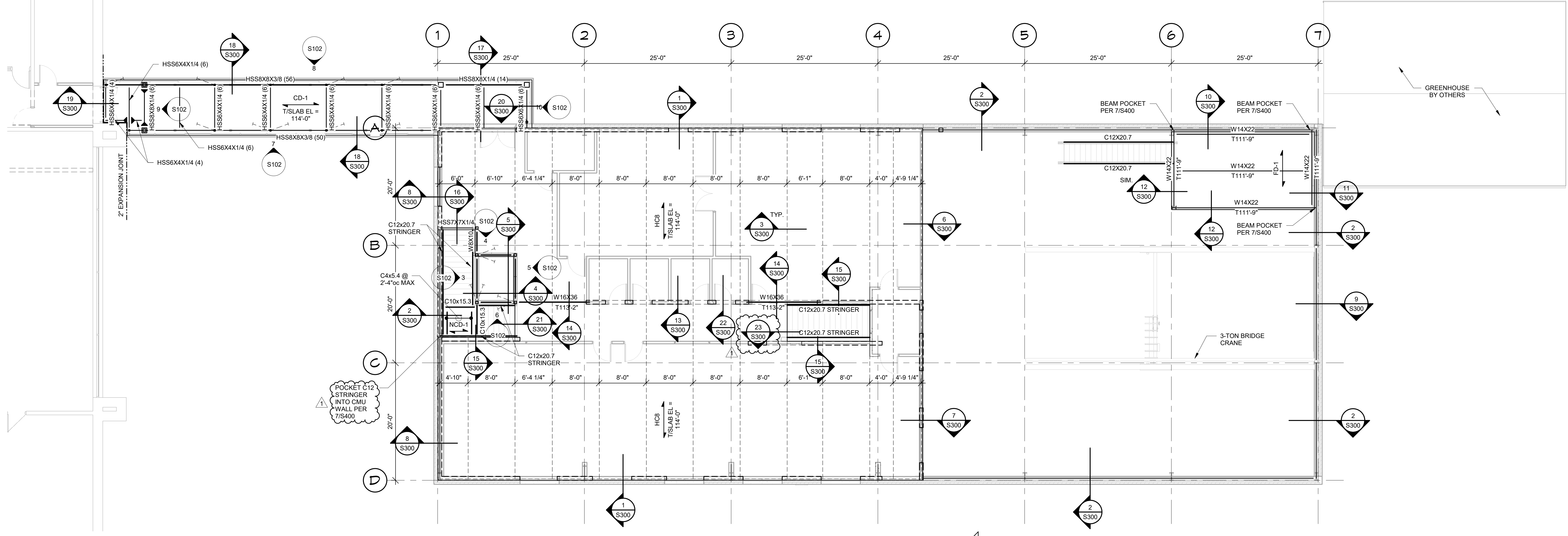
HTK PROJECT NUMBER:
 1908.03

SHEET NUMBER:
S101



1 FOUNDATION PLAN

1/8" = 1'-0"
 NOTES:
 1. REFER TO GENERAL NOTES ON SHEET S100.
 2. NCD-1 INDICATES 2 7/16" CONC. SLAB ON 9/16"x26ga METAL FORM DECK (3" TOTAL THICKNESS), REINF. SLAB W/ 6x6-6/6 WWF.



2 UPPER LEVEL FRAMING PLAN

1/8" = 1'-0"
 NOTES:
 1. REFER TO GENERAL NOTES ON SHEET S100.
 2. HCB INDICATES 8" HOLLOW CORE SLABS W/ 2" TOPPING REINF W/ 6x6-6/6 WWF.
 3. CD-1 INDICATES 3" CONC. SLAB ON 3"x18ga GALV. COMPOSITE METAL DECK (6" TOTAL THICKNESS), REINF. SLAB W/ 6x6-6/6 WWF. 11"
 4. FD-1 INDICATES CONTINUOUS 12 GAGE BENT PANS @ 11"oc. 11"
 5. NCD-1 INDICATES 2 7/16" CONC. SLAB ON 9/16"x26ga METAL FORM DECK (3" TOTAL THICKNESS), REINF. SLAB W/ 6x6-6/6 WWF.
 6. HSS6x4x1/4 (6)
 QUANTITY OF 3/4"x4 1/2" HEADED STUDS
 BEAM SIZE

NOTE: ALL TUBE STEEL FRAMING AND CONNECTIONS ASSOCIATED WITH THE BRIDGE, INCLUDING THE COLUMNS, AS WELL AS ALL STEEL FRAMING ASSOCIATED WITH THE MEZZANINE IN THE SOUTHEAST CORNER, AND ALL STEEL FRAMING ASSOCIATED WITH THE ELEVATOR TOWER WILL BE FABRICATED AND SHIPPED TO THE SITE BY THE OWNER'S REPRESENTATIVE. MATERIAL AND FABRICATION OF THESE ITEMS IS NOT IN CONTRACT. CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING THESE ITEMS.



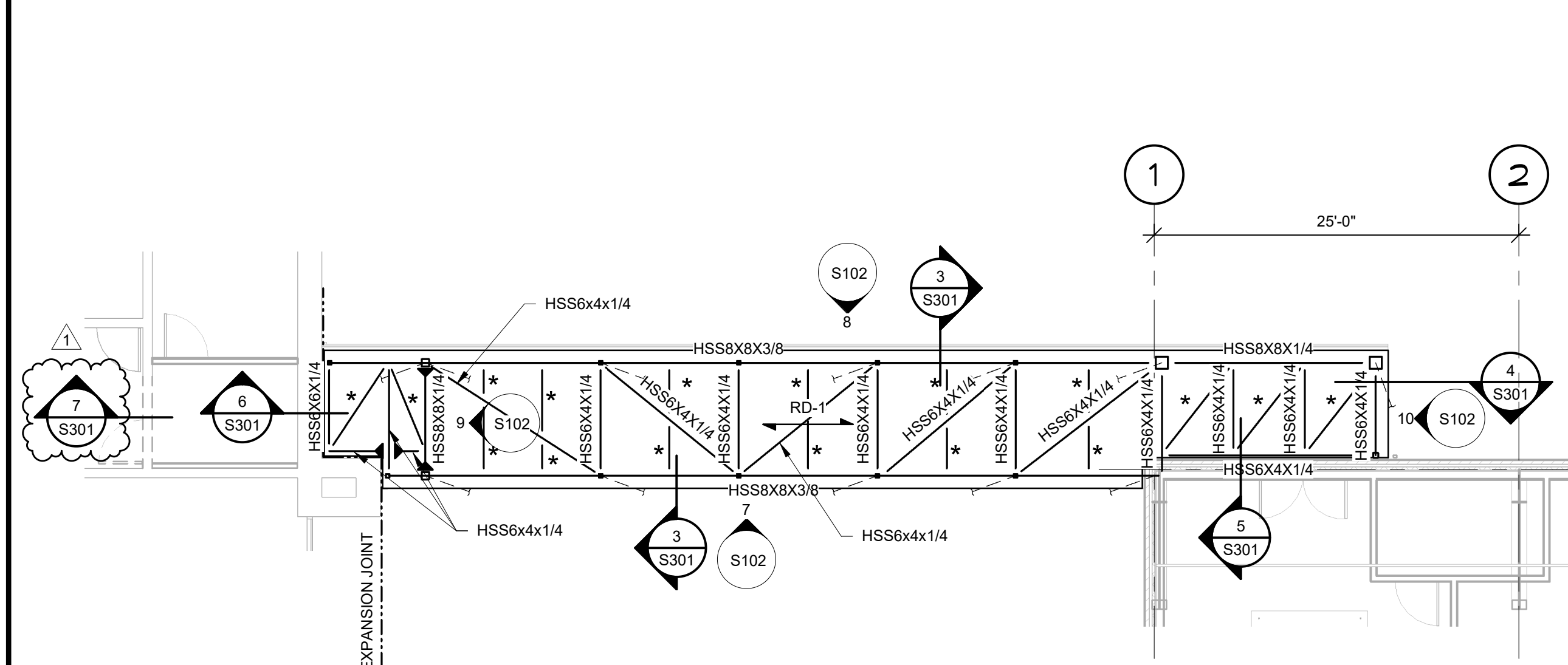
DATE: November 20, 2019
REVISED DATE:

MARYSVILLE HIGH SCHOOL AG SHOP

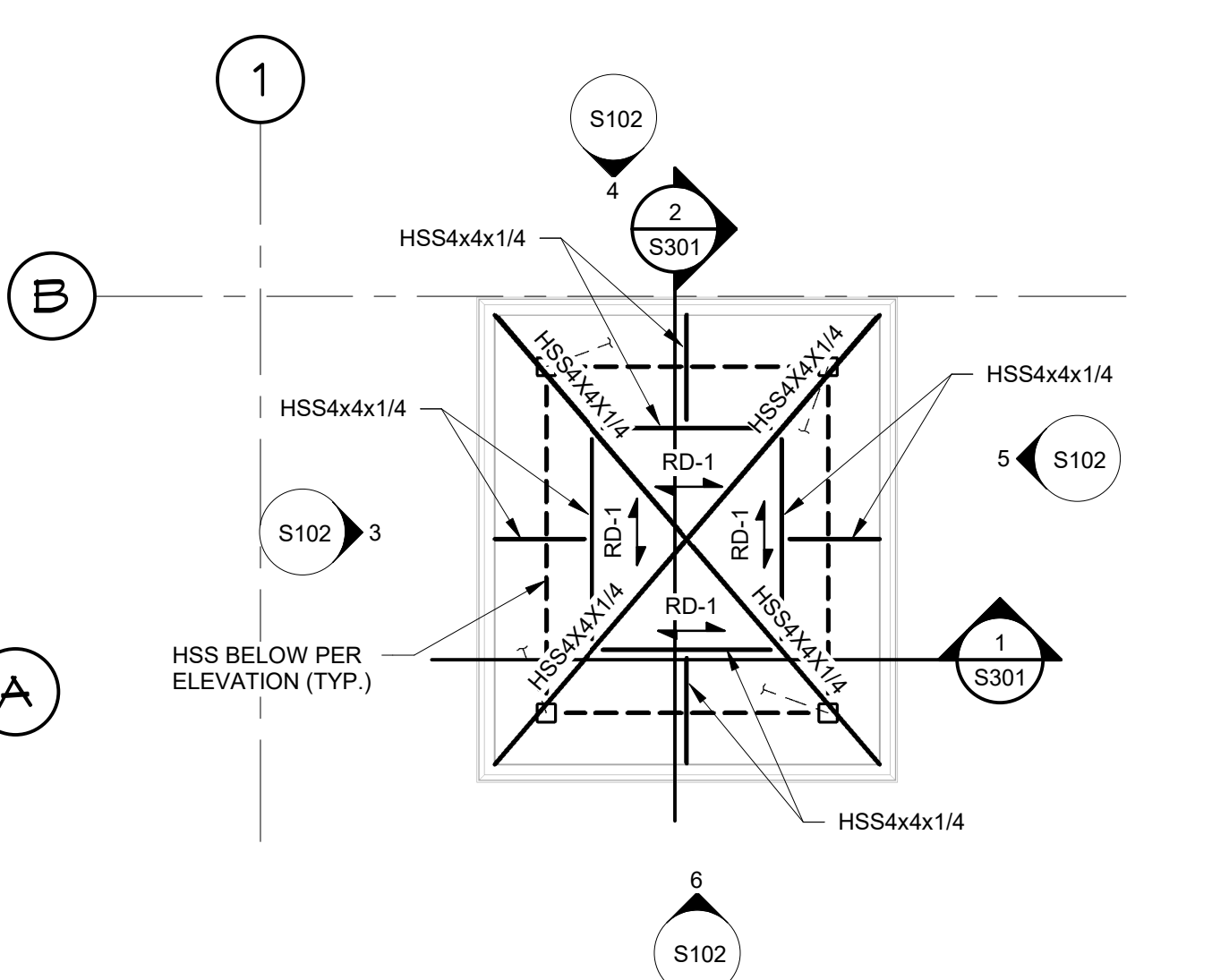
SHEET CONTENTS:
● BRIDGE AND ELEVATOR ROOF FRAMING PLANS

HTK PROJECT NUMBER:
● 1908.03

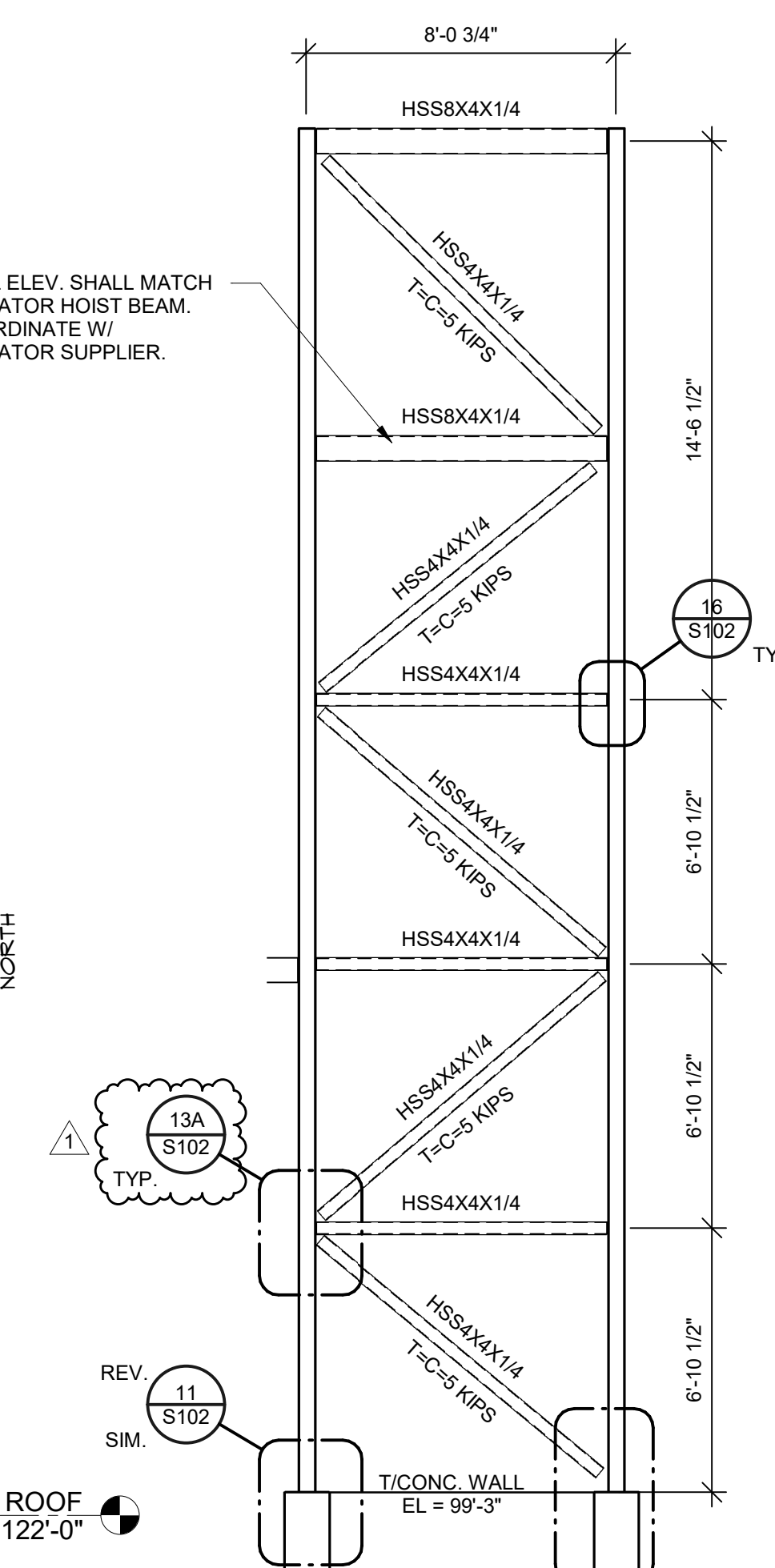
SHEET NUMBER:
S102



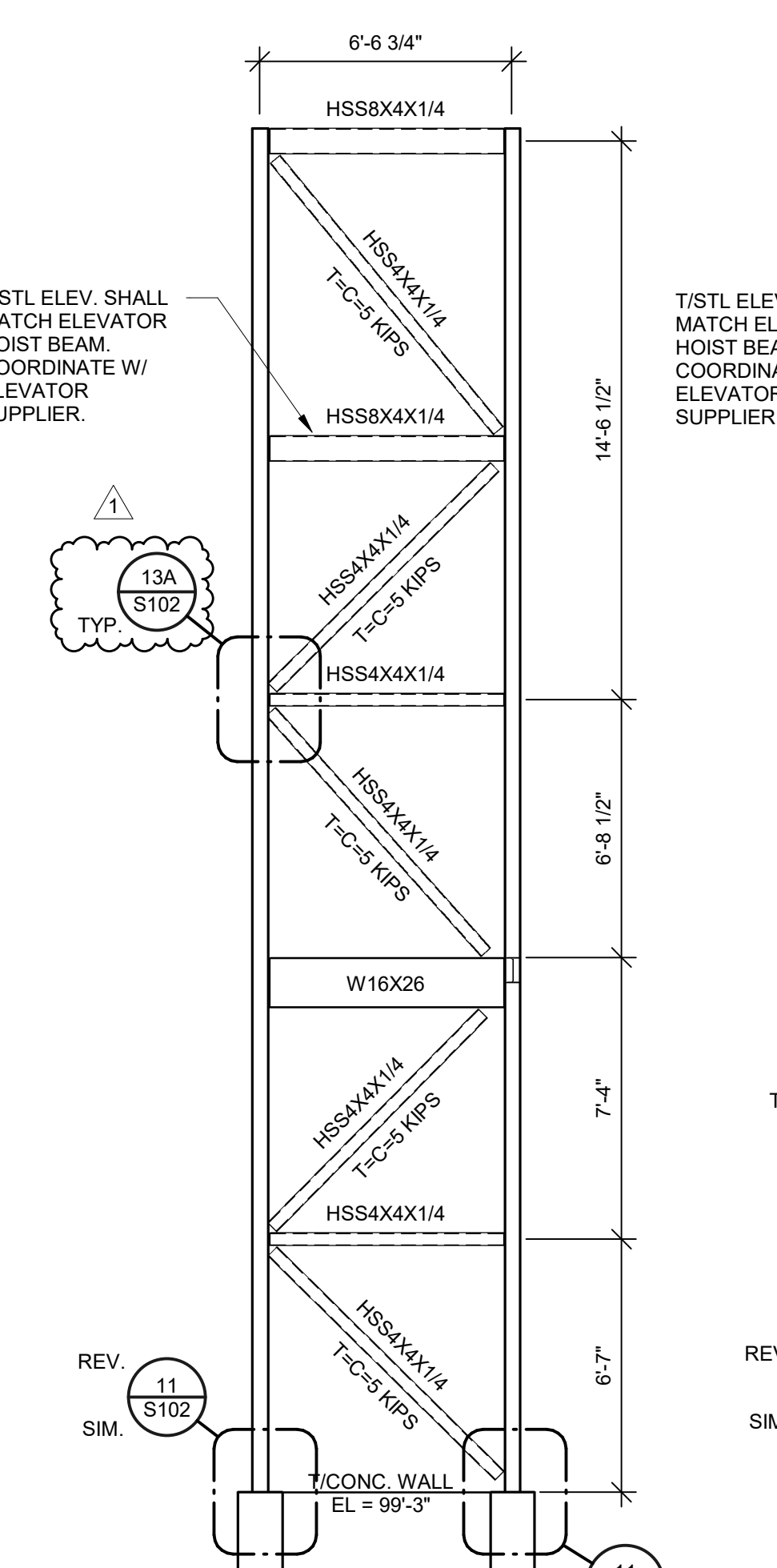
1 BRIDGE ROOF FRAMING PLAN
1/8" = 1'-0"
NOTES:
1. REFER TO GENERAL NOTES ON SHEET S100.
2. RD-1 INDICATES 1 1/2"x22ga GALV. WIDE RIB METAL ROOF DECK.
3. * INDICATES HSS4x4x1/4



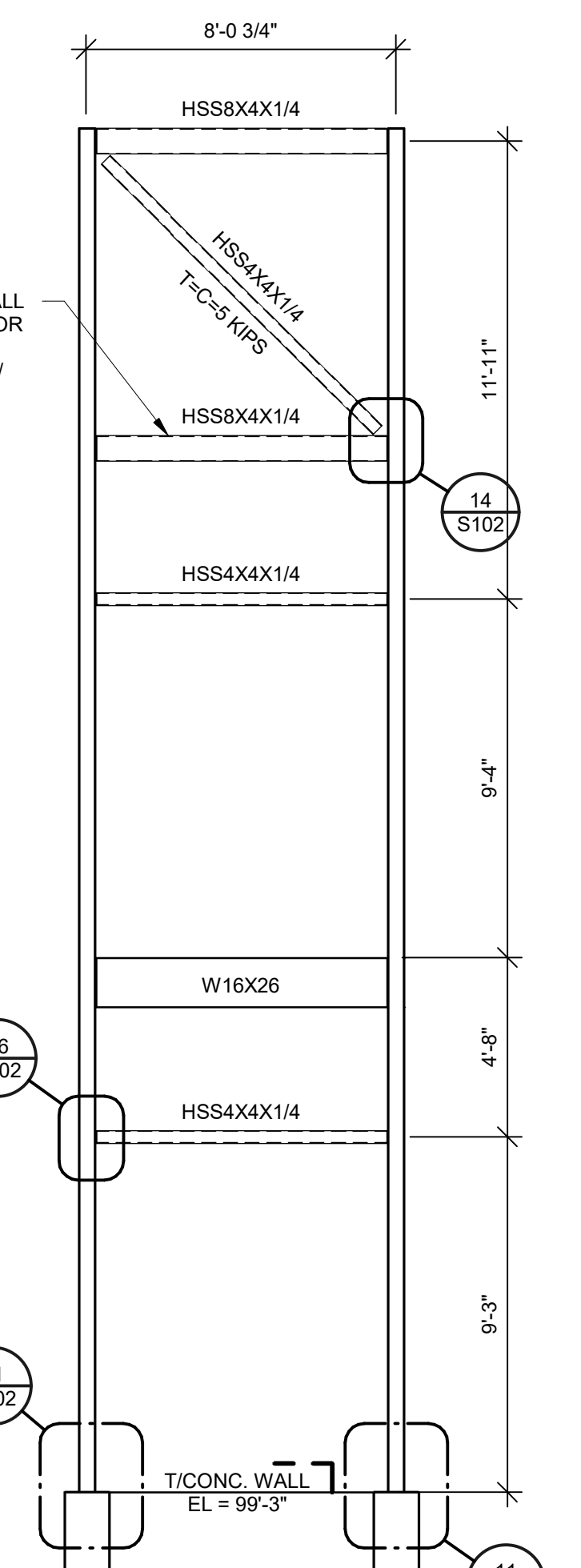
2 ELEVATOR ROOF FRAMING PLAN
1/4" = 1'-0"
NOTES:
1. REFER TO GENERAL NOTES ON SHEET S100.
2. RD-1 INDICATES 1 1/2"x22ga GALV. WIDE RIB METAL ROOF DECK.



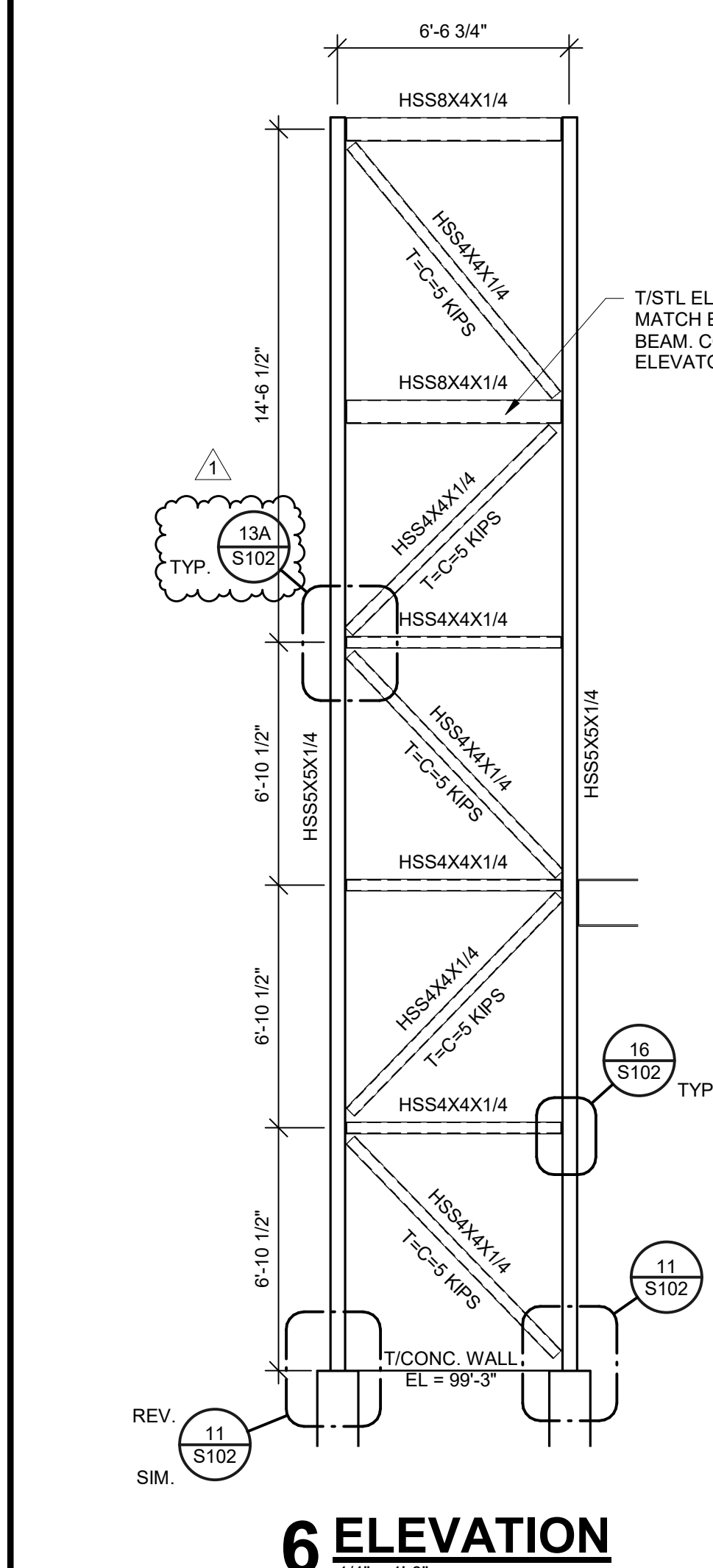
3 ELEVATION
1/4" = 1'-0"



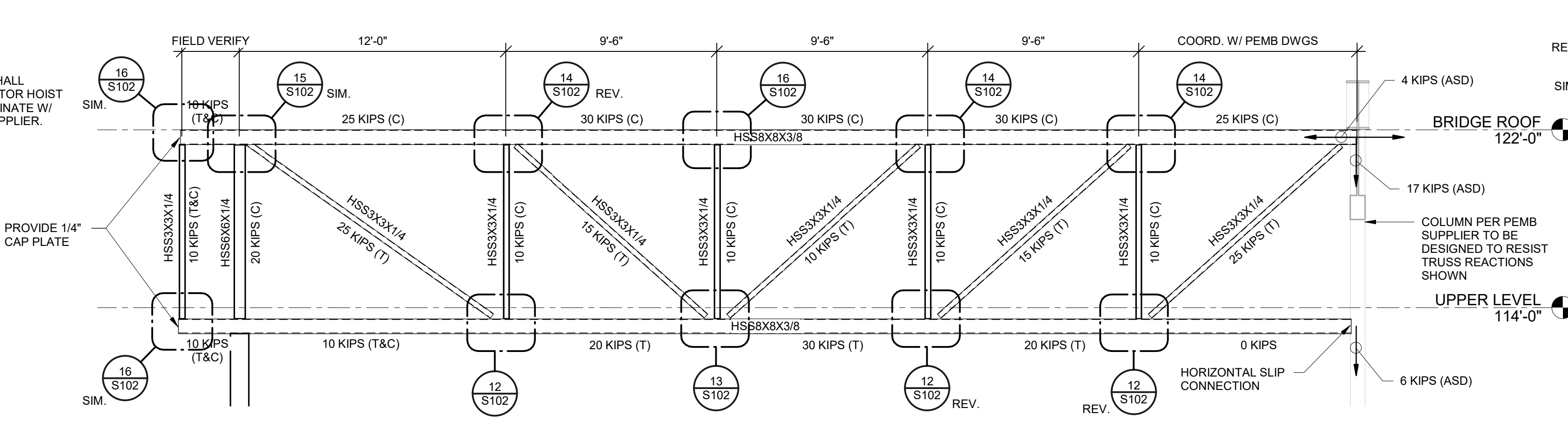
4 ELEVATION
1/4" = 1'-0"



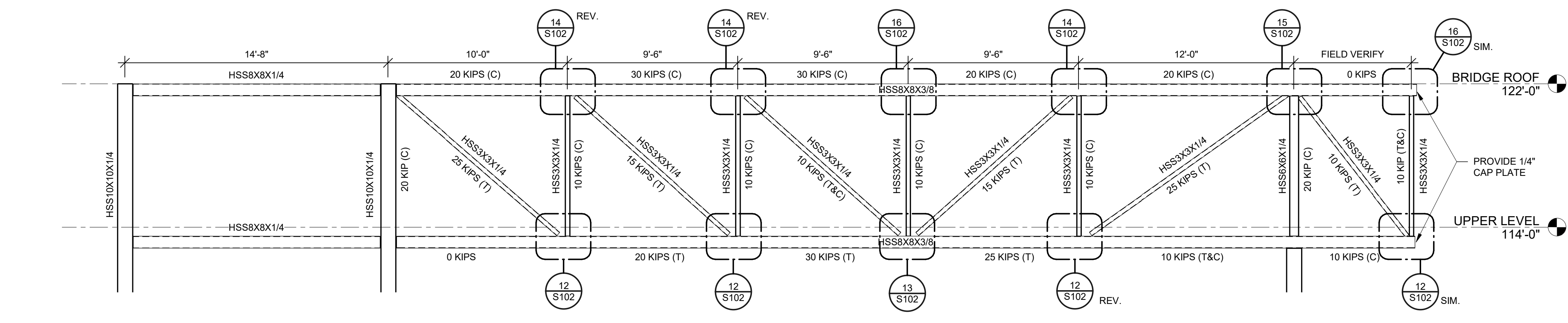
5 ELEVATION
1/4" = 1'-0"



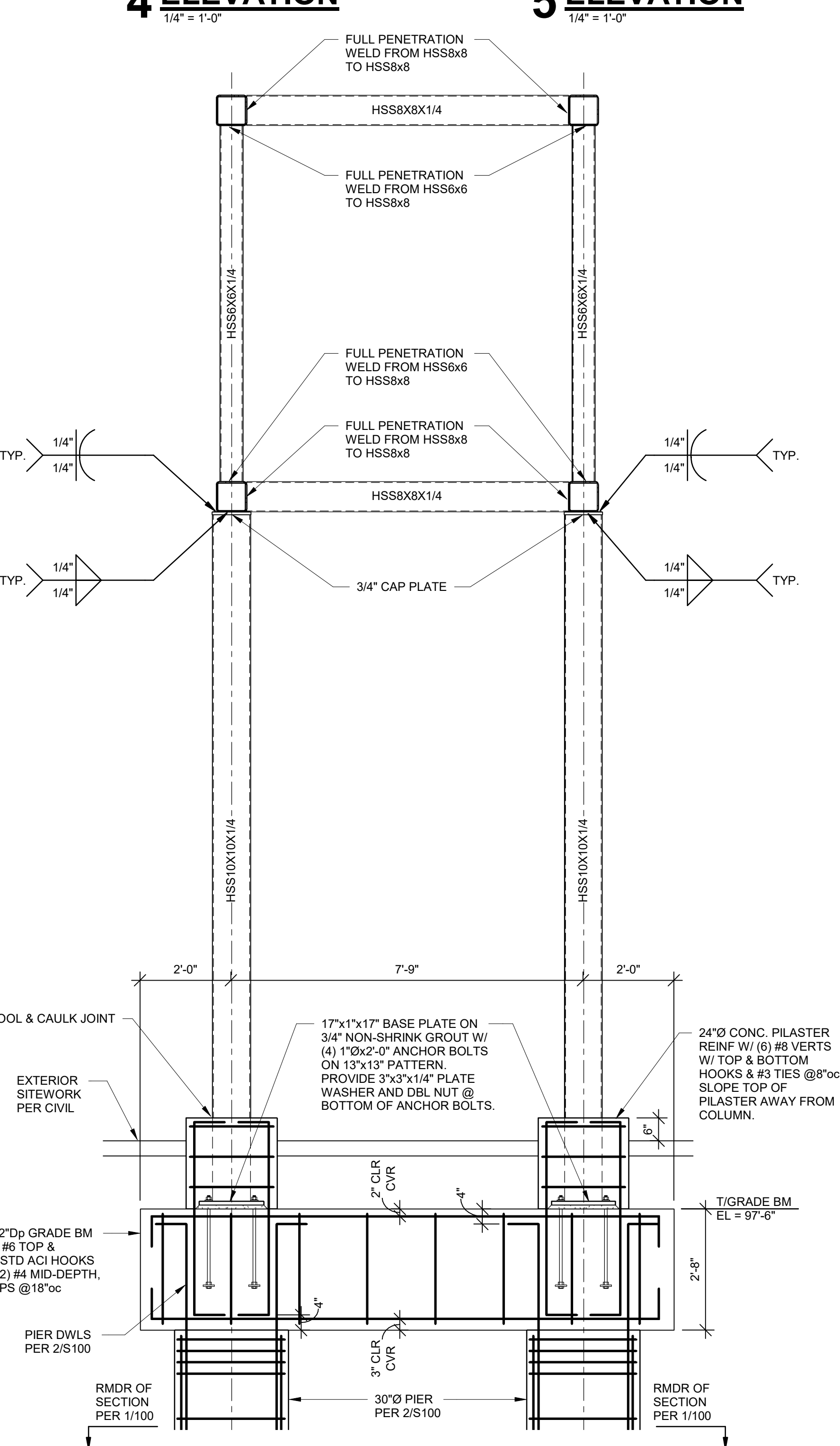
6 ELEVATION
1/4" = 1'-0"



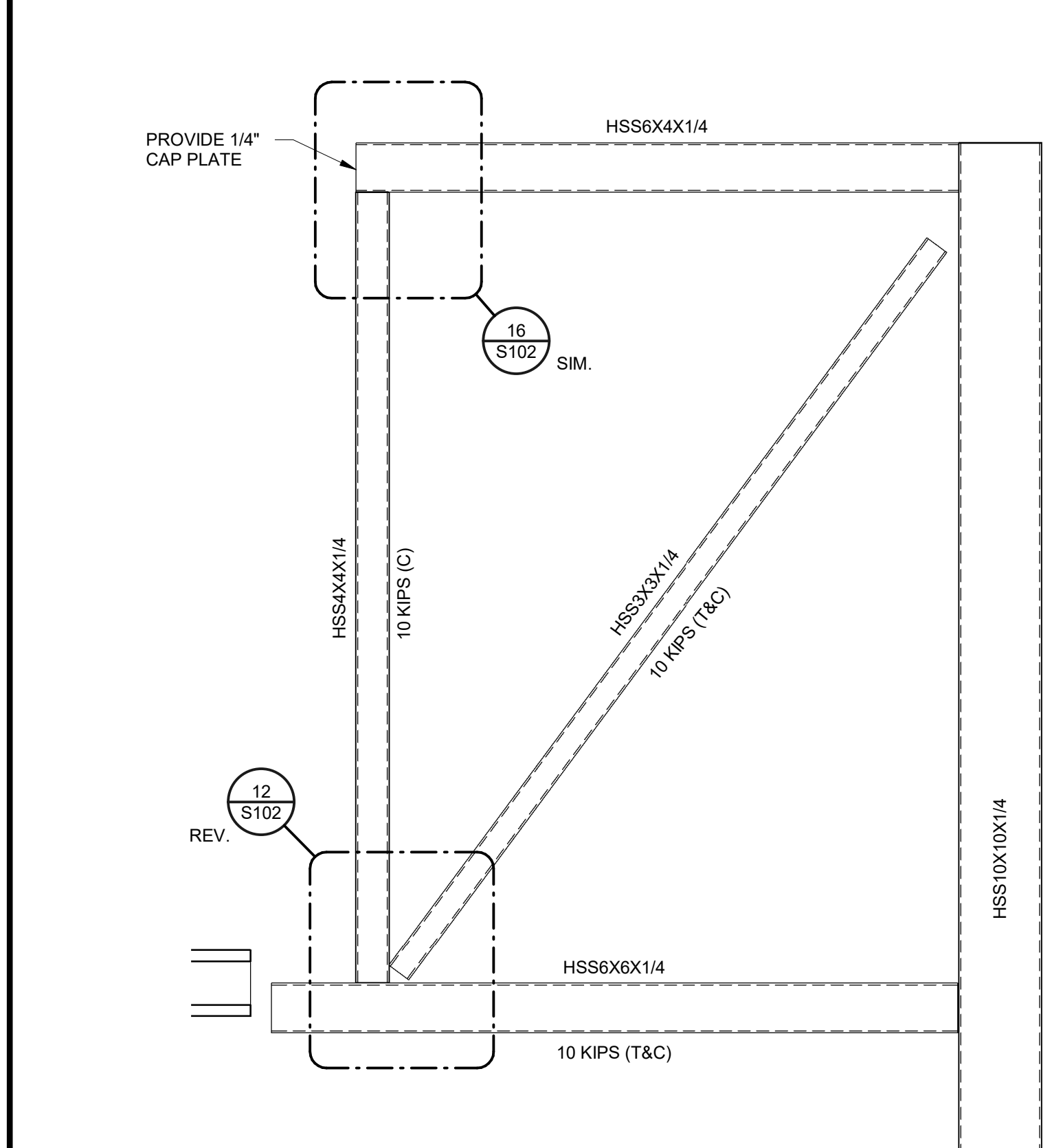
7 ELEVATION
1/4" = 1'-0"



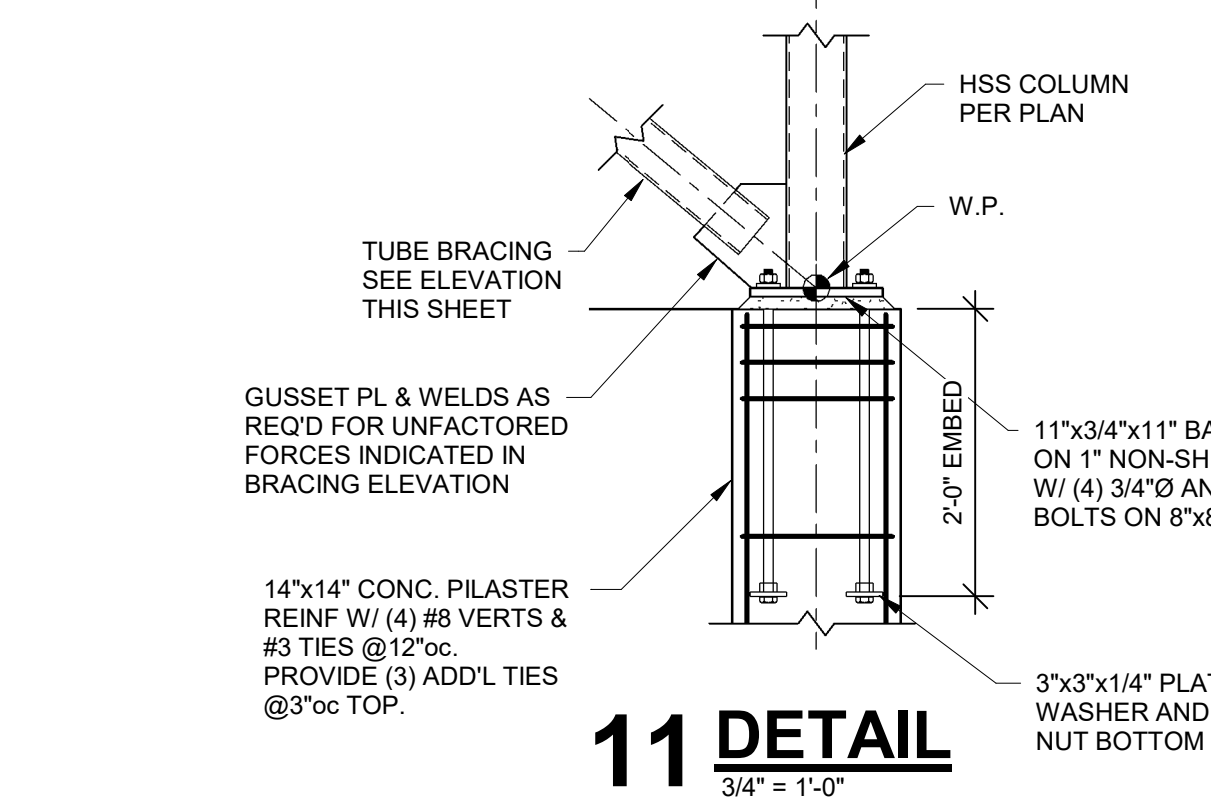
8 ELEVATION
1/4" = 1'-0"



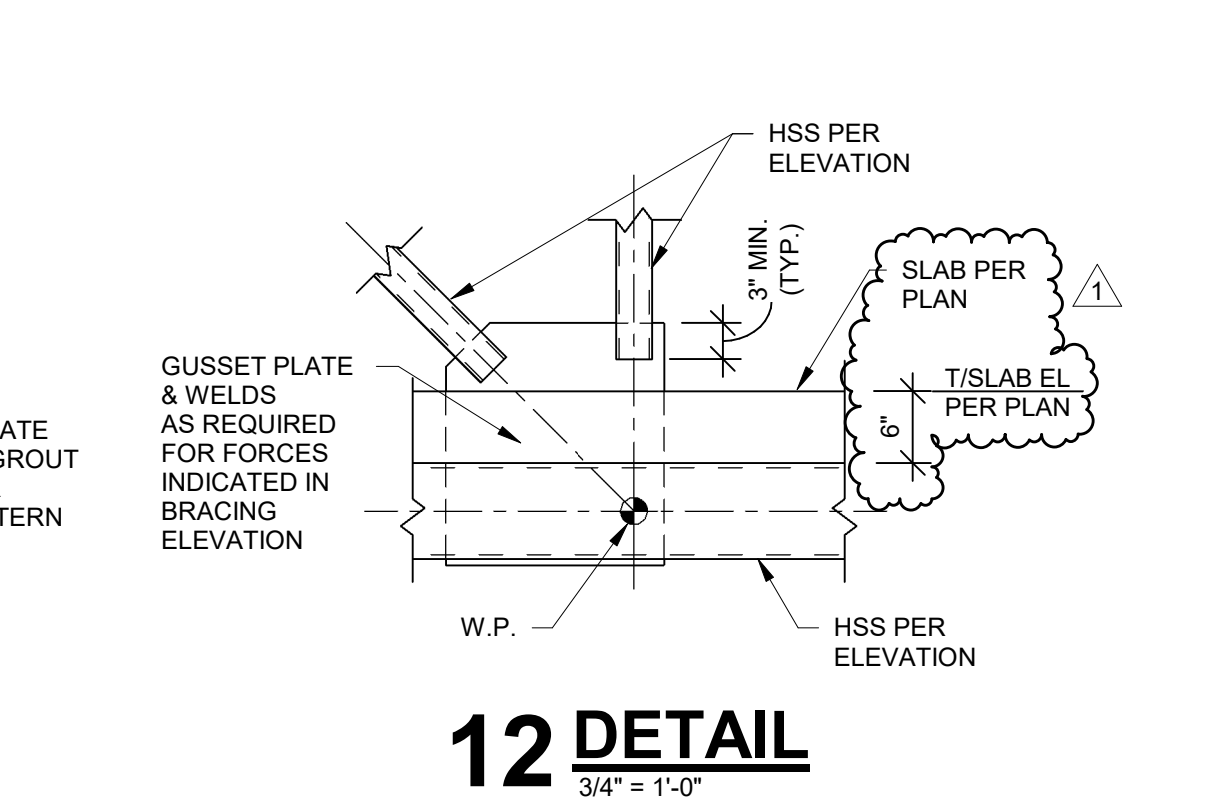
9 ELEVATION
1/2" = 1'-0"



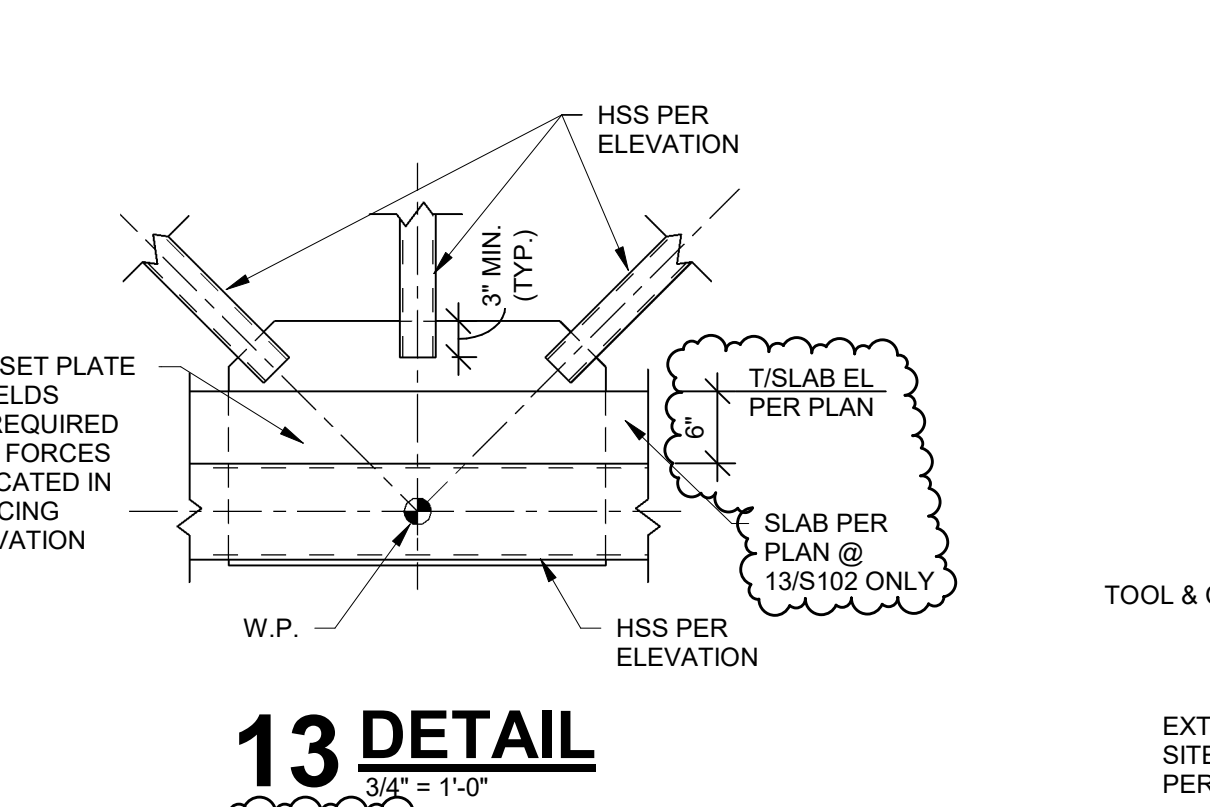
10 ELEVATION
3/4" = 1'-0"



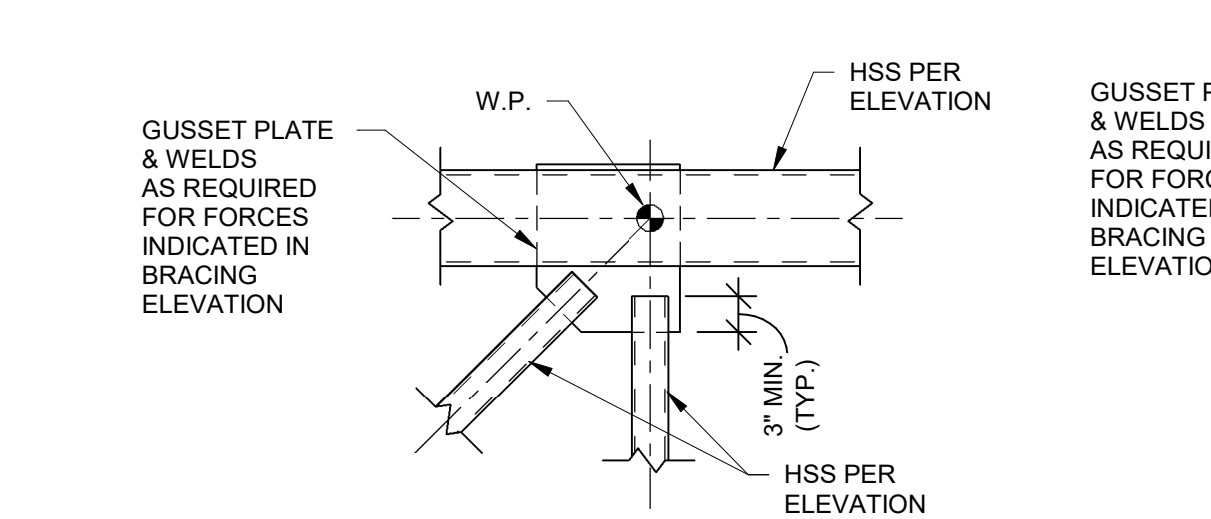
11 DETAIL
3/4" = 1'-0"



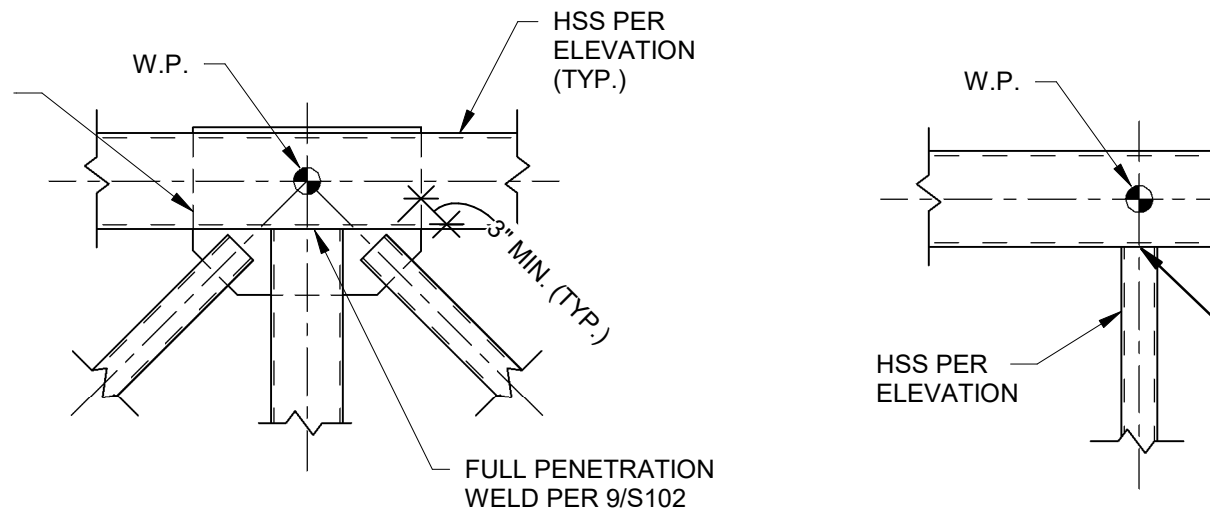
12 DETAIL
3/4" = 1'-0"



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



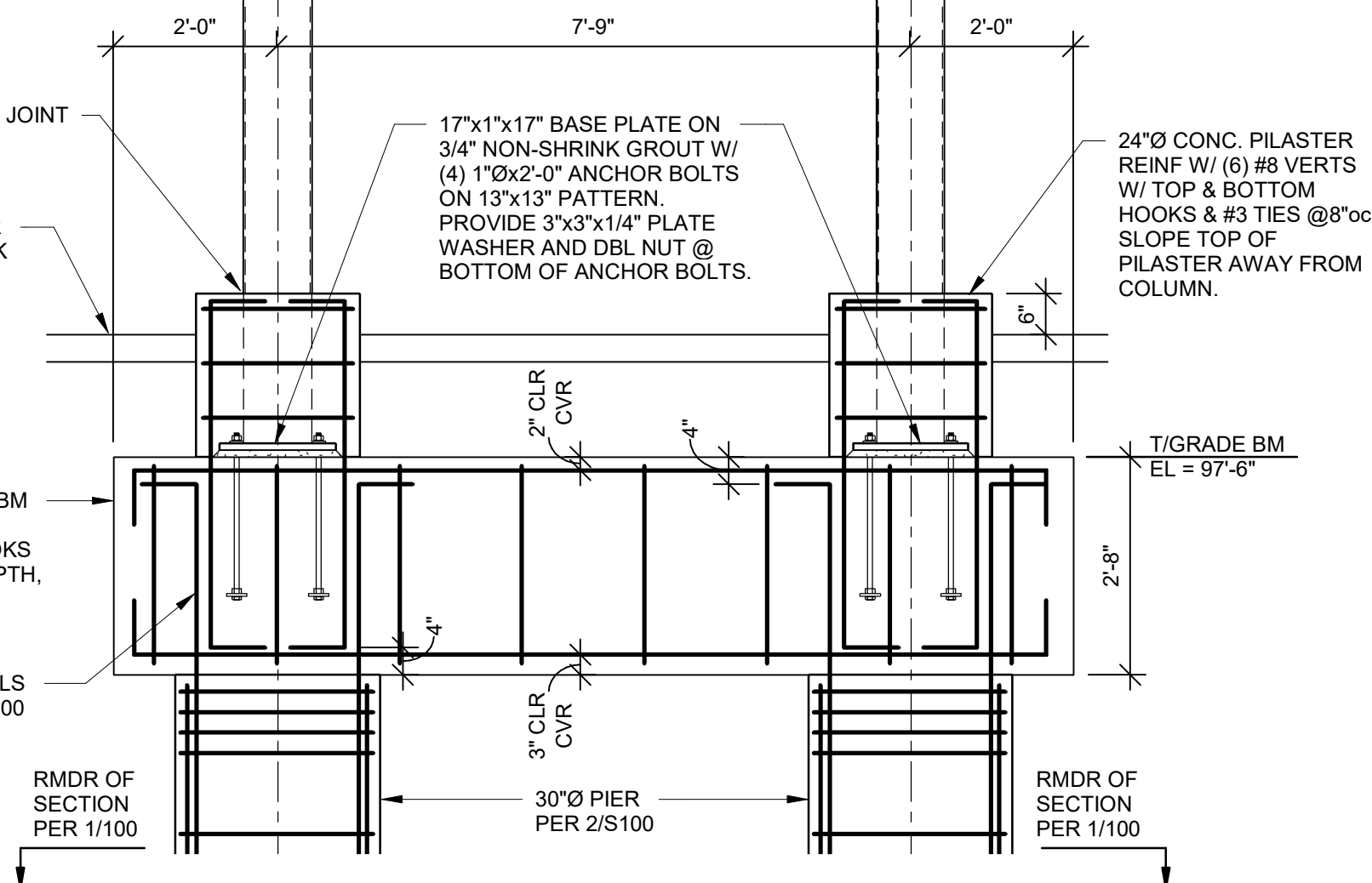
14 DETAIL
3/4" = 1'-0"



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



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



13A



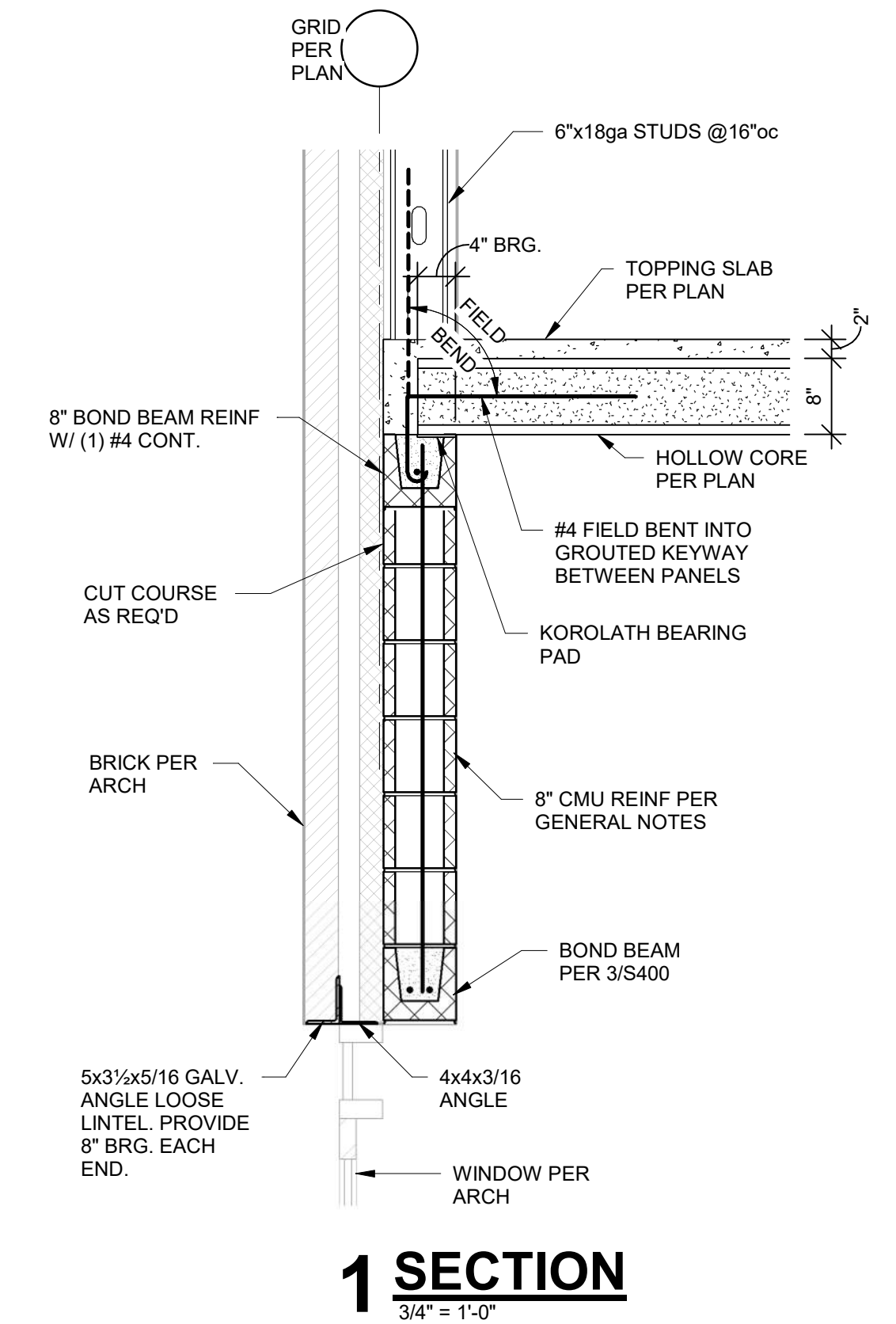
DATE: November 20, 2019

REVISED DATE:

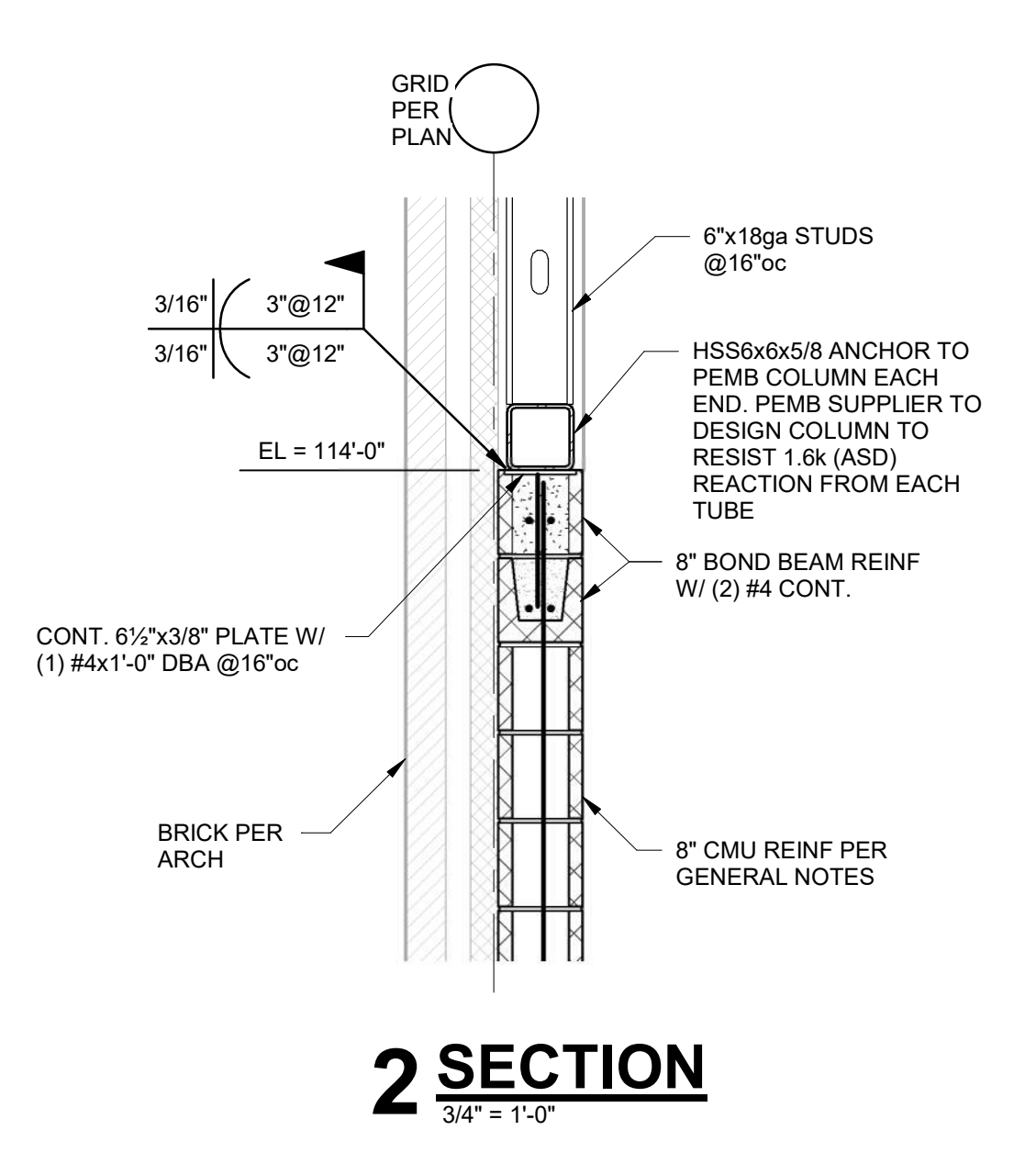
SHEET CONTENTS:
 • FRAMING SECTIONS

HTK PROJECT NUMBER:
 • 1908.03

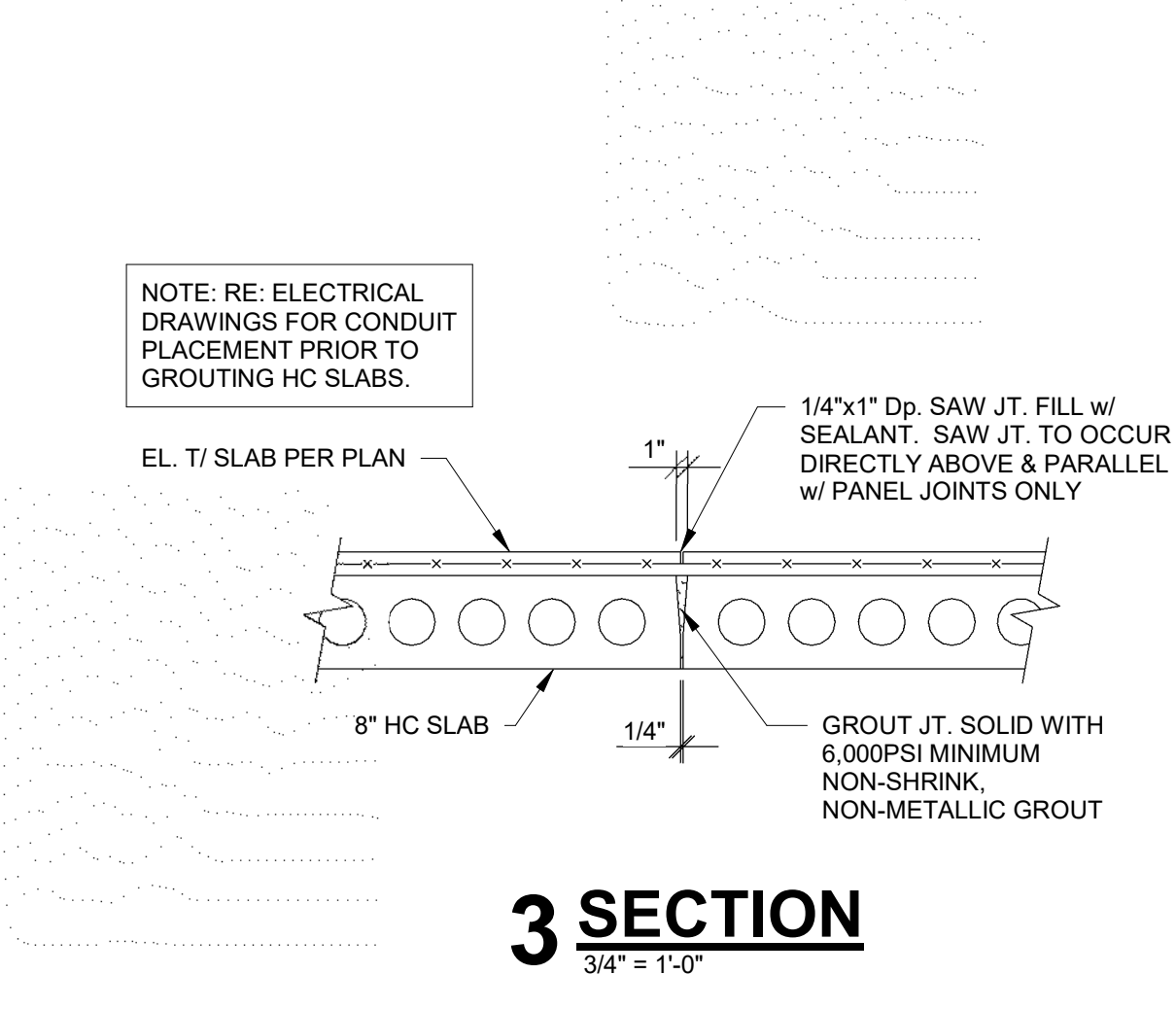
SHEET NUMBER:
S300



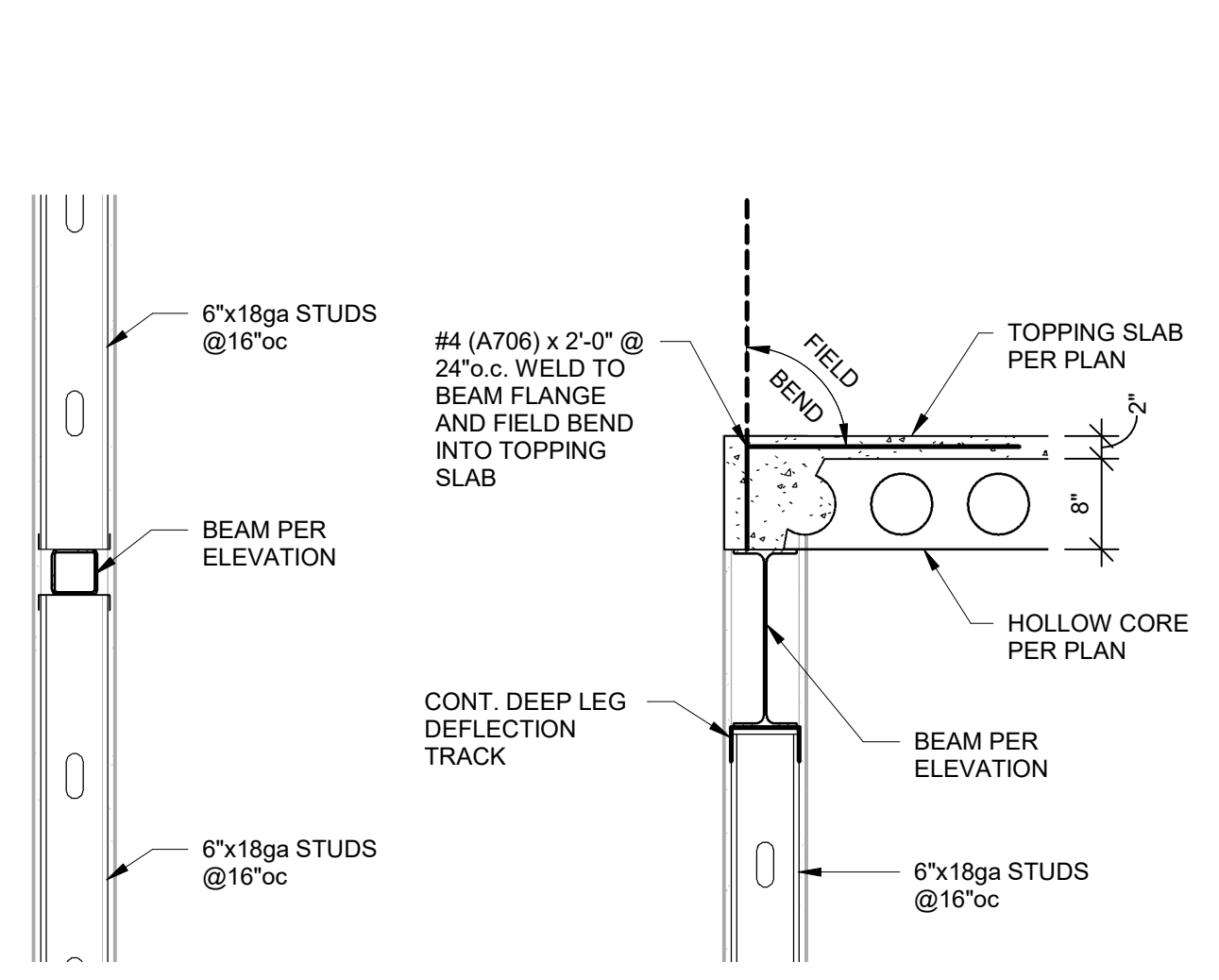
1 SECTION
3/4" = 1'-0"



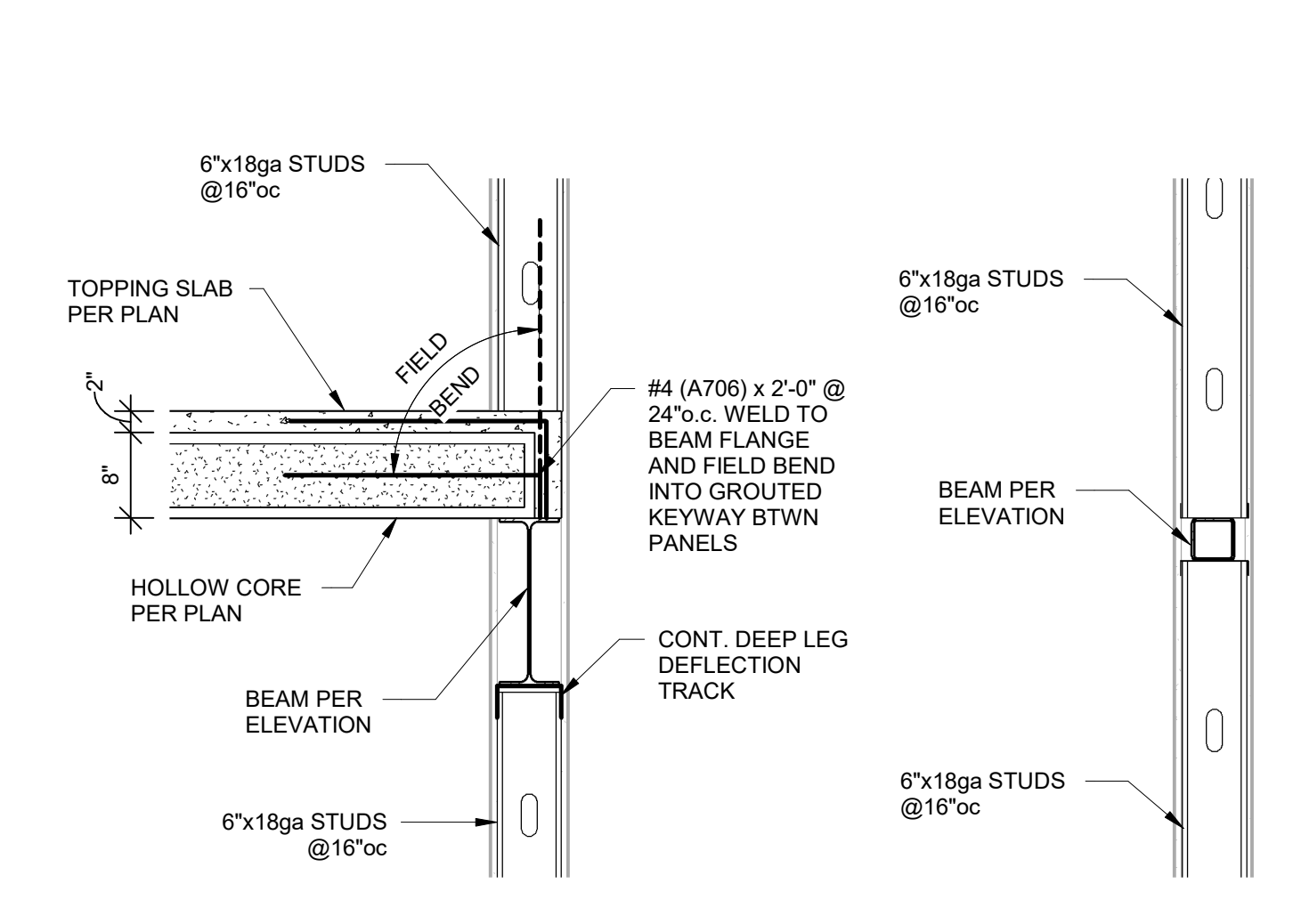
2 SECTION
3/4" = 1'-0"



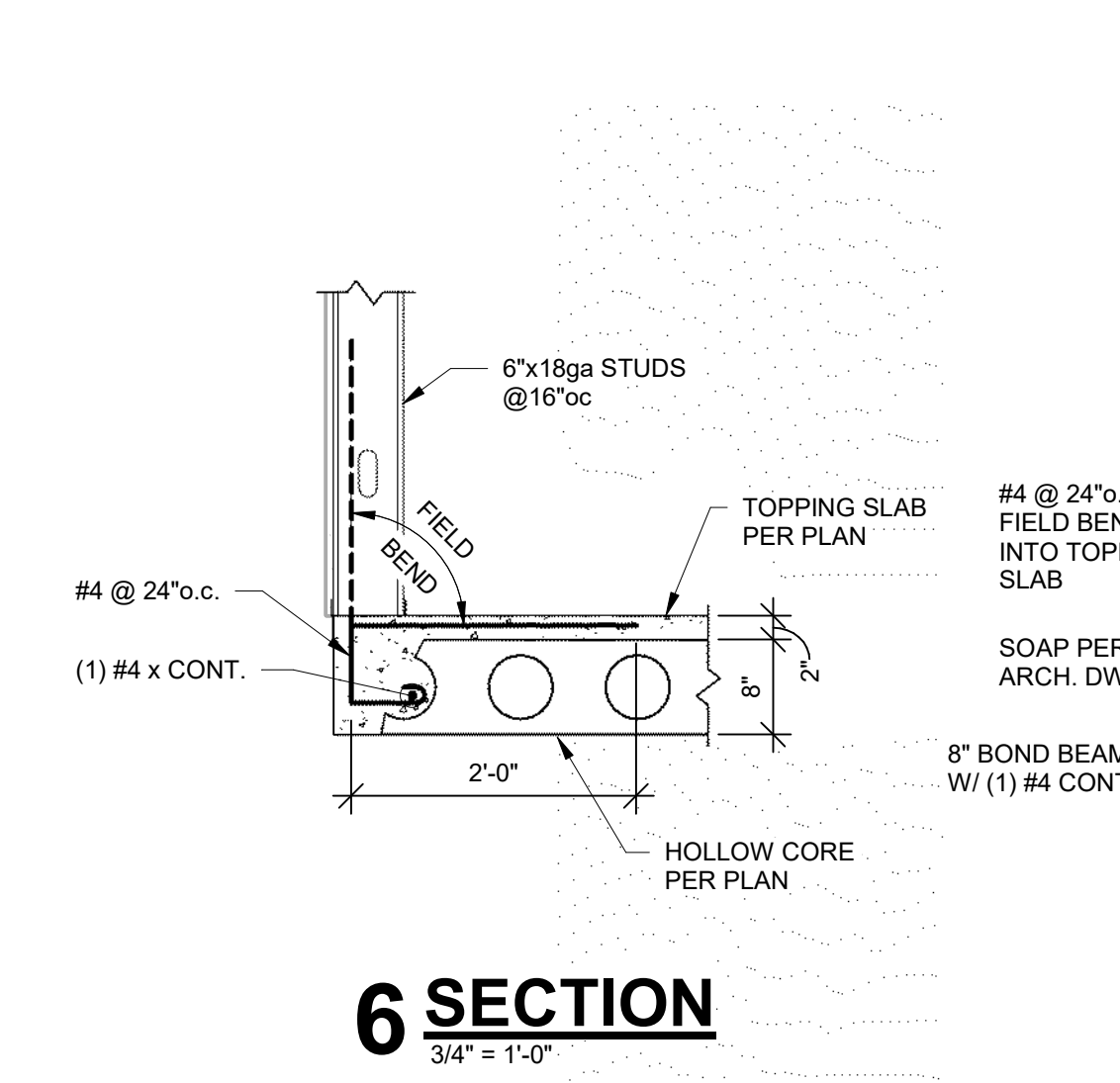
3 SECTION
3/4" = 1'-0"



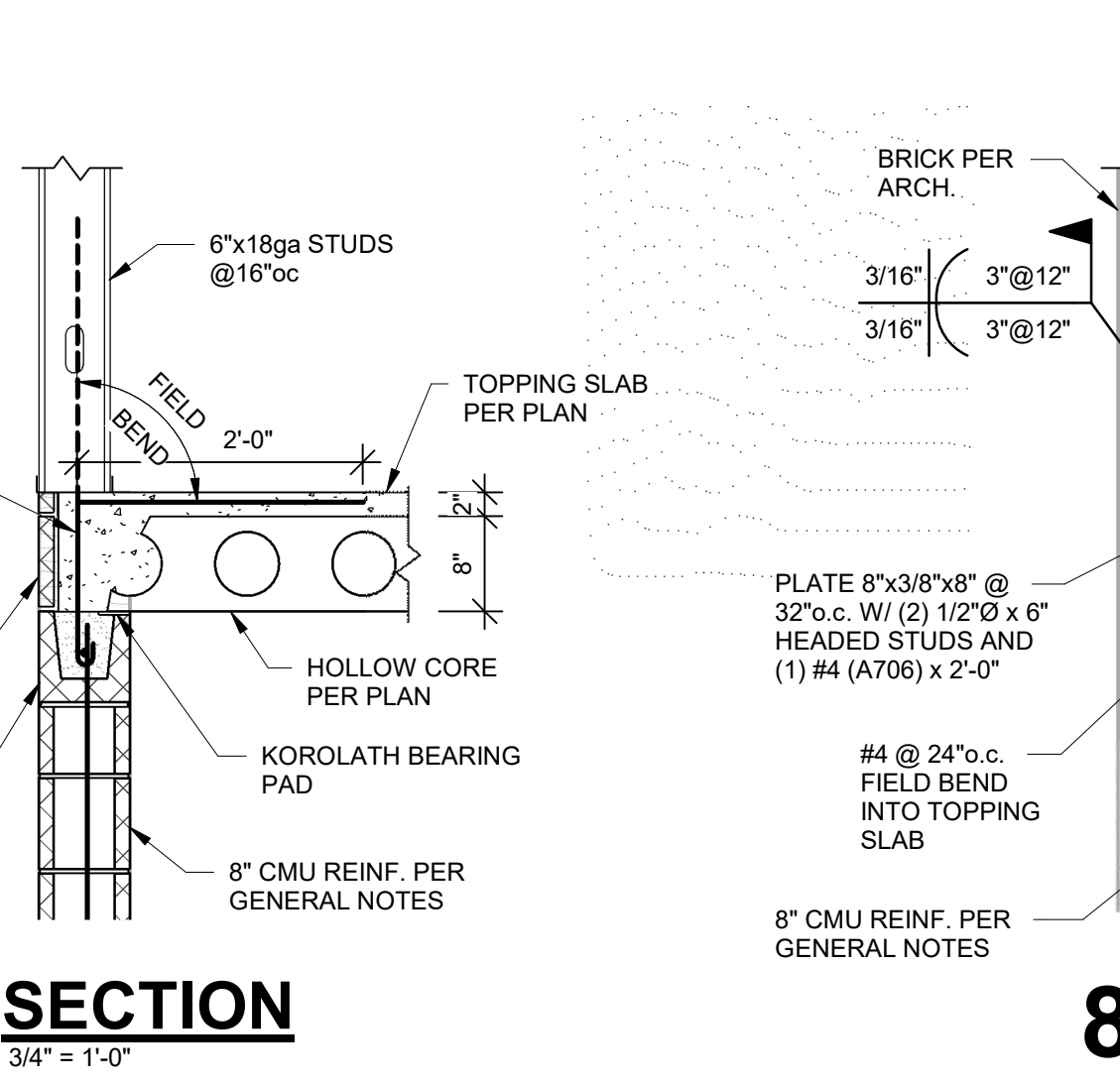
4 SECTION
3/4" = 1'-0"



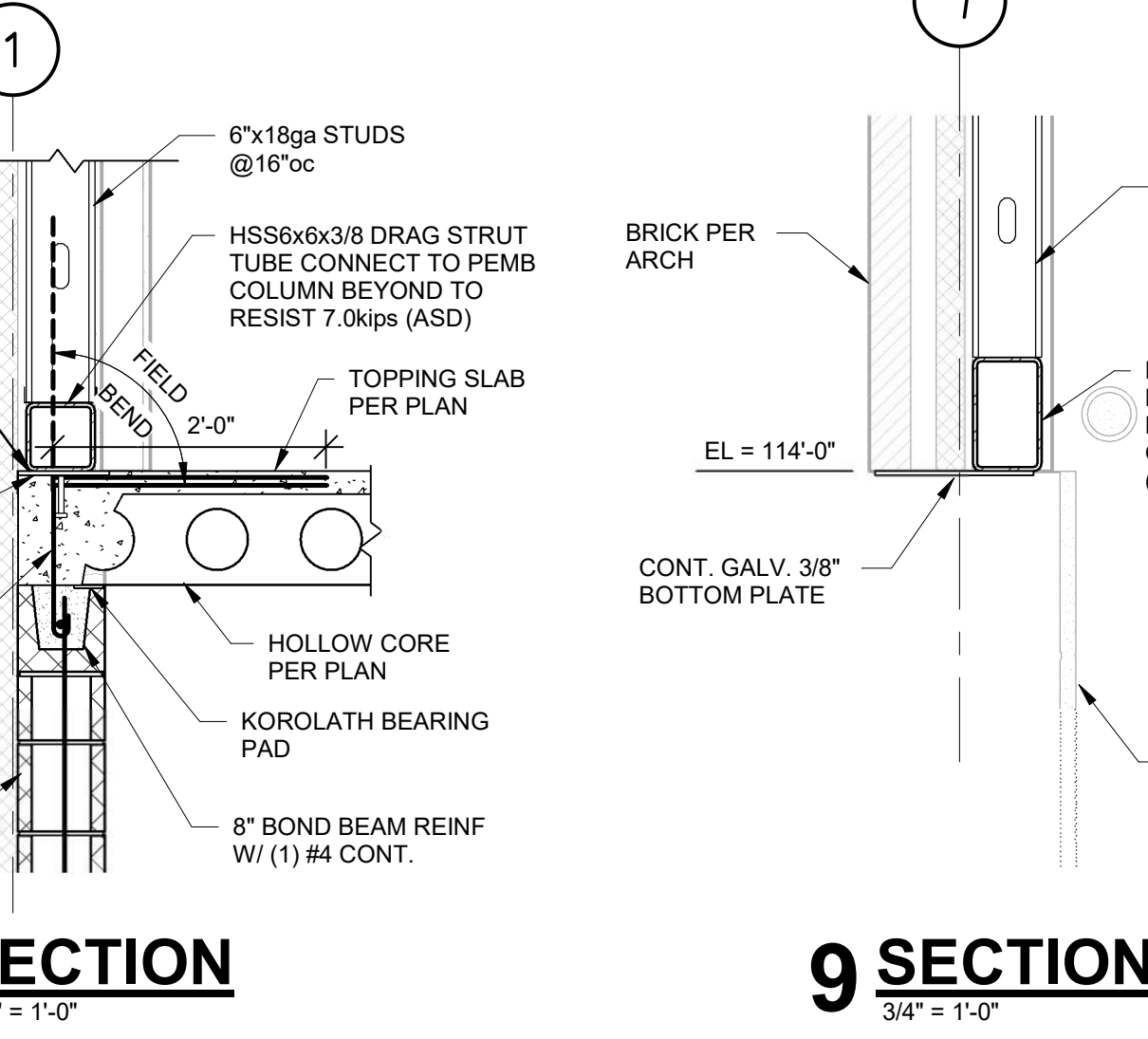
5 SECTION
3/4" = 1'-0"



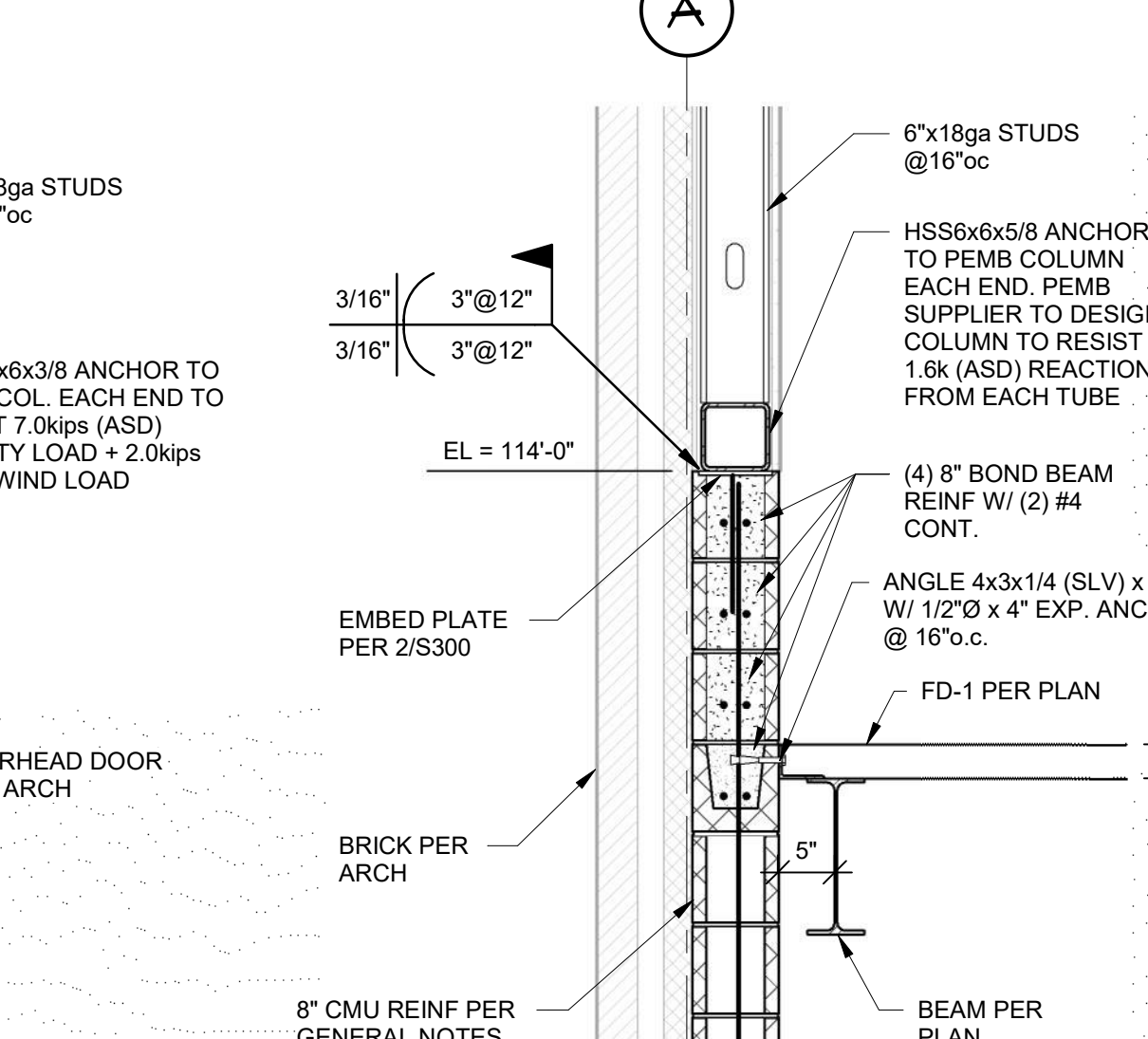
6 SECTION
3/4" = 1'-0"



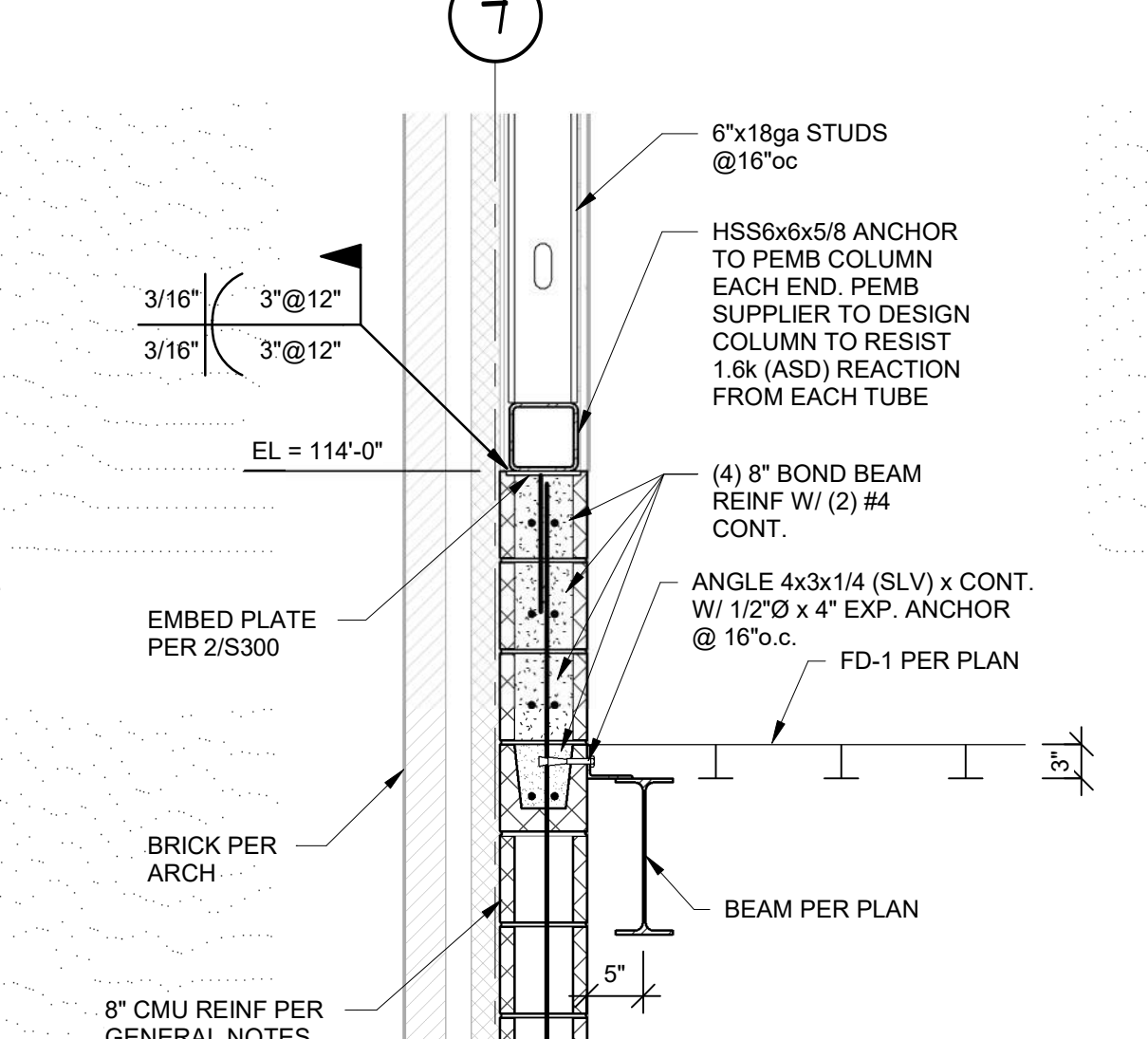
7 SECTION
3/4" = 1'-0"



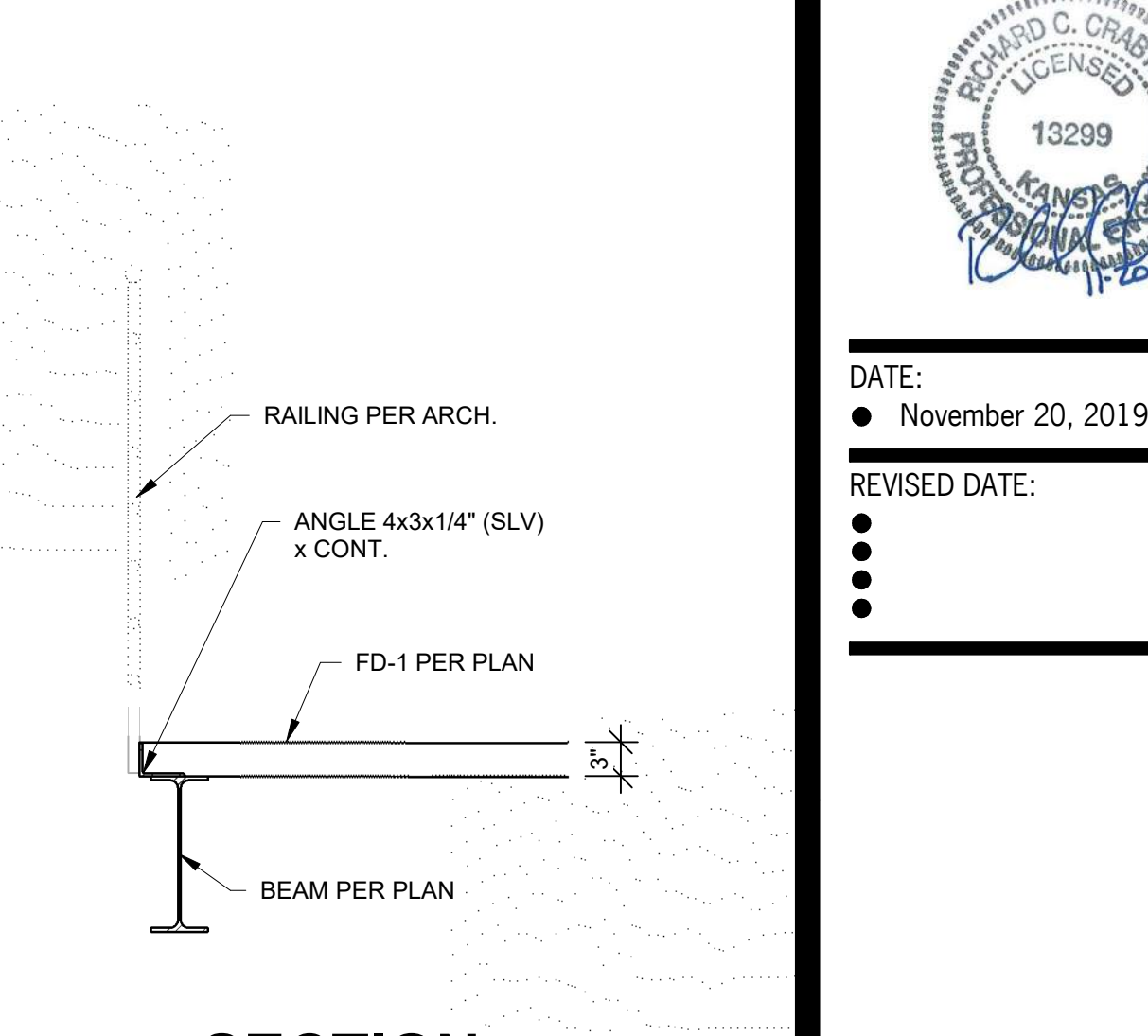
8 SECTION
3/4" = 1'-0"



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

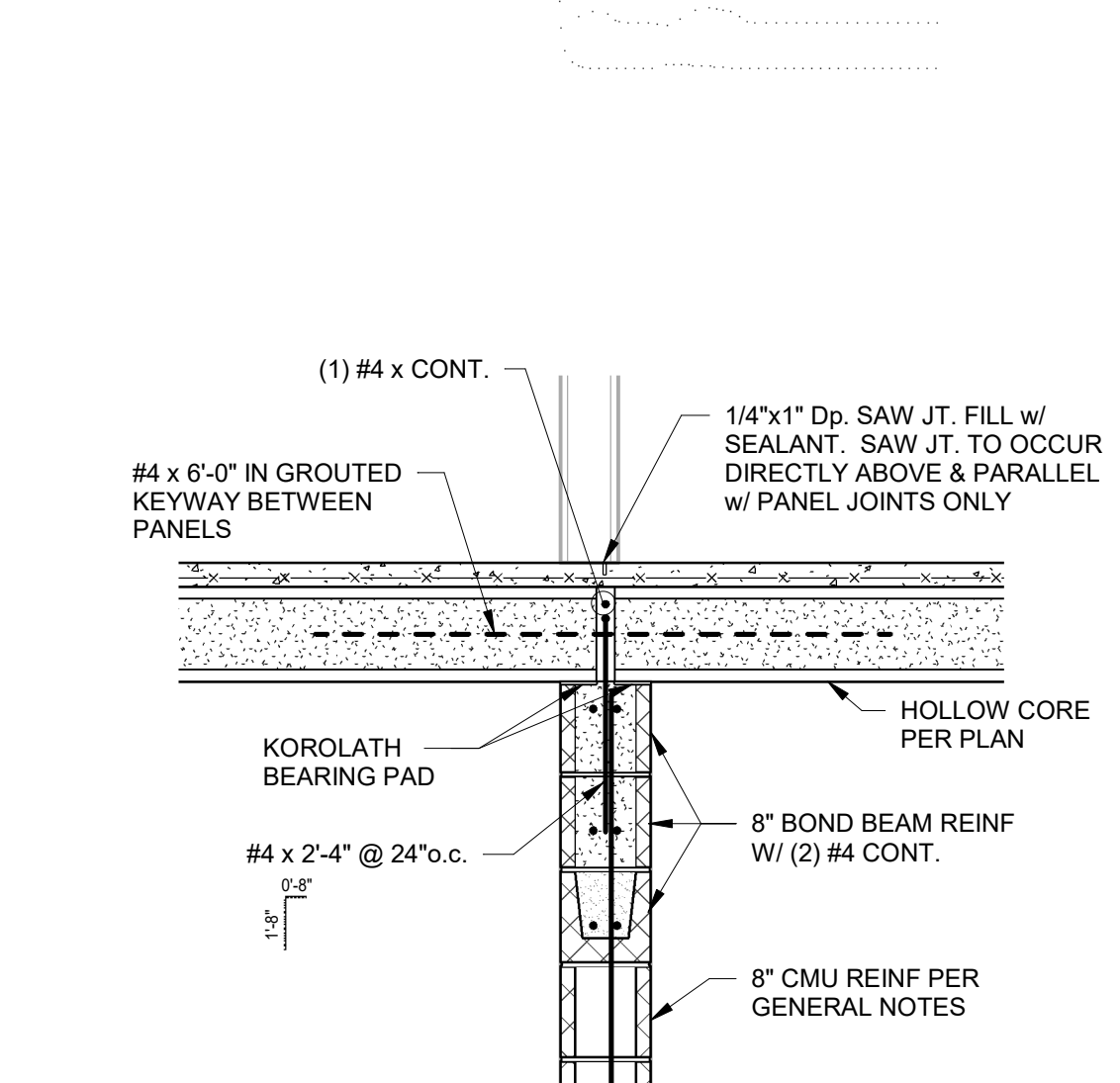


10 SECTION
3/4" = 1'-0"

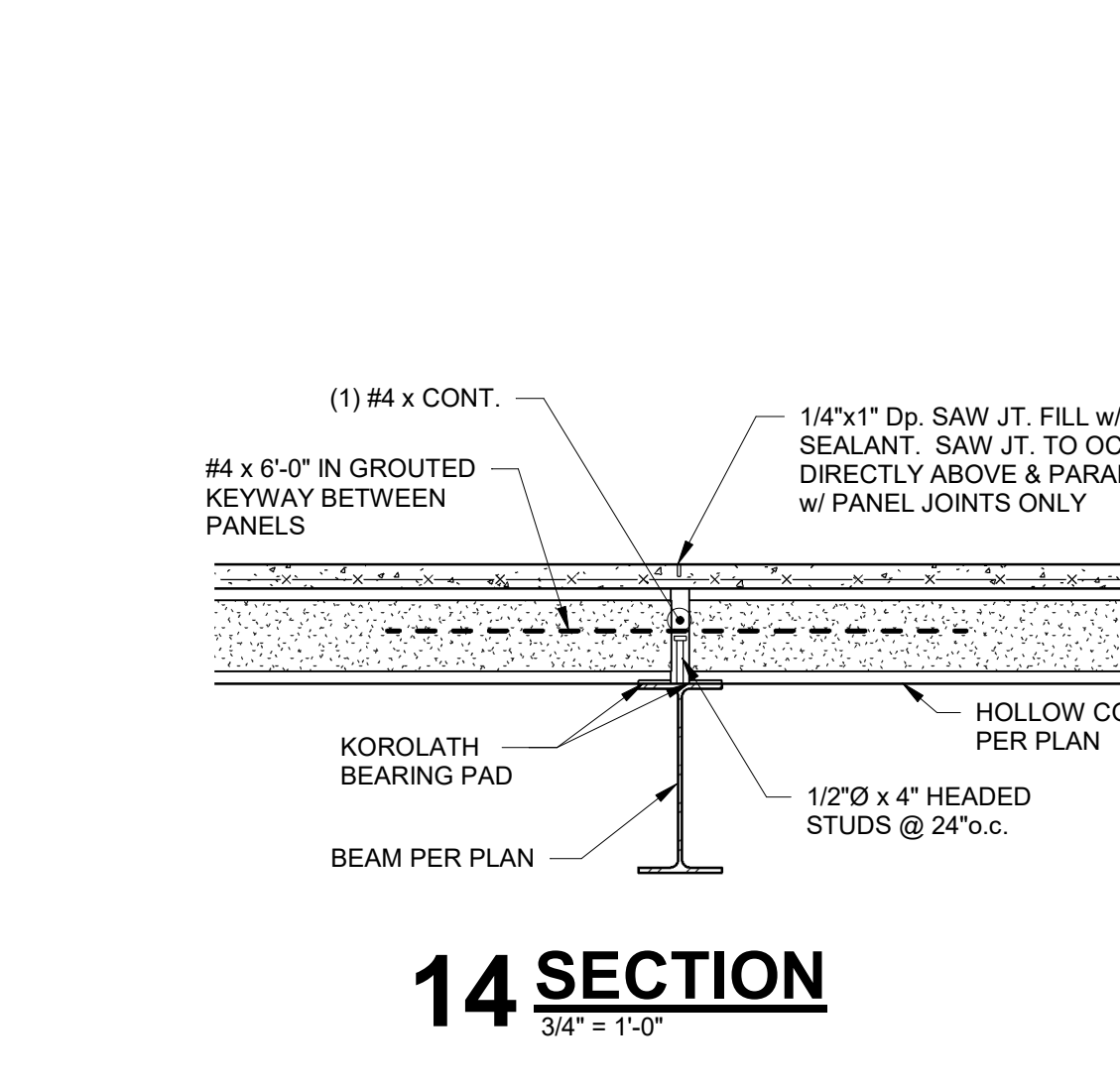


11 SECTION
3/4" = 1'-0"

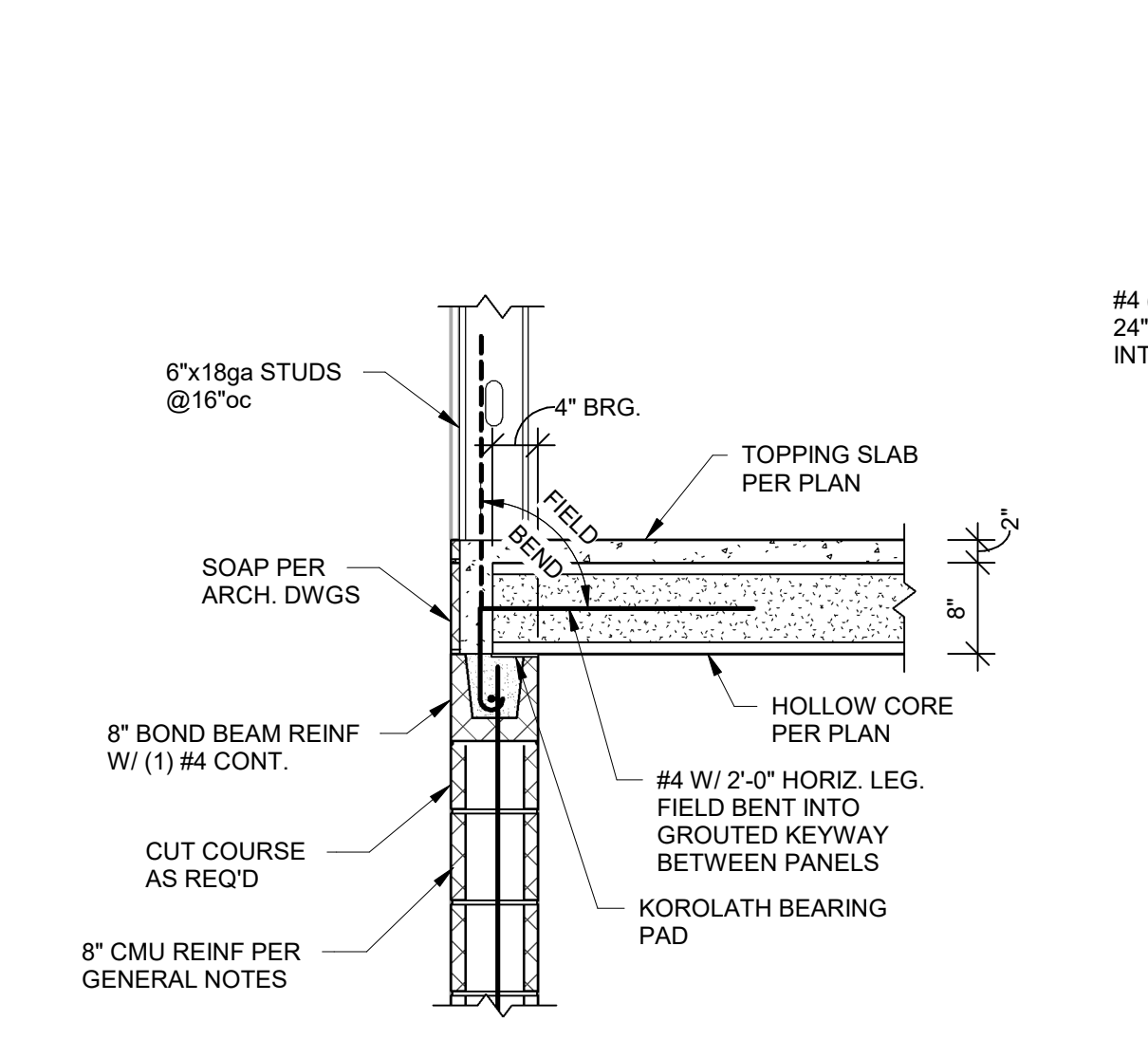
12 SECTION
3/4" = 1'-0"



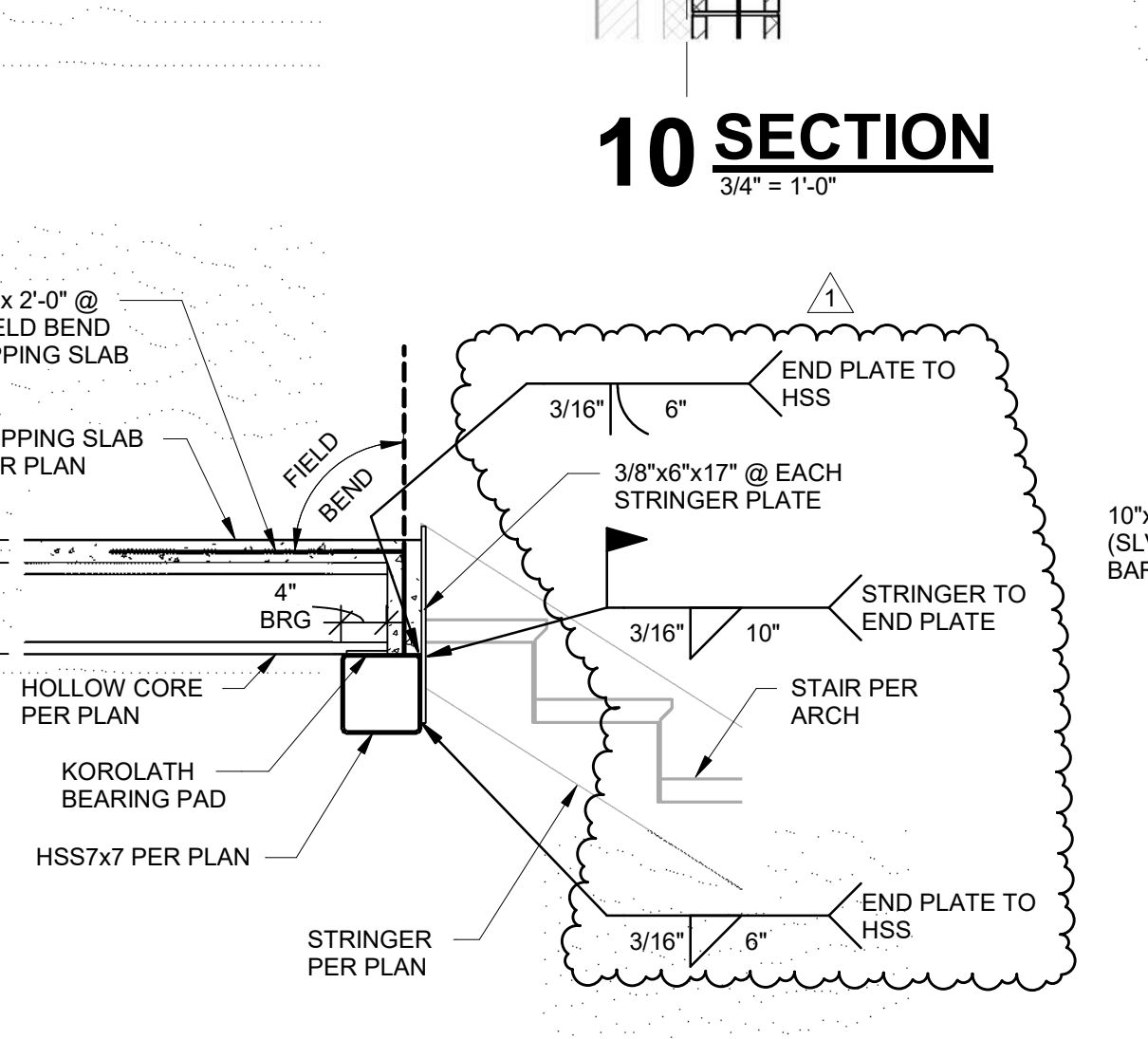
13 SECTION
3/4" = 1'-0"



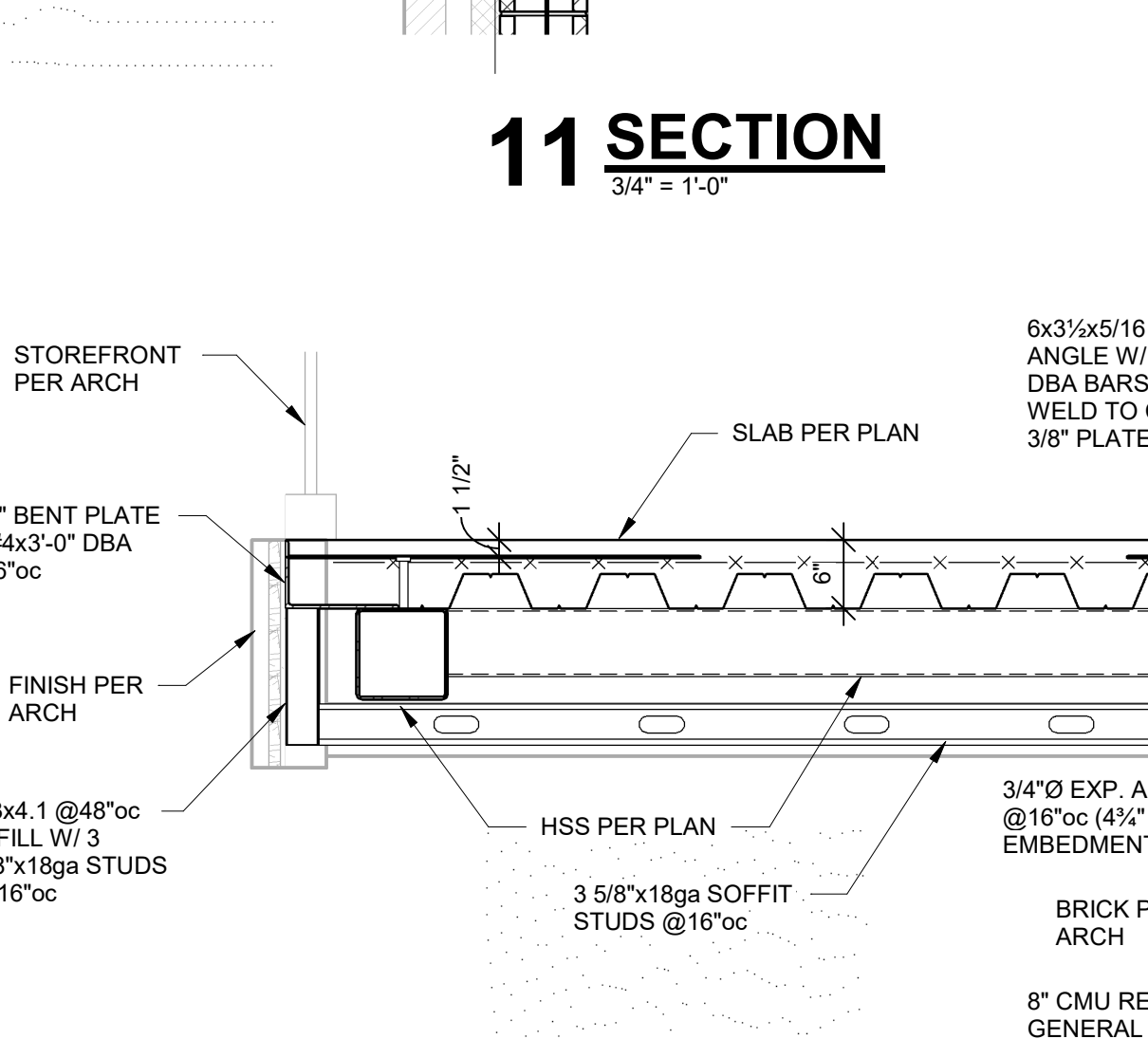
14 SECTION
3/4" = 1'-0"



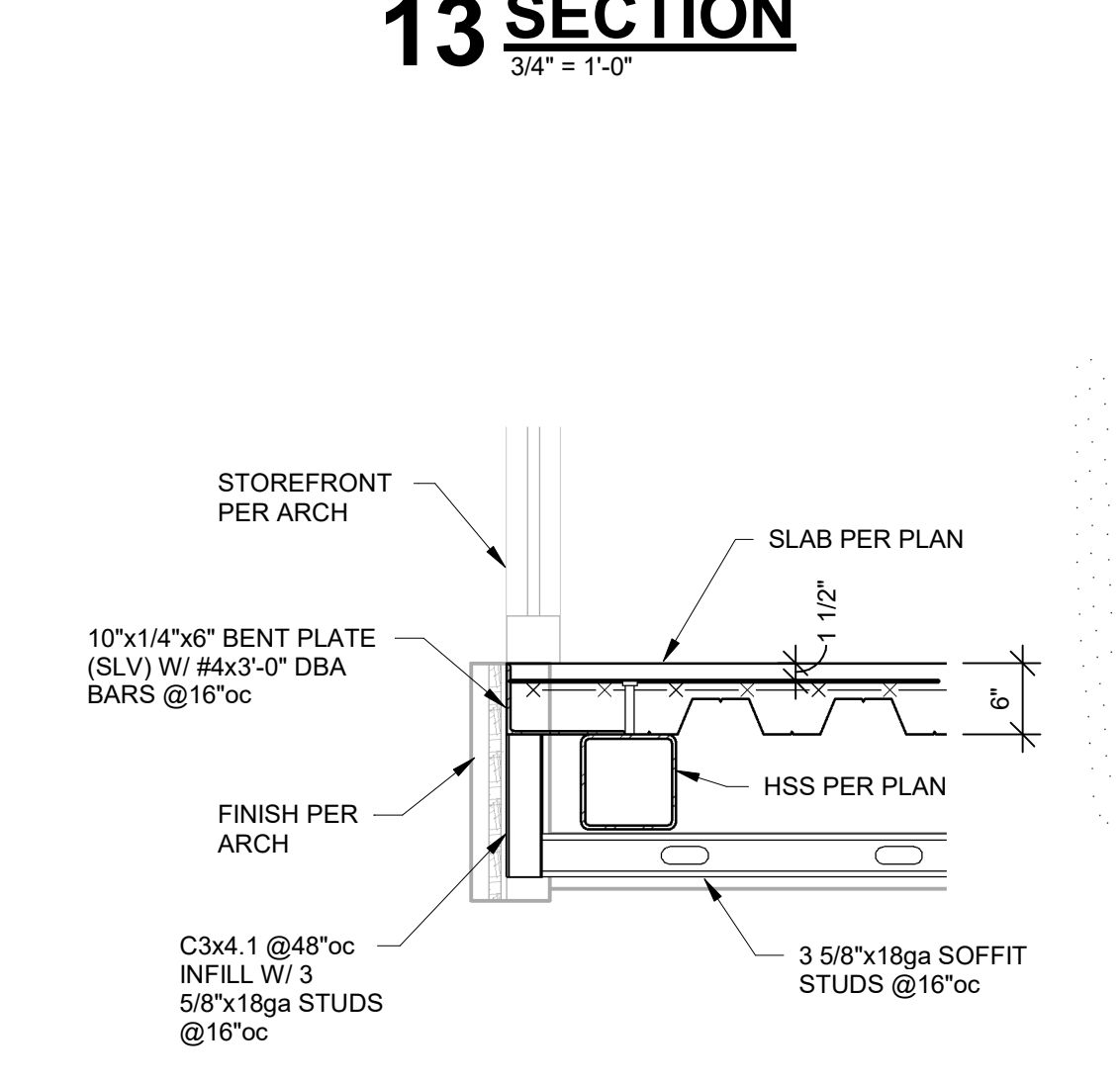
15 SECTION
3/4" = 1'-0"



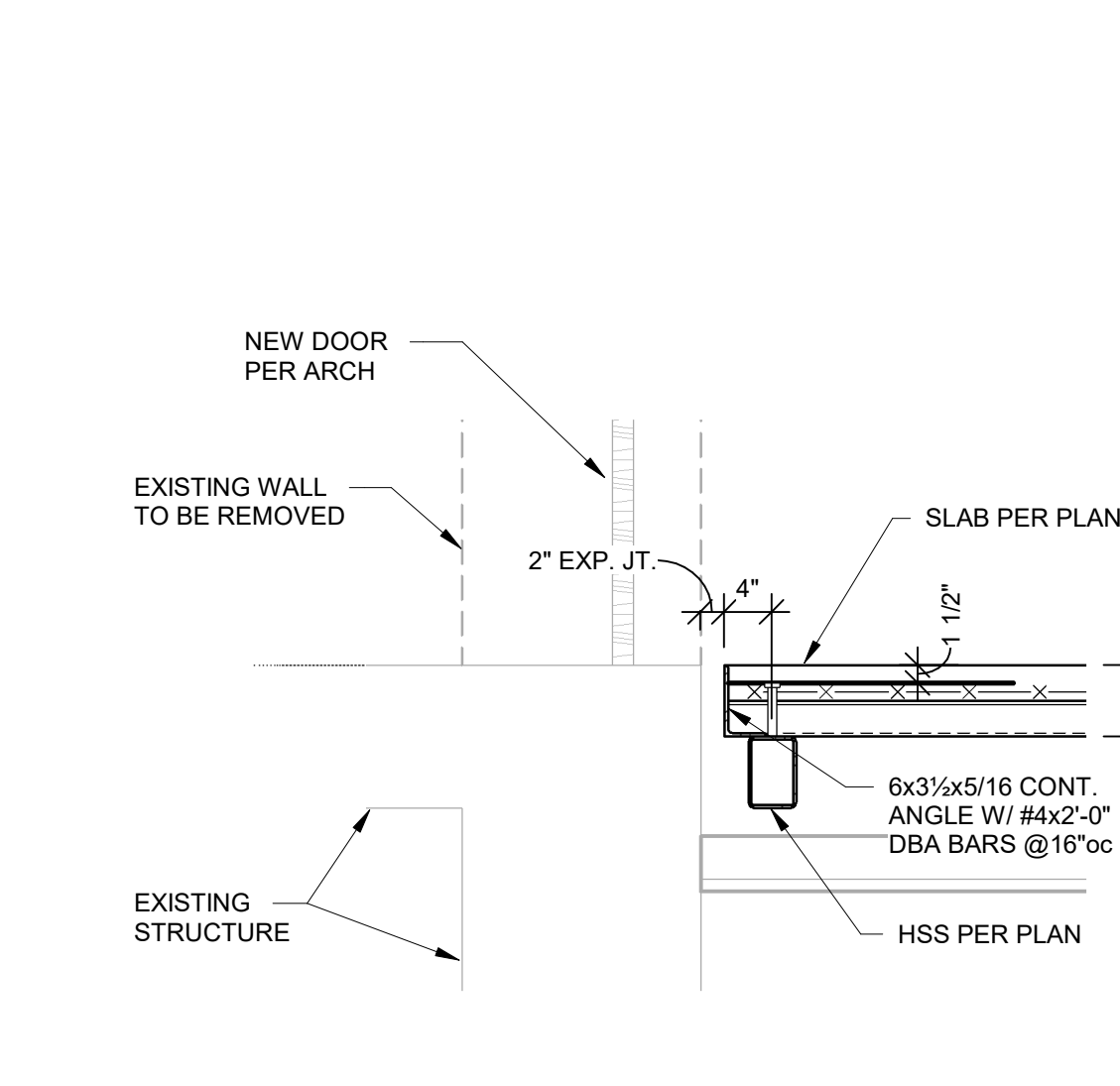
16 SECTION
3/4" = 1'-0"



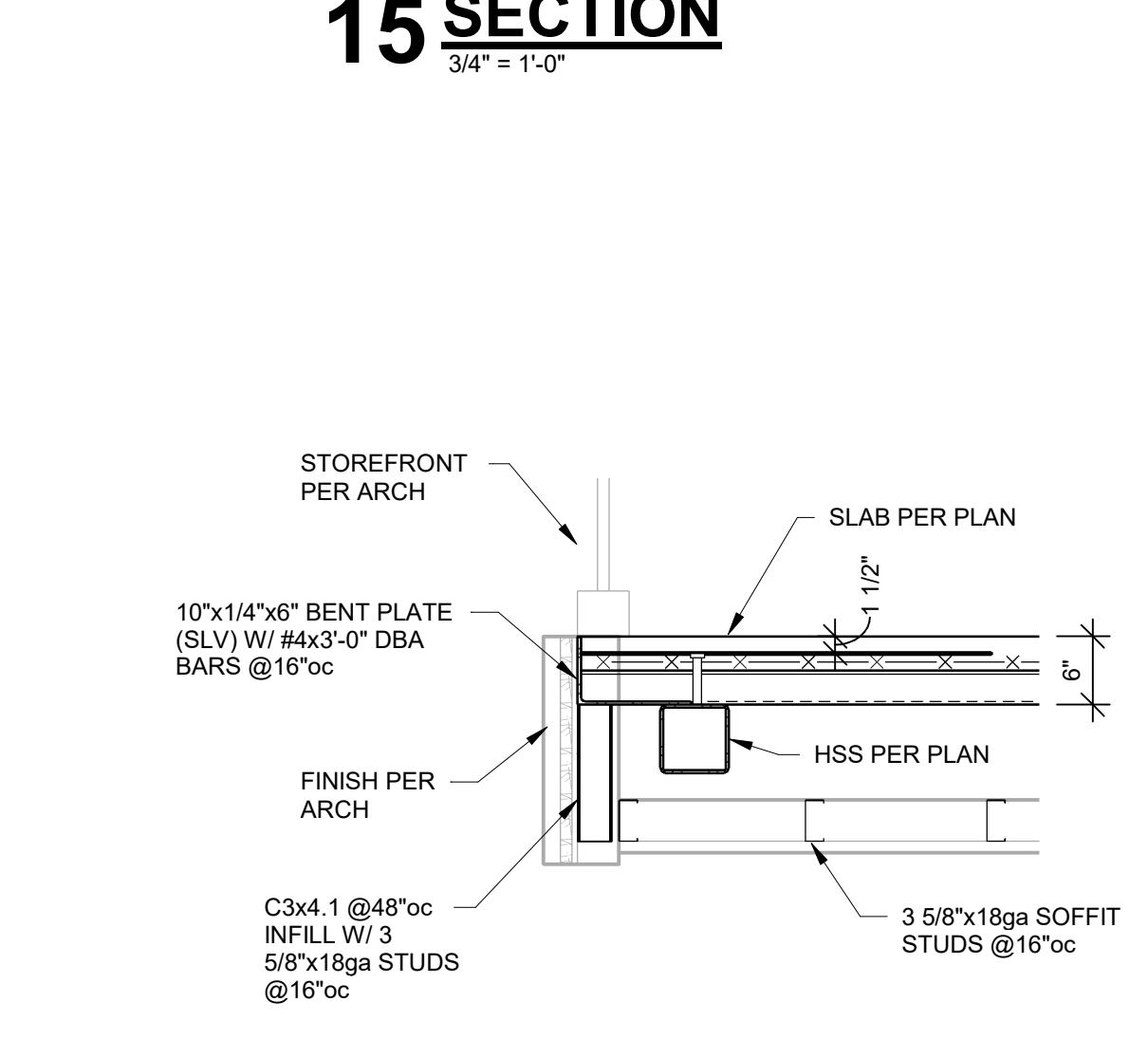
17 SECTION
3/4" = 1'-0"



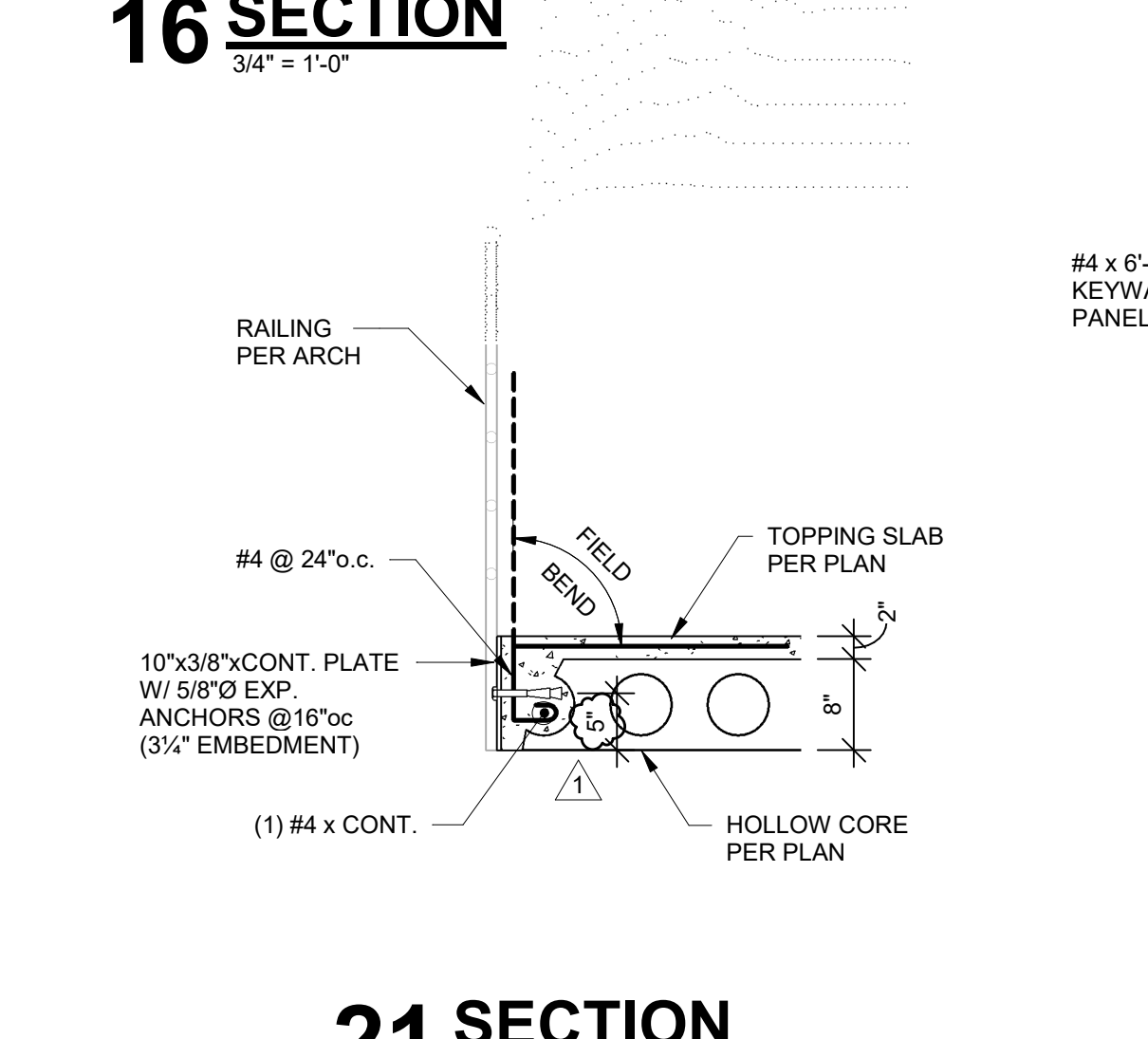
18 SECTION
3/4" = 1'-0"



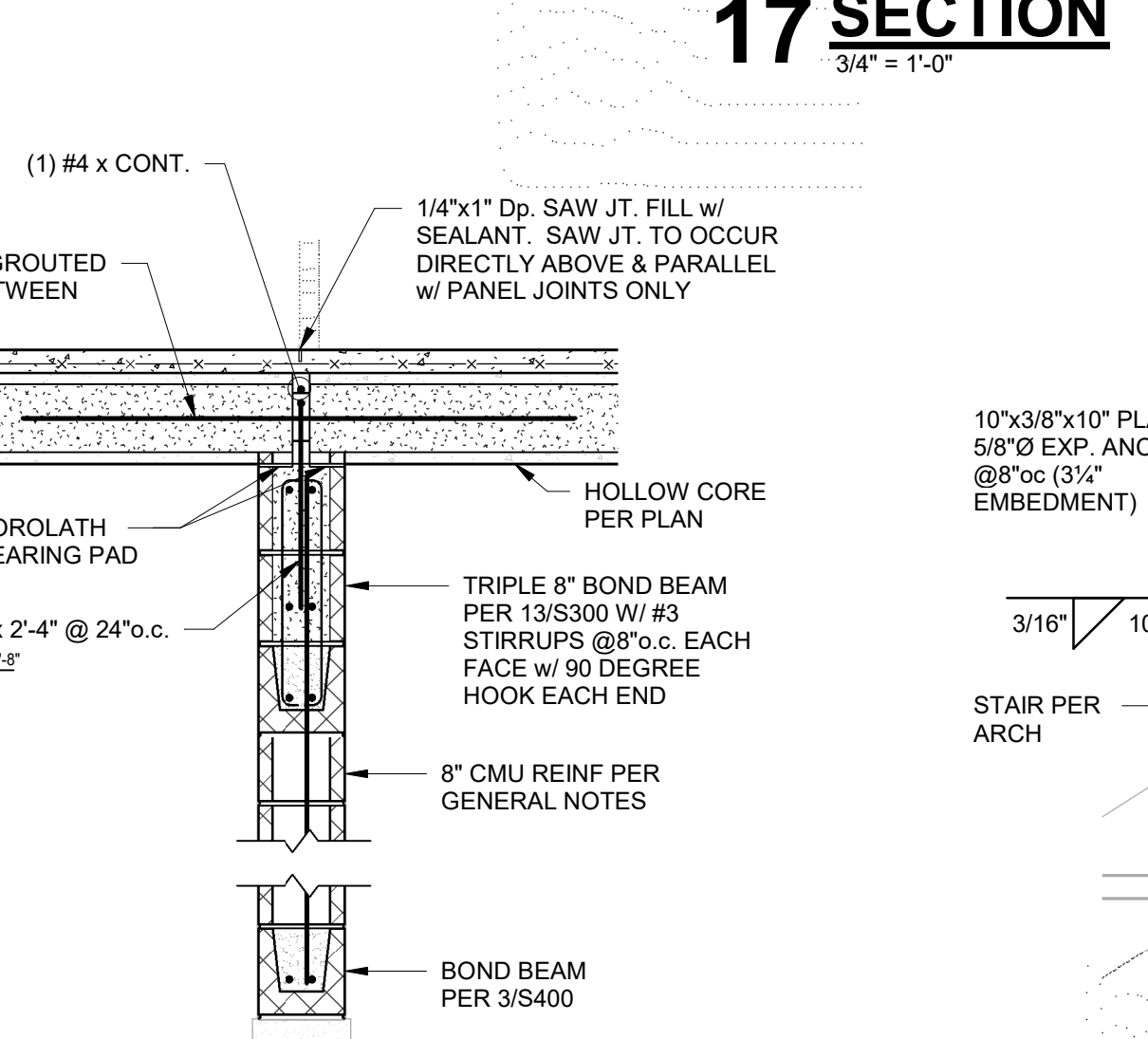
19 SECTION
3/4" = 1'-0"



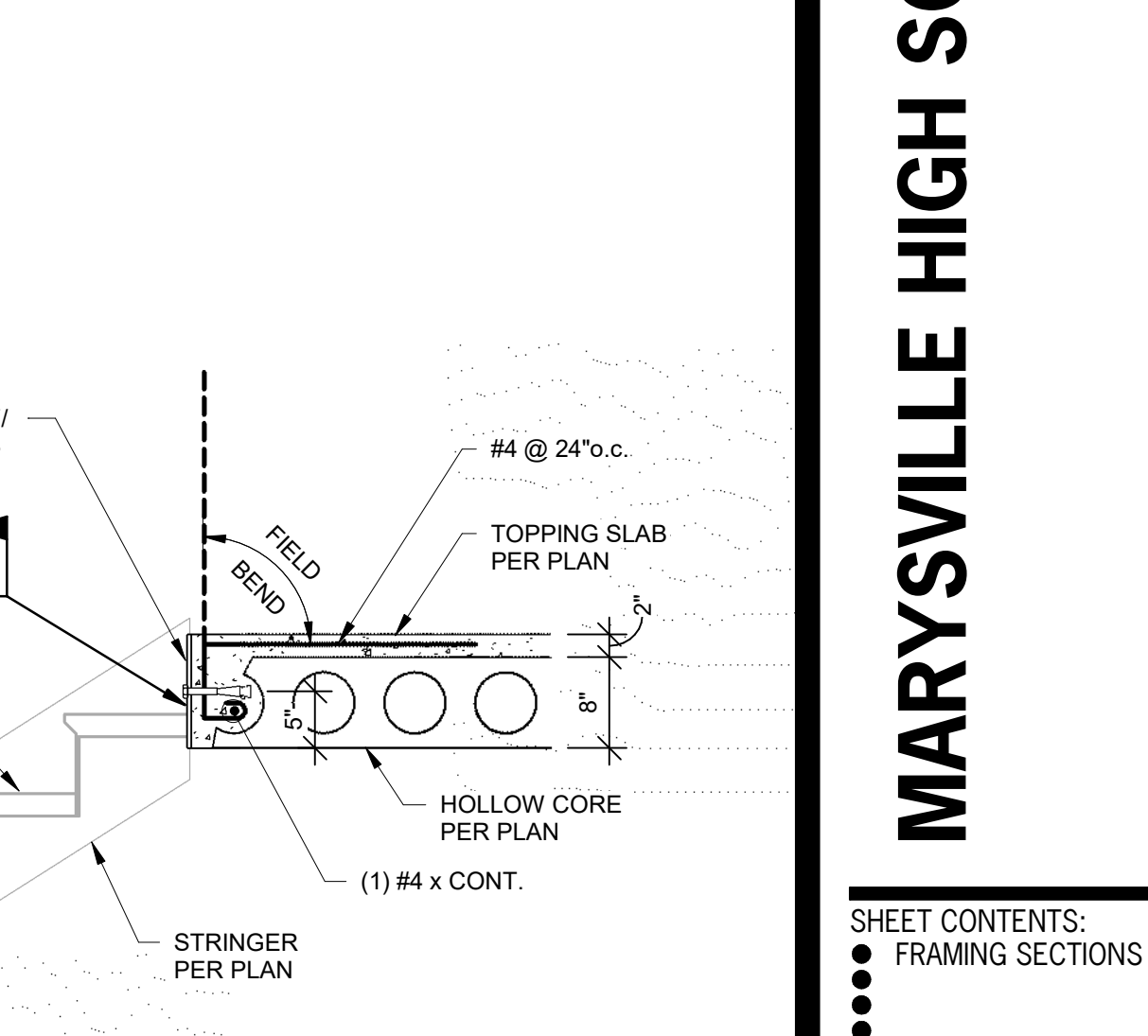
20 SECTION
3/4" = 1'-0"



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

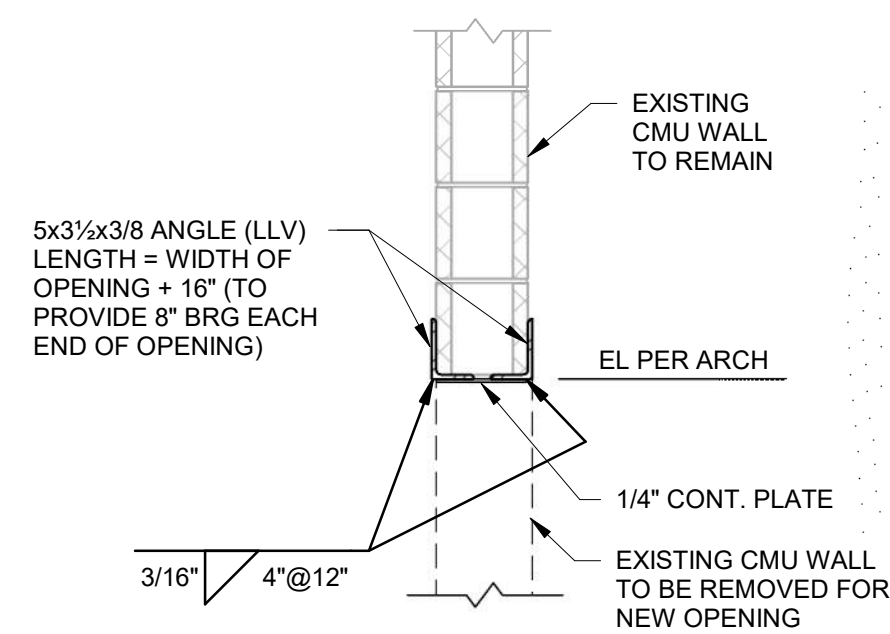
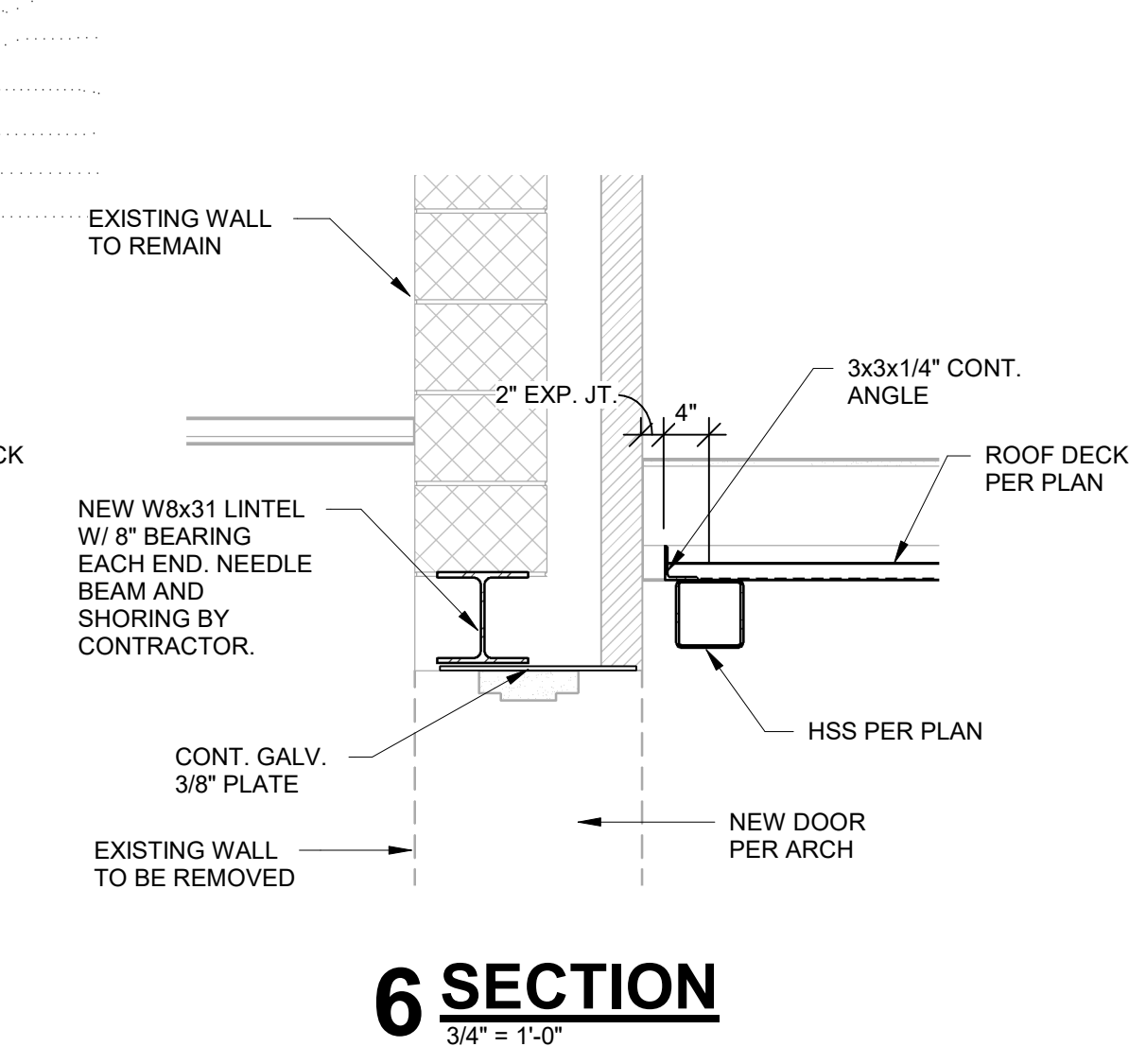
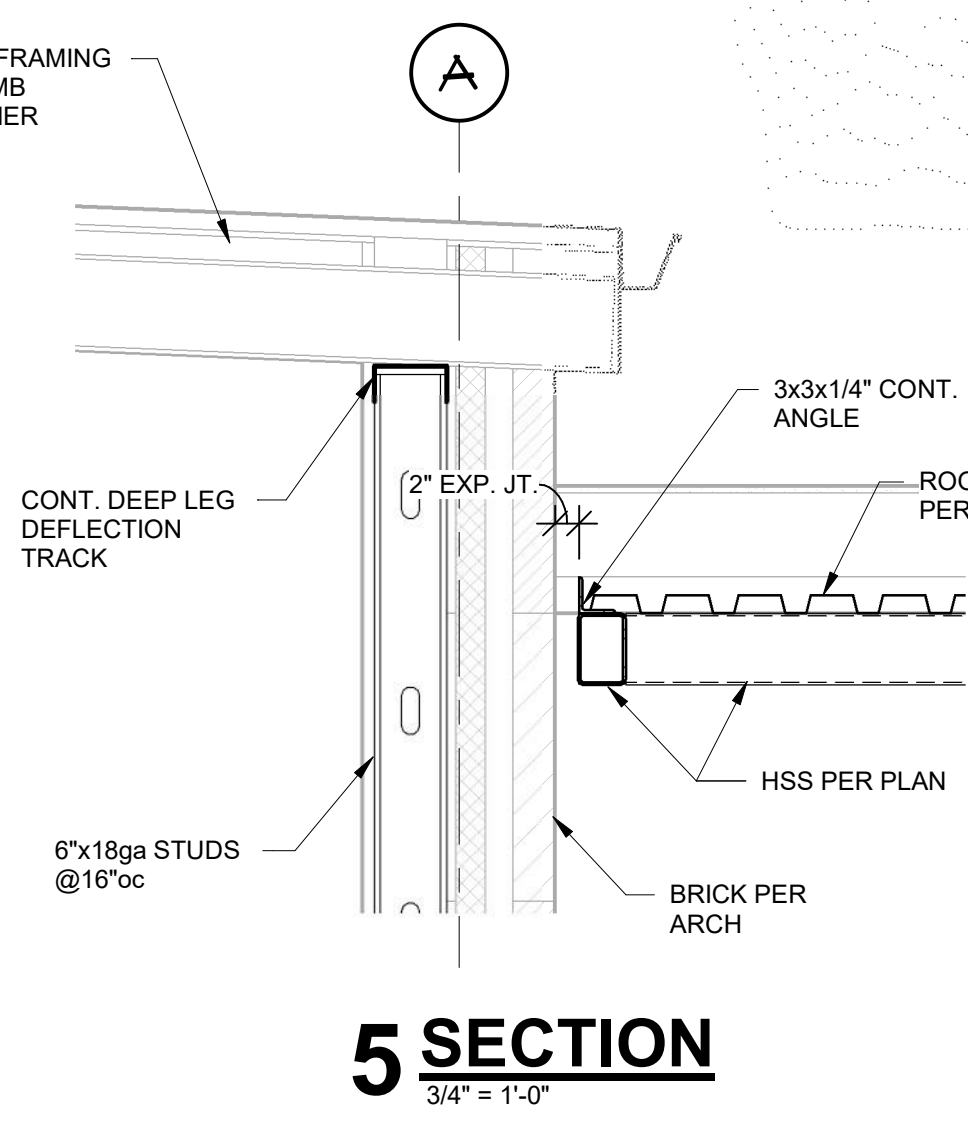
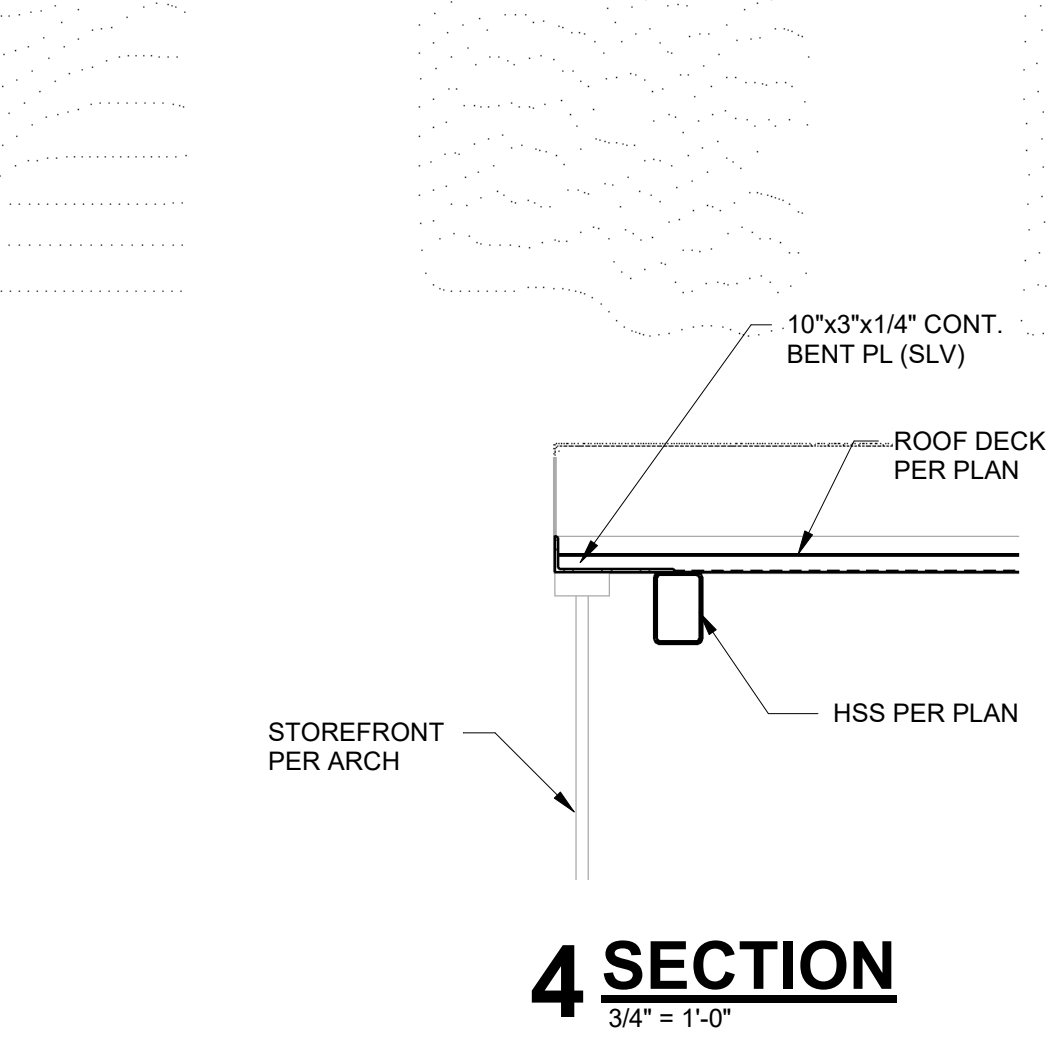
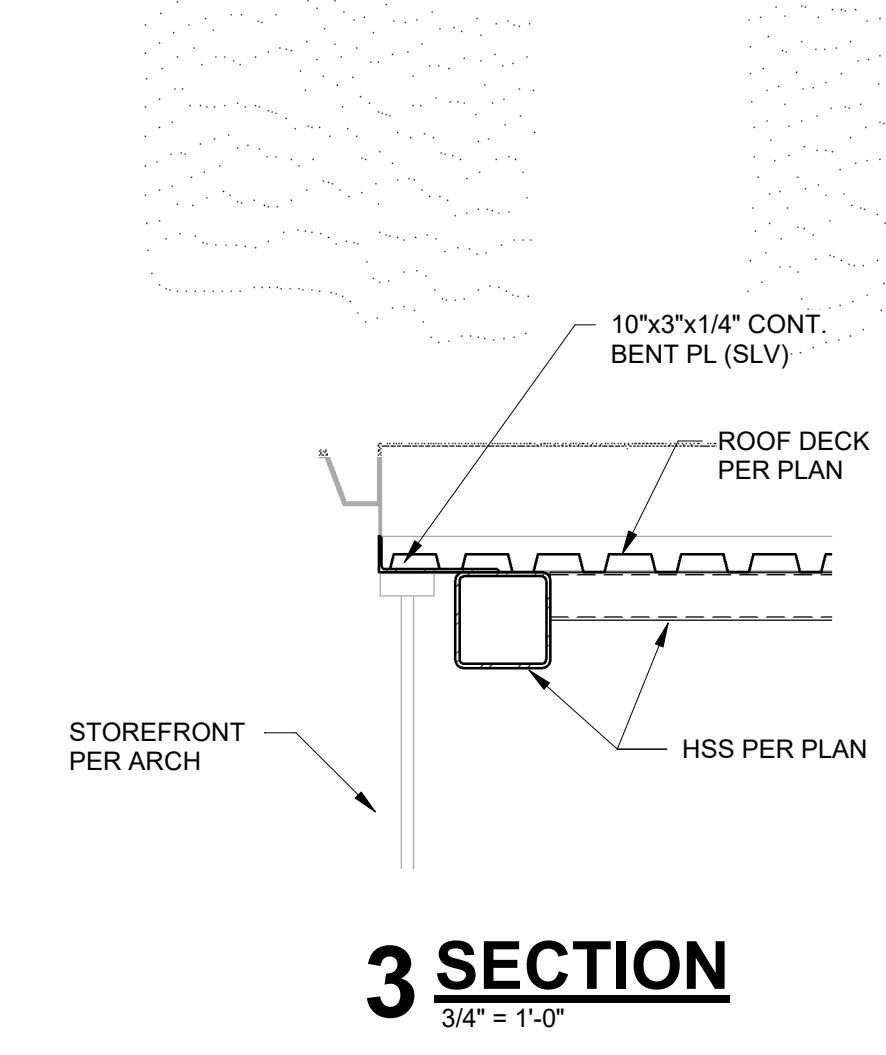
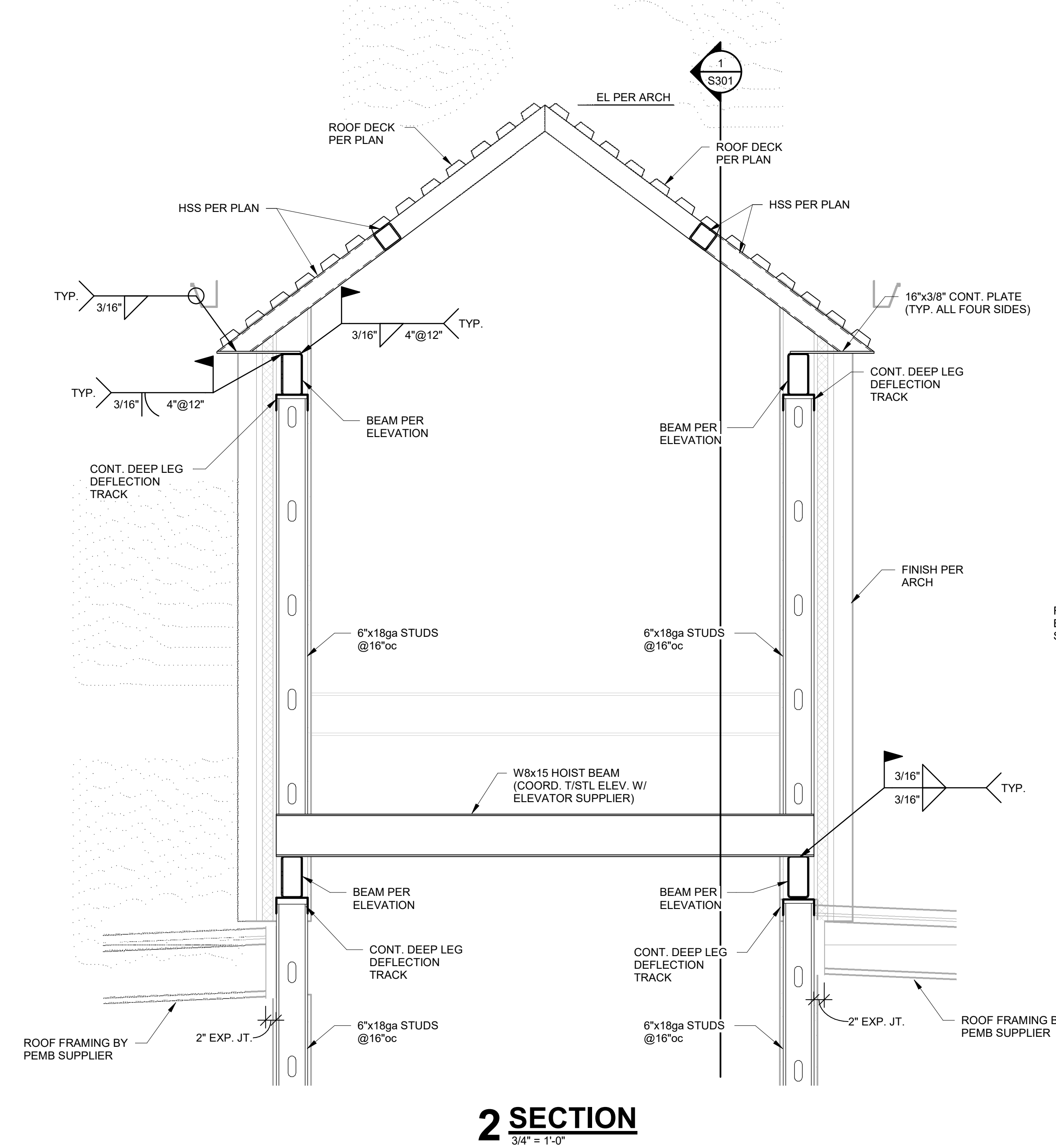
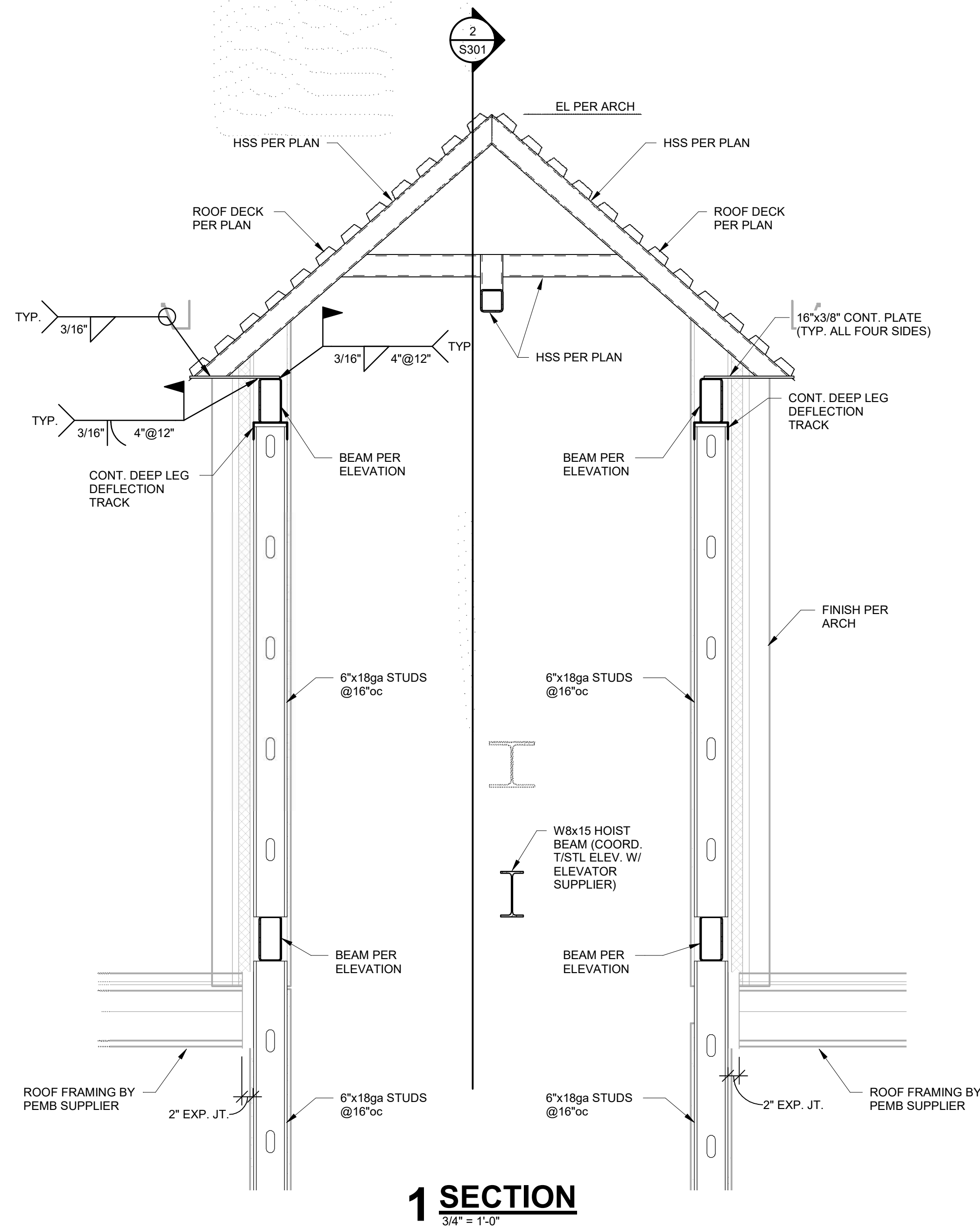


22 SECTION
3/4" = 1'-0"



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

12/12/2019 10:44:51 AM R:\H\HTK\Projects\HTK1908 - Marysville High School Ag Shop\HTK1908 - S18 - Marysville High School Ag Shop_SJB.vnt



- LINTEL INSTALLATION SEQUENCE**
- SCORE BED JOINT AT TOP OF NEW OPENING. EXTEND 8" PAST JAMB OF NEW OPENING EACH END. DO NOT OVER-CUT JOINTS.
 - INSERT HORIZONTAL LEG OF 5x3 1/2 ANGLE INTO SCORED BED JOINT.
 - REPEAT STEPS 1 & 2 FOR OPPOSITE SIDE OF WALL.
 - REMOVED EXISTING WALL TO CREATE NEW OPENING.
 - WELD 1/4" PLATE TO BOTTOM OF 5x3 1/2 ANGLES.

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



DATE: November 20, 2019
 REVISED DATE:

MARYSVILLE HIGH SCHOOL AG SHOP

SHEET CONTENTS:
 ● FRAMING SECTIONS
 HTK PROJECT NUMBER:
 ● 1908.03
 SHEET NUMBER:
S301

PIPING MATERIAL & INSULATION SCHEDULE

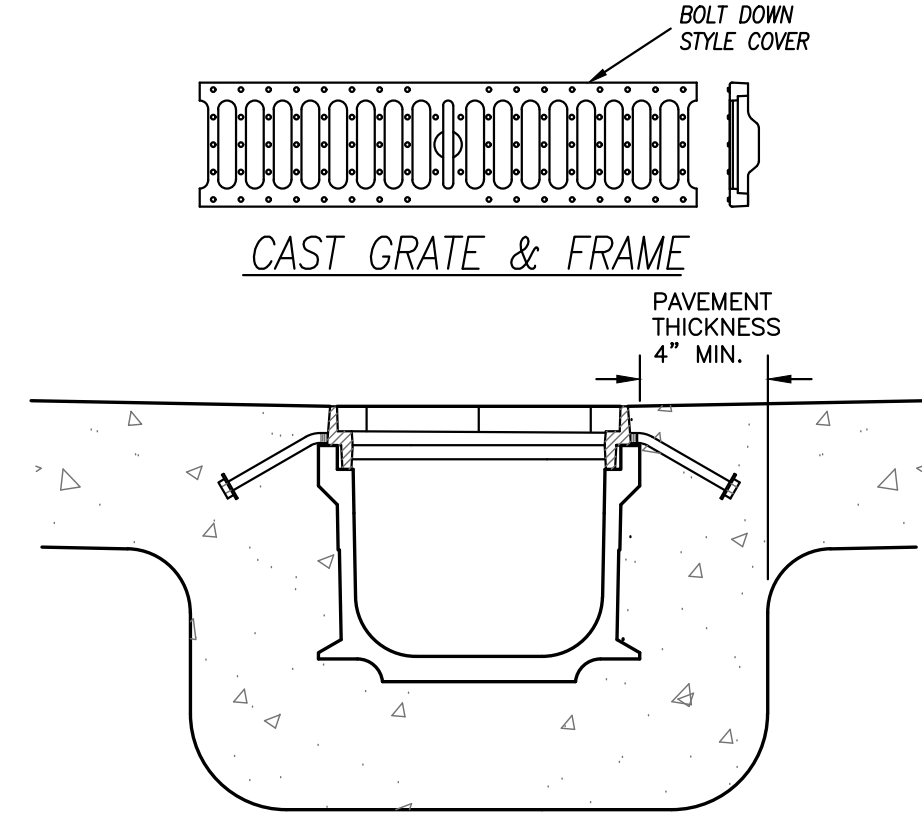
SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS		FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION	
				SOLDER, PRO-PRESS	WELDED			TYPE	THICKNESS
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	WELDED	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASI	1/2"
DOMESTIC HOT WATER & HW RETURN	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	WELDED	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASI	1"
DOM. HOT & COLD BELOW GRADE	1/2"-1-1/4"	K	COPPER	CONTINUOUS TUBING, BRAZED	WELDED	130 PSI - 1/2HR	YES	ELASTOMERIC	3/4" (HOT ONLY)
NATURAL GAS - ABOVE GRADE	2-1/2" & Up	SCH. 40	STEEL - SEAMLESS	WELDED	WELDED	75 PSI - 1HR	YES	---	---
NATURAL GAS - ABOVE GRADE	1/2"-2"	SCH. 40	STEEL - SEAMLESS	THREADED IRON	THREADED IRON	75 PSI - 1HR	YES	---	---
NATURAL GAS BELOW GRADE	ALL	SDR-11	POLYETHYLENE	FUSION JOINTS	FUSION JOINTS	100 PSI - 1HR	NO	---	---
SOIL & WASTE ABOVE GRADE	1-1/2"-8"	NO HUB / SERVICE WT.	CAST IRON	NO HUB	NO HUB	10 FT - 1/2HR	YES	---	---
SOIL & WASTE ABOVE GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	SOLVENT JOINED	10 FT - 1/2HR	NO	---	---
SOIL & WASTE BELOW GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	SOLVENT JOINED	10 FT - 1/2HR	NO	---	---
DRINKING FOUNT. DRINK	ALL	---	---	---	---	---	YES	ELASTOMERIC	1/2"
CONDENSATE DRAIN INTERIOR	1/2"-2"	L	COPPER	SOLDER, PRO-PRESS	SOLDER, PRO-PRESS	10 FT - 1/2HR	YES	FIBERGLASS W/ ASI	1/2" (PLENUM ONLY)
DOM. WATER SERVICE BELOW GRADE	1"-3"	K	COPPER	CONTINUOUS TUBING, BRAZED	CONTINUOUS TUBING, BRAZED	130 PSI - 1/2HR	YES	---	---
DOM. WATER SERVICE BELOW GRADE	1"-3"	DR. 9	HDPE	CONTINUOUS TUBING, FUSED	CONTINUOUS TUBING, FUSED	130 PSI - 1/2HR	NO	---	---

- NOTES:
 1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
 2. ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 REQUIREMENTS AT A MINIMUM.
 3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

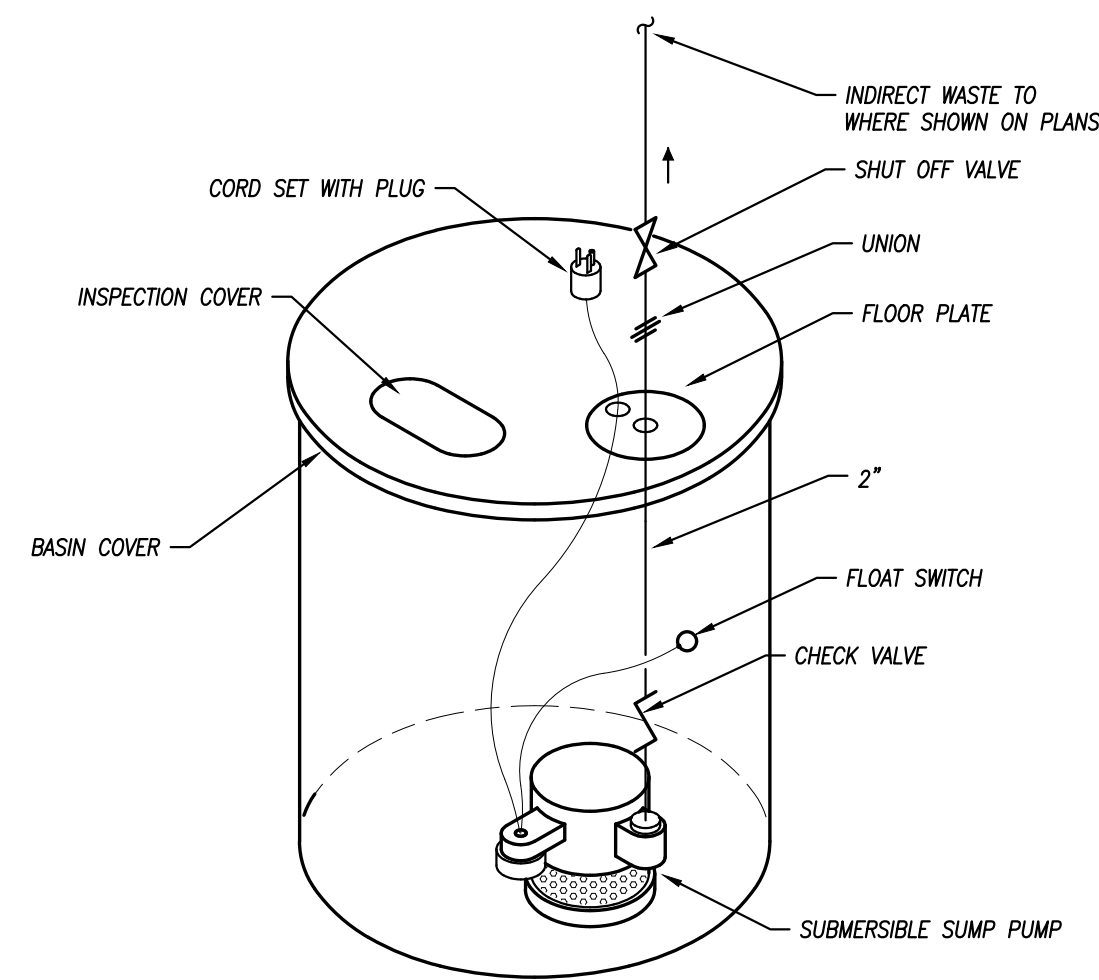
FLOOR / ROOF DRAIN SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	TOP/GRADE SIZE	WASTE SIZE	REMARKS
FD-1	WADE	1100	FLOOR DRAIN	6"Ø	2"	1
FS-2	WADE	9100	FLOOR SINK	8"x8"	2"	1
TRENCH	ZURN	PERMA-TRENCH	TRENCH DRAIN	SEE PLAN	4"	---

- REMARKS:
 1. PROVIDE WITH NICKEL BRONZE TOP.



TRENCH DRAIN DETAILS
NO SCALE

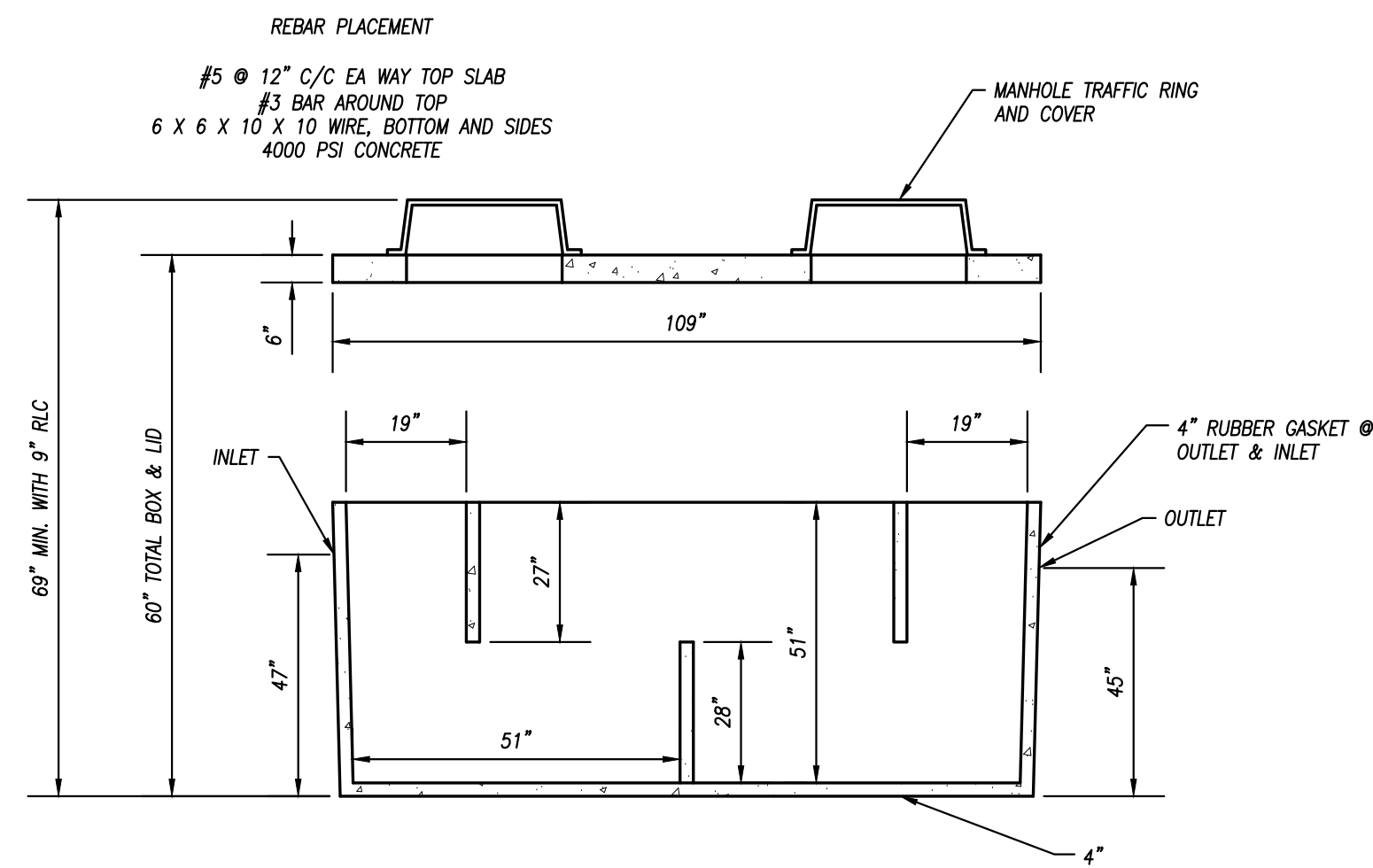


ELEVATOR SUMP PUMP AND PIT
NOT TO SCALE

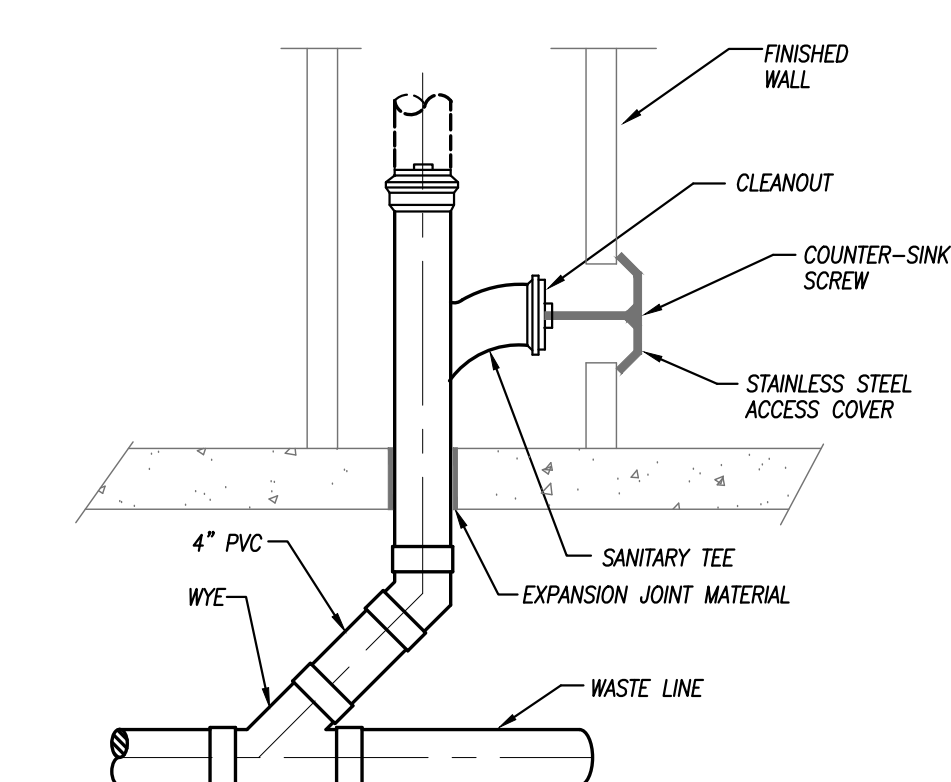
ELEVATOR SUMP PUMP SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	GPM	HEAD FT. W.C.	ELECTRICAL CHARACTERISTICS	NOTES
ELEV. SUMP PUMP	LIBERTY	ELV280	50	15	1/2 HP, 120V.	1,2,3

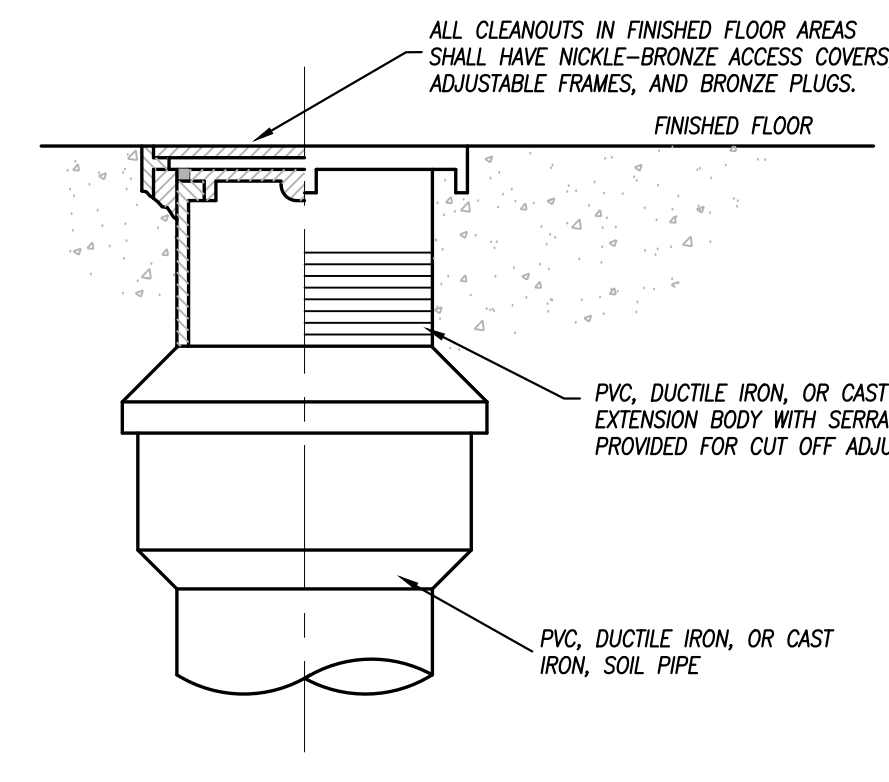
- NOTES LEGEND:
 1 - PROVIDE COMPLETE PACKAGED SUMP PUMP SYSTEM WHICH SHALL INCLUDE PUMP, OILTECTOR CONTROL AND REMOTE ALARM.
 2 - PROVIDE WITH 24"Ø X 36" DEEP FIBERGLASS BASIN.
 3 - REMOVE ALARM SHALL ACTIVATE IN THE EVENT OF A HIGH WATER CONDITION OR HIGH OIL CONDITION.



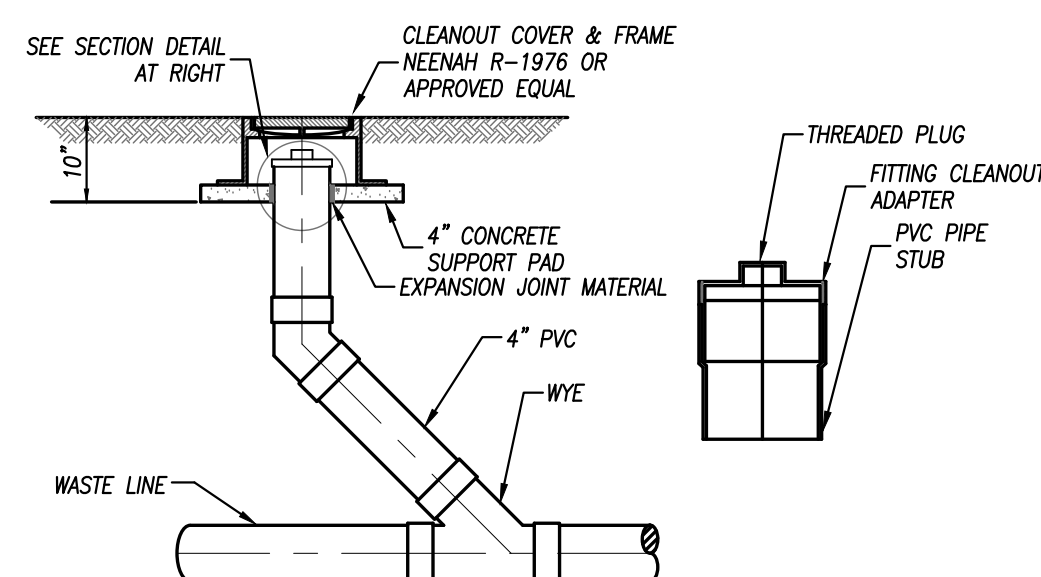
SAND AND OIL INTERCEPTOR DETAIL - 1000 GALLON
NOT TO SCALE



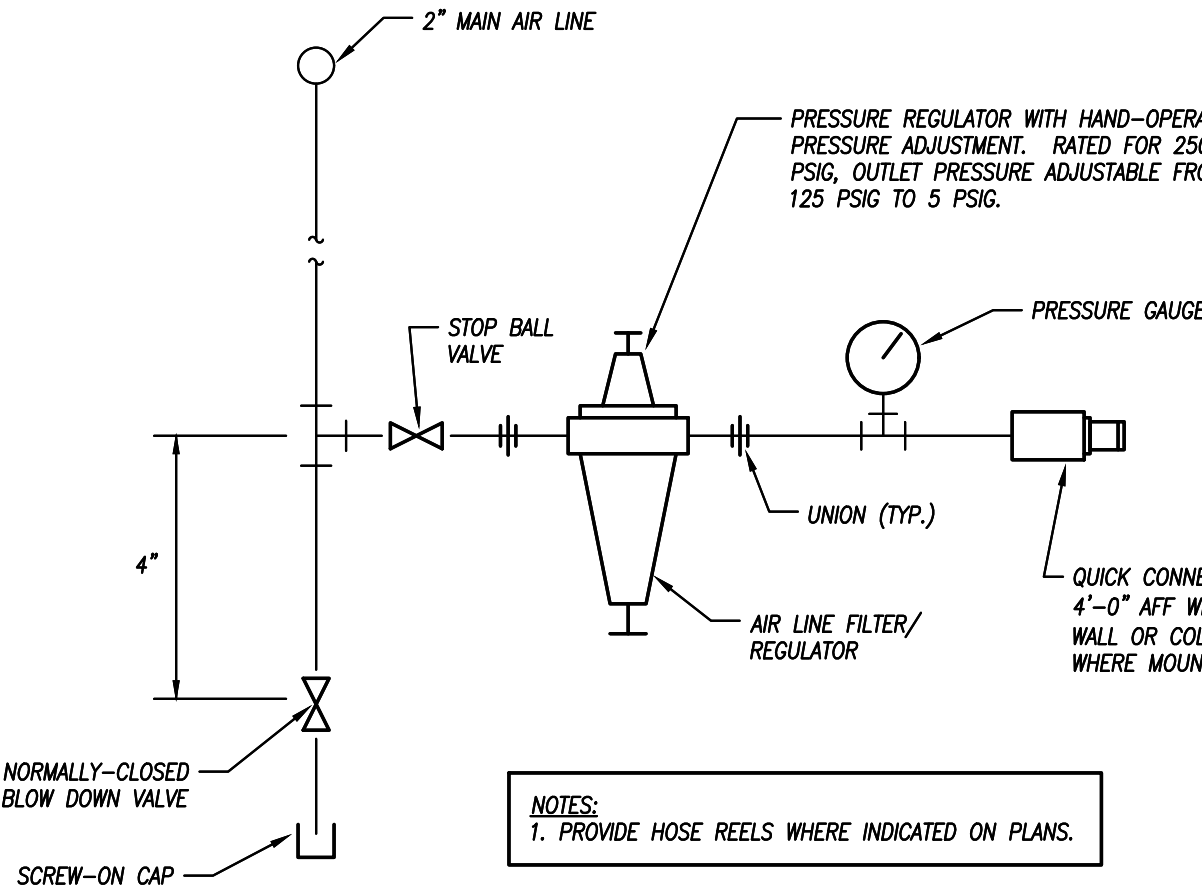
WALL CLEAN OUT DETAIL
NO SCALE



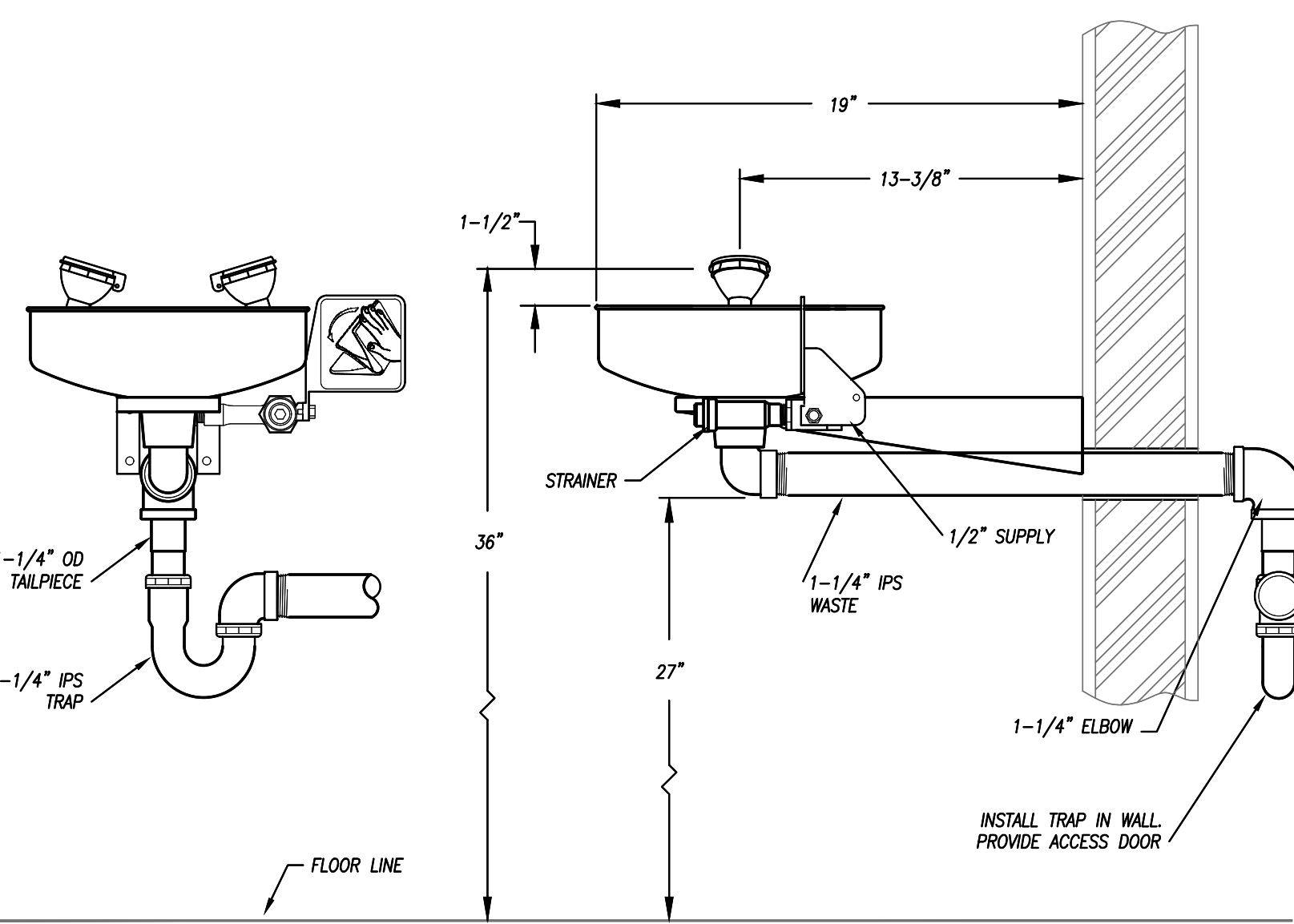
FLUSH FLOOR CLEAN OUT DETAIL
NO SCALE



FLUSH GRADE CLEAN OUT DETAIL
NO SCALE



TYPICAL COMPRESSED AIR DROP
NOT TO SCALE



ACCESSIBLE EYE WASH
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE

PLAN MARK	FIXTURE MODEL	FIXTURE DESCRIPTION	FITTINGS MODEL	FITTINGS DESCRIPTION	PIPE SIZES			
					WASTE	VENT	DCW	DHW
P-1	AMERICAN STANDARD 2234.015 CHRYCO 2500C	WATER CLOSET: FLUSH VALVE, WHITE ELONGATED BOWL, FLOOR MOUNTED, 1.6 GALLON SIPHON AT FLUSHING ACTION SEAT: WHITE, SOLID PLASTIC, OPEN FRONT, ELONGATED	SLOAN 111	EXPOSED WATER CLOSET FLUSH VALVE, CHROME PLATED 1.6 GALLON FLUSH, WITH WALL AND SPUD FLANGES MOUNT HANDLE AT 24" ABOVE FLOOR	4"	2"	1-1/4"	---
P-2	AMERICAN STANDARD 0355.012	ADA COMPLIANT LAVATORY: WHITE WALL HUNG LAVATORY 20"x18" WITH 4" BACK FAUCET HOLES ON 4" CENTERS, WITH CONCEALED ARM CARRIER, PROVIDE HANDLE STOP VALVES AND FLEXIBLE METAL WATER RISERS, MOUNT TOP OF RIM AT 34" ABOVE FLOOR	AMERICAN STANDARD 2175.504	FAUCET: 4" CENTERSET, CHROME FINISH WITH 4" METAL LEVER HANDLE, 1/2" CONNECTIONS, POLISHED CHROME FINISH, 1.5 GPM MAX FLOWRATE, CHROME PLATED BRASS GRID DRAIN, TAILPIECE, AND P-TRAP. INSULATE THE TAILPIECE, P-TRAP, AND WATER RISERS	2"	2"	1/2"	1/2"
P-3	HALSEY-TAYLOR HTHB-HACRBLVY-WF	ADA COMPLIANT DUAL HEIGHT ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION: 8 GPM OF 50 DEGREE WATER WITH FRONT AND REAR PUSHBAR, MOUNT WITH 2" Ø OR KEE CLEARANCE, MOUNT ON CONCEALED ARM CARRIER	---	---	2"	2"	1/2"	---
P-4	ELKAY LR-2022	SINGLE COMPARTMENT SINK: SEAMLESS 18 GAUGE, TYPE 302 STAINLESS STEEL, SATIN FINISH WITH FULL UNDERCUT, HOLES 4" ON CENTERS, 7 1/2" BOWL DEPTH, SELF RIMMING, PROVIDE HANDLE STOP VALVES AND FLEXIBLE METAL WATER RISERS	AMERICAN STANDARD 7500.140	CENTERSET GOOSENECK FAUCET WITH METAL LEVER HANDLES, 1/2" CONNECTIONS, POLISHED CHROME FINISH WITH BRACKET STRAINER AND DRAIN, CHROME PLATED BRASS TAILPIECE AND P-TRAP. INSULATE THE TAILPIECE, P-TRAP, AND WATER RISERS	2"	2"	1/2"	1/2"
P-5	ELKAY LR-3321	DOUBLE COMPARTMENT SINK: SEAMLESS 18 GAUGE, TYPE 302 STAINLESS STEEL, SATIN FINISH WITH FULL UNDERCUT, SINGLE HOLE, 8" BOWL DEPTH, SELF RIMMING, PROVIDE HANDLE STOP VALVES AND FLEXIBLE METAL WATER RISERS	AMERICAN STANDARD 4332.350	CAST BRASS FLEXIBLE GOOSENECK KITCHEN FAUCET WITH SINGLE METAL LEVER HANDLE, 1/2" CONNECTIONS, POLISHED CHROME FINISH, SINGLE HOLD, PROVIDE CHROME PLATED BRASS BASKET STRAINER, DRAIN, TAILPIECE, AND P-TRAP	2"	2"	1/2"	1/2"
P-6	FIAT MSB-2424	JANITORS SINK: WHITE 24"x24"x10" ONE PIECE MOLDED STONE MOP BASIN, WITH STAINLESS STEEL DRAIN BODY WITH 3" WASTE WITH STAINLESS STEEL WALL GUARDS	FIAT 830-AA	CHROME PLATED BRASS WALL MOUNTED FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAUL HOOK, 3/4" HOSE THREAD SPOUT, INDEXED HANDLES, WITH 5 FOOT HOSE AND BRACKET, MOP HANGER AND HOSE RACK	3"	2"	1/2"	1/2"
P-7	FIAT L-1	LAUNDRY TUB: WHITE 25"x21" 1/2"x13" DEEP, WALL MOUNTED, 20 GALLON TUB WITH CONCEALED ARM CARRIER AND SUPPORTS PROVIDE HANDLE STOP VALVES AND FLEXIBLE METAL WATER RISERS	FIAT 4-1	BRASS FAUCET WITH SWING SPOUT, MOUNT ON REAR DECK OF TUB PROVIDE CHROME PLATED BRASS GRID DRAIN, TAILPIECE, AND P-TRAP	2"	2"	1/2"	1/2"
P-8	BRADLEY M2933/STD/RV/LSO/COLOR	TRIPLE WASHMOUNTAIN: TERRAZO SOLID SURFACE INTEGRAL UNIT WITH PLUG-IN WAPRATED ACTIVATION ONE TO THREE USERS AT A TIME INDIVIDUALLY CONTROLLED, THERMOSTATIC MIXING ASSEMBLY AND LIQUID SOAP DISPENSER, PROVIDE WITH WALL HUNG FRAME AND PEDESTAL PANEL, COLOR TO BE SELECTED BY ARCHITECT	---	---	2"	2"	1/2"	1/2"
P-9	BRADLEY S19-224	EYE/FACE WASH UNIT WITH FACE SPRAY RING AND STAINLESS STEEL BOWL	BRADLEY S19-2100	NAVIGATOR EPX25 - EMERGENCY THERMOSTATIC MIXING VALVE	2"	2"	3/4"	3/4"
P-10	ELKAY RNSP 83544	TRIPLE COMPARTMENT SULLERY SINK: #16 GAUGE, TYPE 304, NICKEL BEARING STAINLESS STEEL, COMPARTMENT 18"x24"x12.75" DEEP, SEAMLESS DRAIN 1 3/4" RADIUS COVER CORNER CONSTRUCTION, FULL LENGTH 8" HIGH BACKSPLASH WITH 45 DEGREE SLOPED TOP, FOUR ADJUSTABLE SUPPORT LEGS	AMERICAN STANDARD 7228.152 (2) REQUIRED	WALL MOUNTED SINK FAUCET: 8" SWIVEL SPOUT, CHROME PLATED BRASS CONSTRUCTION AND WASHLESS CERAMIC DISC VALVE CARTRIDGES	2"	2"	1/2"	1/2"
P-11	FIAT MSB-3624	ANIMAL WASH SINK: WHITE 36"x24"x10" ONE PIECE MOLDED STONE WASH BASIN, WITH STAINLESS STEEL DRAIN BODY WITH 3" WASTE WITH 12" HIGH STAINLESS STEEL WALL GUARDS	FIAT 830-AA	CHROME PLATED BRASS WALL MOUNTED FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, 3/4" HOSE THREAD SPOUT, INDEXED HANDLES, WITH 10 FOOT HOSE AND BRACKET, HANGER, HOSE RACK, AND HAND HELD SPRAY NOZZLE	3"	2"	1/2"	1/2"

DOMESTIC WATER PUMP SCHEDULE

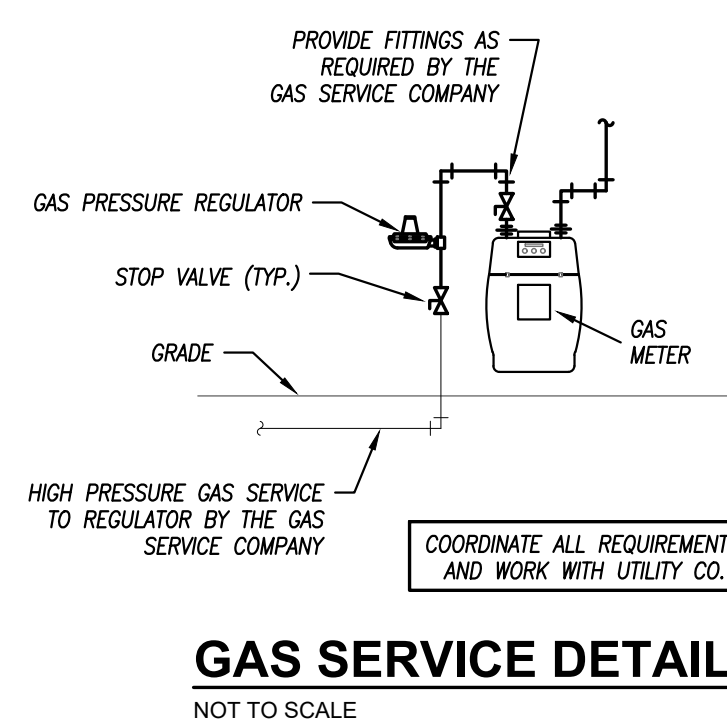
PLAN MARK	MANUFACTURER	MODEL NUMBER	GPM	HEAD FT. W.C.	ELECTRICAL CHARACTERISTICS	MAX. RPM	NOTES
DHW RETURN	BELL & GOSSETT	PL-30B	7	20	1/12 HP, 120V., 1Ø	2650	1

- NOTES LEGEND:
 1 - ALL BRONZE CONSTRUCTION WITH THERMOSTATIC CONTROL BY HOT WATER RETURN TEMP.

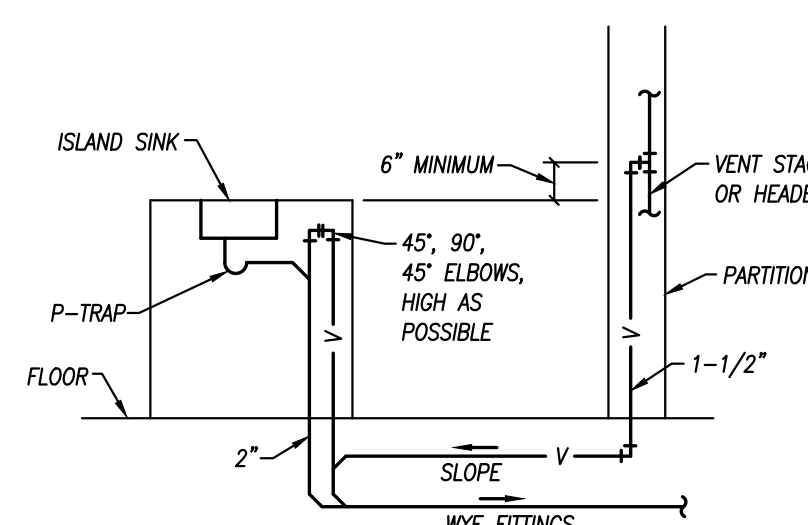
WATER HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	GALLONS	CAPACITY	ELECTRICAL	NOTES
WATER HEATER-1	STATE	CS6 50 TRFOT 5	50	65,000 BTUH	120V, 1Ø, 20AMP	1,2

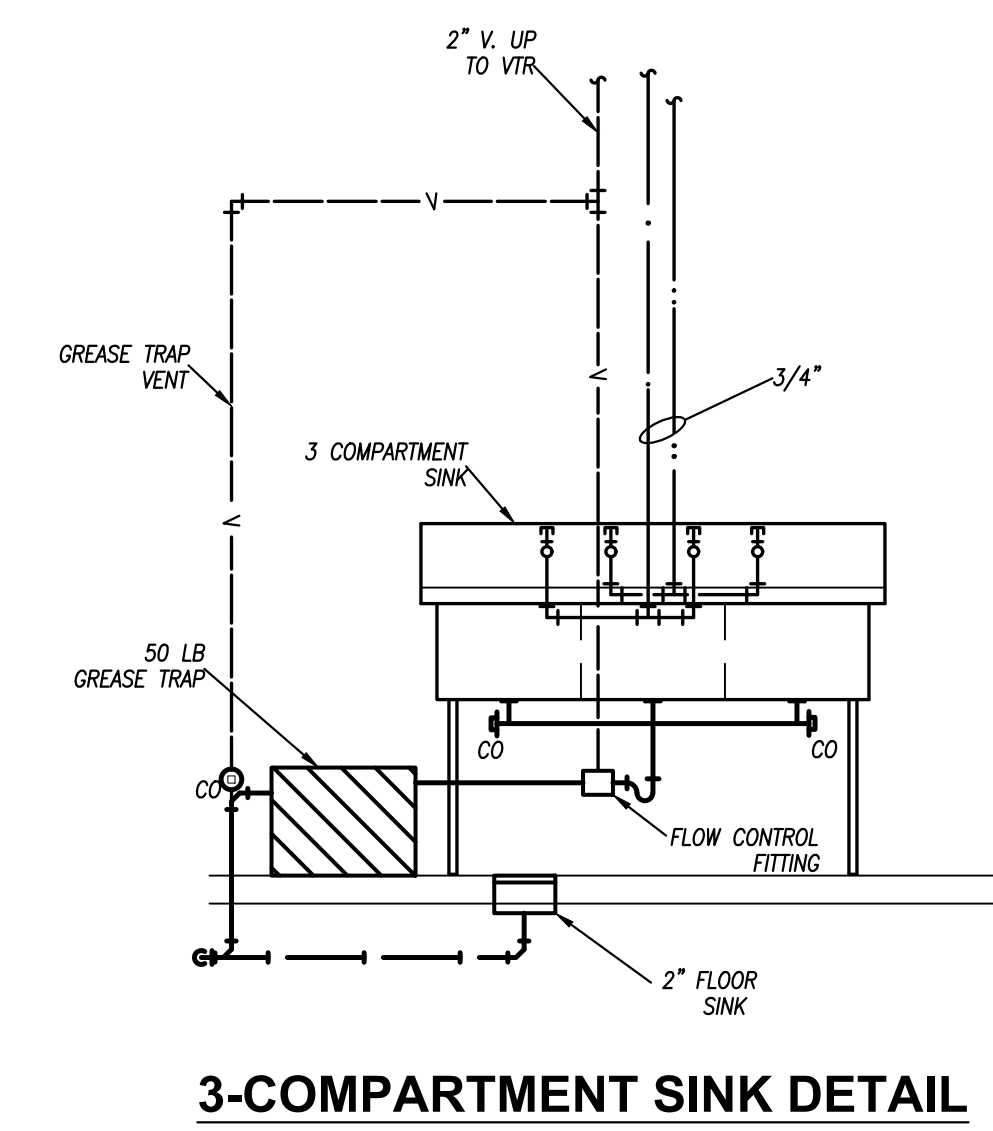
- NOTES LEGEND:
 1 - PROVIDE MOUNTING LEGS
 2 - PROVIDE CONCENTRIC VENT KIT



GAS SERVICE DETAIL
NOT TO SCALE



ISLAND SINK VENTING DETAIL
NOT TO SCALE



3-COMPARTMENT SINK DETAIL
NO SCALE

DATE:
 11-20-19

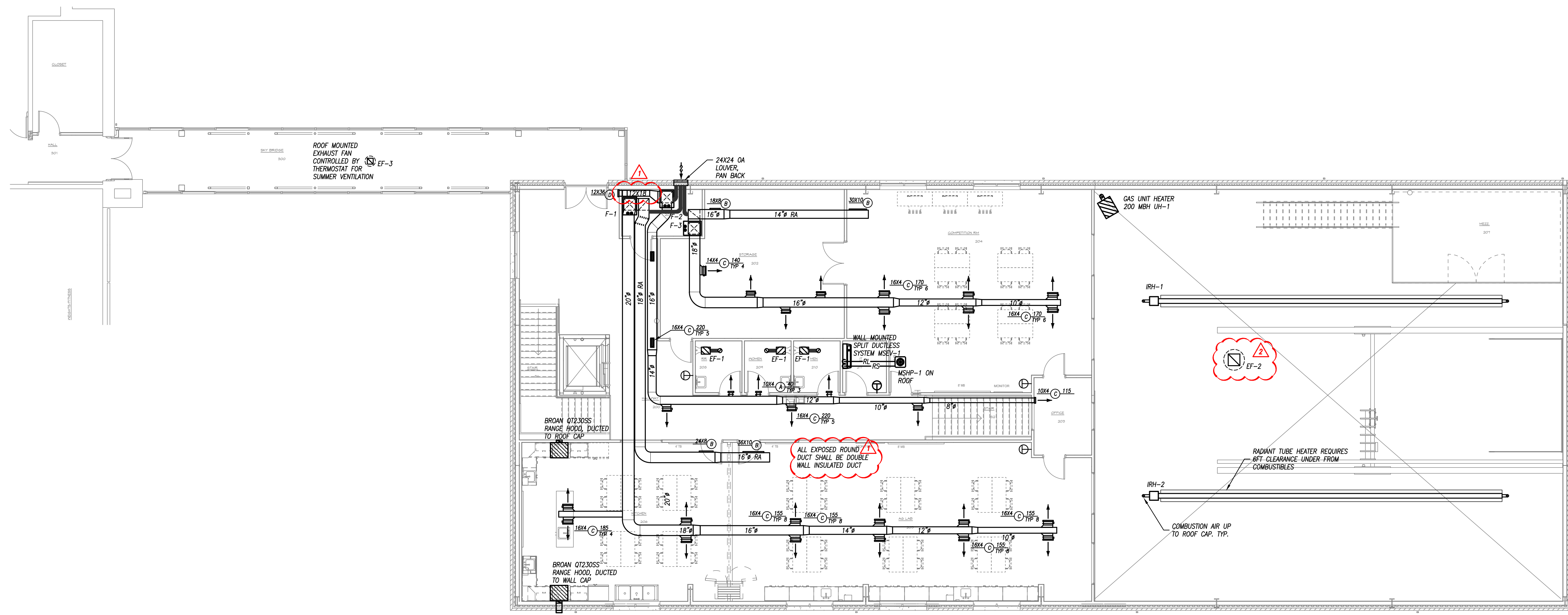
REVISED DATE:

SHEET CONTENTS:
 PLUMBING SCHEDULES AND DETAILS

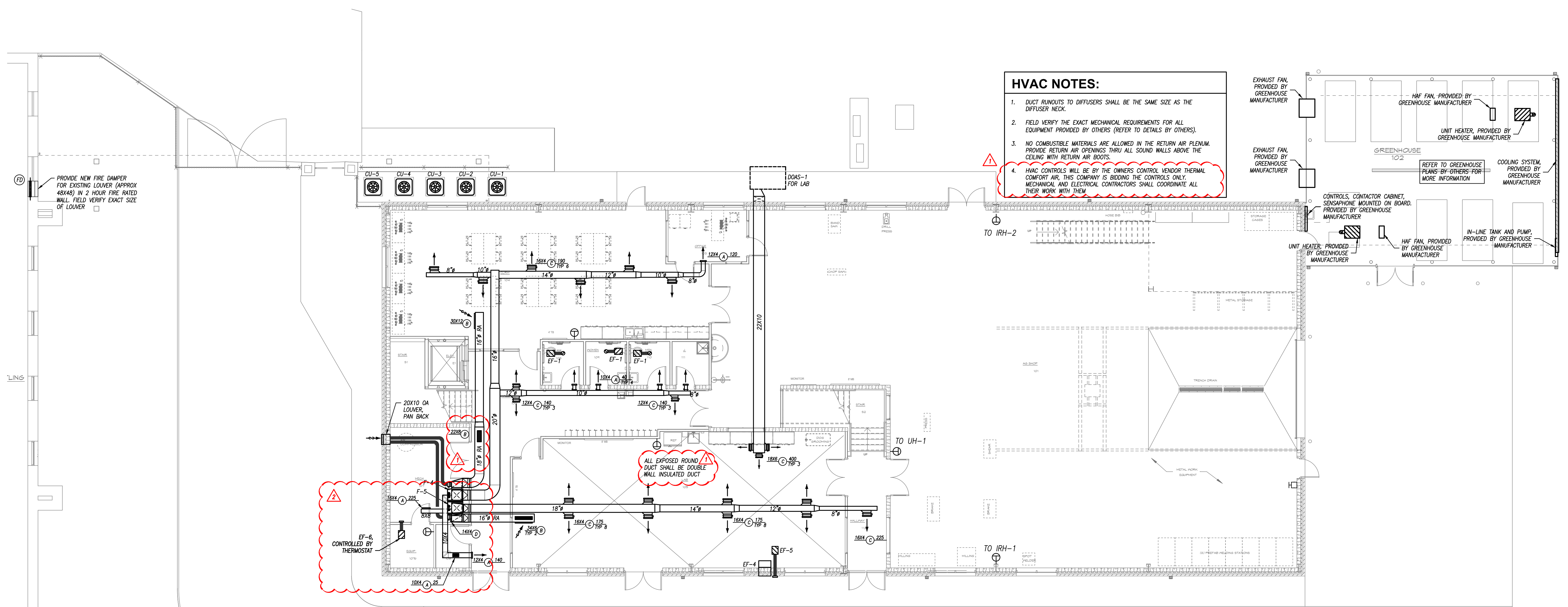
HTK PROJECT NUMBER:
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SHEET NUMBER:

M102



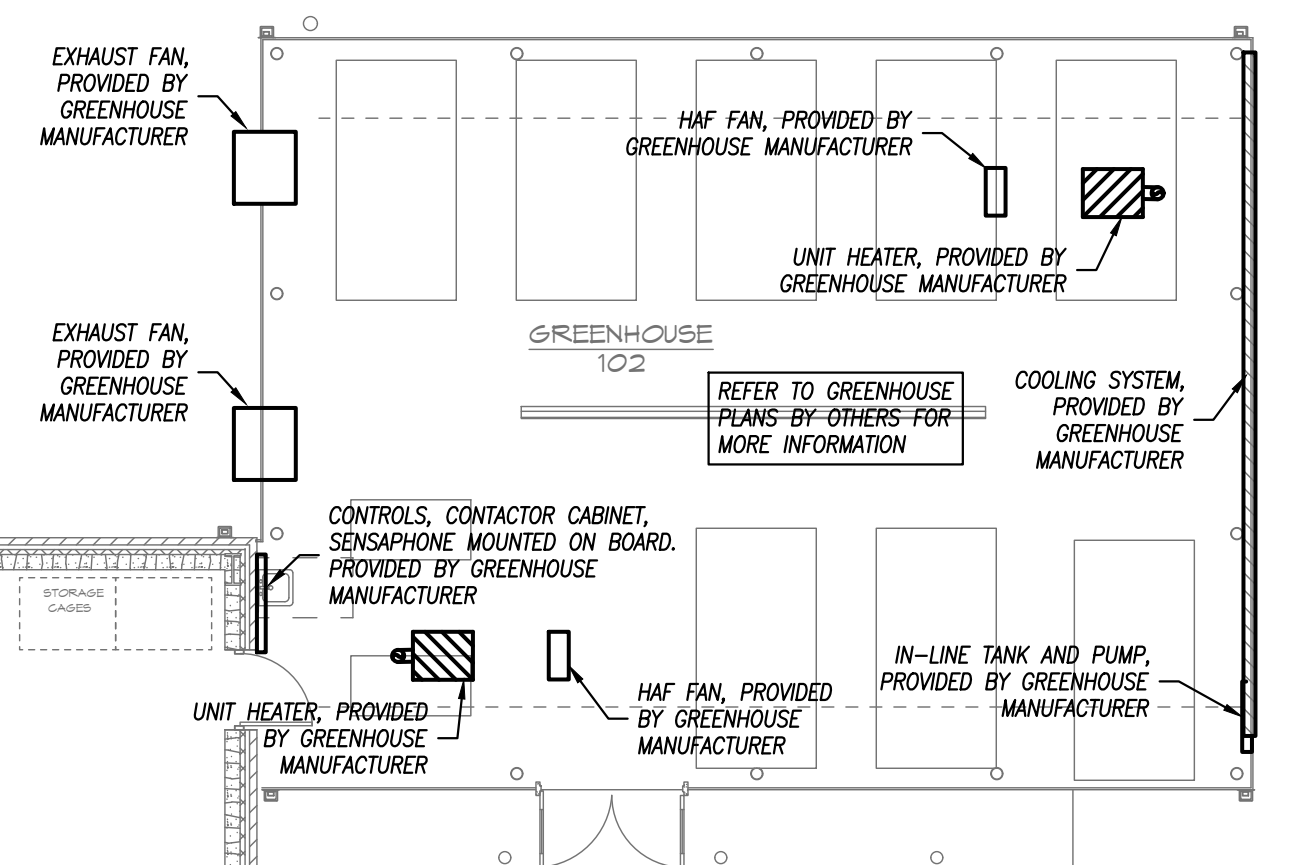
UPPER LEVEL PLAN - HVAC
 1/8" = 1'-0"



MAIN LEVEL PLAN - HVAC
 1/8" = 1'-0"

HVAC NOTES:

- DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
- FIELD VERIFY THE EXACT MECHANICAL REQUIREMENTS FOR ALL EQUIPMENT PROVIDED BY OTHERS (REFER TO DETAILS BY OTHERS).
- NO COMBUSTIBLE MATERIALS ARE ALLOWED IN THE RETURN AIR PLENUM. PROVIDE RETURN AIR OPENINGS THRU ALL SOUND WALLS ABOVE THE CEILING WITH RETURN AIR BOOTS.
- HVAC CONTROLS WILL BE BY THE OWNERS CONTROL VENDOR THERMAL COMFORT AIR. THIS COMPANY IS BIDDING THE CONTROLS ONLY. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL COORDINATE ALL THEIR WORK WITH THEM.



PROVIDE NEW FIRE DAMPER FOR EXISTING LOUVER (APPROX 48X48) IN 2 HOUR FIRE RATED WALL. FIELD VERIFY EXACT SIZE OF LOUVER.

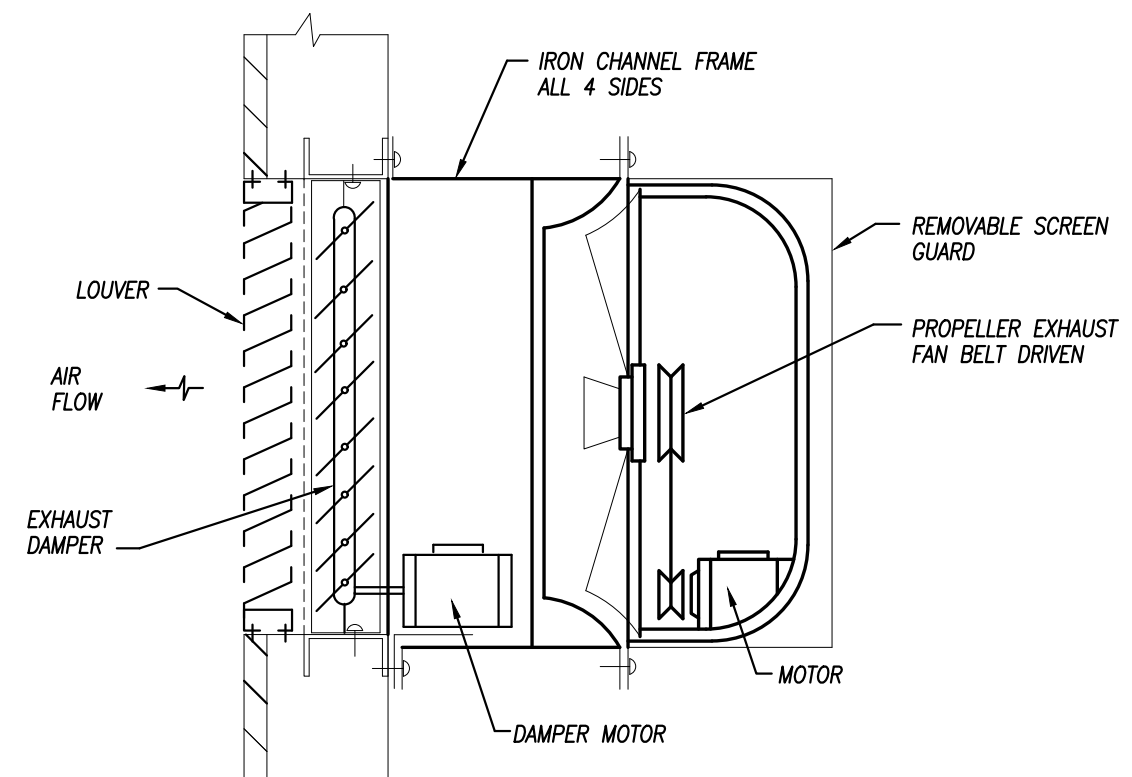
EF-6 CONTROLLED BY THERMOSTAT

ALL EXPOSED ROUND DUCT SHALL BE DOUBLE WALL INSULATED DUCT

TO IRH-2

TO UH-1

TO IRH-1



PROPELLER EXHAUST FAN DETAIL
NOT TO SCALE

TAG	Weight (lbs)	Make	Model	Unit										Cooling					Gas Heating									
				Electrical	Supply Fan			EAT		LAT		Ambient		Compressor			Stages		Total Output Capacity (Btu/hr)		EODB (°F)		LDB (°F)					
DOAS-1	2082	Daikin	DPS007A	460/60/3	14.8	20	11.7	1200	1	1.11	2.3	2" MERV 8	97.2	75.7	53.4	53.4	90676	57444	95	Modulating Control with Inverter Compressors	2	5.6	R410A	Gas	Modulating 10:1	160000	0	100

Notes:
 1. Provide factory installed non-fused disconnect
 2. Provide modulating hot gas reheat
 3. Provide unit powered outside air damper
 4. Provide double wall construction with injected foam insulation
 5. Provide lead circuit with variable speed inverter compressor
 6. Provide variable speed supply fan with EC motor
 7. Provide variable speed condensers fans with EC motors
 8. Provide stainless steel gas heat exchanger
 9. Provide welded and fully insulated pad mounted plenum curb with side discharge

PLAN MARK	MANUFACTURER	MODEL NUMBER	CABINET WIDTH	TOTAL CFM	OUTDOOR AIR CFM	STATIC PRESSURE	MOTOR HP/HP EFF	HEAT INPUT BTUH	HEAT OUTPUT BTUH	FLUE OUTLET	COMBUSTION AIR INLET	EVAPORATOR MODEL	COOLING CAPACITY	ENTERING AIR DRYBWT	LEAVING AIR DRYBWT	ELECTRICAL	FILTER	NOTES
F-1	TRANE	T U/D X1 D120A 9H-80X	25"	1980	230	0.2"	1 HP/ECM	120	108	3"	3"	47XC 064E	5 TON	78/65	57/55	120 V, 1 PH.	MERV 13	1
F-2	TRANE	T U/D X1 C100A 9H-80X	21"	1400	160	0.2"	3/4 HP/ECM	100	90	3"	2"	47XC 048C	4 TON	78/65	57/55	120 V, 1 PH.	MERV 13	1
F-3	TRANE	T U/D X1 C100A 9H-80X	21"	1600	180	0.2"	3/4 HP/ECM	100	90	3"	2"	47XC 048C	4 TON	78/65	57/55	120 V, 1 PH.	MERV 13	1
F-4	TRANE	T U/D X1 D120A 9H-80X	25"	1980	230	0.2"	1 HP/ECM	120	108	3"	3"	47XC 064E	5 TON	78/65	57/55	120 V, 1 PH.	MERV 13	1
F-5	TRANE	T U/D X1 D120A 9H-80X	25"	1980	230	0.2"	1 HP/ECM	120	108	3"	3"	47XC 064E	5 TON	78/65	57/55	120 V, 1 PH.	MERV 13	1

NOTES LEGEND
 1. CONNECT TO EXISTING CAMPUS CONTROLS SYSTEM

PURPOSE	DUCT	LOCATION	STYLE	MATERIAL	INSULATION		NOTES
					APPLICATION	THICKNESS	
SUPPLY	LOW PRESSURE/VELOCITY	CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
		CONCEALED	ROUND	MINERAL FIBER	WRAPPED	1-1/2"	----
		EXPOSED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
		EXPOSED	ROUND	DOUBLE WALL INSULATED FIBERGLASS	DOUBLE WALL DUCT	1/2"	----
RETURN	LOW PRESSURE/VELOCITY	EXTERIOR	ALL	FLEXIBLE ELASTOMERIC	WRAPPED	2"	----
		CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
		CONCEALED	ROUND	MINERAL FIBER	WRAPPED	1-1/2"	----
		EXPOSED	RECTANGULAR	FIBERGLASS	LINED	1/2"	----
EXHAUST	LOW PRESSURE/VELOCITY	CONCEALED	RECTANGULAR	FIBERGLASS	LINED	1/2"	2
		CONCEALED	ROUND	FIBERGLASS	LINED	1/2"	2
		EXPOSED	RECTANGULAR	FIBERGLASS	LINED	1/2"	2
		EXPOSED	ROUND	FIBERGLASS	LINED	1/2"	2
OUTSIDE AIR	ALL	CONCEALED OR MECH SPACE	RECTANGULAR	MINERAL FIBER	WRAPPED	1-1/2"	----
		CONCEALED OR MECH SPACE	ROUND	MINERAL FIBER	WRAPPED	1-1/2"	----
		EXPOSED (NOW MECH SPACE)	RECTANGULAR	RIGID FIBERGLASS BD.	WRAPPED	1"	3
		EXPOSED (NOW MECH SPACE)	ROUND	RIGID FIBERGLASS BD.	WRAPPED	1"	3

NOTES:
 1. IN ADDITION TO OTHER SCHEDULED INSULATION.
 2. PROVIDE LINER ONLY WITHIN 10' OF FAN FOR ACOUSTICS.
 3. THICKNESS SHALL ENCAPSULATE DUCT CONSTRUCTION.
 4. INSTALL FROM UNIT DISCHARGE TO FIRST DUCT ELBOW, THEN 10' FURTHER. NOT REQUIRED INSIDE CHASES OR MECHANICAL ROOMS, BUT SHALL BE INSTALLED ON REMAINING DUCTWORK WHEN 10' DIMENSION FALLS OUTSIDE ROOM.

GENERAL REMARKS (APPLICABLE TO ALL TYPES):
 1) ALL DUCTWORK INSULATION AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
 2) ALL INSULATION THICKNESS SHALL MEET ASHRAE 90.1 - 2010 REQUIREMENTS AT A MINIMUM.
 3) REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION FOR INSULATION PRODUCTS AND SYSTEMS.

HVAC CONTROLS NOTES:
 1. HVAC CONTROLS WILL BE BY THE OWNERS CONTROL VENDOR THERMAL COMFORT AIR. THIS COMPANY IS BIDDING THE CONTROLS ONLY. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL COORDINATE ALL THEIR WORK WITH THEM

PLAN MARK	MANUFACTURER	MODEL NUMBER	NOMINAL SIZE	SENSIBLE MBH	TOTAL MBH	AMBIENT	SUCTION	LIQUID	COMPRESSORS	ELECTRICAL	MOCP AMPS	MIN CIRCUIT AMPS	DISCONNECT	NOTES
CU-1	TRANE	4TTA060	5 TONS	43.3	56.9	100	7/8"	3/8"	1	208/240V, 3PH.	35	21	YES	1,2,3
CU-2	TRANE	4TTA048	4 TONS	33.8	43.6	100	7/8"	3/8"	1	208/240V, 3PH.	30	18	YES	1,2,3
CU-3	TRANE	4TTA048	4 TONS	34.2	44.1	100	7/8"	3/8"	1	208/240V, 3PH.	30	18	YES	1,2,3
CU-4	TRANE	4TTA060	5 TONS	43.3	56.9	100	7/8"	3/8"	1	208/240V, 3PH.	35	21	YES	1,2,3
CU-5	TRANE	4TTA060	5 TONS	43.3	56.9	100	7/8"	3/8"	1	208/240V, 3PH.	35	21	YES	1,2,3

NOTES LEGEND
 1. PROVIDE TXV VALVE, SERVICE VALVES, AND REFRIGERANT ACCUMULATOR AT SUCTION LINE
 2. PROVIDE COIL HAIL GUARDS
 3. VERIFY EXACT REFRIGERANT LINE SIZES WITH MANUFACTURER

PLAN MARK	MANUFACTURER	MODEL NUMBER	MOUNTING	SERVICE	CFM	STATIC PRESSURE	ELECTRICAL	DRIVE	DISCONNECT	DAMPER	NOTES
EF-1	GREENHECK	SP-890	CEILING	EXHAUST	75	1/4"	50 WATTS, 120V, 1 PH.	DIRECT	YES	BACKDRAFT	4
EF-2	GREENHECK	CUBE-300	ROOF	EXHAUST	9,600	1/4"	2 HP, 208V, 1 PH.	BELT	YES	MOTORIZED	1,2
EF-3	GREENHECK	GSB-081	ROOF	EXHAUST	600	1/4"	1/8 HP, 120V, 1 PH.	BELT	YES	MOTORIZED	1,2
EF-4	GREENHECK	SE1-16-428-B	WALL	EXHAUST	1,200	1/4"	1/4 HP, 208V, 1 PH.	BELT	YES	MOTORIZED	3
EF-5	GREENHECK	SP-A290	CEILING	EXHAUST	250	1/4"	81 WATTS, 120V, 1 PH.	DIRECT	YES	MOTORIZED	5
EF-6	GREENHECK	SP-8150	CEILING	EXHAUST	150	1/4"	129 WATTS, 120V, 1 PH.	DIRECT	YES	BACKDRAFT	3

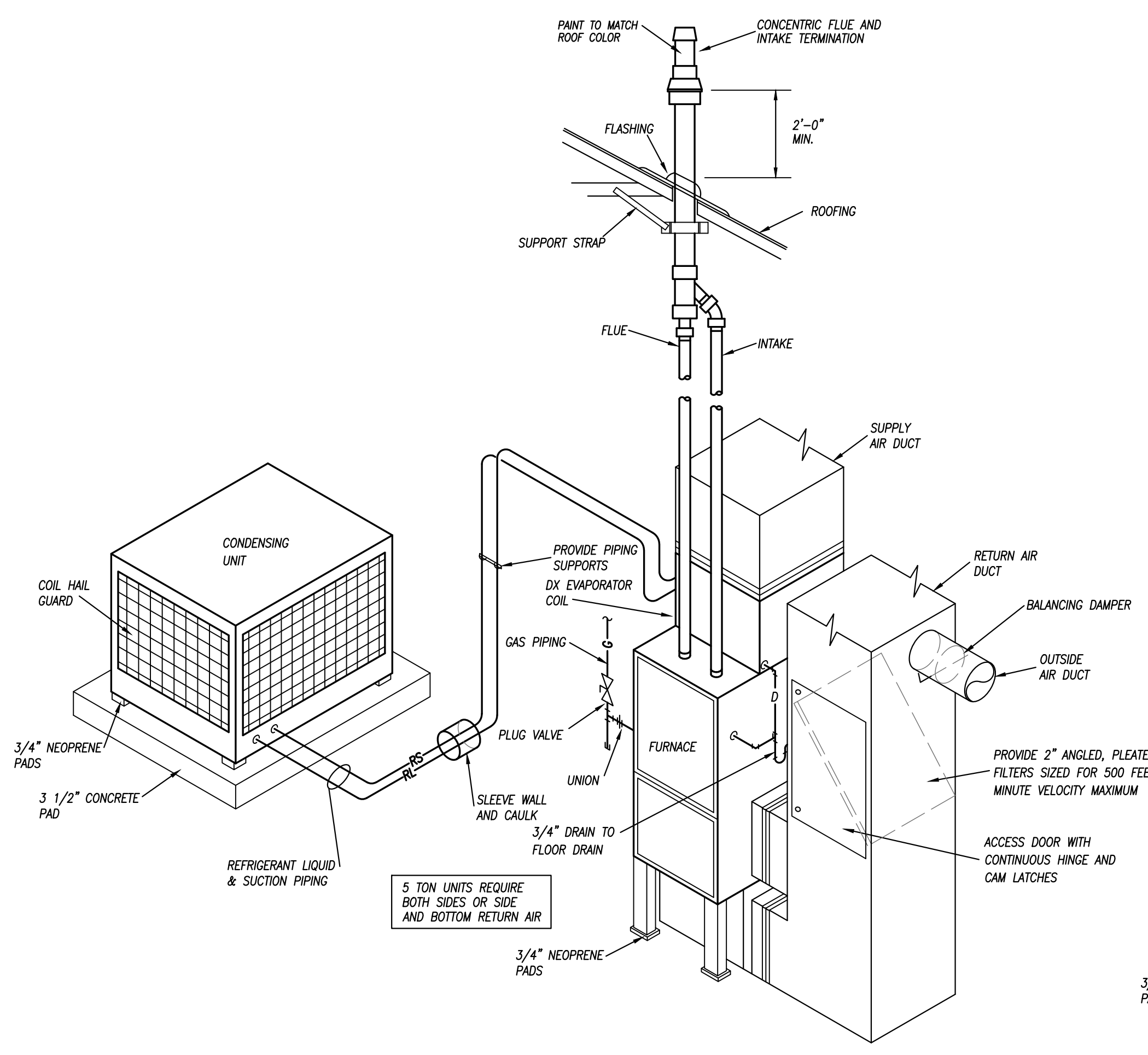
NOTES LEGEND
 1. PROVIDE SPEED CONTROL
 2. PROVIDE ROOF CURB AND BIRD SCREEN
 3. PROVIDE WALL MOUNTED EXHAUST FAN, HOUSING, OSHA GUARD, SLEEVE, MOTORIZED DAMPER, AND DAMPER GUARD
 4. PROVIDE PITCHED ROOF CAP MODEL RJ-4X9 WITH BUILT IN BIRDSCREEN AND BACKDRAFT DAMPER
 5. PROVIDE WITH WALL DISCHARGE HOODED WALL CAP MODEL WJ-3 WITH BUILT IN BIRDSCREEN AND BACK DRAFT DAMPER

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	MOUNT TYPE	VOLUME DAMPER	MATERIAL	MATERIAL COLOR	NOTES
A	PRICE	520-D	SUPPLY	FLANGE	YES	STEEL	WHITE	
B	PRICE	SAGE	RETURN	ROUND DUCT	NO	STEEL	GALVANIZED	
C	PRICE	SAGE	SUPPLY	ROUND DUCT	YES	STEEL	GALVANIZED	
D	PRICE	535	RETURN/EXHAUST	FLANGE	NO	STEEL	WHITE	1

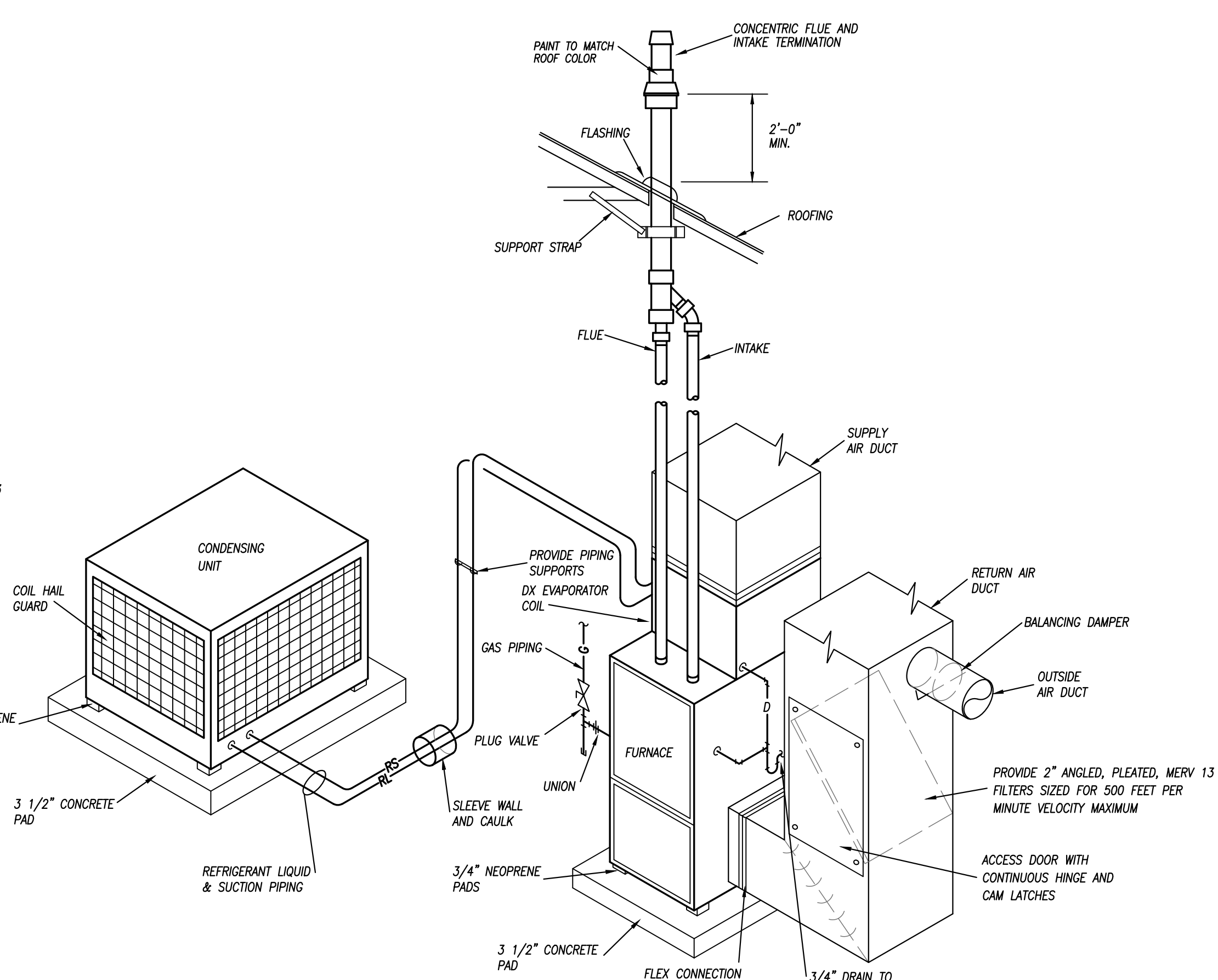
NOTES LEGEND
 1. PROVIDE FIRE RADIATION DAMPER AT GYPSBOARD CEILING.

PLAN MARK	MANUFACTURER	MODEL NUMBER	CAPACITY (BTUH)	ELECTRICAL	NOTES
UH-1	TRANE	GND-020A62-0000-DE7	200,000	120 V, 1 PH, 20 AMP	1,2,3

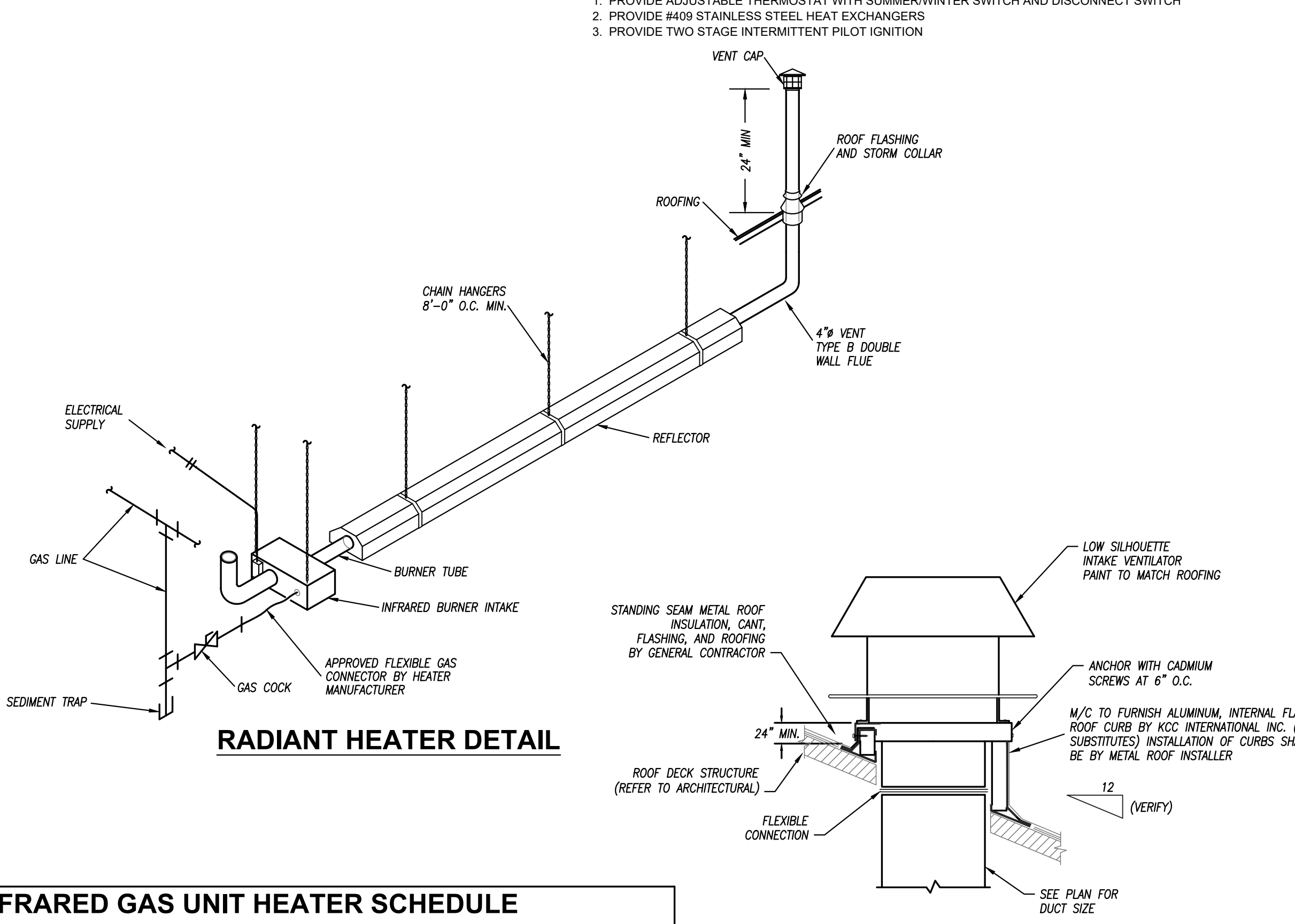
NOTES LEGEND
 1. PROVIDE ADJUSTABLE THERMOSTAT WITH SUMMER/WINTER SWITCH AND DISCONNECT SWITCH
 2. PROVIDE 800 STAINLESS STEEL HEAT EXCHANGERS
 3. PROVIDE TWO STAGE INTERMITTENT PILOT IGNITION



FURNACE AND CONDENSING UNIT DETAIL
NO SCALE



FURNACE AND CONDENSING UNIT DETAIL
NO SCALE

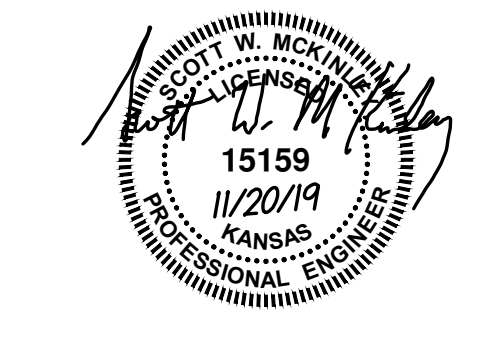


RADIANT HEATER DETAIL

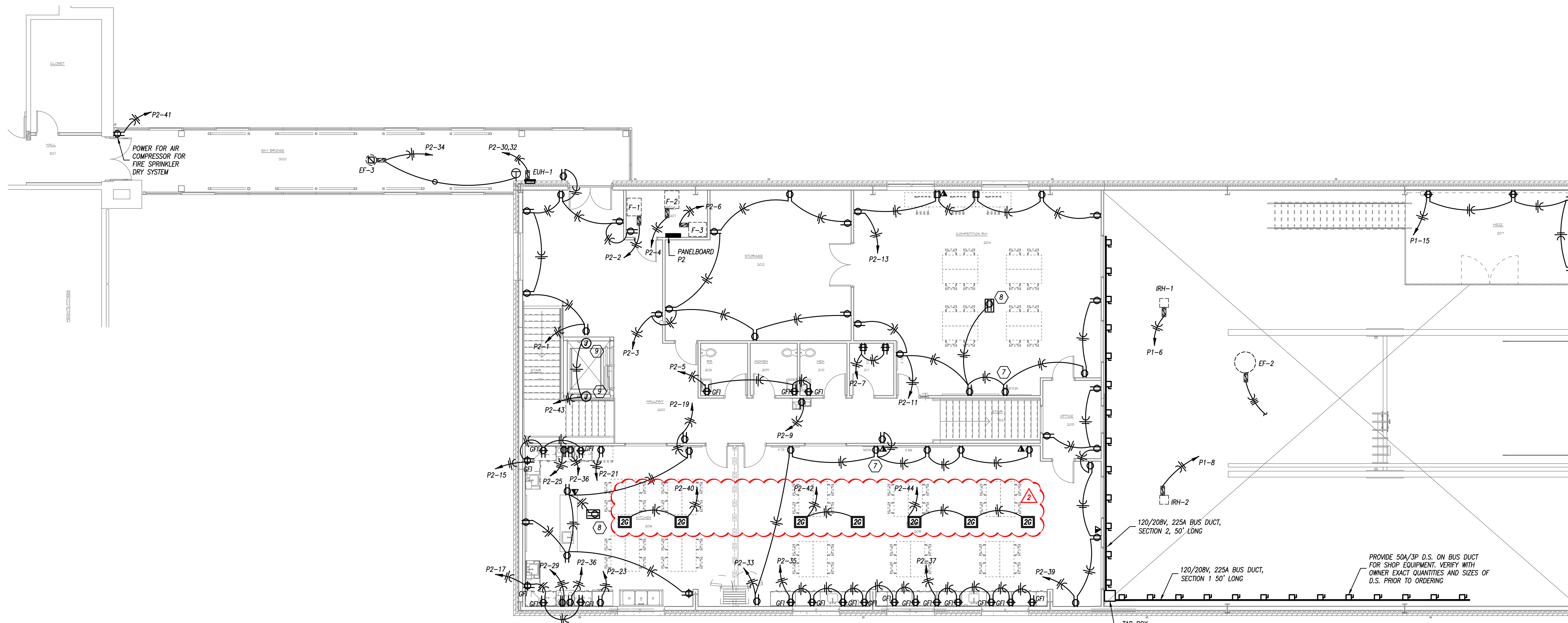
O/A INTAKE DETAIL
NOT TO SCALE

PLAN MARK	MANUFACTURER	MODEL NUMBER	CAPACITY (BTUH)	ELECTRICAL	NOTES
IRH-1	DETROIT RADIANT	DET3-50-200	200,000	120 V, 1 PH, 20 AMP	1
IRH-2	DETROIT RADIANT	DET3-50-200	200,000	120 V, 1 PH, 20 AMP	1

NOTES LEGEND
 1. PROVIDE ADJUSTABLE THERMOSTAT AND DISCONNECT SWITCH



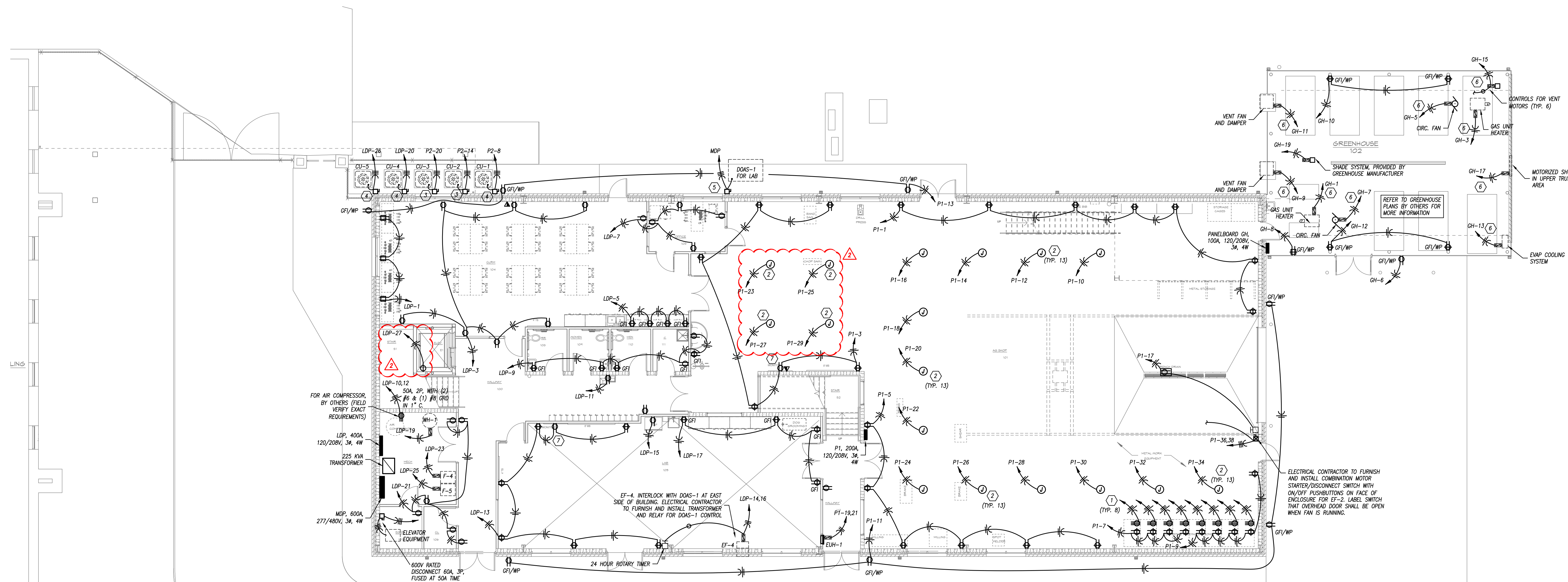
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 ● REVISION #1 12-5-19
 ● REVISION #2 12-12-19



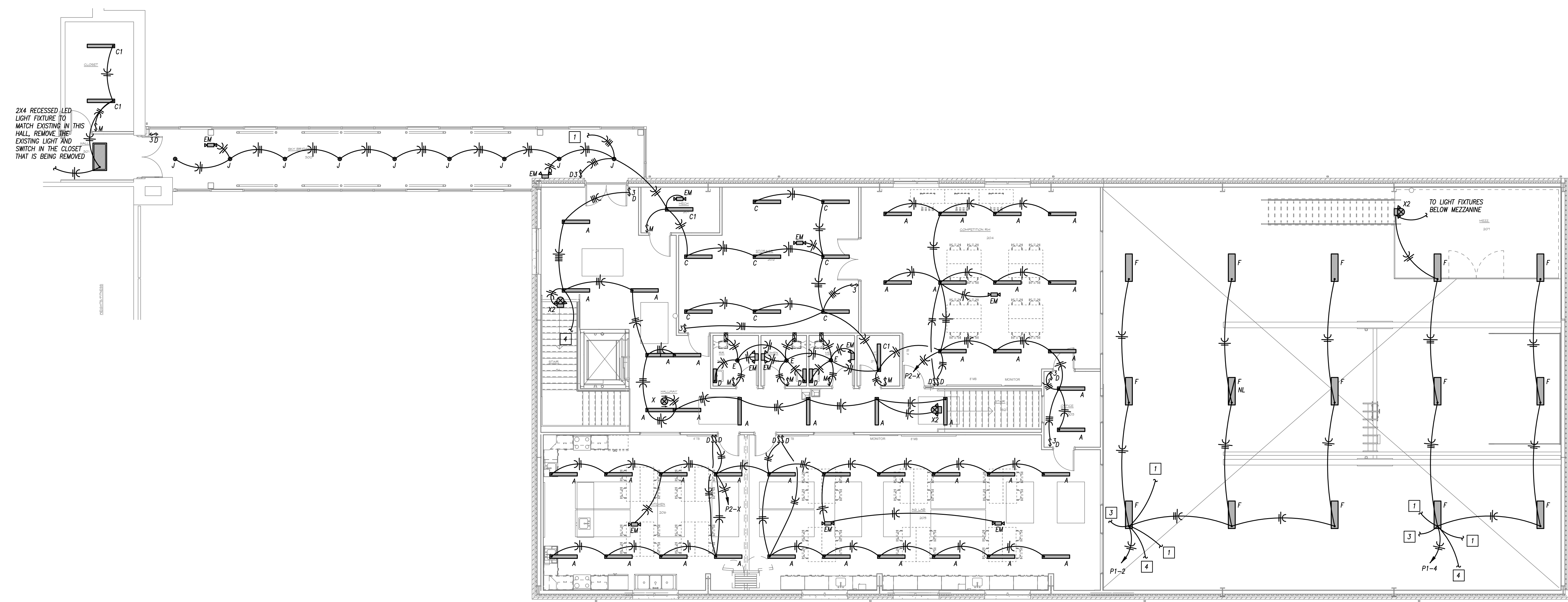
UPPER LEVEL PLAN - POWER
1/8" = 1'-0"

- ELECTRIC NOTES:**
1. FIELD VERIFY THE EXACT LOCATION OF ALL RECEPTACLES AND PHONE/DATA OUTLETS WITH THE OWNER.
 2. ALL WIRING, EQUIPMENT, AND LIGHTING IN THE SERVICE AREA SHALL BE OVERHEAD AND KEPT ABOVE 48" AFF AND BELOW 18" BELOW THE CEILING.
 3. ALL WIRING AND EQUIPMENT IN THE CLASSROOM AREA SHALL BE OVERHEAD AND KEPT ABOVE 18" AFF.
 4. NO CIRCUITING IS ALLOWED IN THE SLAB.
 5. FIELD VERIFY THE EXACT ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT PROVIDED BY OTHERS.

- POWER PLAN KEYED NOTES**
1. CIRCUIT WELDER TO BUS DUCT
 2. RETRACTABLE CORD REEL WITH QUAD RECEPTACLE, VERIFY EXACT LOCATIONS. MAINTAIN REQUIRED CLEARANCES FOR RADIANT HEATERS.
 3. 30 A, 3P, WP, D.S., FUSED AT 30 A, WITH (3) #10 AND (1) #10 GRD, IN 3/4" C.
 4. 60 A, 3P, WP, D.S., FUSED AT 35 A, WITH (3) #8 AND (1) #10 GRD, IN 3/4" C.
 5. 30 A, 3P, WP, D.S., FUSED AT 20 A, WITH (3) #12 AND (1) #12 GRD, IN 3/4" C. INTERLOCK DOAS-1 WITH EF-4.
 6. ROUTE THRU CONTROLLER/CONDUCTOR
 7. VERIFY MOUNTING HEIGHT FOR POWER AND DATA FOR MONITOR WITH ARCHITECT.
 8. FOR PROJECTOR, VERIFY EXACT LOCATION WITH OWNER.
 9. POWER FOR EXTERIOR CLOCK ON CLOCK TOWER. VERIFY EXACT ELECTRICAL REQUIREMENTS WITH MANUFACTURER.



MAIN LEVEL PLAN - POWER
1/8" = 1'-0"



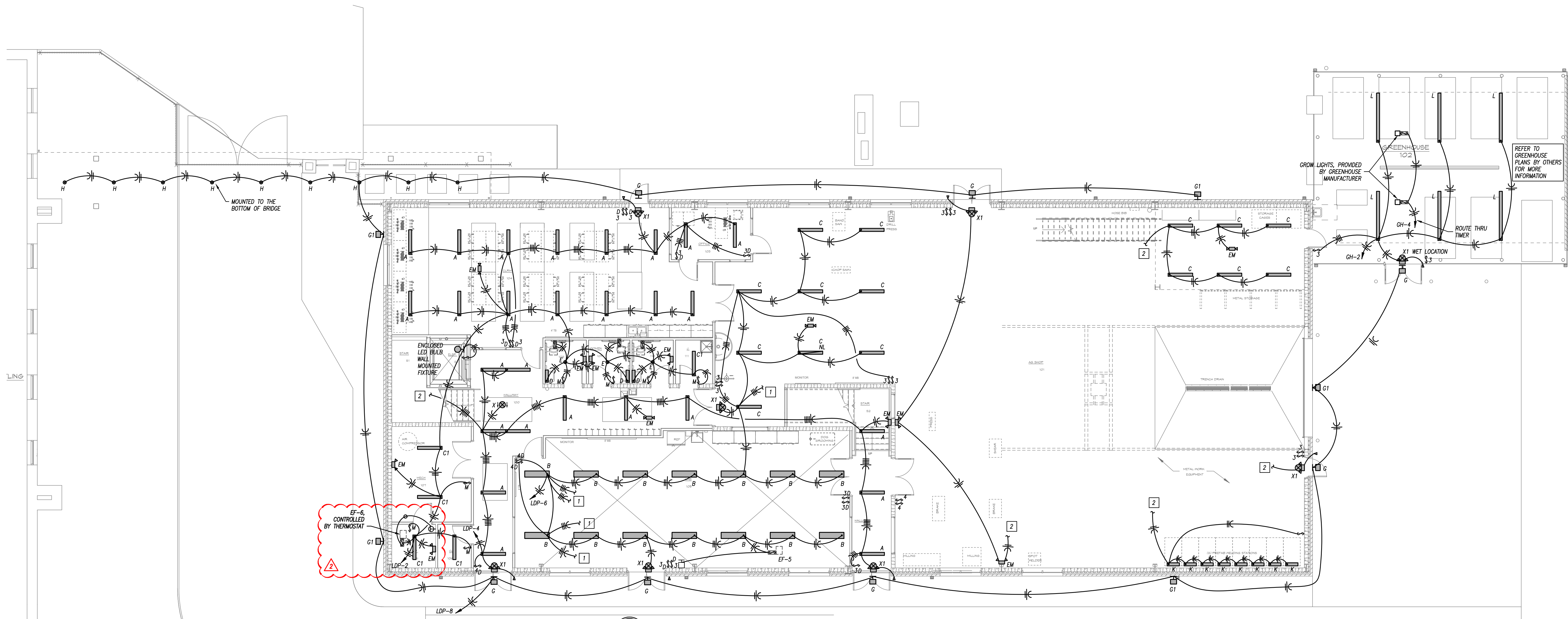
UPPER LEVEL PLAN - LIGHTING
 1/8" = 1'-0"

ELECTRIC NOTES:

1. FIELD VERIFY THE EXACT LOCATION OF ALL SWITCHES AND FAN CONTROLS WITH THE OWNER.
2. FIELD VERIFY THE EXACT ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT PROVIDED BY OTHERS.

LIGHTING PLAN KEYED NOTES

- 1 TO 3-WAY SWITCH
- 2 TO CIRCUIT ABOVE
- 3 TO 4-WAY SWITCH
- 4 TO LIGHTS BELOW



MAIN LEVEL PLAN - LIGHTING
 1/8" = 1'-0"

DISTRIBUTION PANELBOARD SCHEDULE

PANEL DESIGNATION: **MDP** MAIN BUS AMPS: 800 VOLTAGE: 480/277
MAIN BREAKER AMPS: 600 PHASE/WIRE: 3Ø, 4W LOCATION: -

CIRCUIT #	CIRCUIT DESIGNATION	KVA	CIRCUIT BREAKER			SETS # OF WIRES	SIZE	GROUND	MATERIAL	CONDUIT	
			POLE	FRAME	TRIP						
1	TRANSFORMER TFX-1	166.7	3	400	350	1	3	500 MCM	#3	COPPER	3"
2	ELEVATOR	17.5	3	100	50	1	3	#6	#10	COPPER	3/4"
3	DOMS-1	11.1	3	100	20	1	3	#12	#12	COPPER	1/2"
4	CRANE (VERIFY)	0.0	3	100	30	1	3	#10	#10	COPPER	1/2"
5	-	0.0	-	-	-	-	-	-	-	-	-
6	-	0.0	-	-	-	-	-	-	-	-	-
7	-	0.0	-	-	-	-	-	-	-	-	-
8	-	0.0	-	-	-	-	-	-	-	-	-
9	-	0.0	-	-	-	-	-	-	-	-	-
10	-	0.0	-	-	-	-	-	-	-	-	-

LOAD DESCRIPTION	CONNECTED LOAD	DEMAND FACTOR	CODE MIN. (VA)
LIGHTS	12,800	1.25	15,750
RECEPTACLES	45,720	10KVA + 50% REST	27,890
MOTORS	33,750	1.25 x LARGEST + SUM OF REST	38,124
AIR CONDITIONING	31,624	1.00	31,624
SPACE HEATING	10,000	0.00	0
CONTINUOUS	57,540	1.25	71,925
NON-CONTINUOUS	4,000	1.00	4,000
MISC. LOADS 1	0	1.00	0
MISC. LOADS 2	0	1.00	0
TOTAL CONNECTED LOAD (VA):	195,243	SIZING LOAD (VA):	189,283
TOTAL CONNECTED LOAD (AMPS):	234.8	SIZING LOAD (AMPS):	227.7

REMARKS:
1. CUTLER HAMMER POW-R-LINE 4B PANELBOARD OR EQUAL.
2. FIELD VERIFY BREAKER SIZES AND TYPE WITH BRIDGE CRANE MANUFACTURER PRIOR TO ORDERING.

SINGLE-SECTION PANELBOARD SCHEDULE

PANEL DESIGNATION: **LDP** MAIN BUS AMPS: 600 VOLTAGE: 208/120
MOUNTING: SURFACE MAIN BREAKER: 800 PHASE/WIRE: 3Ø, 4W LOCATION: MECH 107

DESCRIPTION	PHASE			TRIP POLE	C/B	CIRCUIT #	PHASE			DESCRIPTION			
	A	B	C				POLE	TRIP	A		B	C	
RECEPT: CLRM 104	1080			20	1	1	2	1	20	1400	LTG: MECH, CLRM 104, RR		
RECEPT: CLRM 104		1260		20	1	3	4	1	20	1700	LTG: HALLWAY 100, 112, 200		
RECEPT: CLRM 104			720	20	1	5	6	1	20	1300	LTG: LAB & WOOD SHOP		
RECEPT: OFFICE 103	900			20	1	7	8	1	20	900	EXTERIOR LIGHTING		
RECEPT: 108-111		720		20	1	9	10	2	50	2400	AIR COMPRESSOR		
DRINKING FOUNTAIN			800	20	1	11	12	-	-	2400	-		
RECEPT: LAB 105	1260			20	1	13	14	2	15	700	EF-4		
RECEPT: LAB 105 REFRIGERATOR				20	1	15	16	-	-	700	-		
RECEPT: LAB 105		720		20	1	17	18	1	20	1500	FACP		
WH-1	800			20	1	19	20	3	30	1450	CU-4		
RECEPT: MECH 107, 107B, 106		1080		20	1	21	22	-	-	1450	-		
F-4			1000	20	1	23	24	-	-	1450	-		
F-5	1000			20	1	25	26	3	30	1450	CU-5		
SUMP PUMP				20	1	27	28	-	-	1450	-		
SPARE				20	1	29	30	-	-	1450	-		
SPARE				20	1	31	32	3	225	940	PANELBOARD P1		
SPARE				20	1	33	34	-	-	7500	-		
SPARE				20	1	35	36	-	-	8060	-		
SPARE				20	1	37	38	3	200	24770	PANELBOARD P2		
SPARE				20	1	39	40	-	-	16290	-		
SPARE				20	1	41	42	-	-	15030	-		
SPARE				20	1	43	44	3	100	3900	PANELBOARD GH		
-				20	1	45	46	-	-	3900	-		
-				20	1	47	48	-	-	4700	-		
-				20	1	49	50	3	225	12500	BUS DUCT		
-				20	1	51	52	-	-	12500	-		
-				20	1	53	54	-	-	12500	-		
-				20	1	55	56	3	20	-	SPARE		
-				20	1	57	58	-	-	-	SPARE		
-				20	1	59	60	-	-	-	SPARE		
TOTALS	5040	5060	3240							57010	47970	48390	TOTALS

LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	12,800	1.25	15,750
RECEPTACLES	45,720	10KVA + 50% REST	27,890
MOTORS	16,350	1.25 x LARGEST + SUM OF REST	17,500
AIR CONDITIONING	20,550	1.00	20,550
SPACE HEATING	10,000	0.00	0
CONTINUOUS	57,540	1.25	71,925
NON-CONTINUOUS	4,000	1.00	4,000
MISC. LOADS 1	0	1.00	0
MISC. LOADS 2	0	1.00	0
TOTALS	166,710	SIZING LOAD:	167,585
		SIZING LOAD (AMPS):	437

REMARKS:
1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL.

SINGLE-SECTION PANELBOARD SCHEDULE

PANEL DESIGNATION: **P1** MAIN BUS AMPS: 225 VOLTAGE: 208/120
MOUNTING: SURFACE MAIN BREAKER: M.L.O. PHASE/WIRE: 3Ø, 4W LOCATION: SHOP

DESCRIPTION	PHASE			TRIP POLE	C/B	CIRCUIT #	PHASE			DESCRIPTION			
	A	B	C				POLE	TRIP	A		B	C	
RECEPT: AG SHOP 101	1080			20	1	1	2	1	20	1200	LTG: AG SHOP 101		
RECEPT: AG SHOP 101		1080		20	1	3	4	1	20	1400	LTG: AG SHOP 101		
RECEPT: AG SHOP 101			1080	20	1	5	6	1	20	1500	IRH-1		
RECEPT: AG SHOP 101	720			20	1	7	8	1	20	1500	HOSE REEL		
RECEPT: AG SHOP 101		720		20	1	9	10	1	20	360	HOSE REEL		
RECEPT: EXTERIOR WEST			720	20	1	11	12	1	20	360	HOSE REEL		
RECEPT: EXTERIOR EAST	540			20	1	13	14	1	20	360	HOSE REEL		
RECEPT: MEZ 207		720		20	1	15	16	1	20	360	HOSE REEL		
RECEPT: GARAGE DOOR			1000	20	1	17	18	1	20	360	HOSE REEL		
EUH-1	1500			20	2	19	20	1	20	360	HOSE REEL		
HOSE REEL			1500	20	1	21	22	1	20	360	HOSE REEL		
HOSE REEL		360		20	1	23	24	1	20	360	HOSE REEL		
HOSE REEL	360			20	1	25	26	1	20	360	HOSE REEL		
HOSE REEL			360	20	1	27	28	1	20	360	HOSE REEL		
HOSE REEL				20	1	29	30	1	20	360	HOSE REEL		
SPARE				20	1	31	32	1	20	360	HOSE REEL		
SPARE				20	1	33	34	1	20	360	HOSE REEL		
SPARE				20	1	35	36	2	20	1600	EF-2		
SPARE				20	1	37	38	-	-	1600	-		
SPARE				20	1	39	40	1	20	-	SPARE		
-				20	1	41	42	1	20	-	SPARE		
TOTALS	4200	4380	3520							5740	3200	4540	TOTALS

LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	2,800	1.25	3,500
RECEPTACLES	13,780	10KVA + 50% REST	11,890
MOTORS	0	1.25 x LARGEST + SUM OF REST	0
AIR CONDITIONING	0	1.00	0
SPACE HEATING	6,000	1.00	6,000
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	3,200	1.00	3,200
MISC. LOADS 1	0	1.00	0
MISC. LOADS 2	0	1.00	0
TOTALS	12,800	SIZING LOAD:	24,340
		SIZING LOAD (AMPS):	68

REMARKS:
1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL.

SINGLE-SECTION PANELBOARD SCHEDULE

PANEL DESIGNATION: **GH** MAIN BUS AMPS: 125 VOLTAGE: 208/120
MOUNTING: SURFACE MAIN BREAKER: M.L.O. PHASE/WIRE: 3Ø, 4W LOCATION: GREENHOUSE

DESCRIPTION	PHASE			TRIP POLE	C/B	CIRCUIT #	PHASE			DESCRIPTION			
	A	B	C				POLE	TRIP	A		B	C	
GAS UNIT HEATER	500			15	1	1	2	1	20	600	LTG: GREENHOUSE		
GAS UNIT HEATER		500		15	1	3	4	1	20	1200	GROW LIGHTS		
FAN			1000	20	1	5	6	1	20	800	RECEPT: EXTERIOR		
FAN	1000			20	1	7	8	1	20	800	RECEPT: CONTROLS		
FAN		900		20	1	9	10	1	20	800	RECEPT: GREENHOUSE		
FAN			1600	20	1	11	12	1	20	800	RECEPT: GREENHOUSE		
COOLING SYSTEM	500			15	1	13	14	1	20	-	SPARE		
VENT		500		15	1	15	16	1	20	-	SPARE		
VENT			500	15	1	17	18	1	20	-	SPARE		
SHADE	500			15	1	19	20	1	20	-	SPARE		
SPARE				20	1	21	22	1	20	-	SPARE		
SPARE				20	1	23	24	1	20	-	SPARE		
SPARE				20	1	25	26	1	20	-	SPARE		
SPARE				20	1	27	28	1	20	-	SPARE		
SPARE				20	1	29	30	1	20	-	SPARE		
TOTALS	2500	1900	3100							1400	2000	1600	TOTALS

LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	1,800	1.25	2,250
RECEPTACLES	3,200	10KVA + 50% REST	2,200
MOTORS	6,500	1.25 x LARGEST + SUM OF REST	6,900
AIR CONDITIONING	0	1.00	0
SPACE HEATING	1,000	1.00	1,000
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
MISC. LOADS 1	0	1.00	0
MISC. LOADS 2	0	1.00	0
TOTALS	11,500	SIZING LOAD:	13,350
		SIZING LOAD (AMPS):	37

REMARKS:
1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL.

TRANSFORMER SCHEDULE

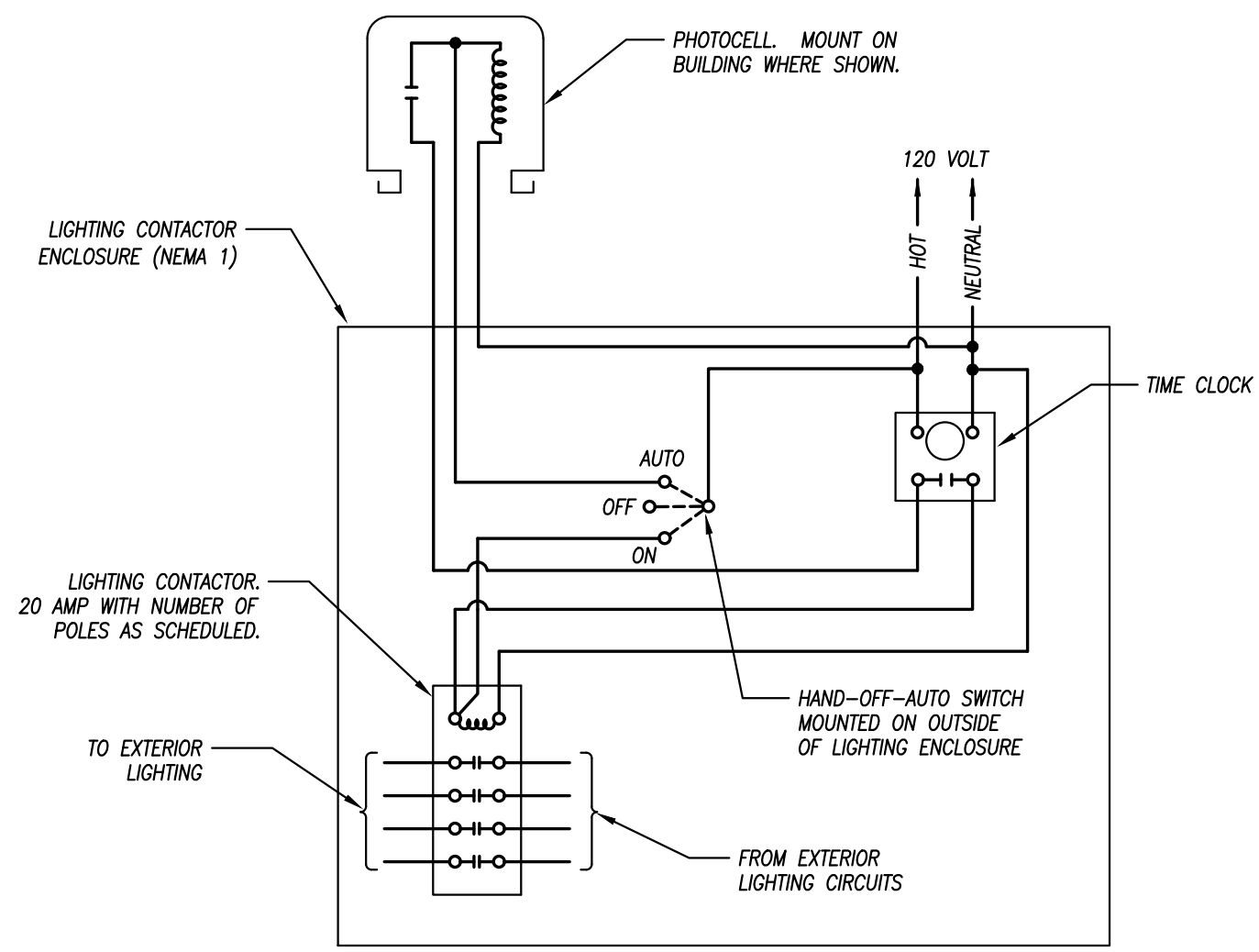
PLAN MARK	MANUFACTURER	MODEL	FACTORED LOAD (VA)	TRANSFORMER RATING (KVA)	PRIMARY			SECONDARY			NOTES	
					VOLTS	PHASE	WIRES	VOLTS	PHASE	WIRES		
TFX-1	CUTLER HAMMER	DT-3	157,585	225.0	480	3	3	208/120	3	4	1	

REMARKS:
1. PAD-MOUNTED TRANSFORMER
2. SUSPEND TRANSFORMER FROM STRUCTURE
3.
4.
5.

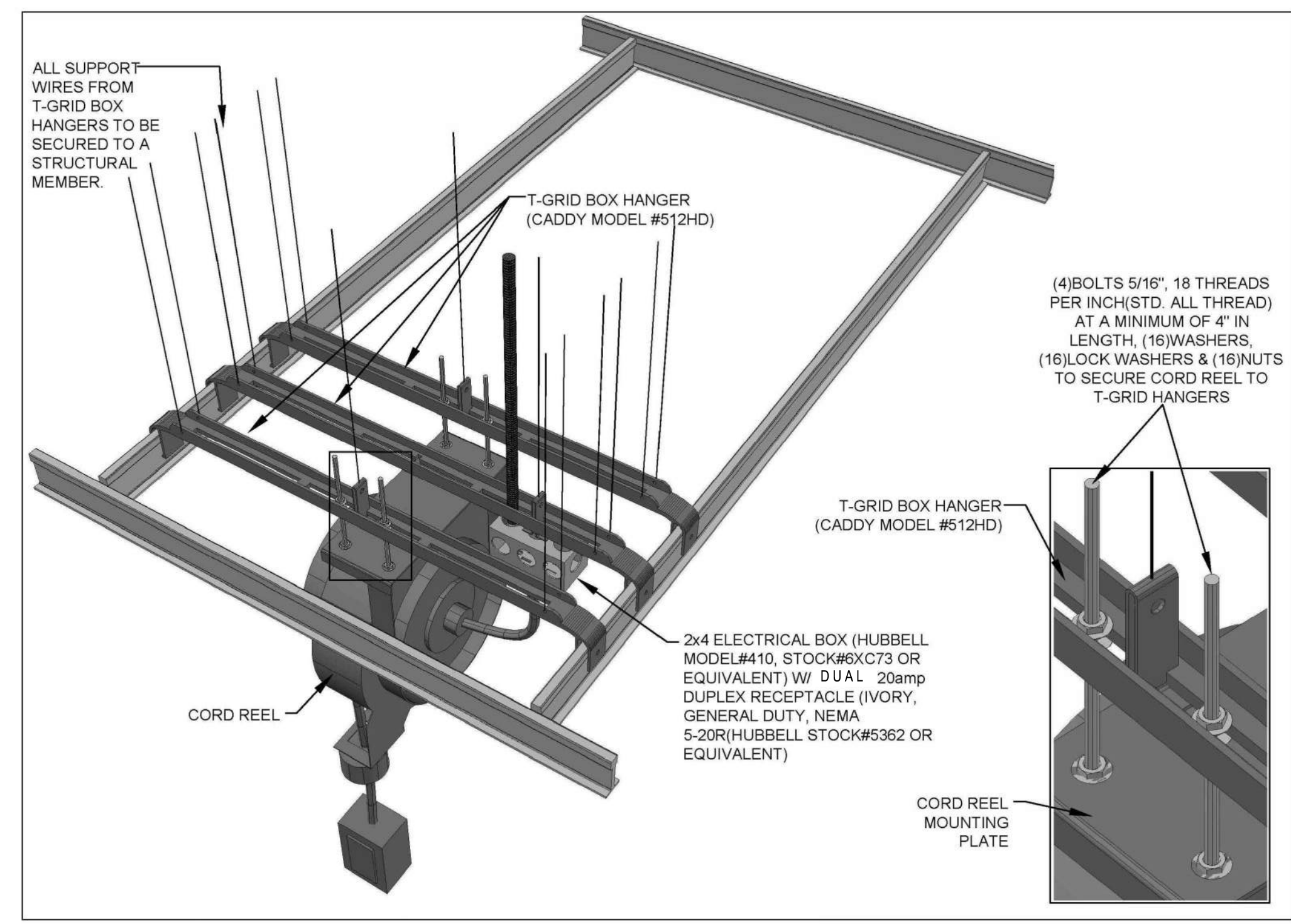
SINGLE-SECTION PANELBOARD SCHEDULE

PANEL DESIGNATION: **P2** MAIN BUS AMPS: 225 VOLTAGE: 208/120
MOUNTING: SURFACE MAIN BREAKER: M.L.O. PHASE/WIRE: 3Ø, 4W LOCATION: MECH 201

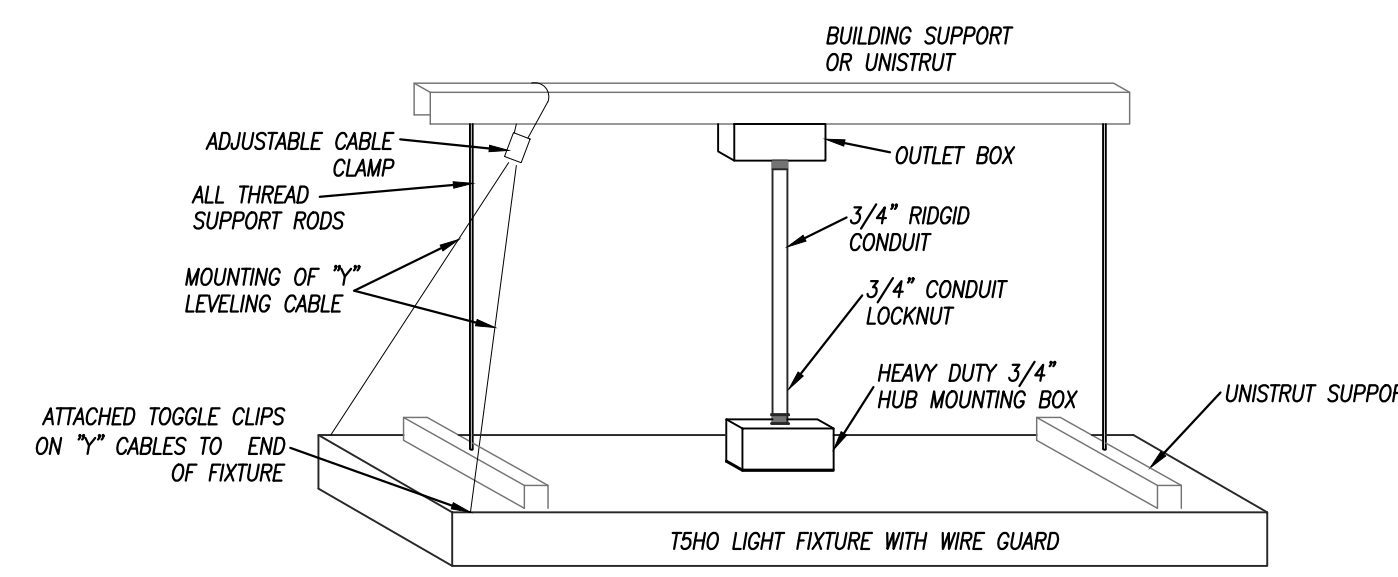
DESCRIPTION	PHASE			TRIP POLE	C/B	CIRCUIT #	PHASE			DESCRIPTION	
	A	B	C				POLE	TRIP	A		B
RECEPT: HALLWAY 200	1260			20	1	1	2	1	20	1000	F-1
RECEPT: STORAGE 202		1260		20	1	3	4	1	20	1000	F-2
RECEPT: RESTROOMS			540	20	1	5	6	1	20	1000	F-3
RECEPT: IT 211	720			20	1	7	8	3	35	1450	CU-1
DRINKING FOUNTAIN		800		20	1	9	10	-	-	1450	-
RECEPT: COMP RM 204			1080	20	1	11	12	-	-	-	-
RECEPT: COMP RM 204	1260			20	1	13	14	3	30	1250	CU-2
RECEPT: KITCHEN 206-EAST		540		20	1	15	16	-	-	1250	-
RECEPT: KITCHEN 206-WEST				20	1	17	18	-	-	1250	-
RECEPT: KITCHEN 206	1260			20	1	19	20	3	30	1250	CU-3
RECEPT: REFRIGERATOR				20	1	21	22	-	-	1250	-
RECEPT: REFRIGERATOR				20	1	23	24	-	-	1250	-
RANGE	4160			50	2	25	26	1	20	1700	LTG: 2ND FLR EAST
RANGE		4160		50	2	27	28	1	20		



EXTERIOR LIGHTING CONTROL
NOT TO SCALE



RETRACTABLE RECEPTACLE REEL DETAIL
NO SCALE



HIGH BAY LIGHT FIXTURE MOUNTING DETAIL
NO SCALE

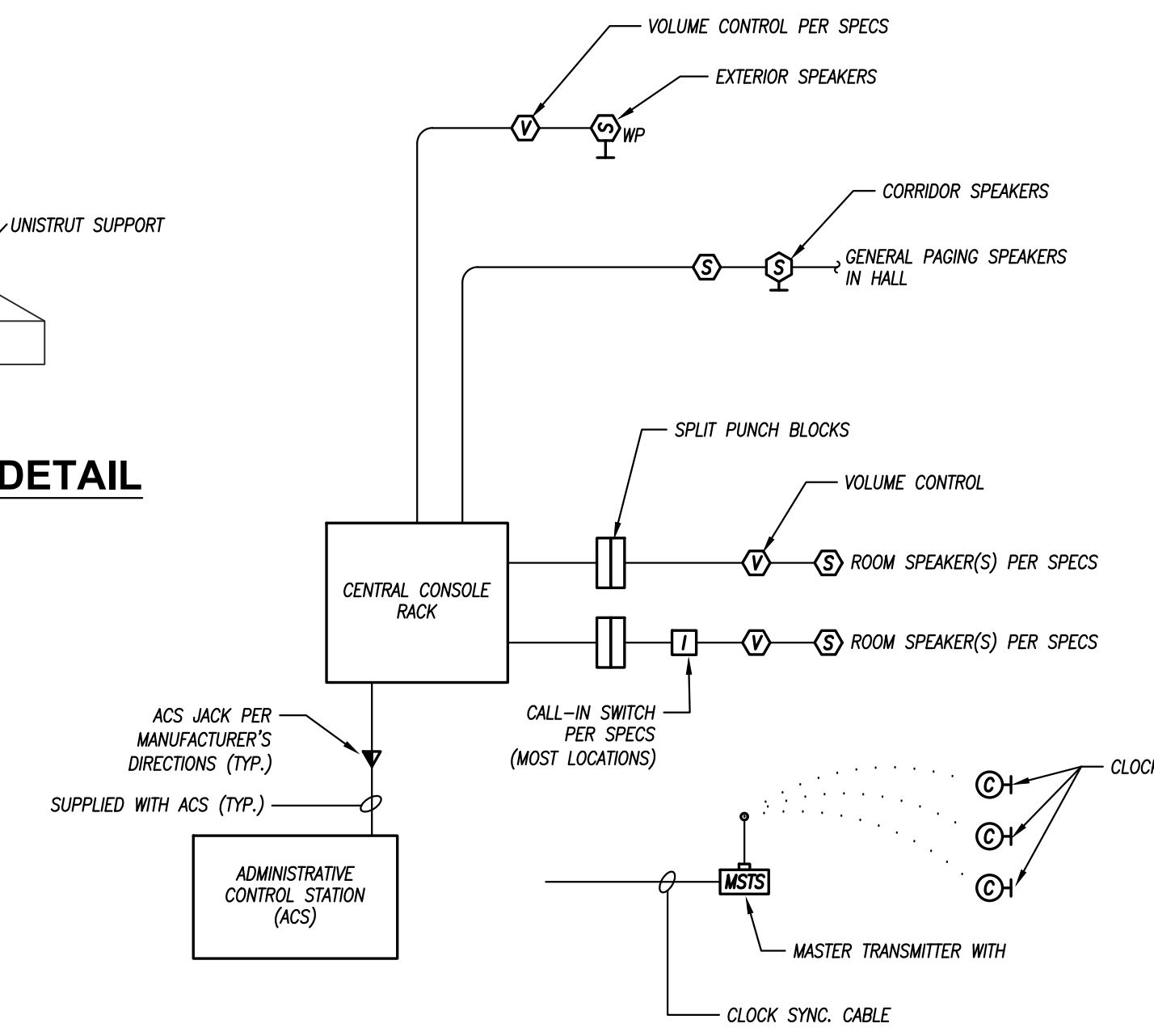
PLAN MARK	MANUFACTURER	MODEL NUMBER	MOUNTING	FINISH	WATTS/LUMENS	CR/CCT	NOTES
A	WILLIAMS	AX2UD-4-116-840-L33-840D-S-DM-UNV	PENDANT	WHITE	60W/4900 LUMENS	80/4000K	1,5,6
B	WILLIAMS	96-4-162-840-HMR-WET-DM-UNV	SURFACE	WHITE	48W/6200 LUMENS	80/4000K	1,5,6
C	WILLIAMS	75-4-165/840-A12125-W675/892-DM-UNV	SURFACE	WHITE	67W/8500 LUMENS	80/4000K	1,5,6
C1	WILLIAMS	76-4-153/840-W676/892-DM-UNV	SURFACE	WHITE	38W/3300 LUMENS	80/4000K	1,5,6
D	WILLIAMS	AX2W-U2-116/840-S-DM-UNV	SURFACE	WHITE	36W/3200 LUMENS	80/4000K	1
E	WILLIAMS	60R-TL-120/840-DM-UNV-UM-OF-CS-N	RECESSED	WHITE	20W/1800 LUMENS	80/4000K	1
F	WILLIAMS	GL-4-1150/840-W6211-DRG-UNV	SURFACE	WHITE	121W/15700 LUMENS	80/4000K	1
G	COOPER	XTOR3B	SURFACE	BRONZE	26W LED	80/4000K	3,4
G1	COOPER	XTOR6B	SURFACE	BRONZE	58W LED	80/4000K	3,4
H	WAC LIGHTING	DS-C00517-N40-BZ	SURFACE	BRONZE	17W LED	80/4000K	1,6
J	BEGA	66-051-K4	SURFACE	BRONZE	10W/800 LUMENS	80/4000K	1,6
K	WILLIAMS	75-2-120/840-W675/892-DM-UNV	SURFACE	WHITE	15W/2000 LUMENS	80/4000K	1,6
L	WILLIAMS	96-8-160/840-PCR-WET-2-DM-UNV	SURFACE	WHITE	61W/8000 LUMENS	80/4000K	1,3,4,6
EM	DUAL LITE	L215-03L	SURFACE	WHITE	15W MAX	---	2
X	DUAL LITE	LXURVE	SURFACE WALL/CEILING	WHITE	LED	---	2
X1	DUAL LITE	HCKURW-03L-RC12	SURFACE WALL/CEILING	WHITE	LED/LED	2	2,7
X2	DUAL LITE	HCKURW-03L	SURFACE WALL/CEILING	WHITE	LED/LED	2	2

- NOTES LEGEND
- 1- PROVIDE DIMMABLE DRIVER FOR 0-10V DOWN TO 10%
 - 2- PROVIDE EMERGENCY BATTERY (MINIMUM OF 150 LUMENS FROM ONE LAMP FOR 90 MINUTES FOR 32W/8 LIGHTS)
 - 3- PROVIDE WET LOCATION RATED FIXTURE
 - 4- PROVIDE COLD LOCATION RATED BALLAST
 - 5- VERIFY MOUNTING HEIGHT WITH ARCHITECT
 - 6- PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION
 - 7- PROVIDE WITH OUTDOOR REMOTE LIGHTING HEAD MODEL #PGR-1. STANDARD COLOR SELECTED BY ARCHITECT.

ELECTRIC UNIT HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	CAPACITY (WATTS)	ELECTRICAL	NOTES
EH-1	BERKO	FRC-4024	3000 WATTS	208V, 1Ø, 20 AMP	1

- NOTES LEGEND
- 1- PROVIDE RECESSED MOUNTED HEATER WITH ADJUSTABLE THERMOSTAT AND DISCONNECT



INTERCOMM / CLOCK SYTEM ONE-LINE DIAGRAM
NOT TO SCALE

ACCESS CONTROL, INTERCOM, AND CLOCK SYSTEMS:
EXTENDING OF THE EXISTING INTERCOM AND CLOCK SYSTEMS INTO THE NEW AG BUILDING WILL CONSIST OF CONDUITS TO ALL NEW LOCATIONS FROM THE IT CLOSET BY THE ELECTRICAL CONTRACTOR. SCHOOL DISTRICT WILL FURNISH AND INSTALL THE SPEAKERS, CLOCKS, AND PAGING.

CLOCKS: SAMPUNG LED DIGITAL CLOCKS WILL BE SUPPLIED BY OWNER. SPEAKERS: WALL-MOUNTED AND CEILING MOUNTED SPEAKERS WILL BE SUPPLIED BY THE OWNER.

INTERCOM SYSTEM CABLING: ALL INTERCOM SYSTEM CABLING SHALL BE PLENUM-RATED AND PER MANUFACTURER'S RECOMMENDATIONS.

COORDINATE ALL WORK AND SCHEDULING WITH BRAD DRESSMAN DISTRICT DIRECTOR OF TECHNOLOGY 785-562-5386 EXT 4

ACCESS CONTROL IS BY CBS MANHATTAN, KS JASEN WALKER 785-220-2995, INCLUDE THIS PRICE AND ALL ACCESS CONTROL WIRING IN THE CONTRACTOR'S PRICING.

DISTRICT WILL HIRE TWO TRENDS TECHNOLOGY AND THEIR SUB CONTRACTOR MOSEM COMMUNICATIONS TO INSTALL CAT 6 DATA AND FIBER OPTIC CABLING.

FIRE ALARM, ACCESS CONTROL, AND SECURITY ALARM LEGEND			
[F]	MANUAL PULL STATION	[ACP]	ACCESS CONTROL PANEL
[D]	CEILING SMOKE DETECTOR	[CARD]	CARD READER
[D]	DUCT SMOKE DETECTOR	[REX]	REQUEST TO EXIT *
[X]	STROBE LIGHT	[MS]	MAGNETIC SWITCH * (DOOR POSITION ACCESS CONTROL)
[H]	HORN	[LBP]	LATCH RETRACTION PUSHBAR (24V DC) *
[X]	COMBINATION HORN/STROBE	[LRT]	LATCH RETRACTION PUSHBAR (TIMER) (24V DC) *
[B]	FIRE ALARM BELL	[MO]	MORTISE LOCK (24V DC) *
[FACP]	FIRE ALARM CONTROL PANEL	[PS]	POWER SUPPLY (24V DC) **
[J]	JUNCTION BOX	[SA]	SECURITY ALARM PANEL **
[JRS]	JUNCTION BOX FOR READER W/STRIKE, 3/4" C TO ABOVE CEILING, WIRING AND CONNECTION BY CONTRACTOR	[KP]	SECURITY ALARM KEY PAD **
[JRS]	JUNCTION BOX FOR READER W/INT. STRIKE, 3/4" C TO ABOVE CEILING, WIRING AND CONNECTION BY CONTRACTOR	[WR]	WIRELESS RECEIVER ***
[JS]	JUNCTION BOX FOR STRIKE, 3/4" C TO ABOVE CEILING, WIRING AND CONNECTION BY CONTRACTOR	[RB]	RELEASE BUTTON
[JO]	JUNCTION BOX FOR DOOR OPEN INDICATOR, 3/4" C TO ABOVE CEILING, WIRING AND CONNECTION BY CONTRACTOR	[ML]	MAG LOCK *
[PC]	POLYCARBONATE GUARD - LIGHTURE PROOF	[SAP]	SECURITY ALARM HORN **
[DC]	DOME CAMERA - LIGHTURE PROOF	[DP]	DOOR POSITION SWITCH **
[K]	KEYED FIRE ALARM PULL STATION		

NOTES LEGEND

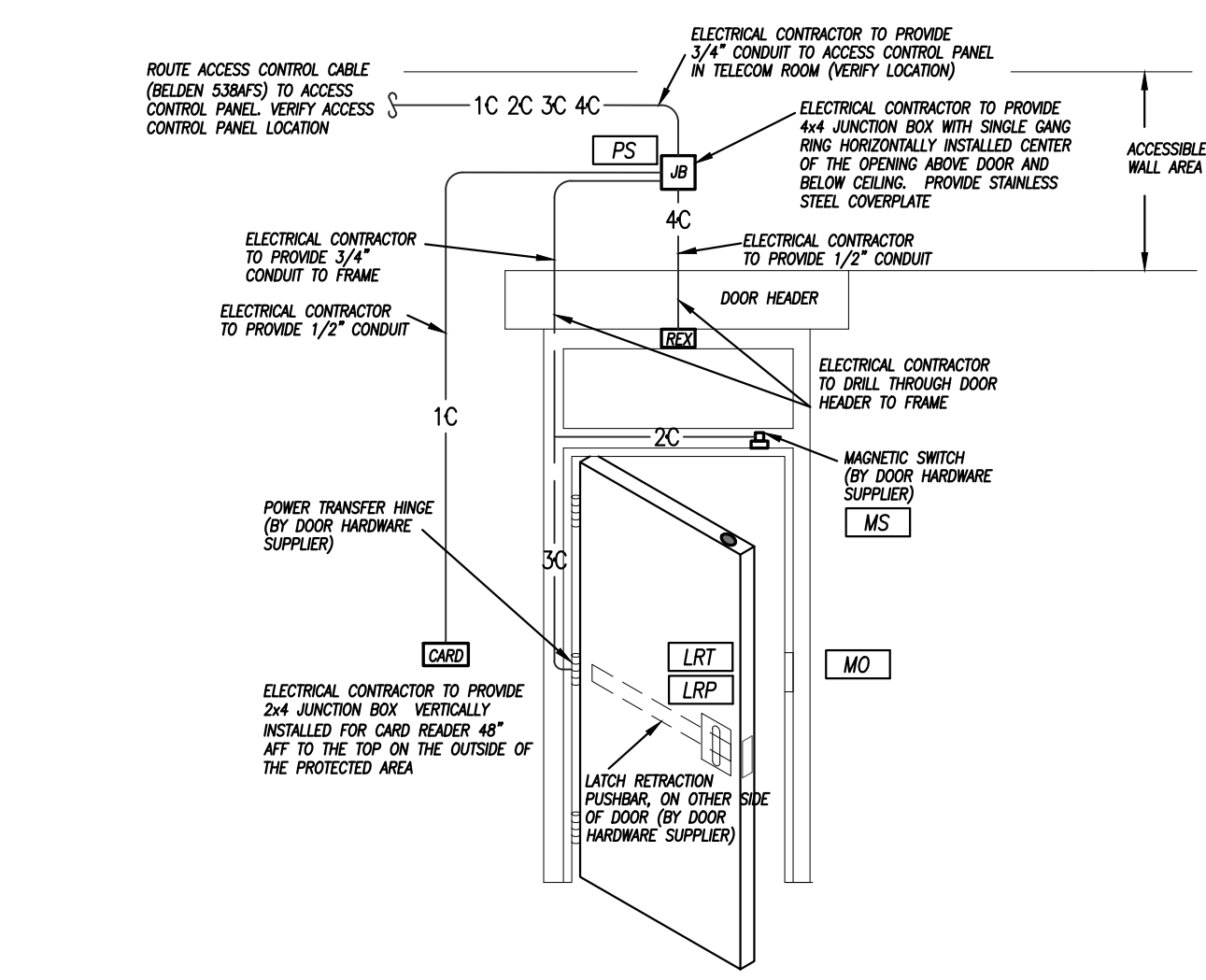
** INDICATES PROVIDED BY DOOR HARDWARE SUPPLIER. REFER TO DOOR HARDWARE SPECIFICATIONS FOR FURTHER WIRING/POWER REQUIREMENTS.

*** INDICATES PROVIDED BY SECURITY ALARM SUPPLIER.

ELECTRICAL CONTRACTOR TO PROVIDE 2X4 BACK BOX, CONDUIT AND CABLE AS INDICATED.

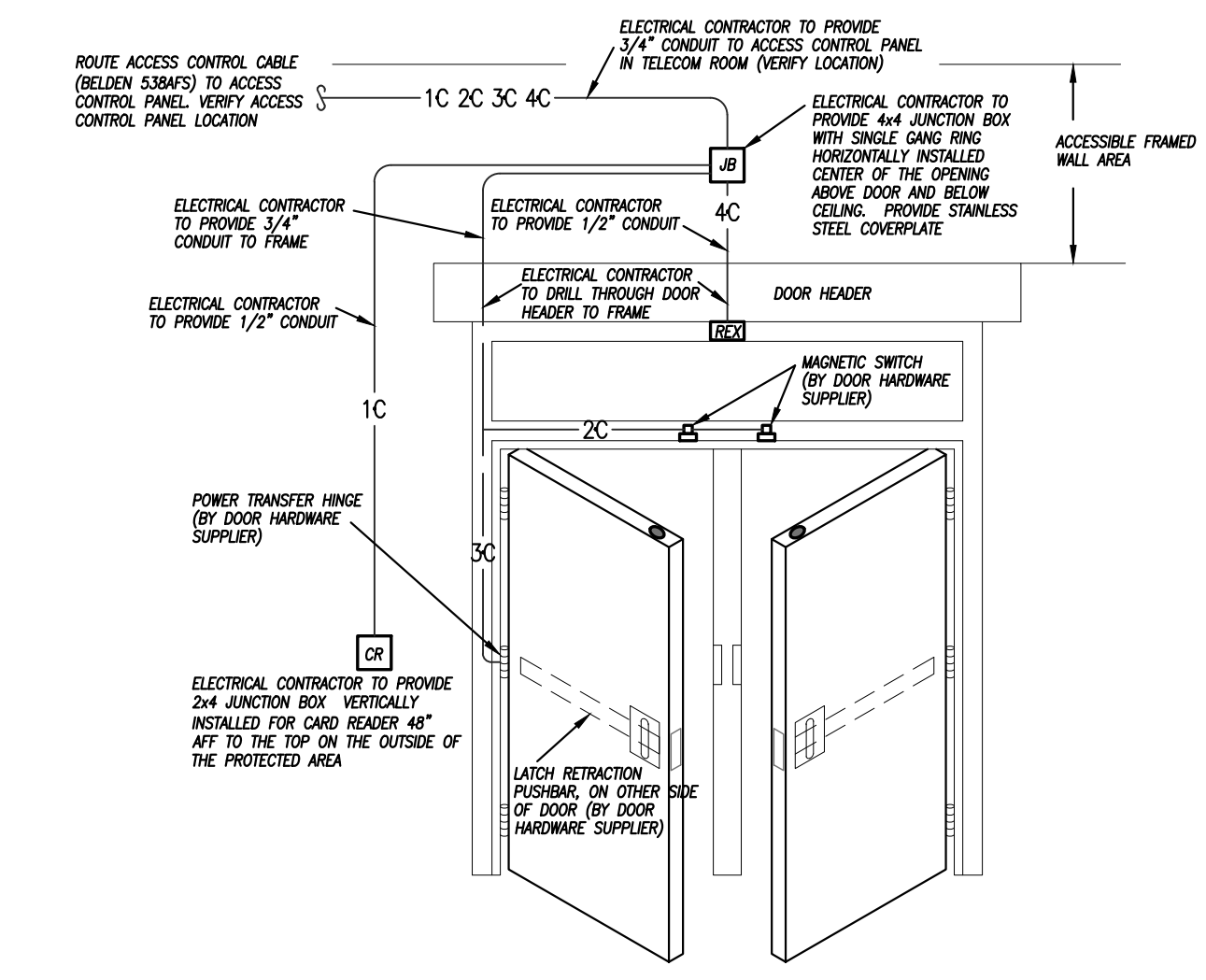
*** INDICATED PROVIDED BY SECURITY ALARM SUPPLIER.

ELECTRICAL CONTRACTOR TO PROVIDE 4X4 BACK BOX, CONDUIT AND CABLE AS INDICATED.



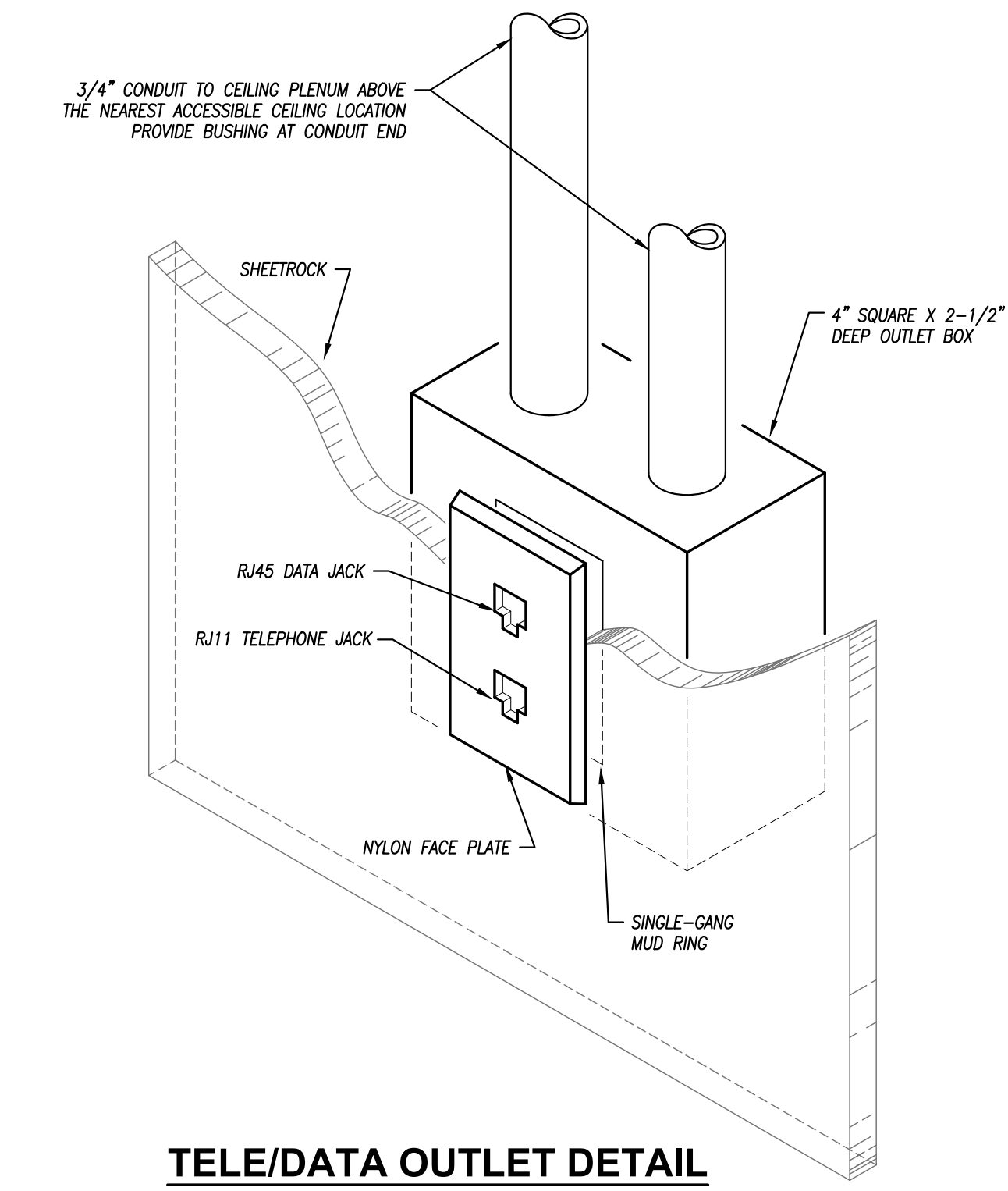
ACCESS CONTROL DOOR DETAIL
NO SCALE

- LEGEND:**
- 1C PROXIMITY CARD READER (ORANGE)
 - 18GA/6 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.
 - 2C MAGNETIC SWITCH (WHITE)
 - 18GA/2 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.
 - 3C ELECTRIC LOCK (GRAY)
 - 18GA/4 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.
 - 4C REQUEST TO EXIT (BLUE)
 - 18GA/4 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.



ACCESS CONTROL DOOR DETAIL
NO SCALE

- LEGEND:**
- 1C PROXIMITY CARD READER (ORANGE)
 - 18GA/6 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.
 - 2C MAGNETIC SWITCH (WHITE)
 - 18GA/2 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.
 - 3C ELECTRIC LOCK (GRAY)
 - 18GA/4 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.
 - 4C REQUEST TO EXIT (BLUE)
 - 18GA/4 COND. TWISTED OVERALL SHIELD, RISER RATED CABLE.



TELE/DATA OUTLET DETAIL
NOT TO SCALE