

GENERAL

1. SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. COORDINATE THESE DRAWINGS WITH EXISTING CONDITIONS, AND COORDINATE ALL DIMENSIONS AND WALL LOCATIONS WITH THE ARCHITECTURAL DRAWINGS. THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES WITHIN THE CONSTRUCTION DOCUMENTS.
2. THE STRUCTURAL DRAWINGS SHOULD NOT BE USED TO SIZE OR LOCATE DOORS, WINDOWS, TOILET PARTITIONS, OR NON-LOAD BEARING WALLS.
3. SEE ARCHITECTURAL FOR ALL EXPANSION JOINT COVERS.
4. DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE, WITH GEORGIA AMENDMENTS.
5. DESIGN LOADS:

LIVE LOAD INFORMATION

A. ROOF LIVE LOAD (REDUCED FOR TRIBUTARY AREA) = 20 PSF

ROOF DEAD LOADING INFORMATION

A. 5.0 PSF STEEL FRAMING AND DECK

B. 5.0 PSF INSULATION AND ROOFING

C. 6.0 PSF COLLATERAL LOAD (LIGHTS, HVAC, SPRINKLER, ETC.)

D. SEE FRAMING PLAN FOR OTHER CONCENTRATED LOADS

SNOW LOAD INFORMATION

A. GROUND SNOW LOAD (PG) = 5 PSF

B. FLAT ROOF SNOW LOAD (RF) = 5.5 PSF

C. SNOW EXPOSURE FACTOR (CE) = 1.0

D. SNOW LOAD IMPORTANCE FACTOR(I_s) = 1.1

E. THERMAL FACTOR (CT) = 1.0

WIND LOAD INFORMATION

A. ULT. WIND SPEED = 110 MPH

B. ASD WIND SPEED = 85 MPH

C. WIND IMPORTANCE FACTOR (I_w) = 1.0

D. RISK CATEGORY = 11

E. WIND EXPOSURE = C

F. INTERNAL PRESSURE COEFFICIENT = +/- 0.18

G. COMPONENTS AND CLADDING = 55 PSF

SEISMIC DESIGN INFORMATION

A. SEISMIC IMPORTANCE FACTOR (I_e) = 1.00

B. SEISMIC DESIGN CATEGORY = B

C. 0.2 SECOND SPECTRAL RESPONSE ACCELERATION (S_s) = 0.13

D. 1 SECOND SPECTRAL RESPONSE ACCELERATION (S₁) = 0.07

E. 0.2 DESIGN SPECTRAL RESPONSE ACCELERATION (SDS) = 0.14

F. 1 DESIGN SECOND SPECTRAL RESPONSE ACCELERATION (SD1) = 0.11

G. SITE CLASS = D (PER GEOTECHNICAL REPORT)

H. RESPONSE MODIFICATION COEFFICIENT (R) = 3.5

I. SYSTEM OVERSTRENGTH FACTOR = 3

J. DEFLECTION AMPLIFICATION FACTOR (CD) = 4

K. SEISMIC RESPONSE COEFFICIENT (CS) = 0.013

L. DESIGN BASE SHEAR (V_x) = VARIES

M. BASIC SEISMIC FORCE RESISTING SYSTEM - STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.

N. ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE PROCEDURE

6. ALL THE SAFETY REGULATIONS METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING, BRACING, AND FRAMEWORK, ETC. AS REQUIRED.

7. DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THESE DRAWINGS. IF THERE IS ANY QUESTION ABOUT DETAILS OR DIMENSIONS, CONTACT THE ARCHITECT AND STRUCTURAL ENGINEER FOR CLARIFICATION.

8. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL ALSO APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE.

9. ISOMETRIC VIEWS ARE FOR ILLUSTRATIVE PURPOSES ONLY. NO INFORMATION ABOUT THE STRUCTURE OR ITS COMPONENTS SHALL BE TAKEN OR ASSUMED FROM THEM.

10. CONTRACTOR SHALL TAMP THE VIRGIN SOIL AFTER EXCAVATION UNTIL NO VISIBLE SOIL RUTTING OCCURS FOR THE FULL SIZE OF THE FOOTING. IF SOIL TAMPING DOES NOT COMPACT SOIL TO THIS CRITERIA, THE ENGINEER SHALL BE NOTIFIED TO DETERMINE SOIL REMEDIATION REQUIREMENTS.
- CONCRETE
1. ALL CONCRETE WORK TO BE DONE IN ACCORDANCE WITH THE CODE REFERENCED EDITION OF ACI-318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"

2. CONCRETE MIX DESIGN REQUIREMENTS AND COMPRESSIVE STRENGTH AT 28 DAYS.
- | DESCRIPTION | 28 DAY STRENGTH (PSI) | WEIGHT PER CUBIC FOOT (PCF) | SLUMP AT POINT OF PLACEMENT | AGGREGATE | FIBERMESH OR WUM |
|------------------------------|-----------------------|-----------------------------|-----------------------------|-----------|--|
| FOOTING AND FOUNDATION WALLS | 3000 | 145 | 4" +/- 1" | ASTM C33 | NONE |
| SLAB ON GRADE | 3000 | 145 | 4" +/- 1" | ASTM C33 | FIBERMESH @ 15LB PER CUBIC YARD OF CONC. |
| EXTERIOR SLAB ON GRADE | 4500 | 145 | 4" +/- 1" | ASTM C33 | WUM 6X6 W1.4 X W1.4 |
- FLY ASH SHALL NOT BE USED. WATER REDUCING ADMIXTURES MAY BE USED TO ACHIEVE SLUMP REQUIREMENTS.
3. SEE ARCHITECTURAL DOCUMENTS FOR JOINT SIZES AND FILLER MATERIALS.

4. LOCATION OF ALL CONSTRUCTION JOINTS, EXCLUDING SLABS ON GRADE, SHALL BE COORDINATED WITH STRUCTURAL ENGINEER.

5. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER SHOWING PROPOSED LOCATIONS OF ANY MATERIAL SUCH AS BUT NOT LIMITED TOO CONDUITS, EMBEDMENTS, OR FIXTURES TO BE PLACED INSIDE ANY STRUCTURAL CONCRETE MEMBER SUCH AS BEAMS, WALLS, SLABS, COLUMNS OR FOOTINGS. THIS IS NOT REQUIRED FOR SLABS ON GRADE OF 4" OR LESS IN THICKNESS.

6. CONCRETE SLAB FLATNESS AND LEVELNESS TOLERANCES SHALL BE IN CONFORMANCE WITH ACI 111, AND SHALL BE SPECIFIED BY THE OWNER UNLESS SUPERSEDED BY THE OWNER'S CRITERIA, CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:

A. PROVIDE A FLOOR SURFACE WHICH IS TRUE AND LEVEL AND ACHIEVES "F NUMBERS" OF FF = 30 AND FL = 20 MINIMUM OVERALL COMPOSITE AND FF = 20 AND FL = 15 MINIMUM AT ANY INDIVIDUAL SECTION, WHEN TESTED IN ACCORDANCE WITH ASTM E1155, REMOVE SURFACE IRREGULARITIES TO PROVIDE A CONTINUOUS SMOOTH FINISH.

B. ALL INTERIOR SLABS TO RECEIVE A SMOOTH TROWEL FINISH UNLESS NOTED.

7. UNLESS SPECIFIED OTHERWISE IN THE SPECIFICATION, TESTING OF CONCRETE SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF ACI 318 SECTION 5.6 "EVALUATION AND ACCEPTANCE OF CONCRETE".

8. CONSTRUCTION JOINTS (CNJT.) ARE TO BE LOCATED ON THE THRESHOLD SIDE OF A WALL.

9. SEE DETAIL "TYPICAL SLAB ON GRADE JOINT LAYOUT".

10. THE FOLLOWING PROCEDURES SHALL MEET THE REQUIREMENTS OF THE REFERENCED CODE SECTIONS:
- | PROCEDURE | REFERENCE SECTION |
|-------------------------|--|
| PREPARATION | ACI 304 - "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE" |
| CONVEYING | ACI 318 SECTION 5.9 - "CONVEYING" |
| DEPOSITING | ACI 318 SECTION 5.10 - "DEPOSITING" |
| CONSOLIDATION | ACI 309 - "GUIDE FOR CONSOLIDATION OF CONCRETE" |
| CURING | ACI 308 - "STANDARD PRACTICE FOR CURING CONCRETE" |
| HOT WEATHER CONCRETING | ACI 305 - "HOT WEATHER CONCRETING" |
| COLD WEATHER CONCRETING | ACI 308 "COLD WEATHER CONCRETING" |
- SUBMITTALS
1. THE CONTRACT DOCUMENTS ARE THE STRUCTURAL ENGINEER'S INSTRUMENTS OF SERVICE TO CONVEY DESIGN INTENT. THEY ARE NOT TO BE CONSIDERED FABRICATION OR LAYOUT DRAWINGS.

2. THE FOLLOW ARE REQUIRED SUBMITTALS

A. CONCRETE MIX DESIGN(S)

B. REINFORCING BAR DRAWINGS

C. STRUCTURAL STEEL

D. METAL DECK

E. STEEL JOISTS

F. LIGHT GAUGE METAL FRAMING

G. OTHER SUBMITTALS AS NOTED ON THE DRAWINGS AND SPECIFICATIONS

3. SUBMITTALS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER AND SHALL BEAR THE CONTRACTOR'S STAMP ATTESTING TO THE DRAWINGS NOT STAMPED WILL NOT BE REVIEWED. SUBCONTRACTOR'S UNCHECKED SUBMITTAL DRAWINGS WILL NOT BE REVIEWED.

4. SUBMITTALS TO BE REVIEWED BY THE STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE ARCHITECT. THE STRUCTURAL ENGINEER WILL NOT ACCEPT SUBMITTALS DIRECTLY FROM CONTRACTORS WITHOUT THE STRUCTURAL ENGINEER'S PRIOR APPROVAL.

5. UPON COMPLETION OF THE STRUCTURAL ENGINEER'S REVIEW, SUBMITTALS WILL BE RETURNED TO THE ARCHITECT FOR THEIR REVIEW.

6. ANY DEVIATION IN DESIGN, DETAILS, DIMENSIONS, ETC. FROM THE CONSTRUCTION DOCUMENTS SHALL BE CLOUDED ON THE SUBMITTAL AND VERIFICATION OF THE CHANGE SHALL BE REQUESTED.
- FOUNDATIONS
1. THE FOUNDATION IS DESIGNED USING AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF BASED ON 2018 IBC SECTION 1806. IF THE BEARING CONDITIONS VARY FROM WHAT IS SHOWN, OR IF THE SOIL BEARING CAPACITY IS QUESTIONABLE, THE ARCHITECT AND STRUCTURAL ENGINEER ARE TO BE NOTIFIED IMMEDIATELY.

2. ALL BUILDING AREAS SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY AT OPTIMUM OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM D698, CURRENT EDITION.

3. A REGISTERED GEOTECHNICAL ENGINEER REPRESENTING THE OWNER SHALL BE PRESENT TO MONITOR COMPACTION AND SETTLEMENT AND VERIFY THE BEARING CAPACITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ON-SITE GEOTECHNICAL ENGINEER.

4. REMOVE ALL TOPSOIL, ROOT SYSTEM OR OTHER DELETERIOUS MATERIAL UNDER PROPOSED SLAB AND COLUMN FOOTINGS AND REPLACE WITH SUITABLE COMPACTED FILL OR CRUSHED STONE. STRUCTURAL ENGINEER'S DECISION ON QUESTIONABLE MATERIAL SHALL BE FINAL.

5. BACKFILLING SHALL BE PERFORMED IN EQUAL LIFTS AROUND THE BUILDING PERIMETER TO BALANCE LATERAL EARTH PRESSURE ON THE BUILDING. WALK BEHIND COMPACTION EQUIPMENT IS REQUIRED WITHIN A DISTANCE OF TWO TIMES THE WALL HEIGHT.

6. BACKFILL AGAINST STRUCTURAL WALLS SHALL NOT BE PERFORMED UNTIL WALL AND SLAB ON GRADE HAS OBTAINED SPECIFIED STRENGTH.

7. IF REQUIRED BY THE GEOTECHNICAL REPORT OR THE ON-SITE GEOTECHNICAL ENGINEER, THE GROUND WATER TABLE SHALL BE LOWERED.

8. ALL FOOTINGS TO BE CENTERED UNDER THE COLUMNS OR WALLS THEY SUPPORT, UNLESS NOTED OTHERWISE ON THE DRAWING.

9. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL IN WRITING. THE CONTRACTOR SHALL LOCATE ANY EXISTING UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION.

10. INSPECTIONS BY GEOTECH FIRM ARE REQUIRED FOR EXISTING SOILS CONDITIONS, FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS:

A. SITE PREPARATION: PRIOR TO PLACEMENT OF PREPARED FILL, THE INSPECTOR SHALL DETERMINE THAT THE SITE HAS BEEN PREPARED IN ACCORDANCE WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.

B. FILL PLACEMENT: DURING PLACEMENT AND COMPACTION OF FILL MATERIAL, THE INSPECTOR SHALL DETERMINE THAT THE PROPER FILL MATERIAL IS BEING USED AND THAT THE MAXIMUM LIFT THICKNESS IS FOLLOWED IN ACCORDANCE WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.

C. EVALUATION OF IN-PLACE DENSITY: THE INSPECTOR SHALL DETERMINE, AT THE FREQUENCIES DETERMINED IN THE SOILS REPORT AND PROJECT SPECIFICATIONS, THAT THE IN-PLACE DRY DENSITY OF THE COMPACTED FILL COMPLIES WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.
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- SHEET TITLE
- GENERAL NOTES
- | REVISIONS |
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- JOB TITLE

PERLIS TRUCK STOP

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CORDELE, GEORGIA
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D. WHITBY | Proj no.
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G. KORNEGAY | Date
10/27/2023 |
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REINFORCING STEEL

1. REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60, AND SHALL BE FREE FROM ANY FORM RELEASE AGENTS.
2. REINFORCING BENDS SHALL CONFORM TO CRSI.
3. WELDED WIRE FABRIC SHALL BE SHEETS OF NEW BILLET STEEL COLD DRAWN, CONFORMING TO ASTM SPECIFICATION A185, GRADE 60.
4. REINFORCING IS TO BE SUPPORTED AND SPACED WITH WIRE BAR SUPPORTS ACCORDING TO CRSI "PLACING REINFORCING BARS" UNLESS NOTED OTHERWISE.
5. BAR SUPPORTS, DESIGN, DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318 AND "THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.
6. SPLICES FOR CONTINUOUS BARS SHALL BE CLASS B, UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.
7. PROVIDE BENT HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF ALL WALLS AND FOOTINGS. BENT BARS ARE TO MATCH THE SIZE AND SPACING OF HORIZONTAL BARS IN WALL OR FOOTING. USE CLASS B SPLICE EACH SIDE.
8. PROVIDE DIAGONAL BARS AT CORNERS OF OPENINGS IN SLABS AND CONCRETE WALLS. SEE DETAILS "RECTANGULAR OPENING WALL SLAB" AND "CIRCLE OPENING WALL SLAB". PROVIDE 2" CLEAR COVER BETWEEN THE OPENING AND THE CORNER REINFORCING BARS.
9. WALL FOOTING REINFORCEMENT SHALL BE CONTINUOUS THROUGH COLUMN FOOTING.
10. EXTEND ALL FOOTING REINFORCEMENT TO FAR SIDE OF FOOTING. SEE NOTE BELOW FOR CONCRETE COVERAGE.
11. PROVIDE DOUBLS IN WALL FOOTING TO MATCH WALL VERTICALS UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE CLASS B SPLICE. USE STANDARD ACI 90 DEGREE HOOK WITH 3" CLEAR TO BOTTOM OF FOOTING UNLESS NOTED OTHERWISE. SEE DETAIL "CORNER BAR 4 SPLICE LENGTH DETAIL (IN CONCRETE)"

CLASS B SPLICE OR CORNER BAR PER ACI 318						
BAR #	3000 PSI CONCRETE		4000 PSI CONCRETE		5000 PSI CONCRETE	
	MIN. SPLICE (INCHES)	MIN. SPLICE (BAR DIAM.)	MIN. SPLICE (INCHES)	MIN. SPLICE (BAR DIAM.)	MIN. SPLICE (INCHES)	MIN. SPLICE (BAR DIAM.)
4	29	51	25	50	24	45
5	36		31		28	
6	43		37		34	
7	63	72	54	62	49	56
8	72		62		56	
9	81		70		63	
10	89		78		69	
11	98		85		76	

12. MINIMUM CONCRETE COVERAGE SHALL BE AS FOLLOWS, IF CONSTRUCTION DOCUMENTS INDICATE A LARGER COVERAGE, IT SHALL BE USED. IF STIRRUPS, TIES, OR SPIRALS ARE USED, COVERAGE SHALL BE TO THE OUTERMOST FACE OF THESE ELEMENTS.
 - A. FOOTINGS, CAISSONS, AND OTHER MEMBERS WHERE CONCRETE IS DEPOSITED AGAINST SOIL (EXCEPT SLABS ON GRADE) = 3"
 - B. CONCRETE EXPOSED TO WEATHER OR SOIL BUT IS NOT DEPOSITED AGAINST SOIL:
 - 16" BAR AND LARGER = 2"
 - 15" BAR AND SMALLER = 1 1/2"
 - C. CONCRETE NOT EXPOSED TO WEATHER OR SOIL:
 - SLABS, WALLS, JOISTS 14" BAR AND LARGER = 1 1/2"
 - SLABS, WALLS, JOISTS 11" BAR AND SMALLER = 3/4"
 - BEAMS AND COLUMNS = 1 1/2"

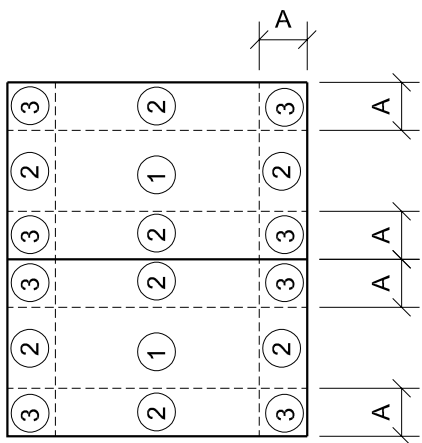
STEEL JOISTS AND JOIST GIRDERS

1. MATERIAL, DESIGN, FABRICATION, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE STEEL DECK INSTITUTE.(SDI)
2. TOP AND BOTTOM CHORD BRIDGING SHALL BE SIZED AND SPACED BY THE JOIST MANUFACTURER, IN ACCORDANCE WITH SJI SPECIFICATIONS. GENERAL CONTRACTOR COORDINATE MISCELLANEOUS STEEL FOR TERMINATION AND CONNECTION OF BRIDGING AS REQUIRED BY SJI.
3. CONNECT JOISTS AND JOIST GIRDERS TO SUPPORTS PER SJI REQUIREMENTS.
4. DESIGN JOISTS, JOIST GIRDERS, CONNECTIONS AND BRIDGING FOR UPLIFT AS FOLLOWS: A (WIDTH OF ZONE 2 + 3', A' = 10.8 FT.)

STEEL JOISTS UPLIFT VALUES

	ZONE	*GROSS UPLIFT PRESSURE (P.S.F.)	NET UPLIFT PRESSURE (P.S.F.)
ROOF	1	22	17
	2	29	24
	3	35	30
OVERHANG	2	33	28
	3	43	38

*DEAD LOAD HAS NOT BEEN ACCOUNTED FOR IN THE VALUES



5. THE DRAWINGS INDICATE LOADS CONSIDERED FOR DESIGN OF JOISTS AND JOIST GIRDERS, ANY CONCENTRATED LOAD IN EXCESS OF 50 POUNDS NOT SHOWN ON THE DRAWINGS SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER.
6. JOIST TOP CHORD EXTENSIONS SHALL BE DESIGNED BY THE JOIST MANUFACTURER TO SUPPORT A TOTAL DOWNWARD SERVICE LOAD OF 200 POUNDS PER FOOT AND LIMITED TO A MAXIMUM TOTAL LOAD DEFLECTION OF L/240.

STEEL DECK

1. MATERIAL, DESIGN, FABRICATION, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE STEEL DECK INSTITUTE. (SDI)
2. STEEL DECK SHALL BE CUT TO LENGTHS TO PROVIDE A MINIMUM OF THREE SPAN CONDITION. STEEL DECK SUBMITTAL DRAWINGS SHALL CLEARLY INDICATE BY CLOUDING ONE OR TWO SPAN CONDITIONS.
3. STEEL DECK SHALL BE FASTENED THROUGH THE DECK ONTO THE SUPPORTING MEMBERS AND AT SIDELAPS PER THE DRAWINGS. USE WELDING WASHERS AS REQUIRED TO PREVENT BURN-THROUGH OF STEEL DECK.
4. ALL STEEL ROOF DECK NOT EXPOSED TO WEATHER SHALL BE PRIME PAINTED. ALL STEEL DECK TO RECEIVE CONCRETE TOPPING SHALL BE 660 GALVANIZED. IN CONFORMANCE WITH ASTM A653, ALL DECK EXPOSED TO WEATHER SHALL BE G30 GALVANIZED IN CONFORMANCE WITH ASTM A653.
5. STEEL DECK MANUFACTURER SHALL PROVIDE ALL REQUIRED ACCESSORIES.
6. FASTEN ROOF DECK TO STEEL SUPPORTING MEMBERS AT EDGE AND INTERIOR RIBS WITH A SUFFICIENT NUMBER OF 5/8" DIAMETER PUDDLE WELDS FOR A 36/4 PATTERN. AT EDGES PROVIDE 5/8" DIAMETER PUDDLE WELD IN EVERY FLUTE. USE 3 #10 TEK SCREWS PER SIDELAP SPAN IN THE FIELD AND AT PLACES WHERE DECK IS CANTILEVERED.

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE CODE-REFERENCED AISC MANUAL OF STEEL CONSTRUCTION, SPECIFICATION FOR STEEL BUILDINGS, AND CODE OF STANDARD PRACTICE.
2. STEEL FABRICATOR SHALL BE CURRENTLY CERTIFIED BY THE AISC QUALITY CERTIFICATION PROGRAM FOR STRUCTURAL STEEL FABRICATIONS AND DESIGNATED AS "AISC CERTIFIED BUILDING FABRICATOR CATEGORY BU." CONTRACTOR SHALL SUBMIT IN WRITING TO THE STRUCTURAL ENGINEER, AT THE TIME OF PROOF OF CERTIFICATION FOR THE STEEL FABRICATOR(S) SUPPLYING STRUCTURAL STEEL.
3. MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
 - A. W-SHAPES = ASTM 992
 - B. HOLLOW STRUCTURAL SHAPES = ASTM A500 GRADE B
 - C. PLATES, BARS, ANGLES, C-SHAPES, MC-SHAPES = ASTM A36
 - D. PIPES = ASTM A53 GRADE B
 - E. WELDING ELECTRODES = E70XX
4. ALL ANCHOR BOLTS SHALL BE SIZE AND STRENGTH SPECIFIED ON THESE DRAWINGS.
5. ALL BEAM END CONNECTIONS SHALL BE AISC DOUBLE ANGLE BOLTED-WELDED CONNECTIONS WITH 3/4" DIA. A325N BOLTS UNO. THE WELD SHALL BE 1/4" WELD FULL LENGTH OF ANGLE PLUS 1" TOP AND BOTTOM. DESIGN SHEAR SHALL BE THE GREATER OF:
 - A. THE SHEAR REACTION SHOWN ON DRAWINGS (IF ANY).
 - B. 50% OF THE VALUE FROM THE "MAXIMUM TOTAL UNIFORM LOAD IN KIPS" TABLES OF THE AISC 13TH EDITION (BLACK BOOK) OR,
 - C. THE MINIMUM NUMBER OF BOLTS IN SINGLE SHEAR AS FOLLOWS:

BEAM SHAPE*	# OF 3/4" DIA. A325 BOLTS	LENGTH OF LL 3 1/2"x3 1/2"x5/16"
W8 , W10	4	5 1/2
W12 , W14	6	8 1/2
W16 , W18	8	11 1/2
W21	10	14 1/2
W24	12	17 1/2
W27	14	20 1/2
W30	16	23 1/2

WHERE CONNECTIONS ARE SKEWED OR THE DOUBLE ANGLE CONNECTIONS ABOVE WILL NOT FIT, THE FOLLOWING CONNECTIONS SHALL BE USED:

END OF BEAM CONNECTIONS*

BEAM SHAPE*	# OF 3/4" DIA. A325 BOLTS	1/2" SHEAR TAB LENGTH**
W8 , W10	2	5 1/2
W12 , W14	3	8 1/2
W16 , W18	4	11 1/2
W21	5	14 1/2
W24	6	17 1/2
W27	7	20 1/2
W30	8	23 1/2

*WHEN THE SHEAR TAB CONNECTION ABOVE DOES NOT FIT IN THE BEAM WEB, USE THE ADJACENT SMALLER CONNECTION AND CLOUD ON SHOP DRAWINGS.

**WELD PLATE TO SUPPORTING MEMBER WITH 5/16" WELD ALL AROUND. SHEAR TAB TO BE 1/2" THICK X 4" WIDE.

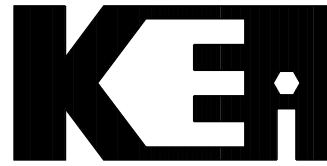
6. ALL BOLTED CONNECTION SHALL BE FULLY PRETENSIONED ACCORDING TO THE REQUIREMENTS OF "AISC MANUAL OF STEEL CONSTRUCTION" UTILIZING DIRECT TENSION INDICATORS OR AN APPROVED INSTALLATION METHOD IN WRITING FROM THE ENGINEER OF RECORD.
7. WELDS SHALL BE MADE ONLY BY OPERATORS CERTIFIED BY THE STANDARD QUALIFICATION PROCEDURE OF THE AMERICAN WELDING SOCIETY FOR THE TYPE OF WELD REQUIRED. WELDER CERTIFICATION SHALL BE SUBMITTED FOR REVIEW.
8. WELD LENGTHS NOT NOTED SHALL BE FULL LENGTH. TERMINATE WELDS IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION AND AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE - STEEL (D11).
9. HOLES LARGER THAN 1" DIA. SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER. HOLES SHALL BE PUNCHED OR DRILLED, EXCEPT AS OTHERWISE PERMITTED THE STRUCTURAL ENGINEER.
10. PROTECT COLUMNS, BASE PLACES, ANCHOR BOLTS, AND ANY STEEL BELOW GRADE WITH AN APPROVED INORGANIC OR EPOXY ANTI-CORROSION COATING, FIELD APPLIED PER MANUFACTURER'S INSTRUCTIONS.
11. ALL EXPOSED STRUCTURAL STEEL INCLUDING LINTELS, AND AS NOTED ON DRAWINGS, SHALL BE GALVANIZED IN CONFORMANCE WITH ASTM A123.FASTENERS AND SMALL PARTS REQUIRING GALVANIZING SHALL BE IN CONFORMANCE WITH ASTM A153.
12. THE CONTRACTORS SHALL DETERMINE, FURNISH AND INSTALL ALL TEMPORARY SUPPORTS SUFFICIENT TO SECURE THE STRUCTURAL STEEL FRAMING AGAINST LOADS PRESENT DURING ERECTION. TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL CONNECTIONS TO THE LATERAL LOAD RESISTING SYSTEM, INCLUDING HORIZONTAL DIAPHRAGMS, ARE COMPLETE.
13. THE GENERAL CONTRACTOR SHALL VERIFY THAT THE CORRECT BEAM AND GIRDER CAMBER IS PRESENT AFTER ERECTION AND BEFORE FLOOR SLAB IS POURED.
14. SPLICE CONTINUOUS STEEL ANGLES AND PLATES WITH PARTIAL-JOINT-PENETRATION SQUARE GROOVE WELDS (JOINT DESIGNATION B-FIA) UNO.
15. STRUCTURAL STEEL FABRICATOR AND DETAILER SHALL SEE THE ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL STEEL NOT SHOWN OR CALLED OUT IN THESE DRAWINGS. IF SIZE IS NOT SHOWN IN ARCHITECTURAL DRAWINGS A REQUEST OR INFORMATION SHALL BE SENT TO THE STRUCTURAL ENGINEER THROUGH THE PROPER CHANNELS.
16. GENERAL CONTRACTOR SHALL COORDINATE CONNECTIONS OF JOIST AND JOIST GIRDERS TO STRUCTURAL STEEL.

COLD-FORMED STEEL STUD FRAMING

1. ALL COLD-FORMED STRUCTURAL STEEL MEMBERS, ACCESSORIES, AND CONNECTIONS SHALL BE DESIGNED BY PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PROJECT LOCATION IN ACCORDANCE WITH THE REFERENCED CODE. DESIGN SHALL BE IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STRUCTURAL STEEL MEMBERS". ALL COLD-FORMED STEEL STUD FRAMING SHALL BE MANUFACTURED BY CURRENT MEMBERS OF THE STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA). THE INSTALLATION SHALL COMPLY WITH THE MANUFACTURER'S RECOMMENDATIONS.
2. ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL CORRESPONDING TO THE REQUIREMENTS OF ASTM 1003 (OR ASTM-A653). WELDS SHALL BE TOUCHED UP WITH A ZINC RICH PROTECTIVE PAINT FOR CORROSION RESISTANCE. STRUCTURAL STEEL STUDS SHALL HAVE A MINIMUM THICKNESS OF 33 MILS AND SHALL HAVE A MINIMUM YIELD STRENGTH 33 KSI.

COLD-FORMED STEEL STRUCTURAL MEMBERS			
THICKNESS (MILS)	GAUGE	THICKNESS (MILS)	GAUGE
33	20	68	14
43	18	97	12
54	16	118	10

3. STEEL STUD DESIGNER SHALL PROVIDE SEALED SHOP DRAWINGS SHOWING DESIGN CRITERIA, MEMBER SIZE AND SPACING, HEADER AND JAMB CONDITIONS, CONNECTIONS BETWEEN MEMBERS AND TO THE BUILDING STRUCTURE.
4. UNLESS SPECIFIED BY FINISH OR GLAZING SYSTEM MANUFACTURER'S MORE STRINGENT REQUIREMENTS (GENERAL CONTRACTOR TO COORDINATE), DESIGN SERVICEABILITY DUE TO LATERAL OR VERTICAL LOADS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
 - A. BRICK VENEER = L/600 VERTICAL, L/480 LATERAL
 - B. EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) = L/240
 - C. STUCCO = L/360
5. "C" SHAPED STUDS AND JOISTS SHALL HAVE A MINIMUM FLANGE WIDTH OF 1 5/8" WITH A MINIMUM RETURN LIP OF 3/8". TRACKS SHALL HAVE A MINIMUM OUTSTANDING LEG OF 1 1/4"
6. ALL STRUCTURAL MEMBERS SHALL BE CONTINUOUS FULL LENGTH. SPLICING OF MEMBERS IS NOT PERMITTED UNLESS SPECIFICALLY DETAILED BY THE STUD DESIGNER.
7. SCREWS SHALL BE SELF DRILLING WITH A LENGTH THAT ENSURES THREE EXPOSED THREADS BEYOND PENETRATION OF THE JOINED MATERIAL. MINIMUM SCREW SPACING SHALL BE 3/4", MINIMUM EDGE DISTANCE SHALL BE 3/8". SCREW CAPACITIES SHALL BE EQUAL TO OR GREATER THAN THOSE GIVEN BY THE STEEL STUD MANUFACTURER'S ASSOCIATION WITH A 3.0 FACTOR OF SAFETY.
8. PROVIDE SEISMIC BRACING AND DETAILS IN CONFORMANCE WITH IBC SECTION 1621, LATERAL BRACING AT THE TOP OF INTERIOR WALLS AND CEILING GRIDS SHALL BE AT 48" ON CENTER MAXIMUM.
9. ALL COLD FORMED STEEL FRAMING ACCESSORIES OR BASIC CLIPS SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KSI AND HAVE MINIMUM PROTECTIVE COATING COMPLYING WITH ASTM 1003/A1003M (OR ASTM A653/A653M) G-60 GALVANIZED COATING, PREFERRED MANUFACTURER: THE STEEL NETWORK, INC.
10. WHERE STUDS BYPASS STRUCTURE (FLOOR AND ROOF) OR ATTACH TO THE BOTTOM OF THE STRUCTURE, DEFLECTION CONNECTIONS SHALL ALLOW FOR POSITIVE ATTACHMENT TO STRUCTURE AND STUD WEB USING STEP-BUSHING TECHNOLOGY TO PROVIDE FRICTIONLESS, VERTICAL MOVEMENT. CONNECTION PRODUCTS ARE REQUIRED TO HAVE A VALID ICC ES REPORT (ESR-1903) OR EQUIVALENT COMPLYING WITH ICC ACCEPTANCE CRITERIA AC208. ALL STRUCTURAL FRAMING ACCESSORIES SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KSI AND HAVE MINIMUM PROTECTIVE COATING COMPLYING WITH ASTM 1003/A1003M (OR ASTM A653/A653M). VERTICLIP® OR VERTITRACK® BY THE STEEL NETWORK, INC ARE ACCEPTABLE PRODUCTS TO MEET THIS CRITERIA.
11. LATERAL DRIFT CLIPS ARE TO PROVIDE POSITIVE ATTACHMENT TO STRUCTURE AND STUD WEB USING STEP-BUSHING TECHNOLOGY TO PROVIDE FRICTIONLESS LATERAL AND VERTICAL MOVEMENT. CONNECTION PRODUCTS ARE REQUIRED TO HAVE A VALID ICC ES REPORT (ESR-2049) OR EQUIVALENT COMPLYING WIT LATERAL AND VERTICAL MOVEMENT. CONNECTION PRODUCTS ARE REQUIRED TO HAVE A VALID ICC ES REPORT (ESR-2049) OR EQUIVALENT COMPLYING WITH STRENGTH OF 50 KSI AND HAVE MINIMUM PROTECTIVE COATING COMPLYING WITH ASTM 1003/A1003M (OR ASTM A653/A653M). DRIFTCLIP® OR DRIFTTRAK® BY THE STEEL NETWORK, INC ARE ACCEPTABLE PRODUCTS TO MEET THIS CRITERIA.
12. RIGID CONNECTIONS FOR ATTACHMENT OF METAL FRAMING TO METAL FRAMING AND TO THE PRIMARY STRUCTURE SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KSI AND HAVE MINIMUM PROTECTIVE COATING COMPLYING WITH ASTM 1003/A1003M (OR ASTM A653/A653M). STIFFCLIP® SERIES BY THE STEEL NETWORK INCLUDES ACCEPTABLE PRODUCTS TO MEET THIS CRITERIA.
13. DESIGN BRIDGING CLIPS TO PROVIDE ATTACHMENT TO STUD WEB AND WRAPPING AROUND THE BRIDGING CHANNEL. BRIDGING ACCESSORIES SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KSI AND HAVE MINIMUM PROTECTIVE COATING COMPLYING WITH ASTM 1003/A1003M (OR ASTM A653/A653M). BRIDGECLIP® AND BRIDGEBAR® BY THE STEEL NETWORK ARE ACCEPTABLE PRODUCTS TO MEET THIS CRITERIA.
14. FRAMING OF WALL OPENINGS SHALL INCLUDE HEADERS AND SUPPORTING STUDS AS RECOMMENDED BY THE STUD MANUFACTURER. CONTRACTORS OPTION: JAMBSTUD® BY THE STEEL NETWORK, INC TO REDUCE OR ELIMINATE BUILT-UP FRAMING IN JAMBS, HEADERS, AND SILLS. USE STIFFCLIP® HE OR STIFFCLIP® AL TO ELIMINATE JACK STUDS.
15. LIGHT GAUGE STRAPS ON BOTH SIDES OF THE WALL ARE REQUIRED TO PROVIDE SHEAR RESISTANCE FOR SHEAR WALL FRAMING. THE STEEL NETWORK, INC. STIFFWALL® SW-S IS AN ACCEPTABLE PRODUCT TO MEET THIS CRITERIA.



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REVISIONS

JOB TITLE

PERLIS TRUCK STOP

STROUD AND COMPANY

I-75

CORDELE, GEORGIA

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D. WHITBY	22-320
Checked	Date
G. KORNEGAY	10/27/2023
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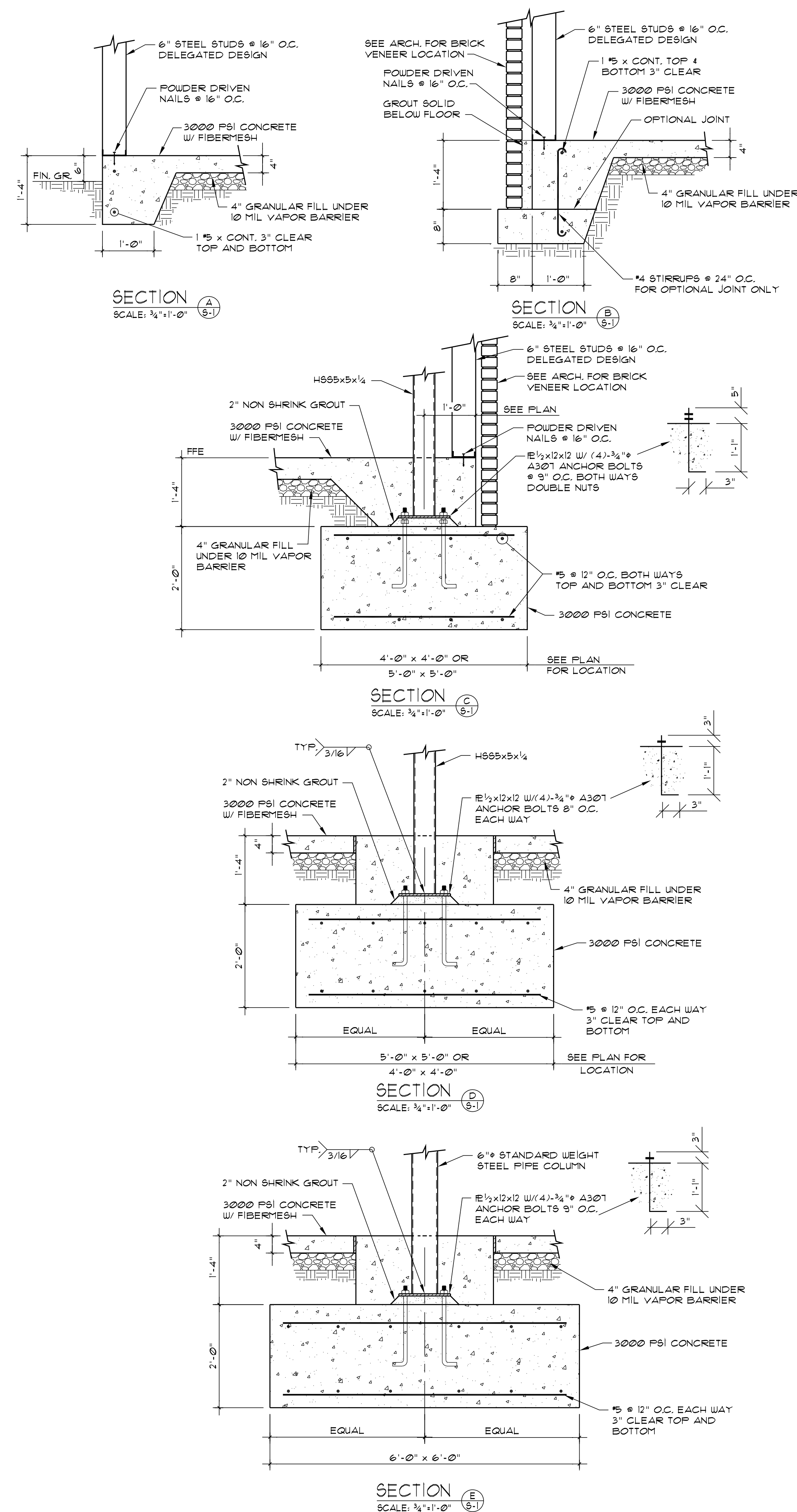
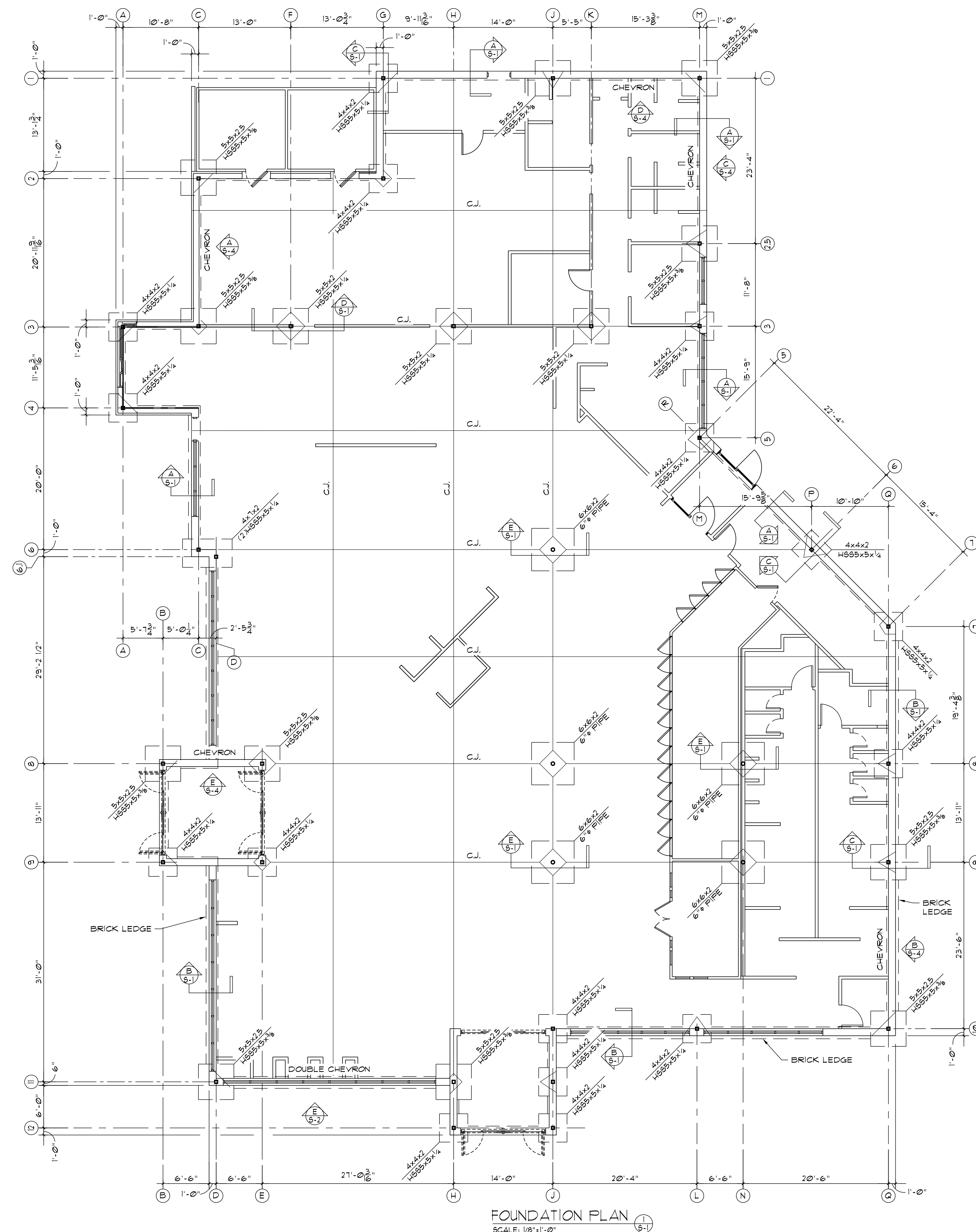
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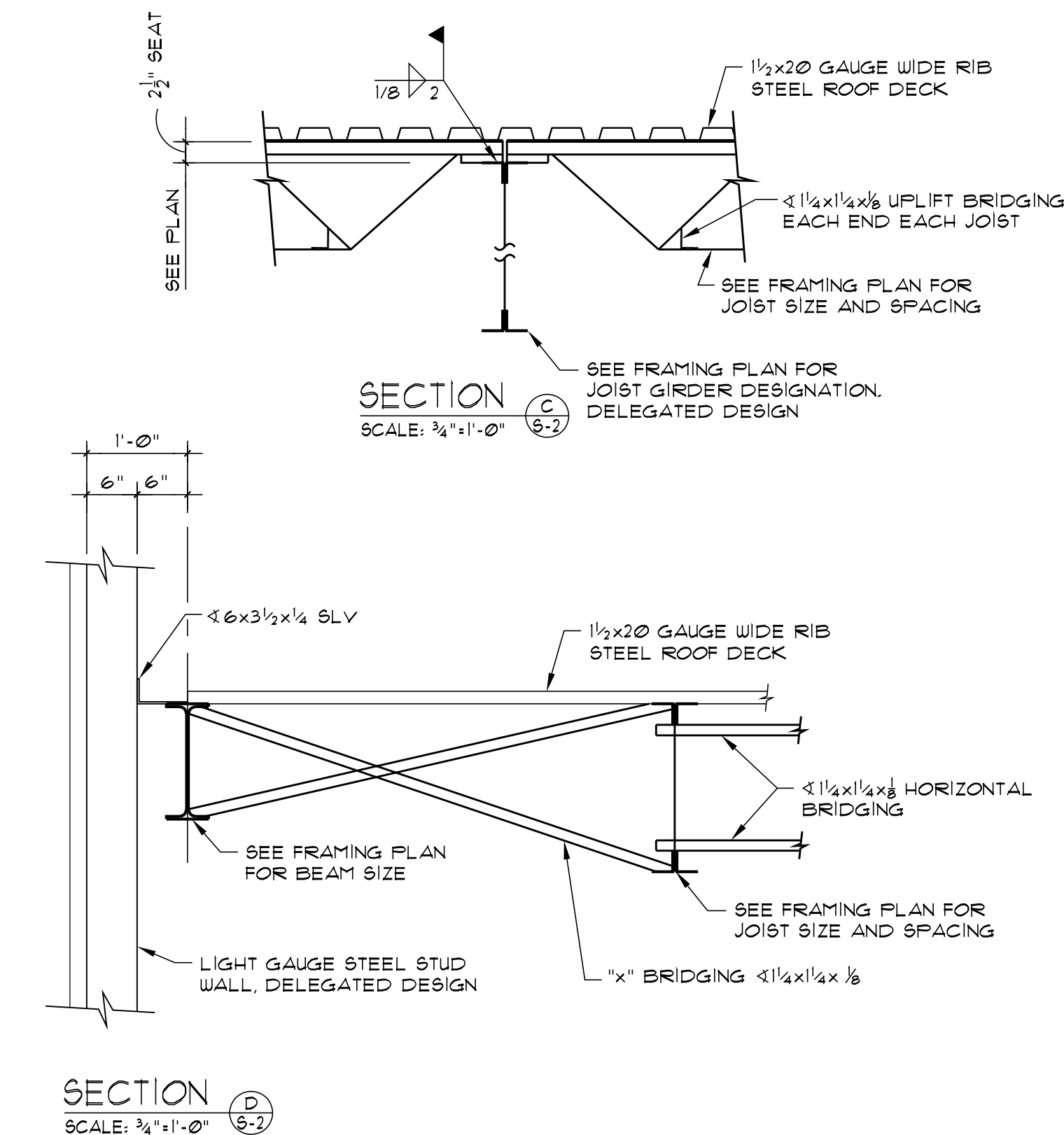
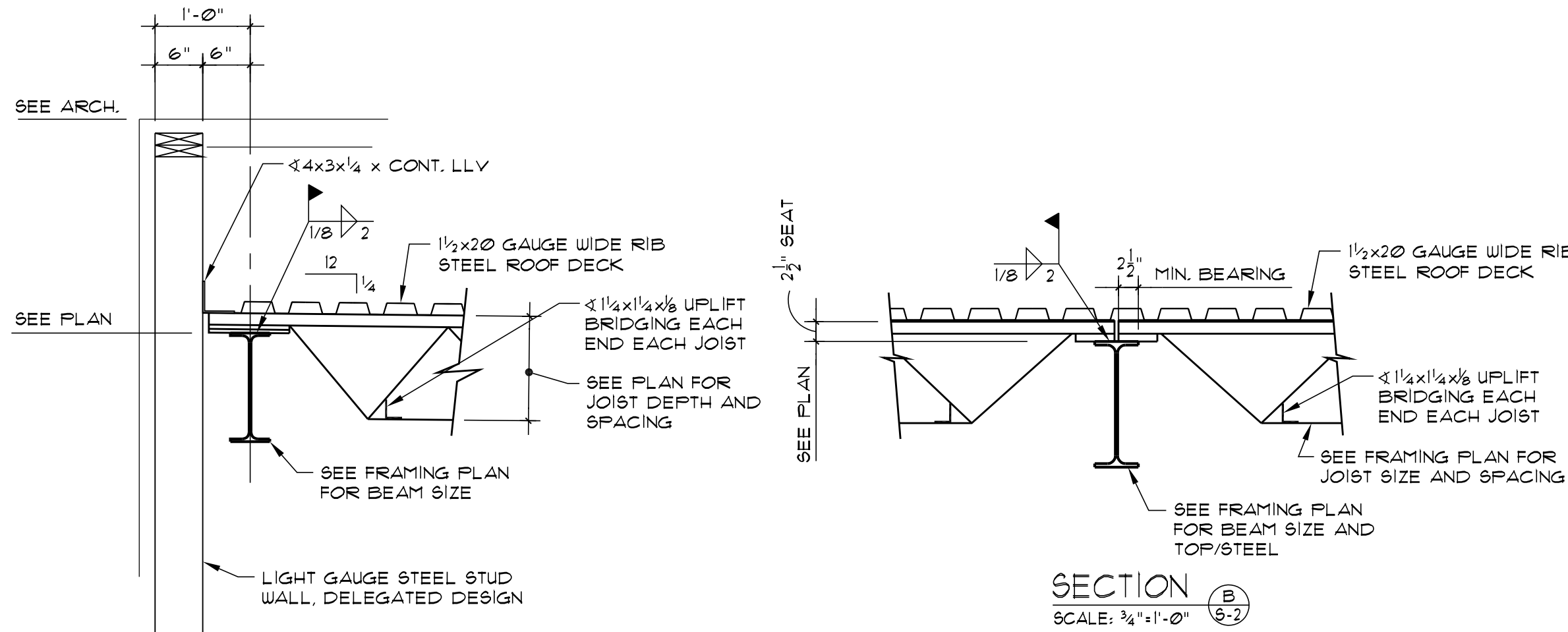
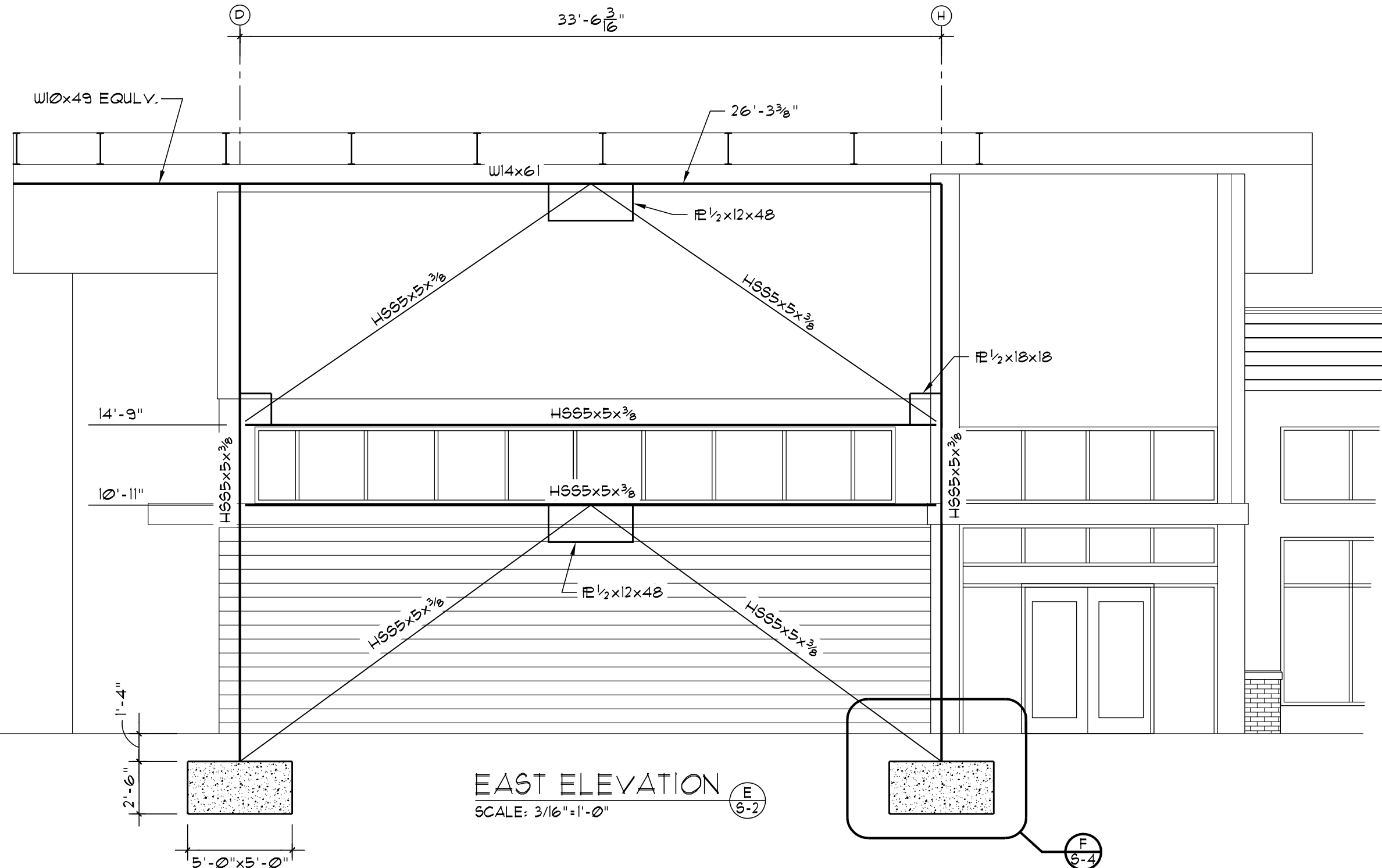
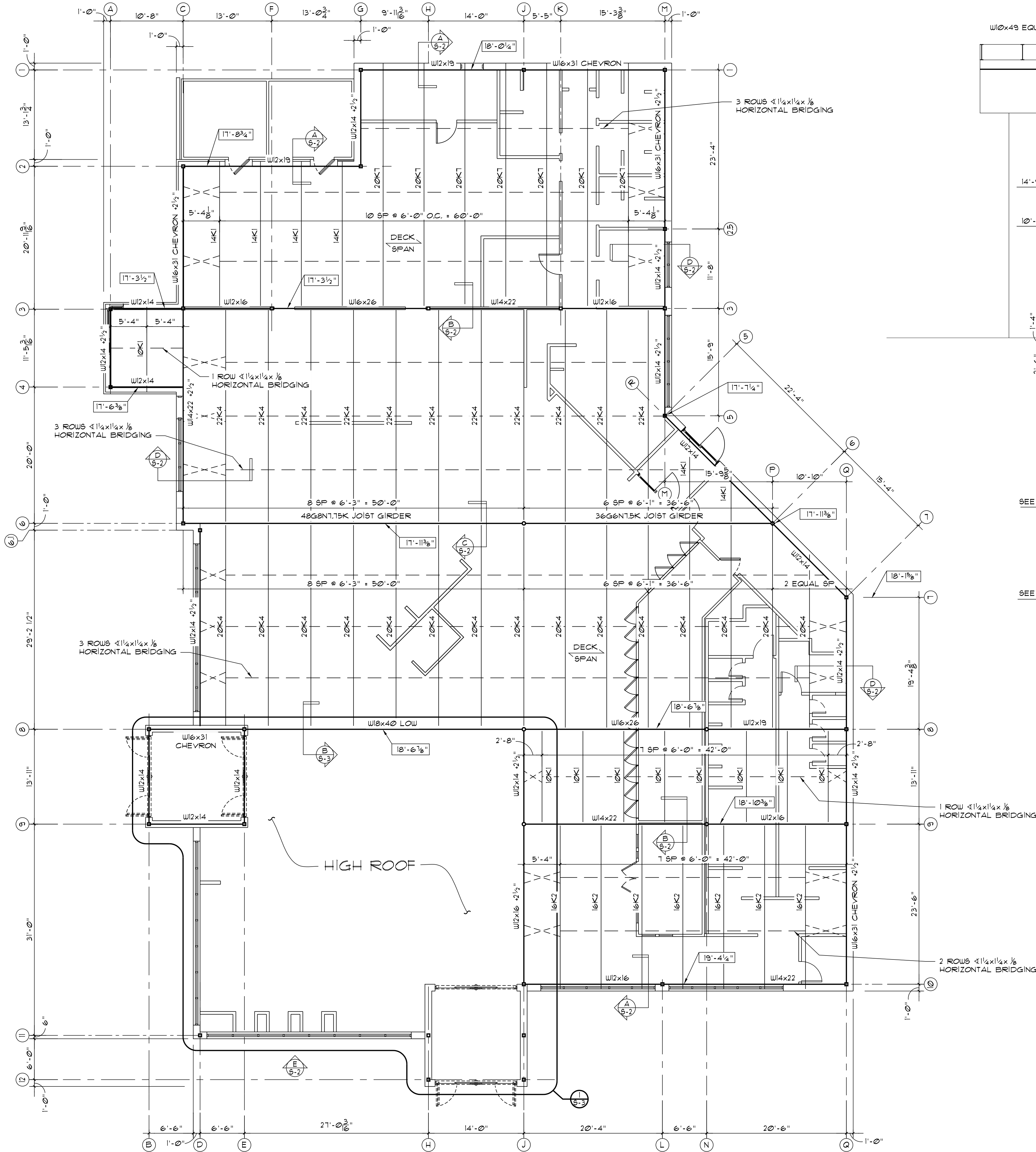


FOUNDATION PLAN AND SECTIONS

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I-75
CORDELE, GEORGIA

S-1





SHEET TITLE

HIGH ROOF FRAMING PLAN AND SECTIONS

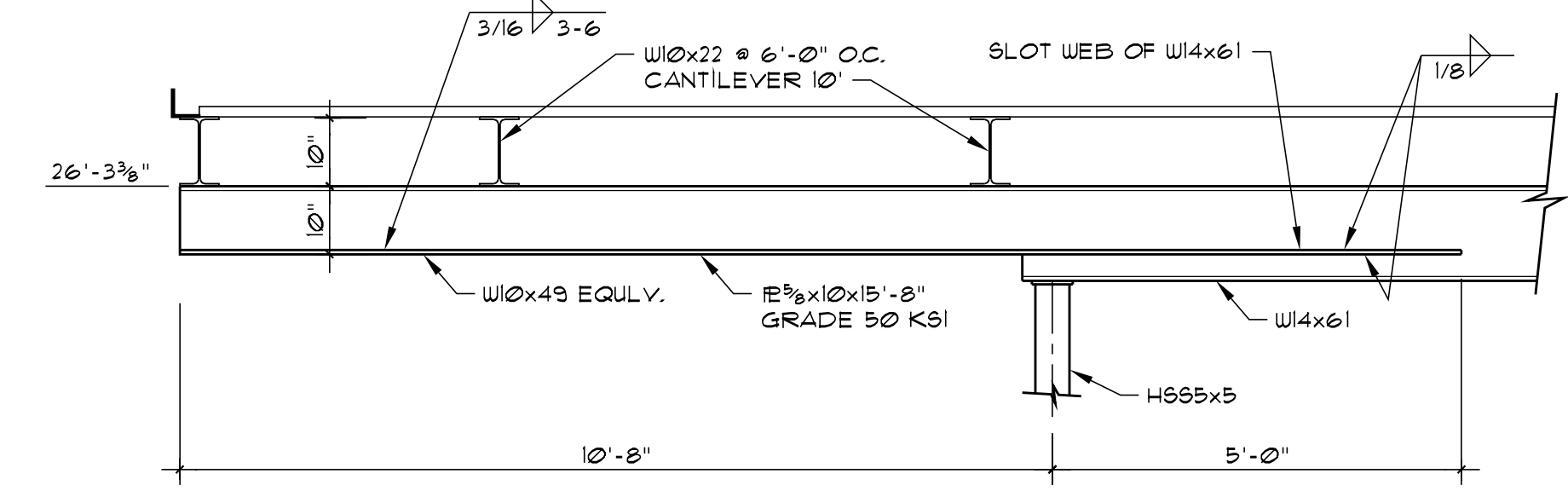
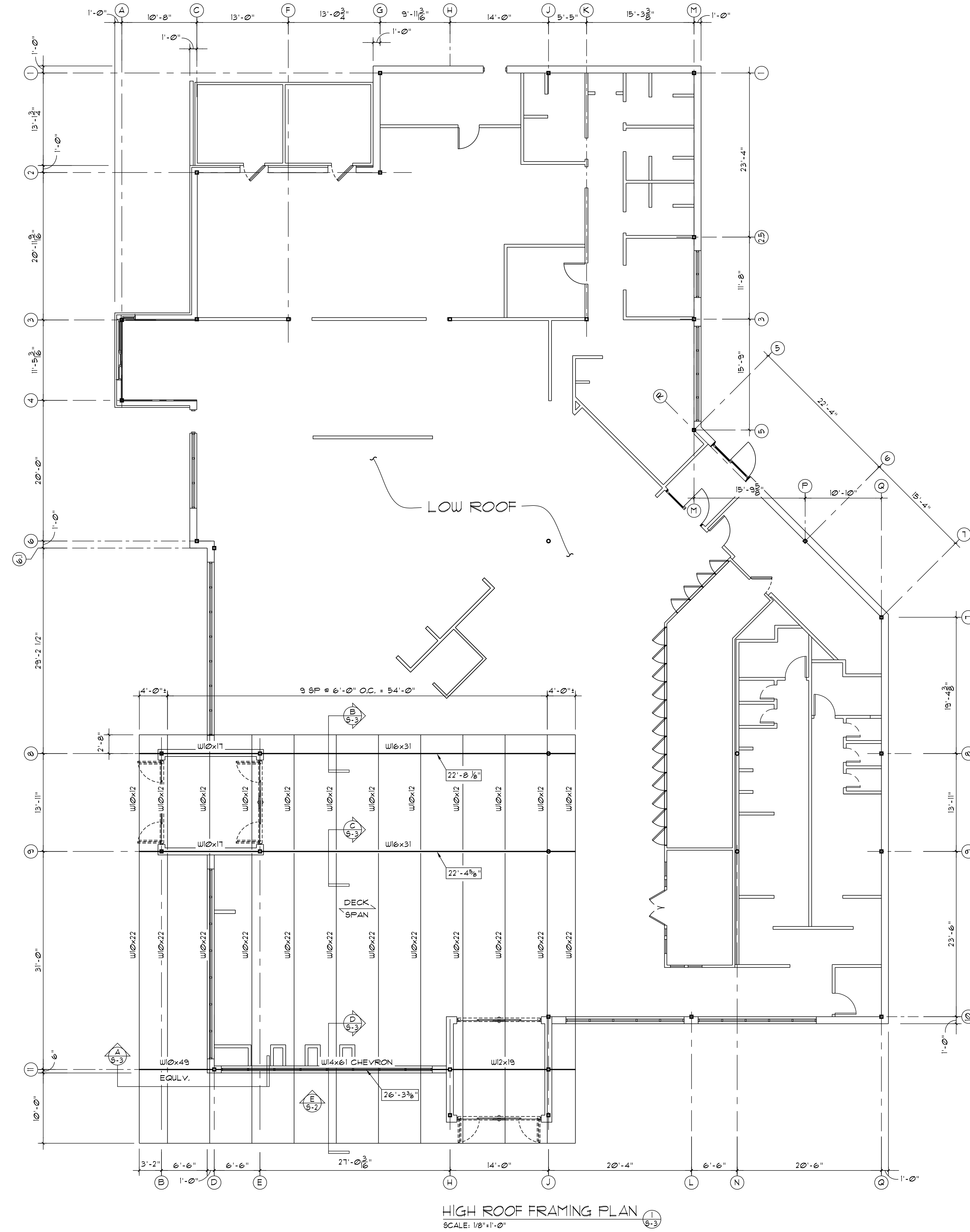
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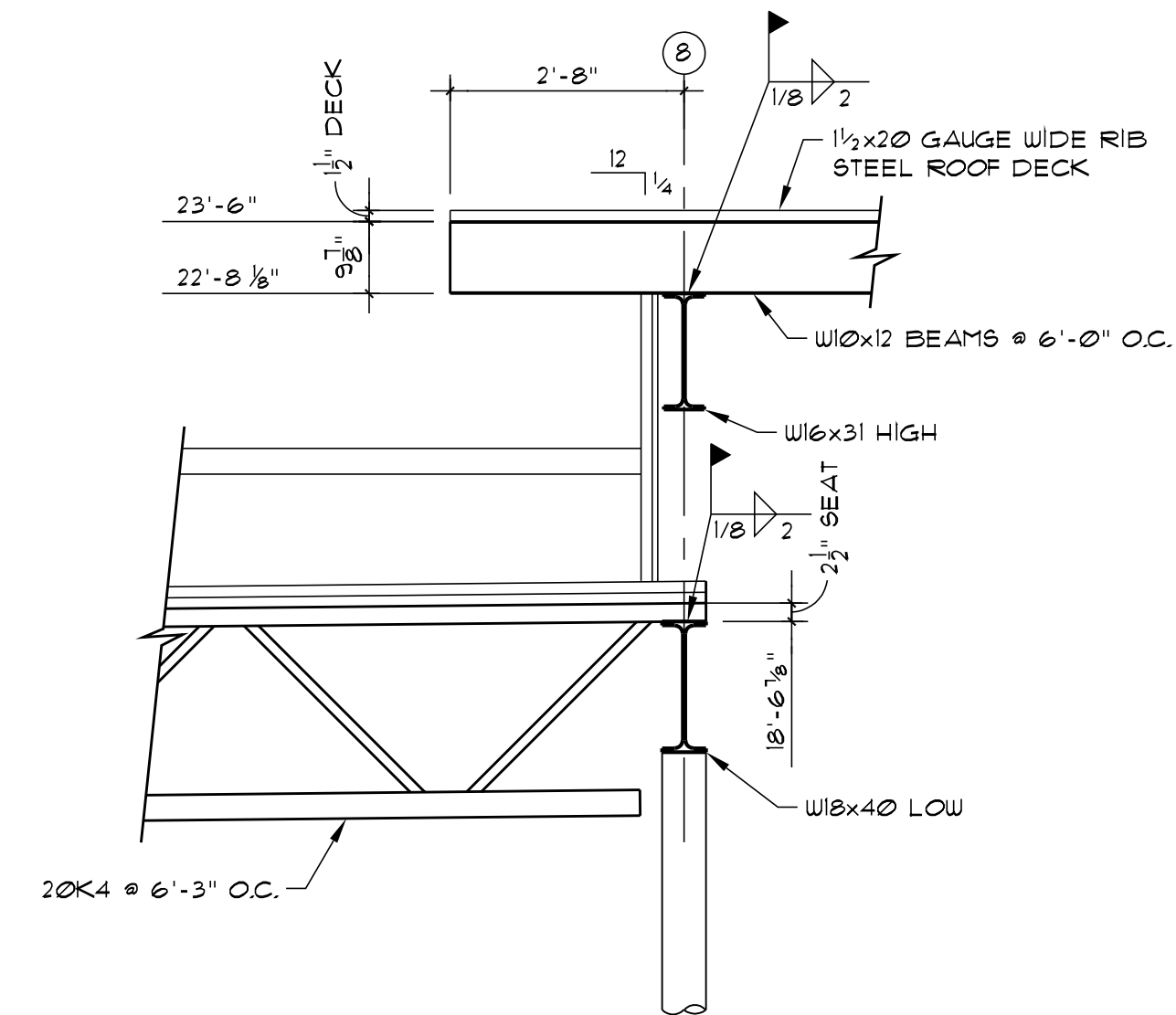
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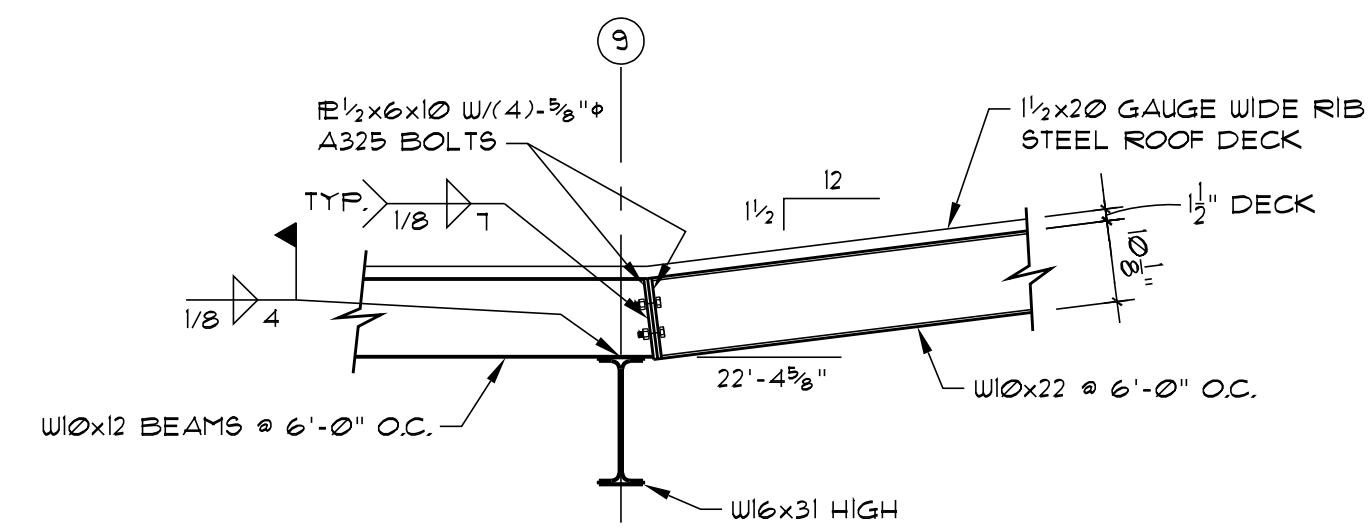
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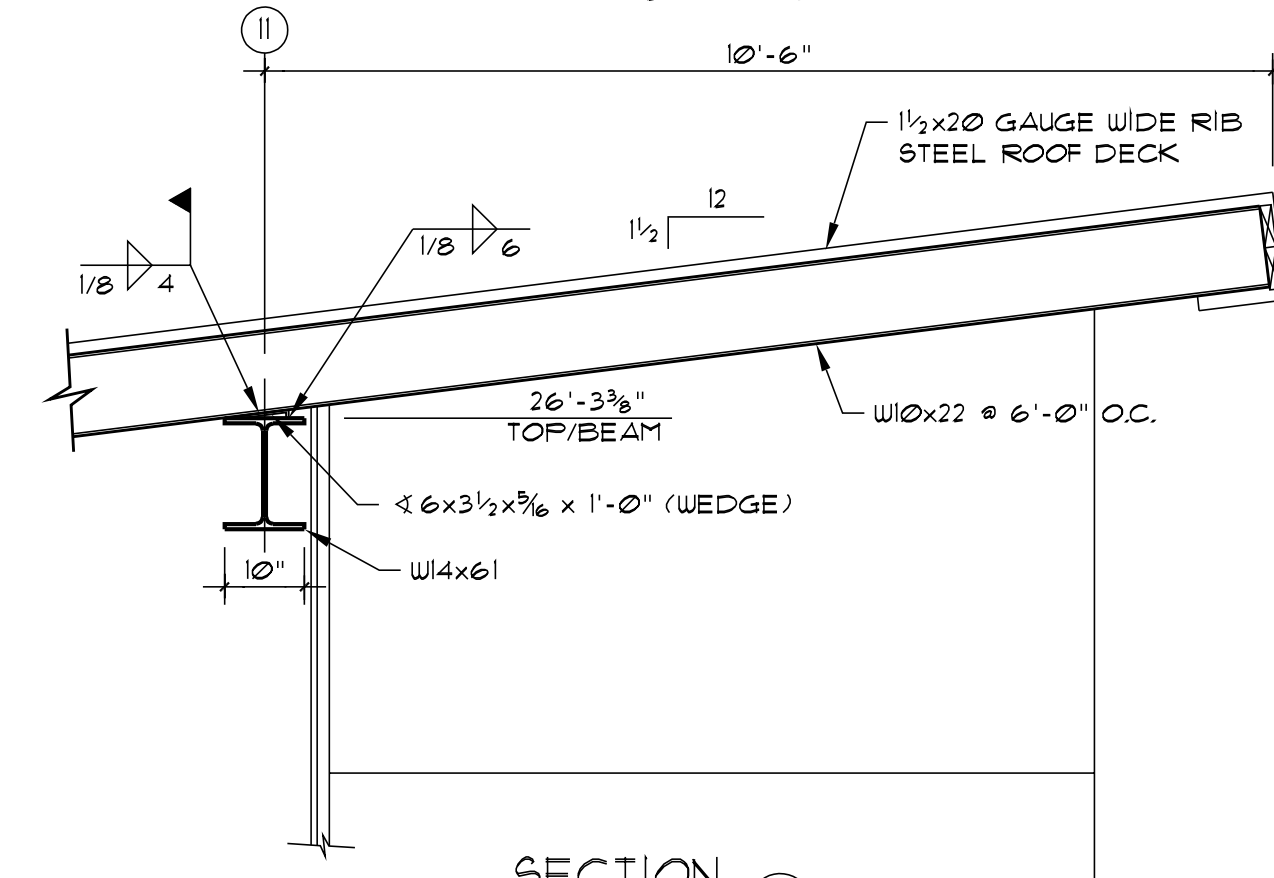
SECTION
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5-3



SECTION
SCALE: 1/2" = 1'-0"



SECTION
SCALE: $\frac{1}{2}" = 1'-0"$



SECTION D
S-3
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SINGLE CHEVRON
BRACE BASE DETAIL (K)
SCALE: 1"=1'-0" (5-4)