

STRUCTURAL ABBREVIATIONS

<b>A</b>		<b>L</b>	
A.B.	ANCHOR BOLT	L.	LENGTH
ABV	ABOVE	L.G.	LONG
A.C.I.	AMERICAN CONCRETE INSTITUTE	L.L.	LIVE LOAD
ADDL.	ADDITIONAL	LLH	LONG LEG HORIZONTAL
A.F.F.	ABOVE FINISH FLOOR	LLV	LONG LEG VERTICAL
A.I.S.C.	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LONG	LONGITUDINAL
A.I.S.I.	AMERICAN IRON AND STEEL INSTITUTE	L.P.	LOW POINT
ALT	ALTERNATE	<b>M</b>	
ARCH	ARCHITECT / ARCHITECTURAL	MAS	MASONRY
A.S.T.M.	AMERICAN SOCIETY OF TESTING MATERIALS	MAX	MAXIMUM
A.W.S.	AMERICAN WELDING SOCIETY	M.B.	MAXIMUM BEAM
<b>B</b>		MBM	METAL BUILDING MANUFACTURER
B.	BOTTOM OF COLUMN	M.C.	MOMENT CONNECTION
BLDC	BELOW	MCJ	MASONRY CONTROL JOINT
BLW	BEAM	MECH	MECHANICAL
BM	BOTTOM	MEZZ	MEZZANINE OR MECH PLATFORM
BOT	BOND BEAM	MFR	MANUFACTURE OR MANUFACTURER
B.B.	BASE PLATE	MIN	MINIMUM
B.P.	BRIDGING	MOM	MOMENT
BRGD	BEARING	M.O.	MASONRY OPENING
BRG	BRICK	MTL	METAL
BRK	BOTH SIDES	<b>N</b>	
B.S.	BETWEEN	N.S.	NEAR SIDE
BTWN		NTS	NOT TO SCALE
<b>C</b>		<b>O</b>	
C/C	CENTER TO CENTER	OA.	OVERALL
C.B.	CANTILEVER	O.B.	OVER BUILT
CANT	CONCRETE COLUMN	O.C.	ON CENTER
C.C.	CAST IN PLACE	O.D.	OUTSIDE DIAMETER
C.I.P.	CONTROL JOINT	O.F.	OUTSIDE FACE
C OR CL	CENTERLINE	OPNG	OPENING
CLR	CLEAR	OPP	OPPOSITE
C.M.U.	CONCRETE MASONRY UNIT	<b>P</b>	
COL	COLUMN	P.A.F.	POWER ACTUATED FASTENER
COORD	COORDINATE	PC.	PRECAST
CONC	CONCRETE	PERP	PERPENDICULAR
CONN	CONNECTION	PE	PRE-ENGINEERED
CONTN	CONTINUOUS	P OR PL	PLATE
CONTR	CONTRACTOR	PLY	PLYWOOD
CONST	CONSTRUCTION	P.L.F.	POUNDS PER LINEAR FOOT
CS.J	CONSTRUCTION JOINT	PNL	PANEL
CTR	CENTER	PREMANUF	PRE-MANUFACTURED
CTRD	CENTERED	PREFAB	PRE-FABRICATED
<b>D</b>		P.S.F.	POUNDS PER SQUARE FOOT
DBL	DOUBLE	P.S.I.	POUNDS PER SQUARE INCH
D.L.	DEAD LOAD	PTN	PARTITION
DIA	DIAMETER	P.T.	PRESSURE TREATED
DIAG	DIAGONAL	<b>R</b>	
DIM	DIMENSION	R	RADIUS
DIST	DISTANCE	REF	REFERENCE OR REFER
DN	DOWN	REINF	REINFORCE(D) OR REINFORCING
DTL	DETAIL	REQ	REQUIRED
DWG(S)	DRAWING(S)	REQ'D	REQUIRED
<b>E</b>		RF	ROOF
EA	EACH	RTN	RETURN
E.E.	EACH END	RW	RETAINING WALL
E.F.	EACH FACE	<b>S</b>	
E.J.	EXPANSION JOINT	SOH	SCHEDULE
ENG	ENGINEER	SECT	SECTION
EL	ELEVATION	SDI	STEEL DECK INSTITUTE
EQ.	EQUAL	S.F.	STEP FOOTING
EQ. SP.	EQUAL SPACING	SHT	SHEET
E.S.	EACH SIDE	SIM	SIMILAR
E.W.	EACH WAY	S.J.	SAW-CUT JOINT
EXT	EXTERIOR	SJI	STEEL JOIST INSTITUTE
<b>F</b>		SL	SLOPE
F.	FACE OF FLOOR DRAIN	SP.	SPACE OR SPACES
F.D.	FINISH FLOOR	SPECS	SPECIFICATIONS
F.F.	FOUNDATION	SQ.	SQUARE
FDN	FOUNDATION	S.S.	STAINLESS STEEL
FIN	FINISH	STD	STANDARD
FLR	FLOOR	STR	STEEL
F.S.	FAR SIDE	STL	STRENGTH
FT.	FOOT	S.W.	SHEAR WALL
FTG	FOOTING	SYMM	SYMMETRICAL
<b>G</b>		<b>I</b>	
GA.	GAGE OR GAUGE	T.B.	TIE BEAM
GALV	GALVANIZED	T&B	TOP & BOTTOM
G.B.	GRADE BEAM	TEMP	TEMPERATURE
G.C.	GENERAL CONTRACTOR	THD	THREADED
<b>H</b>		THK	THICK
HK.	HOOK	THNS	THICKENED SLAB
HORIZ	HORIZONTAL	TOPG	TOPPING
H.P.	HIGH POINT	TYP.	TYPICAL
HSA	HEADER STUD ANCHOR	TJ	TOP OF SLAB
HT	HEIGHT	TRANS	TRANSVERSE
<b>I</b>		<b>U</b>	
I.D.	INSIDE DIAMETER	UNO	UNLESS NOTED OTHERWISE
I.F.	INSIDE FACE	<b>V</b>	
INT	INTERIOR	VERT	VERTICAL
<b>J</b>		<b>W</b>	
JST	JOIST	WD	WOOD
JT	JOINT	W.F.	WALL FOOTING OR CONT FOOTING
<b>K</b>		W.O.	WINDOW OPENING
K	KIP (1000 LBS)	W.P.	WORK POINT
K.O.	KNOCK OUT	WT	WEIGHT
KWY	KEYWAY	W.W.F.	WELDED WIRE FABRIC (MESH)
		W	WITH

GOVERNING CODES AND STANDARDS

THE STRUCTURAL DESIGN AND ALL WORK REFERENCED HEREIN SHALL CONFORM TO THE FOLLOWING CODES AND STANDARDS. USE THE LATEST EDITION UNLESS NOTED OTHERWISE.

- "FLORIDA BUILDING CODE" - FBC 2023, 8TH EDITION.
- "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" - ASCE 7-22.
- "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" - ACI 318-19.
- "ACI MANUAL OF CONCRETE PRACTICE" - PARTS 1 THROUGH 5 - LATEST EDITION.
- "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" - AISC 360-16.
- "STRUCTURAL WELDING CODE - STEEL" - AWS D1.1-2020.
- "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES" - TMS 402/602-16.
- "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, WITH SUPPLEMENT 2" - AISI S100-16(2020) w/S2-20.

GENERAL CONDITIONS

- THE GENERAL CONTRACTOR SHALL REVIEW AND VERIFY THAT ALL DIMENSIONS ARE COORDINATED BETWEEN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS AT THE PROJECT SITE AND SHALL NOTIFY ARCHITECT/ENGINEER OF DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
- THESE STRUCTURAL DRAWINGS ARE TO BE USED IN COMBINATION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL DRAWINGS, AND ANY OTHER PROJECT CONTRACT DOCUMENTS NOT LISTED. REFER TO THESE DRAWINGS FOR DETAILS AND INFORMATION THAT MAY RELATE TO STRUCTURAL COMPONENTS.
- THESE STRUCTURAL DRAWINGS AND RELATED SPECIFICATIONS, IF PROVIDED, REPRESENT THE COMPLETED DESIGN OF THE STRUCTURE. THEY DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE CONSTRUCTION SITE.
- OBSERVATION VISITS TO THE SITE BY THE EOR OR REPRESENTATIVES OF THE EOR MAY BE MADE DURING CONSTRUCTION. ANY SUPPORT SERVICES PERFORMED BY THE EOR SHALL BE DISTINGUISHED FROM INSPECTION AND/OR TESTING SERVICES PERFORMED BY OTHERS AND ARE NOT TO BE CONSTRUED AS SUPERVISION AND/OR MANAGEMENT OF CONSTRUCTION.
- THE OWNER WILL ENGAGE A QUALIFIED, APPROVED TESTING AGENCY TO PROVIDE SERVICES AS INDICATED BELOW. SUBMIT REPORTS TO STRUCTURAL ENGINEER AND ARCHITECT.
  - TEST SOIL COMPACTION PER LATEST GEOTECHNICAL REPORT (U.N.O.)
  - TEST CONCRETE IN ACCORDANCE WITH ASTM C172 AND C31.
  - VISUALLY INSPECT FIELD WELDS, BOLTED CONNECTIONS, AND OTHER STRUCTURAL STEEL CONNECTIONS. ALL FIELD WELDS SHALL BE INSPECTED BY A CERTIFIED WELD INSPECTOR.

SHOP DRAWINGS AND SUBMITTALS

- THE GENERAL CONTRACTOR SHALL FOLLOW THE ARCHITECT'S INSTRUCTIONS FOR DISTRIBUTION OF SHOP DRAWINGS.
- SHOP DRAWING REVIEW IS FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT. CORRECTIONS OR COMMENTS MADE ON THIS REVIEW DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS AND/OR OMISSIONS, NOR FROM COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.
- APPROVAL OF SHOP DRAWINGS DOES NOT INDICATE AN ACCEPTANCE OF DEVIATIONS FROM THE CONTRACT DOCUMENTS OR PREVIOUS SHOP DRAWING REVIEW, UNLESS SPECIFICALLY NOTED THEREIN BY ENGINEER OF RECORD.
- ANY PROPOSED CHANGE TO THE DESIGN CONCEPTS SHOWN IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING AND APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD PRIOR TO SUBMITTING SHOP DRAWINGS. ALL SUCH CHANGES SHALL BE "CLOUDED" ON THE SHOP DRAWINGS AND REFERENCED TO THE PROPER R.F.I. NUMBER.
- DETAILER SHALL BE RESPONSIBLE FOR CHECKING ALL ARCHITECTURAL AND MECHANICAL DRAWINGS FOR OPENINGS AND EMBEDS AFFECTING STRUCTURAL MEMBERS.
- SHOP DRAWINGS SHALL BEAR THE INITIALS OF THE DETAILER'S CHECKER AND SHALL BE REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO ARCHITECT AND ENGINEER OF RECORD.
- THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS, IN WHOLE OR IN PART, BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SHALL SIGNIFY HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATED HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.
- IF REPRODUCTIONS OF THESE CONTRACT DRAWINGS ARE USED IN LIEU OF PREPARATION OF SHOP DRAWINGS, THE ARCHITECT'S, ENGINEER'S OR OTHER DESIGN CONSULTANT'S TITLE BLOCK SHALL BE REMOVED AND REPLACED WITH A TITLE BLOCK LISTING THE FOLLOWING ITEMS.
  - NAME, ADDRESS, AND CONTACT NUMBER OF CONTRACTOR, SUBCONTRACTOR, ETC. SUBMITTING SHOP DRAWINGS.
  - SHEET NUMBER.
- DATE DRAWING WAS PREPARED, THE INITIALS OF THE PERSON WHO PREPARED THE DRAWINGS, AND THE INITIALS OF THE PERSON WHO CHECKED THE DRAWINGS.
- ANY REPRODUCTION OF THESE CONTRACT DRAWINGS NOT COMPLYING WITH THE ABOVE WILL BE REJECTED.
- SOME STRUCTURAL SYSTEMS INCLUDED IN THESE CONTRACT DRAWINGS ARE INDICATED AS "DESIGNED BY SPECIALTY" OR "DELEGATED ENGINEER." DELEGATED ENGINEERING SUBMITTALS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.
- CALCULATIONS AS REQUIRED BY THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE SUBMITTED WITH THE REQUIRED SHOP DRAWINGS. ALL DELEGATED ENGINEERING SUBMITTALS SHALL REQUIRE CALCULATIONS SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.
- SHOP DRAWING AND DELEGATED ENGINEERING SUBMITTAL REQUIREMENTS:
  - INFORMATION SUBMITTALS
    - CONCRETE MIX DESIGNS & MISC. PRODUCT DATA
    - MASONRY UNITS & GROUT MIX DESIGN
    - EPOXY AND MECHANICAL ANCHORS
    - MISCELLANEOUS
  - SHOP DRAWING SUBMITTALS
    - REINFORCING STEEL
    - STRUCTURAL STEEL, MISC STEEL EMBEDS/CONNECTIONS
    - OPEN-WEB STEEL JOISTS & METAL DECKING
    - MISCELLANEOUS
  - DELEGATED ENGINEERING SUBMITTALS
    - PRE-FABRICATED/PRE-ENGINEERED CANPIES, AWNINGS, ETC.
    - COLD-FORMED METAL STUD FRAMING
    - MISCELLANEOUS

POST-INSTALLED ANCHORS NOTES

- POST-INSTALLED ANCHOR SYSTEMS SHALL COMPLY WITH THE LATEST REVISION OF ICC-ES ACCEPTANCE CRITERIA AC308 AND HAVE A VALID ICC-ES REPORT IN ACCORDANCE WITH ALL APPLICABLE CODES.
- POST-INSTALLED ANCHOR SYSTEMS MUST BE INSTALLED IN STRICT ACCORDANCE WITH ALL WRITTEN MANUFACTURER INSTRUCTIONS INCLUDING ANY SPECIAL EQUIPMENT REQUIRED.
- THE PRODUCTS LISTED BELOW ARE THE BASIS OF DESIGN FOR THIS PROJECT. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED BELOW SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO INSTALLATION. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS THAT HAVE A CODE REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION AND PROJECT BUILDING CODE. SUBSTITUTION SUBMITTALS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT PERFORMANCE VALUES OF THE DESIGN BASIS PRODUCT.
- BASIS OF DESIGN FOR POST-INSTALLED ANCHORS:
  - ADHESIVE ANCHORS (EPOXY ANCHORS):
    - INTO CONCRETE: ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 308.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. ADHESIVE ANCHORS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER WHERE DESIGNATED ON THE CONTRACT DOCUMENTS. PRE-APPROVED PRODUCTS INCLUDE:
      - HILTI HIT-HY 200
      - SIMPSON STRONG-TIE SET-XP
    - ANCHORING SYSTEMS SHALL UTILIZE TRADITIONAL PREPARATION OF THE ANCHOR HOLE (BLOWING OR BRUSHING) PER THE MANUFACTURER'S WRITTEN REQUIREMENTS. OTHER METHODS SHALL NOT BE USED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
    - ANCHORING ADHESIVE SHALL BE A TWO-PART COMPONENT 100% SOLID EPOXY BASED SYSTEM SUPPLIED THROUGH A STATIC-MIXING NOZZLE SUPPLIED BY THE MANUFACTURER. THIS REQUIREMENT SHALL BE MET REGARDLESS OF WHICH EPOXY PRODUCT OR MANUFACTURER IS USED.
    - THREADED RODS TO BE USED IN COMBINATION WITH EPOXY SYSTEM SHALL BE FABRICATED FROM STEEL MEETING OR EXCEEDING THE PROPERTIES OF ASTM A36.
  - MECHANICAL ANCHORS (EXPANSION / WEDGE / SCREW ANCHORS):
    - INTO CONCRETE: ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 308.2 AND ICC-ES AC193 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. PRE-APPROVED MECHANICAL ANCHOR PRODUCTS INCLUDE:
      - HILTI KIWK HUS-EZ (SCREW ANCHOR)
      - HILTI KIWK-BOLT TZ OR KWIK BOLT TZ 2 (EXPANSION ANCHORS)
      - SIMPSON STRONG-TIE TITEN-ND (SCREW ANCHOR)
      - SIMPSON STRONG-TIE STRONG-BOLT 2 OR WEDGE-ALL (EXPANSION ANCHORS)

FOUNDATION AND GEOTECHNICAL NOTES

- REFERENCE THE GEOTECHNICAL REPORT COMPLETED FOR THIS SITE FOR FURTHER INFORMATION RELATING TO THE EXISTING SUBSURFACE SOIL CONDITIONS AND REQUIRED SITE PREPARATION PROCEDURES.
  - COMPANY NAME: UNIVERSAL ENGINEERING SCIENCES
  - DATE: MAY 24, 2018
  - REPORT NUMBER: UES REPORT No. 1569297
- THE ALLOWABLE NET SOIL BEARING PRESSURE IS 3,000 PSF. THIS DESIGN SOIL BEARING PRESSURE IS BASED ON THE ACCEPTED COMPLETION OF ALL RECOMMENDATIONS AND REQUIREMENTS IN THE REFERENCED GEOTECHNICAL REPORT.
- ALL REQUIREMENTS FOR SITE PREPARATION AND SOIL COMPACTION SPECIFIED IN THE GEOTECHNICAL REPORT SHALL BE FOLLOWED UNLESS ADDITIONAL MORE STRINGENT REQUIREMENTS ARE SPECIFIED. A CERTIFIED TESTING AGENCY SHALL PERFORM SOIL DENSITY AND COMPACTION TESTS TO ENSURE CONFORMANCE WITH THE GEOTECHNICAL REPORT. SUBMIT ALL TESTS RESULTS TO THE PROJECT ARCHITECT AND ENGINEER. TEST PER THE FOLLOWING:
  - PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL LAYER, AT LEAST ONE TEST FOR EVERY 2000 SQ. FT., BUT IN NO CASE FEWER THAN 3 TESTS.
  - FOOTINGS: AT EACH COMPACTED BACKFILL LAYER AT EACH FOOTING OR ONE TEST FOR EACH 50 FT. OF WALL FOOTING.
  - CONTRACTOR SHALL RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
- CONTRACTOR, IN CONJUNCTION WITH THE PROJECT GEOTECHNICAL ENGINEER, SHALL VERIFY EXISTING FIELD CONDITIONS DURING EXCAVATION THAT MAY AFFECT THE ALLOWABLE BEARING PRESSURE AND / OR THE INSTALLATION OF THE FOUNDATION SYSTEM PRIOR TO STARTING WORK.
- ALL FOOTINGS SHALL BE CENTERED UNDER THE COLUMN OR WALL ABOVE UNLESS NOTED OTHERWISE.
- CONCRETE FOR THE FOUNDATIONS SHALL BE PLACED WITHIN 24 HOURS OF THE SUB-GRADE APPROVAL BY THE PROJECT GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE.
- TERMITE TREATMENT:
  - TERMITE TREATMENT REQUIREMENT BY FBC 110.3.12 FOR ALL CONSTRUCTION.
  - FOR EXTERIOR CONCRETE AGAINST THE BUILDING: THE SOILS MUST BE TREATED FOR SUBTERRANEAN TERMITES PER FBC 1816.1.6 AND PROTECTED WITH A VAPOR RETARDER PER FBC 1816.1.4.
  - TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION. PER FBC FOR REGISTERED TERMITICIDE. UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

CONCRETE SLAB ON GROUND NOTES

- THE CONCRETE SLAB ON GROUND FOR THIS PROJECT IS PRESCRIPTIVE. NO STRUCTURAL DESIGN HAS BEEN PROVIDED.
- THE CONCRETE SLAB ON GROUND HAS BEEN SPECIFIED BASED ON THE FOLLOWING ASSUMPTIONS:
  - MINIMUM SOIL BEARING PRESSURE OF 3000 PSF.
  - SOIL CONSTANT "K" VALUE ASSUMED TO BE 100 PSI / IN.
- THE SLAB ON GRADE CAN ACCOMMODATE A WORKING UNIFORM LOAD OF 500 PSF BASED ON SLAB THICKNESS AND GEOTECHNICAL CONSIDERATIONS.
- THE FOLLOWING GUIDELINES SHALL APPLY TO THE LAYOUT OF CONTRACTION / CONTROL JOINTS IN THE SLAB. THESE JOINTS SHALL BE PROVIDED AT THE FOLLOWING SPACINGS (MAXIMUM):
  - 14'-0" ON CENTER FOR 6" SLABS AND THINNER
  - 15'-0" ON CENTER FOR 7" SLABS AND THICKER
- CONTRACTOR SHALL PROVIDE MM-80 SEMI-RIGID EPOXY JOINT FILLER (OR APPROVED EQUAL) AT ALL SAW-CUT JOINTS IN THE SLAB THAT ARE EXPECTED TO RECEIVE FORKTRK TRAFFIC (OR OTHER MATERIAL HANDLING VEHICLE WHEEL TRAFFIC) AND/OR HEAVY RACKING OR POST LOADING. JOINT FILLER INSTALLATION SHALL BE DEFERRED FOR 90-120 DAYS TO ALLOW FOR SUFFICIENT WIDENING OF JOINTS DURING CURING. SAW-CUT JOINTS IN REFRIGERATED AREAS SHALL BE FILLED AFTER AREA IS STABILIZED AT FINAL OPERATING TEMPERATURES FOR A MINIMUM OF 5 DAYS FOR COOLERS AND 14 DAYS FOR FREEZERS.
- THE SLAB ON GRADE SHALL MEET THE FOLLOWING FLATNESS / LEVELNESS (FF / FL) REQUIREMENTS:
  - TYPICAL FLOOR SLAB: FF 45 / FL 35
- PROVIDE ALL LABOR, PRODUCTS, AND EQUIPMENT REQUIRED TO PROPERLY INSTALL AN UNDERSLAB VAPOR RETARDER UNDER ALL INTERIOR CONCRETE FLOOR SLABS ON GROUND. REFER TO DRAWINGS FOR REQUIRED LOCATIONS.
- VAPOR RETARDER MATERIAL SHALL BE A MULTILAYER POLYETHYLENE SHEET MATERIAL CONFORMING TO ASTM E 1745, CLASS "A", FOR A 15 MIL THICKNESS. VAPOR RETARDER SHALL HAVE A WATER VAPOR PERMEANCE OF LESS THAN 0.0254 PERMS ACCORDING TO ASTM F 1249. STEGO WRAP CLASS A VAPOR RETARDER OR APPROVED EQUAL.
- PROVIDE ALL REQUIRED ACCESSORY MATERIALS BY THE VAPOR RETARDER, INCLUDING SEAM TAPE AND MASTIC. ACCESSORY MATERIALS SHALL HAVE A WATER VAPOR PERMEANCE OF 0.3 PERMS OR LOWER ACCORDING TO ASTM E 96.
- INSTALLER SHALL PROCEED WITH APPLICATION OF THE VAPOR RETARDER ONLY AFTER SUBSTRATE CONSTRUCTION AND PENETRATING WORK HAVE BEEN COMPLETED AND ANY UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- INSTALLER SHALL COMPLY WITH ALL VAPOR RETARDER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AS WELL AS THE REQUIREMENTS OF ASTM E 1643.
- UNROLL THE VAPOR RETARDER MATERIAL WITH THE LONGEST DIMENSION PARALLEL WITH THE DIRECTION OF THE CONCRETE POUR. LAP OVER FOOTINGS OR SEAL TO FOUNDATION WALLS.
- OVERLAP ALL JOINTS 6 INCHES AND SEAL WITH MANUFACTURER PROVIDED SEAM TAPE.
- SEAL ALL PENETRATIONS ACCORDING TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- NO PENETRATION OF VAPOR RETARDER MATERIAL IS ALLOWED EXCEPT FOR REINFORCING STEEL AND PERMANENT UTILITIES.
- INSTALLER SHALL REPAIR DAMAGED AREAS BY CUTTING RECTANGULAR PATCHES OF THE VAPOR RETARDER MATERIAL, OVERLAPPING THE DAMAGED AREA 6 INCHES AND TAPING ALL FOUR SIDES WITH MANUFACTURER PROVIDED SEAM TAPE.

STRUCTURAL STEEL NOTES


- ALL STRUCTURAL STEEL DETAILING, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" - AISC 360, LATEST EDITION AS ADOPTED BY NOTED GOVERNING BUILDING CODES.
- WELDED CONNECTIONS SHALL CONFORM TO THE LATEST EDITION CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1.
- ALL FABRICATION AND ERECTION WORK SHALL BE PERFORMED BY AISC CERTIFIED FABRICATORS AND ERECTORS.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING MATERIAL REQUIREMENTS, UNLESS NOTED OTHERWISE:

STRUCTURAL SHAPE	MATERIAL SPEC	YIELD STRENGTH
WIDE FLANGE (W)	ASTM A992	Fy = 50 KSI
ANGLES, PLATES, CHANNEL SHAPES	ASTM A36	Fy = 36 KSI
ANCHOR RODS (ANCHOR BOLTS)	ASTM F1554, GRADE 36	Fy = 36 KSI
	ASTM F1554, GRADE 55	Fy = 55 KSI - S1 SUPPLEMENT
PIPE (STD, XS, XXS)	ASTM A53, GRADE B	Fy = 35 KSI
STEEL TUBE - SQUARE / RECT.	ASTM A500, GRADE C	Fy = 50 KSI
STEEL TUBE - ROUND	ASTM A500, GRADE C	Fy = 50 KSI
HIGH STRENGTH BOLTS	ASTM A325	Fy = 46 KSI
HARDENED WASHERS	ASTM F436	
HEADED SHEAR CONNECTORS	ASTM A108, TYPE B, GRADE 1010 - 1020	
- ALL STEEL SHAPES, PLATES, FASTENERS, ETC. WHICH ARE EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED.
- ALL STEEL SHAPES, PLATES, FASTENERS, ETC. WHICH ARE EXPOSED TO SOIL SHALL BE ENCASED IN CONCRETE.
- ALL INTERIOR STRUCTURAL STEEL SHALL BE PAINTED WITH A RUST INHIBITIVE PRIMER. DO NOT USE PRIMER AT MEMBERS THAT ARE TO RECEIVE SPRAY-ON FIRE PROOFING. COORDINATE PRIMER WITH ARCHITECT AND OWNERS PAINTING REQUIREMENTS.
- AN APPROVED LICENSED TESTING AGENCY SHALL VISUALLY INSPECT ALL WELDS, BOLTED CONNECTIONS, METAL DECK ATTACHMENT, AND OTHER STRUCTURAL STEEL CONNECTIONS.
- FIELD STRUCTURAL STEEL TO BE INSPECTED BY QUALIFIED INSPECTORS APPROVED BY THE STRUCTURAL ENGINEER. FIELD INSPECTION REPORT SHALL BE FILED WITH THE STRUCTURAL ENGINEER WITHIN 5 DAYS OF THE DATE OF THE INSPECTION. INSPECTORS MUST BE NOTIFIED OF ALL PHASES OF CONSTRUCTION BY THE GENERAL CONTRACTOR.
- ALL WELDED CONNECTIONS SHALL BE COMPLETED WITH E70XX ELECTRODES. SHOP AND FIELD WELDS SHALL BE MADE BY APPROVED CERTIFIED WELDERS AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE OF BUILDINGS AWS D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF THE MATERIALS BEING WELDED UNLESS NOTED OTHERWISE. ALL WELDS SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE (ANSI/AWS D1.1).
- TOUCH UP FIELD WELDS AND ANY DAMAGED AREAS OF PAINT IN FIELD AFTER WELDED. USE TWO COATS OF COLD GALVANIZING COMPOUND PAINT FOR TOUCH UP OF GALVANIZED STEEL.
- ALL HSS AND PIPE SHAPES SHALL HAVE CLOSURE PLATES AND CONTINUOUS WELDS TO SEAL THE SECTIONS.
- BEFORE PROCEEDING WITH ERECTION, AND WITH THE STEEL ERECTOR PRESENT, VERIFY ELEVATIONS OF CONCRETE AND MASONRY BEARING SURFACES AND LOCATIONS OF ANCHORAGES FOR COMPLIANCE WITH REQUIREMENTS. DO NOT PROCEED WITH ERECTION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- NON-METALLIC, NON-SHRINK GROUT UNDER ALL COLUMN BASE PLATES AND BEAM BEARING PLATES SHALL CONSIST OF A PREMIXED PRODUCT COMPLYING WITH ALL REQUIREMENTS OF CRD-C821, ASTM C827, AND C109. GROUT STRENGTH TO BE 6000 PSI (MIN) WHEN BEARING ON 3000 PSI CONCRETE, AND 8000 PSI (MIN) WHEN BEARING ON 4000 PSI CONCRETE.
- SPLICING OF STRUCTURAL STEEL WHERE NOT DETAILED IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF ENGINEER.

OPEN WEB STEEL JOIST NOTES

- DESIGN, DETAILING, FABRICATION, AND ERECTION OF STEEL JOISTS AND JOIST GIRDERS SHALL BE IN ACCORDANCE WITH "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" - AISC 360, LATEST EDITION AND WITH THE LATEST CODES AND STANDARDS OF THE STEEL JOIST INSTITUTE, SJI.
- JOISTS SHALL BE DESIGNED FOR THE COMBINED DEAD, LIVE, AND WIND LOADS AS NOTED IN THE LOAD TABLES AND AS NOTED ON PLAN. IN ALL CASES, JOISTS SHALL NOT BE DESIGNED FOR LESS LOAD THAN PRESCRIBED IN THE STANDARD JOIST LOADING TABLES PER THE STEEL JOIST INSTITUTE.
- PROVIDE UPLIFT BRIDGING AND STANDARD JOIST BRIDGING IN ACCORDANCE WITH THE LATEST SJI SPECIFICATIONS.
- PROVIDE X-BRACING IN ACCORDANCE WITH THE LATEST SJI SPECIFICATIONS, WHERE ANY BRIDGING LINE IS DISCONTINUOUS FOR ANY REASON, AND AS FOLLOWS:
  - AT ALL HORIZONTAL BRIDGING LINES INCLUDING UPLIFT BRIDGING AT INTERVALS NOT TO EXCEED 200 FT.
  - AT ALL HORIZONTAL BRIDGING LINES INCLUDING UPLIFT BRIDGING WHERE TERMINATING AT OUTSIDE (EDGE) BEAMS (EITHER DIRECTLY ADJACENT OR NEXT BAY).
  - BOTH SIDES OF INTERIOR W BEAMS WHERE JOISTS ARE LOCATED (EITHER DIRECTLY ADJACENT OR NEXT BAY).
- WELD ALL STEEL JOISTS TO SUPPORTING STRUCTURAL STEEL MEMBERS AS SHOWN ON THE DRAWINGS, ACCORDING TO SJI AS MINIMUM, BUT NOT LESS THAN THE FOLLOWING UNLESS APPROVED BY EOR:
  - MINIMUM JOIST WELD = 3/16" FILLET, 2" LONG EACH SIDE OR 1/8" FILLET, 3" LONG EACH SIDE.
  - MINIMUM JOIST GIRDER WELD = 1/4" FILLET, 4" LONG EACH SIDE.
- JOIST CAMBER MAY BE USED IN COMPUTING THE JOIST DEFLECTION. LIVE LOAD DEFLECTION MUST NOT EXCEED SPAN/360 UNDER UNIFORM LOADING. CAMBER MUST NOT BE CONSIDERED FOR CONCENTRATED LOADS FROM SUSPENDED EQUIPMENT.
- BOTTOM CHORD OF THE K AND KCS SERIES JOIST SHALL BE FABRICATED OF TEES OR ANGLES, IN LIEU OF RODS.
- COORDINATE THE EXACT LOCATION OF ALL MECHANICAL AND ARCHITECTURAL OPENINGS WITH THE MECHANICAL AND ARCHITECTURAL DRAWINGS AS WELL AS WITH OTHER SUBCONTRACTORS PRIOR TO FABRICATION OF JOISTS.
- ALL HANGERS SUPPORTING MECHANICAL EQUIPMENT, PIPES, AND OTHER CONCENTRATED LOADS TO BE SUPPORTED BY THE JOISTS SHALL BE LOCATED AT THE JOIST PANEL POINTS, OR PROVIDE JOIST STIFFENERS. JOIST ENGINEER SHALL DESIGN ALL JOISTS FOR A MINIMUM 150 LB BEND-CHECK FOR BOTH TOP AND BOTTOM CHORDS UNLESS A GREATER LOAD IS SPECIFIED IN THE DRAWINGS.
- ALL JOISTS ON COLUMN CENTERLINES SHALL BE SECURED BY 1/2" DIAMETER A325 BOLTS AT THE TOP CHORD BEARING. THE BOTTOM CHORD SHALL BE EXTENDED TO THE COLUMN. IF NO JOIST IS PRESENT AT COLUMN CENTERLINE, THE CLOSEST ADJACENT JOISTS ON EACH SIDE OF THE COLUMN SHALL FOLLOW THIS REQUIREMENT.
- STEEL JOISTS AND JOIST GIRDERS SHALL HAVE MANUFACTURER'S STANDARD BEVELED ENDS OR SLOPED SEATS IF ROOF SLOPE EXCEEDS 1/4" PER 12 INCHES.
- STEEL JOISTS SHALL BEAR 4" MINIMUM ON MASONRY / CONCRETE, AND 2-1/2" MINIMUM ON STEEL U.N.O. JOISTS BEARING ON MASONRY / CONCRETE SHAL BEAR ON AN EMBEDDED STEEL PLATE.
- WELDING OF JOISTS BEARING ON STEEL SHALL BE AS SPECIFIED BY THE SJI AND WELDING SHALL BE IN ACCORDANCE WITH THE AWS-D.1 UNLESS NOTED OTHERWISE.
- STEEL JOISTS AND JOIST GIRDERS SHALL BE PRIMED PAINTED WITH ONE COAT OF GRAY PRIMER MEETING THE MINIMUM REQUIREMENTS OF SSPC-PAINT 25 OR STEEL STRUCTURES PAINTING COUNCIL SPECIFICATION 15-68T, TYPE I.
- JOIST MANUFACTURER SHALL DESIGN ROOF JOISTS FOR THE UPLIFT WIND PRESSURE INDICATED IN TABLE 1: DESIGN LOADS AND THE WIND PRESSURE ZONE PLAN. PROVIDE ADDITIONAL BRIDGING AS REQUIRED. SHOW ALL BRIDGING AND DETAILS ON THE JOIST SHOP DRAWINGS.
- JOIST MANUFACTURER SHALL PROVIDE A WRITTEN STATEMENT VERIFYING THAT ALL STEEL JOISTS AND JOIST GIRDERS ARE DESIGNED IN ACCORDANCE WITH ALL THE DESIGN REQUIREMENTS OF THE PROJECT. THIS STATEMENT SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.

Owner:



ARCHITECTURE  
135 W Central Blvd., Suite 400  
Orlando, Florida 32801  
TEL: 407.363.6136  
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Project:

PROVIDENCE  
OFFICE  
BUILDING  
1

US HWY 17-92 AND  
KINNEY HARMON  
ROAD  
LOUGHMAN, FL 33896

Scope Drawings:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Drawing Title:

GENERAL  
NOTES

Revisions:


Issue Date:

02/14/25

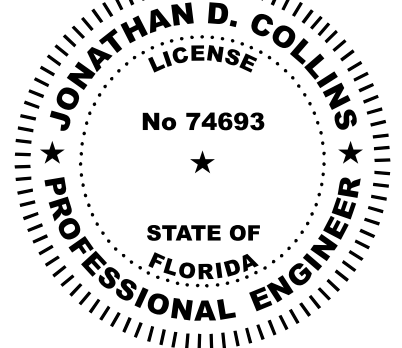
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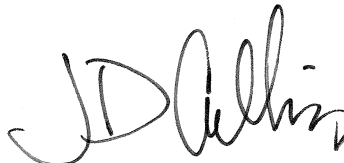
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S001

Project Number:

24312

CAST-IN-PLACE CONCRETE NOTES

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE PUBLICATIONS "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," - ACI 318 LATEST EDITION, AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS," - ACI 301 LATEST EDITION.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS IN ACCORDANCE WITH THE FOLLOWING "SCHEDULE OF CAST-IN-PLACE CONCRETE CONSTRUCTION MATERIALS":

SCHEDULE OF CAST-IN-PLACE CONCRETE CONSTRUCTION MATERIALS			
CONCRETE	LOCATION	28-DAY COMPRESSIVE STRENGTH, f <sub>c</sub>	MAX w/c RATIO
	FOOTINGS, FOUNDATIONS	4,000 PSI	0.52
	SLABS ON GROUND	4,000 PSI	0.54
	CONCRETE BEAMS	4,000 PSI	0.52
	REMAINING CONCRETE	4,000 PSI	0.52
REINFORCING STEEL	BAR TYPE	YIELD STRENGTH	
	WELDABLE REBAR	ASTM A-706, GRADE 60	
	ALL OTHER REBAR	ASTM A-615, GRADE 60	
	WELDED WIRE MESH / FABRIC	ASTM A-185, GRADE 65	

3. ALL CONCRETE SHALL HAVE A MINIMUM SLUMP OF 4" PLUS OR MINUS 1", AND HAVE 2 TO 4% AIR ENTRAINMENT. CONCRETE TO BE USED FOR INTERIOR FLOOR SLABS SHALL CONTAIN ONLY "ENTRAPPED AIR" AND SHALL HAVE NOT MORE THAN 3% MAXIMUM AIR CONTENT. CONCRETE PLACED WITH A PUMP SHALL HAVE A SLUMP OF 5" PLUS OR MINUS 1". BUILDER MAY ELECT TO PROVIDE AN ALTERNATE MIX DESIGN WITH HIGH RANGE WATER REDUCER WITH A HIGHER SLUMP. SUBMIT ALTERNATE MIX DESIGN TO ARCHITECT AND ENGINEER OF RECORD FOR REVIEW.
4. CONCRETE SHALL CONTAIN THE MAXIMUM SIZE AGGREGATE PERMITTED BY ACI UP TO 1-1/2" MAXIMUM. THE GUIDELINES FOR MAXIMUM AGGREGATE SIZE ARE:
- A. NOT GREATER THAN 1/5<sup>TH</sup> THE NARROWEST OPENING IN THE FORMS
  - B. NOT GREATER THAN 1/3<sup>RD</sup> THE THICKNESS OF THE SLAB
  - C. FLOOR SLABS WHICH ARE 6" AND GREATER SHALL HAVE #467 AND #6 BLENDED COARSE AGGREGATE
5. CONCRETE MIX DESIGN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 301 CHAPTER 3, METHOD 1 OR METHOD 2. SUBMIT BACKUP DATA AS REQUIRED BY CHAPTER 26 OF THE LATEST EDITION OF ACI 318.
6. ALL REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL IN ACCORDANCE WITH THE "SCHEDULE OF CAST-IN-PLACE CONCRETE CONSTRUCTION MATERIALS" BELOW. REINFORCING STEEL FOR ELEVATED EXTERIOR SLABS WITHIN 3'-0" OF THE SLAB EDGE PERMITTER AND WITHIN 12" OF ALL EXTERIOR SLEEVES AND BLOCK-OUTS SHALL BE HOT-DIPPED GALVANIZED. SEE ELEVATED SLAB PLANS FOR LOCATIONS.
7. ALL REINFORCEMENT SHALL BE PLACED WITH THE REQUIRED CONCRETE COVER TO REINFORCEMENT AS NOTED IN THE FOLLOWING "SCHEDULE OF CONCRETE PROTECTION FOR REINFORCEMENT":

PROTECTION FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE			
APPLICATION			CLEAR COVER
CAST-IN-PLACE CONCRETE (NON-PRESTRESSED)	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	1. ALL APPLICATIONS EXCEPT SLABS ON GROUND	3"
		2. SLABS ON GROUND - CLEAR TO TOP OF SLAB	1-1/2"
	CONCRETE EXPOSED TO EARTH OR WEATHER	1. #6 BARS AND LARGER	2"
		2. #5 BARS AND SMALLER	1-1/2"
PRESTRESSED OR POST-TENSIONED CONCRETE	CONCRETE NOT EXPOSED TO EARTH OR WEATHER	1. SLABS, JOISTS, AND WALLS	3/4"
		2. BEAMS, COLUMNS, AND OTHER MEMBERS	1-1/2"
	CONCRETE EXPOSED TO EARTH OR WEATHER	1. SLABS, JOISTS, AND WALLS	1-1/4"
		2. BEAMS, COLUMNS, AND OTHER MEMBERS	1-1/2"
NOTES:			
1. TOLERANCE FOR CONCRETE COVER AND REINFORCEMENT LOCATION IS +/- 3/8".			
2. TOTAL CLEAR COVER AT EXTERIOR FACE IS THE SCHEDULED CLEAR COVER PLUS THE DEPTH OF ANY REVEAL.			

8. ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI 315 LATEST EDITION, UNLESS DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.
9. CONTRACTOR SHALL REVIEW ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF EMBEDDED ITEMS, SLEEVES, SLAB DEPRESSIONS, SLOPES, ETC. REQUIRED BY OTHER TRADES. THESE ITEMS SHALL BE FURNISHED AND INSTALLED PRIOR TO PLACEMENT OF CONCRETE. COORDINATE BEARING CONDITIONS REQUIRED BY TILT-UP PANEL LIFTING ENGINEER BEFORE PLACING CONCRETE.
10. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, SLEEVES, ANCHOR BOLTS, INSERTS, ETC. AS REQUIRED BY ALL TRADES BEFORE CONCRETE IS PLACED.
11. WHERE BAR LENGTHS ARE GIVEN ON THE DRAWINGS, THE LENGTH OF ANY HOOK, IF REQUIRED, IS NOT INCLUDED. HOOKS SHALL BE PROVIDED AT DISCONTINUOUS ENDS OF ALL TOP BARS OF BEAMS AND AT SLAB EDGES.
12. CONTRACTOR SHALL PROVIDE SPACERS, CHAIRS, BOLSTERS, ETC. NECESSARY TO SUPPORT REINFORCING STEEL. SUPPORT ITEMS WHICH BEAR ON EXPOSED CONCRETE SURFACES SHALL HAVE ENDS WHICH ARE PLASTIC TIPPED OR STAINLESS STEEL.
13. CONTRACTOR SHALL PROVIDE 3/4" INCH CHAMFER ON ALL EXPOSED CORNERS OF COLUMNS, BEAMS, AND WALLS UNLESS OTHERWISE INDICATED ON THE ARCHITECTURAL DRAWINGS.
14. HORIZONTAL KEYWAYS IN CONSTRUCTION JOINTS SHALL BE PROVIDED WITH A DEPTH OF 1 1/2 INCHES AND A HEIGHT EQUAL TO ONE-THIRD OF THE MEMBERS DEPTH. REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS UNLESS OTHERWISE NOTED ON THE DRAWINGS. CONSTRUCTION JOINTS MAY BE USED ONLY AT LOCATIONS SHOWN ON THE DRAWINGS OR AT OTHER LOCATIONS APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD.
15. CONTINUOUS RX WATERSTOP SHALL BE PROVIDED ALONG BASE OF WALLS AND ALONG VERTICAL WALL JOINTS AT ALL RETAINING WALLS AND ELEVATOR STEM WALLS. PLACE WATERSTOP IN ACCORDANCE WITH THE MANUFACTURERS PROCEDURES.
16. REINFORCEMENT SPLICES SHALL NOT BE PERMITTED EXCEPT AS DETAILED OR AUTHORIZED BY THE PROJECT STRUCTURAL ENGINEER. WHERE INDICATED, THE MINIMUM LAP SPLICES ON ALL REINFORCING BAR SPLICES SHALL BE CLASS B PER ACI 318, SECTION 25.5 EXCEPT WHERE OTHERWISE NOTED ON THE DRAWINGS. SEE TABLES PROVIDED.
17. TESTING LABORATORY SHALL SUBMIT ONE COPY OF ALL CONCRETE TEST REPORTS DIRECTLY TO THE ENGINEER.
- A. THE OWNER SHALL EMPLOY A TESTING LABORATORY TO TAKE AND TEST CONCRETE CYLINDERS, PERFORM SLUMP TESTS, PERFORM TESTS FOR AIR CONTENT, AND TO PERFORM STRENGTH TESTS IN ACCORDANCE WITH ASTM C39.
- B. A MINIMUM OF THREE (3) CYLINDERS SHALL BE TAKEN FOR EACH 50 CU. YD. OF CONCRETE OR FRACTION THEREOF FOR EACH STRENGTH AND TYPE OF CONCRETE BEING CAST ON ANY DAY.
- C. NO CONCRETE SHALL BE PLACED THAT DOES NOT MEET SLUMP OR AIR CONTENT REQUIREMENTS. ALL TESTS FOR AIR CONTENT SHALL BE MADE BY THE PRESSURE METHOD. SLUMP TESTS SHALL BE TAKEN FOR EACH 20 CU. YD. OF CONCRETE BEING PLACED.
- D. SLUMP EXCEEDING THE SPECIFIED MAXIMUM, WHEN OCCURRING IN CONSECUTIVE TESTS MADE ON DIFFERENT PORTIONS OF THE SAME SAMPLE, WILL BE CAUSE FOR REJECTION OF THAT TRUCKLOAD AND SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER. THE REPLACEMENT OF SUCH CONCRETE WITH THE SPECIFIED CONCRETE SHALL BE COMPLETED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- E. AT A MINIMUM, THE CONCRETE TEST REPORTS SHALL CONTAIN THE FOLLOWING INFORMATION:
- a. CONCRETE SUPPLIER
  - b. QUANTITY OF CONCRETE REPRESENTED BY SAMPLE
  - c. LOCATION OF ALL SAMPLES TAKEN
  - d. STRENGTH REQUIREMENT IN PSI AT 28 DAYS
  - e. ACTUAL SLUMP
  - f. SITE CONDITIONS INCLUDING AIR TEMPERATURE, WEATHER, ETC.
  - g. DATE SAMPLE WAS TAKEN
  - h. DATE TESTED
  - i. TEST RESULTS FOR 7 DAYS AND 28 DAYS AGE
  - j. ANY OTHER NECESSARY INFORMATION TO EVALUATE TESTS

CAST-IN-PLACE CONCRETE NOTES CONT'D

18. PLACING CONCRETE:
- A. PLACE CONCRETE IN COMPLIANCE WITH ACI 304 AND AS HEREIN SPECIFIED.
  - B. BEFORE PLACING AND CONCRETE IN FORMWORK, THOROUGHLY CLEAN AND WASH OUT FORMS WITH WATER.
  - C. IF EARTH AT BOTTOM OF FORMS HAS DRIED OUT, RE-WET SO THAT SOIL IS MOIST, BUT FREE OF STANDING WATER AND MUD.
  - D. THOROUGHLY WET WOOD FORMS IMMEDIATELY BEFORE PLACING CONCRETE WHERE FORM COATINGS ARE NOT USED.
  - E. CONVEY CONCRETE FROM MIXER TO FINAL POSITION BY METHODS WHICH WILL PREVENT SEPARATION OR LOSS OF MATERIALS.
  - F. MAXIMUM HEIGHT OF CONCRETE FREE FALL IS 4 FT. (U.N.O.)
  - G. REGULATE RATE OF PLACEMENT SO CONCRETE SURFACE IS KEPT LEVEL THROUGHOUT, A MINIMUM BEING PERMITTED TO FLOW FROM ONE AREA TO ANOTHER. USE TREMIE HEADS SPACED AT APPROXIMATELY 10 FT. INTERVALS FOR PLACING CONCRETE IN WALLS. CONTROL RATE OF POUR CONSISTENT WITH FORM DESIGN.
  - H. DEPOSIT CONCRETE IN CONTINUOUS OPERATION UNTIL SECTION BEING PLACED HAS BEEN COMPLETED.
19. FORMWORK
- A. DESIGN, ERECT, SHORE, BRACE, AND MAINTAIN FORMWORK, ACCORDING TO ACI 301, TO SUPPORT VERTICAL, LATERAL, STATIC, AND CONSTRUCTION LOADS THAT MIGHT BE APPLIED, UNTIL CONCRETE STRUCTURE CAN SUPPORT SUCH LOADS.
  - B. CONSTRUCT FORMWORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION INDICATED, WITHIN TOLERANCE LIMITS OF ACI 117.
  - C. CONSTRUCT FORMS TIGHT ENOUGH TO PREVENT LOSS OF CONCRETE MORTAR.
  - D. COAT CONTACT SURFACES OF FORMS WITH FORM-RELEASE AGENT, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, BEFORE PLACING REINFORCEMENT.
  - E. SUBMIT SIGNED AND SEALED FORMWORK SHOP DRAWINGS AND CALCULATIONS AND / OR DIMENSIONED WALL PANEL SHOP DRAWINGS WITH ALL OPENINGS TO ENGINEER AND ARCHITECT FOR REVIEW.

MASONRY / CMU NOTES


1. ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH THE PUBLICATIONS "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" - TMS 402 LATEST EDITION, AND "SPECIFICATION FOR MASONRY STRUCTURES" - TMS 602, LATEST EDITION, OR EDITIONS AS ADOPTED BY THE GOVERNING BUILDING CODES REFERENCED IN THE GENERAL NOTES.
2. HOLLOW LOAD BEARING UNITS SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C90, WITH A MINIMUM NET COMPRESSIVE STRENGTH OF 2000 PSI (f<sub>m</sub> = 2000 PSI).
3. UNITS SHALL BE MANUFACTURER'S STANDARD UNITS WITH NOMINAL FACE DIMENSION OF 16" LONG.
4. PROVIDE SPECIAL SHAPES WHERE SHOWN AND WHERE REQUIRED FOR LINTELS, CORNERS, JAMBS, SASH, JOINTS, HEADERS, BONDING, AND OTHER SPECIAL CONDITIONS.
5. MORTAR SHALL BE TYPE "N" OR "S", CONFORMING TO ASTM C270.
6. COARSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8", A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI, AND A SLUMP BETWEEN 8" AND 11". JOB SITE MIXING OF GROUT SHALL NOT BE PERMITTED. DO NOT USE MIX DESIGNS OTHER THAN THE GROUT MIX APPROVED FOR MASONRY CONSTRUCTION.
7. VERTICAL REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS IN CELLS FULLY FILLED WITH COARSE GROUT. ALL VERTICALLY REINFORCED WALLS SHALL HAVE DOWELS THAT, AT A MINIMUM, MATCH THE MAIN VERTICAL BAR SIZE AND SPACING, UNLESS OTHERWISE NOTED.
8. WHEN A FOUNDATION DOWEL DOES NOT ALIGN WITH THE REQUIRED LOCATION OF A REINFORCED VERTICAL CORE, IT SHALL NOT BE SLOPED MORE THAN 1" HORIZONTALLY IN 6" VERTICALLY. ADJACENT CORES SHALL BE FULLY GROUTED AS REQUIRED TO ENSURE THAT DOWEL IS IN A FULLY GROUTED CORE.
9. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM OF THE BAR, AND AT A MAXIMUM SPACING OF 10'-0" OR 16X THE BAR DIAMETER, WHICHEVER IS LESS. REINFORCEMENT SHALL BE PLACED AT THE CENTER OF THE MASONRY CELL, TYPICAL, UNLESS OTHERWISE NOTED. SEE TYPICAL GROUTING DETAILS FOR ADDITIONAL INFORMATION.
10. ALL REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 50X THE BAR DIAMETER. EXTEND ALL VERTICAL REINFORCEMENT TO WITHIN 2" OF THE TOP OF WALL OR COLUMN UNLESS OTHERWISE NOTED.
11. HORIZONTAL JOINT REINFORCEMENT IN ALL WALLS SHALL BE STANDARD LADDER TYPE (ASTM A-82 #9 GAUGE WIRE) REINFORCEMENT SPACED AT 16" O.C., UNLESS OTHERWISE NOTED. WIRE SHALL BE HOT-DIPPED GALVANIZED.
12. SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 8" AND SHALL CONTAIN AT LEAST ONE CROSS-WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 8" LAP. LAP WITH STANDARD PRE-FABRICATED "T" AND "L" SHAPED PIECES AT WALL INTERSECTIONS AND CORNERS. JOINT REINFORCEMENT SHALL NOT BE CONTINUOUS THROUGH EXPANSION OR CONTROL JOINTS. REFERENCE STRUCTURAL PLANS AND TYPICAL DETAILS FOR JOINT LOCATIONS AND DETAILS.
13. MASONRY CONTROL JOINTS SHALL BE PLACED AT 24'-8" (MAX) ON CENTER, OR 1.5X THE WALL HEIGHT, WHICHEVER DIMENSION IS LESS. MASONRY CONTROL JOINTS SHALL BE PLACED AT SIGNIFICANT CHANGES IN WALL HEIGHT OR THICKNESS. PLACE MASONRY CONTROL JOINTS A MINIMUM OF 2'-0" FROM OPENINGS AND WALL CORNERS.
14. WHERE BEAMS FRAME INTO MASONRY WALLS, PROVIDE A MINIMUM OF 3 COURSES HIGH BY 3 CELLS WIDE (24" X 24") SOLID GROUTED MASONRY. WHERE STEEL BEAMS FRAME INTO MASONRY WALLS, PROVIDE A 24" X 24" BLOCKOUT FOR SOLID CONCRETE POUR WITH EMBED PLATE AS REQUIRED. REFERENCE STRUCTURAL PLAN AND STRUCTURAL DETAILS.
15. PROVIDE PRECAST CONCRETE LINTELS OVER ALL OPENINGS UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS. BASIS OF DESIGN FOR PRECAST CONCRETE LINTEL PRODUCTS IS CAST-CRETE, INC. CONTRACTOR MAY ELECT TO SOURCE ALTERNATE PROVIDER. SUBMIT PRODUCT DATA FOR ENGINEER REVIEW.
16. PROVIDE A FULLY GROUTED KNOCK-OUT BLOCK OR U-BLOCK REINFORCED WITH (1) #5 CONTINUOUS AT THE SILL OF ALL WINDOW OPENINGS. EXTEND 16" BEYOND EACH SIDE OF THE OPENING, TYPICAL.
17. MORTAR PLACEMENT:
- A. USE BED JOINT BETWEEN 1/4" (MINIMUM) AND 3/4" (MAXIMUM) THICK AT FIRST COURSE BEARING ON FOUNDATION.
  - B. USE 3/8" THICK JOINTS BETWEEN ALL OTHER UNITS.
  - C. TOOL ALL JOINTS WITH A ROUND JOINTER WHEN THE MORTAR IS THUMBPRINT HARD, UNLESS OTHERWISE REQUIRED BY THE CONTRACT DOCUMENTS.
  - D. PLACE MORTAR ON CLEAN UNITS WHILE THE MORTAR IS SOFT AND PLASTIC.
  - E. DO NOT DISTURB THE UNIT AFTER IT IS INITIALLY POSITIONED, EXCEPT FOR FULLY SEATING AND LEVELING.
  - F. PLACE MORTAR SO THAT ALL JOINTS OF SOLID UNITS ARE FULLY FILLED WITH MORTAR.
  - G. FILL THE BED AND HEAD JOINTS OF HOLLOW UNITS WITH MORTAR. MORTAR SHALL BE PLACED IN WIDTHS EQUAL TO THE FULL WIDTH OF THE FACE SHELL, MINIMUM.
  - H. MORTAR THE CROSS WEBS IN HOLLOW UNITS IN THE FOLLOWING SITUATIONS:
    - a. ADJACENT TO CELLS TO BE GROUTED FOR PARTIALLY GROUTED CONSTRUCTION.
    - b. AT THE STARTING COURSE BEARING ON FOUNDATIONS OR OTHER STRUCTURAL SUPPORTS.
    - c. ALL PIERS, COLUMNS, AND PILASTER UNITS THAT ARE TO BE FULLY FILLED WITH GROUT.
  - I. REMOVE PROTRUSIONS OF MORTAR INTO COLLAR JOINT CAVITIES AND CELLS OF HOLLOW UNITS THAT ARE TO BE GROUTED SOLID.
  - J. DO NOT SLUSH MORTAR INTO HEAD JOINTS.
  - K. FILL ALL HOLES IN THE MORTAR JOINTS PRIOR TO GROUTING WALL.
18. PROVIDE ADEQUATE BRACING AND SUPPORT OF MASONRY UNTIL PERMANENT CONSTRUCTION IS IN PLACE.
19. ALL INTERSECTING LOAD BEARING WALLS SHALL BE TIED TOGETHER IN RUNNING BOND UNLESS NOTED OTHERWISE.

METAL ROOF DECK NOTES

1. DETAILING, FABRICATION, AND ERECTION OF STEEL DECK SHALL BE IN ACCORDANCE WITH THE LATEST STEEL DECK INSTITUTE SPECIFICATIONS, AWS, AND CONTRACT DOCUMENTS. DECK SHALL CONFORM TO "BASIC DESIGN SPECIFICATIONS" AS ADOPTED BY THE STEEL DECK INSTITUTE, SDI.
2. STEEL DECK PROFILE SHALL CONFORM TO FACTORY MUTUAL REQUIREMENTS.
3. METAL ROOF DECK SHALL BE MINIMUM 1-1/2" DEEP, TYPE B (AS IDENTIFIED BY SDI) PAINTED WHITE UNDERSIDE AND GRAY TOP SIDE STEEL DECK CONFORMING TO ASTM A1008 OR ASTM A1039 WITH MINIMUM YIELD STRESS OF 50 KSI. REFERENCE DRAWINGS FOR REQUIRED DECK STRENGTH, DECK FINISH SHALL BE SHOP PRIMED WITH BAKED-ON, LEAD- AND CHROMATE-FREE RUST-INHIBITIVE PRIMER COMPLYING WITH PERFORMANCE REQUIREMENTS OF SSPC-PAINT 25.
4. DECK SUPPLIER SHALL PROVIDE ANY MISCELLANEOUS CLOSURE PIECES, POUR STOPS, DRAIN SUMP PANS, ETC. TO COMPLETE PROJECT. MISCELLANEOUS ITEMS SHALL MATCH (AT A MINIMUM) THE STEEL DECK FINISH AND THICKNESS.
5. THE DECK SHALL BE PLACED ON THE SUPPORTING FRAMEWORK WITH A MINIMUM END LAP OF TWO INCHES CENTERED OVER THE SUPPORTS. THE DECK SHALL BE ATTACHED TO THE SUPPORTS, AND THE SIDE LAP OF ADJACENT UNITS IN THE PATTERN SHOWN ON THE CONTRACT DRAWINGS.
6. ALL ROOF DECK OPENINGS 12" DIAMETER OR LARGER ARE TO HAVE SUPPORT ANGLES PER TYPICAL DECK OPENING DETAIL, INCLUDING OPENINGS FOR ROOF SUMP PANS.
7. ALL ROOF DECK OPENINGS 6" DIAMETER OR LARGER (UP TO 12" DIAMETER) SHALL HAVE LIGHT GAUGE DECK REINFORCEMENT PER TYPICAL DECK REINFORCEMENT DETAIL.
8. NO LOADS SHALL BE HUNG FROM THE ROOF DECK.
9. ROOF DECK SHALL BE LAID OUT SUCH THAT DECKING SHALL SPAN THREE SPANS WITHOUT INTERRUPTION.
10. DECK AND SUPPORTING MEMBERS DAMAGED BY EXCESS WELDING HEAT SHALL BE REPAIRED OR REPLACED AS DETERMINED BY THE ARCHITECT OR ENGINEER.
11. PUDDLE WELDS SHALL BE AT LEAST 5/8" EFFECTIVE DIAMETER OR AN ELONGATED WELD HAVING AN EQUAL PERIMETER, FILLET AND SEAM WELDS, WHEN USED, SHALL BE A MINIMUM OF 1-1/2" LONG. WELD METAL SHALL PENETRATE ALL LAYERS OF DECK MATERIAL AT END LAPS AND SIDE JOINTS AND HAVE SOLID FUSION TO THE SUPPORTING MEMBERS.

TABLE 1: DESIGN LOADS & DESIGN CRITERIA			
DEAD LOADS			
BUILDING COMPONENT	TYPICAL ROOF OVER WAREHOUSE	TYPICAL ROOF OVER OFFICE SPACE	
TPO ROOFING	3.0 PSF	--- PSF	
INSULATION	3.0 PSF	--- PSF	
METAL DECK	2.0 PSF	--- PSF	
STEEL JOISTS	4.0 PSF	--- PSF	
FIRE SPRINKLERS	2.0 PSF	--- PSF	
MECHANICAL	4.0 PSF	--- PSF	
CEILING	2.0 PSF	--- PSF	
SOLAR PANELS	--- PSF	--- PSF	
MISCELLANEOUS	5.0 PSF	--- PSF	
STRUCTURAL SLAB	--- PSF	--- PSF	
FLOORING	--- PSF	--- PSF	
TOTAL DEAD LOAD	25.0 PSF	--- PSF	
LIVE LOADS			
ROOF LIVE LOAD	20.0 PSF	--- PSF	
LIVE LOAD	--- PSF	--- PSF	
ROOF CONCENTRATED	150 LBS	--- LBS	
FLOOR CONCENTRATED	--- LBS	--- LBS	
WIND LOAD CRITERIA			
DESIGN WIND SPEED ( $V_{ult}$ )	139 MPH	BUILDING RISK CATEGORY	II
DESIGN WIND SPEED ( $V_{asd}$ )	108 MPH	EXPOSURE CATEGORY	C
TORNADO WIND SPEED ( $V_t$ )	[N/A] MPH	EFFECTIVE PLAN AREA ( $A_{ef}$ )	[N/A] SF
VELOCITY PRESSURE, $q_s$ (ULT)	42.7 PSF	ENCLOSURE CLASSIFICATION	ENCLOSED
VELOCITY PRESSURE, $q_s$ (ASD)	25.6 PSF	INTERNAL PRESSURE COEFFICIENT	+/- 0.18
NOTES:			
1. ROOF LIVE LOADS MAY BE REDUCED, WHERE APPLICABLE, PER FLORIDA BUILDING CODE SEC 1607.12.2.1. REDUCED UNIFORM LIVE LOAD SHALL NOT BE LESS THAN 12.0 PSF.			
2. CONCENTRATED ROOF LOADS OVER STEEL JOIST ROOFS SHALL BE APPLIED AS BEND CHECK LOADS TO THE ROOF JOISTS AT THE TOP AND BOTTOM CHORDS (NOT SIMULTANEOUSLY).			

Owner:



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BUILDING  
1  
US HWY 17-92 AND  
KINNEY HARMON  
ROAD  
LOUGHMAN, FL 33896

Scope Drawings:  
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Drawing Title:

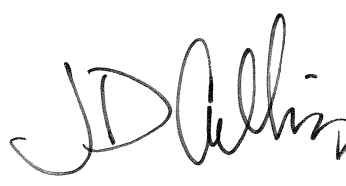
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NOTES

Revisions:


Issue Date:	Drawn By:	Checked By:
02/14/25	AFR	JDC

Certified By:  
JONATHAN D. COLLINS  
LICENSE  
No 74693  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

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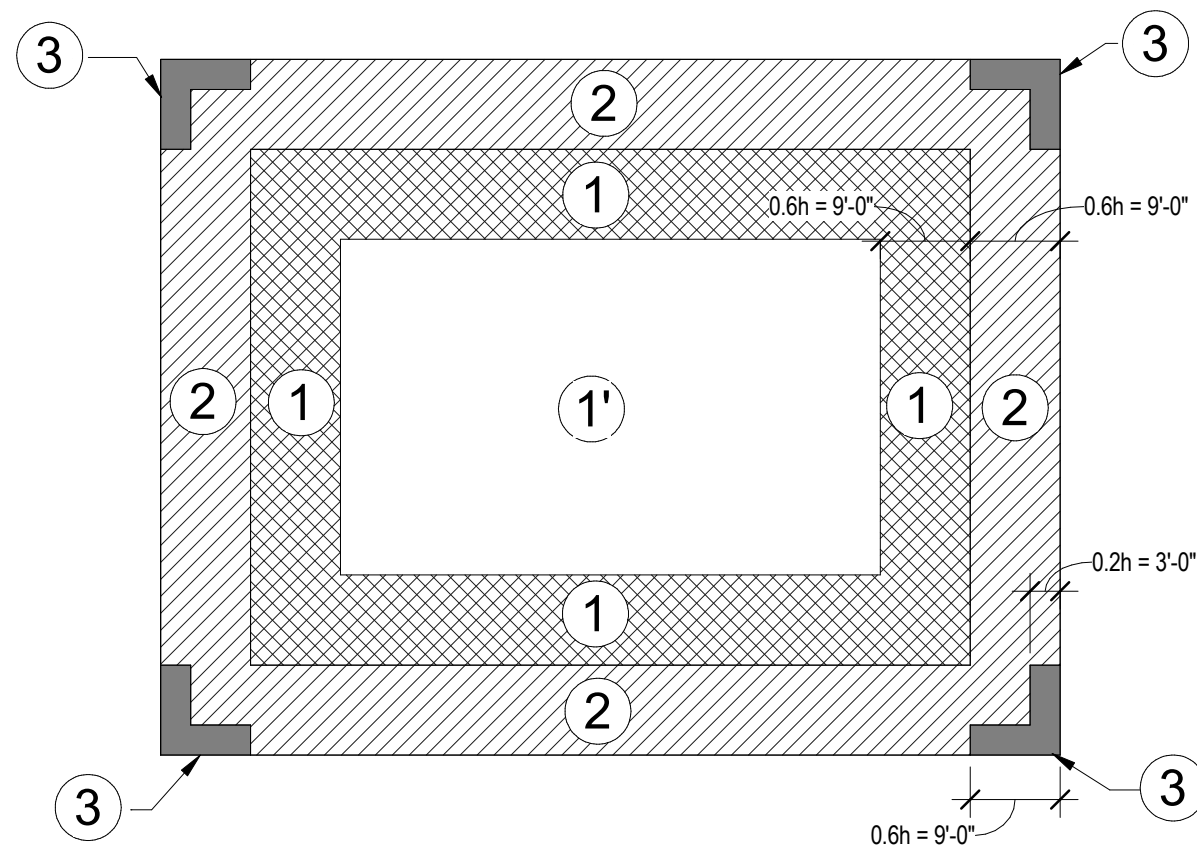
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S002

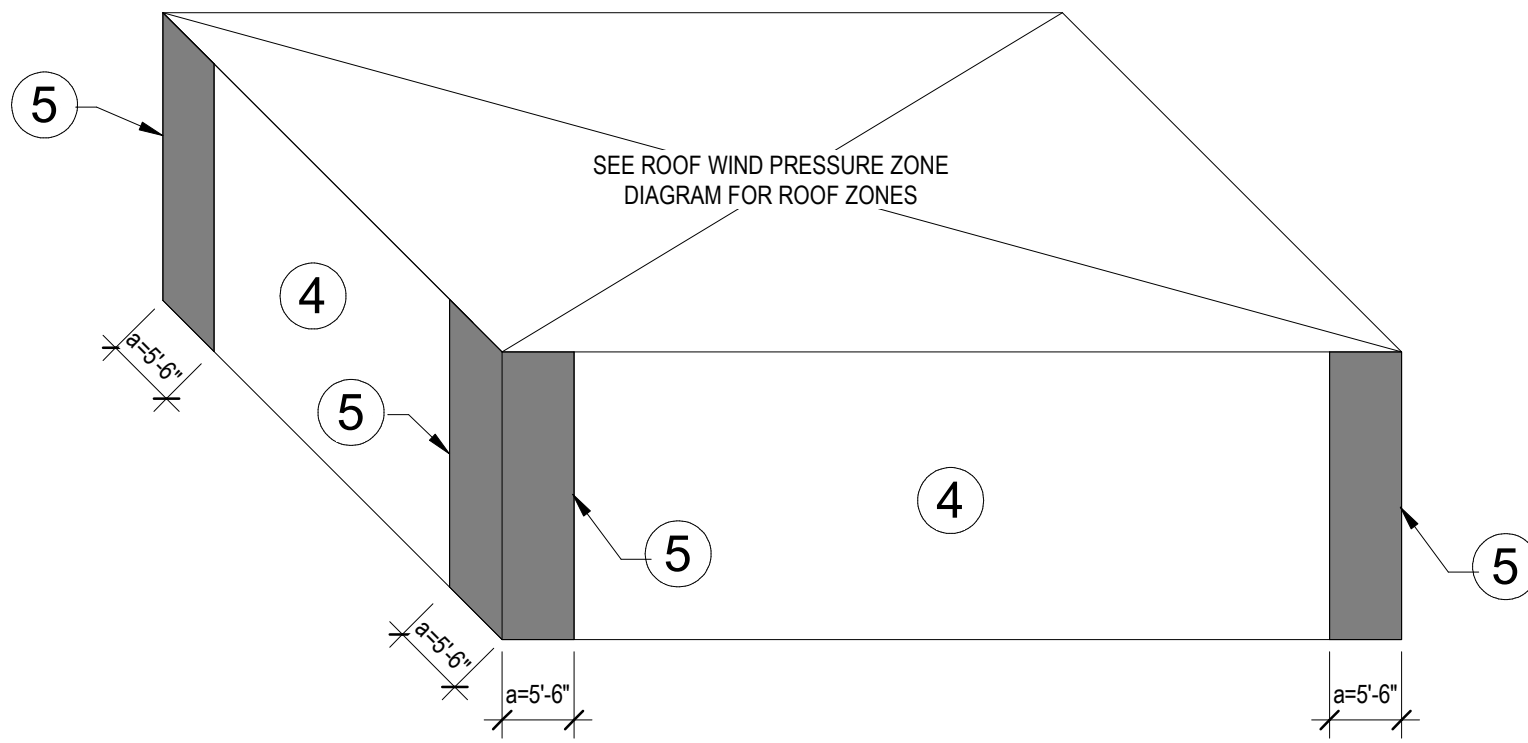
Project Number:

24312

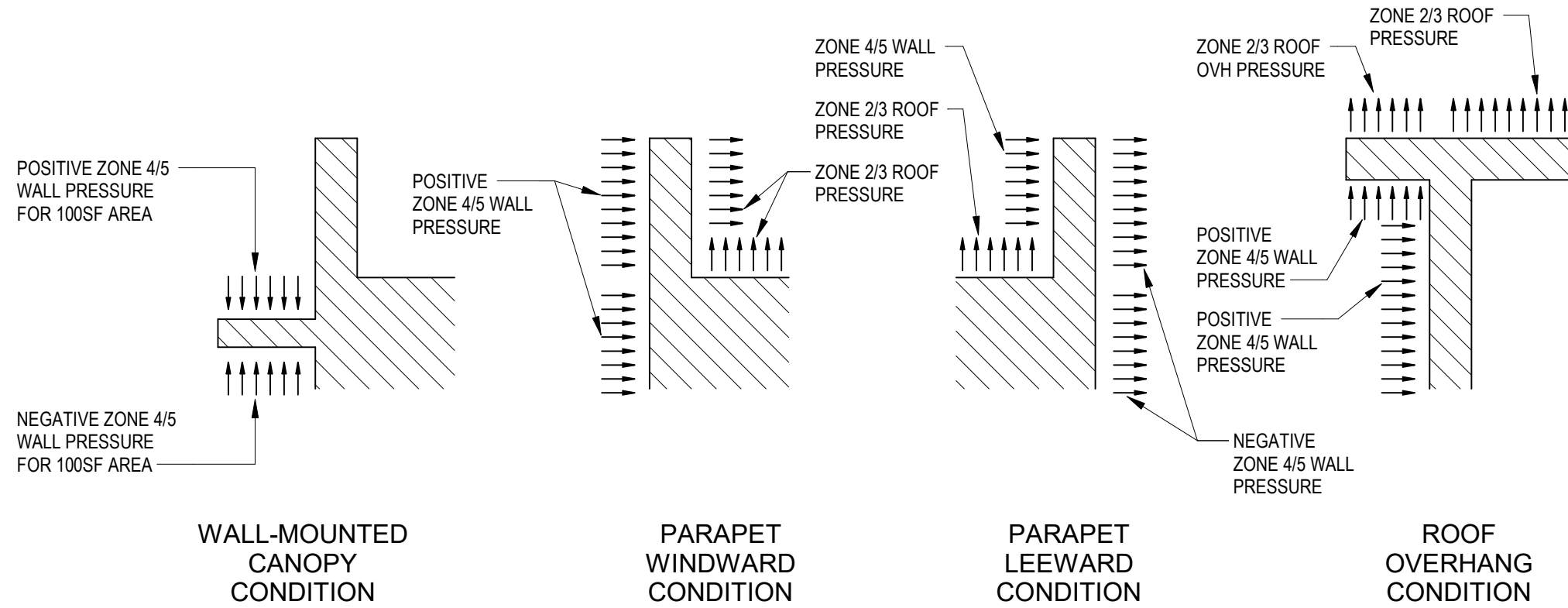




FLAT ROOF WIND PRESSURE ZONE DIAGRAM



WALL WIND PRESSURE ZONE DIAGRAM



COMPONENTS AND CLADDING SPECIAL LOADING DIAGRAMS

TABLE 2: STRENGTH DESIGN (ULTIMATE) WIND PRESSURES

POSITIVE WIND PRESSURES ON WALLS & WALL OPENINGS					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
WALL ZONE ④	39.2 PSF	37.5 PSF	35.2 PSF	33.4 PSF	31.7 PSF
WALL ZONE ⑤	39.2 PSF	37.5 PSF	35.2 PSF	33.4 PSF	31.7 PSF
NEGATIVE WIND PRESSURES ON WALLS & WALL OPENINGS					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
WALL ZONE ④	-42.5 PSF	-40.7 PSF	-38.4 PSF	-36.7 PSF	-35.0 PSF
WALL ZONE ⑤	-52.3 PSF	-48.8 PSF	-44.2 PSF	-40.7 PSF	-37.3 PSF
POSITIVE WIND PRESSURES ON ROOFING & ROOF FRAMING					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
ROOF ZONE ①'	17.4 PSF	16.3 PSF	16.0 PSF	16.0 PSF	16.0 PSF
ROOF ZONE ①	17.4 PSF	16.3 PSF	16.0 PSF	16.0 PSF	16.0 PSF
ROOF ZONE ②	17.4 PSF	16.3 PSF	16.0 PSF	16.0 PSF	16.0 PSF
ROOF ZONE ③	17.4 PSF	16.3 PSF	16.0 PSF	16.0 PSF	16.0 PSF
NEGATIVE WIND PRESSURES ON ROOFING & ROOF FRAMING					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
ROOF ZONE ①'	-39.2 PSF	-39.2 PSF	-39.2 PSF	-39.2 PSF	-33.7 PSF
ROOF ZONE ①	-68.3 PSF	-63.7 PSF	-57.8 PSF	-53.3 PSF	-48.8 PSF
ROOF ZONE ②	-90.0 PSF	-84.2 PSF	-76.6 PSF	-70.8 PSF	-65.0 PSF
ROOF ZONE ③	-122.7 PSF	-111.1 PSF	-95.8 PSF	-84.2 PSF	-72.7 PSF

- NOTES:
- WIND PRESSURES IN THE TABLES ABOVE ARE BASED ON CALCULATIONS FROM ASCE 7-22.
  - OVERHANG PRESSURES IN THE TABLES ABOVE SHALL APPLY TO ALL ROOFS OVER BALCONIES, BREEZEWAYS, AND COVERED ENTRIES. COORDINATE WITH ARCHITECTURAL DRAWINGS.
  - WHEN THE "BASIC WIND SPEED ( $V_{ult,1}$ )" IN "TABLE 1: DESIGN LOADS & DESIGN CRITERIA" IS 140 MPH OR HIGHER, PROVIDE IMPACT RESISTANT GLAZING AS REQUIRED FOR WIND BORNE DEBRIS PER FLORIDA BUILDING CODE.
  - MAXIMUM ALLOWABLE DEAD LOADS TO BE USED TO RESIST UPLIFT SHALL BE AS FOLLOWS:  
A. NET UPLIFT = ULTIMATE UPLIFT - 10 PSF DEAD LOAD  
B. NET UPLIFT = ALLOWABLE UPLIFT - 6 PSF DEAD LOAD

TABLE 3: ALLOWABLE STRESS (ASD) WIND PRESSURES

POSITIVE WIND PRESSURES ON WALLS & WALL OPENINGS					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
WALL ZONE ④	23.5 PSF	22.5 PSF	21.1 PSF	20.1 PSF	19.0 PSF
WALL ZONE ⑤	23.5 PSF	22.5 PSF	21.1 PSF	20.1 PSF	19.0 PSF
NEGATIVE WIND PRESSURES ON WALLS & WALL OPENINGS					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
WALL ZONE ④	-25.5 PSF	-24.4 PSF	-23.1 PSF	-22.0 PSF	-21.0 PSF
WALL ZONE ⑤	-31.4 PSF	-29.3 PSF	-26.5 PSF	-24.4 PSF	-22.4 PSF
POSITIVE WIND PRESSURES ON ROOFING & ROOF FRAMING					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
ROOF ZONE ①'	10.5 PSF	9.8 PSF	9.6 PSF	9.6 PSF	9.6 PSF
ROOF ZONE ①	10.5 PSF	9.8 PSF	9.6 PSF	9.6 PSF	9.6 PSF
ROOF ZONE ②	10.5 PSF	9.8 PSF	9.6 PSF	9.6 PSF	9.6 PSF
ROOF ZONE ③	10.5 PSF	9.8 PSF	9.6 PSF	9.6 PSF	9.6 PSF
NEGATIVE WIND PRESSURES ON ROOFING & ROOF FRAMING					
WIND PRESSURE ZONE	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA	EFF. AREA
	≤ 10 SF	20 SF	50 SF	100 SF	≥ 200 SF
ROOF ZONE ①'	-23.5 PSF	-23.5 PSF	-23.5 PSF	-23.5 PSF	-20.2 PSF
ROOF ZONE ①	-41.0 PSF	-38.2 PSF	-34.7 PSF	-32.0 PSF	-29.3 PSF
ROOF ZONE ②	-54.0 PSF	-50.5 PSF	-46.0 PSF	-42.5 PSF	-39.0 PSF
ROOF ZONE ③	-73.6 PSF	-66.7 PSF	-57.5 PSF	-50.5 PSF	-43.6 PSF

- NOTES:
- WIND PRESSURES IN THE TABLES ABOVE ARE BASED ON CALCULATIONS FROM ASCE 7-22.
  - OVERHANG PRESSURES IN THE TABLES ABOVE SHALL APPLY TO ALL ROOFS OVER BALCONIES, BREEZEWAYS, AND COVERED ENTRIES. COORDINATE WITH ARCHITECTURAL DRAWINGS.
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  - MAXIMUM ALLOWABLE DEAD LOADS TO BE USED TO RESIST UPLIFT SHALL BE AS FOLLOWS:  
A. NET UPLIFT = ULTIMATE UPLIFT - 10 PSF DEAD LOAD  
B. NET UPLIFT = ALLOWABLE UPLIFT - 6 PSF DEAD LOAD

Owner:



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US HWY 17-92 AND  
KINNEY HARMON  
ROAD  
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Scope Drawings:

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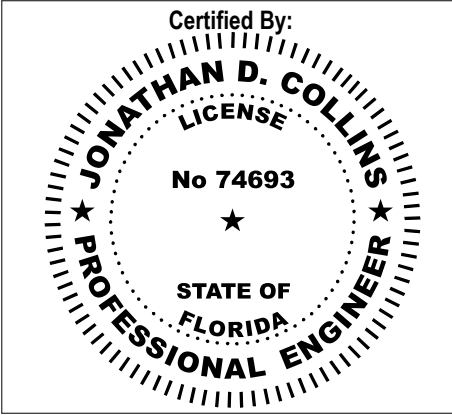
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Drawing Title:

WIND LOAD  
DATA

Revisions:

Issue Date: 02/14/25  
Drawn By: AFR  
Checked By: JDC



Electronic Signature:

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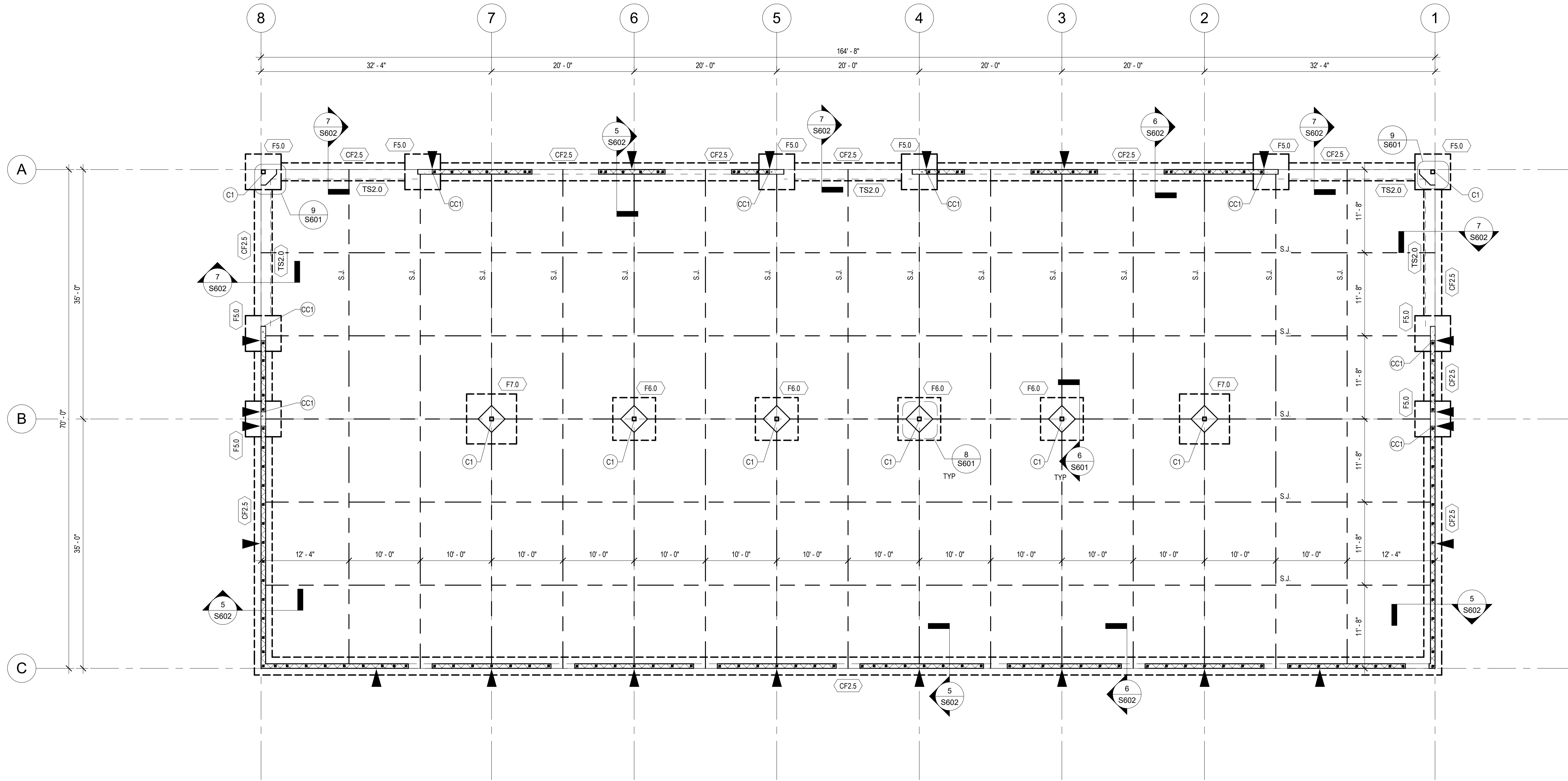
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Drawing Number:

S003

Project Number:

24312



**1 FOUNDATION PLAN**  
1/8" = 1'-0"

### LEGEND

- EL = #'-##" T.O. FTG INDICATES TOP OF CONCRETE FOOTING ELEVATION.
- F#.# INDICATES SPREAD FOOTING TYPE. SEE FOUNDATION SCHEDULE FOR SIZE AND REINFORCEMENT.
- TS#.# INDICATES THICKENED SLAB EDGE TYPE. SEE FOUNDATION SCHEDULE FOR SIZE AND REINFORCEMENT.
- CF#.# INDICATES CONTINUOUS FOOTING TYPE. SEE FOUNDATION SCHEDULE FOR SIZE AND REINFORCEMENT.
- C# INDICATES STEEL COLUMN TYPE. SEE STEEL COLUMN SCHEDULE FOR COLUMN SIZE AND BASEPLATE DETAILS.
- CC# INDICATES CONCRETE COLUMN TYPE. SEE CONCRETE COLUMN SCHEDULE FOR COLUMN SIZE AND REINFORCEMENT.
- S.J. INDICATES SLAB SAWCUT JOINT PER DETAIL 8 / S602.
- C.S.J. INDICATES CONSTRUCTION JOINT PER TYPICAL DETAIL 1 / S602 OR AS REQUIRED PER CONSTRUCTION SEQUENCING.
- I.J. INDICATES 1/2" THICK ASPHALT-IMPREGNATED BOARD ISOLATION JOINT PER DETAIL 3 / S602.
- INDICATES 8" THICK REINFORCED MASONRY WALL - PROVIDE VERTICAL #5 AT 32" O.C. (MAX) U.N.O.
- INDICATES VERTICAL REINFORCEMENT AT CENTER OF CMU WALL GROUTED SOLID. BAR SIZE MUST MATCH WALL REINF. NOTED
- INDICATES MASONRY CONTROL JOINT. SEE TYPICAL DETAIL 4 / S602

### FOUNDATION PLAN NOTES:

- REFERENCE THE STRUCTURAL GENERAL NOTES ON DRAWINGS S001 & S002. GENERAL NOTES INCLUDE CODES AND STANDARDS, DESIGN LOADS AND OTHER REQUIREMENTS.
- CONTRACTOR TO VERIFY ALL ELEVATIONS AND DIMENSIONS SHOWN WITH ARCHITECTURAL DRAWINGS AND EQUIPMENT SUPPLIERS SHOP DRAWINGS PRIOR TO FABRICATION AND / OR START OF CONSTRUCTION.
- COORDINATE EXISTING / INSTALLED UNDERGROUND UTILITIES AND OTHER BURIED PIPES AND CONDUITS PRIOR TO PLACEMENT OF FOOTINGS. DO NOT PLACE BUILDING FOUNDATIONS OVER EXISTING / INSTALLED PIPES AND CONDUITS UNLESS APPROVED OTHERWISE.
- T.O. FOOTING ELEVATION IS AT -2'-0" (U.N.O.) THIS IS A REFERENCE ELEVATION ONLY. SEE FOUNDATION DETAIL SHEETS AND SCHEDULES FOR FOUNDATION SIZE AND REINFORCEMENT.
- EXTEND ALL CONTINUOUS FOOTING REINFORCEMENT INTO ADJACENT SPREAD FOOTINGS A MINIMUM DISTANCE OF 4'-0".
- ALL WALLS AND COLUMNS ARE TO BE CENTERED ON FOUNDATIONS UNLESS NOTED OTHERWISE. SEE PLAN DIMENSIONS FOR OFFSETS.
- PREPARE THE SLAB SUB-BASE AND COMPACT THE SOIL PER THE PROJECT GEOTECHNICAL REPORT, THE CIVIL DRAWINGS, AND THE STRUCTURAL GENERAL NOTES. IF ANY OF THESE DRAWINGS OR NOTES ARE IN CONFLICT, THE CONTRACTOR MUST ALERT THE ENGINEER FOR CLARIFICATION PRIOR TO START OF CONSTRUCTION.
- T.O. SLAB ELEVATION IS AT 0'-0" (U.N.O.) THIS IS A REFERENCE ELEVATION ONLY. SEE CIVIL DRAWINGS FOR TRUE ELEVATION ABOVE SEA LEVEL. REFERENCE THE FOUNDATION AND SLAB ON GRADE DETAIL SHEETS FOR TYPICAL SLAB CONSTRUCTION DETAILS.
- SLAB ON GROUND SHALL BE 4" THICK MINIMUM CONCRETE, UNLESS NOTED OTHERWISE. REINFORCE SLAB WITH 3.0 LBS/ CUBIC YARD OF FIBER MESH. (ALTERNATE REINFORCEMENT TO FIBERMESH SHALL BE 6x6 - W1.4 x W1.4 WELDED WIRE MESH). PROVIDE A 15 MIL VAPOR RETARDER ON TERMITTE TREATED COMPACTED SUBGRADE. SEE PLAN FOR SAW-CUT JOINT SPACINGS.
- PROVIDE (2) #4 x 4'-6" LG BARS AT TOP OF SLAB AT ALL RE-ENTRANT CORNERS AND DISCONTINUOUS ENDS OF SLAB SAW-CUT JOINTS.
- REFERENCE THE ARCHITECTURAL DRAWINGS FOR SLAB EDGES, FLOOR SLOPES, WALL OPENINGS, AND OTHER DIMENSIONS NOT GIVEN. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH PROJECT ARCHITECT PRIOR TO FABRICATION.

Owner:



**ARCHITECTURE**  
135 W Central Blvd., Suite 400  
Orlando, Florida 32801  
TEL: 407.363.6136  
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## PROVIDENCE OFFICE BUILDING 1

US HWY 17-92 AND  
KINNEY HARMON  
ROAD  
LOUGHMAN, FL 33896

### Scope Drawings:

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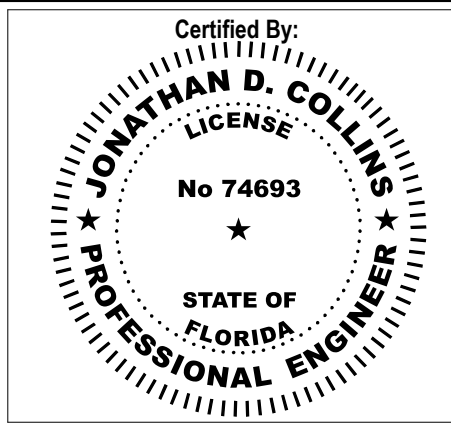
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### Drawing Title:

## FOUNDATION PLAN

### Revisions:

Issue Date:	Drawn By:	Checked By:
02/14/25	AFR	JDC



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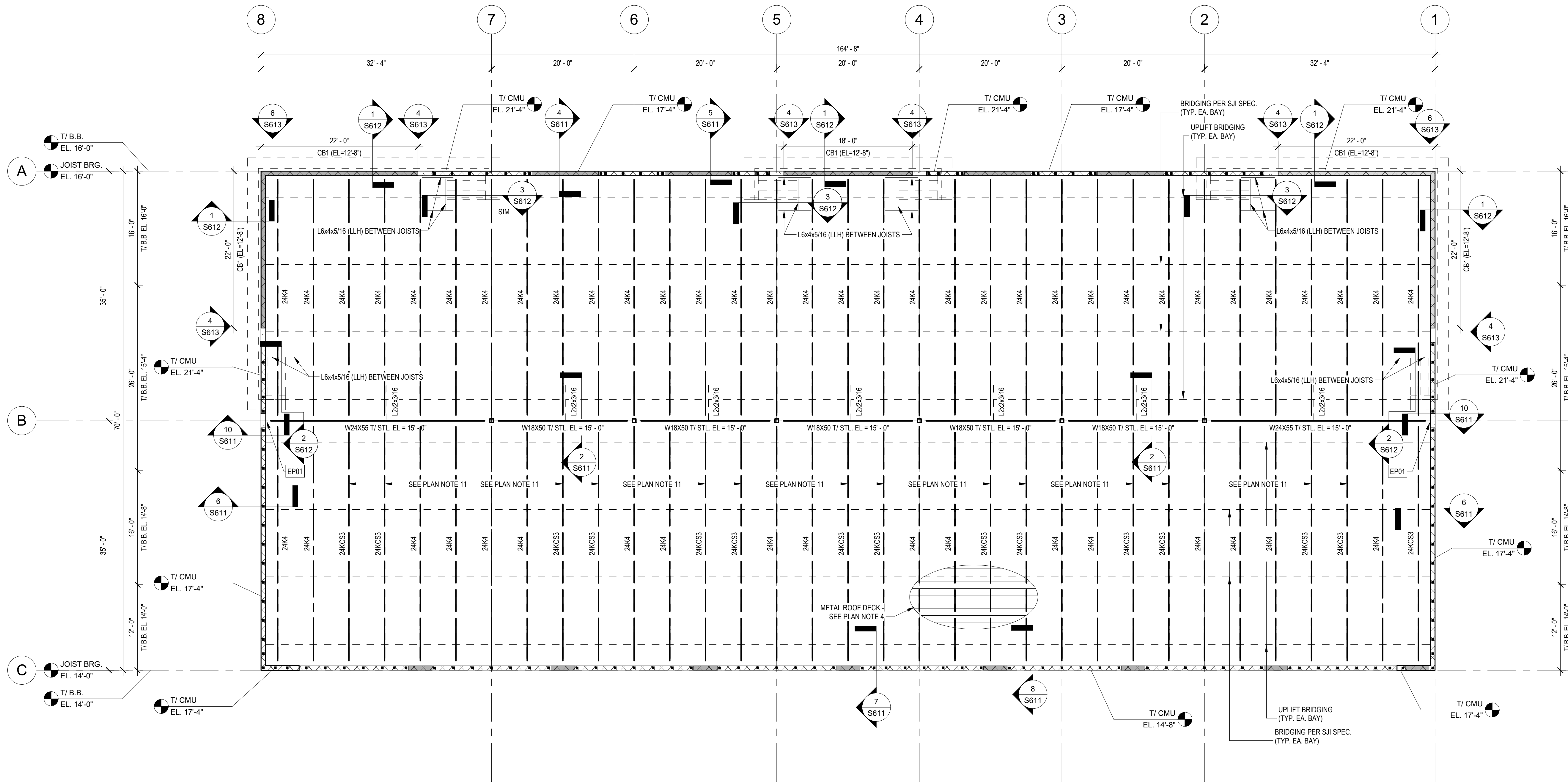
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### Drawing Number:

**S101**

### Project Number:

**24312**



**1** ROOF FRAMING PLAN  
1/8" = 1'-0"

### LEGEND

- T/ CMU EL. ##'-##" INDICATES TOP OF CMU WALL ELEVATION. SEE PLAN.
- CB## INDICATES CONCRETE BEAM TYPE. SEE CONCRETE BEAM SCHEDULE ON S501 FOR BEAM SIZE AND DETAILS.
- (EL = ##'-##") INDICATES BOTTOM OF CONCRETE BEAM ELEVATION. SEE PLAN.
- C# INDICATES STEEL COLUMN TYPE. SEE STEEL COLUMN SCHEDULE ON S501 FOR COLUMN SIZE AND BASEPLATE DETAILS.
- EP## INDICATES EMBED PLATE TYPE. SEE EMBED PLATE SCHEDULE ON S501 FOR PLATE SIZE AND DETAILS.
- INDICATES 8" THICK REINFORCED MASONRY WALL - PROVIDE VERTICAL #5 AT 32" O.C. (MAX) U.N.O.
- INDICATES VERTICAL REINFORCEMENT AT CENTER OF CMU WALL GROUTED SOLID. BAR SIZE MUST MATCH WALL REINF. NOTED
- INDICATES PRE-CAST LINTEL - SEE LINTEL SCHEDULE ON S502 FOR DETAIL.
- INDICATES CONCRETE BEAM LINTEL. SEE CONCRETE BEAM SCHEDULE ON S501 FOR BEAM SIZE AND DETAILS.

### ROOF FRAMING PLAN NOTES:

- REFERENCE THE STRUCTURAL GENERAL NOTES ON DRAWINGS S001 & S002. GENERAL NOTES INCLUDE CODES AND STANDARDS, DESIGN LOADS AND OTHER REQUIREMENTS.
- TOP OF STEEL ELEVATIONS MAY VARY. SEE THE STRUCTURAL AND ARCHITECTURAL PLANS AND SECTIONS FOR REQUIRED ELEVATIONS. (##'-##") INDICATES TOP OF STEEL ELEVATION.
- CONTRACTOR SHALL VERIFY ALL ELEVATIONS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS AND EQUIPMENT SUPPLIERS SHOP DRAWINGS PRIOR TO FABRICATION AND/OR START OF CONSTRUCTION.
- ROOF DECK SHALL BE GALV 1-1/2" - 20GA WIDE RIB METAL DECK, (U.N.O.) SPANNING OVER OPEN-WEB STEEL JOISTS SPACED AT 5'-0" O.C. (MAX) OR AS INDICATED ON ROOF FRAMING PLAN.  
  
DECK SECTION PROPERTIES:  
Ip = 0.201 in<sup>4</sup> / ft  
In = 0.222 in<sup>4</sup> / ft  
Sp = 0.234 in<sup>2</sup> / ft  
Sx = 0.247 in<sup>2</sup> / ft  
Fy = 50 KSI
- FASTEN ROOF DECK TO ALL SUPPORTS w/ HILTI X-HSN 24 (36/4 PATTERN) AND ATTACH DECK SIDELAPS w/ HILTI S-SLC 01 AT 12" O.C. (MAX). ATTACH TO ROOF DECK TO PERIMETER ANGLE WITH HILTI X-HSN 24 NAILS AT 12" O.C. (MAX).
- PROVIDE L4x4x1/4 EDGE ANGLE AROUND ALL OPENINGS AND AROUND PERIMETER OF ROOF. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF EDGE ANGLES. SEE DECK ANGLE SPLICE DETAIL 3 / S613.
- OPEN WEB STEEL JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE SPECIFICATION OF THE STEEL JOIST INSTITUTE. PROVIDE JOIST REINFORCEMENT PER TYPICAL DETAIL 1 / S611 AT CONCENTRATED LOADS > 150 LBS.
- PROVIDE L2x2x3/16 BRACE FROM JOIST TO BOTTOM FLANGE OF STEEL BEAM AT BEAM MID-SPAN OR AS NOTED ON PLAN. SEE DETAIL 2 / S611.
- PROVIDE STANDARD JOIST BRIDGING AND UPLIFT BRIDGING PER LATEST SJI SPECIFICATIONS AND THE STEEL JOIST SHOP DRAWINGS (TYPICAL).
- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS AND DETAILS NOT SHOWN. RESOLVE ALL DISCREPANCIES PRIOR TO FABRICATION.
- JOISTS NOTED AS "24KCS3" ARE DESIGNED FOR ROOF TOP EQUIPMENT WITH A MAXIMUM WEIGHT OF 1,500 LBS.

Owner:



ARCHITECTURE

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## PROVIDENCE OFFICE BUILDING 1

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LOUGHMAN, FL 33896

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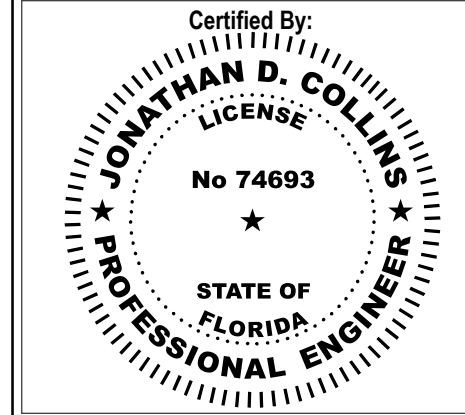
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

### Drawing Title:

## ROOF FRAMING PLAN

### Revisions:

Issue Date:	Drawn By:	Checked By:
02/14/25	AFR	JDC



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### Drawing Number:

## S121

### Project Number:

## 24312

TENSION DEVELOPMENT LENGTHS OF ACI STANDARD  
HOOKS FOR UNCOATED BARS

BAR SIZE	3000 PSI	3500 PSI	4000 PSI	5000 PSI	6000 PSI	7000 PSI	≥8000 PSI
# 3	10	9	9	8	7	7	6
# 4	13	12	12	10	10	9	8
# 5	17	16	15	13	12	11	10
# 6	20	19	17	16	14	13	12
# 7	23	22	20	18	17	15	14
# 8	27	25	23	21	19	18	16
# 9	30	28	26	23	21	20	18
# 10	34	31	29	26	24	22	21
# 11	37	35	32	29	27	25	23
# 14	45	42	39	35	32	29	28
# 18	60	55	52	46	45	39	37

NOTES:

- TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE. ALL VALUES ARE LENGTHS IN INCHES.
- TENSION DEVELOPMENT LENGTHS OF STANDARD HOOKS ARE CALCULATED PER ACI 318-19, SECTION 25.4.3.
- FOR BAR SIZES #3 THROUGH #11 ONLY, THE FOLLOWING FURTHER REDUCTIONS IN LENGTH CAN BE APPLIED:
  - IF CONCRETE COVER CONFORMS TO ACI 318-19, SECTION 25.4.3.2:
    - A MODIFICATION FACTOR OF 0.7 MAY BE APPLIED, HOWEVER:
    - THE FINAL CALCULATED LENGTH OF THE HOOK SHALL NOT BE LESS THAN EITHER 8.0 (db) **NOR** 6 INCHES.
  - IF HOOK IS ENCLOSED IN TIES OR STIRRUPS PER ACI 318-19, SECTION 25.4.3.2:
    - A MODIFICATION FACTOR OF 0.8 MAY BE APPLIED, HOWEVER:
    - THE FINAL CALCULATED LENGTH OF THE HOOK SHALL NOT BE LESS THAN EITHER 8.0 (db) **NOR** 6 INCHES.
- FOR LIGHTWEIGHT AGGREGATE CONCRETE, ALL TABULATED VALUES SHALL BE MULTIPLIED BY A FACTOR OF 1.3.

TENSION DEVELOPMENT LENGTHS AND LAP SPLICE LENGTHS FOR UNCOATED BARS

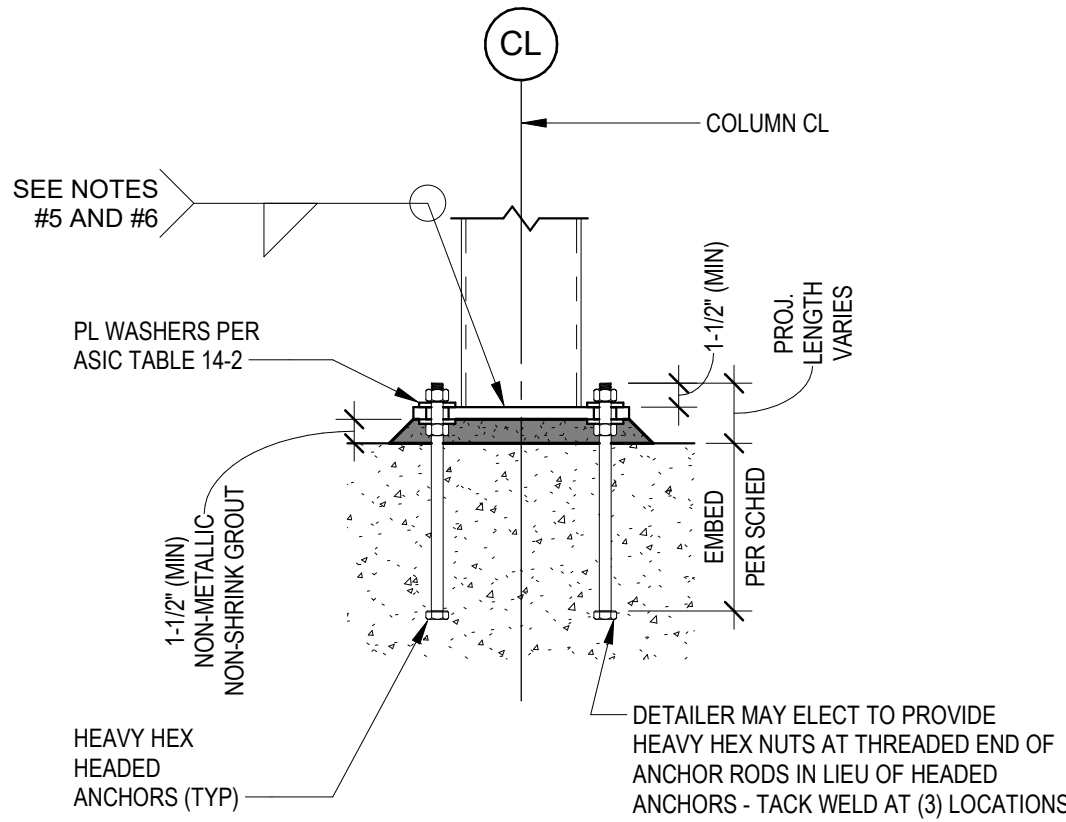
BAR SIZE	LAP CLASS	3000 PSI				4000 PSI				5000 PSI				6000 PSI				7000 PSI				≥ 8000 PSI			
		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
# 3	A	22	32	17	25	19	28	15	22	17	25	13	19	15	23	12	18	14	21	12	16	13	20	12	15
	B	28	42	22	32	24	36	19	28	22	33	17	25	20	30	15	23	18	28	14	21	17	26	13	20
# 4	A	29	43	22	33	25	37	19	29	22	33	17	26	20	31	16	24	19	28	15	22	18	26	14	20
	B	37	56	29	43	32	48	25	37	29	43	22	33	26	40	20	31	25	37	19	28	23	34	18	26
# 5	A	36	54	28	41	31	47	24	36	28	42	22	32	25	38	20	29	24	35	18	27	22	33	17	25
	B	47	70	36	54	40	60	31	47	36	54	28	42	33	49	25	38	31	46	24	35	29	43	22	33
# 6	A	43	64	33	50	37	56	29	43	33	50	26	38	31	46	24	35	28	42	22	33	26	40	20	30
	B	56	84	43	64	48	72	37	56	43	65	33	50	40	59	31	46	37	55	28	42	40	51	26	40
# 7	A	63	94	48	72	54	81	42	63	49	73	37	56	44	66	34	51	41	61	32	47	38	58	30	44
	B	81	122	63	94	70	106	54	81	63	94	49	73	58	86	44	66	53	80	41	61	50	75	38	58
# 8	A	72	107	55	82	62	93	48	71	55	63	43	64	51	76	39	58	47	70	36	54	44	66	34	51
	B	93	139	72	107	80	121	62	93	72	108	55	83	66	98	51	76	61	91	47	70	57	85	44	66
# 9	A	81	121	62	93	70	105	54	81	63	94	48	72	57	85	44	66	53	79	41	61	49	74	38	57
	B	105	157	81	121	91	136	70	105	81	122	63	94	74	111	57	85	69	103	53	79	64	96	49	74
# 10	A	91	136	70	105	79	118	61	91	70	105	54	81	64	96	49	74	59	89	46	69	56	83	43	64
	B	118	177	91	136	102	153	79	118	91	137	70	105	83	125	64	96	77	116	59	89	72	108	56	83
# 11	A	101	151	76	116	87	131	67	101	76	117	60	90	71	107	55	82	66	99	51	76	62	93	48	71
	B	131	196	101	151	113	170	87	131	101	152	78	117	93	139	71	107	86	128	66	99	80	120	62	93
# 14	N/A <sup>[B]</sup>	121	161	93	139	105	157	81	121	94	140	72	108	86	128	66	99	79	119	61	91	74	111	57	85
# 18	N/A <sup>[B]</sup>	161	241	124	186	139	209	107	161	125	187	96	144	114	171	88	131	106	158	81	122	99	148	76	114

NOTES:

- TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE. ALL VALUES ARE LENGTHS IN INCHES.
- TENSION DEVELOPMENT AND LAP SPLICE LENGTHS ARE CALCULATED PER ACI 318-19, SECTION 25.4.2 AND 25.5.2, RESPECTIVELY. TABULATED VALUES FOR BEAMS AND COLUMNS ARE BASED ON TRANSVERSE REINFORCEMENT AND CONCRETE COVER MEETING MINIMUM CODE REQUIREMENTS.
- CASE 1 AND CASE 2 ARE DEPENDENT ON THE TYPE OF STRUCTURAL ELEMENT, CONCRETE COVER, AND THE CENTER-TO-CENTER SPACING OF THE BARS. CASES ARE DEFINED AS FOLLOWS:
  - BEAMS AND COLUMNS:
    - CASE 1: COVER OF AT LEAST 1.0 (db) **AND** C-C SPACING OF AT LEAST 2.0 (db) - WHERE (db) IS THE DIAMETER OF THE BAR.
    - CASE 2: COVER LESS THAN 1.0 (db) **OR** C-C SPACING LESS THAN 2.0 (db)
  - ALL OTHER STRUCTURAL MEMBERS:
    - CASE 1: COVER OF AT LEAST 1.0 (db) **AND** C-C SPACING OF AT LEAST 3.0 (db)
    - CASE 2: COVER LESS THAN 1.0 (db) **OR** C-C SPACING LESS THAN 3.0 (db)
- LAP SPLICE LENGTHS ARE MULTIPLES OF THE CALCULATED TENSION DEVELOPMENT LENGTH PER ACI 318-19, SECTION 25.2.2 AS FOLLOWS:
  - CLASS "A" = 1.0 (L<sub>d</sub>)
  - CLASS "B" = 1.3 (L<sub>d</sub>)
- ACI 318-19 DOES NOT ALLOW TENSION LAP SPLICES OF #14 OR #18 BARS. THE TABULATED VALUES FOR THESE BAR SIZES ARE THE TENSION DEVELOPMENT LENGTHS.
- TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.
- FOR LIGHTWEIGHT AGGREGATE CONCRETE, ALL TABULATED VALUES SHALL BE MULTIPLIED BY A FACTOR OF 1.3.

STEEL COLUMN AND BASE PLATE SCHEDULE

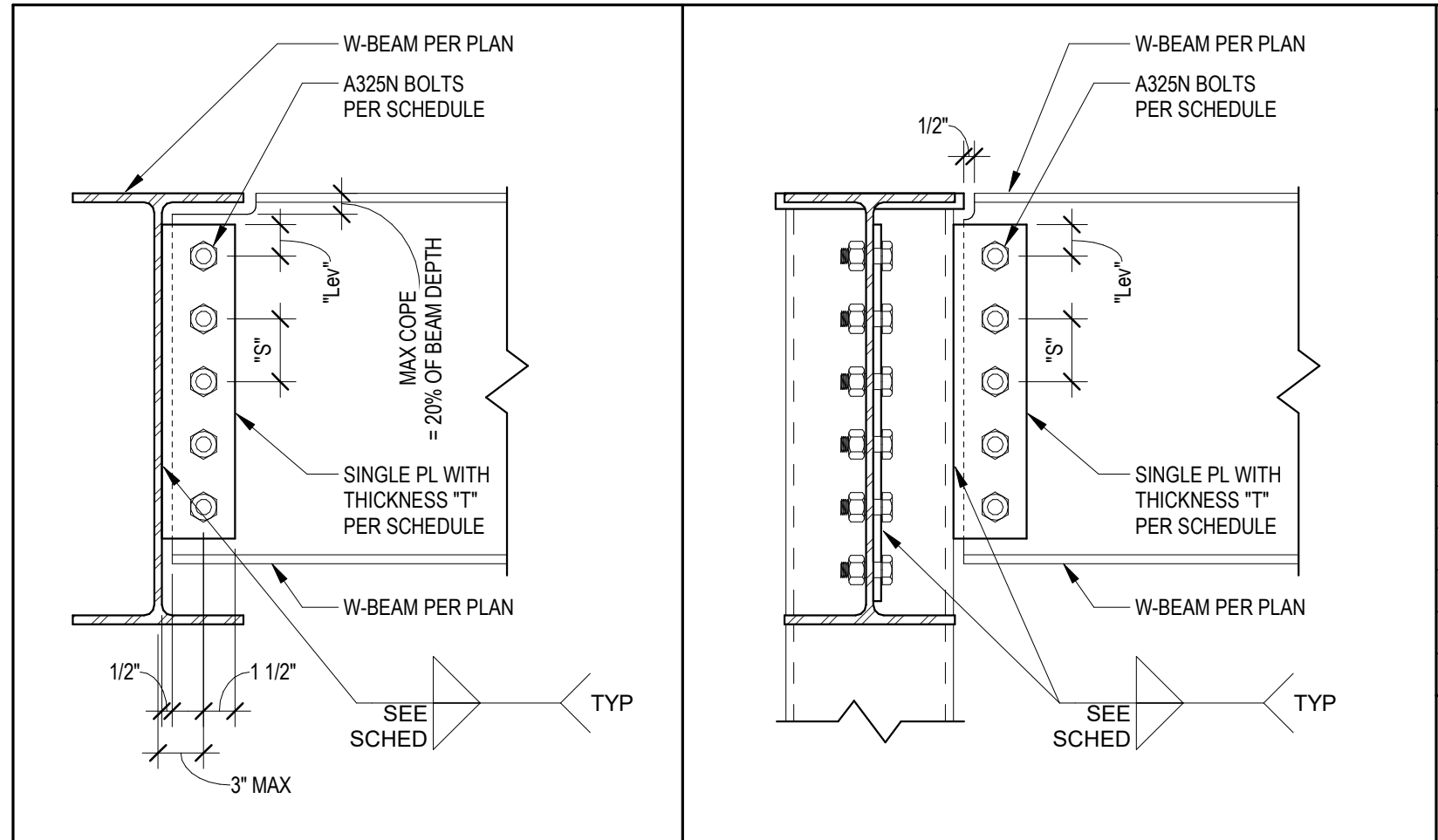
TYPE	HSS 6x6x5/16	COLUMN AND BASE PLATE NOTES:
BASE PLATE PLAN		<ol style="list-style-type: none"><li>PROVIDE 1/4" CAP PLACES ON ALL TUBE AND PIPE COLUMNS THAT ARE NOT LOADED THROUGH THE CAP PLATE.</li><li>ALL BASE PLATE AND SHEAR LUG MATERIAL TO BE ASTM A572 GRADE 50, UNLESS NOTED OTHERWISE.</li><li>ALL ANCHORS TO BE ASTM F1554, 55 KSI, S1 WELDABLE MATERIAL UNLESS NOTED OTHERWISE.</li><li>SET ALL BASE PLATES ON WEDGES, SHIMS, OR LEVELING NUTS AS REQUIRED. FULL BED OF NON-METALLIC, NON-SHRINK, HIGH STRENGTH GROUT MUST BE INSTALLED BELOW BASE PLATE. GROUT MUST BE INSTALLED IMMEDIATELY AFTER ERECTION OF MAIN JOIST GIRDERS AND JOISTS AT COLUMN LINES.</li><li>ALL WELDS ARE CONTINUOUS AROUND COLUMN BASE.</li><li>UNLESS OTHERWISE NOTED, PROVIDE 5/16" FILLET WELDS AT COLUMN MATERIAL GREATER THAN 1/2" WALL THICKNESS. PROVIDE 1/4" FILLET WELD OTHERWISE.</li></ol>
BASE PLATE	PL 1" x 1'-2" x 1'-2"	
ANCHOR BOLTS	(4) 3/4" DIA. ANCHORS 12" EMBEDMENT	
COLUMN MARK	C1	



TYPICAL COLUMN ANCHOR BOLT DETAIL

STEEL EMBED PLATE SCHEDULE

EMBED MARK	PLATE SIZE	HEADED STUD QUANTITY AND LAYOUT	EMBED USE	COMMENTS
EP01	PL 1/2" x 12" x 2'-0" LG.	(8) 5/8" DIA. x 5" LG. HSA	STEEL BEAM TO PANEL CONNECTION	-----



SINGLE PLATE CONNECTION SCHEDULE

CAPACITY (KIPS) (FACTORED)	BEAM SIZE	NO. OF A325N BOLTS	HOLE TYPE	PLATE DIMENSIONS		BOLT SPACING (S)	MIN. EDGE DISTANCE (L <sub>eh</sub> )	FILLET WELD SIZE (EA SIDE)
				"T"	"L"			
25	W8	(2) 3/4" DIA.	SSLT	3/8"	6"	3"	1 1/2"	1/4"
44	W10	(3) 3/4" DIA.	SSLT	3/8"	8"	2 3/4"	1 1/4"	1/4"
44	W12	(3) 3/4" DIA.	SSLT	3/8"	9"	3"	1 1/2"	1/4"
44	W14	(3) 3/4" DIA.	SSLT	3/8"	9"	3"	1 1/2"	1/4"
63	W16	(4) 3/4" DIA.	SSLT	3/8"	12"	3"	1 1/2"	1/4"
82	W18	(5) 3/4" DIA.	SSLT	3/8"	15"	3"	1 1/2"	1/4"
89	W21	(6) 3/4" DIA.	SSLT	5/16"	18"	3"	1 1/2"	1/4"
108	W24	(7) 3/4" DIA.	SSLT	5/16"	21"	3"	1 1/2"	1/4"
127	W27	(8) 3/4" DIA.	SSLT	5/16"	24"	3"	1 1/2"	1/4"
142	W30	(9) 3/4" DIA.	SSLT	5/16"	27"	3"	1 1/2"	1/4"
157	W33	(10) 3/4" DIA.	SSLT	5/16"	30"	3"	1 1/2"	1/4"
173	W36	(11) 3/4" DIA.	SSLT	5/16"	33"	3"	1 1/2"	1/4"

STD  
SSLT  
N  
X

STANDARD HOLES  
SHORT-SLOTTED HOLES (TRANSVERSE TO DIRECTION OF LOAD)  
THREADS INCLUDED IN THE SHEAR PLANE (ALLOWED)  
THREADS EXCLUDED FROM THE SHEAR PLANE

VALUES ARE BASED ON TABLE 10-10a OF THE AISC STEEL CONSTRUCTION MANUAL - 15TH ED.  
VALUES ARE BASED ON A MINIMUM WEB THICKNESS OF 1/4"

CONCRETE BEAM SCHEDULE

COLUMN TYPE	B	H	TOP REINF.	BOT REINF.	STIRRUPS
CB1	7'-5/8"	32"	(4) #5	(4) #5	#3 AT 12" O.C.

CONCRETE COLUMN SCHEDULE

COLUMN TYPE	B	H	VERTICAL REINF.	TIES
CC1	7'-5/8"	24"	(8) #5	#3 AT 8" O.C.

CONCRETE FOOTING SCHEDULE

TYPE	SIZE			REINFORCING	REMARKS
	WIDTH	LENGTH	DEPTH		
F5.0	5' - 0"	5' - 0"	1' - 4"	(6) #5 x 4' - 6" LG. EA WAY TOP	SPREAD FOOTING
				(6) #5 x 4' - 6" LG. EA WAY BOTTOM	
F6.0	6' - 0"	6' - 0"	1' - 4"	(7) #5 x 5' - 6" LG. EA WAY TOP	SPREAD FOOTING
				(7) #5 x 5' - 6" LG. EA WAY BOTTOM	
F7.0	7' - 0"	7' - 0"	1' - 4"	(8) #5 x 6' - 6" LG. EA WAY TOP	SPREAD FOOTING
				(8) #5 x 6' - 6" LG. EA WAY BOTTOM	
CF2.5	2' - 6"	CONT.	1' - 0"	LONG. (3) #5 x CONT. BOTTOM TRANS. #4 x 2'-0" LG. AT 16" O.C. BOTTOM	CONTINUOUS FOOTING

Owner:



ARCHITECTURE  
135 W Central Blvd., Suite 400  
Orlando, Florida 32801  
TEL: 407.363.6136

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Project:

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BUILDING  
1

US HWY 17-92 AND  
KINNEY HARMON  
ROAD  
LOUGHMAN, FL 33896

Scope Drawings:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

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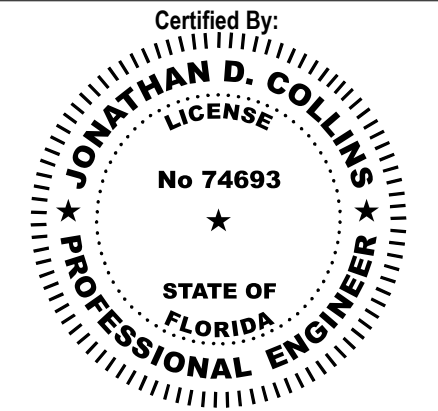
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Drawing Title:

SCHEDULES

Revisions:

Issue Date: 02/14/25  
Drawn By: AFR  
Checked By: JDC



Electronic Signature:

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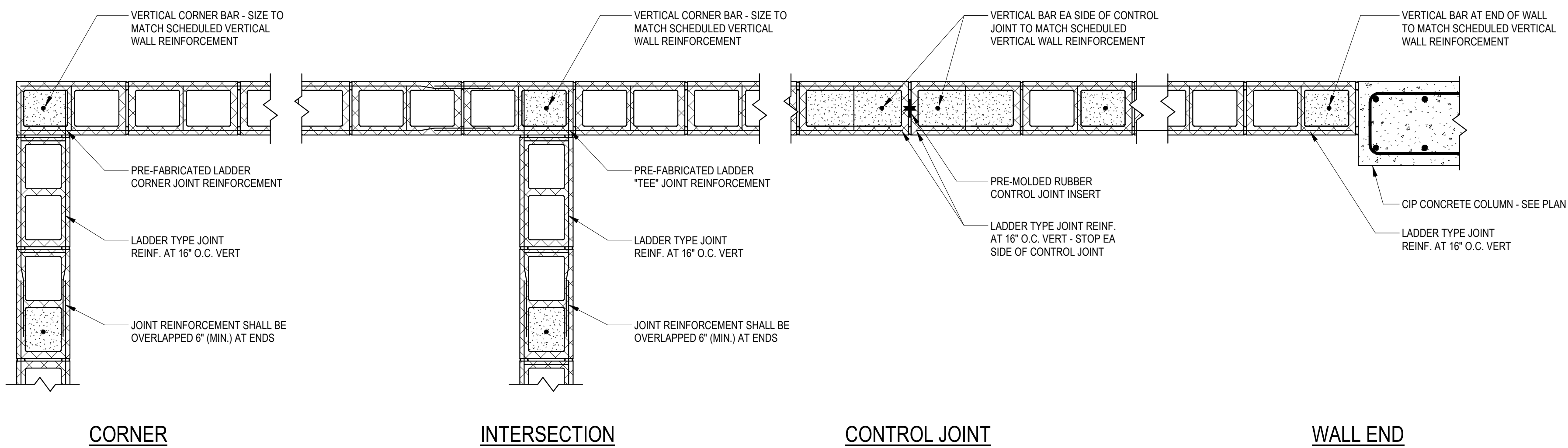
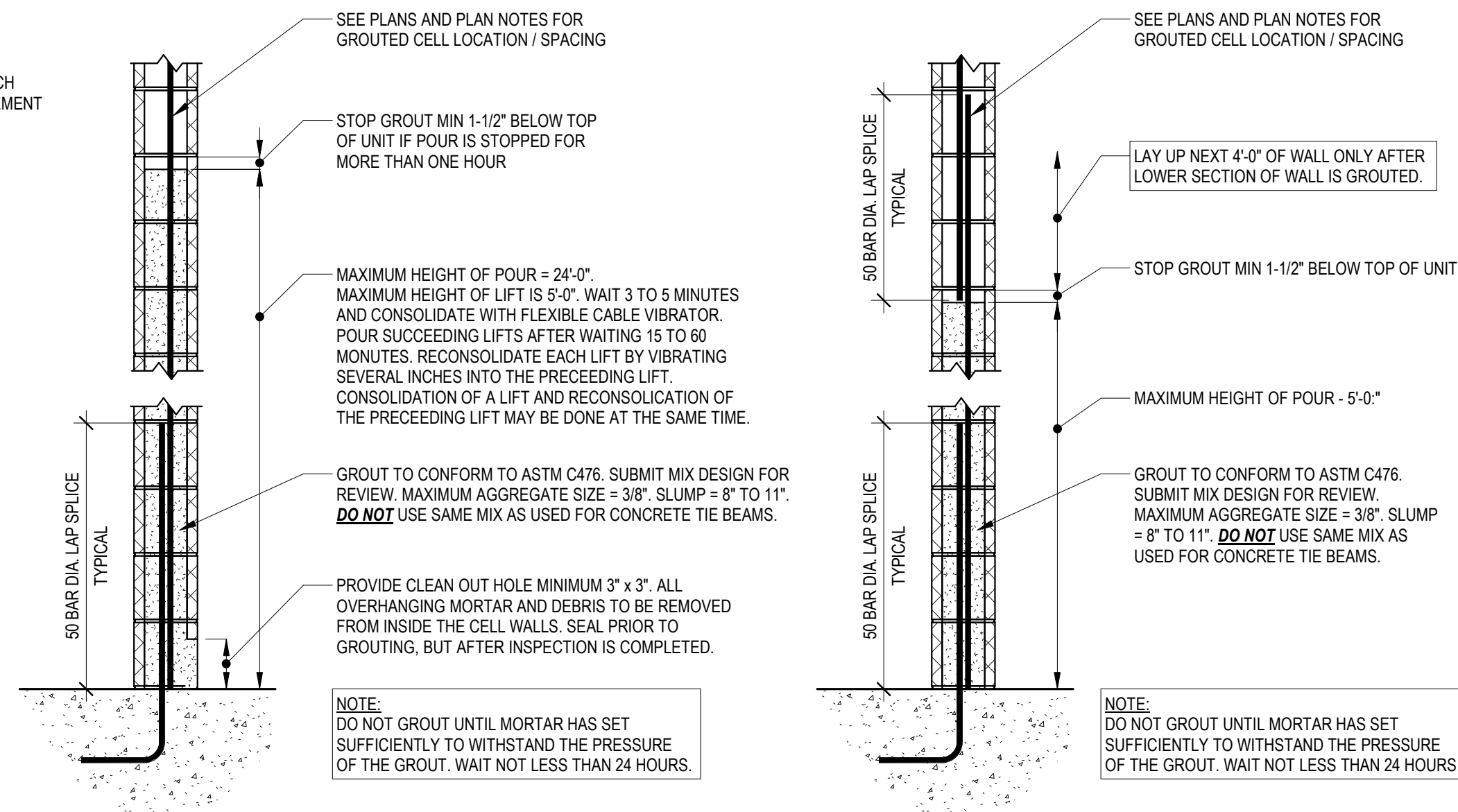
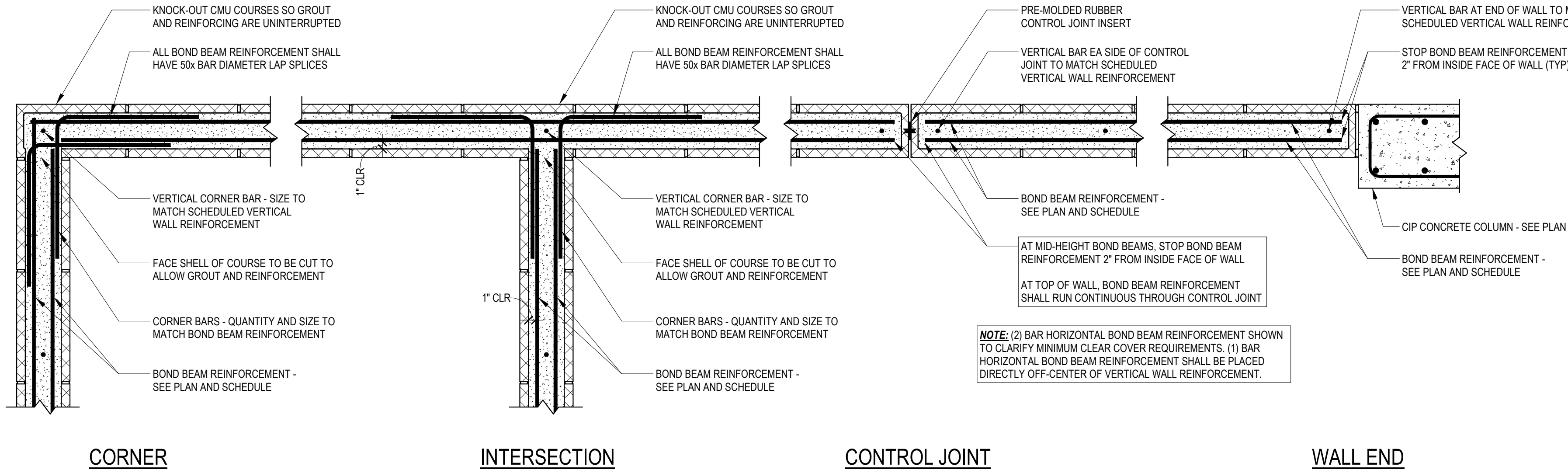
Drawing Number:


S501

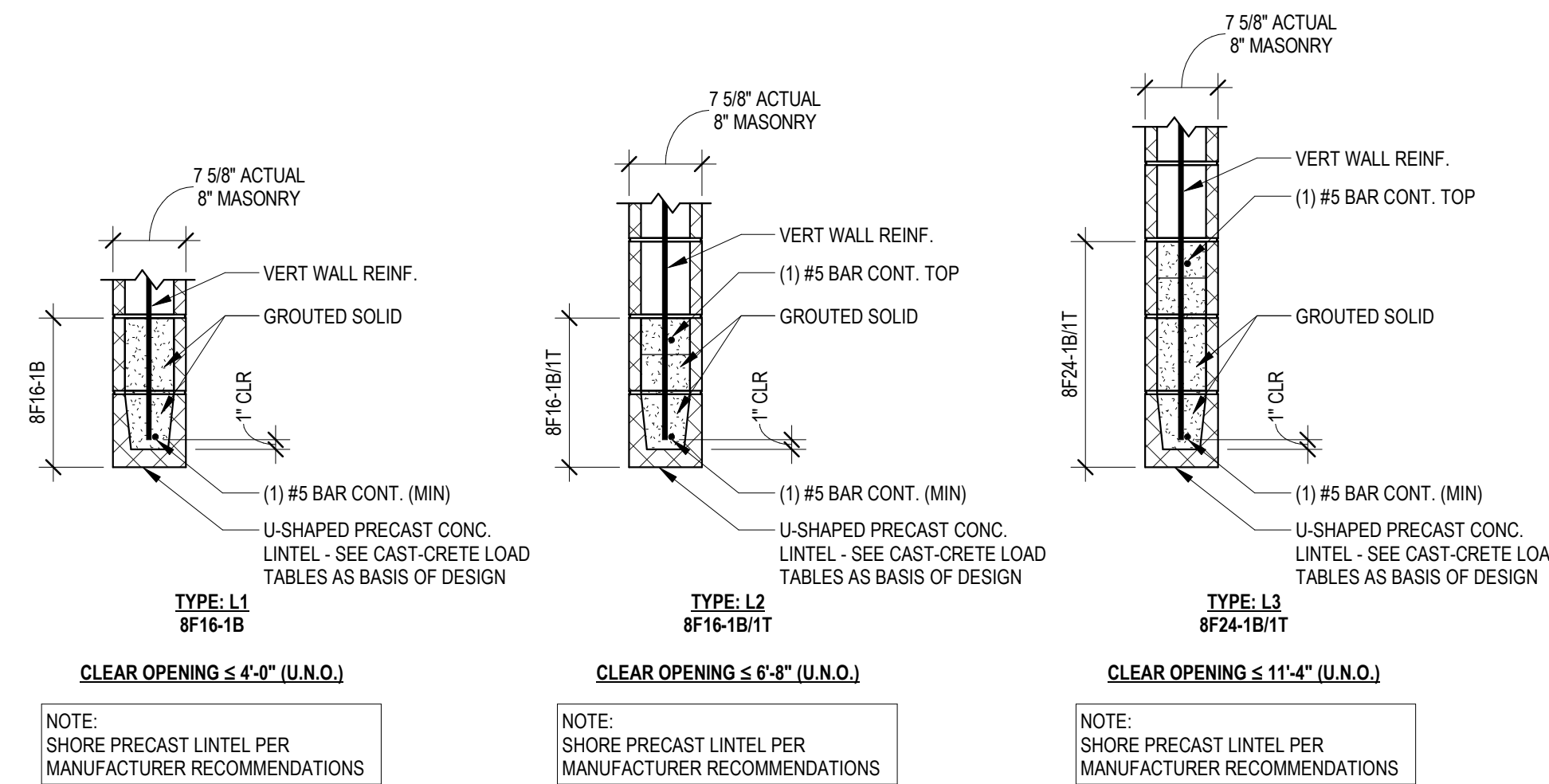
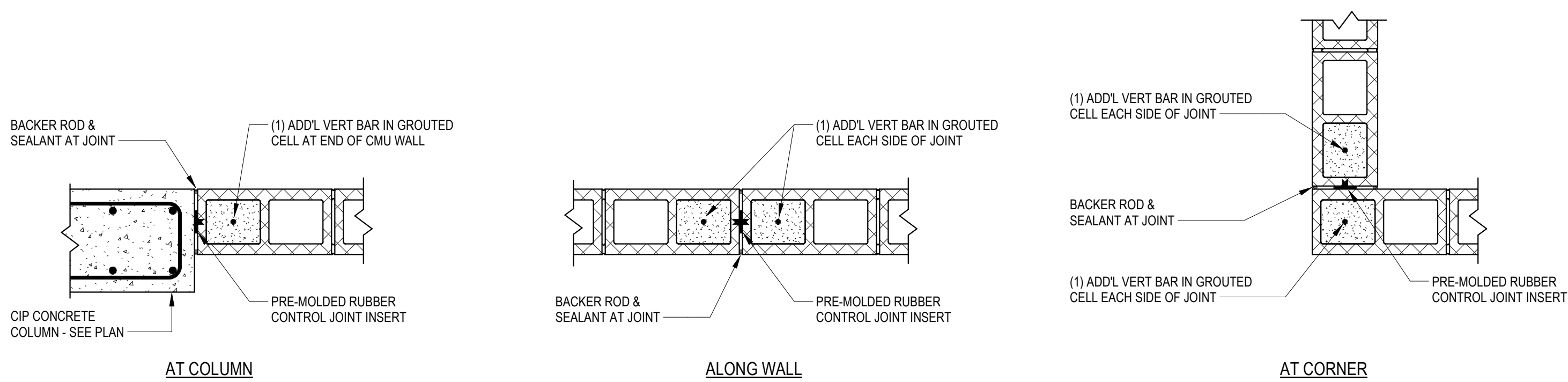
Project Number:

24312





		ALLOWABLE GRAVITY LOAD				ALLOWABLE UPLIFT LOAD				ALLOWABLE LATERAL LOAD			
OVERALL LINTEL LENGTH	TYPE OF LINTEL	8U8	8F8-0B	8F16-0B	8F24-0B	8F32-0B	8F8-1T	8F16-1T	8F24-1T	8F32-1T	8U8	8F8	REINF. CMU
			8F8-1B	8F16-1B	8F24-1B	8F32-1B	8F8-2T	8F16-2T	8F24-2T	8F32-2T			
2' - 8" TO 3' - 6"	PRECAST	2231	3069	5163	8054	10951	1569	3524	5263	7001	1025	1024	1598
			3069	6113	8974	11809	1569	3524	5263	7001			
3' - 7" TO 4' - 0"	PRECAST	1966	2561	3820	5961	8107	1363	3060	4570	6079	765	763	1309
			2693	6113	8974	11809	1363	3060	4570	6079			
4' - 1" TO 4' - 6"	PRECAST	1599	1969	2931	4576	6224	1207	2707	4043	5379	592	591	1073
			2189	6113	8672	11809	1207	2707	4043	5379			
4' - 7" TO 5' - 4"	PRECAST	1217	1349	1999	3123	4249	1016	2276	3399	4522	411	411	745
			1663	5365	7342	10127	1016	2276	3399	4522			
5' - 5" TO 5' - 10"	PRECAST	1062	1105	1631	2549	3470	909	2080	3107	4133	340	339	616
			1451	4360	6036	8328	909	2080	3107	4133			
5' - 11" TO 6' - 6"	PRECAST	908	1238	3480	3707	5061	835	1868	2790	3712	507	721	490
			1238	3480	8360	8825	835	1868	2790	3712			
6' - 7" TO 7' - 6"	PRECAST	743	1011	2632	2698	3685	727	1624	2426	3228	424	534	363
			1011	2661	5681	6472	727	1624	2426	3228			
7' - 7" TO 9' - 4"	PRECAST	554	699	1625	3486	3302	591	1136	1815	2500	326	512	230
			752	1843	3486	6390	591	1318	1969	2619			
9' - 5" TO 10' - 6"	PRECAST	475	535	1247	2777	2536	530	916	1461	2011	284	401	180
			643	1533	2781	4754	530	1180	1763	2346			
10' - 7" TO 11' - 4"	PRECAST	362	582	1366	2423	4006	474	800	1274	1753	260	452	154
			582	1366	2423	4006	494	1042	1643	2187			
11' - 5" TO 12' - 0"	PRECAST	337	540	1254	2193	3552	470	724	1153	1585	244	402	137
			540	1254	2193	3552	470	940	1560	2075			
12' - 1" TO 13' - 4"	PRECAST	296	471	1075	1838	2883	418	607	964	1323	217	324	110
			471	1075	1838	2883	428	780	1418	1887			
13' - 5" TO 14' - 0"	PRECAST	279	424	1002	1697	2630	384	560	869	1220	205	293	100
			442	1002	1697	2630	410	717	1358	1807			
14' - 1" TO 14' - 8"	PRESTRESSED	NR	NR	NR	NR	NR	239	520	825	1131	NR	284	91
			458	1370	2245	2712	246	663	1303	1734			
14' - 9" TO 15' - 4"	PRESTRESSED	NR	NR	NR	NR	NR	224	486	769	1054	NR	259	83
			412	1250	2058	2513	230	616	1240	1668			
15' - 5" TO 17' - 4"	PRESTRESSED	NR	NR	NR	NR	NR	187	405	638	873	NR	194	64
			300	950	1609	2047	192	506	1005	1473			



Owner:

**4**

ARCHITECTURE

135 W Central Blvd., Suite 400  
Orlando, Florida 32801  
TEL: 407.363.6136

Project:

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**US HWY 17-92 AND  
KINNEY HARMON  
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LOUGHMAN, FL 33896**

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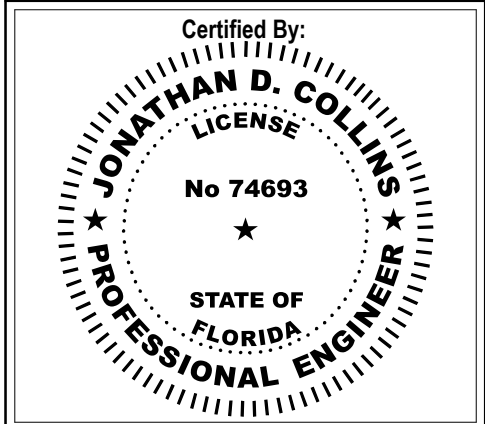
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Drawing Title:

**TYPICAL CMU  
DETAILS**

Revisions:		

Issue Date:	Drawn By:	Checked By:
02/14/25	AFR	JDC



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*Jonathan D. Collins*

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Drawing Number:

**S502**

Project Number:

**24312**

**1**

**TYPICAL PRECAST LINTEL SCHEDULE**

N.T.S.



**Owner:**



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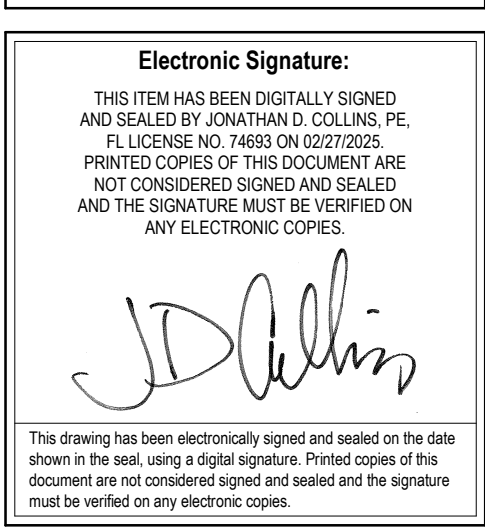
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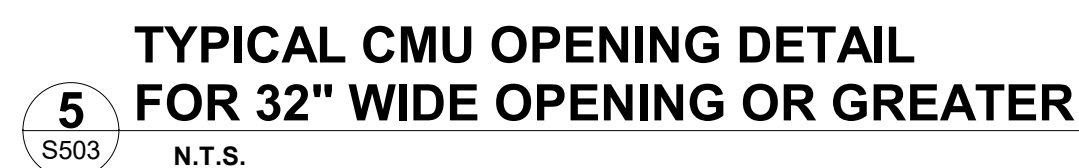
## TYPICAL CMU DETAILS


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**S503**

24312







24312

NOTES:

1. SEE FOUNDATION PLAN OR SLAB PLAN FOR LOCATION OF CONTROL JOINTS
2. CONTROL JOINTS MUST BE SAW-CUT INTO THE SLAB USING EARLY-ENTRY SAW BLADES. TRIAL CUTS MAY BE REQUIRED TO AVOID RAVELING.

PROVIDE MM-30 SEMI-RIGID EPOXY JOINT FILLER AT ALL SAW-CUT JOINTS WHERE FORKLIFT TRAFFIC OR HEAVY LOADS ARE EXPECTED

1/8" x T/4 DEEP SAW-CUT JOINT - SAW CUT TO BE MADE WITHIN 24 HOURS OF CONCRETE PLACEMENT

SLAB ON GROUND MESH OR BAR REINFORCEMENT - SEE PLAN

VAPOR RETARDER - SEE PLAN (15 MIL MIN THICKNESS)

## 8 TYPICAL SLAB ON GROUND SAW-CUT JOINT

1 1/2" = 1'-0"

MASONRY WALL BEYOND - SEE PLAN

EXTERIOR GRADE - SEE CIVIL DWGS

GROUT CELLS SOLID BELOW GRADE

THICKENED SLAB EDGE - SEE PLAN AND SCHEDULE FOR SIZE AND REINFORCEMENT

CONCRETE SLAB ON GRADE - SEE PLAN

VAPOR RETARDER - SEE PLAN (15 MIL MIN THICKNESS)

CLEAN COMPACTED TERMITE TREATED SOIL

CONTINUOUS FOOTING - SEE FOUND SCHEDULE FOR SIZE AND REINFORCEMENT

## 7 TYPICAL SECTION AT LARGE OPENING

3/4" = 1'-0"

MASONRY WALL BEYOND - SEE PLAN

CONTINUOUS #4 ALONG EDGE

EXTERIOR GRADE - SEE CIVIL DWGS

GROUT CELLS SOLID BELOW GRADE

RECESS FOR DOOR - SEE ARCH

STOP DOWELS 2" FROM TOP OF SLAB

CONCRETE SLAB ON GRADE - SEE PLAN

VAPOR RETARDER - SEE PLAN (15 MIL MIN THICKNESS)

CLEAN COMPACTED TERMITE TREATED SOIL

CONTINUOUS FOOTING - SEE FOUND SCHEDULE FOR SIZE AND REINFORCEMENT

## 6 TYPICAL SECTION AT DOOR

3/4" = 1'-0"

8" REINF MASONRY WALL - SEE PLAN

DOWELS AT VERTICAL WALL REINFORCEMENT WITH ACI 90° HOOK INTO FOOTING

GROUT CELLS SOLID BELOW GRADE

8" MIN COVER

1/2" BITUMINOUS BOARD ISOLATION JOINT

CONCRETE SLAB ON GRADE - SEE PLAN

VAPOR RETARDER - SEE PLAN (15 MIL MIN THICKNESS)

CLEAN COMPACTED TERMITE TREATED SOIL

CONTINUOUS FOOTING - SEE FOUND SCHEDULE FOR SIZE AND REINFORCEMENT

## 5 TYPICAL PERIMETER SECTION

3/4" = 1'-0"

(2) #4 x 4'-0" LG. - PROVIDE 1-1/2" COVER FROM TOP OF SLAB

ADJACENT CONCRETE OR MASONRY WALL, SLAB BLOCKOUT, OR ABRUPT TERMINATION OF CONTROL JOINTS

## 4 TYPICAL SLAB RE-ENTRANT BARS

3/4" = 1'-0"

ADJACENT EXISTING STRUCTURE OR BLOCKOUT

1/2" THICK ASPHALT-IMPREGNATED BOARD ISOLATION JOINT ALONG SLAB EDGE

SLAB ON GROUND MESH OR BAR REINFORCEMENT - SEE PLAN

VAPOR RETARDER - SEE PLAN (15 MIL MIN THICKNESS)

## 3 TYPICAL SLAB ISOLATION JOINT

1 1/2" = 1'-0"

DOWEL PLATE SCHEDULE		
SLAB DEPTH (IN)	PNA DIAMOND DOWEL	SIKA SPEED PLATE
5 - 6	1/4"t x 4'-1/2" x 4'-1/2"	1/4"t x 4"w x 6"lg
7 - 8	3/8"t x 4'-1/2" x 4'-1/2"	3/8"t x 4"w x 6"lg
9 - 11	3/4"t x 4'-1/2" x 4'-1/2"	3/4"t x 4"w x 6"lg

DOWEL PLATES TO BE PLACED AT 18" O.C. - LOCATE AT AT 12" FROM ADJACENT PERPENDICULAR SLAB JOINT

STOP REINFORCEMENT AT JOINT

SLAB ON GROUND MESH OR BAR REINFORCEMENT - SEE PLAN

VAPOR RETARDER - SEE PLAN (15 MIL MIN THICKNESS)

## 2 SLAB CONSTRUCTION JOINT - DOWEL PLATES

1 1/2" = 1'-0"

SMOOTH DOWEL SCHEDULE		
SLAB DEPTH (IN)	DWL DIA (IN)	LENGTH (IN)
4	1/2	18
5	5/8	18
6	3/4	18
7	7/8	24
8	1	24
9	1 1/8	24
10	1 1/4	24

DOWELS TO BE PLACED AT 12" O.C. - SEE SCHEDULE FOR SIZE AND LENGTH

STOP REINFORCEMENT AT JOINT

SLAB ON GROUND MESH OR BAR REINFORCEMENT - SEE PLAN

VAPOR RETARDER - SEE PLAN (15 MIL MIN THICKNESS)

## 1 SLAB CONSTRUCTION JOINT - SMOOTH DOWELS

1 1/2" = 1'-0"

Owner:



ARCHITECTURE

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Project:

## PROVIDENCE OFFICE BUILDING 1

US HWY 17-92 AND KINNEY HARMON ROAD  
LOUGHMAN, FL 33896

### Scope Drawings:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

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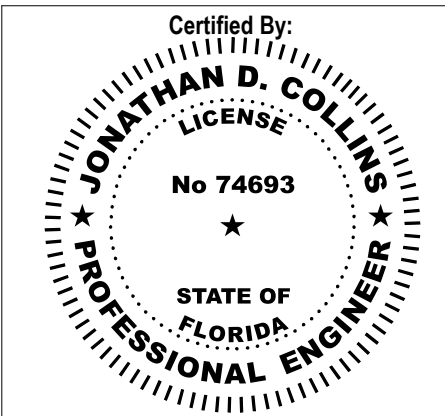
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Drawing Title:

## FOUNDATION & SLAB DETAILS

### Revisions:

Issue Date:	Drawn By:	Checked By:
02/14/25	AFR	JDC



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*JD Collins*

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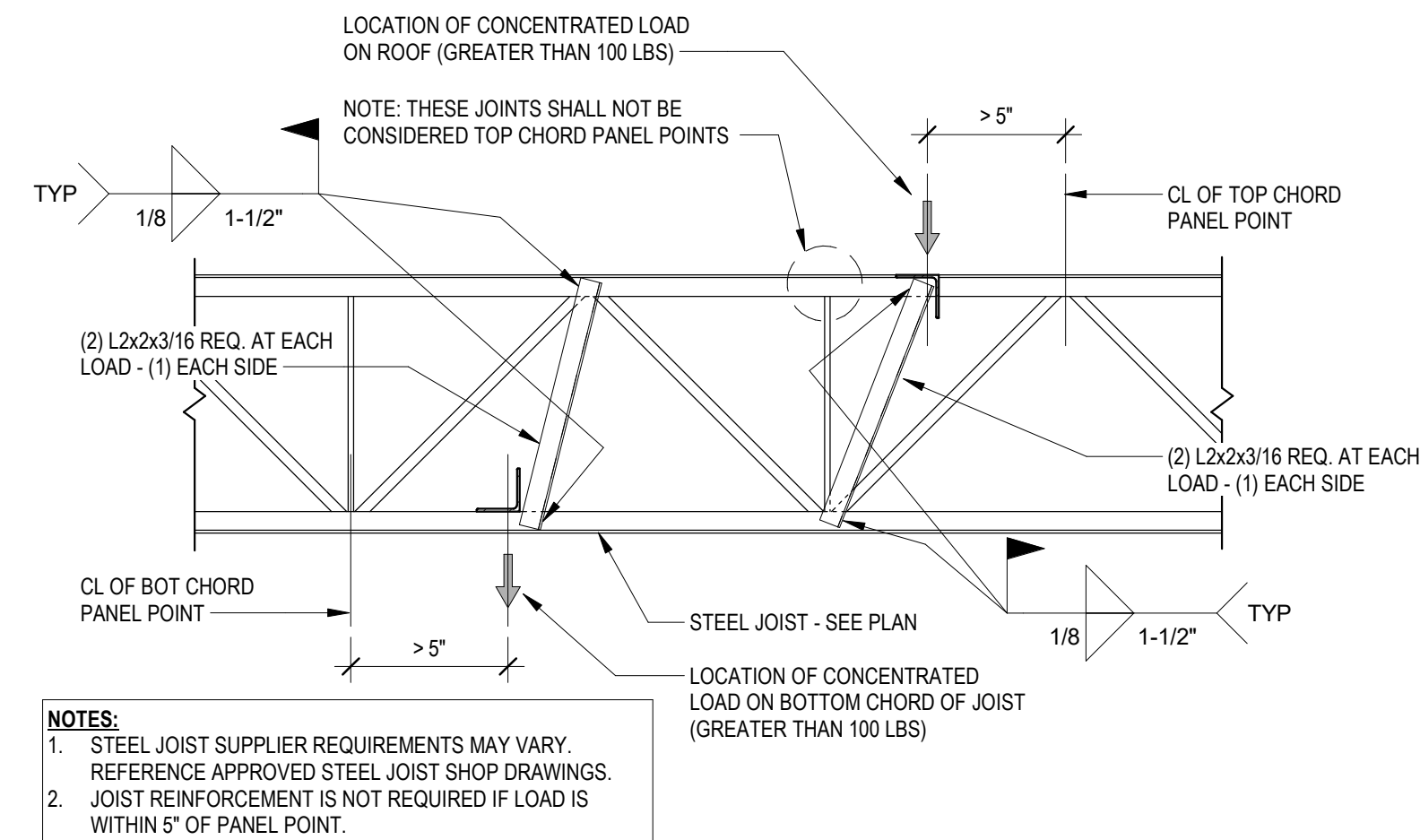
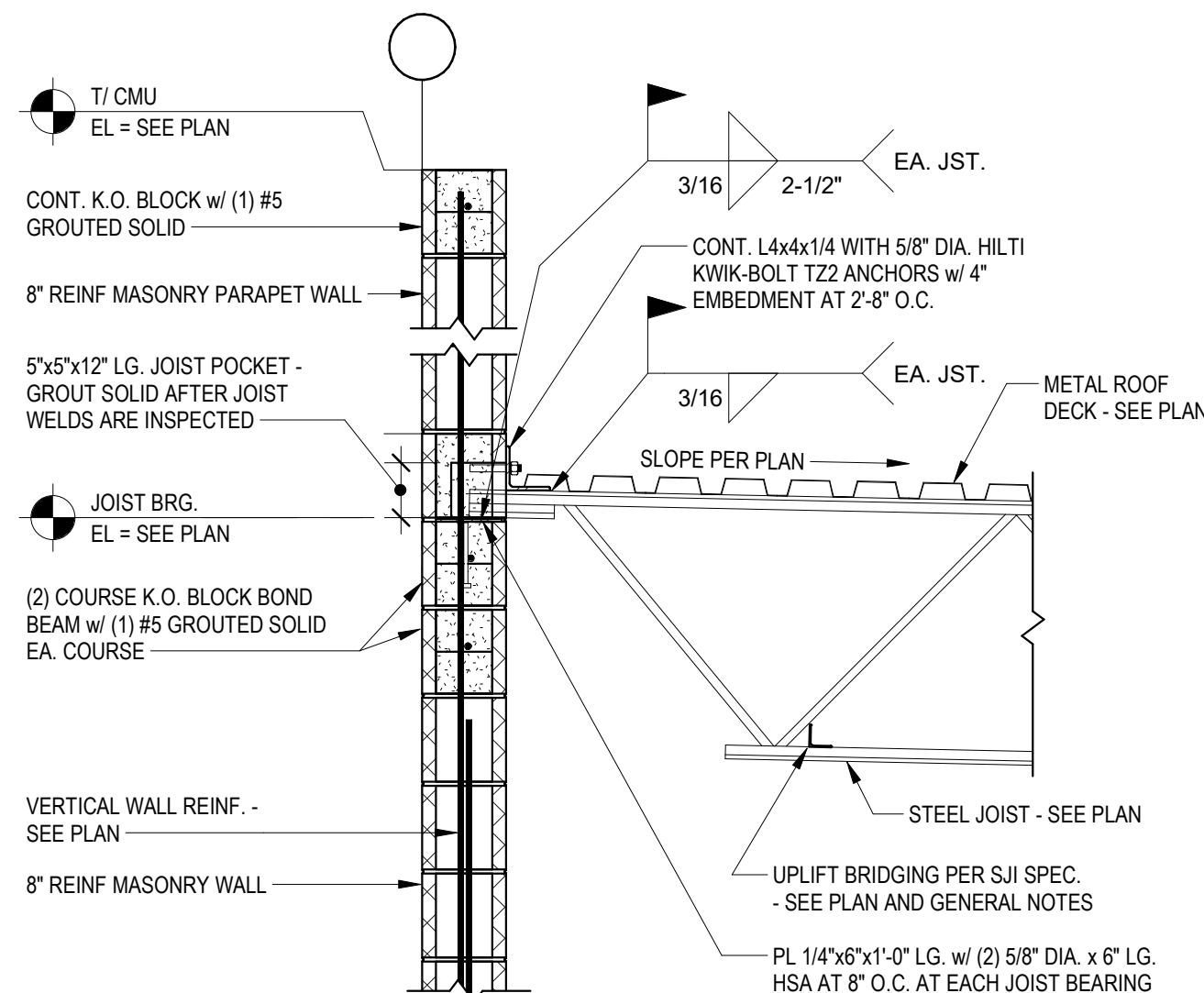
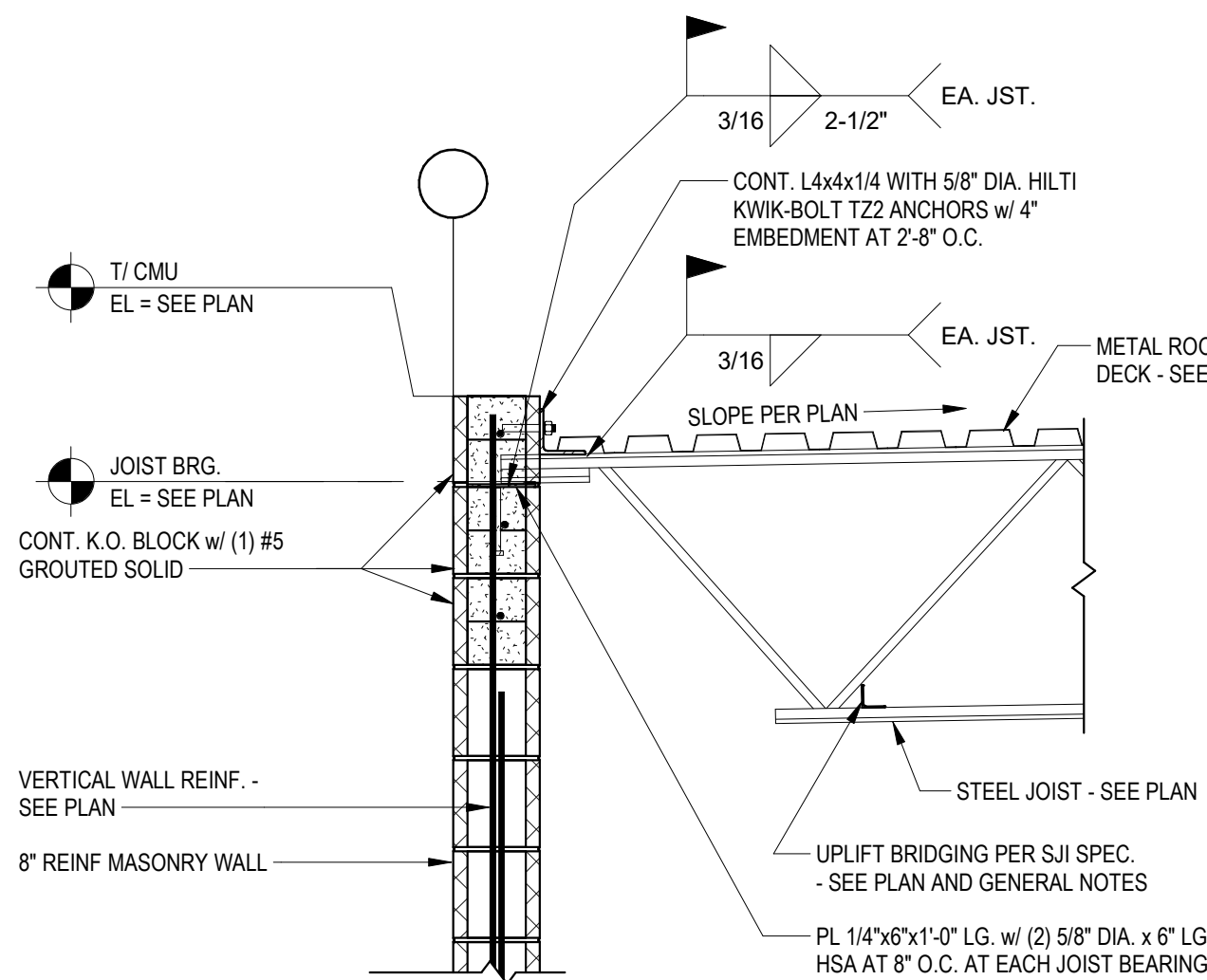
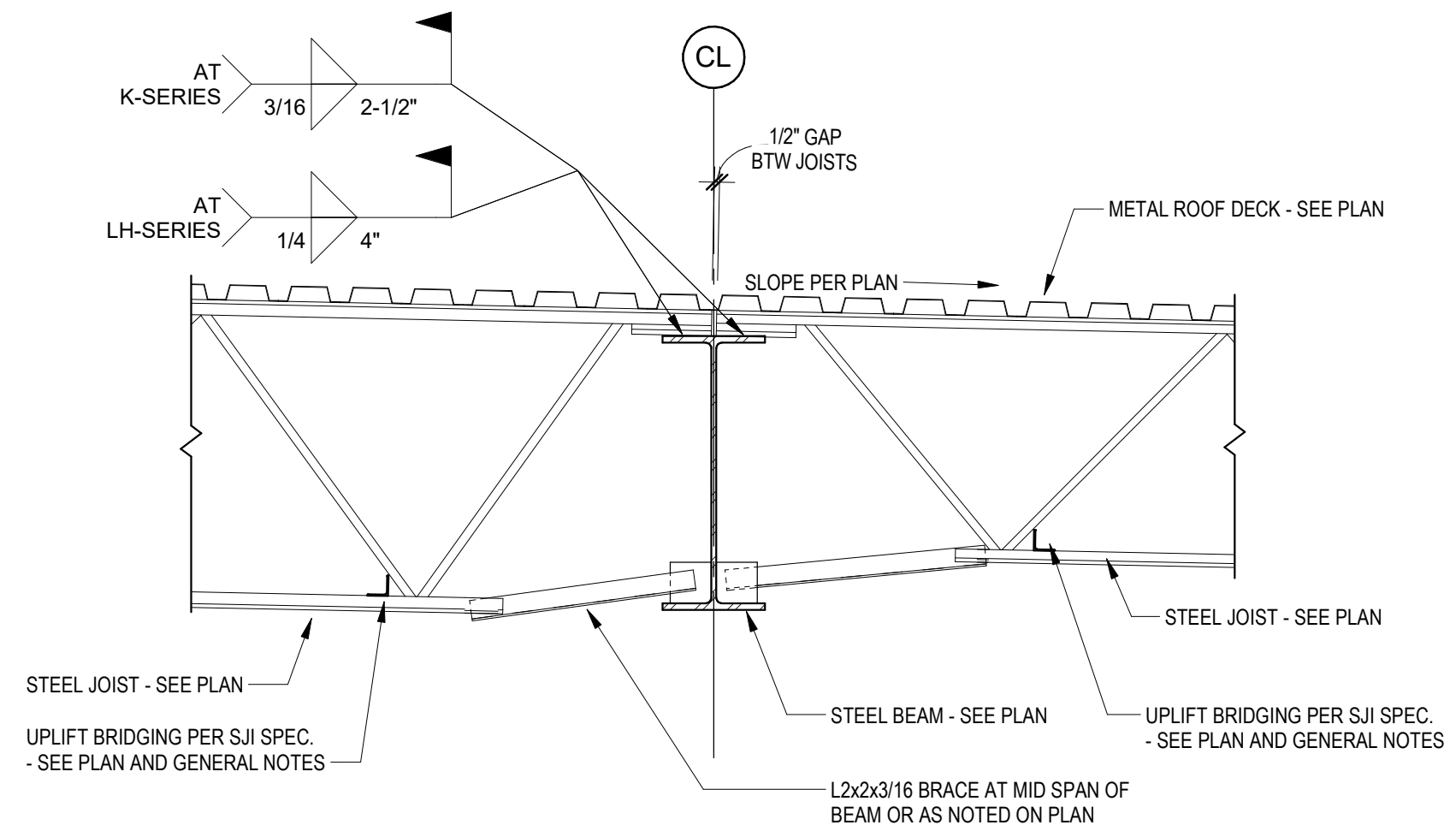
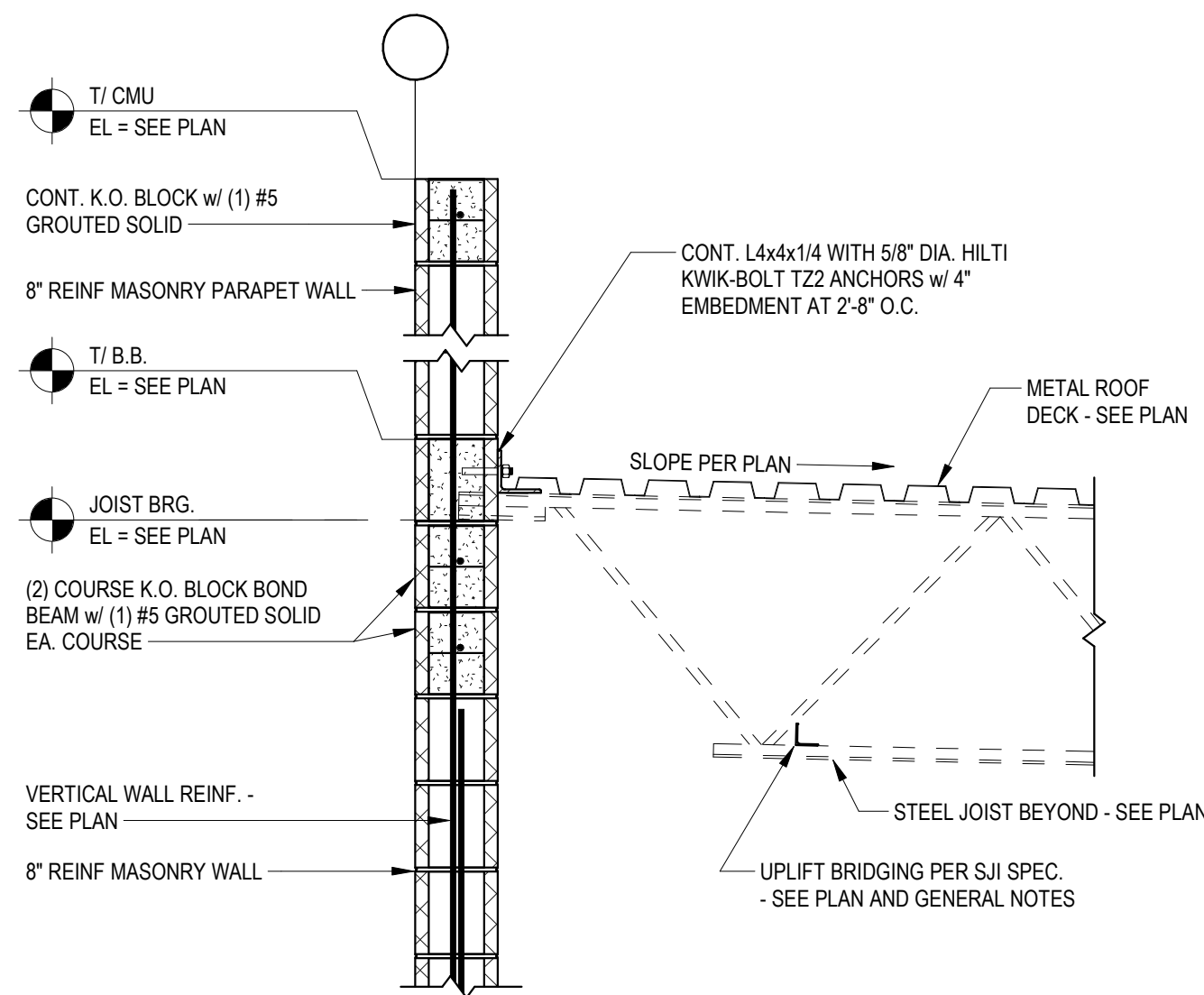
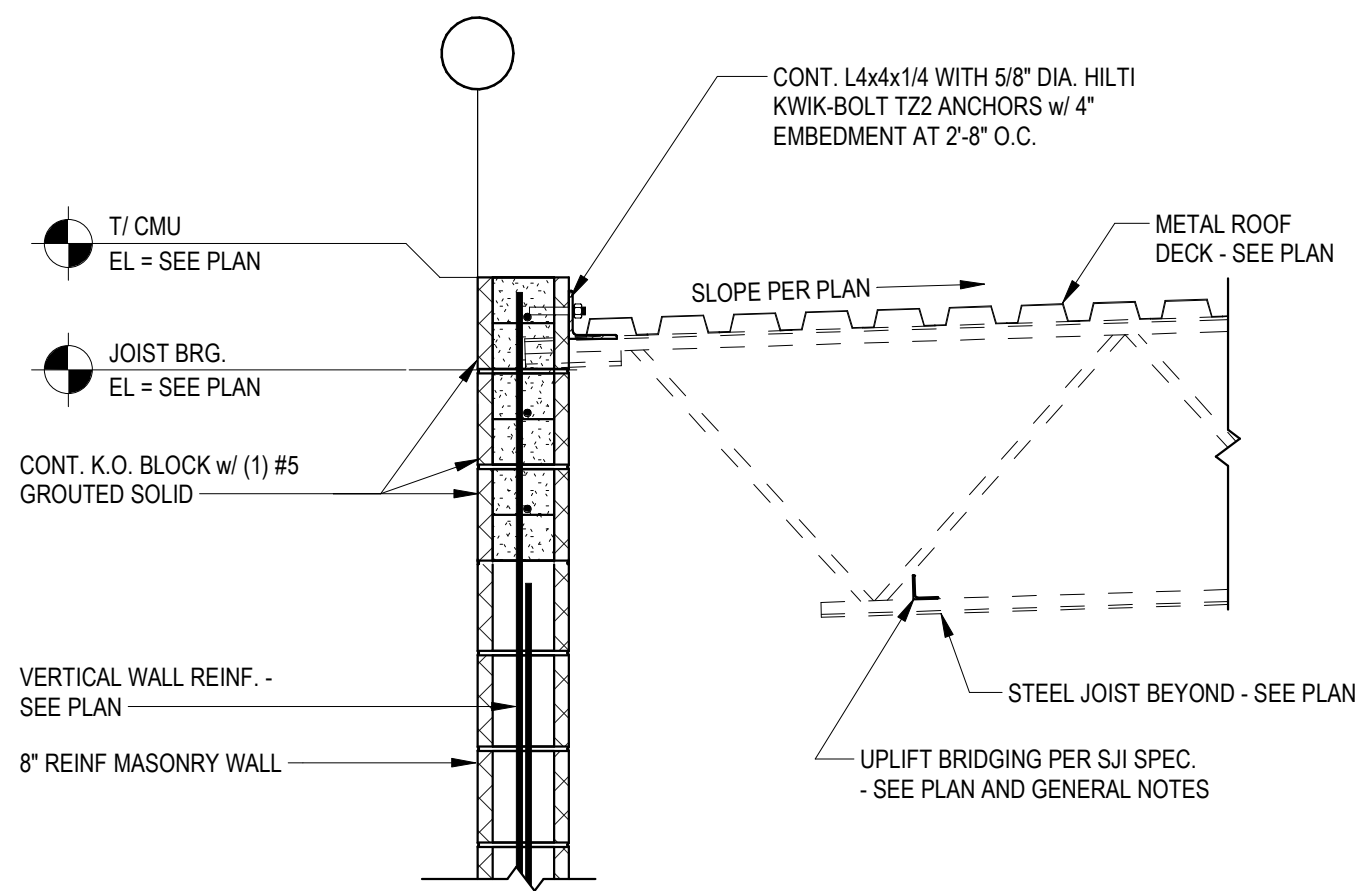
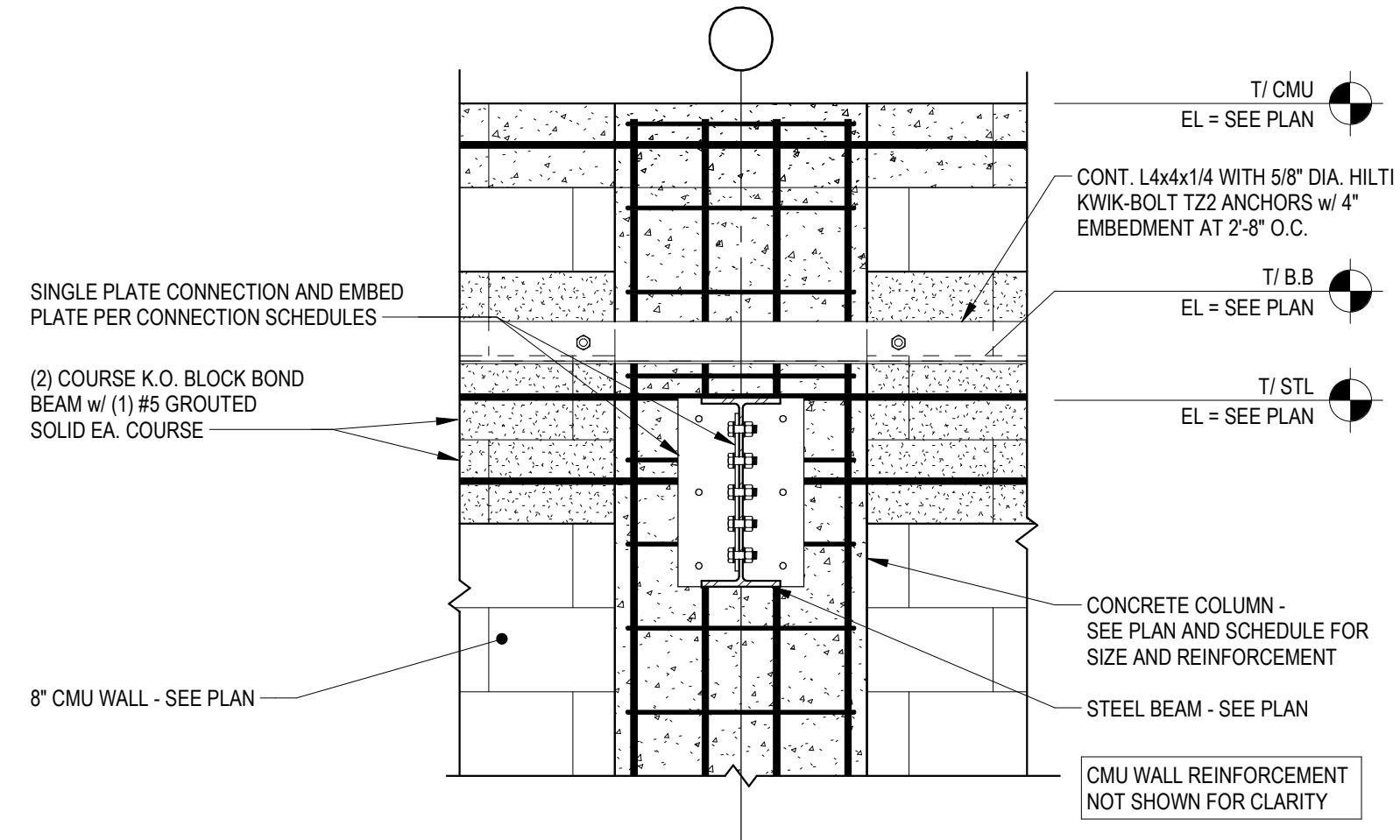
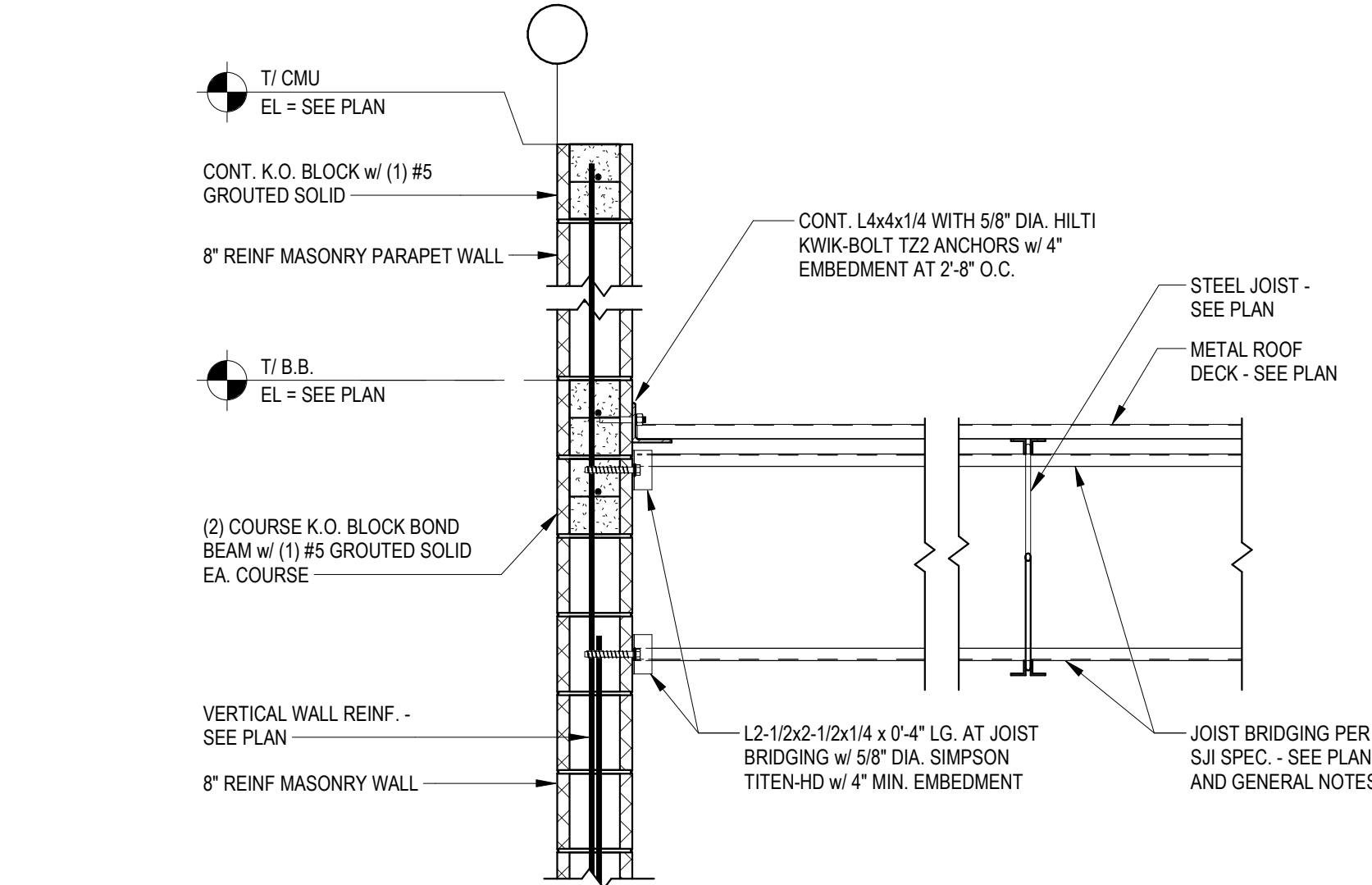
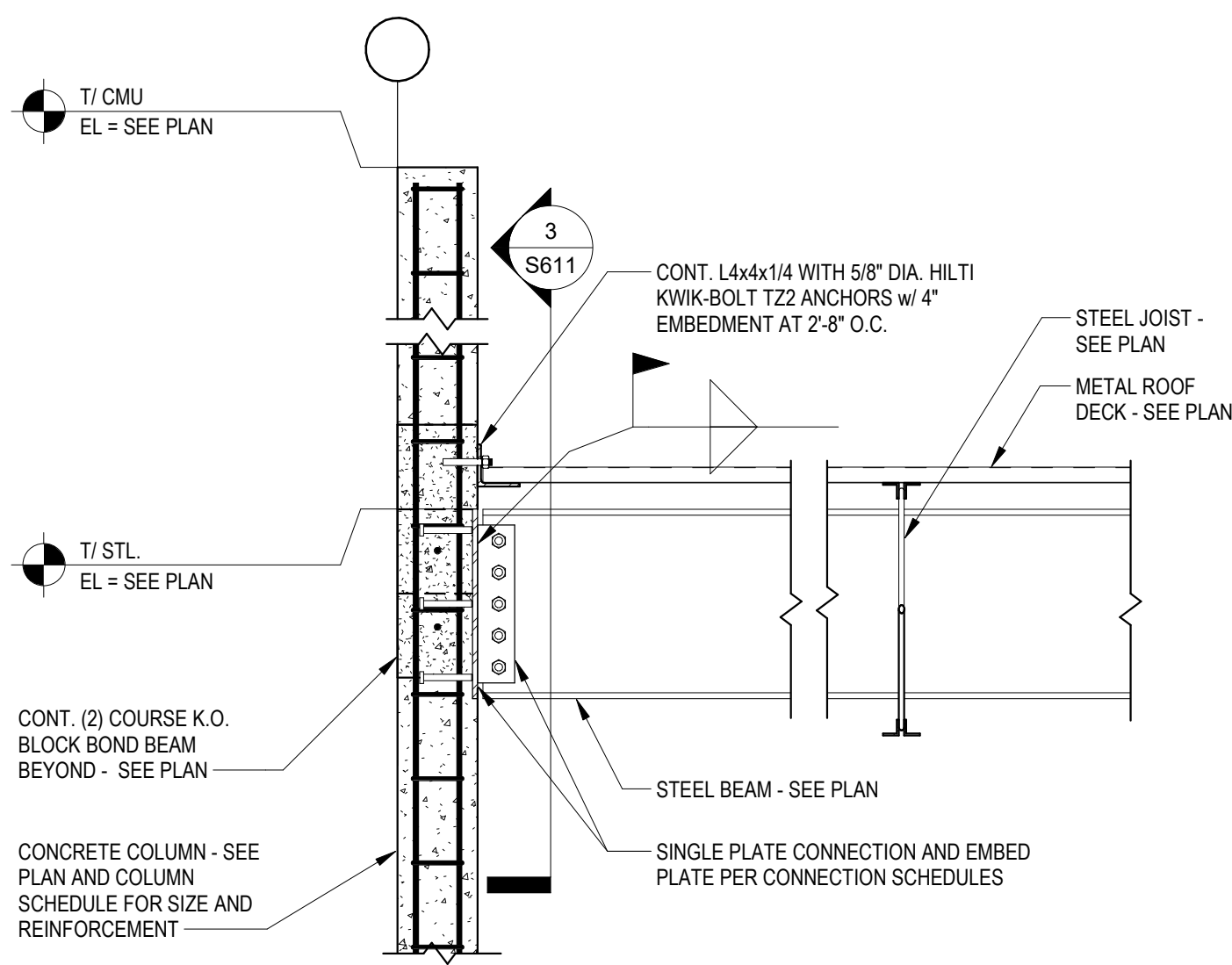
Drawing Number:

S602

Project Number:

24312





Owner:



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Project:

**PROVIDENCE  
OFFICE  
BUILDING  
1**  
**US HWY 17-92 AND  
KINNEY HARMON  
ROAD  
LOUGHMAN, FL 33896**

Scope Drawings:

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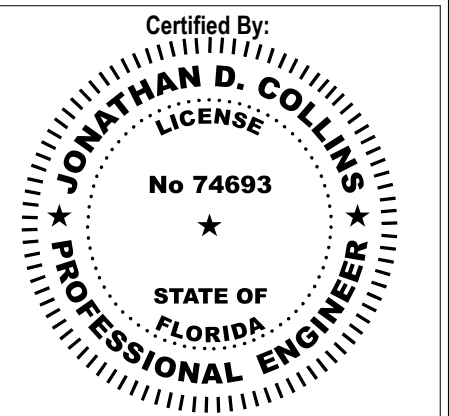
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

Drawing Title:

**ROOF  
FRAMING  
DETAILS &  
SECTIONS**

Revisions:

Issue Date: 02/14/25  
Drawn By: AFR  
Checked By: JDC



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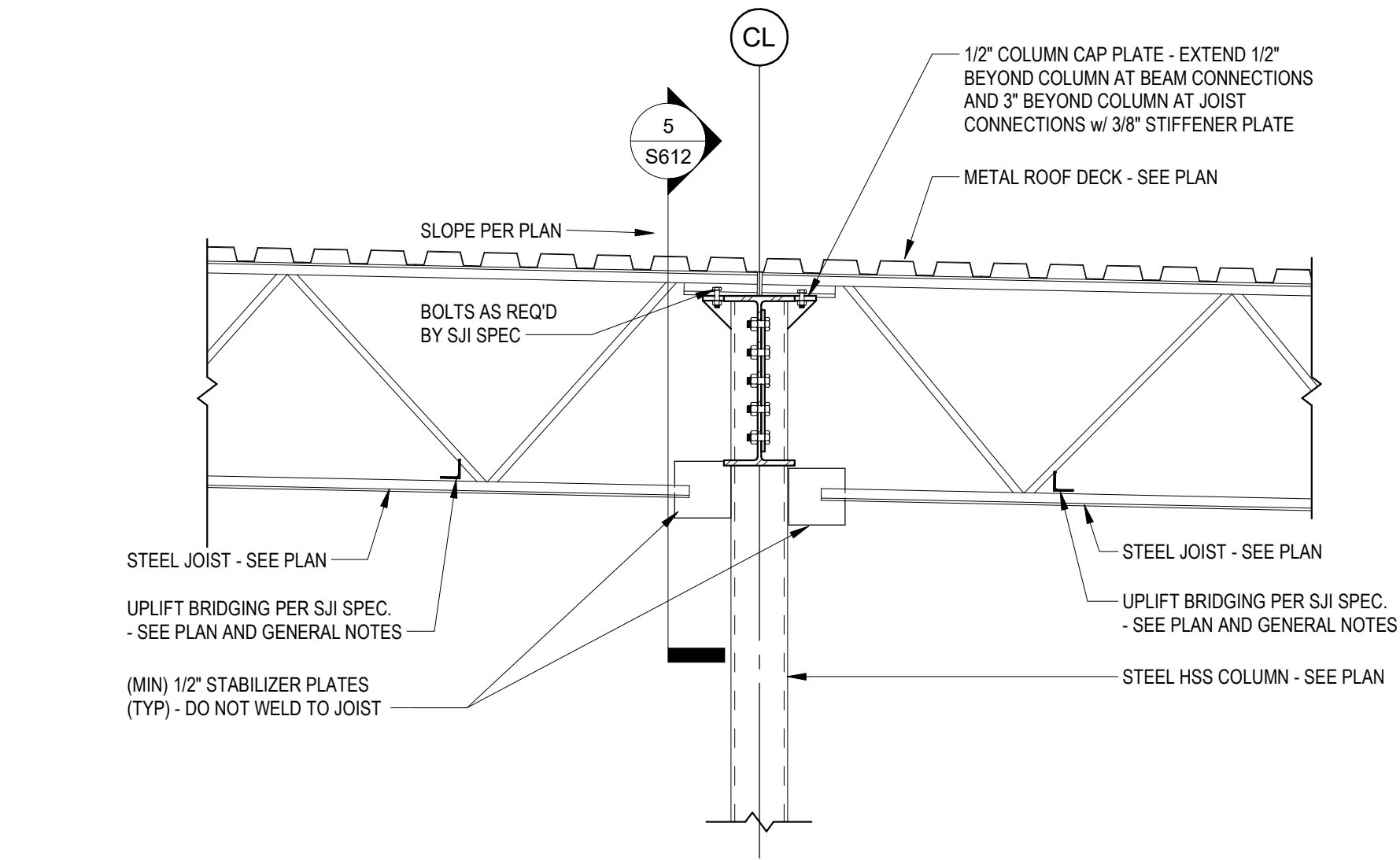
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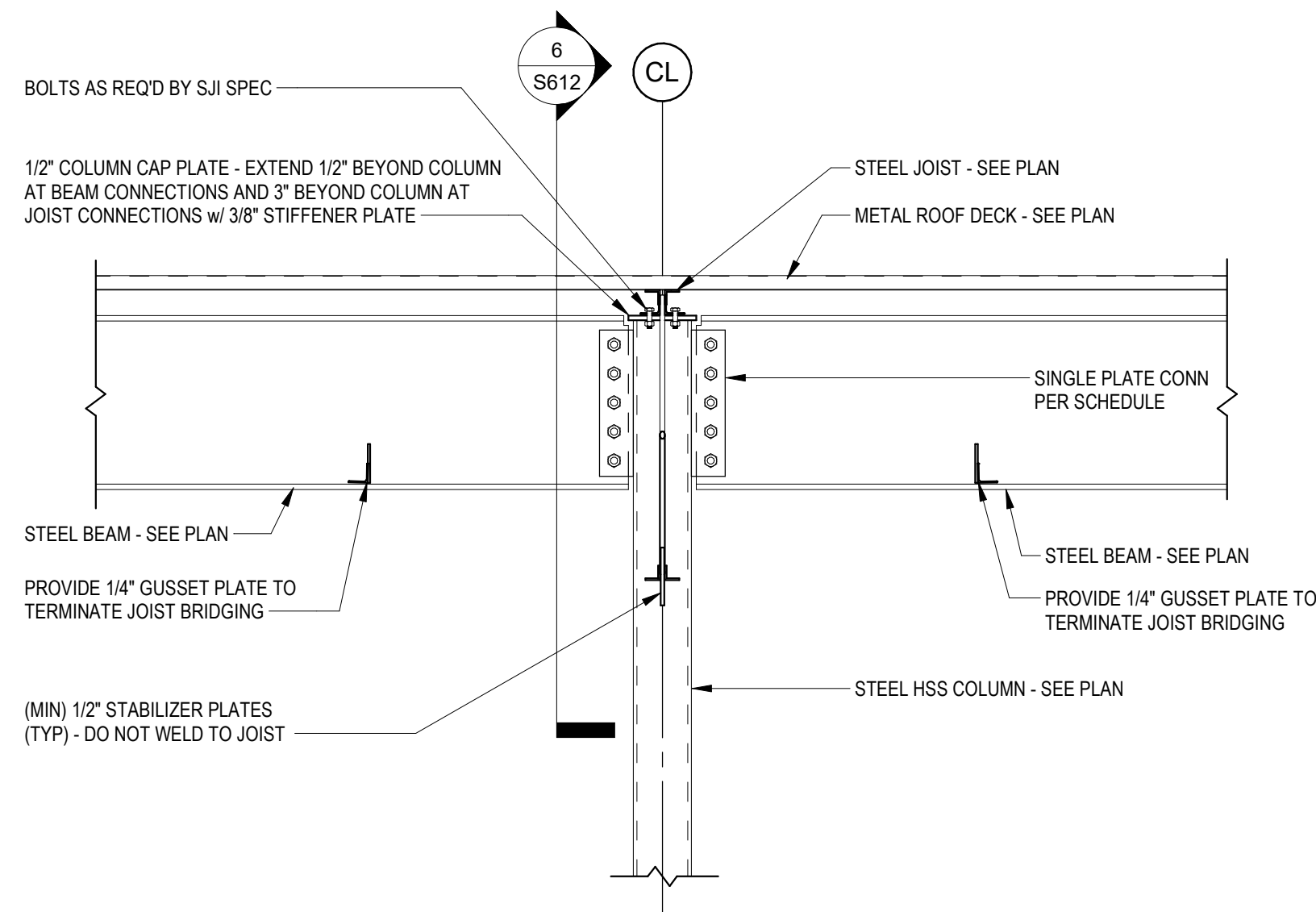
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Project Number:

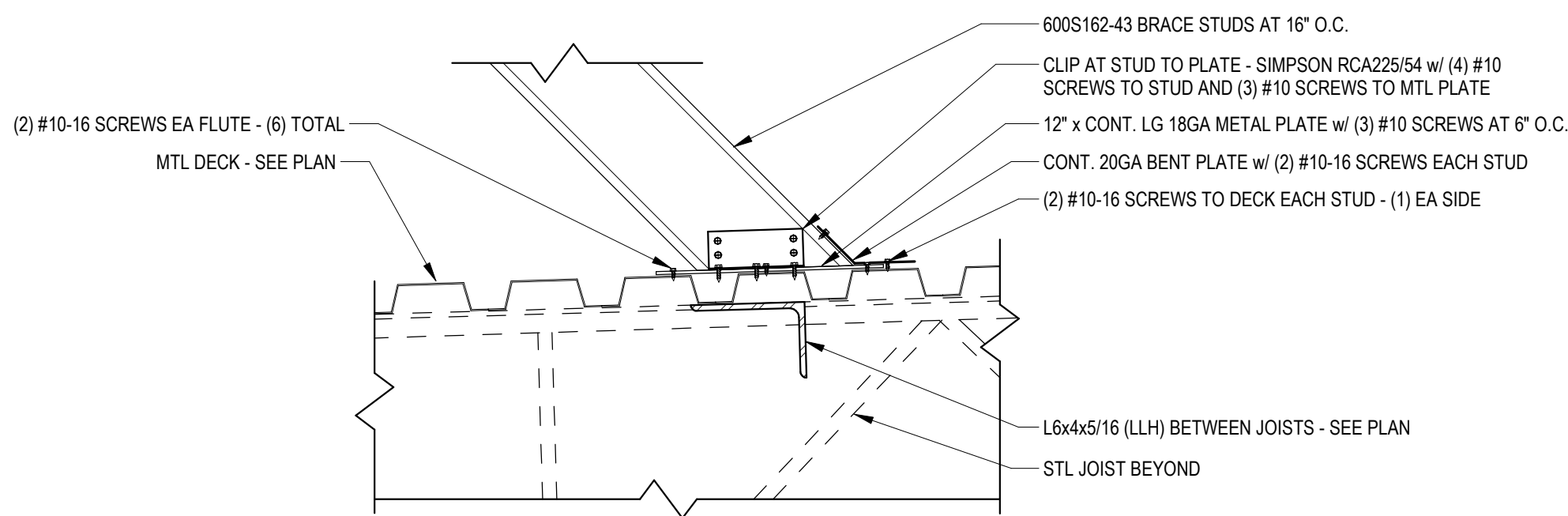
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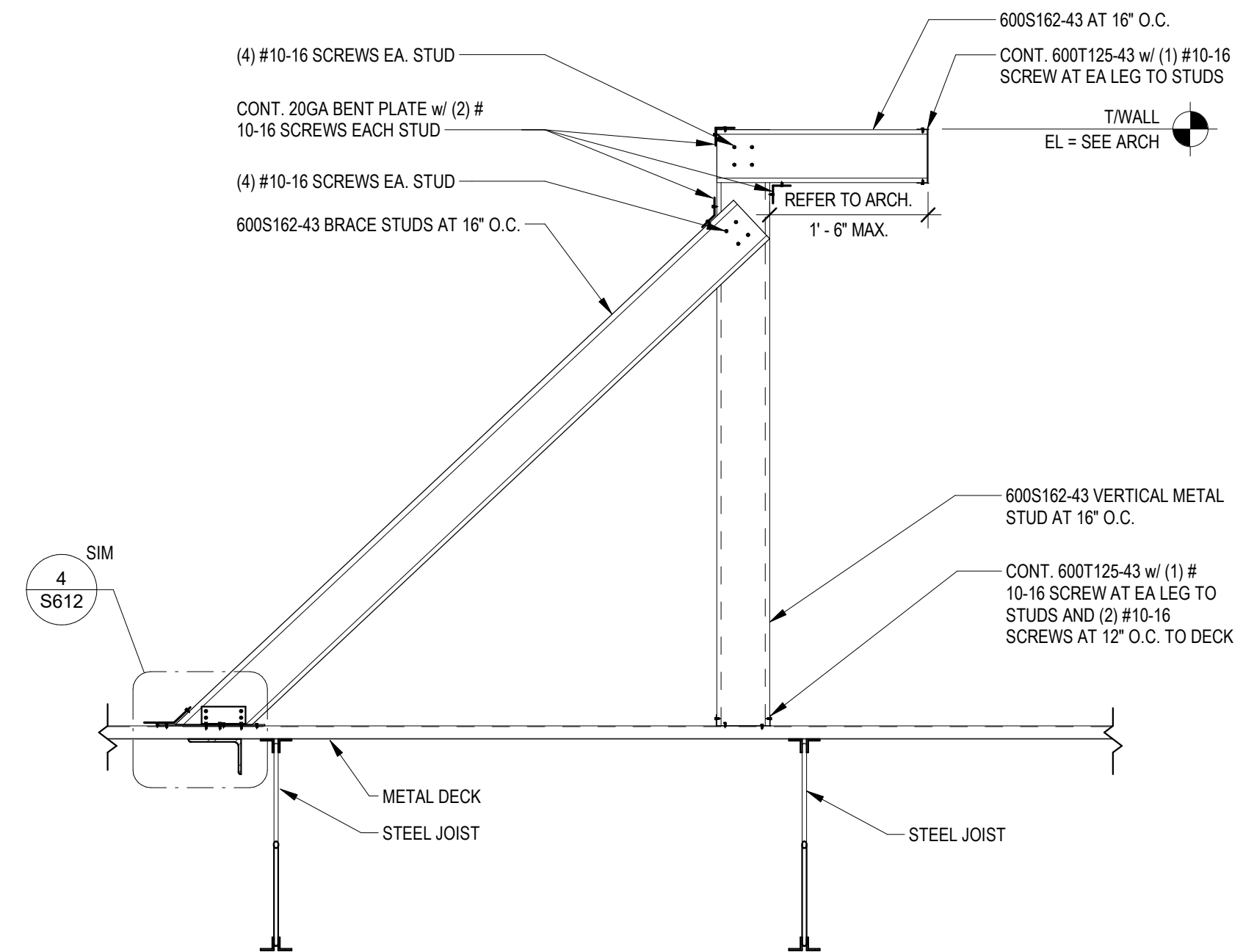
**6 TYPICAL BEAM AND JOIST SECTION AT COLUMN**  
S612 3/4" = 1'-0"



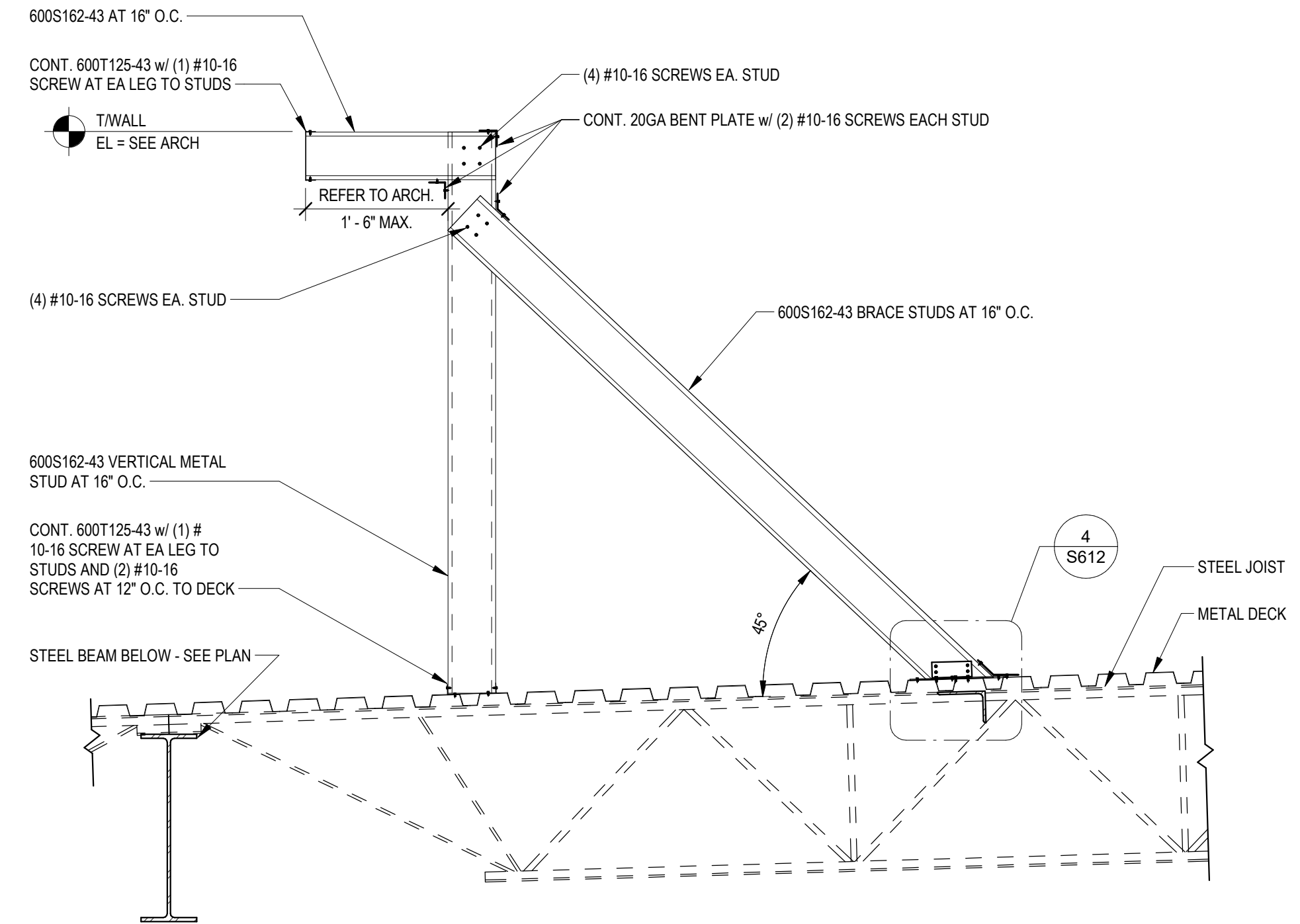
**5 TYPICAL JOIST AND BEAM SECTION AT COLUMN**  
S612 3/4" = 1'-0"



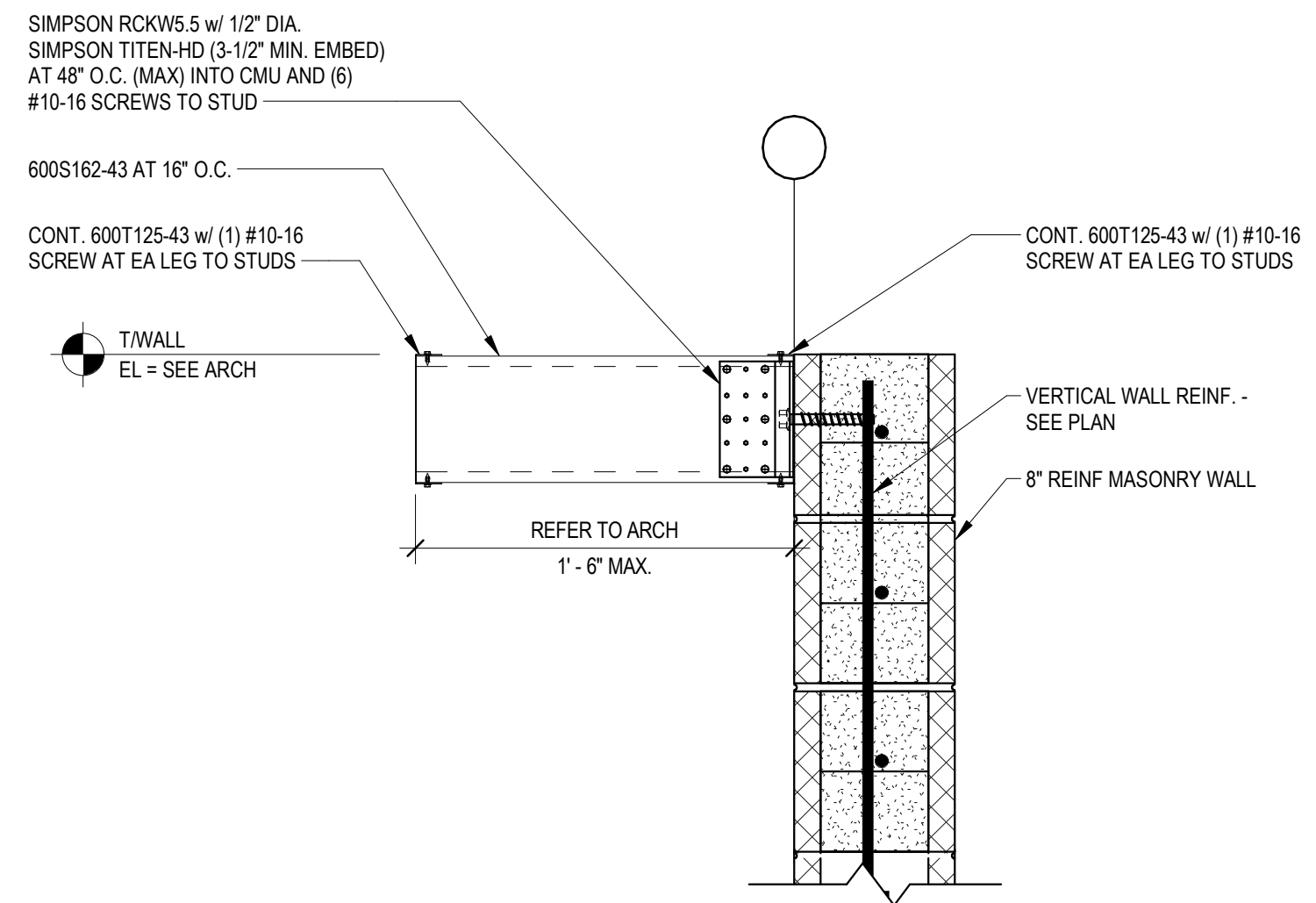
**4 PARAPET DETAIL**  
S612 1 1/2" = 1'-0"



**3 PARAPET DETAIL**  
S612 3/4" = 1'-0"



**2 PARAPET DETAIL**  
S612 3/4" = 1'-0"



**1 TYPICAL CFS STUD FRAMING AT TOP OF PARAPET**  
S612 1 1/2" = 1'-0"

Owner:



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**US HWY 17-92 AND  
KINNEY HARMON  
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LOUGHMAN, FL 33896**

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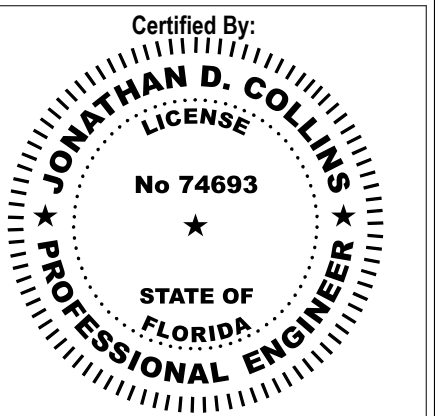
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**Drawing Title:**

**ROOF  
FRAMING  
DETAILS &  
SECTIONS**

**Revisions:**

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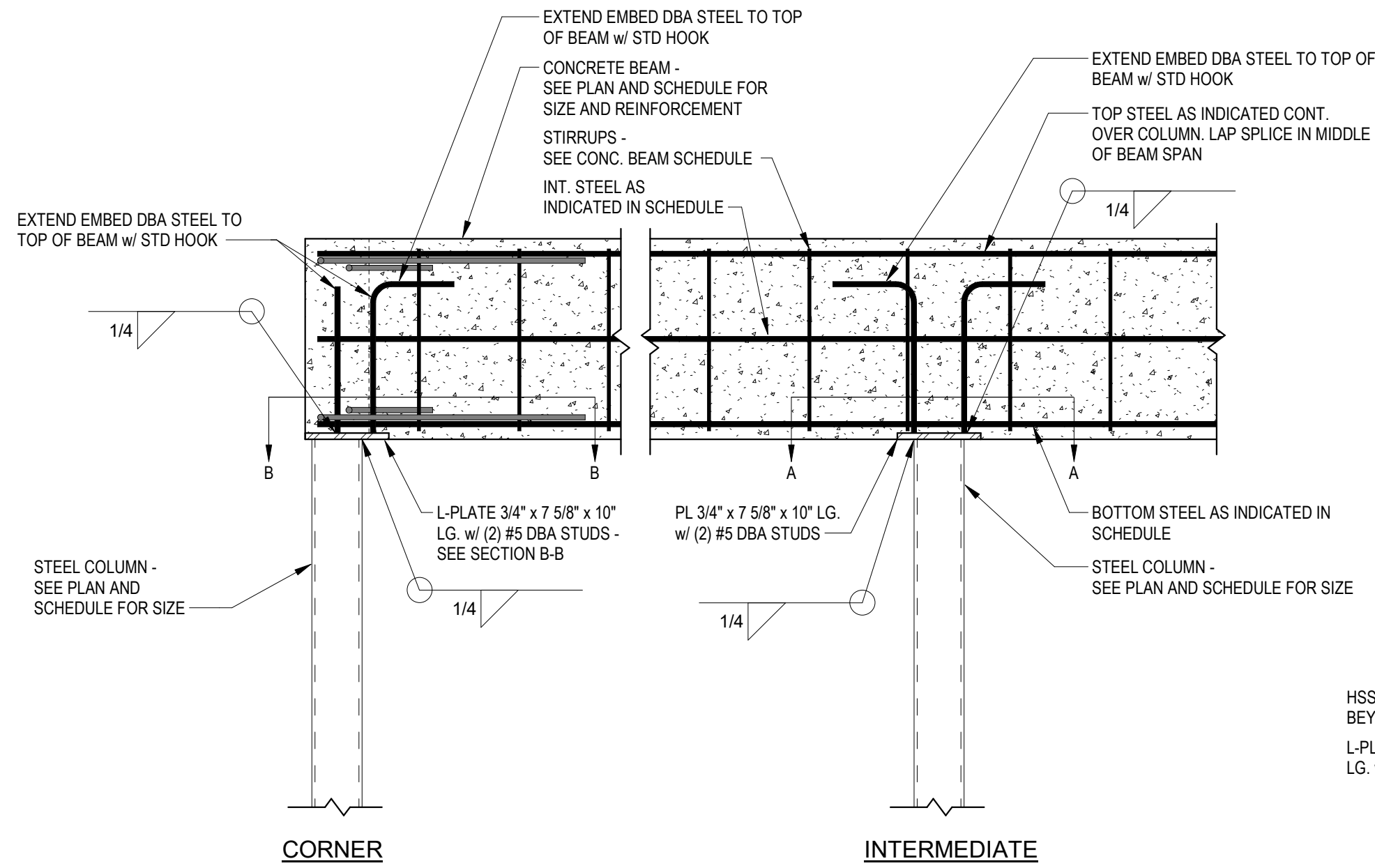
**Drawing Number:**

**S612**

**Project Number:**

**24312**





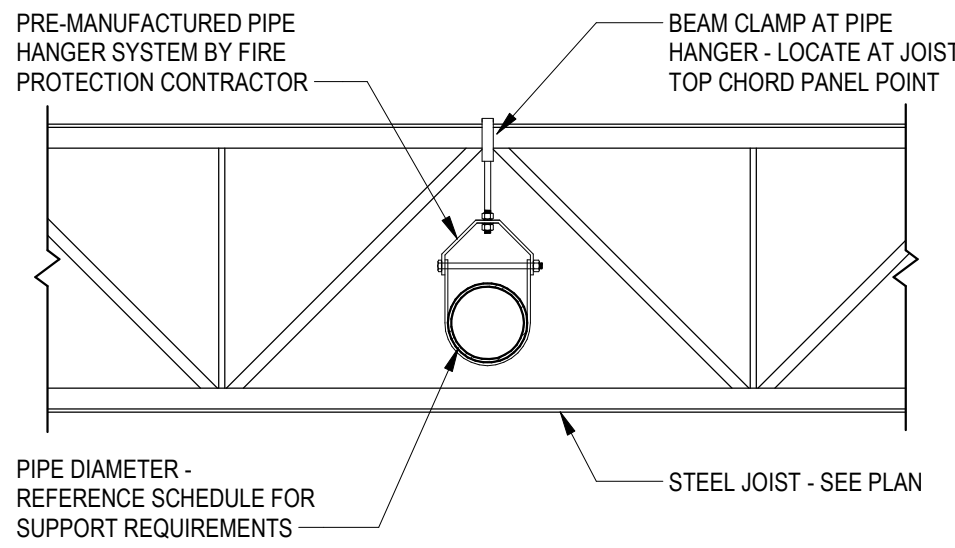
**6 CONCRETE BEAM TO STEEL COLUMN DETAIL**  
S613 3/4" = 1'-0"

WATER PIPE SUPPORT SCHEDULE					
PIPE NOMINAL DIA. (IN.)	PIPE WEIGHT (LB/FT)	PARALLEL PIPE MAX SUPPORT SPACING (FT)	CONCENTRATED LOAD ON SUPPORT (LB)	PERPENDICULAR PIPE MAX SUPPORT SPACING (FT)	CONCENTRATED LOAD ON SUPPORT (LB)
2 1/2"	8.0	12	96	12	96
3"	11.0	12	132	12	132
4"	17.0	8	136	12	204
6"	32.0	12 *	192 *	6	192
8"	51.0	12 *	306 *	6	306

**NOTES:**

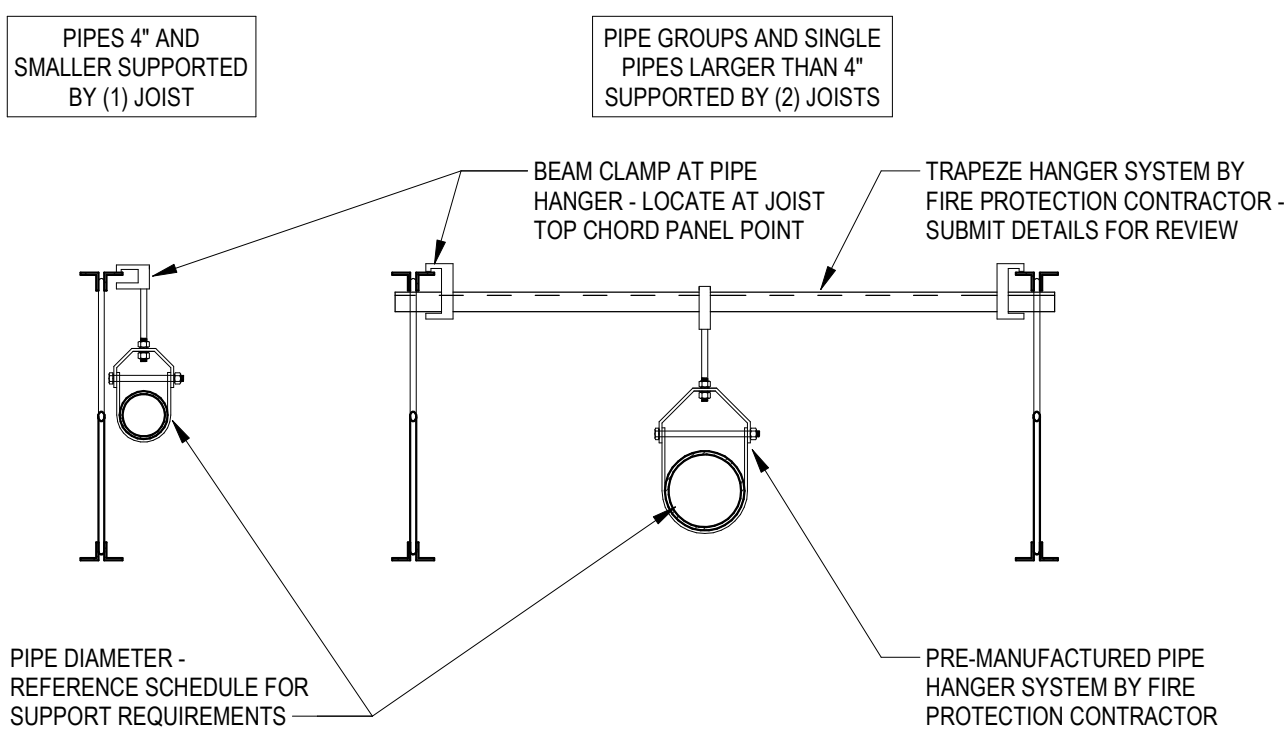
- PIPES IN TABLE ARE ASSUMED TO BE SCHEDULE 40 (OR STANDARD) ASTM A53 GRADE B STEEL PIPE.
- PIPE WEIGHT PROVIDED INCLUDES WEIGHT OF PIPE + WATER.
- EXACT PIPING LAYOUT IS TO BE PROVIDED BY FIRE PROTECTION SPRINKLER SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE PROPOSED LOCATION OF ALL PIPE RUNS AND INTENDED PIPE SUPPORT DETAILS AND ACCESSORIES.
- (\*) IN SCHEDULE INDICATES PIPES RUNNING PARALLEL WITH JOISTS WHERE PIPE SUPPORTS MUST BE DISTRIBUTED ACROSS (2) JOISTS. LOAD PROVIDED IS THE EXPECTED CONCENTRATED LOAD ON EACH JOIST.
- ANY PROPOSED PIPING LARGER THAN 8" NOMINAL DIAMETER MUST BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER OF RECORD WITH PROPOSED PIPE SUPPORT DETAILS AND ROUTING.
- ALL PIPING SHALL BE INSTALLED SO THAT ALL PIPES, PIPE HANGERS, ETC. ARE LOCATED ABOVE THE BOTTOM OF THE ROOF FRAMING MEMBERS.

PIPES INSTALLED PERPENDICULAR TO ROOF JOIST FRAMING

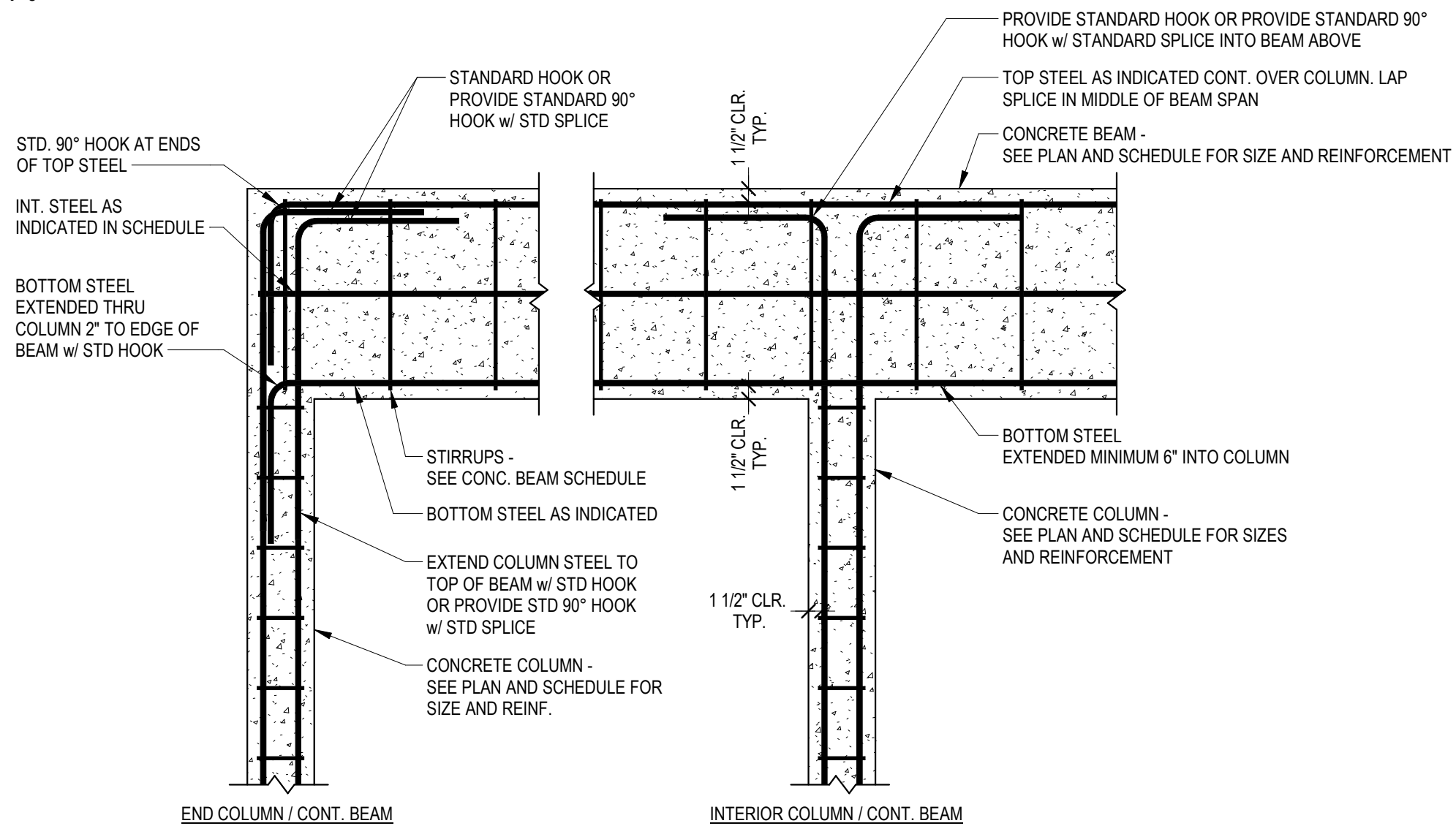


NOTE:  
FOR 12 FT MAXIMUM SUPPORT SPACING, PROVIDE SUPPORT AT EVERY SECOND JOIST.  
FOR 6 FT MAXIMUM SUPPORT SPACING, PROVIDE SUPPORT AT EVERY JOIST.

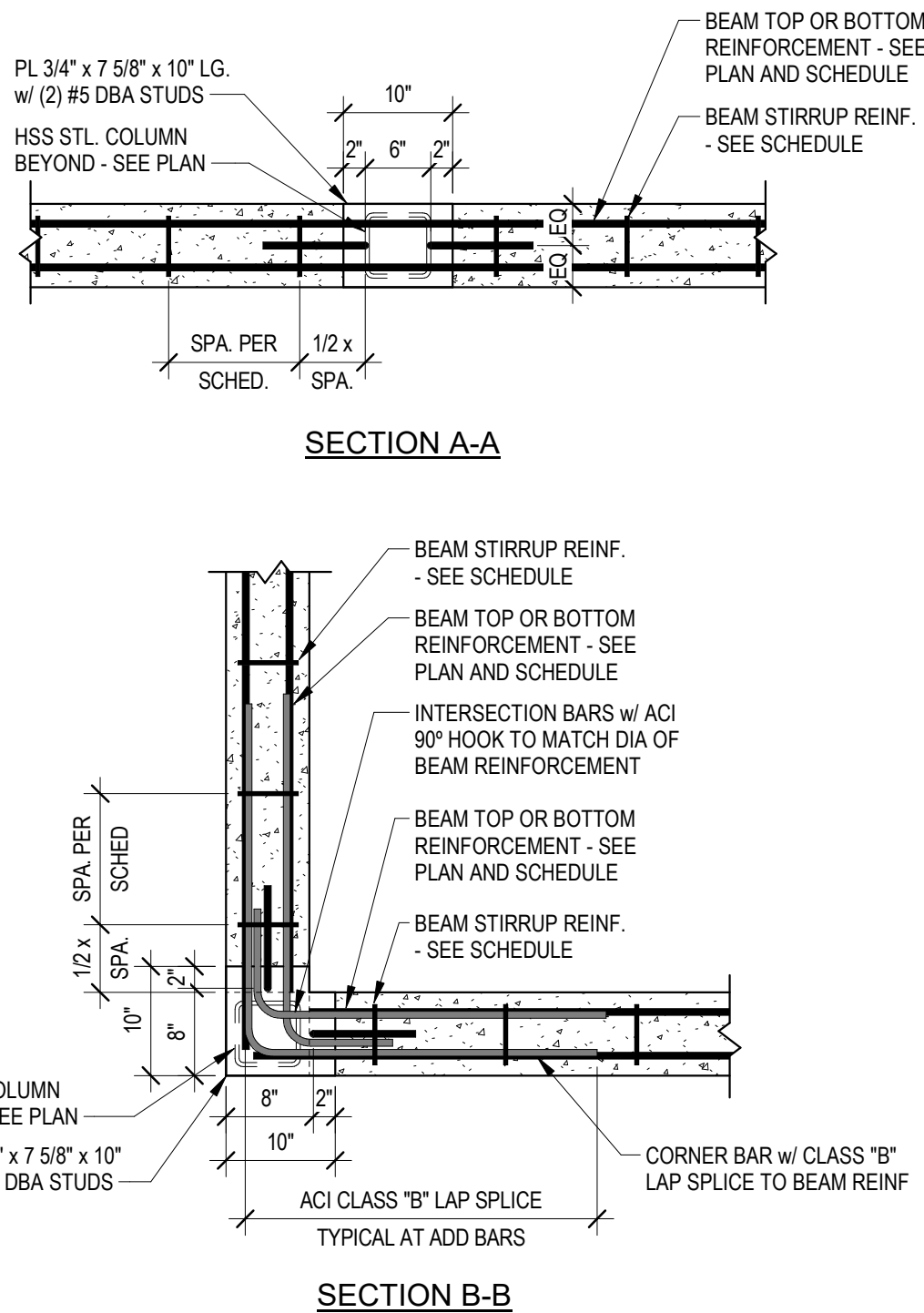
PIPES INSTALLED PARALLEL TO ROOF JOIST FRAMING



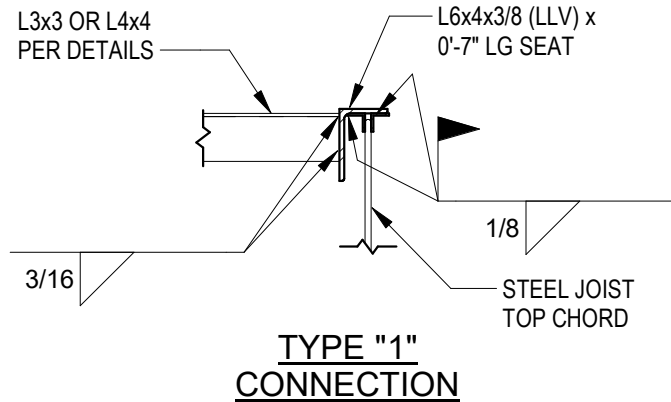
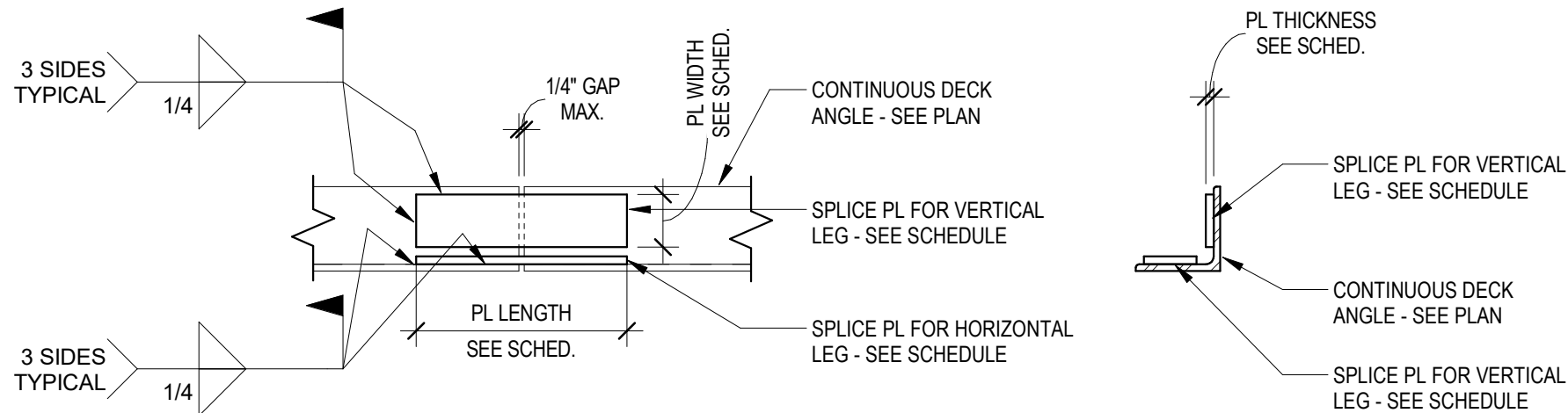
**5 WATER PIPE SUPPORT SCHEDULE AND DETAILS**  
S613 3/4" = 1'-0"



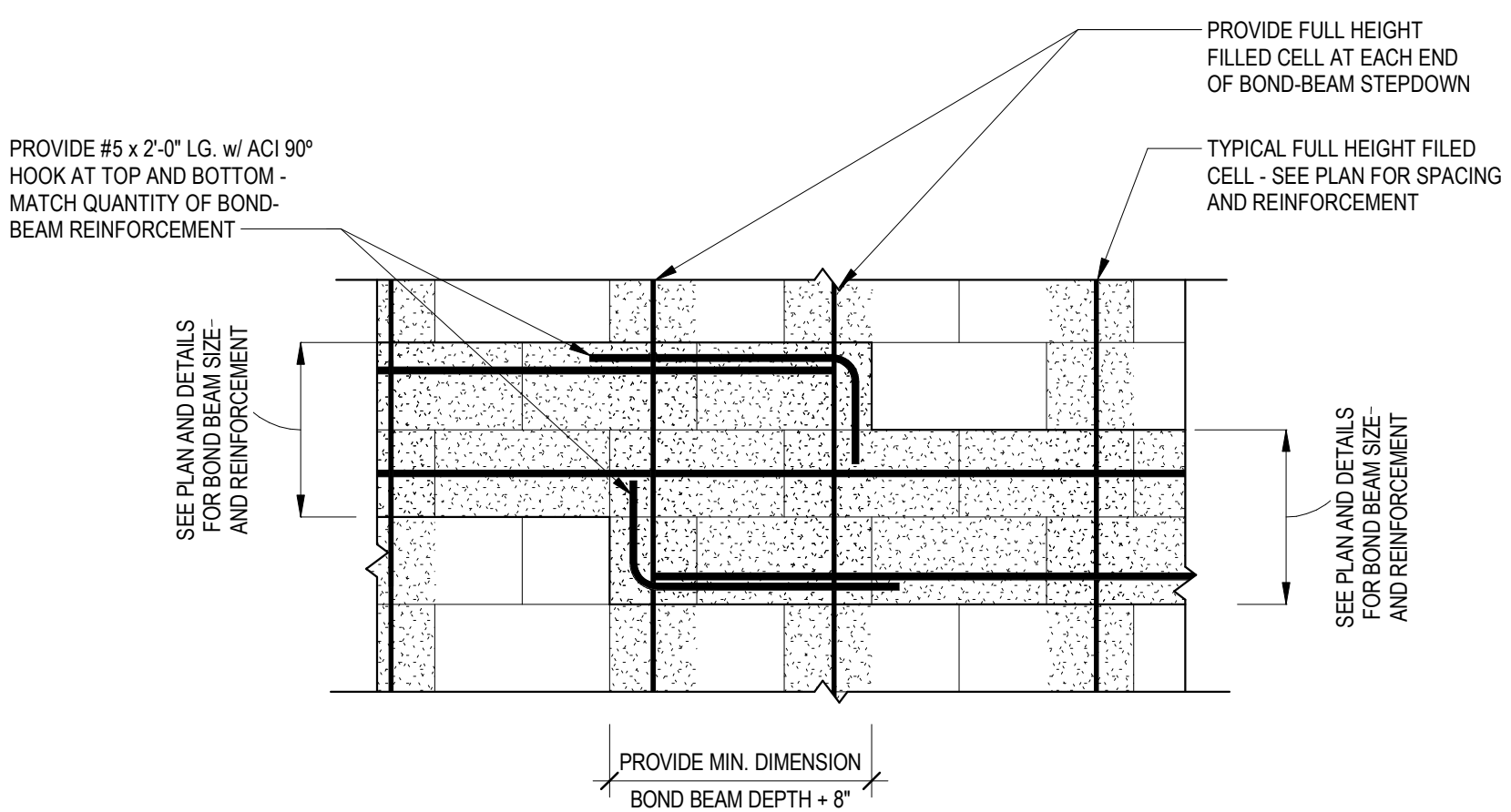
**4 TYPICAL CONCRETE BEAM TO CONCRETE COLUMN REINFO. DETAIL**  
S613 3/4" = 1'-0"



**3 TYPICAL DECK ANGLE SPLICE DETAIL**  
S613 1 1/2" = 1'-0"



**2 TYP SUPPORT ANGLE CONNECTION TO JOIST**  
S613 3/4" = 1'-0"



**1 TYPICAL STEP IN MASONRY BOND BEAM**  
S613 3/4" = 1'-0"

Owner:

**4**

ARCHITECTURE

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Project:

**PROVIDENCE  
OFFICE  
BUILDING  
1**

**US HWY 17-92 AND  
KINNEY HARMON  
ROAD  
LOUGHMAN, FL 33896**

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Drawing Title:

**ROOF  
FRAMING  
DETAILS &  
SECTIONS**

Revisions:


Issue Date: 02/14/25

Drawn By: AFR

Checked By: JDC

Certified By: JONATHAN D. COLLINS

LICENSE No 74693

STATE OF FLORIDA

PROFESSIONAL ENGINEER

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**S613**

Project Number:

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