$\mathbb{B}AIA^{\circ}$ Document G710^{$\circ\circ} – 2017$ </sup>

Architect's Supplemental Instructions

PROJECT: (name and address)
Wilma P. Mankiller Health Center
Expansion
Stilwell, OK

CONTRACT INFORMATION: Contract For: CMAR

Date:

OWNER: (name and address) Cherokee Nation Property Management, LLC

ARCHITECT: (name and address) James R Childers Architect Inc.

ASI INFORMATION: ASI Number: Bid Package 01 - ASI 001

Date: 01/10/20

CONTRACTOR: (name and address) M Ross Inc

The Contractor shall carry out the Work in accordance with the following supplemental instructions without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

(Insert a detailed description of the Architect's supplemental instructions and, if applicable, attach or reference specific exhibits.)

See attached narrative from Chavez Grieves

ISSUED BY THE ARCHITECT:

James R Childers Architect Inc. ARCHITECT (Firm_name)

Call SIGNATURE

Breck Childers PRINTED NAME AND TITLE

01/10/20 DATE

1

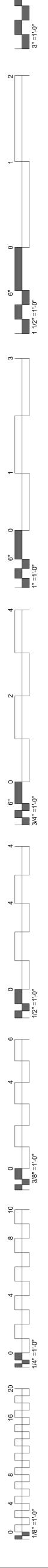
Bid Package 01- ASI 01 – Wilma P. Mankiller Health Center Expansion

Chavez-Grieves would like to incorporate the following revisions into the drawings for the above referenced project.

<u>Sheet</u>	Description
S2.01	SidePlate connection designations updated for elevations A4, A5, and
	C4.
S8.01	SidePlate information updated.
S8.02	SidePlate information updated.
S8.04	SidePlate information updated.
S8.06	SidePlate information updated.
S8.07	SidePlate information and sheet title updated.
S8.08	Sheet added.

WILMA P. MANKILLER HEALTH CENTER EXPANSION

INDEX OF DRAWINGS - BID PACKAGE 01										
SHEET NUMBER	SHEET NAME	11-01-19 - BID PACKAGE 01	11-22-19 - BID PACKAGE 01 - ADDENDUM 01	12-10-19 - BID PACKAGE 01 - ADDENDUM 02	01-10-20 - BID PACKAGE 01 - ASI 01					
GENERAL										
GENERAL G0.01	COVER / INDEX									
CIVIL		-	1							
C002	GENERAL NOTES				_					
CS100	EXISTING SITE PLAN				<u> </u>					
CS101 CS102	DEMOLITION PLAN DEMOLITION PLAN				<u> </u>					
CS102 CE100	EROSION CONTROL SITE PLAN		-		-					
CE100 CE500	EROSION CONTROL STEPLAN EROSION CONTROL DETAILS				<u> </u>					
			I	I	<u>I</u>					
ARCHITECTURAL A0.01	OVERALL BUILDING DEMOLITION PLAN									
STRUCTURA										
STRUCTURAL S0.01	ABBREVIATIONS AND LEGENDS				1					
S0.01	GENERAL STRUCTURAL NOTES									
S0.03	GENERAL STRUCTURAL NOTES AND SPECIAL INSPECTIONS									
SD0.01	DEMOLITION GENERAL STRUCTURAL NOTES									
SD1.01	DEMOLITION PLANS -SECTOR 1									
SD2.01	DEMOLITION SECTIONS									
S1.00	OVERALL PLAN - FOUNDATION									
S1.01	FOUNDATION PLAN SECTOR 1									
S1.02	FOUNDATION PLAN SECTOR 2									
S1.10	OVERALL PLAN - FLOOR FRAMING									
S1.11	FLOOR FRAMING PLAN - SECTOR 1				<u> </u>					
S1.12	FLOOR FRAMING PLAN - SECTOR 2									
S1.13 S1.20	LOW ROOF FRAMING PLAN OVERALL PLAN - ROOF FRAMING									
S1.20 S1.21	ROOF FRAMING PLAN - SECTOR 1									
S1.22	ROOF FRAMING PLAN - SECTOR 2									
S2.01	MOMENT FRAME ELEVATIONS									
S2.02	MOMENT FRAME AND BRACED FRAME ELEVATIONS									
S3.01	WALL SECTIONS									
S3.02	WALL SECTIONS									
S3.03	WALL SECTIONS									
S3.04	WALL SECTIONS		_							
S3.11	FOUNDATION SECTIONS				_					
S3.12	FOUNDATION SECTIONS									
S3.21 S3.31	FLOOR FRAMING SECTIONS ROOF FRAMING SECTIONS				<u> </u>					
S4.01	ENLARGED PLANS				<u> </u>					
S5.21	MASONRY FRAMING SECTIONS AND DETAILS				<u> </u>					
S5.41	VERTICAL CIRCULATION DETAILS				+					
S5.51	STEEL DETAILS									
S5.52	STEEL DETAILS	Í								
S5.53	STEEL DETAILS									
S5.54	STEEL DETAILS	_								
S6.01	SCHEDULES				_					
S7.11										
S7.21	TYPICAL MASONRY DETAILS				<u> </u>					
S7.31 S7.41	TYPICAL COLD-FORMED DETAILS TYPICAL STEEL DETAILS				<u> </u>					
S7.41 S7.42	TYPICAL STEEL DETAILS				-					
S8.01	SIDEPLATE GENERAL NOTES AND CONSTRUCTION GUIDELINES									
S8.02	SIDEPLATE COLUMN DETAILS, A TYPE									
S8.03	SIDEPLATE COLUMN DETAILS, B TYPE	Í								
S8.04	SIDEPLATE BEAM DETAILS	Í								
S8.05	SIDEPLATE BEAM DETAILS, NARROW	Í								
S8.06	SIDEPLATE FIELD ERECTION DETAILS									
S8.07	SIDEPLATE COORDINATION ITEMS									
S8.08	SIDEPLATE MISCELLANEOUS DETAILS									
ELECTRICAL										
E0.01 Grand total: 56	ELECTRICAL DEMOLITION PLAN				L					
Grand total: 56										



BID PACKAGE 01 (DEMOLITION / STEEL / FOUNDATIONS)



1836 SOUTH BALTIMORE AVE. TULSA, OK 74119 (539) 664-4618

MECHANICAL / ELECTRICAL / PLUMBING ENGINEER



<u>CIVIL ENGINEER</u>



4700 LINCOLN ROAD NE, SUITE 102

ALBUQUERQUE, NM 87109 (505) 344-4080

STRUCTURAL ENGINEER



808 TRAVIS STREET, SUITE 200 HOUSTON, TX 77002 (281) 589-5900

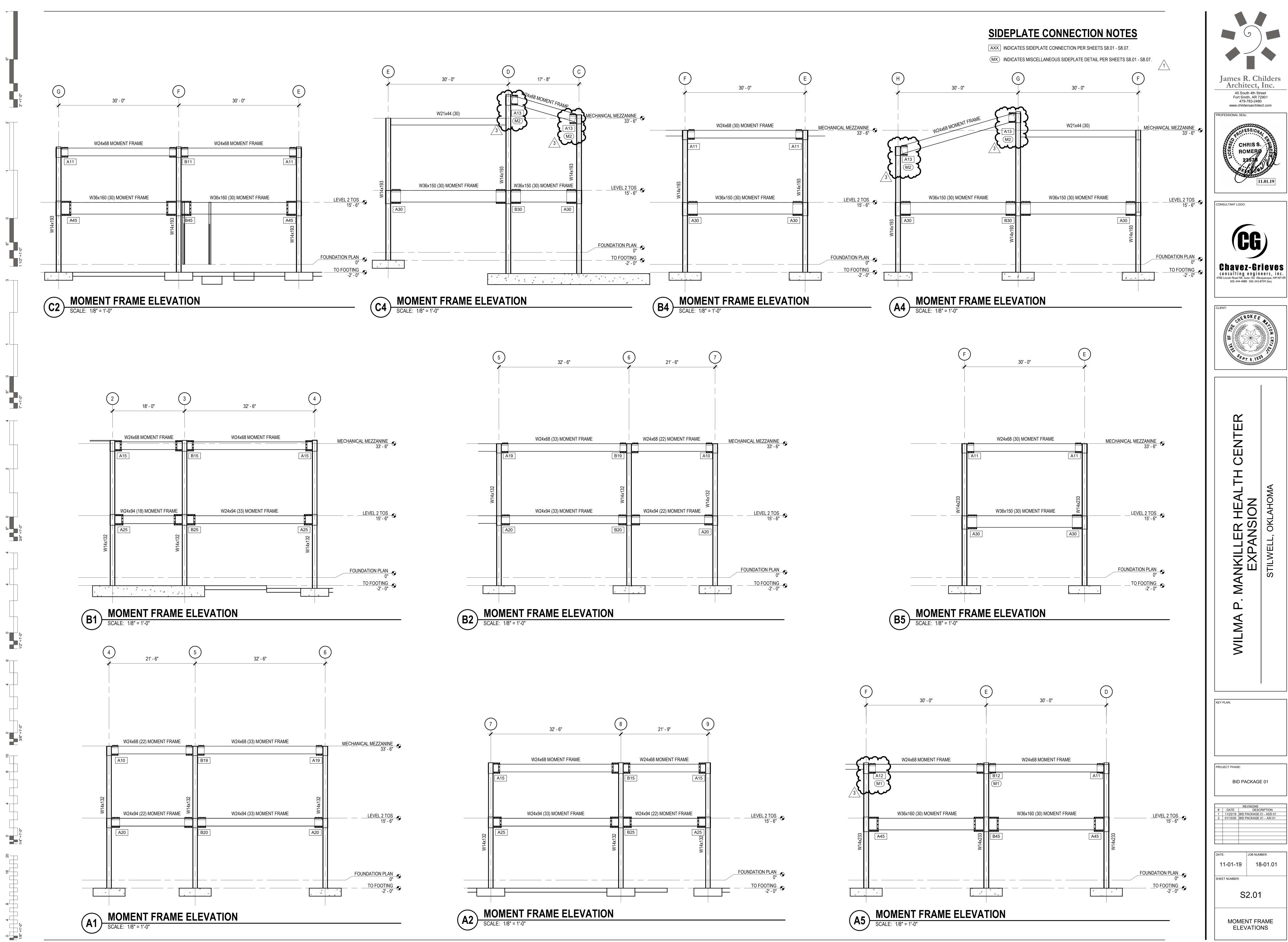
FIRE PROTECTION / LIFE SAFETY



1316 E 35TH PLACE, SUITE 100 TULSA, OK 74105 (918) 382-9120

EQUIPMENT PLANNER







PROJECT	SPECIFIC	INFORMATION

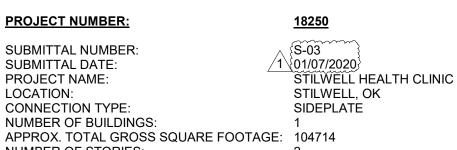
PROJECT NUMBER:

SUBMITTAL NUMBER: SUBMITTAL DATE: PROJECT NAME:

NUMBER OF BUILDINGS:

NUMBER OF STORIES:

LOCATION:



eDATA:

CONNECTION TYPE:

a. THERE MAY BE EDATA AVAILABLE FOR YOUR PROJECT WHICH IS AVAILABLE FOR DOWNLOAD AT WWW.SIDEPLATE.COM. INCLUDE: eSTIMATE FILE IN EXCEL FORMAT FOR USE IN AFFIRMING SIDEPLATE CONNECTION MATERIAL QUANTITIES.

- ComponentXML FILE FOR USE IN ASSISTING DETAILING EFFORTS. b. ESTIMATED NUMBER OF SIDEPLATE JOINTS FOR THIS PROJECT = 54
- c. ESTIMATED NUMBER OF SIDEPLATE JOINTS FOR THIS PROJECT THAT ARE **NOT** SUPPORTED BY eDATA = (10)/1d. MISCELLANEOUS DETAILS, TYPICALLY DESIGNATED BY M#, ARE NOT SUPPORTED.

INSTRUCTIONS TO STEEL FABRICATOR . <u>SIDEPLATE LICENSE FEE</u>:

- a. THE STEEL FABRICATOR'S BID PRICE FOR PROCUREMENT, FABRICATION AND ERECTION OF STRUCTURAL AND MISCELLA SHALL INCLUDE THE SIDEPLATE LICENSE FEE FOR THE PROJECT. EACH PROSPECTIVE STEEL FABRICATOR WHO BIDS THI FORMALLY REQUEST THE SIDEPLATE LICENSE FEE BY ACCESSING THE SIDEPLATE WEBSITE (http://www.sideplate.com). b. UPON THE SUCCESSFUL STEEL FABRICATOR SIGNING A CONTRACT TO FABRICATE STRUCTURAL STEEL FOR THIS PROJECT FABRICATOR SHALL SUBMIT A PURCHASE ORDER (PO) TO SIDEPLATE SYSTEMS, INC. FOR THE TOTAL AMOUNT OF THE SIL
- FEE AND SHALL INCLUDE SAID FEE IN ITS FIRST CONSTRUCTION DRAW. c. THE STEEL FABRICATOR SHALL MAKE PAYMENT OF THE SIDEPLATE LICENSE FEE DIRECTLY TO:
 - SIDEPLATE SYSTEMS, INC. 25909 PALA, SUITE 200 MISSION VIEJO, CA 92691

TEL: 949-238-8900

- SUBMITTALS 1. IN ADDITION TO THE REQUIRED SUBMITTALS SPECIFIED BY THE BALANCE OF THE CONTRACT DOCUMENTS, THE FOLLOWING BE SENT TO SIDEPLATE SYSTEMS, INC. ELECTRONICALLY VIA THE STRUCTURAL ENGINEER OF RECORD FOR THEIR REVIEW A a. QUALITY CONTROL PROGRAM (REQUIRED IF NOT AISC CERTIFIED) b. ONE ELECTRONIC COPY OF ALL STRUCTURAL STEEL DRAWINGS THAT EITHER DIRECTLY PERTAINS TO AND/OR AFFECTS
- FABRICATION OR FIELD ERECTION OF THE SIDEPLATE STEEL FRAME CONNECTION SYSTEM, INCLUDING THE INITIAL SUBM CORRECTED RE-SUBMITTALS OF AFFECTED DRAWINGS. SIDEPLATE SYSTEMS, INC. SHALL BE GIVEN, AS A MINIMUM, THE REVIEW TIME (NOT LESS THAN SEVEN BUSINESS DAYS) AS THE ENGINEER OF RECORD.

MEETINGS 1. PRE-DETAILING MEETING

- a. PRIOR TO THE START OF DETAILING OF THE SHOP DRAWINGS, THE FABRICATION CONTRACTOR SHALL FORMALLY REQUE DETAILING MEETING FROM SIDEPLATE SYSTEMS, INC. THIS MEETING IS TYPICALLY A WEBINAR TO DISCUSS BEST PRACTIC DETAILING OF THE SIDEPLATE CONNECTIONS, AND TO CREATE A PROACTIVE FORUM TO ANSWER ANY QUESTIONS.
- PRE-FABRICATION MEETING a. PRIOR TO THE START OF FABRICATION, THE FABRICATION CONTRACTOR SHALL FORMALLY REQUEST A PRE-FABRICATION SIDEPLATE SYSTEMS, INC. THIS MEETING IS TYPICALLY A WEBINAR TO DISCUSS BEST PRACTICES FOR THE FABRICATION CONNECTIONS, AND TO CREATE A PROACTIVE FORUM TO ANSWER ANY QUESTIONS.
- 3. PRE-ERECTION MEETING a. PRIOR TO THE START OF STEEL ERECTION, THE ERECTION CONTRACTOR SHALL FORMALLY REQUEST A PRE-ERECTION M SIDEPLATE SYSTEMS, INC. THIS MEETING IS TYPICALLY A WEBINAR TO DISCUSS BEST PRACTICES FOR FIELD ERECTION O BEAMS AND COLUMNS, AND TO CREATE A PROACTIVE FORUM TO ANSWER ANY QUESTIONS.

GENERAL

- 1. THE GOVERNING CODES SHALL CONSIST OF ANSI/AWS D1.1-2010 (AWS D1.1), AISC CODE OF STANDARD PRACTICE FOR STEEI BRIDGES (APRIL 14, 2010), 2009 RCSC SPECIFICATIONS FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS, AND ALL API AND JURISDICTIONAL CODES AND PROJECT STANDARDS SPECIFIED IN THE PROJECT SPECIFICATION STRUCTURAL STEEL SE REQUIREMENTS DIFFER BETWEEN SIDEPLATE CONNECTION NOTES, THE GENERAL STRUCTURAL NOTES, AND THE GOVERNIN MORE STRINGENT SECTION CRITERIA SHALL CONTROL.
- 2. ALPHA AND NUMERIC DESIGNATORS {X} & {#} USED HEREIN TO SIMPLIFY THE IDENTIFICATION OF PLATES, ANGLES, AND WELE BELOW: SIDE PLATE FOR UNIAXIAL CONNECTIONS {A}
- BEAM FLANGE COVER PLATE, AS REQUIRED
- VERTICAL SHEAR PLATE OR FLAT BAR, AS REQUIRED {C}
- {D} HORIZONTAL SHEAR PLATE OR FLAT BAR, AS REQUIRED
- VERTICAL ANGLE WELDED TO THE VERTICAL SHEAR PLATE {C}, AS REQUIRED {E}
- VERTICAL SHEAR ELEMENT (VSE) WHICH CONSISTS OF PLATE {C} AND ANGLE {E} MATERIAL, AS REQUIRED {F}
- {G} LONGITUDINAL ANGLE WELDED TO THE OUTSIDE FACE OF SIDE PLATE {A}, AS REQUIRED
- LONGITUDINAL ANGLE WELDED TO THE BOTTOM BEAM FLANGE (OR TOP BEAM FLANGE AS REQUIRED) {H}
- HORIZONTAL PLATE WELDED TO THE OUTSIDE FACE OF SIDE PLATE {A}, AS REQUIRED
- FILLET WELD CONNECTING SIDE PLATE {A} TO HORIZONTAL SHEAR PLATE {D} OR COLUMN {1}
- FILLET (AND/OR FLARE BEVEL) WELD CONNECTING INSIDE FACE OF SIDE PLATE {A} TO COLUMN
- FILLET WELD CONNECTING HORIZONTAL SHEAR PLATE {D} TO COLUMN, AS REQUIRED
- FILLET WELD TO CONSTRUCT VSE {F} AND TO CONNECT IT TO THE WEB OF THE BEAM, AS REQUIRED
- FILLET (AND/OR PJP) WELD CONNECTING BEAM FLANGE TIPS TO COVER PLATE {B} AND/OR LONGITUDINAL ANGLE {H},
- {5a} FILLET WELD CONNECTING OUTSIDE FACE OF BEAM FLANGE TO COVER PLATE {B} AND/OR LONGITUDINAL ANGLE {H},
- {5b} FILLET WELD CONNECTING COVER PLATE {B} EDGE TO TOP FACE OF BEAM FLANGE, ACROSS ITS WIDTH
- ({5p}) PJP WELD CONNECTING ANGLE {H} TO BEVELED BEAM FLANGE
- FILLET (AND/OR PJP) WELD CONNECTING LONGITUDINAL ANGLE {G} (AND/OR PLATE {T}) TO SIDE PLATE {A}, AS REQUIF {8}
- ({8p}) PJP WELD CONNECTING PLATE {T} TO SIDE PLATE {A} AND/OR CONNECTING BUILT UP ANGLE {H} PLATES TOGETHER, A
- FILLET WELD CONNECTING SIDE PLATE {A} TO COLUMN FACE, WRAPPED AROUND THREE SIDES OF SIDE PLATE {A}
- {10} FILLET WELD TO CONSTRUCT SIDE PLATE SLOTTED INTERLOCK ASSEMBLY
- {10p} PJP WELD TO CONSTRUCT SIDE PLATE SLOTTED INTERLOCK ASSEMBLY
- {10r} REINFORCING FILLET WELD TO CONSTRUCT SIDE PLATE SLOTTED INTERLOCK ASSEMBLY
- 3. ALPHA DESIGNATORS, USED HEREIN TO SIMPLIFY THE IDENTIFICATION OF DIMENSIONS OF THE SIDEPLATE CONNECTIONS, AI GAP PHYSICAL SEPARATION BETWEEN THE END OF THE MOMENT FRAME BEAM AND THE ADJOINING FACE OF THE COLUM
- B DEPTH OF SIDE PLATE {A}
- C LENGTH OF COVER PLATE {B} AND/OR LONGITUDINAL ANGLE {H}
- LENGTH OF SLOT FROM THE TOE OF THE RADIUS IN THE COVER PLATE {B}, AS REQUIRED D
- EDGE DISTANCE OF BOLT HOLES IN COVER PLATE {B}, AS REQUIRED E
- GAGE DISTANCE TO CENTERLINE OF BOLT HOLES IN ANGLES {G} AND {H}, AND PLATE {T}, AS REQUIRED G
- ADDED DIMENSION TO COLUMN FLANGE WIDTH TO DEFINE TOTAL COVER PLATE {B} WIDTH Н
- DISTANCE FROM END OF THE BEAM TO CENTERLINE OF VERTICAL BOLT HOLES IN VSE {F}, AS REQUIRED
- RADIUS OF SLOT DIMENSION IN COVER PLATE {B} R
- HORIZONTAL SPACING BETWEEN BOLT HOLES S
- ADDED DIMENSION TO COLUMN FLANGE WIDTH FOR ALLOWABLE SPREAD OF SIDE PLATES {A}

MATERIAL 1. PLATE, FLAT BAR, AND ANGLE MATERIAL:

a. ALL PLATE MATERIAL SHALL HAVE A MINIMUM YIELD STRENGTH (Fv) OF 50 KSI. b. ANGLE AND BAR MATERIAL SHALL HAVE A HIGH STRENGTH STEEL SPECIFICATION AND SHALL HAVE A MINIMUM YIELD STR KSI HIGH STRENGTH BOLTS/FASTENERS

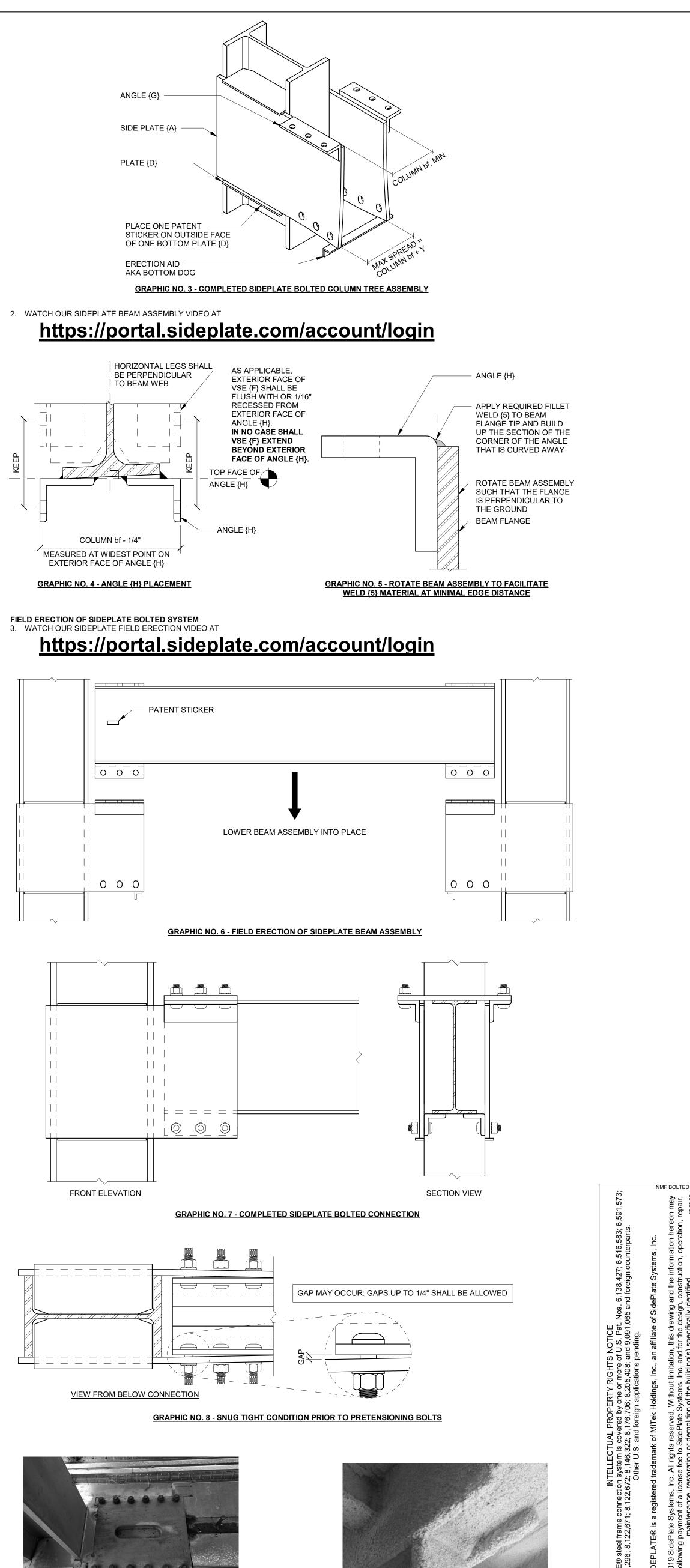
- a. BOLTS SHALL BE TYPE 1 OR TYPE 3 AND SHALL BE A490-X HEAVY HEX, F2280 TWIST-OFF-TYPE TENSION-CONTROL BOLT A F3148 FIXED SPLINE BOLT ASSEMBLIES. THE BOLT HEAD SHALL BE DISTINCTIVELY MARKED WITH A MINIMUM MARKING OF 144 RESPECTIVELY. AN ALTERNATIVE DESIGN THAT MEETS THE REQUIREMENTS OF RCSC SECTION 2.8 MAY BE USED, WIT APPROVAL FROM SIDEPLATE SYSTEMS, INC. b. WASHERS SHALL BE ORDINARY THICKNESS AND ASTM F436 TYPE 1 OR TYPE 3.
- c. NUTS SHALL BE ASTM A563 GRADE DH OR DH3. THE BOLT ASSEMBLY SHALL BE COVERED IN A LIGHT PROTECTIVE OIL. F2280 AND F3148 ASSEMBLIES SHALL ONLY BE LUE
- SUPPLIER. e. THE MILL TEST REPORT (MTR) MUST HAVE DOCUMENTED LOT TRACEABILITY, STATEMENT OF DIMENSIONAL RESULTS, FU MECHANICAL TEST RESULTS TO THE SPECIFICATIONS ABOVE. THE USE OF FINGER SHIMS ARE ACCEPTABLE PER BOLTING SECTION 8.
- ROLLED SHAPES: a. ALL ROLLED SHAPES USED FOR COLUMNS AND BEAMS IN CONSTRUCTING SIDEPLATE MOMENT FRAMES SHALL BE ASTM UNO.
- 4. HSS TUBE SHAPES: a. ALL HSS SHAPES USED FOR COLUMNS AND BEAMS IN CONSTRUCTING SIDEPLATE MOMENT FRAMES SHALL, AS A MINIMU GRADE B OR GRADE C OR ASTM1085. PREPARATION
- 1. THE STEEL FABRICATION AND ERECTION SUBCONTRACTORS SHALL EMPLOY A DISTORTION CONTROL PROGRAM PRIOR TO T SIDEPLATE MOMENT FRAME FABRICATION. THE DISTORTION CONTROL PROGRAM SHALL BE IN ACCORDANCE. WITH THE PRO D1.1 SECTION 5.21 AND 5.22 TO ENSURE THAT THE FOLLOWING ARE MAINTAINED: DIMENSIONAL ACCURACY
- FRAMING AND ALIGNMENT TOLERANCES COMPLIANCE WITH AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, SECTION 7.0, ERECTION CONTROL OF DISTORTION AND WELD SHRINKAGE
- WELDING 1. WELDER QUALIFICATION: THE PERFORMANCE OF ALL WELDERS, WELDING OPERATORS AND TACK WELDERS SHALL BE QUAL CONFORMANCE WITH AWS D1.1, SECTION 4, PART C TO DEMONSTRATE ABILITY TO PRODUCE SOUND WELDS.
- BOLTING 1. BOLTS/FASTENERS SHALL BE INSTALLED TO PRETENSIONED CONDITION USING ONE OF THE METHODS PRESCRIBED HERE: 1 CALIBRATED WRENCH (A490), TWIST-OFF-TYPE TENSION-CONTROL BOLT (F2280), OR TORQUE AND ANGLE METHOD(F3148).
- FOR ALL PRETENSIONING METHODOLOGIES, ALL FASTENER ASSEMBLIES WITHIN THE JOINT SHALL FIRST BE BROUGHT TO A CONDITION, FOLLOWED BY A SYSTEMATIC PRETENSIONING PROCESS. PRETENSIONING SHALL BEGIN AT THE MOST RIGID PAI AND CONTINUE IN A MANNER THAT WILL MINIMIZE THE RELAXATION OF PREVIOUSLY PRETENSIONED FASTENERS, UNTIL THE ARE IN AS FIRM CONTACT AS POSSIBLE.

	 THE BOLT LENGTH USED SHALL BE SUCH THAT THE BOLT THREAD EXTENDS BEYOND OR IS AT LEAST FLUSH WITH THE OUTER FACE OF THE NUT WHEN PROPERLY INSTALLED. FASTENER COMPONENTS SHALL BE PROTECTED FROM DIRT AND MOISTURE IN CLOSED CONTAINERS AT THE SITE OF INSTALLATION. F2280 OR F3148 ASSEMBLIES AND ALTERNATIVE DESIGN FASTENERS THAT MEET THE SPECIFIED REQUIREMENTS PREVIOUSLY MENTIONED SHALL NOT BE RE-LUBRICATED, EXCEPT BY THE MANUFACTURER. FINGER SHIMS MAY BE USED UP TO 1/4 INCH WITHOUT RESTRICTION, SHIM REQUIREMENTS GREATER THAN 1/4 INCH SHALL BE SUBMITTED TO SIDEPLATE SYSTEMS INC FOR APPROVAL PRIOR TO USE. WASHERS SHALL BE ASTM F436 ORDINARY THICKNESS AND SHALL BE USED UNDER THE NUT OF THE FASTENER ASSEMBLY SO AS TO PROVIDE A HARDENED NON-GALLING SURFACE OF THE TURNED ELEMENT. WHEN USING THE TURN-OF-NUT OR CALIBRATED WRENCH METHOD, THE TURNED ELEMENT MUST BE THE SAME AS WAS USED WHEN PERFORMING PREINSTALLATION VERIFICATION TESTING.
eDATA MAY	QUALITY CONTROL THE FABRICATOR AND ERECTOR SHALL BE RESPONSIBLE FOR QUALITY CONTROL BY PROVIDING, AS A MINIMUM, IN-PROCESS VISUAL INSPECTION OF ALL FABRICATION AND ERECTION ACTIVITIES TO ENSURE THAT MATERIALS AND WORKMANSHIP MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND SHALL INCLUDE WORK PERFORMED PRIOR TO ASSEMBLY. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, VERIFYING THAT EFFECTIVE PROCEDURES AND METHODS HAVE BEEN EMPLOYED IN THE FORM OF A DISTORTION CONTROL PROGRAM TO ACCOUNT FOR AND COUNTERACT THE EFFECTS OF WELD SHRINKAGE, EXISTING BEAM SWEEP AND CAMBER, AND CHANGES IN MOMENT FRAME GEOMETRY DUE TO SKEWED AND CURVED DESIGN CONFIGURATIONS (AS OCCURS), TO ENSURE COMPLIANCE WITH SPECIFIED ERECTION AND ALIGNMENT TOLERANCES. QC INSPECTION SHALL INCLUDE HOLD POINTS FOR THE FOLLOWING: COLUMN TREE ASSEMBLY
NEOUS STEEL IE PROJECT SHALL ECT, THE STEEL DEPLATE LICENSE	 a. <u>COLUMN TREE ASSEMBLY</u> 1. VERIFICATION THAT ACTUAL COLUMN FLANGE WIDTH IS AT LEAST NOMINAL COLUMN FLANGE WIDTH WHERE THE SIDE PLATES {A} ARE TO BE INSTALLED. IN THE UNLIKELY EVENT ACTUAL COLUMN FLANGE WIDTH IS LESS THAN NOMINAL, BUT WITHIN AISC STANDARD MILL TOLERANCES (-3/16 INCH MAX), CONTACT SIDEPLATE SYSTEMS, INC FOR APPROPRIATE RECOMMENDATIONS. 2. MINIMUM CLEAR DIMENSION SHALL BE VERIFIED AFTER PLACEMENT OF WELD {2}, COOLING OF WELD {2}, AND REMOVAL OF TEMPORARY SHOP CONSTRUCTION AID(S). VERIFY THAT A MINIMUM ACTUAL COLUMN FLANGE WIDTH DIMENSION OCCURS ANYWHERE IN BETWEEN THE SIDE PLATES (A} FROM TOP TO BOTTOM. THE SIDE PLATES SHALL BE PARALLEL TO ONE ANOTHER. IN NO CASE SHALL THEY BE LESS THAN THE ACTUAL COLUMN FLANGE WIDTH. 3. MAXIMUM SPREAD DIMENSION OF SIDE PLATE {A} SHALL NOT EXCEED ACTUAL COLUMN FLANGE WIDTH PLUS THE SCHEDULED SPREAD DIMENSION Y. THE FIELD CONSTRUCTION AID SHALL BE PLACED AND HOLD THE SIDE PLATES IN THIS FLARED CONDITION UNTIL THE BEAM HAS BEEN SAFELY ERECTED. IN NO CASE SHALL THE SPREAD CAUSE PERMANENT DEFORMATION IN THE SIDE PLATES. 4. VERIFICATION OF BOLT HOLE ELEVATION AND SPACING FOR POSITION OF SIDE PLATE {A} AND PROPER POSITION AND ELEVATION OF ANGLES {G}. b. <u>BEAM ASSEMBLY</u> 1. VERIFICATION OF PERPENDICULAR ALIGNMENT BETWEEN THE TOP COVER PLATE {B} AND BOTTOM ANGLES {H} TO THE WEB OF THE
SUBMITTALS SHALL AND DISPOSITION: THE SHOP /ITTAL AND ALL SAME SPECIFIED	 BEAM, TO MINIMIZE, IF NOT ELIMINATE, ANY MISALIGNMENT OF BOLT HOLES DUE TO BEAM FLANGE TILT WHEN THE BEAM HAS BEEN LOWERED INTO PLACE. VERIFICATION OF BOLT HOLE SPACING AND POSITION ON COVER PLATE {B} AND ANGLES {H}. CONSIDERATION SHALL BE GIVEN TO THE CUPPING EFFECT OF THE TOP COVER PLATE {B}, DUE TO WELD SHRINKAGE. VERIFICATION OF THE DISTANCE BETWEEN EXTERIOR ANGLE {H} FACES AND THEIR RESPECTIVE BOLT HOLE PLACEMENT TO EACH OTHER (VERTICALLY AND HORIZONTALLY). VERIFICATION THAT IN NO CASE SHALL THE OUTSIDE FACE OF VSE {F} EXTEND BEYOND THE OUTSIDE FACES OF THE LONGITUDINAL ANGLES {H}. VERIFICATION THAT VERTICAL PLACEMENT OF VSE {F} IS IN THE CORRECT LOCATION.
EST A PRE- CES FOR THE	 FILLET WELD FIT-UP TOLERANCES: THE PARTS TO BE JOINED BY FILLET WELDS SHALL BE BROUGHT INTO AS CLOSE CONTACT AS PRACTICABLE, USING AS NECESSARY SUITABLE CLAMPING MEANS. THE ROOT OPENING (I.E., THE FIT-UP GAP) SHALL NOT EXCEED 1/4 INCH. FOR FILLET WELD ROOT GAPS GREATER THAN 1/16 INCH, THE LEG SIZE (I.E., THE SPECIFIED SIZE) OF FILLET WELD SHALL BE INCREASED BY THE AMOUNT OF THE ROOT OPENING.
N MEETING FROM OF THE SIDEPLATE	3. <u>THERMAL CUTTING</u> : a. THE ROUGHNESS OF ALL THERMAL-CUT SURFACES SHALL BE NO GREATER THAN AN ANSI SURFACE ROUGHNESS VALUE OF 1000 MICRO- INCHES. ROUGHNESS EXCEEDING THIS VALUE AND NOTCHES OR GOUGES NOT MORE THAN 3/16 INCH DEEP SHALL BE REMOVED BY MACHINING OR GRINDING. NOTCHES OR GOUGES IN THE THERMALLY CUT EDGES DEEPER THAN 3/16 INCH SHALL BE REPAIRED PER AWS.
MEETING FROM DF THE SIDEPLATE	 4. <u>TENSION CALIBRATION FOR PRE-INSTALLATION</u>: a. TENSION CALIBRATION SHALL BE USED TO CONFIRM THE SUITABILITY OF THE COMPLETE FASTENER ASSEMBLY, AND THE PROCEDURE TO BE USED BY THE BOLTING CREW.
L BUILDINGS AND PPLICABLE BUILDING ECTION. WHERE THE NG CODES, THE DS ARE DEFINED	 QUALITY ASSURANCE IN ADDITION TO ALL OTHER QUALITY ASSURANCE INSPECTION ACTIVITIES, THE OWNER'S VERIFICATION INSPECTOR SHALL BE RESPONSIBLE FOR: 1. WELDING: a. TO ASSURE THE PROPER AMPERAGE AND VOLTAGE OF THE WELDING PROCESS, THE USE OF HAND HELD CALIBRATED AMP AND VOLT METERS SHALL BE USED. THIS EQUIPMENT SHALL BE USED BY THE FABRICATOR AND THE INSPECTOR. AMPERAGE AND VOLTAGE SHALL BE MEASURED NEAR THE ARC. TRAVEL SPEED AND ELECTRODE STICK OUT SHALL BE VERIFIED TO BE IN COMPLIANCE WITH THE APPROVED WPS. b. VISUAL INSPECTION SHALL BE PERFORMED ON ALL SHOP WELDS. c. EACH WELDER EMPLOYED ON THE PROJECT SHALL UNDERSTAND ALL THE REQUIREMENTS OF THE WELDING PROCEDURE SPECIFICATION(S) BEFORE WELDING ON THE PROJECT. d. AS-BUILT BEAM TO COLUMN GAP PER CONNECTION SCHEDULE IS ALLOWED TO BE INSTALLED WITH A TOLERANCE OF PLUS OR MINUS 1/2 INCH. 2. FAYING SURFACES: a. THE SURFACES ADJACENT TO THE BOLT HEAD AND NUT SHALL BE FREE OF DIRT AND OTHER FOREIGN MATERIAL OTHER THAN THE SPECIFIED COATINGS. b. FAYING SURFACES ARE PERMITTED TO BE UNCOATED AND COATED WITH ANY COATINGS OF ANY FORMULATION OR GALVANIZATION. c. AFTER THE CONNECTIONS HAVE BEEN ASSEMBLED, VISUALLY ENSURE THAT THE PLIES OF THE CONNECTED ELEMENTS HAVE BEEN BROUGHT INTO AS CLOSE OF CONTACT AS PRACTICABLE WITH ONE ANOTHER. GAPS UP TO 1/8 INCH BETWEEN THE SURFACES SHALL BE ALLOWED. GAPS GREATER THAN 1/8 INCH UP TO 1/4 INCH SHALL HAVE FINGER SHIMS INSTALLED BEFORE PRETENSIONING. FOR GAPS GREATER THAN 1/4 INCH, CONTACT SIDEPLATE SYSTEMS, INC.
	 SIDEPLATE CONNECTIONS REQUIRING THIS TYPE OF FINISH SHALL FOLLOW THE SAME CONSTRUCTION SEQUENCING AS PREVIOUSLY OUTLINED WITH THE FOLLOWING MODIFICATIONS: HORIZONTAL SHEAR PLATES {D} SHALL HAVE AN INCREASED CLIP SIZE WHICH SHALL BE 1 5/8 INCH BY 1 5/8 INCH TO PROVIDE ADEQUATE VENTILATION AND DRAINAGE. CONTACT SIDEPLATE SYSTEMS, INC. IN THE EVENT THAT THE GALVANIZING CONTRACTOR SPECIFICATIONS REQUIRE A LARGER OPENING THAN THAT SPECIFIED HEREIN. SEAL WELDING SHALL BE ALLOWED ON THE PLATES {B} AND ANGLES. ANY DEVIATIONS TO THESE MODIFICATIONS SHALL BE COORDINATED WITH SIDEPLATE SYSTEMS, INC. AND THE SEOR. FIREPROOFING WHEN REQUIRED BY THE GOVERNING CODE FOR CERTAIN TYPES OF CONSTRUCTION, SIDEPLATE CONNECTIONS SHALL HAVE A FIRE- RESISTANCE RATING LIKE THAT OF A STEEL "STRUCTURAL FRAME". THE MINIMUM THICKNESS OF SPRAY-APPLIED FIRE-RESISTIVE MATERIAL (SFRM) FOR STEEL SIDEPLATE CONNECTIONS PLATES THAT ARE NOT ENCASED IN CONCRETE, SHALL BE DETERMINED JUST LIKE THAT OF A PIPE/TUBE COLUMN SECTION WITH A CONSTANT STEEL WALL THICKNESS USING THE THICKNESS OF SIDE PLATE {A} FOR EACH SIDEPLATE CONNECTION SCHEDULE, WHICH ARE UNIFORMLY HEATED AND PROTECTED (THE FIRE EXPOSURE OF A PIPE/TUBE COLUMN IS DIRECTLY ANALOGOUS TO A PLATE WITH A 1-SIDED
, AS REQUIRED AS REQUIRED	 FIRE EXPOSURE AND PROTECTION). THE SFRM SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ASTM E119 AND LISTED FOR FIRE RESISTIVE PIPE/TUBE COLUMN APPLICATIONS FOR NO LESS THAN THE REQUIRED RATED TIME. 3. AS REQUIRED, WHEN NO VERTICAL SHEAR ELEMENT {F} EXISTS IN THE BEAM, SPRAY THE MINIMUM THICKNESS OF SFRM BETWEEN INSIDE OF SIDE PLATE {A} AND BEAM WEB COVERING ALL SURFACES INCLUDING COLUMN FLANGE. NOTE: THIS DOES NOT NECESSITATE FILLING THE CAVITY FULL. 4. WHEN VERTICAL SHEAR ELEMENT {F} IS USED, THE CONTRACTOR SHALL PROVIDE THE MEANS, TYPICALLY DONE WITH A LAYERING TECHNIQUE, FOR FIREPROOFING ACROSS THE BOTTOM OF THE GAP. 5. SEE GRAPHIC NUMBER 10 IN FIELD ERECTION OF THE SIDEPLATE BOLTED SYSTEM FOR FIREPROOFING ACROSS THE BOTTOM OF THE GAP.
RED AS REQUIRED	 INTELLECTUAL PROPERTY 1. IN ORDER TO SAFEGUARD THE AUTHORIZED USE AND INTELLECTUAL PROPERTY OF THE PATENTED SIDEPLATE CONNECTION TECHNOLOGY, THE STEEL FABRICATION SUBCONTRACTOR SHALL SATISFY THE FOLLOWING REQUIREMENTS: a. A NOTICE OF INTELLECTUAL PROPERTY, IDENTICAL TO THAT PROVIDED ON THIS SHEET, SHALL BE AFFIXED ON EACH SHEET OF SHOP DETAIL AND FIELD ERECTION DRAWINGS CONTAINING SIDEPLATE SYSTEM INFORMATION WHICH DISCLOSES IN ANY WAY THE SIDEPLATE CONNECTION CONCEPT PRIOR TO RELEASING SUCH INFORMATION FOR ITS INTENDED USE. SUCH NOTICE SHALL BE PROVIDED TO THE STEEL FABRICATION SUBCONTRACTOR BY SIDEPLATE SYSTEMS, INC. IN A FORMAT (E.G. WORD OR AUTOCAD) SUITABLE TO THE NEEDS OF THE STEEL FABRICATION SUBCONTRACTOR'S DETAILER. b. PATENT LABELS SHALL BE APPLIED ON THE OUTSIDE FACE OF ONE OF THE TWO BOTTOM HORIZONTAL SHEAR PLATES {D} OF EACH MOMENT CONNECTION AND ON ONE END OF THE BEAM WEB IN COMPLIANCE WITH THE PATENT AND INTELLECTUAL PROPERTY LAWS.
RE DEFINED BELOW: IN FLANGE	 CONSTRUCTION GUIDELINES 1. THE CONTRACTOR SHALL ASSUME FULL AND COMPLETE RESPONSIBILITY FOR THE MEANS AND METHODS OF CONSTRUCTION THE STEEL FRAME USING THE SIDEPLATE BOLTED SYSTEM. CONSTRUCTION MEANS AND METHODS SHALL BE COMPLIANT WITH THE CURRENT PROVISIONS OUDELINES PROVIDED HEREIN AND SHALL INCLUDE, BUT ARE NOT LIMITED TO: a. DIMENSIONAL VERIFICATION AND SCHEDE (INCLUDING METHODS FOR CONTROLLING DISTORTION DUE TO WELD SHRINKAGE, AND FOR CONTROLLING COMBINED MILL, FABRICATION AND ERECTION TOLERANCES). c. CONSTRUCTION AND SECCITION PROCEDURES (INCLUDING METHODS FOR CONTROLLING DISTORTION DUE TO WELD SHRINKAGE, AND FOR CONTROLLING COMBINED MILL, FABRICATION AND ERECTION TOLERANCES). c. CONSTRUCTION AND SECCITION REGISTING AND SHORING. PROPER BOLT HOLE ALIGNMENT PROPER PRETENSIONING OF BOLT THE SEQUENCE OF CONSTRUCTION OPTIONS PROVIDED BELOW IN THESE CONSTRUCTION GUIDELINES HAVE PROVEN TO BE SUCCESSFUL BY STEEL FABRICATORS AND ERECTORS TO COST EFFICIENTLY CONSTRUCT THE BOLTED SUBPLATE CONNECTION SYSTEM. VARIATIONS TO THESE CONSTRUCTION SEQUENCE OFTONS PROVIDED BELOW IN THESE CONSTRUCTION SUBPLATE SYSTEM, VARIATIONS TO THESE CONSTRUCTION SEQUENCE OFTONS PROVIDED BELOW SHALL BE SUBMITTED FOR REVIEW AND DISPOSITION TO SIDEPLATE SYSTEMS. A PRE-FABRICATION COORDINATION MEETING WITH A SIDEPLATE SYSTEMS, INC. REPRESENTATIVE IS REQUIRED FOR ALL PROJECTS. THE PRE-FABRICATION COORDINATION MEETING IS INTENDED TO SHARE BEST PRACTICES AND COMMON MISTAKES TO AVOID. SHOP FABRICATION OF THE SIDEPLATE BOLTED SYSTEM. WATCH OUR SIDEPLATE COLUMN ASSEMBLY VIDEO AT MEDSE SUBPLATE COLUMN ASSEMBLY VIDEO AT MEDSE SUBPLATE COLUMN ASSEMBLY VIDEO AT MEDSE SUBPLATE COLUMN ASSEMBLY VIDEO AT
RENGTH (Fy) OF 50	
ASSEMBLIES, OR F A490, A490TC, OR TH THE WRITTEN	TEMPORARY CONSTRUCTION AID AT INSIDE OF SIDE PLATES {A} SUCH AS ANGLE, PIPE, WOOD, ETC.
BRICATED BY THE	
JLL CHEMICAL AND	
IM, BE ASTM A500	
THE START OF DVISIONS OF AWS	FRONT ELEVATION GRAPHIC NO. 1 - COLUMN TREE ASSEMBLY PREPARATION FOR WELD {2}
ON PROVISIONS	COLUMN FLANGE
LIFIED IN FURN-OF-NUT (A490),	 IF MILL ROLL GAP < 1/16", PERFORM FILLET WELD {2} AS SCHEDULED. IF MILL ROLL GAP > 1/16", RUN AN INITIAL PASS TO FILL GAP. THEN PERFORM FILLET WELD {2} AS SCHEDULED.
SNUG TIGHT RT OF THE JOINT CONNECTED PLIES	$\square = \square =$

3. REUSE OF A490, F2280, AND F3148 BOLT ASSEMBLIES SHALL NOT BE ALLOWED. TOUCHING UP OR RE-TIGHTENING BOLTS THAT MAY HAVE BEEN

LOOSENED BY THE INSTALLATION OF ADJACENT BOLTS SHALL NOT BE CONSIDERED TO BE A REUSE.

4. ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT INSERTION OF THE BOLTS WITHOUT UNDUE DAMAGE TO THE THREADS.



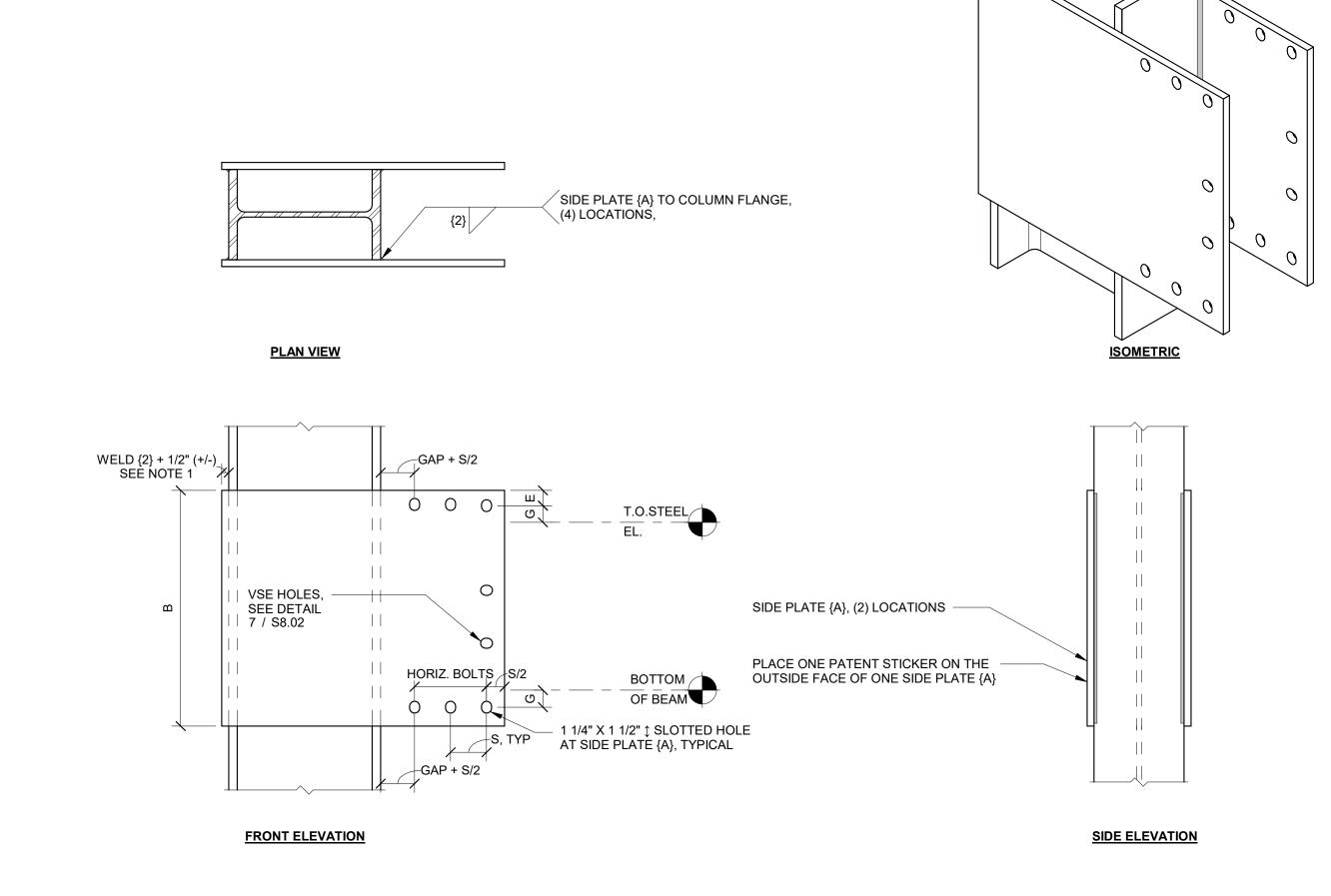
GRAPHIC NO. 9 - TYPICAL GAP CLOSURE AT THE TOP OF THE GAP

GRAPHIC NO. 10 - FIREPROOFING ACROSS THE BOTTOM OF THE GAP

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NOTE(S):
1. THE 1/2 INCH OVERHANG ON THE SIDE PLATE {A} IS TO ENSURE SUFFICIENT ROOM FOR WELD {2}, THE +/- TOLERANCE IS APPLIED SO THAT IF DESIRED, THE DETAILER CAN MAKE THE SIDE PLATES {A} THE SAME LENGTH
WITH SLIGHTLY VARYING COLUMN DEPTHS WITHIN A GROUP OF THE SAME CONNECTION ID'S.



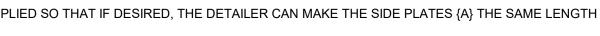
6 A TYPE NARROW COLUMN CONNECTION SCHEDULE N.T.S.

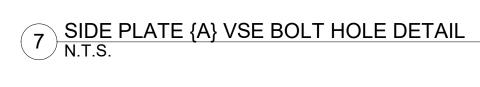
	COLUMN PANEL ZOI	NE DESI	GN (INCHE	S) SIDE PLATE {A} EXTENSION DESIGN (INCHES)									
	COLUMN	WELD	BEAN	1		PLATE				BOL	Т		
ID	ID SERIES		SHAPE	GAP		{A}			DIAMETER	HORIZONTAL		G	S
		SIZE			THICKNESS	В	E	Y		#	#		
A15	W14x	3/8	W24X68	2	5/8	31 3/4	1 3/8	2 1/2	1 1/8	4	2	2 1/8	4 1/2
A25	W14x	3/8	W24X94	2	5/8	32 1/4	1 3/8	3 5/8	1 1/8	5	2	2 1/8	4 1/2
A45	W14x	3/8	W36X160	2	5/8	44	1 3/8	5	1 1/8	6	3	2 1/8	4 1/2

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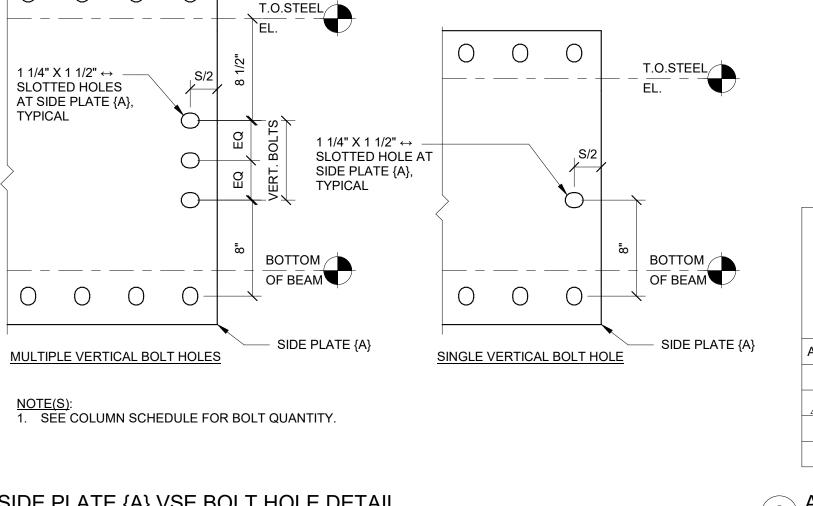
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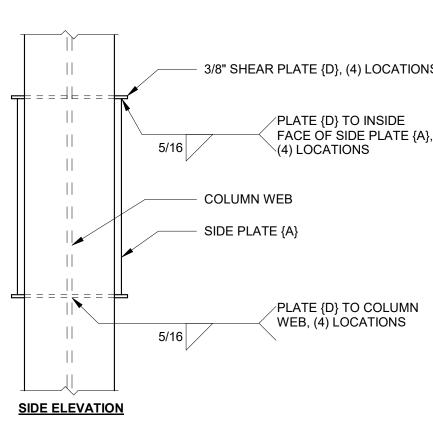


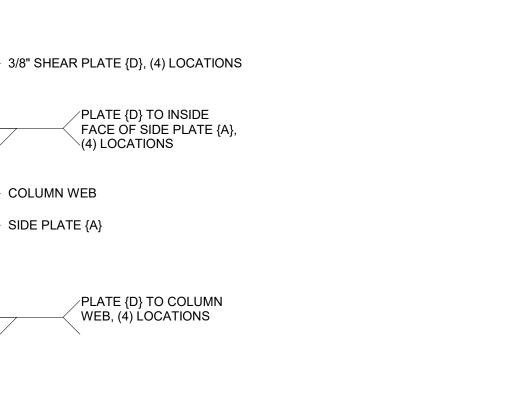
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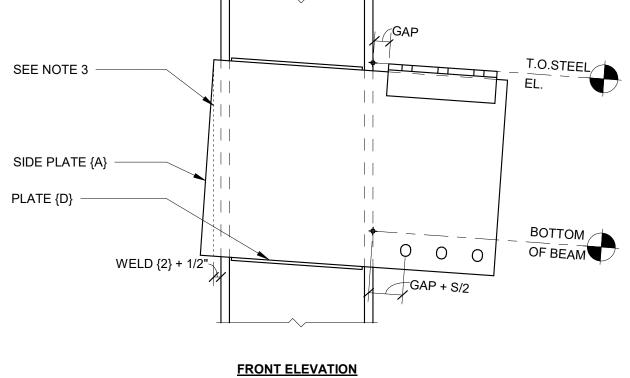


8 PLATE {D} DETAIL FOR SLOPED CONDITIONS N.T.S.

<u>NOTE(S)</u>: 1. LONGITUDINAL ANGLES {G} NOT SHOWN FOR CLARITY.

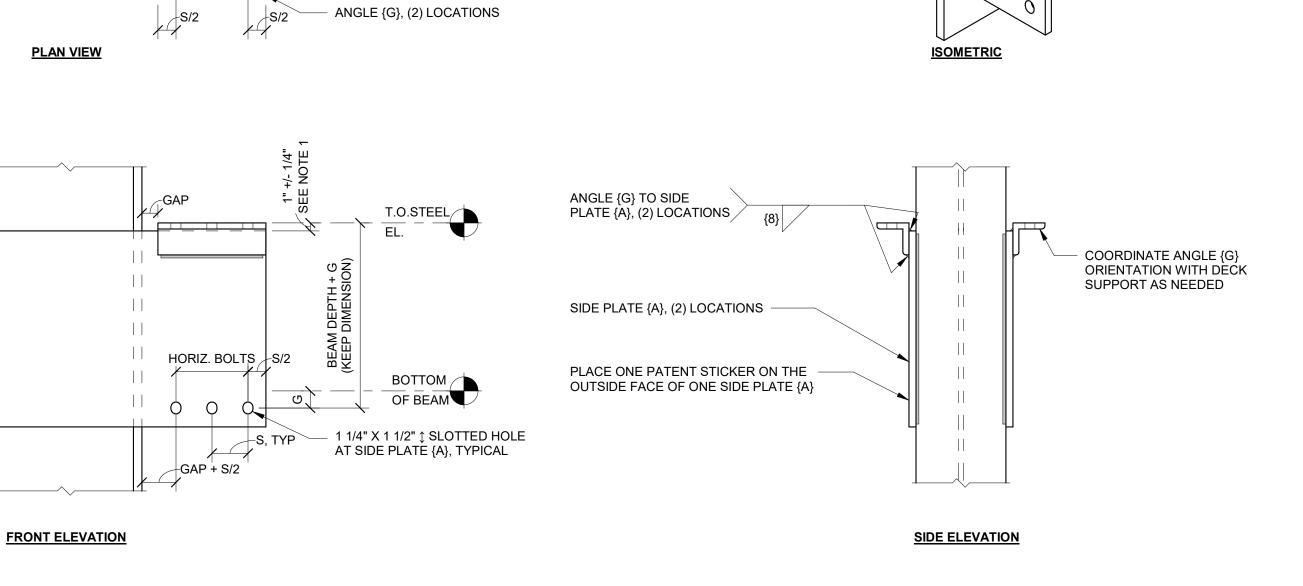






NOTE(S):
1. THE +/- 1/4 INCH TOLERANCE FOR PLACEMENT OF ANGLES {G} IS TO ENSURE CORRECT TOP OF STEEL PLACEMENT RELATIVE TO THE CENTERLINE OF THE BOTTOM HORIZONTAL ROW OF BOLT HOLES. THE PLACEMENT OF ANGLES {G} SHALL NEVER BE MEASURED FROM THE BOTTOM EDGE OF SIDE PLATE {A} TO ESTABLISH THE CORRECT TOP OF STEEL. 2. THE 1/2 INCH OVERHANG ON THE SIDE PLATE {A} IS TO ENSURE SUFFICIENT ROOM FOR WELD {2}, THE +/- TOLERANCE IS APPLIED SO THAT IF DESIRED, THE DETAILER CAN MAKE THE SIDE PLATES {A} THE SAME LENGTH WITH SLIGHTLY VARYING COLUMN DEPTHS WITHIN A GROUP OF THE SAME CONNECTION ID'S.

WELD {2} + 1/2" (+/-) SEE NOTE 2





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- HOLE SIZE = BOLT DIA. + 1/8" AT ANGLE {G}, TYPICAL

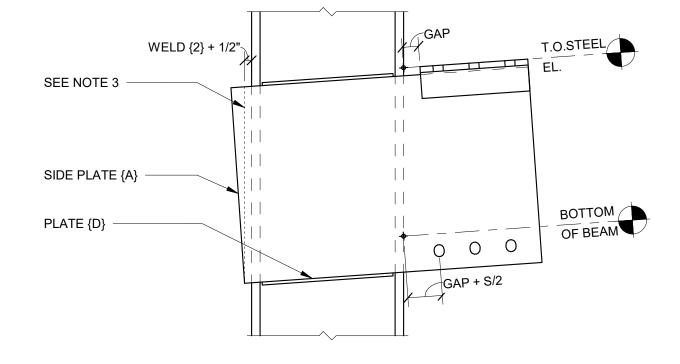
SIDE PLATE {A} TO COLUMN FLANGE, (4) LOCATIONS

			I														
	COLUMN PANEL ZO	DNE DESI	GN (INCHE	N (INCHES) SIDE PLATE {A} EXTENSION DESIGN (INCHES)													
ID	COLUMN	WELD BEAM PLATE ANGLE								WELD	BOLT						
	SERIES	{2}	SHAPE	GAP	{/	A}			{G}		{8}	DIAMETER	HORIZONTAL	G	s		
	SERIES	SIZE	SHAPE	GAP	THICKNESS	В	Y	SUGGESTED SIZE	HORIZONTAL LEG	VERTICAL LEG	SIZE		#	0	3		
0, A11, A19	W14x	3/8	W24X68	2	5/8	27 1/4	2 1/2	L5X3-1/2X5/8	3-1/2 to 6	4 to 6	5/16	1 1/8	4	2 1/8	4 1/2		
A12	W14x	7/16	W24X68	2 1/4	1	27 1/4	1 7/8	L5X3-1/2X5/8	3-1/2 to 6	4 to 6	5/16	1 1/8	4	2 1/8	4 1/2		
1 (A13)	W14x	3/8	W24X68	2	3/4	27 1/4	2 1/8	L5X3-1/2X5/8	3-1/2 to 6	4 to 6	5/16	1 1/8	4	2 1/8	4 1/2		
A20	W14x	3/8	W24X94	2	7/8	27 3/4	2 7/8	L5X3-1/2X5/8	3-1/2 to 6	4 to 6	5/16	1 1/8	5	2 1/8	4 1/2		
A30	W14x	3/8	W36X150	2	5/8	39 3/8	5	L5X3-1/2X5/8	3-1/2 to 6	4 to 6	5/16	1 1/8	6	2 1/8	4 1/2		

4 SLOPED DOWN CONNECTION (AS APPLICABLE) N.T.S.

NOTE(S): 1. FOR BEAM SLOPES > 1" PER FOOT, CONTACT SIDEPLATE SYSTEMS, INC. 2. COORDINATE PLATES, ANGLES, AND DIMENSIONS WITH RESPECT TO THE SLOPE OF THE CONNECTION. 3. AT CONTRACTOR'S DISCRETION, SIDE PLATE {A} MAY BE CUT AS SHOWN. 4. HORIZONTAL SHEAR PLATES {D} AND ASSOCIATED WELDS ARE REQUIRED FOR SLOPED SIDE PLATE

CONDITIONS. SEE 8 / S8.02



FRONT ELEVATION

2. COORDINATE PLATES, ANGLES, AND DIMENSIONS WITH RESPECT TO THE SLOPE OF THE CONNECTION.

4. HORIZONTAL SHEAR PLATES {D} AND ASSOCIATED WELDS ARE REQUIRED FOR SLOPED SIDE PLATE

NOTE(S): 1. FOR BEAM SLOPES > 1" PER FOOT, CONTACT SIDEPLATE SYSTEMS, INC. 1. FOR BEAM SLOPES > 1" PER FOOT, CONTACT SIDEPLATE SYSTEMS, INC.

3. AT CONTRACTOR'S DISCRETION, SIDE PLATE {A} MAY BE CUT AS SHOWN.

CONDITIONS. SEE 8 / S8.02

3 SLOPED UP CONNECTION (AS APPLICABLE) N.T.S.

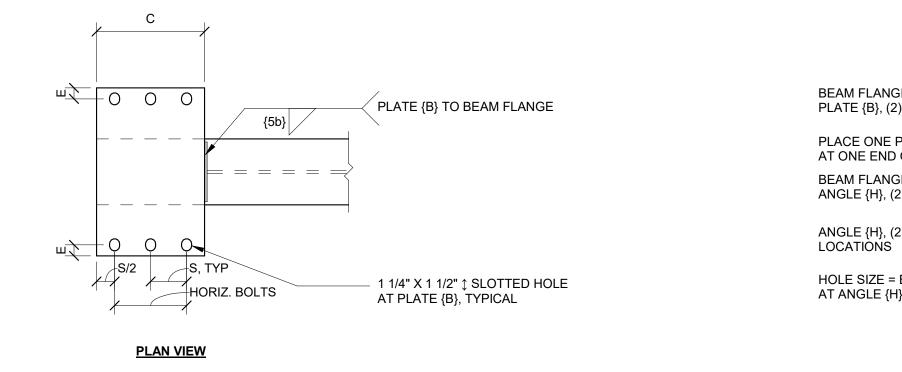


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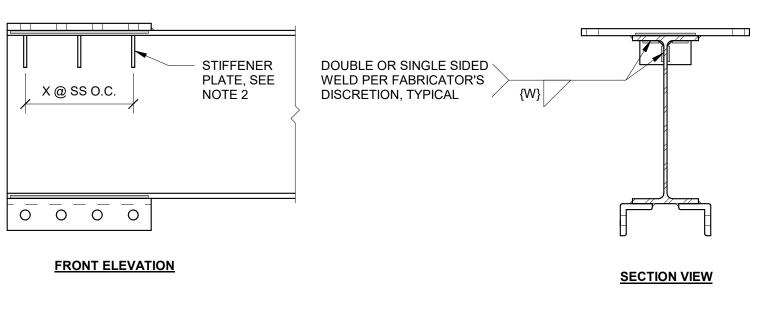
5 RECTANGULAR COVER PLATE {B}

<u>NOTE(S)</u>: 1. FOR ITEMS NOT NOTED, SEE DETAIL 1 / S8.04



6 STIFFENER PLATES N.T.S.

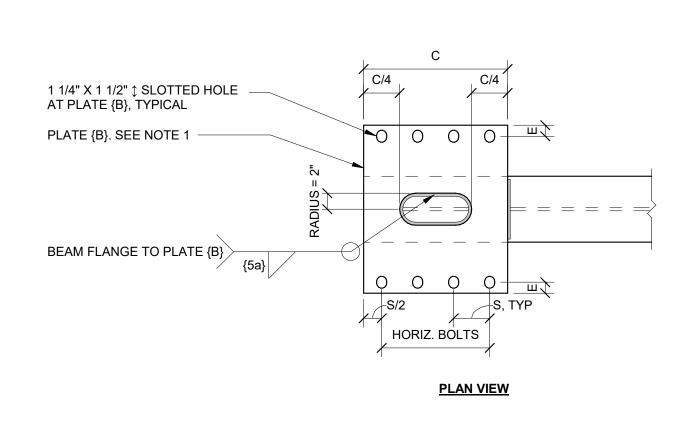
<u>NOTE(S):</u> 1. SEE BEAM END SCHEDULE FOR QUANTITY, SPACING, AND WELDING OF STIFFENER PLATES. 2. STIFFENER PLATES SHALL BE MADE OF GRADE 50 MATERIAL. 3. STIFFENER PLATES AND WELDS ARE NOT CREATED BY SIDEPLATE CUSTOM COMPONENT TOOL



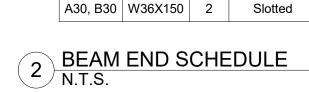
1 BEAM END DETAIL N.T.S.

BEAM FLANGE TO PLATE {B}, (2) LOCATIONS	{5}
PLACE ONE PATENT STICKER AT ONE END OF BEAM	2
BEAM FLANGE TO ANGLE {H}, (2) LOCATIONS	{5}
ANGLE {H}, (2) LOCATIONS	
HOLE SIZE = BOLT DIA. + 1/8" AT ANGLE {H}, TYPICAL	

1/2 COL. DEPTH + GAP-

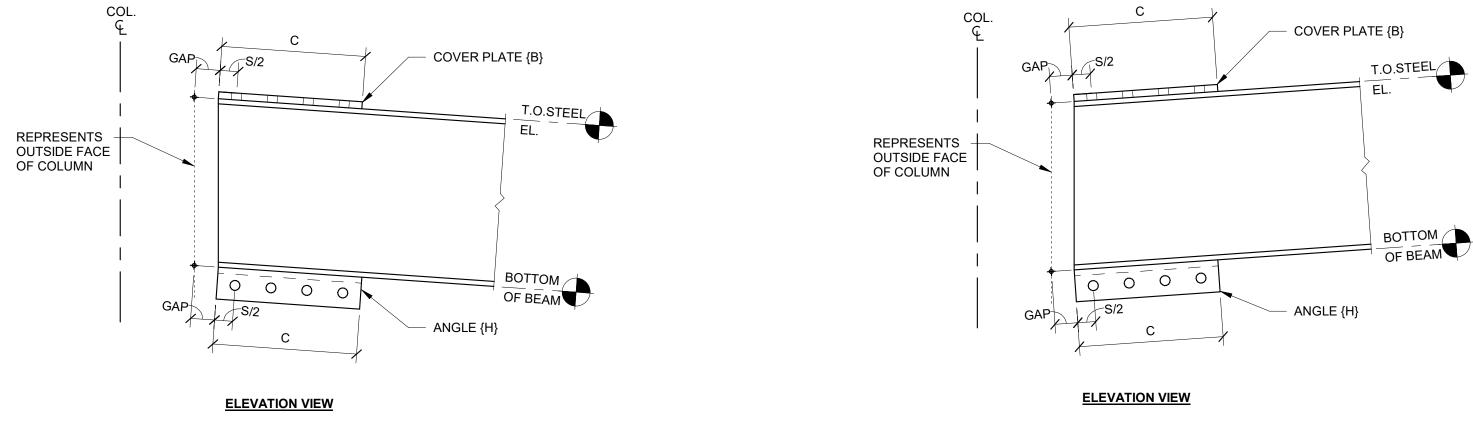


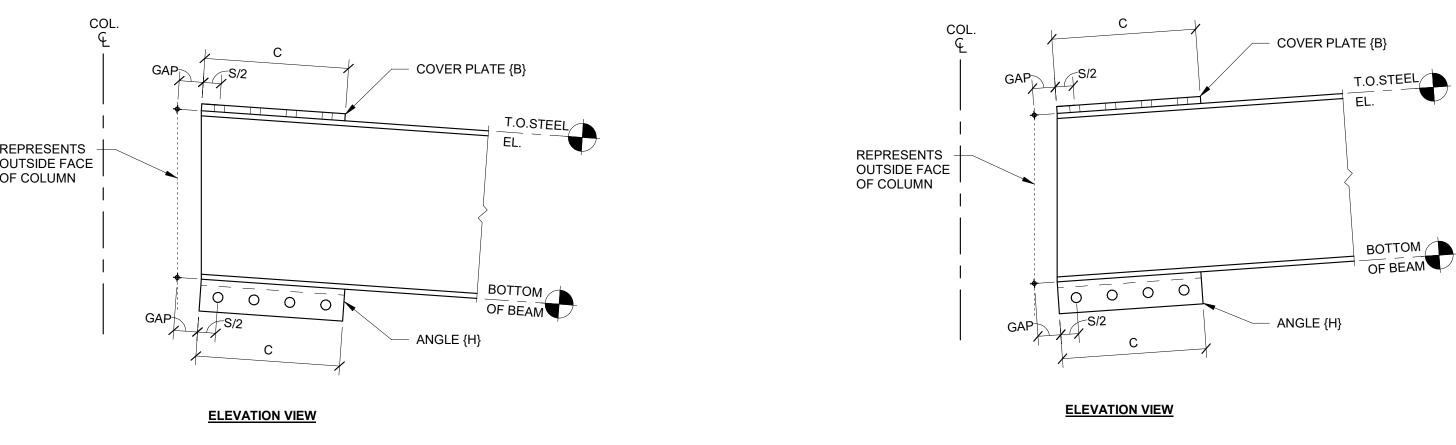
COL.



										BEA	M DESI	GN (INCHES)										
ID	BEAN	BEAM PLATE								ANGLE						WELD			BOLT			
		045		{B}			STIFFENER (SEE DETAI	L 6 THIS	SHEET)	HEET) {H} {5}			{5a}	{5b}	{W} (SEE DETA			HORIZONTAL			
	SHAPE GA	GAP	COVER PLATE TYPE	THICKNESS	E	н	THICKNESS	LENGTH X WIDTH	x ss	SUGGESTED SIZE	С	HORIZONTAL LEG	VERTICAL LEG	SIZE	SIZE	SIZE	SIZE (SINGLE)	SIZE (DOUBLE)	DIAMETER	# G	S	
A10	W24X68	2	Slotted	1 1/8	1 3/8	8 1/4	-	-		L6X4X5/8	18	6	4	5/16	5/16	5/16	-	-	1 1/8	4	2 1/8	4 1/2
A11, B11	W24X68	2	Slotted	3/4	1 3/8	8 1/4	-	-		L7X4X5/8	18	7	4	5/16	5/16	5/16	-	-	1 1/8	4	2 1/8	4 1/2
A12, B12	W24X68	2 1/4	Slotted	3/4	1 3/8	9	-	-		L7X4X5/8	18	7	4	5/16	5/16	5/16	-	-	1 1/8	4	2 1/8	4 1/2
1 (A13)	W24X68	2	Slotted	7/8	1 3/8	8 1/2	-	-		L7X4X5/8	18	7	4	5/16	5/16	5/16	-	-	1 1/8	4	2 1/8	4 1/2
A19, B19	W24X68	2	Slotted	1	1 3/8	8 1/4	1/4	4 X 4	3 6 3/4	L6X4X5/8	18	6	4	5/16	5/16	5/16	1/4	1/8	1 1/8	4	2 1/8	4 1/2
A20, B20	W24X94	2	Slotted	1 1/4	1 3/8	8 3/4	-	-		L6X4X5/8	22 1/2	6	4	5/16	5/16	5/16	-	-	1 1/8	5	2 1/8	4 1/2
A30, B30	W36X150	2	Slotted	1 1/4	1 3/8	8 1/4	-	-		L5X3-1/2X5/8	27	5	3 1/2	5/16	5/16	5/16	_	-	1 1/8	6	2 1/8	4 1/2

4 SLOPED DOWN BEAM END (AS APPLICABLE) N.T.S.

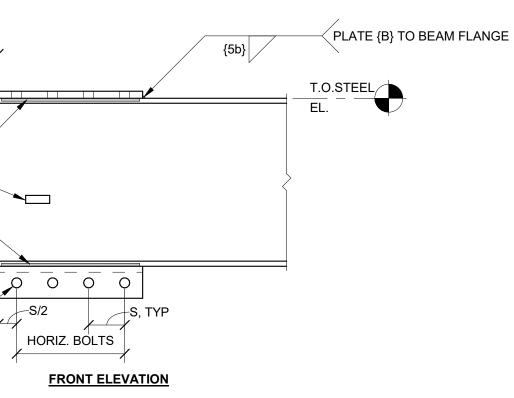


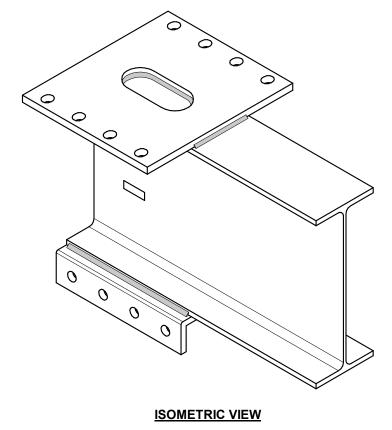


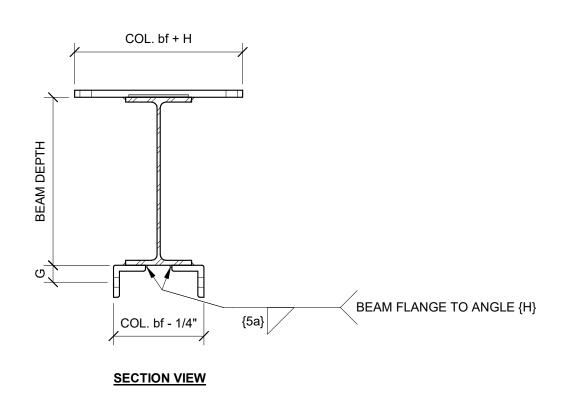
<u>NOTE(S)</u>: 1. FOR BEAM SLOPES > 1" PER FOOT, CONTACT SIDEPLATE SYSTEMS, INC.

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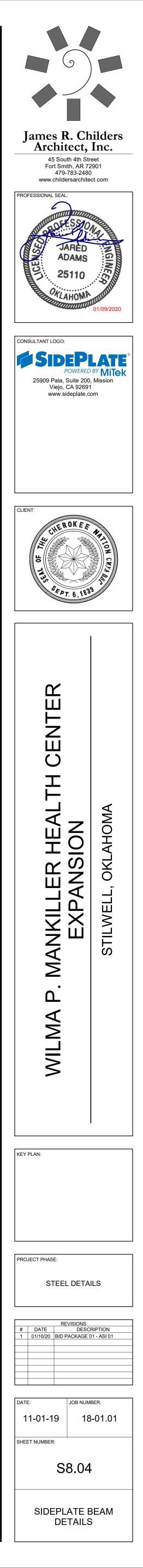
3 SLOPED UP BEAM END (AS APPLICABLE) N.T.S.





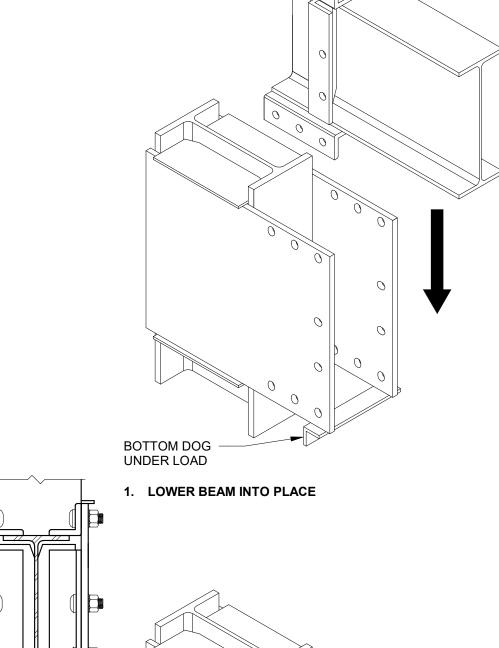


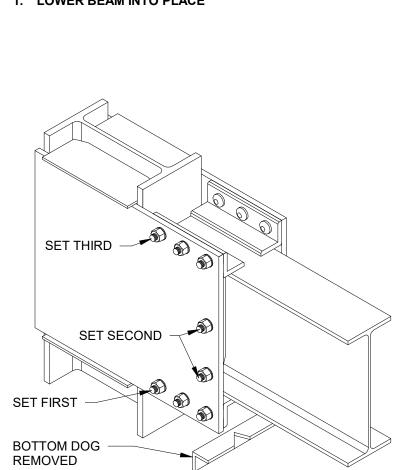
<u>NOTE(S)</u>: 1. USE SLOTTED OR RECTANGULAR COVER PLATE {B} PER SCHEDULE. FOR RECTANGULAR COVER PLATE, SEE DETAIL 5 / S8.04



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SECTION VIEW

CAREFULLY REMOVE BOTTOM DOG AS IT IS UNDER LOAD. THEN STUFF ALL REMAINING BOLTS STARTING WITH THE BOTTOM ROW, THEN THE VERTICAL ROW, AND LAST THE TOP ROW.



GROUND SMOOTH.

GAP

_ _ _ _

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_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

PLAN VIEW

FRONT ELEVATION

5. SYSTEMATICALLY TIGHTEN BOLTS PER RCSC SPECIFICATIONS.

 \bigcirc

3. BOTTOM DOG SHALL BE REMOVED. IT IS RECOMMENDED THAT IT BE REMOVED BY TORCH

CUTTING A 'V' SECTION OUT OF ONE OF THE ANGLE LEGS TO ALLEVIATE THE LOAD AND THEN

PROCEED TO REMOVE IT. IT IS NOT RECOMMENDED TO USE A GRINDING WHEEL TO REMOVE

4. BOLTS SHALL BE STUFFED INTO HOLES IN THE BEAM COVER PLATE {B} AND THE SIDE PLATES {A}.

6. THE WELD REMNANTS OF THE BOTTOM DOG MAY REMAIN IN PLACE AND DO NOT NEED TO BE

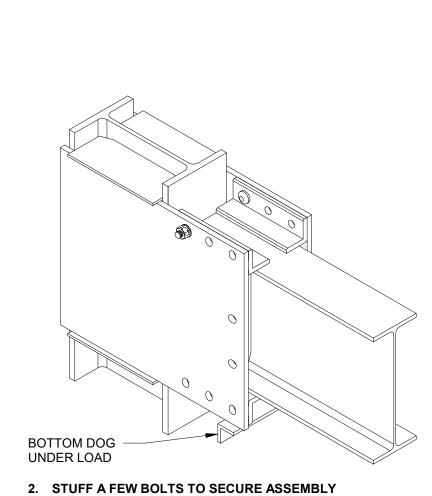
TYPICAL SEQUENCE OF ERECTION: 1. LOWER THE BEAM INTO PLACE FROM ABOVE.

2. STUFF A FEW BOLTS TO SECURE ASSEMBLY.

THE WELDS WHILE THE DOG IS UNDER LOAD!



GROUND SMOOTH.



B

6

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4. SYSTEMATICALLY TIGHTEN BOLTS PER SPECIFICATIONS.

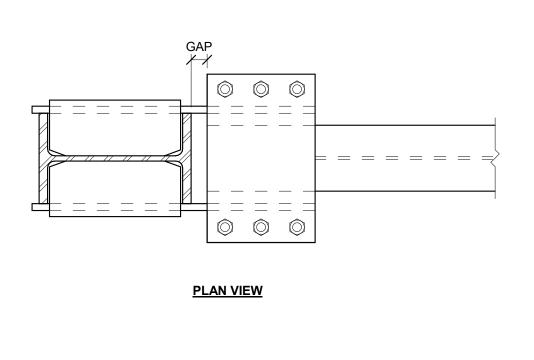
ONCE BOTTOM DOG

IS REMOVED, THE

SIDE PLATES WILL

CLAMP TOGETHER

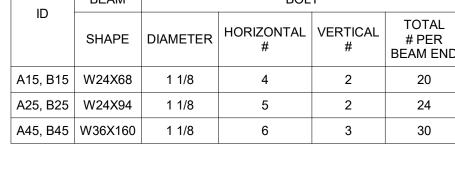
AND ELIMINATE GAPS



FRONT ELEVATION

TYPICAL SEQUENCE OF ERECTION: 1. LOWER THE BEAM INTO PLACE FROM ABOVE.

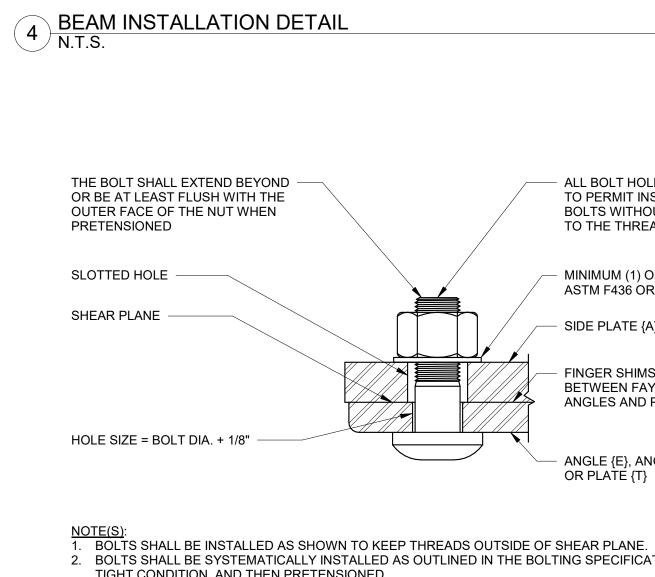
2. STUFF A FEW BOLTS TO SECURE ASSEMBLY.



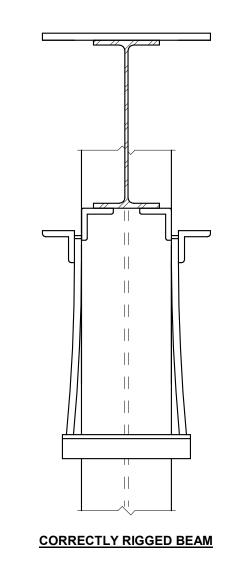
6 NARROW BEAM ERECTION SCHEDULE N.T.S.

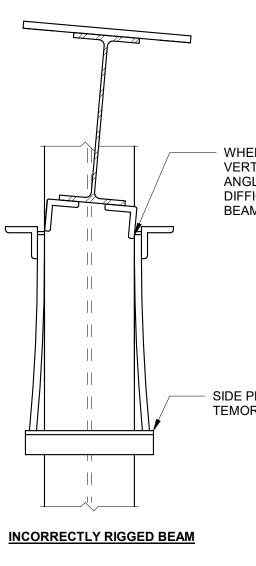
	ERECTION DESIGN (INCHES)													
	BEAM	BOLT												
ID	SHAPE	DIAMETER	HORIZONTAL #	VERTICAL #	TOTAL # PER BEAM END									
A15, B15	W24X68	1 1/8	4	2	20									
A25, B25	W24X94	1 1/8	5	2	24									
A45, B45	W36X160	1 1/8	6	3	30									

EREC	TION DESIGN (II	NCHES)					
BOLT							
ETER	HORIZONTAL #	VERTICAL #	TOTAL # PER BEAM END				



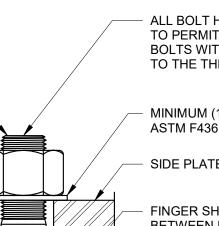
3 FIELD BOLTING DETAIL N.T.S.





WHEN THE BEAM WEB IS NOT VERTICAL, IT MAY CAUSE THE ANGLES TO BIND MAKING IT DIFFICULT TO LOWER THE BEAM INTO PLACE

SIDE PLATES HELD APART BY TEMORARY CONSTRUCTION AID



ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT INSERTION OF THE BOLTS WITHOUT UNDUE DAMAGE TO THE THREADS

MINIMUM (1) ORDINARY THICKNESS ASTM F436 OR F959 WASHER

SIDE PLATE {A} OR PLATE {B}

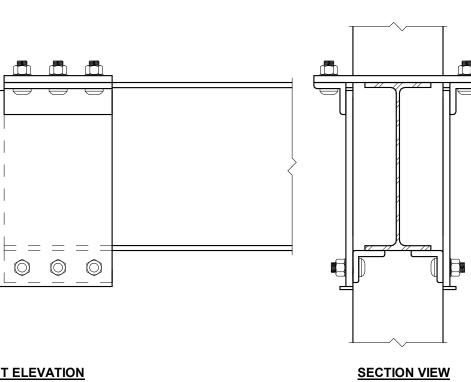
FINGER SHIMS MAY BE PLACED BETWEEN FAYING SURFACES OF ANGLES AND PLATE

ANGLE {E}, ANGLE {G}, ANGLE {H}, OR PLATE (T)

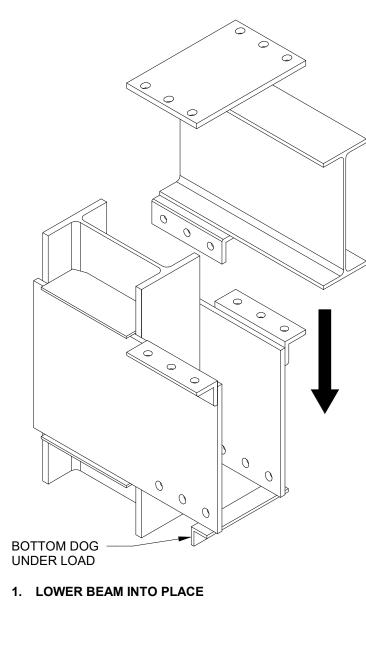
2. BOLTS SHALL BE SYSTEMATICALLY INSTALLED AS OUTLINED IN THE BOLTING SPECIFICATIONS. FIRST TO A SNUG 2. BOLTS SHALL BE STSTEMATICALLY INSTALLED AS COTLINED IN THE BOLTING SPECIFICATIONS. FIRST TO A TIGHT CONDITION, AND THEN PRETENSIONED.
 3. THE USE OF FINGER SHIMS ARE ALLOWED FOR GAPS GREATER THAN 1/8 INCH UP TO 1/4 INCH. CONTACT SIDEPLATE SYSTEMS, INC. IF GAPS ARE GREATER THAN 1/4 INCH.
 4. NUT SHALL BE ASTM A563. 5. THE BOLT/FASTENER ASSEMBLY SHALL BE COVERED IN A LIGHT PROTECTIVE OIL. 6. FOLLOW QUALITY CONTROL SECTION FOR EXPOSURE LIMITATION ON BOLTS/FASTENERS.

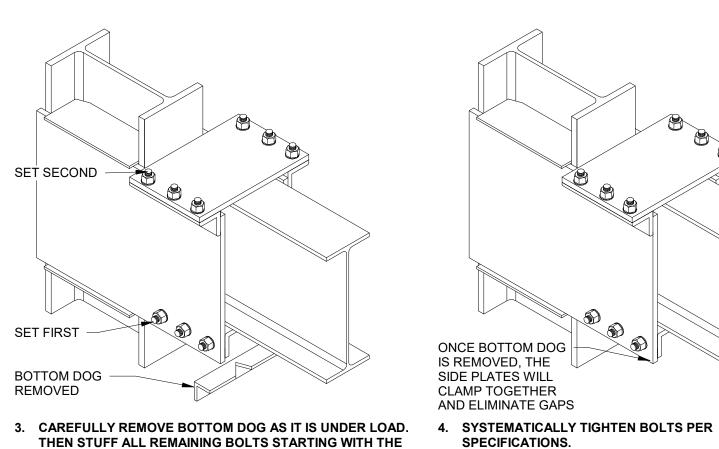
		ERECTION D	DESIGN (INCHES	S)							
	BEAM	BOLT									
ID	SHAPE	DIAMETER	HORIZONTAL #	TOTAL # PER BEAM END							
A10, A11, A12, (A13) A19, B11, B12, B19	W24X68	1 1/8	4	16							
A20, B20	W24X94	1 1/8	5	20							
A30, B30	W36X150	1 1/8	6	24							

2 BEAM ERECTION SCHEDULE N.T.S.

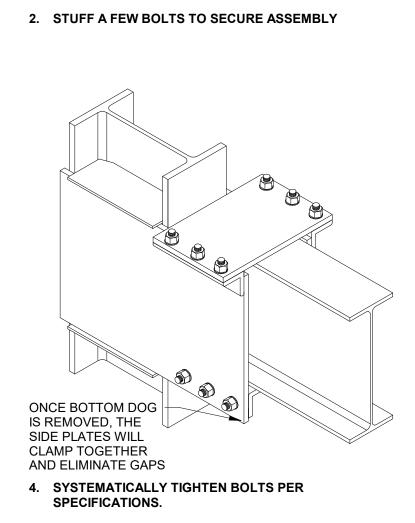


3. BOTTOM DOG SHALL BE REMOVED. IT IS RECOMMENDED THAT IT BE REMOVED BY TORCH CUTTING A 'V' SECTION OUT OF ONE OF THE ANGLE LEGS TO ALLEVIATE THE LOAD AND THEN PROCEED TO REMOVE IT. IT IS NOT RECOMMENDED TO USE A GRINDING WHEEL TO REMOVE THE WELDS WHILE THE DOG IS UNDER LOAD! 4. BOLTS SHALL BE STUFFED INTO HOLES IN THE BEAM COVER PLATE {B} AND THE SIDE PLATES {A}. 5. SYSTEMATICALLY TIGHTEN BOLTS PER RCSC SPECIFICATIONS. 6. THE WELD REMNANTS OF THE BOTTOM DOG MAY REMAIN IN PLACE AND DO NOT NEED TO BE

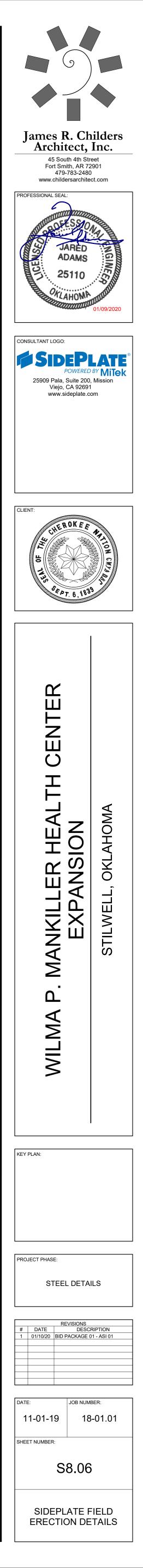




BOTTOM ROW AND THEN THE TOP ROW.



BOTTOM DOG – UNDER LOAD

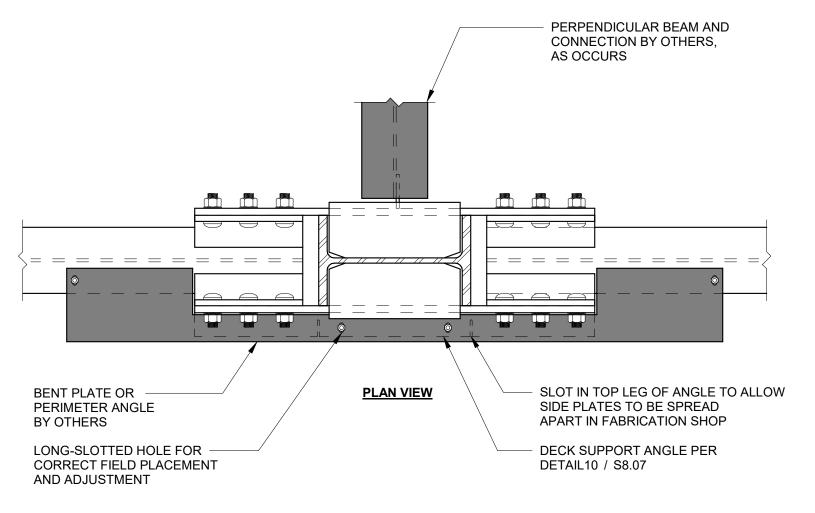


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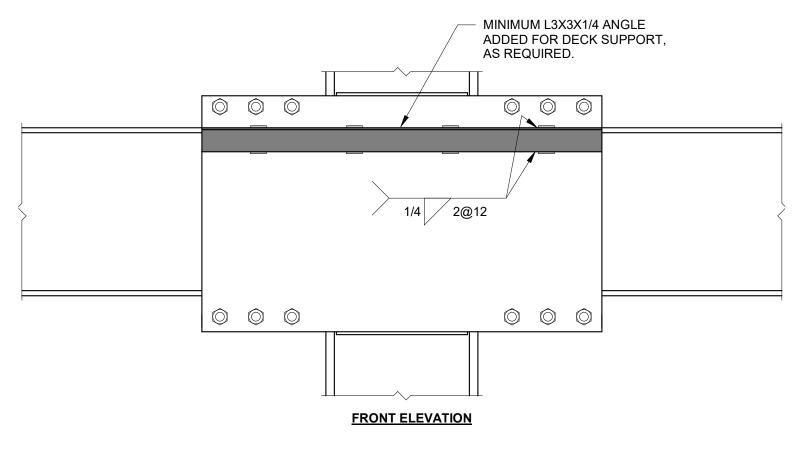
9 NARROW CONFIGURATION SLAB EDGE DETAIL N.T.S.

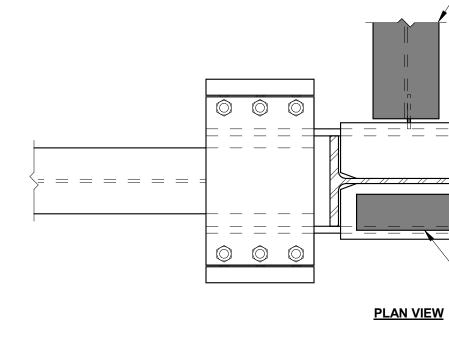




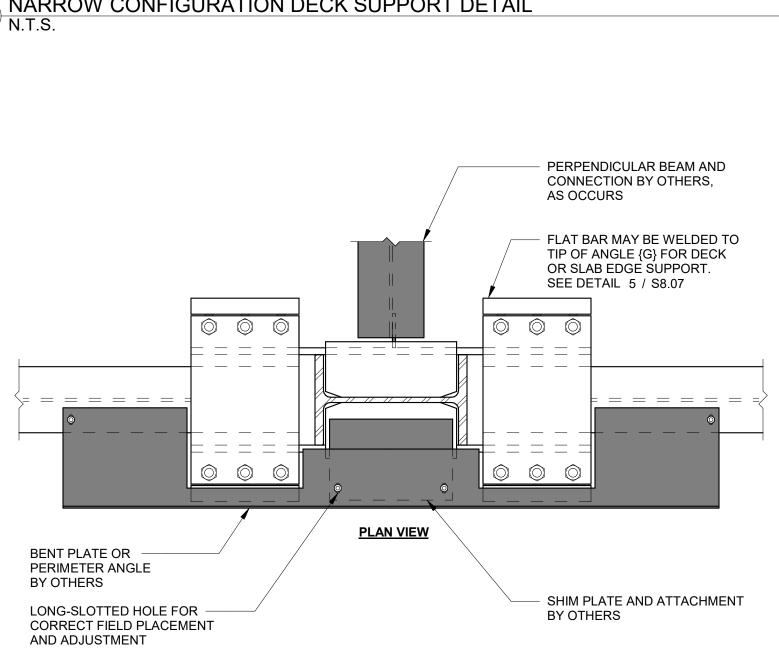
_ _ _ _ _ _ _ _ _ _ _ _ _ TOP VIEW

10 DECK SUPPORT ANGLE DETAIL N.T.S.

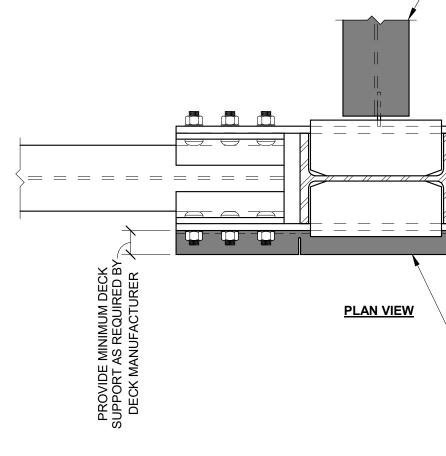




7 WELDED FLAT BAR FOR SLAB EDGE SUPPORT DETAIL N.T.S.

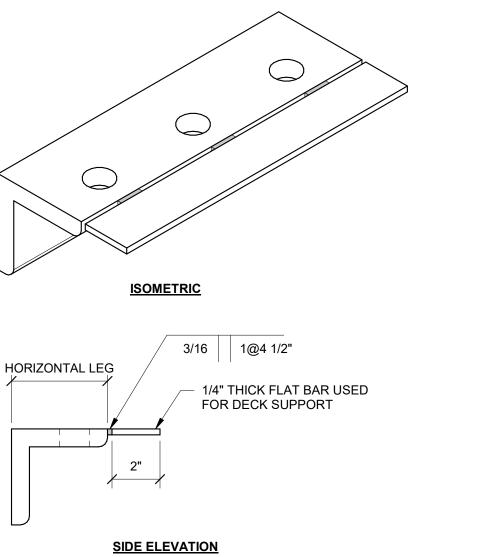


8 NARROW CONFIGURATION DECK SUPPORT DETAIL N.T.S.



1 DISCONTINUOUS COLUMN DETAIL N.T.S.

NOTE(S): 1. SLOPED CONDITION SHOWN, CONNECTION MAY BE FLAT. 2. LONGITUDINAL ANGLES {G} NOT SHOWN FOR CLARITY.



PERPENDICULAR BEAM AND CONNECTION BY OTHERS, AS OCCURS

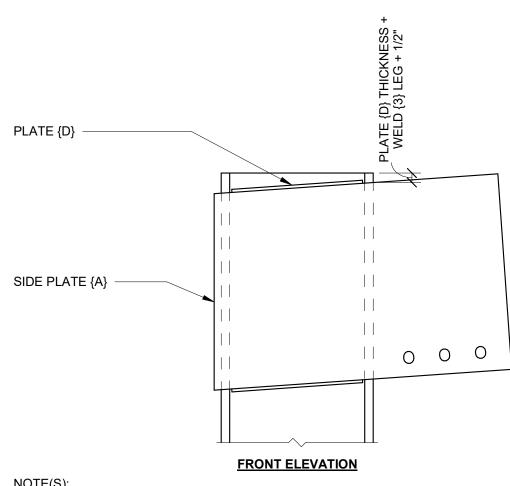
- FLAT BAR MAY BE WELDED TO

TIP OF ANGLE {G} FOR DECK SUPPORT. SEE DETAIL 5 / S8.07

= = = = = =

SHIM PLATE FOR DECK

SUPPORT, AS NEEDED

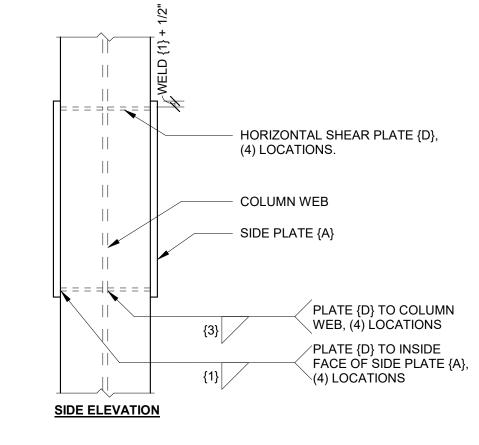


6 WELDED FLAT BAR DECK SUPPORT DETAIL N.T.S.

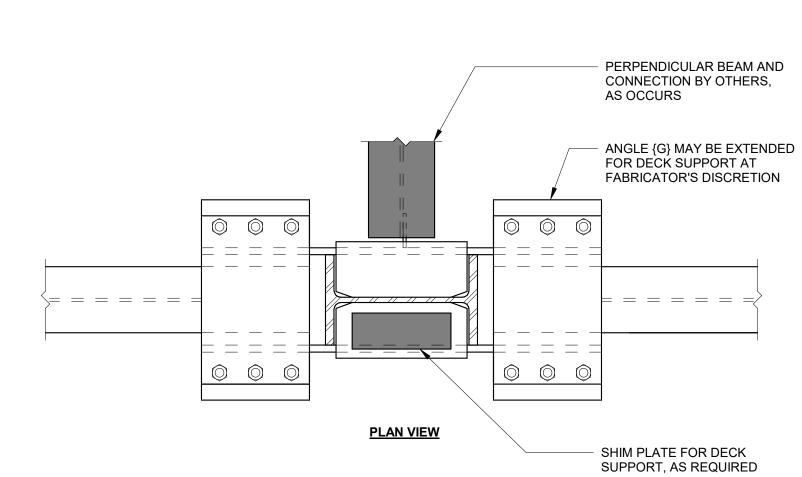
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2 PLATE {D} ALTERNATE DETAIL N.T.S.

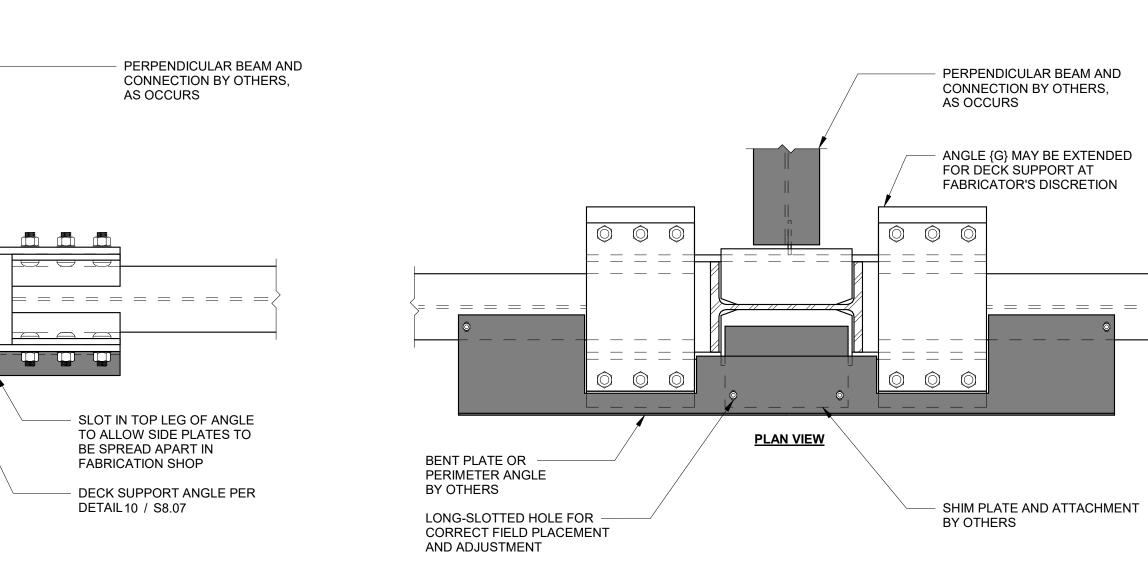
<u>NOTE(S)</u>: 1. LONGITUDINAL ANGLES {G} NOT SHOWN FOR CLARITY.







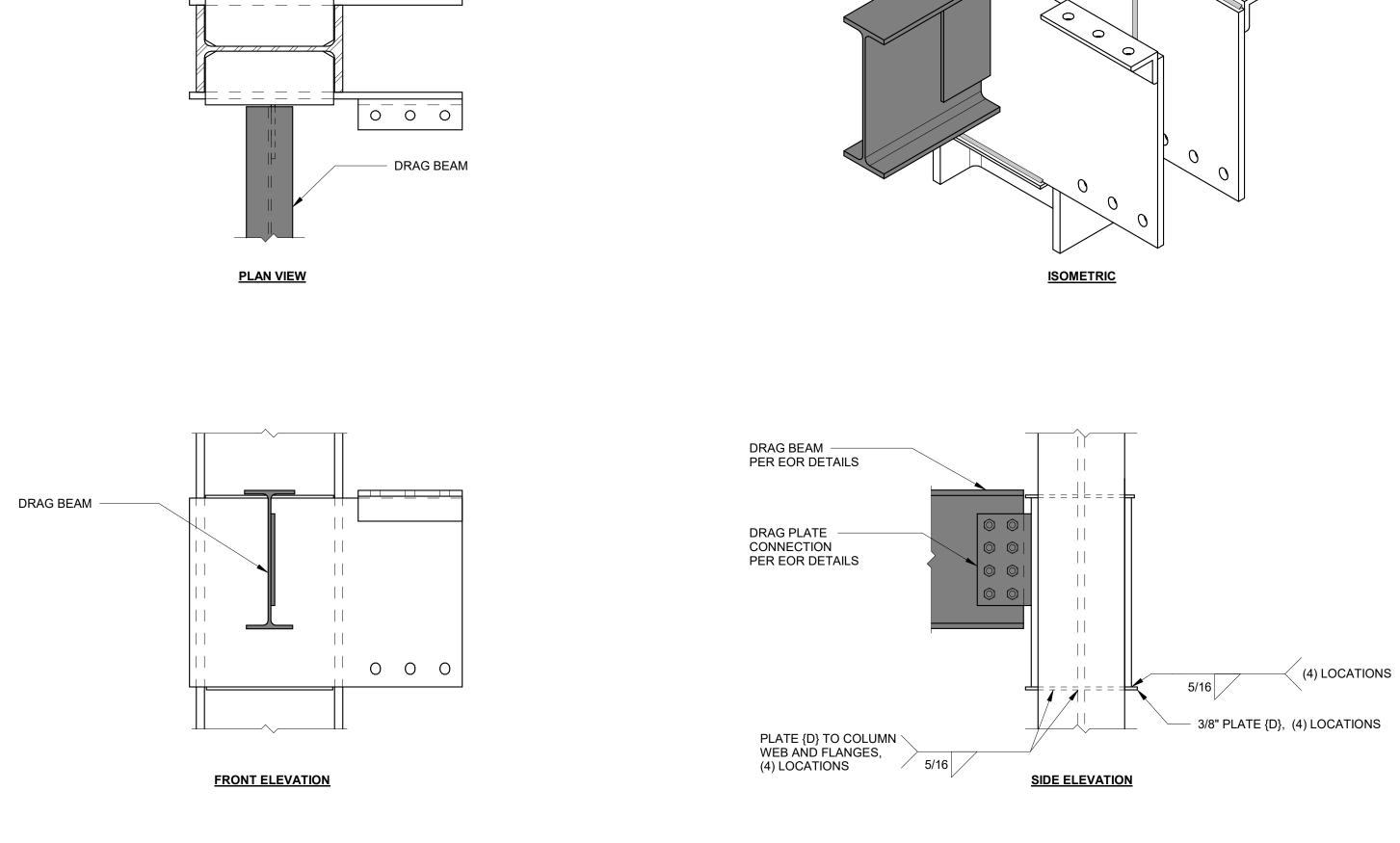
4 SLAB EDGE DETAIL N.T.S.





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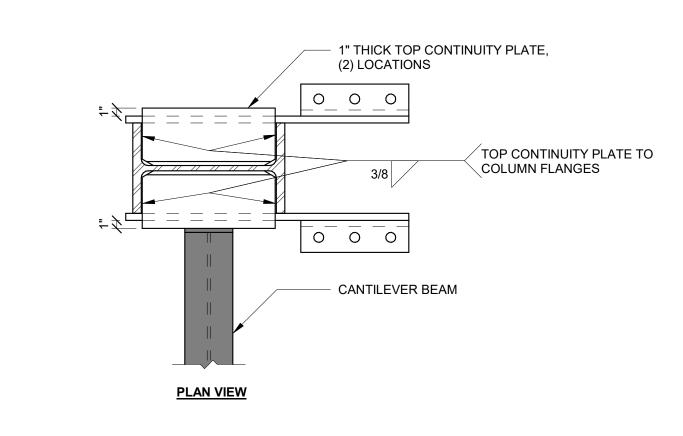
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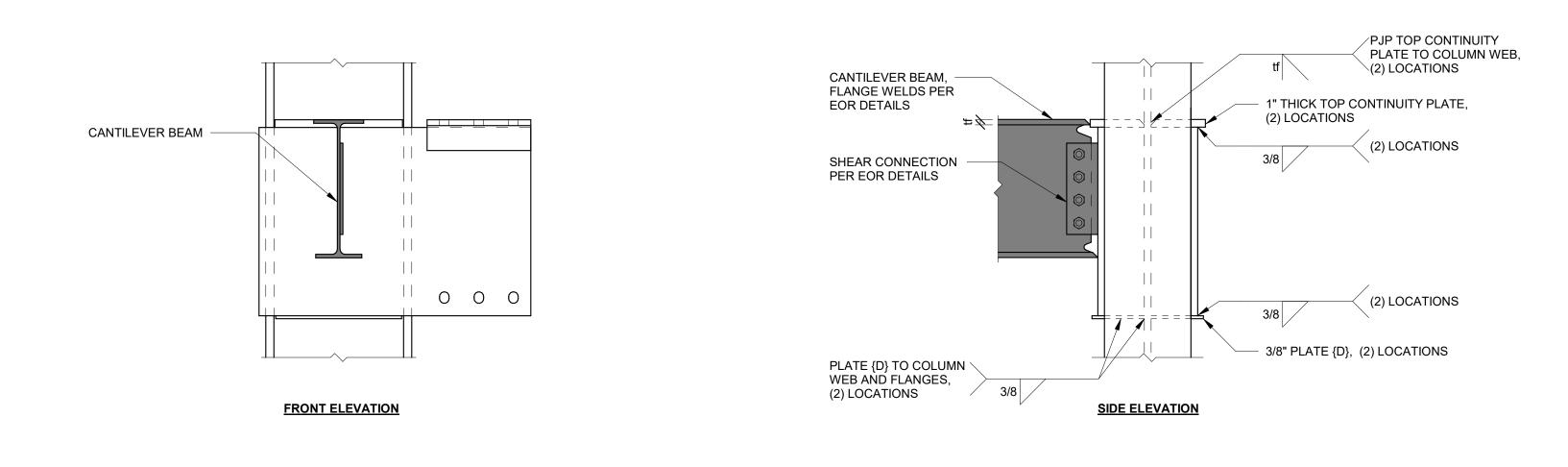




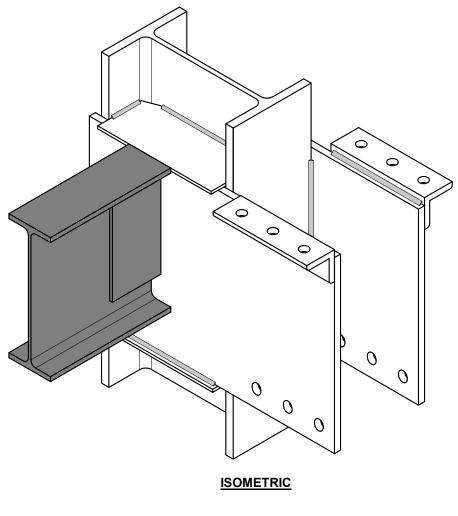
0 0 0

M2 SHEAR PLATE DRAG BEAM TO SIDEPLATE CONNECTION N.T.S.

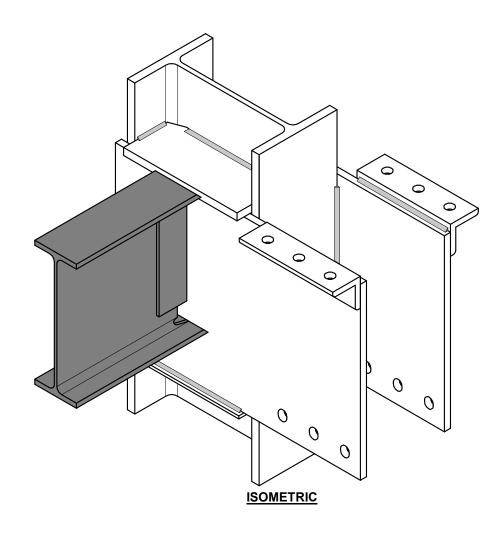




NOTE(S): 1. ATTACHMENT SHOWN ON ONE SIDE OF SIDEPLATE CONNECTION FOR ILLUSTRATION. ATTACHMENT CAN OCCUR ON LEFT SIDE, RIGHT SIDE, OR BOTH SIDES OF CONNECTION AS APPLICABLE.



NOTE(S): 1. ATTACHMENT SHOWN ON ONE SIDE OF SIDEPLATE CONNECTION FOR ILLUSTRATION. ATTACHMENT CAN OCCUR ON LEFT SIDE, RIGHT SIDE, OR BOTH SIDES OF CONNECTION AS APPLICABLE.



Misc ID	Coordinate with Detail
M1	M1/S8.08
M2	M2/S8.08

