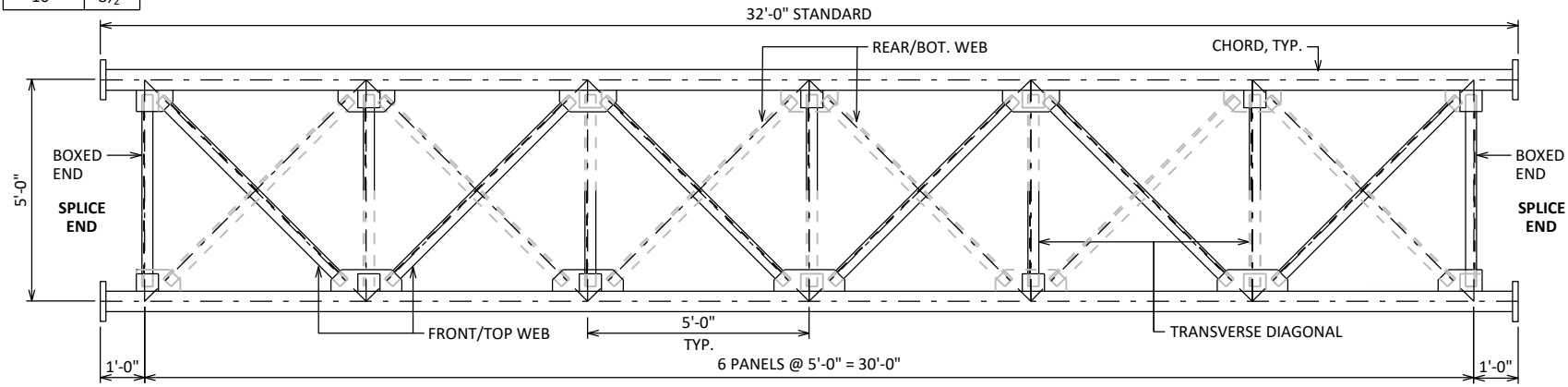


COLUMN "OD"	"X"
12¾"	10⅞"
14"	9½"
16"	8½"

END TRUSS SECTION

1 LOOKING AT F.F., TOP SIMILAR

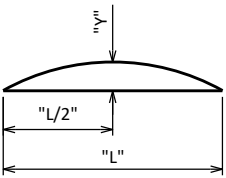


CENTER TRUSS SECTION

8 LOOKING AT F.F., TOP SIMILAR.

CAMBER VALUES

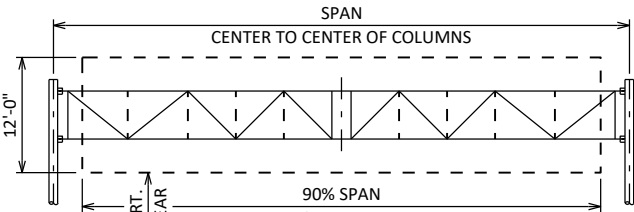
SPAN "L"	"Y"	
	TYPE I	DMS
60'-0"	1"	1¼"
82'-0"	1½"	1⅞"
102'-0"	2½"	2⅝"
114'-0"	2⅝"	3¼"
130'-0"	3¼"	4"



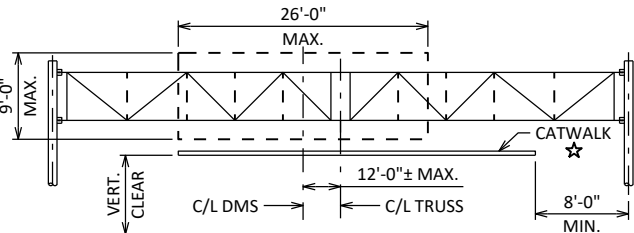
INTERPOLATE FOR VALUES NOT SHOWN.
DMS VALUES INCLUDE DL OF CATWALK.

CAMBER DIAGRAM

CAMBER SHALL BE BUILT INTO THE TRUSS DURING FABRICATION. SHIM PLATES BETWEEN TRUSS SECTIONS TO CREATE CAMBER SHALL NOT BE ALLOWED.



TYPE I SIGN LIMITS

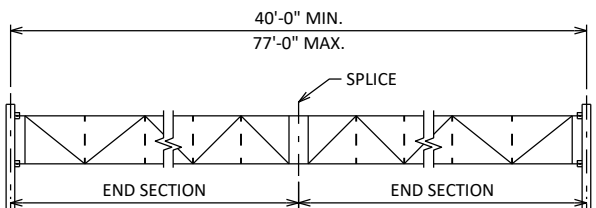


DMS SIGN LIMITS

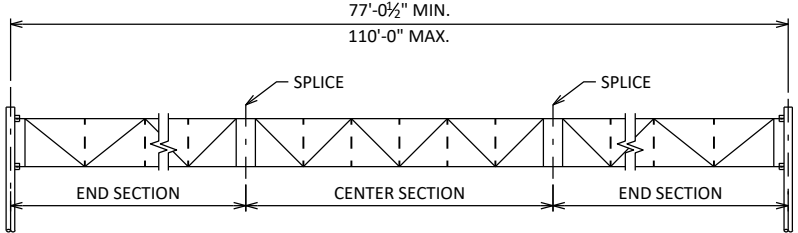
4,500 LB MAX DMS WEIGHT, INCLUDES DMS VERTICAL SUPPORT MEMBERS

FULL SPAN 4-CHORD TRUSS MEMBER TABLE

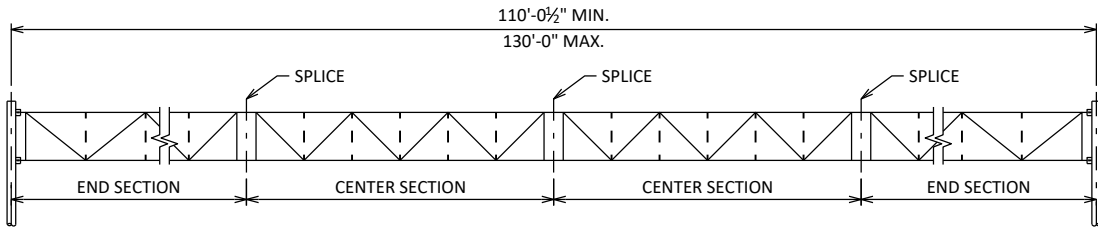
STANDARD DESIGN TRUSS	TYPE I SIGN AREA (SQ. FT)	DMS AREA (SQ. FT.)	MAXIMUM SPAN	CHORD "OD" X THK	WEB W X D X THK	BOXED END W X D X THK	TRANSVERSE DIAGONAL W X D X THK	SPLICE PLATE "OD" X THK	CHORD SPLICE NO. ¾" BOLTS
I	648	234	60'-0"	5.563" X 0.258"	L3½ X 3½ X ⅜	L3 X 3 X ¼	L3 X 3 X ¼	11⅝" X 1½"	8
II	885	234	82'-0"	5.563" X 0.375"	L3½ X 3½ X ⅜	L3 X 3 X ¼	L3 X 3 X ¼	11⅝" X 1½"	8
III	1102	234	102'-0"	5.563" X 0.500"	L4 X 4 X ⅜	L3 X 3 X ¼	L3 X 3 X ¼	11⅝" X 1½"	8
IV	1232	234	114'-0"	6.625" X 0.375"	L4 X 4 X ⅜	L3 X 3 X ¼	L3 X 3 X ¼	1'-0⅝" X 1½"	8
V	1404	234	130'-0"	6.625" X 0.500"	L4 X 4 X ½	L3 X 3 X ¼	L3 X 3 X ¼	1'-0⅝" X 1½"	8



2 SECTION TRUSS



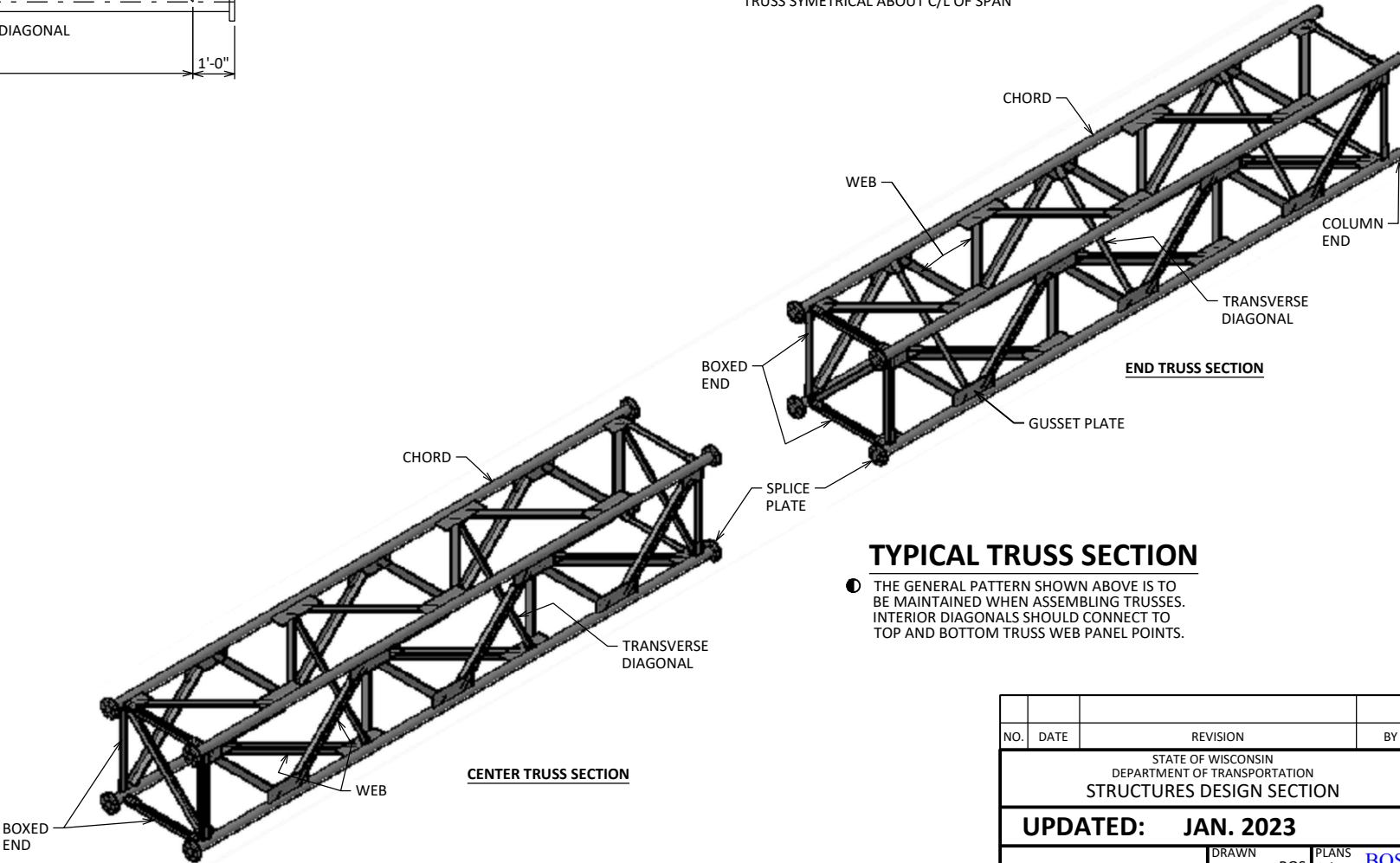
3 SECTION TRUSS



4 SECTION TRUSS

TRUSS CONFIGURATIONS

TRUSS SYMMETRICAL ABOUT C/L OF SPAN



TYPICAL TRUSS SECTION

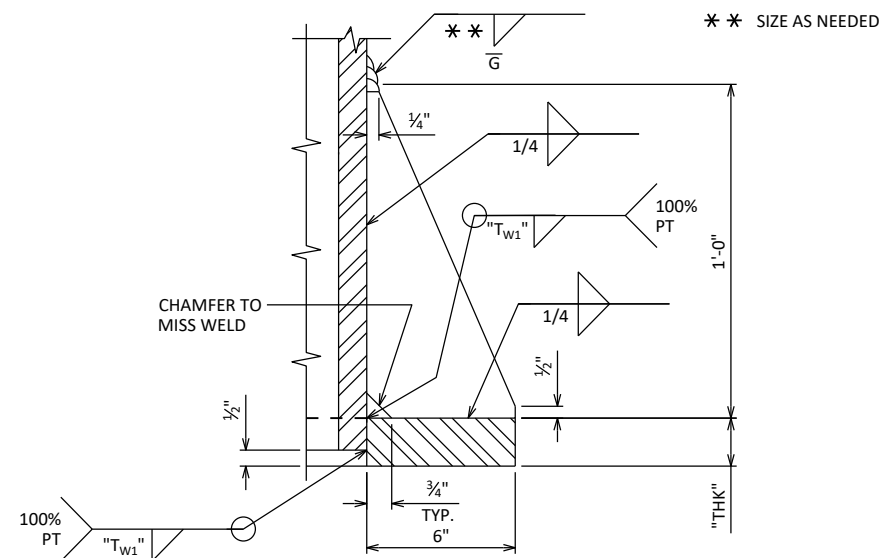
THE GENERAL PATTERN SHOWN ABOVE IS TO BE MAINTAINED WHEN ASSEMBLING TRUSSES. INTERIOR DIAGONALS SHOULD CONNECT TO TOP AND BOTTOM TRUSS WEB PANEL POINTS.

LEGEND

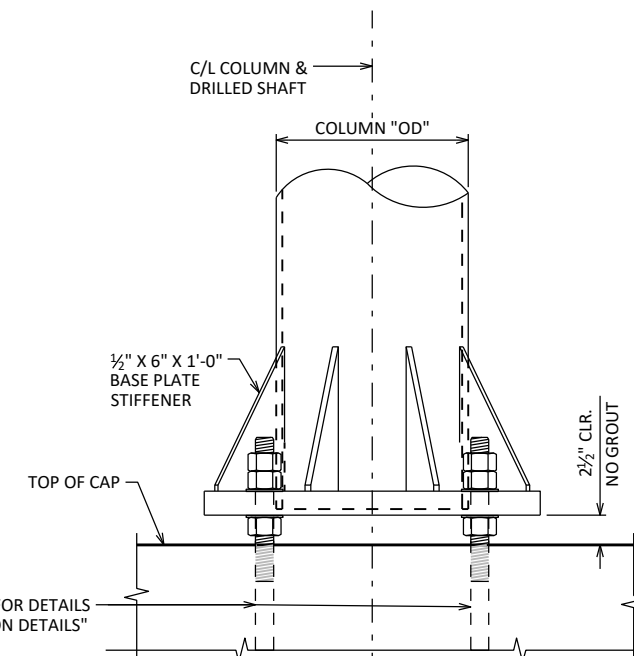
★ FOR OSS WITH DMS ONLY, SEE "CATWALK DETAILS" SHEET.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED: JAN. 2023			
DRAWN BY		BOS	PLANS CK'D BOS
4-CHORD TRUSS FULL SPAN DETAILS		SHEET I	

SCALE = 4:0



BASE PLATE STIFFENER DETAIL

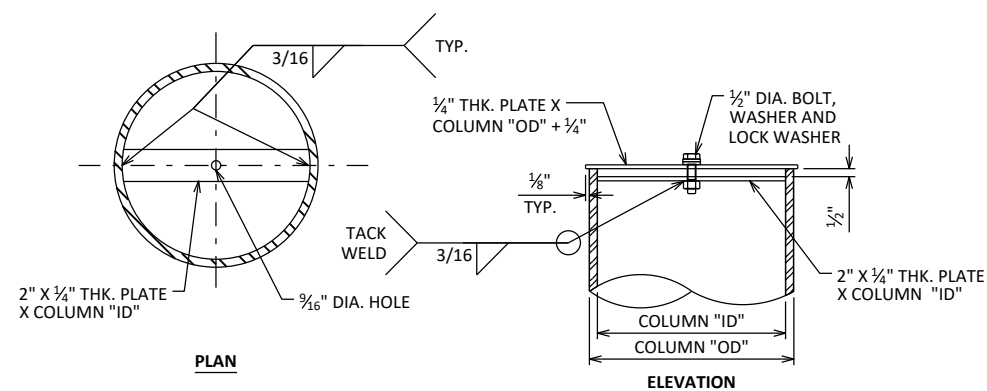


BASE PLATE & COLUMN DETAIL

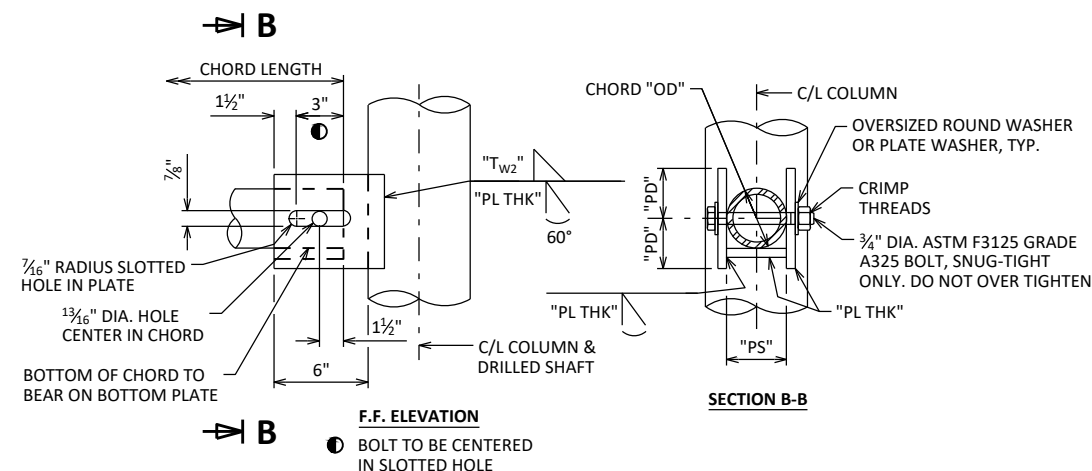
LOOKING AT F.F. OF STRUCTURE



LOOKING AT F.F. OF STRUCTURE,
OTHER COLUMN TRUSS SIMILAR

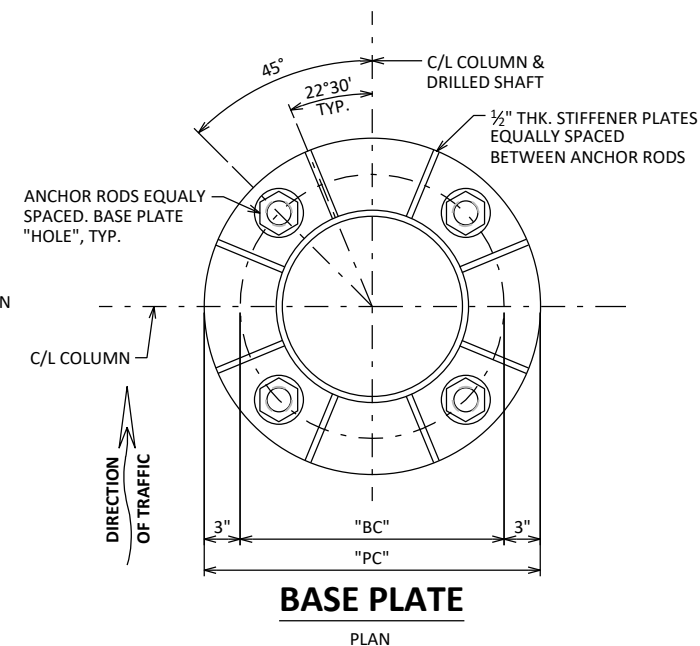


TOWER CAP DETAIL



TOWER SADDLE CONNECTION DETAILS

BOLT AND HOLE DIMENSIONS SHOWN ARE MINIMUM



BASE PLATE

PLAN

FULL SPAN 4-CHORD COLUMN MEMBER TABLE

STANDARD DESIGN TYPE	MAXIMUM COLUMN HEIGHT	COLUMN "OD" X THK	WEB W X D X THK	STIFFENER THK X W X D	BASE PLATE					TOWER SADDLE CONNECTION			
					"TW1"	"HOLE"	"THK"	"BC"	"PC"	"TW2"	"PL THK"	"PS"	"PD"
I	31'-0"	12¾" X 0.250"	L3½ X 3½ X ¾	½" X 6" X 1'-0'	⅝ ₁₆ "	1⅜ ₁₆ "	2"	1'-6¾"	2'-0¾"	¼"	⅜"	5¾"	3⅜ ₁₆ "
II	31'-0"	12¾" X 0.375"	L4 X 4 X ¾	½" X 6" X 1'-0'	⅝ ₁₆ "	1⅜ ₁₆ "	2"	1'-6¾"	2'-0¾"	¼"	⅜"	5¾"	3⅜ ₁₆ "
III	31'-0"	12¾" X 0.500"	L4 X 4 X ½	½" X 6" X 1'-0'	⅝ ₁₆ "	2⅛ ₁₆ "	2"	1'-6¾"	2'-0¾"	¼"	⅞ ₁₆ "	5¾"	3⅜ ₁₆ "
IV	31'-0"	14" X 0.500"	L5 X 5 X ⅞ ₁₆	½" X 6" X 1'-0'	⅝ ₁₆ "	2⅛ ₁₆ "	2"	1'-8"	2'-2"	¼"	⅞ ₁₆ "	6⅜ ₁₆ "	4⅞ ₁₆ "
V	31'-0"	16" X 0.500"	L5 X 5 X ½	½" X 6" X 1'-0'	⅝ ₁₆ "	2⅛ ₁₆ "	2"	1'-10"	2'-4"	¼"	½"	6⅜ ₁₆ "	4⅞ ₁₆ "

LEGEND

- ☆ FOR OSS WITH DMS ONLY, PROVIDE HANDHOLES AT COLUMN ADJACENT TO DMS. SEE "ELECTRICAL DETAILS" SHEET.
- FOR OSS WITH DMS ONLY, DRILL AND TAP FOR 2 - 2" STD. PIPE THREADS. LOCATE CENTER OF BOTTOM HOLE 6" ABOVE TOP OF BOTTOM CHORD AND SPACE VERTICALLY AT 6" C/C. PLACE CONDUIT PLUG IN HOLES THAT ARE NOT USED FOR WIRING SIGN PANELS. SEE "ELECTRICAL DETAILS" SHEET.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		OCT. 2023	
		DRAWN BY	PLANS CK'D
		BOS	BOS
4-CHORD TRUSS FULL SPAN COLUMN DETAILS		SHEET II	

SCALE - 40

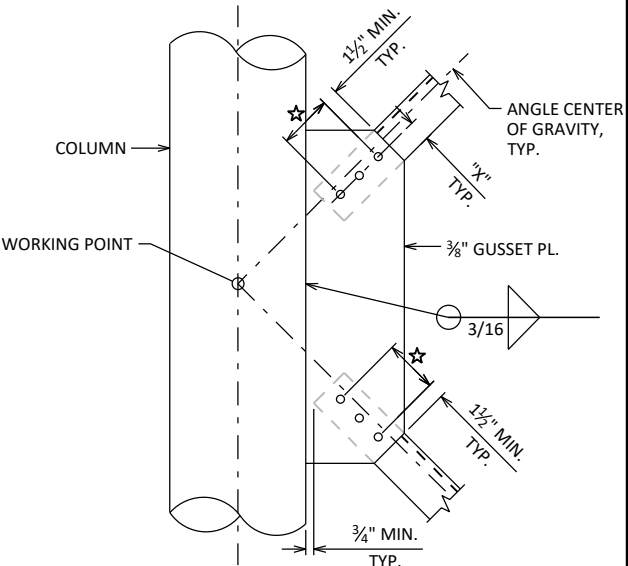
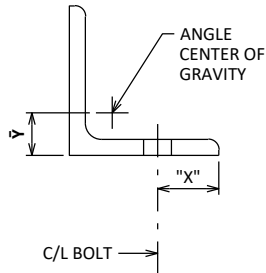
MEMBER CONNECTION DATA

STANDARD DESIGN TYPE	WELD LEG MIN. LENGTH		NO. OF BOLTS	
	▲	●	■	☆
I	3"	4"	3	3
II	3½"	6"	3	3
III	3½"	6"	5	3
IV	4"	6¾"	5	4
V	4½"	7¾"	5	4

FOR ALL ANGLE TO GUSSET CONNECTIONS,
BOLT SPACING = 2½"

ANGLE DATA

ANGLE SIZE	ȳ	"X"
L3 X 3 X ¼	0.84"	1¼"
L3½ X 3½ X ⅝	0.98"	1½"
L3½ X 3½ X ¾	1.00"	1½"
L4 X 4 X ¾	1.13"	1½"
L4 X 4 X ⅞	1.15"	1½"
L4 X 4 X 1	1.18"	1½"
L5 X 5 X ⅞	1.40"	2"
L5 X 5 X 1	1.42"	2"



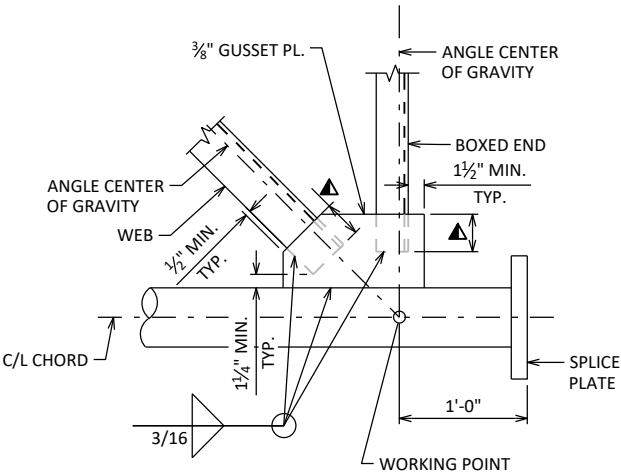
BOLTED COLUMN WEB CONNECTION

NOTE:

FABRICATOR HAS THE OPTION TO USE NON-MITERED
RECTANGULAR GUSSET PLATES IN LIEU OF MITERED
PLATES SHOWN IN THESE DETAILS.

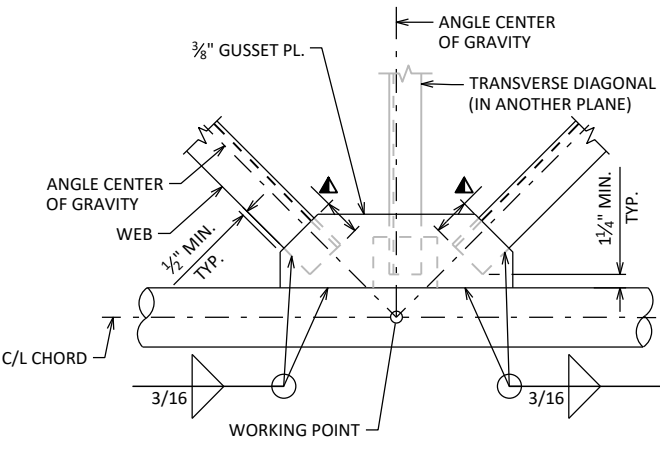
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED: JAN. 2023			
DRAWN BY		BOS	PLANS CK'D
4-CHORD TRUSS FULL SPAN CONNECTIONS 1		SHEET III	

SCALE = 3/8"

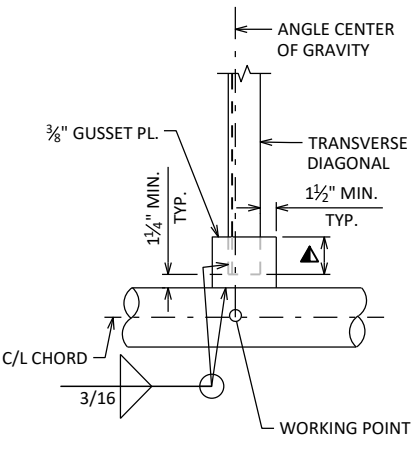


WELDED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE,
CONNECTION AT COLUMN END SIMILAR

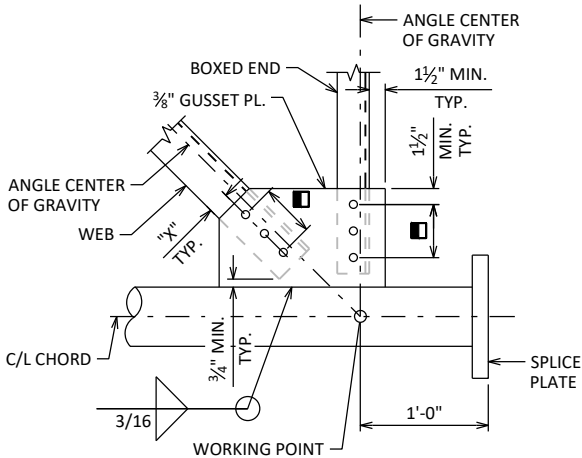


WELDED PANEL CONNECTION



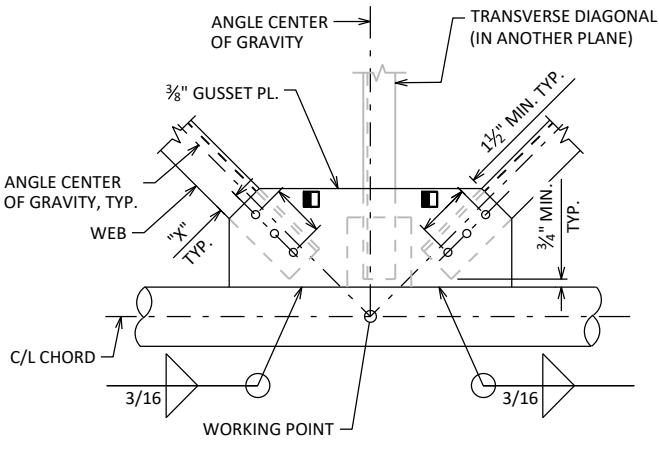
WELDED TRANSVERSE DIAGONAL CONNECTION

WEB MEMBERS NOT SHOWN FOR CLARITY

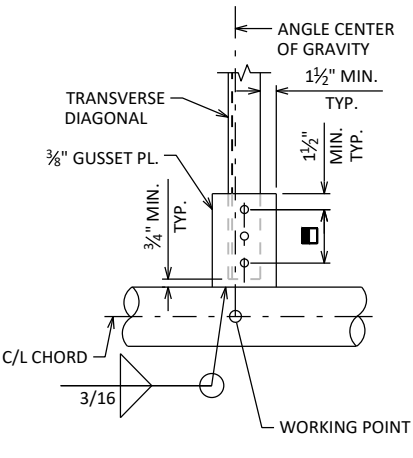


BOLTED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE,
CONNECTION AT COLUMN END SIMILAR

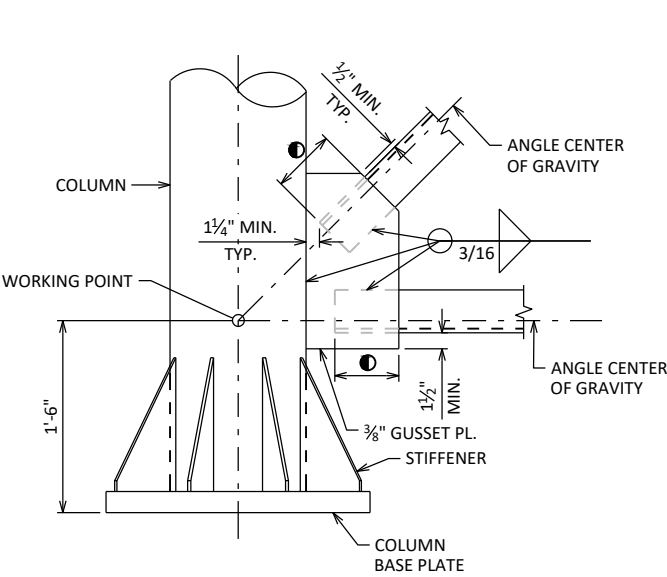


BOLTED PANEL CONNECTION



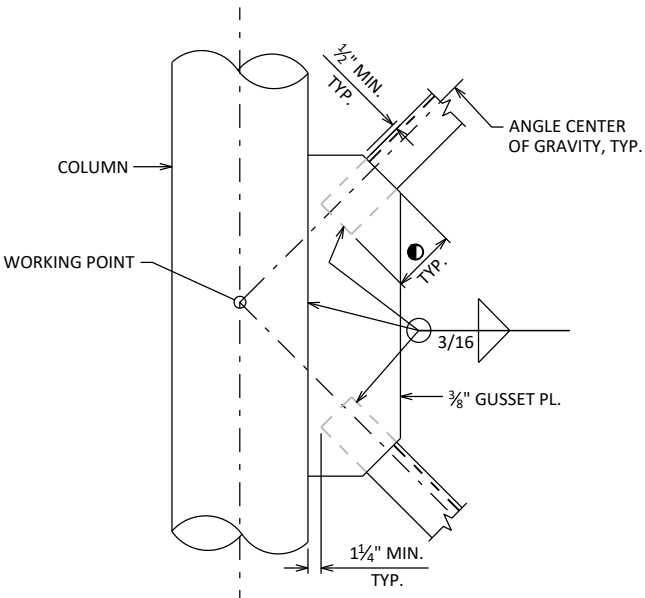
BOLTED TRANSVERSE DIAGONAL CONNECTION

WEB MEMBERS NOT SHOWN FOR CLARITY

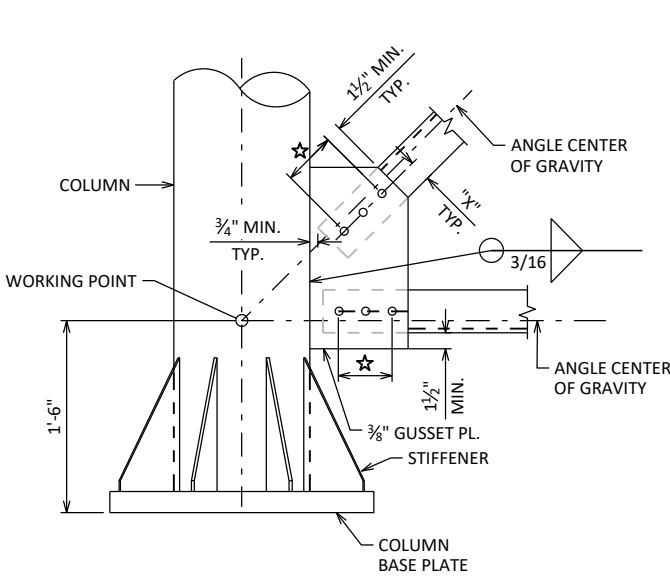


WELDED COLUMN BOTTOM CONNECTION

TOP CONNECTION SIMILAR

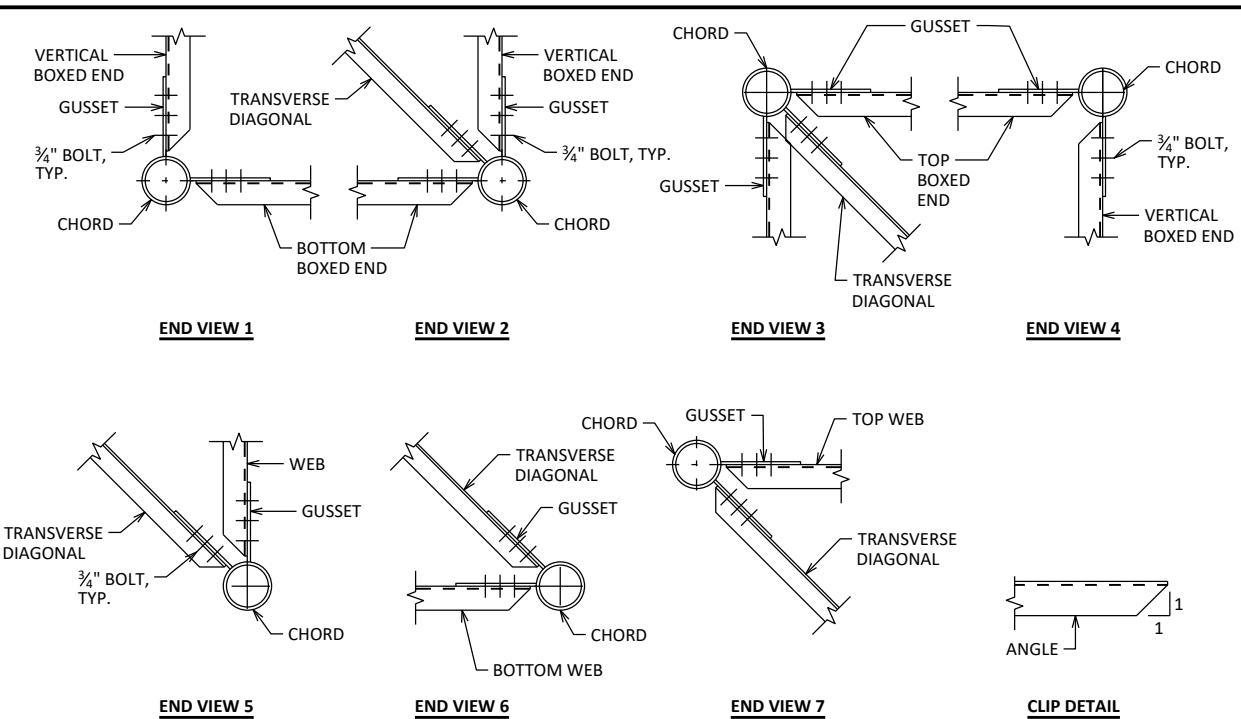


WELDED COLUMN WEB CONNECTION

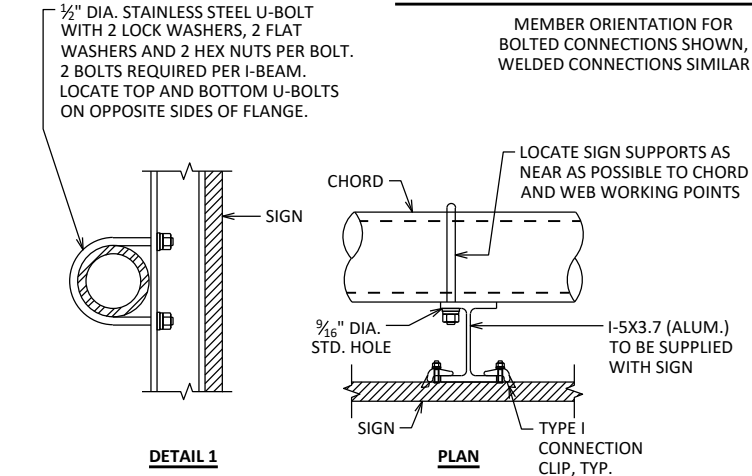


BOLTED COLUMN BOTTOM CONNECTION

TOP CONNECTION SIMILAR

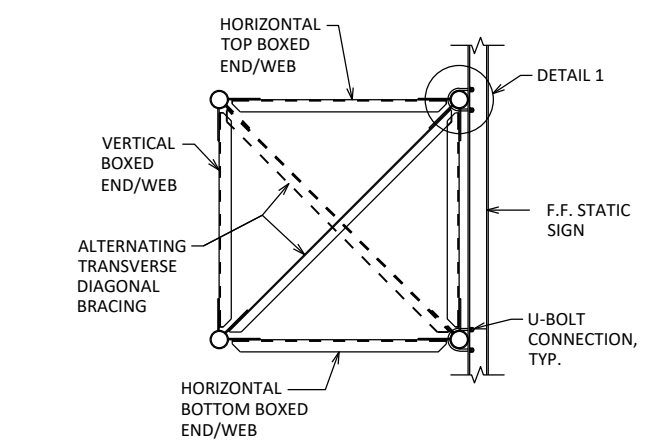


TRUSS CONNECTION DETAILS



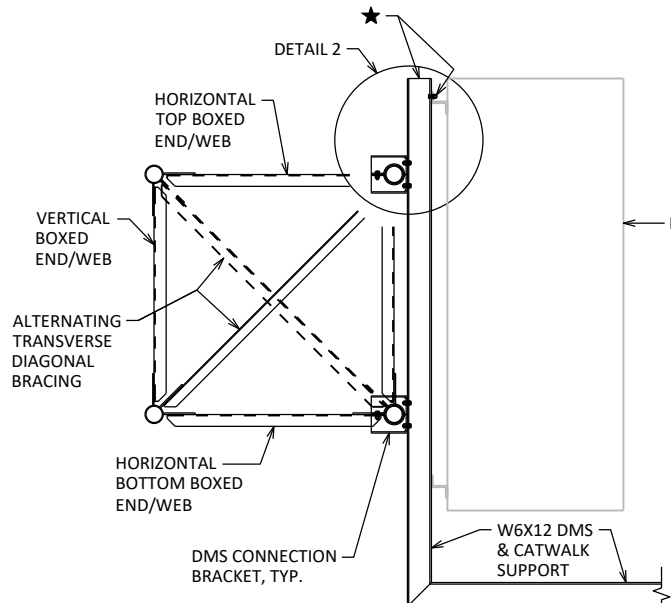
TYPICAL SIGN CONNECTION

USE FOR TYPE I AND II SIGNS, TYPE I SIGN SHOWN. SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.



SECTION THRU TRUSS - STATIC SIGN

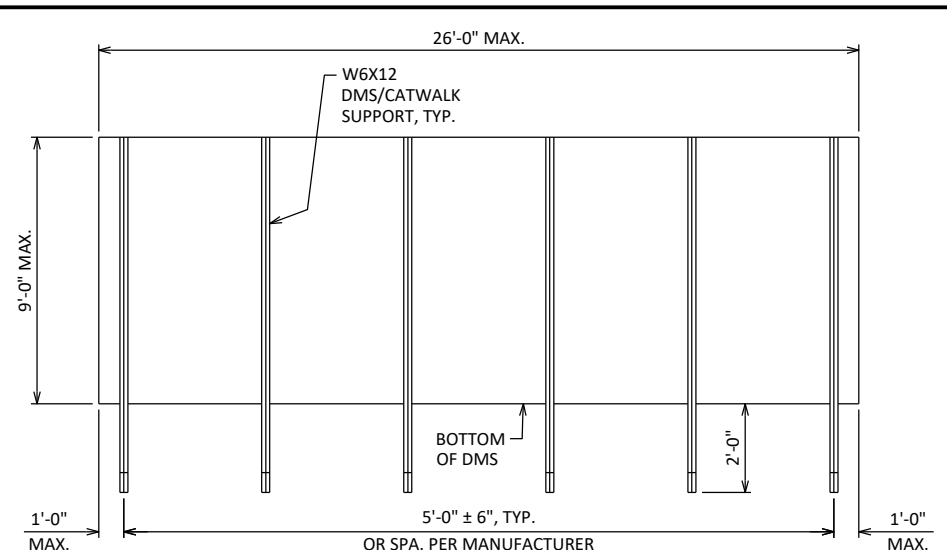
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL. HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



SECTION THRU TRUSS - DMS

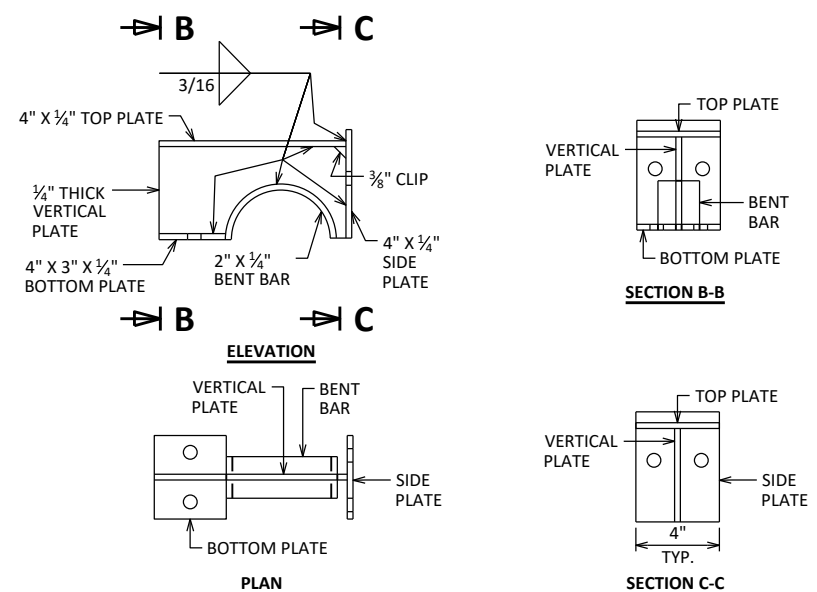
FOR DMS/CATWALK CONNECTIONS

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. 1/2" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12. FIELD DRILLED HOLES IN STEEL SUPPORTS MUST BE COLD GALVANIZED.



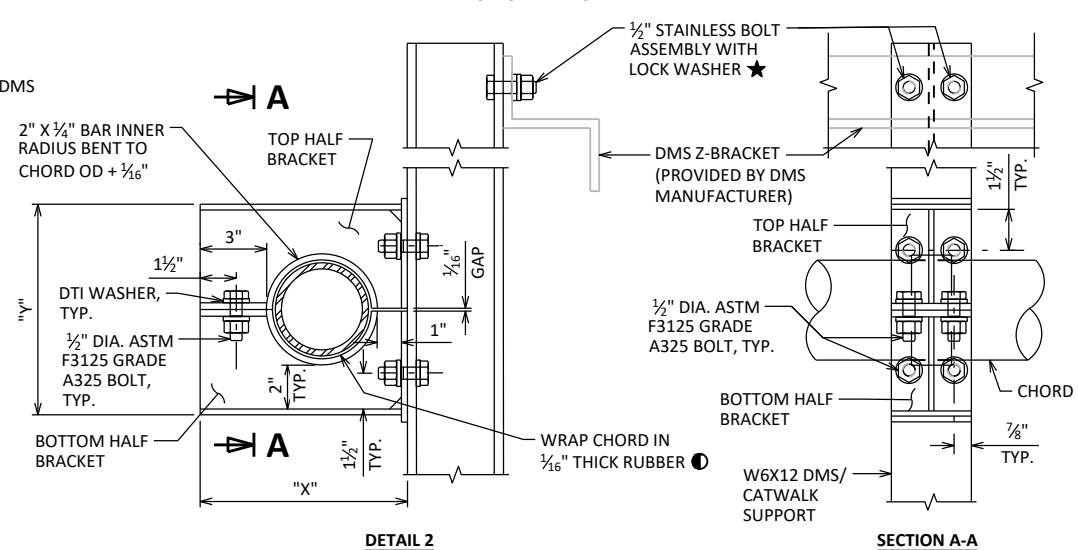
DMS MOUNTING POST SPACING DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.



DMS WELDED PLATE CONNECTION DETAILS

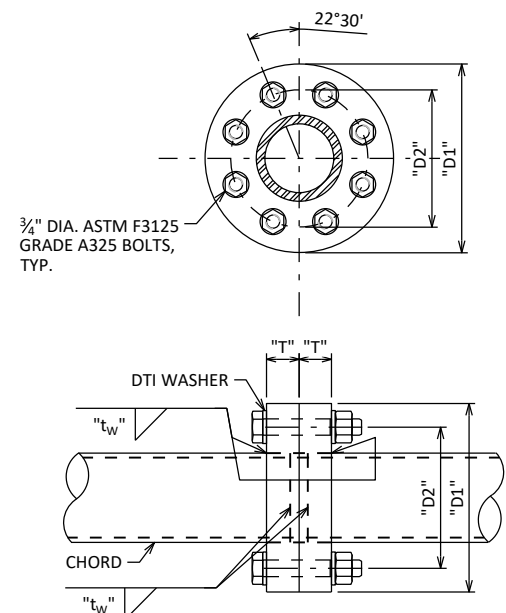
TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.



CHORD "OD"	"X"	"Y"
5.563"	10 3/8"	10 5/8"
6.625"	11 1/16"	11 1 1/16"

TYPICAL DMS CONNECTION

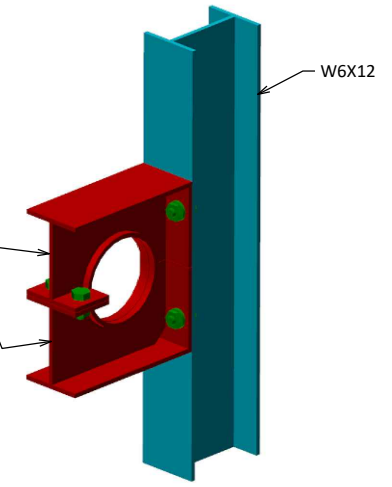
● NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD. SPEC. 506.2.6.1



CHORD SPLICE PLATE DETAIL

CHORD SPLICE CONNECTION DATA

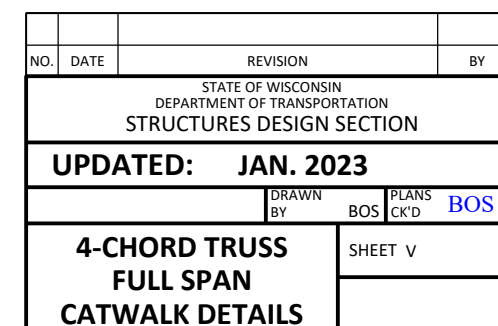
STANDARD DESIGN TYPE	"D1"	"D2"	"T"	"tw"	NO. OF BOLTS
I	11 5/8"	8 5/8"	1 1/2"	5/16"	8
II	11 5/8"	8 5/8"	1 1/2"	5/16"	8
III	11 5/8"	8 5/8"	1 1/2"	3/8"	8
IV	1'-0 5/8"	9 5/8"	1 1/2"	3/8"	8
V	1'-0 5/8"	9 5/8"	1 1/2"	3/8"	8

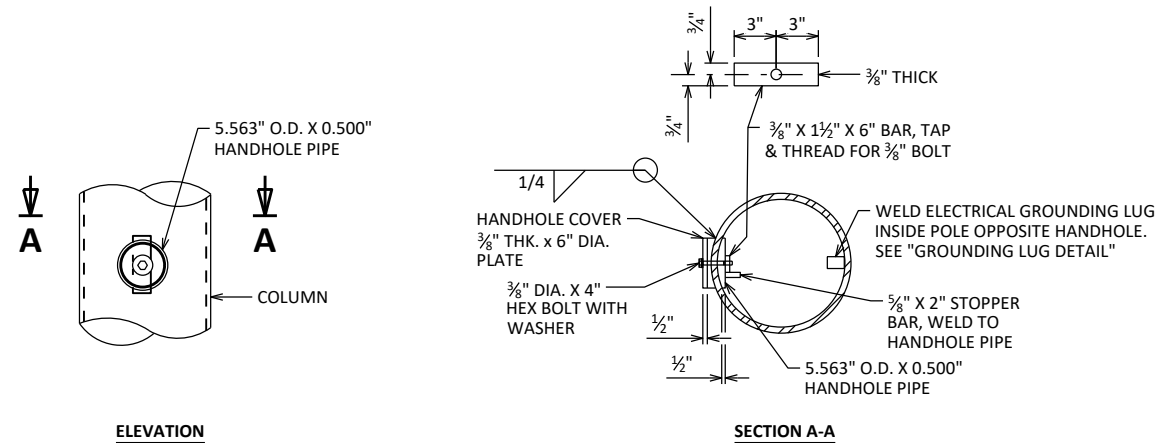


3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED: OCT. 2023			
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4-CHORD TRUSS FULL SPAN CONNECTIONS 2		SHEET IV	

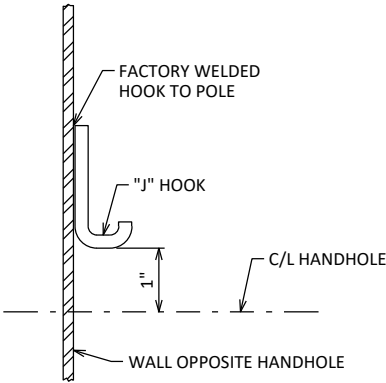




HANDHOLE DETAILS

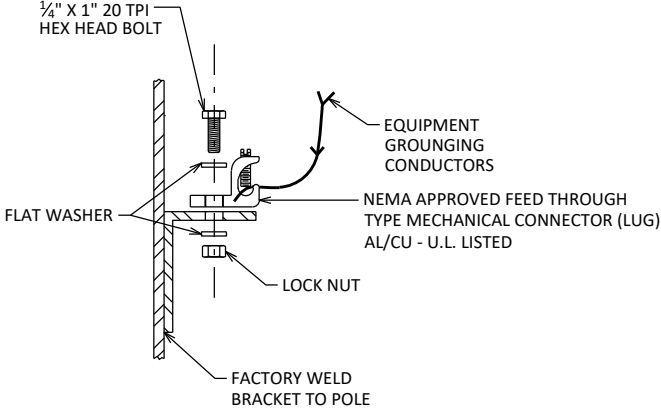
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



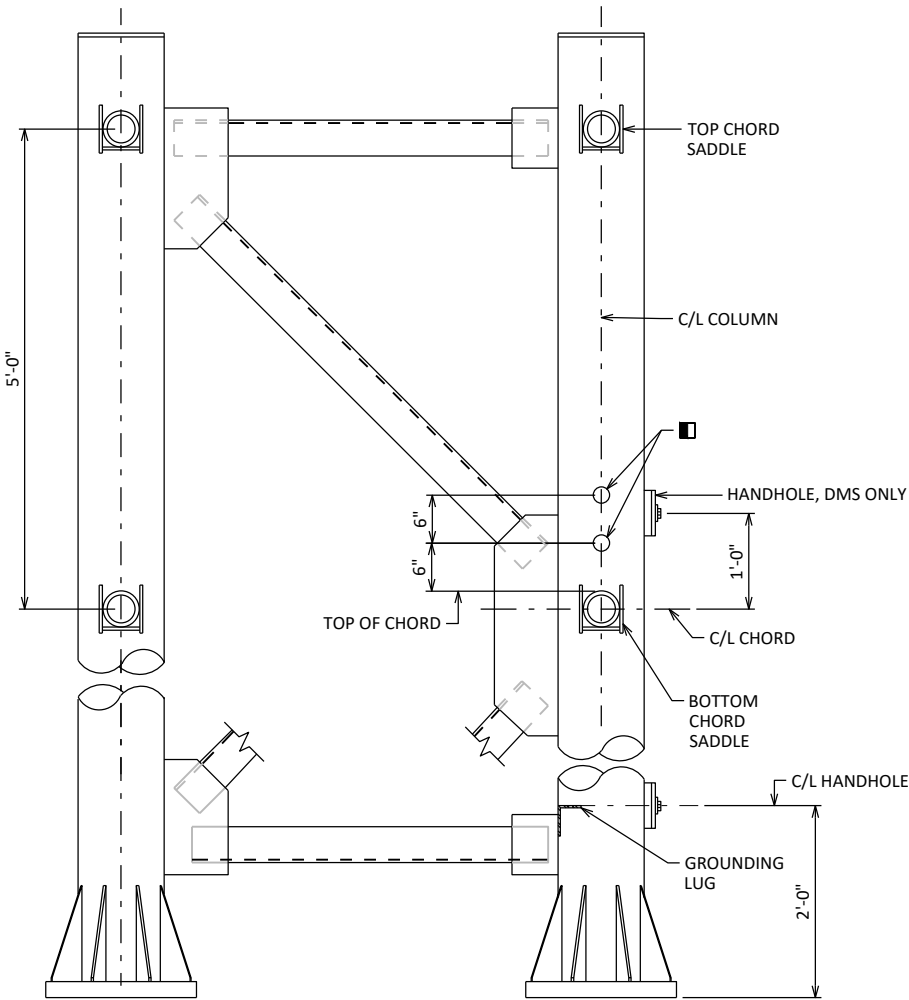
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

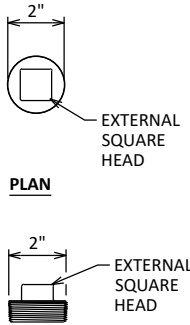
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



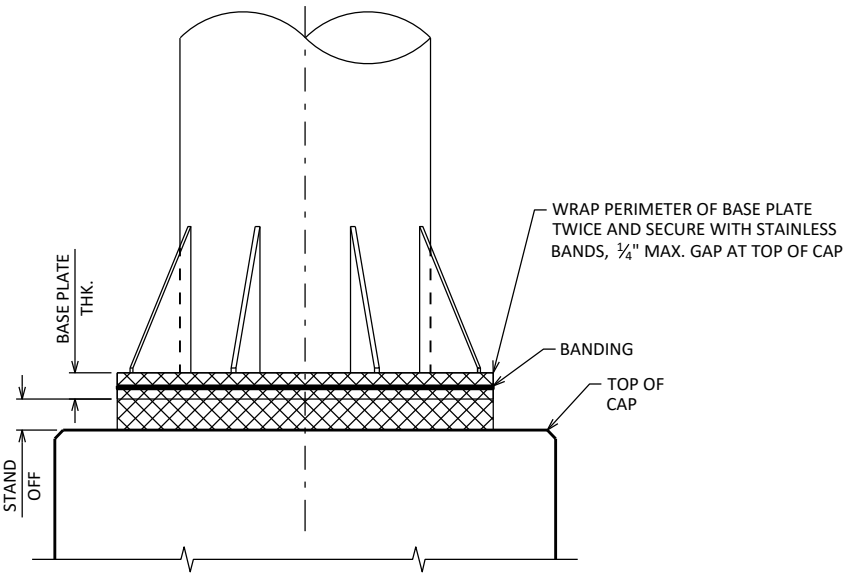
CONDUIT HOLE LOCATIONS

LOOKING AT INSIDE FACE OF COLUMN

2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES

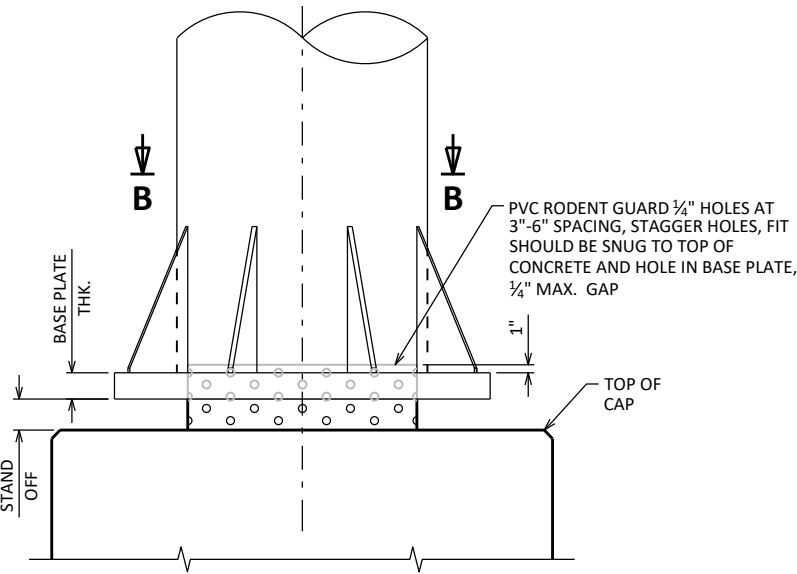


CONDUIT PLUG DETAILS



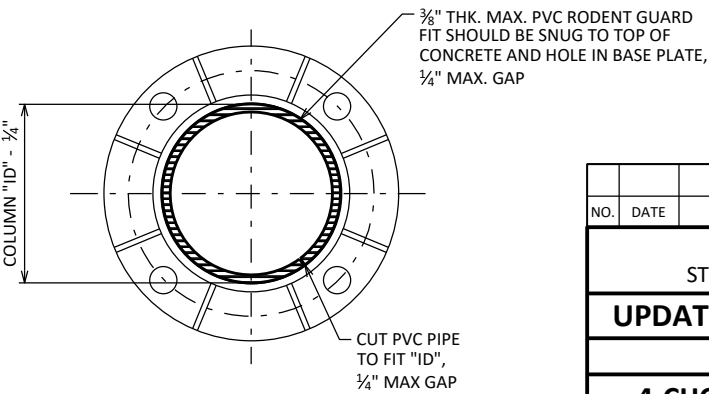
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



RODENT SCREEN - ALTERNATE

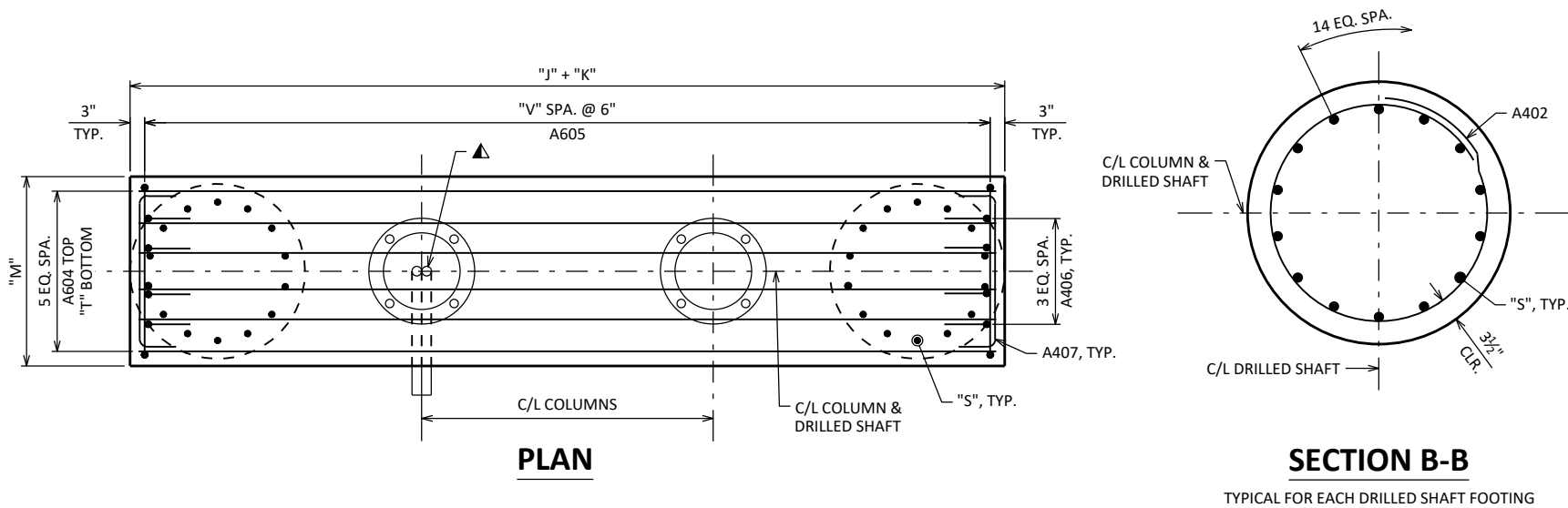
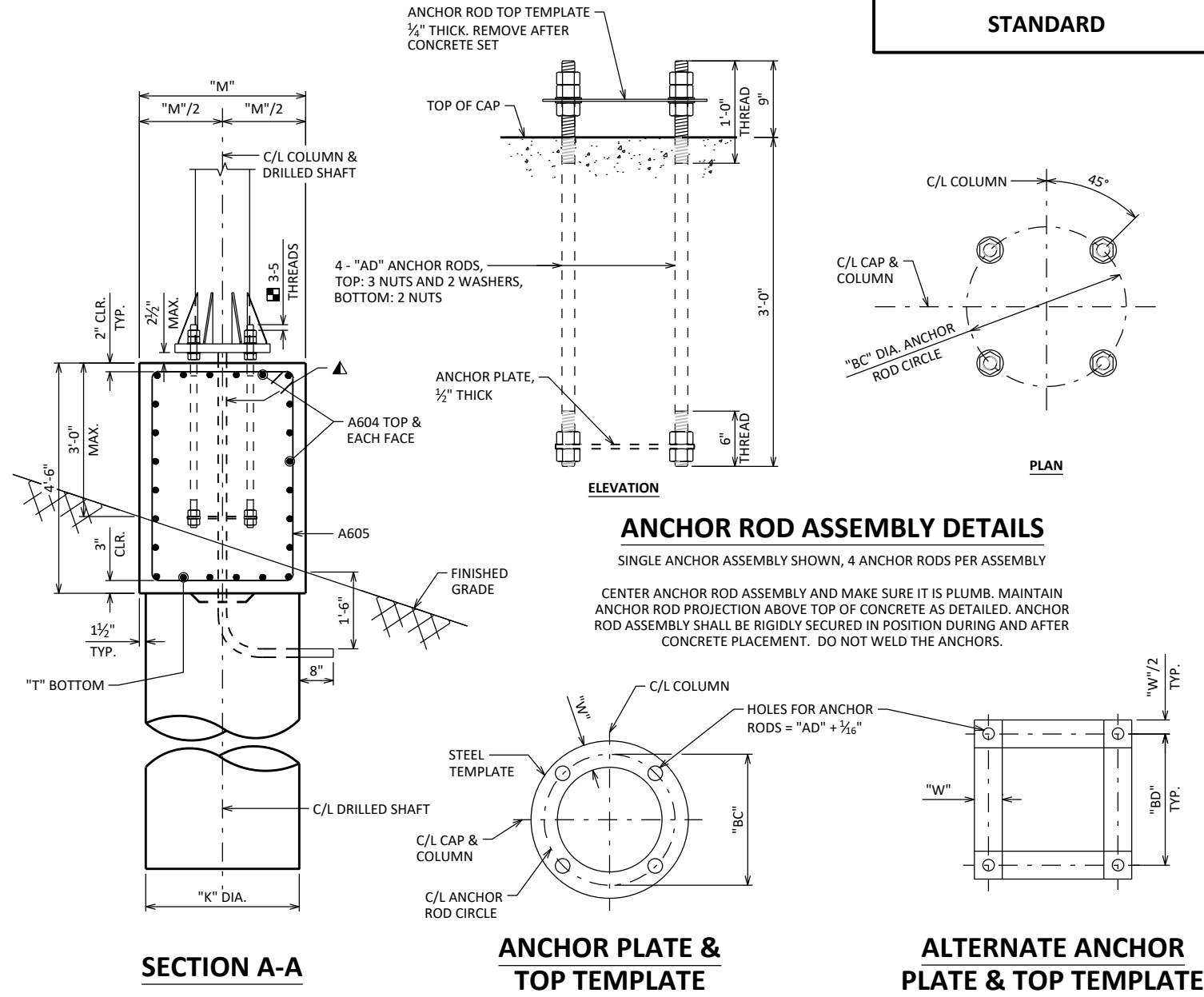
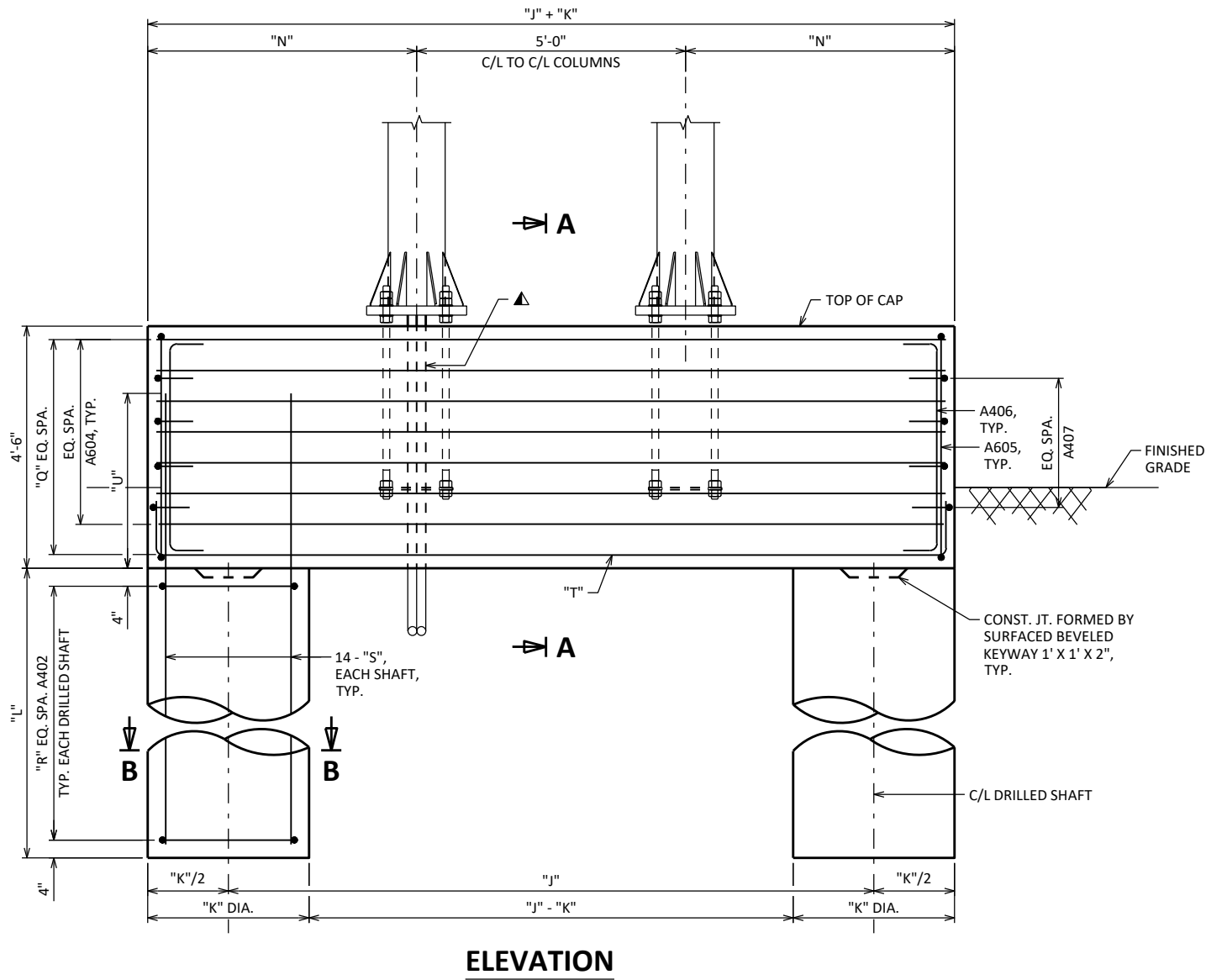
ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



SECTION B-B

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED: JAN. 2023			
DRAWN BY BOS		PLANS CK'D BOS	
4-CHORD TRUSS FULL SPAN ELECTRICAL DETAILS			SHEET VI

SCALE = 2:0



FOUNDATION, REINFORCING & ANCHOR PLATE DATA

STANDARD DESIGN TYPE	FOUNDATION DIMENSIONS											ANCHOR PLATE DIMENSIONS			
	"J"	"K"	"L"	"M"	"N"	"Q"	"R"	"S"	"T"	"U"	"V"	"AD"	"BC"	"BD"	"W"
I	9'-0"	3'-0"	19'-0"	3'-3"	3'-6"	7	19	A801	A603	2'-2"	23	1 1/2"	1'-6 3/4"	1'-1 1/4"	3"
II	12'-0"	3'-0"	22'-0"	3'-3"	5'-0"	7	22	A801	A603	2'-2"	29	1 1/2"	1'-6 3/4"	1'-1 1/4"	3"
III	12'-0"	3'-6"	23'-0"	3'-9"	5'-3"	7	23	A901	A703	2'-9"	30	1 3/4"	1'-6 3/4"	1'-1 1/4"	3 1/2"
IV	15'-0"	3'-6"	23'-0"	3'-9"	6'-9"	7	23	A901	A703	2'-9"	36	1 3/4"	1'-8"	1'-2 1/8"	3 1/2"
V	15'-0"	4'-0"	23'-0"	4'-3"	7'-0"	8	23	A1001	A703	3'-5"	37	1 3/4"	1'-10"	1'-3 5/8"	3 1/2"

LEGEND

- ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.
- 2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED: OCT. 2024			
DRAWN BY		BOS	PLANS CK'D BOS
4-CHORD TRUSS FULL SPAN FOUNDATIONS 1		SHEET VII	

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

STANDARD DESIGN TYPE I

BAR MARK	COAT	NO. * REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		56	21'-3"			DRILLED SHAFT - VERTICAL
A402		80	9'-1"	X		DRILLED SHAFT - HORIZONTAL
A603	X	12	13'-3"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	11'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	48	14'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-5"	X		CAP - HORIZONTAL - EACH END

STANDARD DESIGN TYPE II

BAR MARK	COAT	NO. * REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		56	24'-3"			DRILLED SHAFT - VERTICAL
A402		92	9'-1"	X		DRILLED SHAFT - HORIZONTAL
A603	X	12	16'-3"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	14'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	60	14'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-5"	X		CAP - HORIZONTAL - EACH END

STANDARD DESIGN TYPE III

BAR MARK	COAT	NO. * REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		56	25'-9"			DRILLED SHAFT - VERTICAL
A402		96	10'-7"	X		DRILLED SHAFT - HORIZONTAL
A703	X	12	17'-1"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	15'-2"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	62	15'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-11"	X		CAP - HORIZONTAL - EACH END

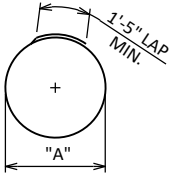
STANDARD DESIGN TYPE IV

BAR MARK	COAT	NO. * REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		56	25'-9"			DRILLED SHAFT - VERTICAL
A402		96	10'-7"	X		DRILLED SHAFT - HORIZONTAL
A703	X	12	20'-1"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	18'-2"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	74	15'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-11"	X		CAP - HORIZONTAL - EACH END

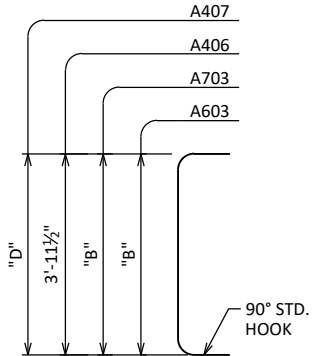
STANDARD DESIGN TYPE V

BAR MARK	COAT	NO. * REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		56	26'-6"			DRILLED SHAFT - VERTICAL
A402		96	12'-2"	X		DRILLED SHAFT - HORIZONTAL
A703	X	12	20'-7"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	18'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	76	16'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	4'-5"	X		CAP - HORIZONTAL - EACH END

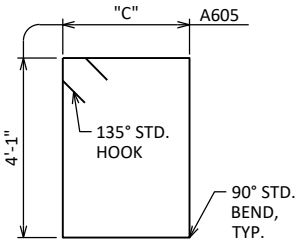
* VALUES SHOWN ARE FOR BOTH FOUNDATIONS, DIVIDE VALUES BY 2 IF A STANDARD FOUNDATION IS USED WITH A NON-STANDARD FOUNDATION.



A402



A603, A703, A406, A407



A605

STATE PROJECT NUMBER

STANDARD

STANDARD DESIGN TYPE	"A"	"B"	"C"	"D"
I	2'-5"	11'-7"	2'-11"	2'-9½"
II	2'-5"	14'-7"	2'-11"	2'-9½"
III	2'-11"	15'-1"	3'-5"	3'-3½"
IV	2'-11"	18'-1"	3'-5"	3'-3½"
V	3'-5"	18'-7"	3'-11"	3'-9½"

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	STEEL REINFORCEMENT HS COATED	ANCHOR ASSEMBLY 1.50-INCH	ANCHOR ASSEMBLY 1.75-INCH	FOUNDATION DRILLING (DIA.) (LF)		
	(CY)	(LBS)	(LBS)	(EACH)	(EACH)	36"	42"	48"
I	32.9	3,670	2,030	4	---	76	---	---
II	39.3	4,190	2,510	4	---	88	---	---
III	52.2	5,590	2,810	---	4	---	92	---
IV	55.9	5,590	3,330	---	4	---	92	---
V	69.7	7,170	3,540	---	4	---	---	92

* * QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS. * *
VALUES SHOWN ARE FOR BOTH FOUNDATIONS, DIVIDE VALUES BY 2 IF A STANDARD FOUNDATION IS USED WITH A NON-STANDARD FOUNDATION.

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4-CHORD TRUSS FULL SPAN FOUNDATIONS 2		SHEET VIII	