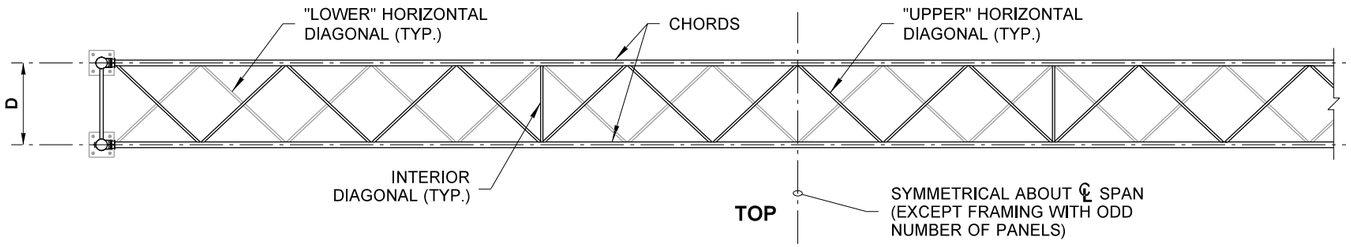
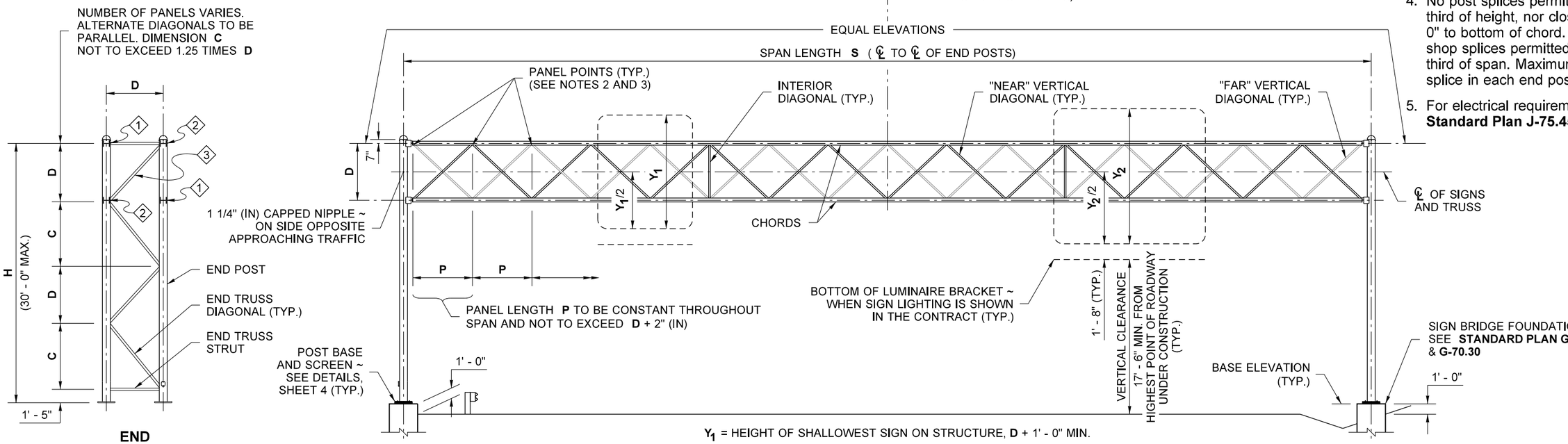
NOTES

1. Horizontal and vertical clearance requirements shall be as shown in Contract Plans.
2. Horizontal diagonals must join chords where vertical diagonals connect (panel points).
3. Interior diagonals shall be placed at panel points, 40' (ft) maximum spacing. Locate symmetrically about centerline of span if possible. An interior diagonal is not required at span ends.
4. No post splices permitted in lower third of height, nor closer than 3' - 0" to bottom of chord. No chord shop splices permitted in middle third of span. Maximum of one splice in each end post.
5. For electrical requirements See **Standard Plan J-75.45.**





END

ELEVATION

Y_1 = HEIGHT OF SHALLOWEST SIGN ON STRUCTURE, **D** + 1' - 0" MIN.

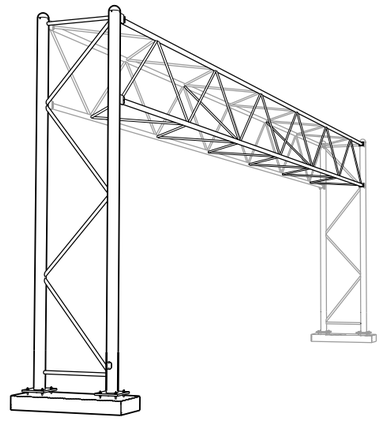
Y_2 = HEIGHT OF ANY SIGN WITH HEIGHT GREATER THAN Y_1.

MATERIAL SPECIFICATIONS	
PIPE (CHORDS, DIAGONALS, STRUTS AND POSTS)	ASTM A 36 OR ASTM A 53 GRADE B, TYPE E OR S, OR A 500 GRADE B
PLATES	ASTM A 36
SHAPES	ASTM A 36 ASTM A 992
BOLTS, NUTS, & WASHERS	STD. SPEC. 9-06.5(3)
PIPE, PLATE & SHAPE GALVANIZING	AASHTO M 111
	AASHTO M 232

1. SEE CHORD TO END POST CONNECTION TYPE **Q**
2. SEE CHORD TO END POST CONNECTION TYPE **R**
3. TOP END TRUSS DIAGONAL JOINS END POSTS AT CHORDS WHERE VERTICAL AND HORIZONTAL DIAGONALS CONNECT

STRUCTURE DIMENSIONS						
SPAN LENGTH **S**	DIMENSION **D**	TOP AND BOTTOM CHORDS	DIAGONALS	END TRUSS POSTS	END TRUSS STRUTS AND DIAGONALS	TOTAL SIGN AREA (MAX.) (SQ. FT.)
60' OR LESS	4' - 0"	3" x .216"	1 1/4" x .140"	10" x .279"	2 1/2" x .203"	384
61' to 90'	5' - 0"	4" x .237"	2" x .154"	10" x .279"	2 1/2" x .203"	624
91' to 120'	6' - 0"	5" x .258"	2" x .154"	10" x .307"	3" x .216"	864
121' to 150'	7' - 0"	6" x .280"	2 1/2" x .203"	10" x .365"	3 1/2" x .226"	1104

ALL MEMBERS ARE PIPE. VALUES SHOWN ARE NOMINAL PIPE SIZE AND WALL THICKNESS.



PERSPECTIVE

FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\02-PSL Work in Progress\Fern\(SD-13) Sign Bridge (Truss Type)\SD-13_good.dgn							PLOT1
TIME	11:51:38 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	
DATE	6/21/2019				JOB NUMBER			
PLOTTED BY	liddelf				CONTRACT NO.	LOCATION NO.		SHEET 1 OF 4 SHEETS
DESIGNED BY								
ENTERED BY								
CHECKED BY								
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

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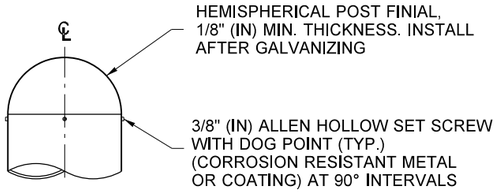
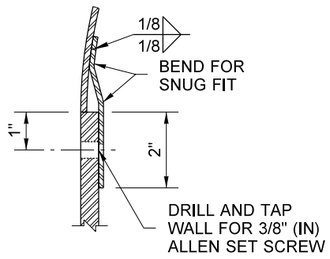
Washington State Department of Transportation

SIGN BRIDGE (TRUSS-TYPE)

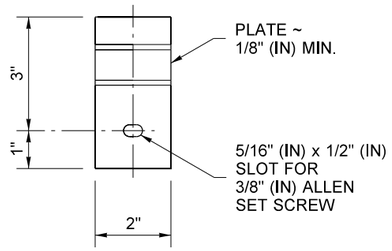


ELEVATION

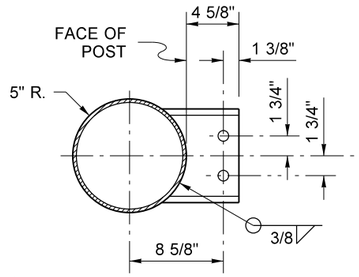
FINIAL DETAIL

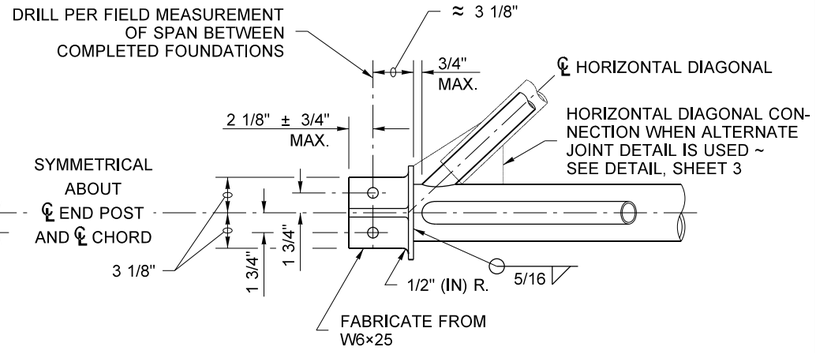


SECTION THROUGH FINIAL AND POST

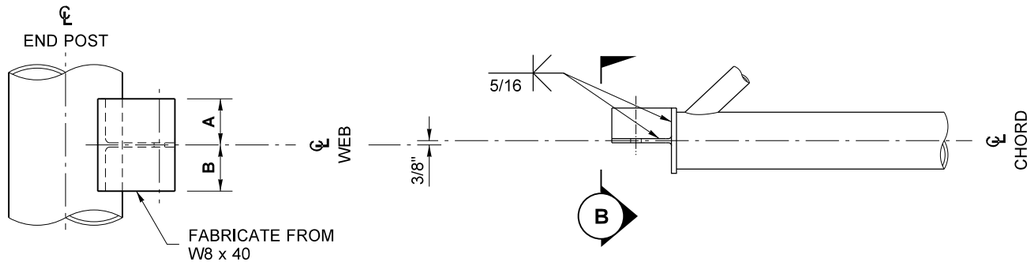


FINIAL BRACKET

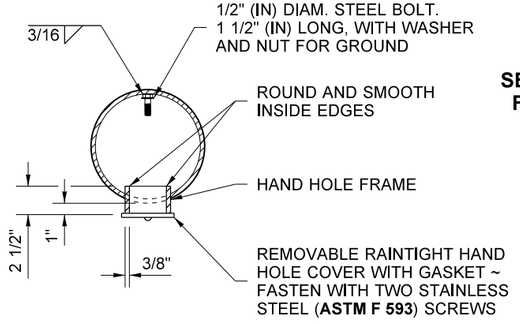




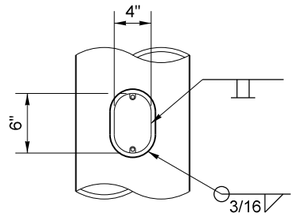
TOP



ELEVATION

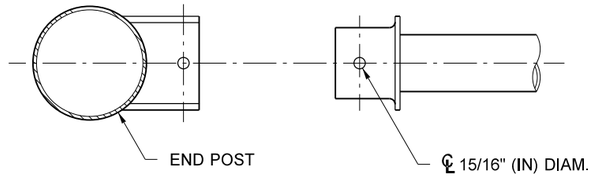


TOP

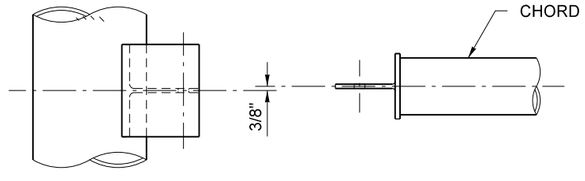


ELEVATION
(COVER NOT SHOWN FOR CLARITY)

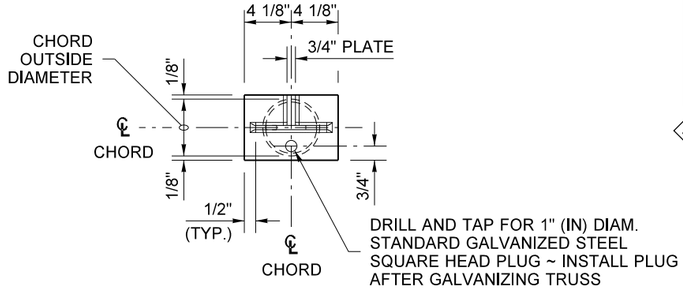
HAND HOLE DETAIL



TOP



ELEVATION



VIEW (B)

CONNECTION DATA			
SPAN LENGTH	A	B	BOLT DIAMETER
60' OR LESS	2 3/8"	1 5/8"	7/8" ◇4
61' TO 90'	2 7/8"	2 1/8"	
91' TO 120'	3 3/8"	2 5/8"	
121' TO 150'	4 1/16"	3 1/4"	

◇4 INSTALL BOLTS WITH HEAD UPWARD. EXCLUDE BOLT THREADING FROM GRIP.

CHORD TO END POST CONNECTION TYPE Q

USED WHERE NO DIAGONALS CONNECT

DETAILS NOT SHOWN ARE SAME AS **CHORD TO END POST CONNECTION TYPE R**, OMITTING THE 3/4" PLATE STIFFENER ON THE TEE MEMBER.

CHORD TO END POST CONNECTION TYPE R

USED WHERE DIAGONALS CONNECT

FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\02-PSL Work in Progress\Fern\(SD-13)Sign Bridge (Truss Type)\SD-13_good.dgn							PLOT2
TIME	11:38:51 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	
DATE	6/21/2019				JOB NUMBER			
PLOTTED BY	liddelf				CONTRACT NO.		LOCATION NO.	
DESIGNED BY								
ENTERED BY								
CHECKED BY								
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

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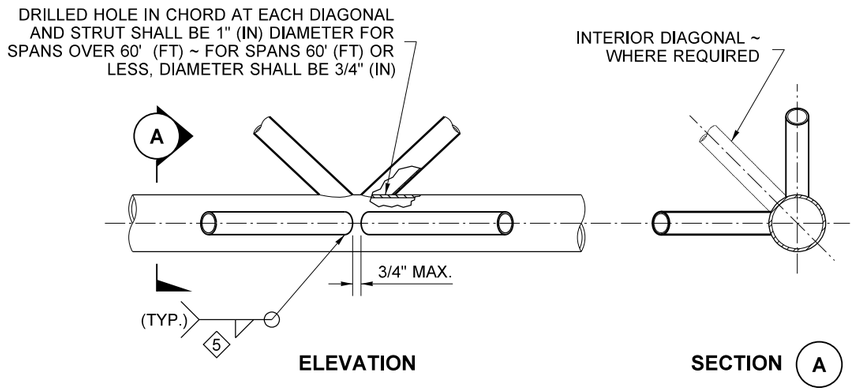
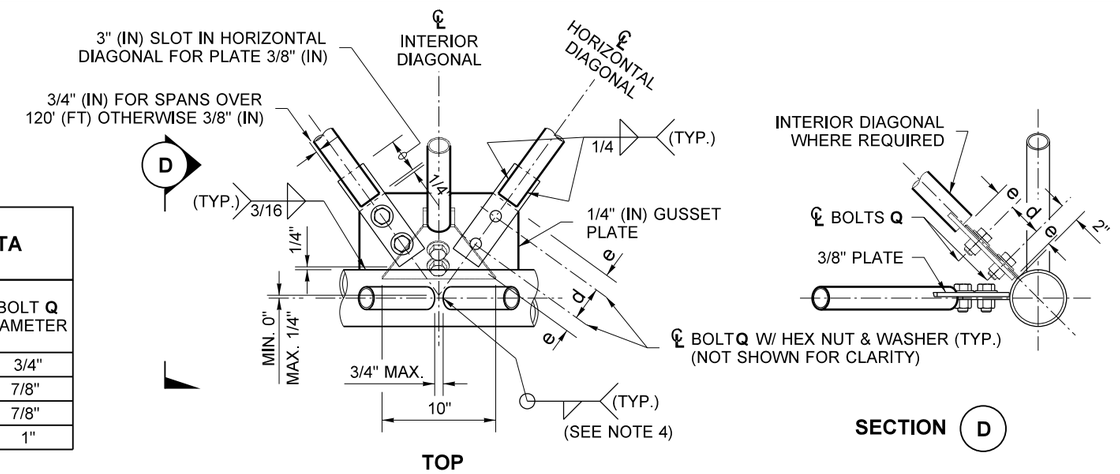
Washington State Department of Transportation

SIGN BRIDGE (TRUSS-TYPE)

SHEET 2 OF 4 SHEETS



ALTERNATE JOINT DATA			
SPAN LENGTH	d	e	BOLT Q DIAMETER
60' OR LESS	2 1/2"	1 1/4"	3/4"
61' TO 90'	3"	1 1/2"	7/8"
91' TO 120'	3"	1 1/2"	7/8"
121' TO 150'	3 1/2"	1 3/4"	1"



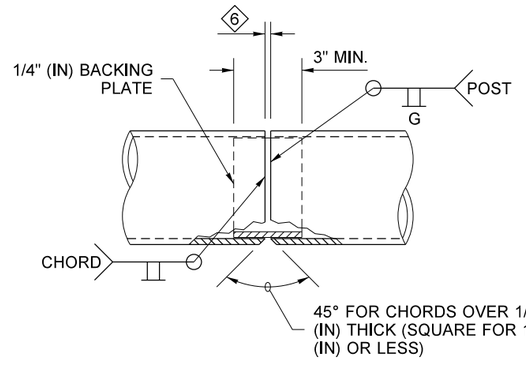
ALTERNATE JOINT DETAIL

NOT FOR CONNECTIONS BETWEEN VERTICAL DIAGONALS AND CHORDS

5 ENDS OF DIAGONALS SHALL BE CUT TO FIT NEATLY AGAINST CHORD OR POST. FILLET WELD SIZE TO BE DIAGONAL TUBE OR PIPE THICKNESS PLUS 1/16" (IN).

TYPICAL JOINT DETAIL

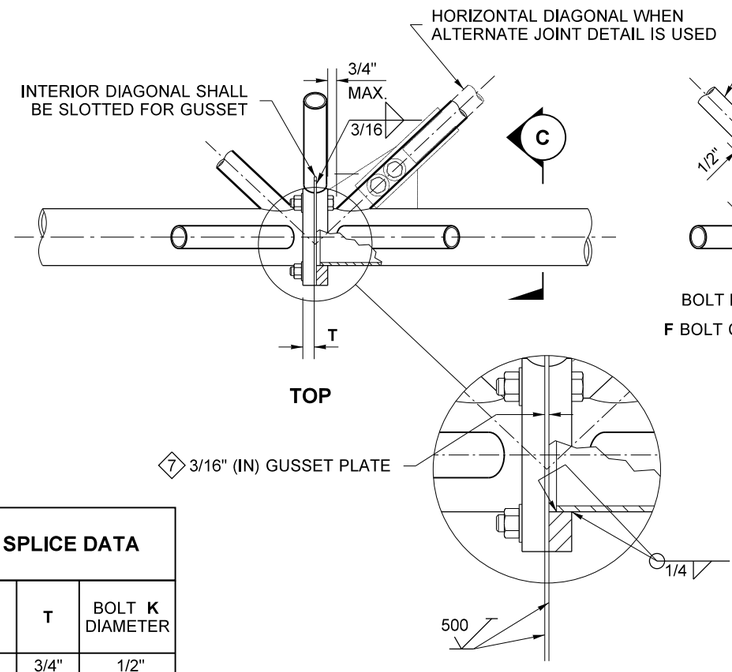
CHORD SHOWN ~ END POST SIMILAR

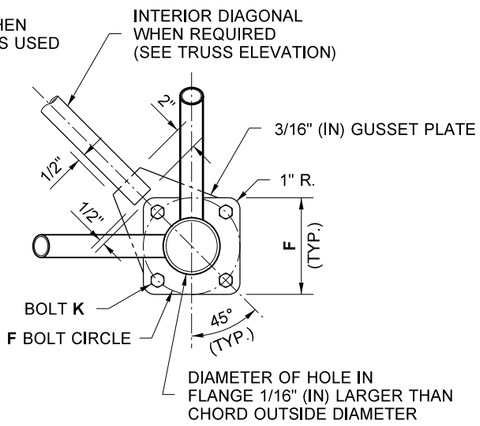


6 DIMENSION SHALL EQUAL CHORD THICKNESS OR 1/4" (IN), WHICHEVER IS LESS.

END POST OR CHORD SHOP SPLICE

NO POST SPLICES PERMITTED IN LOWER THIRD OF HEIGHT, NOR CLOSER THAN 3' - 0" TO BOTTOM OF CHORD. NO CHORD SHOP SPLICES PERMITTED IN MIDDLE THIRD OF SPAN. MAXIMUM OF ONE SPLICE IN EACH END POST.



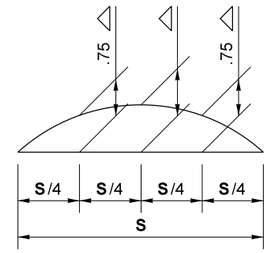


CHORD FIELD SPLICE DATA			
SPAN LENGTH	F	T	BOLT K DIAMETER
60' OR LESS	6"	3/4"	1/2"
61' TO 90'	7"	7/8"	5/8"
91' TO 120'	8 1/2"	1"	3/4"
121' TO 150'	9 1/2"	1 1/4"	7/8"

CHORD FIELD SPLICE

(NO CHORD FIELD SPLICE PERMITTED IN MIDDLE THIRD OF SPAN LENGTH)

7 3/16" (IN) SHIMS ARE REQUIRED AT THE REMAINING TWO CHORD JOINTS WHEN INTERIOR DIAGONAL IS INSTALLED.



SPAN LENGTH S (FT.)	△ (IN.)
40	1/2
50	3/4
60	7/8
61	7/8
70	1
80	1 1/4
90	1 1/2
91	1 3/8
100	1 5/8
110	2
120	2 3/8
121	2 1/8
130	2 1/2
140	2 7/8
150	3 3/8

FOR SPAN LENGTHS NOT LISTED, INTERPOLATE VALUES OF △.

FABRICATE TRUSS WITH CHORDS CURVED TO PROVIDE CAMBER. DO NOT CAMBER BY USING SHIMS BETWEEN CHORDS AT SPLICES.

DEAD LOAD CAMBER

FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\02-PSL Work in Progress\Fern\(SD-13) Sign Bridge (Truss Type)\SD-13_e.dgn			REGION NO.	STATE	FED.AID PROJ.NO.	PLOT3
TIME	7:16:03 AM			10	WASH		
DATE	6/27/2019			JOB NUMBER			
PLOTTED BY	liddelf						
DESIGNED BY				CONTRACT NO.		LOCATION NO.	
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.	REVISION	DATE	BY				

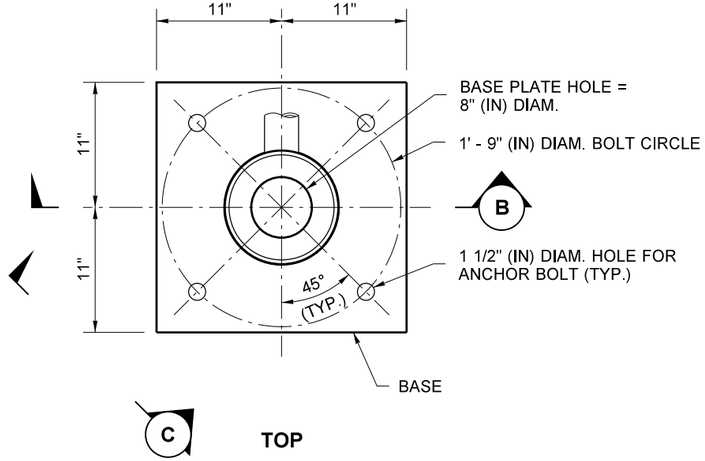
P.E. STAMP BOX DATE

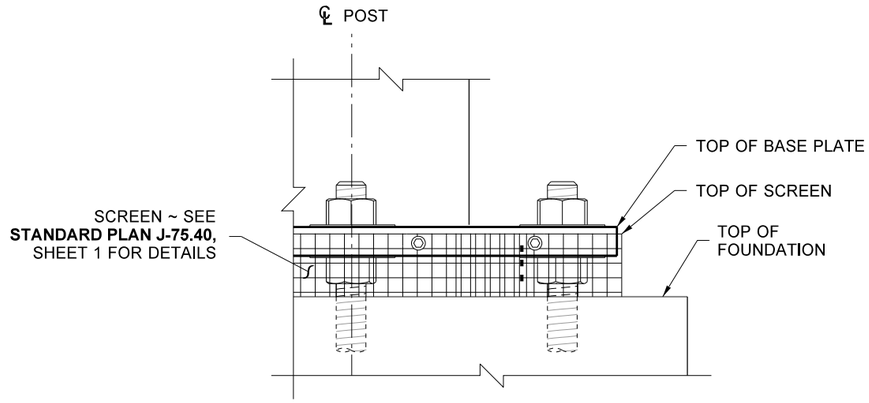
P.E. STAMP BOX DATE

Washington State Department of Transportation

SIGN BRIDGE (TRUSS-TYPE)

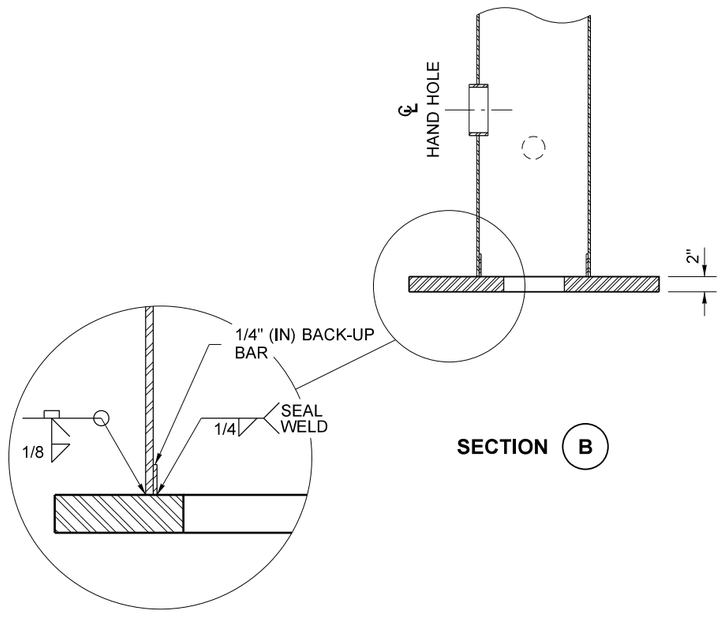
SHEET 3 OF 4 SHEETS





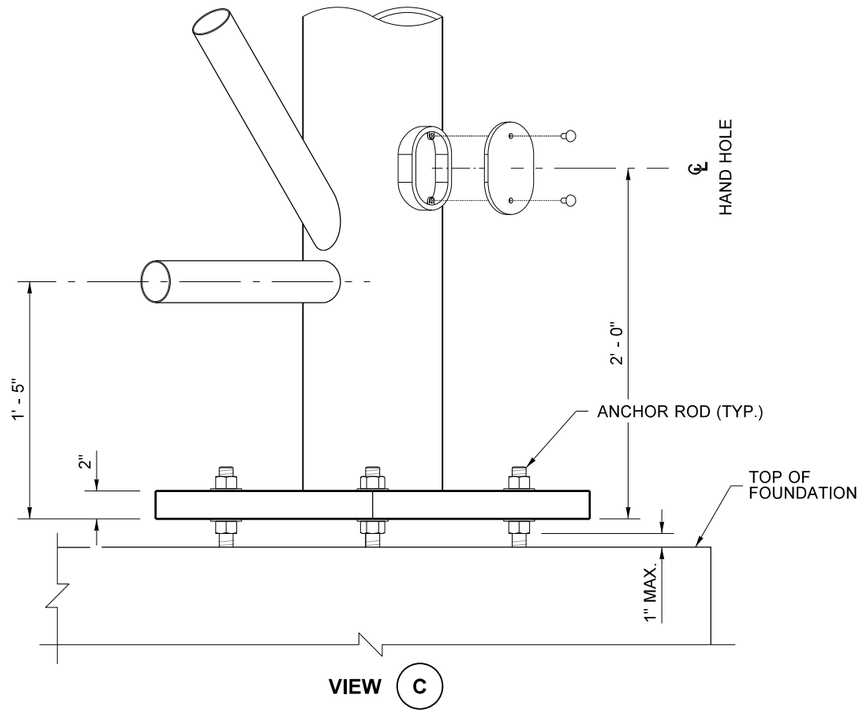
SCREEN DETAIL

CONDUIT OMITTED FOR CLARITY ~ FOR ELECTRICAL REQUIREMENTS
SEE **STANDARD PLAN J-75.45**



SECTION B

BASE WELD DETAIL



VIEW C

POST BASE DETAILS

CONDUIT OMITTED FOR CLARITY ~ FOR ELECTRICAL REQUIREMENTS
SEE **STANDARD PLAN J-75.45**

FILE NAME	S:\Design R P& S\4-Standards\2-Plan Sheet Library\02-PSL Work in Progress\Fern\(SD-13) Sign Bridge (Truss Type)\SD-13_e.dgn						PLOT4
TIME	8:28:03 AM			REGION NO.	STATE	FED.AID PROJ.NO.	
DATE	6/27/2019			10	WASH		
PLOTTED BY	liddelf			JOB NUMBER			
DESIGNED BY							
ENTERED BY							
CHECKED BY				CONTRACT NO.		LOCATION NO.	
PROJ. ENGR.							
REGIONAL ADM.		REVISION	DATE	BY			

DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

Washington State
Department of Transportation

SIGN BRIDGE (TRUSS-TYPE)

SHEET 4 OF 4 SHEETS