

* FOR SIGNS WITH SIGN AREAS LESS THAN THE MAXIMUM LISTED IN THE TABLE ABOVE, B CAN BE RECALCULATED USING THE FOLLOWING EQUATION:

$$\left(\text{MAX. B FOR TRUE SIGN AREA} \right) \leq \frac{\frac{1}{2} \left(\text{MAX SIGN AREA} \right) \times \left(\text{MAX. B WITH MAX. SIGN AREA} \right)}{\left(\text{TRUE SIGN AREA} \right)}$$

** THE CALCULATED VALUE OF B CANNOT RESULT IN A DISTANCE GREATER THAN 1/4 OF THE SIGN WIDTH

TYPE NUMBER	POST			ARM		MAX. AREA (2) SQ. FT.
	GA.	"B"*	DIA.	GA.	DIMENSIONS	
B-2018	0	8'	18"	7	7.5" x 5.82" x 12'	260
	0	12'	18"	7	9.0" x 6.76" x 16'	240
	0	16'	18"	3	10.0" x 7.2" x 20'	230
	0	20'	18"	3	11.0" x 7.64" x 24' (1)	200
B-23318	3+3	10'	18"	7	9" x 6.48" x 18'	290
	3+3	14'	18"	7	11" x 7.92" x 22' (1)	300
	3+3	18'	18"	7	12.5" x 8.86" x 26' (1)	300
B-20018	0+0	14'	18"	7	12.5" x 9.14" x 24' (1)	410
	0+0	18'	18"	3	12.5" x 8.58" x 28' (1)	430
	0+0	24'	18"	0	13" x 24" x 34' (1)	430

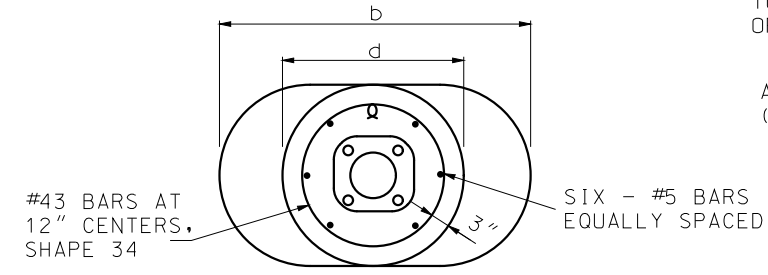
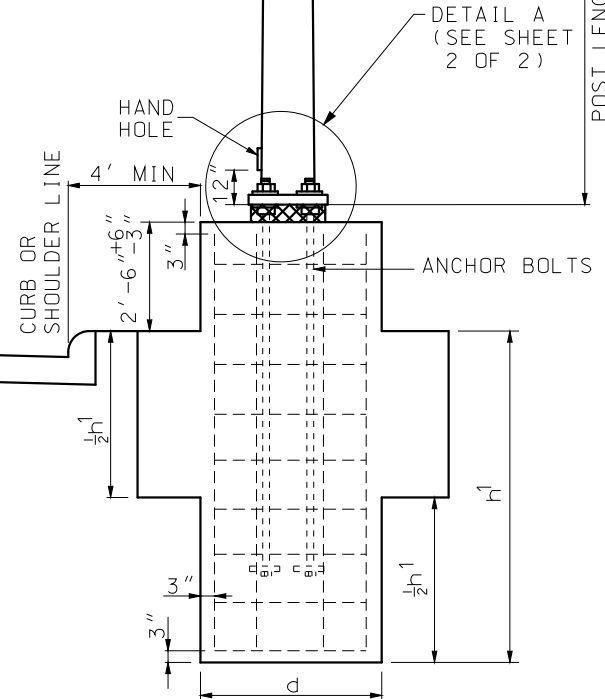
NOTES:
 (1) ARMS OVER 20' TO BE TRUSS TYPE WITH \angle 3" x 3" x 3/8" ANGLES.
 (2) MAX SIGN AREA ON EACH SIDE EQUALS HALF THE TOTAL IN CHART.
 W = 40# PER SQUARE FOOT

TYPE NUMBER	DIA. "d"	DIA. "b"	CLASS B CONCRETE FOOTING (C.Y.)				REINFORCING STEEL			TOTAL LBS.	
			"d" SECTION		"b" SECTION		#5		#4 (3)		
			1' DEPTH	1' DEPTH	1' DEPTH	1' DEPTH	NO. FT.-IN.	NO. FT.-IN.	NO. FT.-IN.		
B-2018	3'-6"	6'-0"	0.3563	0.0297	0.6800	0.0567	6	10'-0"	11	10'-4"	139
B-23318	3'-6"	7'-0"	0.3563	0.0297	0.8100	0.0675	6	10'-6"	12	10'-4"	149
B-20018	3'-6"	7'-0"	0.3563	0.0297	0.8100	0.0675	6	12'-0"	13	10'-4"	165

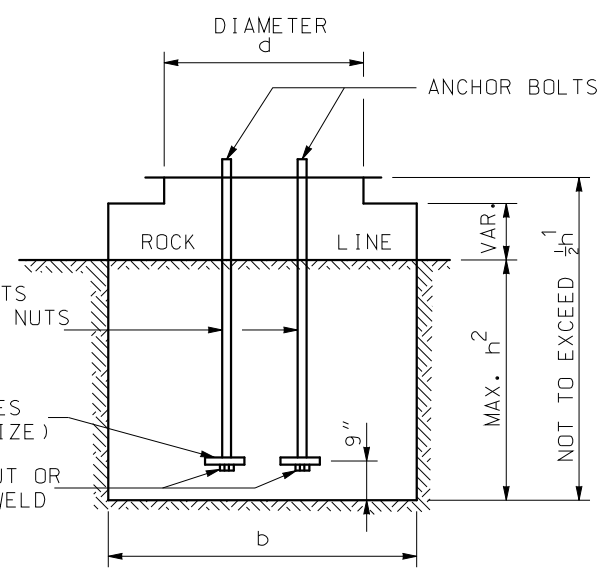
(3) ESTIMATED QUANTITY FOR REINFORCING STEEL IS BASED ON A 2:1 (H:V) SLOPE.

TYPE NUMBER	ANCHOR BOLT (4) (DIA.)	ANCHOR BOLT PLATE	FOOTING			CLASS B CONCRETE FOOTING CU. YD.	
			"h ² "	"d"	"b"	"b" SECTION	
			1' DEPTH	1' DEPTH	1' DEPTH	1' DEPTH	1' DEPTH
B-2018	2 1/4"	4 1/2" x 4 1/2" x 3/4"	3'-6"	3'-6"	3'-6"	0.3563	0.0297
B-23318	3"	5 1/2" x 5 1/2" x 1"	4'-0"	3'-6"	4'-6"	0.4860	0.0405
B-20018	3"	5 1/2" x 5 1/2" x 1"	5'-0"	3'-6"	4'-6"	0.4860	0.0405

(4) ANCHOR BOLT LENGTH AS REQUIRED



PLAN FOOTING



FASTEN ANCHOR BOLTS TO PLATE WITH HEX NUTS OR BY BUTT WELD
 ANCHOR BOLT PLATES (SEE CHART FOR SIZE)
 HEX NUT OR BUTT WELD

REINFORCEMENT SAME AS STANDARD FOOTING
 CONCRETE TO BE POURED TO EXCAVATED FACE OF ROCK

MODIFIED FOOTINGS IN SOLID ROCK

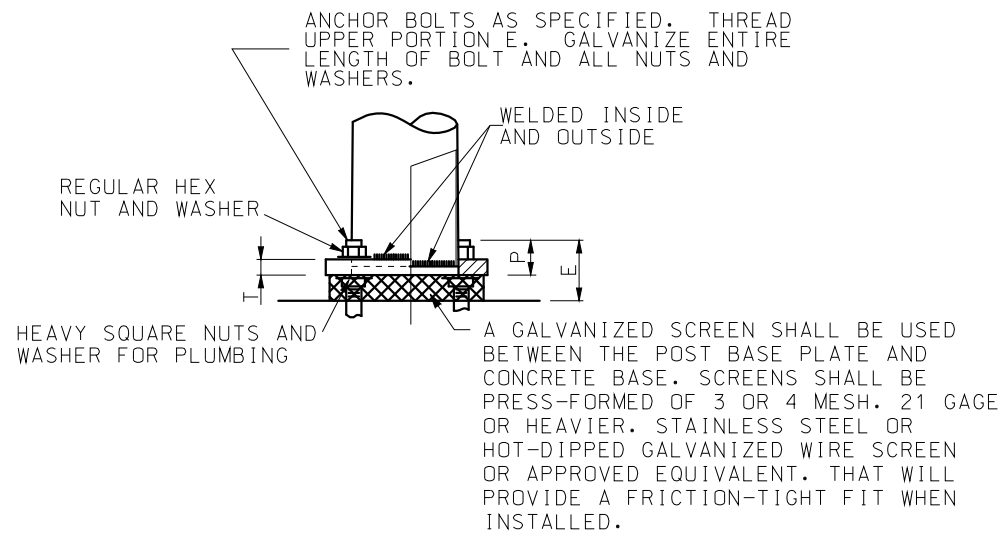
GENERAL NOTE:
 ALL SIGNS SHALL BE CENTERED VERTICALLY ABOUT THE HORIZONTAL CL OF THE TRUSS.

MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

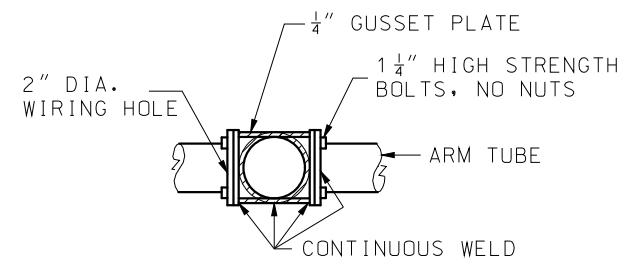
STATE OF MISSOURI
 EILEEN H. RACKERS
 NUMBER PE-28336
 PROFESSIONAL ENGINEER
 THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

HIGHWAY SIGNING TUBULAR SUPPORT STEEL TYPE B

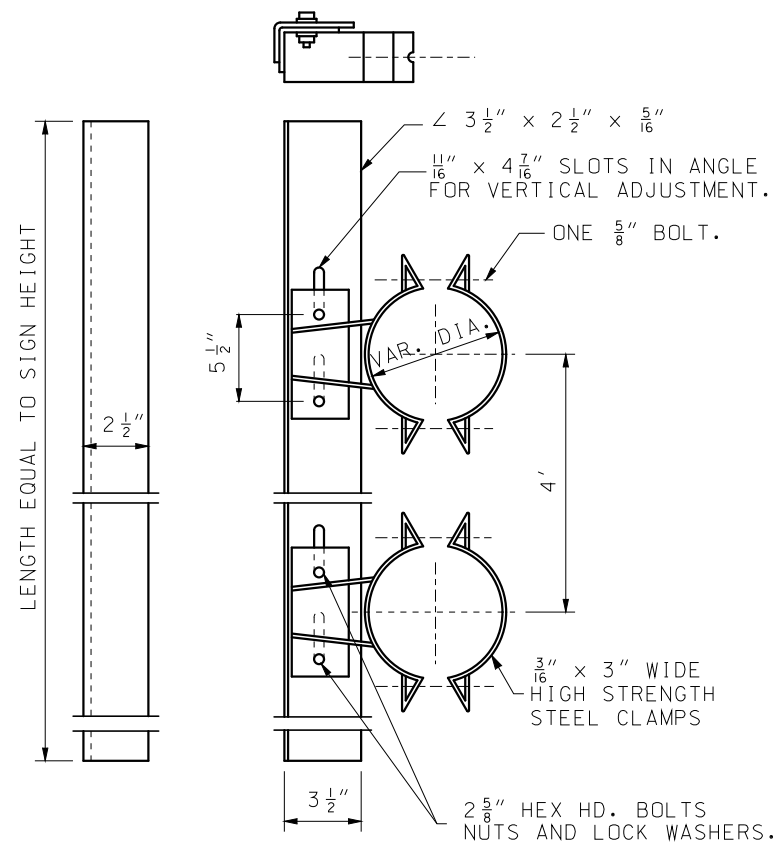
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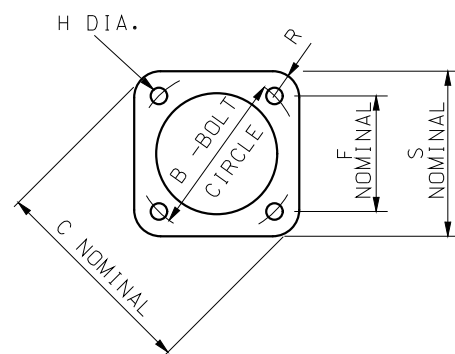
**DETAIL A
ELEVATION BASE DETAIL**



ARM ATTACHMENT DETAIL



GALVANIZED SIGN BRACKET ASSEMBLY *



PLAN POST BASE DETAIL

SIGN HEIGHT INCHES	MAX. LIN. FT. OF SIGN WIDTH PER BRACKET
48 & UNDER	16
60	16
72	15
84	11
96	6
108	4
120	3

* MINIMUM OF TWO BRACKETS REQUIRED ON SIGNS OVER 42" IN LENGTH

TYPE NUMBER	POST BASE DIMENSIONS										FOOTING		
	B	C	F	H	S	R	P	T	E	ANCHOR BOLTS	"h"	"d"	"b"
	B-2018	25 1/2"	33"	18"	2 5/8"	26 1/2"	5 1/2"	5 1/2"	2 1/2"	9 1/2"	2 1/4" x 96"	7'-6"	3'-6"
B-23318	25 1/2"	33"	18"	3 3/8"	26 1/2"	5 1/2"	7"	3"	12"	3" x 120"	8'-0"	3'-6"	7'-0"
B-20018	25 1/2"	33"	18"	3 1/8"	26 1/2"	5 1/2"	7"	3"	12"	3" x 120"	9'-6"	3'-6"	7'-0"

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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STATE OF MISSOURI

EILEEN H. RACKERS
NUMBER PE-28336
PROFESSIONAL ENGINEER

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**HIGHWAY SIGNING
TUBULAR SUPPORT STEEL
TYPE B**

DATE EFFECTIVE: 10/01/2016	903.08H	SHEET NO. 2 OF 2
DATE PREPARED: 8/11/2016		

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