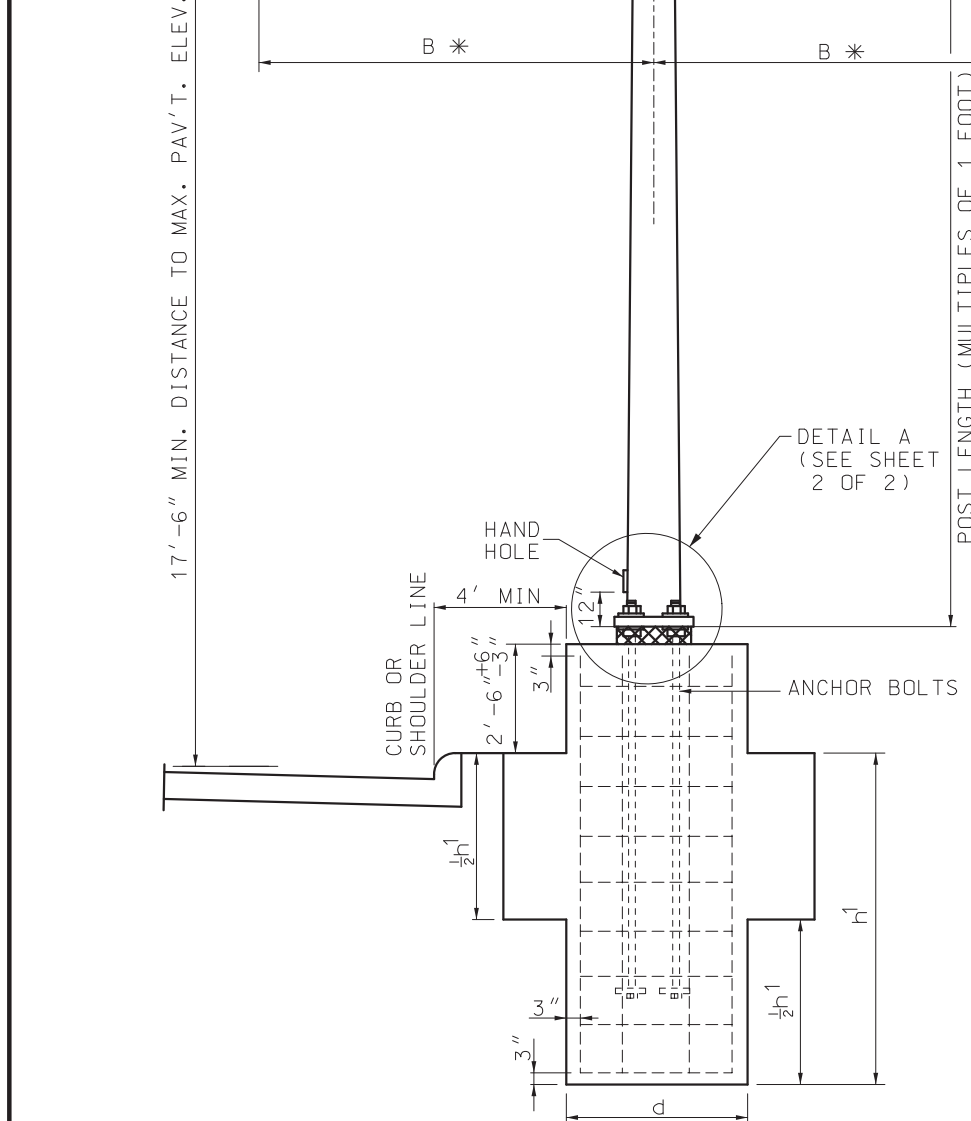


TYPE NUMBER	POST			ARM		MAX. AREA (2) SQ. FT.
	GA.	"B"*	DIA.	GA.	DIMENSIONS	
B-2018	0	8'	18"	7	7.5" x 5.82" x 12'	260
	0	12'	18"	7	9.0" x 6.76" x 16'	240
	0	16'	18"	3	10.0" x 7.2" x 20'	230
	0	20'	18"	3	11.0" x 7.64" x 24' (1)	200
B-23318	3+3	10'	18"	7	9" x 6.48" x 18'	290
	3+3	14'	18"	7	11" x 7.92" 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 $\frac{3}{8}$ " ANGLES.
 (2) MAX SIGN AREA ON EACH SIDE EQUALS HALF THE TOTAL IN CHART.
 W = 40# PER SQUARE FOOT



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

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

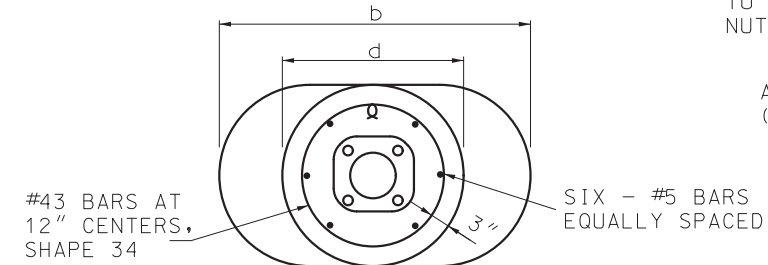
 ** THE CALCULATED VALUE OF B CANNOT RESULT IN A DISTANCE GREATER THAN $\frac{1}{4}$ OF THE SIGN WIDTH

TYPE NUMBER	DIA. "d"	DIA. "b"	ESTIMATED QUANTITIES				REINFORCING STEEL			TOTAL LBS.	
			CLASS B CONCRETE FOOTING (C.Y.)		REINFORCING STEEL		#5	#4 (3)	NO. FT.-IN.		
			"d" SECTION	"b" SECTION	"d" SECTION	"b" SECTION					
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

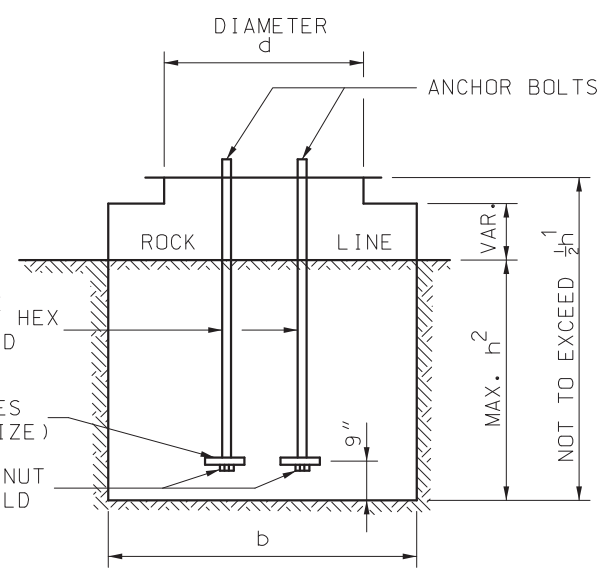
(3) ESTIMATED QUANTITY FOR REINFORCING STEEL IS BASED ON A 2:1 (H:V) SLOPE.

TYPE NUMBER	ANCHOR BOLT (4) (DIA.)	ANCHOR BOLT PLATE	MODIFIED FOOTING IN SOLID ROCK			CLASS B CONCRETE FOOTING CU. YD.	
			FOOTING			"b" SECTION	
			"h ² "	"d"	"b"	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 HEAVY HEX NUTS OR BY BUTT WELD
 ANCHOR BOLT PLATES (SEE CHART FOR SIZE)
 HEAVY HEX NUT OR BUTT WELD

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

GENERAL NOTE:
 ALL SIGNS SHALL BE CENTERED VERTICALLY ABOUT THE HORIZONTAL ϕ OF THE TRUSS.
 ALL ANCHOR BOLTS SHALL BE FULLY GALVANIZED HIGH STRENGTH ANCHOR BOLTS.

MODIFIED FOOTINGS IN SOLID ROCK

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

STATE OF MISSOURI
 NICOLE A. KOLB HOOD
 NUMBER PE-2001018754
 PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

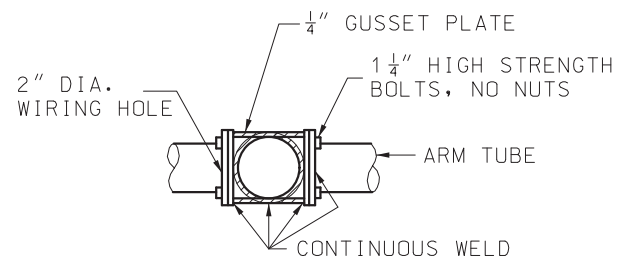
HIGHWAY SIGNING TUBULAR SUPPORT STEEL TYPE B

DATE EFFECTIVE: 10/01/2022
 DATE PREPARED: 7/19/2022

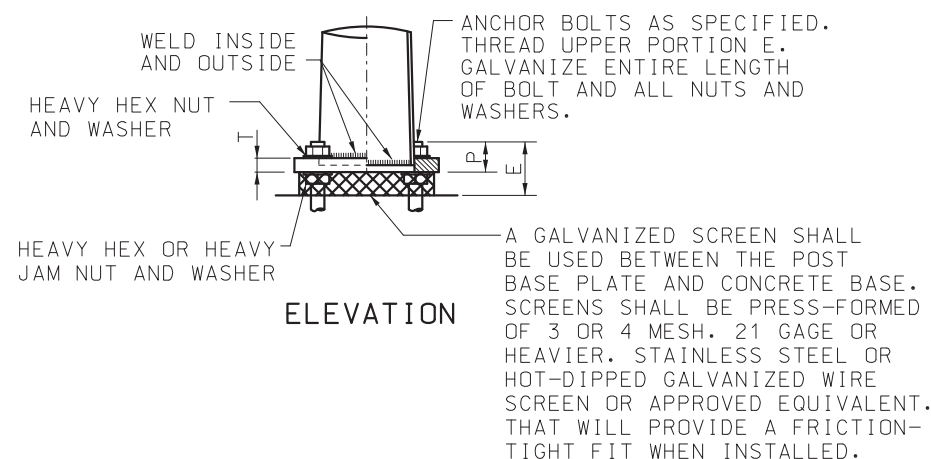
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SHEET NO. 1 OF 2

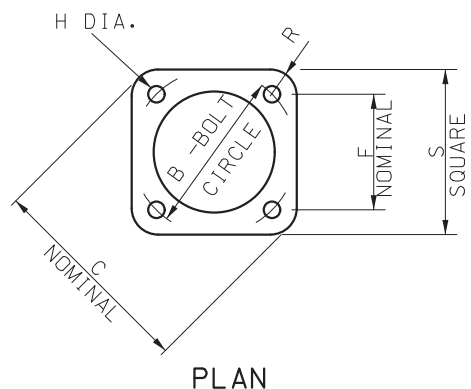
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



ARM ATTACHMENT DETAIL



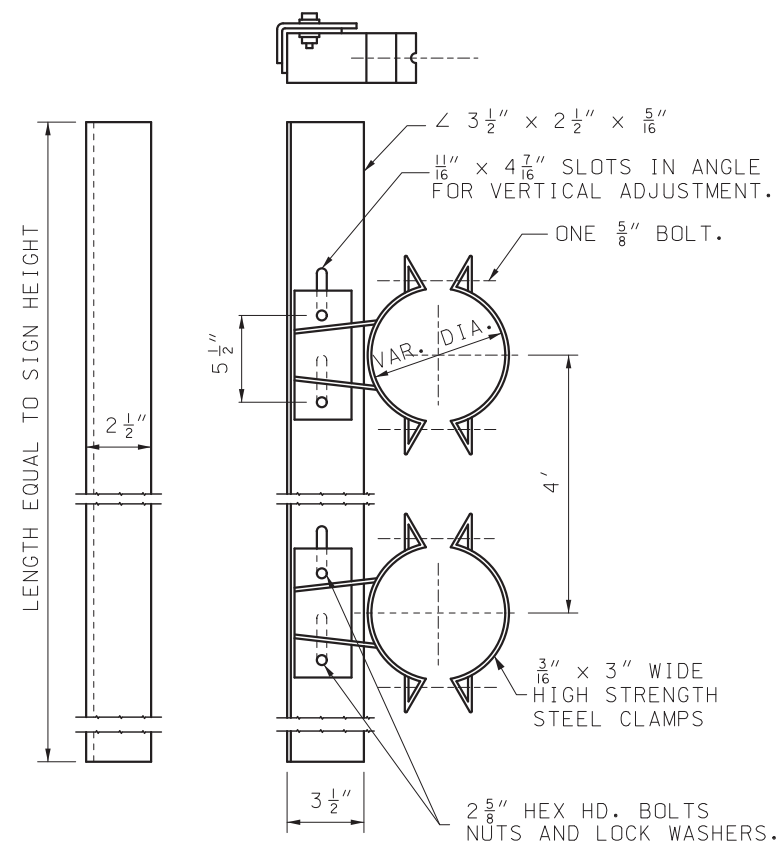
ELEVATION



PLAN

**DETAIL A
POST BASE DETAIL**

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 3/8"	26 1/2"	5 1/2"	7"	3"	12"	3" x 120"	9'-6"	3'-6"	7'-0"



GALVANIZED SIGN BRACKET ASSEMBLY *

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

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

**HIGHWAY SIGNING
TUBULAR SUPPORT STEEL
TYPE B**

DATE EFFECTIVE: 10/01/2022
DATE PREPARED: 7/19/2022

903.08K

SHEET NO.
2 OF 2

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.