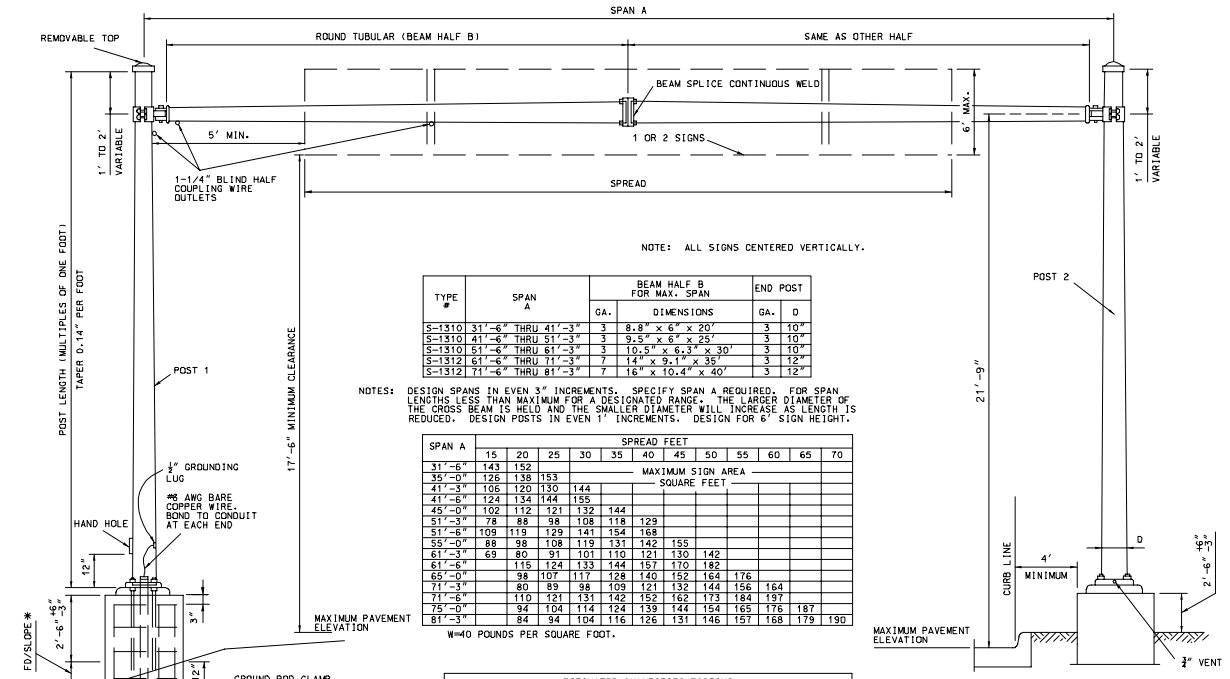


NOTE: ALL SIGNS CENTERED VERTICALLY.

TYPE #	SPAN A	BEAM HALF B FOR MAX. SPAN		END POST	
		GA.	DIMENSIONS	GA.	D
S-1310	31'-6" THRU 41'-3"	3	8.8" x 6" x 20'	3	10"
S-1310	41'-6" THRU 51'-3"	3	9.5" x 6" x 25'	3	10"
S-1310	51'-6" THRU 61'-3"	3	10.5" x 6.3" x 30'	3	10"
S-1312	61'-6" THRU 71'-3"	7	14" x 9.1" x 35'	3	12"
S-1312	71'-6" THRU 81'-3"	7	16" x 10.4" x 40'	3	12"

NOTES: DESIGN SPANS IN EVEN 3" INCREMENTS. SPECIFY SPAN A REQUIRED. FOR SPAN LENGTHS LESS THAN MAXIMUM FOR A DESIGNATED RANGE. THE LARGER DIAMETER OF THE CROSS BEAM IS HELD AND THE SMALLER DIAMETER WILL INCREASE AS LENGTH IS REDUCED. DESIGN POSTS IN EVEN 1' INCREMENTS. DESIGN FOR 6' SIGN HEIGHT.

SPAN A	SPREAD FEET										
	15	20	25	30	35	40	45	50	55	60	65	70
31'-6"	143	152		MAXIMUM SIGN AREA SQUARE FEET								
35'-0"	126	138	153									
41'-3"	106	120	130	144								
41'-6"	124	134	144	155								
45'-0"	102	112	121	132	144							
51'-3"	78	88	98	108	118	129						
51'-6"	109	119	129	141	154	168						
55'-0"	88	98	108	119	131	142	155					
61'-3"	69	80	91	101	110	121	130	142				
61'-6"		115	124	133	144	157	170	182				
65'-0"		98	107	117	128	140	152	164	176			
71'-3"		80	89	98	109	121	132	144	156	164		
71'-6"		110	121	131	142	152	162	173	184	197		
75'-0"		94	104	114	124	139	144	154	165	176	187	
81'-3"		84	94	104	116	126	131	146	157	168	179	190

W=40 POUNDS PER SQUARE FOOT.

ESTIMATED QUANTITIES FOOTING									
TYPE NO.	DIA. FD	CLASS B CONCRETE		REINFORCING STEEL					
		1' DEPTH	1" DEPTH	#5		#4 *		TOTAL
		CU. YD.	CU. YD.	NO.	LENGTH	NO.	LENGTH	LBS.
S-1310	2'-6"	0.1818	0.01515	6	8'-9"	10	7'-2"	103
S-1312	2'-6"	0.1818	0.01515	6	10'-3"	12	7'-2"	121

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

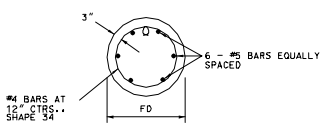
POST BASE DIMENSIONS AND DATA												
TYPE NO.	BOLT CIRCLE	C	F	H	S	R	P	T	E	ANCHOR BOLT	FOOTING	
											FH	FD
S-1310	13-1/2"	17-1/2"	9-9/16"	1-3/4"	14-1/8"	3-1/8"	3-3/4"	1-1/2"	7"	1-1/2" x 60"	6'-6"	2'-6"
S-1312	16"	21"	11-5/16"	2-1/8"	17"	3-3/4"	4-1/2"	2"	7-1/2"	1-3/4" x 90"	6'-6"	2'-6"

MODIFIED FOOTING IN SOLID ROCK		
TYPE NO.	(1) ANCHOR BOLT	ANCHOR BOLT PLATE
S-1310	1-1/2" DIA.	3-1/2" x 3-1/2" x 3/4"
S-1312	1-3/4" DIA.	3-1/2" x 3-1/2" x 3/4"

(1) ANCHOR BOLT LENGTH AS REQUIRED

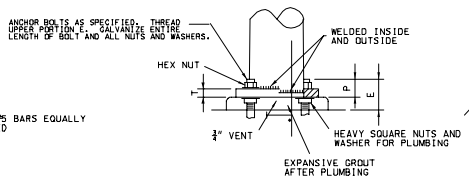
* EXAMPLE: IF SLOPE IS 6:1, THE DENOMINATOR IS 6

ELEVATION

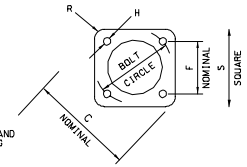


PLAN

FOOTINGS

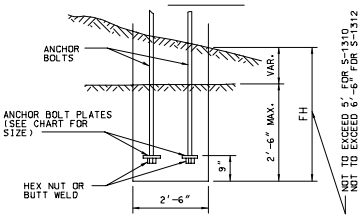


ELEVATION



PLAN

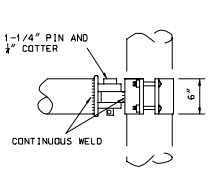
POST BASE DETAILS



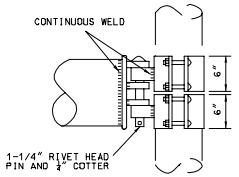
REINFORCEMENT PLACED SAME AS STANDARD FOOTING.

CONCRETE TO BE POURED TO EXCAVATED FACE OF ROCK.

MODIFIED FOOTING IN SOLID ROCK

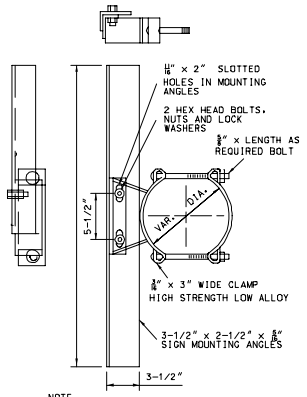


TUBE DIAMETER AT CENTER OF SPAN 10.5" AND UNDER



TUBE DIAMETER AT CENTER OF SPAN OVER 10.5"

BEAM CLAMP DETAIL

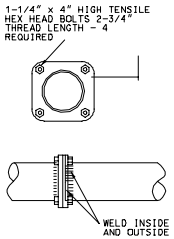


NOTE
MINIMUM OF TWO BRACKETS ARE REQUIRED FOR SIGNS OVER 42" IN LENGTH.

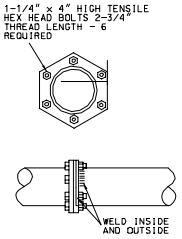
SIGN HEIGHT (INCHES)	MAXIMUM LIN. FT. OF SIGN WIDTH PER BRACKET
48 & UNDER	13
60	8
72	5

(GALVANIZED)

SIGN BRACKET ASSEMBLY



TUBE DIAMETER 9.5" AND UNDER



TUBE DIAMETER OVER 9.5"

BEAM SPLICE DETAIL

GENERAL NOTES:

SEE STD. PLAN 903.09 FOR LIGHTING DETAILS IF LIGHTING THE SIGN IS NECESSARY.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

HIGHWAY SIGNING

TUBULAR SUPPORT
STEEL-TYPE S

ONE TUBE

DATE:_____ EFFECTIVE: 01-01-2003 903.05G 1/1