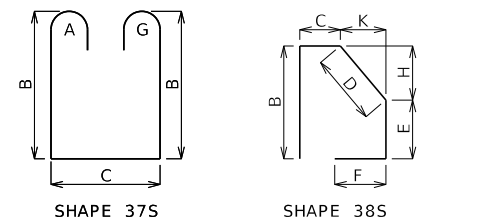
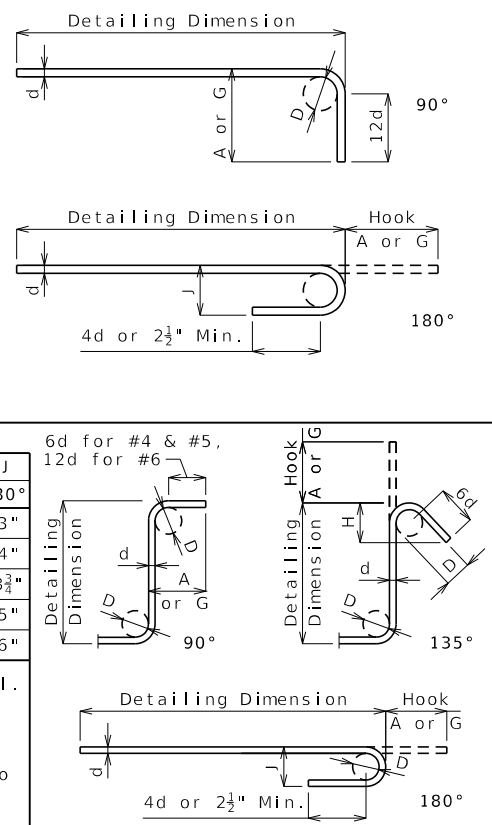


DATE PREPARED 5/7/2024	
ROUTE 142	STATE MO
DISTRICT BR	SHEET NO. 4
COUNTY BUTLER	
JOB NO. J9S3673	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A28392	

Finished Bend Diameters D and Hook Dimensions						
Standard Pin Bend Shapes						
Size	Case	D	A or G		J	
			90°	180°	180°	180°
#4	1	3"	8"	6"	4"	
#5	1	3 1/2"	10"	7"	5"	
#6	1	4 1/2"	12"	8 1/4"	6"	
	2	5 1/4"	14"	9 3/4"	7"	
#7	3	7"	15"	11 1/2"	8 3/4"	
	2	6"	16"	11"	8"	
#8	3	8"	17"	13 1/4"	10"	
	1	9 1/2"	19 1/2"	15 1/2"	11 1/4"	
#10	1	10 3/4"	22"	17 1/2"	13 1/4"	
#11	1	12"	24 1/2"	19 1/2"	14 7/8"	
#14	1	18 1/4"	31 1/4"	27 1/2"	21 7/8"	
#18	1	24"	41 1/2"	36 1/4"	28 1/2"	

Stirrup Pin Bend Shapes (S)							
Size	Case	D	A or G		H		
			90°	135°	180°	135°	180°
#4	2	2"	4 1/2"	4 1/2"	5"	2 3/8"	3"
	3	3"	5"	5 1/4"	6"	3"	4"
#5	2	2 1/2"	5 3/4"	5 3/4"	5 3/4"	3 3/8"	3 3/4"
	3	3 3/4"	6 1/4"	6 1/2"	7"	3 3/8"	5"
#6	1	4 1/2"	12"	7 3/4"	8 1/4"	4 3/8"	6"



BENDING DIAGRAMS

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

All bars shall be Grade 60.

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

All dimensions are out to out. (1) Shall be a deformed or plain spiral bar or wire.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)							
Size	Substructure		Superstructure			Entire Bridge	
	Plain	Epoxy	Slab	Barrier	Slip Form	Plain	Epoxy
4	0	0	0	0	0	0	0
5	0	0	0	453	0	0	453
6	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
By Type	0	0	0	453	0	0	453

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.

Bill of Reinforcing Steel															
No. Req.	Size/Mark	Location	Codes	Dimensions								Nom. Length	Actual Length	Weight	
				C	SH	V	B	C	D	E	F				H
		End Post Mod.													
4	5 R1	MODIFIED END	E 10S					7.00	8.00				1 10	1 7	7
24	5 R2	MODIFIED END	E 10S					7.00	9.00				1 11	1 8	42
20	5 R3	MODIFIED END	E 10S					2 5.00	6.00				5 4	5 1	106
12	5 R4	MODIFIED END	E 10S 4					2 4.75	7.00				5 5	5 2	
		Incr. = 2.000"						2 2.25	8.50				5 1	4 10	63
40	5 R5	MODIFIED END	E 20				4	9.00					4 9	4 9	198
12	5 R6	MODIFIED END	E 15S					11.25	2 1.50				1.25	11.25	3 1 2 11 37

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

Detailed Checked

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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