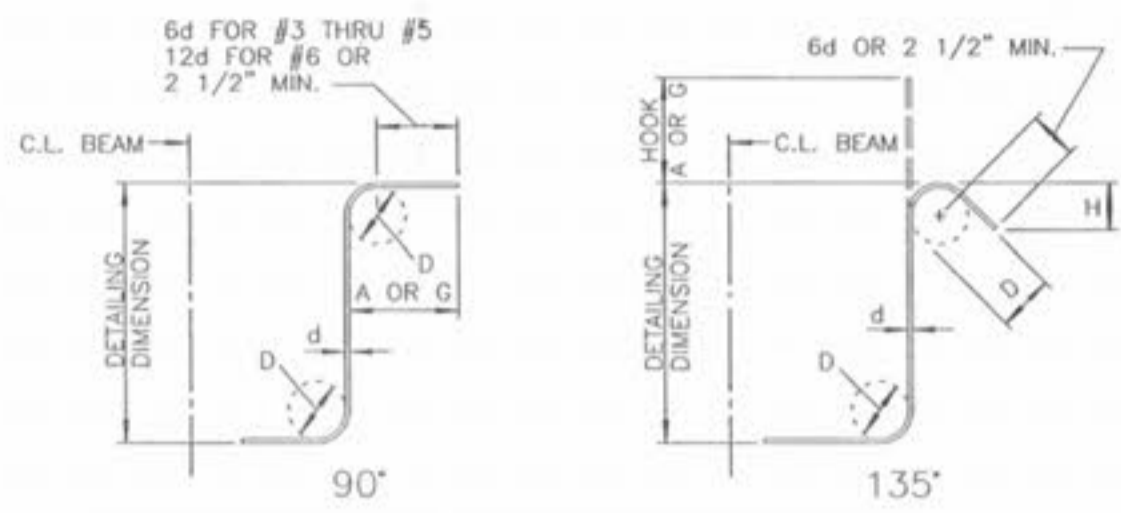
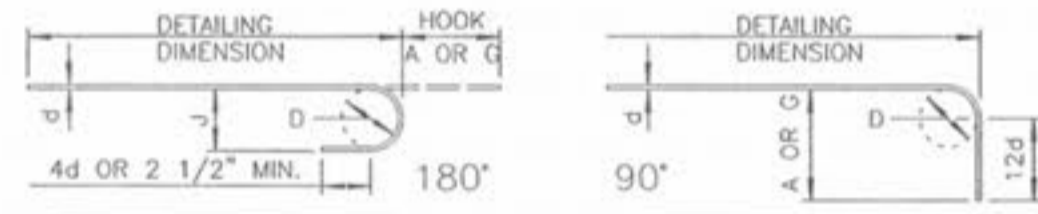


BILL OF REINFORCING STEEL



STIRRUP HOOK DIMENSIONS				
GRADES 40-50-60 KSI				
BAR SIZE	D (IN.)	90° HOOK		135° HOOK
		HOOK A OR G	HOOK A OR G	APPROX. H
#3	1 1/2"	4"	4"	2 1/2"
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	7 3/4"	4 1/2"
#7	5 1/4"	14"	9"	5 1/4"

NOTE: UNLESS OTHERWISE NOTED DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



SIZE OF 180° HOOKS (GRADE 40 KSI)
D=5d FOR #3 THRU #11
D=10d FOR #14 AND #18

SIZE OF 90° HOOKS ALL GRADES AND 180° HOOKS (GRADE 60 KSI)
D=6d FOR #3 THRU #8
D=8d FOR #9 THRU #11
D=10d FOR #14 AND #18

END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	180° HOOKS		90° HOOKS
		ALL GRADES		ALL GRADES
		A OR G	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"

NOTES:

ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEG. STANDARD HOOKS.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.

E--EPOXY COATED REINFORCEMENT.

S--STIRRUP.

X--BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.

V--BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.

NO. EACH--NUMBER OF BARS OF EACH LENGTH.

ACTUAL LENGTHS -- ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.

WEIGHT = ACTUAL WEIGHT X WEIGHT PER LINEAL FOOT X NUMBER REQUIRED.

PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.

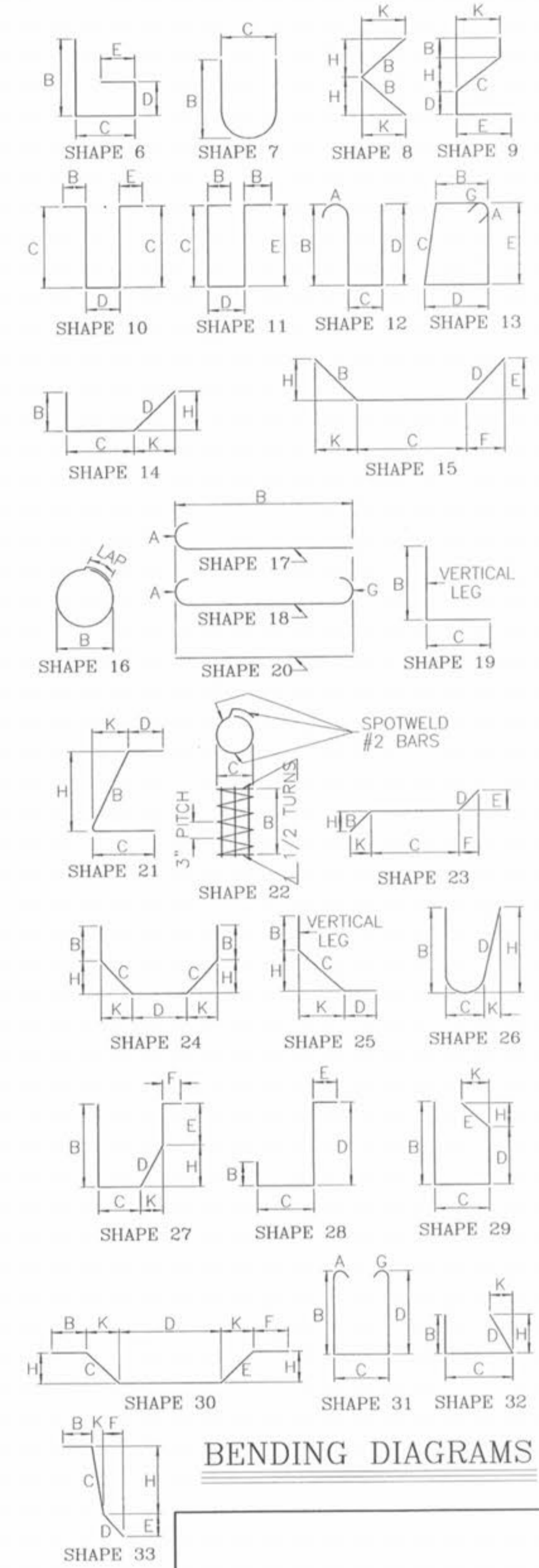
EPOXY (E)	NO. REQUIRED	SIZE	MARK	LOCATION	SHAPE NO.	STIRRUP SUBSTRUCTURE VARIES	NO. EACH	B C D E F H K						ACTUAL LENGTH		WEIGHT							
								Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.		Ft.	In.	Lbs.				
				DIAPHRAGMS AT INTERMEDIATE BENTS NO. 2, 3, 4, AND 5																			
	80	6	H200	DIAPHRAGM	20		7	0.000						7	0	841							
	80	4	H201	DIAPHRAGM	20		8	2.000						8	2	436							
	32	5	H202	DIAPHRAGM	20		3	4.000						3	4	111							
	64	5	H203	DIAPHRAGM	20		4	6.000						4	6	300							
	80	5	H204	DIAPHRAGM	6		3	1.000	0	11.500				3	11	327							
E	80	6	U200	DIAPHRAGM	28	S			2	5.000	4	9.000	1	2.000		8	0	961					
E	240	4	U201	DIAPHRAGM	28	S			2	2.000	4	8.500	1	0.000		7	9	1,242					
E	32	5	V100	DIAPHRAGM	20		5	0.000						5	0	167							
E	949	6	S1	SLAB	20		52	5.000						52	5	74,715							
E	352	6	S2	SLAB	20		53	6.000						53	6	28,286							
E	328	7	S3	SLAB	20		60	0.000						60	0	40,226							
E	1,900	5	S5	SLAB	20		3	9.000						3	9	7,431							
E	1,898	5	S52	SLAB	20		5	3.000						5	3	10,393							
E	48	5	S6	SLAB	20		51	9.000						51	9	2,591							
E	1,068	5	S7	SIDEWALK	9		1	3.000	0	11.375	6	3.000				8	4	9,283					
E	252	4	S8	SIDEWALK	20		31	11.000						31	11	5,373							
E	116	5	K1	BARRIER CURB	19	S	2	5.000	0	5.125						2	9	333					
E	116	5	K2	BARRIER CURB	14	S	0	5.125	0	11.125	1	6.000				0	2.000	1	5.875	2	10	343	
E	72	5	K3	BARRIER CURB	27	S	0	21.375	0	5.125	0	12.000	0	11.500	1	0.000	0	9.875	0	6.875	5	0	375
E	44	5	K4	BARRIER CURB	10	S			0	21.375	0	6.000	0	12.000							4	10	222
E	4	5	K5	BARRIER CURB	27	S			0	4.375	0	6.750	0	15.875	1	0.000	0	5.500	0	4.000	3	1	13
E	4	5	K6	BARRIER CURB	27	S			0	4.375	0	7.875	0	14.875	1	0.000	0	6.500	0	4.500	3	1	13
E	4	5	K7	BARRIER CURB	27	S			0	4.375	0	9.625	0	13.500	1	0.000	0	7.875	0	5.500	3	2	13
E	4	5	K8	BARRIER CURB	27	S			0	4.375	0	11.250	0	12.125	1	0.000	0	9.250	0	6.500	3	3	14
E	48	5	K9	BARRIER CURB	20		5	7.000									5	7					280
E	42	4	K10	BARRIER CURB	20		11	3.000									11	3					316
E	4	5	K11	BARRIER CURB	8		2	2.125						2	2.000	0	2.375	4	3				18
E	826	5	R1	BARRIER CURB	19	S	2	6.000	0	3.500							2	8					2,297
E	826	5	R2	BARRIER CURB	15	S	2	6.125	0	3.500					2	6.000	0	3.000	2	9			2,369
E	826	5	R3	BARRIER CURB	19	S	1	5.000	0	6.000							1	10					1,579
E	826	5	R4	BARRIER CURB	27	S			0	6.000	0	11.250	0	7.000	1	0.000	0	9.250	0	6.375	2	11	2,513
E	56	5	R5	BARRIER CURB	20		37	7.000									37	7					2,195
E	84	5	R6	BARRIER CURB	20		31	4.000									31	4					2,745
E	112	5	R7	BARRIER CURB	20		9	8.000									9	8					1,129
E	72	5	C1	SLIP FORM OPTION	20		10	0.000									10	0					751
E	10	5	C2	SLIP FORM OPTION	20		11	3.000									11	3					117

NOTE:

REINFORCING STEEL SHOWN FOR SAFETY BARRIER CURB, SIDEWALK AND SLAB IS FOR INFORMATIONAL PURPOSES ONLY, AND IS NOT INCLUDED IN THE TOTAL WEIGHTS. BARRIER CURB STEEL IS INCLUDED IN THE PRICE PER LINEAL FOOT OF BARRIER CURB, SIDEWALK STEEL IS INCLUDED IN THE PRICE PER SQUARE FOOT OF SIDEWALK AND SLAB STEEL IS INCLUDED IN THE PRICE PER SQUARE YARD OF SLAB ON I-GIRDER.

TWO ADDITIONAL #4-K10, #5-C2 AND #7-H15 ARE INCLUDED IN THE BAR BILL FOR TESTING.

NOTE: This drawing is not to scale; follow dimensions.



BENDING DIAGRAMS



ENGINEER'S AUTHENTICATION: The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date, unless reauthenticated.

