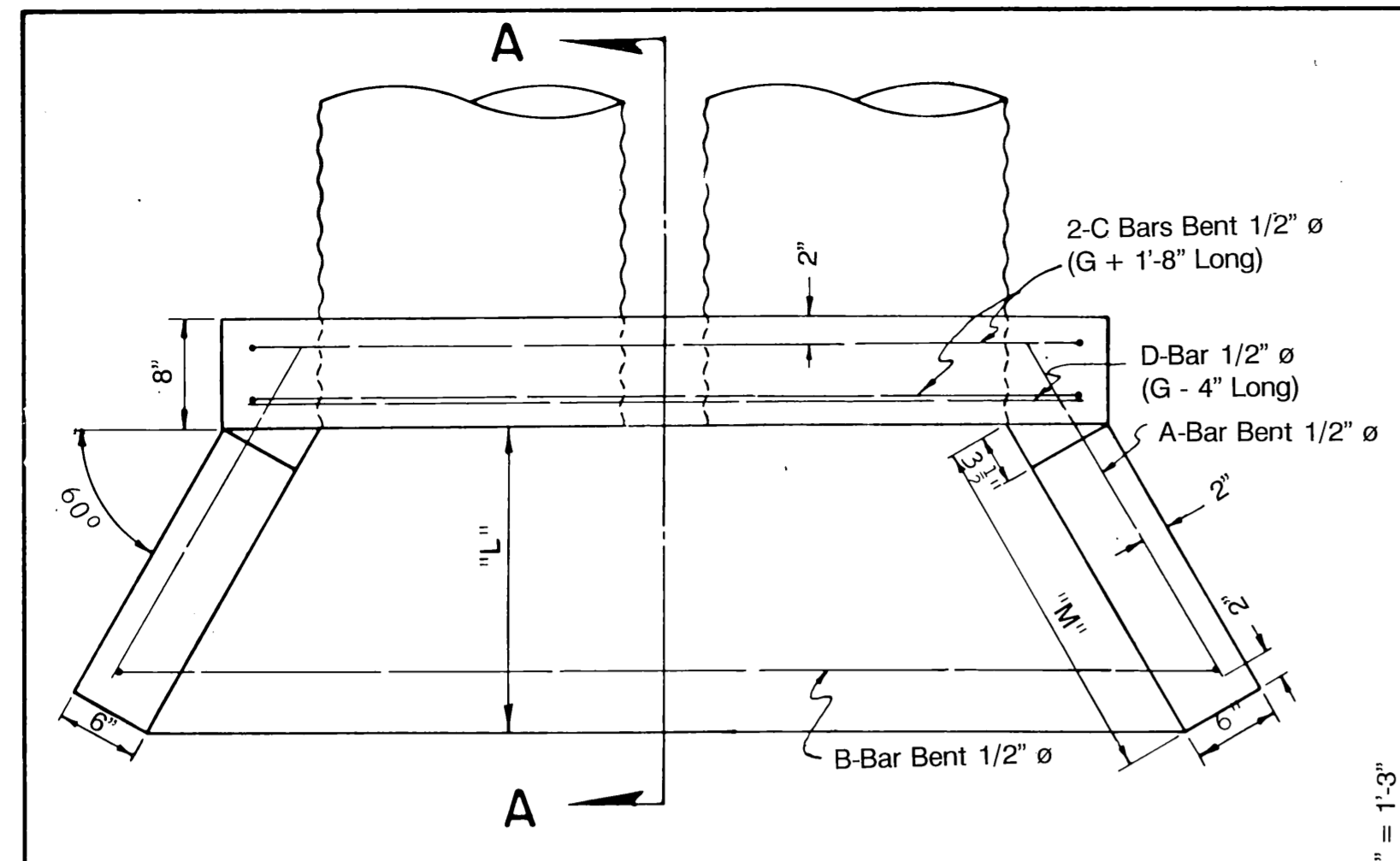
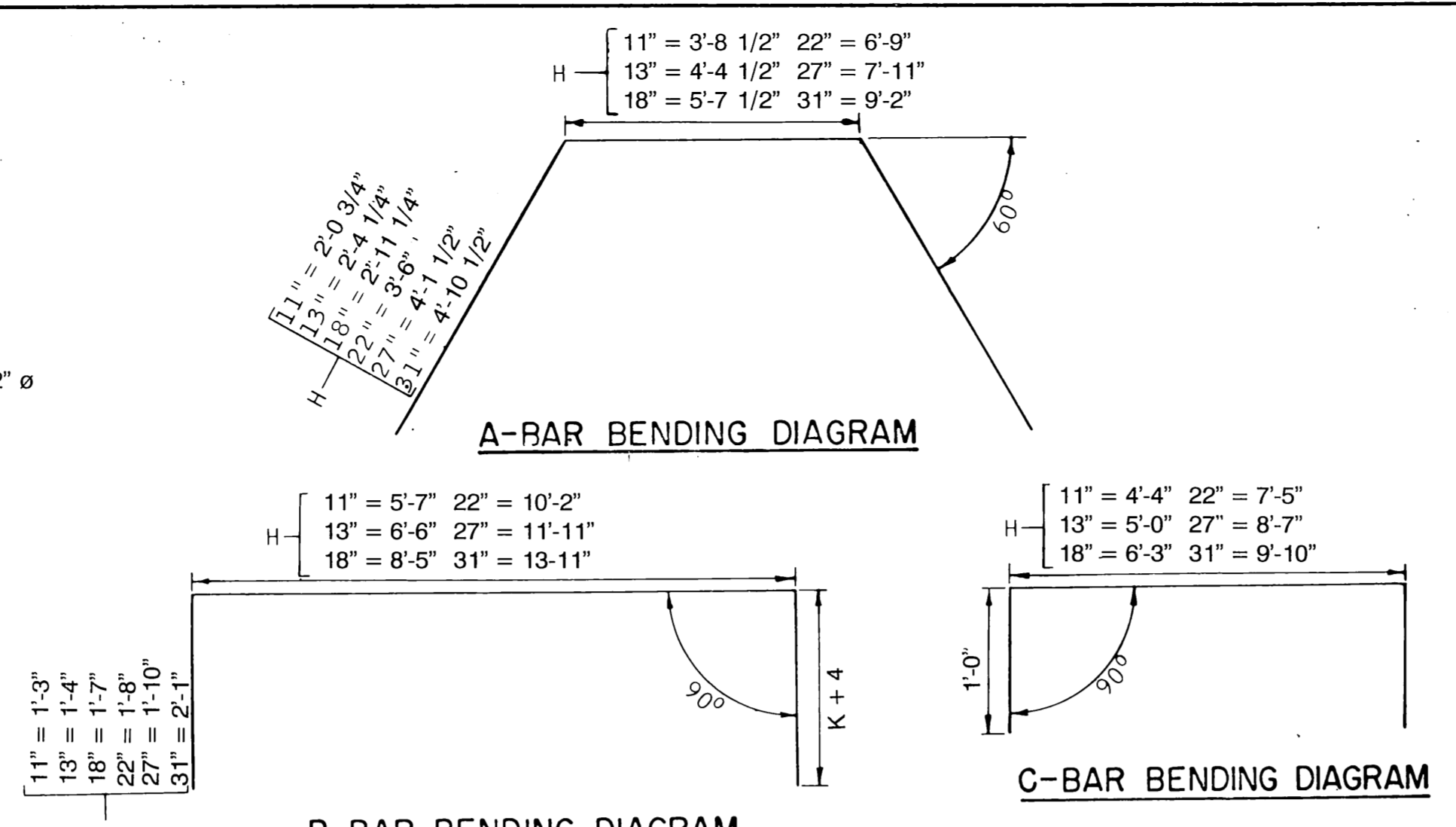


DESCRIPTION	REVISIONS	DATE
RE-ISSUE		
Rev. Pay Item No.		LGC 7/89



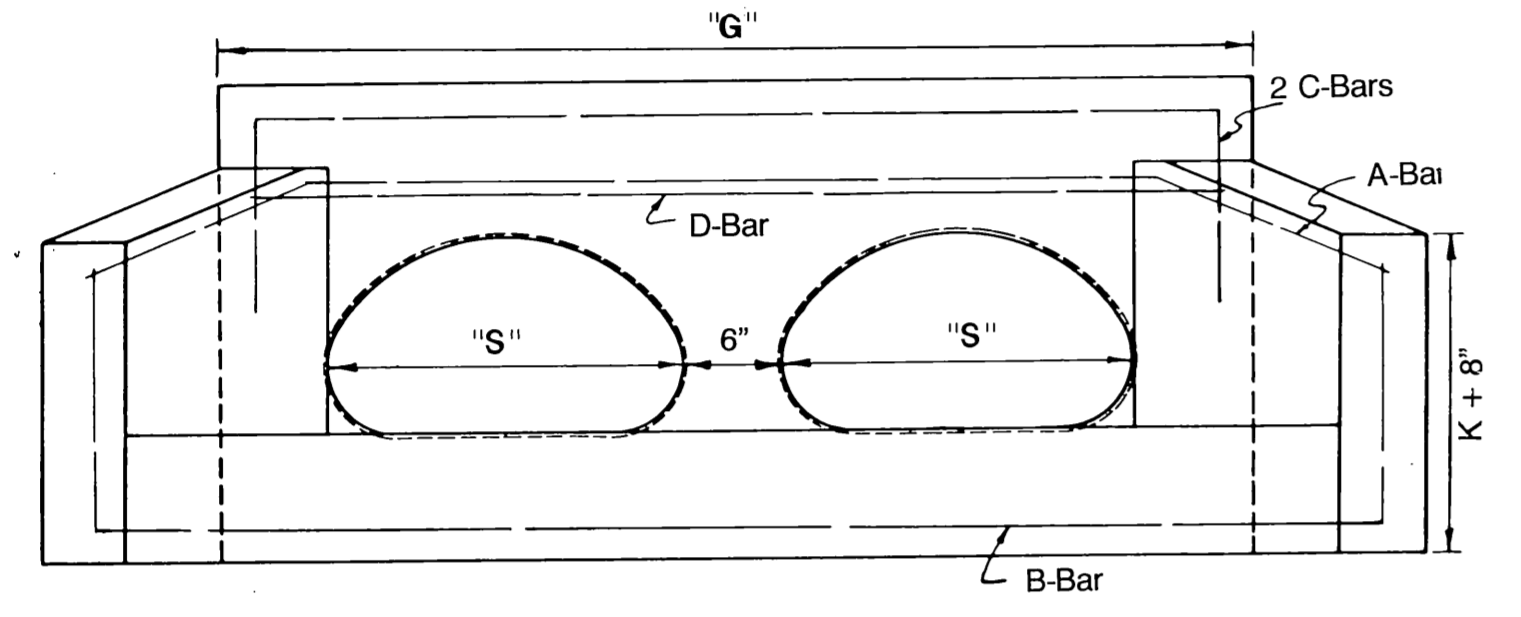
PLAN



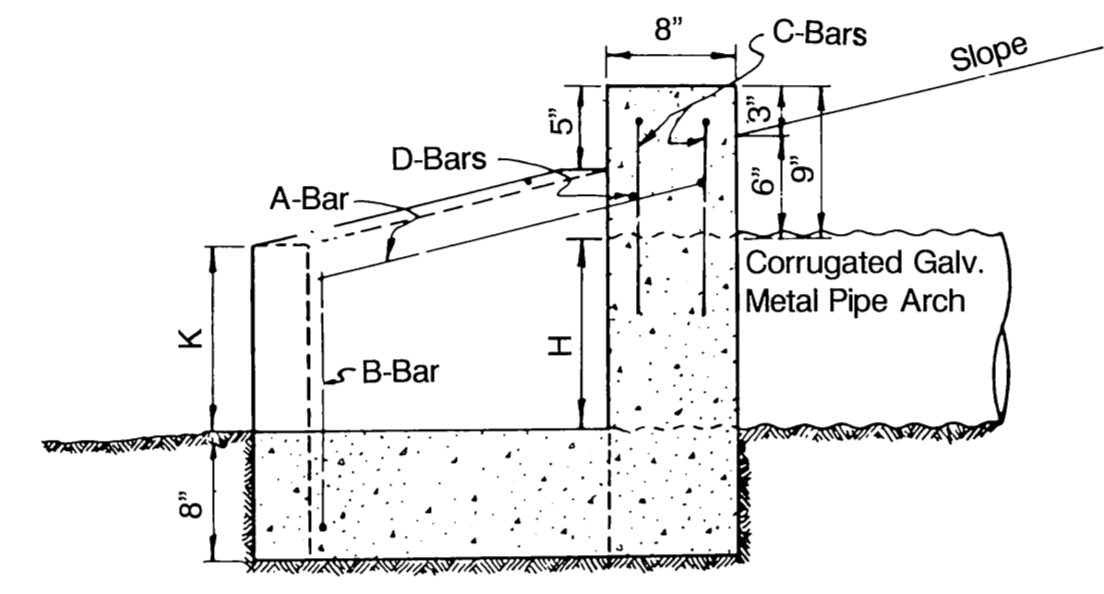
A-BAR BENDING DIAGRAM

C-BAR BENDING DIAGRAM

B-BAR BENDING DIAGRAM



ELEVATION



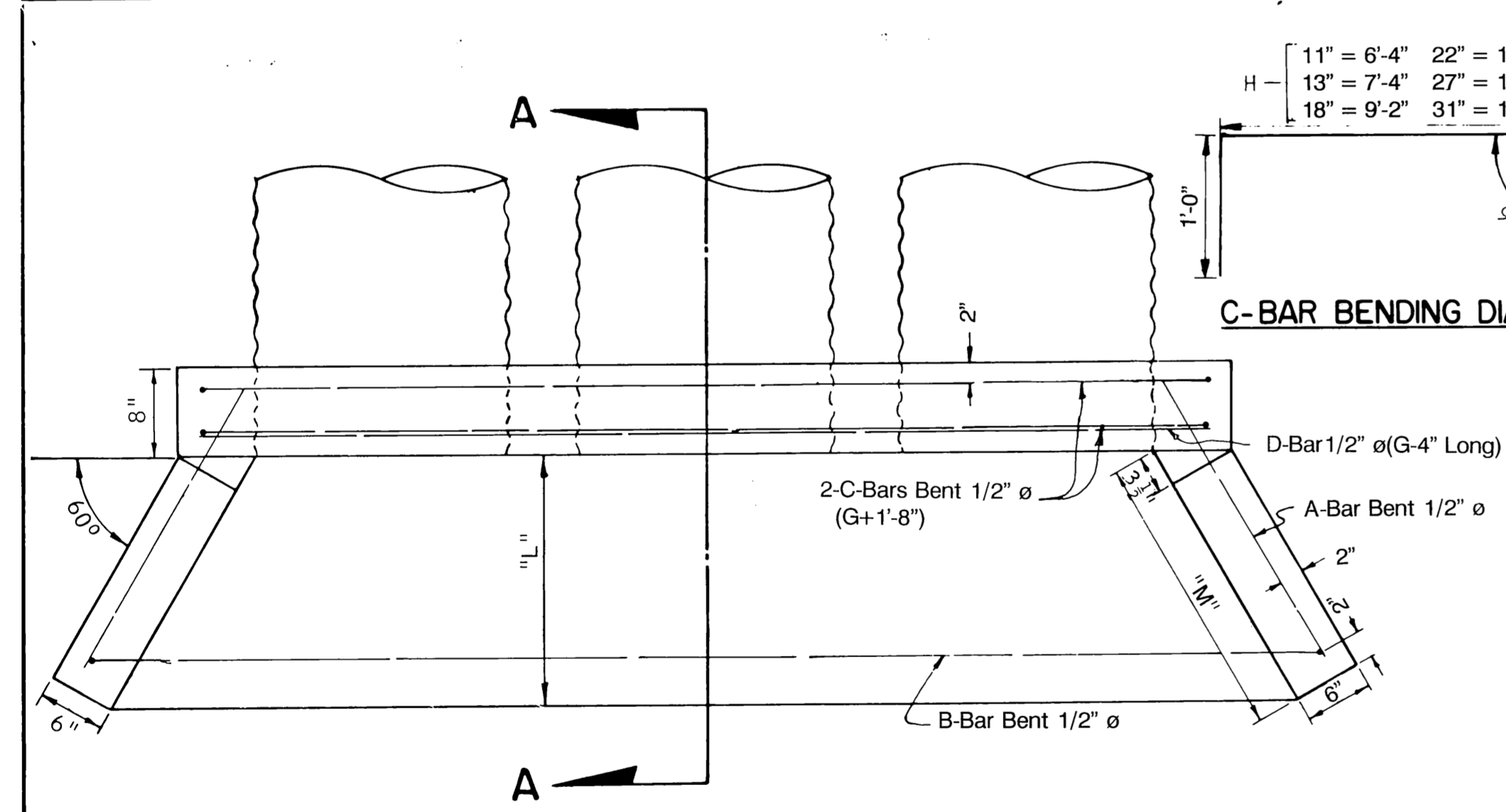
SECTION A-A

S	H	A-Bars				B-Bars				C-Bars				D-Bars			
		FORM	NO.	SIZE	LENGTH	FORM	NO.	SIZE	LENGTH	FORM	NO.	SIZE	LENGTH	FORM	NO.	SIZE	LENGTH
18"	11"	Bent	1	1/2" ø	7'-10"	Bent	1	1/2" ø	8'-1"	Bent	2	1/2" ø	6'-4"	Str.	1	1/2" ø	4'-4"
22"	13"	Bent	1	1/2" ø	9'-1"	Bent	1	1/2" ø	9'-2"	Bent	2	1/2" ø	7'-0"	Str.	1	1/2" ø	5'-0"
29"	18"	Bent	1	1/2" ø	11'-6"	Bent	1	1/2" ø	11'-7"	Bent	2	1/2" ø	8'-3"	Str.	1	1/2" ø	6'-3"
36"	22"	Bent	1	1/2" ø	13'-9"	Bent	1	1/2" ø	13'-6"	Bent	2	1/2" ø	9'-5"	Str.	1	1/2" ø	7'-5"
43"	27"	Bent	1	1/2" ø	16'-2"	Bent	1	1/2" ø	15'-7"	Bent	2	1/2" ø	10'-7"	Str.	1	1/2" ø	8'-7"
50"	31"	Bent	1	1/2" ø	18'-11"	Bent	1	1/2" ø	18'-1"	Bent	2	1/2" ø	11'-10"	Str.	1	1/2" ø	9'-10"

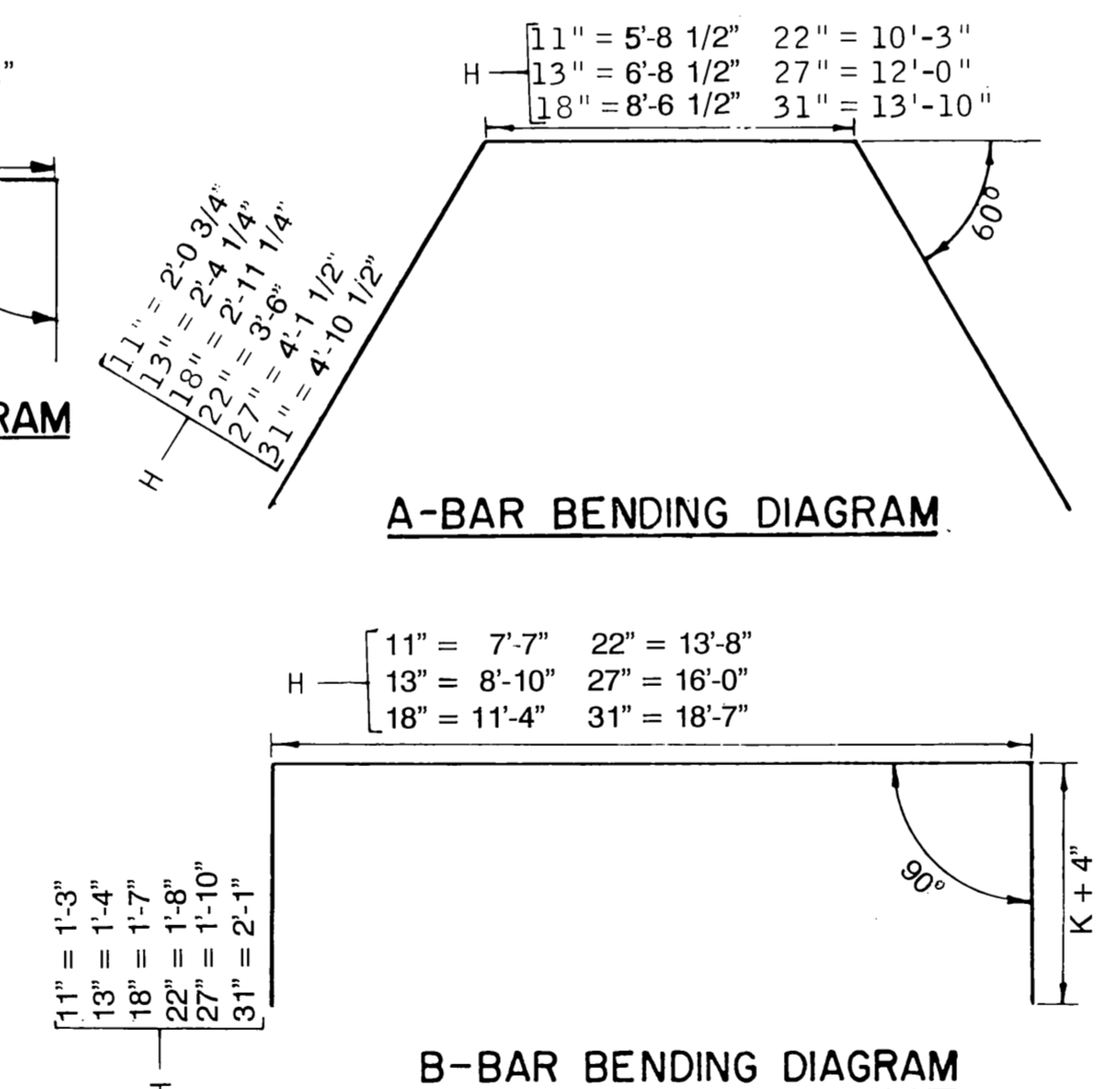
S	H	AREA IN SQ. FT.	K	G	L	M
18"	11"	2.4	0'-11"	4'-8"	1'-7"	1'-10"
22"	13"	3.6	1'-0"	5'-4"	1'-10"	2'-1 1/2"
29"	18"	6.2	1'-3"	6'-7"	2'-4"	2'-8 1/2"
36"	22"	9.8	1'-5"	7'-9"	2'-10"	3'-3 1/2"
43"	27"	14.2	1'-7 1/2"	8'-11"	3'-4 1/2"	3'-11"
50"	31"	19.2	1'-10 1/2"	10'-2"	4'-0 1/2"	4'-8"

H	CLASS A CONCRETE CU. YD.	REINFORCING STEEL - LBS.
11"	0.99	44
13"	1.25	50
18"	1.84	62
22"	2.49	72
27"	3.31	83
31"	4.38	95

DOUBLE ARCH

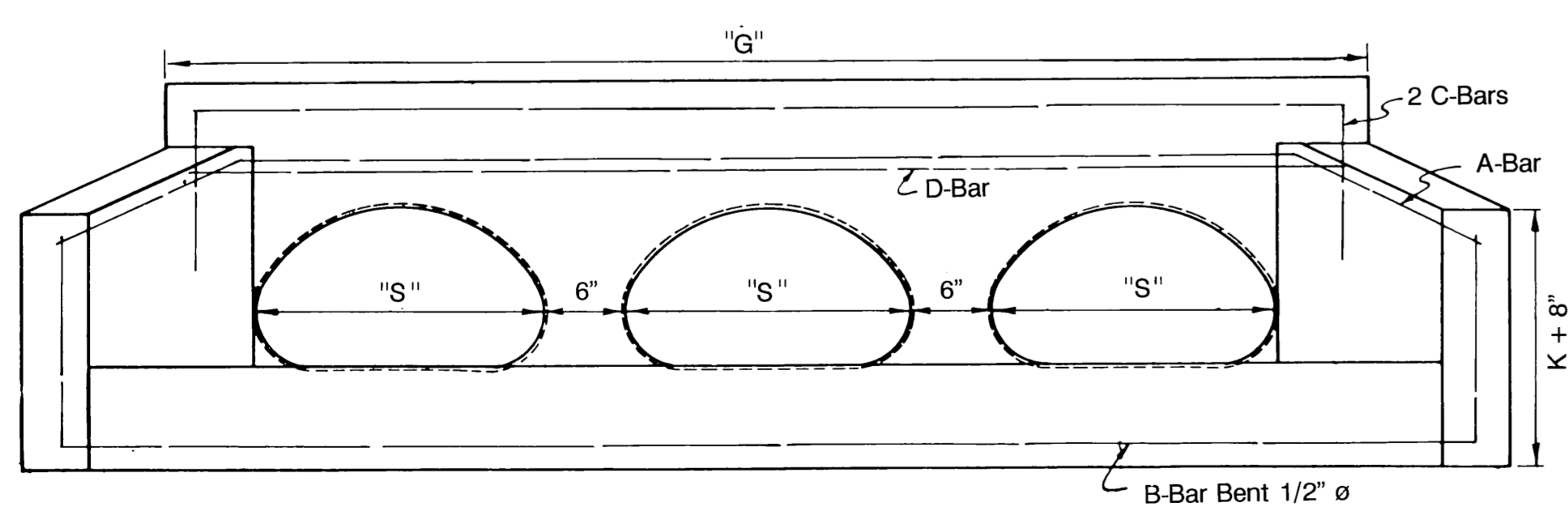


PLAN

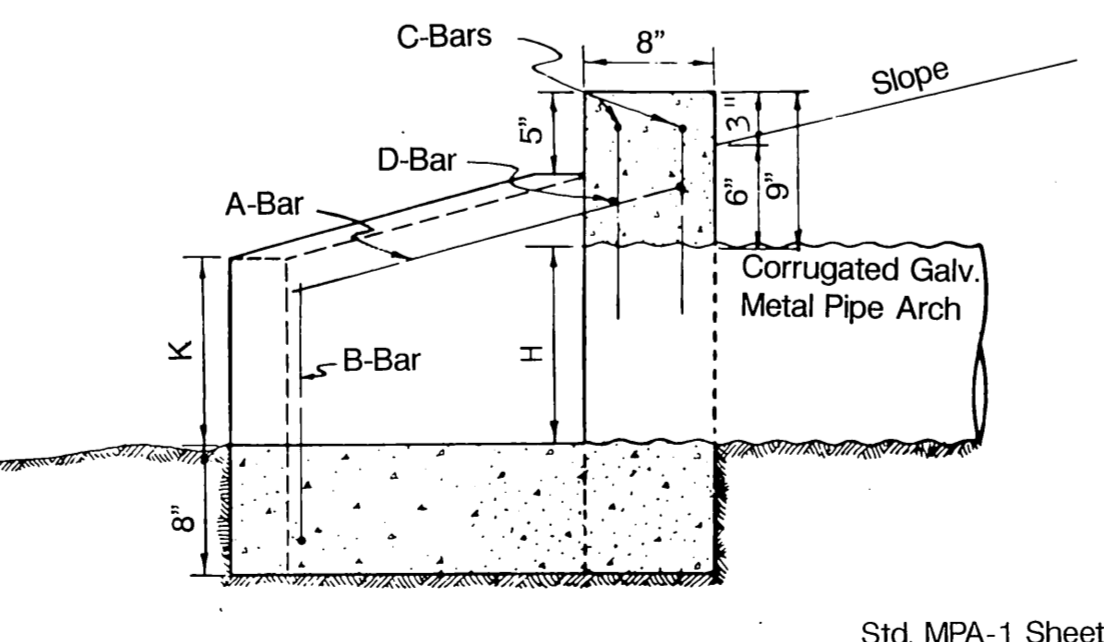


A-BAR BENDING DIAGRAM

B-BAR BENDING DIAGRAM



ELEVATION



SECTION A-A

H	CLASS A CONCRETE CU. YD.	REINFORCING STEEL - LBS.
11"	1.32	58
13"	1.66	66
18"	2.24	81
22"	3.30	95
27"	4.33	110
31"	5.76	126

S	H	AREA IN SQ. FT.	K	G	L	M
18"	11"	3.6	0'-11"	6'-8"	1'-7"	1'-10"
22"	13"	5.4	1'-0"	7'-8"	1'-10"	2'-1 1/2"
29"	18"	9.3	1'-3"	9'-6"	2'-4"	2'-8 1/2"
36"	22"	14.7	1'-5"	11'-3"	2'-10"	3'-3 1/2"
43"	27"	21.3	1'-7"	13'-0"	3'-4 1/2"	3'-11"
50"	31"	28.8	1'-10 1/2"	14'-10"	4'-0 1/2"	4'-8"

TRIPLE ARCH

S	H	A-Bars				B-Bars				C-Bars				D-Bars			
		FORM	NO.	SIZE	LENGTH	FORM	NO.	SIZE	LENGTH	FORM	NO.	SIZE	LENGTH	FORM	NO.	SIZE	LENGTH
18"	11"	Bent	1	1/2" ø	9'-10"	Bent	1	1/2" ø	10'-1"	Bent	2	1/2" ø	8'-4"	Str.	1	1/2" ø	6'-4"
22"	13"	Bent	1	1/2" ø	11'-5"	Bent	1	1/2" ø	11'-6"	Bent	2	1/2" ø	9'-4"	Str.	1	1/2" ø	7'-4"
29"	18"	Bent	1	1/2" ø	14'-5"	Bent	1	1/2" ø	14'-6"	Bent	2	1/2" ø	11'-2"	Str.	1	1/2" ø	9'-2"
36"	22"	Bent	1	1/2" ø	17'-3"	Bent	1	1/2" ø	17'-0"	Bent	2	1/2" ø	12'-11"	Str.	1	1/2" ø	10'-11"
43"	27"	Bent	1	1/2" ø	20'-3"	Bent	1	1/2" ø	19'-8"	Bent	2	1/2" ø	14'-8"	Str.	1	1/2" ø	12'-8"
50"	31"	Bent	1	1/2" ø	23'-7"	Bent	1	1/2" ø	22'-9"	Bent	2	1/2" ø	16'-6"	Str.	1	1/2" ø	14'-6"

GENERAL NOTES
 ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
 ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4 INCH CHAMFER.
 UNLESS OTHERWISE SPECIFIED, ALL EXPOSED CONCRETE SURFACES SHALL HAVE A FINISH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ITEM NO.	ITEM	UNIT
509.06(C)	CLASS A CONCRETE FOR SMALL STRUCTURES	C. Y.
511.06(A)	REINFORCING STEEL	LB.

▲ FOR QUANTITIES OF CLASS A CONCRETE LESS THAN 10.0 C.Y.

APPROVED BY

RURAL DES. ENGR.	URBAN DES. ENGR.	BRIDGE ENGINEER	CONST. ENGINEER	ASS'T. DIR. / DES.
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE 12-16-88	DATE 12-6-88	DATE 12-5-88	DATE 12-12-88	DATE 12-11-88

OKLAHOMA DEPT. OF TRANSPORTATION
 STANDARD
 DOUBLE & TRIPLE METAL
 PIPE ARCH HEADWALL
OBSOLETE

Std. MPA-1 Sheet No. 60 Deleted
 See Std. HEAP-1 Sheet No. 76 for
 Details of Reinf. Conc. Headwalls
 for Single Metal Pipe Arch Culverts