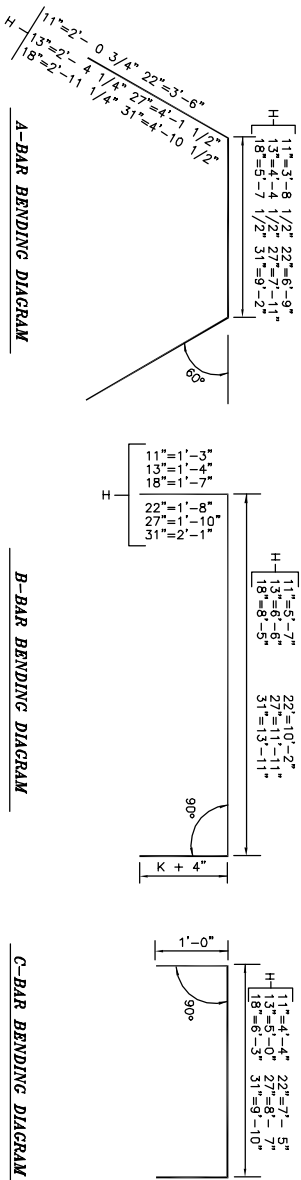
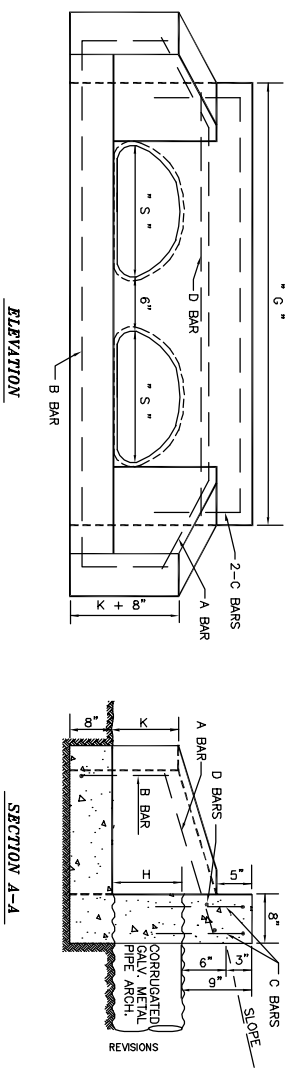


NOTE:
ALL EXPOSED EDGES SHALL HAVE 3/4" CHAMFER UNLESS OTHERWISE SPECIFIED. ALL EXPOSED CONC. SURFACES SHALL HAVE A FINISH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.



A-BAR BENDING DIAGRAM

B-BAR BENDING DIAGRAM

C-BAR BENDING DIAGRAM

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

DIMENSIONS FOR STEEL

DIMENSIONS FOR CONCRETE						
S	H	AREA IN SQ. FT.	K	G	L	M
18"	11"	2.4	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"

QUANTITIES FOR TWO END WALLS		
H	CLASS A CONCRETE C.Y.	REINFORCING STEEL LBS.
11"	.99	44.
13"	1.25	50.
18"	2.49	72.
22"	3.31	83.
31"	4.38	95.



The City of Enid
401 West Owen K. Garrett Road
P.O. Box 1788
Enid, Oklahoma 73702
Telephone: (800) 234-8940 Fax: (800) 234-8946

Contacts:

Robert Hill, Director of Engineering Services, Ext 344
Jason Brinney, Civil Engineer, Ext 348

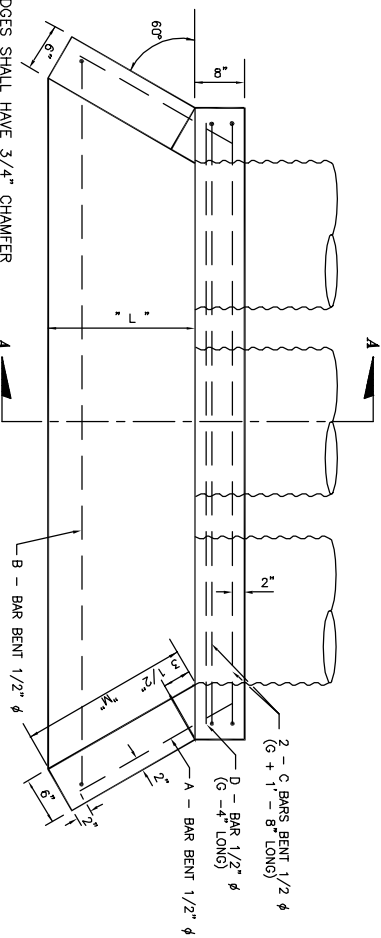
Number	Date	Description

Sheet Title: STANDARD DOUBLE METAL PIPE ARCH HEADWALL
Project Title: DD - 10

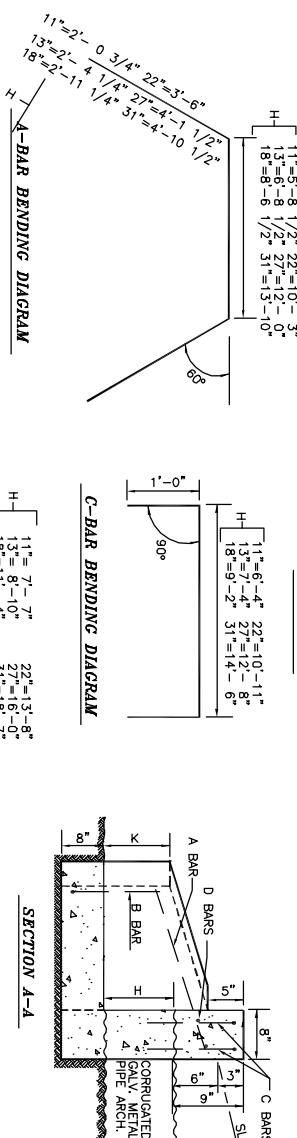
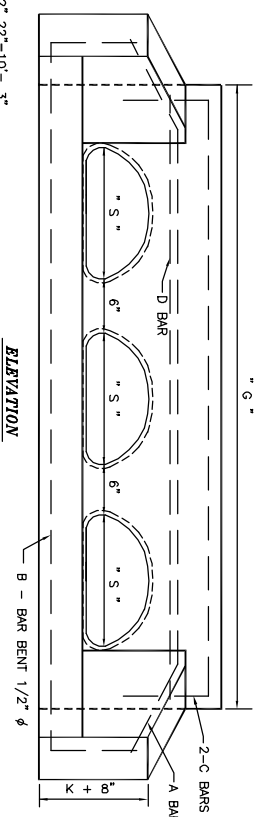
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Project Location: _____



Date: 6/1/00
Scale: NO SCALE
Code: P.E./C.E.H.
Drawn By: P.B./C.L.H.
Designed By: R.H.
Approved By: R.H.
Sheet: 4



NOTE:
ALL EXPOSED EDGES SHALL HAVE 3/4" CHAMFER UNLESS OTHERWISE SPECIFIED. ALL EXPOSED CONC. SURFACES SHALL HAVE A FINISH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.



A-BAR BENDING DIAGRAM

B-BAR BENDING DIAGRAM

C-BAR BENDING DIAGRAM

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

DIMENSIONS FOR STEEL

DIMENSIONS FOR CONCRETE						
S	H	AREA IN SQ. FT.	K	G	L	M
18"	11"	3.6	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 1/2"	13'-0"	3'-4 1/2"	3'-11"
50"	31"	28.8	1'-10 1/2"	14'-10"	4'-0 1/2"	4'-8"

QUANTITIES FOR TWO END WALLS		
H	CLASS A CONCRETE C.Y.	REINFORCING STEEL LBS.
11"	1.32	58.
13"	1.66	66.
18"	2.24	81.
22"	3.30	95.
31"	4.33	110.
	5.76	126.



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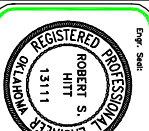
Contacts:

Robert Hill, Director of Engineering Services, Ext 344
Jason Brinney, Civil Engineer, Ext 348

Number	Date	Description

Sheet Title: STANDARD TRIPLE METAL PIPE ARCH HEADWALL
Project Title: DD - 11

Project Number: _____
Project Location: _____



Date: 6/1/00
Scale: NO SCALE
Code: P.E./C.E.H.
Drawn By: P.B./C.L.H.
Designed By: R.H.
Approved By: R.H.
Sheet: 4