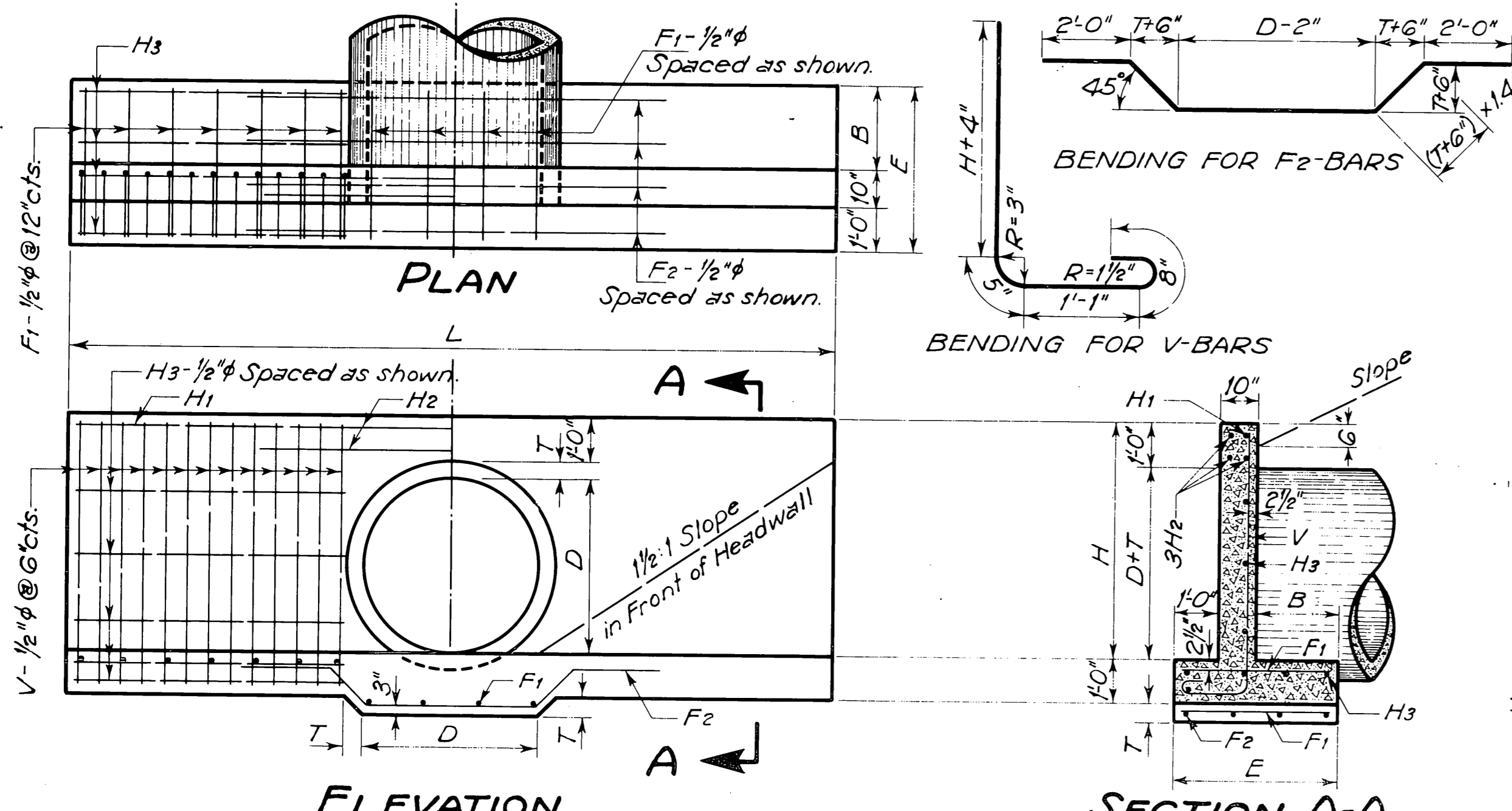
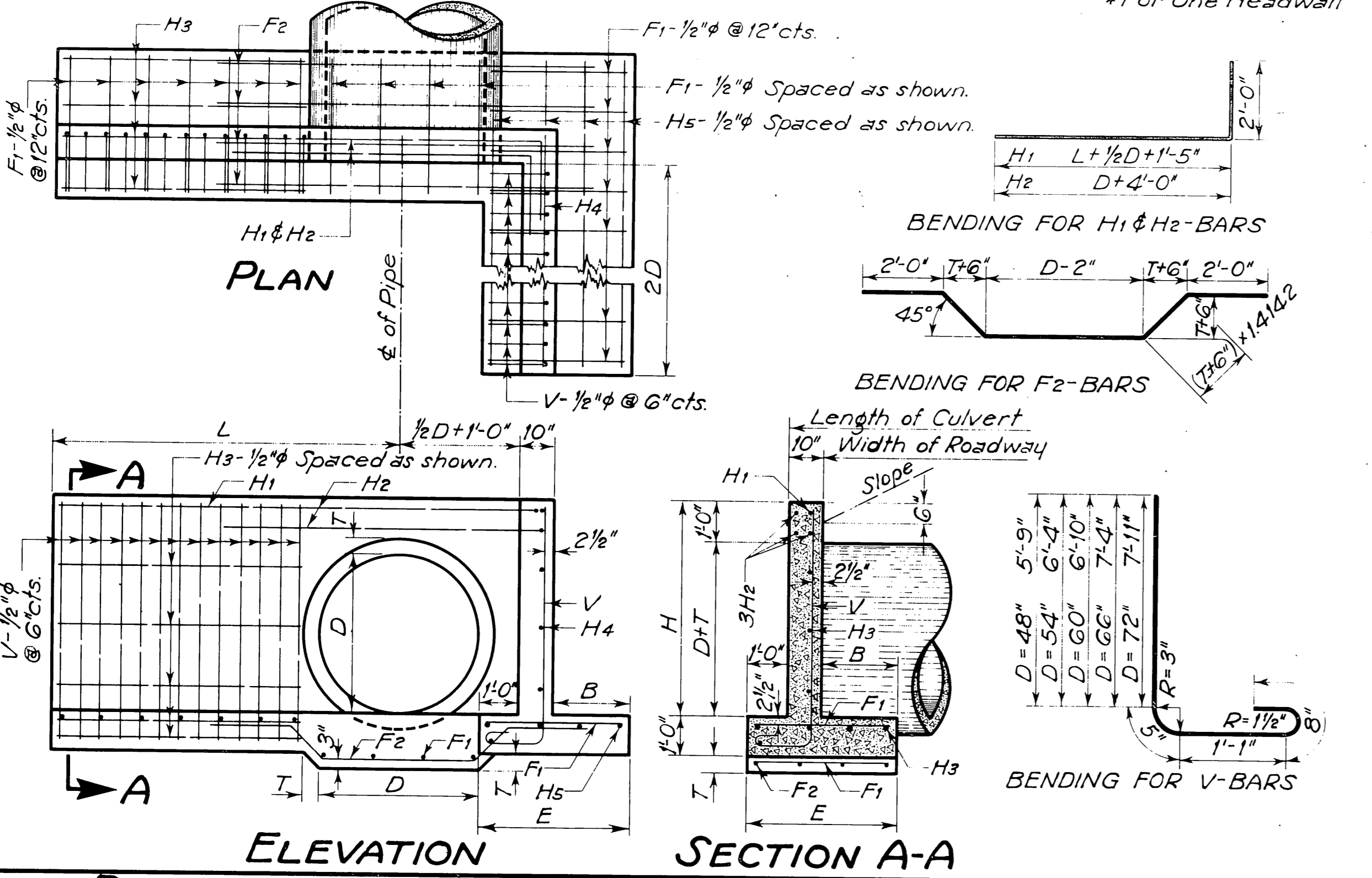


Revised 1-7-47
 Rev. Note for Reinf. w/ 5-7-63
 Rev. Reinf. Steel W/ 5-23-63
 Added Gen. Notes for L.D. 9-10-63
 2nd. Spec. Reference L.E.D. 1-1-67



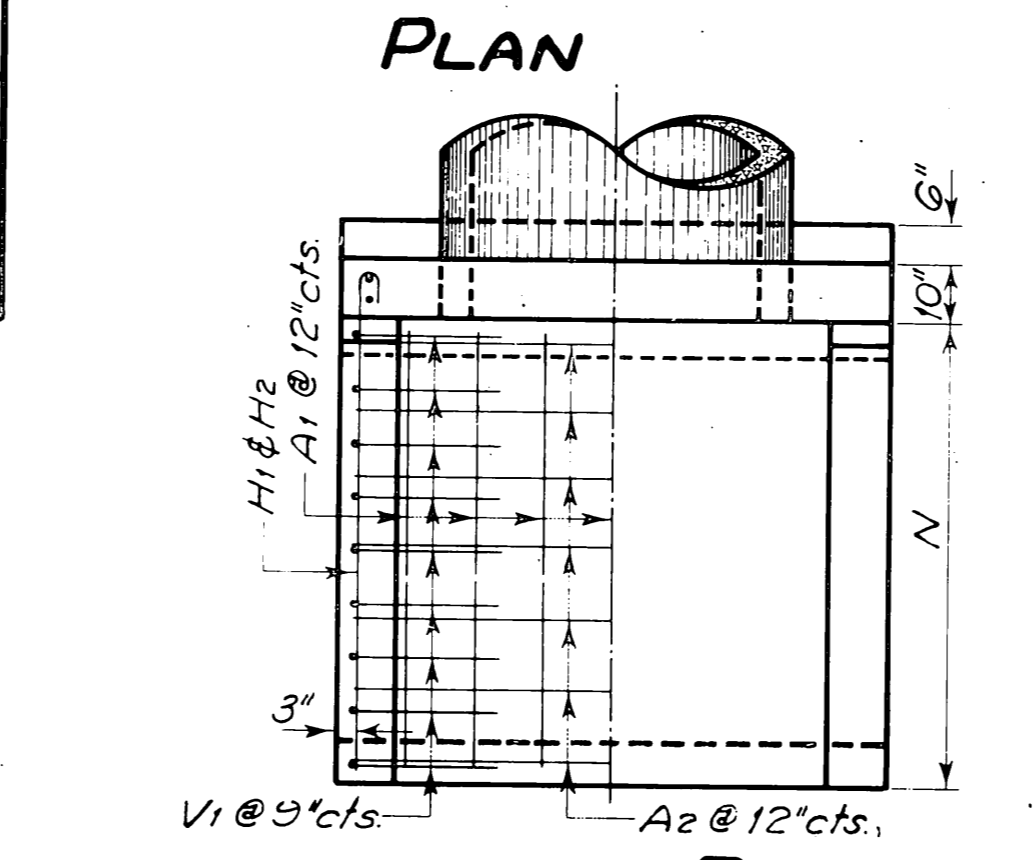
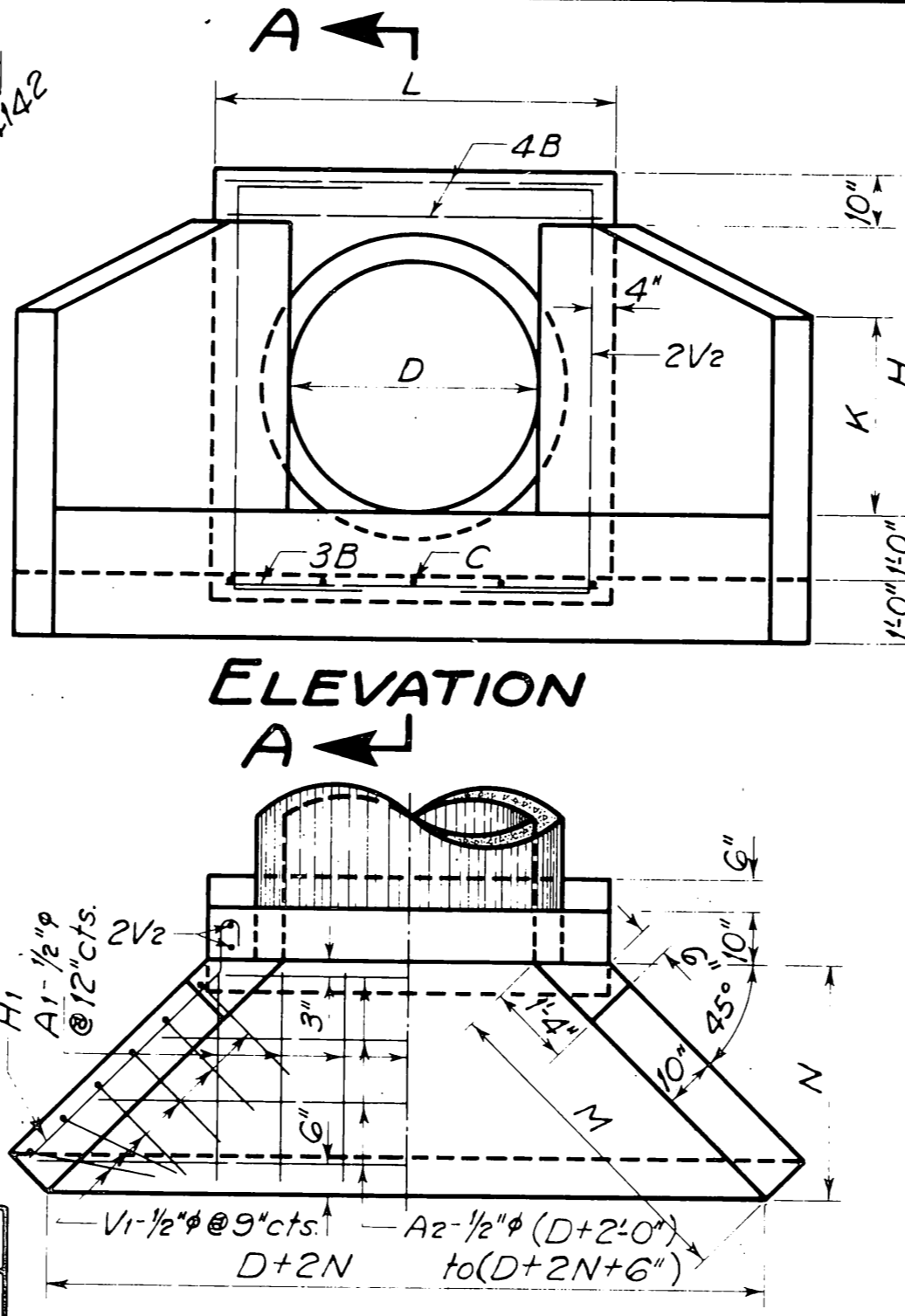
DIMENSIONS & QUANTITIES FOR STRAIGHT HEADWALLS																				
DIMENSIONS							REINFORCING STEEL					QUANTITIES*								
D	Area, Sq. Ft.	T	H	L	E	B	F1-1/2"φ No.	F2-1/2"φ Lgth.	H1-1/2"φ No.	H2-1/2"φ Lgth.	H3-1/2"φ No.	V-1/2"φ No.	Class "A" Conc., C.Y.	Reinf. Steel, Lbs.						
48"	12.57	5"	5'-5"	18'-0"	3'-9"	1'-11"	18	3'-5"	4	10'-5"	1	17'-8"	3	8'-0"	14	6'-5"	28	7'-11"	5.14	30.5
54"	15.90	5 1/2"	5'-11 1/2"	20'-0"	4'-0"	2'-2"	20	3'-8"	4	11'-0"	1	19'-8"	3	8'-6"	16	7'-1"	30	8'-6"	6.19	35.5
60"	19.63	6"	6'-6"	22'-0"	4'-3"	2'-5"	24	3'-11"	5	11'-8"	1	21'-8"	3	9'-0"	18	7'-10"	32	9'-0"	7.34	42.1
66"	23.76	6 1/2"	7'-0 1/2"	24'-0"	4'-6"	2'-8"	25	4'-2"	5	12'-3"	1	23'-8"	3	9'-6"	18	8'-6"	36	9'-6"	8.58	47.6
72"	28.27	7"	7'-7"	26'-0"	4'-10"	3'-0"	27	4'-6"	5	12'-10"	1	25'-8"	3	10'-0"	18	9'-3"	38	10'-1"	10.01	52.9

*For One Headwall



DIMENSIONS & QUANTITIES FOR HEADWALLS WITH 90° WINGS																								
DIMENSIONS						REINFORCING STEEL								QUANTITIES*										
D	Area, Sq. Ft.	T	H	L	E	B	F1-1/2"φ No.	F2-1/2"φ Lgth.	H1-1/2"φ No.	H2-1/2"φ Lgth.	H3-1/2"φ No.	H4-1/2"φ Lgth.	H5-1/2"φ No.	V-1/2"φ No.	Class "A" Conc., C.Y.	Reinf. Steel, Lbs.								
48"	12.57	5"	5'-5"	9'-0"	3'-9"	1'-11"	22	3'-5"	4	10'-5"	1	14'-5"	3	10'-0"	7	6'-5"	4	10'-5"	30	7'-11"	6.14	34.7		
54"	15.90	5 1/2"	5'-11 1/2"	10'-0"	4'-0"	2'-2"	24	3'-8"	4	11'-0"	1	15'-8"	3	10'-6"	8	7'-1"	4	9'-6"	5	11'-8"	33	8'-6"	7.39	41.0
60"	19.63	6"	6'-6"	11'-0"	4'-3"	2'-5"	26	3'-11"	5	11'-8"	1	16'-11"	3	11'-0"	9	7'-10"	5	10'-6"	5	12'-11"	36	9'-0"	8.75	48.2
66"	23.76	6 1/2"	7'-0 1/2"	12'-0"	4'-6"	2'-8"	30	4'-2"	5	12'-3"	1	18'-2"	3	11'-6"	9	8'-6"	5	14'-2"	40	9'-6"	40	9'-6"	10.23	55.1
72"	28.27	7"	7'-7"	13'-0"	4'-10"	3'-0"	31	4'-6"	5	12'-10"	1	19'-5"	3	12'-0"	9	9'-3"	5	12'-6"	5	15'-6"	43	10'-1"	11.95	61.2

*For One Headwall

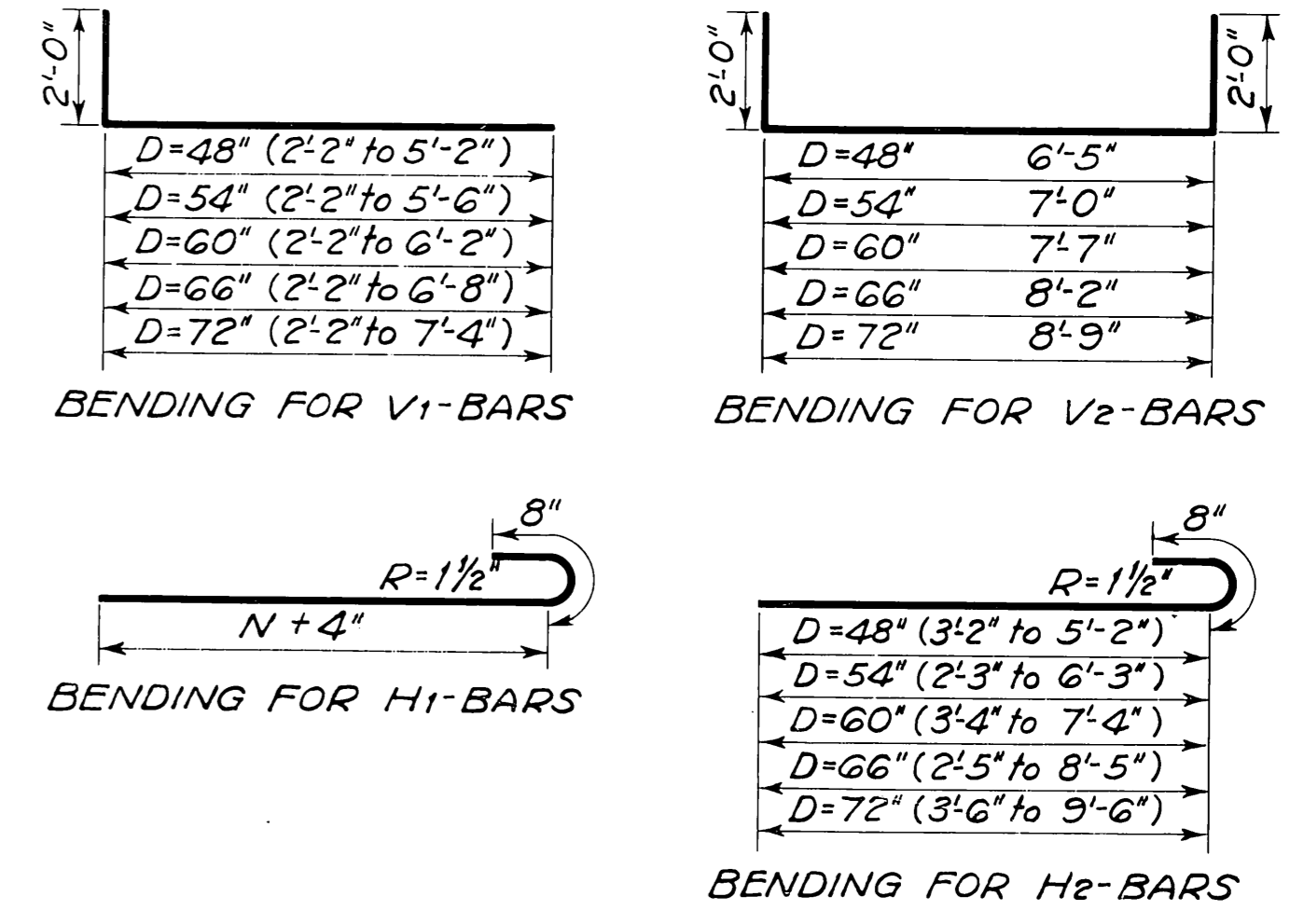


DIMENSIONS & QUANTITIES FOR HEADWALLS WITH 45° WINGS																							
DIMENSIONS							REINFORCING STEEL							QUANTITIES*									
D	Area, Sq. Ft.	T	H	K	L	M	N	A1-1/2"φ No.	A2-1/2"φ Lgth.	B-1/2"φ No.	C-1/2"φ Lgth.	H1-1/2"φ No.	H2-1/2"φ Lgth.	V1-1/2"φ No.	V2-1/2"φ Lgth.	Class "A" Conc., C.Y.	Reinf. Steel, Lbs.						
48"	12.57	5"	5'-5"	3'-2"	6'-4"	5'-3 1/2"	3'-9"	7	3'-5"	4	9'-0"Av.	7	6'-0"	5	1'-6"	8	5'-8"	12	6'-6"Av.	4	10'-5"	3.81	184
54"	15.90	5 1/2"	5'-11 1/2"	3'-6"	6'-10"	5'-10 1/2"	4'-2"	7	3'-10"	5	9'-11"Av.	7	6'-6"	5	1'-6"	8	6'-3"	14	6'-11"Av.	4	11'-0"	4.54	214
60"	19.63	6"	6'-6"	3'-10"	7'-4"	6'-5 1/2"	4'-7"	8	4'-3"	5	10'-10"Av.	7	7'-0"	6	1'-6"	10	6'-10"	16	7'-4"Av.	4	11'-7"	5.33	253
66"	23.76	6 1/2"	7'-0 1/2"	4'-2"	7'-10"	7'-1"	5'-0"	8	4'-8"	5	11'-9"Av.	7	7'-6"	6	1'-6"	10	7'-5"	18	7'-9"Av.	4	12'-2"	6.20	281
72"	28.27	7"	7'-7"	4'-6"	8'-4"	7'-9 1/2"	5'-6"	9	5'-2"	6	12'-9"Av.	7	8'-0"	6	1'-6"	10	8'-2"	20	8'-3"Av.	4	12'-9"	7.22	325

*For One Headwall

DIMENSIONS & QUANTITIES FOR HEADWALLS WITH U-TYPE WINGS																							
DIMENSIONS							REINFORCING STEEL							QUANTITIES*									
D	Area, Sq. Ft.	T	H	L	N			A1-1/2"φ No.	A2-1/2"φ Lgth.	B-1/2"φ No.	C-1/2"φ Lgth.	H1-1/2"φ No.	H2-1/2"φ Lgth.	V1-1/2"φ No.	V2-1/2"φ Lgth.	Class "A" Conc., C.Y.	Reinf. Steel, Lbs.						
48"	12.57	5"	5'-5"	7'-8"	6'-6"	7	6'-2"	7	7'-4"	7	7'-4"	7	1'-6"	4	7'-6"	4	4'-10"Av.	18	5'-8"Av.	4	10'-5"	4.56	234
54"	15.90	5 1/2"	5'-11 1/2"	8'-2"	7'-7"	7	7'-3"	8	7'-10"	7	7'-10"	7	1'-6"	4	8'-7"	6	4'-11"Av.	20	5'-10"Av.	4	11'-0"	5.49	270
60"	19.63	6"	6'-6"	8'-8"	8'-8"	8	8'-4"	9	8'-4"	7	8'-4"	7	1'-6"	4	9'-8"	6	6'-0"Av.	24	6'-2"Av.	4	11'-7"	6.50	321
66"	23.76	6 1/2"	7'-0 1/2"	9'-2"	9'-9"	8	9'-5"	10	8'-10"	7	8'-10"	8	1'-6"	4	10'-9"	8	6'-1"Av.	26	6'-5"Av.	4	12'-2"	7.58	364
72"	28.27	7"	7'-7"	9'-8"	10'-10"	9	10'-6"	11	9'-4"	7	9'-4"	8	1'-6"	4	11'-10"	8	7'-2"Av.	30	6'-9"Av.	4	12'-9"	8.75	423

*For One Headwall



GENERAL NOTES

All construction and materials requirements shall be in accordance with the current standard specifications.
 All exposed concrete edges shall have a 3/4" chamfer.
 Unless otherwise specified, all exposed concrete surfaces shall have a finish in accordance with the current standard specifications.

OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD CONCRETE PIPE CULVERTS CONCRETE HEADWALLS 48" TO 72" REINF. CONC. PIPES

Drawn By F.R.C. Dec. 46
 Checked By L.W.L. Jan. 47

OLD 4-6-89
 16 GAG