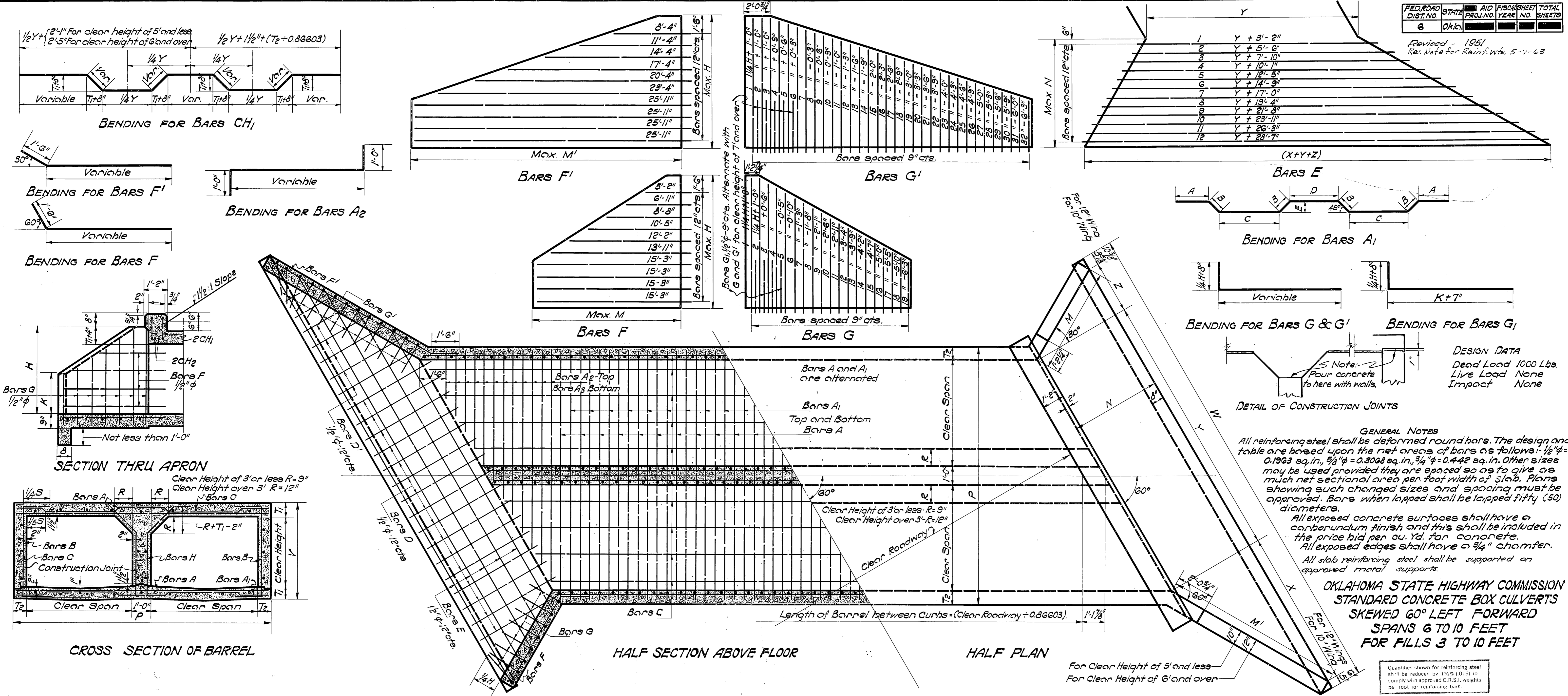


FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

Revised - 1951
 Rev. Note for Reinf. wks. 5-7-68



DESIGN DATA
 Dead Load 1000 Lbs.
 Live Load None
 Impact None

GENERAL NOTES
 All reinforcing steel shall be deformed round bars. The design and table are based upon the net areas of bars as follows: 1/2"φ = 0.1963 sq. in., 5/8"φ = 0.3068 sq. in., 3/4"φ = 0.4422 sq. in. Other sizes may be used provided they are spaced so as to give as much net sectional area per foot width of slab. Plans showing such changed sizes and spacing must be approved. Bars when lapped shall be lapped fifty (50) diameters.
 All exposed concrete surfaces shall have a carborundum finish and this shall be included in the price bid per cu. Yd. for concrete.
 All exposed edges shall have a 3/4" chamfer.
 All slab reinforcing steel shall be supported on approved metal supports.

OKLAHOMA STATE HIGHWAY COMMISSION
STANDARD CONCRETE BOX CULVERTS
SKewed 60° LEFT FORWARD
SPANS 6 TO 10 FEET
FOR FILLS 3 TO 10 FEET

Quantities shown for reinforcing steel shall be reduced by 1 1/2% (1.5%) to comply with approved C.R.S.I. weights per foot for reinforcing bars.

DESIGN NO.	WATERWAY	BARREL OF CULVERT												TWO WINGS AND ONE APRON												TWO CURBS				TOTAL		DESIGN NO.																								
		DIMENSIONS						REINFORCING STEEL						DIMENSIONS						REINFORCING STEEL						QUANTITIES		QUANTITIES																												
		Ti	Te	V	P	BARS A AND A1		BARS A2 AND A3		BARS B	BARS C	BARS H	QUANTITIES	H	K	M	M'	N	W	X	Y	Z	BARS D	BARS D'	BARS E	BARS F		BARS F1		BARS G	BARS G1		BARS G2	QUANTITIES	Reinf. Class A Steel Concrete Cu. Yds.	Reinf. Class A Steel Concrete Cu. Yds.																				
						Length	Length	Length	Length																	Length	Length	Length	Length								Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length	Length
1	2'-0"	24.0	9"	6"	3'-0"	14'-0"	5/8"φ/12"	13'-8"	14'-4"	1-1/2"	7"	3'-7"	2'-7"	5"	26	15'-0"	15'-0"	6'-2"	26	3'-8 1/2"	94.94	0.947	3'-1"	1'-11"	3'-2 1/2"	5'-6"	2'-9"	22'-5"	4'-9 1/2"	15'-0"	1'-7"	17	3'-2"	2	2'-8 1/2"	3	2	4'-3"	2	2	7'-6"		4	7	131	2.29	20'-1"	10'-0"	153	1.46	.556	4829	5090	1		
2	3'-0"	36.0	9"	8"	4'-0"	14'-4"	"	14'-0"	14'-8"	1-3/8"	7"	3'-7"	2'-7"	5"	26	15'-0"	15'-0"	7'-2"	30	4'-8 1/2"	102.70	1.076	4'-1"	2'-2"	4'-6"	7'-9 1/2"	3'-10 1/2"	25'-4"	6'-9"	"	2'-3"	17	4'-4"	4	3'-8 1/2"	4	1	5'-2"	2	6'-0"	1	8'-4"	2	9'-9"	6	10	206	3.60	20'-4"	10'-2"	155	1.48	.621	5342	5962	2
3	4'-0"	48.0	9"	8"	5'-0"	14'-4"	"	14'-0"	14'-8"	1-3/8"	7"	3'-7"	2'-7"	5"	26	15'-0"	15'-0"	8'-2"	30	5'-10"	106.56	1.179	5'-1"	2'-4"	5'-9"	10'-11"	5'-0"	27'-9"	3'-8 1/2"	"	2'-0"	17	5'-6"	6	4'-10"	5	2	Var.	2	7'-4"	2	Var.	2	12'-11"	8	13	293	5.15	20'-4"	16'-2"	155	1.48	.636	5695	6761	3
4	5'-0"	60.0	9"	10"	6'-0"	14'-8"	"	14'-4"	15'-0"	1-5/8"	7"	3'-7"	2'-7"	5"	26	15'-0"	15'-0"	9'-2"	34	6'-10"	113.41	1.346	6'-1"	2'-7"	7'-2"	12'-5"	6'-2 1/2"	30'-5"	10'-9"	"	3'-7"	17	6'-8"	6	6'-0"	6	3	Var.	3	8'-8"	2	Var.	3	14'-5"	10	16	391	6.93	20'-6"	16'-4"	156	1.50	.753	6254	7904	4
5	6'-0"	72.0	9"	10"	7'-0"	14'-8"	"	14'-4"	15'-0"	1-5/8"	7"	3'-7"	2'-7"	5"	26	15'-0"	15'-0"	10'-2"	38	7'-10"	120.66	1.444	7'-1"	2'-0"	8'-5 1/2"	14'-8 1/2"	7'-4"	33'-4"	12'-8 1/2"	"	4'-3"	17	7'-9"	10	6'-0"	6	3	Var.	3	10'-0"	3	Var.	3	18'-8"	12	20	509	9.77	20'-10"	18'-8"	159	1.52	.825	6790	8941	5
6	3'-0"	48.0	12"	8"	5'-0"	18'-4"	3/4"φ/12"	18'-0"	19'-1"	1-5/8"	11 1/4"	4'-9 1/2"	2'-10"	8"	32	19'-0"	19'-0"	8'-8"	32	5'-4"	151.19	1.638	4'-4"	2'-5"	4'-6"	7'-9 1/2"	3'-10 1/2"	29'-9"	6'-9"	19'-7 1/2"	2'-3"	22	4'-4"	4	3'-8 1/2"	4	2	5'-2"	2	6'-0"	1	8'-4"	2	9'-9"	6	10	237	4.19	25'-4"	20'-0"	281	1.85	.735	7800	8736	6
7	4'-0"	64.0	12"	8"	6'-0"	18'-4"	"	18'-0"	19'-1"	1-5/8"	11 1/4"	4'-9 1/2"	2'-10"	8"	32	19'-0"	19'-0"	9'-8"	36	6'-5"	157.69	1.741	5'-4"	2'-8"	5'-9 1/2"	10'-11"	5'-0"	32'-4"	8'-8 1/2"	"	2'-10"	22	5'-6"	6	3'-8 1/2"	6	2	Var.	2	7'-4"	2	Var.	2	12'-11"	8	13	331	5.93	25'-4"	20'-0"	281	1.85	.800	8294	9572	7
8	5'-0"	80.0	12"	10"	7'-0"	18'-8"	"	18'-4"	19'-5"	1-7/8"	11 1/4"	4'-9 1/2"	2'-10"	8"	32	19'-0"	19'-0"	10'-8"	40	7'-5"	165.91	1.913	6'-4"	2'-11"	7'-2"	12'-5"	6'-2 1/2"	35'-1 1/2"	10'-9"	"	3'-7"	22	6'-8"	8	6'-0"	6	3	Var.	3	8'-8"	2	Var.	3	14'-5"	10	16	433	7.83	26'-6"	21'-0"	289	1.87	.867	8394	10774	8
9	6'-0"	96.0	12"	10"	8'-0"	18'-8"	"	18'-4"	19'-5"	1-7/8"	11 1/4"	4'-9 1/2"	2'-10"	8"	32	19'-0"	19'-0"	11'-3"	40	8'-5"	169.53	2.012	7'-4"	3'-1"	8'-5 1/2"	14'-8 1/2"	7'-4"	37'-11 1/2"	12'-8 1/2"	"	4'-3"	22	7'-9"	10	6'-0"	6	3	Var.	3	10'-0"	3	Var.	3	16'-8"	12	20	562	10.93	25'-0"	21'-4"	287	1.89	.938	9314	11856	9
10	7'-0"	120.0	12"	10"	9'-0"	18'-8"	"	18'-4"	19'-5"	1-7/8"	11 1/4"	4'-9 1/2"	2'-10"	8"	32	19'-0"	19'-0"	12'-8"	44	9'-5"	175.88	2.111	8'-4"	3'-4"	9'-9 1/2"	17'-0"	8'-6"	40'-7 1/2"	14'-8 1/2"	"	4'-10"	22	8'-11"	12	6'-0"	6	3	Var.	3	11'-4"	4	Var.	3	19'-0"	19	23	741	13.57	25'-10"	21'-4"	287	1.89	1.003	10230	12854	10
11	8'-0"	160.0	14 1/2"	11"	10'-0"	18'-10"	"	18'-6"	19'-7"	1-7/8"	11 1/2"	4'-9 1/2"	2'-10"	8"	32	19'-0"	19'-0"	13'-8"	48	10'-5"	183.16	2.272	9'-4"	3'-7"	11'-2"	19'-4"	9'-8"	43'-3 1/2"	16'-3 1/2"	"	5'-7"	22	10'-1"	14	6'-0"	6	3	Var.	3	12'-8"	5	Var.	3	21'-4"	15	26	891	16.43	26'-0"	21'-5"	288	1.90	1.070	10335	14194	11
12	6'-0"	120.0	14 1/2"	10"	8'-5"	22'-8"	3/4"φ/10"	22'-4"	23'-9"	1-9/16"	12 3/4"	4'-9 1/2"	2'-10"	8"	32	23'-0"	23'-0"	13'-11"	46	8'-11"	239.27	2.659	7'-6 1/2"	3'-4"	8'-5 1/2"	14'-8 1/2"	7'-4"	42'-7 1/2"	12'-8 1/2"	24'-3"	4'-3"	26	7'-9"	10	6'-0"	6	3	Var.	3	10'-0"	3	Var.	4	16'-8"	12	20	629	12.07	30'-10"	26'-0"	346	2.28	1.052	12663	15134	12
13	7'-0"	140.0	14 1/2"	10"	9'-5"	22'-8"	"	22'-4"	23'-9"	1-9/16"	12 3/4"	4'-9 1/2"	2'-10"	8"	32	23'-0"	23'-0"	14'-1"	50	9'-11"	245.62	2.757	8'-6 1/2"	3'-7"	9'-9 1/2"	17'-0"	8'-6"	45'-2 1/2"	14'-8 1/2"	"	4'-10"	26	8'-11"	12	6'-0"	6	3	Var.	4	11'-4"	4	Var.	4	19'-0"	19	23	846	14.89	30'-10"	26'-0"	346	2.28	1.117	13615	16164	13
14	8'-0"	160.0	14 1/2"	11"	10'-5"	22'-8"	"	22'-6"	23'-11"	1-10/16"	12 3/4"	4'-9 1/2"	2'-10"	8"	32	23'-0"	23'-0"	15'-1"	50	10'-11"	250.46	2.920	9'-6 1/2"	3'-10"	11'-2"	19'-4"	9'-8"	47'-11 1/2"	16'-8 1/2"	"	5'-7"	26	10'-1"	14	6'-0"	6	3	Var.	4	12'-8"	5	Var.	4	21'-4"	15	26	991	17.98	31'-0"	26'-1"	347	2.29	1.184	14224	17548	14
15	9'-0"	180.0	14 1/2"	12"	11'-5"	23'-0"	"	22'-8"	24'-1"	1-11/16"	12 3/4"	4'-9 1/2"	2'-10"	8"	32	23'-0"	23'-0"	16'-1"	54	11'-11"	258.03	3.096	10'-6 1/2"	4'-0"	12'-6 1/2"	21'-8"	10'-0"	50'-7 1/2"	18'-9 1/2"	"	6'-3"	26	11'-3"	16	6'-0"	6	3	Var.	5	14'-0"	5	Var.	5	23'-8"	17	29	1144	21.26	31'-1"	28'-2"	348	2.30	1.250	14988	19032	15
16	10'-0"	200.0	14 1/2"	12"	12'-5"	23'-0"	"	22'-8"	24'-1"	1-11/16"	12 3/4"	4'-9 1/2"	2'-10"	8"	32	23'-0"	23'-0"	17'-1"	58	12'-11"	264.37	3.207	11'-6 1/2"	4'-3"	13'-9 1/2"	23'-11"	11'-11 1/2"	53'-2 1/2"	20'-8 1/2"	"	6'-10"	26	12'-5"	18	6'-0"	6	3	Var.	5	15'-3"	6	Var.	5	25'-11"	19	32	1374	24.79	31'-1"	28'-2"	348	2.30	1.314	15727	20263	16

Drawn by G.M. 2-35.
 Chkd. M.C.Z.