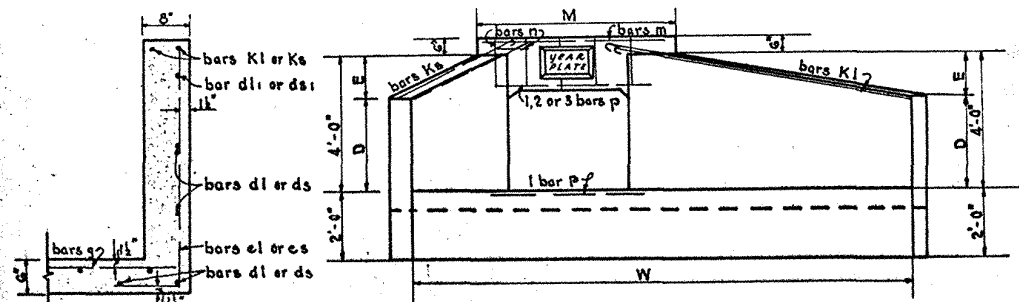
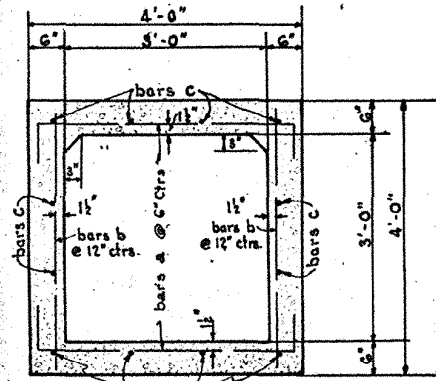


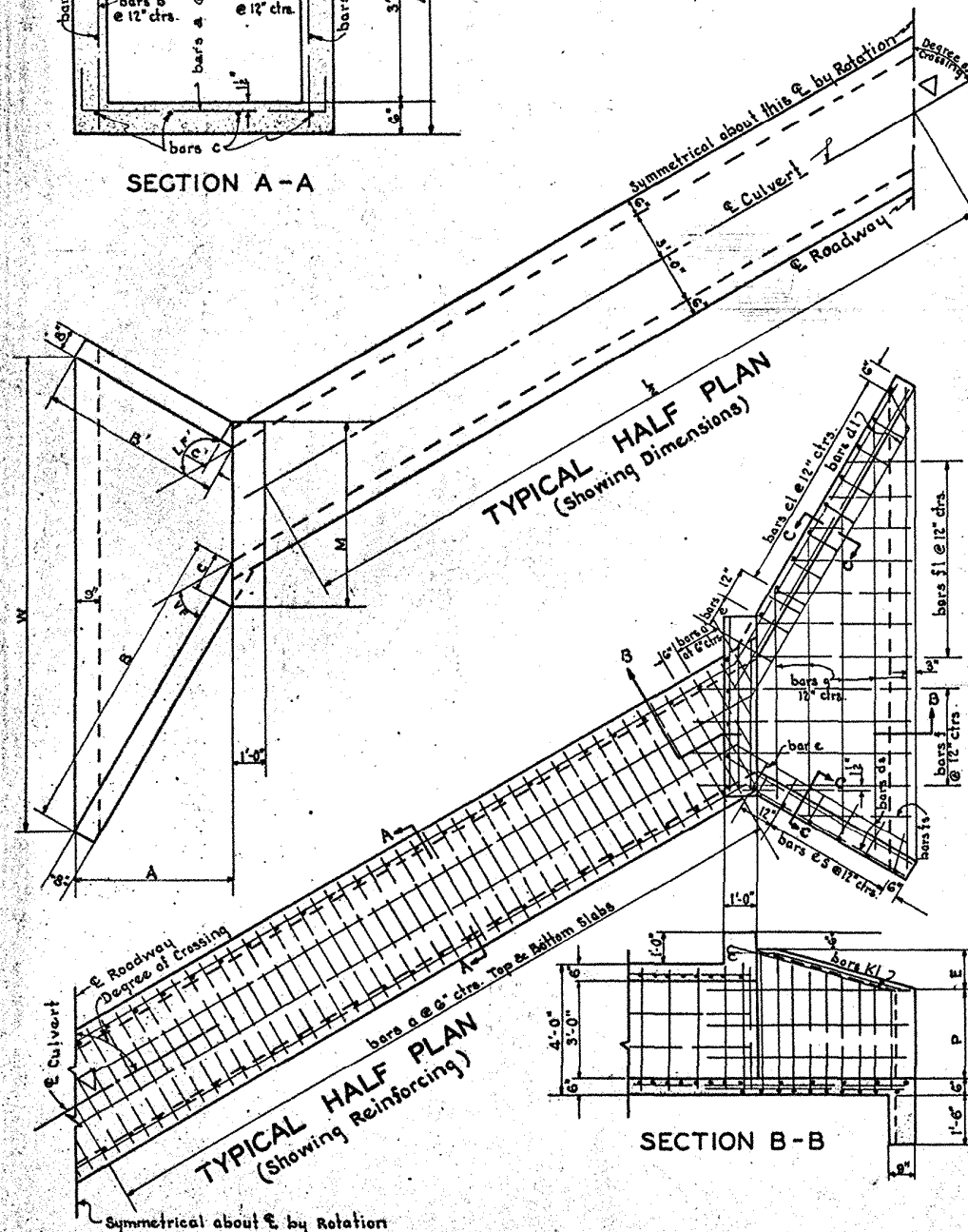


SECTION C-C

END ELEVATION



SECTION A-A



NOTES:

All reinforcing steel to be 1" bars
Bars d1, d11, d5 and d51 to be bent in field
Bars K1 and K5 bent in field as required
For Year Plate see Std. Plan C-M-97.

CONSTANTS FOR ALL SLOPES

REINFORCING STEEL														ANGLES & DIMENSIONS										QUANTITIES		
bars a		bars a'		bars b		bars c		bars e		bars m		bars n		bars p		Degree of Crossing	Angle	Angle	F	L	M	C	C _i	Per Lin. Ft. of Barrel	Concrete	Reinf. Steel
No.	Unit Length	No.	Unit Length	No.	Unit Length	No.	Unit Length	No.	Unit Length	No.	Unit Length	No.	Unit Length	No.	Unit Length	Δ	F	F	F	L	M	C	C _i	Cu. Yds.	Lbs.	
	4'-9"	4				3'-9"	12	42'-3"	5'-3"	2	4'-8"	10	1'-3"	4	3'-9"	82°-30'	41°-15'	48°-45'	40°-6"	4'-11 1/2"	0'-9 1/2"	0'-7"	0.2616	25.718		
	4'-9"	4				3'-9"	12	43'-4"	5'-3"	2	4'-9"	10	1'-3"	4	3'-11"	75°-0'	37°-30'	52°-30'	41°-6"	5'-0 1/2"	0'-10 1/2"	0'-6 1/2"	0.2616	25.718		
	4'-9"	4				3'-9"	12	45'-5"	5'-3"	2	5'-0"	10	1'-3"	6	4'-1"	67°-30'	33°-45'	56°-15'	43°-6"	5'-3"	1'-0"	0'-5 1/2"	0.2616	25.718		
	4'-9"	4				3'-9"	12	48'-0"	5'-3"	2	5'-4"	10	1'-3"	6	4'-4"	60°-0'	30°-0'	60°-0'	46°-0"	5'-6 1/2"	1'-1 1/2"	0'-4 1/2"	0.2616	25.718		
200	4'-9"	4	20	4'-1"	1'-6"	108	3'-9"	12	52'-8"	6	5'-3"	2	5'-9"	10	1'-3"	6	4'-9"	52°-30'	26°-15'	63°-45'	50°-6"	6'-0 1/2"	1'-4 1/2"	0'-4"	0.2616	25.718
	4'-9"	4				3'-9"	12	59'-0"	5'-3"	2	6'-5"	10	1'-3"	8	5'-8"	45°-0'	22°-30'	67°-30'	56°-6"	6'-8"	1'-7 1/2"	0'-3 1/2"	0.2616	25.718		
	4'-9"	4				3'-9"	12	68'-4"	5'-3"	2	7'-5"	12	1'-3"	8	6'-4"	37°-30'	18°-45'	71°-15'	65°-6"	7'-8 1/2"	1'-11 1/2"	0'-2 1/2"	0.2616	25.718		
	4'-9"	4				3'-9"	12	83'-6"	5'-3"	2	9'-0"	14	1'-3"	8	7'-9"	30°-0'	15°-0'	75°-0'	80°-0"	9'-3 1/2"	2'-5 1/2"	0'-2 1/2"	0.2616	25.718		

ADDITIONS FOR 4:1 SLOPES (2:1 RETURN)

REINFORCING STEEL																				Degree of Crossing	DIMENSIONS							TOTAL QUANTITIES	
bars d1		bars d11		bars d5		bars d51		bars e1		bars e5		bars f		bars f1		bars f5		bars g			bars K1		bars K5		Concrete Cu. Yds.	Reinf. Steel Lbs.			
No	Unit Length	No	Unit Length	No	Unit Length	No	Unit Length	No	Unit Length	No	Unit Length	No	Unit Length	No	Unit Length	No	Unit Length	No	Unit Length		No	Unit Length	No	Unit Length					
	2																												
	2																												
	2																												
	2																												
8 14'-8"	2	2 13'-5"		8 7'-11"	2	2 7'-4"		2 22'-5"	2 3'-11"	2 12'-5"	2 3'-11"	8 7'-4"	2 16'-5"	2 2'-5"	2 2 3'-3"		2 12'-3"	5'-6"	4 13'-5"	4 7'-5"	52°-30'	5'-4"	12'-0 1/2"	5'-11 1/2"	2'-8"	1'-4"	17'-2 1/2"	21.46	19.02
	2																												
	2																												
	2																												

ADDITIONS FOR 3:1 SLOPES (2:1 RETURN)

	2			2		2		2		2		2	10		4	4	82°-30'	4'-10"	7'-4"	6'-5 1/2"	2'-4 1/2"	1'-7 1/2"	12'-9 1/2"			
	2			2		2		2		2		2	10		4	4	75°-0'	4'-10"	7'-11 1/2"	6'-1 1/2"	2'-4 1/2"	1'-7 1/2"	13'-1 1/2"			
	2			2		2		2		2		2	10		4	4	67°-30'	4'-10"	8'-8 1/2"	5'-9 1/2"	2'-4 1/2"	1'-7 1/2"	13'-8 1/2"			
	2			2		2		2		2		2	10		4	4	60°-0'	4'-10"	9'-8"	5'-7"	2'-4 1/2"	1'-7 1/2"	14'-7 1/2"			
8 13'-6"	2	2 11'-3"		8 7'-4"	2 6'-0"	2 20'-5"	2 3'-8"	2 10'-5"	2 3'-8"	8 6'-10"	2 16'-5"	2 2'-0"	2 2'-9"	2 10'-0"	7'-0"	4 12'-3"	4 6'-9"	52°-30'	4'-10"	10'-11 1/2"	5'-4 1/2"	2'-4 1/2"	1'-7 1/2"	15'-11 1/2"	20.41	18.45
	2			2		2		2		2		2	10		4	4	45°-0'	4'-10"	12'-7 1/2"	5'-2 1/2"	2'-4 1/2"	1'-7 1/2"	17'-11"			
	2			2		2		2		2		2	10		4	4	37°-30'	4'-10"	15'-0 1/2"	5'-1 1/2"	2'-4 1/2"	1'-7 1/2"	20'-9 1/2"			
	2			2		2		2		2		2	10		4	4	30°-0'	4'-10"	18'-8 1/2"	5'-0"	2'-4 1/2"	1'-7 1/2"	25'-4"			

ADDITIONS FOR 2:1 SLOPES (2:1 RETURN)

bars d1	bars d11	bars d5	bars d51	bars e1	bars e5	bars f	bars f1	bars f5	bars g	bars K1	bars K5	Degree of Crossing	Δ	A	B	B _i	D	E	W	Concrete	Reinf. Steel
No.	Unit	No.	Unit	No.	Unit	No.	Unit	No.	Unit	No.	Unit									Cu. Yds.	Lbs.
2		2		2		2		2		4	4	82°-30'	4'-0"	6'-0 1/2"	5'-0 1/2"	2'-0"	2'-0"	11'-1 1/2"			
2		2		2		2		2		4	4	75°-0'	4'-0"	6'-6 1/2"	5'-0 1/2"	2'-0"	2'-0"	11'-4 1/2"			
2		2		2		2		2		4	4	67°-30'	4'-0"	7'-2 1/2"	4'-8 1/2"	2'-0"	2'-0"	11'-10 1/2"			
2		2		2		2		2		4	4	60°-0'	4'-0"	8'-0"	4'-7 1/2"	2'-0"	2'-0"	12'-8 1/2"			
2		2		2		2		2		4	4	52°-30'	4'-0"	9'-0 1/2"	4'-5 1/2"	2'-0"	2'-0"	13'-10 1/2"			
2		2		2		2		2		4	4	45°-0'	4'-0"	10'-5 1/2"	4'-4"	2'-0"	2'-0"	16'-6 1/2"			
2		2		2		2		2		4	4	37°-30'	4'-0"	12'-5 1/2"	4'-2 1/2"	2'-0"	2'-0"	18'-0 1/2"			
2		2		2		2		2		4	4	30°-0'	4'-0"	15'-5 1/2"	4'-1 1/2"	2'-0"	2'-0"	22'-0"			

ADDITIONS FOR 1 1/2:1 SLOPES (1 1/2:1 RETURN)

bars d1	bars d11	bars d5	bars d51	bars e1	bars e5	bars f	bars f1	bars f5	bars g	bars K1	bars K5	Degree of Crossing	Δ	A	B	B _i	D	E	W	Concrete	Reinf. Steel
No.	Unit	No.	Unit	No.	Unit	No.	Unit	No.	Unit	No.	Unit									Cu. Yds.	Lbs.
2		2		2		2		2		4	4	82°-30'	3'-0"	4'-6 1/2"	3'-11 1/2"	2'-0"	2'-0"	9'-0 1/2"			
2		2		2		2		2		4	4	75°-0'	3'-0"	4'-11 1/2"	3'-9 1/2"	2'-0"	2'-0"	9'-3 1/2"			
2		2		2		2		2		4	4	67°-30'	3'-0"	5'-4 1/2"	3'-7 1/2"	2'-0"	2'-0"	9'-8 1/2"			
2		2		2		2		2		4	4	60°-0'	3'-0"	6'-0"	3'-5 1/2"	2'-0"	2'-0"	10'-4 1/2"			
2		2		2		2		2		4	4	52°-30'	3'-0"	6'-9 1/2"	3'-4 1/2"	2'-0"	2'-0"	11'-4 1/2"			
2		2		2		2		2		4	4	45°-0'	3'-0"	7'-10 1/2"	3'-3 1/2"	2'-0"	2'-0"	12'-8 1/2"			
2		2		2		2		2		4	4	37°-30'	3'-0"	9'-4"	3'-2"	2'-0"	2'-0"	14'-9 1/2"			
2		2		2		2		2		4	4	30°-0'	3'-0"	11'-7 1/2"	3'-1 1/2"	2'-0"	2'-0"	18'-0"			

GENERAL NOTES

Const. Specs.: Latest approved La. Hwy. Dept. Std. Specs.
Design Specs.: La. Hwy. Commission 1940
Assumed Live Load - 2 Typical 15-Ton Trucks
Concrete to be class A throughout
All reinforcing steel shall be considered as deformed bars
Square twisted bars not to be considered as deformed.
Where splicing of bars is necessary they shall be lapped 40 diameters
All exposed corners to be chamfered 3/4"
Place about One (1) Cu. Ft. of large size gravel or loose rock behind and around each weep hole.

Discard
2-26-58
Banks

STANDARD PLAN
SINGLE 3 X 3 R.C. CULVERT
30°-0' To 82°-30' Crossings 7°-30' Intervals
H-15 Loading 10' Max Fill
DATED: Aug. 1943

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
DESIGNED: I. R. P. TRACED: D. J. D.
CHECKED: C. P. CHECKED: A. D. J.
IN CHARGE OF: HEAD: DESIGNER:

(old 60, 5, 3, 1) C-C-300-15