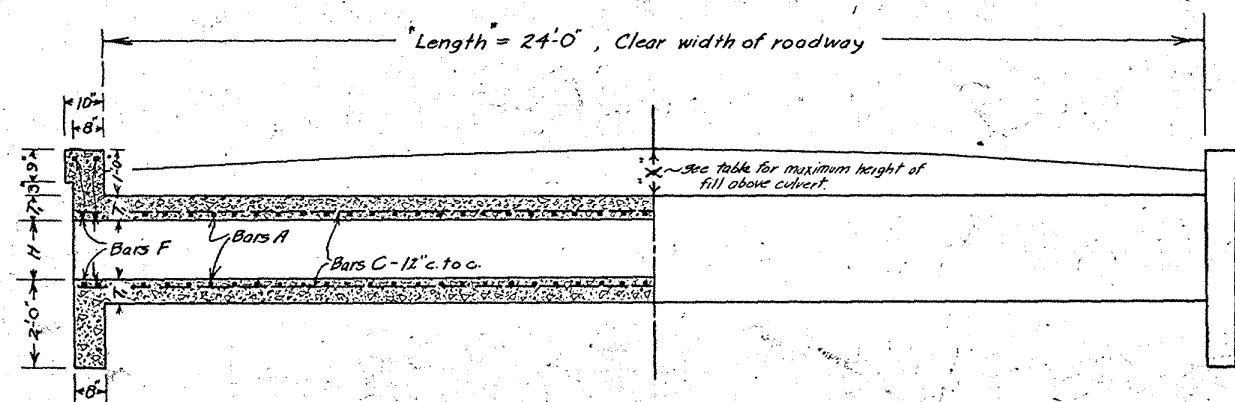
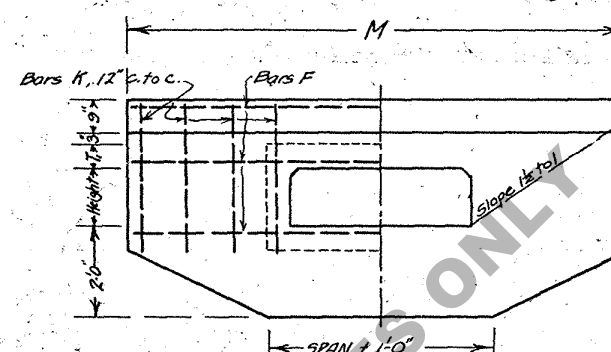


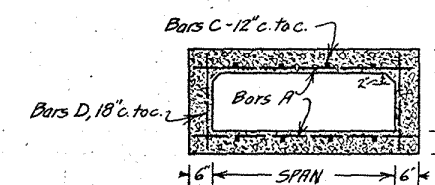


LONGITUDINAL SECTION

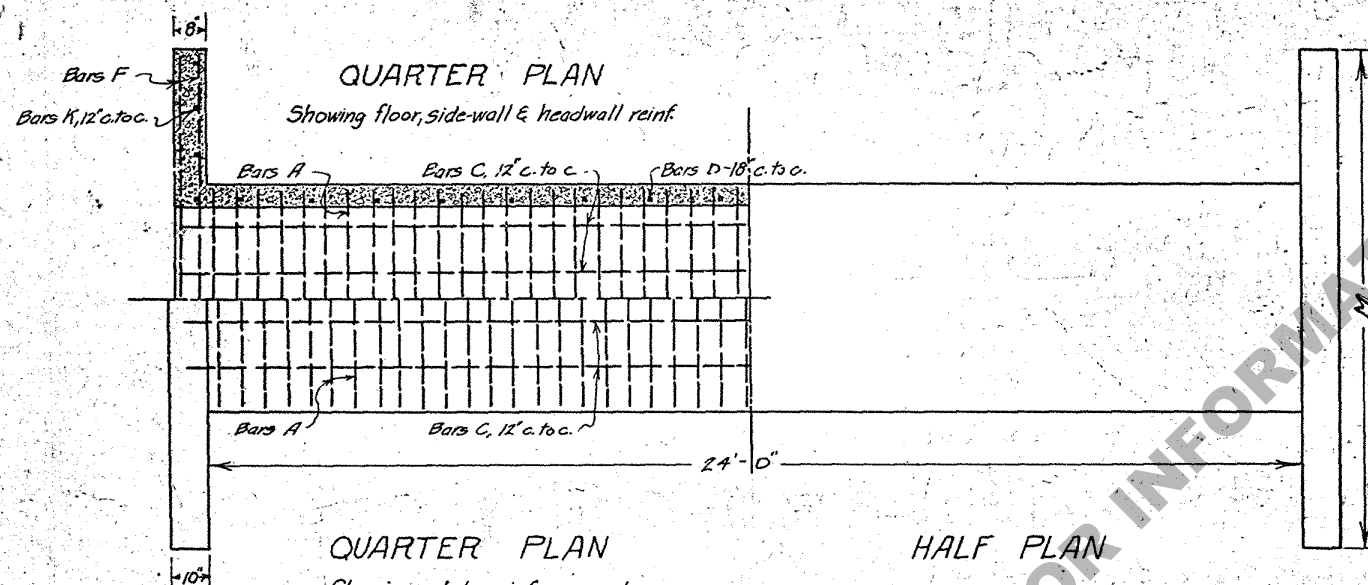
HALF SIDE ELEVATION



END ELEVATION



SECTION OF BARREL



QUARTER PLAN

Showing slab reinforcement.

HALF PLAN

TABLE OF DIMENSIONS & QUANTITIES FOR 24' CULVERT

OPENING			DIMENSIONS			BARREL OF CULVERT (24 Length)														2 HEADWALLS						TOTALS	
CLEAR SPAN FT.	CLEAR HEIGHT FT.-IN.	AREA SQ.FT.	T ₁ IN.	X FT.	M FT.-IN.	STEEL REINFORCEMENT - 1/2" bars										CONCRETE		STEEL REINFORCEMENT				CONCRETE		STEEL LBS.	CONC. CU.Y.		
						BARS A		BARS C		BARS D		WEIGHT		PER LINEAR FOOT CU.FT.	TOTAL CU.YDS.	BARS F	BARS H	WEIGHT LBS.	(1:2:4) CU.YDS.								
						SPACING IN.	LENGTH FT.-IN.	NO. REQ'D	LENGTH FT.-IN.	NO. REQ'D	LENGTH FT.-IN.	NO. REQ'D	PER LINEAR FOOT							TOTAL	LENGTH FT.-IN.	NO. REQ'D	LENGTH FT.-IN.	NO. REQ'D			
2	1-3	2.50	6	12	8-9	8	3-0	72	25-0	4	2-0	32	13.3 ³	323 ³	.158	3.80	8-6	12	3-3	16	131	1.80	454	5.61			
	1-8	3.33	6	12	10-0	8	3-0	72	25-0	4	2-5	32	13.8	334	.174	4.18	9-9	12	3-8	16	150	2.22	484	6.4			
3	1-3	3.75	6	12	9-9	7	4-0	82	25-0	6	2-0	32	19.0	461	.195	4.68	9-6	12	3-3	16	141	1.98	602	6.7			
	1-8	5.00	6	12	11-0	7	4-0	82	25-0	6	2-5	32	19.5	472	.211	5.06	10-9	12	3-8	16	160	2.40	632	7.5			
4	1-3	5.00	7	9	11-0	6	5-0	96	25-0	8	2-2	32	26.3	637	.263	6.32	10-9	12	3-3	16	154	2.27	791	8.6			
	1-8	6.67	7	9	12-3	6	5-0	96	25-0	8	2-7	32	26.8	648	.279	6.69	12-0	12	3-8	16	173	2.71	821	9.4			
5	1-3	6.25	7 1/2	5	12-0	6	6-0	96	25-0	10	2-3	32	31.5	763	.325	7.80	11-9	12	3-3	16	164	2.49	927	10.3			
	1-8	8.33	7 1/2	5	13-3	6	6-0	96	25-0	10	2-8	32	32.0	774	.341	8.17	13-0	12	3-8	16	183	2.93	957	11.1			

GENERAL NOTES & DESIGN DATA

General Specifications:- La. State Highway Dept. Spec.

Concrete - all class A - 1:2:4 mix.

Steel - all 1/2" bars, deformed.

All exposed corners to be chamfered 3/4 in.

All exposed surfaces to be given a smooth finish.

In computing the total quantities for "Barrel of Culvert" above, the barrel was assumed as extending the clear width of roadway only.

Design Loads

Concentrated load - 15 ton typical truck, with 30% impact allowance.

Steel in tension, 16,000 lbs. Concrete in compression, 650 lbs.

Fill above slab of culvert is not to exceed the maximum height "X" as given in table.

For multiple opening use same dimensions and steel, making intermediate walls 6" thick.

All dimensions referring to bars are to centers of bars.

Reinforcing bars should be wired at intersections and properly secured against displacement during depositing of concrete.

SHALLOW CONCRETE BOX CULVERTS

STRAIGHT HEADWALLS

2 FT. TO 5 FT. SPANS

Louisiana State Highway Department
Board of State Engineers

NEW ORLEANS, LA. SCALE - 1/2 IN. = 1 FT.

JULY, 1921

APPROVED: *W. H. B. B.*
STATE HIGHWAY ENGINEER