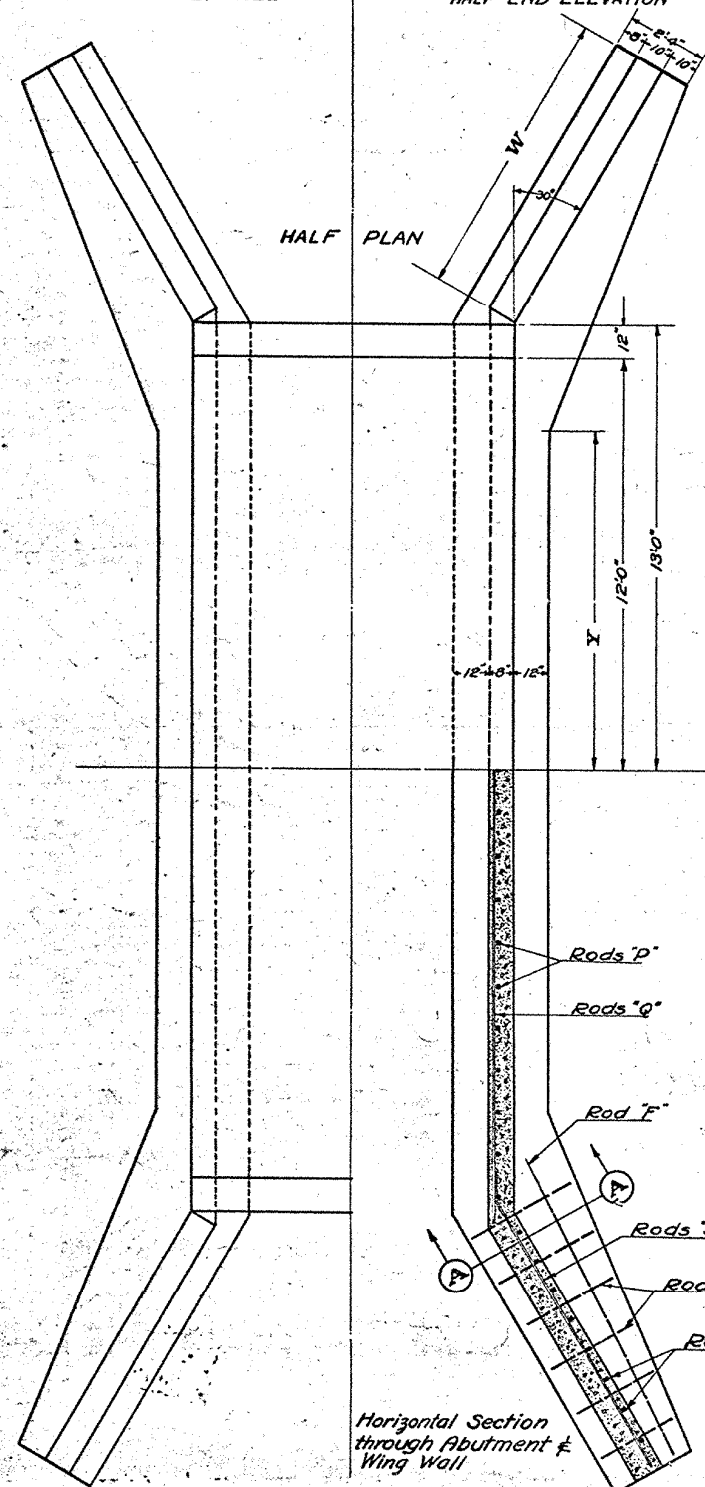
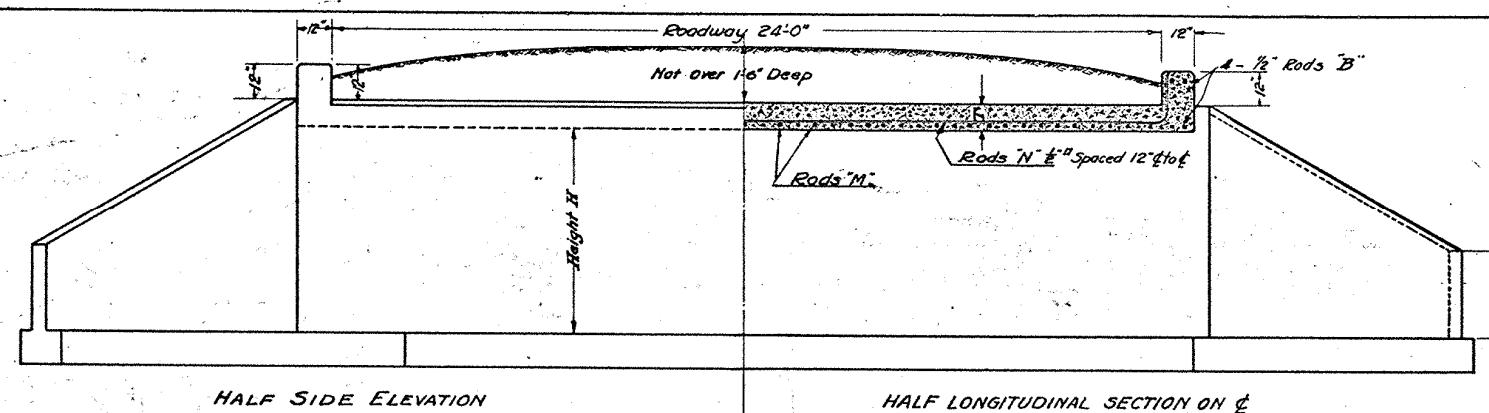
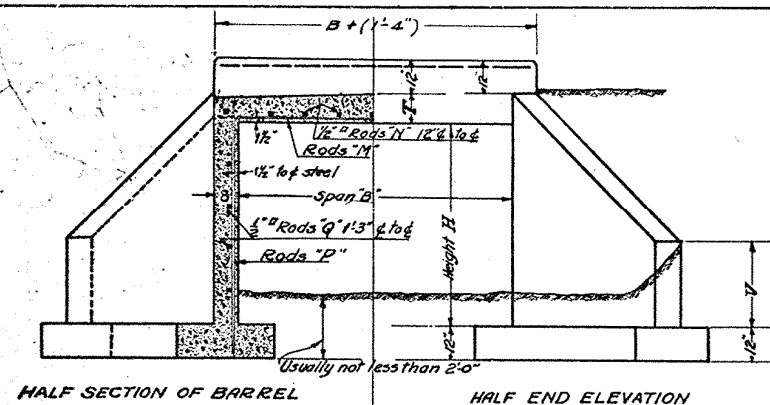




SIZE OF CULVERT		SLAB REINFORCEMENT								SIDE WALLS REINFORCEMENT								WING WALLS REINFORCEMENT								HEADWALLS										
SPAN	HEIGHT	Rods "M"				Rods "N"				Rods "P"				Rods "Q"				Rods "S"		Rods "U"		Rods "R"		Rods "T"		Rods "B"										
		Size	Length	No.	Spacing	Size	Length	No.	Spacing	Size	Length	No.	Spacing	Size	Length	No.	Spacing	Size	Length	No.	Spacing	Size	Length	No.	Spacing	Size	Length	No.	Spacing							
3'	3'-0"	5 [#]	4'-1"	41	7"	143	5 [#]	26'-6"	4	12"	30	5 [#]	4'-2"	42	1'-3"	43	5 [#]	26'-8"	2	1'-3"	46	12	1'-6"	35	16	1'-6"	30	16	1'-6"	39	4	6'-3"	21	8	5'-0"	34
	3'-0"	5 [#]	5'-1"	48	6"	211	5 [#]	26'-6"	5	12"	112	5 [#]	4'-2"	42	1'-3"	148	5 [#]	26'-8"	2	1'-3"	46	12	1'-6"	35	16	1'-6"	30	16	1'-6"	39	4	6'-3"	21	8	5'-0"	34
	4'-0"	5 [#]	5'-1"	48	6"	211	5 [#]	26'-6"	5	12"	112	5 [#]	5'-2"	42	1'-3"	134	5 [#]	26'-8"	3	1'-3"	49	12	1'-6"	78	20	1'-6"	41	20	1'-6"	84	4	8'-0"	27	8	5'-0"	34
5'	3'-0"	5 [#]	6'-1"	48	6"	252	5 [#]	26'-8"	6	12"	136	5 [#]	4'-3"	42	1'-3"	154	5 [#]	26'-8"	2	1'-3"	46	12	1'-6"	55	16	1'-6"	30	16	1'-6"	59	4	6'-3"	21	8	6'-0"	41
	4'-0"	5 [#]	6'-1"	48	6"	252	5 [#]	26'-8"	6	12"	136	5 [#]	5'-3"	42	1'-3"	156	5 [#]	26'-8"	3	1'-3"	69	16	1'-6"	78	20	1'-6"	41	20	1'-6"	84	4	8'-0"	27	8	6'-0"	41
	5'-0"	5 [#]	6'-1"	48	6"	252	5 [#]	26'-8"	6	12"	136	5 [#]	6'-3"	42	1'-3"	222	5 [#]	26'-8"	4	1'-3"	92	16	1'-6"	102	20	1'-6"	41	20	1'-6"	103	4	8'-0"	27	8	6'-0"	41
6'	4'-0"	5 [#]	7'-1"	39	7 [#]	363	5 [#]	27'-0"	7	12"	160	5 [#]	5'-4"	42	1'-3"	150	5 [#]	26'-8"	3	1'-3"	69	16	1'-6"	78	20	1'-6"	41	20	1'-6"	84	4	8'-0"	27	8	7'-0"	48
	5'-0"	5 [#]	7'-1"	39	7 [#]	363	5 [#]	27'-0"	7	12"	160	5 [#]	6'-4"	42	1'-3"	226	5 [#]	26'-8"	4	1'-3"	92	16	1'-6"	102	20	1'-6"	41	20	1'-6"	103	4	8'-0"	27	8	7'-0"	48
	6'-0"	5 [#]	7'-1"	39	7 [#]	363	5 [#]	27'-0"	7	12"	160	5 [#]	7'-4"	42	1'-3"	214	5 [#]	26'-8"	5	1'-3"	115	20	1'-6"	140	24	1'-6"	54	24	1'-6"	134	4	9'-9"	33	8	7'-0"	48
8'	4'-0"	5 [#]	9'-1"	41	7"	499	5 [#]	27'-0"	9	12"	207	5 [#]	5'-3"	42	1'-3"	136	5 [#]	26'-8"	3	1'-3"	69	16	1'-6"	78	20	1'-6"	41	20	1'-6"	84	4	8'-0"	27	8	9'-0"	51
	5'-0"	5 [#]	9'-1"	41	7"	499	5 [#]	27'-0"	9	12"	207	5 [#]	6'-3"	42	1'-3"	232	5 [#]	26'-8"	4	1'-3"	92	16	1'-6"	102	20	1'-6"	41	20	1'-6"	103	4	9'-0"	27	8	9'-0"	51
	6'-0"	5 [#]	9'-1"	41	7"	499	5 [#]	27'-0"	9	12"	207	5 [#]	7'-3"	42	1'-3"	234	5 [#]	26'-8"	5	1'-3"	115	20	1'-6"	140	36	1'-0"	85	24	1'-0"	134	4	9'-9"	33	8	9'-0"	51
	7'-0"	5 [#]	9'-1"	41	7"	499	5 [#]	27'-0"	9	12"	207	5 [#]	8'-3"	49	1'-0"	346	5 [#]	26'-8"	5	1'-3"	115	24	1'-6"	176	40	1'-0"	98	28	9"	167	4	11'-6"	39	8	9'-0"	51
	8'-0"	5 [#]	9'-1"	41	7"	499	5 [#]	27'-0"	9	12"	207	5 [#]	9'-3"	52	8"	512	5 [#]	26'-8"	6	1'-3"	138	24	1'-6"	212	48	1'-0"	125	32	6"	204	4	13'-3"	45	8	9'-0"	51
10'	5'-0"	5 [#]	11'-1"	36	8"	769	5 [#]	27'-4"	11	12"	256	5 [#]	6'-7"	42	1'-3"	222	5 [#]	26'-8"	4	1'-3"	92	16	1'-6"	102	20	1'-6"	41	20	1'-6"	103	4	8'-0"	27	8	11'-0"	75
	6'-0"	5 [#]	11'-1"	36	8"	769	5 [#]	27'-4"	11	12"	256	5 [#]	7'-7"	42	1'-3"	234	5 [#]	26'-8"	5	1'-3"	115	20	1'-6"	140	36	1'-0"	85	24	1'-0"	134	4	9'-9"	33	8	11'-0"	75
	7'-0"	5 [#]	11'-1"	36	8"	769	5 [#]	27'-4"	11	12"	256	5 [#]	8'-7"	48	1'-0"	350	5 [#]	26'-8"	5	1'-3"	115	24	1'-6"	176	40	1'-0"	98	28	9"	167	4	11'-6"	39	8	11'-0"	75
	8'-0"	5 [#]	11'-1"	36	8"	769	5 [#]	27'-4"	11	12"	256	5 [#]	9'-7"	62	8"	516	5 [#]	26'-8"	6	1'-3"	138	24	1'-6"	212	48	1'-0"	125	32	6"	204	4	13'-3"	45	8	11'-0"	75

DIMENSIONS & QUANTITIES FOR 24' CULVERT

SIZE OF CULVERT	AREA	DIMENSIONS				Per Lin. ft. Barrel		TOTAL QUANTITIES	
		T	W	V	Y	Steel	Concrete	Steel	Concrete
3'	9.0	6'-0"	5'-0"	1'-6"	12'-0"	14	426	619	14.30
4'	12.0	6'-0"	5'-0"	1'-6"	12'-0"	18	455	716	15.75
5'	15.0	7'-0"	5'-0"	1'-6"	12'-0"	20	455	794	16.91
6'	24.0	8'-0"	5'-0"	1'-6"	12'-0"	27	587	1062	21.39
8'	32.0	10'-0"	5'-0"	1'-6"	12'-0"	34	683	1262	24.82
10'	40.0	10'-0"	5'-0"	1'-6"	12'-0"	36	732	1364	26.23

GENERAL NOTES & DESIGN DATA

GENERAL SPECIFICATIONS: Louisiana Highway Commission Specifications.

CONCRETE: All concrete to be Class "A" 1:2:4 mixture.

CHAMFER: All exposed corners to be chamfered 3/4".

FOOTINGS: Footings shall be carried to such a depth as necessary to insure against undermining by scour and secure firm foundation.

CONCENTRATED LOAD: 15 Ton Typical Truck with 30% Impact allowance.

Entire weight of fill above Culvert assumed as acting on culvert.

Horizontal component of earth pressure taken as 30 lbs. per Sq. ft.

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

Fill above slab not to exceed the maximum height of 1'-6"

All dimensions referring to bars are 1/2" to 1/2" of bars.

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

CONCRETE OPEN CULVERTS
FLARING WING-WALLS
 SPANS 3' TO 10'
 24' Roadway

LOUISIANA HIGHWAY COMMISSION
 BATON ROUGE, LA. SCALE 3/8"=1'-0" OCTOBER 1922

Approved _____
 STATE HIGHWAY ENGINEER