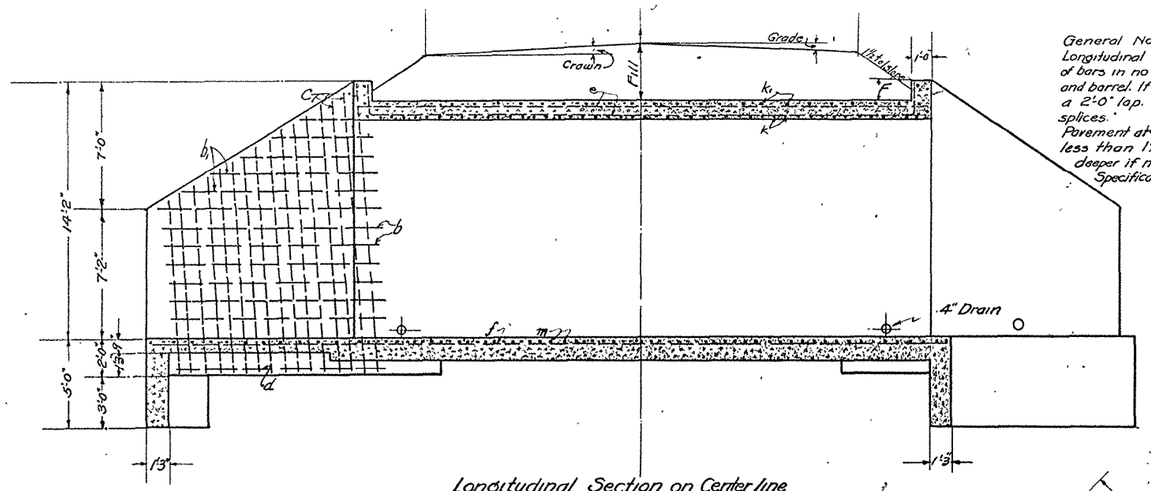
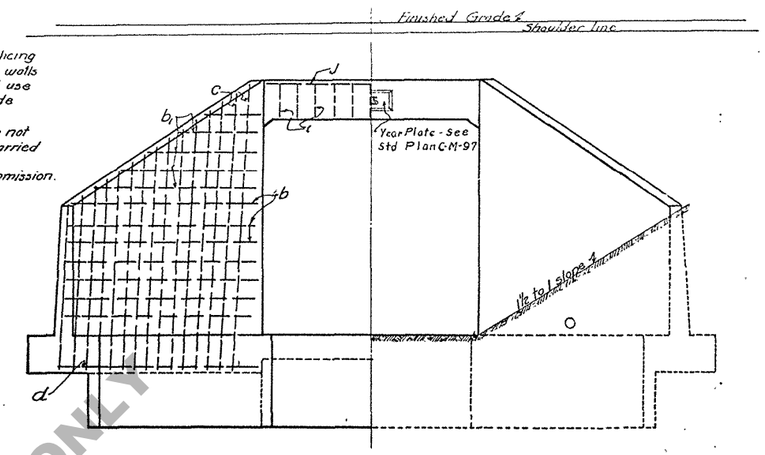
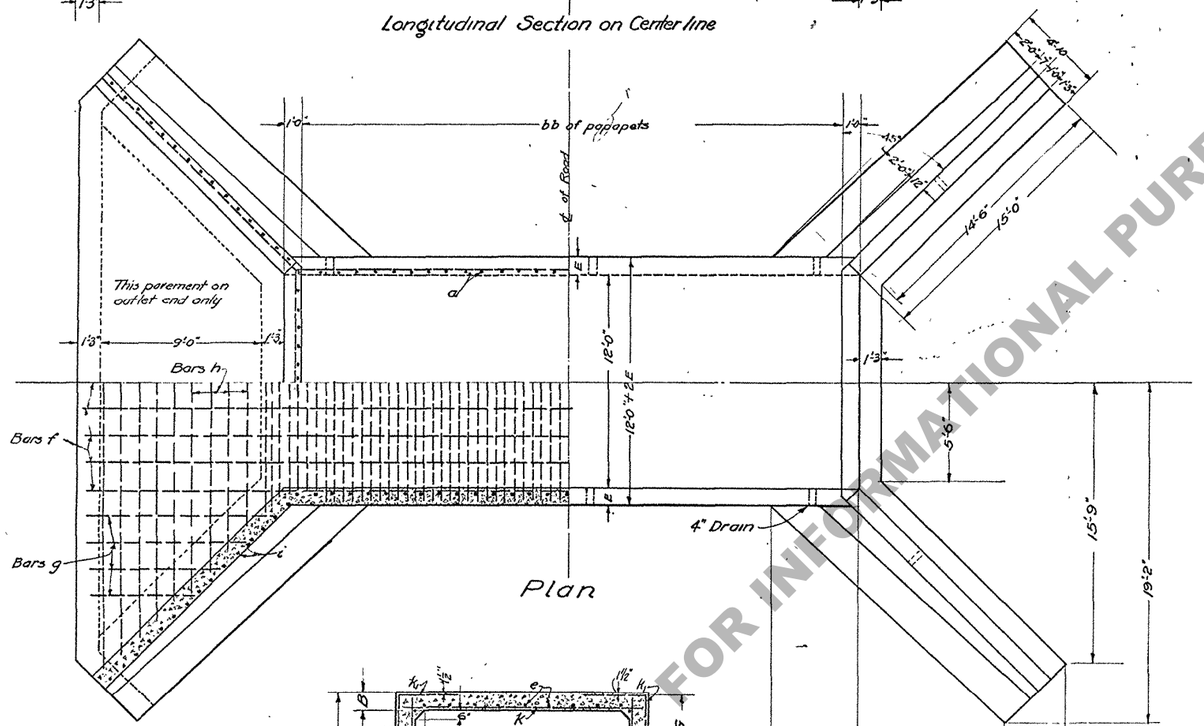
General Notes:-
Longitudinal bars b and b_1 to be continuous, splicing of bars in no case to occur at junction of wing walls and barrel. If Longitudinal bars are spliced use a 2'-0" lap. Bill of material does not include splices.
Pavement at outlet end to be level. Barrel on not less than 1% grade. Foundations to be carried deeper if necessary.
Specifications of Louisiana Highway Commission.



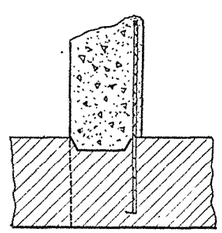
Longitudinal Section on Center line



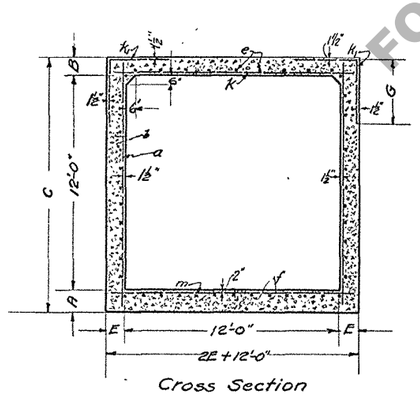
Elevation of Inlet



Plan



Keyed notch extending through barrel and wings. Notch formed by beveled 2x6" timbers



Cross Section

Bill of Reinforcing

Fills 2' to 7' Inclusive - 27'-0" b-b. of parapets

Description of bars	Mark	Number	Size	Spacing	Length	Weight
Walls, vertical	a	36	¾"φ	1'-0"	14'-0"	1176
Walls and wings, horizontal	b	14	½" φ	1'-0"	57'-9"	688
Walls and wings, horizontal	b_1	10	½" φ	1'-0"	variable	384
Wings, vertical	c	60	¾"φ	1'-0"	Variable	1159
Wings, Longitudinal in footing	d	4	½" φ		15'-0"	51
Slab, longitudinal	e	10	½" φ		29'-9"	244
Floor longitudinal	f	9	⅞"φ	1'-6"	41'-3"	766
Pavement longitudinal	g	8	⅞"φ	1'-6"	Variable	103
Pavement Transverse	h	9	½" φ	1'-0"	Variable	184
Parapet, Vertical	i	26	½" φ	1'-0"	1'-11"	42
Parapet, horizontal	j	2	½" φ		12'-6"	21
				Total of Constant		4812

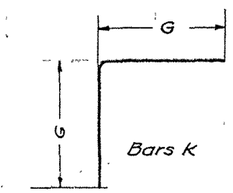
Slab Transverse bars k and k_1. Floor Transverse bars m

b.b. of parapet Feet	Fill	Number k	Number k_1	Size k	Size k_1	Spacing k	Spacing k_1	Length k	Length k_1	Weight	Number	Size	Spacing	Length	Weight
27	2'	44	48	⅞"φ	½"φ	8"	1'-3"	13'-9	7'-6"	1520	47	⅞"φ	8	13'-9"	1318
30	3'	48	52	⅞"φ	½"φ	8"	1'-3"	13'-9	7'-6"	1655	52	⅞"φ	8	13'-9"	1459
33	4'	60	48	⅞"φ	¾"φ	7"	1'-6"	13'-9	8'-0"	2260	64	⅞"φ	7	13'-9"	1795
36	5'	65	52	⅞"φ	¾"φ	7"	1'-6"	13'-9	8'-0"	2448	70	⅞"φ	7	13'-9"	1964
39	6'	70	56	⅞"φ	¾"φ	7"	1'-6"	13'-11	8'-0"	2661	76	⅞"φ	7	13'-9"	2132
42	7'	87	72	⅞"φ	¾"φ	6"	1'-3"	13'-11	8'-0"	3336	93	⅞"φ	6	13'-9"	2609

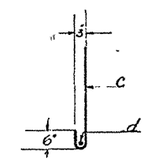
Variable Bars

Mark	Short Bar	Variation	long bar	Number same length
b_1	36'-5"	4'-4"	53'-9	2
c	9'-6"	5½"	16'-1	4
g	4'-0"	1'-6"	8'-6"	2
h	16'-0"	2'-0"	32'-0"	1

Note: 4" Drains or Weep Holes to be placed in Walls of Barrel and Wing Walls @ 10'-0" Centers. Place about one (1) Cu. Ft. of large size gravel or loose rock behind and around each Drain.



Bars K



Hook Detail

DIMENSIONS Fill	A	B	C	E	F	G	Quantities per Lft barrel: Cu. yds. Concrete	Pounds Steel	b to b parapets	TOTAL QUANTITIES: Cu. yds. Concrete	Pounds Steel
2'	1'-3"	1'-0"	14'-3"	1'-0"	1'-2"	3'-6"	2.07	183.0	27'-0"	138.2	7654
3'	1'-4"	1'-1"	14'-5"	1'-0"	1'-1"	3'-6"	2.15	183.0	30'-0"	147.0	8194
4'	1'-4"	1'-1"	14'-5"	1'-0"	1'-1"	4'-0"	2.15	201.0	33'-0"	153.45	9403
5'	1'-6"	1'-3"	10'-9"	1'-0"	11"	4'-0"	2.33	201.0	36'-0"	166.5	10038
6'	1'-7"	1'-4"	14'-11"	1'-1"	10"	4'-0"	2.47	201.0	39'-0"	179.5	10649
7'	1'-7"	1'-4"	14'-11"	1'-1"	10"	4'-0"	2.47	221.0	42'-0"	186.8	12097

2.065
14'-9"
2.5
2.326

STANDARD

12'x12' CONCRETE BOX CULVERT

Flaring Wing Walls

LOUISIANA HIGHWAY COMMISSION

SCALE 1/4" = 1'-0" BATON ROUGE, LA. March

Approved

Void 5-2-35

Revised - Steel Quantities 8/20/29 (J.T.H)

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