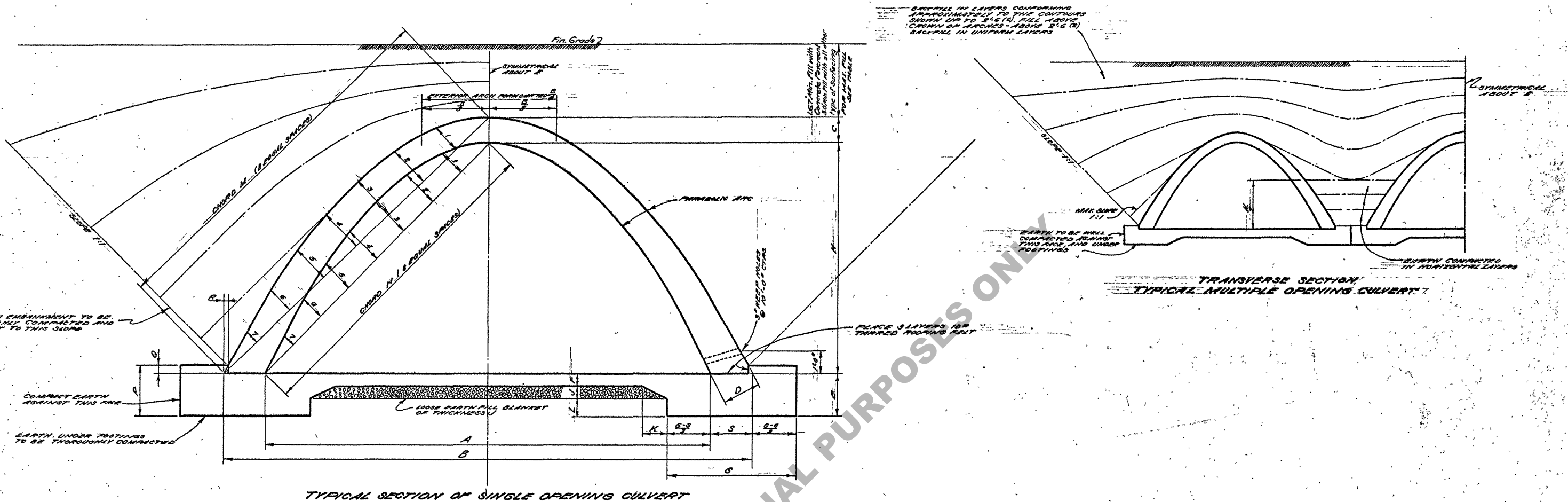




DIMENSIONS OF CONCRETE SECTION															TEMPLATE														CONCRETE WEIGHT CU. YDS.	WATERWAY AREA SQ. FT.	MINIMUM FILL IN FT.		
															INTRADOS							EXTRADOS											
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	CHORD M	1	2	3	4	5	6	7	CHORD M	1	2	3	4	5	6	7			
3'5 1/2	4'2 1/2	0'4	0'4	0'6	0'4	1'5	1'9	0'2	0'4	0	0'7 1/2	0'1 1/2	0'4 1/2	0'4 1/2	3'0 1/2	0'3	0'4 1/2	0'4 1/2	0'3 1/2	0'3 1/2	0'3 1/2	0'1 1/2	3'11 1/2	0'3 1/2	0'4 1/2	0'4 1/2	0'4 1/2	0'3 1/2	0'2 1/2	0'1 1/2	0'1529	4.03	20
4'3 1/2	5'0 1/2	0'4	0'4	0'6	0'4	1'5	2'2	0'2	0'4	0	0'7 1/2	0'1 1/2	0'4 1/2	0'4 1/2	3'0 1/2	0'3	0'4 1/2	0'4 1/2	0'4 1/2	0'3 1/2	0'3 1/2	0'1 1/2	3'6 1/2	0'3 1/2	0'5	0'5 1/2	0'5	0'4 1/2	0'3 1/2	0'1 1/2	0'1820	0.20	20
4'10 1/2	5'8 1/2	0'4	0'4	0'6	0'4	1'7	2'6	0'2	0'4	0	0'7 1/2	0'1 1/2	0'4 1/2	0'4 1/2	3'0 1/2	0'3 1/2	0'4 1/2	0'4 1/2	0'5	0'4 1/2	0'3 1/2	0'1 1/2	4'0 1/2	0'4	0'5 1/2	0'6	0'5 1/2	0'4 1/2	0'3 1/2	0'1 1/2	0'2060	8.26	20
5'6 1/2	6'5 1/2	0'4	0'5	0'6 1/2	0'4	1'8	3'10	0'2 1/2	0'5	0	0'8 1/2	0'2	0'1	0'5 1/2	3'4 1/2	0'3 1/2	0'6 1/2	0'5 1/2	0'5 1/2	0'4 1/2	0'3 1/2	0'1 1/2	4'6 1/2	0'4 1/2	0'6 1/2	0'6 1/2	0'6 1/2	0'5 1/2	0'4	0'2 1/2	0'2330	10.48	20
6'0 1/2	6'11 1/2	0'4	0'5	0'7	0'4	1'9	3'1	0'3	0'6	0	0'9	0'2	0'1	0'5 1/2	4'3 1/2	0'4 1/2	0'6	0'6 1/2	0'6	0'5 1/2	0'3 1/2	0'1 1/2	4'10 1/2	0'4 1/2	0'6 1/2	0'7 1/2	0'7	0'6 1/2	0'4 1/2	0'2 1/2	0'2760	12.40	17
6'11 1/2	8'2	0'4 1/2	0'6 1/2	0'7 1/2	0'4	1'10	3'7	0'3 1/2	0'7	0	0'9 1/2	0'2	0'1	0'7 1/2	4'11 1/2	0'4 1/2	0'7	0'7 1/2	0'7	0'6	0'5 1/2	0'1 1/2	5'1 1/2	0'5 1/2	0'7 1/2	0'8 1/2	0'8 1/2	0'7 1/2	0'5	0'2 1/2	0'3359	16.52	18
7'8 1/2	8'11 1/2	0'5	0'5 1/2	0'7 1/2	0'5	2'0	4'0	0'4	0'8	0	0'10 1/2	0'2 1/2	0'1 1/2	0'7 1/2	5'4 1/2	0'5 1/2	0'7 1/2	0'8 1/2	0'7 1/2	0'6 1/2	0'1 1/2	6'0 1/2	0'6 1/2	0'8 1/2	0'9 1/2	0'9 1/2	0'8 1/2	0'5 1/2	0'3	0'2 1/2	0'4435	20.53	12
8'10 1/2	10'4 1/2	0'5 1/2	0'8 1/2	0'9 1/2	0'5	2'3	4'7	0'4	0'9	0'1	0'11 1/2	0'2 1/2	0'1 1/2	0'8 1/2	6'4 1/2	0'6 1/2	0'8 1/2	0'9 1/2	0'8 1/2	0'7 1/2	0'1 1/2	7'2 1/2	0'7 1/2	0'9 1/2	0'10 1/2	0'10 1/2	0'9 1/2	0'6 1/2	0'3 1/2	0'5285	27.07	10	
10'3 1/2	12'1 1/2	0'6 1/2	0'9 1/2	0'10 1/2	0'6	2'8	5'4	0'4	0'9	0'2	0'12 1/2	0'3 1/2	0'1 1/2	0'9 1/2	7'6	0'7 1/2	0'10 1/2	0'11 1/2	0'10 1/2	0'8 1/2	0'1 1/2	8'5 1/2	0'8 1/2	0'11 1/2	0'12 1/2	0'12 1/2	0'11 1/2	0'7 1/2	0'4	0'7043	36.64	3	
11'6 1/2	13'8 1/2	0'7	0'10 1/2	0'11 1/2	0'6	3'0	5'11	0'4	0'9	0'3	0'13 1/2	0'3 1/2	0'1 1/2	0'10 1/2	8'2 1/2	0'8 1/2	0'11 1/2	0'12 1/2	0'11 1/2	0'9 1/2	0'1 1/2	9'8 1/2	0'9 1/2	0'12 1/2	0'13 1/2	0'13 1/2	0'12 1/2	0'8 1/2	0'5 1/2	0'8263	45.18	8	
12'8 1/2	14'6 1/2	0'7 1/2	0'11 1/2	1'1	0'6	3'3	6'5	0'4	0'9	0'5	0'14 1/2	0'3 1/2	0'1 1/2	1'0 1/2	8'11 1/2	0'9 1/2	1'0 1/2	1'1 1/2	0'10 1/2	0'1 1/2	0'1 1/2	10'11 1/2	0'10 1/2	1'1 1/2	1'2 1/2	1'2 1/2	1'1 1/2	0'9 1/2	0'6 1/2	0'9374	53.88	7	
13'8 1/2	16'0 1/2	0'8 1/2	1'2 1/2	1'1 1/2	0'6 1/2	3'9	7'1	0'4 1/2	0'9	0'5 1/2	1'1 1/2	0'3 1/2	0'1 1/2	1'2 1/2	9'10 1/2	0'9 1/2	1'2 1/2	1'3 1/2	1'2	0'1 1/2	0'1 1/2	11'2 1/2	0'11 1/2	1'3 1/2	1'4 1/2	1'4 1/2	1'3 1/2	0'9 1/2	0'6 1/2	1'228	64.08	6	
15'5 1/2	17'3 1/2	0'9 1/2	1'3 1/2	1'5	0'6 1/2	4'4	7'10	0'5	0'10	0'7	1'3	0'4	0'2	1'3 1/2	10'10 1/2	0'10 1/2	1'3 1/2	1'4 1/2	1'3 1/2	1'1	0'1 1/2	0'1 1/2	12'3 1/2	0'11 1/2	1'4 1/2	1'5 1/2	1'5 1/2	1'4 1/2	0'10 1/2	0'5 1/2	1'523	75.03	3
16'15 1/2	18'10 1/2	0'10	1'3	1'6 1/2	0'6 1/2	4'9	8'4	0'5	0'10	0'8 1/2	1'4 1/2	0'4	0'2	1'4 1/2	11'7 1/2	0'10 1/2	1'4 1/2	1'5 1/2	1'4 1/2	1'1 1/2	0'1 1/2	0'1 1/2	13'4 1/2	0'11 1/2	1'5 1/2	1'6 1/2	1'6 1/2	1'5 1/2	0'11 1/2	0'6 1/2	1'758	83.49	3
18'3 1/2	21'8 1/2	1'0	1'6	1'9	0'6 1/2	5'4	9'6	0'6	1'0	0'9	2'1	0'4	0'2	1'6 1/2	13'8 1/2	1'1 1/2	1'6 1/2	1'7 1/2	1'6 1/2	1'3 1/2	0'1 1/2	0'1 1/2	15'5 1/2	1'2 1/2	1'6 1/2	1'7 1/2	1'7 1/2	1'6 1/2	0'12 1/2	0'7 1/2	2'348	116.07	3

GENERAL NOTES

Specifications: Louisiana Highway Commission, March 1940.

Concrete shall be class "A" except in gravity wall where class "D" concrete shall be used. Allowable unit stresses in class "A" concrete: Compression = 800 $\frac{\text{lb}}{\text{in}^2}$; Tension = 75 $\frac{\text{lb}}{\text{in}^2}$; Bending = 125 $\frac{\text{lb}}{\text{in}^2}$; Pure shear = 320 $\frac{\text{lb}}{\text{in}^2}$; Diagonal shear = 45 $\frac{\text{lb}}{\text{in}^2}$. Backfill weights 120 $\frac{\text{lb}}{\text{cu ft}}$ and equivalent fluid pressure is 40 $\frac{\text{lb}}{\text{cu ft}}$. Live Load = H15; Dead Load = Calculated weight of materials. Allowable soil pressure limited to 3000 $\frac{\text{lb}}{\text{sq ft}}$. Construction Joints to be located along barrel of culvert at 30 cts. Arch footings and invert slab to be poured continuous. Forms inside culvert may be removed 7 days after pouring. Outside forms may be removed 3 days after pouring. Backfill over culvert shall be placed after concrete has reached a strength of 3000 $\frac{\text{lb}}{\text{in}^2}$.

NOT APPROVED

STANDARD PLAN
SINGLE and MULTIPLE OPENING
PLAIN CONCRETE ARCH CULVERTS
4 TO 116 SQ. FT. WATERWAY AREA

DESIGNED *J.S. Fowler* DETAILED *S.E.P.* TRACED *Haseg*
CHECKED CHECKED CHECKED
IN CHARGE OF *Head Bridge Draftman*

DATE DESCRIPTION BY REVISIONS