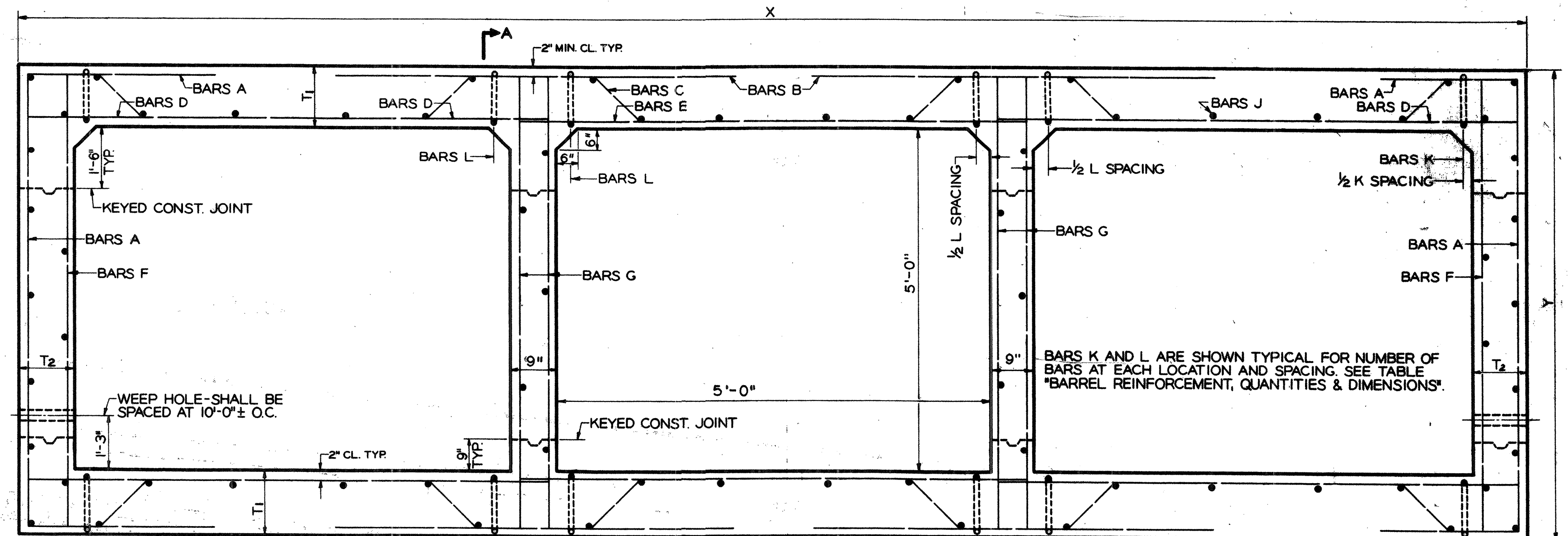


STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

TRIPLE 5' X 5' BOX CULVERT BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS						
DESIGN	1	2	3	4	5	6
BAR A	401 @ 11"	406 @ 11"	409 @ 11"	406 @ 10"	415 @ 10"	601 @ 10"
BAR B	501 @ 11"	501 @ 11"	501 @ 11"	2-502 BETWEEN	2-502 BETWEEN	2-602 BETWEEN
BAR C	402 @ 11"	407 @ 11"	410 @ 11"	407 @ 10"	504 @ 10"	505 @ 10"
BAR D	403 @ 11"	403 @ 11"	403 @ 11"	503 @ 10"	503 @ 10"	603 @ 10"
BAR E	403 @ 11"	403 @ 11"	403 @ 11"	403 @ 10"	403 @ 10"	403 @ 10"
BAR F	404 @ 11"	408 @ 11"	411 @ 11"	408 @ 10"	413 @ 10"	413 @ 10"
BAR G	404 @ 11"	408 @ 11"	411 @ 11"	408 @ 10"	413 @ 10"	413 @ 10"
BAR J	68-405	68-405	68-405	68-405	68-405	68-405
BAR K	--	--	--	1-412 @ 11"	2-414 @ 13"	3-414 @ 7"
BAR L	--	--	--	2-412 @ 9"	3-414 @ 8"	4-414 @ 5"
X	18'-0"	18'-0"	18'-0"	18'-0"	18'-0 1/2"	18'-1"
Y	6'-2"	6'-6 1/2"	7'-1"	6'-6 1/2"	6'-9"	6'-9 1/2"
T ₁	7"	9 1/2"	1'-0 1/2"	9 1/2"	10 1/2"	10 3/4"
T ₂	9"	9"	9"	9"	9 1/2"	9 1/2"
CU. YDS. CLASS "A" CONC.	1.361	1.611	1.972	1.611	1.760	1.799
LBS. BAR REINF. PER FT.	164.3	169.4	173.7	249.4	289.0	368.8
HEIGHT OF FILL OVER TOP	T ₀ 10'	T ₀ 20'	T ₀ 30'	T ₀ 40'	T ₀ 50'	T ₀ 60'

NOTE: BARS B THAT ARE SHOWN AS TWO BETWEEN BARS C SHALL BE EQUALLY SPACED BETWEEN BARS C.



BARREL SECTION BAR REINFORCEMENT DETAILS								
MARK	LENGTH	TYPE	A	B	C	D	E	F
401	9'-6"	8	5'-10"	1'-10"	1'-10"			
402	21'-6"	7	11 1/4"	3'-3 1/2"	2'-6 1/2"	3"	1'-8"	2'-8 1/2"
403	6'-4"	1						
404	5'-10"	1						
405	POUR - 4"	1						
406	9'-6 1/2"	8	6'-2 1/2"	1'-8"	1'-8"			
407	22'-6 1/2"	7	8 5/8"	3'-3"	2'-3 3/8"	5 1/4"	1'-11 1/4"	2'-5 1/2"
408	6'-2 1/2"	1						
409	9'-7"	8	6'-9"	1'-5"	1'-5"			
410	23'-10"	7	5"	3'-1 3/4"	2'-1"	8 1/2"	2'-2 1/2"	2'-1 1/2"
411	6'-9"	1						
412	3'-0"	6	11 1/2"	6 1/4"	6 1/4"			
413	6'-5"	1						
414	3'-2 3/4"	6	11 3/4"	7 1/2"	7 1/2"			
415	9'-5"	8	6'-5"	1'-6"	1'-6"			
501	4'-11"	1						
502	5'-8"	1						
503	6'-4"	1						
504	23'-0"	7	7 1/8"	3'-2 3/8"	2'-2 3/8"	6 1/2"	2'-0 1/2"	2'-3 1/2"
505	23'-4 1/2"	7	6 1/2"	3'-3 3/8"	2'-2 3/8"	6 3/4"	2'-0 3/4"	2'-3"
601	9'-7 1/2"	8	6'-5 1/2"	1'-7"	1'-7"			
602	6'-0"	1						
603	6'-4"	1						

GENERAL NOTES

SPECIFICATIONS: GEORGIA STANDARD.
ALL CONCRETE SHALL BE CLASS "A".
CHAMFER ALL EXPOSED EDGES 3/4".
COST OF DRAIN PIPES, WEEP HOLES, COARSE AGGREGATE AND ANY OTHER INCIDENTAL ITEMS SHALL BE INCLUDED IN PRICES BID FOR CONTRACT ITEMS.
CONSTRUCTION JOINTS IN BARREL WALLS AND WINGWALLS ARE REQUIRED. BARREL WALLS TO SET AT LEAST 2 HOURS BEFORE TOP SLAB IS POURED.
FOR DETAILS OF WINGWALLS, PARAPETS AND APRONS SEE GA. STD. NO. 2303.

DESIGN DATA

SPECIFICATIONS: VIRGINIA STATE HIGHWAY DEPT. CULVERT PROGRAM
REVISED FEB. 1966.

BOX CULVERT REQUIREMENTS:

MINIMUM FILL HEIGHT FROM TOP OF CULVERT TO BOTTOM OF BASE WITHIN TRAVELWAY SHALL BE 12 INCHES.

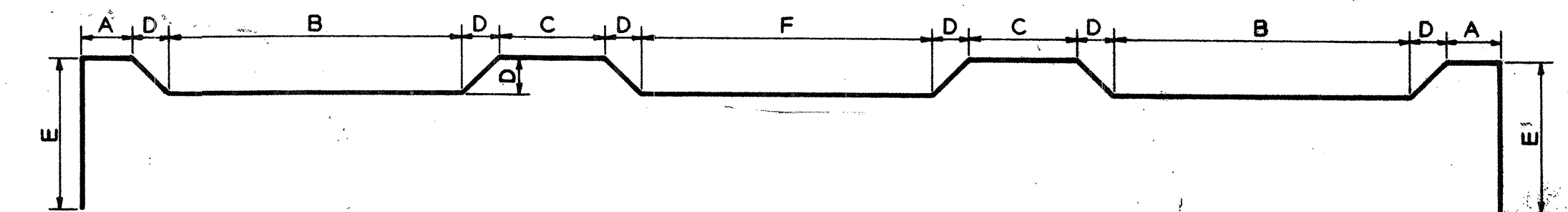
MAXIMUM POUR LENGTH SHALL NOT EXCEED 30 FEET ALONG THE LENGTH OF THE CULVERT.

TRANSVERSE CONSTRUCTION JOINTS SHALL BE PLACED IN THE BARREL, NORMAL TO THE CENTERLINE OF CULVERT, AT THE OUTSIDE SHOULDER BREAK POINTS. LONGITUDINAL BARREL REINFORCING STEEL SHALL NOT BE CONTINUOUS THROUGH THESE JOINTS, PROVIDED THAT THE JOINTS ARE MORE THAN 15 FEET FROM THE BARREL ENDS.
WHEN TRANSVERSE CONSTRUCTION JOINTS OCCUR WITHIN 15 FEET OF THE BARREL ENDS OR WITHIN THE LIMITS OF THE PAVEMENT, THE LONGITUDINAL BARREL REINFORCING SHALL THEN BE CONTINUOUS THROUGH SUCH JOINTS. THE MINIMUM LENGTH OF LAP SPICE FOR LONGITUDINAL REINFORCING SHALL BE 24 INCHES.

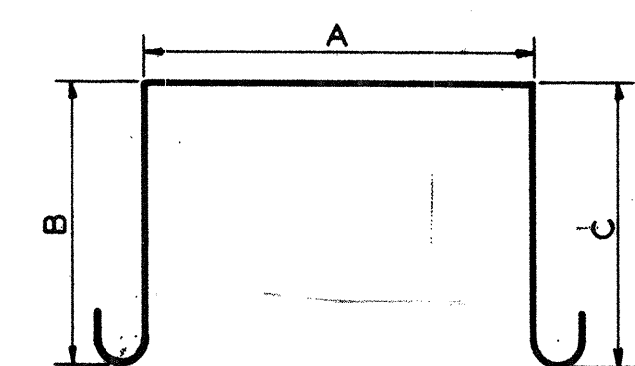
TRANSVERSE CONSTRUCTION JOINTS PLACED AT ANY OTHER LOCATION NOT SPECIFIED ABOVE SHALL BE FORMED WITH NO LONGITUDINAL REINFORCING STEEL PASSING THROUGH THE JOINTS.

NOTE: THE DESIGN OF CULVERT SHALL BE DETERMINED BY THE MAXIMUM HEIGHT OF FILL WITH ONLY A SINGLE DESIGN BEING USED FOR THE ENTIRE INSTALLATION.

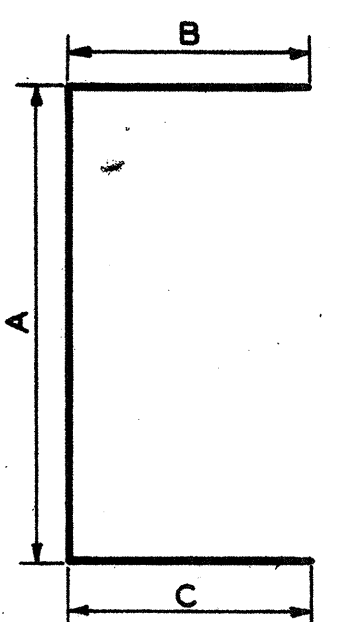
BOTTOM SLAB REINFORCEMENT SAME AS TOP
BARREL SECTION



TRIPLE BOX CULVERT ONLY
TYPE 7

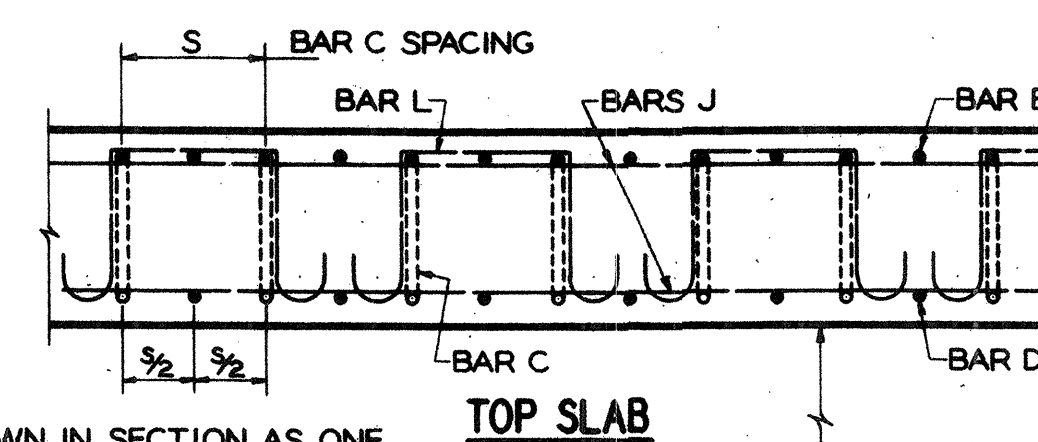


TYPE 6

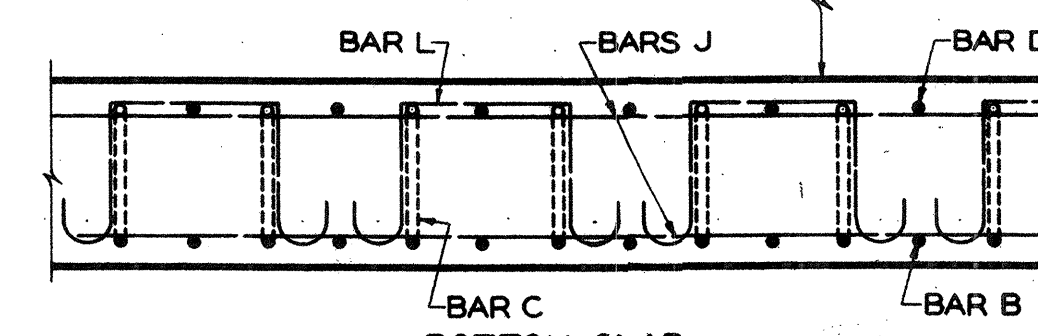


TYPE 8

NOTE: BEND LONGITUDINAL BARS INTO WINGS AND PARAPETS SIMILAR TO STANDARDS. IF CULVERT IS SKEWED CUT TRANSVERSE STEEL AND BEND 12" INTO PARAPET OR TOE WALL AND HOOK.



TOP SLAB



BOTTOM SLAB
SECTION A-A

NOTE: BARS B SHOWN IN SECTION AS ONE BAR EQUALLY SPACED BETWEEN BARS C. TWO BARS B EQUALLY SPACED BETWEEN BARS C SHALL BE USED WHEN REQUIRED.

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA			
REINFORCED CONCRETE BOX CULVERT TRIPLE 5' X 5'			
NO SCALE			
APRIL 1961			
DESIGNED: J.T.K. - J.M.L.	TRACED: G.M.B. - L.R. - K.W.M.	REVIEWED: R.K.J.	
DRAWN: P.D.P.	CHECKED:	APPROVED:	