STATE	PROJECT NUMBER	SHEET No.	TOTAL SHEETS
GA.			

BARREL SECTION BAR REINFORCEMENT DETAILS

MARK	LENGTH	TYPE	A	B	C	D	E	F
401	10′-8″	8	6′-4″	2′-2″	2′-2″			
402	4′-8″	1						
403	26′-11″	7	0′-8″	5′-0″	1′-0″	0′-6″	2′-2″	5′-0″
404	7′-8″	1						
405	8′-0″	1						
406	6′-4″	1						
407	27′-6″	7	0′-9″	4′-10″	1′-0″	0′-7″	2′-3″	4′-10″
408	6′-6″	1						
409	3′-6″	6	1′-1½″	0′-8″	0′-8″			
410	11′-4″	8	6′-8″	2′-4″	2′-4″			
411	27′-11″	7	0′-9″	4′-4″	1′-8″	0′-8″	2′-4″	4′-0″
412	6′-8″	1						
413	3′-8″	6	1′-1½″	0′-9″	0′-9″			
414	12′-6″	8	6′-10″	2′-10″	2′-10″			
415	6′-10″	1						
416	3′-9¾″	6	1′-1⅝″	0′-10″	0′-10″			
417	POUR - 4″	1						
418	6′-11″	1						
419	7′-1″	1						
420	3′-9⅝″	6	1′-0⅝″	0′-10½″	0′-10½″			
421	4′-0¾″	6	1′-1¾″	0′-11½″	0′-11½″			
501	5′-0″	1						
502	7′-8″	1						
503	11′-10″	8	6′-6″	2′-8″	2′-8″			
504	7′-9″	1						
505	28′-1″	7	0′-9″	4′-1″	1′-10″	0′-9″	2′-5″	3′-8″
506	28′-2⅜″	7	0′-8″	3′-11½″	2′-3″	0′-9″	2′-5″	3′-3″
507	28′-6⅛″	7	0′-8⅛″	3′-11⅜″	2′-2½″	0′-9½″	2′-5½″	3′-2½″
601	6′-2″	1						
602	6′-8″	1						
603	6′-0″	1						
604	7′-9″	1						
605	29′-1⅛″	7	0′-8¼″	3′-10″	2′-3½″	0′-10½″	2′-6½″	2′-11½″
606	11′-5″	8	6′-10″	2′-3½″	2′-3½″			
607	11′-6¾″	8	6′-11″	2′-3⅞″	2′-3⅞″			
608	11′-10″	8	7′-1″	2′-4½″	2′-4½″			
701	6′-4″	1						
702	6′-6″	1						
801	7′-7″	1						
802	7′-7¾″	1						
803	7′-9″	1						

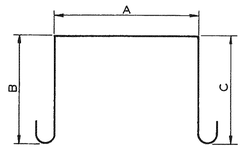
BOX CULVERT REQUIREMENTS:

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 CONTINOUS THROUGH SUCH JOINTS. THE MINIMUM LENGTH OF LAP SPLICE FOR LONGITUDINAL REINFORCING SHALL BE 24 INCHES.

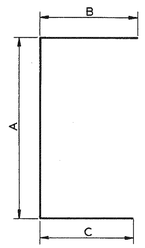
TRANSVERSE CONSTRUCTION JOINTS PLACED AT ANY OTHER LOCATION NOT SPECIFIED ABOVE SHALL BE FORMED WITH NO LONGITUDINAL REINFORCING STEEL PASSING THROUGH THE JOINTS.



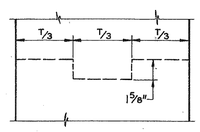
TYPE 6

STRAIGHT

TYPE 1



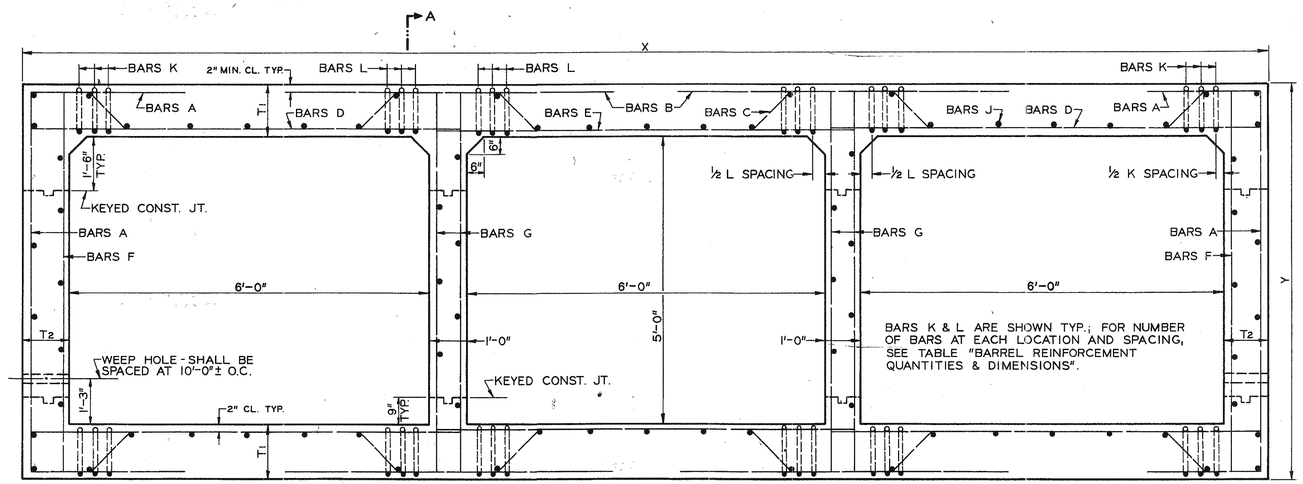
TYPE 8



KEYED CONST. JT.

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

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

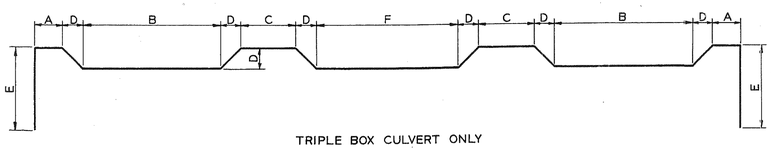


BOTTOM SLAB REINFORCEMENT SAME AS TOP

BARREL SECTION

TRIPLE X BOX CULVERT
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

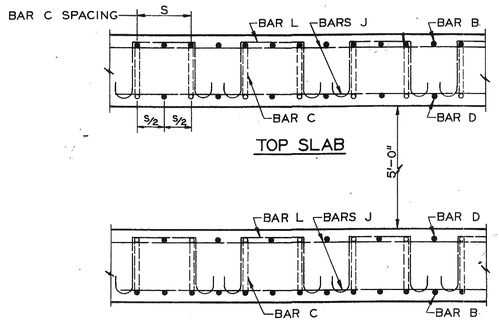
DESIGN	1	2	3	4	5	6	7	8
HEIGHT OF FILL OVER TOP	0′ TO 10′	0′ TO 20′	0′ TO 30′	0′ TO 40′	0′ TO 50′	0′ TO 60′	0′ TO 70′	0′ TO 80′
A	401 AT 17″	401 AT 13″	503 AT 12″	2-410 BETWEEN	2-414 BETWEEN	606 AT 12″	607 AT 11″	608 AT 12″
B	2-402 BETWEEN	2-501 BETWEEN	2-601 BETWEEN	2-602 BETWEEN	2-603 BETWEEN	2-701 BETWEEN	2-701 BETWEEN	2-702 BETWEEN
C	403 AT 17″	403 AT 13″	407 AT 12″	411 AT 12″	505 AT 12″	506 AT 12″	507 AT 11″	605 AT 12″
D	404 AT 17″	502 AT 13″	504 AT 12″	504 AT 12″	604 AT 12″	801 AT 12″	802 AT 11″	803 AT 12″
E	405 AT 17″	405 AT 13″	405 AT 12″	405 AT 12″	405 AT 12″	502 AT 12″	502 AT 11″	404 AT 12″
F	406 AT 17″	406 AT 13″	408 AT 12″	412 AT 12″	415 AT 12″	415 AT 12″	418 AT 11″	419 AT 12″
G	406 AT 17″	406 AT 13″	408 AT 12″	412 AT 12″	415 AT 12″	415 AT 12″	418 AT 11″	419 AT 12″
J	78-417	78-417	78-417	78-417	78-417	78-417	78-417	78-417
K	—	—	—	1-413 AT 4″ O.C.	1-416 AT 6″ O.C.	2-416 AT 6″ O.C.	3-420 AT 4⅜″ O.C.	3-421 AT 4¼″ O.C.
L	—	—	1-409 AT 4″ O.C.	2-413 AT 6″ O.C.	4-416 AT 1½″ O.C.	6-416 AT 3¼″ O.C.	7-420 AT 3″ O.C.	8-421 AT 2⅜″ O.C.
X	21′-8″	21′-8″	21′-10″	21′-10″	21′-10″	21′-10″	21′-11½″	22′-2″
Y	6′-8″	6′-8″	6′-10″	7′-0″	7′-2″	7′-2″	7′-3″	7′-5″
T1	0′-10″	0′-10″	0′-11″	1′-0″	1′-1″	1′-1″	1′-1½″	1′-2½″
T2	0′-10″	0′-10″	0′-11″	0′-11″	0′-11″	0′-11″	0′-11¾″	1′-1″
CU. YDS. CONCRETE PER FT.	2.044	2.044	2.220	2.355	2.490	2.490	2.591	2.784
LBS. BAR REINF. STEEL PER FT.	143.738	198.450	277.060	302.041	365.615	444.267	498.807	505.862



TRIPLE BOX CULVERT ONLY

TYPE 7

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.



TOP SLAB

BOTTOM SLAB

SECTION A-A

NOTE: BARS B & D ARE SHOWN IN SECTION A-A AS ONE EQUALLY SPACED BETWEEN BARS C. TWO BARS B OR D EQUALLY SPACED BETWEEN BARS C SHALL BE USED WHEN REQUIRED.

△ 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

ADD REQUIREMENT NOTE 1.4.6-01

BY	REVISIONS	DATE
H.J.A.	REVISED & REDRAWN	3-15-72
R.J.S.	ADD NOTE	7-26-80
R.L.S.	DELETE SUB. INCREASE CONC.	10-23-97
R.M.U.	ADD FILL HEIGHT NOTE	

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

REINFORCED CONCRETE BOX CULVERT
TRIPLE 6′ X 5′

NO SCALE — MARCH 1972

DESIGNED H.J.A. — TRACED B.J.W. — REVIEWED L.R.P.
DRAWN H.J.A. — CHECKED R.J.S. — APPROVED