

SINGLE 9'-0" X 4'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	436A @ 6"	701A @ 12"	531A @ 6"	605A @ 6"	606A @ 6"			
BAR C	443 @ 6"	526 @ 6"	614 @ 6"	711 @ 6"	712 @ 6"			
BAR E	414 @ 12"	415 @ 12"	416 @ 12"	417 @ 12"	418 @ 12"			
BAR G IN 2 SLABS	32 - 401	32 - 401	32 - 401	32 - 401	32 - 401			
BAR H IN 2 WALLS	12 - 402	12 - 402	12 - 402	12 - 402	12 - 402			
BAR J IN EXT. CORNER	0	0	3-415B @ 10¼"	3-418B @ 10¾"	3-420B @ 11½"			
T ₁	14"	15"	16"	17"	18"			
T ₂	15"	16"	17"	18"	19"			
T ₃	14"	15"	16"	17"	18"			
X	11'-4"	11'-6"	11'-8"	11'-10"	12'-0"			
Y	6'-5"	6'-7"	6'-9"	6'-11"	7'-1"			
YD ³ CLASS AA CONCRETE/FT	1.369	1.480	1.593	1.707	1.824			
LB BAR REINF STEEL/FT	114.5	158.5	201.0	263.9	268.1			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	4.8	4.9	5.0	5.2	5.3			
LB BAR REINF STEEL	695	696	698	699	701			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	5.0	5.1	5.2	5.4	5.5			
LB BAR REINF STEEL	866	869	873	877	880			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	5.5	5.7	5.9	6.0	6.2			
LB BAR REINF STEEL	918	922	927	931	935			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	6.8	7.0	7.2	7.4	7.6			
LB BAR REINF STEEL	1052	1058	1064	1070	1075			

SINGLE 9'-0" X 5'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	444A @ 6"	447A @ 6"	544A @ 6"	610A @ 6"	612A @ 6"			
BAR C	709 @ 12"	526 @ 6"	614 @ 6"	711 @ 6"	712 @ 6"			
BAR E	420 @ 12"	421 @ 12"	422 @ 12"	423 @ 12"	424 @ 12"			
BAR G IN 2 SLABS	32 - 401	32 - 401	32 - 401	32 - 401	32 - 401			
BAR H IN 2 WALLS	14 - 402	14 - 402	14 - 402	14 - 402	14 - 402			
BAR J IN EXT. CORNER	0	0	3-415B @ 10¼"	3-418B @ 10¾"	3-420B @ 11½"			
T ₁	14"	15"	16"	17"	18"			
T ₂	15"	16"	17"	18"	19"			
T ₃	14"	15"	16"	17"	18"			
X	11'-4"	11'-6"	11'-8"	11'-10"	12'-0"			
Y	7'-5"	7'-7"	7'-9"	7'-11"	8'-1"			
YD ³ CLASS AA CONCRETE/FT	1.456	1.573	1.691	1.812	1.935			
LB BAR REINF STEEL/FT	138.0	140.8	212.1	278.6	282.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	4.9	5.1	5.2	5.4	5.5			
LB BAR REINF STEEL	719	720	722	723	725			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	5.1	5.3	5.4	5.6	5.8			
LB BAR REINF STEEL	890	894	898	901	905			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	5.7	5.9	6.1	6.3	6.4			
LB BAR REINF STEEL	943	947	951	956	960			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	7.1	7.3	7.5	7.7	7.9			
LB BAR REINF STEEL	1078	1084	1089	1095	1101			

SINGLE 9'-0" X 6'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	453A @ 6"	455A @ 6"	556A @ 6"	616A @ 6"	620A @ 6"			
BAR C	709 @ 12"	526 @ 6"	614 @ 6"	711 @ 6"	712 @ 6"			
BAR E	426 @ 12"	427 @ 12"	428 @ 12"	429 @ 12"	430 @ 12"			
BAR G IN 2 SLABS	32 - 401	32 - 401	32 - 401	32 - 401	32 - 401			
BAR H IN 2 WALLS	18 - 402	18 - 402	18 - 402	18 - 402	18 - 402			
BAR J IN EXT. CORNER	0	0	3-415B @ 10¼"	3-418B @ 10¾"	4-420B @ 11½"			
T ₁	14"	15"	16"	17"	18"			
T ₂	15"	16"	17"	18"	19"			
T ₃	14"	15"	16"	17"	18"			
X	11'-4"	11'-6"	11'-8"	11'-10"	12'-0"			
Y	8'-5"	8'-7"	8'-9"	8'-11"	9'-1"			
YD ³ CLASS AA CONCRETE/FT	1.542	1.665	1.790	1.917	2.046			
LB BAR REINF STEEL/FT	147.4	150.1	224.4	294.6	298.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	5.1	5.3	5.4	5.6	5.8			
LB BAR REINF STEEL	767	768	770	771	773			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	5.3	5.5	5.7	5.8	6.0			
LB BAR REINF STEEL	939	943	947	951	954			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	5.9	6.1	6.3	6.5	6.7			
LB BAR REINF STEEL	993	997	1001	1006	1010			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD ³ CLASS AA CONCRETE	7.3	7.6	7.8	8.0	8.3			
LB BAR REINF STEEL	1129	1135	1141	1146	1152			

		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		
		REVISION	STANDARD REINFORCED CONCRETE SINGLE BOX CULVERT 9'X4', 9'X5' AND 9'X6' NO SCALE SEPTEMBER 2017		
	BY	DES. YSK DRW. FGS. TRA. <u> </u> CHK. <u> JWB </u>	(SUBMITTED) <i>[Signature]</i> STATE DESIGN POLICY ENGINEER (APPROVED) <i>Margaret B. Puckett</i> CHIEF ENGINEER	NUMBER 2401 SHEET 2-J OF 3	