

SINGLE 5'-0" X 5'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	513A @ 12"	417A @ 6"	418A @ 6"	514A @ 6"	516A @ 6"			
BAR C	414 @ 6"	503 @ 6"	504 @ 6"	601 @ 6"	602 @ 6"			
BAR E	414 @ 12"	414 @ 12"	415 @ 12"	415 @ 12"	416 @ 12"			
BAR G IN 2 SLABS	18 - 401	18 - 401	20 - 401	20 - 401	20 - 401			
BAR H IN 2 WALLS	14 - 402	14 - 402	14 - 402	14 - 402	14 - 402			
BAR J IN EXT. CORNER	0	0	3-403B @ 5"	4-404B @ 5"	4-407B @ 5¾"			
T ₁	8"	8"	9"	9"	10"			
T ₂	9"	9"	10"	10"	11"			
T ₃	8"	8"	9"	9"	10"			
X	6'-4"	6'-4"	6'-6"	6'-6"	6'-8"			
Y	6'-5"	6'-5"	6'-7"	6'-7"	6'-9"			
YD³CLASS AA CONCRETE/FT	0.588	0.588	0.668	0.668	0.750			
LB BAR REINF STEEL/FT	74.6	91.4	107.7	144.7	148.3			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	2.7	2.7	2.8	2.8	2.9			
LB BAR REINF STEEL	485	485	507	507	509			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	2.8	2.8	2.9	2.9	3.1			
LB BAR REINF STEEL	591	591	615	615	620			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.1	3.1	3.3	3.3	3.4			
LB BAR REINF STEEL	624	624	649	649	654			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.9	3.9	4.1	4.1	4.3			
LB BAR REINF STEEL	716	716	742	742	749			

SINGLE 5'-0" X 6'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	532A @ 12"	425A @ 6"	426A @ 6"	520A @ 6"	523A @ 6"			
BAR C	414 @ 6"	503 @ 6"	504 @ 6"	601 @ 6"	602 @ 6"			
BAR E	420 @ 12"	505 @ 12"	506 @ 12"	506 @ 12"	507 @ 12"			
BAR G IN 2 SLABS	18 - 401	18 - 401	20 - 401	20 - 401	20 - 401			
BAR H IN 2 WALLS	18 - 402	18 - 402	18 - 402	18 - 402	18 - 402			
BAR J IN EXT. CORNER	0	0	3-403B @ 5"	4-404B @ 5"	4-406B @ 5¾"			
T ₁	8"	8"	9"	9"	10"			
T ₂	9"	9"	10"	10"	11"			
T ₃	8"	8"	9"	9"	10"			
X	6'-4"	6'-4"	6'-6"	6'-6"	6'-8"			
Y	7'-5"	7'-5"	7'-7"	7'-7"	7'-9"			
YD³CLASS AA CONCRETE/FT	0.638	0.638	0.724	0.724	0.812			
LB BAR REINF STEEL/FT	88.4	106.0	122.5	162.5	166.1			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	2.8	2.8	2.9	2.9	3.1			
LB BAR REINF STEEL	533	533	555	555	558			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	2.9	2.9	3.1	3.1	3.2			
LB BAR REINF STEEL	640	640	664	664	669			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.3	3.3	3.4	3.4	3.6			
LB BAR REINF STEEL	674	674	698	698	703			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	4.0	4.0	4.2	4.2	4.4			
LB BAR REINF STEEL	767	767	793	793	800			

SINGLE 5'-0" X 7'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	546A @ 12"	439A @ 6"	533A @ 6"	536A @ 6"	537A @ 6"			
BAR C	503 @ 6"	503 @ 6"	504 @ 6"	601 @ 6"	602 @ 6"			
BAR E	509 @ 12"	509 @ 12"	427 @ 6"	607 @ 12"	702 @ 12"			
BAR G IN 2 SLABS	18 - 401	18 - 401	20 - 401	20 - 401	20 - 401			
BAR H IN 2 WALLS	20 - 402	20 - 402	20 - 402	20 - 402	20 - 402			
BAR J IN EXT. CORNER	0	0	2-404B @ 5"	4-404B @ 5"	4-407B @ 5¾"			
T ₁	8"	8"	9"	9"	10"			
T ₂	9"	9"	10"	10"	11"			
T ₃	8"	8"	9"	9"	10"			
X	6'-4"	6'-4"	6'-6"	6'-6"	6'-8"			
Y	8'-5"	8'-5"	8'-7"	8'-7"	8'-9"			
YD³CLASS AA CONCRETE/FT	0.687	0.687	0.779	0.779	0.873			
LB BAR REINF STEEL/FT	110.6	116.5	161.7	185.2	197.3			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	2.9	2.9	3.0	3.0	3.2			
LB BAR REINF STEEL	558	558	580	580	582			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.0	3.0	3.2	3.2	3.4			
LB BAR REINF STEEL	665	665	690	690	694			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.4	3.4	3.6	3.6	3.7			
LB BAR REINF STEEL	699	699	724	724	729			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	4.2	4.2	4.4	4.4	4.6			
LB BAR REINF STEEL	793	793	820	820	826			

SINGLE 5'-0" X 8'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	456A @ 6"	458A @ 6"	560A @ 6"	619A @ 6"	618A @ 6"			
BAR C	503 @ 6"	503 @ 6"	504 @ 6"	601 @ 6"	602 @ 6"			
BAR E	515 @ 12"	432 @ 6"	705 @ 12"	801 @ 12"	802 @ 12"			
BAR G IN 2 SLABS	18 - 401	18 - 401	20 - 401	18 - 401	20 - 401			
BAR H IN 2 WALLS	22 - 402	22 - 402	22 - 402	22 - 402	22 - 402			
BAR J IN EXT. CORNER	0	0	3-404B @ 5"	4-405B @ 5"	4-408B @ 5¾"			
T ₁	8"	8"	9"	9"	10"			
T ₂	9"	9"	10"	10"	11"			
T ₃	8"	8"	9"	9"	10"			
X	6'-4"	6'-4"	6'-6"	6'-6"	6'-8"			
Y	9'-5"	9'-5"	9'-7"	9'-7"	9'-9"			
YD³CLASS AA CONCRETE/FT	0.737	0.737	0.835	0.835	0.935			
LB BAR REINF STEEL/FT	130.6	136.8	201.1	268.6	272.7			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.0	3.0	3.2	3.2	3.4			
LB BAR REINF STEEL	583	583	605	585	607			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.2	3.2	3.4	3.4	3.5			
LB BAR REINF STEEL	691	691	715	696	720			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	3.6	3.6	3.7	3.7	3.9			
LB BAR REINF STEEL	725	725	750	730	755			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	4.4	4.4	4.6	4.6	4.9			
LB BAR REINF STEEL	820	820	846	827	853			

		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		REVISION	STANDARD REINFORCED CONCRETE SINGLE BOX CULVERT 5'X5', 5'X6', 5'X7' AND 5'X8' NO SCALE SEPTEMBER 2017	
	BY	DES. YSK DRW. FGS TRA. CHK. JWB	(SUBMITTED) <i>B. A. H.</i> STATE DESIGN POLICY ENGINEER (APPROVED) <i>Margaret B. Pule</i> CHIEF ENGINEER	NUMBER 2401 SHEET 2-C OF 3