

SINGLE 10'-0" X 5'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	450A @ 6"	551A @ 6"	554A @ 6"	617A @ 6"	623A @ 6"			
BAR C	713 @ 12"	615 @ 6"	616 @ 6"	717 @ 6"	718 @ 6"			
BAR E	420 @ 12"	422 @ 12"	424 @ 12"	426 @ 12"	428 @ 12"			
BAR G IN 2 SLABS	32 - 40I	34 - 40I	34 - 40I	40 - 40I	40 - 40I			
BAR H IN 2 WALLS	14 - 402	14 - 402	14 - 402	16 - 402	16 - 402			
BAR J IN EXT. CORNER	0	0	0	3-42IB @ 13"	3-422B @ 14¾"			
T ₁	14"	16"	18"	20"	22"			
T ₂	15"	17"	19"	21"	23"			
T ₃	14"	16"	18"	20"	22"			
X	12'-4"	12'-8"	13'-0"	13'-4"	13'-8"			
Y	7'-5"	7'-9"	8'-1"	8'-5"	8'-9"			
YD³CLASS AA CONCRETE/FT	1.545	1.793	2.049	2.314	2.586			
LB BAR REINF STEEL/FT	144.8	205.7	210.9	312.2	320.7			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.3	5.6	5.9	6.2	6.5			
LB BAR REINF STEEL	740	761	763	851	853			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.5	5.8	6.2	6.5	6.8			
LB BAR REINF STEEL	925	950	957	1049	1056			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.2	6.5	6.9	7.2	7.6			
LB BAR REINF STEEL	981	1008	1016	1110	1118			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	7.6	8.0	8.5	8.9	9.4			
LB BAR REINF STEEL	1125	1154	1165	1263	1274			

SINGLE 10'-0" X 6'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	459A @ 6"	562A @ 6"	563A @ 6"	624A @ 6"	627A @ 6"			
BAR C	713 @ 12"	615 @ 6"	616 @ 6"	717 @ 6"	718 @ 6"			
BAR E	426 @ 12"	428 @ 12"	430 @ 12"	432 @ 12"	434 @ 12"			
BAR G IN 2 SLABS	32 - 40I	34 - 40I	34 - 40I	40 - 40I	40 - 40I			
BAR H IN 2 WALLS	18 - 402	18 - 402	18 - 402	22 - 402	22 - 402			
BAR J IN EXT. CORNER	0	0	3-419B @ 11¾"	3-421B @ 13"	3-422B @ 14¾"			
T ₁	14"	16"	18"	20"	22"			
T ₂	15"	17"	19"	21"	23"			
T ₃	14"	16"	18"	20"	22"			
X	12'-4"	12'-8"	13'-0"	13'-4"	13'-8"			
Y	8'-5"	8'-9"	9'-1"	9'-5"	9'-9"			
YD³CLASS AA CONCRETE/FT	1.632	1.892	2.160	2.437	2.722			
LB BAR REINF STEEL/FT	154.2	218.0	242.5	329.6	338.1			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.5	5.8	6.1	6.5	6.8			
LB BAR REINF STEEL	788	809	811	923	926			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.7	6.0	6.4	6.7	7.1			
LB BAR REINF STEEL	974	999	1006	1123	1130			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.4	6.7	7.1	7.5	7.9			
LB BAR REINF STEEL	1031	1057	1066	1185	1193			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	7.9	8.3	8.8	9.3	9.8			
LB BAR REINF STEEL	1176	1205	1216	1340	1351			

SINGLE 10'-0" X 7'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	465A @ 6"	702A @ 12"	568A @ 6"	628A @ 6"	631A @ 6"			
BAR C	713 @ 12"	615 @ 6"	716 @ 6"	717 @ 6"	805 @ 6"			
BAR E	432 @ 12"	434 @ 12"	436 @ 12"	438 @ 12"	440 @ 12"			
BAR G IN 2 SLABS	32 - 40I	34 - 40I	34 - 40I	40 - 40I	40 - 40I			
BAR H IN 2 WALLS	20 - 402	20 - 402	20 - 402	22 - 402	22 - 402			
BAR J IN EXT. CORNER	0	0	3-419B @ 11½"	3-421B @ 13"	3-422B @ 14½"			
T ₁	14"	16"	18"	20"	22"			
T ₂	15"	17"	19"	21"	23"			
T ₃	14"	16"	18"	20"	22"			
X	12'-4"	12'-8"	13'-0"	13'-4"	13'-8"			
Y	9'-5"	9'-9"	10'-1"	10'-5"	10'-9"			
YD³CLASS AA CONCRETE/FT	1.718	1.991	2.272	2.561	2.858			
LB BAR REINF STEEL/FT	162.2	226.9	281.0	342.9	384.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.7	6.0	6.4	6.8	7.1			
LB BAR REINF STEEL	813	834	836	924	927			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.9	6.3	6.7	7.0	7.4			
LB BAR REINF STEEL	999	1025	1032	1124	1131			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.6	7.0	7.4	7.8	8.3			
LB BAR REINF STEEL	1057	1083	1092	1186	1194			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	8.2	8.6	9.2	9.7	10.2			
LB BAR REINF STEEL	1202	1232	1243	1341	1352			

SINGLE 10'-0" X 8'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	470A @ 6"	703A @ 12"	573A @ 6"	633A @ 6"	637A @ 6"			
BAR C	531 @ 6"	615 @ 6"	716 @ 6"	717 @ 6"	805 @ 6"			
BAR E	438 @ 12"	440 @ 12"	442 @ 12"	443 @ 12"	445 @ 12"			
BAR G IN 2 SLABS	32 - 40I	34 - 40I	34 - 40I	40 - 40I	40 - 40I			
BAR H IN 2 WALLS	22 - 402	22 - 402	22 - 402	28 - 402	28 - 402			
BAR J IN EXT. CORNER	0	0	3-419B @ 11½"	3-421B @ 13"	3-422B @ 14½"			
T ₁	14"	16"	18"	20"	22"			
T ₂	15"	17"	19"	21"	23"			
T ₃	14"	16"	18"	20"	22"			
X	12'-4"	12'-8"	13'-0"	13'-4"	13'-8"			
Y	10'-5"	10'-9"	11'-1"	11'-5"	11'-9"			
YD³CLASS AA CONCRETE/FT	1.805	2.090	2.383	2.684	2.994			
LB BAR REINF STEEL/FT	171.2	237.7	292.0	360.3	402.2			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.9	6.3	6.7	7.1	7.5			
LB BAR REINF STEEL	838	860	862	999	1001			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.2	6.6	7.0	7.4	7.8			
LB BAR REINF STEEL	1026	1051	1058	1200	1207			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.9	7.3	7.8	8.2	8.7			
LB BAR REINF STEEL	1083	1110	1118	1263	1271			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	8.5	9.0	9.6	10.1	10.7			
LB BAR REINF STEEL	1230	1259	1270	1420	1431			

DATE

REVISION

BY

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
REINFORCED CONCRETE
SINGLE BOX CULVERT
10'X5', 10'X6', 10'X7' AND 10'X8'
NO SCALE
SEPTEMBER 2017

DES. YSK
DRW. EGS
TRA. _____
CHK. JWB

(SUBMITTED)
(APPROVED)

STATE DESIGN POLICY ENGINEER
CHIEF ENGINEER

NUMBER
2401
SHEET 2-M OF 3