STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

TRIPLE 4'-0" X 3'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	404A @ 12"	501A @ 12"	401A @ 6"	401A @ 6"	405A @ 6"			
BAR B	540 @ 12"	526 @ 12"	438 @ 6"	438 @ 6"	439 @ 6"			
BAR C	504 @ 12"	410 @ 6"	410 @ 6"	504 @ 6"	505 @ 6"			
BAR D	506 @ 12"	506 @ 12"	412 @ 6"	412 @ 6"	412 @ 6"			
BAR E	403 @ 12"	403 @ 12"	403 @ 12"	403 @ 12"	404 @ 12"			
BAR F	403 @ 12"	403 @ 12"	403 @ 12"	403 @ 12"	404 @ 12"			
BAR G IN 2 SLABS	48 - 401	48 - 401	48 - 401	48 - 401	48 - 401			
BAR H IN 4 WALLS	18 - 402	18 - 402	18 - 402	18 - 402	18 - 402			
BAR J IN EXT. CORNER	0	0	0	3-401B @ 4½"	3-403B @ 5"			
BAR J IN INT. CORNER	0	0	3-401B @ 4½"	4-401B @ 4½"	4-403B @ 5"			
T_1	8"	8"	8"	8"	9"			
T_2	9"	9"	9"	9"	10"			
T_3	8"	8"	8"	8"	9"			
X	15'-4"	15'-4"	15'-4"	15'-4"	15'-6"			
Y	4'-5"	4'-5"	4'-5"	4'-5"	4'-7"			
YD^3 CLASS AA CONCRETE/FT	1.203	1.203	1.203	1.203	1.326			
LB BAR REINF STEEL/FT	128.2	137.1	175.4	212.2	217.6			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	5.6	5.6	5.6	5.6	5.7			
LB BAR REINF STEEL	918	918	918	918	919			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	5.9	5.9	5.9	5.9	6.0			
LB BAR REINF STEEL	1144	1144	1144	1144	1146			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	6.5	6.5	6.5	6.5	6.7			
LB BAR REINF STEEL	1213	1213	1213	1213	1216			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	8.1	8.1	8.1	8.1	8.2			
LB BAR REINF STEEL	1384	1384	1384	1384	1388			

TRIPLE 4'-0" X 4'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	416A @ 12"	504A @ 12"	411A @ 6"	411A @ 6"	412A @ 6"			
BAR B	544 @ 12"	526 @ 12"	434 @ 6"	436 @ 6"	439 @ 6"			
BAR C	504 @ 12"	410 @ 6"	410 @ 6"	504 @ 6"	505 @ 6"			
BAR D	506 @ 12"	506 @ 12"	412 @ 6"	412 @ 6"	412 @ 6"			
BAR E	408 @ 12"	408 @ 12"	408 @ 12"	408 @ 12"	409 @ 12"			
BAR F	408 @ 12"	408 @ 12"	408 @ 12"	408 @ 12"	409 @ 12"			
BAR G IN 2 SLABS	48 - 401	48 - 401	48 - 401	48 - 401	48 - 401			
BAR H IN 4 WALLS	24 - 402	24 - 402	24 - 402	24 - 402	24 - 402			
BAR J IN EXT. CORNER	0	0	0	3-401B @ 4½"	3-403B @ 5"			
BAR J IN INT. CORNER	0	0	3-401B @ 4½"	4-401B @ 4½"	4-403B @ 5"			
T_1	8"	8"	8"	8"	9"			
T_2	9"	9"	9"	9"	10"			
T_3	8"	8"	8"	8"	9"			
X	15'-4"	15'-4"	15'-4"	15'-4"	15'-6"			
Y	5'-5"	5'-5"	5'-5"	5'-5"	5'-7"			
YD^3 CLASS AA CONCRETE/FT	1.326	1.326	1.326	1.326	1.455			
LB BAR REINF STEEL/FT	140.5	150.0	188.7	226.0	231.0			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	6.4	6.4	6.4	6.4	6.5			
LB BAR REINF STEEL	961	961	961	961	961			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	6.7	6.7	6.7	6.7	6.8			
LB BAR REINF STEEL	1188	1188	1188	1188	1190			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	7.4	7.4	7.4	7.4	7.6			
LB BAR REINF STEEL	1258	1258	1258	1258	1261			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	9.2	9.2	9.2	9.2	9.4			
LB BAR REINF STEEL	1431	1431	1431	1431	1435			

TRIPLE 4'-0" X 5'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	432A @ 12"	508A @ 12"	421A @ 6"	422A @ 6"	426A @ 6"			
BAR B	552 @ 12"	526 @ 12"	432 @ 6"	436 @ 6"	439 @ 6"			
BAR C	504 @ 12"	410 @ 6"	410 @ 6"	504 @ 6"	505 @ 6"			
BAR D	506 @ 12"	506 @ 12"	412 @ 6"	412 @ 6"	412 @ 6"			
BAR E	414 @ 12"	414 @ 12"	507 @ 12"	507 @ 12"	508 @ 12"			
BAR F	414 @ 12"	414 @ 12"	414 @ 12"	414 @ 12"	415 @ 12"			
BAR G IN 2 SLABS	48 - 401	48 - 401	48 - 401	48 - 401	48 - 401			
BAR H IN 4 WALLS	26 - 402	26 - 402	26 - 402	26 - 402	26 - 402			
BAR J IN EXT. CORNER	0	0	0	3-401B @ 4½"	3-403B @ 5"			
BAR J IN INT. CORNER	0	0	3-401B @ 4½"	4-401B @ 4½"	4-403B @ 5"			
T_1	8"	8"	8"	8"	9"			
T_2	9"	9"	9"	9"	10"			
T_3	8"	8"	8"	8"	9"			
X	15'-4"	15'-4"	15'-4"	15'-4"	15'-6"			
Y	6'-5"	6'-5"	6'-5"	6'-5"	6'-7"			
YD^3 CLASS AA CONCRETE/FT	1.450	1.450	1.450	1.450	1.585			
LB BAR REINF STEEL/FT	151.1	160.6	204.3	242.6	248.1			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	6.6	6.6	6.6	6.6	6.8			
LB BAR REINF STEEL	985	985	985	985	985			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	6.9	6.9	6.9	6.9	7.1			
LB BAR REINF STEEL	1212	1212	1212	1212	1215			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	7.7	7.7	7.7	7.7	7.9			
LB BAR REINF STEEL	1283	1283	1283	1283	1286			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	9.5	9.5	9.5	9.5	9.7			
LB BAR REINF STEEL	1456	1456	1456	1456	1461			

TRIPLE 4'-0" X 6'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	444A @ 12"	440A @ 6"	440A @ 6"	520A @ 6"	521A @ 6"			
BAR B	549 @ 12"	526 @ 12"	431 @ 6"	436 @ 6"	439 @ 6"			
BAR C	504 @ 12"	410 @ 6"	410 @ 6"	504 @ 6"	505 @ 6"			
BAR D	506 @ 12"	506 @ 12"	412 @ 6"	412 @ 6"	412 @ 6"			
BAR E	421 @ 12"	512 @ 12"	512 @ 12"	421 @ 6"	422 @ 6"			
BAR F	421 @ 12"	421 @ 12"	421 @ 12"	421 @ 12"	422 @ 12"			
BAR G IN 2 SLABS	48 - 401	48 - 401	48 - 401	48 - 401	48 - 401			
BAR H IN 4 WALLS	34 - 402	34 - 402	34 - 402	34 - 402	34 - 402			
BAR J IN EXT. CORNER	0	0	2-401B @ 4½"	3-402B @ 4½"	3-404B @ 5"			
BAR J IN INT. CORNER	0	0	3-401B @ 4½"	4-401B @ 4½"	4-403B @ 5"			
T_1	8"	8"	8"	8"	9"			
T_2	9"	9"	9"	9"	10"			
T_3	8"	8"	8"	8"	9"			
X	15'-4"	15'-4"	15'-4"	15'-4"	15'-6"			
Y	7'-5"	7'-5"	7'-5"	7'-5"	7'-7"			
YD^3 CLASS AA CONCRETE/FT	1.573	1.573	1.573	1.573	1.715			
LB BAR REINF STEEL/FT	162.7	188.9	229.7	288.4	293.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	6.9	6.9	6.9	6.9	7.0			
LB BAR REINF STEEL	1036	1036	1036	1036	1037			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	7.2	7.2	7.2	7.2	7.3			
LB BAR REINF STEEL	1266	1266	1266	1266	1269			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	8.0	8.0	8.0	8.0	8.2			
LB BAR REINF STEEL	1338	1338	1338	1338	1341			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	9.9	9.9	9.9	9.9	10.1			
LB BAR REINF STEEL	1514	1514	1514	1514	1518			

DATE	REVISION	BY

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

REINFORCED CONCRETE
TRIPLE BOX CULVERT
4'X3', 4'X4', 4'X5' AND 4'X6'

NO SCALE — SEPTEMBER 2017

DES. YSK
DRW. FGS
TRA. ____
CHK. JWB

(SUBMITTED) STATE DESIGN POLICY ENGINEER
(APPROVED) Margaret B Pickelo CHIEF ENGINEER

NUMBER 2403

SHEET 2-A OF 3