STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		634A	839

DOUBLE 10'-0" X 9'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A *	1 - 530A	1 - 428C	1 - 429C	1 - 430C	1 - 432C			
BAR B *	1 - 520A	1 - 808	2 - 613	2 - 710	1 - 1002			
BAR C	531A @ 12"	532A @ 12"	533A @ 12"	431C @ 12"	534A @ 12"			
BAR D *	1 - 402C	1 - 515A	1 - 614	1 - 806	1 - 807			
BAR F	432B @ 12"	436B @ 12"	439B @ 12"	449 @ 12"	446B @ 12"			
BAR G	432B @ 12"	436B @ 12"	439B @ 12"	449 @ 12"	446B @ 12"			
BAR H	0	0	0	0	0			
BAR J IN 2 SLABS	44 - 406	44 - 406	44 - 406	44 - 406	44 - 406			
BAR K IN 3 WALLS	27 - 407	27 - 407	27 - 407	27 - 407	27 - 407			
BAR L IN EXT. CORNER	0	2-499A @ 16"	2-457B @ 14"	3-407C @ 10"	4-409C @ 8"			
BAR L IN INT. CORNER	1 - 495A	3-499A @ 10½"	7-457B @ 6"	9-407C @ 4½"	12-409C @ 4"			
T_1	14"	16"	18"	20"	22"			
T_2	14"	16"	18"	20"	22"			
X	23'-4"	23'-8"	24'-0"	24'-4"	24'-8"			
Y	11'-4"	11'-8"	12'-0"	12'-4"	12'-8"			
CY CLASS A CONCRETE/FT	3.146	3.578	4.019	4.467	4.924			
LB BAR REINF STEEL/FT	239.2	299.6	348.6	432.8	527.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
CY CLASS A CONCRETE	10.2	10.8	11.3	11.9	12.4			
LB BAR REINF STEEL	1161	1165	1169	1174	1178			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
CY CLASS A CONCRETE	10.6	11.2	11.7	12.3	12.9			
LB BAR REINF STEEL	1494	1503	1511	1520	1529			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
CY CLASS A CONCRETE	12.6	13.2	13.7	14.2	14.8			
LB BAR REINF STEEL	1596	1606	1616	1626	1636			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
CY CLASS A CONCRETE	15.5	16.1	16.8	17.5	18.1			
LB BAR REINF STEEL	1838	1851	1864	1877	1890			

DOUBLE 10'-0" X 10'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A *	1 - 535A	1 - 433C	1 - 434C	1 - 435C	1 - 438C			
BAR B *	1 - 520A	1 - 808	2 - 613	2 - 710	1 - 1002			
BAR C	536A @ 12"	537A @ 12"	538A @ 12"	436C @ 12"	539A @ 12"			
BAR D *	1 - 402C	1 - 515A	1 - 614	1 - 806	1 - 807			
BAR F	449 @ 12"	446B @ 12"	446B @ 12"	437C @ 12"	439C @ 12"			
BAR G	449 @ 12"	446B @ 12"	446B @ 12"	437C @ 12"	439C @ 12"			
BAR H	0	0	0	0	0			
BAR J IN 2 SLABS	44 - 406	44 - 406	44 - 406	44 - 406	44 - 406			
BAR K IN 3 WALLS	30 - 407	30 - 407	30 - 407	30 - 407	30 - 407			
BAR L IN EXT. CORNER	0	2-499A @ 16"	2-457B @ 13"	3-407C @ 9"	4-409C @ 7½"			
BAR L IN INT. CORNER	1 - 495A	3-499A @ 10½"	7-457B @ 6"	9-407C @ 4½"	12-409C @ 4"			
T_1	14"	16"	18"	20"	22"			
T_2	14"	16"	18"	20"	22"			
X	23'-4"	23'-8"	24'-0"	24'-4"	24'-8"			
Y	12'-4"	12'-8"	13'-0"	13'-4"	13'-8"			
CY CLASS A CONCRETE/FT	3.270	3.714	4.167	4.628	5.097			
LB BAR REINF STEEL/FT	248.3	307.2	356.2	439.7	534.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
CY CLASS A CONCRETE	10.5	11.0	11.6	12.2	12.8			
LB BAR REINF STEEL	1186	1190	1194	1199	1203			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
CY CLASS A CONCRETE	10.9	11.4	12.0	12.6	13.2			
LB BAR REINF STEEL	1520	1528	1537	1546	1555			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
CY CLASS A CONCRETE	12.9	13.5	14.0	14.6	15.2			
LB BAR REINF STEEL	1622	1632	1642	1652	1662			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
CY CLASS A CONCRETE	15.9	16.5	17.2	17.9	18.6			
LB BAR REINF STEEL	1866	1879	1891	1904	1917			

* NUMBER OF BARS A, B, OR D SHOWN SHALL BE PLACED AT EQUAL SPACES BETWEEN EACH PAIR OF BARS C AT EACH LOCATION.

DOUBLE 10'-0" X 11'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A *	1 - 540A	1 - 440C	1 - 441C	1 - 443C	1 - 445C			
BAR B *	1 - 520A	1 - 808	2 - 613	2 - 710	1 - 1002			
BAR C	541A @ 12"	542A @ 12"	543A @ 12"	444C @ 12"	544A @ 12"			
BAR D *	1 - 402C	1 - 515A	1 - 614	1 - 806	1 - 807			
BAR F	437C @ 12"	439C @ 12"	442C @ 12"	406A @ 12"	446C @ 12"			
BAR G	437C @ 12"	439C @ 12"	442C @ 12"	406A @ 12"	446C @ 12"			
BAR H	0	0	0	0	0			
BAR J IN 2 SLABS	44 - 406	44 - 406	44 - 406	44 - 406	44 - 406			
BAR K IN 3 WALLS	33 - 407	33 - 407	33 - 407	33 - 407	33 - 407			
BAR L IN EXT. CORNER	0	2-499A @ 16"	3-457B @ 12"	4-407C @ 8½"	4-409C @ 7"			
BAR L IN INT. CORNER	1 - 495A	3-499A @ 10½"	7-457B @ 6"	9-407C @ 4½"	12-409C @ 4"			
T_1	14"	16"	18"	20"	22"			
T_2	14"	16"	18"	20"	22"			
X	23'-4"	23'-8"	24'-0"	24'-4"	24'-8"			
Y	13'-4"	13'-8"	14'-0"	14'-4"	14'-8"			
CY CLASS A CONCRETE/FT	3.393	3.850	4.315	4.788	5.270			
LB BAR REINF STEEL/FT	257.9	315.0	370.9	455.4	541.9			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
CY CLASS A CONCRETE	10.7	11.3	11.9	12.5	13.1			
LB BAR REINF STEEL	1211	1215	1219	1224	1228			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
CY CLASS A CONCRETE	11.1	11.7	12.3	13.0	13.6			
LB BAR REINF STEEL	1545	1554	1563	1572	1580			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
CY CLASS A CONCRETE	13.2	13.8	14.4	15.0	15.6			
LB BAR REINF STEEL	1648	1658	1668	1678	1689			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
CY CLASS A CONCRETE	16.2	16.9	17.6	18.4	19.1			
LB BAR REINF STEEL	1893	1906	1919	1932	1945			

DOUBLE 10'-0" X 12'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A *	1 - 545A	1 - 447C	1 - 448C	1 - 450C	1 - 453C			
BAR B *	1 - 520A	1 - 808	2 - 613	2 - 710	1 - 1002			
BAR C	546A @ 12"	547A @ 12"	548A @ 12"	451C @ 12"	549A @ 12"			
BAR D *	1 - 402C	1 - 515A	1 - 614	1 - 806	1 - 807			
BAR F	406A @ 12"	446C @ 12"	449C @ 12"	452C @ 12"	454C @ 12"			
BAR G	406A @ 12"	446C @ 12"	449C @ 12"	452C @ 12"	454C @ 12"			
BAR H	0	0	0	0	0			
BAR J IN 2 SLABS	44 - 406	44 - 406	44 - 406	44 - 406	44 - 406			
BAR K IN 3 WALLS	36 - 407	36 - 407	36 - 407	36 - 407	36 - 407			
BAR L IN EXT. CORNER	0	2-499A @ 16"	3-457B @ 10"	4-407C @ 8"	5-409C @ 6½"			
BAR L IN INT. CORNER	1 - 495A	3-499A @ 10¼"	7-457B @ 6"	9-407C @ 4½"	12-409C @ 4"			
T_1	14"	16"	18"	20"	22"			
T_2	14"	16"	18"	20"	22"			
X	23'-4"	23'-8"	24'-0"	24'-4"	24'-8"			
Y	14'-4"	14'-8"	15'-0"	15'-4"	15'-8"			
CY CLASS A CONCRETE/FT	3.516	3.986	4.463	4.949	5.442			
LB BAR REINF STEEL/FT	267.4	322.7	378.0	462.4	557.4			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
CY CLASS A CONCRETE	11.1	11.7	12.3	12.9	13.5			
LB BAR REINF STEEL	1237	1241	1245	1250	1254			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
CY CLASS A CONCRETE	11.4	12.1	12.7	13.4	14.0			
LB BAR REINF STEEL	1572	1581	1590	1599	1607			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
CY CLASS A CONCRETE	13.6	14.2	14.8	15.4	16.1			
LB BAR REINF STEEL	1676	1686	1696	1706	1716			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
CY CLASS A CONCRETE	16.7	17.4	18.2	18.9	19.7			
LB BAR REINF STEEL	1921	1934	1947	1960	1973			

AS-BUILT

DATE	REVISIONS	BY

GEORGIA
DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

SPECIAL DESIGN
REINFORCED CONCRETE
DOUBLE BOX CULVERT

NO SCALE — MARCH 2003

BRIDGE SHEET 2Q OF 3

DESIGNED WEI — CHECKED X — REVIEWED JPT/MCD
DRAWN KWK — DESIGN GROUP WEI — APPROVED PVL