CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @ 12 x 7 REINFORCED CONCRETE BOX BRIDGE

	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	10.5	10	8	8	26.00	7	2	6	25.50	7	2	6	25.50	5	2	6	26.50	7	2	6	26.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	126	48	6	2.19	602
	3	14	14	8	8	26.00	7	2	6	25.50	7	2	6	25.50	7	1	12	26.50	9	1	12	26.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	126	48	6	2.81	582
	5	14	14	8	8	26.00	7	2	6	25.50	6	2	6	25.50	7	1	12	26.50	9	1	12	26.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	152	0	6	2.81	540
	10	16	16	8	8	26.00	8	2	6	25.50	6	2	6	25.50	8	1	12	26.50	7	2	6	26.50	4	2	12	7.00	6	2	12	7.00	4	2	12	7.00	152	0	6	3.14	613
Moment Break	20	16	16	8	8	26.00	4	2	12	12.67	9	2	6	25.50	11	1	12	26.50	4	2	12	12.67	4	2	12	7.00	5	4	6	7.00	4	2	12	7.00	152	0	6	3.14	578
	30	21	21	9	8	26.17	4	2	12	12.67	8	2	6	25.67	11	1	12	26.67	4	2	12	12.67	4	2	12	7.00	5	4	6	7.00	5	2	12	7.00	152	0	6	4.02	547
	40	26	26	11	8	26.50	4	2	12	12.67	8	2	6	26.00	11	1	12	27.00	4	2	12	12.67	4	2	12	7.00	6	2	12	7.00	4	4	6	7.00	152	0	6	4.98	547
	50	31	31	12	8	26.67	4	2	12	12.67	8	2	6	26.17	11	1	12	27.17	4	2	12	12.67	4	2	12	7.00	6	2	12	7.00	7	2	12	7.00	152	0	6	5.89	559
	60	34	34	13	8	26.83	4	2	12	12.67	9	2	6	26.33	9	2	6	27.33	4	2	12	12.67	4	2	12	7.00	5	2	12	7.00	7	2	12	7.00	152	0	6	6.47	633

2 @ 12 x 8 REINFORCED CONCRETE BOX BRIDGE

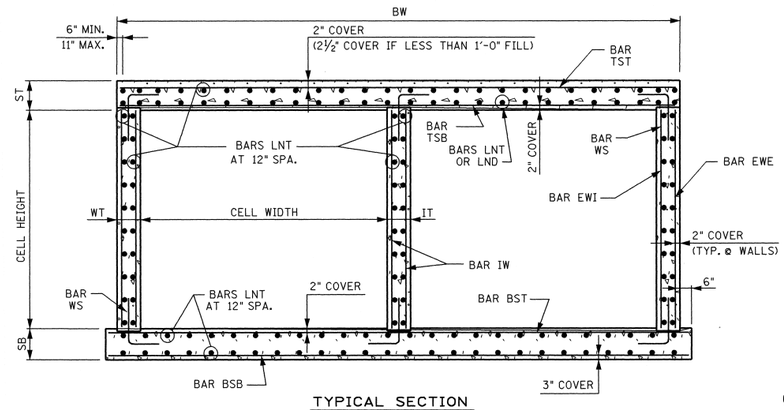
	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	10.5	10	8	8	26.00	7	2	6	25.50	7	2	6	25.50	5	2	6	26.50	7	2	6	26.50	4	2	12	8.00	5	2	12	8.00	4	2	12	8.00	132	48	6	2.27	611
	3	14	14	8	8	26.00	7	2	6	25.50	7	2	6	25.50	7	1	12	26.50	9	1	12	26.50	4	2	12	8.00	5	2	12	8.00	4	2	12	8.00	132	48	6	2.88	591
	5	14	14	8	8	26.00	7	2	6	25.50	6	2	6	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	8.00	5	2	12	8.00	4	2	12	8.00	158	0	6	2.88	567
	10	16	16	8	8	26.00	8	2	6	25.50	6	2	6	25.50	8	1	12	26.50	10	1	12	26.50	4	2	12	8.00	5	4	6	8.00	4	2	12	8.00	158	0	6	3.21	638
Moment Break	20	16	16	9	8	26.17	4	2	12	12.67	9	2	6	25.67	11	1	12	26.67	4	2	12	12.67	4	2	12	8.00	6	4	6	8.00	4	2	12	8.00	158	0	6	3.28	605
	30	21	21	10	8	26.33	4	2	12	12.67	8	2	6	25.83	11	1	12	26.83	4	2	12	12.67	4	2	12	8.00	6	4	6	8.00	5	2	12	8.00	158	0	6	4.17	575
	40	26	26	12	8	26.67	4	2	12	12.67	8	2	6	26.17	11	1	12	27.17	4	2	12	12.67	4	2	12	8.00	7	2	12	8.00	4	4	6	8.00	158	0	6	5.15	568
	50	31	31	13	8	26.83	4	2	12	12.67	8	2	6	26.33	11	1	12	27.33	4	2	12	12.67	4	2	12	8.00	6	4	6	8.00	7	2	12	8.00	158	0	6	6.07	597
	60	34	34	14	8	27.00	4	2	12	12.67	9	2	6	26.50	9	2	6	27.50	4	2	12	12.67	4	2	12	8.00	5	4	6	8.00	7	2	12	8.00	162	0	6	6.66	666

2 @12 x 9 REINFORCED CONCRETE BOX BRIDGE

	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	10.5	10	8	8	26.00	7	2	6	25.50	7	2	6	25.50	5	2	6	26.50	7	2	6	26.50	4	2	12	9.00	5	2	12	9.00	4	2	12	9.00	134	48	6	2.34	617
	3	14	14	8	8	26.00	7	2	6	25.50	7	2	6	25.50	7	1	12	26.50	9	1	12	26.50	4	2	12	9.00	6	2	12	9.00	4	2	12	9.00	134	48	6	2.96	606
	5	14	14	8	8	26.00	7	2	6	25.50	6	2	6	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	9.00	6	2	12	9.00	4	2	12	9.00	160	0	6	2.96	581
	10	16	16	8	8	26.00	8	2	6	25.50	6	2	6	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	9.00	6	4	6	9.00	4	2	12	9.00	160	0	6	3.28	640
Moment Break	20	16	16	10	8	26.33	4	2	12	12.66	9	2	6	25.83	8	2	6	26.83	4	2	12	12.66	4	2	12	9.00	6	4	6	9.00	4	2	12	9.00	160	0	6	3.43	618
	30	21	21	11	8	26.50	4	2	12	12.66	8	2	6	26.00	11	1	12	27.00	4	2	12	12.66	4	2	12	9.00	7	4	6	9.00	5	2	12	9.00	160	0	6	4.33	607
	40	26	26	13	8	26.83	4	2	12	12.66	8	2	6	26.33	11	1	12	27.33	4	2	12	12.66	4	2	12	9.00	6	4	6	9.00	4	4	6	9.00	160	0	6	5.33	597
	50	31	31	15	8	27.17	4	2	12	12.66	8	2	6	26.67	8	2	6	27.67	4	2	12	12.66	4	2	12	9.00	6	4	6	9.00	7	2	12	9.00	164	0	6	6.35	617
	60	34	34	16	8	27.33	4	2	12	12.66	9	2	6	26.83	9	2	6	27.83	4	2	12	12.66	4	2	12	9.00	6	4	6	9.00	7	2	12	9.00	164	0	6	6.95	698

Note: Maximum fill height shown in the table is measured from the bottom of the top slab. To obtain the total fill height from the flow line, add the height of the box.
Note: When height of fill above the top slab is less than 1 foot, the top mat of reinforcing in the top slab shall be constructed with 2-1/2 inches of concrete cover.

The following bar information applies to all fill cases in the tables above:
Bars LNT Size = 4 Spacing = 12 in.
Bars LND Size = 4 Spacing = 6 in.
Bars WS Size = 8 Length = 5.00 ft. Spacing = 12 in.



TYPICAL SECTION

NOTE: FOR DESCRIPTIONS OF BOX DIMENSIONS AND REINFORCING BAR DESIGNATIONS SEE STANDARD DRAWING NO. STD-17-5.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD REINFORCED CONCRETE BOX BRIDGE INTERIOR SECTION SPANS: 2 BARRELS AT 12'-0" CLEAR HEIGHTS 7'-0" THRU 9'-0" 0' THRU 60' FILL 2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

DESIGNED BY	RLL/ALP	DATE	12-09
DRAWN BY	KEVIN MARTINKO	DATE	1-10
SUPERVISED BY	EPW/RLC	DATE	12-09
CHECKED BY	RLL/ALP	DATE	2-10

STD-17-77

DGN: d:\data\standards\drawings\structures\1-6-10\Culvert Files 1-6-10\12' Span\STD-17-76¢77¢78_2barrel_box12'.dgn
DATE: 2/25/2010
STAGE: Stage 2