1 @ 8 x 6 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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 LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	9.5	9	8	9.33	4	1	12	8.83	6	2	6	8.83	8	1	12	9.83	4	1	12	9.83	4	2	12	6.00	5	2	12	6.00	54	16	4	0.86	192
3	11	11	8	9.33	4	1	12	8.83	7	2	6	8.83	8	1	12	9.83	4	1	12	9.83	4	2	12	6.00	5	2	12	6.00	54	16	4	0.96	202
5	9	9	8	9.33	4	1	12	8.83	7	2	6	8.83	6	2	6	9.83	4	1	12	9.83	4	2	12	6.00	5	2	12	6.00	62	0	4	0.84	193
10	9	9	8	9.33	4	1	12	8.83	8	2	6	8.83	8	1	12	9.83	4	1	12	9.83	4	2	12	6.00	5	2	12	6.00	62	0	4	0.84	201
20	10	11	8	9.33	4	1	12	8.83	7	2	6	8.83	7	2	6	9.83	4	1	12	9.83	4	2	12	6.00	6	2	12	6.00	62	0	4	0.94	210
30	14	15	9	9.50	4	1	12	9.00	7	2	6	9.00	9	1	12	10.00	4	1	12	10.00	4	2	12	6.00	6	2	12	6.00	62	0	4	1.23	204
40	18	18	10	9.67	4	1	12	9.17	7	2	6	9.17	9	1	12	10.17	4	1	12	10.17	4	2	12	6.00	6	2	12	6.00	62	0	4	1.50	206
50	21	21	11	9.83	4	1	12	9.33	7	2	6	9.33	7	2	6	10.33	4	1	12	10.33	4	2	12	6.00	5	2	12	6.00	62	0	4	1.75	209
60	24	24	12	10.00	4	1	12	9.50	7	2	6	9.50	7	2	6	10.50	4	1	12	10.50	4	2	12	6.00	5	2	12	6.00	66	0	4	2.00	213

1 @ 8 x 7 REINFORCED CONCRETE BOX BRIDGE

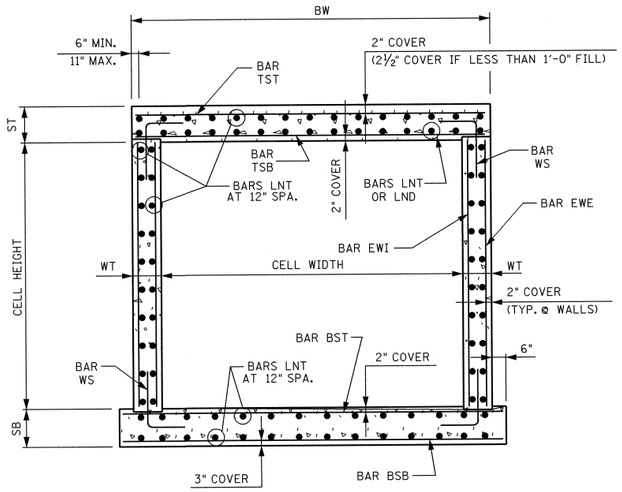
Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	9.5	9	8	9.33	4	1	12	8.83	6	2	6	8.83	8	1	12	9.83	4	1	12	9.83	4	2	12	7.00	5	2	12	7.00	58	16	4	0.91	198
3	11	11	8	9.33	4	1	12	8.83	7	2	6	8.83	8	1	12	9.83	4	1	12	9.83	4	2	12	7.00	5	2	12	7.00	58	16	4	1.01	208
5	9	9	8	9.33	4	1	12	8.83	7	2	6	8.83	6	2	6	9.83	4	1	12	9.83	4	2	12	7.00	5	2	12	7.00	66	0	4	0.89	200
10	9	9	8	9.33	4	1	12	8.83	8	2	6	8.83	6	2	6	9.83	4	1	12	9.83	4	2	12	7.00	6	2	12	7.00	66	0	4	0.89	217
20	10	11	8	9.33	4	1	12	8.83	7	2	6	8.83	7	2	6	9.83	4	1	12	9.83	4	2	12	7.00	7	2	12	7.00	66	0	4	0.98	224
30	14	16	10	9.67	4	1	12	9.17	7	2	6	9.17	6	2	6	10.17	4	1	12	10.17	4	2	12	7.00	5	4	6	7.00	66	0	4	1.38	217
40	18	19	11	9.83	4	1	12	9.33	7	2	6	9.33	9	1	12	10.33	4	1	12	10.33	4	2	12	7.00	5	4	6	7.00	66	0	4	1.66	222
50	21	21	12	10.00	4	1	12	9.50	7	2	6	9.50	7	2	6	10.50	4	1	12	10.50	4	2	12	7.00	7	2	12	7.00	70	0	4	1.88	233
60	24	24	13	10.17	4	1	12	9.67	7	2	6	9.67	7	2	6	10.67	4	1	12	10.67	4	2	12	7.00	5	4	6	7.00	70	0	4	2.14	235

1 @ 8 x 8 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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 LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	9.5	9	8	9.33	4	1	12	8.83	6	2	6	8.83	8	1	12	9.83	8	1	12	9.83	4	2	12	8.00	5	2	12	8.00	62	16	4	0.96	224
3	11	11	8	9.33	4	1	12	8.83	7	2	6	8.83	8	1	12	9.83	4	1	12	9.83	4	2	12	8.00	5	2	12	8.00	62	16	4	1.06	214
5	9	9	8	9.33	4	1	12	8.83	7	2	6	8.83	6	2	6	9.83	4	1	12	9.83	4	2	12	8.00	5	2	12	8.00	70	0	4	0.94	206
10	9	9	8	9.33	4	1	12	8.83	8	2	6	8.83	6	2	6	9.83	4	1	12	9.83	4	2	12	8.00	5	4	6	8.00	70	0	4	0.94	233
20	10	12	9	9.50	4	1	12	9.00	7	2	6	9.00	9	1	12	10.00	4	1	12	10.00	4	2	12	8.00	6	4	6	8.00	70	0	4	1.13	242
30	14	16	11	9.83	4	1	12	9.33	7	2	6	9.33	9	1	12	10.33	4	1	12	10.33	4	2	12	8.00	6	4	6	8.00	70	0	4	1.50	245
40	18	19	12	10.00	4	1	12	9.50	7	2	6	9.50	9	1	12	10.50	4	1	12	10.50	4	2	12	8.00	6	4	6	8.00	74	0	4	1.79	249
50	21	21	14	10.33	4	1	12	9.83	7	2	6	9.83	7	2	6	10.83	4	1	12	10.83	4	2	12	8.00	6	4	6	8.00	74	0	4	2.10	260
60	24	24	15	10.50	4	1	12	10.00	7	2	6	10.00	7	2	6	11.00	4	1	12	11.00	4	2	12	8.00	6	4	6	8.00	74	0	4	2.37	261

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 = 5 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.

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD REINFORCED CONCRETE BOX BRIDGE INTERIOR SECTION SPANS: 1 BARREL AT 8'-0" CLEAR HEIGHTS 6'-0" THRU 8'-0" 0' THRU 60' FILL 2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-53

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

Plotted: 14-JAN-2010 09:43
D:\Projects\StdBoxes\tables\1-6-10\Offfield Culvert Files 1-6-10\8' Spans\std-17-52&53-1barrel_box8.dgn