3 @14 x 8 REINFORCED CONCRETE BOX BRIDGE

	Maximum Fill Height ft.	Dimensions					Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	SB in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.		
Continuous	No Fill	11.5	11	8	8	44.67	7	2	6	44.17	7	2	6	44.17	5	2	6	45.17	6	2	6	45.17	4	2	12	8.00	5	2	12	8.00	4	4	12	8.00	198	44	8	3.93	925
	3	14	14	8	8	44.67	7	2	6	44.17	7	2	6	44.17	5	2	6	45.17	8	1	12	45.17	4	2	12	8.00	5	2	12	8.00	4	4	12	8.00	198	44	8	4.69	910
	5	14	14	8	8	44.67	10	1	12	44.17	6	2	6	44.17	8	1	12	45.17	9	1	12	45.17	4	2	12	8.00	6	2	12	8.00	4	4	12	8.00	242	0	8	4.69	921
	10	16	16	8	8	44.67	7	2	6	44.17	6	2	6	44.17	8	1	12	45.17	7	2	6	45.17	4	2	12	8.00	6	2	12	8.00	4	4	12	8.00	242	0	8	5.25	943
Moment Break	20	17	17	9	8	44.83	4	3	12	14.66	9	2	6	44.33	9	2	6	45.33	4	3	12	14.66	4	2	12	8.00	7	2	12	8.00	4	4	12	8.00	242	0	8	5.60	1002
	30	23	24	10	8	45.00	4	3	12	14.66	9	2	6	44.50	9	2	6	45.50	4	3	12	14.66	4	2	12	8.00	7	2	12	8.00	5	4	12	8.00	246	0	8	7.49	1019
	40	29	29	12	8	45.33	4	3	12	14.66	9	2	6	44.83	9	2	6	45.83	4	3	12	14.66	4	2	12	8.00	5	4	6	8.00	6	4	12	8.00	246	0	8	9.19	1039
	50	33	33	13	8	45.50	4	3	12	14.66	9	2	6	45.00	9	2	6	46.00	4	3	12	14.66	4	2	12	8.00	5	4	6	8.00	7	4	12	8.00	246	0	8	10.41	1058
	60	37	37	14	8	45.67	4	3	12	14.66	9	2	6	45.17	9	2	6	46.17	4	3	12	14.66	4	2	12	8.00	6	2	12	8.00	8	4	12	8.00	246	0	8	11.63	1071

3 @ 14 x 9 REINFORCED CONCRETE BOX BRIDGE

	Maximum Fill Height ft.	Dimensions					Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	SB in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.		
Continuous	No Fill	11.5	11	8	8	44.67	7	2	6	44.17	7	2	6	44.17	5	2	6	45.17	6	2	6	45.17	4	2	12	9.00	5	2	12	9.00	4	4	12	9.00	206	42	8	4.02	934
	3	14	14	8	8	44.67	7	2	6	44.17	7	2	6	44.17	5	2	6	45.17	6	2	6	45.17	4	2	12	9.00	6	2	12	9.00	4	4	12	9.00	206	42	8	4.79	942
	5	14	14	8	8	44.67	10	1	12	44.17	6	2	6	44.17	8	1	12	45.17	9	1	12	45.17	4	2	12	9.00	6	2	12	9.00	4	4	12	9.00	250	0	8	4.79	934
	10	16	16	8	8	44.67	7	2	6	44.17	6	2	6	44.17	8	1	12	45.17	7	2	6	45.17	4	2	12	9.00	6	4	6	9.00	4	4	12	9.00	250	0	8	5.35	982
Moment Break	20	17	17	10	8	45.00	4	3	12	14.66	9	2	6	44.50	9	2	6	45.50	4	3	12	14.66	4	2	12	9.00	6	4	6	9.00	4	4	12	9.00	254	0	8	5.77	1037
	30	23	24	11	8	45.17	4	3	12	14.66	9	2	6	44.67	9	2	6	45.67	4	3	12	14.66	4	2	12	9.00	6	4	6	9.00	5	4	12	9.00	254	0	8	7.68	1053
	40	29	29	13	8	45.50	4	3	12	14.66	9	2	6	45.00	9	2	6	46.00	4	3	12	14.66	4	2	12	9.00	6	4	6	9.00	6	4	12	9.00	254	0	8	9.40	1074
	50	33	34	14	8	45.67	4	3	12	14.66	9	2	6	45.17	9	2	6	46.17	4	3	12	14.66	4	2	12	9.00	6	4	6	9.00	7	4	12	9.00	254	0	8	10.77	1096
	60	37	37	16	8	46.00	4	3	12	14.66	9	2	6	45.50	9	2	6	46.50	4	3	12	14.66	4	2	12	9.00	7	2	12	9.00	8	4	12	9.00	258	0	8	11.95	1108

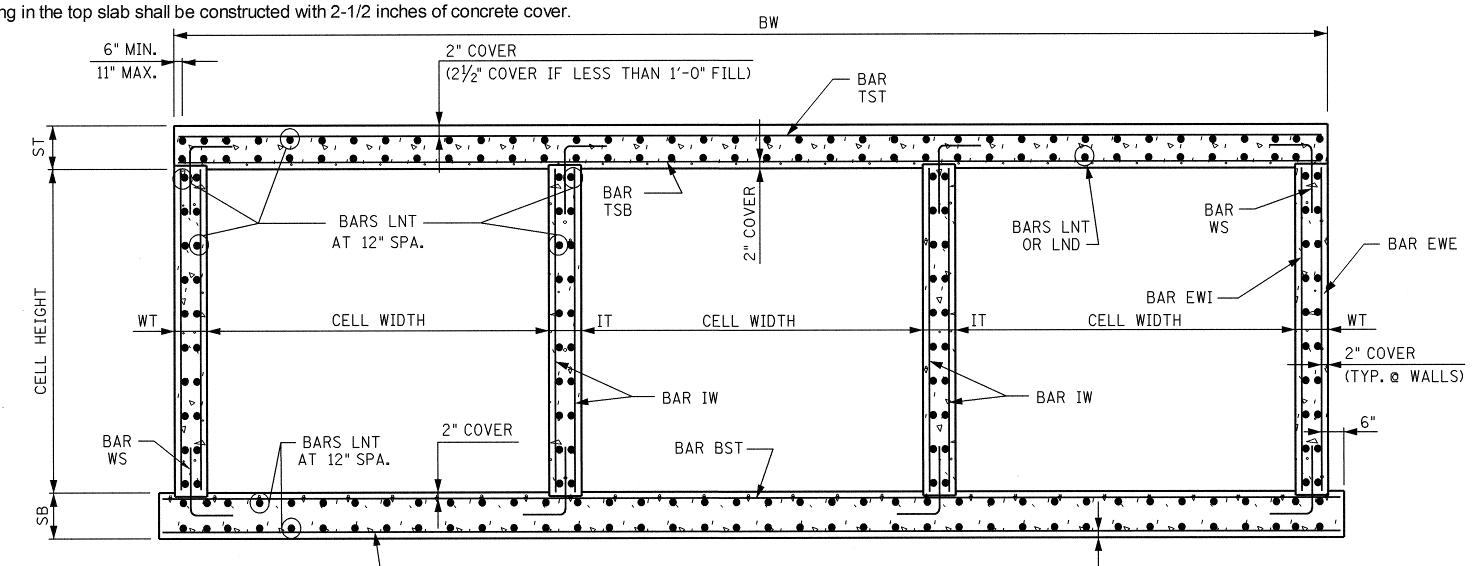
3 @ 14 x 10 REINFORCED CONCRETE BOX BRIDGE

	Maximum Fill Height ft.	Dimensions					Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	SB in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.		
Continuous	No Fill	11.5	11	8	8	44.67	7	2	6	44.17	7	2	6	44.17	7	1	12	45.17	6	2	6	45.17	4	2	12	10.00	6	2	12	10.00	4	4	12	10.00	214	42	8	4.12	953
	3	14	14	8	8	44.67	7	2	6	44.17	7	2	6	44.17	8	1	12	45.17	6	2	6	45.17	4	2	12	10.00	5	4	6	10.00	4	4	12	10.00	214	42	8	4.89	993
	5	14	14	8	8	44.67	10	1	12	44.17	6	2	6	44.17	8	1	12	45.17	9	1	12	45.17	4	2	12	10.00	6	4	6	10.00	4	4	12	10.00	258	0	8	4.89	976
	10	16	16	8	8	44.67	7	2	6	44.17	6	2	6	44.17	8	1	12	45.17	7	2	6	45.17	4	2	12	10.00	7	4	6	10.00	4	4	12	10.00	258	0	8	5.45	1019
Moment Break	20	17	17	10	8	45.00	4	3	12	14.66	9	2	6	44.50	9	2	6	45.50	4	3	12	14.66	4	2	12	10.00	7	4	6	10.00	4	4	12	10.00	262	0	8	5.89	1074
	30	23	24	12	8	45.33	4	3	12	14.66	9	2	6	44.83	9	2	6	45.83	4	3	12	14.66	4	2	12	10.00	7	4	6	10.00	5	4	12	10.00	262	0	8	7.88	1094
	40	29	29	14	8	45.67	4	3	12	14.66	9	2	6	45.17	9	2	6	46.17	4	3	12	14.66	4	2	12	10.00	7	4	6	10.00	6	4	12	10.00	262	0	8	9.62	1117
	50	33	34	16	8	46.00	4	3	12	14.66	9	2	6	45.50	9	2	6	46.50	4	3	12	14.66	4	2	12	10.00	6	4	6	10.00	7	4	12	10.00	266	0	8	11.10	1124
	60	37	37	17	8	46.17	4	3	12	14.66	9	2	6	45.67	9	2	6	46.67	4	3	12	14.66	4	2	12	10.00	6	4	6	10.00	8	4	12	10.00	266	0	8	12.20	1151

3 @ 14 x 11 REINFORCED CONCRETE BOX BRIDGE

	Maximum Fill Height ft.	Dimensions					Bars TST				Bars TSB				Bars BST				Bars BSB				Bars EWE				Bars EWI				Bars IW				Bars LNT	Bars LND	Bars WS	Concrete CY/LF	Reinf. Steel LB/LF
		ST in.	SB in.	WT in.	IT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.		
Continuous	No Fill	11.5	11	8	8	44.67	7	2	6	44.17	7	2	6	44.17	7	1	12	45.17	6	2	6	45.17	4	2	12	11.00	6	2	12	11.00	4	4	12	11.00	222	42	8	4.22	965
	3	14	14	8	8	44.67	7	2	6	44.17	7	2	6	44.17	8	1	12	45.17	6	2	6	45.17	4	2	12	11.00	7	2	12	11.00	4	4	12	11.00	222	42	8	4.99	1005
	5	14	14	8	8	44.67	10	1	12	44.17	6	2	6	44.17	8	1	12	45.17	7	2	6	45.17	4	2	12	11.00	7	4	6	11.00	4	4	12	11.00	266	0	8	4.99	1046
	10	16	16	9	8	44.83	7	2	6	44.33	6	2	6	44.33	8	1	12	45.33	7	2	6	45.33	4	2	12	11.00	7	4	6	11.00	4	4	12	11.00	266	0	8	5.63	1039
Moment Break	20	17	17	11	8	45.17	4	3	12	14.66	9	2	6	44.67	9	2	6	45.67	4	3	12	14.66	4	2	12	11.00	8	4	6	11.00	4	4	12	11.00	270	0	8	6.08	1122
	30	23	24	14	8	45.67	4	3	12	14.66	9	2	6	45.17	9	2	6	46.17	4	3	12	14.66	4	2	12	11.00	7	4	6	11.00	5	4	12	11.00	270	0	8	8.19	1118
	40	29	29	16	8	46.00	4	3	12	14.66	9	2	6	45.50	9	2	6	46.50	4	3	12	14.66	4	2	12	11.00	7	4	6	11.00	6	4	12	11.00	274	0	8	9.95	1145
	50	33	34	18	8	46.33	4	3	12	14.66	9	2	6	45.83	9	2	6	46.83	4	3	12	14.66	4	2	12	11.00	7	4	6	11.00	7	4	12	11.00	274	0	8	11.45	1173
	60	37	38	19	8	46.50	4	3	12	14.66	9	2	6	46.00	9	2	6	47.00	4	3	12	14.66	4	2	12	11.00	7	4	6	11.00	8	4	12	11.00	274	0	8	12.71	1203

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 = 12 in.
Bars WS Size = 8 Length = 5.00 ft. Spacing = 12 in.



TYPICAL SECTION

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

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

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: 3 BARRELS AT 14'-0" CLEAR HEIGHTS 8'-0" THRU 11'-0" 0' THRU 60' FILL 2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-100

D:\d_drive\stdboxes\tables\1-6-10\Official Culvert Files 1-6-10\14' Span\STD-17-99¢100¢101_3barrel_box14'.dgn 30-JUL-2010 07:52