CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @14 x 5 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	11.5	11	8	8	30.00	7	2	6	29.50	7	2	6	29.50	5	2	6	30.50	7	2	6	30.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	122	56	6	2.49	652
	3	14	14	8	8	30.00	7	2	6	29.50	7	2	6	29.50	7	1	12	30.50	7	2	6	30.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	122	56	6	3.01	651
	5	14	14	8	8	30.00	8	2	6	29.50	6	2	6	29.50	7	1	12	30.50	8	2	6	30.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	152	0	6	3.01	677
	10	17	17	8	8	30.00	8	2	6	29.50	6	2	6	29.50	8	1	12	30.50	11	1	12	30.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	152	0	6	3.57	695
Moment Break	20	17	17	8	8	30.00	4	2	12	14.66	9	2	6	29.50	9	2	6	30.50	4	2	12	14.66	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	152	0	6	3.57	653
	30	23	23	8	8	30.00	4	2	12	14.66	9	2	6	29.50	9	2	6	30.50	4	2	12	14.66	4	2	12	5.00	5	2	12	5.00	5	2	12	5.00	152	0	6	4.70	656
	40	29	29	8	8	30.00	4	2	12	14.66	9	2	6	29.50	9	2	6	30.50	4	2	12	14.66	4	2	12	5.00	5	2	12	5.00	6	2	12	5.00	152	0	6	5.83	661
	50	33	33	9	8	30.17	4	2	12	14.66	9	2	6	29.67	9	2	6	30.67	4	2	12	14.66	4	2	12	5.00	5	2	12	5.00	5	4	6	5.00	152	0	6	6.65	669
	60	37	37	10	8	30.33	4	2	12	14.66	9	2	6	29.83	9	2	6	30.83	4	2	12	14.66	4	2	12	5.00	5	2	12	5.00	6	4	6	5.00	152	0	6	7.47	680

2 @14 x 6 REINFORCED CONCRETE BOX BRIDGE

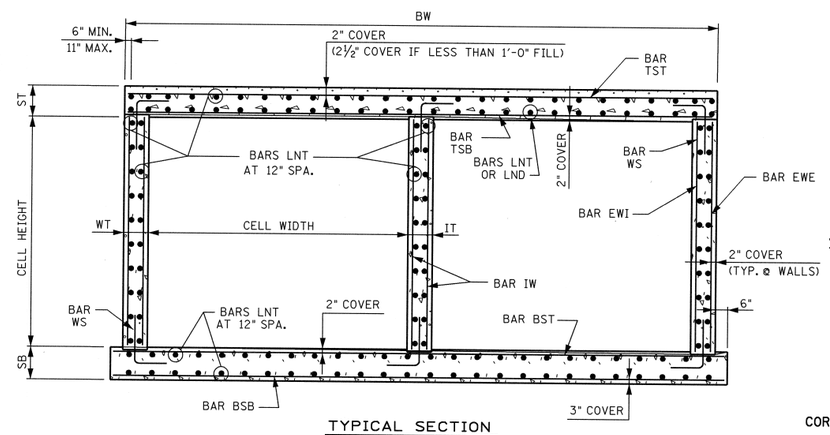
	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing 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	11.5	11	8	8	30.00	7	2	6	29.50	7	2	6	29.50	5	2	6	30.50	7	2	6	30.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	128	56	6	2.56	661
	3	14	14	8	8	30.00	7	2	6	29.50	7	2	6	29.50	7	1	12	30.50	9	1	12	30.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	128	56	6	3.08	639
	5	14	14	8	8	30.00	8	2	6	29.50	6	2	6	29.50	7	1	12	30.50	7	2	6	30.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	158	0	6	3.08	647
	10	17	17	8	8	30.00	8	2	6	29.50	6	2	6	29.50	8	1	12	30.50	11	1	12	30.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	158	0	6	3.65	704
Moment Break	20	17	17	8	8	30.00	4	2	12	14.66	9	2	6	29.50	9	2	6	30.50	4	2	12	14.66	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	158	0	6	3.65	661
	30	23	24	8	8	30.00	4	2	12	14.66	9	2	6	29.50	9	2	6	30.50	4	2	12	14.66	4	2	12	6.00	5	2	12	6.00	5	2	12	6.00	158	0	6	4.87	666
	40	29	29	9	8	30.17	4	2	12	14.66	9	2	6	29.67	9	2	6	30.67	4	2	12	14.66	4	2	12	6.00	5	2	12	6.00	6	2	12	6.00	158	0	6	5.97	674
	50	33	33	10	8	30.33	4	2	12	14.66	9	2	6	29.83	9	2	6	30.83	4	2	12	14.66	4	2	12	6.00	5	2	12	6.00	5	4	6	6.00	158	0	6	6.80	683
	60	37	37	11	8	30.50	4	2	12	14.66	9	2	6	30.00	9	2	6	31.00	4	2	12	14.66	4	2	12	6.00	5	2	12	6.00	6	4	6	6.00	158	0	6	7.64	696

2 @14 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	11.5	11	8	8	30.00	7	2	6	29.50	7	2	6	29.50	5	2	6	30.50	7	2	6	30.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	134	56	6	2.64	670
	3	14	14	8	8	30.00	7	2	6	29.50	7	2	6	29.50	7	1	12	30.50	9	1	12	30.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	134	56	6	3.15	648
	5	14	14	8	8	30.00	8	2	6	29.50	6	2	6	29.50	7	1	12	30.50	7	2	6	30.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	164	0	6	3.15	656
	10	17	17	8	8	30.00	8	2	6	29.50	6	2	6	29.50	8	1	12	30.50	11	1	12	30.50	4	2	12	7.00	6	2	12	7.00	4	2	12	7.00	164	0	6	3.72	719
Moment Break	20	17	17	8	8	30.00	4	2	12	14.66	9	2	6	29.50	9	2	6	30.50	4	2	12	14.66	4	2	12	7.00	5	4	6	7.00	4	2	12	7.00	164	0	6	3.72	685
	30	23	24	9	8	30.17	4	2	12	14.66	9	2	6	29.67	9	2	6	30.67	4	2	12	14.66	4	2	12	7.00	5	4	6	7.00	5	2	12	7.00	164	0	6	5.01	692
	40	29	29	10	8	30.33	4	2	12	14.66	9	2	6	29.83	9	2	6	30.83	4	2	12	14.66	4	2	12	7.00	6	2	12	7.00	6	2	12	7.00	164	0	6	6.12	693
	50	33	33	12	8	30.67	4	2	12	14.66	9	2	6	30.17	9	2	6	31.17	4	2	12	14.66	4	2	12	7.00	5	2	12	7.00	7	2	12	7.00	164	0	6	7.04	698
	60	37	37	13	8	30.83	4	2	12	14.66	9	2	6	30.33	9	2	6	31.33	4	2	12	14.66	4	2	12	7.00	5	2	12	7.00	6	4	6	7.00	164	0	6	7.89	714

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 14'-0"
CLEAR HEIGHTS 5'-0" THRU 7'-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-17-79

DGN: dgn\std*dbcxxx*tables\1-6-10\Offsite\Culvert Files 1-6-10\14' Span\STD-17-79&80&81_2barrel_box14'.dgn
10:26 AM 2010