CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @ 12 x 4 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	4	2	6	26.50	6	2	6	26.50	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	108	48	6	1.97	527
	3	14	14	8	8	26.00	7	2	6	25.50	7	2	6	25.50	7	1	12	26.50	6	2	6	26.50	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	108	48	6	2.59	546
	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	4.00	5	2	12	4.00	4	2	12	4.00	134	0	6	2.59	514
	10	16	16	8	8	26.00	8	2	6	25.50	6	2	6	25.50	5	2	6	26.50	7	2	6	26.50	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	134	0	6	2.91	565
Moment Break	20	16	16	8	8	26.00	4	2	12	12.67	9	2	6	25.50	9	2	6	26.50	4	2	12	12.67	4	2	12	4.00	5	2	12	4.00	4	2	12	4.00	134	0	6	2.91	576
	30	21	21	8	8	26.00	4	2	12	12.67	8	2	6	25.50	11	1	12	26.50	4	2	12	12.67	4	2	12	4.00	5	2	12	4.00	5	2	12	4.00	134	0	6	3.73	502
	40	26	26	8	8	26.00	4	2	12	12.67	8	2	6	25.50	11	1	12	26.50	4	2	12	12.67	4	2	12	4.00	5	2	12	4.00	4	4	6	4.00	134	0	6	4.55	505
	50	31	31	8	8	26.00	4	2	12	12.67	8	2	6	25.50	11	1	12	26.50	4	2	12	12.67	4	2	12	4.00	5	2	12	4.00	7	2	12	4.00	134	0	6	5.37	510
	60	34	34	8	8	26.00	4	2	12	12.67	9	2	6	25.50	9	2	6	26.50	4	2	12	12.67	4	2	12	4.00	5	2	12	4.00	7	2	12	4.00	134	0	6	5.86	587

2 @ 12 x 5 REINFORCED CONCRETE BOX BRIDGE

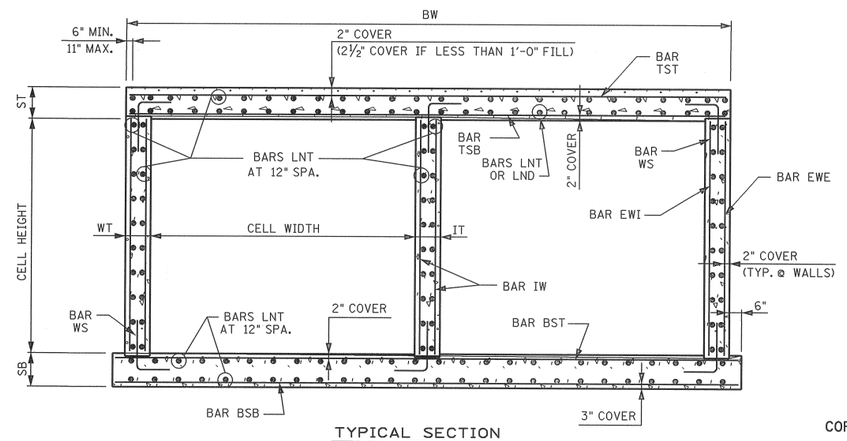
Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing 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
No Fill	10.5	10	8	8	26.00	7	2	6	25.50	7	2	6	25.50	4	2	6	26.50	7	2	6	26.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	114	48	6	2.05	564
3	14	14	8	8	26.00	7	2	6	25.50	7	2	6	25.50	7	1	12	26.50	6	2	6	26.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	114	48	6	2.66	554
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	5.00	5	2	12	5.00	4	2	12	5.00	140	0	6	2.66	523
10	16	16	8	8	26.00	8	2	6	25.50	6	2	6	25.50	5	2	6	26.50	7	2	6	26.50	4	2	12	5.00	5	2	12	5.00	4	2	12	5.00	140	0	6	2.99	574
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	5.00	5	2	12	5.00	4	2	12	5.00	140	0	6	2.99	545
30	21	21	8	8	26.00	4	2	12	12.67	8	2	6	25.50	11	1	12	26.50	4	2	12	12.67	4	2	12	5.00	5	2	12	5.00	5	2	12	5.00	140	0	6	3.81	512
40	26	26	8	8	26.00	4	2	12	12.67	8	2	6	25.50	11	1	12	26.50	4	2	12	12.67	4	2	12	5.00	5	2	12	5.00	4	4	6	5.00	140	0	6	4.62	515
50	31	31	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	5.00	5	2	12	5.00	7	2	12	5.00	140	0	6	5.50	524
60	34	34	10	8	26.33	4	2	12	12.67	9	2	6	25.83	9	2	6	26.83	4	2	12	12.67	4	2	12	5.00	5	2	12	5.00	7	2	12	5.00	140	0	6	6.06	603

2 @ 12 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	10.5	10	8	8	26.00	7	2	6	25.50	7	2	6	25.50	4	2	6	26.50	7	2	6	26.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	120	48	6	2.12	573
	3	14	14	8	8	26.00	7	2	6	25.50	7	2	6	25.50	7	1	12	26.50	6	2	6	26.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	120	48	6	2.73	563
	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	6.00	5	2	12	6.00	4	2	12	6.00	146	0	6	2.73	531
	10	16	16	8	8	26.00	8	2	6	25.50	6	2	6	25.50	5	2	6	26.50	7	2	6	26.50	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	146	0	6	3.06	583
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	6.00	5	2	12	6.00	4	2	12	6.00	146	0	6	3.06	554
	30	21	21	8	8	26.00	4	2	12	12.67	8	2	6	25.50	11	1	12	26.50	4	2	12	12.67	4	2	12	6.00	6	2	12	6.00	5	2	12	6.00	146	0	6	3.88	527
	40	26	26	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	6.00	5	2	12	6.00	4	4	6	6.00	146	0	6	4.76	527
	50	31	31	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	6.00	5	2	12	6.00	7	2	12	6.00	146	0	6	5.65	537
	60	34	34	11	8	26.50	4	2	12	12.67	9	2	6	26.00	9	2	6	27.00	4	2	12	12.67	4	2	12	6.00	5	2	12	6.00	7	2	12	6.00	146	0	6	6.22	617

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 4'-0" THRU 6'-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-17-76

10:34 AM 3/26/2021 S:\Structures\Standard Boxes\Tables\1-6-10\Official Culvert Files 1-6-10\12' Span\STD-17-76&77&78_2barrel_box12'.dgn