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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	9	8	8	30.00	7	2	6	29.50	6	2	6	29.50	4	2	6	30.50	8	1	12	30.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	120	28	6	2.19	540
	3	11	10	8	8	30.00	7	2	6	29.50	6	2	6	29.50	7	1	12	30.50	9	1	12	30.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	120	28	6	2.34	584
	5	11	11	8	8	30.00	10	1	12	29.50	8	1	12	29.50	7	1	12	30.50	7	2	6	30.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	120	28	6	2.44	592
	10	12	13	8	8	30.00	11	1	12	29.50	8	1	12	29.50	8	1	12	30.50	11	1	12	30.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	150	0	6	2.72	679
Moment Break	20	15	16	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	4	2	12	5.00	4	2	12	5.00	150	0	6	3.29	647
	30	22	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	4	2	12	5.00	5	2	12	5.00	150	0	6	4.60	651
	40	28	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	4	2	12	5.00	6	2	12	5.00	150	0	6	5.73	650
	50	32	33	9	8	30.16	4	2	12	14.66	9	2	6	29.66	9	2	6	30.66	4	2	12	14.66	4	2	12	5.00	4	2	12	5.00	7	2	12	5.00	150	0	6	6.55	663
	60	36	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	4	2	12	5.00	8	2	12	5.00	150	0	6	7.38	671

2 @14 x 6 REINFORCED CONCRETE BOX BRIDGE

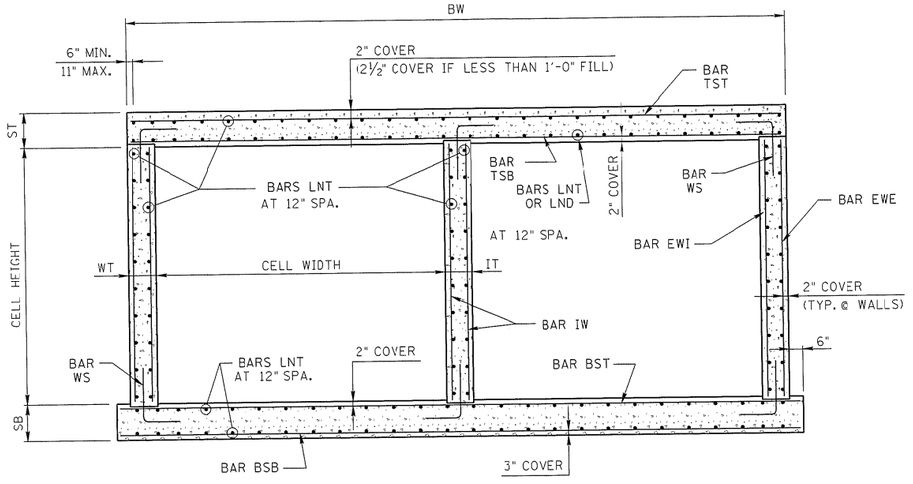
	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	9	8	8	30.00	7	2	6	29.50	6	2	6	29.50	4	2	6	30.50	8	1	12	30.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	126	28	6	2.28	548
	3	11	10	8	8	30.00	7	2	6	29.50	6	2	6	29.50	7	1	12	30.50	9	1	12	30.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	126	28	6	2.41	592
	5	11	11	8	8	30.00	10	1	12	29.50	8	1	12	29.50	7	1	12	30.50	7	2	6	30.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	156	0	6	2.51	600
	10	12	13	8	8	30.00	11	1	12	29.50	8	1	12	29.50	8	1	12	30.50	11	1	12	30.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	156	0	6	2.79	687
Moment Break	20	15	16	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	4	2	12	6.00	4	2	12	6.00	156	0	6	3.36	655
	30	22	24	8	8	30.00	4	2	12	14.66	9	2	6	29.50	9	2	6	30.66	4	2	12	14.66	4	2	12	6.00	4	2	12	6.00	5	2	12	6.00	156	0	6	4.77	659
	40	28	29	9	8	30.16	4	2	12	14.66	9	2	6	29.66	9	2	6	30.66	4	2	12	14.66	4	2	12	6.00	4	2	12	6.00	6	2	12	6.00	156	0	6	5.87	667
	50	32	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	4	2	12	6.00	7	2	12	6.00	156	0	6	6.70	676
	60	36	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	4	2	12	6.00	8	2	12	6.00	156	0	6	7.54	686

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.	Bar EWI Size	No.	Spacing in.	Length ft.	Bar 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	9	8	8	30.00	7	2	6	29.50	6	2	6	29.50	4	2	6	30.50	8	1	12	30.50	4	2	12	7.00	4	2	12	7.00	4	2	12	7.00	132	28	6	2.34	556
	3	11	10	8	8	30.00	7	2	6	29.50	6	2	6	29.50	7	1	12	30.50	9	1	12	30.50	4	2	12	7.00	4	2	12	7.00	4	2	12	7.00	132	28	6	2.49	600
	5	11	11	8	8	30.00	10	1	12	29.50	8	1	12	29.50	7	1	12	30.50	7	2	6	30.50	4	2	12	7.00	4	2	12	7.00	4	2	12	7.00	162	0	6	2.58	608
	10	12	14	8	8	30.00	11	1	12	29.50	8	1	12	29.50	8	1	12	30.50	11	1	12	30.50	4	2	12	7.00	5	2	12	7.00	4	2	12	7.00	162	0	6	2.96	700
Moment Break	20	15	16	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	4	4	6	7.00	4	2	12	7.00	162	0	6	3.43	672
	30	22	24	9	8	30.16	4	2	12	14.66	9	2	6	29.66	9	2	6	30.66	4	2	12	14.66	4	2	12	7.00	4	4	6	7.00	5	2	12	7.00	162	0	6	4.91	680
	40	28	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	5	2	12	7.00	6	2	12	7.00	162	0	6	6.03	684
	50	32	33	12	8	30.66	4	2	12	14.66	9	2	6	30.16	9	2	6	31.16	4	2	12	14.66	4	2	12	7.00	4	2	12	7.00	7	2	12	7.00	162	0	6	6.94	691
	60	36	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	4	2	12	7.00	8	2	12	7.00	162	0	6	7.79	702

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 top slab is the riding surface (No Fill), the concrete cover to the top mat of reinforcing shall be 2-1/2 inches.

The following bar information applies to all fill cases in the table 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.



BOX BRIDGE

NOTE: FOR DESCRIPTIONS OF BOX DIMENSIONS AND REINFORCING BAR DESIGNATIONS SEE STANDARD DRAWING NO. STD-15-4.

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 2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-62

DESIGNED BY IHAB YOUSSEF DATE 9-99
DRAWN BY KEVIN MARTINKO DATE 3-00
SUPERVISED BY FIELDS & HOLLORAN DATE 3-00
CHECKED BY IHAB YOUSSEF DATE 6-00

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION