

3 @ 14 x 12 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.	No.			No.	No.												
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	12.00	7	2	12	12.00	5	4	12	12.00	230	42	8	4.32	1009
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	12.00	7	4	6	12.00	5	4	12	12.00	230	42	8	5.09	1086
5	14	14	9	8	44.83	10	1	12	44.33	6	2	6	44.33	8	1	12	45.33	7	2	6	45.33	4	2	12	12.00	7	4	6	12.00	5	4	12	12.00	274	0	8	5.18	1084
10	16	16	10	8	45.00	7	2	6	44.50	6	2	6	44.50	8	1	12	45.50	7	2	6	45.50	4	2	12	12.00	8	4	6	12.00	5	4	12	12.00	278	0	8	5.83	1110
20	17	17	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	12.00	8	4	6	12.00	5	4	12	12.00	278	0	8	6.29	1162
30	23	24	15	8	45.83	4	3	12	14.66	9	2	6	45.33	9	2	6	46.33	4	3	12	14.66	4	2	12	12.00	7	4	6	12.00	5	4	12	12.00	278	0	8	8.43	1139
40	29	30	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	12.00	7	4	6	12.00	6	4	12	12.00	282	0	8	10.35	1168
50	33	34	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	12.00	7	4	6	12.00	7	4	12	12.00	282	0	8	11.72	1199
60	37	38	21	9	47.00	4	3	12	14.66	9	2	6	46.50	9	2	6	47.50	4	3	12	14.66	4	2	12	12.00	7	4	6	12.00	6	4	12	12.00	282	0	8	13.22	1179

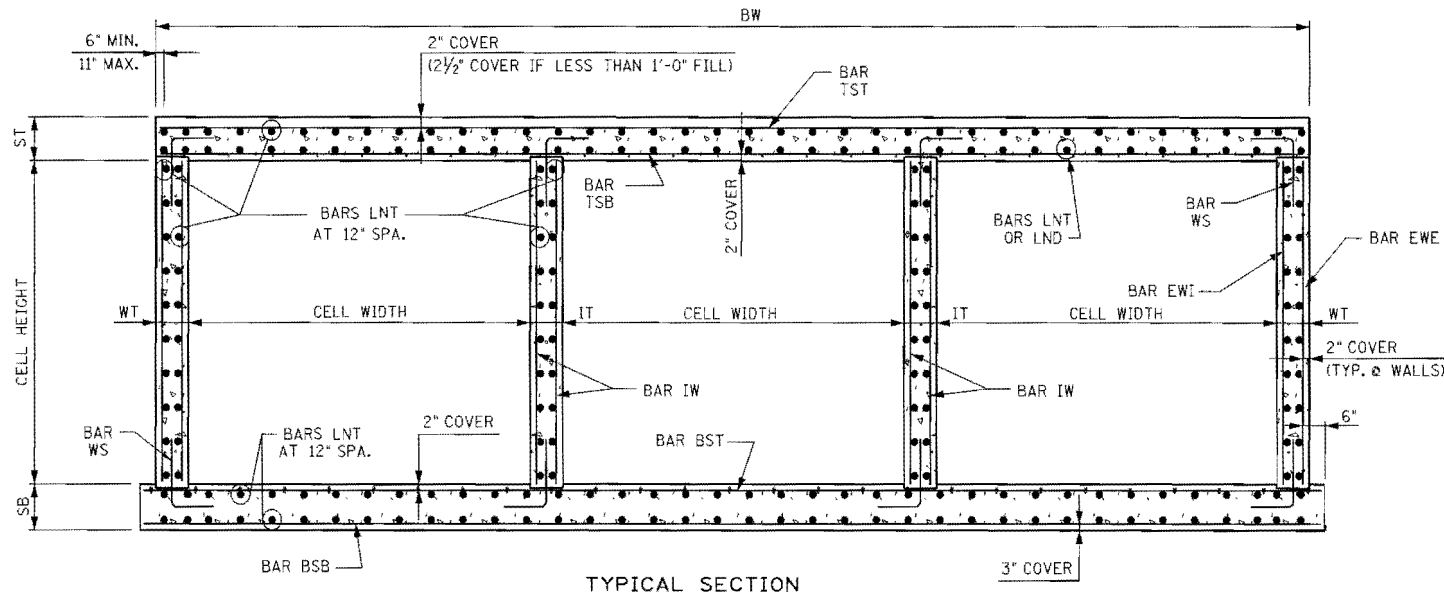
3 @ 14 x 13 REINFORCED CONCRETE BOX BRIDGE

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.	No.			No.	No.												
No Fill	11.5	11	8	8	44.67	7	2	6	44.17	7	2	6	44.17	7	1	12	45.17	8	1	12	45.17	4	2	12	13.00	7	4	6	13.00	4	8	6	13.00	238	42	8	4.42	1077
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	13.00	8	4	6	13.00	4	8	6	13.00	238	42	8	5.19	1153
5	14	14	9	8	44.83	10	1	12	44.33	6	2	6	44.33	6	2	6	45.33	7	2	6	45.33	4	2	12	13.00	8	4	6	13.00	4	8	6	13.00	282	0	8	5.28	1166
10	16	16	10	8	45.00	7	2	6	44.50	6	2	6	44.50	8	1	12	45.50	7	2	6	45.50	4	2	12	13.00	9	4	6	13.00	4	8	6	13.00	286	0	8	5.94	1185
20	17	18	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	13.00	8	4	6	13.00	4	8	6	13.00	286	0	8	6.66	1201
30	23	25	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	13.00	8	4	6	13.00	4	8	6	13.00	290	0	8	8.82	1211
40	29	30	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	13.00	8	4	6	13.00	6	4	12	13.00	290	0	8	10.62	1224
50	33	34	21	9	47.00	4	3	12	14.66	9	2	6	46.50	9	2	6	47.50	4	3	12	14.66	4	2	12	13.00	7	4	6	13.00	6	4	12	13.00	290	0	8	12.23	1200
60	37	38	23	9	47.33	4	3	12	14.66	9	2	6	46.83	9	2	6	47.83	4	3	12	14.66	4	2	12	13.00	7	4	6	13.00	6	4	12	13.00	294	0	8	13.64	1207

3 @ 14 x 14 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.	No.			No.	No.												
No Fill	11.5	11	8	8	44.67	7	2	6	44.17	7	2	6	44.17	7	1	12	45.17	8	1	12	45.17	4	2	12	14.00	8	4	6	14.00	6	4	12	14.00	246	42	8	4.52	1141
3	14	14	9	8	44.83	7	2	6	44.33	8	1	12	45.33	6	2	6	45.33	4	2	12	14.00	8	4	6	14.00	8	4	6	14.00	6	4	12	14.00	246	42	8	5.39	1187
5	14	14	10	8	45.00	10	1	12	44.50	6	2	6	44.50	6	2	6	45.50	7	2	6	45.50	4	2	12	14.00	8	4	6	14.00	6	4	12	14.00	294	0	8	5.49	1203
10	16	16	11	8	45.17	7	2	6	44.67	6	2	6	44.67	8	1	12	45.67	7	2	6	45.67	4	2	12	14.00	9	4	6	14.00	6	4	12	14.00	294	0	8	6.15	1222
20	17	18	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	14.00	9	4	6	14.00	6	4	12	14.00	294	0	8	6.89	1276
30	23	25	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	14.00	8	4	6	14.00	6	4	12	14.00	298	0	8	9.08	1245
40	29	30	20	8	46.67	4	3	12	14.66	9	2	6	46.17	9	2	6	47.17	4	3	12	14.66	4	2	12	14.00	8	4	6	14.00	6	4	12	14.00	298	0	8	11.01	1252
50	33	34	22	9	47.17	4	3	12	14.66	9	2	6	46.67	9	2	6	47.67	4	3	12	14.66	4	2	12	14.00	8	4	6	14.00	6	4	12	14.00	302	0	8	12.54	1261
60	37	38	24	10	47.67	4	3	12	14.66	9	2	6	47.17	9	2	6	48.17	4	3	12	14.66	4	2	12	14.00	8	4	6	14.00	6	4	12	14.00	302	0	8	14.09	1268

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.



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 12'-0" THRU 14'-0"
 0' THRU 60' FILL
 2010

DESIGNED BY: RLL/ALP DATE: 12-09
 DRAWN BY: KEVIN MARTINKO DATE: 1-10
 SUPERVISED BY: EPW/RJC DATE: 12-09
 CHECKED BY: RLL/ALP DATE: 2-10

CORRECT *Edward P. Wasserman*
 ENGINEER OF STRUCTURES