3 @ 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.	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	9.5	8	8	8	38.67	7	2	6	38.17	9	1	12	38.17	5	1	12	39.17	4	2	6	39.17	4	2	12	4.00	4	2	12	4.00	4	4	12	4.00	146	36	8	2.50	642
	3	10	8	8	8	38.67	9	1	12	38.17	6	2	6	38.17	7	1	12	39.17	8	1	12	39.17	4	2	12	4.00	4	2	12	4.00	4	4	12	4.00	146	36	8	2.56	692
	5	9	9	8	8	38.67	7	2	6	38.17	8	1	12	38.17	8	1	12	39.17	6	2	6	39.17	4	2	12	4.00	4	2	12	4.00	4	4	12	4.00	184	0	8	2.57	731
	10	11	12	8	8	38.67	9	1	12	38.17	8	1	12	38.17	8	1	12	39.17	6	2	6	39.17	4	2	12	4.00	4	2	12	4.00	4	4	12	4.00	184	0	8	3.17	704
Moment Break	20	13	14	8	8	38.67	4	3	12	12.67	9	2	6	38.17	9	2	6	39.17	4	3	12	12.67	4	2	12	4.00	4	2	12	4.00	4	4	12	4.00	184	0	8	3.66	827
	30	19	21	8	8	38.67	4	3	12	12.67	11	1	12	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	4.00	4	2	12	4.00	5	4	12	4.00	184	0	8	5.23	718
	40	24	25	8	8	38.67	4	3	12	12.67	11	1	12	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	4.00	5	4	12	4.00	5	4	12	4.00	184	0	8	6.31	718
	50	28	29	8	8	38.67	4	3	12	12.67	11	1	12	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	4.00	4	2	12	4.00	4	8	6	4.00	184	0	8	7.28	723
	60	31	32	8	8	38.67	4	3	12	12.67	9	2	6	38.17	9	2	6	39.17	4	3	12	12.67	4	2	12	4.00	4	2	12	4.00	7	4	12	4.00	184	0	8	8.01	849

3 @ 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.	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	9.5	8	8	8	38.67	7	2	6	38.17	9	1	12	38.17	5	1	12	39.17	4	2	6	39.17	4	2	12	5.00	4	2	12	5.00	4	4	12	5.00	154	36	8	2.54	652
	3	10	8	8	8	38.67	9	1	12	38.17	6	2	6	38.17	7	1	12	39.17	8	1	12	39.17	4	2	12	5.00	4	2	12	5.00	4	4	12	5.00	154	36	8	2.66	702
	5	9	9	8	8	38.67	7	2	6	38.17	8	1	12	38.17	8	1	12	39.17	6	2	6	39.17	4	2	12	5.00	4	2	12	5.00	4	4	12	5.00	192	0	8	2.66	741
	10	11	12	8	8	38.67	9	1	12	38.17	8	1	12	38.17	8	1	12	39.17	9	1	12	39.17	4	2	12	5.00	4	2	12	5.00	4	4	12	5.00	192	0	8	3.27	730
Moment Break	20	13	15	8	8	38.67	4	3	12	12.67	9	2	6	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	5.00	4	2	12	5.00	4	4	12	5.00	192	0	8	3.88	779
	30	19	21	8	8	38.67	4	3	12	12.67	11	1	12	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	5.00	4	2	12	5.00	5	4	12	5.00	192	0	8	5.33	730
	40	24	25	8	8	38.67	4	3	12	12.67	11	1	12	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	5.00	4	2	12	5.00	5	4	12	5.00	192	0	8	6.41	730
	50	28	29	9	8	38.83	4	3	12	12.67	11	1	12	38.33	11	1	12	39.33	4	3	12	12.67	4	2	12	5.00	4	2	12	5.00	4	8	6	5.00	192	0	8	7.44	738
	60	31	32	10	8	39.00	4	3	12	12.67	9	2	6	38.50	9	2	6	39.50	4	3	12	12.67	4	2	12	5.00	4	2	12	5.00	7	4	12	5.00	196	0	8	8.23	873

3 @ 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.	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	9.5	8	8	8	38.67	7	2	6	38.17	9	1	12	38.17	5	1	12	39.17	4	2	6	39.17	4	2	12	6.00	4	2	12	6.00	4	4	12	6.00	162	36	8	2.64	663
	3	10	8	8	8	38.67	9	1	12	38.17	6	2	6	38.17	7	1	12	39.17	8	1	12	39.17	4	2	12	6.00	4	2	12	6.00	4	4	12	6.00	162	36	8	2.76	713
	5	9	9	8	8	38.67	7	2	6	38.17	8	1	12	38.17	8	1	12	39.17	6	2	6	39.17	4	2	12	6.00	4	2	12	6.00	4	4	12	6.00	200	0	8	2.76	752
	10	11	13	8	8	38.67	9	1	12	38.17	8	1	12	38.17	5	2	6	39.17	8	1	12	39.17	4	2	12	6.00	4	2	12	6.00	4	4	12	6.00	200	0	8	3.49	690
Moment Break	20	13	15	8	8	38.67	4	3	12	12.67	9	2	6	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	6.00	4	2	12	6.00	4	4	12	6.00	200	0	8	3.98	791
	30	19	21	8	8	38.67	4	3	12	12.67	11	1	12	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	6.00	5	2	12	6.00	5	4	12	6.00	200	0	8	5.43	747
	40	24	25	9	8	38.83	4	3	12	12.67	11	1	12	38.33	11	1	12	39.33	4	3	12	12.67	4	2	12	6.00	4	2	12	6.00	5	4	12	6.00	200	0	8	6.57	745
	50	28	29	10	8	39.00	4	3	12	12.67	11	1	12	38.50	11	1	12	39.50	4	3	12	12.67	4	2	12	6.00	4	2	12	6.00	4	8	6	6.00	204	0	8	7.61	756
	60	31	32	11	8	39.17	4	3	12	12.67	9	2	6	38.67	9	2	6	39.67	4	3	12	12.67	4	2	12	6.00	4	2	12	6.00	7	4	12	6.00	204	0	8	8.41	891

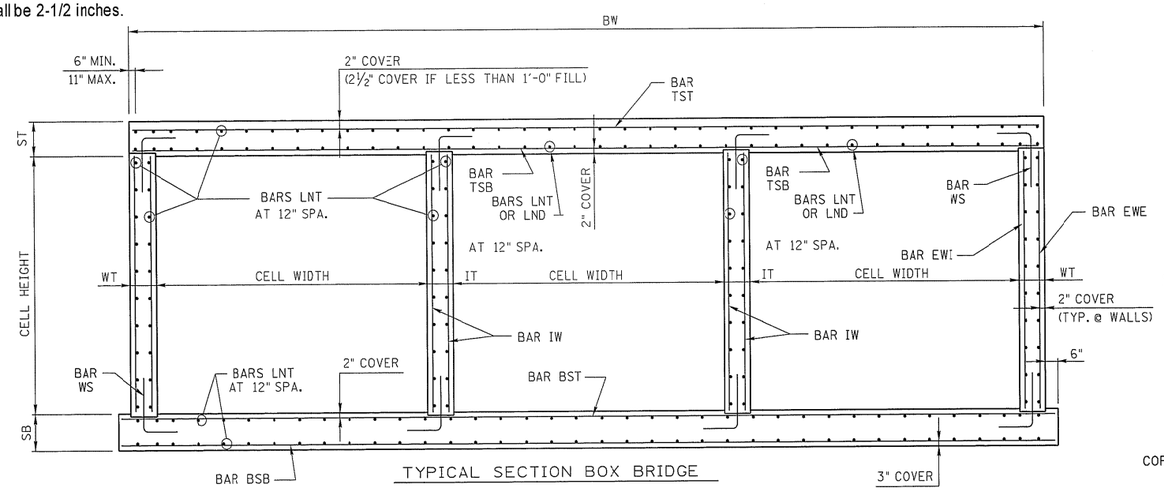
3 @ 12 x 7 REINFORCED CONCRETE BOX BRIDGE

	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	9.5	8	8	8	38.67	7	2	6	38.17	9	1	12	38.17	4	2	6	39.17	6	1	12	39.17	4	2	12	7.00	4	2	12	7.00	4	4	12	7.00	170	36	8	2.74	692
	3	10	8	8	8	38.67	9	1	12	38.17	6	2	6	38.17	7	1	12	39.17	8	1	12	39.17	4	2	12	7.00	4	2	12	7.00	4	4	12	7.00	170	36	8	2.86	724
	5	9	9	8	8	38.67	7	2	6	38.17	8	1	12	38.17	8	1	12	39.17	6	2	6	39.17	4	2	12	7.00	4	2	12	7.00	4	4	12	7.00	208	0	8	2.86	763
	10	11	13	8	8	38.67	9	1	12	38.17	8	1	12	38.17	5	2	6	39.17	8	1	12	39.17	4	2	12	7.00	5	2	12	7.00	4	4	12	7.00	208	0	8	3.59	706
Moment Break	20	13	15	8	8	38.67	4	3	12	12.67	9	2	6	38.17	11	1	12	39.17	4	3	12	12.67	4	2	12	7.00	4	4	6	7.00	4	4	12	7.00	208	0	8	4.07	810
	30	19	21	9	8	38.83	4	3	12	12.67	11	1	12	38.33	11	1	12	39.33	4	3	12	12.67	4	2	12	7.00	4	4	6	7.00	5	4	12	7.00	208	0	8	5.59	766
	40	24	25	11	8	39.17	4	3	12	12.67	11	1	12	38.67	11	1	12	39.67	4	3	12	12.67	4	2	12	7.00	5	2	12	7.00	5	4	12	7.00	212	0	8	6.82	768
	50	28	29	12	8	39.33	4	3	12	12.67	11	1	12	38.83	11	1	12	39.83	4	3	12	12.67	4	2	12	7.00	5	2	12	7.00	4	8	6	7.00	212	0	8	7.87	778
	60	31	32	13	8	39.50	4	3	12	12.67	9	2	6	39.00	9	2	6	40.00	4	3	12	12.67	4	2	12	7.00	4	2	12	7.00	7	4	12	7.00	212	0	8	8.68	912

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.



TYPICAL SECTION 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: 3 BARRELS AT 12'-0" CLEAR HEIGHTS 4'-0" THRU 7'-0" 0' THRU 60' FILL 2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-80

DESIGNED BY ROBERT LEFEVRE DATE 1-00
DRAWN BY KEVIN MARTINKO DATE 3-00
SUPERVISED BY FIELDS & HOLLORAN DATE 3-00
CHECKED BY ROBERT LEFEVRE DATE 6-00

CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION