CONST. NO.

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

2 @ 12 x 8 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	26.00	7	2	6	25.50	9	1	12	25.50	4	2	6	26.50	8	1	12	26.50	4	2	12	8.00	4	2	12	8.00	4	2	12	8.00	126	24	6	2.02	518
	3	10	9	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	8.00	4	2	12	8.00	4	2	12	8.00	126	24	6	2.14	546
	5	10	10	8	8	26.00	7	2	6	25.50	7	1	12	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	8.00	4	2	12	8.00	4	2	12	8.00	152	0	6	2.22	533
	10	10	12	8	8	26.00	11	1	12	25.50	8	1	12	25.50	8	1	12	26.50	10	1	12	26.50	4	2	12	8.00	4	4	6	8.00	4	2	12	8.00	152	0	6	2.39	613
Moment Break	20	13	15	9	8	26.17	4	2	12	12.67	9	2	6	25.57	11	1	12	26.67	4	2	12	12.67	4	2	12	8.00	7	2	12	8.00	4	2	12	8.00	152	0	6	2.94	586
	30	19	21	10	8	26.33	4	2	12	12.67	11	1	12	25.83	11	1	12	26.83	4	2	12	12.67	4	2	12	8.00	7	2	12	8.00	5	2	12	8.00	152	0	6	4.00	555
	40	24	26	12	8	26.67	4	2	12	12.67	11	1	12	26.17	11	1	12	27.17	4	2	12	12.67	4	2	12	8.00	6	2	12	8.00	4	4	6	8.00	152	0	6	4.98	555
	50	28	29	13	8	26.83	4	2	12	12.67	11	1	12	26.33	11	1	12	27.33	4	2	12	12.67	4	2	12	8.00	7	2	12	8.00	7	2	12	8.00	152	0	6	5.64	577
	60	31	33	14	8	27.00	4	2	12	12.67	9	2	6	26.50	9	2	6	27.50	4	2	12	12.67	4	2	12	8.00	4	4	6	8.00	7	2	12	8.00	156	0	6	6.32	649

2 @12 x 9 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	26.00	7	2	6	25.50	9	1	12	25.50	4	2	6	26.50	8	1	12	26.50	4	2	12	9.00	4	2	12	9.00	4	2	12	9.00	132	24	6	2.09	526
	3	10	9	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	9.00	5	2	12	9.00	4	2	12	9.00	132	24	6	2.21	561
	5	10	10	8	8	26.00	7	2	6	25.50	7	1	12	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	9.00	5	2	12	9.00	4	2	12	9.00	158	0	6	2.30	547
	10	10	13	8	8	26.00	11	1	12	25.50	8	1	12	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	9.00	7	2	12	9.00	4	2	12	9.00	158	0	6	2.55	813
Moment Break	20	13	15	10	8	26.33	4	2	12	12.66	9	2	6	25.83	8	2	6	26.83	4	2	12	12.66	4	2	12	9.00	7	2	12	9.00	4	2	12	9.00	158	0	6	3.09	599
	30	19	21	11	8	26.50	4	2	12	12.66	11	1	12	26.00	11	1	12	27.00	4	2	12	12.66	4	2	12	9.00	8	2	12	9.00	5	2	12	9.00	158	0	6	4.16	580
	40	24	26	13	8	26.83	4	2	12	12.66	11	1	12	26.33	11	1	12	27.33	4	2	12	12.66	4	2	12	9.00	5	4	6	9.00	4	4	6	9.00	158	0	6	5.16	578
	50	28	29	15	8	27.16	4	2	12	12.66	11	1	12	26.66	8	2	6	27.66	4	2	12	12.66	4	2	12	9.00	7	2	12	9.00	7	2	12	9.00	162	0	6	5.92	596
	60	31	33	16	8	27.33	4	2	12	12.66	9	2	6	26.83	9	2	6	27.83	4	2	12	12.66	4	2	12	9.00	7	2	12	9.00	7	2	12	9.00	162	0	6	6.61	579

2 @12 x 10 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 Nc.	Bars LND No.	Bars WS Nc.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	9.5	8	8	8	26.00	7	2	6	25.50	9	1	12	25.50	4	2	6	26.50	8	1	12	26.50	4	2	12	10.00	5	2	12	10.00	4	2	12	10.00	138	24	6	2.16	541
	3	10	9	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	10.00	5	2	12	10.00	4	2	12	10.00	138	24	6	2.29	569
	5	10	10	8	8	26.00	7	2	6	25.50	7	2	6	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	10.00	7	2	12	10.00	4	2	12	10.00	164	0	6	2.37	576
	10	10	13	8	8	26.00	11	1	12	25.50	8	1	12	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	10.00	9	2	12	10.00	4	2	12	10.00	164	0	6	2.62	650
Moment Break	20	13	15	10	8	26.33	4	2	12	12.66	9	2	6	25.83	9	2	6	26.83	4	2	12	12.66	4	2	12	10.00	6	4	6	10.00	4	2	12	10.00	164	0	6	3.18	688
	30	19	21	13	8	26.83	4	2	12	12.66	11	1	12	26.33	11	1	12	27.33	4	2	12	12.66	4	2	12	10.00	8	2	12	10.00	5	2	12	10.00	164	0	6	4.42	596
	40	24	26	14	8	27.00	4	2	12	12.66	11	1	12	26.50	11	1	12	27.50	4	2	12	12.66	4	2	12	10.00	8	2	12	10.00	4	4	6	10.00	168	0	6	5.35	606
	50	28	30	16	8	27.33	4	2	12	12.66	11	1	12	26.83	11	1	12	27.83	4	2	12	12.66	4	2	12	10.00	8	2	12	10.00	7	2	12	10.00	168	0	6	6.22	623
	60	31	33	18	8	27.66	4	2	12	12.66	9	2	6	27.16	9	2	6	28.16	4	2	12	12.66	4	2	12	10.00	7	2	12	10.00	7	2	12	10.00	168	0	6	6.92	697

2 @12 x 11 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	26.00	7	2	6	25.50	9	1	12	25.50	4	2	6	26.50	8	1	12	26.50	4	2	12	11.00	5	2	12	11.00	4	2	12	11.00	144	24	6	2.24	550
	3	10	9	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	11.00	6	2	12	11.00	4	2	12	11.00	144	24	6	2.36	588
	5	10	10	8	8	26.00	7	2	6	25.50	7	1	12	25.50	7	1	12	26.50	7	2	6	26.50	4	2	12	11.00	8	2	12	11.00	4	2	12	11.00	170	0	6	2.45	601
	10	10	13	9	8	26.16	11	1	12	25.66	8	1	12	25.66	7	1	12	26.66	7	2	6	26.66	4	2	12	11.00	9	2	12	11.00	4	2	12	11.00	170	0	6	2.78	686
Moment Break	20	13	15	11	8	26.50	4	2	12	12.66	9	2	6	26.00	9	2	6	27.00	4	2	12	12.66	4	2	12	11.00	9	2	12	11.00	4	2	12	11.00	170	0	6	3.35	692
	30	19	21	14	8	27.00	4	2	12	12.66	11	1	12	26.50	11	1	12	27.50	4	2	12	12.66	4	2	12	11.00	8	2	12	11.00	5	2	12	11.00	174	0	6	4.62	613
	40	24	26	16	8	27.33	4	2	12	12.66	11	1	12	26.83	11	1	12	27.83	4	2	12	12.66	4	2	12	11.00	8	2	12	11.00	4	4	6	11.00	174	0	6	5.65	623
	50	28	30	18	8	27.66	4	2	12	12.66	11	1	12	27.16	11	1	12	28.16	4	2	12	12.66	4	2	12	11.00	8	2	12	11.00	7	2	12	11.00	174	0	6	6.53	642
	60	31	33	19	8	27.83	4	2	12	12.66	9	2	6	27.33	9	2	6	28.33	4	2	12	12.66	4	2	12	11.00	8	2	12	11.00	7	2	12	11.00	174	0	6	7.16	726

2 @12 x 12 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	26.00	7	2	6	25.50	9	1	12	25.50	6	1	12	26.50	6	2	6	26.50	4	2	12	12.00	6	2	12	12.00	5	2	12	12.00	150	24	6	2.31	595
	3	10	9	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	12.00	8	2	12	12.00	5	2	12	12.00	150	24	6	2.44	635
	5	10	10	9	8	26.16	7	2	6	25.66	7	1	12	25.66	7	1	12	26.66	7	2	6	26.66	4	2	12	12.00	8	2	12	12.00	5	2	12	12.00	176	0	6	2.60	624
	10	10	13	10	8	26.33	11	1	12	25.83	8	1	12	25.83	7	1	12	26.83	7	2	6	26.83	4	2	12	12.00	9	2	12	12.00	5	2	12	12.00	176	0	6	2.94	691
Moment Break	20	13	16	12	8	26.66	4	2	12	12.66	9	2	6	26.16	11	1	12	27.16	4	2	12	12.66	4	2	12	12.00	7	4	6	12.00	5	2	12	12.00	176	0	6	3.62	693
	30	19	22	15	8	27.16	4	2	12	12.66	11	1	12	26.66	11	1	12	27.66	4	2	12	12.66	4	2	12	12.00	6	4	6	12.00	5	2	12	12.00	180	0	6	4.91	635
	40	24	26	17	8	27.50	4	2	12	12.66	11	1	12	27.00	11	1	12	28.00	4	2	12	12.66	4	2	12	12.00	9	2	12	12.00	4	4	6	12.00	180	0	6	5.87	655
	50	28	30	19	8	27.83	4	2	12	12.66	11	1	12	27.33	11	1	12	28.33	4	2	12	12.66	4	2	12	12.00	9	2	12	12.00	7	2	12	12.00	180	0	6	6.77	676
	60	31	33	21	8	28.16	4	2	12	12.66	9	2	6	27.66	9	2	6	28.66	4	2	12	12.66	4	2	12	12.00	6	4	6	12.00	7	2	12	12.00	184	0	6	7.51	757

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.

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 12'-0" CLEAR HEIGHTS 8'-0" THRU 12'-0" 0' THRU 60' FILL 2000

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

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-61

DGN: T:\PROJECTS\STDDWGS\2000\STD15\2barrel.dgn12
08-JAN-2003
10:10