CONST. NO.		
PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	6-1-11	JHW	REVISED BAR SPACING

2 @ 10 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	22.00	6	1	6	21.50	8	1	12	21.50	5	1	12	22.50	7	1	12	22.50	4	2	12	4.00	4	2	12	4.00	4	2	12	4.00	90	20	6	1.50	368
	3	9	8	8	8	22.00	9	1	12	21.50	8	1	12	21.50	6	1	12	22.50	8	1	12	22.50	4	2	12	4.00	4	2	12	4.00	4	2	12	4.00	90	20	6	1.47	401
	5	9	9	8	8	22.00	6	2	6	21.50	6	1	12	21.50	6	1	12	22.50	6	2	6	22.50	4	2	12	4.00	4	2	12	4.00	4	2	12	4.00	112	0	6	1.54	369
	10	9	11	8	8	22.00	7	2	6	21.50	7	1	12	21.50	7	1	12	22.50	9	1	12	22.50	4	2	12	4.00	4	2	12	4.00	4	2	12	4.00	112	0	6	1.68	425
Moment Break	20	11	13	8	8	22.00	4	2	12	10.66	11	1	12	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	4.00	4	2	12	4.00	4	2	12	4.00	112	0	6	1.96	433
	30	17	18	8	8	22.00	4	2	12	10.66	8	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	4.00	4	2	12	4.00	5	2	12	4.00	112	0	6	2.72	382
	40	21	22	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	4.00	4	2	12	4.00	5	2	12	4.00	112	0	6	3.28	382
	50	24	25	8	8	22.00	4	2	12	10.66	10	1	12	21.50	10	1	12	22.50	4	2	12	10.66	4	2	12	4.00	4	2	12	4.00	4	2	6	4.00	112	0	6	3.70	394
	60	26	28	8	8	22.00	4	2	12	10.66	11	1	12	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	4.00	4	2	12	4.00	7	2	12	4.00	112	0	6	4.04	444

2 @ 10 x 5 REINFORCED CONCRETE BOX BRIDGE

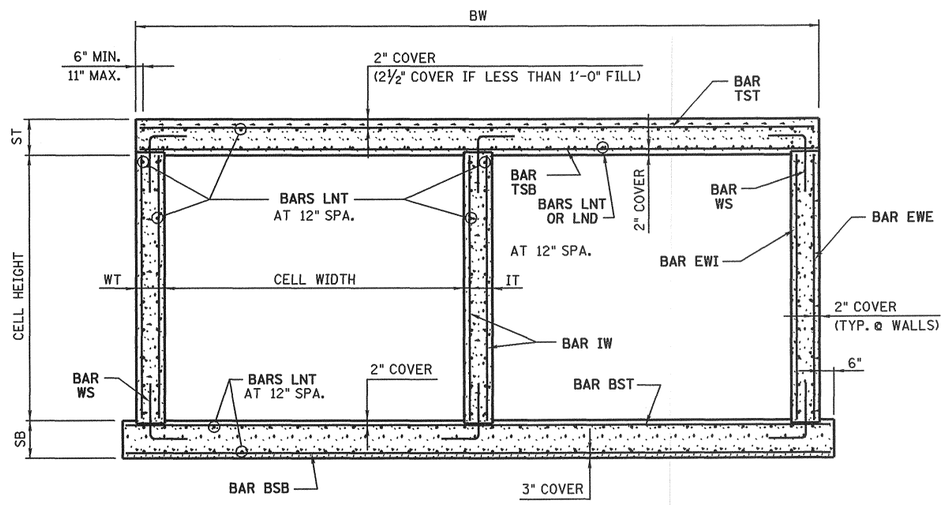
	Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars BST Size	No.	Spacing in.	Length ft.	Bars BSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bar EWI Size	No.	Spacing in.	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	22.00	6	2	6	21.50	8	1	12	21.50	5	1	12	22.50	7	1	12	22.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	96	20	6	1.57	376
	3	9	8	8	8	22.00	9	1	12	21.50	8	1	12	21.50	6	1	12	22.50	6	2	6	22.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	96	20	6	1.54	417
	5	9	9	8	8	22.00	6	2	6	21.50	6	1	12	21.50	6	1	12	22.50	6	2	6	22.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	118	0	6	1.62	377
	10	9	11	8	8	22.00	7	2	6	21.50	7	1	12	21.50	7	1	12	22.50	9	1	12	22.50	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	118	0	6	1.76	433
Moment Break	20	11	13	8	8	22.00	4	2	12	10.66	11	1	12	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	5.00	4	2	12	5.00	4	2	12	5.00	118	0	6	2.04	441
	30	17	18	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	5.00	4	2	12	5.00	5	2	12	5.00	118	0	6	2.80	391
	40	21	23	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	5.00	4	2	12	5.00	5	2	12	5.00	118	0	6	3.35	391
	50	24	25	9	8	22.17	4	2	12	10.66	10	1	12	21.66	10	1	12	22.66	4	2	12	10.66	4	2	12	5.00	4	2	12	5.00	4	4	6	5.00	118	0	6	3.83	405
	60	26	28	10	8	22.33	4	2	12	10.66	11	1	12	21.83	11	1	12	22.83	4	2	12	10.66	4	2	12	5.00	4	2	12	5.00	7	1	12	5.00	118	0	6	4.24	458

2 @ 10 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	22.00	6	2	6	21.50	8	1	12	21.50	5	1	12	22.50	7	1	12	22.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	102	20	6	1.65	384
	3	9	9	8	8	22.00	9	1	12	21.50	8	1	12	21.50	4	2	6	22.50	5	2	6	22.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	102	20	6	1.69	400
	5	9	9	8	8	22.00	6	2	6	21.50	6	1	12	21.50	7	1	12	22.50	6	2	2 6	22.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	124	0	6	1.69	397
	10	9	11	8	8	22.00	7	2	6	21.50	7	1	12	21.50	7	1	12	22.50	9	1	12	22.50	4	2	12	6.00	4	2	12	6.00	4	2	12	6.00	124	0	6	1.83	441
Moment Break	20	11	13	8	8	22.00	4	2	12	10.66	11	1	12	21.50	11	1	12	22.50	4	2	12	10.66	4	2	12	6.00	5	2	12	6.00	4	2	12	6.00	124	0	6	2.11	453
	30	17	18	8	8	22.00	4	2	12	10.66	7	2	6	21.50	7	2	6	22.50	4	2	12	10.66	4	2	12	6.00	5	2	12	6.00	5	2	12	6.00	124	0	6	2.87	404
	40	21	22	10	8	22.33	4	2	12	10.66	7	2	6	21.83	7	2	6	22.83	4	2	12	10.66	4	2	12	6.00	4	2	12	6.00	5	2	12	6.00	124	0	6	3.55	402
	50	24	25	11	8	22.50	4	2	12	10.66	10	1	12	22.00	11	1	12	23.00	4	2	12	10.66	4	2	12	6.00	4	2	6	6.00	4	4	12	6.00	124	0	6	4.03	440
	60	26	28	11	8	22.50	4	2	12	10.66	11	1	12	22.00	11	1	12	23.00	4	2	12	10.66	4	2	12	6.00	4	2	12	6.00	7	2	12	6.00	124	0	6	4.39	471

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

M/R MINOR REVISION - FHWA APPROVAL NOT REQUIRED

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 10'-0"
CLEAR HEIGHTS 4'-0" THRU 6'-0"
0' THRU 60' FILL
2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

DESIGNED BY	CROSSLIN & HARPER	DATE	1-00
DRAWN BY	KEVIN MARTINKO	DATE	3-00
SUPERVISED BY	FIELDS & HOLLORAN	DATE	3-00
CHECKED BY	JOHN CROSSLIN	DATE	6-00

STD-15-58