CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

1 @ 14 x 8 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	15.33	4	1	12	14.83	11	1	12	14.83	9	1	12	15.83	4	1	12	15.83	4	2	12	8.00	4	2	12	8.00	77	28	4	1.39	297
3	11	11	8	15.33	4	1	12	14.83	11	1	12	14.83	7	2	6	15.83	4	1	12	15.83	4	2	12	8.00	4	2	12	8.00	77	28	4	1.47	308
5	11	12	8	15.33	4	1	12	14.83	10	1	12	14.83	10	1	12	15.83	4	1	12	15.83	4	2	12	8.00	4	2	12	8.00	92	0	4	1.52	288
10	12	13	8	15.33	4	1	12	14.83	11	1	12	14.83	11	1	12	15.83	4	1	12	15.83	4	2	12	8.00	4	4	6	8.00	92	0	4	1.61	329
20	15	17	9	15.50	4	1	12	15.00	9	2	6	15.00	9	2	6	16.00	4	1	12	16.00	4	2	12	8.00	6	2	12	8.00	92	0	4	2.02	380
30	22	24	10	15.66	4	1	12	15.16	9	2	6	15.16	9	2	6	16.16	4	1	12	16.16	4	2	12	8.00	6	2	12	8.00	92	0	4	2.79	383
40	28	29	12	16.00	4	1	12	15.50	9	2	6	15.50	9	2	6	16.50	4	1	12	16.50	4	2	12	8.00	4	4	6	8.00	96	0	4	3.49	388
50	32	33	13	16.16	4	1	12	15.66	9	2	6	15.66	9	2	6	16.66	4	1	12	16.66	4	2	12	8.00	4	4	6	8.00	96	0	4	3.98	390
60	36	37	14	16.33	4	1	12	15.83	9	2	6	15.83	9	2	6	16.83	4	1	12	16.83	4	2	12	8.00	5	2	12	8.00	96	0	4	4.48	388

1 @ 14 x 9 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	15.33	4	1	12	14.83	11	1	12	14.83	9	1	12	15.83	4	1	12	15.83	4	2	12	9.00	4	2	12	9.00	81	28	4	1.44	303
3	11	11	8	15.33	4	1	12	14.83	11	1	12	14.83	7	2	6	15.83	4	1	12	15.83	4	2	12	9.00	4	2	12	9.00	81	28	4	1.51	314
5	11	12	8	15.33	4	1	12	14.83	10	1	12	14.83	10	1	12	15.83	4	1	12	15.83	4	2	12	9.00	4	4	6	9.00	96	0	4	1.56	305
10	12	13	8	15.33	4	1	12	14.83	11	1	12	14.83	11	1	12	15.83	4	1	12	15.83	4	2	12	9.00	7	2	12	9.00	96	0	4	1.66	349
20	15	17	10	15.67	4	1	12	15.16	9	2	6	15.16	9	2	6	16.16	4	1	12	16.16	4	2	12	9.00	7	2	12	9.00	96	0	4	2.15	400
30	22	24	11	15.83	4	1	12	15.33	9	2	6	15.33	9	2	6	16.33	4	1	12	16.33	4	2	12	9.00	7	2	12	9.00	96	0	4	2.93	402
40	28	29	13	16.17	4	1	12	15.66	9	2	6	15.66	9	2	6	16.66	4	1	12	16.66	4	2	12	9.00	7	2	12	9.00	100	0	4	3.65	410
50	32	34	14	16.33	4	1	12	15.83	9	2	6	15.83	9	2	6	16.83	4	1	12	16.83	4	2	12	9.00	7	2	12	9.00	100	0	4	4.20	413
60	36	37	16	16.67	4	1	12	16.16	9	2	6	16.16	9	2	6	17.16	4	1	12	17.16	4	2	12	9.00	6	2	12	9.00	100	0	4	4.75	408

1 @ 14 x 10 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	15.33	4	1	12	14.83	11	1	12	14.83	9	1	12	15.83	4	1	12	15.83	4	2	12	10.00	5	2	12	10.00	85	28	4	1.49	315
3	11	11	8	15.33	4	1	12	14.83	11	1	12	14.83	7	2	6	15.83	4	1	12	15.83	4	2	12	10.00	4	4	6	10.00	85	28	4	1.56	332
5	11	12	8	15.33	4	1	12	14.83	10	1	12	14.83	10	1	12	15.83	4	1	12	15.83	4	2	12	10.00	4	4	6	10.00	100	0	4	1.61	312
10	12	13	8	15.33	4	1	12	14.83	11	1	12	14.83	11	1	12	15.83	4	1	12	15.83	4	2	12	10.00	6	4	6	10.00	100	0	4	1.71	377
20	15	17	10	15.67	4	1	12	15.16	9	2	6	15.16	9	2	6	16.16	4	1	12	16.16	4	2	12	10.00	6	2	6	10.00	100	0	4	2.21	427
30	22	24	12	16.00	4	1	12	15.50	9	2	6	15.50	9	2	6	16.50	4	1	12	16.50	4	2	12	10.00	8	2	12	10.00	104	0	4	3.08	428
40	28	29	14	16.33	4	1	12	15.83	9	2	6	15.83	9	2	6	16.83	4	1	12	16.83	4	2	12	10.00	8	2	12	10.00	104	0	4	3.82	433
50	32	34	16	16.67	4	1	12	16.16	9	2	6	16.16	9	2	6	17.16	4	1	12	17.16	4	2	12	10.00	5	4	6	10.00	104	0	4	4.48	426
60	36	37	17	16.83	4	1	12	16.33	9	2	6	16.33	9	2	6	17.33	4	1	12	17.33	4	2	12	10.00	7	2	12	10.00	104	0	4	4.95	428

1 @ 14 x 11 REINFORCED CONCRETE BOX BRIDGE

Maximum Fill Height ft.	Dimensions ST in.	SB in.	WT 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.	Bars LNT No.	Bars LND No.	Bars WS No.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	10.5	10	8	15.33	4	1	12	14.83	11	1	12	14.83	9	1	12	15.83	4	1	12	15.83	4	2	12	11.00	5	2	12	11.00	89	28	4	1.54	322
3	11	11	8	15.33	4	1	12	14.83	11	1	12	14.83	7	2	6	15.83	4	1	12	15.83	4	2	12	11.00	4	4	6	11.00	89	28	4	1.61	339
5	11	12	8	15.33	4	1	12	14.83	10	1	12	14.83	10	1	12	15.83	4	1	12	15.83	4	2	12	11.00	8	2	12	11.00	104	0	4	1.66	348
10	12	13	9	15.50	4	1	12	15.00	11	1	12	15.00	9	2	6	16.00	4	1	12	16.00	4	2	12	11.00	6	4	6	11.00	104	0	4	1.84	412
20	15	17	11	15.83	4	1	12	15.33	9	2	6	15.33	9	2	6	16.33	4	1	12	16.33	4	2	12	11.00	9	2	12	11.00	104	0	4	2.36	448
30	22	24	14	16.33	4	1	12	15.83	9	2	6	15.83	9	2	6	16.83	4	1	12	16.83	4	2	12	11.00	8	2	12	11.00	108	0	4	3.34	442
40	28	29	16	16.67	4	1	12	16.16	9	2	6	16.16	9	2	6	17.16	4	1	12	17.16	4	2	12	11.00	8	2	12	11.00	108	0	4	4.10	447
50	32	34	18	17.00	4	1	12	16.50	9	2	6	16.50	9	2	6	17.50	4	1	12	17.50	4	2	12	11.00	8	2	12	11.00	112	0	4	4.79	455
60	36	38	19	17.17	4	1	12	16.66	9	2	6	16.66	9	2	6	17.66	4	1	12	17.66	4	2	12	11.00	8	2	12	11.00	112	0	4	5.32	458

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 = 4 Spacing = 6 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: 1 BARREL AT 14'-0"
CLEAR HEIGHTS 8'-0" THRU 11'-0"
0' THRU 60' FILL
2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-43

DESIGNED BY S. HASTINGS/I. YOUSSEF DATE 12-99
DRAWN BY KEVIN MARTINKO DATE 3-00
SUPERVISED BY FIELDS & HOLLORAN DATE 3-00
CHECKED BY S. HASTINGS/I. YOUSSEF DATE 6-00

GS\STD\STD15\1f\barrel.box14
11:24 2001