CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

3 @ 16 x 13 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	10.5	8	8	8	50.67	7	2	6	50.16	7	2	6	50.16	7	1	12	51.16	8	1	12	51.16	4	2	12	13.00	8	2	12	13.00	4	8	6	13.00	254	48	8	4.20	1134
	3	11	10	9	8	50.83	10	1	12	50.33	7	2	6	50.33	8	1	12	51.33	9	1	12	51.33	4	2	12	13.00	8	2	12	13.00	4	8	6	13.00	254	48	8	4.68	1216
	5	11	11	9	8	50.83	11	1	12	50.33	9	1	12	50.33	6	2	6	51.33	7	2	6	51.33	4	2	12	13.00	9	2	12	13.00	4	8	6	13.00	304	0	8	4.84	1287
	10	14	16	10	8	51.00	7	2	6	50.50	6	2	6	50.50	6	2	6	51.50	7	2	6	51.50	4	2	12	13.00	10	2	12	13.00	4	8	6	13.00	308	0	8	6.21	1234
Moment Break	20	16	19	13	8	51.50	4	3	12	16.66	10	2	6	52.00	10	2	6	52.00	4	3	12	16.66	4	2	12	13.00	7	4	6	13.00	4	8	6	13.00	308	0	8	7.30	1459
	30	25	27	16	8	52.00	4	3	12	16.66	9	2	6	51.50	9	2	6	52.50	4	3	12	16.66	4	2	12	13.00	9	2	12	13.00	4	8	6	13.00	312	0	8	10.35	1264
	40	31	33	18	8	52.33	4	3	12	16.66	9	2	6	51.83	9	2	6	52.83	4	3	12	16.66	4	2	12	13.00	9	2	12	13.00	6	4	12	13.00	312	0	8	12.52	1277
	50	36	38	20	8	52.67	4	3	12	16.66	10	2	6	52.16	10	2	6	53.16	4	3	12	16.66	4	2	12	13.00	6	4	6	13.00	7	4	12	13.00	312	0	8	14.39	1489
	60	40	42	22	8	53.00	4	3	12	16.66	10	2	6	52.50	10	2	6	53.50	4	3	12	16.66	4	2	12	13.00	6	4	6	13.00	8	4	12	13.00	316	0	8	15.95	1531

3 @ 16 x 14 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	10.5	8	8	8	50.67	7	2	6	50.16	7	2	6	50.16	5	2	6	51.16	6	2	6	51.16	4	2	12	14.00	9	2	12	14.00	6	4	12	14.00	262	48	8	4.30	1200
	3	11	10	9	8	50.83	10	1	12	50.33	7	2	6	50.33	8	1	12	51.33	9	1	12	51.33	4	2	12	14.00	9	2	12	14.00	6	4	12	14.00	262	48	8	4.79	1263
	5	11	11	10	8	51.00	11	1	12	50.50	9	1	12	50.50	6	2	6	51.50	7	2	6	51.50	4	2	12	14.00	9	2	12	14.00	6	4	12	14.00	316	0	8	5.05	1321
	10	14	16	11	8	51.17	7	2	6	50.65	6	2	6	50.65	6	2	6	51.65	7	2	6	51.65	4	2	12	14.00	10	1	12	14.00	6	4	12	14.00	316	0	8	6.42	1266
Moment Break	20	16	20	14	8	51.67	4	3	12	16.66	10	2	6	51.16	9	2	6	52.16	4	3	12	16.66	4	2	12	14.00	7	4	6	14.00	6	4	12	14.00	316	0	8	7.70	1398
	30	25	27	17	8	52.17	4	3	12	16.66	9	2	6	51.66	9	2	6	52.66	4	3	12	16.66	4	2	12	14.00	9	2	12	14.00	6	4	12	14.00	320	0	8	10.61	1294
	40	31	33	20	8	52.67	4	3	12	16.66	9	2	6	52.16	10	2	6	53.16	4	3	12	16.66	4	2	12	14.00	9	2	12	14.00	6	4	12	14.00	320	0	8	12.92	1397
	50	36	38	22	8	53.00	4	3	12	16.66	10	2	6	52.50	10	2	6	53.50	4	3	12	16.66	4	2	12	14.00	9	2	12	14.00	7	4	12	14.00	324	0	8	14.81	1530
	60	40	43	24	8	53.33	4	3	12	16.66	10	2	6	52.83	10	2	6	53.83	4	3	12	16.66	4	2	12	14.00	9	2	12	14.00	8	4	12	14.00	324	0	8	16.55	1570

3 @ 16 x 15 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	10.5	9	9	8	50.83	7	2	6	50.33	7	2	6	50.33	7	1	12	51.33	5	2	6	51.33	4	2	12	15.00	9	2	12	15.00	7	4	12	15.00	270	48	8	4.66	1204
	3	11	10	10	8	51.00	10	1	12	50.50	7	2	6	50.50	8	1	12	51.50	9	1	12	51.50	4	2	12	15.00	9	2	12	15.00	7	4	12	15.00	273	48	8	5.00	1319
	5	11	11	10	8	51.00	11	1	12	50.50	9	1	12	50.50	9	1	12	51.50	7	2	6	51.50	4	2	12	15.00	11	2	12	15.00	7	4	12	15.00	324	0	8	5.16	1450
	10	14	16	12	8	51.33	7	2	6	50.83	6	2	6	50.83	6	2	6	51.83	7	2	6	51.83	4	2	12	15.00	11	2	12	15.00	7	4	12	15.00	324	0	8	6.65	1352
Moment Break	20	16	20	15	8	51.83	4	3	12	16.66	10	2	6	51.33	9	2	6	52.33	4	3	12	16.66	4	2	12	15.00	11	2	12	15.00	7	4	12	15.00	324	0	8	7.95	1489
	30	25	28	18	8	52.33	4	3	12	16.66	9	2	6	51.83	9	2	6	52.83	4	3	12	16.66	4	2	12	15.00	7	4	6	15.00	7	4	12	15.00	328	0	8	11.05	1369
	40	31	34	21	8	52.83	4	3	12	16.66	9	2	6	52.33	9	2	6	53.33	4	3	12	16.66	4	2	12	15.00	7	4	6	15.00	7	4	12	15.00	328	0	8	13.38	1376
	50	36	39	24	8	53.33	4	3	12	16.66	10	2	6	52.83	10	2	6	53.83	4	3	12	16.66	4	2	12	15.00	9	2	12	15.00	7	4	12	15.00	332	0	8	15.42	1558
	60	40	43	26	8	53.67	4	3	12	16.66	10	2	6	53.16	10	2	6	54.16	4	3	12	16.66	4	2	12	15.00	9	2	12	15.00	8	4	12	15.00	332	0	8	17.02	1601

3 @ 16 x 16 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	10.5	9	10	8	51.00	7	2	6	50.50	7	2	6	50.50	7	1	12	51.50	8	1	12	51.50	4	2	12	16.00	9	2	12	16.00	8	4	12	16.00	281	48	8	4.87	1301
	3	11	10	10	8	51.00	10	1	12	50.50	7	2	6	50.50	8	1	12	51.50	9	1	12	51.50	4	2	12	16.00	11	2	12	16.00	8	4	12	16.00	281	48	8	5.11	1443
	5	11	11	11	8	51.17	11	1	12	50.66	9	1	12	50.66	9	1	12	51.66	7	2	6	51.66	4	2	12	16.00	11	2	12	16.00	8	4	12	16.00	332	0	8	5.38	1519
	10	14	16	13	8	51.50	7	2	6	51.00	6	2	6	51.00	6	2	6	52.00	7	2	6	52.00	4	2	12	16.00	11	2	12	16.00	8	4	12	16.00	332	0	8	6.89	1421
Moment Break	20	16	20	16	8	52.00	4	3	12	16.66	10	2	6	51.50	10	2	6	52.50	4	3	12	16.66	4	2	12	16.00	11	2	12	16.00	8	4	12	16.00	336	0	8	8.20	1654
	30	25	28	20	8	52.67	4	3	12	16.66	9	2	6	52.16	9	2	6	53.16	4	3	12	16.66	4	2	12	16.00	7	4	6	16.00	8	4	12	16.00	336	0	8	11.46	1436
	40	31	34	23	8	53.17	4	3	12	16.66	9	2	6	52.66	9	2	6	53.66	4	3	12	16.66	4	2	12	16.00	7	4	6	16.00	8	4	12	16.00	340	0	8	13.83	1446
	50	36	39	25	8	53.50	4	3	12	16.66	10	2	6	53.00	10	2	6	54.00	4	3	12	16.66	4	2	12	16.00	7	4	6	16.00	8	4	12	16.00	340	0	8	15.76	1644
	60	40	43	28	8	54.00	4	3	12	16.66	10	2	6	53.50	10	2	6	54.50	4	3	12	16.66	4	2	12	16.00	7	4	6	16.00	8	4	12	16.00	344	0	8	17.52	1656

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: 3 BARRELS AT 16'-0"
CLEAR HEIGHTS 13'-0" THRU 16'-0"
0' THRU 60' FILL
2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-87

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

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