1 @ 16 x 13 REINFORCED CONCRETE SLAB BRIDGE

Fill Height ft.	Dimensions ST in.	WT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	11.50	5	4	6	11.50	67	32	2	2	1.67	1.42	328
3	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	11.50	6	4	6	11.50	67	32	2	2	1.67	1.56	325
5	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	11.50	7	4	6	11.50	84	0	2	2	1.67	1.56	328
10	15	9	17.50	4	1	12	17.00	9	2	6	17.00	4	2	12	11.50	8	4	6	11.50	84	0	2	2	1.75	1.70	382
20	19	12	18.00	4	1	12	17.50	10	2	6	17.50	4	2	12	11.50	7	4	6	11.50	86	0	2	2	2.00	2.19	391
30	26	14	18.33	4	1	12	17.83	9	2	6	17.83	4	2	12	11.50	7	4	6	11.50	86	0	2	2	2.17	2.76	362
40	32	16	18.67	4	1	12	18.17	9	2	6	18.17	4	2	12	11.50	7	4	6	11.50	86	0	2	2	2.33	3.29	364
50	37	18	19.00	4	1	12	18.50	10	2	6	18.50	4	2	12	11.50	7	4	6	11.50	88	0	2	2	2.50	3.78	402
60	41	20	19.33	4	1	12	18.83	10	2	6	18.83	4	2	12	11.50	7	4	6	11.50	88	0	2	2	2.67	4.22	405

1 @ 16 x 14 REINFORCED CONCRETE SLAB BRIDGE

Fill Height ft.	Dimensions ST in.	WT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	12.50	6	4	6	12.50	71	32	2	2	1.67	1.47	359
3	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	12.50	7	4	6	12.50	71	32	2	2	1.67	1.61	362
5	14	9	17.50	4	1	12	17.00	8	2	6	17.00	4	2	12	12.50	7	4	6	12.50	88	0	2	2	1.75	1.70	341
10	15	10	17.67	4	1	12	17.17	9	2	6	17.17	4	2	12	12.50	8	4	6	12.50	88	0	2	2	1.83	1.85	398
20	19	13	18.17	4	1	12	17.67	10	2	6	17.67	4	2	12	12.50	7	4	6	12.50	90	0	2	2	2.08	2.36	404
30	26	15	18.50	4	1	12	18.00	9	2	6	18.00	4	2	12	12.50	7	4	6	12.50	90	0	2	2	2.25	2.95	375
40	32	18	19.00	4	1	12	18.50	9	2	6	18.50	4	2	12	12.50	7	4	6	12.50	92	0	2	2	2.50	3.60	381
50	37	20	19.33	4	1	12	18.83	10	2	6	18.83	4	2	12	12.50	7	4	6	12.50	92	0	2	2	2.67	4.10	417
60	41	21	19.50	4	1	12	19.00	10	2	6	19.00	4	2	12	12.50	7	4	6	12.50	92	0	2	2	2.75	4.45	419

1 @ 16 x 15 REINFORCED CONCRETE SLAB BRIDGE

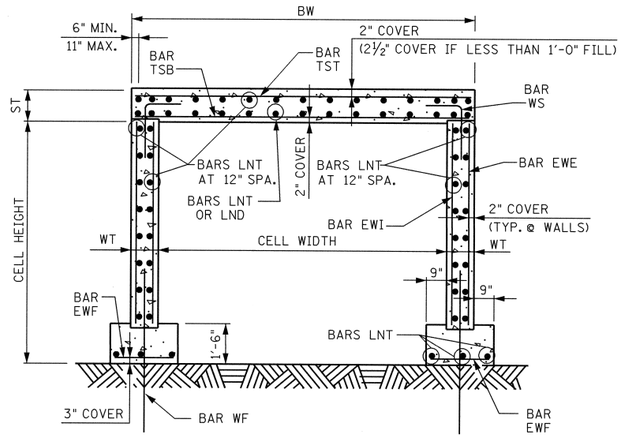
Fill Height ft.	Dimensions ST in.	WT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	13.50	7	4	6	13.50	75	32	2	2	1.67	1.52	399
3	14	9	17.50	4	1	12	17.00	8	2	6	17.00	4	2	12	13.50	7	4	6	13.50	75	32	2	2	1.75	1.76	375
5	14	9	17.50	4	1	12	17.00	8	2	6	17.00	4	2	12	13.50	8	4	6	13.50	92	0	2	2	1.75	1.76	387
10	15	11	17.83	4	1	12	17.33	9	2	6	17.33	4	2	12	13.50	8	4	6	13.50	92	0	2	2	1.92	2.01	414
20	19	14	18.33	4	1	12	17.83	10	2	6	17.83	4	2	12	13.50	8	4	6	13.50	94	0	2	2	2.17	2.54	452
30	26	16	18.67	4	1	12	18.17	9	2	6	18.17	4	2	12	13.50	8	4	6	13.50	94	0	2	2	2.33	3.15	423
40	32	19	19.17	4	1	12	18.67	9	2	6	18.67	4	2	12	13.50	8	4	6	13.50	96	0	2	2	2.58	3.82	428
50	37	21	19.50	4	1	12	19.00	10	2	6	19.00	4	2	12	13.50	8	4	6	13.50	96	0	2	2	2.75	4.34	465
60	41	23	19.83	4	1	12	19.33	10	2	6	19.33	4	2	12	13.50	7	4	6	13.50	96	0	2	2	2.92	4.81	434

1 @ 16 x 16 REINFORCED CONCRETE SLAB BRIDGE

Fill Height ft.	Dimensions ST in.	WT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
No Fill	11.5	9	17.50	4	1	12	17.00	9	2	6	17.00	4	2	12	14.50	7	4	6	14.50	79	32	2	2	1.75	1.68	412
3	14	9	17.50	4	1	12	17.00	8	2	6	17.00	4	2	12	14.50	8	4	6	14.50	79	32	2	2	1.75	1.81	424
5	14	10	17.67	4	1	12	17.17	8	2	6	17.17	4	2	12	14.50	8	4	6	14.50	96	0	2	2	1.83	1.92	403
10	15	11	17.83	4	1	12	17.33	9	2	6	17.33	4	2	12	14.50	9	4	6	14.50	96	0	2	2	1.92	2.08	471
20	19	15	18.50	4	1	12	18.00	10	2	6	18.00	4	2	12	14.50	8	4	6	14.50	98	0	2	2	2.25	2.73	468
30	26	18	19.00	4	1	12	18.50	9	2	6	18.50	4	2	12	14.50	8	4	6	14.50	100	0	2	2	2.50	3.47	441
40	32	20	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	14.50	8	4	6	14.50	100	0	2	2	2.67	4.05	444
50	37	23	19.83	4	1	12	19.33	10	2	6	19.33	4	2	12	14.50	8	4	6	14.50	100	0	2	2	2.92	4.70	483
60	41	25	20.17	4	1	12	19.67	10	2	6	19.67	4	2	12	14.50	8	4	6	14.50	102	0	2	2	3.08	5.19	488

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 height of fill above the top slab is less than 1 foot, the top mat of reinforcing in the top slab shall be constructed with 2-1/2 inches of concrete cover.

The following bar information applies to all fill cases in the tables above:
Bars LNT Size = 4 Spacing = 12 in.
Bars LND Size = 5 Spacing = 6 in.
Bars WS Size = 8 Length = 5.00 ft. Spacing = 12 in.
Bars WF Size = 8 Length = 6.00 ft. Spacing = 12 in.
Bars EWF Size = 4 No. = 2 Spacing = 12 in.



TYPICAL SECTION

NOTE: FOR DESCRIPTIONS OF BOX DIMENSIONS AND REINFORCING BAR DESIGNATIONS SEE STANDARD DRAWING NO. STD-17-5.

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD REINFORCED CONCRETE SLAB BRIDGE INTERIOR SECTION SPANS: 1 BARREL AT 16'-0" CLEAR HEIGHTS 13'-0" THRU 16'-0" 0' THRU 60' FILL 2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-124

DESIGNED BY RLL/ALP DATE 12-09
DRAWN BY KEVIN MARTINKO DATE 1-10
SUPERVISED BY EPW/RLC DATE 12-09
CHECKED BY RLL/ALP DATE 2-10

DGN drawn by: Rebecca Tibbals 11-6-10 C:\Projects\STD-17-122\121\122_1barrel_slab16.dgn
Date plotted: 11-6-2010