1 @ 18 x 9 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.	Bar 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	19.33	4	1	12	18.83	8	2	6	18.83	4	2	12	7.50	4	2	12	7.50	53	36	2	2	1.65	1.29	253
3	13	8	19.33	4	1	12	18.83	11	1	12	18.83	4	2	12	7.50	4	2	12	7.50	53	36	2	2	1.65	1.38	252
5	13	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	7.50	4	2	12	7.50	72	0	2	2	1.65	1.38	269
10	14	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	7.50	4	2	12	7.50	72	0	2	2	1.65	1.44	269
20	18	8	19.33	4	1	12	18.83	11	2	6	18.83	4	2	12	7.50	4	4	6	7.50	72	0	2	2	1.65	1.68	351
30	28	9	19.50	4	1	12	19.00	10	2	6	19.00	4	2	12	7.50	4	4	6	7.50	72	0	2	2	1.75	2.35	315
40	35	11	19.83	4	1	12	19.33	10	2	6	19.33	4	2	12	7.50	4	2	12	7.50	72	0	2	2	1.91	2.92	308
50	40	12	20.00	4	1	12	19.50	10	2	6	19.50	4	2	12	7.50	4	2	12	7.50	74	0	2	2	2	3.30	311
60	45	13	20.17	4	1	12	19.66	10	2	6	19.66	4	2	12	7.50	4	2	12	7.50	74	0	2	2	2.08	3.68	312

1 @ 18 x 10 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.	Bar 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	19.33	4	1	12	18.83	8	2	6	18.83	4	2	12	8.50	4	2	12	8.50	57	36	2	2	1.66	1.34	258
3	13	8	19.33	4	1	12	18.83	11	1	12	18.83	4	2	12	8.50	4	2	12	8.50	57	36	2	2	1.66	1.43	258
5	13	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	8.50	5	2	12	8.50	76	0	2	2	1.66	1.43	281
10	14	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	8.50	4	4	6	8.50	76	0	2	2	1.66	1.49	286
20	18	9	19.50	4	1	12	19.00	11	2	6	19.00	4	2	12	8.50	7	2	12	8.50	76	0	2	2	1.75	1.80	372
30	28	11	19.83	4	1	12	19.33	10	2	6	19.33	4	2	12	8.50	4	4	6	8.50	76	0	2	2	1.91	2.55	325
40	35	12	20.00	4	1	12	19.50	10	2	6	19.50	4	2	12	8.50	4	4	6	8.50	78	0	2	2	2	3.06	328
50	40	13	20.17	4	1	12	19.66	10	2	6	19.66	4	2	12	8.50	5	2	12	8.50	78	0	2	2	2.08	3.45	324
60	45	15	20.50	4	1	12	20.00	10	2	6	20.00	4	2	12	8.50	4	2	12	8.50	78	0	2	2	2.25	3.93	321

1 @ 18 x 11 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.	Bar 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	19.33	4	1	12	18.83	8	2	6	18.83	4	2	12	9.50	4	2	12	9.50	61	36	2	2	1.66	1.39	264
3	13	8	19.33	4	1	12	18.83	11	1	12	18.83	4	2	12	9.50	5	2	12	9.50	61	36	2	2	1.66	1.48	271
5	13	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	9.50	4	4	6	9.50	80	0	2	2	1.66	1.48	292
10	14	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	9.50	7	2	12	9.50	80	0	2	2	1.66	1.54	306
20	18	10	19.67	4	1	12	19.16	11	2	6	19.16	4	2	12	9.50	7	2	12	9.50	80	0	2	2	1.83	1.93	382
30	28	12	20.00	4	1	12	19.50	10	2	6	19.50	4	2	12	9.50	7	2	12	9.50	82	0	2	2	2.00	2.70	348
40	35	13	20.17	4	1	12	19.66	10	2	6	19.66	4	2	12	9.50	7	2	12	9.50	82	0	2	2	2.08	3.22	350
50	40	15	20.50	4	1	12	20.00	10	2	6	20.00	4	2	12	9.50	7	2	12	9.50	82	0	2	2	2.25	3.71	353
60	45	16	20.67	4	1	12	20.16	10	2	6	20.16	4	2	12	9.50	4	4	6	9.50	82	0	2	2	2.33	4.12	341

1 @ 18 x 12 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.	Bar 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	19.33	4	1	12	18.83	8	2	5	18.83	4	2	12	10.50	5	2	12	10.50	65	36	2	2	1.66	1.44	277
3	13	8	19.33	4	1	12	18.83	11	1	12	18.83	4	2	12	10.50	5	2	12	10.50	65	36	2	2	1.66	1.53	276
5	13	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	10.50	7	2	12	10.50	84	0	2	2	1.66	1.53	314
10	14	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	10.50	9	2	12	10.50	84	0	2	2	1.66	1.59	343
20	18	11	19.83	4	1	12	19.33	11	2	6	19.33	4	2	12	10.50	8	2	12	10.50	84	0	2	2	1.91	2.08	405
30	28	13	20.17	4	1	12	19.66	10	2	6	19.66	4	2	12	10.50	8	2	12	10.50	86	0	2	2	2.08	2.87	370
40	35	15	20.50	4	1	12	20.00	10	2	6	20.00	4	2	12	10.50	5	4	6	10.50	86	0	2	2	2.25	3.49	362
50	40	16	20.67	4	1	12	20.16	10	2	6	20.16	4	2	12	10.50	7	2	12	10.50	86	0	2	2	2.33	3.90	362
60	45	18	21.00	4	1	12	20.50	10	2	6	20.50	4	2	12	10.50	6	2	12	10.50	88	0	2	2	2.50	4.41	356

1 @ 18 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.	Bar 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	19.33	4	1	12	18.83	8	2	6	18.83	4	2	12	11.50	4	4	6	11.50	69	36	2	2	1.66	1.49	290
3	13	8	19.33	4	1	12	18.83	11	1	12	18.83	4	2	12	11.50	7	2	12	11.50	69	36	2	2	1.66	1.58	305
5	13	8	19.33	4	1	12	18.83	9	2	6	18.83	4	2	12	11.50	8	2	12	11.50	88	0	2	2	1.66	1.58	337
10	14	9	19.50	4	1	12	19.00	9	2	6	19.00	4	2	12	11.50	9	2	12	11.50	88	0	2	2	1.75	1.73	355
20	18	12	20.00	4	1	12	19.50	11	2	6	19.50	4	2	12	11.50	8	2	12	11.50	90	0	2	2	2.00	2.24	418
30	28	14	20.33	4	1	12	19.83	10	2	6	19.83	4	2	12	11.50	8	2	12	11.50	90	0	2	2	2.16	3.04	382
40	35	16	20.67	4	1	12	20.16	10	2	6	20.16	4	2	12	11.50	8	2	12	11.50	90	0	2	2	2.33	3.68	385
50	40	18	21.00	4	1	12	20.50	10	2	6	20.50	4	2	12	11.50	5	4	6	11.50	92	0	2	2	2.50	4.20	376
60	45	20	21.33	4	1	12	20.83	10	2	6	20.83	4	2	12	11.50	7	2	12	11.50	92	0	2	2	2.66	4.73	378

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.
Bars WF Size = 8 Length = 6.00 ft. Spacing = 12 in.
Bars EWF Size = 4 No. = 2 Spacing = 12 in.

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

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

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 SLAB BRIDGE INTERIOR SECTION SPANS: 1 BARREL AT 18'-0" CLEAR HEIGHTS 9'-0" THRU 13'-0" 0' THRU 60' FILL 2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-108

d:\sdpdata\18\barrel.slab1
14:08 - 2001