2 @ 16 x 9 REINFORCED CONCRETE SLAB BRIDGE

	Fill Height ft.	Dimensions ST in.	WT in.	IT 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 IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Bars IWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	11.5	8	8	34.00	10	1	12	33.50	8	2	6	33.50	4	2	12	7.50	5	2	12	7.50	4	2	12	7.50	85	64	3	3	1.67	1.67	2.12	550
	3	14	8	8	34.00	7	2	6	33.50	7	2	6	33.50	4	2	12	7.50	5	2	12	7.50	4	2	12	7.50	85	64	3	3	1.67	1.67	2.39	501
	5	15	8	8	34.00	11	1	12	33.50	6	2	6	33.50	4	2	12	7.50	5	2	12	7.50	4	2	12	7.50	119	0	3	3	1.67	1.67	2.49	485
	10	18	8	8	34.00	9	2	6	33.50	6	2	6	33.50	4	2	12	7.50	6	2	12	7.50	4	2	12	7.50	119	0	3	3	1.67	1.67	2.81	542
Moment Break	20	19	8	8	34.00	4	2	12	16.66	10	2	6	33.50	4	2	12	7.50	7	2	12	7.50	5	2	12	7.50	119	0	3	3	1.67	1.67	2.91	538
	30	26	10	8	34.33	4	2	12	16.66	9	2	6	33.83	4	2	12	7.50	6	2	12	7.50	4	4	6	7.50	119	0	3	3	1.83	1.67	3.78	476
	40	32	11	8	34.50	4	2	12	16.66	9	2	6	34.00	4	2	12	7.50	6	2	12	7.50	7	2	12	7.50	119	0	3	3	1.92	1.67	4.49	488
	50	37	12	8	34.67	4	2	12	16.66	10	2	6	34.17	4	2	12	7.50	5	2	12	7.50	6	4	6	7.50	119	0	3	3	2.00	1.67	5.10	558
	60	41	13	8	34.83	4	2	12	16.66	10	2	6	34.33	4	2	12	7.50	5	2	12	7.50	6	4	6	7.50	119	0	3	3	2.08	1.67	5.60	560

2 @ 16 x 10 REINFORCED CONCRETE SLAB BRIDGE

	Fill Height ft.	Dimensions ST in.	WT in.	IT 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 IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Bars IWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	11.5	8	8	34.00	10	1	12	33.50	8	2	6	33.50	4	2	12	8.50	5	2	12	8.50	4	2	12	8.50	91	64	3	3	1.67	1.67	2.20	558
	3	14	8	8	34.00	7	2	6	33.50	7	2	6	33.50	4	2	12	8.50	5	2	12	8.50	4	2	12	8.50	91	64	3	3	1.67	1.67	2.46	509
	5	15	8	8	34.00	11	1	12	33.50	6	2	6	33.50	4	2	12	8.50	6	2	12	8.50	4	2	12	8.50	125	0	3	3	1.67	1.67	2.56	502
	10	18	8	8	34.00	9	2	6	33.50	6	2	6	33.50	4	2	12	8.50	5	4	6	8.50	4	2	12	8.50	125	0	3	3	1.67	1.67	2.88	562
Moment Break	20	19	9	8	34.17	4	2	12	16.66	10	2	6	33.67	4	2	12	8.50	6	4	6	8.50	5	2	12	8.50	125	0	3	3	1.75	1.67	3.06	567
	30	26	11	8	34.50	4	2	12	16.66	9	2	6	34.00	4	2	12	8.50	7	2	12	8.50	4	4	6	8.50	125	0	3	3	1.92	1.67	3.94	498
	40	32	12	8	34.67	4	2	12	16.66	9	2	6	34.17	4	2	12	8.50	5	4	6	8.50	7	2	12	8.50	125	0	3	3	2.00	1.67	4.66	512
	50	37	14	8	35.00	4	2	12	16.66	10	2	6	34.50	4	2	12	8.50	6	2	12	8.50	6	4	6	8.50	127	0	3	3	2.17	1.67	5.36	584
	60	41	15	8	35.17	4	2	12	16.66	10	2	6	34.67	4	2	12	8.50	6	2	12	8.50	6	4	6	8.50	127	0	3	3	2.25	1.67	5.87	586

2 @ 16 x 11 REINFORCED CONCRETE SLAB BRIDGE

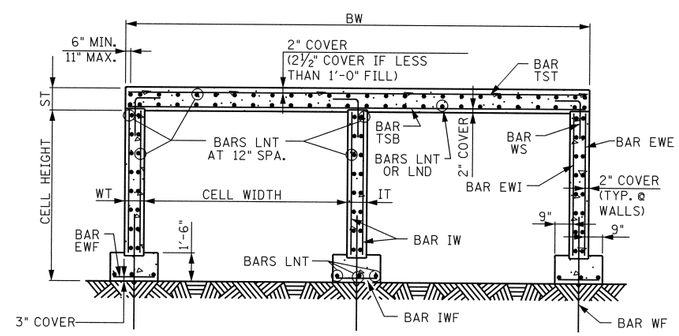
	Fill Height ft.	Dimensions ST in.	WT in.	IT in.	BW ft.	Bars TST Size	No.	Spacing in.	Length ft.	Bars TSB Size	No.	Spacing in.	Length ft.	Bars EWE Size	No.	Spacing in.	Length ft.	Bars EWI Size	No.	Spacing in.	Length ft.	Bars IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Bars IWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	11.5	8	8	34.00	10	1	12	33.50	8	2	6	33.50	4	2	12	9.50	5	2	12	9.50	4	2	12	9.50	97	64	3	3	1.67	1.67	2.27	591
	3	14	8	8	34.00	7	2	6	33.50	7	2	6	33.50	4	2	12	9.50	6	2	12	9.50	4	2	12	9.50	97	64	3	3	1.67	1.67	2.53	551
	5	15	8	8	34.00	11	1	12	33.50	6	2	6	33.50	4	2	12	9.50	5	4	6	9.50	4	2	12	9.50	131	0	3	3	1.67	1.67	2.64	523
	10	18	8	8	34.00	9	2	6	33.50	6	2	6	33.50	4	2	12	9.50	7	4	6	9.50	4	2	12	9.50	131	0	3	3	1.67	1.67	2.95	610
Moment Break	20	19	10	8	34.33	4	2	12	16.66	10	2	6	33.83	4	2	12	9.50	7	4	6	9.50	5	2	12	9.50	131	0	3	3	1.83	1.67	3.21	603
	30	26	12	8	34.67	4	2	12	16.66	9	2	6	34.17	4	2	12	9.50	6	4	6	9.50	4	4	6	9.50	131	0	3	3	2.00	1.67	4.12	529
	40	32	13	8	34.83	4	2	12	16.66	9	2	6	34.33	4	2	12	9.50	6	4	6	9.50	7	2	12	9.50	131	0	3	3	2.08	1.67	4.84	544
	50	37	15	8	35.17	4	2	12	16.66	10	2	6	34.67	4	2	12	9.50	6	4	6	9.50	6	4	6	9.50	133	0	3	3	2.25	1.67	5.56	629
	60	41	16	9	35.42	4	2	12	16.66	10	2	6	34.92	4	2	12	9.50	6	4	6	9.50	5	4	6	9.50	133	0	3	3	2.33	1.75	6.12	613

2 @ 16 x 12 REINFORCED CONCRETE SLAB BRIDGE

	Fill Height ft.	Dimensions ST in.	WT in.	IT 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 IW Size	No.	Spacing in.	Length ft.	Bars LNT No.	Bars LND No.	Bars WS No.	Bars WF No.	Bars EWF Length ft.	Bars IWF Length ft.	Concrete CY/LF	Reinf. Steel LB/LF
Continuous	No Fill	11.5	8	8	34.00	10	1	12	33.50	8	2	6	33.50	4	2	12	10.50	6	2	12	10.50	4	2	12	10.50	103	64	3	3	1.67	1.67	2.35	586
	3	14	8	8	34.00	7	2	6	33.50	7	2	6	33.50	4	2	12	10.50	5	4	6	10.50	4	2	12	10.50	103	64	3	3	1.67	1.67	2.61	549
	5	15	8	8	34.00	11	1	12	33.50	6	2	6	33.50	4	2	12	10.50	6	4	6	10.50	4	2	12	10.50	137	0	3	3	1.67	1.67	2.71	553
	10	18	9	8	34.17	9	2	6	33.67	6	2	6	33.67	4	2	12	10.50	7	4	6	10.50	4	2	12	10.50	137	0	3	3	1.75	1.67	3.11	627
Moment Break	20	19	11	8	34.50	4	2	12	16.66	10	2	6	34.00	4	2	12	10.50	7	4	6	10.50	5	2	12	10.50	137	0	3	3	1.92	1.67	3.38	620
	30	26	13	8	34.83	4	2	12	16.66	9	2	6	34.33	4	2	12	10.50	7	4	6	10.50	4	4	6	10.50	137	0	3	3	2.08	1.67	4.30	567
	40	32	15	8	35.17	4	2	12	16.66	9	2	6	34.67	4	2	12	10.50	6	4	6	10.50	7	2	12	10.50	139	0	3	3	2.25	1.67	5.13	563
	50	37	17	8	35.50	4	2	12	16.66	10	2	6	35.00	4	2	12	10.50	6	4	6	10.50	6	4	6	10.50	139	0	3	3	2.42	1.67	5.86	649
	60	41	18	9	35.75	4	2	12	16.66	10	2	6	35.25	4	2	12	10.50	6	4	6	10.50	5	4	6	10.50	139	0	3	3	2.50	1.75	6.44	632

Note: Maximum fill height 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 = 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 IWF Size = 4 No. = 1 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.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
STANDARD REINFORCED CONCRETE SLAB BRIDGE
INTERIOR SECTION
SPANS: 2 BARRELS AT 16'-0"
CLEAR HEIGHTS 9'-0" THRU 12'-0"
0' THRU 60' FILL
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

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 Group: Bridges\Tables\1-5-10\Off Fold Culvert Files 1-5-10\16' Span\STD-17-142¢143¢144_2barrel_slab16'.dgn
Date: 2/10/2010