STD174.DGN

60° SKEW

2:1 SLOPE						
H	WL	hl	WS	hs	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	7.50	2.75	4.50	1.75	4.2	672
4.5	8.50	3.00	5.00	1.75	5.0	729
5	9.50	3.50	5.50	2.00	6.5	827
5.5	10.50	3.75	6.25	2.25	7.7	977
6	11.75	4.25	6.75	2.50	8.8	1,068
6.5	12.75	4.50	7.50	2.75	10.5	1,164
7	13.75	5.00	8.00	3.00	12.9	1,504
7.5	14.75	5.25	8.50	3.00	14.5	1,616
8	15.75	5.75	9.25	3.25	16.4	1,736
8.5	16.75	6.00	9.75	3.50	18.2	1,915
9	17.75	6.50	10.25	3.75	21.1	2,814
9.5	19.00	6.75	11.00	4.00	23.5	2,948
10	20.00	7.25	11.50	4.25	26.4	3,266
10.5	21.00	7.50	12.25	4.50	28.9	3,423
11	22.00	7.75	12.75	4.50	32.2	3,846
11.5	23.00	8.25	13.25	4.75	36.3	4,672
12	24.00	8.50	14.00	5.00	39.8	5,017
12.5	25.00	9.00	14.50	5.25	44.7	5,243
13	26.25	9.25	15.25	5.50	50.2	6,224
13.5	27.25	9.75	15.75	5.75	53.9	6,749
14	28.25	10.00	16.25	5.75	57.3	6,986
14.5	29.25	10.50	17.00	6.00	61.5	7,404
15	30.25	10.75	17.50	6.25	68.9	7,978
15.5	31.25	11.25	18.25	6.50	73.6	8,881
16	32.25	11.50	18.75	6.75	80.6	9,485
16.5	33.50	12.00	19.25	7.00	87.6	11,203
17	34.50	12.25	20.00	7.25	94.7	12,324
17.5	35.50	12.50	20.50	7.25	99.4	12,224
18	36.50	13.00	21.25	7.50	108.6	12,888
18.5	37.50	13.25	21.75	7.75	112.0	13,152
19	38.50	13.75	22.25	8.00	125.6	14,488
19.5	39.50	14.00	23.00	8.25	131.9	16,455
20	40.75	14.50	23.50	8.50	139.0	17,052
20.5	41.75	14.75	24.00	8.50	145.0	17,579
21	42.75	15.25	24.75	8.75	164.3	19,541

3:1 SLOPE						
H	WL	hl	WS	hs	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	8.50	3.00	5.50	2.00	5.0	712
4.5	9.75	3.50	6.25	2.25	6.2	782
5	10.75	4.00	7.00	2.50	7.9	894
5.5	12.00	4.25	7.75	2.75	9.4	1,064
6	13.00	4.75	8.50	3.00	10.9	1,162
6.5	14.25	5.00	9.25	3.50	13.0	1,261
7	15.50	5.50	10.00	3.75	15.6	1,622
7.5	16.50	6.00	10.75	4.00	17.6	1,750
8	17.75	6.25	11.50	4.25	19.8	1,885
8.5	18.75	6.75	12.25	4.50	22.1	2,073
9	20.00	7.25	13.00	4.75	26.5	3,200
9.5	21.00	7.50	13.75	5.00	29.0	3,319
10	22.25	8.00	14.50	5.25	32.1	3,644
10.5	23.25	8.25	15.25	5.50	34.9	3,789
11	24.50	8.75	16.00	5.75	39.4	4,257
11.5	25.50	9.25	16.75	6.00	45.0	5,270
12	26.75	9.50	17.50	6.25	48.7	5,587
12.5	28.00	10.00	18.25	6.50	52.9	5,802
13	29.00	10.25	19.00	6.75	61.0	6,799
13.5	30.25	10.75	19.75	7.00	65.0	7,462
14	31.25	11.25	20.50	7.25	71.9	7,852
14.5	32.50	11.50	21.25	7.50	76.8	8,307
15	33.50	12.00	22.00	7.75	86.3	8,969
15.5	34.75	12.25	22.75	8.00	91.6	10,054
16	35.75	12.75	23.50	8.25	97.1	10,553
16.5	37.00	13.25	24.00	8.50	106.1	12,649
17	38.00	13.50	24.75	8.75	115.3	13,785
17.5	39.25	14.00	25.50	9.25	123.4	13,784
18	40.50	14.25	26.25	9.50	130.1	14,292
18.5	41.50	14.75	27.00	9.75	136.9	14,626
19	42.75	15.25	27.75	10.00	155.6	16,405
19.5	43.75	15.50	28.50	10.25	162.7	18,513
20	45.00	16.00	29.25	10.50	171.0	19,179
20.5	46.00	16.25	30.00	10.75	178.5	19,814
21	47.25	16.75	30.75	11.00	202.3	21,818

4:1 SLOPE						
H	WL	hl	WS	hs	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	9.25	3.25	6.50	2.25	5.7	745
4.5	10.25	3.75	7.25	2.75	7.0	807
5	11.50	4.25	8.25	3.00	8.5	909
5.5	12.75	4.50	9.00	3.25	10.5	1,117
6	14.00	5.00	9.75	3.50	12.7	1,246
6.5	15.25	5.50	10.75	3.75	14.7	1,340
7	16.25	5.75	11.50	4.25	17.3	1,690
7.5	17.50	6.25	12.25	4.50	19.6	1,824
8	18.75	6.75	13.25	4.75	22.2	1,974
8.5	20.00	7.25	14.00	5.00	25.6	2,226
9	21.25	7.50	15.00	5.25	29.5	3,395
9.5	22.25	8.00	15.75	5.75	32.5	3,517
10	23.50	8.50	16.50	6.00	35.7	3,833
10.5	24.75	8.75	17.50	6.25	39.1	4,051
11	26.00	9.25	18.25	6.50	44.7	4,575
11.5	27.00	9.75	19.00	6.75	49.9	5,566
12	28.25	10.00	20.00	7.25	54.8	5,962
12.5	29.50	10.50	20.75	7.50	56.1	6,013
13	30.75	11.00	21.50	7.75	69.6	7,335
13.5	32.00	11.25	22.50	8.00	74.6	8,000
14	33.00	11.75	23.25	8.25	79.5	8,311
14.5	34.25	12.25	24.25	8.50	85.2	8,812
15	35.50	12.50	25.00	9.00	96.5	9,592

6:1 SLOPE						
H	WL	hl	WS	hs	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	9.75	3.50	7.50	2.75	6.5	781
4.5	11.00	4.00	8.50	3.00	7.9	856
5	12.25	4.50	9.50	3.50	10.2	979
5.5	13.75	5.00	10.50	3.75	12.1	1,183
6	15.00	5.25	11.50	4.25	14.5	1,317
6.5	16.25	5.75	12.50	4.50	16.7	1,413
7	17.50	6.25	13.50	4.75	19.8	1,811

CONST. NO. _____

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

NOTE: QUANTITIES ON THIS SHEET ARE ESTIMATED TOTALS FOR ALL FOUR WINGWALLS.

NOTE: ADDITIONAL CONCRETE AND REINFORCEMENT QUANTITIES FOR BOX CULVERT CUT-OFF WALL SHALL BE ADJUSTED BASED ON AS-BUILT DIMENSIONS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WINGWALL DIMENSIONS AND QUANTITIES

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-13

DESIGNED BY CMH / MAH DATE 12-09
DRAWN BY DIANE BUSH DATE 04-10
SUPERVISED BY RLH / JWP / MAH DATE 12-09
CHECKED BY _____ DATE _____

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14:51 12-DEC-2010