DULZURA TO UPPER OTAY

PIPE LINE

1025

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

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					Correct
	7.27	496.36		489.09	486.09
B.M.#1			4.02	492.34	489.34
0			0.1	96.3	93.3
+10			1.0	95.4	92.4
+12			2.2	94.2	91.2
	1.09	484.71	12.74	483.62	
1			6.2	78.5	75.5
	1.25	483.13	12.83	471.88	
+85			4.5	68.6	65.6
2			5.7	67.4	64.4
+73			11.1	62.0	59.0
	2.06	462.96	12.23	460.90	
+83			8.3	54.7	51.7
3	Creek		9.8	53.2	50.2
+25			6.7	56.3	53.3
+35			6.5	56.5	53.5
+36			4.8	58.2	55.2
+50 +75			6.0	57.0	54.0
4			5.1	57.9	54.9
	11.67		37.80 11.67	489.09 462.96	
			26.13	26.13	

Numerator = Rod from same H.I as station
Denominator = Distance out from ℄.

New Grade Old Grade

= Peg 40 Lt. Sta 21+70 Begin 3-11-16 1 PM.

= Peg 35 Rt. Sta 0+40

493.30 × 493.3 ×

475.00 × 475.0 × 7.4/10 4.8/10

464.00 × 464.0 × 5.9/10 6.0/10

457.33 9.8/10 9.8/10

455.00 × 455.0

454.42 454.07 0.6 F0.2

454.75 451.0 × 5.6/10 ~~3.8~~ 0.9 5.3/10

No change of grade
0+00 - 3+35

		462.96			Correct
4 +50					
5			48	458.2	455.2
+40			56	57.4	53.4
+50					
6			6.1	56.9	53.9
7			5.8	57.2	54.2
8			6.5	56.5	53.5
+50					
	4.72	461.33	6.35	456.61	
9			4.8	56.5	53.5
+50					
+55					
+60			0.1	61.2	58.2
	12.36	473.26	0.48	460.90	
~~+85~~					
10			5.1	68.2	65.2
#					
B.M 2			2.27	470.99	467.99
+25			1.01	71.9	68.9
+35 x					
	12.31	484.96	0.61	472.65	
+40			11.6	73.4	70.4
+50					
+75			2.6	82.4	79.4
	13.30	497.28	0.98	483.98	
11			9.0	87.3	84.3
+30					
	8.88	505.30	0.86	496.42	
+50				505.30	
	51.57		9.23	462.96	
	9.23				
	42.34			42.34	

New Grade	Old Grade	L	R	Old Cut	New Cut
454.57	450.5	47/10 ~~47~~	+0.1 50/10	~~+7.2~~	+0.1
454.40	450.0 x	~~2.49~~	~~-0.1~~		
454.22					
		57/10 ~~2.97~~	-0.5 64/10	~~+3.7~~	-0.5
454.05	450.0			~~+2.8~~	-1.2
		56/10	60/10	~~+3.8~~	-0.1
453.70	450.0			~~+3.8~~	+0.1
		63/10	65/10	~~+4.1~~	+0.6
453.35	450.0			~~+3.5~~	+0.1
453.17 x				+3.9	~~+0.7~~ -0.8
~~454.5~~		46/10	49/10		
~~453.00 x~~	450.0 x			+3.7	~~+0.7~~ -0.8
~~453.4~~	453.0 x			+4.6	~~+0.6~~
~~453.17~~					
~~458.00 x~~					
~~463.0 x~~	457.9	47/10	50/10		+0.0
465.5	460.0 x			+5.5	+1.1
Reg 30 Lt sta 10					
470.00 x					+0.3
(470 x)					
~~473.0~~	470.0			~~+4.2~~ 4.0	+0.9
~~470.1~~					
~~478.2 x~~					+0.0
~~483.45~~		80/10	97/10		+1.4
~~484.54~~	480.0			~~+4.1~~	~~+5.6~~
~~490.00 x~~					+0.5
~~493.00~~	490.0 x			+3.5 (+2.5)	~~+0.5~~ +0.5

		505.30		-	Correct
11+65			69	498 4	4954 ✓
+75					
12			5.0	500 3	973 ✓
+25					
~~3~~ 30			35	0 1.8	98.8 ✓
+50					
13			3.1	0.2 2	99.2 ✓
+50			3.5	0 1.8	988 ✓
14			4 2	01.1	98.1 ✓
15			2.5	02.8	99.8 ✓
	11.28	513.80	3.28	502.02	
16			11.2	02.1	99.1 ✓
+50			123	0 1.0	980 ✓
+60			11.1	02.2	99.2 ✓
+80			116	017	498.7
+85					
17			10.2	03.1	500.1 ✓
+10					
+13	12" pipe bottom		10.2	03.1	00.1
+24 2/3					
+25			33	04.0	01.0
+50					
55			6.2	07.1	04.1
+55					
18			4.2	09.1	06.1
+50					
19			2.4	10.9	07.3
+50					
	11.28	513.30			
	3.28	505.30			
	8.00 ↓	8.00 ↓			

New Grade	Old	R.	L.		
~~495.5~~ x					
~~497.5~~ x					
496.67	494.0 x	40/10	57/10	C 3.8	~~0.4~~ 0.0
~~498.00~~ x					~~0.4~~ C 0.0 ✓
498.05	495.0 x	26/10	43/10	C 3.1	- 0.3
498.16	495.0			C 3.2 4.2	+ 0.0 +1.0
498.27	495.0	25/10	47/10	C 2.7 3.5	- 0.6 +0.5
498.38	495.0	35/10	50/10	C 2.6 3.1	- 0.8 +0.3
498.49		15/10	33/10	C 4.0	+ 0.5
498.60	495.0			C 4.2 4.9	+ 0.6 +1.2
				C 3.4	- 0.3
498.82	495.0	10 1/10	123/10	C 3.4 4.1	- 0.4 +1.3
498.93	495.0 x			C 3.3	- 0.6
499.0 x					
~~499.5~~ x					~~Rod - 0.4~~ +0.2
~~499.9~~ 500.3 x	496.0 x	10 6/10	96/10	C 5.0 4.1	~~+1.1~~
	10.2 Bottom pipe (500.1 Elev. Bottom)				
				C 4.0	
502.9	500.0 x			C 4.4	+ 1.5 ✓
505.0 x		47/10	37/5 57/6 48/10 (Rod)		+ 0.2
505.4	502.0 x			C 3.9 4.3	+ 0.5 +0.7
506.5 x	503.0	30/10	27/5 24/10 (Rod ~~0.86~~)	3.9	+ 0.1
~~507.0~~ x	504.0 x			C 3.9	- ~~0.1~~ +0.9
~~506.33~~	503.25			C 3.4	- ~~0.3~~ +0.2

						Rt.			Lt.		
		513.30			Corrected	New Grade	Old Grade				
20			33	510.0	507.0	505.67 ~~505.87~~	502.5	3 4/10	3 3/6 4 0/7 4 0/10 Road C 5.6		~~+2.2~~ +2.4
B.M #3			1.26	512.04	509.04	Reg 30 Lt Sta 20					
+50						505.00 x 503.30 ~~503.74~~ x	501.75	5 0/10	4 4/4 7 5/7 7 6/10 Road C 4.6	5.1	~~+2.0~~ +1.8 ~~+2.9~~ +2.6
21			44	08.9	05.9		501.0 x				
	1.24	507.02	7.52	505.78							
+50			07	506.3	503.3	x 500.00 x ~~499.38~~	498.0		C 5.5		+3.5 ~~+4.1~~
+75						x 497.8					
200			83	498.7	495.7						
22			90	580	95.0	x 496.00 x	495.0	9 6/10	8 6/2 4 3/8 4 0/10 Road F 4.4		
+25						x 494.8					
+50			11.5	95.5	92.5	x 494.6	492.0 x				
+53	W.W		13.6	93.4	90.4						
+55											
+60	W W		~~14.4~~	92.6	89.6						24" Culv.
+65	W W		13.3	93.7	90.7						
+67			10.5	96.5	93.5						
+76						x 494.6					
+85			8.7	98.3	95.3						
23			7.9	499.1	96.1	x 495.7	493.0 x	7 5/10	7 8/4 4 4/7 4 1/10 Road ~~+3.4~~		
+15			6.7	500.3	97.3						
+25			4.7	502.3	499.3						
+45			3.2	03.8	500.8						
+50						x 499.4	497.5		C ~~4.3~~		
	11.20	517.85	0.37	506.65							
	12.44	513.30	7.89								
	7.89	~~4.55~~									
	4.55										

		517.85			Correct	New Grade	Old Grade	R		L		
23+85			8.2	509.7	506.7	~~505.82~~ x	500.65					+1.1
24			7.6	510.3	07.3	502.38 ✓	~~505.21~~	8.0/10	7 7/3	1 10/6	11 3/10 R	+4.6 ✓
							502.0 x				+5.0	+1.8
+15			8.7	09.2	06.2							
+50						~~505.00~~ x						
+65			7.3	10.6	07.6	~~505.93~~	504.0 x					
+90			5.2	12.7	09.7							
25			5.2	12.7	09.7	~~8.0~~	506.6	5 5/10	5 0/5	7 0/7	6 8/10 R	~~+0.1~~
						~~506.64~~	505.0 x				+4.1	+3.5
+25			6.2	11.7	08.7							
+50						~~508.0~~ x						
+65			7.1	10.8	07.8	~~507.36~~	505.0				+2.6	~~+0.6~~ +0.2
~~25+85~~												
26			5.5	12.4	09.4	~~508.36~~ x	505.0	5 5/10	5 4/1	3 4/5	3 3/10 R	+0.8
+50						509.3 x	505.0 x				+2.5	+1.2
+65			3.2	14.7	11.7	511.40 x	508.0				+4.0	+2.1
	6.79	52486	0.28	517.57								
+85			6.3	18.1	15.1							
27			6.4	18.0	15.0	514.0	511.0	6 0/10			6 3/10 R	+1.4 ✓
						~~514.11~~					+5.2	+2.1
+40			4.3	20.1	17.1							
27 +50						516.8 x	514.0 x					
+75			1.7	22.7	19.7						+4.8	+1.0 ✓
+80												
28			0.8	23.6	20.6	~~517.00~~ x	516.0 x	0 9/10	1 3/3	4 0/7	3 7/10 R 4.6	+0.8
											+5.2	+1.2
+10												
+30			1.0	23.4	20.4							+1.0
+50												
+75			2.8	21.5	18.5	518.15 x	515.0 x					+0.4
	679	524.36	0.28									
	28	51785										
	√651	√651										

						Rt.			Lt.		7
		524.36			Correct	New Grade	Old Grade				
29			4.5	519.9	516.9	516.20 ×	513.25	5.0/10	4.6/3 5.2/5	5.2/10 R +3.8	−3.6
+50						514.46 ×		3.6/10	8.6/2 7.5/6	7.5/10 R 3.6	−4.2
30			8.6	15.8	12.8	514.00 ×	509.75			+3.2	−1.1
BM#4			7.46	516.90	513.90	Peg 40 Lt sta 30					
+50						513.86	508.0 ×			+3.0	−3.1
	7.29	522.24	9.41	514.95	511.95	Bottom 110 End = Lt Line			Sta 30+67 (12")		
						Elev = 508.2					
31			7.3	14.9	11.9	513.72		7.5/10	7.2/3 6.1/5	6.3/10 R	
+50						513.57				3.2	−2.1
32			6.0	16.2	13.2	513.43	509.5	5.5/10		5.5/10 R 2.7	−2.0
										+4.2	+0.4
+40			4.3	17.3	14.3						
+50			5.2	17.0	14.0	513.29	510.0 ×	6.3/10	5.0/5	4.7/10 R +3.1	+0.0
											+0.4
33			5.7	16.5	13.5	513.14	510.0			+3.1	+0.0
+25			4.5	17.7	14.7						
+50						513.00	510.0			+4.2	+1.2
+45			5.5	16.7	13.7						
34			5.6	16.6	13.6	512.86	510.0	6.2/10		4.3/10 R +3.3	+0.4
+50						512.71	510.0	5.8	4.7/6	4.8/10 R +4.0	+1.3
35			5.6	16.6	13.6	512.57	510.0	1.0		+3.7	+1.1
+50						512.43	510.0			+3.1	+2.7
+80			2.9	19.3	16.3						
36			4.0	18.2	15.2	512.29	510.0	4.0/10	4.3/5 5.5/6	5.6/10 R +3.5	+3.2
37						√ 511.80	510.0				
+50			6.6	15.6	12.6	√ 511.70 ×	506.67	6.5/10	6.3/3 7.2/4	7.5/10 R 4.7	
										+3.0	
+50	0.94	516.57	6.61	515.63		510.20	507.33			+3.9	
38			4.1	12.5	9.5	509.0 ×	506.0 ×	4.5/10	4.9/3	4.3/5 4.7/10 R +3.9	
	8.23	524.36	16.0 √								
		516.57	8.23								
		√ 7.79									
			√ 7.79								

					Correct.	New Grade	Old Grade	Rt	Lt	
		516.57				507.0	504.0			+ 4.7
38+50										
38+65			5.4	511.2	508.2					
39			7.5	09.1	06.1	504.0 ×	502.0 ×	78/10	65/6 64/10	+ 4.2
+30			10.1	06.6	03.6					
+50			10.3	06.4	03.4	498.5 ×	497.3	12°/10 129/3	73/7 70/10	C 4.6
+65										
+70			12.5	04.1	501.1		495.0			+ 4.2
+80			16.2	00.4	497.4					
+75						496.5 ×				
+85			15.2	01.4	498.4					
+95										
40+00			14.5	02.1	499.1	496.5 ×	495.0 ×	160/10	132/7 118/10	+ 3.0
+25						498.0 ×	497.4	132/10	118/10	
+50			12.8	03.8	500.8					+ 2.9
Top of Deck of cattlepass			7.2	09.4	006.4	= Sta 39+80 ±				
B.M #5			3.48	509.03	504.03	Reg 50' Lt Sta 40+30 (beside angle post)				
+65						501.0 ×				
+85			11.1	05.5	02.5					
41			8.7	07.9	04.9	503.8 ×	499.8	102/10	72/5 62/10	+ 2.8 — 0.7
+45			8.0	08.6	05.6					
+50						507.0 ×	502.2			+ 4.7 + 0.9
+80			3.9	12.7	09.7					
42			4.7	11.9	08.9	509.00 ×	504.6	52/10	36/5 34/10	+ 3.6 — 0.8
+30										
	11.99	524.00	4.56	512.01						
+5			3.5	14.5	11.5	510.00 ×	502.0 ×			+ 2.9 — 0.1
	1199	524.00								
	456	16.57								
	7.43	7.43								

		524.00			Correct
43			10.5	513.5	510.5
+35 +50 4			6.0	18.0	15.0
+50			0.52	523.48	520.48
	10.53	531.01		520.48	
45 +50			9.9	21.1	
46 +50			5.3	25.1	
47 +50 +50			4.0	27.0	
48			3.7	27.3	
	12.86	541.62	2.25	528.76	
49 +50 +75			10.0	31.6	
+25 +50			2.9	38.7	
+75			0.4	41.2	
	4.32	545.12	0.82	540.80	
B.M. # 6			2.26	542.90	
51 +25 +50			5.3	39.8	
+73 83 P.T.			8.1	37.0	
2 +50	27.71 3.07 24.64	545.12 520.48 24.64	2.4	36.7	
			9.7	35.4	
			3.07		

New Grade	Old Grade	RT	LT		
511.0	507.0 ×	12 3/10	7 5/7	7 1/10 R +2.8	+0.0
511.70 ×					
512.50	509.6	8 2/10	3 0/7	3 1/10 R +4.9	-1.0
515.00	512.2			+4.0	-1.8
517.50	514.8			+0.6	-2.1
				End 3-11-16	
				Δ Rm	
520.00	517.4	12 3/10	9 4/5	8 6/10 R +2.x	-0.4
522.50	520.0 ×	7 7/10 missing	5 4/5	5 7/10 R —	
525.00 ×	522.0	10		+2.5	-1.5
526.5x ×	522.05	+10 +7 4 3/3	4 0/3	2 4/7 2 1/10 R +3.7	-0.9
526.5				+3.1	-2.6
526.50 ×	522.33	10	3 3/3	3 0/8 0 0/10 +2.5	-2.8
526.57	522.69	10.0 5 0/10		+3.1	-0.9
526.64	523.0	+0.7 10			
526.71	525.0	+0.7		+1.9	-0.1
526.78	527.0 ×	15.9 11 3/10	8 4/5	6 9/10 R 4.6 +2.1	+2.1
526.85	+9.7 LT	3 9/10	2 8/5	1 5/6 1 5/10 +7.6	+7.6
526.92	527.0			+10.2	+10.2
				+11.5	+11.5
				+9.8	+9.8
527.00 ×	527.0	0 5/10		0 8/10 R +14.2	+14.2
				+13.1	+13.1
Pon 50	Lt sta 50				
526.92	527.0	5 5/10		5 3/10 R +12.5	+12.5
526.85	527.0	8 3/10	7 7/3	6 4/7 6 3/10 R 9.6 +11.1	+11.1
					+9.6
				+9.1	+9.1
526.78	527.0	10 4/10	9 3/7	8 7/8 1 5/10 R +7.7	+7.7
526.71				+5.2	+5.7

					New Grade	Old Grade	Rt.	Lt.	
		514.12							
53			13.2	531.9					
+50					526.64	522.0 ×	14.0 / 10	17½ / 9	11⅔ / 7 — 11⅛ / 12 R +4.5 +4.5 +4.3
	3.34	535.82	12.64	532.48	526.57	526.00			+3.0
54			5.7	30.1			7.0 / 10	5⅔ / 4	4⅜ / 6 — 4⅜ / 10 R +4.1 +2.9
+20			8.3	27.5	526.5	525.00 ×			+1.7
54 +25 +50					526.80 ×	524.20	11.3 / 10	9⅘ / 5	8/8 — 7⅜ / 10 +2.2 +1.4 −0.8
55 +50			10.6	25.2	× 526.20	523.40			−0.8
	9.06	524.90	10.98	524.84	× 525.10	521.80			−1.1
					× 523.80	520.20			−0.4
56			2.3	22.0					
6+14.0					522.16	518.60	4.0 / 10	0⅘ / 7	0⅛ / 10 R +1.0
+50			2.6	22.3					
+85						517.0 ×			+0.1
			4.4	20.5					
57			3.6	21.3			5.9 / 10	2⅘ / 6	2⅜ / 10 R +2.1 −0.1
+40			6.1	18.8					
+50									
+75			5.5	19.4					+4.5 −2.0
8			7.1	17.8			6.7 / 10	6⅘ / 5	5⅔ / 7 — 4⅞ / 10 +3.6 −2.1
+20			6.7	18.2		514.0 ×	8.1 / 10	7⅞ / 9	6.5 / 6 — 6⅜ / 10 R
+45			6.3	18.6					
+50									
+61.5	2.0		7.4	17.5	× 518.2				517.4 −0.4
9			7.8	17.1					
+40					× 517.2	513.0 ×			−0.2
+50			8.5	16.4			10.2 / 10	7⅘ / 5	7⅘ / 10 R −1.4
+80	3.10	15.12 +4.10	12.62 +5.10						−1.2 515.1 +0.3
		20.72	+0.22						−1.9

1			524.90	see page 33			Rt.		Lt.	
60				10.3	514.6		12 6/10		8 5/5	8 6/10 R
B.M. # 7				4.25	520.65					
	424		517.53	11.61	513.29					
+50										
60+58 P.T.				4.5	13.0					
+60										
1				5.8	11.7					
+20										
+30				8.2	09.3					
+40										
+80	bottom 24" Pipe			9.0	08.5					
+80	of Ditch			11.8	05.7					
2				7.1	10.4					
3				6.9	10.6					
4				10.0	07.5					
	9.08		515.75	10.86	506.67					
+50				8.4	07.4					
5				7.2	08.6					
+45				5.6	10.2					
+82	Pipe bottom 36"			10.2	05.6					
+82	Ditch			11.0	04.8					
66				9.2	06.6					
	13.32		524.90	22.47						
			515.75	13.32						
			9.15	9.15						

abandoned

× 513.6

B.M. Peg 30' Lt Sta 60

513.0 ×

510.4 ×

506.8

504.9

504.0

504.0 ×

8 0/10	5 5/7		2 8/3	2 7/10 R	
9 7/10	7 5/3		4 0/3	4 0/10 R	
507.0 ×					
12 6/10	11 8/7		4 9/5	4 5/10 R	
10 9/10			6 3/3	4 8/6	4 5/10 R
14 9/10			9 7/7	6 0/8	5 7/10 R
503.0 ×					

503.0

503.0

9 2/10			6 5/3	4 7/7	4 8/10 R
5	15 7/10		5 2/5	4 8/10	
503.0					

-1.7
-2.1

		515.75			
76+50			7.1	508.7	
7			7.7	08.1	
+50			8.7	07.1	
8			7.6	08.2	
+26.20			7.2	08.6	
+20			8.3	07.5	✓
+50					509.6
	2.71	512.89	5.57	510.18	
+85			4.3	08.6	
9			3.8	09.1	
+50			5.0	07.9	~~309.6~~
70			5.4	07.5	~~509.2~~
BM#8			12.69	500.20	
+50			4.9	05.0	503.6
1			8.9	04.9	503.4
+50			8.9	04.0	502.5
2			9.8	03.1	501.7
+50			10.9	02.0	499.3
+74	Pipe bottom (24")		11.9	01.0	℄ 499.2 ✓
+74	Ditch		12.5	00.4	✓

1575 − 1289 = 286

5.57 − 2.71 = 2.86 ✓

	Rt	Lt	
503.0			
503.0	10 4/10	5 6/5	5 3/10 R
503.0			
503.0	10 4/10	5 7/5	5 0/10 R
503.0			
503.0	6 9/10	2 5/4	2 7/10 R
503.0			
503.0 ✓	8 7/10	5 9/2 3 5/6	3 9/10 R
Spike in Fence Post 40' Rt Sta 69+90			
	11 1/10	4 9/5	4 6/10 R
	13 1/1.0 11 8/2	7 8/5	6 6/10 R
497.0 ✓			

		512.89							
73			95	503.4	502.4		116/10	77/7	74/10
+5₀			8.6	04.3	503.0				
4			10.6	07.3	501.1		127/10	107/7 78/6	76/10 R
	7.17	507.38	12.68	500.21					
+5₀			6.1	01.3	500.6				
5			4.9	02.5	501.5		66/10	27/5	27/10 R
+10					502.7				
+15			4.7	02.7					
+5₀					501.7				
+73			6.7	00.7	500.8				
6			6.6	00.8	499.8		92/10	58/3	39/6 38/10 R
+50					500.0	497.0 x			
+10			5.8	501.6					
+25					500.5				
7			9.0	498.4	97.3	494.0 x	103/10	82/2 58/7	55/10 R
+5₀			9.2	98.2	95.8				
+75			8.7	98.7	94.7				
8			11.2	96.2	94.7		136/10	62/7	67/10 R
+25 (7)									
+28₀			9.7	97.7	96.7	(8) 493.0 x			
+35			8.8	98.6					
+5₀			8.4	99.0					
9			9.5	97.9	95.6		133/10	82/3	80/10 R
		517.89	12.68						
		507.38	7.17						
		5.51	5.51						

		507.38			5' offset Rt.
	4.41	499.70	7.68	485.29	
79+50			4.2	95.5	93.5
80			6.2	93.5	91.4
+50			7.8	91.9	90.6
B.M.#9			0.31	499.39	
1			8.4	91.3	
+06	Δ Lt		8.6	91.1	
+50			9.6	90.1	
2			9.9	89.8	
+50			10.6	89.1	
83			10.6	89.1	
	2.37	490.79	11.28	488.42	
+50			1.6	89.2	
4			2.3	88.5	
+50			3.2	87.6	
5			5.4	85.4	
+07	36		5.5	85.3	
+25			5.0	85.8	
	678	507.38 490.79 16.59	23.37 678 16.59		

Rt. Lt.

$\frac{84}{10}$ $\frac{56}{2}$ $\frac{35}{5}$ $\frac{30}{10}$

Peg 40 Lt Sta 80+50

487.0 × $\frac{107}{10}$ $\frac{60}{4}$ $\frac{56}{10}$

486.0 × $\frac{114}{10}$ $\frac{95}{2}$ $\frac{78}{5}$ $\frac{73}{10}$

486.0 × $\frac{122}{10}$ $\frac{104}{4}$ $\frac{88}{7}$ $\frac{87}{10}$

$\frac{30}{10}$ $\frac{20}{5}$ $\frac{10}{4}$ $\frac{11}{10}$

$\frac{31}{10}$ $\frac{17}{3}$ $\frac{23}{4}$ $\frac{20}{10}$

$\frac{48}{10}$ $\frac{22}{4}$ $\frac{35}{5}$ $\frac{35}{10}$

$\frac{72}{10}$ $\frac{45}{4}$ $\frac{56}{5}$ $\frac{49}{10}$

$\frac{62}{10}$ $\frac{45}{4}$ $\frac{53}{5}$ $\frac{51}{10}$

						Rt	Lt	
		490.79						
85+50			6.6	484.2		5 8/10	5 1/5	5 6/10 R
+60			6.2	84.6			5 8/8	
+75			6.5	84.3		8 2/10		4 2/8 4 7/10
86			8.1	82.7		11 5/10		6 5/10
+25			11.5	79.3		15 0/10		8 2/10
	0.82	480.39	11.22	479.57				
+50			7.4	73.0		9 3/10		4 5/10
+60			8.8	71.6				
+75			9.3	71.1		9 7/10		8 8/10
+90			10.0	70.4				
+91			11.1	69.3				
87			10.8	69.6	℄	11 1/10		10 8/10
+02	± Pipe (bottom) (36")		98	706	[illegible]			
+02			11.1	69.3				
+02			10.3	70.1				
+08			8.6	71.8				
+25			6.8	73.6		8 5/10		6 3/10
+33			6.9	73.5				
		490.79 480.39 10.40	11.22 .82 10.40					

		480.39		
87+50			4.0	476.4
+60			2.5	77.9
+75			1.9	78.5
+90			1.8	78.6
8			0.6	79.8
	12.89	493.13	0.16	480.23
+25			10.6	82.5
+45 52			11.0	82.1
+80			9.1	84.0
9			9.2	83.9
+07			9.0	84.1
+20			6.9	86.2
+50			4.6	88.5
+75			5.1	88.0
+95			3.0	90.1
90			3.0	90.1
B.M. #10			-0.33	492.79
+15			4.9	88.2
	12.89	493.12		
	16	80.39		
	12.73	412.73		

Rt.	Lt
34/10	38/10
18/10	15/10
12/10	09/10
116/10	102/10
116/10	109/10
95/10	81/10
33/10	33/5 66/5 66/10 R

Reg 90 Lt sta 90

		493.12		
90+35			38	489.3
+50			4.3	88.8
+70			3.5	89.6
+90			5.0	88.1
1			4.8	88.3
+50			4.9	88.2
2			3.3	89.8
	881	497.74	4.19	488.93
+50			8.0	89.7
3			6.2	91.5
+260	ALt.		6.5	91.2
+50			6.3	91.4
4			6.6	91.1
+50			6.7	91.0
5			6.9	90.8
+50			6.6	91.1
6			7.4	90.3
+50			7.2	90.5
	881 4.19 4.67	497.74 493.12 4.62		

Rt.	Lt.
58/10	45/4 46/10 R
43/10	24/3 25/10 R
85/10 55/5	58/4 58/10 R
95/10 83/5	52/4 52/10 R
85/10	42/5 42/10 R
93/10	48/6 45/10 R

V.I					
		497.74			
97			5.4	492.3	
+5.			5.5	92.2	
+75	Rt		5.1	92.6	
98			5.7	92.0	
	2.77	497.26	3.25	494.49	
+5.			4.3	93.0	
9			2.6	94.7	
+40			1.7	95.6	
+5.			2.0	95.3	
100			4.0	93.3	
+5.			7.1	90.2	
B.M.#11			3.47	493.79	
+75			9.0	88.3	
1			10.1	87.2	
+39 26	P.C.		11.2	86.1	
+5.			10.8	86.5	
+61	Pipe (bottom) 36" pipe		18.7	78.6	
275			12.1	85.2	

497.74
497.26
0.48

3.25
2.77
0.48

Rt.	Lt.	
8 6 / 10	3 5 / 8	3 6 / 10 R
6 0 / 10	4 3 / 3	3 4 / 7 — 3 3 / 10 R
4 1 / 10	2 4 / 5	3 2 / 8 — 3 2 / 10 R
5 0 / 10	4 0 / 2	5 7 / 4 — 5 5 / 10

Reg 35 | + 100 + 50

12 7 / 10	12 3 / 4	8 4 / 6	8 4 / 10
16 2 / 10	15 2 / 6	9 0 / 4	8 5 / 10
19 5 / 10	14 4 / 5	9 2 / 6	8 8 / 10

		497.26		
102			11.6	485.7
+25			9.0	88.3
+50			8.3	89.0
	6.62	496.70	7.18	490.08
3			6.0	90.7
+20			6.8	89.9
+50			6.0	90.7
4			5.7	91.0
+15			4.9	91.8
+50			6.7	90.0
5			6.0	90.7
+50			6.0	90.7
+80			7.1	89.6
6			6.0	90.7
+50			6.2	90.5
7			7.1	89.6
+50			6.0	90.7
8			5.0	91.7
		497.26 496.70 0.56	7.18 6.62 0.56	

			12.6/10	11 4/2 9 3/8 9 1/10 R
			10.0/10	8 6/10 R
			8.6/10	8 0/9 8 3/10 R
			6.2/10	6 7/12 6 6/10 R
			6.6/10	5 3/10 R
			7.4/10	6 0/5 5 4/7 5 3/10 R
			7.5/10	5 2/4 4 8/7 4 7/10 R
			7.2/10	4 4/10 R
			7.6/10	6 1/6 5 2/10
			6.0/10	4 4/5 4 5/10

		496.70			
	3.18	495.41	4.47	492.23	
108+50			3.7	91.7	
9			5.0	90.4	
+35			6.1	89.3	
+50			8.0	87.4	
+90	Pipe bottom (12")		12.8	82.6	
+90	Ditch -		13.7	81.7	
+90			15.7	79.7	
110			14.0	81.4	
+50			9.0	86.4	
BM #12			6.77	488.64	
+80			6.6	88.8	
1			5.7	89.7	
+50			6.5	88.9	
2			6.9	88.5	
+50			8.1	87.3	
3			8.8	86.6	
+50			6.9	88.5	
		496.70 495.41 1.29	4.47 3.18 1.29		

RT. LT.

5 6/10 — 4 4/8 5 0/10 R

1 6 0/10 — 12 7/6 11 6/10

Page 50 Lt sta 110

8 3/10 6 4/1 — 4 9/2 5 1/10 R

9 8/16 7 5/2 — 5 8/2 4 7/10 R

1 0 4/10 — 3 9/5 3 6/10 R

11 0/7 13 3/10 — 7 6/3 3 5/10

		495.41		
114			6.8	488.6
+5₀			6.2	89.2
115			6.2	89.2
	4.48	498.86	1.03	494.38
+5₀			9.1	89.8
6			9.0	89.9
+5₀			9.9	89.0
7			10.2	88.7
+5₀			11.2	87.7
+53	Pipe bottom (12")		7.9	91.0
+53	ground		11.1	87.8
8			12.2	86.7
+5₀			11.5	87.4
9			11.4	87.5
+5₀			10.2	88.7
120			9.7	89.2
B.M #13			0.78	498.08
+50			7.7	91.2
	4.48	498.86		
	1.03	495.41		
	3.45	3.45		

Rt	Lt
10 3/10	1 1/10 R
10 5/10	1 3/8 1 1/10 R
14 0/10 11 8/4	4 7/7 4 6/10 R
15 0/10 12 1/3	5 1/8 4 9/10 R
16 0/10	5 5/10
14 2/10	4 2/10
13 7/10	3 7/10

Peg 30 Lt sta 120 on bank road.

		498.86		
121			6.0	492.9
	3.52	498 44	9.94	488 92
+50			54	93.0
2			6.2	92.2
+05	P.pe bottom (12")		7.0	91.4
+05	Ground		10.6	87.8
+50			6.0	92.4
3			6.4	92.0
+50			6.0	92.4
4			6.0	92.4
+50			7.0	91.4
5			8.5	89.9
+50			9.8	88.6
6			7.7	90.7
+50			7.8	90.6
7			6.9	91.5
	8.36	500.71	6.03	492.35
+50			8.7	92.0
	17.88 16.03 1.85	500.71 498.86 1.85	16.03	

R

$\frac{11^{8}}{10}$ $\frac{12^{9}}{10}$ $\frac{11^{9}}{7}$ $\frac{10^{7}}{10}$ $\frac{8^{5}}{4}$ $\frac{12^{2}}{10}$ $\frac{11^{10}}{10}$ $\frac{10^{2}}{10}$

L

$\frac{3^{0}}{5}$ $\frac{3^{0}}{10}$ $\frac{3^{2}}{4}$ $\frac{2^{6}}{10}$ $\frac{2^{0}}{7}$ $\frac{1^{8}}{10}$ $\frac{0^{8}}{8}$ $\frac{0^{8}}{10}$ $\frac{7^{0}}{4}$ $\frac{2^{5}}{10}$ $\frac{4^{3}}{10}$ $\frac{5^{3}}{6}$ $\frac{2^{3}}{10}$

		500.71			
128			8.5	492.2	
+30			8.7	92.0	
+50			9.2	91.5	
+77 83			10.0	90.7	
9			9.6	91.1	
+50			8.3	92.4	
130			7.0	93.7	V
B.M. #14			4.25	496.46	
+50			8.8	91.9	
+349 P.O.T			9.2	91.5	
1			9.5	91.2	
+29 99 PC			10.6	90.1	
+50			12.8	87.9	
	2.78	491.07	12.42	488.29	
+90			10.4	80.7	
2			10.0	81.1	
+35			9.2	81.9	
+37			10.5	80.6	
	2.78	500.71 491.07 9.64	12.42 2.78 9.64		

Rt	Lt.
10 7/10	7 6/2 4 3/10
12 5/10	7 8/7 5 4/10 R
12 9/10	6 3/4 7 4/6 7 5/10 R

Peg 35 Lt sta 130 (on Lt bank road)

13 2/10	8 0/3 8 7/6 10 4/9 10 4/10
10 6/10	9 8/1 4 3/9 4 5/10

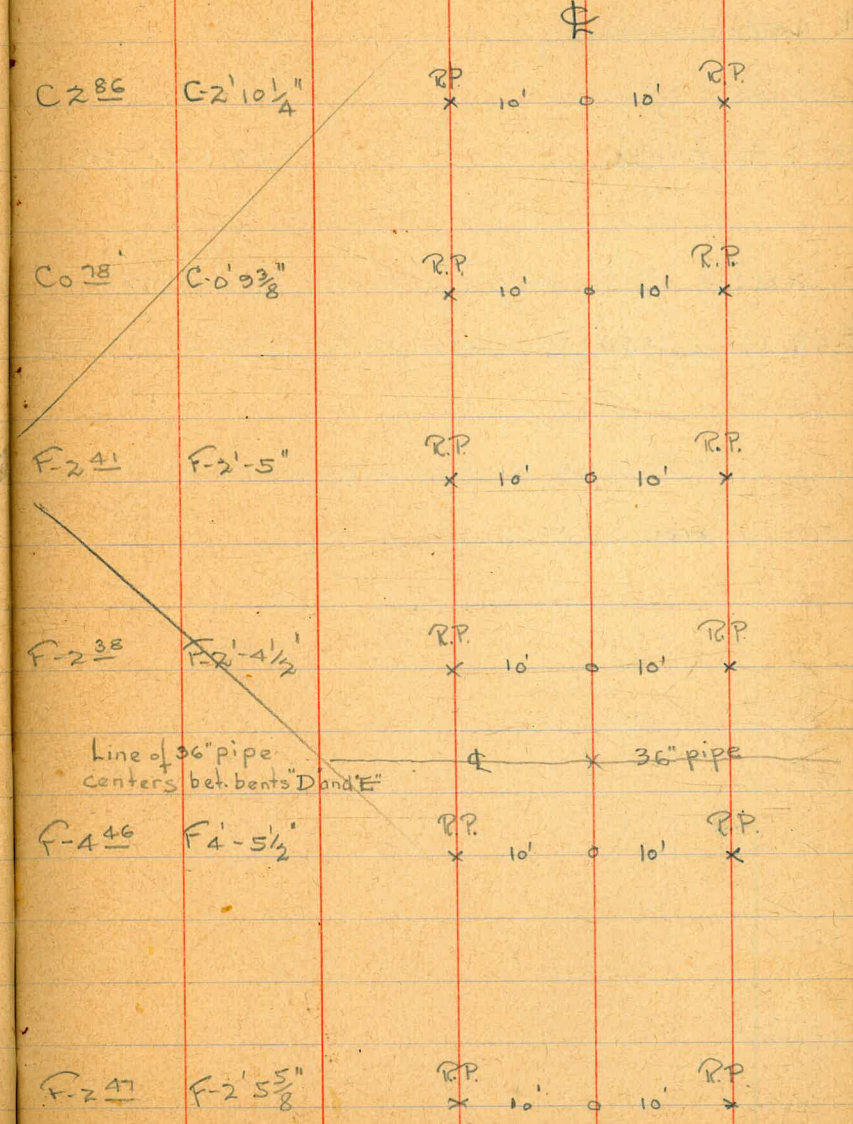
		491.07		
132+75		11.1	480.0	
3		9.6	81.5	℄
+06	Pipe bottom 36"	10.8	80.3	1'
+06	Ground 36"	11.0	80.1	
+05		7.3	83.8	
+12		10.2	80.9	
+50		7.1	84.1	
+75		3.6	87.5	
4		2.6	88.5	
		2.61	488.46	

Continued Book # 993 page 28

Trestle #1 ✓	463.10		Elev	Grade		
Bent "A" sta 2+71.00						
℄ Ground.		3.8	459.3			
Ref. Hub		3.24	459.86	459.38	Co .48	Co'-5 3/4"
Bent "B" " 2+86.5						
℄ Ground.		11.4	451.7			
Ref Hub		11.33	451.77	458.38	F-6.61	F-6'-7 3/8"
Bent "C" " 3+02.0						
℄ Ground.		11.9	451.2			
Ref. Hub		12.31	450.79	457.37	F-6.58	F-6'-7"
Bent "D" " 3+17.5						
℄ Ground.		10.8	452.3			
Ref. Hub		11.56	451.14	456.36	F-5.22	F-5'-2 5/8"
Bent "E" " 3+33.0						
℄ Ground.		9.7	453.4			
Ref. Hub		9.77	453.33	455.35	F-2.02	F-2'-00 1/4"

Tranverse sections are approximatly level.

Trestle #2.	475.73		Elev	Grade
Bent "A" 86+48				
℄ Ground		2.2	473.5	
Ref. hub at 10' Lt.			476.86	474.0
Bent "B" 86+56				
℄ Ground		3.3	472.4	
Ref. hub at 10' Lt.		0.95	474.78	474.0
Bent "C" 86+71.38				
℄ Ground		4.4	471.3	
Ref hub at 10' Lt.		4.14	471.53	474.0
Bent "D" 86+86.76				
℄ Ground		5.0	470.7	
Ref. hub at 10' Lt.		4.11	471.62	474.0
Bent "E" 87+02.14				
℄		6.0	469.7	
Ref hub at 10' Lt.		6.19	469.54	474.0
Bent "F" 87+17.52				
℄ bent located on gravel fill		3.0	472.7	
Origional Ground		4.5	471.2	
Ref. hub at 10' Lt.		4.20	471.53	474.0
Continued				



Trestle #2	475.79		Ground Grade			
Bent "G"	87+32.90					
℄ bent is located on gravel fill.		1.3	474.4			
Origional ground.		3.0	472.7			
Ref. hub at 10 Lt.		1.94	473.79	474.0	$F_0 2\frac{1}{2}$	$F_0'-2\frac{1}{2}''$

℄

R.P. × 10' ○ 10 × R.P.

Trestle is located on curve of ~~200~~ radius.
℄ chord of 15.38', c. c. bents center 15.50' on outside.

Transverse sections are approximatly level.

Trestle #11 546.85 Ground Grade

Bent "A" sta. 194+50.0

℄ Ground

Ref. hub	5.53	541.32	540.0

Bent "B" " 195+65.5

℄ Ground

Ref. hub	10.43	536.42	540.0

Bent "C" " 195+81.0

℄ Ground

Ref. hub	13.24	533.61	540.0

Bent "D" " 195+96.5

℄ Ground

Ref. hub	13.07	533.78	540.0

Bent "E" " 195+12.0

℄ Ground

Ref. hub.	5.35	541.50	540.0

Tranverse slope of Bents "A" and "E" approx. level, others as shown on opposite page.

Lt	℄	Rt
C 1 32	C 1'-3 3/4"	
F 3 58	F 3'-7"	
F 6 39	F 6'-4 5/8"	
F 6 27	F 6'-2 5/8"	
C 1 5	G 1'-6"	

+6.0/10 ℄ as 0.0 — × Ref. hub set 3' back on ℄ — -5.8/7 — -10.0/10

+7.2/10 ℄ as 0.0 — × Ref hub set 3' back on ℄ — -5.5/8 — -6.5/10

+7.7/10 ℄ as 0.0 — × Ref. hub set 3' back on ℄ — -6.3/10

× Ref. hub set 3' back on ℄.

× Ref. hub set 3' ahead on ℄.

Trestle # ~~4~~ 3 545.03

Bent "A" ~~200+97~~ 200+90 ℄

Ref. hub 4.77 540.26 540.0 C 0.26 C 0'-03"

Bent "B" 201+07.50 ℄

Ref hub 3.09 535.94 540.0 F 4.06 F 4'-00 3/4"

Bent "C" 201+23 ℄

Ref. hub 10.99 529.04 540.0 F 5.96 F 5'-11 1/2"

Bent "D" ~~201+30.5~~ 201+38.5 ℄

Ref hub 5.44 539.59 540.0 F 0.41 F 0'-4 7/8"

Transverse sections are approximatly level.

× Ref. hub set 3' back on ℄

× Ref. hub set 3' back on ℄

w.w. about 10' wide

× Ref. hub set 3' back on ℄

× Ref. hub set 3' ahead on ℄

Changes made from profile Grade.

101+50	485.0	to	483.0
110+00	485.0	to	482.0
180+00	530.0	to	526.0
181+00	532.0	to	530.0

Changed to get clearance for roadway

184+50	531.3	to	531.0
185+50	530.0	to	526.0
185+75	made		526.0

22+60	extend pipe of road in place of trestle
109+90±	extend 12" pipe 15'± in place of trestle.
185+75	15' of 12" pipe in place of trestle.
192+55	15' of 12" pipe " "
198+31±	15' of 24" pipe " "
214+10	provision for a drainage area of 70 sq ft.

Line changes. 60-90+

Note 66+00 on curve made P.T.

81				
81+00	P.O.T.	495.05	4.9	490.1
+50			6.3	488.7
82			7.9	487.1
		488.39		
+50			3.1	485.3
83			4.2	84.2
+50			6.7	482.2
		488.39		
84			7.7	480.7
			13.2	475.2
+33			12.35	462.82
+50	5.18	473.00	5.3	67.7
+57			11.2	461.8
+60			11.7	461.3
+64			11.2	461.8
85			9.5	463.5
+50			7.1	465.9
T.P	0.0	480.57	12.40	480.57
86			11.6	469.0
+50			8.0	472.6
87			5.9	474.7
+50			3.3	477.3
88		492.97	13.0	480.0
+50			10.4	482.6
89+00			9.5	482.5
+25			7.6	484.4
+50			7.6	484.4

Sta		Elev.
~~491+17~~		
90	5.4	487.6
+ 42 = 91+49 Old Line	4.4	488.6

#2 Change of Line

New Line

	+	H.I.	-	Elev.	Grade	Grade Stake
BM.	0.18	520.83		520.65	×513.6	
60			6.3	514.5	~~514.2~~	−1.7 +0.3
~~+20~~					~~×513.2~~	−2.1
+50			9.5	511.3	×511.2	+0.2
T.P.	2.30	511.65	11.48	509.35		−2.2
~~+60~~					~~×508.4~~	−0.1 grade
61			5.0	506.6	×507.60	
+20					×506.4	−3.6
~~+30~~					~~×505.6~~	−4.2 Sta. 61+45
+50			9.4	502.2	×505.2	−4.6
~~+60~~					~~×505.6~~	
~~+75~~			10.7	501.0		−5.0
+70					504.6	
62			9.5	502.2	504.6	−4.8 −1.3
+50			7.3	504.4	~~505.7~~	−2.0 +1.0
63			5.8	05.9	~~505.2~~	−0.5 +2.7 center
+50			7.6	04.1	~~503.1~~	−1.7 +1.0
64			9.3	02.3	×503.0	−3.7 −0.7
+27			10.8	00.8		
+50			9.3	02.3	503.0	−2.6 −0.7
65			5.9	05.7	503.0	+0.3 +2.7
+35			4.0	07.6		
+50			5.6	06.0	503.0	in curve
+64	△ 17°21' Rt (13° effect)		8.3	03.3		EP +0.2 −2.7
T.P.	8.35	512.30	7.70	503.95		
+91			14.4	497.9		
66			11.0	501.3	503.0	−3.9 −1.7 ℄ 499.14
+50			7.7	04.6	503.0	−1.5 +1.6
67			8.2	04.1	503.0	−1.4 +1.1

		512.30										
67+50			8.5	503.8	503.0		+0.8	-1.7				
68			~~9.1~~	~~03.2~~ 04.3	503.0		+1.6	+1.3				
+35½ E.D.							-1.9	+1.2				
+26 P.I.	△ 18°01' Lt (16' offset)		8.1	04.2								
+50			~~+1.0~~	~~01.3~~ 02.2	503.0		-3.4	-0.8				
69			9.7	02.6	503.0		-3.3	-0.4	Sta	Elev.	Grade	
+38	△ 9°33' Lt (5' offset ahead)		9.3	03.0					76	499.8	~~500.0~~	-2.7 -0.4
+50			9.0	03.3	503.0		-2.3	+0.3	+50	500.0	×499.10	-0.8 +0.8
70			8.4	03.9	503.0		-1.3	+0.9	77	497.3	~~498.16~~	-3.6 -0.7
+50				03.6	503.0		-2.1	+0.6	+50	95.5	×496.40	-3.8 -1.6
69+38 – 80 was offset + 5' - use same stations									78	94.7	~~496.72~~	-3.0 -1.4
									+28	96.7	~~495.66~~ 495.10	-1.2 +1.0
71				03.4	503.0		-2.8	+0.4	+50	95.6	~~494.98~~	-0.8 +1.5
+20					×503.0		-3.1		79			
+50				02.5	~~502.6~~		-3.1	-0.1	+50	493.5	×492.20	-1.7 +0.4
+85					~~501.5~~		-2.7					
72				501.2	~~501.5~~		-0.2		+90		×492.2	
+40					×501.2		-3.9					
+50				499.3	501.2		-4.0	-4.9				
73				502.4	501.2		-0.6	+1.2				
+50				503.0	501.2		-0.3	+1.8				
74				501.1	×501.2		-2.1	-0.1				
+50				500.6	~~501.5~~		-2.7	-0.6				
75				501.5	~~501.1~~		-1.0	+0.2				
+50				501.5	×500.6		-1.0	+0.3				

Line Change Short Cut-off

	+	H.I.		
BM				493.79
98+60	2.8	496.59	4.1	492.5
99			3.8	92.8
+50			4.5	92.1
100			7.5	89.1
+50			10.5	
T.P.	4.78	488.52	12.85	483.74
101			8.6	479.9
+30			12.8	75.7
+34	Ditch		13.8	74.7
+38			11.8	76.7
+50			10.6	77.9
+73			6.4	82.1
102			6.2	82.3
+26		496.59	12.9	84.3
+50			11.1	85.5
+63			9.5	87.1
+76			10.3	86.3
103			7.9	88.7
+50			7.7	88.9
			6.4	90.5

+76.5 = 104+13.0 old P.I. now P.O.T. 6 inches high

14+66.5 =

Save 82.5

Line Change Long Cut-off
549 80-109+22.6=111+33.6

Bm.	0.28	479.67		479.39		10' offset	℄	
80+00	△ old POT	15.05 Rt	7.3	492.4	×490.7	-2.0 +0.2		84+61 Pt on EL Hub 492.28
~~+25~~	0				~~490.6~~	-1.9		
+50			10.8	488.9	×488.2	-1.6 +0.2		
	0.76	487.67	12.76	486.91				
81			3.2	484.5	×485.0	-1.3 0.0		
+50			6.0	481.7	482.2	-1.3 0.0		
82			8.9	478.8	~~479.4~~	-2.2 0.0		
+50			11.5	476.2	476.5	-1.2 0.0		
83			13.2	474.5	473.8	+0.5 +1.9		
	1.28	476.20	12.75	474.92				
+50			3.5	472.7	×470.9	+0.7 +1.2		
+60			4.0	472.2				
+70					~~×466.9~~	+0.5		
+90					~~×466.6~~	-1.5		
84			11.3	64.9	×467.0		84 467.0	
+10					~~×465.8~~	-1.0		
+30								
+50			15.3	460.9	×464.4	-1.0	84+50 463.3	
+61			18.1	58.1	~~×463.3~~			
+83			16.3	59.9				
85			14.9	461.3	463.3			
~~+30~~					~~×463.0~~			
+50			11.4	64.8	~~×464.4~~	-0.5 +0.5 +0.7 +0.5		462.75
86			7.7	68.5	468.5	+0.6 +1.1		
~~+30~~					~~471.0~~	-0.5	El. Hub 470.55	
+50			5.5	70.7	×471.2			
+80					×472.4	-0.4		
87			3.1	73.1	~~473~~			
+20					×473.3	+0.1		+0.1
+50			2.3	73.9				
	5.80	479.75	2.25	473.95				+0.8
88			5.3	74.4	473.4	+0.0 +1.0		+0.7
+50			6.2	73.5	473.5	-0.5 +0.1		+0.7

		479.75							
89			5.8	474.0	473.6	−0.3	+0.4		+0.7
+50			4.7	75.1	473.7	+1.3	+1.4		+0.6
90			7.1	72.7	473.8	−0.9	−1.1		−0.1
+50			7.1	72.7	473.9	−1.6	−1.2		−0.3
91			6.6	73.2	474.0	−1.2	−0.8		−0.2
+50			6.1	73.7	474.1	−1.2	−0.4		+0.2
92			5.4	74.4	474.2	−0.2	+0.2		+0.6
+50			4.4	75.4	474.3	+0.6	+1.0		+0.8
93			4.3	75.5	474.4	+0.8	+1.2		+0.7
+50			5.1	74.7	474.50	−0.2	+0.2		+0.3
94			6.1	73.7	474.6	−1.5	−0.9		
+20				75.7					
+50			4.7	75.1	474.7	−0.1	+0.3		
95		83.0.	8.8	74.2	×474.8	−0.5	−0.6		
+50			7.3	75.7	475.05	+0.4	+0.7		+0.4
96			7.0	76.0	476.1	+0.7	+0.9		
+50			5.9	77.1	476.8	~~+1.2~~			
+60				78.2	×477.0	+1.2			
97			5.5	77.5	477.0				+0.8
+20			3.0	80.0		+2.0			
+50			4.0	79.0	477.0				
98			2.9	480.1	477.0	+3.0	+3.1		

	82.0					-0.3
98+50		5.4	76.6	477.0	-0.8	
99		8.2	73.8	477.0	-3.6	-3.1
+30		11.1	70.9		2' def	
+50		7.0	75.0			
+60				×477.0	-2.0	
+80				×477.3	-2.2	-0.9
100	91.2	13.6	78.2	×478.2	-0.7	+0.1
+35				480.4	-0.3	-0.6
+50		9.5	81.7	481.4	+0.2	+0.4 +0.6
+60	See 39			482.0		
101		6.5	84.7	×484.6	-0.9	+0.3
+50		4.7	86.5	486.55	+0.4	+0.0
102		+.6	89.6 88.4	×488.5		
+035 E.P.					+0.1	+0.2
+045 = 104+132 P.I.		0.80	490.4			
End of Change - Long Cut-off.						
+45			489.4	489.6	-0.7	-0.2
+54						
102+94.9 = 105+00 Old Line.						

New Line - Con. from P 38.

Sta	+	H.I.	−	Elev	Grade	Grade Stakes
100+60					×482.0 ×482.6	
+80	+0.62	494.41		493.79		+0.4 −0.6
+35			14.8	479.6		
101			11.2	483.2	×483.0	+0.8 +0.2
+50			8.0	86.4		+1.6 +3.4
+75			9.1	85.3		
102			9.7	84.7	483.0	+1.2 +1.7
+25			10.0	84.4		
+50			10.1	84.3		+0.4 +1.3
+80			9.0	85.4		
103			10.4	84.0	483.0	+0.0 +1.0
+50			10.6	83.8		+0.1 +0.8
104			10.7	83.7	483.0	−0.6 +0.7
+20			9.7	84.7		
+50			11.4	83.0		−2.0 +0.0
+75			10.9	83.5		
105			12.4	82.0	483.0	−2.2 −1.0
+50			10.7	83.7		−1.0 +0.7
106			9.7	84.7	483.0	−0.1 +1.7
+50			9.95	484.46	TP 483.0	−0.3 +1.4
	9.38	487.84				
+90			4.6	83.2	483.0	−1.6 +0.1
107+41.7	P.C.		6.2	81.6	483.0	−3.4 −1.4 −0.7

		487.54				
107+84	E.P.		9.6	78.2	483.0	-6.4 -4.8
108+10					×483.0	
108+08			6.6	81.2	×483.2	-1.6
+20					×485.1	-0.5
+50						
108+23.27	P.T.		5.3	482.5	~~×484.6~~	
+70						-0.4
+85						-0.8
109			0.8	487.0	×486.0	-0.8 +1.0
+22.6	=111+33.6	P.C.	1.3	486.5	486.0	-1.4 +0.5
111+50			1.4	86.4	486.0	
111+81				86.1		-2.4 +0.1
112 +26.68	P.T.			86.8		-4.1 +0.8
	0.68	498.76		498.08		
113	3.28	491.09	10.95 6.0	487.81 485.1	486.0	-4.7 -0.9
+50			5.5	85.6		-4.1 -0.4
114			4.5	86.6	486.0	-2.6 +0.6
+50			4.1	487.0		-2.7 +1.0
115			4.0	487.1	486.0	-2.5 +1.1
+50			4.3	86.8		-2.4
116			4.6	86.5	486.0	-2.6 +0.5
+50			4.6	86.5		-3.0 +0.5
117			5.2	85.9	486.0	-3.4 -0.1
+50			6.1	85.0		-3.9
118			6.3	84.8	486.0	-4.5 -1.2
+50			5.1	86.0		-4.2
119			5.3	85.8	486.0	-3.0 -0.2
+50			5.0	86.1	486.0	-2.6

12" pipe - Trough over.

					Grade		offset		
		491.09							
120			3.7	487.4	486.0	-2.3 +1.4			
+50				486.6	×486.0	-2.4			
		494.62							
121			7.7	486.9	486.0	-2.5 +0.9			
+50			7.9	486.7	486.0	-2.8 +0.7			
122			8.3	486.3	486.0	-3.8 +0.3			
+50			9.3	485.3	486.0	-4.7 -0.7	122+05 12" pipe - Trough over		
123				486.5	×486.0	-3.5 +0.5			
+50			8.5	486.1	×486.0	-4.0 +0.1			
124			12.2 6.9	487.7	486.6	-4.2 +1.1			
+50			10.82 6.45	488.2	487.4	-3.6 +0.8			
125			10.05 7.4	487.2	488.1	-3.5 -0.9			
+50			9.25 5.6	489.0	488.8	-3.4 +0.2			
126			6.15 3.9	490.7	×489.5	-1.8 +1.2			
+50			6.36 3.0	491.6	490.3	-2.0 +1.3			
+90				488.42	×491.0				
127			6.20 3.0	491.6	491.0	-2.6 +0.6	0		
	+8.88	497.30							
+50			9.19 6.1	491.2	491.1	-3.0 +0.1	4		
128			8.2 5.5	491.8	491.2	-2.1 +0.6	4		
+50			10.33 6.35	491.0	491.3	-4.3 -0.3			
+77			9.80 6.35	491.0	491.4	-3.8 -0.4			
129			9.00 6.15	491.1	491.4	-3.2 -0.3			

		497.36	9.2				
129+50			4.5	492.8	491.5	-3.4	+1.3
130			7.12 3.65	93.7	×491.6	+1.6	+2.1
+50			5.94 5.00	492.3	×490.8	-0.5	
~~+70~~					~~×491.4~~	-0.5	
~~+95~~			7.20	494.8	~~×492.2~~	-0.1	+1.6
131			6.10	491.2	×489.6		
~~+20~~					~~×488.~~	+0.8	
+29 93	PC		8.40 7.1	490.2	~~×488.0~~		
+65					×485.3		
~~+40~~					~~×486.2~~	+2.2	
+60					~~×483.2~~	+4.9	
~~+80~~					~~×481.2~~	+6.0	
					×483.0		
132		496.99	16.0	481.0	~~×481.2~~	+5.3	-0.2
+50					×482.6 ✓	-	
+75					×482.6		
133			15.5	481.5	×483.7	-1.6	-2.5
+50					485.1	+1.8	
134			8.5	485.5	486.2	+3.3	+2.2
134+50				8	×487.2	+3.2	
135				88.0	487.7	+3.6	+0.3
+50					×488.2	+4.9	
+80					×488.8	+5.5	
136				489.1	489.5	+5.2	-0.4
+50				91.3	491.2	+5.8	-0.3
137				94.5	493.0	+5.8	+0.9

	Grades		
	Centers		
137+50	494.8	×494.8	+3.6 -0.8
		×496.6	+2.9
+90	497.6	497.8	-0.2
138		498.4	+3.8
138+10			
+50	501.4	501.25	+0.0
		×504.0	+3.1
+85	506.7	504.8	+3.0 +0.8
139			
+10		×505.4	+3.0
+50	505.7	507.0	+1.5
140	508.6	509.0	+1.0 -0.4
+25		× 510.0	+0.4
+50		×510.4	+0.8
+90		×510.4	+0.9
141	510.7		+0.2
141+10		×510.7	+1.5
+50	512.0	511.9	+1.0
142	512.7	×513.0	+0.2 -0.7
+25		×514.5	+0.4
+50	516.2	×515.9	+1.2
143	519.5	519.5	+0.8 0.0
+50	522.5	522.6	+0.5
		×524.3	
+76	527.4	527.05	+2.5 +0.8
144			
+50	531.0	×530.2	+1.4

144+75	~~532.4~~	×531.2	+1.1	
145	532.4	×531.8	+0.8	+0.6
+25		×532.0	+0.7	
+50	532.8	×531.6	+1.1	
+75		×530.8	+1.1	
146	529.7	529.5	+2.1	+0.2
+50	528.0	527.0	+2.6	
147	524.6	×524.6	+3.0	+0.0
+50	522.6	522.7	+2.7	
148	523.1	520.9	+2.5	+2.2
+50	518.3	519.1	+0.6	
149	518.3	517.3	+1.7	+1.0
+50	514.9	515.5	+1.1	
150	515.7	513.7	+1.5	+2.0
+25		×512.6		
+50	512.0	×510.1		
151	504.8	~~×504.4~~		
+50	501.9	×499.7		
152	500.6	×497.3		
+50	499.7			
+70		×494.9		
153	496.8	494.4		

2/8/24 Gregory

CROSS SECTION OF MONROE AVE from E. L. Texas

80' ST. 14' cbs

	12.52	351.48		338.96	SE Texas and Monroe
		E. L Texas			
S			12.1	339.3	✓
cb			12.50	338.9	✓ on cement
1/4			12.4	339.0	✓
C			12.1	339.3	✓
1/4			12.2	339.2	✓
+10			12.2	339.2	✓
cb			11.60	339.8	✓ on cement
N			11.3	340.1	✓
		3' E			
N			11.0	340.4	✓
cb			11.2	340.2	✓
1/4			11.2	340.2	✓
C			11.3	340.1	✓
1/4			11.6	339.8	✓
cb			11.7	339.7	✓
S			11.4	340.0	✓
		50' E			
S			11.0	340.4	✓

351 1/

cb	10.8	340.6	✓
1/4	10.8	340.6	✓
C	10.6	340.8	✓
1/4	10.6	340.8	✓
cb	10.4	341.0	✓
N	10.1	341.3	✓
100' E			
N	9.1	342.3	✓
cb	9.3	342.1	✓
1/4	9.5	341.9	✓
C	9.6	341.8	✓
1/4	9.6	341.8	✓
cb	9.8	341.6	✓
S	10.0	341.4	✓
150' E			
S	9.1	342.3	✓
cb	8.4	343.0	✓
1/4	8.4	343.0	✓
C	8.5	342.9	✓
1/4	8.3	343.1	✓

351.48

351 L

cb		8.1	343	✓
N		7.7	343.7	✓
	200' E			
N		6.2	345.	✓
cb		6.4	345.0	✓
1/4		6.6	344.6	✓
C		6.9	344.5	✓
1/4		7.1	344.3	✓
cb		7.2	344.2	✓
5		7.2	344.	✓
+10		8.0	343.	✓
	235 E			
-10		7.3	344.1	✓
5		6.2	345	✓
cb		5.6	345.8	✓
1/4		5.6	345.8	✓
C		5.5	345.9	✓
1/4		5.1	346.3	✓
cb		4.9	346.5	✓
N		4.5	346.9	✓

MONROE 40

270' E 351 L

-5		1.9	349.5	✓
N		2.1	349.3	✓
cb		2.4	349.0	✓
1/4		2.7	348.7	✓
C		2.6	348.8	✓
1/4		2.7	348.7	✓
cb		2.9	348.5	✓
5		3.6	347.8	✓
+10		4.1	347.3	✓
	293' E			
-7		2.1	349.3	✓
5		1.0	350.4	✓
cb		0.3	351.1	✓
T.P.	11.88	36308	028	351.20
1/4			11.6	351 L 36308 ✓
C			11.5	351.5 ✓
1/4			10.9	351.1 ✓
cb			10.8	351.2 ✓
N			11.4	351.6 ✓
+7			11.4	351.6 ✓

36308 / 36308

300' E = W.L Arizona

N		9.4	353.6
cb		10.2	352.8
	on cement	(9.13)	353.45
1/4		10.1	352.9
c		10.3	352.8
1/4		11.1	351.9
cb		11.3	351.7
	on cement	10.74	352.34
S		10.7	352.3

E.L. Arizona

S		8.7	351.3
+13		8.8	351.2
cb	(cement covered)	8.1	351.9
1/4		8.1	351.9
c		7.9	352.1
1/4		7.6	352.4
cb		7.1	352.9
	on cement	7.50	352.5
N		6.4	351.6

MONROE

3' E 36308

N		3.5	359.5
cb		4.1	358.9
+4		6.6	356.4
1/4		6.8	356.2
c		7.3	355.7
+8		6.4	356.6
1/4		4.2	358.8
cb		4.3	358.7
S		4.8	358.2

12' E

S		3.7	359.3
cb		3.3	359.7
1/4		3.2	359.8
c		5.5	357.5
1/4		5.2	357.8
+8		4.6	358.4
cb		2.8	360.2
N		1.0	362.0

		36308		
		25' E		
N			0.4	36.6
cb			1.2	361.8
+3			2.8	360.4
1/4			3.4	359.6
c			3.7	359.3
+4			3.6	359.4
+8			2.6	360.4
1/4			2.7	360.3
cb			2.4	360.6
S			2.1	360.9
T.P.	11.93	37408	0.93	362.15
		45' E	37408	
S			11.7	36.4
cb			11.1	36.9
1/4			11.3	36.7
+5			10.7	363.3
+8			12.1	361.9
c			12.4	361.6
1/4			11.8	36.4

		MONROE		
		374.08		
+9		11.1	36.9	
cb		9.3	364.7	
N		9.4	364.6	
	65' E			
N		7.7	366.3	
cb		8.5	365.5	
1/4		9.4	364.6	
c		9.7	364.3	
1/4		10.1	363.9	
cb		9.1	364.9	
+11		9.2	364.8	
S		11.3	36.7	
	79' E			
S		10.7	363.3	
+4		8.9	365.1	
cb		8.9	365.1	
1/4		8.8	365.2	
C		7.3	366.7	
	81' E			
S		8.4	365.6	

		374°8		
		374°		
cb		8.8	365.2	✓
+11		8.8	365.2	✓
1/4		8.1	365.9	✓
C		6.7	367.3	✓
1/4		6.5	367.5	✓
cb		6.2	367.8	✓
N		6.1	367.9	✓
	90° E			
N		5.6	368.4	✓
cb		5.5	368.5	✓
1/4		5.2	368.8	✓
C		5.5	368.5	✓
1/4		7.2	366.8	✓
cb		7.3	366.7	✓
S		7.3	366.7	✓
	105° E			
S		5.9	368.1	✓
+3		5.1	368.9	✓
cb		5.9	368.1	✓
1/4		6.4	367.6	✓

MONROE

		374°		
C		6.2	367.8	✓
1/4		5.5	368.5	✓
cb		5.0	369.0	✓
N		4.3	369.7	✓
	118° E			
N		4.1	369.9	✓
cb		4.3	369.7	✓
1/4		4.7	369.3	✓
C		5.6	368.4	✓
1/4		5.7	368.3	✓
cb		5.7	368.3	✓
S		5.7	368.3	✓
	133° E			
S		5.5	368.5	✓
cb		4.9	369.1	✓
1/4		3.9	3701	✓
C		4.3	369.7	✓
1/4		2.3	371.7	✓
cb		1.9	372.1	✓
+3		1.5	372.5	✓

374.08

+5		3.8	370.4 ✓
N		3.7	370.3 ✓
	140' E		
N		3.6	370.4 ✓
+7		3.3	370.7 ✓
+9		2.3	371.7 ✓
cb		1.8	372.2 ✓
1/4		2.2	371.8 ✓
c		2.2	371.8 ✓
+3		3.4 ✓	370.6 ✓
1/4		3.2	370.8 ✓
cb		4.3	369.7 ✓
S		5.3	368.7 ✓
	155' E		
S		3.6	370.4 ✓
cb		3.8	370.2 ✓
1/4		3.8	370.2 ✓
c		3.0	371.0 ✓
1/4		2.5	371.5 ✓
cb		2.5	371.5 ✓

374 MONROE

N		3.0	371.0 ✓
	165' E		
N		2.5	371.5 ✓
cb		3.0	371.0 ✓
1/4		3.5	370.5 ✓
c		3.4	370.6 ✓
1/4		3.7	370.3 ✓
cb		3.7	370.3 ✓
S		3.4	370.6 ✓
	174' E		
S		3.3	370.7 ✓
cb		3.1	370.9 ✓
1/4		3.1	370.9 ✓
c		3.0	371.0 ✓
1/4		3.2	370.8 ✓
cb		2.3	371.7 ✓
N		1.5	372.5 ✓
	194' E		
N		1.6	372.4 ✓
cb		2.0	372.0 ✓

		374.08		
			374.0	
1/4			2.5	371.5 ✓
C			1.7	372.3 ✓
48			0.8	373.2 ✓
1/4			1.3	372.7 ✓
Cb			1.9	372.1 ✓
S			2.6	371.4 ✓
		220' E		
S			1.8	372.2 ✓
Cb			1.8	372.2 ✓
1/4			2.0	372.0 ✓
C			2.2	371.8 ✓
1/4			1.4	372.6 ✓
Cb			0.9	373.1 ✓
N			0.6	373.4 ✓
T.R	6.82	380.60	0.30	373.78
		240' E		
N			6.3	374.3 ✓
Cb			6.0	374.6 ✓
1/4			6.1	374.5 ✓
C			7.0	373.6 ✓

			3806	
1/4			7.4	373.2 ✓
Cb			7.2	373.4 ✓
S			7.6	373.0 ✓
		255' E		
S			7.2	373.4 ✓
Cb			7.6	373.0 ✓
1/4			7.2	373.4 ✓
C			6.5	374.1 ✓
1/4			6.5	374.1 ✓
Cb			6.1	374.5 ✓
N			6.0	374.6 ✓
		275' E		
N			5.5	375.1 ✓
Cb			6.0	374.6 ✓
1/4			6.3	374.3 ✓
C			6.3	374.3 ✓
1/4			6.0	374.6 ✓
Cb			6.6	374.0 ✓
S			6.7	373.9 ✓

380.60

3806

300' E. W. Line Hamilton

S		6.1	374.5 ✓
Cb.	Cement	6.13	374.47 ✓
+2		6.5	374.1 ✓
1/4		6.0	374.6 ✓
C		6.1	374.5 ✓
1/4		6.2	374.4 ✓
+12		6.5	374.1 ✓
Cb.	Cement	5.51	375.04 ✓
N		5.6	375.0 ✓

E. Line Hamilton

N		4.6	374.0 ✓
Cb.	Cement	4.72	373.98 ✓
Cb.		5.5	375.1 ✓
1/4		5.1	375.5 ✓
C		5.2	375.4 ✓
1/4		5.4	375.2 ✓
Cb		5.8	375.8 ✓
Cb.	Cement	5.30	375.3 ✓
S		4.8	375.8 ✓

Monroe

52

3806

25' E.

S		4.7	375.9 ✓
Cb		4.7	375.9 ✓
1/4		4.4	376.2 ✓
C		4.4	376.2 ✓
1/4		4.7	375.9 ✓
Cb		4.9	375.7 ✓
+1		4.6	376.0 ✓
N		4.5	376.1 ✓

35' E

N		4.4	376.2 ✓
Cb		4.4	376.2 ✓
1/4		4.7	375.9 ✓
C		4.5	376.1 ✓
1/4		4.6	376.0 ✓
Cb.		4.8	375.8 ✓
S		4.0	376.6 ✓

50' E

S		5.1	375.5 ✓
Cb.		4.8	375.8 ✓

	380.60		
	380.6		
1/4		4.5	376.1
C		4.6	376.0
1/4		4.7	375.9
Cb.		4.7	375.9
N		4.1	376.5
	62' E		
N		4.0	376.6
+12		4.2	376.4
Cb		4.8	375.8
1/4		4.6	376.0
C		4.5	376.1
1/4		4.5	376.1
Cb.		4.7	375.9
S		5.1	375.5
	83' E		
S		3.4	377
Cb		4.7	375.9
1/4		4.6	376.0
C		4.3	376.3
1/4		4.3	376.3

	380.6 Monroe		
Cb.		4.5	376.1
+2		4.0	376.6
N		3.9	376.7
	100' E		
N		3.8	376.8
+12		3.8	376.8
Cb.		4.3	376.3
1/4		4.1	376.5
C		4.1	376.5
+10		4.1	376.5
1/4		4.5	376.1
Cb.		4.8	375.8
S		4.9	375.7
	150' E		
S		3.3	377.3
Cb		4.1	376.5
1/4		4.3	376.3
C		3.8	376.8
1/4		3.8	376.8
Cb.		3.8	376.8

3806

N		3.5	377.1
	185' E		
N		3.0	377.6
+13		3.2	377.4
cb		3.4	376.8
1/4		3.5	377.1
c		3.7	376.9
1/4		4.1	376.5
cb.		3.9	376.7
5		3.5	377.1
	205' E		
5		3.5	377.1
cb.		3.4	377.4
1/4		3.7	376.9
c		3.4	377.4
1/4		3.4	377.4
cb		3.6	377.0
+1		3.0	377.6
N		2.9	377.7

Monroe

	225' E 3806		
N		2.7	377.9
+13		2.8	377.8
cb.		3.4	377.4
1/4		3.1	377.5
c		3.2	377.4
1/4		3.6	377.0
cb.		3.5	377.1
5		3.4	377.4
	240' E		
5		3.2	377.6
cb.		3.2	377.4
1/4		2.8	377.8
+7		2.7	377.9
c		3.3	377.3
1/4		3.3	377.3
cb.		3.3	377.3
+1		2.7	377.9
N		2.6	378.0

		380.60		
		265' E		
N			2.3	378.1
+12			2.6	378.0
cb.			3-3	377.3
1/4			3.0	377.6
C			3.1	377.5
1/4			3-3	377.3
cb.			3.2	377.2
S			2.6	378.0
		299.7' E.	W. Line	Oregon
S			2.1	378.5
cb.			2.7	377.9
cb.	Cement		2.33	378.27
1/4			2.4	377.8
C			2.6	377.8
1/4			2.8	377.8
cb.			2.6	377.8
+1	Cement	cb.	2.41	378.19
N			2.1	378.5

Monroe

380.6

E. Line Oregon

N			1.5	379.1
cb.			2.0	378.6
cb.	Cement		1.60	379.0
+1			2.3	378.3
1/4			2.1	378.5
C			1.8	378.8
1/4			2.2	378.4
+12			2.1	378.5
cb.	Cement		1.33	379.07
T.P.	1.63	380.78	1.45	379.15
		17' E		
		380.7		
cb	Cement		1.82	378.9
+1			2.4	378.3
1/4			2.3	378.4
C			2.4	378.3
1/4			2.5	378.2
cb.			2.2	378.5
N			2.0	378.7

N.B. Cement cb. & sidewalk completed from Oregon to Idaho

380.78

35' E 3807

N		1.9	378.8
cb		1.5	379.2
1/4		2.0	378.7
c		2.4	378.3
1/4		2.3	378.4
+12.8		2.1	378.6
	65' E		
cb. +0.2		2.1	378.6
1/4		2.2	378.5
c		2.4	378.3
1/4		2.5	378.2
cb.		2.7	378.0
N		2.4	378.3
	80' E		
N		1.3	379.4
cb.		2.0	378.7
1/4		2.6	378.1
c		2.6	378.1
1/4		2.3	378.4

MONROE

380.78

56

+12.8		2.3	378.4
	108' E		
cb.	Cement	2.57	378.21
+1		2.2	378.5
1/4		2.2	378.5
c		2.2	378.5
+7		1.6	379.1
1/4		2.5	378.2
cb.		2.1	378.6
N		1.8	378.9
	123' E		
N		1.0	379.7
cb.		0.7	380.0
1/4		2.1	378.6
c		2.4	378.3
1/4		2.5	378.2
cb.	Cement	2.47	378.31
	152' E		
cb. +0.2		2.9	377.8
1/4		3.0	377.7

		380.78		
		380.78		
c			2.7	378.0
1/4			2.5	378.2
cb.			2.3	378.4
N			2.2	378.5
		170' E		
N			1.8	378.9
+3			2.9	377.8
cb.			3.4	377.3
1/4			3.3	377.4
c			3.2	377.5
1/4			3.3	377.4
+12.8			3.1	377.6
		220' E		
cb.	cement		3.55	377.25
+1			3.4	377.3
1/4			3.6	377.1
c			3.8	376.9
1/4			3.6	377.1
cb.			3.3	377.4
+12			3.0	377.7

Monroe

		380.78		
N			2.3	378.4
		260' E		
N			2.7	378.0
+8			2.9	377.8
cb			4.0	376.7
1/4			3.8	376.9
c			3.9	376.8
1/4			4.0	376.7
+12.8			3.8	376.9
		290' E		
cb. +0.2			4.5	376.2
1/4			4.4	376.3
c			4.3	376.4
1/4			4.4	376.3
cb.			4.4	376.3
N			3.7	377.0
		W. Line Idaho 300.8' E		
N			3.7	377.0
cb	cement		4.28	376.56
+1			4.8	375.9

		380.78	380.78		
1/4			4.4	376.3	✓
C			4.3	376.✓	✓
1/4			4.5	376.✓	✓
+12			4.8	375.9	✓
Cb.	Cement		4.24	376.✓4	✓
Ch. B. M.			4.85	375.93	S.P. Idaho + Mont. 375.94
		E. Line Idaho			
S			4.7	376.0	✓
Cb	Cement		4.83	375.93	✓
+1			5.6	375.1	✓
1/4			5.3	375.4	✓
C			5.2	375.5	✓
1/4			5.4	375.3	✓
+12			5.8	374.9	✓
Cb	Cement		4.92	375.86	
N			4.3	376.4	✓
		15' E			
N			5.7	375.0	✓
Cb			6.2	374.✓	✓
1/4			5.7	375.0	✓

			380.78	380.78	58
C			5.8	374.9	✓
1/4			5.9	374.6	✓
Cb.			5.8	374.9	✓
S			6.4	374.3	✓
		42' E			
S			7.6	373.1	✓
Cb.			7.6	373.1	✓
1/4			7.5	373.✓	✓
C			7.6	373.1	✓
1/4			7.4	373.3	✓
Cb.			7.0	373.7	✓
N			6.3	374.4	✓
		65' E			
N			8.9	371.8	✓
Cb.			8.9	371.8	✓
1/4			8.9	371.8	✓
C			8.7	372.0	✓
1/4			8.9	371.8	✓
Cb.			8.7	372.0	✓
S			9.0	371.7	✓

380.78

380.7

65' E

S	9.7	371.0
cb	9.9	370.8
1/4	9.9	370.8
C	9.5	371.2
1/4	9.8	370.9
cb.	9.3	371.4
N	8.8	371.9

97' E

-5	10.1	370.6
N	10.5	370.2
cb.	10.5	370.2
1/4	10.1	370.6
C	9.9	370.8
1/4	10.3	370.4
cb.	10.4	370.3
S	10.4	370.3
+5	10.4	370.3

115' E

-5	10.9	369.8

Monroe

59

380.7

S

N	10.9	369.8
cb.	10.9	369.8
1/4	10.7	370.0
C	10.4	370.3
1/4	10.8	369.9
cb	10.8	369.9
N	9.6	371.1
+5	9.3	371.4

125' E

-5	10.4	370.3
N	10.8	369.9
cb.	10.9	369.8
1/4	10.8	369.9
C	10.6	370.1
1/4	11.0	369.7
cb.	11.0	369.7
S	11.1	369.6
+5	11.1	369.6

160' E

-5	11.6	369.1

	380.78		
	380.78		
S	11.6	369.1	✓
cb	11.1	369.6	✓
+1	11.6	369.1	✓
1/4	11.4	369.3	✓
C	10.9	369.8	✓
1/4	11.1	369.6	✓
cb.	10.7	370.0	✓
N	10.9	369.8	✓
+5	11.1	369.6	✓
	190' E		
-5	11.2	369.5	✓
N	11.2	369.5	✓
cb.	11.3	369.4	✓
1/4	11.2	369.5	✓
C	11.2	369.5	✓
1/4	11.5	369.2	✓
+12	11.7	369.0	✓
cb	11.3	369.4	✓
5	11.7	369.0	✓
+5	11.7	369.0	✓

	208' E	380.78	MONROE
-5		11.6	369.1 ✓
S		11.6	369.1 ✓
cb.		11.1	369.6 ✓
+1.		11.6	369.1 ✓
1/4		11.3	369.4 ✓
C		11.4	369.3 ✓
1/4		11.5	369.2 ✓
cb.		10.0	370.7 ✓
N		9.1	371.6 ✓
+5		9.1	371.6 ✓
	228' E		
-5		11.4	369.3 ✓
N		11.4	369.3 ✓
cb.		11.5	369.2 ✓
1/4		11.2	369.5 ✓
C		11.0	369.7 ✓
1/4		11.5	369.2 ✓
cb.		11.4	369.3 ✓
+4		10.2	370.5 ✓
+5		11.6	369.1 ✓

	380.78		
S	11.7	369.0	✓
+5	11.7	369.0	✓
	245' E		
-5	11.6	369.1	✓
S	11.6	369.1	✓
+6	11.3	369.4	✓
+11	10.1	370.6	✓
cb.	11.2	369.5	✓
1/4	11.4	369.3	✓
C	10.8	369.9	✓
1/4	10.8	369.9	✓
cb.	10.8	369.9	✓
N	11.2	369.5	✓
+5	10.8	369.9	✓
	265' E		
N	9.7	371.0	✓
+7	10.6	370.1	✓
cb.	10.2	370.5	✓
+6	9.6	371.1	✓
1/4	10.8	369.9	✓

Monroe

	380.78		
+7	10.3	370.4	✓
C	10.6	370.1	✓
1/4	11.4	369.3	✓
cb.	11.1	369.6	✓
+4	10.2	370.5	✓
+6	11.2	369.5	✓
S	11.4	369.3	✓
+5	11.4	369.3	✓
	275' E		
-5	11.5	369.4	✓
S	11.3	369.4	✓
+6	11.2	369.5	✓
+9	10.3	370.4	✓
cb	11.2	369.5	✓
1/4	11.3	369.4	✓
C	10.4	370.3	✓
+6	10.2	370.5	✓
1/4	10.8	369.9	✓
cb.	10.5	370.4	✓
N	10.1	370.6	✓

		380.78		
		380.78		
+5		10.1	370.6	✓
	299.5' E	W. Line	Utah	
N		9.3	371.2	✓
cb.		9.3	371.4	✓
cb.	Cement	9.76	371.01	✓
+2		10.6	370.1	✓
1/4		10.3	370.4	✓
c		10.4	370.3	✓
1/4		10.9	369.8	✓
+12		10.1	370.6	✓
cb.		10.9	369.8	✓
cb.	Cement	10.39	370.39	✓
S		11.0	369.7	✓
	4-3	380.17	375.94	375.94 SE Idaho Monroe
		E.L. Utah		
		380.17		
S		9.4	370.7	✓
+13		9.7	370.4	✓
cb		10.2	369.9	✓
1/4		10.1	370.0	✓
c		9.4	370.7	✓

		380.17		Monroe
1/4		9.8	370.3	✓
+12		9.6	370.5	✓
cb	Cement	9.17	371.00	✓
N		8.8	371.3	✓
	10' E			
N		9.0	371.1	✓
cb		9.3	370.8	✓
1/4		9.6	370.5	✓
c		9.4	370.7	✓
1/4		10.1	370.0	✓
cb.		10.2	369.9	✓
S		9.7	370.4	✓
	35' E			
S		9.4	370.7	✓
cb.		9.5	370.6	✓
1/4		9.4	370.7	✓
c		8.6	371.5	✓
+7		8.6	371.5	✓
1/4		9.4	370.7	✓
cb		9.1	371.0	✓

380.17

N	9.1	371.0	✓
55' E			
N	9.2	370.9	✓
cb	9.2	370.9	✓
1/4	9.4	370.7	✓
+6	8.8	371.3	✓
C	8.8	371.3	✓
1/4	9.5	370.6	✓
cb.	9.6	370.5	✓
S	9.7	370.4	✓
70' E			
S	9.6	370.5	✓
cb.	9.6	370.5	✓
1/4	9.5	370.6	✓
C	8.8	371.3	✓
1/4	9.5	370.6	✓
cb	9.4	370.7	✓
N	7.6	372.5	
95' E			
N	8.9	371.2	✓

Monroe

380.17

63

cb	9.0	371.1	✓
1/4	9.5	370.6	✓
C	8.4	371.7	✓
1/4	9.1	371.0	✓
cb.	9.2	370.9	✓
S	9.1	371.0	✓
125' E			
S	9.6	370.5	✓
cb	9.7	370.4	✓
1/4	9.7	370.4	✓
C	8.6	371.5	✓
1/4	9.3	370.8	✓
+5	8.2	371.9	✓
cb	8.8	371.3	✓
N	8.7	371.4	✓
140' E			
N	7.4	372.7	✓
cb.	8.3	371.8	✓
1/4	9.0	371.1	✓
C	9.0	371.1	✓

380.17

380.17

1/4	9.7	370.1
cb	9.4	370.7
S	9.7	370.4
160' E		
S	9.9	370.2
cb	9.4	370.7
1/4	9.2	370.9
C	9.0	371.1
1/4	9.3	370.6
cb	8.9	371.2
N	8.8	371.3
+2	8.9	371.2
180' E		
-5	9.0	371.1
N	9.2	370.9
cb	8.0	372.1
+9	8.9	371.2
1/4	9.7	370.4
C	9.2	370.9
1/4	9.8	370.3

Monroe

64

380.17

cb	10.3	369.8
S	10.3	369.8
195' E		
S	10.6	369.5
cb	10.4	369.7
1/4	9.8	370.3
C	9.2	370.9
1/4	9.6	370.5
cb.	9.8	370.3
N	9.3	370.8
+3	8.9	371.2
220' E		
-5	9.0	371.1
N	9.3	370.8
cb	9.4	370.7
1/4	9.8	370.3
C	9.4	370.7
1/4	9.8	370.3
cb	10.2	369.9
S	10.6	369.5

380.17

+5	380.17	10.5	369.6 ✓
	232' E		
-5		10.5	369.6 ✓
S		10.0	370.1 ✓
cb		10.3	369.8 ✓
1/4		9.8	370.3 ✓
C		9.4	370.7 ✓
1/4		9.7	370.4 ✓
cb		8.2	371.9 ✓
N		9.2	370.9 ✓
+5		8.9	371.2 ✓
	255' E		
-5		8.9	371.2 ✓
N		9.2	370.9 ✓
cb		9.6	370.5 ✓
1/4		9.6	370.5 ✓
C		9.2	370.9 ✓
1/4		9.5	370.6 ✓
cb		9.8	370.3 ✓
S		10.0	370.1 ✓

Monroe

+5	380.17	10.4	369.7 ✓
	275' E		
-5		10.3	369.8 ✓
S		10.2	369.9 ✓
cb		10.0	370.1 ✓
1/4		9.6	370.5 ✓
C		9.0	371.1 ✓
1/4		9.3	370.4 ✓
+5		7.8	371.3 ✓
cb		8.6	371.5 ✓
N		8.8	371.3 ✓
+5		8.7	371.4 ✓
	285' E		
-5		8.7	371.4 ✓
N		8.8	371.3 ✓
cb		9.1	371.0 ✓
1/4		9.3	370.8 ✓
C		8.8	371.3 ✓
1/4		9.7	370.4 ✓
cb		10.0	370.1 ✓

380.17

S			10.2	369.9	✓
+5			10.1	370.0	✓
300' E		W. Line	Kansas		
-5			9.6	370.5	✓
S			9.6	370.5	✓
cb			9.7	370.4	✓
cb	Cement		9.21	370.96	
1/4			9.6	370.5	✓
C			9.1	371.0	✓
1/4			9.2	370.8	✓
cb			9.0	371.1	✓
cb	Cement		8.20	371.9	✓
N			8.1	371.8	✓
		E. Line	Kansas		
N			6.9	373.0	✓
cb			7.8	372.3	✓
cb	Cement		7.30	372.8	✓
1/4			8.0	371.1	✓
C			8.1	371.0	✓
1/4			8.9	371.2	✓

380.17 Monroe

cb		8.5	371.6	✓
cb	Cement	8.16	371.01	✓
S		8.3	371.8	✓
	30' E			
-5		8.4	371.7	✓
S		8.4	371.7	✓
cb		8.4	371.7	✓
1/4		7.5	372.6	✓
C		7.1	373.0	✓
1/4		7.5	372.6	✓
cb		6.9	373.2	✓
N		6.4	373.7	✓
	45 E			
N		5.6	374.5	✓
cb		6.8	373.3	✓
+6		7.3	372.8	✓
1/4		7.1	373.0	✓
C		6.8	373.3	✓
1/4		7.0	373.1	✓
cb		7.7	372.4	✓
S		7.3	372.8	

380.17

65' E 380.17

-5	7.9	371.1	✓
S	7.9	371.1	✓
cb.	7.0	373.1	✓
1/4	6.9	373.1	✓
C	6.6	373.5	✓
1/4	7.2	371.9	✓
+5	6.1	374.0	
cb	6.0	374.1	✓
N	5.7	374.4	✓

90' E

N	5.5	374.6	✓
cb	5.7	374.4	✓
+4	6.4	373.7	✓
1/4	6.6	373.5	✓
C	6.3	373.8	✓
1/4	6.8	373.3	✓
cb	7.2	371.9	✓
S	7.0	373.1	✓

100' E 380.17

-5	7.3	371.8	✓
S	7.3	371.8	✓
Cb	7.0	373.1	✓
1/4	6.2	373.9	✓
C	6.0	374.1	✓
1/4	6.6	373.5	✓
Cb	5.2	374.9	✓
N	5.0	375.1	✓

120' E

N	5.3	374.8	✓
Cb	6.3	373.8	✓
+5	6.4	373.7	✓
1/4	5.8	374.3	✓
C	5.8	374.3	✓
1/4	6.2	373.9	✓
Cb	6.7	373.4	✓
S	7.1	373.0	✓
+5	7.1	373.0	✓

380.17

135' E

380.17

-5	6.4	373.7	✓
S	6.4	373.7	✓
Cb	5.7	374.4	✓
1/4	5.8	374.3	✓
C	5.6	374.5	✓
+10	5.7	374.4	✓
1/4	6.4	373.7	✓
Cb	5.2	374.9	✓
+10	4.0	376.1	✓
N	3.8	376.3	✓

155' E

-5	5.0	375.1	✓
N	5.0	375.1	✓
Cb	4.4	375.7	✓
+8	4.8	375.3	✓
1/4	5.3	374.8	✓
C	5.5	374.6	✓
1/4	5.9	374.2	✓
Cb	6.2	373.9	✓

Monroe

68

380.17

S	6.3	373.8	✓
+5	6.3	373.8	✓

170' E

S	5.1	375.0	✓
Cb	5.0	375.1	✓
1/4	5.7	374.4	✓
C	5.3	374.8	✓
1/4	5.3	374.8	✓
Cb	4.6	375.5	✓
N	5.0	375.1	✓
+5	4.0	376.1	✓

200' E

-5	5.1	375.0	✓
N	5.1	375.0	✓
Cb	5.2	374.9	✓
1/4	4.8	375.3	✓
C	4.6	375.5	✓
1/4	5.5	374.6	✓
Cb	5.0	375.1	✓

380.17

380.1

+7	4.0	376.1	✓
S	4.5	375.6	✓
220' E			
S	5.0	375.1	✓
+3	5.2	374.9	✓
cb	5.4	374.7	✓
1/4	4.9	375.2	✓
C	4.1	376.0	✓
1/4	4.2	375.9	✓
+3	3.3	376.8	✓
cb	3.0	377.1	✓
N	3.8	376.3	✓
+5	3.1	377.0	✓
240' E			
-5	3.4	376.7	✓
N	3.4	376.7	✓
cb	3.8	376.3	✓
1/4	3.7	376.4	✓
C	3.6	376.5	✓
1/4	4.1	376.0	✓

386.1 Monroe

+3	3.2	376.9	✓
cb.	4.1	376.0	✓
+7	4.6	375.5	✓
S	3.7	376.4	✓
255 E			
-5	3.4	376.7	✓
S	4.3	375.8	✓
cb.	2.8	377.3	✓
+9	2.1	378.0	✓
+11	3.5	376.6	✓
1/4	3.5	376.6	✓
C	3.2	376.9	✓
1/4	3.6	376.5	✓
cb	3.6	376.5	✓
N	3.7	376.4	✓
+5	3.7	376.4	✓
270 E			
-5	2.5	377.6	✓
N	3.0	377.1	✓
cb	3.6	376.5	✓

		380.17							
			380.17						
1/4			3.6	376.5 ✓					
C			3.1	377.0 ✓					
1/4			3.7	376.4 ✓					
Cb.			3.5	376.6 ✓					
+10			3.8	376.3 ✓					
5			2.9	377.2 ✓					
+3			2.9	377.2 ✓					
		285' E							
-3			2.3	377.8 ✓					
5			2.3	377.8 ✓					
+1			3.3	376.8 ✓					
Cb			2.8	377.3 ✓					
1/4			3.0	377.1 ✓					
C			2.6	377.5 ✓					
1/4			2.8	377.3 ✓					
Cb			2.0	378.1 ✓					
N			2.9	377.2 ✓					
+3			1.2	378.9 ✓					
		300' E = W line 30th St.							
N			1.6	378.5 ✓					

			380.17 Monroe						
Cb			2.0	378.1 ✓					
Cb.	Cement		1.13	379.07 ✓					
1/4			1.6	378.5 ✓					
C			1.5	378.6 ✓					
1/4			2.0	378.1 ✓					
Cb.			1.9	378.2 ✓					
Cb	Cement		1.70	378.4 ✓					
5			1.6	378.5 ✓					
Ch. B.M.		380.17	1.20	378.97	SE 30th & Monroe	378.95			

Prelim. change 100+35 — 109+71

		494.57		
100+35			14.0	480.6
+65			11.4	483.2
101			11.3	483.3
+70			8.2	486.4
102			9.8	484.8
+75			9.3	485.3
103			10.7	483.9
104			11.6	483.0
105			12.8	481.8
106			10.7	483.9
+50			11.1	483.5
107			11.5	483.1
+82		487.85	12.5	475.3
108			9.8	478.0
109			1.6	486.2
+77			1.9	486.0

E 111+81 P.I.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44 2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.