

W

558

DIETZGEN  
D. 1881

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DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide.

Side Slopes 1 on 1.

For Single Track Embankment.

H	1	2	3	4	5	6	7	8	9	H	
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be  $30.6 + (20 - 16) \div 2$  or 2 ft. added to  $30.6 = 32.6$ . For slopes of 1 on 1½ see inside of back cover.

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The paper stock of this book is made of a high grade 50% rag paper having a water resisting surface. This book is sewed with Bing Special Enamel Waterproof Thread.

Made in U. S. A.



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INDEX		Pages
SAN VICENTE DAM		
Profile & isecs of 1907-310		
straight gravity dams		1-26 ✓
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Profile & Xsecs of 190' x 310' straight  
gravity dams. San Vicente

Sta.	+	X	-	Elev.
IP	0.20	799.73	12.65	799.53 ✓
0+03			13.3	798.9 ✓
0+00			8.1	804.1 ✓
0-6.2			6.9	805.3 ✓
0-26.1			0.9	811.3 ✓
B.M.	12.65	812.18 ✓		799.53

11-4-38 Hill  
Isbell  
Leekey  
Brooks

L  
UPSTREAM

R  
DOWNSTREAM

800.0	799.7	794.4	784.2
+1.9	-4.4	-9.7	-21.0
30'	7'	20'	30'

Back sight flag +4.38 to top



Sta. + X - Elev.

0+50 5.9 768.6 ✓

0+46.1 770.0 Top 210 Dam

0+43 2.2 772.3 ✓

TP 0.34 774.49 ✓ 12.93 774.15 ✓

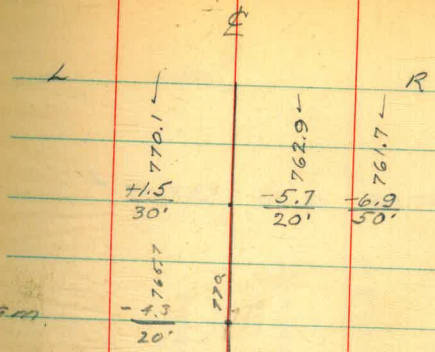
0+38 9.6 777.5 ✓

TP 0.08 787.06 ✓ 12.73 787.00 ✓

0+18 10.8 788.9 ✓

799.73 ✓

2







Sta.	+	x	-	Elev
156			13.6	711.8 ✓
1+50			4.8	720.6 ✓
B.M.			3.80	721.60 721.63 ✓
TP	0.08	725.40 ✓	12.53	725.32 ✓
130			10.1	727.8 ✓
1+15			5.7	732.2 ✓
			737.85 ✓	

4

L	Σ	R
713.7 ✓		
-6.9 30'	717.6 ✓	
	-3.0 5'	
	-1.1 40.9'	719.5 ✓
	+3.3 54'	723.9 ✓
	+4.2 70'	724.8 ✓

Sta.	+	X	-	Elev.
+17			13.4	686.5 ✓
2+00			5.3	694.6 ✓
1+95			3.6	696.3 ✓
TP	0.07	699.95 ✓	13.09	699.88 ✓
1+75			6.5	706.5 ✓
TP	0.04	712.97 ✓	12.47	712.93 ✓
		725.40 ✓		

5

L	R
690.0 ✓	
694.9 ✓	
697.6 ✓	
708.5 ✓	
708.3 ✓	
710.2 ✓	
-6.3 30'	+1.3 16'
-1.4 10'	+12.2 48'
	+12.0 50' toe
	+13.9 80'



Sta. + X - Elev.

7 0.20 674.72 ✓ 12.93 674.52 ✓

+86 13.0 674.5 ✓

+60 10.4 677.1 ✓

+50 5.3 682.1 ✓

2+32 4.8 682.7 ✓

B.M. 0.34 687.45 ✓ 12.84 687.11 687.13 ✓

699.95 ✓

L

R

669.9 ✓  
-12.2  
30'

673.8 ✓  
-8.3  
10'

690.9 ✓  
+8.8  
38'

694.1 ✓  
+12.0  
61.5'  
70c

697.8 ✓  
+15.7  
90'

6





Sta.	+	x	-	Elev.
4+15			9.2	616.3 ✓
TP	0.21	625.50 ✓	13.04	625.29 ✓
7+00			10.8	627.5 ✓
3+80			3.4	634.9 ✓
TP	0.03	638.33 ✓	12.75	638.30 ✓
B.M.			1.36	649.69 ✓ 649.72 651.05 ✓

C

8

L	R
621.4 ✓ -6.1 38'	628.1 ✓ +0.6 9'
627.5 ✓ 0.0 1.2' 700	628.7 ✓ +1.2 2.0'
637.6 ✓ +10.1 35'	632.2 ✓ +4.7 48'
632.1 ✓ +4.6 88'	626.2 ✓ -6.3 116.8 700
625.9 ✓ -1.6 128'	622.1 ✓ -5.4 143'

Sta.	+	x	-	Elev.
4170			5.8	581.6 ✓
TP	0.29	587.42	12.67	587.13 ✓
B.M.		0.62	599.18	599.19 ✓
4160				587.8
4150			11.7	588.1 ✓
TP	0.17	599.80	13.01	599.63 ✓
TP	0.07	612.64 ✓	12.93	612.57 ✓
		625.50		

L	R
592.2 ✓	591.3 ✓
588.5 ✓	590.1 ✓
589.9 ✓	584.2 ✓
594.4 ✓	585.6 ✓
599.3 ✓	586.1 ✓
591.3 ✓	592.8 ✓
590.1 ✓	592.8 ✓
584.2 ✓	592.8 ✓
585.6 ✓	592.8 ✓
586.1 ✓	592.8 ✓
592.8 ✓	592.8 ✓

+4.4 39' toe  
 +0.7 31' toe  
 +2.1 38' toe  
 +6.6 45' toe  
 +11.5 73' toe  
 +3.5 94' toe  
 +2.3 116' toe  
 -3.6 138' toe  
 -2.2 149.4 toe  
 +5.0 167' toe



Sta.	+	x	-	Elev.
5+93			11.7	537.4 ✓
TP	0.11	549.09 ✓	13.02	548.98 ✓
5+04				557.6
5+00			7.6	554.4 ✓
TP	0.39	562.00 ✓	13.06	561.61 ✓
TP	0.20	574.67 ✓	12.95	574.47 ✓
4+78			14.5	572.9 ✓
		587.42		

10

L	R
562.1 ✓	
+4.8 38'	
559.4 ✓	
+1.5 4.5 toe	
559.1 ✓	
+11.0 22'	
568.6 ✓	
+11.8 36'	
569.4 ✓	
+7.0 57'	
564.6 ✓	
+10.2 66.6 toe	
567.8 ✓	
+10.9 88'	
568.5 ✓	
+13.0 117'	
570.6 ✓	
+12.8 133'	
570. A ✓	
+4.2 200'	
561.8 ✓	
+3.5 180'	
563.9 ✓	
+3.4 169.3' toe	
561.0 ✓	

Sta. + X - Elev.

TP 1.01 514.13 13.06 513.12 ✓

+81 11.7 514.5 ✓

5+59 3.8 522.4 ✓

TP 0.20 526.18 12.64 525.98 ✓

5+55 525.2

5+50 6.3 532.3 ✓

TP 2.57 538.62 13.04 536.05 ✓

549.09 ✓

L R

532.0 ✓	527.3 ✓	534.3 ✓	539.4 ✓	548.7 ✓	545.4 ✓	538.0 ✓	534.2 ✓	532.5 ✓	529.4 ✓
16.8 39'	+2.1 6.1' to c	+9.1 36'	+4.2 89.6' to c	+23.5 100'	+20.2 122'	+12.8 165'	+9.0 190.9 to c	+7.3 212'	+4.2 222'



Sta	+	X	-	Elev.
B.M.	0.10	489.15 ✓	12.33	489.05 489.08 ✓
+22			11.0	490.4 ✓
6+09			7.3	494.1 ✓
TP	0.27	501.38 ✓	13.02	501.11 ✓
6+00			13.0	501.1 ✓
5+90			8.8	505.3 ✓
		514.13 ✓		

E

L	R
502.5 ✓	
500.4 ✓	
500.2 ✓	
505.8 ✓	
506.7 ✓	
503.6 ✓	
505.6 ✓	
508.7 ✓	
508.7 ✓	
505.9 ✓	
502.8 ✓	
494.1 ✓	

+1.2 40' toe  
 -0.7 7.5 toe  
 -0.9 17'  
 +4.7 31'  
 +5.6 68'  
 +2.5 93'  
 +4.5 117'  
 +7.6 126' toe  
 +7.6 170'  
 +2.8 193'  
 +1.7 216.4 toe  
 -7.0 256'  
 502.8 ✓

Sta.	+	x	-	Elev.
6+82				460.5

6+66		11.6		460.8 ✓
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TP	8.83	472.45	12.97	463.62 ✓
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6+63		5.2		471.4 ✓
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6+50		1.9		474.7 ✓
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TP	0.03	476.59	12.59	476.56 ✓
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6+43		12.0		477.1 ✓
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489.15 ✓

461.1 ✓	460.8 ✓	462.4 ✓	459.9 ✓	461.5 ✓	459.0 ✓	458.5 ✓
+0.6	+0.3	+1.9	-0.6	+1.0	-1.5	-2.0
50'	82'	152'	200'	236'	275'	300'

467.4 ✓	467.6 ✓	474.1 ✓	479.3 ✓	478.4 ✓	470.7 ✓	478.4 ✓	474.1 ✓	467.1 ✓	468.8 ✓
-2.3	-7.1	-0.6	+4.6	-2.3	-4.0	+3.7	0.0	-0.4	+6.7
50'	10'	8.8'	17'	55'	67'	94'	138'	142.3'	195'
		to c					to c	to c	to c



Sta. + X - Elev.

8+14 6.0 478.1 ✓

8+00 9.1 475.0 ✓

TP 12.35 484.08 0.72 471.73 ✓

+50 7.7 469.7 ✓

+33 10.1 462.3 ✓

7+00 11.9 460.5 ✓

472.45 ✓

Q

14

L

R

478.6 ✓	478.7 ✓	471.5 ✓	471.6 ✓	468.2 ✓	465.2 ✓	459.7 ✓	459.6 ✓	465.0 ✓	468.0 ✓
+1.6	-1.3	-3.5	-3.4	-6.8	-9.8	-15.3	-15.4	-10.0	-7.0
45'	8.8	17'	40'	100'	149.7	200'	235'	247.1	280'
	toe			toe	toe			toe	

468.0 ✓	466.7 ✓	461.4 ✓	459.8 ✓	459.7 ✓	459.0 ✓
+3.3	+2.0	-3.3	-4.9	-5.0	-5.7
50'	9.2	22'	154.1	251.7	285'
	toe		toe	toe	

461.7 ✓	461.4 ✓	461.4 ✓	460.1 ✓	459.4 ✓	459.0 ✓	458.9 ✓
+1.2	+0.9	+0.9	-0.4	-1.1	-1.5	-1.6
48'	9.4	100'	153.8	200'	251.9	285'
	toe		toe	toe		





Sta.	+	x	-	Elev.
TP	11.79	520.61 ✓	0.16	508.82 ✓
9+20			5.3	503.7 ✓
TP	12.89	508.98 ✓	0.40	496.09 ✓
9+00			2.3	494.2 ✓
8+88			6.9	489.6 ✓
TP	12.85	496.49 ✓	0.44	483.64 ✓
		484.08 ✓		

16

L	±	R
495.2 ✓		
493.3 ✓		
495.3 ✓		
492.5 ✓		
484.2 ✓		
480.7 ✓		
480.5 ✓		
480.7 ✓		
+1.0 32'	-0.9 7.8 toe	+1.1 19'
	-1.7 83'	-10.0 134.3 toe
		-13.5 174'
		-13.7 234.5 toe
		-13.5 265'

Sta.	+	∓	-	Elev.
9+81			6.6	538.0 ✓
TP	12.24	544.61 ✓	0.72	532.37 ✓
B.M.			6.85	526.24 ✓ 526.25 ✓
9+74			6.6	526.5 ✓
TP	12.65	533.09 ✓	0.17	520.44 ✓
9+50			4.1	516.5 ✓
				520.61 ✓

L	±	R
511.4 ✓		
517.6 ✓		
515.9 ✓		
520.5 ✓		
518.8 ✓		
517.1 ✓		
512.3 ✓		
505.0 ✓		
503.5 ✓		
502.8 ✓		
503.5 ✓		
35'	19'	6.7 Toe
14.0 31'	12.3 60'	10.6 107.6 Toe
4.2 135'	11.5 164'	13.0 195'
13.7 216.4	13.0 250'	13.0 Toe



Sta.	+	-	Elev.
10+50		9.2	572.8 ✓
TP	12.67	582.04 ✓	0.37 569.37 ✓
10+22		11.4	558.3 ✓
TP	12.77	569.74 ✓	0.09 556.97 ✓
10+00		6.5	550.6 ✓
TP	12.81	557.26 ✓	0.36 544.25 ✓
		544.61 ✓	

18

L	R
554.7 ✓	594.4 ✓
-16.1 30'	+21.6 89'
558.9 ✓	589.4 ✓
-14.4 15'	+16.6 108
568.8 ✓	578.9 ✓
-4.0 4.1 toe	+15.6 155.2 toe
584.3 ✓	572.1 ✓
+11.5 21'	-0.7 170'
592.6 ✓	578.8 ✓
+19.8 46.3 toe	+6.0 184'

534.0 ✓	552.8 ✓
-76.6 36'	+2.2 52'
534.4 ✓	551.0 ✓
-16.2 9'	+0.4 80.2 toe
545.4 ✓	550.2 ✓
-5.2 5.2 toe	-0.4 96'
552.8 ✓	548.9 ✓
+12.2 52'	-1.7 124'
551.0 ✓	535.2 ✓
+0.4 80.2 toe	-15.4 166'
550.2 ✓	537.2 ✓
-0.4 96'	-13.4 188.3 toe
548.9 ✓	539.8 ✓
+12.2 52'	-10.8 220'

11-7-38 Hill  
Isbell  
Lockey  
Brooks  
L

Sta.	+	x	-	Elev.
B.M.			7.65	599.01 ✓ 599.00
TP	12.83	606.66 ✓	0.65	593.83 ✓
11+29			4.8	589.7 ✓
TP	12.69	594.48 ✓	0.25	581.79 ✓
11+00			0.3	581.7 ✓
10+57			5.4	576.7 <sup>6</sup> ✓ 582.04 ✓

571.3 ✓	581.0 ✓	598.6 ✓	611.5 ✓	614.2 ✓	614.7 ✓
-10.4	-0.7	+16.9	+29.8	+32.5	+33.0
35'	3.4	41.6	91'	126.2	160
	toe	toe		toe	



Sta. + X - Elev.

TP 12.90 632.48 ✓ 0.11 612.58 ✓

12+00 2.3 617.4 ✓

+87 4.4 615.3 ✓

11+80 9.7 610.00 ✓

TP 13.09 619.69 ✓ 0.06 606.60 ✓

11+50 8.1 598.6 ✓

606.66 ✓

L R

604.2	613.4	617.7	617.1	622.4	627.2	653.6	663.2
-13.2	-4.0	+0.3	-0.3	+5.0	+9.8	+36.2	+45.8
42'	21'	1.6 Toe	12'	22.3' Toe	28'	94.3' Toe	130'

590.3	590.1	597.8	609.1	634.4	634.4	638.9
-8.3	-8.5	-0.8	+10.5	+35.8	+35.8	+40.3
35'	21'	2.6 Toe	33.1 Toe	103'	109.8' Toe	135'

Sta.	+	X	-	Elev.
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TP	12.78	670.77 ✓	0.10	657.99 ✓
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+68.54				650.00 Tap
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12+67			9.4	648.7 ✓
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TP	13.00	658.09 ✓	0.06	645.09 ✓
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12+50			4.7	640.4 ✓
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TP	12.69	645.15 ✓	0.02	632.46 ✓
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12+15			9.7	622.8 ✓
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632.48 ✓

L	I	R
	662.5 ✓	
	+12.5	
	20'	

632.0 ✓	633.8 ✓	640.4 ✓	647.9 ✓	648.8 ✓	675.9 ✓	685.5 ✓
-8.4	-6.6	0.0	+7.5	+29.4	+35.5	+45.1
30'	6'	0.5	20'	55'	76.2'	105'
		Toe			Toe	





Sta.	+	X	-	Elev.
B.M.			12.10	722.50 ✓ 722.46
TP	12.81	734.60 ✓	0.01	721.79 ✓
+50			7.5	714.3 ✓
13+36			14.8	707.0 ✓
TP	12.84	721.80 ✓	0.15	708.96 ✓
TP	12.84	709.11 ✓	0.28	696.27 ✓ 696.55 ✓

Q

L	R	
↓ 708.6	↓ 725.6	↓ 732.2
-5.7 33'	+11.3 35.9 700	+17.9 68'





Sta.	+	x	-	Elev.
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14+72.5			0.1	808.4 ✓
---------	--	--	-----	---------

TP	12.77	808.54 ✓	1.10	795.77 ✓
----	-------	----------	------	----------

14+57.5			4.0	792.9 ✓
---------	--	--	-----	---------

14+50				789.6
-------	--	--	--	-------

TP	12.74	796.87 ✓	0.00	784.13 ✓
----	-------	----------	------	----------

+38			2.3	781.8 ✓
-----	--	--	-----	---------

14+30			12.0	772.1 ✓
-------	--	--	------	---------

784.13 ✓

L

E

R

786.2	794.3	789.8
-3.4	+4.7	+0.2
30'	28'	50'

11.0 Top stake





5/13/41  
Hill  
Super  
Hedgcock

cont from book 168 page 74

27

Levels over base line for contours Foster

BM.	2.72	458.57		455.85
TP	3.70	458.27	7.00	454.57
2+60			3.3	55.0
2			3.5	54.9
1+50			3.4	54.9
0+75			4.8	53.5
0+00			4.5	53.8
-1+00			4.1	53.9
-2			5.8	52.5
-3			7.3	51.0
-4			7.6	50.7
-5			6.6	51.7

Sp. in pow. pale in front of Fosters Hotel



(cont.)

28

Topog. for establishing contours

East &amp; West

2+60

	53.8	53.3	53.2
455.0	-1.2	-1.2	-1.8
	77	150	267 point

2+00

	53.1	53.6	53.5	53.2
454.8	-0.7	-1.2	-1.2	-1.6
	59	141	185	205 point

1+60

	53.1	53.3	53.1
454.9	-1.2	-1.6	-1.8
	85	140	294 point

0+75

	53.1	53.2	53.0
453.5	-0.1	-0.3	-0.5
	89	150	305 point

0+25

	53.0	52.8
453.1	-0.1	-0.2
	69	145

0+00

	52.2	52.5	52.5
453.8	-1.6	-1.3	-1.3 point
	98	179	317

-1+00

52.5		51.7	52.3	52.3
+2.5	452.9	-2.2	-1.6	-1.6 point
80		127	181	319

-2+00

52.8		51.9	51.9	51.5
+3.3	452.5	-0.6	-0.6	-1.0 point
83		116	174	322

-3+00

53.4		51.3	51.5	51.1
+2.4	451.0	+0.3	+0.5	-0.3 point
61		87	177	327

(cont.)

-1+00

-5+00

29

East & West

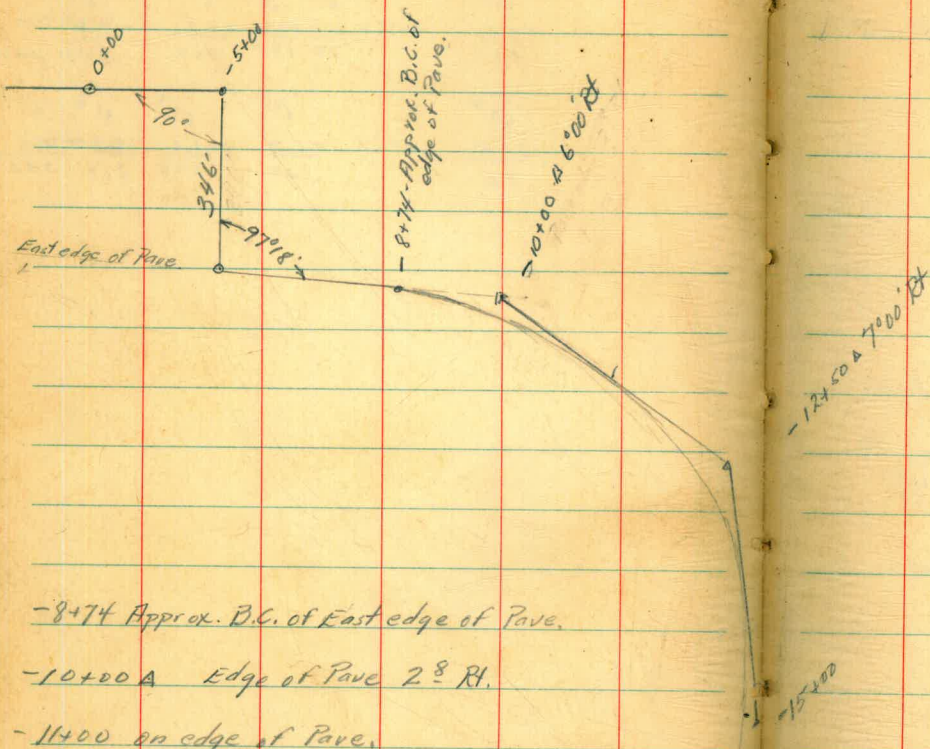
52.2	51.0	50.9	51.3	49.9
+1.5	150.7	+0.3	+0.2	+0.6
57'		50	195	307
				335' par X
53.2	50.0	50.1	51.6	49.7
+1.5	45.7	-1.7	-1.6	-0.1
36'		129'	246	319 346



6/17/41

Soper  
Brooks  
Hedges

30



-8+74 Approx. B.C. of East edge of Pave.

-10+00 A Edge of Pave 2<sup>8</sup> Rt.

-11+00 on edge of Pave.

-12+50 A Edge of Pave. 5<sup>1</sup> Rt.-13+00 " " " 3<sup>2</sup> Rt-14+00 " " " 3<sup>3</sup> Rt-15+00 " " " 8<sup>2</sup> Rt.

Profile of base line

	4.0	453.7	449.7
-9+00		4.6	449.1
-11+00		4.6	49.1
-13+00		4.3	49.4
-15+00		2.8	50.9

X-sections - taken perpendicular to base line,

-9+00

-11+00

-13+00

-15+00

Pave. elev. 346 W. of 5+00 (Page 29)

East  $\oplus$  West

<sup>100</sup>	$\frac{+43}{246}$	$\frac{+30}{25}$	$\frac{-05}{19}$	449.1	$\frac{+16}{45}$	$\frac{-10}{105}$ stream
----------------	-------------------	------------------	------------------	-------	------------------	--------------------------

<sup>100</sup>	$\frac{+52}{130}$	$\frac{+29}{80}$	449.1	$\frac{-08}{67}$	$\frac{-17}{92}$ stream
----------------	-------------------	------------------	-------	------------------	-------------------------

<sup>100</sup>	$\frac{+5.1}{16}$	$\frac{+15}{10}$	449.4	$\frac{-01}{77}$	$\frac{-31}{66}$ stream
----------------	-------------------	------------------	-------	------------------	-------------------------

<sup>100</sup>	$\frac{+48}{26}$	$\frac{+24}{17}$	450.9	$\frac{-30}{50}$	$\frac{-52}{72}$ stream
----------------	------------------	------------------	-------	------------------	-------------------------



# SAN VICENTE DAM.

Engineers Camp.

Stakes for Res. Engrs House  
and Connecting Road

8/4/41

Coste

Holbeck

Peterson

## Location for Res. Engr House

Sta. 2+00 (FB 168/74)

Cor. #1

Stakes  
for  
House

#4

32°

39° 31'

Found Pt.  
Set 2x2 hub

1x2 Hub

1x2 Hub

0+00

98-21-30

197-32-30

0+66.13

27° 01'

27° 41'

27° 8'

35° 35'

44° 25'

24°

Garage

#4

#3

Note:

For location of 0+00  
See F.B. 168/74

4+09  $\frac{5}{1}$

End

3+21  $\frac{17}{1}$   
Hub

1°45' Rt.  
3°19' 30"

2+19  $\frac{5}{1}$   
Hub

32°22'30" Rt.  
64°44'30"

0+66  $\frac{18}{1}$   
1x2 Hub

~~Not Used~~

14°12' Lt.  
28°24'

0+00  
2x2 Hub

LINE # 1

33

18' S. of Olive Tree

~~Not Used~~

See Pg. 31



3+6348  
3+1148  
1x1

42' →  
53.60

45° 31 1/2 Lt  
91° 02'

2+5788  
1x1

46.08

12° 09' Rt.  
24° 19'

2+118  
1x1

145.62'

19° 49' Rt.  
39° 38' 30"

0+6618  
1x2 Hub

66.18'

80° 02' 30" Rt  
160° 04' 30"

0+00

↓

LINE # 2

34

Edge of Pav. - 612' N'y  
from N. Side of Hotel extended.

Same as Line # 1

Same as Line # 1

0+25	17.5	Left	Stump Tree
+295	15'	✓	✓
+42	12.5	✓	✓
+51	11'	✓	✓
1+22	2'	✓	✓
1+15	12.5'	Rt.	✓
3+	7.5	Rt.	✓

D = 18"

D = 10"

D = 2'



BM + #1 - E1 488.7

0.64 489.34

2.1 87.2

5.4 83.9

5.1 84.2

1.4 87.9

Bm 10.04 498.74 488.7

5.24 93.50

4.65 94.09

8.23 90.51

9.15 89.59

Bm 10.04 488.70

On 0+00

> Garage Cor. #1

✓ - #2

✓ - #3

✓ - #4

On 0+00

House - Cor. #1

✓ - #2

✓ - #3

PROFILE Rd. # 2

	+	H	-	El.
BW	0.93	489.63		488.7
0+66			6.6	83.0
1			12.3	77.3
			12.49	477.14
	0.65	477.79		
+28			4.7	73.1
+50			4.3	73.5
2+11 <sup>s</sup>			9.6	68.2
+24			8.5	69.3
+30			10.9	66.9
			11.56	466.23
	1.78	468.01		
2+41			0.9	67.1
+57 <sup>ss</sup>			4.5	63.5
+76			5.5	62.5
3			10.7	57.3
			12.38	455.63

On 0+00



	4.18	459.81	459.81
3+11 <sup>45</sup>		4.2	55.6
+17		5.0	54.8
+634 <sup>8</sup>		4.80	455.01
BM		3.58	456.23 455.85

Edge Pave.

See Pg. 27

To Site for Tank

+ H - El.

BM

488.70

11.37 500.07

0.29 499.78

12.33 512.11

1.03 511.08

13.0 524.1

+ 7.1 531.2

+ 2.7 526.8

39

On 0+00

8/4/41

Coote

Holbeck

Peterson

Top North Peak (e-c 24')

✓ S. ✓



Levels on Slope Chaining Points 9/2/41  
on East

Sta.	+	x	-	Elev.	Isbell Folck
H.W. Culvert					
B.M. #1	12.53	489.42		476.89	
stab.					
8+47			12.62	476.80	
Nail					
8+54	12.70	492.47	9.65	479.77	
TP	12.21	505.12	0.26	492.21	
TP	11.78	516.56	0.34	504.78	
Point "H"	12.73	528.23	1.06	515.50	
50' N. Axis					
B.M. #11	12.57	538.17	2.63	525.60	9+75
TP	12.47	550.17	0.47	537.70	
Point "B"	13.01	560.99	2.19	547.98	
60' N. Axis					
B.M. #12	12.93	573.53	0.39	560.60	10+70
Point "C"	13.35	586.19	0.69	572.84	
TP	12.62	598.00	0.81	585.38	
Point "D"	12.91	606.73	1.18	593.82	
B.M.			7.72	599.01	599.00
60' N. Axis					
B.M. #13	12.89	619.05	0.57	606.16	
TP	12.87	631.20	0.72	618.33	
30' N. Axis					
B.M. #14	11.93	642.76	0.37	630.83	
Point "E"	10.36	643.42	9.70	633.06	

Sta.	+	x	-	Elev.	
				643.42	
TP	13.19	655.82	0.79	642.63	
12+68.54					
Top 120' Dam			5.89	649.93	
Point "F"	11.44	658.96	8.30	647.52	
50' N. Axis					
B.M. #15	1.99	657.94	3.01	655.95	
B.M.			10.02	647.92	
TP	0.78	645.69	13.03	644.91	
TP	0.45	633.50	12.64	633.05	
TP	0.21	620.57	13.14	620.36	
TP	0.84	608.80	12.61	607.96	
B.M.	2.30	601.31	9.79	599.01	599.00
60' S. Axis					
B.M. #16	0.45	588.80	12.96	588.35	
TP	1.47	577.15	13.12	575.68	
TP	0.38	564.60	12.93	564.22	
TP	0.80	552.12	13.28	551.32	
100' S. Axis					
B.M. #17	0.23	542.37	9.98	542.14	
TP	1.44	530.78	13.03	529.34	
TP	1.64	519.68	12.74	518.04	

Sta.	+	-	Elev.
		509.68	
TP	0.62	507.38	12.92 506.76
TP	1.34	495.44	13.28 494.10
TP	1.89	484.86	12.47 482.97
B.M.		8.00	476.86



Bench Levels and Levels  
on Slope Chaining points

Sta.	+	x	-	Elev.
H.W. Colvert B.M.#1	2.55	479.44		476.89
Point "A"	12.51	487.39	4.56	474.88
TP	12.78	500.08	0.09	487.30
TP	12.52	512.13	0.47	499.61
TP	8.93	516.32	4.74	507.39
Point "B"	11.88	526.13	2.07	514.25
B.M.#2	10.79	534.22	2.70	523.43
TP	11.42	543.45	2.19	532.03
Point "C"	12.57	550.46	5.56	537.89
B.M.#3	17.76	562.99	0.23	550.23
TP	12.88	575.38	0.49	562.50
TP	12.78	588.04	0.12	575.26
Point "D"	12.21	600.00	0.25	587.79
B.M.#4	13.05	610.65	2.40	597.60
TP	12.84	622.81	0.68	609.97
TP	11.49	634.02	0.28	622.53
Point "E"	11.96	639.82	6.16	627.86
3+40 B.M.#5			2.08	637.74

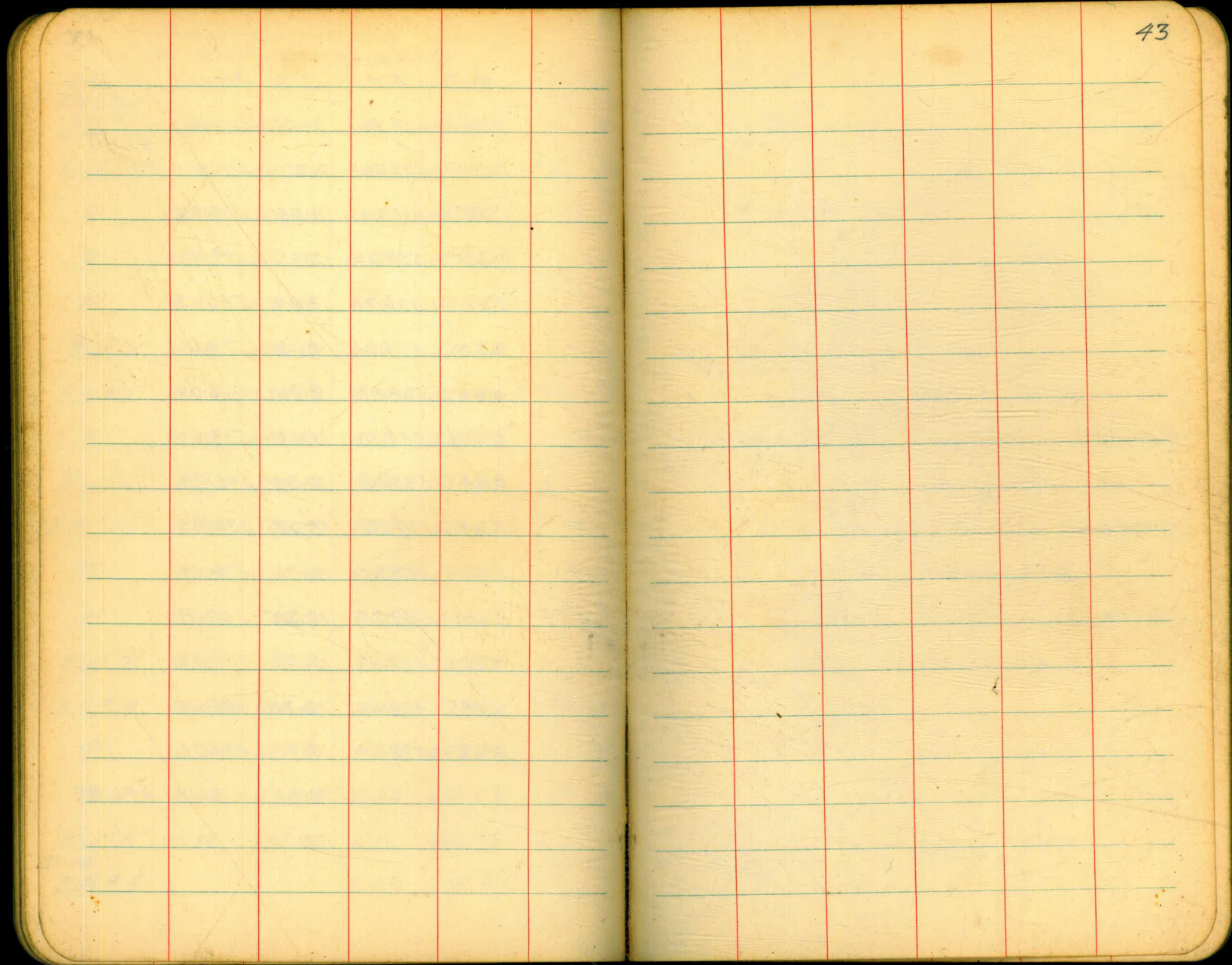
4+51  
50' N.

3+40  
50' N.

Sta.	+	x	-	Elev.
Point "E"	5.00	632.86		627.86
B.M.#6	2.39	622.10	13.15	619.71
TP	1.38	610.24	13.24	608.86
TP	0.38	598.21	12.41	597.83
TP	0.57	586.74	12.04	586.17
TP	0.30	574.91	12.13	574.61
B.M.#7	0.44	566.49	8.86	566.05
TP	0.74	554.58	12.65	553.84
B.M.#8	0.14	543.88	10.84	543.74
TP	0.39	531.22	13.05	530.83
TP	0.80	519.31	12.71	518.51
B.M.#9	0.18	507.29	12.20	507.11
TP	1.60	495.92	12.97	494.32
B.M.#10	0.98	484.62	12.28	483.64
Point "A"	4.63	479.54	9.71	474.91
B.M.#1			2.61	476.93

4+45  
70' S.

476.89





# "A" Circuit Levels

	+	H.I.	-	ELEV.
				476.89
	3.423	480.313		
TP			6.602	473.711
	5.606	479.317		
			6.630	472.687
TP			6.795	472.522
	3.976	476.498		
B.M.A-1			3.870	472.628
	<sup>41</sup> 1.337	<sup>969</sup> 473.965		
B.M.A-2			11.435	462.534
	7.535	470.069		
B.M.A-3			2.955	467.114
	4.968	472.082		
TP			2.256	469.826
	8.260	478.086		
TP			3.902	474.184
	5.858	480.042		
			<sup>859</sup> 3.183	476.849
				476.89

44

B.M #1- On Hwy Culvert.

Sept 29 - '41

π Ecker

φ King

φ Laing

Weather Hot.

£ Blk #10 on E. edge of Hwy pavement.

S.E. Cor of culvert headwall on E. side of Hwy.

On east side of 35' Cottonwood Tree - 50' W of £ of Hwy B.M. is head of nail.

On S.W. Cor of headwall below & betw. Dixon Office + Whse.

Closure = 0.031

# "A" CIRCUIT LEVELS

Sta.	H.I.	ELEV.	ADJ.
N. on Hwy.		476.89	
	6.905	483.795	
B.M.A-4		4.294	479.501 <b>479.50</b>
	5.926	485.427	
B.M.A-5		5.037	<sup>+.002</sup> 480.390 <b>480.39</b>
	4.566	484.956	
B.M.A-7		3.572	481.384 <b>481.39</b>
	4.069	485.453	
B.M.A-6		2.617	<sup>+.002</sup> 482.836 <b>482.84</b>
	1.675	484.511	
TP		3.901	480.610
	5.548	486.158	
B.M.A-8		2.492	<sup>+.003</sup> 483.666 <b>483.67</b>
	2.308	485.974	
TP		5.502	480.472
	4.250	484.722	
TP		5.016	<sup>+.004</sup> 479.706
	4.345	484.051	

45

T Ecker      NOTES  
 φ King  
 φ Laing sept 29; 41      weather - Hot.

On S.E. Cor of conc. headwall on E. ⚡ of Hwy

By St. Hwy Post B-10.05

On N.E. Cor of Conc headwall on E. ⚡ of Hwy

By St. Hwy Post B-10.07

On S.W. Cor of Conc headwall about 300'

N of # 5

On W side of Live Oak Tree on E. ⚡ of Hwy

Nail in E sd of Cottonwood on W. ⚡ of Rd.



A Circuit  
(Cont.)

Sta.	H.I.	ELEV.	ADJ.
	484.051		
TP		3.748	480.303
	5.003	485.306	
TP		5.623	479.683
	2.881	482.564	
		5.679	476.885 476.89
			476.89
	3.464	480.354	
TP		5.559	<sup>+ .002</sup> 474.795
	4.225	479.020	
TP		5.497	<sup>+ .003</sup> 473.523
	4.177	477.100	
B.M.A-1		5.080	<sup>+ .004</sup> 472.620 <b>472.62</b>
	2.716	475.336	
TP		7.085	<sup>+ .006</sup> 468.251
	3.249	471.500	
B.M.A-2		8.262	<sup>+ .008</sup> 462.538 <b>462.54</b>
	7.643	470.181	

46

NOTES

Closure = .005  
Sept 30, 1941  
W. Ecker & King & Laing

South on Hwy.

S.F. Conc. Headwall by St. Hwy Post B.9.93

Nail in E side of 35' Cottonwood just W of Hwy  
in Rio bottom.

"A" Circuit  
(cont)

47

Sta.	H.I.	LEV	ADJ
	470.181		
B.M.A.3		3.060	467.121 <sup>+ .009</sup> 467.13
4.313	471.434		
TP		3.267	468.167 <sup>+ .080</sup>
6.743	474.910		
		2.230	472.680
5.709	478.389		
TP		4.422	473.967
5.770	479.737		
TP		4.487	475.250
5.407	480.657		
		3.784	476.873 476.89

NOTES

on S.W. Cor of headwall below & betw.  
Dixon Whse & Office

£ Blk # 10 on E edge of paving

Close = 0.017



A CIRCUIT Con't.

Sta.	+	HI.	-	ELEV.	Adj.
B.M.#1				476.89	
	2.431	479.321			
TP			8.152	471.169	
	1.930	473.099			
TP			9.812	463.287	
	5.570	468.857			
					+ .001
B.M.A.9			4.582	464.275	464.28
	11.842	476.117			
	11.909	476.184			
			1.436	474.681	
TP			1.906	474.278	
	12.651	487.332			
	11.758	486.033			
			1.584	485.748	
TP			2.287	485.746	
	12.334	498.082			
	11.153	496.899			
			2.536	495.546	
TP			2.546	494.353	
	11.912	507.458			
	12.236	506.589			
			1.052	506.406	
TP			0.585	506.004	
	11.268	517.674			
	10.442	516.416			
			2.798	514.876	
			1.552	514.864	514.88
B.M.A.10					
	11.963	526.839			
	12.309	527.178			

48

NOTES

Sept. 30, 1941  
 Eckee π  
 King φ  
 Loing φ  
 Weather Warm

Is Iron pin in bed rock - E. Blk # 8 in Rio bottom.

Top of knob on protruding bed rock.

## A" Circuit Con't.

49

sta.	H.I.	ELEV.	Adj.
	526.839 <del>529.173</del>		
TP		0.953 525.886 2.566 524.607	
	11.334 537.220 12.387 536.994		
TP		2.710 534.510 2.465 534.629	
	12.912 547.422 12.562 547.091		
TP		1.512 545.910 1.163 545.928	
	12.500 558.410 10.913 556.641		
TP		0.180 557.630 1.421 555.720	
	5.885 563.515 4.333 562.553		
B.M.#11		4.948 558.567 3.969 558.584	558.57
	9.392 567.959 12.819 571.208		
		2.042 565.917 5.480 565.723	
TP		1.950 569.453	
	9.709 575.626 12.451 581.904		
TP		0.472 575.154 0.970 580.234	
	12.738 587.892 11.001 591.235		
		2.170 585.722 2.222 589.413	
	7.365 593.087 11.567 601.280		

NOTES

10-1-41

Rock knob in long rock outcrop approx 45' S of

B.M. #7

Check shot on B.M. #7



"A" CIRCUIT CONT.

50

STA.	I	H.I.	ELEV.	Adj.
		593.087		
		<del>601.280</del>		
B.M.A.12			0.655 <sup>+0.007</sup> 592.432	
			<del>8.835</del> 592.445	592.44
	10.562	602.994		
	<del>11.672</del>	<del>604.117</del>		
TP			1.143 601.851	
			<del>2.958</del> 603.159	
	12.059	613.910		
	<del>11.798</del>	<del>614.954</del>		
TP			1.671 612.239	
			<del>1.344</del> 613.613	
	11.658	623.897		
	<del>11.903</del>	<del>625.516</del>		
TP			1.462 622.435	
			<del>5.959</del> 613.557	
	9.908	632.343		
	<del>11.997</del>	<del>631.554</del>		
B.M.A.13			3.006 <sup>+0.008</sup> 629.337	
			<del>2.201</del> 629.359	629.35
	12.550	641.887		
	<del>11.362</del>	<del>640.715</del>		
TP			0.237 641.650	
			<del>1.175</del> 639.540	
	12.748	654.398		
	<del>12.668</del>	<del>652.208</del>		
TP			1.857 652.541	
			<del>2.792</del> 651.416	
	7.840	660.382		
	<del>9.881</del>	<del>661.297</del>		
B.M.A.14			4.240 <sup>+0.010</sup> 656.142	
			<del>5.139</del> 656.158	656.15
	7.295	663.437		
	<del>8.251</del>	<del>664.409</del>		
TP			0.091 663.346	
			<del>1.055</del> 663.354	

NOTES

10-1-41

Rock knob on outcrop approx 100' W of B.M.#1

Is nail in rock crack in bed rock outcrop.

Nail at base on W side of LIVE Oak Tr.

A" CIRCUIT CONT.

51

Sta	+	HI	-	ELEV.	Adj.
				663.348	
TP				<del>663.354</del>	
	11.562	674.908			
	<del>12.688</del>	675.442			
TP			1.683	673.225	
			<del>1.583</del>	<del>673.859</del>	
	8.194	681.419			
B.M.A-15				680.369	+0.011
			1.050	<del>680.369</del>	680.38
	2.600	682.969			
TP			12.656	670.313	
	1.180	671.493			
TP			12.612	658.881	
	0.980	659.861			
B.M.A-16				649.566	+0.12
			10.295	<del>649.566</del>	649.58
	0.042	649.608			
TP			12.294	637.314	
	0.975	638.289			
TP			12.588	625.701	
	2.505	628.206			
B.M.A-17				618.337	+0.13
			9.869	<del>618.337</del>	618.35
	5.423	623.760			

NOTES

10-1-41

Levels rerun over same B.M's to here.

Rock knob on outcrop above top of dam. **Top-**

Rock knob in long outcrop N. of top of dam.

Rock knob in same long outcrop as # A-16



## A CIRCUIT CONT

Sta.	+	41	-	ELEV.	Adj.
		623.760			
TP		12.558		611.202	
	1.298	612.500			
TP		11.353		601.147	
	0.727	601.874			
B.M.A-18		10.436		591.438	+ .014 591.45
	0.341	591.779			
TP		12.483		579.296	
	0.860	580.156			
TP		11.837		568.319	
	1.639	569.958			
TP		10.906		559.052	
	4.523	563.575			
B.M.A-19		3.805		559.770	+ .016 559.79
	2.464	562.234			
TP		11.560		550.674	
	1.082	551.756			
TP		12.085		539.671	

52

## NOTES

10-1-41

Rock knob on outcrop

10-2-41

Rock knob on side of Outcrop

"A" CIRCUIT Con't.

Sta + HI - Adj.

539.671

2.020 541.691

TP 12.097 529.594

1.108 530.702

TP 11.467 519.235

0.930 520.165

TP 8.908 511.257

3.878 515.135

BM A-20 11.058 504.077 <sup>+ 018</sup> 504.10

0.247 504.324

TP 12.390 491.934

1.688 493.622

TP 11.494 482.128

0.693 482.821

TP 11.963 470.858

2.165 473.023

B.M.A-21 3.869 469.154 <sup>+ .020</sup> 469.17

4.503 473.657

53

NOTES

10-2-41

Knob on rock ledge just above phone line

1/2 nail in base of 3' Live Oak on W. side of Rio bottom



## A" CIRCUIT CONT

Sta	+	HI	-	ELEV.	ADJ.
		473.657			
TP			5.001	468.656	
	6.442	475.098			
					+ .021
B.M. A22			3.295	471.803	471.82
	4.460	476.263			
TP			1.403	474.860	
	0.590	475.450			
TP			10.614	464.836	
	4.367	469.203			
					+ .022
B.M. A9			4.955	464.248	
	7.950	472.198			
TP			1.061	471.137	
	8.270	479.407			
					+ .023
B.M. #1			2.540	476.867	476.89

NOTES

10-2-41

Chiseled knob on large outcrop on W side  
of Rio bank

476.89

$$\text{Closure } \frac{0.023}{57 \text{ TP}} = .0004 / \text{TP}$$

Completed by Ecker & King 10/2/41

A" CIRCUIT CONT.

Sta	+	H.I.	-	ELEV	ADJ.
B.M.#1				476.890	
	11.432	488.322			
TP			1.858	486.464	
	12.613	499.077			
TP			1.128	497.949	
	12.700	510.649			
TP			1.677	508.972	
	10.481	519.453			
TP			4.276	515.177	
	10.280	525.457			
B.M.A-23			1.600	523.857	523.86
	12.222	536.079			
TP			0.926	535.153	
	12.146	547.299			
TP			1.226	546.073	
	11.372	557.445			
B.M.A-24			5.317	552.128	552.13
	12.287	564.415			

55

NOTES

π Ecker

10-2-41

φ King

Rock painted wrong

Rock knob on ledge of Outcrop of bedrock.

10-3-41

Knob on outcrop of bedrock



"A" CIRCUIT CONT

SEC.	H.I.	ELEV.	ADJ.
	564.415		
TP	11.374	574.079	
		1.710	562.705
TP.		1.755	572.324
	12.216	584.540	
TP		3.206	581.334
	10.125	591.459	
B.M.-A-25		3.186	588.273 <b>588.27</b>
	12.679	600.952	
TP		2.175	598.777
	6.200	604.977	
B.M.-A-26		2.641	602.336 <b>602.34</b>
	12.311	614.647	
TP		0.890	613.757
	12.496	626.253	
TP		1.744	624.509
	12.214	636.723	
		1.385	635.338

56

NOTES

K Ecker

10.3.41

φ King

φ Laing

Knob on rock outcrop

Rock knob on prominent outcrop at edge of  
near vertical cliff

"A" CIRCUIT CONT

SEC	+	HI.	-	ELEV	ADJ
				635.338	
	9.378	644.716			
B.M. A27			3.536	641.180	641.18
	11.541	652.721			
TP			1.685	651.036	
	12.062	663.098			
TP			1.909	661.189	
	12.506	673.695			
TP			1.996	671.699	
	12.733	684.432			
TP			1.938	682.494	
	12.311	694.805			
TP			0.664	694.141	
	11.893	706.034			
TP			1.898	704.136	
	5.971	710.107			
B.M. A28			2.266	707.841	707.84
	12.164	720.005			

57

NOTES

10-3-41

Knob on bedrock exposed in opened cut just below 190 CONTOUR SIGN and just above pioneered rd.

Rock knob on prominent outcrop.



"A" CIRCUIT CONT.

58

S&C + H.I. - ELEV. ADJ.

NOTES

10-3-41

720.005

TP

1.431 718.574

12.327 730.901

TP

0.757 730.144

12.401 742.545

TP

1.078 741.467

12.769 754.236

B.M.A. 29

0.568 753.668 **753.67**

Knob on prominent outcrop on cliff. **Top**

2.829 756.497

TP

11.443 745.054

0.691 745.745

TP

10.831 734.914

1.588 736.502

TP

12.482 724.020

0.471 724.491

TP

11.617 712.874

1.369 714.243

TP

12.364 701.879

A' CIRCUIT CONT

39

SEC	+	H.I.	-	ELEV.	ADJ.
				701.879	
	4.457	706.336			
B.M.A.30			6.027	700.309	700.31
	2.914	703.223			
TP			11.076	692.147	
	1.553	693.700			
TP			11.813	681.887	
	0.909	682.796			
TP			11.174	671.622	
	1.479	673.101			
B.M.A.31			9.918	663.183	663.18
	0.343	663.526			
TP			12.478	651.048	
	2.311	653.359			
TP			12.638	640.721	
	0.512	641.233			
TP			8.204	633.029	
	2.564	635.593			

NOTES

10-3-41

Rock knob on outcrop just below 18" Live Oak

see Page 77

Rock knob on small outcrop



"A" CIRCUIT CONT

60

Sta	+ H.I.	-	ELEV.	ADJ.
	635.593			
B.M. 432		9.528	626.065	626.07
	1.788	627.853		
TP		12.460	615.393	
	1.515	616.908		
TP		12.096	604.812	
	1.303	606.115		
B.M. 433		11.377	594.738	594.74
	0.458	595.196		
TP		11.712	583.484	
	0.486	583.970		
TP		11.908	572.062	
	2.274	574.336		
TP		11.915	562.221	
	1.357	563.778		
B.M. 434		10.191	553.587	553.59
	2.842	556.429		
TP		11.798	544.631	

NOTES

10-3-41

Knob on rock outcrop above rd.

π Ecker

10-4-41

φ King

φ Laing

Is iron pin on N R.P. Line set in outcrop

Knob on rock outcrop below overhanging  
rocks

"A" CIRCUIT CONT.

61

Sta	H.I.	ELEV.	ADJ.
		544.631	
	1.218	545.849	
TP		10.640	535.209
	1.008	536.217	
TP		11.921	524.296
	3.852	528.148	
B.M.A-35		10.871	517.277 <b>517.28</b>
	1.188	518.465	
TP		12.122	506.343
	2.219	508.562	
B.M.A-36		7.646	500.916 <b>500.92</b>
	1.297	502.213	
TP		11.128	491.085
	1.340	492.425	
B.M.#4		12.917	479.508 <b>479.51</b>
	3.483	482.991	
B.M.#1		6.105	476.886 <b>476.89</b>

NOTES

10-4-41

Knob atop large boulder in Gully

Knob on rock outcrop on long knoll

479.501

476.89



A CIRCUIT CONT.

Sta	+ H.I.	-	ELEV.
B.M.A-15			680.380
	12.178	692.558	
TP		0.301	692.257
	12.088	704.345	
TP		2.554	701.791
	11.792	713.583	
B.M.B-1		1.178	712.405
	11.341	723.746	
TP		2.161	721.585
	12.258	733.843	
TP		1.400	732.443
	12.387	744.830	
TP		0.675	744.155
	12.797	756.952	
TP		0.686	756.266
	12.450	768.716	
B.M.B-2		2.562	766.154
	12.008	778.162	

62

NOTES

K Ecker

10-4-41

King

Knob on rock outcrop about 15' E of W end of  
test ditch. On S. bank.

Knob atop 3' Boulder on S. side of 310 Contour  
Sign.

"A" CIRCUIT CONT

SEC	+	H.L.	-	ELEV.
		778.162		
TP			0.664	777.498
		12.250	789.748	
TP			1.941	787.807
		11.642	799.449	
			0.162	799.287

NOTES

10-4-41

799.53



Check Levels on "A" circuit

Date: 10/8/41  
 Weather: Fair  
 Warm

Notes: Jackson  
 Rodman-King

Sta. #1	+	H.I.	-	Elev.
B.M.				476.89
	2.98	479.87		
T.P.			12.57	467.30
	1.58	468.88		
A-9 B.M.			4.59	464.29
	12.38	476.67		
T.P.			0.92	475.75
	12.06	487.81		
T.P.			2.05	485.75
	12.10	497.86		
T.P.			1.155	496.705
	12.13	508.835		
T.P.			0.935	507.90
	9.91	517.81		
A-10 B.M.			2.93	514.88
	12.00	526.88		
T.P.			2.255	524.625

Sta.	+	H.I.	-	Elev.
T.P.				524625
	12.615	537.240		
T.P.			1.775	535465
	11.830	547.295		
T.P.			1.23	546.065
	12.585	558.650		
A-11				
B.M.			0.09	558.56
	12.63	571.19		
T.P.			0.625	570.565
	11.635	582.22		
T.P.			0.395	581.825
	11.075	592.90		
A-12				
B.M.			0.475	592.425
	11.135	603.56		
T.P.			1.02	602.54
	11.44	613.98		
T.P.			0.735	613.245



Sta	+	H.I	-	Elev
T.P				613.245
	9.205	622.45		
T.P.			2.65	619.80
	12.875	632.675		
A-13 B.M.			3.34	629.335
	11.610	640.945		
T.P			1.55	639.395
	10.23	649.625		
T.P			0.47	649.155
	7.40	656.555		
A-14 B.M.			0.42	656.135
	11.775	667.91		
T.P			0.82	667.09
	9.93	677.02		
T.P			4.375	672.645
	12.20	684.845		
A-15 B.M.			4.495	680.35

Sta	+	H.I	-	Elev.
T.P				680.35
	12.475	692.825		
T.P			0.52	692.305
	11.88	704.185		
T.P			0.76	703.425
	10.335	713.760		
B-1				
B.M.			1.39	712.37
	12.595	724.965		
T.P			1.07	723.895
	13.03	736.925		
T.P			1.54	735.385
	12.89	748.275		
T.P			1.07	747.205
	12.405	759.61		
T.P			3.38	756.23
	12.495	768.725		
B-2				
B.M.			2.605	766.120



Sta	+	H.I.	-	Elev.
B-2				
B.M.				766.12
	12.425	778.545		
T.P.			0.315	778.23
	12.97	791.20		
T.P.			0.795	790.405
	12.575	802.98		
B.M.			3.74	799.24
	3.63	802.87		
T.P.			12.35	790.52
	1.12	791.64		
T.P.			12.77	778.87
	0.97	779.84		
T.P.			11.985	767.855
	3.945			
B-2				
B.M.			5.685	766.115
	0.93	767.045		
T.P.			12.52	754.525

Top of rock to approx. 20' East of 0+00  
and 5' S. of Axis line

Sta	+	H.I.	-	Elev
T.P.				754.525
	0.935	755.46		
T.P.			12.01	743.45
	2.04	745.49		
T.P.			12.095	733.395
	2.50	735.895		
T.P.			12.195	723.70
	0.465	724.165		
B-1 B.M.			11.79	712.375
	0.305	712.68		
T.P.			12.510	700.165
	0.135	700.30		
T.P.			12.655	687.645
	0.75	688.395		
A-15 B.M.			8.05	680.345
	0.66	681.005		
T.P.			12.36	668.645



Sta.	+	H.I.	-	Elev.
T.P.				668.645
	1.525	670.17		
T.P.			11.975	658.195
A-14	6.955	665.15		
B.M.			9.02	656.13
	0.57	656.70		
A-16				
B.M.			7.15	649.55
	0.325	649.875		
T.P.			12.575	637.30
	0.785	638.085		
T.P.			12.305	625.78
	4.69	630.47		
B.M.			12.15	618.32
(A-17)	4.525	622.845		
T.P.			12.565	610.28
	0.94	611.22		
T.P.			12.52	598.70

Sta	+	H.I.	-	Elev.
T.P.				598.70
	0.835	599.535		
A-18				
B.M.			8.11	591.425
	0.54	591.965		
T.P.			12.675	579.29
	0.615	579.905		
T.P.			11.435	568.47
	1.52	569.99		
A-19				
B.M.			10.215	559.775
	1.22	560.995		
T.P.			12.425	548.57
	0.155	548.725		
T.P.			12.055	536.67
	0.57	537.24		
T.P.			12.565	524.675
	1.39	526.065		
T.P.			12.975	513.09



Sta	H.I.	Elev.
T.P.		513.09
A-20	0.065	513.155
B.M.	9.055	504.10
	0.265	504.365
T.P.	12.405	491.96
	0.73	492.69
T.P.	11.37	481.32
A-21	0.88	482.20
B.M.	13.01	469.19
	4.745	473.935
A-22		
B.M.	2.10	471.835
	7.645	479.48
		476.89
B.M.	2.59	476.89
	Error = 0.00	

Chis. O on headwall of culvert

Check Levels on "A" circuit.  
Sta. + H.I. - Elev.

Date: 10/13/41 Notes: Jackson  
Weather: Fair Rodman - King 73  
Warm

B.M. 476.89

13.05 489.94

T.P. 0.36 489.58

12.03 501.61

T.P. 1.155 500.455

12.63 513.085

T.P. 1.13 511.955

12.295 524.25

A-23

B.M. 0.395 523.855

12.02 535.875

T.P. 0.735 535.14

12.93 548.07

T.P. 0.78 547.29

8.735 556.025

A-24

B.M. 3.91 552.115

12.28 564.395

T.P. 0.185 564.21

chis. 0 on culvert head-wall



Sta.	+	H.I.	-	Elev.
T.P.				564.21
	11.935	576.145		
T.P.			0.15	575.995
	12.39	588.485		
A-25				
B.M.			0.14	588.245
	9.205	597.45		
T.P.			0.745	596.705
	12.15	608.855		
A-26				
B.M.			6.54	602.315
	12.57	614.885		
T.P.			1.055	613.83
	12.71	626.54		
T.P.			0.165	626.375
	9.76	636.135		
T.P.			1.19	634.945
	9.815	644.76		
A-27				
B.M.			3.605	641.155
(out)				

Sta	+	H.I.	-	Elev.
-----	---	------	---	-------

A-27

B.M.

12.93 654.085

T.P.

1.05 653.035

12.97 666.005

T.P.

1.23 664.775

12.325 677.10

T.P.

0.15 676.95

11.08 688.03

T.P.

2.76 685.27

12.58 697.85

T.P.

0.84 697.01

12.33 709.34

A-28

B.M.

1.54 707.80

12.915 720.715

T.P.

0.99 719.725

12.78 732.505

T.P.

0.615 731.89



Sta	+	H.I.	-	Elev.
T.P.				731.89
	12.15	744.04		
T.P.			0.25	743.79
	11.69	755.48		
A-29				
B.M.			1.865	753.615
(out)				
	2.93	756.545		
T.P.			12.625	743.92
	1.00	744.92		
T.P.			11.84	733.08
	1.67	734.75		
T.P.			12.025	722.725
	0.245	722.97		
T.P.			12.87	710.10
	2.56	712.66		
A-30				
B.M.			12.38	700.28
(out)				
	1.72	702.00		
T.P.			12.07	689.93

Sta. + H.I. - Elev

T.P. 689.93

3.70 693.63

T.P. 11.885 681.745

0.16 681.905

T.P. 12.26 669.645

1.225 670.87

A-31 663.09

B.M. 7.71 663.16

1.62 664.78

T.P. 13.075 651.705

2.32 654.025

T.P. 12.82 641.205

3.295 644.50

T.P. 10.15 634.35

3.065 637.415

A-32 B.M. 11.36 626.055

2.395 628.45

T.P. 13.075 615.375

CORRECTED as per Pg 11 / BK 587  
11-22-41 RE



Sta.	+	H.I.	-	Elev.
T.P.				615.375
	1.14	616.515		
T.P.			11.76	604.755
A-33	0.925	605.68		
B.M.			10.96	594.72
	0.525	595.245		
T.P.			11.995	583.25
	0.17	583.42		
T.P.			11.94	571.48
	0.69	572.17		
T.P.			10.435	561.735
A-34	3.795	565.30		
B.M.			11.955	553.575
	2.55	556.125		
T.P.			12.61	543.515
	0.69	544.205		
T.P.			11.83	532.375

(cont'd L.B #589 Page 1)

R.M. rail in pow. Pat Foster opp. Top Elev. 455.85

$$R_2 = 5.122 \quad R_4 = 5.713$$

$$R_1 = 4.433 \quad R_3 = 4.992$$

$$.689$$

$$.721$$

$$.689$$

$$.032$$

$$e = \frac{11}{229} (.721 - 689)$$

$$e = \frac{11}{10} (.032)$$

$$e = .0352$$

$$.032$$

$$1.1$$

$$32$$

$$32$$

$$.0352$$

$$R_2 = 5.122$$

$$R_4 = 5.408$$

$$R_1 = 4.433$$

$$R_3 = 4.863$$

$$0.689$$

$$0.545$$

check

$$R_4 = 5.530$$

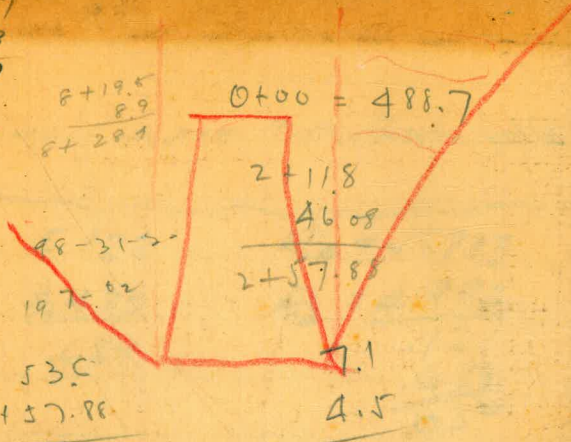
$$R_3 = 4.873$$

$$= .657$$



26.57  
1.93  
28.50  
9.81  
38.31

8+19.5  
89  
8+28.1



28.50  
46.50  
46.50  
46.50  
168.00

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
Roadway 16 feet wide. Side Slopes 1 on 1 1/2  
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be  $41.9 + (20 - 16) \div 2$  or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.