

W  
57.5

# EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS  
Chicago New York San Francisco New Orleans Pittsburg Toronto

575

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

H	0	.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

This Field Book is manufactured  
of a high grade 50% Rag Paper  
having a WATER RESISTING surface.

MICROFILMED

JAN 13 1965

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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Index

Original Cross-Section  
of San Vicente Dam      page 3-79  
(Sta. 6+8250 - 11+40)

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Blank grid page with a vertical red margin line on the left side.

Orig. X Sections San Vicente Dam

Sta	+	X	-	Elev
B.M.	2.04	478.93 ✓		476.89
TP	1.06	468.61 ✓	11.38	467.55 ✓ <del>466.55</del>
$\frac{2}{6+82.50}$			5.7	462.9 ✓
10' N.			5.6	63.0 ✓
20'			5.5	63.1 ✓
30' N			5.4	63.2 ✓
40' N			5.3	63.3 ✓
50' N.			5.3	63.3 ✓
60' N			5.3	63.3 ✓
70' N			5.2	63.4 ✓
80' N.			5.1	63.5 ✓
90' N.			5.0	63.6 ✓
100' N.			5.0	63.6 ✓
10' S.			5.6	63.0 ✓
20' S.			5.7	62.9 ✓
30' S.			5.7	62.9 ✓
40' S.			5.8	62.8 ✓
50' S.			5.9	62.7 ✓
60' S.			5.9	62.7 ✓
70' S.			6.0	62.6 ✓
80' S.			6.0	62.6 ✓
90' S.			6.1	62.5 ✓
100' S.			6.2	62.5 ✓
110' S.			6.2	62.5 ✓
120' S.			6.3	62.3 ✓

Sept. 18-1941

Bock - Engineer

Istall - Chief

King - Level

Cole - Rod

Polak - Chain

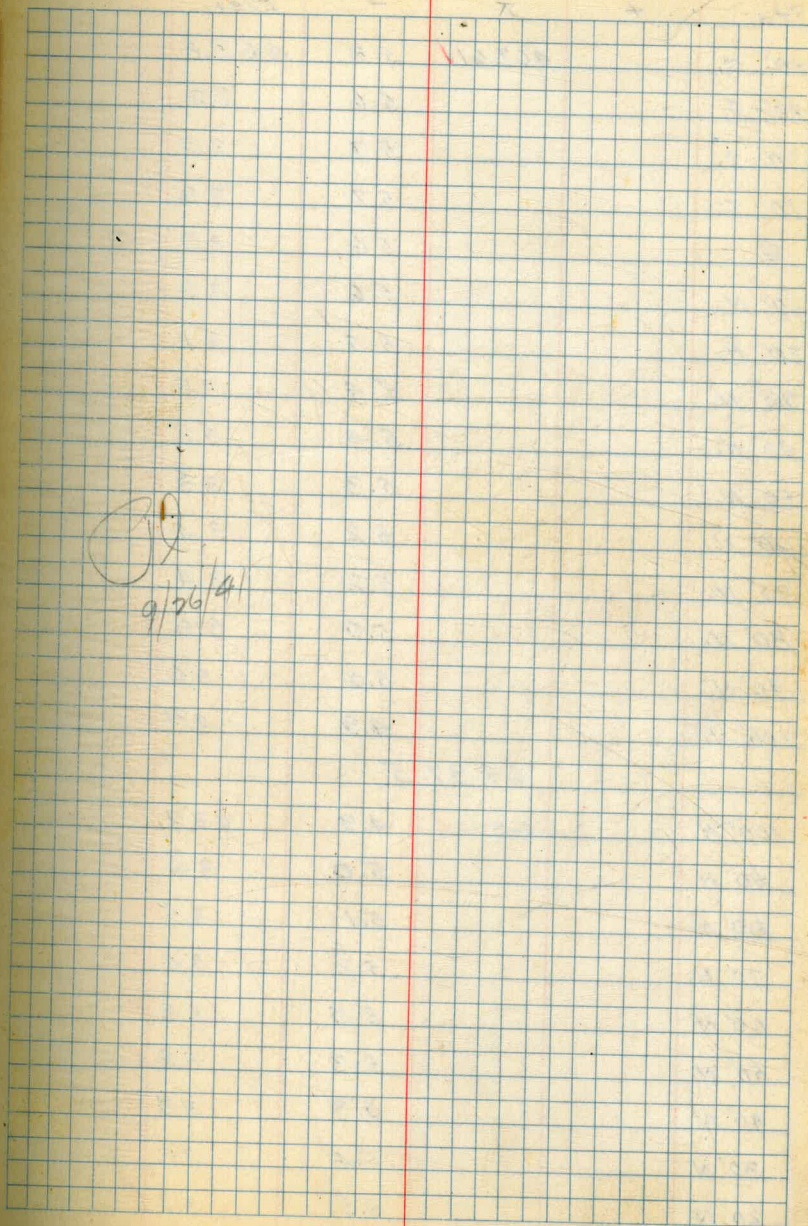
Laing - Chain

3

on Head Wall of Culvert E side Hwy 20' S. of Axis

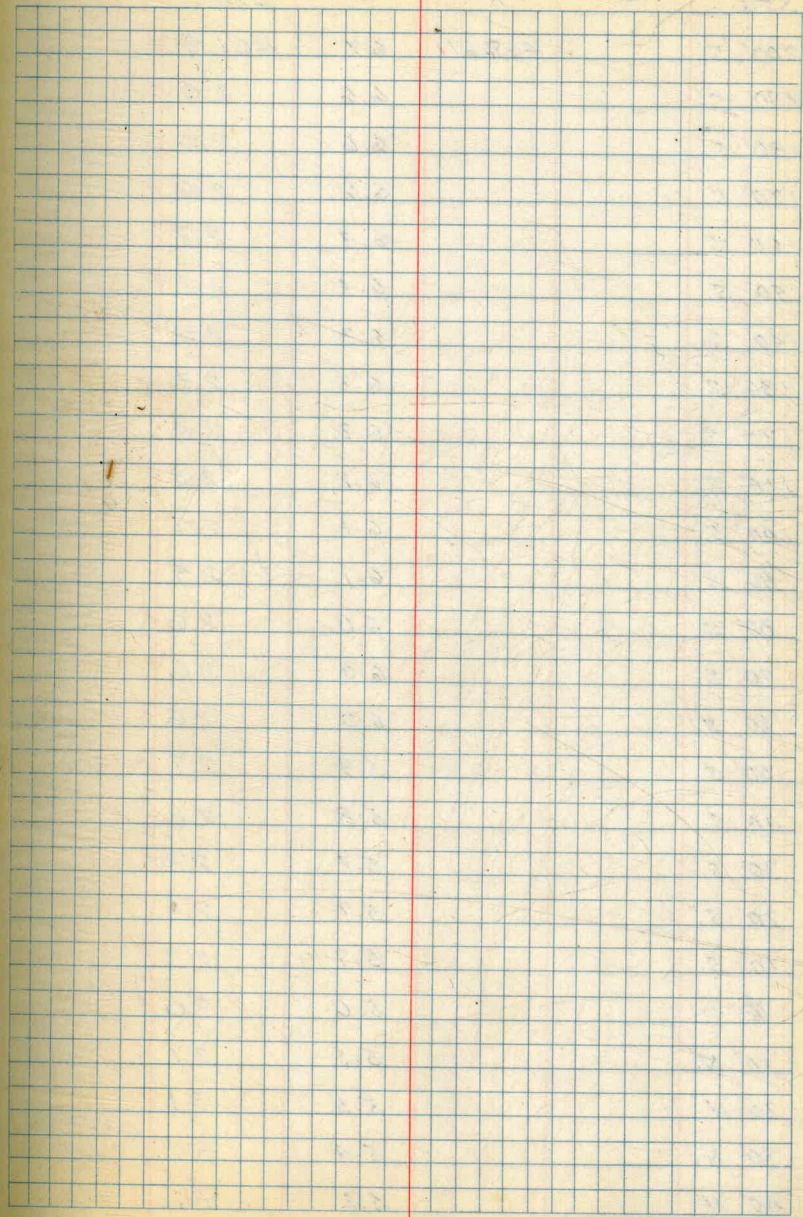
Pl.  
2/16/41

Sta.	+	x	-	Elev.
130' S.		468.61 ✓	6.3	462.3 ✓
140' S.			6.4	2.2 ✓
150' S.			5.9	2.7 ✓
160' S.			6.5	2.1 ✓
170' S.			6.5	2.1 ✓
180' S.			6.5	2.1 ✓
190' S.			6.7	1.9 ✓
200' S.			6.8	1.8 ✓
		6+87.50		
200' S.		468.61 ✓	6.7	61.9 ✓
190' S.			6.6	2.0 ✓
180' S.			6.5	2.1 ✓
170' S.			6.5	2.1 ✓
160' S.			6.4	2.2 ✓
150' S.			6.4	2.2 ✓
140' S.			6.3	2.3 ✓
130' S.			6.3	2.3 ✓
120' S.			6.2	2.4 ✓
110' S.			6.2	2.4 ✓
100' S.			6.1	2.5 ✓
90' S.			6.1	2.5 ✓
80' S.			6.0	2.6 ✓
70' S.			6.0	2.6 ✓
60' S.			5.9	2.7 ✓
50' S.			5.8	2.8 ✓



Sta	+	π	-	Elev.
40' S.		468.61 ✓	5.8	462.8 ✓
30' S.			5.6	3.0 ✓
20' S.			5.7	2.9 ✓
10' S.			5.7	2.9 ✓
♠			5.6	3.0 ✓
10' N.			5.6	3.0 ✓
20' N.			5.5	3.1 ✓
30' N.			5.4	3.2 ✓
40' N.			5.4	3.2 ✓
50' N.			5.3	3.3 ✓
60' N.			5.2	3.4 ✓
70' N.			5.2	3.4 ✓
80' N.			5.0	3.6 ✓
90' N.			5.0	3.6 ✓
100' N.			4.9	3.7 ✓
6 + 97.5				
100' N.		468.61 ✓	4.9	63.7 ✓
90' N.			5.0	3.6 ✓
80' N.			5.1	3.5 ✓
70' N.			5.2	3.4 ✓
60' N.			5.3	3.3 ✓
50' N.			5.3	3.3 ✓
40' N.			5.3	3.3 ✓
30' N.			5.4	3.2 ✓
20' N.			5.5	3.1 ✓

Sta.	+	π	-	Elev.
10' N.		468.61 ✓	5.5	463.1 ✓
Φ			5.6	3.0 ✓
10' S.			5.6	3.0 ✓
20' S.			5.7	2.9 ✓
30' S.			5.7	2.9 ✓
40' S.			5.7	2.9 ✓
50' S.			5.8	2.8 ✓
60' S.			5.9	2.7 ✓
70' S.			5.9	2.7 ✓
80' S.			6.0	2.6 ✓
90' S.			6.1	2.5 ✓
100' S.			6.0	2.6 ✓
110' S.			6.1	2.5 ✓
120' S.			6.2	2.4 ✓
130' S.			6.3	2.3 ✓
140' S.			6.3	2.3 ✓
150' S.			6.4	2.2 ✓
160' S.			6.4	2.2 ✓
170' S.			6.4	2.2 ✓
180' S.			6.5	2.1 ✓
190' S.			6.6	2.0 ✓
200' S.			6.7	1.9 ✓
250' S.			6.7	1.9 ✓
		7+07.50		
250' S.		468.61 ✓	6.9	61.7



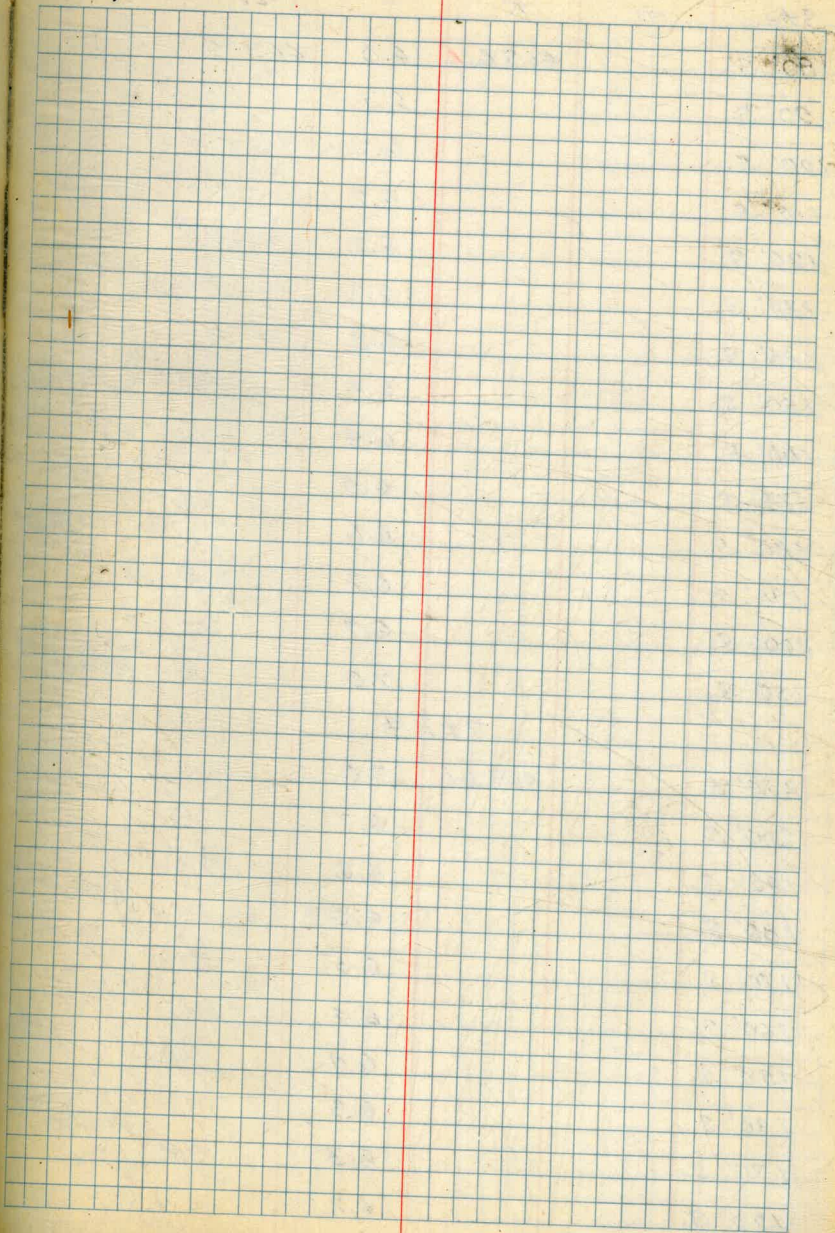


Sta.	+	x	-	Elev.
200' S.		46861 ✓	6.7	461.9 ✓
190' S.			6.6	2.0 ✓
180' S.			6.6	2.0 ✓
170' S.			6.6	2.0 ✓
160' S.			6.4	2.2 ✓
150' S.			6.4	2.2 ✓
140' S.			6.3	2.3 ✓
130' S.			6.3	2.3 ✓
120' S.			6.2	2.4 ✓
110' S.			6.2	2.4 ✓
100' S.			6.1	2.5 ✓
90' S.			6.1	2.5 ✓
80' S.			6.0	2.6 ✓
70' S.			6.0	2.6 ✓
60' S.			6.0	2.6 ✓
50' S.			5.9	2.7 ✓
40' S.			5.8	2.8 ✓
30' S.			5.7	2.9 ✓
20' S.			5.7	2.9 ✓
10' S.			5.7	2.9 ✓
Q			5.6	3.0 ✓
10' N.			5.5	3.1 ✓
20' N.			5.5	3.1 ✓
30' N.			5.4	3.2 ✓
40' N.			5.2	3.4 ✓ 3.2

Sta.	+	κ	-	Elev.
50' N.		468.61 ✓	5.3	463.3 ✓
60' N.			5.3	3.3 ✓
70' N.			5.2	3.4 ✓
80' N.			5.3	3.3 ✓
90' N.			5.2	3.4 ✓
100' N.			5.0	3.6 ✓

7+14

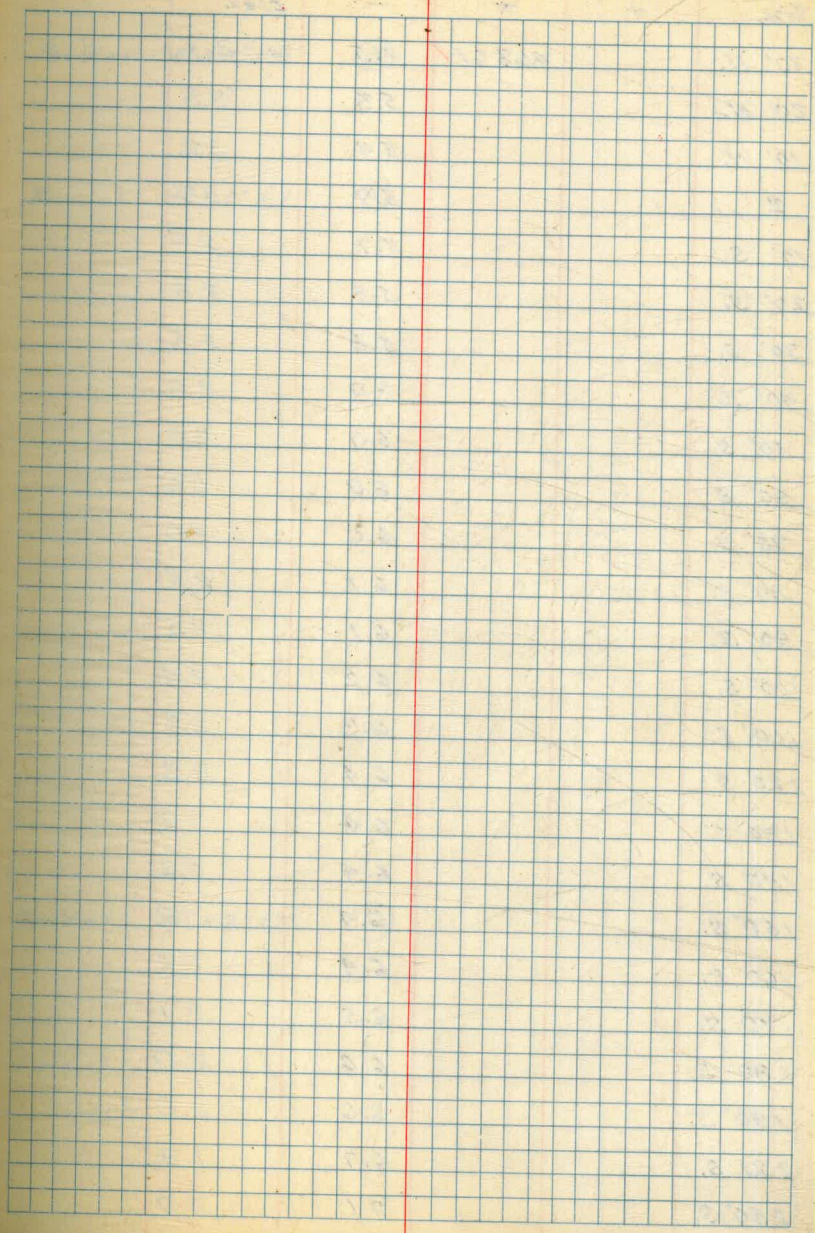
100' N.		463.61 ✓	5.1	63.5 ✓
90' N.			4.8	3.8 ✓
80' N.			4.9	3.7 ✓
70' N.			5.0	3.6 ✓
60' N.			5.3	3.3 ✓
50' N.			5.3	3.3 ✓
40' N.			5.3	3.3 ✓
30' N.			6.3	3.3 ✓
20' N.			5.4	3.2 ✓
10' N.			5.5	3.1 ✓
Q			5.6	3.0 ✓
10' S.			5.6	3.0 ✓
20' S.			5.8	2.8 ✓
30' S.			5.8	2.8 ✓
40' S.			5.8	2.8 ✓
50' S.			5.8	2.8 ✓
60' S.			5.9	2.7 ✓
70' S.			6.0	2.6 ✓



Sta.	+	π	-	Elev.
80' S.		468.61 ✓	6.0	462.6 ✓
90' S.			6.1	2.5 ✓
100' S.			6.2	2.4 ✓
110' S.			6.2	2.4 ✓
120' S.			6.2	2.4 ✓
130' S.			6.3	2.3 ✓
140' S.			6.3	2.3 ✓
150' S.			6.4	2.2 ✓
160' S.			6.4	2.2 ✓
170' S.			6.5	2.1 ✓
180' S.			6.6	2.0 ✓
190' S.			6.7	1.9 ✓
200' S.			6.7	1.9 ✓
250' S.			7.0	1.6 ✓
		7+24		
250' S.		468.61 ✓	7.0	61.6 ✓
200' S.			6.7	1.9 ✓
190' S.			6.6	2.0 ✓
180' S.			6.6	2.0 ✓
170' S.			6.5	2.1 ✓
160' S.			6.4	2.2 ✓
150' S.			6.4	2.2 ✓
140' S.			6.3	2.3 ✓
130' S.			6.3	2.3 ✓
120' S.			6.2	2.4 ✓

Boulder 4'x4'x3' - ①

Sta.	+	X	-	Elev.
110' S.		468.61 ✓	6.2	462.4 ✓
100' S.			6.2	2.4 ✓
90' S.			6.2	2.4 ✓
80' S.			6.0	2.6 ✓
70' S.			6.0	2.6 ✓
60' S.			5.9	2.7 ✓
50' S.			5.9	2.7 ✓
40' S.			5.8	2.8 ✓
30' S.			5.8	2.8 ✓
20' S.			5.7	2.9 ✓
10' S.			5.7	2.9 ✓
☐			5.8	2.8 ✓
10' N.			6.0	2.6 ✓
20' N.			5.8	2.8 ✓
30' N.			5.5	3.1 ✓
40' N.			5.5	3.1 ✓
50' N.			5.4	3.2 ✓
60' N.			4.4	4.2 ✓
70' N.			3.0	5.6 ✓
80' N.			2.3	6.3 ✓
90' N.			3.0	5.6 ✓
100' N.			2.5	6.1 ✓
7+34				
50' N.		468.61 ✓	1.8	6.8 ✓
40' N.			2.7	5.9 ✓



Sta.	+	π	-	Elev.
30' N.		468.61 ✓	4.5	464.1 ✓
20' N			5.3	3.3 ✓
10' N.			5.4	3.2 ✓
♠			5.7	2.9 ✓
10' S.			5.7	2.9 ✓
20' S.			5.8	2.8 ✓
30' S.			5.8	2.8 ✓
40' S.			6.0	2.6 ✓
50' S.			6.0	2.6 ✓
60' S.			6.0	2.6 ✓
70' S.			6.0	2.6 ✓
80' S.			6.1	2.5 ✓
90' S.			6.1	2.5 ✓
100' S.			6.2	2.4 ✓
110' S.			6.3	2.3 ✓
120' S.			6.4	2.2 ✓
130' S.			6.4	2.2 ✓
140' S.			6.4	2.2 ✓
150' S.			6.4	2.2 ✓
160' S.			6.4	2.2 ✓
170' S.			6.5	2.1 ✓
180' S.			6.6	2.0 ✓
190' S.			6.6	2.0 ✓
200' S.			6.7	1.9 ✓
250' S.			7.0	<del>2.0</del> 1.6

Boulder 4'x4'x3' (3)

Boulder 5'x6'x1' (4)

Boulder 4'x3'x1' (2)

Sta.	+	κ	-	Elev.
		7+44		
250' S.		468.61 ✓	7.2	461.4 ✓
200' S.			6.8	1.8 ✓
190' S.			6.7	1.9 ✓
180' S.			6.7	1.9 ✓
170' S.			6.6	2.0 ✓
160' S.			6.6	2.0 ✓
150' S.			6.4	2.2 ✓
140' S.			6.4	2.2 ✓
130' S.			6.4	2.2 ✓
120' S.			6.4	2.2 ✓
110' S.			6.3	2.3 ✓
100' S.			6.3	2.3 ✓
90' S.			6.3	2.3 ✓
80' S.			6.1	2.5 ✓
70' S.			6.1	2.5 ✓
60' S.			6.0	2.6 ✓
50' S.			6.0	2.6 ✓
40' S.			6.0	2.6 ✓
30' S.			5.9	2.7 ✓
20' S.			5.8	2.8 ✓
10' S.			5.7	2.9 ✓
±			5.7	2.9 ✓
10' N.			4.7	3.9 ✓
20' N.			2.0	6.6 ✓

Sta.	+	∓	-	Elev.
30' N.		468.61 ✓	1.9	466.7 ✓
40' N.			1.2	7.4 ✓
50' N.			1.1	7.5 ✓
		7+54		
∅		468.61 ✓	2.5	6.1 ✓
10' S.			5.8	2.8 ✓
20' S.			5.8	2.8 ✓
30' S.			5.9	2.7 ✓
40' S.			6.0	2.6 ✓
50' S.			6.0	2.6 ✓
60' S.			6.1	2.5 ✓
70' S.			6.1	2.5 ✓
80' S.			6.2	2.4 ✓
90' S.			6.3	2.3 ✓
100' S.			6.3	2.3 ✓
110' S.			6.4	2.2 ✓
120' S.			6.4	2.2 ✓
130' S.			6.5	2.1 ✓
140' S.			6.6	2.0 ✓
150' S.			6.6	2.0 ✓
160' S.			6.6	2.0 ✓
170' S.			6.6	2.0 ✓
180' S.			6.7	1.9 ✓
190' S.			6.8	1.8 ✓
200' S.			6.8	1.8 ✓

Sta.	+	x	-	Elev.
250' S.		468.61 ✓	7.3	461.3 ✓
300' S.			7.5	1.1 ✓
360' S.			7.7	0.9 ✓
		7+60.5		
360' S.		468.61 ✓	1.7	6.9 ✓
350' S.			4.0	4.6 ✓
340' S.			7.6	1.0 ✓
320' S.			7.5	1.1 ✓
280' S.			7.3	1.3 ✓
240' S.			7.1	1.5 ✓
200' S.			6.8	1.8 ✓
190' S.			6.7	1.9 ✓
180' S.			6.6	2.0 ✓
170' S.			6.6	2.0 ✓
160' S.			6.6	2.0 ✓
150' S.			6.5	2.1 ✓
140' S.			6.5	2.1 ✓
130' S.			6.5	2.1 ✓
120' S.			6.5	2.1 ✓
110' S.			6.3	2.3 ✓
100' S.			6.3	2.3 ✓
90' S.			6.2	2.4 ✓
80' S.			6.1	2.5 ✓
70' S.			6.1	2.5 ✓
60' S.			6.0	2.6 ✓

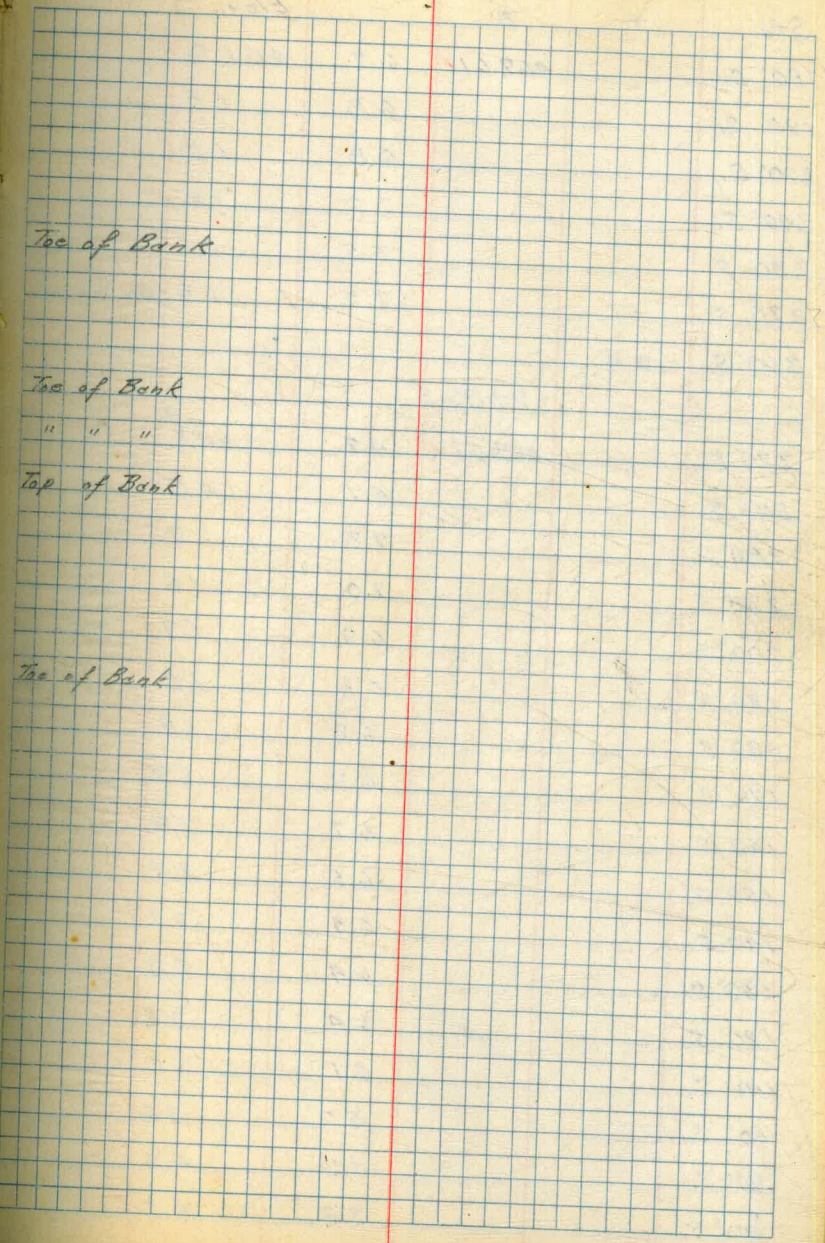
Toe of Bank

on Boulder

Toe of Bank



Sta.	+	-	Elev.
50' S.	468.61 ✓	6.1	462.5 ✓
40' S.		5.7	2.9 ✓
30' S.		5.2	3.4 ✓
20' S.		6.0	2.6 ✓
10' S.		6.8	1.8 ✓
∅		0.3	8.3 ✓
7+70.5			
10' S.	468.61 ✓	5.8	62.8 ✓
21' S.		6.3	2.3 ✓
23' S.		1.0	7.6 ✓
30' S.		0.3	8.3 ✓
40' S.		0.0	8.6 ✓
50' S.		1.5	7.1 ✓
60' S.		5.4	3.2 ✓
70' S.		5.5	3.1 ✓
80' S.		6.4	2.2 ✓
90' S.		6.3	2.3 ✓
100' S.		6.3	2.3 ✓
110' S.		6.4	2.2 ✓
120' S.		6.4	2.2 ✓
130' S.		6.4	2.2 ✓
140' S.		6.5	2.1 ✓
150' S.		6.5	2.1 ✓
160' S.		6.6	2.0 ✓
170' S.		6.6	2.0 ✓



Toe of Bank

Toe of Bank

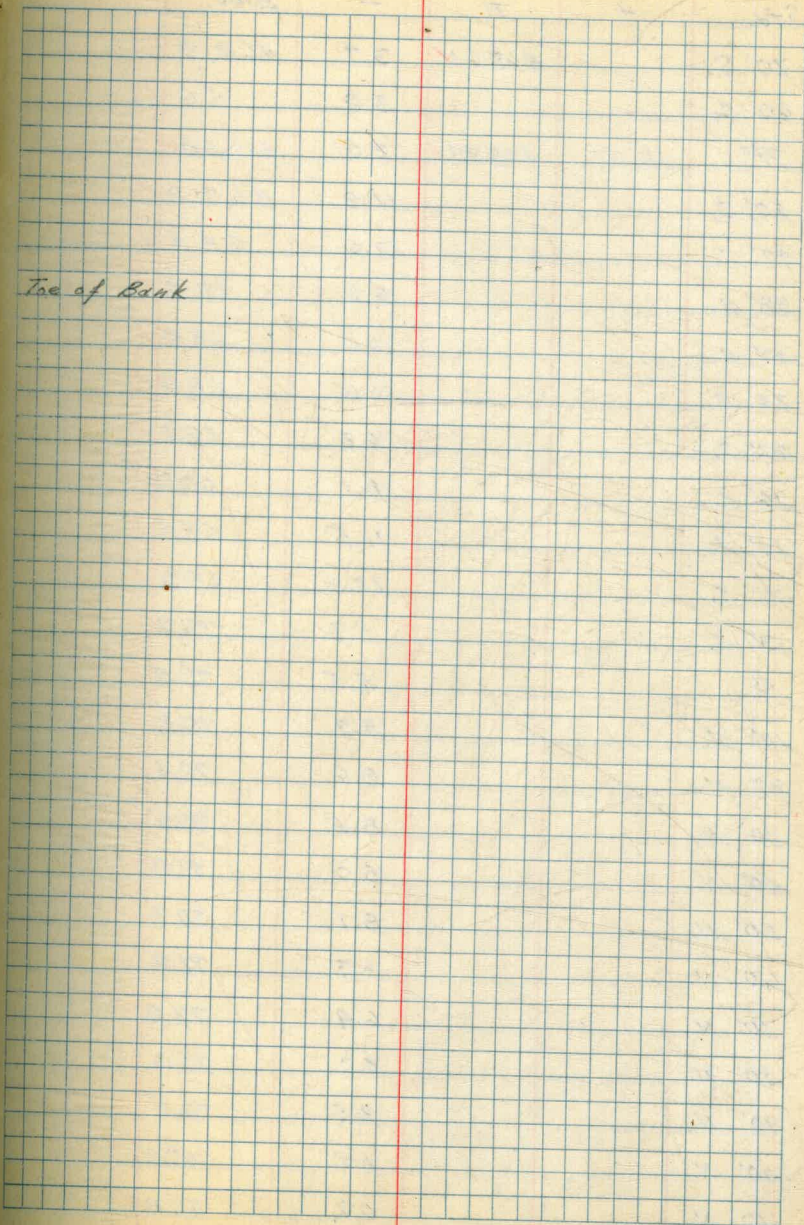
" " "

Top of Bank

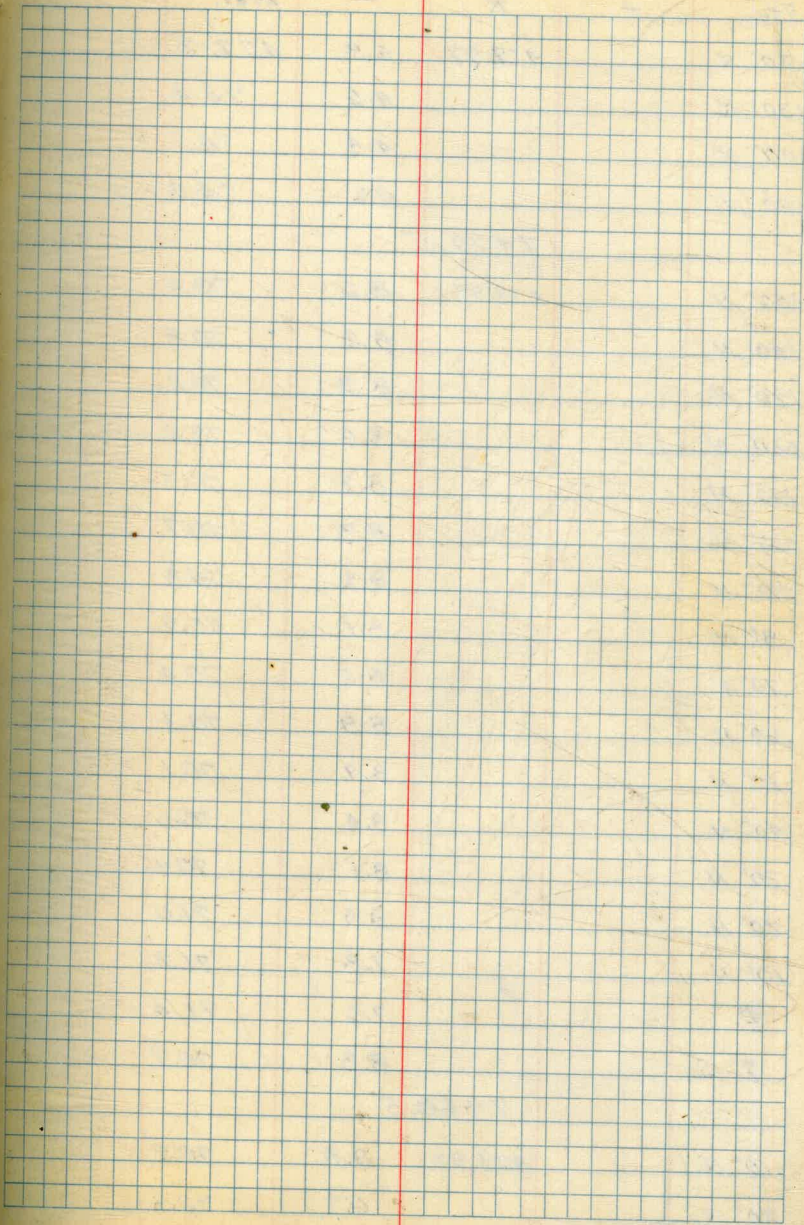
Toe of Bank

Sta.	+	X	-	Elev.
180' S.		468.61 ✓	6.7	461.9 ✓
190' S.			6.8	1.8 ✓
200' S.			6.8	1.8 ✓
240' S.			7.0	1.6 ✓
280' S.			7.5	1.1 ✓
320' S.			7.5	1.1 ✓
360' S.	0.4			
		7180.5		
320' S.		468.61 ✓	4.2	64.8 <sup>4</sup> ✓
300' S.			4.1	4.5 ✓
280' S.			7.3	1.3 ✓
240' S.			7.0	1.6 ✓
200' S.			6.9	1.7 ✓
190' S.			6.8	1.8 ✓
180' S.			6.8	1.8 ✓
170' S.			6.7	1.9 ✓
160' S.			6.7	1.9 ✓
150' S.			6.5	2.1 ✓
140' S.			6.5	2.1 ✓
130' S.			6.4	2.2 ✓
120' S.			6.4	2.2 ✓
110' S.			6.1	2.5 ✓
100' S.			5.0	3.6 ✓
90' S.			4.3	4.3 ✓
80' S.			3.8	4.8 ✓

Toe of Bank

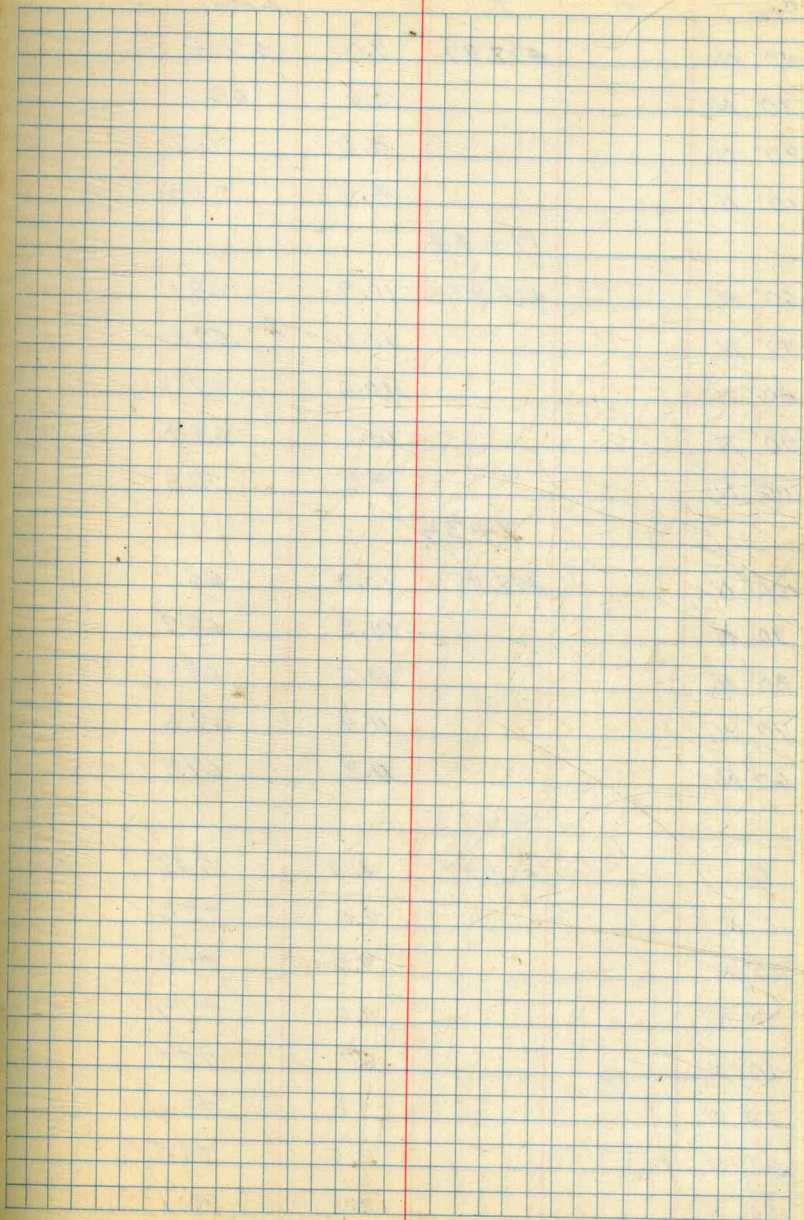


Std.	+	π	-	Elev.
70' S.		468.61 ✓	3.7	464.9 ✓
60' S.			3.0	5.6 ✓
TP	12.37	478.97 ✓	2.01	466.60 ✓
50' S.			11.8	467.2 ✓
47' S.			10.6	68.4 ✓
38' S.			6.6	72.4 ✓
30' S.			11.0	68.0 ✓
24' S.			10.6	68.4 ✓
22' S.			16.8	62.2 ✓
16' S.			18.1	60.9 ✓
14' S.			11.5	67.5 ✓
10' S.			10.0	69.0 ✓
3' S.			5.3	73.7 ✓
ϕ			5.5	73.5 ✓
10' N.			8.7	70.3 ✓
20' N.			8.6	70.4 ✓
30' N.			8.5	70.5 ✓
40' N.			8.0	71.0 ✓
50' N.			8.1	70.9 ✓
60' N.			7.3	71.7 ✓
70' N.			6.4	72.6 ✓
80' N.			4.0	75.0 ✓
90' N.			2.5	76.5 ✓
100' N.			1.5	77.5 ✓
110' N.			6.2	72.8 ✓



Std.	+	κ	-	Elev.
120' N.		478.97 ✓	6.8	472.2 ✓
130' N.			4.6	74.4 ✓
140' N.			4.9	74.1 ✓
150' N.			4.2	74.8 ✓
		7+70.5		
150' N.		478.97 ✓	8.6	70.4 ✓
140' N.			8.2	70.8 ✓
130' N.			8.2	70.8 ✓
120' N.			8.6	70.4 ✓
110' N.			8.7	70.3 ✓
100' N.			8.3	70.7 ✓
90' N.			8.2	70.8 ✓
80' N.			8.1	70.9 ✓
70' N.			8.6	70.4 ✓
60' N.			8.9	70.1 ✓
50' N.			8.9	70.1 ✓
40' N.			8.4	70.6 ✓
30' N.			8.1	70.9 ✓
20' N.			8.0	71.0 ✓
10' N.			7.8	71.2 ✓
Q			7.6	71.4 ✓
7' S.			8.3	70.7 ✓
		7+60.5		
10' N.		478.97 ✓	8.8	70.2 ✓
20' N.			6.7	72.3 ✓

Sta.	+	x	-	Elev.
30' N.		478.97 ✓	8.4	470.6 ✓
40' N.			7.8	71.2 ✓
50' N.			8.8	70.2 ✓
60' N.			8.2	70.8 ✓
70' N.			7.4	71.6 ✓
80' N.			7.7	71.3 ✓
90' N.			8.3	70.7 ✓
100' N.			8.4	70.6 ✓
110' N.			8.3	70.7 ✓
120' N.			9.3	69.7 ✓
130' N.			8.4	70.6 ✓
140' N.			8.6	70.4 ✓
150' N.			8.6	70.4 ✓
		7+54		
150' N.		478.97 ✓	8.7	70.3 ✓
140' N.			8.5	70.5 ✓
130' N.			7.7	71.3 ✓ <del>71.3</del>
120' N.			9.8	69.2 ✓
110' N.			9.0	70.0 ✓
100' N.			9.0	70.0 ✓
90' N.			8.7	70.3 ✓
80' N.			8.0	71.0 ✓
70' N.			8.9	70.1 ✓
60' N.			10.1	68.9 ✓
50' N.			8.7	70.3 ✓



Sta.	+	X	-	Elev.
40' N.		478.97 ✓	9.0	470.0 ✓
30' N.			10.0	69.0 ✓
20' N.			8.8	70.2 ✓
10' N.			8.7	70.3 ✓
		7744		
60' N.		478.97 ✓	10.9	68.1 ✓
70' N.			11.1	67.9 ✓
80' N.			10.0	69.0 ✓
90' N.			10.1	68.9 ✓
100' N.			8.2	70.8 ✓
		7734		
100' N.		478.97 ✓	10.9	68.1 ✓
90' N.			10.3	68.7 ✓
80' N.			10.7	68.3 ✓
70' N.			11.4	67.6 ✓
60' N.			11.2	67.8 ✓
		7790.5		
E		478.97 ✓	4.4	746 ✓
10' N.			7.0	720 ✓
20' N.			7.6	714 ✓
30' N.			7.1	719 ✓
40' N.			6.7	723 ✓
50' N.			5.8	73.2 ✓
60' N.			3.5	75.5 ✓
70' N.			2.9	76.1 ✓

Sta.	+	π	-	Elev.
80' N.		478.97 ✓	2.7	476.3 ✓
90' N.			1.5	77.5 ✓
100' N.			1.5	77.5 ✓
110' N.			4.3	74.7 ✓
120' N.			5.1	73.9 ✓
3' S.			4.3	74.7 ✓
15' S.			11.3	67.7 ✓
17' S.			20.1	58.9 ✓
23' S.			19.0	60.0 ✓
25' S.			10.0	69.0 ✓
30' S.			8.5	70.5 ✓
40' S.			7.0	72.0 ✓
50' S.			8.3	70.7 ✓
60' S.			10.1	68.9 ✓
70' S.			10.9	68.1 ✓
80' S.			11.4	67.6 ✓
90' S.			12.0	67.0 ✓
100' S.			13.4	65.6 ✓
110' S.			13.8	65.2 ✓
120' S.			14.5	64.5 ✓
130' S.			15.2	63.8 ✓
140' S.			17.1	61.9 ✓
150' S.			17.1	61.9 ✓
160' S.			17.1	61.9 ✓
170' S.			17.1	61.9 ✓

Concrete Block 10' x 3' x 2

(5)

Sta.	+	κ	-	Elev.
180' S.		478.97 ✓	17.1	461.9 ✓
190' S.			17.3	61.7 ✓
200' S.			17.2	61.8 ✓
240' S.			17.4	61.6 ✓
280' S.			13.7	65.3 ✓
300' S.			9.6	69.4 ✓
320' S.			6.0	73.0 ✓
340' S.			3.6	75.4 ✓
	8+00.5			
340' S.		478.97 ✓	4.3	74.7 ✓
300' S.			4.6	74.4 ✓
290' S.			5.1	73.9 ✓
280' S.			10.5	68.5 ✓
270' S.			12.0	67.0 ✓
260' S.			13.0	66.0 ✓
250' S.			14.0	65.0 ✓
240' S.			16.2	62.8 ✓
230' S.			17.0	62.0 ✓
220' S.			17.5	61.5 ✓
210' S.			17.0	62.0 ✓
200' S.			16.9	62.1 ✓
190' S.			16.6	62.4 ✓
180' S.			16.3	62.7 ✓
170' S.			15.2	63.8 ✓
160' S.			14.5	64.5 ✓



Sta.	+	×	-	Elev.
150' S.		478.97 ✓	13.7	465.3 ✓
140' S.			12.6	66.4 ✓
130' S.			13.0	66.0 ✓
120' S.			11.9	67.1 ✓
110' S.			11.0	68.0 ✓
100' S.			10.6	68.4 ✓
90' S.			10.7	68.3 ✓
80' S.			9.9	69.1 ✓
70' S.			8.8	70.2 ✓
60' S.			8.0	71.0 ✓
50' S.			7.5	71.5 ✓
40' S.			6.4	72.6 ✓
30' S.			7.1	71.9 ✓
27' S.			18.9	60.1 ✓
20' S.			19.2	59.8 ✓
17' S.			7.4	71.6 ✓
8' S.			3.0	76.0 ✓
☉			4.0	75.0 ✓
10' N.			5.9	73.1 ✓
	8+07			
☉		478.97 ✓	3.2	75.8 ✓
10' S.			3.4	75.6 ✓
18' S.			7.5	71.5 ✓
20' S.			16.3	62.7 ✓
27' S.			17.3	61.7 ✓

Boulder 3 x 4 x 2 (7)

Sta.	+	x	-	Elev.
29' S.		478.97 ✓	6.4	472.6 ✓
40' S.			7.2	71.8 ✓
50' S.			6.7	72.3 ✓
60' S.			7.1	71.9 ✓
70' S.			7.6	71.4 ✓
80' S.			8.5	70.5 ✓
90' S.			9.1	69.9 ✓
100' S.			9.6	69.4 ✓
110' S.			9.8	69.2 ✓
120' S.			10.5	68.5 ✓
130' S.			10.7	68.3 ✓
140' S.			11.3	67.7 ✓
150' S.			11.4	67.6 ✓
160' S.			11.4	67.6 ✓
170' S.			13.5	65.5 ✓
180' S.			13.0	66.0 ✓
190' S.			13.7	65.3 ✓
200' S.			14.5	64.5 ✓
210' S.			15.8	63.2 ✓
220' S.			16.0	63.0 ✓
230' S.			15.9	63.1 ✓
240' S.			14.2	64.8 ✓ <del>64.8</del>
250' S.			12.3	66.7 ✓
260' S.			11.0	68.0 ✓
270' S.			10.2	68.8 ✓

Sta.	+	X	-	Elev.
280' S.		478.97 ✓	9.7	469.3 ✓
290' S.			5.0	74.0 ✓
300' S.			4.7	74.3 ✓
340' S.			4.6	74.4 ✓
8+17				
300' S.		478.97 ✓	4.6	74.4 ✓
280' S.			5.0	74.0 ✓
270' S.			5.2	73.8 ✓
260' S.			7.7	71.3 ✓
250' S.			9.0	70.0 ✓
240' S.			10.7	68.3 ✓
230' S.			12.3	66.7 ✓
220' S.			11.7	67.3 ✓
210' S.			11.8	67.2 ✓
200' S.			11.5	67.5 ✓
190' S.			10.5	68.5 ✓
180' S.			10.0	69.0 ✓
170' S.			9.9	69.1 ✓
160' S.			9.8	69.2 ✓
150' S.			9.5	69.5 ✓
140' S.			9.7	69.3 ✓
130' S.			9.5	69.5 ✓
120' S.			9.0	70.0 ✓
110' S.			9.9	69.1 ✓
100' S.			9.5	69.5 ✓

on Paving

on Paving

Sta.	+	κ	-	Elev.
90' S.		478.97 ✓	8.1	470.9 ✓
80' S.			7.6	71.4 ✓
70' S.			6.7	72.3 ✓
60' S.			6.8	72.2 ✓
50' S.			6.9	72.1 ✓
40' S.			6.0	73.0 ✓
30' S.			3.0	76.0 ✓
20' S.			1.8	77.2 ✓
10' S.			1.7	77.3 ✓
ϕ			1.4	77.6 ✓
B.M. #1	444	481.32 ✓	2.09	476.88 ✓ 476.89
10' N.			3.5	77.8 ✓
20' N.			3.3	78.0 ✓
30' N.			3.2	78.1 ✓
40' N.			3.0	78.3 ✓
50' N.			2.8	78.5 ✓
60' N.			2.6	78.7 ✓
70' N.			2.5	78.8 ✓
80' N.			2.3	79.0 ✓
90' N.			2.1	79.2 ✓
100' N.			2.0	79.3 ✓
	8+07			
100' N.		481.32 ✓	1.9	<del>79.4</del> 79.4 ✓
90' N.			2.1	79.2 ✓
80' N.			3.0	78.3 ✓

on Taving

10' "  
 20' "  
 30' "  
 40' "  
 50' "  
 60' "  
 70' "  
 80' "  
 90' "  
 100' "

Sta.	+	∓	-	Elev.
70' N.		481.32 ✓	3.5	477.8 ✓
60' N.			3.6	777 ✓
50' N.			3.4	779 ✓
40' N.			3.0	783 ✓
30' N.			4.5	768 ✓
20' N.			5.7	756 ✓
10' N.			6.0	753 ✓
	8+00.5			
20' N.		481.32 ✓	9.3	720 ✓
30' N.			5.2	761 ✓
40' N.			4.6	767 ✓
50' N.			5.0	763 ✓
60' N.			4.6	767 ✓
70' N.			4.8	765 ✓
80' N.			3.9	774 ✓
90' N.			3.8	775 ✓
100' N.			3.7	776 ✓
110' N.			7.1	742 ✓
120' N.			5.9	754 ✓
130' N.			3.8	775 ✓
140' N.			3.2	781 ✓
150' N.			2.1	792 ✓
	7+90.5			
150' N.		481.32 ✓	5.9	754 ✓
140' N.			5.7	756 ✓

4x3<sup>5</sup> x 1<sup>5</sup> Boulder ⑥

Sta.	+	-	Elev.
130' N.	481.32 ✓	6.1	475.2
	8+27		
100' N.	481.32 ✓	2.5	78.8 ✓
90' N.		2.7	78.6 ✓
80' N.		2.8	78.5 ✓
70' N.		3.0	78.3 ✓
60' N.		3.1	78.2 ✓
50' N.		3.2	78.1 ✓
40' N.		3.4	77.9 ✓
30' N.		3.5	77.8 ✓
20' N.		3.7	77.6 ✓
10' N.		3.8	77.5 ✓
♠		3.9	77.4 ✓
10' S.		4.1	77.2 ✓
20' S.		4.3	77.0 ✓
30' S.		4.5	76.8 ✓
40' S.		4.8	76.5 ✓
50' S.		5.0	76.3 ✓
60' S.		5.3	76.0 ✓
70' S.		5.6	75.7 ✓
80' S.		6.0	75.3 ✓
90' S.		7.3	74.0 ✓
100' S.		8.9	72.4 ✓
110' S.		9.2	72.1 ✓
120' S.		9.6	71.7 ✓

on Faving

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Sta.	+	-	Elev.
130' S.	481.32 ✓	10.4	470.9 ✓
140' S.		10.9	70.4 ✓
150' S.		11.0	70.3 ✓
160' S.		11.7	69.6 ✓
170' S.		11.7	69.6 ✓
180' S.		11.5	69.8 ✓
190' S.		11.2	70.1 ✓
200' S.		10.8	70.5 ✓
210' S.		9.9	71.4 ✓
220' S.		9.2	72.1 ✓
230' S.		8.5	72.8 ✓
240' S.		8.0	73.3 ✓
250' S.		7.8	73.5 ✓
260' S.		7.6	73.7 ✓
270' S.		7.4	73.9 ✓
280' S.		7.2	74.1 ✓
290' S.		7.0	74.3 ✓
300' S.		6.8	74.5 ✓
8+37			
300' S.	481.32 ✓	7.2	74.1 ✓
290' S.		6.9	74.4 ✓
280' S.		6.9	74.4 ✓
270' S.		7.0	74.3 ✓
260' S.		7.2	74.1 ✓
250' S.		7.3	74.0 ✓

on paving

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Sta.	+	∓	-	Elev.
240' S.		481.32 ✓	7.6	473.7 ✓
230' S.			7.8	73.5 ✓
220' S.			8.0	73.3 ✓
210' S.			8.2	73.1 ✓
200' S.			8.3	73.0 ✓
190' S.			7.5	<del>73.9</del> 72.8 ✓
180' S.			8.0	73.3 ✓
170' S.			8.6	72.7 ✓
160' S.			7.5	73.8 ✓
150' S.			7.7	73.6 ✓
140' S.			7.3	74.0 ✓
130' S.			7.1	74.2 ✓
120' S.			6.9	74.4 ✓
110' S.			6.5	74.8 ✓
100' S.			6.2	75.1 ✓
90' S.			5.9	75.4 ✓
80' S.			5.7	75.6 ✓
70' S.			5.4	75.9 ✓
60' S.			5.2	76.1 ✓
50' S.			5.0	76.3 ✓
40' S.			4.8	76.5 ✓
30' S.			4.7	76.6 ✓
20' S.			4.6	76.7 ✓
10' S.			4.5	76.8 ✓
∅			4.2	77.1 ✓

Edge Paving

on Paving

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Sta.	+	∓	-	Elev.
10' N.		481.32 ✓	4.5	476.8 ✓
20' N.			4.6	76.7 ✓
30' N.			4.3	77.0 ✓
40' N.			4.2	77.1 ✓
50' N.			4.5	76.8 ✓
	8+47			
∅		481.32 ✓	4.5	76.8 ✓
10' S.			4.6	76.7 ✓
20' S.			5.1	76.2 ✓
30' S.			5.5	75.8 ✓
40' S.			5.1	76.2 ✓
50' S.			5.2	76.1 ✓
60' S.			5.2	76.1 ✓
70' S.			5.4	75.9 ✓
80' S.			5.5	75.8 ✓
90' S.			5.6	75.7 ✓
100' S.			5.7	75.6 ✓
110' S.			6.0	75.3 ✓
120' S.			6.2	75.1 ✓
130' S.			6.5	74.8 ✓
140' S.			6.8	74.5 ✓
150' S.			7.0	74.3 ✓
160' S.			7.2	74.1 ✓
170' S.			7.3	74.0 ✓
180' S.			7.3	74.0 ✓

Edge of Paving

on Paving

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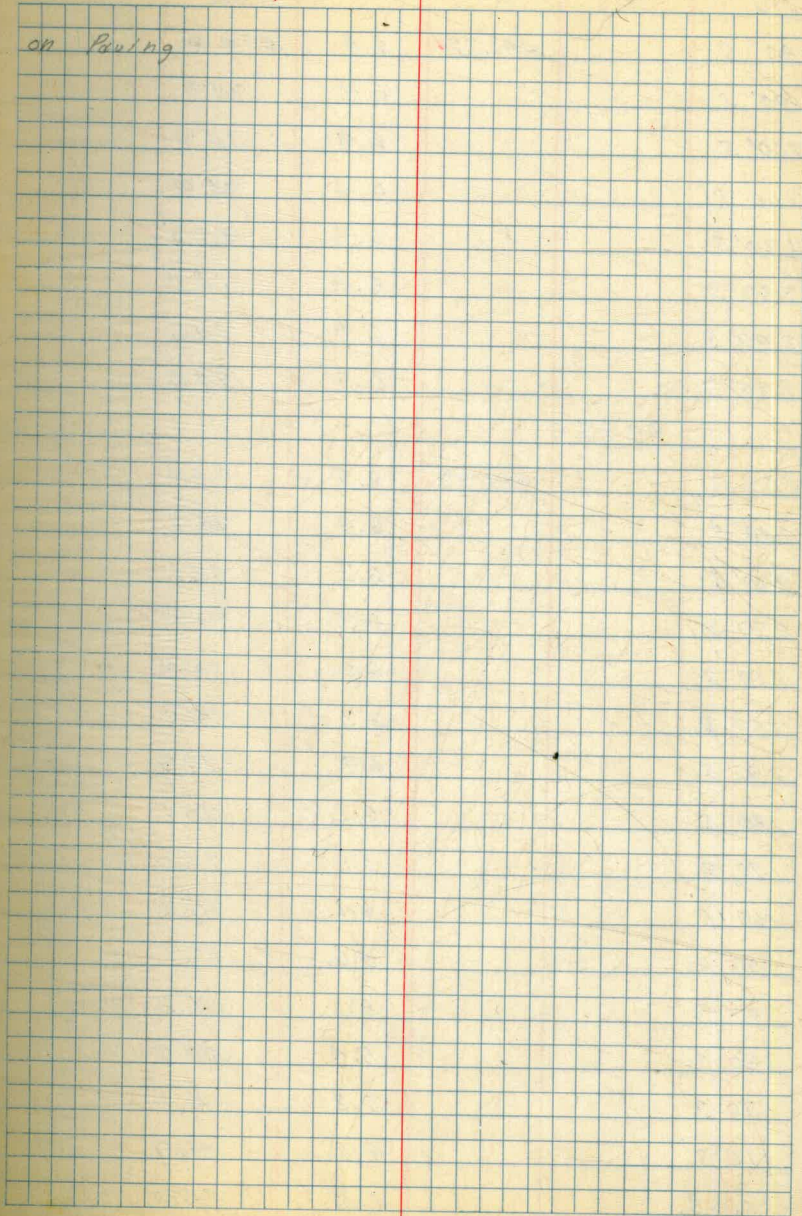
"

"



Sta.	+	π	-	Elev.
80' S.		481.32 ✓	5.5	475.8 ✓
70' S.			5.4	75.9 ✓
60' S.			5.2	76.1 ✓
50' S.			4.9	76.4 ✓
40' S.			4.2	77.1 ✓
30' S.			4.3	77.0 ✓
20' S.			3.4	77.9 ✓
10' S.			2.2	79.1 ✓
⊕			1.9	79.4 ✓
8+63.5				
30' S.		481.32 ✓	1.2	80.1 ✓
40' S.			0.3	81.0 ✓
50' S.			1.9	79.4 ✓
60' S.			2.5	78.8 ✓
70' S.			4.2	<del>77.1</del> 74.1 ✓
80' S.			5.3	76.0 ✓
90' S.			5.7	75.6 ✓
100' S.			5.7	75.6 ✓
110' S.			5.8	75.5 ✓
120' S.			6.0	75.3 ✓
130' S.			6.1	75.2 ✓
140' S.			6.2	75.1 ✓
150' S.			6.2	75.1 ✓
160' S.			6.3	75.0 ✓
170' S.			6.4	74.9 ✓

on Pauling



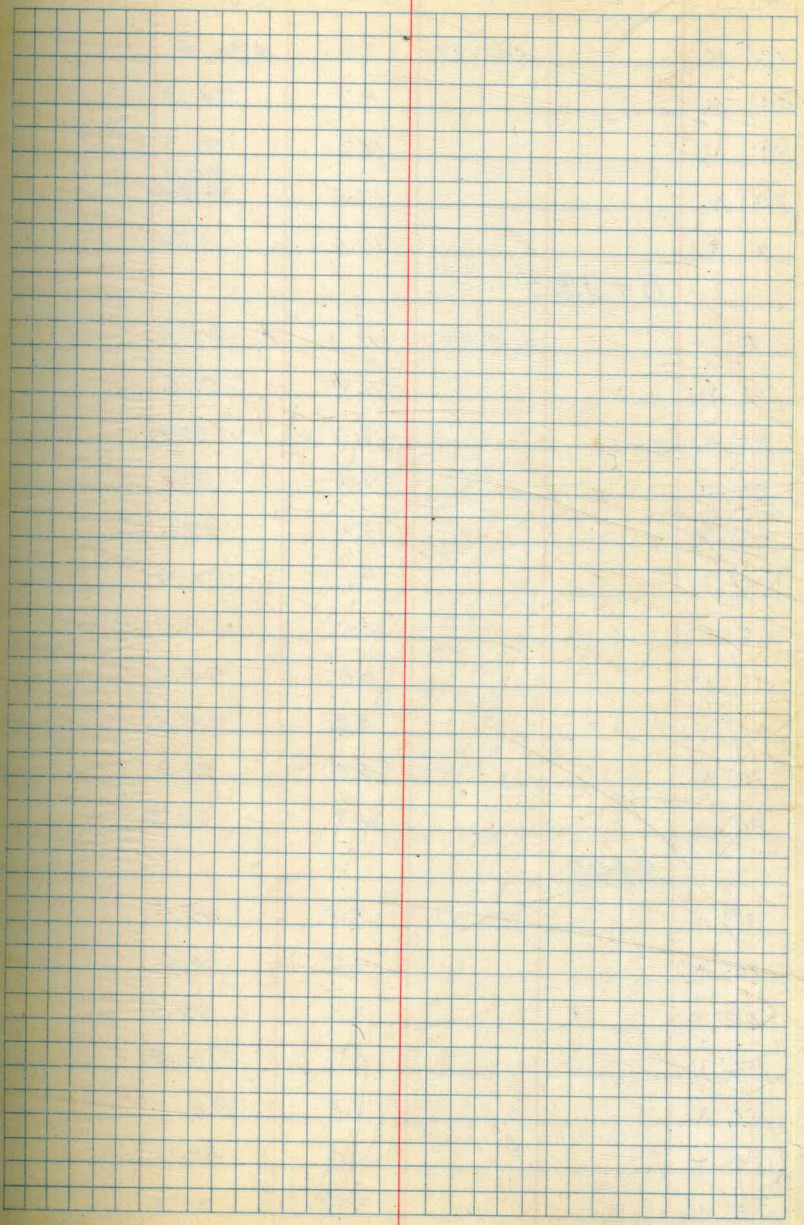
Sta.	+	X	-	Elev.
180' S.		481.32 ✓	6.4	474.9 ✓
190' S.			6.4	74.9 ✓
200' S.			6.4	74.9 ✓
210' S.			6.4	74.9 ✓
220' S.			6.3	75.0 ✓
230' S.			6.4	74.9 ✓
240' S.			6.7	74.6 ✓
250' S.			6.7	74.6 ✓
8+73.5				
250' S.		481.32 ✓	6.5	74.8 ✓
240' S.			6.4	74.9 ✓
230' S.			6.2	75.1 ✓
220' S.			6.3	75.0 ✓
210' S.			6.0	75.3 ✓
200' S.			6.3	75.0 ✓
190' S.			6.4	74.9 ✓
180' S.			6.2	75.1 ✓
170' S.			6.0	75.3 ✓
160' S.			6.1	75.2 ✓
150' S.			5.6	75.7 ✓
140' S.			5.1	76.2 ✓
130' S.			5.4	75.9 ✓
120' S.			5.2	76.1 ✓
110' S.			4.6	76.7 ✓
100' S.			1.8	79.5 ✓

Sta.	+	-	Elev.
		481.32 ✓	
TP	13.19	493.09 ✓	1.42 479.90 ✓
90' S.		12.2	80.9 ✓
80' S.		11.4	81.7 ✓
70' S.		11.2	81.9 ✓
60' S.		10.4	82.7 ✓
50' S.		8.8	84.3 ✓
40' S.		8.1	85.0 ✓
30' S.		6.2	86.9 ✓
25' S.		9.0	84.1 ✓
20' S.		8.8	84.3 ✓
15' S.		6.1	87.0 ✓
8' S.		7.2	85.9 ✓
⊕		8.3	84.8 ✓
10' N.		6.5	86.6 ✓
20' N.		5.2	87.9 ✓
30' N.		3.8	89.3 ✓
40' N.		2.8	90.3 ✓
50' N.		0.6	92.5 ✓
	8+63.5		
20' S.		493.09 ✓	12.8 80.3 ✓
10' S.			11.6 <del>82.5</del> 81.5 ✓
⊕		11.0	82.1 ✓
10' N.		9.0	84.1 ✓
20' N.		7.7	85.4 ✓

Sta.	+	x	-	Elev.
30' N.		493.09 ✓	6.9	486.2 ✓
40' N.			6.0	87.1 ✓
50' N.			5.0	88.1 ✓
60' N.			3.7	89.4 ✓
70' N.			1.9	91.2 ✓
80' N.			0.9	92.2 ✓
8+53.5				
80' N.		493.09 ✓	6.3	86.8 ✓
70' N.			5.3	87.8 ✓
60' N.			6.0	87.1 ✓
50' N.			6.9	86.2 ✓
40' N.			8.6	84.5 ✓
30' N.			10.0	83.1 ✓
20' N.			11.4	81.7 ✓
10' N.			12.6	80.5 ✓
8+47				
10' N.		493.09 ✓	14.0	79.1 ✓
20' N.			13.0	80.1 ✓
30' N.			11.4	81.7 ✓
40' N.			9.7	83.4 ✓
50' N.			7.7	85.4 ✓ <del>86.4</del>
60' N.			6.7	86.4 ✓
70' N.			6.4	86.7 ✓
80' N.			8.5	84.6 ✓
90' N.			12.8	80.3 ✓

Sta.	+	x	-	Elev.
100' N.		493.09 ✓	13.2	479.9 ✓
	8+37			
60' N.		493.09 ✓	14.6	78.5 ✓
70' N.			14.3	78.8 ✓
80' N.			12.8	80.3 ✓
90' N.			12.6	80.5 ✓
100' N.			13.6	79.5 ✓
	8+83.5			
4		493.09 ✓	4.8	88.3 ✓
10' S.			3.1	90.0 ✓
16' S.			0.8	92.3 ✓
20' S.			1.9	91.2 ✓
22' S.			8.0	85.1 ✓
24' S.			8.0	85.1 ✓
27' S.			2.0	91.1 ✓
30' S.			1.7	91.4 ✓
40' S.			3.7	89.4 ✓
50' S.			4.6	88.5 ✓
60' S.			4.7	88.4 ✓
70' S.			4.9	88.2 ✓
80' S.			3.2	89.9 ✓
90' S.			7.7	85.4 ✓
100' S.			10.0	83.1 ✓
110' S.			11.0	82.1 ✓
120' S.			12.3	80.8 ✓

Sta.	+	x	-	Elev.
130' S.		493.09 ✓	13.3	479.8 ✓
140' S.			14.1	79.0 ✓
150' S.			14.9	78.2 ✓
160' S.			15.0	78.1 ✓
170' S.			15.6	77.5 ✓
180' S.			15.5	77.6 ✓
190' S.			15.5	77.6 ✓
200' S.			16.5	76.6 ✓
250' S.			17.7	75.4 ✓
TP	10.87	502.97 ✓	0.99	492.10 ✓
	8+73.5			Same Party Sept. 19-1941
60' N.		502.97 ✓	10.0	493.0 ✓
70' N.			8.4	94.6 ✓
80' N.			8.1	94.9 ✓
90' N.			8.8	94.2 ✓
100' N.			17.0	86.0 ✓
	8+83.5			
90' N.		502.97 ✓	7.9	95.1 ✓
80' N.			6.9	96.1 ✓
70' N.			6.1	96.9 ✓
60' N.			6.2	96.8 ✓
55' N.			6.3	96.7 ✓
52' N.			11.8	91.2 ✓ 92.2 ✓
50' N.			11.8	91.2 ✓ 92.2 ✓
48' N.			11.8	91.2 ✓ 92.2 ✓





Sta.	+	$\pi$	-	Elev.
46' N.		502.97 ✓	7.6	495.4 ✓
40' N.			8.7	94.3 ✓
30' N.			11.7	91.3 ✓
20' N.			13.6	<del>89.4</del> ✓
10' N.			17.6	85.4 ✓

8+93.5

¢		502.97 ✓	11.7	91.3 ✓
10' N.			11.4	91.6 ✓
20' N.			11.0	92.0 ✓
30' N.			9.4	93.6 ✓
40' N.			5.4	97.6 ✓
45' N.			9.1	93.9 ✓
50' N.			15.0	88.0 ✓
55' N.			8.8	94.2 ✓
60' N.			4.2	98.8 ✓
70' N.			5.0	98.0 ✓
80' N.			4.3	98.7 ✓

9+00

80' N.		502.97 ✓	3.5	99.5 ✓
70' N.			4.0	99.0 ✓
60' N.			3.5	99.5 ✓
56' N.			6.1	96.9 ✓
51' N.			15.0	88.0 ✓
50' N.			15.0	88.0 ✓
48' N.			7.7	95.3 ✓

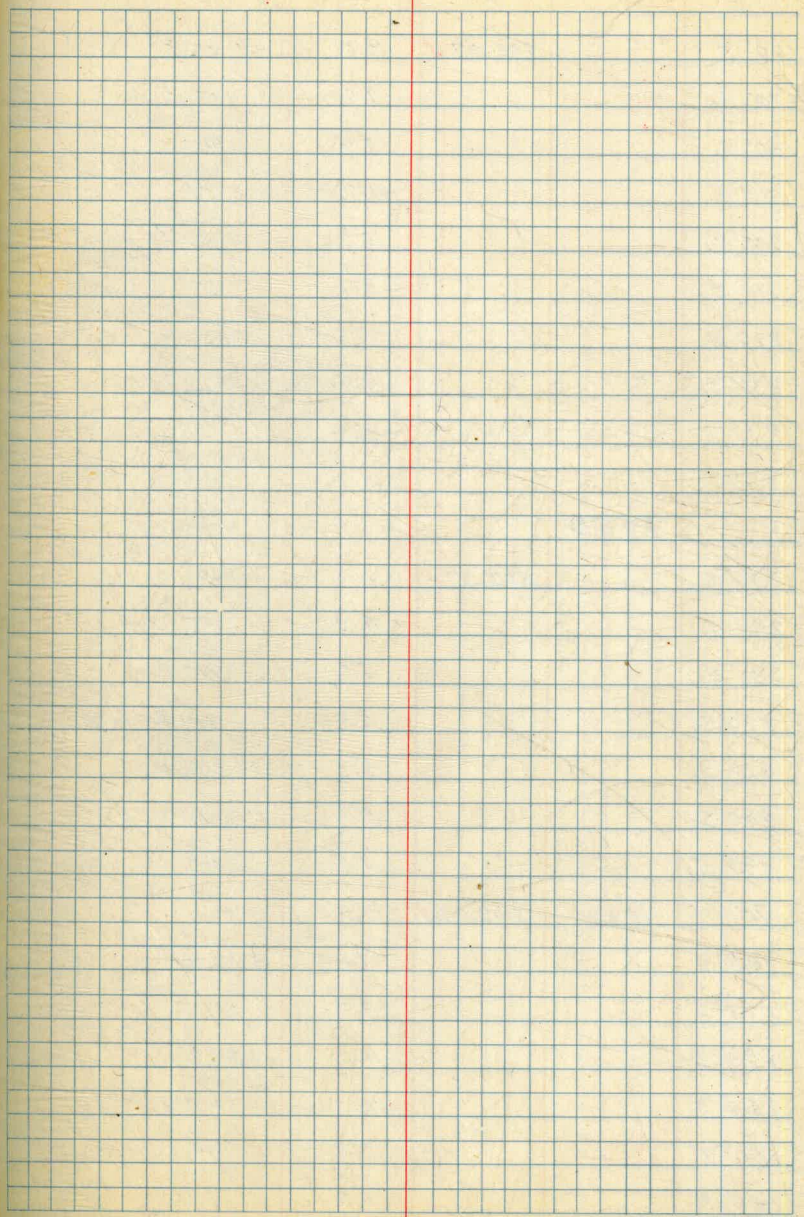
Sta.	+	x	-	Elev.
40' N.		502.97 ✓	4.7	498.3 ✓
30' N.			7.7	95.3 ✓
20' N.			8.2	94.8 ✓
10' N.			9.3	9 <del>4</del> <sup>3</sup> .7 ✓
Q			8.9	94.1 ✓
8+93.5				
10' S.		502.97 ✓	9.3	93.7 ✓
15' S.			7.2	95.8 ✓
20' S.			15.3	87.7 ✓
24' S.			15.3	87.1 ✓
28' S.			8.0	95.0 ✓
30' S.			8.2	94.8 ✓
40' S.			10.3	92.7 ✓
50' S.			11.5	91.5 ✓
60' S.			12.3	90.7 ✓
70' S.			10.6	92.4 ✓
80' S.			10.6	92.4 ✓
90' S.			14.7	88.3 ✓
100' S.			16.8	86.2 ✓
110' S.			17.0	86.0 ✓
120' S.			18.0	85.0 ✓
130' S.			19.0	84.0 ✓
TP	1.08	492.12 ✓	11.93	491.04 ✓
140' S.			9.7	82.4 ✓
150' S.			11.2	80.9 ✓

Sta.	+	x	-	Elev.
160' S.		492.12 ✓	12.3	479.8 ✓
170' S.			13.4	78.7 ✓
180' S.			13.4	78.7 ✓
190' S.			12.9	79.2 ✓
200' S.			12.9	79.2 ✓
210' S.			12.8	79.3 ✓
220' S.			13.7	78.4 ✓
230' S.			14.5	77.6 ✓
240' S.			14.0	78.1 ✓
250' S.			14.5	77.6 ✓
	9+00			
250' S.		492.12 ✓	11.7	80.4 ✓
240' S.			11.2	80.9 ✓
230' S.			11.4	80.7 ✓
220' S.			11.4	80.7 ✓
210' S.			11.0	81.1 ✓
200' S.			11.3	80.8 ✓
190' S.			11.7	80.4 ✓
180' S.			11.8	80.3 ✓
170' S.			11.2	80.9 ✓
160' S.			10.3	81.8 ✓
150' S.			8.9	83.2 ✓
140' S.			8.1	84.0 ✓
130' S.			7.3	84.8 ✓
120' S.			6.4	85.7 ✓

Sta.	+	⊗	-	Elev.
110' S.		492.12 ✓	5.5	486.6 ✓
100' S.			3.2	88.9 ✓
9+10				
140' S.		492.12 ✓	2.0	901 ✓
150' S.			5.2	86.9 ✓
160' S.			6.0	86.1 ✓
170' S.			7.5	84.6 ✓
180' S.			8.4	83.7 ✓
190' S.			7.4	84.7 ✓
200' S.			8.1	84.0 ✓
210' S.			7.8	84.3 ✓
220' S.			8.6	83.5 ✓
230' S.			8.7	83.4 ✓
240' S.			8.5	83.6 ✓
250' S.			8.3	83.8 ✓
9+20				
250' S.		492.12 ✓	5.3	86.8 ✓
240' S.			5.8	86.3 ✓
230' S.			5.1	87.0 ✓
220' S.			6.0	86.1 ✓
210' S.			4.7	87.4 ✓
200' S.			4.4	87.7 ✓
190' S.			4.9	87.2 ✓
180' S.			4.7	87.4 ✓
170' S.			4.1	88.0 ✓

Sta.	+	X	-	Elev.
160' S.		492.12 ✓	2.3	489.8 ✓
TP	11.73	502.07 ✓	1.78	490.34 ✓
150' S.			10.7	91.4 ✓
147' S.			8.0	94.1 ✓
140' S.			6.2	95.9 ✓
130' S.			4.0	98.1 ✓
125' S.			2.9	99.2 ✓
120' S.			3.0	99.1 ✓
110' S.			3.6	98.5 ✓
100' S.			3.3	98.8 ✓
90' S.			2.7	99.4 ✓
80' S.			2.3	99.8 ✓
77' S.			8.8	93.3 ✓
70' S.			8.7	93.4 ✓
66' S.			0.3	501.8 ✓
9+10				
130' S.		502.07 ✓	11.3	490.8 ✓
120' S.			10.3	91.8 ✓
110' S.			10.1	92.0 ✓
100' S.			9.0	93.1 ✓
90' S.			8.6	93.5 ✓
80' S.			6.4	95.7 ✓
75' S.			9.2	92.9 ✓
72' S.			8.8	93.3 ✓
70' S.			6.4	95.7 ✓

Sta.	+	X	-	Elev.
60' S.		502.07 ✓	5.8	496.3 ✓
50' S.			4.8	97.3 ✓
40' S.			3.4	98.7 ✓
30' S.			1.8	500.3 ✓
25' S.			8.4	493.7 ✓
22' S.			2.1	500.0 ✓
20' S.			1.5	00.6 ✓
15' S.			0.2	01.9 ✓
10' S.			1.9	00.2 ✓
	9+00			
<del>4</del>		502.07 ✓	8.1	494.0 ✓ <sup>see</sup> P. 39
10' S.			6.1	96.0 ✓
15' S.			4.6	97.5 ✓
20' S.			7.0	95.1 ✓
23' S.			12.9	89.2 ✓
26' S.			6.2	95.9 ✓
30' S.			5.9	96.2 ✓
40' S.			8.0	94.1 ✓
50' S.			8.8	93.3 ✓
60' S.			9.1	93.0 ✓
70' S.			9.6	92.5 ✓
80' S.			9.6	92.5 ✓
90' S.			7.9	94.2 ✓
	<del>9+50</del> 9+30			
150' S.		502.07 ✓	5.8	96.3 ✓



Sta.	+	x	-	Elev.
160' S.		502.07 ✓	8.5	493.6 ✓
170' S.			9.6	92.5 ✓
180' S.			10.6	91.5 ✓
190' S.			11.0	91.1 ✓
200' S.			10.3	91.8 ✓
210' S.			8.9	93.2 ✓
220' S.			11.2	90.9 ✓
230' S.			9.7	92.4 ✓
240' S.			8.7	93.4 ✓
250' S.			11.2	90.9 ✓
9+40				
250' S.		502.07 ✓	6.2	95.9 ✓
240' S.			4.9	97.2 ✓
230' S.			5.0	97.1 ✓
220' S.			5.7	96.4 ✓
210' S.			5.3	96.8 ✓
200' S.			5.4	96.7 ✓
190' S.			4.7	97.4 ✓
TP	10.28	509.08 ✓	3.27	498.80 ✓
180' S.			9.1	500.0 ✓
173' S.			8.7	00.4 ✓
170' S.			11.0	498.1 ✓
160' S.			10.7	98.4 ✓
150' S.			7.7	501.4 ✓
140' S.			3.2	05.9 ✓

Sta.	+	π	-	Elev.
130' S.		509.08 ✓	1.0	508.1 ✓
	9+30			
148' S.		509.08 ✓	10.3	498.8 ✓
140' S.			9.5	99.6 ✓
130' S.			6.4	502.7 ✓
120' S.			5.6	03.5 ✓
110' S.			5.4	03.7 ✓
100' S.			3.9	05.2 ✓
	9+20			
60' S.		509.08 ✓	6.6	02.5 ✓
50' S.			7.0	02.1 ✓
40' S.			5.7	03.4 ✓
30' S.			4.8	04.3 ✓
25' S.			10.2	498.9 ✓
22' S.			4.7	504.4 ✓
20' S.			3.7	05.4 ✓
10' S.			4.9	04.2 ✓
⊕	<del>(9+36)?</del>		5.7	03.4 ✓
	9+50			
150' S.		509.08 ✓	1.3	507.8 ✓
160' S.			3.3	05.8 ✓
170' S.			4.3	04.8 ✓
180' S.			4.4	04.7 ✓
190' S.			5.1	04.0 ✓
200' S.			6.4	02.7 ✓

check this  
section  
for correct stationing



Sta.	+	x	-	Elev.
		509.08 ✓		
TP	4.04	510.03 ✓	3.09	505.99 ✓
	9+10			
Q		510.03 ✓	11.3	498.7 ✓
10' N.			12.6	97.4 ✓
20' N.			11.4	98.6 ✓
30' N.			11.5	98.5 ✓
40' N.			10.1	99.9 ✓
44' N.			10.1	99.9 ✓
50' N.			19.0	91.0 ✓
56' N.			11.0	99.0 ✓
60' N.			9.3	500.7 ✓
62' N.			7.8	02.2 ✓
65' N.			7.6	02.4 ✓
70' N.			9.7	00.3 ✓
80' N.			11.5	498.5 ✓
	9+20			
80' N.		510.03 ✓	9.8	500.2 ✓
70' N.			8.7	01.3 ✓
61' N.			6.0	04.0 ✓
60' N.			6.7	03.3 ✓
56' N.			8.1	01.9 ✓ <del>01.8</del>
55' N.			13.4	496.6 ✓
52' N.			13.7	96.3 ✓
50' N.			7.6	502.4 ✓

Sta.	+	X	-	Elev.
40' N.		510.03 ✓	7.0	503.0 ✓
30' N.			7.0	03.0 ✓
20' N.			7.7	02.3 ✓
10' N.			7.0	03.0 ✓
	9+30			
Q		510.03 ✓	2.6	07.4 ✓
10' N.			2.6	07.4 ✓
20' N.			3.0	07.0 ✓
30' N.			4.2	05.8 ✓
40' N.			4.8	05.2 ✓
50' N.			4.5	05.5 ✓
56' N.			6.7	03.3 ✓
57' N.			5.2	04.8 ✓
60' N.			5.0	05.0 ✓
70' N.			6.1	03.9 ✓
80' N.			9.7	00.3 ✓
P	12.70	521.99 ✓	0.74	509.29 ✓
10' S.			12.9	09.1 ✓
20' S.			11.8	10.2 ✓
23' S.			11.9	10.1 ✓
24' S.			15.8	06.2 ✓
28' S.			15.0	07.0 ✓
30' S.			12.0	10.0 ✓
40' S.			13.1	08.9 ✓ <del>08.9</del>
50' S.			13.2	08.8 ✓

Sta.	+	-	Elev.
60' S.	521.99 ✓	15.4	506.6 ✓
70' S.		16.5	05.5 ✓
72' S.		17.9	04.1 ✓
80' S.		16.5	05.5 ✓
90' S.		17.0	05.0 ✓
9+40			
120' S.	521.99 ✓	12.7	09.3 ✓
110' S.		13.0	09.0 ✓
100' S.		11.3	10.7 ✓
90' S.		12.9	09.1 ✓
80' S.		11.7	10.3 ✓
70' S.		10.7	11.3 ✓
60' S.		9.0	13.0 ✓
50' S.		8.2	13.8 ✓
40' S.		7.2	14.8 ✓
32' S.		7.6	14.4 ✓
30' S.		11.2	10.8 ✓
25' S.		10.4	11.6 ✓
20' S.		6.2	15.8 ✓
10' S.		8.3	13.7 ✓
±		10.1	11.9 ✓
10' N.		9.9	12.1 ✓
20' N.		11.3	10.7 ✓
30' N.		12.9	09.1 ✓
40' N.		13.0	09.0 ✓

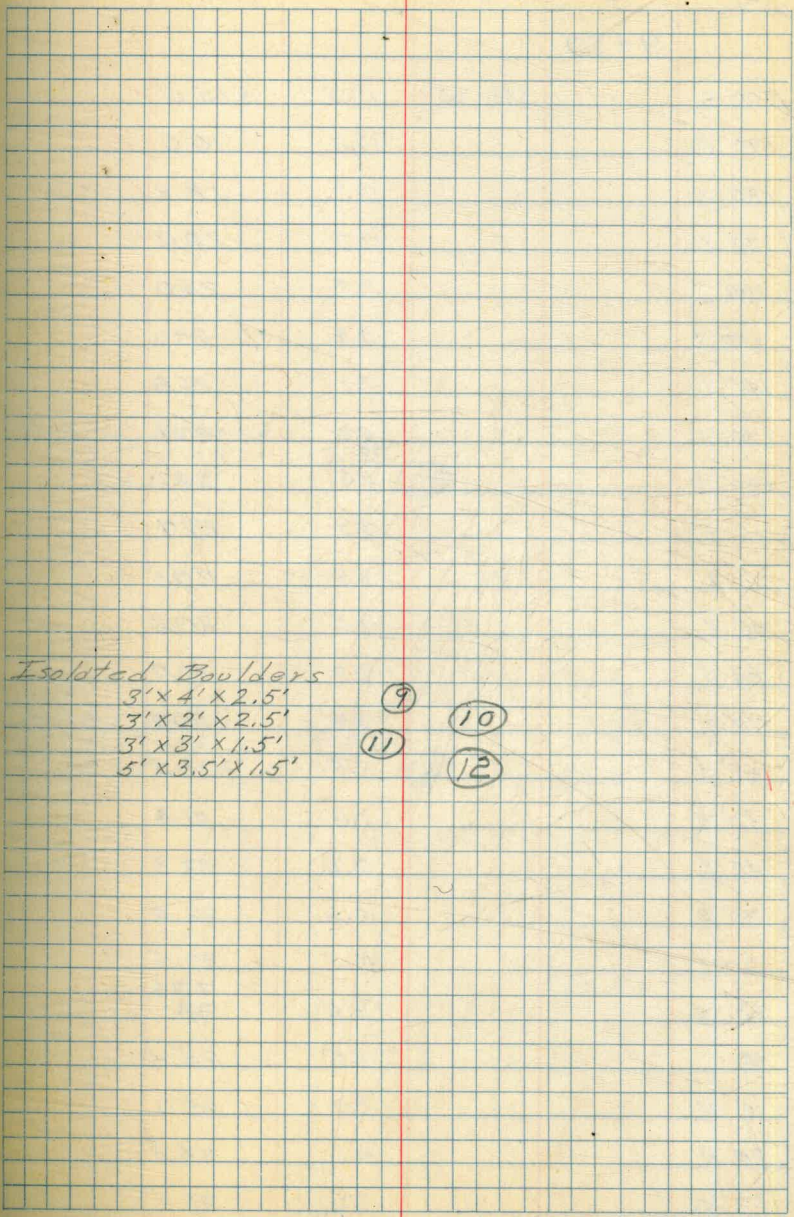
Std.	+	X	-	Elev.
50' N.		521.99 ✓	13.5	508.5 ✓
52' N.			13.7	08.3 ✓
53' N.			15.7	06.3 ✓
57' N.			16.7	05.3 ✓
58' N.			14.0	08.0 ✓
60' N.			14.3	07.7 ✓
64' N.			12.5	09.5 ✓
70' N.			15.0	07.0 ✓
80' N.			17.0	05.0 ✓
9+50				
80' N.		521.99 ✓	13.8	08.2 ✓
70' N.			12.6	09.4 ✓
60' N.			11.8	10.2 ✓
50' N.			12.0	10.0 ✓
40' N.			10.4	11.6 ✓
30' N.			9.3	12.7 ✓
20' N.			4.5	17.5 ✓
14' N.			4.9	17.1 ✓
10' N.			6.0	16.0 ✓
Q			5.6	16.4 ✓
5' S.			4.1	17.9 ✓
10' S.			3.5	18.5 ✓
20' S.			1.5	20.5 ✓
22' S.			1.0	21.0 ✓
27' S.			5.8	16.2 ✓

Sta.	+	×	-	Elev.
30' S.		521.99 ✓	6.2	515.8 ✓
31' S.			1.7	20.3 ✓
40' S.			1.6	20.4 ✓
50' S.			3.8	18.2 ✓
60' S.			3.1	18.9 ✓
70' S.			4.2	17.8 ✓
80' S.			5.1	16.9 ✓
90' S.			4.5	17.5 ✓
100' S.			5.1	16.9 ✓
110' S.			5.3	16.7 ✓
120' S.			7.0	15.0 ✓
130' S.			9.0	13.0 ✓
140' S.			11.6	10.4 ✓
	9+60			
200' S.		521.99 ✓	15.0	07.0 ✓
190' S.			13.0	09.0 ✓
180' S.			12.7	09.3 ✓
170' S.			11.5	10.5 ✓
160' S.			8.0	14.0 ✓
10' N.			0.4	21.6 ✓
20' N.			0.0	22.0 ✓
25' N.			0.9	21.1 ✓
30' N.			3.8	18.2 ✓
40' N.			4.6	17.4 ✓
50' N.			5.5	16.5 ✓

Boulder 4'x3'x2.5'

8  
9

Sta.	+	X	-	Elev.
60' N.		521.99 ✓	5.3	516.7 ✓
63' N.			7.0	15.0 ✓
70' N.			7.7	14.3 ✓
80' N.			4.8	17.2 ✓
TP	11.90	532.95 ✓	0.94	521.05 ✓
Q			12.8	520.2 ✓
10' S.			9.0	24.0 ✓
20' S.			7.8	25.2 ✓
26' S.			7.0	26.0 ✓
27' S.			10.4	22.6 ✓
30' S.			11.0	22.0 ✓
32' S.			6.3	26.7 ✓
40' S.			6.6	26.4 ✓
50' S.			5.7	27.3 ✓
60' S.			8.1	24.9 ✓
70' S.			7.6	25.4 ✓
80' S.			8.7	24.3 ✓
90' S.			9.1	23.9 ✓
100' S.			10.0	23.0 ✓
110' S.			11.5	21.5 ✓
120' S.			11.7	21.3 ✓
130' S.			13.3	19.7 ✓ 16.7 ✓
140' S.			13.0	20.0 ✓
150' S.			14.8	18.2 ✓



Isolated Boulders

- 3' x 4' x 2.5'
- 3' x 2' x 2.5'
- 3' x 3' x 1.5'
- 5' x 3.5' x 1.5'

- (9)
- (10)
- (11)
- (12)

Sta.	+	$\bar{x}$	-	Elev.
	9+70			
200' S.		532.95 ✓	17.5	515.5 ✓
190' S.			17.0	16.0 ✓
180' S.			14.3	18.7 ✓
170' S.			13.0	20.0 ✓
160' S.			9.0	24.0 ✓
150' S.			9.5	23.5 ✓
140' S.			7.0	26.0 ✓
130' S.			5.9	27.1 ✓
120' S.			4.9	28.1 ✓
110' S.			5.3	27.7 ✓
100' S.			3.5	29.5 ✓
90' S.			2.6	30.4 ✓
80' S.			2.3	30.7 ✓
70' S.			3.3	29.7 ✓
60' S.			1.5	31.5 ✓
50' S.			1.6	31.4 ✓
40' S.			0.2	32.8 ✓
30' S.			0.6	32.4 ✓
20' S.			2.5	30.5 ✓
10' S.			3.4	29.6 ✓ <del>30</del>
0'			7.5	25.5 ✓
10' N.			8.0	25.0 ✓
20' N.			8.1	24.9 ✓
30' N.			9.2	23.8 ✓

Isolated Boulders

3.5' x 2' x 2'

3' x 5' x 2'

(13)

(14)

Isolated Boulder

5' x 7' x 2'

4' x 5' x 1.4'

(15)

(16)





Sta.	+	π	-	Elev.
80' S.		541.65 ✓	2.8	538.9 ✓
90' S.			4.4	39.3 ✓
100' S.			4.2	37.5 ✓
110' S.			8.6	33.1 ✓
120' S.			8.7	33.0 ✓
130' S.			8.0	33.7 ✓
140' S.			9.5	<del>32.2</del> 34.2
150' S.			12.2	29.5 ✓
9+85				
150' S.		541.65 ✓	9.5	32.2 ✓
140' S.			6.4	35.3 ✓
TP	10.59	551.21 ✓	1.03 ✓	540.62
130' S.			13.5	37.7 ✓
120' S.			13.7	37.5 ✓
110' S.			13.5	37.7 ✓
100' S.			10.4	40.8 ✓
90' S.			8.7	42.5 ✓
80' S.			8.6	42.6 ✓
70' S.			8.6	42.6 ✓
60' S.			8.8	42.4 ✓
50' S.			8.5	42.7 ✓
40' S.			10.1	41.1 ✓
30' S.			9.9	41.3 ✓
20' S.			6.0	45.2 ✓
11' S.			5.1	46.1 ✓

Sta.	+	π	-	Elev.
10' S.		551.21 ✓	10.6	540.6 ✓
ϕ			11.8	394 ✓
9+90				
ϕ		551.21 ✓	7.9	43.3 ✓
7' S.			8.5	42.7 ✓
10' S.			4.0	47.2 ✓
20' S.			4.1	47.1 ✓
30' S.			4.0	47.2 ✓
40' S.			5.1	46.1 ✓
50' S.			4.8	46.4 ✓
60' S.			4.4	46.8 ✓
70' S.			4.9	46.3 ✓
80' S.			4.6	46.6 ✓
90' S.			6.1	45.1 ✓
100' S.			6.8	44.4 ✓
110' S.			9.8	41.4 ✓
120' S.			11.3	39.9 ✓
130' S.			10.8	40.4 ✓
140' S.			13.9	37.3 ✓
150' S.			16.7	34.5 ✓
10+00				
150' S.		551.21 ✓	13.5	37.7 ✓
140' S.			9.7	41.5 ✓
130' S.			6.6	44.6 ✓
TP	1.02	543.30 ✓	8.90	542.31 ✓

5' x 2' x 1.5'  
Isolated Boulder  
1.5' x 2.5' x 4'

(21)

(22)

Sta.	+	∓	-	Elev.
		543.33 ✓		
	9+85			
3' N.		543.33 ✓	5.7	537.6 ✓
4' N.			12.6	30.7 ✓
10' N.			14.6	28.7 ✓
20' N.			14.9	28.4 ✓
30' N.			14.8	28.5 ✓
40' N.			15.0	28.3 ✓
50' N.			16.0	27.3 ✓
60' N.			15.8	27.5 ✓
70' N.			17.0	26.3 ✓
80' N.			17.8	25.5 ✓
	9+90			
80' N.		543.33 ✓	18.8	24.5 ✓
70' N.			15.2	28.1 ✓
60' N.			12.7	30.6 ✓
50' N.			13.0	30.3 ✓
48' N.			13.5	29.8 ✓
44' N.			7.7	35.6 ✓
40' N.			9.9	33.4 ✓
39' N.			12.7	30.6 ✓
30' N.			11.0	32.3 ✓
23' N.			12.2	31.1 ✓
20' N.			12.0	31.3 ✓
10' N.			12.1	31.2 ✓

Sta.	+	x	-	Elev.
7' N.		543.33 ✓	12.3	531.0 ✓
5' N.			3.0	540.3 ✓
10+00				
10' N.		543.33 ✓	7.7	35.6 ✓
20' N.			6.8	36.5 ✓
28' N.			6.9	36.4 ✓
30' N.			5.8	37.5 ✓
40' N.			8.0	35.3 ✓
43' N.			8.1	35.2 ✓
47' N.			3.1	40.2 ✓
50' N.			8.1	35.2 ✓
60' N.			9.7	33.6 ✓
70' N.			11.5	31.8 ✓
10+10				
70' N.		543.33 ✓	6.3	37.0 ✓
60' N.			5.7	37.6 ✓
54' N.			4.6	38.7 ✓
50' N.			3.9	39.4 ✓
44' N.			5.1	38.2 ✓
40' N.			4.2	39.1 ✓
34' N.			3.3	40.0 ✓
32' N.			0.3	43.0 ✓
30' N.			0.9	42.4 ✓
28' N.			3.4	39.9 ✓
20' N.			3.3	40.0 ✓

Isolated Boulder  
4' x 2.5' x 2'

(23)

Sta.	+	x	-	Elev.
12' N.		543.33 ✓	3.7	539.6
	10+20			
80' N.		543.33 ✓	8.0	535.3 ✓
70' N.			3.6	39.7 ✓
60' N.			0.4	42.9 ✓
TP	11.79	555.05 ✓	0.07	543.26 ✓
50' N.			11.6	43.5 ✓
40' N.			10.9	44.2 ✓
30' N.			10.4	44.7 ✓
25' N.			11.6	43.5 ✓
20' N.			10.0	45.1 ✓
13' N.			10.2	44.9 ✓
10' N.			1.8	53.3 ✓
5' N.			1.8	53.3 ✓
	10+10			
10' N.		555.05 ✓	10.9	44.2 ✓
6' N.			3.5	51.6 ✓
3' N.			1.2	53.9 ✓
☺			1.8	53.3 ✓
	10+00			
4' N.		555.05 ✓	7.4	47.7 ✓
☺			4.5	50.6 ✓
6' S.			4.5	50.6 ✓
10' S.			3.0	52.1 ✓
15' S.			3.2	51.9 ✓
20' S.			2.2	52.9 ✓

Sta.	+	x	-	Elev.
30' S.		555.05 ✓	2.2	552.9 ✓
40' S.			2.4	52.7 ✓
50' S.			1.7	53.4 ✓
60' S.			2.1	53.0 ✓
70' S.			2.5	52.6 ✓
80' S.			3.9	51.2 ✓
90' S.			3.7	51.4 ✓
100' S.			5.5	49.6 ✓
110' S.			10.1	45.0 ✓
120' S.			9.0	46.1 ✓
10+30				
80' N.		555.05 ✓	13.4	41.7 ✓
74' N.			14.7	40.4 ✓
71' N.			10.2	44.9 ✓
70' N.			10.5	44.6 ✓
60' N.			10.2	44.9 ✓
56' N.			9.9	45.2 ✓
53' N.			7.3	47.8 ✓
50' N.			7.3	47.8 ✓
44' N.			7.0	48.1 ✓
40' N.			8.2	46.9 ✓
30' N.			6.5	48.6 ✓
20' N.			5.8	49.3 ✓
16' N.			4.9	50.2 ✓

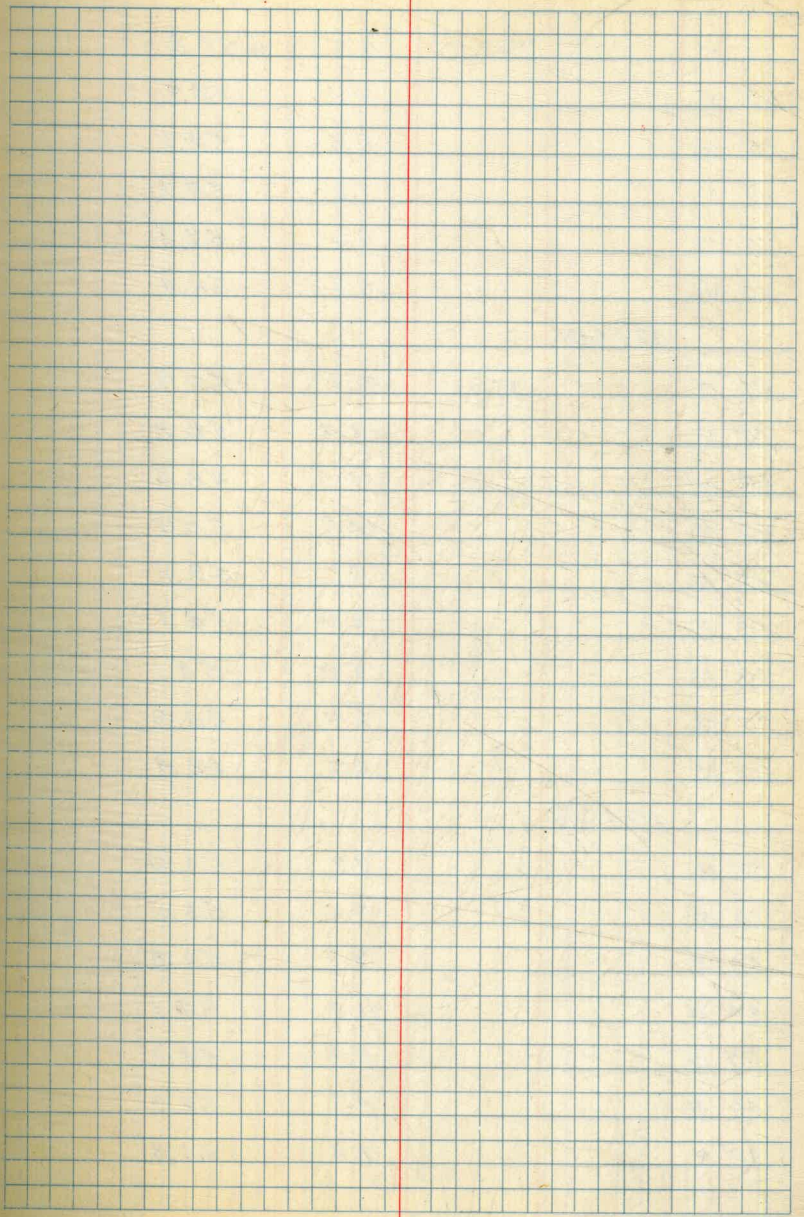
Isolated Boulder  
2' x 1' x 3'

(24)

Sta.	+	x	-	Elev.
<b>10+40</b>				
20' N.		555.05 ✓	0.7	554.4 ✓
30' N.			2.1	53.0 ✓
40' N.			3.2	51.9 ✓
42' N.			2.9	52.2 ✓
46' N.			3.4	51.7 ✓
49' N.			4.5	50.6 ✓
50' N.			4.9	50.2 ✓
60' N.			7.5	47.6 ✓
70' N.			10.7	44.4 ✓
80' N.			11.0	44.1 ✓
TP	11.06	563.11 ✓	3.00	552.05 ✓ Sept. 20 - 1941 Same Party

<b>10+47</b>				
80' N.		563.11 ✓	19.0	544.1
70' N.			16.3	46.8 ✓
60' N.			14.0	49.1 ✓
50' N.			11.2	51.9 ✓
40' N.			8.2	54.9 ✓
30' N.			7.1	56.0 ✓
20' N.			6.0	57.1 ✓

<b>10+50</b>				
80' N.		563.11 ✓	16.5	46.6 ✓
70' N.			16.0	47.1 ✓
60' N.			15.0	48.1 ✓



Sta.	+	⊗	-	Elev.
55' N.		563.11 ✓	11.3	551.8 ✓
50' N.			10.4	527 ✓
45' N.			8.2	54.9 ✓
40' N.			7.2	55.9 ✓
30' N.			6.0	57.1 ✓
20' N.			4.7	58.4 ✓
10+60				
80' N.		563.11 ✓	10.2	52.9 ✓
70' N.			12.3	50.8 ✓
68' N.			14.5	48.6 ✓
60' N.			12.2	50.9 ✓
52' N.			9.6	53.5 ✓
50' N.			9.0	54.1 ✓
40' N.			5.0	58.1 ✓
30' N.			2.9	60.2 ✓
20' N.			0.7	62.4 ✓
10+63				
80' N.			9.2	53.9 ✓
70' N.			9.6	53.5 ✓
60' N.			9.3	53.8 ✓
54' N.			11.0	52.1 ✓
50' N.			8.8	54.3 ✓
40' N.			4.2	58.9 ✓
30' N.			1.8	61.3 ✓



Sta.	+	X	-	Elev.
<b>10+70</b>				
80' N.		563.11 ✓	5.3	557.8
70' N.			5.0	58.1
60' N.			6.0	57.1
50' N.			5.8	57.3
47' N.			6.2	56.9
40' N.			3.2	59.9
<b>10+80</b>				
80' N.			3.3	59.8
70' N.			1.9	61.2
60' N.			2.0	61.1
50' N.			1.2	61.9
B.M.# 12			2.48	560.63 ✓ 560.60
Corrected X		563.08 ✓		
<b>10+10</b>				
10' S.			5.9	57.2 ✓
14' S.			6.1	57.0 ✓
15' S.			6.9	56.2 ✓
16' S.			7.0	56.1 ✓
17' S.			5.5	57.6 ✓
20' S.			5.1	58.0 ✓
30' S.			4.8	58.3 ✓
40' S.			5.5	57.6 ✓
50' S.			4.4	58.7 ✓
TP	12.33	571.28 ✓	4.13	558.95 ✓

60' N. of Axis

Sta.	+	∓	-	Elev.
60' S.		571.28 ✓	12.0	559.3 ✓
70' S.			13.0	58.3 ✓
80' S.			13.5	57.8 ✓
90' S.			13.7	57.6 ✓
100' S.			14.0	57.3 ✓
105' S.			14.8	56.5 ✓
109' S.			21.0	50.3 ✓
110' S.			19.9	51.4 ✓
120' S.			18.1	53.2 ✓
130' S.			18.2	53.1 ✓
10+20				
130' S.			12.5	58.8 ✓
120' S.			12.2	59.1 ✓
110' S.			11.4	59.9 ✓
100' S.			7.5	63.8 ✓
90' S.			6.9	64.4 ✓
80' S.			5.1	66.2 ✓
70' S.			5.0	66.3 ✓
60' S.			3.4	67.9 ✓
50' S.			4.6	66.7 ✓
40' S.			5.7	65.6 ✓
30' S.			8.1	63.2 ✓
20' S.			8.0	63.3 ✓
18' S.			8.1	63.2 ✓
16' S.			11.8	59.5 ✓

Isolated Boulder  
3' x 6' x 2.5'

(25)

Isolated Boulder  
4' x 4' x 1.5'

(26)

Sta.	+	×	-	Elev.
13' S.		571.28 ✓	11.5	559.8
10' S.			9.0	62.3 ✓
☒			13.0	58.3 ✓
10+30				
130' S.			6.8	64.5 ✓
120' S.			5.8	65.5 ✓
115' S.			5.4	65.9 ✓
110' S.			1.5	69.8 ✓
100' S.			0.4	70.9 ✓
TP	11.60	592.00 ✓	0.88	570.40 ✓
90' S.			10.5	71.5 ✓
80' S.			7.0	75.0 ✓
70' S.			5.9	76.1 ✓
60' S.			5.1	76.9 ✓
50' S.			9.3	72.7 ✓
40' S.			10.4	71.6 ✓
30' S.			12.0	70.0 ✓
20' S.			13.9	68.1 ✓
18' S.			17.1	64.9 ✓
15' S.			17.5	64.5 ✓
12' S.			14.6	67.4 ✓
10' S.			13.5	68.5 ✓
5' S.			14.7	67.3 ✓
3' S.			13.4	68.6 ✓
☒			16.8	65.2 ✓

Isolated Boulder  
6' x 7' x 4'

(27)

Isolated Boulder  
4' x 3' x 15'

(28)

Std.	T	X	-	Elev.
7' N.		582.00 ✓	19.0	563.0 ✓
10' N.			24.0	58.0 ✓
10+35 South Only				
Q		582.00 ✓	13.5	68.5 ✓
3' S.			8.8	73.2 ✓
7' S.			12.0	70.0 ✓
10' S.			11.8	70.2 ✓
20' S.			11.0	71.0 ✓
30' S.			8.0	74.0 ✓
40' S.			5.3	76.7 ✓
50' S.			5.6	76.4 ✓
60' S.			3.6	78.4 ✓
70' S.			1.7	80.3 ✓
80' S.			2.5	79.5 ✓
85' S.			1.5	80.5 ✓
88' S.			5.4	76.6 ✓
90' S.			6.3	75.7 ✓
100' S.			7.3	74.7 ✓
10+40				
100' S.			4.3	77.7 ✓
90' S.			3.1	78.9 ✓
88' S.			2.7	79.3 ✓
TP	11.67	592.45 ✓	1.22	580.78 ✓
85' S.			9.8	82.7 ✓
80' S.			9.0	83.5 ✓

Sta.	+	x	-	Elev.
70' S.		592.45 ✓	8.6	583.9
63' S.			7.1	85.4
60' S.			4.3	88.8 <sup>2</sup>
55' S.			2.4	90.1
50' S.			5.0	87.5
40' S.			5.1	87.4
38' S.			4.6	87.9
36' S.			10.9	81.6
30' S.			12.1	80.4
25' S.			9.7	82.8
20' S.			11.0	81.5
16' S.			11.6	80.9
10' S.			17.6	74.9
2' S.			17.4	75.1
±			19.3	73.2
10' N.			32.1	60.4
14' N.			36.4	56.1
	10+47			
TP	12.33	602.82 ✓	1.96	590.49 ✓
100' S.			14.5	588.3
95' S.			12.8	90.0
90' S.			10.6	92.2
88' S.			8.8	94.0
85' S.			14.0	88.8
80' S.			15.8	87.0

Sta.	+	π	-	Elev.
78' S.		602.82 ✓	15.5	587.3
70' S.			12.2	90.6
64' S.			13.3	89.5
60' S.			11.3	91.5
55' S.			9.5	93.3
50' S.			9.7	93.1
45' S.			10.5	92.3
40' S.			12.9	89.9
	10+50			
40' S.			13.2	89.6
48' S.			9.0	93.8
50' S.			9.0	93.8
55' S.			8.3	94.5
60' S.			9.2	93.6
70' S.			10.1	92.7
80' S.			6.2	96.6
83' S.			9.0	93.8
87' S.			8.8	94.0
90' S.			8.1	94.7
96' S.			9.2	93.6
100' S.			11.8	91.0
	10+60			
100' S.			5.7	97.1
95' S.			4.5	98.3
90' S.			3.5	99.3

Sta.	+	$\pi$	-	Elev.
80' S.		602.82✓	2.4	600.4
70' S.			2.1	00.7
60' S.			5.0	597.8
50' S.			7.0	95.8
40' S.			10.1	92.7
30' S.			13.0	89.8
10+63				
30' S.			12.9	89.9
40' S.			9.8	93.0
50' S.			6.4	96.4
60' S.			4.8	98.0
70' S.			2.0	600.8
80' S.			1.1	01.7
90' S.			1.0	01.8
100' S.			3.7	599.1
TP	0.13	590.28✓	12.67	590.15✓
TP	0.05	577.46✓	12.87	577.41✓
TP	3.16	569.51 <sup>3</sup>	11.09	566.35 <sup>7</sup>
B.M. #12			8.81	560.70 <sup>2</sup> 560.60
Corrected $\pi$		569.41✓		
TP	12.16	581.08✓	0.49	568.92✓
10+47				
Q			8.4	72.7
10' N.			19.4	61.7

60' N. of Axis

Sta.	+	x	-	Elev.
	10+50			
☐		581.08 ✓	8.4	572.7
6' N.			13.0	68.1
10' N.			11.3	69.8
15' N.			8.6	72.5
	10+60			
☐			4.4	76.7
4' N.			7.9	73.2
8' N.			8.7	72.4
10' N.			7.8	73.3
14' N.			6.7	74.4
16' N.			16.4	64.7
	10+63			
20' N.			17.5	63.6
16' N.			15.4	65.7
12' N.			10.3	70.8
10' N.			10.0	71.1
2' N.			6.2	74.9
☐			4.2	76.9
	10+70			
☐			3.8	77.3
6' N.			6.1	75.0
8' N.			8.8	72.3
10' N.			9.6	71.5
20' N.			14.8	66.3

Isolated Boulder  
4' x 5' x 1.5'

(29)

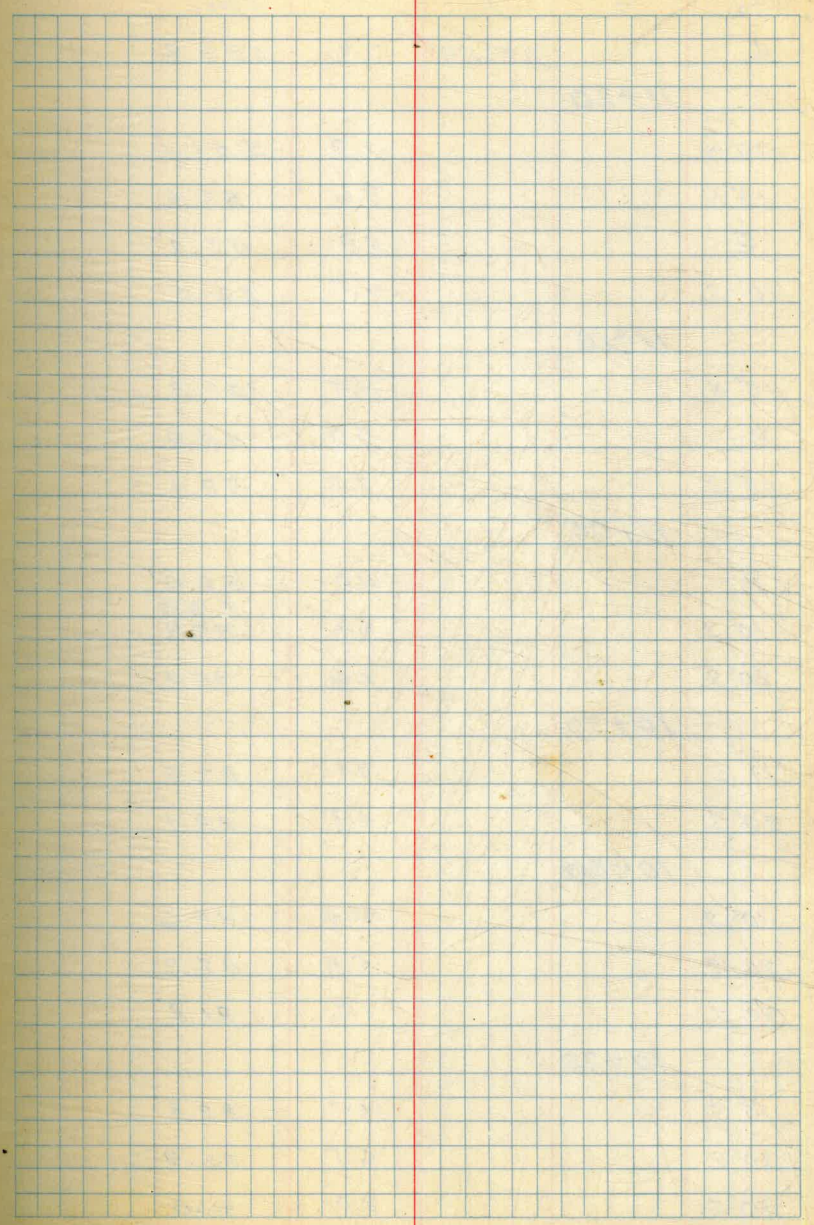


Sta.	+	x	-	Elev.
30' N.		581.08	17.5	563.6
	10+80			
40' N.			18.4	62.7
30' N.			14.4	66.7
20' N.			11.4	69.7
10' N.			6.1	75.0
☐			2.2	78.9
	10+90			
☐			0.9	80.2
10' N.			4.2	76.9
14' N.			5.3	75.8
20' N.			9.2	71.9
30' N.			11.5	69.6
40' N.			14.4	66.7
50' N.			14.9	66.2
60' N.			14.2	66.9
70' N.			15.8	65. <sup>3</sup> <del>8</del>
80' N.			20.8	60.3
	11+00			
80' N.			16.3	64.8
70' N.			13.8	67.3
60' N.			12.6	68.5
50' N.			12.2	68.9
44' N.			11.9	69.2
40' N.			10.1	71.0

Isolated Boulder  
5' x 4' x 1.5'

(30)

Sta.	+	x	-	Elev.
30' N.		581.08 ✓	7.7	573.4 ✓
20' N.			7.8	73.3
10' N.			2.8	78.3
11+10				
20' N.			2.8	78.3
30' N.			5.2	75.9
40' N.			7.9	73.2
50' N.			9.4	71.7
60' N.			11.0	70.1
11+20				
60' N.			7.5	73.6
50' N.	7		6.0	75.1
40' N.			4.7	76.4
30' N.			3.7	77.4
25' N.			0.6	80.5
11+30				
60' N.			2.6	78.5
50' N.			1.5	79.6
40' N.			0.1	81.0
TP	13.18	593.04 ✓	1.22	579.86 ✓
30' N.			12.4	80.6
26' N.			11.8	81.2
22' N.			8.4	84.6
20' N.			8.6	84.4
10' N.			7.0	86.0



Sta.	+	Δ	-	Elev.
Φ		593.04 ✓	3.2	589.8
	11+20			
20' N.			11.9	581.1
10' N.			9.6	83.4
Φ			5.8	87.2
10' S.			0.5	92.5
	11+10			
10' N.			11.7	81.3
Φ			8.0	85.0
10' S.			2.9	90.1
	11+00			
Φ			11.0	82.0
10' S.			6.2	86.8 <del>87.8</del>
20' S.			2.6	90.4
	10+90			
10' S.			9.1	83.9
20' S.			4.9	88.1
	10+80			
10' S.			10.4	82.6
20' S.			5.8	87.2
30' S.			1.2	91.8
	10+70			
10' S.			10.7	82.3
20' S.			6.1	86.9
30' S.			2.0	91.0

Sta	+	∓	-	Elev.
	10+63			
10' S.		593.04 ✓	12.0	581.0
20' S.			7.7	85.3
	10+60			
23' S.			6.1	86.9
20' S.			8.2	84.8
10' S.			11.1	81.9
	10+50			
10' S.			13.6	79.4
20' S.			9.1	83.9
30' S.			6.5	86.5
	10+47			
30' S.			7.6	85.4
20' S.			9.9	83.1
10' S.			13.8	79.2
TP	11.83	604.39 ✓	0.48	592.56 ✓
	10+70			
40' S.			9.4	595.0
50' S.			7.1	97.3
60' S.			4.4	600.0
68' S.			2.1	02.3
70' S.			0.5	03.9
	10+80			
60' S.			2.1	02.3
50' S.			5.7	598.7

Isolated Boulder  
3' x 3' x 3'

(31)

Std.	+	X	-	Elev.
40' S.		609.39 ✓	8.9	595.5
10+90				
30' S.			11.9	92.5
40' S.			8.0	96.4
50' S.			4.5	99.9
60' S.			2.0	602.4
11+00				
50' S.			3.1	013
40' S.			6.1	598.3
30' S.			9.8	94.6
11+10				
20' S.			10.6	93.8
30' S.			6.6	97.8
40' S.			3.5	600.9
11+20				
40' S.			1.4	03.0
30' S.			4.7	599.7
20' S.			7.6	96.8
11+30				
10' S.			10.1	94.3
20' S.			5.4	99.0
30' S.			2.7	601.7
11+40				
20' S.			3.8	00.6
10' S.			6.1	598.3

Isolated Builders  
4' x 3 x 2'  
3' x 4 x 1'

(33)

(32)

Sta.	+	τ	-	Elev.
ϕ		604.39	9.1	595.3
10' N.			14.0	90.4
20' N.			17.4	87.0
27' N.			17.8	86.6
30' N.			17.4	87.0
35' N.			19.7	84.7
40' N.			20.4	84.0
50' N.			20.4	84.0
60' N.			23.1	81.3
11+50				
60' N.			19.4	85.0
50' N.			16.7	87.7
40' N.			14.8	89.6
30' N.			14.3	90.1
27' N.			12.0	92.4
20' N.			14.8	89.6
16' N.			14.0	90.4
10' N.			9.1	95.3
ϕ			5.8	98.6
10' S.			2.9	601.5
11+60				
ϕ			2.9	01.5
10' N.			7.4	597.0
20' N.			7.0	97.4
25' N.			8.3	96.1

Sta.	+	π	-	Elev.
26' N.		604.39 ✓	10.0	594.4
30' N.			9.0	95.4
40' N.			12.2	92.2
50' N.			15.8	88.6
60' N.			17.7	86.7
11+70				
60' N.			18.0	86.4
50' N.			9.7	94.7
40' N.			4.8	99.6
30' N.			4.5	99.9
23' N.			5.9	98.5
20' N.			4.0	600.4
15' N.			3.5	00.9
10' N.			4.0	00.4
∅			0.0	04.4
11+80				
30' N.			0.2	04.2
40' N.			1.4	03.0
46' N.			2.9	01.5
50' N.			6.2	598.2
60' N.			9.5	94.9
11+90				
60' N.			6.9	97.5
50' N.			2.2	602.2

Sta.	+	∓	-	Elev.
12+00				
60' N.		604.39 ✓	3.6	600.8
50' N.			1.0	03.4
TP	12.86	617.02 ✓	0.23	604.16 ✓
B.M. #13			10.88	606.14 ✓ 606.16
Corrected ∓		617.04 ✓		
10+70				
80' S.			12.7	604.3
90' S.			12.4	04.6
100' S.			12.7	04.3
10+80				
100' S.			10.7	06.3
90' S.			10.0	07.0
82' S.			11.2	05.8
80' S.			15.5	01.5
76' S.			15.5	01.5
72' S.			11.5	05.5
70' S.			11.3	05.7
10+90				
70' S.			9.6	07.4
76' S.			10.1	06.9
78' S.			14.7	02.3
80' S.			14.7	02.3
83' S.			10.1	06.9
90' S.			8.5	08.5

40' North of Axis



Sta.	+	X	-	Elev.
100'S.		617.04 ✓	8.4	608.6
	11+00			
80'S.			5.9	11.1
70'S.			10.1	06.9
60'S.			13.0	04.0
	11+10			
50'S.			14.7	02.3
60'S.			10.5	06.5
70'S.			7.8	09.2
80'S.			3.5	13.5
	11+20			
70'S.			4.7	12.3
60'S.			7.6	09.4
50'S.			10.7	06.3
	11+30			
40'S.			11.0	06.0
50'S.			7.2	09.8
60'S.			4.0	13.0
	11+40			
50'S.			3.8	13.2
48'S.			4.5	12.5
40'S.			8.5	08.5
30'S.			12.1	04.9

CONTINUED IN BOOK # 576

Checked & Reduced by RRE 2/22/41

Plotted by J.W.J.

9/26/41

~~7+90.5 120' N.~~  
~~8+00.5 10' N.~~  
~~8+07~~  
~~S 8+37 50' N.~~  
~~S 8+47~~  
~~S 8+53.5~~  
 30's 8+63.5  
 8+73.5 50' N.

**DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.**  
 Roadway 16 feet wide. Side Slopes 1 on 1½  
 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	25.2	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.