

Sectional Subdivision  
S 36 T. 139 - 2B

16

16

16

# EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and  
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

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

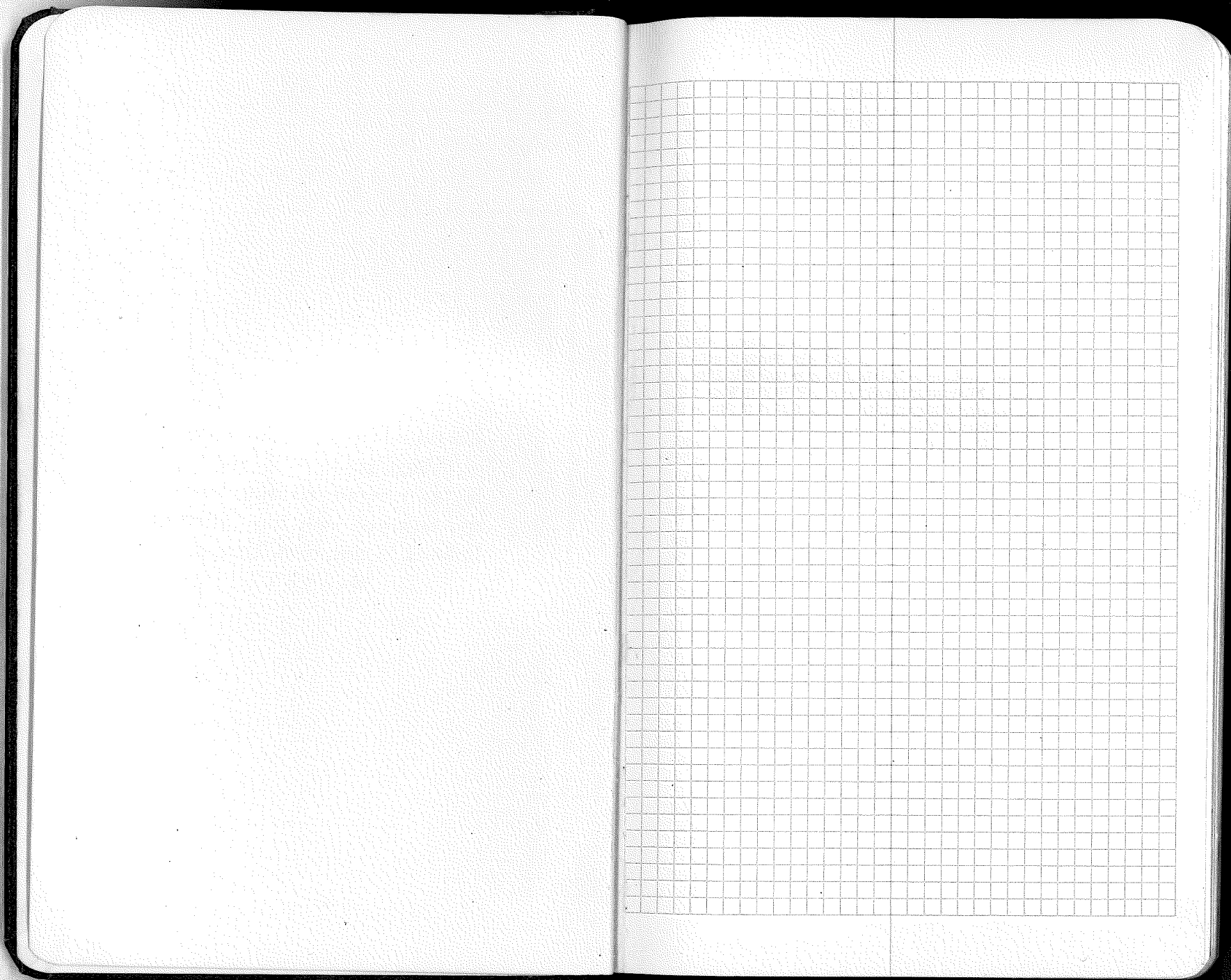
Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be  $30.6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

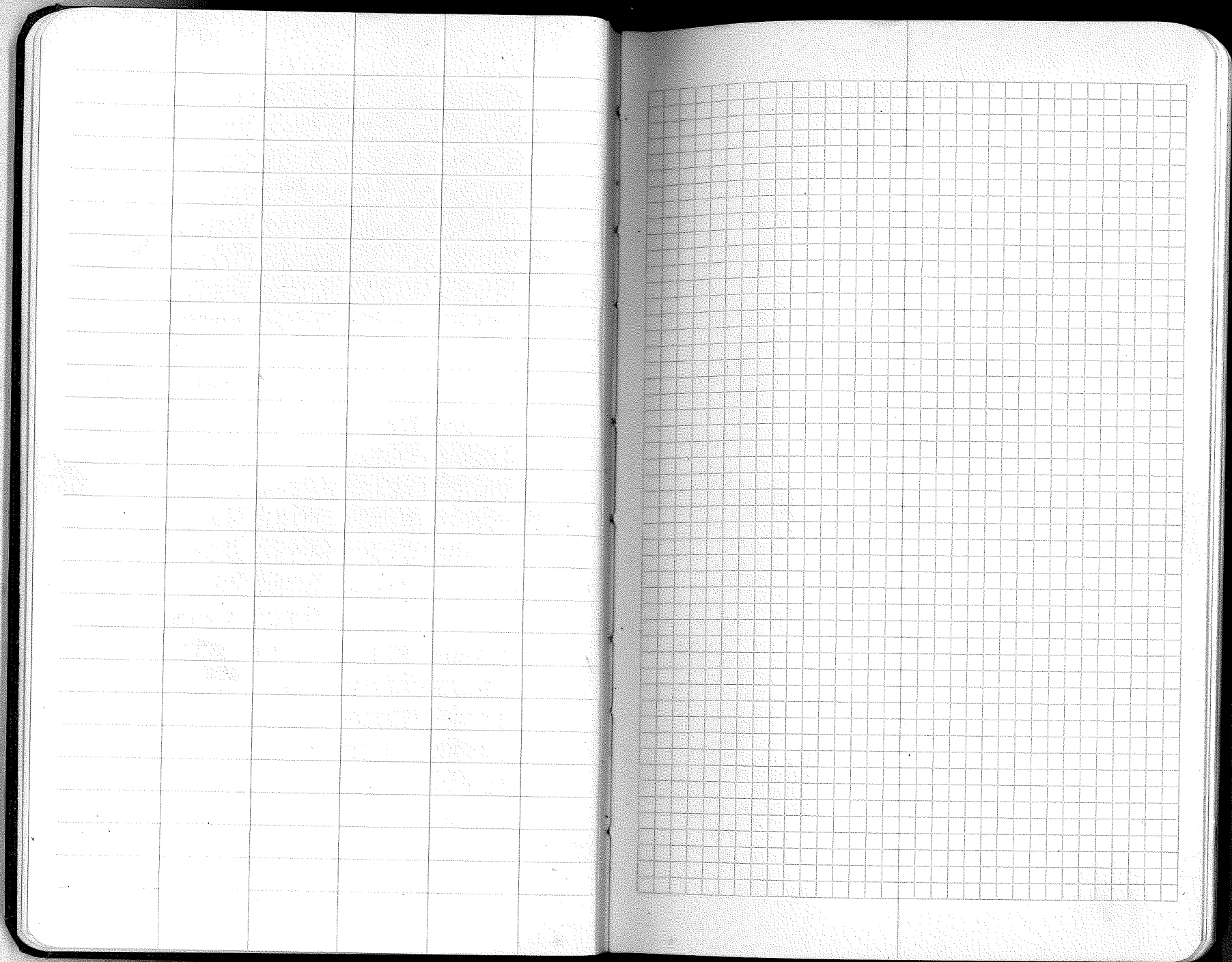
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The paper stock of this book is made of a high grade 50% rag paper having a water resisting surface and is sewed with Bing Special Enamel Waterproof Thread.

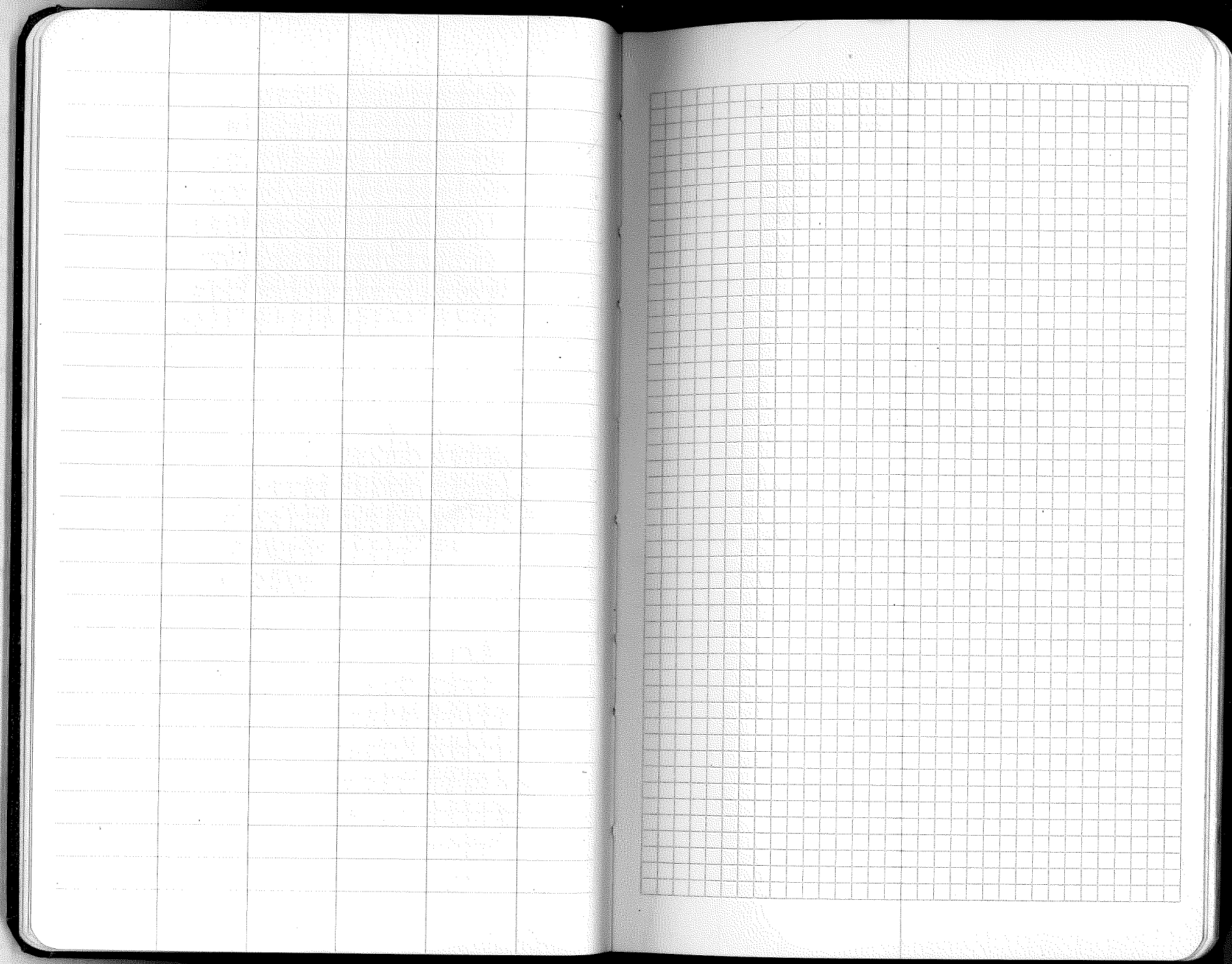
Made in U. S. A.















	2	2	1	1	
15			6		4
			18		18
16			6		4
	7	7	36	9	9
14		12	10		13
	17	17	11		11
14		12	10		13
	8	8	5		5

26+38.8

Tried into Iron Pipe by cor.  $\frac{25}{36}$  139-28

13+20

set approx. E  $\frac{1}{6}$  stake. - was reset at 13+17.4

? 1+66

Center of old railroad grade.

0+00

Started West from I.P.  $\frac{25}{36}$  139-28

W.  
V.  
O.

Date: July 11, 1940  
Party: Fisher  
S. Smith  
Johnson

Magnetic Bearing S 89° W  
Random Line

The  $\frac{1}{6}$  corner was reset: was moved east 16 feet, since the random line hit the I.P. there was no need offsetting N. or S.

0 I.P.



26+38  
26+19

Found iron pipe 46' North in swamp.  
Hit swamp

13+20

Set approx. w/o stake - this to stake was  
reset at 13+19  
and 93' North of  
random line.

0+00

Started west from  $\frac{1}{4}$  cor. iron pipe  $\frac{25}{36}$  132.00

Date: July 11, 1910

Party: Johnson  
Fisher  
Schultz

46' → ← I.P.

13+19

25' → ←

26

Magnetic Bearing  $58^{\circ}$  W. 26  
13+19  
Random Line

0

25+90 Found iron pipe 1/4 cor. 37' west sec 139-28  
25+70 Left grass swamp hit willows.

24+25 Start of swamp

23+40 Left swamp -

22+35 Start of swamp - Md. Mt

15+30 Left swamp

14+80 Start of swamp

13+20 Set approx. 5' stake sec

11+80 Left swamp

11+25 Start of swamp

0+00 Started North from I.P. 36 137-5

Date: July 12, 1940 3

Party: Fisher - chain-

Schick

Yager - picket

Knapp - brusher

Terry - brusher

37'

July 13, 1940

This stake was  
corrected - was set  
at 12+95 and 12.5'  
west of line

By Fisher & Knapp.

Magnolia Bearing N 64 W  
Bearing Line

25+90

Var. 6 1/4



26+40 Found I.Pipe for sec. cor. 28.5' west -  
36 | 139-28

13+20 set approx. N.  $\frac{1}{16}$  stake -

0+00 Started North from I.P. at  $\frac{1}{4}$  36 | 139-28

Date: July 15, 1941  
Party: Yager  
Fisher  
Hoff  
Ferry, J.  
Schultz

Magnetic Bearing N  $62^{\circ}$  W  
Random Line  
26+40

VA.  $6\frac{1}{2}^{\circ}$

26+59

Found  $\frac{1}{4}$  cor. iron pipe 40' North

36-139-28

13+29.5  
13+20

set good E  $\frac{1}{16}$  cor. + 20' north of random  
set 7-11-40  $\frac{1}{16}$  cor. - reset E  $\frac{1}{16}$  cor. at  
13+29.5

0+00

started west from iron pipe sec 36-139-28  
cor

W  
46' 0' I.P.

13+29.5

13+20

→ 20' ←

13+20  
20'  
7.5'

Random line  
13+29.5

13+20

0  
18

Date: July 1940  
Party:  
Yager  
Eshler  
Kerry T.  
Schmitt



26+41 Intersected North Section line 4.3' south of  $\frac{1}{4}$  cor.  
Found I.P. at  $\frac{1}{4}$  cor.

21+00 Leave Swamp

17+80 Hit Swamp

16+00 Leave Swamp

13+20 set trap to slope

12+30 Hit Swamp

0+00

Started N. from I.P. at interior  $\frac{1}{4}$  cor. [26] 137-25

Date: July 1910<sup>6</sup>  
Party: Fisher  
Terry J.  
Schultz

⊙ ← 4.3'

—

—

26+41

Flondor line

Use  $6\frac{1}{2}$

26+44.5 Tried into iron pipe 14' North 139-28

20+25 Base of hill

15+50 Summit of hill

13+20 Set temp. w.  $\frac{1}{10}$  - set a good  $\frac{1}{10}$  cor.  
12+50 start of hill stake at 13+22 $\frac{1}{2}$  and

7+64 Left swamp

6+60 Ran into swamp grass

0+00 started west from to cor. 26 139-28  
Iron Pipe

→ N.O.P.

Date July 11, 1940  
Party: Yagel  
Epickson  
Koppel  
Tally, T.

17200000000

3' → □  
|||||

7' North

|||

|||

Random line

60. 6 $\frac{1}{2}$

019.

26+65  $\frac{3}{4}$  Offset north to line - 439'. The iron pipe  
was found 96.3' North and 6.5' West.

81+47 HIT CAT TAIL SWAMP - Offset south  
439 feet

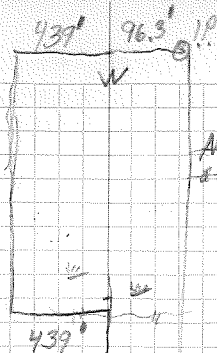
18+14 END OF BLUE JOINT & CAT TAIL SWAMP

13+36.1 Set -  
13+70 HIT BLUE JOINT & CAT TAIL SWAMP  
13+20 Set approx.  $\frac{1}{16}$  Stake

0+00

Started West  $\frac{1}{16}$  of I.P.  $\frac{1}{4}$  cor.  $\frac{36}{137-28}$   
Var =  $6^\circ$

Date: July 15, 1948  
Party: Schintz  
Erickson



~~An iron pipe checked in to  
as yet.~~

The  $\frac{1}{16}$  cor. was  
moved to 13+36.1  
and set 68.2' N.

Random Line - 26+72

40' I.P.



86+74 HIT IRON PIPE for interior  $\frac{1}{4}$  [36] 139-28  
Iron pipe is 455' No. of  
random line.

88+70 END OF SWAMP  
21+05 Center of Sec. 36 planting road.

19+88 HIT CAT TAIL SWAMP

13+37 ~~13+30~~ Reset  $\frac{1}{6}$  stake at correct place,  
Set temp.  $\frac{1}{6}$  stake -

11+08 LEFT SWAMP  
10+43 HIT SWAMP

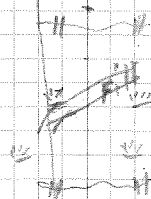
8+91 Center of reconstructed old railroad grade.  
8+53  $\frac{1}{3}$  HIT Control post

0+00 started West on  $\frac{1}{4}$  line from E. cor. 139-A  
309

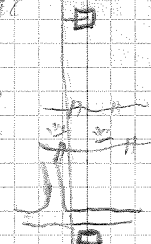
Date: July, 1940 (?)

Party: Fisher  
Knapp  
Terly, T.

W.  
455'



July 19, 1940  
Reset  $\frac{1}{6}$  stake at  
corrected place -  
~~Reset~~  
Set  $\frac{1}{6}$  at 13+37  
9 22.75 Feet  
North



W. 1/4  
RANDOM

Var. 6°

0  
I.P.

26+75 Intersected south section line - from pipe is  
329' East and 40.7' North

2675  
40.7  
2634

19+20 Left swamp.

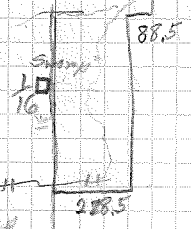
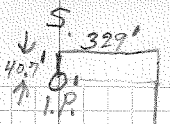
15+21.5 Hit swamp - offset 88.5' West to avoid swamp.

13+20 Set temp to stake - reset good to stake at 13+17 and 6' east

11+40 Start of swamp - offset 288.5' West to avoid swamp

0+00 Started So. from interior of cor.

Party: Fisher - compass 10  
Kraff - bubble level  
Terry - pick  
Date: July 16, 1940



On July 18, 1940  
Continued random  
line from 11+40  
to 13+20 in swamp  
to intersect with 1/6  
line - see page 11.  
On the cont'd random  
line set good stake  
at 13+17 and 6' east  
of line.

By Schmitz - Erickson - Fisher

Random Line

Vol. 6

26+91.75 Intersected N & S  $\frac{1}{16}$  interior  $\frac{1}{16}$  line  
at 25 feet SO of ~~1st~~  
newly estab.  $\frac{1}{16}$  cor. - see page 10

13+33 $\frac{3}{4}$  Intersected the N & S  $\frac{1}{16}$  line - and was  
13+26 $\frac{1}{4}$  set temp  $\frac{1}{16}$  stake on E & W line

11+18 Center of newly constructed railroad gub

0+00 Started west from south  $\frac{1}{16}$  cor. 36 137-28

Date: 7-17-40 (11)  
Party: Fisher  
Kropp  
Terry, T.

25' NW

This corner reset -  
see page 16.

6 $\frac{3}{4}$ ' S. of the  $\frac{1}{16}$  stake for N & S line

Random Line

Var. 6°

Iron Pipe



99+18.75 Intersecting south sec line 35.25' west of  
this line is only a  
random line. This lin

13+20 set temp stake  $\frac{1}{16}$

0+00 started south from newly set up to cor.

12  
west to temp stake which is not corrad yet.

35'  $\rightarrow$   $\leftarrow$   
Temp stake

Party: Schantz  
Hallbeck  
Frickson

Date: July 16, 1945

Random Line

O.P.

25+88  $\frac{3}{4}$  Intersected E & W  $\frac{1}{4}$  line  
 Offset back to E  $\frac{1}{16}$  corner on E & W  $\frac{1}{4}$  line 417 Feet West.  
 Therefore line is 9.75 feet east.

21+34  $\frac{1}{4}$  Offset 19.5' east for swamp.

20+37.5 Offset 16.25' east for swamp.

19+38  $\frac{3}{4}$  Offset 19.75' east for swamp.

18+46  $\frac{3}{4}$  Offset 19.25' east for swamp.

17+67.5 Offset 30.5' east for swamp and west North.

16+52 Struck pond - offset 302 east. and west North.

13+20 Set Temp.  $\frac{1}{16}$  stake on N & S. line

0+00 Started North from E  $\frac{1}{16}$  cor. on South line.  
 Offset to cor.

13  
 Date: July 1960  
 Party:

Schultz  
 Erickson

9.75'

090

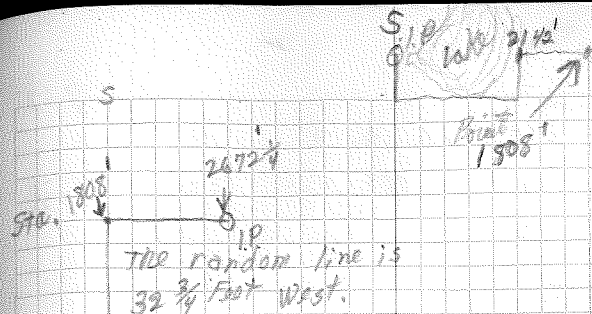
Handwritten line

Van. 6  $\frac{1}{2}$

27+21 intersected south random line - offset  
 334' west to 21+42 stake  
 which is on edge of lake  
 see page 8.

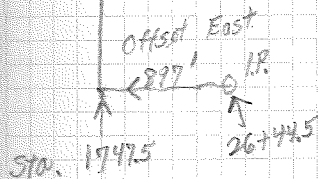
13+90 Set Temp. stake

0+00 started south from I.P. by con. 36 17+41



The random line is  
 32 3/4 feet west.

877 = 16.4' → Made 13+20 stake 890.6' west and  
 1.5' south.



offset 897' east account of Swamp - offset at 17+47.5  
 var. 6° I.P.

14  
 Date: July 19/60  
 Party:  
 Fisher  
 Kaylor  
 Halket  
 Terry, J



25797

Intersected E & W line,  
at 643' east & 1/2'  
South of iron pipe

36

See cor

138-28

7/30

13176

Set Terry 1/2 state.

0160

Started North from same corner as  
page 14. Offset east 590' - Swampy.

Var. 60

OIP

Date: July 17, 1949

Party: Fisher

Kenny

Holbrook

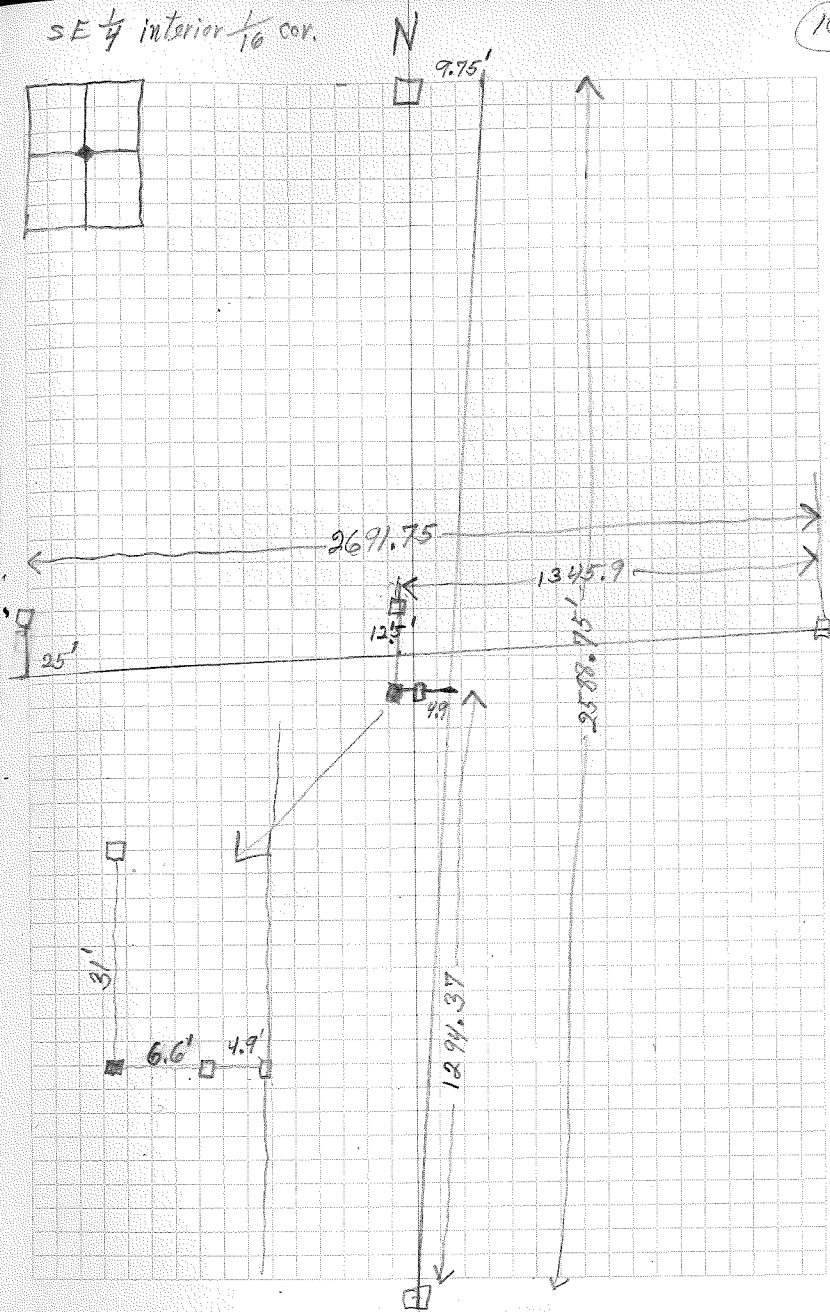
Terry, J.

15

OIP

SE  $\frac{1}{4}$  interior  $\frac{1}{16}$  cor.

10



Date: July 24, 1900 (17)  
Party: Yager  
Fisher  
Schultz

21+26	Swamp - stopped	chain of
21+20	Set stake	marked 21+00
19+01.4	Crossed picket line	
13+20	Set approx. 1/2 stake	
12+56	Base of hill	
6+45	Summit of hill	
5+00	Base of hill	
4+65	Left swamp	
3+65	Entered swamp	
1+00	Left swamp	
0+00	Started west from south	to cor. on N & S. 1/2 line





26+59 Trial pit to cor. or N+S interior  $\frac{1}{8}$  line.  
 Line is 22 feet north of  $\frac{1}{8}$  corner.  
 25+80 Enter

16+22 Offset south 65' to Nre

13+20 Set trap to stake

12+60 Offset 65' N. & cont'd West.

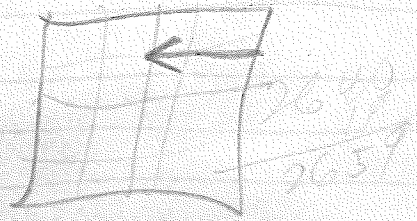
11+00 Hit lake shore - rocks - mt.

2+25 center of old r.r. grade.

0+00 started west from N  $\frac{1}{8}$  on East section  
 Used new set to mt. line. [36] 139-46

~~22~~ Date: July 24, 1908  
 Party  
 Yager  
 Fisher  
 Schantz

$\frac{1}{8}$  cor. is 22' S. & W. of our line  
 19+40 set stake - our line 19' short  
 25+80 SWAMP



16+22 leave lake to set back to <sup>65'</sup> line

13+20 set approx. to cor. W.

12+60 offset 65' N & cont'd W.

11+00 Hit lake shore

2+25 CROSS ROAD

set  $\frac{1}{8}$  cor. 19.25' W. of N+S line  
 0+00 started West from Per. line

26+57 Tied into ... on N & S interior  $\frac{1}{8}$  line.  
 Line is 22 feet north of  $\frac{1}{8}$  corner.  
 25+80 Enter ...

16+22 Offset south 65' to line

13+20 Set ... to stake  
 12+60 Offset 65' N. + cont'd West.  
 11+00 Hit lake shore - rocks - mat.

2+25 center of old r.r. grade.

0+00 started west from N  $\frac{1}{8}$  on East section  
 Used ... set to mat. line. [136] 139-26

Var. 6°

~~22~~ Date: July 24, 1900  
 Party  
 Yager  
 Fisher  
 Sahintz

