16

16

Sectional Subdivision
S 36 T. 139 - 28

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)÷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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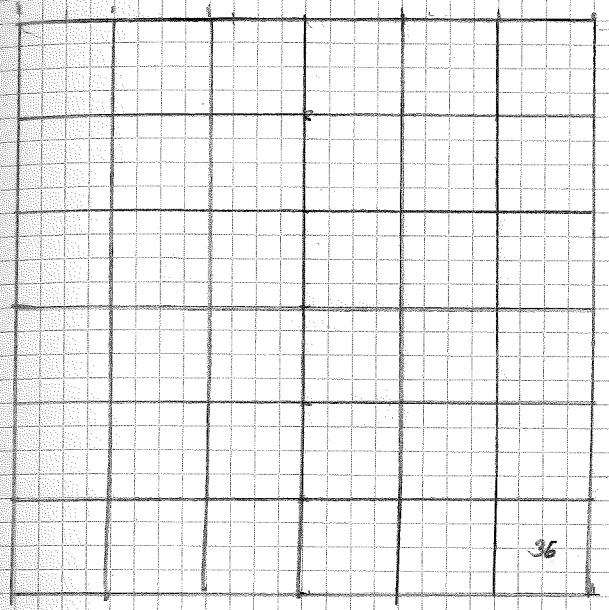
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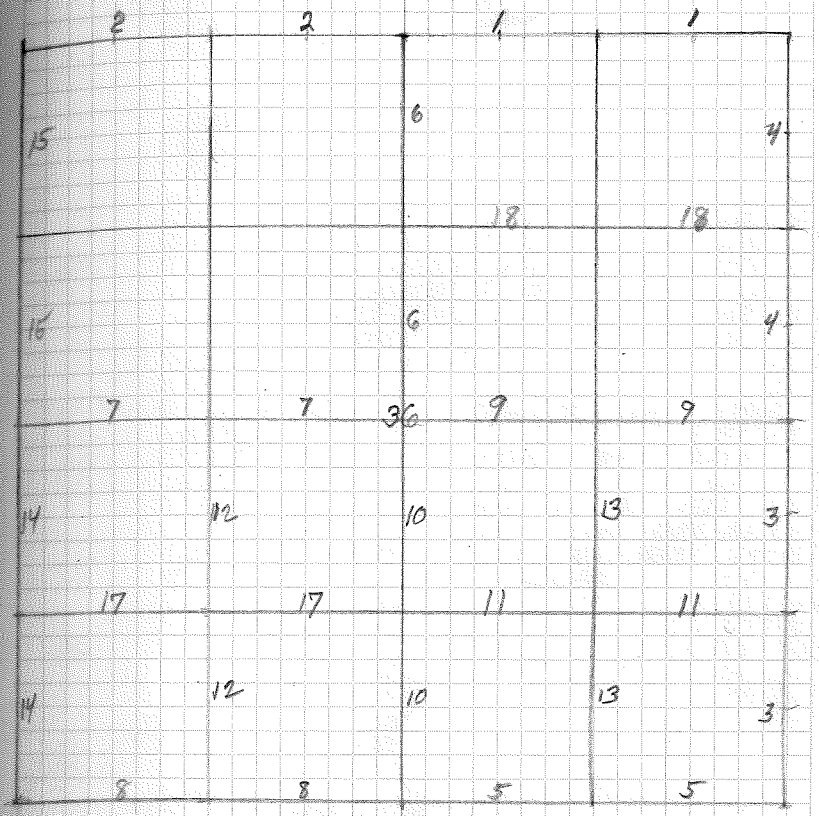
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| | |
|---|---|
| 26+38.8 | Tried into Iron Pipe ¼ cor. 25/36 — 139.28 |
| 13+20 | Set approx. E ¼ stake. — was reset at 13+19.4 |
| ? 1+66 | Center of old railroad grade. |
| 0+00 | Started West from I.P. 25/36 — 139.28 |

W. I.P. 0

Date: July 11 1940
Party: Fisher
Sapnita
Johnson

1

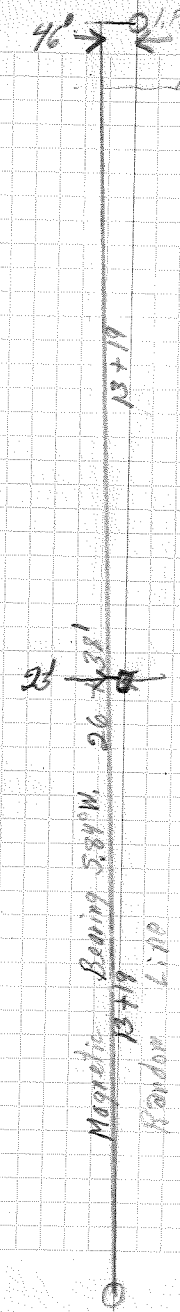
The ¼ corner was reset; was moved East .6 foot, since the random line hit the I.P. there was no need of setting No. or So.

Magnetic Bearing Line — S 88° W

0 I.P.

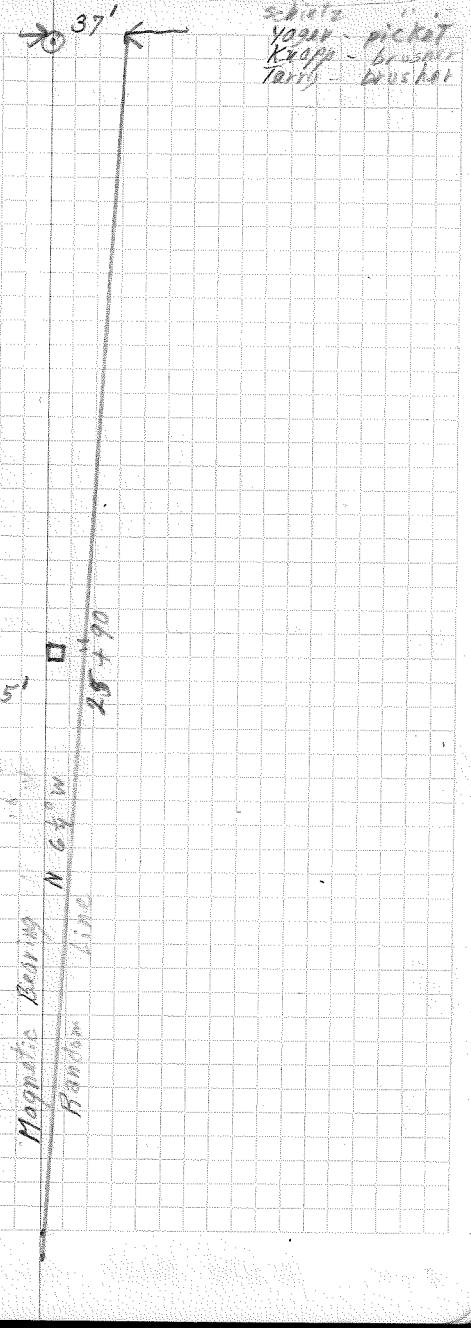
| | | |
|---|---|---|
| 26+38<br>26+19 | Found iron pipe<br>Hit swamp – | 46' North – in swamp. |
| 13+20 | Set approx. W 1/16 stake – | this 1/16 stake was reset at 13+19 and 23' North of random line. |
| 0+00 | started west from 1/4 cor. | iron pipe 25/36 132.28 |

Date: July 11, 1940
Party: Johnson
Fisher
Schantz



| | |
|---|---|
| 25+90<br>26+70 | Found iron pipe ½ cor. - 37' West - 36 139-28<br>Left grass swamp - at w. Hawn. |
| 24+25 | Start of swamp |
| 23+40 | Left swamp - |
| 22+35 | Start of swamp - Mdl. Mot |
| 15+30 | Left swamp |
| 14+80 | Start of swamp |
| 13+20 | Set approx. ¼ stake 36 |
| 11+80 | Left swamp |
| 11+25 | Start of swamp |
| 0+00 | Started North from I.P. 36 139-28 |

Date: July 12, 1940 3.
Party: Fisher - chain.
Schultz
Yoast - picket
Knapp - brushman
Tarris - brushman

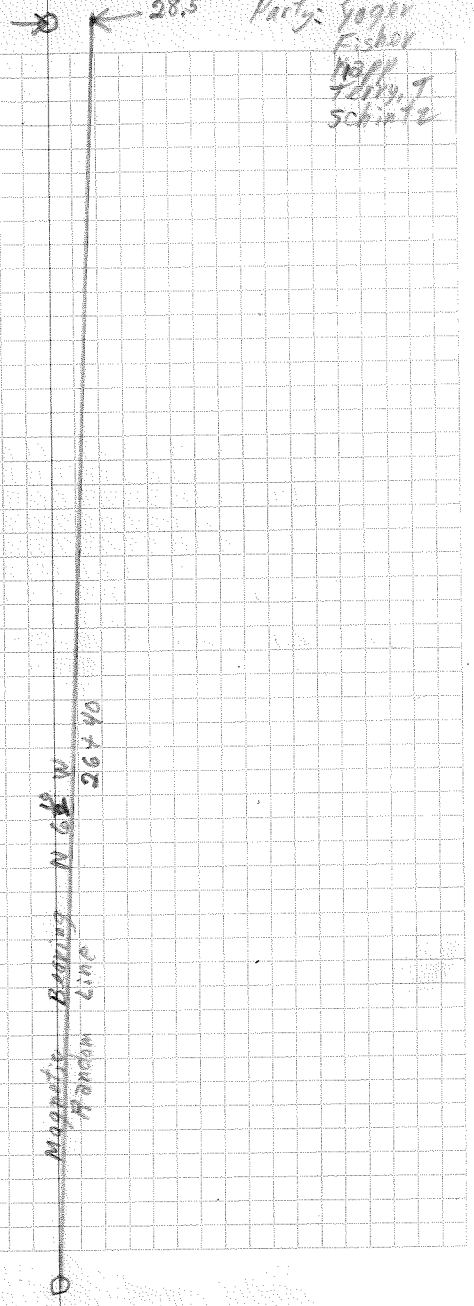



July 15 1940
This Stake was
Corrected - was set
at 12+95 and 18.5'
West of line
By Fisher & Knapp.

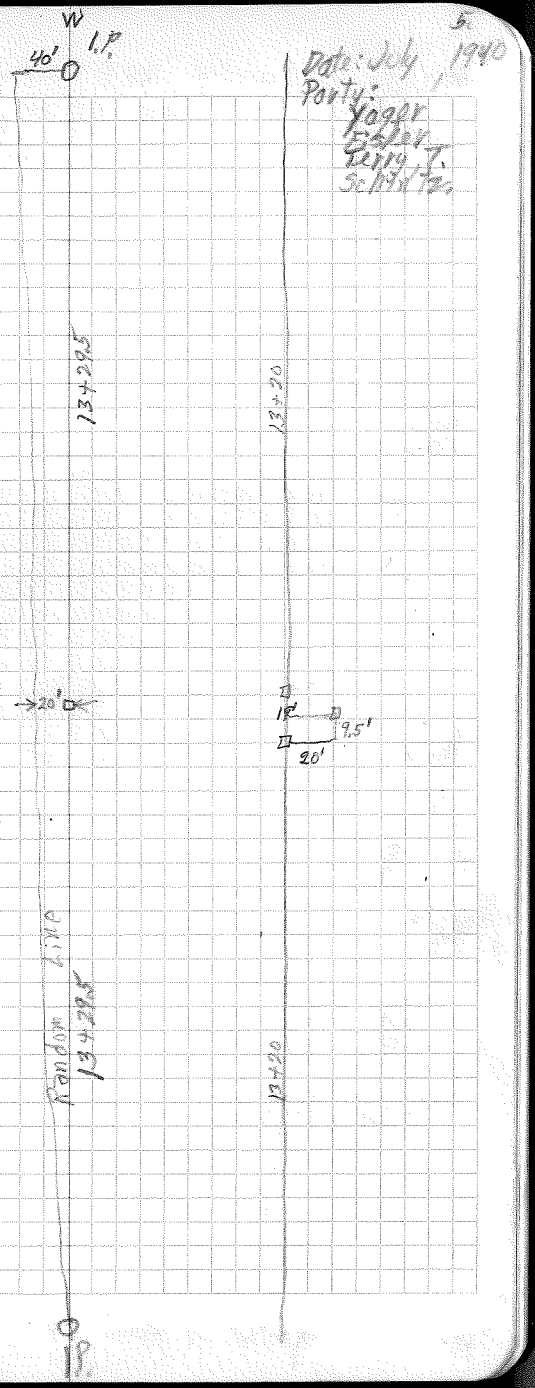
Var. 6¼°

| | | |
|---|---|---|
| 26+40 | Found 1" Pipe for Sec. cor. 28.5' West. | 36 \| 139-28 |
| 13+20 | Set approx. N. ¼ stake | |
| 0+00 | Started North from I.P. at ¼ | 36 \| 139-28 |

Date: July 15, 1940
Party: Yager
Fisher
Hall
Tidy
Schmitz



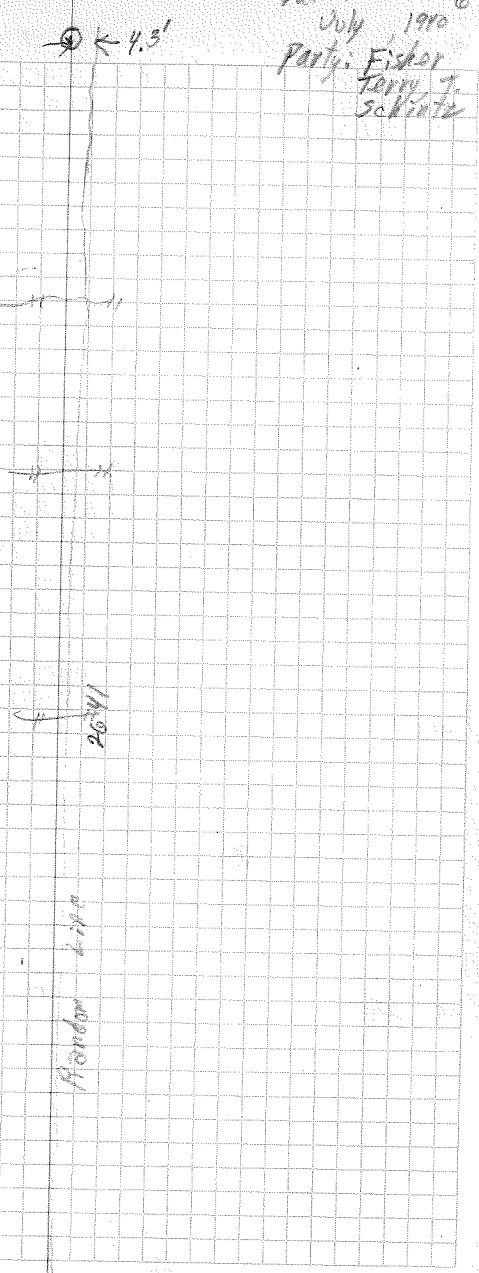
| | | |
|---|---|---|
| 26+59 | Found ¼ cor. iron pipe 40' North. | 36 — 139-28 |
| 13+29.5 | set good E ⅛ cor. & 20' North of random line | |
| 13+20 | set temp ⅛ cor. – reset E ⅛ cor. at 13+29.5 | |
| 0+00 | started west from iron pipe see cor | 36 — 139-28 |




Date: July 1940
Party:
Yager
Eaton
Terry T.
Schuster

| | |
|---|---|
| 26+41 | Intersected North section line 4.3' east of ¼ cor. Found I.P. at ¼ cor. |
| 21+00 | Leave swamp |
| 17+80 | Hit swamp |
| 16+00 | Leave swamp |
| 13+20 | set temp ⅛ stake |
| 12+30 | Hit swamp |
| 0+00 | Started N. from I.P. at interior ¼ cor. [26] 13 E 26 |

Date: July 1910
Party: Fisher, Ferry, Schmitz




Var 6½°

| | |
|---|---|
| 26+44.5 | Tried into iron pipe 14' North (B) 39-28 |
| 20+25 | Base of hill |
| 15+00 | Summit of hill |
| 13+20 | Set temp. W. 1/16 — Set a good 1/16 cor. |
| 12+50 | Start of hill — Stake at 13+22 1/2 and 7' North |
| 7+64 | Left swamp |
| 6+60 | Ran into swamp grass |
| 0+00 | Started West from 1/4 cor. [26] 139-28 Iron Pipe |

Date-July 1/1940

Party: Yaggi
Erickson
Hanson
Tuttle, J.

→ 14' O.R.

12

3' → □

Wet Swamp

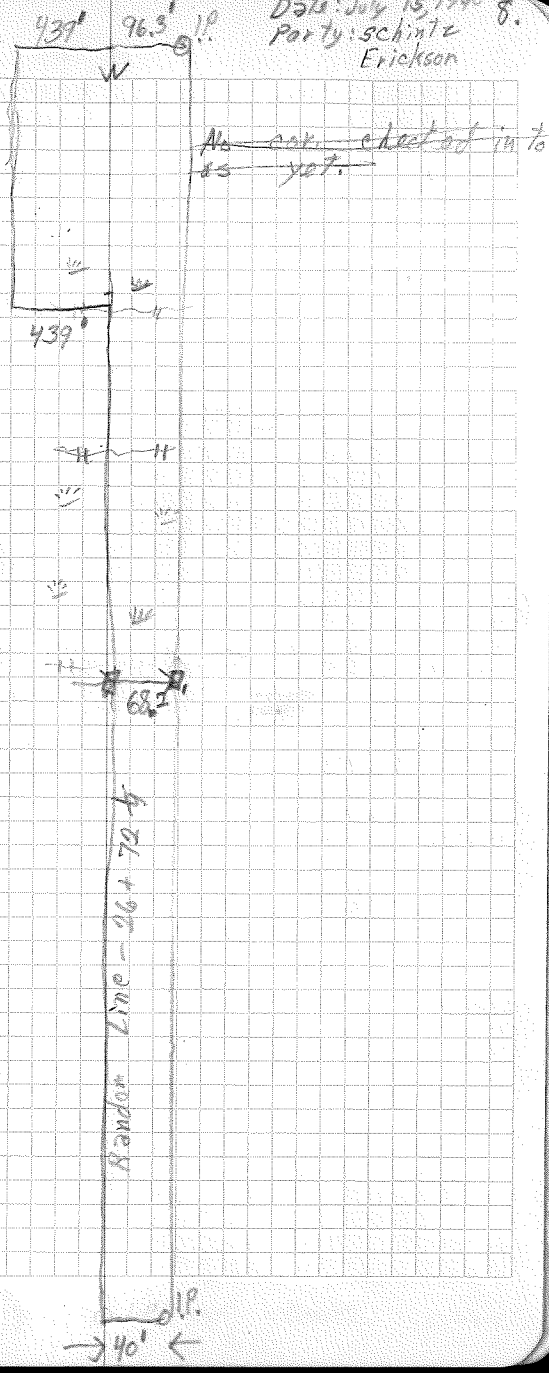
Wet. Cor.

O.P.

| | | |
|---|---|---|
| 26+65 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+20 | HIT BLUE JOINT & CAT TAIL SWAMP | |
| | Set approx. 1/16 Stake | |
| 0+00 | Started | West 40' Sq. of ~~from~~ I.P. 1/4 cor. 36 139 28 |
| | Var = 6° | |



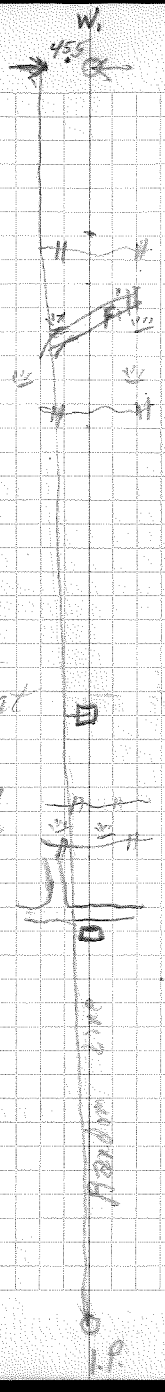
Date: July 15, 1948
Party: Schintz
Erickson



| | | |
|---|---|---|
| 86+74 | HIT IRON PIPE for interior 1/4 [3/4] corner. Iron pipe is 45.5' No. of random line. | 139-28 |
| 88+70 | END OF SWAMP | |
| 21+05 | Center of Sec. 36 planting road. | |
| 19+88 | HIT CAT TAIL SWAMP | |
| 13+37 | Reset 1/16 stake at correct place. | |
| 13+20 | Set temp. 1/16 Stake - | |
| 11+08 | LEFT SWAMP | |
| 10+43 | HIT SWAMP | |
| 8+91 | center of reconstructed old railroad grade. | |
| 8+53 1/3 | HIT Control POST | |
| 0+00 | Started West on 1/4 line from E 1/4 cor. | 139-28 36 |

Date: July , 194(9)

Party: Fisher
Knapp
Tarr, E.

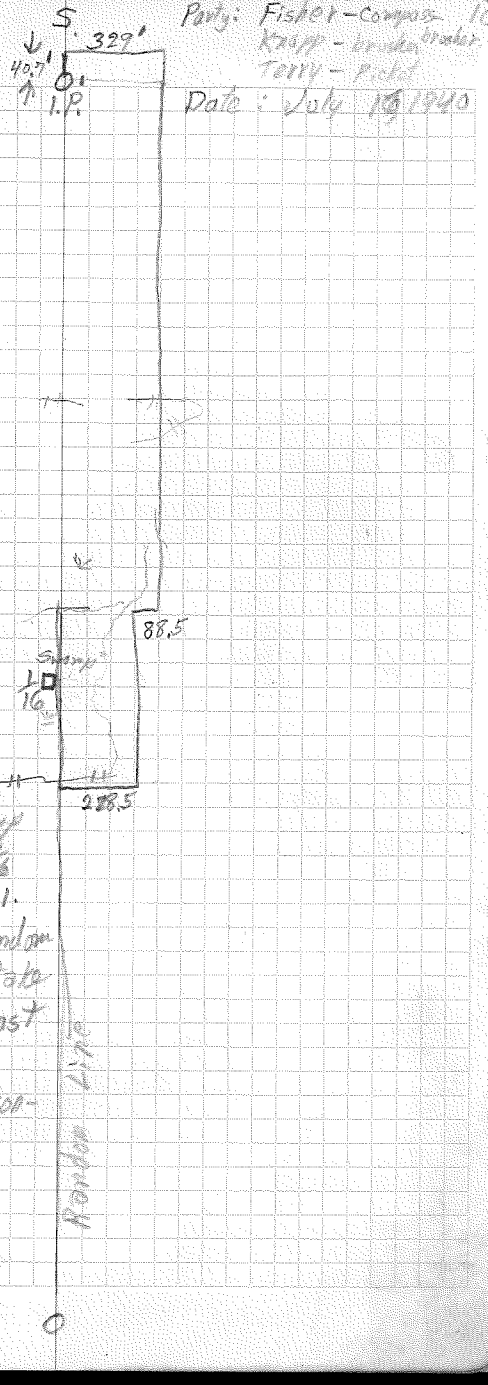



Var 6°

| | |
|---|---|
| 26+75 | Intersected south section line – Iron pipe is 329' East and 40.7' North. |
| | 26 75<br>40.7<br>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 228.5' West to avoid swamp |
| 0+00 | Started So. from interior of sec. |

Party: Fisher – compass
Krupp – leveler & marker
Terry – picket

Date: July 18, 1940




On July 18, 1940
Continued random line from 11+40 to 13+20 in swamp to intersect with 16 line – see page 11.
On the cont'd random line set good stake at 13+17 and 6' east of line.
By Schultz – Erickson – Fisher

Var. 6°

| | |
|---|---|
| 26+91.75 | Intersected N & S ¼ interior ¼ line at 25 feet so of ~~point~~ newly estab. ¼ cor. — See page 10 |
| 13+33¾ / 13+20 | Intersected the N & S. ¼ line — and was set temp. ¼ stake — on E & W. line |
| 11+18 | Center of newly constructed railroad grade |
| 0+00 | Started west from South ¼ cor [3] 137-28 |

6¾' So of the ¼ stake for N & S. line

25° W.

This corner reset — see page 16.

Date: 7-18-40
Party: Fisher
Knopp
Tarry, T.

11

Var. 6°

Iron Pipe

97+18.75 Intersecting South sec line 35.25' West of
This line is only a
random line. This lin

13+20 set temp state. 1/16

0+00 Started South from newly set up 1/16 cor.

1/16 temp state mark is not corrected yet.



35½' → ← 35½'

Temp. State

Party: Schantz
Wallack
Erickson

Date: July 16, 1940

Random Line

Var. 6°

O.P.

| | | |
|---|---|---|
| 25+88¾ | Intersected E & W. ¼ line | 139-28 |
| | Offset back to E ¼ Corner on E & W. ¼ line 417 East West. | |
| | Therefore line is 9.75 East East. | |
| 21+34¼ | Offset | 19.5' East for swamp. |
| 20+37.5 | Offset | 16.25' East for swamp. |
| 19+38¾ | Offset | 19.75' East for swamp. |
| 18+46¾ | Offset | 19.25' East for swamp. |
| 17+67.5 | Offset | 30.5' East for swamp and west North |
| 16+52 | Stuck and offset 302' East. and West North. | |
| 13+20 | Set Temp. ¼ Stake on N. & S. line | |
| 0+00 | Started North from ↓E ¼ cor. on South line. | |

Date: July 1940
Party:
Schantz
Erickson

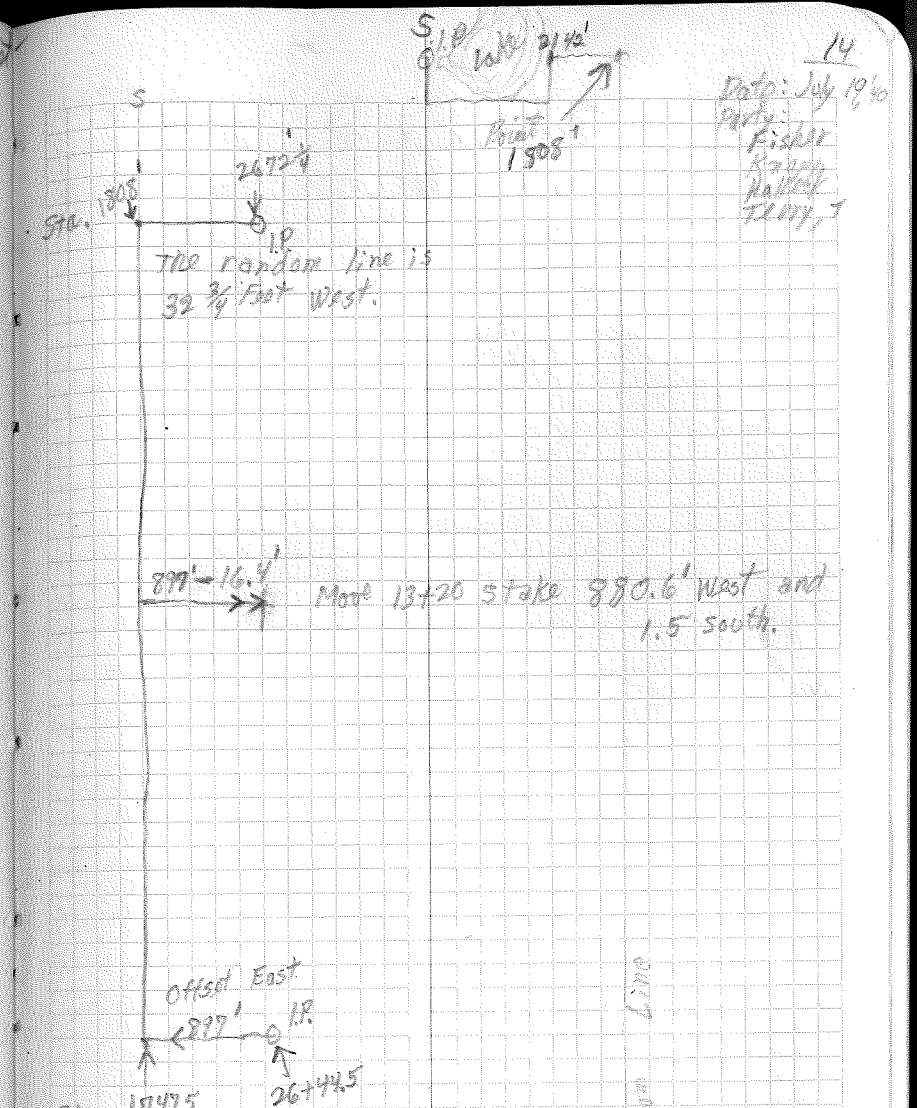
9.75'

Ogd. Line

Meander

Var. 6½°

| | | |
|---|---|---|
| 27+21 | Intersected south random line — offset 33' West to 21+42 stake which is on edge of lake See page 8. | |
| 13+20 | Set Temp. stake | |
| 0+00 | Started south from 1.P. ¼ cor. [3] | |




Date: July 19'10
Party: Fisher, Hatch, Hallock, Flory, T

14

— Offset 897' east account of Swamp. — Offset at 17+47.5

Var. 6°

1.P.

| | | | |
|---|---|---|---|
| 25+97 | Intersected E & W line at 643' east & 45' south of iron pipe | 36 Sec. cor T36 | 138-28 |
| 13+20 | Set Temp 1/16 stake. | | |
| 0+00 | Started North from same corner as page IV. Offset east 590' - Swamp | Var. 6° | |

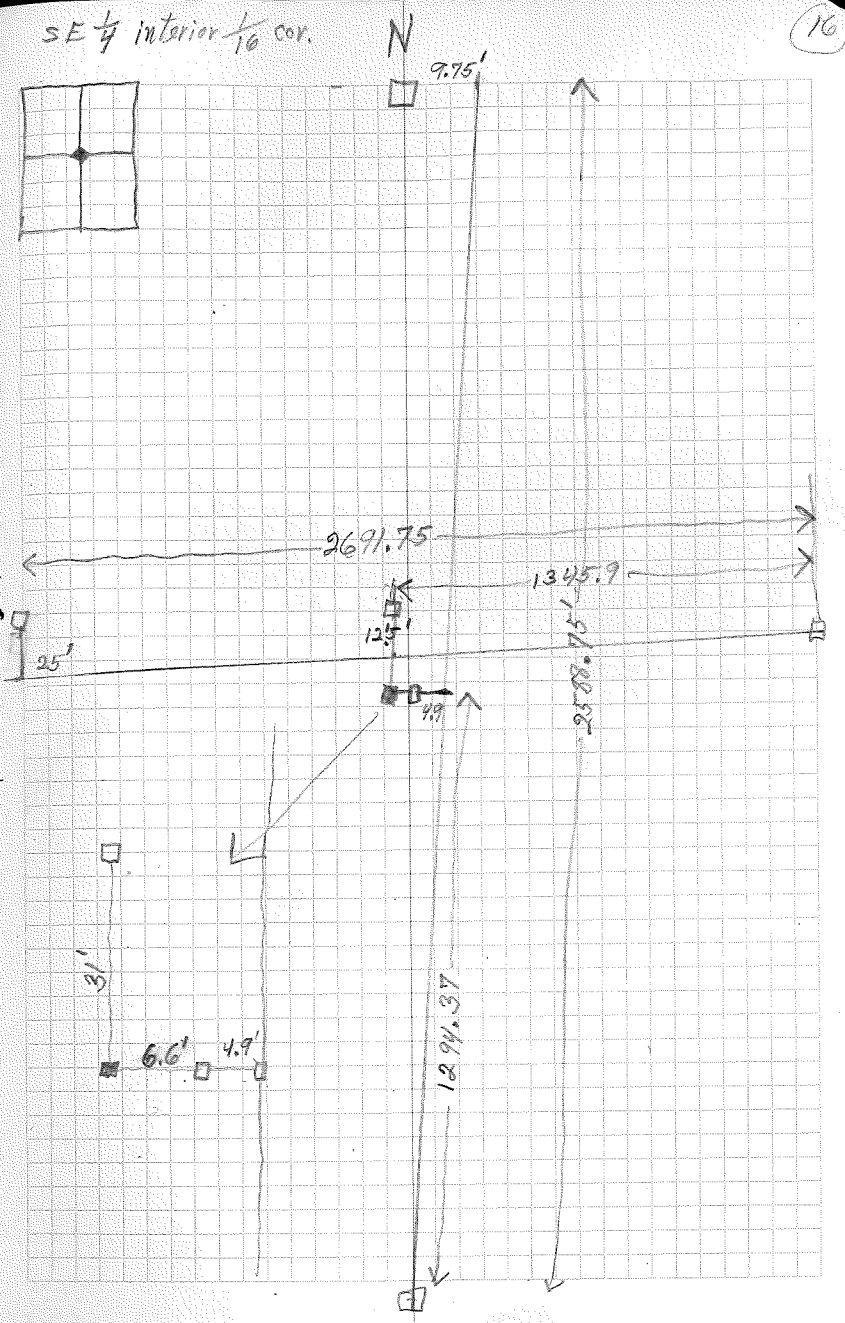
O/P

Date: July 18, 1911
Party: Fisher
Knapp
Hallock
Terry, Jr.

15

SE ¼ interior ~~1/16~~ cor.





Date: July 24 1900 (17)
Party: Yager
Fisher
Schiatz

| | |
|---|---|
| 21+26 | Swamp - stopped chaining. |
| 21+00 | Set stake marked 21+00 |
| 13+01.4 | Crossed picket line |
| 13+20 | Set approx. 16 stake |
| 12+50 | Base of hill |
| 6+45 | Summit of hill |
| 5+00 | Base of hill |

1/6 cor. is 22' So. & 19' W. of our line
19/6 + 49 set at the cor. line 19' short