

84.

MINING  
TRANSIT BOOK  
363



Copy

Norman R. Robinson  
To John W. Cunniff

Establishing True USMC AT-25  
on West side Sibley Lake Bet  
Acres 9 and 16 T136-1929 125.

March 24-1948

Paid this \_\_\_\_\_ day of March 1948

---



Colleen M.

83<sup>5</sup> Tree  
172 IM

79D - d  
Pg 209



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Leveling Notes. Sec 36-141-30 -- 64 " 110

Horston Loon Lake 136-29 2 - 13

Sec. 36-141-30



② 306

136-29

Tuesday Nov 14-1916.

I am working for Soon Lake  
Twp 136-29

I get Notes and plats and  
survey outfit and leave  
Walker for Peguot on 9-28  
A.M. train. fare \$0.85.

P.M. - Ray Anderson takes me and  
outfit and 15 I.M.s to Mads C.  
Andersons in S.W.  $\frac{1}{4}$  sec 21  
I walk to  $\frac{1}{4}$  cor between sec  
21 and 28. L-104 where U.S.  
Notes call for

B Pine 10 N  $45^{\circ}$  E 40 = 26.40 ft.

B Pine 8 S  $15^{\circ}$  W 36 = 23.76 ft

U.S. B.T.s are gone but I find  
a manufactured B.T. marked  
with a large size scribe

I pass it up as nothing checks.  
with M.C. Anderson for supper  
and overnight

E.B. Horst



136-29

806

(3)

Wednesday Nov 13-1916.

Horst with compass chain and  
notes. Made C Anderson with team  
and Wagon tools and I.M.s.

Tobias Bye (Chairman Town Board)  
Sam Arkland (Board member)

We begin setting I.M.s

at cor. to sec 19 and 30-136-29 and  
sec 24 and 25-136-30 where U.S.

Notes call for post and following B.T.s

B. Pine. 11 N  $10^{\circ}30'E$  25 = 16.30 ft.

" Pine. 12 N  $52^{\circ}30'W$  20 = 13.20 ft.

" " 12 S  $79^{\circ}W$  63 = 42.60 ft.

" " 10 S  $47^{\circ}E$  34 = 22.40 ft.

I find S.W. B.T. with <sup>25</sup>Marks nearly all  
cut off I also find stumps and  
roots of the other B.T.s which check  
with notes there are also 5 other  
B.T.s marked at this cor.

I find a stake at point for corner  
and drive a  $2\frac{1}{2} \times 4$  inch capped I.M.  
with New B.T.s as follows

Jack Pine stump 7 N  $36^{\circ}E$  53.7 ft. Sec 19

Jack pine 9 N  $30^{\circ}30'W$  73.5 ft. " 24

Jack Pine 10 S  $56^{\circ}W$  65.3 ft. " 25

" " 10 S  $62^{\circ}E$  37.7 ft. Sec 30

306

C.B. Horst.



④

306

136-29

Nov 15-1914

this corner is about in centre  
of a cross road +  
We drive S on graded road 1/2  
mile and find B.T. to 1/4 cor  
where Notes call for Post and B.T.s  
Pine 10 S 82° 30' W 12 = 7.92 ft

" 10 S 44° E 21 = 13.86

S.E. stump is plainly marked  
B.T. the mark on S.W. B.T. is  
burned off but blaze shows  
plainly stump check for course  
and distance

I set a 2 x 48 inch I.M. with  
New B.T.s

Jack pine 5 S 49° W 55.4 ft

" " 5 E 33.5 ft

We drive S 1/2 mile to cor of  
secs 25-30-31-36 T136Rgs29  
and 30 where Govt Notes call for

B.Pine 13 S 19 E 36 = 23.76 ft.

B.Pine 12 S 28 W 22 = 14.52 ft.

B.Pine 10 N 76° 30' W 13 = 8.58 ft.

Aspen 10 N 29° 30' W 23 = 16.50 ft

I find S.E. stump badly burned  
and find a part of stump broken

306

E.B. Horst.



136-29

Nov 15-1916

306

5

off bearing some scribe marks  
land owners nearby identify the  
position of the other stumps which  
have been grubbed out in road  
building. The points identified  
check with Gort Notes for course  
and distance from this evidence  
I establish corner and set a 2 X  
4 8 inch I.M. with following B.T.s  
J Pine 10 S 53° E 98.0 ft. in 31  
W. Pine stump 18 S 33° W 52.9 ft. in 36

We drive to Cor of secs 5-6-31-32 Twp  
135 and 136 Range 29 on Town line  
where County Surveyor J. W. Curo  
has established a corner with  
following B.T.s

J Pine 6 N 26° E 21.12 ft. in sec 32  
" " 6 N 36° W 20.30 ft. " 31  
" " 7 S 59° 52' W. 36.30 ft. " 6  
" " 7 S 33° 51' E. 54.00 ft. " 5

I find all B.T.s which check with  
Curo's Notes perfectly. I also find roots  
of stumps mentioned in his notes  
I set a 2 X 4 8 inch I.M. at true corner

E. B. Horst.

306



⑥ 306

136-29.

Nov 15-1916

driving 1 M. thru point of wood  
post. I remark Curo's B.T. by  
driving tracks in lower bluffs.  
We drive N one mile to cor  
of sec 29-30-31-32 T136-29

another corner established by  
Curo with following B.T.s  
(old Govt trees remarked)

B.P. in S N 59° E 65.48 ft.

" " 7 N 75° W 56.76 ft.

" " 8 S 57° W 52.80 ft.

" " 8 S 50° E 44.48 ft.

all check perfectly with Curo's notes  
and U.S. Notes except N.E. and S.E.  
trees which do not check for distance  
with U.S. Notes sent for by Curo  
The N.E. B.T. has been broken off 2 ft  
high. I remark stump

all other trees are standing as called  
for in Curo's notes

I set a 2x4 8 inch 1 M. at corner  
established by Curo  
we quit for night and drive to  
M.C. Anderson's

Arkland does not work in P.M.

306

E. R. Horst.



Thursday, Nov. 16-1916.

Horst, Compass and Chain M.C. Anderson  
and Tobias Beye carrying tools and I.M. we  
walk to corner of Secs 28-29-32-33  
where Govt Notes call for post and B.T.s

B. Pine 12 N 5° E 90 = 59.40 ft.

" " 10 N 65° W 86 = 56.76 ft.

Spruce 10 S 13° W 31 = 20.46 ft.

Oak 16 S 27° E 42 = 27.72 ft.

all are gone. A Mr Kramp tells us  
where the corner used to set but no  
stumps or trees check any way  
with Govt Notes. so I pass it up  
We walk to corner of secs 21-22-27-28  
where Govt Notes call for post and following

B.T.s B. Pine 10 N 20° E 134 = 88.44 ft

N.P. 16 N 73° W 106 = 69.96 ft.

N. Pine. 10 S 47° W 35 = 23.10 ft.

N. Pine. 14 S 65° E 11 = 7.26 ft.

the spruce is gone the stumps of the  
3 other trees still remain the S.E. and  
S.W. stumps bearing the B.T. badly burned  
a Norway Pine 18 plainly marked and green  
stands N 30° E 88.6 ft from a stake which  
is at point for corner

I set a 2 x 4 8 inch I.M. with New B.T.s

E.B. Horst. 306



8306

136-29

46  
66  
7200

Nov 16-1916

Noway Pine 18 N 30° E 88.6 ft. <sup>22</sup>

Oak 5 N 36° W 50.5 ft. 21

Oak 4 S 38° 30' W 27.2 ft. 20

No trees S.E. in <sup>27</sup>

P.M. - M.C. Anderson takes team and we drive to M.C. No 27 on W side of Loon Lake between secs 20+29 where Govt Notes call for

N. Pine. 14 N 59° W 52 = 34.32

N. Pine. 18 S 6° E 47 = 31.02

the S.E. B.T. stands green and plainly marked the N.W. B.T. is gone from the S.E. B.T. Dist cor at 8° 46'

Var from center of blaze cor being a 2 x 48 in 1M. to which I mark New Bearings N.P. 22 S 6° E 31.02 ft 22 S.B.T.

Noway Pine 4 N 43° 30' W 31.30 ft. <sup>22</sup>

We then drive to M.C. No 24 on N.W. side of Sibly Lake between secs 9 and 10 T136-R29 on county line between Cass and Crow Wing Counties where 22 S. Notes call for post and following B.T.s

B. Pine 12 N 35° E 75 = 49.50 ft.

N. Pine 18 N 82° W 70 46.20 ft.

306

E.B. Horst.



136-29.

(9)

Nov 16-1916

306

I find N.E. B.T. dead but plainly  
marked also find stump of N.W.  
B.T. with B.T. badly burned  
the measurement brings this cor at  
waters edge of lake but the courses  
seem to have been turned from along  
13° Var. at this Var the trees check for  
course and distance I set the cor by  
flat chain setting a 2X48 in I.M. and  
remark old B.T.s

at 8° 46' Var the old trees set as follows

B.P. 12 N 30° 15' E 49.50 ft 17 S. 10

N. Pine stump 18 N 86° 45' W 46.20 ft

We drive to 1/4 cor between sec 7 and  
18-136-29 where notes call for

B. Pine 7 N 59° E 110 = 72.60 ft

W. Pine 28 S 33° W 103 = 67.98 ft

N.E. B.T. has been cleared away more 7  
stump of S.W. B.T. still remains about  
18 inches high with part of B.T. still  
plain <sup>now</sup> from this I set a 2X48 in I.M.  
and remark old stump of S.W. B.T.

Fence Post stands N 21.6 ft

Cor being in center of E & W graded road  
quit for night.

E.B. Horst. 306



Friday Nov 17-1916.

Horst, transit and chain  
 made Anderson flag  
 Tobias Bye axe and chain  
 Homer Cochran axe  
 walk to cor of secs 19.24-25-30  
 Twp 136 Range 29 and 30 and  
 begin survey of a Twp road to  
 run E one mile on sec line  
 from point of beginning being  
 the cor to above sec on range line  
 we run E on an old road at  $9^{\circ}55'$   
 Variation

at 1178.1 set temp  $W \frac{1}{4}$  cor

" 1442.0 ft E leave road

" 1600.0 " " set Hub

" 2060.7 " " " "

" 2592.5 " " " " and

look for  $\frac{1}{4}$  cor to sec 19-4-30

Where U.S. Notes call for

N. Pine.  $10 N 6^{\circ} E 22 = 14.52$  ft

B. Pine  $10 S 12^{\circ} E 34 = 22.44$  ft

both are gone. We continue  
 our line E.

E. B. Horst.



136-29.

306' (11)

Nov 17-1916

at 3110.0 ft E enter swamp.

" 3314.0 " " set Hub

" 3564.0 " " leave swamp.

" 3757.7 " " set Hub.

" 4500.0 " " " "

" 5007.1 " " " " (I.M.) cor to

secs 19-20-29-30 - 136-29 sets  
to the Right  $23^{\circ}$  - 188.3 ft.

at sta 5180.4 E cor sets S 73.6 ft.

U.S. chain for this mile = 5138.1 ft

one ft U.S. chain = 1.00823 feet metric chain

Correcting back on this mile

 $73.6 \div 5180.4 = .0142$  of a foot S for  
each foot E. Setting road centers

Hub 5007.1 E goes S 71.10 ft.

" 4500.0 E " S 63.90 "

" 3757.7 E " S 53.36 "

" 3314.0 E " S 47.06 "

44 cor at sta 2578.66 goes S of random  
line 35.76 ft. where we set a 2x48  
inch I.M. (Boiler flue)

Hub 2060.7 E goes S 29.25 ft.

" 1600.0 E " S 22.72 ft.

W 1/6 cor at sta 1187.80 E goes

306'

E.B. Horst.



(12)

306

136-29

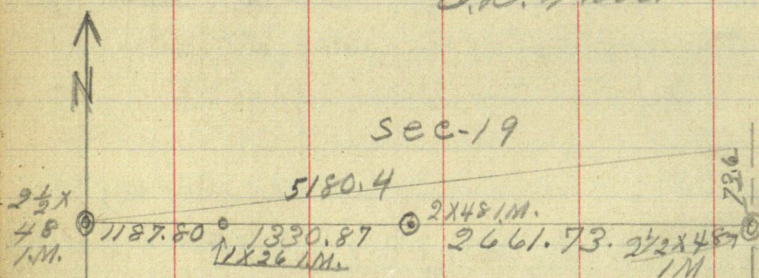
Nov 17-1916.

S of random line 16.87 ft.  
which concludes this survey.

we quit for night

Sam Arkland and a man  
whose name I failed to get  
worked since 11 A.M.

E.B. Horst.



sec-30

T136 R29

306



136-29.

306 13

Sat. Nov 18-1916.

Horst making plats and  
writing notes of survey for Loon  
Lake Town.

P.M. M.C. Anderson with team  
takes me and outfit to Peguot.  
also return 6 A.M. to Peguot Depot.  
Return to Walker, fare 85 etc.

E.B. Horst.

306



This Indenture Made this \_\_\_\_\_ day of March 1948

between Olds and Olds husband and  
~~OF Cass County, Minnesota~~  
wife of Cass County, Minnesota parties of the first part

and Normen R. Robinson and Colleen M. Robinson husband and wife of Cass County  
Minnesota, parties of the second part

One dollar and other valuable consideration

In the County of Cass and State of Minnesota

To\*wit;

A part of Government Lot (1) Section 16, T 136 Rg 29 being the East 200 feet  
of the south 60 feet of the north 120 feet of said Lot one

Starting at a 2x40 inch iron pipe of the west bank of Lake  
Sibley 11.74 feet west of U.S. Meander Corner No 25 and running thence 90 degree  
90 degrees South 60 feet to the waters edge the place of beginning;  
thence west parallel to the section line 200 feet to an iron monument  
thence 90 degrees South 60 feet to a second iron monument; thence east  
parallel to the section 200 feet to the waters edge of said lake;  
thence north 60 feet to the place of beginning

The land herein conveyed extends east to said lake and contains  
28/100 of an acre more or less. As surveyed and monumented March 24th 1948  
by John W. Curo County Surveyor, Cass County, Minnesota assisted by Harold J.  
Curo, deputy County Surveyor of said County

Together with easement of an unobstructed roadway leading from the  
land herein conveyed to connect with the public highway

All subject to mineral rights and mineral reservations of the State  
of Minnesota and subject to flowage rights if any of record the north boundary  
line of said Lot one (1) is considered a true east and west line in this  
description.



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South Side Levels on Surveyed  
line sec 36 - 141-30

STATION	B.S.	H.I.	F.S.	Inter	Elev
B.M.	0.14	200.14			200.00
50 + 00				2.62	197.52
49				2.98	197.16
48				6.25	193.89
T.P.			12.40		187.74
	.22	187.96			
47				4.1	183.86
46				8.6	179.86
T.P.			11.38		176.58
	1.00	177.58			
45				5.1	172.0
44				5.6	172.0
42				5.2	172.0
40				5.8	172.0
39				5.7	172.0
T.P.			0.57		177.01
	11.07	188.08			
38				7.6	180.48
T.P.			0.75		187.33
	11.99	199.32			
36				11.1	188.0
35				6.4	193
34				3.9	195
33				9.0	190 OK



B.M. at S.E. Cor 36

enter marsh

leave marsh



66

South side

STATION	BS	HI	FS	Inter.	Elev
	11.99	199.32			
T.P.			11.50		187.82
	.62	188.44			
32				5.7	183.
31				11.3	177.
T.P.			11.22		177.22
	2.48	179.70			
30				4.9	175
29				4.9	175
28				2.8	177
27				2.1	177
T.P.			.39		179.31
	5.76	185.07			
26				3.9	181.
25				4.4	180.5
24				4.4	180.5
T.P.			1.80		183.27
	12.34	195.61			
				5.02	190.59
22				7.00	188
21				9.7	185
20				5.0	190
19				2.6	193.0
18				4.0	191.
T.P.			11.10		184.51

OK.



Marshy & willows

BM set on Pop stump



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## South side

STATION	B.S.	HI	PS	Inter	Elev
	.36	184.87			184.51
16				3.0	182.
15				4.0	181.
14				13.5	171.
13				19.0	165.87
12				18.0	166.87
T.P.			12.23		172.64
	0.0	172.64		<del>7.0</del>	
11				7.2	165
10				6.6	166
			0.30		172.34
	9.51	181.83			
9				8.7	173
8				2.0	179.8
7				7.2	174.6
6				16.0	165.8
T.P.			12.04		169.81
	0.08	169.89			
5				7.0	162.9
4				11.0	158.9
T.P.			11.95		157.94
	0.46	158.40			
3				3.7	154.7
2+20				7.2	151.2
2				7.2	151.2



edge of marsh



70 South Side & Beginning West Side

STATION B.S. HI F.S. Inter Elev

158.40

0+0

7.2 151.2

Going West from Baldwins Random

0+60

3.9 154.5

1

5.2 153.2

1+50

11.4 147.0

9.96 148.44

8K.

B.M. 4.20 152.64 going North

1

5.2 147.4

2

5.4 147.2

2+40

4.6 148.

T.P.

.13

152.51

11.30 143.81

3

8.0 155.0

T.P.

.18

143.63

11.71 175.34

T.P.

1.16

174.18

11.79 185.97

4

8.8 177.1

5-

8.0 178.

T.P.

0.90

183.07

12.43 197.50

6

10.7 187.

7

65- 191.

8.

2.0 195.



B.M. S.W. Cor Sec 36



72	West Side				
STA	BS	HI	FS	Inter	Elev
		197.50			
9				1.2	196.3
10				2.5	195.0
T.P.			2.55		194.95
	7.72	202.67			
11				7.9	195
12				7.0	195
13				7.3	195
14				7.5	195
16+40				7.0	195
17				5.0	197
18				3.5	199
18.36				3.9	199
20				4.1	198
20+30			9.		
T.P.			0.07		202.60
	10.17	212.77			
23				3.6	209.
24				9.2	203.5
T.P.			11.48		201.29
	1.13	201.42			
25				10.0	191.
26				19.0	182.
T.P.			9.37		192.05



enter meadow

leave "

enter meadow

leave "

BM At  $\frac{1}{4}$  cor W side 36



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## West Side

Sta	BS	HI	FS	Inter	Elev.
B.M.					192.05
	3.71	195.76			
2760				1.8	194.
28				7.0	188.
T.P.			12.14		183.62
	1.06	184.68			
T.P.			12.29		172.39
	.60	172.99			
29				4.0	169
T.P.			12.41		160.58
	2.29	162.87			
29.60				7.0	154
32+40				7.0	156
33				5.0	158
34				1.8	161
T.P.			.98		161.89
	12.38	174.27			
35				3.0	171
T.P.			1.70		172.57
	5.42	177.89			
36				4.4	173.5
37				5.0	173
38				7.0	170.0
39				2.0	176
T.P.	.36		.30		177.68



enter meadow  
leave

level of Ry grade



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West Side

S.T.A.

B.S.

H.I.

F.S.

Inter

Elev

9.64 187.33

40

5.7 182

40+60

3.0 184

41

5.6 182

42

3.4 184

42+5-

8.0 179

43

8.0 179

44

5.0 182

T.P.

12.38

.24

187.08

12.38

199.47

46

13.0 186

47

13.0 186

48

8.4 191

49

4.0 195-

50

8.6 197

T.P.

.23

199.24

5.02 204.26

51

4.5 200

52

4.0 200

4.58 199.05

52+80

6.00 198

T.P.

5.94

198.32

OK



narrow meadow

B.M. at N.W. cor 36



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North Side

Sta.	B.S.	H.I.	F.S.	Inter	Elev
					198.32

Running East from N.W. Cor 36-141-30

10.44 208.66

1				9.5	197.
---	--	--	--	-----	------

2				8.3	210
---	--	--	--	-----	-----

3				5.0	203
---	--	--	--	-----	-----

4				2.3	206
---	--	--	--	-----	-----

T.P.			.69		208.07
------	--	--	-----	--	--------

6.35 214.42

5				5.0	209.
---	--	--	--	-----	------

6				5.0	209
---	--	--	--	-----	-----

7				4.0	210
---	--	--	--	-----	-----

8				6.7	208
---	--	--	--	-----	-----

T.P.			12.23		202.19
------	--	--	-------	--	--------

.15 202.34

T.P.			12.35		189.99
------	--	--	-------	--	--------

0.00 189.99

9				9.0	181.
---	--	--	--	-----	------

10				8.0	182.
----	--	--	--	-----	------

11				7.0	183.
----	--	--	--	-----	------

12				12.0	178.
----	--	--	--	------	------

T.P.			12.09		177.90.
------	--	--	-------	--	---------

5.71 183.61

13				8.00	175.6
----	--	--	--	------	-------

14				6.4	177.
----	--	--	--	-----	------

ca.



80

## North Side

Sta.	B.S.	H.I.	P.S.	Inter.	Elev.
15		183.61		5.2	178.4
16				2.0	181.6
T.P.			0.19		183.42
	8.24	191.66			
17				4.0	187.7
T.P.			.24		191.40
	11.85	203.25			
18				5.0	198
18+40				2.3	201
19				5.0	198
20				7.5	196
20+40				7.5	196
21				0.0	203
T.P.			0.05		203.20
	11.60	214.80			
22				7.0	208.
23				4.0	211.
24				1.0	214.
			0.56		214.24
	4.39	218.03		6	
25				6.6	212
26				4.0	214
				7.30	211.33
27				8.6	210
28				10.7	208



0

3

B M at  $\frac{1}{4}$  cor N side 36



82

## North Side

STA	BS	HI	F.S	Intor	
29.		218.63		1.0	217.7
T.P.			1.20		217.43
	3.82	221.85			
30				4.5-	217
31				7.5-	214.
32.				12.	209
<sup>33</sup> 34				17	207
				16	205-
35				8.5-	213
T.P.			.12		221.13
	1.95	229.08			
36				6.00	223
37				<del>8.00</del> 5.00	224
38				8.00	221.
39				9.00	225-
40				7.00	222
T.P.	12.4		12.47		216.61
	.26	216.87			
41				4.00	212.8
42				N.O	203.8
43				9.5-	207.
T.P.			9.12		207.75
	1.96	209.71			
44				4.0	203.7
45-				2.8	207
46				14.0	195.7
					OK



84.

North Side v East Line

STA	BS	HI	FS	Int	EL
47		209.71		11.4	198.
T.P.			12.24		197.47

1.6 198.07

48 8.0 191

52 8.0 191

52+90 5.0 194

T.P. 7.66 191.41

forming south

6.70 198.11

0+60 8.00 190

5+60 7.5 191

6- 0.5 198

T.P. 0.02 198.09

11.26 209.35

7. about 191

8. 9.0 200

8+40 2.0 207

10 17.0 192

T.P. 11.87 197.48

2.68 200.16

11 7.6 192.5

12 10.00 190

13 9.6 191

14 4.5 196

15 10.00 190

OK.



enter meadow

leave "

edge of meadow

leave "

same as other meadow

edge of meadow

leave meadow

in meadow



86

## East Line

STA	BS	HI	FS	Int	
		200.16		8.00	192.16
16				5.00	195
17				4.5	195
18				3.5	197
T.P.			0.60		198.56
	11.56	210.12			
19				10.5	201
T.P.			0.09		211.03
	8.72	219.75			
20				2.5	217
21				3.5	216
22				4.5	215
23				5.0	215
T.P.			12.06		207.69
	.41	208.10			
24				13	195
25				15	193
26				12	196.41
T.P.			.98		207.12
	7.36	217.48			
27				7.00	207
28				2.6	212
29				8.0	206
30				12.00	202
31				6.0	208

OK.



Ry grade



88

## East Line

STA	Bs	HI	FS	Enter	Elev
32		214.48		6.4	208.
T.P.			6.20		208.28

Monday  
2.06 200.34

33				6.4	204.
34				9.0	201.
35-				4.0	206.
36				1.5	209.
T.P.			1.58		208.76

6.59 215.35

37				7.0	208.
37.50				11.5	204
38				10.5	205-
39				3.0	212
40				10.0	205-
41				13.0	202
42				5.0	210
43				5.0	210
T.P.			5.33		210.02

0.56 200.58

44				5.0	210.6
			12.11		198.47

0.27 198.74

45-				4.0	194.7
-----	--	--	--	-----	-------



20	East Line		V NYS	1/4 Line	
STA	BS	HI	FS	Inter	E
		198.74			
46				7.0	192
47				9.0	190
47+25				11.0	187.7
50				9.0	190
51			6.15	6.0	193
T.P.			5.90		192.83
	9.57	202.41			
52				7.00	195
				2.91	199.50
B.M.	1.79	192.38	going N		190.59
1				4.3	188
2				9.4	183
3				7.0	185
4				1.3	191
T.P.			0.10		192.28
	11.80	204.08			
5				8.5	196
6				8.7	195
7				5.0	199
8				4.0	200
9				2.0	202
T.P.			0.23		203.85
	3.01	206.84			



enter meadow  
leave meadow

B.M.



98

NYS 1/4 Line

Sta

BS

HI

FS

Inter

E

10

206.86

5.0

207

11

5.5

201

12

13.0

193

T.P.

12.24

194.62

0.17 194.79

13

6.0

189

T.P.

12.06

182.73

2.29 183.02

14

12.00

173

T.P.

11.72

173.30

D.14 173.44

15

7.59

145.85

8.10 173.95

22

7.80

146

23

7.8

146

24

7.4

146

25

5.0

169

26

4.0

170

0.95

173

T.P.

1.26

172.69

10.26 182.95

27

9.3

174

28

5.0

178

29

1.5

181

0.27

182.68



ice in lake

B.M.



94

NVS 1/4 line

STA	BS	HI	FS	Inter	E
	8.67	191.35			182.68
30				4.6	187
31				4.0	187
32				6.0	185
33				7.5	184
34				6.2	185
35				2.5	189
T.P.			1.00		190.35
	11.31	201.66			
Grade				7.00	194
36				4.00	197.6
T.P.			0.30		201.36
	12.19	213.55			
37				6.0	207.5
T.P.			0.24		213.21
	12.28	225.49			
38				12.00	213.5
39				6.00	219.5
40				4.50	221
41				4.7	221
42				4.0	221.5
T.P.			0.50		224.99
	2.90	227.89			
43				3.0	225.
44				5.0	223.



96	N+5 1/4 Line &		EVW 1/4 Line		
STA	BS	HI	FS	Intor	E
		227.89	12.30		215.59
	1.35-	216.94			
45				5.00	212.
45+40				17.00	210
			11.80		205.14
	9.76	214.90			
50+20					
51				10.00	205-
52				5.5-	209
				3.32	211.58
B.M.	0.35	192.40	joining	E	192.05
T.P.			.07		192.33
	11.63	203.96			
T.P.			.67		203.29
	12.43	215.72			
1				12.00	195-
2				6.0	209.
T.P.			0.56		215.16
	7.38	222.54			
3				2.0	220
4				3.0	219
5-				7.0	215-
6				5.0	217

OK.



Smarrf

low smarrf

B. M.

(211.33) On other Line of Levels



98

E/W 1/4 Line

STA	BS	HI	FS	Inter	Elev
7		228.54		5.0	217
TP			12.12		210.42
	.80	211.22			
8				12.0	199
T.P.			12.17		199.05
	1.07	200.12			
T.P.			12.32		187.80
	.32	188.12			
9				3.0	185
T.P.			12.23		175.89
	.25	176.14			
11				19.06	157
14				16.0	140
15				2.0	174
T.P.			0.40		175.74
	12.42	188.16			
16				8.0	180
T.P.			.17		187.99
	6.18	194.17			
17				5.0	189
18				3.0	191
19				3.0	191
20				8.0	186
TP			12.08		182.09
	0.40	182.49			



enter meadow



100

E &amp; W 1/4 Line

STA

BS

HI

FS

Inter

Elev

182.49

22

9.0 173

23

13.0 170

24

16.0 166

25

16.0 166

26

13.0 169

27

9.0 173

28

4.0 178

T.P.

3.70

178.79

6.07

184.89

29

2.5 182

30

8.0 176

T.P.

12.25

172.61

10.71

183.32

31

14.0 169

32

33

16.5 167.2

36

" 167

37

9.0 174

T.P.

1.44

181.88

11.30

193.18

38

8.0 183

39

14.0 182

40

15.5 178

41

8.0 185



open meadow

lean meadow



102

E &amp; W 1/4 Line

STA.

BS

HI

FS

Inter

Elev

193.18

42

6.0

187

43

10.0

183

44

14.0

179

45

17.0

176

46

13.0

180

47

5.5

188

T.P.

0.13

193.05

12.17 205.22

48

8.0

195.0

T.P.

0.15

205.07

11.77 216.84

49

4.5

212

50

4.5

212

51

13.0

203

T.P.

12.15

224.69

0.99 205.68

52

14.0

194.7

T.P.

104.2

195.26

7.68 202.94

7.1

195.84



Traverse of old Ry Grade  
 Westward from P.E. of random  
 range line & grade

sighting south end.  
 turn to right from Random P.E.

Angle 96.05 R 1200.0

1°30' L 400.0

13°20' L 324.0

10°26' L 476.0

9°33' R 216.0

8°43' R 243

9°22' R 200.0

30°27' R 10.00

0°45' L 7.20

11°23' L 2.00

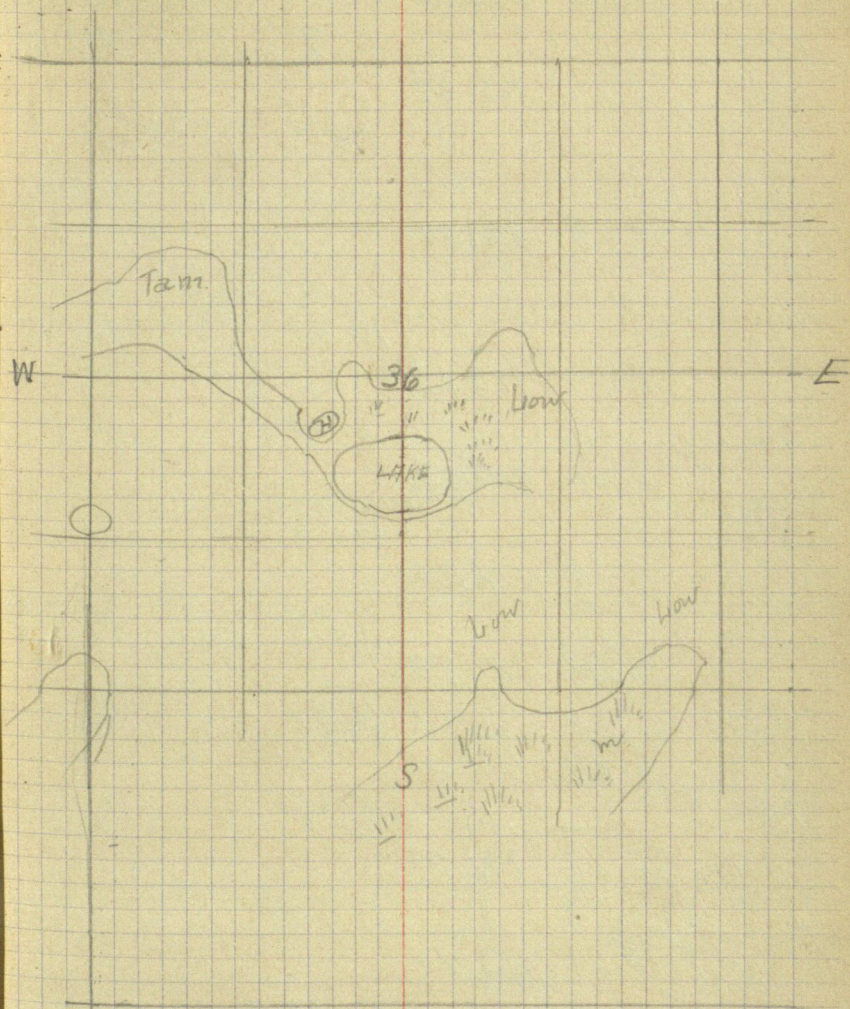
11°57' L 484

76°56' L To west section  
 line

crossed  
 1/2 line

26 on west line







106  
S.T.A.  
ICE on

B.S. HI  
12.06 173.10

F.S. Intor Elev  
0.19 161.04  
172.91

T.P.  
T.P. 9.73 182.64

~~11.2~~ 163

T.P. 11.2 171.44  
7.13 178.57

1 7.65

T.P. 10.00 168.57  
5.25 173.82

T.P. 5.37 168.45  
6.58 175.03

T.P. 3.32 171.71  
9.29 181.00

T.P. 5.23 175.77  
5.16 180.93

T.P. 5.48 175.45  
6.86 182.31

T.P. 3.28 179.03  
12.04 191.07

T.P. 0.58 190.49  
10.21 200.70

0.70 200.00

OK.



Stocking Lake

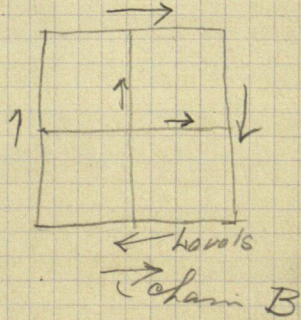
Grade

Meadow south of Grade

Ice in first lake south of camp

Ice in second lake

B.H. 300.00





108

STA	B.S.	HI	F.S.	Inter	Elev
B.M.	4.08	132.52			148.44
TP			5.71		146.81
T	4.96	151.77			
			8.30		143.47



BM S.W. Cor 36

ice in Little West Lake



$$\begin{array}{r}
 42 \\
 31 \overline{) 6} \quad 36 \quad 66 \quad 134 \\
 \underline{25} \quad 2 \quad \underline{6} \quad 6 \quad 804 \\
 186 \quad 252 \quad 216 \quad 350 \quad 204 \\
 \underline{186} \quad \underline{252} \quad \underline{216} \quad \underline{350} \quad \underline{204} \\
 20.46 \quad 27.7 \quad 237.6 \quad 42.66 \quad 88.44 \\
 \quad \quad \underline{237.6} \quad \quad \quad \quad \quad \quad 86 \\
 \quad \quad \underline{136} \quad \quad \quad \quad \quad \quad \underline{6} \\
 \quad \quad 22.46 \quad \quad \quad \quad \quad \quad \underline{6} \quad 51.6 \\
 \quad \quad \quad \quad \quad \quad \underline{636} \quad \underline{516} \\
 \quad \quad \quad \quad \quad \quad 6996 \quad 5676
 \end{array}$$

$$\begin{array}{r}
 132 \\
 132 \\
 \hline
 1452
 \end{array}$$

$$\begin{array}{r}
 35 \\
 35 \\
 \hline
 210
 \end{array}$$

$$\begin{array}{r}
 13 \\
 13 \\
 \hline
 28
 \end{array}$$

$$\begin{array}{r}
 47.52 \\
 47.52 \\
 \hline
 252 \quad 312 \\
 252 \quad 312 \\
 \hline
 51.02 \quad 34.82
 \end{array}$$