

276

N&E
FIELD BOOK
364A

276

Note: This book No 276 belongs
to Jack Curo, Co Surveyor-
Walker Minn. If lost,
Finder please return book to
Curo Engineers for reward

John W Curo
March 17-1946
and please hurry!

Surveys for
Clarence Kendall P₁
Hack Single

Carla A Ryan Jenkins P₉
Single

The paper in this book No. 364A
is made of 50% high grade rag stock
with a WATER RESISTING surface sizing.

Index

Clarence Kendall Pg 5

Carl Ryan

Al Woot

35

Plat of Long Beach on Ten Mile Lot 1 Sec 11-¹⁴⁰₃₁

Pony Barran, Champlin, Carter, & Cole Pg 51

Monroe - Lot 1 Sec 1-142-31

93

Clarence Kindal

March 17-1946 Sunday

Harald and I & Walker
in my 41 Ford @ 11 AM

Work on Kindal Plat

at Hub 438.3 S of $\frac{1}{4}$ Cor
See ties

π over Hub 438.3 S of $\frac{1}{4}$ Cor bet
Sec 13 and 18- bet T140-R30-31
Chain North 8.3 ft to 430.5 Set 90° dip

π over 430 Focus North on Range
line - try to get a line west along
old Birch Lake Narrows Road
Run

S $88^{\circ}53'W$ 1.0

Sine 019488

cos 999810) 33. (33.0062

Tang. 019492 X 433.04 = 8.44 S.

999810) 100 (100.01

400-400.04

At 400.04 set 90° spike Bel Lats

4 and 5 Rain cald Home 7-05 PM

John W. Carr

7

438.35
see ties

430.8

8.30

Rongel Line

430

Co. Road

○ 117

Ms. B. 5. 8. 85

71

5

100.01

108.01

100.0

1000	
------	--

2

1

9

2

4

5

1

9

11

150015

५५

67.

454

8

March 18-1946

9-30 Omat office Sun comes out
Cool. Fisher calls at CHo
to get his Lot surveyed near
Chase Hotel

Figuring Kindal Plot

$$588^{\circ}53'W = 1^{\circ}07'$$

$$\text{Sine } 019488 \times 433.08 = 8.44 \text{ S}$$

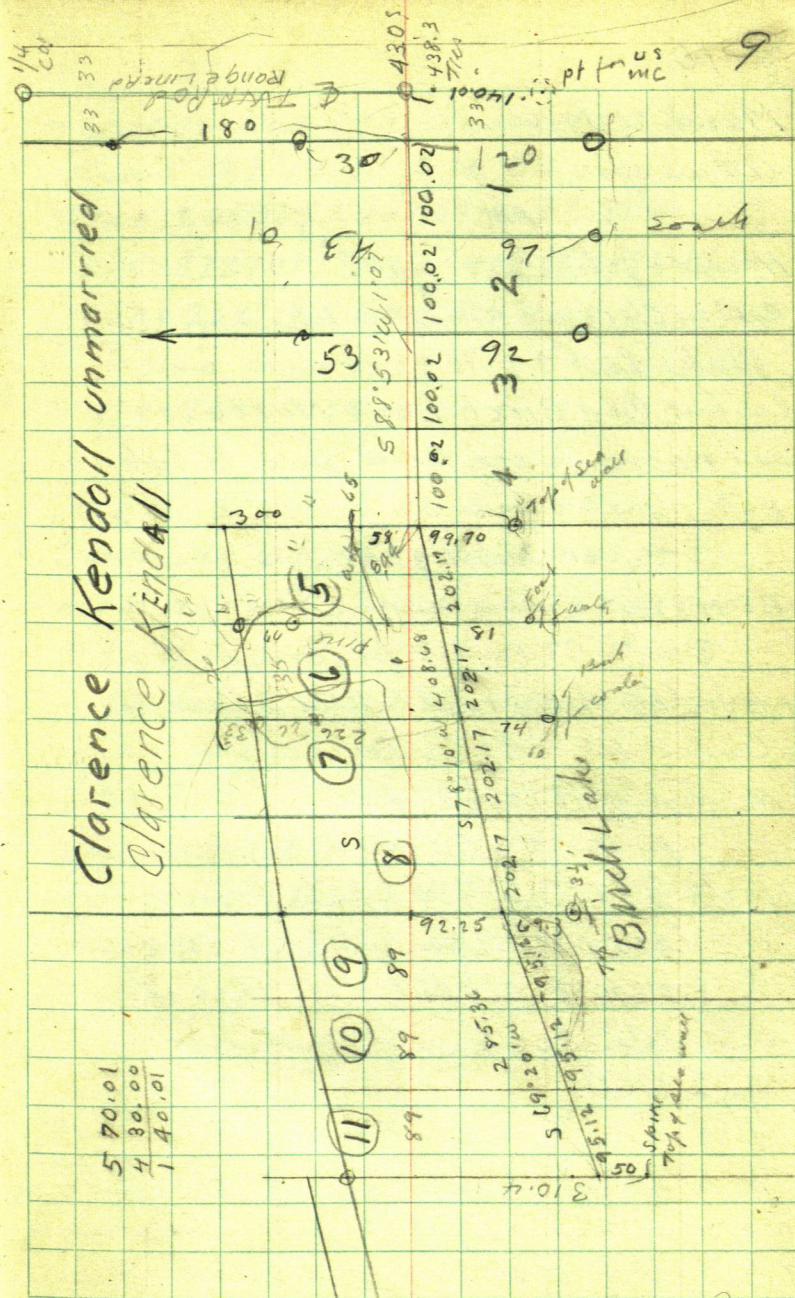
$$\text{Cos } 999810 \div 433 (= 433.08$$

$$\text{Tang } 019492 \times 433 = 8.44 \text{ S}$$

$$99981 \div 100 (= 100.02$$

5	70.01
4	30.00
1	40.01

Clarence Kindall



10

March 20-1946

AM in office

PM

Harald + John Curo ^{Kendall}

Call on Clarence Kindel who says

Make last 3 Lots 89 ft wide and
lay out Old Birch Lake Narrows
and Hackensack Ponds so as to cut
out small creeks

T over Hub 433.08

B8 N 88° 53' E and run

South 99.70 set pt for I m at
on top of 4 ft seawall 3 ft wide
Called U.S. Meander line of
N. Side of Birch Lake

From T run

North @ 58.11 set 90° spike pt for I m
@ 65 enter Low wet land Swamp?
@ 200.3 set ball stake thro ice
and water 300 ft N of spike on
Seawall

π still on Hut 433. ft west of R9 Line

Run S $78^{\circ}10'W = 11^{\circ}50'$

Sine $205065 \times 408.68 = 83.81$

Cos $978748 / 400 = 408.68 = 102.17$

Tan $209518 \times 400 = 83.81$ So

4) $408.68 = 102.17$

π @ Hut 833 W. and 92.25 So Run

South 69.3 set stake pt for IM at foot
of 4 ft sea wall $3\frac{1}{2}$ ft N of top of wall and
 8 ft N of 20 foot of wall and $10'$ N of water.

Cut line N bet 8-9 Run

S $69^{\circ}20'W = 20^{\circ}40'$

Sine $352931 \times 285.36 = 100.7121048$

Cos $935050 / 267 = 285.36 - 3 = 95.12$

Tan $377204 \times 267 = 100.71$

12

March 25 - 1946 Monday
Clarence Kendall
called at the Ctto.

Ryan is back I call him at
Jenkins

Harold & I to back

π over 430 Soon True Range
line Ch South 430 + 129.7 =

find my old 60 d spike
5 ft N of foot low sea wall

π @ 430 S Run

S 88° 53' W @ 33 - Re-set 90 d

spike π over 33 FS S 88° 53' W

Run South 120 set 90

d spike pt for IM on
Top of 4 ft sea wall.

10' N of Water

π over 90 d spike 5 ft So
of E end road bet lots 1-2
Run South @ about 7 ft hit

7" SP Tam 1° 30' R and Run

S 1° 30' W

@ 8 ft Hub @ 50 ft Hub

@ 97 Hub N side broad 6 ft sea wall 8 ft from water

Pin = $0.262 \times 97 = 2.54$ E At 90°

Spike pt for Im Hub 50 gars E 1.31

Hub 8 gars E 0.20. set nails

Run

North bet 1-2- @ 43 set pt for Im 6 ft so of water and 8 ft so of N edge of alder brush

π bet 2-3- Hub 9 ft so of road run South 92 ft set big spike on top broad sea wall 8 ft N of water Then π North 53. Six ft so of water

π bet 3-4 from W of road run South 91 ft for Im on broad sea wall 9 ft N of foot = water edge.

Run north 64 ft Six ft from water set North as per Swamp

14 March 25th 46 continued

2. PM

Harold and I to Jenkins. Ryan
went north - Ryan call his office
at Jenkins to say he is in Hack
I call Ryan from his Jenkins
office and he says he will wait
for me at Red Crown, has sta Hack

Harold and I beat it back
for Hackensack - eat lunch \$1.
at Pine River, @ Hack - Ryan
says meet him at Etha Walker

Ryan at my office want plat
changed -- I tell him "cant do it
coz commissioners meet in 6 days

Ryan thinks we will have
time to change plat but I doubt

Ryan rushes back to Jenkins
to get money from his safe. Says
he will send me \$130.00 order to-
night He only has an hour to get
to Jenkins (40 miles) and get my
\$130. in the mail Elsie Miller left
with Walt. Gertrude has her picture
taken. I sleep with Don

John W. Curran

March 26-1946.

Find P.O. Money in the mail
\$130. from Ryan - Nelson Mfg Co
Ch \$35. First quarter exp

I deposit \$130. Ryans P.O.
then give Harold my ch for \$130.

Harold gives
Store bill in full \$123+

I Cash Nelson Co Ch Deposit \$25
Keep \$10. Dinner at home

Buy ball plater 45¢ 60¢ spike 45¢
Gas 2.50 oil 26 = \$2.76 Bennett

PM

Harold and I at Hack

Buff T over 90° spike but L to 5-6
ft point 10 ft N of 2 old wood ch
South 81 ft set 60° spike pt for 2 m
N side of sea wall 4 ft N of end of
sea wall and 8 ft N of foot at water

North from T @ 69 Swamp @ 91 L
but palist land @ 219.

16

Kendall North Shore Birch Lake

π 2 ft so of & road bet Lake 6-7 Run

South 74 ft set 60 d spike foot of seawall
on N side of wall 10 ft N of wall

π run North abt. 1 ft bet 2 6" lines
turn $1^{\circ}30'$ R and run N $1^{\circ}30'$ E Bet 6-7

@ 80 ent wet land abt 226 abt 300
30 ft so of sated land

226

@ 160

$$\begin{array}{r} 66 \\ 160 \end{array}$$

Tang = 262

74.000

$$\begin{array}{r} 226 \\ 300 \\ \hline 66 \end{array}$$

80 gers W

2.10 W

234

160

y

4.20 W

74

226

W

5.92 W

160

262

80

2096

262

16

$$\begin{array}{r} 1572 \\ 262 \\ \hline 4192 \end{array}$$

262

226

1572

524

$$\begin{array}{r} 524 \\ 12 \\ \hline 592 \end{array}$$

π 3 ft so of & of road bet Lake 7-8
South 69- set 60 d spike ft-
fir Im on foot of seawall
N side

North 64 set 60 d spike
Im ent low land

π 35 ft N of & road run Bet 9-10
 South 53- set 60° on a foot of
 ridge sea wall 4 ft N of top of
 6 ft hi ridge and 15 ft N of water

Run

North 9-10 ^{Set} @ 12 ft top of E-W ridge
 @ 24 foot of ridge @ 85.1 spike pt for
 I.M. 10 ft so of water in swamp
 Fr N 69° 20' W

π 5 ft N of & road Bet Lats 10-11 Run
 South 45.3 set 60° pt for I.M.
 foot of North side of 6 ft hi
 ridge on sea wall and
 15 ft from water

Run

North @ 24 top of ridge
 @ 40 foot N side of ridge
 @ 84 set 60° pt for I.M. 15 ft so
 of water

18

From road on W. side
Lat 11° 14' north

@ 35 top of ridge @ 50 foot
@ 112 enter water in low land
not swamp

35 - 50 - 112

March 28-1946

Carl A. Ryan comes to Walker

All go back to Hachensack

Harald. Carl and I look up
road N of Swamp across

Kendall 1100 x 300 ft

Lot 4 Sec 13-140-31

N. Side 33 ft road for Ryan

Bag @ $\frac{1}{4}$ Cor on E. Side

Sec 13-140-31 Run

South 67.77 ft then

N $78^{\circ}30'W$ 339.82 to pt 333.00

West from $\frac{1}{4}$ Cor

Then S $76^{\circ}30'W$ 974 ft

Then S $51^{\circ}W$ - 578 ft - -

To SE Cor Lot 9 - of Plat of
Peaceful Shores

Ryan gives me his check \$200

I deposit ch and give Harald
my ch for \$100. also ch \$14.44 to
Mrs Pearl Anderson in full for my
old Store bill with Harry Anderson

James Curo

20

March 28-1946 Cont'd

I gave Est Natl Bk W alken
 $\$24.78$ on my note ag ainst my
 car. All I owe the bank now
 is $\$50.+$ about $\$4.$ interest

Figuring at Ctho

$$S 78^{\circ}30'E 339.82 \text{ To pt } 17.77 S. of 1/4 = 11^{\circ}30'$$

Sine 1994

$$\cos 97992 \times 306.15 = 300 \text{ on R of way}$$

$$\text{Tang } 2035$$

$$33.68$$

$$67.77$$

$$101.45 \approx 101.45 \text{ Ao on R of Line}$$

From 333 West run $S 76^{\circ}30'W$
 $= \text{West } 13^{\circ}30'S$

Sine 2334

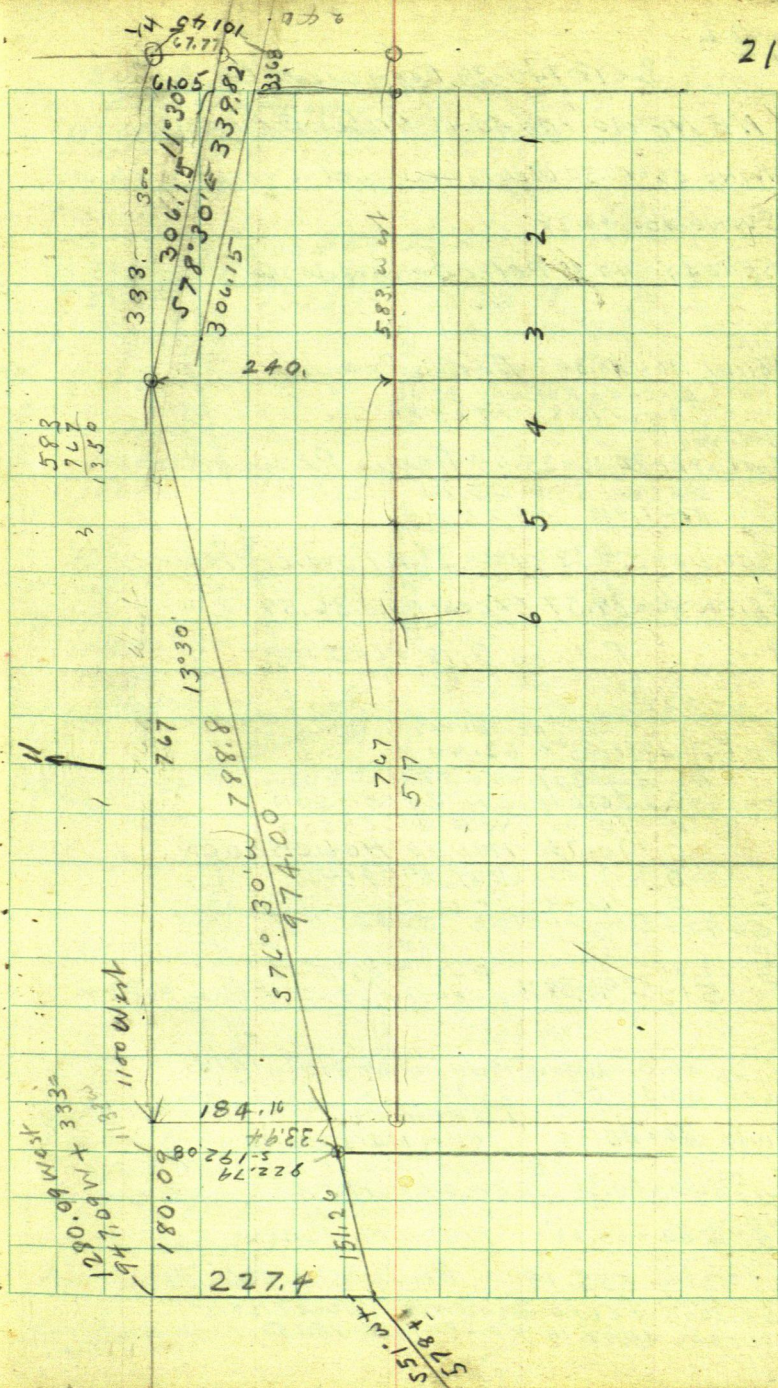
$$\text{Tang } 2401 \times 767 = 18415675$$

$$\cos 97237 / 767 (= 788.7943$$

$$\cos 97237 / 33 = 33.94$$

$$97237 \times 974 = 947.09$$

$$\text{Tang } 2401 \times 947.09 = 227.40$$



Sec 18-140-30 Reg'd Deeds Office

NE NE 40. - Re 40.46 Arthur G. Preston

NW NE 40 = 40.50 Weyerhaeuser et al

SW NE 40 = 40.28 "

SE NE 40 = 40.38 Peter Dennis Dry 40.29^{Lake 0.09}

NENW 40 = 40.34 Agnes Pearson

" EXCEPT R of way 39.06 "

R of way 1.28 M + IRR

NWNW

Gov Lot 2 = 24.00 = 25.65 Agnes Pearson

" EXCEPT R of way 23.74 "

R of way 1.91 M + IRR

Gov Lot 3 = 32.3405 = 33.10 Fowler & Yawkey

SE NW 40 = 39.57 EXCEPT R of way 36.59 "

" R of way 3.18 M + IRR.

RE-SURVEY

Gov Lot 4 = 60.95 = 62.44

R of way 3.21 M + IRR

Tract A = 36.04 S. P. Sorenson

" B 10.00 W. E. FICKSON

" C 10.75 MAUDE HOLLENBACK

" D 1.00 ROY RINGIUS

" E 1.00 "

CORROD on W side 0.44

Gov Lot 5 = 37.90-38.11 R of way 3.09 M + I

EXCEPT R of way 35.02 Henry Bohrt

NESE 40.15 Lake 17.10 James W. Miel

NESE 40.42 Dry 23.32 " "

NWSE 40 = 40.35 L. J. Hemen

and HELEWIS

SWSE 40 = 40.36 EXCEPT R of way Chester Carlson

R of way 0.06 M + IRR

SESE 40. = 40.43 Nora M. Jones

US Total 555.19 Re-Survey 562.39

By John W. Curo Contract of June 1-1915

Survey June 19 to Sept 15-1915

24

Ryan. Birch lake

Some of the Notes on Ryan's
Survey, found on paper in this book

From $\frac{1}{4}$ run south 438.3 spits on
ridge

N.P. 12 N $88^{\circ}14'E$ 25.5

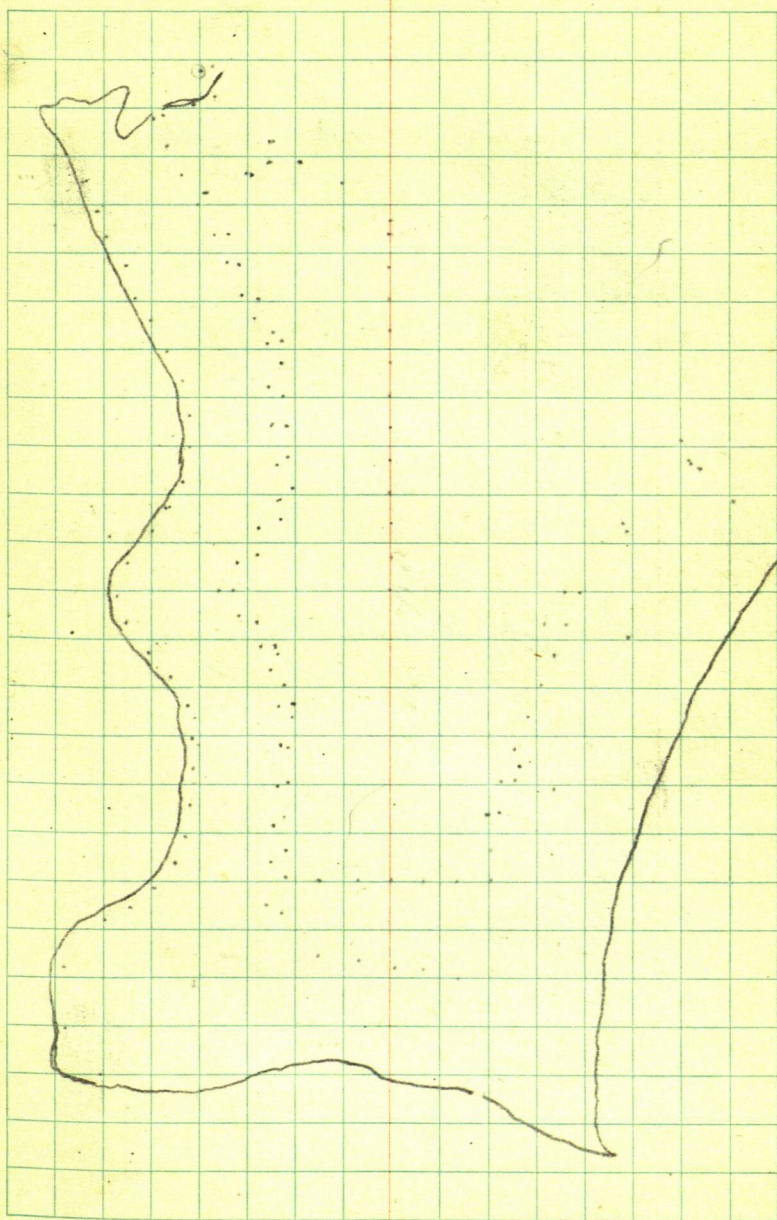
Birch 9 N $52^{\circ}23'W$ 31.2 to spot 3' 410

Tover 4383 run S $68^{\circ}50'W$
252.10 spits on bank?

Tover 252.1 continues S $68^{\circ}50'W$
@ 1179.58 spits on ice -- 1100 straight
west

Tover hub 1179.58 run North
@ 1915 spits on sea wall 18 ft N of
water's edge

T still @ 1179.58 continues
S $68^{\circ}50'W$ 1200-1500-1800 pin
on ice + plus 213.5 = 2013.5 spits
on point @ Narrows. Stopped?



Ryan - Sec 13-140-31 29
Platting unplatted part of Ryans

Nov 23-1948 Tues.

J.W.C. in bed.

I take Walt + Glen
Miller in J.W.C's Carto/Hackensack
to drive in I.M. on Carl Ryans
back lots arrive @ 10:45 AM.
Over I M $\frac{1}{4}$ Cor site south
on sec line and set
hubs for string intersection
of sec line and back end
of lots - Cont back of lots
to intersection

Over intersection hub
read angle, SW $52^{\circ}50'$
No reading glass

intersection hub is 193.70 S
of $\frac{1}{4}$ I M

Lot stake is 50.7 SW of intersection

~~Set~~ I Ms + reset I Ms

Need 2x2 stake marked 26-27
set I M @ 23-24 - 26-27 @ 1-street
@ 34-35 - drive I M on back
lots quit @ 340

Glen + Walt get in 5 hr each.

30

Ryan Hackensack
sec 13-140-31

Nov 24-1948

Walt & Helen go cut pulp
I take Donald & Gertrude
with me To sec. 13-140-31
We run Lot lines

Home late
Get Duck @ Hackensack
for tomorrow's dinner

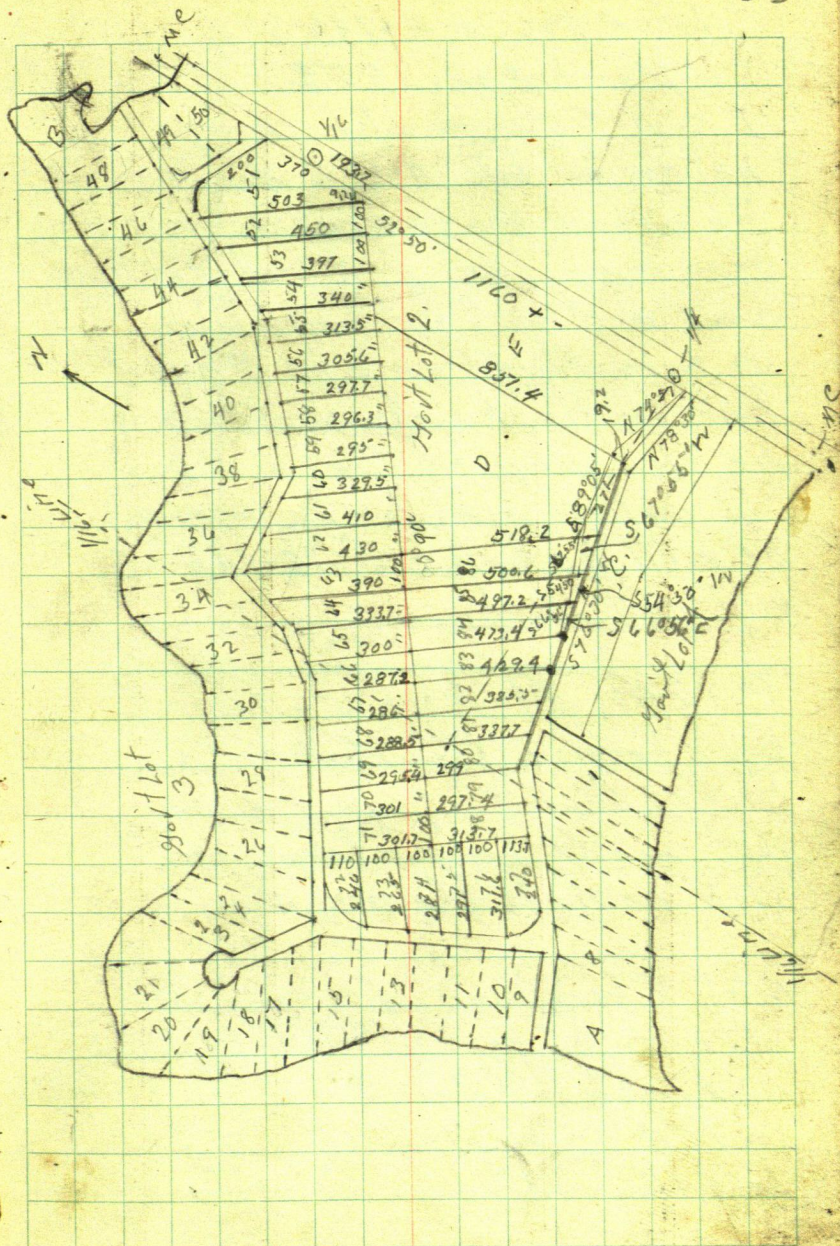
figuring @ Court House

$52^{\circ}50'$

$37^{\circ}10'$

Sine 604136

Cosine $796002 \div 33 = 41.46$



AL WOOCK of Hackensack
Lots 4-5-6 Sec 4-140-31

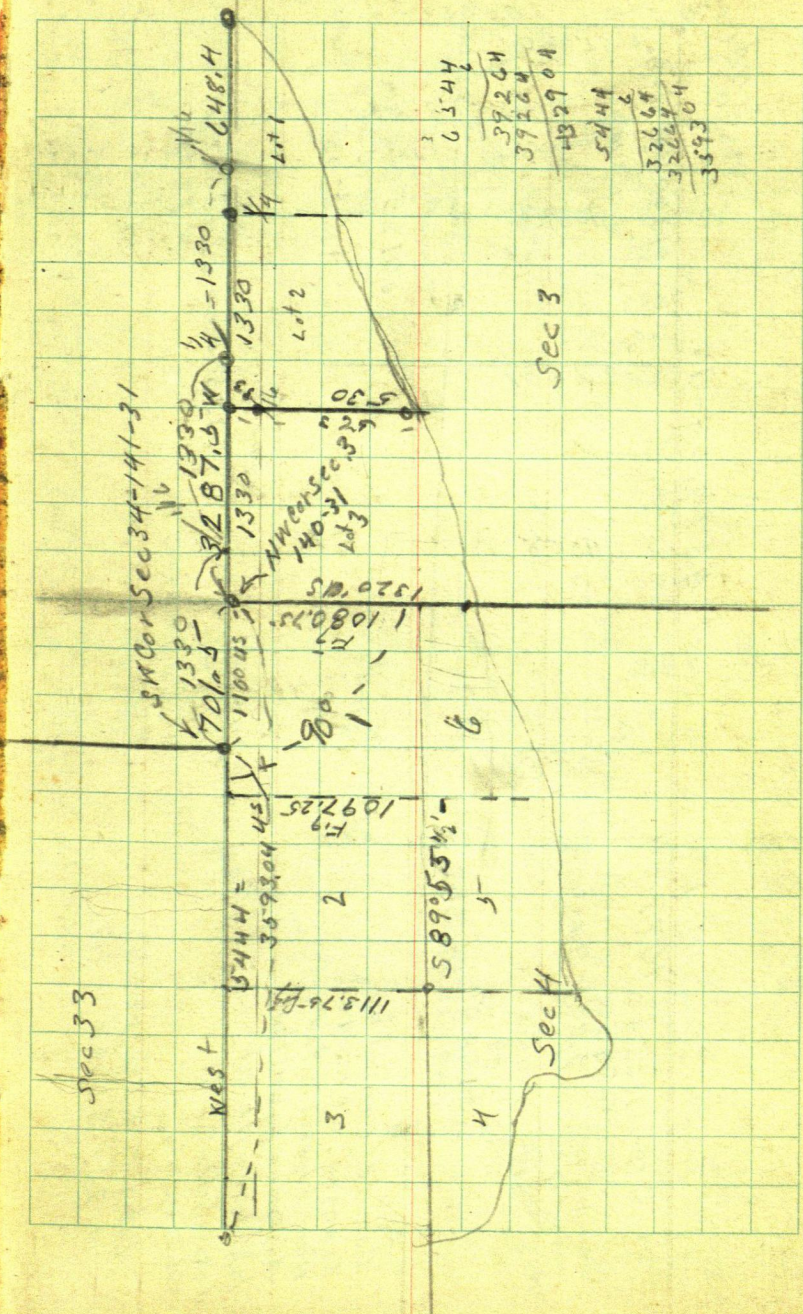
March 2nd-1953

I call Al Woock of Hackensack
he owns Lots 4-5-6 Sec. 4-140-31
He asked me to run the lines a
year or so ago. bad weather
and did not get lines run
a month or so ago I meet
him in Hackensack. He said
he still wanted the lines run.

I called him today @ 10-45
he will be home @ 12-30 and
will call back.

@ 12-45 Al Woock called me
back from his farm out of
Hackensack. Says he has
not made any plans yet
will be in to see me soon

Note: I have been checking over
old notes of surveys made by J.W.C.
as he platted Lots 1 & 2 Sec 3-140-31
and Lot 3- Sec 34-141-31 for Cookin
Sard Plat. Known as Chariton Beach



Section 4-140-31

1320
1080
240

Tenth Sta Parallel

1679.04

1105.50

1089.00

7.50 ft slope in 1320'

1105.50

1089

2 2294.50

1097.25 bet lots 2

West 4319.04-45

1320 US

1092.60

1105.50

1092.60

1320 US

331

1089.00

NE Cor Sec 4

Sec 1142-132045

Sec 3

Corrections
0.01259 for each
ft West =
0.043'

33' in 1/2 mile

33 acres = 213300

1680

1660 changed 1

1466

9900

9900

1087.00 ft through center lot 1

2nd

3350 acres = 213350

1675

1675 change

66

10050

10050

1105.50 through center lot 2

This course cannot be changed. No matter what happens to the distance from the lake to the NE cor. Shoreholder's lake. Shore only

Lot 1 = 33 Acres 45

" 2 = 35.50 " 45.

38

Al. Woock - Tern Mts. lake

March 2-1953 Sec. 4-140-31

Old Notes Book 415 pg. 50

T@ 3989 W- I.M.S.W Cor Sec 34-141-31

sets S 88° 20' W 51.0 ft

Tower I.M. BS N 88° 20' E

old uprooted pine bears N 67° 30' E 6.0

14" W.P. stump N 67° 30' E 12.00 ft

Old Pine stump N 14° W 18.60

Old Pine roots N 23° 15' W 20.50

New B.T.s

6" White Birch 14' 45' W 87.1

5" " " N 71° 25' E 25.1

Pop 857° 20' W 36.6

Page 59.

@ 3035.5 hub on top Ties to RR spike

W. Birch 8 N 11° E 87.90

Br Oak 7 S 40° 25' W 28.9

Green Pop Stump. 9 S 27° 10' E 7.0

@ 3287.5 I.M. N 3 ft = NW Cor Sec. 3-140-31

@ 3736.1 hub. @ 3938.0 hub on ridge hill

@ 3989.0 I.M. SW cor. Sec. 34-141-31

So. 1.5

Sat April 11th? 1933

@ 8 o'clock it is snowing hard in Walker
I go to P.O. for the mail then to the Office
where I call Al. Woock's Res. he has
gone to Sec 4 - 140 - 31 on N side Ten Mile
Lake so I get gas and lunch and drive
to Sec. 4 where I find Al. and 2 of his
boys -? waiting for me. I set a flag at
IM which I think is the NE cor of Sec 4
go west and set tall flag at IM, which
I take for the SW cor. of Sec 33 - 141 - 31
work T on line between these Trons
and as the land is hilly I have a hub-
60" spike set 25 or 30 ft E of SW cor of sec
33 - 141 - 31 T over said hub I find that
the line cut out by Al and his sons
Two years ago is too far South. they
opened up an old line as their cutting
runs for almost $\frac{1}{2}$ mile I want to
use it and not cut out a new line
I pack T West across swp. and set it
up on top of hill site East on the IM
transit Telescope and find that Their line
runs NW and that I will cross their line
We walk west find IM $\frac{1}{4}$? which sets North

7366	440.4	14.4
501.5	296.2	
12381	346	

of their cut out line. I am going to try
and use the cut out line.

P.M.

pack π West and set it up over 60^d
spike in center of cut out line

Sta 00 the I.M. sets N

From 00 we run East on cut out line
calling this Random as E + W.

Tower I.M. V.L. @ 7-30

Ties

N.P. 26" S 82° 37' W 20.05 Sndal

Rd. cut 4 N 9° 24' E 39.35 Base

Tower spike in random line

Sta 00 I.M. bears W 87° 16' N 14.4 ft

run E @ 10 ft enter bog. 300

@ 410 L.V. bog @ 440.4 hub 60^d spike
+ 60 enter bog. 440.4 + 296.2 = 736.6
hub 60^d spike - 30 L.V. bog

Tower 736.6 a 2x2x30" stake
sets E 84° 37' N 8.53 ft.

From hub on top chain W down
hill 501.5 ft to hub 736.6 =

1238.1 W to hub on top + 210 enter
bog 1238.1 + 250 = 1488.1 run on
top + 270 = 17581 pin 10 ft W
of bog

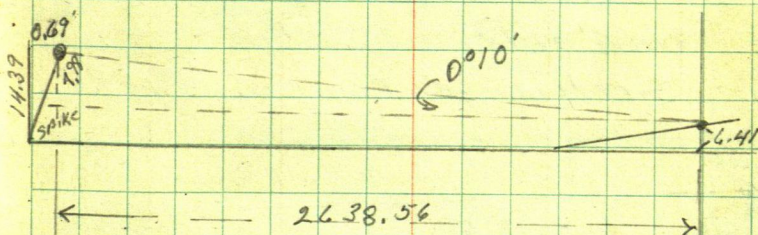
$+ 79.95^\circ$ ^{1838.05} ~~hub on top~~ $+ 3856 =$ ~~hub~~
~~on top~~ 2223.65

Tower ~~hub~~ ^{hub on top} 2223.65 IM bears L or N

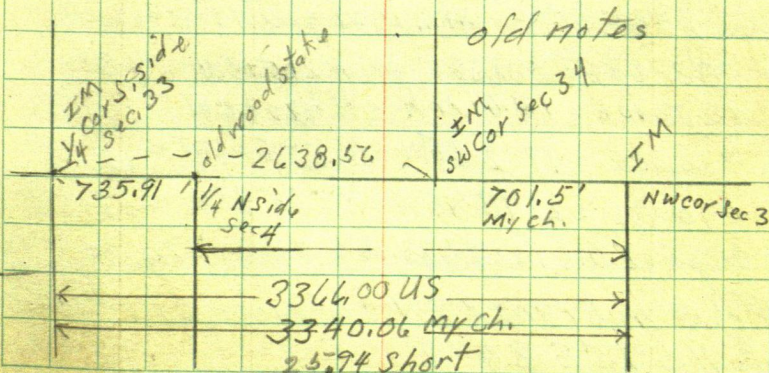
$0^\circ 53'$ @ 210 center bog +

$210 - 4.35 =$ IM, $= 415.65$

Tower IM BS $0^\circ 53'$ R Range line
 runs East $0^\circ 08'$ L or N



$$7.98 \div 2638.56 = 0.0030243769 = 0^\circ 16'$$



$$25.94 \div 3366.00 = .007706476 \text{ short in each ft.}$$

U.S. Notes

Y4

26.40 US =
 2638.56 Mch
 1.44 short

sec con

726.45 =
 701.6 Mch =
 24.9 short

3366 US
 3340.06 Mch
 25.94 short

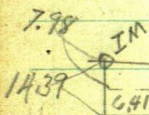
sec con

$$25.94 \div 3366 = .007706476 \text{ short}$$

$$2640 \text{ US} = 2640 \times .007706476 = 20.35 \text{ short}$$

in $\frac{1}{2}$ mile

Correction for ramden. on pg 41



2638.56

IM
6.41

$$7.98 \div 2638.56 = .0030243769 \approx 0^{\circ}10' \frac{1}{2}''$$

$$\text{hub } 2223.65 \text{ E} = 416.60 \text{ W goes } N 1.26 + 6.41 = 7.67$$

$$\text{" } 1838.05 \text{ E} = 801.20 \text{ W goes } N 2.42 + 6.41 = 6.83$$

$$\text{" } 1238.10 \text{ E} = 1401.15 \text{ W " } N 4.24 + 6.41 = 10.65$$

$$\text{" } 736.60 \text{ E} = 1902.65 \text{ W " } N 5.75 + 6.41 = 12.16$$

$$\text{" } 440.40 \text{ E} = 2198.85 \text{ W " } N 6.65 + 6.41 = 13.06$$

$$\text{" } 00 \text{ goes } E 0.69 \text{ to } 2638.56 \text{ W then } N 14.39 \text{ to IM}$$

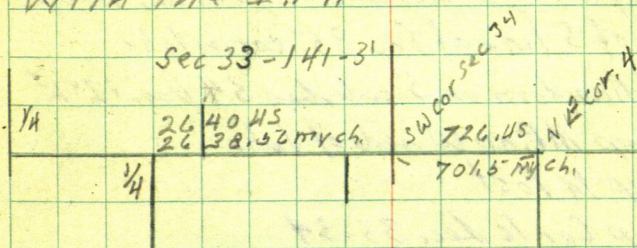
Note: @ hub 1902.65 W old wood 2x2 stake
 sets N $5^{\circ}23'E$ 8.55 ft

N 50° 23' E 8.53'

Sine $145795' \times 8.53' = 125'E$

cosine $989315' \times 8.53' = 8.46 N$

Note: hub 1902.65' W - 1.25' E = 1901.40 W
and sets 8.46 ft South of 2x2x \square stake
which someone has set for the corner
it is 3.70 ft to for South to be in line
with the I.M.



Sec 4-140-31.

Note old 2x2x \square stake is 2602.90 W of
I.M. at NE cor Sec 4-140-31

The swp where this stake sets
check awful close with U.S. Transcript
Notes for distance

fig. Corrections

See page 48

44 U.S. Transcripts Notes

South Boundary Twp 141-31
from cor of Twp 141-30-31. West on random
on S side Sec. 36 N. 31 Var. $11^{\circ}15' E$
2900 marsh N & S

3600 Lr " N & SW

4000 Temp $\frac{1}{4}$ Post

4542. Temp MP. E side lake set flag on line on
West side of Lake & take for base $N 41^{\circ}22' \text{ as } W 1288 \text{ ch}$
bearing to flag $569\frac{1}{2} W$ distance 123.4 ch. therefore
the whole of S line of Sec 35 cor in lake

West on Random on S side Sec 34 Var. $12^{\circ} E$

856 Temp MP on W side of lake

4000 Temp $\frac{1}{4}$ Post

8000 Temp Cor to Sec 33-34

Rolling 1st rate timber Oak Ash asp. Bir Pine Maple

West on Random S. side Sec. 33 Var $12^{\circ} E$

2900 Tanik mp NW-SE

3975 Lr. NW $11^{\circ} SE$

4000 Temp $\frac{1}{4}$ post

5400 " M post on E side lake set flag on
Temp MP.

8000 Cor in lake. On W. side lake on line take
for base $N 11^{\circ} E 1200 \text{ chs}$ bearing to flag on E side
 $S 73^{\circ} E$ dist. 4084

1484 Temp MP W side lake

4000 " $\frac{1}{4}$ Post

4400 marsh 6028 Temp MP E side Lake

6686 Temp MP 7000 Lr marsh

8000 Temp Cor to Sec 31-32

U.S. Transcript Notes

10th Standard Parallel

East True line from Closing cor to Twp 140^N R 903 31-32

2800 1/4 post J.P. 11N 37W 19 40 =

W Birch 7N 48E 12 =

6800 cor to Sec. 31-32 - T 141^N R. 31^W

Yellow Pine 7N 63W 35

Aspin 10N 35E 113

East on true line on S side Sec. 32 V. 114⁵

1315^{Wit. Point} W.P. on W side of Marsh

W.P. 10N 30W 103.

aspin 6N 9W 105

1972 W.P. (wit-point) on east side marsh

aspin 10N 35E 579 Noother tree

4000 1/4 post

W Birch 6N 31W 9

W Birch 6N 42E 10

6590 M.P. on W. side of Lake

Aspin 8N 60W 17

Willow 6S 50W 25

8000 Cor in Lake

East on true line S side 33-Van 12⁵E

2556 M.P. East side Lake

W. Pine 10N 70E 119

Aspin 13S 81 115

U.S. Transcript Notes from book 115.

- 4000 $\frac{1}{4}$ Post
W. Pine 6 N 69 W 13 - 858 ft
W Pine 4 N 8 E 23 - 1518 ft
- 8000 cor to Sections 33-34
WP 8 N 11 W 3-9
J P 12 N 42 E 18
East true line S. side 34 U. 125° E
- 4000 $\frac{1}{4}$ post
Aspen 10 N 60 W 38
Sugar 6 N 52 E 14
- 7160 M.P. on W side lake
W Birch 10 N 20 E 25 Lks
W Birch 8 S 40 W 36 "
- 8000 cor in lake
South side Sec. 35 all in lake
East true line S. side 36 U. 1120° E
- 3458 M.P. on E side lake
Y Pine 16 N 20 E 14
Y Pine 15 S 21 E 39
East true line S. side 36 U. 1120° E
- 4000 $\frac{1}{4}$ Post
Dry Pine 24 N 49 W 125°
W. Birch 3 N 11½ E 29
- 8000 Marked W Birch 15 ins. diam for cor to
Pg. 30-31 Twp 14 N. Lind 8 N 30 W 23
Ironwood 5 N 27 E 15°
May 4 1864

Twp 140 R9c 31
Sketch Notes

47

A = NW Cor Twp

Aspin 8 S 70 W 14

W Birch 8 S 35 E 13

B - Sec 5-6 - 140-31 W Oak 20 S 26 E 17

Aspin 4 North 10 W P. 24 S 29 W 19 4

C = Sec. 4-5 - 140-31

in Lake

Asp. 10 S 66 W 22
" 8 S 88 E 32

D - Sec. 3-4 - 140-31

Blk Pine 12 S 19 E

Blk Pine 8 S 17 W

40 9
90 9
60 1

→ Tamk 9 S 66 E 44 = 29.04'

BO 9 S 30 W 108 = 71.28'

2640.45

2638.56 mych

726.45

701.5 mych

3366.45

3340.06 mych

25.94 short

Corrections - 007706476 short
in each ft in Sec 4-140-31

2640.45 X .007706476 = 20.35 short

in E $\frac{1}{2}$ mile of Sec. 4-140-31

Note: the 2x2x8" stake 1901.40 W
of S E cor Sec 38-141-31 should
go West 16.76 to 1918.16 which
would put it 2619.66 ft W of the NE
cor of Sec. 4, 140-31 and should
go N 3.70 ft to be on line

$$8' = 002327 \times 701.5 = 1.63 \text{ ft}$$

$$10\frac{1}{2}' = 0030545 \times 2638.56 = 8.06 \text{ should be } 7.98$$

7.98

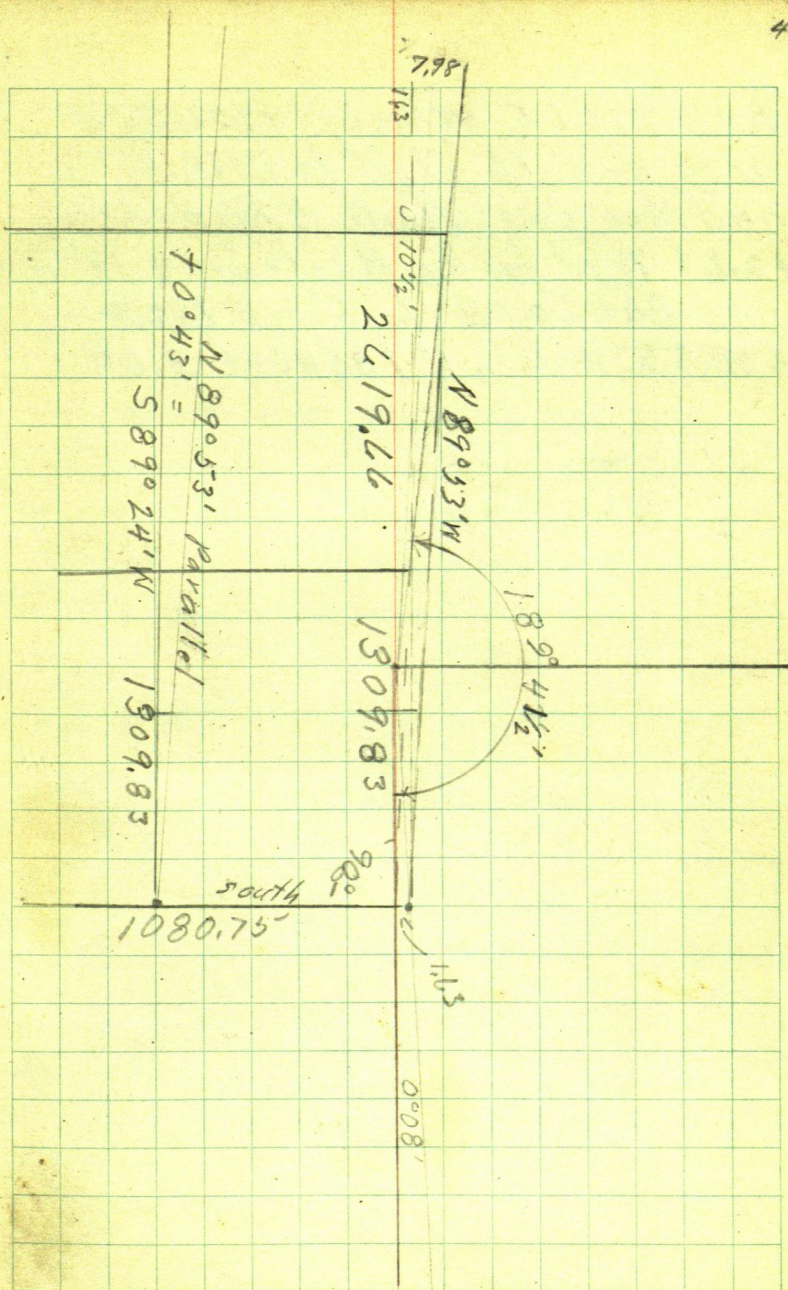
1.63

6.35

$$2638.56 + 701.5 = 3340.06$$

$$6.35 \div 3340.06 = .0019011634 = 0'07"$$

0'07"



hub 736.6 E which is 1902.65 W
goes West 15.57 ft to 1918.16
and then goes North $5.80 + 6.41 =$
12.21 to pt for $\frac{1}{4}$ N side Sec 4-140-31
hub 801.20 W should go E 192.87 to
608.33 W then N 18346.41 = 8.24

Thurs Sept. 24 -

I copy plat of Long beach in Reg. of
deeds office get my books
dinner at home
P.M.

Pick up Sawyer drive to Long Beach
arrive about 2 p.m. look for I.M.

Travel a 2" I.M. (think is same on S
'/16 line site NEly on I.M. (?) Turn
R. $35^{\circ}27'$ Note this does not seem to
check with anything

I find another I.M. 225 ft \pm passed
W. of this 2" I.M.

Will look up (Crabb)

as we can not find where to
start we go to I.M. SW cor of Street
SE Cor Lot 22 B/K 1 plat of Long Beach
Travel I.M. site NEly on I.M. SW cor
to 1 B/K 2 of same plat Turn R.
 $183^{\circ}40'$ and run Temp. line SW
for back of Lot 12-20 of B/K 1

quit @ 5 - rain

Fri. Sept 25th 1953

I pick up Sawyer at Bills. - cloudy cold wind. We stop at Court House where I check my plat with Reg. of Deed. plat as Mr. Cole told me yesterday that lots 13 to 21 were 52.5 ft along street and that only lots 12 and 22 were 52.5 when I said that they were all 52.5 - Lots 12 to 22 He said that he had looked this up to be sure when he was in Walker. That only 12-22 were 52.5, the rest were 50 That is the reason I checked as my Plat show them all 52.5 which is correct with Reg. Plat.

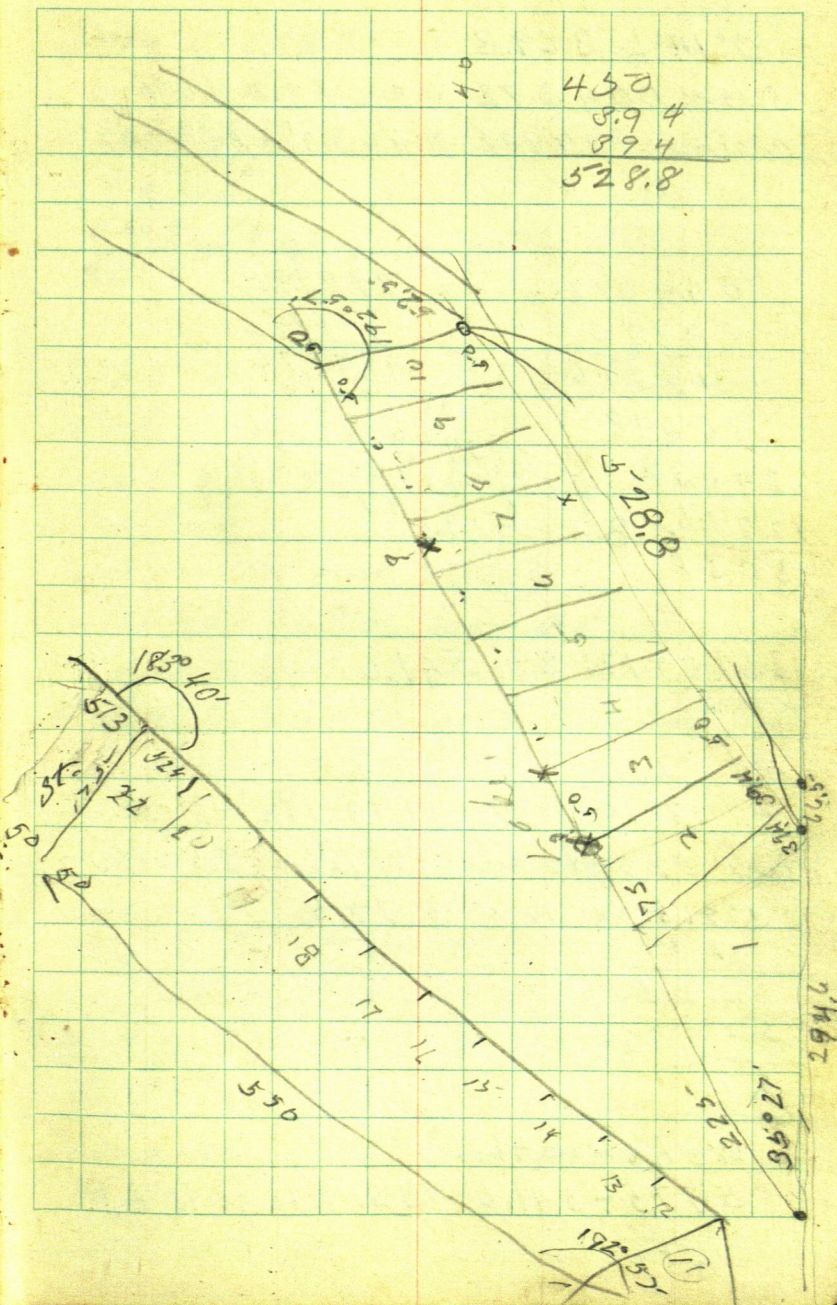
We arrive at Long Beach @ 10 o'clock

From I M SW cor of street run back lot line @ 172.3 hub as this line will hit a tree we will have to swing our line to get by

Angle 172.3 BS on I M Transit. Tape & ran but the swing L or S $0^{\circ}14'$ - @ 202.30 hub + 167 hub $202.3 + 167 = 369.3$

Continued on page 54

450
 8.9 4
 89 4
 528.8



$$0^{\circ}14' L \quad 369.3$$

$$\text{Sine } .004072 \times 369.3 = 1.50$$

$$\text{Cosine } 999992 \times 369.3 = 369.297$$

$\begin{array}{r} 004072 \\ \times 3693 \\ \hline 12216 \\ 36648 \\ 24432 \\ 12216 \\ \hline 15037 \end{array}$	$\begin{array}{r} 999992 \\ 3693 \\ \hline 2999976 \\ 8999928 \\ 5999952 \\ 2999976 \\ \hline 36929704 \end{array}$
---	---

$$369.3 + 172.3 = 541.6$$

Lot 12 is 52.5 ft wide

" 13-14-15-16-17-18-19-20-21-22

are 52.5 ft wide - 11 lots 52.5 wide -

$$52.5 \times 11 = 577.5$$

$$\begin{array}{r} 11 \\ \hline 525 \\ 525 \\ \hline 577.5 \end{array}$$

We have 541.6.

$$577.5 - 541.6 = 35.9 \text{ to go to A.P.}$$

$$\begin{array}{r} 541.6 \\ 35.9 \\ \hline \end{array}$$

0°14' L 202.3

004072

2023

12216

8144

8144

8237

hub 202.3 goes R. .82 of ft to Temp
Stake line

hub 369.3 goes R. 1.50 to Temp
Stake line

We correct hub 202.3

also hub 369.3 from A.P.

Tower corrected hub 369.3 B.S. on corrected
hub 202.3 and continues line 35.9 ft to
A.P. as shown on plat

Tower A.P. B.S. on corrected hub 202.3

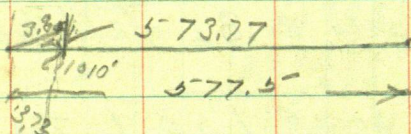
Turn R. 192°57' and run random back
lot line but into 14" Poplar tree - 2 or 3 inches

We find an I.M. at cor to lot 6 chain
from T 246 ft we start digging
4 ft from T and find old 2x48" I.M.
best we dig this I.M. up and put
in a new 2x48" I.M. in ~~the~~ old hole
old I.M. lying down

Tower still over our Random
but A.P. Site on corrected but
202.3 I M bears L $11^{\circ}10'$ 3.8 ft
 $11^{\circ}10' - 3.8$ ft

$$\text{Sine } 193664 \times 3.8 = 74$$

$$\text{Cosine } 981068 \times 3.8 = 3.73$$



$$\begin{array}{r} 577.5 \\ 3.73 \\ \hline 573.77 \end{array}$$

$$573.73 \text{ into } 74 = 1.00129$$

but 172.3 goes toward the lake .32

" 202.3 = 374.6 goes toward lake .48

Crescent Beach platted by Green
Book 193

Meet George Allin around the
6th of April he tells me he has
a letter from a man in Iowa
for me to get the corners to his
lot on Ten Mile lake. says he
will be in the end of the week
and take me out and show
me where the lot is located

Allin never showed up
Friday Allin is looking for me
he gives me the letter he received

Cpy.

Christiansen Bros. Hardware
hardware Plumbing Electrical wiring
Ringsted Iowa

4/13/54

Dear Mr. Allin

Received your letter this morning,
so will answer it right now. Yes I would
like the County Surveyor to stake out
my lot so will appreciate it if you
will tell him to do so.

Will you please let me know how you
come out with the surveying

I will be up there sometime in

April and then will settle with the County surveyor, or if he wants it before, mail me a bill and I will send it to him

Thanks again for all of your trouble

Sincerely

Kermit Christiansen

I check the records and find that Kermit Christiansen owns lot 17 of Crescent Beach on Ten Mile Lake being a part of Lot 3 Sec. 25-T 141-31

Copy the plat that is on file and figure the locations of the NE + NW cor. of lot 17 from the NW Cor of lot 1 being on the W sec. line

Using the Sec. line as N + S and running Easterly along the side of Highway 80 figuring the courses shown on filed plat

The NW Cor of lot 17 is 940.27 ft East and 237.38 ft S from the NW cor. lot 1 which is 318.7 N of MC on Ten Mile lake

Note) If I can find the two MC
 set by Green one on Ten Mile
 Lake and One on Portage I
 can chain N 318.7 along
 the sec line bet said TMs
 then run along the highway
 until I get 940.27 ft E
 and 237.385 and I will be
 at the NW Cor Lot 17

from NW Cor run S 63°20'E
 53.95 to NE Cor

from NW Cor run S 16°14'W to
 the lake for the West line

from NE Cor run S 16°52'W
 to the lake for the East line

Sat Apr. 17-1954

Don & I drive to Ten Mile
 Lake W Section line Sec. 25
 T41-31

I M MC south side of Portage
 Lake in water bent over find I.P.
 on bank set by Gus Hole
 Brainerd. at NW Cor lot 1 - Crescent
 Beach find another one of Gus's I.P.

^{over road}
251 + 33.8 - 338. - 318.7 -

321.9
1.1
318.9

61

on the N Bank of Ten Mile lake
find M.C. I 1st.

beg at Gus's I.P. N.W. cor lot 1
chain South at 100.1 pin + 1.3 old
hub. $100 + 110 = 210$ pin + 110 = 3.20 -
1.1 = 318.9 from Center of M.C.
on N side Ten Mile lake to center
of I.P. at N.W. cor lot 1

from iron pipe chain 33.8 to 4
road + 33.8 = 67.6 spike near lot 1 pin
N line of R of W of Road = 60th spike
from 60th spike chain N 200 pin
+ 40 = 240 pin - 4.05 = 236.95
iron pipe set by Gus.

@ 240 + 11 = 251 old M.C. is tipped
south. and out in lake. could check
out for distance.

To check if Gus's iron pipe line up
set it on Gus's hub. 101.3 s. it on M.C.

Tower 60' spike & road 33.75'
 ft N of NW iron pipe cor Lot
 1 site South and run $S 81^{\circ} 42' E$
 along road 710 + 4.9 A.P. ①

Tower A.P. 1 site N $81^{\circ} 42' W$ on
 00, and run $S 63^{\circ} 18' E$ along N
 side of road. 519.05' to A.P. ②

A.P. 1 is 7.5' S of S sign post
 Camp Iowa cabins in line with
 post A.P. 2 is 7 ft S of Tele +
 light poles.

Figureing

Sta 00 = 33.75' ft N

run $S 81^{\circ} 42' E$ 714.9

Sine $989526 \times 714.9 = 707.41 E$

Cosine $144356 \times 714.9 = 103.20 S$

Sta 1 =

run $S 63^{\circ} 18' E$ 519.05'

Sine $893371 \times 519.05 = 463.70 E$

Cosine $449319 \times 519.05 = 233.22 S$

$893371 \times 400.05 = 357.39$

$449319 \times 400.05 = 179.75$

Sta 00 = E road, 00 E + W 33,76 N ⁶³

Sta 1 is 707.41 E and 103.20 - 3375 =
69.45 S of NW Cor lot 1

Sta 2 is 707.41 + 463.70 = 1171.11 E
+ 69.45 + 233.22 = 302.67 South

Want a point 940.27 E and
237.38 S from NW Cor lot 1.

From Sta A.P. 2 run West 230.84
ft. then North. 65.29' to NW Cor
Lot 17

NE corner lot 17 is

988.48 ft E 261.59' S from NW cor 1

1171.11 - 988.48 = 182.63

from Sta AP 2 run W 182.63 to SE cor 17
then N 41.08 to cor

179.75 - + checking fig.
169.45

249.20 S Sta ③ AP

Location of NE Cor S 261.59
249.2

Sta 3 goes South
to NE cor lot 17

12.3.9
Check O.K. N+S

Easter Sunday PM

Don Bob & I drive to Ten Mile lake

Then over Sta A.P. 2 site N $63^{\circ}18'W$ on Sta 1 - run W. but garage

Still at Sta 2 run N $63^{\circ}18'W$ 1.64 ft. out sta ③

From A.P. 2 run N $63^{\circ}18'W$ 119 ft

Sine $893371 \times 119 = 106.31 W$

Cosine $449319 \times 119 = 53.47 N$

Sta 2 is 1171.11 E & 302.67 S

" " - 106.31 W & - 53.47 N

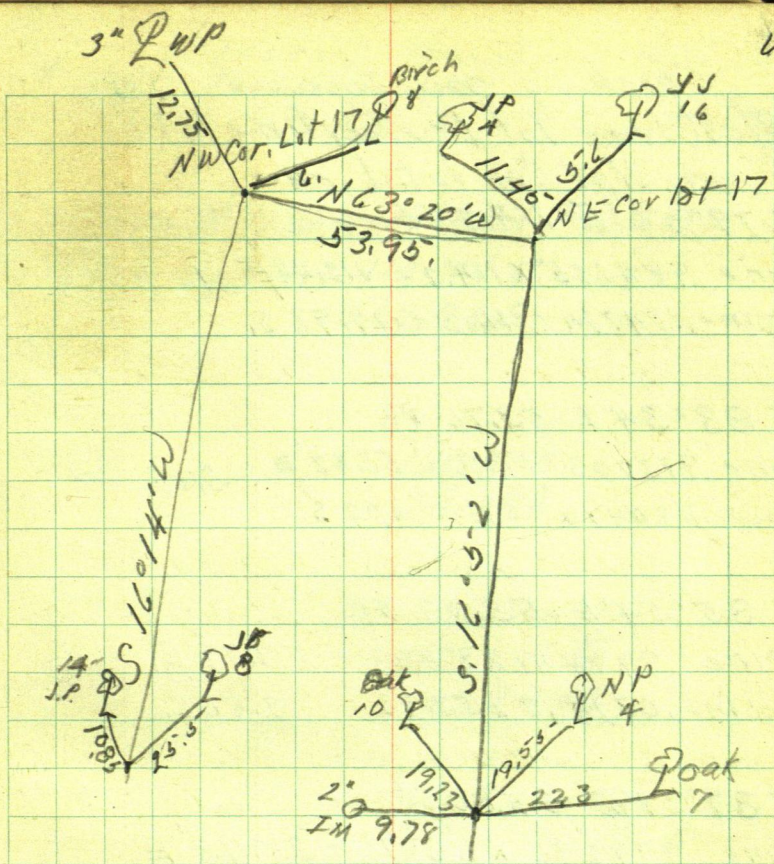
Sta 3 is 1064.80 E - 249.20 S

NE Cor is 988.48 E 261.59 S

Want 76.32 W 249.20
12.39 S

From Sta 3 NE Cor Lot 17. nts.

West 76.32 ft and N 12.39 ft.



Checking my figures

West line lot 1 - Acc. line N + S.

From NW Cor lot 1 run

$S 79^{\circ} 56' E$ 114.2 ft

Sine $.984605 \times 114.2 = 112.44' E$ Sta 1 \rightarrow

Cosine $.174794 \times 114.2 = 19.96 S$

$S 83^{\circ} 34' E$ 53.76 ft.

Sine $.993703 \times 53.76 = 53.42' E$ Sta 2 \rightarrow

Cosine $.112047 \times 53.76 = 6.02 S$

$S 85^{\circ} 54' E$ 53.93 ft.

Sine $.997441 \times 53.93 = 53.79' E$ \rightarrow

Cosine $.071497 \times 53.93 = 3.86 S$

$S 87^{\circ} 51' E$ 35.96 ft

Sine $.999296 \times 35.96 = 35.93' E$

Cosine $.037516 \times 35.96 = 1.35 S$

$S 88^{\circ} 11' E$ 18.20 ft

Sine $.999497 \times 18.20 = 18.19' E$

Cosine $.031702 \times 18.20 = 0.58 S$

$S 86^{\circ} 24' E$ 54.10 ft

Sine $.998027 \times 54.10 = 53.99' E$

Cosine $.062791 \times 54.10 = 3.40 S$

Crescent Beach
Ten Mile Lake

67

From NW Corner lot 1 = Sta 00

Sta 1 is 112.44 E
19.96 S

Sta 2 is 165.86 E
25.98 S

Sta 3 is 219.65 E
29.84 S

Sta 4 is 255.58 ft E,
31.19 ft S.

Sta 5 is 273.77 ft E
31.77 ft S,

Sta 6 is 327.76 ft E
35.17 ft S.

S 83° 03' E 80.90 ft

$$\text{Sine } 992652 \times 80.90 = 80.31 \text{ E.} \rightarrow$$

$$\text{Cosine } 121003 \times 80.90 = 9.79 \text{ S.}$$

S 79° 01' E. 80.80 ft.

$$\text{Sine } 981683 \times 80.80 = 79.32 \text{ ft E} \rightarrow$$

$$\text{Cosine } 190523 \times 80.80 = 15.39 \text{ " S.}$$

S 76° 30' E 20.10 ft

$$\text{Sine } 972370 \times 20.10 = 19.54' \text{ E}$$

$$\text{Cosine } 233445 \times 20.10 = 4.69' \text{ S}$$

S 76° 00' E 33.80'

$$\text{Sine } 970296 \times 33.80 = 32.80 \text{ ft E}$$

$$\text{Cosine } 241922 \times 33.80 = 8.17 \text{ " S}$$

S 76° 00' E 53.90 ft

$$\text{Sine } 970296 \times 53.90 = 52.30 \text{ ft E.}$$

$$\text{Cosine } 241922 \times 53.90 = 13.04 \text{ " S.}$$

S 76° 00' E 4.62 ft

$$\text{Sine } 970296 \times 4.62 = 4.48 \text{ ft E}$$

$$\text{Cosine } 241922 \times 4.62 = 1.12 \text{ " S}$$

S 74° 17' E 49.28

$$\text{Sine } 962613 \times 49.28 = 47.44 \text{ ft E}$$

$$\text{Cosine } 270880 \times 49.28 = 13.35 \text{ " S.}$$

Sta 7 13 408.07 ft E
44.96 " S

Sta 8 13 487.39 ft E
60.35 " S.

Sta 9 13 506.93 ft E
65.04 " S.

Sta 10 13 539.73 ft E
73.21 " S.

Sta 11 13 592.03 ft E
86.25 " S.

Sta. 12 13 596.51 ft E
87.37 " S

Sta 13 13 643.95 ft E
100.72 " S.

S. $70^{\circ}43'E$ 54.10 ft

Sine $943897 \times 54.10 = 57.06' E$,

Cosine $330240 \times 54.10 = 17.87' S$.

S $67^{\circ}01'E$ 54.40 ft

Sine $920618 \times 54.40 = 50.08' E$

Cosine $390463 \times 54.40 = 21.24' S$

S $64^{\circ}15'E$ 26.50 ft

Sine $900698 \times 26.50 = 23.87' E$,

Cosine $434445 \times 26.50 = 11.51' S$.

S $63^{\circ}20'E$ 28.20 ft

Sine $893633 \times 28.20 = 25.20' E$

Cosine $448799 \times 28.20 = 12.66' S$.

S. $63^{\circ}20'E$ 54.75 ft

Sine $893633 \times 54.75 = 48.93' E$

Cosine $448799 \times 54.75 = 24.57' S$

S $63^{\circ}20'E$ 54.50 ft

Sine $893633 \times 54.50 = 48.70' E$

Cosine $448799 \times 54.50 = 24.46' S$

Sta. 14 15 695.01 ft E
118.59 " S

Sta 15 15 745.09 ft E,
139.83 ft S.

Sta 16 15 768.96 ft E
151.34 " S.

Sta 17 15 794.16 ft E
164.00 " S.

Sta 18 15 843.09 ft E
188.57 " S

Sta 19 15 891.79 ft E
213.03 " S

S 63°20'E 54.25 ft.

Sine $893633 \times 54.25 = 48.48' E$

Cosine $448799 \times 54.25 = 24.35' S$

S 63°20'E 53.95

Sine $893633 \times 53.95 = 48.21' E$

Cosine $448799 \times 53.95 = 24.21' S$

From a point 33.75 ft N of
line called N+S on plat
road S 81°42'E 714.90 ft

Sine $989526 \times 714.9 = 707.41' E$

Cosine $144336 \times 714.9 = 103.20' S$

fig from NW Cor lot 1 - 103.20 -

33.75

69.45

Run S 63°18'E 400.05

Sine $893371 \times 400.05 = 357.39' E$

Cosine $449319 \times 400.05 = 179.75' S$

From Sta 2 I run West
to a point 988.48 ft E and
Then I run South 12.39 ft.
From NE Corner Lot 17 I
milk Lake

Sta 20 is NW Cor Lot 17 and is
 Located 940.27 ft E. From NW
 237.38" S. Cor Lot 1.

Sta 21 is NE Corner Lot 17 and is
 Located 988.48 ft E from NW
 261.59 ft S cor Lot 1

NW Cor Lot 1 - on W Section
 Tower 33.75' N I run along
 to 60 degree A.P. ①

Sta ① is 707.41' E of
 69.45' S of
 NW Cor Lot 1.

Sta ② is 1064.80 ft E
 249.20" S

$1064.80 - 988.48 = 76.32$ ft
 249.20 ft S from NW Cor Lot 1
 to NE cor Lot 17
 run S $16^{\circ}52'$ W to shore of Ten

April ^{Thu} 20 1954

Herb + I to Ten Mile Lake Lot
17 Crescent Beach

From NE cor Lot 17 chain
South along E side Lot 17.

@ 60.80 hub 60' spike + 58.15 = 118.95
hub 60' spike + 64.05 = 183.00 hub
60' spike on rock + dirt around trees
+ 66.00 = 249 hub 60' spike 3:35 N
of E cement wall, point for I.M.

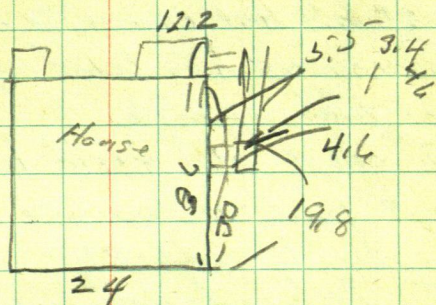
From NW corner lot 17 chain
South along W line lot 17

@ 58.75 - 60' spike hub in line
9.3 ft ^E with N side of 4x4 shed + 64.85
123.6 hub 60' spike + 72.5 = 196.10
hub 60' spike + 64.85 = 260.95 hub
60' spike about 5 ft. from brush
at for I.M.

Notes 183. on E side lot 17
Site N 16° 52' E lake buildings
Shed

NE cor N 48° 13' W 16.9 10x8
SE cor N 81° 55' W 10.20
SW cor S 87° 50' W 27.9

House

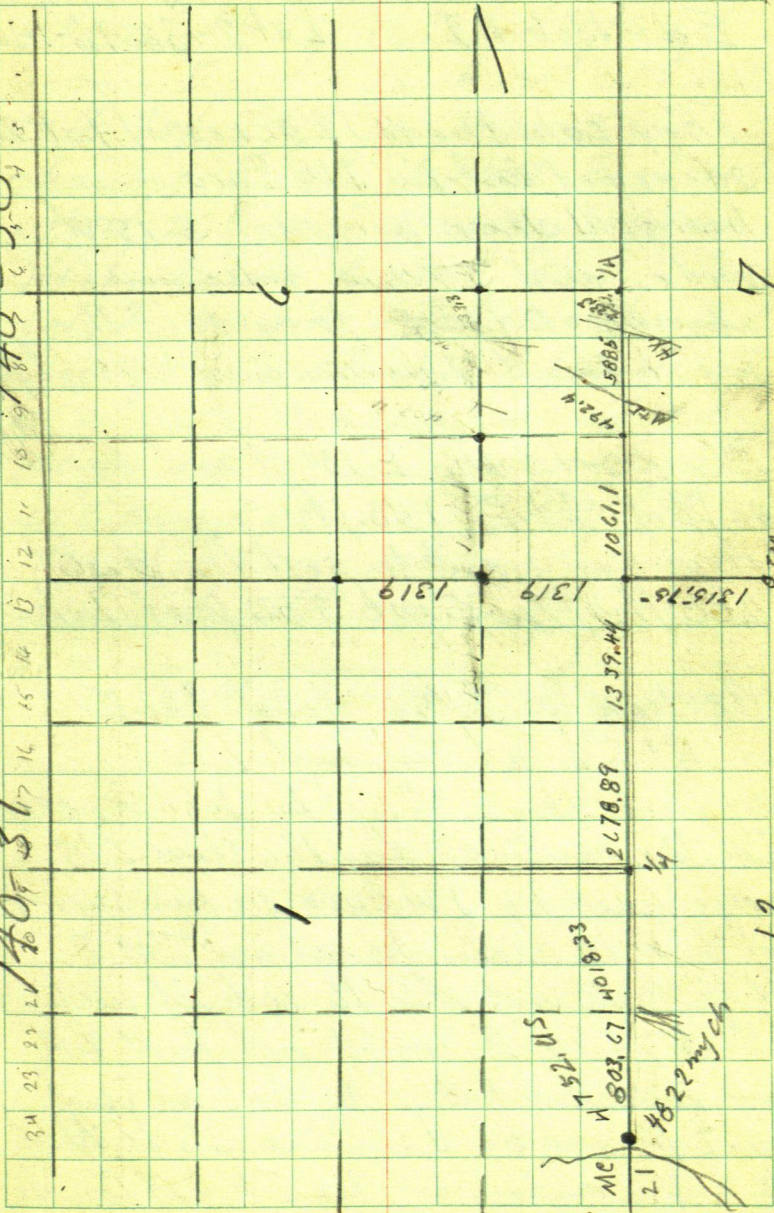
SE Cor. S $8^{\circ}34'E$ 80.7NE Cor S $4^{\circ}15'E$ 45-NW Cor S $18^{\circ}25'W$ 59.5-

• Look by trees
 45.1
 • 2nd Cor
 9.75
 • Old Iron

140.6
 • cor.
 2.8

1 2 3 4 5 6 7 8 9 10 11 12

140-30
140-31



MC 152.05
803.67 4018.33
21 4822 mych

2678.89
1339.44
1061.1
1319
1319
1319

492.4
5085
1A

17

12

87M

Anna McGrath - Sunday July 18th

Ed - Bob + I to Lot 2 - Sec 16 - 140-31

They sold the W 12 acres of Lot 2 surveyed out by J W Caro being a strip of land 575 ft wide and 575.14 measured along the E & W $\frac{1}{2}$ they sold the next 100 ft then the next 75 ft

They sold the E 100 ft and then 50 ft of the E 150 ft.

Now they want to sell the West 200 ft of the East 350 ft of Lot 2

We look for I.M.s. find the I.M. on N & S $\frac{1}{2}$ at Ten mile lake

We find the I.M. set by John Green for the center of Sec 16. these I.M. were used by J.W. Caro in his survey of the W 12 acres. he set an I.M. 33 ft N of Center of Sec 16 which we find at 575.14 E we do not find I.M. in road on E & W $\frac{1}{2}$ but we find the I.M. set by J.W. Caro 33 ft N of $\frac{1}{2}$. We also find the I.M. set for NE Cor of 12 acres tract

From IM center of Sec 16 we
 chain E at 575.14 set 60 ft spike
 33 ft S of IM, and continue
 chaining E at 1285.2 E of center
 west 60 ft spike where Green's
 plat shows point for SE cor
 lot 2 as we find nothing
 here we continue chaining
 E at 2370.40 where Green
 says SE cor lot 1 should be
 we are over 20 ft west of
 Turn^{road} which should have
 been built on the section
 line

SOMETHING HayWire

Monday I have to go to
Brainard. All day in
Brainard

Tue July 20th 1954

Don-John-Bob & I start
to Ten Mile lake Lot 2
Sec. 16-140-31

Stop at Albert Thomas's
to ask about $\frac{1}{4}$ Cor bet
Sec 15-16 - have dinner
with Albert,

P.M.

Don-John-Bob & I drive
into Hackensack then
around West end of
Birch lake to Victor Marton's
Victor is out helping put
up Hay. We drive to hay-
field Victor & his son
do not remember the
location of the $\frac{1}{4}$ but say
the road is on the Sec line
If I do not find it they
will go over to morrow
after hay is in stack

and help me locate it.

We drive to N $\frac{1}{4}$ bet 15-16 and on into Fred, Tsom's one of the Fredicson's home and says he has helped find the $\frac{1}{4}$ several times and know right where it is he goes with us but we do not seem to be able to locate it. We drive to N $\frac{1}{4}$ corner bet 15-16.

Fredic says he drove this cor down and that they have hauled gravel in on top so the I M must be a foot or so down. I locate it with my compass $2\frac{1}{2}$ ft W of where he shows me and the top of the iron looks like a rock on top of road. From this I M I look S and line up with road running S a mile or so and walk South on this line to point for $\frac{1}{4}$ bet 15-16.

with my compass to locate this I M cap broken off 4 inches below ground in E road

Work T on line on top between N $\frac{1}{4}$ I M & $\frac{1}{4}$ I M bet Sec 15-16 + set 60 ft spike on true Sec line

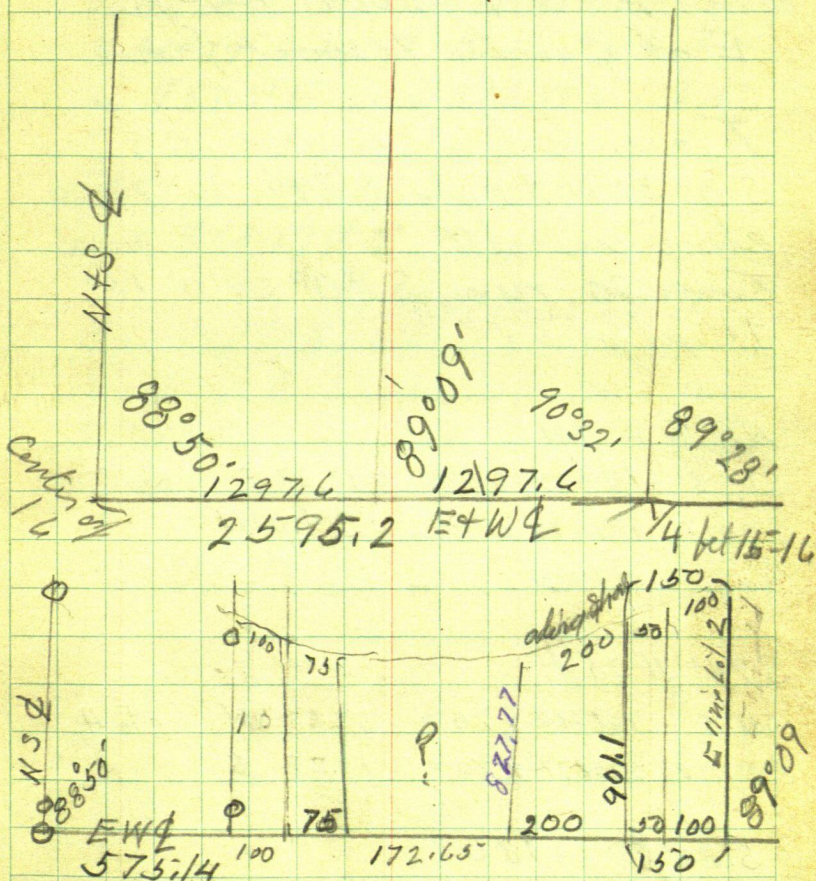
T over $\frac{1}{4}$ side N on true sec line Turn Left to flag at I M a center of Sec 16. Angle reads $90^{\circ}32'$

as the N E angle of the 2 E Sec 16 according to J W Caros plat of the West 12 acres of lot 2 show as $88^{\circ}50'$

We re chain this $\frac{1}{2}$ mile and find the distance bet I M at center of Sec 16 and the $\frac{1}{4}$ on the E side to be 2595.2

Green's plat shows, 2570.4
24.8 ft over length

as the $\frac{1}{16}$ cor SE cor Lot 2
 should be half way bet
 $\frac{1}{4}$ & center of section
 point at 1285.2 goes E
 1214 ft. to SE cor Lot 2



July 21st 1954 Wed

Ed - John - Bob and I to Lot
2 Sec 16. Ed. holds flag at
 $\frac{1}{4}$ I M bet Acs. 15-16 - 140-31
Tower Greens I M. Center
Sec. 16 cause hut to be set
on E & W $\frac{1}{2}$ about 1000 ft
E of Center to work from

Tower hut on sea wall B S
S $0^{\circ} 51' W$ + run S 74° 7000
along sea wall

Tower to run S $80^{\circ} 39' W$ 130.
to pt for I M.

N $0^{\circ} 57' E$ 901.1

Sine $0.14835 \times 901.1 = 13.37 E$ Sta 3

Cosine $999.890 \times 901.1 = 901.00 N$

Tang. 0.144836

S $74^{\circ} W$ 70 ft

Sine $961262 \times 70 = 67.29' W$ Sta 4

Cosine $275637 \times 70 = 19.29 S$

S $80^{\circ} 39' W$ 130

Sine $986714 \times 130 = 128.27 W$ Sta 5

Cosine $162465 \times 130 = 21.12 S$

beg. from SW cor. lat 2. Buille
beg. SW cor is 935.20 E 6000 N to S sta 1

S E " , 1135.20 E 400 N to S " 2

N 037' E 901.1 to sta 3 which

is 1148.57 E and 901.00 ft N Sta ③

S 74° W 70 ft to Sta 4 which is

1081.28 ft E and 881.71 N - Sta 4

S 80° 39' W 130 ft to sta 5 which is

is 953.01 E and 860.59 N - Sta 5

Sta 1 is 17.83 ft W of sta 5
and 860.59 ft S " 5

$$\frac{.02071835}{860.59 / 17.83, 00} = 1.011$$

so the west line of 200 ft tract runs
S 1° 11' W

$$\cosine \ 999787 \text{ into } 860.59 = 1.011$$

July - 22 - 1954

(Don John + I To Lot 2 - Sec 16
140-31

Tower 60th mile Sta 5

BS N 80° 39' E & Run

S 86° 24' W 190 - 3.1 = 186.9

Tower 186.9 BS N 86° 24' E run

S 87° 38' W 75-

Tower 75 BS N 87° 38' E

run N 86° 33' W 100

Fig Sta 5 is $953.01^{\circ}E$
860.59 N run S 86° 24' W 186.9

Sine 998027 x 186.9 = 186.53 W to Sta 6

Cosine 062791 x 186.9 = 11.74 S

Sta 6 is 766.48 E and 848.85 N

run S 87° 38' W 75- ft to Sta 7

Sine 999147 x 75- = 74.94 W to Sta 7

Cosine 041294 x 75- = 3.10

Sta 7 is 691.54 E and 845.75 N

run N 86° 33' W 100' to Sta 8

Sine 998188 x 100 = 99.82 Sta 8

Cosine 060177 x 100 = 6.02 N

Sta 8 is 697.56 E and 851.77 N

Ties to N $\frac{1}{4}$ Cor bet Sec. 15-16
140-31 - I.M. Sec. line N+S
W Pine 30 N $63^{\circ}33'W$ 102.28
W Oak 14 S $52^{\circ}10'W$ 42-1.2
W Oak 18 at base hollow on N side
Mark E side of hollow S $13^{\circ}47'E$
106.05

Ties to $\frac{1}{4}$ bet 15-16-140-31
I.M. & N+S road W road
W.P. 26 N $14^{\circ}12'W$ 74.3
J.P. 10 S $70^{\circ}15'E$ 47.75

Sunset Beach ①
Lot 2 - Sec. 11 - 140 - 31

R. G. Garbisch

owns Lots 3-4-5-6-7-8-9-10-11-12
blk 2. Sunset beach also that
part of Out lot B lying North
of a straight line running
East from a point 100 ft S
of SW cor of said blk 2 from
E line of Beach way drive to E
line of said out lot B

also wants line bet lots

8-9 blk 1

and a line run through center of
Lot 7 - Blk 2 and continue S
to the line through Out lot B.

Aug. 3rd 1954

Ed-Bob + I drive to Sunset Beach
Mr. Garbisch show us I M NW cor Out-
Lot B- I find I M 100 ft S. - He shows
us I M bet 8-9 ^{BLK 1} on S end. and I M.
bet Lot 2-3 BLK 2.

from NW cor out lot chain N 36 ft at pt
as fence post are in the way I can
not put this point on true line

Then I M bet Lots 2-3 BLK 2 BS
S 70° W on pt quit at and run
N 66° 31' E hit tree we offset 9 ft South
@ 90° to lot line From offset hub @
Lot cor bet 2-3 run NE parallel with
lot line 300 ft to point 9 ft from N.E.
cor lot 6 BS along offset line and
Turn 90° run N 9 ft to point for cor
bet lots 6-7-

Then Temp Cor Lot 6-7 run N 55° E

Barbeau

Long Beach S. side Ten Mile

Sept 14-1954

as I found a note on my office
door from Perry Barbeau
as follows

at your earliest convenience
will you set out a series of stakes
between Hansel's property and
our own on Ten Mile Lake so there
will be no doubt as to whether or
not their boat house is on our property
our lot run over a hill separating
the two properties. So it is impossible
for us to draw a line accurately
between the two corner stakes which
you set last fall. so we need additional
stakes. There is some delayation
involved. Ed Rogers is handling
it so you had better check with him
on this too

Thanks Mr Curro

Perry Barbeau

P.M.

Gertie + I drive to Long
Beach S. side Ten Mile Lake
I set flags at each corner

try to work Tonline big NP
in front of Boat house is online
so will have to run to miss Boat
house.

Ton ridge BS, on Perys SE
corner + run N on random.
from T chain S 75 ft to IM

" T " N 53.8 to 60.9 ft
128.8

Ton 128.8 corner bears R
18° 24' - 30.8 ft.

fig
18° 24'

$$\sin 18^\circ 24' = 315649 \times 30.8 = 962$$

$$\cos 18^\circ 24' = 948876 \times 30.8 = 29,23$$

$$\begin{array}{r} 315649 \\ \times 30.8 \\ \hline \end{array}$$

$$\begin{array}{r} 948876 \\ \times 30.8 \\ \hline \end{array}$$

$$\begin{array}{r} 2525552 \\ 947082 \\ \hline \end{array}$$

$$\begin{array}{r} 2525552 \\ 947082 \\ \hline \end{array}$$

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$$\begin{array}{r} 2525552 \\ 947082 \\ \hline \end{array}$$

$$\begin{array}{r} 2525552 \\ 947082 \\ \hline \end{array}$$

$$\begin{array}{r} 7591008 \\ 2846628 \\ \hline \end{array}$$

$$\begin{array}{r} 7591008 \\ 2846628 \\ \hline \end{array}$$

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$$\begin{array}{r} 7591008 \\ 2846628 \\ \hline \end{array}$$

$$\begin{array}{r} 7591008 \\ 2846628 \\ \hline \end{array}$$

$$128.8$$

$$29.23$$

$$158.03$$

$$158.03$$

$$962.00$$

$$94818$$

$$.060875$$

$$138200$$

$$126424$$

$$117760$$

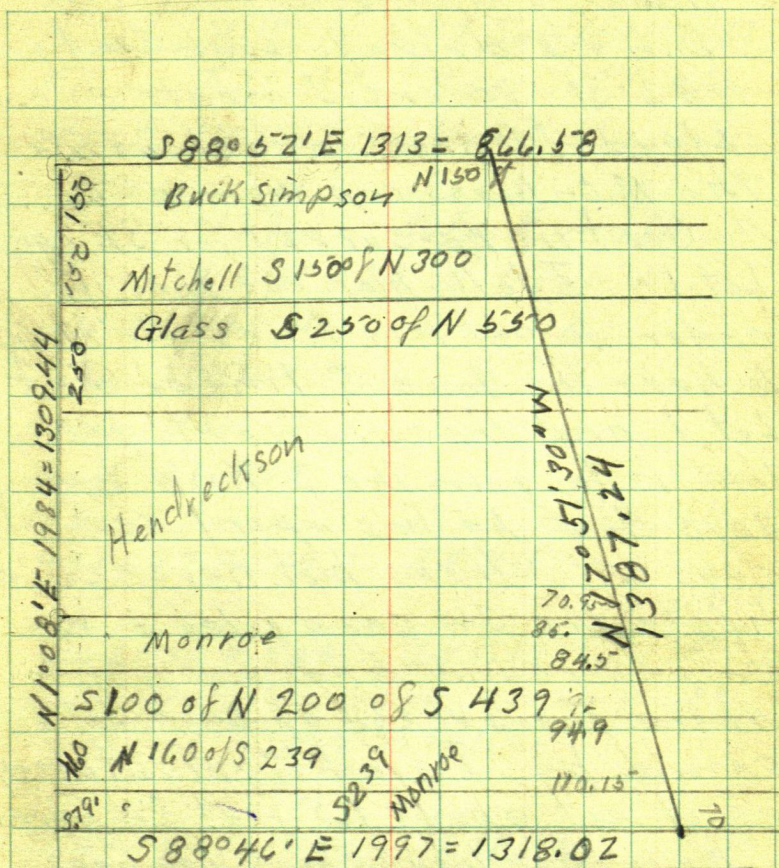
$$110621$$

$$71398$$

Corrections .060875

Correction, 060875⁻
hub.

73-N goes E 4.57 to lot line
128.8 N " E 7.84 " " "



Simpson $N 150'$ of Lot 1

Mitchell $S 130'$ of $N 300'$ of Lot 1

Glass $S 230'$ of $N 530'$ of Lot 1

Hendreckson all lot 1 Less $N 330'$ Less $S 239'$
 Less sold

Lloyd & Helma M Monroe $S 239'$ Less $N 160'$

" " " $N 200'$ of $S 439'$

Buebendor $S 100'$ of $N 200'$ of $S 439'$

(2)
Lot 1 - Sec. 1 - 142-31

Tue. - Apr. 12 1933

Don & I drive to Lot 1 - Sec. 1
142-31 where I meet

Lloyd Monroe who shows me
the M.C. Brass cap. mon. set by
the Gov't in re-survey for SE cor
Lot 1 - I tell Monroe that in
order to get his lines we have
to have the true S line of Gov't
Lot 1 and the only way to get
that is to run the S line he
says that he has spent several
days with others but never could
locate the SW cor of lot 1 we
drive around and walk into
where the SW cor of said Lot 1
should be I find it right away
as it set about 1.5 feet SW from
a large oak tree which has been
squandrup. Don & I open up
the line so we can work T on
line between the SE & SW cor's
of Lot 1.

Wed Apr 13 - 1955

Don and I to lot 1 Sec 1-142-31
 From IM MC SE cor lot 1 chain
 West. 123.22 but spike.

Tower 123.22 Site E on IM.

Turn L $90^\circ + 20^\circ 30'$ + runN $20^\circ 30'$ W

Sine 350207

Cosine 936672

Tang 373885

$$936672 \div 79 = 84.34$$

$$936672 \div 239 = 253.16$$

$$936672 \div 339 = 361.92$$

$$936672 \div 439 = 468.68$$

$$\begin{array}{r} 361.92 \\ 253.16 \\ \hline 106.76 \end{array}$$

$$\begin{array}{r} 253.16 \\ 74.78 \\ \hline 180.43 \end{array}$$

$$468.68$$

$$361.92$$

$$106.76$$

Tower 84.34

Cor of eves of house bears $57^\circ 08' 72.5''$
 $7^\circ 08'$

$$\text{sine } 124129 \times 72.5 = 9.61$$

$$\text{Cosine } 992264 \times 72.5 =$$

$$9 \div 936672 = 9.61$$

$$\begin{array}{r} 84.34 \\ 9.61 \\ \hline 74.73 \end{array}$$

Howard Lake Sec 30-141-31

Howard A Helmbrecht

Howard Lake

owns NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ Sec 30
T141-31.

Wants it platted - 400 and he
helps

This 40 should be a Gov't
Lot but the Gov't never put
Howard Lake on their platts

May 13th I copy Plat of
Subdivision of Sec 30. in Office
of the Reg. of Deeds.
Sec 30 subdivided by Elmer
Horst

June 2 - 1955 -

Ed & I drive to Howard Lake pick
up Helmbrecht who is working drive
to Heathman's cabin where Helmbrecht
shows me IM $\frac{1}{4}$ set by Horst and the MC
on the N line of Section 30. Howard Helmbrecht
goes back to work.

Ed & I alone Over I.M. $\frac{1}{4}$
site westerly on flag held at M.C. and run
East @ 237.5' up in E Trip road

240
2.5
237.5

110

33
106.7

334.7

440
1.4
438.6

97

At over spike in Φ B.S. S $70^{\circ}06'W$
along N line of Sec 30 and take
angle of Φ of road with N line Sec 30
which reads SW angle $106^{\circ}10'$

At still at spike in Φ ^{site S $70^{\circ}06'W$} we run S $36^{\circ}03'E$
334.7 along Φ to 60' spike

At over 334.7 B.S. N $36^{\circ}03'W$ + run S $40^{\circ}01'E$
438.6 to 60' spike in Φ road

At still at 334.7 site Northwly Turn 90° run
westerly 33 ft. set spike

At still at 334.7 site Southwly along Φ turn
 90° run westerly 33 ft set spike

At over 438.6. B.S. N $40^{\circ}01'W$ run S $37^{\circ}44'E$
522.1 to 60' spike in Φ near S line of NW-NE

At over 522.1 Turn 90 and run westerly
33 ft set 60' spike

At still over 522.1 I M SW cor Tract
bears $31^{\circ}19'R$ from 33' spike 106.7'

June 3

I go to Office around 7 AM to figure
courses of N+S & Sec. 30-141-31

Geo Horst's plat on file of his subdivision
of land sec his plat shows N+S
& to be 5246 ft long.

fig. the line I get 5255.24
almost 11 ft short

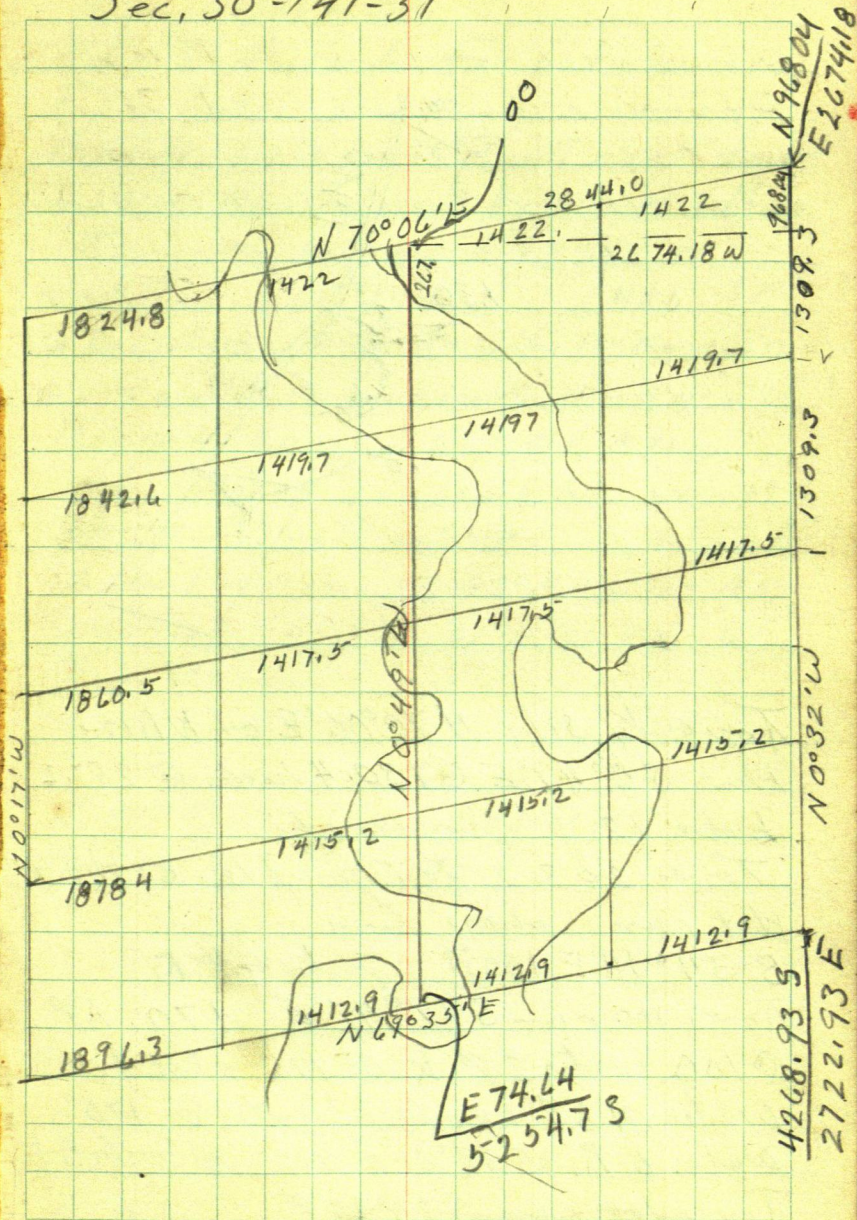
I pick up Donald and Edward
we drive to Heathmans cabin
on Howard Lake

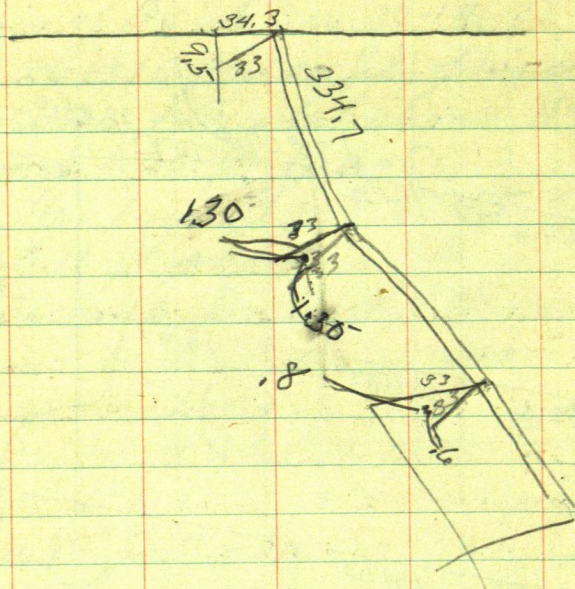
Turn left 33 ft W of intersection
but of N line sec 30 and E road

Turn 90° and run southerly
parallel with road to hub set
33 ft out from E at sta 334.7
set 2-60° spikes Nely from
section of R of W of road with
N line sec 30

Move T south to point 33 ft
W of sta 438.6 Turn 90°
continue R of W line southerly
to sta 5221.1-

99





Tower $\frac{1}{4}$ site $N 70^{\circ} 06' E$ on N line
 run $S 0^{\circ} 49' E @ 130.4$ hub. @ 253.2
 hub. 12 ft from water

Tower 25-3, 2 P.T. for I.M. BS $N 0^{\circ} 49'$
 W & run. shore line

$S 34^{\circ} 14' E$ 100 ft Water 9 ft R.

Tower 100 run $S 77^{\circ} 47' E$ 170. A.P.

@ 100 water 2 ft R @ 110 edge of
 water @ 155 L edge of water @ 170

Water 6 R, $S 35^{\circ} 01' E$ 100 AP water to R

~~Tower 100 run $S 20^{\circ} 26' E$~~

20 24 E 197 - Water 7

to I.M

June 4 - 1953 Sat.

Ed & I drive to Fox Lake near
Fifty Lakes. Look things over do not
have the field book I will need drive
back to Howard Lake by way of Alkay.

Tower sta 170 BS N $77^{\circ}47'W$
and run, S $60^{\circ}34'E$ 460 A.P.

@ 30 water 8 R @ 130 water 10 R @ 230 12

@ 330 water 15 @ @ 430 water 10 @ 460 15

Tower 460 run S $46^{\circ}18'E$ @ 70 spike
water 10 R @ 170 spike A.P. water 12 R
15 ahead to water ~~in S 330 11 - 100 A.P. water 10~~

Tower 170 run, S $53^{\circ}54'E$ 100 A.P.
water 10 R S $35^{\circ}01'E$ 100 water 6 R

Tower 100 run

Figuring the SE cor of NW $\frac{1}{4}$
of NE $\frac{1}{4}$ should set N $74^{\circ}025'E$ from
IM. SW cor of NW-NE

Monday June 6th 1955

Howard A Helmbrecht and
Florence Helmbrecht his
wife comes to the Office
they will call their Plat
Shady Lane

Don + I chair back line of lots
S 36° 03' E @ 50 apks @ 150 apks
@ 250 apks @ 300 pin @ 344.7 AP
Now AP BS N 36° 30' E on pt
203.25 from $\frac{1}{4}$ IM + run S 40° 33' E
@ 5.3 apks + 100 apks + 100 apks + 100
apks + 100 apks + 34.2 AP run
S 38° 47' E @ 65.8 apks + 100 + 100 + 100
rains all day

Work on plat in Office until
3 A.M.

The SE cor of the NW $\frac{1}{4}$ of the
NE $\frac{1}{4}$ scaled on plat, the
Drafting m. reads N 73° 05' E
from M.C SW cor. IM.

21 June 5

99.10
34.2
65.8

88
- 5.8
34.2

100

72°49'
72°49'
20

103

June 7- \$755'

Ecl - Don + I get Gas 1.00

Get \$20.00 in the mail from Peterson
drive to Sec 30-141-31 check
corner on lake shore

Work T on line between IM's
on S boundary of NW 1/4 of NE 1/4
set spikes on Westerly right of
way of Turp road for intersection
of S line with lot line

Now intersection point
site N 38° 47' W flag at IM MC
beats S 72° 09' E

From NE cor lot 12 to SE cor
122.65'

from MC SW cor to SE cor 62.6 ft

Now IM site N 20° 24' W
spike at intersection reads 72° 49'

104 Gov't Lot 3 - Sec 31 - 141-30

Brown.

Sunday Sept. 25 - 1955

Brown comes to my House he wants his work on Ten Mile Lake done now

I tell him that I will start tomorrow if I can get Albert Thomas to help me.

Monday Sept 26, 1955

up early find it is stormy out go to office call Con Lan Realty at Remer #5 he is not in.

I check over old Notes and copy Gov't Notes

U.S. Transcript Notes 141-31

FB 115

East on line S. side sec. 34 Van. $12^{\circ} 05' E$

4000 $\frac{1}{4}$ post

Aspen 10 N 60 W 38 Lks =

Sugar 6 N 52 E 14 =

7160

M.P. on Waide Lake

W Bir 10 N 25 Lks =

W B. 8 S 40 W 36 Lks =

8000

cor in Lake

South side Sec 35 all in Lake

East on true line S side Sec. 36 Var $11^{\circ}20'E$
 3438 = M.P. on E side Lake

Y.P. 16 N 20 E 14

Y.P. 15 S 21 E 39

East True line S side Sec. 36 Var $11^{\circ}20'E$
 4000 $\frac{1}{4}$ Post

Dry Pine 24 N 49 W 125 Lks =

W. Birch 3 N $11\frac{1}{2}$ E 29 "

8000 Marked W. Birch 15 ins diam for
 Cor. to Rgs 30-31 Twp 141 N.

Lind 8 N 30 W 23 Lks

Ironwood 5 N 27 E 15 "

Commencing at the Standard
 corner on the 10th S.P. of T. 141 N between
 R. 30-31 W

North between Section 31-36 Var $11^{\circ}45'E$

1000 enter Twp Swp E & W

1500 Lv same bds E & W

1957 intersect South bank of Ten Mile
 Lake and set Post for M.C. for

Frost sec. 31-36 From which

Aspen 6 S 20 W 19

Bir 8 S 17 W 32

Set flag at M.C. & from over the N bank
 of lake on line offset. 356 ch from this

point the flag on S bank of lake bears
 $59^{\circ}45'W$ distance over lake 2071 Lks
 to which add 1957 makes

4028 to N Bank and set M.C. Fracture
 Sec 31-36 from which

W Oak, $4N57^{\circ}30'E$ 3 Lks

W Oak 4 West 3 lks

4213 intersect point of Ten Mile
 Lake & set M.P. from which
 Tank $5S10^{\circ}W$ 6

asp. $4S19^{\circ}E$ 4 and cause
 a flag to be set on line on N bank of
 Lake and Offset East 125 chs

from this point flag on N Bank
 of lake bears $N12^{\circ}W$ distance over
 lake 588 chs to which add 4213
 makes

4801 to flag on the North bank of lake
 set post for M.C. for Fracture
 31-36 from which

W.P. $20N9^{\circ}30'W$ 120

asp. $14N2^{\circ}30'E$ 177

enter W & Y Pine Oakash Birch Maple

8000 set post for Cor. to Sec. 25303/36

YP10 $N7^{\circ}30'E$ 148 (145)

YP13 $N3^{\circ}30'W$ 147

asp. $3S16^{\circ}30'W$ 38

asp. $3S19^{\circ}30'E$ 35

North bet Sec 25-30 - Var. $11^{\circ}45'E$

4000 Net post $\frac{1}{4}$ Sec Cor from which

Asp. 6 S $37^{\circ}E$ 4

Sugar 5 S $30W$ 10

7500 enter Tank's sup NE-SW

8000 Net post for cor to Sec. 19-24-25-30
from which

Tank 5 N $11E$ 54

" 4 N $32\frac{1}{2}W$ 34

" 3 S $64^{\circ}W$ 10

" 3 S $62\frac{1}{2}E$ 15-

US Notes from F. B. 185

Autd. Sec 6. - 140-30

Twp Cor - 141-30-31. =

15" W Bir Tree for cor

Lind 8 N $30W$ 23

Iron wood 5 N $27E$ 13

Fast on true line S. side, Sec 31

980 M.C. W. side lake Var $11^{\circ}05'$

Tank. 5 N $51W$ 142

" 4 S $63W$ 300

3222 M.C. E. side lake

WP12 N $60E$ 7

WP14 S $70^{\circ}W$ 13

- 4000 $\frac{1}{4}$ post
W Birch 3N19W 36 = 23.74
Br Oak 12N30E 23 + 5.18
- 4300 ME, West side, small bay of lake
Deed pin 14° N 81° W 100
aspin 4527E 4
- 4696 MC E side, small bay
WP, 10 N 80° E 21
" " 3-533 W 18
- 8000 Cor to Sec 31-32
WP 20 N 67 W 38 } 38.28
Pin Stub 22 N 60 E 94 } 63.36

From County Record Book of Surveys

Subdivision of Sec 30 - 141-30

By E. B. Hörst, Field Books 80+178

Says Pick up line from Sec Cor 30-31

run by B B Bartlett @ 444.9 hnt @

580 rnp @ 700 Lv rnp @ 910 rnp @

1482.7 $\frac{1}{4}$ Cor set by B B B @ 1521 \$

State Highway @ 1964 Lv rnp @ 2204 hnt

@ 2216 \$ RR Tract @ 2416.3 hnt from

hnt. 2416.3 set at B over rnp at $\frac{1}{4}$ Cor

turn 90° from A + set C Total distance

from Ace Cor to $\frac{1}{4}$ at "B" = 2870.5

Short distance 2763.4 = 1500 ft for W 40
and 1370.2 for E 40

New BT

Tank 1 8955W

Tank 6 N 62°43'E

Continue line E bet 30-31 which
fell 6.2 ft S of $\frac{1}{4}$

Tower Cor to Section 25-36-141-31
and 30-31-141-30

Site W on N line of Sec 36 Turn NW
angle 88°30' New B.T.

NW Cor Sec 31

J.P. 8567°W 32.0

N.P. 10 N 43°30'W 89.0

run N @ 584 \pm State Highway #80 Tower 584
Highway has N 68°W 748.8 hub run road pg 95
book 80.

98.30' NW cor

JPB 567°W 32.0
NP 10 N 43°30'W 89.0

31

Harst

← 2765.4 MS. →
← 2870.5 - FBH →
① 1500.3 - 1370.2

32 pins
20 pins

300 ft

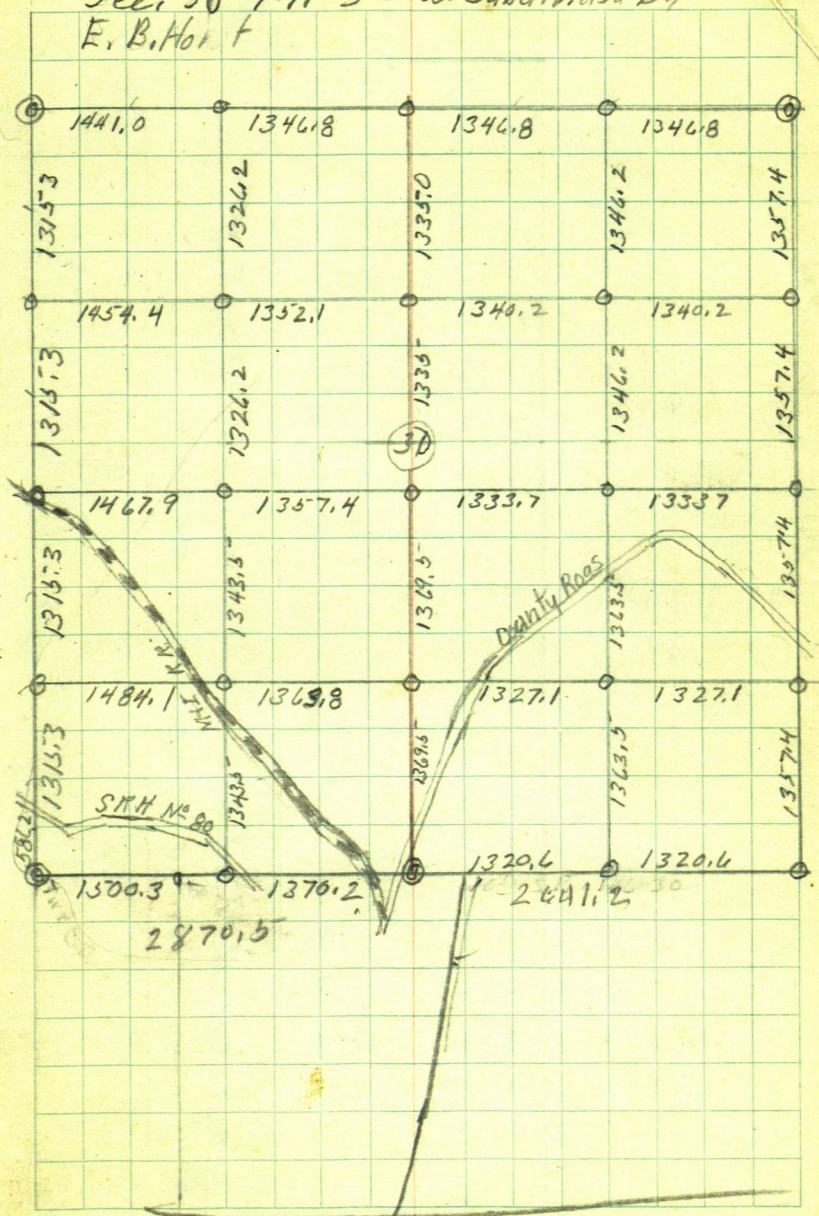
5280

32
141-30

29

5
140-30

Sec. 30 - 141-30 as subdivided by
E. B. Horst



602.2/152
397.32

89 9043

201

0460 22

Standard

col

7,81068 N

① 22

7,69068N

以

Mc, N^o 48

6198

707. f

64618

76.

Friday Sept 30-1955

I get notes and drive to Happyness Lodge where I find Albert Thomas waiting for me we drive around bay and look for M.C. on point of Ten Mile lake on 10th St. Parallel we find the West IM but the easterly MC on point seems to be missing. We cannot find any point where Bill Spain claims he established the $\frac{1}{4}$ cor on the South side of Sec. 31- 141-30

Thomas goes with me into Walker where we go over old Notes. We drive back Albert takes his boat which he left at Happyness Lodge goes and sets flag at IM MC on West side of Point then goes home. I drive around by Hackensack and around S end of Birch lake and over to Thomas house as the bridge on the main road is out.

We take T and go to the MC on the West side of Ten Mile lake as the snow is too soft I set

115

a flag and go west to solid ground
near Thomas's house

Work X on line with the two flags
and set 60' spike on the 10th S.P.

Too dark to read var.

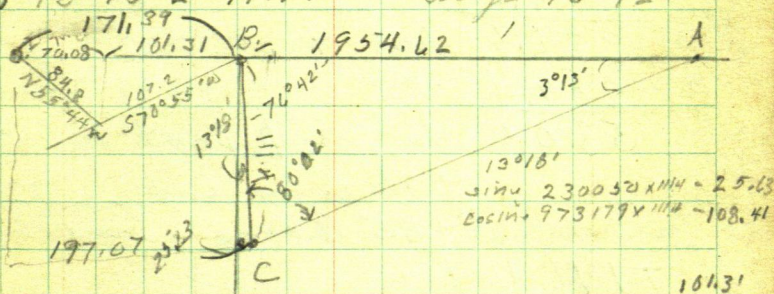
Have around 8

Oct 1st 1955 -

I drive to Thomas's house
drop Ed + Bob off along the road
as they are hunting.

Tower 60' spike on 10th S.P. in line with the 2 MCIM

Site E on M.C. over take & run
S 13° 18' E 111.4 azyl 76° 42'



\bar{T} still at B. ran S $70^{\circ}55'W$ 107.2

Track 107.2 " N 55° 44' W 84.8

57° 05' 3" W 107.2

Since $945044 \times 107,2 = 101,31$

$$\cos 326943^\circ \times 107.2 = 33.05$$

30131

$3^{\circ}13'$
 $\cot \alpha_9 17.793442 \times 108.41 = 1928.99 + 25.63 = 1954.62$

164.31

70 43

131139

25 67

6702

147.0

N 55° 44' W 84.8

Sine 82.6426 x 84.8 = 70.08

Cosine 56.3045 x 84.8 47.75

Now IMMC over lake site
W on IMMC and BS at hut
on top of Bank near Thomas's
house on 10th S.P. Turn L
3° 13' to pt. C, over lake

Trail over IMMC E side
Ten Mile Lake site W on IM
MC on W side of lake run E
@ 124.4 hut = 60 ft up +

196.2

320.6 hut +

209.4

530.0 hut in E road

+ 40 enter up front of
+ 85 Lr run up

+ 166.1 +

696.1 hut on sea wall

523.9

523.9

212.8

250.

311.1

273.9

250.

61.1

Fig. in office Sunday Oct 2
 From I.M. Trp corner West of
 Thomas's house to I.M.M.C over
 Lake = 2126.01 ft Sig
 + 6961 =

2822.11 ft from Trp cor to
 hut on West side of small bay 10 miles

Green's Notes: pg. 69 Book 185
 Brushcut old random line on point
 chain west from IM set by Horst 00
 W side of small bay @ 168.6 hut
 @ 406.65 hut @ 490.5 hut @ 571.25 hut
 571.25' & 4°20' S to hut MC set by Curo 126.95'
 { 4°20' =
 Sine 075559 x 126.95 = 9.59 } Sig by
 Cosine 997141 x 126.95 = 126.59 } H.C.
 383.06 IM to E.R.R.
 293.06 hut E side bay
 362.76 @ 235' N of IM 20.5' W of R.R.

Curo's Old Notes Book 269
 beg at 2x48" Copped Galv iron extreme East
 shore of Ten mile lake U.S.M.C. run East
 on 10th Standard Parallel
 @ — E M+I.R.R. @ 212.8 hut 60' uph + 77' uph

- @ 289.8 4 Tar St. Ky. @ 512.8 mm
 @ 523.9 E hub 60° up to in old cutout line
 @ 530 enter round wet marsh @ 605' L
 @ 683.6 hub on top Ties

Red Oak 5-N 13°30' E 10.20

Twin R. O. 8-9-15 x 14 at base S33°50' E 3030

@ 847.5 hub on E Brink

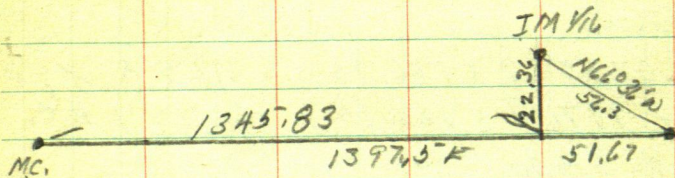
W. O. 7 North 2.5

Birch 7 S72°30' E 8.20

@ 1182 enter Wet camp

1397.5 hub 20 ft E of camp

Tower 1397.5 - a 2" iron pipe set by
 Green for E 1/4 Sec 6 bears N66°36' W 56.3



@ 1784 cross old road @ 18672 hub on top

W. O. 6 N 63°39' E 9.82

W Birch 55°50'41' E 12.55

2138.4 hub W O 5 N 51°04' W 19.85

R O 8 S 0°39' W 31.80

Oct 3-1955

Stormy I drive to A. Thomas place Albert is ready to go haul logs. so I tell him to go ahead as I have a lot of Office work to do.

I take a can of cream into Walker for him. and Work on Leech Lake Lodge Channel & harbor plat. I tell Albert that if weather is good I will be out to-morrow but if I am not there by 11 I am not coming

Oct 6th 1955

I take plat of channel & harbor to Leech Lake Lodge. Jack Gleason's do not get away in time to go to Albert Thomas's so go to Office Brown comes in and wants to know if I will go out as the trial comes up Wed Oct. 12th I said yes. he will have Albert at his place at about 1 o'clock

I drive to Brown's we take a boat and go to Thomas's Albert will come in his boat and meet me at Ten Mile Lake Store

$$\begin{array}{r} 523.9 \\ 310 \\ \hline 213.9 \end{array}$$

Brown & I go back to his place where
I get my car drive to Ten Mile Lake
Store. Albert comes we go East
and pick up our old Random
line we find 60 d spike @ 1397.5
and Green E $\frac{1}{4}$ I.M. we find
60 d spike but 847.5 on our old random
we go back and look for hub 60 d spike
@ 683.6. old Note call for

R.O. 5 N 13° 30' E 10.20

twice R.O. - 8-9-15 X 14" at base

533° 50' E 30.30

We find hub and ties OK.

Check and see who plotted

Busher's Point on Ten Mile
E 5'

We find hub 523.9

From 523.9 we chain West
@ 60 pin + 90 = 150 west edge of
New Ten Highway 371 + 100 =
250 pin + 60 = 310 pin + 8.3 ft.
on log. + 1.6 = 319.9 hub 60 d spike
+ 80 = 399.9 + 40 = 439.9 + 80 =

290 over bay

Total distance from Trip corner
SW corner Sec 31 to SE corner Sec 32
is 11096.46 ft

\div by 2 = 5548.23 to pt for SE cor Sec 31

\div by 2 = 2774.11 to pt for $\frac{1}{4}$ Cor S
side Sec 31.

This point would come 48.00 ft
W of hub on seawall ~~W~~ side small
bay.

as the Gov't measurement
and my measurement check out within
.39 of a foot from Trip Corner to M.C.
on E side of Lake which sets West of $\frac{1}{4}$
and as the I.M set for MC W side of small
bay and M.C. extreme East shore have
both been pulled out and as the SE
corner of Sec 31 is gone I will use what
I have and set the $\frac{1}{4}$ corner on the
South side of Sec 31. - 2640 from Trip
corner which will come 513.48 ft
East of MC No 35

This point will come 16.52 ft W of spike
hub in $\frac{1}{2}$ road leading to the cabin on
point

Green note page 69 book 185' rays

$571.25 + 126.95 = 698.20$ from IM MC to IMMC across point
+ 293.06 to IM Mc over bay which reads $S. 2.35'$

$689.20 + 293.06 = 979.26$ Green ch.

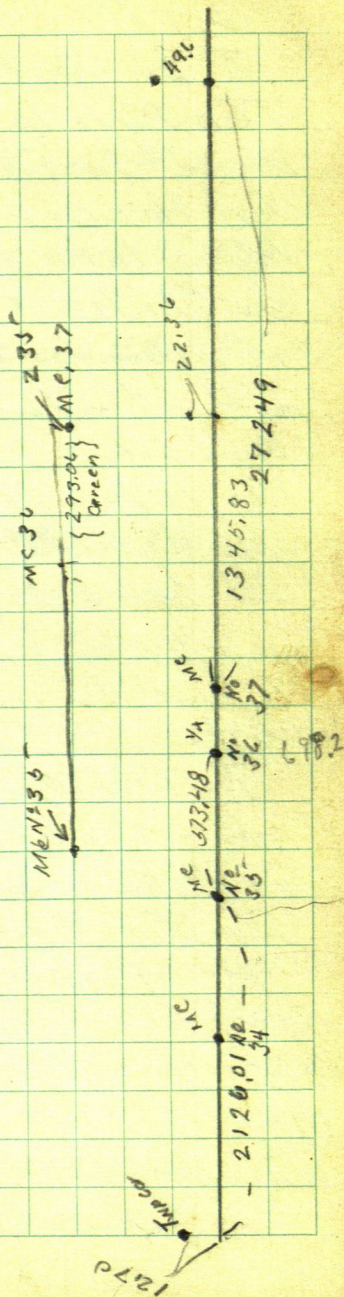
$696.1 + 290.0 = 986.1$ my ch. - 684 difference

Grvt distance = 973.84 U.S. meas 4000 ft

696.1 NYC

686.1 Green

10.0 West of hub 69 hub on seawall pt for M.C. No 36, and South p.



Oct 11 - 1955

I & Walker drive around
Ten Mile Lake to Albert Thomas
We eat lunch and drive around
by Hackensack and on to Ten
Mile Lake on 10th S.P.

as we have packed our old
random line west to 10 Mile Lake
and set a hub where the MC set
in 1945, and as Greens
Notes Book 185 pg. 69 says he
ran from MC 35 thru 36 and
set hub 2.35 ft N of MC 37
we set a pt 2.35 N of our pt for MC
37, and tie in our line from the
West.

From hub 696.1 E on MC N° 36
point 2.35 N of MC N° 37 bears $\text{E } 0^{\circ} 13' \text{ N}$
as distance from hub 696.1 to MC 37
is 290 ft

MC 37 bears $\text{E } 0^{\circ} 15' \text{ S}$

$0^{\circ} 13'$

$\text{Sine } 003782 \times 290 = 1.10 \text{ N}$

$0^{\circ} 15'$

$\text{Sine } 004363 \times 290 = 1.27 \text{ S}$

179.63
70.40
109.20

125

696.1 + 290 = 986.1 E goes N 1.10

$$1.10 \div 986.1 = .0011163 = 0^{\circ}04'$$

sin 001164 X 696.1 = goes N.81 to line
cosine 999999

sin 001164 X 698.2 = goes N.81 to MC 36

373.40 E goes N.6 to pt for $\frac{1}{4}$ S side to 31
hub 320.6 E goes N.37 to line

Temp $\frac{1}{4}$ 26.40 ft E ~~turn~~ Corner
Tower pt for $\frac{1}{4}$ S side 31 side E on 10th
S.P. Horst's IM over lake bears
N $40^{\circ}53'E$

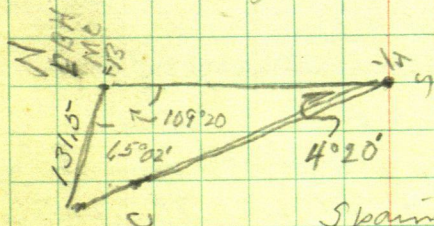
$\frac{1}{4}$ T at A - MC = B. not C.

T at A - C bears N W

T at C - B " N E

T over B = MC site on A - C bears

For Triangulation A - B is North



Spanning IM bears
N $58^{\circ}15'W$ 52.15

Oct 12-55

I find Albert cutting line at
Ten Mile lake we go look for V4 N
side of Sec 31 which we find
there has not been any brush cut
around the V4 IM which is in a
swamp Note: how could either Howard
or Spain chain or run a line
without cutting brush.

We go back to cut hub 60' up
on S side Ten on shoulder 371.

From hub under T chain S
down hill @ 230 pin - 1.4 = hub
from 230 chain down hill + 149.7 =
379.7

from hub under T chain N @ 40 pin
+ 300 = 340 ^{+ 10.5 = 4 Troct} pin at end of Tie
from hub on shoulder of 371 chain S

200 pin + 52.1 pin at end of tie

340 + 252.1 + 379.7 = 981.8 from

252.1
379.7
981.8

Horsts IM MC to hub
in W. shoulder of 371

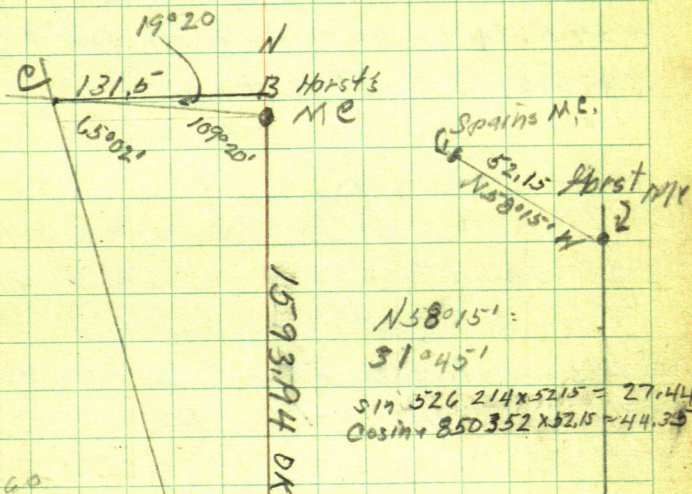
from hub on top of hill chain S

183.25 hub + 200 pin = 383.25

+ 250 = 633.25 + 150 + 300 + 150

over leg 150 + 169.6

Oct 12 - 1955

Albert has to go to Court this
P.M. @ 2 o'clockin Office figuring
Triangulation over lake pg 12669 60
70040'

19 20

19°20'

$$\begin{aligned} \sin &= 331063 \times 1315 = 43.53 \\ \cos &= 943609 \times 1315 = 124.08 \end{aligned}$$

4°20'

Cotang.

$$\begin{aligned} 13.196883 \times 124.08 &= 1637.47 \\ &- 43.33 \\ \hline &1592.94 \end{aligned}$$

128

3978.59

230

4208.59

11.99

230

31

226.9

4208.59

310

549

distance from $\frac{1}{4}$ on S side Sec 31
to hub on top of hill under T is
1593.94 to M. Gorer lake + 379.7 = 1973.64 +
360.5 = 2334.14 $\frac{1}{2}$ tract M. + I.R.R.
1973.64 + 350. + 252.1 = 2575.74 hub on shoulder
+ 319.6 = 2895.34 enter bag. +
+ 300 = ^{3195.34} 2195.34 pin + 150 = 3345.34 + 250 =
3595.34 + 200 = 3795.34 hub + 183.25 =
3978.59 hub on top +

Oct 13th 1955

Don + I Lu Walker drive to Sec 31
at Ten Mile Lake We find Albert
Thomas cutting line on N & S random
in sec. 31 we all cut line to top of
big hill then hub on top and Don +
I chain viz: S 150 pin + 260 = 410 S
pin then we go S to hub on top and chain
N From Hub 3978.59 + 205 = 4183.
in old road cut NW-SE 3978.59 + 226.9 =
4205.49 N hub 3978.59 + 230 = 4208.59 pin
+ 102 cross line E + W
4208.59 + 199 = 4407.59 to pin 4105
4407.59 + 410 = 4817.59 N hub on top
+ 285.31 = 5102.9 hub 20 ft S of top

4817.59
283.31
5102.90

5102.9
520

129

$$5102.9 + 520 = 5622.9 - 2.7 = 5620.2$$

Traverse 5620.2 B.S.S. IM 1/4 Cor
bears N85°54'W 141.5

Oct 17 - 1955

I drive to Ten Mile Lake, Alberta
is not on the job and as I have
a lot of Figuring and checking to
do I go back to Walker, put car in
Garage to have greased, and go to
Office

Corrections

N85°54'W 141.5 ft

$$\sin 85.917441 \times 141.5 = 141.14 \text{ W}$$

$$\cos 85.917441 \times 141.5 = 10.12 \text{ N}$$

$$5620.2 + 10.12 = 5630.32$$

$$141.14 \div 5630.32 = 0.2506784 = 1^{\circ}26'$$

Horsts IM MC 159394N go W 39.96

$$1722.54 \text{ N go W } 43.18$$

$$1973.64 \text{ N } \text{ " } \text{ W } 49.47$$

$$2575.74 \text{ N } \text{ " } \text{ W } 64.57$$

$$3795.34 \text{ N } \text{ " } \text{ W } 95.14$$

$$3978.59 \text{ N } \text{ " } \text{ W } 99.73$$

$$4205.49 \text{ N } \text{ " } \text{ W } 105.42$$

$$4817.59 \text{ N } \text{ " } \text{ W } 120.77$$

$$5102.9 \text{ N } \text{ " } \text{ W } 127.92$$

$$5620.2 \text{ N } \text{ " } \text{ W } 140.89$$

Correction Sum pt 2840 W of Top Cor

@ 1593.94 Spain's IM sets
N 58°13' W 52.13'

$$\sin = 850352 \times 52.13' = 44.33'$$

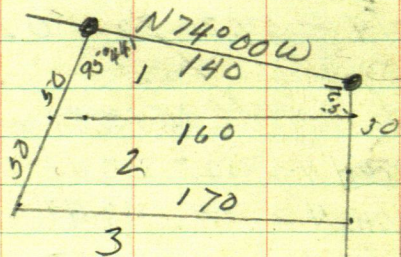
$$\cos = 526214 \times 52.13' = 27.44'$$

$$1593.94 + 27.44 = 1621.38 N$$

1631.38 N on My Random line goes W 40.90

Which Leaves Spain's IM - 3.45 to far
West.

File E 5 Reg of Deed Office
by Louis Knudsen 1923

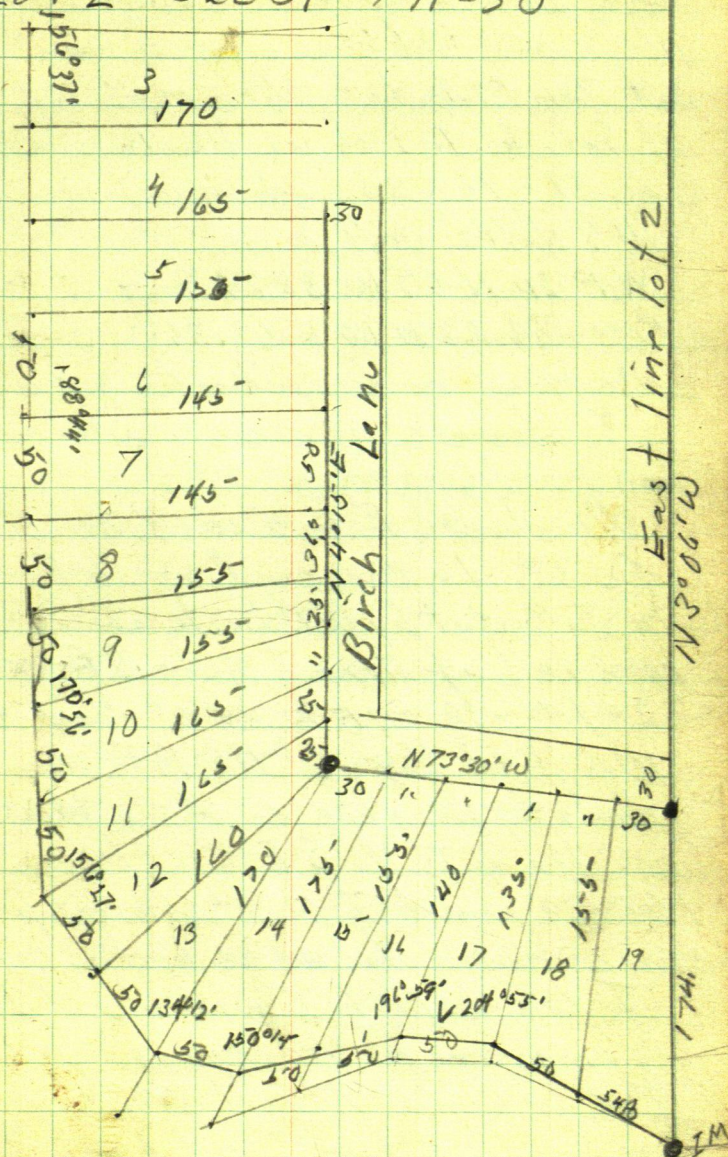


Old Notes pg 128 book 80
see book 178

Bush's Point

131

Lot 2 - Sec 31 - 141-30



Oct 18 - 1958

Last night I drove to Albert Thomas's place and told him I would meet him at Ten Mile Lake Store or at NE cor of Sec 6 to look for U.S. B.T.s. SE Cor Sec 31 - 141-30 We hunt for USBTs

US Notes call for

WP 20 N 67 W 38.28

Pine Stub 22 N 60' E 63.36st

We hunt and check stamps until after dinner at noon we drive in on old road

We drive E to near $\frac{1}{4}$ cor S's side Sec 32. Lv car and walk East to I.M. set by R.B.B. to see if I can tell if this I.M. is SE cor of 32-141-30 or NE cor of sec 5-140-30

We find the old US BT stamps plainly marked and as these stamps are the BTs to SE cor of sec 32-141-30 and I.M. check out for measurements we go back to cor

I tell Albert I will meet him tomorrow at Happiness Lodge I drive home Albert goes home in his boat. When I get home I find

117
653
164

187.6
287.8
39.4

523
213
310

133

I have hit something with my cor
and put a hole in the oil pan
So Lv. car at Deep Rock Sta to be
fixed walk home

Oct 19-1955

I try all AM to call Hoppyness
Lodge to tell Albert but get no answer
I work on old notes of 10th S.P.
old Notes in book 269. says
beg at IMMC extreme East shore
run E on 10th Standard Parallel
@ 212.8 hub 60^d spikes all hub 60^d spikes
@ 289.8 E to S. Hy M^o 376-512.8 pin @ 523.9 hub
on old cut out line @ 530 enter round wet marsh
@ 683.6 hub Ties R.O. 5N13°30'E 10.20 Twin R.O. 15x14
at base S33°50'E 30.30 @ 847.5 hub Ties
7" W O North 2.50 7 W Birch S72°30'E 8.20
@ 1182 enter wet swp 1397.5 hub 20 ft E of swp
Tower 1397.5 - 2" I.P. Set by Surveyor Green
for E 1/4 Sec 6-140-30 bears N66°36'W 56.3 ft

IM 56.3
N66°36'W
22.3

1345.83

57.67

1397.6 E

2214.8 hnt Ties W.O. 8 N 52° 53' E 79.95
Oak 20 N 17° 55' W 53.98

@ 2400 Cross same old road NW-SE

@ 2823.9 hnt no ties

@ 3092.6 " Ties W.O. 4 N 54° 20' E 36.15
R.O. 4 N 2° 18' W 34.10

@ 3410 enter wet swp NE-SE

@ 3562 Cross 2nd ditch or stream N+S

@ 3692.6 stake in wet swp 10 ft W of E edge.
NW+S-SE

@ 3865.4 hnt Ties J.P. 9 N 1° 22' E 66.20
R.O. 6 S 38° 22' E 45.90

@ 3965 enter S end of wet ground 25 ft wide

@ 4103 enter wet swp NE+S about 50 ft S of N end

@ 4234 E Lvs same NW-S

@ 4321.3 hnt Ties J.P. 8 N 18° 12' E 45.0 viz stop
" " 5 S 25° 06' E 77.0 " "

@ 4993.3 hnt on top Ties Birch 6 S 19° 33' E 45.7
N.P. 14 N 35° 11' E 61.5 viz stop

@ 5263.10 hnt

From 5263.1 a 2x48" jupe set by B.B.B
bears N 34° 56' W 8.15

Ties to hnt 5263.1 Oak 5 N 26° 48' W 39.8
Poplar 7 N 3° 17' E 23.4

Cluster of 3 R.O. 8-6-5 use E 8" oak
S 74° 46' E 75.0 Yellow Tag on NW 5" Oak

@ 5358 hut Tis N.P. 18 S $50^{\circ}16'$ E 63.32

Twin Birch 5x5 N $19^{\circ}50'$ W 28.5

April 11 - 1946

from hut 5358 E of Green's New CC NE
cor Sec 6 - 140 - 30

@ 5483 enter wet swp NW-SE @ 5540
Lv swp NW-SE

@ 5358 + 200 = 5558 pin

@ 5695 pin @ 5808 enter swp NE-SW

@ 5910 E Lv swp NE-SW @ 5995 pin

@ 6295 pin + 64.9 = 6359.9 hut $\frac{1}{2}$ " wood hut
ties N.P. 16 N $20^{\circ} \pm$ W 35.8 ft

Birch 5 S $50^{\circ} \pm$ W 16.85

@ 6495 E enter big swp NW-S

@ 6609.9 pin in big swp + 300 = 6909.9 pin
30 ft E of swp @ 6922.2 hut 60" spike

Tis W.O. 5 N $70^{\circ} \pm$ E 36.1

J.P. 9 N $45^{\circ} \pm$ W 20.60

@ 6922.2 we offset 45 ft S continue E

@ 7911.3 hut 60" spike on top 6 ft N of S shoulder
of road Tis Pop 7 S $10^{\circ} \pm$ E 32.9

" L N $45^{\circ} \pm$ E 52

@ 8648.5 hut 60" spike on top 1 ft S of N shoulder

Tis Twin W.O. - 10-14 - use the W 14" tree
stands South \pm 31.3 R020 N $50^{\circ} \pm$ E 43.95

May 7 1954

Albert Thomas & I look
for the S E cor Sec 31-141-30

Where U.S. Notes call for

W P 20 N 67° W 38.28

Pine Stub 22 N 60 E 63.36

E B Horst could Not find
them in 1918

John Green did not find it
in 19 when he subdivided
Sec. 6-140-30

We had to make sure.

May 10 1956

Albert Thomas & I go to

 $\frac{1}{4}$ N side Sec 31-141-30set flag. go E took son. E $\frac{1}{4}$ IMfind E $\frac{1}{4}$ IM but as the $\frac{1}{4}$ N

side Sec 31 is in swamps and

the Sec. line E of $\frac{1}{4}$ is mostly

in wet swamps we decided to

run a Traverse from hut

on Random N+S & Sec 31

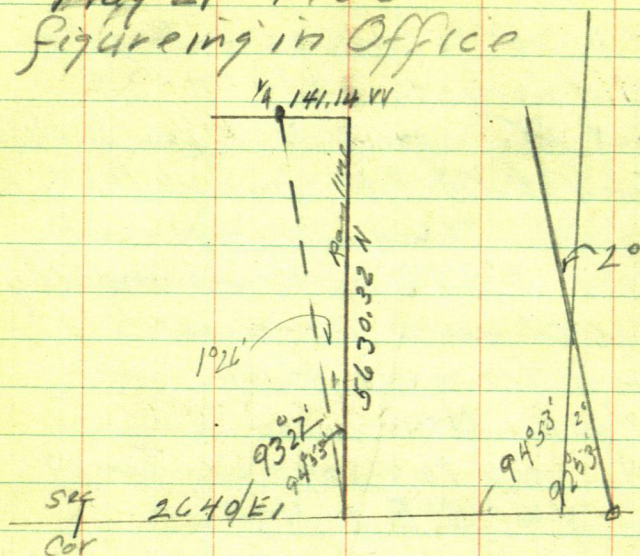
Notes page 125 says from Temp $\frac{1}{4}$ run N $4^{\circ}53'E$ on N+S &

Traverse hut on N+S & (pg. 128-) 5102.9

N I site Son Random Trvs. @ 00° and run N $21^{\circ}06'E$ 393.3 Sta 1" S $57^{\circ}08'E$ 261.5 " 2run S $70^{\circ}17'E$ -300+130.5- 430.5 (3)N $53^{\circ}15'E$ 300+171.5= 471.5?N $27^{\circ}16'E$ 151.95 to IMEX $\frac{1}{4}$ G

140

May 21st 1956
 figuring in Office

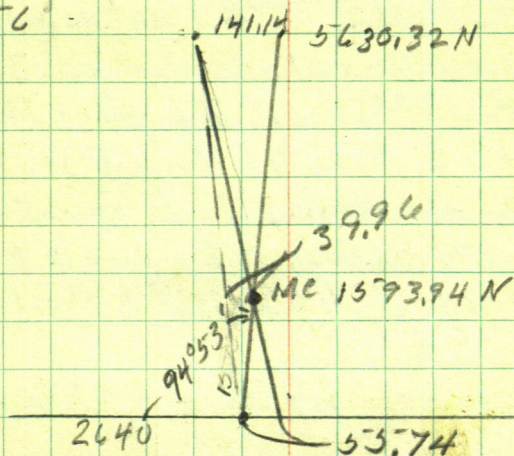


from hub 5102.9 Non Random N & S E

as old Horst notes say from NE Cor
 Sec. 31 S to 105th PL. is 5424.8 ft
 the N & S E Sec 31 is 5630.32
 at E 1/4 line it should be $5527.56 =$
 102.76 shorter in 1/4 mile as you go E

from MC bet Lots 3-4 on N S E
 to 1/4 on N side is 4036.38 ft
 $141.14 + 4036.38 = 4177.52$

from 2640 E to S line Sec 31
 called 00 E run N $4^{\circ}53'E$
 @ 56



at 1593.94 Horst IN MC goes W 39.96
 from Horst & MC to Vicer is
 4036.38 ft.

$$39.96 \div 4036.38 =$$

$$.0099 = 0^{\circ}34'$$

$$.0099 \times 5630.32 = 55.74$$

as the N. line of sec. 31 is narrow on the
 E than on the West at the rate of 70.86 in 1/4 mile
 with this line called E & W the N line
 run ~~5852~~ $585^{\circ}33'E$ as the N & S line run from
 1320) 70.8 (.05363636 = 3003'
 $586^{\circ}57'E$

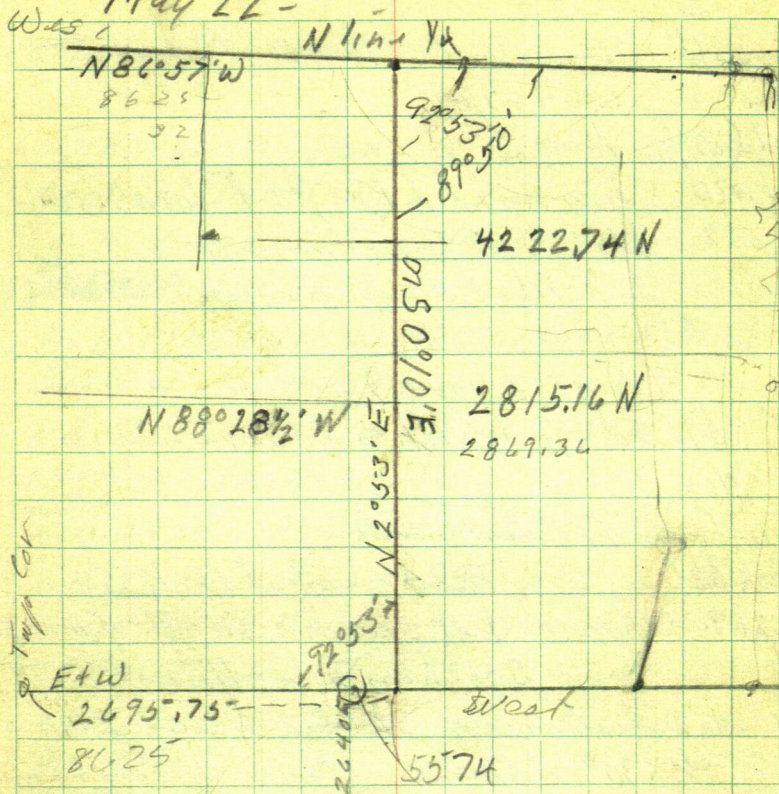
the S. line run from a point 53.74 E of
 2640 E it would run from a point 2695.74
 E on 10th S.P. N 2°53'E but as we have
 a Gov't $\frac{1}{4}$ corner on the N side of Sec. 31 and
 nothing on the S. end I figure the course
 of the N & S of Sec. 31 using the N line
 as E & W in doing so to run South
 from N $\frac{1}{4}$ cor using N line as E & S you
 run S 1°34' E 4034.38 ft to Horst's IM
 N.C. 50°10'E

in correcting said N & S from
 an random

@ 159394 N = IMME goes West 39.96 ft then
 as this IM is on true line we have to chain back
 E 39.96 to the line Correction, 02506784
 hub 1973.64 N goes W 47.13
 hub 1973.64 N is 3656.56 S goes E to line
 hub 2575.74 N goes W
 " 2575.74 N is 3054.46 S goes E
 " 3795.34 N goes W
 3795.34 N is 1834.86 S goes E
 hub 1744.04 N goes W
 " 1744.04 N is 3886.16 S & goes E

Correction for line E after it has been
 set W is .0099 E for Each foot S

May 22 -



from 1/4 Corner N side of Sec 31
using N line of Sec 31 as E & W
run 80° 10' E 4036.58 to IM
on N & S & set by Elmer B Horst
for MC. between Gov't Lots 3 & 4 Sec.
31-141-30

32482
800

40482

page 325

W.D. Eeon W La Clair + Mildred La Clair

Apr 1-46 hub + wife

fired Dec 28/51 to

Book 107D Raymond A Kraft + Florence M

Pg. 522 Kraft as joint tenants

Described same as Next above,

(Next Above)

Alfred M. Smith + Marie - wife
to

W.D. Leon La Clair + wife

Book 62D Commencing at the $\frac{1}{4}$ Sec

Pg. 269. corner bet sections 30-31 of 141-30

Thence South on $\frac{1}{4}$ Sec line of sec 31

a distance of 3248.2 ft to an I.M.

2 $\frac{1}{2}$ X 30" capped and place of beginningThence South on $\frac{1}{4}$ Sec line 800 ftto an I.M. 2 $\frac{1}{2}$ X 30" Capped being a special

Meander corner on the N shore of Ten

Mile Lake thence Northwesterly + westerly

along the shore of Ten Mile Lake

as follows N 61° 30' W 169 ft - S 44° 30' W

110.5 ft S 52° 15' W 157 ft North 25° 45' W

30 ft N 7° 00' W 100 ft N 38° 15' W 100 ft

N 22° 45' W 148 ft N 43° 12' E 20 feet to an

I.M. 2 $\frac{1}{2}$ X 30" Capped on the shore of Ten Mile

Lake Thence N 43° 12' E 707 ft to I.M.

May 23rd 1956

145

The place of beginning Less RR right of way

Corrections for our Random N+S $\frac{1}{4}$
Section 31-141-30

Correction .0349678 W for each RN 55.74

At East to line

hub 1745.04 N goes W 61.02 then E 55.74 = to
5.28 W to on N+S $\frac{1}{4}$

hub 1973.64 N goes W 69.01 then E 55.74 to
13.27 W to on N+S $\frac{1}{4}$

hub 2575.74 N goes W 90.07 then E 55.74

34.33 W to on N+S $\frac{1}{4}$ ^{on shoulder of H.Y.}

hub 3795.74 N goes W 132.73 then E 55.74

76.99 W to on N+S $\frac{1}{4}$ ^{on high hill}

hub 3978.59 N goes W 139.12 then E 55.74

83.38 W to on N+S $\frac{1}{4}$

hub 4205.49 N goes W 147.06 then E 55.74

91.32 to on N+S $\frac{1}{4}$

hub 4817.59 N goes W 168.46 then E 55.74

112.72 to on N+S $\frac{1}{4}$

hub 5102.9 N goes W 178.44 then E 55.74

122.72 to on N+S $\frac{1}{4}$

hub 5830.32 N goes 196.88 then E 55.74

to 141.16 to IM $\frac{1}{4}$ N side Sec. 31

from hub 4205.49 run N 17.25 to 4222.74
then W 147.66 then E 55.74 to 91.92 = $\frac{1}{16}$ Center
N $\frac{1}{2}$ Sec 31 - 141-30

as Kraft's 5 acres starts 3248.2 ft
South from $\frac{1}{4}$ Cor his North corner
would come 2382.12 ft N.

as but on a shoulder of State highway
is 2575.74 ft N we chain S 193.62
ft S along the correct line 193.62 ft
to said point.

Fig Lake shore angles given in
deed, page 522 Book 107 of Deeds
in office of Reg. of Deeds

from point on N & S \pm 800 ft S of
pt 2382.12 N = 1582.12 N of S line
run N. Cor 00 E 800 N MC 900 South.

N $61^{\circ}30'W$ 169

sine $878817 \times 169 = 148.52 W = 148.52 W$

cosine $477159 \times 169 = 80.64 N = 719.36 S$

S $44^{\circ}30'W$ 110.5

sine $700909 \times 110.5 = 77.45 W = 225.97 W$

cosine $713250 \times 110.5 = 78.81 S = 798.17 S$

S $52^{\circ}15'W$ 154

sine $790690 \times 154 = 121.77 W = 347.74 W$

cosine $612217 \times 154 = 94.28 S = 892.43 S$

N 25° 45' W 50'

$$\sin \theta 434445 \times 50 = 21,72 \text{ W} = 369.46 \text{ W}$$

$$\cos \theta 900698 \times 50 = 45.03 \text{ N} = 847.42 \text{ S}$$

N 7° 00' W 100

$$\sin \theta 121869 \times 100 = 12.19 \text{ W} = 381.65 \text{ W}$$

$$\cos \theta 992546 \times 100 = 99.25 \text{ N} = 748.17 \text{ S}$$

N 38° 15' W 100

$$\sin \theta 619094 \times 100 = 61.91 \text{ W} = 443.56 \text{ W}$$

$$\cos \theta 785317 \times 100 = 78.53 \text{ N} = 669.64 \text{ S}$$

N 22° 45' W 148

$$\sin \theta 386711 \times 148 = 57.23 \text{ W} = 500.79 \text{ W}$$

$$\cos \theta 922201 \times 148 = 136.49 \text{ N} = 533.16 \text{ S}$$

N 43° 12' E 20 M To IM

$$\sin \theta 684547 \times 20 = 13.69 \text{ E} = 487.10 \text{ W}$$

$$\cos \theta 728969 \times 20 = 14.58 \text{ N} = 378.57 \text{ S}$$

N 43° 12' E 707

$$\sin \theta 684547 \times 707 = 483.97 \text{ E} = 3,113 \text{ W}$$

$$\cos \theta 728969 \times 707 = 515.38 \text{ N} = 3,195 \text{ S}$$

this should have come out 00-S

" " " " " 00 W

148

3795.74

183.25

8338

7698

1.40

3978.30.32

1593.94

103496.69

4036.38

141.14.00

3

12109.14

324

12109.14

200486.0

4036.38

4036.38

141455.2

6

4

390308.0

2421828

161455.2

363274.2

53.2

270338.0

4036.38

2421828

9

281552.0

363274.2

4036.38

323846.5

2421828

3795.34

3496.69

39369.2

240.64

214618.5

3795.74

5630.32

143079.0

402264

3795.34

143079.0

1834.98

914618.5

3795.74

715395.18

183.25

3795.34

838

3978.99

1593.94

3795.34

3496.69

2201.80

1593.94

2201.4

3496.69

2201.40

13986.76

19816.20

2201.40

3496.69

132108.0

183.25

6993.38

132108.0

23846.5

6993.38

19816.20

76976.13

88072.0

2575.74

66062.0

1593.94

76.998

981.80

May 24 - 1952

149

hub on top 3795.34 N =
2201.9 N of MC and goes W 76.98 ft
to line

hub 3978.59 N of S line is 2384.65 N
of MC and goes W (83) 38 ft to line
hub

hub 4205.49 N of S line is 2611.53 N of MC
and goes W (91.32)

Albert # I correct hub 3978.59
and hub 4205.49

Tower corrected 4205.49 site S
as corrected hub 3978.59 and
set a 60' spike on line on top of
hill. Transit telescope and run
N 17.25 ft and set a 2x36" iron pipe
for Vic cor Center N $\frac{1}{2}$ Sec 31-141-30

Tower hub 2575.94 N of S line and 981.8
N of MC site. Son Random Turn 90° and
run West 34.33 to line

Tower corrected hub 2575.94 site
N on hub on top on corrected line +
run S 193.62 to Krafts cor
run N 293.42 to Center Sec 31

June 11th

Ed + I after supper drive to Ten Mile Lake and continue E + W @ Sec 31 set hubs gets to dark to see.

June 12th

Ed + I go to Remer S. side Big Sand Lake.

dinner in Remer, drive back to Walker I sleep until 4-30

Ed + I to Ten Mile Lake and continue E + W random line West setting hubs on random.

Notes last hub W. I M corner by Green for cor bears $S 39^{\circ} 55' W$

beg. at hub at 2815.16 N on N + S @ pt for I M Center of Sec. 31 chain West on Temp E + W @ @ 41.9 = @ Tar Hy 371

@ 198.2 cross RR R/W fence

@ 256.7 hub on top. W goes S 15.33

@ 474.1 " W goes S. 28.31

@ 616.4 hub W. " S 36.81

@ 745.8 hub W. " S 44.54

@ 1052.9 hub W. " S 62.88

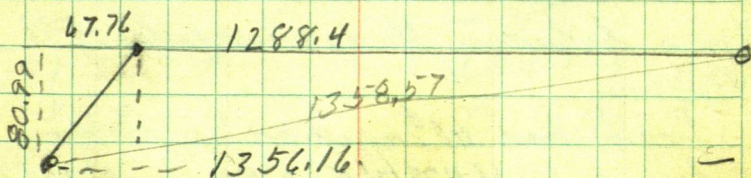
@ 1166.8 hub W. " S 69.68

@ 1288.4 hub, W goes S. 76.94

Tower hub 1288.4 IM sets
S. 39°35' W or L. 50°05'
105.6 ft

$$\sin 76.94 \times 105.6 = 67.76 \text{ W}$$

$$\cos 76.94 \times 105.6 = 80.99 \text{ S}$$



Corrections

$$80.99 \div 1356.16 = .05972 = 3^{\circ}25'$$

hub 256.7 W goes S. 15.33 to E & W \checkmark

" 474.1 W " S 28.31 " " " \checkmark

" 616.4 W " S 36.81 " E & W \checkmark

" 745.8 W " S 44.54 " E & W \checkmark

" 1052.9 W " S 62.88 " E & W \checkmark

" 1166.8 W " S 69.68 " E & W \checkmark

" 1288.4 W " S 76.94 " E & W \checkmark

152

June 15 - 1955

Don + I meet Albert Thomas
and go to spike on R.R. Tract
on N4S & Sec. 31-141-30
3248.2 ft South of $\frac{1}{4}$ I.M. North
side Sec. 31

Turn spike 3248.2 S. of $\frac{1}{4}$ site S
on N4S & Turn R. $43^{\circ}12'$ and run
line between Happiness Lodge &
Brown.

from hub 60.1 spike on top chain
down hill N $43^{\circ}12'E$ @ 90 min @ 260.85
hub. on N4S & 3248.2 being Pt. of beg.
of Happiness Lodge Tract

From 3248.2 Run S $43^{\circ}12'W$
@ 48.45 hub on R of W Fence line
@ $140 \pm$ fork in roads one to Browns
one Fort to Happiness Lodge

@ 260.85 hub on top + 100 = 360.85 min +
111.4 = 472.25 hub

(Note) about 375 enter N end of wet
land about 25 ft S of N end

at 472.25 edge of wet land, +

113.8 = 586.05 hub. + 45.5 = 631.55

hub + 1.7 = 633.25. hit corner of building

hub 631.55 is 1.1 from side of building
about $2\frac{1}{2}$ ft from corner of bldg.

90	260.85	260.85	360.85	153
130.4	2124	120	1114	
220.4	48.45	14	472.25	
2-8	90		1138	
212.4	23.8	50.5	586.05	
	113.8		45.5	
			631.55	
			17	
			325	

$$631.55 + 10$$

$$691.55 + 825$$

$$699.80 \text{ hub}$$

$$+ 4. = 701.80 \text{ water}$$

$$@ 691.55$$

$$691.55$$

$$- 7$$

$$684.55 \text{ pt for}$$

$$IM, 685.$$

689.5 DLD IM sets N @ 90°
8.3 ft.

Tower hub 1288.4 on E+W & random
BS S 88°28' E on random
run S 41°58' W to IM on E. line
Lot 2

Tower IM BS N 41°58' E th E line
Lot 2 turn S 0°10' E

134

$$\begin{array}{r} 19.9 \\ 4 \\ \hline 15.9 \\ 40 \end{array}$$

Ralph Brown

5032 - 14th Ave So.

Minneapolis 17-Minn.

Bill for work on Ten Mile lake
\$580 he paid by check \$300.bal. due \$280 will send statement
monday if he does not show up over
the week end.Sept 5th 1956

Correction for N & S of Sec 31

141-30 see page 145 - 2°

.03496% 97W for each foot N

hub 151.10 N of MC run W 5.28

" 379.7 N & " " W 13.28

" 981.8 N " " " W 34.33 hub on
west side

110.2 100.05 49.65 130.6 109.8 153
 $\frac{6}{42}$

Brown & Happiness ledge

Tower hub 266.85 on page 152 this book
 run S 43° 12' W along property line
 site on hub 472.25 set hub @
 from hub 472.25 chain N 95° 05'

to plat beg. - to hub 377.20 S W
 472.25 along property line
 - 95° 05' from pt on R.R. tract
 377.20

Tower 377.2 into S 43° 12' W and
 run S 25° 15' W 122.5 to A.P.

Tower 122.5 BS N 25° 15' E and down
 S 54° 37' W 103.80 to A.P.

Tower 103.80 BS N 54° 37' E run
 off at 5.05 (35°) at pt tower pt site
 of flag turn N 54° 37' E

Tower 122.5 BS N 25° 15' E run
 S 55° 27' W 104.2 to A.P.

Tower 104.2 BS N 55° 27' E run
 S 83° 40' W 24.20 to intersection with property line

Then property line @ 566.05 S 43° 12' E
 site along property line set hub at inter-
 section of property line and line from
 S 83° 40' W 27.75 to intersection
 From intersection pt run S 83° 40' W 53.9
 to E.M. on shore 45.67 from I.M. on property line

156

Section 31-141-30
Kraft - Brown

Ralph Brown
5032 - 14th Ave So.
Minneapolis 17, Minn

Raymond A. Kraft
Happiness Lodge Resort
Hackensack Minn.

Sec. 6 - 140 - 30

In Greene's subdivision of Sec. 6-140-30
 the N line of sec 6 from Lake E runs
 $N 88^{\circ} 52' E$ and the N & S of Sec 6 runs
 $N 0^{\circ} 52' E$ - From Greens I Mon N & S of Sec 6 it is
 1208.5 S. to $\frac{1}{4}$ center N $\frac{1}{2}$ sec. 6 + 1323 to center of sec

Note

This goes into Book 293 or 298 ?

Ten Mile Lake Store

From hub on our old random
line N line sec. 6 - 140-30

Over hub 683.6 BS on hub

847.5 and find hub 523.9

at spike on line W on top find

my old spike at in Brown's

Survey 1 ft W of old log and

1.8 E of my new spike hub

Over my new spike BS E on

hub 683.6 and set hub on Lake

shore of Ten Mile Lake

Take course to

$N 2053 \frac{1}{2} 281514$ $S142 050302 \times 286936 = 144.33$ $Cos142 998634 \times 286936 =$

160

32 33

US Govt
Con

279656

32

279656

8389.69
11085.44

2796.56

31

N 3003' E
at 1111 ft with
4 N 3014' E MC N 3016' E

2695.75

141000

5
1003'

3112.15

290

2696.1

212401

from M Crn E at 523.9 hrb sat Hy + sup
@ 1345.83 E IM $\frac{1}{4}$ Cor. N of su 6 sat N 22.36

correction of our old random list
hub 10th St. P. book 269, page 18

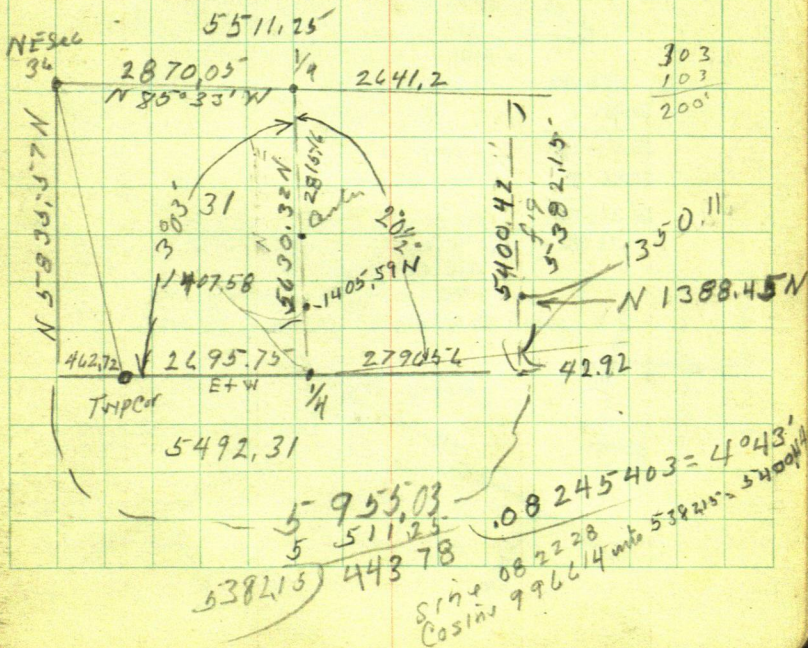
from ME W of RR tract on 10 mile lake W
correction .0182 = $1^{\circ} 02' \frac{1}{2}$

hub 523.9 E goes N 9.53' to 1013 St.P.
line

F19

hub 523.9 E 13 3434.01 E of Twp 10 Corr
and 940.27 E of pt for 1/4

NW cor of Lot 5 - Sec. 31 - T41 - R31
intersects N45°E at 1407.58 ±



162

N 85° 33' W 2641.2

S 85° 33' E 2641.2

SIN 996985 - 2633.24
COS 077589 20.493

N 87° 47' W 3

N 88° 53' S 3

12210321
3030321

E & W

Judicial

CURVE TABLES.

Published by KEUFFEL & ESSER CO.

HOW TO USE CURVE TABLES.

Table I. contains Tangents and External to a 1° curve. Tan. and Ext. to any other radius may be found nearly enough, by dividing the Tan. or Ext. opposite the given Central Angle by the given degree of curve.

To find Deg. of Curve, having the Central Angle and Tangent: Divide Tan. opposite the given Central Angle by the given Tangent.

To find Deg. of Curve, having the Central Angle and External: Divide Ext. opposite the given Central Angle by the given External.

To find Nat. Tan. and Nat. Ex. Sec. for any angle by Table I.: Tan. or Ext. of twice the given angle divided by the radius of a 1° curve will be the Nat. Tan. or Nat. Ex. Sec.

EXAMPLE.

Wanted a Curve with an Ext. of about 12 ft. Angle of Intersection or I. P. = 23° 20' to the R. at Station 542+72.

Ext. in Tab. I opposite 23° 20' = 120.87
 $120.87 \div 12 = 10.07$. Say a 10° Curve.

Tan. in Tab. I opp. 23° 20' = 1183.1
 $1183.1 \div 10 = 118.31$.

Correction for A. 23° 20' for a 10° Cur. = 0.16
 $118.31 + 0.16 = 118.47$ = corrected Tangent.

(If corrected Ext. is required find in same way)

Ang. 23° 20' = 23.33° ÷ 10 = 2.3333 = L. C.

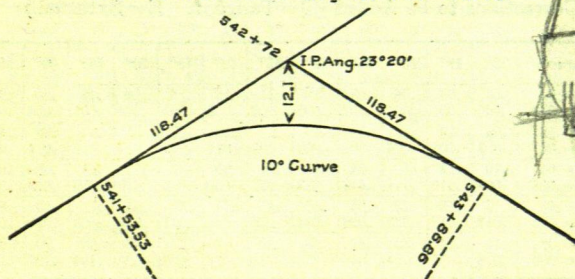
2° 19½' = def. for sta.	542	I. P. = sta.	542+72
4° 49½' = " " "	+50	Tan. =	1 18.47
7° 19½' = " " "	543	B. C. = sta.	541+53.53
9° 49½' = " " "	+50	L. C. =	2 33.33
11° 40' = " " "	543+	E. C. = Sta.	543+86.86
	86.86		

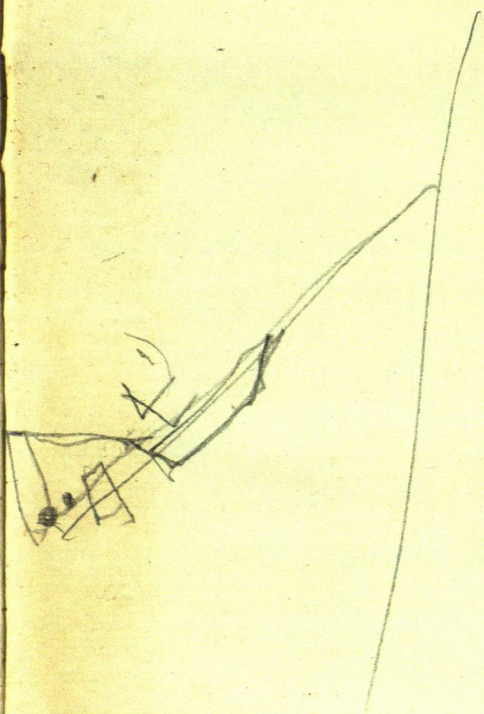
$100 - 53.53 = 46.47 \times 3' \text{ (def. for 1 ft. of } 10^\circ \text{ Cur.)} = 139.41' =$

2° 19½' = def. for sta. 542.

Def. for 50 ft. = 2° 30' for a 10° Curve.

Def. for 36.86 ft. = 1° 50½' for a 10° Curve.





172.3

124.4

1285.2

276

129.65

$\frac{7}{122.65}$

210 enter by

4 7°08' 72.5
58 94 3

$\frac{6}{348}$
 $\frac{5.76}{348}$
 $\frac{5.76}{3828}$
 $\frac{6.33}{3828}$

1285.2

370.4

1285.2

2570.4

1285.2

1310

2595.2

N 1297.6
285.2

300 124

~~1285.2~~

~~1310~~

2595.2

2570.4

24.8

7°08'

Sine
Cosine

847

683

164