

BRainerd - Motley Road  
S.T.H. No 2

122  
TRANSIT - No 1

FIELD BOOK

361

Transit Notes  
 Δ Mag. bear

Sta.  
 16  
 15  
 14  
 +82  
 13  
 12  
 11  
 +39.4  
 10  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1

Due East (8°30') V.

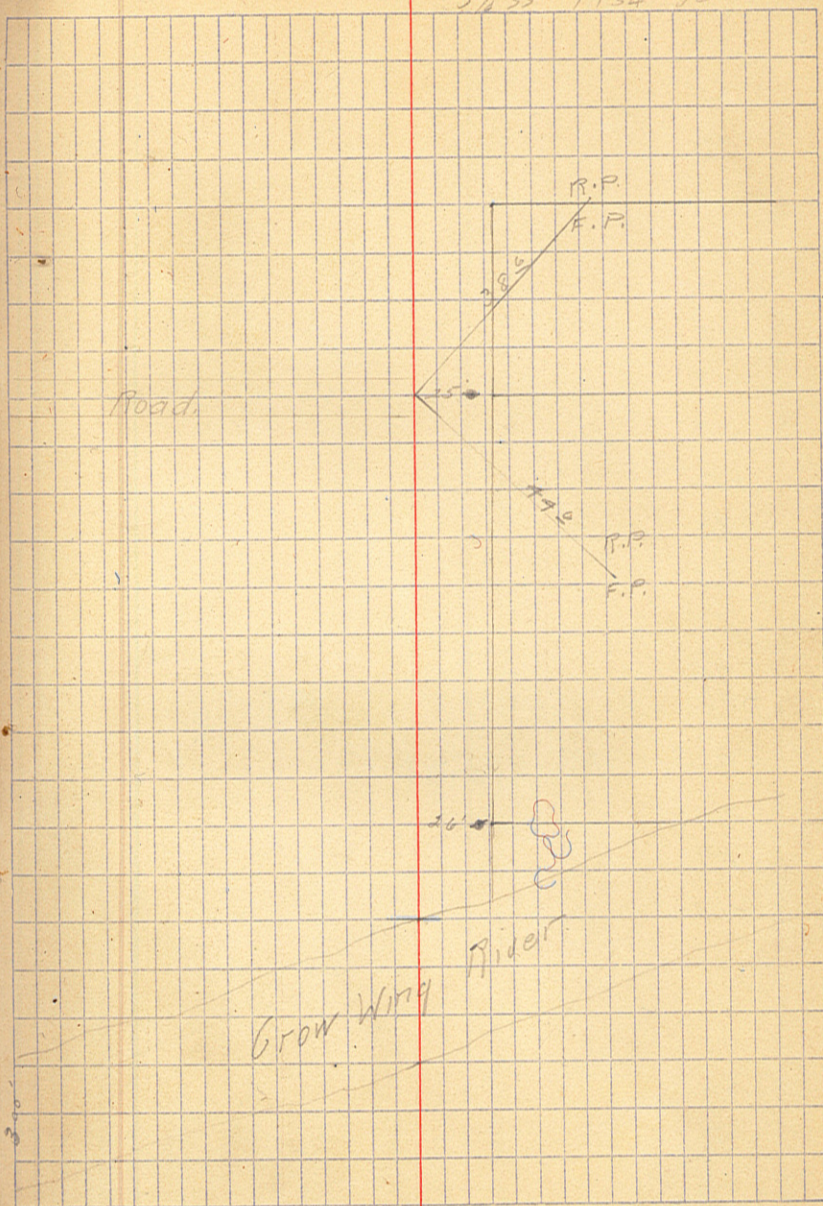
S 1/4 cor. Sec. 33  
 T 134 R 32

N 79° 40' E Line follows road.  
 0+00 = E bank Grow Wing River.

Brainerd - Motley Road

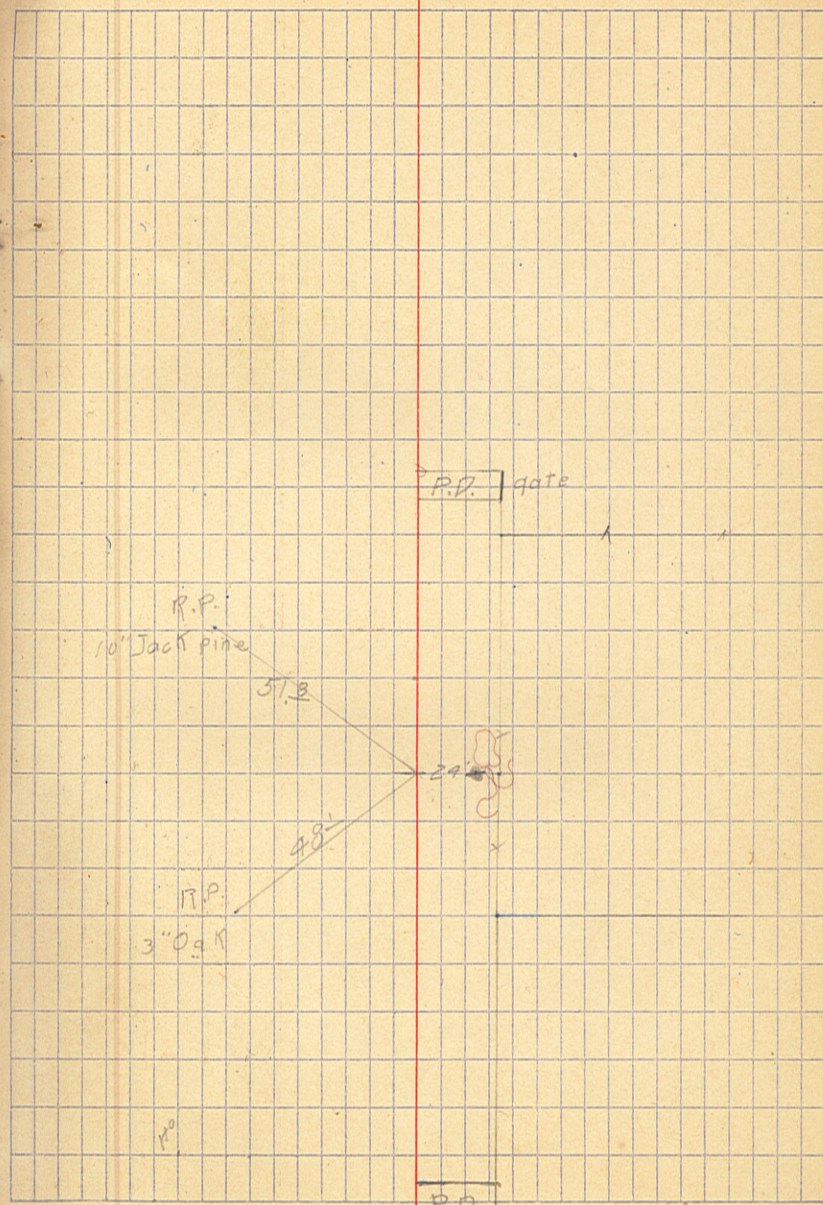
(2)

S 1/4 33 T 134 R 32



Sta	A	Mag. bear.
35		
34		
33		
32		7
31		
30		
29		
28		
27		
+20		
+13		
26		
25		
24		
23		
+96	P.O.T.	N 80° 30' E
22		
21		
+12		
20		
19		
18		
17		
+56		
16+30		

P.D.P.



R.P. gate

R.P.  
10" Jack pine

37.2

29

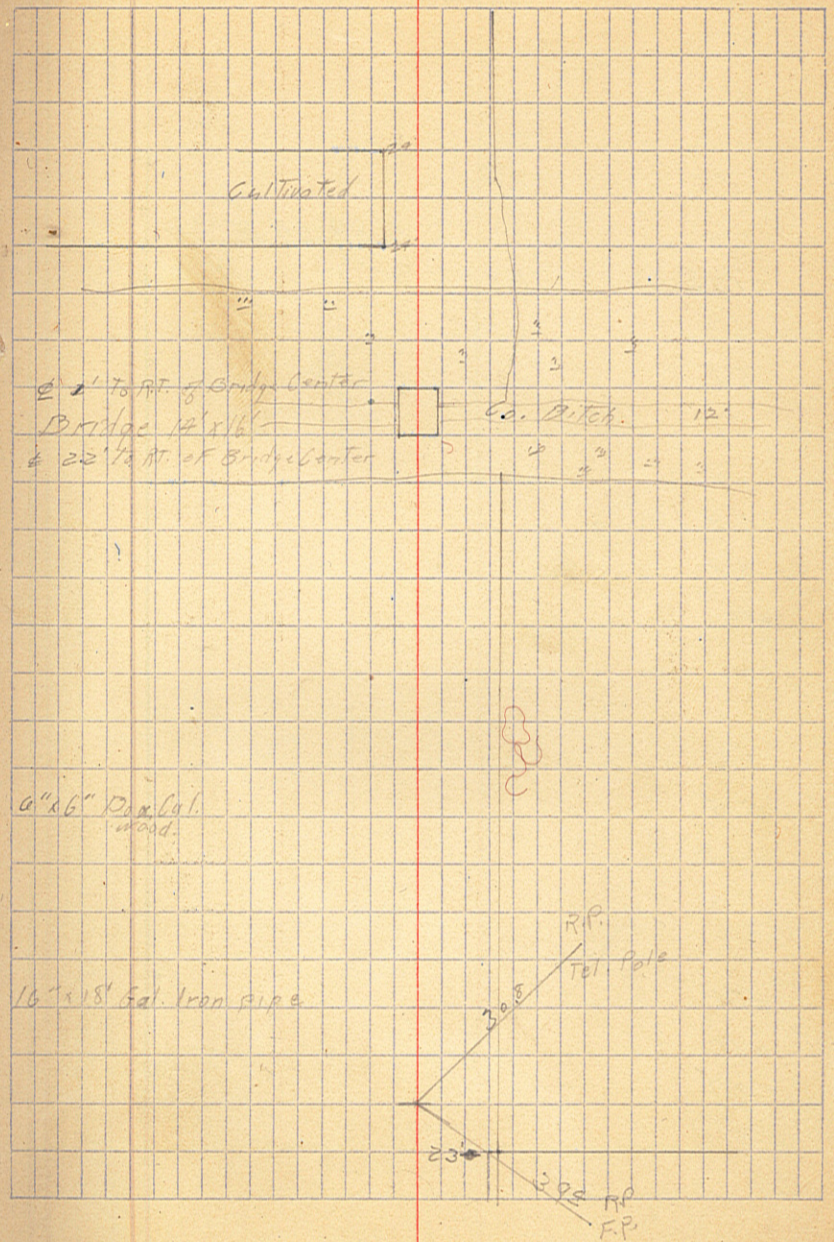
48'

R.P.  
3" Oak

P.D.

Sta.    Δ    Mag. bear

51			
+76			7
50			
+83			
+60			
49			
48			Bridge head
+86			
47			
46			
45			
44			
43			
42			
41			
+75			
40			
39			
38			
+55			
37			N. 89° 57' E
+75 <sup>2</sup>	0° - 03'	N 80° - 30' E	Sec. 6 or 7    3   34
+56			4   33
36			



Sta.    Δ    Mag. bear

67

66

+75

65

64

+12<sup>s</sup> 0°-23' N 80° E

63

62

61

60

59

58

+60

+20

57

56

55

+97

+38

+12

54

+69

+57

53

52

7

Fence

N. 89° 34' E.

S 1/4 Cor. Sec 34

Wood Cuts. 6" 26" x 16"

R.P.  
F.P.

38'

R.P.  
F.P.

42'

P.D.

16  
30

30  
100

Wood Cuts. 6" 26" x 16"

24'

15  
30

P.D. P.D.

(5)

Sta.  $\Delta$  Mag. bear

86

+60

85

+75

84

+60

83

82

81

80

79 P.O.T.

78

77

+35

76

+45

75

74

73

72

71

70

+16

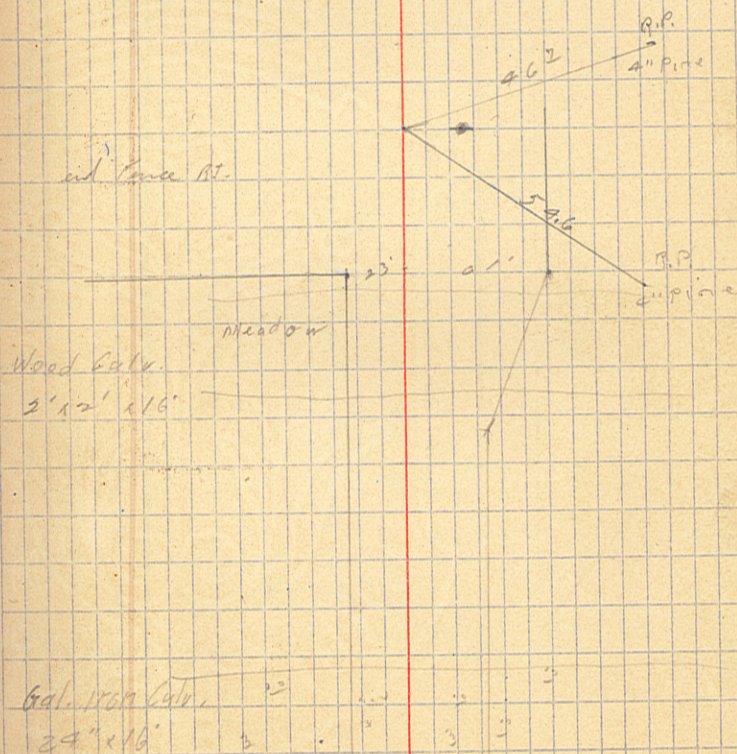
69

68

leam meadow

enta meadow

18" x 16" Gal. Iron Cate.



6

Sta.  $\triangleright$  Mag. bear

+51

106

105

104

103

102

101

100

+78

99

98

97

96

95

94

93

92

91

90

+89

+51<sup>2</sup> 0°-03' N 80°E

225 rel. line

89

88

87

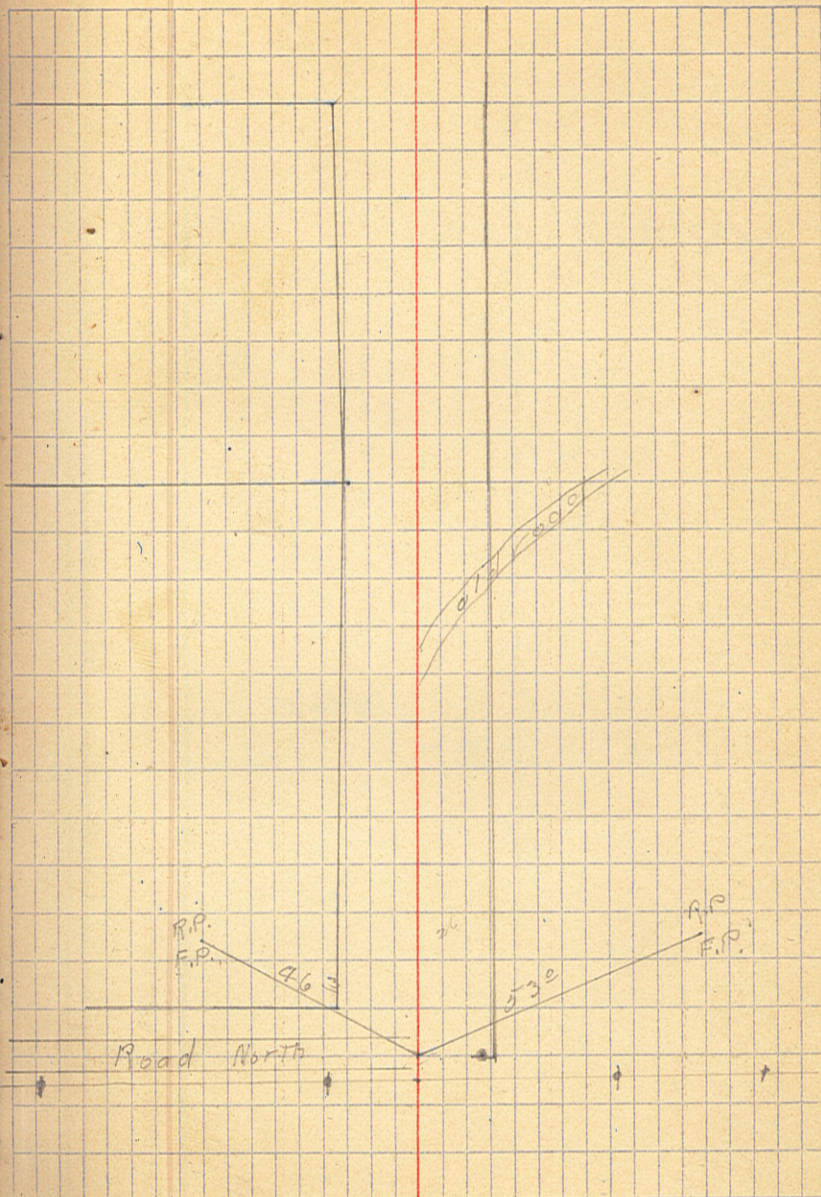
N. 89° 31' E

Sec. 60.

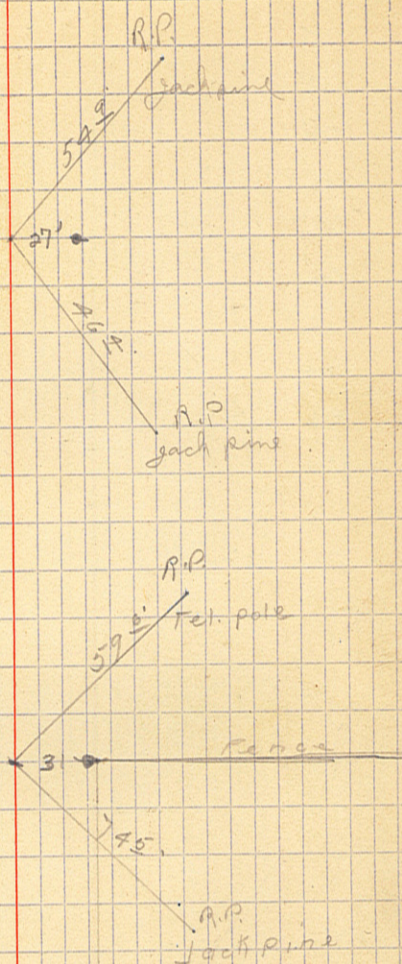
35 2

34 3

(7)



Sta.	A	Mag. bear.
129		
128		
127		
126		
+55.8	P.O.T.	N80°E
125		
124		
123		
122		
121		
120		
119		
118		
117		
116		N.89°26'E
+87.5	0°05'E	N80°E S 1/4 6or. Sec 35
115		
114		
113		
112		
111		
110		
109		
108		
107		





Sta.  $\Delta$  Mag. bear.

151

T.B.

150

149

148

147

146

145

144

143

+54

+28

+213  $0^{\circ}-10'$  R

N.  $89^{\circ}36'E$

Sec Cor.  $\frac{36}{35}$   $\frac{31}{2}$

142

141

140

139

138

137

136

135

134

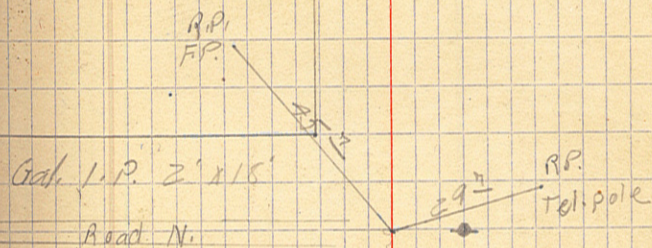
133

132

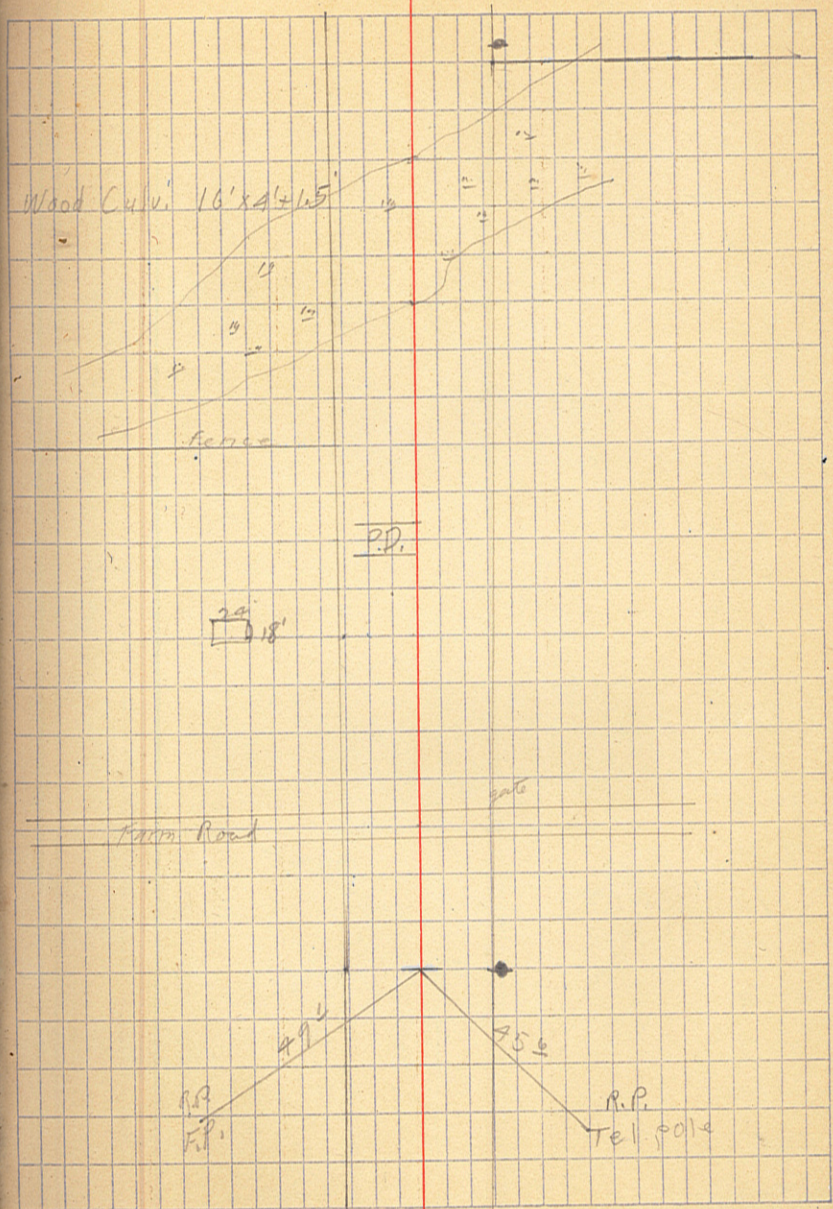
131

130

(9)



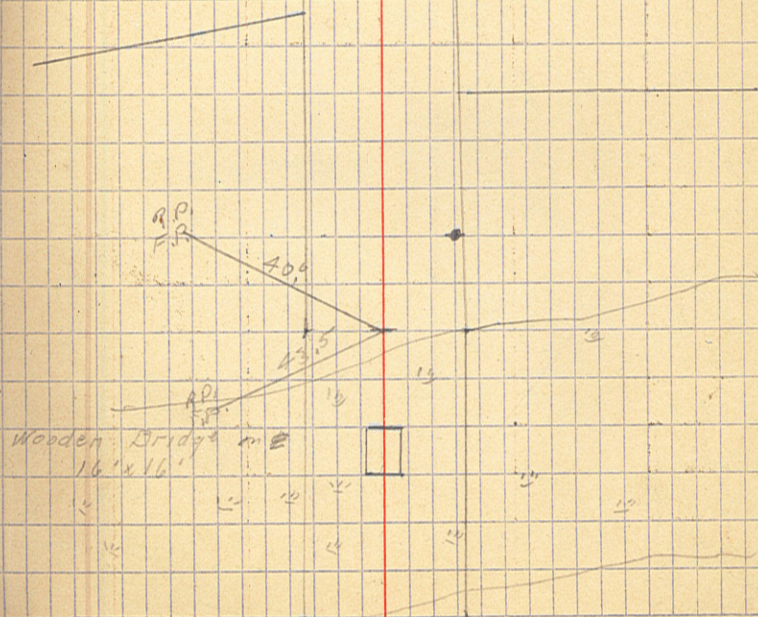
Sta.	△	Mag. bear.
+47		
168		
+30		
+10		
167		
166		
165		
164		
+33		
163		
+75		
162		
+45		
161		
160		
159		
+50		
158		
157		
+29	ROT.	N80°30'E
156		
155		
154		
153		
152		



Sta.	$\Delta$	Mag. bear.
187		
186		
185		
184		
183		
+66		
182		
181		
180		
179		
178		
+57		
177		
+05		
176		
175		
174		
173		
172	P.O.T.	
171		
+39		
+23		
170		
169		
168+57		

enter meadow

8" x 18" P.A. Culvert



Sta.  $\triangle$  Mag. bear.

208    entire swamp

207

206

205

204

+96 P.O.T. N 81°30'E

203

202

201

200

199

198

197

196

+10

195    S. 89°28'E

+98<sup>5</sup> 0°56' P    Sec. Cor. 5' x 11' granite rock.

+85

194

193

+18

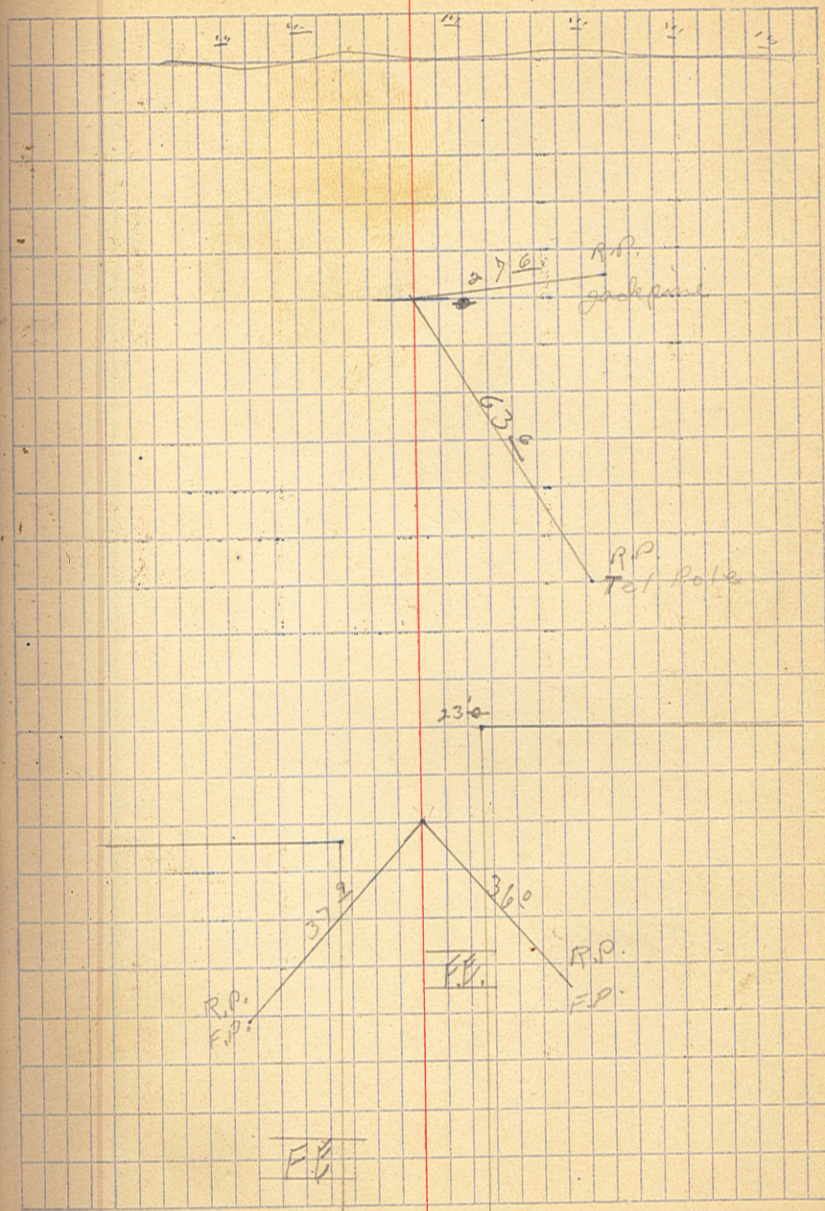
192

191

190

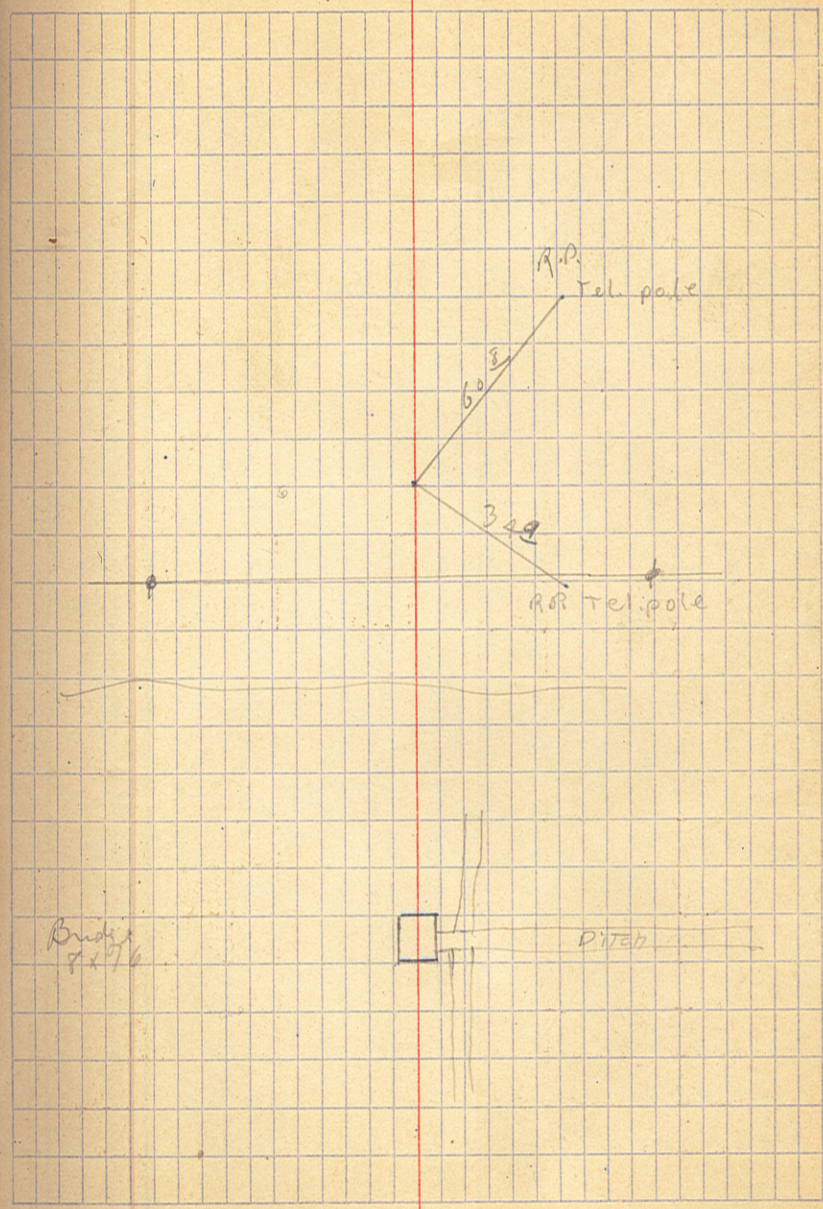
189

188



Sta.  $\Delta$  Mag. bear.

+02.8 End of survey  
220  
+75  
219  
218  
217<sup>+50</sup>  
216  
215  
214  
+02  
+34  
213  
212  
211  
210  
209



289

8

7

6

5

+74

4

3

2

1

280

9

8

7

6

5

4

279+55.8 90°13' L N 80°30' E

N & S Tel Line

1/4 Cor. 6/7 T133.

Chained S. on S.R.#81 from end of previous survey 220+028 - 5353' to beginning of present survey.

Rain in morning

Late start.

Showers in A.M.

Sat. Sept. 13, 1919.

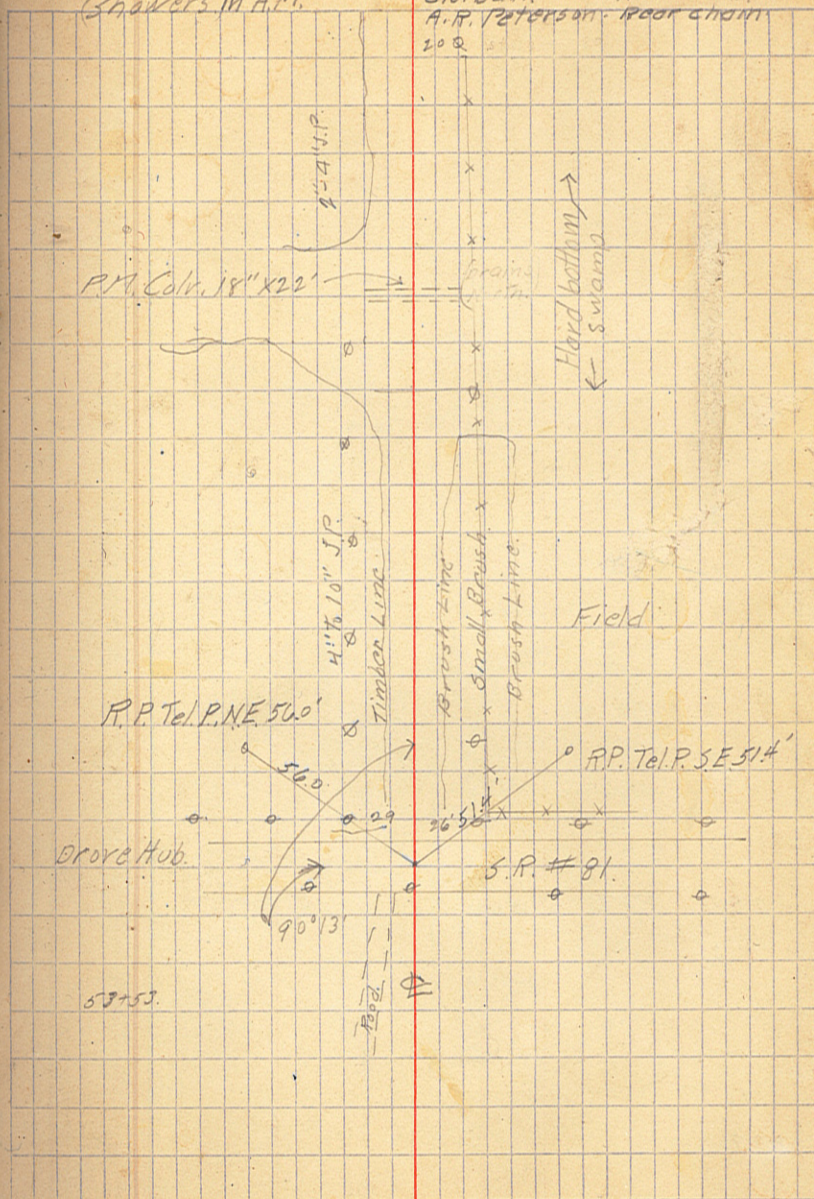
R.J. Torgerson - Engr.

C.J. Bark - Hd. chain.

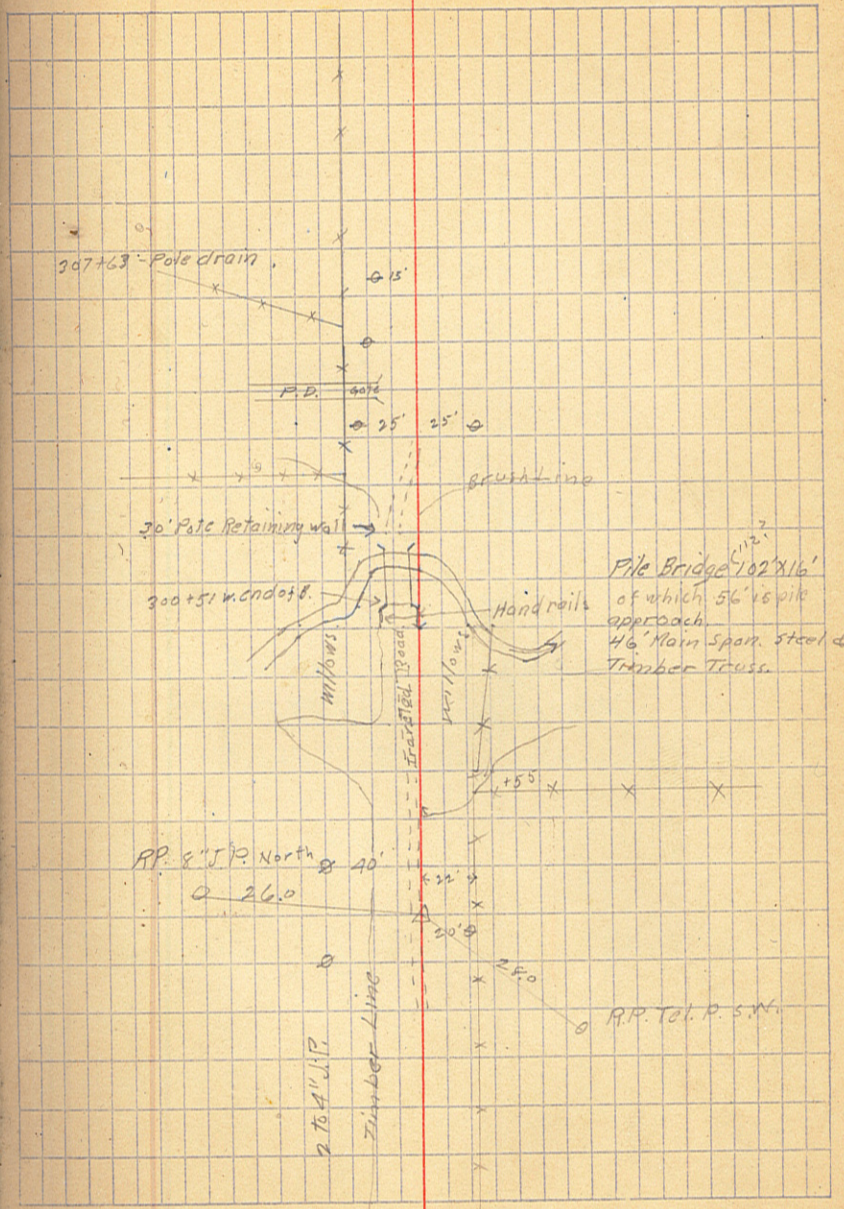
A.P. Peterson - Rear chain.

200

(14)



12  
 11  
 10  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 300  
 9  
 8  
 7  
 6  
 5  
 294+0 P.O.T. 2" Hub  
 3  
 2  
 1  
 90  
 289



5  
4  
3  
2  
1  
320  
9  
8  
7  
6  
5  
4  
3  
2  
1  
312

N 81°45'E

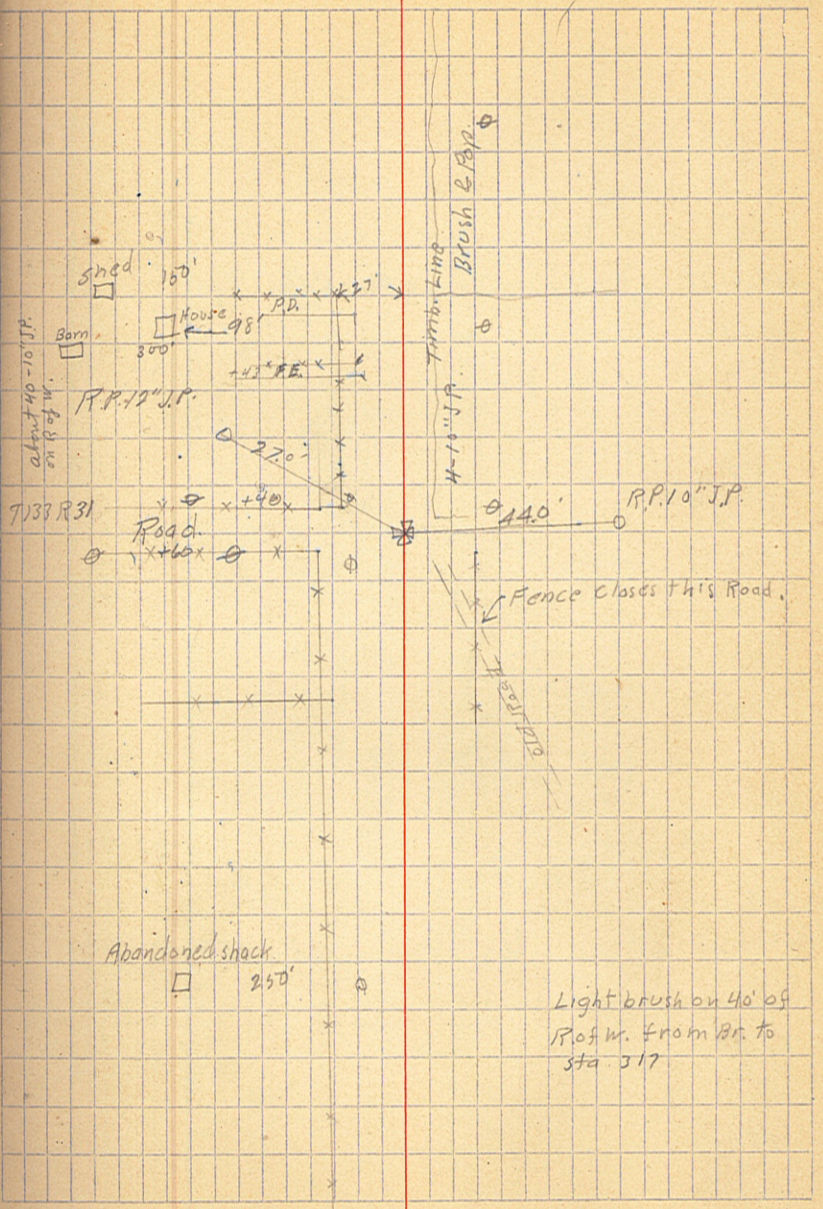
1°00'R. N 81°45'E

Drove  
2" Hub. 

6	5
7	8

Used Intersection  
of Roads for Cor.

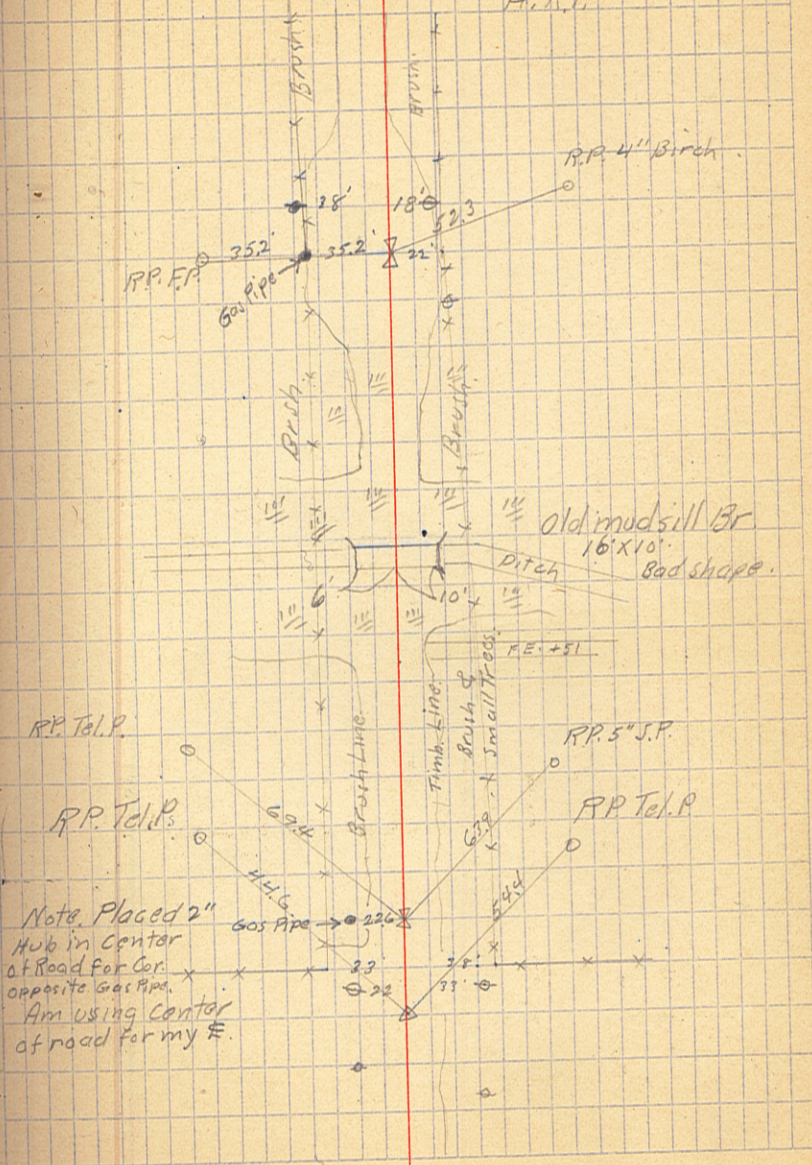
Note - Mistake in  
chaining. Sta. 325 should be 327.  
Make Equation  $327 = 325$   
Long Sta.  $325$  to  $326 = 300'$





6  
 5  
 4  
 3  
 2  
 351+56.8 1° 18' L Prove 2" Hub  $\frac{1}{4}$  Cor.  $\frac{5}{8}$   
 1  
 350  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 340  
 9  
 338+31.3  $\frac{1}{6}$  Cor.  $\frac{5}{8}$   
 338  
 337+0 P.O.T.  
 6  
 335

Weather Fine Sunday Sept 14 1919  
 P.O.T. (17)  
 C.V.P.  
 A.R.P.



377+94.9

1°25'R

N82°00'E

Sec. Cor.

5 | 4  
8 | 9

T133.R31.

7

6

5

4

3

2

1

370

9

8

7

6

5

4

3

362+69

P.O.T.

N.80°30'E

2

1

360

9

8

7

356

R.P. Tel. P.

R.P. F.A.

12

Graded Road.

Graded Road.

Drove 2" Hub at  
Intersection of Pools  
for Con.

Thick Brush  
+ Fern. Trees.

Thick Brush  
+ Fern. Trees.

Mud sill Br.  
16" X 12"

Ditch.

Slough.

Ditch.

Brush.

Brush.

5" x 27' drain

5" x 16' Box Culv.

P.E.

HOUSE

BARN.

P.D. + 62

435'

+32'

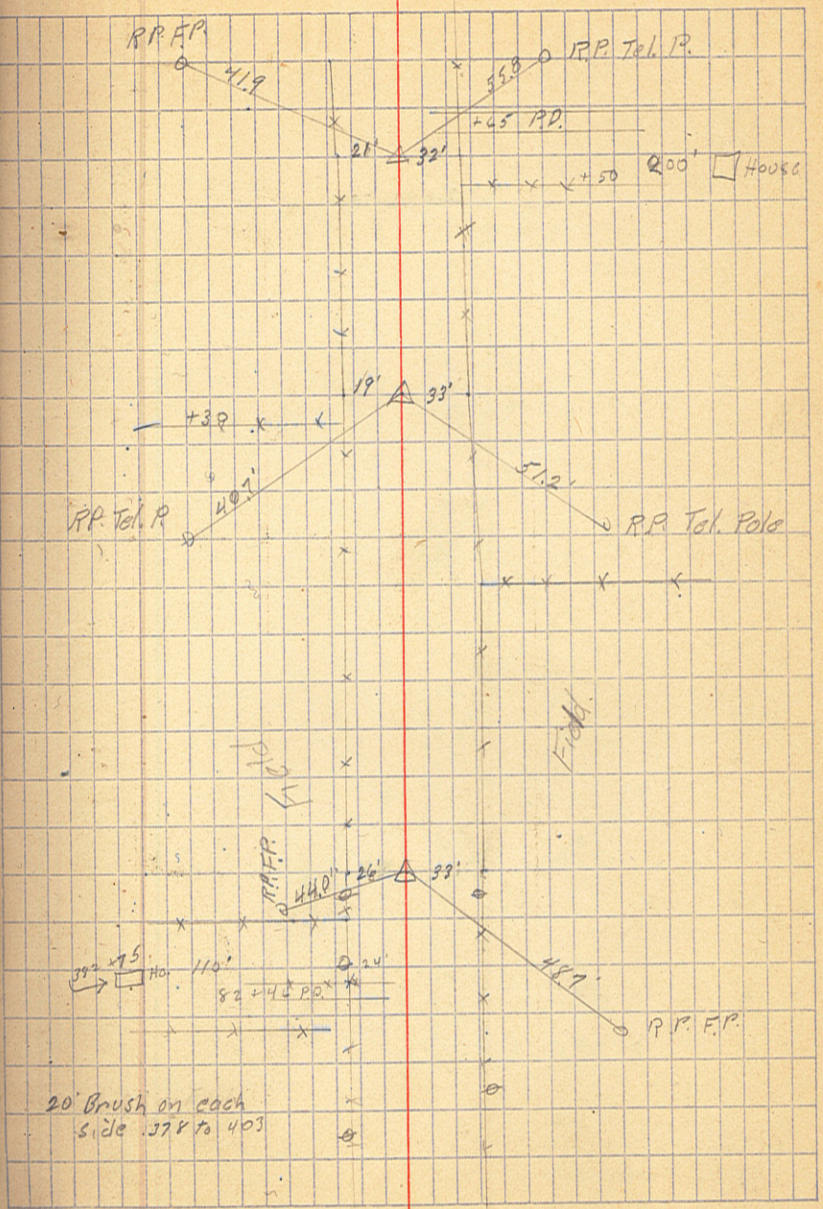
R.P. Tel. P.

BRUSH LINES

Brush.

R.P. Tel. P.

2  
 1  
 400+0 POT.  
 9  
 8  
 7  
 6  
 395+0 POT. N 82° 00' E  
 4  
 5  
 2  
 1  
 90  
 9  
 8  
 7  
 6  
 385+0 POT.  
 4  
 3  
 2  
 1  
 80  
 9  
 378



4  
3  
2  
1

420

9  
8  
7  
6  
5  
4  
3

2  
1

410

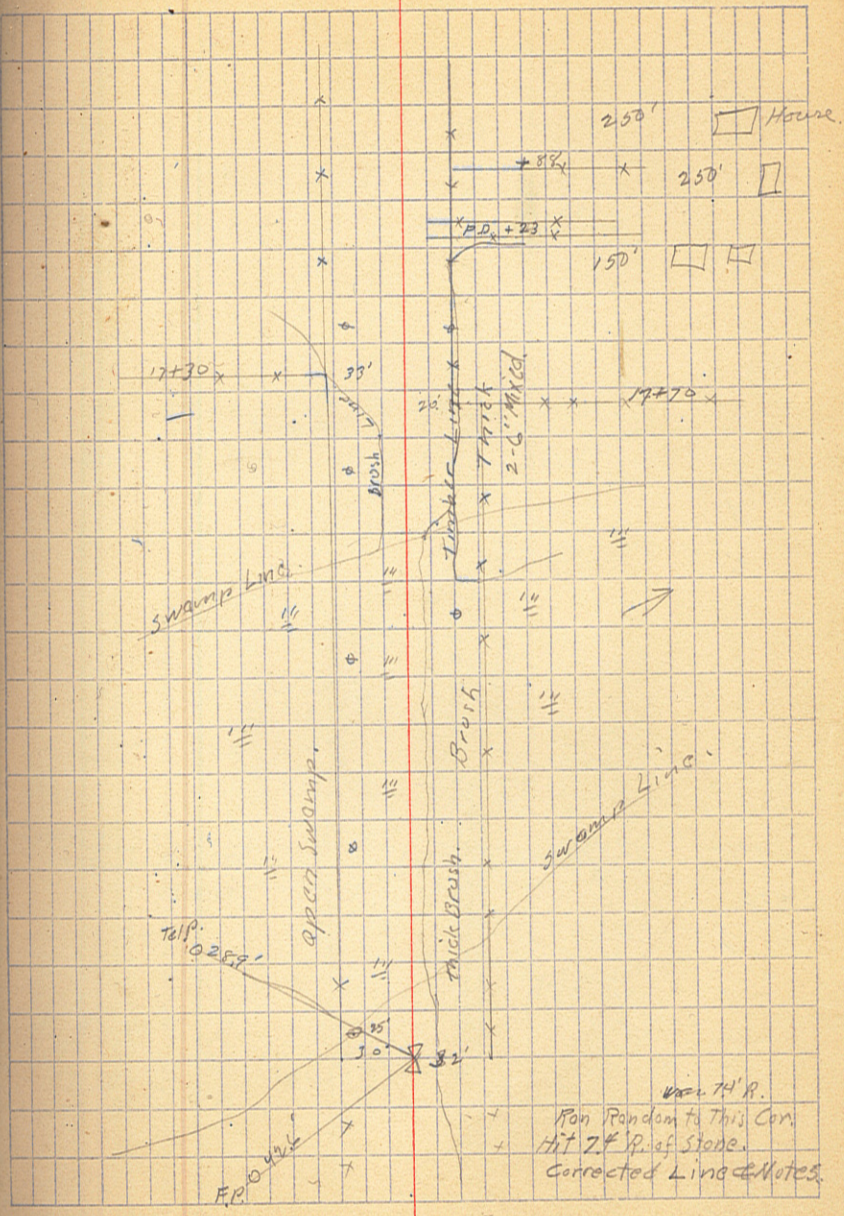
9  
8  
7  
6  
5  
4

403+470 0° 25' L N 81° 30' E.

3

402

1/4 Cor.  $\frac{4}{9}$   
8" x 8" sq. Stone.



From 74' R.  
From Random to This Cor.  
Hit 74' R. of Stone.  
Corrected Line & Notes.

7  
6  
5  
4  
3  
2  
1  
440  
9  
8  
7  
6  
5  
4  
3  
2  
1  
+994  
430  
9  
8  
7  
6  
5  
424

$0^{\circ}15' L \quad N81^{\circ} E$

Gross Pipe.

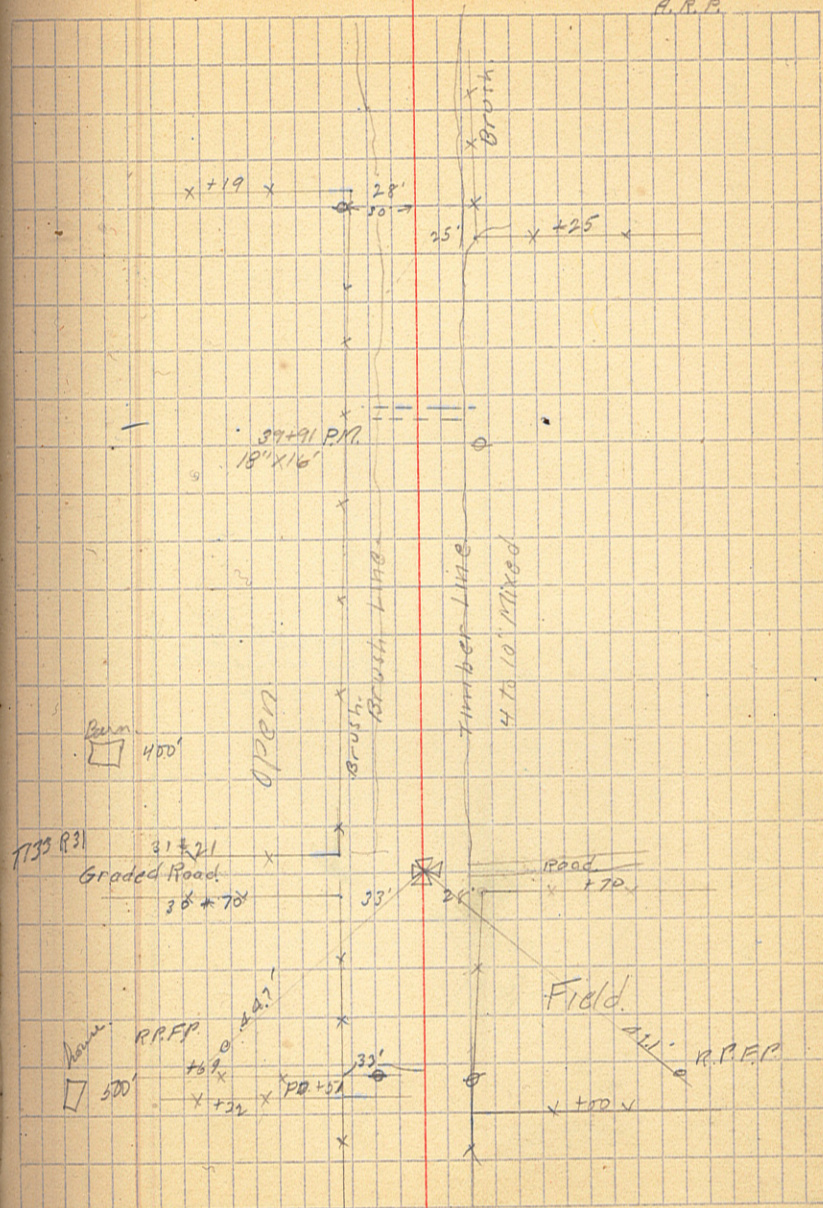
$\frac{41.3}{10.9}$

Weather - Cloudy.

Mon. Sept. 15

R.J.T.  
C.J.B.  
R.R.F.

(21)



70

8

468

P.O.T.

7

6

5

4

3

2

1

60

9

8

457+51

0°17' L N.80°30' E

Drove Hub in Center  
of Road online with  
Fence For 1/4 Cor.

$\frac{3}{10}$

7

6

5

4

3

2

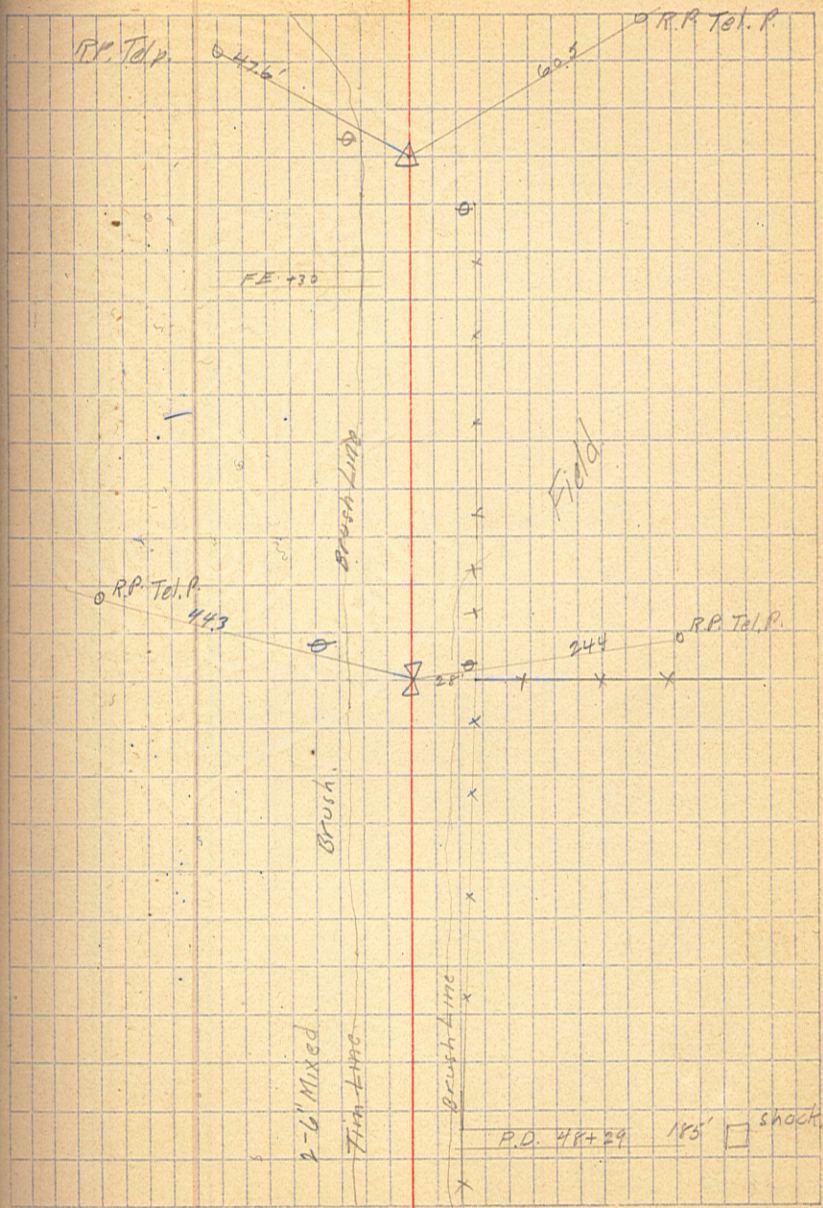
1

50

9

8

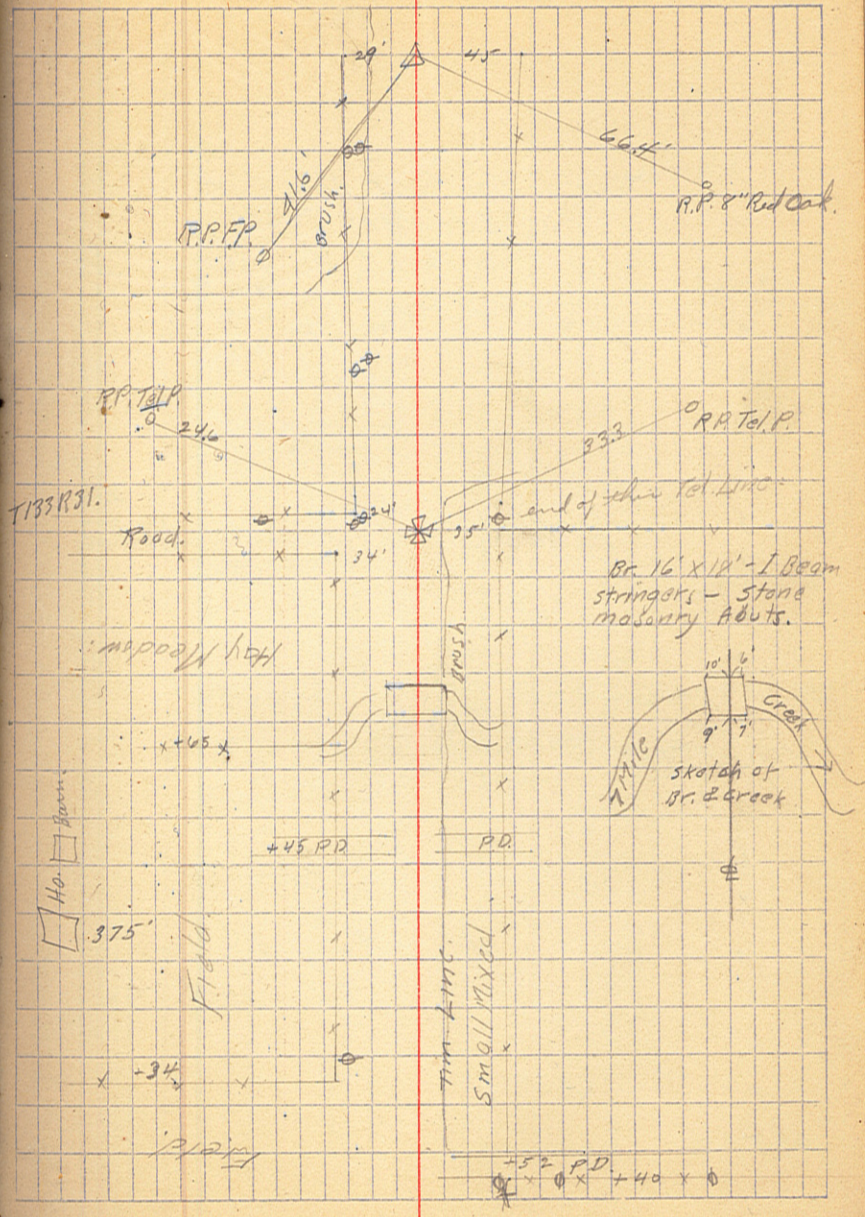
447



1047 P.O.T. N82°15'E  
 1  
 90  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 482+836 1°22'R N82°15'E  
 2  
 1  
 80+26  
 80+08  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 470

Gas Pipe.  $\frac{3}{10} \frac{2}{11}$

E edge Br.  
 W edge of Br.



Ho. Boon  
 Ho.

375'

Field

+34'

Field

+45 P.D.

Thin Linc.  
 Small Mixed

+52 P.D.  
 +40 x 0

Br. 16' x 10' - I Beam stringers - Stone masonry Abuts.

Sketch of Br. & Creek

Turn South at this Cor.  
(See next Page.)

509+32.7

1/4 Cor.  $\frac{2}{11}$   
Gas Pipe

9

8

7

6

5

4

3

2

1

500+00 P.O.T.

9

8

7

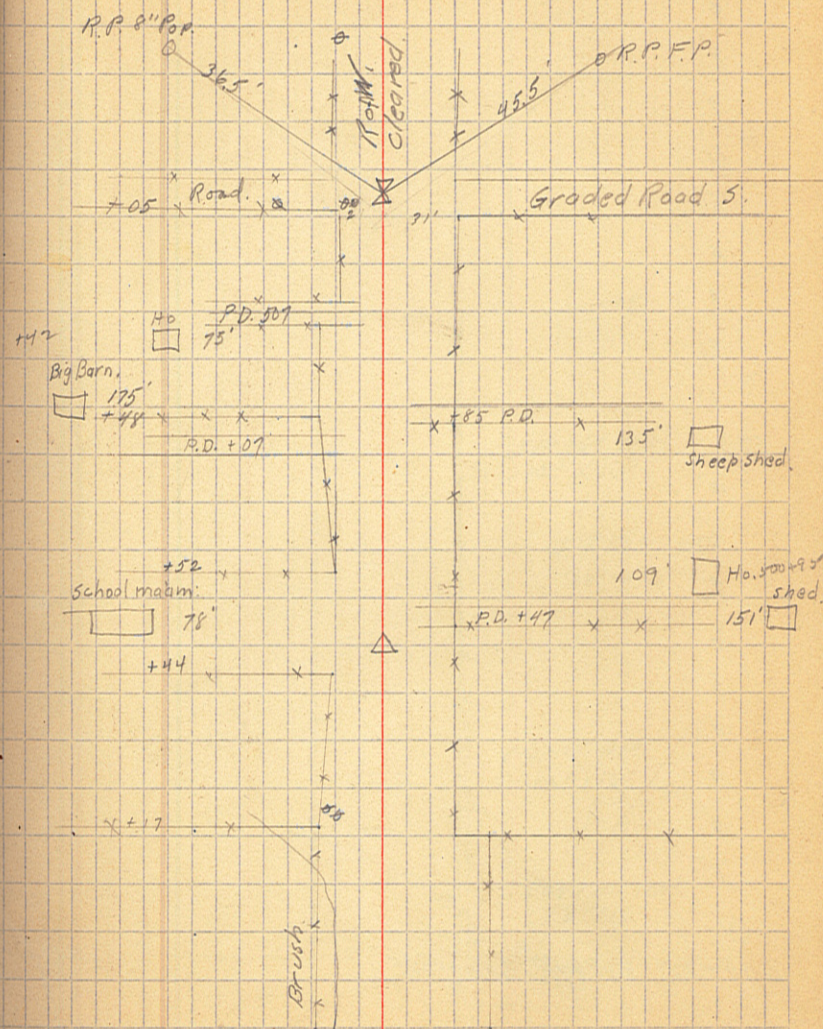
6

5

4

3

492





- 1
- 530
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

520

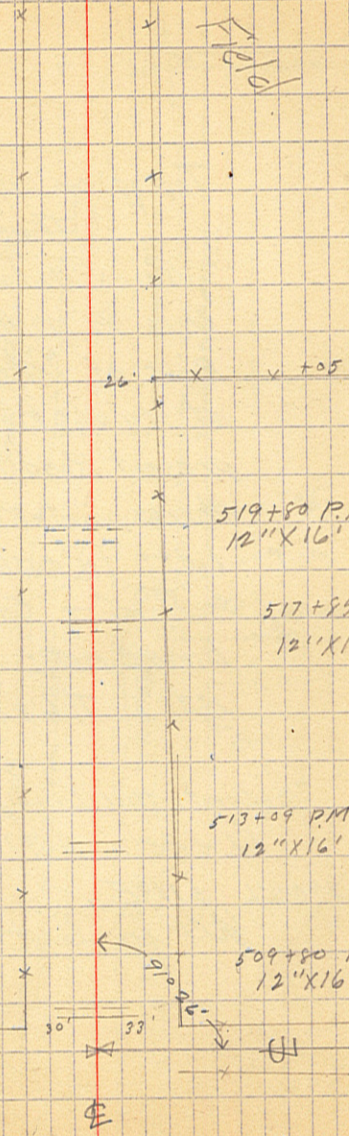
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

10

509+327 88°34'P 509°00'E

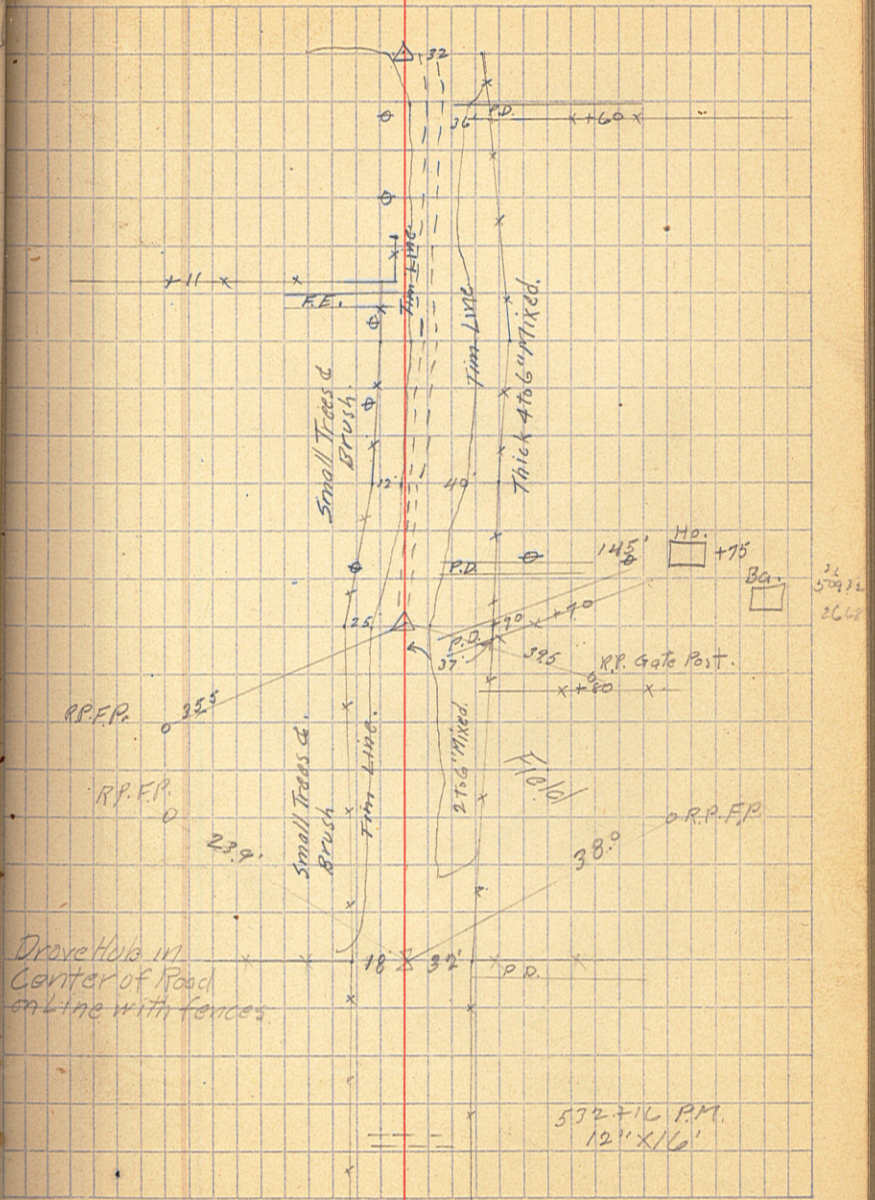
$\frac{11}{2}$

Running S. thru center Sec 411



T/33 R31

4 P.O.T.  
 3  
 2  
 1  
 50 Topog. on opposite Page is for  
 9 True Line.  
 8 Ran Random Line thru  
 7 this 1/2 mile - Hit 23.43' to  
 6 Right of Intersection of Roads  
 5 at Sta. 562+10. This Line follows  
 4 present Road to Sta. 555 at  
 3 which point Road swings to  
 2 P.O.T. Lett for easier grade across  
 1 hollow. - Corrected this  
 540 Line & notes. Ran. L at 535+99 =  
 9 1°31' L. T.L = 2°02' L  
 8  
 7 Cont. this Line Sept 18 P.M.  
 6 (Levels A.M.)  
 5 +990 2°02' L 311° E 1/4 Sec. 11  
 4 del for Sept 15  
 3  
 2  
 531



560+10 end of this Line =  
563+98 on South Line.

560+10

2

1

60

9

8

7

6

~~429.7 P.O.T.~~

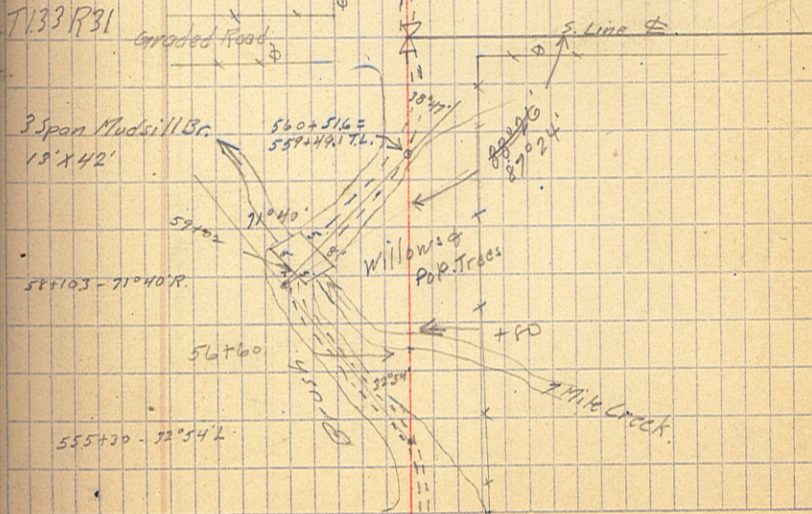
555

554 P.O.T.

Drove Hole  $\frac{1}{4}$  Cor.  
at Intersection  
of Roads.

$\frac{14}{11}$

T.133 R.31



330+222 P.O.T.

See Last Page in Book  
for Large scale Sketch of  
River Xing.

3+0 P.O.T.

2

+61.8 P.O.T.

1

20

9

8

7

6

5

4

313+071 89°12' N 80°45' E

1/6 Cor.

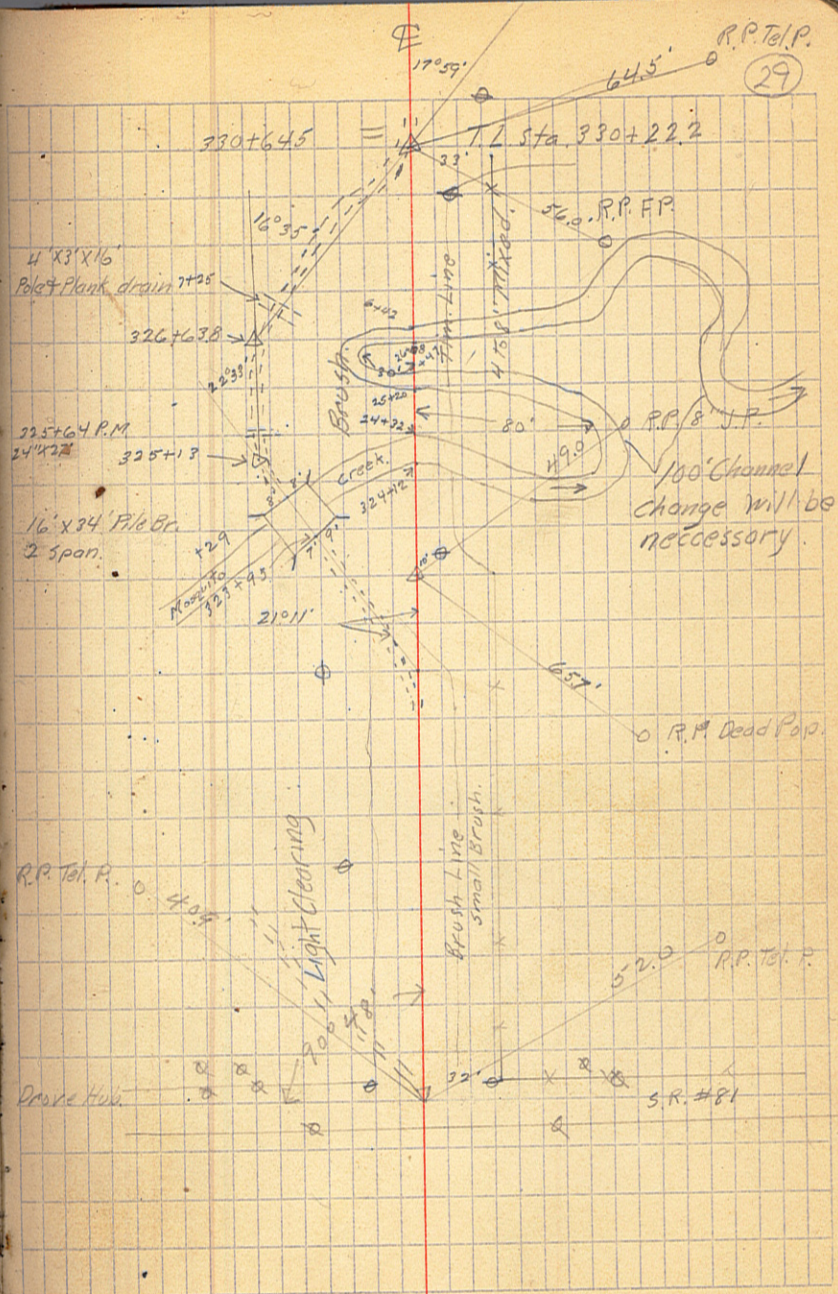
(Running East)

Cont. Chaining from 275+558 down #81

to Road E. on S. 1/4 Line Sec 9 T133R.31

27355.8  
39451.3  
313+071

8

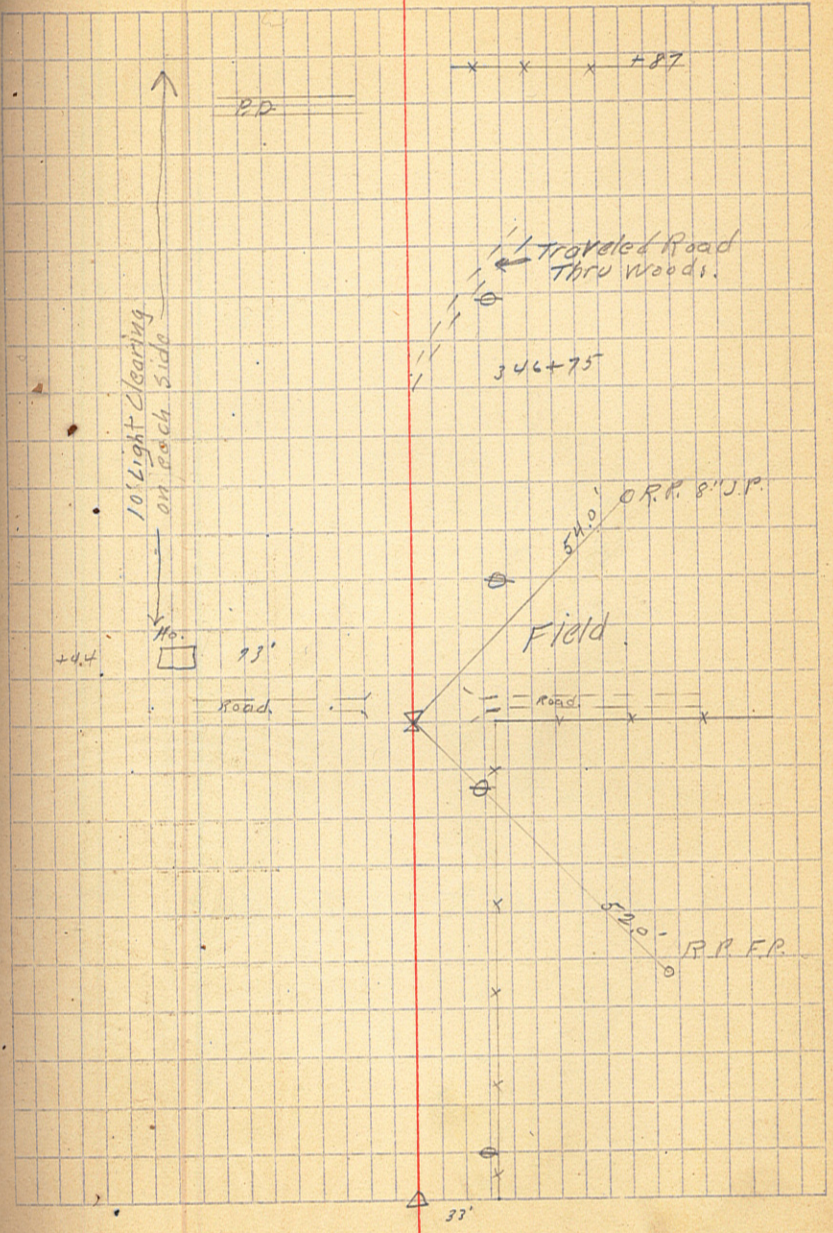


- 3
- 2
- 1
- 350
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1
- 40

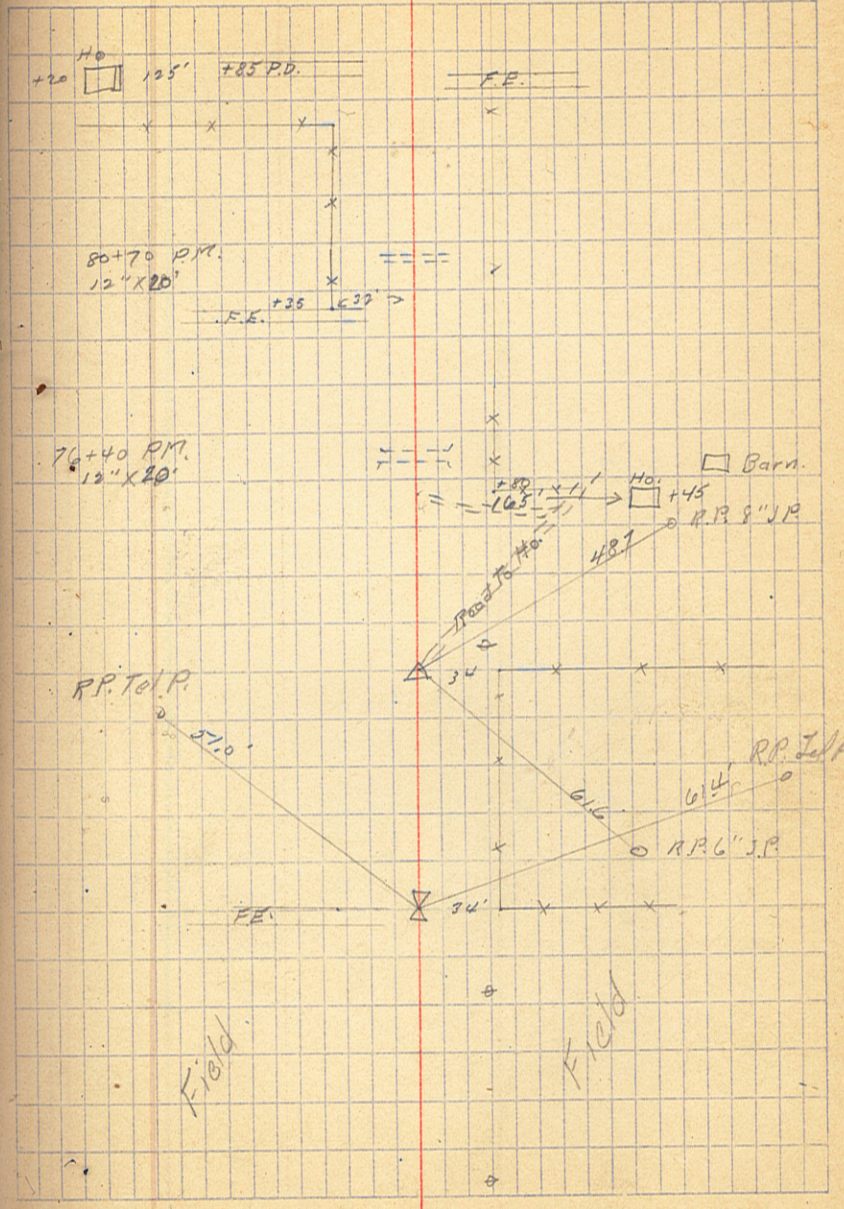
+54 00°05' L N 80°30' E (N 80°40' E) Gas Pipe

W. Cor.  
S. of  
center  
Sec. 7.

330+222



5  
 4  
 3  
 2  
 1  
 80  
 9  
 8  
 7  
 6  
 5  
 4  
 150 P.O.T.  
 3  
 2  
 1  
 370  
 9  
 368 + 082 0°37'R N81°E. (N.81°17'E) Gas Pipe  $\frac{1}{4}$  Cor.  $\rightarrow$   
 8  
 7  
 6  
 5  
 4  
 353



7  
6  
5  
4  
3  
2  
1  
450

9  
+89.2 P.S.T.  
8  
7  
6

5  
4  
3

+61.5 0°19' L N 81° E (N. 80° 58' E)

2  
1  
90  
9  
8  
7  
6

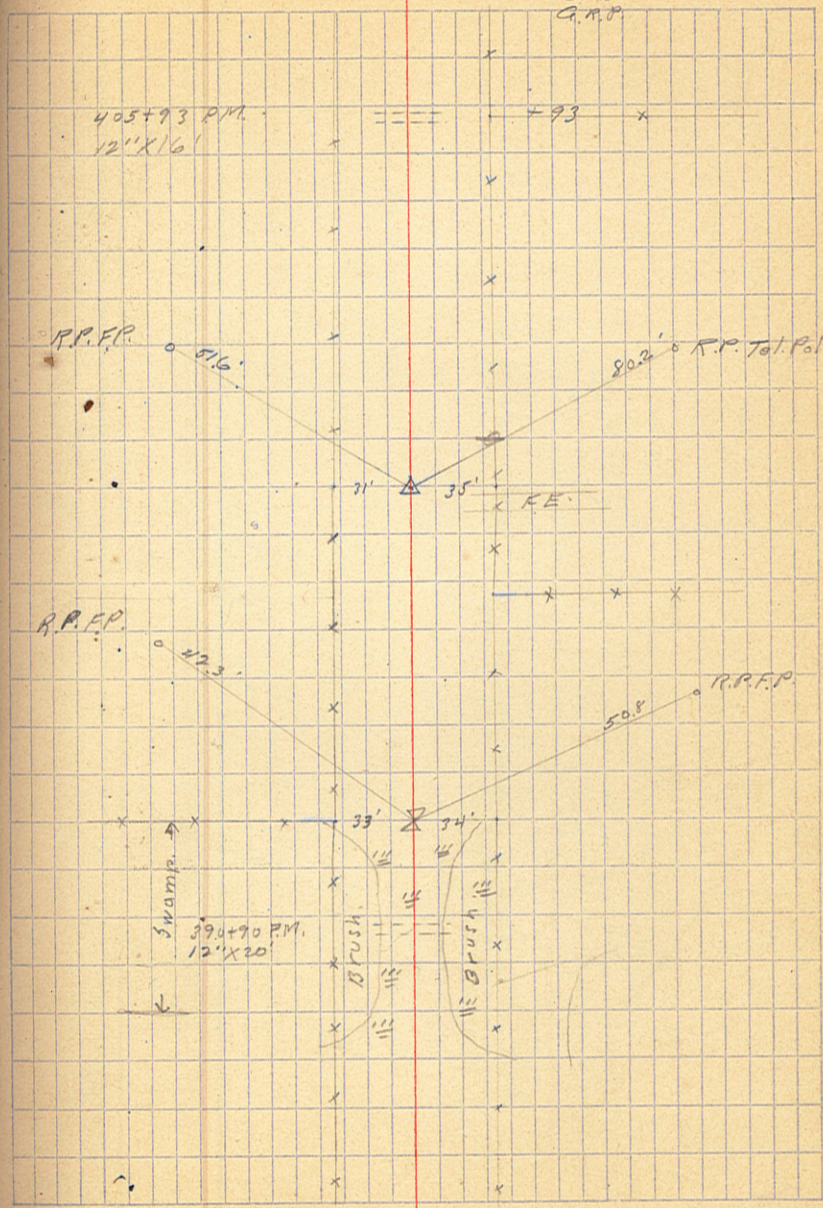
380

Gos Pipe. 1/4 Cor.  
S. as Center  
Sec. 8. T133-31

cloudy.

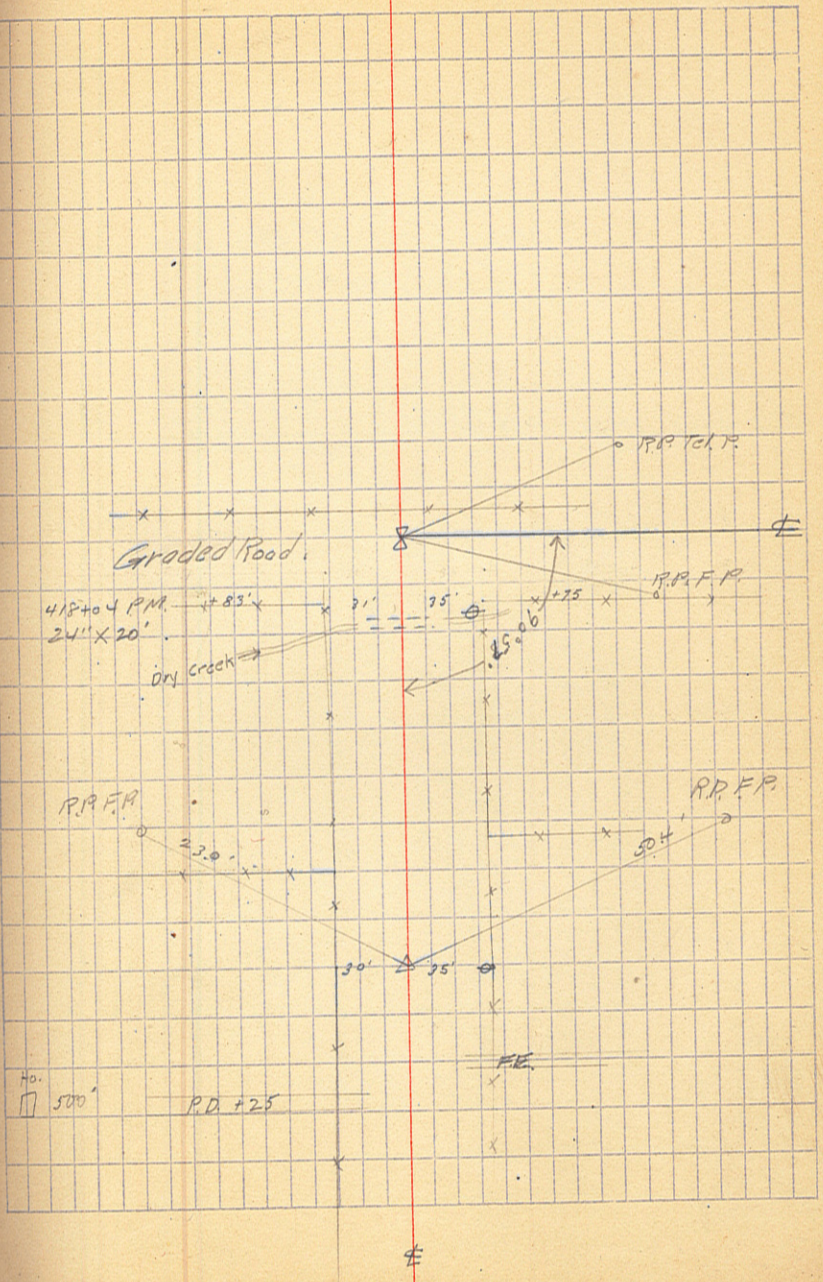
Sept 20  
R.F.T.  
C.J.B.  
G.M.P.

32



Turn S. at this Cor. for  
1/4 Mile (See next page)

+08.2	89°03' P. S. 959'E	1/16 Cor.	$\frac{9}{8}$
9		Drive Hub	
8		at Intersection	
7		of Roads.	
6			
5			
4			
3			
2			
+739	P.O.T.		
1			
410			
9			
8			
407			

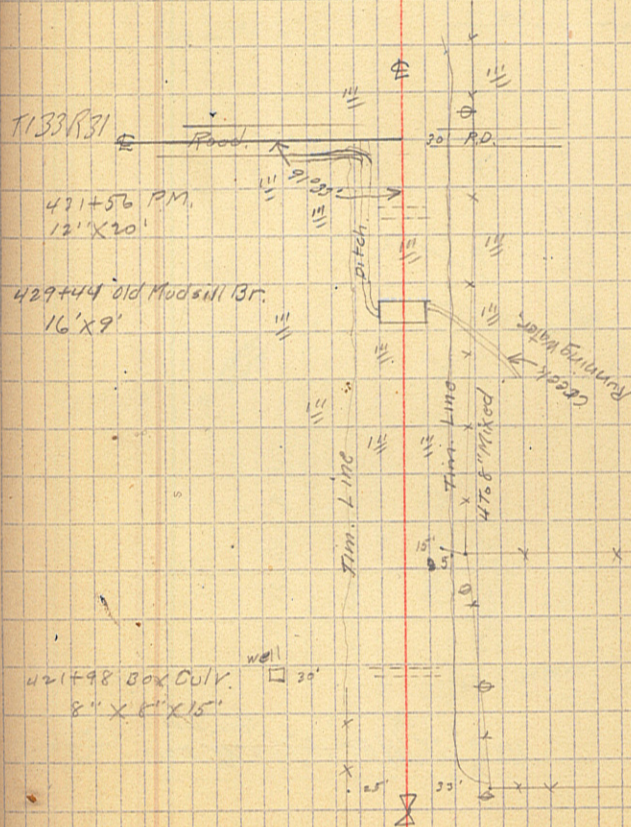




Turn East at this Cor.  
(See next Page)

6			
5			
4			
432 + 40	88°26' L. (N. 81°35' E)	8" x 8" stone.	$\frac{89}{17.16}$
2			
1			
30			
9			
8			
7			
6			
5			
4			
3			
2			
1			
20			
419 + 082	510° E. (S. 9°39' E) $\frac{1}{16}$ Cr.		9   8

Running Southern Line  
between Sec. 8 & 9 T. 133 R. 31  
(from S.  $\frac{1}{16}$  Cr.)



2  
1  
50  
9  
8  
7  
6  
5  
4  
3  
+50 P.O.T.  
2  
1  
440  
9  
8  
7  
6  
5  
4  
3

432+40

Sec. Cor.  
N80°30'E (N81°35'E) 8" x 8" stone.

89  
1716

Running East

cloudy → AM.  
Cold. }  
FINE PM.

Monday Sept. 22 1919.

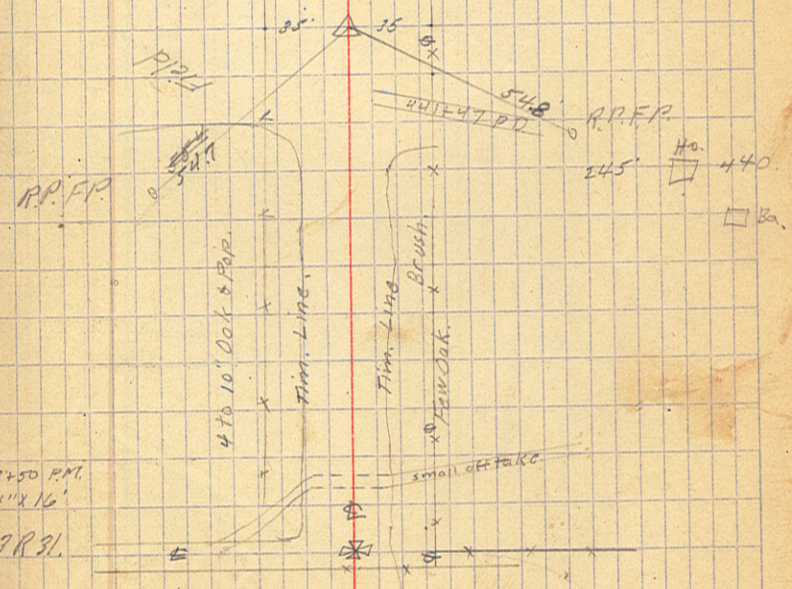
(35)

R.J. Torgerson - Engr.  
C.J. Park - Rod.  
A.R. Peterson. chain.  
Geo. Lizotte - Axe.

447+37 P.M.  
15" x 17"

+39 x F.E. x

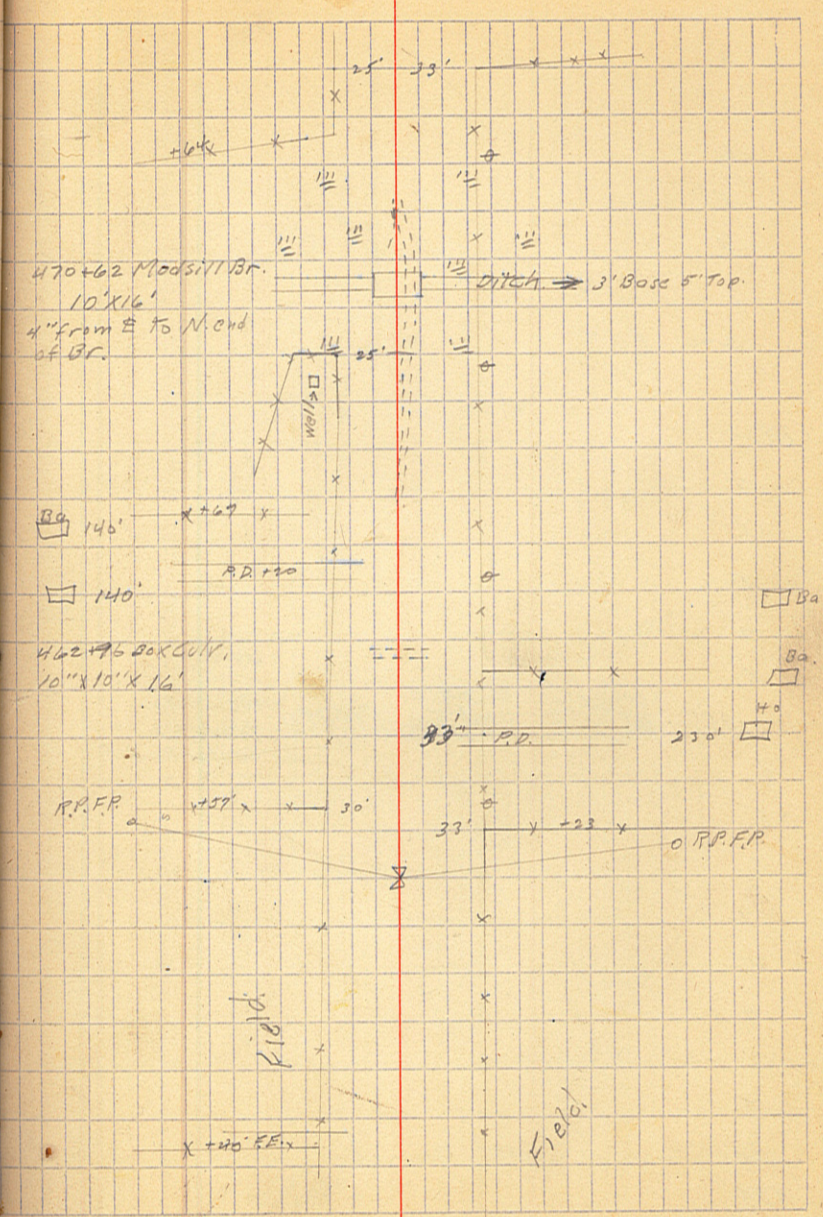
F.E. x x +69



5  
4  
3  
2  
1  
470  
9  
8  
7  
6  
5  
4  
3  
2  
1  
60  
9  
+29'  
8  
7  
6  
5  
4  
3  
452

0°07'R. N 80°30'E (N 81°42'E) 1/4 Cor. Gas Pipe

9  
16

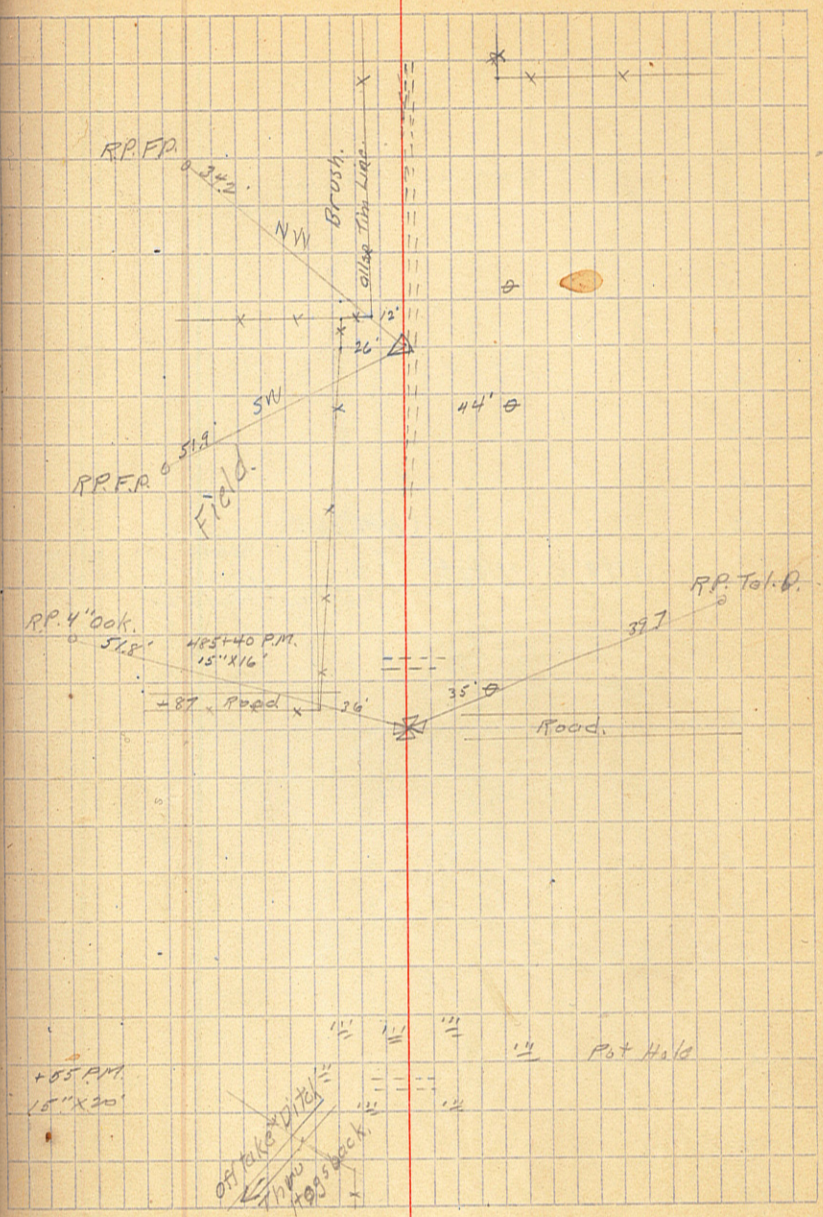


8  
 7  
 6  
 5  
 4  
 3  
 2+0 P.O.T.  
 1  
 490  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 80  
 9  
 8  
 7  
 6  
 475

0° 55' L  
~~55~~ N 80° 40' E  
 N 80° 25' E  
 N 80° 47' E  
 Sec. Cor.  
 Drive Hub.  
 Center Road

9	10
16	15

good gravel.



OFF TAKE VITEL  
 THRU  
 HOSS WELT

+ 85 P.M.  
 15' x 20'

Pot Hole

22  
 21  
 20  
 19  
 18  
 17  
 16  
 15  
 14  
 13  
 12  
 11 + 0  
 10  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 500  
 9  
 498

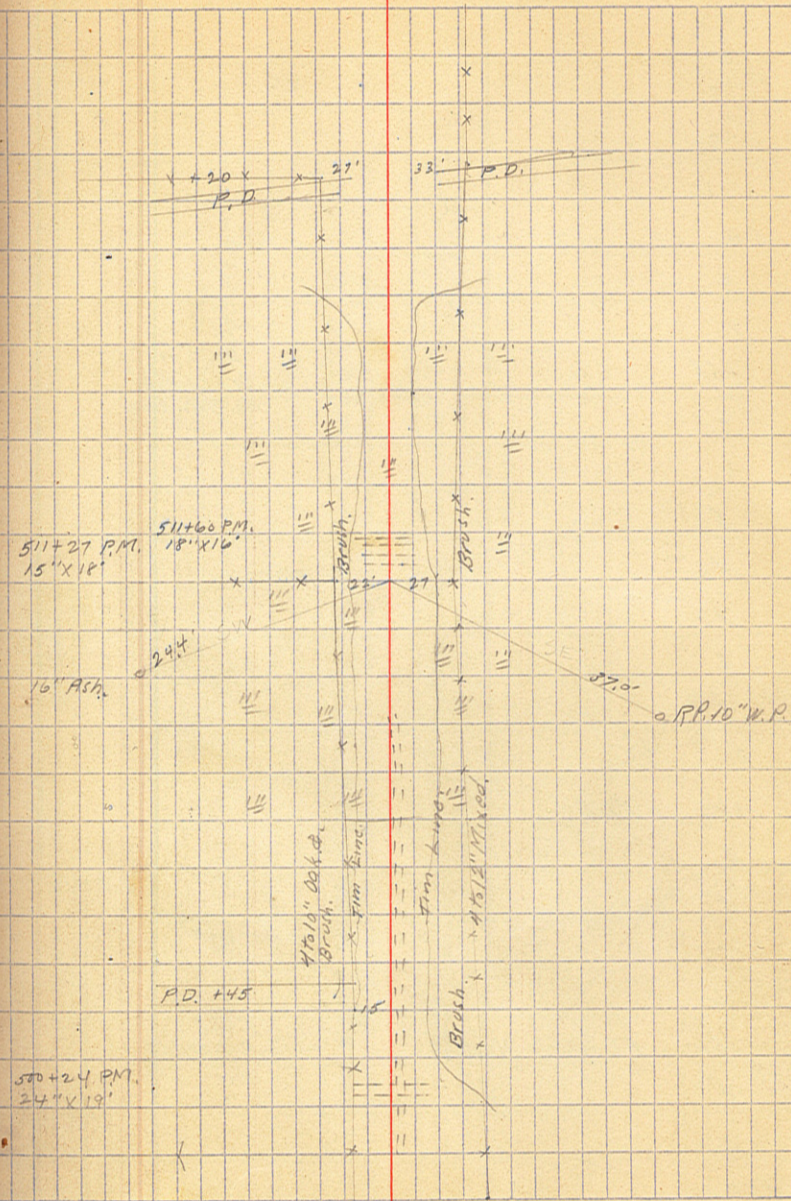
0°39'R. N 80°E

(N 81°26'E)

1/2 Car.  
 Drive Hub  
 Did not find Stone.

10  
 15

(38)



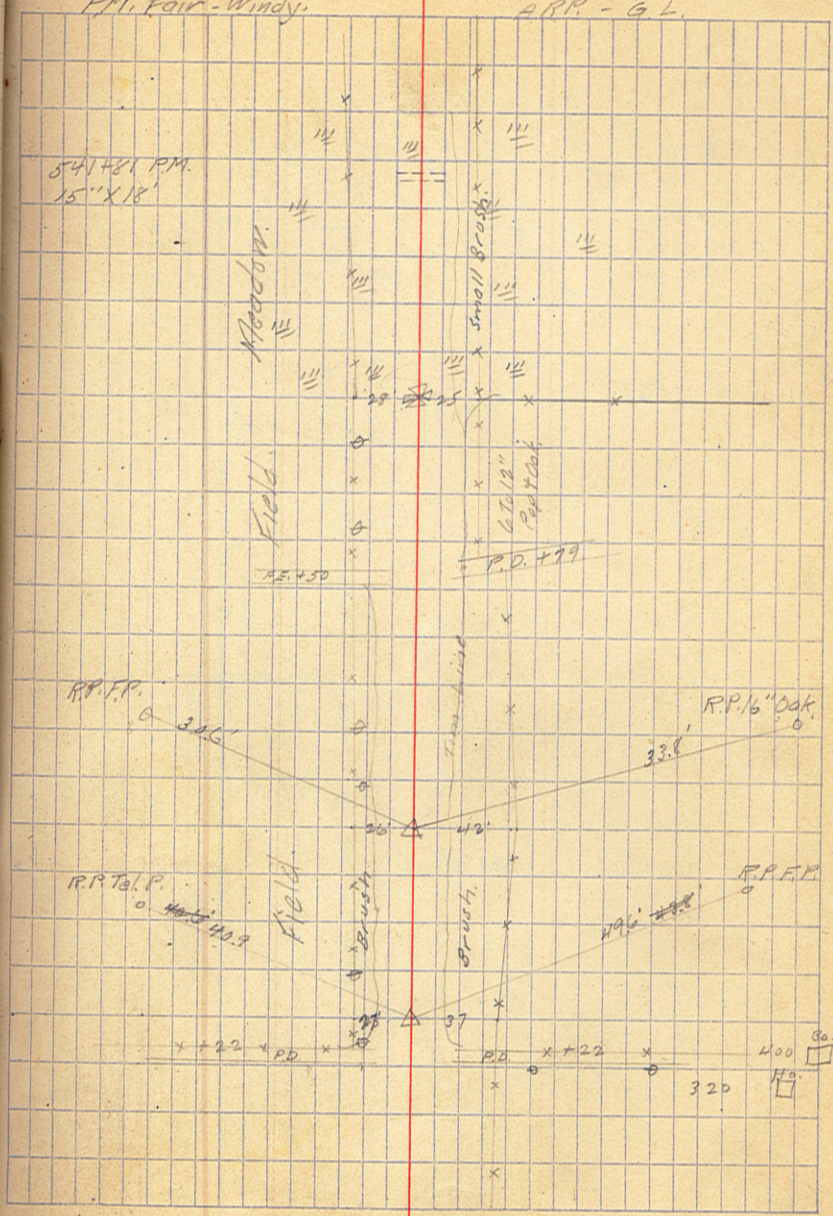
4  
 3  
 2  
 1  
 540  
 9  
 8  
 +58  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 30  
 +80 P.O.T.  
 9  
 8  
 7  
 6  
 5+0 P.O.T. N 80° E.  
 4  
 3  
 522

sec. Cor.  
 Drove Hub.  
 No. Mon. Hrs.

Weather -  
 cloudy - Cold.  
 P.M. Fair - Windy.

Tue. - Sept. 23  
 R.J.T. - C.S.B.  
 A.R.P. - G.L.

39



Make Dist.  
on N. Line.  
12' greater  
than on S. Line.

Turn South at this Cor.  
(see next Page)

568 + 10 N. Line =

563 + 98

3

2

1 + 0

60

9

8

7

6

5

4

3

2

1 + 0

550

9

8

7

6

5

544

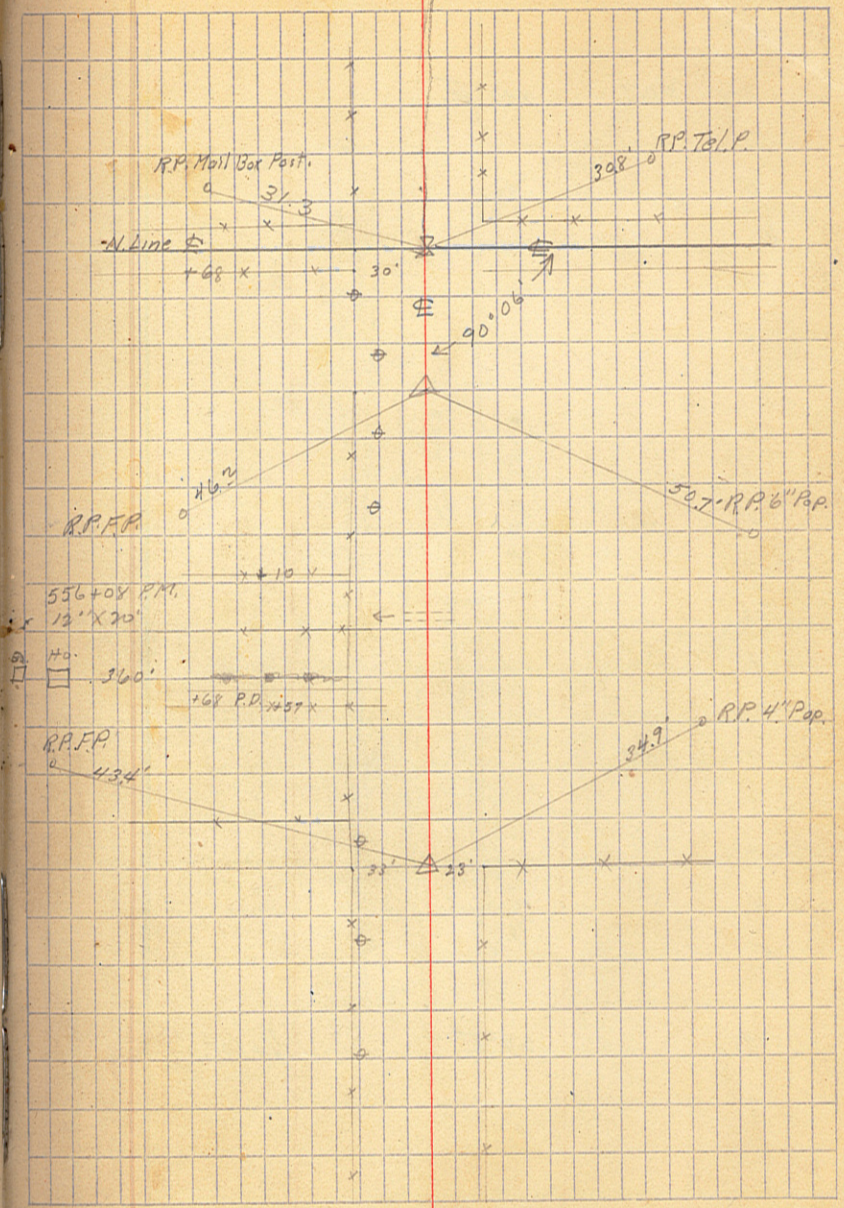
89054' R. 100' R.  
VOID

1/4 Cor.  
Hvb.

P.O.T.

P.O.T. N81°E

Raining



3+0 P.O.T. 309° E.

2

1

80

9

8

7

6

5

4

3

2

1

70

9+0 P.O.T.

8

7

6

5

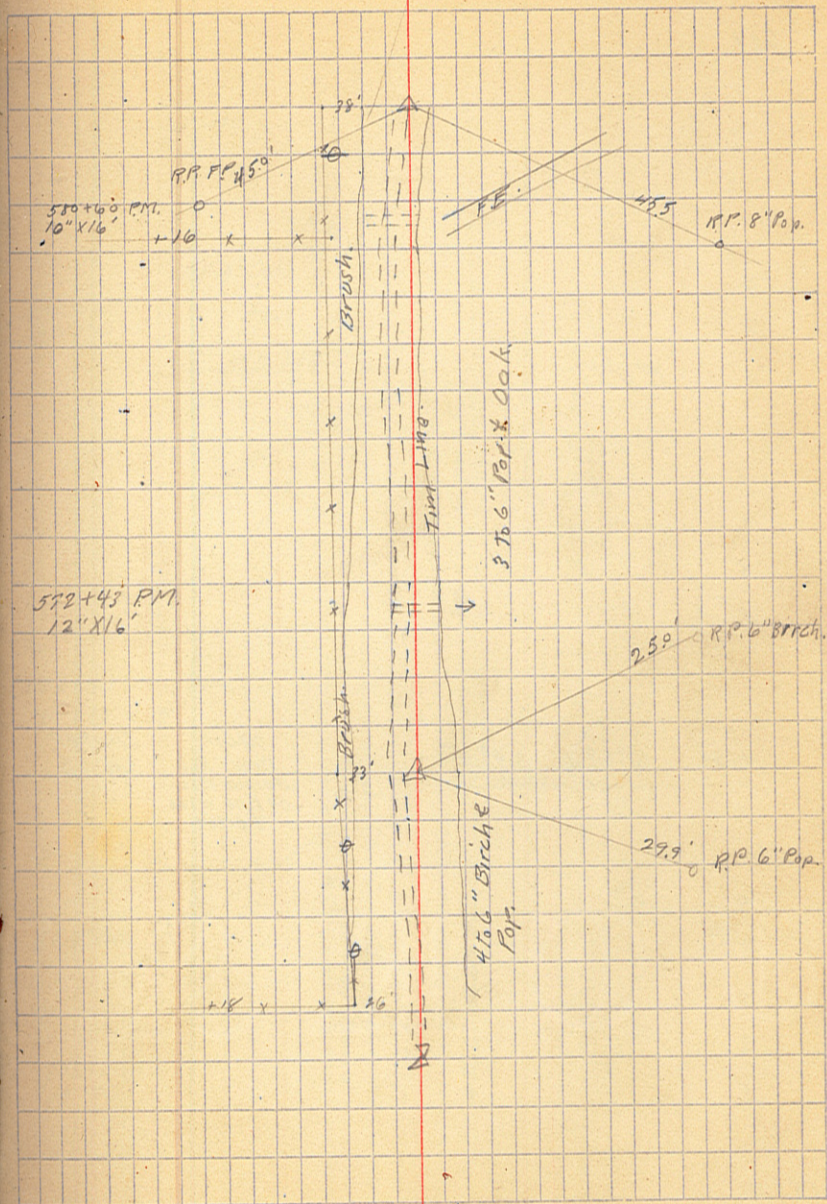
4

563+98

59° E.

1/4 Cor.

41





605  
 4  
 3  
 2  
 1  
 600  
 9  
 8 P.O.T.  
 7  
 6  
 5  
 4  
 3  
 2  
 +121 0°09' L 59° E  
 1  
 590  
 9  
 8  
 7  
 6  
 5  
 4  
 583+0

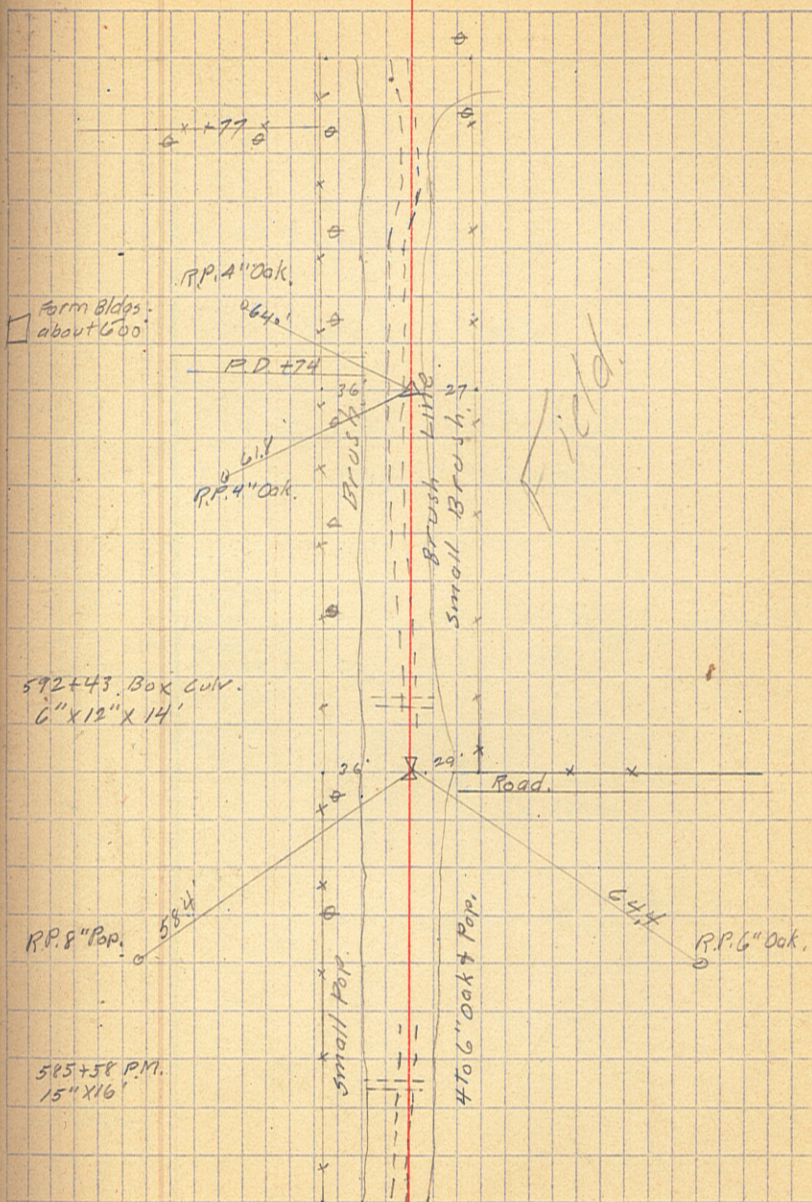
P.O.T.

0°09' L 59° E

1/4 Cor.  
 Drive Hub  
 Beside Rock  
 on line with  
 fence.

Center  
 Sec. 16

(42)



Running levels Sept 24-25-26

End work Sept 23

Turn East at this Cor.  
(See next Page.)

+88.6 + ~~675~~ 89° 02' L

6

5

4

3

2

611 + 0 P.O.T.

610

9

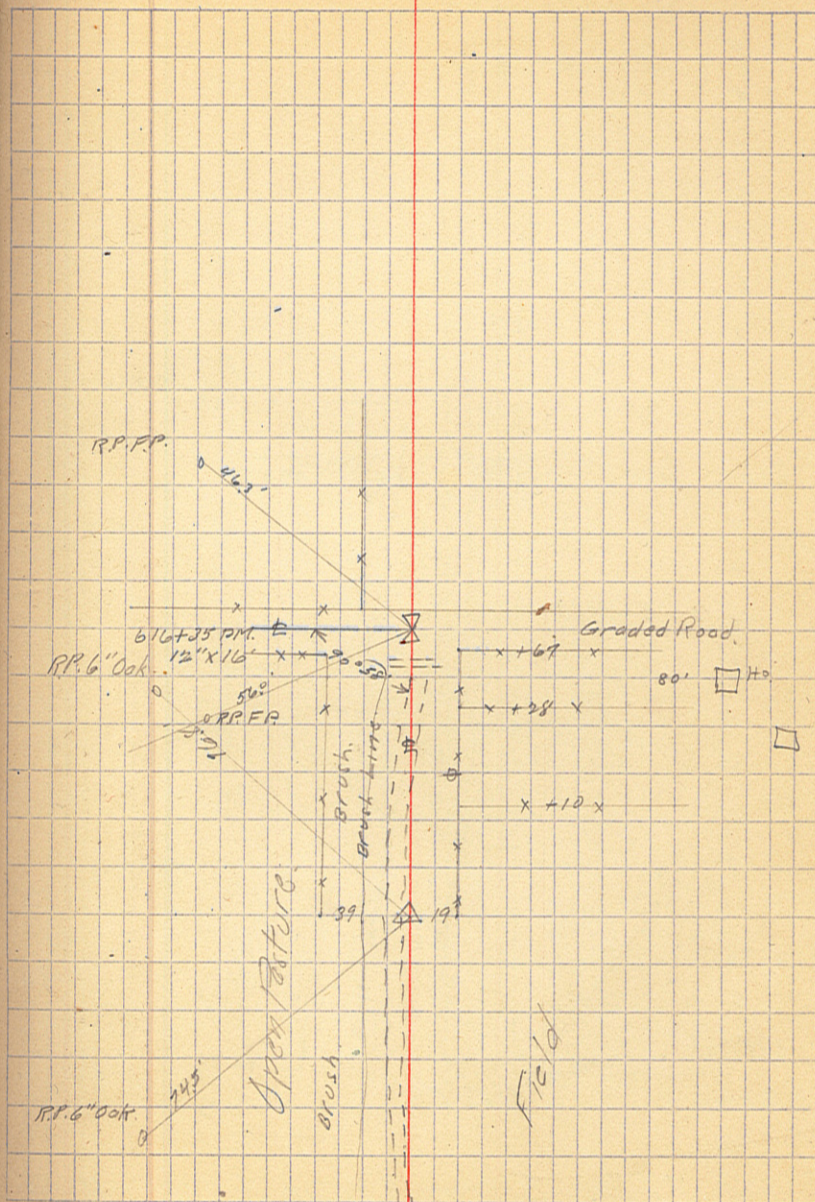
8

7

6

605

5/4 Cor. 14/23  
506.14-133-31  
Drove Hub at  
Intersection of Roads.



9  
8  
7  
6  
5  
4  
3  
2

630

9  
8  
7  
6  
5  
4  
3  
2  
1

20

9

618

616+88.6.

N82°E.

14  
23

Running E. from  $5\frac{1}{4}$  Corn of Sec 14-133-31

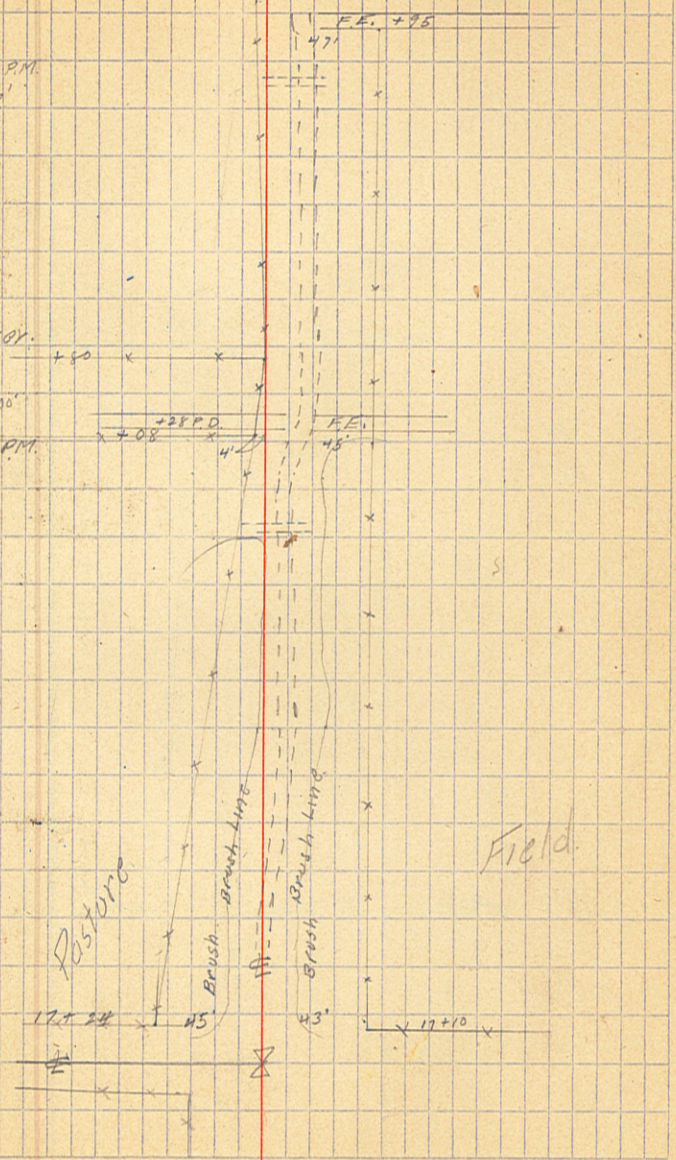
Sat. Sept. 27, 1919  
R.J.T. A.R.P.  
G.J.B. Geo. L.

(44)

637+76 P.M.  
15" x 16'

Shumacker  
Farm  
Farm Bldgs.  
about 800'

628+13 P.M.  
15" x 16'

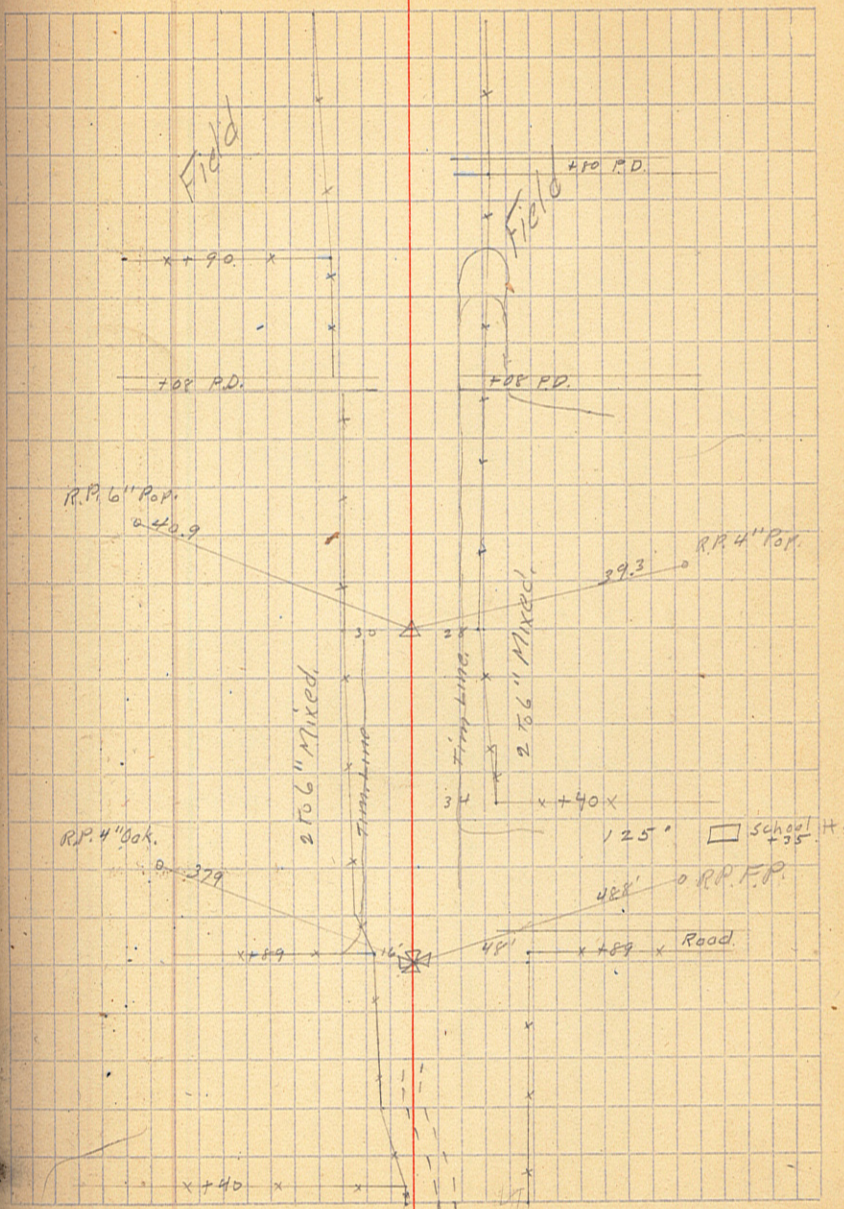


2  
1  
660  
9  
8  
7  
6  
5  
4  
3  
2  
1  
650+0 P.O.T.  
9  
8  
7  
6  
5  
4  
643+82.2  
3  
2  
1  
40  
639

0° 37' L N 81° 30' E

Sec. Cor.  
Gas Pipe

14	13
23	24



5  
4  
3  
2  
1

680

9

8

7

6

5

4

3

2

1

+30.8 0° 06' L N 81° 15' E

670

9

8

7

6

5

4

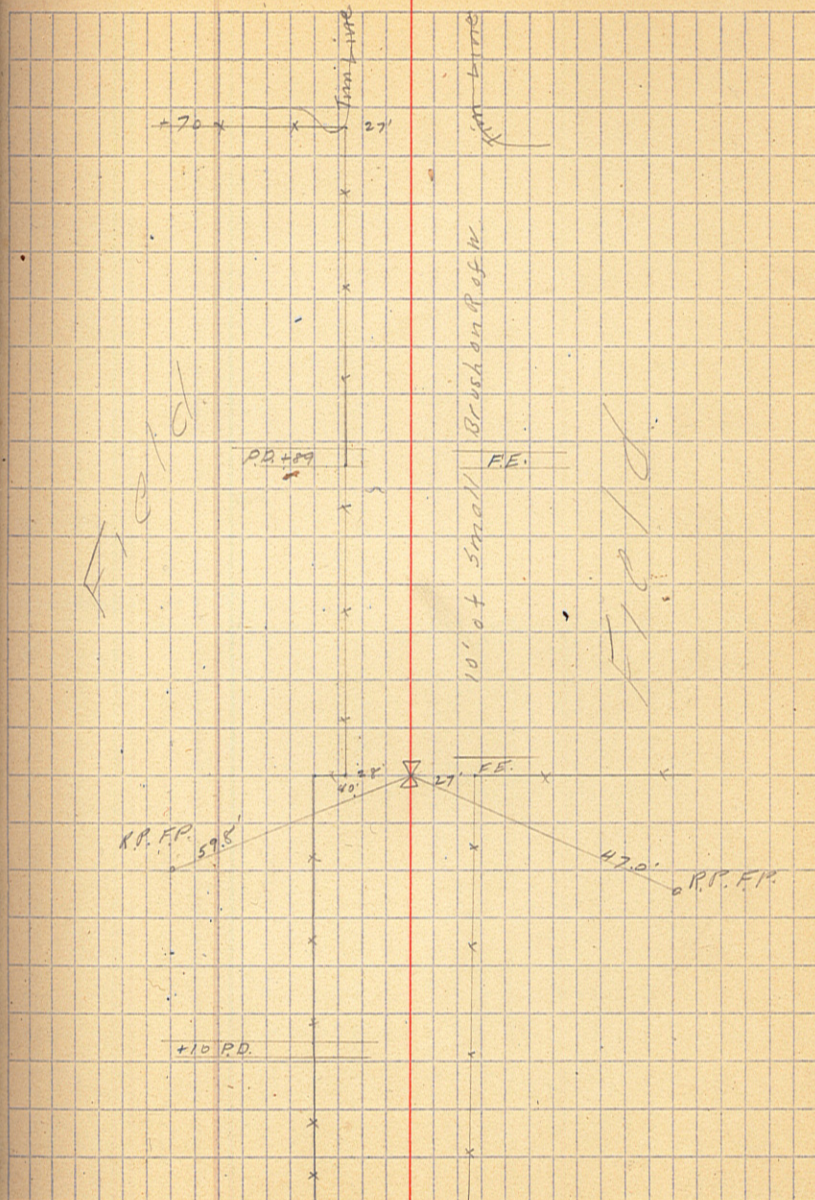
3

662

1/4 Cor.  
Drove Hole  
on Line with Fence.

13  
24

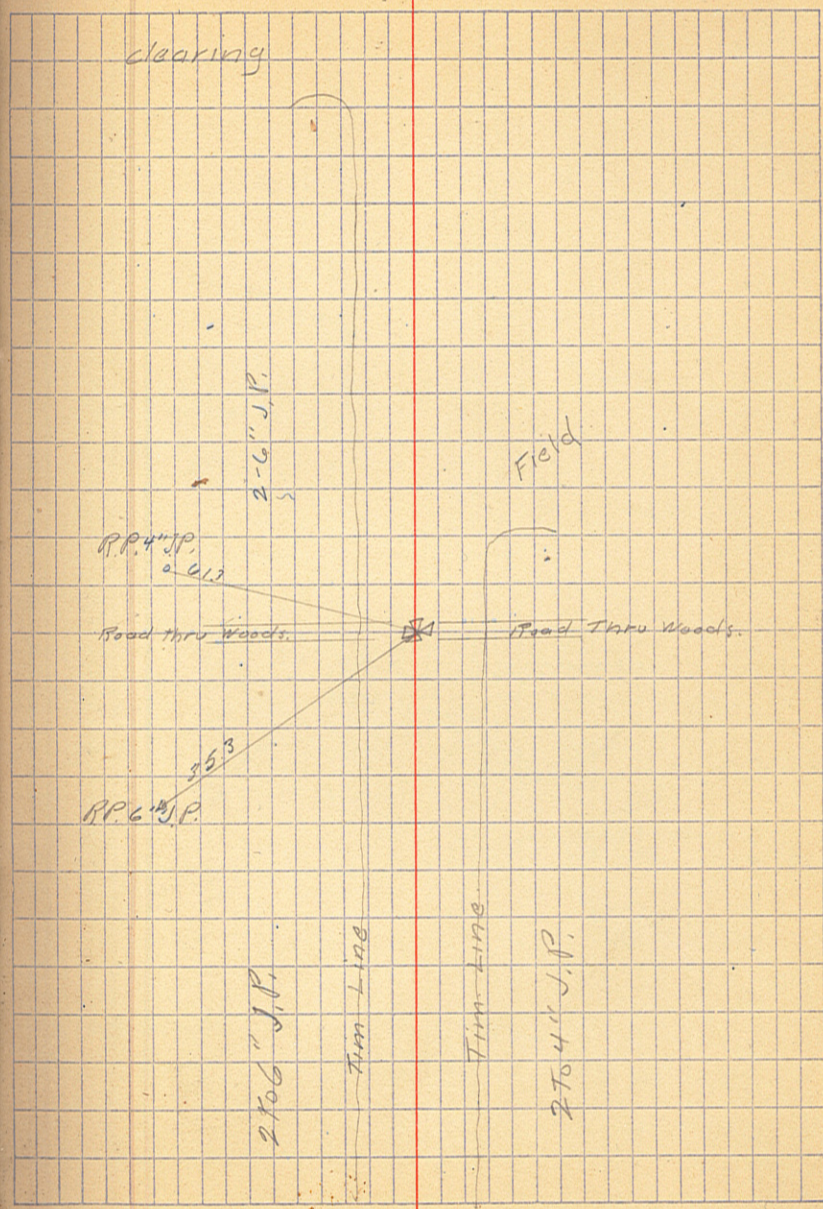
46



8  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 700  
 9  
 8  
 7  
 478.4  
 6  
 5  
 4  
 3  
 2  
 1  
 690  
 9  
 8  
 7  
 6  
 685

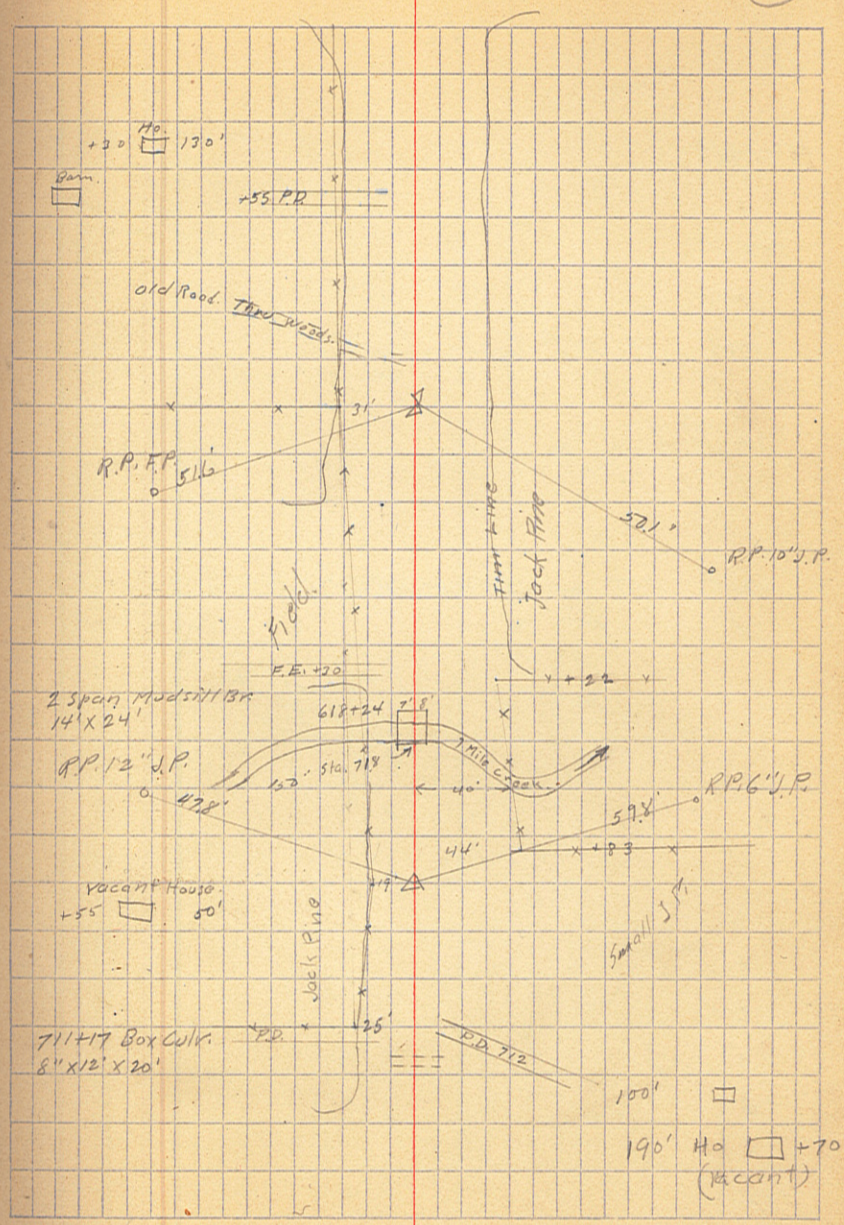
0°10' L N X 1° E

Sec Cor. ~~Range Line~~  
 Drors Hub  
 T133R30  
 T133R31



2  
 1  
 730  
 9  
 8  
 7  
 6  
 725+11 0°24' L N 81° E  
 5  
 4  
 2  
 1  
 720  
 9  
 8  
 7  
 6  
 715+0 P.O.T.  
 4  
 3  
 2  
 1  
 10  
 9  
 708

1/4 Cor.  
 Drare Hub  
 on Line with Fence  
 18  
 19



751+90.7

1

750

9

+08.3 R N.P. Track.

8

7

6

5

+96.7 P.O.T. out 83' from N.P. R.R. E.

4

3

2

1

740

9

8

7

6

5

4

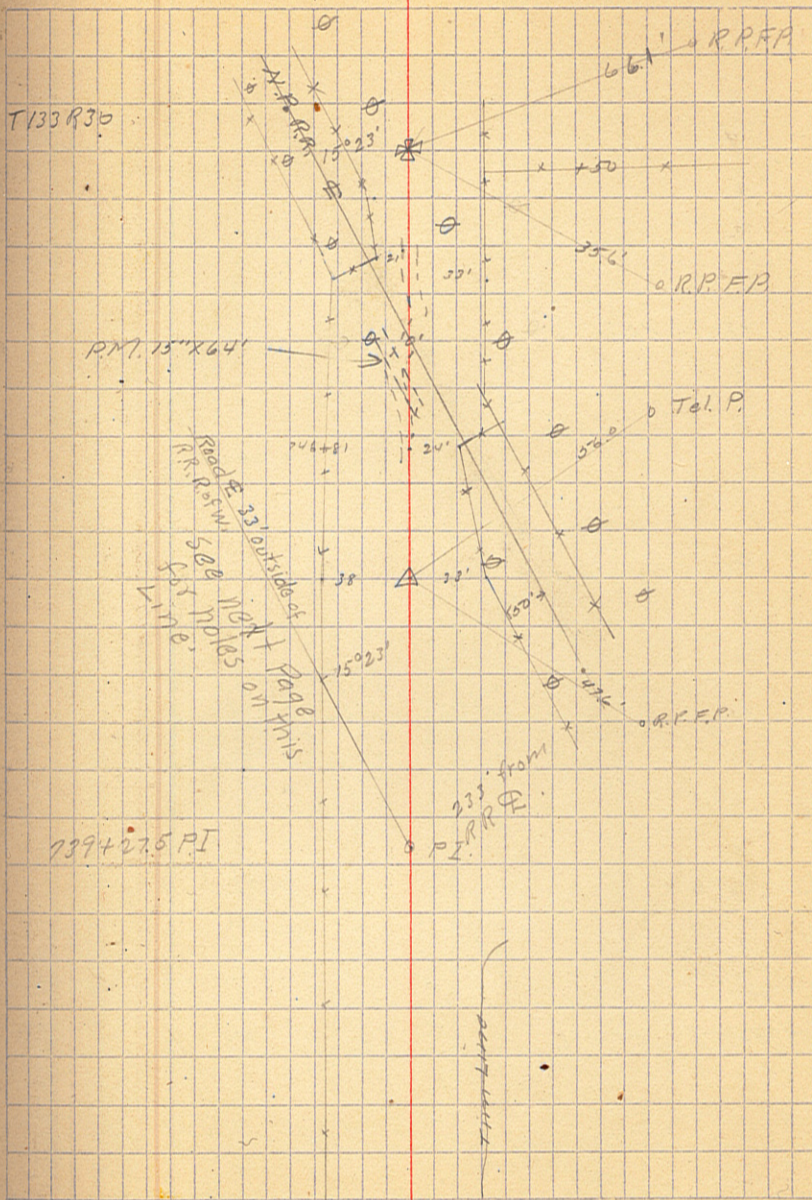
3

732

Sec. Cor.  
Drive Hub.  
Center Road  
opposite Cox stake  
which had been set  
on N. side of Road.

18/17  
19/20

T133 R30





6  
5  
4  
3  
2  
1  
+56.3 P.O.T.  
3  
2  
1  
150  
9  
8  
7  
6  
5  
4  
3  
2  
1  
40

129+275 15°23' L

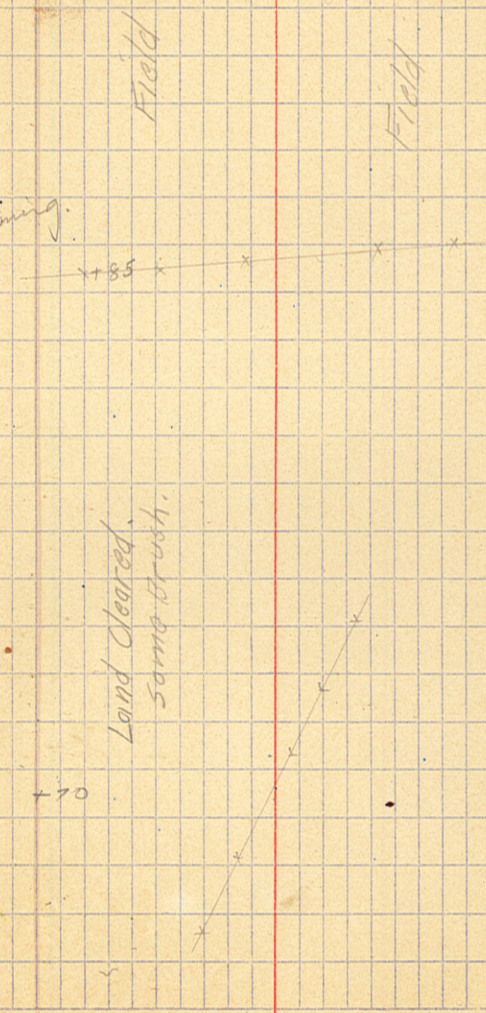
P.I.

Running East 233' North of  
N.P. Ry. ~~☒~~

Drizzle AM.  
No work in PM  
Raining.

Wed. Oct. 1, 1919.  
R.J.T. - G.B. A.R.P.

(50)



9  
 8  
 7  
 6  
 775+325 P.O.T.      offset around straw stack  
 5  
 4  
 3  
 2  
 1  
 10  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1  
 60  
 9  
 8  
 7  
 756

Field

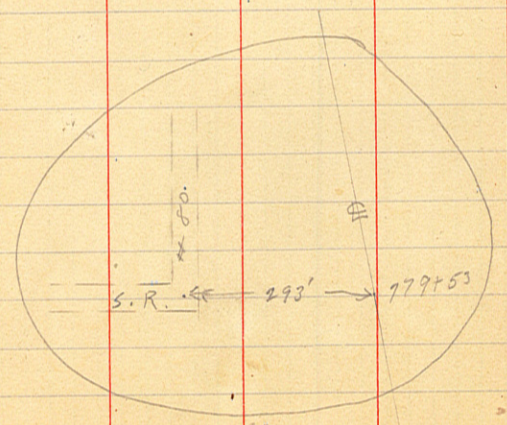
⊕

8  
7  
6  
5  
4  
3  
2  
1  
790

9  
788+0 (Turn 45° at 784 to S.R.#80)

no work P.M. Oct. 1  
Count of Rain

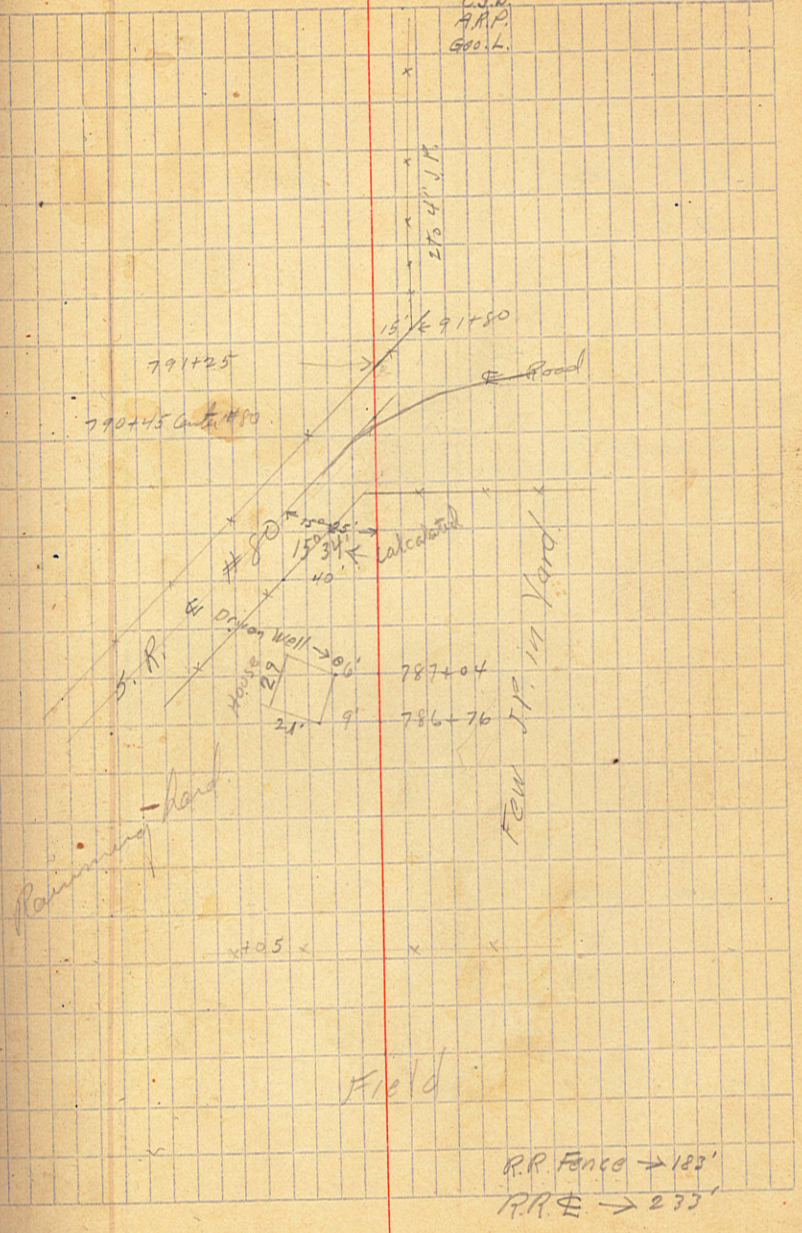
5  
4  
3  
2  
1  
80  
779



Weather - Fine.

Thursday Oct. 2. (52)

R.T.  
C.S.B.  
H.M.P.  
500 L.



11  
 10  
 809+115 8°04'L P.I.

9

8

7

Location Line to be changed  
 when plotting

6

5

4

3

2+0 8°08'R

P.I.

800

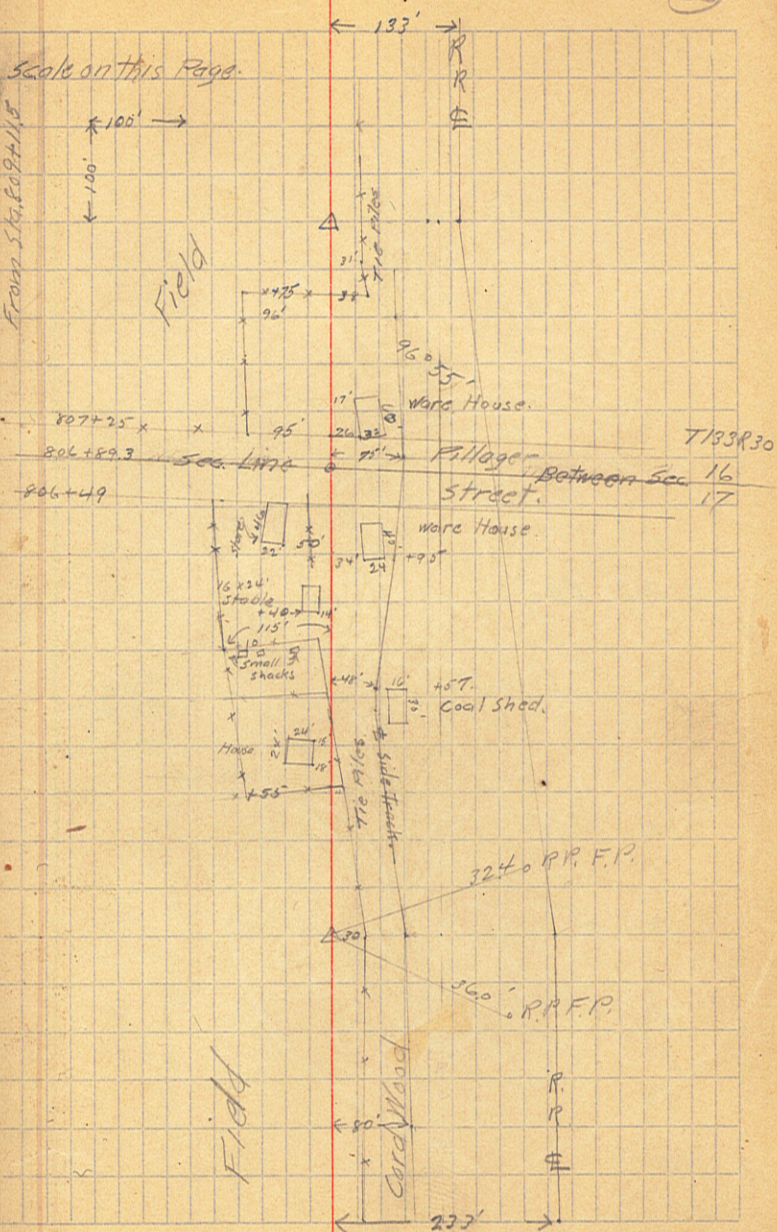
799

(53)

Running 133' N of R.R. &  
 Thru Sec. 16  
 From Sta. 509+11.5

Scale on this Page.

100' →  
 ↓ 100'



823+50.9 POT

3

2

1

820

9

8

7

6

5

4

3

12

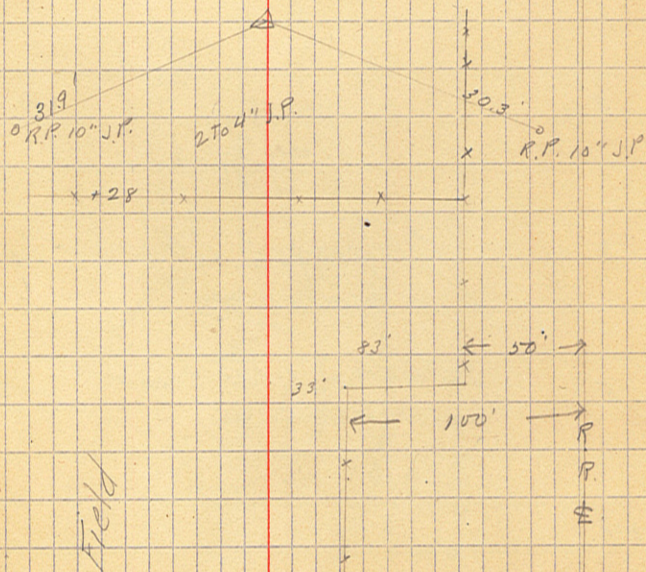
811

Weather -  
Fine.

Friday Oct. 3

(54)

R.J.T.  
G.J.B.  
A.R.P.  
G.L.L.



5

4

3

2

1

105 POT.

30

8

7

6

Channel Change will  
be necessary.

5

30' Base - 1 to 1 slope.  
About 1000 cu yds.

824

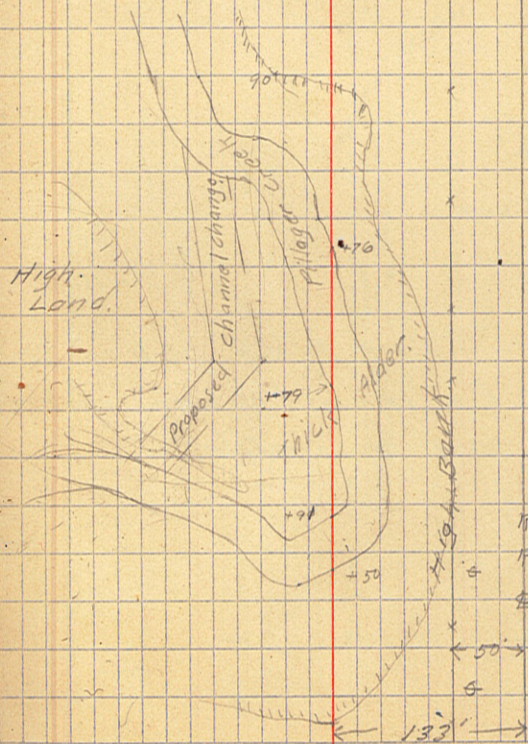
Scale this Page

100'

700'

6 to 12" S.P.

x +78 x x x



9

8

7

6

5

+412 P.O.T.

4

+166 P.O.T.

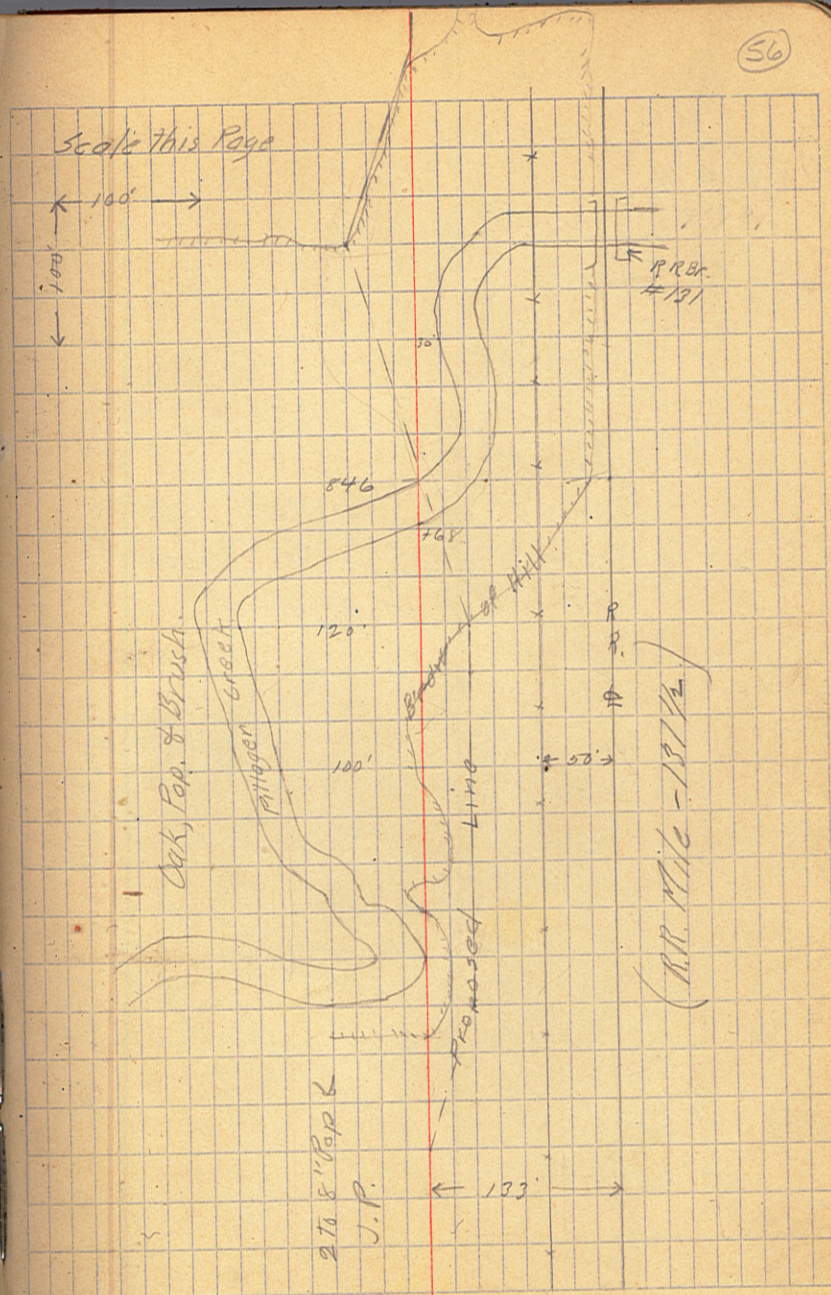
3

Line to be swung onto  
R. of W. as shown by broken  
line on sketch.

2

1

840+70 P.O.T.



4  
+92 45° R.  
3  
+515 45° L  
2  
1  
60 P.O.T.  
9  
8  
7  
6  
5  
4  
853 P.O.T.  
1+078 P.O.T.  
50  
849

should turn out back  
of true line.  
(To be changed when  
plattling)

Oct. 3. Set Huger Run Line  
Between 9 & 16 & 15  
did not close & you got  
tie to true line. <sup>10</sup>  
turned out count  
change in R. of W.

Oct. 6 - Ran true line  
from 14 cor. between 15 & 16  
T133830. Intersection with  
Road E at sta 861+79.2

(57)

\$ is 233' N. of  
P.R. & after  
Leaving Sec. 16.

Total 207 myok,  
77 lodging,  
280 @ 50¢ = 140.00  
140.00

Board	Notes	Bill Turned	Trips
1	2-1-3-1	1	1
2	2-1-3-1	1	1
3	2-1-3-1	1	1
4	2-1-3-1	1	1
5	2-1-3-1	1	1
6	2-1-3-1	1	1
7	2-1-3-1	1	1
8	2-1-3-1	1	1
9	2-1-3-1	1	1
10	2-1-3-1	1	1
11	2-1-3-1	1	1
12	2-1-3-1	1	1
13	2-1-3-1	1	1
14	2-1-3-1	1	1
15	2-1-3-1	1	1
16	2-1-3-1	1	1
17	2-1-3-1	1	1
18	2-1-3-1	1	1
19	2-1-3-1	1	1
20	2-1-3-1	1	1
21	2-1-3-1	1	1
22	2-1-3-1	1	1
23	2-1-3-1	1	1
24	2-1-3-1	1	1
25	2-1-3-1	1	1
26	2-1-3-1	1	1
27	2-1-3-1	1	1
28	2-1-3-1	1	1
29	2-1-3-1	1	1
30	2-1-3-1	1	1
31	2-1-3-1	1	1
32	2-1-3-1	1	1
33	2-1-3-1	1	1
34	2-1-3-1	1	1
35	2-1-3-1	1	1
36	2-1-3-1	1	1
37	2-1-3-1	1	1
38	2-1-3-1	1	1
39	2-1-3-1	1	1
40	2-1-3-1	1	1
41	2-1-3-1	1	1
42	2-1-3-1	1	1
43	2-1-3-1	1	1
44	2-1-3-1	1	1
45	2-1-3-1	1	1
46	2-1-3-1	1	1
47	2-1-3-1	1	1
48	2-1-3-1	1	1
49	2-1-3-1	1	1
50	2-1-3-1	1	1
51	2-1-3-1	1	1
52	2-1-3-1	1	1
53	2-1-3-1	1	1
54	2-1-3-1	1	1
55	2-1-3-1	1	1
56	2-1-3-1	1	1
57	2-1-3-1	1	1
58	2-1-3-1	1	1
59	2-1-3-1	1	1
60	2-1-3-1	1	1
61	2-1-3-1	1	1
62	2-1-3-1	1	1
63	2-1-3-1	1	1
64	2-1-3-1	1	1
65	2-1-3-1	1	1
66	2-1-3-1	1	1
67	2-1-3-1	1	1
68	2-1-3-1	1	1
69	2-1-3-1	1	1
70	2-1-3-1	1	1
71	2-1-3-1	1	1
72	2-1-3-1	1	1
73	2-1-3-1	1	1
74	2-1-3-1	1	1
75	2-1-3-1	1	1
76	2-1-3-1	1	1
77	2-1-3-1	1	1
78	2-1-3-1	1	1
79	2-1-3-1	1	1
80	2-1-3-1	1	1
81	2-1-3-1	1	1
82	2-1-3-1	1	1
83	2-1-3-1	1	1
84	2-1-3-1	1	1
85	2-1-3-1	1	1
86	2-1-3-1	1	1
87	2-1-3-1	1	1
88	2-1-3-1	1	1
89	2-1-3-1	1	1
90	2-1-3-1	1	1
91	2-1-3-1	1	1
92	2-1-3-1	1	1
93	2-1-3-1	1	1
94	2-1-3-1	1	1
95	2-1-3-1	1	1
96	2-1-3-1	1	1
97	2-1-3-1	1	1
98	2-1-3-1	1	1
99	2-1-3-1	1	1
100	2-1-3-1	1	1

Total 140.00  
Total 16 Trips @ 20¢ = 3.20  
Total 286 = 7.28  
Total 55 @ 50¢ = 2.50  
Total 140.00 + 3.20 + 7.28 + 2.50 = 153.00

Bill Turned in Oct. 15  
Hirman Stall Livery Trips  
Oil (2.5) 8  
Gas (2.0) 8  
Food Storage 1  
Pillbox Garage  
John Crossman

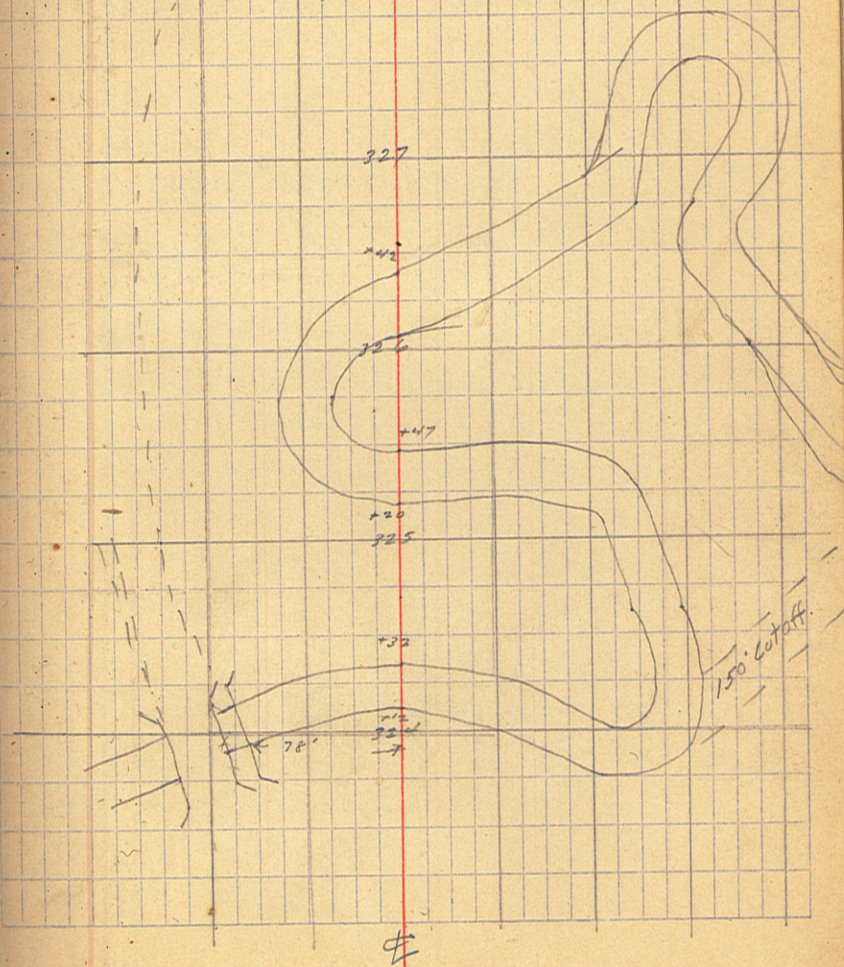
(190 gal gas deducted from together bill) 8/10/38



Sept 24 - R.J.J.

Sketch of Mosquito Creek Xing

Scale 1" = 100'



R.J. Torgerson - Expenses paid

Sept. 12	Loth & Hub stakes	1.15
✓ 12	Spikes	0.90
✓ 12	Grain sac. for stake bag	0.80
✓ 12	Red Cloth for markers	0.35
✓ 12	Keel & Tacks	0.30
✓ 13	Coffee Pail & 3 Cups	0.65
✓ 13	Spikes	1.80
✓ 13	Red Cloth	0.35
✓ 12	lath	2.40

Turned Sept 20 Bill

(All Bills turned in including Sept 20)

Sept. 21	Loth	0.90
✓ 21	File & Whet stone	0.50
✓ 26	Spikes	0.90
✓ 26	Red Cloth	0.70
Oct 2	lath	0.90
✓ 6	✓	0.90

All bills in  
Oct. 29, 1919

	Sept. 12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
R.J. Torgerson	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
C.J. Bark	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A.R. Peterson	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Geo. Lizotte & Ford	(Bill Turned in Oct. 20)																		
R.J. Torgerson	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
C.J. Bark	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A.R. Peterson	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Geo. Lizotte & Ford	(Bill Turned in Oct. 20)																		
John Crossman	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
in office																			
Finished Survey																			
Oct. 13-1919																			
Bill into Pine, Oct 18																			
Bill Turned in																			
Sept. 23																			
M.L.	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML
1-1	2-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1
1-1	2-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1
3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3
Totals																			
Geo Lizotte																			
Board - City Hotel, Motley																			
Sept.	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				
M.L.	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML	ML				
1-1	2-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1				
1-1	2-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1				
3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3				
Totals																			
13-5 = 18 @ 50¢ = 9.00																			
10-39 = 149 @ 50¢ = 74.50																			
32.50																			
1.65																			
2.00																			
36.15																			
(5)																			
Bill Turned in Sept 23 / Sped. gear 1 qt. oil = 1.65																			
Total 16 Trips 20 1/2 hr 5 nights @ .50 = 2.50																			
Total per Trip \$72																			
Motley Garage.																			
Livery Trips																			

897 74" New Cor  
 84+75 - 18"

27°20' L  
 808+50 = 24°30' SR.  
 370 18' L

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
 ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.  
 FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.