

CASU

2

2

INDEX

Data - Proposed Bridge #363-1-6
" " " 367 7

Elev. 50 feet E of E end of bridge =
 0.0.
 Elev. 250 " " " " " " " " =
 3.0'

Graded about 10 feet wide.
 corduroy, brush + dirt.
 Grade has settled until nearly
 level with water.

River.

Course - from center of bridge -
 N 70° W
 S 30° E.

Width = 40'

Depth = 3'

Current - slow and sluggish -
 1 1/2 miles per hour.

Flows N.W.

Soundings -

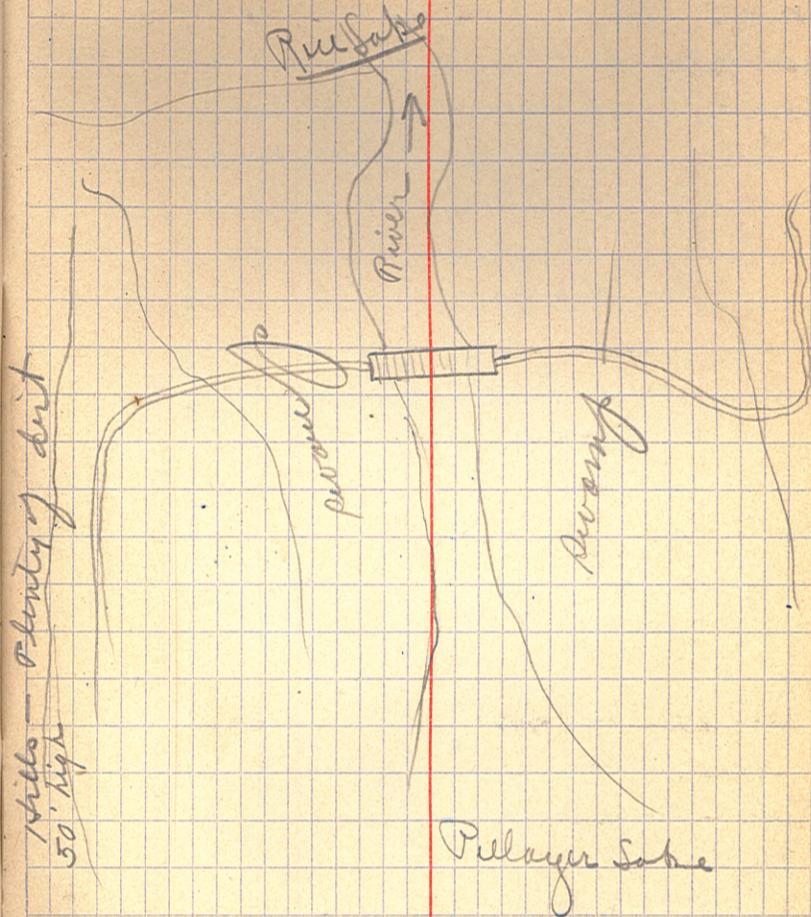
East End

West "

Middle -

Page 4

Sketch of site - 363



Plenty of dirt to fill - 125 to 500
 feet west of bridge. Sand for
 cement. No rocks.

^{present}
 No piles used under bridge -
 was built on logs laid in bed
 of stream - a sort of a crib.
 Logs laid across each other.
 Logs used for stringers.

Soundings -

East End - Used a piece of $\frac{3}{4}$ "
 pipe 18' long. Could not touch
 hard bottom.

W End - Pipe went down 16' -
 could not move it any farther.

Center - at 12 $\frac{1}{2}$ ' - struck a hard
 bottom. This is evidently a false
 bottom. Could not penetrate it.

As I have no longer pipe - I will
 have to sound this by hand.

2-20-1917

Soundings - East side 25 feet
 West " 21 "

Sand + clay bottom

Bench Mark

30' W P string - 200' SW of present
 bridge. 20 penny spike driven in
 NE side of string.
 Elev. of spike = 7.83' = 7.83 feet
 above present stage of water.

Proposed Bridge to 362, being on the
 section line between sections
 1-12, Aug 140, R. 25 -
 Stake in river - set by Deputy Co.
 (Cass Co) Surveyor Bond - marked -
 3089 feet W to cor. 1-2-11-12
 2211 " E " SE Cor 12.

Width of stream - 100 feet
 Course θ N $6^{\circ}30'$ E - 320'
 S 6° E 180', then
 due east 250' $8^{\circ}30'$ Kas.

Current - 2 miles per hour
 flows -

No flowing ice in spring
 In spring the water rises
 4 feet - floods swamps back to
 highland. (An old resident,
 Milton Watson, gave me this
 information.)

Bench Marks -

A 20 penny spike drove in
a cut out shoulder of a 5" oak -
on west side of river 20 feet
south of section line - 50 feet
from water edge.

Elev. 100 feet.

Elev. of river = 95.95

" " Swamps, E side = 97

" " " " W " = 96.40

Cedar swamp extends east
and west from river.

50 feet low land on west side
of river - then into swamp.

Soundings -

From top of ice to hard bottom,
bottom being clay - some sand.

East side -

2 feet water

2 1/2 feet to hard bottom.

Center -

6 feet of water

19 " to hard bottom

West side -

6 " water

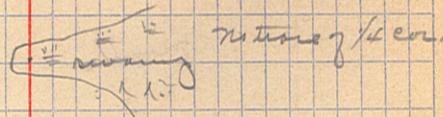
13 feet to hard bottom

10 Transit notes on S.R. # 4

Sta.	Brg.	Ang. R.	Ang. L.	Dist.	Offset.
30+00					
28+66.35					45.9 E
28+00					
26+40					
26+00					
24+00					
23+97					
22+00					
20+00					
18+00					
16+00					
14+00					
13+23.65					
12+00					
11+25					
10+00					
9+25.8					
8+90					
8+00					
6+00					
4+00 ⁰⁰					
2+00					
0+75					
0+00	Touch				

between sections 8+9 - 138-29 - Conn Co. "

in way on road
to civil way on road.



Hub

Top of small hill
South foot of hill

Hub on hill

Top of hill

Hub

North foot of hill

Sand in log

Foot of hill.

Shutty of dirt in hole for auger.

Green Sand. aug

edge of tree. auger

N.E. Cor. Sec 8

N.B.T. N.B.T.

12 Transit Notes of S.P. No 4.

53+07

52+00

50+00

48+00

46+00

4439.10

44+00

42+00

40+00

38+00

36+00

34+00

33+16.4

32+00

13
Bet. Sections 8 & 9 - 138-29 - Cas Co.
Con. from July 10-11

0 feet

45.90
34.50
11.4

SECOR. sec. 8 sets west

34.50 feet

on east side wagon road

Hub

Hub - wide road

SECOR. sec. 8
Found Hubs
New Bearings

And. Moulton Eng.
April 5-6-1912

Location of culvert on east side -
Sec. 27-137-30. P.R. No 3

1-12' x 28' 304.50' just north of
S.E. Cor. of 27

1-12' x 28' 1591.50' south of
N.E. Cor. 27

Ransom Line - Bet. 28-29-127-29
Sta. Bry. Aug. R. Aug. J. Dist. Offet

8+00

7+00

6+00

5+00

4+00

3+00

2+00)

1+00

0+00 71.2° 20'

Walden Town Road

(17)

Point Highland

Swango.

S.E. Ch. on 79
818126 mon. am.

Tindson Down Road

Sta.	B.S. +	H.I.	I.S. -	S.E.	B.M.
0.00	3.96	103.96			100.0
0+25			5.0	99.0	
1+00			4.7		
2+00			5.2		
3+00			4.9		
4+00			4.8		
5+00			5.0		
6+00	4.95	103.46	5.45	98.51	
#7			5.55	97.91	

Random Line - Pitt. Dec. 28-29-137-29

Remarks

Sp. of Cornus

#7 being in way 125' NE Sta 6+00

Cal White - roamer
 M. Donnell - roamer
 Ralph - "

Sept 25-1913

Mount Point on S.R. #4

Sta.

Brq.

Ransom Line

32+90

32+00

30+00

29+50

29+00

28+00

26+37.5

26+00

24+00

22+00

20+00

1800

16+00

14+00

12+00

11+20

11+00

10+00

8+00

6+00

4+98

4+00

2+00)

0+70

0+00 East 9:30 Var

North Line Dec. 34 - 138-21

20

Remarks

Enter highland taylor line

Enter away line
Hub

1/4 Cor. set by line - South of foot

Hub

Hub

To lowland

Enter lowland - requires ditch
Hub

Hub

to field - enter cut out
Hub

Enter cleared field
Hub
to SW cor. Dec 34 - 138-21

Drain Notes on S.P. #3
Ransom Mine

52+75.5

52+00

5000

4800

47+50

46+00

44+00

42+00

40+00

38+00)

36+00

34+00

South Line Sec. 34-138-31

21

Oct. 15-1913

Geo. Kline }
John Hudson }

W.D. Wahlquist }

W.H. Hudson }
Geo. Hanford }

Cor. set from SE. line + W.P. # S.E. Cor. 34 - South 15.10 ft.

High camp - ditch req.

Drainage outlet can be dug
around north of 47+50

Enter lowland
Hull
So. lowland - later high camp

No ditching required bet
34+00 and 34+50

Hull

Enter lowland to again

Transit Run on S. R. # 2

Sta. Bq.

24+49

26+00

24+00

22+00

20+00

18+00

16+10

16+00

14+00

12+00

10+00

8+00

7+60

6+36.7

6+00

4+00

2+00

0+40)

0+00 East
9' bar

Ransom Line - S. Line on 35-158-31

22

Corrections -

W. Line - 1408 - Est.

1/4 cor. South side on
35 - sets back 27.2 feet

22+00

1 hills

16+00

2 pines road as
sketch above - being
cut - just around
of hills - wood being
a patch 75' from line

W. Line

Hub on top of hill
to aug. - sandhill

Pin to north
E. line open Aug - 10' west
hill

E. line with fence
SW. cor. 35

Oct. 16 - 1913

run of 15' - 1' road
distance 1/2 mile

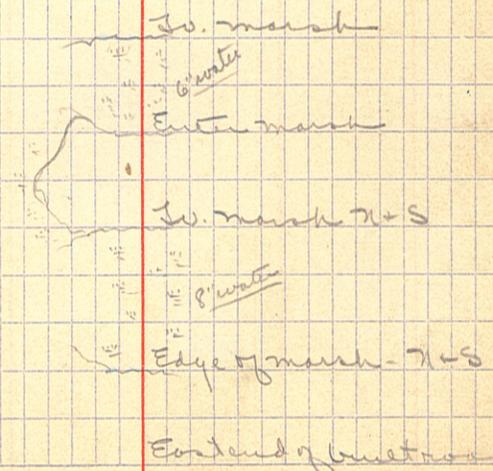
Drainage Notes on S.R. #5

Sta.	Brg.	Ang. R.	Ang. L.	Dis.	Effect
18+00					
17+00					
16+00					
15+00					
14+00					
13+00					
12+00					
11+00					
10+00					
9+30					
9+00					
8+60					
8+00					
7+00					
6+00					
5+70					
5+00					
4+44					
4+00					
3+30					
3+00					
2+00					
1+62					
1+00					
0+00	East				

East 1/2 of South line of Sec. 4 - 139-77

Remarks

Between Sta. 0+00 and 2+56.4 - right quarter - estimated and bounded to the south side - Total amount of filling estimated to cost of grading 15¢ per cu. yd.



Grant Notes on S.P. #5

Sta. Brg. Ang. R. Ang. L. Dis

41+00

40+00

39+00

38+93 East 88°19'

38+00

37+00

36+00

35+00

34+00

33+00

32+00

31+00

30+00

29+00

28+00

27+00

26+00

25+66.4 North 87°26'

25+00

24+00

23+00

22+00

21+00)

20+00

19+00

Dec. 4 - 139.29

24

Remains

□ N. 16 Cor.

□ I.M. - S.E. Cor. Dec. 4 -

Transit notes on S.P. #5
 Sta. Brg. Ang R Ang L Dis
 63+00
 62+59.4 7155°10'E 151'
 62+00
 61+09.4 7135°E 158'
 61+00
 60+00
 59+00
 58+00
 57+50
 57+00
 56+00
 55+00
 54+00
 53+00
 52+00
 51+00
 50+00
 49+00
 48+00
 47+00
 46+00
 45+00
 44+00)
 43+00
 42+00

Dec. 3-139-29 - Porto Lapehug

Remarks

200' to Lake

Bearings at 61+09.4
 P12 S 60° E 21.25 feet 200' west to Porto Lake
 P16 S 90° 36' W 25.10 "

Center-Country Road - NE-SW

Levels on S.T.R. #5

Rt.	B.S. +	H.I.	I.S. -	S.F.	B.M.
	2.6	102.6			100.0
0+00			4.9	97.7	
1+00			3.8	98.8	
1+62			8.0	94.6	
2+00			8.6	94.0	
3+00			8.7	93.9	
3+30			8.6	94.0	
4+00			6.2	96.4	
Y.P.	5.00	102.36	5.24	97.36	
4+44			7.6	94.7	
5+00			8.5	93.9	
5+70			7.5	94.9	
6+00			6.6	95.8	
7+00			4.7	97.7	
8+00			2.8	99.6	
8+60			3.4	101.0	
9+00			4.9	97.5	
9+30			8.0	94.4	
10+00			5.4	97.0	
11+00			1.0	101.4	
Y.P.	11.1	113.44	0.02	102.34	
12+00			8.1	105.3	
13+09			7.4	106.0	
14+00			5.5	107.9	109.42
15+00			6.85	106.6	

East 1/2 of South Line Du 4-139.79

Remarks

On W.P. 50' west of Sta 0+00

5' Y.P. 50' W of 14+00 Spike

Level Notes on S.R. #5

Sta.	T.B.S. +	H.I.	F.S. -	S.E.	B.M.
16+00			6.9	106.5	
17+00			3.1	110.3	
18+00			3.2	110.2	
19+00	0.03	111.05	2.42	111.02	
20+00			2.8	108.2	
21+00			7.3	103.7	
22+00			8.25	102.8	
23+00			8.35	102.7	
24+00			6.1	104.9	
25+00			4.9	106.1	
25+00			2.2	108.8	
25+66.4			3.4	107.6	
26+00	5.66	114.54	2.77	108.88	108.88
27+00			8.1	106.4	
28+00			5.75	108.8	
29+00			3.4	111.1	
30+00			5.4	109.1	
31+00			7.3	107.2	
32+00			9.7	104.8	
33+00			10.2	104.3	
33+00			12.6	101.9	
34+00	11.81	114.39	11.96	102.58	
34+00			8.75	105.7	
35+00			6.85	107.6	
36+00			5.0	109.4	

Dec. 3+4-139-79

29

Remarks

S.E. cor. Sta. 4
B.M. Top of Iron Corner

Sta.	B.S. +	H.I.	FS -	SE	B.S.M.
57+00			6.75	102.75	
58+00			7.25	102.25	
59+00			5.5	104.0	
60+00			10.2	99.3	
61+00			11.6	97.9	
61+09.4			11.7	97.8	
I.P.	0.92	99.41	11.0	98.49	98.23
62+00			4.2	95.2	
62+59.4			6.2	93.2	
63+00			11.0	88.4	
63+50			8.25	91.2	
64+00			10.55	88.9	
64+10			11.1	88.3	
65+00			4.55	94.85	
I.P.	5.87	104.76	1.02	98.39	
66+00			4.5	99.8	
66+80			2.5	101.8	
67+00			3.2	101.1	
68+00			9.5	94.8	
I.P.	3.46	96.13	11.59	92.67	
69+00			6.2	89.9	
69+57			9.45	86.7	
70+00			10.6	85.5	
71+00			9.4	86.7	
72+00			3.0	93.1	

Remarks

6' I.P. 25' South of 61+09.4

Ar. Mountain
Nov. 9-13

Level notes on S.R.#5

Sta.	B.S.+	H.I.	F.S.-	S.E	T.B.M.
87+00			7.4	102.0	
88+00			1.15	108.25	
I.P.	0.48	109.29	0.57	108.81	
89+00			1.3	108.0	
90+00			6.55	102.75	
I.P.	3.10	101.50	10.89	98.40	
91+00			6.0	95.5	
91+50			9.1	92.4	
92+00			2.2	99.3	
			3.85		97.65

~~13-20~~

Dec. 24-1913

Remarks

4" dipper 35' back of 91+25
 End of Survey.

G.W. Moulton
 Dec. 10-1913

Drumstick Notes on S. R. #15

33

32+40

32+00

31

30

29+30

29

28

27+00

26+5

26+00

25+75

25+20

25+00

24+75

24+00

23+85

23

22

21

20+00

19+65

19+40

19

18

17

East Surgeon - 4-134-20

11

10

11

11

Enter lowland

Current salt - 12"

2nd part of cloud house

54+82

54

53

52

51

50+00

49+75

49+20

49+00

48+88

Note -

From Sta 48+00 to 54+ add 1/2 ft a
 feet for ditch cut, which now lies along
 roadway. This to be placed on roadway

In good N. Co. East 105 ft

3 end of bridge
 1/2 way out of
 1/2 above it SW-SE
 1/2 way

G.W. Maudslayi
 Jan. 22-14

Time of raising
 20' below zero

Tunnel Notes on S.P. #15

Sta.	B.S. +	I.I.	F.S. -	S.E.	B.M.
	2.0	102.0			100.0
0+00			4.2	97.8	
1+00			4.2	97.8	
2+00			6.4	95.6	
2+60			9.3	92.7	
3+00			8.2	93.8	
3+50			5.5	96.5	
4+00			6.2	95.8	
5+00			4.6	97.4	
6+00			0.9	101.1	
7+00			1.25	100.75	
I.P.	6.35	107.70	0.45	101.35	
8			5.0	102.7	
9			4.6	103.1	
9+56			10.0	97.7	
10+00			11.6	96.1	
10+12			12.0	95.7	
10+50			11.2	95.6	
11+00			5.5	102.2	
11+35			3.5	104.2	
12+00			7.6	100.1	
12+40			11.0	96.7	
13+00			11.4	96.3	
14+00			7.5	100.2	
14+15			6.7	101.0	

East Survey No. 4-134-30

Remarks

check in our journal
 1357E gate 0+00

From 11+40 to 12+00
 1" fill on east side
 10' wide

Sta.	B.S. +	H.I.	F.S. -	S.E.	B.M.
J.P.	1.88	102.81	6.77	100.93	
15+00			8.00	94.8	
15+69			8.5	94.3	
16+00			9.00	93.8	
17+00			7.2	95.6	
18+00			5.0	97.8	
19+00			7.8	95.0	
19+40			8.7	94.1	
19+65			8.7	94.1	
20+00			3.2	99.6	
21+00			0.8	102.0	
J.P.	2.93	104.79	0.95	101.86	
22			3.7	101.1	
23			5.2	99.6	
			5.46		99.33
23+85			7.0	97.8	
24+00			7.4	97.4	
24+75			4.1	100.7	
25+00			6.9	97.9	
25+20			10.0	94.8	
25+75			11.0	93.8	
26+00			8.6	96.2	
26+45			6.6	98.2	
27+00			6.2	98.6	
28+00			8.6	96.2	

E. 100.4 - 134.30

Remarks

From Sta 5 to 16+50
narrow road bed in
lowland - 11' deep 10' wide

Spin in 9" fence post
23' W of Sta 23+45

Sunset Notes on S.R. # 1

Sta.	Brg	Ang. R.	Ang. I.	Dis.	Magn. Brg.
19					
18					
17+00					
16+73	N 54° 30' W		35° 30'	481.	
16+00					
15					
14					
13+00					
12+90					
12+00					
11+75					
11+40	N 19° W	23° 30'		533'	
11+00					
10+00					
9+50					
9					
8					
7					
6					
5					
4					
3					
2)					
1					
0+00	N 42° 30' W 9' m.		42° 30'	1140'	

Rec.

J. 142-31

42

Remarks

Clearing and surveying 11+40 to 11+54 of Acker building of the Park and White River.

Clearing 9+30 to 10+00 of 11+40 to 11+54.



R.P. at 16+73
 12 S 25 W 54.80'
 12 780 W 49.80'

20.5 marsh

Enter on the marsh
 Fall 1 1/2 - no drain
 R.P. at 11+40

W P 10883 E 61.25' 7.7 P 6940 E 61.30'

Spruce hill

Anty hill

R. point to Van go east
 5' W.P. 82.1° E 36.75 feet
 10' W.P. 56.2° 45' W 31.70 feet
 all R.E. made

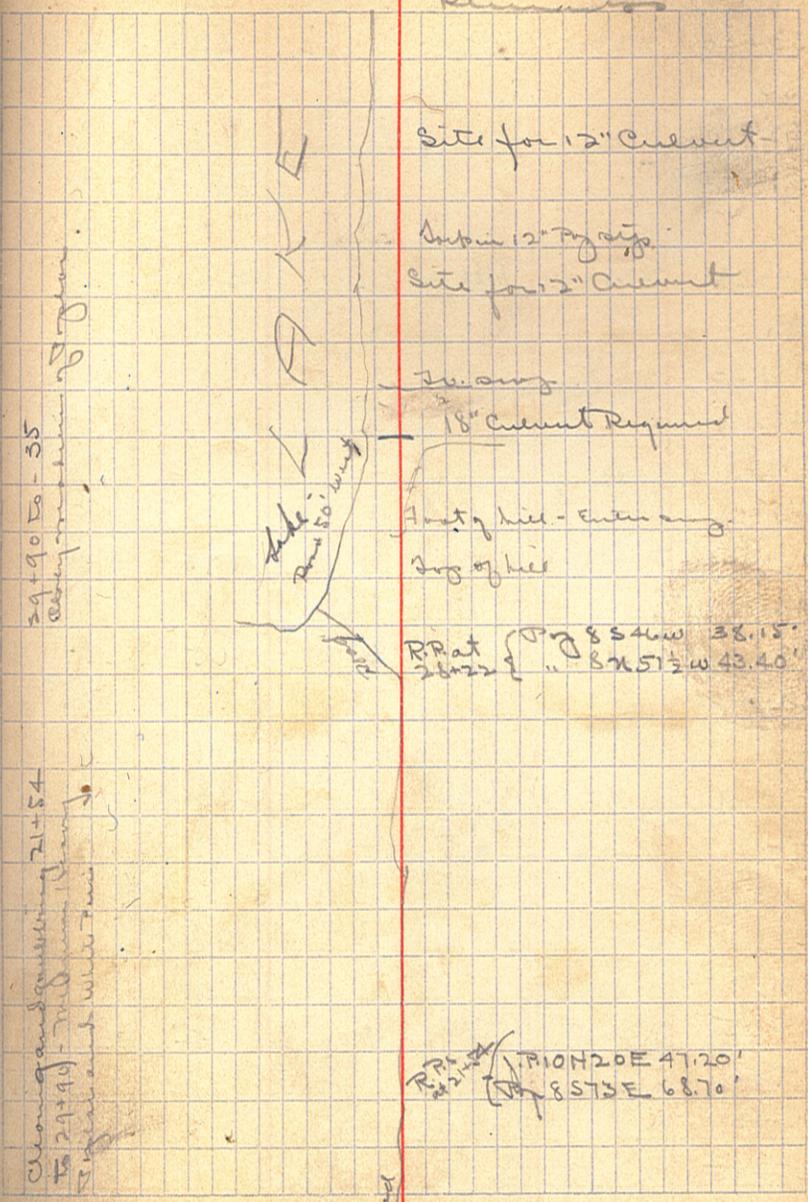
Inventories on S.R.#1

Sta	Bely	Ang P	Ang J	His	Agut
35					
34					
33+75					
33					
32+09	N 25 1/2 W		2 1/2°	616'	
32+00					
30+78	N 4° W		34° 30'	131'	
30+60					
30+20					
30+00					
29+90					
29+35					
29					
28+22	N 30° 30' E	32° 15'		256'	
28					
27					
26					
25+21	N 1° 45' W	27° 15'		301'	
25					
24					
23					
22					
21+54	N 29° W	25° 30'		367'	
21					
20					

Section

O. 142-31

Remarks



Site for 12" Culvert

Sub in 12" Pipe

Site for 12" Culvert

18" Culvert Required

Foot of hill - Entrance

Top of hill

RR at 28+22
 S 85 1/4 W 38.15'
 " S 76 1/2 W 43.40'

RR at 21+54
 N 10 1/2 E 47.20'
 " S 75 E 68.70'

Pond

Sta.	Bearing	Ang. R	Ang. D	Dist	Point
53+40	N 23° W	11 1/2°	?	377'	A.P.
53					
52					
51					
50					
49+38	N 34 1/2° W	12°		402'	A.P.
49					
48+50					
48					
47+20					
47					
46+65	N 46 1/2° W	12° 30'		273'	A.P.
46					
45	N 59° W		39° 30'	165'	A.P.
44					
43					
42+67	N 19° 30' W	16° 30'		233'	A.P.
42					
41					
40					
39					
38+25	N 36° W		10 1/2°	442'	A.P.
37					
36+00					
35+75					

Remarks

Quality and quantity Medium Topsoil and Buck

12" Current Required
Sta. 45-335 and west
and 1500 feet to
Rec. Co. (By Cur.)

Full 1 1/2' 40+50 to 41+50

R.P. at 38+25
P 37 25 E 60.20'
" 256 3 1/2 E 66.20'

So. some at right

Site for 12" current

LAKE

Summit notes - S.R. #1

Sta.	Brg.	Ang. R.	Ang. D	Dis.	Aspect
72+00)					
71+25					
71					
70					
69					
68+70	N41W	17°		496'	
68					
67					
66					
65+83	N58W		16°	287'	
65					
64					
63+50					
63					
62+90					
62					
61					
60					
59					
58					
57+17	N42W		19°	866'	✓
57					
56)					
55					
54					

See

S. 142-31

Remarks

	NE				12" crevasse
	NE				HILLS
	NE	P			Top of hill
	NE				of
	NE	H			9.P.
	NE				9.P.
	NE				Top of hill
	NE				12" crevasse
	NE	W			HILLS
	NE				HILLS
	S				in hollow
	"				9.P. Very Rocky at this Sta.
	NE				Foot of
	NE				Foot of

clearing and grubbing - first 50' and summit. Many
 stumps of red and white pine

Sta.	Bray	Ang. R	Ang. T	Dis.	Offset
90					
89					
88					
87					
86					
85+65					
85					
84+50					
84					
83					
82					
81					
80					
79+35					
79					
78					
77					
76+77	N 2° 53' E	41° 23'		2133	
76					
75+80	N 38½° W	39°		97'	
75					
74+35					
74					
73+66	N 77½° W		36½°	214'	
73					

Remarks

Clearing out of vegetation 86 to 87

Center old road

Foot
 Edge
 Foot of hill

82 to 84+50 requires heavy clearing on a steep valley slope.

Small ridge

q. Var

B.P.

D

2m below

B.P. Nail in heavy stump

April - 12th 1914 (73+66)
 (North of - Reconnaissance)

Sta	Range	Ang R	Ang I	Mis
105+25				
105				
104				
103+81	774°W		43°15'	714'
103				
102				
101+20				
101				
100+75				
100				
99+50				
99				
98+50				
98+10	730°W		33°38'	571'
98				
97				
96				
95+51				
95				
94				
93				
92+83				
92+11				
92				
91				

98+10 To 133+15
 along Point Point, Bald
 ash, oaks and pines.

Clearing and grubbing
 91 to 98+10 in 1951

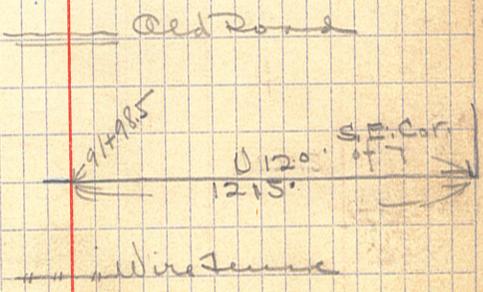
12" Culvert

Elm 14 S 30° W 47.15
 A.P. Ash 87 N 43° W 60.70

12" Culvert Range

Wire fence N+S
 7' 1 1/2'

R.P.S
 A.P. P 94 N 65° W 73.10
 W 05 S 48° W 54.2



Sta.	Brg.	Ang R	Ang L	Dis
123				
122+40				
122				
121				
120				
119				
118+22	$716^{\circ}W$	$23^{\circ}40'$		878
118				
117				
116				
115				
114+93	$589^{\circ}20'W$	G.P.	$31^{\circ}10'$	$329'$
114				
113+35	$7159^{\circ}30'W$	$29^{\circ}50'$ G.P.	$20^{\circ}50'$	158'
113				
112				
111				
110+95	$7189^{\circ}20'W$		$15^{\circ}20'$	$240'$
110				
109				
108				
107+74				
107+8				
107				
106				

In hollow

cut 14 $538^{\circ}20'E$ $46.25'$
 Proj 12 $537^{\circ}2'W$ $37.85'$

117+70 - Culvert 14" -
 7' $1\frac{1}{2}'$ 117+50 to 118+50

110+95 G.P.
 Bal 6 $7148^{\circ}E$ $38'$
 Ash 4 $7128^{\circ}W$ $37A'$

From 107 to 110 near
 gravel bottom - gravel taken
 from pit 50' N of 107

Current runs NE - Swift
 Gravel bottom - 6" water
 Bottom is 4' below
 bank

N Bank creek
 S Bank creek

Road crosses at Right Angle

Sta	Bearing	Ang R	Ang L	Dist
163+42				
163				
162				
161+16	N 65° W		9½°	226'
161				
160				
159+15	N 55½° W	20°	20°	201'
159				

163+42

163

162

161+16 N 65° W

9½° 226'

161

160

159+15 N 55½° W 20°

20° 201'

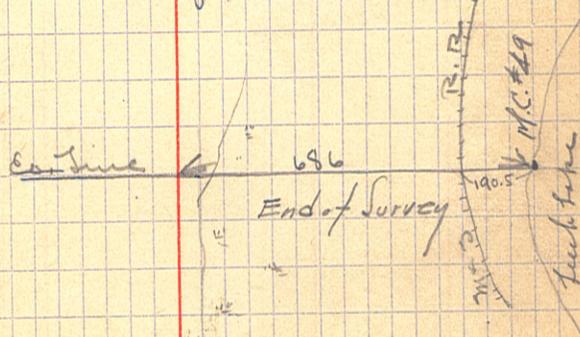
159

Remarks

Notes - By Coro

4410' west of monument to 16, 17, 20+21, we intersect at Sta 51+50

Bearing at 163+42
 WP 50g 12 N 57½° W 48.90'
 JP " 12 S 40½° W 35.90'



A.P. Jackson's Dog Stumps

Level Notes on S.P. #1

Sta	B.S. +	H.I	F.S. -	S.E.	B.M.
	5.15	105.15			100.0
0+00			6.6	99.1	
0+50			9.2	96.0	
1			7.9	97.2	
2			15.2	90.0	
3			15.2	90.0	
I.P.	0.74	94.27	11.22	93.53	
3+50			3.20	91.1	
4			4.5	89.8	
5			8.4	85.9	
6			9.7	84.6	
7			8.4	85.9	
I.P.	5.46	93.21	6.52	87.75	
8			9.7	85.3	
9			7.6	85.6	
9+50			2.4	90.8	
10			3.3	90.0	
11			6.1	87.1	
11+40			4.7	88.5	
I.P.	12.96	101.80	4.37	88.84	
11+75			16.0	85.8	
12			16.0	85.8	
12+90			16.0	85.8	
13			12.70	89.1	
14			2.2	99.6	

142-31

Remarks	Post L	Post R
On 10" W.P. 32' S.W. (cont)		
	4.2	90.1
	2.2	92.1
	5.8	88.5
	2.6	91.7
	10.0	84.3
	6.8	87.5
	9.4	84.9
	7.4	86.9
	10.4	82.8
	8.1	85.1
	3.4	90.2
	0.3	93.0
	4.3	88.9
	2.3	90.9
	9.3	83.9
	5.4	87.8
	1.2	100.6
	3.2	98.6

Level Notes on S. 12 #1

Sta	B.S. +	H.I.	F.S. -	S.E.	B.M.
15			1.3	100.5	
I.P.	5.58	106.75	0.63	101.17	
16			4.8	102.0	
16+73			4.7	102.1	
17			4.9	101.9	
17+25			5.7	101.1	←
18			9.3	97.5	—
19			8.7	98.1	—
I.P.	0.14	98.42	8.47	98.28	
20			1.9	96.5	—
21			5.9	92.5	—
21+54			5.5	92.9	—
22			4.3	94.1	—
23			4.8	93.6	—
23+30			4.3	94.1	—
24			5.5	92.9	—
I.P.	0.86	95.79	3.49	94.93	✓
25				95.0	—
25+21				95.0	—
25+50			2.40	93.4	—
26			3.5	92.3	—
B.M.			2.0	93.8	93.79
27			6.0	89.8	—
28			7.5	88.3	—
28+22			9.0	86.8	—

L 10' R

142-31

Remarks

73.3	103.4	4.3	102.4
8.5	98.2	11.3	95.4
7.7	99.0	10.0	96.7
0.2	98.2	1.9	96.5
5.9	92.5	7.9	90.5
2.4	96.0	7.0	91.4
0.8	97.6	3.2	95.2
4.8	93.6	7.0	91.4
4.3	94.1	7.0	91.4
3.5	94.9	6.5	91.9
	99.0		96.0
	99.0		96.0
2.4	93.4	0.0	95.8
4.5	91.3	2.0	93.8
5.0	90.8	6.0	89.8
6.5	89.3	10.0	85.8
9.5	86.3	10.0	85.8

On 16' I.P. - 50' L of 26+50

Sta.	B.S. +	H.I.	F.S. -	S.E.	B.M.
J.P.	6.01	93.40	8.40	87.39	
28+50			6.70	86.7	
29			5.5	87.9	
29+25			1.9	91.5	
30			4.8	83.6	
30+50			9.8	83.6	
30+70			6.4	87.0	
31			6.5	86.9	
32			9.0	84.4	
J.P.	3.15	89.99	6.56	86.84	
33			6.30	83.7	
34			6.3	83.7	
35			6.3	83.7	
36			5.3	84.7	
37			1.1	88.9	
J.P.	5.55	95.47	0.07	89.92	
38			4.6	90.9	
38+25			2.2	93.3	
39			4.3	91.2	
40			6.2	89.3	
41			8.2	87.3	
42			5.0	90.5	
42+67			8.5	87.0	
J.P.	2.14	90.20	7.41	88.06	
43			3.0	87.20	

10' R

142-31 55

Point	lev	Point	lev	Remarks
6.5	86.9	4.5	88.9	
4.6	88.8	0.0	93.4	
7.4	86.0	5.4	88.0	
9.70	83.7	1.0	92.4	Subst. to left.
6.3	83.7	5.0	85.0	P-15' 88.7
6.3	83.7	5.0	85.0	13 88.7
6.3	83.7	3.5	86.5	1.0 89.0
6.0	84.0	2.0	88.0	
5.2	86.8	0.0	90.0	
6.0	89.5	2.8	92.7	
4.0	91.5	0.7	94.8	
5.7	90.0	2.8	92.7	
7.0	88.5	5.2	90.3	
8.2	87.3	7.0	88.5	
9.5	86.0	7.0	88.5	
5.7	84.5	0.5	89.7	

Kind Notation S.R.#1

Dtn.	B.S.+	H.I.	F.S.-	S.E.	B.M.
44			4.8	85.4	
45			5.0	85.2	
46			5.0	85.2	
46+65			3.8	86.4	
J.P.	4.55	91.67	8.08	87.12	
47			6.2	85.5	
48			8.1	83.6	
49			6.3	85.4	
49+38			4.2	87.5	
50			6.1	85.6	
51			7.4	84.3	
51+60			3.3	88.4	
52			5.9	85.8	
+50			7.4	84.3	
53			3.1	88.6	
J.P.	8.62	98.56	1.73	89.94	
B.M.	8.13	98.69	8.00		90.56
53+46			5.0	93.7	
54			3.8	94.9	
55			2.2	96.5	
56			10.0	88.7	
57			5.0	93.7	
+17			4.4	94.3	
J.P.	2.29	93.58	7.40	91.29	←
58			12.5	81.1	

L 10' R

142-31

Pod	Pod	Pod	Pod	Remarks
6.6	83.6	0.0	90.2	
6.6	83.6	1.3	88.9	
6.9	83.3	0.0	90.2	
6.7	83.5		90.0	
7.5	84.2	4.5	87.2	
8.1	83.6	7.2	84.5	
7.5	84.2	4.1	87.6	
6.8	84.9	2.6	89.1	
7.8	83.9	2.7	89.0	
8.4	83.3	4.6	87.1	
6.0	85.7	0.0	91.7	
8.0	83.7	2.0	89.7	
9.5	82.2	4.3	87.4	
3.1	88.6	1.1	90.6	
5.8	93.0	4.2	94.5	
5.4	93.3	3.0	95.7	
3.5	95.2	1.5	97.2	
12.0	86.7	7.3	91.4	
6.8	91.9	3.8	94.9	
6.6	92.1	2.8	95.9	
12.5		1.8		

On 8" Bass Wood 60' L. 54+00

4-8-14

Level notes on S.R. #1

Sta.	B.S. +	H.I.	F.S. -	S.E.	B.M.
59			12.2	81.4	
+30			7.5	86.1	
60			5.2	88.4	
60 +50			4.3	89.3	
61			5.4	88.2	
62			14.5	79.1	
63			13.2	80.4	
63+50			7.9	85.7	
J.P.	1.90	86.92	8.56	85.02	
64			5.0	81.9	
65			7.7	79.2	
66			4.6	82.3	
67			6.9	80.9	
68			6.5	80.4	
68+70			2.6	84.3	
J.P.	9.21	94.54	1.59	85.33	
69			14.5	80.0	
70			12.1	82.4	
70+50			11.6	82.9	
71			14.7	79.8	
71+25			15.5	79.0	
72			7.3	87.2	
72+59			4.5	90.0	
B.M.			0.68		93.86
73			6.3	88.2	

L		R		142-31
Red		Red		Remains
9.5	84.1	5.0	88.6	
6.7	86.9	2.2	91.4	
5.2	88.4	3.2	90.4	
7.0	86.6	4.2	89.4	
14.0	79.6	11.5	82.1	
11.1	82.5	5.3	88.3	
7.2	79.7	2.8	84.1	
7.7	79.2	5.9	81.0	
6.9	80.0	0.0	87.0	
8.4	78.5	2.0	85.0	
8.0	78.9	3.2	83.7	
4.7	82.2	2.0	85.0	
15.0	79.5	12.3	82.2	
15.5	79.0	7.6	86.9	
15.5	79.0	7.6	86.9	
15.0	79.5	11.4	83.1	
15.5	79.0	12.1	82.4	
9.4	85.1	5.8	88.7	
5.4	89.1	4.8	89.7	
7.5	87.0	6.2	88.3	

On 8th June 50' R of 72+00

Level notes on S.P. #

Sta.	B.S. +	I.T.	F.S. -	S.E.	B.M.
73+66			2.4	92.1	
74			5.6	88.9	
74+35			12.0	82.5	
75			5.4	89.1	
S.P.	6.72	99.74	1.52	93.02	
75+80			4.1	95.6	
76			4.7	95.0	
77			4.6	95.1	
S.P.	0.92	91.0	9.66	90.08	
78			4.5	86.5	
79			15.0	76.0	
79+35			13.5	77.5	
S.P.	0.08	79.28	11.80	79.20	
80			7.40	71.9	
81			10.20	69.1	
B.M.			1.52		77.76
S.P.	1.26	68.44	12.10	67.18	
82			5.90	62.5	
83			6.7	61.7	
84			8.0	60.4	
84+50			9.4	59.0	
85			4.1	64.3	
+65)			11.5	56.9	
86			12.1	56.3	
87			12.8	55.6	

L

R

142-31

Pod	Pod	Pod	Pod	Remarks
4.7	89.8	0.9	93.6	
6.8	87.7	3.4	91.1	
14.0	80.5	10.5	84.0	
8.7	85.8	2.0	92.5	
5.2	94.5	1.0	98.7	
6.4	93.3	1.7	98.0	
4.2	95.5	3.4	96.3	
3.8	87.2	4.9	86.1	
16.0	75.0	11.50	79.5	
5.6	73.7	7.5	71.8	
8.6	70.7	10.4	68.9	
				Out of Proj - 35' L of 80+25

Levels on S.P. #1

Sta.	B.S. +	H.I.	F.S. -	S.E.	B.M.
B.M.			3.86		37.98
107			12.6	29.2	
I.P.	4.52	35.15	11.21	30.63	
			7.3	27.8	
			9.6	25.5	
			6.6	29.1	
108			6.7	28.4	
109			5.2	29.9	
110			5.1	30.0	
111			5.4	29.7	
I.P.	8.88	39.04	4.09	30.16	
112			8.6	30.4	
113			6.3	32.7	
113+35			5.0	34.0	
114			7.3	31.7	
115			6.5	32.5	
I.P.	5.60	39.09	5.55	33.49	
116			4.8	34.3	
117			5.0	34.1	
117+70			5.8	33.3	
118			5.3	33.8	
119			1.5	37.6	
I.P.	8.05	46.99	0.15	38.94	
120			4.5	42.5	
121			5.2	41.8	

142-31 60

L		R		
Rod		Rod		
				In 10" Clear 40" L of 106+00
110	30.8	4.0	27.8	
				South Bank of Creek
				Bottom
				North Bank of Creek
6.0	29.1	7.4	27.7	
4.6	30.5	6.0	29.1	
4.0	31.1	6.0	29.1	
4.4	30.7	6.4	28.7	
6.6	32.4	10.0	29.0	
4.3	34.7	8.3	30.7	
3.0	36.0	7.0	32.0	
5.3	33.7	9.3	29.7	
4.5	34.5	8.5	30.5	
2.8	36.3	6.8	32.3	
3.0	36.1	6.0	33.1	
4.8	34.3	6.8	32.3	
2.5	36.6	0.50	38.6	
6.5	40.5	2.5	44.5	
3.2	43.8	7.2	40.0	

Jenkinson S.P. #1

Sta.	B.S.+	H.I.	F.S.-	S.E.	B.S.M.
122			7.8	39.2	
+40			9.8	37.2	
123			2.6	44.4	
I.P.	12.49	59.08	0.40	46.59	
124			7.3	51.8	
I.P.	11.05	70.05	0.08	59.00	
124+65			11.0	59.0	
125			10.3	59.7	
125+50			11.6	58.4	
126			7.9	62.1	
127			4.5	65.5	
I.P.	12.34	80.68	1.71	68.34	
128			10.6	70.1	
129			8.2	72.5	
130			5.7	75.0	
130+40			9.0	71.7	
131			2.6	78.1	
B.M.			4.12		76.56
I.P.	10.45	90.16	0.97	79.71	
132			4.8	85.4	
I.P.	6.66	95.80	1.02	89.14	
133			1.6	94.2	
+15			0.0	95.8	
+55			5.8	90.0	
134			4.4	91.4	

142-31

L		R	
Red	Black	Red	Black
4.8	42.2	10.8	36.2
6.8	40.2	12.8	34.2
0.6	46.4	4.6	42.4
15'		15'	
7.30	62.7	7.3	62.7
15'		15'	
7.3	62.7	7.3	62.7
9.6	60.4	11.0	59.0
4.9	65.0	10.9	59.0
8.6	72.1	10.6	70.1
6.2	74.5	6.2	74.5
0.0	80.7	7.7	73.0
7.4	73.3	11.0	69.7
3.7	77.0	0.0	80.7
2.8	87.4	4.8	85.4
	97.2		91.2
	99.0		93.0
6.5	89.3	4.1	91.7
7.7	88.1	1.5	94.3

On Pt 10' W.P. 100' TR. 130+40

June on S. P. #1

Sta.	B.S. +	H.I.	F.S. -	S.F.	B.M.
150+45			3.3	75.2	
151			15.0	63.5	
+25			18.0	60.5	
2. TP	0.50	66.73	12.30	66.23	
152			6.2	60.5	
152+50			3.8	62.9	
153			7.0	59.7	
153+60			11.8	54.9	
154			7.8	58.9	
154+25			7.0	59.7	
155			11.3	55.4	
3. TP	4.58	61.17	10.14	56.59	
156			6.1	55.1	
B.M.			3.80	57.4	57.37
157			6.0	55.2	
157+65			6.8	54.4	
4. TP	5.03	60.46	5.74	55.43	
158			5.7	54.8	
159			6.3	53.2	
159+25			4.6	55.9	
160			5.2	55.3	
161			7.3	53.2	
5. TP	0.31	54.22	6.55	53.91	
162			6.3	47.9	
163			7.8	46.4	

L 10' TR

142-31

Point	10'	TR	Remarks
20.0	58.5	16.0	62.5
9.2	57.5	3.2	63.5
4.8	60.0	0.8	66.0
4.0	62.7	10.0	56.7
8.8	57.9	14.8	51.9
4.8	62.0	10.8	56.0
4.0	62.7	10.0	56.7
9.3	57.4	13.3	53.4
2.1	57.1	8.1	53.1
			On Point 16" Head of 50' R of 156+30
7.0	54.2	5.0	56.2
5.8	55.4	5.8	55.4
2.7	57.8	8.7	51.8
3.3	57.2	9.3	51.2
0.0	60.5	9.2	51.3
2.2	58.3	8.2	52.3
4.3	56.2	10.3	50.2
5.3	48.9	5.3	48.9
3.8	48.4	9.8	44.4

Level Notes on S.R.#1

Sta.	B.S. +	H.I.	F.S. -	S.E.	B.M.
163+42			9.1	45.1	
B.M.			9.02		45.20

L

R

142-31

Red

Red

Remains

On Rod 6' Back 40' R of 162+00

End of Survey

Co. Line

Friday 4-10-14

Surreit Notes on Lower Road.			Dist
Sta.	Bearing		
0+00	$\gamma 51^{\circ} 31' W$	80 Var.	305'
1+00			
2+00			
3+00			
3+05	$\gamma 89^{\circ} 5' W$		95'
3+17			
4+00	$\gamma 60^{\circ} 15' W$		200'
5+00			
6+00			

Tunnel Notes on Lower Road

Sta.	B.S. +	H.I.	I.S. -	S.I.E.	B.M.
	2.3	102.3			100.0
0+00			1.1	101.3	101.3
1+00			3.6	98.7	98.7
I.P.	5.59	96.36	11.53	90.77	
2			9.0	87.40	
2+50			11.80	84.60	
3			9.4	87.0	
I.P.	12.12	107.61	0.87	95.49	
4+00			8.1	99.51	
5+00			0.6	107.0	
6+00			0.5	107.0	

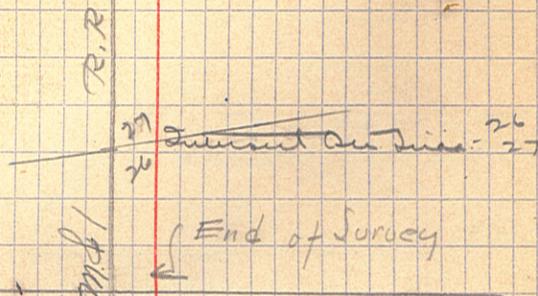
Dec. 26+27

138-30

66

Remarks

R.P. R.P. tunnel 25' L.



Dec. 26+27

138-30

Remarks

on R.P.

J.P. LEE
A.W.M.
5-1-14

Transit Notes on S.P. #1

Sta. Berg

20+85

20

19

18

17

16+85

16

15+55

15

14+75

14

13

12

11

10

9

8

7

6

5

4

3

2

1

0 to 0 South 80 W.

East Survey on 16

145-31

Remarks

Leave lowland

11

13

In 2' water
 Cen. of crest deep -
 slow current minus crest

12

Enter lowland

1/4 Cor. bet. 15-16-2" x 48" Iron
 R.P. - N. 12 S 54° 20' E 51.30
 SW Cor. of House -
 T 22° 55' E - 84.0
 R. 8° 15'

Sta.

Qty

59

58

57

56

55

54

53

52+81

52

51

50+45

50

49

48

47

46

45

44

43

42+60

42

41+65

41

40

39

Remarks

1/4 Cor. bet 21 and 22
Set from old T2 T5

Draught notes on S.T.R. #1

Sta Terry

82

81

80

79+27.5 West Dair 90

79

78

77

76

75

74

73

72

71

70

69

68

67

66

65

64

63

62+40

62

61

60

Dec. 21

145-21

70

Remains

Dec. Cor. 21+22-27-28
cut from South BTS
5' x 48" Iron pipe

Transit Notes on S.R. #1

Sta.	Bng.	
106		
105+82.6		
105		
104		
103		
102		
101		
100		
99		
98		
97		
96		
95		
94		
93		
92		
91		
90		
89		
88		
87		
86		
85		
84		
83		

Dec 21 - 145-31

21

Remarks

1/4 cor. on South side of
section 21 - out from
Kov. B. T.S.

Account Notes on S.R. #1

Sta.

Byg

122

121

120

119

118

117+10

117

116+40

116+30

116+10

116

115+90.6

115+75

115+65

115+42

115

114

113+75

113

112

111

110

109

108

107

Rec 21-145-31

Remarks

Down NE + SW

N Bank R.R. Grade

N. N. on R.R. N+S

Foot of R.R. Grade

Old road N+S

Oranmit Notes on G.R.#1

Sta.

Brg.

- 132+32.8
- 132
- 131+46
- 131
- 130
- 129
- 128
- 127
- 126
- 125
- 124
- 123

Dec. 21

145-31

23

Remarks

Sw cor. Dec. 21

Round RE+SW