

STATE  
HIGHWAY COMMISSION  
OF MINNESOTA

FIELD BOOK

360

Cass

COUNTY

No. 3

# KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO.

SAN FRANCISCO.

ST. LOUIS.

## TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS SECTIONING.  
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.  
FOR SINGLE TRACK EXCAVATION.

"Copyright", 1895, by Keuffel & Esser Co."

|    | 0    | .1   | .2   | .3   | .4   | .5   | .6   | .7   | .8   | .9   |    |
|----|------|------|------|------|------|------|------|------|------|------|----|
| 0  | 9.0  | 9.1  | 9.2  | 9.3  | 9.4  | 9.5  | 9.6  | 9.7  | 9.8  | 9.9  | 0  |
| 1  | 10.0 | 10.1 | 10.2 | 10.3 | 10.4 | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 | 1  |
| 2  | 11.0 | 11.1 | 11.2 | 11.3 | 11.4 | 11.5 | 11.6 | 11.7 | 11.8 | 11.9 | 2  |
| 3  | 12.0 | 12.1 | 12.2 | 12.3 | 12.4 | 12.5 | 12.6 | 12.7 | 12.8 | 12.9 | 3  |
| 4  | 13.0 | 13.1 | 13.2 | 13.3 | 13.4 | 13.5 | 13.6 | 13.7 | 13.8 | 13.9 | 4  |
| 5  | 14.0 | 14.1 | 14.2 | 14.3 | 14.4 | 14.5 | 14.6 | 14.7 | 14.8 | 14.9 | 5  |
| 6  | 15.0 | 15.1 | 15.2 | 15.3 | 15.4 | 15.5 | 15.6 | 15.7 | 15.8 | 15.9 | 6  |
| 7  | 16.0 | 16.1 | 16.2 | 16.3 | 16.4 | 16.5 | 16.6 | 16.7 | 16.8 | 16.9 | 7  |
| 8  | 17.0 | 17.1 | 17.2 | 17.3 | 17.4 | 17.5 | 17.6 | 17.7 | 17.8 | 17.9 | 8  |
| 9  | 18.0 | 18.1 | 18.2 | 18.3 | 18.4 | 18.5 | 18.6 | 18.7 | 18.8 | 18.9 | 9  |
| 10 | 19.0 | 19.1 | 19.2 | 19.3 | 19.4 | 19.5 | 19.6 | 19.7 | 19.8 | 19.9 | 10 |
| 11 | 20.0 | 20.1 | 20.2 | 20.3 | 20.4 | 20.5 | 20.6 | 20.7 | 20.8 | 20.9 | 11 |
| 12 | 21.0 | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 12 |
| 13 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 | 22.5 | 22.6 | 22.7 | 22.8 | 22.9 | 13 |
| 14 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 14 |
| 15 | 24.0 | 24.1 | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 15 |
| 16 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 | 25.7 | 25.8 | 25.9 | 16 |
| 17 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 17 |
| 18 | 27.0 | 27.1 | 27.2 | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 18 |
| 19 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 | 28.9 | 19 |
| 20 | 29.0 | 29.1 | 29.2 | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 20 |
| 21 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 21 |
| 22 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 22 |
| 23 | 32.0 | 32.1 | 32.2 | 32.3 | 32.4 | 32.5 | 32.6 | 32.7 | 32.8 | 32.9 | 23 |
| 24 | 33.0 | 33.1 | 33.2 | 33.3 | 33.4 | 33.5 | 33.6 | 33.7 | 33.8 | 33.9 | 24 |
| 25 | 34.0 | 34.1 | 34.2 | 34.3 | 34.4 | 34.5 | 34.6 | 34.7 | 34.8 | 34.9 | 25 |
| 26 | 35.0 | 35.1 | 35.2 | 35.3 | 35.4 | 35.5 | 35.6 | 35.7 | 35.8 | 35.9 | 26 |
| 27 | 36.0 | 36.1 | 36.2 | 36.3 | 36.4 | 36.5 | 36.6 | 36.7 | 36.8 | 36.9 | 27 |
| 28 | 37.0 | 37.1 | 37.2 | 37.3 | 37.4 | 37.5 | 37.6 | 37.7 | 37.8 | 37.9 | 28 |
| 29 | 38.0 | 38.1 | 38.2 | 38.3 | 38.4 | 38.5 | 38.6 | 38.7 | 38.8 | 38.9 | 29 |
| 30 | 39.0 | 39.1 | 39.2 | 39.3 | 39.4 | 39.5 | 39.6 | 39.7 | 39.8 | 39.9 | 30 |
| 31 | 40.0 | 40.1 | 40.2 | 40.3 | 40.4 | 40.5 | 40.6 | 40.7 | 40.8 | 40.9 | 31 |
| 32 | 41.0 | 41.1 | 41.2 | 41.3 | 41.4 | 41.5 | 41.6 | 41.7 | 41.8 | 41.9 | 32 |
| 33 | 42.0 | 42.1 | 42.2 | 42.3 | 42.4 | 42.5 | 42.6 | 42.7 | 42.8 | 42.9 | 33 |
| 34 | 43.0 | 43.1 | 43.2 | 43.3 | 43.4 | 43.5 | 43.6 | 43.7 | 43.8 | 43.9 | 34 |
| 35 | 44.0 | 44.1 | 44.2 | 44.3 | 44.4 | 44.5 | 44.6 | 44.7 | 44.8 | 44.9 | 35 |
| 36 | 45.0 | 45.1 | 45.2 | 45.3 | 45.4 | 45.5 | 45.6 | 45.7 | 45.8 | 45.9 | 36 |

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

For Keith's Railroad Curve Tables see end of book.

20

SR 1 -S33-34-135-30 & S3-4-134-30  
Co. Road survey---Conzett  
Survey for Pine River Twp---S 13-24-18--19-138-30  
Br Survey Mayo Brook  
Br Survey Stony Brook  
SR #3 S31-140-38  
Rice Lake Ditch

S. R. # 1

6/12-14

16

+30

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

00

2

C.D. Conzett  
C.D. White.  
Ernest Fricke

SWAMP

18" C.I.P.

12" C.I.P.

sec Cor. 33-34 T. 135 N. R. 30 W. and  
3-4 T. 134 N. R. 30 W. [Iron Pipe]

S.R. # 1 6/12-14

38

37

36

35

+58

34

33

32

31

30

29

28

+84<sup>7</sup>

+82

27

+05

26

25

24

23

22

21

20

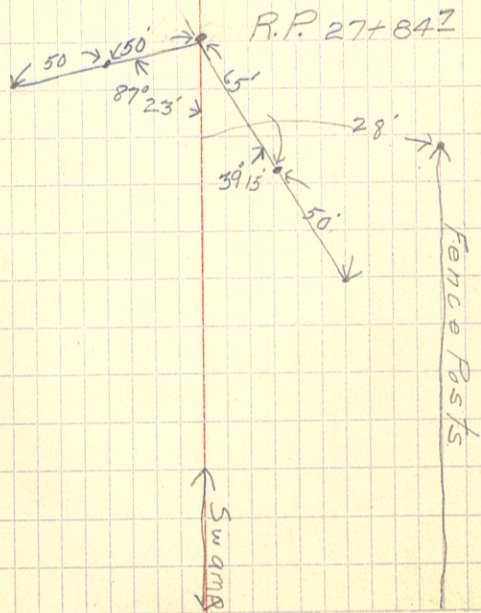
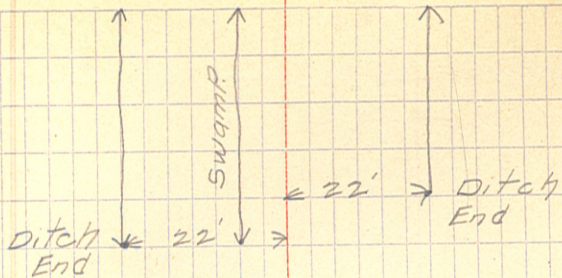
19

18

17

△  
114 Cor.

3

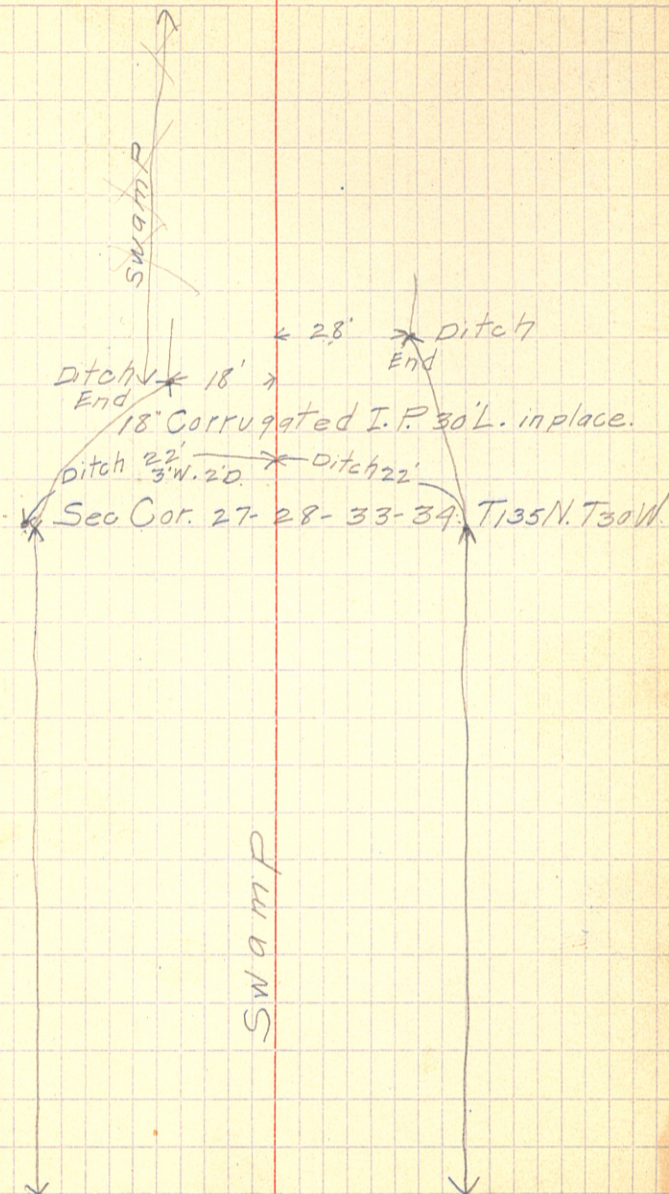


S. R. #1

6/12-14

59  
58  
57  
56  
55  
54  
+95  
+72  
+33  
53  
+66  
52  
51  
50  
49  
48  
47  
46  
45  
44  
43  
42  
41  
40  
39

4

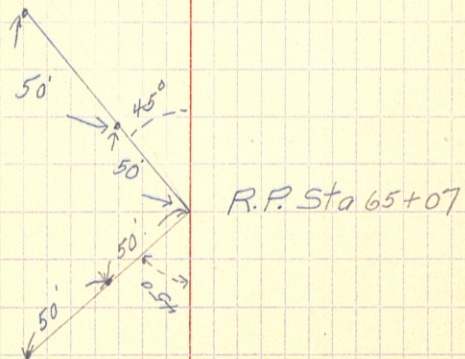
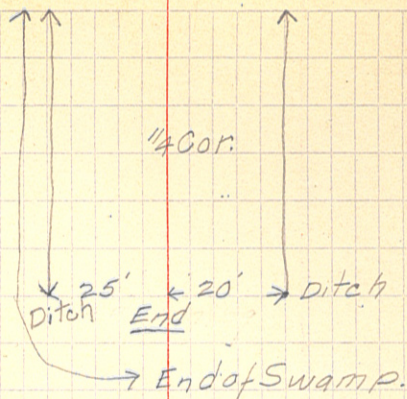


S. R. #1

6/12-14

5

81  
80  
+22  
79  
78  
+30  
77  
76  
75  
74  
73  
72  
71  
70  
69  
68  
67  
66  
+07  $\triangle$   
65  
64  
63  
62  
61  
60



S. R. #1

6/12-14

104

103

102

101

100

99

98

97

96

95

94

93

+39

92

+922

+277

91

90

+15

89

88

87

86

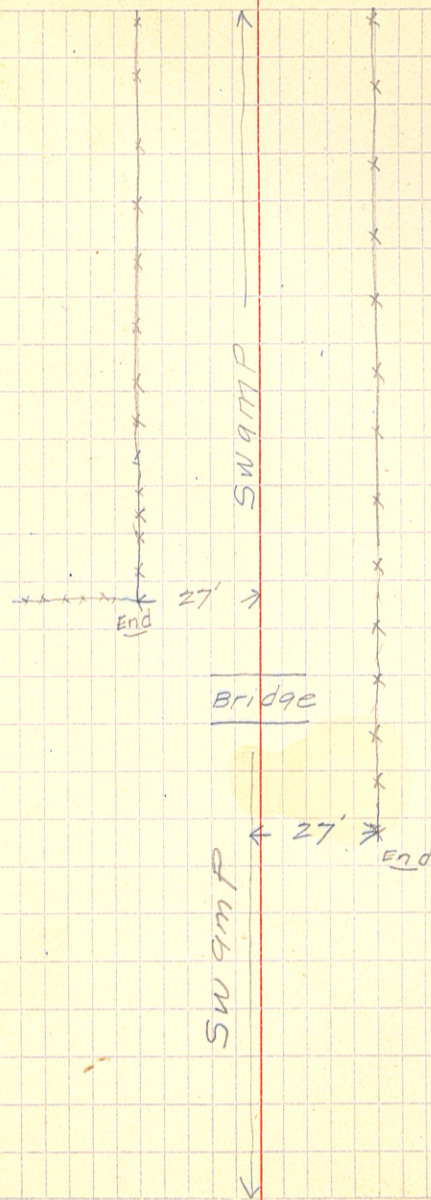
85

84

83

82

6



S.R. #1

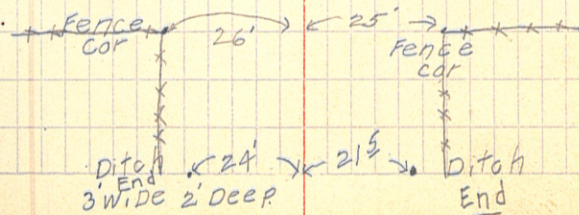
6/12-14

7

105+67  
+33  
105

104+85

Sec. Cor. Sec's 21-22-27-28 (stake)  
T. 135 N. R. 30 W. 5<sup>th</sup> Mer.





S.R. # 1

4/3-14

|      |      |        |       |           |
|------|------|--------|-------|-----------|
| B.M. | 6.57 | 106.57 |       | 100.00    |
| 00   |      |        |       | 8.9 97.7  |
| +20  |      |        |       | 9.4 97.2  |
| +60  |      |        |       | 9.0 97.6  |
| 1    |      |        |       | 8.6 98.0  |
| 2    |      |        |       | 5.5 01.1  |
| 3    |      |        |       | 4.8 01.8  |
| +75  |      |        |       | 6.9 99.7  |
| 4    |      |        |       | 5.9 00.7  |
| +45  |      |        |       | 4.8 01.8  |
| 5    |      |        |       | 7.1 99.5  |
| +50  |      |        |       | ⊙ 95.6    |
| 6    |      |        |       | 12.4 94.2 |
| T.P  | 5.85 | 100.86 | 11.56 | 95.01     |
| +35  |      |        |       | 6.5 94.4  |
| 7    |      |        |       | 4.2 96.7  |
| +70  |      |        |       | 2.6 98.3  |
| 8    |      |        |       | 3.7 97.2  |
| 9    |      |        |       | 5.1 95.8  |
| 10   |      |        |       | 5.1 95.8  |
| +60  |      |        |       | 4.7 96.2  |
| 11   |      |        |       | 5.8 95.1  |
| 12   |      |        |       | 6.7 94.2  |
| T.P  | 1.12 | 95.40  | 6.58  | 94.28     |
| +55  |      |        |       | 3.1 92.3  |

L.

R.

8

C.D. Conzett  
C.J. White.
$$\begin{array}{r} 97.8 \\ 10 \\ \hline 00.5 \\ 10 \end{array}$$

$$\begin{array}{r} 98.6 \\ 10 \\ \hline 02.0 \\ 10 \end{array}$$

$$\begin{array}{r} 99.5 \\ 15 \\ \hline 97.4 \\ 10 \\ \hline 96.0 \\ 10 \end{array}$$

$$\begin{array}{r} 97.2 \\ 15 \\ \hline 96.9 \\ 10 \\ \hline 95.4 \\ 10 \end{array}$$

$$\begin{array}{r} 94.3 \\ 15 \end{array}$$

$$\begin{array}{r} 93.7 \\ 15 \end{array}$$

$$\begin{array}{r} 92.7 \\ 15 \end{array}$$

$$\begin{array}{r} 91.5 \\ 15 \end{array}$$

S.R. #1

95.40

6/13-14

L.

R

110 9

|      |       |        |      |      |       |
|------|-------|--------|------|------|-------|
| 13   |       |        |      | 8.5  | 86.9  |
| 14   |       |        |      | 10.0 | 85.4  |
| 15   |       |        |      | 10.2 | 85.2  |
| +30  |       |        |      | 10.1 | 85.3  |
| 16   |       |        |      | 6.5  | 88.9  |
| T.P. | 3.45  | 92.65  | 6.20 |      | 89.20 |
| B.M. |       |        |      | 3.38 | 89.27 |
| +30  |       |        |      | 2.8  | 89.9  |
| 17   |       |        |      | 5.0  | 87.7  |
| 18   |       |        |      | 5.3  | 87.4  |
| 19   |       |        |      | 5.2  | 87.5  |
| T.P. | 10.05 | 101.00 | 1.70 |      | 90.95 |
| 20   |       |        |      | 13.1 | 87.9  |
| +60  |       |        |      | 10.7 | 90.3  |
| 21   |       |        |      | 5.0  | 96.0  |
| +40  |       |        |      | 2.5  | 98.5  |
| 22   |       |        |      | 5.1  | 95.9  |
| +50  |       |        |      | 7.3  | 93.7  |
| 23   |       |        |      | 6.5  | 94.5  |
| +50  |       |        |      | 5.2  | 95.8  |
| 24   |       |        |      | 7.1  | 93.9  |
| T.P. | 10.61 | 104.88 | 6.73 |      | 94.27 |
| 25   |       |        |      | 9.6  | 95.3  |
| 26   |       |        |      | 8.0  | 96.9  |
| +45  |       |        |      | 10.2 | 94.7  |

← Swamp ↓

18° Cor. I.P.

Spike in Fence Post 30' R of 16

← Swamp ↓

$$\begin{array}{r} 90.4 \\ 10 \\ \hline 96.8 \\ 15 \end{array}$$

$$\begin{array}{r} 89.8 \\ 10 \\ \hline 94.8 \\ 10 \end{array}$$

$$\begin{array}{r} 95.3 \\ 12 \end{array}$$

$$\begin{array}{r} 96.2 \\ 12 \end{array}$$

$$\begin{array}{r} 94.0 \\ 12 \\ \hline 95.8 \\ 15 \\ \hline 94.0 \\ 10 \end{array}$$

$$\begin{array}{r} 95.5 \\ 10 \\ \hline 96.4 \\ 15 \\ \hline 95.5 \\ 10 \end{array}$$

S. R # 1

104.88

6-13-14

|     |      |       |       |      |        |
|-----|------|-------|-------|------|--------|
| 27  |      |       |       | 9.1  | 95.8   |
| +30 |      |       |       | 9.0  | 95.9   |
| B.M |      |       |       | 3.99 | 100.89 |
| +82 |      |       |       | 4.5  | 00.4   |
| 28  |      |       |       | 4.3  | 00.6   |
| 29  |      |       |       | 9.6  | 95.3   |
| T.P | 0.10 | 93.48 | 11.50 |      | 93.38  |
| 30  |      |       |       | 4.4  | 89.1   |
| 31  |      |       |       | 9.4  | 84.1   |
| +50 |      |       |       | 12.7 | 80.8   |
| T.P | 1.35 | 82.42 | 12.41 |      | 81.07  |
| 32  |      |       |       | 2.9  | 79.5   |
| +75 |      |       |       | 4.2  | 78.2   |
| 33  |      |       |       | 6.9  | 75.5   |
| +25 |      |       |       | 9.9  | 72.5   |
| +60 |      |       |       | 9.4  | 73.0   |
| 34  |      |       |       | 11.6 | 70.8   |
| T.P | 1.41 | 71.25 | 12.58 |      | 69.84  |
| +60 |      |       |       | 5.0  | 66.3   |
| 35  |      |       |       | 6.0  | 65.3   |
| 36  |      |       |       | 6.6  | 64.7   |
| 37  |      |       |       | 7.3  | 64.0   |
| 38  |      |       |       | 7.5  | 63.8   |
| T.P | 1.93 | 66.63 | 6.55  |      | 64.70  |
| 39  |      |       |       | 3.6  | 63.0   |
| 40  |      |       |       | 4.4  | 62.2   |

L.

R

54

10

|      |      |
|------|------|
| 96.3 | 96.4 |
| 10   | 10   |
| 96.0 | 96.1 |
| 10   | 10   |
| 91.2 | 90.2 |
| 10   | 15   |
| 81.0 | 90.7 |
| 15   | 15   |

On Hub at 27+84.7

14.00

68.8

15

72.4

15

65.3

15

67.0

15

S.R #1

66.63

|      |      |       |      |      |       |
|------|------|-------|------|------|-------|
| 41   |      |       |      | 5.0  | 61.6  |
| B.M. |      |       |      | 3.68 | 62.95 |
| 42   |      |       |      | 5.5  | 61.1  |
| 43   |      |       |      | 6.3  | 60.3  |
| 44   |      |       |      | 7.1  | 59.5  |
| T.P. | 3.30 | 63.10 | 6.83 |      | 59.80 |
| 45   |      |       |      | 4.1  | 59.0  |
| 46   |      |       |      | 4.4  | 58.7  |
| 47   |      |       |      | 4.7  | 58.4  |
| 48   |      |       |      | 5.0  | 58.1  |
| 49   |      |       |      | 5.0  | 58.1  |
| 50   |      |       |      | 5.2  | 57.9  |
| T.P. | 5.35 | 63.58 | 4.87 |      | 58.23 |
| 51   |      |       |      | 6.0  | 57.6  |
| 52   |      |       |      | 6.0  | 57.6  |
| +66  |      |       |      | 6.3  | 57.3  |
| 53   |      |       |      | 6.2  | 57.4  |
| +70  |      |       |      | 5.8  | 57.8  |
| 54   |      |       |      | 4.9  | 58.7  |
| 55   |      |       |      | 2.6  | 61.0  |
| T.P. | 6.36 | 69.15 | 0.79 |      | 62.79 |
| 56   |      |       |      | 5.7  | 63.5  |
| 57   |      |       |      | 5.0  | 64.2  |
| 58   |      |       |      | 4.6  | 64.6  |
| 59   |      |       |      | 3.7  | 65.5  |

6/13-14 11

Spike in Tam Tree 40+85 35 R.

Sec. Cor.

S. R. #1

69.15 ✓

|      |      |       |      |      |       |
|------|------|-------|------|------|-------|
| 60   |      |       |      | 2.2  | 67.0  |
| 61   |      |       |      | 3.0  | 66.2  |
| T.P. | 8.73 | 75.09 | 2.79 |      | 66.36 |
| +50  |      |       |      | 10.5 | 64.6  |
| 62   |      |       |      | 9.7  | 65.4  |
| +50  |      |       |      | 9.8  | 65.3  |
| 63   |      |       |      | 6.0  | 69.1  |
| +40  |      |       |      | 4.2  | 70.9  |
| +75  |      |       |      | 5.7  | 69.4  |
| 64   |      |       |      | 4.5  | 70.6  |
| 65   |      |       |      | 4.8  | 70.3  |
| B.M. |      |       |      | 2.89 | 72.70 |
| +50  |      |       |      | 6.8  | 68.3  |
| 66   |      |       |      | 7.5  | 67.6  |
| 67   |      |       |      | 5.6  | 69.5  |
| T.P. | 1.68 | 71.42 | 5.35 |      | 69.74 |
| 68   |      |       |      | 4.1  | 67.3  |
| 69   |      |       |      | 6.8  | 64.6  |
| +50  |      |       |      | 6.0  | 65.4  |
| 70   |      |       |      | 4.6  | 66.8  |
| 71   |      |       |      | 3.3  | 68.1  |
| +60  |      |       |      | 1.6  | 69.8  |
| 72   |      |       |      | 3.7  | 67.7  |
| T.P. | 3.00 | 71.24 | 3.18 |      | 68.24 |
| +20  |      |       |      | 5.1  | 66.1  |

12

 $\frac{71.3}{12}$  $\frac{69.7}{12}$ 

On R.P. 64+70 35 L.

18" Cor. I.P.

S. R. #1

71.24

|       |      |       |       |      |       |
|-------|------|-------|-------|------|-------|
| 72+50 |      |       |       | 3.6  | 67.6  |
| 73    |      |       |       | 3.9  | 67.3  |
| 74    |      |       |       | 3.5  | 67.7  |
| +50   |      |       |       | 5.8  | 65.4  |
| 75    |      |       |       | 12.9 | 58.3  |
| T.P.  | 1.96 | 60.38 | 12.82 |      | 58.42 |
| 76    |      |       |       | 5.4  | 55.0  |
| 77    |      |       |       | 7.1  | 53.3  |
| 78    |      |       |       | 7.6  | 52.8  |
| 79    |      |       |       | 7.7  | 52.7  |
| +22   |      |       |       | 7.8  | 52.6  |
| 80    |      |       |       | 7.9  | 52.5  |
| T.P.  | 3.53 | 57.69 | 6.22  |      | 54.16 |
| 81    |      |       |       | 5.3  | 52.4  |
| 82    |      |       |       | 5.3  | 52.4  |
| 83    |      |       |       | 5.5  | 52.2  |
| 84    |      |       |       | 5.3  | 52.4  |
| 85    |      |       |       | 5.0  | 52.7  |
| 86    |      |       |       | 5.0  | 52.7  |
| B.M.  | 2.87 | 57.49 | 3.07  |      | 54.62 |
| 87    |      |       |       | 5.4  | 52.1  |
| 88    |      |       |       | 5.5  | 52.0  |
| 89    |      |       |       | 5.5  | 52.0  |
| 90    |      |       |       | 5.7  | 51.8  |
| 91    |      |       |       | 5.9  | 51.6  |

13

1/4 Cor.

On Burn't Stump 35' L of 86

S.R. #1  
57.49

|             |      |       |      |       |
|-------------|------|-------|------|-------|
| 91+27.1     |      |       | 4.1  | 53.4  |
| +30         |      |       | 10.6 | 46.9  |
| Water Elev. |      |       | 7.3  | 50.2  |
| +50         |      |       | 5.7  | 51.8  |
| +90         |      |       | 5.7  | 51.8  |
| 92          |      |       | 5.6  | 51.9  |
| T.P.        | 4.42 | 58.05 | 3.86 | 53.63 |
| 93          |      |       | 6.5  | 51.6  |
| 94          |      |       | 7.1  | 51.0  |
| 95          |      |       | 6.6  | 51.5  |
| 96          |      |       | 6.1  | 52.0  |
| 97          |      |       | 5.7  | 52.4  |
| 98          |      |       | 5.5  | 52.6  |
| 99          |      |       | 5.7  | 52.4  |
| T.P.        | 4.60 | 59.56 | 3.09 | 54.96 |
| 100         |      |       | 6.5  | 53.1  |
| 101         |      |       | 6.5  | 53.1  |
| 102         |      |       | 6.3  | 53.3  |
| 103         |      |       | 6.3  | 53.3  |
| 104         |      |       | 5.9  | 53.7  |
| 105         |      |       | 5.0  | 54.6  |
| +50         |      |       | 5.4  | 54.2  |
| +60         |      |       | 2.9  | 56.7  |
| +67         |      |       | 2.9  | 56.7  |
| B.M.        |      | 1.64  |      | 57.92 |

14

On Bridge  
Bottom of Cr  
Top of Water

C.D. Gonzett  
C.D. White.

53.6 = Elev of Top of Fill  $\frac{6}{13}$ -14 at Sta 92

54.6 " " "  $\frac{6}{13}$ -14 " " 97

56.0 = Elev of Top of Fill  $\frac{6}{13}$ -14 at Sta 105

7 Sec. Cor  
Stake in Center of Road,  
Spike in Cor Fence Post 105+50 30'R

County Road Survey  
M.B. T.B.

- 20
- 19
- 18
- 17
- 16
- 15
- 14
- 13
- 12
- 11
- 10
- 9
- 8
- 7
- 6
- 5
- +60.5
- +03
- 4
- 3
- 2
- 1
- 00

N. 71° 15' W. N. 62° 15' W.

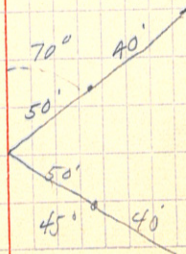
6/22-14

C.D. Conzett

C.J. White.

Road Follows Old R.R. Grade

Bridge





County Road Survey  
M.B. T.B.

6/22-14 17

|                  |   |          |                          |
|------------------|---|----------|--------------------------|
| 43               |   |          |                          |
| 42               |   |          |                          |
| +66 <sup>6</sup> | △ | 7° 38' R | N. 57° 05' W N 48° 05' W |
| 41               |   |          |                          |
| 40               |   |          |                          |
| +74 <sup>3</sup> | △ | 6° 32' R | N. 64° 43' W N 55° 43' W |
| 39               |   |          |                          |
| 38               |   |          |                          |
| 37               |   |          |                          |
| 36               |   |          |                          |
| 35               |   |          |                          |
| 34               |   |          |                          |
| 33               |   |          |                          |
| 32               |   |          |                          |
| 31               |   |          |                          |
| 30               |   |          |                          |
| 29               |   |          |                          |
| 28               |   |          |                          |
| 27               |   |          |                          |
| 26               |   |          |                          |
| 25               |   |          |                          |
| 24               |   |          |                          |
| 23               |   |          |                          |
| 22               |   |          |                          |
| 21               |   |          | N. 71° 15' W 62° 15' W.  |

# County Road Survey

18  
6/22-14

|      |   |        |                     |
|------|---|--------|---------------------|
| +96  | △ | End.   |                     |
| 57   |   |        |                     |
| +092 | △ | 2°38'L | N.32°11'W N.23°11'W |
| 56   |   |        |                     |
| 55   |   |        |                     |
| 54   |   |        |                     |
| 53   |   |        |                     |
| 52   |   |        |                     |
| 51   |   |        |                     |
| 50   |   |        |                     |
| +585 | △ | 4°10'R | N29°33'W N20°33'W   |
| 49   |   |        |                     |
| 48   |   |        |                     |
| +72  | △ | 7°42'R | N33°43'W N24°43'W   |
| 47   |   |        |                     |
| 46   |   |        |                     |
| +76  | △ | 8°07'R | N39°25'W N32°25'W   |
| 45   |   |        |                     |
| 44   |   |        |                     |
| +80  | △ | 7°33'R | N49°32'W N40°32'W   |

R.P. Hub Driven Down 2 witness Stakes  
set out 6' at R.A.S.

# County Road Survey

19

6/22-14

|       |      |        |      |          |
|-------|------|--------|------|----------|
| B.M.  | 410  | 104.10 |      | 100.00   |
| 57+96 |      |        |      | 2.2 01.9 |
| 57    |      |        |      | 4.1 00.0 |
| 56    |      |        |      | 5.2 98.9 |
| 55    |      |        |      | 5.4 98.7 |
| 54    |      |        |      | 6.5 97.6 |
| T.P.  | 2.31 | 99.84  | 6.57 | 97.53    |
| 53    |      |        |      | 3.3 96.5 |
| 52    |      |        |      | 4.3 95.5 |
| 51    |      |        |      | 4.9 94.9 |
| 50    |      |        |      | 5.5 94.3 |
| 49    |      |        |      | 6.0 93.8 |
| 48    |      |        |      | 6.1 93.7 |
| T.P.  | 3.55 | 98.14  | 5.25 | 94.59    |
| 47    |      |        |      | 4.7 93.4 |
| 46    |      |        |      | 4.9 93.2 |
| 45    |      |        |      | 5.0 93.1 |
| 44    |      |        |      | 5.3 92.8 |
| 43    |      |        |      | 5.4 92.7 |
| 42    |      |        |      | 5.4 92.7 |
| T.P.  | 5.28 | 98.11  | 5.31 | 92.83    |
| 41    |      |        |      | 5.4 92.7 |
| 40    |      |        |      | 5.1 93.0 |
| 39    |      |        |      | 5.0 93.1 |
| 38    |      |        |      | 5.1 93.0 |

Small Birch Stump 40' R of 57+70

# County Road Survey

98.11

|      |      |       |      |      |       |
|------|------|-------|------|------|-------|
| 37   |      |       |      | 51   | 93.0  |
| T.P. | 4.02 | 97.78 | 4.35 |      | 93.76 |
| 36   |      |       |      | 4.8  | 93.0  |
| 35   |      |       |      | 4.8  | 93.0  |
| 34   |      |       |      | 4.9  | 92.9  |
| 33   |      |       |      | 4.9  | 92.9  |
| 32   |      |       |      | 4.6  | 93.2  |
| 31   |      |       |      | 3.9  | 93.9  |
| T.P. | 3.48 | 98.07 | 3.19 |      | 94.59 |
| 30   |      |       |      | 4.2  | 93.9  |
| 29   |      |       |      | 4.7  | 93.4  |
| 28   |      |       |      | 5.1  | 93.0  |
| B.M. |      |       |      | 1.32 | 96.75 |
| 27   |      |       |      | 5.5  | 92.6  |
| 26   |      |       |      | 6.2  | 91.9  |
| 25   |      |       |      | 6.2  | 91.9  |
| T.P. | 4.73 | 97.05 | 5.75 |      | 92.32 |
| 24   |      |       |      | 4.9  | 92.2  |
| 23   |      |       |      | 4.7  | 92.4  |
| 22   |      |       |      | 4.7  | 92.4  |
| 21   |      |       |      | 5.2  | 91.9  |
| 20   |      |       |      | 5.6  | 91.5  |
| 19   |      |       |      | 5.7  | 91.4  |
| T.P. | 3.92 | 96.04 | 4.93 |      | 92.12 |
| 18   |      |       |      | 4.6  | 91.4  |

20

6/22-14

37+85 = Offtake Ditch.

Proposed 25' to 30' wide

Center 35' to 20'

Width 35' to 20'

Depth 12' to 14'

Side 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

Bottom 12' to 14'

# County Road Survey

96.04

|                  |      |       |      |      |       |
|------------------|------|-------|------|------|-------|
| 17               |      |       |      | 4.7  | 91.3  |
| 16               |      |       |      | 4.8  | 91.2  |
| 15               |      |       |      | 5.0  | 91.0  |
| 14               |      |       |      | 5.2  | 90.8  |
| 13               |      |       |      | 5.3  | 90.7  |
| T.P.             | 3.85 | 95.39 | 450  |      | 91.54 |
| 12               |      |       |      | 4.6  | 90.8  |
| 11               |      |       |      | 4.8  | 90.6  |
| 10               |      |       |      | 4.9  | 90.5  |
| 9                |      |       |      | 5.2  | 90.2  |
| 8                |      |       |      | 5.2  | 90.2  |
| 7                |      |       |      | 5.5  | 89.9  |
| 6                |      |       |      | 5.7  | 89.7  |
| T.P.             | 5.68 | 95.86 | 5.21 |      | 90.18 |
| +60 <sup>s</sup> |      |       |      | 5.7  | 90.2  |
|                  |      |       |      | 5.0  | 90.9  |
| +45              |      |       |      | 11.0 | 84.9  |
| +15              |      |       |      | 11.0 | 84.9  |
| +03              |      |       |      | 5.0  | 90.9  |
| 4                |      |       |      | 5.4  | 90.5  |
| 3                |      |       |      | 4.8  | 91.1  |
| 2                |      |       |      | 4.1  | 91.8  |
| T.P.             | 6.80 | 99.31 | 3.35 |      | 92.51 |
| 1                |      |       |      | 7.0  | 92.3  |
| 00               |      |       |      | 4.7  | 94.6  |
| B.M.             |      |       | 4.21 |      | 95.10 |

21

6/22-14

C.D. Conzett  
C.J. White

Bridge

Elev. of Water 6/22-14 = 87.9

Bridge

On Small Stamp 50 N. E. of 00

Survey For Pine River Twp

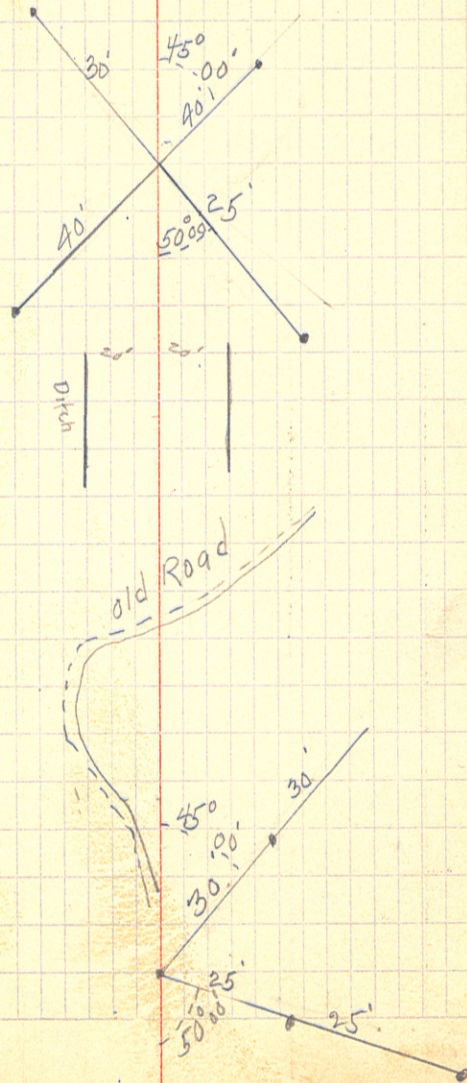
Starting at Sec Cor bet 13-24-  
18-19 T. 138 N. R. 30 W.

|                  |   |          |
|------------------|---|----------|
| +15              | △ | End      |
| 19               |   |          |
| 13               |   |          |
| 12               |   |          |
| 11               |   |          |
| 10               |   |          |
| +60              |   |          |
| 9                |   |          |
| 8                |   |          |
| 7                |   |          |
| 6                |   |          |
| +26 <sup>6</sup> |   | Sec Cor. |
| 5                |   |          |
| 4                |   |          |
| 3                |   |          |
| 2                |   |          |
| 1                |   |          |
| 00               | △ |          |

23

7/6-14

C.J. White  
C.D. Corzett



# Survey for Pine River TWP.

7/6-14 24

|      |      |        |       |             |
|------|------|--------|-------|-------------|
| B.M. | 0.0  | 100.00 |       | 100.00      |
| 00   |      |        |       | 2.2 97.8    |
| 1    |      |        |       | 4.6 95.4    |
| 2    |      |        |       | 4.3 95.7    |
| 3    |      |        |       | 6.7 93.3    |
| 4    |      |        |       | 10.0 90.0   |
| T.P. | 0.43 | 89.32  | 11.11 | 88.89       |
| 5    |      |        |       | 3.5 85.8    |
| +40  |      |        |       | 8.2 81.1    |
| T.P. | 1.02 | 80.17  | 10.17 | 79.15       |
| 6    |      |        |       | 8.6 71.6    |
| T.P. | 2.93 | 70.94  | 12.16 | 68.01       |
| +65  |      |        |       | 10.8 60.1   |
| +90  |      |        |       | 11.3 59.6   |
| 7    |      |        |       | 9.8 61.1    |
| +50  |      |        |       | 3.3 67.6    |
| 8    |      |        |       | 6.0 64.9    |
| +60  |      |        |       | 10.2 60.7   |
| T.P. | 00   | 60.69  | 10.25 | 60.69       |
| 9    |      |        |       | 4.7 56.0    |
| +60  |      |        |       | 14.0 46.7   |
| B.M. |      |        |       | 11.11 49.58 |
| 10   |      |        |       | 14.4 46.3   |
| 11   |      |        |       | 13.8 46.9   |
| 12   |      |        |       | 13.8 46.9   |

Spike in Tree 25' R of 00.

C. J. White  
C. D. Corzett

L. R.

|           |           |
|-----------|-----------|
| 82.5      | 86.9      |
| <u>15</u> | <u>15</u> |
| 78.6      | 82.4      |
| <u>15</u> | <u>15</u> |

|           |           |
|-----------|-----------|
| 69.4      | 73.4      |
| <u>15</u> | <u>15</u> |

|           |           |
|-----------|-----------|
| 62.4      | 60.2      |
| <u>15</u> | <u>15</u> |
| 69.1      | 65.3      |
| <u>15</u> | <u>15</u> |
| 65.5      | 63.7      |
| <u>15</u> | <u>15</u> |

Notch in Tree 25' L 9+60

Survey for Pine River

60-69

|      |      |      |
|------|------|------|
| 13   | 13.4 | 47.3 |
| 14   | 9.1  | 51.6 |
| + 15 | 8.6  | 52.1 |

Twp

7/6-14<sup>25</sup>

|           |           |
|-----------|-----------|
| L.        | R.        |
| 49.2      | 54.2      |
| <u>15</u> | <u>15</u> |

C.D. Conzett  
C.J. White



Bl. No 2896

Material on ground

|        |                |       |       |        |
|--------|----------------|-------|-------|--------|
| 92 pss | 3" x 6" x 16'  | +     | 2160  | Boards |
| 39 "   | 3" x 8" x 16'  | +     | 3488  |        |
| 8 "    | 3" x 10" x 16' | +     | 2320  |        |
| 5 "    | 3" x 12" x 16' | +     | 240   |        |
| 2 "    | 3" x 6" x 14'  | ⊗     | 42    |        |
| 5 "    | 3" x 8" x 12'  | +     | 120   |        |
| 10 "   | 3" x 10" x 12' | +(17) | 480   |        |
| 10 "   | 3" x 10" x 14' | +     | 350   |        |
| 1 "    | 3" x 12" x 24' | +     | 72    |        |
| 4 "    | 3" x 10" x 24' | +     | 540   |        |
|        |                |       | <hr/> |        |
|        |                |       | 9812  |        |

Bridge No 2850

|       |             |   |       |   |
|-------|-------------|---|-------|---|
| ✓ 238 | 3 x 6 x 16  | + | 5712  | ✓ |
| ✓ 194 | 3 x 8 x 16  | + | 4608  |   |
| ✓ 25  | 3 x 10 x 16 | + | 1000  |   |
| ✓ 6   | 3 x 12 x 12 | + | 216   |   |
| ✓ 1   | 3 x 8 x 12  | + | 24    |   |
| ✓ 1   | 3 x 6 x 12  | + | 18    |   |
| ✓ 3   | 3 x 10 x 12 | + | 40    |   |
| ✓ 7   | 3 x 8 x 24  | + | 336   |   |
| ✓ 4   | 3 x 12 x 16 | + | 192   |   |
| 2     | 3 x 10 x 14 | + | 70    |   |
|       |             |   | <hr/> |   |
|       |             |   | 12260 |   |
|       |             |   | 9812  |   |
|       |             |   | <hr/> |   |
|       |             |   | 22078 |   |
|       |             |   | 30    |   |
|       |             |   | <hr/> |   |
|       |             |   | 22108 |   |

|             |          |
|-------------|----------|
| 3 x 6 x 16  | 328 pss. |
| 3 x 8 x 16  | 253 pss. |
| 3 x 10 x 16 | 83 pss.  |
| 3 x 12 x 16 | 9 "      |
| 3 x 6 x 14  | 2 "      |
| 3 x 10 x 14 | 12 "     |
| 3 x 12 x 12 | 6 "      |

$$\begin{array}{r} 3 \text{ } 18 \\ 40 \\ \hline 1920 \end{array}$$

$$\begin{array}{r} 36 \\ 42 \\ \hline 72 \\ 144 \\ \hline 1512 \end{array}$$

#2640

Planned in early  
 Weyon West about  
 Ruton Q.R.

3x12-16

3x12-12

4

~~4~~

4

~~10~~

6

8

2

24

14

42

30

~~40~~ ps 3x12-16

42 " 3x12-12

# LUMBER - GULL RIVER BRIDGES (White Pine)

24 24 pcs 12" x 12" x 18' 18' ✓  
 4 4 " 12 x 12 x 20 20' ✓  
 208) 288 " 4 x 12 x 16 ✓  
 ✓ 19,776 Feet (B.M) 3 inch x 16 ft. Flooring 6" min.  
 (5A) 52 pcs 4" x 6" x 16' ✓  
 (108) 104 " 2 x 6 x 16' ✓  
 (54) 52 " 2 x 4 x 16' ✓  
 (78) 78 " 2 x 4 x 12' ✓  
 (8) 8 " 4 x 12 x 14' ✓  
 2208) 2016 B.F. 3 inch x 16' ✓  
 2648) 2640 B.F. 3 " x 14' ✓  
 48 pcs 3" x 10" x 20' ✓  
 32 " 3 x 10" x 20' ✓  
 (20) 20 " 3 x 12 x 12' ✓  
 (60 - 4 x 4 x 12)

} 16-24  
 } 44-22

This list has not been checked.

PETE JEWELL

24 - 12 x 12 - 18 - (2)

4 - 12 x 12 - 20 ✓

~~4~~ = 3 x 10 - 20 - 30 pc

62

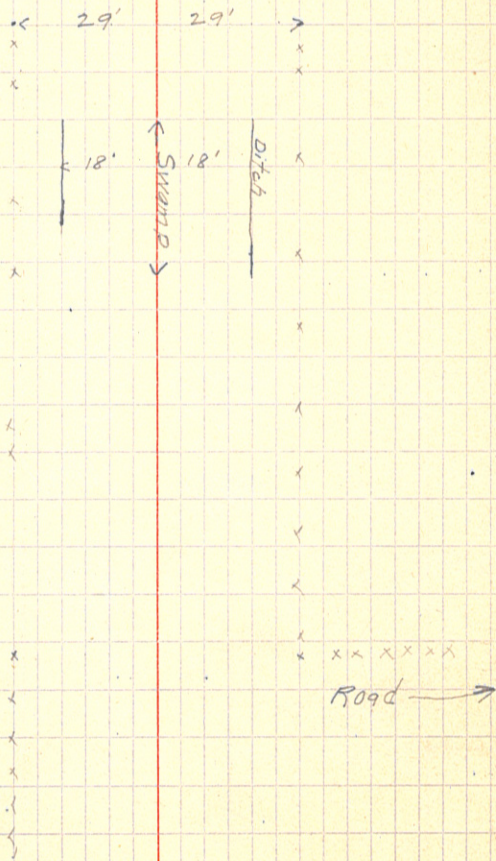
# Survey For Pine River Twp

7/8 - 14 26

C.J. White  
C.D. Conzett

16      End  
15  
14  
+50  
13  
12  
+50  
11  
+70  
10  
9  
8  
7  
6  
5  
4  
3  
+40  
+132  
2  
1  
00

Sec. Cor. Iron Pipe



# Survey For Pine River Twp

7/8-14 27

|      |       |        |       |           |
|------|-------|--------|-------|-----------|
| B.M. | 5.60  | 105.60 |       | 100.00    |
| 00   |       |        |       | 0 105.8   |
| 1    |       |        |       | 12 04.4   |
| 2    |       |        |       | 49 00.7   |
| 3    |       |        |       | 10.3 95.3 |
| +30  |       |        |       | 10.7 94.9 |
| 4    |       |        |       | 6.9 98.7  |
| T.P. | 12.53 | 117.44 | 0.69  | 104.91    |
| 5    |       |        |       | 70 10.4   |
| T.P. | 5.96  | 22.05  | 135   | 16.09     |
| 6    |       |        |       | 2.4 19.7  |
| +20  |       |        |       | 2.4 19.7  |
| 7    |       |        |       | 9.1 13.0  |
| +30  |       |        |       | 8.9 13.2  |
| T.P. | 0.35  | 13.28  | 912   | 12.93     |
| 8    |       |        |       | 5.8 07.5  |
| T.P. | 0.53  | 102.31 | 11.50 | 101.78    |
| 9    |       |        |       | 2.5 99.8  |
| T.P. | 2.25  | 91.76  | 12.80 | 89.51     |
| 10   |       |        |       | 3.0 88.8  |
| +50  |       |        |       | 4.4 87.4  |
| 11   |       |        |       | 4.6 87.2  |
| 12   |       |        |       | 5.6 86.2  |
| 13   |       |        |       | 5.5 86.3  |
| 14   |       |        |       | 3.0 88.8  |

Spike in Cor Fence Post 2+60 25'R.

C.J.W.  
C.D.C.

| L.                 | R.                |
|--------------------|-------------------|
| $\frac{96.9}{15}$  | $\frac{00.4}{15}$ |
| $\frac{08.0}{15}$  | $\frac{12.1}{15}$ |
| $\frac{17.4}{15}$  | $\frac{20.6}{15}$ |
| "                  | "                 |
| $\frac{11.9}{15}$  | $\frac{14.1}{15}$ |
| $\frac{11.9}{15}$  | $\frac{13.5}{15}$ |
| $\frac{09.6}{15}$  | $\frac{05.0}{15}$ |
| $\frac{101.8}{15}$ | $\frac{97.5}{15}$ |
| $\frac{90.3}{15}$  | $\frac{87.4}{15}$ |

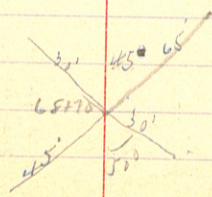
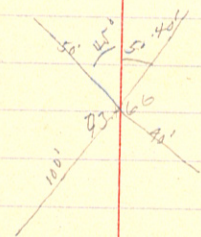
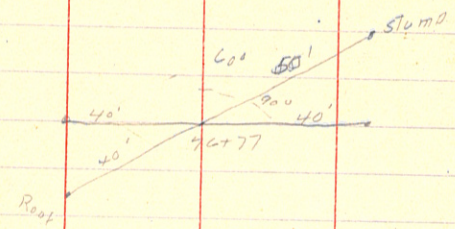
# Survey For Pine River Twp

7/8-14 28

|      |      |       |       |      |       |
|------|------|-------|-------|------|-------|
| T.P. | 7.46 | 91.76 | 97.21 | 2.01 | 89.75 |
| 15   |      |       |       | 41   | 93.1  |
| +50  |      |       |       | 38   | 93.4  |
| 16   |      |       |       | 4.8  | 92.4  |
| B.M. |      |       | 2.51  |      | 94.70 |

End.  
Spike Fence Post 25' R 15

93 00 = FR



Bridge Survey Mayo Brook

M.B. T.B.

N. 48° 00' W. N. 41° 00' W

S. 74° 30' W. S. 66° 30' W

00

1

1+70

2

3+62

4

S. 28° 00' W. S. 21° 00' W

7/16-14 30

A.W. Moulster

C.D. Conzett

End of Bridge

" " "

Bridge Clearance = 13' 16" Planks  
Borrow Pit 30' R of 1+00 Sand & Gravel.

Sta. 1+70 = 3' of Water.

1+85 6' of "

2+00 4.5 "

800' South to Upper Gull Lake



# Bridge Survey Mayo Brook.

7/6-14 31

|      |      |        |       |        |
|------|------|--------|-------|--------|
| B.M. | 3.20 | 103.20 |       | 100.00 |
| 00   |      |        |       | 6.6    |
| 1    |      |        |       | 8.2    |
| +70  |      |        |       | 10.5   |
| T.P. | 4.84 | 97.63  | 10.41 | 92.79  |
| 2    |      |        |       | 4.8    |
|      |      |        |       | 7.1    |
|      |      |        |       | 6.0    |
| 3    |      |        |       | 5.2    |
| +62  |      |        |       | 5.2    |
| T.P. |      |        |       |        |
| +62  |      |        |       | 3.9    |

Spike 8" oak Tree 50' R of 100

A.W.M.

C.D.C.

End of Bridge.

End of Bridge

Water Level

High Water

Hard Gravel Bottom.

Bridge Survey Stony Brook

7/16-14 32

M.B. T.B

S. 49° 00' W 541' 00" W

F.W.M.

C.D.C.

00

1

2

+164

Δ

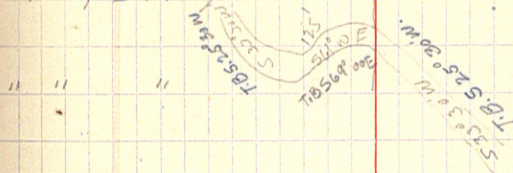
S 80° 30' W 572° 30'

+56

3

End of Bridge

+12



Bridge to be 16' Shorter on E Side.

# Bridge Survey Stony Brook

7/6-14<sup>33</sup>

|      |      |        |      |        |
|------|------|--------|------|--------|
| B.M. | 1.80 | 101.80 |      | 100.00 |
| .00  |      |        | 3.7  | 98.1   |
| 1    |      |        | 3.1  | 98.7   |
| 2    |      |        | 5.1  | 96.7   |
| +164 |      |        | 4.9  | 96.9   |
| +56  |      |        | 3.6  | 98.2   |
| +84  |      |        | 3.0  | 98.8   |
| 3    |      |        | 2.7  | 99.1   |
| +12  |      |        | 2.7  | 99.1   |
|      |      |        | 10.2 | 91.6   |
|      |      |        | 7.0  | 94.8   |
| 4    |      |        | 1.4  | 100.4  |
| 5    |      |        | 0    | 02.8   |

Spike in 6" Poplar Tree 15' R + 25' A.W.M.  
C.D.C.

End of Bridge

End of "

Water Elev.

H.W.

Clearance of Bridge 15' 18' Planks

Sta. 2+72 = 6" of Water

2+84 1.0 "

3+12 Edge "

East Span of Bridge = 16'

W. " " " 40'

Gravel Pit 500' W.

S. R. #3

12

11

10

+80

9

+60

8

7

6

+50

5

4

3

2

1

00

△ R.P. ← 20' × 20' →

3

7/18-14<sup>34</sup>

6' Bridge

Swamp

424.3 East of Sec Cor. S.W. Cor 31 T.140 R.28

+25

25

24

+90

23

22

+75

21

20

19

18

17

16

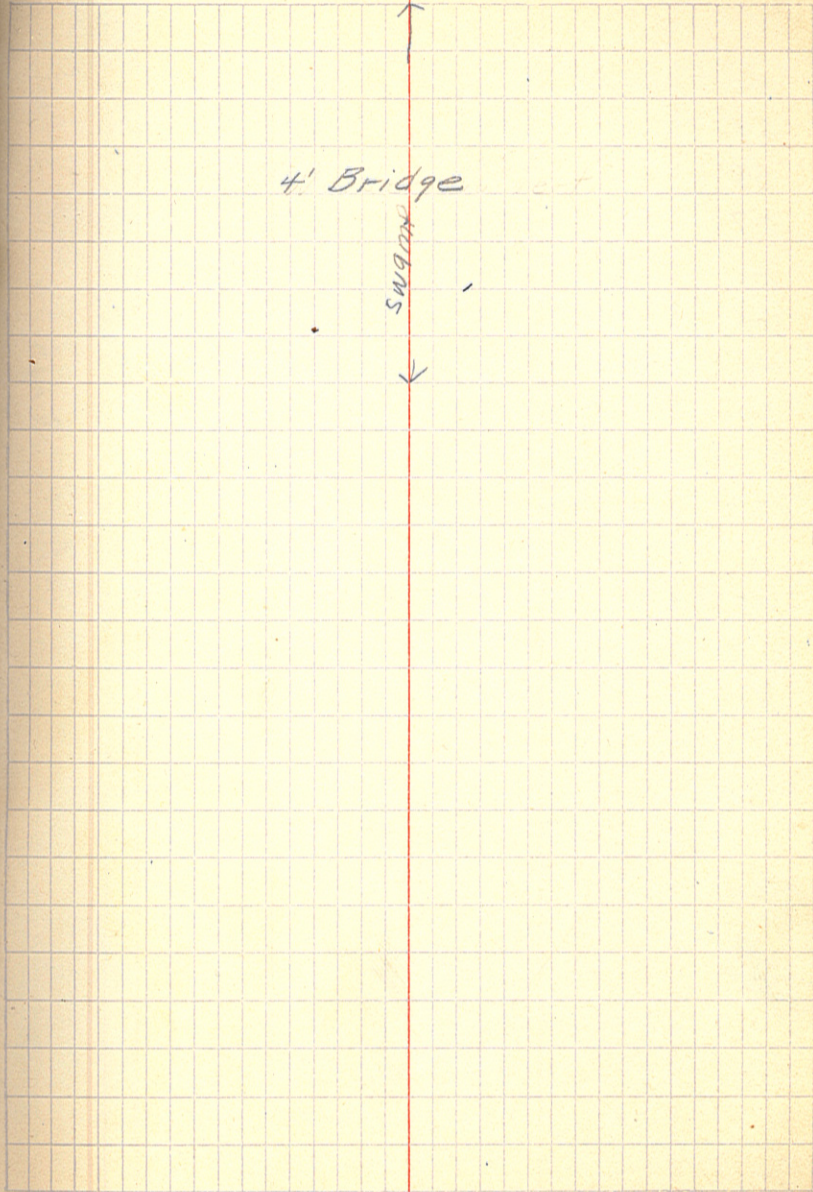
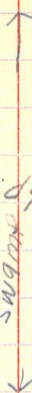
15

14

13

4' Bridge

swamp



M.B. T.B.

40 End.

39

38

37

36

35

+65  $\Delta$   $\Delta 20'10''$  N.  $61^{\circ}30'E$  N.  $69^{\circ}50'E$ .

34

33

32

31

30

29

28

27

26

&lt; 27' &lt; 28' &gt; R.F

S. R. #3

7/18-14

37

|      |      |        |      |            |
|------|------|--------|------|------------|
| B.M. | 4.60 | 104.60 |      | 100.00     |
| 00   |      |        |      | 1.6 03.0   |
| 1    |      |        |      | 4.4 00.2   |
| 2    |      |        |      | 6.2 98.4   |
| 3    |      |        |      | 7.3 97.3   |
| 4    |      |        |      | 7.9 96.7   |
| T.P. | 3.38 | 100.51 | 7.47 | 97.13      |
| 5    |      |        |      | 4.3 96.2   |
| 6    |      |        |      | 5.0 95.5   |
| 7    |      |        |      | 5.0 95.5   |
| 8    |      |        |      | 5.6 94.9   |
| 9    |      |        |      | 5.3 95.2   |
| 10   |      |        |      | 5.3 95.2   |
| T.P. | 3.92 | 100.44 | 3.99 | 96.52      |
| 11   |      |        |      | 5.3 95.1   |
| 12   |      |        |      | 5.2 95.2   |
| 13   |      |        |      | 5.0 95.4   |
| 14   |      |        |      | 5.2 95.2   |
| 15   |      |        |      | 4.8 95.6   |
| 16   |      |        |      | 5.0 95.4   |
| T.P. | 4.40 | 100.38 | 4.46 | 95.98      |
| 17   |      |        |      | 4.9 95.5   |
| 18   |      |        |      | 4.4 96.0   |
| 19   |      |        |      | 4.7 95.7   |
| B.M. |      |        |      | 42.5 96.13 |

Notch in 12" Oak Tree 40' R 1+30

F.W. Moulster

C.D. Conzett

C.J. White.

Notch in 12" Poplar 40' R 19

|     | S. R. |        | 7/18-20 |       |
|-----|-------|--------|---------|-------|
| —)  |       | 100.38 |         |       |
| 20  |       |        | 51      | 95.3  |
| 21  |       |        | 59      | 94.5  |
| 22  |       |        | 58      | 94.6  |
| T.P | 5.01  | 100.19 | 5.20    | 95.18 |
| 23  |       |        | 5.6     | 94.6  |
| 24  |       |        | 55      | 94.7  |
| 25  |       |        | 50      | 95.2  |
| 26  |       |        | 46      | 95.6  |
| 27  |       |        | 48      | 95.4  |
| 28  |       |        | 46      | 95.6  |
| T.P | 5.11  | 101.13 | 4.17    | 96.02 |
| 29  |       |        | 51      | 96.0  |
| 30  |       |        | 5.0     | 96.1  |
| 31  |       |        | 5.0     | 96.1  |
| 32  |       |        | 5.9     | 95.2  |
| 33  |       |        | 6.3     | 94.8  |
| 34  |       |        | 6.6     | 94.5  |
| T.P | 4.30  | 99.14  | 6.29    | 94.84 |
| +65 |       |        | 4.8     | 94.3  |
| 35  |       |        | 4.8     | 94.3  |
| 36  |       |        | 3.9     | 95.2  |
| 37  |       |        | 4.0     | 95.1  |
| 38  |       |        | 3.9     | 95.2  |
| 39  |       |        | 4.1     | 95.0  |
| 40  |       |        | 10.9    | 88.2  |



~~T.P. 3.66 100.18~~

~~94.52~~

~~2  
T.P.~~

~~3.60~~

~~101.31~~

~~5.47~~

5.6

94.6

Swamp

5.4

94.8

94.71

+36

94.3

4

4.7

93.6

County Road

T.B.

+60

4

3

2

1

00

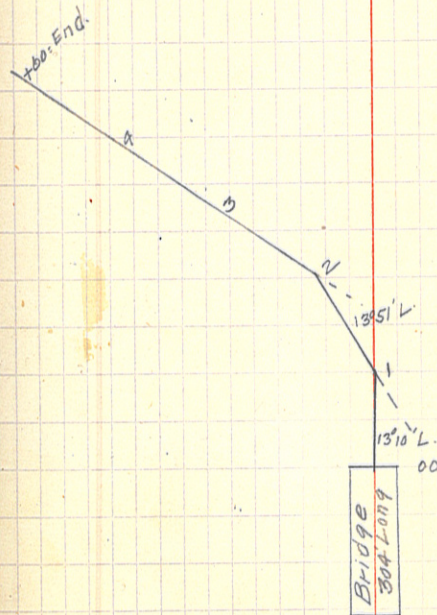
△ 13°51' L

△ 13°10' L

S.58°00'E

7/23-14 410

A.W.M.  
C.D.G.  
C.J.W.



County Road

7/23-14

100.00 (Assumed)

|             |      |       |
|-------------|------|-------|
| 4+60        | 8.0  | 92.0  |
| 4           | 9.2  | 90.8  |
| 3           | 10.8 | 89.2  |
| 2           | 10.1 | 89.9  |
| 1           | 10.2 | 89.8  |
| 00          | 11.1 | 88.9  |
| 00 & B.M.   | 5.10 | 94.90 |
|             | 1.8  | 98.2  |
| Water Level | 8.8  | 91.2  |

7/23-14 41

Borrow Pits.

#1 1300' S.E. of East End of Bridge

#2 1100 " " " " " "

#3 Gravel Pit for Surfacing  
1/2 mile east (on Town line)

00 is end of Bridge.

On Floor of Bridge 8' R of 00.

Water Level 7/23-14

S. R #

7/28-14

12

11

10

9

8

7

6

5

4

3

2

1

00

42

F. W. Moulster.

C. D. Corzett.

C. J. White.

9+30 Culvert. 12" 2' Fill required.

Sec. Cor. N. W. Cor. 7- T. 134 R 31

0 226 0 25 0

R.P.

S.P.

7/28-14

43

24

23

22

21

20

+59

⊙

37° 08' L

19

18

17

16

15

14

13

⊙ 50' R.P.

50' ⊙

S.R. #

7/29-14

37

36

35

34

33

+92 0

31° 08' R

7/29-14

7/28-14

32

R.P.  
0 40' 0 40' 0

31

30

29

28

27

26

25

7/28-14

S.R. #

7-29-14

45

58  
+96  $\Delta$  3° 46' R  
57  
56  
55  
54  
53  
52  
51  
50  
49  
+50  
48  
+80  
47  
46  
45  
44  
43  
+60  $\circ$  1° 03' R  
42  
41  
40  
39  
38

← Move Tel Poles Sta 32+72 to 59  
→  $\circ$  35'  $\Delta$  35'  $\circ$   
R.P.

Gravel Pit at 57?  
Clay & Black Dirt at R of 29

← Swamp X

$\circ$  30' R.P.  $\circ$  30'  $\circ$