

Dr. 8-BK. III

OFFICE OF COUNTY ENGINEER  
RAMSEY CO. MINN.

11 Ditch Survey

DITCH NO. 10

From Wheelock To Larpenfeur

Road Acc't. No. ....

Date Filed 1936

File D. 8 B. III

1  
Ditch #10

Wheelock Parkway to Carpenter  
West of Rice St.

W. H. Carlson  
May 17, 1926

Sta.

Angle  
Lt. Rt.

# Base Line for Location of Ditch #10

17+60.5      P.I.       $64^{\circ}46'$  Lt.

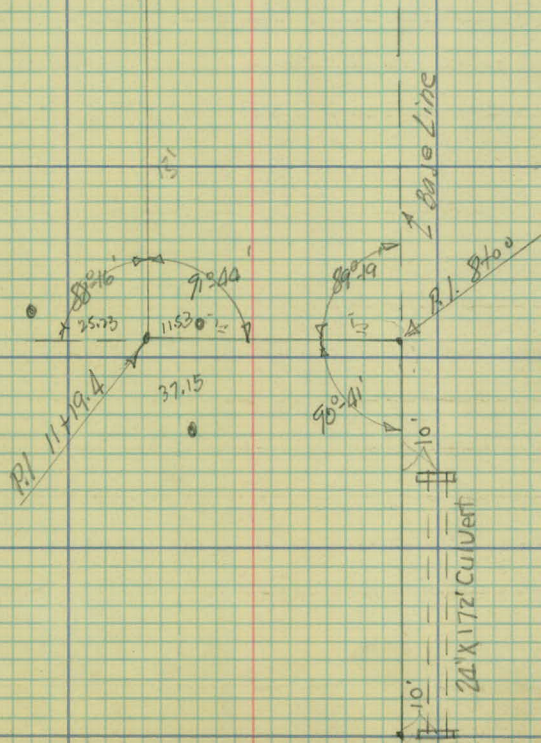
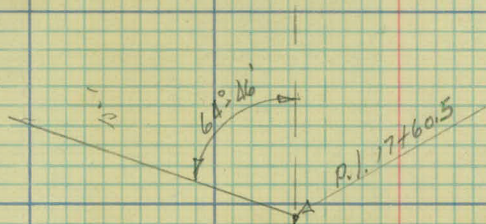
11+19.4      P.I.       $88^{\circ}16'$  Rt.

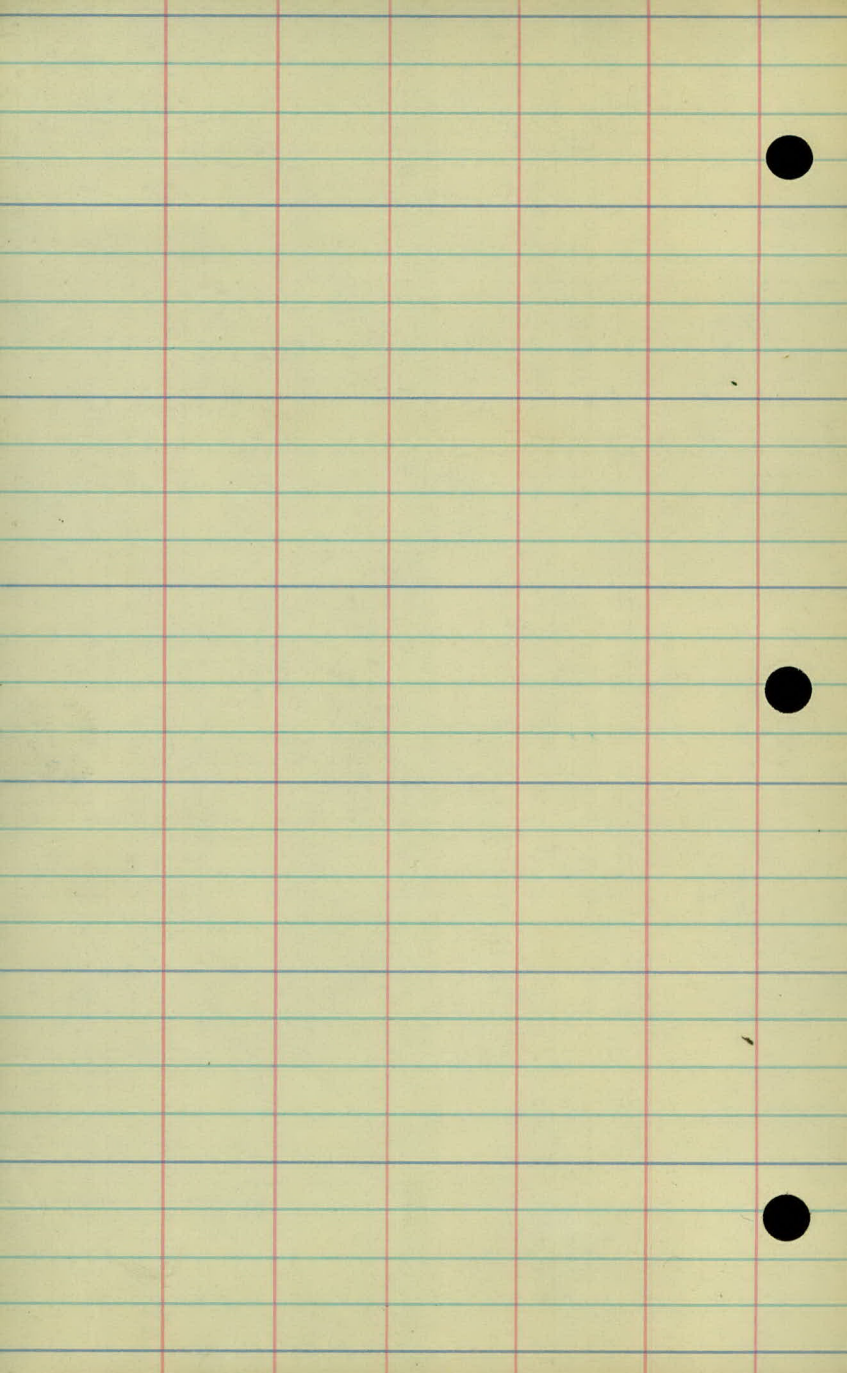
8+00      P.I.       $89^{\circ}19'$  Lt.

6+72 = North end 24" Culvert 10' Right or East

5+0 = South end 24" Culvert 10' Right or East







Topography.



Contd

8 to

P.I.

7 to

6 to

+ PS. 3 - E Wheelock Parkway

5 to

4-12-36

1070

See next page.

940

840

Calu. 24' x 30' vit  
Fair

174 - Bag 24' Calu. 0

+ 70 - Trail / 10' - 27'

+ 67 - Wind 12" C.M.

54.8" W. 11

+ 20 - 10' W. 10' 11

5' 33' Long

Trail - 20 - 29'

Trail - 20 - 29'

1' x 5' conc. H.W.

193 - 6" Bx. Cld - 6'

6477 - Wind - 5' vit - 4'

6472 - End 24' Calu.

10'

6450 - Hyd.

64' 3'

54' 26'

54' 26'

54 57 M.H.  
18'

(Over 1/2 full of sand)  
flush from Hydrant

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

1' x 5' conc. H.W.

Base Line



11+19.4  
11+0

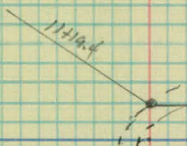
10+0

9+0

8+0

See next Page.

Trail 16'-4'



+08-P.P. 4'

Trail 14'-9'

 +27-12" Coff 11'  
 +27-8" Jap. 19'

+20-3-8" Jap. 18'

Trail 13'-1'

+08-8" Jap. 18'

 +25-P.P. 6' 9" W. 19'  
 +32 6" Bx. E 9'  
 +23-9" W. 6'  
 +16-8" Tw. Will. 20'

Trail 11'-0'

+66-8" Bx E/d. 20'

 +35 12" W. Will 19'  
 +22-6" Bx. E/d 14'  
 +10-P.P. 8'  
 +09-5" Bx. 12'  
 +015-N. End 24' Oak

4.5

+60.15

17

16

15

14

13

12

11+19.4



1750-6 Trail  
23'

2 Trail - 6' Wid. 2  
24'

2 Trail  
13'

2 Trail 7'

+51-Int. of Roads 10'  
Trail - 8'

Trail 2' 10' TOP

Trail 4' 10' TOP

Trail 3-10  
+11-Q.P. 75'

64° 20' 0"  
17+60.5 P.I.

Ditch

+75-6" Tw. Stp.  
20'

+27-9" Wire 3'  
+14-P.R. 2-5'  
+14-9" Wire 2'

+29-24" Cott.  
18'

+99-5" Stp 17'

+62-P.R. 7'

1160

1040

23

22

21

20

19

18

17460.5

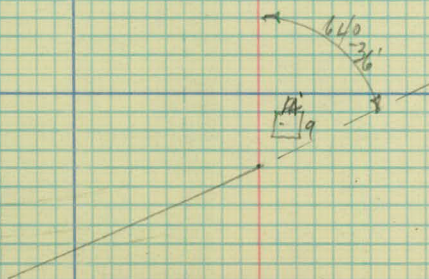
28+24 = West edge  
of cultivated.  
80a.

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7

Cultivated

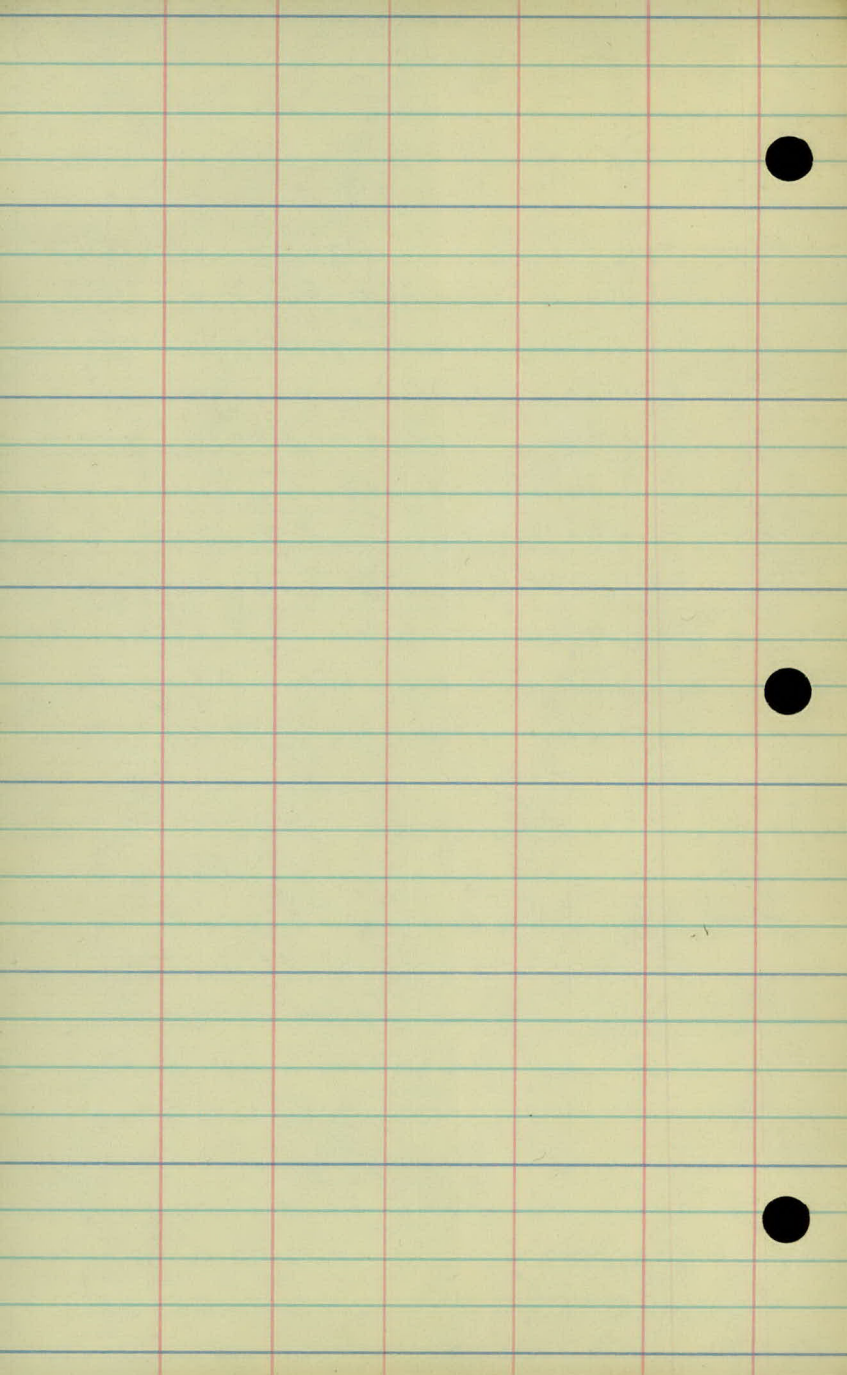
Cultivated



(9x14' Por)

174  
17481 - 4 of check  
11' brick





Levels & Cross Sections.

| Sta.         | +                | T        | -     | Elev.    |
|--------------|------------------|----------|-------|----------|
| Going North) | 2.70             | 855.93 ✓ |       | ✓ 853.23 |
| 5+0          |                  |          | 12.87 | 843.06 ✓ |
| "            |                  |          | 11.8  | ✓ 44.1   |
| "            |                  |          | 10.22 | ✓ 42.71  |
| 5+0.8        |                  |          |       |          |
| +20          |                  |          |       |          |
| 5+85.3       |                  |          | 5.80  | 50.1     |
| 6+63         |                  |          |       |          |
| 6+72         |                  |          |       |          |
| 6+72         |                  |          |       |          |
| 6+72         |                  |          |       |          |
| 6+72         |                  |          |       | 47.1     |
| 6+88         | Ain Ditch        |          |       | 46.0     |
| 7+0          |                  | ✓        |       | 43.9 ✓   |
| T.P.         | 6.58             | 851.09 ✓ | 11.42 | 844.51   |
| 7+55         |                  |          |       | 43.5     |
| 7+4          | So. end Culvert. |          |       |          |
| 7+4          |                  |          |       | 43.4     |



Lt.

2

Rt.

7

Top Fire Hyd. 65' H. H. 6450

843.06

12.87

Flow Line 24" C.M. Head Wall.

10

W.H.C.

11.8

H.A.W.

Top Dirt in Pipe

10

K.A.

4-12

" Conc. Head Wall

10.22

L.B.H

36

10

10.3 45.6

10

4.8 5.1

10

E Wheelock Pkwy.

50.5

5.4

10

Top Conc. Head

10.16

10

843.20

Flow Line 24" C.M.

12.73

44.2

10

Top Dirt in Pipe

11.7

10

44.2

8.8

0

7.7

3

11.6

8

11.7

10

11.4

11.5

7.6

14.5

5.9

20.0

43.9

Garden

11.3

12

9.9

7

9.3

2

9.9

3.0

12.0

4

12.0

4

6.7

16

6.7

20

43.9

12.0

14.5

10.4

7.5

10.4

3.5

12.0

Dit

11.7

5

9.0

10

8.1

13

7.9

2.0

43.5

6.6

19

5.2

13

5.2

9

5.9

5

7.2

3

7.6

4.5

7.4

4.5

5.3

7.5

5.4

21.

843.24

8.85

0

H Line

24" V. I.

27 = Top Dirt

43.4

6.0

8

5.5

6.8

7.0

7.8

7.7

0

7.0

2

5.6

6.5

5.3

20

Sta.                      +                       $\pi$                       -                      Elev.

851.09

(8400 = R.I.)

8404.5" = 2 Extended  
No. and Cu/V. 24"

8404.5

43.7

(Going West)

8412

46.9

940

46.9

1040

48.5

10490

6.08

T.P.

(T.P.)

853.07

4.10

46.5  
846.99

(Going North)

(11+19.4 P.I.)

11450

46.6

1240

45.6

1340

46.9

1440

49.0

H.

Z

RT.

10

Top Dir.  $\frac{7.8}{1.5}$ F.L. Line  
24"

84.77

9.32

1.5

West

43.3

East

 $\frac{39}{10}$  $\frac{60}{5}$  $\frac{74}{30}$  $\frac{78}{1.5}$  $\frac{74}{1.5}$  $\frac{50}{5}$  $\frac{5.6}{18}$ 

South

43.4 North

 $\frac{42}{0}$  $\frac{39}{8.5}$  $\frac{7.7}{15}$  $\frac{7.6}{19}$  $\frac{5.1}{22}$  $\frac{5.3}{30}$ 

43.1

 $\frac{42}{0}$  $\frac{43}{6.5}$  $\frac{5.5}{10.5}$  $\frac{7.9}{14}$  $\frac{8.0}{18}$  $\frac{6.5}{20}$  $\frac{5.1}{23}$  $\frac{4.6}{28}$ 

43.7

 $\frac{3.6}{0}$  $\frac{3.4}{5.5}$  $\frac{5.5}{9.5}$  $\frac{7.3}{13}$  $\frac{7.4}{17}$  $\frac{5.8}{20}$  $\frac{4.7}{28}$ 

44.2

 $\frac{4.6}{0}$  $\frac{5.2}{7}$  $\frac{6.5}{12}$  $\frac{6.9}{18}$  $\frac{5.5}{20}$  $\frac{4.5}{28}$ 

West

East

43.7

 $\frac{6.5}{0}$  $\frac{7.7}{13}$  $\frac{9.3}{16}$  $\frac{9.4}{20}$  $\frac{7.7}{22}$  $\frac{6.7}{30}$ 

43.0

 $\frac{7.5}{0}$  $\frac{7.5}{3}$  $\frac{8.2}{10}$  $\frac{10.0}{14}$  $\frac{10.1}{17}$  $\frac{7.4}{22}$  $\frac{6.8}{29}$  $\frac{7.4}{33}$ 

43.4

 $\frac{6.2}{4}$  $\frac{6.2}{4}$  $\frac{7.0}{8}$  $\frac{9.5}{12}$  $\frac{9.7}{16}$  $\frac{6.9}{19}$  $\frac{6.0}{21}$  $\frac{6.0}{30}$ 

43.9

 $\frac{4.1}{7}$  $\frac{4.6}{7}$  $\frac{9.0}{13}$  $\frac{9.2}{14.3}$  $\frac{8.5}{17}$  $\frac{4.4}{22}$  $\frac{4.4}{30}$



Sta.

+

八

1

E/ov.

853.07 ✓

1570

49.1

16 to

48.2

1740

48.2

750

T.P.

4.45

851.40

6.12

48.3/

846.95

T.B.M.

0.43

850.97

 $17+60.5^{\circ}$ 

P. 1

rest.

 $17+60.5$ 

46.9

1840

46.9

1940

45.9

2040

46.0

 $21 + 0$ 

45.9

2240

46.0

2340

46.5

lt.  
West

2

121

11

East

4.0 4.2 9.0 9.0 5.2 3.1 4.1  
7 13.5 16 20 26 32

44.1

4.9 5.7 9.0 9.0 5.4 3.6 4.6  
0 6 14 16 22 30 36

44.1

4.9 5.2 9.0 9.0 5.0 4.4 5.3  
7 12 16 22 29 36

943.57

4.8 6.4 9.5 9.5 6.7 5.9  
7.5 12.5 16.5 21 27

Nail in F.P. on Sea-Line about 100' N. of 17460.5

South

North

43.4

3.3 4.5 8.0 8.0 4.4 5.1  
8 0 5.5 8.5 12 23

43.2

4.5 5.3 6.5 8.2 7.9 5.0 5.1  
6 8.5 11 14 17.5 28

43.2

5.5 5.6 8.2 8.2 5.7 5.8  
9 14 17 21 30

43.1

5.4 5.4 8.3 8.2 6.0 6.1  
9 12.5 16.5 20 30

43.1

5.5 5.6 8.3 8.1 5.7 5.7  
9 14 17 20 30

42.7

5.4 5.6 8.7 8.6 5.7 5.6  
9 14.0 17.5 22 30

42.9

4.9 5.2 8.4 8.5 5.2 4.6  
9 13 16 22 30

851.40 ✓

73+50

46.9

24

46.9

+50

+50

45.9

7570

|       |          |      |          |
|-------|----------|------|----------|
| 7.64  | 854.59 ✓ | 4.45 | 846.95 ✓ |
| 4.06  | 851.05 ✓ | 7.60 | 846.99 ✓ |
| 11.29 | 855.80 ✓ | 6.54 | 844.51 ✓ |
|       |          | 2.57 | 853.23 ✓ |

Recommendation

Flush 172' - 24" Culv.

Clean Ditch

Lower Pipe @ Sta. 8 to

W.S. Elev. 843.82.

Bot. Ditch Sta.

75 842.2 (X)

Suggest Ditch 841.8

{ N. end culv  
Thru Pipe

43.2 (X) (92.0<sup>21</sup><sub>9</sub>)



$$\begin{array}{r} 4.5 \\ \hline 4.5 \end{array} \quad \begin{array}{r} 4.8 \\ \hline 8 \end{array} \quad \begin{array}{r} 7.3 \\ \hline 12.8 \end{array} \quad \begin{array}{r} 7.3 \\ \hline 15.5 \end{array} \quad \begin{array}{r} 7.8 \\ \hline 21 \end{array} \quad \begin{array}{r} 4.8 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 4.5 \\ \hline 0 \end{array} \quad \begin{array}{r} 4.5 \\ \hline 8 \end{array} \quad \begin{array}{r} 7.6 \\ \hline 13 \end{array} \quad \begin{array}{r} 7.6 \\ \hline 16 \end{array} \quad \begin{array}{r} 4.9 \\ \hline 22 \end{array} \quad \begin{array}{r} 4.5 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 5.5 \\ \hline 0 \end{array} \quad \begin{array}{r} 6.1 \\ \hline 6 \end{array} \quad \begin{array}{r} 8.6 \\ \hline 12 \end{array} \quad \begin{array}{r} 7.58 \\ \hline 15 \end{array} \quad \begin{array}{r} 8.6 \\ \hline 15 \end{array} \quad \begin{array}{r} 5.8 \\ \hline 20 \end{array} \quad \begin{array}{r} 5.4 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 6.8 \\ \hline 7 \end{array} \quad \begin{array}{r} 7.2 \\ \hline 10 \end{array} \quad \begin{array}{r} 8.9 \\ \hline 10 \end{array} \quad \begin{array}{r} 7.58 \\ \hline 15 \end{array} \quad \begin{array}{r} 9.2 \\ \hline 15 \end{array} \quad \begin{array}{r} 7.1 \\ \hline 19 \end{array} \quad \begin{array}{r} 6.7 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 38174 \\ 1828 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 7512 \\ 1828 \\ \hline \end{array}$$

Staking.

Grade

B.M.

0.55

853.78

2

853.23

843.20

10.58

Old

6+77- N. end 15' 0" T  
4' East.

10.85

842.93

43.2  
42.9  
0.3

T.R.

8.01

852.03

9.76

844.02

43.20

8.83

T.P.

4.28

851.25

5.06

846.97

Blue Top to Sta. 13

43.20

8.05

T.P. Nail in R.P.

0.46

850.79

54.22  
43.20  
11.02