

Dr 11 - BK 27

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

PLAN Survey

Garden Ave.

from \$ Pascal Ave. to \$ Ham Line Ave.

Road Acc't. No.

Date Filed

File

1
Garden St. Ave

From E Pascal St.
to E Hamline Ave.

Angle

Sta.	Point	Lt.	Rt.
------	-------	-----	-----

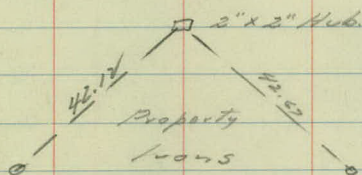
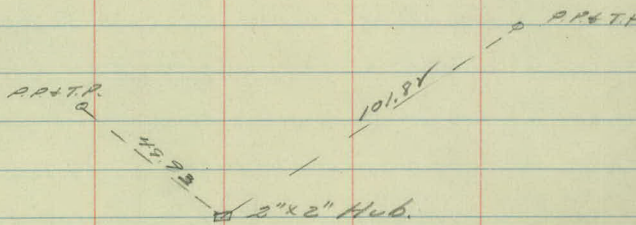
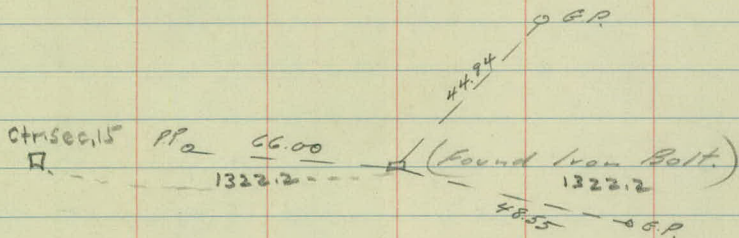
13+27.55	P.T.		
----------	------	--	--

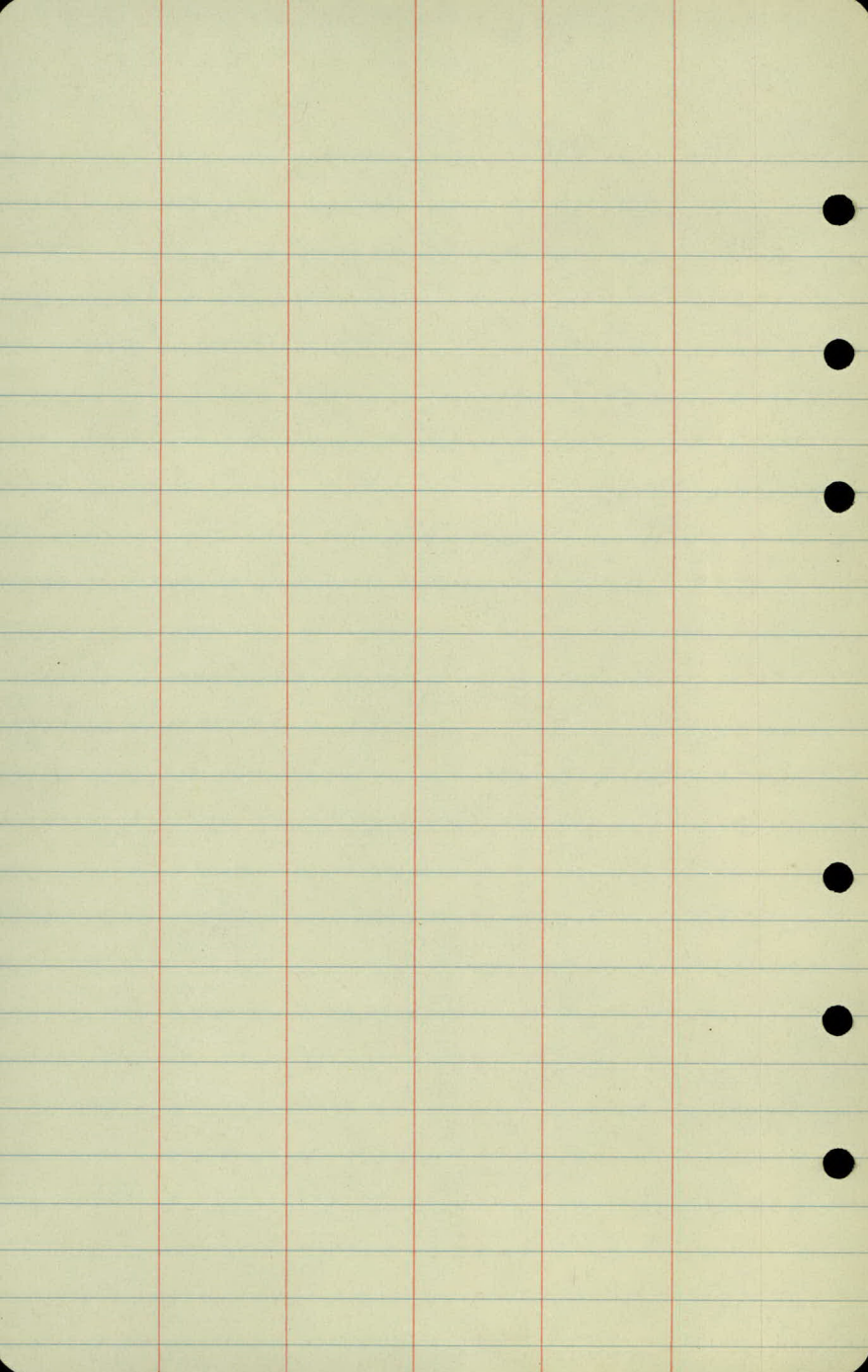
4+53.70	P.O.T.		
---------	--------	--	--

0+00	P.O.T.		
------	--------	--	--

		Bessel Ave.	
--	--	-------------	--

2
#50.14 50.5 sec. 15-30-37





13
Garden St.

Pascal to Hamline

6+00

5+00

4+00

3+00

2+00

1+00

0+00

199-PR & TR King

Cultivated

22' 4'

22'

22'

Cultivated

Wagon Trail

15' x 1'

9' x 3+51 = 15" x 20' C.M.

3+45

Traveled Road (Holton)
Gravel & some Oil

3+18

Cultivated

Cultivated

Pascal

Mr

0-04 Sh. Pascal

Sidebanks

13100

12100

13+00

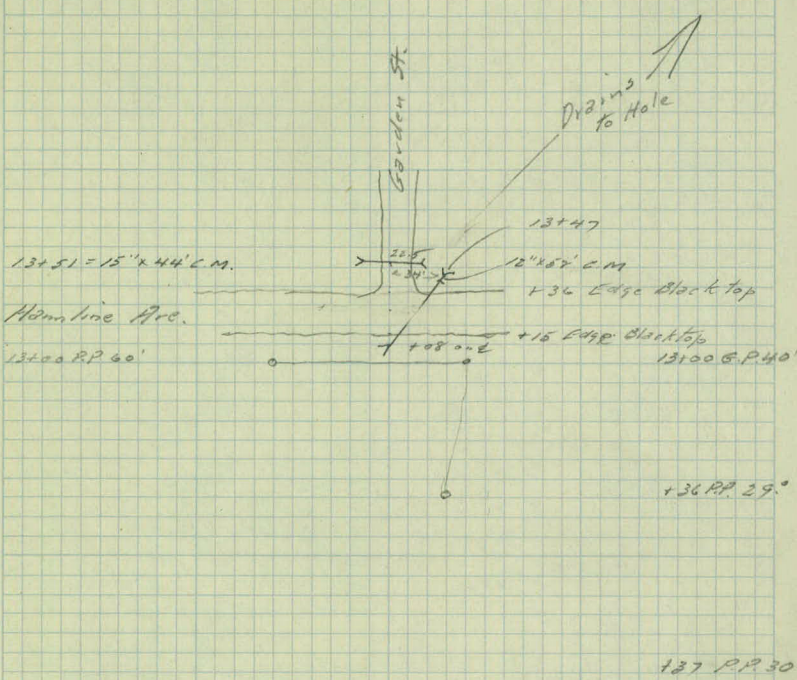
12+00

11+00

8+00

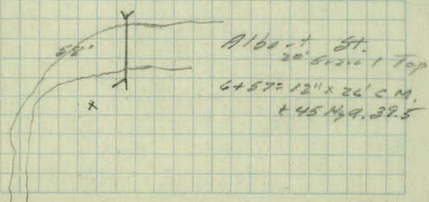
7+00

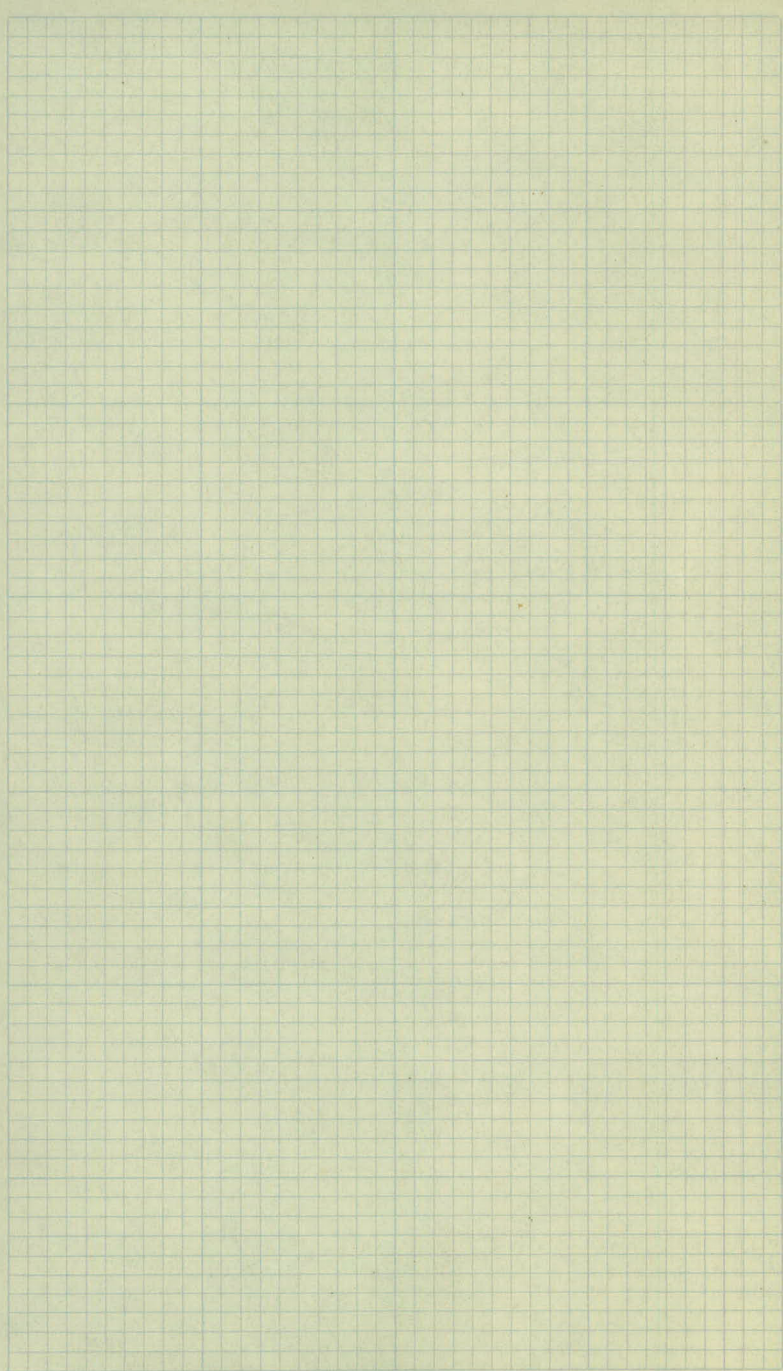
6+00



Cultivated

Cultivated





6/
Garden St.

Pascal Ave. to Hamline Ave.

Sta.	+	π / -	Elev
BM	368	956.45	952.77

0-30			952.0
------	--	--	-------

0-03			51.2
------	--	--	------

0+00			50.1
------	--	--	------

0+10			47.5
------	--	--	------

0+30			46.0
------	--	--	------

0+73			44.9
------	--	--	------

1+00			45.1
------	--	--	------

+50			46.3
-----	--	--	------

2+00			48.3
------	--	--	------

+50			49.1
-----	--	--	------

3+00			49.5
------	--	--	------

Lt.

E

Et.

7

Top of Lon. N.W. Cor. Pascal & Fairbanks

$\frac{3.4}{50}$	$\frac{39}{30}$	$\frac{47}{28}$	$\frac{48}{17}$	$\frac{54}{15}$	$\frac{54}{13}$	$\frac{52}{17}$	$\frac{50}{10}$	$\frac{45}{12}$	$\frac{47}{12}$	$\frac{52}{14}$	$\frac{52}{16}$	$\frac{48}{17}$	$\frac{47}{28}$	$\frac{41}{30}$	$\frac{35}{50}$
------------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

$\frac{4.7}{50}$	$\frac{54}{34}$	$\frac{53}{50}$	$\frac{48}{44}$	$\frac{46}{50}$
------------------	-----------------	-----------------	-----------------	-----------------

$\frac{6.2}{50}$	$\frac{68}{30}$	$\frac{64}{50}$	$\frac{6.2}{20}$	$\frac{57}{50}$
------------------	-----------------	-----------------	------------------	-----------------

$\frac{74}{50}$	$\frac{84}{16}$	$\frac{90}{50}$	$\frac{8.1}{30}$	$\frac{73}{50}$
-----------------	-----------------	-----------------	------------------	-----------------

$\frac{91}{50}$	$\frac{99}{23}$	$\frac{105}{50}$	$\frac{10.9}{28}$	$\frac{10.0}{50}$
-----------------	-----------------	------------------	-------------------	-------------------

$\frac{104}{50}$	$\frac{111}{28}$	$\frac{116}{50}$	$\frac{11.8}{27}$	$\frac{11.6}{50}$
------------------	------------------	------------------	-------------------	-------------------

Low Bot Ho.

$\frac{101}{50}$	$\frac{111}{24}$	$\frac{114}{50}$	$\frac{11.6}{29}$	$\frac{11.5}{50}$
------------------	------------------	------------------	-------------------	-------------------

$\frac{92}{50}$	$\frac{96}{23}$	$\frac{102}{50}$	$\frac{10.0}{50}$
-----------------	-----------------	------------------	-------------------

$\frac{91}{50}$	$\frac{8.2}{50}$	$\frac{7.0}{50}$
-----------------	------------------	------------------

$\frac{85}{50}$	$\frac{77}{35}$	$\frac{74}{50}$	$\frac{67}{50}$
-----------------	-----------------	-----------------	-----------------

$\frac{78}{50}$	$\frac{72}{26}$	$\frac{70}{50}$	$\frac{7.6}{26}$	$\frac{7.2}{50}$
-----------------	-----------------	-----------------	------------------	------------------

Sta.	+	π	-	Elev.
		956.45		
3+09				947.6
3+15				47.6
3+18				48.2
3+31				48.7
3+44				48.6
3+48				49.2
3+51	15" C.M.			
3+55				49.7
3+65				50.5
4+00				53.6
4+50				55.0
T.P.	4.07	959.34 ✓	120	955.25 ✓
5+00				55.0
+50				530

Lt.

L

Rt.

8

$$\frac{95}{50}$$

$$\frac{91}{25}$$

$$\frac{89}{50}$$

$$\frac{89}{50}$$

$$\frac{95}{50}$$

$$\frac{91}{25}$$

$$\frac{89}{50}$$

$$\frac{89}{50}$$

$$\frac{83}{50}$$

$$\frac{83}{50}$$

$$\frac{82}{50}$$

$$\frac{78}{50}$$

$$\frac{78}{50}$$

$$\frac{78}{50}$$

2 Trax
Road

$$\frac{84}{50}$$

$$\frac{79}{50}$$

$$\frac{81}{50}$$

$$\frac{92}{50}$$

$$\frac{83}{38}$$

$$\frac{85}{10}$$

$$\frac{76}{8}$$

$$\frac{73}{50}$$

$$\frac{83}{15}$$

$$\frac{80}{50}$$

$$\frac{124}{98}$$

$$\frac{124}{98}$$

$$\frac{85}{50}$$

$$\frac{88}{20}$$

$$\frac{84}{10}$$

$$\frac{71}{8}$$

$$\frac{68}{50}$$

$$\frac{70}{6}$$

$$\frac{83}{9}$$

$$\frac{88}{50}$$

$$\frac{44}{50}$$

$$\frac{60}{14}$$

$$\frac{59}{9}$$

$$\frac{60}{5}$$

$$\frac{60}{5}$$

$$\frac{64}{11}$$

$$\frac{82}{50}$$

$$\frac{19}{50}$$

$$\frac{30}{14}$$

$$\frac{35}{9}$$

$$\frac{39}{50}$$

$$\frac{67}{50}$$

$$\frac{102}{50}$$

$$\frac{04}{14}$$

$$\frac{09}{3}$$

$$\frac{15}{50}$$

$$\frac{23}{5}$$

$$\frac{50}{50}$$

$$\frac{25}{50}$$

$$\frac{26}{11}$$

$$\frac{29}{6}$$

$$\frac{43}{50}$$

$$\frac{43}{14}$$

$$\frac{70}{50}$$

$$\frac{56}{50}$$

$$\frac{85}{38}$$

$$\frac{60}{4}$$

$$\frac{63}{50}$$

$$\frac{71}{11}$$

$$\frac{91}{50}$$

Sta. + π - Elev.

959.34

6+00

949.5

6+54

48.4

+59 C.M. Culvert Rt.

+61

48.4

+71

48.2

+80

48.1

+88

48.1

7+00

48.1

+50

47.9

8+00

49.3 47.2

+50

47.1

9+00

47.2

Lt.

E

Et.

7

$$\frac{90}{50}$$

$$\frac{93}{25}$$

$$\frac{98}{17}$$

$$\frac{102}{17}$$

$$\frac{114}{50}$$

$$\frac{103}{50}$$

$$\frac{104}{16}$$

$$\frac{109}{15}$$

$$\frac{115}{15}$$

$$\frac{120}{22}$$

$$\frac{123}{50}$$

Inr. East End.

$$\frac{121}{1}$$

Inr. W. End

$$\frac{120}{1}$$

$$\frac{106}{50}$$

$$\frac{109}{14}$$

$$\frac{112}{14}$$

$$\frac{112}{50}$$

$$\frac{106}{50}$$

$$\frac{111}{8}$$

$$\frac{111}{8}$$

$$\frac{109}{50}$$

$$\frac{106}{50}$$

$$\frac{112}{50}$$

$$\frac{113}{50}$$

$$\frac{106}{50}$$

$$\frac{112}{30}$$

$$\frac{118}{30}$$

$$\frac{122}{50}$$

$$\frac{108}{50}$$

$$\frac{112}{50}$$

$$\frac{122}{50}$$

$$\frac{115}{50}$$

$$\frac{114}{26}$$

$$\frac{115}{26}$$

$$\frac{122}{50}$$

$$\frac{122}{50}$$

$$\frac{121}{13}$$

$$\frac{118}{13}$$

$$\frac{121}{50}$$

$$\frac{125}{1}$$

$$\frac{122}{1}$$

$$\frac{115}{50}$$

$$\frac{124}{50}$$

$$\frac{121}{14}$$

$$\frac{113}{14}$$

$$\frac{112}{50}$$

Sta.	+	π	-	Elev.
		959.34 ✓		
T.P.	4.20	954.09 ✓	11.45	947.89 ✓
9+50				47.2
10				47.6
+50				48.0
11+00				47.7
+50				47.5
12+00				46.6
+50				44.3
13+00				42.1
+05				41.8
+08				41.8
+10				42.4
+ 27.5				42.8
Horn line Arc.				

Lt.

E

Rt.

10

$$\frac{5.9}{50}$$

$$\frac{4.9}{50}$$

$$\frac{4.0}{17}$$

$$\frac{3.8}{50}$$

$$\frac{5.4}{50}$$

$$\frac{4.5}{50}$$

$$\frac{4.1}{11}$$

$$\frac{3.8}{50}$$

$$\frac{4.8}{50}$$

$$\frac{4.1}{50}$$

$$\frac{4.1}{50}$$

$$\frac{5.2}{50}$$

$$\frac{4.4}{50}$$

$$\frac{4.1}{30}$$

$$\frac{4.0}{50}$$

$$\frac{5.6}{50}$$

$$\frac{4.8}{24}$$

$$\frac{4.6}{50}$$

$$\frac{4.4}{30}$$

$$\frac{4.5}{50}$$

$$\frac{6.5}{50}$$

$$\frac{5.9}{27}$$

$$\frac{5.5}{50}$$

$$\frac{5.2}{50}$$

$$\frac{8.4}{50}$$

$$\frac{7.8}{50}$$

$$\frac{7.1}{12}$$

$$\frac{7.0}{50}$$

$$\frac{9.5}{50}$$

$$\frac{9.3}{24}$$

$$\frac{9.0}{50}$$

$$\frac{9.4}{20}$$

$$\frac{9.1}{50}$$

$$\frac{10.4}{50}$$

$$\frac{10.5}{28}$$

$$\frac{10.3}{50}$$

$$\frac{9.8}{22}$$

$$\frac{9.4}{50}$$

$$\frac{10.4}{50}$$

$$\frac{10.5}{28}$$

$$\frac{10.3}{50}$$

$$\frac{9.8}{22}$$

$$\frac{9.4}{50}$$

$$\frac{9.5}{50}$$

$$\frac{9.7}{50}$$

$$\frac{9.4}{50}$$

$$\frac{9.2}{50}$$

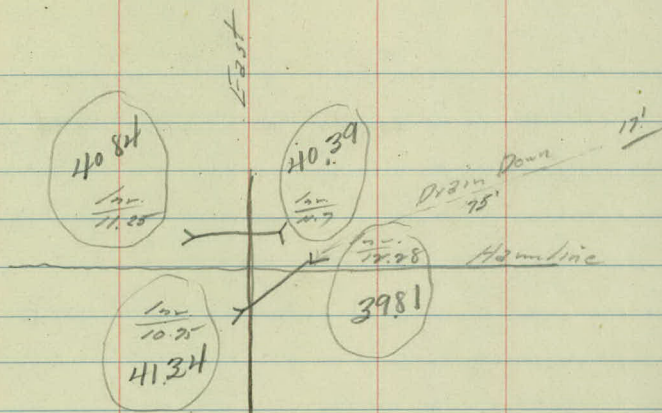
$$\frac{9.3}{50}$$

$$\frac{9.4}{50}$$

Sta.	+	Σ	-	Elev.
		954.09		

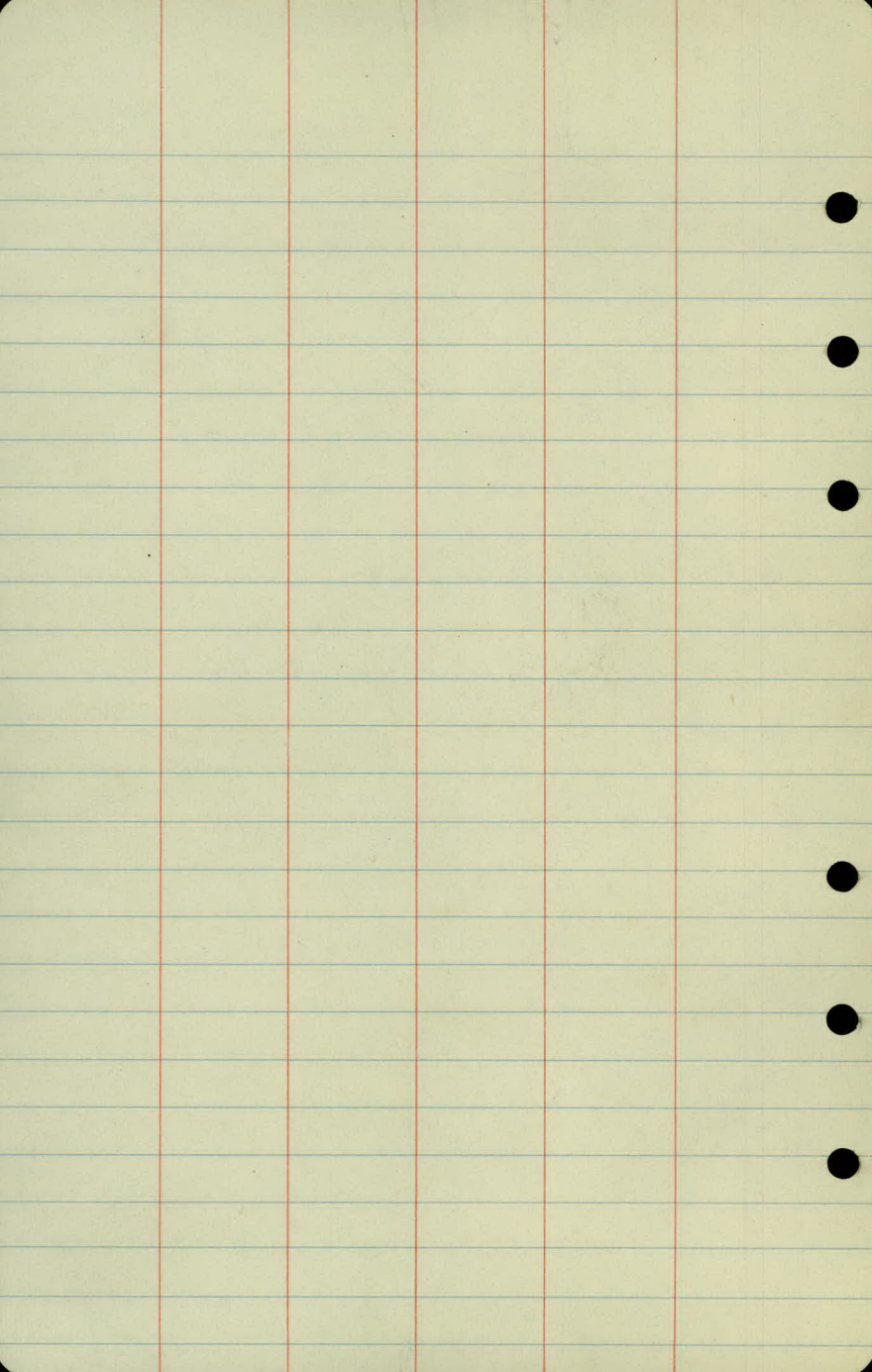
B.M.	8.83	954.09 ✓	8.83	943.26 ✓
I.P.	11.25	958.91 ✓	4.43	947.66 ✓
B.M.			6.14	952.77

952.77



Spike in G.P. at S.E. Cor. Hamline & Garden

Top Iron N.W. Cor. Fairbanks & Pascal



GARDEN AVE.

Slope stakes.

Top. N. End Ent. Culv.

5 Pages

Sta.	+	π	-	Grade
B.M.	3.89	956.06		952.11

0+00				51.0
------	--	--	--	------

+10				50.9
-----	--	--	--	------

+30				50.8
-----	--	--	--	------

+73				50.4
-----	--	--	--	------

1				50.2
---	--	--	--	------

+50				49.8
-----	--	--	--	------

2				49.4
---	--	--	--	------

+50				49.0
-----	--	--	--	------

T.P.	7.26	956.45	6.87	949.19
------	------	--------	------	--------

3				48.6
---	--	--	--	------

+65				48.6
-----	--	--	--	------

4				48.5
---	--	--	--	------

T.P.	5.62	959.83	2.29	959.21
------	------	--------	------	--------

$R.OO = 20.5$ Rockshore - 2.1
 $0000 = 22.5$
 $5/000 = 3.1 - 1.5 \text{ Top}$

Gr. Rod Lt $\frac{1}{2}$ Rt

Top from H. W. Cor. Pascal & Fairbanks

5.1

5.2

5.3 $\frac{25.3}{-9.1} / \frac{9.4}{-4.1}$ $\frac{10.1}{-4.7}$ $\frac{10.6}{-5.3} / \frac{28.9}{-2.7}$

5.7 $\frac{28.0}{-5.0} / \frac{10.7}{-5.0}$ $\frac{11.1}{-5.4}$ $\frac{11.1}{-5.4} / \frac{29.2}{-2.2}$

5.9 $\frac{26.8}{-4.6} / \frac{10.5}{-4.6}$ $\frac{11.0}{-5.8}$ $\frac{11.1}{-5.8} / \frac{30.0}{-2.0}$

6.3 $\frac{22.0}{-3.0} / \frac{9.3}{-3.0}$ $\frac{9.7}{-3.4}$ $\frac{9.9}{-3.6} / \frac{23.8}{-2.8}$

6.7 $\frac{20.9}{-10.2} / \frac{8.0}{-10.2}$ $\frac{7.8}{-1.1}$ $\frac{7.0}{-1.2} / \frac{22.9}{-2.9}$

7.1 $\frac{23.1}{-1.3} / \frac{7.3}{-1.3}$ $\frac{7.0}{-1.1}$ $\frac{6.4}{-1.7} / \frac{24.9}{-2.9}$

7.9 $\frac{24.9}{+0.7} / \frac{7.2}{+0.7}$ $\frac{7.0}{+0.9}$ $\frac{7.6}{+0.3} / \frac{24.1}{-2.1}$

7.9 $\frac{29.9}{+3.2} / \frac{4.1}{+3.2}$ $\frac{6.0}{+1.9}$ $\frac{7.4}{+0.5} / \frac{24.5}{-2.5}$

8.0 $\frac{34.1}{+5.3} / \frac{2.7}{+5.3}$ $\frac{4.0}{+7.0}$ $\frac{5.5}{+2.5} / \frac{28.5}{-2.5}$

Slope Stake Lt

Sta	+	π	-	Grade
		959.83		

1	+50			48.4
---	-----	--	--	------

5				48.3
---	--	--	--	------

	+50			48.2
--	-----	--	--	------

6				48.1
---	--	--	--	------

	+34			48.0
--	-----	--	--	------

	+61			48.0
--	-----	--	--	------

	+71			47.9
--	-----	--	--	------

	+80			47.9
--	-----	--	--	------

	+88			47.8
--	-----	--	--	------

7				47.8
---	--	--	--	------

T.P	1.21	952.66	8.38	951.45
-----	------	--------	------	--------

	+50			47.6
--	-----	--	--	------

$20.00 = 20.5$
 $CU + 00 = 27.5 \quad 2.75/40$
 $18' TO 0 - 3.15/100$

2

Gr Rod	Lt	Lt	Rt
11.4	$39.3 / \frac{34}{18.9}$	$\frac{49}{105}$	$\frac{71}{14.3} / 31.0$
11.5	$40.5 / \frac{30}{18.5}$	$\frac{47}{16.8}$	$\frac{69}{15.1} / 30.0$
11.6	$35.1 / \frac{58}{158}$	$\frac{69}{14.7}$	$\frac{8.8}{12.8} / 29.1$
11.7	$23.9 / \frac{9.5}{12.2}$	$\frac{103}{11.4}$	$\frac{113}{10.4} / 24.3$
11.8	$25.3 / \frac{10.8}{11.0}$	$\frac{115}{10.3}$	$+50 \quad \frac{11.8}{10.0} / 23.5$
11.8			
11.9			
12.0	$25.1 / \frac{11.2}{10.8}$	$\frac{118}{10.2}$	$\frac{119}{10.1} / 23.7$
Top Hyd. Rt			
5.1	$25.1 / \frac{43}{10.8}$	$\frac{47}{10.4}$	$\frac{47}{10.9} / 24.3$

Sta + π - Grade

952.66

8 47.4

+50 47.2

9 47.0

+50 46.8

10 46.6

T.P. 3.90 951.40 9.56 948.10

+50 46.4

11 46.1

+50 45.3

12 44.8

+50 43.8

13 42.7

R.O. = 20.5
Cut 00 = 23.5 2' 1.5' up
13' Top - 2' 1.5' 1.5' up
Ditch = 1.5' deep

7/17/58
K.D.
K.D.
L.C.
M.A.G.

3

Gr Rod

Lt

R

Rt

$$5.3 \quad 23.5 / \frac{5.3}{+9.0} \quad \frac{5.3}{-9.4} \quad \frac{5.0}{+9.3} / 24.1$$

$$5.5 \quad 24.1 / \frac{5.2}{+9.3} \quad \frac{5.5}{+9.0} \quad \frac{4.7}{+9.8} / 25.1$$

$$5.7 \quad 24.5 / \frac{5.2}{+9.5} \quad \frac{5.4}{+9.3} \quad \frac{4.5}{+11.2} / 25.9$$

$$5.9 \quad 25.7 / \frac{5.8}{+9.1} \quad \frac{5.5}{+9.4} \quad \frac{4.6}{+11.3} / 26.1$$

$$6.1 \quad 25.3 / \frac{5.2}{+9.9} \quad \frac{5.1}{+1.0} \quad \frac{4.9}{+11.2} / 25.9$$

$$6.0 \quad 26.7 / \frac{2.9}{+1.6} \quad \frac{3.5}{+1.5} \quad \frac{3.5}{+11.5} / 26.5$$

$$5.3 \quad 26.1 / \frac{4.0}{+1.3} \quad \frac{3.7}{+1.6} \quad \frac{3.5}{+11.8} / 27.1$$

$$5.9 \quad 26.9 / \frac{4.2}{+1.7} \quad \frac{4.1}{+1.8} \quad \frac{3.8}{+12.1} / 27.7$$

$$6.6 \quad 25.9 / \frac{5.4}{+1.2} \quad \frac{4.9}{+1.7} \quad \frac{4.2}{+12.4} / 28.3$$

$$7.6 \quad 28.9 / \frac{2.2}{+9.2} \quad \frac{7.0}{+9.6} \quad \frac{6.4}{+11.2} / 25.9$$

$$8.7 \quad 22.7 / \frac{8.6}{+9.1} \quad \frac{8.3}{+9.5} \quad \frac{8.6}{+9.1} / 23.7$$

Sta	+	π	-	Grade
		951.40		
12	+05			42.6
	+08			42.5
	+10			42.5
B.M.		8.18	943.22	943.26

Gr. Rod.

Lt

R

Rt

Spk. in Guy Polo S.E. Cor Hamline & Garden Ave

