

BK. 46 Dr. 11

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Plan Survey

Pascal & Rugles
Larp. Ave. A²"
From Smetting To Pascal

Road Acc't. No. R-39-40

Date Filed 6-11-41

File

PLAN SURVEY

RUGGLES ST.

Snelling Ave to Pascal Ave.

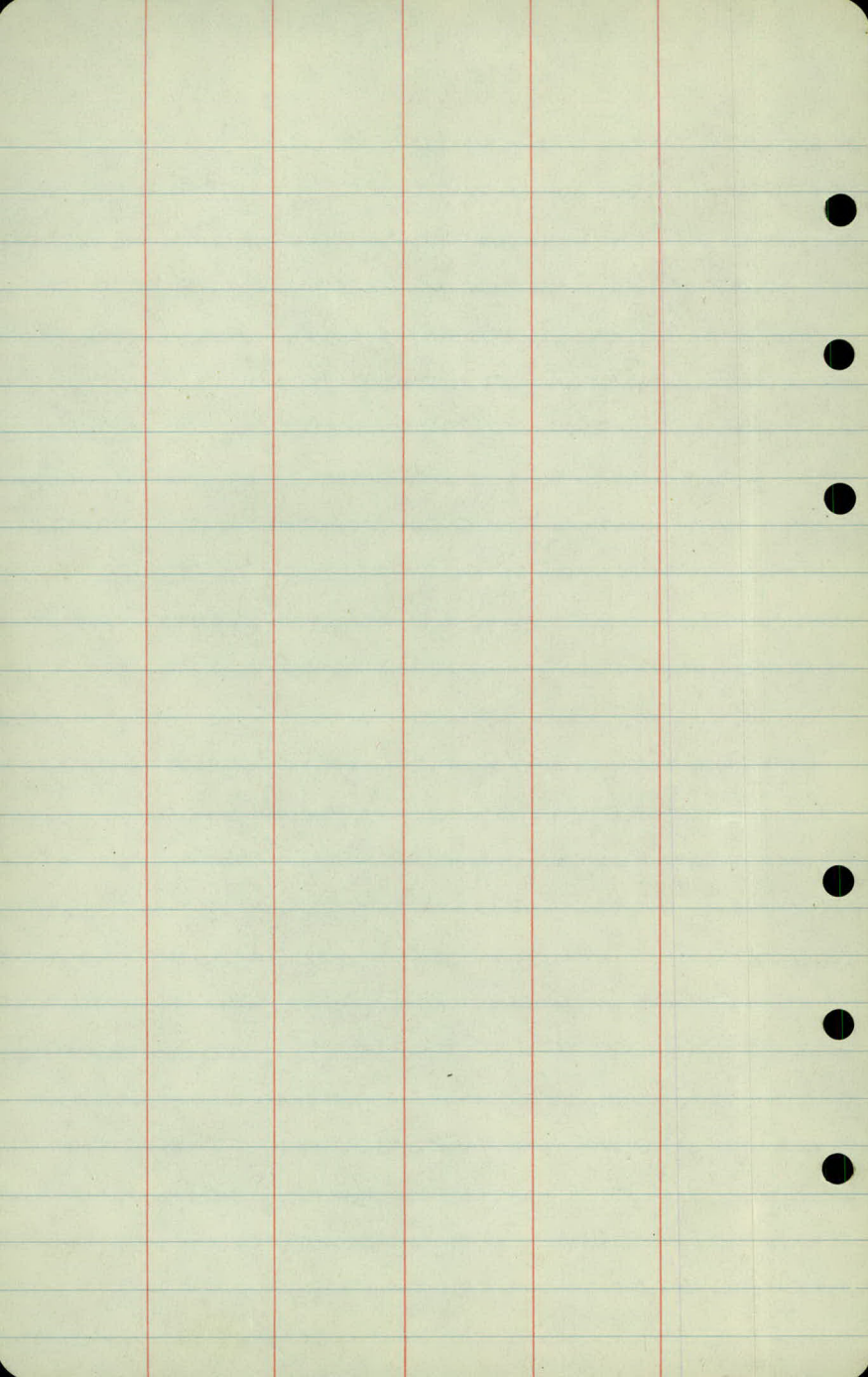
Completed
Partially
1/27/41

INDEX

Align - 1-2

Topog. - 3-5

Xsections - 6-10



1

Alignment

Sta	Point	ΔLt	ΔRt
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Red Figures Taken From Plat

13 + 25.84
13 + 25.77 = E Pascal Ave.

9 + 99.66
9 + 98.98 P.O.T. = E Simpson Ave

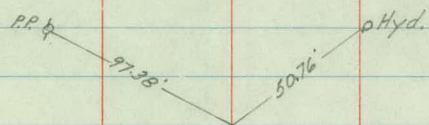
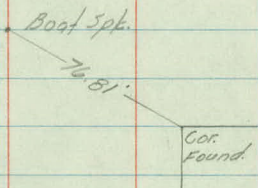
6 + 72.94
6 + 72.36 P.O.T. = Arona Ave.

3 + 46.22
3 + 45.28 P.O.T. = E Asbury Ave

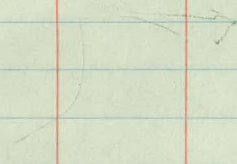
0 + 100 = E Snelling Ave.

1-6-41
K.F.
L.C.
M.B.
C.N.

2



Sta	Point	ΔLt	ΔRt
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Topography

+53-Row Cedars -35'
 +50- -31'
 +47- -32'
 +44- -31'
 +40- -28'
 +36- -35'
 +32- -31'
 +27- -31'

+73-N.W. Cor. Ho-40'

+12-N.W. Cor. Car-34'

5 +34-Row Cedars -31'
 +93-Row Pines -29'
 +87-Row Pines -00-31'
 +62-Row Cedars -30'
 +59-Row Cedars -23'
 +55-Row Cedars -16'
 +53-Row Cedars -22'
 +49-Row Cedars -9'
 +35-Row Pines -19'
 +15-Row Pines -13'
 4 +103-2' Elm -15' +07-1' Elm -10'
 +97-Row Pop -11'
 +91-Row Pop -2'
 +86-Row Pop -23'
 +82-Row Pop -5'

3

+55-5" sq 11 Lillies 30'
 +81- 30'
 +77-Row Lillies 30'
 +61-Row Pop -31'
 +28- 3'
 +25-Row Pop -1'
 +09-Row Pop -1'

+53-Row Pops -1' +58-Row Pop -1'
 +45- 1'
 +41- 1'
 +49- 0.0 +37- 2'
 +33-Row 1" Elm -1'
 +21-Row Trees -0.0 +11- 2'
 +17- 2'
 +13-Row Pop -2'
 +09- 2'
 +04-Row Pop -2'

2

+195-3" Pop -6'

+82-2' +86-2'
 +74-Row -2' +78-2'
 +65-Row Poplars -2'
 +70-11 " -2'

2"

+104-Edge Service Drive
 +123-Approx Edge Service Drive

1

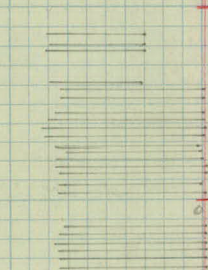
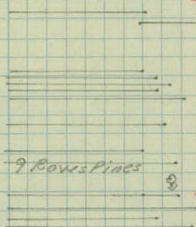
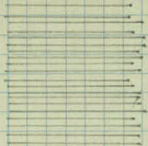
+25-R. Ent -12'
 +31-Hyd -40'
 +22-P.P. -42'

+15-Shoulder line

0+80

+80- -32'
 +76- -36'
 +87- -37'
 +86- -30'
 +82- -34'
 +79- -29'
 +75- -28'
 +71- -32'
 +68- -30'
 +65- -35'
 +61- -32'
 +57- Low Pile - 38'

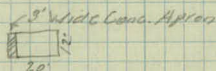
all trees & bushes are nursery stock.



Black Top

LL φ

20' Black Top over Pav.



#2 Low Pile - 38'

+106-Cor. Trees-31'

Poplars.

8 Rows.

+77-Cor. Trees-31'

+73-Cor. Shrubs-30'

+39-Cor. Shrubs-30'

9 Rows.

+35-N.W. Cor. Hb.-40'

12 +104-Cor. Lindens-31'

7 Rows.

+79-Cor. Lindens-31'

+75-Row Trees-14'

+58-5' +63-9' +68-12'

+38-6' +49-9' +48-9' +53-6'

+27-Row Lindens-5' +33-5'

Row Lindens

11 +23-Row Birch-5'-22'

+40- -26' +43-27'

+37- -25' +43-27'

+35- -26'

+29- -26'

+26- -25'

+22- -26'

+18- -26'

+14- -27'

+10- -27'

+6- -27'

10 +102-Row Shrubs-27'

+91- -30' +95-27'

+86- -18'

+76- -31'

+73-Row Shrubs-31'

9

+103-N.W. Cor. Hb.-33'

8

+91-N.W. Cor. Hb.-35'

7

+18-Pine Tree-14'-25'

+99-Row Cedars-25'

+93-Row Trees-25'

+88- -31'

+84-Row Trees-9'

+65-Row Lindens-32' +75-Lindens-18'

+52-Row Shrubs-7' +56-Row Shrubs-4'

+40-Row Pines-35' +46-Row Elm-32'

+38-2' Elm-4' 4 Rows 3

+19-Row Cedars-19' Pines-33'

6 +101-Row Cedars-14' +11-Cedar-11'

+72-15' x 20' 0" 17' 21'

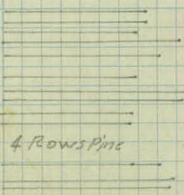
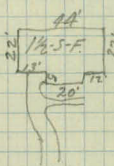
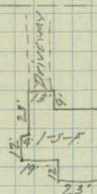
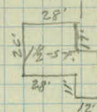
+54-Hyd-36'

8 Rows.

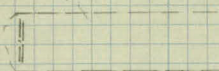
9 Rows

7 Rows

All trees and shrubs are nursery stock.



4 Rows Pine



xsections

Sta	+	π	-	Elev
B.M.	3.23	954.89		951.66
T.P.	3.13	954.66	3.36	951.53
B.M.	4.64	958.77	0.53	954.13
T.P.	6.07	960.23	4.61	954.16
T.P.	7.34	965.94	1.63	958.60
B.M.			1.54	964.40

0	+00	61.94
	+10	61.84
	+15	61.5
	+23	59.5
	+27	59.4
	+37	61.3
	+70	59.8
1		57.7

Lt

E

Pt.

Top N. E. Cor. Lower step of Ho. S.W. Cor. Percal + Ruggles

Top Hyd. S.W. Cor. Arona and Ruggles.

Top Hyd. S. E. Cor. Ruggles + Snelling.

4.0

$$\frac{452}{50} \quad \frac{410}{50} \quad \frac{370}{50}$$

$$\frac{46}{50} \quad \frac{44}{50} \quad \frac{40}{50}$$

$$\frac{80}{50} \quad \frac{75}{41} \quad \frac{66}{25} \quad \frac{64}{4} \quad \frac{63}{7} \quad \frac{52}{12} \quad \frac{47}{18} \quad \frac{62}{43} \quad \frac{62}{50}$$

$$\frac{80}{50} \quad \frac{75}{41} \quad \frac{66}{25} \quad \frac{65}{4} \quad \frac{67}{8} \quad \frac{50}{13} \quad \frac{47}{19} \quad \frac{59}{31} \quad \frac{70}{50} \quad \frac{62}{50}$$

$$\frac{75}{50} \quad \frac{55}{28} \quad \frac{48}{14} \quad \frac{46}{9} \quad \frac{43}{17} \quad \frac{47}{40} \quad \frac{46}{50} \quad \frac{47}{50}$$

$$\frac{83}{50} \quad \frac{67}{26} \quad \frac{61}{8} \quad \frac{58}{28} \quad \frac{63}{50} \quad \frac{63}{50}$$

$$\frac{98}{50} \quad \frac{89}{28} \quad \frac{83}{11} \quad \frac{82}{7} \quad \frac{79}{21} \quad \frac{79}{50} \quad \frac{82}{50}$$

Sta	+	π	-	Elev.
		965.94,		
1	+23			56.1
	+44			56.0
I.P.	1.54	960.14.	7.34	958.60.
	+47			56.9
	+53			56.9
	+58			55.1
2				54.1
	+50			54.4
3				54.1
	+15	415.22		54.3
	+45	446.22		54.0
	+75	476.22		53.8

Lt.

k

Rt.

$$\frac{96}{50} \quad \frac{98}{50} \quad \frac{99}{50}$$

$$\frac{97}{50} \quad \frac{99}{50} \quad \frac{100}{50}$$

$$\frac{32}{50} \quad \frac{31}{28} \quad \frac{32}{20} \quad \frac{41}{32} \quad \frac{34}{50} \quad \frac{35}{50}$$

$$\frac{32}{50} \quad \frac{31}{28} \quad \frac{32}{20} \quad \frac{41}{32} \quad \frac{34}{50} \quad \frac{35}{50}$$

$$\frac{47}{50} \quad \frac{48}{25} \quad \frac{50}{50} \quad \frac{47}{27} \quad \frac{49}{50}$$

$$\frac{58}{50} \quad \frac{59}{26} \quad \frac{60}{38} \quad \frac{57}{50} \quad \frac{61}{50}$$

$$\frac{54}{50} \quad \frac{55}{30} \quad \frac{57}{30} \quad \frac{58}{50} \quad \frac{51}{50}$$

$$\frac{52}{50} \quad \frac{55}{30} \quad \frac{60}{30} \quad \frac{58}{50} \quad \frac{54}{50}$$

$$\frac{52}{50} \quad \frac{54}{30} \quad \frac{58}{30} \quad \frac{58}{50} \quad \frac{54}{50}$$

$$\frac{55}{50} \quad \frac{57}{30} \quad \frac{61}{30} \quad \frac{58}{50} \quad \frac{57}{50} \quad \frac{53}{100} \quad \frac{51}{150}$$

$$\frac{63}{30} \quad \frac{60}{30} \quad \frac{63}{30} \quad \frac{59}{50} \quad \frac{58}{50}$$

Sta	+	π	-	Elev
		960.14		
4				54.1
	+ 50			54.3
5				53.7
	+ 20			
T.P.	5.37	967.53	7.98	952.16
	+50			53.1
6				53.1
	+42.36	42.94		52.4
	+72.86	72.94		52.2
7	+12.36	02.94		51.0
	+56			50.1
8				49.9

Lt.

K.

Rt.

$$\frac{6.1}{50} \quad \frac{6.2}{27} \quad \frac{6.0}{5} \quad \frac{6.0}{50} \quad \frac{6.3}{12} \quad \frac{6.3}{16} \quad \frac{7.3}{20} \quad \frac{5.8}{29} \quad \frac{5.8}{50}$$

$$\frac{6.0}{31} \quad \frac{5.9}{12} \quad \frac{5.8}{13} \quad \frac{5.9}{21} \quad \frac{7.9}{31} \quad \frac{5.3}{50} \quad \frac{5.4}{50}$$

$$\frac{5.9}{50} \quad \frac{5.8}{30} \quad \frac{6.4}{10} \quad \frac{6.4}{15} \quad \frac{6.5}{15} \quad \frac{8.5}{17} \quad \frac{8.4}{24} \quad \frac{5.7}{30} \quad \frac{5.6}{50}$$

53.73

$\frac{6.21}{\text{Elev. Cook Floor}}$

$$\frac{3.4}{50} \quad \frac{3.7}{30} \quad \frac{4.6}{7} \quad \frac{4.4}{15} \quad \frac{4.6}{15} \quad \frac{7.1}{19} \quad \frac{6.7}{27} \quad \frac{4.1}{30} \quad \frac{3.6}{50}$$

$$\frac{3.7}{30} \quad \frac{4.0}{30} \quad \frac{4.6}{8} \quad \frac{4.4}{13} \quad \frac{4.6}{18} \quad \frac{7.7}{24} \quad \frac{7.2}{31} \quad \frac{4.6}{31} \quad \frac{4.0}{39}$$

$$\frac{4.6}{50} \quad \frac{4.2}{30} \quad \frac{4.7}{5} \quad \frac{5.1}{13} \quad \frac{5.0}{17} \quad \frac{7.1}{24} \quad \frac{7.2}{30} \quad \frac{6.1}{30} \quad \frac{6.0}{50}$$

$$\frac{4.8}{50} \quad \frac{5.1}{33} \quad \frac{5.8}{10} \quad \frac{5.3}{30} \quad \frac{6.3}{30} \quad \frac{6.6}{50} \quad \frac{6.7}{100} \quad \frac{6.6}{150}$$

$$\frac{6.0}{50} \quad \frac{5.9}{30} \quad \frac{6.2}{12} \quad \frac{6.5}{13} \quad \frac{6.5}{19} \quad \frac{8.1}{23} \quad \frac{8.1}{29} \quad \frac{6.3}{29} \quad \frac{6.3}{50}$$

$$\frac{7.2}{50} \quad \frac{7.6}{30} \quad \frac{8.4}{15} \quad \frac{7.4}{13} \quad \frac{7.5}{19} \quad \frac{8.1}{24} \quad \frac{8.1}{24} \quad \frac{6.4}{50} \quad \text{L.O.}$$

$$\frac{8.2}{50} \quad \frac{9.1}{30} \quad \frac{9.8}{17} \quad \frac{7.6}{20} \quad \frac{8.1}{30} \quad \frac{8.4}{30} \quad \frac{7.2}{50}$$

Sta.	+	π	-	Elev.
		957.53		
8	+50			48.9
9				48.0
T.P.	7.37	956.09	8.83	948.70
+68.98	69.66			49.3
+98.98	99.66			58.8
10	+28.98	29.66		51.3
11				50.4
	+50			50.6
12				49.7
T.P.	4.93	955.58	5.44	950.65
+50				49.8
	+95.77			50.0
13	+25.77			50.3
B.M.		3.89		951.69
				951.66 ✓

Lt.

C.

Rt.

$$\frac{94}{50} \quad \frac{119}{35} \quad \frac{118}{15} \quad \frac{86}{16} \quad \frac{87}{30} \quad \frac{92}{50} \quad \frac{86}{50}$$

$$\frac{91}{50} \quad \frac{97}{30} \quad \frac{94}{15} \quad \frac{95}{6} \quad \frac{95}{15} \quad \frac{96}{23} \quad \frac{70}{30} \quad \frac{66}{50} \quad \frac{64}{50}$$

$$\frac{71}{50} \quad \frac{69}{30} \quad \frac{69}{15} \quad \frac{68}{16} \quad \frac{71}{22} \quad \frac{55}{30} \quad \frac{52}{30} \quad \frac{52}{50}$$

$$\frac{69}{50} \quad \frac{59}{30} \quad \frac{56}{10} \quad \frac{53}{30} \quad \frac{48}{50} \quad \frac{53}{100} \quad \frac{53}{150} \quad \frac{50}{150}$$

$$\frac{53}{50} \quad \frac{51}{30} \quad \frac{49}{10} \quad \frac{48}{20} \quad \frac{52}{30} \quad \frac{47}{50} \quad \frac{50}{50}$$

$$\frac{54}{50} \quad \frac{53}{30} \quad \frac{51}{10} \quad \frac{57}{19} \quad \frac{56}{30} \quad \frac{50}{50} \quad \frac{53}{50}$$

$$\frac{14}{50} \quad \frac{54}{30} \quad \frac{57}{10} \quad \frac{55}{17} \quad \frac{54}{30} \quad \frac{61}{50} \quad \frac{62}{50}$$

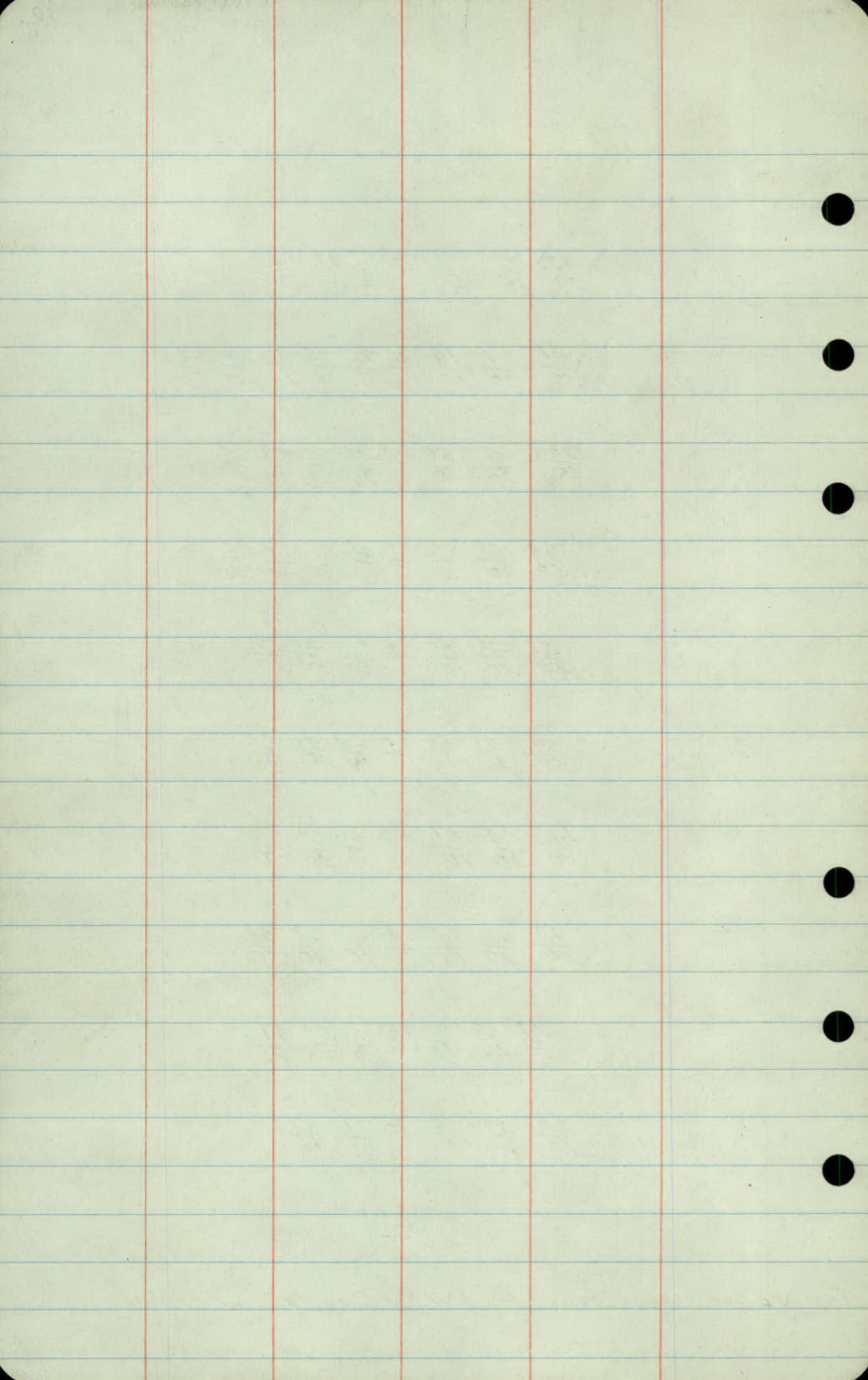
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$$\frac{59}{50} \quad \frac{55}{33} \quad \frac{58}{10} \quad \frac{58}{19} \quad \frac{60}{30} \quad \frac{51}{38} \quad \frac{47}{38}$$

$$\frac{60}{50} \quad \frac{54}{30} \quad \frac{56}{10} \quad \frac{56}{30} \quad \frac{57}{30} \quad \frac{57}{30}$$

5.3

Top N.E. Cor. Lower step at Ho. S.W. Cor. Ruggles and Pascal



PLAN SURVEY

PASCAL AVE.

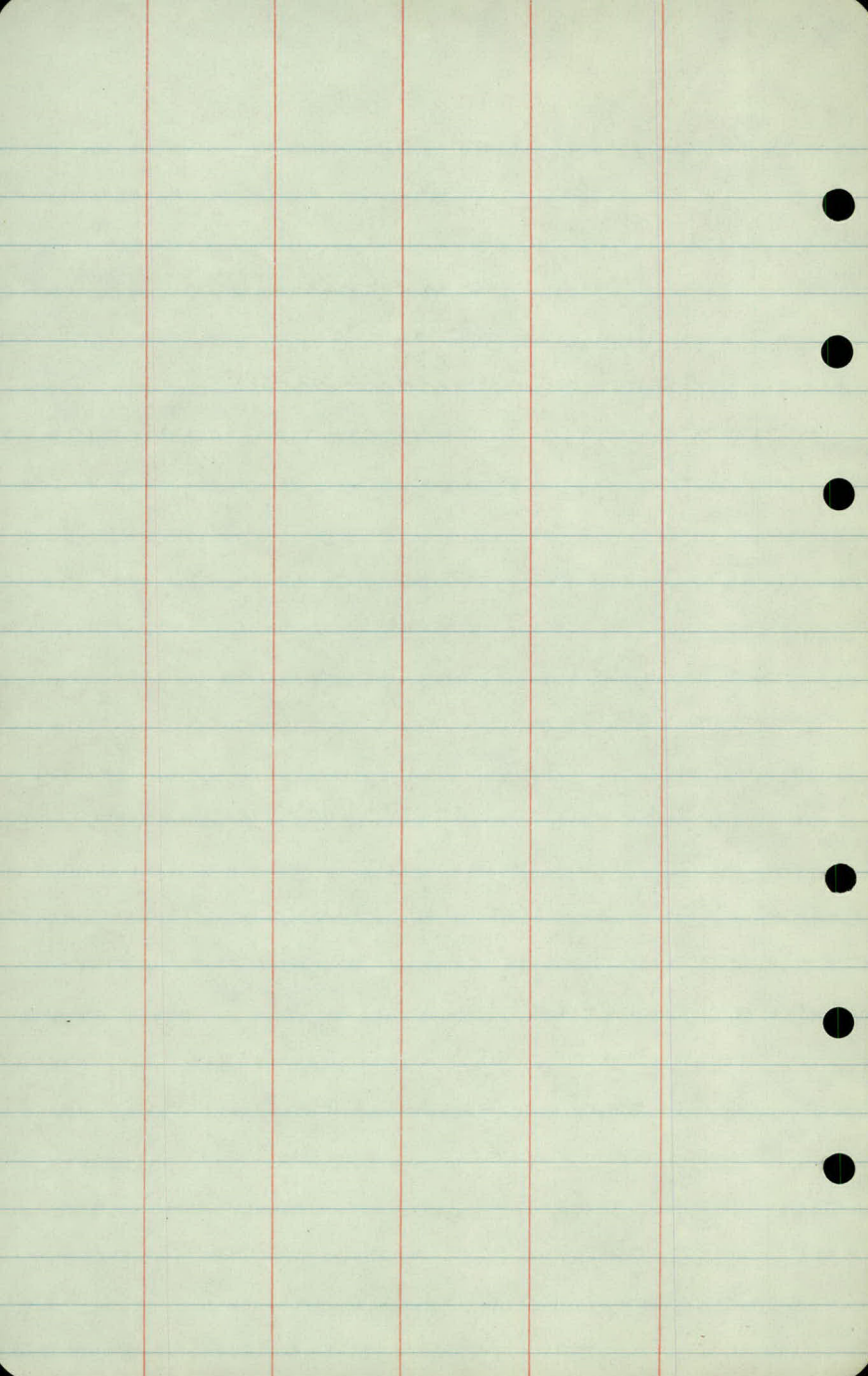
Larpeur Ave to Co. Rd. "A" 2"

INDEX.

Align - 1-3

Topog. 4-12

Xsections 13-21



Alignment

Sta	Point	ΔLt	ΔEf
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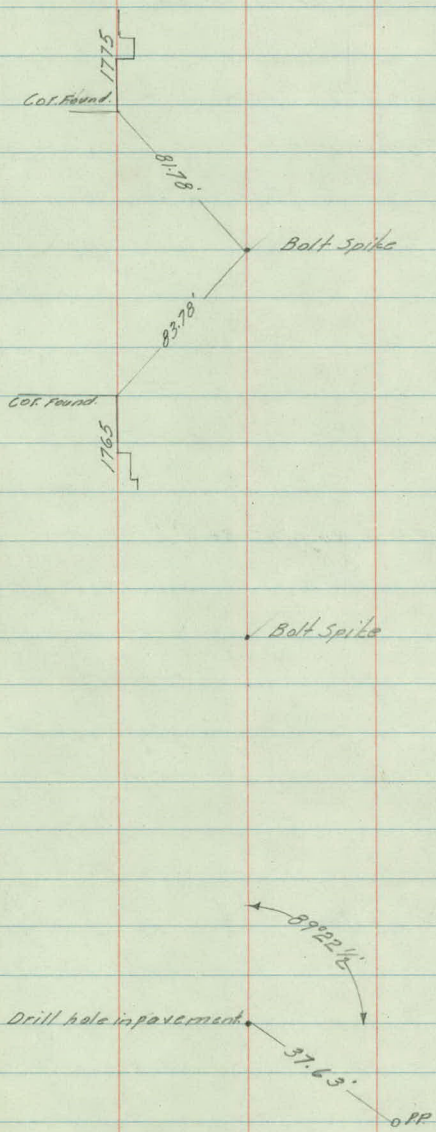
9	+56.62 P.O.T.		
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3	+87.55 P.O.T. = Crawford St.		
---	------------------------------	--	--

0	+00 = La Repenteur Ave.		
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12-26-40
K.A.
L.C.
M.B.
C.N.

12

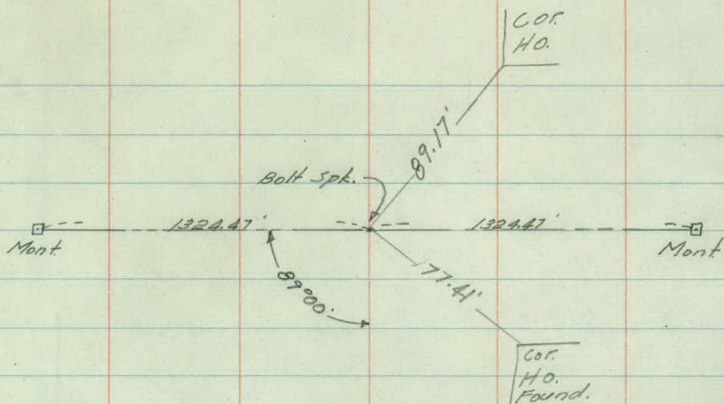


Sta Point Δ Lt Δ Rt

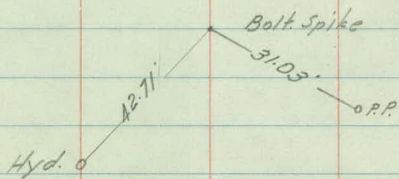
26 +37.10 = $\&$ Roselawn Ave.

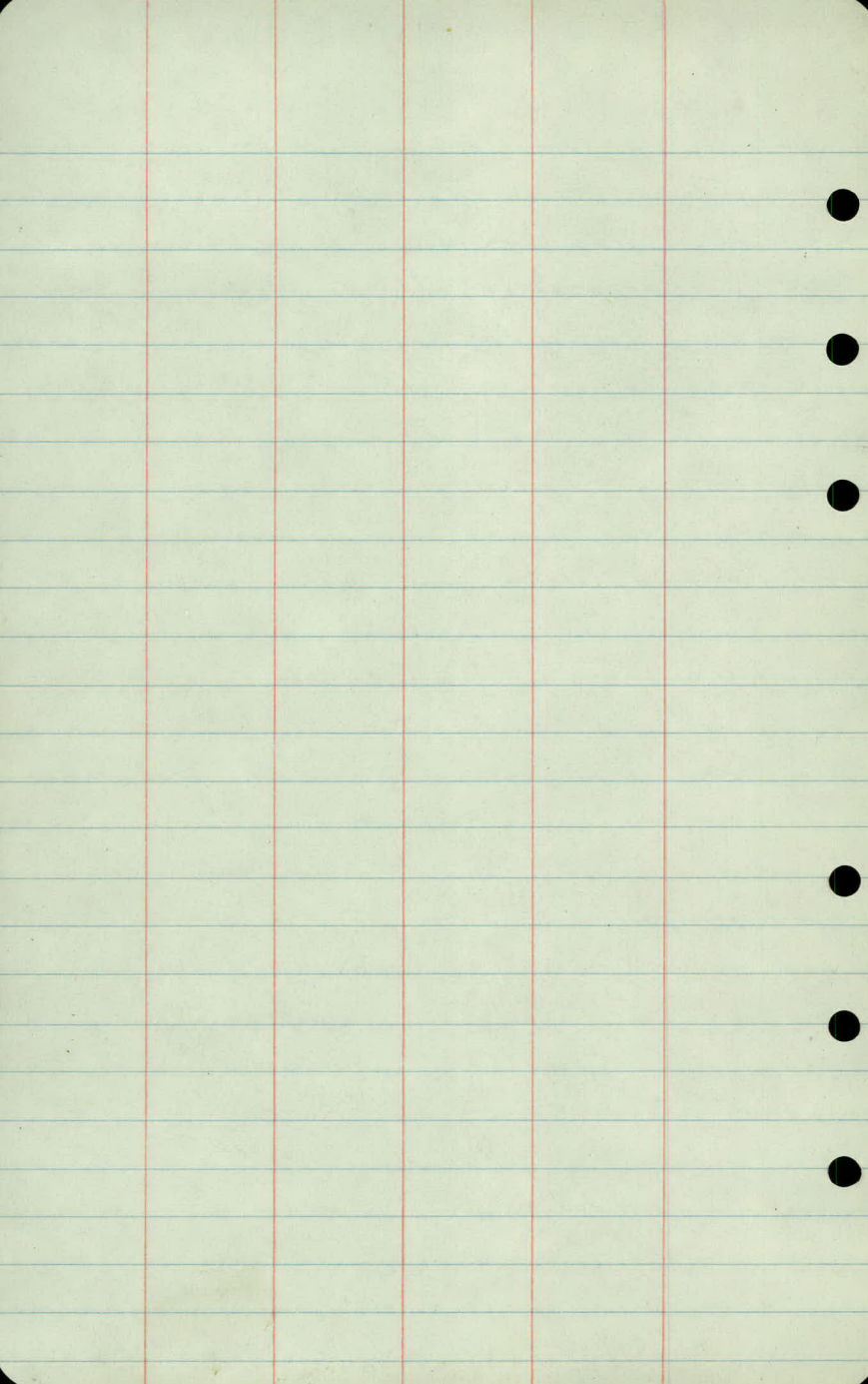
19 +78.25 P.O.T. = $\&$ Ruggles St

13 +18.45 P.O.T. = $\&$ Garden St.



Bolt Spike





Topography

13' 9'

+15-End 12" C.M.-15'

2

12' 9'

+95-5 E Cor Garage - 33'

+91-PP-29'

+56-6 Alley

+75-End 12" C.M.-15'

1

13' 8'

+50-2" Elm-37'

+46-stop sign - 15'

+37-Rd-13' Rd Sign-25'

+34-End 15" C.M.-14'

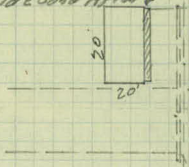
+21-Rod-21'

+34-End 15" C.M.-6' Rd-6'

+22-Rod-14'

0100

3' Wide Load Area



+42-4"E/m-32'

+52 } 2' wide Drives - 30'
+27 } 3' wide

+19-4"E/m-32'

6

17' 1'

+95-4"E/m-32'

+89-S.E. Cor Ho. - 65'

+72 } 2' wide Drives - 30'
+67 }

+55-4"E/m-32'

+33-S.E. Cor Ho. - 65'

+22 }

+17-R. 2' Driveway - 31'

+15-4"E/m-32'

5

17' 2'

+80-S.E. Cor Ho. - 70'

+74-4"E/m-32'

+59-R. 4' wide Walk - 24'

+34-S.E. Cor Ho. - 65'

+34-4"E/m-32'

+17-Hedge - 30'

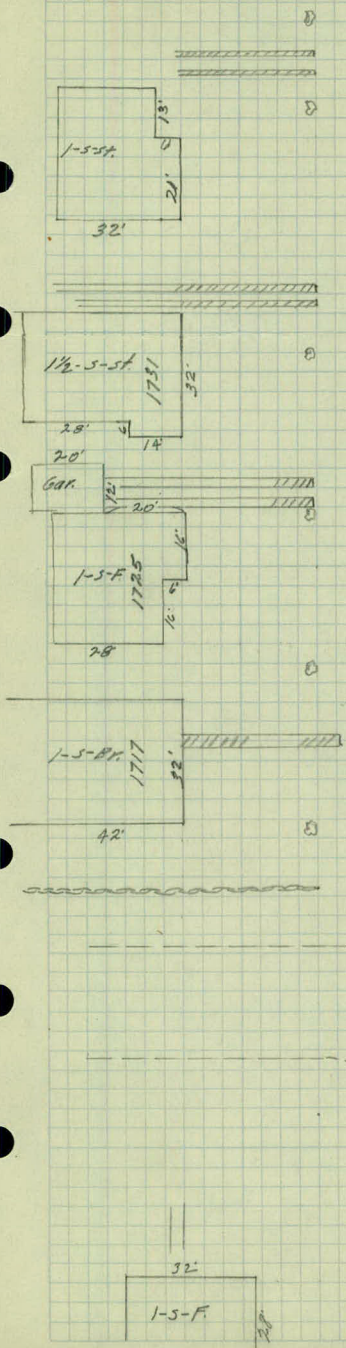
4

13' 7'

+16-N.E. Cor Ho. - 47'

3

13' 9'



Cult.

+92-4" Ash - 32'

+119 } 2" wide Drives - 24'
+114 }

+46-5" E Cor Ho - 65'

+32-2" Pine - 32'

+121 } 2" wide Drives - 24'
+116 }

+113-4" Ash - 32'

9 17'-1'

+94-8-4" Walk - 24'

+77-5" E Cor Ho - 65'

+73-4" Ash - 32'

+161 } 2" wide Drives - 30'
+156 }

+33-4" Elm - 32'

+21-5" E Cor Ho - 65'

+105-3/4" Pine - 34'

8 18'-0'
+102 } 2" wide Drives - 30'
+107 }

+89-2" Elm - 32'

+66-8-4" Walk - 30'

+62-5" E Cor Ho - 71'

+54-4" Elm - 32'

+142 } 2" wide Drives - 30'
+137 }

+115-4" Elm - 32'

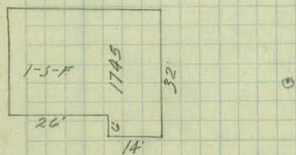
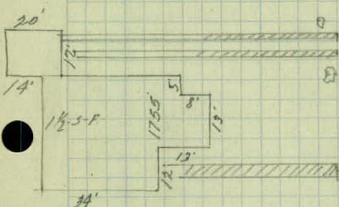
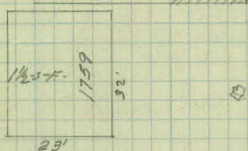
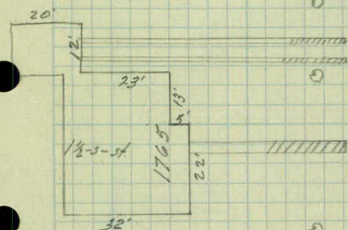
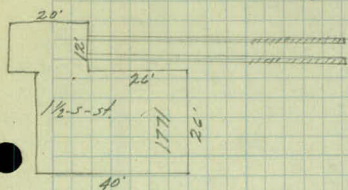
+101-5" E Cor Ho - 65'

7 17'-0'

+187 } 2" wide Drives - 30'
+182 }

+74-4" Elm - 32'

+45-5" E Cor Ho - 70'



Cult.

+52-4" Elm-2'

12" X 32' C.M.

+48-End 12" C.M.-3'

+32-End 12" C.M.-30'

+31-Shoulder Line

+05-Shoulder Line

13

+92-End 12" C.M.-24.0'

+97-P.R.-23'

0.791 +92-End 12" C.M.-2.0'

+86-21'

+82-Hyd.-22'

+73-4" Elm-32'

+33-2" Elm-32'

+20 } 2' Wide Drive - 30'
+15 }

12

18' 0

+84-S.E. Cor. Ho.-65

+53-4" Elm-32'

+26-S.E. Cor. Ho.-72

+10-4" Elm-32'

11

20' 1'

+72-4" Elm-32'

+47-Lillie's Hedge - 32'

+39 } 2' Wide Drive - 30'
+34 }

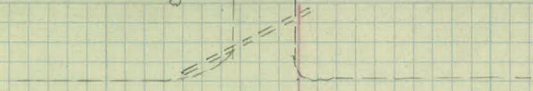
+26-4" Ash-32'

+18-S. 4' Walk-24'

10 S.E. Cor. Ho.-69'

18'-0

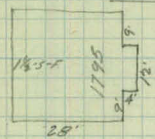
D



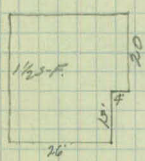
D



D



D

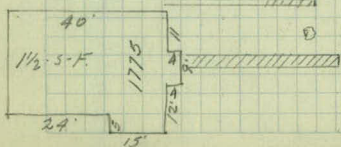


D

D



D



+74-3" Elm - 32'

+33-2" Elm

16

17-2'

+94-Elm-32'

+52-2" Elm

+12-2" Elm-32'

15

18-3

+73-4" Elm-32'

+65 } 2" Wide Drives - 42
+60 }

+25.5 E. Cor. Ho. - 65

14

17-3'

+94-2 5/16 - 32'

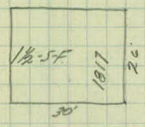
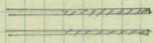
D

B

D

D

D



D

+09 Bog Nursery
20 26'

+40 End Road

19 +09 S.E. Cor. Ho. - 65
+03 Ent 12' 2'

+75-4"E/m - 32'

+95-8"E/m

+20-Ent

18 13' 1'

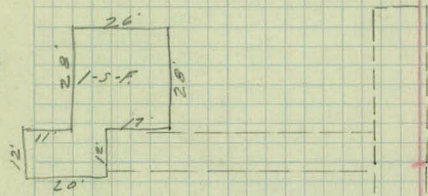
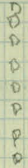
+95-8"E/m - 32'

+84 S.E. Cor. Ho. - 65

+54-3"E/m -

17 +12-2"E/m - 32' 15' 0'

Hort
Nursery



UNCULTIVATED

23

22

21

Nursery

Thick Nursery Stock

UNCULTIVATED

+29 Edge Black Top

+10 $\frac{P.P.}{10}$ +09 $\frac{End Nursery}{23}$ +13 $\frac{Tr}{13}$

26

+73 $\frac{Tr}{12}$ +96 $\frac{Tr}{13}$
+60 $\frac{Tr}{11}$

+44 $\frac{Tr}{11}$ +45 $\frac{SW Cor Ho}{43'}$

+28 $\frac{Tr}{10}$ +12 $\frac{Pump Ho}{48'}$
+13 $\frac{Tr}{10}$

25

+83 $\frac{Cor Fe}{1'}$

+51 $\frac{Cor Barn}{43}$

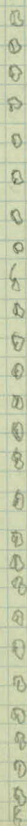
+40 $\frac{Bas Fe}{1}$
+40 $\frac{Cor Barn}{1'}$

+21 $\frac{12" B.E.}{11}$

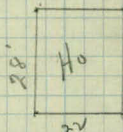
24

20' Black Top

Nursery



Yard



Brush

Wood Fc

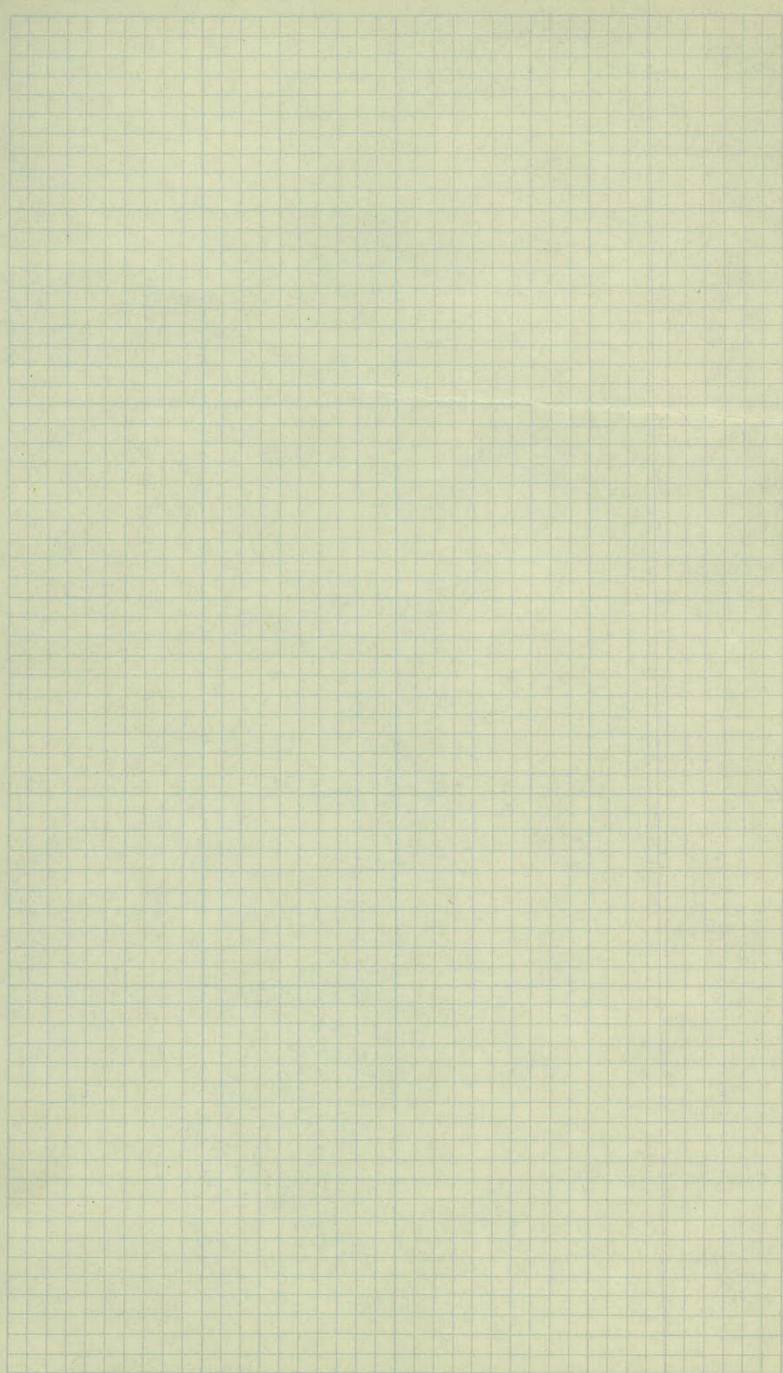
Barn Yard

Barn

Moensville



18



X Sections

Sta	+	π	-	Elev
B.M.				
B.M.	6.07	957.23		951.16
0	+10			51.1
	+23			50.9
	+29			50.8
	+34	Flow Line of Culv		
	+44			50.6
	+48			50.7
1				51.2
	+50			51.9
	+75			52.1
2				52.2

Lt

R

Rt

Top Iron N.W. Cor. Larp & Pascal Ave's.
 Drill Hole in Pav. R Larp & Pascal Ave's.

$$\frac{613}{50} \quad \frac{617}{50} \quad \frac{62}{50}$$

$$\frac{62}{50} \quad \frac{65}{20} \quad \frac{61}{11} \quad \frac{63}{13} \quad \frac{67}{17} \quad \frac{64}{39} \quad \frac{63}{50}$$

$$\frac{79}{50} \quad \frac{80}{29} \quad \frac{77}{17} \quad \frac{64}{15}$$

$$\frac{64}{7} \quad \frac{69}{11} \quad \frac{78}{31} \quad \frac{82}{50}$$

$$949.20 \\ \underline{8.93}$$

$$949.01 \\ \underline{8.22}$$

$$\frac{79}{50} \quad \frac{78}{28} \quad \frac{71}{15} \quad \frac{63}{12} \quad \frac{66}{5} \quad \frac{68}{9} \quad \frac{79}{26} \quad \frac{80}{50}$$

$$\frac{62}{50} \quad \frac{63}{26} \quad \frac{65}{18} \quad \frac{70}{15} \quad \frac{63}{12} \quad \frac{65}{7} \quad \frac{66}{12} \quad \frac{75}{16} \quad \frac{70}{32} \quad \frac{74}{30}$$

$$\frac{60}{50} \quad \frac{57}{18} \quad \frac{65}{16} \quad \frac{60}{10} \quad \frac{58}{12} \quad \frac{66}{15} \quad \frac{68}{21} \quad \frac{69}{32} \quad \frac{65}{50}$$

$$\frac{50}{50} \quad \frac{50}{20} \quad \frac{53}{17} \quad \frac{61}{16} \quad \frac{54}{11} \quad \frac{53}{10} \quad \frac{55}{12} \quad \frac{62}{16} \quad \frac{61}{27} \quad \frac{62}{41} \quad \frac{59}{50}$$

Colly

$$\frac{50}{50} \quad \frac{50}{50} \quad \frac{51}{17} \quad \frac{616}{16} \quad \frac{52}{12}$$

$$\frac{51}{10} \quad \frac{53}{13} \quad \frac{64}{25} \quad \frac{60}{34} \quad \frac{57}{50}$$

52.67

$$\text{Conc. Aprax} \quad \frac{456}{30} \quad \frac{50}{11} \quad \frac{50}{10} \quad \frac{52}{12} \quad \frac{62}{39} \quad \frac{61}{50}$$

Sta	+	T ✓	-	Elev
		957.23		
2	+16			52.2.
	+50			52.2.
3				52.2.
	+57.55			52.5.
	+87.55			52.6.
A	+17.55			52.9.
	+50			53.2.
T.P.	11.87	965.38 ✓	3.72	953.51 ✓
	+54 & Walk			
5				54.0.
	+17 End Conc. Drive			
	+50			55.5.

Lt

R

Rt

Culv

$$\frac{46}{50} \frac{48}{30} \frac{49}{18} \frac{60}{15} \quad \frac{50}{12} \quad \frac{50}{9} \quad \frac{52}{9} \quad \frac{60}{10} \quad \frac{61}{25} \quad \frac{62}{50}$$

$$\frac{42}{50} \quad \frac{47}{31} \quad \frac{46}{18} \quad \frac{58}{16} \quad \frac{51}{12} \quad \frac{50}{10} \quad \frac{50}{13} \quad \frac{55}{38} \quad \frac{58}{50}$$

$$\frac{26}{45} \frac{30}{41} \frac{46}{30} \frac{46}{22} \frac{49}{17} \frac{56}{16} \frac{50}{12} \quad \frac{50}{9} \frac{48}{14} \frac{57}{22} \quad \frac{56}{22} \quad \frac{63}{50}$$

$$\frac{38}{50} \quad \frac{47}{24} \quad \frac{47}{19} \quad \frac{54}{16} \quad \frac{47}{9} \quad \frac{45}{9} \quad \frac{58}{11} \quad \frac{56}{28} \quad \frac{58}{50}$$

$$\frac{44}{100} \frac{45}{30} \quad \frac{48}{24} \quad \frac{50}{16} \frac{47}{9} \quad \frac{46}{10} \frac{47}{12} \quad \frac{49}{29} \quad \frac{50}{50} \quad \frac{53}{50}$$

$$\frac{36}{50} \quad \frac{42}{30} \quad \frac{43}{20} \quad \frac{45}{14} \quad \frac{43}{6} \quad \frac{43}{6} \quad \frac{47}{8} \quad \frac{50}{30} \quad \frac{55}{50}$$

$$\frac{35}{50} \quad \frac{37}{25} \quad \frac{41}{19} \quad \frac{41}{15}$$

$$\frac{40}{5} \quad \frac{40}{8} \quad \frac{47}{25} \quad \frac{38}{25} \quad \frac{40}{50}$$

953.51

$$\frac{11.87}{30}$$

$$\frac{108}{50} \quad \frac{114}{31} \quad \frac{116}{21} \quad \frac{117}{18} \quad \frac{114}{4} \quad \frac{114}{14} \quad \frac{116}{29} \quad \frac{113}{29} \quad \frac{112}{50}$$

954.13

$$\frac{11.25}{30}$$

$$\frac{101}{50} \quad \frac{106}{25} \quad \frac{106}{21} \quad \frac{99}{5} \quad \frac{99}{21} \quad \frac{95}{21} \quad \frac{96}{50}$$

Sta. + π ✓ - Elev

965.38

5 +72 End Conc. Drive

57.3 -

+32 End Conc. Drive

+50

58.9 -

+87 End Conc. Drive

60.1 -

+92 End Conc. Drive

+50

60.8 -

+66 End Conc. Walk

61.4 -

+02 End Conc. Drive

lt

4

rt

955.63.

$$\frac{975}{30}$$

$$\frac{79}{50} \frac{88}{30} \frac{85}{21} \frac{89}{17} \frac{81}{8} \frac{79}{8} \frac{77}{28} \frac{86}{50}$$

957.84.

$$\frac{7.54}{30}$$

$$\frac{60}{50} \frac{62}{28} \frac{66}{19} \frac{70}{18} \frac{65}{7} \frac{66}{29} \frac{70}{29} \frac{80}{50}$$

959.91.

$$\frac{5.47}{30}$$

$$\frac{48}{50} \frac{50}{30} \frac{52}{20} \frac{55}{17} \frac{53}{4} \frac{57}{16} \frac{65}{36} \frac{68}{36} \frac{73}{50}$$

960.68.

$$\frac{470}{30}$$

$$\frac{37}{50} \frac{40}{30} \frac{39}{20} \frac{46}{18} \frac{46}{6} \frac{52}{24} \frac{55}{24} \frac{66}{50}$$

961.76.

$$\frac{362}{30}$$

$$\frac{33}{50} \frac{35}{31} \frac{32}{20} \frac{39}{18} \frac{40}{6} \frac{45}{26} \frac{50}{26} \frac{40}{50}$$

961.94.

$$\frac{344}{30}$$

Sta	+	π ✓	-	Elev
		765.38		
8	+50			62.1 .
	+61	End Conc. Drive		
	+94	End Conc. Walk.		
T.P.	3.34	966.39 ✓	2.33	963.05 ✓
9			2.33	
	+21	End Conc. Drive		
	+50			64.2 .
	+79	End Conc. Drive		
10				63.7 .
	+18	End Conc. Walk.		
	+39	End Conc. Drive.		
	+44			61.5 .

H

E

Rt

$$\frac{27}{50} \quad \frac{30}{30} \quad \frac{34}{22} \quad \frac{38}{73} \quad \frac{42}{27} \quad \frac{44}{27} \quad \frac{52}{50}$$

$$962.42 \cdot$$

$$\frac{2.96}{30}$$

$$963.05 \cdot$$

$$\frac{2.33}{24}$$

$$963.20 \cdot$$

$$\frac{3.19}{24}$$

$$\frac{23}{50} \quad \frac{26}{24} \quad \frac{27}{19} \quad \frac{22}{70} \quad \frac{28}{10} \quad \frac{33}{30} \quad \frac{42}{50}$$

$$963.75 \cdot$$

$$\frac{2.64}{24}$$

$$\frac{24}{50} \quad \frac{28}{24} \quad \frac{30}{20} \quad \frac{27}{70} \quad \frac{32}{10} \quad \frac{38}{29} \quad \frac{48}{50}$$

$$963.19 \cdot$$

$$\frac{3.20}{24}$$

$$963.17 \cdot$$

$$\frac{3.22}{30}$$

$$\frac{30}{50} \quad \frac{40}{22} \quad \frac{47}{19} \quad \frac{49}{9} \quad \frac{54}{22} \quad \frac{61}{22} \quad \frac{77}{50}$$

Sta	+	π ✓	-	Elev.
		966.39		
10	+56			60.5.
11				56.6.
T.P.	2.38	958.37 ✓	10.40	955.99
	+35			55.3.
12	+65			54.9.
				54.4.
	+20	Conc. Drive.		
	+50			52.6.
	+88.45			51.5.
	+92	FL. CURV		
13	+06			51.6.
	+18.45			51.6.
B.M.	1.27	956.49 ✓	3.15	955.22

Lt

R

Rt

$$\frac{49}{50} \quad \frac{52}{34} \quad \frac{54}{21} \quad \frac{60}{19} \quad \frac{59}{9} \quad \frac{66}{9} \quad \frac{72}{21} \quad \frac{90}{30}$$

$$\frac{83}{50} \quad \frac{93}{30} \quad \frac{93}{21} \quad \frac{95}{20} \quad \frac{94}{8} \quad \frac{98}{6} \quad \frac{109}{21} \quad \frac{114}{30}$$

$$\frac{23}{50} \quad \frac{26}{30} \quad \frac{30}{21} \quad \frac{27}{13} \quad \frac{31}{7} \quad \frac{42}{7} \quad \frac{50}{22} \quad \frac{68}{50}$$

$$\frac{28}{50} \quad \frac{33}{30} \quad \frac{35}{20} \quad \frac{33}{12} \quad \frac{35}{6} \quad \frac{48}{6} \quad \frac{54}{20} \quad \frac{82}{50}$$

$$\frac{27}{50} \quad \frac{30}{30} \quad \frac{38}{22} \quad \frac{40}{20}$$

$$\frac{40}{50} \quad \frac{42}{50} \quad \frac{60}{9} \quad \frac{74}{24} \quad \frac{94}{50}$$

$$55.7 \quad 55.14$$

$$\frac{2.67}{49} \quad \frac{3.23}{58}$$

$$\frac{39}{50} \quad \frac{42}{41} \quad \frac{51}{25} \quad \frac{50}{21} \quad \frac{59}{20} \quad \frac{58}{6} \quad \frac{76}{12} \quad \frac{96}{30} \quad \frac{112}{30} \quad \frac{125}{50}$$

$$\frac{47}{50} \quad \frac{61}{26} \quad \frac{79}{24} \quad \frac{79}{22} \quad \frac{67}{21} \quad \frac{64}{15} \quad \frac{69}{6} \quad \frac{86}{14} \quad \frac{106}{22} \quad \frac{112}{22} \quad \frac{121}{50}$$

$$50.09$$

$$49.20$$

$$\frac{11}{50}$$

$$\frac{8.28}{50}$$

$$\frac{7.17}{50}$$

$$\frac{68}{50} \quad \frac{68}{37} \quad \frac{73}{34} \quad \frac{73}{32} \quad \frac{70}{30} \quad \frac{65}{19} \quad \frac{68}{19} \quad \frac{73}{19} \quad \frac{78}{50}$$

$$\frac{6.4}{50}$$

$$\frac{6.8}{50}$$

$$\frac{7.5}{50}$$

Sta	+	π	-	Elev
		956.49		
13+31				51.6.
+41				51.0.
+50				50.9.
14				51.6.
+50				52.2.
15				50.2.
+50				46.1.
T.P.	7.44	953.25	10.68	945.81
16				44.9.
+50				46.4.
17				47.9.
+50				48.1.
18				48.7.

L+

*

R1

$$\frac{5.0}{50} \quad \frac{5.0}{25} \quad 4.9 \quad \frac{5.4}{10} \quad \frac{5.9}{50}$$

$$\frac{4.7}{50} \quad \frac{4.7}{33} \quad \frac{4.5}{25} \quad 5.5 \quad \frac{6.8}{3} \quad \frac{7.7}{7} \quad \frac{9.0}{26} \quad \frac{9.2}{60}$$

$$\begin{array}{ccccccc} & & 6.20 & & & & 7.55 \\ & & FL & & & & FL \\ \frac{2.3}{50} & \frac{3.5}{34} & \frac{4.5}{16} & \frac{4.8}{5} & 5.6 & \frac{8.0}{3} & \frac{8.4}{14} & \frac{9.5}{30} & \frac{10.4}{50} \end{array}$$

$$\frac{1.3}{50} \quad \frac{2.8}{31} \quad \frac{3.1}{20} \quad \frac{4.1}{18} \quad \frac{3.9}{2} \quad 4.9 \quad \frac{6.2}{4} \quad \frac{6.9}{19} \quad \frac{8.0}{35} \quad \frac{8.1}{50}$$

$$\frac{0.4}{50} \quad \frac{2.9}{24} \quad \frac{3.5}{19} \quad 4.3 \quad \frac{5.9}{6} \quad \frac{7.4}{30} \quad \frac{8.3}{50}$$

$$\frac{2.8}{50} \quad \frac{4.5}{27} \quad \frac{4.6}{19} \quad \frac{5.7}{18} \quad \frac{5.6}{3} \quad 6.3 \quad \frac{7.2}{3} \quad \frac{8.7}{13} \quad \frac{9.8}{29} \quad \frac{11.4}{50}$$

$$\frac{6.3}{50} \quad \frac{7.8}{33} \quad \frac{8.1}{20} \quad \frac{9.5}{18} \quad \frac{9.8}{3} \quad 11.4 \quad \frac{10.7}{6} \quad \frac{12.0}{9} \quad \frac{13.2}{24} \quad \frac{14.5}{50}$$

$$\frac{4.2}{50} \quad \frac{5.6}{37} \quad \frac{6.5}{22} \quad \frac{6.7}{19} \quad \frac{7.7}{18} \quad \frac{7.4}{4} \quad 8.4 \quad \frac{8.8}{3} \quad \frac{10.0}{10} \quad \frac{10.8}{27} \quad \frac{11.5}{50}$$

$$\frac{4.6}{50} \quad \frac{5.4}{32} \quad \frac{5.8}{19} \quad \frac{7.3}{17} \quad \frac{6.8}{4} \quad 6.1 \quad 6.9 \quad \frac{6.5}{3} \quad \frac{8.2}{6} \quad \frac{8.8}{17} \quad \frac{9.5}{35} \quad \frac{10.0}{50}$$

$$\frac{4.6}{50} \quad \frac{4.8}{35} \quad \frac{4.4}{19} \quad \frac{5.9}{17} \quad \frac{5.4}{14} \quad 5.4 \quad \frac{5.9}{7} \quad \frac{7.5}{27} \quad \frac{8.0}{50}$$

$$\frac{4.5}{50} \quad \frac{4.9}{32} \quad \frac{4.9}{18} \quad \frac{6.1}{16} \quad \frac{5.6}{14} \quad 5.2 \quad \frac{5.7}{5} \quad \frac{5.4}{17} \quad \frac{5.3}{36} \quad \frac{5.3}{50}$$

$$\frac{2.9}{50} \quad \frac{3.8}{32} \quad \frac{4.6}{19} \quad \frac{5.3}{16} \quad \frac{5.5}{13} \quad \frac{4.6}{9} \quad 4.6 \quad \frac{4.9}{8} \quad \frac{4.6}{30} \quad \frac{4.5}{50}$$

Sta	+	π 953.25	-	Elev
18+50				49.1.
19				49.6.
B.M.	3.46		1.57	
+50				50.2.
+78 ²⁵				50.3.
20				49.8.
B.M.	3.46	955.12	1.59	951.66
+50				48.7.
21				49.3.
+50				50.4.
22				51.1.
+50				51.2.
23				51.5.
T.P.	4.80	957.09	2.83	952.29
+50	4.80		2.83	51.4.

LT

K

RT

$$\frac{4.1}{50} \frac{4.3}{31} \frac{4.2}{19} \frac{5.4}{17} \frac{4.8}{14} \frac{4.2}{11} \frac{4.1}{7} \frac{4.1}{25} \frac{4.2}{50}$$

$$\frac{3.1}{50} \frac{3.6}{33} \frac{4.2}{18} \frac{4.0}{12} 3.7 \frac{4.0}{6} \frac{4.0}{27} \frac{3.9}{50}$$

$$\frac{3.0}{50} \frac{3.4}{23} \frac{3.0}{13} 3.1 \frac{3.2}{8} \frac{3.3}{27} \frac{3.4}{50}$$

$$\frac{3.4}{50} 3.0 \frac{4.0}{50}$$

$$\frac{3.4}{50} \frac{3.0}{21} \frac{4.0}{9} \frac{3.6}{8} 3.5 \frac{4.2}{11} \frac{4.1}{28} \frac{4.3}{50}$$

NE Cor Bot Horn Step 60' L1 19+20

$$\frac{5.9}{50} \frac{6.1}{22} \frac{6.4}{17} \frac{6.8}{13} \frac{6.8}{6} 6.4 \frac{6.4}{22} \frac{6.4}{50}$$

$$\frac{5.5}{50} \frac{5.7}{22} \frac{6.2}{14} \frac{6.2}{6} 5.8 \frac{5.5}{10} \frac{5.4}{29} \frac{5.4}{50}$$

$$\frac{4.2}{50} \frac{4.2}{22} \frac{5.0}{14} \frac{4.8}{4} 4.7 \frac{4.2}{5} \frac{4.3}{20} \frac{4.5}{50}$$

$$\frac{3.6}{50} \frac{3.6}{21} \frac{3.9}{17} \frac{4.3}{8} \frac{4.1}{2} 4.0 \frac{3.9}{6} \frac{4.2}{16} \frac{4.4}{29} \frac{4.8}{50}$$

$$\frac{3.5}{50} \frac{3.5}{32} \frac{3.5}{19} \frac{4.2}{12} \frac{4.0}{6} 3.9 \frac{3.8}{11} \frac{4.1}{50}$$

$$\frac{3.6}{50} \frac{3.3}{25} \frac{3.9}{18} \frac{4.2}{9} 3.6 \frac{3.8}{10} \frac{3.8}{26} \frac{4.1}{50}$$

$$\frac{5.2}{50} \frac{5.4}{33} \frac{5.5}{20} \frac{6.1}{7} 5.7 \frac{6.0}{14} \frac{6.5}{50}$$

Sta	+	π	-	Elev
24		957.09		51.5
+30				51.9
25				51.5
+50				51.5
26				52.5
+25				52.9
+37 ¹⁰				53.6
B.M			2.52	954.57

Lt

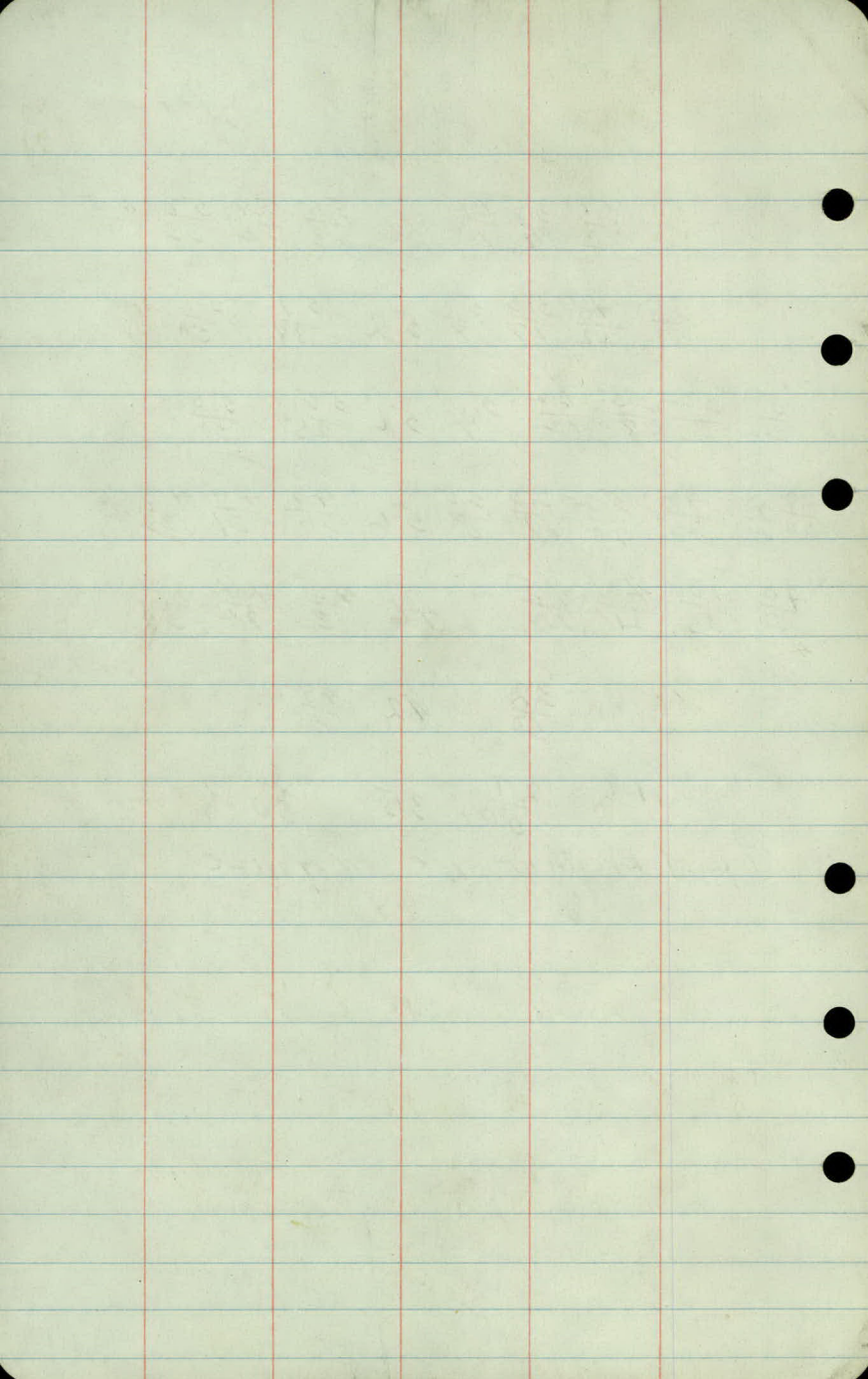
R

Rt

 $\frac{5.0}{50}$ $\frac{5.1}{23}$ $\frac{5.5}{17}$ $\frac{6.1}{10}$ 5.6 $\frac{5.6}{13}$ $\frac{5.9}{16}$ $\frac{5.9}{33}$ $\frac{6.5}{50}$
 $\frac{5.0}{50}$ $\frac{4.8}{22}$ $\frac{5.5}{17}$ $\frac{5.9}{8}$ 5.2 $\frac{5.9}{38}$ $\frac{5.9}{50}$
 $\frac{5.2}{50}$ $\frac{5.2}{23}$ $\frac{5.5}{18}$ $\frac{6.2}{12}$ ~~$\frac{5.5}{17}$~~ 5.6 $\frac{5.5}{25}$ $\frac{5.5}{50}$
 $\frac{4.9}{50}$ $\frac{4.8}{42}$ $\frac{4.9}{25}$ $\frac{5.2}{20}$ $\frac{5.3}{11}$ $\frac{5.5}{5}$ 5.6 $\frac{4.9}{10}$ $\frac{4.4}{31}$ $\frac{4.3}{33}$ Ho

 $\frac{4.0}{50}$ $\frac{4.0}{33}$ $\frac{4.0}{21}$ $\frac{4.5}{10}$ 4.6 $\frac{4.5}{13}$ $\frac{4.4}{34}$ $\frac{4.4}{50}$
 $\frac{4.0}{50}$
 $\frac{3.2}{50}$ 4.2 $\frac{4.8}{50}$
 $\frac{1.9}{50}$ $\frac{2.7}{50}$ 3.5 $\frac{4.3}{50}$

Top of Breather pipe on House S.E. Cor
A² & Pascal Ave



Ruggles St.

Water Main Grade.

& Cut or Fill on 10' Offset

Sta	+	π	-	Grade	
B.M.	4.53	958.02		953.49	(953.54)
T.P.	7.36	960.43	4.95	953.07	
T.P.	0.75	966.78	4.40	956.03	
0	+00			54.9	
	+50			54.7	
1				54.4	
	+50			53.8	
2				53.0	
	+50			52.0	
3				51.0	
	+50			51.0	
4				51.0	
	+50			51.0	
5				51.0	

9-30-40
K.R.
L.C.
M.B.

Gr. Rod

Top S.E. Cor. Cons. Walk. N.W. Cor. Crawford & Simpson

1.9

2.1

$$\begin{array}{r} 3.1 \\ -1.0 \\ \hline \end{array}$$

2.4

$$\begin{array}{r} 3.9 \\ -1.5 \\ \hline \end{array}$$

3.0

$$\begin{array}{r} 4.4 \\ -1.4 \\ \hline \end{array}$$

3.8

$$\begin{array}{r} 5.4 \\ -1.6 \\ \hline \end{array}$$

4.8

$$\begin{array}{r} 5.9 \\ -1.1 \\ \hline \end{array}$$

5.8

$$\begin{array}{r} 6.4 \\ -0.6 \\ \hline \end{array}$$

5.8

$$\begin{array}{r} 7.0 \\ -1.2 \\ \hline \end{array}$$

5.8

$$\begin{array}{r} 7.4 \\ -1.6 \\ \hline \end{array}$$

5.8

5.8

$$\begin{array}{r} 7.5 \\ -1.7 \\ \hline \end{array}$$

Sta.	+	π	-	Grade
		956.78		

T.P.

5	+50			51.0
---	-----	--	--	------

6				51.0
---	--	--	--	------

T.P.	5.66	956.09	6.35	950.43
------	------	--------	------	--------

	+50			51.0
--	-----	--	--	------

7				51.0
---	--	--	--	------

	+50			50.8
--	-----	--	--	------

8				50.55
---	--	--	--	-------

T.P.	3.98	954.97	5.10	950.99
------	------	--------	------	--------

	+50			50.3
--	-----	--	--	------

9				50.10
---	--	--	--	-------

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

	+70.05			
--	--------	--	--	--

B.M.

953.54

B.M.

952.77

Gr. Rod.

5.8

$\frac{76}{-18}$

5.8

5.1

$\frac{49}{+0.2}$

5.1

$\frac{48}{+0.3}$

5.3

$\frac{48}{+0.5}$

5.6

$\frac{56}{0.0}$

From Pascal Ave.

4.7

$\frac{5.0}{-0.3}$

4.9

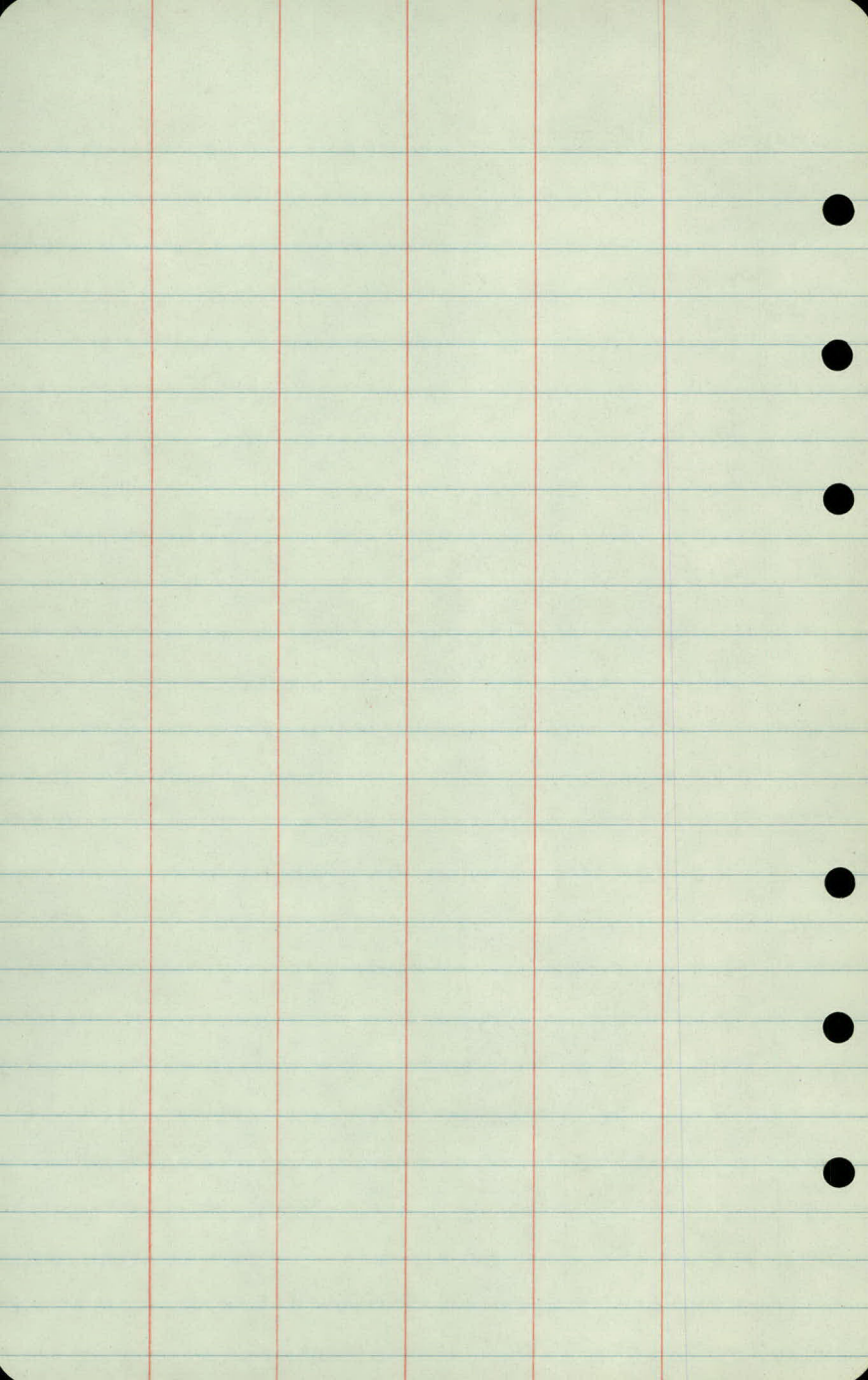
$\frac{5.1}{-0.2}$

5.2

$\frac{4.4}{+0.8}$

Top S.E. Cor. Cong. Walk. N.W. Cor. Crawford & Simpson.

Top 1/2 N.W. Cor. Pascal & Garden.



Water Main Grades
Pascal Ave.

Sta.	+	π	-	Grade
B.M.	13.40	966.17		952.77

0	+00			62.1
---	-----	--	--	------

	+50			62.3
--	-----	--	--	------

1				62.0
---	--	--	--	------

	+50			60.9
--	-----	--	--	------

2				59.6
---	--	--	--	------

	+50			58.0
--	-----	--	--	------

3				56.4
---	--	--	--	------

	+50			54.9
--	-----	--	--	------

4				53.2
---	--	--	--	------

T.R.	4.70	957.28	13.59	952.58
------	------	--------	-------	--------

	+50			52.0
--	-----	--	--	------

5				52.0
---	--	--	--	------

9-30-40
K.A.
L.C.
M.B.

+ or -
on 10'
offset stake.

Cor. Rod.

Top Iron NW. Cor. Pascal & Garden

4.1

$$\begin{array}{r} 39 \\ +0.2 \\ \hline \end{array}$$

3.9

$$\begin{array}{r} 31 \\ +0.8 \\ \hline \end{array}$$

4.2

$$\begin{array}{r} 21 \\ +2.1 \\ \hline \end{array}$$

5.3

$$\begin{array}{r} 25 \\ +2.8 \\ \hline \end{array}$$

6.6

$$\begin{array}{r} 44 \\ +2.2 \\ \hline \end{array}$$

8.2

$$\begin{array}{r} 9.1 \\ -0.9 \\ \hline \end{array}$$

9.8

$$\begin{array}{r} 10.8 \\ -1.1 \\ \hline \end{array}$$

11.3

$$\begin{array}{r} 11.6 \\ -0.3 \\ \hline \end{array}$$

13.0

$$\begin{array}{r} 13.1 \\ -0.1 \\ \hline \end{array}$$

5.3

5.3

$$\begin{array}{r} 56 \\ +0.3 \\ \hline \end{array}$$

Sta.	+	π	-	Grade
		957.28		

5	+50			51.0
---	-----	--	--	------

6				50.0
---	--	--	--	------

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

7				48.1
---	--	--	--	------

	+50			47.5
--	-----	--	--	------

8				47.3
---	--	--	--	------

I.P.	7.21	954.97	9.52	947.76
------	------	--------	------	--------

	+50			47.7
--	-----	--	--	------

9				48.0
---	--	--	--	------

	+50			48.5
--	-----	--	--	------

10				49.0
----	--	--	--	------

	+50			49.5
--	-----	--	--	------

11	+09.55			49.8
----	--------	--	--	------

G. Rod.

6.3

$$\begin{array}{r} 36 \\ +2.7 \\ \hline \end{array}$$

7.3

$$\begin{array}{r} 39 \\ +3.4 \\ \hline \end{array}$$

8.3

$$\begin{array}{r} 51 \\ +3.2 \\ \hline \end{array}$$

9.2

$$\begin{array}{r} 91 \\ +0.1 \\ \hline \end{array}$$

9.8

$$\begin{array}{r} 101 \\ -0.3 \\ \hline \end{array}$$

10.0

$$\begin{array}{r} 95 \\ +10.5 \\ \hline \end{array}$$

7.3

$$\begin{array}{r} 61 \\ +1.2 \\ \hline \end{array}$$

7.0

$$\begin{array}{r} 63 \\ +0.7 \\ \hline \end{array}$$

6.5

$$\begin{array}{r} 60 \\ +0.5 \\ \hline \end{array}$$

6.0

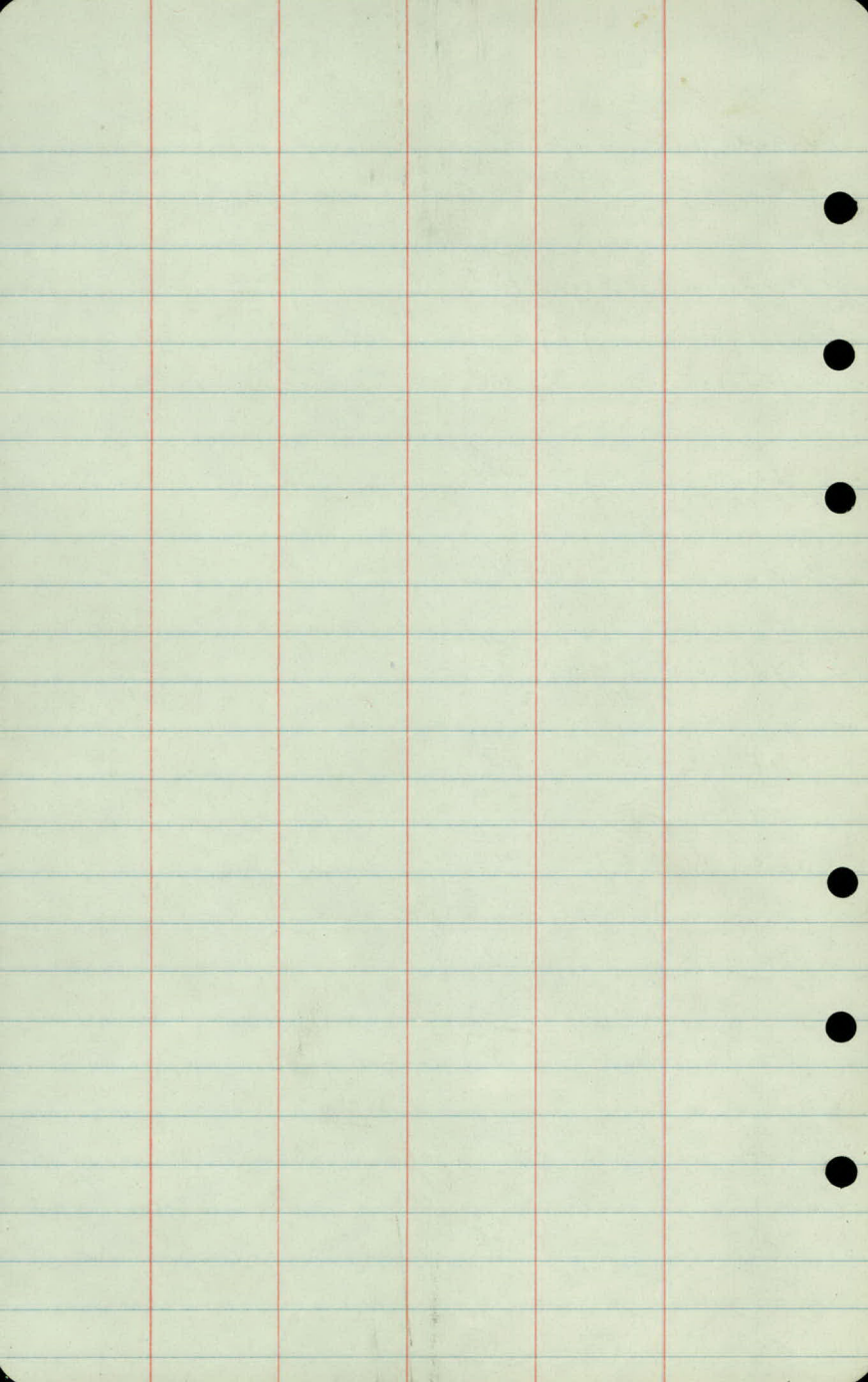
$$\begin{array}{r} 58 \\ +0.2 \\ \hline \end{array}$$

5.5

$$\begin{array}{r} 59 \\ -0.4 \\ \hline \end{array}$$

5.2

$$\begin{array}{r} 44 \\ +0.8 \\ \hline \end{array}$$



Slope stakes

Ruggles St.

stakes are set 0.2' to high

Sta.	+	π	-	Grade
B.M.	-0.02	964.38		(964.40)

1	+53			56.8
---	-----	--	--	------

2				55.3
---	--	--	--	------

	+50			54.5
--	-----	--	--	------

3				54.1
---	--	--	--	------

T.P.	3.09	957.49	9.98	954.40
------	------	--------	------	--------

	+16.22			54.0
--	--------	--	--	------

	+76.22			54.0
--	--------	--	--	------

4				53.7
---	--	--	--	------

	+50			53.2
--	-----	--	--	------

5				52.6
---	--	--	--	------

	+50			52.1
--	-----	--	--	------

6				51.5
---	--	--	--	------

PROP
Line

Gr Rod

Lt

Rt

Rt

Top Hyd. S.E. Cor Ruggles & Snelling Ave's

PROP
Line

7.6 = 7.3

$$30.0 / \frac{7.9}{8.1}$$

$$\frac{7.9}{-9.3}$$

$$\frac{7.9}{8.1} / 30.0$$

9.1 = 8.8

$$32.8 / \frac{10.2}{-1.4}$$

$$\frac{10.2}{-1.3}$$

$$\frac{9.1}{-2.9} / 31.8$$

9.9 = 9.6

$$30.0 / \frac{9.6}{8.1}$$

$$\frac{10.5}{-0.7}$$

$$\frac{9.6}{8.1} / 30.0$$

10.3 = 10.0

$$30.0 / \frac{10.0}{8.1}$$

$$\frac{10.8}{-0.5}$$

$$\frac{10.0}{8.1} / 30.0$$

9.5 = 9.2

$$30.0 / \frac{9.2}{8.1}$$

$$\frac{9.3}{+0.2}$$

$$\frac{9.2}{8.1} / 30.0$$

9.5 = 9.2

$$30.0 / \frac{9.2}{8.1}$$

$$\frac{9.1}{-0.2}$$

$$\frac{9.2}{8.1} / 30.0$$

9.8 = 9.5

$$30.0 / \frac{9.5}{8.1}$$

$$\frac{10.2}{-0.2}$$

$$\frac{9.5}{8.1} / 30.0$$

4.3 = 4.0

$$30.0 / \frac{3.6}{+0.4}$$

$$\frac{3.6}{+0.7}$$

$$\frac{3.0}{+1.0} / 32.0$$

4.9 = 4.6

$$30.0 / \frac{3.9}{+1.2}$$

$$\frac{3.8}{+1.1}$$

$$\frac{3.3}{+1.3} / 32.6$$

5.4 = 5.1

$$30.0 / \frac{5.4}{+1.2}$$

$$\frac{5.1}{+0.3}$$

$$\frac{4.4}{+1.7} / 30.0$$

6.0 = 5.7

$$38.0 / \frac{4.1}{+1.9}$$

$$\frac{4.9}{+1.1}$$

$$\frac{4.3}{+1.0} / 30.0$$

Sta.	+	π	-	Grade
		957.49		
6	+42.94			51.0
7	+02.94			51.0
	+36			50.9
8				50.8
T.P.	4.47	955.71	6.25	951.24
	+50			50.7
9				50.6
	+40			50.5
	+69.66			50.4
T.P.	3.61	954.32	5.00	950.71
10	+29.66			50.4
	+65			50.3
11				50.2

2 PROP
LINE

Gr Rod Lt 2 Rt

$$6.5 = 6.2 \quad 33.0' \begin{array}{r} 45 \\ +1.7 \\ \hline \end{array} \quad \begin{array}{r} 59 \\ +1.2 \\ \hline \end{array} \quad \begin{array}{r} 6.2 \\ RT/30.0' \\ \hline \end{array}$$

$$6.5 = 6.2 \quad 30.0' \begin{array}{r} 6.0 \\ +0.2 \\ \hline \end{array} \quad \begin{array}{r} 62 \\ +0.3 \\ \hline \end{array} \quad \begin{array}{r} 6.2 \\ RT/30.0' \\ \hline \end{array}$$

$$6.6 = 6.3 \quad 30.0' \begin{array}{r} 8.0 \\ +1.7 \\ \hline \end{array} \quad \begin{array}{r} 71 \\ -0.5 \\ \hline \end{array} \quad \begin{array}{r} 6.3 \\ RT/30.0' \\ \hline \end{array}$$

$$6.7 = 6.4 \quad 28.0' \begin{array}{r} 8.7 \\ -2.5 \\ \hline \end{array} \quad \begin{array}{r} 74 \\ -0.7 \\ \hline \end{array} \quad \begin{array}{r} 8.2 \\ +1.8/33.6' \\ \hline \end{array}$$

$$5.0 = 4.7 \quad 31.8' \begin{array}{r} 9.1 \\ -4.4 \\ \hline \end{array} \quad \begin{array}{r} 56 \\ -0.6 \\ \hline \end{array} \quad \begin{array}{r} 5.2 \\ -1.2/32.4' \\ \hline \end{array}$$

$$5.1 = 4.8 \quad 36.0' \begin{array}{r} 7.8 \\ -5.0 \\ \hline \end{array} \quad \begin{array}{r} 58 \\ -0.7 \\ \hline \end{array} \quad \begin{array}{r} 4.8 \\ RT/30.0' \\ \hline \end{array}$$

$$5.2 = 4.9 \quad 35.2' \begin{array}{r} 7.5 \\ -2.6 \\ \hline \end{array} \quad \begin{array}{r} 46 \\ +0.6 \\ \hline \end{array} \quad \begin{array}{r} 4.9 \\ RT/30.0' \\ \hline \end{array}$$

$$5.3 = 5.0 \quad 32.6' \begin{array}{r} 6.3 \\ -1.3 \\ \hline \end{array} \quad \begin{array}{r} 41 \\ +1.2 \\ \hline \end{array} \quad \begin{array}{r} 5.0 \\ RT/30.0' \\ \hline \end{array}$$

$$3.9 = 3.6 \quad 30.0' \begin{array}{r} 3.6 \\ RT \\ \hline \end{array} \quad \begin{array}{r} 31 \\ +0.8 \\ \hline \end{array} \quad \begin{array}{r} 3.1 \\ +0.5/31.0' \\ \hline \end{array}$$

$$4.0 = 3.7 \quad 30.0' \begin{array}{r} 3.7 \\ RT \\ \hline \end{array} \quad \begin{array}{r} 32 \\ +0.8 \\ \hline \end{array} \quad \begin{array}{r} 1.8 \\ +1.9/33.8' \\ \hline \end{array}$$

$$4.1 = 3.8 \quad 30.0' \begin{array}{r} 3.8 \\ RT \\ \hline \end{array} \quad \begin{array}{r} 38 \\ RT/30.0' \\ \hline \end{array}$$

Sta + π - Grade

954.32

11 +50

50.1

12

50.0

+50

49.9

+95.77

49.8

B.M.

2.85

951.47

951.66

954.70

0.8
4.8

4 Prop
Linc
Cor. Bod.

$$4.2 = 39$$

$$30.0 / \frac{29}{BT}$$

$$4.3 = 4.0$$

$$30.0 / \frac{40}{BT}$$

$$\frac{20}{BT} / 30.0$$

$$4.4 = 4.1$$

$$30.0 / \frac{41}{BT}$$

$$\frac{41}{BT} / 30.0$$

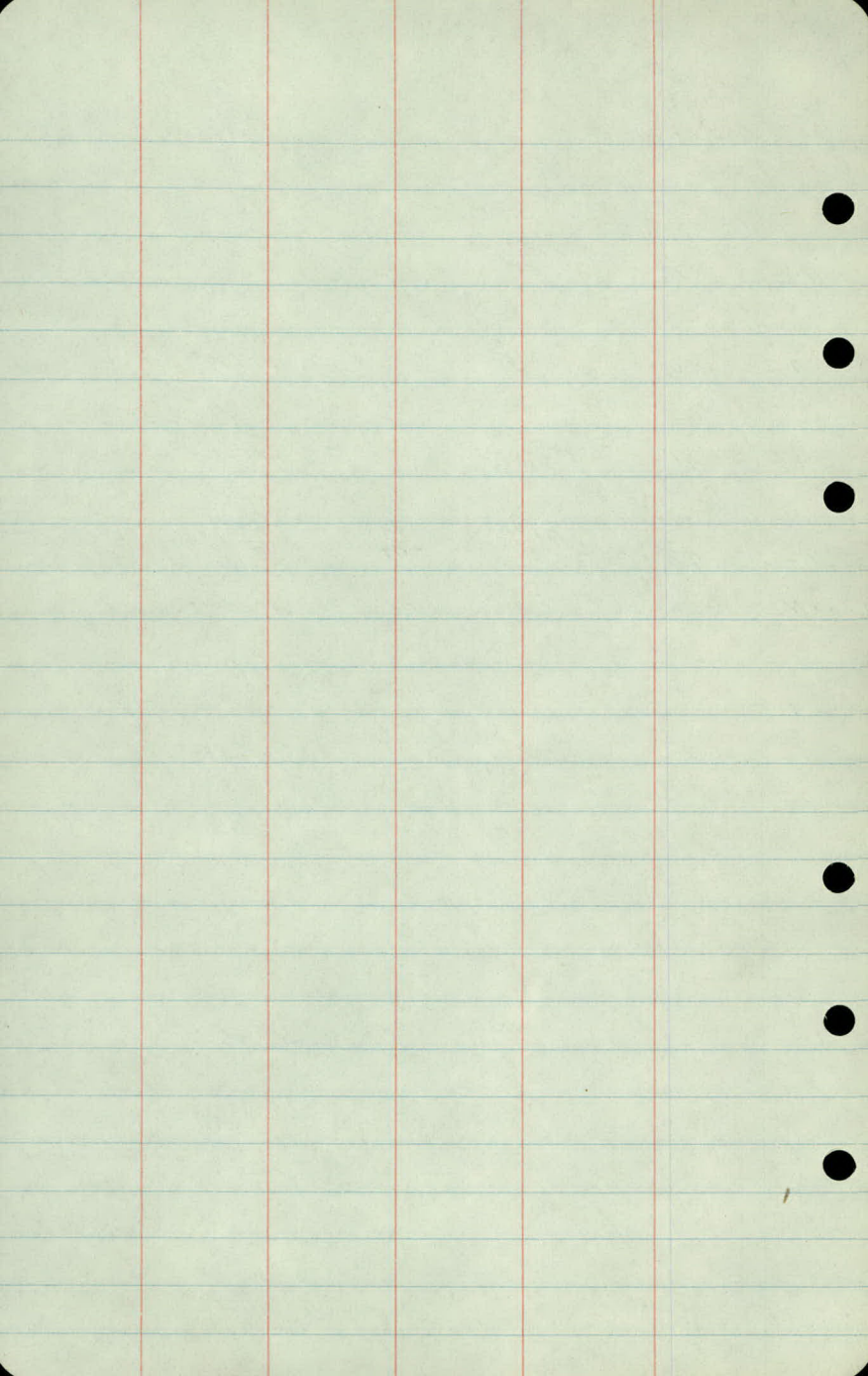
$$4.5 = 4.2$$

$$30.0 / \frac{42}{BT}$$

$$\frac{42}{-0.1}$$

$$\frac{4.2}{BT} / 30.0$$

Top N.E. Cor. Lower Cong. stop S.W. Cor. Peggles & Pascal.



Slope Stakes

Pascal Ave.

Sta	+	π	-	Grade
B.M.				951.16

0 +49.5

1

+50

+75

2

+15

+50

3

+

57.55

4 +17.55

Gr. Red.

Lt.

K

Et.

Drill hole in Pav. Large + Pascal

4 +50

5

+50

6

+50

7

+50

8

+50

9

+50

Gr. Rod Lt R Rt

$$7.3 \quad 7.0 \quad 41.9 \begin{array}{r} 1.3 \\ +5.7 \\ \hline \end{array} \quad \begin{array}{r} 5.3 \\ +2.0 \\ \hline \end{array} \quad \begin{array}{r} 7.8 \\ -0.8 \\ \hline \end{array} / 31.6$$

$$8.4 = 8.1 \quad 40.9 \begin{array}{r} 3.4 \\ +5.0 \\ \hline \end{array} \quad \begin{array}{r} 7.0 \\ +1.9 \\ \hline \end{array} \quad \begin{array}{r} 10.7 \\ -2.6 \\ \hline \end{array} / 35.2$$

$$9.4 = 9.1 \quad 31.6 \begin{array}{r} 8.3 \\ +0.8 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ -1.7 \\ \hline \end{array} \quad \begin{array}{r} 14.5 \\ -5.4 \\ \hline \end{array} / 40.8$$

$$6.0 = 5.7 \quad 32.2 \begin{array}{r} 4.6 \\ +1.1 \\ \hline \end{array} \quad \begin{array}{r} 8.4 \\ -2.4 \\ \hline \end{array} \quad \begin{array}{r} 10.9 \\ -5.2 \\ \hline \end{array} / 40.4$$

$$6.1 = 5.8 \quad 31.2 \begin{array}{r} 5.2 \\ +0.6 \\ \hline \end{array} \quad \begin{array}{r} 7.0 \\ -0.9 \\ \hline \end{array} \quad \begin{array}{r} 9.7 \\ -3.9 \\ \hline \end{array} / 37.8$$

$$5.8 \quad 5.5 \quad 31.8 \begin{array}{r} 4.6 \\ +0.9 \\ \hline \end{array} \quad \begin{array}{r} 5.7 \\ +0.1 \\ \hline \end{array} \quad \begin{array}{r} 7.7 \\ -2.2 \\ \hline \end{array} / 34.4$$

$$5.3 \quad 5.0 \quad 30.8 \begin{array}{r} 4.6 \\ +0.4 \\ \hline \end{array} \quad \begin{array}{r} 5.3 \\ 0.0 \\ \hline \end{array} \quad \begin{array}{r} 5.0 \\ +1.1 \\ \hline \end{array} / 30.0$$

$$4.8 = 4.5 \quad 31.6 \begin{array}{r} 3.7 \\ +0.3 \\ \hline \end{array} \quad \begin{array}{r} 4.6 \\ +0.2 \\ \hline \end{array} \quad \begin{array}{r} 4.5 \\ +1.1 \\ \hline \end{array} / 30.0$$

$$4.3 = 4.0 \quad 30.0 \begin{array}{r} 4.0 \\ +1.1 \\ \hline \end{array} \quad \begin{array}{r} 4.1 \\ +0.2 \\ \hline \end{array} \quad \begin{array}{r} 4.0 \\ +1.1 \\ \hline \end{array} / 30.0$$

$$3.8 \quad 3.5 \quad 30.0 \begin{array}{r} 3.5 \\ +1.1 \\ \hline \end{array} \quad \begin{array}{r} 3.6 \\ +0.2 \\ \hline \end{array} \quad \begin{array}{r} 3.5 \\ +1.1 \\ \hline \end{array} / 30.0$$

$$3.3 \quad 3.0 \quad 30.0 \begin{array}{r} 3.0 \\ +1.1 \\ \hline \end{array} \quad \begin{array}{r} 3.1 \\ +0.2 \\ \hline \end{array} \quad \begin{array}{r} 3.0 \\ +1.1 \\ \hline \end{array} / 30.0$$

Top N.E. Cor. Lower Coal step

Sto	+	X	-	Grade
		959.70		

20	108.25			49.8
----	--------	--	--	------

	150			49.9
--	-----	--	--	------

T.P.	6.46	956.07	509	949.61
------	------	--------	-----	--------

21				49.9
----	--	--	--	------

	150			50.0
--	-----	--	--	------

22				50.1
----	--	--	--	------

	150			50.2
--	-----	--	--	------

23				50.2
----	--	--	--	------

	150			50.3
--	-----	--	--	------

24				50.4
----	--	--	--	------

T.P.	4.28	956.40	395	952.12
------	------	--------	-----	--------

	150			50.5
--	-----	--	--	------

25				50.8
----	--	--	--	------

Gr. Rod	Lt			
4.9	4.6	$30.0' / \frac{4.6}{8.1}$	$\frac{54}{-0.5}$	$\frac{6.0}{1.4} / 92.8'$
4.8	4.5	$30.0' / \frac{4.5}{8.1}$	$\frac{59}{-1.1}$	$\frac{6.1}{1.6} / 93.2'$
6.2	5.9		$\frac{6.7}{-0.5}$	$\frac{5.9}{8.1} / 30.0'$
6.1	5.8	$30.0' / \frac{5.2}{10.6}$	$\frac{5.1}{+0.4}$	$\frac{5.4}{10.4} / 30.8'$
6.0	5.7	$30.0' / \frac{4.5}{11.2}$	$\frac{5.0}{+1.0}$	$\frac{5.7}{8.1} / 30.0'$
5.9	5.6	$32.4' / \frac{4.1}{11.2}$	$\frac{5.0}{+0.9}$	$\frac{5.1}{+0.5} / 31.0'$
5.9	5.6	$30.0' / \frac{4.4}{11.2}$	$\frac{4.7}{+1.2}$	$\frac{4.9}{+0.7} / 31.4'$
5.8	5.5	$30.0' / \frac{4.2}{11.3}$	$\frac{4.9}{+0.9}$	$\frac{5.5}{8.1} / 30.0'$
5.7	5.4	$30.0' / \frac{4.0}{11.4}$	$\frac{4.6}{+1.1}$	$\frac{5.4}{8.1} / 30.0'$
5.9	5.6	$30.0' / \frac{4.1}{11.5}$	$\frac{4.6}{+1.3}$	$\frac{5.1}{+0.5} / 31.0'$
5.6	5.3	$30.0' / \frac{4.1}{10.9}$	$\frac{4.9}{+0.7}$	$\frac{5.0}{+0.3} / 30.6'$

Sta + π - Grade

956.40

25 +30

51.5

26

52.4

+37.10

1.

53.6

B.M.

1.88

954.59

(954.57)

10-11-41

Gr. Red

Lt.

k

Bt.

4.9

46

$$\begin{array}{r} 30.0 \\ + 4.3 \\ \hline 103 \end{array}$$

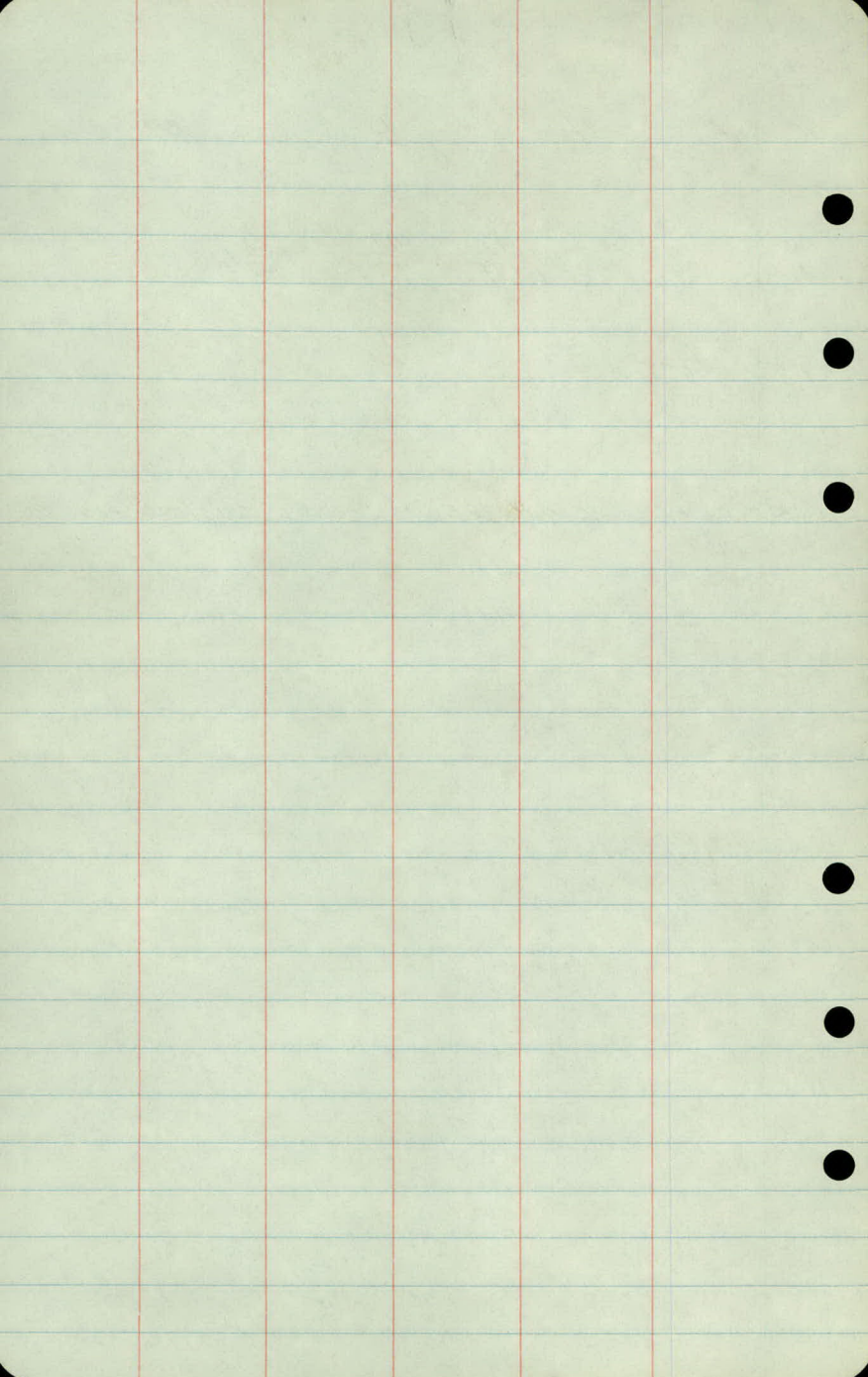
$$\begin{array}{r} 4.9 \\ 0.0 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ 109 \\ \hline 31.8 \end{array}$$

4.0 = 37

$$\begin{array}{r} 41 \\ - 0.1 \\ \hline \end{array}$$

Top Breather pipe on Ho. S.E. Cor. Pascal & Rose lawn Ave.



Sta	+	π	-	Grade
-----	---	-------	---	-------

10

+44

+65

11

+35

+65

12

+50

+8845

B.M.

1.73

956.95

12.2

(955.22)

13 +8845

52.0

14

50.8

Gr	Rod	Lt	L	Lt
	Prep			
L	Ring			

Top Hyd SW Cor Gardent Pascal

5.0	47	$30^{\circ} \frac{47}{51}$	$\frac{63}{13}$	$\frac{104}{57/41.4}$
-----	----	----------------------------	-----------------	-----------------------

6.2	5.9	$35.6 \frac{31}{728}$	$\frac{54}{108}$	$\frac{83}{2.4/348}$
-----	-----	-----------------------	------------------	----------------------

Sta	+	π	-	Grade
-----	---	-------	---	-------

956.95

14	+50			49.7
----	-----	--	--	------

15				48.6
----	--	--	--	------

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

T.P.	7.29	953.05	11.19	945.76
------	------	--------	-------	--------

16				47.1
----	--	--	--	------

	+50			47.0
--	-----	--	--	------

17				47.3
----	--	--	--	------

	+50			47.9
--	-----	--	--	------

18				48.3
----	--	--	--	------

	+50			48.5
--	-----	--	--	------

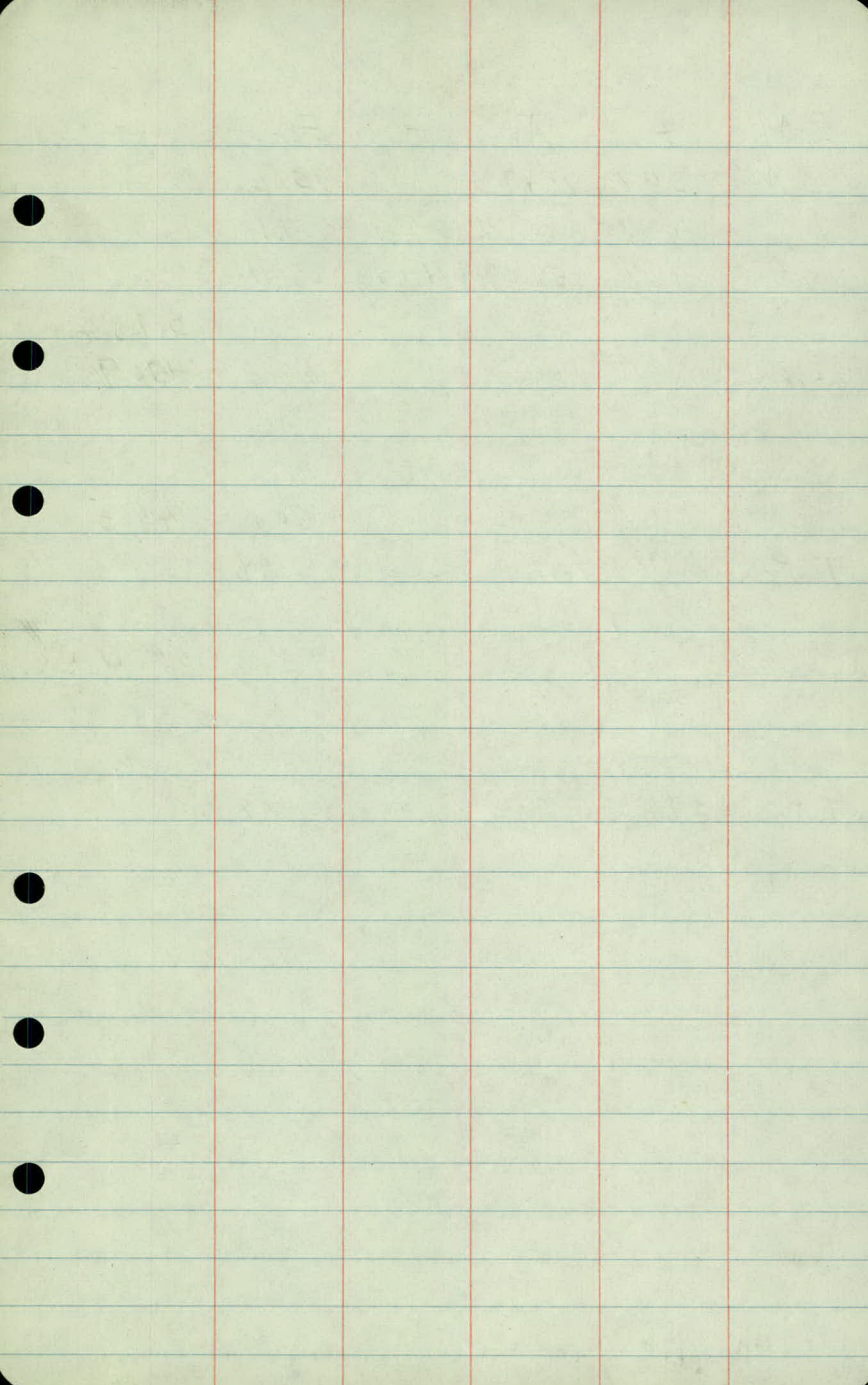
19				49.3
----	--	--	--	------

	+48.25			49.8
--	--------	--	--	------

B.M.	3.09	954.70	1.40	951.65
------	------	--------	------	--------

Spec. dist. Pt. 1450 to 30400

(951.60)



B.M.	+	π	-	Elev
------	---	-------	---	------

B.M.	3.07	954.73		951.66
------	------	--------	--	--------

	4.37	955.56	3.54	951.19
--	------	--------	------	--------

	4.67	956.08	4.15	951.41
--	------	--------	------	--------

Ditch Grade

9499.66

50.4

47.9

Arona

51.6

48.5

T.P.	6.08	959.02	3.10	952.98
------	------	--------	------	--------

Asbury

54.0

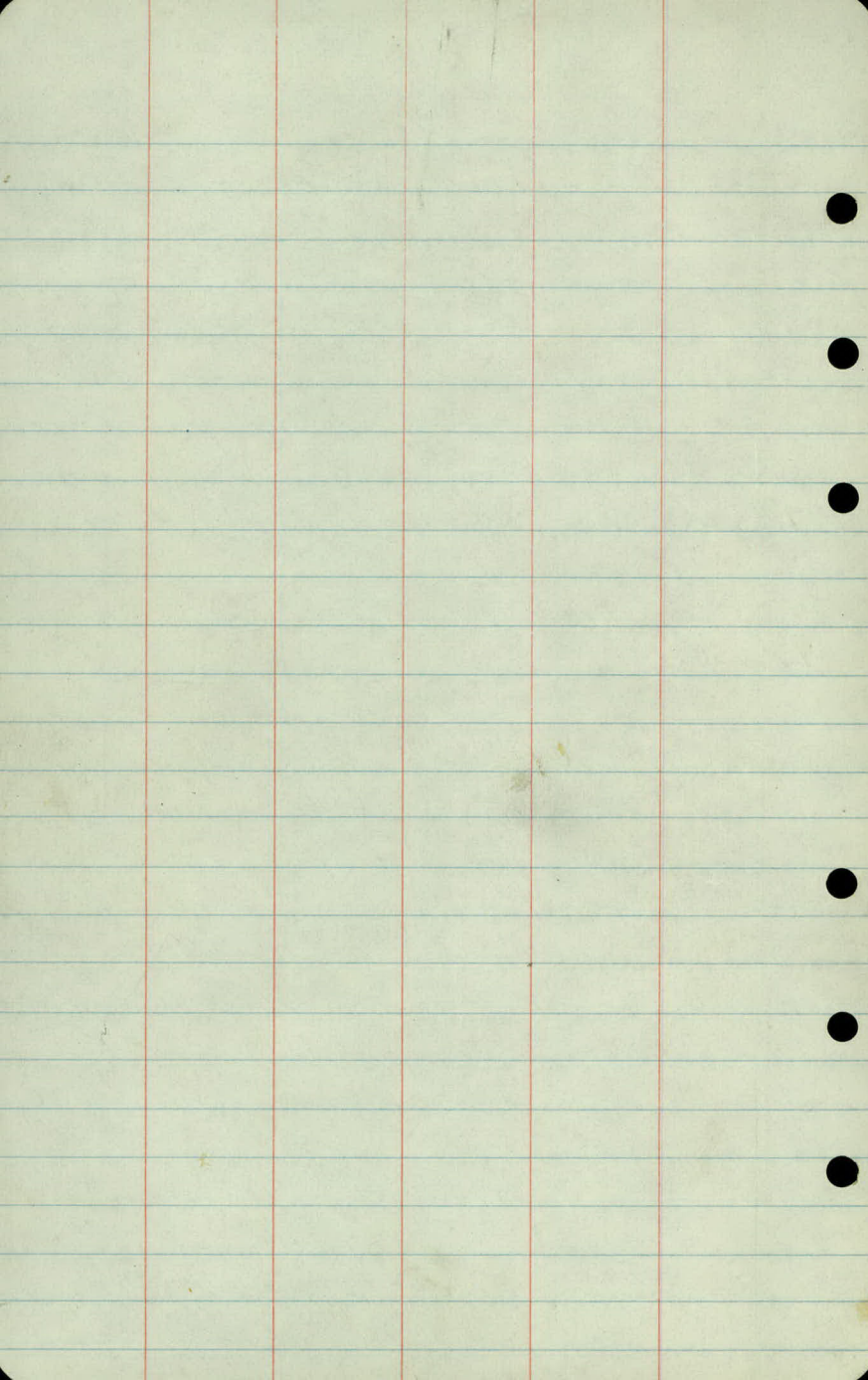
T.P.	3.76	954.95		951.19
------	------	--------	--	--------

Top N.E Cor Lower Step

Ditch

7.58 5.08

756 501



1
North Ditch Ruggles

Asbury to Simpson

Rec'd. 6-3-52

4 Pages

Sta	+	π	-	Elev
B M	1.95	956.08		954.19 954.13
0+00		956.14	4.90	51.18 51.24
+00			4.0	52.1 52.1
+50			4.9	51.2 51.2
1			5.4	50.7 50.7
+22			5.54	50.54 50.60
+42			5.71	50.37 50.43
+50			5.7	50.4 50.4
2			6.1	50.0 50.0
+50			6.3	49.8 49.8
3			7.1	49.0 49.0
+40			7.60	48.48 48.54
+50			7.0	49.1 49.1
+50			7.70	48.38 48.44
4			6.9	49.2 49.2

3 May 1952

Kridera
Moeschter
Clark
Benson

2

East End Culr at Astary (F.L.) 15" CM

ground

FL 15" CM West End

54.13

FL 15" CM E End

5.65

1.85

7.60

5.75

FL West catch basin drain

Arona
arross

FL East catch Basin drain

Ruggles

103
65
7.15

Sta	+	Δ	-	Elev.
		956.08		
4+50		956.14	7.1	49.0 49.0
5			6.7	49.4 49.4
+02			7.15	48.93 48.99
+22			7.35	48.73 48.79
+50			6.9	49.2 49.2
6			7.3	48.8 48.8
+12			7.70	48.38 48.44
+52			2.75	48.33 48.39
7			7.3	48.8 48.8
+30		612	7.82	48.46 48.52
+36			7.68	48.40 48.40
+50			7.5	48.6 48.6

FL 18" CM W End

FL 18" CM E End

FL 15" CM W End x drain Simpson

FL 15" CM E End

FL 18" CM W End

FL 18" CM E End

667

956.06

8.13

7 + 99

956.14

8.13

47.95

48.01

8 + 23

8.17

47.91

47.97

+ 50

8.2

47.9

47.9

9

8.3

47.8

47.8

+ 23

91.4

46.94

47.00

PM

194

954.12

954.20

954.19

954.13

FL 18" CM W End

FL 18" CM E End

FL 15" SCP X drain Pascal

Top Hyd S.W. Cor. Arena and Buggles

