

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Plan Survey

Midvale Pl. Harvester Av. Brand St.

MIDVALE ACRES

From To

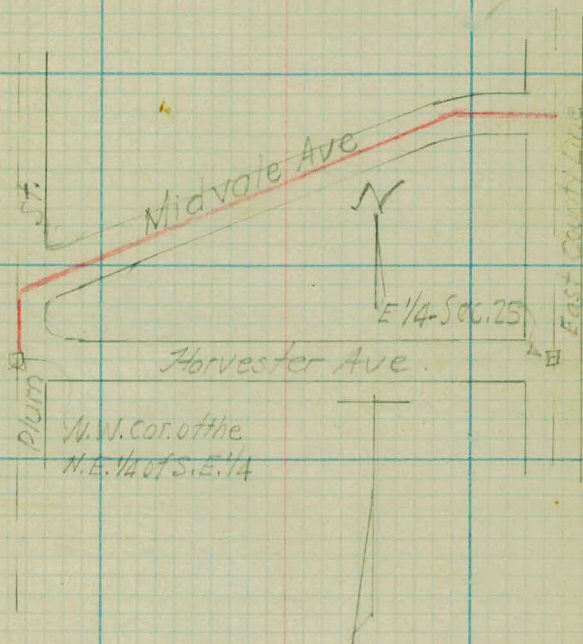
Road Acc't. No. Proj. 36-N25

Date Filed June 27, 36 File Dr. TABk.12

Plan Survey

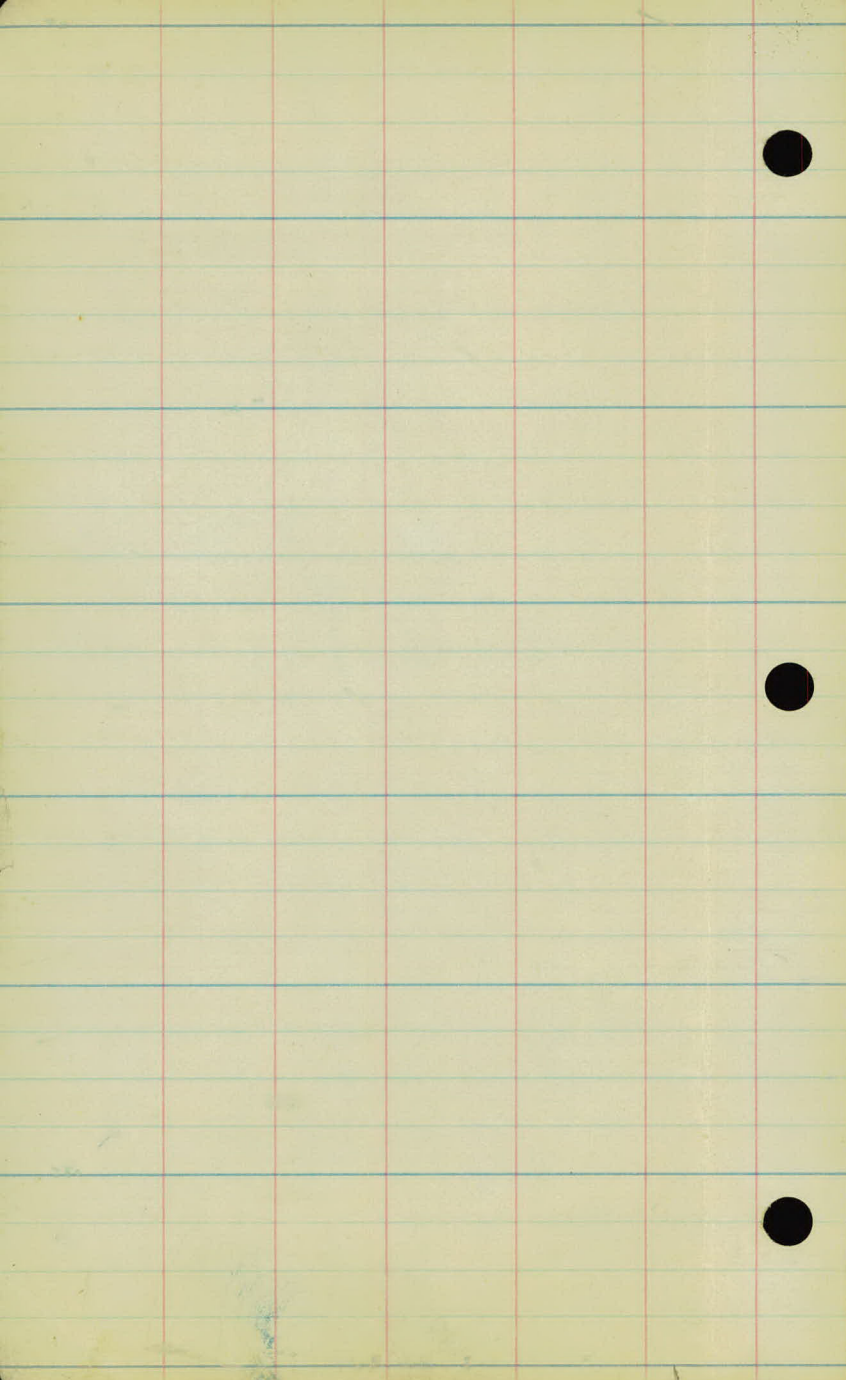
Midvale Place

Harvester to East County Line



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W. H. Carlson
June 17, 1936



alignment
Midvale Place

Harvester & Plum to E. County Line.

Sta.	Point	Angle	
		Lt	Rt.

15+34.6

P.I. 10+79.73

11+55.38 P.T.

13°-57' 1/2

18°-C.Rt.

11+0

8°-58' 1/2

A 27°-55'

10+50

4°-28' 1/2

T. 79.44

10+00.29 P.C.

02°-00'

L. 155.09

R= 319.62

5+09.8 P.O.T.

1+13.30 P.I.
Int. of Plum +
Middle

60°-55'

0200 = Stone Mark 2 Plum + Harvester

2nd Elm. (3)

3035

Nails top 10" Tw. Str.

P.2

35.69 90

565.62

88° 20'

89° 55' 91° 31' E. 1/4 Cor. Sec. 25

14486.28 6 33'

33' 14484.38

2 Homester

Iron Man.

1c. Mon.

34.49

33.94

2" x 2" Hub

M.H.C.
K.A.
L.B.H.
A.M.

6/17/36

Windy.
A.M.

5708.9 32 1c. Mon.
33'

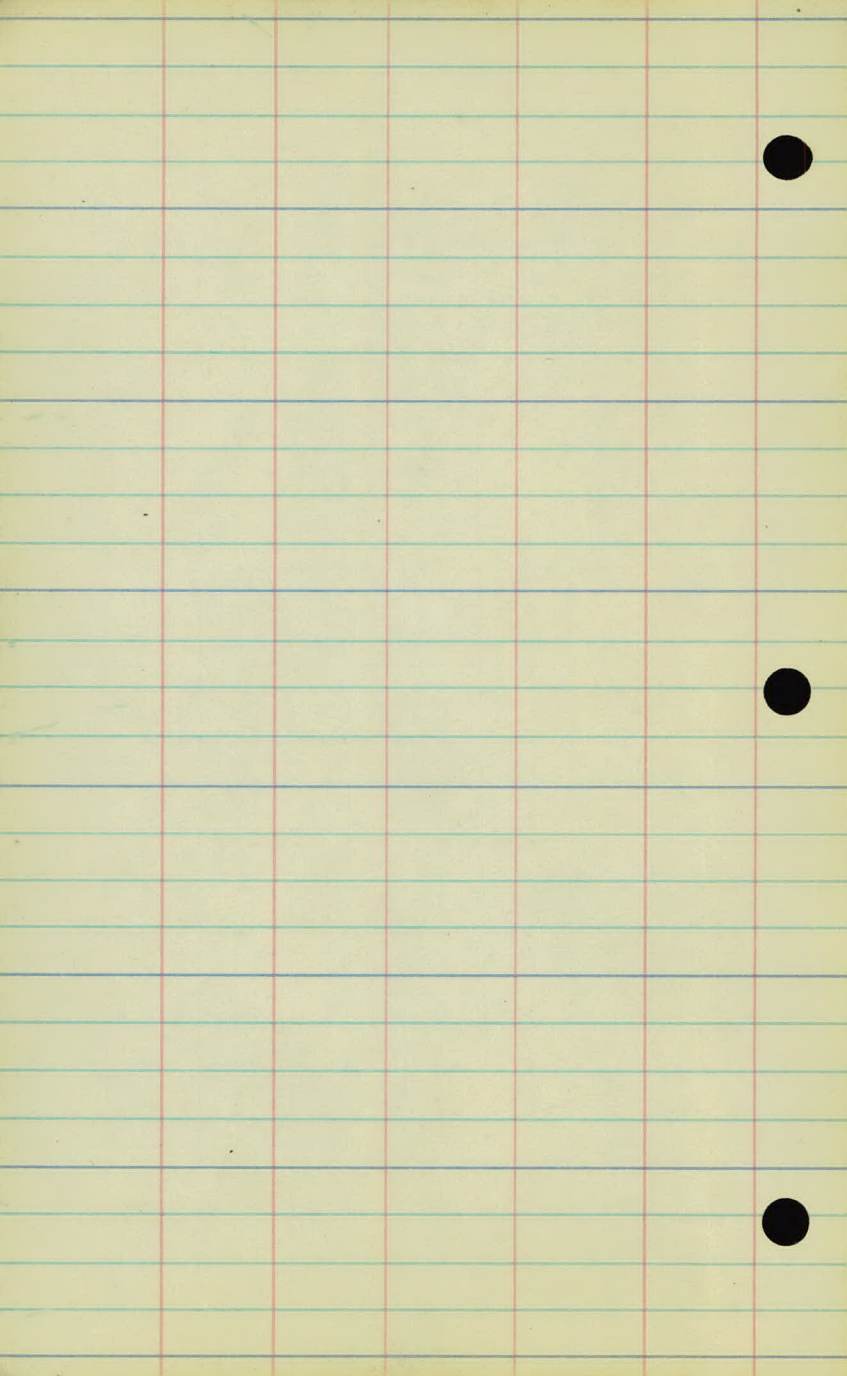
64.85'

38.10' 1c. Mon

88° 51'

88° 50'

2 Homester



Topography
Midvale Place

5

4

3

2

1

oto

Rd-8

Rd-8

4.

Rd-8'

Rd-8

Rd-7'

Rd-8'

Rd-9'

Rd-9'

Rd-9'

Rd-8

H133
38.1
33.32
Iron Mo. 1.

Rd-5-21'

+So Rd-5-17'
p

12

11

10

9

8

7

6

Rd 0

Rd 6' 5

+76-P.P. 20'

X5 Road

Rd 8'

Rd 8'

+55-Rd-10

+55-Rd-10

Rd -10'

Rd 6'

+80 Rd -12'

+80-Rd-60

Rd. 11'

Rd 8'

Rd 10'

Rd. 8

Rd-8'

Rd-3'

Rd-6'

Rd-10'

15+34.6 E East County Line Rd

+16 E Culu. 12' X 26' C.M. New

15

$\frac{24}{11-15}$

14

13

+01-20' Elm. II
Rd-5

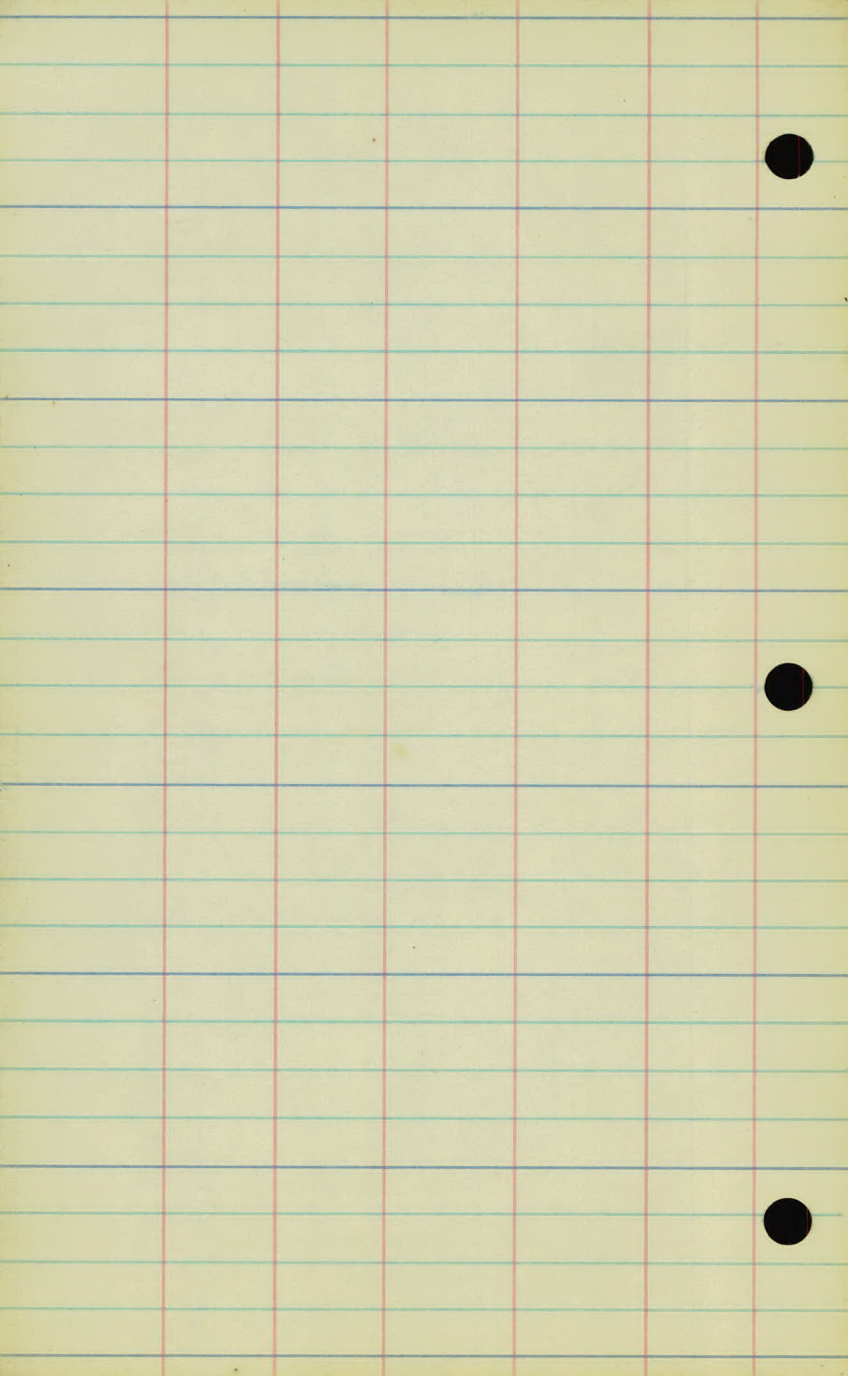
+21- Edge Tarn
+00-16" Bx. Elm. 30'
Rd-10

Rd-8

Rd-6

411-N.E. cor. No.
15.1. 20'x20'

191-N.W. cor. No.
80



Cross Sections
Midvale Place

Stk	+	π ✓	-	Elev.
B.M.	4.79	1029.81		1025.02
040 = E Harvester				1025.0.
+50				24.7.
140				24.3.
1+13.3	RT. A to Plum			24.1.
1+13.3	RT A to Mucate			24.1.
+50				24.1.
240				24.8.
+50				24.4.
340				24.9.
+60				24.2.
440				24.3.

Lt. 2 Rt. Rain 6/17/76 8

Top Stone Mon. Int. of Plum & Strawberry.

$$\frac{4.9}{33}$$

$$4.8$$

$$\frac{5.2}{10}$$

$$\frac{4.6}{16}$$

$$\frac{5.4}{33}$$

$$\frac{5.5}{33}$$

$$\frac{5.1}{-}$$

$$\frac{5.6}{3}$$

$$\frac{5.2}{5}$$

$$\frac{5.3}{33}$$

$$\frac{6.0}{33}$$

$$\frac{5.5}{-}$$

$$\frac{6.2}{4}$$

$$\frac{5.8}{5}$$

$$\frac{5.5}{11}$$

$$\frac{5.7}{33}$$

$$\frac{6.2}{33}$$

$$\frac{5.5}{8}$$

$$\frac{5.7}{-}$$

$$\frac{6.4}{4}$$

$$\frac{6.0}{5}$$

$$\frac{5.8}{33}$$

$$\frac{6.2}{33}$$

$$\frac{6.3}{33}$$

$$\frac{5.5}{10}$$

$$5.7$$

$$\frac{5.8}{3}$$

$$\frac{6.4}{5}$$

$$\frac{5.4}{6}$$

$$\frac{5.6}{18}$$

$$\frac{5.8}{33}$$

$$\frac{5.7}{33}$$

$$\frac{6.1}{10}$$

$$\frac{5.7}{-}$$

$$\frac{5.7}{12}$$

$$\frac{5.5}{33}$$

$$\frac{5.4}{33}$$

$$\frac{5.3}{11}$$

$$\frac{5.0}{-}$$

$$\frac{5.0}{8}$$

$$\frac{4.7}{33}$$

$$\frac{5.6}{33}$$

$$\frac{5.8}{12}$$

$$5.4$$

$$\frac{5.5}{10}$$

$$\frac{4.8}{33}$$

$$\frac{6.2}{33}$$

$$\frac{5.3}{12}$$

$$\frac{4.9}{-}$$

$$\frac{4.9}{10}$$

$$\frac{4.8}{33}$$

$$\frac{6.1}{33}$$

$$\frac{6.0}{10}$$

$$5.6$$

$$\frac{5.7}{12}$$

$$\frac{5.3}{33}$$

$$\frac{6.1}{33}$$

$$\frac{5.7}{9}$$

$$\frac{5.5}{-}$$

$$\frac{5.6}{12}$$

$$\frac{5.5}{33}$$

Sta.	+	π	-	Elev.
		✓ 1029.81		
4+50				1024.7.
5+0				26.3.
+45				27.4.
6+0				26.4.
+50				26.5.
7+0				26.3.
T.P.	2.25	✓ 1029.07	2.99	✓ 1026.82
+40				26.6.
8+0				25.3.
+50				25.0.
9+0				25.1.
+50				25.1.
10+0				24.3.

Lt.

Z

Rt.

9

$$\frac{5.7}{33}$$

$$\frac{5.3}{10}$$

$$5.1$$

$$\frac{4.7}{12}$$

$$\frac{4.7}{33}$$

$$\frac{4.7}{33}$$

$$\frac{4.0}{9}$$

$$\frac{3.5}{-}$$

$$\frac{3.5}{14}$$

$$\frac{2.9}{33}$$

$$\frac{3.0}{33}$$

$$\frac{2.7}{10}$$

$$2.4$$

$$\frac{2.4}{9}$$

$$\frac{2.4}{33}$$

$$\frac{3.4}{33}$$

$$\frac{3.6}{10}$$

$$\frac{3.4}{-}$$

$$\frac{3.7}{11}$$

$$\frac{3.5}{33}$$

$$\frac{3.9}{33}$$

$$\frac{3.8}{12}$$

$$\frac{3.3}{-}$$

$$\frac{3.5}{12}$$

$$\frac{3.4}{33}$$

$$\frac{3.8}{33}$$

$$\frac{3.9}{8}$$

$$\frac{3.5}{-}$$

$$\frac{3.7}{12}$$

$$\frac{3.5}{33}$$

Top 1/6 to 7/10

$$\frac{3.4}{33}$$

$$\frac{3.1}{10}$$

$$2.5$$

$$\frac{2.9}{10}$$

$$\frac{2.7}{33}$$

$$\frac{4.0}{33}$$

$$\frac{4.1}{13}$$

$$\frac{3.8}{-}$$

$$\frac{3.5}{12}$$

$$\frac{3.5}{33}$$

$$\frac{4.4}{33}$$

$$\frac{4.4}{15}$$

$$\frac{4.1}{-}$$

$$\frac{4.0}{9}$$

$$\frac{3.8}{33}$$

$$\frac{4.4}{33}$$

$$\frac{4.0}{7}$$

$$\frac{4.0}{-}$$

$$\frac{3.8}{9}$$

$$\frac{3.4}{33}$$

$$\frac{4.5}{33}$$

$$\frac{4.2}{11}$$

$$\frac{4.0}{-}$$

$$\frac{3.6}{10}$$

$$\frac{3.9}{33}$$

$$\frac{5.1}{33}$$

$$\frac{4.9}{16}$$

$$\frac{4.8}{-}$$

$$\frac{4.8}{10}$$

$$\frac{4.5}{33}$$

102281
mon @ E. O. L. m.

Sta. + π - E/cv.

✓
1029.07

10+50

1024.4

11+0

24.5

+55

24.7

12+0

24.7

+50

25.1

13+0

25.4

+50

25.8

14+0

26.3

T.R

4.77

✓
1031.86

2.48

✓
1026.59

+50

26.6

15+0

27.1

+15

27.3

+17

27.3

+23

sh/dr

27.4

+34.6

27.6

B.M.

129

✓
1030.07

H.

L.

Rt.

10

$$\begin{array}{r} 4.9 \\ 33 \end{array}$$

$$\begin{array}{r} 5.1 \\ 18 \end{array}$$

$$\begin{array}{r} 4.6 \\ 11 \end{array}$$

$$\begin{array}{r} 4.7 \\ 8 \end{array}$$

$$\begin{array}{r} 4.7 \\ 8 \end{array} \begin{array}{r} 4.8 \\ 18 \end{array}$$

$$\begin{array}{r} 4.7 \\ 33 \end{array}$$

$$\begin{array}{r} 4.6 \\ 33 \end{array}$$

$$\begin{array}{r} 4.7 \\ 16 \end{array}$$

$$\begin{array}{r} 4.5 \\ 8 \end{array}$$

$$\begin{array}{r} 4.6 \\ 7 \end{array}$$

$$\begin{array}{r} 4.7 \\ 7 \end{array}$$

$$\begin{array}{r} 4.6 \\ 33 \end{array}$$

$$\begin{array}{r} 4.4 \\ 33 \end{array}$$

$$\begin{array}{r} 4.4 \\ 11 \end{array}$$

$$\begin{array}{r} 4.4 \\ 12 \end{array}$$

$$\begin{array}{r} 4.6 \\ 12 \end{array}$$

$$\begin{array}{r} 4.4 \\ 33 \end{array}$$

$$\begin{array}{r} 4.2 \\ 33 \end{array}$$

$$\begin{array}{r} 4.4 \\ 12 \end{array}$$

$$\begin{array}{r} 4.4 \\ 10 \end{array}$$

$$\begin{array}{r} 4.2 \\ 10 \end{array}$$

$$\begin{array}{r} 4.2 \\ 33 \end{array}$$

$$\begin{array}{r} 4.1 \\ 33 \end{array}$$

$$\begin{array}{r} 4.0 \\ 12 \end{array}$$

$$\begin{array}{r} 4.0 \\ 10 \end{array}$$

$$\begin{array}{r} 4.1 \\ 10 \end{array}$$

$$\begin{array}{r} 3.9 \\ 33 \end{array}$$

$$\begin{array}{r} 3.7 \\ 33 \end{array}$$

$$\begin{array}{r} 3.6 \\ 13 \end{array}$$

$$\begin{array}{r} 3.7 \\ 10 \end{array}$$

$$\begin{array}{r} 3.7 \\ 10 \end{array}$$

$$\begin{array}{r} 3.5 \\ 33 \end{array}$$

$$\begin{array}{r} 3.4 \\ 33 \end{array}$$

$$\begin{array}{r} 3.4 \\ 14 \end{array}$$

$$\begin{array}{r} 3.3 \\ 9 \end{array}$$

$$\begin{array}{r} 3.3 \\ 9 \end{array}$$

$$\begin{array}{r} 3.0 \\ 33 \end{array}$$

$$\begin{array}{r} 2.8 \\ 33 \end{array}$$

$$\begin{array}{r} 2.8 \\ 13 \end{array}$$

$$\begin{array}{r} 2.8 \\ 10 \end{array}$$

$$\begin{array}{r} 2.8 \\ 10 \end{array}$$

$$\begin{array}{r} 2.8 \\ 33 \end{array}$$

$$\begin{array}{r} 5.1 \\ 33 \end{array}$$

$$\begin{array}{r} 5.0 \\ 14 \end{array}$$

$$\begin{array}{r} 4.8 \\ 12 \end{array}$$

$$\begin{array}{r} 4.7 \\ 12 \end{array}$$

$$\begin{array}{r} 4.5 \\ 33 \end{array}$$

$$\begin{array}{r} 4.4 \\ 33 \end{array}$$

$$\begin{array}{r} 4.0 \\ 33 \end{array}$$

$$\begin{array}{r} 4.3 \\ 13 \end{array}$$

$$\begin{array}{r} 4.2 \\ 13 \end{array}$$

$$\begin{array}{r} 4.1 \\ 33 \end{array}$$

$$\begin{array}{r} 4.0 \\ 33 \end{array}$$

$$\begin{array}{r} 4.5 \\ 12 \end{array}$$

$$\begin{array}{r} 4.3 \\ 15 \end{array}$$

$$\begin{array}{r} 4.3 \\ 15 \end{array}$$

$$\begin{array}{r} 4.4 \\ 33 \end{array}$$

$$\begin{array}{r} 5.1 \\ 100 \end{array}$$

$$\begin{array}{r} 5.1 \\ 33 \end{array}$$

$$\begin{array}{r} 5.0 \\ 15 \end{array}$$

$$\begin{array}{r} 4.5 \\ 11 \end{array}$$

$$\begin{array}{r} 4.4 \\ 14 \end{array}$$

$$\begin{array}{r} 4.3 \\ 14 \end{array}$$

$$\begin{array}{r} 4.9 \\ 33 \end{array}$$

$$\begin{array}{r} 4.1 \\ 33 \end{array}$$

$$\begin{array}{r} 4.0 \\ 33 \end{array}$$

$$\begin{array}{r} 4.0 \\ 33 \end{array}$$

$$\begin{array}{r} 3.8 \\ 50 \end{array}$$

$$\begin{array}{r} 3.8 \\ 50 \end{array}$$

$$\begin{array}{r} 3.8 \\ 50 \end{array}$$

Drains

R.R. Top Twin Sp. S.W. of Inter.

Sta. + π - Elev
£ East County/Linc, Harvester to Midvale

1031.36

5465.62 = £ Midvale

540

3.7

4

3.6

3

4.2

2

5.1

1

6.0

0 to = Top Mon-
£ Harvester.

8.55

1022.81

W.N.B.

(11)

K.A.

6/17/36

L.B.A.

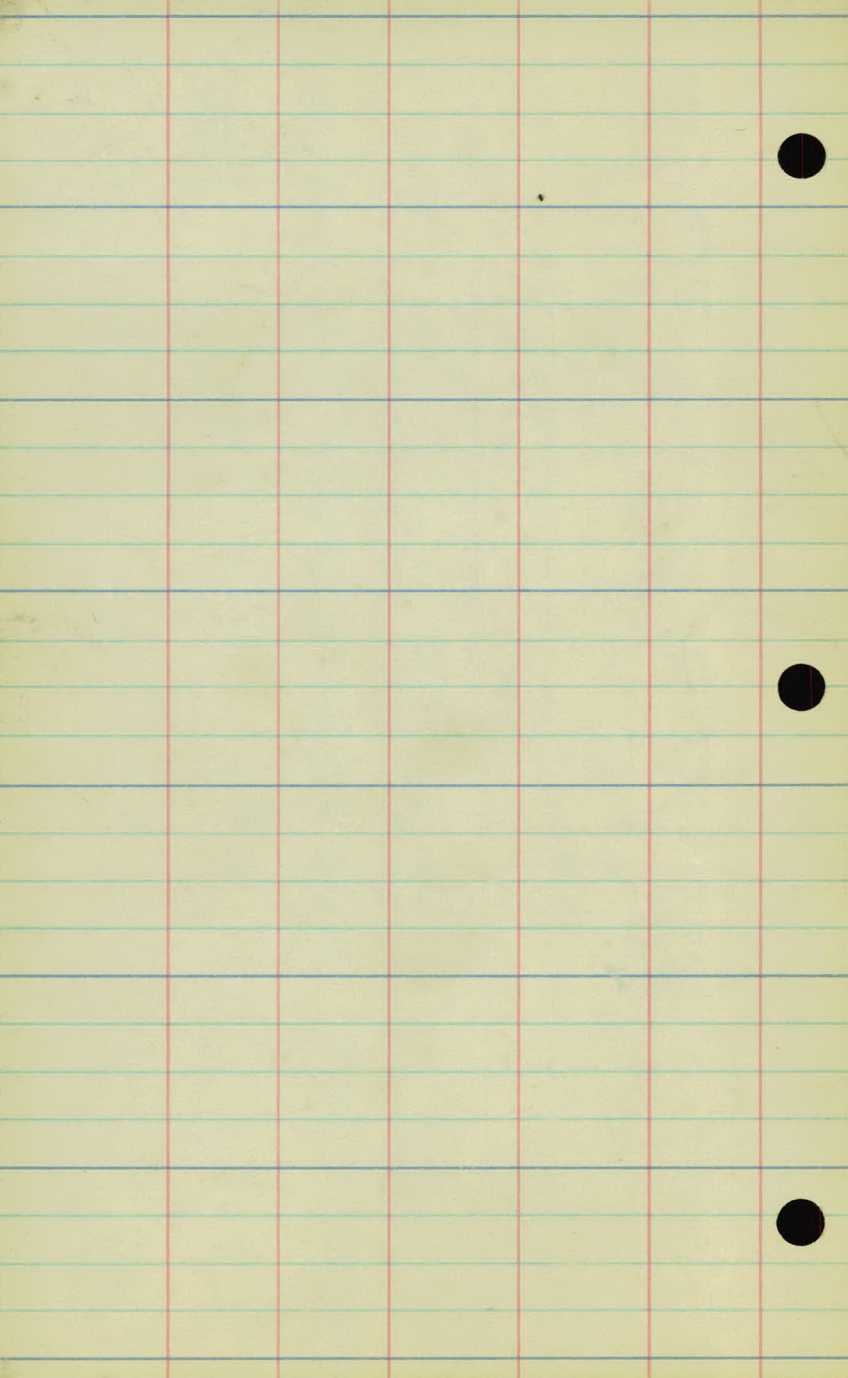
A.M.

Rain.

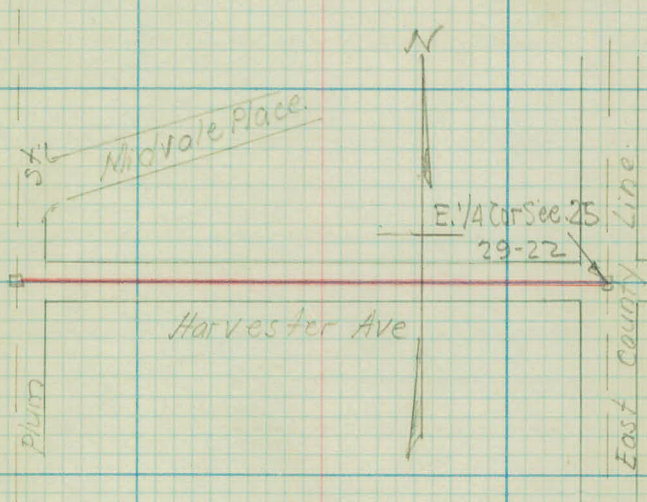
4.9 Ditch West Side

5.6 ✓ ✓ ✓

Drainage Depends on
Grade Line.

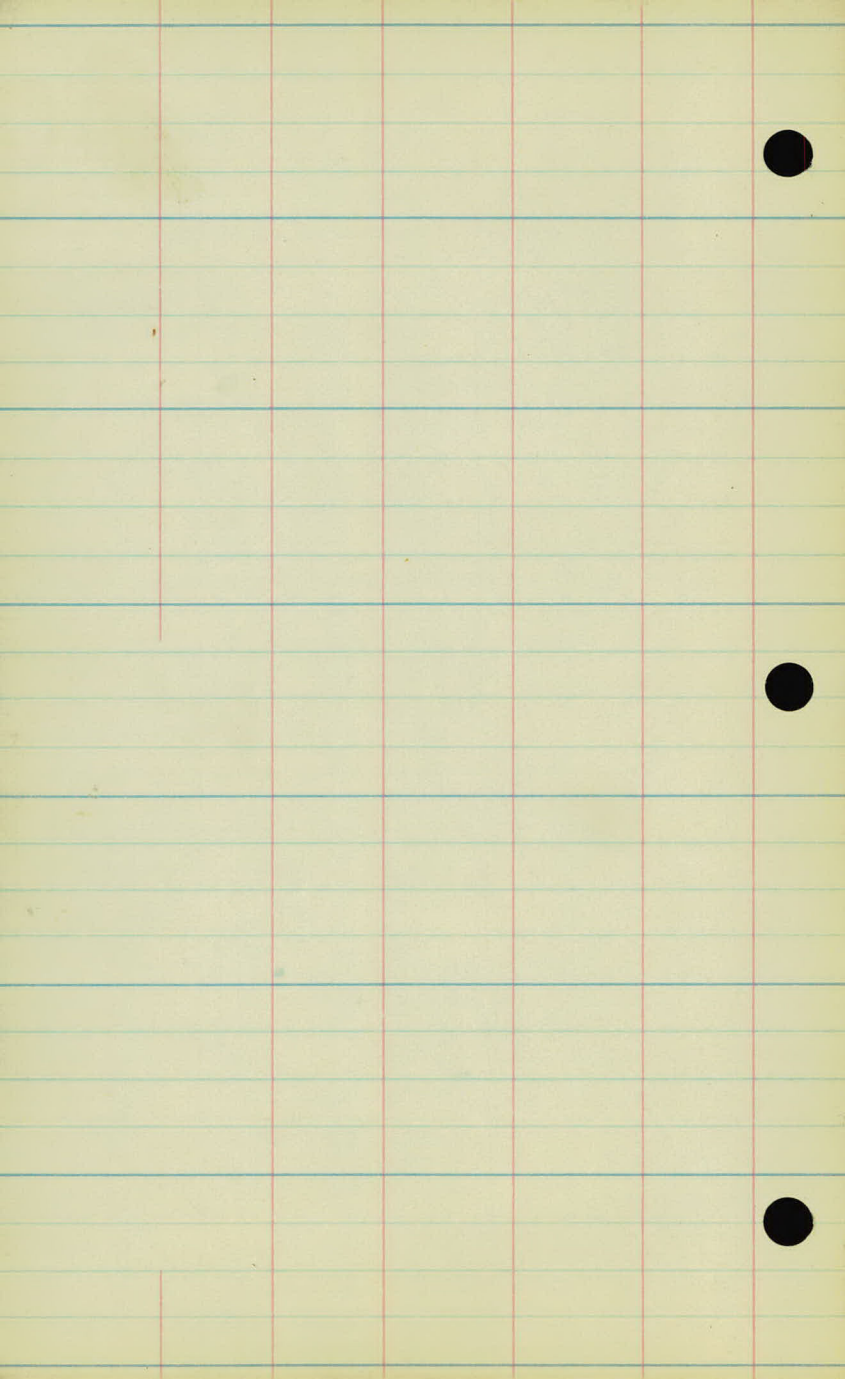


Plan Survey
Harvester Ave.
Plum St. to East Co. Line.



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W. H. Carlson
Nov. 12, 1926



alignment

Harvester Ave.

Plum St. to East Co. Line.

Sta. Point

12199.79

11480.0 R.O.T.

0400 = Stone Man & Plum St.

W.H.C.
R.A.
L.B.H.
A.M.

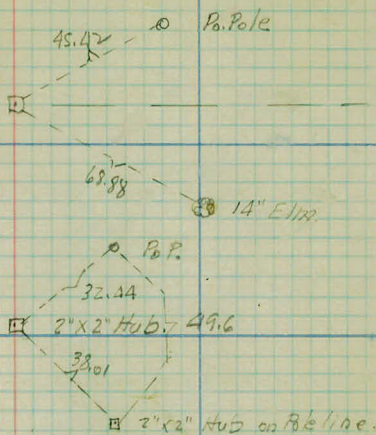
6/11/36

2

East County Line

(Mon. down 0.3')

E. 1/4 Sec. 25



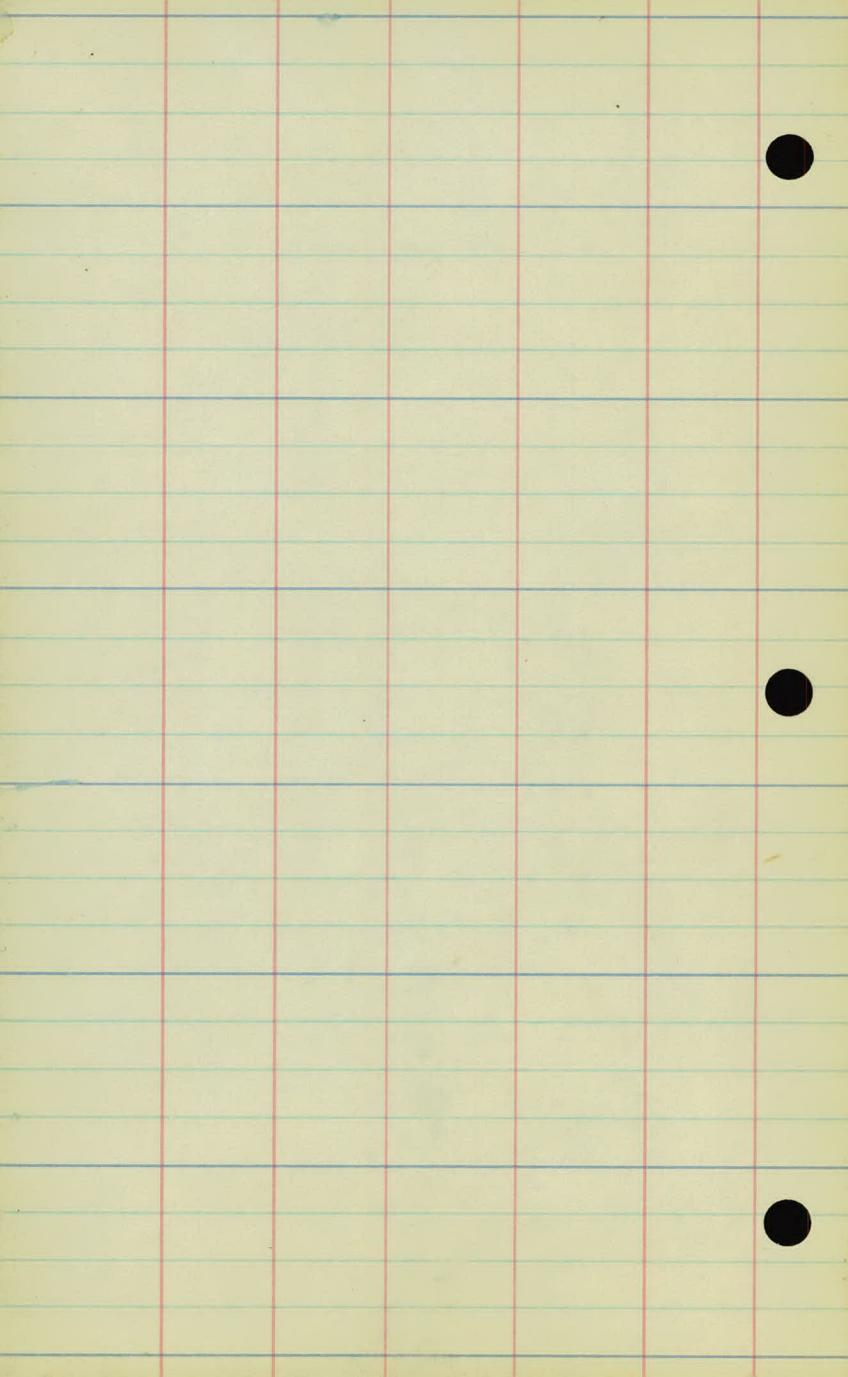
Iron Mon.

47.20



Iron Mon.

46.54



Topography
Harvester Ave.

6



5

4



3

2

1



oto

Rd-10'

Rd-10' 4

+30-Ent.

+30-Ent.
+92- } 2 S. frame 82'
24' x 31'

+30-R.P.
Rd-9'

+83-Ent.

Rd-10'

Rd-7'

+97-Ent.
+82- } 15' x 12' x 18'
+69- } 80'
+51-R.P.D.

Rd-10'

Rd-6'

+47- } Cottage.
+30- } 15' x 8' - 116'
+18-Ent.
Rd-10.

+40-Ent.
+36- } 68' - 20' x 20'
+16- }
+01-R.P.-25
Rd-10'

Rd-10'

+37-Ent.
+27- } 68' - 20' x 20'
+13- }
Rd-11'

Rd-8

Rd-12

+40-Rd-8

+40-Rd-8'

13

1249-79 Stonemort

483-2 Cu IV.

Lt. & Rt.

12" 14"

18" x 26" CM

Drains So.

(New)

12

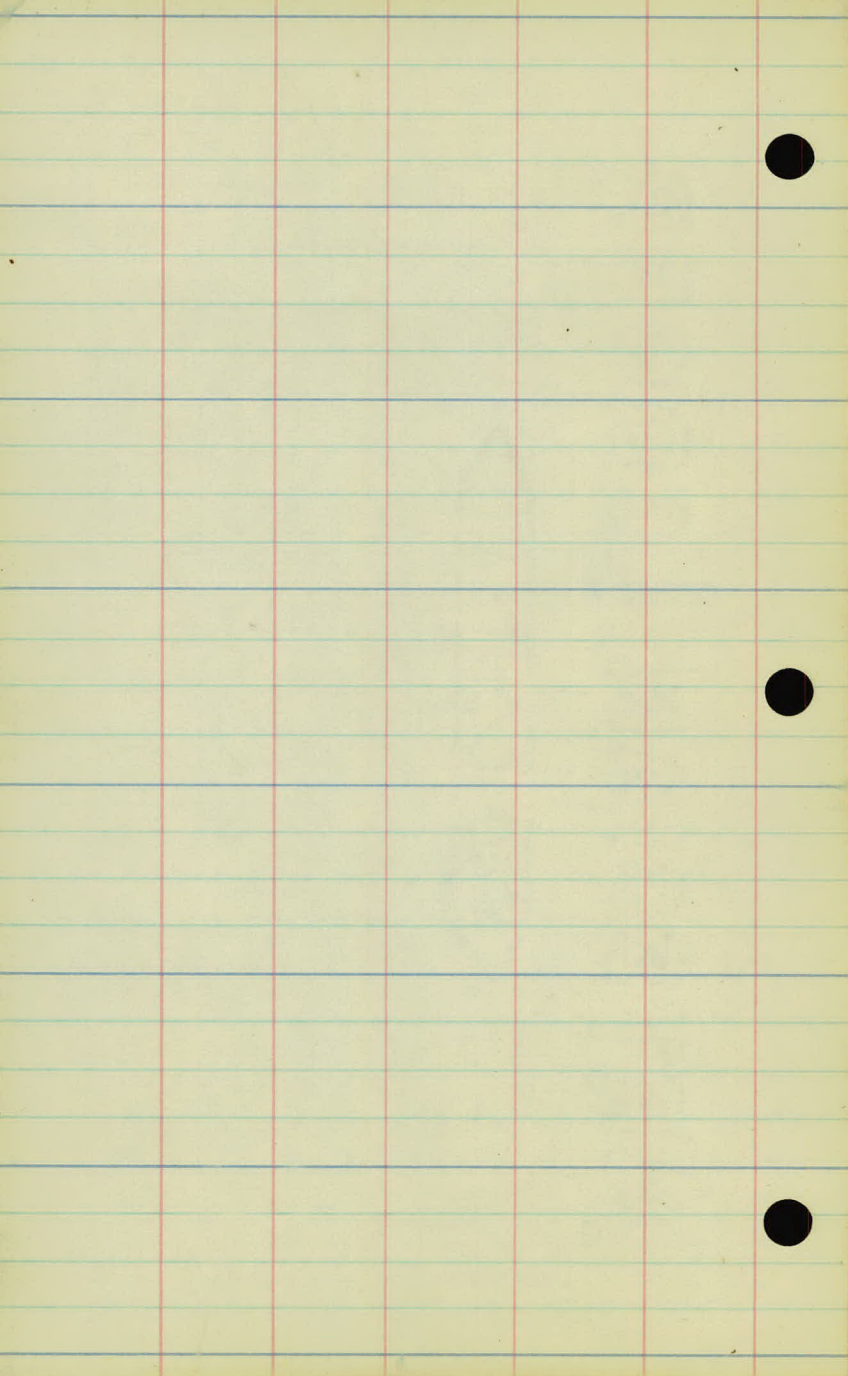
11

10

9

8

7



Bench Levels
& Cross Sections.
Harvester Ave.

Sta.	+	π	-	Elev.
B.M.	12.31	987.47-		975.16-
	12.73	999.60-	0.60	986.87-
	13.66	1011.92-	1.34	998.26-
	8.91	1019.93	0.90	1011.02
	3.87	1022.15-	1.65	1018.28-
	4.45	1022.80-	3.80	1018.35-
	8.24	1029.31-	1.73	1021.07-
B.M.	6.00	1032.71-	-2.60	1026.71-

-0+50 1024.6-

0+00 = $\pm$ Plum St. 7.69 1025.02-

0+33 24.8-

1+0 25.4-

+30 25.0-

2+0 25.9-

+50 26.5-

3+0 27.1-

(Soil Sandy Clay)

W.H.C.
K.A.
Z.B.H.
A.M.

6/12/36 7

Spike in T.P. N.W. of the W. 1/4 Cor. Sec. 25 - East Av. @ Beaver Creek

Lt. E Rt.

Spike in P.O. Pole. 25' Rt. Sta. 1450 (or 150' E. of Mon.)

$\frac{86}{33}$

$\frac{81}{33}$

$\frac{78}{33}$

Top Mon.

$\frac{79}{33}$

$\frac{769}{33}$
Top Mon.

$\frac{75}{33}$

$\frac{81}{33}$

$\frac{79}{33}$

$\frac{79}{33}$

$\frac{77}{33}$

$\frac{76}{10}$

$\frac{73}{33}$

$\frac{72}{33}$

$\frac{79}{33}$

$\frac{77}{10}$

$\frac{77}{33}$

$\frac{76}{15}$

$\frac{73}{33}$

$\frac{75}{33}$

$\frac{71}{10}$

$\frac{68}{33}$

$\frac{63}{12}$

$\frac{60}{33}$

$\frac{68}{33}$

$\frac{65}{12}$

$\frac{62}{33}$

$\frac{60}{12}$

$\frac{57}{33}$

$\frac{61}{33}$

$\frac{57}{13}$

$\frac{56}{33}$

$\frac{55}{14}$

$\frac{55}{33}$

Sta.	+	π	-	Elev.
		103271		
3450				1027.1 -
440				27.2 -
450				27.7 -
540				27.9 -
450				27.9 -
640				27.8 -
450				27.9 -
740				27.6 -
450				27.6 -
840				27.8 -
T.P.	5.48	1033.73 ✓	4.46	1028.35 ✓
450				27.6 -
940				28.0 -

4

C

RT

8

$$\frac{6.0}{33}$$

$$\frac{5.7}{13}$$

$$\frac{5.6}{15}$$

$$\frac{5.1}{15}$$

$$\frac{4.8}{33}$$

$$\frac{6.1}{33}$$

$$\frac{5.9}{14}$$

$$\frac{5.5}{12}$$

$$\frac{5.3}{12}$$

$$\frac{4.8}{33}$$

$$\frac{6.0}{33}$$

$$\frac{5.6}{14}$$

$$\frac{5.0}{11}$$

$$\frac{4.8}{11}$$

$$\frac{4.5}{33}$$

$$\frac{5.5}{13}$$

$$\frac{5.2}{14}$$

$$\frac{4.8}{13}$$

$$\frac{4.4}{13}$$

$$\frac{4.2}{33}$$

$$\frac{5.2}{33}$$

$$\frac{5.2}{14}$$

$$\frac{4.8}{0}$$

$$\frac{4.5}{14}$$

$$\frac{4.5}{33}$$

$$\frac{5.3}{33}$$

$$\frac{5.2}{22}$$

$$\frac{4.9}{12}$$

$$\frac{4.6}{12}$$

$$\frac{4.8}{33}$$

$$\frac{5.2}{33}$$

$$\frac{4.9}{13}$$

$$\frac{4.8}{12}$$

$$\frac{4.5}{12}$$

$$\frac{4.4}{33}$$

$$\frac{5.7}{33}$$

$$\frac{5.4}{12}$$

$$\frac{5.1}{12}$$

$$\frac{4.8}{12}$$

$$\frac{4.6}{33}$$

$$\frac{5.5}{33}$$

$$\frac{5.3}{11}$$

$$\frac{5.0}{13}$$

$$\frac{5.0}{13}$$

$$\frac{4.9}{33}$$

$$\frac{5.3}{33}$$

$$\frac{5.3}{12}$$

$$\frac{4.9}{13}$$

$$\frac{4.9}{13}$$

$$\frac{4.9}{33}$$

$$\frac{6.1}{33}$$

$$\frac{6.2}{12}$$

$$\frac{6.1}{12}$$

$$\frac{6.2}{12}$$

$$\frac{6.4}{33}$$

$$\frac{5.8}{33}$$

$$\frac{5.8}{12}$$

$$\frac{5.7}{7}$$

$$\frac{6.0}{7}$$

$$\frac{6.3}{33}$$

Sta.	+	π ✓	-	Elev.
		103373		
9+50				10285 -
1070				28.7 -
+50				29.2 -
1140				29.1 -
+50				29.7 -
1240				29.4 -
+40				28.4 -
+70				25.6 -
+83				22.5 -
+92				23.0 -
12+99.79				23.2 -
B.M.		10.92		✓ 1022.81

Lt -

E

Rt.

9

$$\begin{array}{r} 5.5 \\ 33 \end{array}$$

$$\begin{array}{r} 5.5 \\ 12 \end{array}$$

$$\begin{array}{r} 5.2 \\ 1 \end{array}$$

$$\begin{array}{r} 5.4 \\ 11 \end{array}$$

$$\begin{array}{r} 5.6 \\ 33 \end{array}$$

$$\begin{array}{r} 5.3 \\ 33 \end{array}$$

$$\begin{array}{r} 5.2 \\ 14 \end{array}$$

$$\begin{array}{r} 5.0 \\ 1 \end{array}$$

$$\begin{array}{r} 5.3 \\ 11 \end{array}$$

$$\begin{array}{r} 5.5 \\ 33 \end{array}$$

$$\begin{array}{r} 4.6 \\ 33 \end{array}$$

$$\begin{array}{r} 4.6 \\ 14 \end{array}$$

$$\begin{array}{r} 4.5 \\ 0 \end{array}$$

$$\begin{array}{r} 4.9 \\ 10 \end{array}$$

$$\begin{array}{r} 5.3 \\ 33 \end{array}$$

$$\begin{array}{r} 4.8 \\ 50 \end{array}$$

$$\begin{array}{r} 4.6 \\ 33 \end{array}$$

$$\begin{array}{r} 4.7 \\ 11 \end{array}$$

$$\begin{array}{r} 4.6 \\ 1 \end{array}$$

$$\begin{array}{r} 5.0 \\ 11 \end{array}$$

$$\begin{array}{r} 4.9 \\ 50 \end{array}$$

$$\begin{array}{r} 5.1 \\ 50 \end{array}$$

$$\begin{array}{r} 4.4 \\ 12 \end{array}$$

$$\begin{array}{r} 4.0 \\ 1 \end{array}$$

$$\begin{array}{r} 4.3 \\ 25 \end{array}$$

$$\begin{array}{r} 4.5 \\ 50 \end{array}$$

$$\begin{array}{r} 5.1 \\ 50 \end{array}$$

$$\begin{array}{r} 4.6 \\ 12 \end{array}$$

$$\begin{array}{r} 4.3 \\ 1 \end{array}$$

$$\begin{array}{r} 4.6 \\ 11 \end{array}$$

$$\begin{array}{r} 5.1 \\ 33 \end{array}$$

$$\begin{array}{r} 5.5 \\ 50 \end{array}$$

$$\begin{array}{r} 4.8 \\ 50 \end{array}$$

$$\begin{array}{r} 5.1 \\ 14 \end{array}$$

$$\begin{array}{r} 5.3 \\ 1 \end{array}$$

$$\begin{array}{r} 5.5 \\ 12 \end{array}$$

$$\begin{array}{r} 6.0 \\ 33 \end{array}$$

$$\begin{array}{r} 6.6 \\ 50 \end{array}$$

$$\begin{array}{r} 4.4 \\ 50 \end{array}$$

$$\begin{array}{r} 4.4 \\ 33 \end{array}$$

$$\begin{array}{r} 5.0 \\ 12 \end{array}$$

$$\begin{array}{r} 8.1 \\ 9 \end{array}$$

$$\begin{array}{r} 8.1 \\ 1 \end{array}$$

$$\begin{array}{r} 8.0 \\ 11 \end{array}$$

$$\begin{array}{r} 6.0 \\ 12 \end{array}$$

$$\begin{array}{r} 6.7 \\ 32 \end{array}$$

$$\begin{array}{r} 8.0 \\ 50 \end{array}$$

$$\begin{array}{r} 10.6 \\ 50 \end{array}$$

$$\begin{array}{r} 11.0 \\ 21 \end{array}$$

$$\begin{array}{r} 10.6 \\ 11 \end{array}$$

$$\begin{array}{r} 10.2 \\ 1 \end{array}$$

$$\begin{array}{r} 10.8 \\ 12 \end{array}$$

$$\begin{array}{r} 11.9 \\ 16 \end{array}$$

$$\begin{array}{r} 12.9 \\ 50 \end{array}$$

in ditch

$$\begin{array}{r} 9.7 \\ 50 \end{array}$$

$$\begin{array}{r} 10.7 \\ 1 \end{array}$$

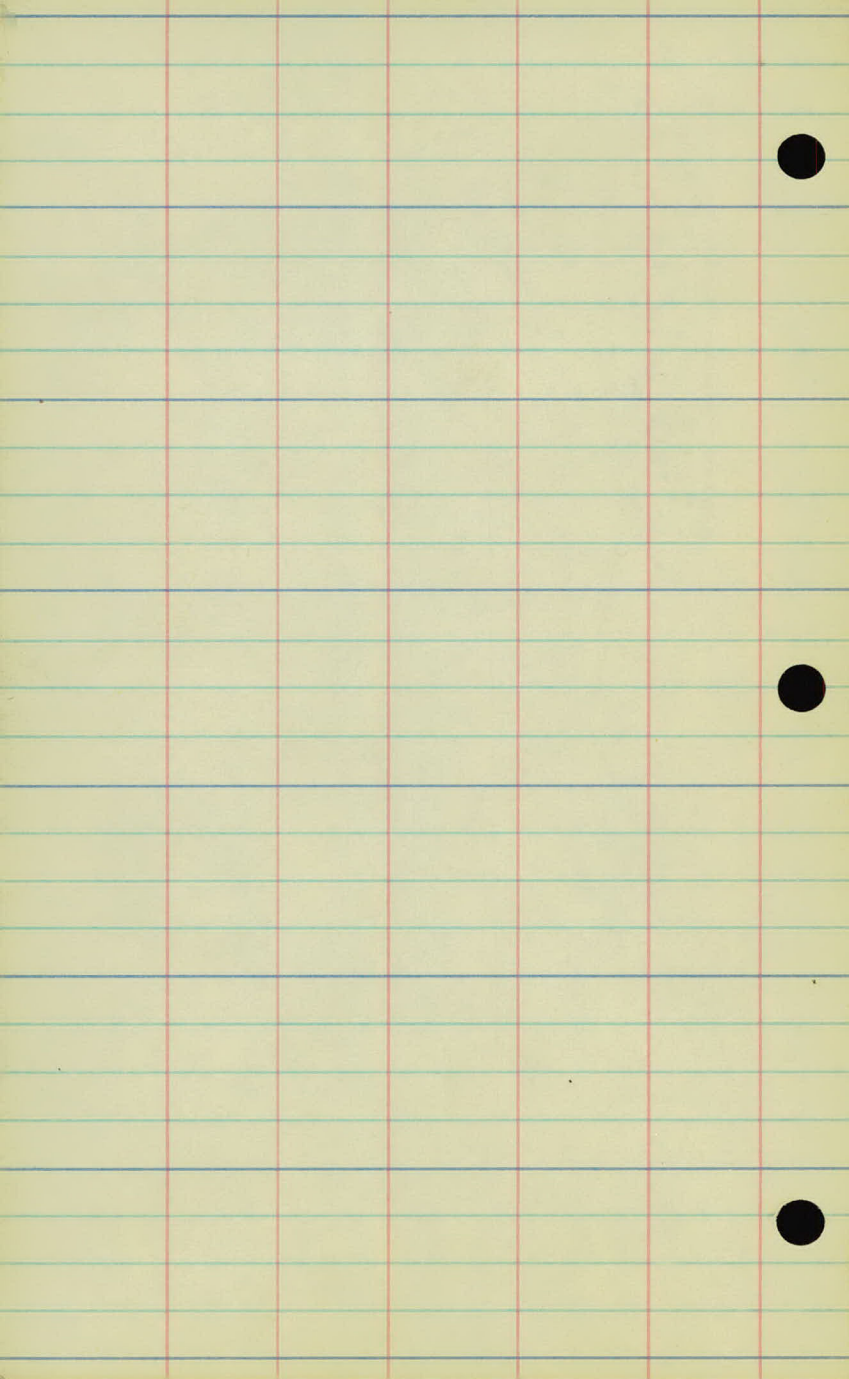
$$\begin{array}{r} 12.2 \\ 50 \end{array}$$

$$\begin{array}{r} 9.4 \\ 50 \end{array}$$

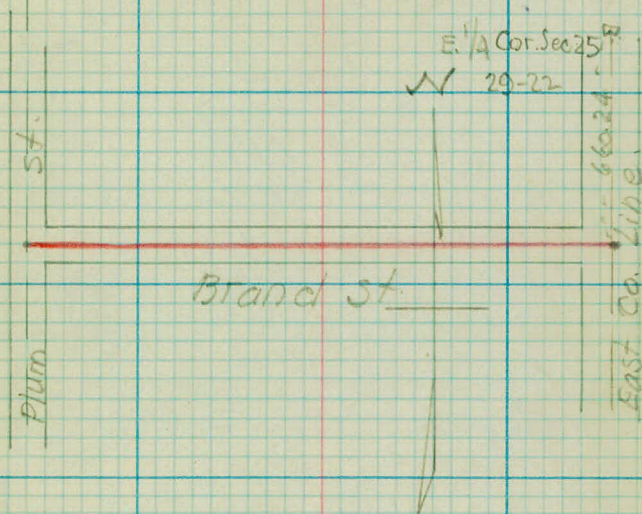
$$\begin{array}{r} 10.5 \\ 1 \end{array}$$

$$\begin{array}{r} 12.0 \\ 50 \end{array}$$

Top Stone Mon. 2 E. Co-Line Rd. + Harvester.



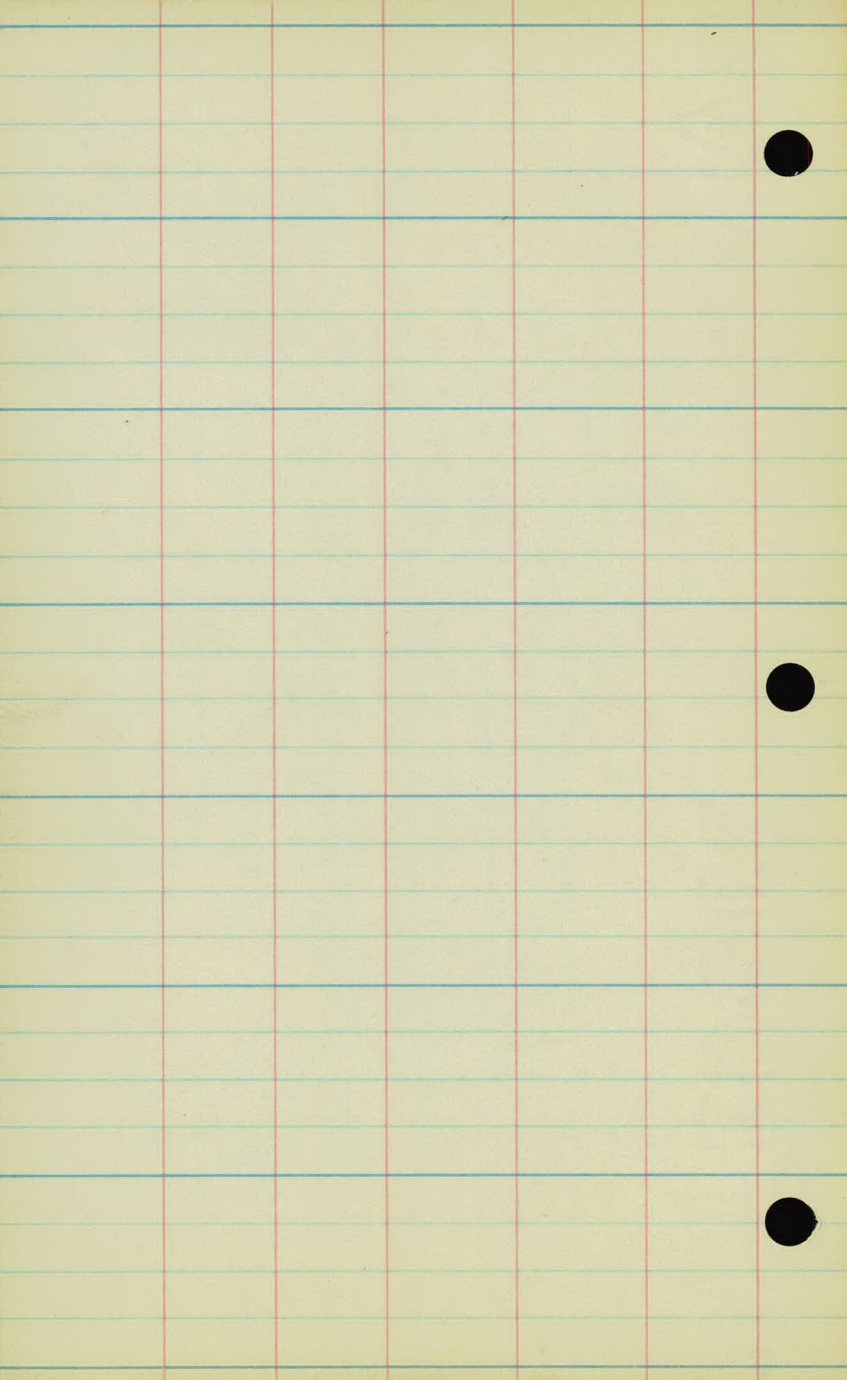
Plan Survey
Brand St.
Plum St to East Co. Line.



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Alignment	P. 1-2
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± E. Co. Line	11

W. H. Carlson.
June 13, 1926



1
Alignment

Brand Ave.

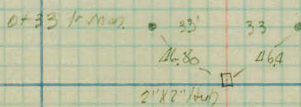
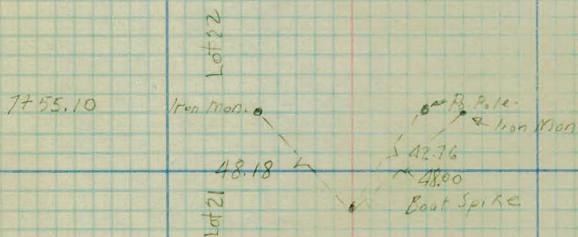
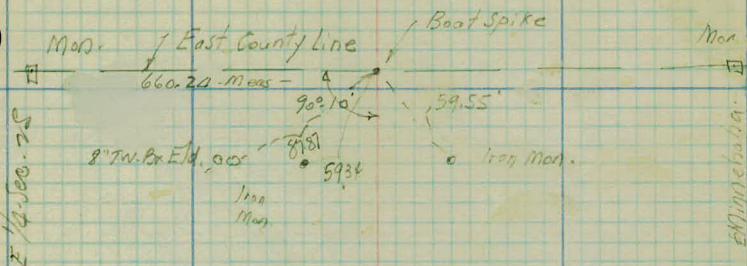
Plum St. to East Co. Line

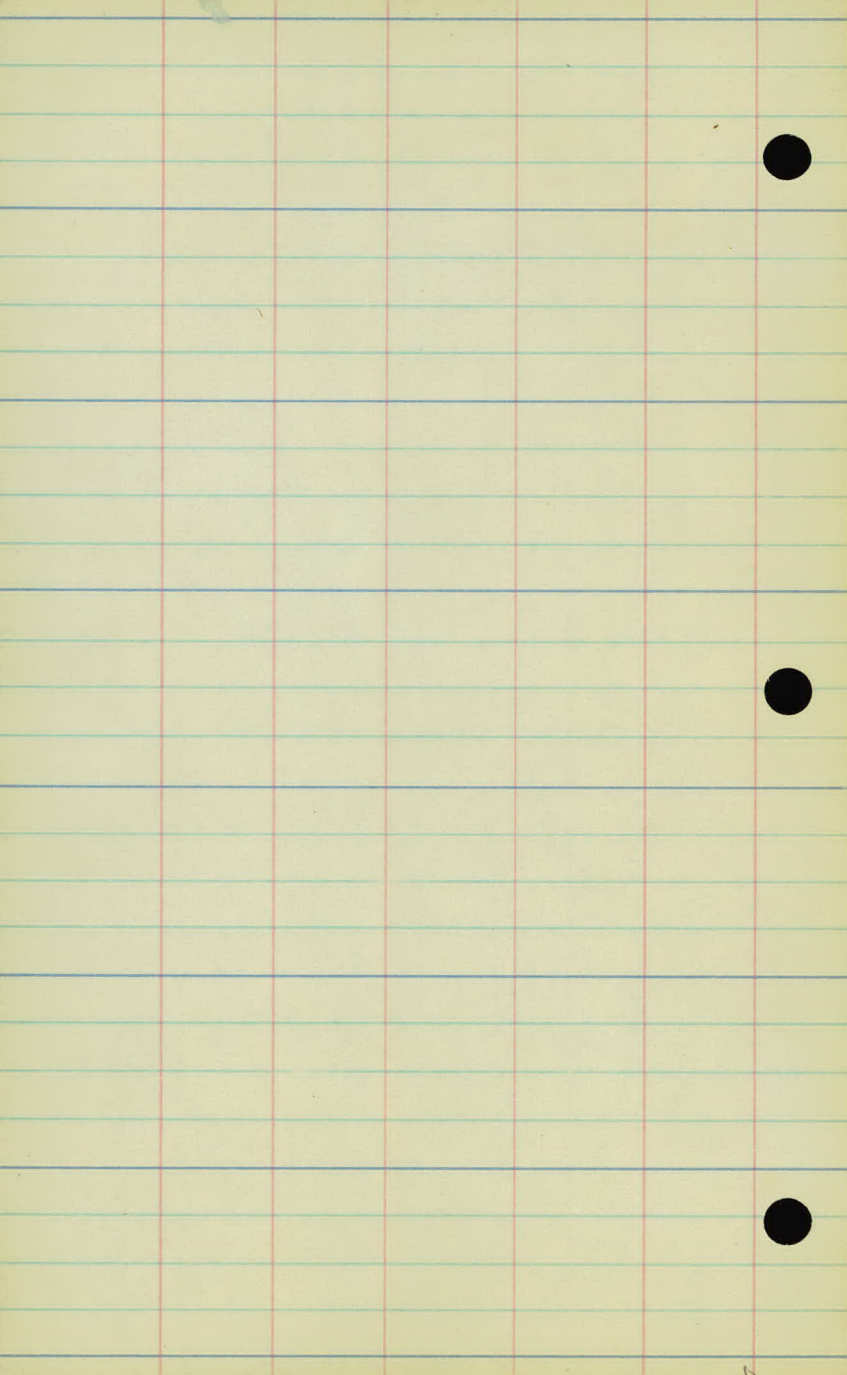
Sta. Point.

13104.39

7+20

0100 = E Plum St.





Topography
Brand Ave.

6

5

4

3

2

1

oto

175- Ent.

Pd-10

 $+42 - 15 \pm$

Rd-8

Red-8

Rd-8

105. P.P. 78
Rd. 7

Rd-8

455-P.P. 25'

Rd-3

+60-En7

(2)
$$\begin{array}{r} +27-30' \text{ Cott} - 25' \\ +17-8' \text{ Oak} + 11' - H_s \\ \hline 19' \end{array} \left. \begin{array}{l} 135' \text{ No.} \\ \\ \end{array} \right\} \begin{array}{l} 16' \times 24 \\ 72 \end{array}$$

+83-16"SE K-22'

462-F. Cor. 33'

+51-141100 k-S

+38-14" (top. 12")

+60-14' oak 29'

+18-16" Oak 42

Low Swampy

040 - F. Cor. 32

13

+84-1 18"X30'C.M. 8'Lt. 22'R/

- New -

12

11

10

9

8

7

+14- Taruia

+93- Edge Taruia.
+90- Shlar

East County Line Road.

+80- Rd- 0-15'

Rd- 5'

Rd- 15

Rd- 6'

Rd- 12'

+55- B.P. 75'

Rd. 7'

Rd 11'

Rd- 8'

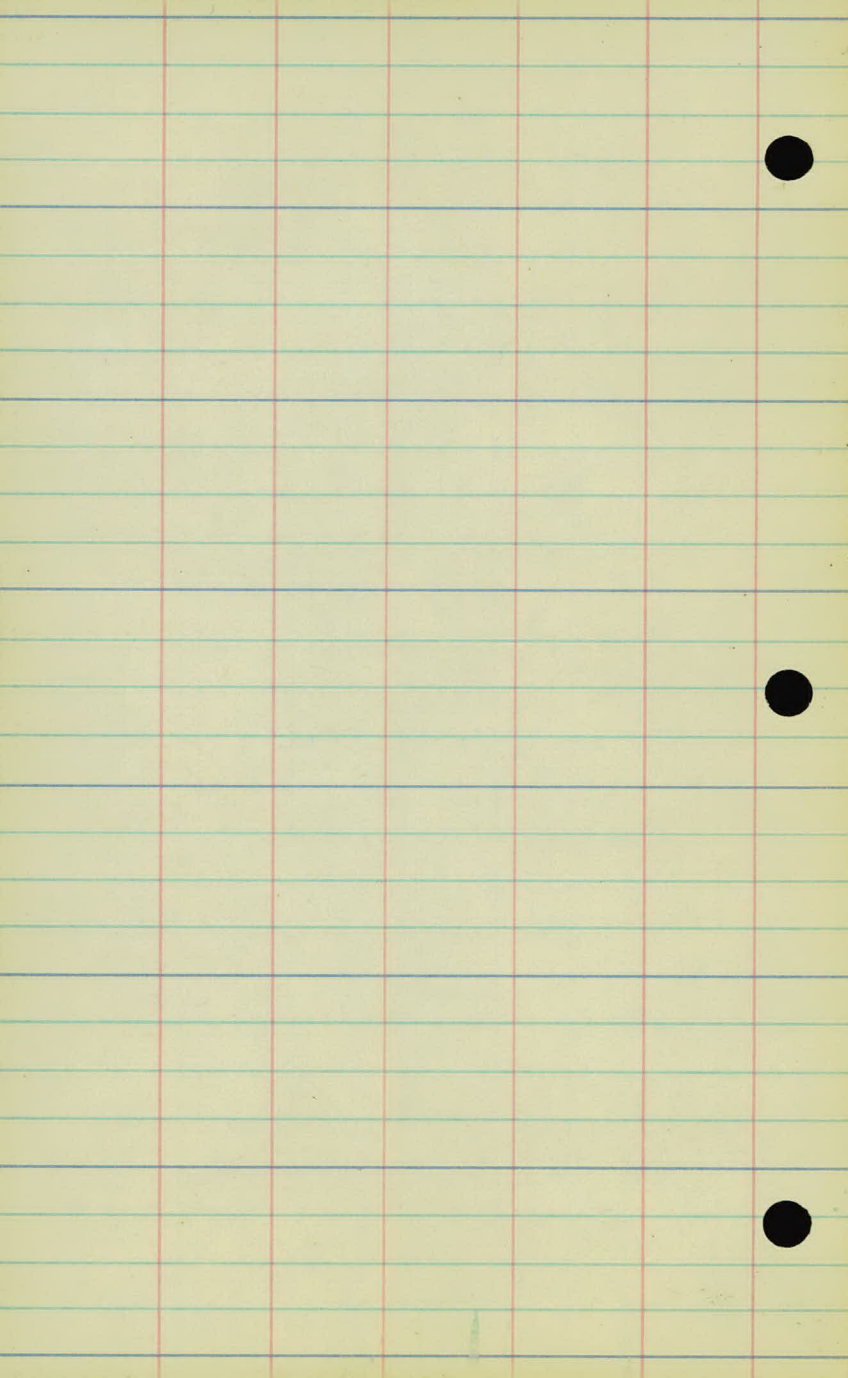
+55- B.P. 75'
Rd. 10'

+116- Ent-

+102- Ho. } 14x20'
Rd- 9' }
+104- Ho. } 110'

Rd- 9

+55- B.P. 75'



Cross Sections

Brand St.

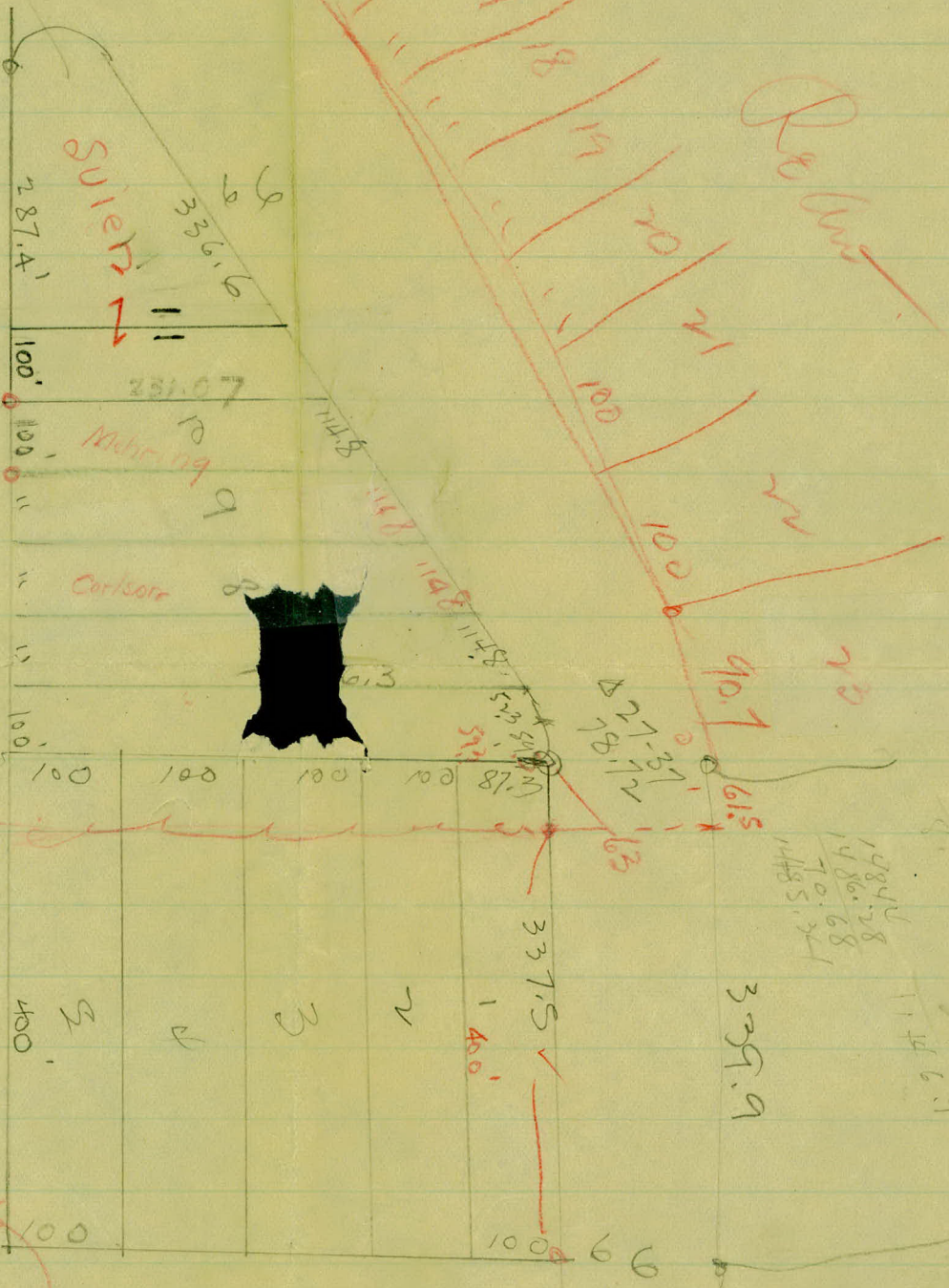
Sta.	+	Δ	-	Elev.
B.M.	7.90	1032.92		1025.02

± Levels on Plum St. from Harvester to Brand-

60 = ± Harvester.			7.9	25.0
1			7.0	25.9
2			6.7	26.2
3			5.2	27.7
+60			4.4	28.5
4			4.0	28.9
+82			4.0	28.9
5			9.0	23.9
T.P.	0.44	1020.76	12.60	1020.32
+30			7.2	13.6
T.P.	1.29	1008.55	13.50	1007.26
5+58			8.3	00.3
6+0			9.4	99.2
6+62 = ± Brand.			11.0	97.6
B.M.			1.79	1007.28

$\Delta 152.03$
 $T. 159.2$

52.3
 54.2
 111.2



Suler
 11
 339.9

111.2
 100

Carlson

114.8
 117.8
 11.

1484.28
 1486.28
 1485.28
 1485.28

1484.28
 1486.28
 1485.28
 1485.28

1486.28
 1485.28
 1485.28

1486.28
 1485.28
 1485.28



Kenya

Lt.

L

Rt

7

Top Stone Mon. Int. of Harvester Brand.

W.R.H.

K.H.

L.B.A. June 13, 1986

A.M.
(Very Windy)

Sta. + π - Elev.
 X-Sections on Brand from Plum to E. Co. Line
 1.29 1008.55 1007.26
 0+0 = E Plum. 992.6 -

0+33 98.2 -

1+0 999.1 -

1+60 1001.0 -

2+0 1005.3 -
 T.P. 13.29 1019.38 2.46 1006.09

1+60

2+0

1+73 14.9 -

3+0 14.8 -

1+50 Ruggert begin Leds. 11.7 -

4+0 12.4 -

1+55 13.4 -

T.P. 11.93 1030.4 1.17 1018.21

(Soil Sandy Clay)

Lt.

L

Rt.

8

Nail in Top¹⁰ 50 Rt. Sta. 0+55

$$\begin{array}{r} 83 \\ 100 \\ \hline \end{array}$$

$$\begin{array}{r} 9.4 \\ 62 \\ \hline \end{array}$$

$$\begin{array}{r} 11.0 \\ \hline \end{array}$$

$$\begin{array}{r} 11.3 \text{ W.S.} \\ 40 \\ \hline \end{array}$$

$$\begin{array}{r} 12.0 \\ 40 \\ \hline \end{array}$$

$$\begin{array}{r} 8.0 \\ 85 \\ \hline \end{array}$$

$$\begin{array}{r} 9.8 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 10.4 \\ \hline \end{array}$$

$$\begin{array}{r} 11.3 \\ 40 \\ \hline \end{array}$$

then
L.O

$$\begin{array}{r} 5.5 \text{ to } 100' \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 50 \\ \hline \end{array}$$

$$\begin{array}{r} 7.1 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 8.2 \\ 27 \\ \hline \end{array}$$

$$\begin{array}{r} 9.5 \\ \hline \end{array}$$

$$\begin{array}{r} 10.5 \\ 40 \\ \hline \end{array}$$

Cont'd

$$\begin{array}{r} 2.4 \\ 13 \\ \hline \end{array}$$

$$\begin{array}{r} 7.6 \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 14 \\ \hline \end{array}$$

$$\begin{array}{r} 9.7 \\ 32 \\ \hline \end{array}$$

$$\begin{array}{r} 10.1 \\ 40 \\ \hline \end{array}$$

$$\begin{array}{r} 3.3 \\ \hline \end{array}$$

$$\begin{array}{r} 6.0 \\ 14 \\ \hline \end{array}$$

$$\begin{array}{r} 8.4 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 40 \\ \hline \end{array}$$

then
L.O

$$\begin{array}{r} 5.5 \text{ to } 110' \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 55 \\ \hline \end{array}$$

$$\begin{array}{r} 10.0 \\ 28 \\ \hline \end{array}$$

18.4

$$\begin{array}{r} 5.5 \text{ to } 75' \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 42 \\ \hline \end{array}$$

$$\begin{array}{r} 5.7 \\ 25 \\ \hline \end{array}$$

14.1

$$\begin{array}{r} 5.5 \text{ to } 75' \\ \hline \end{array}$$

$$\begin{array}{r} 7.5 \\ 50 \\ \hline \end{array}$$

$$\begin{array}{r} 7.0 \\ 34 \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 23 \\ \hline \end{array}$$

$$\begin{array}{r} 3.0 \\ 11 \\ \hline \end{array}$$

$$\begin{array}{r} 4.5 \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 14 \\ \hline \end{array}$$

$$\begin{array}{r} 12.2 \\ 27 \\ \hline \end{array}$$

$$\begin{array}{r} 13.5 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 7.0 \\ 70 \\ \hline \end{array}$$

$$\begin{array}{r} 7.5 \\ 54 \\ \hline \end{array}$$

$$\begin{array}{r} 9.4 \\ 20 \\ \hline \end{array}$$

$$\begin{array}{r} 4.6 \\ \hline \end{array}$$

$$\begin{array}{r} 6.0 \\ 13 \\ \hline \end{array}$$

$$\begin{array}{r} 9.5 \\ 22 \\ \hline \end{array}$$

$$\begin{array}{r} 12.0 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 9.0 \\ 39 \\ \hline \end{array}$$

$$\begin{array}{r} 1.7 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 7.4 \\ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7.7 \\ \hline \end{array}$$

$$\begin{array}{r} 9.5 \\ 15 \\ \hline \end{array}$$

$$\begin{array}{r} 9.5 \\ 25 \\ \hline \end{array}$$

$$\begin{array}{r} 11.4 \\ 31 \\ \hline \end{array}$$

$$\begin{array}{r} 12.4 \\ 40 \\ \hline \end{array}$$

$$\begin{array}{r} 1.0 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 2.1 \\ 27 \\ \hline \end{array}$$

$$\begin{array}{r} 4.6 \\ 14 \\ \hline \end{array}$$

$$\begin{array}{r} 6.8 \\ 9 \\ \hline \end{array}$$

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

$$\begin{array}{r} 7.2 \\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8.8 \\ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10.4 \\ 17 \\ \hline \end{array}$$

$$\begin{array}{r} 11.1 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 0.4 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 4.0 \\ 12 \\ \hline \end{array}$$

$$\begin{array}{r} 5.7 \\ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6.0 \\ \hline \end{array}$$

$$\begin{array}{r} 6.0 \\ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8.0 \\ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10.2 \\ 33 \\ \hline \end{array}$$

Sta.

+

π

-

Elev.

103914

540

17.4 -

+35

20.5 -

+70

22.5 -

640

23.5 -

+50

25.4 -

740

25.9 -

+55

25.2 -

840

23.7 -

+55

19.9 -

T.P

2.99

10/954

13.59

10/655

940

15.9 -

+40

14.7 -

1040

14.4 -

Lt.

E

Rt.

9

$$\frac{10.8}{33}$$

$$\frac{11.4}{26}$$

$$\frac{12.4}{10}$$

$$\frac{12.7}{-}$$

$$\frac{14.6}{27}$$

$$\frac{15.5}{33}$$

$$\frac{7.8}{33}$$

$$\frac{8.9}{14}$$

$$\frac{9.6}{-}$$

$$\frac{10.0}{11}$$

$$\frac{11.5}{27}$$

$$\frac{12.4}{33}$$

$$\frac{6.2}{33}$$

$$\frac{7.2}{12}$$

$$\frac{7.6}{-}$$

$$\frac{8.5}{9}$$

$$\frac{9.5}{33}$$

$$\frac{5.0}{33}$$

$$\frac{6.2}{13}$$

$$\frac{6.6}{-}$$

$$\frac{7.4}{8}$$

$$\frac{7.3}{33}$$

$$\frac{2.6}{33}$$

$$\frac{4.5}{11}$$

$$\frac{4.7}{-}$$

$$\frac{5.8}{9}$$

$$\frac{8.3}{33}$$

$$\frac{2.3}{33}$$

$$\frac{3.6}{15}$$

$$\frac{4.2}{-}$$

$$\frac{5.1}{9}$$

$$\frac{6.9}{33}$$

$$\frac{3.8}{33}$$

$$\frac{4.7}{12}$$

$$\frac{4.9}{-}$$

$$\frac{5.7}{10}$$

$$\frac{7.0}{33}$$

$$\frac{5.7}{33}$$

$$\frac{6.2}{11}$$

$$\frac{6.4}{-}$$

$$\frac{7.1}{10}$$

$$\frac{8.1}{25}$$

$$\frac{9.1}{33}$$

$$\frac{9.6}{33}$$

$$\frac{9.9}{13}$$

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

$$\frac{11.1}{10}$$

$$\frac{13.0}{33}$$

$$\frac{3.2}{33}$$

$$\frac{3.6}{9}$$

$$\frac{3.6}{-}$$

$$\frac{4.3}{10}$$

$$\frac{4.9}{33}$$

$$\frac{4.6}{33}$$

$$\frac{4.9}{9}$$

$$\frac{4.8}{-}$$

$$\frac{5.2}{11}$$

$$\frac{5.4}{33}$$

$$\frac{4.8}{33}$$

$$\frac{5.1}{9}$$

$$\frac{5.1}{-}$$

$$\frac{5.4}{11}$$

$$\frac{5.7}{33}$$

Sta.

+

A

-

Elev.

1019.54

10+50

1014.5 -

11+0

14.7 -

+60

14.9 -

12

14.7 -

+60

13.1 -

+75

13.4 -

+80

13.8 -

+86

14.3 -

Ditch Drains South.

12+92 Edge Talvia.

14.9 -

13+04.29 - E. Co. Line.

1015.4 -

13+04.29

B.M.

4.13

1015.41

B.M.

2.34

1017.20

4.

2

12.

10

$$\frac{40}{33}$$

$$\frac{48}{9}$$

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

$$\frac{56}{73}$$

$$\frac{64}{33}$$

$$\frac{3.2}{33}$$

$$\frac{4.5}{9}$$

$$\frac{48}{-}$$

$$\frac{5.5}{12}$$

$$\frac{6.3}{27}$$

$$\frac{6.7}{33}$$

$$\frac{29}{33}$$

$$\frac{4.2}{8}$$

$$\frac{46}{-}$$

$$\frac{53}{74}$$

$$\frac{58}{24}$$

$$\frac{6.5}{33}$$

$$\frac{30}{33}$$

$$\frac{4.4}{7}$$

$$\frac{48}{-}$$

$$\frac{56}{16}$$

$$\frac{66}{33}$$

$$\frac{54}{33}$$

$$\frac{6.0}{5}$$

$$\frac{64}{-}$$

$$\frac{6.7}{33}$$

$$\frac{55}{33}$$

$$\frac{5.9}{4}$$

$$\frac{61}{-}$$

$$\frac{6.3}{20}$$

$$\frac{6.5}{40}$$

$$\frac{6.6}{33}$$

$$\frac{6.7}{2}$$

$$\frac{57}{-}$$

$$\frac{5.7}{14}$$

$$\frac{6.9}{18}$$

$$\frac{7.1}{33}$$

$$\frac{6.6}{33}$$

$$\frac{6.7}{3}$$

$$\frac{5.4}{1}$$

$$\frac{5.2}{-}$$

$$\frac{5.2}{14}$$

$$\frac{6.6}{18}$$

$$\frac{7.1}{33}$$

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

$$\frac{46}{-}$$

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

$$\frac{40}{50}$$

$$4.13$$

$$\frac{4.3}{50}$$

Drainage

Boat Spike @ Intersection 13 to 4.79

Nail in 8" Box Elder. to Lt. Sta. 12+75

Sta. + X - Elev.

℄-Levels East County Line, Brand to Harvester.

5.85 1021.26 1015.41

40's = ℄ Brand

5.85 15.4

1 5.3 16.0

2 4.9 16.4

3 5.1 16.2

4 4.0 17.3

5 2.1 19.2

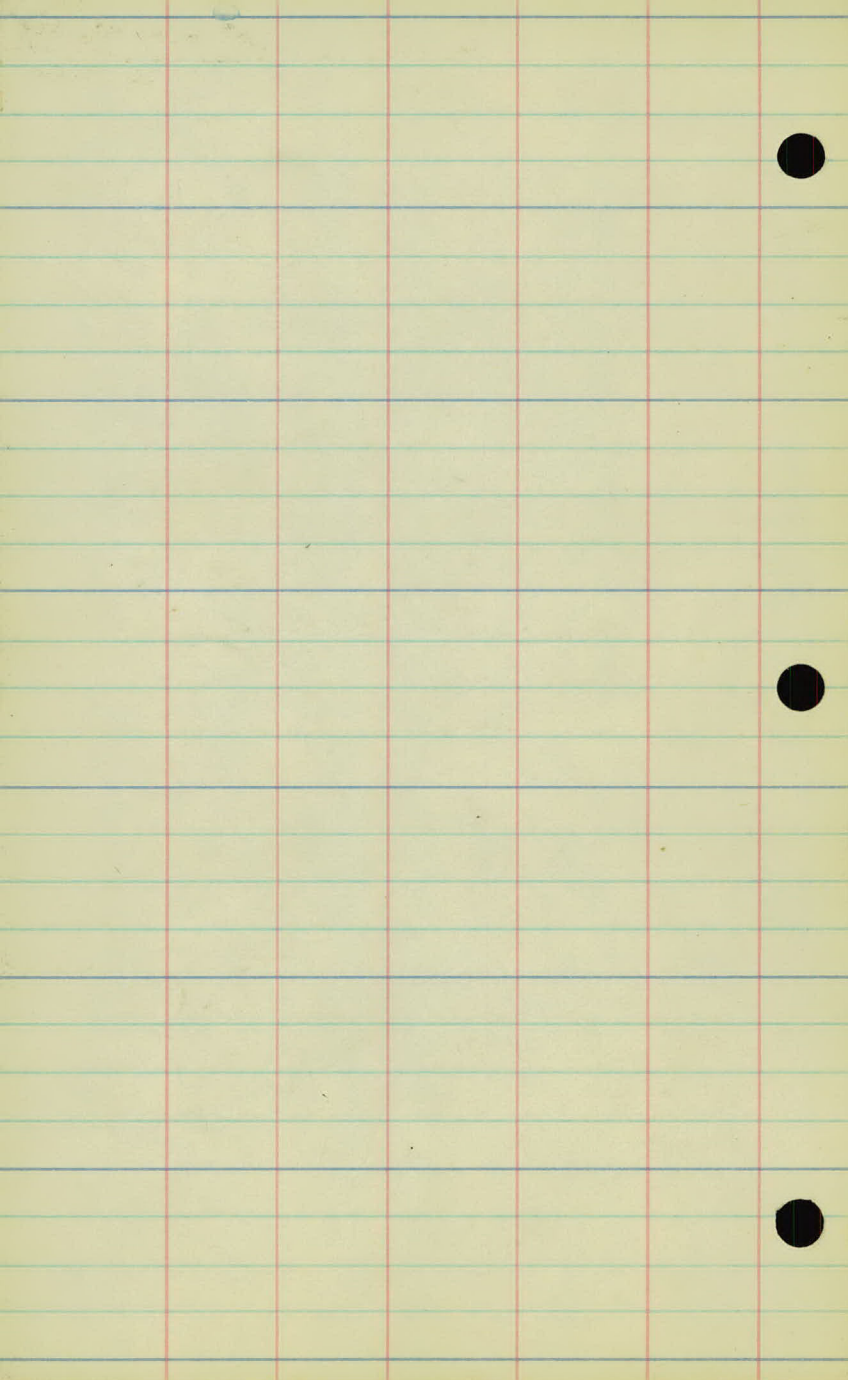
T.P. 5.26 1025.88 0.64 1020.62

6 4.4 21.5

B.M.

6 + 60.24 = ℄ Harvester. 3.07 1022.81

Top Stone Men. Harvester & E. Co. Line



Plants in Hand.
Proj. 36-N25

June 23, 1936
M.W.C. & A.R.C.

Harvester Ave.

- Sta. 12+83 $\frac{1}{2}$ - Pl. 18" x 78' S.C. ✓
✓ 8+34 Lt. Pl. 15" x 20' C.M. ✓
✓ 6+30 ✓ ✓ 15" x 20' ✓ ✓
✓ 5+83 Rt. ✓ 15" x 20' - ✓
✓ 4+97 ✓ - 15" x 20' - ✓
✓ 3+44 ✓ - 15" x 20' ✓ ✓
✓ 3+18 Lt. ✓ 15" x 20' - ✓
✓ 2+39 Rt. - 15" x 20' - ✓
-

Midvale Pl.

- Sta. 1+30 $\frac{1}{2}$ { Ext. 18" x 10' ✓
{ Repl. - 18" x 26' C.M. - { from 12+83
12+84
12+84
{ from Brand St
✓ 10+50 $\frac{1}{2}$ Repl. 18" x 30' C.M. ✓
✓ 13+67 Rt. Pl. 15" x 20' C.M. ✓
✓ 15+16 $\frac{1}{2}$ Pl. 18" x 66' S.C. ✓
✓ 15+05 Lt. - Cl. & Gr. 1 Tree. ✓

Brand St.

- Sta. 12+84 Φ Remove culv.
- ✓ 12+60 Φ Pl. 18" x 48" S.C. ✓
- ✓ 8+16 Lt. Pl. 15" x 20' C.M. ✓
- ✓ 6+75 ✓ No culv req.
- ✓ 5+42 Rt + Lt. Pl. 2-15" x 20' C.M. ✓
- ✓ 4+00 Φ Pl. 24" x 48" S.C. ✓
- ✓ 3+60 Rt Pl. 15" x 20' C.M. ✓
- ✓ 2+00-4+00 C 1.3 Gr. 4 ✓

Brand St.
Construction Notes.

Sta.	+	Σ	-	Grade.
B.M.	2.47	1009.73		1007.26
040				997.6
0433				1000.4
140				06.0
1460				07.90
2				09.2
T.P.	10.29	1016.39	3.63	1006.10
+35				10.3
+73				11.5
3				12.4
T.P.	7.39	1024.93	0.85	1015.54
+50				14.0
4				15.6
+55				17.4
5				18.8
1				

Nail to Top 10" sp 80' ct. St. 0+55

$$9.3 \quad 19.0 \overline{) 11.3} \quad \begin{array}{r} 11.6 \\ -2.3 \\ \hline \end{array} \quad \begin{array}{r} 12.5 \\ -3.2 \\ \hline 22.6 \end{array}$$

$$3.7 \quad 44.2 \overline{) 5.2} \quad \begin{array}{r} 9.0 \\ 89 \quad 53 \\ \hline \end{array} \quad \begin{array}{r} 10.7 \\ -7.0 \\ \hline \end{array} \quad \begin{array}{r} 12.2 \\ -8.5 \\ \hline 38.5 \end{array}$$

$$18 \quad \begin{array}{r} 9.0 \\ +4.0 \\ \hline 13.0 \end{array} \quad \begin{array}{r} 101639 \\ 19.0 \overline{) 3.8} \\ \hline \end{array} \quad \begin{array}{r} 8.9 \\ -7.1 \\ \hline \end{array} \quad \begin{array}{r} 11.3 \\ -9.5 \\ \hline 41.5 \end{array}$$

$$0.5 \quad 7.0 \quad \begin{array}{r} 11.6 \\ +1.6 \\ \hline 13.2 \end{array} \quad \begin{array}{r} 102493 \\ 13 \overline{) 7.2} \\ \hline \end{array} \quad \begin{array}{r} 4.5 \\ -4.0 \\ \hline \end{array} \quad \begin{array}{r} 10.0 \\ -9.5 \\ \hline 41.5 \end{array}$$

9.24.

$$6.1 \quad 14.6 \quad \begin{array}{r} +16.6 \\ 57.7 \\ \hline 10.4 \end{array} \quad \begin{array}{r} 2.8 \\ 13 \end{array} \quad \begin{array}{r} 6.4 \\ -0.3 \\ \hline 1.5 \end{array} \quad \begin{array}{r} 11.2 \\ 14 \end{array} \quad \begin{array}{r} 12.9 \\ 31 \end{array} \quad \begin{array}{r} 13.1 \\ -7.0 \\ \hline 34.0 \end{array}$$

$$4.9 \quad 3.1 \quad \begin{array}{r} 58.5 \\ +13.0 \\ \hline \end{array} \quad \begin{array}{r} 10.1 \\ +3.4 \\ \hline \end{array} \quad \begin{array}{r} 11.6 \\ +0.9 \\ \hline 13 \end{array}$$

$$12.5 \quad 44.7 \overline{) 2.4} \quad \begin{array}{r} 10.1 \\ +2.4 \\ \hline \end{array} \quad \begin{array}{r} 11.6 \\ +0.9 \\ \hline 13 \end{array}$$

$$(34.5) \quad 11.7 \quad \begin{array}{r} 37.7 \\ +6.6 \\ \hline 7.6 \end{array} \quad \begin{array}{r} 8.1 \\ 73 \end{array} \quad \begin{array}{r} 11.2 \\ +0.5 \\ \hline 13.2 \end{array} \quad \begin{array}{r} 12.9 \\ 13 \end{array} \quad \begin{array}{r} 12.6 \\ -0.9 \\ \hline 15.7 \end{array}$$

$$10.9 \quad 31.1 \overline{) 7.6} \quad \begin{array}{r} 11.8 \\ 13 \quad 8.9 \\ \hline \end{array} \quad \begin{array}{r} 13.2 \\ -2.3 \\ \hline \end{array} \quad \begin{array}{r} 16.6 \\ -5.7 \\ \hline 30.1 \end{array}$$

$$9.3 \quad 28.7 \overline{) 7.2} \quad \begin{array}{r} 15.1 \\ 10.0 \\ -0.7 \\ \hline \end{array} \quad \begin{array}{r} 12.5 \\ -3.2 \\ \hline \end{array} \quad \begin{array}{r} 16.8 \\ -7.5 \\ \hline 3.3 \end{array}$$

$$7.5 \quad 31 \overline{) 6.4} \quad \begin{array}{r} 16.6 \\ 8.7 \\ -1.2 \\ \hline \end{array} \quad \begin{array}{r} 11.5 \\ -7.0 \\ \hline \end{array} \quad \begin{array}{r} 15.1 \\ -8.0 \\ \hline 3.3 \end{array}$$

$$6.1 \quad 7.0 \quad \begin{array}{r} 31 \overline{) 5.8} \\ +0.3 \\ \hline \end{array} \quad \begin{array}{r} 15.1 \\ 6.8 \\ -0.7 \\ \hline \end{array} \quad \begin{array}{r} 7.4 \\ -7.3 \\ \hline \end{array} \quad \begin{array}{r} 8.9 \\ -7.8 \\ \hline 21.4 \end{array}$$

102493

5+35

19.9

T.P.

6.84

1029.74

2.03

1022.90

5+70

21.0 T.P. Lt. St 78

6

21.7

+50

22.5

7

22.7 x

+55

22.4

8

21.5

+55

19.9

3.78

1020.34

13.18

1016.56

9

18.5

+40

17.5

10

16.3

+50

15.6

$$5.0 \quad \begin{array}{r} 6.5 \\ 31 \overline{) 2.8} \\ +12.2 \end{array} \quad \begin{array}{r} 4.3 \\ +0.7 \end{array} \quad \begin{array}{r} 5.5 \\ 1.3 \end{array} \quad \begin{array}{r} 6.5 \\ 100.0 \overline{) 28.4} \end{array}$$

Nail in P.P. at Sta. 6+05

$$8.7 \quad \begin{array}{r} 10.7 \\ 31 \overline{) 5.8} \\ +11.9 \end{array} \quad \begin{array}{r} 7.2 \\ +1.5 \end{array} \quad \begin{array}{r} 8.3 \\ 1.6 \end{array} \quad \begin{array}{r} 9.6 \\ 100.6 \overline{) 31} \end{array}$$

$$8.0 \quad \begin{array}{r} 9.5 \\ 31 \overline{) 5.0} \\ +13.0 \end{array} \quad \begin{array}{r} 6.2 \\ +1.8 \end{array} \quad \begin{array}{r} 7.3 \\ 10.7 \overline{) 13} \end{array} \quad \begin{array}{r} 8.7 \\ 100.8 \overline{) 31} \end{array}$$

$$7.2 \quad \begin{array}{r} 8.1 \\ 31 \overline{) 2.3} \\ +14.9 \end{array} \quad \begin{array}{r} 4.3 \\ +2.9 \end{array} \quad \begin{array}{r} 7.5 \\ 101.2 \overline{) 31} \end{array}$$

$$7.0 \quad \begin{array}{r} 2.1 \\ 31 \overline{) 4.9} \end{array} \quad \begin{array}{r} 3.8 \\ +2.2 \end{array} \quad \begin{array}{r} 6.2 \\ 10.8 \overline{) 31} \end{array}$$

$$7.3 \quad \begin{array}{r} 3.6 \\ 31 \overline{) 3.7} \end{array} \quad \begin{array}{r} 4.4 \\ +2.9 \end{array} \quad \begin{array}{r} 6.4 \\ 10.9 \overline{) 31} \end{array}$$

$$8.2 \quad \begin{array}{r} 9.7 \\ 31 \overline{) 5.1} \\ +3.1 \end{array} \quad \begin{array}{r} 5.8 \\ +2.4 \end{array} \quad \begin{array}{r} 8.3 \\ 101.4 \overline{) 31} \end{array}$$

$$9.8 \quad \begin{array}{r} 11.3 \\ 31 \overline{) 9.2} \\ +10.6 \end{array} \quad 9.8 \quad \begin{array}{r} 11.0 \\ -1.2 \overline{) 10.6} \end{array} \quad \begin{array}{r} 11.3 \\ 105.0 \overline{) 21.5} \text{ - } \text{Length} \end{array}$$

$$1.8 \quad \begin{array}{r} 31 \overline{) 2.9} \\ 10.7 \overline{) 2.1} \end{array} \quad \begin{array}{r} 4.4 \\ -2.6 \end{array} \quad \begin{array}{r} 5.3 \\ -2.9 \overline{) 24.1} \end{array}$$

$$2.8 \quad \begin{array}{r} 2.1 \overline{) 5.5} \\ -2.7 \end{array} \quad \begin{array}{r} 5.6 \\ -2.8 \end{array} \quad \begin{array}{r} 6.1 \\ -2.9 \overline{) 22.9} \end{array}$$

$$4.0 \quad \begin{array}{r} 5.0 \\ 31 \overline{) 8.6} \\ 100.0 \overline{) 18.4} \end{array} \quad \begin{array}{r} 5.8 \\ -1.8 \end{array} \quad \begin{array}{r} 6.3 \\ -2.3 \overline{) 19.9} \end{array}$$

$$4.7 \quad \begin{array}{r} 6.2 \\ 31 \overline{) 4.8} \\ 100.0 \overline{) 11.4} \end{array} \quad \begin{array}{r} 5.3 \\ 14.8 \overline{) 11.4} \end{array} \quad \begin{array}{r} 6.7 \\ -2.0 \overline{) 19.0} \end{array}$$

102034

1140

15.1

+60

15.0

12

15.0

+60

15.0

+75

15.0

+80

15.0

+86

15.0

12492

15.0

13+04.39

15.0

BMj

4.93

10.541

5.2 ^{6.4}

$$31 \overline{) 4.0} \\ +1.2$$

$$\frac{5.2}{1.3}$$

$$\frac{5.4}{-0.2}$$

$$\frac{6.5}{-1.3} / 16.9$$

5.3 ^{6.8}

$$31 \overline{) 2.9} \\ +1.4$$

$$\frac{5.2}{+0.1}$$

$$\frac{6.2}{-0.9} / 15.7$$

$$\frac{6.8}{20.0} / 27 \text{ Right}$$

200. ^{7.0}
5.3

$$31 \overline{) 4.1} \\ +1.2$$

$$\frac{5.6}{-0.3}$$

$$\frac{6.4}{-1.1} / 16.3$$

$$\frac{6.8}{20.0} / 27.3$$

5.3 ^{7.2}

$$31 \overline{) 6.5} \\ +0.9$$

$$\frac{7.2}{-1.9}$$

$$\frac{7.3}{-2.0} / 19$$

5.05 1012.31

1007.76

140

86.0

6.3

160

07.9

4.4

240

09.2

3.1

275

10.3

2.0

273

11.5

0.8

12.71 1024.16

0.86

1011.45

340

12.4

1.8

430

14.0

1.2

440

15.6

2.6

450

17.0

6.7

540

18.8

5.4

535

19.9

4.3

6

21.0

3.2

6

21.7

2.4

7

22.5

1.7

7

22.7

1.5

8

24.8

1.8

8

24.5

2.7

9

19.9

4.3

9

44.35

1019.21

9

20.8

18.5

10

3.8

17.5

10

5.0

14.3

10

5.7

15.6

11

6.2

15.1

11

6.3

15.0

11

6.3

15.0

11

6.3

15.0

11

6.3

15.0

11

6.3

15.0

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6.3

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11

6.3

15.0

11

6.3

15.0

11

6.3

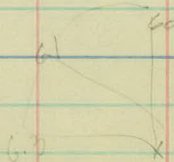
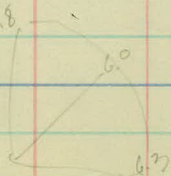
15.0

B.M.

5.8

4.19

1017.09



Slope stakes

Harvester Ave.

Plum St. to E. Co. Line

Sta.	+	π	-	Grade	Ditch Grade
B.M.	528	1031.99			1026.71

0+0				25.0	
-----	--	--	--	------	--

0+33				25.3	
------	--	--	--	------	--

1				26.0	
---	--	--	--	------	--

+30				26.3	
-----	--	--	--	------	--

2				27.0	
---	--	--	--	------	--

+50				27.4	
-----	--	--	--	------	--

3				27.7	26.2
---	--	--	--	------	------

+80				28.0	26.3
-----	--	--	--	------	------

4				28.3	26.4
---	--	--	--	------	------

+80				28.5	26.5
-----	--	--	--	------	------

5				28.6	26.6
---	--	--	--	------	------

H. A. RT

Sept. 28, 1936

R.R. Spike in Po. P. 25' RT. 1450

W. H. B.

1936

A.M.

$$7.0 \quad 31' \left| \begin{array}{r} 7.3 \\ 101.2 \end{array} \right. \quad \begin{array}{r} 7.0 \\ - \\ 101.2 \end{array} \quad \begin{array}{r} 6.8 \\ 101.2 / 31' \end{array}$$

$$6.7 \quad 31' \left| \begin{array}{r} 7.5 \\ 100.7 \end{array} \right. \quad \begin{array}{r} 7.3 \\ -0.6 \end{array} \quad \begin{array}{r} 7.2 \\ 101.0 / 31' \end{array}$$

$$6.0 \quad 31' \left| \begin{array}{r} 6.9 \\ 100.6 \end{array} \right. \quad \begin{array}{r} 6.6 \\ -0.6 \end{array} \quad \begin{array}{r} 6.5 \\ 101.0 / 31' \end{array}$$

$$5.7 \quad 31' \left| \begin{array}{r} 7.2 \\ 100.0 \end{array} \right. \quad \begin{array}{r} 7.2 \\ -1.5 \end{array} \quad \begin{array}{r} 6.6 \\ 100.6 / 31' \end{array}$$

$$5.0 \quad 17.5' \left| \begin{array}{r} 6.5 \\ -1.5 \end{array} \right. \quad \begin{array}{r} 6.2 \\ -1.2 \end{array} \quad \begin{array}{r} 5.2 \\ 101.3 / 31' \end{array}$$

$$4.6 \quad 31' \left| \begin{array}{r} 6.0 \\ 100.1 \end{array} \right. \quad \begin{array}{r} 5.5 \\ -0.9 \end{array} \quad \begin{array}{r} 5.0 \\ 101.1 / 31' \end{array}$$

$$4.3 \quad 31' \left| \begin{array}{r} 5.4 \\ 100.4 \end{array} \right. \quad \begin{array}{r} 4.9 \\ -0.6 \end{array} \quad \begin{array}{r} 5.2 \\ 100.6 / 31' \end{array}$$

$$4.0 \quad 31' \left| \begin{array}{r} 5.3 \\ 100.2 \end{array} \right. \quad \begin{array}{r} 4.8 \\ -0.8 \end{array} \quad \begin{array}{r} 4.0 \\ 101.5 / 31' \end{array}$$

$$3.7 \quad 17.5' \left| \begin{array}{r} 5.0 \\ -1.5 \end{array} \right. \quad \begin{array}{r} 4.8 \\ -1.1 \end{array} \quad \begin{array}{r} 4.1 \\ 101.1 / 31' \end{array}$$

$$3.5 \quad 12.2' \left| \begin{array}{r} 4.9 \\ -1.4 \end{array} \right. \quad \begin{array}{r} 4.3 \\ -0.8 \end{array} \quad \begin{array}{r} 3.8 \\ 101.2 / 31' \end{array}$$

$$3.4 \quad 31' \left| \begin{array}{r} 4.8 \\ 100.1 \end{array} \right. \quad \begin{array}{r} 4.0 \\ -0.6 \end{array} \quad \begin{array}{r} 3.7 \\ 101.2 / 31' \end{array}$$

Sta.	T	T	-	Grade	Ditch Grade
		1031.99			
5+50				78.7	26.7
6				78.7	26.8
+50				78.8	26.9
T.P.	6.15	1033.26	4.38		1027.61
7				78.8	27.0
+50				78.95	26.9
8				78.9	26.8
+50				78.10	26.7
9				78.7	26.6
+50				78.4	26.5
10				77.9	26.4
+50				77.3	
11				76.6	

lt.

¢

121.

$$3.3 \quad 31 \overline{) \frac{4.5}{120.3}} \quad \frac{4.2}{-0.9} \quad \frac{3.7}{121.1} / 31$$

$$3.3 \quad 31 \overline{) \frac{4.6}{120.2}} \quad \frac{4.2}{-0.9} \quad \frac{4.1}{120.7} / 31$$

$$3.2 \quad 31 \overline{) \frac{4.6}{120.1}} \quad \frac{4.2}{-1.0} \quad \frac{3.7}{121.0} / 31$$

$$5.0 \quad 178 \overline{) \frac{6.6}{-1.6}} \quad \frac{6.2}{-1.2} \quad \frac{5.6}{120.9} / 31$$

$$4.9 \quad 178 \overline{) \frac{6.5}{-1.6}} \quad \frac{6.1}{-1.2} \quad \frac{6.0}{120.4} / 31$$

$$4.9 \quad 175 \overline{) \frac{6.4}{-1.5}} \quad \frac{6.0}{-1.1} \quad \frac{6.0}{120.4} / 31$$

$$4.9 \quad 31 \overline{) \frac{6.1}{120.3}} \quad 169 \overline{) \frac{6.2}{-1.3}} \quad \frac{6.5}{120.0} / 31$$

$$5.1 \quad 31 \overline{) \frac{6.0}{120.6}} \quad \frac{5.7}{-0.6} \quad \frac{6.4}{120.2} / 31$$

$$5.4 \quad 31 \overline{) \frac{5.6}{121.3}} \quad \frac{5.2}{+0.2} \quad \frac{5.7}{121.2} / 31$$

$$5.9 \quad 31 \overline{) \frac{5.3}{+0.6}} \quad \frac{5.0}{+0.9} \quad \frac{5.6}{+0.3} / 31$$

$$6.5 \quad 31 \overline{) \frac{4.5}{+2.0}} \quad \frac{4.5}{+2.0} \quad \frac{5.4}{+1.1} / 31$$

$$7.2 \quad 31 \overline{) \frac{4.6}{+2.6}} \quad \frac{4.6}{+2.6} \quad \frac{5.1}{+2.1} / 31$$

Sta. + π - grade.

1033.76

11+50

25.7

12

24.7

+46

23.8

+70

23.2

+83

22.9

+92

199.79 L.E. Co. Line

T.P.

10.87

1022.89

B.M.

4.

2

0+

3-2

8.1

$$30.9 \begin{array}{r} 4.9 \\ +3.2 \\ \hline \end{array}$$

$$\begin{array}{r} 4.1 \\ +4.0 \\ \hline \end{array}$$

$$\begin{array}{r} 4.5 \\ +3.6 \\ \hline 31.7 \end{array}$$

9.1

$$32.9 \begin{array}{r} 4.9 \\ +4.2 \\ \hline \end{array}$$

$$\begin{array}{r} 4.4 \\ +4.7 \\ \hline \end{array}$$

$$\begin{array}{r} 5.1 \\ +4.0 \\ \hline 32.5 \end{array}$$

10.0

$$34.1 \begin{array}{r} 5.2 \\ +4.8 \\ \hline \end{array}$$

(13')

$$\begin{array}{r} 5.4 \\ +4.6 \\ \hline \end{array}$$

(13)

$$\begin{array}{r} 6.0 \\ +4.0 \\ \hline 32.5 \end{array}$$

10.6

$$34.9 \begin{array}{r} 4.4 \\ +6.2 \\ \hline \end{array}$$

(17')

$$\begin{array}{r} 8.3 \\ +2.3 \\ \hline \end{array}$$

(17')

$$\begin{array}{r} 6.8 \\ +3.8 \\ \hline 35.1 \end{array}$$

Nail in T.P. S.E. cor. Hor. & E. Co. Line

1022.81

Top Mon. E Co. Line.

7

4.70	4.70	1031.41	-	1026.71
000			6.4	75.0
+50			5.9	75.1
40			5.4	76.0
+50			4.9	76.5
10			4.4	77.0
+50			4.0	77.4
3+0			3.7	77.7
+50			3.4	78.0
4+0			3.1	78.3
+50			2.9	78.5
5				
55			2.7	78.7
+50			2.7	78.7
6+0			2.6	78.7
	4.64	1033.40	2.65	1028.76
6+50			4.6	78.8
7+0			4.6	78.8
+50			4.55	78.85
8+0			4.5	78.9
+50			4.6	78.8
9+0			4.7	78.7
+50			5.0	79.4
10+0			5.5	79.9
+50			6.1	79.3
11+0			3.47	79.4
	5.04	1027.93		1022.99
11+0			1.5	76.6
+50			2.2	75.7
12			3.2	74.7
+50			4.1	73.8
	7.5		4.0	73.7

33.4
78.7
4.7

78

Final X-Sections

Harvester Ave.

Plum to E. County Line
(and part of Midvale Place)

W. H. Carlson
July 6, 1937

Sta.	+	π	-	Grade	Ground.
B.M.	5.48	1032.19 ✓			

North on Midvale 0+00 = $\frac{1}{2}$ Harvester

0+0

0+13 = (Cut + Fill)

0+20 (Inter for Orig.)

0+50

1+0

1+13.3

0+00.7

E. on Harvester.

0+06 Inter for Orig.

0+33

25.4

1+0

26.2

1+30

7671
518
32.19
7.18

N.H.C.
A.A.
L.H.H. July
G.M. 6
G.G. 1937
P.

2

4. 7

1026.71 R.R. Spike in B.P. 25' W. S.W. H.S.O

7.2

$\frac{74}{2}$ $\frac{8.3}{2}$ $\frac{8.3}{2}$ $\frac{7.1}{6}$ 7.0 $\frac{8.4}{20}$ $\frac{8.4}{32}$ $\frac{7.6}{33}$
27.5

7.5

$\frac{73}{2}$ $\frac{8.2}{2}$ $\frac{8.2}{3}$ 7.2 $\frac{7.1}{27}$ $\frac{8.4}{29}$ $\frac{8.4}{32}$ $\frac{7.8}{33}$

7.9

$\frac{75}{1}$ $\frac{8.4}{1}$ $\frac{8.6}{2}$ $\frac{6.9}{5}$ $\frac{6.8}{15}$ $\frac{7.3}{26}$ $\frac{8.6}{29}$ $\frac{8.6}{31}$ $\frac{8.0}{32}$

Some points.

00 Cut & Fill.

7.2
33

1025.01
7.18

7.2
33

(0403 & Hand Ditch N. & S.O.

$\frac{4}{15}$ 15

50' Long.

(0400 =
0.00 Ditch)

$\frac{7.1}{2.0}$

$\frac{7.2}{14}$ $\frac{7.1}{17.5}$ $\frac{8.1}{23}$ $\frac{7.1}{31}$

(0420 = 0.00 Ditch)

7.4

$\frac{7.6}{28}$ $\frac{8.4}{23}$ $\frac{8.4}{19}$ $\frac{6.9}{13}$ $\frac{6.8}{13.5}$ 7.0 $\frac{8.5}{18}$ $\frac{8.4}{21}$ $\frac{7.8}{24.5}$ $\frac{7.2}{31}$

6.8

$\frac{7.0}{29.5}$ $\frac{7.7}{21.5}$ $\frac{7.6}{17.5}$ $\frac{6.4}{13.5}$ $\frac{6.8}{13}$ 7.0 $\frac{7.7}{17.5}$ $\frac{7.7}{21.5}$ $\frac{6.7}{30}$

7.2

$\frac{7.5}{26}$ $\frac{7.5}{21.5}$ $\frac{7.5}{17.5}$ $\frac{6.0}{13}$ $\frac{5.8}{13}$ $\frac{5.9}{17.5}$ $\frac{7.4}{21.5}$ $\frac{6.8}{30}$

Sta.	+	Σ	-	Grade	Ground
		1032.19			

240.				27.2	
------	--	--	--	------	--

+50

3				27.9	
---	--	--	--	------	--

+50

4				28.6	
---	--	--	--	------	--

+50

T.D.	6.19	✓ 1033.98	4.40		
------	------	--------------	------	--	--

5				28.8	
---	--	--	--	------	--

+50

6				28.8	
---	--	--	--	------	--

+50

7				29.2	
---	--	--	--	------	--

32.19
1027.79
6.19
1033.98

4.

8

84

1st Floor 3.8

6.7 6.8 5.3 5.0 5.3 6.8 6.8 5.4
278 175 13 13 17.5 21.5 29.5

(6.3)

(5.2)

6.0 6.3 6.3 4.9 4.7 4.8 6.3 6.3 5.1
26.5 21.5 17.5 13.5 13 17 21.5 29.5

(5.1)

5.5 6.0 6.0 4.5 4.0 4.5 5.9 6.0 5.0
25.8 22.5 17.5 13 12 17.5 21 29.5

(5.1)

5.3 5.9 5.9 4.3 4.0 4.2 6.0 6.0 5.2 4.3
26 22 18 13 13 18.5 21.5 23 20.6

(5.0)

5.5 5.9 5.9 4.1 3.6 4.0 5.8 5.8 5.1 4.3
27 23 18.5 13 13 18.5 22 24 31

(4.5)

5.3 5.8 5.8 3.7 3.4 3.8 5.7 5.7 4.6 4.0
27 23 19 13 12 19.5 22.5 25 31.5

1027.79

top of end of cul. at 1/4 80

6.1 7.3 7.3 5.4 5.2 5.3 7.3 7.2 6.4 5.6
30.0 23 19.5 13 13 19.5 22.5 25 29.5

(6.1)

6.5 7.3 7.3 5.3 5.0 5.4 7.3 7.3 5.8
28.5 22.5 18.5 13 12.5 19.5 23.5 29.5

(6.2)

1st Floor 2.9

6.4 7.2 7.2 5.3 5.2 5.3 7.1 7.2 6.6 6.1
28.6 22.5 18.5 13 13 19 22.5 24 30.5

(6.1)

6.5 7.2 7.1 5.2 4.9 5.2 7.1 7.1 6.3 5.6
28.5 22.5 18 13 13 19.5 22.5 24.5 31.0

(6.4)

6.8 7.3 7.2 5.2 4.8 5.2 6.9 7.0 6.3 5.8
26 22.5 19 13 13 18.5 22.5 24 31

Sta.	+	π ✓ 1033.98	-	Grade	Ground.
------	---	--------------------	---	-------	---------

7+50

8+0

29.1

+50

9.

28.8

+50

T.P.

3.74

✓
1031.56

6.16

10

28.0

+50

11

+50

12.

+40

L/

S

R/

(6.4)

$$\begin{array}{r} 6.7 \quad 7.1 \quad 7.1 \quad 5.1 \\ 28.2 \quad 27.5 \quad 18.5 \quad 13 \end{array} \quad \begin{array}{r} 48 \\ 13 \end{array} \quad \begin{array}{r} 5.2 \quad 7.1 \quad 7.0 \quad 6.3 \\ 13 \quad 19 \quad 27.5 \quad 24 \end{array} \quad \begin{array}{r} 6.2 \\ 31 \end{array}$$

(6.2)

$$\begin{array}{r} 6.5 \quad 6.6 \quad 7.3 \quad 7.2 \quad 5.1 \\ 31 \quad 27.5 \quad 23 \quad 19 \quad 13 \end{array} \quad \begin{array}{r} 44 \\ 13 \end{array} \quad \begin{array}{r} 5.1 \quad 7.2 \quad 7.1 \quad 6.4 \\ 13 \quad 19.5 \quad 22.5 \quad 24.5 \end{array} \quad \begin{array}{r} 6.2 \\ 31 \end{array}$$

(6.4)

$$\begin{array}{r} 6.4 \quad 6.7 \quad 7.4 \quad 7.4 \quad 5.2 \\ 31 \quad 28 \quad 23.5 \quad 20 \quad 13 \end{array} \quad \begin{array}{r} 48 \\ 13 \end{array} \quad \begin{array}{r} 5.2 \quad 7.4 \quad 7.4 \quad 6.6 \\ 13 \quad 20.5 \quad 23.5 \quad 26 \end{array} \quad \begin{array}{r} 6.7 \\ 31 \end{array}$$

(6.0)

$$\begin{array}{r} 6.2 \quad 7.4 \quad 7.4 \quad 5.4 \\ 31 \quad 23 \quad 19 \quad 13 \end{array} \quad \begin{array}{r} 5.2 \\ 13 \end{array} \quad \begin{array}{r} 5.3 \quad 7.4 \quad 7.4 \quad 6.4 \\ 13 \quad 19.5 \quad 23 \quad 25.9 \end{array} \quad \begin{array}{r} 6.7 \\ 31 \end{array}$$

5.7

$$\begin{array}{r} 5.8 \quad 7.5 \quad 7.5 \quad 5.7 \\ 31 \quad 23 \quad 18 \quad 13 \end{array} \quad \begin{array}{r} 5.6 \\ 13 \end{array} \quad \begin{array}{r} 5.7 \quad 7.6 \quad 7.6 \quad 6.8 \\ 13 \quad 18.5 \quad 22.5 \quad 25 \end{array} \quad \begin{array}{r} 5.7 \\ 33 \end{array}$$

✓
1027.82

2.9

$$\begin{array}{r} 3.2 \quad 5.6 \quad 5.5 \quad 3.8 \\ 31 \quad 22 \quad 18 \quad 13 \end{array} \quad \begin{array}{r} 3.6 \\ 13 \end{array} \quad \begin{array}{r} 3.8 \quad 5.3 \quad 5.3 \quad 3.1 \\ 13 \quad 18 \quad 22 \quad 33 \end{array}$$

2.4

$$\begin{array}{r} 2.7 \quad 6.0 \quad 6.0 \quad 4.6 \\ 31 \quad 22.5 \quad 17.5 \quad 13 \end{array} \quad \begin{array}{r} 4.1 \\ 13 \end{array} \quad \begin{array}{r} 4.4 \quad 5.8 \quad 5.8 \quad 4.1 \\ 13 \quad 18 \quad 21.5 \quad 26.5 \end{array} \quad \begin{array}{r} 3.1 \\ 33 \end{array}$$

2.5

$$\begin{array}{r} 2.7 \quad 6.7 \quad 6.5 \quad 5.1 \\ 31 \quad 22 \quad 17.5 \quad 13 \end{array} \quad \begin{array}{r} 4.8 \\ 13 \end{array} \quad \begin{array}{r} 5.0 \quad 6.6 \quad 6.5 \quad 2.9 \\ 13 \quad 17.5 \quad 21.5 \quad 31.6 \end{array}$$

1.9

$$\begin{array}{r} 2.8 \quad 7.6 \quad 7.7 \quad 5.9 \\ 31.7 \quad 22 \quad 18 \quad 13 \end{array} \quad \begin{array}{r} 5.8 \\ 13 \end{array} \quad \begin{array}{r} 6.0 \quad 7.5 \quad 7.5 \quad 2.4 \\ 13 \quad 17.5 \quad 21 \quad 31 \end{array}$$

(2.2)

$$\begin{array}{r} 2.9 \quad 8.5 \quad 8.6 \quad 7.0 \\ 33 \quad 22 \quad 17.5 \quad 13 \end{array} \quad \begin{array}{r} 6.9 \\ 13 \end{array} \quad \begin{array}{r} 7.0 \quad 8.6 \quad 8.6 \quad 2.9 \\ 13 \quad 17.5 \quad 21.5 \quad 33 \end{array}$$

(3.2)

$$\begin{array}{r} 3.0 \quad 7.3 \quad 7.4 \quad 7.9 \\ 34 \quad 21.5 \quad 17.5 \quad 13 \end{array} \quad \begin{array}{r} 7.6 \\ 13 \end{array} \quad \begin{array}{r} 7.9 \quad 9.4 \quad 9.5 \quad 3.7 \\ 13 \quad 17 \quad 21.5 \quad 33 \end{array}$$

Sta.

+

π

-

Grade

Ground

✓
1031.56

12+70

+83

+92

12+99.79

B.M.

8.78

4.

2

21.

(60)

$$\begin{array}{r} 28. \\ 39 \end{array} \quad \begin{array}{r} 9.6 \\ 25 \end{array} \quad \begin{array}{r} 9.7 \\ 20.5 \end{array} \quad \begin{array}{r} 8.2 \\ 15 \end{array}$$

$$\begin{array}{r} 8.2 \\ \hline \end{array}$$

$$\begin{array}{r} 8.6 \\ 16 \end{array}$$

$$\begin{array}{r} 10.4 \\ 21 \end{array}$$

$$\begin{array}{r} 10.4 \\ 24 \end{array}$$

$$\begin{array}{r} 44 \\ 25 \end{array}$$

(9.1)

$$\begin{array}{r} 8.6 \\ 50 \end{array}$$

$$\begin{array}{r} 9.3 \\ 40 \end{array}$$

$$\begin{array}{r} 9.6 \\ 32 \end{array}$$

$$\begin{array}{r} 9.2 \\ 24 \end{array}$$

$$\begin{array}{r} 8.3 \\ \hline \end{array}$$

$$\begin{array}{r} 9.2 \\ 27 \end{array}$$

$$\begin{array}{r} 10.8 \\ 33 \end{array}$$

$$\begin{array}{r} 11.0 \\ 50 \end{array}$$

$$+ 8.8 - 6.12 \quad \begin{array}{r} 9.71 \\ 32.5 \end{array}$$

$$\begin{array}{r} 7.5 \\ 50 \end{array}$$

$$\begin{array}{r} 8.0 \\ 25 \end{array}$$

$$\begin{array}{r} 8.5 \\ \hline \end{array}$$

$$+ 8.4 - 6.10 \quad \begin{array}{r} 11.1 \\ 33.5 \end{array}$$

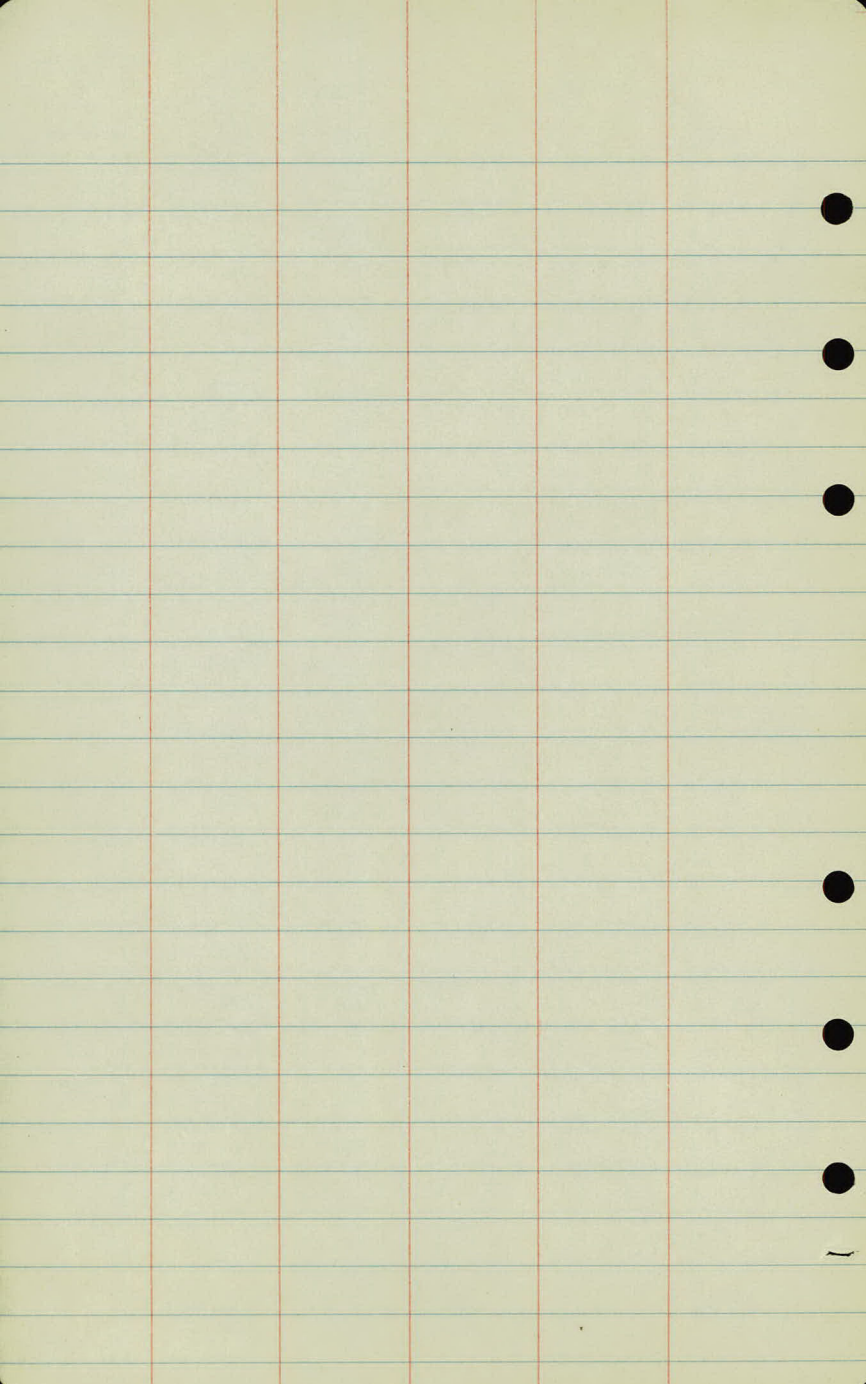
$$\begin{array}{r} 9.3 \\ 27 \end{array}$$

$$\begin{array}{r} 9.9 \\ 50 \end{array}$$

✓

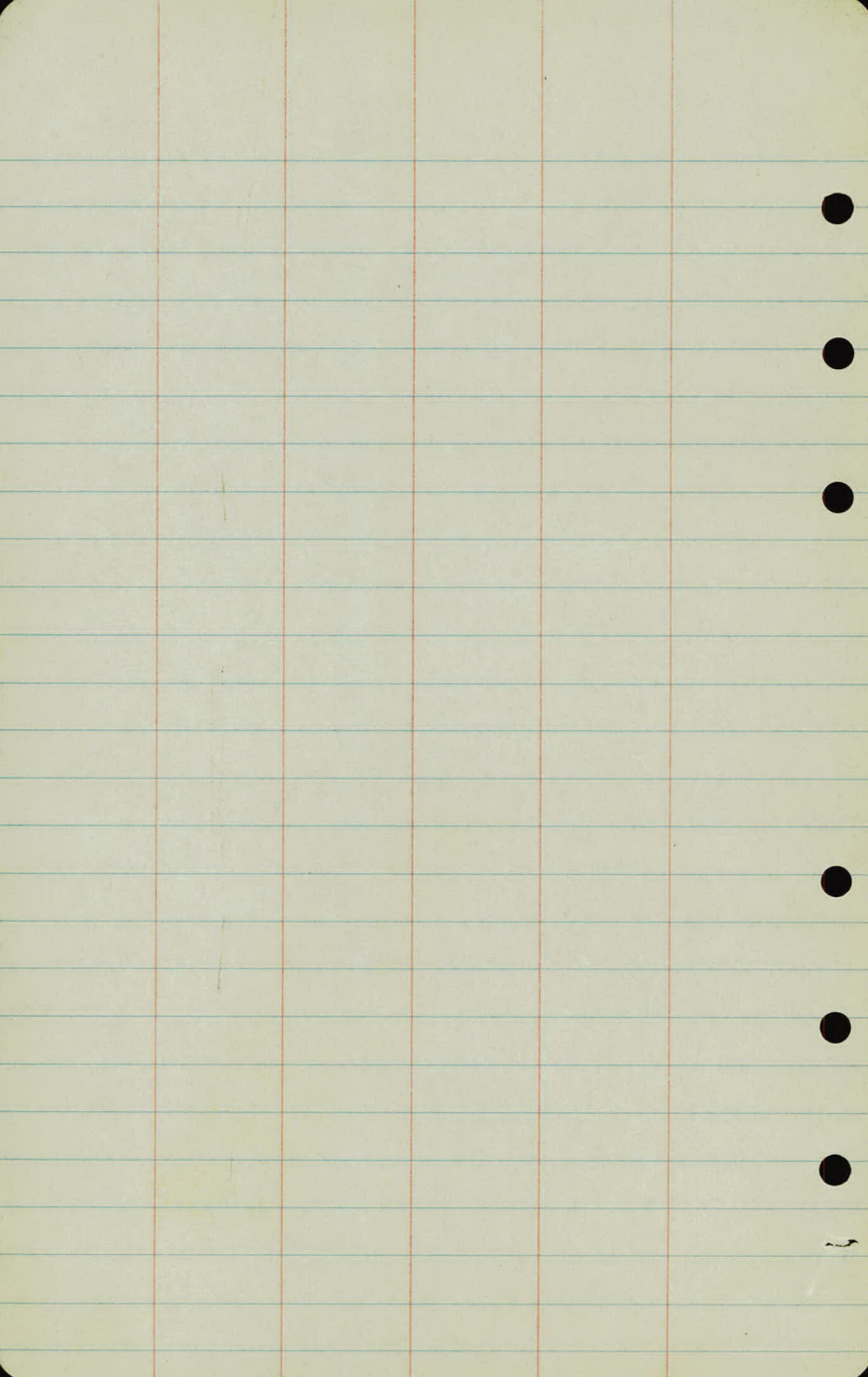
1022.78

Top Mon.



Excavation & Embankment Quantities

Sta.		cu. yds.	
		Emb	Exc.
1+94	Ent. Rt.	8	
2+40	" "	8	
2+41	" Lt.	8	
3+13	" Lt.	8	
3+44	" Rt.	8	
3+78	" Rt.	10	
4+97	" Rt.	10	
5+37	" Lt.	10	
5+84	" Rt.	10	
6+32	" Lt.	10	
6+98	" Lt.	10	
8+34	" Lt.	10	



Install C.M. Culverts	Remove Old Culverts	Replace Old Culverts
15"	18"	
0+30 mid. pt. L ^g		
1+94 Ent Rt.	18'	20
2+40 " Rt	20	20
2+41 " Lt	20	20
3+13 " Lt	20	20
3+44 " Rt	20	20
3+78 " Rt	20	20
4+97 " Rt	20	20
5+37 " Lt	20	20
5+84 " Rt	20	20
6+32 " Lt	20	20
6+98 " Lt	20	20
8+34 " Lt	20	20
12+83	20	20
	48	18
	<u>48</u>	

0+30 mid. pt. L^g

1+94 Ent Rt.

2+40 " Rt

2+41 " Lt

3+13 " Lt

3+44 " Rt

3+78 " Rt

4+97 " Rt

5+37 " Lt

5+84 " Rt

6+32 " Lt

6+98 " Lt

8+34 " Lt

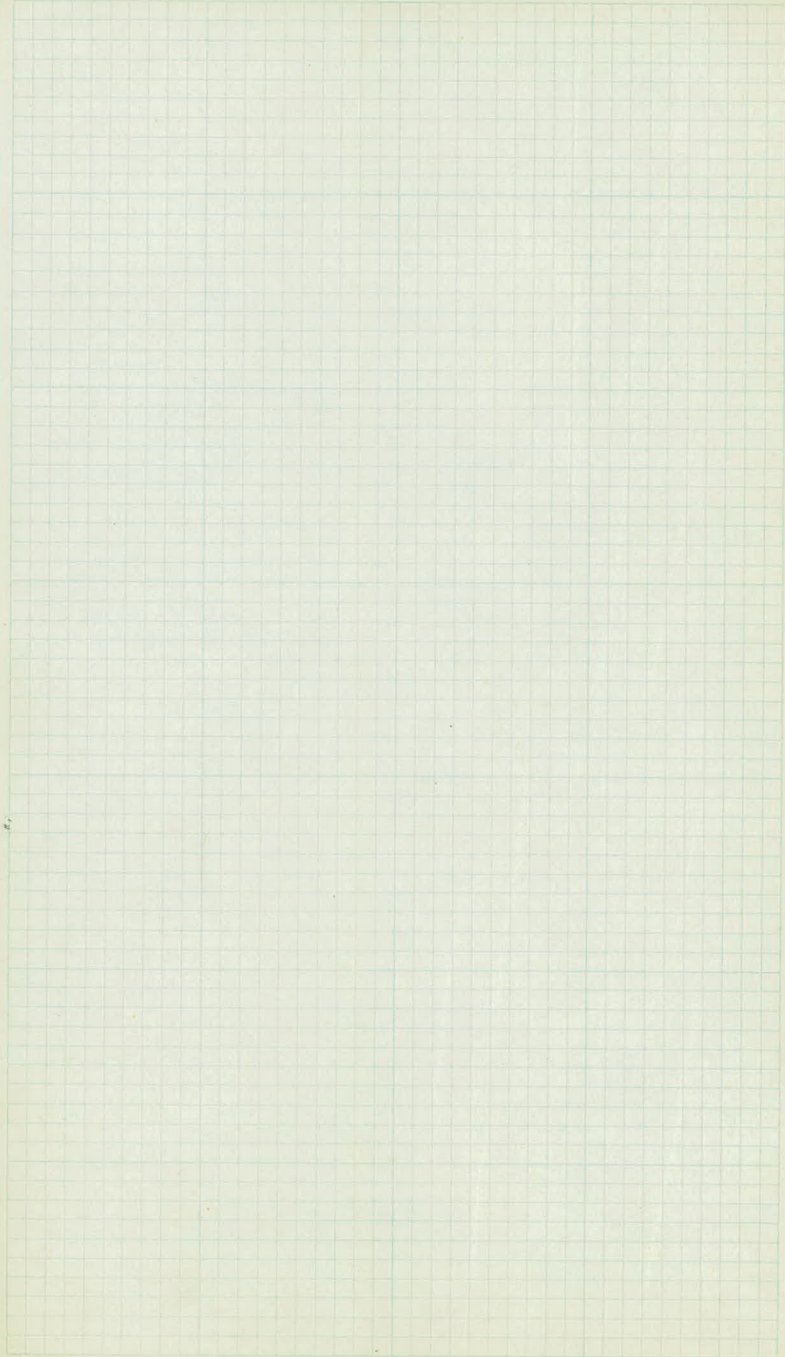
12+83

(No culverts)

to Broad St.

Placed in town

8' wide



Final Topography.

Harvester Ave.

5

4

3

2

1

0

+51 - P.P. 32'

+37 - Ent. $\frac{15' \times 20' \text{ C.M.}}{21'}$

+13 - Ent. $\frac{15' \times 20' \text{ C.M.}}{20'}$

+41 - Ent. $\frac{15' \times 20' \text{ C.M.}}{20'}$

+30 - Cuts Area Middle
+37 - Shldr 13' (11" Lt.)
+66 Shldr.
19
20

Ent 9
+84 - $\frac{12' \times 18' \text{ C.M.}}{21'}$

Formed by Town Board.

+97 - Ent. $\frac{15' \times 20' \text{ C.M.}}{20'}$

+50 P.P. 25'

+78 - Ent. $\frac{15' \times 20' \text{ C.M.}}{20'}$

+44 - Ent. $\frac{15' \times 20' \text{ C.M.}}{20'}$

+61 - P.P. 25'

+40 - Ent. $\frac{15' \times 20' \text{ C.M.}}{20'}$

+94 - Ent. $\frac{15' \times 20' \text{ C.M.}}{20'}$

+51 - P.P. 25'

+66 - Shldr 13'

12+99.79- $\pm$ East Ave Mon.

+88- $\pm$ Calv. 18" x 66' C.M.

12

11

10

9

8

7

6

32.5 33.5

10 P.
8.76
1.10

151-P.P. 25'

102-P.P. 25'

149-P.P. 30'

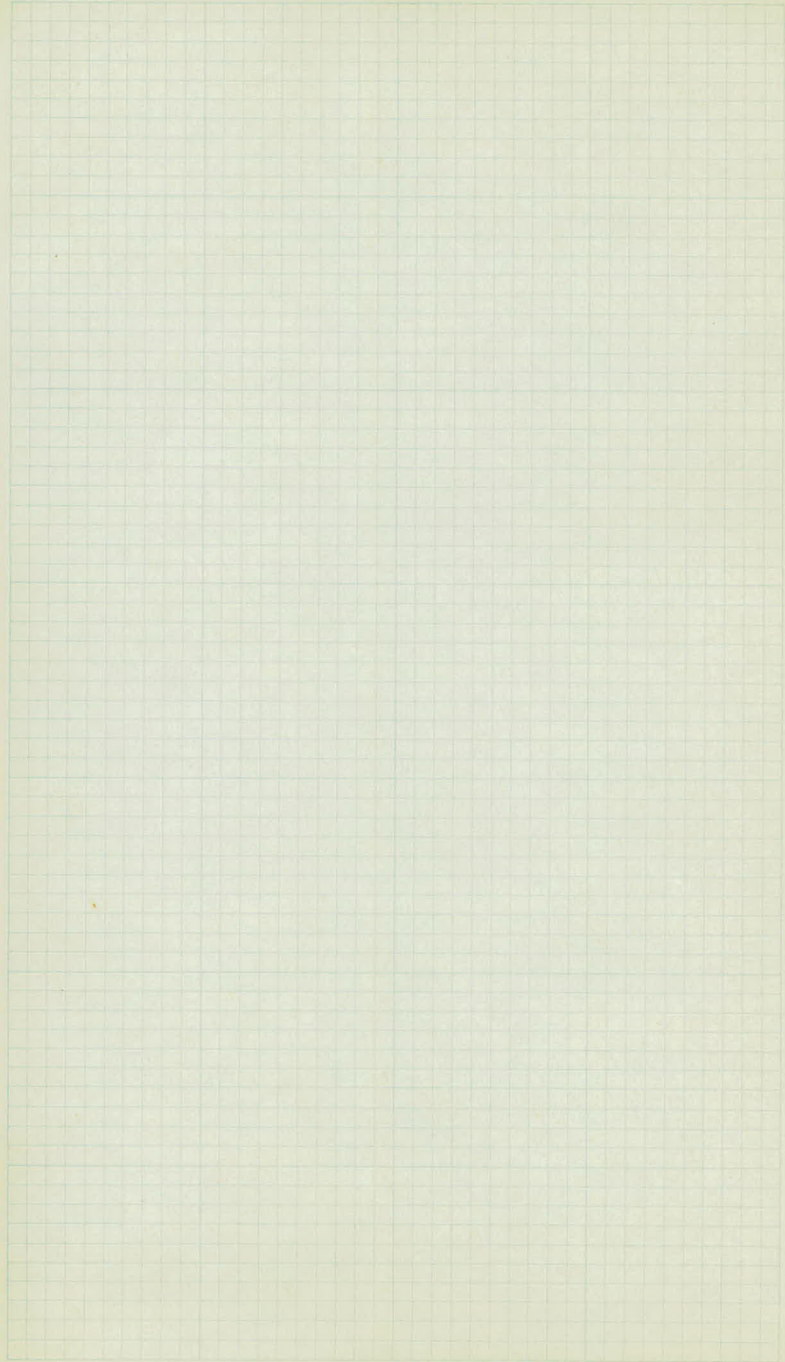
134-Ent. 15' x 20'
21'

152-P.P. 25'

198-Ent. #70 cut 10.

132-Ent. 15' x 20' C.M.
21'

101-P.P. 25'



Final Topography.
Midvale Place

2

+47 - 2 culv. of N. + S. 10' - 18'
2 15" x 38" C.M.

1

0

Final X-Sections

Brand Street

Plum to E. County Line.

W. H. Carlson.

July 2, 1937

Station	t.	T ✓	-	Grade	Ground
B.M.	5.45	1012.71			

0+0

0+83

1+0

1+60

2

+35

+73

T.P.	9.77	✓ 1022.17	0.31
------	------	--------------	------

2+0 contd

+35

+73

3+0

W.H. Carlson

K. Orter

L.B. Hendrix

O. Moeschter

July 2004

1937

14

4.

2

14.

1007.26 nail top 10" stump 80' lat 56. 0+55

(15.1)

$$\frac{15.4}{13}$$

$$\frac{15.4}{13}$$

$$\frac{16.1}{13}$$

= 0.0 Error.

(14.5)

$$\frac{14.0}{20}$$

$$\frac{12.4}{12}$$

$$\frac{12.4}{12}$$

$$\frac{12.8}{9}$$

$$\frac{15.2}{14}$$

(0+33) 6.0 cut.

(13.6)

$$\frac{7.4}{46.5}$$

$$\frac{10.7}{37}$$

$$\frac{9.8}{19}$$

$$\frac{6.9}{13}$$

$$\frac{7.0}{14}$$

$$\frac{7.0}{14}$$

$$\frac{15.1}{37}$$

11.7

$$\frac{3.3}{27}$$

$$\frac{6.3}{21}$$

$$\frac{6.1}{17.5}$$

$$\frac{4.8}{13}$$

$$\frac{4.9}{13}$$

$$\frac{5.2}{12.5}$$

$$\frac{7.5}{21}$$

$$\frac{13.9}{29}$$

(1.4)

Confid

$$\frac{4.9}{22}$$

$$\frac{4.9}{18}$$

$$\frac{3.4}{13}$$

$$\frac{3.5}{13}$$

$$\frac{3.8}{13}$$

$$\frac{13.1}{10}$$

11

$$\frac{3.9}{21.5}$$

$$\frac{4.0}{18}$$

$$\frac{2.5}{13}$$

$$\frac{2.1}{13}$$

$$\frac{2.4}{13.5}$$

$$\frac{9.2}{34.5}$$

(2.2)

$$\frac{2.7}{20.5}$$

$$\frac{2.7}{17.5}$$

$$\frac{1.2}{13}$$

$$\frac{1.0}{13}$$

$$\frac{1.3}{13}$$

$$\frac{5.2}{25}$$

1012.40

16.9

0.9

4.9

$$\begin{array}{r} +25 \\ \hline 54.5 \end{array}$$

$$\frac{4.3}{4.4}$$

(9.3)

$$\begin{array}{r} +2.2 \\ \hline 61 \end{array}$$

(2.4)

$$\frac{0.0}{44.5}$$

$$\frac{11.2}{21.5}$$

$$\frac{11.3}{17.5}$$

$$\frac{9.7}{13}$$

$$\frac{9.4}{13}$$

$$\frac{9.7}{14}$$

$$\frac{12.7}{24}$$

Station	+	π ✓	-	Grade	Ground
		1022.17			

3+50

440

4+55

5+0

T.P.	7.93	✓ 1028.07	2.03
------	------	--------------	------

+35

+70

6

+50

7

+55

8+0

4. 5 6

$$\begin{array}{r} 47 \\ 32 \end{array} \quad \begin{array}{r} 7.5 \\ 21 \end{array} \quad \begin{array}{r} 7.5 \\ 17.5 \end{array} \quad \begin{array}{r} 8.2 \\ 13 \end{array} \quad \begin{array}{r} 7.8 \\ 10.5 \\ 12.1 \end{array} \quad \begin{array}{r} 8.2 \\ 12.1 \end{array} \quad \begin{array}{r} 13.3 \\ 27.5 \end{array}$$

$$\begin{array}{r} 48 \\ 28.5 \end{array} \quad \begin{array}{r} 8.0 \\ 21 \end{array} \quad \begin{array}{r} 8.0 \\ 18 \end{array} \quad \begin{array}{r} 6.5 \\ 13 \end{array} \quad \begin{array}{r} 6.2 \\ 13.5 \end{array} \quad \begin{array}{r} 6.6 \\ 13.5 \end{array} \quad \begin{array}{r} 13.8 \\ 23 \end{array}$$

$$\begin{array}{r} 33 \\ 31.5 \end{array} \quad \begin{array}{r} 6.3 \\ 21.5 \end{array} \quad \begin{array}{r} 6.3 \\ 17.5 \end{array} \quad \begin{array}{r} 4.8 \\ 13 \end{array} \quad \begin{array}{r} 4.5 \\ 13.5 \end{array} \quad \begin{array}{r} 4.9 \\ 13.5 \end{array} \quad \begin{array}{r} 12.7 \\ 32 \end{array}$$

$$\begin{array}{r} 2.1 \\ 26.5 \end{array} \quad \begin{array}{r} 4.9 \\ 21.5 \end{array} \quad \begin{array}{r} 4.9 \\ 17.5 \end{array} \quad \begin{array}{r} 3.4 \\ 13 \end{array} \quad \begin{array}{r} 3.0 \\ 13.5 \end{array} \quad \begin{array}{r} 3.6 \\ 13.5 \end{array} \quad \begin{array}{r} 6.1 \\ 21.5 \end{array}$$

$$\begin{array}{r} 6.2 \\ 31.5 \end{array} \quad \begin{array}{r} 7.8 \\ 26.5 \end{array} \quad \begin{array}{r} 7.8 \\ 17.5 \end{array} \quad \begin{array}{r} 8.0 \\ 13 \end{array} \quad \begin{array}{r} 8.1 \\ 13 \end{array} \quad \begin{array}{r} 8.4 \\ 13 \end{array} \quad \begin{array}{r} 7.6 \\ 21.5 \end{array} \quad \begin{array}{r} 9.5 \\ 23 \end{array}$$

$$\begin{array}{r} 4.0 \\ 30 \end{array} \quad \begin{array}{r} 8.6 \\ 21.5 \end{array} \quad \begin{array}{r} 8.6 \\ 13 \end{array} \quad \begin{array}{r} 7.1 \\ 13 \end{array} \quad \begin{array}{r} 7.1 \\ 13 \end{array} \quad \begin{array}{r} 7.3 \\ 13 \end{array} \quad \begin{array}{r} 8.8 \\ 17.5 \end{array} \quad \begin{array}{r} 8.8 \\ 21.5 \end{array} \quad \begin{array}{r} 7.9 \\ 29 \end{array}$$

$$\begin{array}{r} 3.1 \\ 30 \end{array} \quad \begin{array}{r} 7.8 \\ 21.5 \end{array} \quad \begin{array}{r} 7.8 \\ 17.5 \end{array} \quad \begin{array}{r} 6.4 \\ 13 \end{array} \quad \begin{array}{r} 6.5 \\ 13 \end{array} \quad \begin{array}{r} 6.4 \\ 13 \end{array} \quad \begin{array}{r} 7.8 \\ 17.5 \end{array} \quad \begin{array}{r} 7.8 \\ 23 \end{array} \quad \begin{array}{r} 6.8 \\ 28.5 \end{array}$$

$$\begin{array}{r} 0.6 \\ 31.0 \end{array} \quad \begin{array}{r} 7.0 \\ 21.5 \end{array} \quad \begin{array}{r} 7.0 \\ 18 \end{array} \quad \begin{array}{r} 5.6 \\ 13 \end{array} \quad \begin{array}{r} 5.7 \\ 13 \end{array} \quad \begin{array}{r} 5.8 \\ 13 \end{array} \quad \begin{array}{r} 7.1 \\ 17.5 \end{array} \quad \begin{array}{r} 7.1 \\ 22.5 \end{array} \quad \begin{array}{r} 5.9 \\ 30.5 \end{array}$$

$$\begin{array}{r} 0.5 \\ 29 \end{array} \quad \begin{array}{r} 6.8 \\ 21.5 \end{array} \quad \begin{array}{r} 6.8 \\ 17.5 \end{array} \quad \begin{array}{r} 5.3 \\ 13 \end{array} \quad \begin{array}{r} 6.2 \\ 13 \end{array} \quad \begin{array}{r} 5.5 \\ 13 \end{array} \quad \begin{array}{r} 6.9 \\ 17.5 \end{array} \quad \begin{array}{r} 6.9 \\ 21.5 \end{array} \quad \begin{array}{r} 4.8 \\ 32.5 \end{array}$$

$$\begin{array}{r} 2.0 \\ 20.5 \end{array} \quad \begin{array}{r} 7.2 \\ 21.5 \end{array} \quad \begin{array}{r} 7.2 \\ 17.5 \end{array} \quad \begin{array}{r} 5.6 \\ 13 \end{array} \quad \begin{array}{r} 5.6 \\ 13 \end{array} \quad \begin{array}{r} 5.7 \\ 13 \end{array} \quad \begin{array}{r} 7.1 \\ 18 \end{array} \quad \begin{array}{r} 7.2 \\ 22 \end{array} \quad \begin{array}{r} 4.8 \\ 31 \end{array}$$

$$\begin{array}{r} 3.5 \\ 30 \end{array} \quad \begin{array}{r} 7.9 \\ 21.5 \end{array} \quad \begin{array}{r} 7.9 \\ 17.5 \end{array} \quad \begin{array}{r} 6.6 \\ 13 \end{array} \quad \begin{array}{r} 6.6 \\ 13 \end{array} \quad \begin{array}{r} 6.6 \\ 13 \end{array} \quad \begin{array}{r} 8.1 \\ 17.5 \end{array} \quad \begin{array}{r} 8.3 \\ 22 \end{array} \quad \begin{array}{r} 6.6 \\ 29 \end{array}$$

5/20 = 0.0 Dita
Right

10 20, 14

Station	+	π ✓ 1028.07	-	grade	ground.
---------	---	--------------------	---	-------	---------

8+55

9		✓			
T.P.	2.08	1020.58	10.57		

+40

10

+50

11+0

+60

12

+60

+75

+80

4. 2 4

$\begin{array}{r} 7.6 \\ 30 \end{array}$
 $\begin{array}{r} 9.7 \\ 22 \end{array}$
 $\begin{array}{r} 9.7 \\ 17.5 \end{array}$
 $\begin{array}{r} 8.2 \\ 13 \end{array}$
 $\begin{array}{r} 8.2 \\ 13 \end{array}$
 $\begin{array}{r} 8.2 \\ 13 \end{array}$
 $\begin{array}{r} 9.7 \\ 20 \end{array}$
 $\begin{array}{r} 10.7 \\ 24.5 \end{array}$
 (0.0 Ditch Rt.)

(8+8.5=0.0 Ditch Lt.)

$\begin{array}{r} 11.6 \\ 24.5 \end{array}$
 $\begin{array}{r} 9.5 \\ 13 \end{array}$
 $\begin{array}{r} 9.6 \\ 13 \end{array}$
 $\begin{array}{r} 9.6 \\ 13 \end{array}$
 $\begin{array}{r} 9.6 \\ 13 \end{array}$
 $\begin{array}{r} 12.0 \\ 23.5 \end{array}$

1017.50

(9+9.0=0.0 Ditch Lt.)

$\begin{array}{r} 5.8 \\ 33 \end{array}$
 $\begin{array}{r} 6.1 \\ 26.5 \end{array}$
 $\begin{array}{r} 6.1 \\ 18.5 \end{array}$
 $\begin{array}{r} 4.3 \\ 13 \end{array}$
 $\begin{array}{r} 4.3 \\ 13 \end{array}$
 $\begin{array}{r} 4.3 \\ 13 \end{array}$
 $\begin{array}{r} 6.4 \\ 19.5 \end{array}$

$\begin{array}{r} 4.9 \\ 31 \end{array}$
 $\begin{array}{r} 6.4 \\ 22 \end{array}$
 $\begin{array}{r} 6.4 \\ 17.5 \end{array}$
 $\begin{array}{r} 5.0 \\ 13 \end{array}$
 $\begin{array}{r} 5.0 \\ 13 \end{array}$
 $\begin{array}{r} 5.0 \\ 13 \end{array}$
 $\begin{array}{r} 6.7 \\ 19 \end{array}$

$\begin{array}{r} 4.2 \\ 31 \end{array}$
 $\begin{array}{r} 6.8 \\ 21.5 \end{array}$
 $\begin{array}{r} 6.7 \\ 17 \end{array}$
 $\begin{array}{r} 5.4 \\ 13 \end{array}$
 $\begin{array}{r} 5.4 \\ 13 \end{array}$
 $\begin{array}{r} 5.6 \\ 13 \end{array}$
 $\begin{array}{r} 6.8 \\ 17.5 \end{array}$

$\begin{array}{r} 4.1 \\ 30.8 \end{array}$
 $\begin{array}{r} 7.0 \\ 22 \end{array}$
 $\begin{array}{r} 7.0 \\ 17.5 \end{array}$
 $\begin{array}{r} 5.7 \\ 13 \end{array}$
 $\begin{array}{r} 5.7 \\ 13 \end{array}$
 $\begin{array}{r} 5.5 \\ 13 \end{array}$
 $\begin{array}{r} 6.4 \\ 16.5 \end{array}$

$\begin{array}{r} 4.2 \\ 31 \end{array}$
 $\begin{array}{r} 7.1 \\ 21.5 \end{array}$
 $\begin{array}{r} 7.1 \\ 18 \end{array}$
 $\begin{array}{r} 5.6 \\ 13 \end{array}$
 $\begin{array}{r} 5.6 \\ 13 \end{array}$
 $\begin{array}{r} 5.7 \\ 13 \end{array}$
 $\begin{array}{r} 6.7 \\ 17 \end{array}$

(+60 = $\frac{7.4}{24.0}$ = F.L. line 18" X 18" C.M.)

$\begin{array}{r} 6.4 \\ 33.5 \end{array}$
 $\begin{array}{r} 7.3 \\ 24.5 \end{array}$
 $\begin{array}{r} 7.3 \\ 24.5 \end{array}$
 $\begin{array}{r} 5.5 \\ 19 \end{array}$
 $\begin{array}{r} 5.6 \\ 16 \end{array}$
 $\begin{array}{r} 5.6 \\ 16 \end{array}$
 $\begin{array}{r} 7.3 \\ 23.5 \end{array}$

$\begin{array}{r} 6.3 \\ 46 \end{array}$
 $\begin{array}{r} 7.2 \\ 42 \end{array}$
 $\begin{array}{r} 7.1 \\ 30 \end{array}$
 $\begin{array}{r} 5.5 \\ 25 \end{array}$
 $\begin{array}{r} 5.6 \\ 22 \end{array}$
 $\begin{array}{r} 5.7 \\ 22 \end{array}$
 $\begin{array}{r} 7.3 \\ 29 \end{array}$

00 Ditch Cut $\begin{array}{r} 7.1 \\ 50 \end{array}$ $\begin{array}{r} 7.2 \\ 34.5 \end{array}$ $\begin{array}{r} 5.5 \\ 29 \end{array}$ $\begin{array}{r} 5.4 \\ 25 \end{array}$ $\begin{array}{r} 5.6 \\ 25 \end{array}$ $\begin{array}{r} 7.6 \\ 33 \end{array}$

Station	+	π ✓ 1020.58	-	Grade	Ground.
---------	---	--------------------	---	-------	---------

12+92

12+04.29 ϕ E. Co. Line

B.M.

3.38

Lt.

E

Rt.

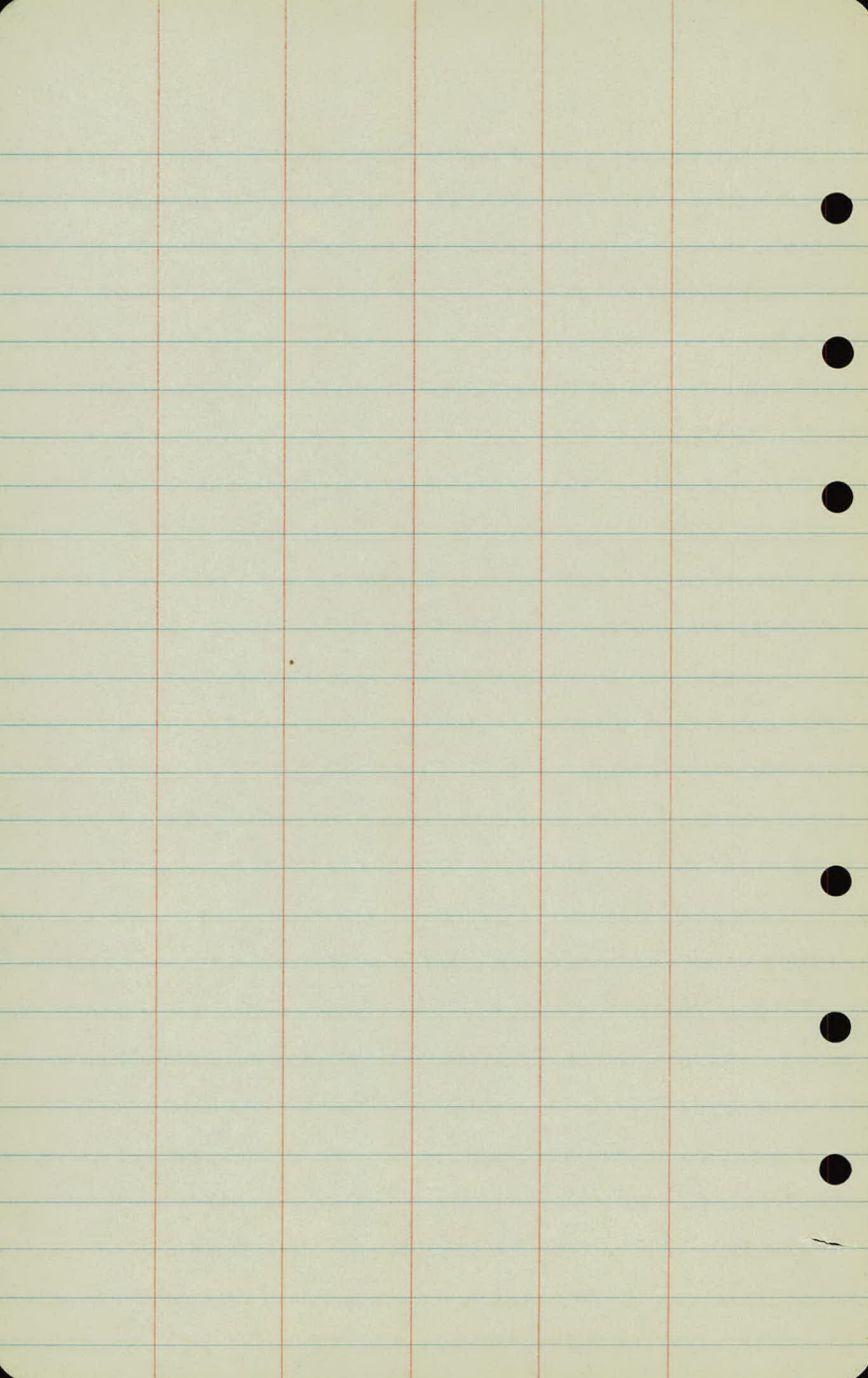
00 Emb.

 $\frac{52}{50}$

52

 $\frac{54}{50} = 0.0 \text{ Emb.}$ ✓
1017.20

Nail in 8" Br E Elev 80' Lt. 12+75 (1017.20)



Excavation & Embankment
Quantities
& Entrances.

Ent. left Sta. 3+48
15' X 20' C.M.

	Area		Cu. Yds	
	Emb	Exc	Emb	Exc.
0+68		0.0		8
0+32		12.0		✓
0+25	0.0	0.0	2	
0+21	27.0		4	
0+17	27.0		2	
0+13	0.0			

0+00 = 3+48 ± Ent.

$$\frac{0.0}{5}$$

$$\frac{0.0}{5}$$

$$\frac{0.0}{7}$$

$$\frac{+1.0}{5}$$

$$\frac{+1.0}{5}$$

$$\frac{0.0}{7}$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{0.0}{10}$$

$$\frac{0.0}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{0.0}{10}$$

$$\frac{-0.0}{8}$$

$$\frac{-0.0}{8}$$

Area
Emb EXX.

Cu yds
Emb EXX.

0+50

0

0+25

0

16

1

0+22

27

0

0+17

27

0+13

0

0+00 = 546 Ent. H. 15" x 20' C.M.

1+03

0

0+58

96

0+26

176

0+13

0

0+00 = 3467- Ent Rt.

$$\frac{0.0}{8}$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{8}$$

$$+1.0$$

$$\frac{+1.5}{8}$$

$$\frac{0.0}{10}$$

$$\frac{0.0}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{0.0}{10}$$

$$\frac{0.0}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{0.0}{10}$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{8}$$

$$\frac{-0.0}{8}$$

$$\frac{-0.0}{8}$$

$$\frac{0.0}{16}$$

$$\frac{-4.0}{8}$$

$$\frac{-4.0}{8}$$

$$\frac{0.0}{16}$$

$$\frac{0.0}{20}$$

$$\frac{-4.2}{10}$$

$$\frac{-4.2}{10}$$

$$\frac{0.0}{20}$$

$$\frac{-0.0}{10}$$

$$\frac{-0.0}{10}$$

Area.
Ent

0425 0

0421 27

0417 27

0403 No Calc.
0

040 = 6480 - Ent Lt.

$$\frac{80}{8}$$

$$\frac{80}{8}$$

$$\frac{80}{10}$$

$$-1.5$$

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

$$-1.5$$

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

$$\frac{80}{10}$$

$$\frac{80}{10}$$

$$-1.5$$

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

$$-1.5$$

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

$$\frac{80}{10}$$

$$\frac{80}{8}$$

$$\frac{80}{8}$$

Area
Emb. Exo.

Cu. Yds.
Emb. Exo.

0+25 0

0+21 27

0+17 27

0+13 0

0+00 = 84 14 - Ent/LT 15' x 20' C.M.

0+25 0

0+21 18

0+17 18

0+13 0

0+0 = 74 1/2 Ent/LT 16' C.M.

$$\frac{0.0}{8}$$

$$\frac{1.0}{8}$$

$$\frac{0.0}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{0.0}{10}$$

$$\frac{0.0}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{0.0}{10}$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{8}$$

$$\frac{1}{2}$$

$$x$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{10}$$

$$\frac{-1.0}{18}$$

$$\frac{-1.0}{18}$$

$$\frac{1.0}{10}$$

$$\frac{0.0}{10}$$

$$\frac{-1.0}{8}$$

$$\frac{-1.0}{8}$$

$$\frac{0.0}{10}$$

$$\frac{0.0}{8}$$

$$\frac{0.0}{8}$$

Area
Emb

0+75 0

0+21 27

0+17 27

0+10 0

0+00 = 8+46 Ent. Pt 15" x 20" CAN.

$$\frac{80}{8}$$

$$\frac{80}{8}$$

$$\frac{80}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{80}{10}$$

$$\frac{80}{10}$$

$$\frac{-1.5}{8}$$

$$\frac{-1.5}{8}$$

$$\frac{80}{10}$$

$$\frac{80}{8}$$

$$\frac{80}{8}$$

Summary of Culverts.

	Install C.M. Culvert		Remove Old Culverts	Replace Old Culverts.
	15"	18"		
3+40 E.H. Lt.				
5+43 " Lt.	20			
5+72 " Rt.	20		(12) 20 (fracture) 20	
8+14" Lt.	20			
8+46-E. Rt.	20			
12+60 dL		18		30
12+84		18	30	



Final Topography
Brand St.

5

4

3

2

1

0/0

+43 Ent. 15'x20'CM
19'

+72 - Ent 15'x20'CM
20'

+55- P.P. 26'

+48- Ent. 15'x20'CM.
19'

+67 Ent. 00 C. 10.

+26-36" C. H. 24'

+83-24" Oak 22.6

+61 F. Cor. 33.6

F. 33.4

+400 F. Cor. 33

12 + 04.39 = 9 L. Co. Line

21' 38' + 94
26' 24' + 80
16.0 - 18" 48' CNT = 19' - 18' + 65
15' 13' + 50

12

11

10

9

8

7

6

24

24

+55 - P.P. 25'

+55 - P.P. 25'

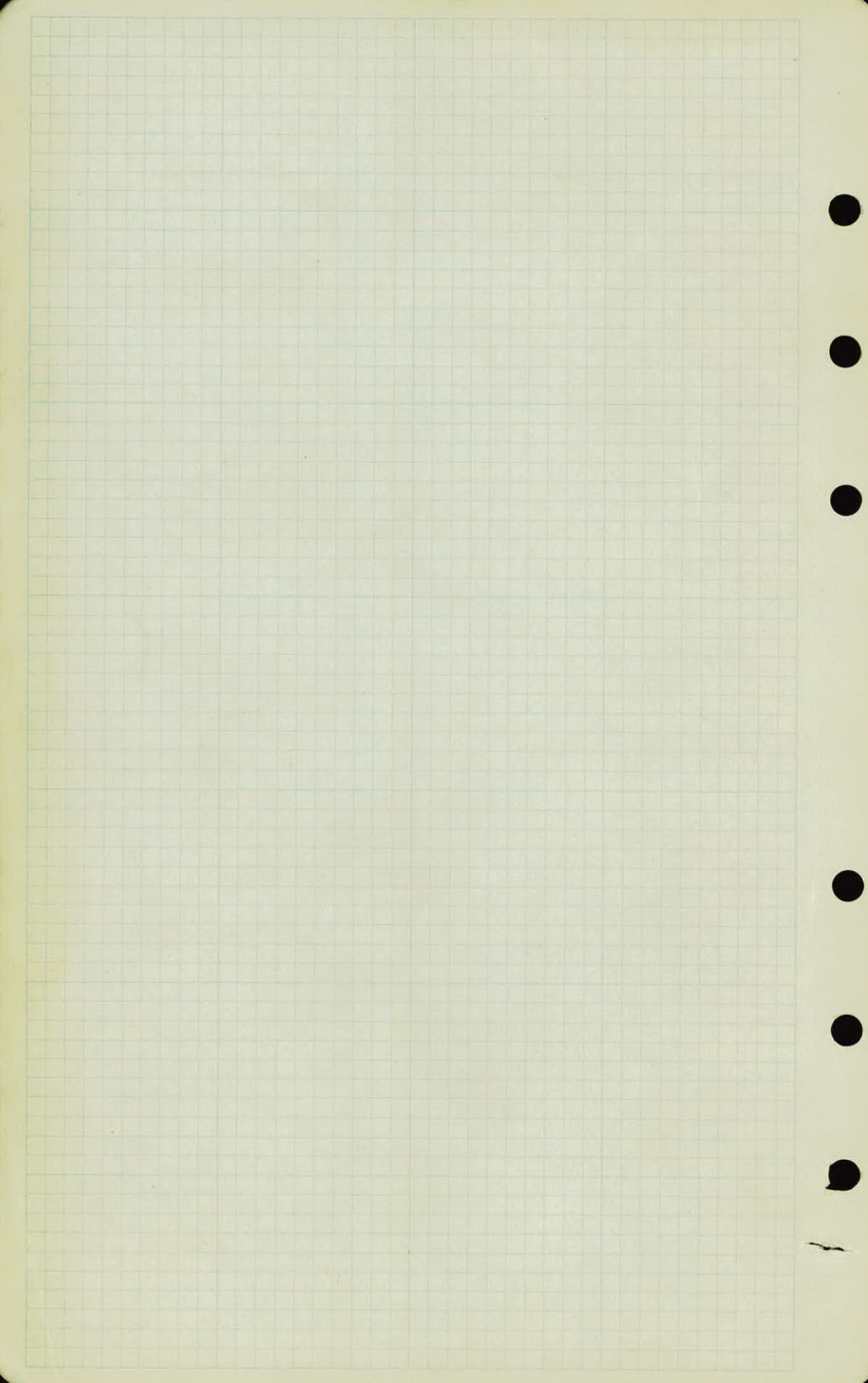
+46 - Ent 15' x 20' 9/11
20'+44 - Ent 15' x 20' C.M.
19

+50 - P.P. 25

+42 - Ent 15' x 20' 9/11

+80 - Ent No Culo.

+04 P.P. 25'



Slope Stakes
Middle Place
Plum St. to E. Co. Line.

Sta.	+	π	-	Grade	q.B.
------	---	-------	---	-------	------

1340	3.20	1029.91			
------	------	---------	--	--	--

040				25.0	
-----	--	--	--	------	--

0450				25.1	
------	--	--	--	------	--

1				25.2	
---	--	--	--	------	--

+33				25.3	
-----	--	--	--	------	--

+50				25.4	
-----	--	--	--	------	--

2				25.5	
---	--	--	--	------	--

+50				25.6	
-----	--	--	--	------	--

3				25.7	
---	--	--	--	------	--

+60				25.8	
-----	--	--	--	------	--

4				25.9	
---	--	--	--	------	--

+50				26.0	
-----	--	--	--	------	--

4.

2

121.

1026.71 Spike in P.D. Worcester Ave.

13

4.4 8.9

31 / 5.6
100.35.2
-0.85.3
100.6 / 31

4.3 5.8

31 / 5.6
100.25.6
-1.35.0
100.8 / 31

4.2 5.7

31 / 6.4

5.0
-0.85.1
100.6 / 31

4.1 5.6

31 / 6.3

5.7
-1.65.5
100.1 / 31

4.0 5.5

31 / 6.2

8.6
-1.65.5
100.0 / 31

3.9 5.4

31 / 5.9

5.2
-1.34.9
100.5 / 31

Sta.	+	π	-	grade	g.R.
		1029.91			
5				26.0	39.54
+45				26.0	39.54
6				26.0	
	3.62	1029.98	3.55		1026.36
+50				26.0	
7				26.0	
+40				25.9	
8				25.8	
+50				25.7	
9				25.6	
+50				25.5	
10				25.5	

LH.

C

RY.

$$3.9 \quad 3i \mid \begin{array}{r} 4.8 \\ 10.6 \end{array}$$

$$\begin{array}{r} 3.8 \\ 10.1 \end{array}$$

$$\begin{array}{r} 3.3 \\ 10.6 \end{array} / 3i$$

$$3i \mid \begin{array}{r} 3.1 \\ 10.8 \end{array}$$

$$\begin{array}{r} 2.8 \\ 11.4 \end{array}$$

$$\begin{array}{r} 2.5 \\ 11.4 \end{array} / 3i$$

$$3i \mid \begin{array}{r} 3.6 \\ 10.3 \end{array}$$

$$\begin{array}{r} 3.6 \\ 10.3 \end{array}$$

$$\begin{array}{r} 3.6 \\ 10.3 \end{array} / 3i$$

$$4.0 \quad 5.5 \quad 3i \mid \begin{array}{r} 4.5 \\ 10.10 \end{array}$$

$$\begin{array}{r} 3.6 \\ 10.4 \end{array}$$

$$\begin{array}{r} 3.7 \\ 10.3 \end{array} / 3i$$

$$4.0 \quad 5.5 \quad 3i \mid \begin{array}{r} 4.1 \\ 10.14 \end{array}$$

$$\begin{array}{r} 3.8 \\ 10.2 \end{array}$$

$$\begin{array}{r} 3.9 \\ 10.1 \end{array} / 3i$$

$$4.1 \quad 5.6 \quad 3i \mid \begin{array}{r} 4.3 \\ 10.13 \end{array}$$

$$\begin{array}{r} 3.6 \\ 10.5 \end{array}$$

$$\begin{array}{r} 4.3 \\ 10.13 \end{array} / 3i$$

$$4.2 \quad 5.7 \quad 3i \mid \begin{array}{r} 5.0 \\ 10.07 \end{array}$$

$$\begin{array}{r} 4.7 \\ 10.5 \end{array}$$

$$\begin{array}{r} 4.5 \\ 10.12 \end{array} / 3i$$

$$4.3 \quad 5.8 \quad 3i \mid \begin{array}{r} 5.3 \\ 10.05 \end{array}$$

$$\begin{array}{r} 5.0 \\ 10.7 \end{array}$$

$$\begin{array}{r} 4.7 \\ 10.11 \end{array} / 3i$$

$$4.4 \quad 5.9 \quad 3i \mid \begin{array}{r} 5.3 \\ 10.06 \end{array}$$

$$\begin{array}{r} 5.0 \\ 10.6 \end{array}$$

$$\begin{array}{r} 4.4 \\ 10.15 \end{array} / 3i$$

$$4.5 \quad 6.0 \quad 3i \mid \begin{array}{r} 5.4 \\ 10.06 \end{array}$$

$$\begin{array}{r} 5.0 \\ 10.5 \end{array}$$

$$\begin{array}{r} 4.7 \\ 10.12 \end{array} / 3i$$

$$4.5 \quad 6.0 \quad 3i \mid \begin{array}{r} 5.9 \\ 10.01 \end{array}$$

$$\begin{array}{r} 5.1 \\ 11.2 \end{array}$$

$$\begin{array}{r} 5.4 \\ 10.06 \end{array} / 3i$$

$$\begin{array}{r} 153.4 \\ 49.4 \\ \hline 104.0 \end{array}$$

$$\begin{array}{r} 81.5 \\ 1.0 \\ \hline 82.5 \end{array}$$

Sta.	+	π	-	Grade	g.p.
		1029.98			
10+50				25.5	
11				25.5	
+55				25.6	
12				25.8	
+50				26.0	
13				26.2	
T.P.	6.64	1031.94	4.68		1025.20
+50				26.5	
14				26.7	
+50				27.0	
+85.1	E.P.			27.1	
			1.90		

4.

E

41.

$$4.5 \quad 6.0 \quad 31 \mid \begin{array}{r} 5.8 \\ 100.2 \end{array}$$

$$\begin{array}{r} 5.7 \\ -1.2 \end{array}$$

$$\begin{array}{r} 5.7 \\ 100.3 / 31 \end{array}$$

$$4.5 \quad 6.0 \quad 31 \mid \begin{array}{r} 5.5 \\ 100.5 \end{array}$$

$$\begin{array}{r} 5.5 \\ -1.0 \end{array}$$

$$\begin{array}{r} 5.5 \\ 100.5 / 31 \end{array}$$

$$4.4 \quad 5.9 \quad 31 \mid \begin{array}{r} 5.3 \\ 100.6 \end{array}$$

$$\begin{array}{r} 5.3 \\ -0.9 \end{array}$$

$$\begin{array}{r} 5.4 \\ 100.5 / 31 \end{array}$$

$$4.2 \quad 5.7 \quad 31 \mid \begin{array}{r} 5.2 \\ 100.5 \end{array}$$

$$\begin{array}{r} 5.2 \\ -1.0 \end{array}$$

$$\begin{array}{r} 5.1 \\ 100.6 / 31 \end{array}$$

$$4.0 \quad 5.5 \quad 31 \mid \begin{array}{r} 4.9 \\ 100.6 \end{array}$$

$$\begin{array}{r} 5.0 \\ -1.0 \end{array}$$

$$\begin{array}{r} 4.8 \\ 100.7 / 31 \end{array}$$

$$3.8 \quad 5.3 \quad 31 \mid \begin{array}{r} 4.6 \\ 100.7 \end{array}$$

$$\begin{array}{r} 4.7 \\ -0.9 \end{array}$$

$$\begin{array}{r} 4.5 \\ 100.9 / 31 \end{array}$$

$$5.4 \quad 6.9 \quad 31 \mid \begin{array}{r} 6.3 \\ 100.6 \end{array}$$

$$\begin{array}{r} 6.4 \\ -1.0 \end{array}$$

$$\begin{array}{r} 5.4 \\ 101.0 / 31 \end{array}$$

$$5.2 \quad 6.7 \quad 31 \mid \begin{array}{r} 5.7 \\ 101.0 \end{array}$$

$$\begin{array}{r} 5.8 \\ -0.6 \end{array}$$

$$\begin{array}{r} 5.7 \\ 101.0 / 31 \end{array}$$

$$4.9 \quad 6.4 \quad 31 \mid \begin{array}{r} 5.9 \\ 100.7 \end{array}$$

$$\begin{array}{r} 5.5 \\ -0.6 \end{array}$$

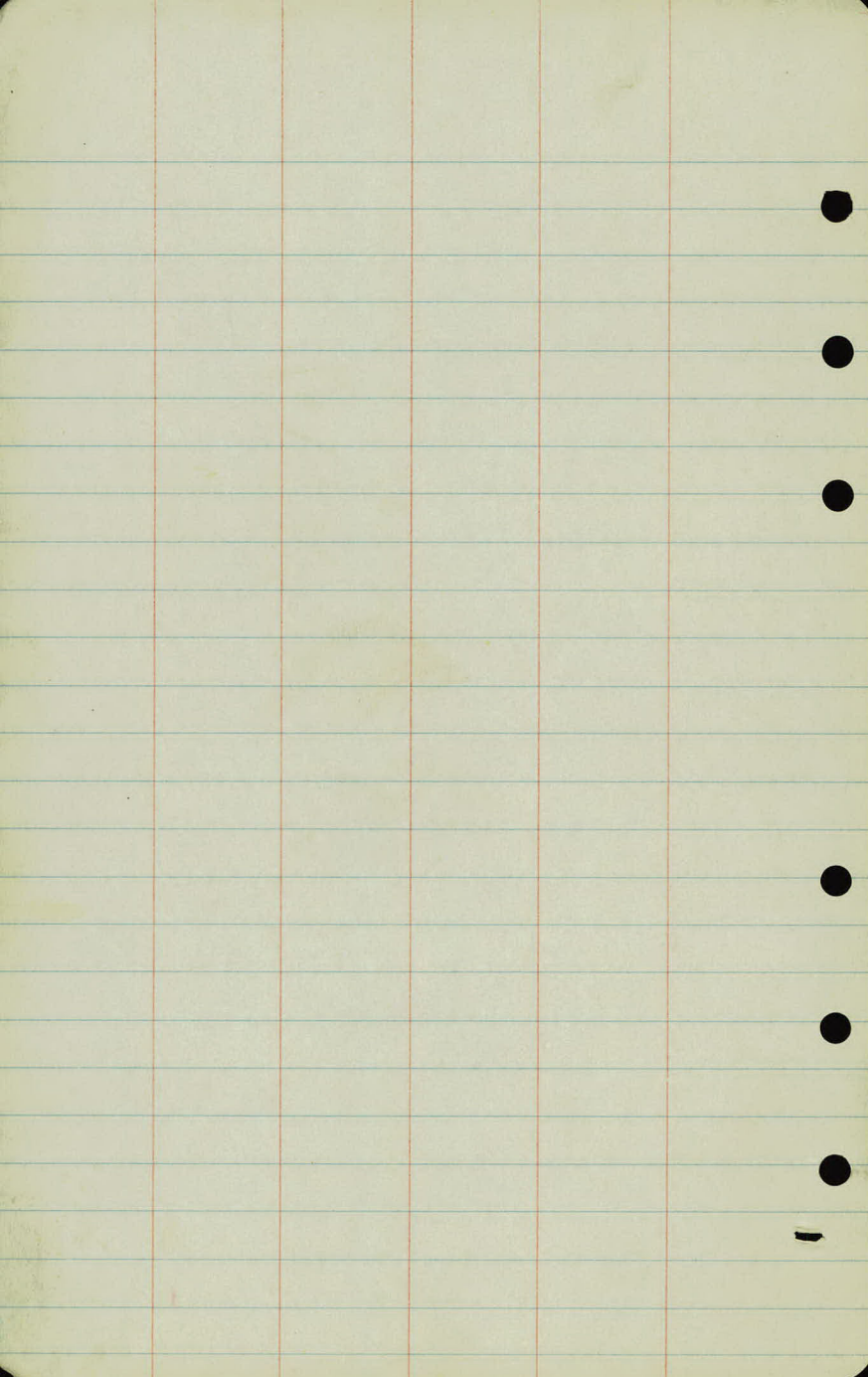
$$\begin{array}{r} 5.1 \\ 101.2 / 31 \end{array}$$

$$4.8 \quad 6.3 \quad 31 \mid \begin{array}{r} 5.3 \\ 101.0 \end{array}$$

$$\begin{array}{r} 5.3 \\ 10.5 \end{array}$$

$$\begin{array}{r} 5.0 \\ 101.2 / 31 \end{array}$$

1030.07 Spk. top Two Stp. S.E. cor. Mid + E. Co. Line.



BRAND ST.

slope stakes

Plum St. to 200' East

Sta	+	-	Grade
B.M.	4.48	1011.70	1007.22

0	+00		1005.0
---	-----	--	--------

	+50		05.3
--	-----	--	------

1			06.0
---	--	--	------

	+44		07.1
--	-----	--	------

	+67		07.9
--	-----	--	------

2			09.1
---	--	--	------

Gr. Rod Lt R Rt.

Spt. in Top stump 80' 2 1/2 + 55.

6.7		$\frac{131}{-6.4}$	$\frac{146}{-79/28.8}$
-----	--	--------------------	------------------------

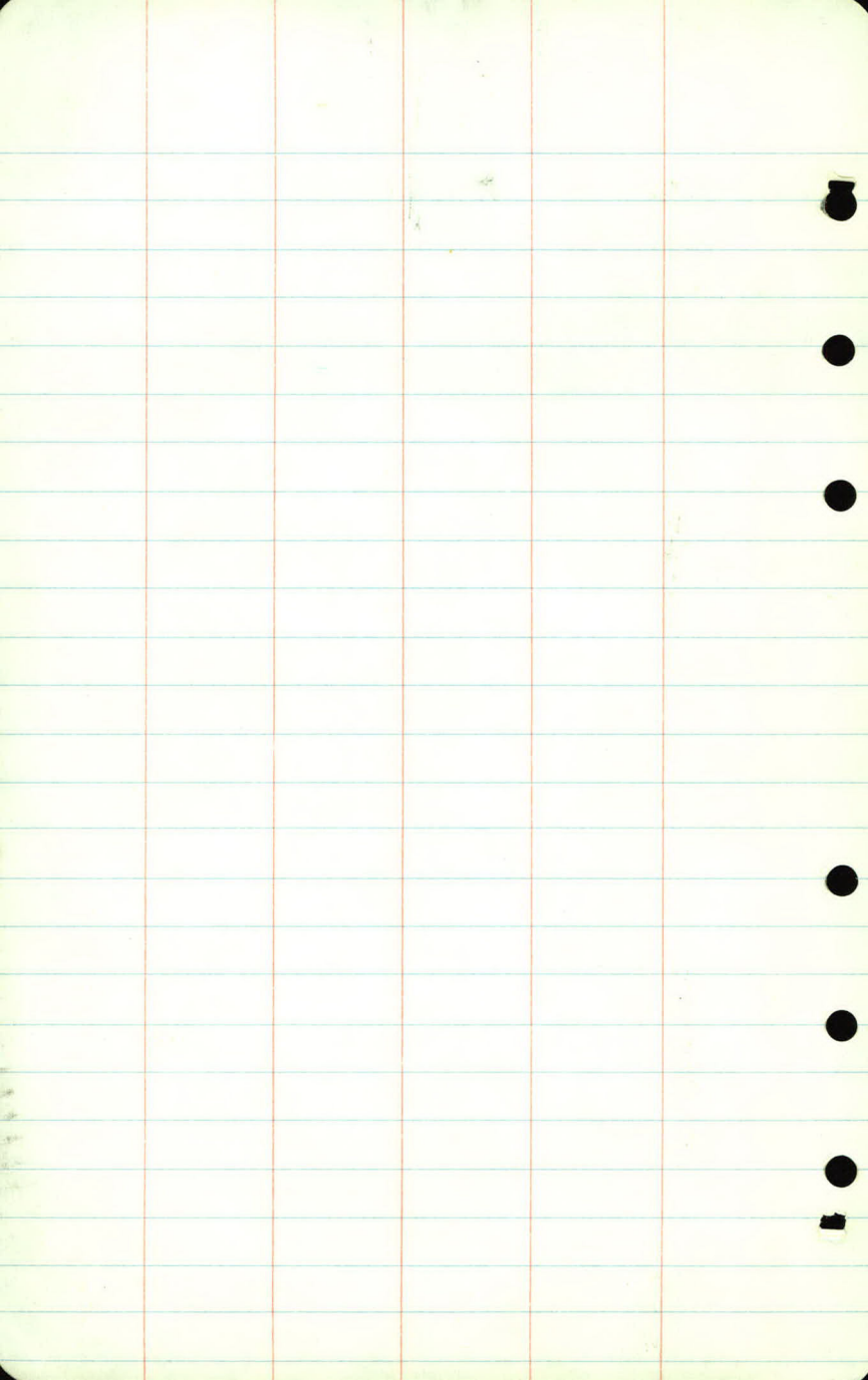
6.4	$\frac{21.0}{-4.0}$	$\frac{10.5}{-4.1}$	$\frac{144}{-8.0/29.0}$
-----	---------------------	---------------------	-------------------------

5.7	$\frac{18.0}{-2.5}$	$\frac{6.6}{-0.9}$	$\frac{91}{3.4/19.8}$
-----	---------------------	--------------------	-----------------------

4.6	$\frac{18.4}{-2.7}$	$\frac{4.7}{-0.1}$	$\frac{78}{3.2/19.4}$
-----	---------------------	--------------------	-----------------------

3.8	$\frac{13.0}{+0.3}$	$\frac{3.7}{+0.1}$	$\frac{35}{8.7/3.0}$
-----	---------------------	--------------------	----------------------

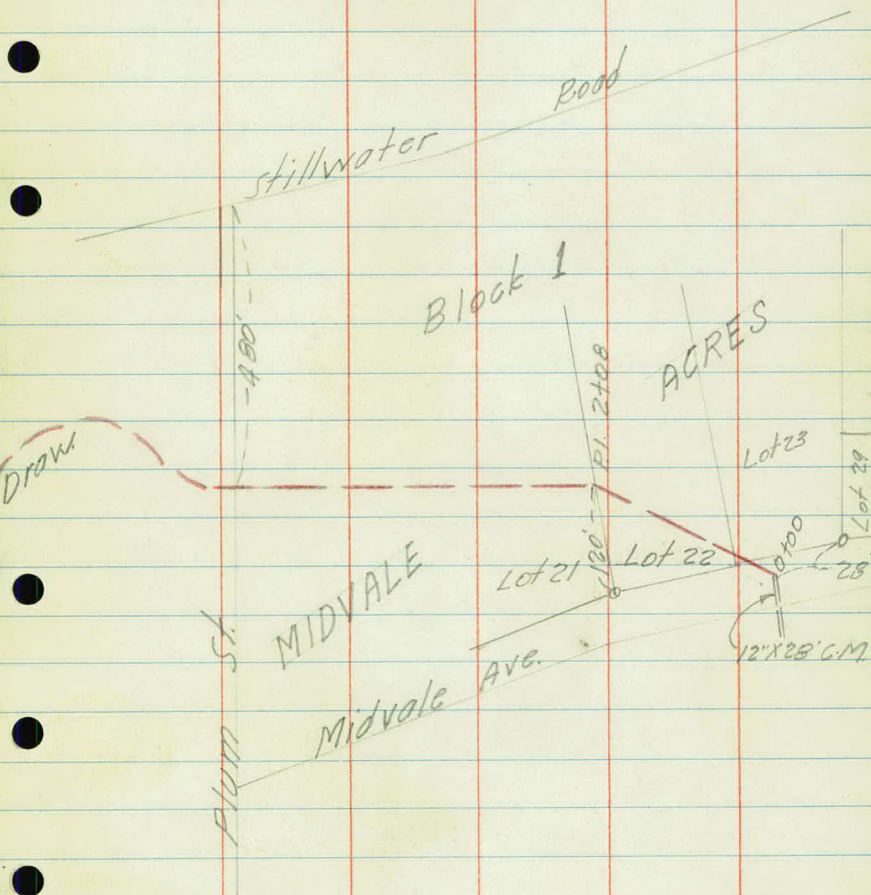
2.6		$\frac{2.5}{+0.1}$	
-----	--	--------------------	--



-1945-

Drainage Levels

Midvale Ave



Sta.	+	π	-	Elev.
B.M.	3.61	1020.10		(1016.49)
	12.80	1029.59	3.31	1016.29
B.M.	3.53	1032.34	0.78	1028.81

0 +00 = E. Co. Line 279

+19 = Highway Ditch

+50 27.4

1 27.0

2 26.2

3 25.7

T.P. 3.73 1029.42 6.65 1025.69

4 25.60

8-14-43
K.H.
C.F.
C.N.

Lt.

E

Rt.

U.S.G.S. B.M. H-4 Cap gone elev. corr. = 1016.43

Spt. in 24" Elm N.W. Cor. Midvale Ave & E. Co. Line

43
100

44

44
100

FL 12" C.M.

6.3 5.9
107 30

5.8 5.3
40 118

FL 12" C.M.

49

53

61

66

38

Sta	+	π	-	Elev.
		1029.42		

4	+58			25.5
---	-----	--	--	------

5				25.2
---	--	--	--	------

6				25.7
---	--	--	--	------

7				25.9
---	--	--	--	------

8				26.7
---	--	--	--	------

BM	4.18	1030.52	308	1026.34
----	------	---------	-----	---------

0 +00 = N. End 12" C.M.				23.8
-------------------------	--	--	--	------

+01				24.2
-----	--	--	--	------

+08				24.6
-----	--	--	--	------

Lt

E

Bt

FL 12"
CM

460-Top

42 47 50 54 49 53 39 56 53 51 48 L.O.
44 23 21 16 7 7 21 22 24 26

53 53 50 50 55 49 44 46 42 47 49 46 46
100 64 31 24 22 15 10 7 9 18 28 50

3.7

3.5

2.7 Keeps rising to west

Sph. in P.P. et sta 5+

24.2

6.7 6.3
Ground

6.3

5.9

Sta	+	π	-	E/ev
		1030.52		
0	+38			24.3
1				24.4
	+50			24.1
2				23.8
	+08	P.I.		23.7
	+23			23.7
	+58			23.9
3				23.8
T.P.	2.52	1027.54	5.60	1025.02

8-16-45
K.H.
G.F.
G.N.

Lt.

2

Et.

62

61

64

6.7

23.3
7.0
25

X Section along fence
or prop. line

64 6.8 6.8 6.8
50 50 100

6.8

6.6

bl'dg line 6.8
20

6.7 6.5 6.7
50 100

Sta	+	π	-	Elev.
		1022.54		

3	+50			23.6
---	-----	--	--	------

4				23.3
---	--	--	--	------

	+50			22.9
--	-----	--	--	------

5				22.7
---	--	--	--	------

	+50			22.4
--	-----	--	--	------

6				22.3
---	--	--	--	------

	+50			22.0
--	-----	--	--	------

7				21.7
---	--	--	--	------

Lt.

4

Rt.

39

bldg. line 39 42 42 40
54 50 100

46

42 47 48 44 44
80 50 50 100

51

48 54 52 48 52
100 50 50 100

55

54 55 58 48 54
100 50 50 100

Sta.	+	π	-	Elev.
		1022.54		
7	+50		6.5	21.0
8			6.6	20.9
	+15		6.9	20.6
	+17		6.2	21.3
	+24		6.2	21.3
	+27		6.6	20.9
	+33		6.5	21.0
	+37		6.4	22.1

lt.

b

Bl

} berm sec const plans.

} road ditch

Sta.	+	π	-	Elev.
		1027.54		
B	+49		4.9	22.6
	+63		5.6	21.9
	+67		6.7	20.8
	+73		6.7	20.8
	+76		5.9	21.6
	+80		5.9	21.6
	+83		7.9	19.6
9			7.7	19.8

E of Plum St.

} road ditch

} berm

in draw

Sta	+	π	-	Elev.
		1027.54		
9			9.0	18.5
10			9.5	18.0
150			10.3	17.2
11			10.5	17.0
T.P.	4.37	1026.14	5.77	1021.77
			4.85	21.29
B.M.			2.16	1023.98
T.P.	4.31	1024.99	5.46	1020.68
T.P.	4.70	1023.69	6.02	1018.97
B.M.	1.41	1022.26	2.82	1020.85
T.P.	4.59	1023.015	3.835	1018.425
T.P.	6.92	1027.92	2.015	1021.00
T.P.	6.535	1032.84	1.915	1026.005
B.M.			3.40	1029.14
T.P.	5.59	1033.495	4.635	1027.905
T.P.	0.16	1023.54	10.115	1023.38
	3.57	1020.315	6.795	1016.745
B.M.			3.84	1016.475 (1016.49)

3.90

Lt.

&

Rd.

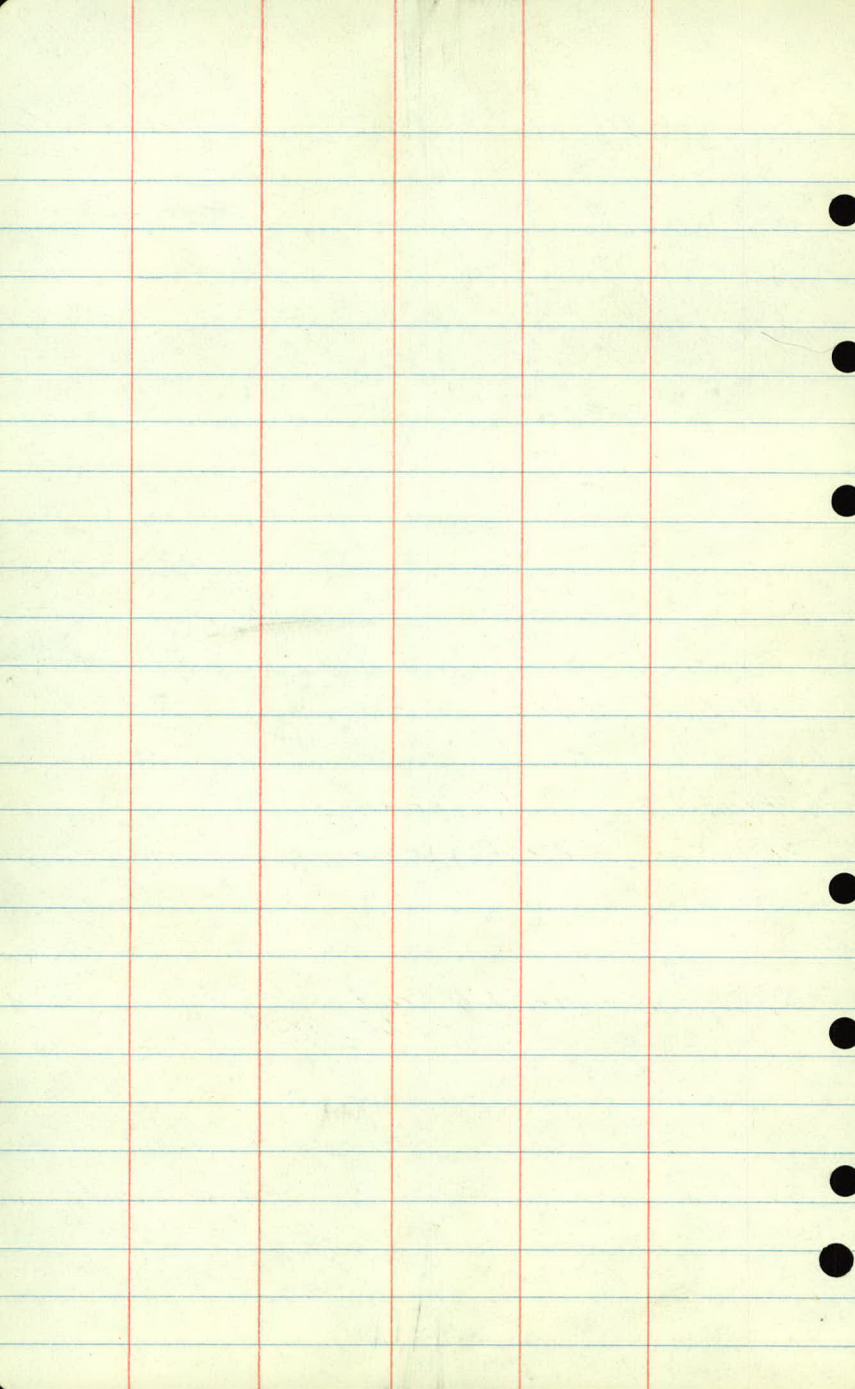
S end of pot hole

& Plum St & Stillwater Road

R.R. Spk in 30° Oak N.W. Cor Plum & Stillwater Road

Top W. End of Door Sill Front of Hg. at 2497 ^{Rd.} Stillwater
Sterling Ave.

Top N.E. Cor Top Step Front of Church of Transfiguration



Levels

Vicinity of Bartelmy Lane and
Stillwater Rd.

Sta	+	π	-	Elev
-----	---	-------	---	------

3.6 ✓

0 +00

5.7

+10

5.6

1

rd. 3.8
N. ditch 5.5

2

rd. 3.8
N. ditch 5.9

3

rd. 4.1
ditch 5.9

+10

6.1

+52

6.35

4

rd. 4.3
ditch 6.3

8-11-45
X.A.
C.F.
C.M.

E. Sterling & Stillwater Rd. (going west)

F.L. W. End 15" C.M. X Drain at Sterling & Stillwater
Rd.

F.L. 15" C.M. Under Frammeir Ave.

Sta.	+	π	-	Elev.
------	---	-------	---	-------

5		6. rd. N. ditch	4.2 6.4	
---	--	--------------------	------------	--

6			6.6	
---	--	--	-----	--

+56			6.4	
-----	--	--	-----	--

E. End			7.2	
--------	--	--	-----	--

W. End			7.7	
--------	--	--	-----	--

			7.7	
--	--	--	-----	--

0 +00			4.6	
-------	--	--	-----	--

1		6. rd. N. ditch	4.8 6.8	
---	--	--------------------	------------	--

center of rd. in ditch of N.E. Cor. Bartelmy Lane ^{Stillwater Rd.}

F.L. 15" C.M. X Drain under Bartelmy Lane 228' N
of Stillwater Rd.

in West ditch of Bartelmy Lane 100' N. of X Drain
drains north.

& rd of Bartelmy Lane & Stillwater Rd. (going west)

sta.	+	π	-	Elev.
2		2 rd N ditch	5.4 8.6	
3		rd. ditch	5.9 9.5	
4		rd. ditch	6.0 10.8	
	+37		10.6	
	+64		10.5	
5		rd. ditch	6.2 11.0	
6		rd. ditch	6.8 10.8	
7		rd. ditch	7.2 9.4	

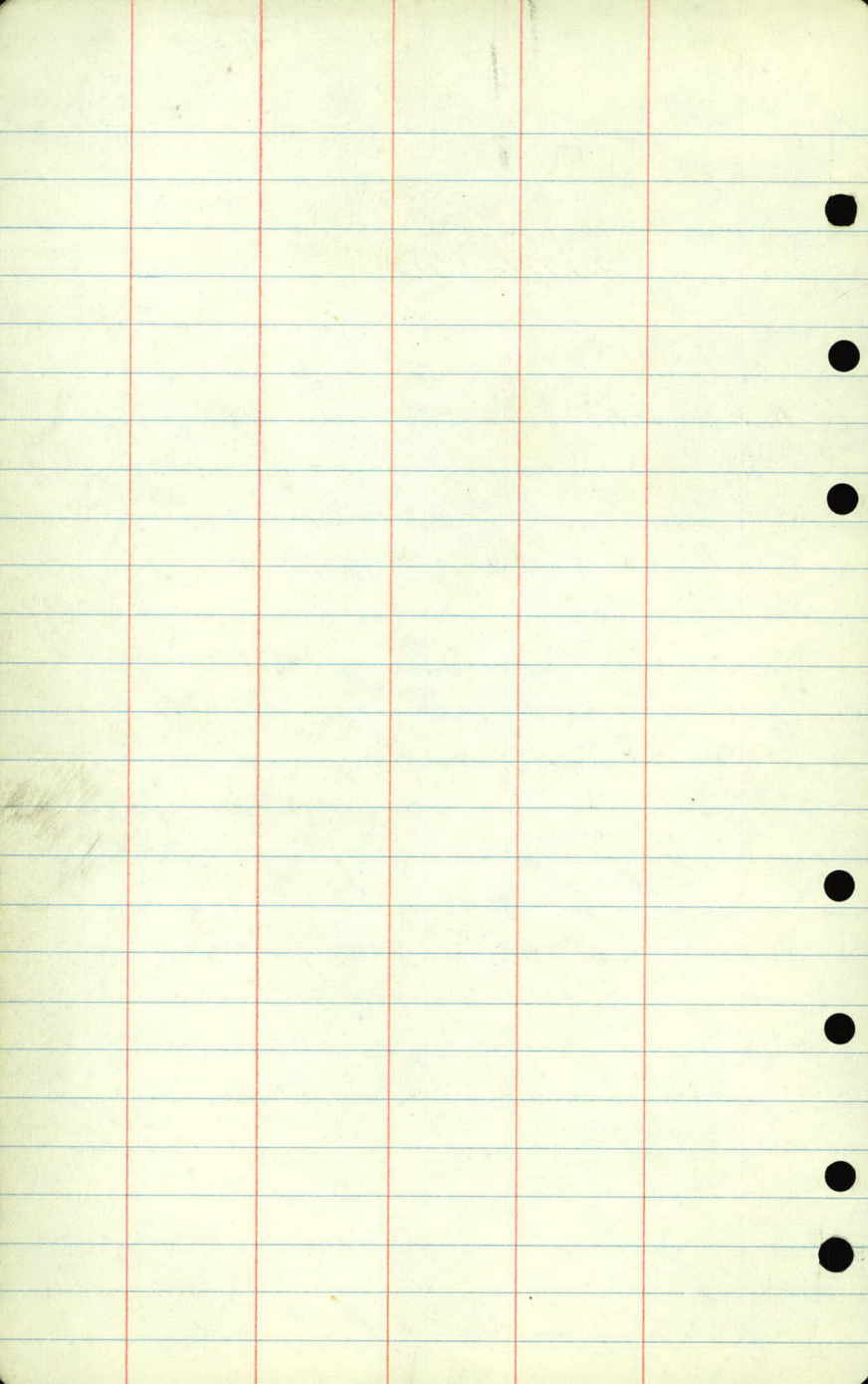
} FL. 12" Ent. culm. C.M. pipe

Sta.	+	π	-	Elev.
7	+64	Δ	ditch	105

8	+64			129
---	-----	--	--	-----

Int. with draw to N.W.

Drains N.W.



Harvester Ave
Alignment & Mant. Check

4-13-19

G.B.
A.M.
M.B.
B.C.

St Mount
Chr Sec 25

Sterling Ave

Harvester

Brand

2x2 Hwb

662.60

Plum

Ave.

N. D. Vole place

Ave.

5075
5075
5075

E. Co Line

660.19

STH # 100

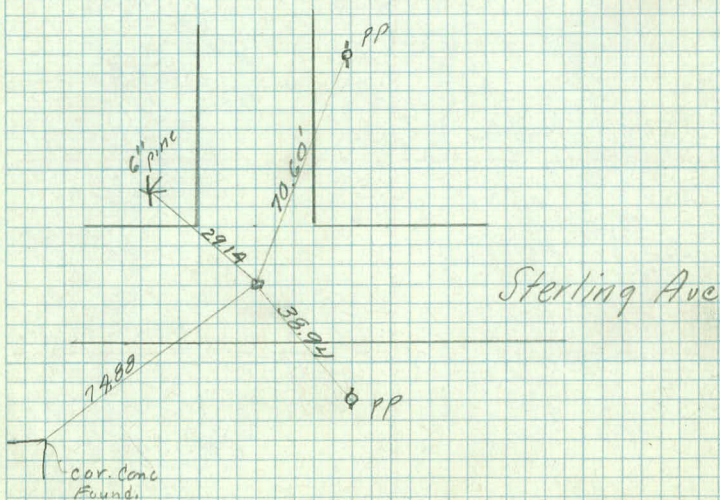
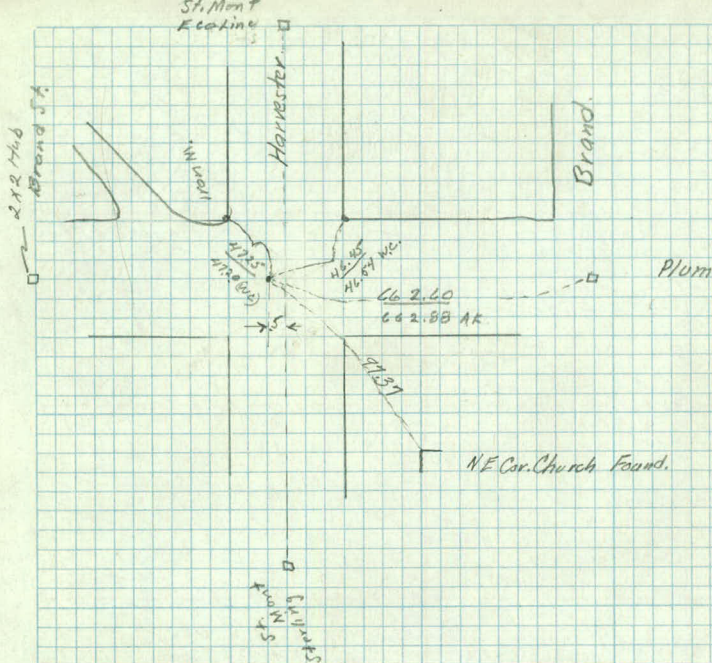
660.24 (W.C.)

Boat Spk

EW Pig line
0 k m l n
Mistaken Spk
1800 ft

N

4-25-99



66-52-b

