

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

----- *Plan* ----- Survey

----- *LARPENTEUR AVE.* -----

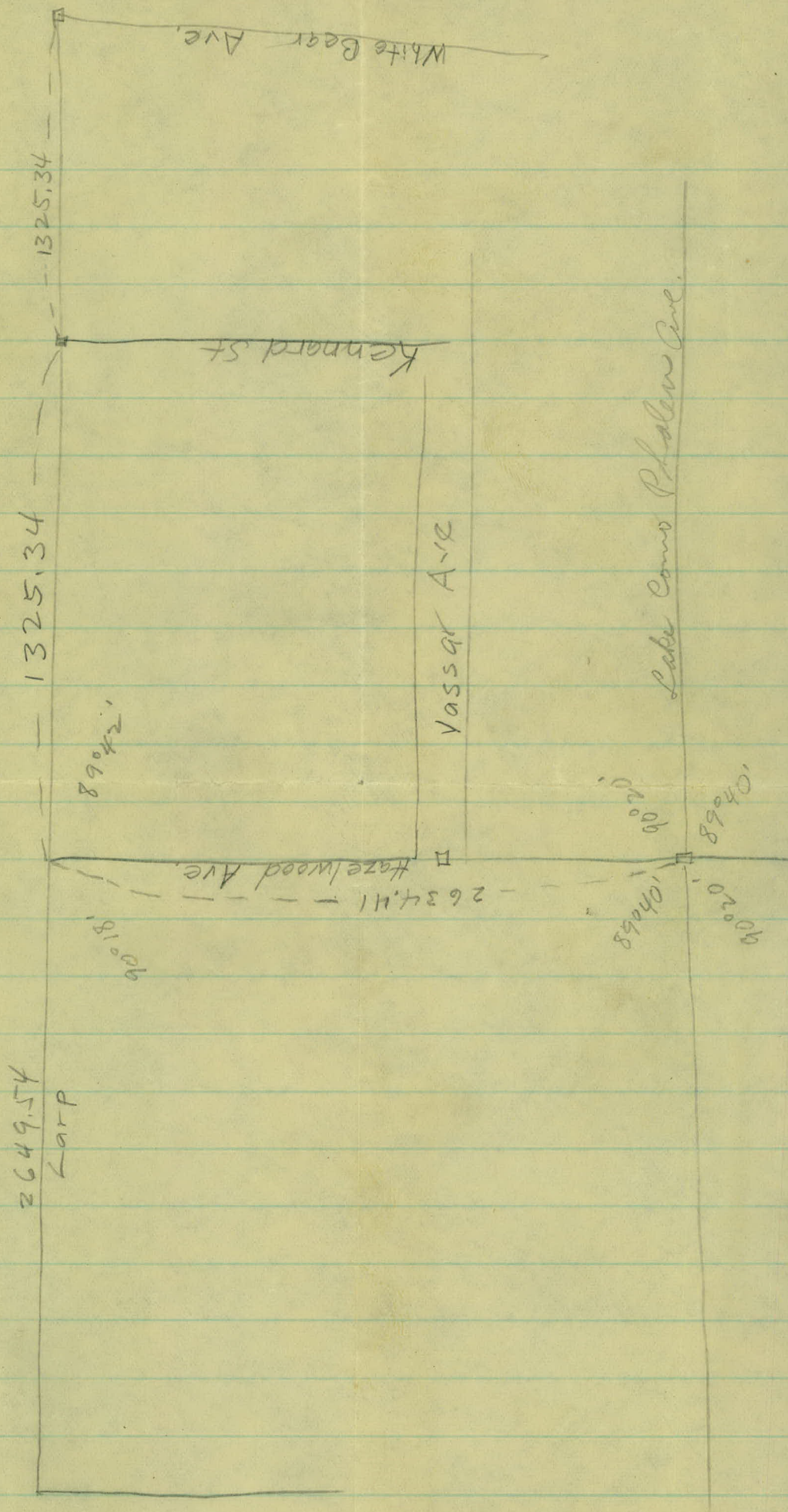
From *Lake St.* ----- To *Prosperity* -----

Road Acc't. No. -----

Date Filed *1935* -----

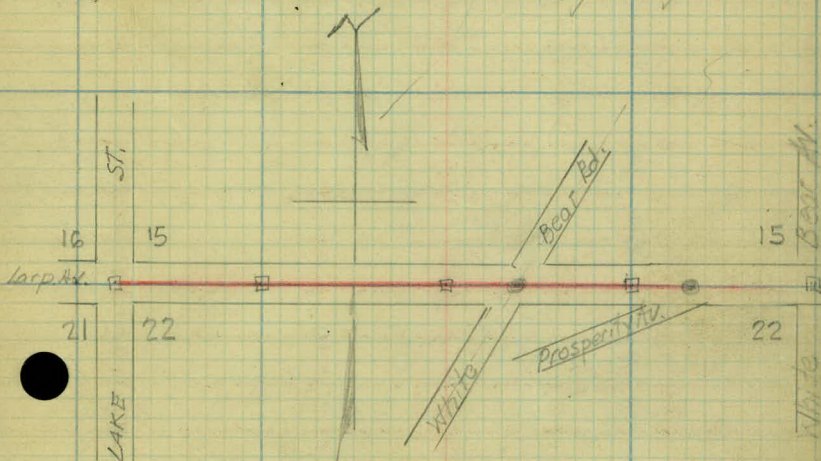
File *16-6* -----

Route -



Plan Survey.

Larpen Ave.
Lake St. to Prosperity Ave.

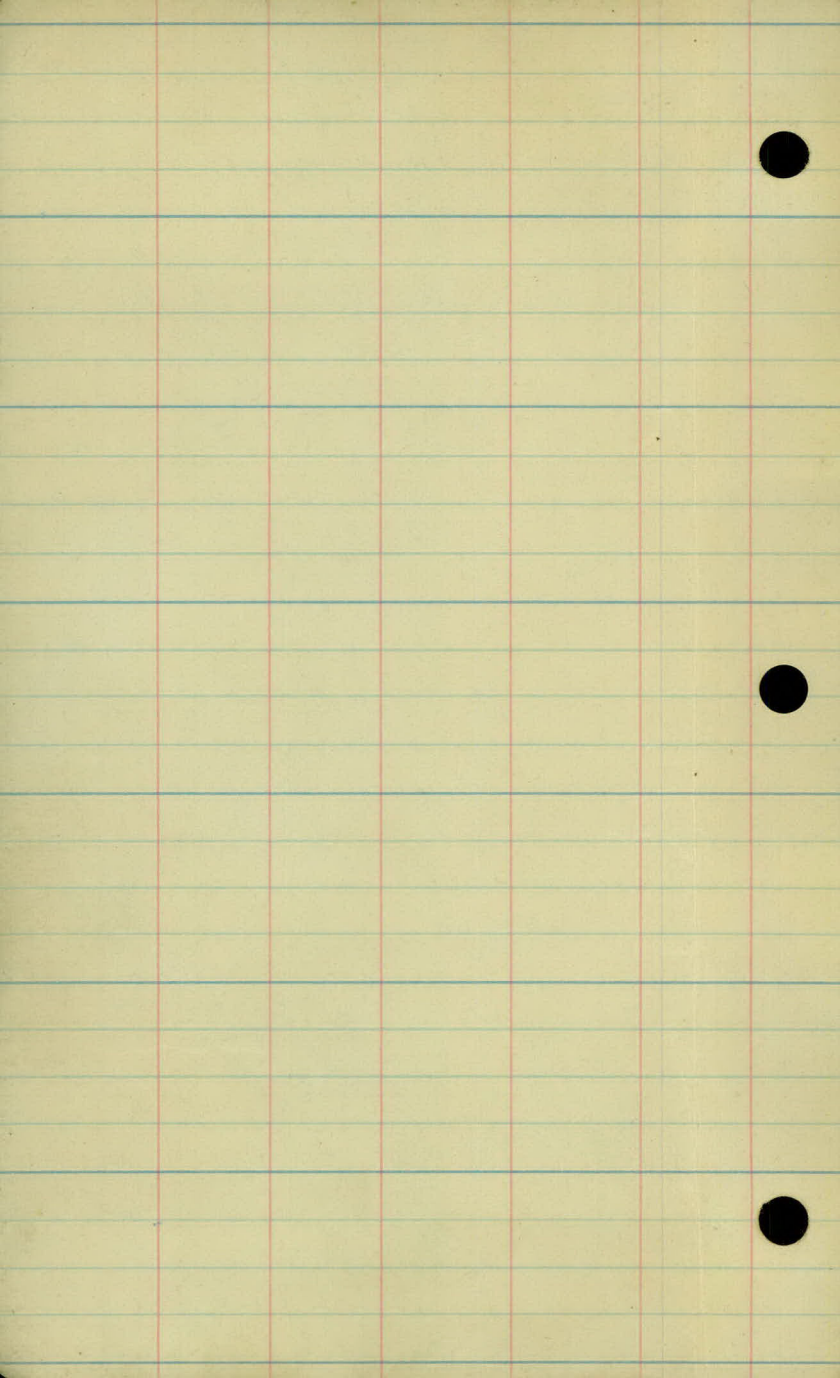


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W. H. Carlson

Aug. 28, 1935



alignment.

Sta. Point Lt. A Rt.

26+49.53 Mon.

24+70.80 P.O.T.

23+00 P.O.T.

14+00

13+24.86 P.O.T. Mon.

2+16.90 E No. Bound Nh

2+02.80 E So. Bound Nh

0+00 Stone Mon.

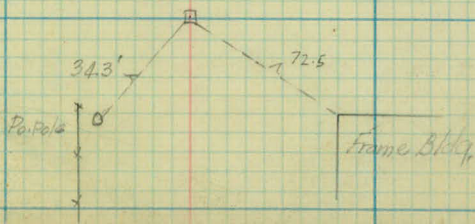
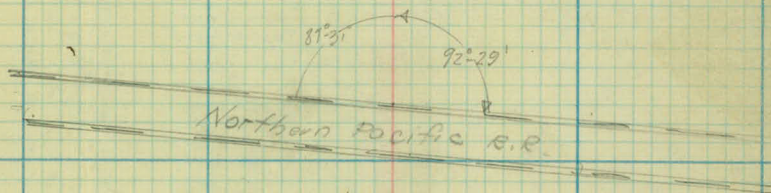
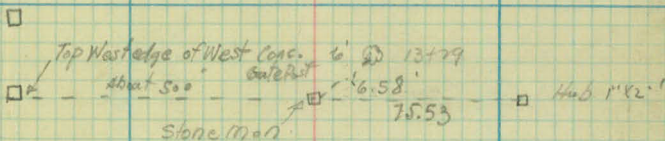
2 Lake St.

W.H.G.
H.A.W.
K.A.
L.B.H. } Aug. 24
1935



2"x2" Hub □ 1" North of Fence

□ 2"x2" Hub



Sta. Point Lt. A Rt.

41+63.4 P.O.T. 10th of Prosp.

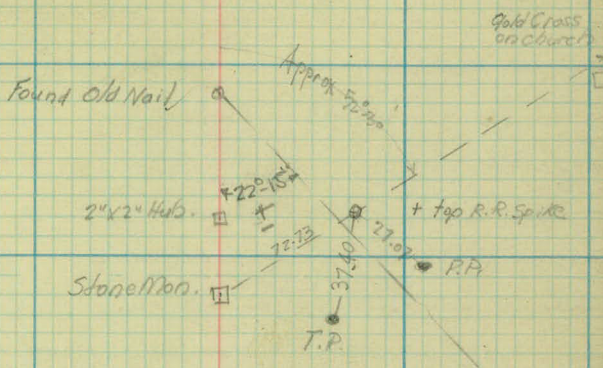
40+87.43 P.O.T.

39+75.25 P.O.T.
Mon

35+29.9 P.O.T.

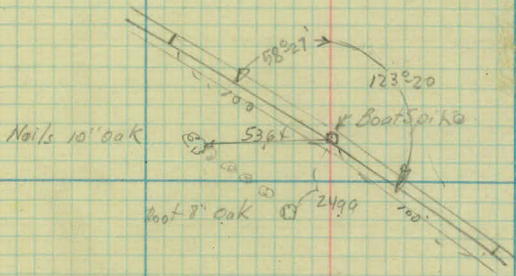
30+86.81 2 White Bear Rd.

29+88.67 P.O.T.



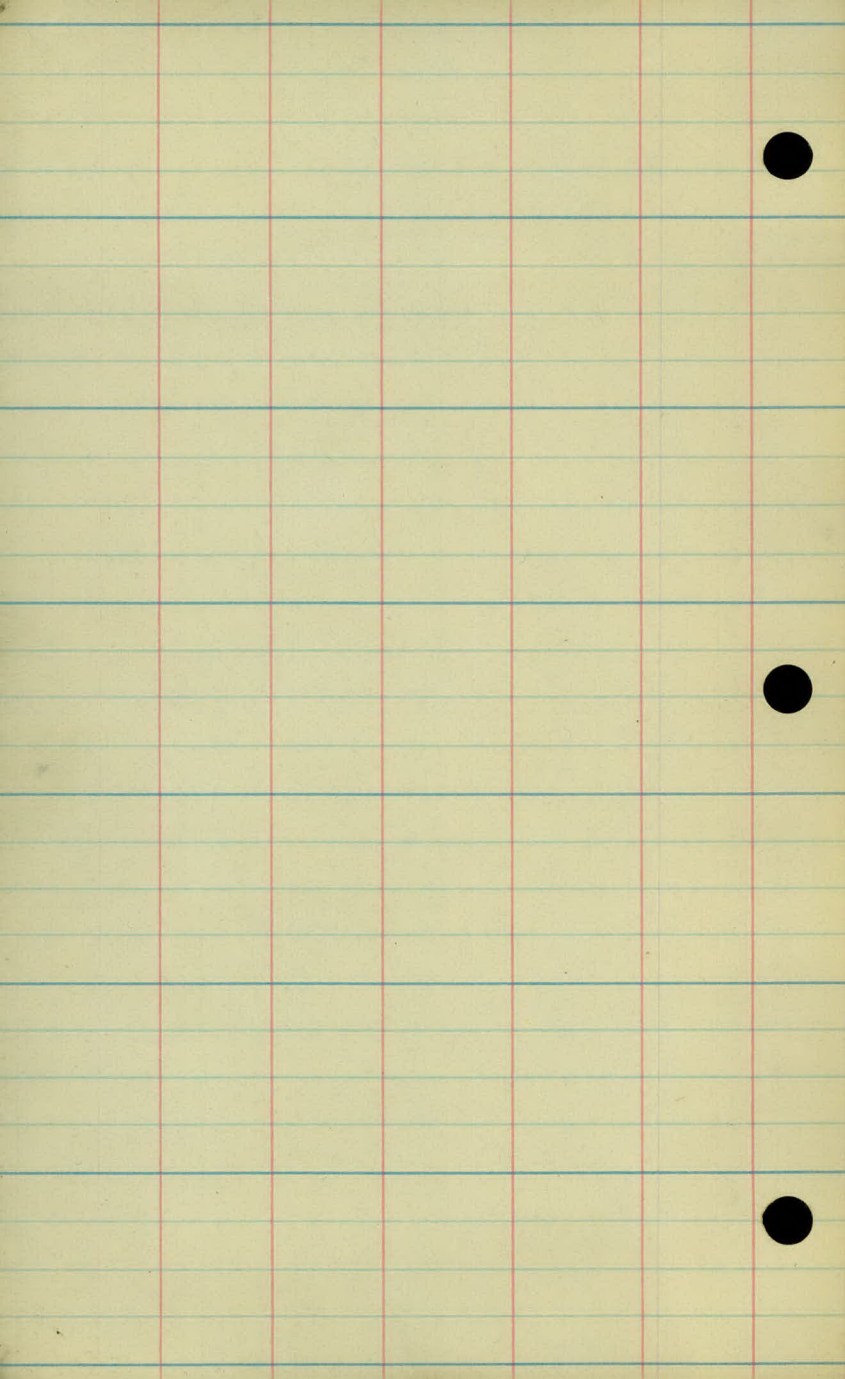
2" x 2" Hub

4-1-1952



$58^{\circ}27'$
 $123^{\circ}20'$
 $181^{\circ}47'$

2" x 2" Hub



Topography.

4

3

2

1

oto = Lake St.

Lake St. Ailed North

" " Gravel South

Larp

"

"

189-T.P. 76'

165-T.P. 26'

1467.5-R.O.W. F.E.
149-T.P. 25'

166-R.R. Fence
161-T.P. 25'

145-T.P. 75'
134-In Rd. Sign 76'

Lake St.

Cult.

Cult.

Laipenbur.

Scatt. Oak 15.

Scattered oak

F-09' 5
192-16" Oak 9'
182-6" Tw. Oak 20'
148-12" Oak 8'

100-Beg. F. 00'
198-20" Oak 24
183-30" Oak 36'

166-10" Oak 15'
141-16" Oak 11'

116-24" Oak 4'
197-20" Oak 22'
162-30" Oak 6'

Dited Top 110
11-0+13

Frame 8 d.

11

10

9

8

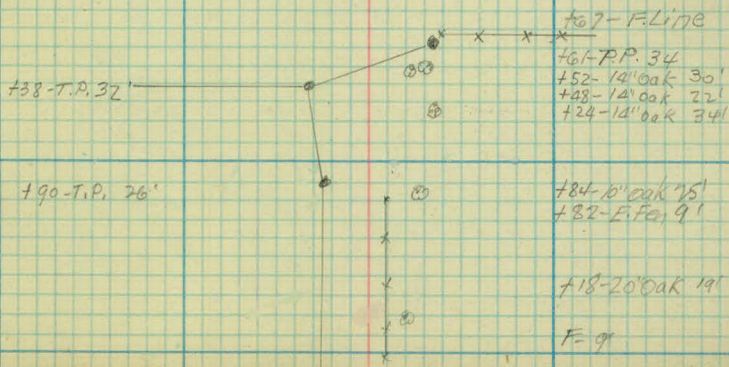
7

6

5

Cultivated

Cultivated



18

17

16

15

14

13

12

E9'

F-05'

Hay Meadow

cult.

Right Angle

+70-F. Cor. 0'

+65-F. Cor. 0

Pasture

+21-F. Cor. 0

cult.

+24.86 - Stone Mon.

+29-10" Oak - 6'

25

24

23

22

21

20

19

+40 12' Oak 35'
+31 15' Oak 20'
+20 10' Oak 15'

3
2
1

F-2'

+50-F-1'
Place Ditch
Small F-2'
Hole

Meadow

F-2'

Meadow

F-7'
Pot Hole
Small
Tussock
+48-10' Oak-20'

F-7
Timber
40

Scatt.
Oaks.

F-8'
Timber
20

+50
+45
+40

F-7

32

31

+86.81 - E White Bear Road.

30

29

28

27

26

F-31

9

+76-12" E/m. 6'

+75-12" oak 4'

+70-F. 4'

+33-8" oak 18'
+31-F. cor. 3'

+78-8" oak 35'
+73-10" oak 20'
+60-8" oak 20'
+55-6" oak 10'
+49-F. cor. 3'

F-1'

+35-8" oak 20'
+28-12" oak 30'
+12-10" oak 10'
+07-10" oak 20'
F-1'

Scattered

+42-12" oak 12'
+42-14" oak 20'

F-1'

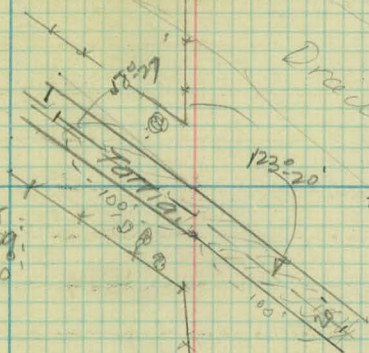
Draw

F-1'

+49.5-F. Cor. 2'

Stone Mon. Tipped

F-1'



Draw

+99-Edge Tor Via
+75-Edge Tor Via
+52-2" oak 4'
+50-3-4" oak 15'

+90-F. Cor. 3'

+51-12" oak 20'

+22-12" oak 15'

F-2'
+79-12" oak 8'
+77-F. Cor. 2'

39

38

37

36

35

34

33

F-10-End-

+105-0" Oak-10'

+62-6" Oak-6'

+50-10" Oak-4'

+33-8" Oak-5'

+16-8" Oak-6'

F-6'

F-5'

F-5'

Wasteland

Wasteland

+48-0" Oak-7'

F-1' wit 33'

Oaks

+62-8" Oak-5'

+57-30" F.M.-24'

+50-24" Oak-32'

+25-10" Oak-7'

F-3'

+10-2" W.Ditch

5

Brush Ditch

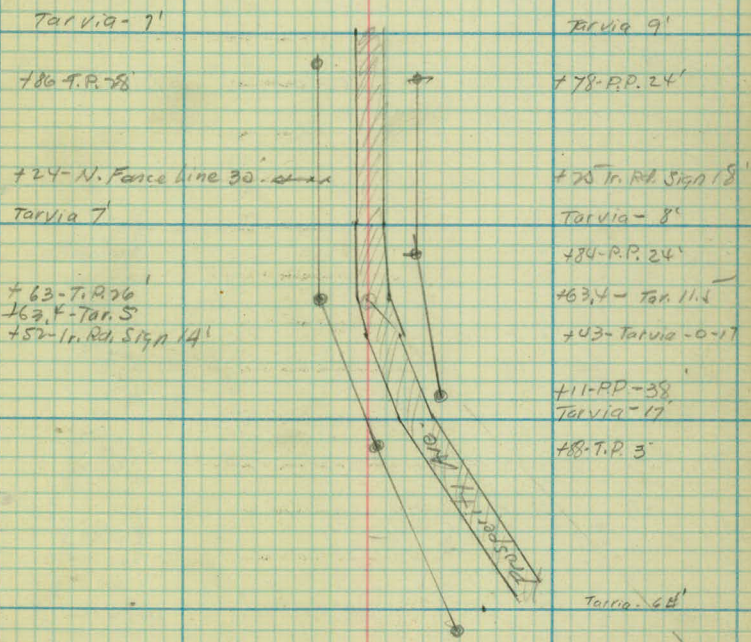
Scatter

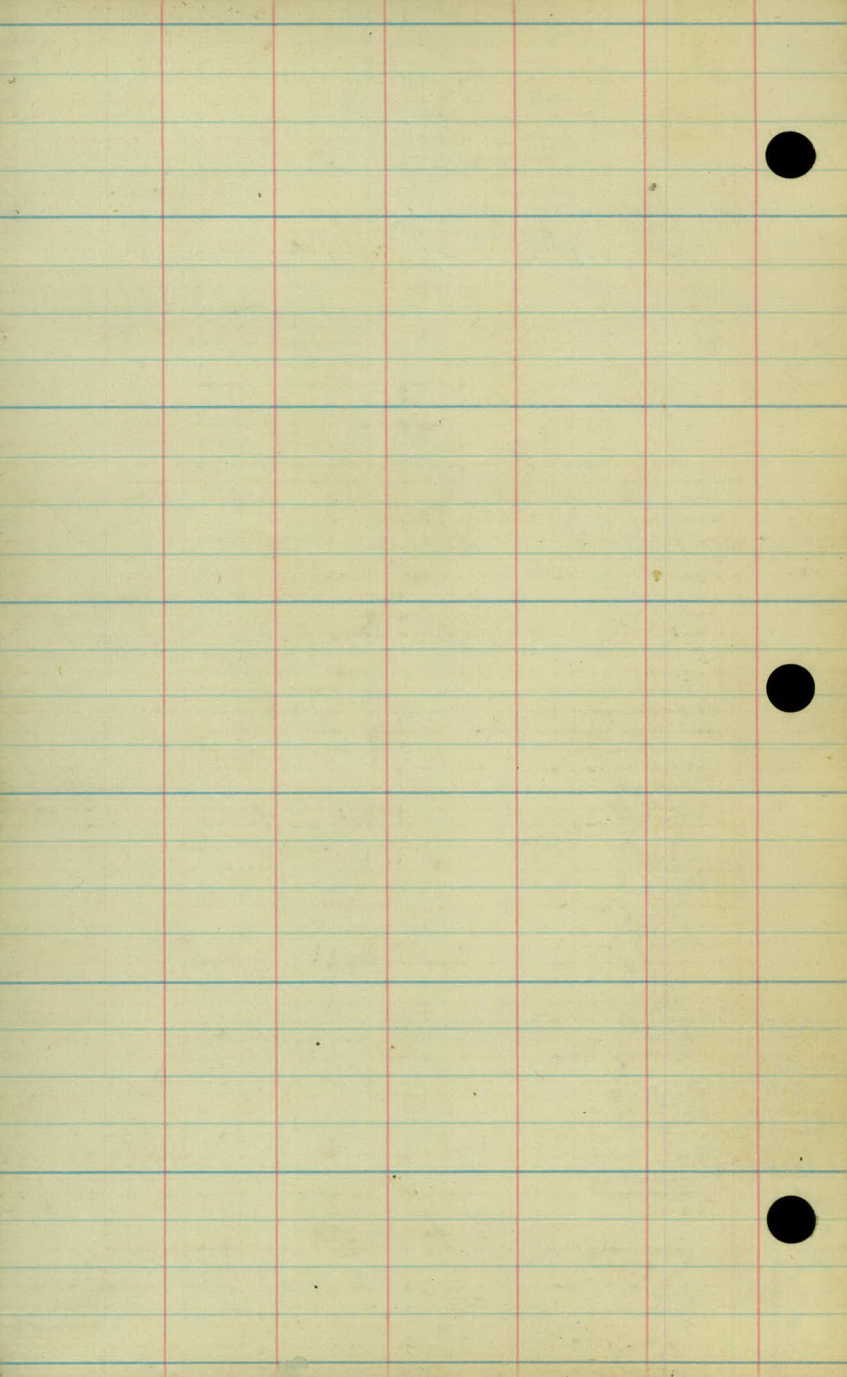
+634 Inter. of Prosperity.

41

40

39





Cross-Sections

Sta.	+	π	-	Elev.
B.M.				G006 898.90
✓	1.62	890.50		888.88

✓			4.56	
---	--	--	------	--

= 0+20			4.8	
--------	--	--	-----	--

- 0+50			6.3	
--------	--	--	-----	--

- 1+00			9.1	
--------	--	--	-----	--

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

0+18				
------	--	--	--	--

0+23				
------	--	--	--	--

0+31				
------	--	--	--	--

1+0				
-----	--	--	--	--

150				
-----	--	--	--	--

4.93	893.88	1.55	888.95
------	--------	------	--------

+79				
-----	--	--	--	--

+90				
-----	--	--	--	--

2+00.3	Top West Rail			
--------	---------------	--	--	--

2+19.5	Top East Rail			
--------	---------------	--	--	--

H.

I

Rt.

13

(Spike 15" Maple N.W. cor. Lake & Larp. (Gone)

R.R. Spike 30" Oak G.Rt. 0462

Top Stone Mon.

W.H.C. } Aug 27.35
 H.D.W. }
 K.A. } Very Windy
 L.B.H. } Clear

$$\begin{array}{r} \text{Lake} = \frac{5.0}{100} \quad \frac{4.9}{50} \quad \frac{45.94}{45} \quad \frac{86.1}{55} \quad \frac{48}{100} = \frac{1}{2} \text{ Lake} \end{array}$$

$$\begin{array}{r} \text{Mab. w. Reg.} \quad \frac{6.2}{100} \quad \frac{6.2}{50} \quad \frac{6.2}{33} \quad \frac{45.9}{46} \quad \frac{86.1}{44} \quad \frac{86.1}{33} \end{array}$$

$$\begin{array}{r} 85.1 \quad 84.3 \quad 84.2 \quad 84.2 \quad 89.3 \quad 89.7 \end{array}$$

$$\begin{array}{r} 84.0 \quad 84.6 \quad 87.6 \end{array}$$

T.P. Top Bolt. R.R. pole Lt. 1770

$$\begin{array}{r} \text{Place w. "cable"} \quad \frac{8.7}{33} \quad \frac{8.1}{17} \quad \frac{7.7}{22} \quad \frac{6.6}{33} \end{array}$$

$$\begin{array}{r} \text{Drains North.} \quad 91.1 \quad 90.8 \quad 90.9 \end{array}$$

$$\begin{array}{r} 92.5 \quad 92.4 \quad 92.3 \end{array}$$

$$\begin{array}{r} 92.6 \quad 92.5 \quad 92.5 \end{array}$$

Station	+	π	-	Elev.
---------	---	-------	---	-------

		893.88		
--	--	--------	--	--

2+76				
------	--	--	--	--

2+35				
------	--	--	--	--

2+67				
------	--	--	--	--

3+0				
-----	--	--	--	--

+50				
-----	--	--	--	--

4+0				
-----	--	--	--	--

+60				
-----	--	--	--	--

T.P.	7.28	897.25	3.91	889.97
------	------	--------	------	--------

5+0				
-----	--	--	--	--

5+72				
------	--	--	--	--

6+0				
-----	--	--	--	--

+30				
-----	--	--	--	--

+70				
-----	--	--	--	--

41

2

Rt.

14

91.4

$$\begin{array}{r} 2.5 \\ 33 \end{array}$$

89.5

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

90.2

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

89.1

$$\begin{array}{r} 4.8 \\ 33 \end{array}$$

86.5

$$\begin{array}{r} 2.4 \\ 33 \end{array}$$

86.4

$$\begin{array}{r} 7.5 \\ 33 \end{array}$$

89.0

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

89.5

$$\begin{array}{r} 7.8 \\ 33 \end{array}$$

90.6

$$\begin{array}{r} 6.7 \\ 33 \end{array}$$

91.3

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

91.4

$$\begin{array}{r} 5.7 \\ 33 \end{array}$$

91.8

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

91.3

$$\begin{array}{r} 2.6 \\ 33 \end{array}$$

88.2

$$\begin{array}{r} 5.7 \\ 33 \end{array}$$

89.0

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

88.0

$$\begin{array}{r} 5.9 \\ 33 \end{array}$$

85.7

$$\begin{array}{r} 8.2 \\ 33 \end{array}$$

86.1

$$\begin{array}{r} 7.8 \\ 33 \end{array}$$

90.3

$$\begin{array}{r} 3.6 \\ 33 \end{array}$$

89.4

$$\begin{array}{r} 7.9 \\ 33 \end{array}$$

90.1

$$\begin{array}{r} 7.2 \\ 33 \end{array}$$

90.8

$$\begin{array}{r} 6.5 \\ 33 \end{array}$$

91.4

$$\begin{array}{r} 5.9 \\ 33 \end{array}$$

92.4

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

Rt.

91.2

$$\begin{array}{r} 2.7 \\ 33 \end{array}$$

86.7

$$\begin{array}{r} 7.2 \\ 33 \end{array}$$

87.1

$$\begin{array}{r} 6.8 \\ 33 \end{array}$$

86.1

$$\begin{array}{r} 7.8 \\ 33 \end{array}$$

84.6

$$\begin{array}{r} 7.3 \\ 33 \end{array}$$

84.7

$$\begin{array}{r} 9.2 \\ 33 \end{array}$$

89.4

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

89.5

$$\begin{array}{r} 7.8 \\ 33 \end{array}$$

92.1

$$\begin{array}{r} 5.2 \\ 33 \end{array}$$

92.0

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

91.2

$$\begin{array}{r} 6.1 \\ 33 \end{array}$$

92.0

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

No Culv. Reg.

Pl. 241 Culv.
Drains So.Drains
South.

Station + A - Elev.

897.25

740

840

T.P. 10.84 905.35 2.74 894.51

+50

940

+50

1040

+50

1140

T.P. 7.35 912.06 964 904.71

+50

1240

+50

1340

B.M. 6.75 912.06 6.75 905.31

LT.

S

RT.

15

91.9

$$\begin{array}{r} 54 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ 14 \\ \hline \end{array}$$

92.7

46

92.4

$$\begin{array}{r} 49 \\ 33 \\ \hline \end{array}$$

91.5

$$\begin{array}{r} 58 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ 13 \\ \hline \end{array}$$

91.9

54

92.9

$$\begin{array}{r} 44 \\ 33 \\ \hline \end{array}$$

Place 24's

top Ha to 910

93.0

$$\begin{array}{r} 124 \\ 33 \\ \hline \end{array}$$

95.4

$$\begin{array}{r} 100 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 104 \\ 28 \\ \hline \end{array}$$

92.4

13.0

93.6

92.6

$$\begin{array}{r} 128 \\ 33 \\ \hline \end{array}$$

93.2

Culv.
or Ditch
on So. Side

96.2

$$\begin{array}{r} 92 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ 9 \\ \hline \end{array}$$

95.2

102

126

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

94.3

$$\begin{array}{r} 111 \\ 33 \\ \hline \end{array}$$

97.3

$$\begin{array}{r} 81 \\ 33 \\ \hline \end{array}$$

96.0

94

97

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

95.8

$$\begin{array}{r} 96 \\ 33 \\ \hline \end{array}$$

99.0

$$\begin{array}{r} 64 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ 20 \\ \hline \end{array}$$

96.8

86

95

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

95.9

$$\begin{array}{r} 95 \\ 33 \\ \hline \end{array}$$

900.7

$$\begin{array}{r} 47 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ 25 \\ \hline \end{array}$$

98.8

66

74

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

97.8

$$\begin{array}{r} 76 \\ 33 \\ \hline \end{array}$$

04.4

$$\begin{array}{r} 77 \\ 33 \\ \hline \end{array}$$

$$\begin{array}{r} 82 \\ 20 \\ \hline \end{array}$$

03.0

91

98

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

01.6

$$\begin{array}{r} 105 \\ 33 \\ \hline \end{array}$$

05.9

$$\begin{array}{r} 62 \\ 33 \\ \hline \end{array}$$

06.2

59

05.5

$$\begin{array}{r} 66 \\ 33 \\ \hline \end{array}$$

04.7

$$\begin{array}{r} 74 \\ 33 \\ \hline \end{array}$$

06.2

59

06.9

$$\begin{array}{r} 52 \\ 33 \\ \hline \end{array}$$

03.7

$$\begin{array}{r} 84 \\ 33 \\ \hline \end{array}$$

04.7

74

07.1

$$\begin{array}{r} 50 \\ 33 \\ \hline \end{array}$$

Top Man.

Station	+	π	-	Elev.
---------	---	-------	---	-------

✓ 912.06

1345

#53

+75

1440

+40

1540

T.P.

3.96 904.66 11.36

900.70

+50

1640

+50

1740

+50

18

21

2

RT.

16

05.4

$$\frac{67}{33}$$

$$\frac{66}{20}$$

05.3

$$\frac{68}{33}$$

06.0

$$\frac{61}{33}$$

05.7

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

$$\frac{56}{6}$$

05.4

$$\frac{65}{33}$$

Hold to grade Save moving May

$$\frac{55.1}{33}$$

06.3

$$\frac{58}{33}$$

$$\frac{54}{11} \frac{76}{6}$$

03.7

$$\frac{84}{17}$$

$$\frac{85}{17}$$

04.3

$$\frac{78}{33}$$

06.3

$$\frac{58}{33}$$

$$\frac{50}{6}$$

06.2

$$\frac{59}{22}$$

$$\frac{70}{22}$$

04.9

$$\frac{72}{33}$$

06.7

$$\frac{2.0}{75}$$

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

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

04.1

$$\frac{80}{24}$$

$$\frac{87}{24}$$

03.1

$$\frac{90}{33}$$

03.9

$$\frac{85}{80}$$

$$\frac{812}{33}$$

$$\frac{105}{17}$$

$$\frac{112}{11}$$

99.5

$$\frac{126}{33}$$

98.1

$$\frac{140}{33}$$

Top Stake 15 02.5

$$\frac{85.5}{75}$$

$$\frac{22}{33}$$

$$\frac{47}{12}$$

$$\frac{50}{2}$$

99.5

$$\frac{52}{3}$$

$$\frac{69}{3}$$

96.7

$$\frac{80}{33}$$

$$\frac{85.5}{75}$$

$$\frac{35}{33}$$

$$\frac{58}{16}$$

$$\frac{62}{3}$$

97.1

$$\frac{76}{17}$$

$$\frac{83}{17}$$

95.7

$$\frac{90}{33}$$

10.0 = W.S. 10.0

900.0

$$\frac{515}{75}$$

$$\frac{47}{33}$$

$$\frac{67}{15}$$

$$\frac{71}{6}$$

96.9

$$\frac{78}{4}$$

$$\frac{85}{4}$$

$$\frac{97}{25}$$

94.7

$$\frac{100}{33}$$

10.0 = W.S. 10.0

98.1

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

$$\frac{60}{27}$$

$$\frac{80}{15}$$

$$\frac{80}{8}$$

$$\frac{90}{3}$$

96.1

$$\frac{86}{16}$$

$$\frac{90}{16}$$

95.7

$$\frac{90}{33}$$

96.7

$$\frac{75}{55}$$

$$\frac{92}{49}$$

$$\frac{80}{33}$$

$$\frac{84}{27}$$

97.4

$$\frac{73}{9}$$

$$\frac{63}{9}$$

98.3

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

98.4

$$\frac{63}{33}$$

99.5

$$\frac{52}{11}$$

$$\frac{42}{11}$$

00.2

$$\frac{45}{33}$$

Sta. + T - Elev.

904.66

18+60

19+0

T.P. 11.22 914.74 1.14 903.52

+65

19+85

20+0

+50

21+0

+40

* Front here

+80

22+0

+75

T.P. 7.73 921.68 0.79 913.95

+55

95.4

4.

E

H.

17

$$\begin{array}{r} 11.1 \\ 100 \end{array}$$

$$\begin{array}{r} 7.3 \\ 50 \end{array}$$

$$\begin{array}{r} 8.4 \\ 28 \end{array}$$

$$\begin{array}{r} 7.6 \\ 9 \end{array}$$

$$\begin{array}{r} 6.7 \\ 10 \end{array}$$

$$\begin{array}{r} 5.5 \\ 14 \end{array}$$

$$\begin{array}{r} 5.2 \\ 33 \end{array}$$

98.7

98.0

99.5

99.1

89.0

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

$$\begin{array}{r} 5.8 \\ 17 \end{array}$$

$$\begin{array}{r} 5.6 \\ 8 \end{array}$$

$$\begin{array}{r} 6.2 \\ 8 \end{array}$$

$$\begin{array}{r} 5.7 \\ 33 \end{array}$$

Ditch
Grade
on At.
Back to
marsh

07.7

08.1

07.7

$$\begin{array}{r} 7.0 \\ 33 \end{array}$$

$$\begin{array}{r} 6.6 \\ 13 \end{array}$$

$$\begin{array}{r} 6.4 \\ 13 \end{array}$$

$$\begin{array}{r} 7.0 \\ 33 \end{array}$$

07.3

08.2

08.3

$$\begin{array}{r} 7.4 \\ 33 \end{array}$$

$$\begin{array}{r} 6.5 \\ 12 \end{array}$$

$$\begin{array}{r} 6.4 \\ 12 \end{array}$$

$$\begin{array}{r} 6.4 \\ 33 \end{array}$$

05.4

07.1

07.9

$$\begin{array}{r} 7.2 \\ 33 \end{array}$$

$$\begin{array}{r} 8.2 \\ 17 \end{array}$$

$$\begin{array}{r} 7.6 \\ 14 \end{array}$$

$$\begin{array}{r} 7.5 \\ 14 \end{array}$$

$$\begin{array}{r} 6.8 \\ 33 \end{array}$$

04.1

05.3

07.0

$$\begin{array}{r} 10.6 \\ 33 \end{array}$$

$$\begin{array}{r} 7.9 \\ 15 \end{array}$$

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

$$\begin{array}{r} 8.7 \\ 20 \end{array}$$

$$\begin{array}{r} 7.7 \\ 33 \end{array}$$

05.3

07.6

09.8

$$\begin{array}{r} 9.4 \\ 33 \end{array}$$

$$\begin{array}{r} 8.6 \\ 18 \end{array}$$

$$\begin{array}{r} 7.1 \\ 19 \end{array}$$

$$\begin{array}{r} 6.2 \\ 19 \end{array}$$

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

09.0

09.6

08.1

07.0

$$\begin{array}{r} 5.7 \\ 33 \end{array}$$

$$\begin{array}{r} 5.5 \\ 15 \end{array}$$

$$\begin{array}{r} 5.1 \\ 12 \end{array}$$

$$\begin{array}{r} 5.4 \\ 12 \end{array}$$

$$\begin{array}{r} 6.6 \\ 26 \end{array}$$

$$\begin{array}{r} 7.7 \\ 85 \end{array}$$

07.5

06.9

06.2

$$\begin{array}{r} 7.2 \\ 33 \end{array}$$

$$\begin{array}{r} 7.3 \\ 15 \end{array}$$

$$\begin{array}{r} 7.8 \\ 12 \end{array}$$

$$\begin{array}{r} 8.4 \\ 12 \end{array}$$

$$\begin{array}{r} 8.5 \\ 33 \end{array}$$

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

$$\begin{array}{r} 2.0 \\ 7 \end{array}$$

No outlet.

07.0

(N. outlet)

$$\begin{array}{r} 7.5 \\ 65 \end{array}$$

$$\begin{array}{r} 7.3 \\ 33 \end{array}$$

$$\begin{array}{r} 9.5 \\ 24 \end{array}$$

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

$$\begin{array}{r} 7.7 \\ 11 \end{array}$$

$$\begin{array}{r} 8.4 \\ 11 \end{array}$$

$$\begin{array}{r} 8.1 \\ 24 \end{array}$$

$$\begin{array}{r} 7.3 \\ 37 \end{array}$$

$$\begin{array}{r} 6.0 \\ 46 \end{array}$$

(Fill small Pond Note Lt.)

07.7

Also Right.

11.6

$$\begin{array}{r} 10.3 \\ 150 \end{array}$$

$$\begin{array}{r} 6.3 \\ 100 \end{array}$$

$$\begin{array}{r} 7.4 \\ 80 \end{array}$$

$$\begin{array}{r} 8.2 \\ 50 \end{array}$$

$$\begin{array}{r} 8.4 \\ 35 \end{array}$$

$$\begin{array}{r} 7.6 \\ 73 \end{array}$$

$$\begin{array}{r} 7.0 \\ 9 \end{array}$$

$$\begin{array}{r} 5.0 \\ 9 \end{array}$$

$$\begin{array}{r} 4.3 \\ 20 \end{array}$$

$$\begin{array}{r} 3.1 \\ 38 \end{array}$$

11.1

13.5

16.9

$$\begin{array}{r} 10.6 \\ 33 \end{array}$$

$$\begin{array}{r} 9.6 \\ 20 \end{array}$$

$$\begin{array}{r} 8.2 \\ 4 \end{array}$$

$$\begin{array}{r} 6.0 \\ 4 \end{array}$$

$$\begin{array}{r} 5.8 \\ 21 \end{array}$$

$$\begin{array}{r} 4.8 \\ 33 \end{array}$$

Sta + π - Elev.

$\times 921.68$

22+75

73

+35

+60-Left

T.P. 4.80 914.27 12.21 909.47

23+60 Right

24

04.2

+30

04.0

+75

09.3

B.M. 3.30 914.27 3.30

910.97

25

05.7

$\times$ +30-Left

T.P. 2.91 904.69 12.49

901.78

25+30-Right

97.5

+60

94.9

4.

2

Rt.

18.

15.3

15.8

18.2

$$\begin{array}{r} 6.4 \\ 33 \end{array}$$

$$\begin{array}{r} 6.2 \\ 18 \end{array}$$

$$\begin{array}{r} 5.9 \\ 5 \end{array}$$

$$\begin{array}{r} 4.5 \\ 5 \end{array}$$

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

18.3

16.4

16.5

$$\begin{array}{r} 3.4 \\ 50 \end{array}$$

$$\begin{array}{r} 4.0 \\ 20 \end{array}$$

$$\begin{array}{r} 5.4 \\ 8 \end{array}$$

$$\begin{array}{r} 5.3 \\ 2 \end{array}$$

$$\begin{array}{r} 4.4 \\ 2 \end{array}$$

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

$$\begin{array}{r} 5.3 \\ 50 \end{array}$$

14.1

11.5

10.6

$$\begin{array}{r} 5.6 \\ 36 \end{array}$$

$$\begin{array}{r} 9.0 \\ 10 \end{array}$$

$$\begin{array}{r} 11.2 \\ 13 \end{array}$$

$$\begin{array}{r} 11.1 \\ 13 \end{array}$$

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

13.1

09.3

$$\begin{array}{r} 14.5 \end{array}$$

$$\begin{array}{r} 8.6 \\ 33 \end{array}$$

$$\begin{array}{r} 12.4 \\ 18 \end{array}$$

07.2

05.3

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

$$\begin{array}{r} 8.5 \\ 15 \end{array}$$

$$\begin{array}{r} 9.0 \\ 33 \end{array}$$

07.3

04.2

900.6

$$\begin{array}{r} 7.0 \\ 33 \end{array}$$

$$\begin{array}{r} 9.3 \\ 15 \end{array}$$

$$\begin{array}{r} 10.1 \\ 13 \end{array}$$

$$\begin{array}{r} 11.8 \\ 13 \end{array}$$

$$\begin{array}{r} 12.4 \\ 26 \end{array}$$

$$\begin{array}{r} 13.5 \\ 37 \end{array}$$

$$\begin{array}{r} 13.7 \\ 50 \end{array}$$

05.1

Drains

02.1

place
ditch
to Drain
GOLF

Pl. 24 Culv.
Dn Rt.

$$\begin{array}{r} 9.2 \\ 36 \end{array}$$

$$\begin{array}{r} 9.6 \\ 19 \end{array}$$

$$\begin{array}{r} 10.3 \end{array}$$

$$\begin{array}{r} 12.2 \\ 33 \end{array}$$

09.5

03.5

01.8

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

$$\begin{array}{r} 4.4 \\ 41 \end{array}$$

$$\begin{array}{r} 2.0 \\ 29 \end{array}$$

$$\begin{array}{r} 2.7 \\ 16 \end{array}$$

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

$$\begin{array}{r} 6.1 \\ 9 \end{array}$$

$$\begin{array}{r} 9.2 \\ 22 \end{array}$$

$$\begin{array}{r} 10.8 \\ 38 \end{array}$$

$$\begin{array}{r} 12.5 \\ 50 \end{array}$$

then
up.

Nail in 12" Oak - 50' Sta. 25 to

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

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

$$\begin{array}{r} 6.7 \\ 15 \end{array}$$

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

$$\begin{array}{r} 11.4 \\ 15 \end{array}$$

$$\begin{array}{r} 12.2 \\ 33 \end{array}$$

$$\begin{array}{r} 13.0 \\ 50 \end{array}$$

Low for

02.7

01.0

$$\begin{array}{r} 11.6 \\ 46 \end{array}$$

$$\begin{array}{r} 13.3 \\ 29 \end{array}$$

-16.8

98.0

98.7

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

$$\begin{array}{r} 7.5 \\ 19 \end{array}$$

$$\begin{array}{r} 6.7 \\ 33 \end{array}$$

$$\begin{array}{r} 6.0 \\ 50 \end{array}$$

96.0

95.4

95.1

$$\begin{array}{r} 11.0 \\ 100 \end{array}$$

$$\begin{array}{r} 8.7 \\ 50 \end{array}$$

$$\begin{array}{r} 9.7 \\ 21 \end{array}$$

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

$$\begin{array}{r} 9.3 \\ 76 \end{array}$$

$$\begin{array}{r} 9.3 \\ 33 \end{array}$$

$$\begin{array}{r} 9.6 \\ 50 \end{array}$$

Sta.	+	π	-	Elev.
76		904.69		896.9
+50				95.2
27				93.2
	6.10	903.65	2.14	997.55
+50	Place	36" Calv.		91.6
28				93.1
+33				897.1
T.P.	11.81	915.07	0.39	903.26
+70				906.9
T.P.	13.24	926.90	1.41	913.66
29+00				918.4
T.D.	13.62	939.21	1.31	925.59
✓	11.81	950.77	0.25	938.96
29+61				944.2
T.B.M.	3.46	950.77	3.46	947.31
+87 - Summit				47.5
30+0				46.1
+15				43.0

4.

8

RT

19

92.7	97.1	96.9	93.7	91.4	91.4
$\frac{12.0}{100}$	$\frac{7.4}{56}$	$\frac{2.6}{25}$	$\frac{7.8}{24}$	$\frac{8.8}{45}$	$\frac{11.0}{45}$
90.7		95.2			
$\frac{14.0}{100}$	$\frac{12.4}{78}$	$\frac{10.0}{48}$	$\frac{8.8}{21}$	$\frac{9.5}{20}$	$\frac{10.8}{45}$
				$\frac{12.0}{45}$	$\frac{12.7}{75}$
					$\frac{12.3}{100}$

more to W

89.2	93.2	95.7
$\frac{15.5}{100}$	$\frac{14.0}{75}$	$\frac{12.8}{50}$
	$\frac{11.8}{25}$	$\frac{11.5}{0}$
		$\frac{18.7}{18}$
		$\frac{17.6}{46}$
		$\frac{10.6}{80}$
		$\frac{9.0}{100}$

89.6	91.6	90.4
$\frac{16.0}{125}$	$\frac{14.1}{100}$	$\frac{13.4}{85}$
	$\frac{13.0}{50}$	$\frac{12.6}{23}$
		$\frac{12.1}{12.1}$
		$\frac{11.6}{20}$
		$\frac{10.4}{45}$
		$\frac{4.5}{87}$
		$\frac{3.3}{100}$

(X)

92.7	93.1	05.2
$\frac{11.0}{100}$	$\frac{10.5}{75}$	$\frac{11.3}{53}$
	$\frac{11.6}{30}$	$\frac{10.6}{25}$
		$\frac{6.4}{50}$
		$\frac{2.0}{75}$
		$\frac{+1.5}{100}$

96.7	97.1	00.7
$\frac{7.0}{100}$	$\frac{7.0}{60}$	$\frac{7.5}{31}$
	$\frac{6.6}{16}$	$\frac{5.8}{16}$
		$\frac{3.0}{50}$
		$\frac{00}{65}$

08.7	08.7	06.9	09.6	10.6
$\frac{6.4}{100}$	$\frac{6.4}{50}$	$\frac{7.6}{35}$	$\frac{8.2}{82}$	$\frac{6.5}{33}$
			$\frac{5.5}{50}$	$\frac{4.5}{100}$

16.9	18.4	18.4	19.9
$\frac{8.0}{100}$	$\frac{8.5}{33}$	$\frac{8.5}{33}$	$\frac{8.5}{33}$
			$\frac{2.0}{100}$

S.S.	36.5	26	6.5	44.2	6.5	6.5
	$\frac{36.5}{20}$	$\frac{26}{50}$	$\frac{6.5}{28}$	$\frac{6.5}{40}$	$\frac{6.5}{25}$	

Top 2x2" Hub 79+13.67

S.S.	11.2	6.3	4.7	47.5	44	6.6	10.6
	$\frac{11.2}{25}$	$\frac{6.3}{69}$	$\frac{4.7}{45}$	$\frac{3.3}{33}$	$\frac{23}{23}$	$\frac{50}{50}$	$\frac{10.6}{100}$
							Top Bank
							drops to
							white
							Beet
							2x2
							112 = Ditch

45.5	46.1
$\frac{10.0}{20}$	$\frac{5.3}{50}$
	$\frac{4.4}{32}$

43.0

43.0

31.5 slope	$\frac{10.2}{75}$	$\frac{7.8}{50}$	$\frac{7.0}{28}$	$\frac{7.8}{78}$	$\frac{10.0}{51}$	$\frac{11.6}{56}$	to Ditch
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Sta.	+	-	Elev.
	950.77		
T.P.	0.80	938.44	13.13
30+50			937.64
			934.4

30+67-Left			
T.P.	4.22	930.60	12.06
30+67-Right			926.38
			921.5

187-2 Tarvig			921.64
B.M.	3.14	924.78	8.96
30+86.81			921.64
B.M.		3.44	921.34

31+0

31+08

31+40

T.P.	1.86	913.45	13.19
31+40			911.59

31+70

32+0

+50

$$\frac{4.5}{80}$$

$$\frac{3.1}{50}$$

$$\frac{3.0}{30}$$

$$\frac{4.0}{40}$$

$$\frac{16.5}{29}$$

$$\frac{15.9}{39}$$

- E. Tarvia

$$28.4$$

$$30.4$$

$$31.2$$

$$30.7$$

$$\frac{10.0}{80}$$

$$\frac{8.0}{58}$$

$$\frac{7.2}{30}$$

$$\frac{7.7}{17}$$

$$17.0$$

$$21.5$$

$$21$$

$$\frac{8.2}{29}$$

- E. Tarvia

$$\frac{8.7}{62}$$

- Shld. - 3.1 Stop

$$21.64$$

$$\frac{4.0}{71}$$

$$\frac{5.0}{75}$$

$$\frac{10.4}{35}$$

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

$$\frac{8.26}{20}$$

$$\frac{9.0}{20}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

$$\frac{9.7}{37}$$

Top Boat Spike E. White Bear Rd.

E. White Bear Rd.

$$\frac{5.9}{100}$$

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

$$\frac{3.14}{20.9}$$

$$\frac{2.00}{50}$$

$$\frac{1.09}{100}$$

- (921.27) Spike in 1/2 oak 760 m. Larp. N. Side W. Bear Rd.

$$\frac{1.6}{80}$$

$$\frac{5.3}{48}$$

$$\frac{4.5}{41}$$

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

$$\frac{3.9}{15}$$

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

$$\frac{17.4}{60}$$

$$\frac{6.7}{80}$$

$$\frac{5.1}{51}$$

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

$$\frac{4.2}{12}$$

$$\frac{5.2}{12}$$

$$\frac{18.0}{50}$$

$$18.7$$

$$18.4$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$\frac{6.1}{73}$$

$$\frac{6.4}{66}$$

$$\frac{13.2}{30}$$

$$18.7$$

$$18.4$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

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$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$19.6$$

$$5.2$$

$$18.0$$

$$5.0$$

$$18.7$$

$$18.4$$

$$11.6$$

$$11.6$$

$$11.6$$

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$$11.6$$

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$$11.6$$

$$11.6$$

$$11.6$$

$$11.6$$

$$\frac{6.1}{73}$$

$$\frac{6.4}{66}$$

$$\frac{13.2}{30}$$

$$18.7$$

$$18.4$$

$$11.6$$

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$$11.6$$

$$11.6$$

$$06.1$$

$$7.4$$

$$00.8$$

$$\frac{12.5}{36}$$

$$\frac{12.7}{50}$$

$$\frac{12.3}{98}$$

$$06.0$$

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

$$\frac{10.0}{26}$$

$$\frac{12.1}{21}$$

$$\frac{13.7}{32}$$

$$\frac{13.7}{50}$$

$$01.4$$

$$01.2$$

$$01.2$$

$$01.2$$

$$01.2$$

$$01.2$$

$$01.2$$

$$01.2$$

$$01.5$$

$$\frac{12.0}{50}$$

$$\frac{12.4}{31}$$

$$\frac{12.3}{23}$$

$$\frac{13.4}{20}$$

$$\frac{13.4}{50}$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$99.3$$

$$\frac{14.2}{50}$$

$$\frac{13.4}{25}$$

$$\frac{12.2}{12}$$

$$\frac{12.3}{32}$$

$$\frac{12.3}{50}$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$\frac{14.2}{50}$$

$$\frac{13.4}{25}$$

$$\frac{12.2}{12}$$

$$\frac{12.3}{32}$$

$$\frac{12.3}{50}$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

$$01.3$$

(P. 36 Culw)

(Drains North)

Sta. + π - Elev.

913.45

33

T.P. 11.04 916.29 8.20 905.25

+50

* - To here.

34

+50

35

+30

T.P. 12.17 916.56 1.90 914.39

36

+50

37

+50

38

+50

T.P. 11.66 937.75 0.47 926.09

H. 2 H. 21

98.3 02.5 02.5 02.5

$\begin{array}{r} 15.2 \\ \hline 50 \end{array}$ $\begin{array}{r} 13.0 \\ \hline 25 \end{array}$ $\begin{array}{r} 11.0 \\ \hline 15 \end{array}$ $\begin{array}{r} 11.0 \\ \hline 23 \end{array}$ $\begin{array}{r} 11.0 \\ \hline 50 \end{array}$

99.7 01.8 03.1 04.6

$\begin{array}{r} 16.6 \\ \hline 50 \end{array}$ $\begin{array}{r} 14.5 \\ \hline 33 \end{array}$ $\begin{array}{r} 13.2 \\ \hline 11 \end{array}$ $\begin{array}{r} 12.1 \\ \hline 11 \end{array}$ $\begin{array}{r} 14.9 \\ \hline 13 \end{array}$ $\begin{array}{r} 14.9 \\ \hline 15 \end{array}$ $\begin{array}{r} 13.1 \\ \hline 17 \end{array}$ $\begin{array}{r} 12.7 \\ \hline 30 \end{array}$ $\begin{array}{r} 11.7 \\ \hline 50 \end{array}$

03.0 04.2 08.1 06.2

$\begin{array}{r} 13.3 \\ \hline 50 \end{array}$ $\begin{array}{r} 13.0 \\ \hline 37 \end{array}$ $\begin{array}{r} 12.1 \\ \hline 21 \end{array}$ $\begin{array}{r} 12.2 \\ \hline 29 \end{array}$ $\begin{array}{r} 13.8 \\ \hline 32 \end{array}$ $\begin{array}{r} 13.8 \\ \hline 34 \end{array}$ $\begin{array}{r} 12.3 \\ \hline 40 \end{array}$

07.3 08.1 06.2

$\begin{array}{r} 9.0 \\ \hline 50 \end{array}$ $\begin{array}{r} 8.9 \\ \hline 25 \end{array}$ $\begin{array}{r} 8.2 \\ \hline 20 \end{array}$ $\begin{array}{r} 8.1 \\ \hline 20 \end{array}$ $\begin{array}{r} 10.1 \\ \hline 50 \end{array}$ $\begin{array}{r} 13.2 \\ \hline 70 \end{array} = \text{E Ditch.}$

12.1 12.1 11.4

$\begin{array}{r} 4.2 \\ \hline 33 \end{array}$ $\begin{array}{r} 4.2 \\ \hline 22 \end{array}$ $\begin{array}{r} 4.5 \\ \hline 22 \end{array}$ $\begin{array}{r} 4.9 \\ \hline 40 \end{array}$

14.0 13.9 12.3

$\begin{array}{r} 2.3 \\ \hline 33 \end{array}$ $\begin{array}{r} 2.4 \\ \hline 15 \end{array}$ $\begin{array}{r} 3.2 \\ \hline 15 \end{array}$ $\begin{array}{r} 4.0 \\ \hline 33 \end{array}$

Top Hub

15.9 15.0 13.2

$\begin{array}{r} 10.7 \\ \hline 33 \end{array}$ $\begin{array}{r} 14.6 \\ \hline 17 \end{array}$ $\begin{array}{r} 12.2 \\ \hline 17 \end{array}$ $\begin{array}{r} 13.4 \\ \hline 33 \end{array}$

17.7 17.1 13.5

$\begin{array}{r} 8.7 \\ \hline 33 \end{array}$ $\begin{array}{r} 9.5 \\ \hline 33 \end{array}$ $\begin{array}{r} 13.1 \\ \hline 33 \end{array}$

20.9 18.9 18.7 17.4

$\begin{array}{r} 5.7 \\ \hline 33 \end{array}$ $\begin{array}{r} 7.7 \\ \hline 22 \end{array}$ $\begin{array}{r} 8.9 \\ \hline 22 \end{array}$ $\begin{array}{r} 7.9 \\ \hline 33 \end{array}$ $\begin{array}{r} 9.2 \\ \hline 50 \end{array}$

23.6 22.4 11.2

$\begin{array}{r} 3.0 \\ \hline 33 \end{array}$ $\begin{array}{r} 4.2 \\ \hline 15 \end{array}$ $\begin{array}{r} 4.9 \\ \hline 15 \end{array}$ $\begin{array}{r} 7.0 \\ \hline 28 \end{array}$ $\begin{array}{r} 15.4 \\ \hline 43 \end{array}$

25.8 23.1 17.4 14.9

$\begin{array}{r} 0.8 \\ \hline 33 \end{array}$ $\begin{array}{r} 2.7 \\ \hline 15 \end{array}$ $\begin{array}{r} 3.4 \\ \hline 19 \end{array}$ $\begin{array}{r} 6.2 \\ \hline 19 \end{array}$ $\begin{array}{r} 9.2 \\ \hline 33 \end{array}$ $\begin{array}{r} 11.7 \\ \hline 50 \end{array}$ $\begin{array}{r} 14.0 \\ \hline 65 \end{array}$

Sta.	+	π	-	Elev.
------	---	-------	---	-------

		937.75		
--	--	--------	--	--

38+50				
-------	--	--	--	--

39+0				
------	--	--	--	--

+40				
-----	--	--	--	--

B.M.	12.64	948.10	2.29	935.46
------	-------	--------	------	--------

+75				
-----	--	--	--	--

40+0				
------	--	--	--	--

+50				
-----	--	--	--	--

41+0				
------	--	--	--	--

+22				
-----	--	--	--	--

+63				
-----	--	--	--	--

42	Proposed end Project.			
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43				
----	--	--	--	--

		4.28		
--	--	------	--	--

			943.82	
--	--	--	--------	--

4

L

Rt.

22

32.8

28.5

17.2

$$\begin{array}{r} 5.0 \\ 50 \end{array}$$

$$\begin{array}{r} 7.3 \\ 25 \end{array}$$

$$\begin{array}{r} 9.3 \\ 15 \end{array}$$

$$\begin{array}{r} 10.8 \\ 15 \end{array}$$

$$\begin{array}{r} 13.6 \\ 26 \end{array}$$

$$\begin{array}{r} 20.6 \\ 26 \end{array}$$

31.7 35.0

30.9

16.8

$$\begin{array}{r} 1.1 \\ 50 \end{array}$$

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

$$\begin{array}{r} 4.8 \\ 16 \end{array}$$

$$\begin{array}{r} 6.9 \\ 3 \end{array}$$

$$\begin{array}{r} 7.8 \\ 3 \end{array}$$

$$\begin{array}{r} 19.0 \\ 20 \end{array}$$

$$\begin{array}{r} 21.0 \\ 50 \end{array}$$

$$\begin{array}{r} 18.0 \\ 15 \end{array}$$

$$\begin{array}{r} 9.0 \\ 90 \end{array}$$

$$\begin{array}{r} 8.7 \\ 16 \end{array}$$

39.8

33.2

19.8

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

$$\begin{array}{r} 0.0 \\ 24 \end{array}$$

$$\begin{array}{r} 2.2 \\ 18 \end{array}$$

$$\begin{array}{r} 4.6 \\ 10 \end{array}$$

$$\begin{array}{r} 6.0 \\ 23 \end{array}$$

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

$$\begin{array}{r} 18.0 \\ 58 \end{array}$$

$$\begin{array}{r} 16.0 \\ 78 \end{array}$$

$$\begin{array}{r} 7.2 \\ 93 \end{array}$$

$$\begin{array}{r} 7.3 \\ 93 \end{array}$$

$$\begin{array}{r} 7.3 \\ 93 \end{array}$$

43.3

40.7

35.5

32.1

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

$$\begin{array}{r} 7.4 \\ 33 \end{array}$$

$$\begin{array}{r} 10.1 \\ 14 \end{array}$$

$$\begin{array}{r} 12.6 \\ 15 \end{array}$$

$$\begin{array}{r} 14.7 \\ 15 \end{array}$$

$$\begin{array}{r} 15.2 \\ 37 \end{array}$$

$$\begin{array}{r} 17.4 \\ 47 \end{array}$$

$$\begin{array}{r} 22.2 \\ 57 \end{array}$$

$$\begin{array}{r} 16.3 \\ 64 \end{array}$$

$$\begin{array}{r} 16.3 \\ 77 \end{array}$$

$$\begin{array}{r} 16.2 \\ 77 \end{array}$$

45.1

42.4

37.9

33.9

$$\begin{array}{r} 3.0 \\ 50 \end{array}$$

$$\begin{array}{r} 5.7 \\ 32 \end{array}$$

$$\begin{array}{r} 8.8 \\ 7 \end{array}$$

$$\begin{array}{r} 10.2 \\ 14 \end{array}$$

$$\begin{array}{r} 12.3 \\ 14 \end{array}$$

$$\begin{array}{r} 14.4 \\ 23 \end{array}$$

$$\begin{array}{r} 14.2 \\ 43 \end{array}$$

$$\begin{array}{r} 17.7 \\ 48 \end{array}$$

$$\begin{array}{r} 15.5 \\ 57 \end{array}$$

$$\begin{array}{r} 12.2 \\ 68 \end{array}$$

$$\begin{array}{r} 12.2 \\ 68 \end{array}$$

46.1

41.0

35.7

$$\begin{array}{r} 2.0 \\ 50 \end{array}$$

$$\begin{array}{r} 4.4 \\ 24 \end{array}$$

$$\begin{array}{r} 5.2 \\ 10 \end{array}$$

$$\begin{array}{r} 7.1 \\ 9 \end{array}$$

$$\begin{array}{r} 8.6 \\ 22 \end{array}$$

$$\begin{array}{r} 10.6 \\ 26 \end{array}$$

$$\begin{array}{r} 12.9 \\ 31 \end{array}$$

$$\begin{array}{r} 13.4 \\ 45 \end{array}$$

$$\begin{array}{r} 14.2 \\ 45 \end{array}$$

$$\begin{array}{r} 14.2 \\ 45 \end{array}$$

$$\begin{array}{r} 14.2 \\ 45 \end{array}$$

46.8

44.5

41.4

37.1

$$\begin{array}{r} 1.3 \\ 50 \end{array}$$

$$\begin{array}{r} 3.6 \\ 30 \end{array}$$

$$\begin{array}{r} 4.0 \\ 17 \end{array}$$

$$\begin{array}{r} 6.7 \\ 6 \end{array}$$

$$\begin{array}{r} 10.0 \\ 6 \end{array}$$

$$\begin{array}{r} 9.4 \\ 8 \end{array}$$

$$\begin{array}{r} 9.8 \\ 24 \end{array}$$

$$\begin{array}{r} 9.8 \\ 24 \end{array}$$

$$\begin{array}{r} 9.8 \\ 24 \end{array}$$

$$\begin{array}{r} 9.8 \\ 24 \end{array}$$

$$\begin{array}{r} 9.8 \\ 24 \end{array}$$

46.0

39.7

38.7

$$\begin{array}{r} 2.1 \\ 33 \end{array}$$

$$\begin{array}{r} 5.0 \\ 8 \end{array}$$

$$\begin{array}{r} 9.0 \\ 3 \end{array}$$

$$\begin{array}{r} 8.4 \\ 8 \end{array}$$

$$\begin{array}{r} 8.6 \\ 8 \end{array}$$

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

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

$$\begin{array}{r} 8.6 \\ 24 \end{array}$$

$$\begin{array}{r} 8.6 \\ 24 \end{array}$$

$$\begin{array}{r} 8.6 \\ 24 \end{array}$$

$$\begin{array}{r} 8.6 \\ 24 \end{array}$$

48.3

41.0

42.0

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

$$\begin{array}{r} 0.3 \\ 25 \end{array}$$

$$\begin{array}{r} 6.9 \\ 19 \end{array}$$

$$\begin{array}{r} 7.3 \\ 4 \end{array}$$

$$\begin{array}{r} 7.3 \\ 4 \end{array}$$

$$\begin{array}{r} 7.1 \\ 3 \end{array}$$

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

$$\begin{array}{r} 7.8 \\ 11 \end{array}$$

$$\begin{array}{r} 8.3 \\ 17 \end{array}$$

$$\begin{array}{r} 6.1 \\ 20 \end{array}$$

$$\begin{array}{r} 6.1 \\ 33 \end{array}$$

$$\begin{array}{r} 6.1 \\ 33 \end{array}$$

$$\begin{array}{r} 6.1 \\ 33 \end{array}$$

47.1

42.0

45.3

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

$$\begin{array}{r} 1.5 \\ 24 \end{array}$$

$$\begin{array}{r} 5.5 \\ 19 \end{array}$$

$$\begin{array}{r} 6.1 \\ 7 \end{array}$$

$$\begin{array}{r} 6.1 \\ 7 \end{array}$$

$$\begin{array}{r} 6.1 \\ 7 \end{array}$$

$$\begin{array}{r} 6.6 \\ 7 \end{array}$$

$$\begin{array}{r} 7.0 \\ 14 \end{array}$$

$$\begin{array}{r} 3.4 \\ 20 \end{array}$$

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

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

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

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

45.0

3.1

Spike in RD 24' Rt. Sta. 41 + 84

Sta.

+

π

-

Elev.

Recommendations

Sta. 0+23 No Culvert required.

" 1+79 P. 24" x 60' " Drains north

" 2+35 No Culvert. required

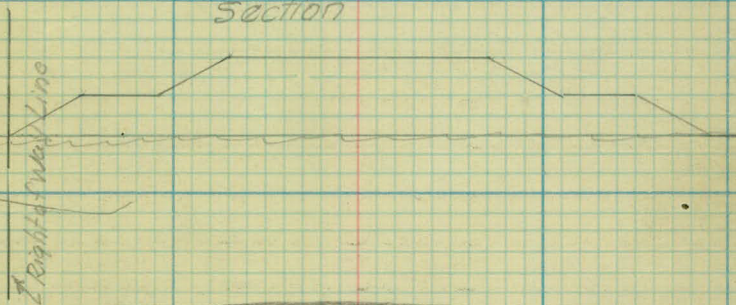
" 3+50 P. 24" 18' " Drains South

out, 8+50 P. 24" culvert, Drain north,
✓ or Ditch Grade So. Side.

Pl. 24" x 60' 17+50 Low Spot drains to 100' Lt. 18+60

" 19 Ditch Grade Rt. side back to March

" 21+50 to 22+50 Lt. & Rt. make Berm
Section



Sta. 24+30 P. 24" Culvert Drains South,
then Hand Ditch east about 25'

" 27+50 P. 36" ^{114'} Culvert - Drains North.

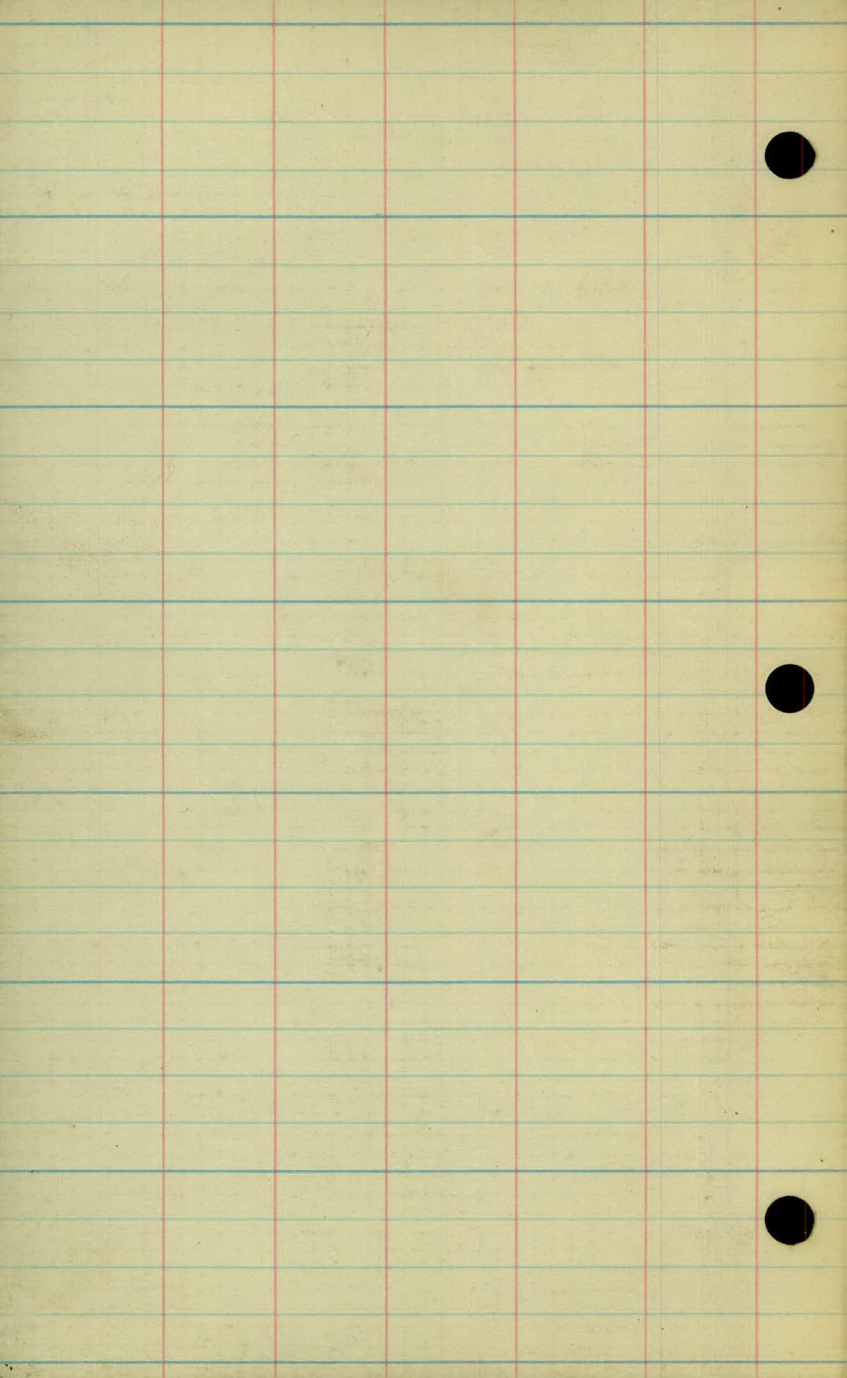
" 30+67 P. 24" 18' " Skew Drains North
deepen present ditch (about 100')

Sta. 32+50 P. 36" ^{84'} Culvert Drains North.

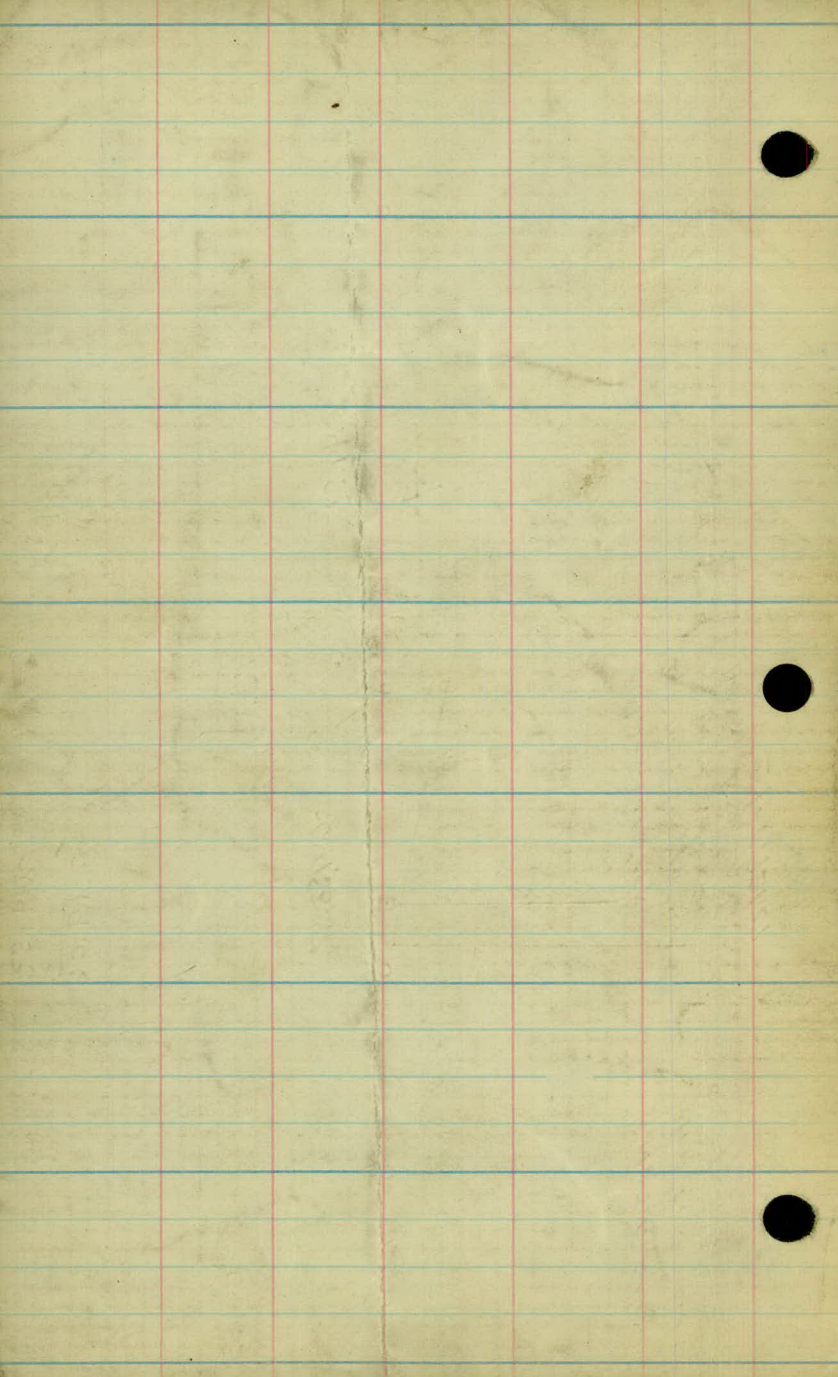
" 42 - all drainage back to 32

Note: Place Road App. bet. Lake St. & White Bear Rd.
see plot for locations.

none req. bet. White Bear Rd. & Prosperity



$29 + 74.28$
 1049.53
 1324.7



Slope stakes
and cross sections.
Lorpenleur Ave.
Lake St. to Prosperity.

Sta.	+	π	-	Elev. Grade
B.M.	4.81	890.75		885.94

0+0

0+18 885.9

0+23 86.15

0+31 86.55

0+50 87.50

1+0 89.7

6.67 895.62 1.80 888.95

1+50 91.3

1+79 91.96

1+90 92.15

2+00.3 92.3

3.75 895.37 - 4.00 891.62

Lt.

L

Rt.

2

Top Stone Mon. & Lake St.

4.2

$$\begin{array}{r} 4.5 \\ -0.3 \\ \hline \end{array}$$

3.3

$$\begin{array}{r} 33/5.9 \\ -2.6 \\ \hline \end{array}$$

$$\begin{array}{r} 4.0 \\ -0.7 \\ \hline \end{array}$$

1.1

$$\begin{array}{r} 33/7.1 \\ -6.0 \\ \hline \end{array}$$

$$\begin{array}{r} 4.8 \\ -3.7 \\ \hline \end{array}$$

4.3

$$\begin{array}{r} 33/11.5 \\ -7.2 \\ \hline \end{array}$$

$$\begin{array}{r} 10.7 \\ -6.4 \\ \hline \end{array}$$

2.6

$$\begin{array}{r} 33/10.1 \\ -6.5 \\ \hline \end{array}$$

$$\begin{array}{r} 7.6 \\ -5.0 \\ \hline \end{array}$$

3.6

$$\begin{array}{r} 22/4.8 \\ -1.2 \\ \hline \end{array}$$

$$\begin{array}{r} 5.0 \\ -1.4 \\ \hline \end{array}$$

Sta.	+	Δ	-	Elev.	Grade
		895.37			
2+19.5					92.5
		895.37			
+26					92.6
+35					92.6
+67					92.7
T.P.	8.02	896.39	7.00	888.37	
3+0					92.8
+50					92.9
4					93.0
+60					93.1
5					93.2
+72					93.3
6					
6+0					93.4
6+30					93.5
6+70					93.5

Lt.

Z

Rt.

3

2.8

$$183 \overline{) 39} \\ \underline{-7.1}$$

4.1

$$\begin{array}{r} 4.1 \\ -1.3 \\ \hline 1189 \end{array}$$

2.8

$$243 \overline{) 5.9} \\ \underline{-3.1}$$

$$\begin{array}{r} 7.1 \\ -4.3 \\ \hline \end{array}$$

$$\begin{array}{r} 8.4 \\ -5.6 \\ \hline 318 \end{array}$$

2.7

$$22.8 \overline{) 5.3} \\ \underline{-2.6}$$

$$\begin{array}{r} 6.3 \\ -3.6 \\ \hline \end{array}$$

$$\begin{array}{r} 7.8 \\ -5.1 \\ \hline 30.3 \end{array}$$

3.6

$$276 \overline{) 7.8} \\ \underline{-4.2}$$

$$\begin{array}{r} 8.6 \\ -5.0 \\ \hline \end{array}$$

$$\begin{array}{r} 10.2 \\ -6.6 \\ \hline 34.8 \end{array}$$

3.5

$$34.2 \overline{) 9.9} \\ \underline{-6.4}$$

$$\begin{array}{r} 10.5 \\ -7.0 \\ \hline \end{array}$$

$$\begin{array}{r} 12.1 \\ -8.6 \\ \hline 40.8 \end{array}$$

3.4

$$34.5 \overline{) 9.9} \\ \underline{-6.5}$$

$$\begin{array}{r} 10.4 \\ -7.0 \\ \hline \end{array}$$

$$\begin{array}{r} 11.6 \\ -8.2 \\ \hline 39.6 \end{array}$$

3.3

$$26.4 \overline{) 7.1} \\ \underline{-3.8}$$

$$\begin{array}{r} 6.0 \\ -2.7 \\ \hline \end{array}$$

$$\begin{array}{r} 6.9 \\ -2.6 \\ \hline 25.8 \end{array}$$

3.2

$$26.1 \overline{) 6.9} \\ \underline{-3.7}$$

$$\begin{array}{r} 7.1 \\ -2.9 \\ \hline \end{array}$$

$$\begin{array}{r} 7.9 \\ -4.7 \\ \hline 29.1 \end{array}$$

3.1

$$23.4 \overline{) 5.9} \\ \underline{-2.8}$$

$$\begin{array}{r} 6.3 \\ -3.2 \\ \hline \end{array}$$

$$\begin{array}{r} 4.7 \\ -1.6 \\ \hline 19.8 \end{array}$$

3.0

$$21.0 \overline{) 5.0} \\ \underline{-2.0}$$

$$\begin{array}{r} 5.6 \\ -2.6 \\ \hline \end{array}$$

$$\begin{array}{r} 5.3 \\ -2.3 \\ \hline 21.9 \end{array}$$

2.9

$$20.4 \overline{) 4.7} \\ \underline{-1.8}$$

$$\begin{array}{r} 5.1 \\ -2.2 \\ \hline \end{array}$$

$$\begin{array}{r} 5.7 \\ -2.8 \\ \hline 23.4 \end{array}$$

2.9

$$19.5 \overline{) 4.4} \\ \underline{-1.5}$$

$$\begin{array}{r} 3.7 \\ -0.8 \\ \hline \end{array}$$

$$\begin{array}{r} 4.0 \\ -1.1 \\ \hline 18.3 \end{array} \quad \begin{array}{r} 4.4 \\ 20.00 \\ \hline 18 \end{array}$$

Sta.	+	+	-	Elev.	Grade.
		896.39			
7+0					93.6
	5.63	898.49	3.53	892.86	
+50					93.8
8					94.0
	8.51	901.37	5.63	892.86	
+50					94.2
9					94.5
+50					94.8
10					95.1
+50					95.5
	12.68	910.46	3.59	897.78	
11+0					95.9
+50					96.3
12+0					96.7
+50					97.1

Lt.

Z

Rt. 2/27/35

4

$$2.8 \quad 18.6 \left| \begin{array}{r} 4.0 \\ -1.2 \end{array} \right. \quad \begin{array}{r} 3.8 \\ -7.0 \end{array} \quad \begin{array}{r} 3.8 \\ -1.0 \end{array} / 18 \quad \begin{array}{r} 4.1 \\ DC.0.2 \end{array} / 31'$$

Nail in T.P. Lt. Sta.

$$4.7 \quad 20.4 \left| \begin{array}{r} 6.5 \\ -1.8 \end{array} \right. \quad \begin{array}{r} 6.4 \\ -1.7 \end{array} \quad \begin{array}{r} 5.8 \\ -1.1 \end{array} / 18.3 \quad \begin{array}{r} 5.8 \\ DC.0.4 \end{array} / 31'$$

$$4.5 \quad 20.5 \left| \begin{array}{r} 7.0 \\ -2.5 \end{array} \right. \quad \begin{array}{r} 6.4 \\ -1.9 \end{array} \quad \begin{array}{r} 6.1 \\ -1.6 \end{array} / 19.8 \quad \begin{array}{r} 5.3 \\ DC.0.7 \end{array} / 31'$$

$$7.2 \quad 31' \left| \begin{array}{r} 8.3 \\ -2.4 \end{array} \right. \quad 19.4 \left| \begin{array}{r} 8.6 \\ -1.4 \end{array} \right. \quad \begin{array}{r} 8.8 \\ -7.6 \end{array} \quad \begin{array}{r} 9.0 \\ -1.8 \end{array} / 20.4 \quad \begin{array}{r} 8.6 \\ DC.0.1 \end{array} / 31'$$

$$6.9 \quad 31' \left| \begin{array}{r} 6.0 \\ -1.9 \end{array} \right. \quad \begin{array}{r} 7.5 \\ -0.6 \end{array} \quad \begin{array}{r} 8.6 \\ -1.7 \end{array} / 20.1 \quad \begin{array}{r} 8.0 \\ DC.0.4 \end{array} / 31'$$

$$6.6 \quad 31.7 \left| \begin{array}{r} 5.0 \\ +1.6 \end{array} \right. \quad \begin{array}{r} 6.0 \\ +0.6 \end{array} \quad \begin{array}{r} 7.2 \\ -0.6 \end{array} / 16.2 \quad \begin{array}{r} 7.1 \\ DC.0.1 \end{array} / 31'$$

$$6.3 \quad 31.1 \left| \begin{array}{r} 4.0 \\ +2.3 \end{array} \right. \quad \begin{array}{r} 5.0 \\ +1.3 \end{array} \quad \begin{array}{r} 5.2 \\ +1.1 \end{array} / 31'$$

$$5.9 \quad 33.7 \left| \begin{array}{r} 2.8 \\ +3.6 \end{array} \right. \quad \begin{array}{r} 4.2 \\ +1.6 \end{array} \quad \begin{array}{r} 5.0 \\ +0.9 \end{array} / 31'$$

$$14.6 \quad 37.3 \left| \begin{array}{r} 9.2 \\ +5.4 \end{array} \right. \quad \begin{array}{r} 11.5 \\ +3.1 \end{array} \quad \begin{array}{r} 13.0 \\ +1.6 \end{array} / 31.7$$

$$14.2 \quad 42.9 \left| \begin{array}{r} 6.0 \\ +8.2 \end{array} \right. \quad \begin{array}{r} 7.0 \\ +7.2 \end{array} \quad \begin{array}{r} 8.6 \\ +5.6 \end{array} / 37.7$$

$$13.8 \quad 44.9 \left| \begin{array}{r} 14.8 \\ +9.2 \end{array} \right. \quad \begin{array}{r} 4.1 \\ +9.7 \end{array} \quad \begin{array}{r} 5.6 \\ +8.2 \end{array} / 42.9$$

$$13.4 \quad 46.9 \left| \begin{array}{r} 6.2 \\ +7.2 \end{array} \right. \quad \begin{array}{r} 3.8 \\ +9.6 \end{array} \quad \begin{array}{r} 4.2 \\ +9.2 \end{array} / 44.9$$

Sta.	+	Σ	-	Elev.	Grade.
		910.46			
13+0					897.5
+25					97.7
B.M.	6.72	912.00	5.15	(905.31)	(905.78)
+53					97.9
				908.61	
+75					98.1
14+0					98.3
+40					98.6
	1.53	906.80	6.73	905.07	
15+0					99.1
+50					99.5
16					899.93
+50					900.4
17					900.74
	2.06	907.12	1.74	905.06	
+50					901.5
18					902.15

Lt.

L

Rt.

5

$$13.0 \quad 395 \begin{array}{r} 6.5 \\ +6.5 \end{array} \quad 5.2 \begin{array}{r} 7.8 \\ +7.8 \end{array} \quad 2.8 \begin{array}{r} 46.9 \\ +10.2 \end{array}$$

$$12.8 \quad 419 \begin{array}{r} 5.1 \\ +7.9 \end{array} \quad 5.2 \begin{array}{r} 7.8 \\ +7.8 \end{array} \quad 3.0 \begin{array}{r} 46.1 \\ +9.8 \end{array}$$

Top Mon. 13+24.86 (To be Lowered)

$$14.1 \quad 419 \begin{array}{r} 6.4 \\ +7.7 \end{array} \quad 6.3 \begin{array}{r} 7.8 \\ +7.8 \end{array} \quad 7.0 \begin{array}{r} 40.7 \\ +7.1 \end{array}$$

(Top Ref. Hub 75' Rt. 13+25)

12.9

$$13.7 \quad 425 \begin{array}{r} 5.7 \\ +8.0 \end{array} \quad 5.9 \begin{array}{r} 7.8 \\ +7.8 \end{array} \quad 7.6 \begin{array}{r} 38.7 \\ +6.1 \end{array}$$

$$13.4 \quad 429 \begin{array}{r} 4.7 \\ +8.7 \end{array} \quad 7.8 \begin{array}{r} 7.8 \\ +5.6 \end{array} \quad 9.1 \begin{array}{r} 35.1 \\ +4.3 \end{array}$$

$$7.7 \quad 37.5 \begin{array}{r} 2.2 \\ +5.5 \end{array} \quad 7.0 \begin{array}{r} 10.7 \\ +0.7 \end{array} \quad 8.2 \begin{array}{r} 8.6 \\ +0.5 \end{array} \quad 16.5 \begin{array}{r} 31 \\ +0.6 \end{array}$$

$$7.3 \quad 33.1 \begin{array}{r} 4.0 \\ +3.3 \end{array} \quad 7.9 \begin{array}{r} 0.6 \\ -0.6 \end{array} \quad 9.4 \begin{array}{r} 21.3 \\ -2.1 \end{array}$$

$$6.9 \quad 31 \begin{array}{r} 8.6 \\ +1.3 \end{array} \quad 17.4 \begin{array}{r} 7.7 \\ -0.8 \end{array} \quad 9.4 \begin{array}{r} 2.5 \\ -2.5 \end{array} \quad 10.6 \begin{array}{r} 26.1 \\ -3.7 \end{array}$$

$$6.5 \quad 24 \begin{array}{r} 7.7 \\ +0.3 \end{array} \quad 19.8 \begin{array}{r} 8.1 \\ -1.6 \end{array} \quad 14.0 \begin{array}{r} 3.5 \\ -3.5 \end{array} \quad 11.8 \begin{array}{r} 30.9 \\ -5.3 \end{array}$$

$$6.1 \quad 23.1 \begin{array}{r} 8.8 \\ -2.7 \end{array} \quad 10.6 \begin{array}{r} 4.5 \\ -4.5 \end{array} \quad 10.6 \begin{array}{r} 28.5 \\ -4.5 \end{array}$$

$$5.6 \quad 24.4 \begin{array}{r} 10.4 \\ -4.8 \end{array} \quad 9.7 \begin{array}{r} 4.1 \\ -4.1 \end{array} \quad 9.1 \begin{array}{r} 25.5 \\ -3.5 \end{array}$$

$$5.0 \quad 24.9 \begin{array}{r} 8.3 \\ -3.3 \end{array} \quad 7.6 \begin{array}{r} 7.6 \\ -7.6 \end{array} \quad 7.1 \begin{array}{r} 21.3 \\ -2.1 \end{array}$$

Sta.	+	π	-	Elev.	Grade
		907.12			
18+60					902.94
19					03.53
+50					04.30
T.P.	8.45	913.51	2.06	905.06	
+65					04.54
+85					04.88
20					05.05
+50					05.7
21					06.25
+40					06.62
+80					06.92
22+0					07.05
22+25					907.19
	8.71	921.48	0.74	912.77	

Lt.

L

Rt.

6

$$4.2 \quad 357 \overline{) 11.1} \\ -69$$

$$7.0 \\ -48$$

$$7.8 \\ -36 \quad / 25.8$$

$$3.7 \quad 291 \overline{) 84} \\ -47$$

$$8.2 \\ -45 \quad / 28.5$$

$$2.8 \quad 297 \overline{) 1.6} \\ -112$$

$$2.3 \\ +0.5 \quad / 27.5$$

$$9.0 \quad 329 \overline{) 5.8} \\ +32$$

$$6.5 \\ +2.5 \quad / 31.5$$

$$8.6 \quad 52 \\ +34$$

$$8.5 \quad 281 \overline{) 7.9} \\ +0.8$$

$$6.3 \\ +22$$

$$5.5 \\ +30 \quad / 32.5$$

$$7.8 \quad 239 \overline{) 91} \quad 180 \overline{) 88} \\ -0.2 \quad -1.0$$

$$81 \\ -0.3$$

$$7.1 \\ +0.7 \quad / 27.9$$

$$7.2 \quad 257 \overline{) 7.6} \quad 15 \overline{) 7.2} \\ -1.1 \quad 0.0$$

$$5.8 \\ +14$$

$$3.8 \\ +3.4 \quad / 33.3$$

$$6.9 \quad 315 \overline{) 4.4} \\ +2.5$$

$$3.8 \\ +3.1$$

$$5.1 \\ +1.8 \quad / 30.1$$

$$6.6 \quad 273 \overline{) 6.2} \\ +0.4$$

$$6.4 \\ +0.2$$

$$6.6 \overline{) 15} \quad 7.2 \overline{) 25.3}$$

$$6.4 \quad 6.4$$

$$6.8 \\ -1.1 \quad / 25.7$$

$$6.3 \quad 765 \overline{) 6.3} \quad 15 \overline{) 6.3} \\ 00 \quad 00$$

$$5.0 \\ +1.3$$

$$2.8 \\ +4.0 \quad / 34.5$$

Sta.	+	-	Elev.	Grade.
------	---	---	-------	--------

921.48

22 +55

907.32

+75

07.39

23

07.45

+35

07.50

23 +60

07.5

4.25 912.99 12.74 908.74

23 +60

07.5

24 +0

07.63

+30

07.82

+75

08.28

25 +0

08.62

B.M.

2.02

910.97 = 911.00

900.63

1.39

902.02

+30

909.12

+60

909.71

26 +0

10.62

Lt.

Z

Rt.

7

$$14.2 \quad 33.7 \overline{) 10.6} \\ \underline{+ 3.6}$$

$$\frac{8.0}{+6.2}$$

$$\frac{4.0}{+10.2} / 46.9$$

$$14.0 \quad 47.5 \overline{) 3.6} \\ \underline{+ 10.4}$$

$$\frac{5.0}{+9.0}$$

$$\frac{4.8}{+9.2} / 44.9$$

$$14.0 \quad 44.5 \overline{) 5.0} \\ \underline{+ 9.0}$$

$$\frac{11.0}{+3.0} / 32.5$$

$$14.0 \quad 37.3 \overline{) 8.6} \\ \underline{+ 5.4}$$

2

5.5

$$\frac{7.5}{+0.0} / 31'$$

5.4

$$\frac{+1.1}{-6.5} / 34.5$$

$$5.2 \quad 24.0 \overline{) 8.2} \\ \underline{- 3.0}$$

$$\frac{+0.1}{-5.3} / 38.9$$

$$4.7 \quad 31.9 \overline{) 2.0} \\ \underline{+ 2.7}$$

$$\frac{8.9}{-4.2} / 27.8$$

$$4.4 \quad 31.0 \overline{) 3.4} \\ \underline{+ 1.0}$$

$$\frac{10.9}{-6.5} / 34.5$$

12" Oak 50' Lt. Sta. 25 to

$$(+ 7.1) \quad 32.0 \overline{) 11.0} \\ \underline{+ 8.1}$$

$$\frac{4.0}{-11.1}$$

$$\frac{3.5}{-10.6} / 35.9$$

$$(+ 7.7) \quad 40.9 \overline{) 6.2} \\ \underline{+ 12.9}$$

$$\frac{7.0}{-14.7}$$

$$\frac{6.0}{+13.7} / 40.6$$

$$(+ 8.6) \quad 39.4 \overline{) 4.3} \\ \underline{- 12.9}$$

$$\frac{5.3}{-12.9}$$

$$\frac{8.3}{-10.9} / 45.4$$

Sta.	+	+	-	Elev.	Grade
		902.02			
76+50					912.0
27+0					13.63
+50					15.5
28					17.5
+33					18.7
T.P.	13.18	914.30	0.90	901.12	
+70					19.8
T.P.	11.69	923.57	2.42	911.88	
29					20.5
T.P.	11.71	934.13	1.15	922.42	
+30					21.0
	12.42	944.95	1.60	932.53	
+60					21.3
+87					21.4
30+0					21.5
T.P.	8.76	950.84	2.22	942.73	
T.P.	3.50	950.82	3.57	947.32	
29+87					21.4
30+0					21.5

Lt.

Z

Rt.

+10.0

$$45.2 \begin{array}{r} 6.8 \\ -16.8 \end{array}$$

$$\begin{array}{r} 6.7 \\ -16.7 \end{array}$$

$$\begin{array}{r} 9.2 \\ -19.2 \end{array} / 48.8$$

+11.6

$$52.4 \begin{array}{r} 10.0 \\ -21.6 \end{array}$$

$$\begin{array}{r} 8.7 \\ -20.3 \end{array}$$

$$\begin{array}{r} 9.6 \\ -21.2 \end{array} / 51.8$$

+13.5

$$57.1 \begin{array}{r} 11.2 \\ -24.7 \end{array}$$

$$\begin{array}{r} 10.3 \\ -23.8 \end{array}$$

$$\begin{array}{r} 7.8 \\ -21.3 \end{array} / 52.0$$

+15.5

$$57.7 \begin{array}{r} 9.6 \\ -25.1 \end{array}$$

$$\begin{array}{r} 8.5 \\ -24.0 \end{array}$$

$$\begin{array}{r} 4.7 \\ -20.2 \end{array} / 50.3$$

+16.7

$$53.5 \begin{array}{r} 12.6 \\ -22.3 \end{array}$$

$$\begin{array}{r} 5.0 \\ -21.7 \end{array}$$

$$\begin{array}{r} 1.0 \\ -17.7 \end{array} / 46.6$$

+5.5

$$37.4 \begin{array}{r} 6.1 \\ -11.6 \end{array}$$

$$\begin{array}{r} 7.3 \\ -12.8 \end{array}$$

$$\begin{array}{r} 6.1 \\ -11.6 \end{array} / 37.4$$

- 3.1

$$28 \begin{array}{r} 3.1 \\ -0.0 \end{array}$$

$$\begin{array}{r} 4.8 \\ -7.7 \end{array}$$

$$\begin{array}{r} 3.1 \\ -0.0 \end{array} / 28$$

13.1

$$77.2 \begin{array}{r} 0.8 \\ -12.3 \end{array}$$

$$\begin{array}{r} 1.5 \\ -11.6 \end{array}$$

$$\begin{array}{r} (+4.2) \\ -17.3 \end{array} / 97.2$$

23.7

$$96.0 \begin{array}{r} 6.7 \\ -17.0 \end{array}$$

$$\begin{array}{r} 1.2 \\ -22.5 \end{array}$$

24.6

$$91.0 \begin{array}{r} 7.8 \\ -16.8 \end{array}$$

73.5

$$94.1 \begin{array}{r} 7.9 \\ -16.6 \end{array}$$

Hub.

29.4

$$\begin{array}{r} 3.6 \\ -25.8 \end{array}$$

1.2

29.3

$$\begin{array}{r} 4.6 \\ -24.7 \end{array}$$

Sta.	+	π	-	Elev.	Grade.
		950.82			
30+15					921.5
30+50					21.3
T.P.	1.08	939.01	12.89	937.93	
30+50					21.3
+67					21.1
+87					20.7
T.P.	2.54	928.07	13.48	925.53	
B.M.			6.44	921.63	
"	1.07	922.71		921.64	
31+0					920.5
+08					
T.P.	0.98	910.21	13.48	909.23	
+40					919.54
+70					918.60
32+0					917.5
+50					915.5
33+0					913.9

Lt.

L

Rt.

9

$$29.3 \quad 90.4 \overline{) 13.7} \\ + 15.6$$

$$\frac{7.6}{+ 21.7}$$

$$29.5 \quad \frac{15.8}{+ 13.7}$$

$$17.7 \quad 74.8 \overline{) 6.0} \\ + 11.7$$

$$17.9 \quad 65.4 \overline{) 9.3} \\ + 8.6$$

$$18.3 \quad 63.0 \overline{) 13.3} \\ + 5.0$$

Spike Intersection of White Bear Road.

2.2

$$\frac{2.2}{20.0} \overline{) 0.0}$$

$$+ 9.3 \quad \frac{3.8}{- 13.1} \quad \frac{7.3}{- 18.6} \overline{) 47.9}$$

$$+ 8.4 \quad \frac{4.8}{39.8 - 13.2} \quad \frac{10.2}{- 18.6} \overline{) 47.9}$$

$$+ 7.3 \quad 44.7 \overline{) 9.2} \\ - 16.5 \quad \frac{7.3}{- 16.6} \quad \frac{10.1}{- 17.4} \overline{) 46.1}$$

$$+ 5.3 \quad 42.6 \overline{) 10.4} \\ - 15.7 \quad \frac{8.7}{- 14.0} \quad \frac{9.2}{- 14.5} \overline{) 41.8}$$

$$+ 3.7 \quad 41.8 \overline{) 10.8} \\ - 14.5 \quad \frac{7.8}{- 11.5} \quad \frac{7.6}{- 11.3} \overline{) 37.0}$$

Sta.	+	T	-	Elev.	Grade.
		910.21			
33+50					912.8
T.P.	10.66	912.53	8.34	901.87	
34					912.3
				905.57	
+50					12.3
T.P.	7.74	919.14	1.13	911.40	
35					12.8
+30					13.4
36					915.6
+50					917.8
T.P.	11.62	929.83	0.93	918.21	
37					920.2
T.P.	11.62	929.83	0.93	918.21	
+50					922.6
38					925.0
38+50					927.4
T.P.	12.68	942.09	0.42	929.41	
38+50					927.4
39+0					929.8

Lt.

C

Rt.

10

$$12.6 \quad 37.7 \left| \begin{array}{r} 9.2 \\ -11.8 \end{array} \right. \nearrow$$

Top Slope Stake

$$0.2 \quad 33.5 \left| \begin{array}{r} 9.2 \\ -9.0 \end{array} \right.$$

Top Hump Rt. Sta. 33+75

$$0.2 \quad 32.4 \left| \begin{array}{r} 6.0 \\ -5.8 \end{array} \right.$$

$$\begin{array}{r} 8.5 \\ -8.3 \end{array}$$

$$\begin{array}{r} 8.4 \\ -8.2 \end{array} / 32.3$$

$$\begin{array}{r} 4.3 \\ -4.1 \end{array}$$

$$\begin{array}{r} 4.2 \\ -4.0 \end{array} / 27.0$$

$$6.3 \quad 31.0 \left| \begin{array}{r} 7.2 \\ -8.6 \end{array} \right. \quad 18.0 \left| \begin{array}{r} 7.3 \\ -1.0 \end{array} \right.$$

$$\begin{array}{r} 7.1 \\ -0.8 \end{array}$$

$$\begin{array}{r} 7.1 \\ -0.8 \end{array} / 17.4 \quad \begin{array}{r} 7.3 \\ -0.5 \end{array} / 24.5$$

$$5.7 \quad 31' \left| \begin{array}{r} 5.0 \\ -10.7 \end{array} \right.$$

$$\begin{array}{r} 5.4 \\ -10.3 \end{array}$$

$$\begin{array}{r} 6.1 \\ -0.4 \end{array} / 16.2 \quad \begin{array}{r} 6.6 \\ -0.5 \end{array} / 31'$$

$$3.5 \quad 31' \left| \begin{array}{r} 3.2 \\ -10.3 \end{array} \right. \quad 16.2 \left| \begin{array}{r} 3.9 \\ -0.4 \end{array} \right.$$

$$\begin{array}{r} 4.0 \\ -0.5 \end{array}$$

$$\begin{array}{r} 4.7 \\ -1.2 \end{array} / 18.6$$

$$1.3 \quad 31' \left| \begin{array}{r} 1.2 \\ -10.1 \end{array} \right. \quad 16.2 \left| \begin{array}{r} 1.7 \\ -0.4 \end{array} \right.$$

$$\begin{array}{r} 1.9 \\ -0.6 \end{array}$$

$$\begin{array}{r} 3.9 \\ -2.6 \end{array} / 22.8$$

$$9.6 \quad 31' \left| \begin{array}{r} 9.1 \\ -10.5 \end{array} \right. \quad 16.8 \left| \begin{array}{r} 10.2 \\ -0.6 \end{array} \right.$$

$$\begin{array}{r} 10.8 \\ -1.2 \end{array}$$

$$\begin{array}{r} 11.1 \\ -1.5 \end{array} / 19.5$$

$$7.2 \quad 31' \left| \begin{array}{r} 6.3 \\ -10.9 \end{array} \right.$$

$$\begin{array}{r} 7.3 \\ -2.1 \end{array}$$

$$\begin{array}{r} 8.2 \\ -1.0 \end{array} / 18.0$$

$$4.8 \quad 31' \left| \begin{array}{r} 4.5 \\ -10.3 \end{array} \right. \quad 18.0 \left| \begin{array}{r} 5.8 \\ -1.0 \end{array} \right.$$

$$\begin{array}{r} 6.6 \\ -1.8 \end{array}$$

$$\begin{array}{r} 11.8 \\ -1.0 \end{array} / 26.0$$

$$2.4$$

$$\begin{array}{r} 1.5 \\ -10.9 \end{array}$$

$$\begin{array}{r} 2.9 \\ -0.4 \end{array} / 16.2$$

$$14.7 \quad 34.2 \left| \begin{array}{r} 10.6 \\ -14.1 \end{array} \right.$$

$$12.3 \quad 38.1 \left| \begin{array}{r} 6.5 \\ -15.8 \end{array} \right.$$

$$\begin{array}{r} 11.1 \\ -11.2 \end{array}$$

Sta.	+	π	-	Elev.	Grade.
------	---	-------	---	-------	--------

942.09

39+40

931.7

+75

6.59

935.50

935.46

933.3

B.M.

13.71

949.17

935.46

39+75

933.3

40+0

934.3

+50

936.4

41+0

938.3

T.P.

7.09

950.92

5.34

943.83

41+63

940.6

42+0

941.8

Lt.

Z

Rt

11

$$10.4 \quad 40.9 \overline{) 3.2} \\ + 7.2$$

$$\frac{9.1}{+1.3}$$

$$8.8$$

$$\frac{6.6}{+2.2}$$

$$\frac{8.8}{15} 0.0$$

$$15.9 \quad 44.3 \overline{) 7.0} \\ + 8.9$$

$$14.9 \quad 47.3 \overline{) 4.5} \\ + 10.4$$

$$\frac{11.2}{+3.7}$$

$$12.8 \quad 45.1 \overline{) 3.5} \\ + 9.3$$

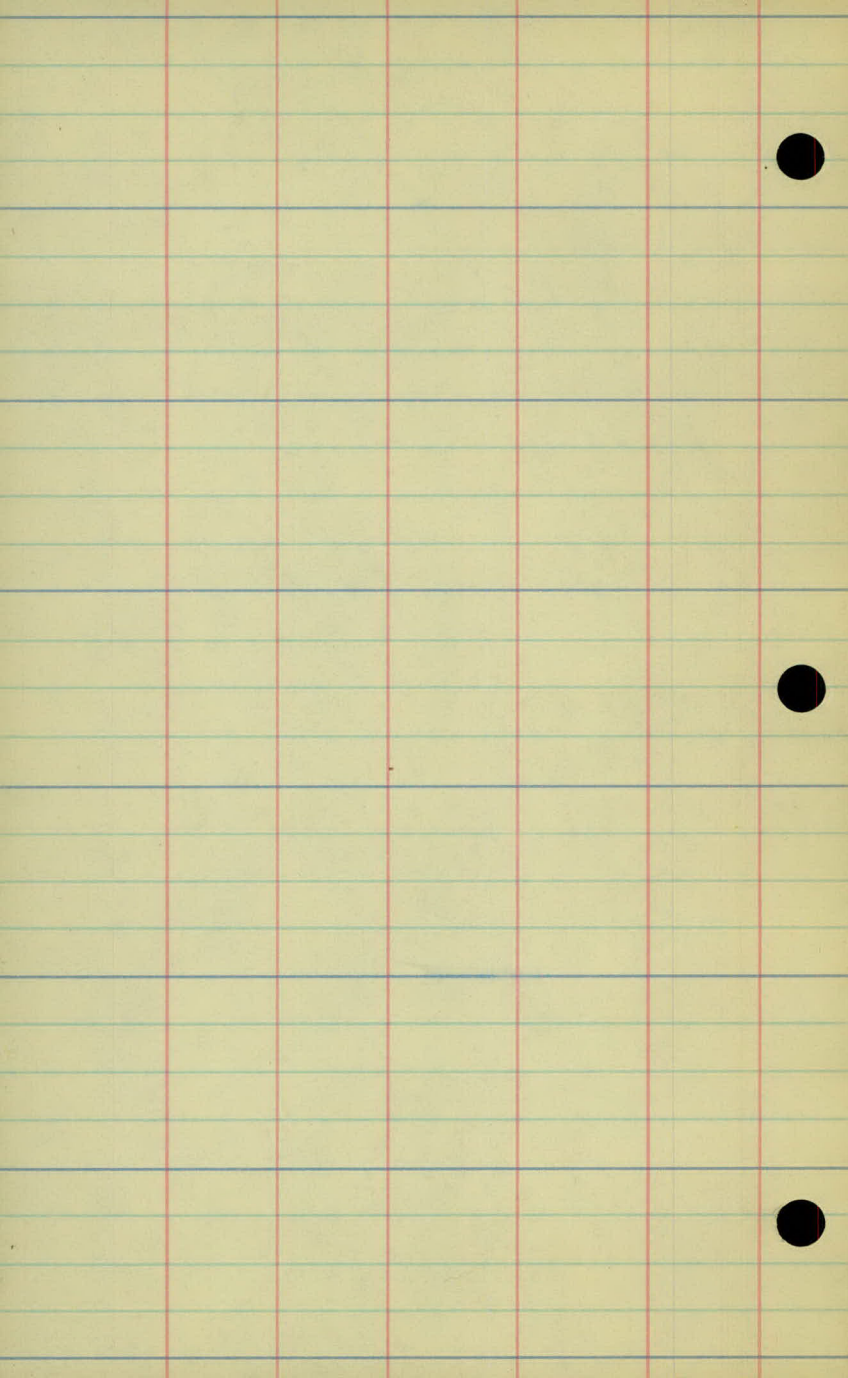
$$\frac{8.1}{+4.7}$$

$$10.9 \quad 41.3 \overline{) 3.5} \\ + 7.4$$

$$\frac{8.2}{+2.7}$$

$$10.3 \quad 29.5 \overline{) 38} \\ + 16.5$$

$$9.1 \quad 37.3 \overline{) 3.7} \\ + 5.4$$



Larpeur Ave.

17

Additional X-sec.
for Borrow.

Left of Sta. 29+0 - to Sta. 32+0

B.N.

6.98

✓
92862

✓
921.64

324

3170

31440

3108

310

30787

9.94

✓
937.88

0.68

✓
927.94

30767

3067

30750

30715

3070

29787

41+6.39

52498.47
39475.25

1323.22

3975.25

5298.47

Wait.

3972.52

1325.95

2649.53

2650.70

5300.23

5297.39

02.89

Record.

5312.89

265

240

212

880

1323.38

1324.34

2647.72

2650.70
2654
1660290
1325350
14313780

2649.27

2650.70
1.43

2649.53
193
2648.10
2649.27
5297.37

Mont
2648.50
1324.82
2648.50

264914
1323.38
3972.52
1324.82
5297.34

5297.34

5972.82
1324.82

W/eqs.

2649.27
2648.60
.77

60.567

26.49.14 Mean

1320.08

1325.53

2650.7

2649.53

292 | N.
296 | Side.

1325.53
2
2651.06

Left.

2

'8

W.H.G.

H.A.W. 3/7/36

K.A.

L.B.H.

916.6

12.0

140

2 wh. 50

918.8

915.3

917.6

9.8

13.3

11.0

140

170

140

= 4 wh. 30

922.3

921.5

920.3

916.3

917.4

6.3

7.1

8.3

12.3

11.2

200

190

144

133

120

922.7

920.7

924.8

923.9

921.8

2.8

1.9

3.8

5.7

6.8

200

190

155

140

95

929.0

928.2

924.9

922.6

10.4

04

3.7

6.0

200

190

150

100

924.6

926.9

920.1

924.6

925.6

11.0

1.7

3.5

4.0

3.0

190

150

120

100

75

929.9

929.9

929.0

8.0

8.0

8.9

150

125

100

931.5

932.9

6.4

5.0

130

100

925.9

935.1

12.0

2.8

150

100

925.2

935.0

12.7

2.9

150

100

926.5

930.8

935.9

11.4

2.1

2.0

150

125

100

✓
937.88

29461

29420

2940 ✓

2.27

↓
933.25

6.90

↓
930.98

30467

30450

30415

3040

29487

2.44

↓
933.12

2.27

↓
930.98

$$\begin{array}{r} 923.8 \\ 14.1 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 927.1 \\ 10.8 \\ \hline 170 \end{array}$$

$$\begin{array}{r} 929.4 \\ 8.5 \\ \hline 155 \end{array}$$

$$\begin{array}{r} 932.7 \\ 5.2 \\ \hline 134 \end{array}$$

$$\begin{array}{r} 937.0 \\ 0.6 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 921.3 \\ 7.6 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 921.8 \\ 14.1 \\ \hline 181 \end{array}$$

$$\begin{array}{r} 927.9 \\ 10.0 \\ \hline 150 \end{array}$$

$$\begin{array}{r} 931.0 \\ 6.9 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 911.5 \\ 76.4 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 919.3 \\ 18.6 \\ \hline 150 \end{array}$$

$$\begin{array}{r} 919.3 \\ 18.6 \\ \hline 100 \end{array}$$

x

$$\begin{array}{r} 929.2 \\ 4.1 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 925.3 \\ 8.0 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 929.3 \\ 4.0 \\ \hline 160 \end{array}$$

$$\begin{array}{r} 917.2 \\ 16.1 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 921.8 \\ 11.5 \\ \hline 175 \end{array}$$

$$\begin{array}{r} 916.1 \\ 17.2 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 920.7 \\ 12.6 \\ \hline 175 \end{array}$$

$$\begin{array}{r} 917.5 \\ 15.8 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 922.1 \\ 11.2 \\ \hline 175 \end{array}$$

x

$$29\frac{1}{10}$$

$$29\frac{1}{30}$$

$$29\frac{1}{60}$$

$$29\frac{1}{87}$$

$$30\frac{1}{10}$$

$$30\frac{1}{15}$$

$$30\frac{1}{50}$$

$$30\frac{1}{67}$$

$$30\frac{1}{87}$$

$$31\frac{1}{10}$$

$$31\frac{1}{40}$$

$$31\frac{1}{40}$$

$$31\frac{1}{70}$$

Carpentier Ave.

Add. X-sections

et. Sta. 29 to 31

12.85 933.62

920.77

2940

T.P.

13.07

943.80

2.89

930.73

T.P.

2940

28470

29430

29461

T.P.

1.16

933.75

11.21

932.59

2940

29430

29461

29487

4/22/35 21

$$\frac{9.5}{50} \quad \frac{3.4}{100}$$

$$\frac{10.0}{132} \quad \frac{9.2}{150} \quad \frac{7.8}{175} \quad \frac{9.1}{195} \quad \frac{11.7}{209}$$

$$\frac{11.0}{162} \quad \frac{8.2}{183} \quad \frac{8.5}{200} \quad \frac{9.8}{220}$$

$$\frac{4.2}{74} \quad \frac{3.4}{82} \quad \frac{4.0}{100} \quad \frac{5.4}{125} \quad \frac{6.6}{150} \quad \frac{9.2}{176}$$

$$\frac{1.6}{86} \quad \frac{2.9}{100} \quad \frac{6.5}{130}$$

$$\frac{8.2}{228} \quad \frac{10.2}{231} \quad \frac{8.2}{237} = \text{Shkht.} \quad \frac{76}{258} = \frac{1}{2.1}$$

DIT

$$\frac{8.1}{190} \quad \frac{8.9}{195} \quad \frac{8.0}{200} = \text{Shkht.} \quad \frac{7.8}{218} = \frac{1}{2.1}$$

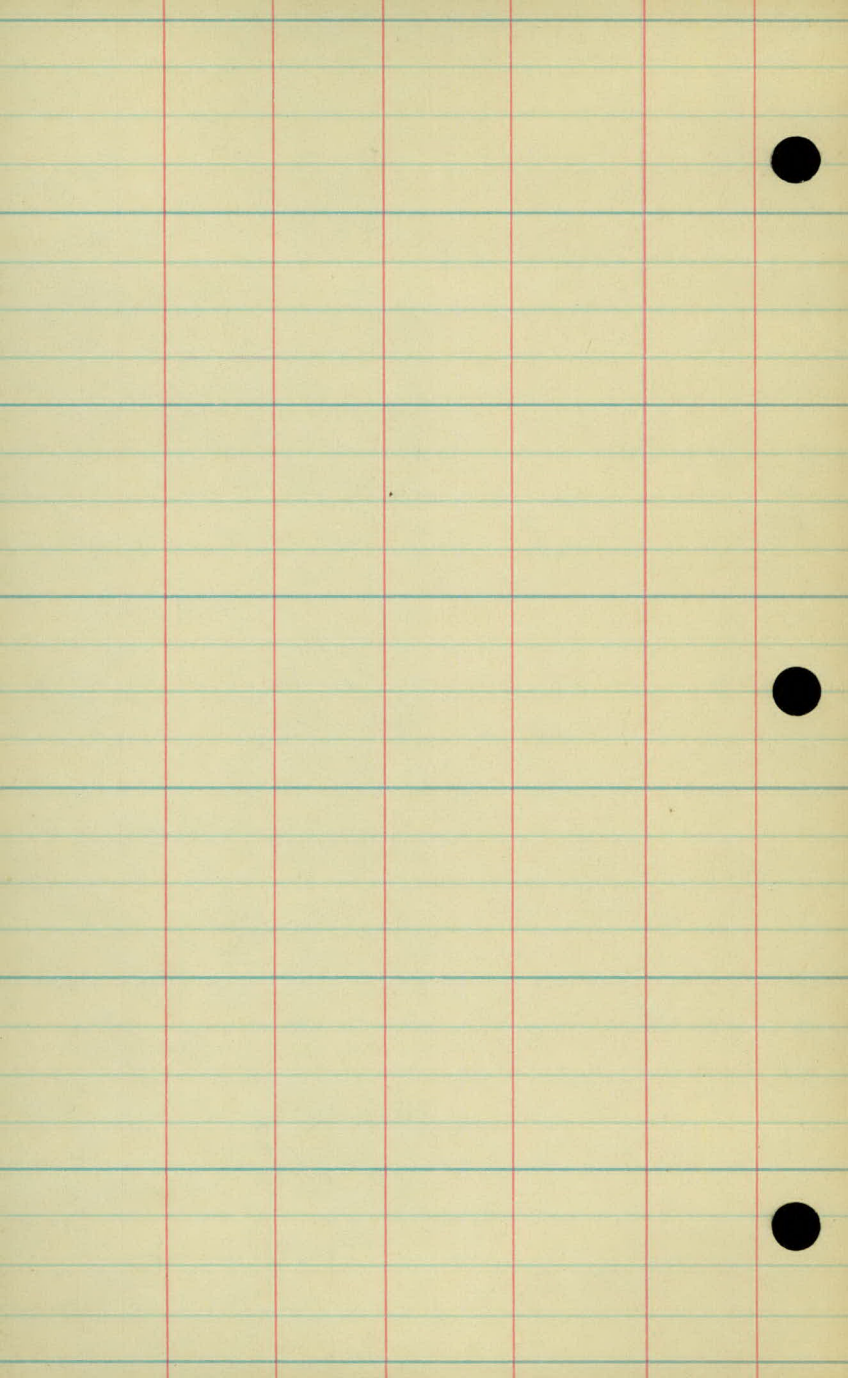
DIT

$$\frac{7.4}{150} \quad \frac{9.0}{157} \quad \frac{8.4}{164} = \text{Shkht.} \quad \frac{8.2}{183} = \frac{1}{2}$$

DIT

$$\frac{10.2}{120} \quad \frac{9.4}{127} = \text{Shkht.} \quad \frac{8.8}{146} = \frac{1}{2}$$

DIT



N^o Affec St. Approach.

Rt. Sta. 3+65

20' Top

2:1 Slopes.

4.19 893.14 888.95

4.00 889.84 7.30 885.84

Grade

3465 50400

893.0

0415 Solder

895.0

0420

893.0

0440

891.6

0480

888.8

4%
7.0%
1

1420

886.0

1435

885.0

East.

 $\frac{d}{2}$

West

+1.8

$$23.8 \overline{) 5.1} \\ - 69$$

$$\frac{5.2}{-7.0}$$

$$\frac{5.3}{-7.1} / 24.2$$

1.0

$$19.2 \overline{) 5.6} \\ - 76$$

$$\frac{5.3}{-4.3}$$

$$\frac{5.4}{-4.4} / 18.8$$

3.8

$$13.2 \overline{) 5.5} \\ - 16$$

$$\frac{5.5}{-1.7}$$

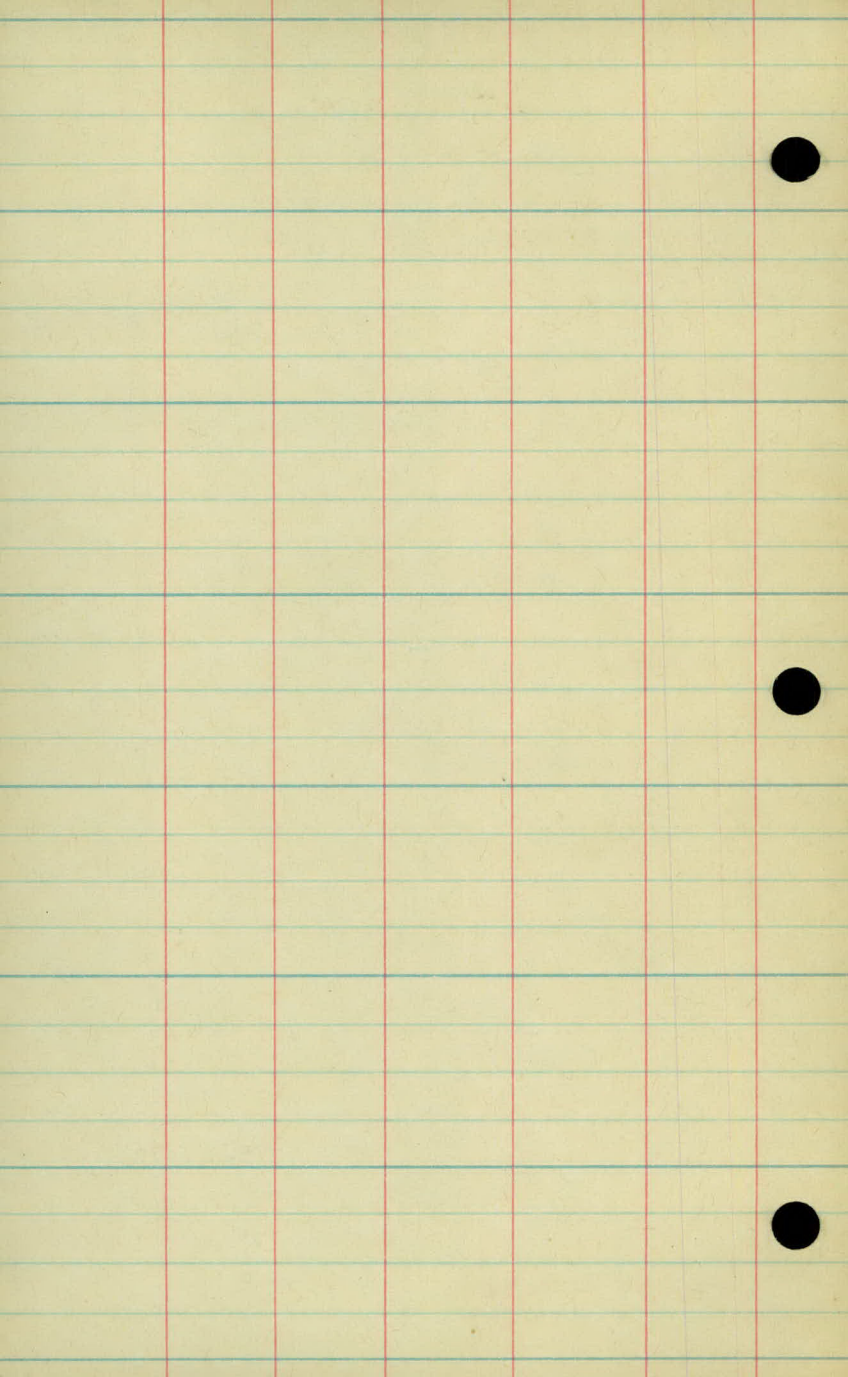
$$\frac{5.5}{-1.7} / 13.4$$

4.8

$$10.0 \overline{) 4.8} \\ 90$$

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

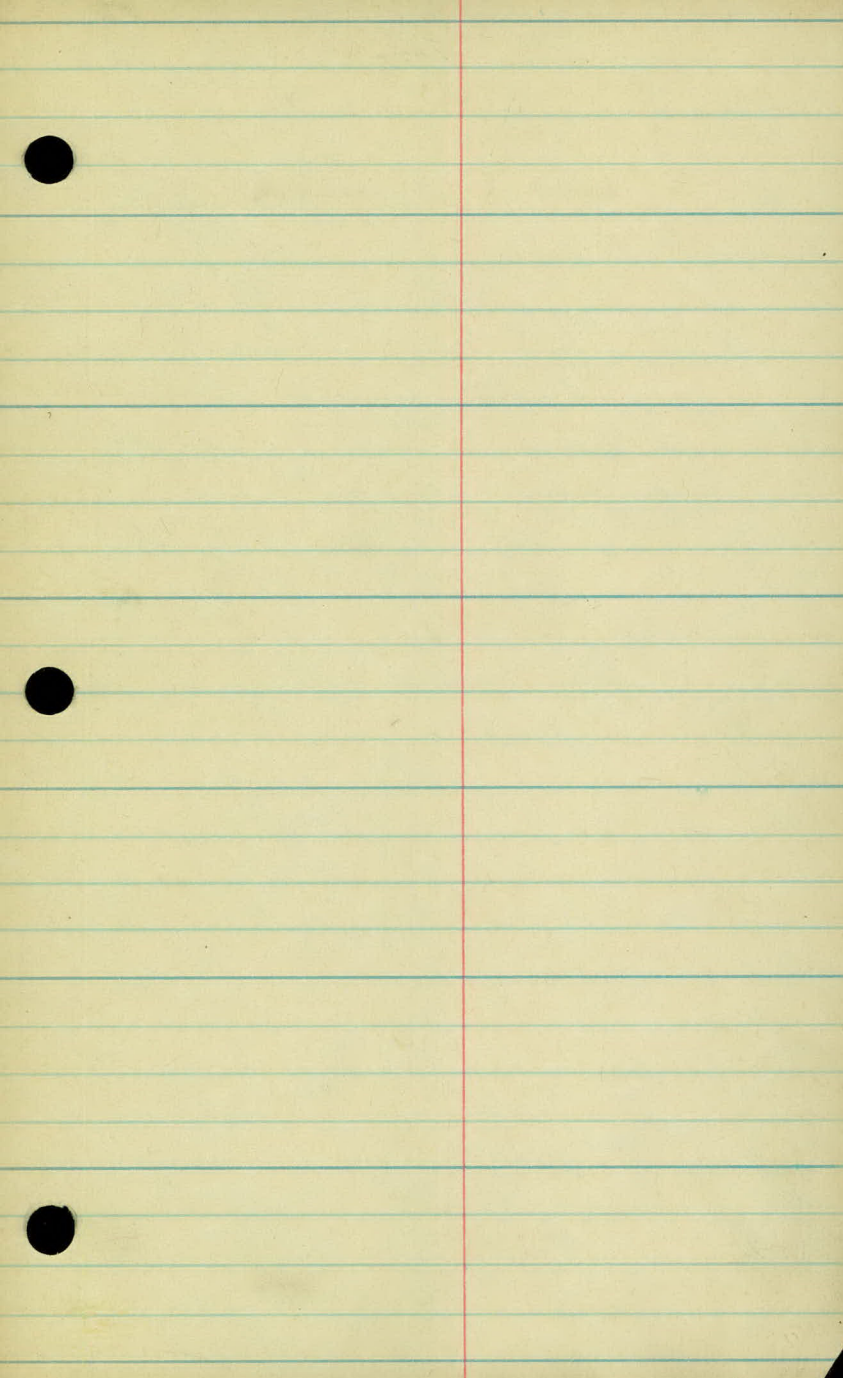
$$\frac{4.8}{80} / 10$$



Larpeur Ave
Grades
Profile

5

Sta		T. Grade	Grade
37+50	+4.8%		22.6
38			25.0
+50			27.4
39	B.V.C		29.8
+40	3000	-0.04	31.72
+75		-0.15	33.40
40		-0.27	34.60
+50	P.I M 0.6	-0.6	37.0
41	3000	-0.27	38.6
+22		-0.16	39.3
+63		-0.04	40.62
42		-0.04	41.8



Sta		T. Grade	Grade
29		-1.0 21.5	20.5
	⁷³⁰ +61	-2.56 23.9	^{21.00} 21.34
	+87	-3.50 24.9	21.4
30	^{PI} (M 4.0)	-4.0 25.5	21.5
	^{400 V.C.} +15	-3.42 24.9	21.48
	+50	-2.25 23.5	21.25
	+67	-1.77 22.82	21.05
	+87	-1.28 22.02	20.74
31		-1.0 21.50	20.5
	+08	-0.85 21.18	20.33
	+40	-0.36 19.90	19.54
	+70	-0.09 18.7	18.61
32	^{PI} (400 V.C.)	17.5	17.5
	(+42.05) B.V.C.	15.818	15.82
	+50	+0.01 15.5	15.51
33	^(400 V.C.)	+0.37 13.5	13.87
	+50	+1.28 11.50	12.78
34		+2.75 09.5	12.25
	^{PI} (+42.05) (M 4.4)	+4.4 07.818	12.22
	+50	+4.06 08.2	12.26
35		+2.22 10.6	12.82
	+30	+1.38 12.04	13.42
36		+0.19 15.4	15.59
	(+42.05) E.V.C.	17.42	17.42
	+50		17.8
37			20.2

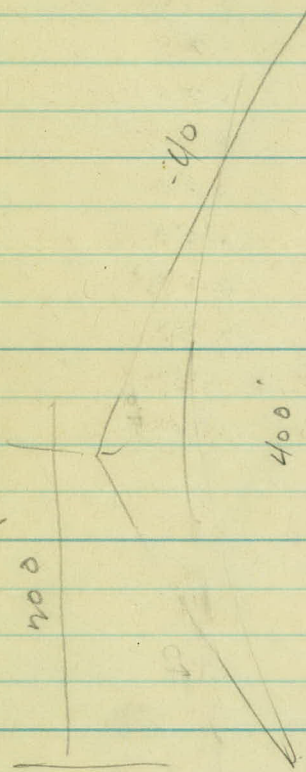
Borrow Pit Grades.

150	175	100	75	50	
18.0	18.75	18.50	18.75	19.0	
18.5	19.75	19.00	19.25	19.5	
18.8	19.0	19.30	19.55	19.8	
18.9	19.15	19.40	19.65	19.9	
19.0	19.25	19.50	19.75	20.0	
19.0	19.25	19.5	19.75	20.0	
18.75	19.00	19.25	19.5	19.75	
18.5	18.75	19.0	19.25	19.5	
18.25	18.5	18.75	19.0	19.25	
18.0	18.25	18.5	18.75	19.0	
17.8	18.05	18.3	18.55	18.8	
17.0	17.25	17.5	17.75	18.0	
16.1	16.35	16.6	16.85	17.1	
15.0	15.25	15.5	15.75	16.0	

3497

(3)

Sta		T Grade	Grade
20+50		-0.02 905.9	905.7
21		-0.45 906.7	906.75
+40		-0.72 907.34	906.62
+50	M =	-0.80 907.50	906.70
+80		-0.58 907.50	906.92
22		-0.45 907.50	907.05
+25	28	-0.31	907.19
+55	28	-0.18	907.32
+75	28	-0.11	907.39
23		-0.05	907.45
+35			907.50
(+50)	B.V.C	+0.00 907.50	907.50
+60		+0.0 907.5	907.52
24		+0.13 907.54	907.63
+30	400 V.C	+0.32 907.54	907.82
+75		+0.78 907.54	908.28
25		+1.12 907.54	908.62
+30		+1.62 907.54	909.12
(+50)	(P.I. M. 1.60)	+2.00 907.54	909.50
+60		+1.84 907.54	909.71
26		+1.12 907.54	910.62
+50		+0.5 907.54	912.0
27		+0.13 907.54	13.63
+50	E.V.C		15.5
28	B.V.C		17.5
+33		-0.11 18.82	18.71
+70		-0.49 20.3	19.81



$$\frac{4140}{1.0}$$

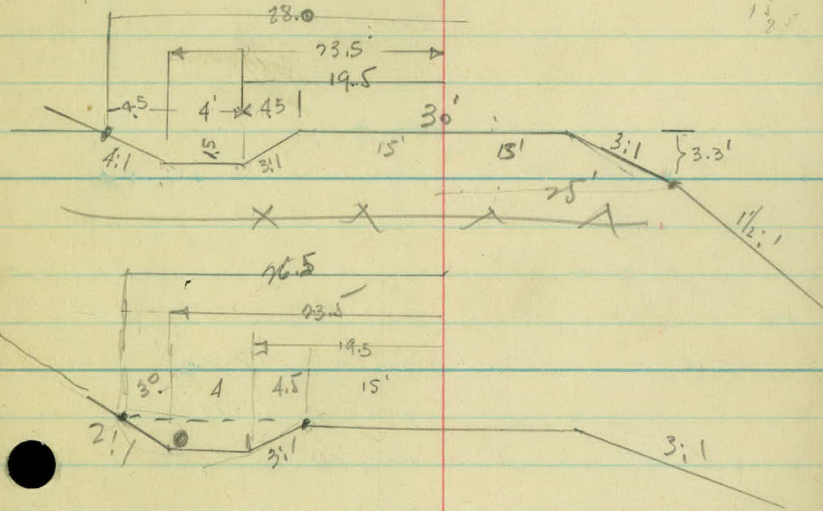
Sta		T. Grade	E. grade
8+50	400 KC. (PI M 0.30	+3.10	93.9
9		+0.17	94.3
+50		+0.08	94.7
10		+0.02	95.1
+50	E.V.C.		95.5
11			95.9
+50			96.3
12+50			96.7
+50	+ 0.80		97.1
13			97.5
+25			97.7
+53			97.92
+75			98.1
14			98.3
+40			98.62
15		Rev. Grade 3/10/36	99.1
+50	B.V.C.	+0.00	99.5
16		+0.03	99.9
+50		+0.10	900.3
17		+0.24	900.7
+50	M =	+0.40	901.1
18		+0.24	901.9
+60		+0.08	902.86
19		+0.03	903.50
+50 - E.V.C.		+0.00	904.30
+65		+0.00	904.54
+85		-0.02	904.86
20		-0.05	905.10

Sta. 24-35

1.5
2

23.5
4.5
28.0

1.5
2



3.3

Sta.	T	Tun Gr.	Grade	
0+0		85.0	85.0	
+18		85.9	85.9	
+23		86.15	86.15	
+31			86.55	
(0+50)	B.V.C.		87.50	
+0	-0.30	90.0	89.70	
+50 = (P.L.)	-1.3	92.5	91.30	✓
+79	-0.6	92.56	91.96	
+90	-0.43	92.58	92.15	
+00.3	-0.3	92.6	92.3	
+19.5	-0.1	92.64	92.54	
+76	-0.07	92.65	92.58	
+35	-0.03	92.67	92.64	
(2+50)	E.V.C.		92.7	
+67			92.73	
+00			92.8	
+50			92.9	
4			93.0	
+60			93.12	
5			93.2	
+72			93.34	
6			93.4	
+30			93.46	
(6+50)	B.V.C.		93.50	
+70		93.54	93.54	
7	+0.02	93.6	93.62	
8	+0.17	93.8	93.97	

Slope stakes.

Larpenteur Ave.

Prosperity to White Bear Ave.

W. H. Carlson -
June 3, 1936

Sta.	+	π	-	$\Sigma / \text{ov.}$	Grade.
B.M.	4.02	947.82		943.82	
41+40					939.6
41+63					940.6
42+0					941.8
	13.63	957.11	4.26	943.48	
+50					943.4
43					945.0
	12.04	959.75	9.40	947.71	
43					945.0
+24					945.8
+34					946.1
+65					947.1
44+0					948.2
+50					949.6

Wid. 10.0

8.7

 $\frac{7.7}{+0.4}$ $\frac{8.2}{+1.0} / 35.5$

Wid 5.0

7.2

 $\frac{6.8}{+0.4}$ $\frac{6.2}{+1.0} / 32.5$

6.0

 $37.4 / \frac{2.6}{+5.4}$ $\frac{5.8}{+0.2}$ $\frac{2.7}{+3.3} / 32.1$

13.7

 $36.9 / \frac{8.0}{+5.7}$ $\frac{7.6}{+0.1}$ $\frac{3.6}{+10.1} / 45.7$

12.1

 $\frac{12.2}{-0.1}$ $\frac{1.7}{+10.4} / 46.3$

14.8

 $47.2 / \frac{3.8}{+11.0}$

14.0

 $\frac{14.4}{+0.4}$ $\frac{4.0}{+10.0} / 45.5$

13.7

 $49.5 / \frac{1.7}{+12.0}$ $\frac{13.8}{-0.1}$ $\frac{9.0}{+4.7} / 34.9$

12.7

 $49.5 / \frac{0.7}{+12.0}$ $\frac{12.9}{-0.2}$ $\frac{9.4}{+3.3} / 32.1$

11.6

 $44.5 / \frac{2.1}{+9.5}$ $\frac{11.9}{-0.3}$ $\frac{9.9}{+1.7} / 28.9$

10.2

 $34.7 / \frac{8.6}{+4.6}$ $\frac{10.6}{-0.4}$ $\frac{10.1}{+0.1} / 25.7$

959.75

4540

950.7

450

51.5

46

51.9

+17

51.9

+39

520

+50

520

4740

51.7

450

51.1

48

502

+80

49.1

6.51

955.18

11.08

948.67

4940

480

49450 x

469

$$9.1 \quad 31.7 \overline{) 6.0} \quad +3.1$$

$$\frac{9.4}{-0.3}$$

$$\frac{9.7}{22.09} \overline{) 24.3}$$

$$8.3 \quad 34.7 \overline{) 3.7} \quad +4.6$$

$$\frac{8.4}{-0.1}$$

$$\frac{7.1}{+0.7} \overline{) 76.9}$$

$$7.9 \quad 42.7 \overline{) 2.7} \quad +0.7 \quad +8.6$$

$$\frac{7.9}{0}$$

$$\frac{6.9}{+1.0} \overline{) 27.5}$$

$$7.9 \quad 31.3 \overline{) 5.0} \quad +2.9$$

$$\frac{7.9}{0}$$

$$\frac{5.7}{+2.2} \overline{) 29.9}$$

$$7.8 \quad 30.5 \overline{) 5.3} \quad +7.8$$

$$\frac{7.7}{+0.1}$$

$$\frac{5.2}{+2.6} \overline{) 30.7}$$

$$7.8 \quad 41.5 \overline{) 4.02} \quad +8.0$$

$$\frac{7.7}{+0.1}$$

$$\frac{5.0}{+2.8} \overline{) 31.1}$$

$$8.1 \quad 38.9 \overline{) 1.4} \quad +6.7$$

$$\frac{8.1}{0}$$

$$\frac{4.5}{+2.6} \overline{) 32.7}$$

$$8.7 \quad 37.5 \overline{) 2.1} \quad +2.4 \quad +4.0 \quad +9.9 \quad +7.6 \quad +0.6$$

$$\frac{7.3}{-0.6}$$

$$\frac{7.7}{14.} \quad \frac{7.0}{18} \quad \frac{6.5}{+2.2} \overline{) 29.9} \quad \frac{6.5}{33}$$

$$9.6 \quad 32.7 \overline{) 6.0} \quad +2.6$$

$$\frac{10.3}{-0.7}$$

$$\frac{7.8}{+1.8} \overline{) 29.1}$$

$$10.7 \quad 80 \quad 30.9 \overline{) 8.0} \quad +9.2 \quad +11.0 \quad +1.1 \quad +0.4$$

$$\frac{11.1}{-0.4}$$

$$\frac{11.2}{11} \quad \frac{11.5}{15} \quad \frac{10.1}{17} \quad \frac{10.2}{+0.5} \overline{) 76.5} \quad \frac{10.0}{33}$$

$$7.2 \quad 31.3 \overline{) 4.3} \quad +2.9$$

$$\frac{7.5}{-0.3}$$

$$\frac{6.8}{+0.4} \overline{) 26.3}$$

$$8.3 \quad 32.5 \overline{) 4.8} \quad +4.8 \quad +5.7 \quad +8.6 \quad +1.2$$

$$\frac{8.3}{0}$$

$$\frac{8.4}{15} \quad \frac{7.0}{19} \quad \frac{6.8}{+1.5} \overline{) 28.5} \quad \frac{7.2}{33}$$

955.18

50 to

945.8

+50 x

44.7

51 to

43.6

+44

42.6

+52

42.4

T.P.

52 to

41.4

T.P.

3.71

945.67

13.22

941.96

+40

40.5

+57

40.1

+86.5

39.4

B.M.

3.70

942.97

9.4

$$347 \overline{) 47} \\ +47$$

$$9.1 \\ +0.3$$

$$7.6 \\ +1.8 \overline{) 29.1}$$

10.3

$$365 \overline{) 50} \quad 53 \quad 84 \quad 105 \\ +5.5 \quad 21 \quad 18 \quad 13$$

$$190 \\ +0.5$$

$$106 \\ 15$$

$$66 \\ 21$$

$$7.0 \\ +9.5 \overline{) 32.5}$$

11.6

$$37.1 \overline{) 5.8} \\ +5.8$$

$$113 \\ +0.3$$

$$7.4 \\ +4.2 \overline{) 33.9}$$

12.6

$$124 \\ +0.2$$

$$80 \\ +46 \overline{) 34.7}$$

12.8

$$359 \overline{) 7.6} \\ +5.2$$

$$125 \\ +0.3$$

$$178 \\ D.C. 15 \overline{) 25.5}$$

13.8

$$31.1 \overline{) 11.0} \\ +7.8$$

$$13.8 \\ 0.0$$

$$144 \\ D.C. 09 \overline{) 24.3}$$

5.2

$$25.5 \overline{) 5.2} \\ D.C. 15$$

$$52 \\ 0.0$$

$$54 \\ D.C. 13 \overline{) 25.1}$$

5.6

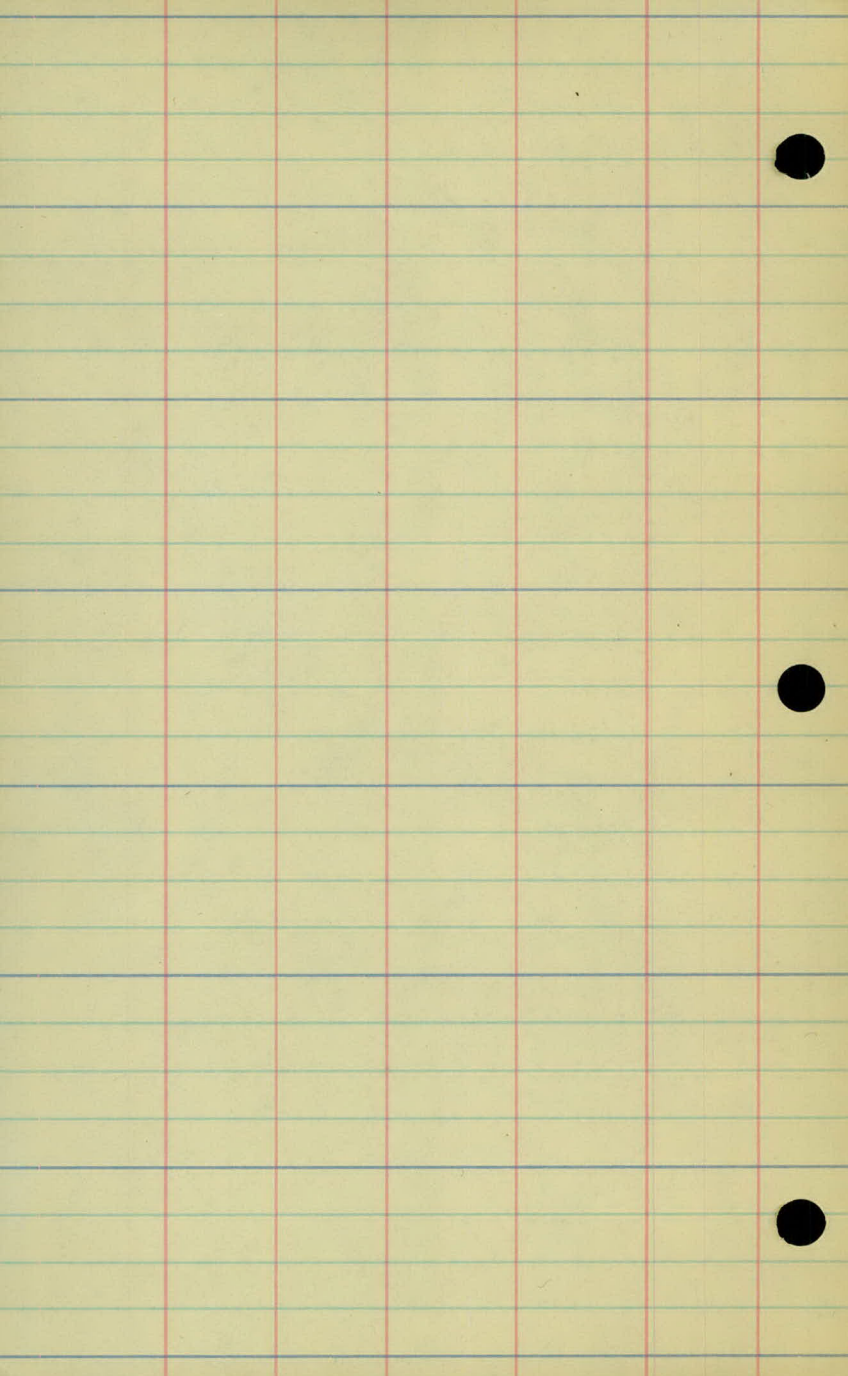
$$263 \overline{) 52} \\ +0.4$$

$$53 \\ +0.3$$

$$5.7 \\ 11$$

$$6.2 \\ D.C. 09 \overline{) 24.3} \quad 29 \\ 46$$

Top Fire Hyd.



Revised X-sec.
for 2:1 Slope
Sta. 25-29
Lt. and Rt.

0.65 911.65

911.00

75+30

909.12

1.90 901.76 11.29

899.86

+60

909.71

26+0

910.62

+50

912.0

17+0

913.63

+50

915.5

28

917.5

+33

918.7

+70

919.8

Nail in 12' oak 50' L. Sta. 75 to

$$68.28 \quad 31.9 \mid \frac{10.5}{-80}$$

$$+7.9 \quad 41.0 \mid \frac{5.1}{-12.0}$$

$$+8.8 \quad 39.8 \mid \frac{3.6}{-12.4}$$

$$+10.2 \quad 49.6 \mid \frac{7.1}{+17.3}$$

$$+11.8 \quad 58.2 \mid \frac{9.8}{-21.6}$$

$$+13.7 \quad 62.4 \mid \frac{10.0}{-23.7}$$

$$+15.7 \quad 63.6 \mid \frac{26}{-24.3}$$

$$+17.0 \quad 58.6 \mid \frac{4.8}{-21.8}$$

Back Widen

$$\begin{array}{r} 911.00 \\ - 39 \\ \hline 911.39 - X \\ 11.38 \\ 900.01 - 7.12 \\ \hline 3.3 \\ 903.31 X \end{array}$$

$$+6.4 \quad -7.7 \mid 43.2$$

$$+7.3 \quad -17.3 \mid 49.6$$

$$+8.7 \quad -19.3 \mid 53.6$$

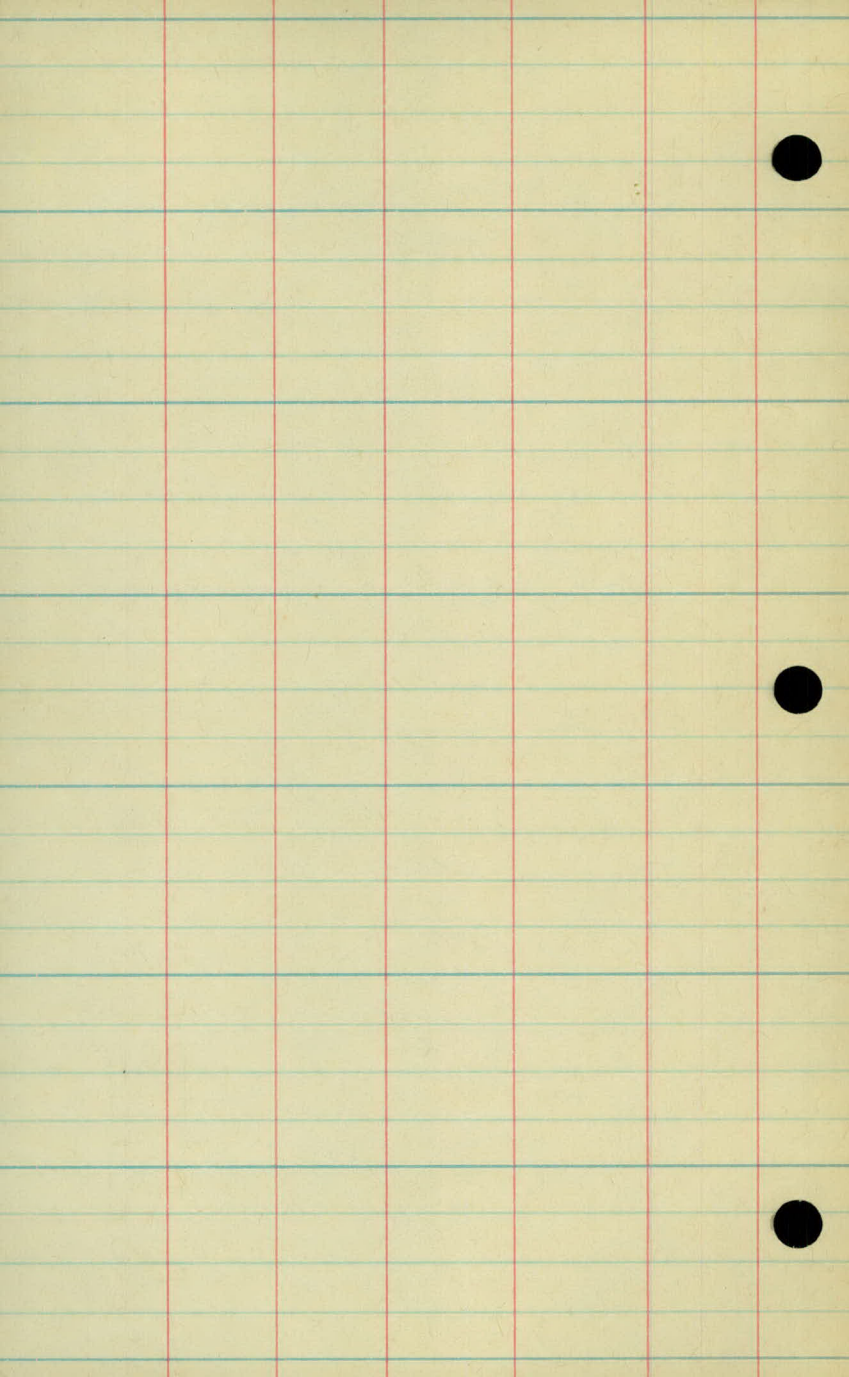
$$\text{Cul.} \quad +10.3 \quad -20.7 \mid 56.4$$

$$+12.2 \quad -19.4 \mid 53.8$$

$$+14.2 \quad -19.0 \mid 53.0$$

$$+6.00d \quad +15.4 \quad -17.1 \mid 49.2$$

$$-11.7 \mid 88.4$$



Revised X-sec.

2:1 slope.

2.11

923.74

921.63

1290

910.84

7.31

923.94

921.63

7.07

917.88

13.13

910.81

⁺⁴⁶
31776

^{19.5}
918.60

32

917.5

+50

915.5

33

913.9

+50

912.8

34

912.3

+50

912.3

$$+0.7 \quad 41.1 \overline{) 17.3} \\ \underline{-13.0}$$

$$-0.4 \quad 45.6 \overline{) 15.7} \\ \underline{-15.2}$$

3245 Bulw.

7'-short.

$$-2.4 \quad 45.6 \overline{) 17.7} \\ \underline{-15.3}$$

$$-4.0 \quad 47.2 \overline{) 17.6} \\ \underline{-13.6}$$

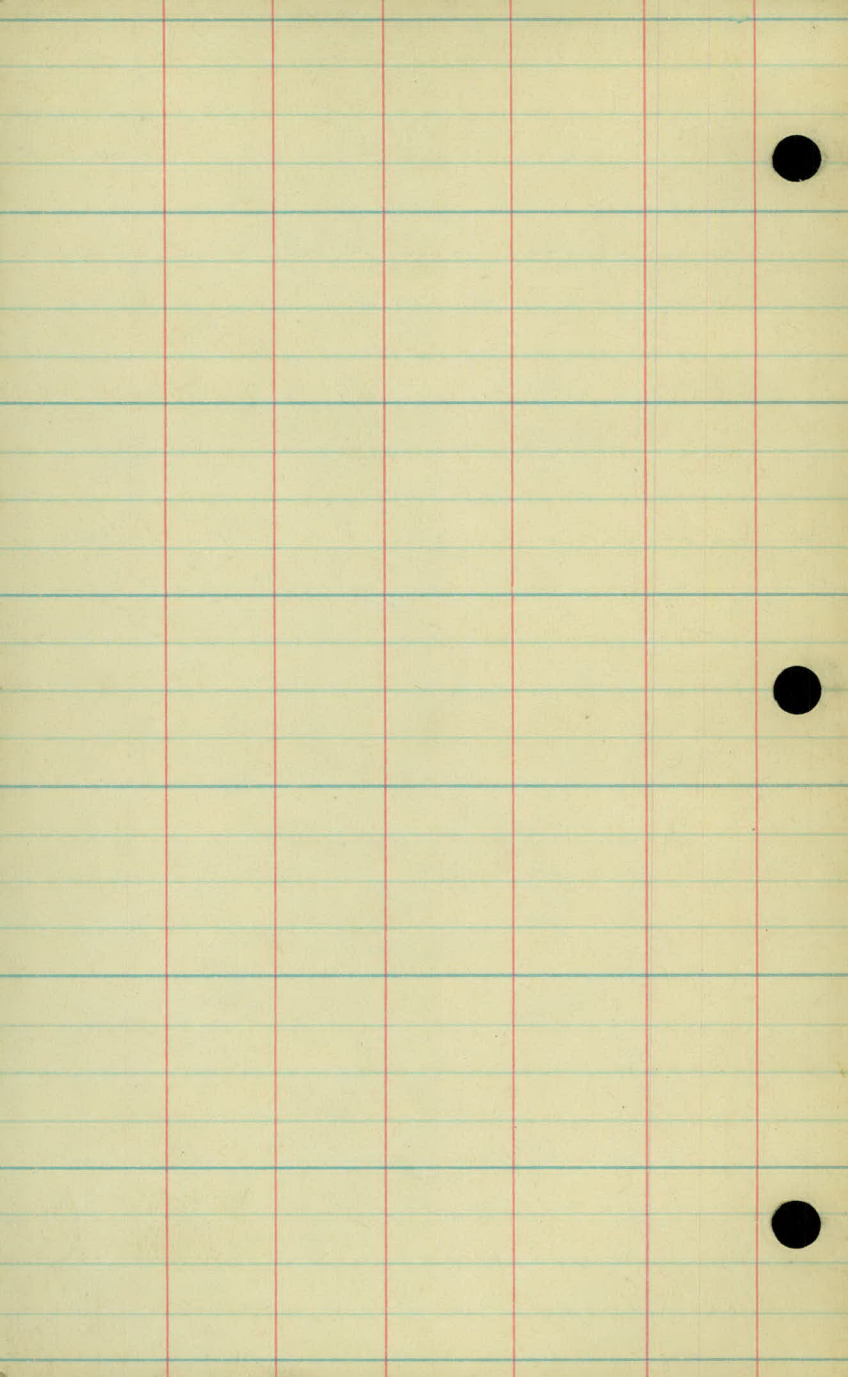
$$-5.1 \quad 36.4 \overline{) 15.8} \\ \underline{-10.7}$$

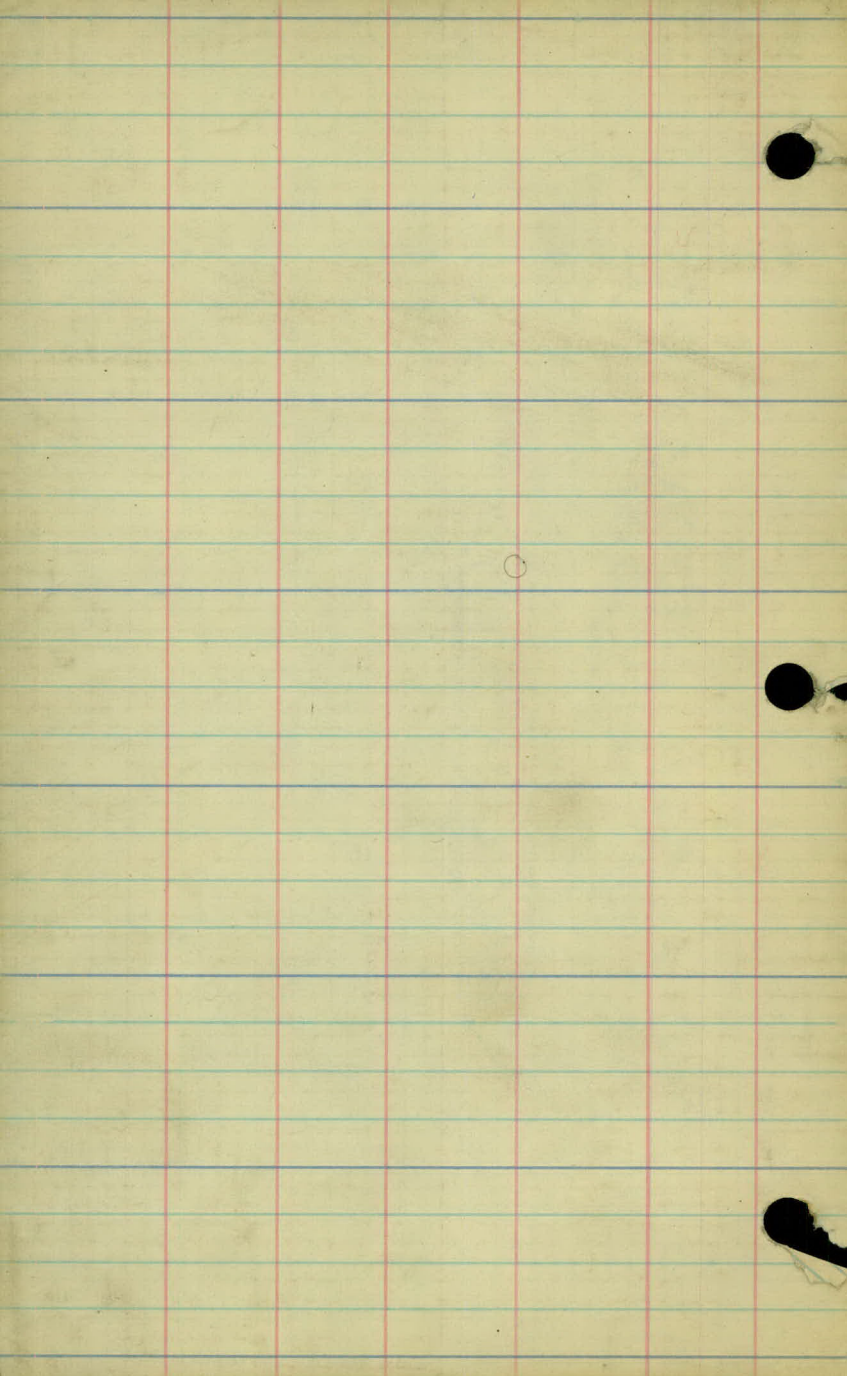
15.7

$$-8.6 \quad 31.0 \overline{) 13.6} \\ \underline{-8.0}$$

$$13.4 \overline{) 30.6} \\ \underline{-7.8}$$

$$5.6 \quad 44.8 \overline{) 10.8}$$





Proposed Cath Basin
@ 5th & White Bear Ave.

White Bear Minn.

Sh + T - Elev.

10.24 110.24

100.00 Fl. Line
me to sea

① ± White Bear Ave. 20. ft.

5.22

Top M. H. Ring

5.08

Fl. Line Main Pipe.

10.24

Rad. Pt. Top Curb. } W. Side.

5.03

✓ ✓ Gutter

5.79

✓ ✓ ± White Bear.

5.32

Rad. Pt. Top Curb East Side

5.04

✓ Curb at "

5.72

②

5.69

5.37

10.38

100.00

Gutter East Side

5.86'

5.72

6.06

7.7

2.0 deep = 8.86

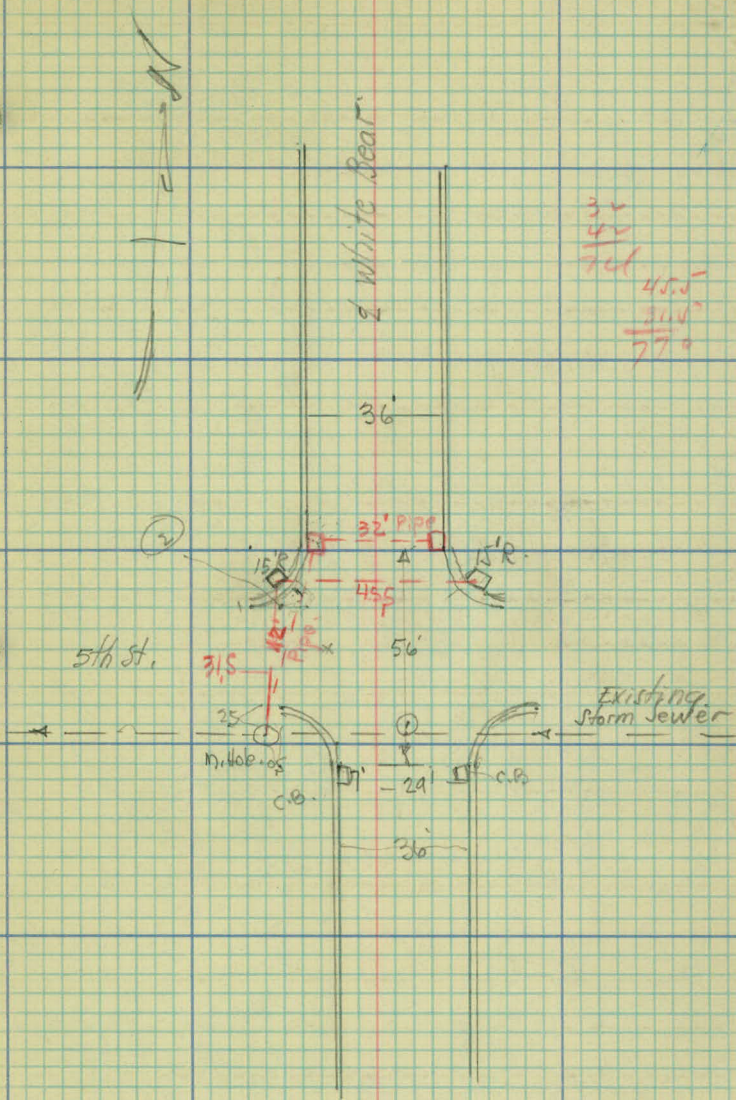
1 West Side

5.94

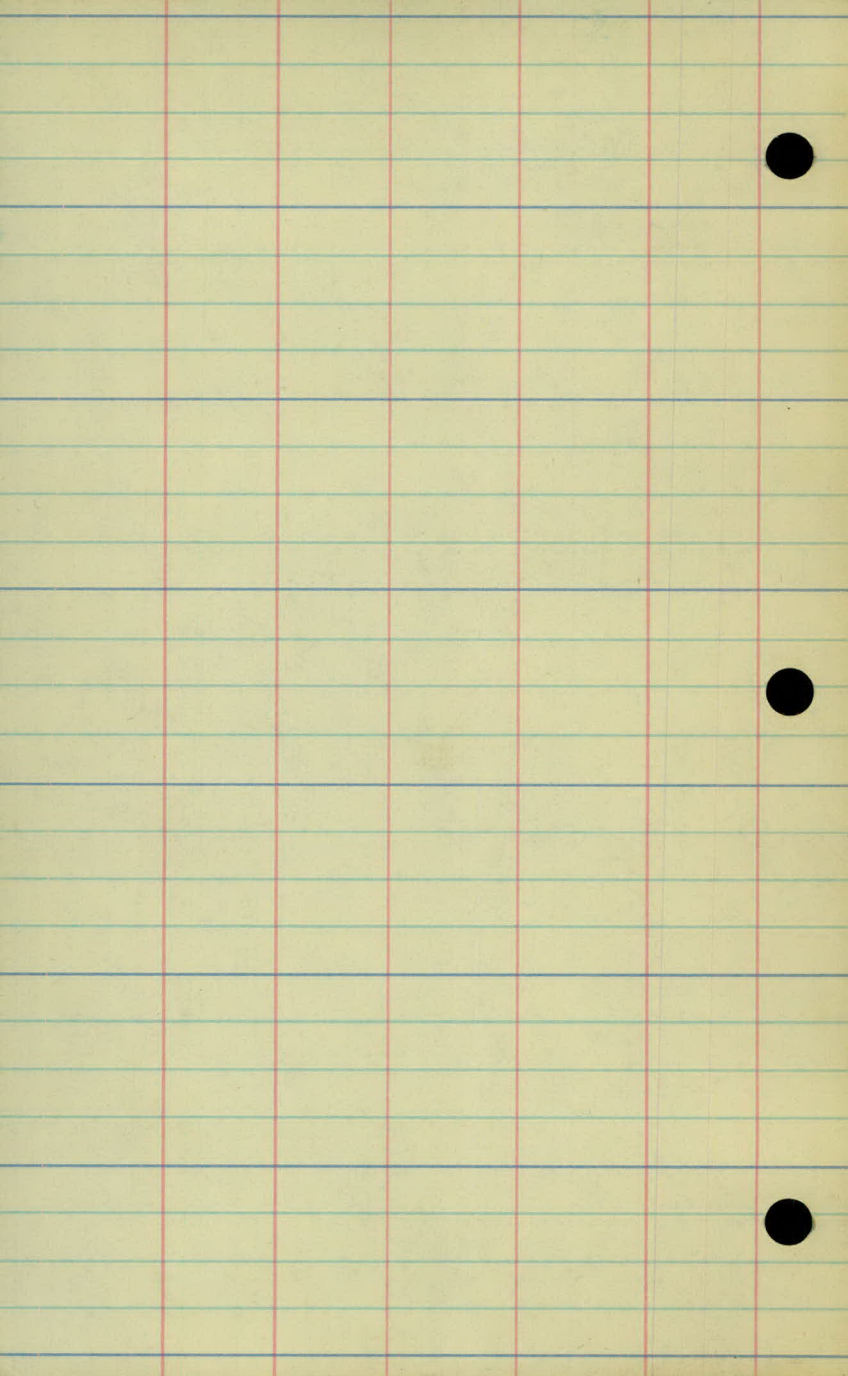
6.14

2.5 deep

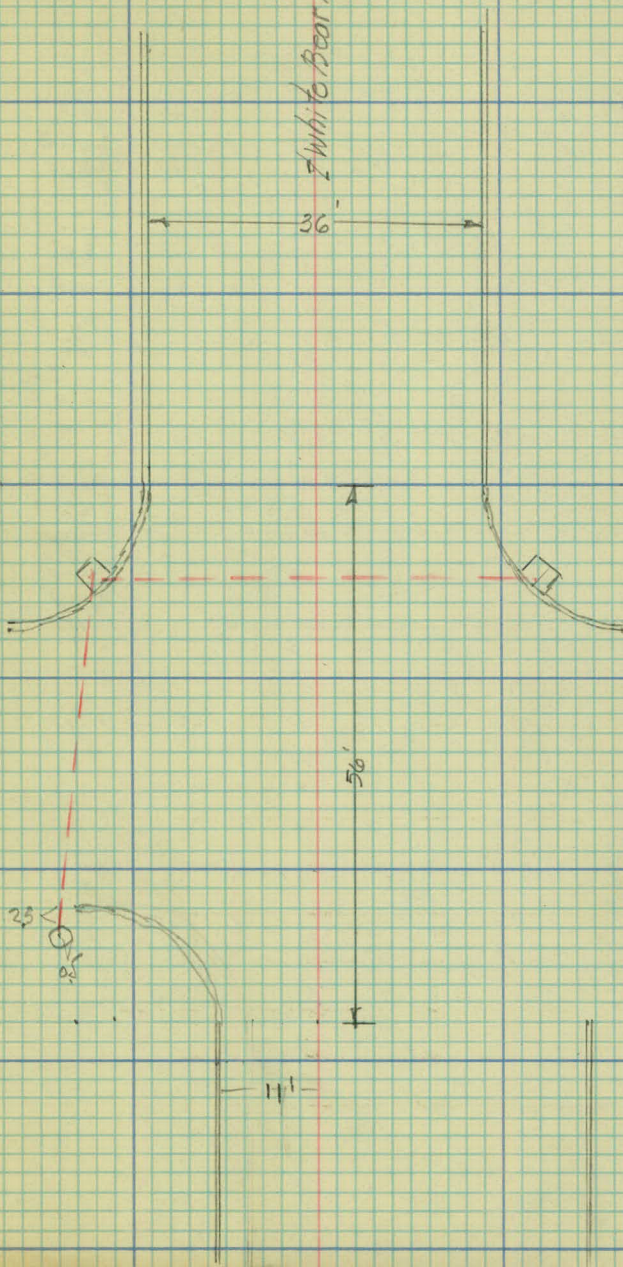
8.64

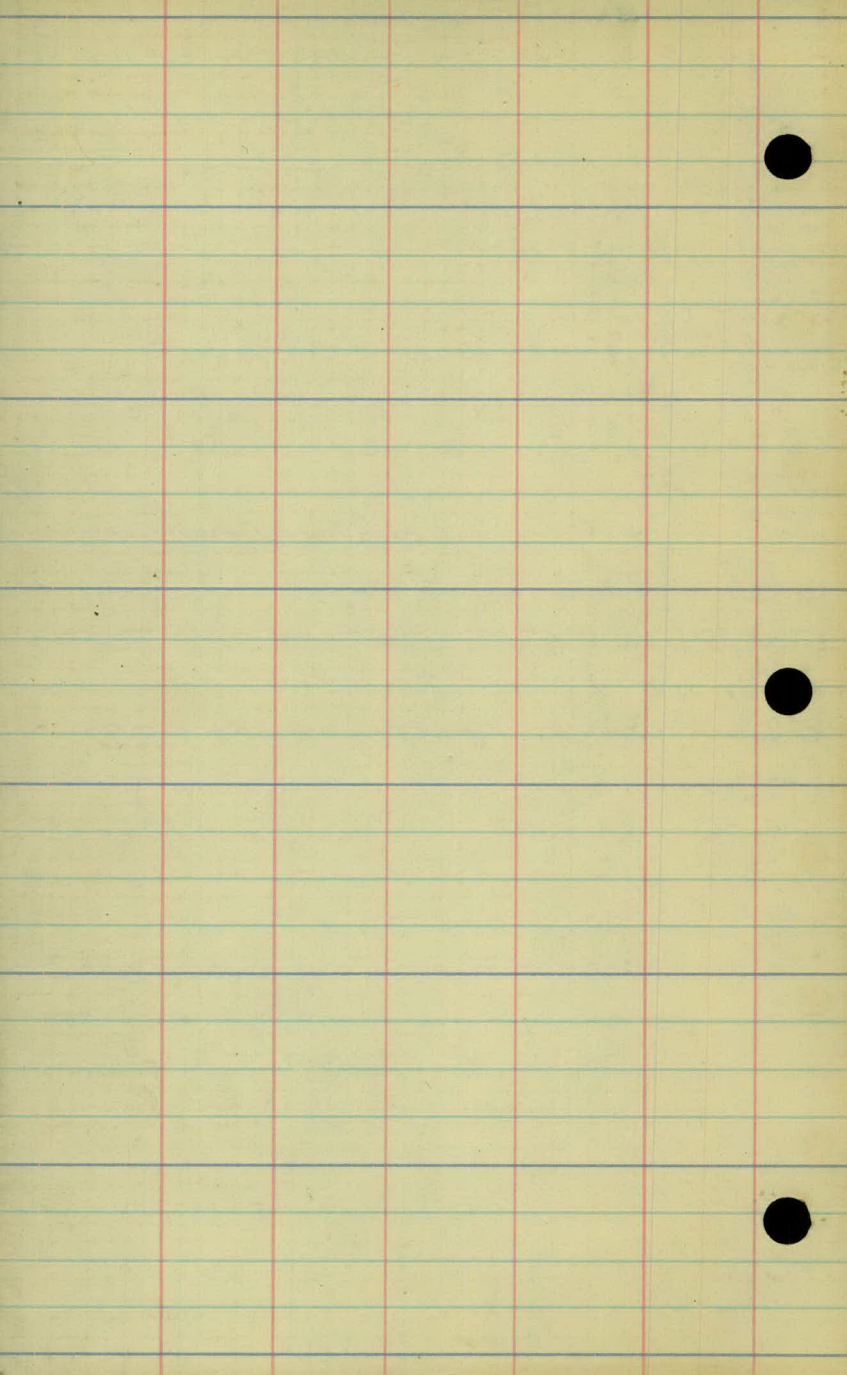


3.4
 4.0
 7.4
 45.5
 31.5
 77.0



White Bear Ave.





Gr. Rod

Lt

L

Rt

Larpentour Ave

Lake St. to R.P.

Sta	+	π	-	Grade
	7.66	892.60		885.94

0+0

0+18

85.9

0+23

86.15

0+35

86.7

0+50

87.5

1+0

89.7

1+50

91.3

1+79

92.0

1+90

92.5

(92.41)

Gr. Rod

Lt.

L

Rt.

2.4

$$\frac{8.7}{-1.3}$$

6.9

$$22.5 / \frac{9.4}{-2.5}$$

$$\frac{6.9}{10.1} = 1.18$$

$$\frac{4.5}{+1.4} / 30$$

6.1

$$25.5 / \frac{9.6}{-3.5}$$

$$\frac{-0.7}{6.8} / 1$$

$$\frac{4.2}{+1.9} / 30$$

3.9

5.

$$28 / \frac{9.9}{-2.0}$$

$$\frac{7.2}{23.3} / 1.1$$

$$\frac{4.2}{20.2} / 30$$

2.3

$$33 / \frac{19.8}{-8.5}$$

$$\frac{3.9}{-6.6}$$

$$\frac{5.9}{-2.6} / 25.8$$

1.6

$$\frac{7.6}{-6.0}$$

$$\frac{6.3}{-4.7} / 29.1$$

Sta	+	x	-	Grade
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
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100				

