

Dr 6 - Bk 110

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

_____PLAN_____Survey_____

_____FROST AVENUE_____

From Phalen Blvd _____ To White Bear Ave

Road Acc't. No. 10_____

Date Filed 2-17-37

File _____

Preliminary Notes
Complete

alignment

Frost Ave.

Phalen Blvd to White Bear Ave.

For Top. See Rd. Map Survey

W. H. Carlson
Dec. 15, 1936

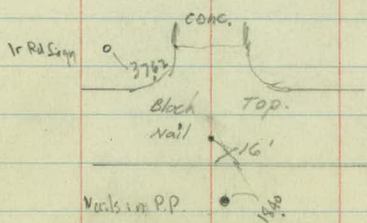
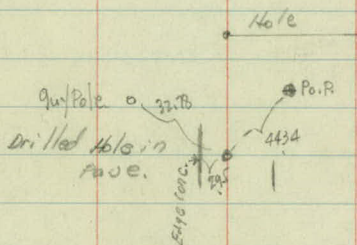
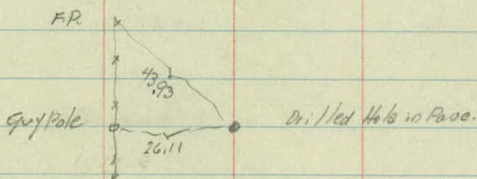
angle

Sta. Point Lt Rt

10+56.63		3° 20' 1/2	P.I. Sta 9+45.38
10		2° 29' 1/2	Δ 6° 41' Rt.
+50		1° 44' 1/2	D-3°
9		0° 59.5'	T. 111.53'
+50		0° 14.5'	L. 222.78
8+33.85		0° 00'	R= 1910.08

6+18.03	P.T.	8° 59'	P.I. 5+29.22
6		8° 04.9'	Δ 17° 58' Rt.
+50		5° 34.9'	D-10°
5		3° 04.9'	T. 90.86
+50		0° 34.9'	L. 179.67
4+38.36	P.C.	0° 00'	R= 573.69

0+00



Angle

Sta. Point Lt. Rt.

44+47.0 P.I. 0° 02°28'

From Rd. map
Survey.
70.60 intersection Ave.

18+05.10 Iron.
18+05.53 Mont

14+30.72 P.T. 11°-39.5'

14 10°-07.4'

P.I. 13+15.92

+50 7-37.4'

& 23°-19' Rt.

13 5°-07.4'

D-10°

+50 2-37.4'

T. 118.37

12 0°-07.4'

L. 233.17

11+97.55 R.C. 0°-00'

R= 573.09

III Steel Plate.

Guy Pole 20.67' 4302 P.P. Boat Spike.

angle.

Sta.	Point	Lt	Rt.
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97+48.6			
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70+96.85			
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58+00			
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	P.O.T.		
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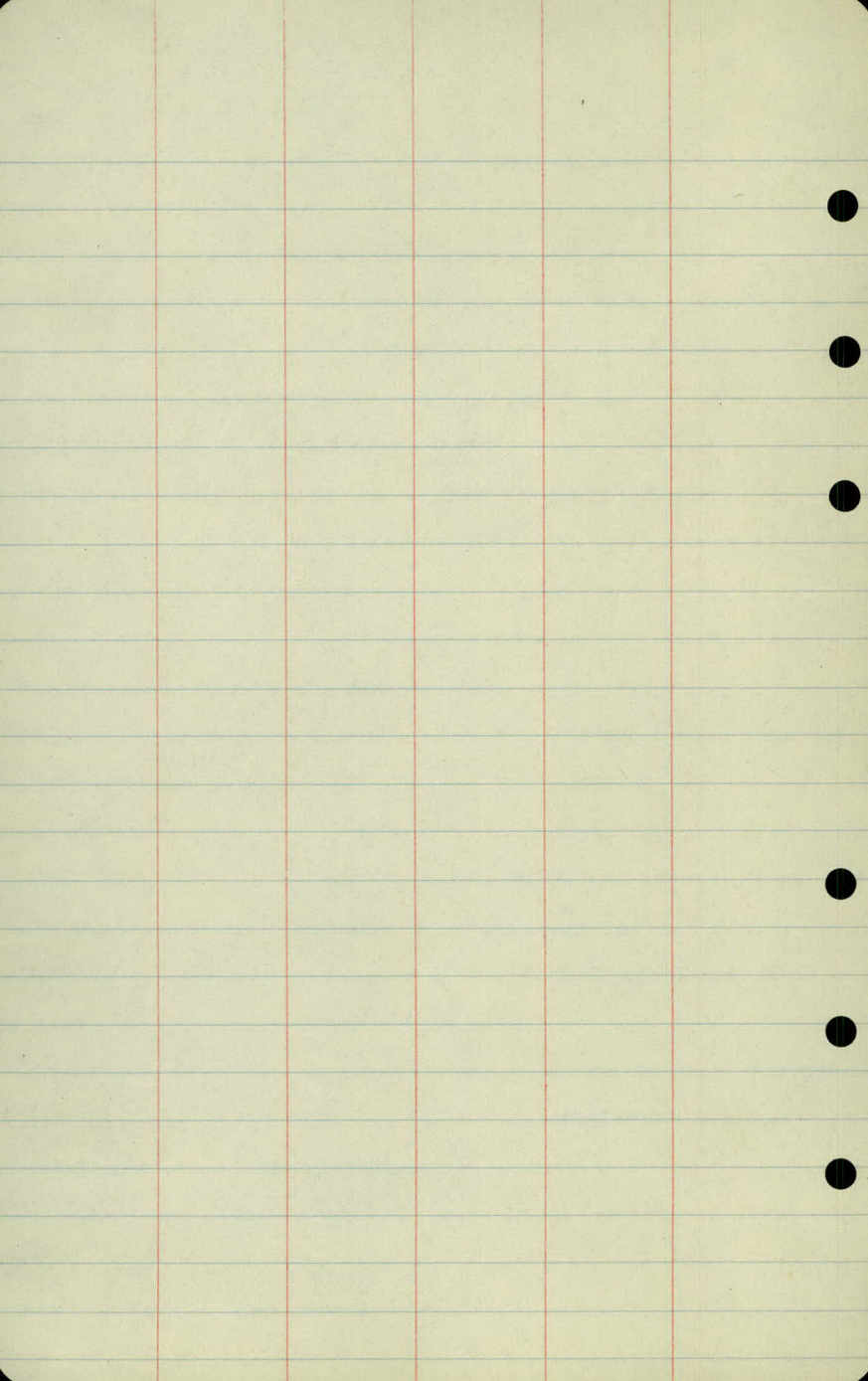
47+85.65	2		
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H

H mont.

92°
21

N.P.R.-R



Cross Sections

Frost Ave

Phalen Blvd to

Sta.	+	π	-	Elev.
B.M.	0.47	867.69		867.22
B.M.	4.65	868.65	3.69	864.00
0+00 =	E. Haden Blvd.			63.28
0+39.6	beg conc.			63.20
1+00				63.55
+50				63.75
2+0				63.85
3+0				63.65
4+00				63.70
+50				64.00
5+0				65.15
T.R.	9.00	875.37	2.28	866.37
+50				66.37

Lake Platen Bench

Nail in P.P. - 0+18

537

Dry Wall = $\frac{51}{28}$ $\frac{5.61}{16.2}$ $\frac{5.45}{16.2}$ $\frac{5.5}{16.2}$ $\frac{5.7}{50}$

Wall = $\frac{5.2}{23}$ $\frac{5.2}{10.9}$ $\frac{5.1}{10.9}$ $\frac{5.2}{10.9}$ $\frac{5.6}{32}$ $\frac{6.2}{50}$

Wall = $\frac{51}{22}$ $\frac{5.0}{10}$ $\frac{4.9}{10}$ $\frac{5.05}{10}$ $\frac{5.5}{30}$ $\frac{8.4}{29}$ $\frac{8.8}{50}$

Wall = $\frac{4.7}{22}$ $\frac{4.25}{10}$ $\frac{4.8}{10}$ $\frac{5.0}{10}$ $\frac{5.1}{22}$ $\frac{8.6}{34}$ $\frac{9.2}{50}$

Wall = $\frac{4.0}{22}$ $\frac{5.0}{10}$ $\frac{5.0}{10}$ $\frac{5.2}{10}$ $\frac{5.4}{12}$ $\frac{5.4}{21}$ $\frac{8.6}{32}$ $\frac{9.4}{50}$ L.O.

$\frac{10}{94}$ $\frac{5.2}{80}$ $\frac{6.4}{78}$ $\frac{6.4}{69}$ $\frac{4.6}{55}$ $\frac{2.8}{48}$ $\frac{3.3}{27}$ $\frac{4.65}{10}$ $\frac{4.95}{10}$ Curb $\frac{5.2}{10.3}$ $\frac{5.0}{17}$ $\frac{8.6}{28}$ $\frac{9.6}{50}$ L.O.

SHL. 2nd

$\frac{10}{80}$ $\frac{7.7}{66}$ $\frac{8.7}{41}$ $\frac{7.9}{41}$ $\frac{5.1}{35}$ $\frac{3.5}{35}$ $\frac{3.85}{70}$ $\frac{4.65}{70}$ $\frac{5.2}{11.8}$ $\frac{5.0}{19}$ $\frac{9.6}{34}$ $\frac{10.0}{50}$ ✓

SHL

$\frac{10}{70}$ $\frac{7.7}{55}$ $\frac{8.7}{50}$ $\frac{7.9}{42}$ $\frac{5.1}{29}$ $\frac{3.1}{23}$ $\frac{2.7}{10}$ $\frac{3.5}{10}$ $\frac{4.6}{12.5}$ $\frac{4.7}{20}$ $\frac{8.6}{31}$ $\frac{9.9}{50}$ L.O.

SHL

$\frac{10}{68}$ $\frac{1.38}{49}$ $\frac{1.50}{44}$ $\frac{1.47}{35}$ $\frac{8.6}{76}$ $\frac{8.53}{10}$ $\frac{9.00}{10}$ $\frac{10.13}{14.3}$ $\frac{10.1}{21}$ $\frac{15.7}{33}$ $\frac{17.5}{50}$ L.O.

Sta.	+	Δ	-	Elev.
		875.37		
640				67.72
+50				69.07
740				70.45
+50				71.79
T.P.	10.30	882.98	2.69	872.68
+85				72.66
(740)				72.68
8450				74.18
940				75.38
+50				76.70
1040				78.16
+56				79.73
				79.03
1140				81.16
	8.00	890.57	0.41	882.57

4. I R4

1.7
 $\frac{1.0}{65} \frac{1.8}{49} \frac{1.5}{36} \frac{1.5}{32} \frac{7.0}{16} \frac{7.2}{10} \frac{7.65}{11.7} \frac{8.1}{21} \frac{16.5}{38} \frac{16.8}{50} \text{Lo.}$

carb.

$\frac{1.0}{66} \frac{9.7}{50} \frac{13.9}{33} \frac{5.4}{16} \frac{5.95}{10} \frac{6.30}{10} \frac{6.50}{10} \frac{6.9}{19} \frac{16.2}{26} \frac{16.6}{50} \text{Lo.}$

$\frac{1.0}{63} \frac{2.0}{53} \frac{1.3}{40} \frac{11.8}{33} \frac{4.5}{29} \frac{4.80}{16} \frac{4.72}{10} \frac{4.9}{10} \frac{5.3}{29} \frac{15.0}{37} \frac{16.3}{50} \text{Lo.}$

3.10

$\frac{6.0}{61} \frac{5.0}{50} \frac{6.8}{33} \frac{7.0}{21} \frac{3.4}{15} \frac{3.60}{10} \frac{3.58}{10} \frac{3.44}{10} \frac{3.8}{22} \frac{12.3}{27} \frac{14.3}{50} \text{Lo.}$

F37'

10.7

$\frac{0.5}{78} \frac{2.0}{59} \frac{4.5}{56} \frac{10.2}{35} \frac{11.5}{22} \frac{11.8}{20} \frac{10.3}{15} \frac{10.42}{10} \frac{10.32}{10} \frac{10.15}{10} \frac{9.9}{24} \frac{9.8}{50}$

carb.

$\frac{0.3}{78} \frac{1.3}{60} \frac{2.4}{33} \frac{3.4}{26} \frac{9.8}{23} \frac{10.0}{19} \frac{8.9}{15} \frac{8.17}{10} \frac{8.8}{10} \frac{8.76}{10} \frac{9.7}{50}$

$\frac{0.6}{62} \frac{1.7}{54} \frac{4.8}{33} \frac{8.0}{23} \frac{8.5}{18} \frac{7.4}{15} \frac{7.4}{10} \frac{7.60}{10} \frac{7.5}{10} \frac{7.1}{15} \frac{10.9}{24} \frac{10.4}{20} \frac{11.2}{50}$

6.7

$\frac{0.1}{72} \frac{1.5}{52} \frac{6.3}{31} \frac{7.1}{26} \frac{7.3}{23} \frac{5.8}{19} \frac{6.05}{15} \frac{6.28}{10} \frac{6.22}{10} \frac{6.3}{15} \frac{12.0}{27} \frac{12.0}{25} \frac{13.7}{50}$

$\frac{0.6}{65} \frac{2.7}{45} \frac{7.2}{29} \frac{7.2}{26} \frac{4.5}{22} \frac{4.63}{16} \frac{4.82}{10} \frac{4.82}{10} \frac{4.7}{15} \frac{12.7}{29} \frac{13.5}{50}$

3.3

$\frac{0.7}{65} \frac{4.0}{60} \frac{5.7}{50} \frac{8.0}{37} \frac{9.0}{29} \frac{9.5}{26} \frac{3.2}{15} \frac{3.15}{10} \frac{3.23}{10} \frac{3.1}{15} \frac{9.7}{26} \frac{10.0}{29} \frac{8.8}{26} \frac{6.5}{42} \frac{6.2}{50}$

$\frac{0.4}{68} \frac{10.7}{29} \frac{10.3}{31} \frac{2.0}{17} \frac{1.86}{10} \frac{1.82}{10} \frac{1.7}{10} \frac{1.5}{21} \frac{8.3}{27} \frac{8.8}{29} \frac{7.1}{31} \frac{2.7}{43} \frac{6.5}{50}$

Sta.	+	$\bar{x}$	-	Elev
		890.57		
11+50				82.77
12				84.82
+50				86.90
T.P.	10.70	899.76	1.51	889.06
13				89.06
+50				91.16
14				93.26
+50				95.41
T.P.				
15				97.61
T.P.	10.90	910.59	0.07	899.69
+50				99.69
16				01.77
+50				03.45

[illegible]

	53	7.5	$\frac{170}{55}$	$\frac{194}{44}$	$\frac{181}{33}$	$\frac{166}{32}$	$\frac{52}{16}$	$\frac{782}{10}$	$\frac{780}{-}$	$\frac{775}{104}$	$\frac{80}{15}$	$\frac{16.2}{29}$	$\frac{16.4}{35}$	$\frac{13.0}{50}$
2nd														
Tie	76	67	55	44	33	F. 32								

T_p	4.7	6.6	16.6	16.4	$F_2 = 23.58$	5.8	5.8	6.1	6.1	14.6	14.6	12.8
T_{ie}	7.3	6.5	5.0	3.8	3.0	23.17	10	11.8	16	3.1	3.6	5.0

[illegible]

176	135	92	78	176	176	9.5	102	10.70	11.23	11.0	146	150	18.0
76	68	61	46	72	28	27	21	10	12.7	17	24	31	50

74	96	111	110	79	803	860	913	87	113	120	115	140
89	38	34	31	27	21	10	126	17	23	30	31	50

$$F = \frac{68}{49} \quad \frac{59}{34} \quad \frac{84}{78} \quad \frac{84}{76} \quad \frac{5.8}{70} \quad \frac{6.00}{10} \quad \frac{6.50}{-} \quad \frac{6.9}{6.88} \quad \frac{6.4}{12.2} \quad \frac{8.6}{17} \quad \frac{9.0}{23} \quad \frac{9.8}{35} \quad \frac{9.8}{50}$$

$$F = \frac{58}{61} \frac{141}{43} \frac{38}{33} \frac{65}{28} \frac{64}{25} \frac{43}{20} \frac{40}{10} \frac{43}{10} \frac{45}{10} \frac{44}{16} \frac{70}{22} \frac{70}{23} \frac{42}{29} \frac{30}{41} \frac{29}{50}$$

$$\begin{array}{r} 93.2 \\ F \end{array} \begin{array}{r} 3.3 \\ 33 \end{array} \begin{array}{r} 4.8 \\ 28 \end{array} \begin{array}{r} 4.82 \cdot 0.3 \\ 26 \end{array} \begin{array}{r} 2.10 \\ 20 \end{array} \begin{array}{r} 2.15 \\ 10 \end{array} \begin{array}{r} 2.10 \\ 16 \end{array} \begin{array}{r} 4.8 \\ 22 \end{array} \begin{array}{r} 4.4 \\ 25 \end{array} \begin{array}{r} 0.3 \\ 32 \end{array} \begin{array}{r} 1.1 \\ 50 \end{array}$$

$$F = \frac{13.6}{90} \frac{10.8}{63} \frac{10.8}{31} \frac{12.7}{26} \frac{12.7}{25} \frac{10.6}{20} \frac{10.85}{10} 15.90 \frac{10.5}{10} \frac{10.07}{15} \frac{13.4}{22} \frac{13.5}{28} \frac{10.5}{29} \frac{11.3}{5}$$
[illegible]

$F = \frac{12.4}{11} \frac{8.0}{76} \frac{7.2}{62} \frac{7.2}{28} \frac{9.4}{23} \frac{9.4}{21} \frac{7.2}{75} \frac{7.0}{10} \frac{7.1}{7.14} \frac{7.32}{16} \frac{7.0}{15} \frac{8.94}{20} \frac{8.94}{22} \frac{3.4}{35} \frac{2.1}{50}$

Sta	+	π	-	Elev.
		910.59		
17				04.86 .
+50	+50			05.74 .
18				06.29 .
B.M			4.24	906.35

4. £ 184.

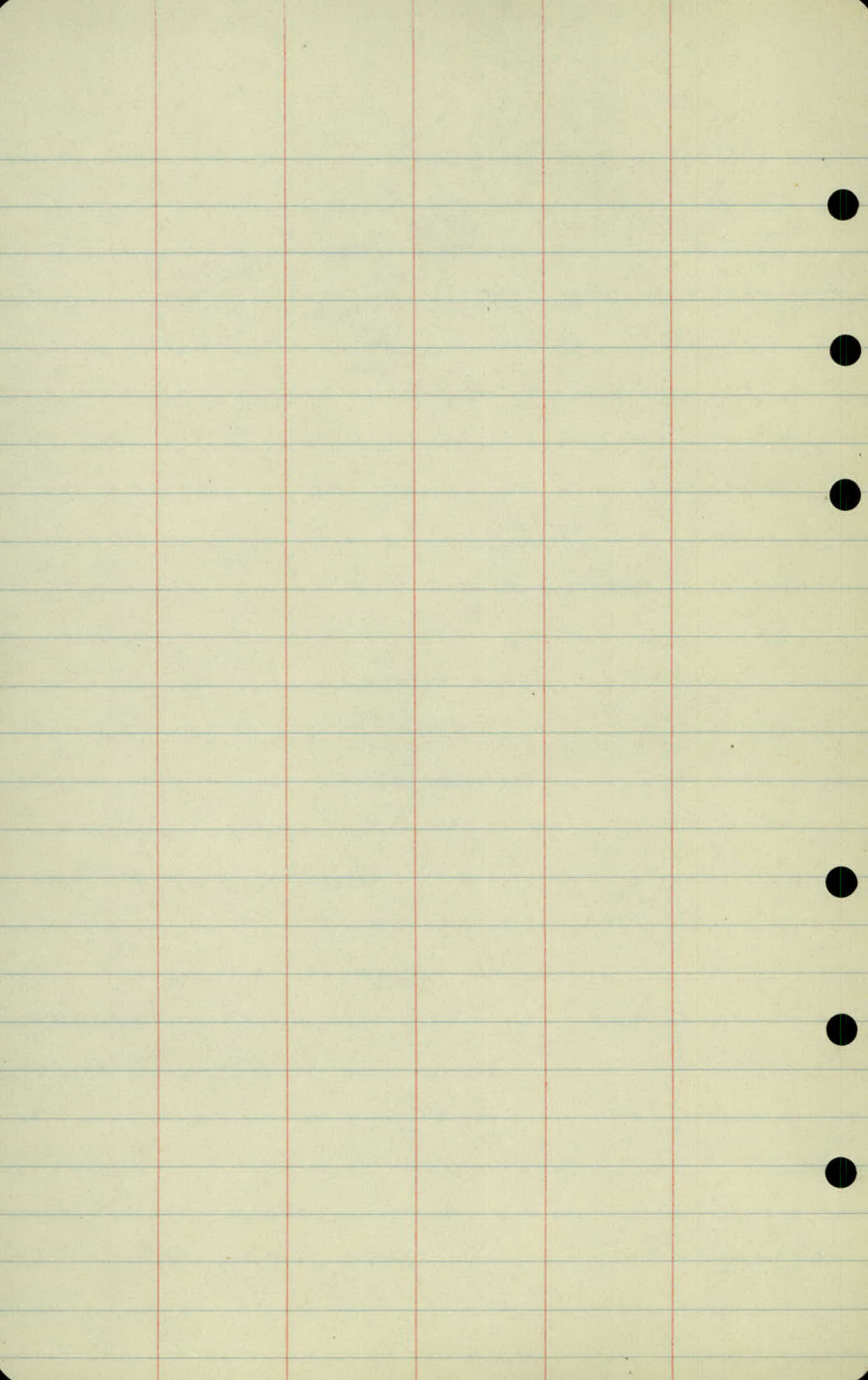
$$F = \frac{13.4}{119} \frac{16.0}{98} \frac{7.6}{78} \frac{6.1}{59} \frac{5.6}{29} \frac{8.0}{23} \frac{7.9}{21} \frac{5.9}{15} \frac{5.85}{10} \frac{5.7}{5.73} \frac{5.83}{10} \frac{5.7}{16} \frac{7.7}{21} \frac{8.0}{22} \frac{5.1}{35} \frac{4.7}{43} \frac{4.2}{50}$$

4.9

$$F = \frac{16.3}{128} \frac{116.0}{99} \frac{4.5}{61} \frac{20.1}{28} \frac{4.9}{23} \frac{4.9}{15} \frac{4.6}{10} \frac{4.85}{10} \frac{4.7}{16} \frac{5.07}{22} \frac{2.0}{23} \frac{4.5}{30} \frac{4.0}{50}$$

$$F = \frac{16.0}{105} \frac{14.0}{112} \frac{5.6}{67} \frac{5.3}{50} \frac{4.5}{28} \frac{6.1}{25} \frac{4.1}{23} \frac{4.3}{19} \frac{4.4}{16} \frac{4.30}{4.30} \frac{4.40}{10} \frac{4.70}{16} \frac{5.9}{22} \frac{5.9}{24} \frac{1.8}{33} \frac{1.8}{50}$$

(906.26) Top Iron Mon.



X-Sections contd

Frost Ave..

Sta.	+	-	Elev.
B.M.	4.26	910.61	906.35
18 +50			906.7
19			06.6
+50			06.2
20			05.6
+50			05.0
21			04.3
+41			03.7
+70			03.3
22 +20			02.8
+50			02.5
23			01.9
I.P	10.05	911.40	901.35

25. 2 25

40

$\frac{13.6}{100.0}$ $\frac{11.4}{74.0}$ $\frac{8.3}{6.50}$ $\frac{5.8}{4.50}$ $\frac{5.7}{2.50}$ $\frac{4.5}{2.0}$ $\frac{4.0}{1.00}$ 3.95 $\frac{4.0}{1.0}$ $\frac{5.2}{1.90}$ $\frac{5.4}{2.50}$ $\frac{2.2}{33.0}$ $\frac{0.0}{44}$ $\frac{+0.}{50}$

$\frac{14.4}{10.00}$ $\frac{12.7}{71.0}$ $\frac{9.5}{62.0}$ $\frac{7.6}{27.0}$ $\frac{4.2}{2.0}$ $\frac{4.1}{2.0}$ $\frac{4.0}{1.00}$ $\frac{4.1}{1.0}$ $\frac{3.9}{1.50}$ $\frac{6.0}{2.00}$ $\frac{6.0}{2.50}$ $\frac{4.1}{34.0}$ $\frac{2.9}{42.0}$ $\frac{1.0}{50.0}$

$\frac{7.3}{100.0}$ $\frac{7.6}{73.0}$ $\frac{9.1}{4.0}$ $\frac{8.6}{29.0}$ $\frac{5.0}{1.0}$ $\frac{4.5}{1.00}$ $\frac{4.4}{1.0}$ $\frac{4.5}{1.0}$ $\frac{4.6}{1.40}$ $\frac{7.8}{23.0}$ $\frac{8.4}{30.0}$ $\frac{8.4}{50.0}$

$\frac{5.7}{100}$ $\frac{5.5}{84.0}$ $\frac{7.2}{27.0}$ $\frac{5.7}{19.0}$ $\frac{5.1}{1.0}$ $\frac{5.0}{1.0}$ $\frac{5.1}{1.0}$ $\frac{5.2}{1.60}$ $\frac{8.4}{22.0}$ $\frac{8.9}{29.0}$ $\frac{8.0}{31.0}$ $\frac{8.9}{5.0}$

$\frac{6.3}{1.00}$ $\frac{6.3}{84.0}$ $\frac{7.6}{30.0}$ $\frac{6.8}{27.0}$ $\frac{6.8}{22.0}$ $\frac{5.8}{2.0}$ $\frac{5.7}{1.0}$ $\frac{5.6}{1.0}$ $\frac{5.7}{1.0}$ $\frac{5.6}{1.60}$ $\frac{8.2}{2.2}$ $\frac{8.2}{2.6}$ $\frac{6.8}{32.0}$ $\frac{8.5}{5.0}$

$\frac{6.7}{100}$ $\frac{6.0}{3.0}$ $\frac{7.2}{21.0}$ $\frac{7.1}{23}$ $\frac{6.3}{19.0}$ $\frac{6.4}{1.0}$ $\frac{6.3}{1.0}$ $\frac{6.4}{1.0}$ $\frac{6.4}{1.60}$ $\frac{9.2}{2.2}$ $\frac{9.8}{2.80}$ $\frac{9.5}{3.0}$ $\frac{10.9}{5.0}$

$\frac{8.3}{100}$ $\frac{8.0}{39.0}$ $\frac{9.1}{28.0}$ $\frac{8.8}{24.0}$ $\frac{6.5}{19.0}$ $\frac{6.5}{14.0}$ $\frac{7.0}{1.00}$ $\frac{6.9}{1.0}$ $\frac{7.0}{1.0}$ $\frac{7.2}{1.5}$ $\frac{1.3}{2.5}$ $\frac{1.4}{3.6}$ $\frac{15.5}{54.0}$

$\frac{15.8}{100}$ $\frac{15.6}{38.0}$ $\frac{7.8}{19.0}$ $\frac{7.4}{1.0}$ $\frac{7.3}{1.0}$ $\frac{7.4}{1.0}$ $\frac{7.7}{1.40}$ $\frac{17.6}{23.0}$ $\frac{18.3}{50.0}$

$\frac{11.6}{100.0}$ $\frac{11.5}{72.0}$ $\frac{14.0}{79.0}$ $\frac{16.8}{34.0}$ $\frac{8.5}{18.0}$ $\frac{7.9}{1.00}$ $\frac{7.8}{1.0}$ $\frac{7.8}{1.0}$ $\frac{12.2}{16.0}$ $\frac{19.9}{27.0}$ $\frac{13.2}{39.0}$ $\frac{13.2}{39.0}$ $\frac{12.6}{50.0}$

$\frac{9.0}{100}$ $\frac{16.6}{36.0}$ $\frac{8.2}{19.0}$ $\frac{8.2}{1.0}$ $\frac{8.1}{1.0}$ $\frac{8.2}{1.0}$ $\frac{8.1}{1.0}$ $\frac{10.3}{16.0}$ $\frac{10.5}{2.1}$ $\frac{8.2}{2.5}$ $\frac{8.3}{3.4}$ $\frac{8.3}{5.0}$

$\frac{11.1}{100}$ $\frac{9.6}{34.0}$ $\frac{10.8}{3.0}$ $\frac{10.8}{26.0}$ $\frac{8.8}{2.0}$ $\frac{8.8}{1.0}$ $\frac{8.7}{1.0}$ $\frac{8.8}{1.0}$ $\frac{8.8}{1.0}$ $\frac{10.8}{2.0}$ $\frac{10.9}{2.40}$ $\frac{8.4}{3.1}$ $\frac{8.1}{5.0}$

	+	H.I.	-	Elev
		911.40		
23	+50			01.4
24				00.8
	+50			00.3
25				99.8
T.P.	3.72	902.93	12.19	899.21
	+50			99.2
26				98.6
	+50			98.0
27				97.5
	+50			97.0
28				96.4
	+50			96.0
29				95.8
T.P.	3.57	899.31	7.19	895.74

$$\frac{12.4}{100} \quad \frac{12.6}{740} \quad \frac{110}{320} \quad \frac{117}{23} \quad \frac{117}{25} \quad \frac{101}{19} \quad \frac{101}{10} \quad \frac{101}{10} \quad \frac{10.2}{16} \quad \frac{12.5}{220} \quad \frac{126}{27} \quad \frac{12.5}{50}$$

$$\frac{12.4}{100} \quad \frac{112}{330} \quad \frac{123}{27} \quad \frac{12.7}{25} \quad \frac{110}{19} \quad \frac{107}{10} \quad \frac{10.6}{10} \quad \frac{10.7}{17} \quad \frac{11.2}{17} \quad \frac{13.5}{280} \quad \frac{13.2}{50}$$

$$\frac{140}{100} \quad \frac{119}{75} \quad \frac{118}{310} \quad \frac{125}{28} \quad \frac{125}{21} \quad \frac{114}{200} \quad \frac{112}{10} \quad \frac{111}{10} \quad \frac{112}{10} \quad \frac{114}{14} \quad \frac{13.8}{210} \quad \frac{13.5}{250} \quad \frac{110}{33} \quad \frac{108}{41} \quad \frac{65}{50} \quad \frac{37}{50} \quad \frac{1.0}{50}$$

$$\frac{13.6}{100} \quad \frac{119}{30} \quad \frac{12.8}{28} \quad \frac{12.2}{21} \quad \frac{11.7}{10} \quad \frac{11.6}{10} \quad \frac{11.1}{10} \quad \frac{11.7}{16} \quad \frac{140}{20} \quad \frac{145}{270} \quad \frac{126}{32} \quad \frac{101}{41} \quad \frac{12.2}{50} \quad \frac{32}{75}$$

$$\frac{56}{100} \quad \frac{52}{70} \quad \frac{46}{30} \quad \frac{21}{27} \quad \frac{51}{24} \quad \frac{41}{19} \quad \frac{38}{10} \quad \frac{37}{10} \quad \frac{38}{10} \quad \frac{38}{16} \quad \frac{57}{24} \quad \frac{52}{29} \quad \frac{22}{42} \quad \frac{21}{50} \quad \frac{1.0}{50}$$

$$\frac{46}{100} \quad \frac{50}{29} \quad \frac{52}{29} \quad \frac{45}{19} \quad \frac{44}{10} \quad \frac{43}{10} \quad \frac{44}{10} \quad \frac{42}{17} \quad \frac{64}{22} \quad \frac{68}{25} \quad \frac{40}{29} \quad \frac{24}{50}$$

$$\frac{11.7}{100} \quad \frac{88}{28} \quad \frac{50}{19} \quad \frac{50}{10} \quad \frac{49}{10} \quad \frac{5.0}{10} \quad \frac{4.9}{17} \quad \frac{7.6}{23} \quad \frac{7.6}{26} \quad \frac{8.7}{50}$$

$$\frac{12.3}{100} \quad \frac{116}{32} \quad \frac{58}{19} \quad \frac{56}{10} \quad \frac{54}{10} \quad \frac{55}{10} \quad \frac{57}{16} \quad \frac{10.9}{27} \quad \frac{12.6}{50}$$

$$\frac{11.8}{100} \quad \frac{11.7}{620} \quad \frac{126}{31} \quad \frac{62}{19} \quad \frac{60}{16} \quad \frac{59}{10} \quad \frac{60}{15} \quad \frac{121}{30} \quad \frac{130}{50}$$

Cont.

$$\frac{6.7}{19} \quad \frac{6.6}{10} \quad \frac{6.8}{10} \quad \frac{6.6}{170} \quad \frac{6.5}{270} \quad \frac{12.0}{50} \quad \frac{13.3}{50}$$

Cont.

$$\frac{6.9}{19} \quad \frac{7.0}{10} \quad \frac{6.9}{10} \quad \frac{6.9}{10} \quad \frac{7.4}{16} \quad \frac{12.6}{30} \quad \frac{14.2}{50}$$

Cont.

$$\frac{7.3}{120} \quad \frac{7.2}{10} \quad \frac{7.1}{10} \quad \frac{7.2}{10} \quad \frac{7.2}{16} \quad \frac{15.5}{34} \quad \frac{15.7}{50}$$

+ H.1 - Elev

899.31

28

+50

29

+50

895.8

30

95.8

+50

96.0

31

96.2

+50

96.4

J. P.

812

904.84

2.59

896.72

32

96.7

+40

96.8

33

97.0

+50

96.9

$$\frac{16.2}{100} \quad \frac{16.8}{61} \quad \frac{15.9}{43} \quad 2.9$$

$$\frac{17.5}{100} \quad \frac{16.5}{58.0} \quad \frac{13.3}{54.0} \quad \frac{11.7}{55.0} \quad 3.3$$

$$\frac{19.0}{100} \quad \frac{18.9}{79.0} \quad \frac{14.1}{49.0} \quad \frac{15.3}{31.0} \quad 3.5$$

$$\frac{17.0}{100} \quad \frac{17.9}{70} \quad \frac{14.5}{36} \quad \frac{5.8}{15} \quad \frac{9.65}{10} \quad \frac{3.55}{10} \quad \frac{3.7}{10} \quad \frac{3.9}{17} \quad \frac{15.2}{42} \quad \frac{16.0}{50} \quad \frac{16.0}{75}$$

$$\frac{19.2}{100} \quad \frac{16.8}{68.0} \quad \frac{15.6}{55.0} \quad \frac{5.5}{14.0} \quad \frac{3.6}{10} \quad \frac{3.5}{10} \quad \frac{3.6}{15} \quad \frac{3.8}{43.0} \quad \frac{17.2}{75} \quad \frac{18.0}{75}$$

$$\frac{12.2}{100} \quad \frac{16.7}{42.0} \quad \frac{13.9}{59.0} \quad \frac{3.7}{15.0} \quad \frac{8.9}{10} \quad \frac{3.3}{10} \quad \frac{3.2}{15.0} \quad \frac{3.5}{47.0} \quad \frac{17.7}{75.0} \quad \frac{18.7}{75.0}$$

$$\frac{11.3}{100} \quad \frac{14.2}{41.0} \quad \frac{12.2}{32} \quad \frac{3.1}{15.0} \quad \frac{3.1}{10} \quad \frac{3.1}{10} \quad \frac{3.2}{15} \quad \frac{3.5}{3.10} \quad \frac{13.2}{50} \quad \frac{15.2}{50} \quad \frac{16.0}{75.0}$$

$$\frac{9.8}{80.0} \quad \frac{9.1}{39.0} \quad \frac{5.0}{15.0} \quad \frac{6.9}{15} \quad \frac{2.9}{10} \quad \frac{2.9}{15.0} \quad \frac{2.8}{30} \quad \frac{9.3}{33.0} \quad \frac{9.3}{60} \quad \frac{10.0}{60}$$

$$\frac{5.0}{50} \quad \frac{5.8}{40} \quad \frac{9.7}{27.0} \quad \frac{10.3}{28} \quad \frac{8.1}{16.0} \quad \frac{8.2}{10} \quad \frac{8.1}{10} \quad \frac{5.2}{10} \quad \frac{8.3}{14} \quad \frac{12.0}{27.0} \quad \frac{12.3}{45} \quad \frac{9.7}{55} \quad \frac{6.0}{55}$$

$$\frac{0.0}{50} \quad \frac{0.1}{43} \quad \frac{7.3}{27.0} \quad \frac{9.5}{20} \quad \frac{8.0}{15.0} \quad \frac{8.1}{10} \quad \frac{8.05}{10} \quad \frac{8.1}{15.0} \quad \frac{8.2}{27.0} \quad \frac{12.0}{43} \quad \frac{12.3}{55} \quad \frac{9.0}{55}$$

$$\frac{0.5}{50} \quad \frac{1.1}{37.0} \quad \frac{8.6}{26.0} \quad \frac{8.8}{19} \quad \frac{7.8}{15.0} \quad \frac{7.9}{10} \quad \frac{7.75}{10} \quad \frac{7.9}{18} \quad \frac{8.4}{29.0} \quad \frac{11.5}{43} \quad \frac{12.2}{50} \quad \frac{10.1}{50} \quad \frac{9.7}{57}$$

$$\frac{0.6}{50} \quad \frac{0.0}{42} \quad \frac{8.3}{31} \quad \frac{9.0}{28} \quad \frac{7.9}{16.0} \quad \frac{7.9}{10} \quad \frac{7.9}{10} \quad \frac{7.7}{15} \quad \frac{11.3}{29} \quad \frac{12.0}{44} \quad \frac{10.2}{55}$$

	+	H.I.	-	Elev
		909.84		
34				997.0
	+50			96.9
35				96.8
	+50			96.6
36				96.4
	+50			96.1
T.P.	293	899.28	9.49	895.35
37				95.8
	+50			95.4
38				95.0
	+50			94.7
39				94.4
	+50			94.2

$$\frac{1.7}{50} \quad \frac{2.0}{40} \quad \frac{2.2}{26} \quad \frac{2.3}{180} \quad \frac{2.2}{10} \quad 7.8 \quad \frac{7.2}{10} \quad \frac{7.2}{16} \quad \frac{11.5}{28} \quad \frac{12.2}{45} \quad \frac{10.8}{50}$$

$$\frac{2.3}{50} \quad \frac{1.8}{41} \quad \frac{4.2}{380} \quad \frac{4.2}{30} \quad \frac{5.2}{26} \quad \frac{5.9}{230} \quad \frac{5.0}{170} \quad \frac{7.9}{10} \quad 7.9 \quad \frac{8.0}{10} \quad \frac{8.0}{16} \quad \frac{9.8}{22} \quad \frac{10.9}{380} \quad \frac{11.6}{45} \quad \frac{10.4}{54}$$

$$\frac{1.7}{30} \quad \frac{1.7}{41} \quad \frac{4.8}{36} \quad \frac{5.6}{93} \quad \frac{9.7}{24} \quad \frac{9.7}{20} \quad \frac{8.1}{16} \quad \frac{8.1}{10} \quad 8.0 \quad \frac{8.0}{10} \quad \frac{8.1}{16.0} \quad \frac{9.6}{21} \quad \frac{9.7}{23} \quad \frac{8.0}{29} \quad \frac{8.3}{330} \quad \frac{9.0}{42} \quad \frac{11.2}{60}$$

$$\frac{1.7}{50} \quad \frac{1.9}{42} \quad \frac{5.2}{36} \quad \frac{6.1}{32} \quad \frac{7.5}{25} \quad \frac{9.6}{20} \quad \frac{8.4}{16} \quad \frac{8.3}{10} \quad 8.2 \quad \frac{8.3}{10} \quad \frac{8.3}{15} \quad \frac{8.3}{20} \quad \frac{7.4}{25} \quad \frac{9.7}{27} \quad \frac{8.9}{33} \quad \frac{8.8}{37} \quad \frac{9.5}{50} \quad \frac{9.3}{50}$$

$$\frac{4.4}{50} \quad \frac{3.6}{40} \quad \frac{6.1}{36} \quad \frac{6.6}{31} \quad \frac{10.2}{22} \quad \frac{10.2}{210} \quad \frac{8.8}{15} \quad \frac{8.5}{15} \quad 8.5 \quad \frac{8.5}{10} \quad \frac{8.5}{150} \quad \frac{8.5}{21} \quad \frac{10.4}{26} \quad \frac{10.2}{33} \quad \frac{9.8}{50} \quad \frac{9.4}{50}$$

$$\frac{8.0}{50} \quad \frac{8.0}{39} \quad \frac{9.4}{26} \quad \frac{9.0}{25} \quad \frac{11.1}{240} \quad \frac{11.0}{21} \quad \frac{8.7}{16} \quad \frac{8.9}{10} \quad 8.75 \quad \frac{8.9}{10} \quad \frac{8.9}{15} \quad \frac{11.0}{21} \quad \frac{10.9}{26} \quad \frac{10.4}{33} \quad \frac{10.5}{50}$$

$$\frac{5.5}{50} \quad \frac{4.8}{38} \quad \frac{5.7}{31} \quad \frac{6.0}{25} \quad \frac{3.7}{17} \quad \frac{3.6}{10} \quad 3.5 \quad \frac{3.6}{10} \quad \frac{3.6}{14} \quad \frac{6.0}{20} \quad \frac{6.0}{24} \quad \frac{5.5}{27} \quad \frac{6.7}{50}$$

$$\frac{8.1}{50} \quad \frac{6.8}{40} \quad \frac{7.2}{36} \quad \frac{7.2}{29} \quad \frac{3.9}{19} \quad \frac{4.0}{10} \quad 3.9 \quad \frac{4.0}{10} \quad \frac{3.7}{14} \quad \frac{3.7}{16} \quad \frac{6.6}{24} \quad \frac{7.0}{33} \quad \frac{7.0}{50}$$

$$\frac{8.8}{50} \quad \frac{7.2}{38} \quad \frac{8.8}{35} \quad \frac{8.8}{31} \quad \frac{4.4}{19} \quad \frac{4.2}{10} \quad 4.1 \quad \frac{4.2}{10} \quad \frac{4.0}{14} \quad \frac{7.8}{27} \quad \frac{7.7}{33} \quad \frac{8.7}{50}$$

$$\frac{10.9}{50} \quad \frac{9.2}{36} \quad \frac{10.2}{34} \quad \frac{8.9}{30} \quad \frac{4.9}{20} \quad \frac{4.7}{10} \quad 4.6 \quad \frac{4.7}{10} \quad \frac{4.5}{15} \quad \frac{8.6}{27} \quad \frac{9.4}{39} \quad \frac{9.0}{40} \quad \frac{9.4}{50}$$

$$\frac{10.7}{50} \quad \frac{10.2}{44} \quad \frac{11.0}{40} \quad \frac{10.7}{38} \quad \frac{5.0}{19} \quad \frac{5.0}{10} \quad 4.9 \quad \frac{5.0}{10} \quad \frac{5.0}{14} \quad \frac{10.0}{29} \quad \frac{10.5}{40} \quad \frac{9.9}{41} \quad \frac{10.2}{50}$$

$$\frac{11.6}{50} \quad \frac{10.8}{30} \quad \frac{5.5}{19} \quad \frac{5.1}{10} \quad 5.1 \quad \frac{5.2}{11} \quad \frac{5.0}{15} \quad \frac{9.7}{25} \quad \frac{10.7}{31} \quad \frac{10.6}{41} \quad \frac{11.0}{50}$$

	+	H.I.	-	Elev
		899.28		
40				94.2
	+50			94.3
41				94.5
	+50			94.7
42				94.9
T.P.	5.37	900.49	416	895.12
	+50			95.1
43				95.3
	+50			95.5
44				95.7
	+15			95.8
			4.45	896.04

$$\frac{12.1}{50} \quad \frac{11.3}{32} \quad \frac{5.3}{19} \quad \frac{5.2}{10} \quad 5.1 \quad \frac{5.2}{10} \quad \frac{5.0}{14} \quad \frac{9.5}{13} \quad \frac{10.2}{3.3} \quad \frac{10.4}{8.8} \quad \frac{9.3}{4.8} \quad \frac{9.3}{50}$$

$$\frac{11.8}{50} \quad \frac{11.9}{34} \quad \frac{5.3}{19} \quad \frac{5.1}{10} \quad 5.0 \quad \frac{5.1}{10} \quad \frac{4.9}{15} \quad \frac{9.2}{26} \quad \frac{9.0}{8.3} \quad \frac{8.1}{36} \quad \frac{7.6}{42} \quad \frac{5.6}{50}$$

$$\frac{10.5}{50} \quad \frac{10.2}{33} \quad \frac{4.9}{18} \quad \frac{4.9}{10} \quad 4.8 \quad \frac{4.9}{10} \quad \frac{4.5}{14} \quad \frac{7.3}{22} \quad \frac{6.6}{33} \quad \frac{5.8}{39} \quad \frac{4.1}{43} \quad \frac{3.8}{50}$$

$$\frac{8.6}{50} \quad \frac{9.2}{31} \quad \frac{5.0}{20} \quad \frac{4.7}{10} \quad 4.6 \quad \frac{4.7}{10} \quad \frac{4.7}{15} \quad \frac{8.2}{24} \quad \frac{8.2}{28} \quad \frac{5.6}{33} \quad \frac{4.8}{41} \quad \frac{3.6}{48} \quad \frac{3.0}{50}$$

$$\frac{7.2}{50} \quad \frac{7.4}{37} \quad \frac{8.1}{30} \quad \frac{4.8}{18} \quad \frac{4.4}{10} \quad 4.4 \quad \frac{4.3}{10} \quad \frac{4.1}{15} \quad \frac{6.8}{21} \quad \frac{6.4}{26} \quad \frac{3.1}{35} \quad \frac{2.1}{40} \quad \frac{2.4}{50}$$

$$\frac{7.0}{50} \quad \frac{7.4}{25} \quad \frac{5.2}{18} \quad \frac{5.5}{16} \quad 5.4 \quad \frac{5.5}{10} \quad \frac{5.4}{15} \quad \frac{7.9}{20} \quad \frac{7.4}{25} \quad \frac{4.2}{38} \quad \frac{4.2}{50}$$

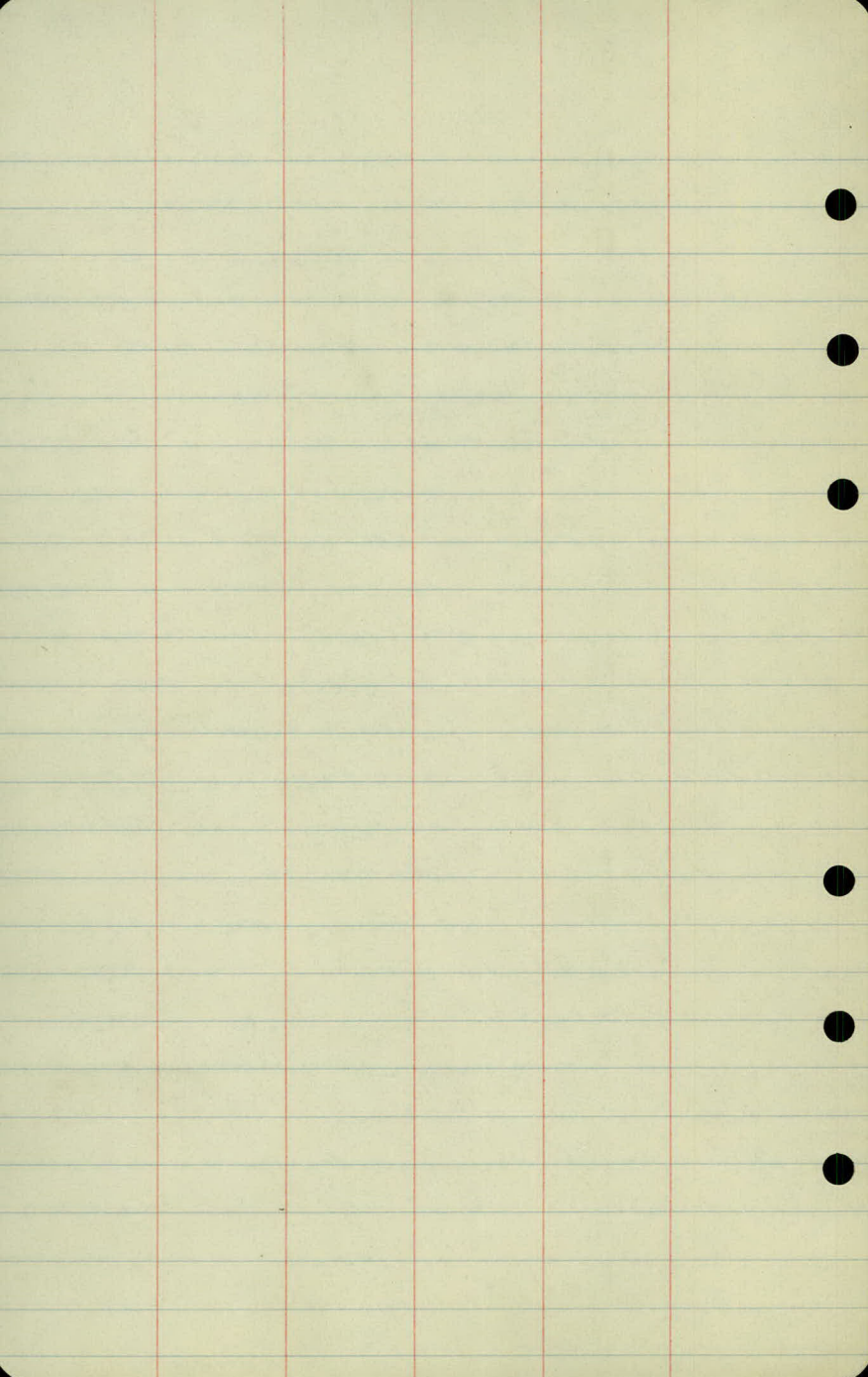
$$\frac{6.8}{50} \quad \frac{6.6}{27} \quad \frac{5.3}{19} \quad \frac{5.3}{10} \quad 5.2 \quad \frac{5.2}{10} \quad \frac{4.8}{15} \quad \frac{6.8}{20} \quad \frac{6.8}{24} \quad \frac{5.5}{28} \quad \frac{5.4}{33} \quad \frac{5.1}{50}$$

$$\frac{6.6}{50} \quad \frac{6.8}{25} \quad \frac{4.9}{20} \quad \frac{5.1}{11} \quad 5.0 \quad \frac{4.9}{10} \quad \frac{4.7}{17} \quad \frac{6.8}{21} \quad \frac{6.2}{24} \quad \frac{4.7}{29} \quad \frac{4.7}{33} \quad \frac{4.7}{50}$$

$$\frac{6.8}{50} \quad \frac{6.6}{27} \quad \frac{4.9}{21} \quad \frac{4.8}{10} \quad 4.8 \quad \frac{4.8}{10} \quad \frac{4.8}{16} \quad \frac{7.2}{22} \quad \frac{7.2}{25} \quad \frac{5.5}{38} \quad \frac{5.4}{50}$$

$$\frac{6.2}{50} \quad \frac{6.5}{30} \quad \frac{2.0}{27} \quad \frac{4.9}{22} \quad \frac{4.7}{10} \quad 4.7 \quad \frac{4.7}{10} \quad \frac{4.9}{17} \quad \frac{7.2}{23} \quad \frac{6.5}{33} \quad \frac{4.9}{50}$$

Top Iron Man.



Frost Ave

& Levels

Lake St. to Book St.

Sta.	+	π	-	Elev.	Rod.
B.M.	9.80	905.89		896.04	
45					9.3
	+50				8.8
46					8.2
	+50				7.55
47					7.0
48					5.8
	+50				5.25
49					4.8
	+20				4.3
50					3.9
	+50				3.45
51					3.1

Top Mont. Frost Ave & Lake St

Sta.	+	1	-	Elev	Red.
		905.84			
51	+50				2.7
52					2.8
	+50				1.83
T.P.	8.58	912.59	1.83	904.01	
53					8.05
	+50				7.55
54					7.0
	+50				6.45
55					5.8
	+50				5.2
56					4.6
	+50				4.0
57					3.5

Sta	+	1	-	Elev	Red
		912.49			
57	+50				3.1
58					2.85
	+50				2.7
59					2.79
T.P.	3.11	912.96	2.74	909.85	
	+50				3.15
60					3.30
	+50				3.50
61					3.83
	+50				4.25
62					4.70
	+50				5.20

Sta	+	π	-	Elev	Red
-----	---	-------	---	------	-----

63		912.96			5.70
----	--	--------	--	--	------

+50					6.1
-----	--	--	--	--	-----

64					6.6
----	--	--	--	--	-----

+50					7.05
-----	--	--	--	--	------

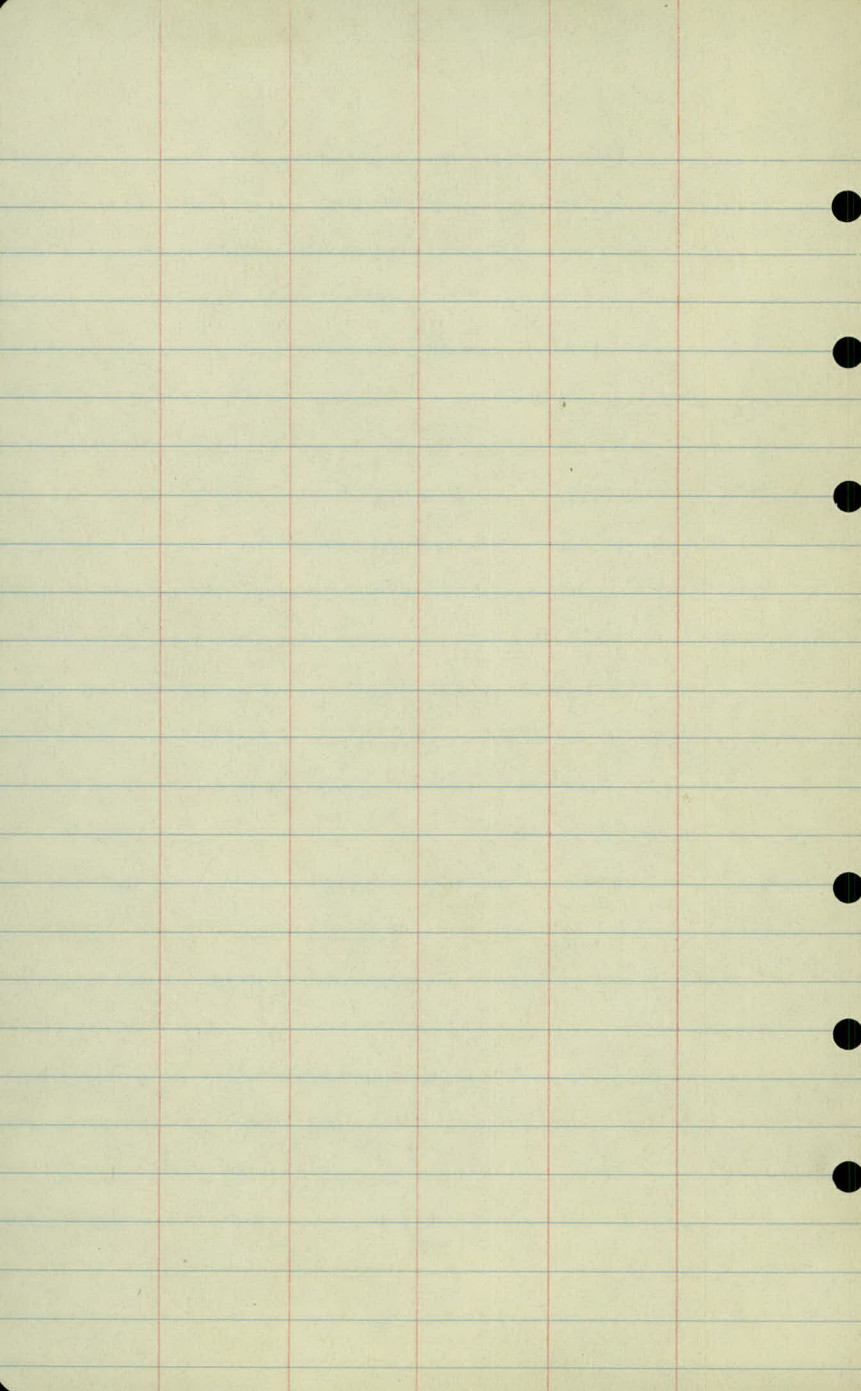
65					7.65
----	--	--	--	--	------

+50					8.3
-----	--	--	--	--	-----

66					7.05
----	--	--	--	--	------

T.P.	1.77	905.68	7.05	903.91	
B.M.			6.21	899.47	

Top Mont Back St & Front Ave.



1
Plan Survey.
Frost Ave.

Bock St. to White Bear Ave.
X-Sections

Note: for Alignment & Topography
see Road Map Survey.

W. H. Carlson
Dec. 1936

Sig.	+	π ✓	-	E/CV
3.M.	7.56	905.12		895.56
B.M.			5.60	899.52

70 + 96.85 @ Back

71				99.6
----	--	--	--	------

+50				99.5
-----	--	--	--	------

72				99.7
----	--	--	--	------

+50				00.1
-----	--	--	--	------

73				00.9
----	--	--	--	------

+50				02.2
-----	--	--	--	------

74		✓		03.6
T.P.	7.86	912.42	0.56	904.56 ✓

+50				05.0
-----	--	--	--	------

75				06.3
----	--	--	--	------

+15				06.6
-----	--	--	--	------

Spike in R.P. S.E.

Top Mar. @ Beck St.

36	56	55	56.5	5.5	84	84	51	51
50	10	—	10	15	24	28	33	50

76	75	59	56	55	570	57	95	99	91	89
50	24	19	10		10	14	75	30	33	50

72	76	57	55	535	55	57	108	110	112
50	76	20	10		10	15	27	35	50

$\frac{8.0}{50}$	$\frac{9.9}{28}$	$\frac{5.4}{20}$	$\frac{5.1}{10}$	$\frac{2.95}{10}$	$\frac{5.1}{10}$	$\frac{5.3}{15}$	$\frac{1.15}{36}$	$\frac{15.8}{50}$
------------------	------------------	------------------	------------------	-------------------	------------------	------------------	-------------------	-------------------

<u>10.3</u>	<u>12.1</u>	<u>4.9</u>	<u>4.3</u>	<u>4.15</u>	<u>4.4</u>	<u>4.9</u>	<u>15.1</u>	<u>16.5</u>
50	35	20	10		10	15	36	50

$\frac{124}{50}$	$\frac{126}{37}$	$\frac{53}{19}$	$\frac{30}{10}$	$\frac{24}{10}$	$\frac{30}{14}$	$\frac{34}{28}$	$\frac{146}{50}$	$\frac{148}{50}$
------------------	------------------	-----------------	-----------------	-----------------	-----------------	-----------------	------------------	------------------

9.0	9.1	20	2.1	1.6	1.5	1.7	1.7	7.8	8.2	7.7
50	41	28	20	10		10	15	28	35	50

62	59	83	97	77	75	74	75	75	76	76	62	70
50	40	86	28	21	10		10	14	23	25	34	50

82	65	62	61	62	60	88	84	37	43
50	45	10		10	13	21	28	34	50

57	59	58	59	62	78	97
80	10		10	15	16	50

Sta.	+	✓ 912.42	-	Elev.
+50				07.2
+70				07.3
76+0				07.6
+50				07.5
77				07.4
+50				07.2
78				07.1
T.P.	1.64	✓ 911.61	2.45	✓ 909.97
+50				07.0
79				06.8
+50				06.7
80				06.6

60°F
windy.

3

41 2 101

$\frac{6.4}{50}$ $\frac{5.7}{28}$ $\frac{5.3}{10}$ $\frac{5.2}{10}$ $\frac{5.3}{10}$ $\frac{5.3}{50} = 2 \text{ rot}$

$\frac{2.7}{50}$ $\frac{2.7}{37}$ $\frac{4.6}{28}$ $\frac{6.6}{28}$ $\frac{5.2}{18}$ $\frac{5.2}{10}$ $\frac{5.05}{10}$ $\frac{5.2}{10}$ $\frac{5.5}{14}$ $\frac{7.9}{22}$ $\frac{7.2}{50}$

$\frac{5.8}{50}$ $\frac{6.0}{34}$ $\frac{7.9}{20}$ $\frac{7.8}{26}$ $\frac{5.3}{20}$ $\frac{4.9}{10}$ $\frac{4.8}{10}$ $\frac{5.0}{10}$ $\frac{5.2}{14}$ $\frac{8.7}{24}$ $\frac{6.8}{20}$ $\frac{7.3}{50}$

$\frac{7.4}{50}$ $\frac{9.0}{28}$ $\frac{5.4}{20}$ $\frac{5.0}{10}$ $\frac{4.9}{10}$ $\frac{5.7}{10}$ $\frac{5.4}{13}$ $\frac{7.6}{23}$ $\frac{10.6}{50}$

$\frac{8.3}{50}$ $\frac{9.1}{29}$ $\frac{5.6}{20}$ $\frac{5.1}{10}$ $\frac{5.0}{10}$ $\frac{5.3}{10}$ $\frac{5.5}{14}$ $\frac{10.0}{23}$ $\frac{10.9}{34}$ $\frac{9.9}{50}$

$\frac{7.6}{50}$ $\frac{8.8}{28}$ $\frac{5.7}{19}$ $\frac{5.3}{10}$ $\frac{5.2}{10}$ $\frac{5.3}{10}$ $\frac{5.5}{14}$ $\frac{9.7}{25}$ $\frac{9.5}{35}$ $\frac{7.5}{50}$

$\frac{4.9}{50}$ $\frac{5.4}{32}$ $\frac{7.7}{26}$ $\frac{5.6}{19}$ $\frac{5.21}{10}$ $\frac{5.8}{10}$ $\frac{5.45}{10}$ $\frac{5.1}{14}$ $\frac{9.0}{24}$ $\frac{6.8}{37}$ $\frac{4.7}{50}$

Top on 103. R. Post. 28 + 55

$\frac{2.9}{50}$ $\frac{2.5}{31}$ $\frac{5.1}{27}$ $\frac{5.1}{23}$ $\frac{2.7}{19}$ $\frac{2.7}{10}$ $\frac{4.6}{10}$ $\frac{4.7}{16}$ $\frac{4.6}{14}$ $\frac{7.5}{22}$ $\frac{6.4}{33}$ $\frac{3.8}{50}$

$\frac{2.9}{50}$ $\frac{2.0}{34}$ $\frac{5.5}{28}$ $\frac{6.3}{22}$ $\frac{5.0}{17}$ $\frac{4.8}{10}$ $\frac{4.8}{10}$ $\frac{4.9}{10}$ $\frac{4.8}{14}$ $\frac{6.9}{21}$ $\frac{6.8}{32}$ $\frac{6.2}{50}$

$\frac{0.9}{50}$ $\frac{0.5}{34}$ $\frac{6.4}{24}$ $\frac{5.3}{21}$ $\frac{5.0}{10}$ $\frac{4.9}{10}$ $\frac{5.0}{10}$ $\frac{5.1}{15}$ $\frac{4.8}{20}$ $\frac{6.8}{23}$ $\frac{6.0}{25}$ $\frac{6.2}{50}$

$\frac{10.7}{50}$ $\frac{11.2}{31}$ $\frac{6.5}{26}$ $\frac{6.6}{24}$ $\frac{5.4}{20}$ $\frac{5.1}{10}$ $\frac{5.0}{10}$ $\frac{5.1}{15}$ $\frac{5.1}{21}$ $\frac{6.6}{25}$ $\frac{4.5}{34}$ $\frac{3.4}{50}$

Sta	+	T	-	Elev.
		11.61		
80+50				06.4
81				06.3
+50				06.0
82				05.9
T.P.	3.96	912.89	4.68	08.93
+50				05.8
83				05.8
+50				06.3
T.D.	9.37	918.65	3.61	09.28
84				07.5
+50				09.2
85				11.8
+50				14.3

4c 2 41.

$\frac{10.7}{50}$ $\frac{11.2}{37}$ $\frac{6.6}{27}$ $\frac{6.9}{24}$ $\frac{5.6}{20}$ $\frac{5.3}{10}$ $\frac{5.2}{-}$ $\frac{5.3}{10}$ $\frac{5.3}{15}$ $\frac{7.2}{21}$ $\frac{6.5}{26}$ $\frac{7.1}{50}$

$\frac{0.6}{50}$ $\frac{1.7}{36}$ $\frac{7.2}{24}$ $\frac{5.7}{20}$ $\frac{5.4}{10}$ $\frac{5.3}{-}$ $\frac{5.4}{10}$ $\frac{5.7}{14}$ $\frac{9.0}{22}$ $\frac{10.3}{34}$ $\frac{10.9}{50}$

$\frac{4.0}{50}$ $\frac{4.1}{34}$ $\frac{7.6}{26}$ $\frac{6.0}{20}$ $\frac{5.7}{10}$ $\frac{5.6}{-}$ $\frac{5.8}{10}$ $\frac{6.0}{14}$ $\frac{10.0}{25}$ $\frac{4.7}{26}$ $\frac{11.9}{50}$

$\frac{6.7}{50}$ $\frac{6.6}{34}$ $\frac{8.3}{25}$ $\frac{6.3}{21}$ $\frac{5.8}{10}$ $\frac{5.7}{-}$ $\frac{5.9}{10}$ $\frac{6.0}{14}$ $\frac{10.2}{24}$ $\frac{10.8}{26}$ $\frac{10.8}{50}$

Top end of rail post 82-150

$\frac{8.6}{50}$ $\frac{8.4}{34}$ $\frac{7.3}{21}$ $\frac{7.2}{10}$ $\frac{7.1}{-}$ $\frac{7.2}{10}$ $\frac{7.2}{15}$ $\frac{9.8}{21}$ $\frac{7.2}{25}$ $\frac{9.6}{50}$

$\frac{5.0}{50}$ $\frac{4.0}{28}$ $\frac{9.3}{27}$ $\frac{8.5}{23}$ $\frac{7.0}{19}$ $\frac{7.2}{10}$ $\frac{7.1}{-}$ $\frac{7.2}{10}$ $\frac{7.0}{17}$ $\frac{8.6}{23}$ $\frac{8.6}{28}$ $\frac{6.7}{25}$ $\frac{7.7}{50}$

Top curb

Top curb

$\frac{4.2}{50}$ $\frac{4.5}{41}$ $\frac{9.3}{29}$ $\frac{10.0}{26}$ $\frac{6.6}{20}$ $\frac{6.6}{10}$ $\frac{6.6}{-}$ $\frac{6.6}{10}$ $\frac{6.3}{14}$ $\frac{10.1}{22}$ $\frac{10.1}{29}$ $\frac{8.9}{34}$ $\frac{9.3}{50}$

Top Bag of R. 41-44 83-150

$\frac{14.0}{50}$ $\frac{14.9}{36}$ $\frac{16.1}{32}$ $\frac{16.1}{29}$ $\frac{11.4}{21}$ $\frac{11.2}{10}$ $\frac{11.2}{-}$ $\frac{11.3}{10}$ $\frac{11.3}{14}$ $\frac{16.1}{27}$ $\frac{16.0}{50}$

Co. ditch

$\frac{17.2}{50}$ $\frac{17.2}{39}$ $\frac{15.5}{31}$ $\frac{9.7}{21}$ $\frac{9.55}{10}$ $\frac{9.45}{-}$ $\frac{9.4}{10}$ $\frac{9.7}{14}$ $\frac{15.0}{27}$ $\frac{14.9}{50}$

$\frac{1.65}{50}$ $\frac{1.96}{31}$ $\frac{7.1}{21}$ $\frac{6.9}{10}$ $\frac{6.85}{-}$ $\frac{6.85}{10}$ $\frac{6.9}{15}$ $\frac{13.4}{29}$ $\frac{13.4}{50}$

$\frac{12.5}{50}$ $\frac{15.2}{38}$ $\frac{4.5}{21}$ $\frac{2.4}{10}$ $\frac{4.4}{-}$ $\frac{4.4}{10}$ $\frac{4.4}{14}$ $\frac{11.2}{29}$ $\frac{11.5}{50}$

Sta.	T.	π	-	Elev.
		918.65		
86+0				16.8
+50				
87+0				
T.P.	10.04	928.36	0.33	918.32
86+50				19.2
87+0				21.7
+50				24.3
88				26.8
T.P.	12.17	939.93	0.60	927.76
+20				27.2
+60				29.8
89				31.7
+50				34.2
	11.90	948.62	3.21	936.72

H. Z. RT.

$\frac{126}{50}$	$\frac{142}{46}$	$\frac{21}{20}$	$\frac{195}{10}$	$\frac{19}{10}$	$\frac{195}{10}$	$\frac{22}{14}$	$\frac{92}{28}$	$\frac{90}{50}$
------------------	------------------	-----------------	------------------	-----------------	------------------	-----------------	-----------------	-----------------

$\frac{134}{50}$	$\frac{118}{40}$	$\textcircled{+0.5}$	Cont'd	$\frac{5.8}{26}$	$\frac{7.1}{50}$
------------------	------------------	----------------------	--------	------------------	------------------

$\frac{106}{50}$	$\frac{93}{48}$	$\frac{85}{38}$	$\textcircled{+3.0}$	$\frac{40}{27}$	$\frac{54}{50}$
------------------	-----------------	-----------------	----------------------	-----------------	-----------------

$\frac{94}{19}$	$\frac{93}{10}$	$\frac{92}{10}$	$\frac{9.20}{10}$	$\frac{9.1}{14}$
-----------------	-----------------	-----------------	-------------------	------------------

$\frac{68}{17}$	$\frac{6.7}{10}$	$\frac{6.7}{10}$	$\frac{6.6}{10}$	$\frac{6.5}{14}$
-----------------	------------------	------------------	------------------	------------------

$\frac{152}{50}$	$\frac{135}{37}$	$\frac{45}{18}$	$\frac{41}{10}$	$\frac{41}{10}$	$\frac{4.1}{10}$	$\frac{4.0}{14}$	$\frac{103}{25}$	$\frac{103}{27}$	$\frac{5.3}{31}$	$\frac{0.0}{50}$
------------------	------------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	------------------	------------------	------------------

$\frac{85}{50}$	$\frac{73}{39}$	$\frac{65}{24}$	$\frac{14}{12}$	$\frac{1.6}{10}$	$\frac{1.6}{10}$	$\frac{1.6}{10}$	$\frac{1.5}{13}$	$\frac{4.0}{19}$	$\frac{4.0}{24}$	$\frac{2.2}{44}$	$\frac{1.6}{50}$
-----------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------

$\frac{120}{50}$	$\frac{126}{30}$	$\frac{140}{25}$	$\frac{160}{23}$	$\frac{122}{14}$	$\frac{122}{10}$	$\frac{121.7}{10}$	$\frac{121}{10}$	$\frac{120}{14}$	$\frac{15.7}{23}$	$\frac{15.7}{26}$	$\frac{11}{43}$	$\frac{0.6}{50}$
------------------	------------------	------------------	------------------	------------------	------------------	--------------------	------------------	------------------	-------------------	-------------------	-----------------	------------------

$\frac{94}{50}$	$\frac{94}{41}$	$\frac{107}{28}$	$\frac{120}{25}$	$\frac{11.4}{23}$	$\frac{10.7}{18}$	$\frac{10.1}{10}$	$\frac{10.1}{10}$	$\frac{10.0}{10}$	$\frac{9.9}{15}$	$\frac{12.0}{22}$	$\frac{12.4}{25}$	$\frac{1.2}{40}$	$\frac{2.7}{50}$
-----------------	-----------------	------------------	------------------	-------------------	-------------------	-------------------	-------------------	-------------------	------------------	-------------------	-------------------	------------------	------------------

$\frac{146}{70}$	$\frac{146}{56}$	$\frac{00}{46}$	$\frac{7.7}{24}$	$\frac{7.3}{24}$	$\frac{8.1}{20}$	$\frac{8.15}{10}$	$\frac{8.5}{10}$	$\frac{8.1}{10}$	$\frac{8.1}{15}$	$\frac{11.0}{22}$	$\frac{10.8}{24}$	$\frac{3.6}{39}$	$\frac{4.0}{50}$
------------------	------------------	-----------------	------------------	------------------	------------------	-------------------	------------------	------------------	------------------	-------------------	-------------------	------------------	------------------

$\frac{1.0}{50}$	$\frac{1.8}{28}$	$\frac{6.5}{28}$	$\frac{6.9}{24}$	$\frac{5.8}{21}$	$\frac{5.7}{10}$	$\frac{5.7}{10}$	$\frac{5.6}{10}$	$\frac{5.4}{15}$	$\frac{8.3}{22}$	$\frac{8.3}{23}$	$\frac{9.7}{29}$	$\frac{1.0}{50}$
------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------

Sta.	+	π	-	Elev.
		948.62		
90+0				36.7
+50				39.2
B.M.	0.25	948.62	0.25	948.37 (948.32)
91+0				41.7
T.P.	12.19	956.39	4.42	944.20
+50				44.2
92				46.7
+50				49.3
T.P.	13.48	965.23	4.64	951.75
93				51.7
+50				54.2
94				56.7
+50				59.3
95				61.7
	11.67	975.42	1.48	963.75

4c 2 10x

$$\begin{array}{r} 104 \quad 95 \quad 128 \quad 129 \quad 119 \quad 119 \quad 119 \quad 119 \quad 118 \quad 138 \quad 133 \quad 66 \quad 68 \\ \hline 50 \quad 3 \quad 28 \quad 23 \quad 19 \quad 10 \quad 10 \quad 14 \quad 21 \quad 27 \quad 37 \quad 50 \end{array}$$

$$\begin{array}{r} 64 \quad 59 \quad 106 \quad 106 \quad 97 \quad 94 \quad 94 \quad 93 \quad 93 \quad 107 \quad 108 \quad 57 \quad 42 \\ \hline 50 \quad 32 \quad 27 \quad 23 \quad 21 \quad 10 \quad 10 \quad 14 \quad 20 \quad 22 \quad 37 \quad 50 \end{array}$$

4yd. 12x 56x 90x

$$\begin{array}{r} 25 \quad 22 \quad 80 \quad 81 \quad 72 \quad 70 \quad 69 \quad 20 \quad 20 \quad 26 \quad 83 \quad 07 \quad 10 \\ \hline 50 \quad 40 \quad 27 \quad 24 \quad 21 \quad 10 \quad 10 \quad 15 \quad 21 \quad 24 \quad 36 \quad 50 \end{array}$$

$$\begin{array}{r} 69 \quad 66 \quad 130 \quad 133 \quad 121 \quad 121 \quad 1219 \quad 122 \quad 124 \quad 140 \quad 140 \quad 56 \quad 68 \\ \hline 50 \quad 41 \quad 27 \quad 25 \quad 19 \quad 10 \quad 10 \quad 16 \quad 21 \quad 24 \quad 39 \quad 50 \end{array}$$

$$\begin{array}{r} 43 \quad 39 \quad 107 \quad 109 \quad 96 \quad 96 \quad 97 \quad 97 \quad 96 \quad 119 \quad 119 \quad 31 \quad 32 \\ \hline 50 \quad 43 \quad 27 \quad 23 \quad 20 \quad 10 \quad 10 \quad 16 \quad 21 \quad 25 \quad 37 \quad 50 \end{array}$$

$$\begin{array}{r} 33 \quad 30 \quad 81 \quad 84 \quad 70 \quad 71 \quad 71 \quad 21 \quad 21 \quad 92 \quad 93 \quad 11 \quad 16 \\ \hline 50 \quad 29 \quad 28 \quad 25 \quad 21 \quad 10 \quad 10 \quad 16 \quad 21 \quad 24 \quad 26 \quad 50 \end{array}$$

$$\begin{array}{r} 120 \quad 120 \quad 148 \quad 148 \quad 137 \quad 135 \quad 1348 \quad 134 \quad 137 \quad 168 \quad 165 \quad 94 \quad 88 \\ \hline 50 \quad 34 \quad 27 \quad 27 \quad 21 \quad 10 \quad 10 \quad 16 \quad 21 \quad 25 \quad 33 \quad 50 \end{array}$$

$$\begin{array}{r} 112 \quad 111 \quad 133 \quad 128 \quad 112 \quad 109 \quad 110 \quad 109 \quad 111 \quad 134 \quad 134 \quad 83 \quad 80 \\ \hline 50 \quad 31 \quad 26 \quad 24 \quad 20 \quad 10 \quad 10 \quad 10 \quad 16 \quad 22 \quad 24 \quad 33 \quad 50 \end{array}$$

$$\begin{array}{r} 86 \quad 81 \quad 96 \quad 96 \quad 85 \quad 84 \quad 85 \quad 84 \quad 86 \quad 106 \quad 99 \quad 58 \quad 53 \\ \hline 50 \quad 29 \quad 27 \quad 23 \quad 20 \quad 10 \quad 10 \quad 10 \quad 15 \quad 22 \quad 25 \quad 33 \quad 50 \end{array}$$

$$\begin{array}{r} 66 \quad 57 \quad 84 \quad 89 \quad 89 \quad 84 \quad 84 \quad 27 \quad 76 \quad 24 \quad 23 \\ \hline 50 \quad 21 \quad 17 \quad 10 \quad 10 \quad 16 \quad 20 \quad 28 \quad 35 \quad 50 \end{array}$$

$$\begin{array}{r} 26 \quad 27 \quad 48 \quad 46 \quad 34 \quad 38 \quad 38 \quad 25 \quad 28 \quad 60 \quad 57 \quad 03 \quad 10 \\ \hline 50 \quad 32 \quad 26 \quad 23 \quad 20 \quad 10 \quad 10 \quad 17 \quad 21 \quad 28 \quad 34 \quad 50 \end{array}$$

Sta. + - Elev.

975.42

95+50

63.7.

96

65.3.

+50

66.4.

97

66.9.

+

8.76

967.16.

4 2 14

$\frac{9.5}{50}$ $\frac{9.7}{34}$ $\frac{128}{76}$ $\frac{123}{22}$ $\frac{117}{20}$ $\frac{116}{10}$ $\frac{116.7}{-}$ $\frac{116}{10}$ $\frac{120}{16}$ $\frac{142}{22}$ $\frac{135}{75}$ $\frac{87}{34}$ $\frac{92}{50}$

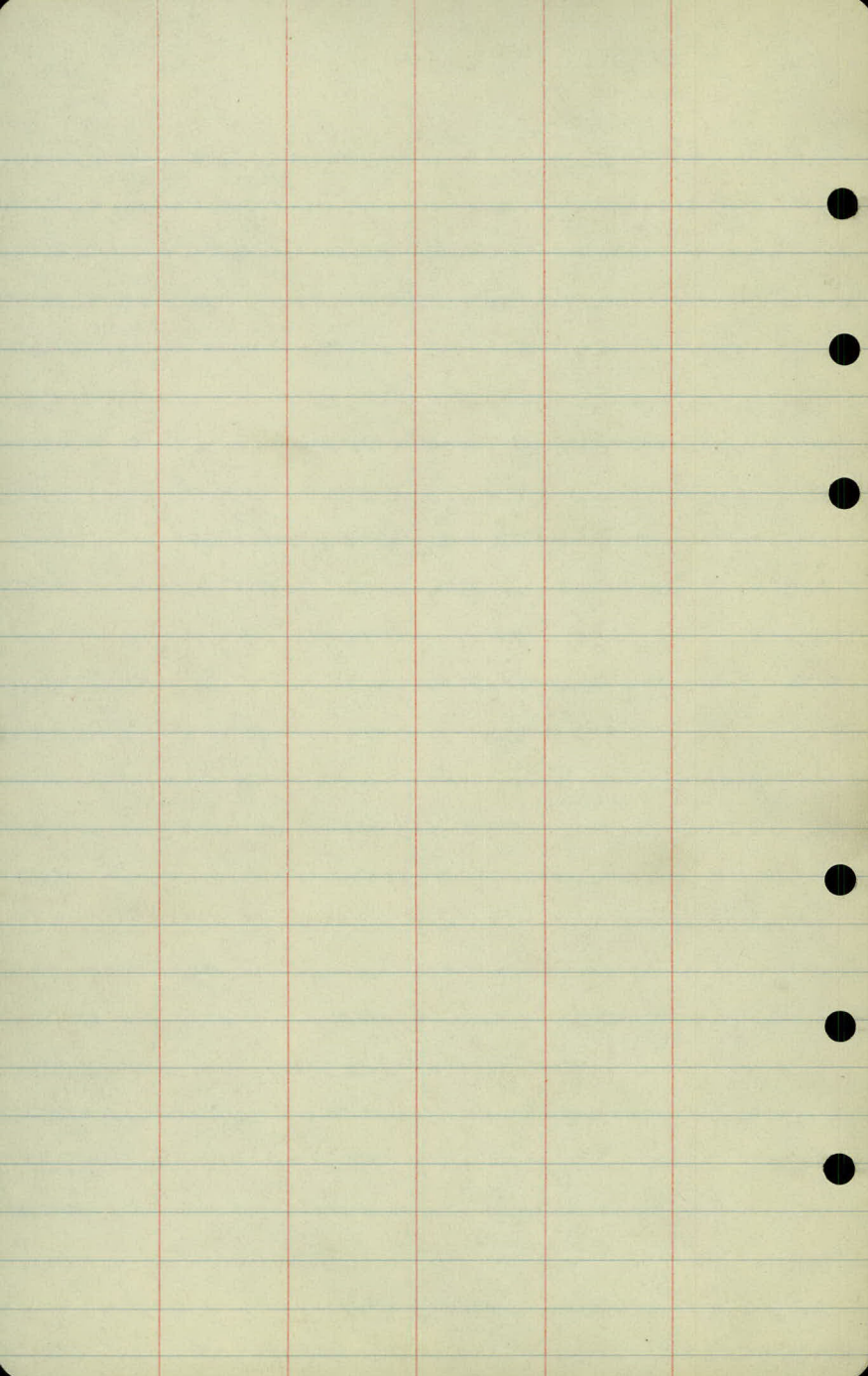
$\frac{66}{50}$ $\frac{69}{29}$ $\frac{117.2}{28}$ $\frac{107}{23}$ $\frac{100}{20}$ $\frac{100}{10}$ $\frac{101}{-}$ $\frac{101}{10}$ $\frac{103}{15}$ $\frac{124}{22}$ $\frac{120}{76}$ $\frac{53}{35}$ $\frac{60}{50}$

$\frac{4.3}{65}$ $\frac{67}{50}$ $\frac{91}{23}$ $\frac{100}{24}$ $\frac{93}{21}$ $\frac{91}{10}$ $\frac{90}{-}$ $\frac{91}{10}$ $\frac{92}{15}$ $\frac{10.8}{22}$ $\frac{103}{25}$ $\frac{57}{76}$ $\frac{83}{46}$ $\frac{94}{60}$

$\frac{77}{75}$ $\frac{86}{50}$ $\frac{99}{29}$ $\frac{90}{24}$ $\frac{87}{112}$ $\frac{85}{-}$ $\frac{85}{112}$ $\frac{82}{18}$ $\frac{75}{29}$ $\frac{48}{50}$ $\frac{2.9}{75}$

top Mem. 2 white

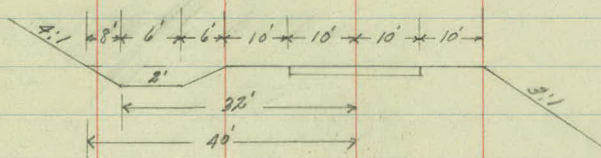
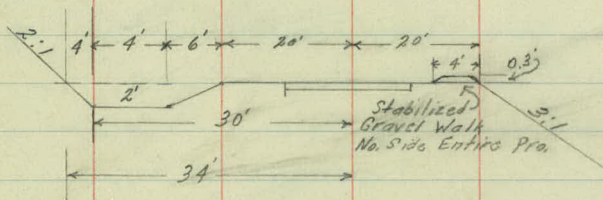
8.76



Frost Ave

Phalen Pkwy to White Bear Ave.

Slope Stakes



Sta. 71400 to 71450

Sta + 1 - Grade

0 + 00

+39.6

1

+50

2

+50

3

+50

4

+50

5

Lt

£

Rt

Sta	+	↑	-	Grade
-----	---	---	---	-------

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

6				
---	--	--	--	--

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

7				
---	--	--	--	--

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

+85				
-----	--	--	--	--

8				
---	--	--	--	--

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

9				
---	--	--	--	--

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

10				
----	--	--	--	--

lt £ Rt

9.6 Not
reputed

2.4

7.0

12.0 / 27.4

14.4 / 28.0

14.4 / 42.2

2.8
2.0
1.0

2.2

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

10	+56			
----	-----	--	--	--

11				
----	--	--	--	--

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

12				
----	--	--	--	--

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

13				
----	--	--	--	--

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

14				
----	--	--	--	--

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

15				
----	--	--	--	--

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

Lat

E

Rt

54

$$\frac{114}{-60} / 28.0$$

39

$$\frac{76}{-5.7} / 27.6$$

2.3

$$\frac{9.8}{-7.0} / 41.5$$

0.6

(11.7)

$$\frac{8.3}{-7.7} / 45.1$$

9.0

12.5

$$\frac{130}{-40} / 34.5$$

6.8

12.5

$$\frac{11.2}{-4.4} / 35.7$$

4.8

12.0

$$\frac{69}{-2.1} / 28.8$$

u. 13
kt. 2.5

$$\frac{460}{100} / 11.3$$

12.0

$$\frac{43}{-1.8} / 27.4$$

12.2 13.0

$$39 \times \frac{124}{1218}$$

$$\frac{124}{+106} / 33$$

10.2 10.6

$$35.2 \times \frac{114}{2208}$$

$$\frac{8.6}{+20} / 33$$

8.3 8.4

$$39 \times \frac{85}{1018}$$

$$\frac{8.0}{+104} / 33$$

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

16

+50

17

+50

18

+50

19

20

+50

23

20

30

+50

21

Lt

E

Rt

6.2

$$41.2 \left| \frac{59}{+0.3} \right.$$

$$\frac{2.5}{+3.7} / 3.3$$

4.6

$$40 \left| \frac{46}{+0.5} \right.$$

$$\frac{2.0}{+1.6} / 3.3$$

3.2

$$40.8 \left| \frac{38}{+0.2} \right.$$

$$\frac{3.0}{+0.2} / 3.3$$

2.3

$$39.9 \left| \frac{25}{+0.8} \right.$$

$$\frac{1.9}{+0.4} / 3.3$$

5.0

$$38.0 \left| \frac{5.5}{+0.5} \right.$$

$$\frac{2.4}{+2.6} / 3.2$$

2.18/ope.

4.7

$$34.4 \left| \frac{6.1}{+0.6} \right.$$

$$\frac{2.2}{+2.8} / 2.0$$

+0.6/35.2

(4.7)

$$32.0 \left| \frac{6.0}{-4.0} \right.$$

$$\frac{4.0}{-2.0} / 26.0$$

$$32.0 \left| \frac{7.3}{-5.0} \right.$$

$$\frac{6.2}{-3.9} / 21.7$$

$$32.0 \left| \frac{5.1}{-2.1} \right.$$

4.7

$$\frac{6.3}{-2.5} / 29.9$$

$$39.6 \left| \frac{1.9}{+0.1} \right.$$

3.6

$$\frac{5.8}{-2.2} / 26.6$$

$$0.10 / 32.0$$

$$39.7 \left| \frac{1.8}{+0.1} \right.$$

$$5.3 \left| \frac{4.3}{+0.1} \right.$$

$$\frac{7.8}{-3.0} / 29.0$$

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

21	+41			4.9
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	+70			5.3
--	-----	--	--	-----

22				5.6
----	--	--	--	-----

	+20			
--	-----	--	--	--

	+50			6.1
--	-----	--	--	-----

23				
----	--	--	--	--

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

24				
----	--	--	--	--

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

25				
----	--	--	--	--

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

Lt

L

Rt

$$36.0 / 121.0 \quad 26.6 / \frac{21}{-2.2}$$

$$\frac{12.7}{-7.8} / 43.4$$

$$43.1 / \frac{130}{-2.7}$$

$$\frac{16.7}{-11.9} / 54.2$$

$$47.3 / \frac{14.7}{-2.1}$$

Snowing

$$34 \quad 30 \quad 200 \quad 27.2 / \frac{8.5}{-2.4}$$

$$\frac{3.2}{101.7} / 33.5$$

$$3.8 \quad 36.4 \quad \frac{4.4}{101.1}$$

$$\frac{3.5}{100} / 34$$

$$4.0 \quad 36.4 \quad \frac{4.9}{101.1}$$

$$\frac{7.0}{-2.0} / 32.0$$

$$4.6 \quad 36.8 / \frac{5.3}{101.2}$$

$$\frac{7.3}{-2.7} / 28.1$$

$$5.2 \quad 38.0 \quad \frac{5.7}{101.5}$$

$$\frac{4.9}{103} / 34.6$$

$$5.6 \quad 36.8 / \frac{6.4}{101.2}$$

$$\frac{6.4}{101.2} / 32.4$$

$$6.2 \quad 35.2 / \frac{7.4}{100.8}$$

$$\frac{7.5}{100.7} / 31.4$$

Sta	+	↑	-	Grade Road
-----	---	---	---	---------------

26

+50

3.8

27

4.4

+50

4.8

28

2.9

+50

3.3

29

3.5

+50

3.6

30

3.5

+50

3.4

31

3.7

let

2

at

+ 6.7

$$35 \sim \frac{79}{808}$$

$$\begin{array}{r} 7.8 \\ F. 4.0 \\ \hline 37.0 \end{array}$$

2.1

$$\begin{array}{r} 4.3 \\ - 2.2 \\ \hline 26.6 \end{array}$$

$$\begin{array}{r} 11.0 \\ F. 6.6 \\ \hline 39.8 \end{array}$$

2.6

$$\begin{array}{r} 8.8 \\ - 4.2 \\ \hline 38.8 \end{array}$$

$$\begin{array}{r} 10.8 \\ F. 6.0 \\ \hline 38 \end{array}$$

2.1

$$\begin{array}{r} 9.5 \\ - 6.4 \\ \hline 39.2 \end{array}$$

$$\begin{array}{r} 16.8 \\ F. 13.9 \\ \hline 61.7 \end{array}$$

3.6

$$\begin{array}{r} 9.4 \\ - 5.8 \\ \hline 37.4 \end{array}$$

$$\begin{array}{r} 19.0 \\ F. 15.7 \\ \hline 67.1 \end{array}$$

4.0

$$\begin{array}{r} 11.1 \\ - 7.1 \\ \hline 41.3 \end{array}$$

$$\begin{array}{r} 18.6 \\ F. 15.1 \\ \hline 66.3 \end{array}$$

4.3

$$\begin{array}{r} 12.8 \\ - 8.5 \\ \hline 45.5 \end{array}$$

$$\begin{array}{r} 17.6 \\ F. 14.0 \\ \hline 64.0 \end{array}$$

4.3

$$\begin{array}{r} 16.0 \\ - 11.7 \\ \hline 55.1 \end{array}$$

$$\begin{array}{r} 17.2 \\ F. 13.7 \\ \hline 61.1 \end{array}$$

4.2

$$\begin{array}{r} 19.4 \\ - 15.2 \\ \hline 65.2 \end{array}$$

$$\begin{array}{r} 15.3 \\ F. 11.9 \\ \hline 51.7 \end{array}$$

4.1

$$\begin{array}{r} 18.8 \\ - 14.7 \\ \hline 64.1 \end{array}$$

$$\begin{array}{r} 13.0 \\ F. 9.8 \\ \hline 47.4 \end{array}$$

3.9

$$\begin{array}{r} 13.7 \\ F. 11.6 \\ \hline 54.9 \end{array}$$

Sta	+	π	-	Grade
31	+50			8.9
32				8.2
	+40			8.1
33				8.0
	+50			8.0
34				7.9
	+50			8.0
35				8.1
	+50			8.3
36				8.5
	+50			8.7

LT

L

RT

$$\begin{array}{r} 9.5 \\ 56.6 \\ \hline 39.8 \end{array}$$

5.7

$$\begin{array}{r} 12.5 \\ -6.8 \\ \hline 30.5 \end{array}$$

$$30 / \frac{10.2}{20.00}$$

5.4

$$\begin{array}{r} 98 \\ -44 \\ \hline 33.2 \end{array}$$

$$486 / \frac{0.8}{+7.3}$$

5.3

$$\begin{array}{r} 96 \\ -43 \\ \hline 32.0 \end{array}$$

$$484 / \frac{0.8}{+7.2}$$

5.2

$$\begin{array}{r} 91 \\ -3.9 \\ \hline 31.7 \end{array}$$

$$48.6 / \frac{0.7}{+7.3}$$

5.2

$$\begin{array}{r} 89 \\ -3.7 \\ \hline 31.1 \end{array}$$

$$46.2 / \frac{1.8}{+6.1}$$

5.1

$$\begin{array}{r} 91 \\ -40 \\ \hline 32.0 \end{array}$$

$$33.0 / \frac{5.4}{+2.6}$$

5.2

$$\begin{array}{r} 23 \\ -20 \\ \hline 26.0 \end{array} \quad \begin{array}{r} 6.8 \\ 10.0 \\ \hline 20.00 / 29.2 \end{array}$$

$$33.0 / \frac{5.5}{+2.6}$$

$$\begin{array}{r} 81 \\ 10.20 \\ \hline 32.0 \end{array}$$

$$33.0 / \frac{6.1}{+2.2}$$

$$\begin{array}{r} 86 \\ 20.17 \\ \hline 32.5 \end{array}$$

$$33.0 / \frac{6.9}{+1.6}$$

$$\begin{array}{r} 10.0 \\ 20.05 \\ \hline 31.0 \end{array}$$

$$32.0 / \frac{9.2}{12.5}$$

3.4

$$\begin{array}{r} 55 \\ -21 \\ \hline 26.3 \end{array} \quad \begin{array}{r} 10.7 \\ 20.00 \\ \hline 30.0 \end{array}$$

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

37				9.0 3.9
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+50				4.3
-----	--	--	--	-----

38				4.7
----	--	--	--	-----

+50				5.0
-----	--	--	--	-----

39				5.2
----	--	--	--	-----

+50				5.4
-----	--	--	--	-----

40				5.4
----	--	--	--	-----

+50				5.3
-----	--	--	--	-----

41				5.1
----	--	--	--	-----

+50				4.9
-----	--	--	--	-----

42				4.7 ^{5.5}
----	--	--	--	--------------------

+50				4.6 ^{5.3}
-----	--	--	--	--------------------

ht F₁ Rt

$$\frac{110}{200} \frac{6.3}{F. 2.4} \\ \frac{22}{22}$$

37

$$\frac{5.7}{-2.0} / 26.0$$

$$\frac{7.8}{F. 3.1} \\ \frac{30.1}{30.1}$$

4.2

$$\frac{6.8}{-2.6} / 27.8$$

$$\frac{9.4}{F. 4.7} \\ \frac{33}{33}$$

4.5

$$\frac{7.7}{-3.2} / 29.6$$

$$\frac{10.6}{F. 5.6} \\ \frac{33}{33}$$

4.9

$$\frac{9.6}{-4.7} / 32.5$$

$$\frac{11.3}{F. 6.1} \\ \frac{33}{33}$$

5.1

$$\frac{10.6}{-5.5} / 32.5$$

$$\frac{10.8}{F. 5.4} \\ \frac{33}{33}$$

5.3

$$\frac{10.8}{-5.5} / 32.5$$

$$\frac{11.2}{F. 5.8} \\ \frac{33}{33}$$

5.3

$$\frac{10.6}{-5.3} / 32.5$$

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

5.2

$$\frac{9.2}{-4.0} / 32.0$$

$$\frac{10.3}{F. 5.2} \\ \frac{33}{33}$$

5.0

$$\frac{7.4}{-2.4} / 27.4$$

$$\frac{9.9}{F. 5.0} \\ \frac{33}{33}$$

5.0

$$\frac{7.2}{-2.9} / 27.7$$

$$\frac{8.4}{F. 3.7} \\ \frac{31.1}{31.1}$$

4.8

$$\frac{6.8}{-2.0} / 26.0 \quad \frac{4.9}{+0.6} / 32.5$$

$$\frac{L. 6}{F. 2.0} \\ \frac{26.0}{26.0}$$

$$\frac{31.4}{20.0} \frac{6.6}{20.0}$$

$$\frac{9.2}{+1.1} / 31.6$$

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

42	+50			
----	-----	--	--	--

43				5.1
----	--	--	--	-----

	+50			4.9
--	-----	--	--	-----

44				4.7
----	--	--	--	-----

	+47.0			
--	-------	--	--	--

	+			
--	---	--	--	--

45	+0			
----	----	--	--	--

46	+0			
----	----	--	--	--

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

47	+0			
----	----	--	--	--

48	+25			
----	-----	--	--	--

Lt

\$

Rt

$$31.0 / \frac{6.6}{20.05}$$

$$\frac{5.1}{20.20} / 32.0$$

$$31.2 / \frac{6.3}{20.06}$$

$$\frac{4.7}{20.2} / 32.0$$

$$31.4 / \frac{6.7}{20.06}$$

$$\frac{6.7}{20.06} / 30.0$$

$$\frac{6.0}{-}$$

$$\frac{8.7}{-2.7} / 28.1$$

$$4.8$$

$$\frac{8.8}{-4.0} / 32.0$$

$$4.2$$

$$\frac{5.8}{-4.6} / 24.8$$

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

$$\frac{7.3}{-3.7} / 21.1$$

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

48+75				
-------	--	--	--	--

+4/5				
------	--	--	--	--

49				
----	--	--	--	--

+				
---	--	--	--	--

50				
----	--	--	--	--

+				
---	--	--	--	--

Lt

E

Rt

5.4

$$\begin{array}{r} 6.5 \\ 101.3 \overline{) 33} \end{array}$$

7.3

7.5

4.9

$$\begin{array}{r} 5.6 \\ 100.4 \overline{) 33} \end{array}$$

7.0

$$\begin{array}{r} 4.3 \\ 102.4 \overline{) 33} \end{array}$$

6.7

4.0

$$\begin{array}{r} 5.4 \\ 101.0 \overline{) 33} \end{array}$$

6.4

Culo.

3.9

6.3

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

52+50

53+0

+50

54

+50

55

+50

56+25

56+50

57+0

+50

Lt

E

Rt

Ditka

6.5 $\frac{7.2}{100.3} / 31.6$

8.7

6.0

 $\frac{7.2}{100.3} / 28.6$ 7.55.5 $\frac{6.7}{100.3} / 28.1$

7.0

5.0

 $\frac{6.2}{100.3} / 28.1$

6.5

4.5

 $\frac{5.5}{100.4} / 28.3$

5.9

3.8 $\frac{4.1}{101.2} / 29.0$

5.3

6.0

 $\frac{7.6}{104.4} / 33$

(2.0)

8.0

5.7 $\frac{3.9}{100.3} / 33$

(1.5)

7.2

5.1 $\frac{4.8}{101.8} / 31.1$

6.6

4.5

 $\frac{4.8}{101.8} / 30.5$

6.3

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

5840				
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+50				
-----	--	--	--	--

59				
----	--	--	--	--

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

60				
----	--	--	--	--

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

61				
----	--	--	--	--

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

62				
----	--	--	--	--

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

63				
----	--	--	--	--

Lt

E

Rt

45

$$\frac{53}{-28} / 22.4$$

41

$$\frac{7.1}{-2.7} / 28.1$$

43

$$\frac{88}{-45} / 33.0$$

44

$$\frac{7.2}{-2.8} / 28.4$$

45

$$\frac{63}{-1.8} / 25.4$$

47

$$\frac{63}{-1.8} / 24.8$$

54

$$\frac{68}{-1.4} / 24.2 \quad \frac{60}{-25.4} / 24.3$$

59

$$\frac{9.3}{-4.4} / 33.0$$

64

$$\frac{109}{-4.5} / 33$$

34

$$\frac{7.6}{-4.2} / 27.6$$

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

63+80				
-------	--	--	--	--

64+0				
------	--	--	--	--

66+0				
------	--	--	--	--

65				
----	--	--	--	--

65+50				
-------	--	--	--	--

ht

L

RL

38

$$\begin{array}{r} 5.8 \\ -2.0 \\ \hline 3.8 \end{array} / 100$$

43

$$\begin{array}{r} 5.1 \\ -0.8 \\ \hline 4.3 \end{array} / 10.4$$

48

$$\begin{array}{r} 4.9 \\ 101.6 \\ \hline 48 \end{array} / 20.9$$

53

$$\begin{array}{r} 3.7 \\ 123.1 \\ \hline 53 \end{array} / 33$$

6.8

60

$$\begin{array}{r} 4.7 \\ 127.8 \\ \hline 60 \end{array} / 32.1$$

7.5

Sta	+	π	-	Grade
B.M.	6.28			<u>895.56</u>
6640				

+50

6740

6840

6840

+50

6940

+50

7040

+50

Mon.
P.P.S. E. Cor. ~~Banker~~ No. 1

Lst

£

Rt.

193

 $\frac{1.7}{10.2/33}$

21.47
- 3.3
42

2.7

 $\frac{35}{10.7/33}$

55

35

 $\frac{45}{10.9/32}$

23

43

 $\frac{68}{2.5/275}$
 $\frac{75}{75/25}$

80

 $\frac{81}{2.1/262}$ (2:18/92)

 $\frac{83}{28.1/27}$

86

 $\frac{100}{2.4/288}$
 $\frac{83}{27.2/54}$
 $\frac{11.1}{5.7}$
 $\frac{11.1}{5.2/204}$

8.4

 $\frac{7.7}{31.4/107}$

61

 $\frac{108}{4.2/28.4}$

8.5

 $\frac{6.5}{38/100}$

62

 $\frac{97}{2.5/205}$

8.6

 $\frac{5.2}{33/100}$
 $\frac{6.5}{100}$

Sta + π - Grade

70 496.85 Mon.

71

+50

72

+50

73

+50

74

+75

+50

+75

75

+15

+50

Lt

E

Rt

5.2

$$\begin{array}{r} 102 \\ 40.8 \end{array}$$

5.1

$$\begin{array}{r} 763 \overline{) 7.2} \\ - 7.1 \\ \hline \end{array}$$

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

$$\begin{array}{r} 89 \\ - 38 \overline{) 31.4} \end{array}$$

$$\begin{array}{r} 763 \overline{) 7.1} \\ - 7.1 \\ \hline \end{array}$$

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

$$\begin{array}{r} 104 \\ - 54 \overline{) 56.2} \end{array}$$

$$\begin{array}{r} 338 \overline{) 9.2} \\ - 7.6 \\ \hline \end{array}$$

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

$$\begin{array}{r} 15.2 \\ - 15.6 \overline{) 51.8} \end{array}$$

$$\begin{array}{r} 475 \overline{) 11.3} \\ - 7.5 \\ \hline \end{array}$$

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

$$\begin{array}{r} 16.0 \\ - 12.2 \overline{) 56.6} \end{array}$$

$$\begin{array}{r} 482 \overline{) 12.0} \\ - 9.4 \\ \hline \end{array}$$

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

$$\begin{array}{r} 14.4 \\ - 17.8 \overline{) 56.4} \end{array}$$

$$\begin{array}{r} 21.0 \overline{) 8.0} \\ - 7.0 \\ \hline \end{array}$$

$$\begin{array}{r} 1.2 \quad 7.4 \\ \hline \end{array}$$

$$\begin{array}{r} 14.0 \\ - 6.8 \overline{) 39.8} \end{array}$$

$$\begin{array}{r} 290 \overline{) 9.7} \\ - 7.0 \\ \hline \end{array}$$

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

$$\begin{array}{r} 763 \overline{) 8.1} \\ - 7.1 \\ \hline \end{array}$$

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

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

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

$$\begin{array}{r} 4.0 \\ 7.2 \\ 3.7 \\ + 1.0 \overline{) 44.0} \end{array}$$

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

75	+100			
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76				
----	--	--	--	--

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

77				
----	--	--	--	--

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

78				
----	--	--	--	--

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

79				
----	--	--	--	--

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

80				
----	--	--	--	--

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

LT	Q	RT
$\sqrt{60} \int \frac{1.3}{T4.0}$	5.3	
$360 \int \frac{60}{181.0}$	5.0	$\frac{1.9}{-28/284}$
$311 \int \frac{8.7}{-3.7}$	5.0	$\frac{10.8}{-5.8/374}$
$299 \int \frac{8.8}{-3.3}$	5.2	$\frac{10.9}{-5.7/37.1}$
$293 \int \frac{8.1}{-3.1}$	X 5.0	$\frac{9.4}{-4.4/33.2}$
$388 \int \frac{5.4}{101.7}$	5.1	$\frac{2.1}{1000/32}$
$46.4 \int \frac{3.6}{41.6}$	5.2	$\frac{7.0}{100.2/32.8}$
$480 \int \frac{3.4}{420}$	5.4	$\frac{7.3}{100.1/32.4}$
$56.0 \int \frac{1.5}{44.0}$	5.5	$\frac{6.6}{100.9/356}$
$66.8 \int \frac{1.0}{46.7}$	7.0 5.0	$\frac{4.3}{11.3/45.2}$
$640 \int \frac{1.4}{46.0}$	7.3 5.8	$\frac{7.8}{100.0/32.0}$

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

81

+50

82

+50

83

+50

84

+50

85

+50

86

LT

L

RT

$$56.0 \overline{) 0.5} \\ +4.0$$

$$\underline{4.5}$$

$$\frac{9.6}{-5.1} \overline{) 35.3}$$

$$46.8 \overline{) 3.0} \\ +1.7$$

$$4.7$$

$$\frac{10.5}{-5.8} \overline{) 37.4}$$

$$96.8 \overline{) 5.7} \\ 101.2$$

$$\underline{4.9}$$

$$\frac{9.9}{-5.0} \overline{) 50.0}$$

$$34.8 \overline{) 6.3} \\ 100.7$$

$$5.0$$

$$\frac{7.0}{100.0} \overline{) 32.0}$$

$$50.4 \overline{) 2.4} \\ 17.6$$

$$\underline{5.0}$$

$$\frac{4.7}{10.3} \overline{) 41.2}$$

$$49.6 \overline{) 2.4} \\ 12.4$$

$$4.5$$

$$\frac{7.0}{-2.5} \overline{) 3.0}$$

$$\frac{-2.8}{32.9}$$

$$\frac{-5.0}{35.0}$$

$$\frac{-7.2}{43.4}$$

$$\frac{-5.3}{35.9}$$

$$\frac{-9.3}{47.9}$$

$$\frac{-6.2}{98.9}$$

$$\frac{-10.1}{50.3}$$

$$\frac{-6.7}{40.1}$$

$$\frac{-15.0}{65.0}$$

$$\frac{-7.0}{41.0}$$

Sta + π - Grade

86 +50

87

+50

88

+20

+60

89

+50

90

+50

91 +10

ht

R

RT

$$\frac{-15.3}{65.9}$$

$$\frac{-7.2}{41.6}$$

$$\frac{-14.8}{64.4}$$

$$\frac{-8.3}{44.9}$$

$$\frac{-13.0}{56.0}$$

$$\frac{+14.0}{96.0}$$

$$\frac{-5.5}{36.5}$$

$$\frac{+15.0}{100.0}$$

$$\frac{0.0}{40.0}$$

$$44.8 \left| \begin{array}{l} 30 \\ 11.2 \end{array} \right.$$

4

$$\frac{+5.8}{63.2}$$

$$88.0 \left| \begin{array}{l} 4.2 \\ 112.0 \end{array} \right.$$

16.2

$$\frac{+4.6}{58.4}$$

$$56.0 \left| \begin{array}{l} 9.7 \\ 110.0 \end{array} \right.$$

13.7

$$\frac{+5.0}{60.0}$$

$$48.0 \left| \begin{array}{l} 9.2 \\ 120.0 \\ 6.0 \\ 50.8 \end{array} \right. \left| \begin{array}{l} 9.2 \\ 120.0 \\ 6.0 \\ 11.7 \end{array} \right.$$

11.2

8.1

$$\frac{+5.5}{62.0}$$

$$56.0 \left| \begin{array}{l} 2.4 \\ 110.0 \end{array} \right.$$

6.2

6.2

$$\frac{+5.8}{63.2}$$

$$\frac{+5.8}{62.2}$$

Sta.	+	↑	-	Grade
------	---	---	---	-------

91	+50			
----	-----	--	--	--

92				
----	--	--	--	--

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

93				
----	--	--	--	--

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

94				
----	--	--	--	--

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

95				
----	--	--	--	--

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

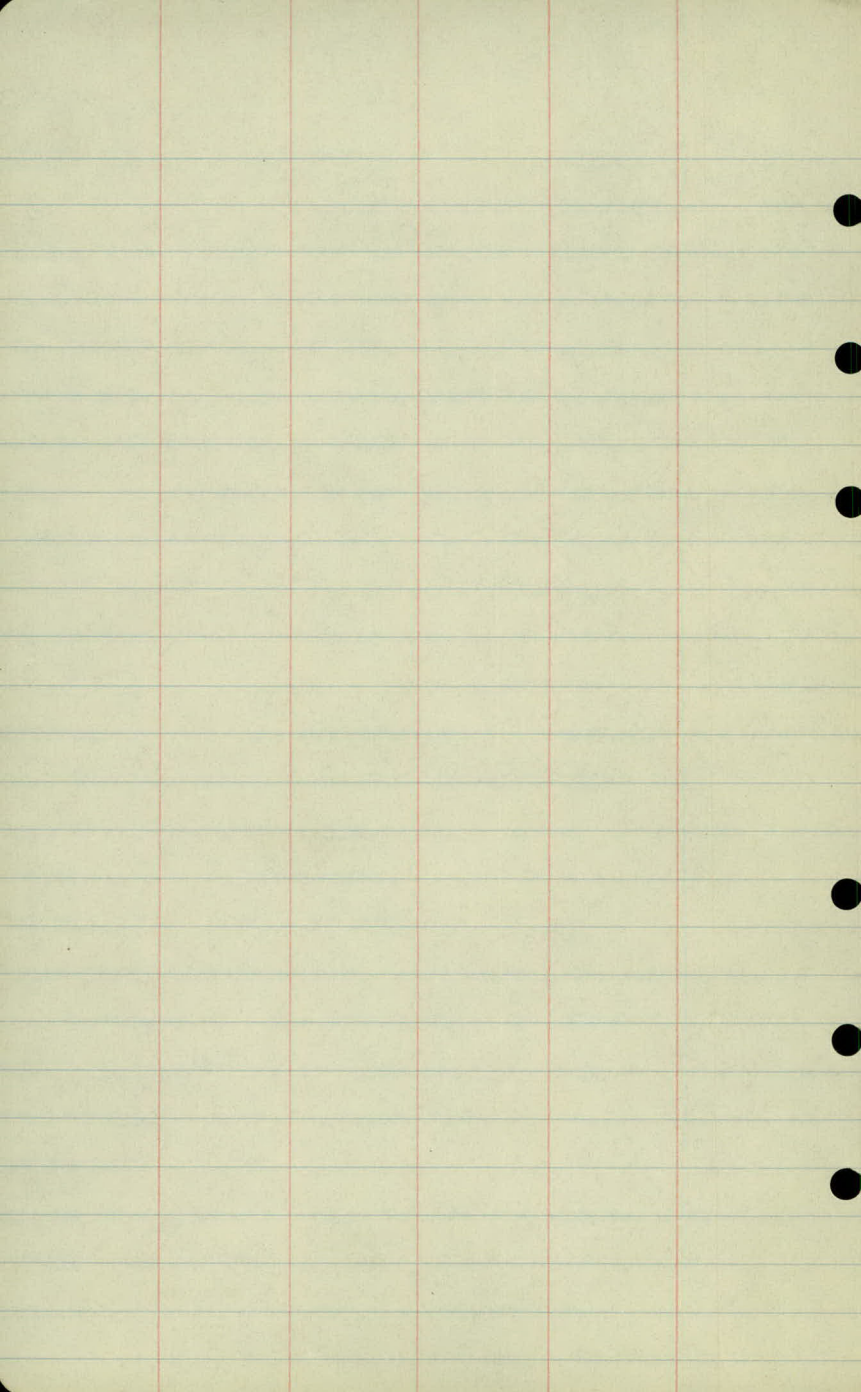
96				
----	--	--	--	--

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

97				
----	--	--	--	--

	+48.6 - E Wh Bear Ave			
--	-----------------------	--	--	--

Lat	ϕ	Alt
$59.2 \frac{6.6}{+4.8}$	1.4	$\frac{+6.2}{64.8}$
$61.6 \frac{3.6}{+4.4}$	9.0	$\frac{+4.8}{67.2}$
$55.2 \frac{7.7}{+3.8}$	11.8	$\frac{+6.0}{64.0}$
$46.0 \frac{7.3}{+1.5}$	9.0	$\frac{+5.0}{62.0}$
$38.8 \frac{6.6}{+0.7}$	6.3	$\frac{+7.0}{52.0}$
$40.4 \frac{3.8}{+0.1}$	3.9	$\frac{+2.8}{61.2}$
$38.8 \frac{1.7}{+1.7}$	1.4	$\frac{+1.5}{58.0}$
$45.6 \frac{7.4}{+1.4}$	8.2	$\frac{+1.5}{65.2}$
$48.8 \frac{2.4}{+0.8}$	6.8	$\frac{+2.5}{60.0}$
$56.0 \frac{1.4}{+0.0}$	5.4	$\frac{+4.0}{56.0}$
$46.8 \frac{11.7}{+6.8}$	11.7	$\frac{+5.7}{62.8}$
$38.8 \frac{0.1.7}{+3.8}$	3.6	$\frac{+3.8}{+55.2}$



Bench Levels

Frost Ave

Phalen Blvd to Bock St

	+	H. I	-	Elev.	
B.M.	0.68	867.90		867.22	
	552	871.71	1.71	866.19	
	13.51	884.83	0.39	871.32	
	13.33	898.12	0.04	884.79	
	13.38	911.14	0.36	897.76	
B.M.	488	911.14	4.88	906.26	(X-See. 906.35)
	1.66	904.97	7.83	903.31	
	3.52	901.86	6.63	898.34	
	4.74	899.96	6.64	895.22	
B.M.	9.78	905.73	4.01	895.95	Xsec 44+15
	9.20	913.58	1.35	904.38	
	2.62	912.35	3.85	909.73	
	1.98	909.54	9.79	902.56	
B.M.			8.94	895.60	
B.M.			4.98	899.56	

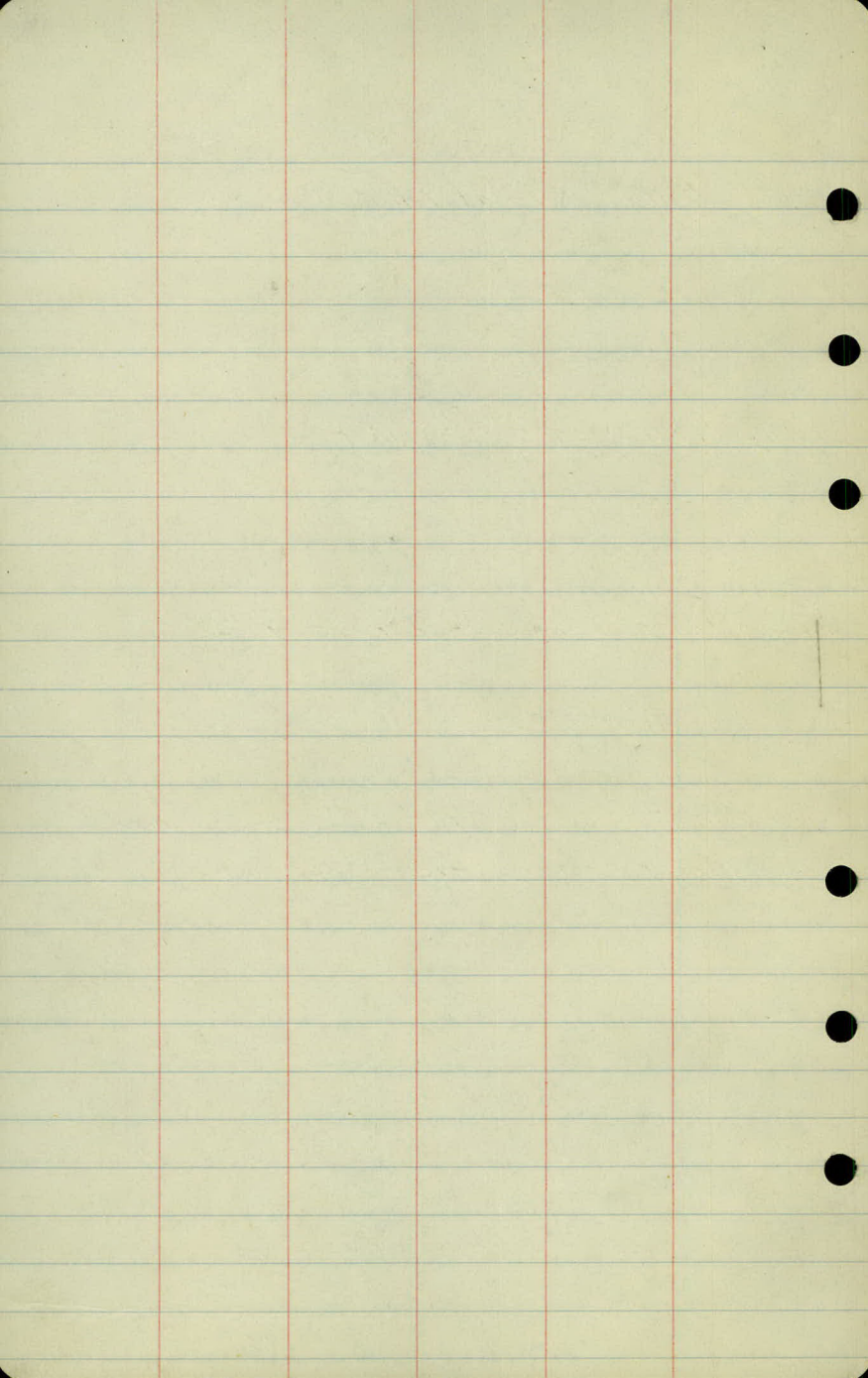
Top Gourd Rail at Phalen Creek

Top Iron Mont. Sta 18+

Top Mont. Lake St & Frost Ave.

Nail in P.P. 100 S.E. Frost Ave & Book St.

Top Mont. at Frost Ave & Book St.



Borrow Pit

Frost Ave

Sta 24+00 to 25+65 Rt.

Sta	+	A	-	Elev
-----	---	---	---	------

24

+47

+65

25

+30

+75

4

$$\frac{118}{10} \quad \frac{119}{20} \quad \frac{145}{29} \quad \frac{146}{52} \quad \frac{127}{74} \quad \frac{127}{110} \quad \frac{121}{150}$$

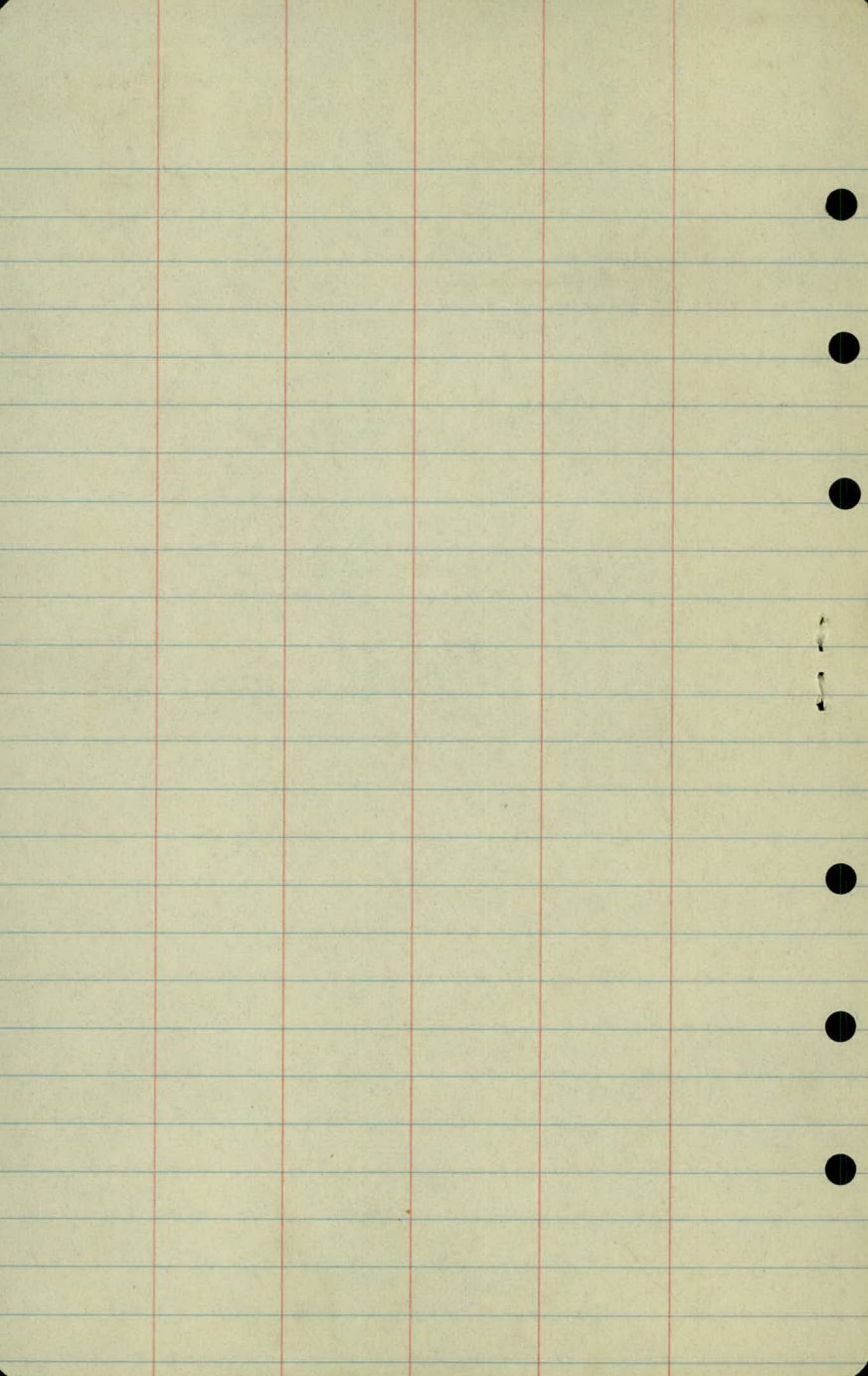
$$\frac{128}{10} \quad \frac{128}{20} \quad \frac{145}{26} \quad \frac{145}{30} \quad \frac{122}{39} \quad \frac{49}{52} \quad \frac{62}{110} \quad \frac{78}{150}$$

$$\frac{125}{10} \quad \frac{125}{20} \quad \frac{146}{26} \quad \frac{146}{30} \quad \frac{137}{39} \quad \frac{137}{56} \quad \frac{39}{67} \quad \frac{58}{110} \quad \frac{63}{150}$$

$$\frac{128}{10} \quad \frac{129}{20} \quad \frac{150}{26} \quad \frac{150}{30} \quad \frac{135}{39} \quad \frac{122}{40} \quad \frac{38}{50} \quad \frac{56}{110} \quad \frac{57}{150}$$

$$\frac{131}{10} \quad \frac{131}{20} \quad \frac{152}{26} \quad \frac{152}{30} \quad \frac{142}{32} \quad \frac{110}{45} \quad \frac{98}{109} \quad \frac{58}{110} \quad \frac{68}{150}$$

$$\frac{138}{10} \quad \frac{136}{20} \quad \frac{155}{26} \quad \frac{158}{30} \quad \frac{133}{39} \quad \frac{108}{80} \quad \frac{125}{110} \quad \frac{101}{150}$$



Dr6-BK110

Frost Ave

Borrow Pit

Sta.	+	-	Elev.
T.B.M.	6.75	906.55	899.8

+36.11

76

+50

75

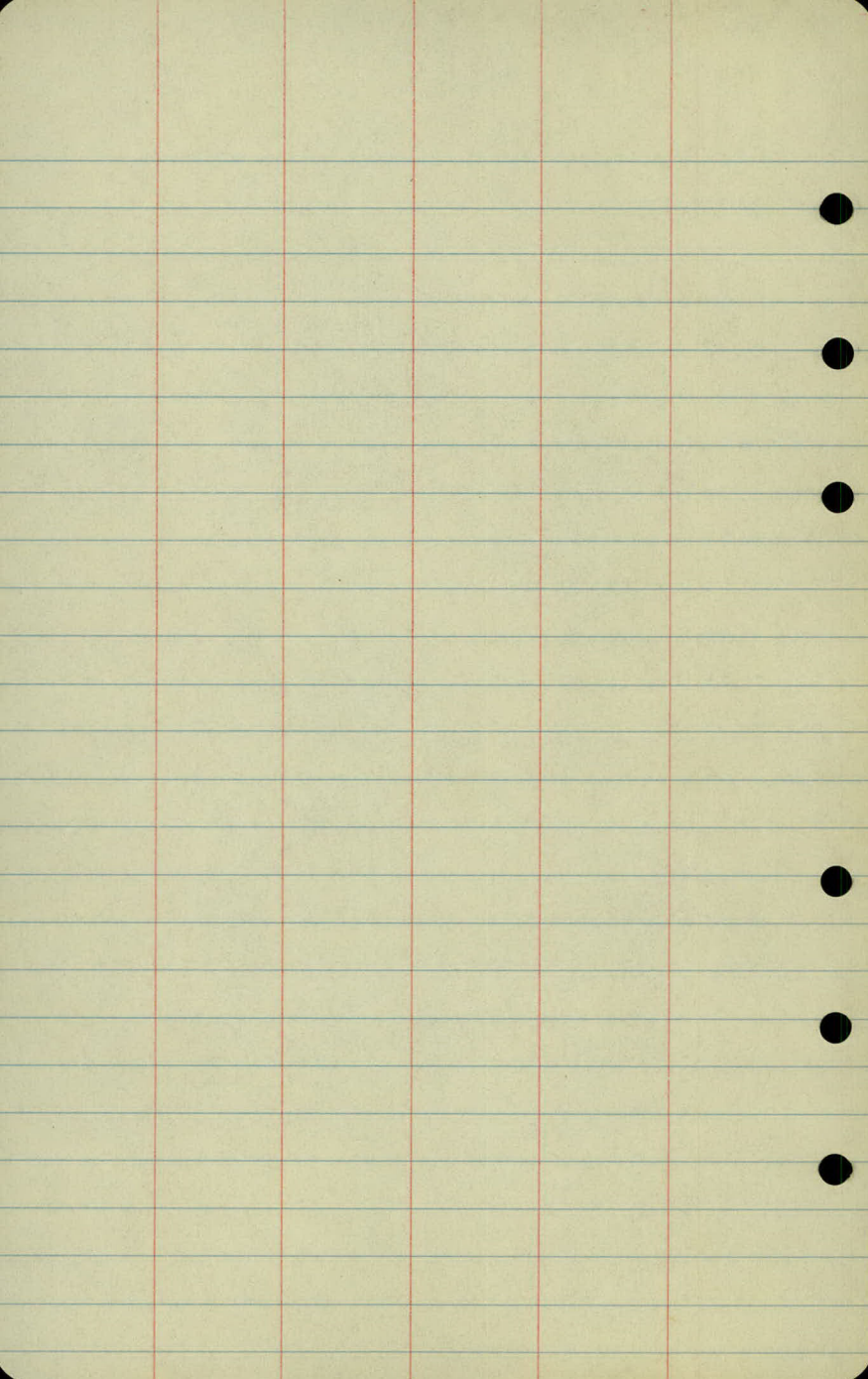
24+56

24+50

24+0

Top Bu. 2 Stg. 75+00

$\frac{98.2}{17}$	$\frac{98.4}{37}$				
$\frac{98.6}{29}$	$\frac{89.6}{33}$	$\frac{+2.2}{99.2}$	$\frac{+1.3}{90.2}$	$\frac{90.6}{125}$	$\frac{90.30}{173}$
$\frac{99.2}{67}$	$\frac{99.2}{33}$	$\frac{+2.4}{99.6}$	$\frac{+4.4}{90.5}$	$\frac{+1.4}{90.6}$	
$\frac{99.8}{61}$	$\frac{99.8}{33}$	$\frac{+7.7}{900.0}$	$\frac{+6.1}{90.6}$	$\frac{+4.0}{90.6}$	
$\frac{57}{900.2}$	$\frac{900.2}{33}$	$\frac{+7.2}{900.4}$	$\frac{+4.2}{90.7}$	$\frac{+5.2}{90.6}$	
$\frac{900.3}{33}$	$\frac{900.3}{33}$	$\frac{900.8}{50}$	$\frac{90.8}{100}$	$\frac{90.6}{125}$	
$\frac{900.8}{33}$	$\frac{900.8}{33}$	$\frac{90.0}{50}$	$\frac{90.20}{100}$	$\frac{90.6}{125}$	$\frac{90.6}{173}$



Lake St -

Frost Ave

W. N. C.
Aug. 1937

1321.0

2640.16 - Rec.
2642.00 - Meas.

31/26.5

6 10.50

$$\begin{array}{r} 24+56.03 \\ 25+16.03 \\ \hline 26+36.11 \end{array}$$

60 13210

650,50

1870553

Center

toppling

20	140.0g	20	140.0g
20	140.0g	20	140.0g

1562

Charles St.

0.68

no

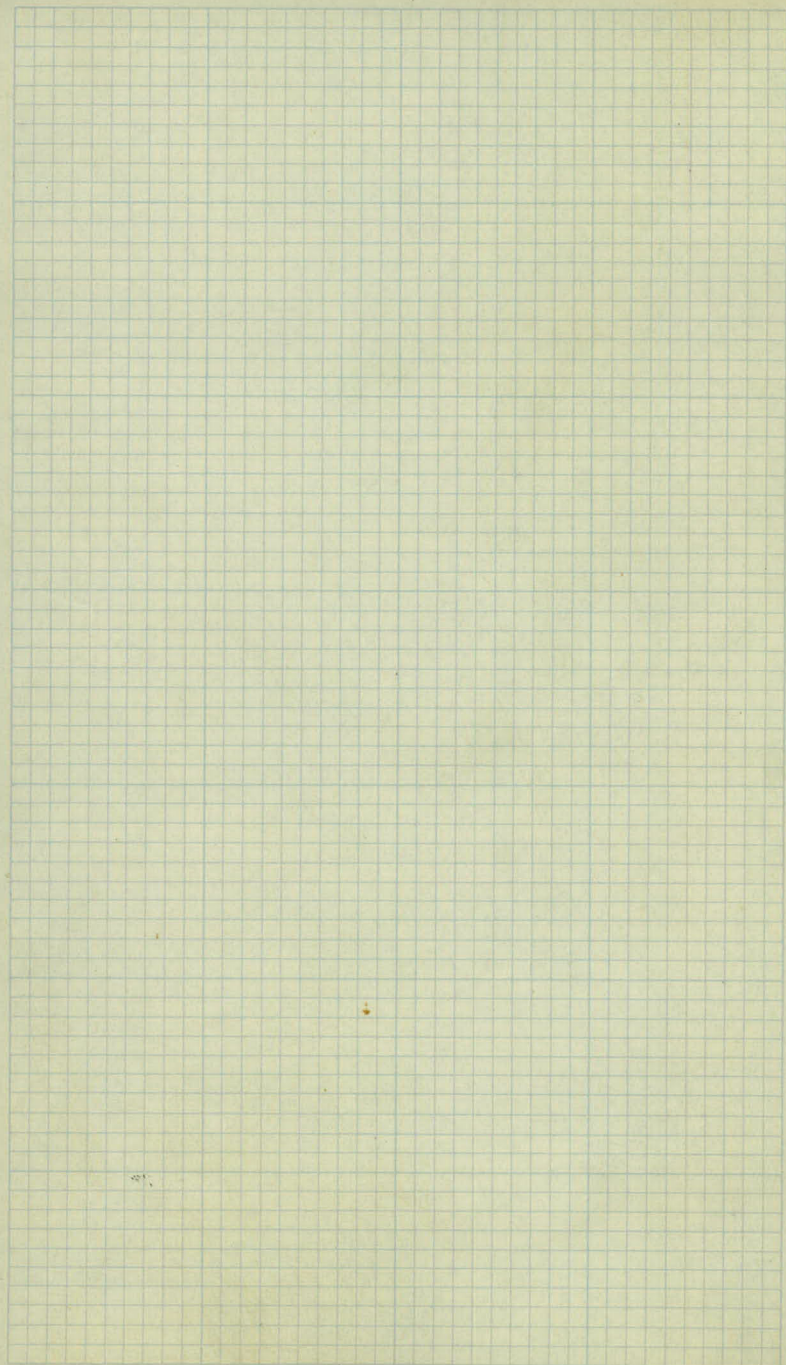
0

20

9000

[illegible]

$\begin{matrix} 81 \\ 51 \end{matrix} \begin{matrix} 30+12 \\ 88+82 \end{matrix}$



X Sections

Frost Ave. Borrow Pit.

Sta 15+00 to 31+40

Sta	+	π	-	Elev
B.M.	1.63	907.98		906.35
15.				97.8
+50				99.8
16				01.7
+50			✓	03.3
17				04.8
17+50				05.7

Top 1000 18400

$\frac{13.2}{77}$ $\frac{132}{70}$ $\frac{115}{38}$ $\frac{113}{35}$ $\frac{121}{30}$ $\frac{123}{26}$ $\frac{98}{20}$ $\frac{102}{10}$

$\frac{70}{59}$ $\frac{141}{76}$ $\frac{84}{61}$ $\frac{84}{39}$ $\frac{100}{30}$ $\frac{101}{26}$ $\frac{80}{20}$ $\frac{82}{10}$

$\frac{86}{100}$ $\frac{45}{76}$ $\frac{58}{41}$ $\frac{82}{31}$ $\frac{82}{26}$ $\frac{60}{20}$ $\frac{63}{10}$

$\frac{97}{110}$ $\frac{53}{76}$ $\frac{46}{40}$ $\frac{66}{30}$ $\frac{66}{26}$ $\frac{45}{20}$ $\frac{42}{10}$

$\frac{128}{120}$ $\frac{75}{110}$ $\frac{76}{96}$ $\frac{42}{73}$ $\frac{31}{40}$ $\frac{50}{30}$ $\frac{51}{25}$ $\frac{30}{20}$ $\frac{32}{10}$

$\frac{138}{129}$ $\frac{121}{110}$ $\frac{40}{68}$ $\frac{29}{37}$ $\frac{42}{31}$ $\frac{41}{26}$ $\frac{21}{20}$ $\frac{23}{10}$

Sta	+	π ✓	-	Elev.
B.M.	3.80	910.15		906.35

18+00 (Mont = 18405.1 = 18455 Equa.) 06.2

+45 06.5

19 06.6

+28 06.4

+45 06.3

+70 06.1

B.M.	0.88	✓ 907.23		906.35
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20 05.6

+55 05.0

21 04.3

+57 03.5

+77 03.3

L+

L

Top 1007 18+18.5

$$\frac{158}{132.0} \quad \frac{13.5}{120.} \quad \frac{80}{81} \quad \frac{54}{70} \quad \frac{44}{35.0} \quad \frac{5.9}{30} \quad \frac{57}{32} \quad \frac{37}{20} \quad \frac{4.0}{10}$$

$$\frac{196}{140} \quad \frac{127}{123} \quad \frac{54}{66} \quad \frac{49}{36} \quad \frac{57}{30} \quad \frac{56}{27} \quad \frac{34}{20} \quad \frac{37}{10}$$

$$\frac{72}{151} \quad \frac{14.3}{138.0} \quad \frac{140}{74.0} \quad \frac{138}{77} \quad \frac{119}{73} \quad \frac{114}{64} \quad \frac{85}{53} \quad \frac{57}{27} \quad \frac{36}{20} \quad \frac{36}{10}$$

$$\frac{98}{134} \quad \frac{7.7}{139} \quad \frac{106}{22} \quad \frac{130}{71} \quad \frac{125}{72} \quad \frac{95}{64} \quad \frac{84}{34} \quad \frac{37}{20} \quad \frac{32}{10}$$

$$\frac{85}{137} \quad \frac{84}{128} \quad \frac{100}{76} \quad \frac{88}{70} \quad \frac{84}{34} \quad \frac{38}{20} \quad \frac{39}{10}$$

$$\frac{93}{161} \quad \frac{87}{141} \quad \frac{70}{122} \quad \frac{61}{121} \quad \frac{67}{72} \quad \frac{84}{49} \quad \frac{84}{34} \quad \frac{38}{20} \quad \frac{41}{10}$$

$$\frac{57}{166} \quad \frac{35}{136} \quad \frac{24}{80} \quad \frac{45}{45} \quad \frac{45}{30} \quad \frac{13}{20} \quad \frac{16}{10}$$

$$\frac{63}{175} \quad \frac{48}{149} \quad \frac{31}{134} \quad \frac{23}{75} \quad \frac{30}{85} \quad \frac{25}{39} \quad \frac{46}{30} \quad \frac{43}{27} \quad \frac{19}{20} \quad \frac{2.2}{10}$$

$$\frac{68}{153} \quad \frac{57}{157} \quad \frac{33}{140} \quad \frac{33}{100} \quad \frac{24}{90} \quad \frac{45}{30} \quad \frac{45}{27} \quad \frac{25}{20} \quad \frac{2.9}{10}$$

$$\frac{64}{192} \quad \frac{63}{169} \quad \frac{25}{147} \quad \frac{44}{41} \quad \frac{42}{35} \quad \frac{56}{31} \quad \frac{56}{28} \quad \frac{38}{20} \quad \frac{3.7}{10}$$

$$\frac{130}{196} \quad \frac{111}{159} \quad \frac{105}{120} \quad \frac{114}{42} \quad \frac{36}{10} \quad \frac{3.9}{10}$$

Sta	+	π / 907.23	-	Elev
22				03.1
	+24			02.7
	+50			02.5
	+67			02.3
	+87			02.2
23				01.9
T.P.	6.12	✓ 902.96	5.39	✓ 901.84
	+50			01.4
24				00.9
	+55			00.3
25				99.9
	+60			99.2

LT

4
L

$\frac{148}{199}$	$\frac{122}{170}$	$\frac{109}{138}$	$\frac{121}{93}$	$\frac{128}{47}$	$\frac{40}{20}$	$\frac{41}{10}$
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$\frac{166}{205}$	$\frac{133}{177}$	$\frac{89}{167}$	$\frac{80}{146}$	$\frac{88}{102}$	$\frac{109}{89}$	$\frac{131}{47}$	$\frac{46}{20}$	$\frac{45}{10}$
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$\frac{158}{210}$	$\frac{147}{194}$	$\frac{96}{174}$	$\frac{88}{164}$	$\frac{61}{144}$	$\frac{58}{110}$	$\frac{81}{61}$	$\frac{54}{34}$	$\frac{44}{20}$	$\frac{47}{10}$
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$\frac{158}{211}$	$\frac{131}{195}$	$\frac{101}{176}$	$\frac{76}{162}$	$\frac{55}{183}$	$\frac{51}{100}$	$\frac{66}{65}$	$\frac{68}{35}$	$\frac{71}{30}$	$\frac{70}{27}$	$\frac{46}{20}$	$\frac{49}{10}$
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$\frac{57}{213}$	$\frac{147}{195}$	$\frac{135}{181}$	$\frac{77}{153}$	$\frac{59}{109}$	$\frac{64}{59}$	$\frac{58}{31}$	$\frac{68}{30}$	$\frac{68}{25}$	$\frac{48}{20}$	$\frac{48}{10}$
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$\frac{157}{216}$	$\frac{150}{200}$	$\frac{136}{188}$	$\frac{183}{179}$	$\frac{165}{100}$	$\frac{166}{68}$	$\frac{69}{310}$	$\frac{58}{35}$	$\frac{71}{30}$	$\frac{71}{26}$	$\frac{50}{20}$	$\frac{53}{10}$
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$\frac{116}{228}$	$\frac{112}{215}$	$\frac{138}{209}$	$\frac{138}{185}$	$\frac{150}{181}$	$\frac{150}{162}$	$\frac{128}{100}$	$\frac{125}{24}$	$\frac{83}{47}$	$\frac{66}{37}$	$\frac{35}{30}$	$\frac{34}{27}$	$\frac{13}{20}$	$\frac{16}{10}$
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$\frac{120}{192}$	$\frac{117}{220}$	$\frac{135}{215}$	$\frac{127}{172}$	$\frac{139}{168}$	$\frac{128}{100}$	$\frac{128}{54}$	$\frac{85}{37}$	$\frac{88}{36}$	$\frac{46}{30}$	$\frac{41}{26}$	$\frac{18}{28}$	$\frac{21}{10}$
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$\frac{84}{242}$	$\frac{84}{227}$	$\frac{135}{219}$	$\frac{125}{191}$	$\frac{121}{157}$	$\frac{128}{133}$	$\frac{125}{59}$	$\frac{31}{49}$	$\frac{31}{36}$	$\frac{47}{32}$	$\frac{47}{27}$	$\frac{29}{20}$	$\frac{27}{10}$
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$\frac{48}{249}$	$\frac{40}{242}$	$\frac{113}{228}$	$\frac{125}{200}$	$\frac{118}{133}$	$\frac{103}{118}$	$\frac{100}{95}$	$\frac{36}{20}$	$\frac{31}{10}$
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$\frac{48}{259}$	$\frac{41}{248}$	$\frac{101}{256}$	$\frac{113}{200}$	$\frac{107}{150}$	$\frac{101}{98}$	$\frac{70}{96}$	$\frac{50}{64}$	$\frac{48}{35}$	$\frac{57}{30}$	$\frac{57}{27}$	$\frac{35}{20}$	$\frac{38}{10}$
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Sta	+	1/	-	Elev
		✓ 982.96		
26				98.8
	+90			98.3
	+80			97.7
T.P.	0.15	✓ 897.82	5.22	✓ 892.67
27	+17			97.3
	+67			96.8
28				96.5
	+55			96.0
29				95.8
	+70			95.6
30				95.6
	+50			95.8

ht

4

$\frac{46}{265}$ $\frac{47}{220}$ $\frac{70}{219}$ $\frac{72}{200}$ $\frac{69}{168}$ $\frac{45}{190}$ $\frac{53}{100}$ $\frac{54}{32}$ $\frac{62}{26}$ $\frac{41}{20}$ $\frac{42}{10}$

$\frac{73}{171}$ $\frac{73}{68}$ $\frac{158}{255}$ $\frac{159}{230}$ $\frac{178}{188}$ $\frac{123}{177}$ $\frac{110}{199}$ $\frac{73}{89}$ $\frac{62}{21}$ $\frac{61}{53}$ $\frac{67}{28}$ $\frac{45}{26}$ $\frac{45}{20}$ $\frac{47}{10}$

$\frac{193}{290}$ $\frac{155}{192}$ $\frac{187}{87}$ $\frac{184}{69}$ $\frac{125}{162}$ $\frac{141}{100}$ $\frac{130}{100}$ $\frac{116}{59}$ $\frac{51}{20}$ $\frac{53}{10}$

Tap Rev. 27100

$\frac{121}{289}$ $\frac{98}{266}$ $\frac{100}{219}$ $\frac{51}{126}$ $\frac{62}{65}$ $\frac{67}{70}$ $\frac{93}{20}$ $\frac{96}{10}$

$\frac{143}{291}$ $\frac{129}{200}$ $\frac{115}{172}$ $\frac{113}{149}$ $\frac{125}{141}$ $\frac{131}{72}$ $\frac{68}{58}$ $\frac{54}{36}$ $\frac{95}{19}$ $\frac{10}{10}$

$\frac{157}{298}$ $\frac{142}{252}$ $\frac{127}{188}$ $\frac{154}{158}$ $\frac{123}{143}$ $\frac{168}{100}$ $\frac{132}{85}$ $\frac{134}{59}$ $\frac{11}{20}$ $\frac{13}{10}$

$\frac{171}{306}$ $\frac{170}{250}$ $\frac{158}{168}$ $\frac{154}{89}$ $\frac{172}{68}$ $\frac{15}{20}$ $\frac{18}{10}$

$\frac{129}{314}$ $\frac{147}{264}$ $\frac{157}{186}$ $\frac{162}{123}$ $\frac{173}{83}$ $\frac{149}{24}$ $\frac{15}{20}$ $\frac{20}{10}$

$\frac{82}{323}$ $\frac{80}{274}$ $\frac{74}{211}$ $\frac{111}{141}$ $\frac{132}{110}$ $\frac{139}{59}$ $\frac{21}{20}$ $\frac{22}{10}$

$\frac{81}{331}$ $\frac{83}{300}$ $\frac{87}{250}$ $\frac{89}{200}$ $\frac{102}{145}$ $\frac{149}{72}$ $\frac{150}{62}$ $\frac{20}{20}$ $\frac{22}{10}$

$\frac{87}{338}$ $\frac{89}{300}$ $\frac{88}{250}$ $\frac{84}{200}$ $\frac{92}{137}$ $\frac{133}{64}$ $\frac{136}{58}$ $\frac{12}{20}$ $\frac{20}{10}$

Sta	+	π ✓	-	Elev.
		897.82		

31				96.1
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+40	Approx. End Co. Prop			96.2 ✓
T.P.	6.67	902.45 ✓	2.04	895.78 ✓
T.P.	7.16	908.93	1.28	901.17 ✓
B.M.			1.99	906.39 906.35

Lt

f

$\frac{96}{349}$	$\frac{101}{300}$	$\frac{96}{260}$	$\frac{93}{200}$	$\frac{92}{155}$	$\frac{92}{100}$	$\frac{112}{52}$	$\frac{16}{20}$	$\frac{17}{10}$
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$\frac{10.6}{354}$	$\frac{10.7}{300}$	$\frac{89}{260}$	$\frac{9.0}{200}$	$\frac{9.2}{165}$	$\frac{9.2}{100}$	$\frac{9.5}{75}$	$\frac{1.9}{20}$	$\frac{1.6}{10}$
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Top Iron sta 18+05.1

