

Dr. 8 Bk. 161

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

PLAN Survey

Co. RD. "F"

from Belleaire Ave To East Co. Line

Road Acc't. No. 56

ate Filed

File

PLAN SURVEY

CO. RD. "F"

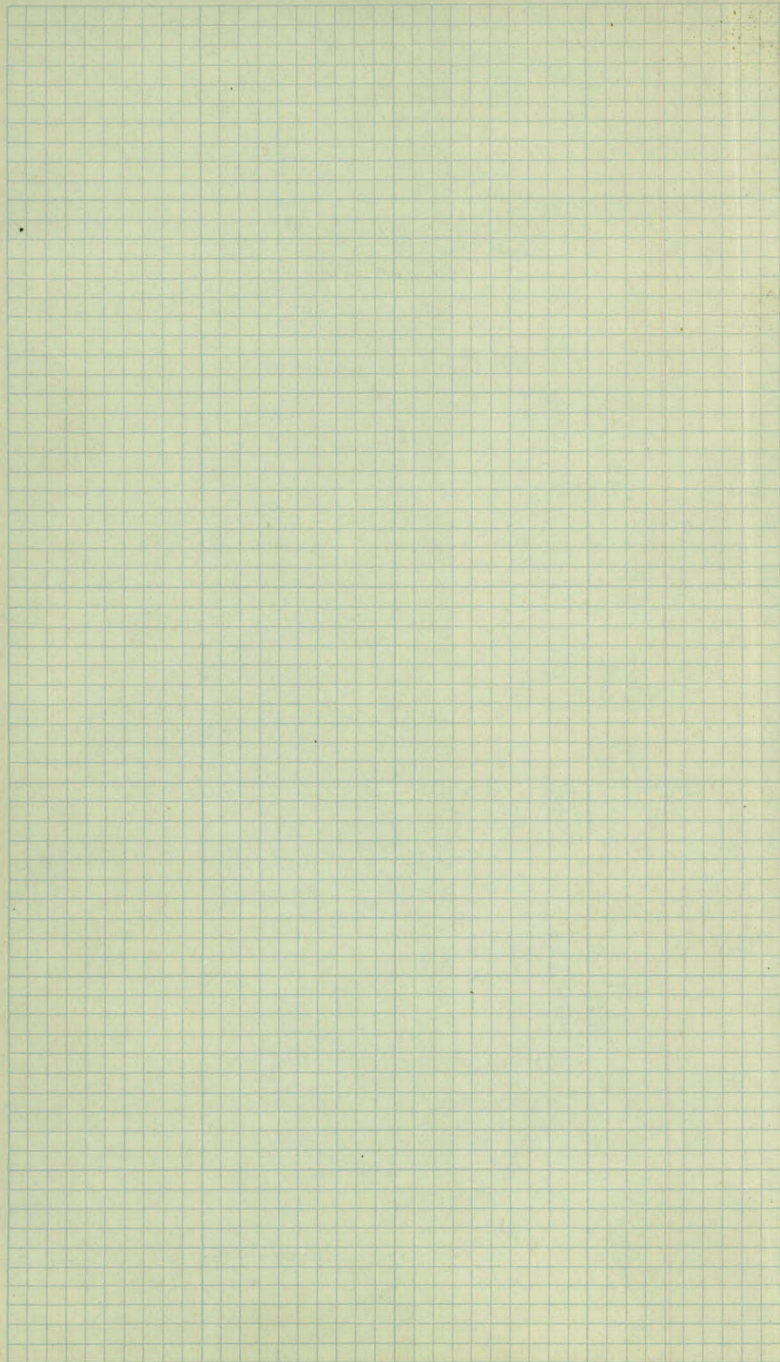
Bellaire Ave to E. Co. Line



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H.A. & H.W.
 L.C.
 L.H.
 M.G.



1

Alignment

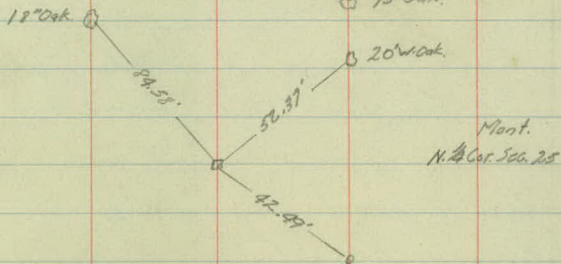
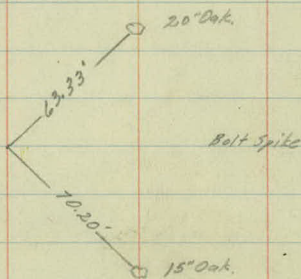
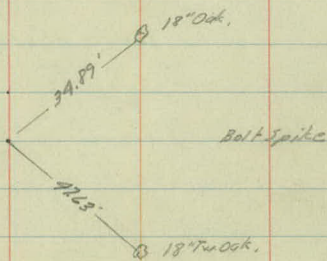
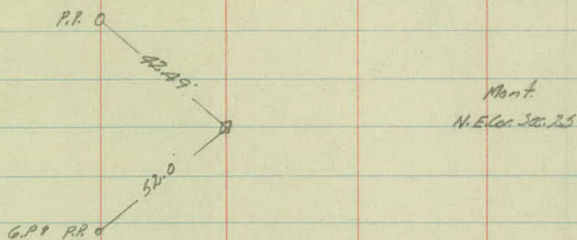
Sta	Point	ΔLt	ΔRt
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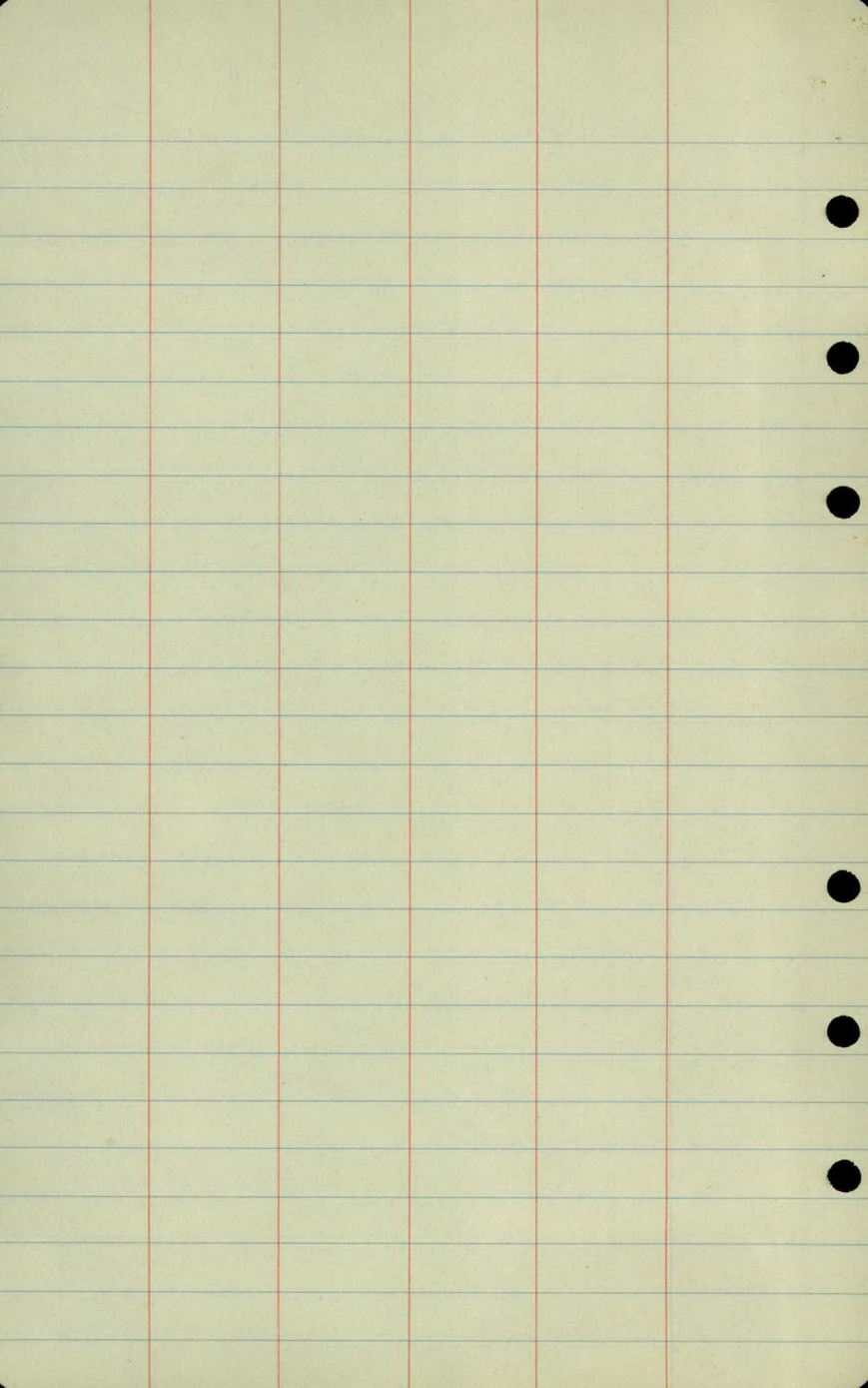
^{30.57}
 26 + 29.85 = E. East Co. Line.

9 + 17.94 P.O.T.

3 + 72.68 P.O.T.
 ✓

0 + 00 = E. Bellmore Ave.





Topography

+82-18"5"Stump-28'

5 +108-24"Stump-34' 11' 11' FC-33'

+125-15"Oak-33'

+18-15"Oak Stump-22'

+127-24"Oak-31'

4 12' 12' FC-31'

+89-24"Stump-21'

+54-15"Stump-19'

+99-24"Stump-29'

3 13' 12' FC-33'

+18-15"Oak-34'

+97-18"Oak-34'

+82-12"Stump-31'

+68-30"Oak-31'

+92-15"Stump-24'

+79-15"Stump-23'

+71-30"Oak-31'

+26-14"Oak-31'

2 +112-W Edge Parking Area- 12' 12' 15"Oak 0 FC-33'

+125-5"Gas Pump-25'

+12-5"Gas Pump Platform-28.4'

+57-5"Gas Storage-18'

+84-20"Stump-29'

+60-18"Oak-32'

+92-15"Oak-31'

+80-14"Oak-33'

1 103-12"Oak-29' 11' 12' FC-34'

+92-16"Oak-29'

+88-16"Stump-29'

+69-12"Stump-31'

+63-8"Oak-36' FC-34'

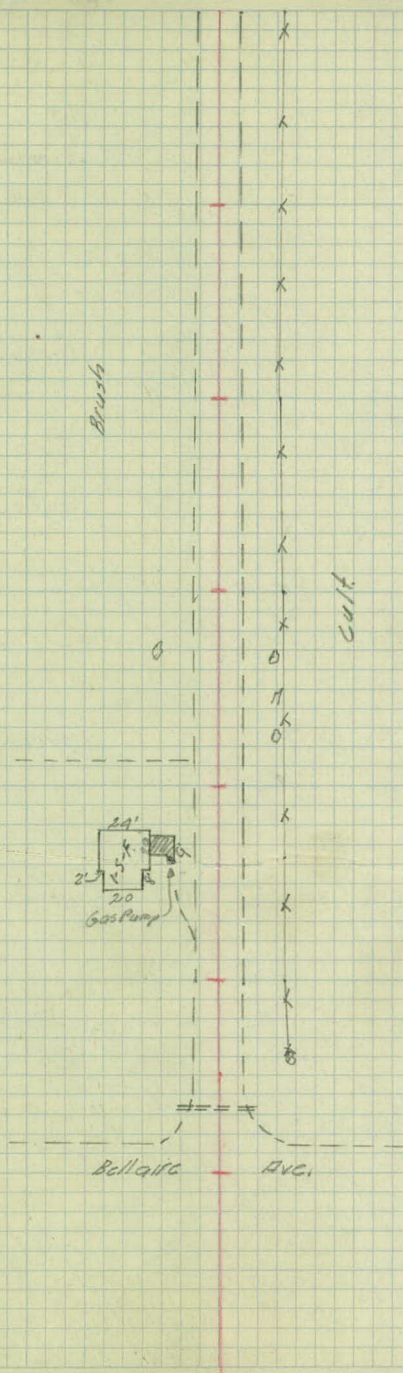
+78-15"Oak-34'

+33-2-24"X40'6M

21' 19'

+38-24"Oak-36'

0100



+90-12" Oak-38'
 +76-12" Oak-34'
 +65-6" Oak-37'
 +56-18" Oak-36'
 +23-18" Oak-35'

12 Brush-22' 9' 12' Fc-36'

Two-Ent.

+95-8" Oak-34'
 +92-10" Oak-36'

11 Brush-19' 9' 11' Fc-35'

+71-6" Oak-36'
 +56-15" Oak-39'
 +51-12" Oak-34'
 +19-12" Oak-36'

+90-15" Oak-34'
 +85-12" Oak-33'

+56-15" Oak-34'
 +57-15" Oak-33'

10 Brush-23' 10' 12' Fc-35'

+95-8" Oak-34'
 +94-8" Oak-35'
 +79-15" Oak-32'

+74-20" Oak-33'
 +19-12" Oak-35'
 +02-18" Oak-32'

9 10' 13' Fc-36'

+82-15" Oak-34'
 +60-15" Oak-33'
 +53-15" Oak-33'

8 10' 12' Fc-35'

Two-Ent.

+85-12" Oak-37'
 +25-24" Elm-32'
 +00-24" Oak-30'

7 11' 13' Fc-36'

+90-6 Rd-

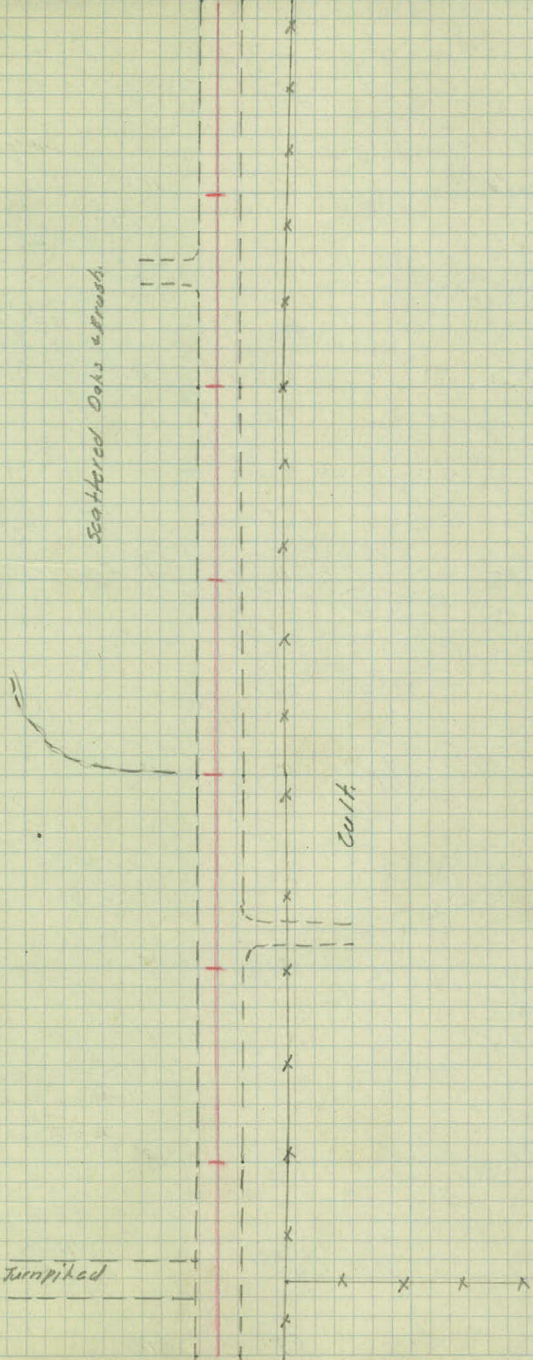
+78-12" Oak-35'
 +75-6" Oak-35'
 +58-12" Oak-33'
 +56-24" Oak-31'
 +20-Fc Oak-38'

6 11' 11' Fc-33'

Scattered Oaks & brush.

Cult.

Turnpiked



+73-FC Cor-33'

+39-15" W/16W-32'
~~124-40' Oak-34'~~

19 FC-27'

11'

11'

FC-35'

+75-End Swamp.

+80

10" X 5 V. T Plugged
29' Rt

18 FC-25

9'

12'

FC-36'

+80-Reg. Swamp

17 FC-24'

9'

11'

FC-35'

+90-Ent.-15" X 2.6' C.M.-17'

16 FC-24'

10'

12'

FC-36'

+35-FC Cor-24'

15

9'

14'

FC-36'

+15-Ent.

+50-1309 Swamp
+39-Range Tie to Fe.
+22-Δ in FC 40
+02-10" Oak-33'

14 Brush-19'

8'

12'

+91-FC Cor-47'
+85-8" Oak 40'

+50-15" Oak-28'
+40-14" Oak-37'

+17-18" Oak-25'

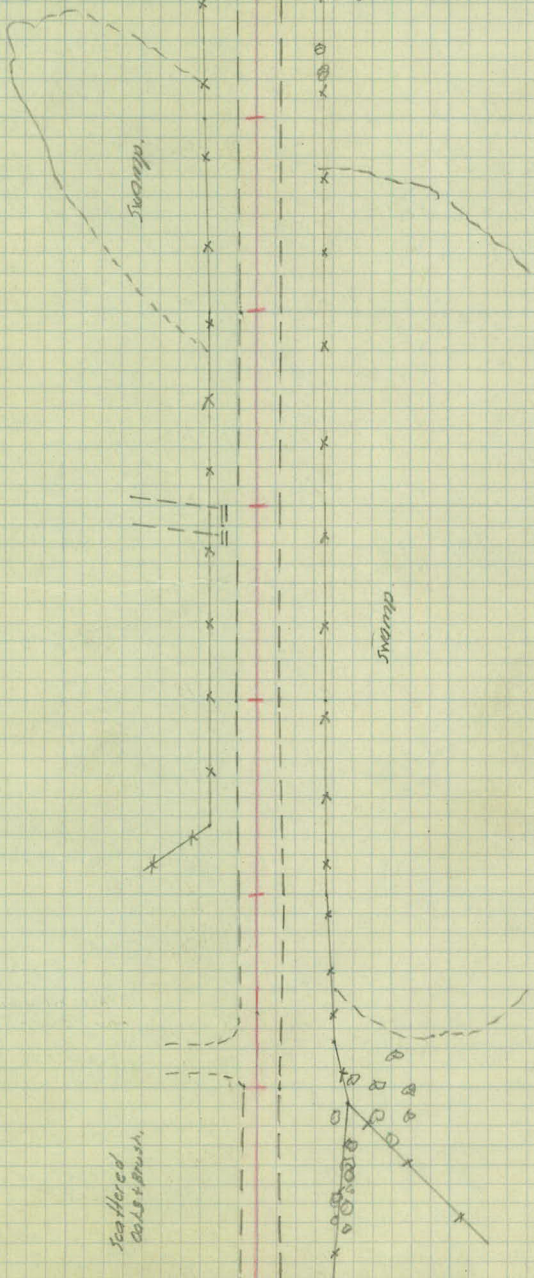
+08-15" Tw Oak-35'

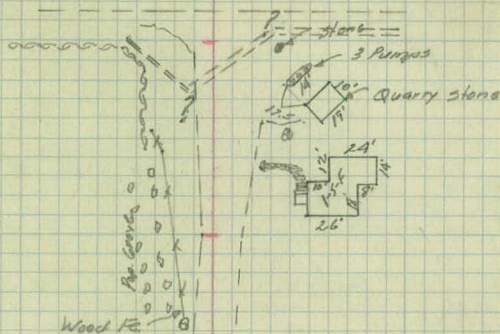
13 Brush-18'

9'

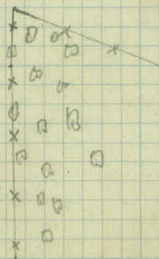
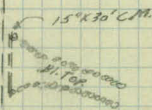
12'

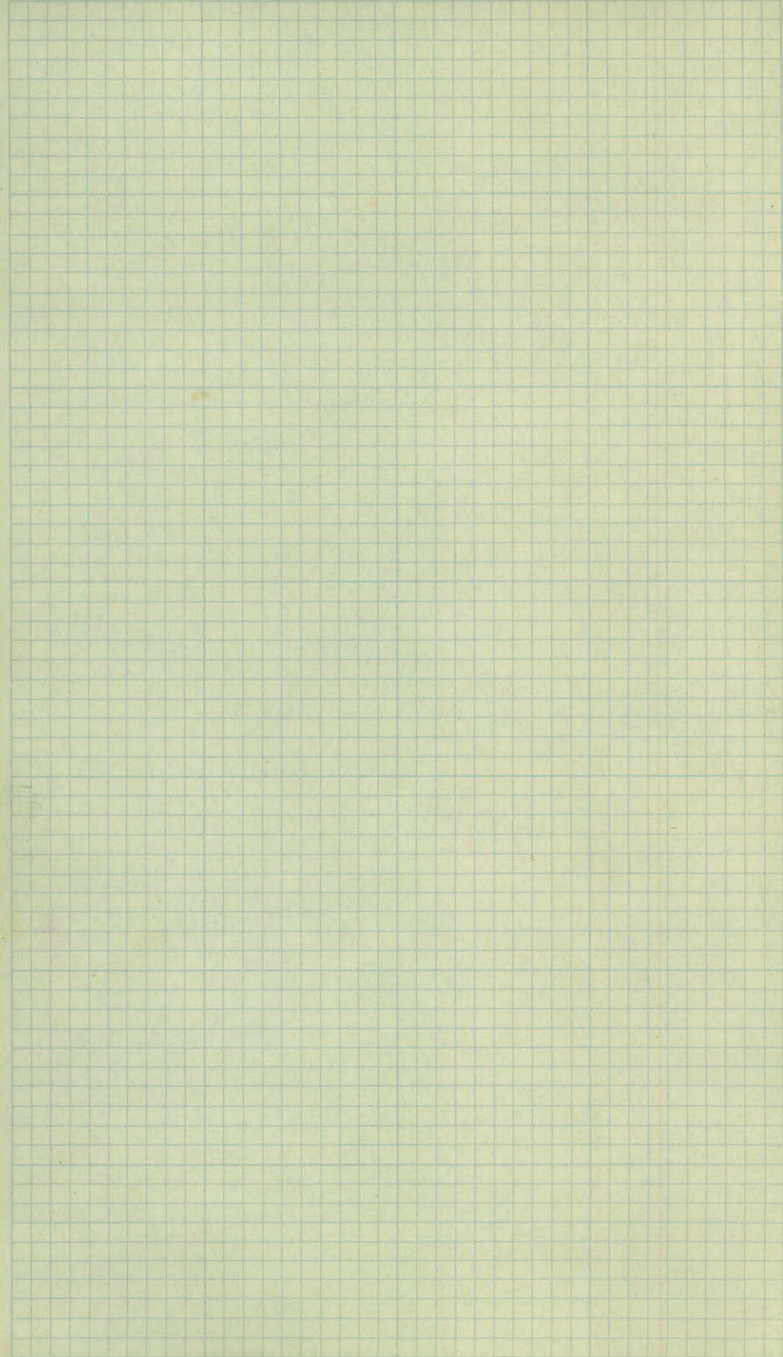
FC-39'





Exposed Oak & Birch





Bench Levels

These levels appear
to be approx. 10' $\frac{1}{2}$ to high
11/4/53
K.A.

Lower Elevs. 9.95 ft.
K.A. 4-17-63

Sta	I	X	-	Elev	
B.M.	11.70	976.67			955.02 964.97
	2.10	972.52	6.25	970.42	
	0.23	960.70	12.05	960.47	
B.M.	0.97	960.70	0.97	959.73	
	0.39	948.95	12.14	948.56	
	12.79	955.48	6.26	942.69	
B.M.	2.65	955.48	2.65	952.83	
	13.33	968.55	0.26	955.22	
	5.58	973.79	0.34	968.21	
B.M.			3.05	970.74	960.79

See new
Bench levels
K.D.G.
4-17-63

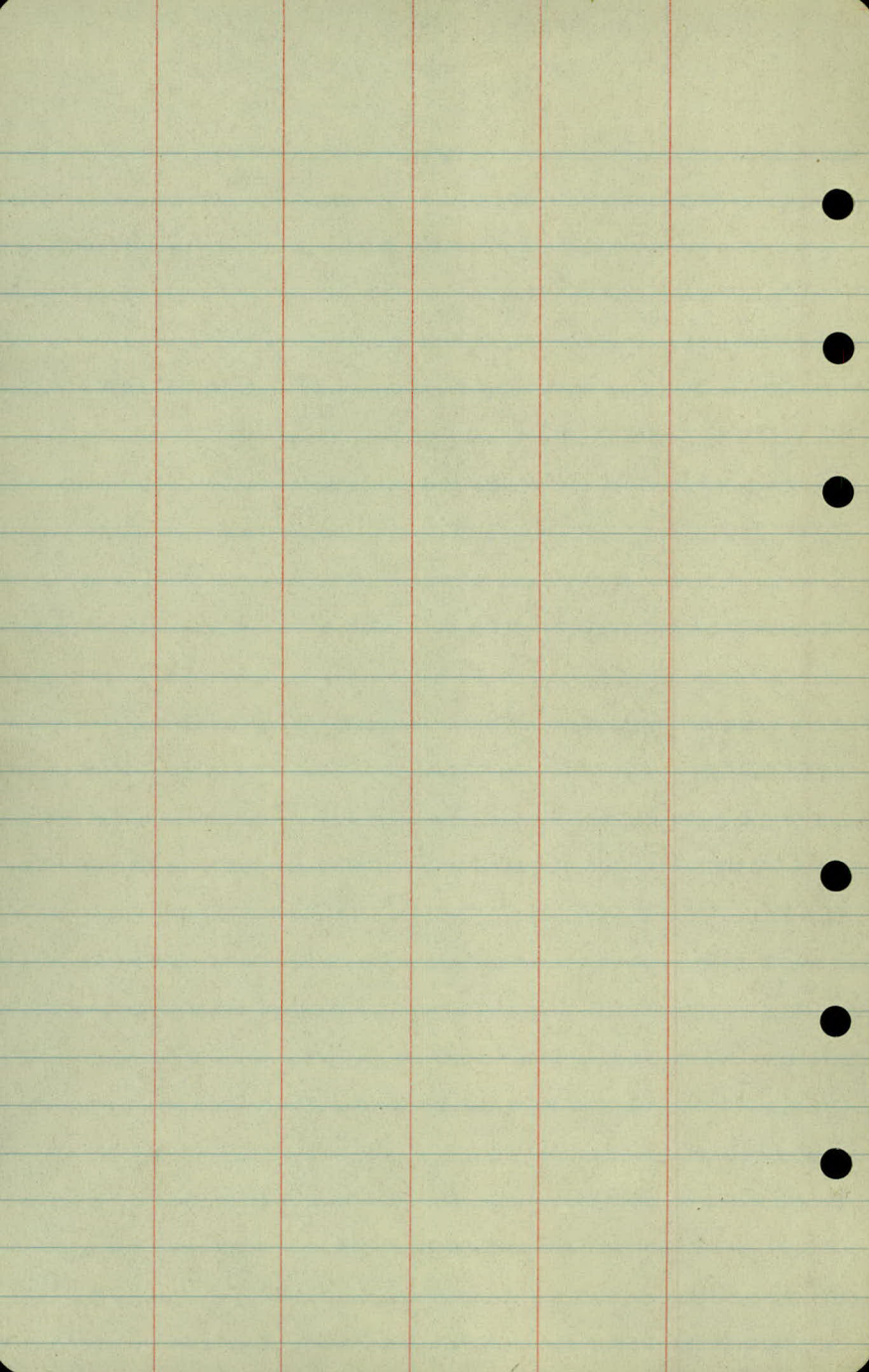
Description

Top Mont. Bellair & Col. Rd. "F"

Spk in 15" Oak 45' Lt Sta 11+20

Spk in 12" Twin Oak 50' Rt Sta 20+15

Top Mont. Col. Rd. "F" & East Co Line



x sections

Sta	+	π	-	Elev
B.M	983	974.80		964.97 965.02
C+00				65.0
+17				65.2
+23				65.3
+33				65.5
+33	24" X 40' CM. X Drain			
+50				65.7
+100				67.2
+35				68.3
+78				69.7
+100				70.3
+12				70.6
+18				70.8
+50				71.7
T.P	759	979.64	2.75	972.05

LT R RT

Top of Mount

$$\frac{10.7}{50} \quad 98 \quad \frac{9.2}{50}$$

$$\frac{10.8}{50} \quad \frac{10.7}{26} \quad 96 \quad \frac{10.1}{22} \quad \frac{9.6}{50}$$

$$\frac{12.3}{50} \quad \frac{12.4}{39} \quad \frac{10.5}{27} \quad \frac{10.3}{16} \quad \frac{9.5}{5} \quad \frac{9.3}{22} \quad \frac{10.3}{37} \quad \frac{11.3}{30} \quad \frac{10.8}{50}$$

$$\frac{14.0}{50} \quad \frac{13.7}{22} \quad \frac{10.7}{18} \quad 93 \quad \frac{10.2}{16} \quad \frac{12.3}{19} \quad \frac{11.8}{23} \quad \frac{11.1}{28} \quad \frac{9.4}{50}$$

13.20 (61.6)

123 (62.6)

Invert

Invert

$$\frac{14.0}{50} \quad \frac{13.8}{33} \quad \frac{11.9}{15} \quad \frac{9.6}{10} \quad 7.1 \quad \frac{9.9}{50} \quad \frac{10.7}{18} \quad \frac{10.4}{33} \quad \frac{8.6}{50}$$

$$\frac{12.7}{50} \quad \frac{11.0}{27} \quad \frac{9.8}{16} \quad \frac{8.3}{11} \quad 7.6 \quad \frac{8.1}{13} \quad \frac{8.2}{21} \quad \frac{9.1}{24} \quad \frac{9.1}{26} \quad \frac{6.4}{32} \quad \frac{5.6}{37} \quad \frac{3.8}{50}$$

$$\frac{7.5}{50} \quad \frac{7.5}{28} \quad \frac{7.5}{14} \quad \frac{7.0}{9} \quad 6.5 \quad \frac{6.9}{10} \quad \frac{7.2}{17} \quad \frac{6.2}{19} \quad \frac{6.3}{25} \quad \frac{3.2}{34} \quad \frac{3.6}{50}$$

$$\frac{4.7}{50} \quad \frac{4.6}{27} \quad \frac{5.9}{13}$$

$$5.1 \quad \frac{5.6}{11} \quad \frac{5.4}{18} \quad \frac{3.8}{20} \quad \frac{4.5}{27} \quad \frac{2.1}{31} \quad \frac{1.7}{34} \quad \frac{2.1}{50}$$

$$\frac{4.8}{50} \quad \frac{4.7}{24} \quad \frac{5.1}{13} \quad 4.5 \quad \frac{5.1}{12} \quad \frac{5.0}{18} \quad \frac{3.0}{20} \quad \frac{3.1}{27} \quad \frac{1.5}{33} \quad \frac{1.8}{50}$$

$$\frac{4.8}{50} \quad \frac{4.5}{16} \quad \frac{4.8}{13} \quad 4.2 \quad \frac{4.8}{12} \quad \frac{4.2}{19} \quad \frac{2.4}{21} \quad \frac{2.8}{27} \quad \frac{1.3}{29} \quad \frac{1.2}{35} \quad \frac{1.8}{50}$$

$$\frac{1.9}{50} \quad \frac{1.5}{24} \quad \frac{4.7}{16}$$

$$4.0 \quad \frac{4.6}{11} \quad \frac{4.3}{18} \quad \frac{2.2}{21} \quad \frac{2.7}{27} \quad \frac{1.0}{31} \quad \frac{1.1}{35} \quad \frac{1.8}{50}$$

$$\frac{1.4}{50} \quad \frac{1.0}{21} \quad \frac{3.9}{13} \quad 3.1$$

$$\frac{3.7}{11} \quad \frac{3.3}{15} \quad \frac{1.6}{20} \quad \frac{1.8}{29} \quad \frac{1.0}{35} \quad \frac{1.3}{50}$$

Sta	+	π ✓	—	Elev
		979.64		
3+00				72.6
+50				73.3
4+00				73.5
+50				73.0
5+00				72.3
+40				71.5
+70				70.9
6+00				70.3
+23		✓		69.8
T.P.	3.59	973.22	10.01	969.63
+28				69.7
+40		2 Road Lt		69.4
+53				69.1

LT * RT

$$\frac{55}{50} \frac{52}{20} \frac{71}{11} \quad 70 \quad \frac{72}{9} \frac{73}{14} \frac{50}{18} \frac{40}{26} \frac{47}{31} \frac{50}{37} \frac{50}{50}$$

$$\frac{64}{50} \frac{49}{18} \frac{68}{14} \quad 63 \quad \frac{68}{10} \frac{67}{14} \frac{44}{17} \frac{52}{25} \frac{41}{37} \frac{49}{50}$$

$$\frac{72}{50} \frac{52}{18} \frac{68}{14} \quad 61 \quad \frac{63}{9} \frac{63}{15} \frac{45}{17} \frac{52}{30} \frac{42}{35} \frac{49}{50}$$

$$\frac{10.8}{50} \frac{67}{19} \frac{75}{15} \frac{71}{12} \quad 66 \quad \frac{68}{10} \frac{68}{14} \frac{54}{16} \frac{57}{26} \frac{39}{34} \frac{45}{50}$$

$$\frac{12.2}{50} \frac{110}{31} \frac{100}{19} \frac{77}{13} \quad 73 \quad \frac{76}{12} \frac{67}{17} \frac{67}{30} \frac{51}{33} \frac{52}{50}$$

$$\frac{111}{50} \frac{110}{31} \frac{107}{18} \frac{86}{11} \quad 81 \quad \frac{84}{10} \frac{86}{14} \frac{76}{16} \frac{80}{23} \frac{93}{32} \frac{76}{50}$$

$$\frac{90}{50} \frac{86}{31} \frac{80}{18} \frac{96}{15} \frac{90}{9} \quad 87 \quad \frac{90}{9} \frac{91}{14} \frac{78}{17} \frac{91}{28} \frac{89}{37} \frac{84}{50}$$

$$\frac{90}{50} \frac{75}{34} \frac{68}{19} \frac{97}{15} \frac{96}{9} \quad 93 \quad \frac{97}{10} \frac{95}{15} \frac{83}{16} \frac{86}{27} \frac{72}{29} \frac{74}{36} \frac{85}{50}$$

$$\frac{104}{50} \frac{85}{34} \frac{77}{21} \frac{103}{12} \frac{100}{8} \quad 98 \quad \frac{100}{8} \frac{103}{14} \frac{91}{16} \frac{100}{27} \frac{71}{34} \frac{80}{44} \frac{88}{50}$$

$$\frac{68}{50} \frac{60}{37} \frac{48}{18} \frac{38}{11} \quad 35 \quad \frac{38}{9} \frac{40}{14} \frac{27}{16} \frac{36}{27} \frac{07}{33} \frac{15}{38} \frac{23}{50}$$

$$\frac{111}{100} \frac{59}{50} \frac{44}{27} \frac{40}{12} \quad 38 \quad \frac{42}{15} \frac{33}{17} \frac{39}{28} \frac{21}{31} \frac{15}{34} \frac{21}{39} \frac{26}{50}$$

$$\frac{72}{50} \frac{53}{24} \frac{43}{12} \quad 41 \quad \frac{44}{10} \frac{46}{14} \frac{37}{17} \frac{45}{29} \frac{27}{31} \frac{24}{35} \frac{35}{50}$$

Sta	+	π	-	Elev
		973.22		
+58				69.0
+77				68.7
7+00				68.2
T.P	3.02	970.15	6.09	967.13 ✓
+50				67.2
8+00				66.2
+50				65.3
9+00				63.9
+50				62.3
10				60.5
+50				58.9
11				56.9 ✓
T.P	3.76	960.27 ✓	13.64	956.51 960.27 ✓
B.M	0.53	960.27 ✓	0.53	959.74 959.73
+50				54.7

14 2 R4

$\frac{71}{50}$ $\frac{47}{33}$ $\frac{38}{20}$ $\frac{48}{15}$ $\frac{44}{10}$ $\frac{42}{14}$ $\frac{40}{16}$ $\frac{47}{28}$ $\frac{24}{34}$ $\frac{32}{39}$ $\frac{38}{50}$

$\frac{83}{50}$ $\frac{70}{34}$ $\frac{62}{17}$ $\frac{49}{12}$ $\frac{45}{12}$ $\frac{51}{12}$ $\frac{48}{16}$ $\frac{60}{29}$ $\frac{40}{35}$ $\frac{55}{41}$ $\frac{57}{50}$

$\frac{91}{50}$ $\frac{81}{36}$ $\frac{74}{18}$ $\frac{52}{15}$ $\frac{50}{50}$ $\frac{56}{13}$ $\frac{62}{21}$ $\frac{80}{31}$ $\frac{84}{50}$

$\frac{76}{50}$ $\frac{69}{32}$ $\frac{46}{17}$ $\frac{35}{12}$ $\frac{30}{30}$ $\frac{37}{14}$ $\frac{46}{16}$ $\frac{68}{31}$ $\frac{52}{36}$ $\frac{65}{50}$

$\frac{64}{50}$ $\frac{70}{31}$ $\frac{69}{17}$ $\frac{43}{12}$ $\frac{40}{40}$ $\frac{45}{13}$ $\frac{55}{19}$ $\frac{65}{29}$ $\frac{51}{33}$ $\frac{52}{39}$ $\frac{58}{50}$

$\frac{67}{50}$ $\frac{65}{31}$ $\frac{64}{16}$ $\frac{52}{10}$ $\frac{49}{49}$ $\frac{54}{13}$ $\frac{58}{16}$ $\frac{68}{29}$ $\frac{45}{37}$ $\frac{46}{50}$

$\frac{47}{50}$ $\frac{51}{34}$ $\frac{50}{21}$ $\frac{75}{16}$ $\frac{67}{10}$ $\frac{63}{63}$ $\frac{68}{13}$ $\frac{70}{17}$ $\frac{58}{20}$ $\frac{68}{30}$ $\frac{37}{37}$ $\frac{37}{50}$

$\frac{31}{50}$ $\frac{37}{38}$ $\frac{48}{21}$ $\frac{85}{15}$ $\frac{83}{10}$ $\frac{79}{79}$ $\frac{84}{15}$ $\frac{62}{19}$ $\frac{66}{29}$ $\frac{40}{34}$ $\frac{34}{38}$ $\frac{27}{50}$

$\frac{40}{50}$ $\frac{58}{23}$ $\frac{101}{13}$ $\frac{97}{97}$ $\frac{98}{9}$ $\frac{97}{15}$ $\frac{69}{18}$ $\frac{69}{29}$ $\frac{34}{35}$ $\frac{29}{50}$

$\frac{54}{50}$ $\frac{74}{29}$ $\frac{77}{21}$ $\frac{117}{14}$ $\frac{113}{113}$ $\frac{117}{14}$ $\frac{86}{20}$ $\frac{89}{30}$ $\frac{56}{35}$ $\frac{55}{50}$

$\frac{87}{50}$ $\frac{103}{35}$ $\frac{115}{28}$ $\frac{108}{19}$ $\frac{137}{12}$ $\frac{133}{133}$ $\frac{138}{12}$ $\frac{110}{20}$ $\frac{113}{29}$ $\frac{81}{35}$ $\frac{85}{50}$

Sph in 15" Oak 45' Lt 5+9 11+20

$\frac{28}{50}$ $\frac{35}{31}$ $\frac{33}{20}$ $\frac{59}{15}$ $\frac{57}{9}$ $\frac{56}{56}$ $\frac{63}{12}$ $\frac{69}{17}$ $\frac{37}{20}$ $\frac{39}{29}$ $\frac{17}{34}$ $\frac{25}{50}$

Sta + π - Elev
960.27

11+62 Driveway Lt 54.2

12 52.4

+50 49.6 ✓

T.P. 1.34 949.90 11.71 948.56

13 46.8

+50 44.4

+85 43.0

14 42.5

+15 Driveway Lt 41.9

+22 41.6

+25 41.5

+50 40.6

+78 39.7 ✓

T.P. 2.82 941.98 10.74 939.16

LT R PT

$$\frac{3.9}{50} \quad \frac{5.9}{20} \quad \frac{6.3}{9} \quad 6.1$$

$$\frac{6.0}{50} \quad \frac{7.0}{32} \quad \frac{5.9}{20} \quad \frac{8.3}{16} \quad \frac{8.3}{9} \quad 7.9 \quad \frac{8.4}{12} \quad \frac{8.4}{17} \quad \frac{6.8}{20} \quad \frac{8.1}{30} \quad \frac{8.0}{41} \quad \frac{9.3}{50}$$

$$\frac{10.9}{50} \quad \frac{11.4}{33} \quad \frac{10.6}{17} \quad \frac{10.1}{10} \quad 10.7 \quad \frac{11.2}{12} \quad \frac{11.0}{19} \quad \frac{12.5}{31} \quad \frac{11.8}{37} \quad \frac{12.2}{50}$$

$$\frac{5.0}{50} \quad \frac{7.4}{30} \quad \frac{6.9}{19} \quad \frac{3.3}{13} \quad \frac{3.5}{9} \quad 3.1 \quad \frac{4.6}{13} \quad \frac{6.8}{22} \quad \frac{6.6}{38} \quad \frac{5.9}{39} \quad \frac{4.0}{50}$$

$$\frac{7.4}{50} \quad \frac{10.2}{32} \quad \frac{9.4}{20} \quad \frac{5.8}{13} \quad 5.5 \quad \frac{5.8}{9} \quad \frac{6.0}{14} \quad \frac{7.5}{19} \quad \frac{8.0}{34} \quad \frac{6.6}{37} \quad \frac{4.1}{50}$$

$$\frac{6.2}{50} \quad \frac{8.8}{33} \quad \frac{10.3}{30} \quad \frac{10.2}{19} \quad \frac{6.8}{12} \quad \frac{7.0}{9} \quad \frac{4.2}{13} \quad \frac{8.5}{21} \quad \frac{9.0}{29} \quad \frac{4.6}{34} \quad \frac{3.7}{45} \quad \frac{3.7}{50}$$

$$\frac{5.3}{50} \quad \frac{7.0}{35} \quad \frac{8.9}{32} \quad \frac{8.7}{20} \quad \frac{7.5}{17} \quad \frac{7.5}{11} \quad 7.4 \quad \frac{7.8}{13} \quad \frac{8.4}{19} \quad \frac{9.1}{29} \quad \frac{4.6}{35} \quad \frac{4.3}{45} \quad \frac{4.6}{50}$$

$$\frac{6.0}{50} \quad \frac{7.1}{26} \quad \frac{8.0}{12} \quad 8.0 \quad \frac{8.7}{17} \quad \frac{9.2}{22} \quad \frac{9.2}{26} \quad \frac{5.2}{33} \quad \frac{5.3}{41} \quad \frac{6.5}{50}$$

$$\frac{5.9}{50} \quad \frac{7.2}{32} \quad \frac{8.2}{8} \quad 8.3 \quad \frac{8.8}{12} \quad \frac{9.7}{24} \quad \frac{7.5}{29} \quad \frac{9.7}{37} \quad \frac{12.8}{50}$$

$$\frac{4.3}{50} \quad \frac{4.0}{39} \quad \frac{7.5}{32} \quad \frac{4.9}{18} \quad 8.4 \quad \frac{8.9}{12} \quad \frac{8.9}{19} \quad \frac{9.5}{25} \quad \frac{4.6}{30} \quad \frac{12.5}{38} \quad \frac{15.6}{50}$$

$$\frac{2.3}{50} \quad \frac{7.0}{35} \quad \frac{8.4}{28} \quad \frac{9.1}{13} \quad \frac{9.2}{8} \quad 9.3 \quad \frac{9.8}{15} \quad \frac{11.4}{22} \quad \frac{14.4}{30} \quad \frac{15.3}{35} \quad \frac{16.3}{50}$$

$$\frac{0.2}{50} \quad \frac{1.2}{41} \quad \frac{9.8}{29} \quad \frac{10.3}{19} \quad \frac{10.4}{8} \quad \frac{10.2}{10.2} \quad \frac{10.8}{14} \quad \frac{12.1}{16} \quad \frac{12.9}{24} \quad \frac{15.4}{31} \quad \frac{17.3}{50}$$

Sta	+	π ✓	-	Elev
		941.78		

15+00				39.0
-------	--	--	--	------

+50				37.9
-----	--	--	--	------

16+00				37.3
-------	--	--	--	------

+50				37.0
-----	--	--	--	------

17				37.1
----	--	--	--	------

+50				37.3
-----	--	--	--	------

18				37.7
----	--	--	--	------

+00	Plugged	X Drain	10" X P.V.T	29' Rt
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+50				38.7
-----	--	--	--	------

19				40.5 ✓
----	--	--	--	--------

TP	12.61	953.43 ✓	1.16	940.82 ✓
----	-------	----------	------	----------

B.M	0.58	953.41 ✓	0.60	952.83	952.83
-----	------	----------	------	--------	--------

+50				43.4
-----	--	--	--	------

20+00				47.2
-------	--	--	--	------

+30				49.6
-----	--	--	--	------

Lt

R

Rt

$\frac{+5.0}{50} \frac{2.0}{33} \frac{3.9}{31} \frac{4.2}{20} \frac{3.1}{11} 3.0 \frac{3.4}{13} \frac{2.2}{17} \frac{8.1}{28} \frac{8.4}{34} \frac{9.5}{50}$

$\frac{4.7}{50} \frac{6.9}{34} \frac{6.8}{17} \frac{4.1}{12} 4.1 \frac{4.7}{12} \frac{6.8}{17} \frac{8.0}{25} \frac{9.6}{30} \frac{10.2}{50}$

$\frac{6.8}{50} \frac{8.0}{31} \frac{7.6}{17} \frac{4.9}{12} 4.7 \frac{5.3}{13} \frac{7.5}{17} \frac{10.3}{30} \frac{10.7}{36} \frac{10.9}{50}$

$\frac{5.5}{50} \frac{7.3}{36} \frac{7.8}{22} \frac{7.453}{16} \frac{5.0}{11} 5.0 \frac{5.4}{13} \frac{7.7}{19} \frac{9.7}{29} \frac{10.8}{3.9} \frac{10.8}{50}$

$\frac{3.3}{50} \frac{6.5}{16} \frac{5.3}{13} 4.9 \frac{5.3}{12} \frac{6.3}{15} \frac{9.9}{28} \frac{10.0}{50}$

$\frac{7.6}{50} \frac{8.4}{30} \frac{8.1}{17} \frac{5.0}{10} 4.7 \frac{5.2}{12} \frac{7.1}{17} \frac{10.1}{27} \frac{10.5}{36} \frac{10.3}{50}$

$\frac{9.1}{50} \frac{9.8}{30} \frac{9.4}{18} \frac{4.9}{10} 4.3 \frac{4.9}{12} \frac{7.0}{15} \frac{9.7}{25} \frac{10.5}{36} \frac{10.7}{50}$

$\frac{10.6}{50} \frac{11.1}{33} \frac{10.0}{23} \frac{6.9}{13} \frac{4.0}{10} 3.3 \frac{3.8}{13} \frac{6.6}{17} \frac{9.2}{25} \frac{9.6}{33} \frac{9.9}{50}$
 10.6 (31.4)
 T.H.K.

$\frac{12.4}{50} \frac{10.7}{46} \frac{9.2}{27} \frac{6.0}{15} \frac{1.9}{10} 1.5 \frac{1.9}{12} \frac{4.1}{17} \frac{6.6}{28} \frac{8.3}{50}$

SpK in Tw 14 12' Oak 60' Rt Sta 20+15
 $\frac{20.0}{50} \frac{19.4}{40} \frac{18.4}{25} \frac{10.6}{12} 10.0 \frac{10.2}{13} \frac{12.2}{17} \frac{14.7}{33} \frac{16.2}{50}$

$\frac{19.4}{50} \frac{16.7}{36} \frac{15.5}{25} \frac{6.8}{13} 6.2 \frac{6.7}{15} \frac{7.8}{16} \frac{7.2}{18} \frac{11.0}{33} \frac{10.9}{35} \frac{9.0}{41} \frac{8.1}{50}$

$\frac{16.4}{50} \frac{14.8}{35} \frac{12.4}{26} \frac{4.4}{15} 3.8 \frac{4.2}{14} \frac{4.8}{15} \frac{4.8}{16} \frac{3.6}{18} \frac{3.9}{25} \frac{5.5}{33} \frac{3.0}{35} \frac{2.0}{45} \frac{1.1}{50}$

Sta	+	π	-	Elev
		953.41		✓
	12.79	765.09 ✓	1.11	952.30
20+47				50.9
+56				51.7
+74				53.0
21				54.8
+25				56.3
+50				57.6
22				60.3 ✓
T.P	13.79	972.12 ✓	6.76	958.33
21+25				(56.3)
+50				(57.6)
22				(60.3)
+57				63.6
+62				63.9

At & Pt

6.4
50

$$\begin{array}{r} 192 \\ 50 \end{array} \quad \begin{array}{r} 142 \\ 31 \end{array} \quad \begin{array}{r} 150 \\ 11 \end{array} \quad 142 \quad \begin{array}{r} 145 \\ 12 \end{array} \quad \begin{array}{r} 153 \\ 15 \end{array} \quad \begin{array}{r} 153 \\ 16 \end{array} \quad \begin{array}{r} 141 \\ 19 \end{array} \quad \begin{array}{r} 127 \\ 22 \end{array} \quad \begin{array}{r} 128 \\ 27 \end{array} \quad \begin{array}{r} 113 \\ 30 \end{array} \quad \begin{array}{r} 101 \\ 39 \end{array}$$

$$\begin{array}{r} 189 \\ 50 \end{array} \quad \begin{array}{r} 153 \\ 31 \end{array} \quad \begin{array}{r} 146 \\ 23 \end{array} \quad \begin{array}{r} 139 \\ 13 \end{array} \quad 134 \quad \begin{array}{r} 135 \\ 12 \end{array} \quad \begin{array}{r} 126 \\ 16 \end{array} \quad \begin{array}{r} 126 \\ 17 \end{array} \quad \begin{array}{r} 135 \\ 19 \end{array} \quad \begin{array}{r} 118 \\ 21 \end{array} \quad \begin{array}{r} 120 \\ 27 \end{array} \quad \begin{array}{r} 81 \\ 34 \end{array} \quad \begin{array}{r} 71 \\ 43 \end{array} \quad \begin{array}{r} 48 \\ 50 \end{array}$$

$$\begin{array}{r} 102 \\ 50 \end{array} \quad \begin{array}{r} 88 \\ 43 \end{array} \quad \begin{array}{r} 57 \\ 26 \end{array} \quad \begin{array}{r} 120 \\ 16 \end{array} \quad \begin{array}{r} 126 \\ 11 \end{array} \quad 121 \quad \begin{array}{r} 122 \\ 13 \end{array} \quad \begin{array}{r} 133 \\ 15 \end{array} \quad \begin{array}{r} 133 \\ 16 \end{array} \quad \begin{array}{r} 121 \\ 17 \end{array} \quad \begin{array}{r} 95 \\ 21 \end{array} \quad \begin{array}{r} 93 \\ 26 \end{array} \quad \begin{array}{r} 53 \\ 33 \end{array} \quad \begin{array}{r} 28 \\ 39 \end{array} \quad \begin{array}{r} 33 \\ 50 \end{array}$$

$$\begin{array}{r} 72 \\ 50 \end{array} \quad \begin{array}{r} 35 \\ 35 \end{array} \quad \begin{array}{r} 21 \\ 25 \end{array} \quad \begin{array}{r} 102 \\ 15 \end{array} \quad \begin{array}{r} 109 \\ 11 \end{array} \quad 103 \quad \begin{array}{r} 106 \\ 11 \end{array} \quad \begin{array}{r} 115 \\ 13 \end{array} \quad \begin{array}{r} 115 \\ 15 \end{array} \quad \begin{array}{r} 101 \\ 16 \end{array} \quad \begin{array}{r} 67 \\ 21 \end{array} \quad \begin{array}{r} 66 \\ 25 \end{array} \quad \begin{array}{r} 03 \\ 37 \end{array} \quad \begin{array}{r} 120 \\ 41 \end{array}$$

419
50

$$\begin{array}{r} 90 \\ 15 \end{array} \quad \begin{array}{r} 92 \\ 11 \end{array} \quad 88 \quad \begin{array}{r} 91 \\ 9 \end{array} \quad \begin{array}{r} 99 \\ 11 \end{array} \quad \begin{array}{r} 99 \\ 13 \end{array} \quad \begin{array}{r} 99 \\ 14 \end{array} \quad \begin{array}{r} 44 \\ 22 \end{array} \quad \begin{array}{r} 35 \\ 28 \end{array}$$

$$\begin{array}{r} 77 \\ 74 \end{array} \quad \begin{array}{r} 79 \\ 10 \end{array} \quad 75 \quad \begin{array}{r} 78 \\ 10 \end{array} \quad \begin{array}{r} 86 \\ 11 \end{array} \quad \begin{array}{r} 86 \\ 12 \end{array} \quad \begin{array}{r} 77 \\ 14 \end{array} \quad \begin{array}{r} 22 \\ 22 \end{array}$$

$$\begin{array}{r} 42 \\ 10 \end{array} \quad \begin{array}{r} 52 \\ 11 \end{array} \quad 48 \quad \begin{array}{r} 52 \\ 10 \end{array} \quad \begin{array}{r} 67 \\ 12 \end{array} \quad \begin{array}{r} 67 \\ 13 \end{array} \quad \begin{array}{r} 49 \\ 14 \end{array}$$

$$\textcircled{15.8} \quad \begin{array}{r} 112 \\ 50 \end{array} \quad \begin{array}{r} 74 \\ 26 \end{array} \quad \begin{array}{r} 89 \\ 31 \end{array} \quad \begin{array}{r} 71 \\ 37 \end{array} \quad \begin{array}{r} 23 \\ 44 \end{array} \quad \begin{array}{r} 22 \\ 50 \end{array}$$

$$\textcircled{14.5} \quad \begin{array}{r} 95 \\ 50 \end{array} \quad \begin{array}{r} 66 \\ 33 \end{array} \quad \begin{array}{r} 59 \\ 26 \end{array} \quad \begin{array}{r} 84 \\ 26 \end{array} \quad \begin{array}{r} 38 \\ 38 \end{array} \quad \begin{array}{r} 0.0 \\ 50 \end{array}$$

$$\textcircled{11.8} \quad \begin{array}{r} 71 \\ 50 \end{array} \quad \begin{array}{r} 43 \\ 36 \end{array} \quad \begin{array}{r} 31 \\ 26 \end{array} \quad \begin{array}{r} 59 \\ 22 \end{array} \quad \begin{array}{r} 48 \\ 27 \end{array} \quad \begin{array}{r} 0.0 \\ 37 \end{array} \quad \begin{array}{r} 0.5 \\ 50 \end{array}$$

$$\begin{array}{r} 47 \\ 50 \end{array} \quad \begin{array}{r} 20 \\ 24 \end{array} \quad \begin{array}{r} 90 \\ 12 \end{array} \quad 85 \quad \begin{array}{r} 85 \\ 9 \end{array} \quad \begin{array}{r} 76 \\ 15 \end{array} \quad \begin{array}{r} 12 \\ 26 \end{array} \quad \begin{array}{r} 11.2 \\ 38 \end{array} \quad \begin{array}{r} 11.4 \\ 50 \end{array}$$

$$\begin{array}{r} 46 \\ 50 \end{array} \quad \begin{array}{r} 1.9 \\ 24 \end{array} \quad \begin{array}{r} 88 \\ 11 \end{array} \quad 8.2 \quad \begin{array}{r} 7.9 \\ 10 \end{array} \quad \begin{array}{r} 5.9 \\ 23 \end{array} \quad \begin{array}{r} 1.2 \\ 50 \end{array}$$

Sta	+	π ✓	-	Elev
		972.12		
+90		Drive	RT	64.3
+75				64.5
+80				64.7 ✓
T.P	11.11	977.95 ✓	5.28	966.84
23				65.6
+20				66.4
+25				66.5
+50				67.3
24				68.3 ✓
T.P	5.57	974.32 ✓	9.20	968.75
+50				68.6
+90				69.0
+95				69.1
25				69.2

Note Lt ~~2~~ Rt
Hold Grade of drive

This is Black-Topped 78 $\frac{7.4}{11}$ $\frac{5.0}{27}$ $\frac{1.3}{50}$

$\frac{5.4}{58}$ $\frac{3.1}{22}$ $\frac{8.2}{11}$ 76 $\frac{7.2}{11}$ $\frac{5.7}{23}$ $\frac{1.2}{50}$

$\frac{5.7}{50}$ $\frac{3.1}{22}$ $\frac{7.9}{11}$ 74 $\frac{6.2}{19}$ $\frac{1.2}{26}$ $\frac{1.1}{39}$ $\frac{1.4}{50}$

$\frac{12.3}{50}$ $\frac{8.8}{30}$ $\frac{7.0}{23}$ $\frac{12.8}{14}$ $\frac{12.8}{9}$ 124 $\frac{12.4}{11}$ $\frac{13.2}{13}$ $\frac{13.2}{14}$ $\frac{12.2}{15}$ $\frac{7.0}{21}$ $\frac{46.39}{35}$ $\frac{50}{58}$

$\frac{13.8}{58}$ $\frac{12.4}{35}$ $\frac{8.4}{27}$ $\frac{7.5}{21}$ $\frac{11.8}{14}$ $\frac{12.1}{10}$ $\frac{12.1}{11}$ $\frac{12.1}{15}$ $\frac{6.5}{22}$ $\frac{5.2}{32}$ $\frac{26.34}{45}$ $\frac{50}{50}$

$\frac{14.1}{50}$ $\frac{12.0}{26}$ $\frac{11.9}{12}$ 115 $\frac{11.9}{11}$ $\frac{11.8}{15}$ $\frac{6.3}{22}$ $\frac{4.5}{33}$ $\frac{2.4}{45}$ $\frac{3.3}{50}$

$\frac{14.8}{50}$ $\frac{12.1}{23}$ $\frac{11.2}{11}$ 107 $\frac{11.0}{12}$ $\frac{10.7}{17}$ $\frac{5.7}{23}$ $\frac{4.2}{40}$ $\frac{1.8}{45}$ $\frac{1.3}{50}$

$\frac{14.6}{50}$ $\frac{13.9}{31}$ $\frac{11.9}{17}$ $\frac{10.4}{9}$ 97 $\frac{9.5}{16}$ $\frac{9.5}{18}$ $\frac{6.0}{22}$ $\frac{5.4}{33}$ $\frac{3.9}{35}$ $\frac{1.5}{50}$

$\frac{9.1}{50}$ $\frac{8.7}{37}$ $\frac{7.5}{32}$ $\frac{7.1}{16}$ $\frac{6.4}{8}$ 5.7 $\frac{5.3}{7}$ $\frac{5.4}{16}$ $\frac{5.6}{22}$ $\frac{4.3}{26}$ $\frac{4.2}{31}$ $\frac{1.2}{40}$ $\frac{10.5}{50}$

$\frac{7.4}{50}$ $\frac{6.4}{21}$ $\frac{6.2}{16}$ $\frac{5.7}{7}$ 53 $\frac{4.9}{9}$ $\frac{4.3}{29}$ $\frac{1.4}{38}$ $\frac{12.6}{50}$

$\frac{7.2}{50}$ $\frac{6.3}{23}$ $\frac{6.1}{17}$ $\frac{5.6}{7}$ 52 $\frac{4.8}{8}$ $\frac{4.7}{19}$ $\frac{4.1}{29}$ $\frac{1.4}{50}$

$\frac{7.3}{50}$ $\frac{6.1}{24}$ $\frac{5.9}{18}$ $\frac{5.6}{8}$ 51 $\frac{4.8}{8}$ $\frac{4.8}{17}$ $\frac{4.3}{25}$ $\frac{1.4}{47}$

Sta	+	TI	-	Elev
		974.32		

25+50				69.7
-------	--	--	--	------

26				70.3
----	--	--	--	------

+14				70.5
-----	--	--	--	------

+29.85				70.7
--------	--	--	--	------

B.M		3.58	970.74	970.74
				960.79

LT E RT

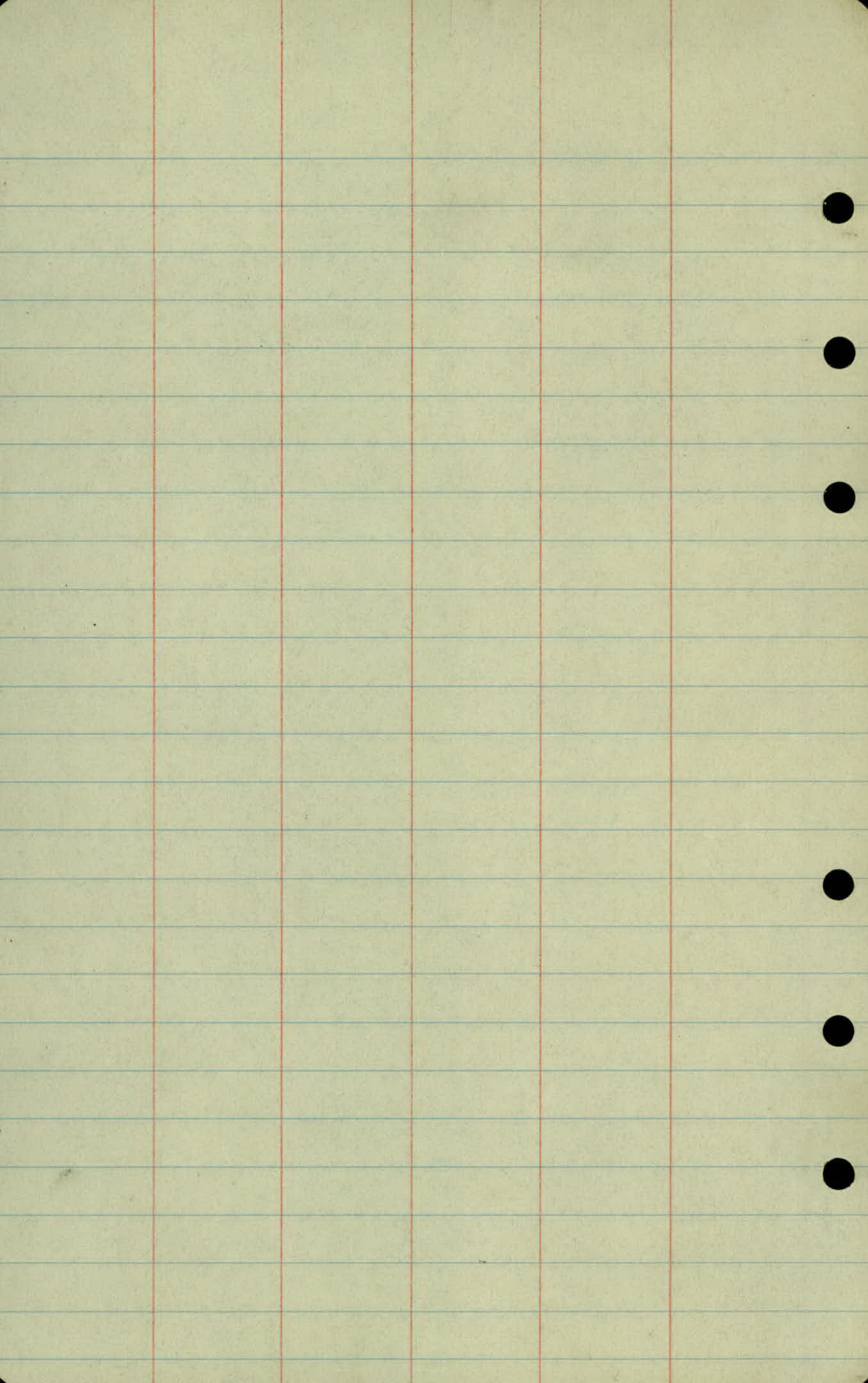
$$\begin{array}{r} 7.6 \quad 6.6 \quad 5.7 \quad 6.1 \quad 5.7 \quad 5.0 \\ 50 \quad 34 \quad 28 \quad 26 \quad 23 \quad 10 \end{array} \quad 4.6 \quad \begin{array}{r} 4.2 \quad 4.0 \quad 2.8 \quad 0.3 \quad 0.0 \\ 12 \quad 23 \quad 31 \quad 39 \quad 50 \end{array}$$

$$\begin{array}{r} 6.9 \quad 6.1 \quad 5.4 \quad 4.8 \\ 50 \quad 39 \quad 24 \quad 13 \end{array} \quad 4.0 \quad \begin{array}{r} 3.4 \quad 3.2 \quad 2.6 \quad 1.9 \\ 12 \quad 24 \quad 30 \quad 50 \end{array}$$

$$\begin{array}{r} 7.8 \quad 6.6 \quad 5.2 \quad 4.3 \\ 50 \quad 39 \quad 23 \quad 10 \end{array} \quad 7.8 \quad \begin{array}{r} 3.2 \quad 2.8 \quad 2.6 \quad 2.1 \\ 11 \quad 23 \quad 37 \quad 50 \end{array}$$

$$\begin{array}{r} 7.4 \\ 50 \end{array} \quad \begin{array}{r} 5.1 \\ 26 \end{array} \quad 3.6 \quad \begin{array}{r} 2.6 \\ 25 \end{array} \quad \begin{array}{r} 1.6 \\ 50 \end{array}$$

Top of Mont Co Rd F + East Co Line



933.40

923.54 - 5/31/40

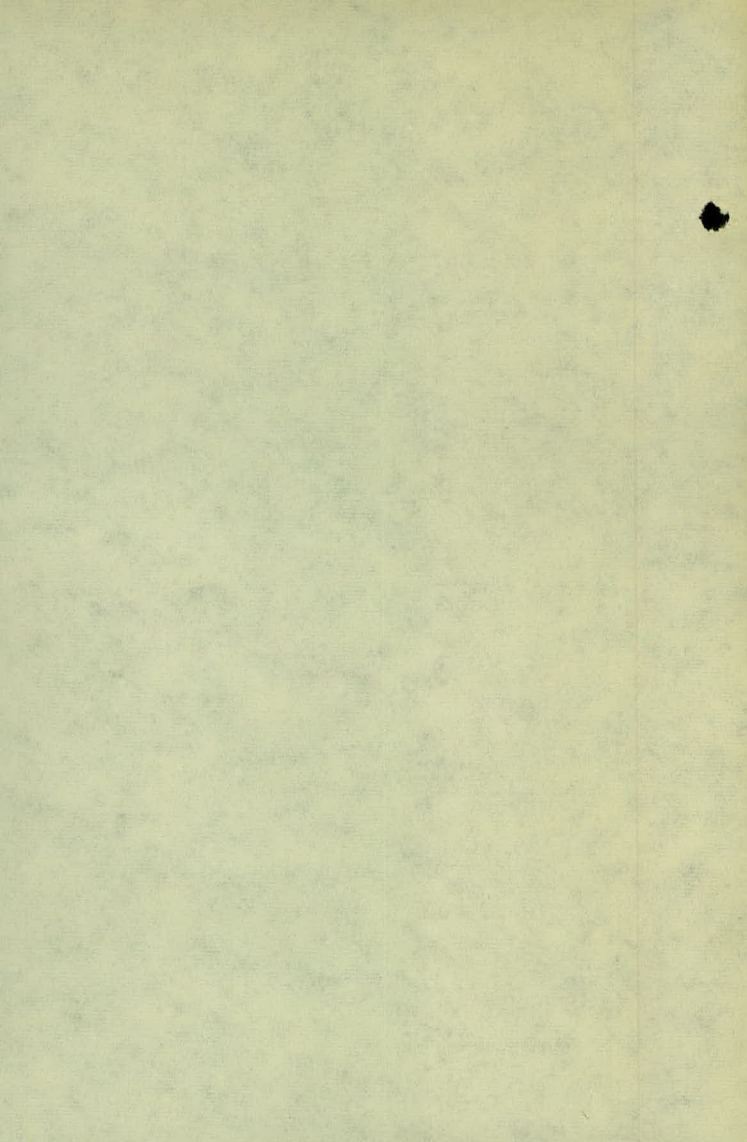
9.86

4-17-63 K.A

964.97

55.00

9.97



KP
JS
DS
R. BOSS
W.M.

20 MARCH 1963

1.

Co. RD F.

E. Co. Line TO BELLAIRE AVE
CULVERT ELEVATIONS

Bellaire Ave

97.95

97.46

POND

ELEV.
97.27

3/20/63

95.71

Co. RD F.

OLD STREET CAR TRACKS

EAST Co. Line

STA	+	Δ	-	Elev.
BM		107.10	7.10	(100.00)
			9.64	97.46
			9.15	97.95
			11.39	95.71
			9.83	97.27
BM			7.10	100.00 (100.00)

TOP 30" CULVERT (N. SIDE OF RD.)

* FL N.E. END 30" CM (CO. RD F)

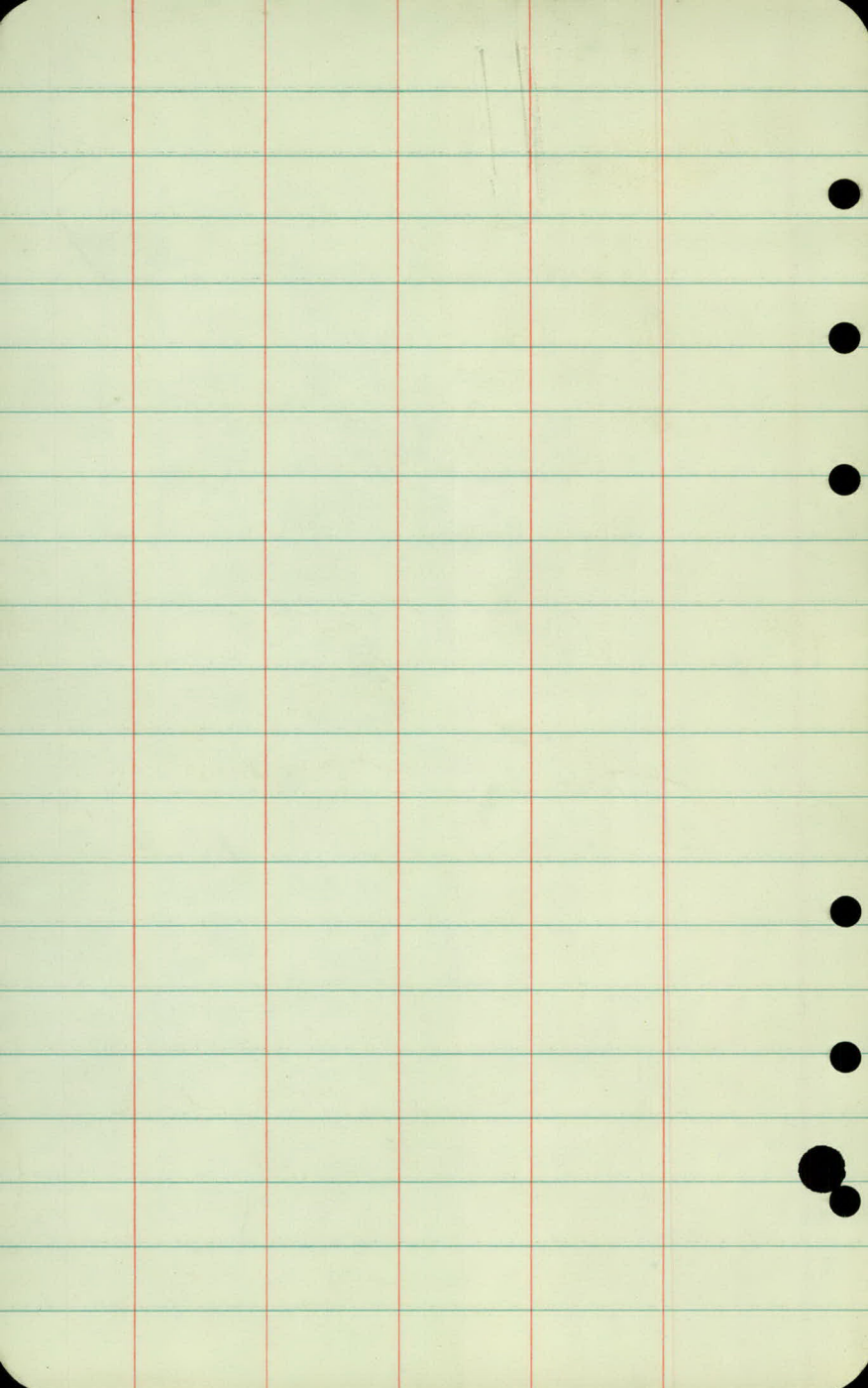
FL S.W. END 30" CM (CO. RD. F.)

* FL S. END 24" CM UNDER STREET-CAR TRACK

ELEV. POND N. SIDE OF ROAD.

TOP 30" CULVERT (N. SIDE OF RD)

NOTE: 24" UNDER STREET-CAR TRACKS
IS BLOCKED BY OBSTRUCTION
ABOUT 8.0 S. OF S. END
OF PIPE. PIPE IS HALF PLUGGED.
K.R. 3/20/63



W.S. 96.06 So. Side Of 'F' = 923.87 ¹⁰⁶

4 Rd. 99.83 Lowest Point = 927.64

W.S. 94.45 No. Side Of 'F' = 922.26

So. End F.L. 24" C.M. Under Old St. Car R/W 97.36 = 925.17

No. End F.L. - - - - - 96.42 = 924.23

G.E. 98.05 = 925.86

✓ 98.15 = 925.96

✓ 97.45 = 925.26

- 97.55 = 925.36

- 98.65 = 926.46

F.L. 10" Vit. Under So. Sh. Blvd. 97.67 = 925.48

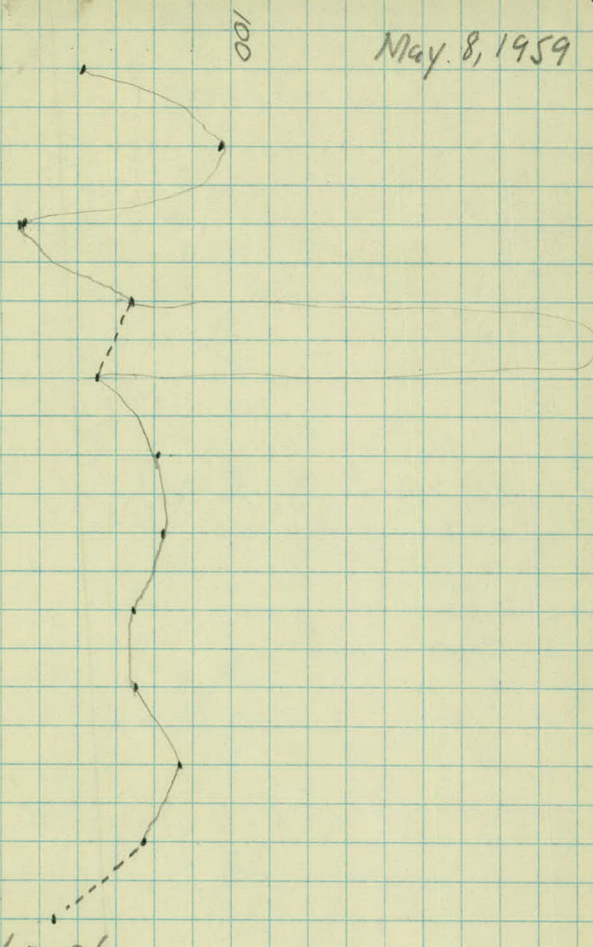
W.S. W.B. Lake 95.34 = 923.15

Lake is 1.35' Below Normal

Normal Elev. = 924.50

Sea Level

May. 8, 1959



FK
RG
KP
JH

May 8, 1959
cool and clear
60°

1.

County Road F.
E. CO. LINE to BELLAIR AVE.

DRAINAGE ELEVATIONS

3 pages

Sfa	+	x	-	Elev	
BM	6.95	106.95			100.00
± F"			7.12	99.73	99.83
W.S.			12.50	94.45	
W.S.			10.89	96.06	
			9.59	95.36	97.36
TP1	12.75	118.88	0.82	106.13	
TP2	0.84	106.95	12.77	106.11	
			10.53	96.19	96.42
GE			8.9	98.05	
"			8.8	98.15	
"			9.5	97.45	
"			9.4	97.55	
"			8.3	98.65	
TP3	5.81	^{103.51} 105.51	9.25	97.70	
			5.84	97.67	

FK
RG
KP
JH

MAY 8, 1959

2.

headwall at 24" CM 200' N
of $\pm$ CORO F.

lowest spot on "F."

water surface North side "F."

water surface South side F.

F.L. 24" CM (S. end), ^{under old street} car road-bed.

iron (1 1/2" pinched)

rock

F.L. N end 24" C.M. (under old street car
road bed.
east of culvert

North east

"

"

"

"

"

"

PIECE OF WOOD IN GROUND

F.L. 10" VIT. running under South
shore BLVD. into White Bear Lake.

(South end)

Sta	+	π	-	Elev
		103.51		
			8.17	95.34
TP4	12.10	114.84	0.77	102.74
TP5	13.64	127.98	0.50	114.34
TP6	9.35	137.05	0.28	127.70
TP7	0.23	124.06	13.22	123.83
TP8	1.43	113.24	12.25	111.81
TP9			13.42	99.82
				99.73

MAY 8, 1959

3.

FK
RG
KP
JH

- Elevation of White Bear Lake,
Stone under hedge at east Co. line
- mark in B.T. ditch west of road.
ROCK
- mark on Co. R.D. F.
Iron
- mark on road.

Year	High Elev.
------	------------

1961	923.70
------	--------

1960	24.20
------	-------

1959	23.30
------	-------

58	23.74
----	-------

57	24.30
----	-------

56	• 24.80
----	---------

55	• 24.55
----	---------

54	• 25.05
----	---------

53	• 25.50
----	---------

52	• 26.10
----	---------

51	• 25.30
----	---------

50	• 24.80
----	---------

49	24.40
----	-------

48	• 24.60
----	---------

47	• 25.35
----	---------

46	• 25.65
----	---------

45	• 25.80
----	---------

44	• 26.20
----	---------