

Book 81 Dr. 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

PLAN

Survey

COUNTY ROAD "F"

From Hamline To Victoria

Road Acc't. No. 29

Date Filed. 1-30-43

File

PLAN SURVEY

CO. RD. "F"

Hamline Ave to Victoria St.

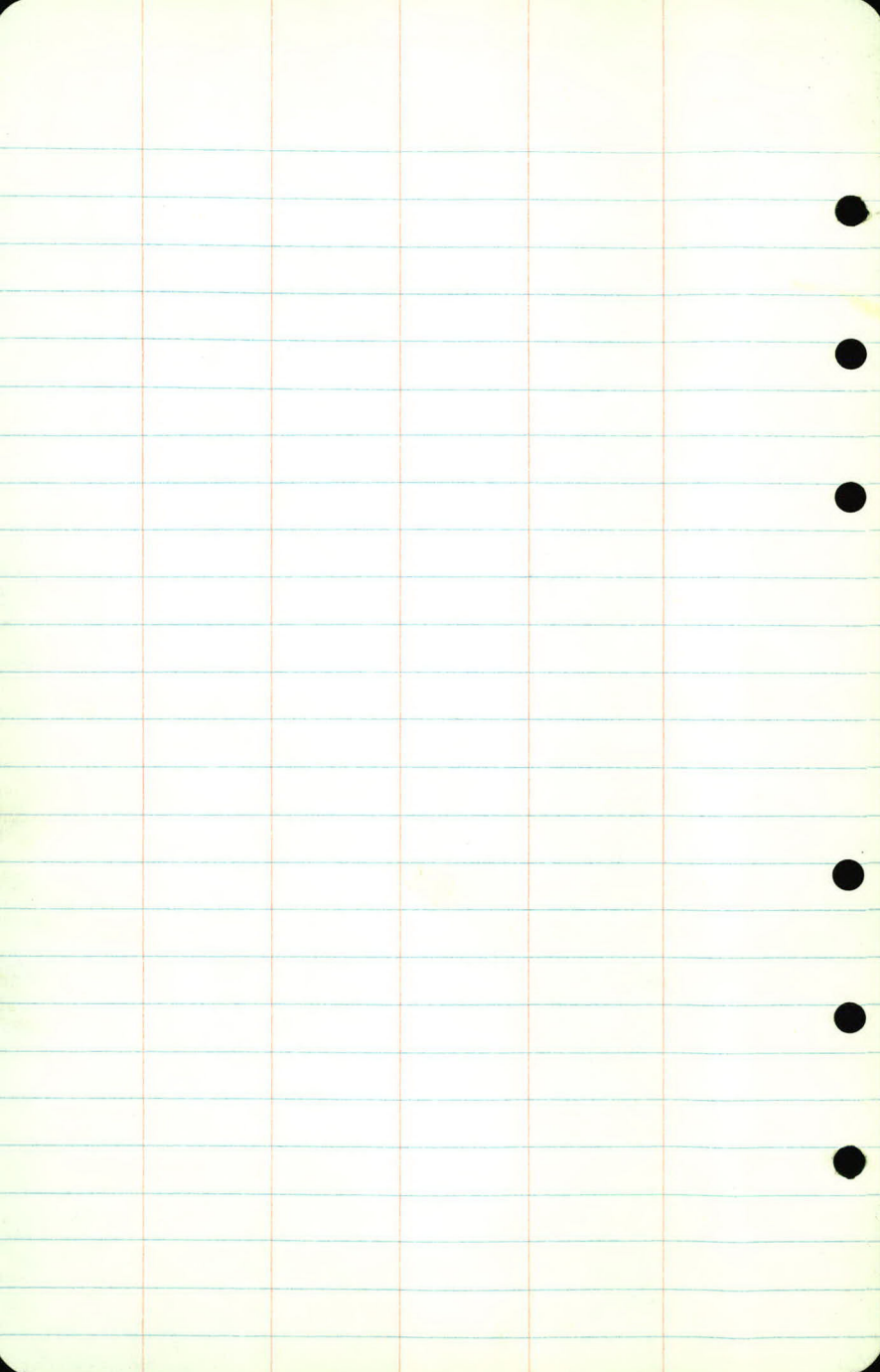
INDEX

Align - 1-2

Topog. - 3-13

Bench
Levels - 14-15

Xsections - 16-44



Alignment

Sta	Point	ΔLf	ΔRf
-----	-------	-------------	-------------

65 + 93.33	P.O.T. = P.O.C E Victoria St	Sta. 281 + 70.33	
------------	------------------------------	------------------	--

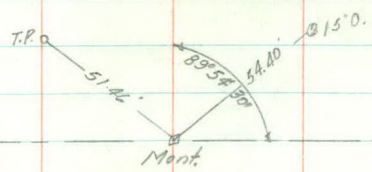
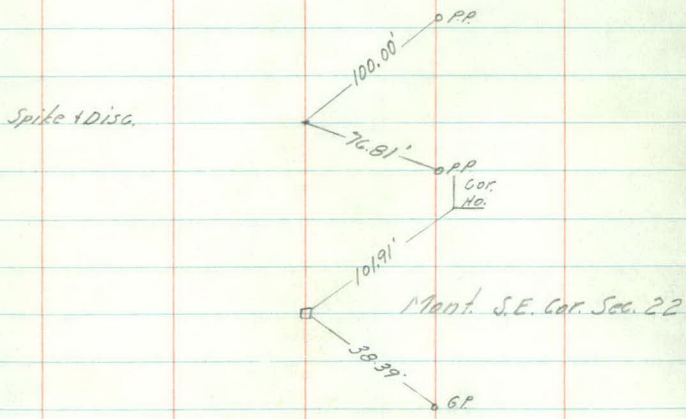
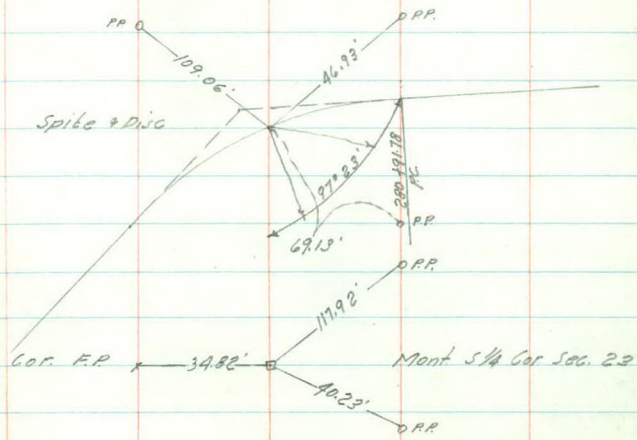
52 + 68.47	P.I.		$0^{\circ}00'30''$
------------	------	--	--------------------

45 + 61.57	P.O.T.		
------------	--------	--	--

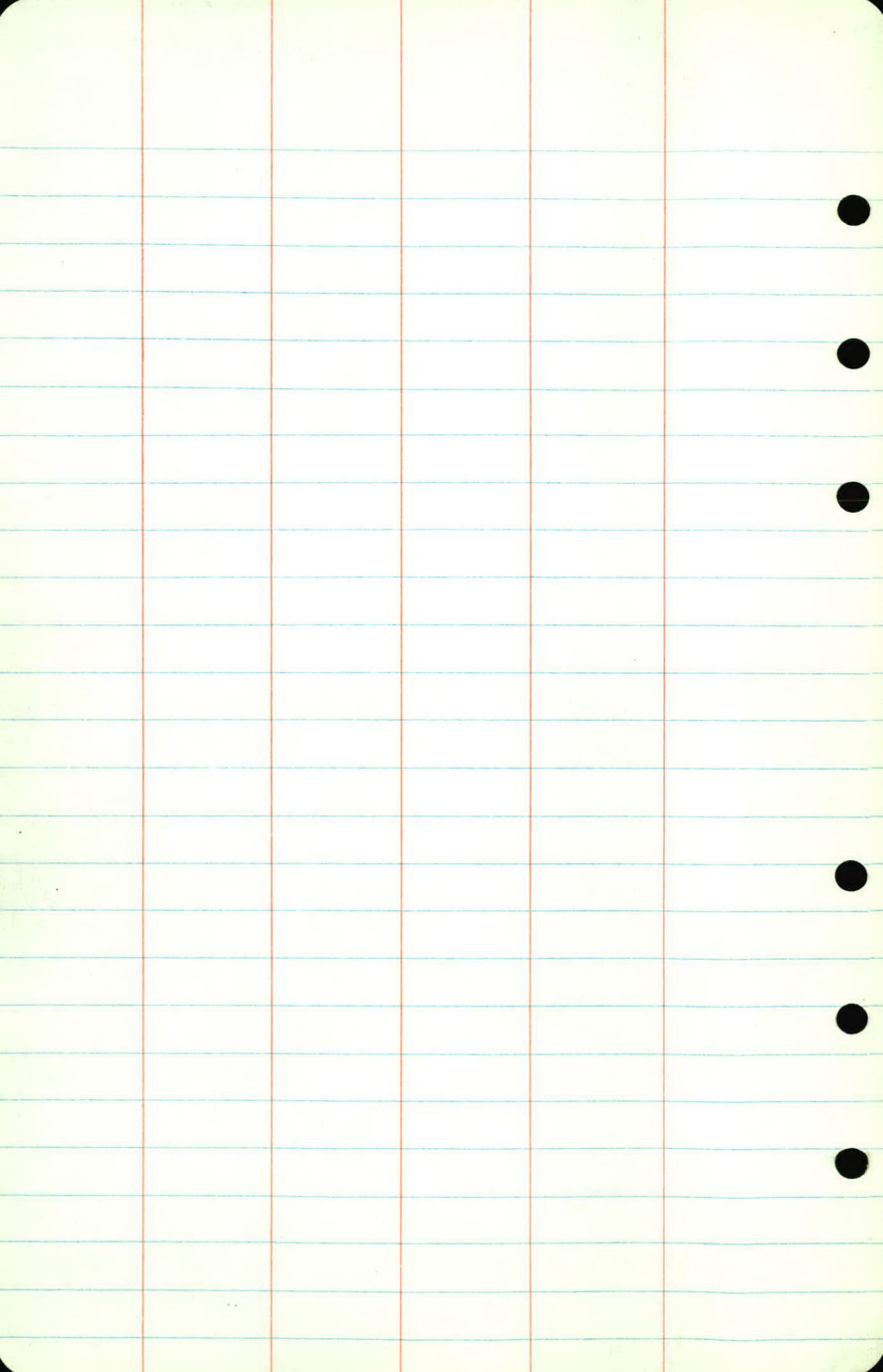
26 + 32.25	P.O.T. = E Lexington Ave.		
------------	---------------------------	--	--

0 + 00	= E Hamling Ave.		
--------	------------------	--	--

12-4-41
K.H.
L.G.
M.B.
C.F.



S 1/4 Cor Sec. 22



Topography

+97-18°D-41'

+66-24°D-47'

+28-5th-43'

+21-20°D-46'

5

+94-15°D-49'

11' 10' 5th-40'

+90-5th-34'

+70-30' Coll-33'

+59-24' Coll-33'

+64-5th-39'

+47-15°D-38'

+47-Ent- 15°X20'CM

+39-30°D-42'

+28-5th-33'

+27-15°D-38'

+28-12°D-36'

4

11' 10'

+50-End Brush.

+90-15°D-39'

+87-6'12" Coll wall-39' Old Approach

+78-6'12" Coll wall-34.5'

+54-5th-35'

3

Brush-38'

+91-15°D-40'

10' 11'

+94-20°D-34'-Brush.

+32-15°D-37'

+32-5th-31'

+22-5th-31'

+15-12°D-33'

+07-5th-30'

+35-Brush-41' -D

2

10' 10'

+75-Reg Brush-36'

+94-20°Ash-30' 12°D-36'

+45-Reg Brush-25-37'

+58-5th-27'

+26-8°D-34'

+16-30°D-29'

1

10' 11'

+47-Box 14'

+33-Box --- 13'

+30-TP-43'

Under Hamline 40' Long

+20-End 15" CM-44'

+45-5th-30'

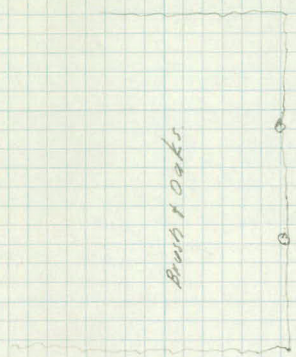
+34-10°D-29'

+13-Box-45' 36'

0400

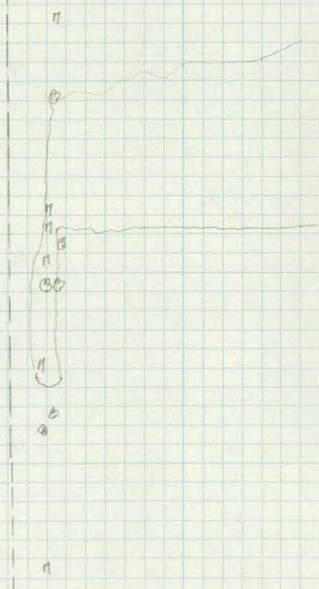
Scattered Oaks.

Bush & Oaks



Scattered Oaks.

Scattered Oaks.



+87-8"Tw.O.-39'

+82-20"O.-37'

+69-5tp-33'

12 Ent.

10' 11' +04-15"O.-33'

+91-5tp-37'

+59-High Line K5 R

+37-Tele Line K5-R

+27-14" P- 38'

+21-14" Pole- 32.5

+17-8"O.-32'

+10-High Line K5 &

+11-TP- 26'

11 Swamp.- 29'

10' 10'

+93-XDram 18" X 55' Cons. Guts. 27' 28'

+55-Swamp.- 27'

+38-10"O.-33'

+31-12"Tw.O.- 32'

+06-Ent. $\frac{15" \times 20' \times .17}{22'}$

10

10' 10' +02-5tp- 25'

+90-15"O.- 43'

+90-5tp- 27'

+38-10"O.- 46'

+08-6" P&P.- 39'

+04-12"O.- 44'

9

10' 9'

+20-Dig Ditch - 30'

+87-12"O.- 48'

+37-18"O.- 50'

+21-24"Willow - 33'

8

11' 9'

+71-24"O.- 49'

+57-30" Cotti- - 34'

+36-42" Cotti- - 34'

+23-24"O.- 49'

7

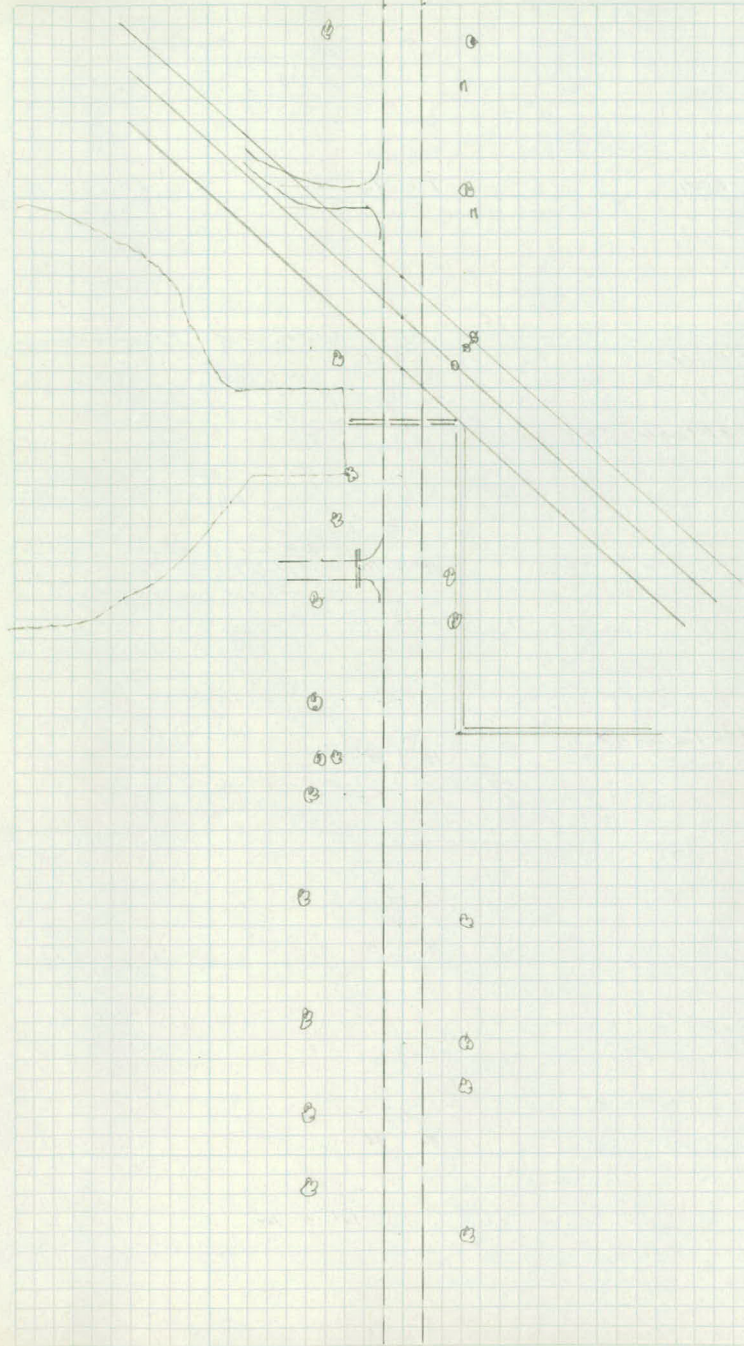
10' 10'

+83-24"O.- 48'

+61-18" E/m- 34'

6

11' 10'



+20-Bog. Swamp - 31'

19 Brush - 30'

9' 12'

Brush - 29'-44'

+52-12' O - 34'

18 +01-slp - 30'

10' 11' +23-Bog. Brush - 50'-43'

+50-8' O - 36'

+31-Road = Tie

+65-Swamp - 22' 2

17 Swamp - 30'

10' 10' 30' wide
+17-2 Road - 2

+50-Swamp - 28'

16 +46-Range Tie
Swamp - 40' 2

10' 11'

+50-End Brush - 27'

15 +15-slp - 35
Brush - 35'

10' 11'

+65-slp - 34'

14 Brush - 30'

10' 11'

+66-6' O - 30'

+50-End

+67-slp - 28'

+30-6' O - 31'

+29-6' O - 31'

+32-End - 5' x 20' C. 19 - 21'

+15-24' O - 35'

+03-15' O - 35'

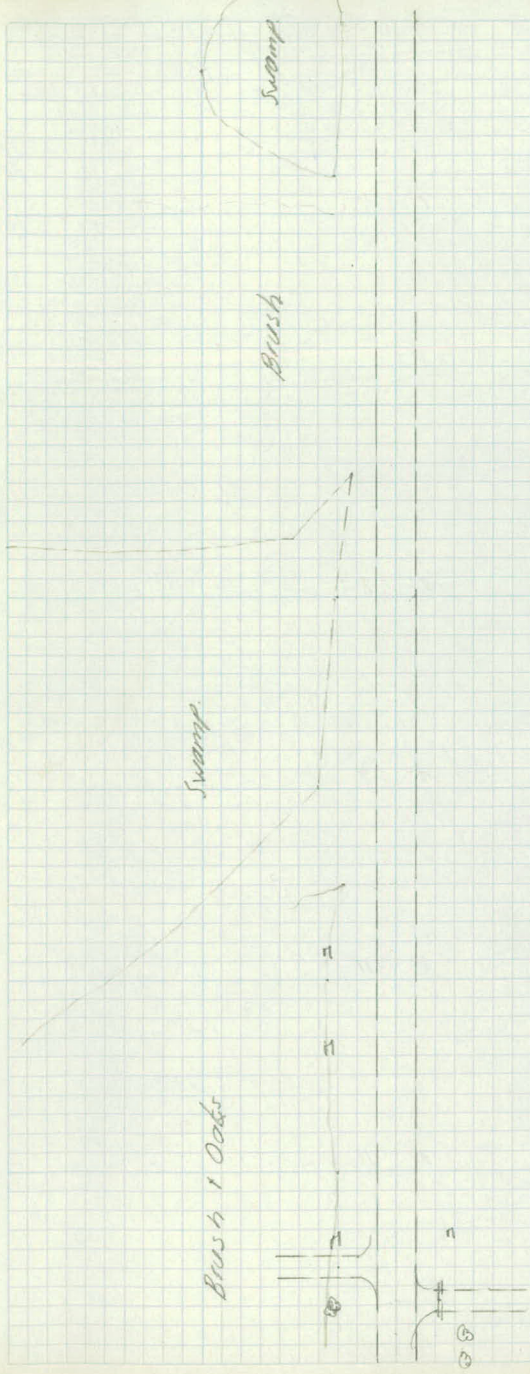
13 9' 11'

Brush & Oaks

Swamp

Brush

Swamp



+05-Rod. 11' 12'
 +52-X Drain 15' X 41' C.M. 20' 21' +60-PP 27'
 +92-Rod. 35' 36'

26 +18-Rod. 39' 44'
 +95-Rod. - 12' 12' +105-G.P. 27'

25 10' 11'

24 9' 11'

+19-12" O. 33'
 +16-10" O. 26'
 +06-End 6" V.H. 42'
 23 Old Ent. 10' 12'
 +99-End 6" V.H. - 33'
 +88-10" O. - 33' Dist 18' from A to 29'
 +98-15" O. 34'
 +67-Ent - 15" X 20' C.M. - 26'
 +49-15" O. - 36'

22 10' 11'

+98-15" O. - 32'
 +69-12" O. - 37'

+10-X Drain - 18" X 53' Conc. 25' 28'
 +20-Bog Brush - 29'

21 9' 11' End Brush h. 27' - 40'

+10-Ent.

+25-End Swamp. 27'

20 Swamp - 29' 10' 11' Brush. 31' - 42'

Sothwest Oke

Uncont.



148-Fe Cor-34'
124-pp-28'

33 Fe-32 9' 11' Fe-35'

32 Fe-26' 9' 11' Fe-35'

157-pp-28'

31 Fe-34' 9' 11' Fe-35'

30 104-End 12' Vit-33' 9' 11'
190-pp-28'
185-End 6' Vit Tile 92'

137-Beg. Fe-33'

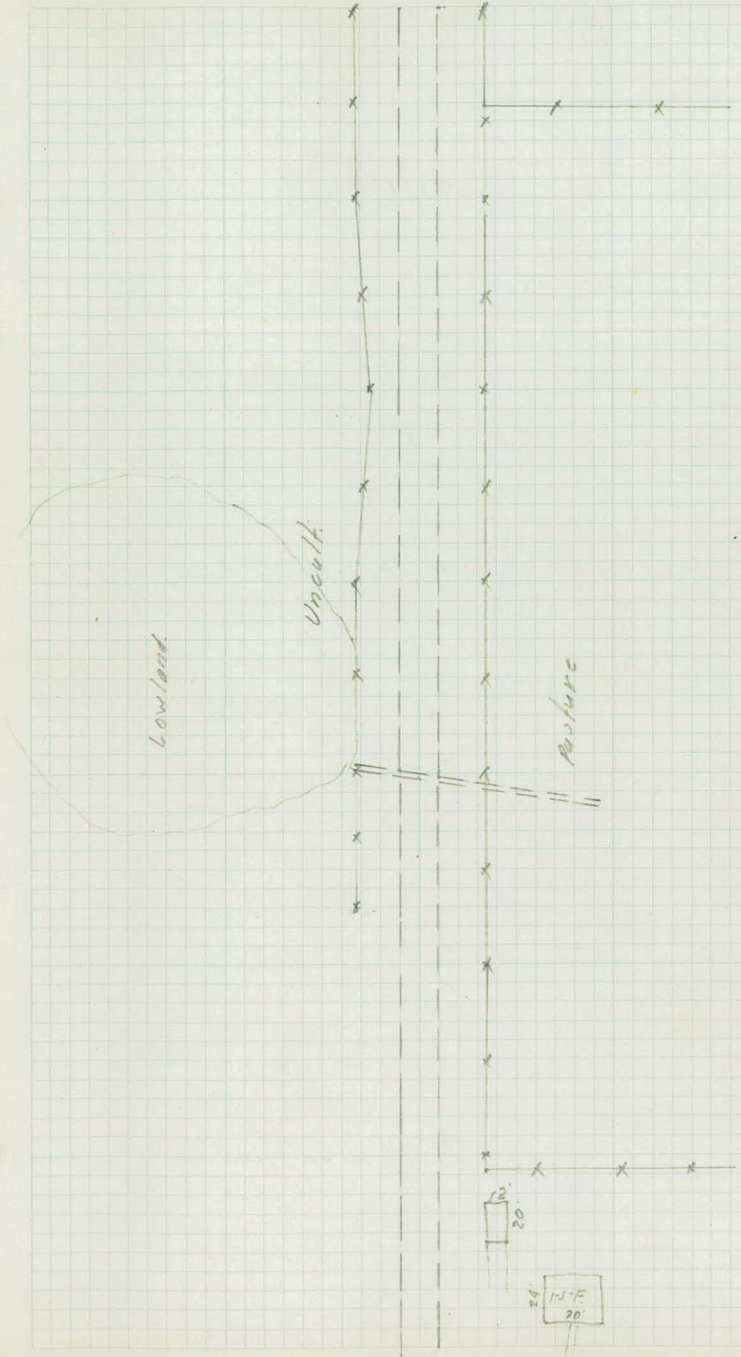
29 110-Bridel Path 9' 11' Fe-34'

124-pp-28'

28 9' 11' 191-Fe Cor-33'

155-Cor Cor-33.5'

27 9' 12' 112-NW Cor Ho-65'
105-End



End 12" Vit - 35
 +89-~~12" Vit~~ 12" Vit 35 32 +82-End 12" Vit - 32'

+30-Reg G.R. 13' Fc - 22'

+131

+05-End

40

9'

10'

+13-Reg G.R. 13'

+07-PP-285

+08-Fc Cor-35

+90-End - 31'

+02-Reg Small Trees 31'

+64-End

+51-Fc Cor-27'

39

10' 10' Fc - 35'

+86-End G.R. - 12.3'

+70-End G.R. - 12.8'

+24-PP-28'

38

Fc - 29' G.R. 12.8' 9' 10' G.R. 12.7' Fc 34'

+90-Dioid. 33'

+17-Range 110'

+32-End 18' M. 33.3' 18' A 55' M.

+26-End 18' M. 32'

+03-Reg Dioid. - 35'

37

Fc 30' G.R. 12.8' 10' 10' G.R. 12.9' Fc 34'

36

35

34

+58-PP-28'

+22-Reg G.R. 13.3'

+38-Reg G.R. 13.3'

Fc - 31'

9'

10'

Fc 34'

35

Fc - 32'

9'

11'

Fc 34'

+91-PP-28'

34

Fc - 33'

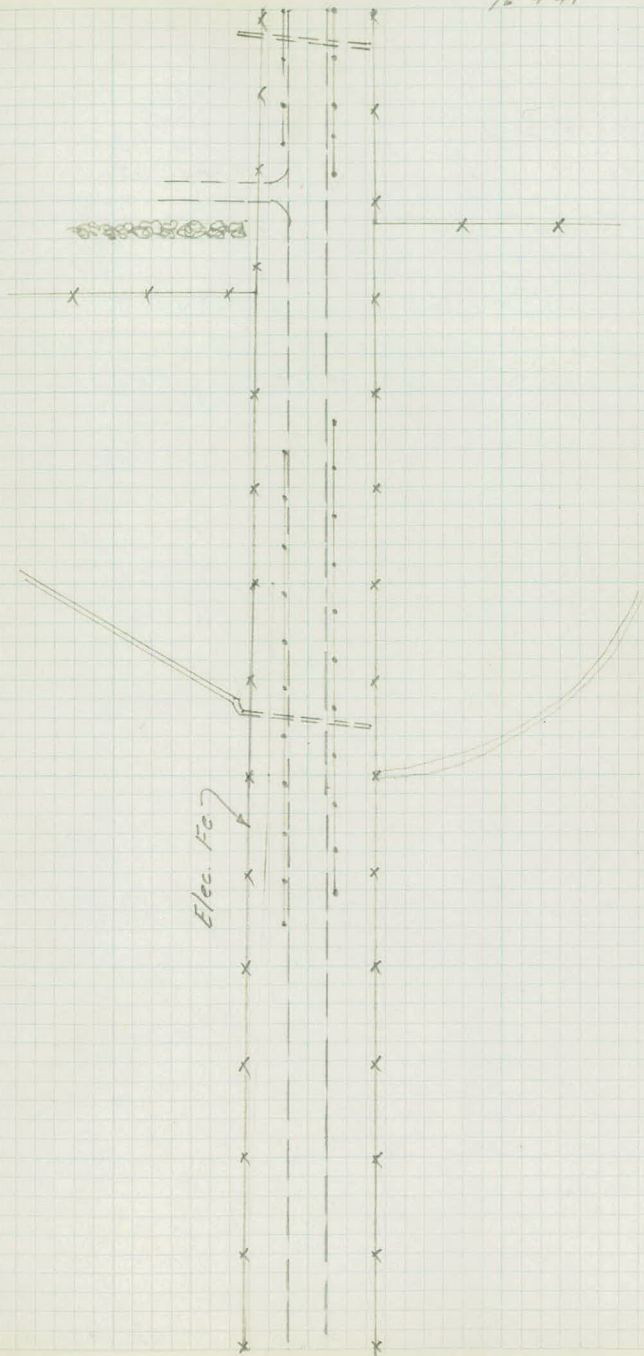
9'

11'

Fc 34'

12-4-41

9



Elec. Fe

+68-End Fe-13'

+39-Bdg G.R-13'

47 +15-End-15"X20 CM-21'
Fe-

+81-G.P. + Fe-27'

+41-Bdg G.R-132'

11' 9' +13-Range Tie to Fe. Cor-

+39-Fe Cor-34'

+74-End-15"X30 CM-21'

+59-P.P-29'

+52-G Maple-35'

46 Fe-27'

11' 9'

45 Fe-27'

10' 9'

+90-P.P-29'

44 Fe-25'

10' 9'

43 +11-End G.R-131'
Fe- G.R.

+81-Fe Cor-22'

+31-Fe Cor-34'

+25-P.P-29'

+07-End G.R-131'

9' 9' G.P. Fe-

+94-Range Tie to Fe Cor.

+60-P.P-29'

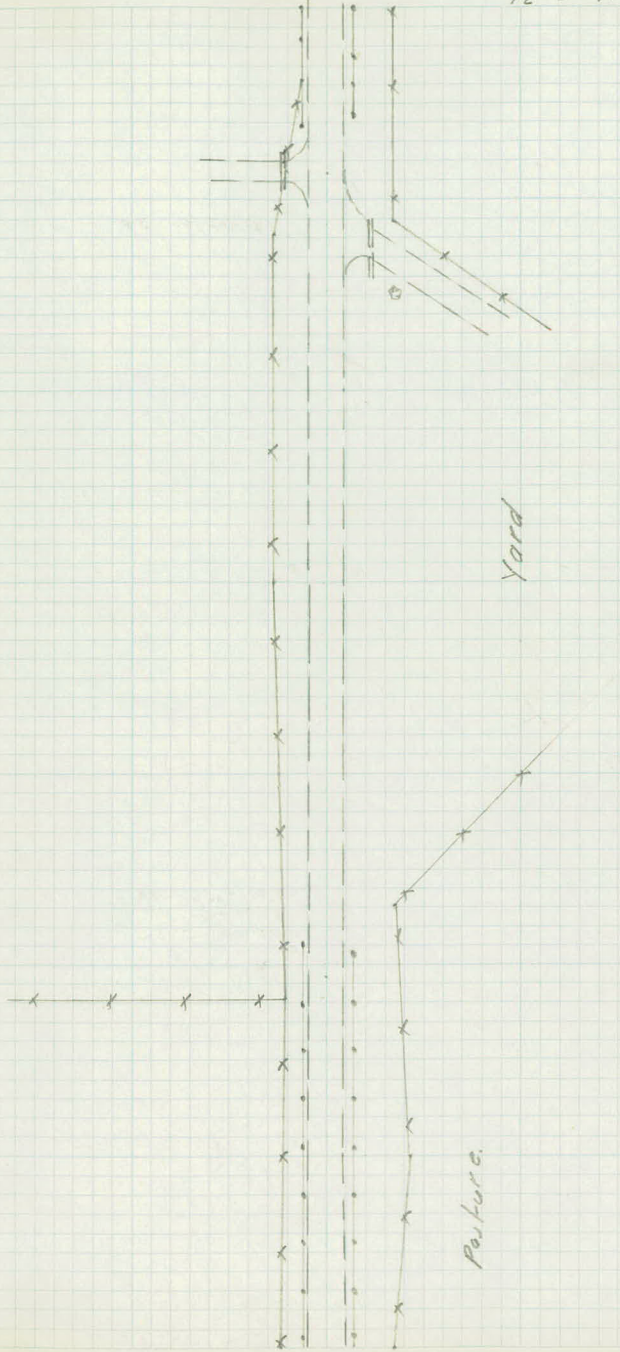
42 Fe-22' G.R. 28' 9' 9' G.R. 29' Fe-42'

+60-P.P-29'

41 Fe-33'

10' 10'

Fe-34'



54 10' 9'
+84-PP-29'

53 10 11'
+69-Fc. Cor-35'
+40-PP-29'

52 Fc-35' 10 10'

51 Fc-29' 10 9'
+97-PP-28'

+67-End G.R-13'

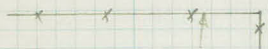
+45-Bcg. Fc-13'

50 10' 9'
+37-End 15'x20'-M-21'
+17-Fc Cor-34'
+13-End G.R-13.2'

+54-PP-29'

+45-End 18' C.M. Culi-36.5'
49 G.R-13' 10 9' +41-End 18' C.M-37.5'
+94-Rango Tie
+99-Ditch-55' N G.R-13.2' Fc-35'

48 10' 10' +47-PP-29'
Fc-34'



cut



Pasture



61 9' 10' PP-28'

60 9' 11'

+57-PP-28'

59 9' 11'

58 9' 10' +15-PP-28'

+31-XD min 10' X 56' CM 93' 23'

57 9' 10'

+70-PP-28'

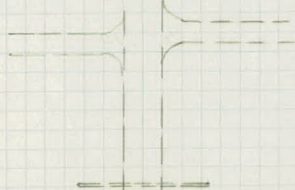
56 +06-Ent. 10' 10' +10-Ent.

+31-XD min 13' X 66' CM 94' 92' +27-PP-28'

55 10' 9'

Uncult.

Uncult.



66

+75-End-29
+60-End-10'

+80-End-30'

+50-End-10'
+31-PP-28'

65

10' 11'

+61-End 12" C.M. - 29.5'

+65-End 12" C.M. - 25'

64

10' 10'

+88-PP-28'

+33-Ent.

63

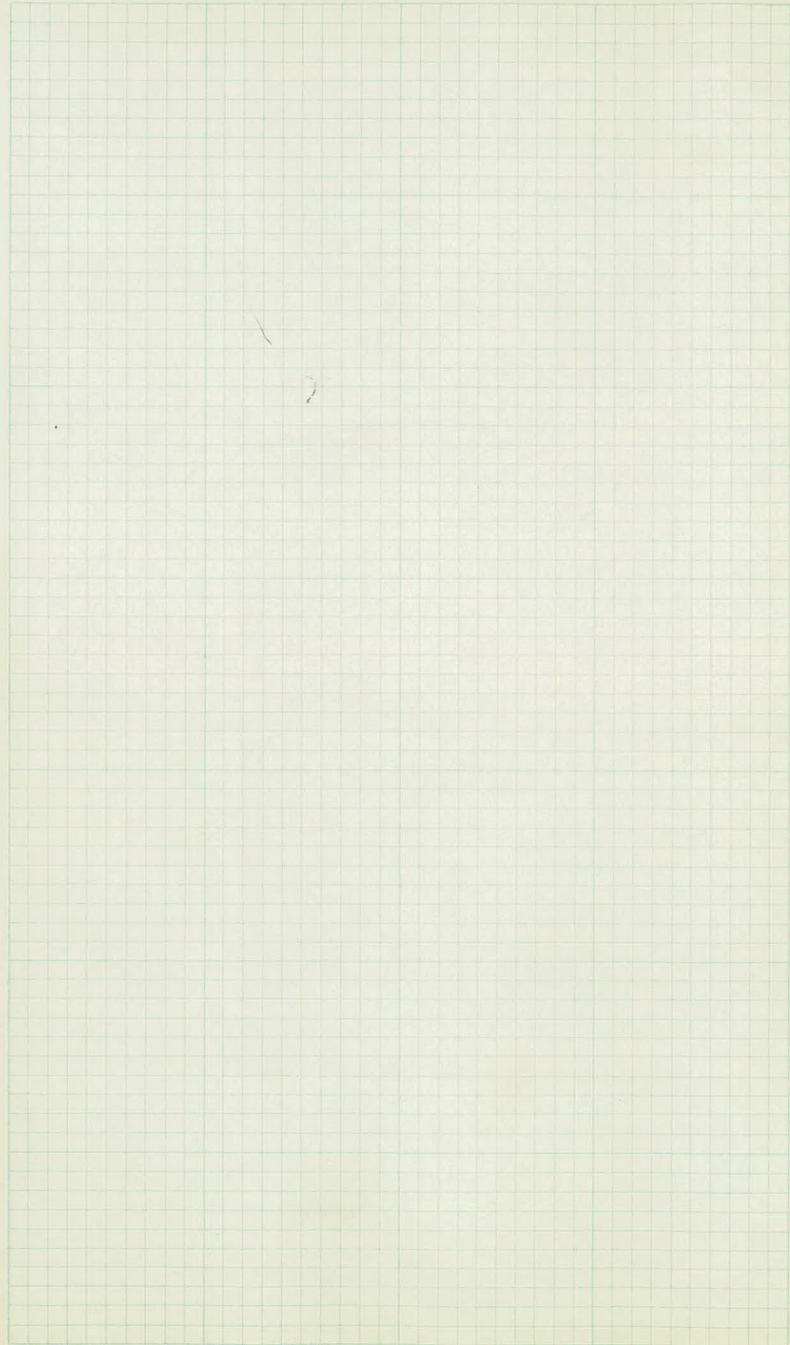
9' 10'

+43-PP-28'

62

9' 10'





Bench Levels

Sta.	+	π	-	Elev.	
B.M.	4.05	972.36			969.31
T.P.	0.17	962.28	10.25	962.11	
T.P.	10.79	970.82	2.25	960.03	
B.M.			6.17	964.65	965.30
T.P.	10.29	980.11	1.00	969.82	
T.P.	1.12	977.04	4.19	975.92	
B.M.	13.48	988.50	2.02	975.02	
T.P.	0.47	988.91	0.06	988.44	
T.P.	10.22	988.51	10.62	978.29	
B.M.			5.53	982.98	985.0
T.P.	2.25	979.97	10.79	977.72	
T.P.	6.80	985.87	0.90	979.07	
B.M.			5.76	980.11	981.12
B.M.			5.29	980.58	980.36

Description

R.R. spike in 18" O. 35 Rt. sta 13405

Top Mont. Lexington Ave + Co. Rd "F"

$$\begin{array}{r}
 68.31 \\
 65.82 \\
 \underline{65.30} \\
 .52
 \end{array}$$

spk in P.P. 28 Rt sta. 39489

$$\begin{array}{r}
 68.91 \\
 \underline{52} \\
 15.27
 \end{array}$$

$$\begin{array}{r}
 905.30 \\
 \underline{52} \\
 954.78
 \end{array}$$

$$1/4 = -.13$$

$$1/2 = -.23$$

Top Mont sta 52 + 68.47

$$3/4 = -.22$$

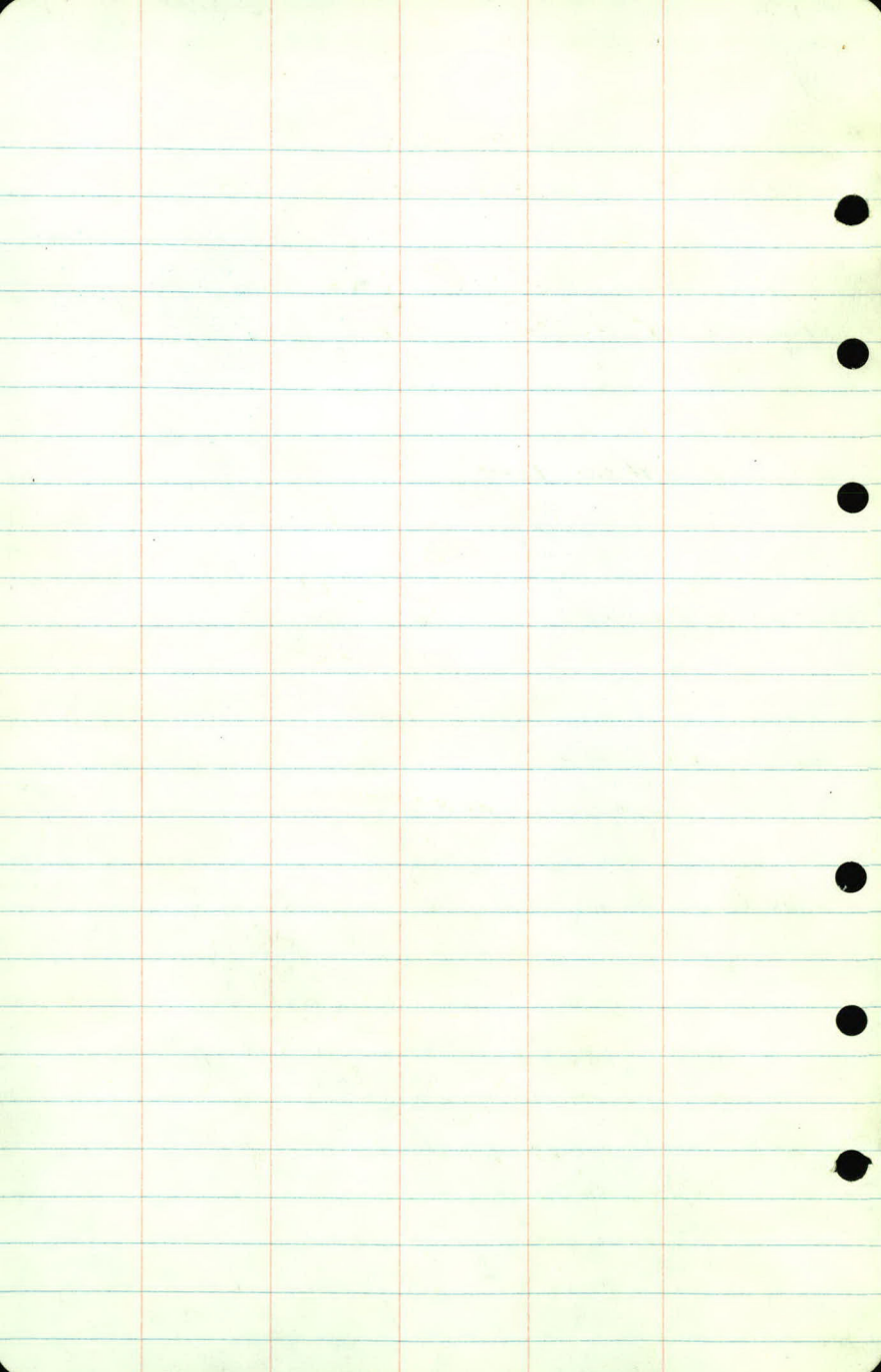
$$1 = -.32$$

$$\begin{array}{r}
 83.84 \\
 \underline{52} \\
 32
 \end{array}$$

Top spk. Victoria + Co. Rd "F"

Spk. in P.P.S. W. Cor. Victoria + Co. Rd "F"

$$\begin{array}{r}
 980.95 \\
 \underline{52} \\
 80.43 \\
 \underline{11} \\
 32
 \end{array}$$



X sections

These elevations are 0.52' lower
than elevations west of Hamline Ave.

Sta	+	π	-	Elev.
B.M.	536	988.35		982.99

0	100			983.00
---	-----	--	--	--------

	+16			983.3
--	-----	--	--	-------

	+20			983.3
--	-----	--	--	-------

	+23			983.3
--	-----	--	--	-------

				83.3
--	--	--	--	------

	+33			
--	-----	--	--	--

	+63			83.3
--	-----	--	--	------

				83.4
--	--	--	--	------

	+15			83.5
--	-----	--	--	------

Lt

R

Rt

Top Mast Hamline Ave + Co. Rd "F" (U.S.G.S. Datum)

✓

48	54	59	63
50		50	100

✓

51	51	51	55	58	60
50	25		13	29	50

✓

61	52	52	54	59	73	85
50	40	21		21	28	50

✓

61	63	53	52	51	60	69	85
50	37	34	21		17	21	50

✓

20	40	65	53	51	57	62	68	68	42	65	87
50	36	30	26		13	16	19	23	27	32	50

✓

127	116	55	65	55	51	59	68	68	36	54	71
50	34	25	19	16		16	19	23	30	33	50

✓

122	111	58	66	55	50	56	67	66	32	41	57
50	33	25	19	16		15	19	24	30	33	50

✓

115	117	60	67	54	49	55	64	64	36	41	55	61
50	33	24	19	16		15	19	23	27	32	36	50

Sta.	+	π	-	Elev.
		989.85		
1	+55			983.5
	+90			83.4
2				83.4
	+28			83.3
	+60			83.4
3				82.4
	+37			81.8
	+80			80.9

Lt

R

Rt

✓

0.0	1.7	4.1	6.8	5.2	4.9	5.5	7.2	7.8	8.2	8.1	8.2
50	33	24	18	15	16	21	24	34	37	50	

✓

1.7	2.8	6.5	6.9	5.4	5.0	5.5	7.5	8.2	8.5
50	31	24	19	16	15	21	31	50	

✓

2.7	3.9	6.6	6.6	5.5	5.0	5.5	7.1	7.6	8.3
50	30	24	19	16	15	21	28	50	

✓

4.2	4.8	6.8	7.2	5.4	5.1	5.7	7.0	7.4	7.6
50	29	24	19	15	15	19	33	50	

✓

2.7	3.1	7.2	7.2	5.9	5.5	5.9	7.4	7.4	5.5	5.2
50	32	24	19	15	15	19	23	27	50	

✓

2.0	2.3	7.3	7.7	6.6	6.0	6.5	7.7	7.5	2.8	2.5
50	33	25	19	17	15	19	24	33	50	

✓

1.4	1.9	7.5	8.2	7.2	6.6	7.0	8.4	7.8	2.6	3.0
50	33	24	19	16	17	20	25	34	50	

✓

2.0	1.4	8.6	8.8	7.8	7.5	7.6	8.9	7.6	3.6	4.8
50	34	23	19	16	17	20	25	33	50	

Sta	+	π	-	Elev
		988.35		
4				980.9
T.P.	3.56	984.03	7.88	980.47
+50				979.2
5				77.9
+42				76.7
+72				75.7
6				74.6
+50				972.7
T.P.	0.23	971.36	12.90	971.13
7				971.1

Lt.

L

Rt.

29 23 23 95 95 83 79 82 95 94 47 54 59
 50 43 34 23 18 16 16 20 24 33 35 50

14 21 63 65 53 43 43 63 62 27 28
 50 33 24 19 16 15 19 24 31 50

40 46 79 79 68 61 64 75 74 41 31 21
 50 30 24 19 16 16 20 24 30 45 50

57 53 91 88 77 73 75 90 89 45 37 19
 50 32 24 13 15 15 19 24 33 41 50

94 91 100 88 101 101 86 83 85 99 99 92 38 11
 50 38 35 26 23 20 15 15 19 24 33 39 50

112 113 123 120 110 110 97 94 96 110 113 63 44
 50 40 36 31 26 19 15 15 19 23 33 50

126 127 142 138 117 113 117 135 127 122
 50 46 41 22 16 16 20 38 50

105 82 25 29 23 23 06 03 09 13 44 43 41 37
 50 43 39 27 25 19 15 13 16 27 33 39 50

Sta.	+	π	-	Flov.
		971.36		
7	+50			969.2
8				67.7
	+50			66.6
9				65.9
	+17			65.7
	+21 & Ditch R.F.			65.6
	+29			65.5
	+60			965.3

Lt

R

Rt

10 11 45 39 24 22 28 74 81 78
50 48 38 19 15 14 28 41 50

15 1.8 51 54 52 39 37
50 46 38 30 19 16

44 98 112
15 31 50

3.2 36 49 52 66 69 52 98 54 117 124
50 44 41 36 31 19 15 14 32 50

51 58 84 83 74 76 61 55 62 96 103 121 115 117
50 43 37 29 25 19 15 15 25 31 36 42 50

5.2 59 85 7.7 77 61 57 64 97 9.8 126 129 117 117
50 42 37 24 19 15 14 26 31 35 39 45 50

Ditto + 17 Lt.

58 64 89 130
14 24 32

136 141 150 160
50 100 150 200

5.2 58 84 7.9 7.9 6.2 59 6.5 83 130 128 105 10.1
50 43 37 24 21 15 14 22 30 31 36 50

5.5 6.2 86 80 8.0 6.5 61 6.5 9.3 130 130 10.2 9.5
50 42 36 23 20 16 14 24 29 31 35 50

Sta	+	π	-	Elev	
		971.36			
10				965.1	
	+50			64.9	
	+83 X Drain			64.8	
11				64.9	
	+50			965.1	
T.P.	6.87	972.17	6.01	965.35	(965.30)
12				965.7	
	+35			66.0	
	+66			66.4	

Lk

E

Rt

7.0 7.0 8.0 8.2 6.6
50 39 34 20 15

✓
6.3 7.0 9.9 12.8 12.8 10.9 10.5
15 25 28 30 34 50

11.1 10.8 7.1 6.5 7.0 11.5 12.0
50 27 16 14 28 50

✓
Culv. ↓ Culv. ↓
11.9 11.38 7.2 6.6 7.1 11.96 12.3
50 27 15 14 28 50

✓
10.9 10.6 7.2 6.5 7.0 12.0 12.5
50 25 15 15 28 50

✓
10.2 10.7 10.1 6.9 6.3 6.7 11.1 11.4 11.4
50 34 25 15 15 28 39 50

✓
10.0 9.7 7.0 6.5 7.1 9.5 9.6 7.8 7.3
50 25 15 15 23 27 30 50

✓
9.4 8.7 6.6 6.2 6.7 8.6 8.4 5.9 9.8 9.0 9.0
50 23 15 17 23 24 32 37 39 50

✓
9.1 9.1 6.4 5.8 6.4 7.6 7.4 3.7 3.4 2.8 2.8
50 24 14 16 21 24 31 37 39 50

Sta.	+	π	-	Elev.	
		972.17			
13				966.8	✓
B.M.	4.47	972.93	3.81	968.36	(968.31)
+50				967.3	✓
14				67.4	
+33				67.7	
+58				67.6	
15				67.2	
+30				67.0	
+70				66.4	

Lt.

R

Rt.

7.2 86 80 60 54 6.0 7.0 7.9 4.6 3.8 4.0 ✓
 50 31 23 16 16 19 25 30 43 50

R.R. Spike in 18" 0.35' R/sta 13405

7.8 82 74 5.7 5.5 5.9 7.0 7.9 6.8 5.6 5.7 ✓
 50 38 21 15 15 19 23 24 39 50

6.1 4.7 6.5 6.8 5.4 5.2 5.7 6.8 6.8 2.9 2.7 ✓
 50 28 24 19 16 16 18 24 31 50

3.1 1.9 4.0 6.7 5.2 5.1 5.5 6.5 6.4 1.1 1.8 ✓
 50 32 25 19 15 15 18 23 33 50

2.4 1.4 0.7 5.9 6.6 5.3 5.2 5.4 6.5 6.5 1.0 1.8 ✓
 50 44 33 25 19 15 15 18 23 33 50

2.7 2.1 6.4 7.0 5.8 5.6 6.0 6.8 6.8 2.0 2.8 ✓
 50 33 25 19 16 16 18 24 33 50

4.8 4.0 7.0 7.3 6.0 5.8 6.3 7.5 7.0 3.1 3.7 ✓
 50 29 24 20 16 15 19 24 32 50

10.4 9.3 8.3 6.6 6.4 6.6 7.7 7.8 5.6 4.6 ✓
 50 30 22 16 16 18 23 28 50

Sta	+	π	-	Elev.
		972.83		
16				966.0
+29				65.6
+61				65.1
+97				64.4
17				64.4
+36				63.5
+40				63.5
T.P.	2.92	965.73	10.02	962.81
+69				962.7

Lt.

Z

Rt.

37 133 124 104 88 7.2 68 70 82 83 48 47 37 37 ✓
 50 50 40 28 22 16 15 19 24 31 45 46 50

131 132 1 7.6 7.2 7.4 8.7 80 26 2.6 ✓
 50 38 16 15 19 39 45 50

134 133 8.0 7.7 7.9 9.2 86 31 31
 50 33 16 15 19 38 45 50

Ditto sta 17

84 84 11 9.5 9.2 49 50
 15 21 30 38 42 50

132 132 116 9.1
 50 33 25 17

84 8.7 7.7 7.5
 15 29 50

L.O. 132 98 93 94 89 89
 23 15 15 31 50

Ditto +36

9.3 94 108 107 8.7 88 88
 15 20 26 36 41 50

2.2 40 46 47 34 3.0 3.1 4.3 4.2 5.0 3.9
 50 43 25 20 16 15 19 25 38 50

Sta.	+	π	-	Elev.
		96573		
18				962.2
	+36			61.6
	+65			61.0
19				60.3
	+50			59.3
20				58.4
	+28			57.9
	+57			57.4

Lt.

2

Rt.

0.9 3.1 4.9 5.1 3.7 35 3.7 5.0 5.1 5.1
50 28 24 20 16 16 20 29 50

3.9 4.5 4.6 5.6 5.5 4.3 9.1 4.3 5.5 5.7 4.9 5.0 4.0 4.0
50 41 28 24 19 16 16 19 29 31 40 45 50

4.2 5.1 4.8 6.0 6.0 4.9 4.7 4.8 6.0 6.2 5.1 4.8 4.1
50 27 28 24 20 16 15 19 27 33 38 50

9.1 8.7 5.8 5.4 5.6 7.0 7.0 4.8 4.7
50 25 16 17 19 26 41 50

12.3 12.4 7.1 6.4 6.7 8.0 8.6 7.6 7.4
50 32 16 15 19 31 43 50

12.3 12.3 7.8 7.3 7.6 8.7 8.7 6.4 5.1 4.5
50 29 16 16 19 27 30 40 50

11.0 11.4 12.3 11.2 10.9 8.2 7.8 8.1 9.1 9.3 5.0 3.6 3.2
50 37 35 23 25 16 15 19 23 29 39 50

10.6 11.5 12.5 11.6 11.5 8.7 8.3 8.5 9.5 9.9 8.0 6.1 5.0 4.7
50 33 32 30 26 16 14 18 23 26 35 45 50

Sta	+	π	-	Elev.
		965.73		
21				956.8
T.P.	10.79	964.43	12.09	953.64
+39	X Drain			956.5
+67				56.6
22				56.9
+26				57.4
+54				57.9
+81				58.4
23				958.8
T.P.	818	968.43	418	960.25

Lt

R

Rt

11.2 11.8 12.2 9.9 8.9 9.2 11.6 11.6 10.3 10.0
50 41 24 16 15 25 32 43 50

Culv.



11.1 11.0 8.3 7.9 8.2 12.2 12.2 12.7 11.6
50 25 15 15 28 28 3 41 50

Culv.



9.6 10.0 10.6 10.5 8.1 7.8 8.2 12.8 13.8 14.0
50 27 26 23 16 17 29 36 50

5.0 6.2 10.2 10.2 7.9 7.5 8.0 10.6 11.5 10.7 11.2
50 32 26 21 16 16 24 37 39 50

3.1 3.5 10.2 10.1 7.5 7.0 7.6 9.1 10.2 8.2 8.4
50 37 26 22 16 17 21 35 38 50

5.3 5.1 9.4 9.5 7.0 6.5 7.1 8.4 8.7 5.4 5.4
50 35 29 21 15 15 19 33 40 50

6.8 6.4 9.1 9.1 7.8 6.5 6.0 6.6 8.0 8.2 5.8 5.8
50 27 23 21 19 15 16 20 24 27 50

7.0 6.9 6.4
50 32 17

6.1
15

5.6 6.2 7.6 7.7 6.9 6.9
15 19 23 25 50

2.5 to 2.4

Sta	+	π	-	Elev
		968.43		
23	+50			959.4
24				960.2
	+50			61.1
25				62.3
	+42			63.0
	+63			963.3
B.M.	6.77	971.42	875	964.68 (964.65)
26				964.0
B.M.				
	+16			64.9

Lt

2

Pt.

11.9 11.6 11.3 9.5 9.0 9.8 12.0 12.3
50 37 21 16 15 23 50

11.6 11.0 10.6 8.7 8.2 8.8 12.3 12.7
50 33 22 16 16 26 50

8.4 9.1 10.0 9.9 7.6 7.3 8.0 11.4 12.8
50 32 26 22 16 15 27 50

6.0 6.0 9.0 8.8 6.6 6.1 7.1 8.3 9.3 10.2
50 40 26 23 16 16 20 34 50

5.8 5.4 7.7 7.9 5.8 5.4 5.9 7.1 7.2 5.1 6.9
50 38 29 22 15 15 19 22 27 50

5.4 6.3 7.2 7.1 5.7 5.1 5.7 6.8 6.9 4.9 5.8 6.5
50 38 26 20 15 15 19 22 27 43 50

Fop Mont. Lex. & Co. Rd "F"

6.6 6.6 8.2 9.0 8.9 7.8 7.4 7.7 8.3 9.1 9.9 10.5
50 40 26 24 20 17 18 19 23 37 50

5.9 6.8 6.8
50 31 20

7.0 8.2 8.6
16 50

Sta	+	π	-	Elev
		971.42		
26	+32.25			964.6
	+46			64.9
	+52			65.0
	+59			65.1
27				65.6
	+21			66.0
	+55			66.5
	+75			966.8

Lt

L

Rt

5.2
50

6.8

8.3
505.7 6.5 6.5 8.0 8.6
50 25 28 50

Culv.

7.5 8.6 6.7
50 20 166.3
7

6.4

7.0
118.0
1910.1 10.2
21 50

Culv.

4.0 5.4 7.8 8.0 6.6 6.3 7.4 8.6 8.6 8.0 9.4
50 29 23 20 15 16 20 23 24 505.3 5.9 7.2 7.3 6.1 5.8 6.3 7.4 8.5 8.9
50 27 23 19 15 15 20 35 504.9 4.7 7.0 7.0 5.6 5.4 5.9 7.1 7.1 9.8 9.9
50 28 23 19 15 15 20 24 45 504.2 4.0 4.6 6.3 6.2 5.2 4.9 5.4 9.1 10.4 11.8
50 38 27 23 19 16 15 27 34 50107
Et. 640.4/100r3.5 3.6 4.5 6.0 6.0 4.7 4.6
50 40 27 23 19 155.3
179.8 12.0
29 50

Sta	+	π	-	Elev
		971.42		
28				967.1
	+50			67.9
	+87			68.5
29				68.6
T.R	7.20	975.87	275	968.67
	+50			969.5
	+85 Flow Line Tile Rt.			
30				70.2
	+04 Flow Line Tile Lt.			

Lt

E

Rt.

3/ 3.9 5.6 5.6 4.4 4.3 4.7 8.0 10.1 11.0
50 29 23 20 16 15 26 39 50

2.8 2.4 5.1 5.3 3.7 3.5 4.1 6.1 6.4 5.9 6.7 8.9
50 29 2.4 20 15 17 22 23 29 34 50

5.0 4.3 5.7 4.8 4.9 3.3 2.9 3.3 5.7 5.8 5.2 7.8
50 36 29 23 20 15 16 23 26 29 50

6.3 4.8 4.6 3.2 2.8 3.0 5.7 6.1 5.6 8.0
50 28 20 15 15 23 26 27 50

13.6 13.0 6.9 6.4 6.9 12.4 14.0
50 34 16 15 32 50

18.4
92

✓ 14.2 14.1 6.3 5.7 6.5 12.3 13.6
50 34 16 16 32 50

14.45
33

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

		975.87		
--	--	--------	--	--

30	+50			
----	-----	--	--	--

31				
----	--	--	--	--

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

T.P.	7.07	981.21	1.73	974.14
------	------	--------	------	--------

32				
----	--	--	--	--

	+35			
--	-----	--	--	--

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

33				
----	--	--	--	--

	+32			
--	-----	--	--	--

L

E

R

13.9 128 6.0 5.3 48
50 32 17 11

5.3 7.8 8.6 9.2
15 23 33 50

13.4 120 5.1 4.9 39 44 5.9 6.0 5.3 5.4 5.9
50 32 16 12 16 21 24 25 33 50

10.5 9.2 8.1 3.5 2.9 3.4 4.6 4.1 10.5 10.1
50 44 30 16 16 19 24 33 50

12.4 8.4 9.0 9.0 1.9 7.1 7.8 9.1 8.7 1.9 2.7
50 25 23 20 16 15 19 24 33 50

7.7 5.8 5.8 8.0 8.2 7.1 4.5 7.3 8.5 8.4 5.5 5.8 6.1
50 37 28 29 19 16 15 18 23 29 33 50

4.4 4.9 1.7 1.8 6.3 5.9
50 30 24 19 15

4.6 8.2 8.1 9.1 9.8
15 19 24 33 50

3.5 3.7 7.2 7.6 5.9
50 32 24 19 14

5.6 6.3 7.5 7.6 7.2 8.5 9.5
16 19 24 25 34 50

2.1 1.9 6.1 6.8 5.4 5.3 6.0 7.0 6.9 4.8 5.5 7.1
50 33 26 19 15 16 19 23 29 33 50

5/2 + π - E/ev

981.21

33 +70

34

+39

+61

35

T.P. 2.26 977.62 5.85 975.36

+25

+55

36

Lt

K

Pt

2.5 1.8 6.0 6.3 5.8
50 33 24 19 16

5.2 5.5 6.5 6.2 0.0 1.8
16 20 23 33 50

1.8 1.7 5.7 6.1 5.3 5.2 5.4 6.6 6.0 1.0 3.0
50 34 26 19 15 16 19 24 33 50

1.1 1.9 6.0 6.5 5.4 5.2 5.7 6.6 6.3 2.5 5.1
50 33 25 19 16 16 21 23 32 50

2.3 3.2 6.3 6.6 3.6 5.4 5.7 6.8 6.6 2.2 3.0
50 32 25 19 16 17 21 23 32 50

3.8 4.3 6.9 7.3 6.1 5.9 6.2 7.1 7.1 5.3 6.0
50 30 25 20 17 16 19 23 29 50

14935100 K

0.0 0.4 3.6 4.0 2.6 2.7 2.9 4.0 4.2 3.5 3.9 4.3
50 32 25 19 16 15 19 24 26 37 50

0.0 0.4 4.0 4.5 3.2 3.1 3.7 4.6 4.7 3.3 3.8 4.2
50 32 25 19 16 16 18 23 27 37 50

2.9 4.0 5.0 5.4 5.5 4.2 3.9 4.5 5.5 5.5 3.5 3.9 3.0
50 36 25 24 20 16 15 18 23 28 36 50

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

977.62

36 +30

+75

37

+02 Profile of ditch Lt

+26

+32

+32 Profile of ditch Lt

38 +50

$$\begin{array}{r} 129 \\ 13 \\ \hline 4 \end{array}$$

12-9-41

31

Lt

R

Rt

6.3 7.8 8.3 4.8
50 37 23 15

4.5 4.7 5.2 6.4 6.3 5.6 3.7
13 16 21 23 33 50

8.7 9.7 10.1 9.0 6.0 5.3 5.2 5.5 6.4 11.4 12.0 11.4
50 42 31 25 17 13 12 16 29 36 50

9.4 10.1 10.4 9.3 6.0 5.6
50 44 31 25 16 12

5.4 5.8 6.6 12.5 13.0 13.3
13 17 32 36 50

13.7 13.9 14.6 14.8
39 50 100 150

10.1 10.6 9.5 6.2 5.8 5.7 4.1 7.0 12.9 13.0 13.1 13.4
50 32 27 17 12 13 17 32 40 50 32

Culv

10.0 10.4 12.4 12.5 10.8 5.6 2.5 5.8 6.0 6.8 12.1 12.8 13.0
50 39 36 33 32 26 16 12 13 17 31 36 50

Culv

10.3 10.2 10.7 10.8 10.7 11.3 12.5
300 250 200 150 100 50 333

10.6 10.6 9.6 6.6 6.1 5.9 6.1 6.7 12.0 12.4 12.4
50 32 27 17 12 12 16 32 37 50

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

		977.62		
--	--	--------	--	--

38

+35

+70

39

+30

+65

+85

40

B.M.

7.41

982.43

2.60

975.02

975.02

Lt

R

Rt.

85 90 96 94 67 62 61 64 71 115 119 115 118
 50 35 27 24 15 12 13 16 30 41 45 50

51 62 84 83 76 63 61 65 74 112 121 124
 50 36 25 22 19 12 12 16 28 40 50

30 29 40 77 76 62 60 59 63 67 100 105 116
 50 45 34 24 19 16 13 13 16 26 33 50

24 26 35 62 74 72 57 56 60 73 80 95 101
 50 43 35 26 24 19 15 13 18 34 44 50

24 31 55 66 66 51 51 56 68 70 61 69 76 83
 50 37 29 24 19 15 14 18 23 26 34 45 50

55 53 63 59 44 44 49 63 66 48 51 55 60
 15 33 29 23 16 16 17 23 26 33 46 50
 14

69 67 62 56 42 41 43 61 60 38 39 42
 50 35 25 19 16 13 17 23 27 37 50

86 81 66 54 38 39 41 59 59 55 52 46
 50 43 26 17 14 14 19 24 25 34 50

Sta + π - Elev

982.43

40 +50

+89 X Drain Profile Lt

+82 Profile X Drain Rt

41

+50

42

+50

43

T.P.

13.76

998.93

0.26

982.17

Lt

4

Bt

14.3 13.8 11.6 8.1 7.5 7.6 7.8 8.3 13.4 14.3 14.2 13.3
 50 34 25 16 13 13 14 27 42 39 50

Cultr

↓

15.2 13.8 13.5 14.9 14.9 13.4 14.6 6.7 6.5 6.7 7.8
 35 50 38 37 35 34 24 14 10 15

Cultr

↓

6.7 7.3 7.8 15.2 15.4 15.4
 13 15 31 36 50

16.5
 32

13.6 13.5 12.7 11.9 6.5 6.2 6.1 6.6 7.2 15.3 15.7 15.7
 50 38 32 24 16 13 13 15 32 38 50

12.2 12.1 10.8 5.3 4.6 4.6 5.1 5.7 13.5 14.8 15.3
 50 33 29 15 13 13 14 30 39 50

10.2 10.2 8.7 3.5 3.0 2.9 3.1 3.6 11.9 12.2 13.6
 50 33 29 16 13 13 16 30 38 50

7.4 7.3 4.7 1.7 1.3 1.2 1.5 2.0 10.7 11.5 12.0
 50 32 23 16 12 12 14 31 37 50

6.3 6.6 7.5
 31 38 50

sta + T - E/EX

995.93

43

+30

+70

44

+35

+60

45

+16

Lt

E

Pt.

126 147 144 144 132 129 129 131 137
50 28 25 21 16 14 12 17

49 87 126 128 120 119 119 132 132 119 136 146 157
50 32 25 19 15 15 18 23 25 33 39 50

130 105 107 115 105 105 107 119 118 68 86
75 42 25 18 15 15 18 24 33 50

96 104 95 96 99 112 114 108 32 45 85
26 17 15 16 20 22 25 37 50 75

87 96 91 90 92 103 98 07 17 44
27 16 15 15 19 26 42 50 75

84 93 86 87 89 101 95
27 16 14 16 19 26

87 93 85 85 86 95 91
26 17 15 15 18 25

90 93 84 85 85 95 90
26 16 14 16 19 25

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

		998.93		
--	--	--------	--	--

45	+44			
----	-----	--	--	--

	+65			
--	-----	--	--	--

FP #1			8.63	987.30
-------	--	--	------	--------

T.P.	10.15	1006.00	0.00	995.93
------	-------	---------	------	--------

44				
----	--	--	--	--

	+35			
--	-----	--	--	--

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

45				
----	--	--	--	--

	+16			
--	-----	--	--	--

	+44			
--	-----	--	--	--

Lt.

£

Ft.

93 96 86 86 87 98 94
26 17 14 16 19 25

94 100 88 87 88 98 95
26 18 15 15 18 25

28 51
75 47

06 1.9
75 51

16 30
75 49

90 94 11.2
48 53 75

63 72
75 43

60 74 82
46 62 75

79 85
75 42

58 68 82
46 61 75

94 95
75 41

108 104 98 91 99
39 42 44 58 75

Sta + π - Elev.

1006.09

45 +65

46

T.P. 1.33 997.26 10.15 995.93

T.P. #1 9.98 997.28 9.98 987.28 987.30

46

+50

47

T.P. 0.15 883.94 13.49 883.79

+30

+60

48

Lt

K

Rt

96 99
75 40

89 92 112
41 56 75

100 105 112
75 50 39

119 132 153
38 53 75

54 113 119 106 106 107 118 111
30 30 26 19 16 16 19 25

64 79 126 132 122 119 120 132 131 101 111 121
50 34 25 19 16 15 18 24 30 43 50

119 137 151 151 140 135 136 152 151 134 134 139
50 27 24 19 16 15 19 24 27 33 50

29 45 44 33 20 16 12 16 28 26 21 24 35
50 31 25 20 17 14 14 19 25 29 40 50

76 92 86 26
50 39 29 15

23 28 54 58 76
14 22 34 50

116 114 133 121 38 36
50 43 37 32 14

38 48 132 139
11 15 33 50

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

		883.94		
--	--	--------	--	--

48	+50			
----	-----	--	--	--

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

	+01	Profile Ditch Rt.		
--	-----	-------------------	--	--

	+05			
--	-----	--	--	--

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

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

	+27			
--	-----	--	--	--

	+68			
--	-----	--	--	--

T.P	7.14	888.31	2.77	881.17
-----	------	--------	------	--------

Lt.

E

Rt.

160 15.5 54
50 34 15

50 5.5 68 16.6 17.4
12 16 34 50

17.2 16.7 59 58
50 34 13

63 17.4 17.8
14 33 50

Culr

19.1 17.7 188 19.3 19.1
33.5 35 50 100 150

Culr

186 180 178 181 183 184 189
300 250 200 150 100 50 36.5

16.2 16.0 60 57 61 16.2 17.4
50 34 15 14 32 50

136 131 52
50 34 15
33

50 54 134 148
14 32 50

11.8 11.0 45 45 50 60 60 56 6.3
50 30 14 15 21 25 26 50

80 57 46 36
50 27 20 15

36 37 48 44 0.0 0.8
15 19 24 31 50

Sta.	+	π	-	Elev.	
		888.31			
51					
	+21				
	+70				
52					
B.M.	10.54	993.52	5.31	983.00	982.95
	+45				
	+70				
53					
	+50				

Lt

E

Rt

9.8 7.3 8.5 8.4 7.4 7.1 7.4 8.4 8.1 1.5 2.6
50 26 23 19 16 16 19 24 34 50

⁵⁸
6.9 6.8 7.8 7.9 6.8 6.6 6.8 8.0 7.7 1.4 2.3
50 29 24 20 17 16 19 24 33 50

1.7 2.0 6.4 6.9 5.8 5.6 5.9 7.0 6.9 3.5 4.5
50 33 25 19 16 15 19 24 32 50

107 0.0 5.9 6.5 5.4 5.2 5.5 6.7 6.2 2.8 3.8
50 34 24 20 16 16 19 24 32 50

Top Mont. R. sta. 52+68.47

2.8 3.1 10.5 11.5 10.5 10.2 10.3 11.6 11.4 5.3 6.1
50 34 24 19 16 15 19 24 33 50

1.5 2.0 10.3 11.2 10.2 10.3 10.3 11.8 11.3 5.0 6.0
50 34 24 19 15 15 19 24 33 50

5.2 2.9 11.0 11.7 10.7 10.6 10.5 11.8 11.8 7.7 8.6
50 34 24 19 16 15 18 23 33 50

8.3 8.1 12.5 12.8 11.6 11.4 11.8 12.7 12.6 9.8 10.0
50 33 24 19 16 16 19 24 30 50

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

		993.52		
--	--	--------	--	--

54

T.P	0.05	980.88	12.69	980.83
-----	------	--------	-------	--------

+34

+73

55

+31

+66

56

+27

Lt.

♀

Rt.

114	106	139	140	131	127	129	139	140	134	143	137
50	31	24	19	17		16	19	23	26	39	50

29	1.2	23	23	13	11	14	47	57
50	26	23	19	16		15	25	50

82	75	29
50	27	16

23	29	78	87
16	28	50	

105	101	37	31
50	33	16	

36
15

92	100
30	50

culv.
↓
12.5
34

109	110
50	33

47
17

40	45	84	102	97
14	23	32	50	

culv.
↓
11.85
32

101	104	96	54	48
50	37	27	16	

54	89	78
14	26	50

101	88	56
50	24	15

54	60	72	66	62
15	20	32	50	

110	107	103	60	57	60	75	69	63
50	42	27	14		14	20	30	50

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

		980.83		
--	--	--------	--	--

56	+70			
----	-----	--	--	--

57				
----	--	--	--	--

	+25			
--	-----	--	--	--

	+31			
--	-----	--	--	--

	+65			
--	-----	--	--	--

58				
----	--	--	--	--

	+32			
--	-----	--	--	--

T.P.	9.55	985.14	529	975.59
------	------	--------	-----	--------

	+71			
--	-----	--	--	--

44

2

RF.

13.9 13.4 14.6 6.9 6.0 6.4 9.7 9.7 8.7
50 36 26 14 14 21 31 50

198131 64 61	66	99 101 92
50 31 14	14	21 32 50

135	13.2	6.5	62.66	108	100	90
50	34	14	19	23	33	50

Cult. 1				Cult. 2			
134	1335	65	62	66	1175	114	10190
50	33	13		14	23	30	3350

129	12.2	6.6	6.3	6.7	11.1	11.4	10.9	9.3
50	29	14	14	25	30	32	50	

12.0	11.5	6.6	6.2	6.6	10.8	11.0	10.1	9.1
50	29	14		15	25	29	32	50

11.0	10.9	9.9	6.9	0.165	9.1	10.3	10.4	8.7	8.4
50	31	25	14	15	23	27	30	34	50

13.6	13.4	12.8	10.5	10.2	10.0	10.5	12.4	14.3	13.9	11.7	12.2
50	31	22	16	13		16	22	27	31	36	50

Sta.	t	π	-	Elev.
------	---	-------	---	-------

		985.14		
--	--	--------	--	--

59

+50

+93

60 +10

+50

+79

61

+50

T.P.	4.61	985.28	4.47	980.67
------	------	--------	------	--------

Lt.

Z

Rt.

12.0 11.6 11.3 9.8
50 30 21 14

9.5 10.0 12.5 14.0 14.0 12.5 12.6
15 23 27 31 36 50

11.0 11.9 11.3 9.3 8.8
50 34 24 15

9.2 12.4 13.3 13.4 13.1
15 23 28 33 50

10.6 11.2 10.6 8.4
50 34 21 14

8.1 8.4 11.9 12.5 12.5 11.5 8.2
15 25 34 50 37 50

7.9 8.5 9.3 9.3 8.0 7.8
50 25 23 21 16

8.1 11.0 11.5 11.4
15 23 33 50

3.9 4.5 8.0 8.4 7.3
50 32 25 20 16

7.1 7.3 8.6 8.7 7.6 8.4
14 19 23 25 50

1.1 1.8 7.1 7.8 6.7 6.5
50 34 25 19 16

6.8 8.0 7.9 4.7 5.9
16 19 23 30 50

0.6 1.4 6.8 7.4 6.2
50 34 25 19 16

6.1 6.2 7.6 7.4 3.4 4.0
15 19 23 32 50

4.2 4.1 5.5 6.4 5.2 5.1
50 34 25 19 16

5.3 6.6 6.1 1.2 1.4
16 19 24 33 50

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

		985.28		
--	--	--------	--	--

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

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

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

	+45			
--	-----	--	--	--

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

64				
----	--	--	--	--

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

Lt.

E

Rt.

41.4	406	54	61	49	46	4.8	61	60	00	+0.8
50	34	25	19	16	15	19	24	34	50	

1.2	12	55	60	4.8	43	47	60	5.5	15	16
50	34	24	19	16	16	19	24	33	50	

3.3	36	59	5.9	40	43	46	61	6.0	3.5	3.5
50	29	24	20	16	16	19	23	30	50	

56	50	54	61	61	4.9	45	4.8	60	6.2	5.5	54
50	31	25	23	19	16	16	19	23	26	50	

8.0	77	51	46	4.9	7.0	4.8	6.6
50	23	17		15	21	29	50

8.5	84	4.9	46	5.1	7.6	7.3
50	26	16	16	23	50	

95	9.2	54	43	54	84	7.9
50	23	16		16	25	50

Calc.

↓
9.05
29.5

5/9. + π - Elev.

985.28

69 +65

+85

65

+25

+60

+64

+72

+77

Lt

F

Rt

Culv

9.2

25

89 91 54
50 26 15

49 55 83 78 69
16 25 37 50

74 78 81 54 49
50 37 29 15

55 78 71 64
16 24 36 50

53 58 72 71 56
50 26 29 21 17

49 53 67 67 61 56 47
15 19 23 25 36 50

46 51 70 69 56 50
50 28 29 20 16

55 68 66 48 43
14 19 22 29 50

71 71 69 57
50 28 19 16

50 53 67 68 67
17 21 34 50

69 66 55 50
50 24 19

54 64 64
24 30 50

54 53
50 21

51 51 50
28 50

Sta.	+	π	-	Elev.
		985.28		
65	+99.33			
66			5.2	
	+18		5.6	
	+42		6.8	
	+50		7.2	
67			9.2	
	+50		11.4	
68			13.8	
B.M.			4.71	980.57
				(980.58)

Lt

R

Rt

4.7
50

5.2

4.8
50

Spk. in P.P. S.W. Cor. Victoria & Co. R.R. 2nd

Sta + π - Elev