Bk. 56 Dr. 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Plan ..... Survey

Hamline Ave.

From Hamline Conn To Co. Rd "E"

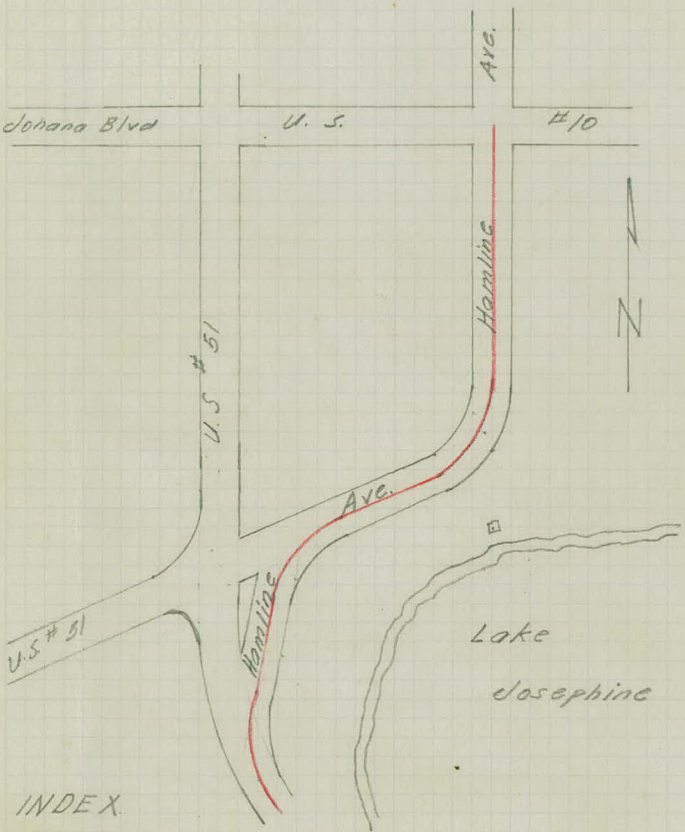
Road Acc't. No. 9

Date Filed 6-11-41 File

PLAN SURVEY

HAMLINE AVE.

Hamline Ave. Conn. to U.S. #10



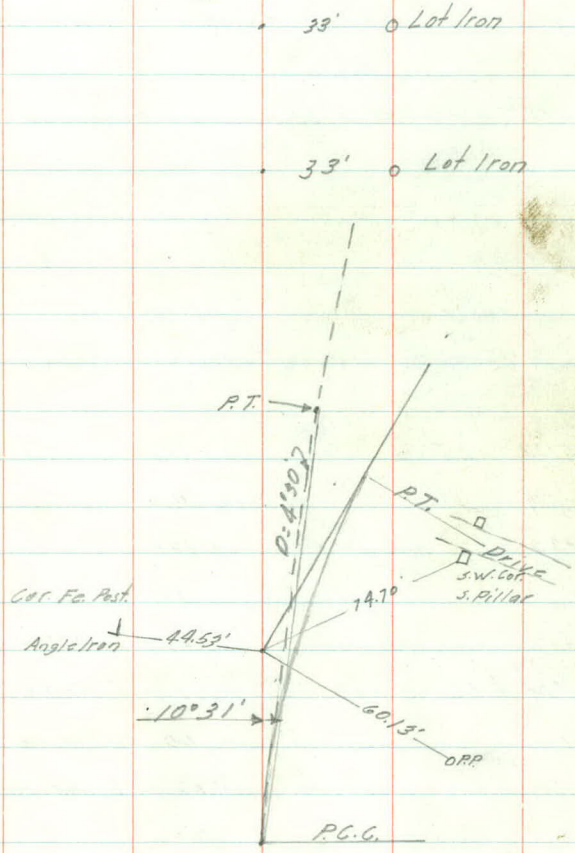
INDEX

4-2-41

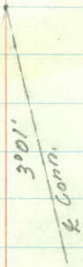
Alignment

Sta	Point	Δ Lt	Δ Rt
5	+28.15	P.O.T.	
4	+48.21	P.O.T.	
	+83.83	P.T.	14°11.5'
	+50		12°30
2			10°00' Δ 28°23'
	+50		7°30' D-10°—
	+45.07	P.I.	28°23' T-145.07'
1			5°00' L-283.83'
	+50		2°30' R-573.69'
0	+00	P.C.C. =	0°00'

→ P.O.C. 203+53.03 Line #2
Hamlin Ave & S.T.H #51 Conn.


33'
Lot Iron
33'
Lot Iron
P.T.
D=4°30'
P.T.
P.L.S.E.
S.W. Cor.
S. Pillar
Cor. Fe. Post
Angle Iron
44.52'
14.7°
10°31'
60.13'
O.P.P.
P.C.C.

Sta	Point	Δ Lt	Δ Rt
7 +75.53	P.A.T. = P.I. 12+32.31 Line #3 Hamline Ave. & S.T.H. #51 survey.		
+57.63	P.T.	21°50.5'	
+50		21°00'	
+25		18°15.0'	
7		15°30'	Δ = 43°41'
+75		12°45.1'	D = 22° —
6 +64.08	P.I.		T = 105.22'
+50		10°00'	L = 198.56'
+25		7°15'	R = 262.04'
6		4°30'	
+75		1°45.1'	
5 +58.07	P.C.	0°00'	



G.P.
0

15.11'

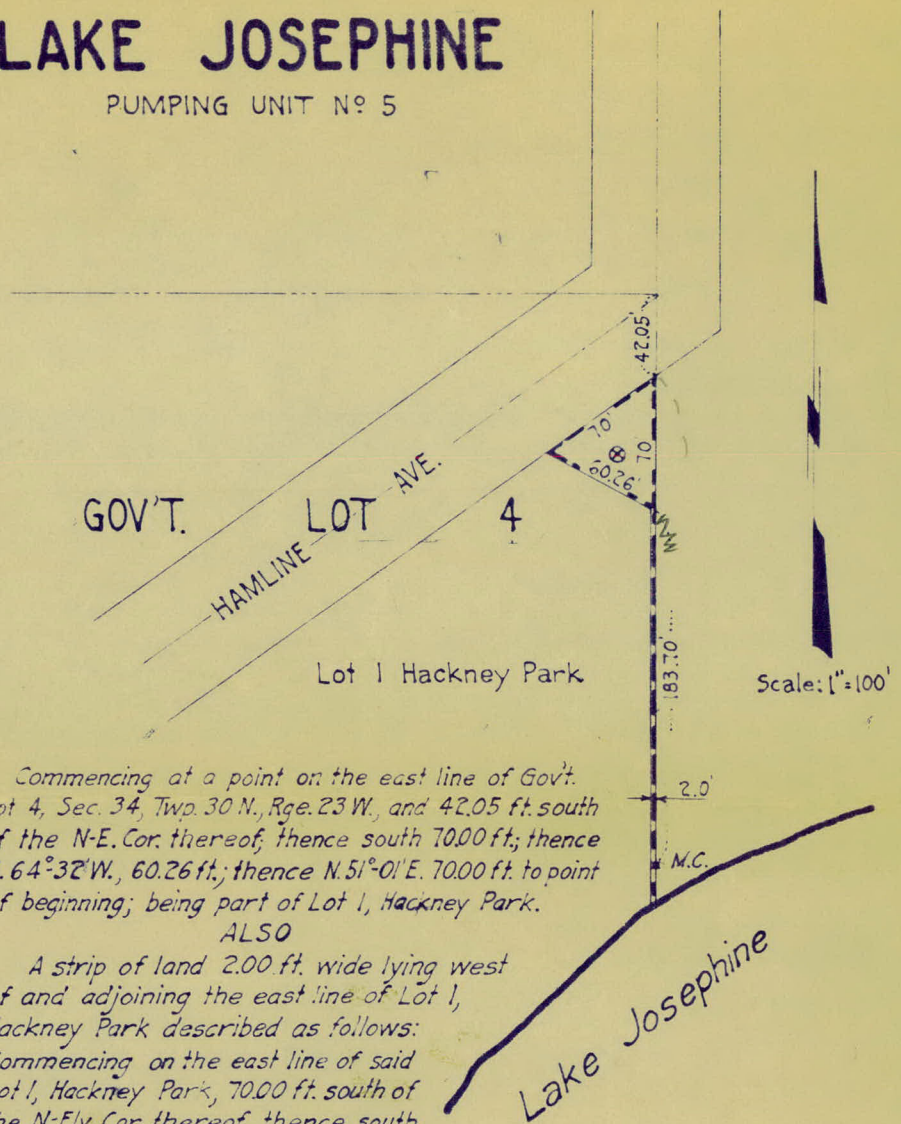
P.P.O 1416'

Sta	Point	Δ Lt	Δ Rt	
54 +90.5 =	& Co. Rd. "E."			
29 +56.25	P.O.T.			
+61.31	P.T.	25°30.5'		
+7.50		24°15.8'		
+25		21°30.8'		
16		18°45.8'		Δ-51°01'
+75		16°00.8'		D-22°—
15 +54.40	P.I.			T-124.98'
+50		13°15.8		L-231.89'
+25		10°30.8'		R-262.04'
15		7°45.8'		
+75		5°00.8		
+50		2°15.8'		
14 +29.42	P.C.	0°00"		

183.70
42.05
225.75

LAKE JOSEPHINE

PUMPING UNIT Nº 5



Commencing at a point on the east line of Gov't. Lot 4, Sec. 34, Twp. 30 N., Rge. 23 W., and 42.05 ft. south of the N-E. Cor. thereof; thence south 70.00 ft.; thence N. 64°-32' W., 60.26 ft.; thence N. 51°-01' E. 70.00 ft. to point of beginning; being part of Lot 1, Hackney Park.

ALSO

A strip of land 2.00 ft. wide lying west of and adjoining the east line of Lot 1, Hackney Park described as follows: Commencing on the east line of said Lot 1, Hackney Park, 70.00 ft. south of the N-Ely. Cor. thereof; thence south to the shore of Lake Josephine, all being in Sec. 34, Twp. 30 N., Rge. 23 W.

$\frac{2}{4055} \quad \frac{x}{225.75}$

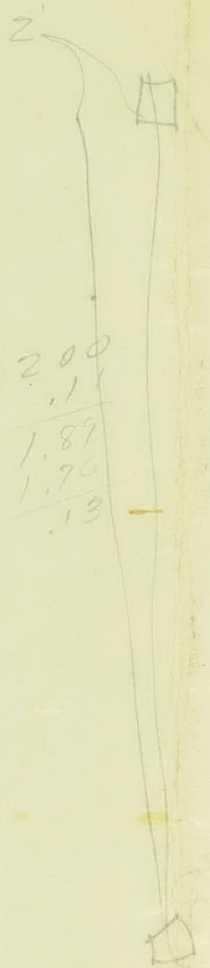
$4055x = 451.50$

$4055 \overline{)451.50}$

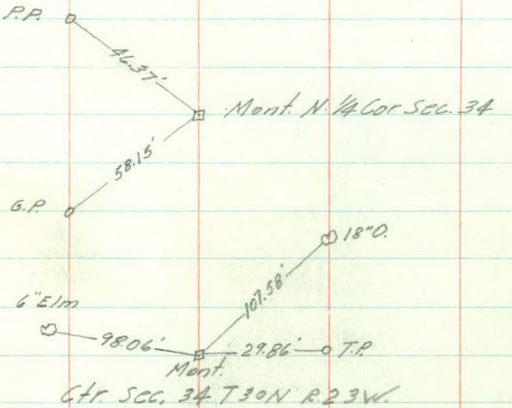
.111

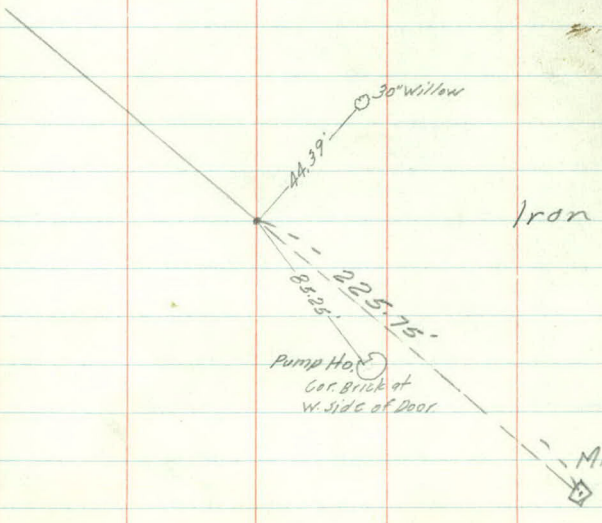
4055
4600
4055
5450
4055

2.00
.1
1.87
1.70
.13



3-21-41
K.A
L.C.
M.B.
C.H.





Topography

G.R. - 24' - 20'

+97 - G.R. - 27' - 16'

+52 - Beg. G.R. - 66'
+35 - No Dumping Sign - 14'
+22 - End G.R. - 67'
+17 - G.P. - 16'

5 G.R. - 65' - 13'

+45 - End 24" Conc. - 39'

4 G.R. - 51' - 12'

+75 - G.P. - 15' End 24" C.M. - 27'

+50 - G.R. - 38'

+08 - Beg. Gable G.R. - 12'
+02 - Beg. Gable G.R. - 26' G.R. - 12'
3 P.P. - 19' +05 - Fe Gar. - 100' 53'
+90 - Range Tie to Fe.

+95 - G.R. - 17'

+51 - Fe. Cor. - 62'
+42 - Range Tie to Fe.

1 Fe. - 56'

+86 - T.P. - 44'

0+00 Fe. - 59'

0 - 50

9' 15' +00 - End 26" C.M. = 2 End / 28
+93 - 2 End. - 15'

+50 - Range Tie

13' +92 - Cor. Stone Wall - 34'
+28 - End Row Bushes - 37'
+16 - P.P. - 22'
+12 - Beg. Row Bushes - 37'
+04 - End - 15" X 20' C.M. - 24'

12'

+94 - End Row Shrubs - 37'
+47 - End 15" C.M. - 21'
+55 - Range Tie to Fe.
+51 - Turn Sign - 18'
C.B.S. Row Shrubs
+97 - 12" P.P.A. - 37' - 4" P.P. - 29'
+45 - Fe. Cor. - 43'
+18 - 10' P.P. - 36'

13'

+88 - Ctr. 2' x 2' Pillar. - 32'
+84 - Fe. Cor. - 37' +90 - Range Tie
+94 - 10' P.P. - 35'
+73 - Ctr. 2' x 2' Stone Pillar - 31'

14' +71 - P.P. + T.P. - 24'
+42 - End G.R. - 19'
+59 - End 4" Tile Drains - 27' - 27.5'

+10 - End 24" C.M. - 31.5'

17' G.R. - 22'

19' +14 - Ctr. 2' x 2' Stone Pillar - 33.4'
+44 - Beg. G.R. - 24'
+29 - T.P. + P.P. - 24'
+08 - Range Tie to Wood Fe.
Retain Wall -

18' Ctr. 2' x 2' Stone Pillar - 32.6'
+99 - End 15" C.M. - 30.6'

17'

+14 - Stp. - 31'
+06 - P.P. - 30'

16'

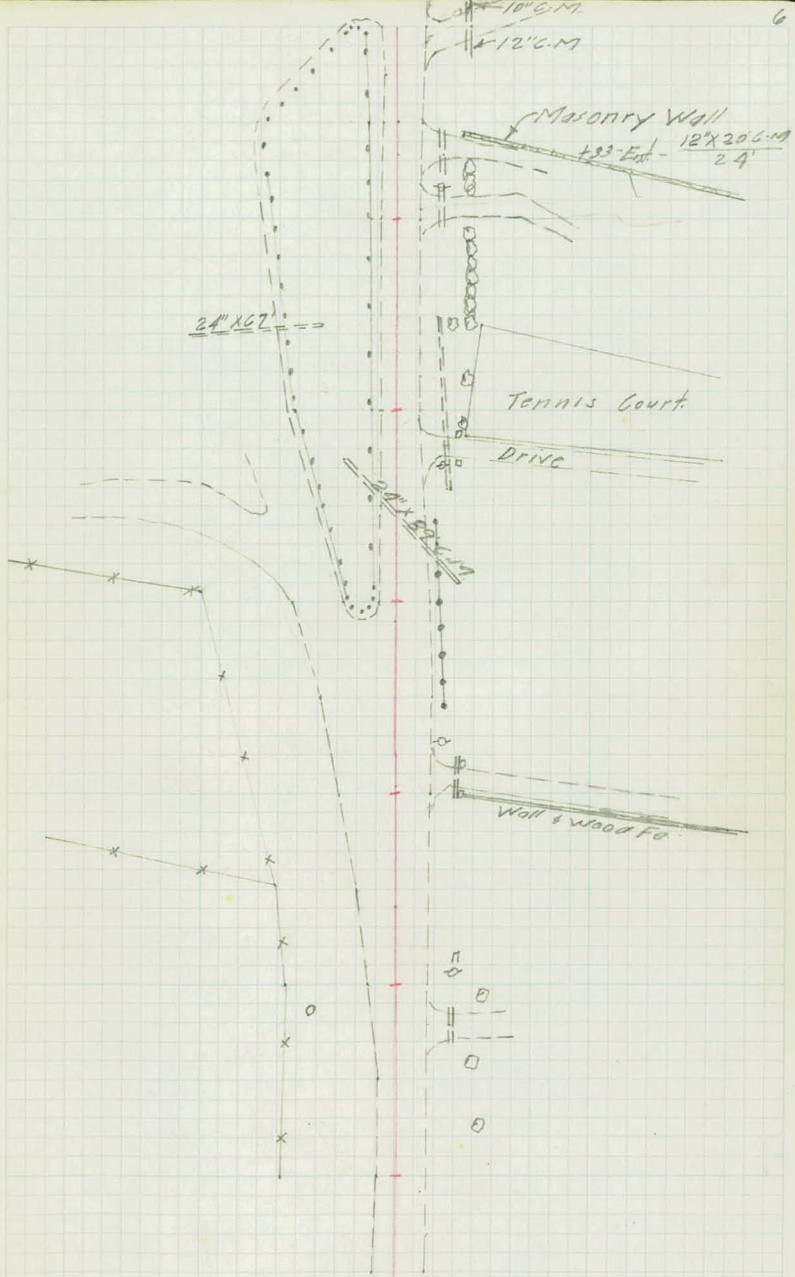
+94 - 16" Elm - 45'
+78 - End - 15" X 20' C.M. - 28'
+20 - 18" Elm - 40'

17'

+28 - 12" Elm - 43'

16'

15'


10" C.M.
12" C.M.
Masonry Wall
+93 Ext.
12"X20" C.M
24'
24" X 67'
Tennis Court.
Drive
24" X 67' C.M.
Wall & Wood Fe.

+96-Pipe Line Xs &
+70-Longetic to Pipe Line
+67-2 X Drain 24"X 43' C.M.

+45-PP-26'
+42-Drin Pipe Line-58'

12 Fc-31'

+57-P.P.-25'

+04-Rd. sign.-20'
10

9 Fc-23'
+97-P.P.-24'

8 Fc-31'

+50-Fc-29'
+42-PP-19'

7 Fc.-33'

+73-End Gik-24'

+54-PP-34'

+20-Beg. Gabk C.L-50'

+08-49'

6

+81-15" Pap-29'
+67-12" Tw. Will.-34'
22 21'

+54-8" Willow-28'
+44-T.P.-23'
+43-24" Willow-35'
+32-8" Tw. Pap-29'
+19-12" Willow-34'
+06-15" Pap-30'
9' 11' Fc-24'

+80-6" Elm-30'

+55-Group 6-6" Willows-30'

+36-T.P.-24'
+22-18" Pap-30'
9' 11' Fc-26'

+53-15" Ash-37'
+41-12" O-42'
+08-15" O-38' Terrace-20'
+02-12" O-41'
10 Fc-33'

+91-T.P.-25'
+73-12" O-33'

+50-Fc-33'

+23-20' O-40'

11' 11' Cor Gar.-49' Fc-37'

+83-N.W. Cor Garage-54'

+62-T.P. 26 Brace-32' Fc 42'

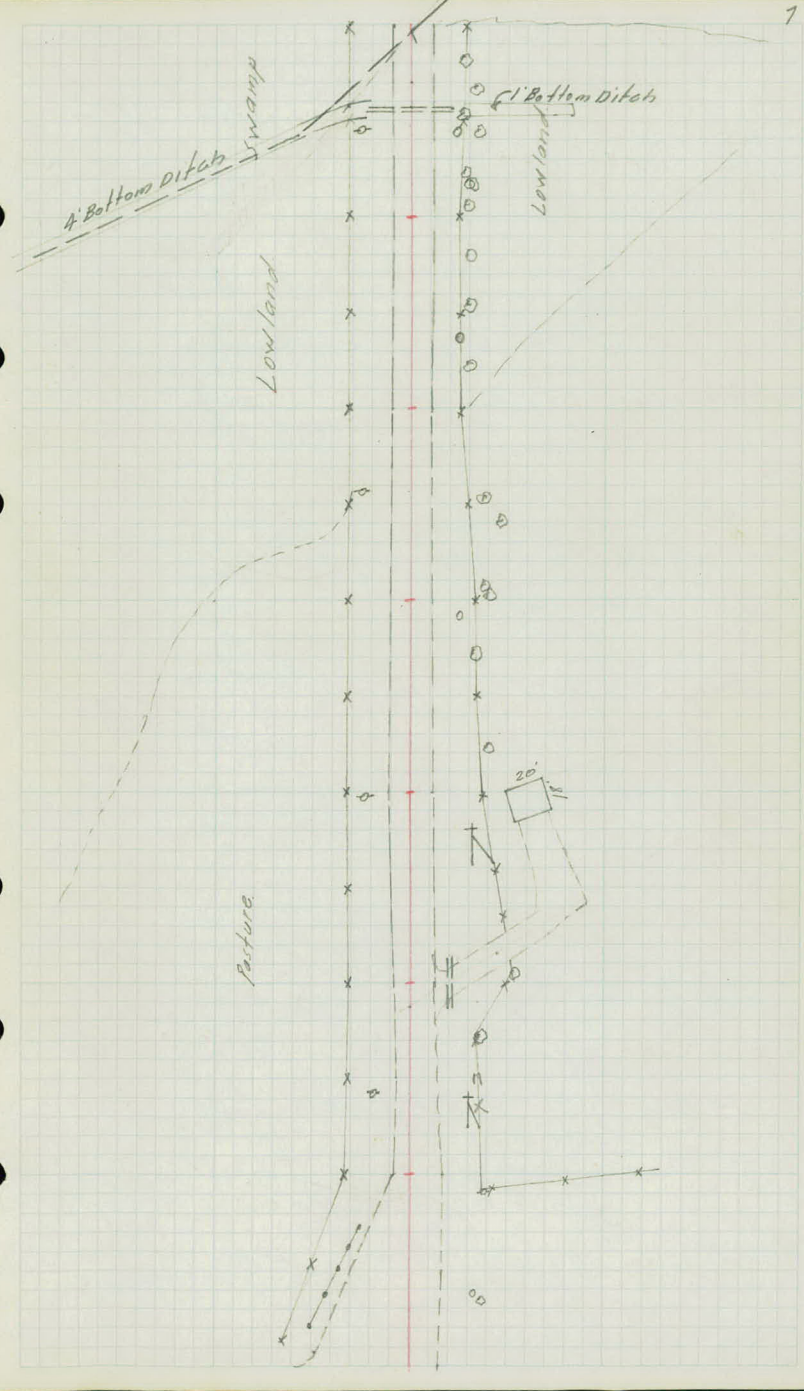
+15-R Ent.-44'
+03-15' O. Drin Fc-51'
9' 12'

12"X 24' C.M.-20'
+88-R Ent. at Block Top.
+74-12" D. Drin Fc.-34'
+61-Step-38'
7' 15 +50-Step-35'

+24-T.P.-30' Brace-36'

9' 17'
+92-Fc Cor.-37' PP.-41'
+07-Rangetic

17'
+38-T.P.-32'
+24-4" O.-38'


4' Bottom ditch
Swamp
6' Bottom Ditch
Lowland
Lowland
20'
Pasture

+92-Rd. Sign -16'
+70-G.P. 15'

+72-Fc. Cor. -22'
+69-P.P.-30'
+55-Sing Rd. 15"X20' Wood. 35'
+42-Fc Cor-21'

19 Fc-23' 10' 11'

18 Fc-24' 10' 11' Fc-22'
+97-T.P.-27'

+15-15"D-32'
17 Fc-31' 11' 10' Fc-23'

+60-Fc-35'

+6 3-12"D.-31'
+52-12"D-32'
+34-12"D.+Fc-36'
+25-T.P.-29'

16 14' 10'

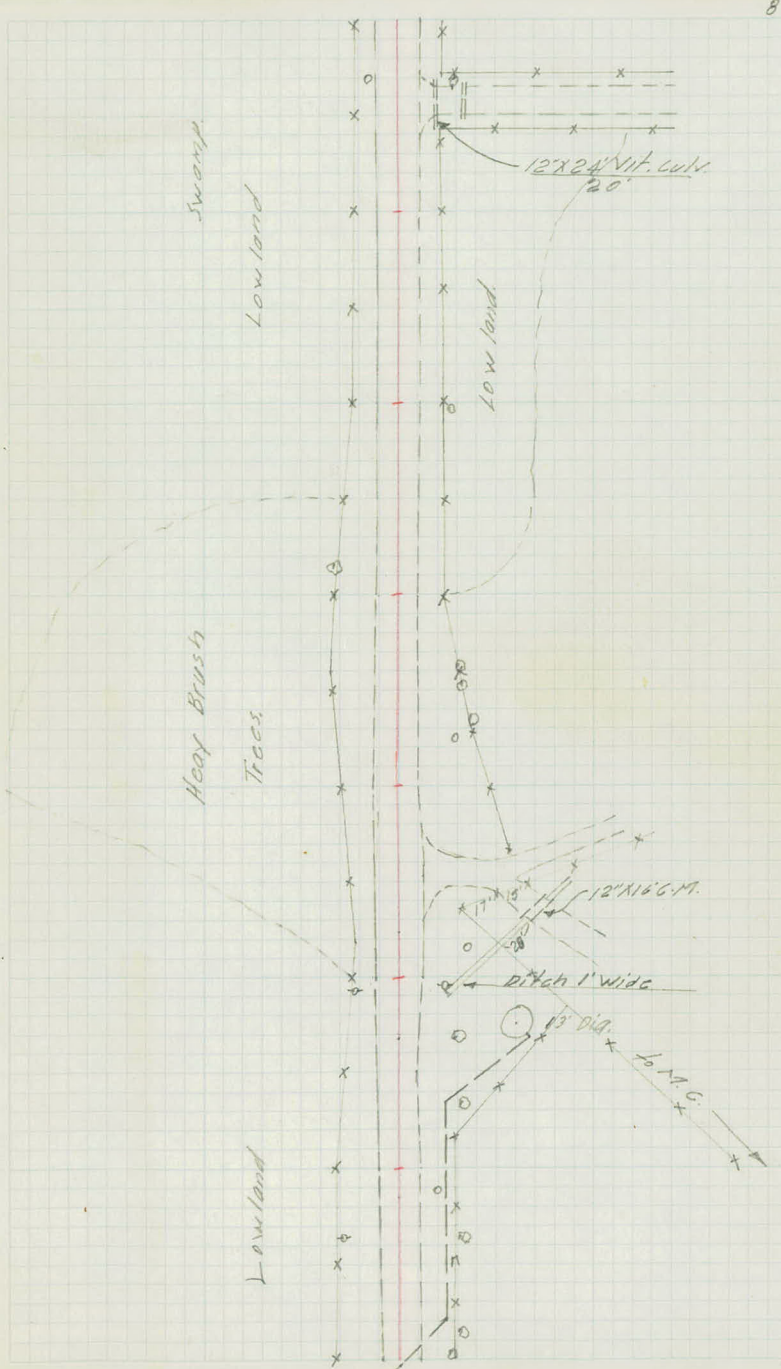
+66-Bee Fc.-57'
13' 12' +52-Ent.
+23-Range Tie to Fc. Cor.
+36-Fc. Cor-31'

+49-Δ in Fc-22'
15 +94-P.P.-22' +15-T.P.-35'
12' 12' Fc-60'
+97-P.P.-24'
+68-Range Tie to Ditch
+76-Cit. Pump. 40-60'
+70-20'Pm.-30'
+50-Fc.-31' 12' 9' +91-Ditch-24'

+34-Δ in Pipe Line-24'
+34-Groun. C.C. Will.-32'
14 Fc-32' +15-Δ in Fc-27'
10' 11'

+63-P.P.-28' +59-T.P.-20'
+85-Range Tie to Fc.
+62-8" Tree Willow-34'

+51-Stp.-28'
+21-Δ in Pipe Line-25'
+15-18" Will.-33'
+03-6" Ash-28'
13 Fc-32' 8' 11' Fc-28'


12"x24" Vit. Culv.
20'
Swamp
Low land
Low land
Heap Brush
Trees
12"x16" C.M.
ditch 1' wide
13' Dia.
to M.C.
Low land

26 Fc. – 34' 12' 9' Fc - 28'

+75-Beg. Brush of Fc.

+68-8" D+Fc-23'
+68-T.P-28
+52-15"D-25'

+12-15" Willow – 31'
25 Fc - 27' 12' 9' Fc - 22'

+66-10" Willow – 31'
+50-10" Trip Wil. - 33'

+21-T.P-28'

24 Fc. - 24' 12' 9' Fc-19'
+84-12" Willow - 36'
+78- Willow - 33'
+73-15" Willow - 32'

+23-24" Willow - 28'

23 Fc. - 23' 13' 10' Fc - 20'

+70-T.P-27'

22 Fc - 22' 12' 10' Fc - 20'

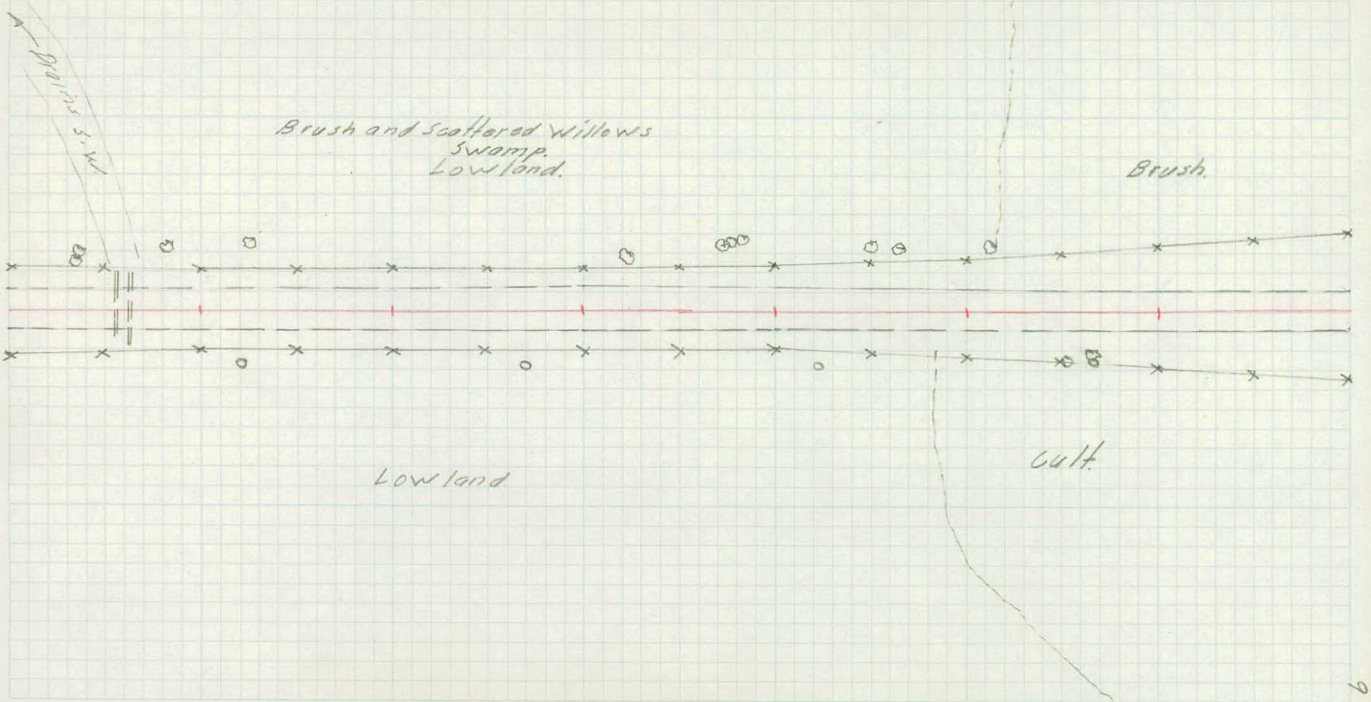
+27-4-10" Willows - 35' +20-T.P-28'

21 Fc. - 21' 12' 10' Fc - 20'

+83-6-10" Willows - 33'

+63-15" X 37' C.M. Co. W. 19' 18'
+54-12" X 34' Vit Cult. 20' 14'
+37-12" " - 30'
+35-15" Will. - 25

20 Fc. - 22' 11' 11'


Brush and scattered willows
Swamp.
Lowland.
Brush.
Lowland
Cult.

+24-T.P.-28'

33 Fc-33' 12' 8' Fc-36'

+27-10"O.-33'

32 Fc-33' 13' 8' Fc-36'

+72-T.P.-28'

+48-10"Willow-40'

31 Fc-33' 13' 8' Fc-36'

+21-T.P.-28'

30 Fc-33 12' 9'

+90-Fc.Cor.-36'

+61-20"O.-26'

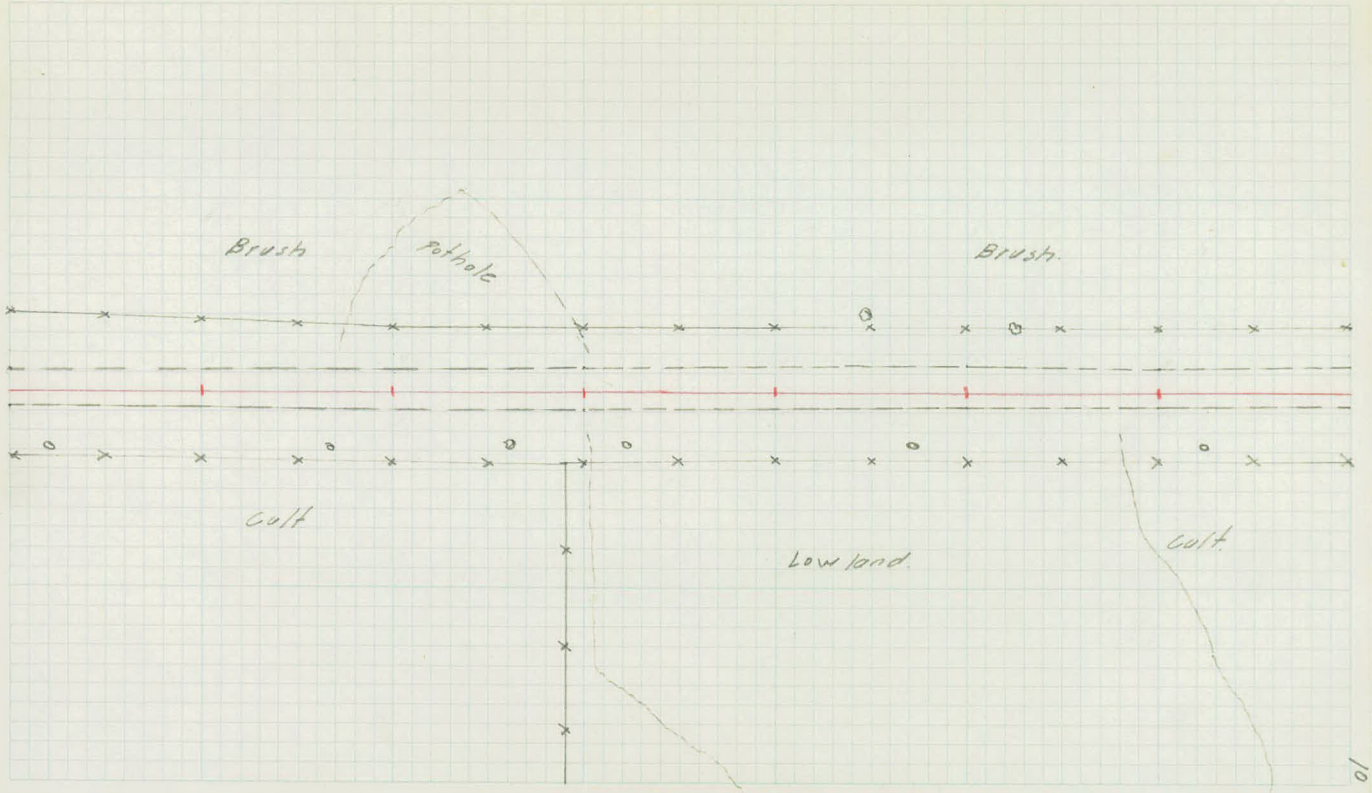
29 Fc-32' 12' 9' Fc-35'

+68-T.P.-28'

28 Fc-37' 11' 9' Fc-33'

+20-T.P.-28'

27 Fc-41 11' 8' Fc-33'


Brush
Pothole
Brush.
Gulf
Low land.
Gulf.

+78-T.P.-27'

40 Fc-34' 12' 8' Fc-32'

+25-T.P.-27'

39 Fc-33' 11' 8' Fc-32'

Swamp

+54-Fc. Cor.-33'
+[illegible]-Range TIC

38 Fc-33' 11' 9' Fc-33'

+76-T.P.-28'

37 Fc-34' 11' 8' Fe-33'

+47-Bes woods w/ Fc- +44-20"O-4.0'

+24-T.P.-28'

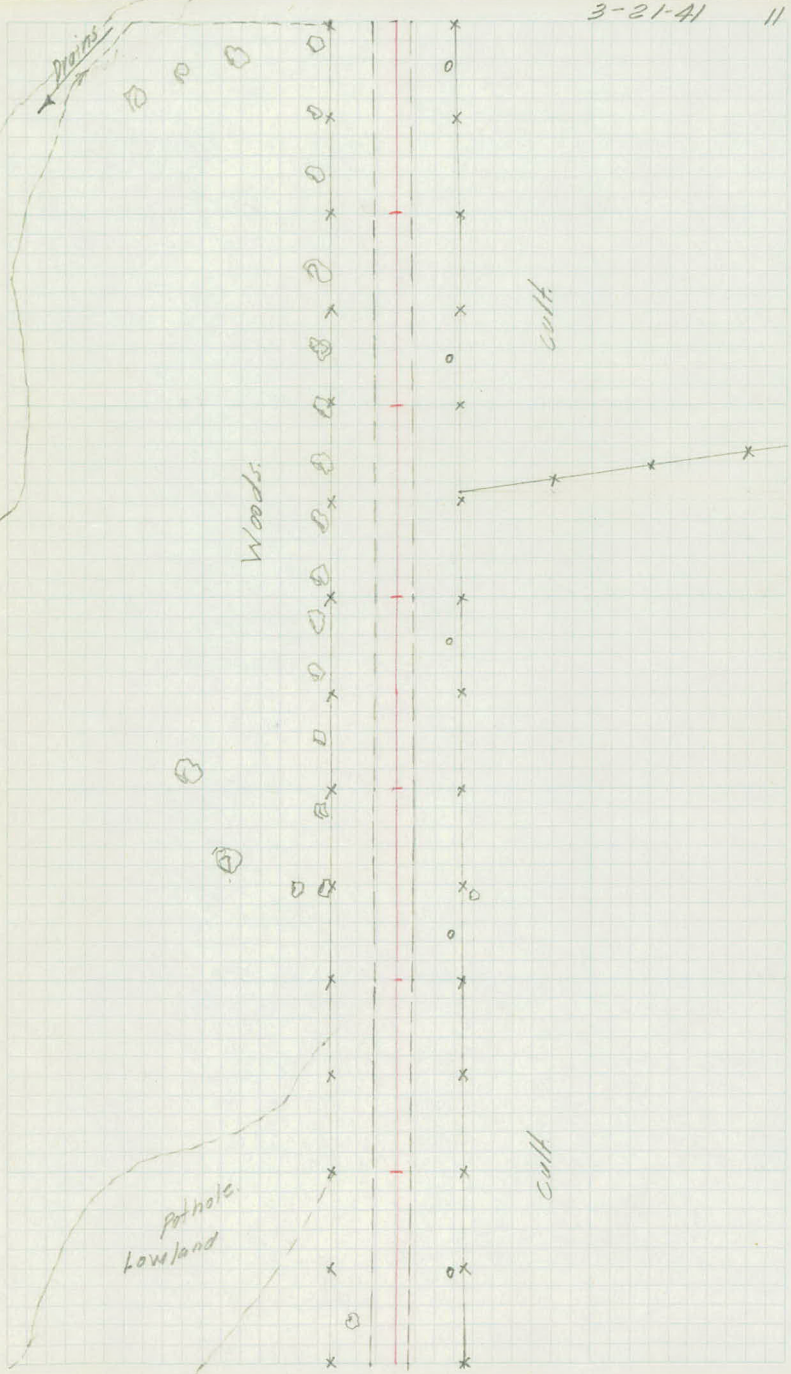
36 Fc-33' 11' 9' Fc 33'

35 Fc.-32 12' 7' Fc-34'

+47-T.P.-28'

+21-10"O.-21'

34 Fc.33' 13' 7' Fe-35'


Drains
Woods
Cult.
Cult.
Pothole
Lowland

47 Fc.-34' 12' 8' Fc-28'

+82-TP-27'

46 Fc-34' 12' 7' Fc-28'

+31-TP-28'

+18-Ditch-28'

45 Fc-34' 13' 7' Fc-28'

+89-Range Tie to Ditch

Swamp

44 Fc.-34' 13' 7' Fc-28'

+80-TP-28'

43 Fc-33' 12' 8' Fc-28'

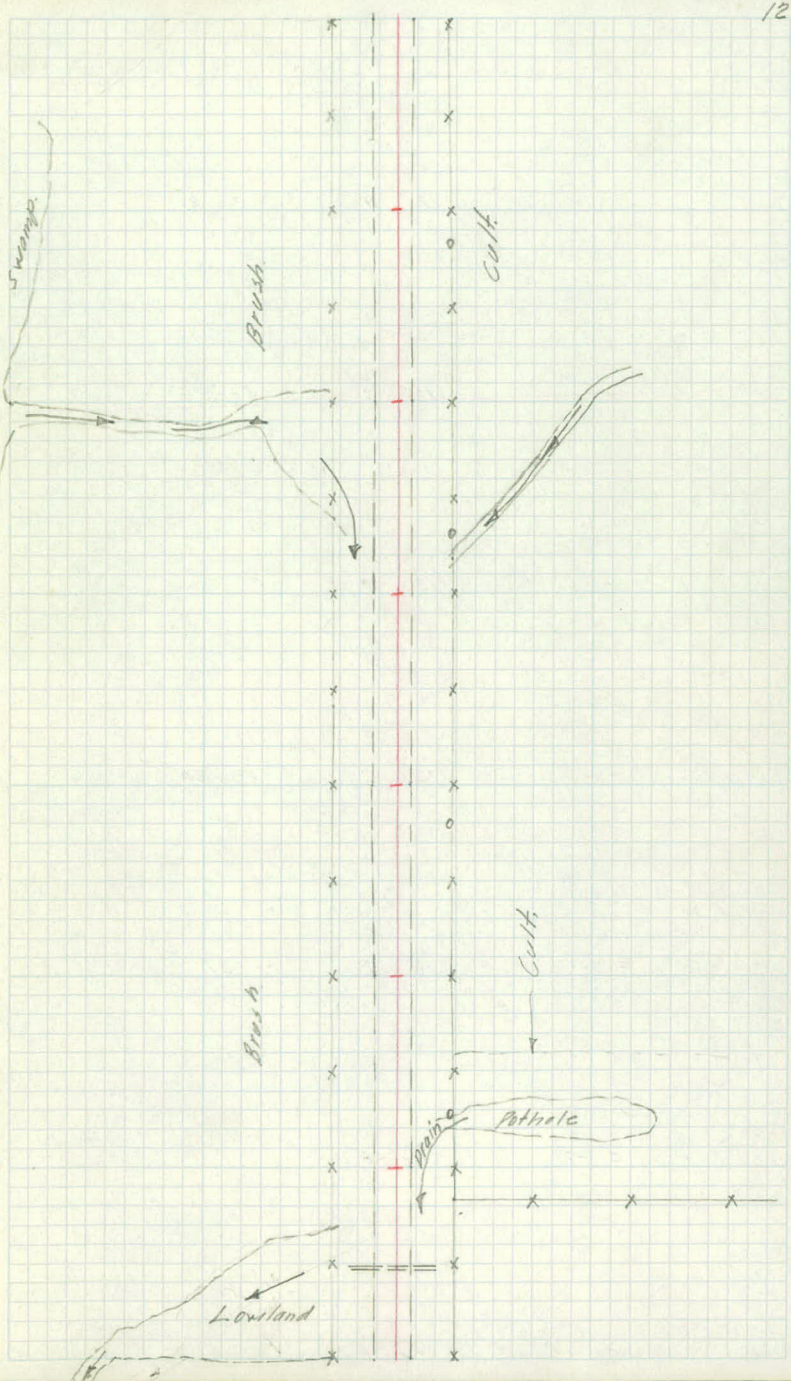
+28-TP-28'

42 Fc-32' 12' 8'

+82-Fc.Cor-30'

+49 X Drain 10"X43'6-M 25' 18'

41 Fc.-34' 12' 7' Fc-30


Swamp
Brush
Cult.
Brush
Cult.
Drain
Pothole
Lowland

+77- 65' 50'
+65- 36' 25'
+50- 21' 15' +46-Fc Cor -23'
+37-SIGO Stop -21'
+38-G.R-27' +35- 16' 11' +36-T.P.-28
+20- 13' 11'

54 Fc-60' 13' 11' Fc-23'

+60-Fc-40'
+58-End Woods at Fc

+26-Dip Fc-33'

53 Fc-34' 12' 8' Fc-24'
+86-T.P-28'

52 Fc-34' 13' 8' Fc-26'

+34-T.P-28'
+18-X Rd Sign-23'

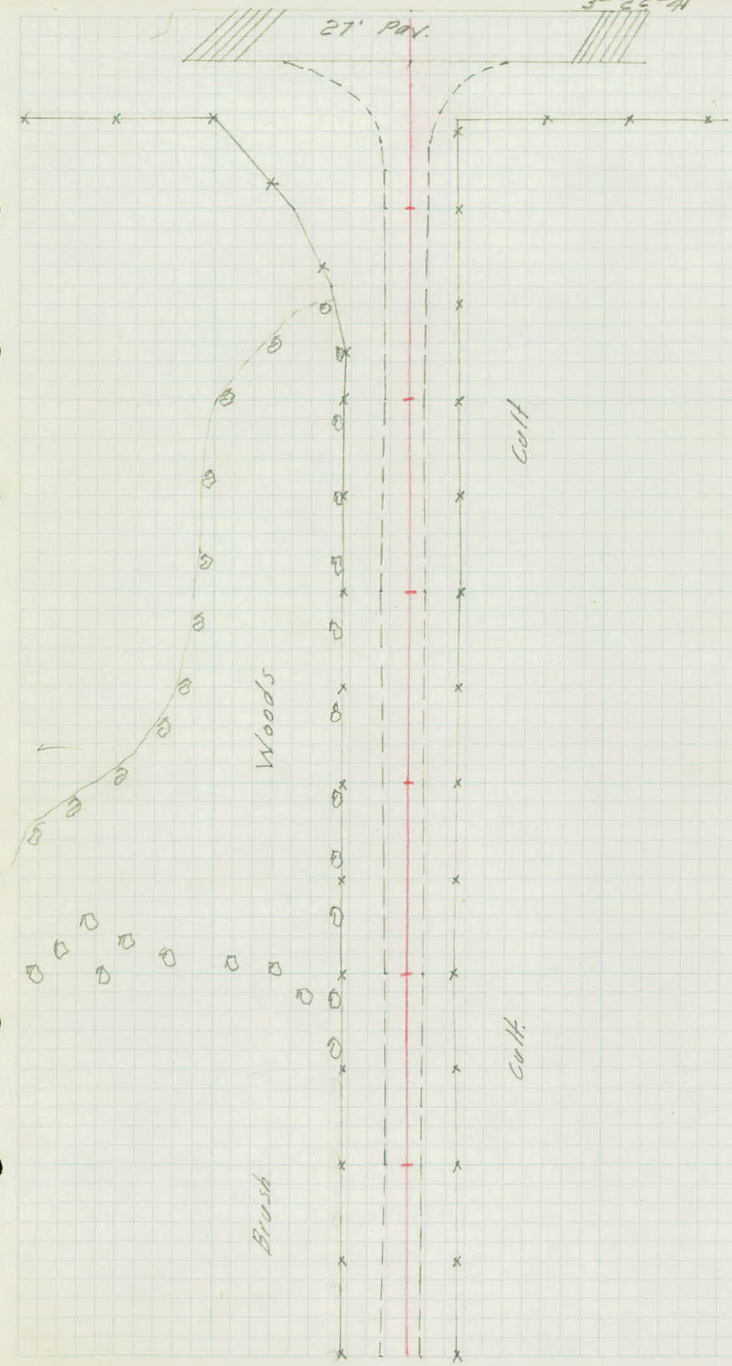
51 Fc.-34' 12' 8' Fc-26'

50 Fc.-33' 11' 8' Fc-24'
+90-End Brush + Beg. Woods.
+82-T.P-28'

49 Fc-34' 11' 8' Fc-25'

+20-T.P-27'

48 Fc-34' 12' 8' Fc-26'


27' Pav.
Cut
Woods
Cut
Brush

Bench Levels.

Sta.	+	H	−	Elev.	
B.M.	4.12	934.68			(930.56)
T.P.	0.15	926.51	8.32	926.36	
T.P.	1.15	915.57	12.09	914.42	
B.M.			4.13	911.44	
T.P.	0.35	910.45	5.47	910.10	
T.P.	0.94	899.22	12.17	898.28	
T.P.	3.89	895.64	7.47	891.75	
B.M.			4.62	891.02	
T.P.	2.10	888.09	9.65	885.99	
T.P.	6.54	890.73	3.90	884.19	
T.P.	4.16	890.23	4.66	886.07	
B.M.			2.07	888.16	~~(887.73)~~
T.P.	13.64	901.69	2.18	888.05	
T.P.	4.32	904.74	1.27	900.42	
B.M.			3.57	901.17	

Description

Top Mont Hamline & Co. Rd. E.

Spk. in 18" O. 60' Rt. sta. 41+10

Top Mont & sta. 28+56.25

Hamline Ave Levels are 0.43' Higher than Lake Imp. Data.

Spk. in 24" O. N. of M.C. near Lake Josephine Pump Ho (Lake Imp. B.M.)

Spike in PP #130 24' Rt sta. 2+29

Xsections

Sta.	+	π	−	Elev.	
B.M.	9.58	910.75			(901.17)
0 +00					
+50					
1					
+50					
+95					
B.M.	2.91	904.08	9.58	901.17	
2 +26					
+68					
3					
+10					
+15					
+50					

4 ℄ ℄

Spk in RR #130 24' Rt sta 21+29

41 50 54 64 64 68 +13 +10
16 22 25 27 32 39 50

℄ = ℄ of Conn. ℄ → 48 48 57 61 74 73 1.5 1.4
1 17 22 25 28 37 50

℄
60 61 71 75 82 81 49 42
4 16 22 24 28 34 50

℄
75 78 87 92 96 96 91 89
11 17 22 23 28 30 50

℄
91 97 104 107 126 126 12.2 13.4
18 18 27 30 32 34 50

℄
35 42 42 47 49 81 92 92
24 8 18 26 35 42 50

℄
49 54 50 50 55 58 111 115
35 12 7 17 25 38 50

℄
58 65 66 56 52 53 58 63 116 119 115 99
44 29 23 7 9 16 22 33 37 44 50

(F.L. curv)
52 52 58 63 128 117 96 93
7 16 21 32 36 44 50

℄
62 68 69 74 58 55 52 52 57 61 96 95 92
46 34 26 22 12 7 8 16 22 30 36 50

℄
70 76 78 80 98 62 53 50 47 46 50 52 81 81
55 43 39 31 23 17 12 7 6 15 20 48 50

Sta	+	H	−	Elev.
		904.08		
3	+ 75			
4				
	+45	F.L. 24" Conc.		
	+48			
	+49			
BM.		3.89	905.06	2.91	901.17
5				
	+40			
	+48			
	+75			
6				
	+25			

Lt. ℄ Rt.

(F.L. Calc.)

℄

7.5/61 7.9/51 8.9/37 11.8/29 11.8/27 6.0/19 4.9/13 4.4/7 4.0 4.3/14 4.3/18 3.2/30 2.2/50

℄

7.7/67 8.0/56 8.3/50 10.1/39 13.2/35 13.0/31 8.0/24 4.7/14 4.1/8 3.8 4.1/13 2.6/30 2.3/37 2.0/50

141/39

Duplicate +49 4.2 4.5/12 4.5/16 2.9/31 0.2/44 +0.3/50

(Ext Calc)

℄

7.8/73 8.0/63 8.5/56 12.5/41 13.9/39 14.0/34 11.7/29 6.0/18 4.8/13 4.4/8 4.2 4.5/12 4.5/16 5.9/20 6.4/21 5.1/26 2.9/31 0.2/44 +0.3/50

℄

8.8/81 9.1/69 9.5/64 14.5/49 14.8/31 6.8/16 6.1/9 5.7 5.9/11 6.0/15 6.7/19 7.0/26 4.8/34 2.8/50

℄

8.9/85 9.4/67 14.0/53 14.4/32 6.5/16 5.9/8 5.6 5.9/12 6.7/18 6.8/27 4.6/32 2.6/50

℄

8.9/86 9.1/62 13.2/49 13.1/34 11.8/27 6.4/17 5.9/6 5.6 5.8/13 5.8/22 6.5/23 6.5/26 5.7/27 4.1/34 +1.9/46 +1.9/50

℄

8.0/62 7.9/44 11.4/32 11.2/26 6.5/16 5.7/6 5.4 5.5/15 5.6/23 6.0/26 5.6/30 3.8/35 +2.5/46 +2.5/50

℄

6.7/43 6.4/22 5.7/10 5.2 5.5/15 4.6/20 3.2/35 0.0/39 +1.4/50

℄

5.6/26 5.4/10 5.1 5.5/17 5.6/27 4.8/32 +0.3/39 +1.4/50

Sta	+	π	−	Elev.
		905.06		
6 +69				
T.P.	7.99	908.38	4.67	896.39
7				
+50				
+85				
8 +29				
+64				
9				
+50				
10				
+32				
T.P.	0.74	895.41	13.71	894.67
10				

Lt. ℄ Rt.

℄
4.8/10 4.8 5.2/17 5.4/22 5.8/23 5.8/25 4.8/27 3.3/32 +2.2/38 +2.4/50

8.0 8.5/17 8.8/21 9.3/25 1.0/37 0.7/50

11.0/50 9.0/39 7.5/28 7.0/23 9.6/19 9.4/16 8.6/13 8.2/6 8.1 8.4/15 8.8/18 9.6/21 9.6/24 8.0/27 2.4/33 2.1/50

8.9/50 7.5/31 7.3/25 10.0/20 9.9/17 9.2/15 8.8/8 8.5 8.6/12 8.6/16 9.9/19 9.9/22 3.1/33 L.O.

6.1/50 5.0/33 4.7/29 10.7/20 10.0/14 9.6/9 9.4 9.4/11 9.7/16 10.3/20 10.5/26 2.3/36 2.0/50

6.3/50 5.2/33 5.3/30 12.0/20 11.2/15 10.8/10 10.5 10.8/12 11.5/21 8.2/28 1.9/35 1.2/50

8.2/50 7.2/33 7.3/30 13.6/23 12.9/18 12.2/10 11.9 12.2/11 12.4/17 12.9/19 12.9/21 10.9/27 4.3/34 1.7/50

13.5/50 11.9/33 11.8/28 16.0/22 16.0/20 14.8/17 14.3/11 13.9 14.0/10 14.4/17 14.2/19 14.9/22 12.1/27 5.4/34 3.2/50

8.5/34 5.9/50

next setup

13.0/34 9.5/50

8.2/50 5.7/33 5.3/25 5.9/23 5.9/21 4.0/16 3.1/10 2.8 3.0/10 3.4/17 4.0/19 4.0/22 2.3/27

Sta.	+	π	−	Elev.
		895.41		
10	+32			
	+50			
	+72			
T.P.		1.29	899.32	7.38	896.03
11				
	+50			
12				
	+50			
	+67 For Culv. Section only & Ditch			
13				
	+50			
14				

Lt E Rt

120/50 110/33 106/26 53/14 46/9 42/— 44/11 48/17 57/20 57/26 42/29

143/50 133/32 129/27 122/24 60/15 52/9 50/— 52/11 57/17 72/20 78/26 53/33 07/50

145/50 144/33 139/27 133/24 71/16 53/9 61/— 63/11 67/17 87/26 93/30 99/36 98/50

Resta: 11

84/50 88/31 76/25 22/15 15/8 13/— 16/11 20/14 65/22 68/24 74/25 74/37 67/50

86/50 86/32 83/24 42/15 35/8 32/— 34/10 36/14 82/22 82/37 80/50

66/50 85/30 87/20 56/14 48/8 43/— 48/11 48/12 87/21 85/25 80/50

106/50 104/44 96/44 94/20 56/12 56/9 50/— 52/11 62/18 83/21 74/34 74/50

(FL Cole) (FL Cole)

106/50 105/32 104/22 108/22 75/20 60/13 57/9 51/— 53/12 55/15 65/20 98/21 88/26 85/30 81/50

88/50 89/31 90/20 59/13 55/8 50/— 54/11 57/17 78/22 84/25 84/27 73/28 68/42 66/50

92/50 88/33 91/18 57/12 52/10 47/— 50/10 58/16 75/22 82/25 68/26 70/42 69/50

82/50 85/32 84/20 54/14 49/9 45/— 48/10 56/16 77/21 74/26 71/38 70/50

Sta	+	I	−	Elev.	
		889.32			
14 +50					
B.M.	1.19	889.35	1.19	888.13	88816
+80					
15					
+25					
+50					
T.P.	5.78	891.84	3.28	886.07	
+75					
16					
+25					
+61.3					
+78					
17					

Lt. R. Rt.

83/50 82/32 81/20 51/14 47/12 — 40/8 42/13 46/19 73/30 73/50 67/50

Lake Imp. B.M. at Lake Josephine Lake Imp. Elev. = 887.73

87/50 90/33 86/21 56/17 46/12 — 37/10 38/15 42/21 67/22 67/24 60/50 62/50

84/50 71/30 68/20 52/16 45/11 — 35/11 35/18 40/25 57/33 61/36 68/41 70/50 70/50

68/50 59/35 53/21 42/11 — 34/11 32/20 34/25 55/32 62/36 52/38 L.O.

60/50 49/29 47/24 55/22 55/20 45/16 41/12 — 33/11 30/22 31/36 41/50 43/50

74/50 68/41 61/30 76/26 67/20 61/11 — 55/10 55/22 60/28 78/34 82/39 81/43 64/50 63/50

61/50 50/34 66/31 66/23 56/13 — 52/9 55/9 60/18 76/24 79/27 78/32 28/40 28/50

46/50 42/35 65/26 56/14 — 50/8 53/15 57/22 73/27 73/37 17/50 25/50

44/50 29/32 63/27 66/22 59/19 53/12 — 49/9 52/14 56/19 79/23 79/27 73/31 55/50 68/50

50/50 — 35/30 69/26 71/23 61/18 55/11 — 51/9 55/14 59/20 80/24 81/32 76/50 80/50

75/50 59/27 78/25 78/23 66/21 58/11 — 54/10 58/15 63/21 86/36 87/50 89/50

Sta.	+	π	−	Elev.
		891.84		
17	+50			
18				
T.P	3.77	888.75	6.86	884.98
	+50			
19				
	+43			
	+45	F.L. S. End Wood Culv.	7.52	
	+55	Profile of Side Rd		
	+65	F.L. N. End Wood. Culv.	7.83	
	+68			
20				
	+50			

L. Q. Ref.

108/50 101/29 96/22 72/17 65/11 — 61/10 65/14 68/21 100/25 101/50

118/50 115/25 112/23 81/17 72/9 69/— — 74/10 76/13 106/19 102/29 95/50

Q sta 18100

91/50 90/35 81/22 49/13 47/10 44/11 47/16 51/20 76/36 75/50 67/—

100/50 92/38 82/21 58/16 51/13 48/10 44/11 48/16 53/21 77/28 77/36 70/50

(FL. VIA)

98/50 93/36 81/20 58/16 48/10 44/11 47/13 54/19 75/21 78/36 77/36 78/50

45/11 47/21 56/50 58/100 57/—

(FL. VIA)

93/50 88/23 71/20 49/11 — 45/12 51/14 53/18 75/20 80/36 83/36 81/50

98/50 94/31 92/22 64/17 51/11 — 46/11 54/14 58/19 82/33 84/30

98/50 98/38 91/21 63/16 51/11 — 48/10 53/14 61/18 83/31 85/50

Sta.	+	HI	−	Elev.
		888.75		
20	+54	Flow Line Vit Culv.		
	+63			
21				
	+50			
22				
	+50			
23				
T.P.	8.75	891.99	5.51	883.24
	+50			
24				
	+50			
25				
	+50			
B.M.			1.03	890.96

(891.02)

Lt. ℄ Rt.

9.38 (FL C.M) 9.82 (FL C.M)

82/50 82/25 91/24 91.2/20 64/17 54/14 52/11 50 53/9 56/13 95.7/18 97/31 98/43 8.5/50

82/50 86/25 83/20 62/16 55/12 52 52/10 57/13 81/19 84/24 85/40 87/50

82/50 82/24 88/22 84/19 62/14 59/11 56 60/10 61/13 68/15 83/18 81/31 82/50

83/50 84/30 90/24 88/21 67/15 62/11 59 63/10 71/16 81/19 82/28 84/50

85/50 84/40 91/23 85/21 70/16 65/13 61 63/9 72/16 83/19 81/50

85/50 89/24 64/17 60/13 56 57/10 65/15 82/19 80/34 84/50

118/50 117/43 118/23 89/16 82/13 78 80/10 90/15 113/19 117/38 115/50

121/50 119/24 80/16 73/12 70 75/9 83/14 113/19 113/35 114/50

125/50 117/33 112/23 76/16 70/12 66 71/9 78/14 102/20 106/35 105/50

122/30 118/30 113/24 71/15 65/12 60 64/8 70/13 104/21 103/36 100/50

103/50 99/32 91/24 59/16 55/12 51 53/9 60/16 77/20 74/28 68/31 70/36 70/50

Top Mont R.sta. 284+56.25

Xsections

Sta	+	↗	−	Elev.	
B.M.	8.97	899.99			(891.02)
26					
+30					
+56					
27					
+33					
+73					
28					
+36					
B.M.	5.75	896.77	8.97	891.02	
+76					
29					
+50					

Lt ℄ Rt

Top Mont. ℄ sta. 28+56.25

115/50 118/30 145/26 147/20 129/16 126/12 122 125/9 128/14 144/17 146/22 145/24 131/27 126/33 123/50

60/50 64/34 102/31 138/25 139/20 124/16 120/11 117 118/8 122/15 138/18 137/25 107/31 96/35 107/50

28/50 32/35 59/34 128/26 135/23 135/20 119/16 115/12 111 112/8 117/15 134/19 132/23 124/27 77/32 71/36 88/50

42/50 48/37 124/29 130/24 127/20 111/17 106/11 102 104/8 108/14 122/18 107/25 65/31 33/33 30/38 46/50

42/50 48/38 117/31 126/25 124/21 107/14 102/11 98 100/8 104/14 117/19 116/22 110/26 55/33 40/37 43/50

82/50 86/40 93/32 116/30 121/25 127/23 126/21 104/17 97/11 94 98/9 103/16 113/19 109/27 77/33 62/37 59/50

101/50 99/31 119/26 119/21 101/16 97/11 93 96/9 101/15 110/18 110/24 105/28 62/33 50/37 51/50

104/50 100/36 99/29 122/26 121/22 99/17 93/12 89 93/9 97/16 107/19 100/26 55/33 41/34 40/42 46/50

84/50 80/34 73/28 84/24 84/20 65/17 60/12 57 60/8 64/14 73/17 77/23 74/30 49/33 55/50

98/50 89/33 88/26 88/22 82/19 62/15 57/12 56 59/8 63/14 77/19 78/22 76/26 71/27 68/33 73/50

100/50 99/35 93/22 88/20 59/18 54/12 52 55/8 60/13 76/17 74/22 66/24 64/35 70/50

Sta.	+	π	−	Elev.
		896.77		
30				
+50				
T.P.	7.56	899.70	4.63	892.14
31				
+50				
+85				
32				
+50				
33				
+43				
+68				
34				

Lt. 4 Rt.

74/50 74/33 77/20 56/16 52/12 50/8 53/13 60/18 84/28 84/36 82/50 82/50

51/50 53/41 62/32 67/28 63/21 54/16 51/12 49/8 52/13 57/19 92/37 93/50 92/50

40/50 43/39 72/32 109/26 110/23 82/18 76/13 75/8 79/12 86/19 117/35 121/50 125/50

90/50 113/35 109/24 78/19 73/13 70/7 74/13 80/18 111/32 119/50 123/50

60/50 90/42 85/32 99/28 97/23 74/18 69/13 67/8 71/11 75/17 113/25 117/33 121/50 120/50

11/50 34/35 93/29 92/23 71/19 67/13 66/7 69/12 74/18 108/23 113/33 119/50 122/50

18/50 32/42 49/33 85/28 85/24 63/19 59/13 58/7 62/13 67/18 101/27 108/32 116/50 121/50

15/50 19/40 30/31 72/27 71/23 54/19 50/13 48/7 52/13 56/19 85/24 90/32 91/50 99/50

27/50 25/41 24/31 63/26 63/23 45/19 41/13 39/7 42/13 47/20 87/23 90/27 91/32 53/46 60/50 65/50

36/50 35/39 38/30 68/26 68/24 43/19 38/13 35/7 37/13 44/19 78/24 86/28 80/32 43/37 46/50 56/50

41/50 45/39 46/30 69/26 64/23 39/18 32/13 30/7 32/13 37/19 80/23 85/29 86/32 66/37 64/50 67/50

Sta.	+	H.I.	−	Elev.
		899.70		
34	+50			
35				
	+50			
T.P.		9.10	908.15	0.65	899.05
36				
	+50			
37				
	+50			
T.P.		8.97	915.48	1.64	906.51
38				
	+39			
39				
	+42			

Lt.																			
42/50	36/34	34/28	65/26	55/23	30/18	25/13	22	24/7	31/14	78/21	80/25	80/29	62/31	65/38	73/50				
68/50	60/37	57/28	61/27	60/23	20/17	16/12	14	17/7	23/13	62/19	73/24	72/28	55/30	56/36	45/50				
71/50	68/39	61/26	49/21	12/16	09/11		07	10/8	16/13	68/21	73/27	76/32	77/40	74/50					
139/50	142/41	145/33	138/24	104/21	86/16	82/11	79	84/8	88/13	134/20	141/32	138/50							
120/50	117/36	113/24	88/20	78/17	62/11		61	65/8	70/15	89/19	88/28	82/34	74/50						
90/50	79/31	73/22	53/18	47/11	43		46/8	51/14	65/19	66/24	62/27	39/31	39/34	36/50					
34/50	20/35	17/32	53/27	53/24	35/18	31/11	29	31/8	38/15	44/20	51/22	51/24	12/31	15/33	21/39	39/50			
92/50	80/37	77/31	110/26	108/22	96/19	92/11	90	93/9	97/14	103/22	109/23	109/25	104/26	101/28	84/31	114/50			
70/50	73/32	98/28	99/22	90/19	85/12		82	85/8	88/13	94/18	94/24	83/28	82/31	113/50					
19/50	23/34	43/32	79/26	82/21	76/17	73/11	70	72/8	76/13	83/19	83/21	66/25	24/31	32/42	37/50				
10.	20/34	42/32	74/26	75/22	68/19	65/11	63	67/8	71/13	80/18	81/24	52/29	60/41	61/50					

Sta.	+	H	−	Elev.	
		915.48			
39					
	+78				
40					
B.M.	3.66	915.10	4.03	911.45	(911.44)
	+38				
	+70				
41					
	+23				
	+49				
42					
	+27				
	+50				
43					

Lt ℄ Rt

19/50 21/33 36/32 67/27 66/23 61/16 58/11 57 61/9 64/14 73/18 70/25 27/32 27/37 42/50

L.O. 98/34 26/32 62/26 62/23 58/18 54/11 54 56/6 63/15 70/19 66/24 30/31 14/32 26/50

Spk. in 18'0. 60' Rt. sta. 41+10

+13/50 +15/34 06/33 59/24 60/21 53/18 49/12 47 49/8 53/14 59/18 59/21 +07/32 +05/50

49/50 42/39 58/31 66/28 66/23 54/19 50/12 48 51/8 55/13 68/17 68/22 38/30 27/40 16/50

101/50 98/31 93/24 56/18 50/13 49 54/7 59/12 85/18 84/28 83/32 57/50

117/50 117/38 114/27 58/18 51/12 51 56/8 61/13 92/17 92/24 87/33 67/50

(Runs S.W. Culv. Culv.

125/200 117/150 126/100 117/50 117/37 114/33 115/25 58/18 52/12 52 57/8 61/13 116/18 107/24 98/26 91/33 83/44 76/50

83/50 88/34 97/33 94/28 88/25 56/19 51/12 51 56/8 61/13 92/17 108/22 110/26 100/27 97/36 95/50

69/50 79/40 84/33 93/33 92/27 76/22 55/18 51/12 50 55/8 60/13 96/17 106/22 107/26 102/27 107/32 109/50 105/100

68/50 76/39 81/33 89/32 87/28 78/24 55/18 50/12 49 53/8 59/13 96/18 103/22 106/27 97/29 99/34 97/50

68/50 76/43 75/33 83/32 85/29 82/24 48/17 44/13 44 48/8 53/13 96/20 95/27 86/28 83/37 87/50

Sta	+	ℸ	−	Elev.
		915.10		
43	+50			
T.P.	9.06	920.43	3.73	911.37
44				
	+50			
45				
	+16			
T.P.	8.76	926.55	2.64	917.79
	+50			
46				
	+50			
47				
	+50			

Lt. ℄ Rt.

51	58	66	79	83	78	73	43	39	37	42	47	86	90	72	66	64
50	38	32	31	28	27	23	17	13		8	13	20	25	28	39	50

95	107	112	124	124	117	87	84	82	86	93	129	132	113	107	106
50	40	33	32	25	22	16	13		7	12	19	24	27	39	50

104	109	112	123	119	115	107	80	75	73	75	83	124	123	113	106	109
50	39	34	32	28	27	23	16	13		7	13	20	26	28	35	50

104	106	104	78	67	64				40	63	68	115	115	97	92	98
50	39	28	21	16	12					7	12	19	25	27	34	50

93	92	87	90	90	64	58	56	59	63	97	105	sta 95	86	in pitch		
50	35	30	29	25	19	12		7	12	19	27	=0.0	50	100	N.E.	

b. sta. 46

120	123	126	131	130	114	110	106	110	114	140	140	133	137	140		
50	39	31	29	24	16	13		7	12	17	21	23	34	50		

69	61	56	106	106	96	91	88		92		98	111	111	114	126	
50	39	32	26	22	18	12			8		14	17	25	34	50	

70	57	52	57	68	80	76	73	76	82	92	92	57	61	84		
50	40	31	26	23	18	12		7	15	19	21	27	32	50		

82	76	68	76	74	69	66	64	67	72	79	79	29	24	22		
50	40	28	26	21	17	12		8	14	18	21	26	34	50		

66	64	60	68	69	60	56	54	58	61	72	70	37	35	32		
50	39	27	25	22	18	12		8	14	18	21	27	34	50		

Sta.	+	℄	−	Elev
		926.55		
48				
+50				
49				
T.P.	8.07	933.46	1.16	925.39
+50				
50				
+50				
51				
T.P.	5.81	934.97	4.30	929.16
+50				
52				
+31				
+66				

LT K PT

54/50 52/40 48/27 58/25 59/21 53/17 48/12 44/11 47/8 51/14 61/17 62/22 40/26 39/13 43/34 40/50

47/50 49/39 50/25 54/24 54/22 44/18 38/12 35/11 39/8 44/14 55/17 55/21 48/23 43/32 47/33 46/44 43/50

21/50 29/39 24/27 42/24 42/21 31/17 27/11 26/11 29/8 34/14 47/19 48/21 44/22 41/32 46/33 49/44 44/50

102/30 97/37 92/30 91/24 98/23 98/21 89/17 86/11 83/11 87/8 92/13 110/17 112/20 110/22 106/31 111/33 115/50

83/50 86/37 88/28 87/22 77/17 73/11 72/11 76/8 81/13 94/16 94/20 90/22 90/32 92/33 95/50

36/50 44/32 74/25 74/22 67/18 62/11 61/11 65/8 69/14 81/17 91/19 56/24 49/31 60/40 60/50

05/50 16/31 63/25 63/23 57/19 53/12 52/11 55/8 60/14 68/16 67/19 24/25 24/34 28/35 30/50

34/50 31/32 69/25 70/21 63/18 60/12 59/11 62/8 67/13 75/16 74/19 27/26 35/34 47/50

L.O. 69/32 67/24 67/21 62/18 55/12 55/11 58/8 63/15 69/18 66/21 39/25 52/34 76/50

L.O. 72/32 68/24 63/19 59/17 57/12 55/11 58/8 64/13 77/18 77/22 70/24 78/36 96/50

35/50 51/39 68/28 72/25 71/21 60/16 57/12 54/11 57/8 62/12 76/17 86/23 100/33 112/50

Sta.	+	π	−	Elev.	
		934.97			
53					
+25					
+62					
54					
+58					
+62					
+72					
+77					
+90.5					
B.M.			4.43	930.54	(930.56)

930.56
4.43
934.99
5.81
929.18

934.24
29.18
4.3

Lt E Rt

53/50 79/42 88/34 69/26 72/24 72/20 61/17 58/12 54 58/8 63/13 119/25 120/38 122/50

27/50 59/38 70/33 69/22 58/17 57/12 54 58/8 65/14 126/25 133/42 126/50

108/50 200/40 57/20 64/24 64/20 56/17 54/12 52 56/9 62/15 91/23 121/28 134/43 L.O.

02/50 22/41 36/27 56/24 59/20 54/18 51/12 47 53/10 57/16 64/17 70/24 97/30 107/50

26/50 26/47 50/39 51/36 43/35 40/28 39/17 40 47/16 51/35 48/30

56/50 56/44 44/38 40/32 38/13 40 53/26 68/31 78/30

39/50 39/21 43 47/19 53/36 53/50

367/50 397/25 446 490/25 540/50

493

Top Man't Hamline Ave & Co Rd "E"

Sta.	+	π	−	Elev.