

BK. 74 Dr. 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Drainage Survey

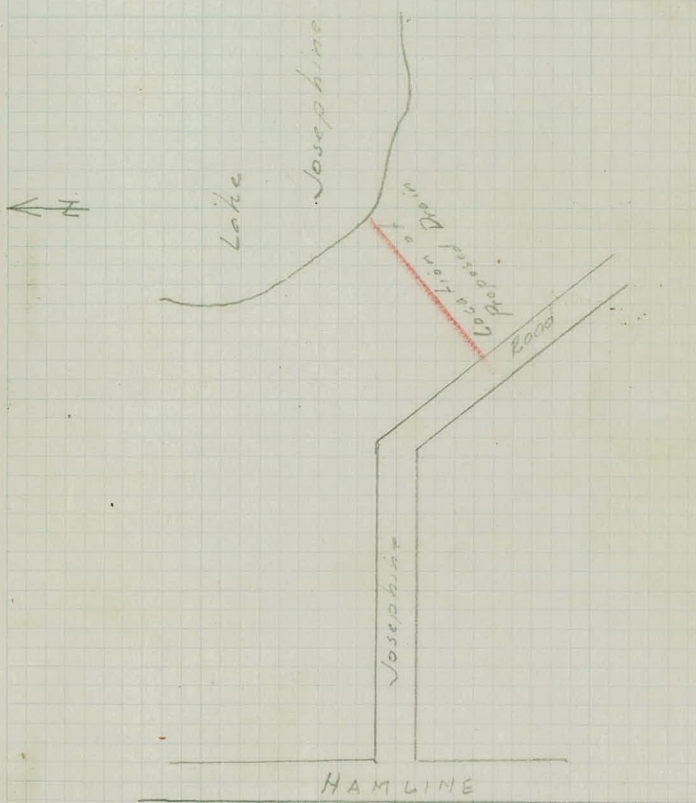
Josephine Road
(Near Hamline Ave)
From To

Profile 0+00 to Sta. 4+00

Road Acc't. No.

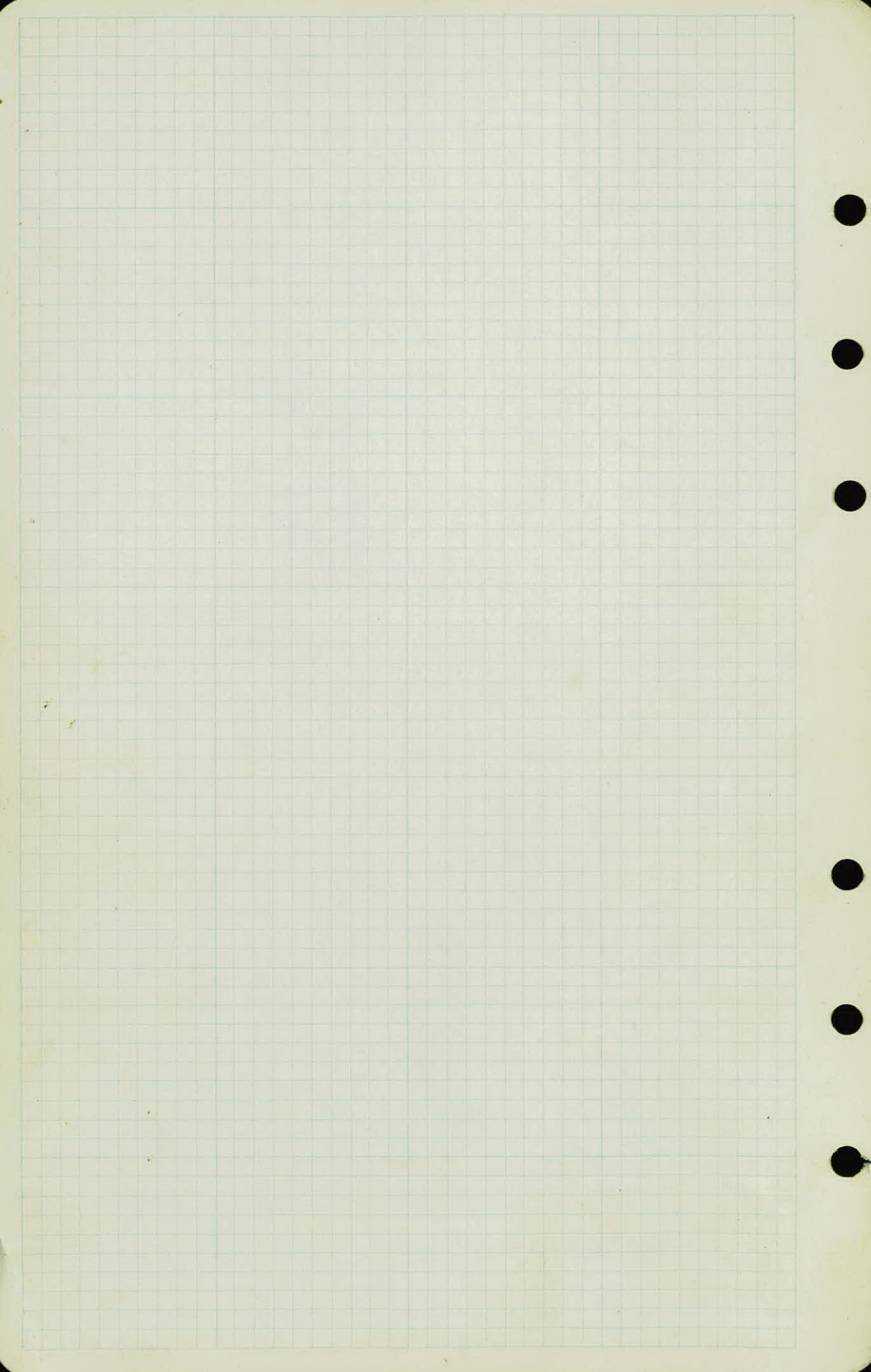
Date Filed 6-11-41

File



5/16/41.

Drawn UP
6/6/41
Hans



Alignment

Drainage Situation

at Hamline + Josephine Rd.

Sta.	Pt.	Angle	Lt	Rt
------	-----	-------	----	----

1547255	± Josephine Pt.	82°57'0".		
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0100	± Glamline			
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□

Mon.
Ch. Sec. 3

Sta.	Pt.	Angle
		Lt. Rt.

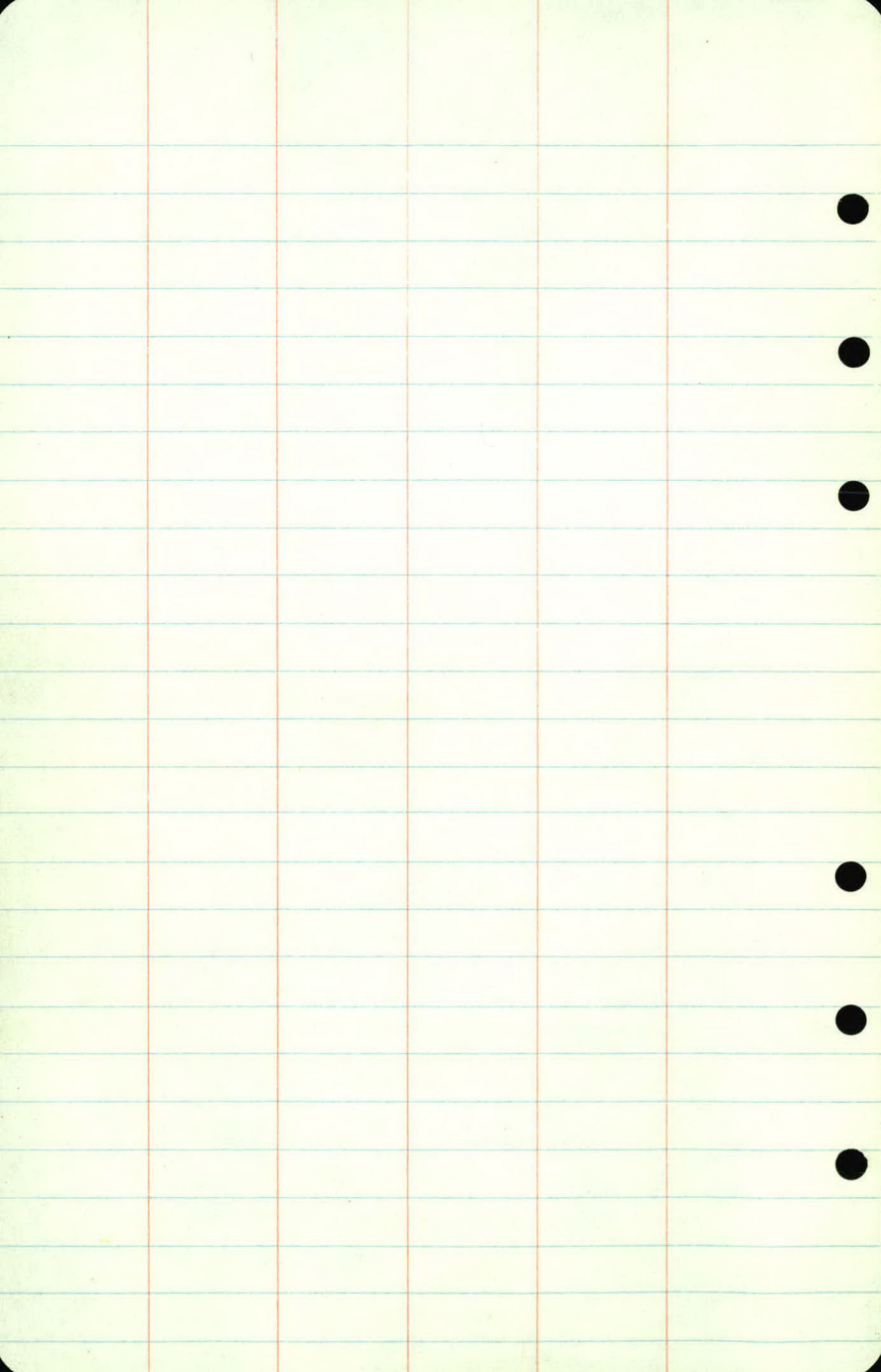
5+26.00	= 0+00 Sta. of Prop. Drain	
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4+54.25	P.I.	43°23' Rt.
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Note Fence out 16.5' Lt.

0+00 = 15+72.55 Hamline

$\frac{1}{2}$ Proposed Drain
208.5' to Lake Shore
68° 01'



TOPOGRAPHY

JOSEPHINE RD.

Hamline East

6

10

10

5

12 +26

13

11

15

4

8

17

8 +69

14

3

8

13

2

7

15

1

8

14

0

Fc 16.5

+67 Ent
+55 Fc. Cor. 18.5
+49 Ent Fc 2.5

+202 Ent 26

Fc 16.5

Fc 16.5

Fc 16.5

+43 End Rad. 10
+33 Fc. Cor. 16.5

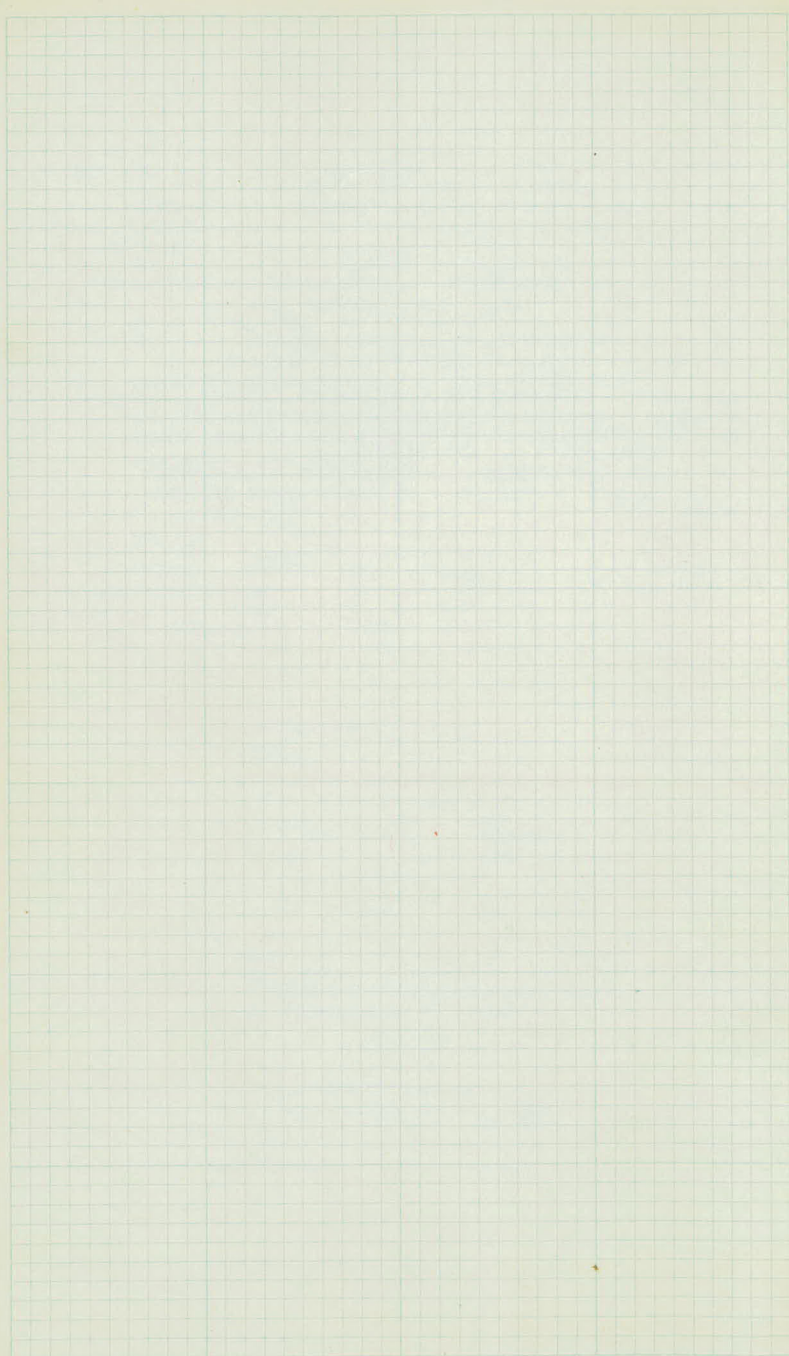
+14 Beg Rad 43

+26 Ditch 24

From Hammer
+89 End Pipe 25
+88 Old Pipe 29

+43 End Rad 17

+14 Beg Rad 46



Topography

Taken on.

± Proposed New Drain.

3
+13 $\frac{1}{2}$ - End Old Pipe

+88.5 Shore Line x s $\frac{1}{2}$

2
1
+07 Dr. x s $\frac{1}{2}$

+77 Δ O.P. 97

+58 End Old Pipe 96

+49 Dr. x s $\frac{1}{2}$

0
+17.5 Fe. x s $\frac{1}{2}$

Lake Josephine

+88 Fe. 128

+70 Lake Shore 24

+35 Lake Shore 56

+19 12" Oak 11

+74 18" Oak 15

Fe. 106
100 O.P. 62
+87 Cor. Ho. 11

+62 Cor. Ho. 43

+30 A.O.P. 96

+17 8" B.W. 10

+100 Fe. 82

+90 Dr. 46

+89 6" Bassw. 22

+66 Bassw. 20

+50 Fe Cor. 68

+65 Dr. 46

+33 6" Elm 19

+35 Dr. 50

+100 End 9" Vd. 46

+05 End Pipe 50

from Hamline

+49 Cor. Ho. 67

+44 15" O. 08

+17 6" B.W. 14

+10 Cor. Ho. 62

+85 Dr. 44

+75 6" Ash 21

+65 Dr. 34

+14 15" Elm 18



Topography

Hamline

Vicinity Josephine Rol.

15

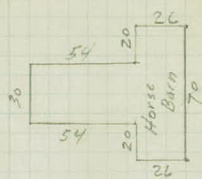
9

13

14

9

12



13

10

12

12

9

12

11

8

12

10

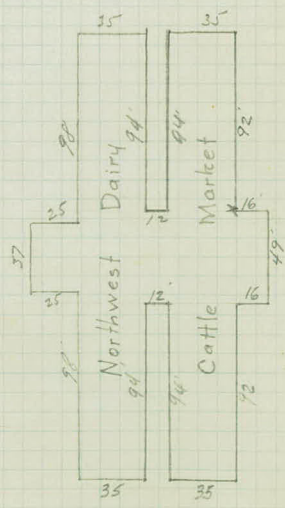
8

12

9

9

13



+67 Ent

+76 Cor Bldg. 209

+50 End Pot H. 30-25

+90 Pot Hole 25-175
+89 Fe. Cor. 38

+100 Pot Hole 26-150
+100 Fe 37

+25 Pot Hole 40-120

Fe 36

+85 Cor Bldg. 231

+75 Beg. Pot Hole 55

Fe 35

Impossible to locate Fe Ent. Buried

21

20

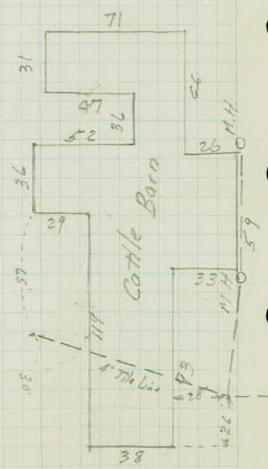
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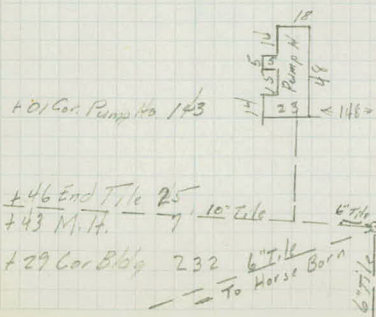
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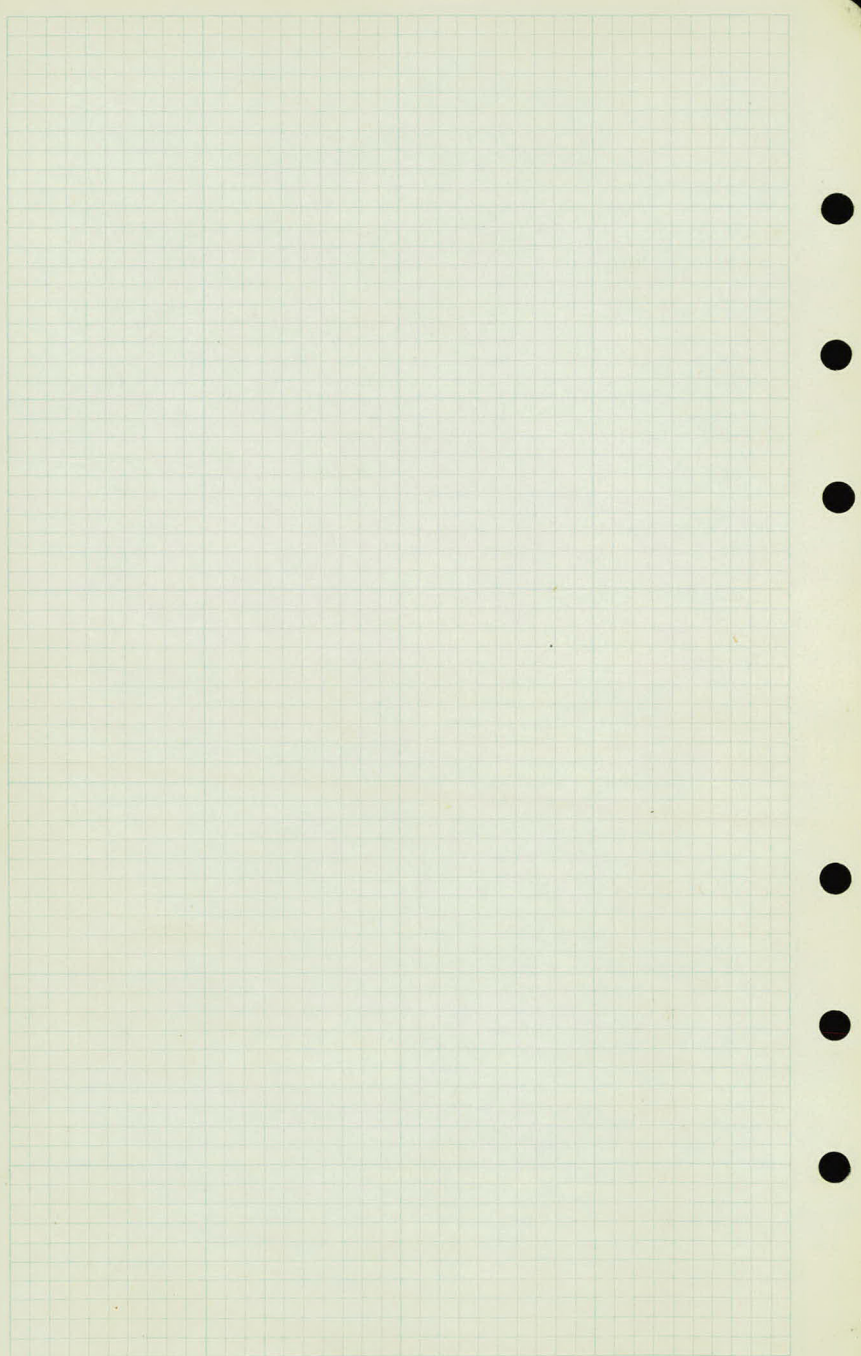
17

16

15





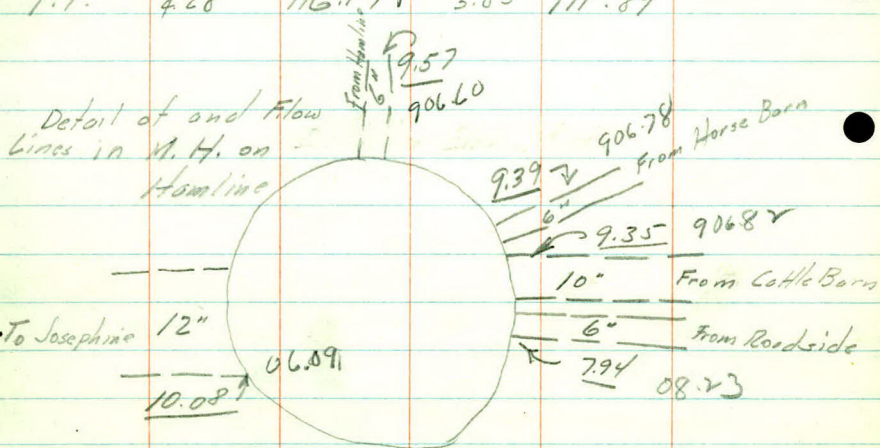


Profile Levels on $\frac{1}{2}$

Proposed Drain

Vicinity of Josephine Rd.
East of Hamline

Sta.	+	π	-	Elev.
B.M.	7.58	908.75		901.17
T.P.	7.22	914.72	1.25	907.50
T.P.	6.23	913.47	7.48	907.24
T.P.	5.71	917.74	1.44	912.03
T.P.	4.28	916.17	5.85	911.89



T.P.	2.38	905.63	12.92	903.25
F.L. Old Pipe			7.23	98.40
F.L. 9" Drain from Hamline			6.95	98.68
0+00			4.3	01.3
- 14			4.7	00.9
- 27			6.5	99.1
0+50			4.8	00.8
+ 75			6.2	99.4
1			9.1	96.5
+ 25			10.8	94.8
+ 50			12.1	93.5

Spike P.P. # 130 24' R + 2+29 (Hamlin Conn.)

Sta	+	π	-	Elev.
		905.63		
T.P	2.99	896.53	12.09	893.54
1 + 75			4.3	92.2
2			6.1	90.4
+25			7.6	88.9
+50			9.0	87.5
+75			10.7	85.8
+88.5			11.8	84.7
Water Level - 5-16-41			11.64	84.89
3 + 03			13.6	82.9
F.L End Old Pipe			14.22	82.31

DRAINAGE STAKES

Josephine Rd.

Sta.	+	-	Ground Elev.
B.M.	510	105.10	100.00
0	+00	3.6	01.5
	+08	2.3	03.8
	+25	2.0	03.1
	+50	1.8	03.3
	+68 = R Driveway	2.5	02.6
	+75	2.4	02.7
1		4.5	00.6
	+25	1.4	97.7
	+50	8.2	96.9
	+75	9.2	95.9
2		9.8	95.3

9-19-41

Grade Gr. Rod Stab.
3' 0.5. R/
F.L. + End of Old V. / Cut

100.00 5.1 $\frac{9.5}{+1.6}$

99.12 5.98 $\frac{2.0}{+3.98}$

98.25 6.85 $\frac{1.65}{+5.2}$

97.37 7.73 $\frac{2.43}{+5.3}$

96.5 8.50 $\frac{4.60}{+3.9}$

95.62 9.48 $\frac{7.28}{+2.28}$

94.75 10.35 $\frac{8.05}{+2.3}$

93.87 11.23 $\frac{8.83}{+2.4}$

93.0 12.10 $\frac{9.50}{+2.6}$

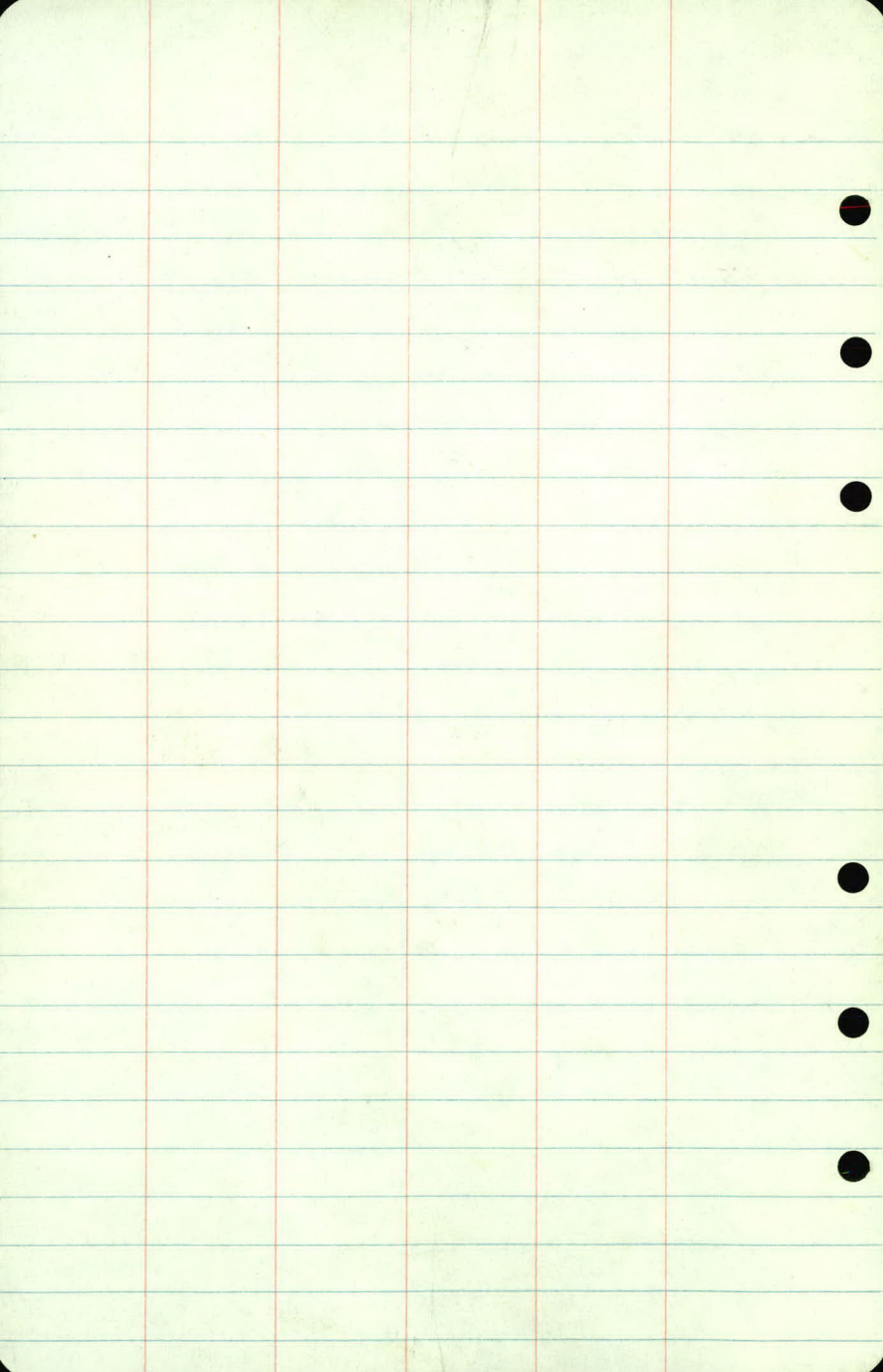
Sta	+	π	-	Ground Elev
		105.10		
2	+25		12.1	93.0
	+50		14.1	89.0
	+60		17.3	87.8
W. S. Lake Josephine			19.1	86.0

Grade	Gr. Red	Stake 20.5. Et
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90.5	14.5	$\frac{117.0}{+2.80}$
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88.0	17.0	$\frac{16.0}{+1.0}$
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87.0	18.0	$\frac{17.0}{+1.0}$
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Josephine Rd.

(West of Lexington)

Profile

0+00 to 4+00

Sta.	+	T	-	Elev.
B.M.	5.10	905.10		900.00

0+00			5.1	
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+19			5.3	
-----	--	--	-----	--

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

1			6.3	
---	--	--	-----	--

+50			6.2	
-----	--	--	-----	--

2			5.9	
---	--	--	-----	--

+50			5.2	
-----	--	--	-----	--

3			4.4	
---	--	--	-----	--

+50			3.8	
-----	--	--	-----	--

4			3.3	
---	--	--	-----	--

4 Parent Lex + Josephine

Rod

5.1

5.3

5.05 ✓

4.8 ✓

4.55 ✓

4.3 ✓

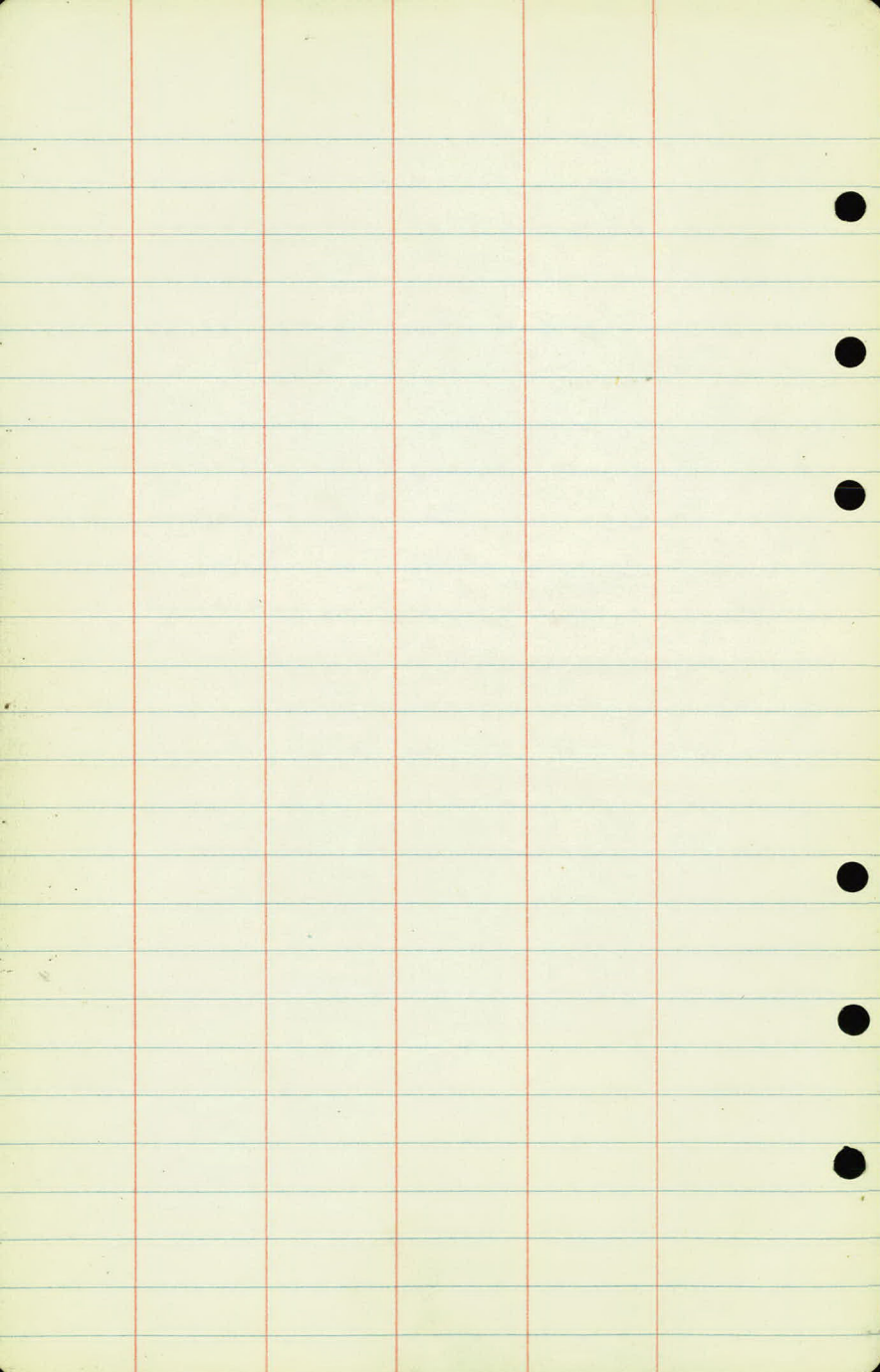
4.05 ✓

3.8 ✓

3.55 ✓

3.3 ✓

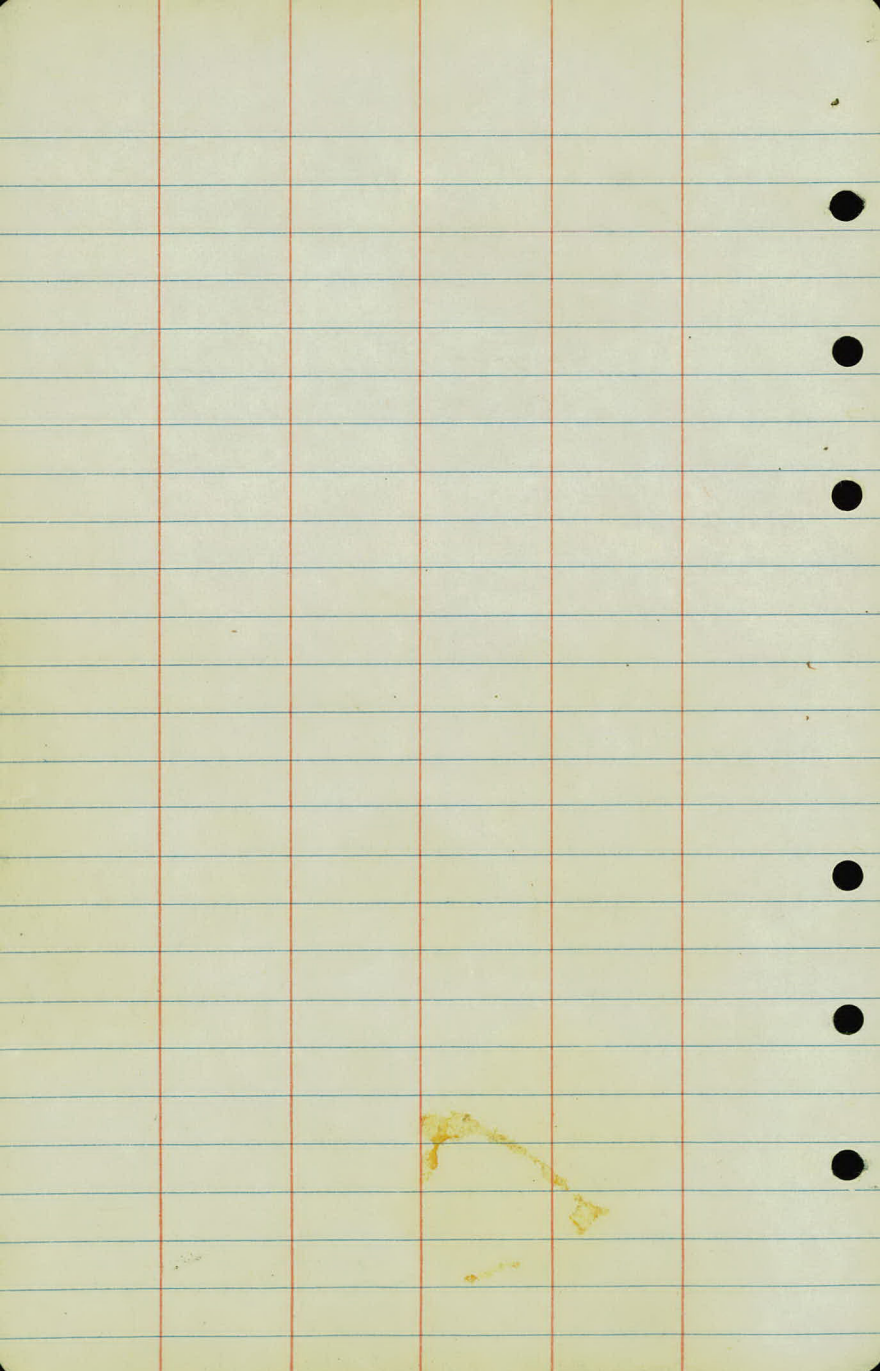
Grade
0.5%



PLAN SURVEY

~~LAKE~~ JOSEPHINE RD.
Hamline to Lexington

4-10-50 P.M.
L.C.



Harline to Lexington

Proj		From		To		Latitude		Departure		Totals	
Sta.	Dist.	Deflection L. R.	Course	Natural Functions Cosine Sine	+N	-S	+E	-W	Latitude	Departure	
	232.4	✓	N 82°15'E	.13485 .99087	31.34		230.28				
	165.8	✓	N 88°20'E	.02908 .99958	4.82		165.73		+ 31.34	+ 230.28	
	162.2	x	S 72°18'E	.30403 .95266		49.31	154.52		+ 36.16	+ 396.01	
	404.6	✓	S 55°15'E	.57000 .82165		230.62	332.44		- 13.15	+ 550.53	
	160.0		S 63°10'E	.45140 .89232		72.22	142.77		- 243.77	+ 882.97	
	1058.5		S 66°54'E	.39234 .91982		415.29	973.63		- 315.99	+ 1025.74	
									- 731.28	+ 1999.37 ✓	
					36.16	767.44 ✓	1999.37 ✓				
	4.62		0°00'E		000		462				
	20.75		0°00'E						000	+ 4.62	
			N 38°30'W	.62251 .78261	+ 12.917			16.239			
	3.65		S 48°00'W	.74314 .66913		2.712		2.442	+ 12.92	- 11.62	
	17.50		S 38°30'W	.62251 .78261		10.893	13.695		10.21	- 14.06	
									- 0.68	- 0.37	

Original Alignment

for 33' ROW, Rt & Lt from ϕ

Comm. at a point on ϕ of Hamline
Ave 1566.78' No. of Ctr. of sec 3
for place of Beginning.

th. N $82^{\circ}15'E$ 232.4 ✓

th N $88^{\circ}20'E$ 165.8

th S $72^{\circ}18'E$ 162.2

th S $55^{\circ}15'E$ 404.6

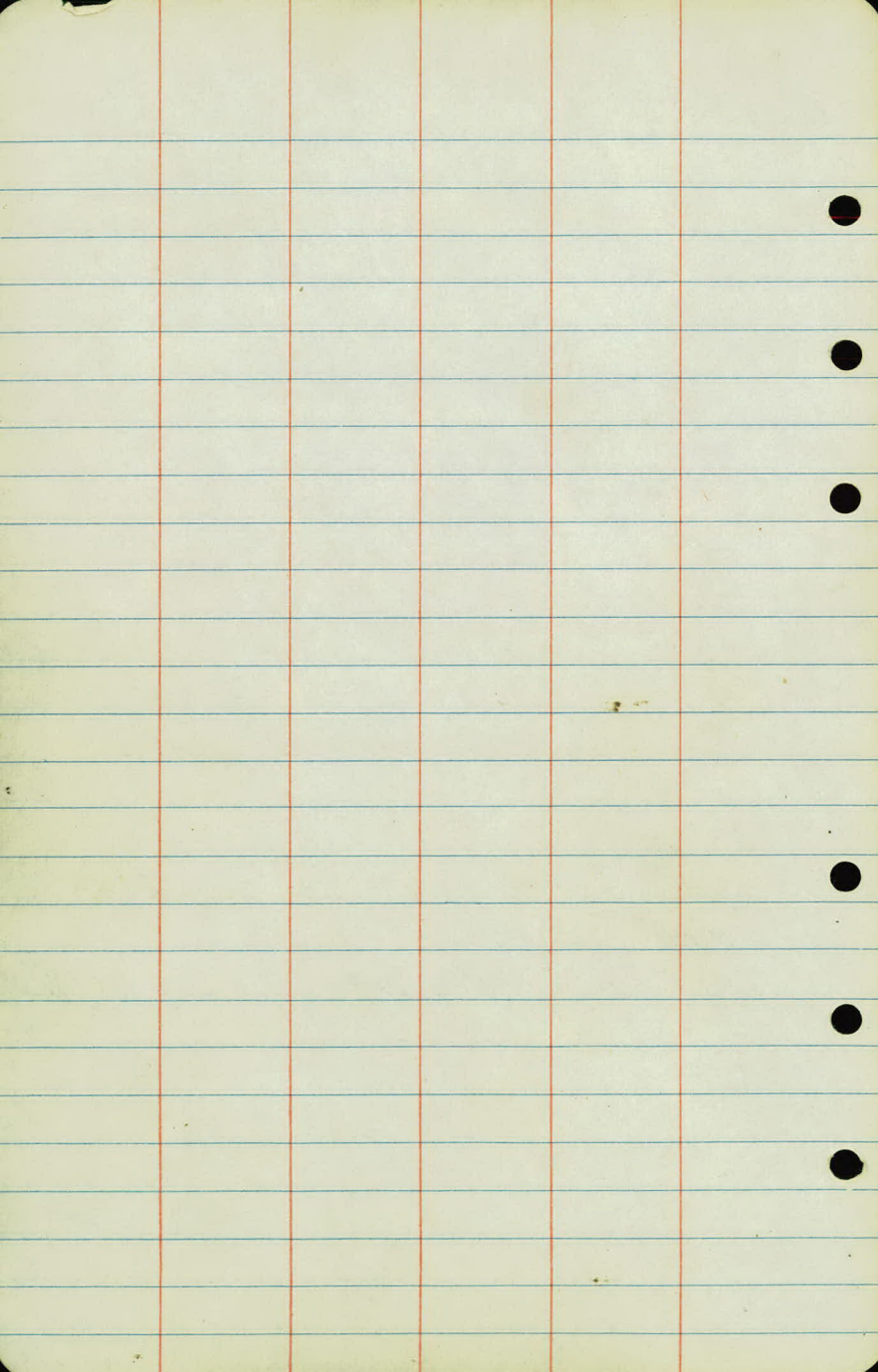
th S $63^{\circ}10'E$ 160.0'

th S $66^{\circ}54'E$ 1058.5 to
a point on Lexington Ave

Plan Survey taken from
 ϕ Ran parallel to and 8.25'
South of above line for
New Row. of 41.25' Rt & Lt of ϕ .

Misc. Bk 112 P-21-22

May 25, 1912



Alignment

4-5-50

G.B

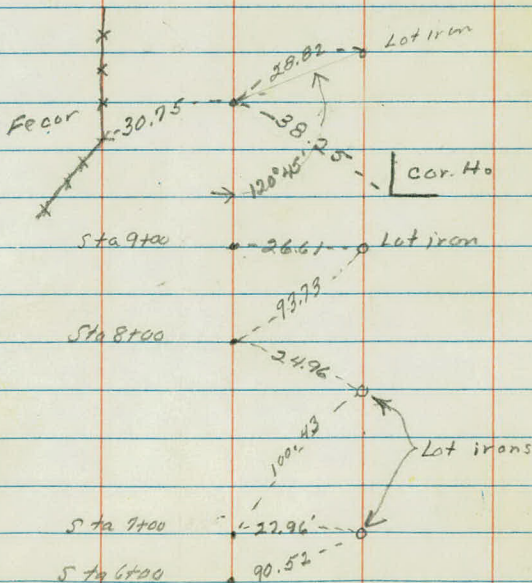
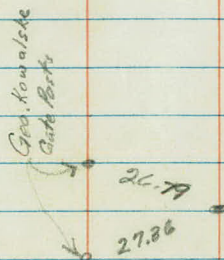
A.M

M.B

K.R.

Sta	Pt.	$\Delta L+$	$\Delta R+$	
5+97.41	P.T.		21°15'	
+75			19°34'	
+50			17°41½'	
+25			15°49'	
5			13°56½'	$\Delta = 42°30'$
+75			12°04'	D 15°00'
+63.05	PI			Tan 148.97 ✓
+50			10°11½'	L 283.33
+25			8°19'	R 383.06 ✓
4			6°26½'	E 26.05
+75			4°34'	
+50			2°41½'	
+25			0°49'	
3 +14.08	PC		0°00'	
2+49.65	P.O.T.			
0+16	Pt on Sec Line			
0+00	PI	= (Sta 147+12.04) Hamline Ave		

Sta	Point	ΔL	ΔR
12 + 33.19	PT	1°52'	
+25		1°47'	
12		1°32'	
+75		1°17'	$\Delta = 3^{\circ}44'$
+50		1°02'	$D = 2^{\circ}00'$
+39.90	PI		$Tan = 93.37$
+25		0°47'	$R = 2864.93$
11		0°32'	$L = 186.66$
+75		0°17'	$E = 1.52$
+50		0°02'	
+46.53	PC	0°00'	
10 + 35.72	PT	3°57½'	
+25		3°35'	$\Delta = 7^{\circ}55'$
10		2°42½'	$D = 7^{\circ}00'$
9 + 79.30	PI		$Tan = 56.67$
+75		1°50'	$R = 819.02$
+50		0°57½'	$L = 113.09$
+25		0°05'	$E = 1.96$
9 + 22.63	PC	0°00'	



22+0535

~~Lexington~~
Black Top Pavm.
over conc.

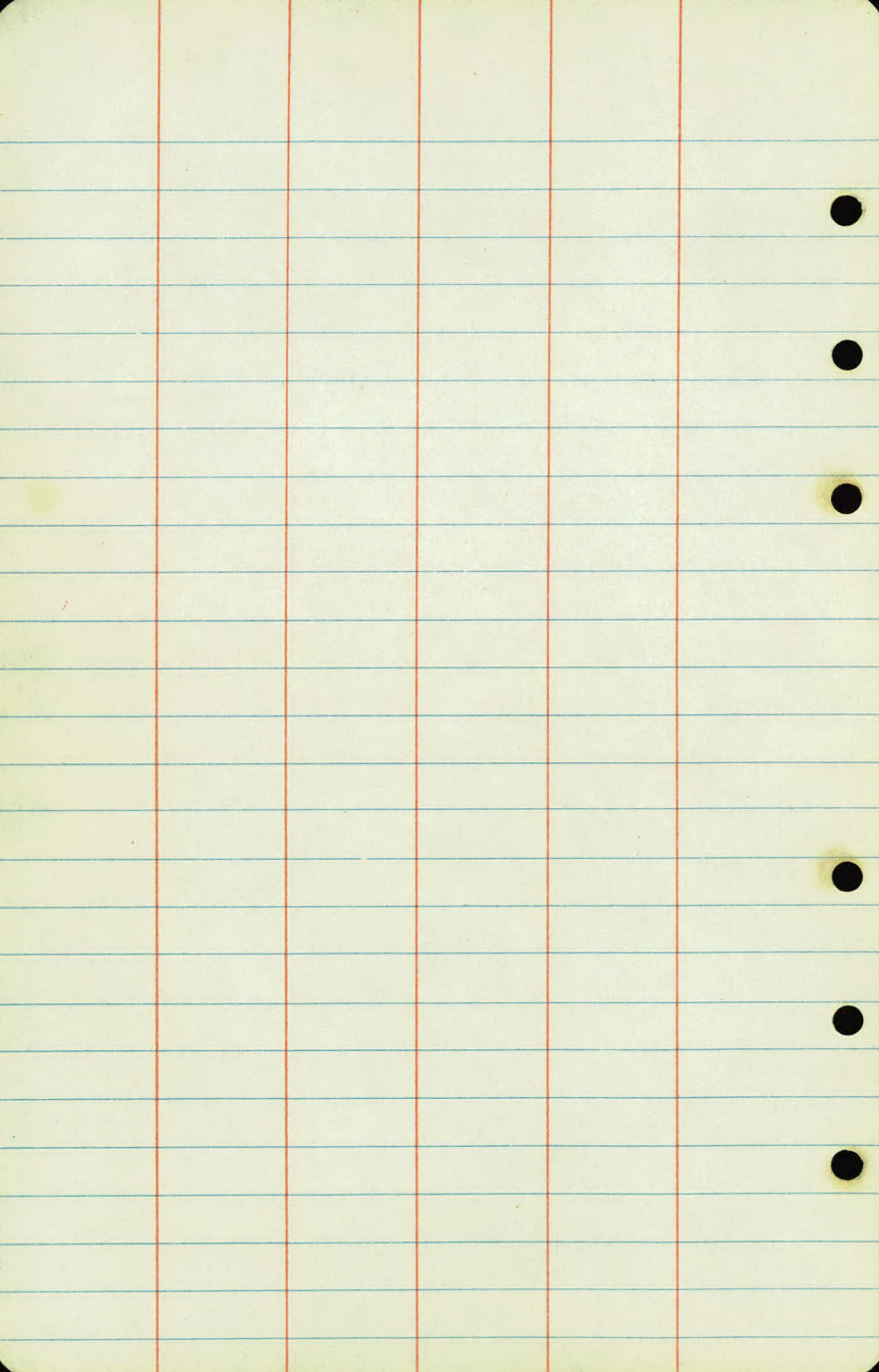
13.1

13528

pp
Q-22.02

113.41

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Topography

4-6-50

GB
AM
MB
K.R

6 - Fe 21, Rd - 14.4
+91 PP-17

+15 Fe-22 Rd 14.5
+50 Fe-25 Rd 10.5
+20 Fe-29
+25 Rd 23.5

+15 Rd -31

+12 L in Ditch -11
+0.5 Ptx to Ditch
2' Ditch -7'

5 Fe 35 Rd 29.9
+93 NH - 35.5 (open Gr 12")
+65 end 12" Vit -00
+30 Cor Fe & Curb -53
+15 Beg Fe - 62
+15 S Cor Pillar Beg 6" curb -62
+12 ctr 2.5 slab -58
+09 ctr 2.5 slab -54
+06 S Cor Pillar -48 (15x15)
+04 L in Fe -45

+92.5 12" Conc - 2.5
+89 Wing Wall - 2'
+95 wing w - 2.5
+98 end wing w - 5.5
~~19~~

4 Fe 43 Rd 30.9

+75 Fe 37.5 Rd. 26.5
+50 Fe 34 Rd - 23.3
+25 Road 22.2
+25 Fe 33.5 PP 30.5
+14.08 33.5
+14.08 Rd 21.7 - 2

3 Fe 33 21.5 2

+50 Fe 33.0

2 Fe 38.0 21.4
+95 PP-301

+50 Fe 33

1 Fe 333 21.2

+58 PP-30
+48 end Rd -24
+54 end Rd -1
+35 Fe Cor -34
+35 Ptx on Rd -29
+16 Beg Rd -61

+40 Beg Grassland
+38 15" Elm 12

+45 Ptx on Rd 00
+13 edge Blk Top
+10 Begin R - 37

-27 PP-31

-06 NH - 14
-7.6 edge Blk Top
-29 PP-19
-27 end 6" Vit. 19.5
Fe -31

- 5497 R Tie to drive @ 4H0

- +75 Fe-34 Rd 334
- +62 C.Brt 49'
- +52 G.Pest -53'
- +50 Rd 355 13
- +42 Fe cor. end curb-59'
- +38 PP-53
- +25 Rd -34 12
- +60 Rte to X Fe

2' ditch

$\sqrt{12} \sqrt{17}$

8' bridge

6' steel post with woven wire
and Barb wire top

Grass

HAMLING

Ave

For detail of MH
See Page —

12 Fe 25.5 185 2'

+96 PP-24

+50 Fe-24

175+50-2

+38 Ctr 16' ent

11 Fe 23.5

17 2

+50 Fe-26

185+50-0.5

+41 PP-23

10 Fe 25.4

19-1

+74 RTie to X Fe

+61 end wall Fcor 23

+50 Wall & Fe-23

16.5+50-2.5

+74 R. Tie To Hedge

+80 Beg Hedge 14

+80 24" BE-14

+72 Ent

+54 Cor Ho-29.8

+35 Cor Ho-42.5

+25 Fe-21.5

15+25-6

+66 Ctr 16' Ent

+66 Ctr 8"x18' Ent Cul. Cm-16.5

+57 32" BE-34

+22-6" Elm-23

9

14 6

+76 PP-16.5

+68 RTie to X Fe

+55 Beg Rock Fe-16.5

+55 end St. Fe, X Fe.-17

8 Fe 17.5

11.5 8

+60 E ent-18.5

+50 Fe 18.3 +50-12 8

+39 PP-16

7 Fe 19.3

13 7

+80 Fcor-20

+75 Cor Gar & Fe-30.5

+61 Cor Gar & Fe-28.0

+50 Fe-20.5

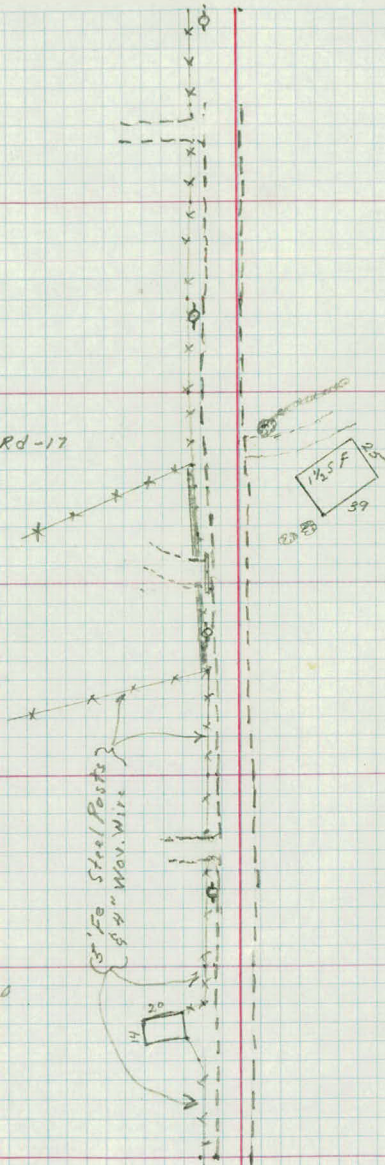
6

+15' Fe -24, Rd-17

Rd-2

14x20

3" Fe Steel Posts
5' 4" Wav. Wire



19 Slab - 27.4 18 02
 +75 3' walk 48.5
 +73 Cor Conc Slab - 27.5
 +69 BW - 39
 +36 4" Apple - 39
 +22 5" Pine - 36
 +19 Lilac - 28
 +20 R Tie to X Fe
 +14 Fe Cor - 22
 +44 end Fe 9.5
 +39 R Tie to Fe

18 Fe 22 18 1 Fe 8
 +94 PP - 21
 +78 PP - 29
 +68 Lin Fe - 22
 +66 Gate P - 26
 +53 Gate P - 26.5
 +53 Lin Fe - 22
 +48 R tie to Fe
 +41 Fe Cor - 22
 +54 18" W - 38
 +51 12" W - 36
 +47 Ent.
 +23 24" - 30
 +29 6" Pop - 16
 +28 24" Oak - 30
 +27 12" Oak - 33
 +16 12" Pop - 16

17 Fe 22 18.5 00 Fe 9
 +79 Lin Fe - 22
 +69 Fe Cor 22
 +78 R Tie to X Fe
 +46 PP - 21.5
 +12 6" Fly S. Ent 25
 +21 4" Fe 22.5
 +19 Gate P - 29.5
 +03 Gate P - 30
 +76 12" Pop - 16
 +70 Fe Cor 9
 +64 R Tie to X Fe

16 Lin Fe 22.4 17.5 0.5 Fe 9
 +50 12" CM - ? No can find about 70
 +50 Fe - 23
 +01 6" W - 20
 +95 10" W - 19
 +50 12" CM - 4
 +50 Pothole 10 - 80
 +15 Pothole - 20 & 50

15 Fe - 23 18.5 00 Fe 8
 +96 PP - 32
 +81 Ctr 10" Gate
 +42 Fe Cor 22.7
 +53 R Tie to X Fe
 +47 R Tie to int.
 +33 6" ent - 26
 +24 end Fe - 26
 +58 Fe cor 5
 +53 R Tie to Fe

14 Fe 26 21-1
 +46 PP - 32
 +20 6" ent
 +20 Ctr 12" X 18' - 21

13 Fe - 26 20 & 1
 +90 10" BE - 40
 +85 18" Pop - 27
 +70 6" ent

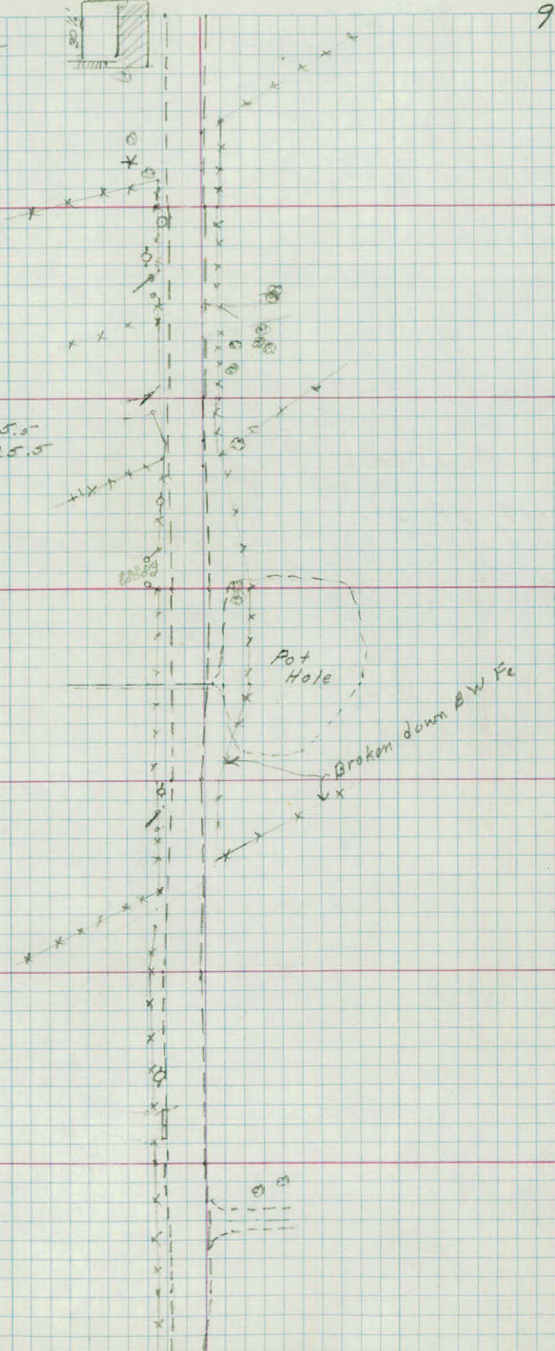
+33 Fe - 25.5 19.5 +32 - 0.5

12 Fe 25.5 18.5 2



+78 Cor Gar 415

- +82 Gate Post - 25.5
- +91 " " 25.5
- +95 414 Fe 22



Pot Hole

Broken down BW Fe

+24" end Conc - 27

+24 edge Pav

+19 PP-20

+11 end Rad - 23

22

+88 edge Pav

+79 end 24" Conc Culv. 73'

+27 end 12" CM - 47'

+32 end Rad - 60

+26 Pion Rad - 30

+05 begin Rad - 18

+79 end 24" Conc - 13

+64 Big Rad - 1

+68 end 12" CM - 8'
56" Long

21

18 1

+94 PP-21

+99 18" Pop - 17

+87 - 20" Pop - 18

+75 25" Pop - 17

+64 18" Pop - 17

+53 12" Pop - 17

+32 39 Pop - 16

20

18 1

+72 18" Pop - 16

+57 end curb

+57 cor slab - 27

+51 R tie to curb

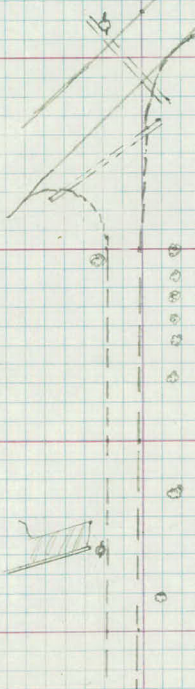
+44 cor Con Slab - 27

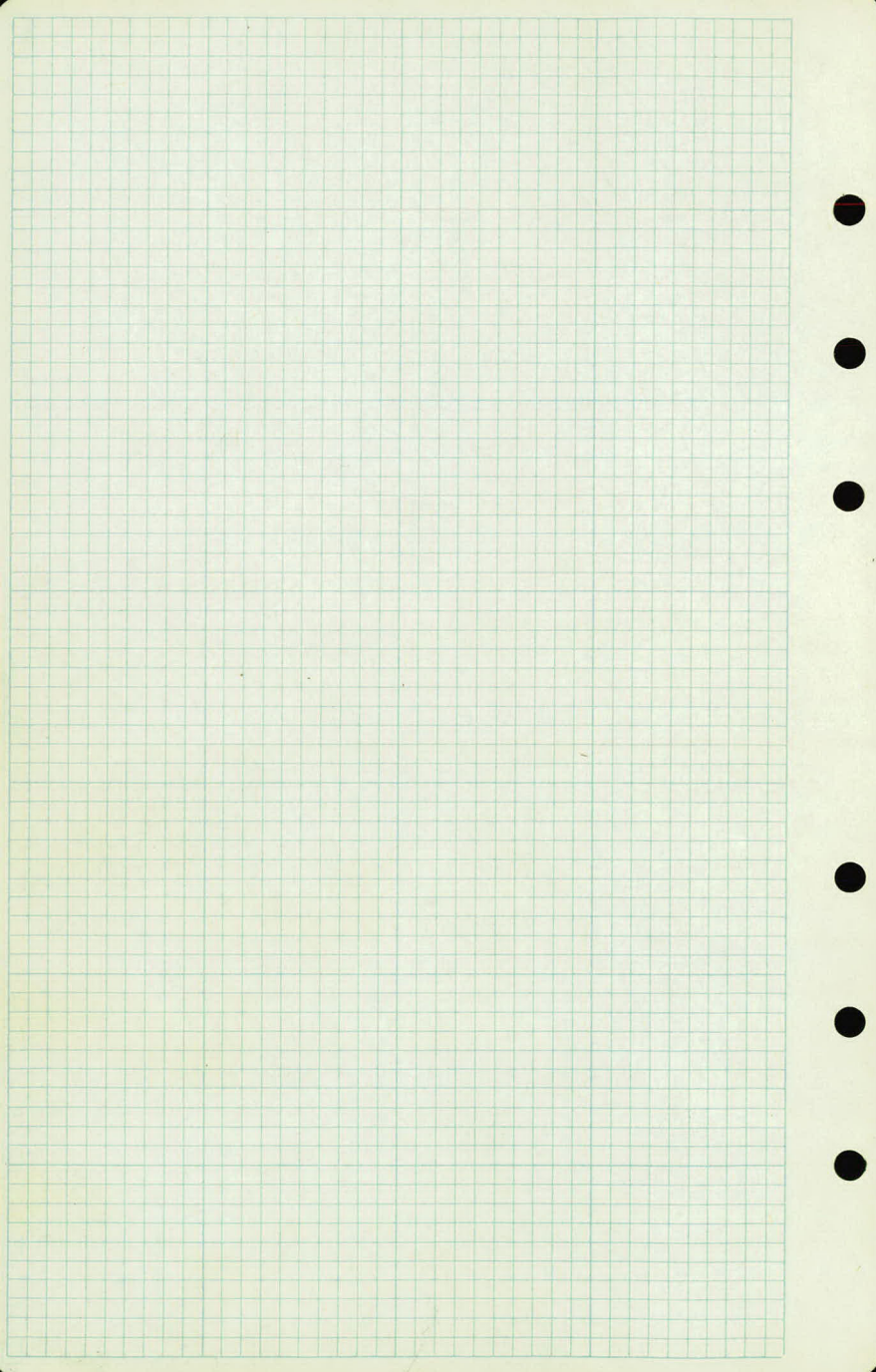
+43 PP-21

+19 36" Pop - 9'

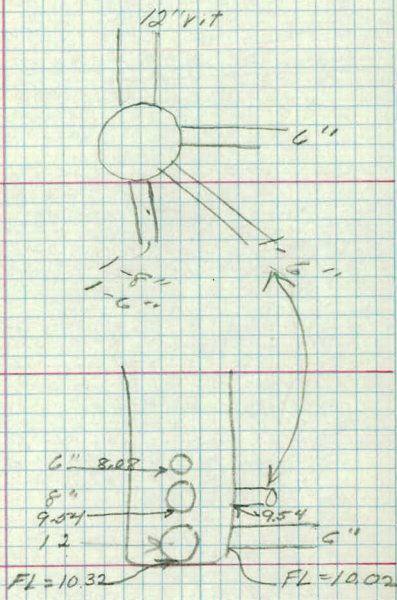
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Lexington Ave.

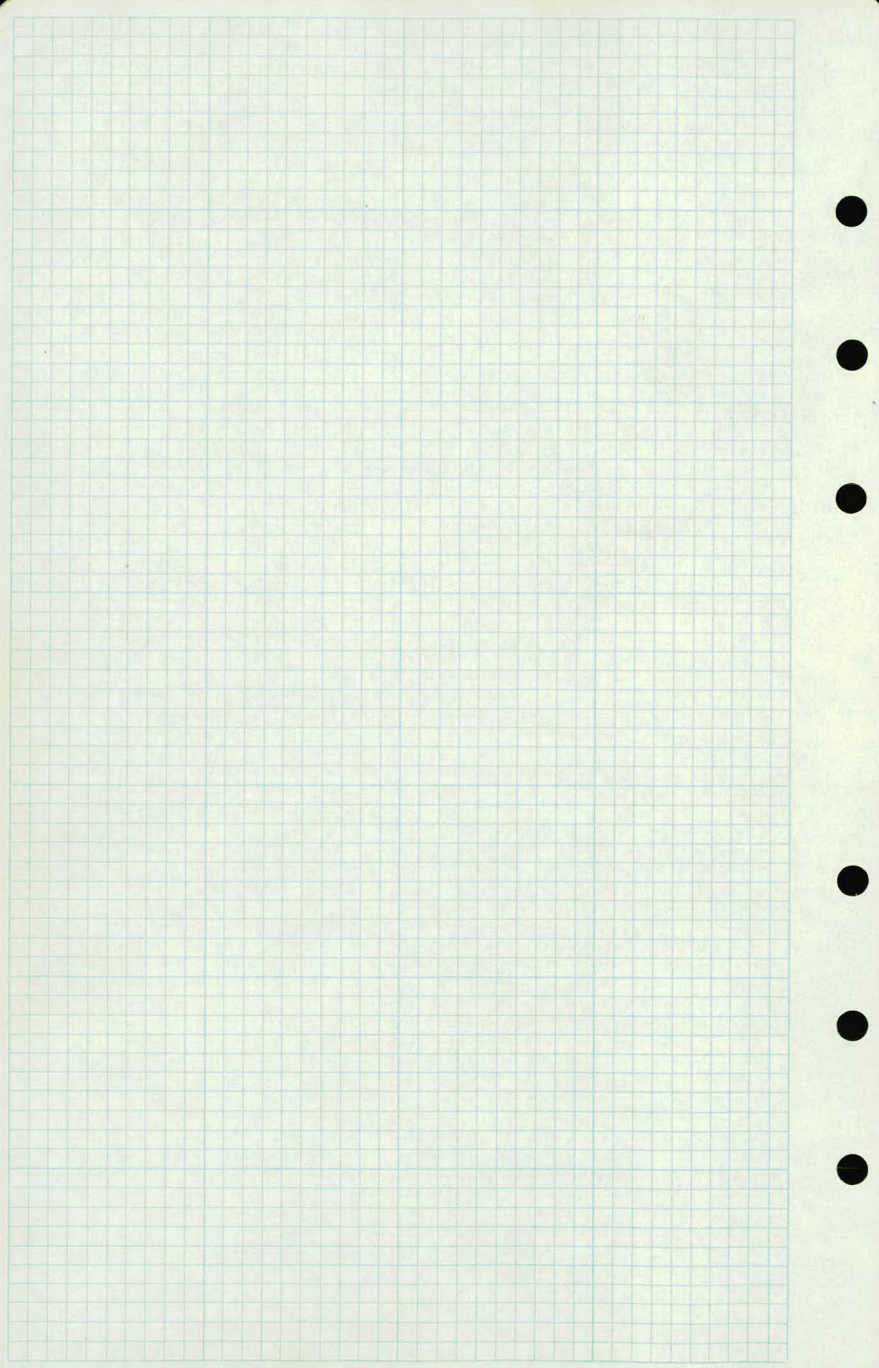




HI = 915.91



FL inv 9.44 - 8"

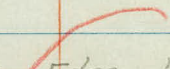


Bench Levels

&

X Sections

Sta	+	π	-	Elev
BM	8.19	922.91		914.72
T.P.	2.58	919.26	6.23	916.68
	4.10	915.91	7.45	911.81
BM			5.94	909.97

- 06 West  Edge Pave. 11.5.

0 + 00 11.5

+ 13 Edge Pave. 11.3

+ ²⁰/~~28~~ Shoulder 11.1

+ 27 10.7

+ 33 10.5

+ 36 10.3

L+

Q

R+

Spk in 18" Elm 31' E of 18' No. of ctr. Sec. 3

Spk in 20" Elm, 33' W. of Sta 147+12.04
(Hamline Ave)

4.4

Top NH.

4.4
1.4

3.4	3.6	4.0	4.2	4.4	4.4	4.2	4.1	3.9
206	150	100	50		50	100	150	200

4.6	4.6	4.7
50		50

5.1	4.8	4.8	5.2	5.2
50	23'		13	50

5.9	5.6	5.0	4.9	5.2	6.0	6.8	7.4	7.4
50	40	25	12		13	18	33	50

check

exposed top
of 24" vit.

6.4	6.2	5.7	5.0	5.4	5.7	6.0	10.3	7.3	7.3
50	35	31	14		4	11	18	31	50

7.0	6.5	5.7	5.0	5.6	5.7	6.1	5.9	6.5	6.3	5.0
50	35	29	14		2	4	10	20	36	50

Sta	+	π ..	-	Elev
		915.91		
0 + 70				10.2
1.				10.6
+50				10.7
2				10.0
+50				08.9
3				07.2
+50				05.5
TP	1.23	905.91	11.23	904.68

L+

Q

R+

7.3 6.5 5.4 5.2 5.0 5.5 5.7 6.7 6.9 6.3 5.2 ✓
 50 33 26 20 12 2 7 17 29 50

5.9 5.1 4.8 4.7 4.6 5.3 5.8 7.2 6.8 5.1 5.0 ✓
 50 33 26 21 12 2 11 21 42 50
 $\frac{5.1}{2}$

1.5 1.7 2.6 4.7 4.6 4.4 5.0 5.2 5.7 8.0 8.0 7.8 ✓
 50 33 29 23 20 12 2 3 14 29 50

00 0.8 2.3 5.3 5.3 5.5 5.9 6.2 7.5 8.5 8.9 ✓
 50 33 27 23 20 13 2 5 12 26 50

2.1 2.8 4.0 6.7 6.6 6.3 6.7 7.0 8.0 9.1 8.3 8.5 ✓
 50 33 28 23 21 12 3 5 15 29 50

5.5 5.5 8.4 8.6 8.2 8.5 8.7 8.5 9.1 8.5 9.2 ✓
 50 33 24 22 12 3 4 11 32 50

9.3 10.5 10.3 10.1 10.5 10.7 10.4 10.1 9.9 9.5 ✓
 29 24 22 14 5 3 8 25 50

88 92
 34 50

Sta	+	HI	-	Elev	
		905.91			
4+00				03.5	
+25				02.3	
+64				98.13	
4+93		FL. @ Catch Basin 12" Conc			
5				00.2	
+50				00.6	
6				01.0	
+50				01.2	
80		Gar. Floor			→
1				01.7	

LT

E

RT

2.6 2.2 2.3 3.4 2.1 2.2 2.4 3.7 3.2 1.8 1.2 ✓

31 29 19 7 6 3 8 23 41 50

2.1 2.1 2.1

37 43 50

3.2 2.1 2.3 2.1 3.4 3.9 3.6

50 20 34 32 20 12 6

37

3.6

4.2 4.1 3.1 1.7

5 17 35 50

FL 12" Vit

4.8 4.2 4.5 4.3 4.4 5.1 6.2 7.78

50 39 36 34 23 11 3

6.0 5.9 4.9 4.2 3.4

1 12 20 32 50

80.33

96.79

open grate top 96.86

5.58 912 905

35.5 out. 14.

80.6

FL 12" CONC

7.85

2.5

90.1

2' ditch

4.5 4.9 5.4 4.9 4.9 5.3

50 37 34 29 19 10

5.7

6.0

3

7.8

8

6.4

11

6.0

24

5.3

50

6.3 6.0 5.5 5.3 5.0 5.0 5.3

50 46 25 20 18 9

5.3 5.7 5.8 6.1

7 16 33 50

6.4 5.4 5.2 5.0

50 21 15 12

4.9

4.9

4

5.0

5

5.0

12

3.8

17

4.6

21

5.4

41

5.6
50

6.1 5.8 5.1 5.1

50 25 21 16

4.7

4.7

4.8

5

5.0

7

4.9

10

5.4

19

5.3

35

5.2

50

5.33

50

6.5 5.0 4.5 4.4 4.9 4.6 4.3

50 20 19 17 15 12 9

4.2

4.4

6

4.6

9

4.3

13

4.4

17

4.7

20

4.7

31

5.0

50

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

905.91

7 +50

02.1

8

02.6

+50

03.3

9

04.1

TP

8.31

912.89

1.33

904.58

+20

04.5

+31

04.7

+60

05.3

+82

05.5

Lx

E

Rx

48 4.0 3.5 3.9 4.2 3.9 3.8 4.1 4.3 5.0 5.7 6.0 ✓
50 30 21 15 13 9 9 15 20 36 50

4.5 2.9 3.7 3.4 3.3 3.2 3.4 3.5 4.2 5.2 5.5 ✓
50 18 12 10 7 8 17 24 36 50

6.4 4.7 3.7 3.1 2.8 2.6 2.6 2.9 3.5 3.8 ✓
50 32 19 17 12 6 12 21 50

4.6 3.4 1.9 1.9 1.8 2.0 2.1 2.7 2.8 3.0 ✓
50 34 19 12 5 8 16 29 50

10.7 8.9 8.7 8.6 8.4 8.4 8.6 8.7 8.7 9.1 8.6 ✓
50 28 18 13 7 3 6 12 34 50

10.5 8.7 8.5 8.5 8.2 8.2 8.4 8.3 7.6 6.6 6.1 ✓
50 29 19 15 6 4 11 15 25 42

gr. @ H₀ = 5.7 907.2

8.3 7.0 8.1 7.9 7.6 7.6 7.9 7.0 5.9 5.6 ✓
50 22 18 16 7 7 11 26 50

8.0 6.9 6.8 7.5 7.4 7.5 6.6 6.1 6.7 6.4 ✓
50 ~~22~~ 16 15 2 7 18 35 50
24 18 9

Sta + HI
912.89

10 05.6

+50 05.7

11 05.5

27 05.2

+50 04.8

+86 03.3

12 02.6

+50 00.2

Lt

L

7.5 6.4 7.6 7.4 7.2 7.3 7.4 7.0 5.5 5.7 5.0 4.1
50 25 19 18 10 2 6 10 20 30 50

6.3 6.2 7.6 7.4 7.2 7.2 7.5 4.6 3.4 3.5 3.5
50 26 20 16 8 4 11 17 33 50

6.0 6.1 7.8 7.5 7.4 7.4 7.4 7.6 4.1 1.6 1.3
50 24 19 16 8 1 5 12 26 50

6.4 6.3 7.7 7.5 7.4 7.7 7.8 7.8 5.0 4.0 0.6 0.4
50 23 19 9 2 3 6 9 17 30 50

6.2 6.3 8.2 8.2 8.0 8.1 8.4 7.2 5.3 0.6 +0.5
50 24 19 17 7 6 8 20 33 50

7.0 7.0 9.8 9.5 9.6 9.8 3.9 0.8 +0.7
50 24 19 8 4 6 27 50

7.0 7.4 10.0 10.4 10.1 10.3 10.6 6.0 1.7 +0.7
50 25 21 19 7 4 12 23 50

10.0 10.8 13.1 12.9 12.5 12.7 13.0 11.5 6.7 5.2 3.6
50 26 21 18 9 2 6 13 28 50

Sta	+	HI	-	Elev
		912.89		
12+64				99.7
+87				98.4
T.P.	0.71	899.87	13.73	899.16
13				97.4
+40				95.5
+20				93.5
14				91.9
		Gar Floor		1
+56				90.5

LT

C

RL

11.8 13.7 13.6 13.3 13.2
25 21 18 9

11.9 5.4 4.5
16 39 50

11.1
50

11.8 13.4 14.9 14.7 14.5 14.5 12.9 11.4 9.5 9.0
50 25 21 18 11 5 14 38 50

H0.
11.0
59

2.2 1.8 2.2 2.1 2.1 2.5 2.2 1.1 0.0 2.1 0.8 +3.0
50 26 19 11 3 1 5 19 26 40 50

3.6 4.6 4.4 4.3 4.2 4.3 4.4
50 30 25 19 12 3

7.6
8.6 8.0 7.4
12 29 50

6.0 6.4 6.0 5.6 5.8 6.4 9.5 10.4 10.5
50 26 23 12 3 6 24 50

7.4 7.4 7.3 7.2 6.8 7.1 8.0
50 55 26 22 13 3

11.8 11.7 11.7
8 30 50

7.85
50

10.5 8.6 8.5 8.5 8.8 9.4 12.5 13.1 13.1
50 23 19 11 2 6 26 50

Sta	+	HI	-	Elev
		899.87		

15				89.7
TP	6.03	895.54	10.36	889.51

	+50			88.8
--	-----	--	--	------

16				88.9
----	--	--	--	------

	+50			89.1
--	-----	--	--	------

17				89.6
----	--	--	--	------

	+50			90.2
--	-----	--	--	------

18				90.2
----	--	--	--	------

	+50			90.0
--	-----	--	--	------

108 9.8 9.6 10.2
50 23 10

13.1 13.0 13.9
6 29 50

71

6.8 6.0 6.0 6.7 11.02 7.3 10.4 11.5 11.6
24 18 10 4 1 16 30 50

check old Notes
for other end 12" cm -

Grav Floor Flagstone Drive
8.2 7.4 6.4 6.0 6.2 6.6 6.9 10.7 11.9 12.3 10.0
48 32 24 17 10 1 14 25 50 75

8.0 7.0 6.4 6.0 6.0 6.4 6.5 7.2 10.2 11.2 10.6 10.0
50 28 20 18 9 2 10 19 32 50 60

6.0 5.7 5.7 5.6 5.9 6.0 6.4 8.1 8.0
50 22 18 10 2 9 27 50

5.0 5.1 5.2 5.2 5.3 4.9 4.6 5.6
50 25 18 8 5 27 50

2.0 4.6 5.3 5.2 5.1 5.3 5.4 4.0 2.5 1.1
50 44 23 18 9 4 16 30 50

2.2 5.2 5.5 5.2 5.5 5.7 5.3 3.3 +1.0
50 33 19 10 2 4 22 50

69
78

Sta	+	HI	+	Elev
-----	---	----	---	------

19		895.54		89.8'
----	--	--------	--	-------

+50				89.2'
-----	--	--	--	-------

20				89.0'
----	--	--	--	-------

+50				88.7'
-----	--	--	--	-------

21				88.3'
----	--	--	--	-------

TBM	5.38	893.72	7.20	888.34
BM			3.20	890.52

+25				88.2
-----	--	--	--	------

+30				88.2'
-----	--	--	--	-------

Lt

E

Rt

Gar. Fl.

90.04

K Conc. Gar. Apron

5.00
425.50 5.8 5.5 5.7
18 85.9 2.3 + 11.0
6 30 50

89.2

K Conc Apron

5.9
506.30 6.1 5.9 6.3
28 16 86.6 4.2 - 0.4
7 27 50

6.5
7.4 7.7 7.7 6.9 6.5 6.3 6.8 7.8 6.8 4.3
50 32 23 18 16 2 3 7 24 50

8.2 8.1 6.7 6.6 6.8 7.3 9.6 9.6 8.0 7.1 6.7
50 23 16 8 4 8 13 24 41 50

7.2
9.0 8.8 8.4 7.3 8.4 10.5 10.5 9.6 8.9 8.4
50 34 22 18 4 7 12 16 36 50

6.8 11.0 7.0 used
8 16

SE cor Gar. on Conc Apron Sta

1/2" cm

7.5 7.94 7.4 5.9 5.8 5.1 5.5 6.0 8.6 8.6 8.0 7.6 7.2
50 47 42 31 25 10 2 8 12 14 32 50

5.2 5.9 5.1 5.5 5.7 8.6 8.6 8.1 7.8 7.5
50 36 10 2 7 12 14 31 50

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

893.72

+69

88.2

+78

88.3

22

88.6

+17

88.3

+24

end 24" conc. (FL)

+24

88.1

+34

87.2

+44

84.6

L+

Φ

R+

5.2 4.9 5.2 5.
50 23 8

5.5 6.1 8.90 8.5 8.5 8.5
3 9 15 35 50

FL 12"cm

5.4 5.4 5.9 10.7 4 9.1 8.2 8.6 8.3
50 28 13 5 13 16 20 31 50

FL 24"conc.

8.8 6.8 6.0 5.2
50 47 34 8

5.1 5.1 5.7 8.5 8.2
13 21 29 50

9.4 8.9 6.0 5.8 5.4
50 32 20 10

5.0 4.9 5.3 8.2
12 32 41 50

10.95 82.77
27

5.6

6.5

9.1

893.72

22+0

Profile Lexington Ave

88.57

4.68 893.77 4.63 889.09

1.27 892.50 892.44

✓

4.8	4.8	5.0	5.2	5.15	4.6	4.4	4.4	4.3
200	150	100	50		50	100	150	200

Spk in 15" Oak, 100' West inter. Lexington Ave
and Co. Rd C-2

