

Dr. 9 BK. 15

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

PLAN Survey

LAKE SHORE AVE.

From Co. Rd. "C" To LITTLE CANADA RD.

Road Acc't. No. _____

Date Filed _____

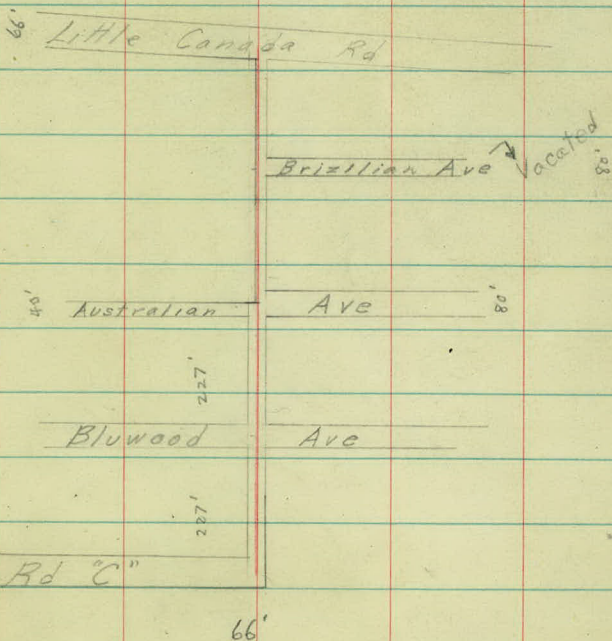
File Dr. 9 Bk 15

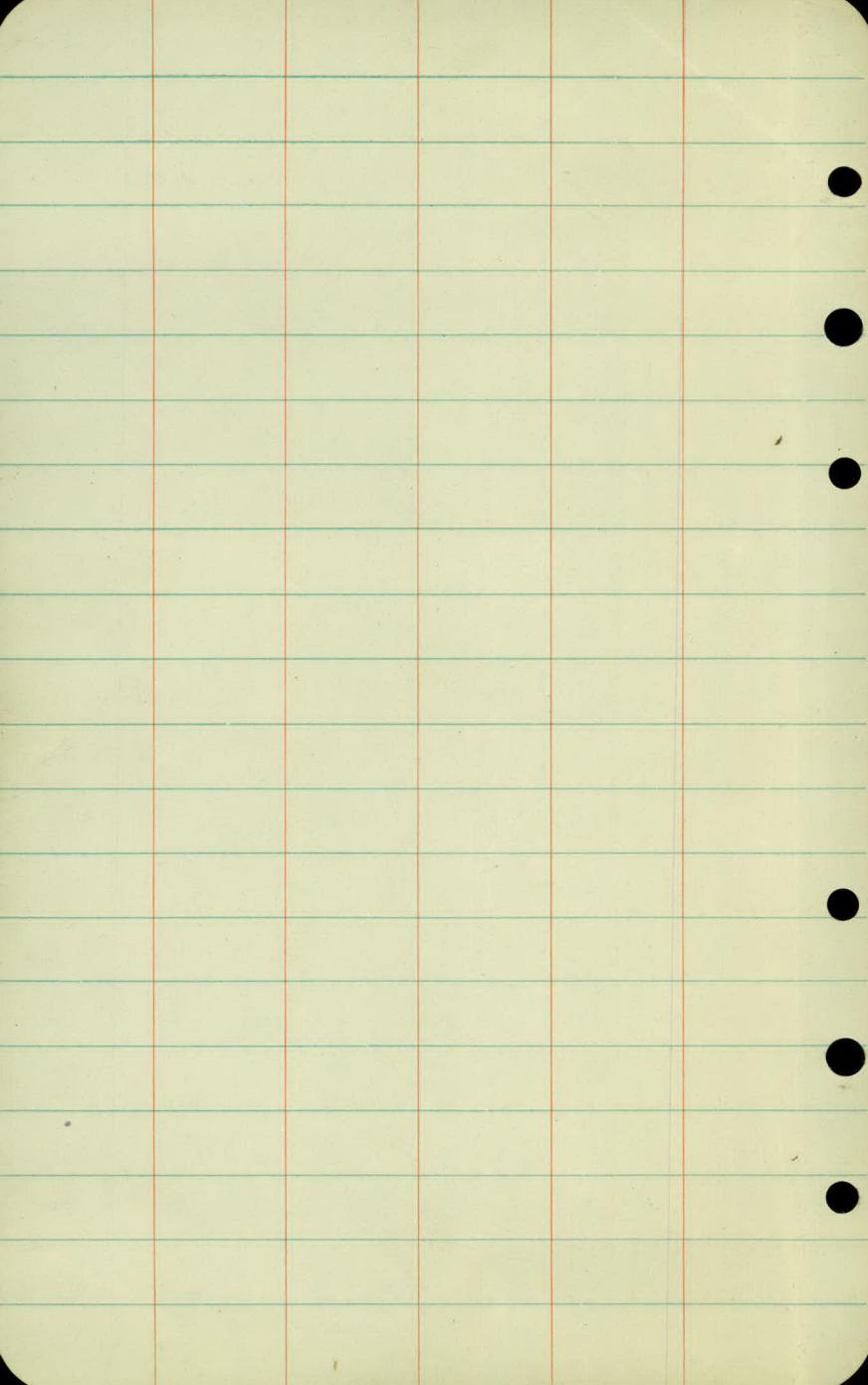
Plan Survey

LAKE SHORE AVE.

Co. Rd. "C" to Little Canada Rd

18 pages





FK
AM
LC
MM

March 21, 1955
Cold Snowing 25°

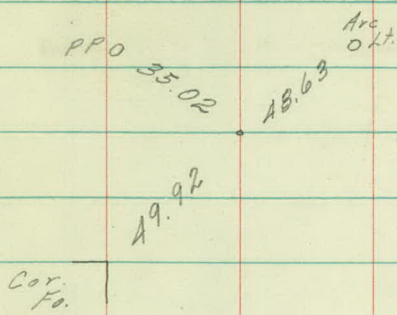
2

Alignment

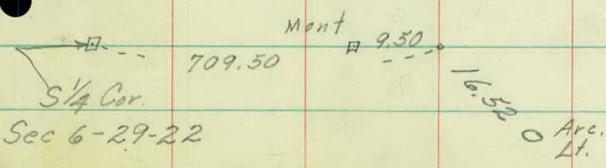
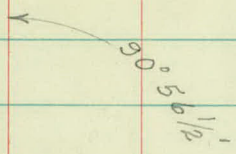
Sta Point ΔH ΔR

12+33.62 $\pm$ Little Canada Rd.

0+00 $\pm$ Co. Rd. "C"

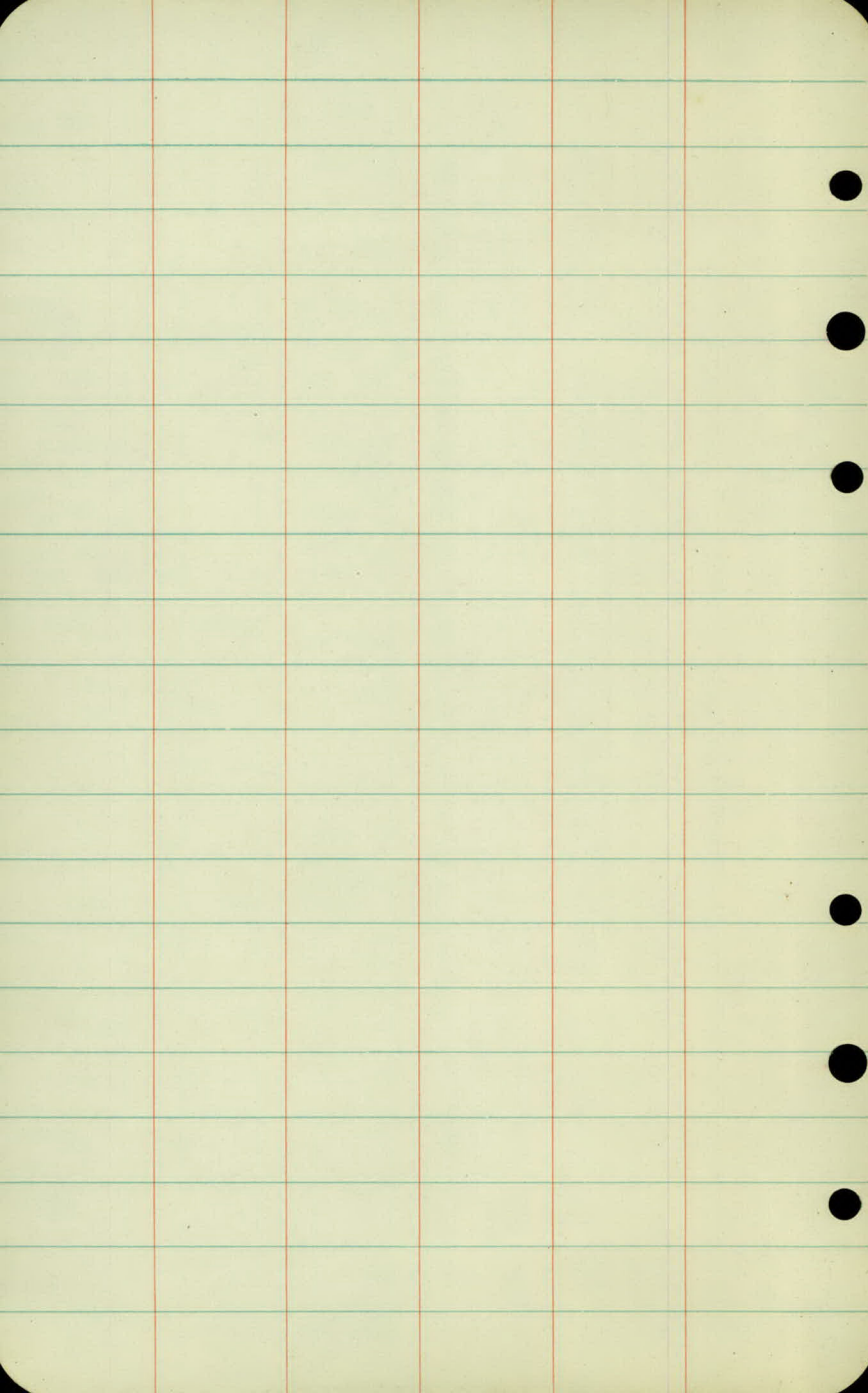


Spike



Spike

Sec 6-29-22



Topography

4

Road
3-17

NE Cor. Ho 65'

+64 SW Cor. Ho
60+82 SE Cor. Ho
73.5+61 PP
26+35 E.R.
3+31 NE 15" x 40' CM 3" SM
10 114 33+27 Ent
Rt+20 B.R.
22

NE Cor. Ho 61

+100 E.R.
26Road
16

3

+92 SE 15" x 40' CM
10+86 B.R.
9+87 SW Cor. Ho
60+26 15" x 20' CM
10+85 4" SM
33Ent SE Cor. Can
+21 108+31 TP
24Road
3 152 SE Cor. Ho
+82 77+69 18" 0
28+39 T.P.
23+51 PP
23Ent 12" x 20' CM
+23 22+105 30" 0
29

1 +100 = ER

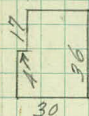
Road
7-13+101 14" 0
31+109 20" Maple
36.5+80 15" 0
25+87 18" 0
26+82 18" 0
28+80 SW Cor. Ho
44+55 18" 0
29+62 15" CM
18.5+64 T.P.
26+49 12" 0
31+70 14" 0
26+69 16" 0
48+28 P.O.R.
39+12+39 23.5
1+39 End St. Wall
28+10 B.R.
94+109 Barrier
7+109 Barrier
1+109 Eng. St. Wall
200 +100 Rad
45-10 B.R.
89-9 Arc 4t
15-28 G.P.
41-28 12" 0
13-26 E.E. 15" Vit.
48.5-26 T.P.
89

FX
AM
G
MMc

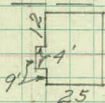
March 22, 1953
Cold Clear 90°

5

1-S-F



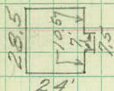
1 1/2-S-S



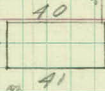
1 1/2-S-S



1 1/2 S-F



1 1/2 S-F



1-21

Road

Road
A 17

Road

3 17

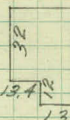
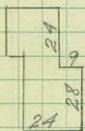
2-S-S

 $1\frac{1}{2}$ -S-S $1\frac{1}{2}$ -S-S

1-S-F



1-S-F

 $1\frac{1}{2}$ -S-S $1\frac{1}{2}$ S-S $1\frac{1}{2}$ S-S

+44.5 Edge B.T.

• ER
+34 36

+33 TP
49

G.P
+15 38

Iron
+106 28.5

• Road
7

100 ft Hill Canada

B.R
+90 6

Li/lac
+96 18

• ER
+94 74

Road
+84 38

SE Cor Ho
+74 39

• Stump
+81 21

TP
+70 35

8" Elm
+37 29.5

• Stump
+51 21

Rt Ho
+69

B.R
+56 21

End Hedge
+13 27

Ent
+23 Lt

Shed
+28 51

PP
+108 18.5

• CE
+79 29

Road
3-19

Stump
+96 21

Ent Par
+57 20.5

Stump
+72 29

TP
+99 33

14" Elm
+32 33

Ent
+49 31

Rt
+46 Fe

Fe Cor
+25 19

Ent
+51 19

Ent
+15 Lt

14" Elm
+102 30

Road
1-19

TP
+98 32

TP
+61 29

5" Elm
+36 32

PP
+36 20

5" CE
+58 30

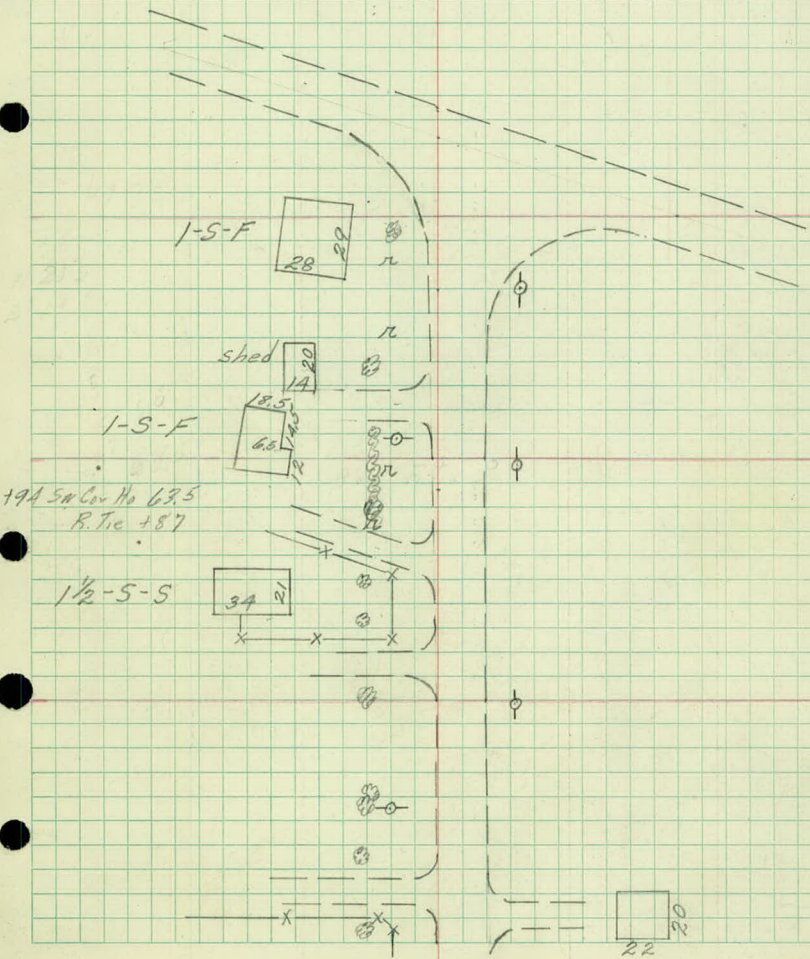
Ent
+21 Lt

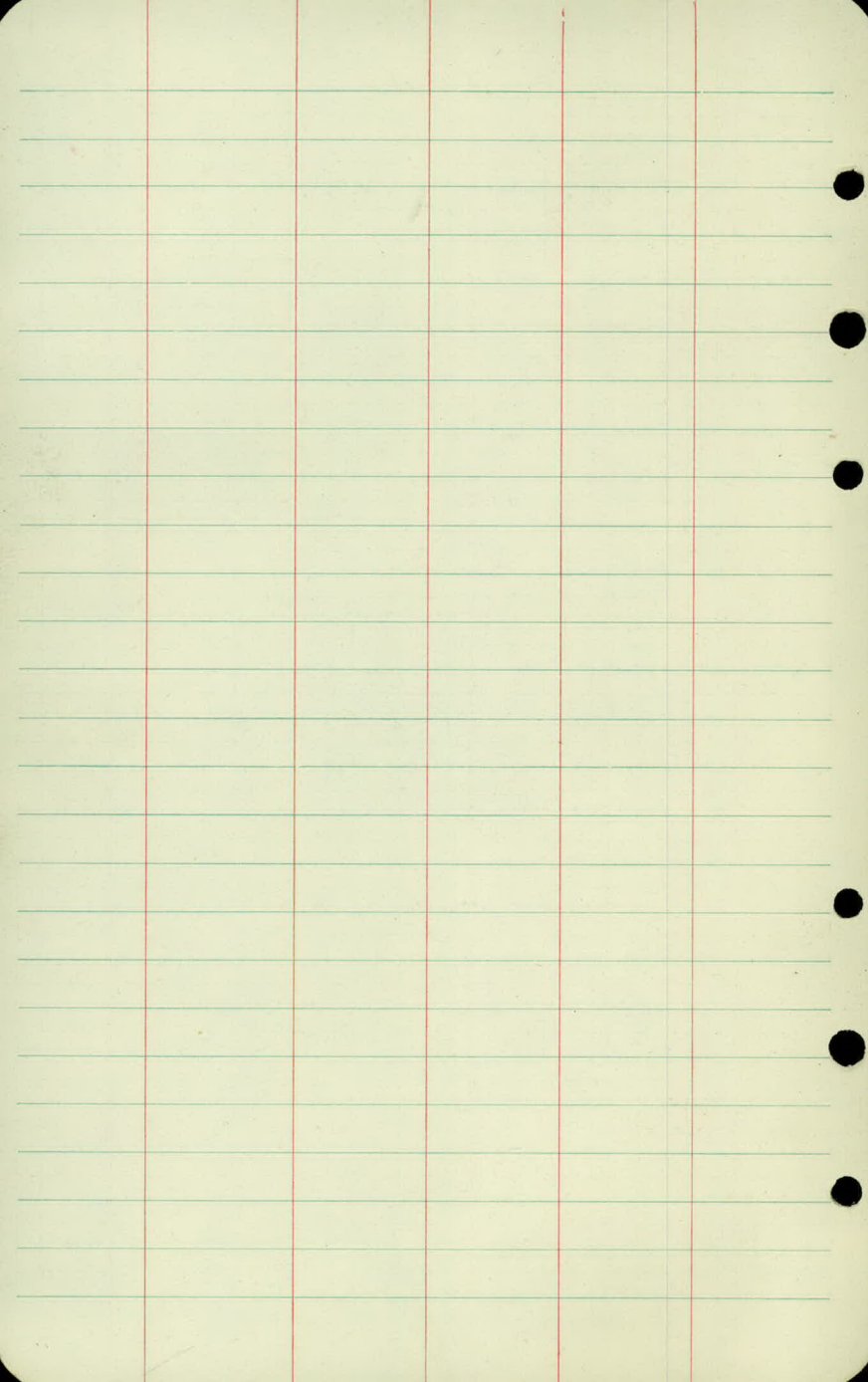
Fe Cor
+10 25.5

Ent
+13 Rt

Fe Cor
+105 19.5

SW Cor Gar
+102 74





Bench Levels

Sta	+	π	-	Elev
BM	7.36	926.21		(918.85)
TP	4.00	928.61	1.60	924.61
"	3.75	928.12	4.24	924.37
BM	0.51	928.12	0.51	927.61 (927.63)
T.P.	5.02	928.72	4.42	923.70
"	2.77	926.68	4.81	923.91
BM			7.87	918.81 (918.85)

FK
AM
LC
NMa

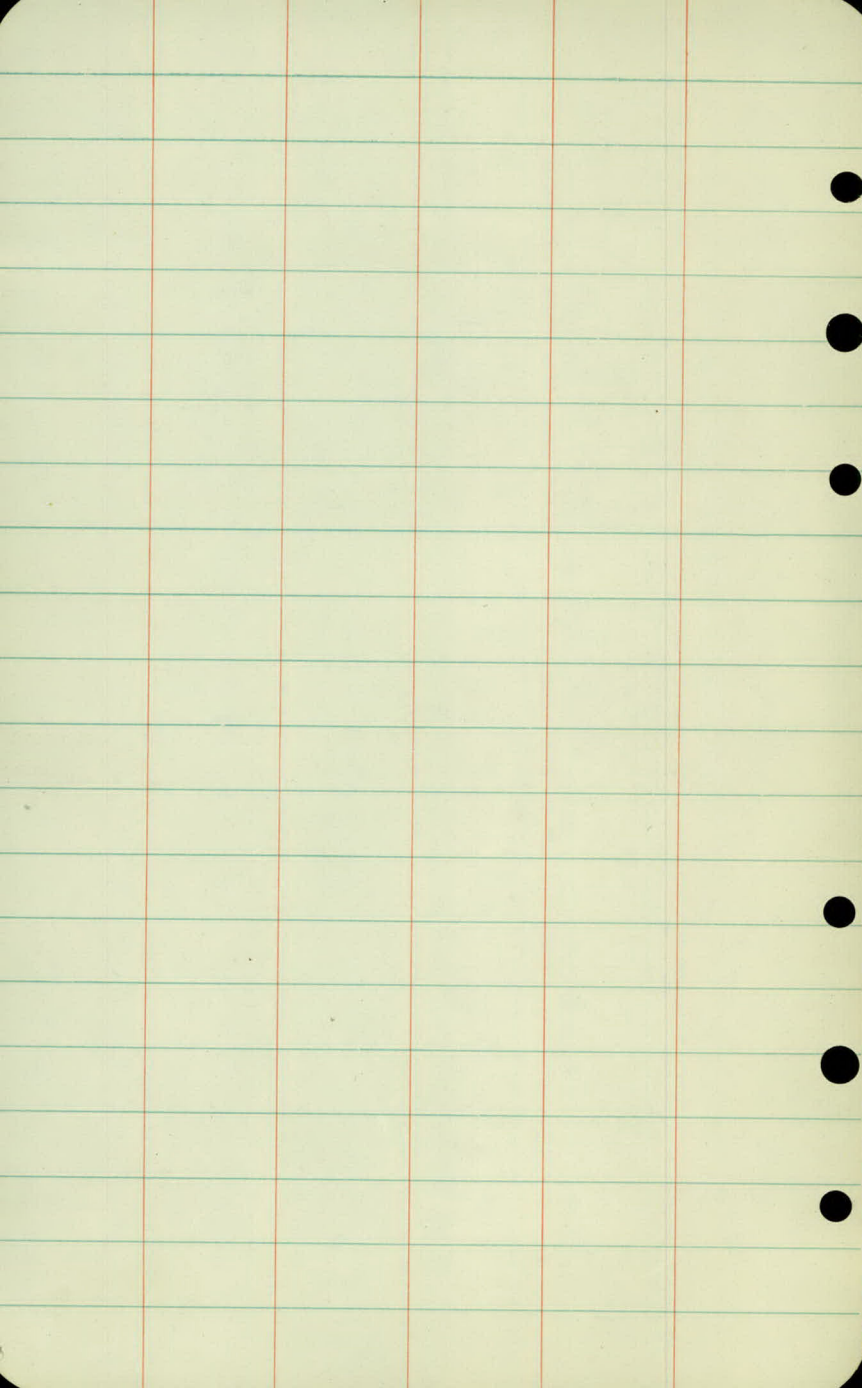
March 22, 1955
Cold Clear 70°

9

Spike in Arc Lt. Pole N.E. Cor. Little Canada Rd &
Lake Shore Ave.

N End ^{Front} Door Sill Ho #2665 Lake Shore Ave

Spike in Arc Lt. Pole N.E. Cor. Little Canada Rd
& Lake Shore Ave.



X-Sections

Sta + π - Elev.

B.M. 0.13 927.76

927.63

0-26

-20 $\pm$ Ditch

-14 shoulder

0+00

+19 Ditch

24
Front

R1

N. End Door Sill Ho. #2665 Lake Shore Ave.

15.63

12.13

48

FL 15" V/t

22.2

22.1

22.0

21.6

22.0

21.2

19.5

18.0

56 92

57 71

58 50

62 29

58 12

6.6

8.3

25

9.8

50



23.4

23.3

23.1

22.5

22.1

22.0

21.6

20.7

19.5

18.4

44 100

45 90

47 67

53 50

57 32

58 13

62 11

71 30

8.3

9.4

50



23.2

22.9

22.7

22.1

21.4

20.7

19.7

18.5

46 79

49 50

51 35

57 20

64

71

81

9.3

38

50



23.7

24.6

25.5

26.2

41 100

32 150

23 200

1.6 250

22.06

22.1

22.6

22.4

21.8

21.1

20.0

18.3

5.7 60

5.7 50

5.2 26

5.4 14

6.0

6.7

7.8

9.5

14

29

50



Pitch

Sta	+	X	-	Elev
-----	---	---	---	------

		927.76		
--	--	--------	--	--

0+33				
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+39				
-----	--	--	--	--

+62				
-----	--	--	--	--

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

/				
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Lt

Rt

2

23.3	22.2	21.7	22.3	22.5	22.2	21.5	20.0	19.0
4.5	5.6	6.1	5.5	5.3	5.6	6.3	7.8	8.8
50	40	31	17	8		14	31	50

✓

19.88
7.88
23.5
F.L. 10" V.t

20.07
7.69
18.5
FL 15" CM

23.0	20.3	20.3	21.6	22.0	22.4	22.1	21.3	19.9	19.9	20.5
4.8	7.5	7.5	6.2	5.8	5.4	5.7	6.5	7.9	7.9	7.3
24	19	17	15	11		15	21	23	25	28

23.1
4.7
39

22.9
4.9
50

✓

20.5
7.3
50

19.6
8.2
48

23.2	23.4	23.2	20.8	20.8	22.1	22.4	22.5	22.2	21.9	20.9	20.9
4.6	4.4	4.6	7.0	7.0	5.7	5.4	5.3	5.6	5.9	6.9	6.9
50	28	17	13	11	7		6	13	18	19	21

✓

20.9
6.9
50

21.1
6.2
25

21.4
6.4
24

Sta + π - Elev

927.76

1 + 13

+33

1 + 50

2

+16

+36

11

4

FL

20.57

7.19

22

FL 12" CM

20.86

6.90

22

FL 12" CM

23.5	23.5	23.4	20.9	20.9	22.2	22.5	22.9	22.6	22.0	21.3	✓
43	43	44	6.9	6.9	5.6	5.3	4.9	5.2	5.8	6.5	
50	32	16	12	10	7		7	15	28	50	

24.2	23.9	23.1	21.5	21.5	22.9	23.1	23.3	22.8	22.9	22.4	✓
36	3.9	4.7	6.3	6.3	4.9	4.7	4.5	5.0	4.9	5.4	
50	32	15	12	10	6		7	16	25	50	

25.1 ✓

21.33

6.43

10

FL 15" CM

21.44

6.32

10

FL 15" CM

Sta	+	π	-	Elev
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		927.76		
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2+50				
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BM	1.14	928.77	0.13	927.63 (927.63)
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2+85				
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+92				
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3				
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+13	✱	BLUWOOD AVE		
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+32				
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+50				
-----	--	--	--	--

LH

R1

24.1	24.2	24.0	22.0	22.0	23.1	23.7	23.8	23.3	23.7	23.3	✓
37	36	38	58	58	47	41	40	45	41	45	
50	38	15	11	9	7		8	16	31	50	
N. End Front Door Sill 48" 26.65 Lake Shore Ave											

24.0	24.3	24.2	22.3	23.7	23.9	24.1	23.7	23.9	24.0	✓
4.8	4.5	4.6	6.5	5.1	4.9	4.7	5.1	4.9	4.8	
50	33	20	11	9	6	8	17	29	50	

21.90
6.87
10
FL 15" CM

Top

5.62	25.4	24.9	24.2	24.1	24.3	23.9	24.2	24.5	24.6	✓
3.4	3.9	4.6	4.7		4.5	4.9	4.6	4.3	4.2	
50	31	14			8	18	34	50		

28.2	26.9	25.6	24.3	24.4	24.1	24.2	24.3	✓
0.6	1.9	3.2	4.5	4.4	4.7	4.6	4.5	
140	100	50		8	19	33	50	

25.0	24.6	24.5
38	4.24	3
50	31	14

22.9	24.0	24.4
Top Pen 5.9	4.8	4.4
5.20	10-8	1
9.5		

24.4	24.2	24.0	23.9
4.4	4.6	4.8	4.9
8	20	31	50

26.0	25.5	24.5	22.6	24.0	24.4	24.5	24.3	24.2	23.9	24.0	✓
2.8	3.3	4.3	6.2	4.8	4.4	4.3	4.5	4.6	4.9	4.6	
50	32	14	10-8	5		8	20	35	50		

STA	+	∇	-	ELEV
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		928.77		
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4+00				
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+50				
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5				
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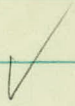
+50				
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+90				
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6				
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T.P.	4.20	928.84	4.13	924.64
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✓	LT	A	PT
26.9			
Ho 26.6		24.2	24.0
1.9 2.2 3.8 4.7 6.0 4.9 4.6 4.6 5.0 4.8 4.8	24.1	24.2	24.0
50 22 13 10-8 5	23.9	24.2	24.0
		23.8	
		23.8	



26.2	25.5	24.8	23.6	24.1	24.0	23.9	23.4	23.2	23.4	23.0	22.8
2.6 3.3 4.0 5.2 4.7 4.8 4.9 5.4 5.6 5.4 5.8 6.0											Ho
50 23 14 10 6 9 17 24 29 50											22.8



✓											
26.7	26.4	25.8	24.4	23.6	23.7	23.6	23.0	22.7	22.6	22.2	
Ho 2.1 2.4 3.0 4.4 5.2					5.1	5.2	5.8	6.1	6.2	6.6	
50 31 18 10					9	21	24	36	50		



✓											
27.4	26.7	26.0	24.2	23.3	23.6	23.6	23.1	23.1	22.9	22.8	
Ho 1.4 2.1 2.8 4.6 5.5 5.2					5.2	5.2	5.7	5.9	5.9	6.0	Ho
50 30 17 7					9	20	30	50			22.8



25.7	25.6	24.7	23.8	23.6	23.6	23.6	22.8	22.6
3.1 3.2 4.1 5.0 5.2 5.2 5.6 6.0 6.2								
50 30 11 7 9 21 35 50								



24.8	24.5	24.1	23.6	23.7	23.2	22.8	22.5
4.0 4.3 4.7 5.2 5.1 5.6 6.0 6.3							
50 39 17 10 20 32 50							



NAIL IN - T.P.

STA +  - ELEV

928.84

6+10 & AUSTRALIAN LT

+20

+26

+31 & AUSTRALIAN RT.

+50

7

+50

LT

2

RT

25.9	24.9	24.5	24.0	23.6	23.6	23.2	22.7
2.9	3.9	4.3	4.8	5.2	5.2	5.6	6.1
95	50	25	13		10	21	50

✓

24.4	24.2	23.9	23.6	23.7	23.2	23.2	22.9
4.4	4.6	4.9	5.2	5.1	5.6	5.6	5.9
50	38	15		10	21	34	50

✓

25.6	25.5	24.4	23.6	23.6
3.2	3.3	4.4	5.2	5.2
50	30	12	9	

✓

25.1	24.9	24.5	23.7	23.6	23.7	23.2	23.0	22.7	22.3
3.7	3.9	4.3	5.1	5.2	5.1	5.6	5.8	6.1	6.5
50	34	16	11	5.2	10	33	50	100	141

✓

26.1 ✓

H0

2.7

25.5	24.8	24.3	23.5	23.4	23.6	23.4	23.5	23.7	23.3
3.3	4.0	4.5	5.3	5.4	5.2	5.4	5.3	5.1	5.5
50	30	11	8		10	21	24	36	50

24.1

4.7

50

24.2

4.6

22

23.8

5.0

10

23.5

5.3

23.6

5.2

10

23.4

5.4

23

23.9

4.9

32

23.8

5.0

50

23.9

4.9

50

✓

STA	+	π	-	ELEV
-----	---	-------	---	------

		928.84		
--	--	--------	--	--

8700				
------	--	--	--	--

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

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

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

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

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

LT

4

PT

23.6	23.8	24.0	23.5	23.3	23.6	23.5	23.7	23.7
5.2	5.0	4.8	5.3	5.5	5.2	5.3	5.1	5.1
50	30	10	8		10	23	25	50



24.3	24.1	24.1	23.9	23.7	23.1	23.8	23.5	23.8	23.9	23.8	23.9	24.2
4.5	4.7	4.7	4.9	5.1	5.1	5.0	5.3	5.0	4.9	5.0	4.9	4.6
50	35	15	7		10	21	27	33	36	50		

HO

24.4	24.4	24.4	24.2	24.0	23.8	23.9	23.5	23.7	23.2	22.5
4.4	4.4	4.4	4.6	4.8	5.0	4.9	5.3	5.1	5.6	6.3
50	35	19	10	6		10	22	29	50	

GARAGE

23.4	24.2	24.1	23.3	23.6	23.7	22.9	23.4	22.5
5.4	4.6	4.7	5.5	5.2	5.1	5.9	5.4	6.3
50	27	9	6		9	21	29	50



23.3	23.5	23.1	22.5	22.6	22.6	21.9	22.0	21.8
5.5	5.3	5.7	6.3	6.2	6.2	6.9	6.8	7.0
50	32	13	9		10	22	36	50



23.2	22.7	22.4	22.0	21.8	21.9	21.9	21.6	21.3	21.7	21.4
5.6	6.1	6.4	6.8	7.0	6.9	6.9	7.2	7.5	7.1	7.4
50		31	12	6		9	18	25	28	50



STA + ∇ - ELEV

928.84

11+00

B. M. 7.21 926.06 10.02 918.82 (918.85)

11+50

+80

12

+33 ∇ LITTLE CANADA

B. M. 7.22 918.84 (918.85)

1.22 928.85 927.63

5+12

5

23.7

LT						RT						
✓ 23.5												✓
40	23.2	22.9	22.1	21.5	21.6	21.5	20.8	21.7	21.7			
5.3	5.6	5.9	6.7	7.3	7.2	7.3	8.0	7.1	7.1			
	50	40	23	8		8	23	30	50			

SPIKE-IN-ARC-LITE-POLE-N.E-COR LITTLE-CANADA

+ LAKE-SHORE-AVE

✓ 22.1												✓
BAR	22.1	21.7	21.2	21.3	21.0	20.3	21.9	21.6				
4.0	4.0	4.4	4.9	4.8	5.1	5.8	4.2	4.5				
50	35	19	15		10	24	32	50				

✓ 22.1												✓
14.0	21.4	21.1		21.2	21.0	20.1	20.6	21.1				
4.0	4.7	5.0		4.9	5.1	6.0	5.5	5.0				
38	23	11			15	35	40	50				

22.1	22.0	21.1	21.0	21.1		20.9	20.5	20.4	20.3			
4.0	4.1	5.0	5.1	5.0		5.2	5.6	5.7	5.8			
50	40	27	12			25	50	70	73			

21.1	21.0	21.0	21.0	21.0	20.7	20.3	20.0	20.1				✓
5.0	5.1	5.1	5.1	5.1	5.4	5.8	6.1	6.0				
200	150	100	50		50	100	150	200				

Spike in Arc Lite pole NE Cor Little Canada Rd + Lake Shore Ave

24.9	25.5	24.9	23.8	23.2	23.7	23.1	22.6	22.6	22.0	21.3	20.3	
2.9	3.4	4.0	5.1	5.7	5.2	5.8	6.3	6.3	6.8	7.6	8.0	
50	36	24	13	8	23.70	20	25	34	50	75	100	Free

STA

+

Δ

-

ELEV

Oct 17, 1956

19

Lake Shore Ave

West Ditch Grade
Profile

Sta + π - Elev

BM 1.41 929.04

927.63

0+62

1

+50

2

+16

+36

FK
RG
KP
JT

\$ Oct 17/1956

20

LT

Top N End Front Door Sill H^o #266³ Lake Shore Ave

20.0k

9.00

FL 15"CM

20.7

8.3

20.8

8.2

21.4

7.6

21.29

7.75

FL 15"CM

21.56

7.48

FL 15"CM

Sta	+	π	-	Elev
		929.04		

2+50

+92

3+32

+50

A

+40

Oct 17, 1956

21

17

21.99

7.05

21.86

7.18

FL 15" CM

21.90

22.21

6.83

FL 15" CM

22.6

6.4

22.8

6.2

22.75

6.29

FL 15" CM

Sta + π - Elev

92904

4+60

5

+50

6 on Australian Ave

+50

7

+50

£ Ditch

£ Oct 17, 1956

22

21

23

22

6, 29

FL 15 CM

23.3

5.7

23.1

5.9

23.92

5.12

23.65

5.39

23.53

5.51

23.50

5.54

