

BK. 13 Dr. 14A

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

Plan Survey

First St. - No. St. Paul

From 7th Ave. To 1800' North

Road Acc't. No. _____

Date Filed _____

File _____

Plan Survey

1ST St.
No. St. Paul
7TH Ave to 1800' No.

INDEX

Align 2-3

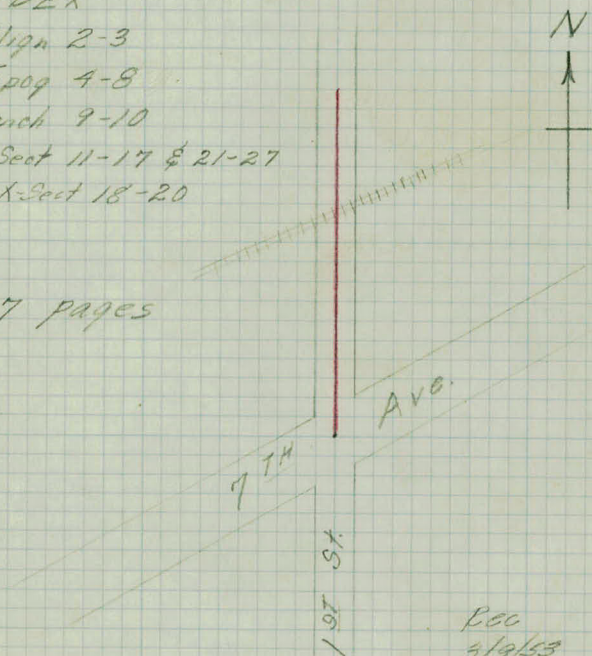
Topog 4-8

Bench 9-10

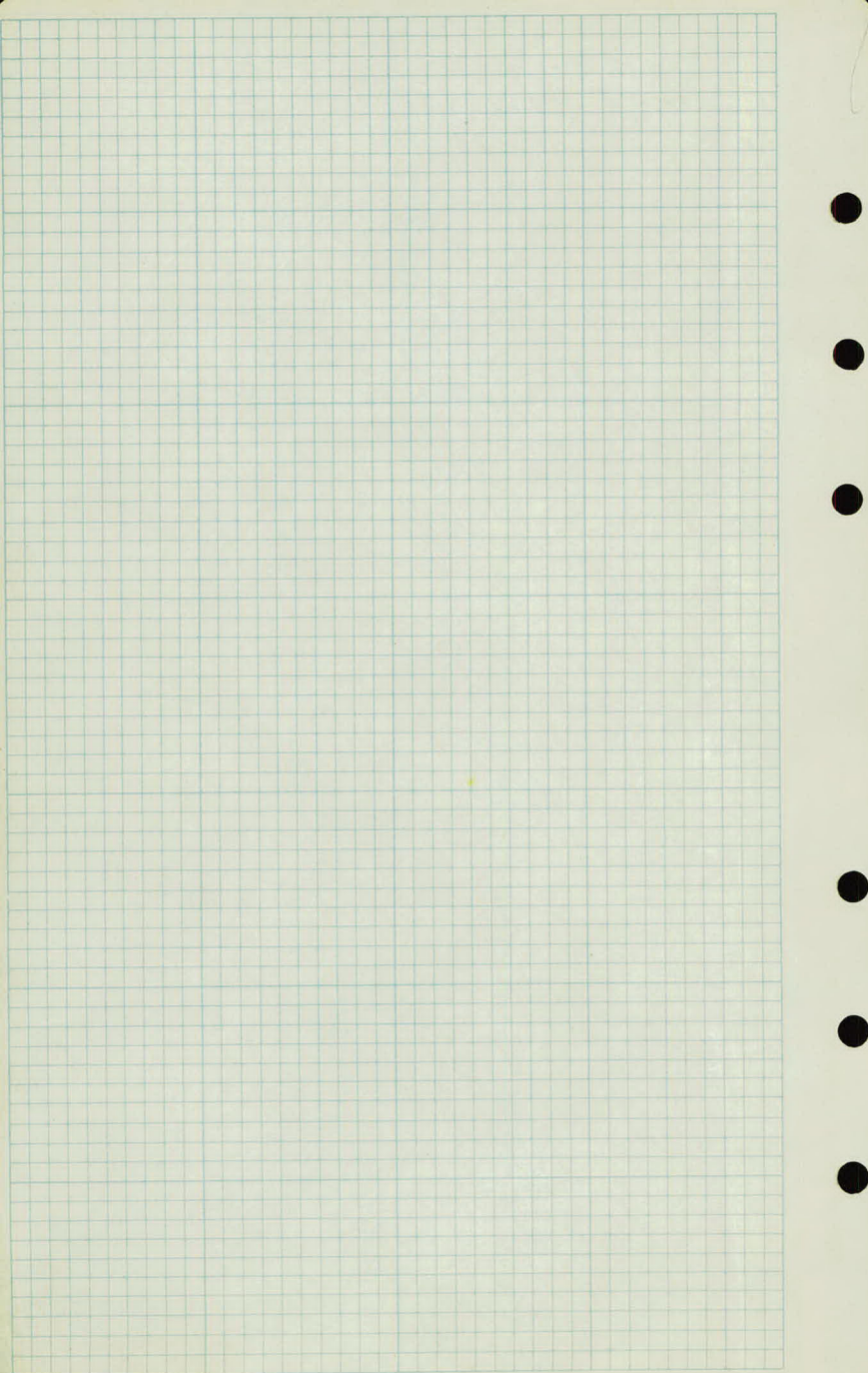
X-Sept 11-17 & 21-27

R.R. X-Sept 18-20

27 pages



Rec
3/9/53



Alignment

Sta Point ΔL ΔR

16+21.80 P1 0°04'

11+80.90 $\pm$ Ent Left Parallel to RR R/W

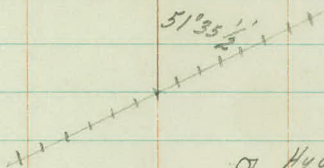
10+91.65 $\pm$ Main Line RR Track

0+00 $\pm$ 7th St

NE Cor Base
325 1st St.

68.63

75.35



Hyd

19.80

39.60 Base Lamp standard

Hyd shut off Bolt

Co Rd "B" 40.32
118.90

40.19

Cor
found.Cor.
foundation

Sta Point ΔL ΔRT

21+80 Approx Φ Castle Ave.

18+52.34 P.O.T.

CO. RD "C"

AA. 78 @ 24" Oak

30.70

30.64

18

* Light Pole

O.P.P.

X

X

Cyclone
Fe. Cor

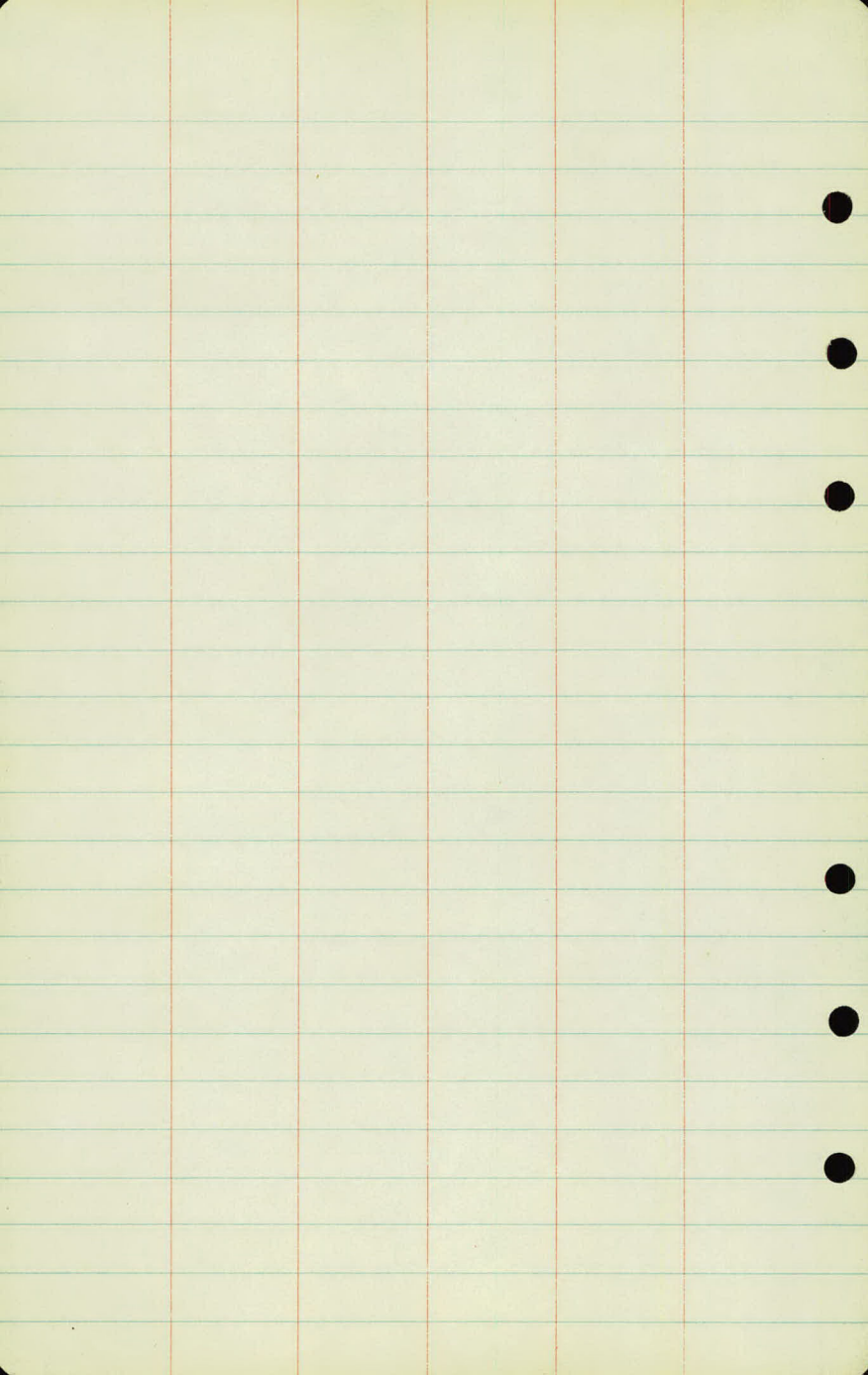
X

X

A7.28

47.25

N.W. Cor. Fo.



Topography

+ 63 Fe Cor 33'
 + 58 PP 34
 + 52 End 25' Cylind. F. 34
 + 52 Cor Bldg 35
 + 43 PP 25
 + 26 Range tie Bldg

+ 77 Beg Brick Bldg 33
 + 59 PP R1
 + 41 Cor Bldg 32 (Frame)

4 10 13 Bldg. 55'

+ 92 Hedge Row 34'
 + 90 Fe Cor 33
 + 64 Beg W. Pk Fe 33
 + 47 PP 21
 + 35 GP 28
 + 34 SE Cor RPH Bldg 33
 + 08 PP 25
 3 + 00 MH 32 13 13

+ 74 SCor Bldg 90
 + 50 PP 26
 + 25 Ent + 9 Beg Park Arc.
 + 20 Hyd 25

+ 93 Ent
 + 67 Range tie to Fe Lt 142
 + 62 Fe Cor 31

+ 44 PP 23
 + 42 Fe Cor 31
 + 49 GP 26
 + 16 Ent 31
 + 34 PP 24
 + 02 Range tie RPH Rt
 14 13

2

+ 98 PP 23'
 + 80 GP 22'

+ 81 GP 26
 + 53 12" Oak 43
 + 52 TP 23

1 + 108 TP 24'
 Pitch 49' 15 14

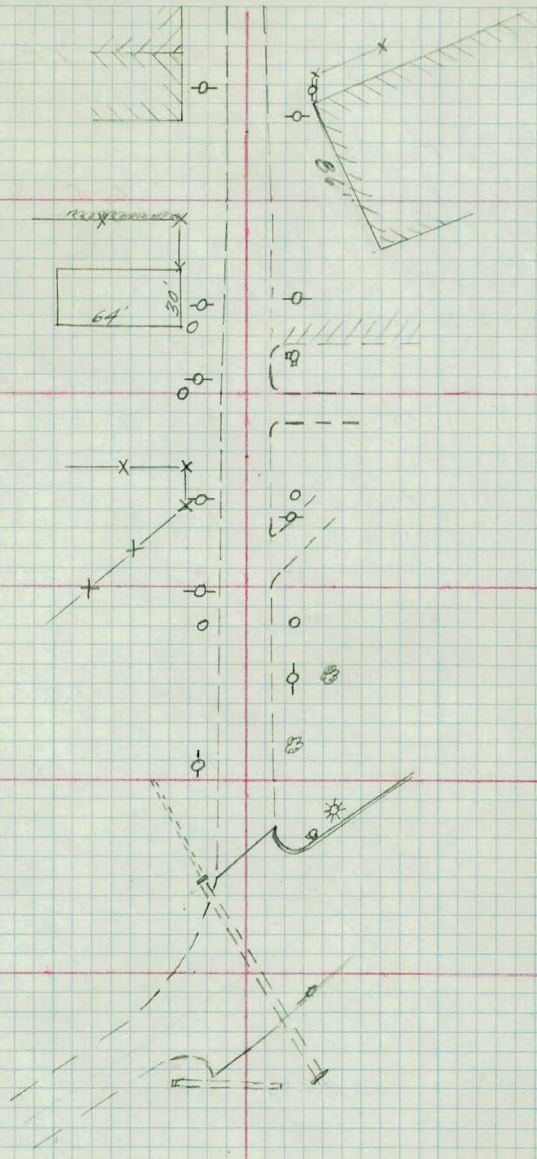
+ 19 30" Willow 25'
 + 85 Light Standard 44
 + 76 End Radi Conc Pav 16'
 + 71 Hyd 35
 + 65 Beg Rad, Curb 39.5

+ 51 Cor Slab 15' + 63 3 Edge Conc Pavement
 + 48 48" Man. Box Culvert 23
 + 35 Radi 19
 + 20 Radi 25
 0 + 00 Radi 37

- 10 CB 33

- 40 Edge Pav.

- 57 4' x 2' Man. Box End 37' — Rt.
 39' - 57 12" x 58 Vit x-Drain 19'



+ 84 Arc Light 29
+ 75 Road 27 + 7

+ 74 TP 25

+ 65 End RR X Drain 72?

+ 40 Road 31 + 59
+ 18 TP 35

E. Rail 57'

+ 77 TP 25
+ 91.65 Main Track
+ 79 N. Rail side track
+ 73 S. Rail side track
+ 50 E. Rail 29

+ 25 PP 21

E. Rail 4'

+ 91 E. Rail

+ 80 TP 25

+ 50 E. Rail 16.5

9) E. Rail 34 30 + 19

Fe Cor 39

+ 75 Road 00
+ 68 PP 21
+ 60 Road 11
+ 50 E. Rail 48

+ 60 Road
+ 50 Fe 45
+ 46 TP 25

+ 34 Bq Radius 6

8

7 14 Fe 60

+ 29 PP 21

+ 14 TP 25

7

9 11

+ 85 End 16' loading dock 33

+ 65 Twin 6" Box Elder 39

+ 35 Cor Loading dock 33 + 54
+ 29 Cor Brick Bldg 33

6

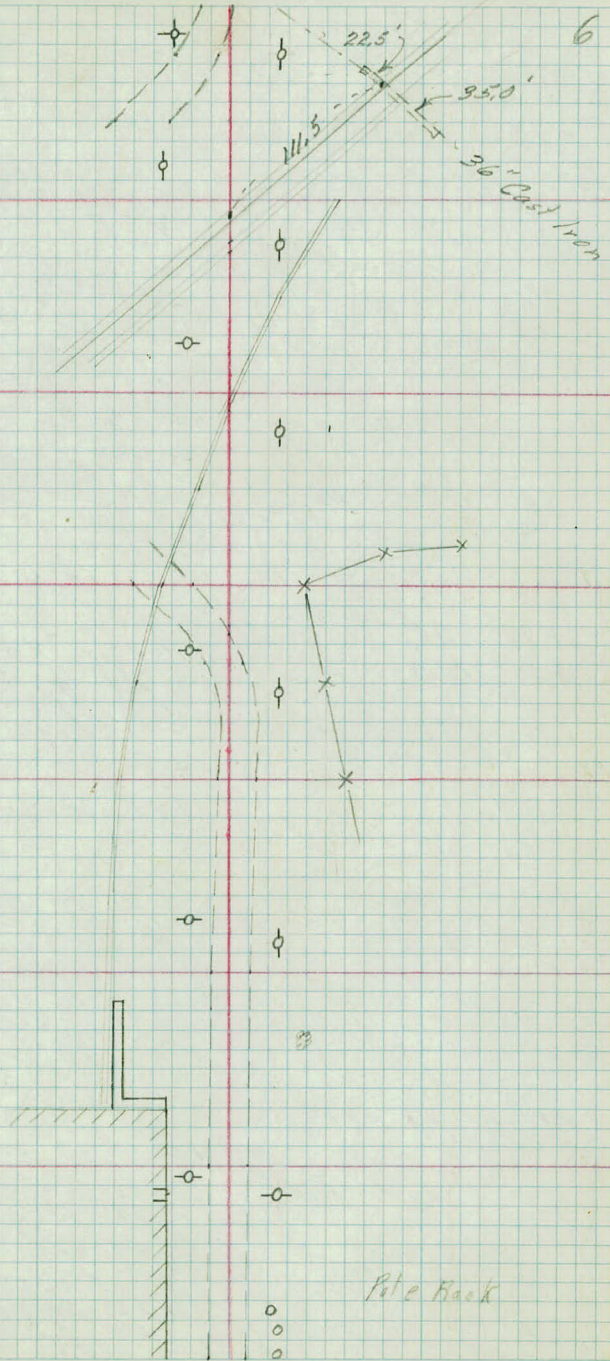
+ 95 PP 21

+ 85 Loading dock 33

+ 85 PP 25

5

+ 26 G.P. 21
+ 15 P/c 25
+ 02 P/c 20



12 11 Fe 32
+99 Range tie to N

+95 Range tie to S
+87 6 Cyclone to Cor 32

SE

+38 SW Cor Bas Ho 58
+16 & 25' Walk 34
18 12 12
+58 PP 22
+43 5 Steps 22-30
+17 Ent
+10 SW Cor Ho 49
+06 4pc Hedge 40
+68 5' Steps 23.5 32
+59 SW Cor Ho 32
+50 12" Elm 37
+49 2" Pine 48
+43 8" Pine 37
+26 Pine 43
+25 Pine 23
+14 Ent
+07 NW Cor Ho 61
+05 8' Elm 43
+38 Ent to 33
+37 20' Box Elder 31
+31 Shrub 33
+24 Shrub 33
+27 Ent
+34 SW Cor Ho 41
+20 10' Box Elder 42
+20 Cor Hedge 32 & 50
+07 16" Pine 47

S.E

+87 SW Cor Ho 69
+38 6" Box Elder 37
+18 SE Cor Ho 67
17 +00 Water S.O. 26 10 10
+94 NE Cor Ho 67
+69 4" Pinyon Ash 36
+39 6" Ash 46
+29 12" Box Elder 39
16 10 10
+82 PP 24
+68 15" Oak 43
+44 Beech hedge 33
+38 Ent
+31 Eng Hedge 42
+10 Stump 31
+94 Stump 31
+32 Hyd 22
+12 1A Box Elder 50
+12 Stumps 31 & 39
+11 PP 24
+11 100 Stump 31
+89 Stump 31

Basement

+92 SE Cor House 68
+81 Post Row 33
+34 L Kent L
+27 SE Cor House 60
15 10 10
+94 Stump 31

+09 Ent L
14 9 11
+100 Stump 31

+21 4" Oak 28
13 10 10

+40 Pitch 80
+12 W End 30" x 22" CM 17
12 +04 Range tie ditch 16 1
+94 TP 24
+89 Stump 38
+36 Trip 5" PP 41
+36 Trip 5" PP 48
+26 4-6 Pines 46
+26 Stump 37
+10 E End 30" x 22" CM 5
Pitoh 22

24 30

26 26

38 28

24 36

25 28

26.8 0.000
3.8 19.3
22.5 12.3
19.8
34.6

X
X
12
38

50 22

191 Ext
180 10 Elm 37

+ 94 3' Walk 35
+ 83 8' E/n 43
+ 67 4' Calc/len 35
+ 56 shrub 35
12
20
19
40

X
X

Like

n
n

n
n
n

n

n

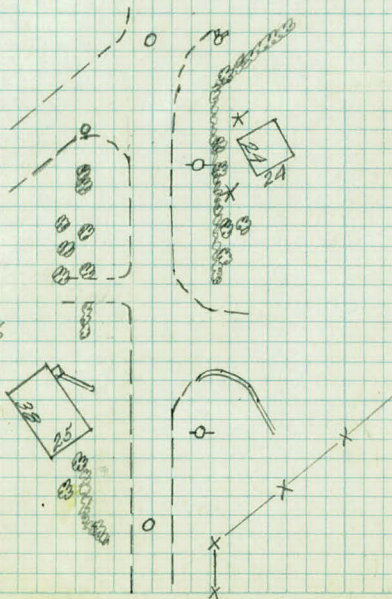
+99 End Radi 13	+100 E Castle 22
+84 M H 1	+89 End Radi 30
+80 E Castle Ave	+87 Hud 34
+79 Beg Radi 27	+60 Beg Radi 15
+37 End Radi 39	+68 18 Beg Elder 38
+37 Radi 34	+61 Corn Hedge 33
+23 Beg Radi 16	+47 8" Pine 42
+16 11" Tree 35	+53 Cor Ho 63
+10 10 Tree 35	+35 Cor Ho 44
21	+31 12" Beg Elder 36
+79 6" Apple 45	+21 PP 23
+66 10" Apr 33	+20 15" Beg Elder 36
+62 12" Apple 44	+107 Apr 40
+56 Ent	9
+47 End Hedge 34	+18 Hedge 33
+32 Beg Hedge 35	+89 15" Beg Elder 37
+18 N Cor Ho 36	+75 12" Beg Elder 37
+12 E Walk 49	+67 End Radi 11
+105 E 2' Walk 32	+60 Beg Hedge 33
20	+46 Beg Radi 30
+84 Cor Ho 32	+28 2" Ent
+70 Cor Ho 32	+08 End Radi 50
+67 18 Beg Wind 39	+15 Curb 37
+66 End Hedge 34	+11 Beg Radi Curb 24
+53 1A Beg Elder 44	9
+36 Cor Hedge 37	Curb 35
+34 M H 2	+95 Beg Radi 10
+24 Beg Lilac Hedge 29	+82 PP 23
19	+24 Fe Cor 32
11	12
12	Fe 32

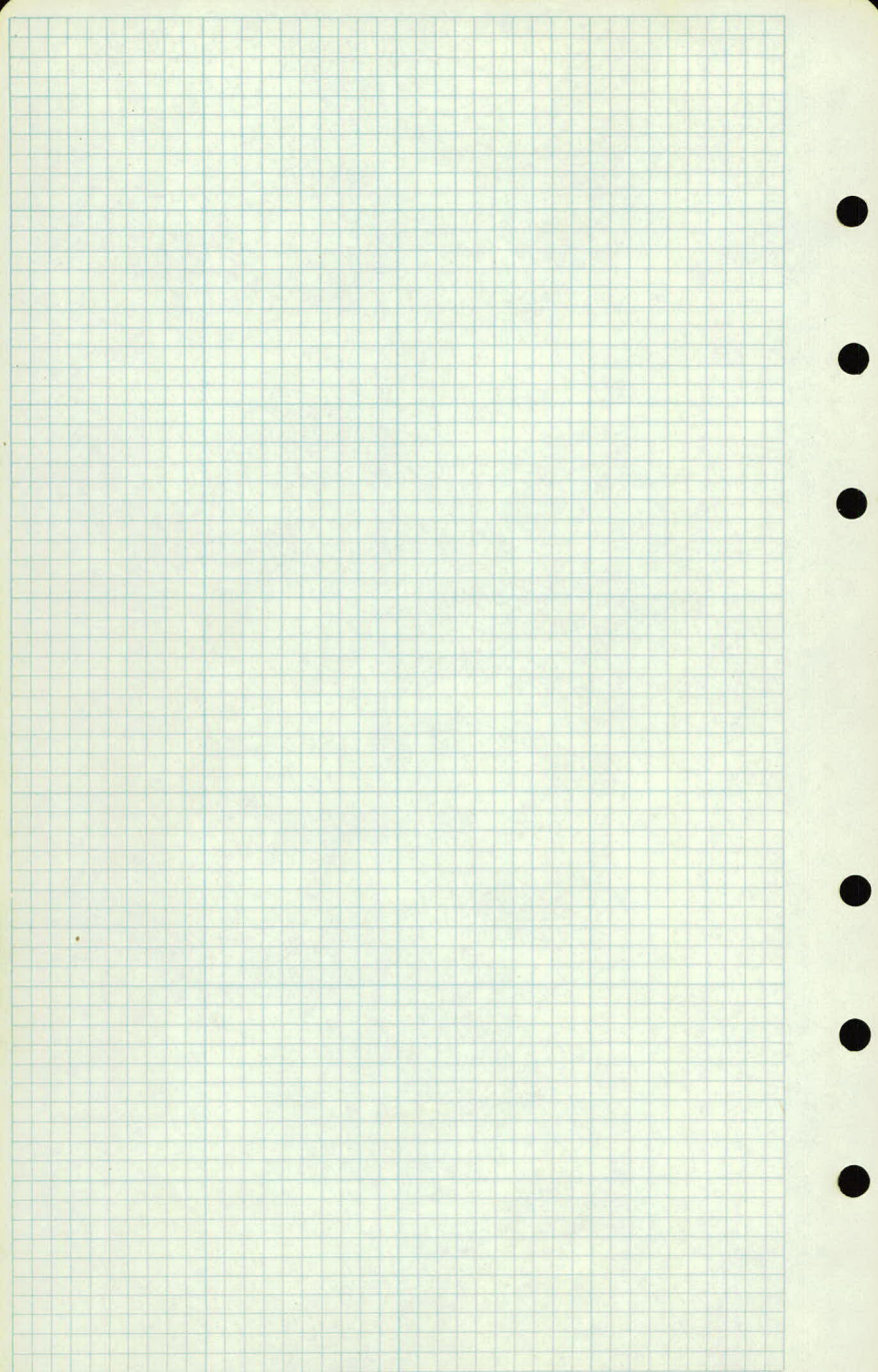
+50 2 Castles 42

+40 Water So. 34

+93 12" Apple 46

+87 12" Tree 34





Bench Levels

Levels Page 17

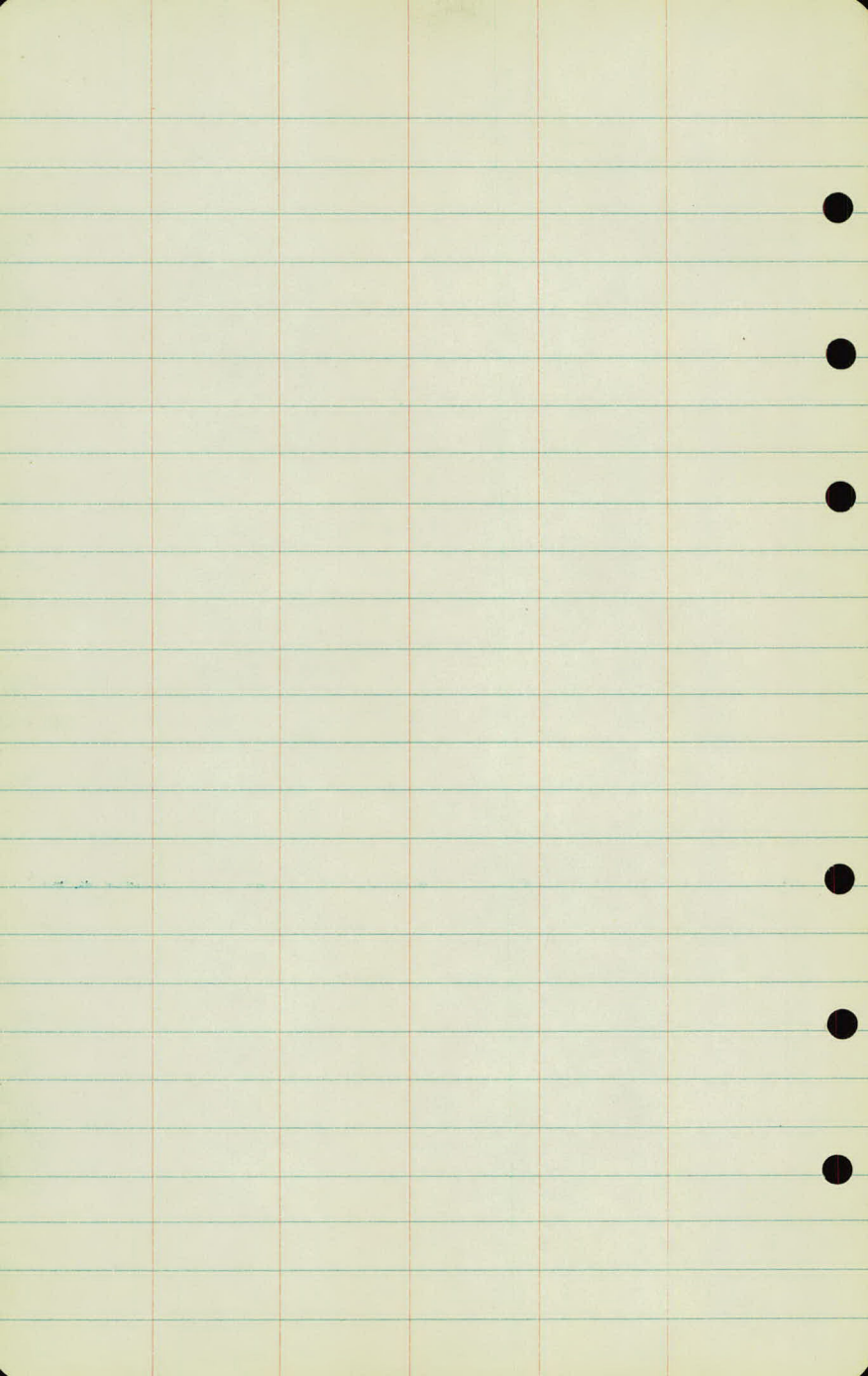
BM 9.38 974.58 . 965.20

1.12 969.74 5.96 968.62

BM 1.64 968.10

Top Shut off. Bolt Hyd Bl. Sta 14+32

Top Hyd S.E. Cor 1st St & Castle Ave.



x-sections

Sta + π - Elev

BM 1.44 963.15

961.71

0+00

+50

1

+50

2

+50

3

+50

2

Top Hyd NE Cor 7th Ave & 1st St.

60.5

2.7

59.6

3.6

58.6

4.6

58.2

5.0

58.1

5.1

58.0

5.2

58.2

5.0

57.8

5.4

Use other set of notes to Sta. 4+50
(X sections)

Sta + π - Elev

963.15

4

+50

TP 1.85 960.03 4.97 958.18

5

+50

6

+50

7

+50

57.0
6.2

56.3
6.9

56.5 55.3 55.3 55.2 55.1 55.5 56.6 56.4 ✓
2.5 4.7 4.7 4.8 4.9 4.5 3.4 3.6
33 24 18 14 17 28 50

54.9 54.7 54.6 54.7 54.9 55.4 56.4 57.0 ✓
5.1 5.3 5.4 5.3 5.1 4.6 3.6 3.0
33 24 14 14 18 30 50

56.1
3.3
Loading
Barway

54.4 54.0 53.9 54.0 54.3 54.8 56.5 56.7 ✓
5.6 6.0 6.1 6.0 5.7 5.2 3.5 3.3
33 21 13 14 17 29 50

3.3
Loading
Dock

53.6 53.8 53.5 53.8 54.0 54.3 55.8 56.5 ✓
6.4 6.2 6.5 6.2 6.0 5.7 4.2 3.5
50 32 16 14 18 29 50

52.5 52.3 52.8 53.4 53.3 53.7 53.9 55.6 55.6 ✓
7.5 7.7 7.2 6.6 6.7 6.3 6.1 4.4 4.4
50 36 20 14 13 17 30 50

51.2 51.7 52.0 52.6 53.0 53.4 53.7 53.5 53.7 54.8 ✓
8.8 8.3 8.0 7.4 7.0 6.6 6.3 6.5 6.3 5.2
50 38 27 17 9 20 26 39 50

Sta + A - Elev
960.03

8

+50

9

TP 5.99 961.08 4.94 955.09

+25

+50

+71

10

+20

+35

+50

+66

+50

+79

+91. E Main Track

2

51.7	50.8	50.9	52.7	53.2	53.3	53.5	54.1	54.8	55.6	✓
83	92	91	73	68	67	65	59	52	44	
50	44	33	18	8		19	25	38	50	

53.78	52.6	52.3	52.7	53.7	54.0	53.9	54.3	54.3	54.8	55.5	✓
6.25	7.4	7.7	7.3	6.3	6.0	6.1	5.7	5.7	5.2	4.5	
50	45	38	28	18	11		14	20	33	50	

Top Rail

54.2	54.45	55.0	54.8	54.3	54.2	54.8	55.5	✓
5.8	5.58	5.0	5.2	5.7	5.8	5.2	4.5	
50	35	26	13		14	28	50	

Spk in floor Long Top Rail

54.1	53.9	53.7	55.2	55.4	53.3	53.9	53.5	53.3	52.3	✓
7.0	7.2	7.4	5.9	5.6	5.8	7.2	7.6	7.8	8.8	
50	45	35	27	17	7		11	25	50	

Top Rail

53.0	53.3	54.4	55.1	56.4	56.6	57.2	56.7	54.8	53.6	52.1	52.5	✓
8.0	7.8	6.7	5.4	4.7	4.5	3.96	4.4	6.3	7.5	8.4	8.6	
50	34	21	13	7		4	11	17	22	37	50	

Top Rail

56.62	58.3	57.6	56.2	53.3	52.6	53.0	53.7	57.4	58.16	57.5	54.2	✓
2.46	2.8	3.5	4.9	7.8	8.5	8.1	7.4	3.7	2.92	3.6	6.9	
36	24	18	10	4		6	13	22	36	43	50	

Top Rail

57.8	58.90	59.00	58.59
3.3	2.18	2.08	2.49
80	71	63	46
TR	T.R.	Top R.	

52.5	53.1	51.1	58.4	59.77	59.3	59.89	59.51	59.61	59.21	✓
8.6	8.0	4.0	2.7	1.31	1.8	1.19	1.57	1.47	1.87	
50	40	22	11	5		4	18	26	54	

TR T.R. TR. TR

Sta + X - Elev

961.08

11 ✓

+25 ✓

+50

+60

12

+10

+12

+50

13

TP 11.85 970.93 2.00 959.08

2.6

$\dot{52.5}$ $\dot{52.5}$ $\dot{53.5}$ $\dot{55.1}$ $\dot{57.5}$ $\dot{58.6}$ $\dot{58.9}$ $\dot{59.91}$ $\dot{60.01}$ $\dot{59.66}$ $\dot{59.73}$ $\dot{59.82}$
 $\dot{55.1}$ $\dot{57.5}$ $\dot{58.6}$ $\dot{58.9}$ $\dot{59.91}$ $\dot{60.01}$ $\dot{59.66}$ $\dot{59.73}$ $\dot{59.82}$

8.6 8.6 7.6 8.0 3.6 2.5 2.2 1.7 1.07 1.42 1.35 1.6
 50 31 27 18 8 4 ~~2~~ 6 14 27 36 58
 TR TR TR TR TR TR

$\dot{51.1}$ $\dot{50.9}$ $\dot{52.8}$ $\dot{53.1}$ $\dot{53.6}$ $\dot{53.1}$ $\dot{53.8}$ $\dot{56.7}$ $\dot{59.5}$ $\dot{60.31}$ $\dot{60.4}$
 10.0 10.2 8.3 8.0 7.5 8.0 7.3 4.4 1.6 0.69 0.64
 50 42 36 22 8 9 19 32 41 50

10.0 10.2 8.3 8.0 7.5 8.0 7.3 4.4 1.6 0.69 0.64
 50 42 36 22 8 9 19 32 41 50
 Top Rail TR

$\dot{50.4}$ $\dot{51.5}$ $\dot{51.1}$ $\dot{51.1}$ $\dot{51.4}$ $\dot{51.5}$ $\dot{50.7}$ $\dot{50.1}$ $\dot{50.1}$ $\dot{50.1}$ $\dot{50.0}$
 10.7 9.6 10.0 10.0 9.7 9.6 10.4 11.0 11.0 11.0 11.1
 50 43 41 27 14 7 11 21 31 50

$\dot{49.1}$ $\dot{49.3}$ $\dot{51.2}$ $\dot{51.6}$ $\dot{51.9}$ $\dot{51.9}$ $\dot{50.7}$ $\dot{50.4}$ $\dot{49.5}$ $\dot{49.2}$ $\dot{50.9}$ $\dot{51.5}$
 12.0 11.8 9.9 9.5 9.2 9.2 10.4 10.7 11.6 11.9 10.2 9.6
 50 25 20 9 4 9 25 27 29 35 50

48.07

13.01

FL 30" CM

47.54

13.54
 17
 FL 30" CM

$\dot{49.0}$ $\dot{49.0}$ $\dot{50.4}$ $\dot{52.1}$ $\dot{52.7}$ $\dot{52.9}$ $\dot{53.0}$ $\dot{52.7}$ $\dot{52.0}$ $\dot{52.4}$ $\dot{53.2}$
 12.1 12.1 10.7 9.0 8.4 8.2 8.1 8.4 9.1 8.7 7.9
 50 31 23 16 13 13 17 25 36 50

$\dot{50.3}$ $\dot{50.2}$ $\dot{52.0}$ $\dot{54.3}$ $\dot{54.6}$ $\dot{54.8}$ $\dot{54.4}$ $\dot{54.6}$ $\dot{52.9}$ $\dot{52.5}$ $\dot{53.0}$
 10.8 10.9 9.1 6.8 6.5 6.3 6.7 6.5 8.2 8.6 8.1
 50 38 24 15 11 13 18 23 33 50

Stump

Sta + π - Elev

970.93

13+50

14

+50

15

BM 5.74 970.93 5.74 965.19 965.20

+50

16

TP 3.09 973.96 0.06 970.87

+50

17

59.9 59.1 60.5 57.7 57.3 57.6 57.5 57.9 58.6 60.4 61.4 61.7
 11.0 10.4 13.2 13.6 13.3 13.4 13.6 12.3 10.5 9.5 9.2
 50 31 17 10 10 19 23 30 40 50

61.3 61.4 59.7 59.9 59.9 60.2 60.3 62.8 63.3 63.6
 9.6 9.5 11.2 11.0 11.0 10.7 10.6 8.1 7.6 7.3
 50 34 17 10 13 21 27 37 50

63.3 63.1 61.9 61.4 61.9 62.1 61.9 62.4 62.3 62.5 62.8
 7.6 7.8 9.0 9.5 9.0 8.8 9.0 8.5 8.6 8.4 8.1
 50 34 21 16 10 12 17 22 31 50

63.8 63.8 63.3 63.6 63.6 63.6 64.3 63.9 64.2
 7.1 7.1 7.6 7.3 7.3 7.3 6.6 7.0 6.7
 50 31 18 12 12 12 21 36 50
 Top 50 31 18 12 12 12 21 36 50
 50 31 18 12 12 12 21 36 50
 50 31 18 12 12 12 21 36 50

66.5 65.5 65.0 64.6 65.1 65.1 65.0 65.0 65.1 67.1 68.8 67.8
 4.28 5.4 5.9 6.3 5.8 5.8 5.9 5.9 5.8 3.8 2.1 3.1
 Garage 50 27 18 15 12 14 19 26 31 50
 Floor

66.5 66.6 66.6 66.3 66.4 66.2 66.3 66.3 67.8 69.1 70.9
 4.4 4.3 4.3 4.6 4.5 4.7 4.6 4.6 3.1 1.8 0.0
 6.5 50 32 16 9 11 17 25 30 50
 HO

64.2 67.5 67.8 67.8 67.7 67.6 68.6 70.7 71.1
 9.8 6.5 6.2 6.2 6.3 6.4 5.4 3.3 2.9
 50 31 12 11 16 25 32 42
 HO

66.0 67.8 68.9 68.9 68.8 68.7 71.8 72.8 72.8
 8.0 6.2 5.1 5.1 5.1 5.2 5.3 2.2 1.2 1.2
 50 32 19 11 11 20 25 50 HO

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

973.96

17+50

18

+ 50

19

BM	0.07	965.26	8.77	965.19	965.20
----	------	--------	------	--------	--------

TP	6.64	962.42	9.48	955.78
----	------	--------	------	--------

BM			0.73	961.69	961.71
----	--	--	------	--------	--------

use x sections

1

10.3

37

11.4

2.6

11.9

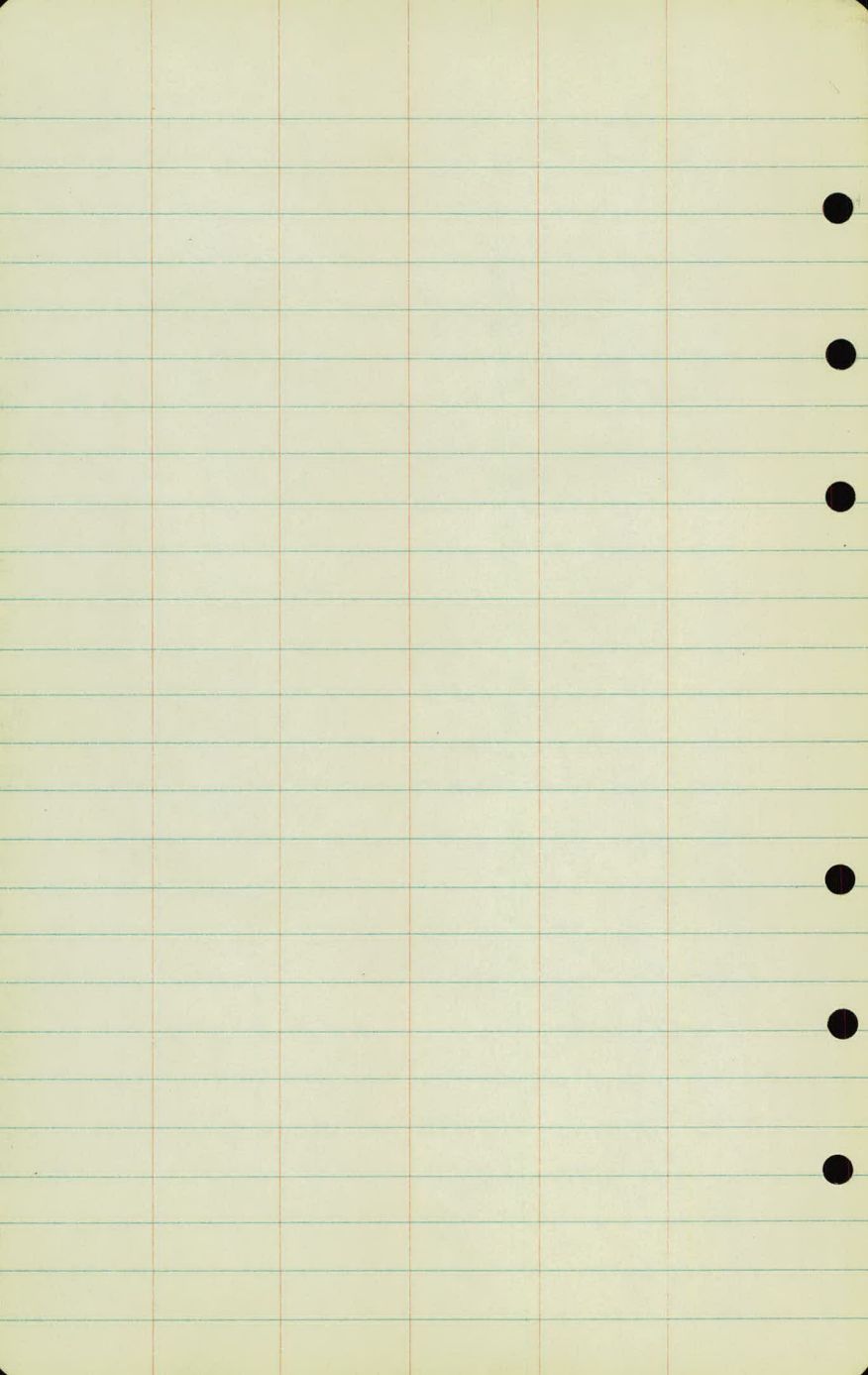
2.1

11.7

2.3

Top shut off Bolt Hyd Sta 14+32 Rt or Lt ?

Top Hyd NE Cor 9th Ave + 13th St.



X-Sections

Along RR Tracks

Note:

0+00 = ~~E~~ 1st St & No Rail

Sta + π - Elev
BM 8.65 973.85

965.20

2

+50

3

+50

TP 5.61 978.98 0.48 973.37

4

+50

+50

+75

Top Shot off Bolt Hyd Sta 14+92 P Rt or Lt.

53.6	54.3	53.6	58.4	59.8	61.0	62.01
203	196	203	155	141	129	11.84
75	58	45	42	26	7	Rail

62.1	61.9	59.6	62.3	62.0	57.4	57.0	61.1	61.6	62.71
118	120	14.3	11.6	11.9	16.5	16.9	12.8	12.3	11.14
100	87	75	60	40	33	27	24	7	Rail

65.1	63.6	63.1	67.5	68.5	67.9	58.6	58.7	61.5	61.8	63.35
8.8	10.3	10.8	6.4	5.4	6.0	15.3	15.2	12.4	12.1	10.50
100	91	84	76	54	38	27	21	18	12	Rail

66.0	67.2	71.1	71.4	72.4	61.0	60.6	62.2	62.8	63.94
7.9	6.7	2.8	2.5	1.5	12.9	13.3	11.7	11.1	9.91
100	88	83	54	39	22	19	16	10	Rail

68.3	69.4	73.7	73.8	74.3	76.1	76.2	63.7	62.0	62.5	63.7	64.49
10.7	9.6	5.3	5.2	4.7	2.9	2.8	15.3	17.0	16.5	15.3	14.49
100	89	84	69	54	49	38	21	17	15	11	Rail

74.9	75.8	76.8	77.8	66.7	63.1	63.1	63.7	63.9	65.01
4.1	3.2	2.2	1.2	12.3	15.9	15.9	15.3	15.1	13.97
68	54	47	40	25	18	14	12	8	Rail

69.4	71.0	75.2
9.6	8.0	3.8
100	88	80

69.7	71.1	73.2	73.6	73.1	73.1	62.9	62.9	64.3	65.28
9.3	7.9	5.8	5.4	5.9	5.9	16.1	16.1	14.7	13.70
100	85	80	64	46	35	17	13	8	Rail

Sta + π - Elev

978.98

5

5

+ 50

+ 50

6

6

B M

13.78 965.20 965.20

73.8	74.1	72.6	64.7	63.5	63.8	65.0	65.53
5.2	1.9	6.4	14.3	15.5	15.2	14.0	13.45
52	42	34	20	16	11	6	Part

70.1	70.6	72.5	72.0
8.9	8.4	6.5	7.0
100	88	81	61

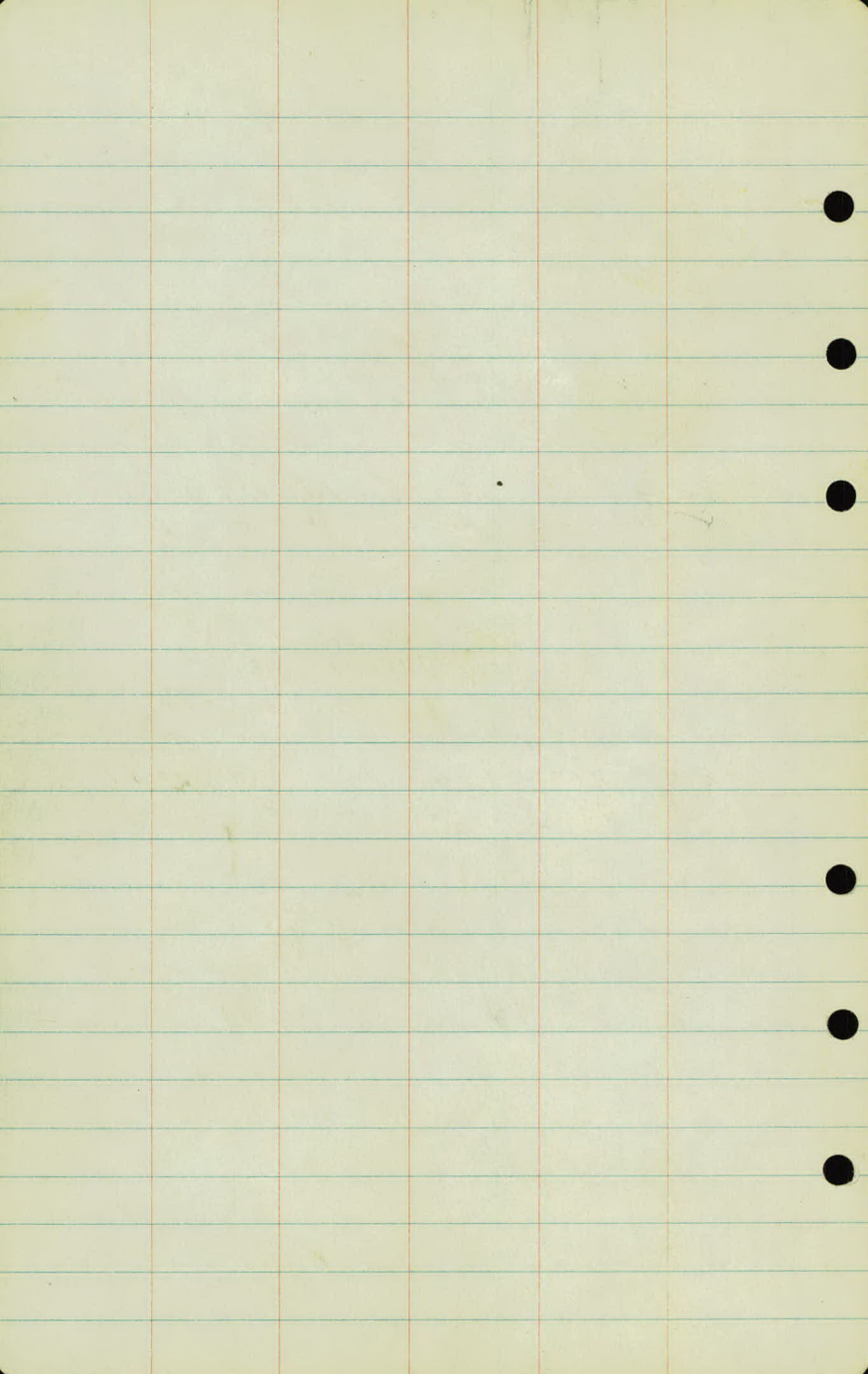
74.7	75.7	74.7	73.5	65.6	63.7	64.4	65.7	66.06
4.3	3.3	4.3	5.5	13.4	15.3	14.6	13.3	12.92
59	51	40	35	21	15	11	6	Part

70.6	70.8	73.5	73.2
8.4	8.2	5.5	5.8
100	90	81	66

73.8	76.0	77.0	75.9	64.7	64.9	66.0	66.57
5.2	3.0	2.0	3.1	14.3	14.1	13.0	12.41
69	55	43	36	17	12	6	Part

71.1	71.4	73.5
7.9	2.6	5.5
100	89	82

Top Shint off Bolt Hyd Sta 14+32 P Rt. or Lt.



X-Sections

Sta 0+00 to Sta 5

Sta 17+50 to Sta 20

Rec 5/14/53
J.L.

Sta	+	π	-	Elev
BM	0.75	962.46		961.71

0+00 $\pm$ 7th St

0-57

0-40

0-10

0+16 12" CM

0+48

+63 Edge of Pavement

+75

12 May 1933

45° Overcast
Between Showers

22

FK
AM
MMc

Top Hyd N.E. Cor 7th Ave & 1st St. ✓

0.1 1.26 2.06 2.1 1.8
100 50 50 50 ?

58.77
3.69
39
FL
12" Ht

59.33
3.13
37
Hd Wall

55.61
6.85
37
FL Box

60.7
1.8

59.35
3.11
C.B.
33

58.05
A.41
51
FL

57.2 58.1 55.11 58.40 59.2 59.5
5.3 4.4 7.35 4.06 3.3 3.0
50 30 23 23 14
FL

59.22
3.24

54.1 55.9 56.5 56.6 59.8 59.8 58.6 58.9 59.3 59.34 59.6 59.33 58.54
8.4 6.6 6.0 5.9 2.7 2.7 3.9 3.6 3.2 3.12 2.9 3.13 3.92
41 39 35 25 18 16 12 15 16 28 41 41
Pitch Curb Inv C.B.

Sta + π - Elev

962.46

0+75

1

1

+50

2

+50

3 +80

3

L					Q					R				
55.6	55.0	55.6	55.6	54.4	58.6	58.1	57.9	57.5	57.5	58.2	58.1	59.2		
6.9	8.5	8.5	6.7	6.7	3.9	4.4	4.6	5.0	5.0	4.3	4.4	3.3		
54	53	51	50	29	15	21	28	30	34	45	50			
58.4	58.7	58.2												
1.1	3.8	4.3												
22	16	14												
55.1	55.1	55.6	57.7	57.9	58.3	58.0	57.8	57.2	58.1	57.9	57.9			
7.4	7.4	6.9	4.8	4.6	4.2	4.5	4.7	5.3	4.4	4.6	4.6			
50	36	29	16	10		6	15	25	35	38	50			
56.1	57.4	57.2	56.7	56.6	57.5	58.0	57.8	57.5	57.9	58.2	58.48			
6.4	5.1	5.3	5.8	5.9	5.0	4.6	4.5	4.7	5.0	4.6	4.3	3.98		
50	36	22	19	16	14	5	9	18	29	30	83			
57.5	57.6	57.3	57.3	58.0	57.7	57.5	57.8	58.2	58.1	57.8				
5.0	4.9	5.2	5.2	4.5	4.8	5.0	4.7	4.3	4.4	4.7				
50	31	21	14	11	17	29	33	50	75					
56.5	57.3	57.41	57.5	58.1	57.7	57.2	57.9	57.7						
6.0	5.2	5.05	5.0	4.4	4.8	5.3	4.8							
50	44	33	15	14	29	50								
		MH												

Garage Floor

Sta + * - Elev

962.46

3+20

+50

4

+50

L

♀

R

57.55
4.91
34
MH57.69
4.77
33
Doorway57.2
5.3
33
2857.0
5.5
1557.6
4.957.6
4.9
1457.9 ✓
4.6
23
5056.5
6.0
5056.7
5.8
2956.4
6.1
1656.9
5.656.8
5.7
1356.8
5.7
2857.9
4.6
5458.14 ✓
4.32
Door
5.1156.2
6.3
5456.01
6.45
4056.3
6.2
3356.0
6.5
2055.8
6.7
1356.2
6.356.0
6.5
755.6
6.9
1456.5
6.0
2757.7
4.8
36

Sta	+	X	-	Elev
BM	11.07	976.27		965.20

17+50

18

+16

+50

19

+34

+50

+84

14 May 1953

Overcast
Cold 50°

25

FX
AM
MMc

L

L

R

Top Shut off. Bolt Hyd. Rt. Sta 14+32

70.1	69.9	69.4	69.9	69.5	70.0	70.1	69.5	69.4	70.0	72.1	73.8
6.2	6.4	6.9	6.4	6.8	6.3	6.2	6.8	6.9	6.3	3.6	2.5
50	40	33	23	15	7		11	15	21	33	50
70.8	70.8	70.5	70.7	71.1	71.3	71.0	70.8	72.3	75.0	75.0	
5.5	5.5	5.8	5.6	5.2	5.0	5.3	5.5	4.0	1.3	1.3	
66	50	33	15	8		9	14	25	33	50	
Ho											

			71.35						79.86		
			4.92						6.41		
			34						Basement		
			Walk						Garage		
71.80	71.7	71.5	71.6	71.4	71.6	71.8	71.6	71.6	72.0	75.1	75.3
4.5	4.6	4.8	4.7	4.9	4.7	4.5	4.7	4.7	4.3	1.2	1.0
58	50	42	24	15	11		9	13	21	31	47
Ho											Ho
67.9	69.2	71.3	71.5	71.3	71.4	71.4	71.3	71.7	72.1	72.2	70.3
8.4	7.1	5.0	4.8	5.0	4.9	4.9	5.0	4.6	4.2	4.1	6.0
50	41	32	23	15	7		12	18	25	32	42
											50

			71.05								
			5.22								
			2								
			MM								
70.1	71.6	71.2	70.7	70.2	70.5	70.7	70.5	70.3	70.7	70.4	70.2
6.2	4.7	5.1	5.6	6.1	5.8	5.6	5.8	6.0	5.6	5.9	6.1
50	34	32	28	17	8		8	12	14	30	50
			70.57								
			5.7								
			32								
			Cor Ho								

Sta	+	π	-	Elev
		976.27		

20

+11

+28 $\pm$ Ent Rt

+50

+64

+80

TP	3.64	969.73	10.18	966.09
----	------	--------	-------	--------

21

+38

Sta + π - Elev
969.73

21 +50

+80 Approx Φ Castle

+83

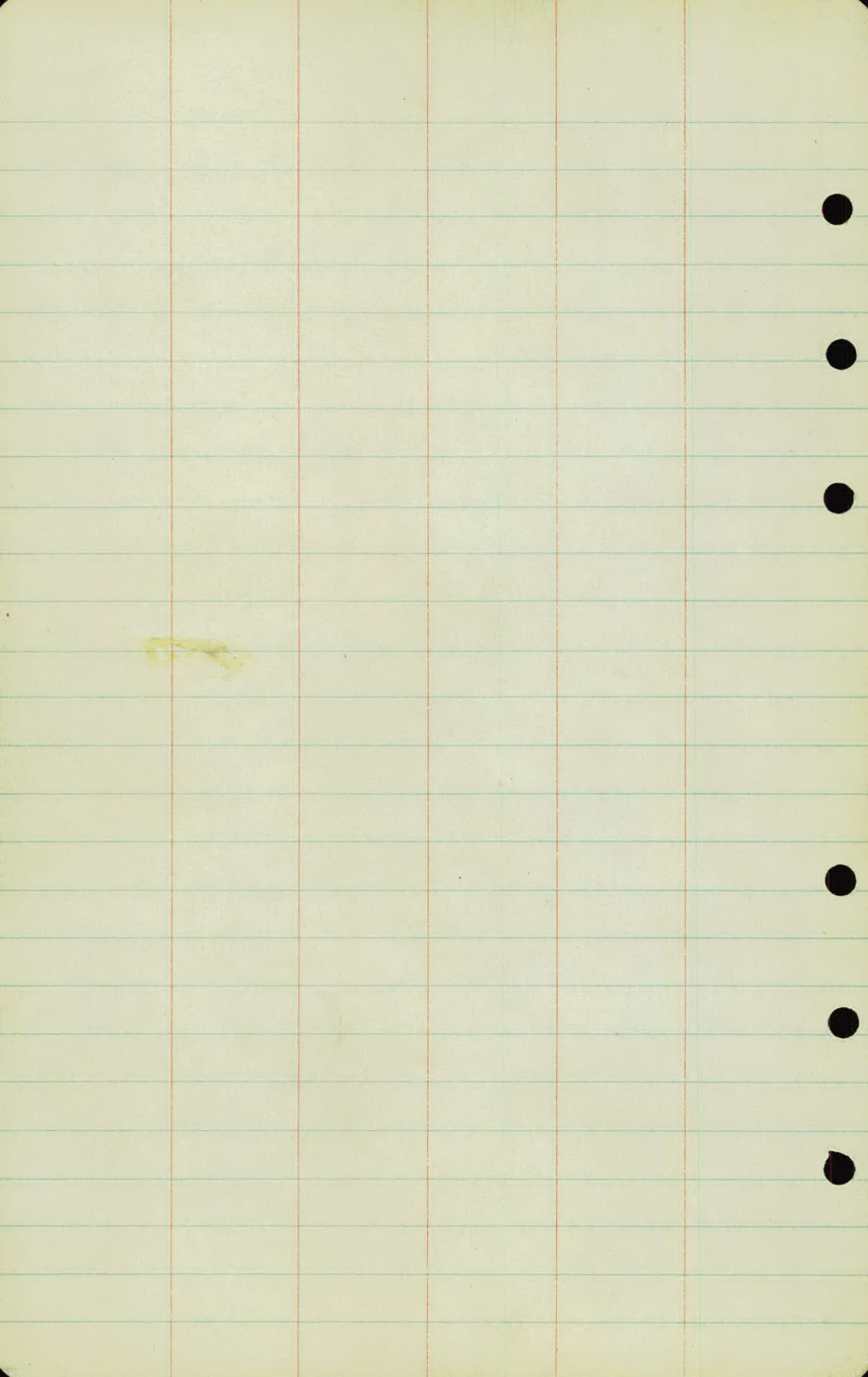
22

+50

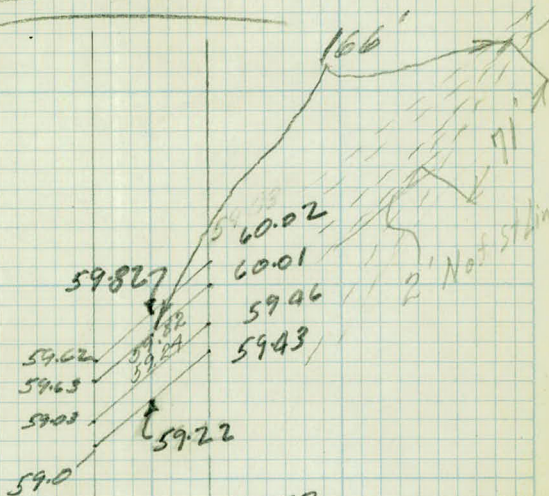
23

BM

1.64 968.09



11



57.72

57.52

Get Plus to

End of Tracks

55-56 also elev

55.81.

10

 $10 + 0.2, 8$

3210

9 + 9

56.82

55-90

55.59

9

123 5230
 123 384
 135 61.35
 135 61.35

5.45
 35.40
 61.35
 453

 56.82

61.35
 4.55

 57.1

249.5

166'

2' No. of
St. Line
to Point of
Switch

10x028

9x97

Culvert Elevations
X Drain of RR Tracks

Sta	1	X	-	Elev
BM	0.07	965.27		965.20
BM			10.16	955.11 955.11

X-Drain Under R.R. Tracks

BM	0.08	965.19	965.20
----	------	--------	--------

22 June 1953

FK
AM
PM

29

Top shut off Bolt Hyd Rt Sta 14+32

Spk in Arc Light Pole N.W. Cor 15th & RR tracks

49.14

16.13

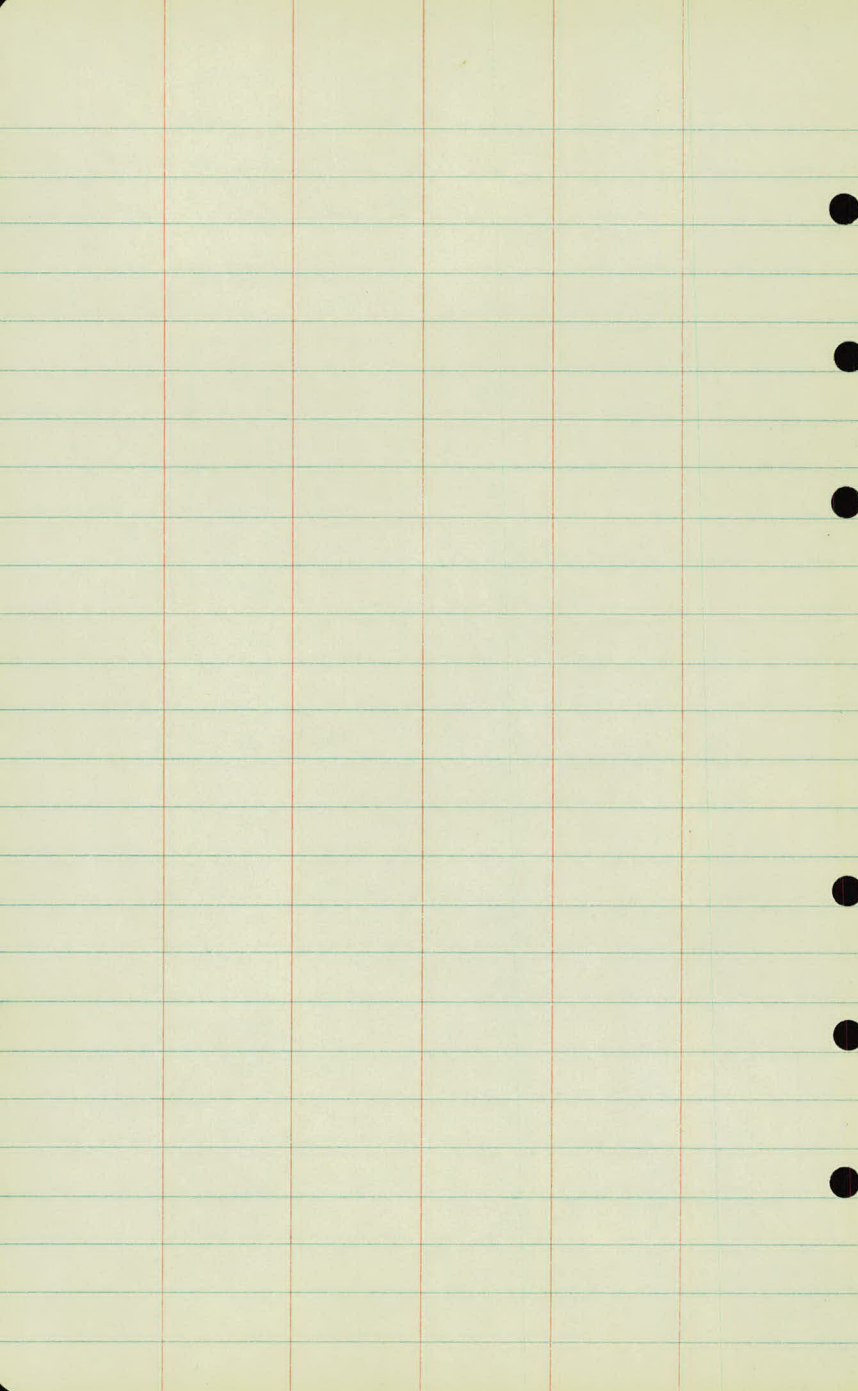
No. End FL 36" Cast Iron
22.5

48.91

16.36

S. End FL 36" Cast Iron
35'

Top shut off Bolt Hyd Rt Sta 14+32



Additional X-Sections

Sta	+	π	-	Elev
BM	6.40	961.51		955.11

9+25 ✓

+71 ✓

10+20 ✓

+35 ✓

+66 ✓

+79 ✓

11+50

BM

6.40

24 June 1959

FA
AM
WNC
DMA

31

Lt

R

RT

Spk in Arc Light Pole NW Cor 1st St & RR Tracks

54.1	54.7	54.8	54.6	54.2	53.4	53.2	53.5	53.2	53.0	54.9
74	672	671	69	73	81	83	80	83	85	6.6
50	31	26	21	9		7	19	30	45	50

53.9	53.6	53.3	55.9	55.89	56.04	56.1	55.9	54.0	53.7	53.2	52.8	52.3
76	79	82	5.6	5.62	5.47	5.4	5.6	75	7.8	8.3	8.7	9.2
50	40	27	20	15	9	4		9	15	26	34	50

54.3	53.8	53.9	55.3	56.4	57.50	57.47	56.8	53.2	52.2	52.0
7.2	7.7	7.6	6.2	5.1	4.01	4.04	4.7	8.3	9.3	9.5
50	32	18	5		8	14	21	29	42	50

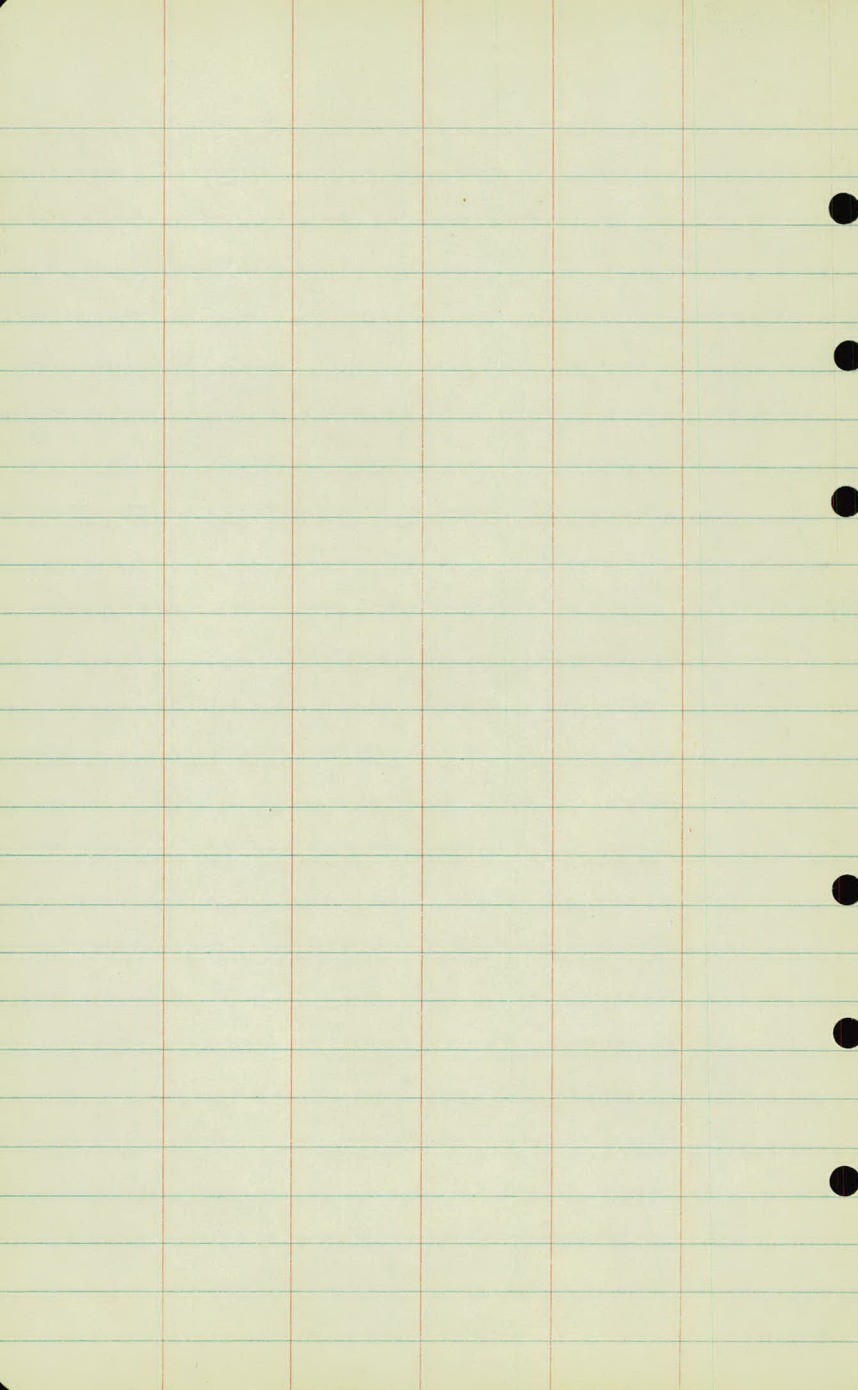
57.9	58.0	53.8	53.3	53.2	53.8	53.9	57.6	57.71	57.67	56.7	52.8	52.1
9.6	3.5	7.7	8.2	8.3	7.7	7.6	3.9	3.80	3.84	4.8	8.7	9.4
50	38	28	18	7		3	11	16	21	27	37	50

58.0	59.29	59.41	58.5	59.01	59.10	58.6	55.4	58.0	58.41	58.36	57.0	56.3
3.5	2.22	2.10	3.0	2.50	2.41	2.9	6.1	3.5	3.10	3.15	4.5	5.2
50	40	30	20	15	7		19	27	33	39	47	50

55.9	58.2	59.46	59.61	59.23	59.35	58.9	58.4	58.76	58.81	58.3
5.6	3.3	2.05	1.90	2.28	2.16	2.6	3.1	2.75	2.70	3.2
50	38	27	16	8	9	18	30	41	42	50

56.5	50.9	50.8	51.2	51.0	50.7	50.4	50.5	51.2	53.4
11.0	10.6	10.7	10.3	10.5	10.8	11.1	11.0	10.3	8.1
50	30	14	4		7	17	26	38	50

Spk in Arc Light Pole NW Cor 1st St & RR Tracks



Side Entrance Left 11+80.90

X-Sections

Sta	+	X	-	Elev
BM	6.40	961.51		955.11

0+00

+35

+35

+50

+50

1

1

+50

24 June 1953

33

FX
AM
MMc
PM

LT

R

BT

Spt in Arc light Pole NW Cor 1st St + RR Tracks

51.4

10.1

54.2	52.7	51.9	50.8	50.9	50.8	50.3	50.2	49.5	48.9
7.3	8.8	9.6	10.7	10.6	10.7	11.2	11.3	12.0	12.6
50	33	21	18	7		12	17	28	38

	59.74		58.5		55.2		48.9		
	1.77	30	6.3			12.6			
	70	66	56			50			

59.72	58.3	55.3	53.4	52.6		50.4	51.4	49.9	49.5	48.9
1.79	3.2	6.2	8.1	8.9		11.1	10.1	11.6	12.0	12.6
68	62	53	42	29		7	10	22	36	50

51.9	50.8	50.8		50.6
9.6	10.7	10.7		10.9
22	20	12		

52.4	52.2	50.7	50.9	50.8	50.4	51.5	50.5	49.6	48.8
9.1	9.3	10.8	10.6	10.7	11.1	10.0	11.0	11.9	12.7
34	21	19	12		6	9	20	34	50

59.35		58.2		52.9
2.16	3.3	8.6		
6.8	6.3	48		

58.77	57.4	53.8	52.8	51.1	50.5	51.2	49.8	49.4
2.74	4.1	7.7	8.7	10.4	11.0	10.3	11.7	12.1
68	62	54	39		12	13	31	50

Sta + π - Elev

961.51

1+50

2

2

+50

+50

+90

+90

3

H

L

ST

52.6

51.0

51.3

51.1

8.9

10.5

10.2

10.4

21

18

7

53.3

52.6

51.8

51.2

51.3

51.4

51.3

51.1

50.6

51.6

51.3

8.2

8.9

9.7

10.3

10.2

10.1

10.2

10.4

10.9

9.9

10.2

50

37

23

20

13

6

13

22

35

50

58.23

57.1

3.28

4.4

68

62

Rail

57.66

56.7

56.1

55.5

54.3

53.2

53.5

53.4

53.5

53.5

38.5

48

54

60

7.2

8.3

8.0

8.1

8.0

8.0

68

63

50

41

31

8

21

35

50

Rail

54.1

53.3

74

8.2

17

6

53.6

53.8

54.0

53.2

52.8

53.1

53.6

53.2

53.2

53.1

7.9

7.7

7.5

8.3

8.7

8.4

7.9

8.3

8.3

8.4

51

34

21

12

9

4

18

34

50

Card

57.21

56.1

A.30

5.4

68

61

Rail

52.4

91

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

961.51

3+20

3+20

+50

4

+50

BM

6.40 955.11 955.11

	L1		L2		R1			
56.85	55.9	51.6	51.7	51.5	52.7	52.5	52.8	52.8
4.66	5.6	9.9	9.8	10.0	8.8	9.0	8.7	8.7
67	42	51	32		carb	21	35	50
Rail					5			
	52.3	51.5						
	92	10.0						
	12	8						

50.6

10.9

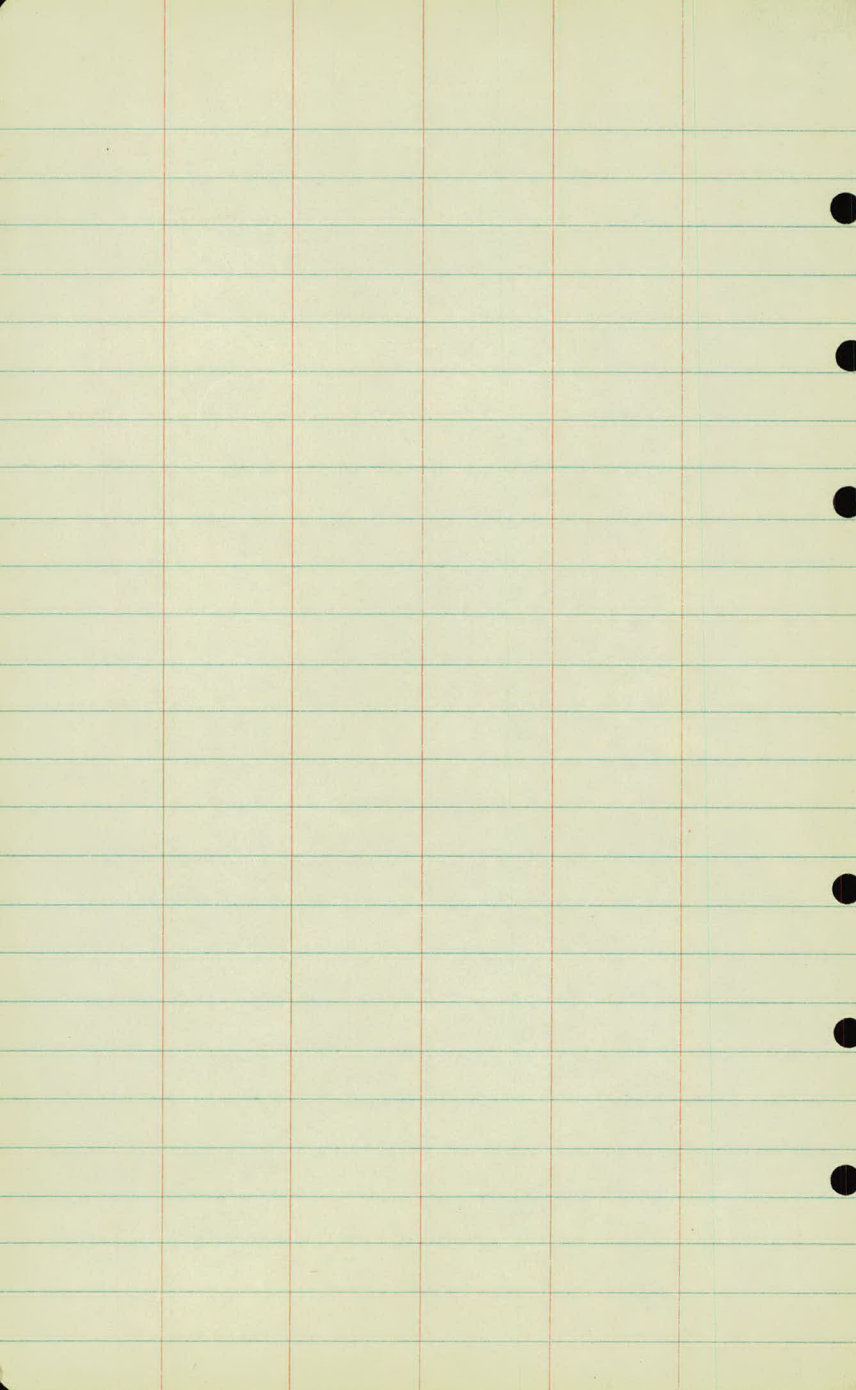
49.8

11.7

49.0

12.5

Spk in Arc Light Pole NW Cor 1st St + RR Tracks



1

1st St. in No. St. Paul

Track Grades

&

Load Location

?

.

5 pages

Sta	+	π	-	Elev
BM	0.10	965.30		965.20

10+59

10+65

10+76

10+82

10+83.5

10+90

11+00

+06.5

TP	2.11	958.15	9.26	956.04
----	------	--------	------	--------

Lt

L

Rt

Top Hyd Rt Sta (14432?)

59.00
6.30
15

59.03
6.27
15

59.63
5.67
15

59.62
5.68

59.43
5.87
15

59.46
5.84
15

60.01
5.29
15

60.02
5.28
15

Sta + π - Elev

958.15

9+54

9+68

10+23

10+35

TP	9.92	965.41	2.71	955.44
BM			0.21	965.20

L1
55.59
2.56
15

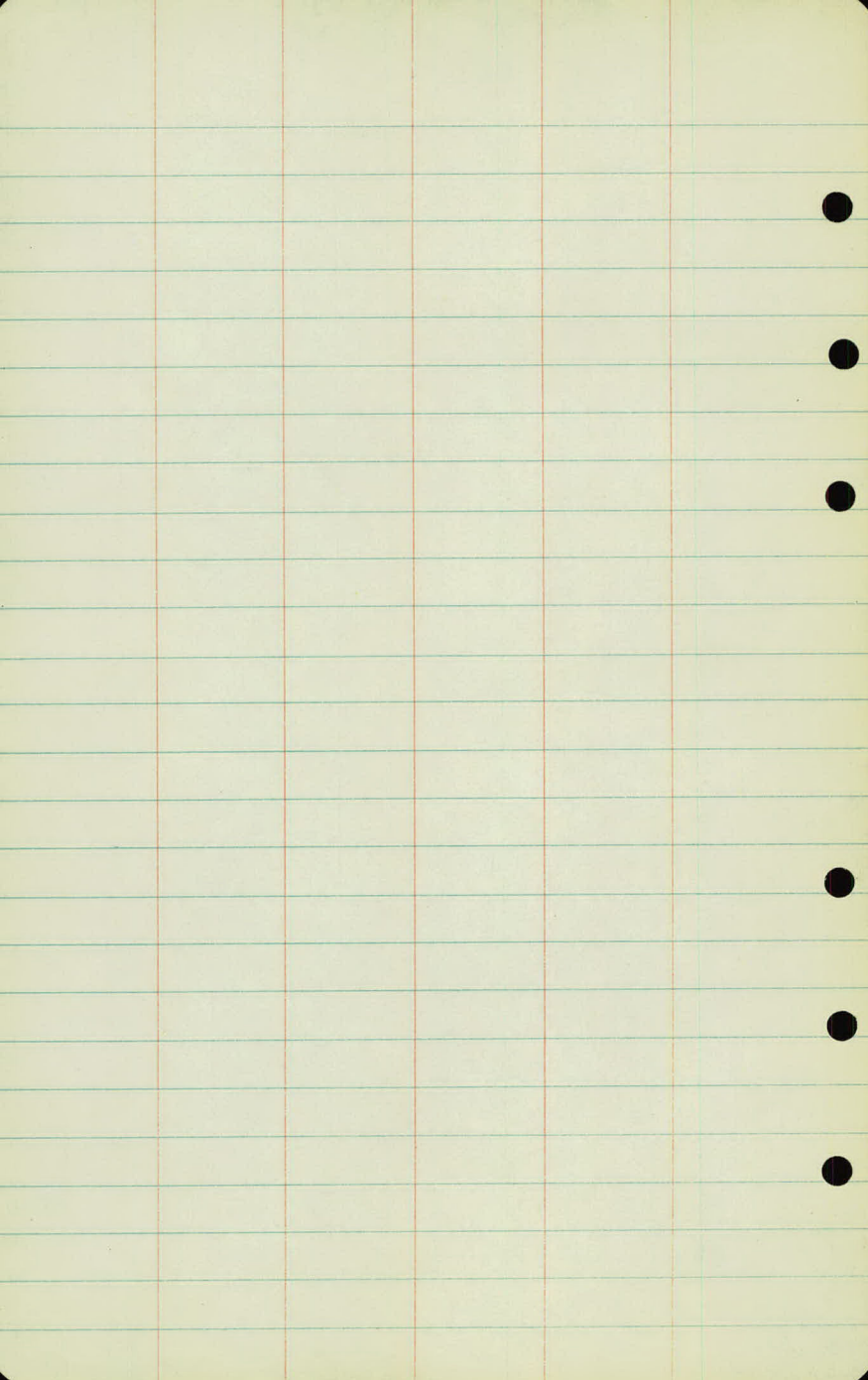
2

PH

55.90
2.25
15

57.52
0.63
15

57.72
0.43
15



A

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	----------------	---------------	-----	-------	-------

Present Street

Location

OBJECT

AZ.

STADIA

X at Sta 8

t sta 10

0°00'

E 20' Roadway

348°15'

" "

338°25'

E 18' Roadway

330°10'

" " "

323°

" " "

322°10'

" " "

321°25'

" " "

323°15'

" " "

328°35'

" " "

336°25'

" " "

345°20'

" " "

352°20'

" " "

355°45'

" " "

357°55'

DIST.

VERT.
ANGLEROD
EQUIV.

ROD

DIFF.

ELEV

200'

91'

122

158'

216'

230'

256'

282'

295'

304'

320'

342'

362'

383'

OBJECT

AZ.

STADIA

3/21

A.M

M.B

M. No

L. C

DITCH - LEVELS

NO. ST PAUL

7TH ST + HELEN-ST

Recd

3/24/52

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

B.M.	0.40	965.76		965.36
------	------	--------	--	--------

0 + 00		F.L. 24" CONC		SO. END
--------	--	---------------	--	---------

+ 63		$\frac{1}{2}$		7 TH ST
------	--	---------------	--	--------------------

1 + 00				
--------	--	--	--	--

+ 20		NO. END		24" CONC
------	--	---------	--	----------

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

2				
---	--	--	--	--

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

+ 53		SO. END		24" CONC
------	--	---------	--	----------

+ 67		$\frac{1}{2}$		ST. RWY. TRACKS 8' WIDE
------	--	---------------	--	-------------------------

+ 82		NO. END		24" CONC
------	--	---------	--	----------

LT

E

RT

Top Hydt. N.W. Cor 7TH + HELEN-ST

10.28 5548

3.13 6243

3.62	6211	FL	46.72
		M.H.	
		24" CONC	
		9.03	
		57	

FL	
10.58	55.18

5486

10.9	24" CONC	
DITCH - 5'	7.67	46.09
	8	

5512

10.6	
DITCH 6'	

RD

6.1

59.7

30

545

11.3

FL	5451	59.5	54.81	55.96
24" CONC				
11.25		RD.	12" CM	12" CM
		4.3	10.95	9.8
		550	30.0	75

4
THICKS

7.0

58.8

FL	53.8
24" CONC	
12.0	

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

965.76

3+00	S. END F.L.	18" CM		
------	-------------	--------	--	--

+11	$\frac{1}{2}$ RD	12' WIDE		
-----	------------------	----------	--	--

+20

+25

4

T.P.	4.92	962.97	7.71	958.05
------	------	--------	------	--------

+50

5

+50

6

LT

L

RT

5481 15" VIT

FL
1095
3.0FL
18" CM
1104
DITCH
4'

5472

9.1 56.7

5486

5491

FL
15" VIT
1090
3.0FL
18" CM
1085

14.4 51.4

13.2 52.6
DITCH
4'14.0 52.0
DITCH
4'10.9 52.1
DITCH
4'

11.2 51.8

11.2 51.8

STA + Δ - ELEV

962.97

6+50

7

+50

8

+50

9

+50

+95 S. E. COR 36" CONC RR CURVINT

T.P. 6.98 966.34 3.61 959.36

B.M. 0.99 965.35-965.36

LT

2

RT

11.9 51.1
4" DITCH

12.1 50.9
3" DITCH

12.9 50.1

12.6 50.4

12.6 50.4

13.6 49.4

14.7 48.3

F.L. 49.25
13.72

TOP HYDT N.W. COR. 7TH + HELEN-ST

STA	+	+	-	ELEV
B.M	0.49	965.85		965.36
10 +25		20' WIDE 500 LINE TRACK		
T.P.	2.24	955.05	13.04	952.81

10 +35 N.W. END RR 36" CONC

11

+30 E. END 36" C.M

+40 E 20' RD

+55 W. END 36" CM

2

+50

3

LT

4

RT

TOP HYDT N.W. COR - 7TH + HELEN-ST

50 60.9

4981

524
3' DITCH

500

5.1
2' DITCH

483

FL

6.8

524

2.7

47.6

F.L.
75

48.7

6.4
3' DITCH

48.4

6.7
4' DITCH

479

72
5' DITCH

STA	+	π	-	ELEV
		955.05		

13 + 50

14

+ 50

15

+ 50

16

+ 50

17

LT.

4

RT

47.9

7.2
3' DITCH

47.6

7.5
2' DITCH

47.1

8.0
2' DITCH

45.4

9.7
2' DITCH

45.1

10.0
2' DITCH

43.8

11.3
2' DITCH

42.7

12.4
2' DITCH

41.2

13.5
2' DITCH

STA + π - ELEV

955.05.

17+50

18

+40 E-END 24" CONC

+55 & 26' RD

+70 W. END 24" CONC

19

+50

20 & E+W DITCH ^{SO SIDE} CASTLE - AVE

LT

Q

RT

41.8

13.3

41.6

13.5

2' DITCH

F.L.

41.0

14.0

14.6

43.5

F.L.

40.11

14.94

14.0

2' DITCH

39.05

15.8

2' DITCH

39.25

16.5

38.55

