

3

1053

LEVEL BOOK

373

1053

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

Tables for Excavations and Embankments.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

2/18/19 Gregory.

CROSS SECTION
OF IMPERIAL AVE
continued from Book 1040

7549

12+25.52 = SECT. ~~X~~ K see sketch

Book 1040

1

				+10		7.6	67.9
				cb.		4.0	71.5
So		+11.5	87.0		12+40		
+3		+11.0	86.5	-32		22.7	52.8
+9		3.1	72.4	-21		17.5	58.0
cb.		6.4	69.1	No.		9.8	65.7
1/4		5.2	70.3	+9		4.5	71.0
+8.8 = So. rail		4.0	70.8	(+12) do not use for yardage	(6.50)	69.5	outlet 10" pipe
c		4.3	71.2	cb.		3.6	71.9
1/4		4.4	71.1	1/4		3.5	72.0
cb.		4.5	71.0	c		3.9	71.6
No.		20.3	55.2	1/4		4.9	70.6
+3		19.7	55.8	+7		5.2	70.3
+7		15.1	60.4	cb.		+4.1	79.6
+32		25.3	50.2	+4		+10.2	85.7
	12+34			So.		+12.2	87.7
-32		23.6	51.9		12+50		
No.		10.7	64.8	So		+12.2	87.7
+3		18.2	57.3	cb.		+9.8	85.3
+9		15.6	59.9	+6		1.5	74.0

+9	4.4	71.1	T.P.	11.98	87.34	0.13	75.36
1/4	4.4	71.1	+9			4.4	82.9
c	3.4	72.1	cb			3.5	83.8
+5.0 = So. rail	3.17	72.33	So.			1.3	86.0
1/4	3.1	72.4			13+00		
cb	3.0	72.5	So.			1.2	86.1
+4	3.6	71.9	+12			3.8	83.5
No.	9.4	66.1	cb			4.7	82.6
+15	14.0	61.5	+3			6.5	80.8
	12+75		+7			8.0	79.3
-20	15.2	60.3	+10			10.8	76.5
1/4	8.9	66.6	1/4			13.1	74.2
+10	1.8	73.7	c			12.4	74.9
cb	1.8	73.7	+10.7 = So. rail			11.82	75.48
1/4	1.4	74.1	1/4			11.8	75.5
9.8' No. of d = So. rail	1.56	73.94	cb			12.1	75.2
c	2.1	73.4	+3			14.5	74.8
1/4 ←	2.7	72.8	No.			20.6	66.7
+2	1.9	73.6	+20			25.1	62.2

9.3 so. of this quarter-center of 1.5x2' concrete box
Elev. of Top is 73.40 10" pipe inlet

87.34

13+25

-25	25.0	62.3
-6	23.0	64.3
No.	20.4	66.9
+11	11.0	76.3
ob	10.8	76.5
1/4	12.4	74.9
10.3 No. of G = So. rail	10.37	76.93
C	10.9	76.4
1/4	11.6	75.7
+2	11.5	75.8
+7	7.8	79.5
ob	5.8	81.5
+3	4.1	83.2
So.	2.1	85.2

13+50

So.	0.4	86.9
+10	2.7	84.6
ob	5.0	82.3
+4	6.1	81.2

+8

1/4

C

+9.8 = So. rail

1/4

ob

+3

No.

+2

+20

-20

No.

+9

ob

1/4

9.4 No. of G = So. rail

C

+6

1/4

IMPERIAL

33

9.9	77.4	
10.1	77.2	
9.3	78.0	
8.88	78.42	
8.9	78.4	
9.4	77.9	
9.5	77.8	
17.0	70.3	
18.0	69.3	
20.8	66.5	
13+25	16.3	71.0
16.3	71.0	
15.0	72.3	
7.7	79.6	
7.8	79.5	
7.5	79.8	
7.37	79.93	
7.8	79.5	
8.1	79.2	
8.8	78.5	

8734

4

+4	8.0	79.3
+10	4.9	82.4
cb	4.2	83.1
+7	1.1	86.2
So.	+0.5	87.8

14+00

So.	+4.0	91.3
cb	+0.7	88.0
+9	4.3	83.0
1/4	6.7	80.6
+2	7.4	79.9
+8	6.5	80.8
C	6.2	81.1
+9.0 = So. rail	5.83	81.47
1/4	5.9	81.4
cb	6.0	81.3
+5	5.5	81.8
+10	7.9	79.4
No	10.7	76.6
+7	13.5	73.8
+20	13.9	

14+25

No.	4.8	82.5
+7	3.9	83.4
cb	4.5	82.8
1/4	4.4	82.9
8.7 No. of b = So-rail	4.26	83.06

C	4.8	82.5
+11	5.2	82.1
1/4	5.0	82.3
+7	+2.0	89.3
cb	+3.5	91.1
So.	+6.6	93.9

14+50

So	+7.9	95.2
+8	+6.9	94.2
cb	+5.8	92.1
+8	+3.8	91.2
+10	+1.9	89.2
1/4	3.4	83.9
+3	3.7	83.6

87.34

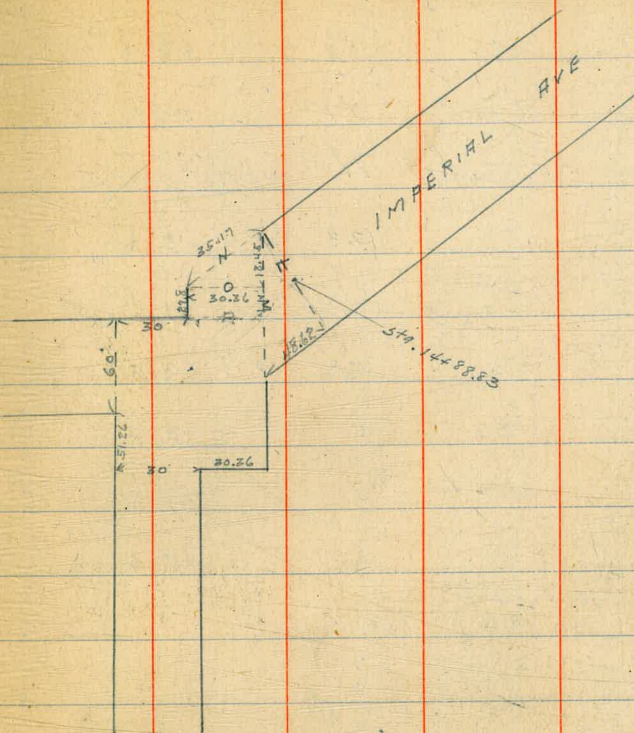
50

C			3.2	84.1
+ 8.4 = Sorail			2.76	84.54
1/4			2.9	84.4
cb			2.9	84.4
+ 7			2.6	84.7
No.			2.7	84.6
T.P.	11.51	97.91	0.94	86.40

14 + 88.83 = SECT L

No.			10.6	87.3
cb			11.2	86.7
1/4			11.0	86.9
10.1 No. of d = Sorail			10.59	87.09

C			11.2	86.7
1/4			11.7	86.2
+ 7			5.9	92.0
cb			4.4	98.5
+ 7			3.1	94.8
So.			2.6	95.3
T.P.	2.98	98.50	2.39	95.52



SECTION M.

So.	3.3	95.2
+ 13	4.6	93.9
+ 16.38 = cb.	5.1	93.4
+ 8	6.0	92.5
+ 15.21 = 1/4	9.2	89.3
+ 4	10.8	87.7
+ 8	11.2	87.3
+ 15.21 = C	10.5	88.0
+ 15.21 = 1/4	9.4	89.1

98.50

+15.21 = No.

8.6 89.9

+16.38 = No.

7.7 90.8

SECTION N. see (last) page 5

No. 3.3 95.2

+16 4.2 94.3

+20 5.0 93.5

+31 5.1 93.4

+32 3.1 95.4

So. 3.1 95.4

18.45 on No.
20 on So. } = SECTION O

So. 3.1 95.4

+3 3.4 95.1

+4 5.1 93.4

+13 5.9 92.6

+18 5.2 93.3

+24 5.0 93.5

No. 5.4 93.1

6' E. of O

No. 5.9 92.6

+8 5.6 92.9

+18 6.6 91.9

+27 5.5 93.0

+28 3.6 94.9

So. 3.6 94.9

16' E. of O

So. 4.1 94.4

+2 4.5 94.0

+3 6.5 92.0

+12 7.4 91.1

+19 7.0 91.5

No. 10.9 87.6

23' E. of O

No. 11.2 87.3

+7 10.0 88.5

+14 7.8 90.7

+21 8.2 90.3

+27 7.3 91.2

So. 4.8 93.7

28.7 E. of O. = P = ML 36" of produced

So. 5.3 93.2

6

98.50

+3	7.8	90.7
+10	8.9	89.6
+20	9.3	89.2
+22	10.6	87.9
No.	10.5	88.0

W.L. 36th ST. SECTION IS 60.36 LONG.

No.	10.5	88.0
+6	10.6	87.9
+10.36 = cb	9.3	89.2
+10 = 1/4	8.9	89.6
+7	7.8	90.7
+10 = c	5.2	93.3
+10 = 1/4	4.4	94.1
+10 = cb	4.0	94.5
+10 = 30	3.5	95.0

7' E of WL.

30	4.0	94.5
cb	4.7	93.8
1/4	5.4	93.1
c	7.9	90.6

IMPERIAL

7

1/4	8.9	89.6
+7	9.6	88.9
cb	9.6	88.9
+10.36 = No.	9.9	88.6

W. Cb. 36th ST.

No.	9.7	88.8
+10.36 = cb	9.4	89.1
1/4	9.0	89.5
c	8.1	90.4
1/4	7.2	91.3
cb	6.4	92.1
30	5.2	93.3

W 1/4

30	5.7	92.8
cb	6.8	91.7
1/4	7.5	91.0
c	8.2	90.3
1/4	8.5	90.0
cb	8.8	89.7
+10.36 = No.	9.1	89.4

98.50

center 36th St

No.	8.6	89.9
+10.36=cl	8.2	90.3
1/4	7.9	90.6
c	7.8	90.7
1/4	7.8	90.7
cl	6.6	91.9
So.	5.6	92.9

5' East Center

So	3.6	94.9
cl	4.8	93.7
1/4	7.7	90.8
c	7.4	91.1
1/4	7.5	91.0
cl	7.8	90.7
+10.36=No	8.4	90.1

E. Quarter

No.	8.2	90.3
+ 9.3 = So. rail	7.36	91.24
+10.36=cl	7.4	91.1

1/4

c

1/4

+6

+9

cl

+5

So.

So.

+5

cl

+2

+3

1/4

c

1/4

cl

+10.36=No.

IMPERIAL

8

7.2

7.0

7.3

6.6

4.6

4.5

4.0

3.0

2.4

3.6

4.3

4.9

6.5

6.7

6.4

6.7

6.8

7.4

91.3

91.5

91.2

91.9

93.9

94.0

94.5

95.5

96.1

94.9

94.2

93.6

92.0

91.8

92.1

91.8

91.7

91.1

E. Curb

98.50

E. L. 36th St

No	6.2	92.3
+10.36 = cl	6.5	92.0
+8.0 = so rail	5.85	92.65
1/4	6.0	92.5
C	5.9	92.6
1/4	5.8	92.7
cl	6.0	92.5
+4	5.7	94.8
So	2.3	96.2

25' E. of 36

So	1.8	96.7
+8	5.1	93.4
cl	5.0	93.5
1/4	4.5	94.0
C	4.4	94.1
+5.3 = so rail	4.15	94.35
1/4	4.4	94.1
+4	4.5	94.0
cl	2.6	95.9

+10.36 = No.

No.

+10.36 = cl

+6

+7

1/4

2.1' No. of C = so rail

C

1/4

cl

+4

+7

So

So.

+3

+5

+6

+15

IMPERIAL

9

3.2 95.3

51.26' E = End of 60.36 St.

2.1 96.4

1.7 96.8

1.6 96.9

2.9 95.6

3.1 95.4

2.89 95.61

3.0 95.5

3.4 95.1

3.6 94.9

3.8 94.7

1.6 96.9

1.5 97.0

1.5 97.0

1.6 96.9

3.5 95.0

3.8 94.7

3.5 95.0

Same SECTION as last for 30' St.

30' wide
 51.26' E
 30' wide

98.50

+25 3.2 95.3

+30 = No 3.0 95.5

75' E of 36th St

No. 2.1 96.4

+5 2.2 96.3

+15 2.6 95.9

+25 3.0 95.5

+26 3.0 95.5

+28 0.9 97.6

So. 0.8 98.7

100' E

So. 0.3 98.2

+2 0.5 98.0

+3 2.3 96.2

+5 2.2 96.3

+10 1.8 96.7

+15 1.7 96.8

+25 1.4 97.1

No 1.3 97.2

+1.9 = Sorail 1.22 97.28

128' E

Sorail

0.76 97.74

No. 0.8 97.7

+5 0.8 97.7

+15 1.0 97.5

+25 1.5 97.0

+27 1.6 96.9

T.P. 5.37 102.87 1.00 97.50

So. 3.3 99.6

133' E

So. 4.9 98.0

+5 5.8 97.1

+15 5.2 97.7

+25 5.1 97.8

No 5.0 97.8

139' E

Sorail 4.90 98.0

No. 4.9 98.0

+5 5.0 97.9

+15 5.1 97.8

+25 5.6 97.3

IMPERIAL 10

10287

So	4.7	98.2
	143'E	
So	3.0	99.9
+2.9	4.5	98.4
+3	5.6	97.3
+5	5.5	97.4
+15	5.0	97.9
+25	4.9	98.0
No	4.8	98.1
So rail	4.83	98.07
	170'E	
So rail	4.62	98.28
No	4.6	98.3
+5	4.6	98.3
+15	4.8	98.1
+25	5.1	97.8
+26.5	5.2	97.7
+28	2.9	100.0
So	2.5	100.4

IMPERIAL 11

	195'E	
So	2.0	100.9
+2	2.6	100.3
+4	4.7	98.2
+5	4.8	98.1
+25	4.6	98.3
+25	4.4	98.5
No	4.4	98.5
So rail	4.43	98.47
	220'E	
So rail	4.32	98.68
No	4.4	98.5
+5	4.3	98.6
+15	4.5	98.4
+25	4.7	98.2
+27	2.5	100.4
So	2.1	100.8
	269'E	
So	3.8	99.1
+2	4.1	98.8

+3	4.8	98.1
+5	4.8	98.1
+15	4.6	98.3
+25	4.4	98.5
No.	4.4	98.5

270° E = W.L. South/Look Ave 60 in wide

- 1.8 = Sora	4.35	98.55
No.	4.4	98.5
+5	4.4	98.5
+15	4.5	98.4
+25	4.8	98.1
So	5.2	97.7

W curb

So	5.40	97.5 on cement
+5	4.9	98.0
+15	4.6	98.2
+25	4.4	98.5
No.	4.4	98.5

W. Quarter

No.	4.5	98.4
-----	-----	------

+5	4.5	98.4
+15	4.6	98.4
+25	4.9	98.0
So	5.2	97.7

Center

So	5.0	97.9
+5	4.8	98.1
+15	4.6	98.3
+25	4.5	98.4
No.	4.4	98.5
So rail	4.40	98.5

E 1/4

No.	4.4	98.5
+5	4.4	98.5
+15	4.6	98.2
+25	4.9	98.0
So.	5.0	97.0

E Curb

So.	5.1	97.5
+5	4.9	98.0

102.89

+15	4.7	98.2
+25	4.5	98.4
No.	4.5	98.4
E. L. Southlook Ave		
-1.7 = 50 rail	4.7	98.43
No	4.6	98.3
+5	4.5	98.4
+15	4.7	98.2
+25	5.0	97.9
+29	5.3	97.6
50	4.0	98.9
50' E		
50	4.6	98.5
+2	4.9	98.0
+3	5.5	97.4
+5	5.2	97.7
+15	4.9	98.0
+25	4.5	98.4
No	4.6	98.3
50 rail	4.60	98.3

IMPERIAL 13

100' E	
50 rail	4.52 98.38
N	4.5 98.4
+5	4.5 98.4
+15	4.9 98.0
+25	5.1 97.8
+26	5.2 97.7
+27	4.5 98.4
50.	4.2 98.7
150' E	
50.	3.6 99.3
+3	4.6 98.5
+3.1	5.3 97.6
+5	5.1 97.8
+15	4.9 97.8
+25	4.5 98.4
No	4.4 98.5
50 rail	4.40 98.5
170' E	
50 rail	4.34 98.56

102.87

No.	44	98.5
+5	44	98.5
+15	4.5	98.4
+25	51	97.8
+26	52	97.7
+27	43	98.6
So.	3.8	99.1

185' E

So.	3.9	99.0
+4	52	97.7
+5	51	97.8
+15	4.5	98.4
+25	4.4	98.5
No.	4.3	98.6

220' E

So rail	4.30	98.6
No.	4.2	98.7
+5	4.2	98.7
+15	4.5	99.4
+25	5.0	97.9

+26

+29

30

30

+1

+4

+5

+15

+25

No.

So rail

-1.2 So rail

No.

+5

+15

+25

+29

30

50

26

2.6

245' E

2.4

26

50

4.9

4.4

4.3

4.2

4.32

270' E = W.L. of 37th St

4.30

4.2

4.2

4.2

4.6

4.5

3.6

IMPERIAL 14

97.9

100.3

100.3

100.5

100.3

97.9

98.0

98.5

98.6

99.7

98.58

98.60

98.7

98.7

98.7

98.3

98.4

99.3

102.87

W. Corb

30	4.4	98.5
+5	4.7	98.2
+15	4.2	98.7
+25	4.2	98.7
No.	4.2	98.7

W 1/4

No.	4.2	98.7
+5	4.2	98.7
+15	4.3	98.6
+25	4.6	98.3
30	4.4	98.5

Center

30	4.2	98.7
+5	4.5	98.4
+15	4.2	98.7
+25	4.2	98.7
No.	4.2	98.7
So rail	4.2	98.68

IMPERIAL 15.

E 1/4 ✓

No.	4.1	98.8
+5	4.1	98.8
+15	4.2	98.7
+25	4.5	98.4
So	4.0	98.9

E Cb

30	3.6	99.3
+3	3.6	99.3
+5	4.4	98.5
+15	4.2	98.7
+25	4.1	98.8
No.	4.1	98.8

E. L. 3rd St.

-1.00 So rail.	4.10	98.9
No.	4.1	98.8
+5	4.1	98.8
+15	4.3	98.6
+25	4.5	98.4
30	3.2	99.7

10287

50' E

So.	3.5	99.4
+4	4.3	98.6
+4.2	5.2	97.7
+5	5.0	97.9
+15	4.3	98.6
+25	4.0	98.9
No.	4.1	98.8
So rail	4.10	98.8
T.P.	3.51	102.17
	4.21	98.66
	3.25	98.92

100' E

So. rail	3.38	98.82
No.	3.4	98.8
+5	3.4	98.8
+15	3.7	98.5
+25	4.3	97.9
+27	4.3	97.9
So.	2.2	100.0

664 NE 374

IMPERIAL 16

119' E

So.	1.3	100.9
+3	4.1	98.1
+5	4.4	97.8
+15	3.8	98.4
+25	3.4	98.8
No.	3.4	98.8
So rail	3.37	98.83

1139' E

So rail	3.49	98.71
No.	3.5	98.7
+5	3.5	98.7
+15	3.8	98.4
+25	4.3	97.9
+27	4.4	97.8
So.	0.4	101.8
	1442	
So.	4.0	98.21
+5	4.3	97.9
+15	3.8	98.4

102.17

+25		3.5	98.7
No.		3.5	98.7
	200' E		
So rail		3.99	98.21
No.		4.0	98.2
+5		3.9	98.3
+15		4.1	98.1
+25		4.6	97.6
So.		3.8	98.4
	250' E		
So.		4.5	97.7
+5		4.5	97.7
+15		4.2	98.0
+25		4.2	98.0
No.		4.3	97.9
So rail		4.41	97.79
	265' E		
No.		4.4	97.8
+5		4.2	98.0
+15		4.2	98.0

IMPERIAL

+25		4.5	97.7
+27		4.4	97.8
So.		5.9	98.3
	300' E		
So		5.1	96.8
+3		4.6	^{97.6} 98.6
+5		4.4	97.8
+6		4.7	97.5
+15		4.5	97.7
+25		4.5	97.7
No.		4.6	97.6
So rail		4.64	^{97.53} 95.8
	350' E		
So rail		4.83	97.37
No.		4.8	97.4
+5		4.7	97.5
+15		4.7	97.5
+23		4.8	97.4
+25		4.5	97.7
So.		5.1	97.1

10217

400' E

So.	4.5	97.7
+5	4.8	97.4
+6	5.1	97.1
+15	4.9	97.3
+25	5.0	97.2
No.	5.0	97.2
So rail	5.00	97.2

450' E

So rail	5.28	96.92
No.	5.3	96.9
+5	5.2	97.0
+15	5.1	96.8
+25	5.5	96.7
So.	4.8	97.4

500' E

So.	5.3	96.9
+5	5.6	96.6
+15	5.1	96.8
+25	5.4	96.8

IMPERIAL 18

A.

So rail

5.1	96.8
5.43	96.77

550' E

So rail

5.83	96.37
------	-------

No.

5.9	96.3
-----	------

+5

5.9	96.3
-----	------

+15

5.8	96.4
-----	------

+20

5.8	96.4
-----	------

+25

6.0	96.2
-----	------

+26

6.0	96.2
-----	------

So.

4.8	97.4
-----	------

575' E

So.

5.1	97.1
-----	------

+3

6.2	96.0
-----	------

+5

6.1	96.1
-----	------

+15

6.0	96.2
-----	------

+25

6.0	96.2
-----	------

No.

4.1	96.1
-----	------

So rail

6.10	96.1
------	------

102.17

580' E

No.	6.2	96.0
+5	6.1	96.1
+15	6.1	96.1
+25	6.2	96.0
So.	5.8	96.4

599.1' E = W.L. 38' ¹⁰/₃₂ + 60' wide

So.	6.0	96.2
+5	6.3	95.9
+15	6.1	96.1
+25	6.0	96.2
No.	6.1	96.1
+0.2 = Sorail	6.19	96.01

W. Corb

No.	6.2	96.0
+5	6.1	96.1
+15	6.1	96.1
+25	6.4	95.8
So.	6.1	96.1

19

W. ¹/₄

So.	6.4	95.8
+5	6.5	95.7
+15	6.2	96.0
+25	6.1	96.1
No.	6.2	96.0

Center

Sorail	6.24	95.96
No.	6.1	96.1
+5	6.2	96.0
+15	6.2	96.0
+21	6.2	96.0
+25	6.6	95.6
+27	6.7	95.5
So.	6.2	96.0

E. ¹/₄

So.	6.5	95.7
+2	6.8	95.4
+5	6.4	95.8
+15	6.3	95.9

102.17

+25 6.2 96.0

No 6.2 96.0

E.C.B.

No 6.2 96.0

+5 6.2 96.0

+15 6.2 96.0

+25 6.4 95.8

So 6.6 95.6

E.L. 38th St

So 6.4 95.8

+5 6.4 95.8

+15 6.2 96.0

+25 6.2 96.0

No 6.2 96.0

+00 = So rail 6.22 95.98

25' E

No = So rail 6.00 96.2

+5 5.9 96.3

+15 6.0 96.2

+25 6.3 95.9

20

So 6.2 96.0

50' E

So 4.9 97.3

+5 5.6 96.6

+8 5.7 96.5

+15 5.7 96.5

+25 5.4 96.8

No 5.40 96.8

7.5' E

No 4.77 97.43

+5 4.9 97.3

+15 5.0 97.7

+22 5.1 97.1

+25 4.7 97.5

So 4.0 98.7

100' E

So 3.0 99.2

+3 4.0 98.7

+5 4.5 97.7

+15 4.2 98.0

102.17

+25 4.2 98.0

+39.8 = So rail 4.0 98.0

N 4.0 98.0

125' E ✓

N 3.2 99.0

So rail 3.17 99.03

+5 3.2 99.0

+15 3.3 98.9

+25 3.4 98.8

So. 2.7 99.5

150' E

So. 1.6 101.6

+2 2.3 99.9

+5 2.4 99.8

+15 2.3 99.9

+25 2.2 100.0

So rail 2.30 99.9

No. 2.3 99.9

175' E

No. 1.4 101.8

IMPERIAL 21

So rail 1.43 101.77

+5 1.3 101.9

+15 1.2 101.0

+25 1.5 101.7

+29 1.1 101.1

So. 0.6 101.6

200' E

So. 0.0 102.2

+2 0.5 101.7

+5 0.7 101.5

+15 0.3 101.9

+25 0.4 101.8

So rail 0.43 101.77

No. 0.4 101.8

T.P. 12.50 114.24 0.43 101.74

225' E

No. 11.4 102.8

So rail 11.38 102.82

+5 11.5 102.7

+15 11.5 102.7

11424

+25	11.7	102.5
So	11.5	102.7
	250' E	
So	9.4	104.8
+22	10.5	103.7
+5	10.5	103.7
+15	10.1	104.1
+25	10.1	104.1
So rail	10.04	104.16 ^{100W}
No.	10.0	104.2
	275' E	
No	8.6	105.6
So rail	8.57	105.63
+5	8.4	105.8
+15	8.6	105.6
+22	8.8	105.4
+25	9.2	105.0
So.	7.4	106.8
	300' E	
So.	6.2	108.0

11424

IMPERIAL 22

+3	7.6	106.6
+5	7.4	106.8
+8	7.0	107.2
+15	6.8	107.4
+25	6.8	107.4
+29.5 = So. rail	6.94	107.26
No.	6.9	107.3
	328' E	
No.	5.1	109.1
So rail	5.16	109.04
+5	5.0	109.2
+15	4.9	109.3
+22	5.2	109.0
+25	5.6	108.6
+27	5.4	109.8
So.	4.0	110.2
	330' E	
So.	4.0	109.4
+5	5.4	108.8
+8	5.0	109.2
+15	4.8	109.4

11424

+25 4.9 109.3

No. 5.0 109.3

350' E ✓

No. 3.9 110.3

So rail 3.95 110.25

+5 3.8 110.4

+15 3.6 110.6

+19 3.8 110.4

+25 4.5 109.7

+27 4.5 109.7

So 1.8 112.4

375' E

So 0.1 114.1

+2 0.5 113.7

+3 3.1 111.1

+5 3.0 111.2

+15 2.4 111.8

+25 2.5 111.7

So rail 2.63 111.57

No. 2.6 111.6

IMPERIAL 23

400' E

No. 1.4 112.8

+0.7 So rail 1.44 112.76

+5 1.3 112.9

+15 1.2 113.0

+25 2.0 112.2

T.P. 11.22 124.09 1.37 112.87 ✓

So 9.0 115.1

425' E

So 7.9 116.2

+1 8.2 115.9

+3 10.5 113.6

+5 10.6 113.7

+15 10.0 114.1

+25 10.1 114.0

So rail 10.37 113.72

No. 10.4 113.7

450' E

No. 9.3 114.8

So rail 9.30 114.79

124.09

+5	9.1	115.0
+15	9.0	115.1
+25	9.4	114.7
+27	9.4	114.7
+28	7.6	116.5
So	7.0	117.1
475' E		
So.	6.9	117.2
+2	7.2	116.9
+3	8.7	115.4
+5	8.7	115.4
+15	8.2	115.9
+25	8.2	115.9
So rail	8.32	115.77
No.	8.3	115.8
500' E		
No.	7.4	116.7
So. rail	7.43	116.66
+5	7.5	116.6
+15	7.6	116.5

124.09

24

+25	7.9	116.2
+27	8.1	116.0
So.	6.7	117.4
525' E		
So.	6.2	117.9
+3	7.5	116.6
+5	7.4	116.7
+15	6.9	117.2
+25	6.8	117.3
So rail	6.77	117.32
No.	6.8	117.3
550' E		
No.	6.2	117.9
So. rail	6.23	117.86
+5	6.2	117.9
+15	6.4	117.7
+25	6.7	117.4
+27	6.9	117.2
So.	5.5	118.6

11873
300
122.63

11925
295

124.09

575' E

So.	5.5	118.6
+3	6.3	117.8
+5	6.3	117.8
+15	5.9	118.2
+25	5.8	118.3
So rail	5.80	118.29
No.	5.8	118.3

599.8' E = W.L. 39th St 60' wide

No.	5.3	118.8
+1.0 = So rail	5.36	118.73
+5	5.4	118.7
+15	5.5	118.6
+25	5.9	118.2
So.	6.0	118.1

W. Cb

So.	6.4	117.7
+5	5.8	118.3
+15	5.4	118.7
+25	5.2	118.9

124.09

IMPERIAL 25

No.	5.2	118.9
W 1/4		
No.	5.0	119.1
+5	5.1	119.0
+15	5.2	118.9
+25	5.6	118.5
So.	6.0	118.1

Center

So.	5.8	118.3
+5	5.5	118.6
+15	5.0	119.1
+25	5.0	119.1
So rail	4.95	119.14
No.	4.9	119.2

E 1/4

No.	4.7	119.4
+5	4.8	119.3
+15	4.8	119.3
+25	5.4	118.7
So.	6.0	118.1

124.09

E. C6

So.	6.1	118.0
+5	5.4	118.7
+15	4.7	119.4
+25	4.6	119.5
No.	4.5	119.6

E. L. 39th St

No.	4.4	119.7
+1.1 = So. rail	4.40	119.69
+5	4.5	119.6
+15	4.6	119.5
+25	5.3	118.8
So.	5.7	118.4

10' E

So.	5.1	119.0
+2	5.4	118.7
+5	5.1	119.0
+15	4.5	119.6
+20	4.2	119.9
+45	4.3	119.8

124.09

No.

4.2	119.9	
50' E		
No.	3.5	120.6
So rail	3.55	120.54
+5	3.7	120.4
+11	3.7	120.4
+15	3.9	120.2
+25	4.5	119.6
So.	4.6	119.5

100' E

So.	3.6	120.5
+1	3.9	120.2
+5	3.5	120.6
+15	3.0	121.1
+25	2.8	121.3
So rail	2.77	121.32
No.	2.8	121.3

138.4' E

No.	2.2	121.9
So rail	2.22	121.87
+5	2.1	122.0

IMPERIAL 26

124.09

+10	1.9	122.2
+15	2.1	122.0
+25	2.6	121.5
+28	2.8	121.3
So.	2.5	121.6
153.4' E		
So.	2.3	121.8
+1	2.5	121.6
+5	2.3	121.8
+15	1.8	122.3
+25	1.8	122.3
So rail	1.9	122.10
No.	2.0	122.1
191.8' E		
No.	1.4	122.7
So rail	1.38	122.71
+5	1.4	122.7
+15	1.4	122.7
+25	2.0	122.1
+29	2.0	122.1

124.09

27

So.	1.4	122.7
241.8' E		
So.	0.0	124.1
+1	1.2	122.9
+5	1.2	122.9
+15	1.0	123.1
+25	1.0	123.1
So rail	1.03	123.06
No	1.0	123.1
291.8' E = W.L. ADA ST. 60' wide.		
N	0.8	123.3
+1.7 = So rail	0.82	123.27
+5	0.5	123.6
+15	0.5	123.6
+25	0.8	123.3
So.	0.6	123.5
TR	2.59	126.19
W. Co.		
So.	2.8	123.4
+5	2.9	123.2

126.19

+15 2.6 123.6

+25 2.6 123.6

No. 2.9 123.3

W 1/4

No. 2.9 123.3

+5 2.6 123.6

+15 2.6 123.6

+25 3.0 123.2

So. 2.9 123.3

Center

So. 3.0 123.2

+5 2.9 123.3

+15 2.6 123.6

+25 2.6 123.6

No. 3.0 123.2

E 1/4

No. 3.0 123.2

+5 2.7 123.5

+15 2.7 123.5

+25 2.9 123.3

126.19

IMPERIAL 28

So. 3.1 123.1

E. Cb.

So. 3.3 122.9

+5 3.0 123.2

+15 2.7 123.5

+25 2.7 123.5

No. 3.1 123.1

E. L. 104 St.

No. 3.20 123.0

+1.8 So rail 122.99

+5 2.9 123.3

+15 2.8 123.4

+25 3.0 123.2

So. 3.3 122.9

+10 2.8 123.4

+20 2.3 123.9

-20 4.3 121.9

-10 4.2 122.0

So. 3.5 122.7

+5 3.3 122.9

+15 3.3 122.9

+25 3.6 122.6

So rail 3.83 122.36

No. 3.9 122.3

126.19

106' E

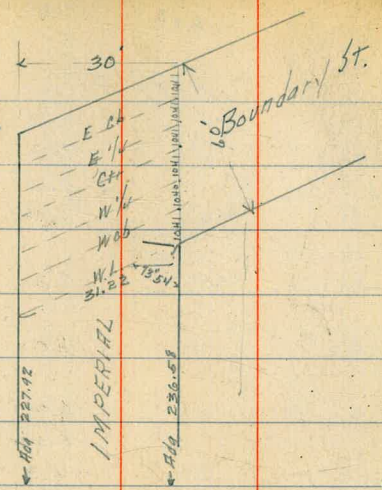
No.	4.5	121.7
So rail	4.5 ⁿ	121.67
+5	4.5	121.7
+15	4.2	122.0
+25	4.3	121.9
So	4.6	121.6
+10	5.0	121.2
+20	4.8	121.7
-20	5.6	120.6
-12	5.8	120.4
-10	5.1	120.9
So	5.0	121.2
+15	4.9	121.3
+25	5.1	121.1
So rail	5.13	121.06
No.	5.1	121.1
153.4' E = E.L. Alley		
No.	5.4	120.8
+5	5.3	120.9
+15	5.2	121.0
+25	5.5	120.7
So	5.8	120.4
+10	6.3	119.9
+20	6.1	120.1

126.19

191.8' E

-20	7.0	119.2
-12	7.1	119.1
-10	7.6	118.6
5	6.7	119.5
+5	6.3	119.9
+15	6.0	120.2
+25	6.2	120.0
+27.8 = So rail	6.26	119.93
No.	6.3	119.9
218.75' E		
No.	7.2	119.0
+5	7.3	118.9
+15	6.8	119.4
+25	7.2	119.0
So	7.5	118.7
+10	8.6	112.5
+12	7.8	115.4
+20	7.6	115.6
see sketch next page Taken on DIAGONALS		
-20	8.5	117.7
-12	8.6	117.6
-10	9.4	116.8
5	8.0	118.2
+13	7.3	118.9
C	7.4	118.8
133.4' E = So rail		
No.	7.6	118.6
	7.53	118.66
	7.5	118.7

29



W. Corb
126.19

No.	7.9	118.3
	80	118.2
C	7.9	118.3
5/30. of C	7.7	118.5
	80	118.2
So.	8.4	117.8
	85	117.7
	83	117.9
C	8.4	117.8
	83	117.9
No.	8.4	117.8

W. 1/4

126.19
Center

No.	88	117.4
	88	117.4
C	88	117.4
	89	117.3
So.	89	117.3
	95	116.7
	9.4	116.8
	9.2	117.0
	9.3	116.9
No.	9.2	117.0
	9.4	116.8
	9.7	116.5
C	9.6	116.6
	9.8	116.4
So.	9.8	116.4
	10.5	115.7

E. 1/4

E. Cb

E.L. Boundary St

126.19

10.3 115.9

c 10.3 115.9

9.9 116.3

No. 9.9 116.3

T.P. 2.86 126.48 2.57 123.62

chk 6.80 119.68 Mon SW 30th Imperial

115.73
7.87
126.60

3.91

6.91

31

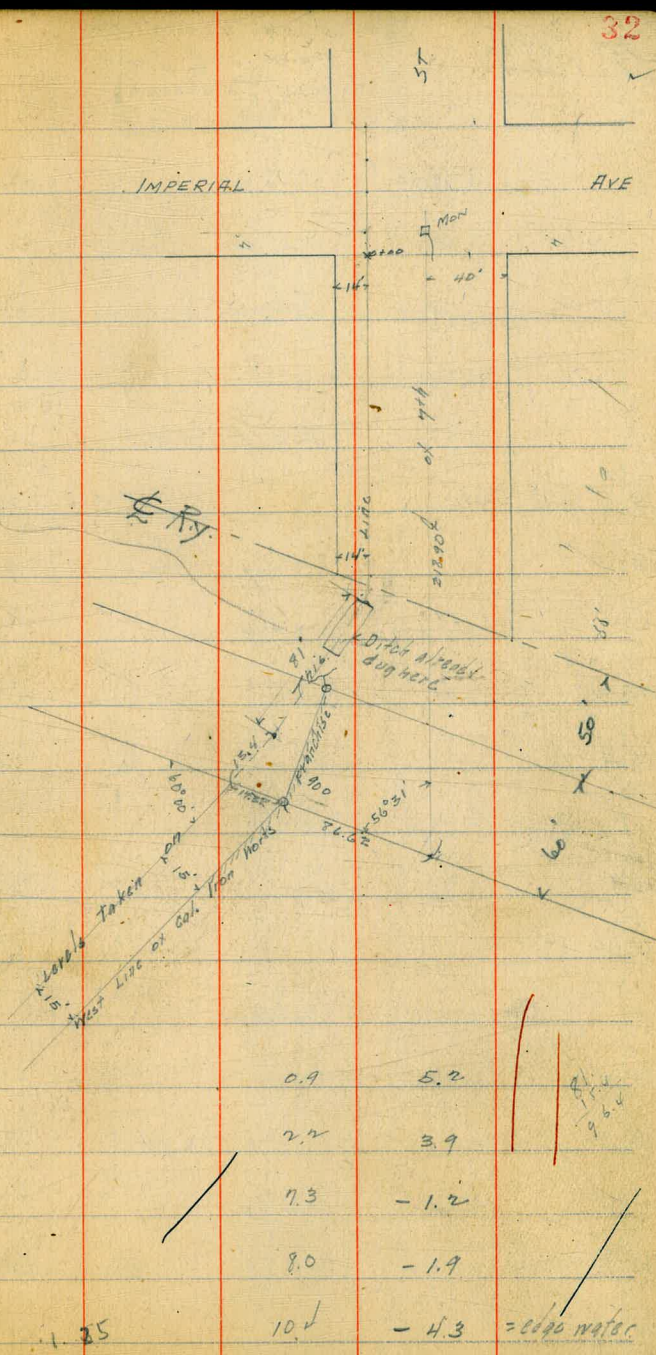
122.99
3.71
126.70

6/28/19 Gregory
M. W. Shaw

Levels on Proposed Drain
at Foot of 7th St
(see page 47 for Location as built)

B.M.	1.73	12.78	11.05	BP 11.74
TP	3.58	6.06	10.20	2.45
So. Line Imperial + E. Curb Line of 7th St.	3.2	2.9		
No. ✓	W ✓	4.4	1.7	
Curb ✓	3.9	2.2		
Ctr ✓	4.0	2.1		
So. ab Line Imperial Arc + Web 7th St	3.7	2.4	= rail.	
W. ab ✓	3.9	2.2	= rail	
So. Line Imp. Ave + Web 7th = 0+00	3.9	2.2		
0+30	4.7	1.4		
0+65	4.26	1.60	= rail.	
0+70	5.0	1.1		
0+85 Δ pt.	4.4	1.7	= curb & street	
0+88	8.3	- 2.2	in ditch	
1+05	8.7	- 2.6	✓ ✓	
1+11	6.7	- 0.6	✓ ✓	1+91
1+12	3.7	2.4	outside	2+11
1+40	3.2	2.9		4+23
1+66 Δ pt.	3.1	3.0		4+48
1+79.4 = SL of 60' St	1.4	4.7		2+48

See pg. 47



7/12/19 Gregory
Miller
Shaw

Levels on Arctic St
15' E+W. of & from
Kalmia To Pierce

	0.78	57.11		56.33	Max NE Laurel + Indig
T.P.	0.16	44.54	13.03	44.08	
T.P.	4.11	38.16	10.49	36.05	
		38.75			
		H.L. Kalmia			
15' E of Q Arctic		12.2		76.0	
15' W - - -		7.8		30.4	
		+ 50			
15' W		8.8		79.4	
15' E		9.7		78.5	
		+ 00			
15' E		8.2		30.0	
15' W		8.7		79.5	
		+ 50			
15' W		8.7		79.5	
15' E		6.8		31.4	
		+ 00			
15' E		4.0		34.2	
15' W		7.5		30.7	

3093

37.2

33

					2+50
					6.3 31.9
					2.4 35.8
					3+00 = 5L Laurel
					0.9 37.3
					5.5 37.7
					7.21 30.95 Nail in pole NW Arctic
					H.L. Laurel
					15' W 5.4 32.8
					15' E 3.3 34.9
					+ 50
					15' E 4.0 34.7
					15' W 5.5 37.7
					+ 00
					15' W 4.9 33.3
					15' E 2.5 35.7
					+ 50
					15' E 2.1 35.8
					15' W 6.9 31.3

38.16

2+00

15' W 6.5 31.7

15' E 3.6 34.6

2+50

15' E 2.5 35.7

15' W 5.4 32.8

3+00 = SL. Maple

15' W 5.0 33.2

15' E 2.6 35.6

NL Maple

15' E 2.2 36.0

15' W 2.4 35.8

+50

15' W 1.6 36.6

T.P. 12.08 49.24 1.00 37.16

15' E 12.5 36.7

1+00

15' E 11.3 37.9

15' W 12.0 37.2

ARCTIC 34

1+50

15' W 11.2 38.0

15' E 10.2 39.0

2+00

15' E 9.1 40.1

15' W 10.5 38.7

2+50

15' W 8.9 40.3

15' E 7.6 41.6

3+00 = SL. Nutmeg

15' E 5.9 43.3

15' W 7.5 41.7

NL Nutmeg

15' W 5.3 43.9

15' E 3.0 46.2

+50

15' E 1.1 48.1

15' W 3.6 45.6

49.24

1400

15' W 2.6 46.6

T.P. 12.75 6139 0.60 48.64

15' E 11.1 50.3

1450

15' E 8.2 53.2

15' W 12.6 48.8

2000

15' W 10.5 50.9

15' E 6.8 54.6

S.L. Olive

15' E 5.5 55.9

15' W 4.4 52.0

N.L. Olive

15' W 8.0 53.4

15' E 4.3 57.1

184 So. of Palm

15' E 6.5 54.9

15' W 7.3 54.1

35

134 So. of Palm

15' W 6.6 54.8

15' E 6.1 55.3

86 So. of Palm

15' E 3.9 57.5

15' W 4.5 56.9

34 So. of Palm

15' W 2.9 58.5

T.P. 9.67 69.38 1.68 59.71

15' E 9.1 60.3

S.L. Palm

15' E 5.9 63.5

15' W 11.0 58.4

N.L. of Palm

15' W 9.3 60.1

15' E 3.6 65.8

50' N. of Palm

15' E 3.8 68.6

15' W 8.7 60.7

69.38

1+00

15' W

8.9

60.5

15' E

4.3

65.1

1+50

15' E

4.8

64.6

15' W

9.9

59.5

2+00

15' W

10.3

59.1

15' E

6.9

62.5

2+50

15' E

6.5

62.9

15' W

10.2

59.2

3+00 = 3L Quince

15' W

10.6

58.8

15' E

7.3

62.1

NL Quince

15' E

5.8

63.6

15' W

9.2

60.2

ARCTIC

36

+ 30

15' W

9.5

59.9

15' E

5.1

64.3

1+00

15' E

4.5

64.9

15' W

9.5

59.9

1+50

15' W

8.8

60.6

15' E

4.7

64.7

2+00

15' E

4.5

64.9

15' W

9.5

59.9

T.P.

6.10

65.69

9.99

59.59

2+50

15' W

6.4

59.3

15' E

2.5

63.2

3+00 = 3L Redwood

15' E

2.1

63.6

15' W

6.6

59.1

6569

N/L Redwood

1'			
15' W		5.8	59.9
15' E		1.5	64.2
	+50		
15' E		1.7	64.0
15' W		7.4	58.3
	1400		
15' W		8.3	57.4
15' E		2.5	63.2
	1450		
15' E		4.3	61.4
15' W		9.7	56.0
	2400		
15' W		12.6	53.1
15' E		9.5	56.2
T.P.	n.no	55.89	12.00 53.69
	2450		
15' E		3.4	52.5
15' W		6.0	49.9

ARCTIC

37

3400 = SL Spruce

15' W		5.9	50.0
15' E		3.7	52.2
	N/L Spruce		
15' E		3.9	52.0
15' W		7.1	48.8

+25

15' W		5.3	50.6
15' E		1.9	54.0

+50

15' E		2.5	53.4
15' W		5.5	50.4

1400

15' W		6.8	49.1
15' E		3.1	52.8

1450

15' E		3.4	52.5
15' W		7.2	48.7

5589

2+00

15' W 7.9 48.0

15' E 3.6 52.3

2+50

15' E 4.6 51.3

15' W 8.6 47.3

3+00 = S.L. SASSAFRAS

15' W 9.4 46.5

15' E 5.7 50.2

N.L. SASS.

15' E 5.8 50.1

15' W 10.4 45.5

+50'

15' W 12.4 43.5

15' E 7.7 48.2

1+00

15' E 9.5 46.4

T.P. 0.94 43.50 11.33 44.56

15' W 4.9 40.6

ARCTIC 38

1+50

15' W 5.9 39.6

15' E 0.4 45.1

2+00

15' E 2.1 43.4

15' W 4.1 38.4

2+50

15' W 9.1 36.4

15' E 3.4 42.1

3+00 = S.L. THORN

15' E 4.4 41.1

15' W 10.1 35.4

N.L. THORN

15' W 9.4 36.1

15' E 5.1 40.4

+50

15' E 7.3 38.2

15' W 10.4 35.1

4550

1700

15' W 96 35.9

15' E 73 38.2

1750

15' E 70 38.5

15' W 97 35.8

2200

15' W 90 36.5

15' E 64 39.1

2250

15' E 56 39.9

15' W 91 36.4

3400 = S.L. Vpas 50' wide

15' W 6.5 39.0

15' E 4.3 41.2

T.P. 4.99 45.26 5.23 40.27

N.L. Vpas

15' E 2.7 42.6

15' W 5.5 39.8

ARCTIC

39

+ 30

15' W 5.7 39.6

15' E 3.1 42.2

+ 80

15' E 4.1 41.2

15' W 6.4 38.9

1730

15' W 6.6 38.7

15' E 5.0 40.3

1780

15' E 4.5 40.8

15' W 6.6 38.7

2230

15' W 6.8 38.5

15' E 3.2 42.1

2280

15' E 3.2 42.1

15' W 6.6 38.7

4526

3+45' = SL YINE 50' wide

15' W		6.8	38.5
15' E		5.0	40.3
T.P.	5.61	45.46	5.41
			39.85

NL YINE

15' E		5.7	39.8
15' W		6.8	38.7

+65' 1

15' W		6.8	38.7
15' E		5.5	40.0

1+15

15' E		5.5	40.0
15' W		6.6	38.9

1+65

15' W		6.6	38.9
15' E		5.3	40.2

2+15

15' E		5.1	40.4
15' W		7.0	38.5

ARCTIC

40

2+65

15' W		6.6	38.9
15' E		4.8	40.7

3+15 = SL WILLOW

15' E		4.8	40.7
15' W		6.0	39.5

NL WILLOW

15' W		4.3	41.2
15' E		3.5	42.0

+50

15' E		2.1	43.4
15' W		3.5	42.0

1+00

15' W		2.7	42.8
15' E		0.5	45.0

T.P.	11.52	56.54	0.46	45.02
------	-------	-------	------	-------

1+50

15' E		10.2	46.3
15' W		12.4	44.1

5654

2+00

15' W	10.6	45.9
15' E	8.8	47.7

2+50

15' E	7.7	48.8
15' W	9.2	47.3

3+00 = S.L. (2)

15' W	7.6	48.9
15' E	6.4	50.1

N.L. Chalmers ST.

15' E	3.1	53.4
15' W	3.2	53.3

+ 50

15' W	2.3	54.2
15' E	2.0	54.5

1+00

15' E	0.7	55.8
T.P.	12.49	68.26
15' W	12.6	55.5

ARCTIC

41

1+50

15' W	11.7	56.6
15' E	10.8	57.5

2+00

15' E	8.9	59.4
15' W	10.3	58.0

2+50

15' W	8.4	59.9
15' E	6.8	61.5

2+95'

15' E	5.0	63.3
15' W	7.5	60.8

3+00 = S.L. WINDER

15' W	9.0	60.3
15' E	6.5	61.8

N.L. WINDER

15' E	5.7	62.6
15' W	6.6	61.7

6826

+15

15' W 5.1 62.9

15' E 4.3 64.0

+50

15' E 4.4 63.9

15' W 4.6 63.7

+100

15' W 4.6 63.7

15' E 4.0 64.3

+25

15' E 3.9 64.4

15' W 4.0 64.3

+50

15' W 4.2 64.1

15' E 3.7 64.6

+100

15' E 4.0 64.3

15' W 4.2 64.1

ARCTIC

42

+150

15' W 4.2 64.1

15' E 3.7 64.6

+280

15' E 3.8 64.5

15' W 4.3 64.0

3+00 = SL. PIERCE

15' W 5.1 63.2

15' E 4.3 64.0

T.P. 10.41 78.66 ✓ 0.01 68.25 ✓

1.65 77.01 ✓
BP 5W India
+ Winger
77.00

2/24/20
Gregor
C. Moore
Shaw

CROSS SECTION OF
Proposed Borrow Pit
P.L. 219

					185' S. of N.L. PL 219	7.40	+6.5	13.9	
0.29	48.04		41.75	B.P. L. 11 ft + Rosaceous	200' - - - - -	do	+14.7	22.1	
0.99	38.40	10.63	37.41		T.P.	10.05	17.16	0.29	7.11
0.97	26.38	12.99	25.41		215' S. of N.L. 219	W	63.64	18.0	45.6
1		9.67	16.71	Mon SE cor 240	237' ✓ ✓ ✓ ✓ ✓	W	do	2.3	61.3
1.19	15.54	12.23	14.35		270' - - - - -	W	do	3.1	60.5
1.71	48.3	12.42	3.12		446 W. of N.E. cor PL 219				
4.72	6.83	2.72	2.11		175' S. of N.L. PL 219	17.16	9.8	7.3	= N. Edge Dyke
4.64	5.62	5.85	0.98		190' - - - - -	17.16	6.5	10.4	
5.71	7.40	3.93	1.69	Top of Post 242 - 243 Mark	198' - - - - -	17.16	1.7	15.5	
		7.28	0.12	Mon N.E. PL 219	218' ✓ - - - - -	W	63.64	12.8	50.8
					249' ✓ ✓ ✓ ✓ ✓	W	do	8.5	56.1
					231' ✓ - - - - -	W	do	5.1	58.2
					246' ✓ ✓ ✓ ✓ ✓	W	do	3.7	59.9
					270' - - - - -	W	do	4.0	59.6
					500 W. of N.E. cor				
N.L. 219		3.4	4.0		195' S. of N.L. PL 219	17.16	12.8	4.4	
40' S. of N.L.		2.6	4.8		197' ✓ ✓ ✓ ✓ ✓	do	8.2	9.0	
55' - - -		0.5	6.9	N. Edge Dyke	225' ✓ ✓ ✓ ✓ ✓	do	+10.8	28.0	
95' ✓ ✓ ✓		0.5	6.9	S - - -	241' ✓ - - - -	±	56.59	5.3	51.3
105' ✓ ✓ ✓		3.5	3.9		253' ✓ ✓ - - -	±	do	1.2	55.4
135' ✓ ✓ ✓		1.2	5.8		270' ✓ ✓ - - -	±	do	0.0	56.6
160' - - - ✓		1.6	5.8						
170' - - - ✓		+5.0	12.4						

533 W. of N.E. cor PL 219

190' S. of N.L. PL 219	17.16	14.4	2.8
200' " " " " " "	"	10.6	6.6
210' " " " " " "	"	5.5	11.7
220' " " " " " "	"	+ 8.0	25.2
240' " " " " " "	z 56.59	9.7	46.9
253' " " " " " "	z 56.59	4.7	51.9
270' " " " " " "	z 56.59	3.1	53.5

575 W. of N.E. cor PL 219

195' S. of N.L. PL 219	17.16	17.2	0.0
205' " " " " " "	"	12.4	4.8
221' " " " " " "	"	4.1	21.3
235' " " " " " "	"	+ 6.3	23.5
T.P. 105	5.26	12.95	4.21
257' S. of N.L.	z 56.59	7.8	48.8
270' S.	z 56.59	5.8	50.8

600 W. of N.E. cor PL 219

200' S. of N.L. PL 219	4.8	0.5
210' " " " " " "	1.6	3.7

715' S. of N.L. PL 219

240' " " " " " "	z 56.59	17.8	38.8
250' " " " " " "	z do	11.8	44.8
270' " " " " " "	z do	9.1	47.5
300' S.	z do	19.1	37.5
350' S.	z do	11.1	45.5

650 S. of N.L. PL 219

210' S. of N.L. PL 219	5.26	5.1	0.2
253' " " " " " "	z 56.59	22.5	34.1
275'	z do	18.6	38.0
300' S.	z do	19.1	37.5
350' S.	z do	11.1	45.5

675 S. of N.L. PL 219

200' S. of N.L. PL 219	5.26	8.8	- 3.5
213' " " " " " "	"	6.6	- 1.2
225' " " " " " "	"	6.3	- 1.0
T.P. 9.90	y 9.57	5.59	- 0.33

265' S. of N.L.	z 56.59	27.8	28.8
275' S. of N.L.	z 56.59	26.4	30.2
285' S. of N.L. PL	z 56.59	27.2	29.4

305' " " " " " "	y 9.57	5.7	3.9
315' " " " " " "	y 9.57	4.9	4.7
340' " " " " " "	z 56.59	36.8	19.8
370'	z	12.4	44.2

700' W of NE cor PL 219
1.57

335' S. of N.L.		10.20	- 0.6
270' - - -		2.7	6.9
300' - - -		7.2	2.4
310' - - -		7.0	2.6
346' - - -	Z 56.59	29.8	26.8
355' - - -	Z	24.6	32.0
390' - - -	Z	14.3	42.3

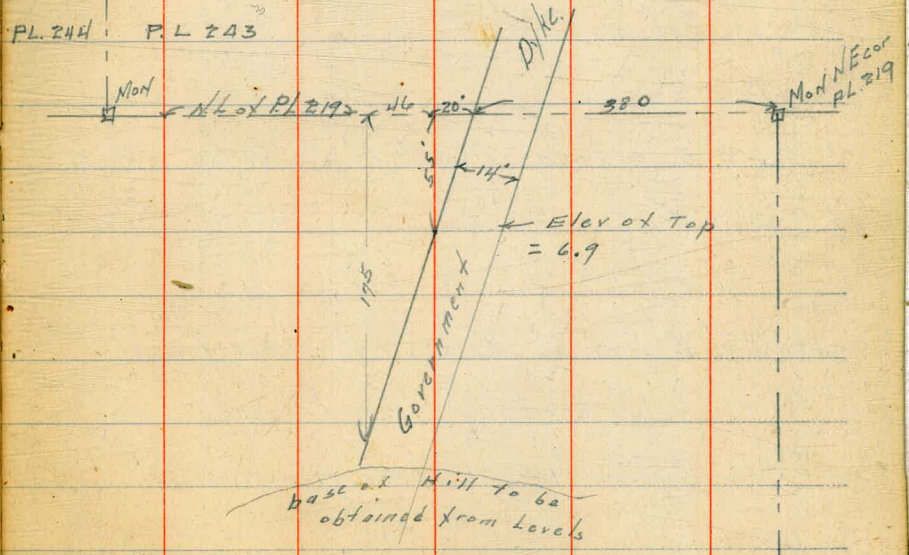
705' W of NE cor PL 219

270' S. of N.L. PL 219		7.7	1.9
300' - - -		7.2	2.4
315' - - -		5.7	3.9

715' W of NE cor PL 219

270' S. of N.L.		8.5	1.1
300' - - -		7.6	2.0
315' - - -		7.0	2.6
340' - - -	12.23 20.57	12.3	8.34
380' - - -	x 45.17	9.4	11.2
390' - - -	x	10.2	35.0
	x	7.2	38.0

740' W of NE cor PL 219 1.23 2.57 12.23 20.57 1.23 8.34			
330' S. of N.L.		7.8	1.8
		12.23	20.57 1.23 8.34
		12.90	32.88 0.59 19.98
		12.39 x 45.17	0.10 32.98
		12.02 z 56.59	0.60 42.57
		7.54 w 63.64	0.49 56.10



10/8/20 Gregory Miller show
Runways on E. Cb of Front St
S. of Market St.

3. L. Market = 0+00

0+35.8 = N. side runway

0+47.5 = S ✓ ✓

0+65.5 = N. side runway

0+85.0 = S ✓ ✓

1+19.5 = N. side runway

1+29.6 = S ✓ ✓

1+50 = End of curb

1+65.9 = N. side of Door to Union Ice Co Stable

1+78.55 = S ✓ ✓ ✓ ✓ ✓ ✓ ✓

2+66.05 = N. End of Runway + Platform 8' wide

Extending from Property Line
Platform runs past N. Line of J.

West side of St

19' N. of N. Line of I. St. 13 S. side of

12' door to Fuller warehouse

10/8/20
Gregory Miller
Shaw

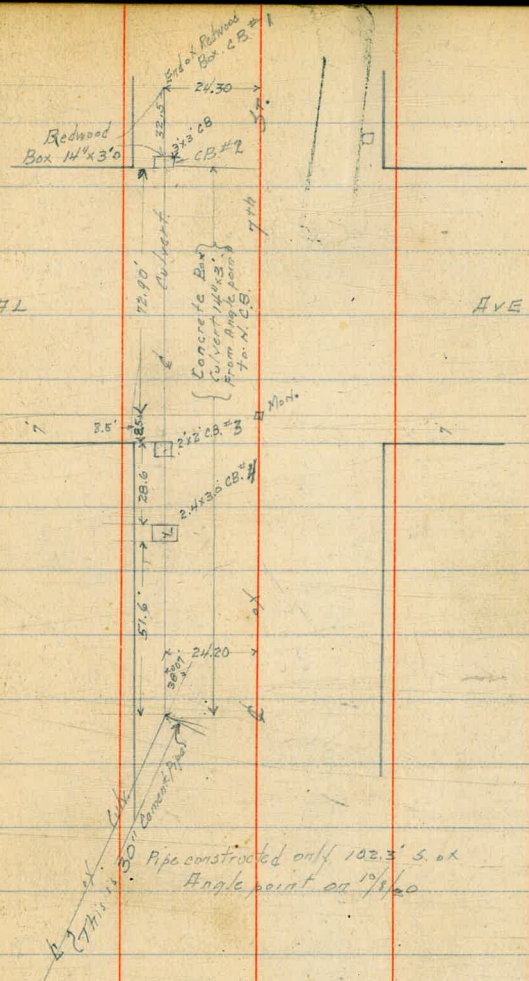
Location of Constructed Culvert
at foot of 7th St

BM	-0.12	10.93	11.05	NW 7th St
T.P.	5.00	7.38	8.55	2.38
Elev. Flow Line C.B #1			7.92	-0.54
✓ ✓ ✓ C.B #2			8.11	-0.73
✓ ✓ ✓ C.B #3			8.40	-1.02
✓ ✓ ✓ #			8.54	-1.16
✓ ✓ ✓ at End of 30' pipe			10.29	-3.51

A.B. This is not
the final location
of out let.

IMPERIAL

AVE



802

2/28/21
Gregory
Miller
Shaw

CROSS SECTION OF
PENNSYLVANIA AVE
as shown on sketch
opposite page.

256.99 gutter
+ Gully top

9.12

264.02

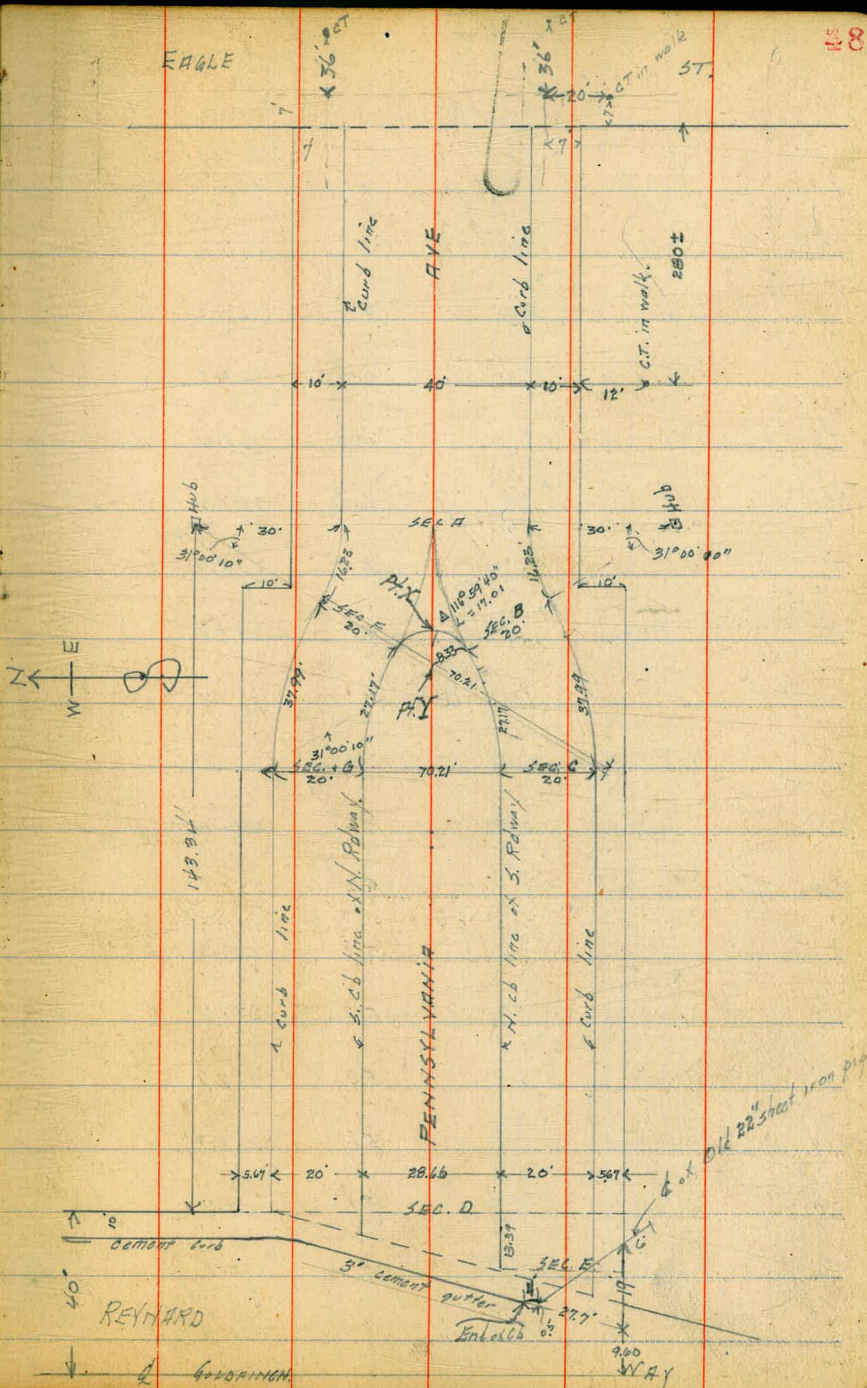
254.90

364 3/4
Eagle

E. L. Eagle

60' St. from here to SEC. A inclusive

5	10.5	253.5
cb	10.3	253.7
1/4	9.7	254.3
C	9.7	254.3
1/4	9.7	254.3
cb	9.9	254.1
N	9.2	254.8
	25' W.	
N	7.0	257.0
1/4	7.8	256.2
cb	8.3	255.7
1/4	8.1	255.9
C	8.0	256.0
1/4	8.3	255.7
cb	8.6	255.4
3	8.0	256.0



264.0W

75' W

S	6.6	257.4
cb	6.8	257.2
1/4	6.8	257.2
C	6.4	257.6
1/4	6.6	257.4
cb	6.5	257.5
+5	5.9	258.1
N	4.1	259.9

125' W

N	3.8	260.2
+4	4.0	260.0
cb	5.2	258.8
+5	5.8	258.2
1/4	5.3	258.7
C	5.3	258.7
1/4	5.8	258.2
cb	5.6	258.4
S	5.2	258.8

PENNSYLVANIA 29

175' W

S	4.0	260.0
cb	4.3	259.7
1/4	4.3	259.7
+2	4.8	259.2
C	4.2	259.8
1/4	4.6	259.4
cb	4.4	259.6
N	3.3	260.2

176' W

N	4.2	259.8
cb	4.4	259.6

220' W

N	4.3	259.7
cb	4.5	259.5
1/4	4.2	259.8
C	3.9	260.1
+9	4.2	259.8
1/4	3.8	260.2
cb	3.7	260.3

5.		39	260.1	260.1	cb	40	260.0
	230' W				1/4	44	259.6
3		33	260.7		c	41	259.9
cb		31	260.9		1/4	43	259.7
+8		36	260.6		cb	45	259.5
1/4		40	260.0		N	46	259.4
c		38	260.2				
1/4		42	259.8		N	49	259.1
cb.		43	259.7		cb	46	259.4
N		43	259.7		1/4	45	259.5
	240' W				c	43	259.7
N		44	259.6		1/4	46	259.4
cb		44	259.6		cb	42	259.8
1/4		42	259.8		5	41	259.9
c		39	260.1				
1/4		41	259.9		5	44	259.6
cb		38	260.2		cb	45	259.5
5		36	260.4		1/4	47	259.3
	250' W				c	44	259.6
5		39	260.1		1/4	46	259.4

260' W

270' W

364.02

cb	4.8	259.2
N	5.1	258.9
280' W		
N	4.9	259.1
cb	5.1	258.9
1/4	4.7	259.3
c	4.5	259.5
1/4	5.0	259.0
cb	4.7	259.3
S	4.6	259.4
315' W		
S	5.6	258.4
cb	6.3	257.7
1/4	6.1	257.9
c	5.6	258.4
1/4	5.7	258.3
cb	5.9	258.1
N	5.8	258.2
320' W		
N	6.1	257.9

PENNSYLVANIA

51

cb	6.0	258.0
1/4	5.9	258.1
c	5.8	258.2
+7	6.4	257.6
1/4	7.7	256.3
cb	8.2	255.8
+3	7.2	256.8
S	6.8	257.2
330' W		
S	11.1	252.9
cb	11.0	253.0
1/4	9.7	254.3
c	8.1	255.9
1/4	7.7	256.3
cb	7.4	256.6
N	7.3	256.7
336.66' W = SECT. A.		
N	9.3	254.7
cb	9.0	255.0
1/4	9.3	254.7

364.00

C	10.2	253.5
1/4	12.4	251.6
cb	15.5	248.5
S	15.0	249.0
+5	14.3	249.7

From this SECTION ON THE North and South Roadways are taken separately distances given are on the respective curb lines.

South Roadway on SECT. A.

15' S. of S. Cb.	14.3	249.7
10' " " " "	15.0	249.0
S. cb	15.5	248.5
1/2 of Roadway	14.4	251.6
N. cb - S. = 1/2 of PENNSY.	10.2	253.8
T.P. 0.05 251.15 129 ✓ 251.10		
15' W. on N. cb line of S. Rdway		
9' " " " "		
(1/2 of Pennsylv.)	(5.6)	245.0
N. cb line of S. Rdway	5.4	245.8
1/2 " " "	6.2	245.0
S. cb line " " "	7.3	243.9

251.15 = 44

PENNSYLVANIA.

52

+ 5.67' S. of S. Cb	7.2	244.0
15' " " "	3.8	247.4
20' W. of SEC. A. on N. cb. of S. Rdway	12' " " "	5' " " "
40' S. of S. Cb.	3.7	248.9
7' " " "	8.4	242.5
S. Cb. of S. Rdway	9.6	241.6
1/2 of S. Rdway	11.4	239.8
N. Cb. of " "	11.2	240.0
Pt X 15.07 S. of Pennsylv.	10.6	240.6
27.05' W. of SEC. A. on N. cb. of S. Rdway	10.23 " " "	5' " " "
8.33' N. of N. cb. of S. Rdway - PT X	7.2	244.0
" " " "	12.3	238.9
4.5' of " " "	13.8	237.4
1/2 " " "	13.6	237.6
S. cb " " "	11.7	239.5
5.67' S. of " " "	10.0	241.2
15.67' " " "	5.8	245.4
9.05' W. of SEC. B. on N. cb.	12.67' " " "	5' " " "
20' S. of S. Cb. of S. Rdway	11.0	240.2
5.67' " " "	14.1	237.1

= SEC. B.

251.15

S. cb. of S. Rdway	17.6	233.6
E. of S. Rdway	13.9	237.3
N. cb. - - -	9.6	241.6
E. of Pennsylvania Ave.	11.4	246.8
13.5 W. of SEC. B on N. cb. of S. Rdway		
19' - - - - -	5.0	
E. of Pennsylv. Ave.	3.8	247.9
N. cb. of S. Rdway	8.2	243.0
E. - - - - -	12.5	238.7
S. cb. - - - - -	18.1	233.1
5.67 S. of - - - - -	19.3	231.9
20' - - - - -	15.7	235.5
30' - - - - -	15.3	235.9
27.17 W. of Sec. B on N. cb. of S. Rdway		
37.99' - - - - -	5.0	
		SEC. C
40' S. of S. cb. of S. Rdway	25.4	225.8
34' - - - - -	26.8	224.4
20' - - - - -	21.6	229.6
5.67' - - - - -	15.6	235.6
- - - - -	13.4	237.8
E. - - - - -	8.9	242.3
N. cb. - - - - -	5.3	245.9

251.15

13
25
228.7

53

14.33 N. of N. cb. of S. Rdway	0.6	250.6
16.52 W. of SEC. C		
14.33 N. of N. cb. of S. Rdway	+2.4	253.6
- - - - -	3.7	247.5
E. - - - - -	7.6	243.6
S. cb. - - - - -	12.2	239.0
5.67 S. of - - - - -	13.1	238.0
15.67' - - - - -	19.2	232.0
		26.52 W. of SEC. C
5.67 S. of S. cb. of S. Rdway	15.1	236.0
- - - - -	12.6	238.6
E. - - - - -	8.1	243.0
N. cb. - - - - -	4.8	246.4
14.33 N. of - - - - -	+1.3	252.5
		16.52 W. of SEC. C
14.33 N. of N. cb. of S. Rdway	3.1	248.0
- - - - -	9.5	241.7
E. - - - - -	13.6	237.6
T.P.	0.60	238.66
	13.09	238.06

S. Co. of S. Rdway,	5.3	233.4
5.67' S. of - - - -	7.4	231.3
25' - - - - -	15.7	223.0
71.52' W. of SEC. C.		
30' S. of S. Co. of S. Rdway	21.5	217.2
15' - - - - -	16.4	222.3
5.67' - - - - -	12.6	226.1
- - - - -	10.2	228.5
- - - - -	4.5	234.2
N. Co. - - - -	0.6	238.1
14.33' N. of - - - -	+ 4.2	242.9
91.52' W. of SEC. C. = SEC. D.		
14.33' N. of N. Co. of S. Rdway	2.9	235.8
- - - - -	7.5	231.2
- - - - -	11.5	227.2
S. Co. - - - -	15.0	223.7
5.67' S. of - - - -	17.3	221.4
20' - - - - -	20.7	218.0

104.91' W. of SEC. D. = SEC. E		
35' S. of S. Co. of S. Rdway,	28.6	210.1
25' - - - - -	26.5	212.9
10' - - - - -	19.4	219.3
5.67' - - - - -	17.9	220.8
Co. - - - - -	16.8	221.9
3' N. of - - - - -	14.8	223.7
- - - - -	14.0	224.7
N. Co. - - - - -	12.9	225.8
E. L. Reynard Way		
N. Co. of S. Rdway	12.9	225.8
- - - - -	13.8	224.9
S. Co. - - - - -	14.4	224.3
5.67' S. of - - - -	15.0	223.7

NORTH ROADWAY SECT. A		
6.74	257.84	251.10 T.P. on page 52
10' N. of N. Co. of N. rdway	3.1	254.7
- - - - -	2.8	255.0
- - - - -	3.1	254.7

257.84

5. cb. of N. Rdway = L PENNSYL.	4.0	
334' W. of SECT. A on N. cb. of N. Rdway		
5.57 - - - - - 3 v - - -		
L of PENNSYLVANIA	6.8	251.0
5. cb. of N. Rdway	6.7	251.1
L of - - -	5.4	252.4
N. cb. - - -	4.4	253.4
10' N. of - - -	4.1	253.7
13.34' W. of SECT. A on N. cb. of N. Rdway		
22.23 - - - - - 3 v - - -		
10' N. of N. cb. of N. Rdway	7.1	250.7
5.67 - - - - -	8.1	249.7
- - - - -	8.6	249.2
L - - - - -	10.7	247.1
3. cb. - - -	14.2	243.6
PT X 16.23 W. of SECT. A on N. cb. of N. Rdway	17.2	240.6
27.05 - - - - - 3 cb } = SECT. F		
PT Y	13.8	244.0
5. cb. of N. Rdway	12.4	245.4
2' N. of - - - - -	14.7	243.1
L - - - - -	11.6	246.2
N. cb. - - - - -	9.1	248.7
5.67 N. of - - - - -	8.0	249.8
10' - - - - -	6.4	251.4

PENN.

55

7.11' W. of SECT. F on N. cb.

5.08 - - - - - 3 cb

5.67 N. of N. cb. of N. Rdway	5.9	251.9
- - - - -	7.8	250.0
L - - - - -	9.4	248.4
5. cb. - - - - -	9.9	247.9
L of PENNSYL	12.3	245.5
22.75 W. of SECT. F on N. cb.		
16.29 - - - - - 3. v		
L of PENNSYL	7.5	248.3
5. cb. of N. Rdway	6.6	251.2
L - - - - -	4.1	253.4
N. cb. - - - - -	2.2	255.6
5.67 N. of - - - - -	1.2	256.6
27.11 W. of SECT. F on N. cb.		
19.39 - - - - - 3 v		
5.67 N. of N. cb. of N. Rdway	0.7	257.1
- - - - -	1.8	256.0
L - - - - -	2.9	254.9
5. cb. - - - - -	5.2	252.5
L of PENN.	8.6	249.2

37.49' N. of SECT F on N. cb }
29.17' - - - - - 5 cb } = SECT G

14.33' S. of S. cb of N. Rdway. 7.3 256.3

5' - - - - - 4.1 253.7

3.2 254.6

1.9 255.9

N. cb - - - 1.2 256.4

5.67' N. of - - - 0.8 257.0

9.12' W. of SECT G.

4700

5.67' N. of N. cb. of N. Rdway. 0.7 252.1

1.2 256.4

1.9 255.9

S. cb - - - 2.3 255.5

9' S. of - - - 3.6 254.3

14.33' - - - 5.4 252.4

19.14' W. of SECT G.

14.33' S. of S. cb. of N. Rdway. 4.2 253.4

11' - - - 4.9 254.9

4.3 255.5

4.0 255.8

N. cb - - - 1.2 256.4

5.67' N. of - - - 0.9 256.9

29.12' W. of SECT G.

5.67' N. of N. cb of N. Rdway. 1.3 256.5

1.9 255.9

2.5 255.3

S. cb - - - 2.7 255.1

9' S. of - - - 2.8 255.0

14.33' - - - 5.7 252.1

14.12' W. of SECT G.

14.33' S. of S. cb of N. Rdway. 10.2 247.6

3.2 254.4

3.6 254.2

N. cb - - - 3.2 254.6

5.67' N. of - - - 2.4 255.4

69.12' W. of SECT G.

4760

5.67' N. of N. cb. of N. Rdway. 3.5 254.3

3' - - - 4.3 253.5

4.7 253.1

5.2 252.6

S. cb - - - 9.4 248.4

14.33' S. of - - - 14.7 243.1

252.87

79.12' N. of SECT G.

14.33' S. of S. cb. of N. Rdway	17.0	240.8
" " " " "	12.2	245.6
" " " " "	9.3	248.5
5' N. of " " " "	7.5	250.3
N. cb " " "	6.3	251.5
5.67' N. of " " " "	5.0	252.8

E. L. GOLD FINCH on Angle

567' N. of N. cb of N. Rdway.	12.0	245.8
" " " " "	11.8	246.0
" " " " "	15.2	242.6
S. cb " " "	19.3	238.5
" PENNSYL.	25.2	232.6

57

8/23/21
 Gregor
 Moore
 Miller
 Shaw
 Levels on paving 2' N+5' x
 N+5 rails Broadway
 from W.L. 3rd to California
 29.95 42.40 39.45 BP 5W 3rd

W.L. 3rd	54.70	5.0x N 7' pt to edge of N rail
2' N. of N rail	1.25	41.15
2' 5 - 5 ✓	1.55	40.85
100' W		
2' N. of N rail	3.49	38.91
2' 5 - 5 ✓	3.73	38.67
E.L. 2nd		
2' N. of N rail	5.70	36.70
2' 5 - 5 ✓	5.73	36.67
W.L. 2nd		
2' N. of N rail	6.65	35.75
2' 5 - 5 ✓	6.84	35.56
100' W		
2' N. of N rail	7.71	34.69
2' 5 - 5 ✓	7.83	34.57
E.L. 1st		
2' N. of N rail	8.65	33.75
2' 5 - 5 ✓	8.84	33.56

This is not used

30 E ✓	8.30	34.06 = curve onto 1st
E.L. of 1st 2' N		
T.P.	2.05	35.99
31' N. of E.L. 1st = E rail of Xing	8.46	33.94
N rail	2.89	33.10
5 ✓	3.06	22.93
W.L. 1st St.		
2' N. of N rail	3.50	32.49
2' 5. of 5 ✓	3.69	32.30
100' W.		
2' N. of N rail	4.49	31.50
2' 5 - 5 ✓	4.58	31.41
E.L. Front St.	47.90	5.0x N 7' pt to N rail
2' N. of N rail	5.25	30.74
2' 5 - 5 ✓	5.37	30.62
on B.M. SW Front	6.67	29.32 = 29.34 ✓
W.L. Front St to 5		
2' N. of N rail	5.72	30.27
2' 5 - 5 ✓	5.87	30.12

100' N of Front

2' N. of N rail	6.97	29.02
2' S - 5 ✓	7.07	28.92

E.L. of Union on S. of Broadway

2' N. of N rail	8.28	27.71
2' S - 5 ✓	8.36	27.63

T.P.	0.43	27.92	8.50	27.49
------	------	-------	------	-------

W.L. Union

2' N. of N rail	0.94	26.98
2' S - 5 ✓	0.94	26.98

100' W

2' N. of N rail	2.45	25.47
2' S - 5 ✓	2.45	25.47

E.L. STATE

2' N. of N rail = Turnout to N	4.00	23.92
2' S - 5 ✓	4.00	23.92

STATE

2' N. of N rail	4.89	23.03
2' S. of 5 ✓	4.89	23.03

chk B.M.

6.23 21.69 = 21.75

SW State

chk B.M.

W.L. STATE

2' N. of N rail	5.71	22.21
2' S - 5 ✓	5.67	22.25 = Turnout.

100' W

2' N. of N rail	7.52	20.40
2' S - 5 ✓	7.54	20.38

E.L. Columbia 47.8 S. of N 7' pt to N rail

2' N. of N rail	9.30	18.62
2' S - 5 ✓	9.36	18.56

W.L. Columbia

2' N. of N rail	10.67	17.25		
2' S - 5 ✓	10.87	17.05		
T.P.	0.91	18.19	10.64	17.28

100' W

2' N. of N rail	2.43	15.76
2' S - 5 ✓	2.59	15.60

E.L. Indig

2' N. of N rail	3.93	14.26
2' S - 5 ✓	4.13	14.06

5.40 12.79 = 12.88 SW Indig

N. L. India

2' N. of N rail	4.53	13.66
-----------------	------	-------

2' S - 5 ✓	4.65	13.54
------------	------	-------

100 W

2' N. of N rail	5.76	12.43
-----------------	------	-------

2' S - 5 ✓	5.90	12.29
------------	------	-------

2' N - N ✓ at 160' W.	6.53	11.66	on turnout
-----------------------	------	-------	------------

E. L. Arctic

2' N. of N rail	6.99	11.20
-----------------	------	-------

2' S - 5 ✓	7.04	11.15	on turnout
------------	------	-------	------------

N. L. Arctic

2' N. of N rail	7.69	10.50
-----------------	------	-------

2' S - 5 ✓	8.06	10.14
------------	------	-------

chk BM	7.76	10.43	SE Arctic = 10.50
--------	------	-------	-------------------

see 40' west on next page

100' W.

2' N. of N rail single Track	9.23	8.96
------------------------------	------	------

2' S - 5 ✓	9.27	8.92
------------	------	------

147' W

2' N. of N rail single Track	10.0	8.19
------------------------------	------	------

2' S - 5 ✓	9.94	8.25
------------	------	------

40' W. of Arctic = end of Double Track

2' N. of N rail	8.30	9.89
-----------------	------	------

2' S - 5 ✓	8.46	9.75
------------	------	------

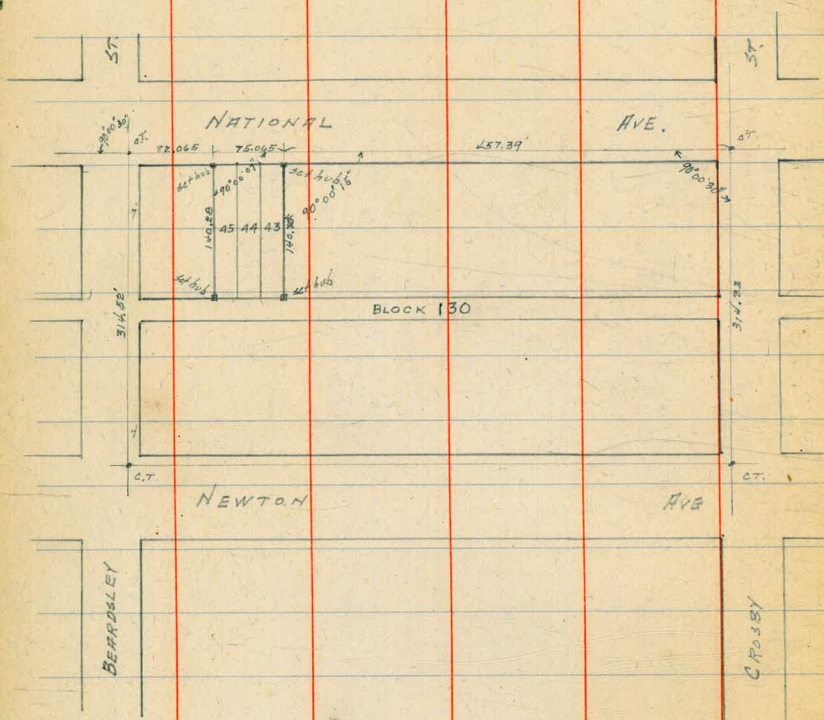
6/7/23

Gregory
Mason
1721/17
S.W.
C.V.

SURVEY OF LOTS 43-44-45
BLOCK 130
Mannassea and Schiller's
x or
Neighbor hood House

61452
15713
45739
7106
53445

61



side
side
side

S cb of Laurel

-10	4.8	40.5
E	4.9	40.4
cb	6.0	39.3
1/4	5.3	40.0
C	5.3	40.0
1/4	5.4	39.9
cb	5.8	39.5
W	6.0	39.3
+10	6.0	39.3

S Quarter of Laurel

-20	4.7	40.6
-10	5.5	39.8
W	5.5	39.8
cb	5.5	39.8
1/4	5.3	40.0
C	5.0	40.3
1/4	5.0	40.3
cb	4.8	40.5
E	4.7	40.6
+10	4.2	41.1

Center of Laurel

-10	3.7	41.6
E	4.2	41.1
cb	4.8	40.5
1/4	5.0	40.3
C	5.2	40.1
1/4	5.3	40.0
cb	5.5	39.8
W	5.5	39.8
+15	4.8	40.5
+25	4.2	41.1

N. Quarter

-25	4.0	41.8
-10	5.2	40.1
W	5.5	39.8
cb	5.4	39.9
1/4	5.1	40.2
C	4.8	40.5
1/4	4.5	40.8
cb	4.7	40.6
E	4.2	41.1
+10	3.5	41.8

+20	2.9	42.4
-----	-----	------

N. Curb of Laurel

-20	2.7	42.6
-----	-----	------

-10	3.0	42.2
-----	-----	------

E	3.2	42.1
---	-----	------

cb	4.0	41.3
----	-----	------

1/4	4.4	40.9
-----	-----	------

C	4.2	41.1
---	-----	------

1/4	4.4	40.9
-----	-----	------

cb	5.0	40.3
----	-----	------

W	5.0	40.3
---	-----	------

+10	5.0	40.3
-----	-----	------

N. L. Laurel

-10	4.1	41.2
-----	-----	------

W	3.7	41.6
---	-----	------

cb	3.8	41.5
----	-----	------

1/2	3.6	41.7
-----	-----	------

C	3.5	41.8
---	-----	------

1/4	3.7	41.6
-----	-----	------

cb	3.7	41.6
----	-----	------

E	3.5	41.8
---	-----	------

+10	3.6	41.7
-----	-----	------

13' N. of N. L. LAUREL

-10	2.8	42.5
-----	-----	------

E	2.7	42.6
---	-----	------

cb	3.0	42.3
----	-----	------

1/2	3.0	42.3
-----	-----	------

C	2.7	42.6
---	-----	------

1/4	2.8	42.5
-----	-----	------

cb	2.5	42.8
----	-----	------

W	1.9	43.4
---	-----	------

+2	0.1	45.2
----	-----	------

20' N. of N. L. LAUREL

-2	0.0	45.3
----	-----	------

W	1.3	44.0
---	-----	------

cb	1.8	43.5
----	-----	------

1/2	2.1	43.2
-----	-----	------

C	2.2	43.1
---	-----	------

1/4	2.2	43.1
-----	-----	------

+10	2.6	42.7
-----	-----	------

4534

800

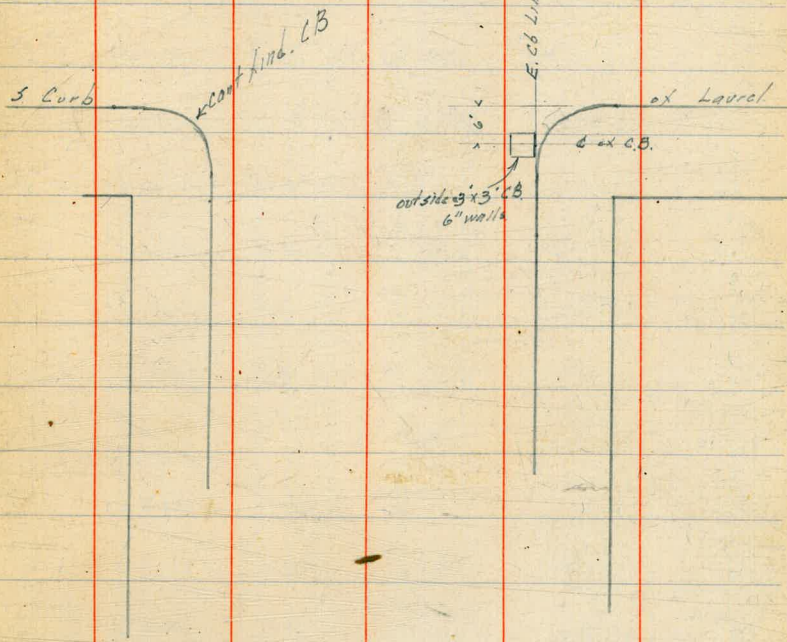
cb	1.9	43.4
E	2.3	43.0

Elev. of Top of Frame of C.B. on SE Corner of
 Laurel + Columbia is 36.90

Cannot locate C.B. on SW Corner.

6301
 140
 444
 13-1
 5140
 054
 5194
 1139
 40.57
 497
 4554
 861
 36.37 = Top of C.B.

COLUMBIA 65



11/21/23

Gregory

CROSS SECTIONS ON
BLK 179 Univ. Heights
Lincoln to Campus
East of Normal St
20' wide

646

319.42

312.96

BPSE

Normal + Lino

3'E. of E.L. = garage (dirt)

6.8

313.9 ✓

1135

330.75

002

319.40

N.L. Lincoln

2' W. of W.L. = garage (dirt)

5.5

318.1 ✓

W

10.15

310.60 ✓

on curb

100' N

+5

10.2

310.13 ✓

E

5.5

315.1 ✓

C

9.9

310.8 ✓

C

5.5

315.1 ✓

E

9.40

311.3 ✓

on curb

+5

5.7

315.0 ✓

29' N

W

5.3

316.1 ✓

E

8.7

311.0 ✓

125' N

C

9.0

311.7 ✓

W

4.4

316.3 ✓

W

8.7

311.0 ✓

Graduation
hall below

C

4.1

316.6 ✓

58' N

E

4.0

316.7 ✓

W - center of walk to house

7.2

313.5 ✓

150' N

+5

7.5

313.1 ✓

E

1.6

319.1 ✓

C

7.2

313.5 ✓

C

2.0

318.7 ✓

E

7.6

313.1 ✓

W

2.7

318.0 ✓

66' N

T.P.

12 1/8

313.13

0.10

330.65

3.5' W. of W.L. = garage dirt

6.3

314.1 ✓

175' N

W

12.3

330.8 ✓

66

343.13

C	11.8	331.3 ✓
E	11.1	332.0 ✓
192' N		
0.5' E of EL (cement apron)	9.65	333.18 ✓
2.5' ✓ ✓ ✓ = front of garage	9.5	333.6 ✓
198' N		
E	9.4	333.7 ✓
C	9.1	334.0 ✓
W	9.3	333.8 ✓
200' N		
W	8.9	334.2 ✓
C	8.8	334.3 ✓
+4	8.7	334.4 ✓
+6	8.0	335.1 ✓
E	8.0	335.1 ✓
220' N		
E	5.8	337.3 ✓
+6	6.3	336.8 ✓
C	6.4	336.7 ✓
W	6.5	336.6 ✓

343.13

67

240' N		
3.5' W of WL = garage (cement)	5.10	338.0 ✓
W	5.3	337.8 ✓
+5	5.5	337.6 ✓
C	5.1	338.0 ✓
E	5.1	338.0 ✓
260' N		
E	3.9	339.2 ✓
+6	4.6	338.5 ✓
C	4.5	338.6 ✓
+5	4.7	338.4 ✓
W	4.4	338.7 ✓
275' N		
C = M. Hole.	3.70	339.4 ✓
300' N		
W	3.1	340.0 ✓
+5	3.5	339.6 ✓
C	3.3	339.8 ✓
E	3.1	340.0 ✓

348.3

319' N

W = garage (wood floor) 1.17 341.96 ✓

325' N

E 1.9 341. ✓ ✓

C 2.2 340.9 ✓

+5 2.5 340.6 ✓

W 1.6 341.5 ✓

350' N

W 0.1 343.0 ✓

+5 1.2 341.9 ✓

C 1.3 341.8 ✓

E 0.6 341.5 ✓

TP 5.85 348.73 0.25 342.88 ✓

366' N

W = garage (dirt) 5.9 341.9 ✓

384' N

W = garage (dirt) 5.7 343.0 ✓

388' N

4' E. of E.L. (dirt garage) 5.9 341.8 ✓

348.7

400' N

E = S. End of long garage (dirt) 5.4 343.3 ✓

C 5.5 343. ✓ ✓

+5 5.7 343.0 ✓

W 5.1 343.6 ✓

430' N

W 4.2 344.3 ✓

+5 5.0 343.7 ✓

C 4.9 343.8 ✓

E = garage (dirt) 5.1 343.6 ✓

448' N

E = N. End of long garage 5.3 343.4 ✓

461' N

E 4.5 344. ✓ ✓

+5 5.2 343.5 ✓

C 4.9 343.8 ✓

W = garage (dirt) 4.8 343.9 ✓

486.5' N

E = S. End of cement apron 5.35 343.3 ✓

68

348.73

500' N

W	5.1	343.6 ✓
+5	5.3	343.4 ✓
C	5.0	343.7 ✓
E	5.4	343.3 ✓

517' N

E = N. L. of Cement apron 5.29 343.44 ✓

W = garage (dirt) 4.8 343.9 ✓

530' N

E	4.9	343.8 ✓
C	4.8	343.9 ✓
+5	5.3	343.4 ✓
+7	4.4	343.3 ✓
W	4.5	344 ✓

570' N

W	5.0	343.7 ✓
+4	5.4	343.3 ✓
C	5.1	343.6 ✓
E	5.1	343.6 ✓

348.73

575' N

C = M.H. 5.2 343.5 ✓

590' N

E	5.2	343.1 ✓
C	5.3	343.4 ✓
+6	5.8	342.9 ✓
W	4.8	343.9 ✓

600' N = 5L Campous

(W)	(5.83)	342.9 ✓ on curb
W use for yardage.	5.3	343.4 ✓
+4	6.2	342.5 ✓
C	5.8	342.9 ✓
E	6.07	342.66 ✓ on curb

69

11/21/73 Gregory

CROSS SECTION OF

ALLEY BLK 7 20' wide
 BRIDGE - CHASSIS
 24th to 25th
 3.0 x F 31

1.55

15836

15681

NW 24th
 F BP

E. L. 24th

N on cement curb

4.61

153.75 ✓

+2

5.2

153.1 ✓

C

5.3

153.0 ✓

+8.4 = edge of cement walk

5.26

153.10 ✓

S on cement curb

5.20

153.16 ✓

46' E

1.24 N of SL = edge of cement walk

2.56

153.80 ✓

C

2.6

153.7 ✓

+8

2.7

153.6 ✓

N

2.2

156.1 ✓

77' E = E. End of cement walk on S.

N

+0.2

158.6 ✓

C

0.4

157.9 ✓

+9.00

0.3

158.0 ✓

+9.10 = edge of cement walk

0.08

158.48 ✓

T.P.

11.78

17006

0.08

158.28 ✓

170.06

70

119' E

S

9.6

160.2 ✓

C

9.7

160.3 ✓

+8.5 = edge of cement apron

9.05

161.01 ✓

N = front of garage

8.81

161.45 ✓

126' E

1.24 N of SL = edge cement apron

9.13

160.93 ✓

.5 - - - front of garage

9.10

160.96 ✓

160' E

N

6.7

163.3 ✓

+2

7.4

164.6 ✓

C

7.5

164.5 ✓

S

7.4

164.6 ✓

191' E

S

6.0

162.0 ✓

C

5.7

162.3 ✓

N

5.5

161.5 ✓

192' E

N

5.4

164.6 ✓

C

5.5

164.5 ✓

	170.06	170.06	
S on cement apron	4.8	165.4	✓
+ 2.7 = front of garage cement	4.60	165.1	✓
<small>same garage</small> 2+09			
- 2.7 = front of garage	4.53	165.55	✓
S = on cement apron	4.6	165.1	✓
C	4.7	165.3	✓
N	4.6	165.1	✓

237 E

N = front of garage	2.92	167.14	✓
+ 2 = edge of apron	3.2	166.8	✓
C	3.7	166.3	✓
S	3.7	166.3	✓

261 E

S = garage board floor	2.73	167.33	✓
274.5 E = west end of cement apron			
S	1.83	168.73	✓
S (use for yardage)	2.2	167.8	✓
+ 2.5 = edge of cement apron	1.91	168.15	✓
C	2.4	167.6	✓
N	2.3	167.7	✓

	280 E		
N = edge of cement apron	1.95	168.11	✓
310 E = east end of cement apron			
N	1.3	168.7	✓
C	1.6	168.1	✓
+ 7.5 = edge of cement apron	1.73	168.33	✓
S	1.8	168	✓

320 E

S	0.9	169.1	✓
C	1.5	168.5	✓
N	1.0	169.0	✓
TP	10.57	179.84	0.79
			169.27

360 E

N	9.6	170.2	✓
+ 2	10.1	169.7	✓
C	10.3	169.5	✓
S = cement apron	10.04	169.80	✓
+ 1.2 = garage	9.90	169.9	✓

392 E

S	9.2	170.6	✓
---	-----	-------	---

17984

C	9.6	170.4 ✓
+8	9.4	170.4 ✓
N	8.9	170.9 ✓

408' E

N = garage (dirt)	8.7	171.1 ✓
-------------------	-----	---------

445' E

N	7.3	171.5 ✓
---	-----	---------

+4	8.2	171.6 ✓
----	-----	---------

C	8.2	171.6 ✓
---	-----	---------

S = garage (asphalt floor)	8.1	171.7 ✓
----------------------------	-----	---------

455' E

S = garage (wood floor)	7.17	171.67 ✓
-------------------------	------	----------

465' E

1.4 S of N/L = cement apron	6.84	173.00 ✓
-----------------------------	------	----------

N = front of garage	6.65	173.19 ✓
---------------------	------	----------

477' E

1.4 S of N/L = cement apron	6.26	173.58 ✓
-----------------------------	------	----------

N = front of garage	6.02	173.84 ✓
---------------------	------	----------

17984

492' E

S	6.0	173.8 ✓
---	-----	---------

C	6.2	173.6 ✓
---	-----	---------

N = front of garage (cement)	5.80	174.0 ✓
------------------------------	------	---------

513' E

N	4.6	175.2 ✓
---	-----	---------

+5	5.4	174.4 ✓
----	-----	---------

C	5.3	174.5 ✓
---	-----	---------

S = front of garage (wood)	4.40	175.4 ✓
----------------------------	------	---------

555' E

S = front of garage (wood)	3.13	176.71 ✓
----------------------------	------	----------

C	3.5	176.3 ✓
---	-----	---------

N	3.3	176.5 ✓
---	-----	---------

564' E

S = front of garage (wood)	3.20	176.6 ✓
----------------------------	------	---------

582' E

N	2.2	177.6 ✓
---	-----	---------

+3	3.0	176.8 ✓
----	-----	---------

C	3.1	176.7 ✓
---	-----	---------

+6	3.0	176.8 ✓
----	-----	---------

S	2.5	177.3 ✓
---	-----	---------

179.84

601 E = WL 25th ST

73

S 3.10 176.74 ✓ on curb

C 3.3 176.5 ✓

N 2.68 177.16 ✓ on curb

11/21/23 (report)

CROSS SECTION OF ALLEY BLK 89
E.W. Morse's
29th to 30th No. B
20' wide

B + 29th

	2.56	199.91	197.35	3E
		E.L. 29th St.		
S		7.20	191.7	on curb
C		6.1	193.8	✓
N		7.1	194.8	✓
T.P.	11.55	211.26	0.02	199.71
		3' E		
N		9.9	101.3	✓
C		9.6	101.6	✓
S		9.8	101.4	✓
		50' E		
S		6.2	105.0	✓
C		6.7	104.5	✓
N		6.4	104.8	✓
		100' E = west end of garage on S		
N		4.8	106.4	✓
C		4.8	106.4	✓
S = front of garage (cement)		4.0	107. ✓	✓
S cement floor		3.60	107.6	✓

11/26

74

125' E = E. End of garage on S

				S = cement floor	3.60	107.6	✓	
				C	3.8	107.4	✓	
				N	3.0	108. ✓	✓	
				165' E				
				N	1.7	109.5	✓	
				C	1.6	109.6	✓	
				S	1.7	109.5	✓	
				T.P.	11.87	223.11	0.02	211.24
				208' E				
				S	11.0	111.1	✓	
				C	11.2	111.9	✓	
				N	11.0	111.1	✓	
				+ 2.8 = edge cement apron	10.72	111.39	✓	
				220' E				
				4' 3.0 x 3.6 = edge cement apron	10.35	111.76	✓	
				237' E				
				4' 3.0 x 3.6 = garage cement	8.65	111.26	✓	

223.11

250' E

N	8.0	✓15.1 ✓
C	8.1	✓15.0 ✓
S	8.2	✓14.9 ✓

251' E

S	7.4	✓15.7 ✓
C	8.1	✓15.0 ✓
N	8.0	✓15.1 ✓

258' E

2' 5.0 x 5.2 = garage (cement)	6.90	✓16. ✓ ✓
--------------------------------	------	----------

268' E

2' 5.0 x 5.4 = garage (cement)	5.90	✓17. ✓ ✓
--------------------------------	------	----------

294' E

2' 5.0 x 5.4 = garage (dirt)	4.4	✓18.7 ✓
------------------------------	-----	---------

300' E

N	3.9	✓19. ✓ ✓
C	3.7	✓19. ✓ ✓
S	4.1	✓19.0 ✓

300.2' E = W. end of cement apron

S	3.00	✓10.1 ✓
---	------	---------

✓13.11

+ 2 = edge of cement apron

	2.99	✓10. ✓ ✓
C	3.6	✓19.5 ✓
N	3.9	✓19. ✓ ✓

324' E = E. End of cement apron

N	2.7	✓10. ✓ ✓
---	-----	----------

C	2.6	✓10.5 ✓
---	-----	---------

+ 8 = edge of apron	2.90	✓10. ✓ ✓
---------------------	------	----------

S = front of garage.	2.73	✓10.58 ✓
----------------------	------	----------

340' E

S	2.3	✓10.8 ✓
---	-----	---------

C	2.0	✓11. ✓ ✓
---	-----	----------

N	2.1	✓11.0 ✓
---	-----	---------

+ 3 = cement apron	2.06	✓11.05 ✓
--------------------	------	----------

376' E

5.0' N = garage (cement)	0.95	✓11. ✓ ✓
--------------------------	------	----------

C	1.3	✓11.8 ✓
---	-----	---------

+ 8 = edge cement apron	1.11	✓11.00 ✓
-------------------------	------	----------

S = front of garage	1.13	✓11.98 ✓
---------------------	------	----------

380' E

S = garage (cement)	0.80	✓11. ✓ ✓
---------------------	------	----------

75

389'E

53.0xN = garage (cement) 0.63 ✓✓✓ 48 ✓

397'E

S = garage (cement) 0.70 ✓✓✓ 4 ✓

400'E

S 1.00 ✓✓✓ 11 ✓

+2 = edge cement apron 0.93 ✓✓✓ 18 ✓

C 1.0 ✓✓✓ 11 ✓

+8.0 = edge cement apron 0.70 ✓✓✓ 11 ✓

+9.5 = front of garage 0.36 ✓✓✓ 7 ✓ this is d of double garage

T.P. 6.50 22921 0.40 22271 ✓

457'E

N 6.0 ✓✓✓ 2 ✓

C 6.3 ✓✓✓ 9 ✓

S = garage cement floor 6.30 ✓✓✓ 9 ✓

500'E

S 5.5 ✓✓✓ 9 ✓

C 5.5 ✓✓✓ 7 ✓

N 5.1 ✓✓✓ 11 ✓

✓✓✓✓

545'E

N 4.8 ✓✓✓ 11 ✓

C 4.8 ✓✓✓ 11 ✓

S 5.1 ✓✓✓ 11 ✓

585'E

S 5.3 ✓✓✓ 9 ✓

C 5.5 ✓✓✓ 7 ✓

N 4.8 ✓✓✓ 11 ✓

598'E

N 5.6 ✓✓✓ 11 ✓

C 6.4 ✓✓✓ 8 ✓

+8 6.4 ✓✓✓ 9 ✓

S 5.5 ✓✓✓ 7 ✓

600' = W.L. 30th St

S on curb 6.94 ✓✓✓ 16 ✓

C 6.9 ✓✓✓ 13 ✓

N 6.3 ✓✓✓ 9 ✓

curb is out on N. from W.L. 30th to 2nd E of W.L.

The image shows an open notebook with two facing pages. Both pages are cream-colored and feature horizontal blue ruling lines. Vertical red lines are drawn on both pages to create margins. The right page has the number '79' printed in red in the upper right corner. The notebook is placed on a white surface, and the binding is visible in the center crease.

CUTS PENNSYLVANIA AVE.

51.6
3.2
51.04
51.0

251.10 TP
11.62
262.72

S. curb

251.12	252.76	5514	5633	5730	5825
10.60	9.0	7.6	6.4	5.4	4.7
+6.1	+4.8	+3.7	+2.8	+2.1	+1.7
5860	5873	5927	5942	5939	5895
4.12	3.8	3.45	3.3	3.3	3.8
+1.2	+1.1	+1.6	+0.9	+0.5	+0.7

N curb

5945	599	5922	598	5917	5824
33	28	23	29	355	39
+0.1	-0.3	-0.2	0.0	+0.1	+0.2
5808	5758	5824	= center		
4.64	5.12	3.9			
+0.1	+0.9	+0.5			
5815	= center				
4.6					
+1.3					
51.62	56.54	= center			
11.1	6.2				
+6.0	+2.4				

N. Rdway

57.24	56.4	56.07	55.5	52
5.5	6.3	6.68	7.2	10.72
-5.3	+0.1	+0.4	+0.4	-0.6
55.9	55.57	55.9	51.5	
6.8	7.15	7.7	11.2	
-0.3	0.0	+0.2	-6.0	

251.10
0.43
251.53
12.59
238.94
0.42
239.16

S. Rdway

251.12	256.14	240.67	235.20	229.44	225.76
35.04	35.04	35.04	35.04	35.04	35.04
5.37	10.36	16.3	11.7	9.7	13.4
-5.0	+5.2	+8.5	+6.5	+0.2	+0.2
246.42	240.72	235.04	229.02	224.37	
5.1	10.8	4.1	10.1	14.8	
-5.5	-2.7	+0.4	-2.3	-0.3	

25.12
22.07

12.7
7.1
105.4

785) 2775 .15

38
15
190
38
57

350) 1700
1500
1500
200

5.70
0.6
16.20
10.50
1.4

25
175
230
40
50
70
80
90

270
1193
528.63
1193
516.70

10570
1740
2318
28864
866920
433

52863
1193
540.56

10000
13
87
1
0000377

130
225
650
260
27250

1918
4045
58
23245
432
22792

28864
30
866920
433

75
65
45
20

16.6

830
2.46

1444 E.P.S.
1775 - P.F.
2+11 = E.C.

31.5 = F.C.
67.5 = P.F.
99.5 E = P.F. 5W

1539 rock in path

14335
300
L

252
123
15.72

1779 K 50 * 7
66
17 * 1 59 1

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.
FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.