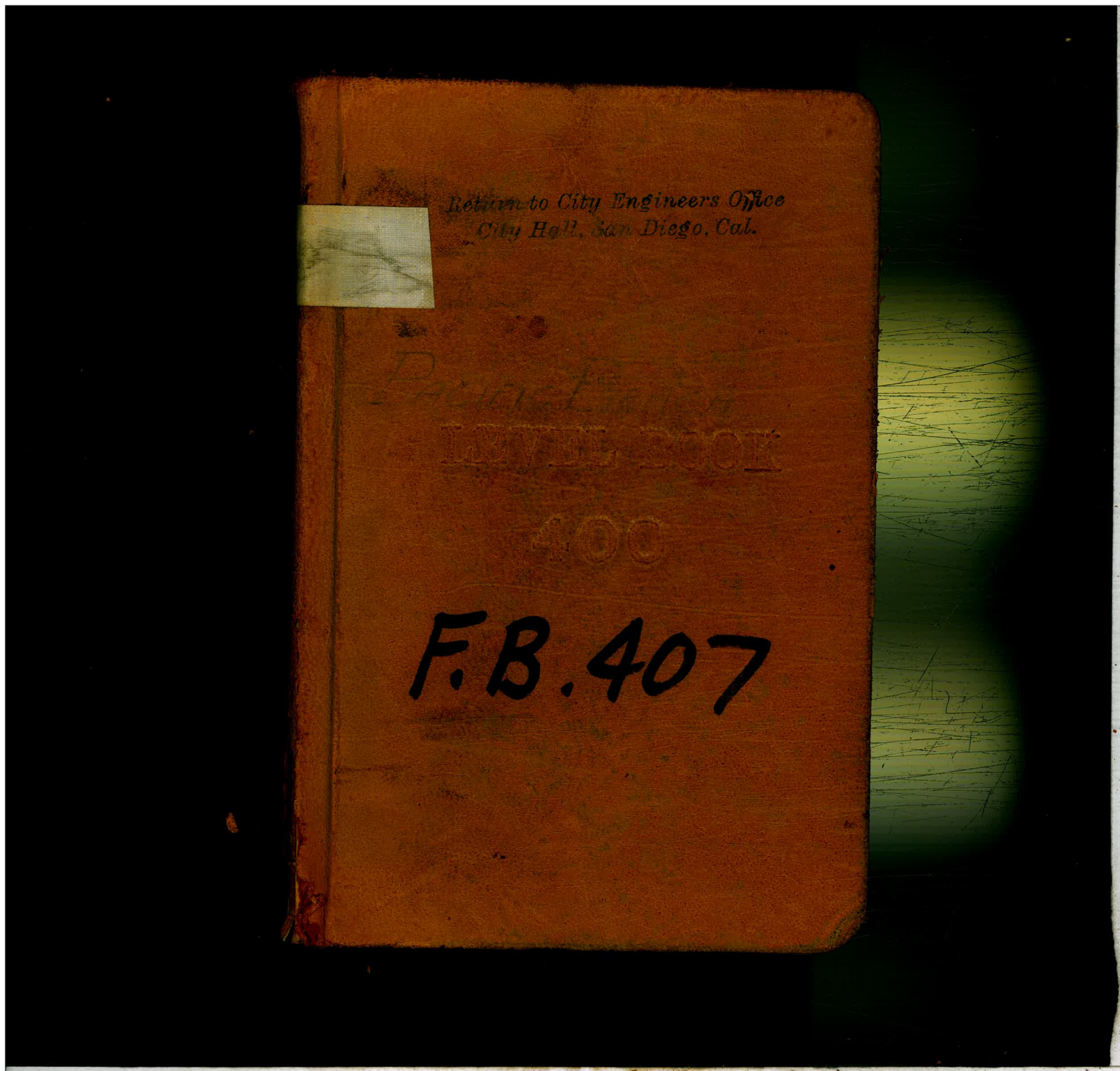


Return to City Engineers Office
City Hall, San Diego, Cal.

Pacific Fishing

LEVEL BOOK

400

F.B. 407

H. S. CROCKER COMPANY
DRAWING MATERIALS AND
SURVEYING INSTRUMENTS
SAN FRANCISCO
407

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 Kueffel & Esser Co."

MICROFILMED 1964

	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.

Return to City Engineers Office
City Hall, San Diego, Cal.

FROM
Loring's Book Store

Bench M

~~B.M. Tel. pole Pendleton + Grand~~

29.44.

~~B.M Top of iron pipe S.E. Cor Beryl + Lamont~~

10' E of S.E. Cor on hub 161.08 ~~160.80~~

Morell + Grand N.E. Cor. spike in pole

45 41.3

Grades - Beryl St - Lamont St - 200' E

	~~0.19~~			161.08	
0+0	2.19	163.27	2.52	160.75	F-1'
+50			3.17	160.10	F-0.50'
1+00			3.82	159.45	F-1.00
+50			4.47	158.80	F-1.00
2+00			5.12	158.15	F-0.50'

Whittelsey, Colbath, Dezziel } July 30 1906.

Whittelsey
Colbath } July 30 1908
Deziel

Xsections Ivy Ave = 125' Wide

Pendleton St East.

E.P.L. of Pendleton

~~N.P.L.~~				30.53	
T.P.	0.57	31.10	7.69	23.41	Spike in tie N. Side of Track
B.M.	3.38	26.79	11.31	15.48	± E. Line of Pendt
S.P.L.	2.99	18.47	4.60		
C			4.40	14.1	
+17			3.80	14.7	
1/4			2.70	15.8	
+4			1.00	17.5	
+7			2.50	16.0	
+8			3.70	14.8	
4' S of ctr N. Rail			2.70	15.8	
℄			3.60	14.9	
+3			1.20	17.3	
+8			2.70	15.8	
1/4			2.60	15.9	
C			1.90	16.6	
N.P.L.			1.20	17.3	

POSTED

50' E. of Pendleton

N.P.L.		18.47	2.50	16.0
N C			3.20	15.3
1/4			3.90	15.6
+14			4.00	14.5
+20			2.10	16.4
℄			4.60	13.9
+5 N. Rail			3.70	14.8
+15			4.50	14.0
+18			2.70	15.8
1/4			4.40	14.1
C			5.10	13.4
S.P.L.			5.90	12.6

100' E. of Pendleton

S.P.L.			6.40	12.1
C			6.20	12.3
+17			5.90	12.6
1/4			4.00	14.5

100' E Cont

+5	18.47	4.00	14.5
+6		5.70	12.8
+16 N. Rail		4.70	13.8
℄		5.60	12.9
+4		2.80	15.7
+9		5.30	13.2
¼		4.80	13.7
C		4.40	14.1
N.P.L.		4.10	14.4

150' E. of Pendleton

N.P.L.		5.60	12.9
C		6.00	12.5
¼		6.20	12.3
+11		6.40	12.1
+18		3.50	15.0
℄		6.60	11.9
+5 Rail		5.70	12.8
+14	18.47	6.70	
+15		5.40	13.1
+19		5.20	13.3
¼		6.70	11.8
C		7.70	10.8
S.P.L.		7.90	10.6

200' E of Pendleton

S.P.L.		9.50	9.0
C		9.20	9.3
+17		9.40	9.1
¼		8.20	10.3
+2		6.00	12.5
+5		7.30	11.2
+6		7.80	10.7
+16 N Rail		6.80	11.7
℄		7.90	10.6
+4		6.60	11.9

200' E cont'

+14	18.47	9.40	9.1
¼		8.70	9.8
C		8.00	10.5
N.P.L.		7.20	11.3

250' E of Pendleton

N.P.L.		9.10	9.4
C		9.90	8.6
¼		10.20	8.3
+11		10.10	8.4
+16		8.00	10.5
+20		8.10	10.4
℄		9.20	9.3
+5 N. Rail		8.00	10.5
+14		9.00	9.5
+15		8.70	10.3
¼		9.30	9.2
~~Rb~~		10.50	8.0
C		10.70	7.8
S.P.L.		10.90	7.6

300' E of Pendleton

S.P.L.	18.47	11.90	
C		11.90	6.6
+18		11.70	6.8
¼		10.30	8.2
+7		9.30	9.2
+16 Rail		8.80	9.7
℄		9.40	9.1
+5		9.60	8.9
+10		11.00	7.5
~~S~~ ¼		11.20	7.3
~~C~~		10.70	7.8
N.P.L.		10.60	7.9

350' E of Pendleton

N.P.L.		11.00	7.5
C		11.80	6.7
¼		11.90	6.6
+11		11.70	6.8
+16		9.70	8.8

	350'		
℄	18.47	10.00	
+5 N Rail		9.50	9.0
1/4		10.50	8.0
+6		13.30	5.2
C		13.50	5.0
S. P. L.		13.00	5.5
	397' E of Pendleton = E. End		
S. P. L.		14.60	3.9
C		14.50	4.0
+12		14.10	4.4
1/4		11.00	7.5
+12		10.50	8.0
+16 N Rail		9.90	8.6
℄		10.40	8.1
+4		10.40	8.1
+14		13.70	4.8
1/4		13.80	4.7

	397' E of Pendleton Cont'd			
C	18.47	13.70	4.8	
N. P. L.		12.90	5.6	

POSTED

Xsections Oliver Ave.

- Noyes to Dawes -

Whittelsey, Colbath, Daigel } Jul. 31 1908

Oliver = 80' Wide - x 20 x 10 x 10 x ℄ 10 x 10 x 20 x

~~Nou~~				40.41
T.P.	2.10	47.51	12.07	35.44
"	2.46	37.90	12.20	25.70
"	1.47	27.17	12.61	14.56
	1.33	15.89		

E.P.L. of Noyes

N.P.L.		15.89	16.80	- 0.90
C		15.9	17.30	
1/4			17.20	
℄			16.90	-1.00
1/4			17.50	
C			17.70	
S.P.L.			17.60	- 1.70

E.C.L. of Noyes

S.P.L.		15.89	17.40	- 1.50
C			17.20	
1/4			16.80	
℄			16.50	- 0.60
1/4			16.10	
C			16.30	
N.P.L.			15.90	0.00

E 1/4 of Noyes

N.P.L.			14.80	1.10
C			15.40	
1/4			15.50	
℄			15.60	0.30
1/4			15.90	
C			16.20	
S.P.L.			16.80	~~0.90~~

	℄ of Noyes			
S.P.L.		15.89	15.20	0.70
C			14.80	
¼			14.50	
℄			14.20	1.70
¼			14.20	
C			14.40	
N.P.L.			14.20	1.70
	W ¼ of Noyes			
N.P.L.			13.40	2.50
C			13.70	2.20
¼			13.50	
℄			13.20	2.70
¼			13.70	
C			14.20	
S.P.L.			14.10	1.80

	W.C.L. of Noyes			
S.P.L.		15.89	13.50	2.40
C			13.30	
¼			12.90	
℄			12.50	3.40
¼			12.60	
C			13.20	
N.P.L.			12.70	3.20
	N.P.L. of Noyes			
N.P.L.			10.90	5.00
C			11.30	
¼			11.10	
℄			11.10	4.80
¼			11.60	
C			12.50	
S.P.L.			12.50	3.40

	50' W. of Noyes			
S.P.L.		15.89	10.20	5.70
C			9.90	
1/4			9.10	
℄			9.30	6.60
1/4			8.60	
C			8.50	
N.P.L.			7.80	8.10
	100' W of Noyes			
N.P.L.			5.30	10.60
C			5.80	
1/4			6.20	
℄			6.40	9.50
1/4			7.20	
C			8.10	
S.P.L.			8.40	7.50

	150' W. of Noyes			
S.P.L.		15.89	7.40	8.50
C			7.10	
1/4			6.20	
℄			5.50	10.40
1/4			5.20	
C			4.60	
N.P.L.			3.60	12.30
	200' W of Noyes			
N.P.L.			3.30	12.60
C			4.30	
1/4			4.60	
℄			4.80	11.10
1/4			5.50	
C			6.00	
S.P.L.			6.20	9.70

	250' W of Noyes			
S.P.L.		15.89	5.50	10.40
C			5.30	
¼			4.60	
℄			3.90	12.00
¼			3.70	
C			3.40	
N.P.L.			2.60	13.30
	300' W of Noyes			
N.P.L.			1.60	14.30
C			2.40	
¼			2.40	
℄			2.40	13.50
¼			2.90	
C			3.40	
S.P.L.			4.00	11.90
T.P.			1.33	14.56
	10.74	25.30		

	350' W of Noyes			
S.P.L.		25.30	12.30	13.00
C			12.00	
¼			11.60	
℄			11.10	14.20
¼			10.90	
C			10.70	
N.P.L.			9.60	15.70
	400' W of Noyes			
N.P.L.			8.70	16.60
C			9.30	
¼			9.80	
℄			10.30	15.00
¼			11.10	
C			11.50	
S.P.L.			12.70	12.60

	450' N of Noyes			
S.P.L.		25.30	13.50	11.80
C			13.00	
1/4			12.50	
℄			11.70	13.60
1/4			10.50	
C			9.90	
N.P.L.			8.80	16.50
	500' N of Noyes = E.P.L. of Morrell			
N.T.L.			9.20	16.10
C			10.90	
1/4			11.50	
℄			11.90	13.40
1/4			12.30	
C			12.30	
S.P.L.			12.90	12.40

	E.C.L. of Morell			
S.T.L.		25.30	12.20	13.10
C			12.30	
1/4			12.40	
℄			12.40	12.90
1/4			12.20	
C			11.80	
N.P.L.			10.10	14.20
	E 1/4 of Morell			
N.P.L.			10.30	15.00
C			11.80	
1/4			12.20	
℄			12.30	13.00
1/4			12.00	
C			11.90	
S.P.L.			12.00	13.30

℄ of Morell

S.P.L.		25.30	11.60	13.70
C			11.40	
¼			11.60	
℄			11.60	13.70
¼			11.90	
C			11.60	
N.P.L.			10.40	14.90

W ¼ of Morell

N.T.L.			10.90	14.40
C			11.80	
¼			11.80	
℄			11.20	14.10
¼			11.40	
C			11.40	
S.T.L.			11.00	14.30

W.C.L. of Morell

S.T.L.		25.30	10.40	14.90
C			11.40	
¼			11.10	
℄			10.80	14.50
¼			11.60	
C			11.60	
N.T.L			10.80	14.50

W.T.L. of Morrell

N.T.L			10.70	14.60
C			11.20	
¼			10.90	
℄			10.50	14.80
¼			10.80	
C			10.20	
S.T.L.			8.40	16.90

50' W of Morell

S.P.L.		25.30	5.00	20.30
C			5.20	
¼			5.40	
¢			6.20	19.10
¼			6.70	
C			7.80	
N.P.L.			9.00	16.30

100' W of Morell

N.P.L.			3.40	21.90
C			3.20	
¼			2.40	
¢			1.90	23.40
¼			1.40	
C			1.00	
S.P.L.			0.00	25.30
T.P.			0.47	24.83
	12.96	37.79		

150' W. of Morell

S.P.L.		37.79	8.40	29.40
C			8.60	
¼			8.80	
¢			9.00	26.80
¼			9.00	
C			9.80	
N.P.L.			10.40	27.40

200' W of Morell

N.P.L.			5.00	32.80
C			5.20	
¼			4.80	
¢			4.60	33.20
¼			5.10	
C			5.50	
S.P.L.			5.20	32.60

		250' W. of Morell		
S.P.L.		37.99	1.10	36.90
C			1.60	
1/4			1.40	
℄			0.80	37.00
1/4			1.20	
C			1.50	
N.P.L.			1.00	36.80
		300' W. of Morell		
N.P.L.		44.71	5.80	38.90
C			6.30	
1/4			6.10	
℄			5.10	39.00
1/4			6.20	
C			6.60	
S.P.L.			6.40	38.30
T.P.		37.99	0.19	37.60
	7.11	44.71		

		350' W. of Morell		
S.P.L.		44.71	6.00	38.70
C			5.90	
1/4			6.20	
℄			5.80	38.90
1/4			5.60	
C			5.60	
N.P.L.			5.20	39.50
		400' W. of Morell		
N.P.L.			5.10	39.60
C			5.70	
1/4			5.50	
℄			5.40	39.30
1/4			5.60	
C			6.10	
S.P.L.			6.10	38.60

		450' W. of Morell		
S.P.L.		44.71	5.70	39.00
C			5.90	
¼			5.40	
℄			5.10	39.60
¼			5.30	
C			5.40	
N.P.L.			5.00	39.70
500' W of Morell = E.P.L. of Lamont				
N.P.L.			4.50	40.20
C			4.90	
¼			4.80	
℄			4.60	40.10
¼			5.00	
C			5.30	
S.P.L.			5.10	39.76
T.P.			3.37	41.84
	11.63	52.97		

		W.P.L of Lamont		
S.P.L.		52.97	12.80	40.60
C			12.40	
¼			12.40	
℄			12.60	40.40
¼			12.40	
C			12.40	
N.P.L.			1200	41.00
		50' W of Lamont		
N.P.L.			11.80	41.20
C			11.90	
¼			11.90	
℄			12.00	41.00
¼			12.10	
C			12.10	
S.P.L.			12.30	40.70

100' W of Lamont

S.P.L.		52.97	12.00	41.00
C			11.50	
¼			11.50	
℄			11.60	41.40
¼			11.60	
C			11.60	
N.P.L.			11.30	41.70

150' W of Lamont

N.P.L.			11.00	42.00
C			11.00	
¼			11.10	
℄			11.20	41.60
¼			11.20	
C			11.30	
S.P.L.			11.50	41.50

200' W of Lamont

S.P.L.		52.97	11.10	41.90
C			11.10	
¼			11.00	
℄			10.90	42.10
¼			10.90	
C			10.80	
N.P.L.			10.70	42.30

250' W of Lamont

N.P.L.			10.50	42.50
C			10.30	
¼			10.40	
℄			10.10	42.90
¼			10.30	
C			10.20	
S.P.L.			10.20	42.80

	300' W. of Lamont			
S.P.L.		52.97	9.10	43.90
℄			9.40	
¼			9.60	
℄			9.90	43.10
¼			9.80	
C			10.00	
N.P.L.			10.00	43.00
	350' W. of Lamont			
N.P.L.			9.40	43.6
C			9.30	
¼			9.20	
℄			9.10	43.90
¼			9.00	
C			8.90	
S.P.L.			8.90	44.10

	400' W. of Lamont			
S.P.L.		52.67	8.10	44.90
C			8.30	
¼			8.30	
℄			8.30	44.7
¼			8.20	
C			8.40	
N.P.L.			8.40	44.60
	450' W. of Lamont			
N.P.L.			7.20	45.80
C			7.00	
¼			6.80	
℄			6.90	46.10
¼			6.40	
C			5.80	
3' from S.P.L.			6.20	
S.P.L.			6.20	46.80

500' W. of Lamont = E.L. of Kendall

S.P.L.	52.97	5.00	48.00
C		4.90	
¼		4.90	
℄		4.90	48.10
¼		5.00	
C		5.00	
N.P.L.		5.00	48.00

W.P.L. of Kendall

N.P.L.		4.70	48.30
C		5.00	
¼		5.00	
℄		5.00	48.00
¼		4.90	
C		5.00	
S.P.L.		4.50	48.50

50' W. of Kendall

S.P.L.	52.97	5.00	48.00
C		4.60	
¼		4.80	
℄		4.80	48.20
¼		4.80	
C		4.70	
N.P.L.		4.50	48.50

100' W. of Kendall

N.P.L.		4.90	48.10
C		4.20	
¼		4.60	
℄		4.50	48.50
¼		4.70	
C		4.90	
S.P.L.		4.90	48.10
T.P.		3.51	49.46
	6.97	56.43	

	150' W of Kendall			
S.P.L.		56.43	8.00	48.40
C			7.80	
1/4			7.50	
℄			7.30	49.10
1/4			7.10	
C			7.00	
N.P.L.			6.60	49.80
	200' W of Kendall			
N.P.L.			5.80	50.60
C			5.90	
1/4			6.00	
℄			6.10	50.30
1/4			6.40	
C			6.70	
S.P.L.			6.80	49.60

	250' W of Kendall			
S.P.L.		56.43	6.00	50.40
C			5.60	
1/4			5.30	
℄			5.20	51.20
1/4			5.10	
C			4.90	
N.P.L.			4.50	51.90
	300' W of Kendall			
N.P.L.			3.60	52.80
C			3.60	
1/4			3.80	
℄			3.70	52.70
1/4			4.00	
C			4.50	
S.P.L.			4.60	51.80
T.P.			2.46	53.97
		5.13	59.10	

350' N. of Kendall

S.P.L.	59.10	6.10	53.00
C.		5.50	
1/4		5.20	
℄		4.90	54.20
1/4		5.20	
C		5.10	
N.P.L.		4.70	54.40

400' W. of Kendall

N.P.L.		4.10	55.00
C		4.10	
1/4		4.40	
℄		4.40	54.70
1/4		4.70	
C		5.00	
S.P.L.		5.40	53.70

450' W. of Kendall

S.P.L.	59.10	5.40	53.70
C		5.20	
1/4		5.10	
℄		4.80	54.30
1/4		4.60	
C		4.30	
N.P.L		4.00	55.10

500' W of Kendall

N.P.L.		4.30	54.80
C		4.40	
1/4		5.00	
℄		5.20	53.90
1/4		5.50	
C		5.60	
S.P.L.		6.00	53.10

Aug 4

		550' W. of Kendall		
S.T.L.		59.10	6.50	52.60
C			6.30	
¼			6.30	
℄			6.10	53.00
¼			5.60	
C			5.40	
N.T.L.			5.00	54.10
		600' W. of Kendall		
N.T.L.		55.56	2.70	52.90
C	3.		3.00	
¼			3.30	
℄			3.60	52.00
¼			3.90	
C			4.20	
S.T.L.	3.27	52.57	1.60	51.00
T.P.		~~56.80~~	~~4.67~~	~~54.13~~
T.P.	1.13	55.56	6.26	49.30

		650' W of Kendall		
S.T.L.		52.57	2.70	49.90
C			2.20	
¼			2.00	1.90
℄			1.70	50.90
¼			1.50	
C			1.30	
N.T.L.		55.56	3.80	51.80
		700' W. of Kendall		
N.T.L.			4.90	50.70
C			5.30	
¼			5.50	
℄			5.70	49.90
¼			5.90	
C			6.10	
S.T.L.		52.57	3.50	49.10

	750' W of Kendall			
S.P.L.		52.57	4.00	48.60
C			3.60	
¼			3.40	
℄			3.20	49.40
¼			3.00	
C			2.80	
N.P.L.		53.56	5.00	50.10
	800' W of Kendall			
N.P.L.			6.20	49.40
C			6.50	
¼			6.60	
℄			6.80	48.80
¼			6.90	
C			7.10	
S.P.L.		52.57	4.40	48.20

	850' W of Kendall			
S.P.L.		52.57	4.20	48.40
C			3.90	
¼			3.80	
℄			3.60	49.00
¼			3.50	
C			3.20	
N.P.L.		53.56	6.10	49.50
	900' W of Kendall			
N.P.L.			6.30	49.30
C			6.70	
¼			6.90	
℄			7.10	48.50
¼			7.30	
C			7.50	
S.P.L.		52.57	4.60	47.80

950' W of Kendall

S.P.L.	52.57	4.50	48.10
C		4.20	
¼		4.10	
℄		3.90	48.70
¼		3.80	
C		3.60	
N.P.L.	55.56	6.30	49.30

1000' W of Kendall

N.P.L.		6.30	49.30
C		6.50	
¼		6.60	
℄		6.70	48.90
¼		6.80	
C		6.90	
S.P.L.	52.57	4.20	48.10

1050' W. of Kendall

S.P.L.	52.57	4.40	48.20
C		4.00	
¼		3.80	
℄		3.60	49.00
¼		3.40	
C		3.20	
N.P.L.	55.56	5.80	49.80

1080' W of Kendall = E.P.L. of Broadway

N.P.L.		5.60	50.00
C		5.70	
¼		5.80	
℄		5.80	49.80
¼		5.90	
C		5.90	
S.P.L.	52.57	3.00	49.60
T.P.		3.26	49.31
	6.02	55.33	

W.P.L. of Broadway

S.P.L.		55.33	2.50	52.80
C			2.80	
1/4			2.80	
℄			2.70	52.60
1/4			3.00	
C			3.40	
N.P.L.			3.50	51.80

50' W. of Broadway

N.P.L.			3.50	51.80
C			3.20	
1/4			2.60	
℄			2.40	52.90
1/4			2.40	
C			2.50	
S.P.L.			1.90	53.40

100' W. of Broadway

S.P.L.		55.33	1.50	53.80
C			2.00	
1/4			2.30	
℄			2.60	52.70
1/4			2.50	
C			2.50	
N.P.L			3.40	51.50

150' W. of Broadway

N.P.L			4.50	50.80
C			4.20	
1/4			3.70	
℄			3.20	52.10
1/4			3.10	
C			2.90	
S.P.L			2.00	53.30

	200' W of Broadway			
S.P.L.		55.33	3.20	52.10
C			3.60	
1/4			4.30	
℄			4.60	50.70
1/4			4.80	
C			5.60	
N.P.L.			6.00	49.30
	250' W of Broadway			
N.P.L.			7.80	47.50
C			7.60	
1/4			7.10	
℄			6.70	48.60
1/4			6.40	
C			6.20	
S.P.L.			5.00	50.30

	300' W of Broadway			
S.P.L.		55.33	7.50	47.80
C			8.10	
1/4			8.30	
℄			8.70	46.60
1/4			9.20	
C			9.50	
N.P.L.			9.30	46.00
	350' W of Broadway			
N.P.L			10.40	44.90
C			10.80	
1/4			10.30	
℄			10.10	40.20
1/4			10.00	
C			10.00	
S.P.L.			8.90	46.40

400' W. of Broadway

S.P.L.	55.33	10.20	45.10
C		10.80	
1/4		10.60	
℄		10.60	44.70
1/4		10.90	
C		11.10	
N.P.L.		10.80	44.50

450' W. of Broadway

N.P.L.		10.90	44.40
C		11.30	
1/4		11.20	
℄		10.80	44.50
1/4		10.90	
C		10.90	
S.P.L.		10.90	44.40

500' W of Broadway = E.P.L. of Haines

S.P.L	55.33	10.90	44.40
C		11.20	
1/4		11.20	
℄		11.00	44.30
1/4		11.20	
C		11.50	
N.P.L.		11.10	44.20
T.P.		10.98	44.40

E.C.L. of Haines

N.P.L.	1.66	46.06	1.80	44.30
C			2.50	
1/4			2.30	
℄			2.20	43.90
1/4			2.30	
C			2.30	
S.P.L.			1.80	44.30

E. ¼ of Haines

S.P.L.	46.06	2.00	44.10
C		2.40	
¼		2.40	
℄		2.40	43.70
¼		2.40	
C		2.50	
N.P.L.		2.00	44.10

℄ of Haines

N.P.L.		2.20	43.90
C		2.60	
¼		2.40	
℄		2.40	43.70
¼		2.40	
C		2.60	
S.P.L.		2.20	43.90

W. ¼ of Haines

S.P.L.	46.06	2.30	43.80
C		2.70	
¼		2.50	
℄		2.50	43.60
¼		2.60	
C		2.60	
N.P.L.		2.10	44.00

W.C.L. of Haines

N.P.L.		2.10	44.00
C		2.70	
¼		2.60	
℄		2.70	43.40
¼		2.60	
C		2.80	
S.P.L.		2.50	43.60

W. P. L. of Haines

S.P.L.	46.06	3.00	43.10	
C		3.00		
¼		2.80		
℄		2.70	43.40	
¼		2.90		
C		3.00		
N.P.L.		2.50	43.60	

50' W. of Haines

N.P.L.		3.30	42.80	
C		4.10		
¼		3.90		
℄		3.90	42.20	
¼		4.10		
C		4.40		
S.P.L.		4.30	41.80	

100' W of Haines

S.P.L.	46.06	5.90	40.20	
C		5.90		
¼		5.70		
℄		5.60	40.50	
¼		5.60		
C		5.70		
N.P.L.		5.20	40.90	

150' W. of Haines

N.P.L.		7.50	38.60	
C		8.10		
¼		8.00		
℄		8.10	38.10	
¼		8.20		
C		8.50		
S.P.L.		8.50	37.60	

	200' W of Haines			
S.P.L.		46.06	11.60	34.50
C			11.70	
1/4			11.20	
℄			11.10	35.00
1/4			11.10	
C			11.30	
N.P.L.			10.90	35.20
T.P.			12.22	33.84
	250' W. of Haines			
N.P.L.	1.05	34.59	3.70	31.20
C			4.00	
1/4			4.10	
℄			3.80	31.10
1/4			3.80	
C			3.80	
S.P.L.			4.00	30,90

	300' W. of Haines			
S.P.L.		34.69	6.70	28.20
C			6.70	
1/4			6.60	
℄			6.60	28.30
1/4			6.60	
C			6.70	
N.P.L.			6.40	28.50
	350 W. of Haines			
N.P.L.			7.90	27.00
C			8.50	
1/4			8.30	
℄			8.50	26.40
1/4			8.50	
C			8.80	
S.P.L.			8.80	26.10

400' W. of Haines

S.P.L.	34.89	9.40	25.50
C		9.40	
1/4		9.10	
℄		9.00	25.90
1/4		8.90	
C		9.30	
N.P.L.		8.70	26.20

450' W. of Haines

N.P.L.		8.70	26.20
C		9.20	
1/4		9.10	
℄		9.20	25.70
1/4		9.50	
C		9.70	
S.P.L.		9.70	25.20

500' W. of Haines = E.P.L. of Gresham

S.P.L.	34.89	9.40	25.50
C		9.50	
1/4		9.20	
℄		8.90	26.00
1/4		8.70	
C		9.00	
N.P.L.		8.20	26.70

E.C.L. of Gresham

N.P.L.		8.10	26.80
C		8.90	
1/4		8.70	
℄		8.80	26.10
1/4		9.00	
C		9.20	
S.P.L.		9.40	25.50

E. ¼ of Gresham

S.P.L.		34.89	9.30	25.60
C			9.00	
¼			8.90	
¢			8.80	26.10
¼			8.60	
C			8.70	
N.P.L.			8.00	26.90

¢ of Gresham

N.P.L.			9.80	27.10
C			8.70	
¼			8.50	
¢			8.60	26.30
¼			8.70	
C			9.10	
S.P.L.			9.40	25.50

W. ¼ of Gresham

S.P.L.		34.89	9.20	25.70
C			8.90	
¼			8.60	
¢			8.40	26.50
¼			8.40	
C			8.40	
N.P.L.			9.10	27.20

W.C.L. of Gresham

N.P.L.			9.70	27.20
C			8.50	
¼			8.40	
¢			8.40	26.50
¼			8.50	
C			8.90	
S.P.L.			9.00	25.90

W.P.L. of Gresham

S.T.P.L.	34.89	8.80	26.10
C		8.80	
1/4		8.40	
℄		8.30	26.60
1/4		8.20	
C		8.20	
N.T.P.L.		7.50	27.40

50' W of Gresham

N.T.P.L.		7.20	27.70
C		7.90	
1/4		7.80	
℄		7.90	27.00
1/4		8.10	
C		8.40	
S.T.P.L.		8.60	26.30

100' W. of Gresham

S.T.P.L.	34.89	8.30	26.60
C		8.10	
1/4		7.50	
℄		7.40	27.50
1/4		7.40	
C		7.60	
N.T.P.L.		6.90	28.00

150' W. of Gresham

N.T.P.L.		6.70	28.20
C		7.30	
1/4		7.20	
℄		7.30	27.60
1/4		7.50	
C.		7.90	
S.T.P.L.		8.20	26.70

200' W of Gresham

S.P.L.		34.89	8.00	26.90
C			6.00	
1/4			7.50	
℄			7.40	27.50
1/4			7.40	
C			7.50	
N.P.L.			7.00	27.90

250' W. of Gresham

N.P.L.			7.90	27.00
C			8.00	
1/4			8.00	
℄			8.10	26.90
1/4			8.30	
C			8.60	
S.P.L.			8.60	26.30

300' W. of Gresham

S.P.L.		34.89	9.60	25.30
C			9.40	
1/4			9.00	
℄			9.00	25.90
1/4			9.00	
C			9.30	
N.P.L.			9.10	25.80
T.P.			10.10	24.79

350' W. of Gresham

N.P.L.	2.18	26.97	2.20	24.86
C			2.40	
1/4			2.30	
℄			2.40	24.60
1/4			2.40	
C			3.00	
S.P.L.			2.70	24.30

400' W. of Gresham

S.P.L.	26.97 27.0	4.10	22.90
C		3.80	
1/4		3.60	
℄		3.50	23.50
1/4		3.30	
C		3.30	
N.P.L.		3.00	24.00

450' W. of Gresham

N.P.L.		3.50	23.50
C		4.00	
1/4		4.00	
℄		4.10	22.90
1/4		4.30	
C		4.90	
S.P.L.		5.20	21.80

500' W. of Gresham = E.P.L. of Fanuel

S.P.L.	26.97	5.40	21.60
C		5.10	
1/4		4.70	
℄		4.40	22.60
1/4		4.60	
C		4.50	
N.P.L.		4.20	22.80

E.C.L. of Fanuel

N.P.L.		4.40	22.60
C		4.60	
1/4		4.90	
℄		5.00	22.00
1/4		5.20	
C		5.50	
S.P.L.		5.90	21.10

E. ¼ of Fanuel

S.P.L.	26.97	5.90	≈1.10
C		5.70	
¼		5.40	
℄		5.20	≈1.80
¼		5.00	
C		4.80	
N.P.L.		4.80	≈2.20

℄ of Fanuel

N.P.L.		4.60	≈2.40
C		4.80	
¼		5.00	
℄		5.20	≈1.80
¼		5.40	
C		5.60	
S.P.L.		6.10	≈0.90

W. ¼ of Fanuel

S.P.L.	26.97	6.20	≈0.80
C		5.90	
¼		5.60	
℄		5.30	≈1.70
¼		5.20	
C		5.00	
N.P.L.		4.80	≈2.20

W.C.L. of Fanuel

N.P.L.		5.00	≈2.00
C		5.20	
¼		5.30	
℄		5.50	≈1.50
¼		5.80	
C		6.10	
S.P.L.		6.30	≈0.70

W.P.L. of Fanuel

S.P.L.	26.97	6.70	20.30
E		6.20	
1/4		6.00	
E		5.70	21.30
1/4		5.60	
C		5.60	
N.P.L.		5.40	21.60

50' W of Fanuel

N.P.L.		6.00	21.00
C		6.20	
1/4		6.10	
E		6.40	20.60
1/4		6.70	
C		6.80	
S.P.L.		7.00	20.00

100' W of Fanuel

S.P.L	26.97	7.70	19.30
C		7.10	
1/4		7.00	
E		7.00	20.00
1/4		6.80	
C		6.70	
N.P.L.		6.20	20.80

150' W. of Fanuel

N.P.L.		6.80	20.20
C		6.90	
1/4		7.10	
E		7.20	19.80
1/4		7.50	
C		7.70	
S.P.L.		8.00	19.00

200' W. of Fanuel

S.P.L.	26.97	8.70	18.30
C		9.90	
¼		8.00	
¢		8.00	19.00
¼		7.90	
C		7.50	
N.P.L.		7.10	19.90

250' W. of Fanuel

N.P.L.		7.80	19.20
C		8.20	
¼		8.60	
¢		8.50	18.50
¼		8.80	
C		8.80	
S.P.L.		9.20	17.80

300' W. of Fanuel

S.P.L.	26.97	9.70	17.30
C		9.30	
¼		9.10	
¢		8.80	18.20
¼		8.80	
C		8.50	
N.P.L.		8.30	18.10

350' W. of Fanuel

N.P.L.		8.90	18.10
C		9.10	
¼		9.40	
¢		9.60	17.40
¼		9.70	
C		9.90	
S.P.L.		10.20	16.80

400' W. of Fanuel

S.T.L.		2697	10.60	16.40
C			10.50	
¼			10.60	
¢			10.30	16.70
¼			10.10	16.60
C			10.00	16.70
N.T.L.			9.80	17.50
T.P.			9.40	17.57

450' W. of Fanuel

N.T.L.	0.27	17.84	1.50	16.30
C			1.70	
¼			1.80	
¢			1.90	15.90
¼			2.10	
C			2.20	
S.T.L.			2.50	15.30

500' W. of Fanuel = E.T.L. of Erects

S.T.L.		17.84	3.50	14.30
C			3.30	
¼			3.10	
¢			2.90	14.90
¼			2.90	
C			2.90	
N.T.L.			2.40	15.40

E.C.L. of Erects

N.T.L.			2.80	15.00
C			3.10	
¼			3.10	
¢			3.40	14.40
¼			3.70	
C			3.80	
S.T.L.			4.00	13.80

E ¼ of Everts

S.P.L.	17.84	4.10	13.70
C		4.00	
¼		3.80	
¢		3.40	14.40
¼		3.30	
C		3.30	
N.P.L.		300	14.80

¢ of Everts

N.P.L.		3.30	14.50
C		3.50	
¼		3.60	
¢		3.60	14.20
¼		4.00	
C		4.10	
S.P.L.		4.20	13.60

W. ¼ of Everts

S.P.L.	17.84	4.40	13.40
C		4.20	
¼		4.20	
¢		3.90	13.90
¼		3.70	
C		3.80	
N.P.L.		3.60	14.20

W.C.L. of Everts

N.P.L.		380	14.00
C		4.00	
¼		3.90	
¢		4.10	13.70
¼		4.30	
C		4.50	
S.P.L.		4.80	13.00

W.P.L. of Everts

S.P.L.	17.84	5.00	12.80
C		5.00	
1/4		4.90	
℄		4.60	13.20
1/4		4.30	
C		4.30	
N.P.L.		4.40	13.40

50' W of Everts

N.P.L.		5.40	12.40
C		5.40	
1/4		5.50	
℄		5.60	12.20
1/4		5.90	
C		6.10	
S.P.L		6.30	11.80

100' W of Everts

S.P.L	17.84	7.40	10.40
C		7.40	
1/4		7.20	
℄		7.10	10.70
1/4		7.00	
C		6.80	
N.P.L.		6.90	10.90

150' W of Everts

N.P.L		8.00	9.80
C		8.20	
1/4		8.30	
℄		8.30	9.50
1/4		8.50	
C		8.50	
S.P.L.		8.80	9.00

200' W. of Everts

S.P.L.	17.84	10.00	7.80
C		9.90	
1/4		9.80	8.00
℄		9.60	
1/4		9.50	
C		9.40	
N.P.L		9.00	8.80

250' W of Everts

N.P.L		10.20	7.60
C		10.60	
1/4		10.80	
℄		11.00	6.80
1/4		11.10	
C		11.30	
S.P.L		11.60	6.20

300' W of Everts

S.P.L	17.64	12.80	5.00
C		12.60	
1/4		12.30	
℄		12.00	5.80
1/4		11.90	
C		11.80	
N.P.L.		11.30	6.50
		11.18	6.66

350' W of Everts

N.P.L	1.77	8.43	2.60	5.80
C			2.90	
1/4			3.20	
℄			3.40	5.00
1/4			3.70	
C			3.90	
S.P.L			4.40	4.00

400' W of Everts.

S.P.L	8.43	4.80	3.60
℄		4.30	
¼		4.20	
℄		4.00	4.40
¼		3.90	
℄		3.50	
N.P.L		3.00	5.40

450' W of Everts

N.P.L		3.20	5.20
℄		3.70	
¼		3.90	
℄		4.20	4.20
¼		4.40	
℄		4.60	
S.P.L.		5.00	3.40

500' W of Everts = E.L. Dawes.

S.P.L	8.43		4.70	3.70	
℄			4.50		
¼			4.30		
℄			4.00	4.40	
¼			3.90		
℄			3.70		
N.P.L			3.50	4.90	
T.P.			4.67	3.56	
T.P	5.62	9.38	4.01	5.37	
B.M	0.97	6.34	2.40	3.94	3.98 L

POSTED

X sections Beryl St

Broadway to Kendall.

B.M.	on hub - 10' E of S.E. Cor.			Beryl Lamont	161.08
B.M.	spike in Fence Bdy 35' ± N. of Chalcedony				107.90
TP	4.50	112.40	0.10	112.30	
T.P.	12.90	125.20	0.34	124.86	
B.M.	12.43	137.29	6.24	131.05	Hub. N.W. Cor Bdy + Beryl
T.P.	6.25	137.30	0.22	137.08	
	12.69	149.77			

E.P.L. of Broadway

N.P.L.		149.77	8.50	141.3
C			11.20	
1/4			12.50	
℄			13.70	136.1
1/4			14.70	
C			16.50	
S.P.L.			18.60	131.2

50' E of Broadway

S.P.L.		149.77	12.00	137.8
C			11.00	
1/4			9.60	
℄			8.40	141.4
1/4			6.90	
C			5.60	
N.P.L.			3.10	146.7
T.P.			0.19	149.58

100' E of Broadway

N.P.L.	12.63	162.21	10.90	151.3
C		149.77	0.70	
1/4			2.10	
℄			4.00	145.8
1/4			5.00	
C			6.80	
S.P.L.			7.60	142.8

POSTED

150' E. of Broadway

S.T.L.	149.71	3.00	146.8
C		2.10	
¼		0.40	
℄	162.21	11.30	150.9
¼		10.10	
C		9.30	
N.P.L.		6.90	155.3

200' E. of Broadway

N.P.L		3.40	158.8
C		6.00	
¼		6.70	
℄		7.40	154.8
¼		8.30	
C		10.00	
S.T.L.		10.70	151.5

250' E of Broadway

S.T.L.	162.21	6.90	153.3
C		7.60	
¼		7.30	
℄		6.00	156.2
¼		5.00	
C		4.00	
N.T.L.		1.40	160.8

300' E of Broadway

N.P.L.		0.40	161.8
C		3.10	
1 ¼		4.50	
℄		5.60	156.6
¼		7.00	
C		7.80	
S.T.L.		9.00	153.2

350' E. of Broadway

S.P.L.		162.21	8.80	153.4
C			8.40	
+2			6.40	
+7			7.00	
1/4			6.70	
℄			5.70	156.5
1/4			4.80	
C			3.20	
N.P.L.			0.20	162.0

400' E. of Broadway

N.P.L.		167.65	5.00	162.6
C		162.21	2.70	
1/4			4.30	
℄			5.60	156.6
1/4			6.70	
+5			6.00	
+7			8.00	
C			8.00	
S.P.L.			8.20	154.0
T.P.			0.99	161.22

450' E. of Broadway

S.P.L.	6.43	167.65	13.40	154.2
C			13.30	
+3			11.30	
1/4			11.40	
℄			10.30	157.3
1/4			8.70	
C			7.20	
N.P.L.			3.40	164.2
B.M.			1.32	Hub N.W. Cor Jewel + Beryl

500' E of Bdy = W.P.L. of Jewel

N.P.L.			1.30	166.3
C			4.40	
1/4			6.40	
℄			6.20	159.4
1/4			10.20	
C			12.50	
S.P.L.			12.70	155.0

W. C. L. of Jewel

S.P.L.	167.65	12.20	155.5
C		12.00	
+3		10.50	
¼		9.50	
℄		7.50	160.1
¼		5.90	
C		4.20	
N.P.L.		1.00	166.6

W. ¼ of Jewel

N.P.L.		1.00	166.6
C		4.00	
¼		5.60	
℄		7.40	160.7
¼		9.10	
C		11.60	
S.P.L.		11.80	155.8

℄ of Jewel

S.P.L.	167.65	11.60	155.0
C		11.40	
¼		8.80	
℄		7.10	160.5
¼		5.40	
C		3.70	
N.P.L.		0.70	167.0

E. ¼ of Jewel

N.P.L.		0.50	
C		3.50	
¼		5.30	
℄		6.70	160.9
¼		8.20	
C		11.00	
S.P.L.		11.40	

E. C. L. of Jewel

S.T.L.	167.65	11.00	156.6
C		10.70	
¼		7.90	
℄		6.40	161.2
¼		4.60	
C		3.00	
N.T.L.		0.30	167.3

E. P. L. of Jewel

N.T.L.		0.20	167.4
C		2.80	
¼		4.60	
℄		6.10	161.6
¼		7.40	
C		9.40	
S.T.L		11.60	156.0

50' E of Jewel

S.T.L.	167.65	10.70	1560
C		7.90	
¼		5.50	
℄		4.30	163.3
¼		3.20	
C		2.10	
N.T.L.		0.40	167.2
T.P.		2.58	165.07

100' E. of Jewel

N.T.L.	7.21	172.28	3.70	168.6
C			4.60	
¼			5.20	
℄			6.40	165.9
¼			7.80	
C			9.00	
S.T.L.			13.00	159.3

125' E of Jewel

S.T.L.	172.28	12.90	159.4
C		8.90	
¼		7.70	
℄		6.00	166.3
¼		4.80	
C		3.80	
N.T.L.		2.60	169.7

150' E. of Jewel

N.T.L.		2.40	169.9
C		4.50	
¼		5.60	
℄		6.90	165.4
¼		8.10	
C		9.70	
S.T.L.		12.60	159.7

200' E. of Jewel

S.T.L.	172.28	14.30	158.0
C		11.30	
¼		10.40	
℄		9.30	163.0
¼		7.60	
C		6.40	
N.T.L.		4.80	167.5

250' E. of Jewel

N.T.L.		7.50	164.8
C		9.20	
¼		10.70	
℄		12.20	160.1
¼		14.70	
C		15.00	
S.T.L.		16.10	156.2

275' E. of Jewel

S.P.L.	172.28	15.60	156.7
C		14.40	
¼		13.50	
℄		12.70	159.6
¼		12.00	
C		11.10	
N.P.L.		9.50	162.8

300' E of Jewel

N.P.L.		7.10	165.2
C		8.30	
¼		8.90	
℄		10.10	162.2
¼		11.00	
C		12.40	
S.P.L.		14.40	157.9

350' E. of Jewel

S.P.L.	172.28	11.80	160.5
C		9.80	
¼		8.30	
℄		6.80	165.5
¼		5.80	
C		4.70	
N.P.L.		3.70	168.6

400' E. of Jewel

N.P.L.		0.90	171.4
C		2.50	
¼		3.50	
℄		4.70	167.6
¼		6.40	
C		7.40	
S.P.L.		10.20	162.1

450' E of Jewel

S.T.P.L.		172.28	6.90	165.4
C			5.00	
¼			3.90	
℄			2.30	170.0
¼			1.10	
C		177.21	4.90	
N.T.P.L.			3.30	173.9
T.P.		172.26	0.27	172.01

500' E of Jewel = W.P.L. of Kendall

N.P.L.	5.20	177.21	0.20	177.0
C			2.30	
¼			3.20	
℄			5.00	172.2
¼			5.40	
C			6.90	
S.P.L.			8.50	168.7

W.C.L. of Kendall

S.P.L.		177.21	8.10	169.1
C			6.56	
¼			4.60	
℄			3.70	173.5
¼			3.00	
C			1.70	
N.P.L.			0.50	176.7

W. ¼ of Kendall

N.P.L.			0.70	176.5
C			2.00	
¼			3.40	
℄			3.90	173.3
¼			5.20	
C			6.30	
S.P.L.			8.50	168.7

℄ of Kendall

S.T.L.	177.21	8.70	168.5
C		7.20	
¼		5.70	
℄		4.30	172.9
¼		3.60	
C		2.40	174.8
N.T.L.		0.90	

E ¼ of Kendall

N.T.L.		1.10	176.1
C		3.00	
¼		4.30	
℄		5.00	172.2
¼		6.10	
C		7.30	
S.T.L.		9.20	168.0

E.C.L. of Kendall

S.T.L	177.21	9.40	167.8
C		7.30	
¼		6.10	
℄		5.00	172.2
¼		4.40	
C		3.40	
N.T.L.		1.50	175.7

E.T.L. of Kendall

N.T.L.		1.80	175.4
C		3.70	
¼		4.90	
℄		6.00	171.2
¼		7.00	
C		8.10	
S.T.L.		9.90	167.3

Xsection of Beryl from N.P.L. of Morell to Pendleton

T.P.		177.21	12.06	165.15
B.M.	1.58	166.73	11.53	155.20
	0.62	155.82		

Hub. N.W. Cor. Beryl + Morell

W.P.L. of Morell

N.P.L.	155.82	0.60	155.V
C		2.30	
¼		3.50	
¢		4.20	151.6
¼		5.00	
C		5.90	
S.P.L.		7.20	148.6

W.C.L. of Morell

S.P.L.	155.82	7.80
C		6.80
¼		5.60
¢		5.40
¼		4.20
C		3.70
N.P.L.		2.00

W. ¼ of Morell

N.P.L.	2.40
C	4.10
¼	4.80
¢	5.50
¼	5.80
C	7.20
S.P.L.	8.10

POSTED

℄ of Morell

S.T.L.	155.82	8.40
C		7.50
¼		6.20
℄		5.90
¼		5.10
C		4.50
N.T.L.		3.00

E. ¼ of Morell

N.T.L.		3.70
C		5.60
¼		6.00
℄		6.50
¼		7.00
C		7.60
S.T.L.		9.10

E. C. L. of Morell

S.T.L.	155.82	9.10
C		8.50
¼		8.00
℄		7.20
¼		6.80
C		6.30
N.T.L.		4.60

E. T. L. of Morell

N.T.L.		5.80	150.0
C		6.80	
¼		7.20	
℄		8.20	
¼		9.10	
C		9.10	
S.T.L.		9.70	146.1

50' E. of Morell

S.T.P.L.	155.82	13.20	142.6
C		12.50	
¼		11.90	
℄		11.20	
¼		10.60	
C		9.80	
N.T.P.L.		8.60	147.2

100' E. of Morell

N.T.P.L		8.30	147.5
C		8.80	
¼		9.00	
℄		9.70	
¼		10.60	
C		12.70	
S.T.P.L.		15.40	140.4

125' E of Morell

S.T.P.L.	155.82	16.50	139.3
C		13.20	
¼		11.20	
℄		9.60	
¼		8.40	
C		7.80	
N.T.P.L.		7.10	148.7

150' E. of Morell

N.T.P.L.		9.40	146.4
C		10.40	
¼		11.70	
℄		13.20	
T.P		12.70	143.12
¼	9.31	152.43	11.00
C		13.00	
S.T.P.L.		16.10	136.3

175' E of Morell

S.P.L.	152.43	17.30	135.1
C		15.20	
¼		14.60	
℄		13.70	
¼		12.60	
C		11.70	
N.P.L.		10.70	141.7

200' E of Morell

N.P.L.		10.90	141.5
C		12.30	
¼		13.00	
℄		13.90	
¼		14.80	
C		16.20	
S.P.L.		16.70	135.7

250' E of Morell

S.P.L	152.43	16.40	136.0
C		15.30	
¼		15.20	
℄		14.00	
¼		12.90	
C		11.70	
N.P.L.		8.90	143.5

300' E of Morell

N.P.L		5.40	147.0
C		7.60	
¼		9.00	
℄		10.10	
¼		11.60	
C		13.90	
S.P.L		16.10	136.3

	325' E of Morell			
S.P.L		152.43	15.40	137.0
C			12.20	
1/4			10.60	
℄			8.90	
1/0			6.80	
C			5.30	
N.P.L.			2.70	149.7
	350' E of Morell			
N.P.L			1.00	151.4
C			5.30	
1/4			7.40	
℄			8.90	
1/4			10.00	
C			11.40	
S.P.L.			14.50	137.9

	375' E of Morell			
S.P.L.		152.43	15.10	137.3
C			12.60	
1/4			11.20	
℄			10.70	
1/4			10.00	
C			9.40	
N.P.L.			8.70	143.7
T.P.			12.93	139.50
	400' E of Morell			
N.P.L.	5.10	144.60	10.90	133.7
C			9.60	
1/4			8.80	
℄			7.60	
1/4			6.70	
C			7.10	
S.P.L.			9.20	135.4

425' E of Morell

S.P.L.	144.60	12.50	132.1
C		11.40	
1/4		11.60	
℄		12.40	
1/4		13.10	
C		13.00	
N.T.P.L.		13.30	131.3

450' E of Morell

N.T.P.L.		12.30	132.3
C		13.10	
1/4		13.70	
℄		13.80	
1/4		13.90	
C		13.70	
S.T.P.L.			

500' E of Morell = W.P.L. of Noyes

S.P.L.	144.60	10.70	133.9	
C		11.00		
1/4		10.90		
℄		10.40		
1/4		10.20		
C		9.70		
N.P.L.	145.82	8.30	137.5	
T.P.	144.60	10.65	133.95	Hub. S. W Cor Noyes + Beryl

W.C.L. of ~~Morell~~ Noyes

N.P.L.	11.87	145.82	6.40
C			8.00
1/4			8.20
℄			8.10
1/4			7.80
C			7.10
S.P.L.			6.20

W ½ of Noyes

S.P.L.	145.82	3.80	
C		4.90	
¼		5.30	
℄		5.70	
¼		6.10	
C		6.40	
N.P.L.		6.00	

℄ of Noyes

N.P.L.		4.70	
C		4.90	
¼		4.40	
℄		3.90	
¼		3.60	
C		3.20	
S.P.L.		2.30	

E ¼ of Noyes

S.P.L.	145.82	1.20	
C		1.80	
¼		2.30	
℄		2.50	
¼		2.80	
C		3.20	
N.P.L.		3.40	
T.P.		0.72	145.10

E.C.L. of Noyes

N.P.L.		2.30	
C		1.60	
¼		1.50	
℄		1.20	
¼		1.00	
C	12.29	157.39	12.00
S.P.L.		11.10	

E. P. L. of Noyes

S.P.L.		15739	7.60	149.8
C			9.30	
¼			10,10	
℄			10.30	
¼			10.20	
C			10.60	
N.P.L.			10.70	146.7
T.P.			0.89	157.10

50' E of Noyes

N.P.L.			3.50	153.9
C			2.50	
¼			1.70	
℄			1.40	
¼			0.60	
C	12.65	169.75	12.40	
S.P.L.			11.20	158.6

75' E of Noyes

S.P.L.		169.75	6.40	163.4
C			7.50	
¼			6.10	
℄			9.00	
¼			9.80	
C			10.60	
N.P.L.			11.30	158.5

100' E of Noyes

N.P.L.			7.40	162.4
C			6.40	
¼			5.80	
℄			5.10	
¼			4.20	
C			3.20	
S.P.L.			1.50	168.3
T.P.			0.79	168.96

	125' E of Noyes			[168.96]
S.P.L.	12.43	181.39	6.90	172.5
C			9.30	
¼			9.50	
℄			9.50	
¼			10.40	
C			12.00	
N.P.L.			12.50	168.9
	150' E of Noyes			
N.P.L.			5.40	176.0
C			3.40	
¼			2.50	
℄			1.90	
¼			2.90	
C			4.00	
S.P.L.			3.20	178.2
T.P.			0.99	180.40

	175' E. of Noyes			
S.P.L.	6.46	186.86	2.80	184.1
C			4.70	
¼			4.90	
℄			6.00	
¼			6.80	
C			7.20	
N.P.L.			8.20	178.7
	188' E of Noyes			
N.P.L.			8.70	178.2
C			7.00	
¼			6.30	
℄			5.50	
¼			4.60	
C			3.90	
S.P.L.			3.20	183.7

200' E of Noyes

S.T.L.	186.86	3.10	183.8
C		4.30	
1/4		5.00	
℄		5.60	
1/4		6.30	
C		7.00	
N.T.L.		6.40	176.5

225' E of Noyes

N.T.L.		9.20	177.7
C		7.80	
1/4		7.10	
℄		6.40	
1/4		5.90	
C		5.30	
S.T.L.		3.80	183.1

250' E of Noyes

S.T.L.	186.86	6.00	180.9
C		7.00	
1/4		7.70	
℄		8.10	
1/4		8.80	
C		9.50	
N.T.L.		10.30	176.6

275' E of Noyes

N.T.L.		11.30	175.6
C		11.20	
1/4		11.00	
℄		10.40	
1/4		10.20	
C		9.70	
S.T.L.		8.90	178.0

300' E of Noyes

S.T.P.L.		186.86	11.70	175.1 ✓
C			12.10	
1/4			12.20	
℄			12.20	
1/4			12.40	
C			12.80	
N.T.P.L.			13.00	173.9
T.P.			12.24	174.62

325' E of Noyes

N.T.P.L.	2.01	176.63	4.20	172.4
C			3.70	
1/4			3.70	
℄			3.80	
1/4			4.20	
C			4.10	
S.T.P.L.			4.10	172.5

360' E of Noyes

S.T.P.L.		176.63	5.70	170.9
C			5.50	
1/4			5.20	
℄			4.80	
1/4			5.00	
C			5.10	
N.T.P.L.			5.80	170.8

400' E of Noyes

N.T.P.L.			7.60	169.0
C			7.20	
1/4			7.10	
℄			6.90	
1/4			7.00	
C			7.00	
S.T.P.L.			7.50	169.1

S

450' E. of Noyes

S.P.L.	176.63	8.10	168.5
C		6.80	
¼		6.00	
℄		5.80	
¼		5.80	
C		5.80	
N.P.L.		6.20	170.4

500' E of Noyes = N.P.L. of Olney

N.P.L		4.30	172.3
C		4.10	
¼		4.20	
℄		4.30	
¼		4.40	
C		4.90	
S.P.L.		5.80	170.8

W.C.L. Olney

S.P.L.	176.63	4.70	
C		4.00	
¼		3.60	
℄		3.70	
¼		3.50	
C		3.50	
N.P.L.		3.70	

W ¼ of Olney

N.P.L.		3.60	
C		3.30	
¼		3.20	
℄		3.20	
¼		3.40	
C		3.80	
S.P.L.		3.20	

℄ of Olney

S.P.L.	176.63	4.00
C		3.40
¼		3.30
℄		2.90
¼		3.00
C		3.10
N.P.L.		3.40

E ¼ of Olney

N.P.L.		3.20
C		2.60
¼		2.70
℄		2.70
¼		2.90
C		3.20
S.P.L.		4.10

E.C.L. of Olney

S.P.L.	176.63	4.00
C		2.90
¼		2.80
℄		2.70
¼		2.70
C.		2.60
N.P.L.		3.80

E.P.L. of Olney

N.P.L.		3.10	173.5
C		2.60	
¼		2.50	
℄		2.40	
¼		2.50	
C		3.10	
S.P.L.		3.90	172.7
T.P.		3.69	172.94

stake 3 nails in top - S.P.L. Beryl - 20'± E of Olney

	25' E. of Olney		[172.94]	
S.P.L.	3.21	176.15	3.30	172.9
C			2.80	
¼			2.30	
¢			2.00	
¼			1.80	
C			1.60	
N.P.L.			2.40	173.8

	50' E of Olney			
N.P.L.			2.50	173.7
C.			2.00	
¼			2.10	
¢			2.30	
¼			2.50	
C			3.00	
S.P.L.			3.80	172.4

	75' E of Olney			
S.P.L.		176.15	4.30	171.9
C			3.90	
¼			3.40	
¢			3.20	
¼			3.10	
C			3.20	
N.P.L.			3.80	172.4

	100' E of Olney			
N.P.L.			4.90	171.3
C			4.60	
¼			4.50	
¢			4.50	
¼			4.90	
C			5.60	
S.P.L.			6.00	170.~

125 E of Olney

S.T.P.L.		176.15	7.00	169.7
C			6.80	
¼			6.60	
℄			6.40	
¼			6.30	
C			6.20	
N.T.P.L.			6.40	169.8

150' E of Olney

N.T.P.L.			8.60	167.6
C			8.30	
¼			8.30	
℄			8.40	
¼			8.30	
C			8.40	
S.T.P.L.			8.70	167.5

175' E. of Olney

S.T.P.L.		176.15	10.60	165.6
C			10.60	
¼			11.20	
℄			11.50	
¼			11.70	
C			11.60	
N.T.P.L.			12.20	164.0
T.P.			12.81	163.34

200' E of Olney

N.T.P.L.	0.66	164.02	4.50	159.5
C			4.50	
¼			4.30	
℄			4.30	
¼			4.20	
C			3.90	
S.T.P.L.			3.70	160.3

225' E of Olney

S.T.P.	164.02	7.40	156.6
C		7.40	
¼		7.40	
℄		7.40	
¼		7.50	
C		7.40	
N.T.P.		7.00	157.0

250' E of Olney

N.T.P.		10.60	153.4
C		12.10	
¼		13.00	
℄		13.10	
¼		13.40	
C		13.40	
S.T.P.		13.50	150.5
T.P.		12.25	151.77

275' E of Olney

S.T.P.	0.86	152.63	5.90	146.7
C			5.70	
¼			5.30	
℄			5.00	
¼			5.20	
C			5.20	
N.T.P.			5.50	147.1

300' E of Olney

N.T.P.	11.50	141.1
C	12.00	
¼	11.40	
℄	10.60	
¼	10.10	
C	9.60	
S.T.P.	9.60	143.0
T.P.	12.20	140.42

	325' E of Olney			[140.43]
S.P.L.	0.15	140.58	3.80	136.8
C			3.70	
¼			5.00	
℄			5.90	
¼			6.00	
C			6.70	
N.P.L.			7.30	133.3
	350' E of Olney			
N.P.L.			15.30	122.3
C			16.00	
¼			15.10	
℄			14.00	
¼			11.50	
C			11.60	
S.P.L.			10.10	130.6
T.P.			12.68	127.90

	363' E of Olney			135.13
S.P.L.	0.42	126.32	2.90	125.4
C			4.90	
¼			6.70	
℄			8.00	
¼			9.40	
C			10.40	
N.P.L.			11.70	116.7
	375' E of Olney			
N.P.L.			16.70	111.7
C			17.70	
¼			16.30	
℄			13.90	
¼			12.90	
C			9.50	
S.P.L.			7.30	121.0
T.P			11.91	116.41

400' E of Olney 116.41

S.T.P.L.	6.61	123.02	6.60	116.6
C			12.30	
¼			13.70	
¢			12.70	
¼			12.50	
C			11.80	
N.T.P.L.			9.30	113.7

412 E of Olney

N.T.P.L.			6.00	117.0
C			8.90	
¼			10.20	
¢			11.50	
¼			12.70	
C			14.00	
N.T.P.L.			13.80	104.7

425' E of Olney

S.T.P.L.		123.02	15.40	107.6
C			13.50	
¼			12.10	
¢			10.80	
¼			9.50	
C			7.60	
N.T.P.L.			5.20	117.8

450 E of Olney

N.P.L.			2.20	120.8
C			3.70	
¼			4.80	
¢			7.00	
¼			9.00	
C			10.90	
S.P.L.			14.70	108.3

475' E of Olney

S.P.L.	133.02	14.00	109.0	
C		8.50		
¼		5.60		
℄		3.80		
¼		1.50		
T.P.		0.90	122.12	
C	11.21	10.10		
N.P.L.		6.90	126.4	

500' E of Olney = N.P.L. of Pendleton

N.P.L.		2.20	131.1
C		5.60	
¼		7.30	
℄		9.50	
¼		11.40	
C		13.70	
S.P.L.		18.10	115.2

	133.33	0.33	133.00		
12.65	145.65	0.53	145.12		
12.63	157.75	0.13	157.62		
11.40	169.02	0.79	168.23		
Hub i. - Scribe Beryl 20± E of Noyes					
9.36	177.61	4.69	172.92	172.94 L	
3.44	176.38	12.56	163.82		
B.M. Hub N.W. Morrell Beryl					
2.67	166.69	11.47	155.22	- 155.20 L	
10.22	165.42	12.38	153.04		
0.33	153.37	10.11	143.26	= 143.13	

Xsection - Law St. Broadway to Lamont - 80' Streets - 20' Walks

N.P.L. of Lamont [143.13]

S.P.L.	9.80	152.93	9.50	143.4
C			8.60	144.3
¼			8.40	144.5
℄			7.60	145.3
¼			7.20	145.7
C			6.80	146.1
N.P.L.			6.90	147.0

50' N. of Lamont

N.P.L.			5.00	147.9
C			5.70	
¼			6.00	
℄			6.50	146.4
¼			7.20	
C			7.40	
S.P.L.			8.40	144.5

POSTED

100' W of Lamont

S.P.L.		152.93	7.00	145.9
C			5.70	
¼			5.20	
℄			4.70	148.2
¼			4.40	
C			4.00	
N.P.L.			3.10	149.8

120' W of Lamont

N.P.L.			1.70	151.2
C			3.10	
¼			3.30	
℄			3.90	149.0
¼			4.40	
C			4.80	
S.P.L.			5.00	
			4.46	148.47

POSTED

150' W of Lamont [148.47]

S.P.L.	7.40	155.87	7.50	148.4
C			7.30	
¼			7.30	
℄			6.00	149.9
¼			5.20	
C			4.50	
N.P.L.			3.10	152.8

200' W of Lamont

N.P.L.			3.70	152.2
C			4.90	
¼			5.60	
℄			6.20	149.7
¼			6.80	
C			7.10	
S.P.L.			7.70	148.2
T.P.			7.93	147.94

250' W of Lamont [147.94]

S.P.L	5.43	153.37	6.20	147.2
C			5.10	
¼			4.40	
℄			3.40	150.0
¼			3.00	
C			2.70	
N.P.L.			2.20	151.2

275' W of Lamont

N.P.L.			3.50	149.9
C			3.50	
¼			4.00	
℄			4.30	149.1
¼			4.60	
C			5.10	
S.P.L.			6.00	147.4

POSTED

300' W of Lamont

S.P.L.	153.37	6.80	146.6
C		6.40	
¼		6.40	
℄		6.50	146.9
¼		6.50	
C		6.50	
N.P.L.		6.20	147.2

350' W of Lamont

N.P.L.		8.80	144.6
+15		10.30	
C		10.10	
¼		10.30	
℄		10.20	143.2
¼		10.30	
C		10.60	
S.P.L.		11.30	142.1

400' W of Lamont

S.P.L.	153.37	13.70	139.7
C		14.10	
¼		13.30	
℄		12.60	140.8
¼		12.00	
C		11.40	
N.P.L.		10.20	143.2
T.P.		11.92	141.40

POSTED

450' W. of Lamont

N.P.L.	153.37	12.40	141.0
C	7.27 148.78	9.30	
¼		9.70	
℄		10.40	138.3
¼		10.90	
C		11.30	
S.P.L.		11.60	137.1

500' W of Lamont = E.P.L. of Kendall

S.P.L.	148.72	13.10	135.6
C		12.50	
¼		12.10	
℄		11.70	137.0
¼		7.10	
C		10.50	
N.P.L.		9.10	139.6

E.C.L. of Kendall

N.P.L		9.70	
C		11.10	
¼		11.80	
℄		12.50	
¼		13.00	
C		13.20	
S.P.L.		14.20	

E ¼ of Kendall

S.P.L.	148.72	14.40	
C		13.70	
¼		13.40	
℄		12.70	
¼		12.10	
C		11.40	
N.P.L.		10.40	

℄ of Kendall

N.P.L.		10.20	
C		11.60	
¼		12.50	
℄		13.10	135.6
¼		13.70	
C		14.20	
S.P.L.		14.70	

W ¼ of Kendall

S.P.L.	148.72	14.70	
C		14.20	
¼		14.00	
℄		13.30	
¼		12.80	
C		12.00	
N.P.L.		10.60	

W.C.L. of Kendall

N.P.L.		11.30	
C		12.60	
		~~11.90~~	
¼		~~13.30~~	
℄		13.~~90~~	
¼		14.30	
C		14.50	
S.P.L.		15.10	

W.P.L. of Kendall

S.P.L.	148.72	15.30	133.4
C		15.00	
¼		14.80	
℄		14.40	134.3
¼		14.20	
C		13.50	
N.P.L.		12.00	136.7

50' W of Kendall

N.P.L.		13.40	135.3
C		14.20	
¼		14.70	
℄		15.00	143.7
¼		15.30	
C		15.20	
S.P.L.		16.30	132.4

100' W of Kendall

S.P.L.	148.72	16.40	132.3
C		15.30	
¼		15.30	
℄		14.60	134.1
¼		14.60	
C		13.90	
N.P.L.		13.40	135.3

150' W. of Kendall

N.P.L.		12.60	136.1
C		13.00	
¼		13.40	
℄		13.70	135.0
¼		14.50	
C		14.90	
S.P.L.		16.20	132.5

200' W of Kendall

S.P.L.	148.72	15.80	132.9
C		14.70	
¼		14.20	
℄		13.60	135.1
¼		13.10	
C		12.40	
N.P.L.		11.30	137.4

250' W of Kendall

N.P.L.		10.90	137.8
C		11.60	
¼		12.20	
℄		13.40	135.3
¼		13.90	
C		14.80	
S.P.L.		16.20	132.5

300' W. of Kendall

S.P.L.	148.72	15.20	133.5
C		13.30	
1/4		12.40	
℄		11.70	137.0
1/4		10.80	
C		10.30	
N.P.L.		9.90	138.8

350' W of Kendall

		~~9.90~~	
		9.90	
N.P.L.		~~10.80~~	138.8
C		10.80	
1/4		~~11.00~~ 11.00	
		~~11.60~~	
℄		11.60	
		~~12.70~~	137.1
1/4		12.10	
C		12.50	
S.P.L.		13.40	135.3

400' W of Kendall

S.P.L.	148.72	14.30	134.4
C		13.40	
1/4		13.20	
℄		12.60	136.1
1/4		11.80	
C		11.50	
N.P.L.		11.40	137.3

450' W. of Kendall

N.P.L.		11.40	137.3
C		10.90	
1/4		11.70	
℄		12.30	136.4
1/4		13.40	
C		13.30	
S.P.L.		14.40	134.2
T.P.		11.19	137.53

147

500' W of Kendall = E.P.L. of Jewell

S.P.L.	4.45	141.98	9.50	132.5 (137.53)
C			8.70	
¼			7.90	
℄			7.90	134.1
¼			8.00	
C			7.10	
N.P.L.			6.80	135.2

E.C.L. of Jewell

N.P.L.			9.00	133.0
C			8.70	
¼			10.20	
℄			10.40	
¼			10.80	
C			11.00	
S.P.L.			11.50	130.5

147

E ¼ of Jewel

S.P.L.	141.98	12.30	129.7
C		11.80	
¼		11.70	
℄		11.40	
¼		11.30	
C		10.80	
N.P.L.		10.40	131.6

℄ of Jewel

N.P.L.		10.60	131.4
C		11.40	
¼		11.90	
℄		12.10	129.1
¼		12.50	
C		12.70	
S.P.L.		13.20	128.8

142

W. ¼ of Jewel

S.P.L.	141.98	13.60	128.4
C		13.70	
¼		13.50	
¢		13.10	
¼		12.40	
C		11.60	
N.P.L.		10.60	131.4

W. C. L. of Jewel

N.P.L.		11.10	130.9
C		12.20	
¼		12.70	
¢		13.30	
¼		14.40	
C		14.30	
S.P.L.		14.50	127.5

142

N.P.L. of Jewel

S.P.L	141.98	14.70	127.3
C		15.10	
¼		14.70	
¢		14.10	127.9
¼		13.10	
C		12.60	
N.P.L		11.20	130.8

S-0'W of Jewel

N P.L		10.40	131.6
C		12.00	
¼		13.20	
¢		14.40	127.6
¼		15.50	
C		16.30	
S.P.L.		18.20	123.8

Continued in Book 410 Page 1

Bench Marks - Pacific Beach

Bayard St N.E. Cor, Missouri spike in pole 48.244

(Oliver Ave) Broadway Brass Plug N.E. Cor Grand + Bdy 5-5, & 47

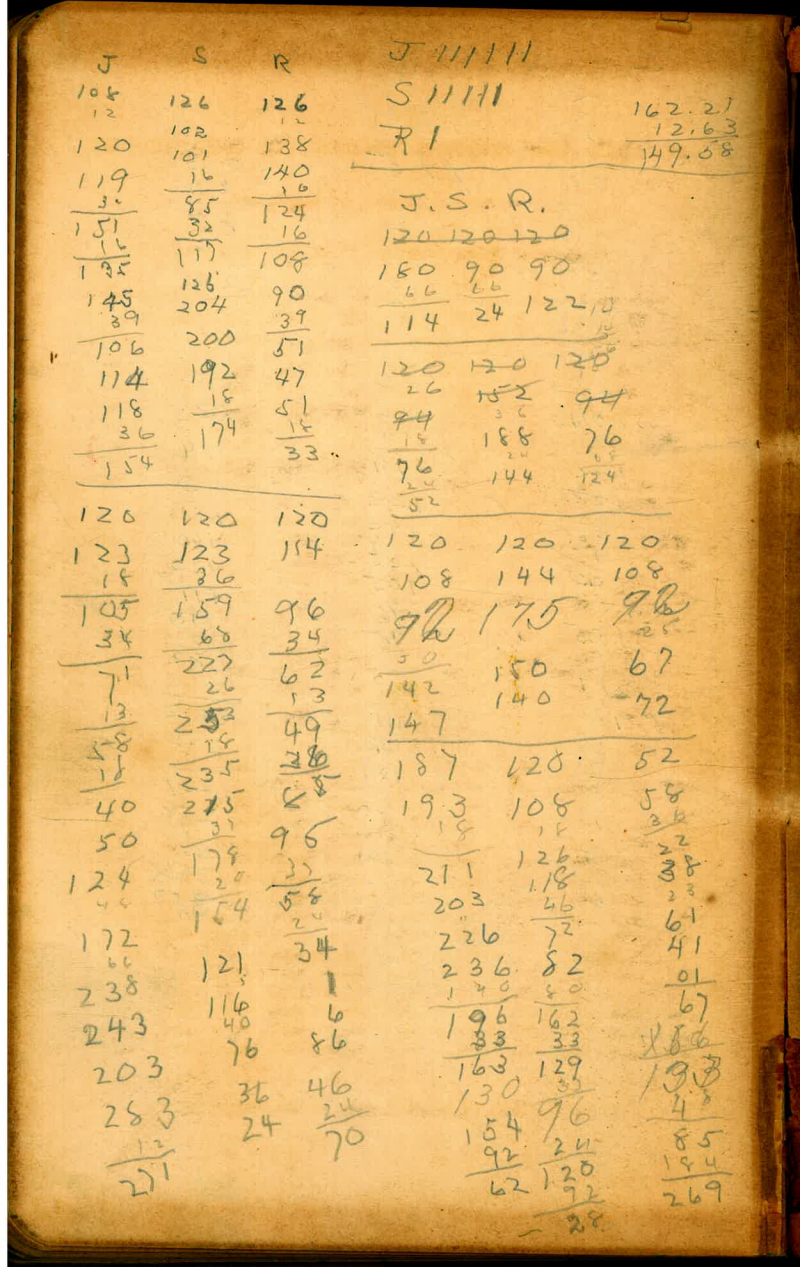
" + Morell N.E. Cor spike pole 45.413

spike in Fence Post E. side of Bdy.

35 ± N. of Chalcedony 107.90

~~J, R, S~~	R	J	78
S			2
124	124	112	156
18			
142	115	103	
110	64	64	
28	~~179~~	167	
82	83	56	
156	28	223	
238	55		

120	120	120
104	128	128
28	14	
132	114	114
128	122	110
42	143	131
86	18	140
95	125	120
135	105	111
153	96	110
155	95	28
56	28	82
211	67	180
23	94	262
189	111	240
50	138	27
135	129	267
18	49	258
153	80	38
60	110	336
104	101	366
44		357
18		
62		



DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

For Single Track Embankment.

Roadway 14 feet wide. Side Slopes 1½ to 1.

	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	27
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.