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City Hall, San Diego, Cal.

400

LEVEL

F.B.427

Cocker Quality

Published by H. S. CROCKER COMPANY, Stationers, Drawing Materials, and Mathematical Instruments, San Francisco.

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

427

MINUTES.	LKS.	MINUTES.	LKS.	MINUTES.	LKS.
1	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

MICROFILMED
DEC 1964

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS
°		°		°		°	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

Crocker Quality

LEVEL BOOK

No. 400

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ANGLE

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— Index —

Sutler St. — 47-57

11/16/08 Dunkle
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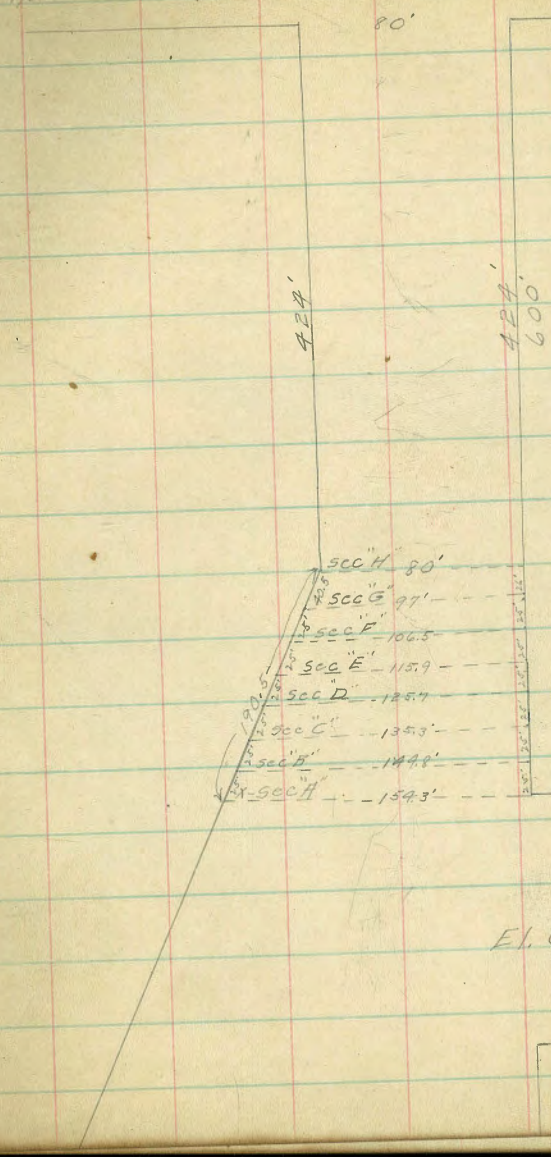
Thomas.

1 2

Meade Ave



El. Cajon

X-section Park Boulevard N. intersection El Cajon to S.L. Adams.

B.M. brass plg in curb N. int. El Cajon & Park. 342.87

B.M.	3.98	346.85		342.87

N.L. El Cajon - See Plot Page 1

X-Sec "A"

W.L.	3.6	343.3
+20 = curb	4.0	342.9
+20 = Gutter	5.0	341.9
+30	4.7	342.2
+45	4.3	342.6
+60	3.9	343.0
+71.4 = 2' W. of W. rail of W. Track	3.8	343.1
+75	3.8	343.1
+90	4.0	342.9
+98 = 2' E of E. rail of E Track	3.7	343.2
1+05	4.2	342.7
1+09	6.0	340.9
1+20	7.0	339.9
1+35	8.0	338.9
1+50	7.6	339.3
1+54^{3} = E.L.	8.1	338.8

Note - See plot page 1

0+25 = Sec "B"

W.L.	3.8	343.1
+15	4.6	342.3
+30	4.7	342.2
+45	4.3	342.6
+60	4.1	342.8
+72 = 2' W. of W. rail of W.T.	4.1	342.8
+75	4.1	342.8
+90	4.2	342.7
+97 = 2' E of E rail	4.0	342.9
1+0	4.4	342.5
1+05	6.6	340.3
1+20	8.3	338.6
1+35	7.9	339.0
144.8 = E.L.	8.1	338.8

0+50 = Sec "C"

W.L.	4.3	342.6
+15	4.9	342.0
+30	4.7	342.2
+45	4.1	342.8
+60	4.2	342.7
+70 = 2 W of W rail	4.4	342.5
+75	4.3	342.6
+90	4.2	342.7
+94 = 2' E of E rail	4.2	342.7
1+0	5.5	341.4
1+05	7.6	339.3
1+20	7.7	339.2
1+35^{3} = E.L.	8.2	338.7

POSTED

346.85

0+75 = Sec "D"

W.L.	5.0	341.9
+15	5.0	341.9
+30	4.5	342.4
+45	4.1	342.8
+60	4.7	342.2
+66.5 = 2' W of W rail	4.7	342.2
+75	4.3	342.6
+89 = 2' E of E rail	4.4	342.5
+90	4.4	342.5
+93	4.7	342.2
1+0	7.4	339.5
1+05	8.0	338.9
1+20	7.9	339.0
1+25.7 = E.L.	8.9	338.0

1+0 = Sec "E"

W.L.	5.3	341.9
+15	4.8	342.1
+30	4.5	342.4
+45	4.5	342.4
+60	4.7	342.2
+62 = 2 W of W. rail	4.8	342.1
+75	4.8	342.1
+83 = 2 E of E rail	4.8	342.1
+90	5.2	341.4
+92	7.0	339.9
1+5	7.6	339.3
1+15.9 = E.L.	7.9	339.0

1+25 = "F"

W.L.	5.2	341.7
+15	4.8	342.1
+30	4.3	342.6
+45	4.9	342.0
+54.5 = 2' W. of W. rail	4.9	342.0
+60	4.8	342.1
+75 = 2' E of E rail	4.8	342.1
+78	5.0	341.6
+82	7.6	339.0
+90	7.4	339.2
1+06.5 = E.L.	8.0	338.6

1+50 = Sec "G"

W.L.	4.9	342.0
+15	4.7	342.2
+30	5.1	341.8
+45	5.1	341.8
+46 = 2' W of W. rail	5.3	341.6
+60	5.0	341.9
+65.5 = 2' E of E rail	4.9	342.0
+68	5.2	341.7
+72	7.5	339.4
+75	7.5	339.4
+90	7.5	339.4
+97 = E.L.	8.2	338.7

POSTED

346.85

1+76 = Sec H

W.L.	4.7	342.7
Crb	5.0	341.9
"4	5.1	341.8
+3 = 2' W. of W. rail	5.2	341.7
M	5.3	341.6
+9 = 2' E of E rail	5.2	341.7
+10	5.2	341.7
"4	7.4	339.5
Crb	7.6	339.3
E.L.	8.6	338.3

2+0

E.L.	10.7	336.2
+3	8.9	338.0
Crb	7.6	339.3
"4	7.0	339.9
+4 = 2' E of E rail	5.4	341.5
M	5.4	341.5
−10 = 2' W of W rail	5.3	341.6
"4	5.2	341.7
Crb	5.2	341.7
W.L.	5.0	341.9

2+25

W.L.	5.2	341.7
Crb	5.6	341.3
"4	5.5	341.4
+3 = 2' W. of W. rail	5.6	341.3
M.	5.5	341.4
+9 = 2' E of E rail	5.5	341.4
+10	5.7	341.2
"4	6.5	340.4
Crb	7.9	339.0
E.L.	9.7	337.2

2+50

E.L.	10.1	336.8
Crb	7.1	339.8
"4	7.7	339.2
+4 = 2' E of E rail	5.7	341.2
M	5.6	341.3
+10 = 2' W of W rail	5.6	341.3
"4	5.6	341.3
Crb	5.7	341.2
W.L.	5.3	341.6

346.85

2+75

W.L.	5.5	341.4
crb	5.7	341.2
"4	5.8	341.1
+ 3 = 2' W. of W. rail	5.7	341.2
M	5.5	341.4
+ 9 = 2' E of E rail	5.7	341.2
"4	6.9	340.0
+ 7	8.3	338.6
+ 8	7.2	339.7
crb	7.1	339.8
E.L.	7.1	339.8

3+0

E.L.	7.0	339.9
crb	7.1	339.8
+ 5	7.3	339.6
+ 6	8.3	338.6
"4	7.2	339.7
+ 4 = 2' E of E. rail	5.5	341.4
M	5.4	341.5
+ 10 = 2' W of W. rail	5.6	341.3
"9	5.6	341.3
crb	5.3	341.6
W.L.	5.2	341.7

3+25

W.L.	5.1	341.8
crb	5.1	341.8
"9	5.4	341.5
+ 3 = 2' W. of W. rail	5.5	341.4
M	5.4	341.5
+ 9 = 2' E of E rail	5.4	341.5
"4	6.0	340.9
+ 7	7.6	339.3
+ 9	6.4	340.5
crb	6.7	340.2
E.L.	6.6	340.3

3+50

E.L.	6.7	340.2
crb	6.5	340.4
+ 1	6.8	340.1
+ 3	7.5	339.4
"4	5.6	341.3
+ 4 = 2' E of E. R	5.1	341.8
M	5.4	341.5
+ 10 = 2' W of W. R	5.4	341.5
"4	5.0	341.9
crb	5.1	341.8
W.L.	5.2	341.7

346.85

3+75

W.L.	5.2	341.7
crb	4.9	342.0
"4	5.1	341.8
+3 = 2' W. of W. rail	5.3	341.6
M	5.2	341.7
+9 = 2' E of E.R.	5.3	341.6
"4	5.5	341.4
+10	7.7	339.2
crb	7.2	339.7
+2	6.3	340.6
E.L.	5.8	341.3

4+0

E.L.	6.0	340.9
crb	6.3	340.6
+3	7.6	339.3
"4	5.5	341.4
+4 = 2' E of E.R.	5.6	341.3
M	5.2	341.7
+10 = 2' W of W.R.	5.3	341.6
"4	5.1	341.8
crb	5.0	341.4
W.L.	5.1	341.8

4+25

W.L.	5.1	341.8
crb	5.0	341.9
"4	5.2	341.7
+3 = 2' W of W.R.	5.2	341.7
M	5.1	341.8
+9 = 2' E of E.R.	5.4	341.5
"4	6.0	340.9
+8	7.6	339.3
crb	6.0	340.6
E.L.	6.1	340.8

4+50

E.L.	6.0	340.9
crb	5.9	341.0
+5	7.6	339.3
"4	5.8	341.1
+4 = 2' E of E.R.	5.4	341.5
M	5.1	341.8
+10 = 2' W of W.R.	5.3	341.6
"4	5.1	341.8
crb	4.9	342.0
W.L.	5.1	341.8
T.P. 6.54	347.67	5.72	341.13

POSTED

347.67

4+75

W.L.	6.0	341.7
Crb	5.7	342.0
"4	5.8	341.9
+3 = 2' W of W rail	5.9	341.8
M	5.9	341.8
+9 = 2' E of E rail.	6.0	341.7
"4	5.8	341.9
+7	7.8	339.9
Crb	8.0	339.7
+1	6.9	340.8
E.L.	6.7	341.0

5+0

E.L.	6.5	341.2
+13	6.9	340.8
Crb	8.1	339.6
"4	5.8	341.9
+4 = 2' E. of E. rail	5.8	341.9
M	5.7	342.0
+10 = 2' W. of W rail	5.8	341.9
"4	6.1	341.6
Crb	5.5	342.2
W.L.	5.6	342.1

5+25

W.L.	5.8	341.9
Crb	5.8	341.9
"4	5.7	342.0
+3 = 2' W of W rail	5.8	341.9
M	5.9	341.8
+9 = 2' E of E rail	5.9	341.8
"4	6.1	341.6
Crb	7.9	339.8
+1	6.7	341.0
E.L.	6.4	341.3

5+50

E.L.	6.1	341.6
Crb	6.7	341.0
+2	8.0	339.7
"4	6.4	341.3
+4 = 2' E of E rail	6.2	341.5
M	6.3	341.4
+10 = 2' W of W rail	6.3	341.4
"4	5.9	341.8
Crb	5.7	342.0
W.L.	5.8	341.9

POSTED

347.67

5+75

W.L.	5.5	342.2
crb	5.7	342.0
"	5.8	341.9
+3 = 2' W of W rail	6.6	341.1
M	6.8	340.9
+9 = 2' E of E rail	6.5	341.2
"	6.5	341.2
crb	7.4	340.3
+1	6.1	341.6
E.L.	6.6	341.1

6+0 = S.L. Meade Graded.

E.L.	6.5	341.2
+12	6.4	341.3
crb	7.4	340.3
"	6.9	340.8
+4 = 2' E of E rail	7.0	340.7
M	7.1	340.6
+10 = 2' W of W rail	7.0	340.7
"	6.8	340.9
+13	6.5	341.2
crb	5.8	341.9
W.L.	5.4	342.3

N.L. Meade.

W.L.	5.5	342.2
crb	5.8	341.9
"	5.7	342.0
+3 = 2' W of W rail	5.5	342.2
M	5.4	342.3
+9 = 2' E of rail	5.6	342.1
"	5.8	341.9
crb	6.1	341.6
+2	5.3	342.4
E.L.	5.5	342.2

0+25

E.L.	5.2	342.5
crb	5.8	341.9
"	5.8	341.9
+4 = 2' E of E. rail	5.3	342.4
M	5.2	342.5
+10 = 2' W of W rail	5.4	342.3
"	5.5	342.2
crb	5.2	342.5
W.L.	5.0	342.7

POSTED

347.67

0+50

W. L.	4.9	342.8
Crb	5.4	342.3
1/4	5.4	342.3
+3 = 2' W of W rail	5.3	342.4
M	5.2	342.5
+9 = 2' W of W rail	5.3	342.4
1/4	5.6	342.1
Crb	5.7	342.0
~~E~~ E. L.	5.2	342.5

0+75

E. L.	4.9	342.8
Crb	5.2	342.5
+ 2	5.9	341.8
1/4	5.5	342.2
+4 = 2' E of E rail	5.1	342.6
M	4.9	342.8
+10 = 2 W of W rail	5.1	342.6
1/4	5.4	342.3
Crb	5.5	342.2
+ 2	4.8	342.9
W. L.	4.5	343.2

1+0

W. L.	4.4	343.3
+ 9	4.4	343.3
Crb	5.1	342.6
+ 2	5.5	342.2
1/4	5.3	342.4
+3 = 2' W of W. rail	5.1	342.6
M	4.8	342.9
+9 = 2' E of E rail	5.1	342.6
1/4	5.4	342.3
Crb	5.6	342.1
+ 6	4.8	342.9
E. L.	4.7	343.0

1+25

E. L.	4.6	343.1
Crb	4.9	342.8
+ 2	5.5	342.2
1/4	5.1	342.6
+4 = 2' E of E rail	5.0	342.7
M	4.7	343.0
+10 = 2 W of W rail	5.0	342.7
1/4	5.3	342.4
+ 12	5.6	342.1
Crb	5.1	342.6
W. L.	4.4	343.3

POSTED

347.67

1+50

W.L.	4.5	343.2
Crb	5.0	342.7
+1	5.4	342.3
11/4	5.1	342.6
+3 = 2' W. of W. rail	4.9	342.8
M	4.7	343.0
+9 = 2' E of rail	4.8	342.9
11/4	4.8	342.9
+12	5.2	342.5
Crb	4.7	343.0
E.L.	4.5	343.2

1+75

E.L.	4.3	343.4
Crb	4.9	342.8
+1	5.3	342.5
11/4	4.8	342.9
+4 = 2' E of rail	4.8	342.9
M	4.6	343.1
+10 = 2' W of rail	4.8	342.9
11/4	5.2	342.5
Crb	5.3	342.4
W.L.	4.5	343.2

2+0

W.L.	4.0	343.7
Crb	5.0	342.7
11/4	5.0	342.7
+3 = 2' W of rail	4.7	343.0
M	4.5	343.2
+9 = 2' E of rail	4.7	343.0
11/4	4.5	343.2
Crb	4.9	342.8
+4	4.4	343.3
E.L.	4.2	343.5

2+25

E.L.	4.1	343.6
Crb	4.5	343.2
+1	4.9	342.8
11/4	4.5	343.2
+4 = 2' E of rail	4.5	343.2
M	4.5	343.2
+10 = 2' W of rail	4.6	343.1
11/4	4.9	342.8
Crb	5.1	342.6
W.L.	4.2	343.5

POSTED

347.67

2+50

W.L.	4.0	343.7
crb	5.1	342.6
"4	4.9	342.8
+3 = 2' W of rail	4.6	343.1
M	4.3	343.4
+9 = 2' E of rail	4.5	343.2
"4	4.4	343.3
crb	4.8	342.9
+5	4.3	343.4
E.L.	4.0	343.7

2+75

E.L.	3.9	343.8
+9	4.0	343.7
crb	4.7	343.0
"4	4.4	343.3
+4 = 2' E of E rail	4.3	343.4
M	4.2	343.5
+10 = 2' W of W rail	4.4	343.3
"4	4.9	342.8
crb	5.0	342.7
~~+1~~ W.L.	4.0	343.7

3+0

W.L.	4.2	343.5
crb	4.9	342.8
"4	4.6	343.1
+3 = 2' W of rail	4.4	343.3
M	4.1	343.6
+9 = 2' E of rail	4.4	343.3
"4	4.3	343.4
crb	4.7	343.0
+4	3.8	343.9
E.L.	3.6	344.1

3+25

E.L.	3.5	344.2
+8	3.7	344.0
crb	4.5	343.2
"4	4.3	343.4
+4 = 2' E of rail	4.1	343.6
M	4.1	343.6
+10 = 2' W of rail	4.3	343.4
"4	4.5	343.2
crb	5.0	342.7
+1	4.6	343.1
W.L.	4.6	343.1

POSTED

347.67

3+50

W.L.	4.0	343.7
crb	4.5	343.2
+2=	4.9	342.8
"4	4.4	343.3
+3= 2' W of W. rail	4.2	343.5
M	3.9	343.8
+9= 2' E of rail	4.0	343.7
"4	4.0	343.7
crb	4.4	343.3
+4	3.5	344.2
E.L.	3.8	343.9

3+75

E.L.	3.6	344.1
crb	4.3	343.4
"4	3.9	343.8
+4= 2' E of E. rail	3.8	343.9
M	3.7	344.0
+10= 2' W. of rail	4.2	343.5
"4	4.4	343.3
crb	4.6	343.1
+1	4.3	343.4
W.L.	3.8	343.9

4+0

W.L.	4.0	343.7
crb	4.4	343.3
"4	4.2	343.5
+3= 2' W of rail	3.9	343.8
M	3.7	344.0
+9= 2' E of E rail	4.0	343.7
"4	3.8	343.9
crb	3.7	344.0
E.L.	3.2	344.5

4+25

E.L.	3.5	344.2
crb	4.1	343.6
"4	4.0	343.7
+4= 2' E of E rail	3.7	344.0
M	3.6	344.1
+10= 2' W of W. rail	3.9	343.8
"4	4.1	343.6
crb	4.3	343.4
+1	3.9	343.8
W.L.	4.1	343.6
T.P. 6.65	350.64	3.68 343.99

POSTED

350-64

4+50

W.L.	7.0	344.6
crb	7.0	343.6
1/4	7.0	343.6
+3 = 2' W of W. rail	6.8	343.8
M	6.7	343.9
+9 = 2' E of E rail	6.7	343.9
1/4	6.7	343.9
crb	7.1	343.5
+ 4	6.6	344.0
E.L.	6.6	344.0

4+75

E.L.	6.6	344.0
crb	7.0	343.6
1/4	6.6	344.0
+ 4 = 2' E of E rail	6.6	344.0
M	6.4	344.2
+10 = 2' W. of W. rail	6.7	343.9
1/4	7.1	343.5
crb	7.2	343.4
W.L.	6.9	343.7

5+0

W.L.	7.0	343.6
crb	7.2	343.2
1/4	6.9	343.7
+3 = 2' W of W rail	6.7	343.9
M	6.4	344.2
+9 = 2 E' of E rail	6.7	343.9
1/4	6.5	344.1
crb	6.8	343.8
E.L.	6.5	344.1

5+25

E.L.	6.6	344.0
crb	6.9	343.7
1/4	6.4	344.2
+4 = 2' E of E rail	6.4	344.2
M	6.3	344.3
+10 = 2' W of W rail	6.5	344.1
1/4	6.7	343.9
crb	6.9	343.7
W.L.	6.5	344.1

POSTED

350.69

5+50

W.L.	6.5	344.1
crb	6.9	343.7
"4	6.6	344.0
+3 = 2' W of W. rail	6.5	344.1
M	6.2	344.4
+9 = 2' E of E rail	6.3	344.3
"4	6.3	344.3
crb	6.7	343.9
E.L.	6.4	344.2

5+75

E.L.	6.1	344.5
crb	6.4	344.2
"4	6.3	344.3
+4 = 2' E of rail	6.2	344.4
M	6.1	344.5
+10 = 2' W of W rail	6.3	344.3
"4	6.6	344.0
crb	6.9	343.7
W.L.	6.5	344.1

6+0 = S.L. Monroe 80' wide

W.L.	6.6	344.0
crb	6.6	344.0
"4	6.4	344.2
+3 = 2' W. of W. rail	6.2	344.4
M	6.0	344.6
+9 = 2' E of E rail	6.2	344.4
"4	6.3	344.3
crb	6.7	343.9
E.L.	6.5	344.1

S. Curb

E.L.	6.5	344.1
crb	6.7	343.9
"4	6.3	344.3
+4 = 2' E of E rail	6.1	344.5
M	6.0	344.6
+10 = 2' W. of W rail	6.2	344.4
"4	6.3	344.3
crb	6.4	344.2
W.L.	6.1	344.5

POSTED

350.64

S ¼

W.L.	6.4	344.2
W. crb	6.5	344.1
¼	6.2	344.4
+3 = 2' W of W rail	6.1	344.5
M	5.9	344.7
+ 9 = 2' E of E. rail	6.1	344.5
¼	6.2	344.4
Crb	6.4	344.2
E.L.	6.2	344.4

Center

E.L.	5.9	344.7
Crb	6.1	344.5
¼	6.2	344.4
+4 = 2' E of E rail	6.0	344.6
M	5.9	344.7
+10 = 2 W of W. rail	6.0	344.6
¼	6.3	344.3
Crb	6.3	344.3
W.L.	6.0	344.6

N ¼

W.L.	6.4	343.7
W. Crb	6.5	344.1
¼	6.2	344.4
+3 = 2' W of W rail	5.9	344.7
M	5.8	344.8
+9 = 2' E of E rail	6.0	344.6
¼	6.1	344.5
Crb	6.2	344.4
E.L.	6.2	344.4

N Curb

E.L.	5.8	344.8
Crb	6.2	344.4
¼	6.1	344.5
+4 = 2 E of E rail	6.0	344.6
M	5.7	344.9
+10 = 2 W of W rail	5.9	344.7
¼	6.2	344.4
Crb	6.5	344.1
+4	5.3	345.3
W.L.	5.3	345.3

N S.L. Monroe

W.L.	5.3	345.3
+8	5.3	345.3
Crb	6.3	344.3
¼	6.2	344.4
+3 = 2 W of W rail	5.9	344.7
M	5.5	345.1
+9 = 2' E of E rail	5.9	344.7
¼	5.9	344.7
Crb	6.2	344.4
E.L.	5.7	344.9

POSTED

350.64

0+25 N

E.L.	5.5	345.1
crb	6.2	344.4
+1	6.6	344.0
1/4	6.0	344.6
+4 = 2' E of E curb	5.7	344.9
M	5.5	345.1
+10 = 2 W of W rail	5.7	344.9
1/4	6.0	344.6
crb	6.4	344.2
+5	5.5	345.1
W.L.	5.0	345.6

0+50

W.L.	4.7	345.9
+8	5.2	345.4
crb	6.3	344.3
1/4	5.9	344.7
+3 = 2 W of W rail	5.5	345.1
M	5.3	345.3
+9 = 2' E of E rail	5.5	345.1
1/4	5.7	344.9
crb	6.4	344.2
+2	5.9	344.7
E.L.	5.3	345.3

0+75

E.L.	5.6	345.0
crb	6.2	344.4
1/4	5.6	345.0
+4 = 2' E of E rail	5.4	345.2
M	5.3	345.3
+10 = 2 W of W rail	5.4	345.2
1/4	5.7	344.9
crb	5.7	344.9
+3	4.7	345.9
W.L.	4.7	345.9

1+0

W.L.	4.7	345.9
+10	5.0	345.6
crb	5.8	344.8
1/4	5.7	344.9
+3 = 2 W of W rail	5.4	345.2
M	5.1	345.5
+9 = 2' E of E rail	5.3	345.3
1/4	5.5	345.1
crb	6.1	344.5
+2	5.7	344.9
E.L.	5.4	345.2

POSTED

350.64

1+25

E.L.		
+12	5.0	345.6
crb	5.5	345.1
"4	5.9	344.7
+ 4 = 2' E of E rail	5.3	345.3
M	5.1	345.5
+10 = 2 W of W rail	4.9	345.7
"4	5.2	345.4
crb	5.5	345.1
+ 6	5.5	345.1
	4.6	346.0
W.L.	4.6	346.0

1+50

W.L.	4.3	346.3
+ 9	4.5	346.1
crb	5.8	344.8
"4	5.4	345.2
+ 3 = 2 W of W. rail	5.0	345.6
M	4.7	345.9
+ 9 = 2 E of E. rail	5.0	345.6
"4	5.4	345.2
crb	5.9	344.7
+ 4	5.1	345.5
E.L.	4.8	345.8

1+75

E.L.	4.8	345.8
+12	5.0	345.6
crb	5.5	345.1
"4	5.1	345.5
+ 4 = 2 E of E rail	4.7	345.9
M	4.7	345.9
+10 = 2 W of W rail	5.0	345.6
"4	5.3	345.3
crb	5.4	345.2
+ 4	4.4	346.2
W.L.	4.2	346.2

2+0

W.L.	4.4	346.2
+	4.3	346.3
crb	5.4	345.2
"4	5.3	345.3
+ 3 = 2 W of W. rail	4.8	345.8
M	4.5	346.1
+ 9 = 2' E of E rail	4.6	346.0
"4	5.1	345.5
crb	5.4	345.2
+ 2	5.0	345.6
E.L.	4.5	346.1

POSTED

350.64

2+25

E.L.	4.2	346.4
+12	4.5	346.1
crb	5.0	345.6
"4	5.0	345.6
+4 = 2E of E rail	4.6	346.0
M	4.4	346.2
+10 = 2W of W. rail	4.7	345.9
"4	5.1	345.5
crb	5.1	345.5
+1	4.7	345.9
W.L.	4.2	346.4

2+50

W.L.	4.0	346.6
+9	3.9	346.7
crb	4.7	345.9
"4	4.9	345.7
+3 = 2' W of W. rail	4.6	346.0
M	4.2	346.4
+9 = 2' E of E rail	4.3	346.3
"4	4.8	345.8
crb	5.1	345.5
+2	4.5	346.1
E.L.	4.1	346.5

2+75

E.L.	3.9	346.7
+12	4.3	346.3
crb	4.8	345.8
"4	4.4	346.2
+4 = 2' E of E rail	4.2	346.4
M	4.0	346.6
+10 = 2W of W. rail	4.4	346.2
"4	4.9	345.7
crb	4.3	346.3
+2	4.0	346.6
W.L.	3.0	347.6

3+0

W.L.	3.7	346.9
+		
crb	4.2	346.4
"4	4.5	346.1
+3 = 2' W of W. rail	4.2	346.4
M	3.9	346.7
+9 = 2 E of E rail	3.9	346.7
"4	4.0	346.6
crb	4.7	345.9
+2	4.1	346.5
E.L.	3.6	347.0

POSTED

350.64

3+25

E.L.	2.2	347.4
+ 12	3.8	346.8
crb.	4.4	346.2
1/4	3.8	346.8
+ 4 = 2' E of E. rail	3.5	347.1
M	3.5	347.1
+ 10 = 2' W. of W. rail	3.8	346.8
1/4	4.1	346.5
crb	4.4	346.2
+ 4	3.7	346.9
W.L.	3.5	347.1

3+50

W.L.	3.2	347.4
+ 11	3.4	347.2
crb	4.2	346.4
1/4	3.6	347.0
+ 3 = 2' W. of W. rail	3.4	347.2
M	3.1	347.5
+ 9 = 2 E of E. rail	3.2	347.4
1/4	3.4	347.2
crb	4.0	346.6
+ 2	3.3	347.3
E.L.	3.1	347.5

3+75

E.L.	2.8	347.8
+ 12	3.1	347.5
crb	3.8	346.8
1/4	3.1	347.5
+ 4 = 2 E of E. rail	2.8	347.8
M	2.8	347.8
+ 10 = 2 W. of W. rail	3.1	347.5
1/4	3.2	347.4
crb	3.5	347.1
+ 2	3.1	347.5
W.L.	3.1	347.5

4+0

W.L.	2.6	348.0
+ 12	2.7	347.9
crb	3.1	347.5
1/4	2.8	348.0
+ 3 = 2 W of W. rail	2.6	348.0
M	2.4	348.2
+ 9 = 2 E of E. rail	2.6	348.0
1/4	2.8	347.8
Crb	3.5	347.1
+ 2	2.9	347.7
E.L.	2.4	348.2

POSTED

350.64 11/7/08 Dingy Rice Spaw Thomas

4+25			
E.L.		2.0	348.6
+ 12		2.7	347.9
crb		3.3	347.3
1/4		2.5	348.1
+ 4 = 2 E. of E. rail		2.2	348.4
M		2.1	348.5
+ 10 = 2 W of W rail		2.3	348.3
1/4		2.7	347.9
crb		3.0	347.6
+ 2		2.3	348.3
W.L.		2.2	348.4
4+50			
W.L.		1.9	348.7
+ 12		2.2	348.4
crb		2.7	347.9
1/4		2.2	348.4
+ 3 = 2' W of W. rail		2.0	348.6
M		1.8	348.8
+ 9 = 2' E of E rail		2.0	348.6
1/4		2.5	348.1
crb		3.0	347.6
+ 4		2.0	348.6
E.L.		1.7	348.9
4+75			
E.L.		1.3	349.3
+ 10		1.6	349.0
crb		2.7	347.9
1/4		1.9	348.7
+ 4 = 2 E of E. rail		1.9	348.7
M		1.4	349.2
+ 10 = 2 W of W. rail		1.7	348.9
1/4		1.9	348.7
crb		2.0	348.6
+ 4		1.5	349.1
W.L.		1.5	349.1
5+0			
W.L.		1.4	349.2
+ 12		1.2	349.4
crb		1.8	348.8
1/4		1.2	349.4
+ 3 = 2 W. of W. rail		1.2	349.4
M		1.2	349.4
+ 9 = 2 E of E rail = P.C. of		1.1	349.5
1/4 E. Track Turning To Single Track		1.4	349.2
Crb		2.1	348.5
+ 4		1.0	349.6
E.L.		0.9	349.7
T.P.	8.88 357.54	1.98	348.66

Spk. Tel Pole 150 S. of Madison & W.L. Park.

POSTED

357.54

5+25

E.L.	7.4	350.1
+12	7.8	349.7
crb	8.4	349.1
1/4	8.1	349.4
+9 = 2' E of E. Rail = P. Frog	7.6	349.9
M	7.6	349.9
+10 = 2' W of W rail	7.6	349.9
1/4	7.9	349.6
crb	8.3	349.2
+1	7.9	349.6
W.L.	7.9	349.6

5+50

W.L.	7.7	349.8
crb	7.7	349.8
1/4	7.5	350.0
+3 = 2 W. of W. rail	7.3	350.2
+12 = 2' E. of E rail = End of double Track.	7.3	350.2
M	7.3	350.2
1/4	7.5	350.0
crb	8.2	349.3
+3	7.4	350.1
E.L.	7.2	350.3

5+75

E.L.	6.9	350.6
+11	7.0	350.5
crb	7.7	349.8
1/4	7.2	350.3
M	6.9	350.6
+1 = 2 E of E. rail	7.0	350.5
+10 = 2 W of " "	7.0	350.5
1/4	7.2	350.3
+10	7.6	350.1
crb	7.2	350.3
W.L.	7.4	350.1

6+0 = S.L. Madison

W.L.	7.0	350.5
crb	7.5	350.0
1/4	7.0	350.5
+3 = 2 W of rail	6.8	350.7
+12 = 2 E " "	6.5	351.0
M	6.5	351.0
1/4	6.5	350.7
crb	7.4	350.1
+3	6.7	350.8
E.L.	6.5	351.0

POSTED

357.54

5. Curb.

E.L.	6.4	351.1
Crb	6.5	351.0
+3	7.2	350.3
¼	6.6	350.9
M	6.5	351.0
+1 = 2 E of rail	6.5	351.0
+10 = 2' W " "	6.6	350.9
¼	6.8	350.7
Crb	7.4	350.1
W.L.	7.1	350.4

S ¼

W.L.	7.3	350.2
Crb	7.1	350.4
¼	6.6	350.9
+3 = 2 W of rail	6.4	351.1
+12 = 2' E " "	6.4	351.1
M	6.5	351.0
¼	6.5	351.0
Crb	6.8	350.7
E.L.	6.7	350.8

Center

E.L.	6.5	351.0
Crb	6.4	351.1
¼	6.4	351.1
M	6.4	351.1
+1 = 2 E of rail	6.3	351.2
+10 = 2' W " "	6.2	351.3
¼	6.5	351.0
Crb	6.7	350.8
W.L.	6.9	350.6

N ¼

W.L.	7.2	350.3
Crb	7.0	350.5
¼	6.4	351.1
+3 = 2 W of rail	6.2	351.3
+12 = 2 E " "	6.1	351.4
M	6.1	351.4
¼	6.2	351.3
Crb	6.5	351.0
E.L.	6.6	350.9

POSTED

357.54

N. Curb.

E.L.	5.9	351.6
+11	6.3	351.2
crb	7.0	350.5
1/4	6.2	351.3
M	5.9	351.6
+1 = 2' E of rail	5.9	351.6
+10 = 2 W " "	6.0	351.5
1/4	6.2	351.3
crb	7.0	350.5
+2	6.5	351.0
W.L.	6.8	350.7

N.L. Madison

W.L.	7.2	350.3
crb	6.9	350.6
1/4	6.0	351.5
+3 = 2 W of rail	5.7	352.0
+12 = 2 E " "	5.6	352.1
M	5.5	352.2
1/4	6.1	351.4
+11	6.6	350.9
crb	6.2	351.3
+5	5.5	351.0
E.L.	5.5	351.0

0+25

E.L.	5.3	352.2
+10	5.8	351.7
crb	6.6	350.9
1/4	5.6	351.9
M	5.3	352.2
+1 = 2 E of rail	5.3	352.2
+10 = 2 W " "	5.4	352.1
1/4	5.7	351.8
crb	6.5	351.0
W.L.	6.0	351.5

0+50

W.L.	6.6	350.9
crb	6.5	351.0
+3	6.0	351.5
1/4	5.3	352.2
+3 = 2 W of rail	5.2	352.3
+12 E " "	5.1	352.2
M	5.0	352.5
1/4	5.5	352.0
crb	6.3	351.2
+4	5.3	352.4
E.L.	5.0	352.5

POSTED

357.54

0+75

E.L.	5.1	352.4
+12	5.3	352.2
crb	6.1	351.4
¼	5.1	352.4
M	4.7	352.8
+1 = 2E of rail	4.7	352.8
+10 = 2W " "	4.7	352.8
¼	5.1	352.4
crb	6.0	351.5
W.L.	5.8	351.7

1+0

W.L.	5.3	352.2
crb	5.5	352.0
¼	4.6	352.9
+3 = 2W of rail	4.4	353.1
+12 2E " "	4.4	353.1
M	4.4	353.1
¼	4.8	352.9
crb	5.4	352.1
+3	4.8	352.7
E.L.	4.7	352.8

1+25

E.L.	4.5	353.0
crb	4.6	352.9
+2	5.1	352.4
¼	4.6	352.9
M	4.3	353.2
+1 = 2E of rail	4.3	353.2
+10 = 2W " "	4.4	353.1
¼	4.6	352.9
crb	5.1	352.4
+2	4.5	353.0
W.L.	4.4	352.8

1+50

W.L.	5.0	352.5
crb	5.2	352.3
¼	4.5	353.2
+3 = 2W of rail	4.2	353.3
+12 = 2E " "	4.3	353.2
M	4.3	353.2
¼	4.3	353.2
+11	4.7	352.8
crb	4.3	353.2
E.L.	4.2	353.3

POSTED

357.54

1+75

E.L.	3.9	353.6
crb	4.3	353.2
1/4	4.2	353.3
M	4.0	353.5
+1=2 E of rail	4.1	353.4
+10=2 W " "	4.1	353.4
1/4	4.4	353.1
crb	4.9	352.6
W.L.	5.3	352.2

2+0

W.L.	3.0	354.5
+12	4.1	353.4
crb	4.8	352.7
1/4	4.4	353.1
+3=2 W of rail	4.1	353.4
+12=2 E of "	4.1	353.4
M	4.1	353.4
1/4	4.0	353.5
crb	4.0	353.5
E.L.	3.4	354.1

2+25

E.L.	3.6	353.9
crb	3.8	353.7
1/4	3.6	353.9
M	3.7	353.8
+1=2 E of rail	3.8	353.7
+10=2 W " "	4.0	353.5
1/4	4.2	353.3
crb	4.5	353.0
+2	4.0	353.5
W.L.	3.6	353.9

2+50

W.L.	4.2	353.3
crb	3.9	353.6
1/4	3.8	353.7
+3=2 W of rail	3.7	353.8
+12=2 E " "	3.6	353.9
M	3.4	354.1
1/4	3.7	353.8
+11	4.3	353.2
crb	3.9	353.6
E.L.	2.9	354.6

POSTED

357.54

2+75

E.L.	3.7	353.8
Crh	3.9	353.6
1/4	3.4	354.1
M	3.4	354.1
+1 = 2E of Rail	3.4	354.1
+10 = 2W " "	3.5	354.0
1/4	3.6	353.9
+12	4.3	353.2
Crh	3.7	353.8
W.L.	4.1	353.4

3+0

W.L.	2.0	355.5
+13	3.2	354.3
Crh	4.1	353.4
1/4	3.4	354.1
+3 = 2W of Rail	3.4	354.1
+12 = 2E " "	3.3	354.2
M	3.2	354.3
1/4	3.1	354.4
Crh	3.5	354.0
E.L.	2.7	354.8

3+25

E.L.	2.8	354.7
Crh	3.4	354.1
1/4	3.0	354.5
M	3.0	354.5
+1 = 2E of Rail	3.0	354.5
+10 = 2W " "	3.2	354.3
1/4	3.3	354.2
Crh	3.6	353.9
+4	2.9	352.6
W.L.	3.4	354.1

3+56

W.L.	2.4	355.1
Crh	3.1	354.4
+1	3.7	353.8
1/4	3.1	354.4
+3 = 2W of Rail	3.1	354.4
+12 = 2E " "	3.0	354.5
M	2.8	354.7
1/4	2.9	354.6
Crh	3.2	354.3
E.L.	2.9	354.6

POSTED

357.54

3+75

E.L.	2.7	354.8
crb	3.1	354.4
"4	2.8	354.7
M	2.8	354.7
+1 = 2' E of rail	2.8	354.7
+10 = 2 W " "	3.0	354.5
"4	3.1	354.4
crb	3.5	354.0
+4	2.3	355.2
W.L.	2.1	355.4

4+0

W.L.	2.0	355.5
+10	2.0	355.5
crb	2.3	354.2
"4	3.0	354.5
+3 = 2' W of rail	2.8	354.7
+12 = 2 E " "	2.7	354.8
M	2.6	354.9
"4	2.5	355.0
crb	2.7	354.8
E.L.	2.2	355.3

4+25

E.L.	2.0	355.5
+12	2.3	355.2
crb	2.7	354.8
"4	2.4	355.1
M	2.5	355.0
+1 = 2 E of rail	2.5	355.0
+10 = 2 W " "	2.7	354.8
"4	2.8	354.7
+12	3.2	354.3
crb	2.8	354.7
W.L.	2.5	355.0

4+50

W.L.	2.3	355.2
crb	2.6	354.9
+2	3.4	354.1
"4	2.6	354.9
+3 = 2' W of rail	2.5	355.0
+12 = 2 E " "	2.4	355.1
M	2.4	355.1
"4	2.2	355.3
crb	2.7	354.8
E.L.	2.5	355.0

POSTED

357.54

(4+64.5)?

E.L.	2.3	355.2
crb	2.6	354.9
1/4	2.5	355.0
M	2.6	354.9
+1 = 2' E of E rail	2.6	354.9
+10 = 2 W of W. rail	2.6	354.9
1/4	2.6	354.9
+11	3.4	354.1
crb	2.6	354.9
W.L.	2.2	355.3

Adams Graded,

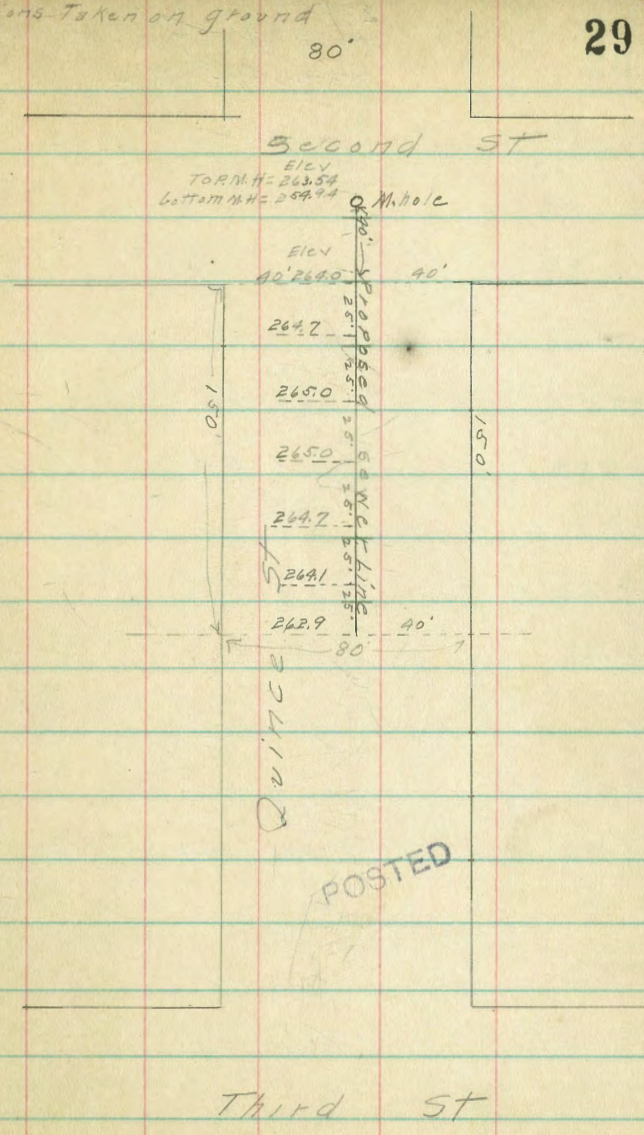
POSTED

Elevations for Proposed Sewer on Quince St
" Taken on ground 11/17/08 Dunkle Shaw Thomas.

B.M. brass plg Cor Quince & Second 263.02

	+ R	H.I	− R	
B.M.	5.02	268.04		263.02
Top of M.H.			4.50	263.54
Bottom M.H.			13.10	254.94
+ 40' = E.L. 2nd			4.0	264.0
+ 65			3.3	264.7
+ 90			3.0	265.0
+ 115			3.0	265.0
+ 140			3.3	264.7
+ 165			3.9	264.1
+ 190 = 150' E of 2nd St			5.1	262.9

Elevations Taken on ground



POSTED

11/19/08 Hatch, Moore, Dezuel

Profile for Proposed Sewer on C, 17th, D, 16th, E, 15th from 19th to H.

					Elev.
BM NW 19th-C	2.86	67.75		64.89	
EL 19th			10.1		67.6
Cr.			1.8		66.0
WL			2.95		64.8
+58			5.1		62.6
1			6.9		60.8
+50			8.7		59.0
2 = EL. 18th			10.6		57.1
Cr. 18th			11.3		56.4
WL. 18th			11.9		55.8
+30			12.5		55.2
T.P.	2.87	58.20	12.42	55.33	
1			3.3		54.9
+50			4.0		54.2
2 = EL 17th			4.1		54.1
Cr. 17th			3.8		54.4
SL. "			3.7		54.5

					Elev.
		58.20			
+12			7.0		51.2
+50			7.6		50.6
1			10.2		48.0
+20			12.6		45.6
+50			12.6		45.6
+60			11.6		46.6
2			9.3		48.9
+50			9.5		48.7
+87			5.0		53.2
T.P.	9.66	67.61	6.25	57.95	
WL D.			6.1		61.5
+4			3.1		64.5
Cr. D St			2.5		65.1
WL D St			3.9		63.7
BM. 17th-D			4.08	63.55	63.5
50' W			5.9		61.7
1			7.7		59.9

POSTED

					Elev.
		67.61			
+50			9.4		58.2
2 = EL. 16 ft			10.9		56.7
Cr. "			11.4		56.2
T.P.	0.35	56.46	11.50	56.11	
Sh. D. Manhole cover,			1.0		55.5
+60			4.4		52.1
1			7.3		49.2
+50			8.4		48.1
2			9.3		47.2
+50			9.8		46.7
3 = NL E ft			9.5		47.0
Cr.			9.6		46.9
WL.			11.0		45.5
+10			12.8		43.7
T.P.	2.15	46.28	12.33	44.13	
+50			4.3		42.0
1			5.1		41.2

				Elev.
	46.28			
+50		5.3		41.0
+60		5.6		40.7
2 = EL. 15 ft		8.7		37.6
+5		10.3		36.0
+25		10.0		36.3
Cr. 15 ft		7.0		39.3
T.P.		2.68	43.60	top of Post

Continued B.421 P.74

POSTED

Levels on 31st St. "M" St to Woolman Dunkle
11/30/08 Shaw
Thomas

B.M. = R.R. Spk S.W. Cor 31st & "M"

B.M.	2.47	79.09		76.62	
		S.L. "M" St			
W			2.9	76.2	
M			2.8	76.3	
E.			3.00	76.1	
		0+25			
E			4.2	74.9	
M			4.6	74.5	
W			3.8	75.3	
		0+50			
W			4.4	74.7	
M			4.8	74.3	
E			4.7	74.4	
		0+75			
E			5.0	74.1	
M			5.3	73.8	
W			5.0	74.1	

		1+00			
W			4.7	74.4	
M			5.1	74.0	
E			5.1	74.0	
		1+25			
E			4.9	74.2	
M			5.2	73.9	
W			5.2	73.9	
		1+50			
W			5.4	73.7	
M			4.5	74.6	
E.			5.2	73.9	
		1+75			
E			5.3	73.8	
M			4.9	74.2	
W			5.4	73.7	

POSTED

Published by H. S. Crocker Company, Stationers, Drawing

79.09

2+0

W	5.5	73.6
M	4.7	74.4
E	5.2	73.9

2+25

E	4.5	74.6
M	5.1	74.0
W	5.4	73.7

2+50

W	4.3	74.8
M	5.2	73.9
E	4.9	74.2

2+75

E	4.7	74.4
M	5.1	74.0
W	5.4	73.7

3+0 = N.L. "N" 100' Wide

W	5.4	73.7
M	5.3	73.8
E	3.8	75.3

Center "N"

E	4.4	74.7
M	4.5	74.6
W	5.0	74.1

S.L. "N" St

W	5.2	73.9
M	4.6	74.5
E	4.6	74.5

0+25

E	4.1	75.0
M	4.6	74.5
W	5.0	74.1
T.P.	6.24 80.41	4.92	74.17

COPIED

80.41

0+50

W	5.9	74.5
M	6.0	74.4
E	5.3	75.1

0+75

E	5.8	74.6
M	5.6	74.8
W	6.1	74.3

1+0

−7.5' = E. Rail N.C.&O R.R	4.9	75.5
W	6.3	74.1
M	4.7	75.7
E	5.5	74.9

80.41

1+25

E	5.6	74.8
M	4.8	75.6
+25 = E. rail	4.8	75.6
W	5.7	74.7

1+50

W	5.3	75.1
+15.5 = E. rail	4.7	75.7
M	5.5	74.9
E	5.5	74.9

1+75

E	5.2	75.2
M	5.4	75.0
+7 = E rail	4.7	75.7
W	5.5	74.9

POSTED

80.41

2+0

W	4.7	75.7
+28.5' = Erail	4.8	75.6
M	5.2	75.2
E	5.8	74.6

2+25

E	5.9	74.5
+29 = Erail	5.0	75.4
M	5.4	75.0
W	5.4	75.0

2+50

W	5.7	74.7
M	5.7	74.7
+24 = Erail	5.2	75.2
E	6.1	74.3

2+82.2 = N.L. Webster

E	7.8	73.1
+27.6 = Erail	5.7	74.7
M	6.1	74.3
W	6.0	74.4

Center

W	7.3	73.1
M	7.8	72.6
+24 = Erail	6.6	73.8
E	8.2	72.2

S.L. Webster

E	7.2	73.2
+27.6 = Erail	7.3	73.1
M	7.7	72.7
W	7.8	72.6

POSTED

80.41

0+25

W	7.7	72.7
M	7.9	72.5
+24 = E.R.	7.8	72.6
E	5.9	74.5

0+50

E	5.3	75.1
+27.6 = E.R.	8.3	72.1
M	8.4	72.0
W	7.6	72.8

0+75

W	7.3	73.1
M	8.9	71.5
+24 = E.Rail	8.8	71.6
E	3.0	77.4

80.41

1+0

E	3.0	77.4
+27.6 = E.Rail	9.3	71.1
M	9.4	71.0
W	6.9	73.5

1+25

W	6.8	73.6
M	10.0	70.4
+24 = Rail	9.9	70.5
E	2.6	77.8

1+50

E	2.4	78.0
+27.6 = E rail	10.4	70.0
M	10.6	69.8
W	5.8	74.6

POSTED

		80.41		
℄		1+75		
W			5.3	75.1
M			11.1	69.3
+2.4 = E Rail			10.9	69.5
E			2.3	78.1
		2+0		
E			3.0	77.4
+27.6 = E. Rail			11.5	68.9
M			11.7	68.7
W			5.4	75.0
		2+25		
W			5.8	74.6
M			12.2	68.2
+2.4 = E Rail			12.0	68.4
E			5.3	75.1

		2+50		
E			6.5	73.9
+27.6 = E. Rail			12.6	67.8
M			12.7	67.7
W			6.8	73.6
		2+75		
W			7.9	72.5
M			13.3	67.1
+2.4 = E Rail			13.1	67.3
E			8.4	72.0
T.P.	5.47	72.99	12.89	67.52
		3+0 = N.L. Clay		
E			3.7	69.3
+27.6 = E. Rail			6.2	66.8
M			6.4	66.6
W			1.7	71.3

POSTED

72.99

Center 80' Wide

W	6.8	66.2
M	7.3	65.7
+24 = E rail	7.2	65.8
E	5.6	67.4

5.2. Clay

E	5.4	67.6
+27.6 = E. rail	8.3	64.7
M	8.6	64.4
W	9.1	63.9

0+25

W	10.0	63.0
M	9.1	63.9
+24 = E rail	8.8	64.2
E.	3.3	69.7

72.99

0+50

E	2.2	70.8
+27.6 = E rail	9.4	63.6
M	9.8	63.2
W	8.3	64.7

0+75

W	6.2	66.8
M	10.3	62.7
+24 = E rail	10.0	63.0
E	2.9	70.1

1+0

E	2.7	70.3
+27.6 = E. rail	10.5	62.5
M	10.9	62.1
W	5.3	67.7

POSTED

		72.99		
		1+25		
W			5.6	67.4
M			11.4	61.6
+2^{4} = E. rail			11.1	61.9
E.			4.6	68.4
		1+50		
E			5.8	67.2
+27^{6} = E. rail			11.7	61.3
M			12.0	61.0
W			5.6	67.4
		1+75		
W			7.0	66.0
M			12.7	60.3
+2^{4} = E rail			12.4	60.6
E			7.2	65.8
T.P. SPK. N.E. Cor Franklin 831st	3.42	66.63	9.78	63.21

		66.63		
		2+0		
E			1.3	65.3
+27^{6} = E rail			6.6	60.0
M			6.9	59.7
W			1.2	65.4
		2+25		
W			2.1	64.5
M			7.5	59.1
+2^{4} = E rail			7.1	59.5
E			2.1	64.5
		2+50		
E			3.3	63.3
+27^{6} = E rail			7.7	58.9
M			8.0	58.6
W			1.7	64.9

POSTED

66.63

2+75

W	2.0	64.6
M	8.6	✓8.0
+29 = E rail	8.3	✓8.3
E	4.1	62.✓
3+0 = N.L. Franklin Graded.		
E	4.9	61.7
+27.6 = E. rail	8.8	✓7.8
M	9.1	✓7.✓
W	2.7	63.9
S.L. Franklin.		
W	11.5	✓✓.1
M	10.8	✓✓.8
+29 = E rail	10.8	✓✓.8
E	9.0	✓7.6

66.63

0+25

E			6.9	✓9.7
+27.6 = E rail			11.4	✓✓.2
M			11.7	✓4.9
W			13.7	✓2.9
T.R.	1.28	55.93	11.98	54.65
		0+50		
W			9.6	46.3
M			1.5	✓4.4
+28 = E rail			1.3	✓4.6
E			0.0	✓✓.9
		0+75		
E			2.2	✓3.7
27.6 = E rail			1.9	✓4.0
M			2.7	✓3.8
W			11.4	44.✓

		55.93		
		1+0		
W			11.6	44.3
M			3.0	52.9
+2 4 = E. rail			2.8	53.1
E			5.2	50.7
		1+25		
E			7.9	48.0
+27 6 = E. rail			3.4	52.5
M			3.5	52.4
W			12.4	43.5
		1+50		
W			15.3	40.6
M			4.3	51.6
+2 4 = E. rail			4.1	51.8
E			10.2	45.7

			55.93	
		1+75		
E			17.1	38.8
+27 6 = E. rail			4.6	51.3
M			4.8	51.1
W			16.6	39.3
T.P.	1.17	51.20	5.90	50.03
		2+0		
W			12.2	39.0
M			0.8	50.4
+2 4 = E. rail			0.7	50.5
E			14.2	37.0
		2+25		
E			14.7	36.5
+27 6 = E. rail			1.3	49.9
M			1.5	49.7
W			10.9	40.3

POSTED

51.20

2+50

W	8.3	42.9
M	2.1	49.1
+2 4	1.9	49.3
E.	15.2	36.0

2+75

E	13.8	37.4
+27 6 = E rail	2.2	49.0
M	2.5	48.7
W	4.0	47.2

340 = N.L. Woolman

W	0.8	50.4
M	3.0	48.2
+2 4 = E rail	2.7	48.5
E.	12.2	39.0

Plotted

POSTED

7.8
11.55

1/4/09 { Whittelsey
Taylor
Churchman

X section of Intersection of 4th & "F" st.

B.M. S.W. Brs. Plg. 4th & F. 28.628

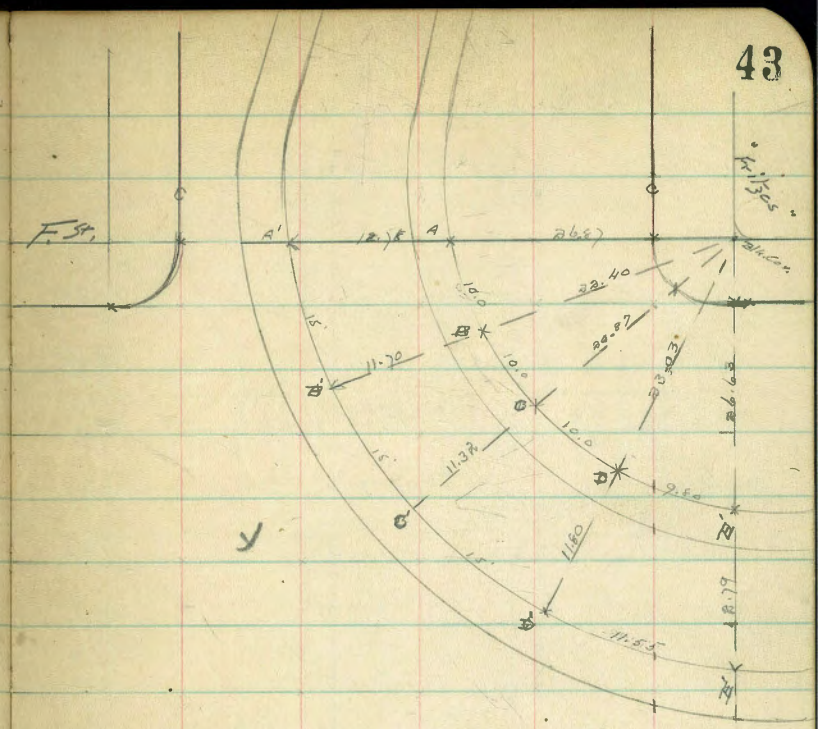
S.L. of F St

W.L.	4.85	33.48	4.50	28.98
C			4.67	28.81
G.			5.35	28.13
1/4			5.16	28.32
℄			5.00	28.48
1/4			5.13	28.35
G			5.32	28.16
C			4.55	28.93
E.L			4.28	29.20

S. Curb of F St

E.L.			4.55	28.93
G.			5.08	28.40
C			5.28	28.20
1/4			5.03	28.45
℄			4.92	28.56

POSTED



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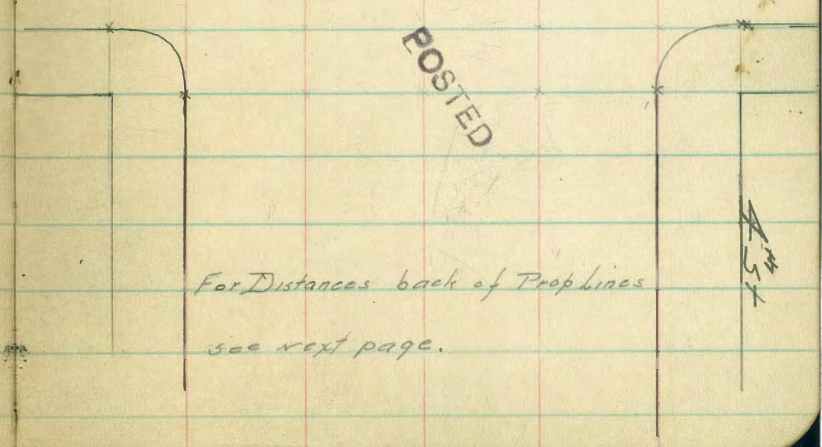


For Distances back of Prop Lines see next page.

S. Curb Cont'd

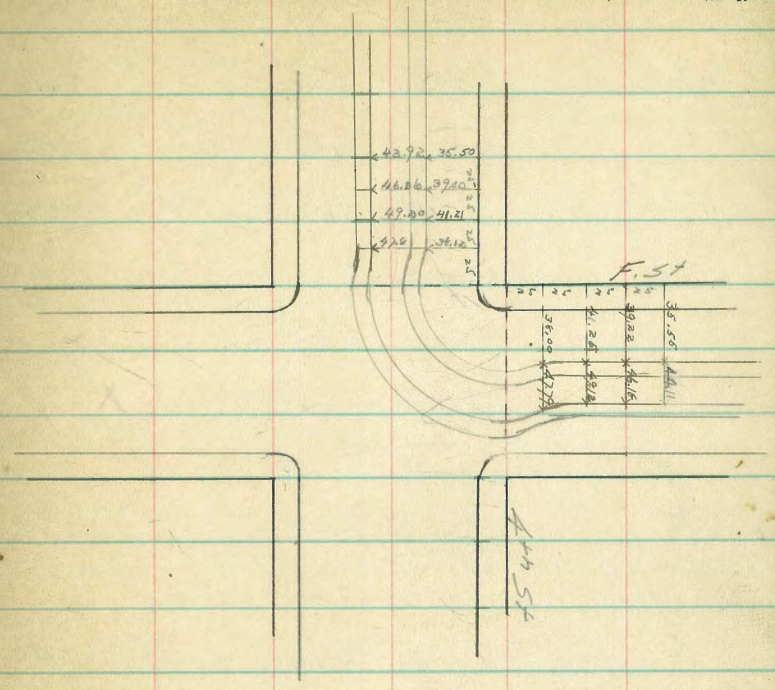
W. 1/4	33.48	5.00	28.48
C		5.30	28.18
W.L.		4.74	28.74
℄		4.90	28.58

S. 1/4 of F.

W.L.		4.78	28.70
C		5.13	28.35
1/4		4.90	28.58
℄		4.79	28.69
1/4		4.86	28.62
C		5.03	28.45
E.L.		4.80	28.68

℄ of F.

E.L.		4.53	28.95
C		4.58	28.90
1/4		4.65	28.83
℄		4.65	28.83



POSTED

℄ of F. Cont'd.

N ¼	33.48	4.46	28.67
C		5.00	28.48
N.L.		4.75	28.73

N ¼ of F.

N.L.		4.43	29.05
C		4.83	28.65
¼		4.62	28.86
℄		4.49	28.99
¼		4.38	29.10
C		4.44	29.04
E.L.		4.39	29.09

N.C. of F.

E.L.G.		4.30	29.18
Top		3.55	29.93
C		4.43	29.05
¼		4.33	29.15
℄		4.28	29.20
¼		4.43	29.05

C		4.81	28.67
G.		4.35	29.13
N.D. Top		4.06	29.42

N.L. of F St.

N.L.		3.85	29.63
C		4.00	29.48
G		4.83	28.65
¼		4.35	29.13
℄		4.20	29.28
¼		4.25	29.23
G.		4.19	29.29
C.		3.52	29.96
E.L.		3.18	30.30

— Levels on inner rails — see sketch p. 43

A		4.25	29.23
B.		4.36	29.12
C.		4.41	29.07
D		4.40	29.08
E		4.38	29.10

POSTED

E'	33.48	4.57	28.91
D'		4.58	29.90
C'		4.45	29.03
B'		4.32	29.16
A'		4.26.	29.22

on E. Side of 4th (27.63)

Levels ~~for~~ Curb & Gutter from F st So.

00 = S.L. of F	3.55	32.18	
+25 C.		3.72	
G.		4.46	
+50 C		4.26	
G		5.03	
+75 C		4.70	
G		5.46	
1+00 C		5.17	
G		5.96	

Levels on W. side of 4th from F st. So

00 = S.L. of F		32.18	
+25	C		3.83
	G		4.53
50	C		4.20
	G		5.03
75	C		4.75
	G		5.52
100	C		4.24
	G.		4.98

POSTED

1/18 Hatch / Sec. Sutter St.
09 Moore
Dezel Eagle to Crane Tract

Wash - Falcon

B.M	6.51	272.01		265.5	
	2.48	267.44	7.05	264.96	
and sutter	3.72	262.66	8.50	258.94	
SE Cor Goldfinch 6.92					
BM Spk in Fence Post		264.73	3.95	258.71	
	E L. Eagle.				
N.			7.7	257.0	✓
cb			7.1	257.6	
1/4			7.8	256.9	
c			7.8	256.9	
1/4			6.8	257.9	
cb			7.2	257.5	
S			6.7	258.0	
	E cb Eagle				
S			6.8	257.9	
cb			7.0	257.7	
1/4			7.1	257.6	
c			7.3	257.4	

		26473			
1/4			7.2	257.5	
cb			6.7	258.0	
N			7.1	257.6	
	E 1/4 Eagle				
N			7.3	257.4	
cb			7.0	257.7	
1/4			7.4	257.3	
c			7.3	257.4	
1/4			7.0	257.7	
cb			6.7	258.0	
S			6.6	258.1	
	Cr.				
S			6.4	258.3	
cb			6.4	258.3	
1/4			6.7	258.0	
c			6.8	257.9	
1/4			7.3	257.4	

POSTED

264.73

cb	7.3	257.4
N	7.3	257.4
W 1/a		
N	6.9	257.8
cb	7.0	257.7
1/a	7.0	257.7
c	6.7	258.0
1/a	6.6	258.1
cb	6.4	258.3
S	6.3	258.4
W cb		
S	6.3	258.4
cb	6.2	258.5
1/4	5.4	259.3
c	5.1	259.6
1/4	6.3	258.4
cb	6.4	258.3
N	6.3	258.4

264.73

W L. Eagle

N.	6.3	258.4
cb	6.2	258.5
1/a	6.0	258.7
c	4.4	260.3
1/a	4.6	260.1
cb	5.8	258.9
S	6.0	258.7
25 W		
S	5.5	259.2
cb	5.4	259.3
1/a	5.6	259.1
c	5.7	259.0
1/a	5.6	259.1
cb	5.7	259.0
N.	6.0	258.7

POSTED

26473

50 W

N	5.3	259.4
cb	5.2	259.5
1/a	4.8	259.9
c	5.0	259.7
1/a	4.9	259.8
cb	5.0	259.7
S	4.9	259.8

75 W

S	4.5	260.2
cb	4.4	260.3
1/a	4.3	260.4
c	4.2	260.5
1/a	4.2	260.5
cb	4.6	260.1
N	4.8	259.9

26473

100 W

N	4.8	259.9
cb	4.6	260.1
1/a	4.3	260.4
c	4.2	260.5
1/a	4.1	260.6
cb	3.8	260.9
S	3.9	260.8

125 W

S	3.5	261.2
cb	3.9	260.8
1/a	4.0	260.7
c	4.1	260.6
1/a	4.4	260.3
cb	4.3	260.4
N	3.5	261.2

26473

150 W

N	5.2	259.5
d	4.8	259.9
1/a	4.6	260.1
c	4.0	260.7
1/a	3.9	260.8
d	3.9	260.8
s	3.6	261.1

175 W

s	3.8	260.9
d	4.1	260.6
1/a	3.9	260.8
c	4.2	260.5
1/a	4.4	260.3
d	4.8	259.9
N	5.1	259.6

26473

200 W

N	5.2	259.5
d	4.9	259.8
1/a	4.8	259.9
c	4.4	260.3
1/a	4.6	260.1
d	4.4	260.3
s	4.2	260.5

225 W

s	4.2	260.5
d	4.4	260.3
1/a	4.6	260.1
c	4.8	259.9
1/a	5.1	259.6
d	5.1	259.6
N	5.2	259.5

26473

250 W

W	5.2	259.5
cb	5.0	259.7
1/4	4.8	259.9
c	4.7	260.0
1/4	3.5	261.2
cb	3.6	261.1
S	4.2	260.5

275 W

S	3.8	260.9
cb	3.5	261.2
1/4	3.9	260.8
c	4.5	260.2
1/4	4.0	260.7
cb	3.6	261.1
N	5.0	259.7

26473

300 W

N	4.5	260.2
cb	3.8	260.9
1/4	2.9	261.8
c	3.4	261.3
1/4	3.6	261.1
cb	3.2	261.5
S	3.3	261.4

325 W

S	2.4	262.3
cb	2.6	262.1
1/4	2.9	261.8
c	3.6	261.1
1/4	3.5	261.2
cb	2.7	262.0
N	3.0	261.7

264.73

350' W

N	3.4	261.3
cb	3.2	261.5
1/a	3.4	261.3
c	3.3	261.4
1/a	3.1	261.6
cb	2.9	261.8
S	2.4	262.3

375' W

S	3.0	261.7
cb	3.4	261.3
1/a	3.6	261.1
c	3.5	261.2
1/a	3.5	261.2
cb	3.3	261.4
N	3.0	261.7

264.73

400' W

N	3.5	261.2
cb	3.7	261.0
1/a	3.8	260.9
c	3.9	260.8
1/a	3.8	260.9
cb	4.0	260.7
S	3.5	261.2

425' W

S	4.0	260.7
cb	4.6	260.1
1/a	4.8	259.9
c	4.7	260.0
1/a	4.5	260.2
cb	4.3	260.4
N	3.8	260.9

26473

450' W

N			3.9	260.8
cb			4.2	260.5
1/4			4.8	259.9
c			5.0	259.7
1/4			5.1	259.6
cb			5.5	259.2
s			4.9	259.8

480' W = El. Goldfinch

S			6.4	258.3
cb			6.2	258.5
1/4			6.0	258.7
c			5.4	259.3
1/4			4.8 5.4	259.9 259.3
cb			5.2 6.0	259.5 258.7
N			5.0 6.9	259.7 257.8
T.P.	2.52	261.23	6.02	258.71

26123

E cb. Goldfinch

S			3.2	258.0
cb			2.7	258.5
1/4			1.9	259.3
c			1.6	259.6
1/4			1.8	259.3
cb			2.8	258.4
N			4.1	257.1

E 1/4

N			4.2	257.0
cb			2.0	259.2
1/4			1.2	260.0
c			1.5	259.7
1/4			1.7	259.5
cb			2.6	258.6
S			3.6	257.6

POSTED

261.23

er.

s	3.7	257.5
cb	3.1	258.1
1/4	2.2	259.0
c	2.1	259.1
1/4	2.1	259.1
cb	2.7	258.5
N	4.2	257.0

W 1/4

N	4.2	257.0
cb	3.6	257.6
1/4	3.2	258.0
c	3.0	258.2
1/4	3.1	258.1
cb	3.2	258.0
s	2.5	257.7

261.23

W cb.

s	4.4	256.8
cb	3.8	257.4
1/4	3.2	258.0
c	3.2	258.0
1/4	3.5	257.7
cb	4.1	257.1
N	4.1	257.1

WL Goldfinch

N	4.1 2.4	257.1 258.8
cb	3.2 2.6	258.0 258.6
1/4	3.0	258.2
c	3.3	257.9
1/4	3.8	257.4
cb	4.3	256.9
s	4.6	256.6

26123

25 W

S	6.1	255.1
cb	5.5	255.7
1/c	4.9	256.3
c	4.4	256.8
1/c	4.1	257.1
cb	3.4	257.8
N	3.0	258.2

50 W

N	3.7	257.3
cb	4.3	256.9
1/c	4.7	2565
c	5.3	255.9
1/c	5.9	255.3
cb	6.5	254.7
S	7.9	253.3

26123

75 W

S	10.9	250.3
cb	8.2	253.0
1/c	6.5	254.7
c	5.7	255.5
1/c	5.4	255.8
cb	4.8	256.4
N	4.4	256.8

100 W

N	5.0	256.2
cb	5.4	255.8
1/c	6.3	254.9
	7.2	254.0
1/c	8.0	253.2
cb	9.8	253.4
S	13.6	247.6

26123

125 W

S	8.3	242.9
cb	5.7	245.7
1/a	12.9	248.3
c	10.2	251.0
+10	7.6	253.6
1/a	6.9	254.3
cb	6.2	255.0
N	6.0	255.2

150 W

N	5.9	255.3
cb	6.9	254.3
1/a	7.1	254.1
c	6.3	254.9
1/a	6.6	254.6
cb	7.6	253.6
S	8.5	252.7

26123

175 W

S	6.8	254.4
cb	6.7	254.5
1/a	6.2	255.0
c	5.9	255.3
1/a	6.1	255.1
cb	6.0	255.2
N	5.5	255.7

200 W

N	5.0	256.2
cb	5.3	255.8
1/a	5.5	255.7
c	5.0	256.2
1/a	5.6	255.6
cb	6.2	255.0
S	7.6	253.6

		261.23		
		325' W		
S			5.8	255.4
cb			6.0	255.2
1/4			5.8	255.4
C			5.0	256.2
1/4			5.0	256.2
TP.	528	261.68	4.83	256.40
cb			5.6	256.1
N.			5.3	256.4
		250' W		
N.			4.7	257.0
cb			5.4	256.3
1/2			5.5	256.2
C			5.7	256.0
1/4			5.9	255.8
cb			5.9	255.8
S			5.7	256.0

		261.65		
		275' W		
S			5.7	256.0
cb			5.4	256.3
1/4			5.3	256.4
C			5.2	256.5
1/4			5.2	256.5
cb			5.0	256.7
N			4.5	257.2
		293' W = Fence line of Pane Tract		
N			4.5	257.2
cb			4.5	257.2
1/4			4.8	256.9
C			5.1	256.6
1/4			5.0	256.7
cb			5.2	256.5
S			5.3	256.4
BM Hub SE Cor Boyle's nursery			293	257.75

POSTED

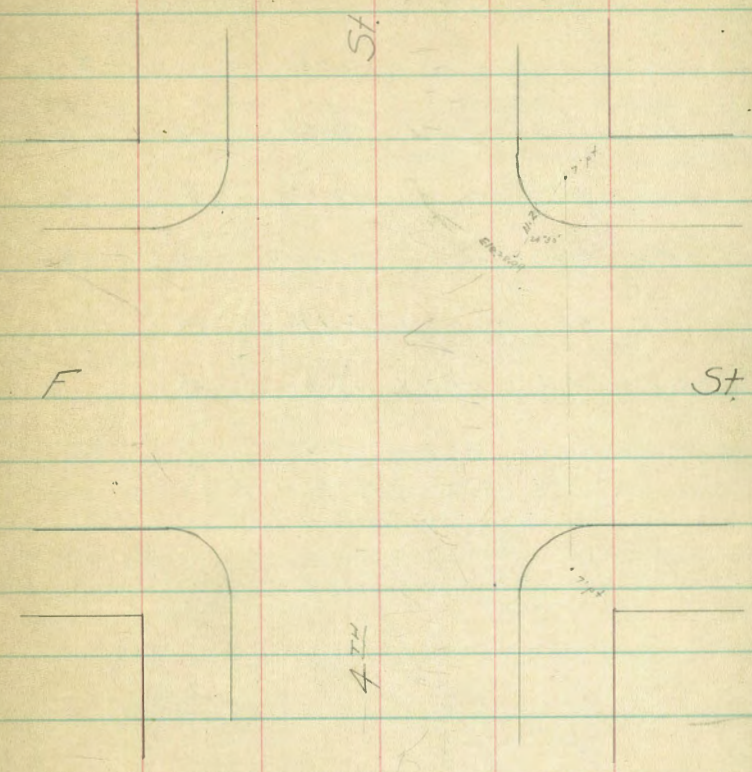
				28.63
	~~E.C.L. of 4th~~			Rad. Line
O.R. I.T.	4.82	33.45	4.34	29.11
OR OT			4.34	29.11
	E.C.L. 4th			
			4.34	29.11
			4.53	28.92
			4.46	28.99
Tob			3.59	29.86
Gut			4.29	29.16

POSTED

2	3.99	32.62		28.63 B.M. S.W. 4th & F.
			3.63	28.99
25 No. of F – E. Rail			2.83	29.79
			2.82	29.80
			3.02	29.60
" " " " W Rail			2.89	29.73
25 E of 4th No rail			3.07	29.55
			3.15	29.47
			3.26	29.36
" " " So "			3.19	29.43

Location of Catch basin at int of 4th & F

1/24/09 { Davis, Dimmer, Williams



2/2/09 { Davis, Dinman, Williams

Grades for drain pipe at 4th and 'F' Sts.

	4.50	33.13		28.63 B.M.	
0+00 Cleanout	5.73	27.40	26.50	0.90	10 3/4"
+25	5.27	27.86	26.67	1.19	1-2 9/32"
+50	4.75	28.38	26.84	1.54	1-6 1/2"
+75	4.27	28.86	27.02	1.84	1-10 3/32"
1	4.81	28.32	27.19	1.13	1-1 9/16"
+25	4.18	28.95	27.36	1.59	1-7 3/32"
+45 CB	4.07	29.06	27.50	1.56	1-6 3/4"

X sect. Lamont. Chalcedony to Law. June 2/09 {Childs Barber Tayeur

	11.55	H.I. 139.38	127.83	B.M.
		No. line Chalcedony		
E. line		11.9	127.5	
		12.3	127.1	
gutter		13.3	126.1	
		12.5	126.9	
C		12.3	127.1	
		12.7	126.7	
gutter		13.4	126.0	
cb		12.4	127.0	
W line		12.0	127.4	
		50 No.		
W line		9.2	130.2	
		9.4	130.0	
gutter		10.4	129.0	
		10.2	129.2	
C		9.6	129.8	
		10.0	129.4	
gutter		10.5	128.9	
		9.5	129.9	
E line		9.3	130.5	

	100' No.		
E line		6.5	132.9
		6.8	132.6
gutter		7.8	131.6
		7.1	132.3
C		6.9	132.5
		7.3	132.1
gutter		7.6	131.8
		6.6	132.8
W line		6.3	133.1
	150' No.		
W line		3.3	136.1
		3.7	135.7
gutter		4.7	134.7
		4.1	135.3
C		3.9	135.5
		4.2	135.2
gutter		5.0	134.4
		4.0	135.4
E line		3.9	135.5

139.38

200' no.

E line			1.0	138.4	
gutter			1.4	138.0	
			2.4	137.0	
			1.5	137.9	
C			1.1	138.3	
gutter			1.4	138.0	
			1.9	137.5	
			0.9	138.5	
W line			0.4	139.0	
		245' no.			
		H.I.			
~~W line~~	9.56	146.32	2.62	136.76	T.P.
W line			4.9	141.4	
gutter			5.2	141.1	
			6.2	140.1	
~~E~~			5.8	140.5	
C			5.4	140.9	
			5.9	140.4	
gutter			6.9	139.4	
E. Cbc			5.9	140.4	
E line			5.7	140.6	

146.32

Co. line Land.

E line	5.7	140.6	
gutter	5.5	140.8	
	6.5	139.8	
	5.2	141.1	
C	4.9	141.4	
gutter	5.1	141.2	
	5.2	141.1	
	4.2	142.1	
W line	3.7	142.6	
Co. Cbc			
W line	3.7	142.5	
gutter	3.7	142.5	
	4.7	141.5	
	4.4	141.9	
C	4.1	142.1	
gutter	4.7	141.6	
	5.8	140.5	
	4.8	141.5	
E line	5.2	141.1	

146.3

No. 1/4

E line	4.7	141.6
	4.4	141.9
gutter	5.4	140.9
	4.5	141.8
C	4.0	142.3
	4.5	141.8
gutter	4.7	141.6
	3.7	142.6
W line	3.7	142.6

Center

W line	3.5	142.8
	3.7	142.6
gutter	4.7	141.6
	4.1	142.2
C	4.0	142.3
	4.8	141.5
gutter	5.3	141.0
	4.3	142.0
E line	4.4	141.9

No. 1/4

E line	4.3	142.0
	4.4	141.9
gutter	5.4	140.9
	4.4	141.9
C	4.0	142.3
	4.2	142.1
gutter	4.5	141.8
	3.5	142.8
W line	3.1	143.2

No. Cb.

W line	3.1	143.2
	3.5	142.8
gutter	4.5	141.8
	3.9	142.4
C	3.9	142.4
	4.3	142.0
gutter	5.4	140.9
	4.4	141.9
E line	4.4	141.9

146.3

No. line Law

E line	5.0	141.3
	4.2	142.1
gutter	5.2	141.1
	4.1	142.2
C	3.8	142.5
	3.8	142.5
gutter	4.2	142.1
	3.2	143.1
W line	2.8	143.5

at rt. angles to No. side Law
on west side

W line	2.8	143.5
	3.2	143.1
gutter	4.2	142.1
	3.4	142.9
C	3.6	142.7
	3.7	142.6
gutter	4.3	142.0
	3.3	143.0
E line	3.4	142.9

X. sect Law. Lamont to

Morell. E line Lamont.

No. line	5.0
	4.4
	4.3
C	4.4
	4.7
	5.2
So line	5.7

50' E

So line	6.6
	7.1
	7.0
C	6.5
	6.4
	6.3
No. line	6.4

100' E

no. line	7.6
	7.9
	8.1
c	7.8
	8.8
	8.7
c	
solid	9.2

150' E

solid	10.4
c	10.1
	10.0
c	9.8
	9.4
	9.0
no line	8.7

200' E

no line	10.0
	10.5
	10.8
c	11.1
	11.4
	11.4
solid	11.5

250' E

solid	13.2
	12.8
	12.4
c	12.4
	12.1
	11.9
no line	11.5

300' E

		H.I.		
T.P.	2.08	137.05	11.35	134.97
~~no line~~			3.0	
n.			3.5	
			3.7	
c			3.9	
			4.1	
			4.3	
solid			4.4	

350' E

solid			5.1	
			5.1	
			4.9	
c			4.4	
			4.4	
			4.2	
no line			3.7	

400' E

no line			3.7	
			4.3	
			4.7	
c			4.5	
			5.1	
			5.2	
solid			5.5	

450' E

solid			5.4	
			5.4	
			5.5	
c			5.3	
			5.4	
			5.7	
no line			5.5	

500' E, (W. line Morell)

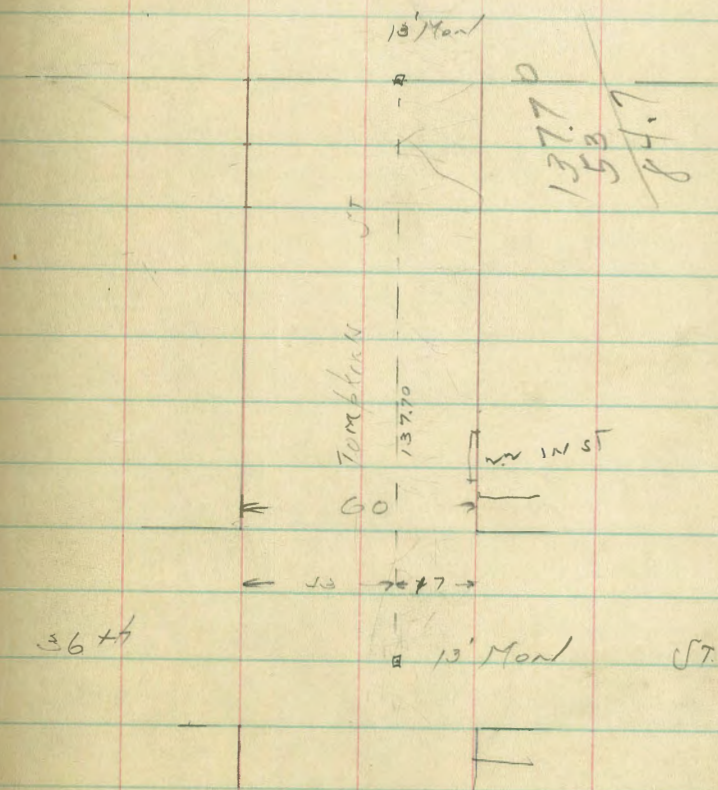
no line	10.3
	9.9
	10.1
C	10.0
	9.6
	9.2
so line	8.5

Cross Section of Tompkins St 36th t. P.L. 60' wide 10' cbs

Moore 11/17/26

NW spike	4.50	73.27	68.77	Tompkins 36th
El 36th = 43' E of Mon = 60' ST			73.3	
cs			6.2	67.1 ✓
cb			6.2	67.1 ✓
1/4			5.6	67.7 ✓
c			5.2	68.1 ✓
1/4			5.2	68.1 ✓
cb			4.8	68.5 ✓
N			4.9	68.4 ✓
	0+13			
N			4.8	68.5 ✓
cb			4.9	68.4 ✓
1/4			4.9	68.4 ✓
c			5.0	68.3 ✓
1/4			5.5	67.8 ✓
cb			6.1	67.2 ✓
+7.8 = ⌀ porch 13' wide			6.2	67.1 ✓

N.B. Look up Tompkins for official closing. Apparently property owners want middle 40' improved



	73.7	73.3	
0+36			
S		6.2	671 ✓
cb		5.7	676 ✓
1/4		5.2	681 ✓
c		4.7	686 ✓
1/4		4.5	688 ✓
cb		4.3	690 ✓
N		4.5	688 ✓
0+57			
N		2.7	706 ✓
cb		3.2	701 ✓
1/4		3.6	697 ✓
c		3.7	696 ✓
1/4		4.1	692 ✓
cb		4.8	685 ✓
S		5.6	677 ✓
0+77			
S	+ porch 12' wide	4.8	685 ✓ outline

	73.27	73.3	Tompkins
cb		4.5	688 ✓
1/4		3.3	700 ✓
c		3.0	703 ✓
1/4		2.9	704 ✓
cb		2.1	712 ✓
N		1.6	717 ✓

+2 = Front line of house

0+94.7 = Pueblo line

N		1.4	719 ✓
cb		1.7	716 ✓
1/4		2.3	710 ✓
c		2.7	706 ✓
1/4		3.1	702 ✓
cb		4.0	693 ✓
S		4.7	686 ✓

76

1400

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TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees
	DEGREES		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		