5th St

Page 1 to 82

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

400

LEVEL

F.B. 144

144

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

Minutes	Lks.	Minutes	Lks.	Minutes	Lks.
1	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 1/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	60	140

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City Hall, San Diego, Cal.

TABLE FOR RUNNING ON SLOPES.

MICROFILMED
1964

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
o		o		o		o	
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

144

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

Book no. 144

name.

date

10/13/03

Cross Section of
Hawthorne St

Elv.

From Water Front to

Bm	+1.60	ø 19.15		17.55	
T.P	0.19	8.23	11.11	8.04	
—	175' W of W. Line California St				
S L		10.3			-2.1
bb		9.5			-1.3
1/4		9.4			-1.2
bt		9.0			-0.8
1/4		9.0			-0.8
bb		8.8			-0.6
N L		9.4			-1.2
	150' W. of W. L Calif. St				
N L		7.3			+0.9
bb		7.7			+0.5
1/4		7.2			1.6
bt		6.8			1.4
1/4		7.5			+0.7

Alverson
Davis
Darcy

	8.23	Elv.
bb	7.3	0.9
S.L	6.1	2.1
	125' W W.Line Calif St	
S.L	4.2	4.0
bb	5.5	2.7
1/4	5.5	2.7
bt	5.2	3.0
1/4	5.3	2.9
bb	5.1	3.1
N.L	5.5	2.7
	100' W W Line Calif St	
N L	2.9	5.3
bb	3.3	4.9
1/4	3.4	4.8
bt	3.1	5.1
1/4	3.2	5.0
bb	2.5	5.3
S.L	2.2	6.0

		8.23		E2+
T.P	+12.85	20.54	-0.54	7.68
	75' W of W Line Calif St			
S.L		11.5		9.0
bk		11.4		9.1
1/4		12.7		7.8
bk		12.6		7.9
1/4		12.3		8.2
bk		13.0		7.5
N.L		12.4		8.1
	50' W of W Line Calif St			
N.L		10.2		10.3
bk		10.8		9.7
1/4		9.5		10.6
bk		10.4		10.1
1/4		10.5		10.0
bk		9.5		10.6
S.L		10.1		10.4

		20.54	Elev.	
	25' W. W. Line Calif St.			
S.L.		7.5	12.6	
bk		7.8	12.6	
1/4		8.0	12.5	
bk		7.4	13.1	
1/4		7.6	12.9	
bk		7.8	12.7	
N.L.		7.7	12.8	
	7' W. of W. Line Calif St.			
N.L.		6.2	14.3	Foot of Embankment S.C.R.R.
bk		6.5	14.0	" " "
1/4		6.6	13.8	
bk		6.1	14.4	
1/4		5.6	14.9	
bk		5.1	15.4	
S.L.		6.3	14.2	

		20.54		Elev.	
	W. Line Calif. St				
S.L		5.3		15.2	
bb		4.2		16.3	
1/4		4.5		16.0	
bb		5.5		15.6	
1/4		4.7		15.8	
bb		3.3		17.2	
N L		2.8		17.7	
T.P	5.16	22.70	2.97	17.57	on Spike Head at N. switch S.C.R.R.
10/14/03			Alverson Davis Lambert		
On S. Line Hawthorne St across Calif St. Easterly					
S Rail		7.5		15.2	
+12		6.1		16.6	
+15		5.3		17.4	2' west of West switch rail
+15.1		5.0		17.7	center of switch

	22.73		
+24	5.0	17.7	Bet West switch & main track
+27.8	4.8	17.9	Center main track
+32	5.1	17.6	Between main track & E. switch
+36	5.1	17.6	Center E. switch
+41	5.0	17.7	2' East of E switch
+50.25	4.1	18.6	
+63	3.1	19.6	
E.S on +75	1.8	20.8	
On Hawthorne St S. Curb Line from E. side Calif St southerly			
E.L.	2.5	20.2	
+12	3.7	19.0	
+24.75	4.3	18.4	
+36.75	4.7	18.0	2' E of E switch rail
+47.5	4.8	17.8	Between main track & E switch
+53.5	4.8	17.9	" " " & W "
+58.5	4.7	18.0	Center West switch

	22.73	Elev.	
+63	4.9	17.8	2' W of W. switch rail & bb
On Hawthorne St S. 1/4 line from W. side Calif St — Easterly			
+10.5	5.4	17.3	2' W of W switch rail
+12	5.2	17.5	
+15	4.9	17.8	Center of W switch
+15.5	5.1	17.6	2' E of W switch
+23	5.1	17.6	2' W of main track
+28	5.1	17.6	Center main track at frog of E switch
+37½	5.0	17.7	2' E of E switch rail & Center of St
+50.25	4.6	18.1	
+63 bb	4.0	18.7	
+71	3.5	18.8	Foot of Bank
E.L. +75	1.9	20.8	Do. " "
T.P.	6.28	23.85 (5.16)	17.57

23.85 Elev.

On Hawthorne St Center Line
from E. side Calif St - westerly southerly

EL	3.1	20.7	Top of Bank
+04	5.5	18.3	Bot. "
bb	5.6	18.2	
+24.25	6.0	17.8	
bb +37.5	6.3	17.5	
+38	6.3	17.5	2' East of E. rail of switch
+47	6.2	17.6	Center main track
+51.5	6.7	17.1	2' W. of main track
+58	6.4	17.4	2' E. of switch
bb +63	5.9	17.9	
+67	6.6	17.2	2' W. of switch
+68.5	6.6	17.2	Top of embankment
W.L	6.8	17.0	

23.85 Elev.

On Hawthorne St N. 1/4
from W. side Calif St - Easterly

W.L	8.0	15,8	
+03	6.7	17.1	Toh of slope
+05	6.6	17.2	2' W of curb
+14	6.3	17.5	2' E " "
+23	6.7	17.1	2' W of main track
+28	6.3	17,5	Centr main track
+35	6.4	17.4	2' E of " "
bt +37½	6.5	17,3	
1/4	6.0	17.8	
bb	5.8	18.0	
+71	5.4	18.4	Toh of slope
E L	2.7	21.1	Toh " "

	23.85	E2V.	
On Hawthorne St W. curb line from E. side Calif St. - Westerly			
E.L.	2.7	21.1	Top of Bank
+04	5.4	18.4	
lb	6.0	17.8	
1/4	5.5	17.9	
lt	6.6	17.2	
+41	6.4	17.4	2' E of Switch rail
+47	6.4	17.4	center main track
+52	6.8	17.0	2' W of main track
lb +63	6.3	17.5	
+64	6.3	17.5	2' E of Switch
+73	6.4	17.4	2' W " "
W L	6.5	17.3	

23.85 Elev.

On Hawthorne St N. Line

from W Line of Calif St Eastly

W.L	6.1	17.7	at W. rail of W. switch
+7½	6.4	17.4	2' E of W. switch
bb	6.5	16.9	
+23.5'	6.5	16.9	2' W of main track
+28.5'	6.4	17.4	Center main track
+33.5'	6.6	17.2	2' E of E switch rail
bt	6.6	17.2	
1/4	6.0	17.8	
bb	6.1	17.7	
+71	5.8	18.0	East of bank
E L	3.7	20.1	

25' East of Calif St

N. Line	1.2	22.6
bb	1.6	22.2
1/4	1.8	22.0

		~~0~~ 23.85			Elev.
bt		1.7			22.1
1/4		1.4			22.4
bb		1.5			21.9
S line		1.7			22.1
T.P	12.71	~~0~~ 35.85	0.71	23.14	
	50' East of Calif. St				
S Line		12.5			23.3
bb		12.2			23.6
1/4		12.1			23.7
bt		12.0			23.8
1/4		11.8			24.0
bb		11.7			24.1
N Line		11.5			24.3
	75' East of Calif. St				
N Line		10.0			25.8
bb		9.8			26.0
1/4		10.4			25.4

	35.85	Elev.
bt	10.7	25.1
1/4	10.5	24.9
bb	11.2	24.6
S Line	10.7	25.1
100' East of Calif. St		
S. Line	9.4	26.4
bb	9.6	26.2
1/4	9.5	26.3
bt	9.4	26.4
1/4	9.1	26.7
bb	9.0	26.8
N Line	8.7	27.1
125' East of Calif St		
N Line	7.7	28.1
bb	7.8	28.0
1/4	8.1	27.7
bt	8.5	27.3

35.85

1/4	8.5	27.3
bb	8.6	27.2
S Line	8.2	27.6
150' East of Calif St		
S Line	6.8	29.0
bb	7.2	28.6
1/4	7.4	28.4
bb	7.7	28.1
1/4	7.3	28.5
bb	7.0	28.8
N Line	7.1	28.7
175' East of Calif St & W Line of Arbor St		
N Line	6.6	29.2
bb	6.6	29.2
1/4	6.5	29.3
bb	6.5	29.3

	+ 35.85		
1/4		6.1	29.7
b.b		6.2	29.6
S Line		5.5	29.9
	Curb W. side Artesia St		
S Line		5.2	30.6
b.b		5.7	30.1
1/4		5.6	30.2
b.b		5.7	30.1
1/4		5.5	30.9
b.b		6.1	29.7
N Line		6.6	29.2
	1/4 West Side Artesia St		
N Line		6.0	29.8
b.b		5.5	30.3
1/4		5.2	30.6
b.b		4.5	31.3
1/4		4.4	31.4

35.85

bb	4.0	31.8
S Line	4.2	31.6

2' W. of W. rail S.D. P.B.Y.L.J. RR
or 33' East of W Line Artic St

S. Line	4.2	31.6
bb	3.9	31.9
1/4	3.7	32.1
bt	4.2	31.6
1/4	4.5	31.3
bb	4.7	31.1
N. Line	4.8	31.0

Center of Artic St &
Center of Railway

N Line	4.1	31.7
bb	4.0	31.8
1/4	3.9	31.9
bt	3.8	32.0

35.85

1/4	3.7	32.1
b b	3.6	32.2
S Line	3.6	32.2
2' E. of E. rail of S.D.P.B.&R.R. or 42' East of W. Line Artesian St		
S Line	4.1	31.7
b b	3.5	32.3
1/4	3.7	32.1
b t	4.0	31.8
1/4	4.3	31.5
b b	4.6	31.2
N Line	4.8	31.0
1/4 East side Artesian St		
N Line	4.8	31.0
b b	4.5	31.3
1/4	4.0	31.8
b t	3.5	32.3

	35.85	
1/4	3.3	32.5
bb	3.1	32.7
S Line	2.2	33.6
	Curb E. side Artice St	
S Line	1.8	34.0
bb	2.4	33.4
1/4	2.7	33.1
bb	2.9	32.9
1/4	3.6	32.2
bb	3.9	31.9
N Line	4.8	31.0
	East side Artice St	
N Line	4.1	31.7
bb	3.4	32.4
1/4	2.9	32.9
bb	2.3	33.5
1/4	2.1	33.7

		35.85	
bb		1.6	34.2
S. Line		0.70	35.1
T.P.	+11.30	46.30 -0.85	34.00

25' East of Artist St

S. Line	9.8	36.5
bb	10.3	36.0
1/4	10.8	35.5
bt	11.4	34.9
1/4	12.3	34.0
bb	12.8	33.5
N Line	13.4	32.9

50' East of Artist St

N Line	12.2	34.1
bb	11.7	34.6
1/4	10.8	35.5
bt	10.3	36.0
1/4	9.8	36.5

	46.30	
bb	9.5	36.8
S Line	8.5	37.4
75' East of Artic St		
S Line	7.5	38.4
bb	8.3	38.0
1/4	8.7	37.6
bt	9.2	37.1
1/4	9.9	36.4
bb	10.5	35.8
N Line	10.8	35.5
100' East of Artic St		
N Line	8.8	37.5
bb	8.7	37.6
1/4	8.5	37.8
bt	8.3	38.0
1/4	7.7	38.6
bb	7.3	39.0
S Line	6.6	39.7

	~~8~~ 46.30	
125' East of Artice St		
S Line	5.6	40.7
Cb	6.2	40.1
1/4	6.6	39.7
Ct	7.1	39.2
1/4	7.5	38.8
Cb	8.0	38.3
N Line	8.0	38.3
150' East of Artice St		
N Line	6.6	39.7
Cb	6.1	40.2
1/4	5.5	40.8
Ct	5.4	40.9
1/4	5.3	41.0
Cb	5.0	41.3
S Line	42	42.1

		∅ 46.30			
	175' East of Artize St				
S Line		2.6			43.7
Cb		3.7			42.6
1/4		4.2			42.1
Ct		4.4			41.9
1/4		5.2			41.1
Cb		5.4			40.9
N Line		5.1			41.2
	West Line of India St				
N Line		2.4			43.9
Cb		2.5			43.8
1/4		2.0			44.3
Ct		2.2			44.1
1/4		2.6			43.7
Cb		2.6			43.7
S Line		1.8			44.5
T.P.	+ 10.07	∅ 55.52	− 0.85	45.45	

& 55.57

East side of India St

S Line	6.5	49.0
bb	7.7	47.8
1/4	7.2	48.3
bb	7.1	48.4
1/4	7.2	48.3
bb	7.4	48.1
N Line	7.7	47.8

25' East of India St

N Line	5.7	49.8
bb	5.0	50.5
1/4	5.0	50.5
bb	4.7	50.8
1/4	4.0	51.5
bb	4.3	51.2
S Line	4.5	51.0

55.52

50' East of India St.

S. Line	2.7	52.8
b.b	2.6	52.9
1/4	2.8	52.7
b.t	2.5	52.6
1/4	2.9	52.8
b.b	3.0	52.5
N Line	2.8	52.7

T.P + 11.08 65.58 − 0.62 54.90

10/15/03 at 2.45 P.M.

75' East of India St.

N Line	11.4	54.5
b.b.	11.6	54.3
1/4	11.3	54.6
b.t	12.5	53.4
1/4	12.5	53.4
b.b. +5-7	11.3	54.6
	11.0	54.9
S Line	10.7	55.2

Alverson
Davis
Lambert

65.98

100' East of Jndia St

S Line	8.8	57.1
bb	9.0	56.9
1/4	10.2	55.7
bt	10.5	55.4
1/4	9.9	56.0
bb	10.0	55.9
N Line	9.8	56.1

125' East of Jndia St

N Line	8.3	57.6
bt	8.2	57.7
1/4	8.3	57.6
bt	8.4	57.5
1/4	8.5	57.4
bb	7.5	58.4
S Line	7.5	58.4

&
65.98

150' East of India St

S Line	6.0	59.9
6 b	6.2	59.7
1/4	6.7	59.2
6 t	7.4	58.5
1/4	6.7	59.2
6 b	6.7	59.2
N Line	7.0	58.9

175' East of India St

N Line	5.2	60.7
6 b	5.3	60.6
1/4	5.3	60.6
6 t	5.6	60.3
1/4	5.5	60.4
6 b	4.8	61.1
S Line	4.8	61.1

65.98

West Line Columbia St

S Line	3.1	62.8
66	3.2	62.7
1/4	3.5	62.0
6t	4.1	61.8
1/4	3.7	62.2
66	3.5	62.4
N Line	3.5	62.4

Curb W. side Columbia St

N Line	2.8	63.1
66	3.0	62.9
1/4	2.8	63.1
6t	3.0	62.9
1/4	3.2	62.7
66	2.5	63.4
S Line	2.3	63.6

		∅ 65.98			
1/4 W. side Columbia St					
S Line		1.5			64.4
C.b		1.6			64.3
1/4		1.4			64.5
Ct		1.6			64.3
1/4		1.8			64.1
C.b		2.0			63.9
N Line		1.8			64.1
Center of Columbia St					
N Line		1.2			64.7
C.b		1.1			64.8
1/4		0.6			65.3
Ct		0.1			65.8
1/4		0.2			65.7
C.b		0.4			65.5
S. Line		0.7			65.2
T.P	+ 10.50	∅ 76.07	− 0.41	65.57	

76.07

1/4 E. side Columbia St

S 2nd	9.8	66.2
bb	9.9	66.1
1/4	9.5	66.5
bt	9.3	66.7
1/4	9.6	66.4
bb	10.3	65.7
N 2nd	10.3	65,7

Curb E. side Columbia St

N 2nd	9.7	66.3
bb	9.6	66.4
1/4	9.3	66.7
bt	9.1	66.9
1/4	9.2	66.8
bb	9.3	66.7
S 2nd	9.5	66,5

76.07

East Line Columbia St

S Line	8.5	67.5
bk	8.6	67.4
1/4	8.7	67.3
bk	8.5	67.5
1/4	8.6	67.4
bk	9.1	66.9
N Line	9.0	67.0

25' East of Columbia St

N Line	7.4	68.6
bk	7.4	68.6
1/4	7.2	68.8
bk	7.2	68.8
1/4	7.3	68.7
bk	7.1	68.9
S Line	7.0	69.0

76.07

50' East Columbia St

S Line	5.7	70.3
bb	6.1	69.9
1/4	5.8	70.2
bt	5.7	70.3
1/4	5.6	70.4
bb	6.1	69.9
N Line	6.0	70.0

75' East of Columbia St

N Line	4.5	71.5
bb	4.5	71.5
1/4	4.2	71.8
bt	4.3	71.7
1/4	4.4	71.6
bb	4.3	71.7
S Line	4.0	72.0

7.6.07

100' East of Columbia St

S Line	2.6	73.4
bb	2.8	73.2
1/4	2.8	73.2
bt	2.7	73.3
1/4	2.8	73.2
bb	2.7	73.3
N Line	2.9	73.1

125' East of Columbia St

N Line	1.3	74.7
bb	1.4	74.6
1/4	1.2	74.8
bt	1.5	74.5
1/4	1.1	74.9
bb	1.3	74.7
S Line	1.1	74.9

T.P. + 5.61 = 80.00 − 0.68 = 7535

85,00

150' East of Columbia St

S Line	8.2	76.8
bb	8.2	76.8
1/4	8.8	76.2
bt	8.9	76.1
1/4	9.2	75.8
bb	9.5	75.5
N Line	9.1	75.9

175' East of Columbia St

N Line	7.9	77.1
bb	7.9	77.1
1/4	7.6	77.4
bt	7.4	77.4
1/4	7.2	77.8
bb	6.9	78.1
S Line	6.7	78.3

1.85 83.15

an nozzle of Hyd. S E cor State ~~Columbia~~ & Hawthorne

		⊗ 85.00		
West Line of State St				
S Line		5.2		79.8
Cb		5.5		79.5
1/4		5.4		79.6
Ct		5.1		79.9
1/4		5.7		79.3
Cb		6.4		78.4
N Line		5.5		79.5
	717	90.32		83.15
W. Curb State St.				
S			10.5	79.8
Cb			10.6	79.7
1/4			9.8	80.5
C			9.8	80.5
1/4			9.7	80.6
Cb			10.4	79.9
N			10.5	79.8

BM. Hydt Nozzle SE Cor-State and Hawthorne

10/8/04 {Hatch, Rennie, Lambert}

W 1/4 State St
10.32

N	9.8	80.5
cb.	9.6	80.7
1/4	8.2	82.1
C	9.1	80.9
1/4	9.3	81.0
cb.	9.7	80.6
S	9.8	80.5

E State St

S	9.2	81.1
cb.	8.7	81.6
1/4	8.7	81.6
C	8.8	81.5
1/4	8.7	81.6
cb.	8.8	81.5
N	9.2	81.1

36

9032

E 1/4 State St.

N	8.6	81.7
Cb	8.3	82.0
1/4	8.5	81.8
C	8.7	81.6
1/4	8.7	81.6
Cb	8.8	81.5
S.	8.7	81.6

E Cb State St.

S	8.3	82.0
Cb	8.7	81.6
1/4	8.5	81.8
C	8.5	81.8
1/4	8.3	82.0
Cb	8.1	82.2
N	8.9	81.9

90.32

E line State

N	7.7	82.6
Cb	7.8	82.5
1/4	7.5	82.8
C	7.5	82.8
1/4	7.6	82.7
Cb	8.3	82.0
S	8.1	82.2

2 ft E of State

S	5.8	84.5
Cb	5.9	84.4
1/4	7.4	82.9
C	7.1	83.2
1/4	7.5	82.8
Cb	7.5	82.8
N	7.4	82.9

Hatch
10/8/04

9032

25ft E of State

N	5.5	84.8
cb	5.6	84.7
1/4	5.1	85.2
C	4.6	85.7
1/4	4.4	85.9
cb	4.0	86.3
S	4.2	86.1

50ft E of State

S	2.7	87.6
cb	2.6	87.7
1/4	2.8	87.5
C	3.2	87.1
1/4	3.4	86.9
cb	3.4	86.9
N	3.4	86.9

Hatch 10/8/04

35

75ft E 90.37 of State

N	1.6	88.7
cb	1.9	88.4
1/4	2.0	88.3
C	1.6	88.7
1/4	1.3	89.0
cb	1.1	89.2
S	1.0	89.3
TP 11.97 101.64 0.15		90.17

100 ft E of State

S	10.1	91.5
cb	10.3	91.3
1/4	10.9	90.7
C	11.1	90.5
1/4	10.9	90.7
cb	11.2	90.4
N	10.9	90.7

101.69

125 ft E of state

N	9.5	92.1
cb.	9.5	92.1
1/4	9.4	92.2
C	9.1	92.5
1/4	8.4	93.2
cb	7.1	94.5
S.	7.6	94.0

150 ft E of State

S	5.8	95.8
cb	5.1	96.5
1/4	5.9	95.7
C	6.5	95.1
1/4	7.2	94.4
cb	7.3	94.3
N	7.7	93.9

101.69

175 ft E of Slab

N	4.2	97.4
cb	3.7	97.9
1/4	3.3	98.3
C	2.8	98.8
1/4	3.5	98.1
cb.	2.5	99.1
S	2.6	99.0

197 ft E of State

S	0.8	100.8
cb.	0.8	100.8
1/4	1.3	100.3
C	1.5	100.1
1/4	1.5	100.1
ch.	2.2	99.4
N	1.6	100.0

101.64

201.5 ft E of State = W. line Union St.

N	1.2	100.4
cb	1.8	99.8
1/4	1.2	100.4
C	1.3	100.3
1/4	1.9	100.2
cb	1.3	100.3
S	1.9	99.7

W. Curb. Union St.

S	1.3	100.3
cb	1.0	100.6
1/4	0.8	100.8
C	0.7	100.9
1/4	0.6	101.0
cb	0.9	100.7
N	1.3	100.3

101.64

W 1/4 Union St

N	0.1	101.5
cb	0.0	101.6
1/4	0.2	101.4
C	0.2	101.4
1/4	0.4	101.2
cb.	0.6	101.0
S.	0.9	100.7
T.P.	6.98 108.20 0.42	101.22

B.M. Spk. in Pole. SW Cor. Hawthorne & Union 7.52 100.68

℄ Union St.

S	7.2	101.0
cb.	6.8	101.4
1/4	6.4	101.8
C	6.2	102.0
1/4	6.0	102.2
cb.	5.9	102.3
N	5.8	102.4

108.20

11½ to Brant

Line from ℄ Union ow S to 28' E of ℄ on N

N	5.0	103.2
cb	5.1	103.1
¼	5.5	102.7
C	5.8	102.4
¼	6.2	102.0
cb	6.6	101.6
S	7.2	101.0

14 ft W of W Line Brant

S	6.8	101.4
cb	6.4	101.8
¼	5.8	102.4
C	5.3	102.9
¼	5.1	103.1
cb	4.7	103.5
N	4.3	103.9

108.20

W Line Brant

N	4.0	104.2
cb.	4.3	103.9
¼	4.6	103.6
C	4.8	103.4
¼	5.3	102.9
cb	5.7	102.5
S	6.2	102.0

W cb. Brant

S	5.7	102.5
cb	5.4	102.8
¼	4.9	103.3
C	4.5	103.7
¼	4.0	104.2
cb	3.8	104.4
N	3.7	104.5

108.20

W 1/4 Brant

N	3.1	105.1
ob.	3.2	105.0
1/4	3.5	104.7
C	4.0	104.2
1/4	4.3	103.9
ob.	4.9	103.3
S	5.4	102.8

℄ Brant

S	5.1	103.1
ob	4.7	103.5
1/4	4.3	103.9
C	3.8	104.4
1/4	3.3	104.9
ob.	2.9	105.3
N	2.6	105.6

108,20

E 1/4 Brant

N	2.5	105.7
ob	2.9	105.3
1/4	3.2	105.0
C	3.7	104.5
1/4	4.1	104.1
ob	4.4	103.8
S	4.9	103.3

E.Cb. Brant

S	4.8	103.4
ob	4.3	103.9
1/4	3.8	104.4
C	3.4	104.8
1/4	2.9	105.3
Cb	2.5	105.7
N	2.2	106.0

108.20

E. line Brant

N	6.0	108.2
Cb	1.1	107.1
1/4	1.6	106.6
C	2.1	106.1
1/4	2.1	106.1
Cb	2.6	105.6
S	2.5	105.7
T.P. 10.71	118.73 | 0.21	107.99

5 ft E of Brant

S	9.9	108.8
Cb	10.0	108.7
1/4	9.0	109.7
C	10.8	108.4
1/4	10.7	108.0
Cb	4.8	113.9
N	4.2	114.5

118.73

10 ft E of Brant

N	3.8	114.9
Cb	4.5	114.2
1/4	5.2	113.5
C	5.8	112.9
1/4	6.6	112.1
Cb	7.7	111.0
S	9.2	109.5

25 ft E of Brant

S	7.9	110.8
Cb	6.3	112.4
1/4	5.1	113.6
C	4.3	114.4
1/4	4.2	114.5
Cb	3.1	115.6
N	2.8	115.9

11873

50 ft. E. of Brant

N		0.8	117.9
cb.		1.6	117.1
1/4		2.0	116.7
C		2.7	116.0
1/4		3.5	115.2
cb.		4.6	114.1
S.		6.2	112.5

65 ft. E. of Brant

S		3.3	115.4
cb.		3.2	115.5
1/4		3.0	115.7
C		2.0	116.7
1/4		1.4	117.3
cb.		1.3	117.4
N		0.7	118.0

11873

75 ft E of Brant

S		3.1	115.6
cb		2.2	116.5
1/4		1.8	116.9
C		1.2	117.5
1/4		0.5	118.2
cb.		0.2	118.5
T.P.	10.01 128.41 0.33		118.40
N		9.3	119.1

95 ft E of Brant

N		6.7	121.7
cb.		8.1	120.3
1/4		9.3	119.1
C		8.9	119.5
1/4		9.2	119.2
cb.		10.6	117.8
S.		10.5	117.9

128 A1

105 ft E of Brant

S		9.8	118.6
Cb		9.8	118.6
1/4		9.2	119.2
C		8.6	119.8
1/4		8.4	120.0
Cb		7.8	120.6
N		7.0	121.4

Curb and Walk in on N. side Hawthorne 100ft W from Albatross.

125 ft E of Brant

N		5.4	123.0
Cb		5.5	122.9
1/4		6.5	121.9
C		6.7	121.7
1/4		7.8	120.6
Cb		7.8	120.6
S		7.1	121.3

128 A1

150 ft E of Brant

S		4.0	124.4
Cb		4.7	123.7
1/4		3.7	124.7
C		3.1	125.3
1/4		2.7	125.7
Cb		1.9	126.5
N		1.9	126.5

Cement Return in on SW cor Hawthorne and Albatross.

175 ft E of Brant

S			0.8	127.6
Cb			1.2	127.2
1/4			0.2	128.2
T.P.	11.52	139.15	0.78	127.63
C			10.3	128.9
1/4			10.0	129.2
Cb			9.5	129.7
N			9.2	130.0

139.15

W Line Albatross.

N		5.9	133.3
Cb.		6.1	133.1
1/4		7.0	132.2
C		7.2	132.0
1/4		8.1	131.1
Cb.		8.1	131.1
S.		7.9	131.3
BM6	SE Cor Albatross and Hawthorne Hydt Nozzle	4.655	134.495

W Cb Albatross

S		8.1	131.1
Cb.		8.4	130.8
1/4		7.3	131.9
C		6.7	132.5
1/4		6.1	133.1
Cb.		6.9	132.3
N		6.0	133.2

139.15

W 1/4 Albatross

N		4.9	134.3
Cb.		5.3	133.9
1/4		5.6	133.6
C		6.1	133.1
1/4		6.6	132.6
Cb.		7.5	131.7
S		8.3	130.9

C. Albatross

S		7.1	132.1
Cb.		6.5	132.7
1/4		5.9	133.3
C		5.2	134.0
1/4		4.9	134.3
Cb.		4.4	134.8
N		4.1	134.8

139.15

E ¼ Albatross

N	3.6	135.6
ob	4.0	135.2
¼	4.3	134.9
C	4.8	134.4
¼	5.4	133.8
ob	6.0	133.2
S	6.6	132.6

E Curb Albatross

S	6.4	132.8
ob	6.0	133.2
¼	5.3	133.9
C	5.0	134.2
¼	4.6	134.6
ob	4.0	135.2
N	4.0	135.2

139.15

E line Albatross

N	3.2	136.0
ob.	2.6	136.6
¼	2.6	136.6
C	3.3	135.9
¼	1.9	137.3
ob.	3.3	135.9
S	4.9	134.3

10 ft E of Albatross

S	1.2	138.0
ob.	1.8	137.4
¼	1.0	138.2
C	1.4	137.8
T.R. 11.985	150.445 0.69	139.46
¼	11.5	138.9
ob.	12.0	138.4
N	8.8	141.6

150.445

25 ft E of Albatross

N	7.A	143.0
Cb.	7.9	142.5
8'	8.A	142.0
9'	10.0	140.4
1/A	9.9	140.5
C	10.5	139.9
1/A	10.9	139.5
Cb.	11.5	138.9
S	11.3	139.1

50 ft E of Albatross

S	1.0	149.4
Cb.	9.8	140.6
1/A	8.6	141.8
C	8.0	142.4
1/A	6.A	144.0
Cb.	5.5	144.9
N	4.6	145.8

150.445

75 ft E of Albatross

N	1.3	149.1
Cb.	1.5	148.9
1/A	2.7	147.7
C	4.7	145.7
1/A	6.A	144.0
Cb.	7.A	143.0
2'	8.5	141.9
S.	8.8	141.6

100 ft E of Albatross

S			6.3	144.1
6'			6.1	144.3
Cb.			5.3	145.1
2'			5.1	145.3
1/A			2.6	147.8
C			1.2	149.2
T.P.	10.83	161.205	2.07	150.375
1/A			9.8	151.4

161.205

Ch	8.8	152.4
N	7.9	153.3
125-ft E of Albatross		
N	5.0	156.2
Ch	5.9	155.3
¼	6.9	154.3
C	8.3	152.9
¼	10.1	151.1
8'	11.7	149.5
11'	14.0	147.2
Ch.	14.1	147.1
7'	14.1	147.1
10'	15.1	146.1
S	15.2	146.0
150 ft E of Albatross		
S	13.9	147.3
4'	13.9	147.3

161.205

7'	11.6	149.6
Ch.	11.6	149.6
¼	7.5	153.7
C	6.0	155.2
¼	4.6	156.6
Ch.	3.3	157.9
N	2.4	158.8
175 ft E of Albatross		
N	+0.4	161.6
Ch.	1.3	159.9
¼	2.7	158.5
C	4.7	156.5
¼	7.3	153.9
Ch.	10.1	151.1
9'	10.7	150.5
10'	12.3	148.9
S.	13.1	148.1

Hatch
Rennie
Lambert

161.205

198 ft E of Albatross

S	11.7	149.5
cb.	10.3	150.9
4'	9.3	151.9
1/4	7.0	154.2
C	5.3	155.9
1/4	3.5	157.7
cb.	1.5	159.7
N	+0.3	161.5
BM	Spk in Pole SW Cor Front by Hawthorne 10.38 (10/8/04 Night) (10/10/04	150.825
	6.08 156.905	150.825

W Line Front

S	7.3	149.6
cb	6.3	150.6
1/4	5.5	151.4
C	5.4	151.5
1/4	5.1	151.8

10/10/04

156.905

cb.	4.2	152.7
N	4.5	152.4

W cb. Front

N	4.7	152.2
cb.	4.8	152.1
1/4	5.3	151.6
C	6.1	150.8
1/4	6.7	150.2
cb.	7.0	149.9
S	6.8	150.1

W 1/4 Front

S	6.7	150.3
cb	6.3	150.6
1/4	5.7	151.2
C	5.2	151.7
1/4	4.7	152.2
cb	4.3	152.6
N	3.6	153.3

156.905

℄ Front

N	3.9	153.0
ob.	4.3	152.6
1/4	4.7	152.2
C	5.1	151.8
1/4	5.4	151.5
ob	6.0	150.9
S	6.8	150.1

E 1/4 Front

S	6.7	150.2
ob.	6.1	150.8
1/4	5.7	151.2
C	5.3	151.6
1/4	4.8	152.1
ob.	4.6	152.3
N	3.9	153.0

156.905

E. ob. Front

N	4.7	152.2
ob.	4.9	152.0
1/4	5.5	151.4
C	5.7	151.2
1/4	6.4	150.5
ob.	6.9	150.0
S.	6.8	150.1

E Line Front

S	6.6	150.3
ob.	6.2	150.7
1/4	5.7	151.2
C	4.8	152.1
1/4	4.7	152.2
ob.	4.6	152.3
N	4.4	152.5

T.P. 8.605 | 64.740 0.77 156.135

164.74

15 ft E of Front

N	7.0	157.7
ch.	8.6	156.1
1'	10.6	154.7
1/4	10.7	154.0
8'	11.3	153.4
C	12.7	152.0
1/4	13.6	151.1
ch.	14.0	150.7
S.	13.8	150.9

25 ft E of Front

S	13.8	150.9
ch.	13.8	150.9
1/4	13.4	151.3
C	11.6	153.1
3'	10.3	154.4
1/4	9.8	154.9

164.74

ch.	8.0	156.7
N	6.0	158.7

30 ft E of Front

N	4.1	160.6
ch.	5.5	159.2
1/4	7.9	156.8
C	9.8	154.9
1/4	12.0	152.7
1'	13.2	151.5
ch.	13.8	150.9
S	13.8	150.9

75 ft E of Front

S	13.7	151.0
ch.	13.5	151.2
1/4	13.4	151.3
C	10.2	154.5
1/4	7.0	157.7

164.74

cb	4.9	159.8
N	3.5	161.2
100ft E of Front		
N	3.5	161.2
cb	5.8	158.9
1/4	8.5	156.2
C	11.0	153.7
1/4	12.4	152.3
cb	12.6	152.1
S	13.4	151.3
125ft E of Front		
S	11.2	153.5
cb	10.5	154.2
1/4	10.3	154.4
C	9.0	155.7
1/4	7.2	157.5
cb	4.8	159.9
N	3.1	161.6

164.74

150ft E of Front		
N	1.9	162.8
cb	3.2	161.5
1/4	4.2	160.5
C	5.8	158.9
1/4	7.1	157.6
cb	8.2	156.5
S	9.2	155.5
175ft E of Front		
S	6.9	157.8
cb	7.3	157.4
1/4	6.3	158.4
C	4.7	160.0
1/4	3.2	161.5
2'	1.9	162.8
cb	1.4	163.3
N	0.6	164.1

16474

190 ft E of Front

N		0.0	164.7
Cb.		1.1	163.6
1/4		2.6	162.1
C		3.2	161.5
1/4		5.0	159.7
Cb.		5.4	159.7
S		4.7	160.0

W. Line First.

S		3.1	161.6
Cb.		3.1	161.6
1/4		2.0	162.7
C		1.4	163.3
1/4		1.3	163.4
Cb.		0.1	164.6
N		+0.1	164.84
T.P. 9.87	171.31	0.30	164.44

171.31

Nozzle Hydt. SE Cor

BM. 1st & Hawthorne 8.58 165.73

W curb. 1st St.

S	12.7	161.6
Cb.	12.6	161.7
1/4	11.6	162.7
C	10.6	163.7
1/4	10.0	164.3
Cb.	9.7	164.6
N	9.0	165.3

W 1/4 1st St.

N	8.5	165.8
Cb.	8.8	165.5
1/4	8.8	165.5
C	9.5	164.8
1/4	10.3	164.0
Cb.	11.1	163.2
S	11.8	162.5

174.31

6 ft W of ℄ of 1st St.

S	11.4	162.9
ch	10.6	163.7
1/4	9.8	164.5
C	9.0	165.3
1/4	8.6	165.7
ch	8.3	166.0
N	7.9	166.4

℄ 1st St.

N	7.7	166.6
ch	8.4	165.9
1/4	9.2	165.1
C	9.7	164.6
1/4	10.3	164.0
ch	10.9	163.4
S	11.6	162.7

174.31

7 ft E of ℄ of 1st St.

S	11.1	163.2
ch	10.1	164.2
1/4	9.2	165.1
C	8.6	165.7
1/4	8.3	166.0
ch	7.6	166.7
N	6.9	167.4

E 1/4 1st St.

N	6.8	167.5
ch	7.5	166.8
1/4	8.0	166.3
C	8.9	165.9
1/4	9.9	164.9
ch	10.3	164.0
S	11.1	163.2

174.31

E. Curb 1st St.

S	9.7	164.6
Cb	9.5	164.8
1/4	8.6	165.7
C	7.7	166.6
1/4	7.5	166.8
Cb	7.0	167.3
N	6.7	167.6

E. line 1st St.

N	6.2	168.1
Cb	6.5	167.8
1/4	6.6	167.7
C	7.0	167.3
1/4	7.9	166.4
Cb	9.0	165.3
S	9.4	164.9

174.31

10 ft E of 1st St.

S.	6.7	167.6
Cb.	6.7	167.6
1/4	6.7	167.6
C	6.1	168.2
1/4	5.1	169.2
Cb	5.6	168.7
N	4.5	169.8

25 ft E of 1st St.

N	3.0	171.3
Cb	4.3	170.0
1/4	4.9	169.4
C	5.4	168.9
1/4	5.7	168.6
Cb	6.1	168.2
S	6.3	168.0

174.31

50ft E of 1st St.

S.		4.3	170.0
Ch.		4.8	169.5
1/4		4.6	169.7
C		3.9	170.4
1/4		2.8	171.5
10'		1.4	172.9
T.P.	12.12 / 183.81	2.62	171.69
Ch.		7.1	176.4
5'		5.1	178.7
N		4.8	179.0

53ft E of 1st St.

N		4.6	179.2
Ch.		4.6	179.2
1'		8.8	175.0
1/4		10.9	172.9
C		12.7	171.1

183.81

1/4		13.9	169.9
Ch.		13.7	170.1
9'		12.3	171.5
S		13.7	170.1

56ft E of 1st St.

S.		13.1	170.7
Ch.		13.1	170.7
1/4		13.8	170.0
C		11.2	172.6
5'		6.0	177.8
1/4		4.6	179.2
Ch		4.3	179.5
N		4.2	179.6

65ft E of 1st St.

N		4.1	179.7
Ch.		4.1	179.7
1/4		4.4	179.4

183.81

C	5.9	177.9
1/4	8.4	175.4
Cb.	10.1	173.7
3'	12.8	171.0
S.	13.7	170.1
75 ft E of 1st St.		
S	14.7	169.1
9'	13.6	170.2
11'	11.7	172.1
Cb.	10.6	173.2
1/4	7.7	176.1
C	6.4	177.4
1/4	4.3	179.5
Cb.	4.1	179.7
N	4.1	179.7

183.81

100 ft E of 1st St.

N	3.5	180.3
Cb	3.8	180.0
1/4	4.2	179.6
C	7.8	176.0
1/4	9.0	174.8
Cb.	11.8	172.0
6'	13.2	170.6
7'	14.5	169.0
S.	15.8	168.0
125 ft E of 1st St.		
S.	17.7	166.1
6'	14.3	169.5
Cb.	11.9	171.9
1/4	8.7	175.1
C.	5.2	178.6
1/4	3.7	180.1
Cb	3.3	180.5
N	2.5	181.3

183.81

160 ft E of 1st St.

N		1.5	182.3
Cb.		2.1	181.7
1/4		4.3	179.5
C		7.4	176.4
1/4		10.0	173.8
Cb.		13.6	170.2
6'		14.5	169.3
3'		17.9	165.9
S.		18.1	165.7

155 ft E of 1st St.

S		18.4	165.4
8'		18.1	165.7
10'		15.3	168.5
Cb.		14.0	169.8
1/4		11.2	172.6
C		8.3	175.5

183.81

1/4			5.8	178.0
Cb.			3.5	180.3
N			2.6	181.2
T.P.	0.815	173.625	10.99	172.82
BM.	Spk in Pole NE Cor 2d & Hawthorne		0.74	172.895

175 ft E of 1st St.

N		3.6	170.0
Cb.		4.0	169.6
1/4		4.1	169.5
C		4.0	169.6
1/4		6.3	167.3
Cb.		7.9	165.7
S		8.3	165.3

187 ft E of 1st St.

S		9.2	164.4
Cb.		7.8	165.8
1/4		7.7	165.9

		173.635		
C			8.3	165.3
1/4			8.8	164.8
ob			9.0	164.6
N			7.9	165.7
	200 ft E of 1st St. = W. Line 2d St			
N			4.5	169.1
ob			12.9	160.7
1/4			14.5	159.1
C			14.2	159.4
1/4			9.8	163.8
11'			7.4	166.2
ob.			9.0	164.6
S	Night of (10/10/04)		13.6	160.0
25'			18.8	154.8
BMC	0.01	172.905		172.895

10/11/04 {Hatch, Rennie, [illegible]}

172.905

W. Curb 2d St.

30'			21.7	151.2
S			20.2	152.7
ob.			10.8	162.1
6'			6.6	166.3
1/4			6.6	166.3
C			15.0	157.9
1/4			14.3	158.6
ob.			11.3	161.6
N			8.1	164.8
10'			6.5	166.4
	W 1/4 2d St.			
N			2.0	170.9
ob.			3.1	169.8
1/4			4.3	168.6
C			7.6	165.3
8'			5.7	167.2
1/4			5.9	167.0

172.905

5'	6.4	166.5
Ob.	12.5	160.4
S	18.1	154.8
30'	25.9	147.0

℄ of 2d St.

15'	13.0	159.9
S	11.3	161.6
Ob.	6.8	166.1
1/4	5.4	167.5
C	4.4	168.5
1/4	3.4	169.5
Ob.	2.5	170.4
N	1.5	171.4

E 1/4 2d St.

N	1.4	171.5
Ob.	2.5	170.4
1/4	3.3	169.6

172.905

C	4.3	168.6
1/4	5.1	167.8
Ob.	6.0	166.9
S	6.9	166.0

E Curb 2d St.

S	6.7	166.2
Ob.	5.9	167.0
1/4	5.2	167.7
C	4.0	168.9
1/4	3.1	169.7
Ob.	2.2	170.7
N	0.8	172.1

E Line 2d St

N	0.6	172.3
Ob.	0.8	172.1
1/4	4.9	168.0
C	5.0	167.9

172.905

1/4	6.2	166.7
cb.	12.1	160.8
6'	16.3	156.6
S.	17.3	155.6
30'	17.3	155.6
25ft E of 2d St.		
N	+0.3	173.2
cb.	2.5	170.4
1/4	6.1	166.8
7'	6.4	166.5
C	10.1	162.8
4'	9.9	163.0
1/4	12.6	160.3
cb.	21.9	151.0
S	28.1	144.8
4'	29.9	143.0
42'	34.7	138.2

Same slope 15ft further.

172.905

60ft E of 2d St

48	33.2	139.7
45'	35.0	137.9
S	31.9	141.0
cb.	27.7	145.2
1/4	18.4	154.5
8'	17.4	155.5
C	14.8	158.1
10'	9.3	163.6
1/4	9.0	163.9
3'	8.4	164.5
cb.	4.1	168.8
7	1.2	171.7
N	0.5	172.4
75ft E of 2d St.		
N	1.2	171.7
cb.	5.5	167.4
1/4	12.5	160.4

		172.905			
7'				13.2	159.7
C				16.7	156.2
1/4				24.1	148.8
7'				24.8	148.1
Cb.				28.4	144.5
S				34.3	138.6
44'				36.3	136.6
53'				32.2	140.7
Same slope 15 ft more					
85 ft E of 2d St.					
50'				31.3	141.6
33'				36.1	136.8
S				35.5	137.4
Cb.				32.1	140.8
7'				28.4	144.5
1/4				28.1	144.8
C				20.9	152.0

		172.905			
9'				15.5	157.4
1/4				14.9	158.0
4'				14.4	158.5
Cb.				8.7	164.2
N				5.1	167.8
100 ft E of 2d St.					
14'				5.4	167.5
N				10.5	162.4
Cb.				14.0	158.9
T.P.	0.61	160.61	12.905		160.00
10'				5.1	155.5
1/4				5.2	155.4
9'				5.1	155.5
C				6.8	153.8
T.P.	1.30	153.78	8.13		152.48
1/4				9.2	144.6
Cb.				11.7	142.1

15378

S		16.6	137.2
25'		16.9	136.9
41'		12.9	140.9
	same slope 30 ft more		
	125 ft E of 2d St.		
	same slope 30 ft more		
35'		10.2	143.6
13'		15.3	138.5
S		15.7	138.1
11'		16.3	137.5
ch.		13.4	140.4
1/4		12.6	141.2
C		6.3	147.5
7'		2.2	151.6
1/4		1.7	152.1
4'		1.6	152.2
ch.		4.9	148.9
10'		5.5	148.3
N		3.1	150.7
27'		+8.1	161.9

15378

150 ft E of 2d St.

41'	+7.2	156.0
N	9.5	144.3
9'	8.3	145.5
ch.	4.3	149.5
1/4	4.1	149.7
6'	5.1	148.7
C	9.3	144.5
7'	12.3	141.5
1/4	12.2	141.6
ch.	13.4	140.4
S	11.2	142.6
18'	8.3	145.5
33'	4.2	149.6

175 ft E of 2d St.

30'	+2.5	156.3
S	1.6	152.2

153.78

ob	3.2	150.6
¼	6.0	147.8
C	9.8	144.0
7'	6.6	147.2
¼	6.2	147.6
ob.	6.8	147.0
7'	11.0	142.8
N.	11.3	142.5
50'	5.6	148.2
200 ft E of 2d W line 3d St.		
60'	13.5	140.3
13'	13.6	140.2
N	10.3	143.5
ob	8.5	145.3
¼	7.4	146.4
C	4.2	149.6
¼	1.1	152.7

153.78

ob.	+ 3.8	157.6
S.	+ 7.1	160.9
20'	+ 8.3	162.1
W curb 3d St.		
18'	+10.9	161.7
S	+9.1	162.9
ob.	+7.2	161.0
¼	+4.0	157.8
C	+0.5	154.3
¼	1.9	151.9
ob.	5.4	148.4
N	8.6	145.2
26'	11.4	142.4
62'	11.7	142.1
W ¼ 3d St.		
60'	5.8	148.0
27'	7.6	146.2

153.78

N				2.6	151.2
T.P.	12.17	164.06	1.89		151.89
ch.				8.2	155.9
¼				4.2	159.9
C				2.3	161.8
¼				1.0	163.0
T.P.	1.65	174.70	0.01		164.05
ch.				9.1	165.6
S				8.8	165.9
16'				6.8	167.9
	C 3d H.				
18'				3.5	171.2
S				6.4	168.3
ch.				7.0	167.7
9'				8.1	166.6
¼				9.5	165.2
C				11.0	163.7

174.70

¼				12.0	162.7
ch.				13.1	161.6
10'				16.7	158.0
N				19.5	155.2
30'				24.8	149.9
50'				23.3	151.4
	E ¼ 3d H.				
50'				17.0	157.7
32'				19.8	154.9
N				13.8	160.9
8'				11.8	162.9
ch.				11.6	163.1
¼				10.8	163.9
C				9.9	164.8
¼				7.7	167.0
ch.				6.1	168.6
S				3.2	171.5

	174.70		
10'		0.0	174.7
25'		+2.0	176.7
A.S.'		+6.5	181.2
	E curb. 3d		
22'		+4.5	170.2
S.		+0.3	174.4
Cb.		2.9	171.8
1/4		5.1	169.6
C.		7.5	167.2
1/4		8.7	166.0
Cb.		10.2	164.5
N		10.5	164.2
50'		13.3	161.4
	E line of 3d St.		
37'		10.7	164.7
N		8.7	166.0
Cb.		6.7	168.0

	174.70		
1/4		5.5	169.2
C		4.1	170.6
1/4		2.6	172.1
Cb.		0.1	174.6
TP.	9.56	184.19	0.07	174.63
S		7.1	177.1
15'		4.2	180.0
	25 ft E of 3d		
15'		1.2	183.0
S		3.6	180.6
Cb.		6.3	177.9
1/4		7.4	176.8
C		8.7	175.5
1/4		9.6	174.6
Cb.		10.0	174.2
N		10.4	173.8
30'		11.8	172.4

184.19

50 ft E of 3d St
level to N line of street

N				7.6	177.2
Cb				6.0	178.2
1/4				4.8	179.4
C				3.1	181.1
1/4				1.9	182.3
Cb				0.5	183.7
S				+1.1	185.3
T.P.	11.64	195.39	0.44		183.75

75 ft E of 3d St

S				7.1	188.3
Cb				7.9	187.5
1/4				9.5	185.9
C				10.8	184.6
1/4				11.3	183.1
Cb				11.9	183.5
N				13.0	182.4

Level —

10/12/04
{Hatch
Rennie
Lambert

195.39

T.P.	5.22	199.68	0.93		194.46
BM		Hydt Nozzle 4th & Hawthorne		2.82	196.86

10/12/04

BM	2.97	199.83			196.86

100 ft E of 3d St.

S				9.6	190.2
Cb				10.6	189.2
1/4				11.2	188.6
C				11.2	188.6
1/4				10.8	189.0
Cb				9.9	189.9
N				9.6	190.2

125 ft E of 3d St.

N				9.2	190.6
Cb				9.1	190.7
1/4				11.0	188.8
C				10.8	189.0

199.83

1/4		10.6	189.2
cb.		9.7	190.1
S.		9.2	190.6
	150 ft E of 3rd St.		
S		8.3	191.5
cb.		8.9	190.9
1/4		9.9	189.9
C		9.9	189.9
10'		9.6	190.2
1/4		8.8	191.0
cb.		7.7	192.1
N		7.4	192.2
	175 ft E of 3rd St.		
N		5.7	194.1
cb.		5.5	194.3
11'		5.5	194.3
1/4		7.2	192.6

199.83

C.		8.0	191.8
1/4		7.9	191.9
cb.		7.0	192.8
S		6.8	193.0
	W line 4th St. - 200 ft E of 3rd St.		
S		5.4	194.4
cb.		5.3	194.5
1/4		5.1	194.7
C		4.9	194.9
1/4		4.5	195.3
cb.		4.3	195.5
N		4.0	195.8
	E Line 4th St.		
N		4.0	195.8
cb		4.3	195.5
1/4		4.4	195.4
C		4.5	195.3

199.83

¼		4.9	194.9
d.		5.2	194.6
S.		5.0	194.8

5ft E of 4th St

S		4.8	195.0
d		4.9	194.9
¼		4.6	195.2
C		3.9	195.9
¼		3.0	196.8
d.		1.1	198.7
N		0.7	199.1

25ft E of 4th St

BM.	874	206.60	196.86
N		6.3	200.3
d.		6.7	199.9
¼		8.7	197.9
C		9.4	197.2

206.60

¼	10.1	196.5
d.	10.2	196.4
S	10.2	196.4

50ft E of 4th St

S	8.7	197.9
d.	8.6	198.0
¼	8.5	198.1
C	8.2	198.4
¼	7.4	199.2
d.	6.0	200.0
N	5.5	201.1

75ft E of 4th St.

N	4.3	202.3
d.	5.5	201.1
6'	5.1	201.6
¼	6.5	200.1
C	7.4	199.2

206.60

1/4	7.5	199.1
cb.	7.7	198.9
S	7.7	198.9
100 ft E of 4th St.		
S	6.5	200.1
cb.	6.8	199.8
1/4	6.5	200.1
C	6.4	200.2
1/4	5.5	201.1
7'	4.5	202.1
cb	4.2	202.4
N	3.4	203.2
125 ft E of 4th St.		
N	1.8	204.8
cb.	3.3	203.3
1/4	5.1	201.5
C	6.4	200.2

206.60

1/4	6.9	199.7
cb.	7.5	199.1
S	7.2	199.4
150 ft E of 4th St.		
S	8.6	198.0
cb.	8.8	197.8
7'	10.0	196.6
1/4	10.1	196.5
C	9.5	197.1
1/4	6.0	200.6
cb.	3.4	203.2
N	1.2	205.4
175 ft E of 4th St		
N	1.0	205.6
cb.	3.5	203.1
1/4	5.8	200.8
6'	7.4	199.2

206.60

C	10.9	195.7
1/4	11.3	195.3
Ob.	10.6	196.0
S	9.3	197.3
198 ft E of 4th St		
S.	10.6	196.0
Ob.	10.5	196.1
1/4	10.6	196.0
C	10.5	196.1
1/4	8.8	197.8
Ob.	4.7	201.9
N	1.8	204.8
200 ft E of 4th - W line 5th St.		
N	7.6	199.0
Ob.	8.0	198.6
1/4	9.1	197.5
C	10.2	196.4

206.60

1/4	10.5	196.1
Ob.	10.5	196.1
S.	10.3	196.3
B.M.	Spike in Pole N.E. Cor Hawthorne & 5th	7.73	198.87

74
(1.3)

Cross Section of intersection of California & Hawthorn

	3.81	21.36	17.55
	East Line of California		
No Line		1.0	20.4
Curb		0,2	21.2
1/4		0,0	21.4
Ct.		0,2	21.2
1/4		0,4	21.0
—		0,7	20.7
So Line		0,4	21.0
	10' West of East Line		
So Line		1,3	20.1
—		2,1	19.3
4		2,5	18.9
Ct		2.8	18.6
4		3,2	18.2
—		3,4	18.0
No Line		3.6	17.8

1/4/04 Hutchison
Evans
Lewis.

(16' West) East Curb of Calif		
No Line	3,6	17.8
—	3,4	18.0
4	3,2	18.2
Ct	2,9	18.5
4	2,6	18.8
—	2,4	19.0
So Line	1,7	19.7
(33' West) East 1/4 Line		
So Line	3,0	18.4
—	3,1	18.3
4	3,4	18.0
Ct.	3,6	17.8
4	3,8	17.6
—	4,0	17.4
No Line	4.1	17.3

Top of Rail 3.42
" " " 3.33

(50' West) Center Line of California

N° Line	21.36	4.1	
—		3.9	17.5
4		3.9	17.5
Ct.		3.9	17.5
4		3.9	17.5
—		3.5	17.9
So Line		3.6	17.8

12' West of Center Line

So Line		3.7	17.7
—		3.4	18.0
4		3.5	17.9
Ct.		3.8	17.6
4		3.8	17.6
—		4.1	17.3
N° Line		4.6	16.8

(17' West of Ct.) West 1/4 Line

N° Line	4.3	17.1
—	3.8	17.6
4	3.6	17.8
Ct.	3.5	Top of Rail 3.29 17.9
4	3.5	17.9
—	3.6	17.8
So Line	4.7	16.7

(27' W) 10' West of West 1/4

So Line	5.8	16.6
Ct.	4.9	16.5
4	5.2	16.2
Ct.	6.0	15.4
4	4.9	16.5
—	4.0	17.4
N° Line	3.3	3.03 Top of R 18.1

(34) West Curt Line of Calif

M° Line	21.36	6.0	16.4
—		6.0	15.4
4		6.5	14.9
Ct.		6.6	14.8
4		6.7	15.5
—		6.8	15.6
So Line		7.0	14.4

(39) 6' West of Curb Line

So Line		7.5	13.9
—		7.1	14.3
4		7.2	14.2
Ct.		7.3	14.1
4		7.8	13.6
—		7.6	13.8
M° Line		7.7	14.2

West Line of California

M° Line	21.36	8.3	13.1
—		8.4	13.0
4		7.8	13.7
Ct.		7.8	13.6
4		8.1	13.3
—		8.3	13.1
So Line		8.4	13.0

	12.65	38.75	0.26	21.10
	12.76	46.23	0.28	33.47
	10.53	56.19	0.57	45.66
	10.00	65.29	0.90	65.29
			2.03	63.26

Cross Sections on Hawthorn st
Bet 2nd & 3rd

		ϕ			
	0.04	172.87			172.83
	0.04	161.44	11.47	161.40	
		110'E of 2nd			
No Line				3.9	157.5
13½ " "				9.8	151.6
23 "				7.3	154.1
34 "				7.9	153.5
40.11=Center Hawthorn				12.1	149.3
		see Next Page			
	1.73	153.10	10.07	151.37	
		140'E of 2nd			
No. Line				8.0	145.1
10'So				6.8	146.3
17 "				3.0	150.1
30 "				2.7	150.4
46'=Center				7.4	145.7
47'So				11.4	141.5
60 "				12.4	140.7
80'=So Line				13.3	139.8

160'E of 2nd
153.10

No Line	9.8	143.3
6'So	9.6	143.5
15 "	4.7	148.4
28 "	4.4	148.7
41 " = Center	8.4	144.7
47'So	10.2	142.9
60 "	11.2	141.9
80'=No Line	7.9	145.2
185'E of 2nd.		
No Line	10.5	142.6
20'So	6.3	146.8
33 "	6.5	146.6
40'=Center	9.2	143.9
60'So	1.1	152.0
No Line	+2.9	156.0

110' E of 2nd
(153.10)

53' Soot No. line		10.8	142.3
63' " " "		11.4	141.7

Levels on Intersection of
California & Hawthorn

	6.30	23.13	16.83
		So line Hawthorn	
So line		10.1	13.03
" Ch.		8.6	14.5
E. Ch.		3.5	19.4
E line Ch.		2.0	21

67.86 - N.E. Cor - Iron pin in ground
Columbine & Juniper
79.35 S E. Cor. Iron pin in ground
State & Juniper
188.35 N E Cor spike in Teb pole
2nd & Hawthorn.

Levels to determine depths of foundations for Piers for Bridge. at 15th E.

Mark Davis Thomas

	0.28		48.32	48.04
	3.47	8.88	42.91	39.44
River Bed			5.7	37.2
Top of Man Hole			3.2	39.7
Foundation			8.6	34.3
	11.0	0.39	53.52	42.52
	6.72	0.68	59.56	52.84
		2.48		
	0.57		56.69	56.12
	1.0	4.89	52.8	51.80
	0.4		48.08	48.04
	2.7	8.64	39.44	42.14

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.		

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