Preliminary Sewers.

393

Engineer's Office
City Hall, San Diego, Cal.

Chollas Valley.

400

LEVEL

F.B. IND 393

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.

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

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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

MANUFACTURED BY

A. S. Crocker Co.

SAN FRANCISCO
and
SACRAMENTO

1/26/10 Hatch Trone Thomas

Prelim. Kerr in alley between Logan and Greeley.

2

1

0+00 = 50' W of 31st

	6.72	78.20		71.48	BM 31st & Nationa
0+00			10.9	67.3	
T.P.	0.26	65.78	12.68	65.52	
+50'	+ W.L. 31st		2.6	62.2	
+80'	Cr.		4.8	61.0	
1+10 = 0+00 = L			8.6	57.2	
+50			11.2	54.6	
1			12.9	52.9	
T.P.	0.37	53.78	12.37	53.41	
+50			1.7	52.1	
2			3.2	50.6	
+50			4.6	49.2	
+75			5.6	48.2	
3			6.0	47.8	
+25			6.6	47.2	
+50			7.9	45.9	
+75			9.9	43.9	

Profile Slotted B-1

Note, Line is ℄ of Alley to Sta 5+78 then jogs 12.5

		53.78		
4			12.4	41.4
T.P.	0.12	41.32	12.58	41.20
+50			6.6	34.7
+75			8.6	32.7
5			9.2	32.1
+30			{9.0 {7.6	32.3 33.7
+50			6.0	35.3
+78	South North		4.1 5.9	36.2 35.4
+98			6.7	34.6
6+04			0.6	40.7
T.P.	1.73	42.43	0.62	40.70
+50			2.5	39.9
7			2.5	39.9
+25			4.5	37.9
+50			4.1	38.3
+65			3.3	39.1
+75			4.9	37.5

North and follows P.L.

		42.43		
8			5.3	37.1
+20			5.3	37.1
+40			11.4	31.0
T.P.	0.25	30.27	12.41	30.02
+65			5.8	24.5
T.P.	0.05	17.44	12.88	17.39
9			1.3	16.1
+10			5.1	12.3
+35			6.0	11.4
+65			5.5	11.9
10			7.0	10.4
+50			7.8	9.6
+75			9.7	7.7
11			12.1	5.3
+50			11.6	5.8
+78			{11.5 {12.7	5.9 4.7
12			14.8	2.6
$+28^5 = 49+59^5$ Trunk Line.			16.3	1.1

on 99 embankment

1/26/10 Hatch Moore Thomas — Line in Alley bet Martin and Greeley from 30th to 32d.

B.M.	8.96	79.87		70.91	N.W. Brass Logan - 30th
T.P. Spk in Home Pole at Greeley	1.91	75.79	5.99	73.88	
0+00 = EL 30th			1.8	74.0	
+50			4.3	71.5	
1			6.4	69.4	
+50			9.2	66.6	
2			11.2	64.6	
T.P.	0.15	63.36	12.58	63.21	
+50			0.8	62.6	
3			4.7	58.7	
+50			6.2	57.2	
4			7.2	56.2	
+50			7.8	55.6	
+70			7.6	55.8	
5			10.0	53.4	
T.P.	0.31	50.64	13.03	50.33	
+50			1.4	49.2	
+75			3.4	47.2	

		50.64			
6 = WL 31st			7.1	43.5	
+30 = Cr 31st			10.6	40.0	
+60 = EL 31st			12.2	38.4	
7			9.6	41.0	
+50			9.1	41.5	
8			9.1	41.5	
+30			9.2	41.4	
+50			10.3	40.3	
T.P.	0.14	37.90	12.88	37.76	
9			1.0	36.9	
+10			1.7	36.2	
+35			5.3	32.6	
+45			7.5	30.4	
+55			13.9	24.0	
T.P.	1.63	26.58	12.95	24.95	
+62.5	℄ R.R. track		1.5	25.1	
+70			3.2	23.4	

Profile plotted B-1

		26.58		
10			8.1	18.5
+50			10.4	16.2
+55			12.7	13.9
+65			8.6	18.0
+85			5.5	21.1
11			4.6	22.0
+25			3.9	22.7
+50			1.4	25.2
T.P.	10.52	36.84	0.26	26.32
12			6.1	30.7
+15			3.4	33.4
+50			2.3	34.5
+60	= W.L. 32d St.		2.0	34.8

1/27/10 Hatch Moore Thomas' Line in Alley between Valle & Martin from 30th to 32d

T.P.	0.84	74.72		73.88
T.P.			4.67	70.05
0+00 = E.L. 30th			9.4	65.3
+50			11.2	63.5
T.P.	0.03	61.67	13.08	61.64
+75			0.3	61.4
1			4.3	57.4
+15			6.4	55.3
+50			9.4	52.3
+75			10.5	51.2
+80			12.0	49.7
2			11.8	49.9
T.P.	0.33	49.53	12.47	49.20
+50			2.3	47.2
3			4.9	44.6
+30			7.2	42.3
+40			10.9	38.6

Profile Plotted B-1

		49.53		
+50			8.8	40.7
+55			11.3	38.2
+70			8.6	40.9
4			9.2	40.3
+40			12.1	37.4
+50			14.6	34.9
+60			16.3	33.2
+65			13.8	35.7
5			12.5	37.0
T.P	0.27	37.37	12.21	37.32
+50			2.9	34.7
+75			4.5	33.1
6	= Wk. 31st		7.3	30.3
+10			7.8	29.8
+30	Ch. 31st		7.6	30.0
+55			9.4	28.2
+60	El. 31st		7.1	30.5

		37.69		
+65			3.7	33.9
474	℄ RR		3.0	34.6
+80			4.2	33.4
+85			8.6	29.0
7			10.4	27.2
+25			15.1	22.5
+30			13.1	24.5
+50			12.9	24.7
8			7.2	30.4
T.P	12.72	49.98	0.34	37.25
+60			11.7	38.3
+75			6.7	43.3
9			2.6	47.4
+50			1.4	48.6
+62			0.2	49.8
T.P	9.98	59.64	0.32	49.66
10			6.8	52.8

		59.64			
+30			3.7	56.9	
+50			2.2	57.4	
11			2.1	57.5	
+50			5.1	54.5	
12			8.5	51.1	
+50			12.8	46.8	
+60 = W. h. 32d			13.5	46.1	

1/27/10 Hatch Moore Thomas	Line in Alley between Woolman-Alley Valle	from	30th to	32d	
B.M.	0.80	91.80		91.00	Mon. NW Woolman-30th
0+00 = E.h. 30th			7.2	84.6	
+50			9.9	81.9	
+75			11.7	80.1	
T.P.	0.05	79.19	12.66	79.14	
1			1.9	77.3	
+50			9.0	70.2	
2			12.7	66.5	
T.P.	0.16	66.80	12.55	66.64	
+50			4.9	61.9	
3			8.8	58.0	
+50			10.6	56.2	
+75			9.6	57.2	
4			11.5	55.3	
T.P.	0.15	54.29	12.66	54.14	
+25			1.9	52.4	
+50			5.5	48.8	

Profile plotted B-1

		54.29		
+75			7.0	47.3
5			10.0	44.8
+20			11.3	43.0
TP	215	43.64	1280	41.49
+50			3.6	40.0
6	WL 2nd		7.4	36.2
+20			7.7	35.9
+25			1.4	42.2
+30	OL 2nd		0.6	43.0
+35			1.6	42.0
+50			9.1	34.5
+60	EL 3rd		10.3	33.3
+95			12.9	30.7
7			14.5	29.1
+10			13.4	30.2
+50			10.5	33.1
8			1.3	42.3

		43.64		
T.P	1222	5557	0.29	43.35
+35			7.1	48.5
+50			5.3	50.3
9	1285	6842	0.0	55.57
+50			7.3	61.1
+75			5.2	63.2
10			3.8	64.6
+50			2.1	66.3
11			1.2	67.2
+50			2.4	66.0
12			4.3	64.1
+50			6.0	62.4
+60			6.2	62.2

1/27 Hatch
1/10 Moore
Thomas

Line in Alley between Woodman and Franklin from 30th to 33d.

BM	120	86.24		85.04	Spk in Pole SW Franklin 30th
0+00 = E.L. 30th			2.0	84.2	
+50			4.5	79.7	
1			7.3	78.9	
+50			11.9	74.3	
T.P.	0.21	73.47	12.98	73.26	
2			2.1	71.4	
+25			3.6	69.9	
+50			7.3	66.2	
+75			11.2	62.3	
3			11.4	62.1	
+50			11.3	62.2	
T.P.	0.09	60.81	12.75	60.72	
4			1.8	59.0	
+50			6.1	54.7	
T.P.	3.80	51.17	12.44	47.37	
5			5.3	45.9	

		51.17			
+40			11.9	39.3	
+85			11.8	39.4	
+87			13.7	37.5	
6			11.5	39.7	
+10			9.4	41.8	
+25			1.1	50.1	
+30			0.6	50.6	
+35			1.2	50.0	
+45			7.2	44.0	
+55			10.7	40.5	
+60 = 0+00			6.5	44.7	
7+10 0+50			2.0	49.2	
T.P.	9.17	60.16	0.18	50.99	
1 7+60			5.0	55.2	
+50 8+10			1.8	58.4	
2 +60			4.9	55.3	
+50 9+10			8.8	51.4	

Profile plotted B+2

		60.6		
+75	+35		10.8	49.4
3	+60		10.2	50.0
+25	+85		7.0	53.2
+50	10+10		3.7	56.5
T.P.	1.202	71.79	0.39	59.77
+75	+35		7.9	63.9
4	+60		6.4	65.7
+50	11+10		5.2	66.6
5	+60		4.9	66.9
+50	12+10		3.5	68.3
6 = Wk. 32d.	+60		2.6	69.2
+30	+90		2.3	69.5
+60 = El. = 0+00	13+20		2.2	69.6
0+50	+70		3.5	68.3
+90	14+10		5.2	66.6
1	+20		6.7	65.1
+25	+45		8.5	63.3

		71.79		
+50	+70		8.8	63.0
2	15+30		5.7	66.1
+25	+45		5.8	66.0
+50	+70		10.8	61.0
T.P.	2.74	62.33	1.20	59.59
+75	+45		8.4	53.9
3	16+30		13.4	48.9
+37	+57 Wk. 33d		19.2	43.1
T.P.	12.66	74.52	0.47	61.86
T.P.	8.88	83.25	0.15	74.37

½ Halidi Point 10 ft. Timbers

Line in Alley between Franklin and Clay from 30th to 33rd Sts.

		8325			
0+00 = W½ 33rd			5.0	78.3	
+50			4.3	79.0	
1			2.7	80.6	
+50			3.5	79.8	
2			5.0	78.3	
+50			5.8	77.5	
3			7.1	76.2	
+39 = E½ 32nd			8.7	74.6	
Cr. "			9.8	73.5	
W½ "			11.0	72.3	
=0+00					
T.P	2.96	76.01	10.20	73.05	
0+50 +89			5.0	71.0	
1+14					
+75			7.6	68.4	
1 4+39			8.5	67.5	
+50 +89			8.8	67.2	
5+14					
+75			7.4	68.6	

Profile started

		76.01			
5+39				8.1	67.9
2 +64					
+25 +89				8.8	67.2
+50				8.6	67.4
3 6+39				7.9	68.6
+50 +89				5.0	71.0
4 7+39				5.0	71.0
+50 +89				5.4	70.6
5 8+39				7.2	68.8
+50 +89				9.0	67.0
6 = 9+39 E½ 31st				9.5	67.2
T.P	1.01	67.35	9.67		66.34
+15 9+54				2.0	65.4
+20 +59				8.3	59.1
Cr. +				7.5	59.9
+38 + 77				7.3	60.1
+45 +84				0.8	66.6
W½ 31st +99 = 0+00				1.0	66.4

		67.35		
0	+50 10+49		6.0	61.9
	+75 +74		9.2	58.2
1	10+99		13.5	63.9
	T.P. 3.50	57.93	12.92	54.43
	11+19			
	+20 +39		9.1	48.8
	+40		9.7	48.2
	+58 11+49		9.0	48.9
	+75 +74		4.7	53.2
2	11+99		3.6	54.3
	+50 12+49		4.0	53.9
3	12+99		2.8	55.1
	TBS 13+24		0.5	57.4
	TP 12.15	69.89	0.19	57.74
	+50 13+49		8.0	61.9
4	13+99		4.3	65.6
	+25 14+24		1.5	68.4
	TP 9.75	79.34	0.30	69.59

		79.34		
	+50 14+49		9.1	70.2
	+65 +64		7.0	72.3
5	14+99		5.9	73.4
	+50 15+49		5.3	74.0
	15+99			
	6 = El. 30		3.6	75.7
	BM		5.51	73.83 74.81

1/31 Hatch
10 None
Thomas.

Line between Webster and Clay from 30th - 33rd

BM	4.77	77.76		72.99	RR Spk SW Webster - 30th
0+00 = EL 30th			4.7	73.1	
+50			5.2	72.6	
+75			5.8	72.0	
1			5.2	72.6	
+25			4.3	73.5	
+50			3.5	74.3	
2			4.6	73.2	
+50			5.0	72.8	
+75			3.9	73.9	
3			5.6	72.2	
+35			5.6	72.2	
+50			6.7	71.1	
4			10.0	67.8	
+30			10.4	67.4	
+50			11.8	66.0	
+75			13.2	64.6	

Profile placed sheet B-3

		77.76		
5			11.2	66.6
+25			7.8	70.0
+50			6.7	71.1
6			3.4	74.4
T.P.	5.71	79.64	3.83	73.93
+15			4.7	74.9
+25			10.2	69.4
+30			10.0	69.6
+35			10.5	69.1
+45			3.3	76.3
+55			0.4	79.2
+60 = EL 31st = 0+00			1.7	77.9
T.P.	6.86	85.10	1.40	78.24
+80 0+20			5.2	79.9
7+10 +50			5.2	79.9
7+60			5.0	80.1
+15 +75			4.6	80.5

		85.10		
+50 8+10			5.7	79.4
2 8+60			6.8	78.3
+50 9+10			5.4	79.7
3 9+60			4.9	80.2
+50 10+10			4.3	80.8
TP.	5.86	86.77	4.19	80.91
4 10+60			5.8	81.0
+25 +85			6.1	80.7
+50 11+10			5.2	81.6
+65 +25			4.7	82.1
+75 11+35			6.2	80.6
5 11+60			6.4	80.4
+50 12+10			6.3	80.5
6 12+60			4.5	82.3
+20 +80			3.4	83.4
+30 +90			4.1	82.7
+60 = 13+20 0+00 EL 32d			4.6	82.2

		86.77		
0+50 +70			5.0	81.8
1 14+20			4.3	82.5
50 +70			4.6	82.2
2. 15+20			6.3	80.5
+50 +70			8.2	78.6
+75 +95			9.2	77.6
3 16+20			11.8	75.0
TP.	1.55	76.52	11.80	74.97
+37 = +57 WL. 33d			8.4	68.1
TP on Fence.			11.34	65.18

2/1/10 Hatch Moore Thomas. Line between N. Cy N. from 30th to Trunk Line Sewer -

BM	3.41	78.38		74.97	NW Cor. 30th N. (Brass)
0+00 = El. 30th			4.8	73.6	
+50			4.3	74.1	
1			5.0	73.4	
+50			4.9	73.5	
2			4.9	73.5	
+50			5.2	73.2	
3			5.2	73.2	
+50			5.1	73.3	
4			5.3	73.1	
+50			5.2	73.2	
5			4.9	73.5	
T.P.	6.63	80.11	4.90	73.48	
+50			6.3	73.8	
6			6.5	73.6	
+30			5.8	74.3	
+60			6.2	73.9	

		80.11		
7			6.2	73.9
+50			5.3	74.8
8			4.9	75.2
+50			4.4	75.7
9			3.1	77.0
+50			3.4	76.7
10			4.9	75.2
+50			5.9	74.2
11			6.0	74.1
+50			5.2	74.9
12			6.7	73.4
+60			7.8	72.3
+90			8.9	71.2
13+20			9.4	70.7
+50			9.9	70.2
+75			10.7	69.4
TP	2.73	72.20	10.64	69.47

Profile Plotted B-3

		72.20		
14			2.4	69.8
+30			1.6	70.6
+50			1.8	70.4
+70			3.0	69.2
+80			7.5	64.7
+92 & RR			6.4	65.8
15			7.2	65.0
+05			7.4	64.8
+10			5.1	67.1
+20			7.0	65.2
+50			8.1	64.1
+60			11.1	61.1
TP	1.12	60.30	13.02	59.18
16			1.6	58.7
+20			2.5	57.8
+50			2.7	57.6
17			3.6	56.7

		60.30		
+50			4.6	55.7
+55			5.5	54.8
+66			13.3	47.0
TP	0.70	47.98	13.02	47.28
+77			8.3	39.7
TP	0.47	35.81	12.64	35.34
+90			4.0	31.8
18			9.2	26.6
+10			12.3	23.5
TP	3.50	26.53	13.06	22.75
+50			4.8	22.3
19			4.9	22.2
20			4.6	22.0
+96 = 17+22 of trunk line			4.3	22.8

2 Hatch Line between L and M from
1 Mord
10 thomas 30th to Trunk Line -

BM	5.03	80.00		74.97
0+00 = N.H. 98' E of Cr. of 30th			5.6	74.4
+50			5.8	74.2
1			5.8	74.2
+50			5.0	75.0
2			5.0	75.0
+50			4.3	75.7
3			4.1	75.9
+50			3.4	76.6
4			3.1	76.9
+50			2.8	77.2
5			2.5	77.5
+30 Cr. 21st			2.6	77.4
+60			2.0	78.0
6			2.3	77.7
T.P.	3.28	80.98	2.30	77.70
+50			3.4	77.6

		80.98		
7			4.6	76.4
+50			4.7	75.3
8			4.7	75.3
+50			5.0	76.0
9			4.8	76.2
+50			4.8	76.2
10			4.0	77.0
+50			4.3	76.7
11			4.5	76.5
+60			6.3	74.7
+85			6.1	74.9
+90	Cr.		5.7	75.3
12			6.2	74.8
+20			6.5	74.5
+50			6.8	74.2
13			4.7	76.3
+50			3.3	77.7

Profile placed B-A

		80.98		
14			3.1	77.9
T.P.	1.25	79.15	3.08	77.90
+50			1.4	77.8
+90			1.4	77.8
+96			3.9	75.3
15			10.9	68.3
T.P.	3.64	68.95	12.84	66.31
+10			9.9	59.1
+15			11.5	57.5
+22.5		℄ RR	10.4	58.6
+35			11.9	57.1
T.P.	0.96	57.23	12.68	56.27
+50			10.5	46.7
T.P.	0.50	44.73	12.90	44.33
+65			6.9	37.9
T.P. (Fence)	1.50	39.21	7.12	37.71
+90			8.8	30.4

		39.21		
16			12.9	26.3
TP	4.77	31.42	12.56	26.65
17			7.7	23.7
18			7.1	24.3

Uniform slope to Trunk Line c 19+96 = 13+42.

2/10 Hatch
1/10 Moore
10 Thomas.

Line between K & L from 32d to Trunk Line.

BM	6.94	85.29		78.35	Mon. SE 32d & L
0+00	E Line 32d		5.1	80.2	
+50			3.6	81.7	
1			3.6	81.7	
+50			3.9	81.4	
2			6.2	79.1	
+20			7.5	77.8	
+40			10.6	74.7	
T.P.	1.02	73.71	12.60	72.69	
+60			4.0	69.7	
+80			8.1	65.6	
+90			11.9	61.8	
T.P.	0.42	61.76	12.37	61.34	
3			1.6	60.2	
+03			1.7 4.7	60.1 57.1	
+10			9.2	52.6	
+13			11.0	50.8	

		61.76		
+23.5	℄ Cuyamaca		10.1	51.7
+30			11.5	50.3
+45			10.7	51.1
+65			13.8	48.0
T.P.	0.40	49.62	12.54	49.22
+80			5.4	44.2
4			11.2	38.4
T.P.	1.50	38.51	12.61	37.01
+30			8.7	29.8
+55			10.9	27.6
5			11.7	26.8
6			11.8	26.7
7			12.0	26.5
+75	Trunk Line		11.8	26.7

Profile Slotted B.2

2/11/10 Hatch Moore Thomas

Line between J-K from 30th To 33d.

B.M.	7.70	7806		7036	Last Stake on 30th St. Drain
EL. 30th = 0+00			4.8	73.3	
+ 02			5.5	72.6	
+ 50			5.4	72.7	
1			5.1	73.0	
+ 50			5.2	72.9	
2			4.9	73.2	
+ 50			4.6	73.5	
3			4.2	73.9	
+ 50			4.2	73.9	
4			4.0	74.1	
+ 50			4.0	74.1	
5			4.3	73.8	
+ 50			3.9	74.2	
6			3.9	74.2	
T.P. ----	11.20	8540	3.86	74.20	
+ 50			11.0	74.4	

Profile Plotted B-4

		8540			
7			10.6	74.8	
+ 50			10.1	75.3	
8	WL 31st		10.0	75.4	
+ 30	C "		9.9	75.5	
+ 60	EL "		9.6	75.8	
9			9.2	76.2	
+ 50			8.7	76.7	
10			8.1	77.3	
+ 50			7.1	78.3	
11			6.7	78.7	
+ 50			5.2	80.2	
12			4.8	80.6	
+ 50			4.5	80.9	
13			4.1	81.3	
+ 50			3.6	81.8	
14			2.2	83.2	
+ 60 WL 32d			2.5	82.9	

		8540			
+75			1.6	83.8	
+80			3.9	81.5	
+90			3.5	81.9	
15			3.7	81.7	
+02			2.6	82.8	
+20	EL 32d		2.4	83.0	
TP	4.81	8781	2.40	83.00	Hub SE Cor 32d & Alley
+50			5.2	82.6	
16			6.0	81.8	
+50			6.8	81.0	
17			6.7	81.1	
+50			6.4	81.4	
18			6.4	81.4	
+15			6.4	81.4	
+45	WL 33d		9.3	78.5	
T.P. Rock at Alley Bet. I-J on 32d			5.52	82.29	

2/11/10 Hatch Moore Thomas

Line between I-J from EL Blk. 130 To 30th

TP (32d I-J)	471	8700		8229
0+00 = EL Blk			12.4	74.6
+40			4.7	82.3
+50			3.7	83.3
1			2.7	84.3
+50			3.0	84.0
2			2.8	84.2
+50			3.1	83.9
3			4.0	83.0
+33 = EL 32d			4.7	82.3
+50			5.7	81.3
+65			5.5	81.5
+80			5.3	81.7
+93 = WL			5.7	81.3
4			5.8	81.2
+50			6.5	80.5
5			6.7	80.3

Profile Stated B-5

		87.00		
+50			6.4	80.6
6			6.8	80.2
+50			6.6	80.4
7			6.6	80.4
+50			6.7	80.3
TP	2.30	83.50	6.80	80.20
8			3.7	79.8
+50			3.9	79.6
9			4.7	78.8
+50			4.4	79.1
10			4.6	78.9
+03 El 3.1 ab			4.9	78.6
+33 Cr			4.9	78.6
+63 WL			5.0	78.5
11			5.2	78.3
+50			5.3	78.2
12			5.4	78.1

		83.50		
+50			5.6	77.9
13			6.0	77.5
+50			6.3	77.2
14			6.5	77.0
+50			6.6	76.9
15			6.5	77.0
+50			5.9	77.6
16			5.8	77.7
+50			3.2	80.3
17			2.8	80.7
+50			1.3	82.2
BM SW 3.1 ab T			7.19	76.31	76.304
+75			0.7	82.8
18 about line of Cross sewer-main				

2 Hatch Line between H and I from
11/10 Moore 31st to EL Blk -
Thomas

BM	7.66	90.47		82.806	SE 32d - I RR Spk
0+00 = EL 31st					
+37 E of 31 = Sewer line			2.4	88.1	
1			2.3	88.2	
+50			2.5	88.0	
2			2.7	87.8	
+50			3.2	87.3	
3			4.1	86.4	
+50			5.0	85.5	
4			5.5	85.0	
+50			6.5	84.0	
5			7.0	83.5	
+50			7.8	82.7	
6 = WL 32d			8.2	82.3	
+30 Cr "			8.6	81.9	
+50			9.4	81.1	
+55			8.2	82.3	
+60 EL "			8.4	82.1	

		90.47			
7			8.7	81.8	
+50			8.3	82.2	
8			8.1	82.4	
+50			8.2	82.3	
9			9.0	81.5	
T.P.	0.64	82.35	87.6	81.71	
+10			1.6	81.8	
+25			5.4	77.0	
+35			11.2	71.2	
T.P.	0.46	69.93	12.88	69.47	
+50			2.3	67.6	
+75			7.9	62.0	
10			12.5	57.4	
T.P.			61.0	63.83	Top of Board at Fence Cor.

Profile Plotted 3-4

2/14/10 Hatch Moore Thomas — Line between G and H from 32d to 30th

BM.	8.91	92.13		83.225	NE Cor. 32d and H. RR Spk.
WL. 32d			8.0	84.1	
+50			6.1	86.0	
1			5.8	86.3	
+50			4.8	87.3	
2			3.6	88.5	
+23 Line of Cross sewer			2.8	89.3	
+50			1.4	90.7	
TP.	13.05	105.14	0.04	92.09	
3			12.0	93.1	
+50			9.6	95.5	
+75			8.1	97.0	
4			6.1	99.0	
+50			1.8	103.3	
TP.	11.01	115.79	0.36	104.78	
+75			10.0	105.8	
5			8.2	107.6	

Profile plotted B-5

		115.79			
+35			6.0	109.8	
+50			6.1	109.7	
6 Zh. 31st			7.5	108.3	
+35 = Cr.			7.3	108.5	
+35			8.2	107.6	
+60 = WL. 31st			5.2	110.6	
+85			2.9	112.9	
TP.	12.90	128.48	0.21	115.58	
7			13.2	115.3	
+50			4.7	123.8	
+75			1.2	127.3	
TP.	12.76	141.03	0.21	128.27	
8			9.5	131.5	
+35			2.0	139.0	
TP.	12.93	153.74	0.22	140.81	
+50			11.9	141.8	
+75			9.7	144.0	

Note - At W.L. 31st ground is Level 20' North - At Sta 10+00, 120' North elevation is 128.5

		153.74		
9			8.0	145.7
+50			7.3	146.4
10			5.9	147.8
+50			3.1	150.6
T.P.	9.80	163.51	0.23	153.51
11			8.0	155.3
+50			5.4	157.9
12			4.1	159.2
+50			4.6	158.7
13			5.9	157.4
+15			5.1	158.2
+30			6.5	156.8
+50			7.0	156.3
+80			7.5	155.8
14			9.4	153.9
+30			11.2	152.1
+38 = El	30ft	Sf.	13.2	150.1
+38 = "	"	" (grade)	15.2	148.1

2/14 Hatch
Moore
10 Thomas

Line between G and H from 32d East

BM	432	87.54		83.22
WL 32d			3.4	84.1
+20			3.5	84.0
+22			5.0	82.5
+30			4.8	82.7
+45			{5.2 / 3.8}	82.3 / 83.7
+60 = EL. 32d			4.2	83.3
+80			4.9	82.6
1			6.8	80.7
+25			8.7	78.8
+50			10.9	76.6
2			12.0	75.5
+50			11.7	75.8
+70			14.0	73.5
+80			11.3	76.2
+85			12.5	75.0
T.P	0.10	64.74	12.90	64.64

Profile Plotted B-6

		64.74		
+86			3.6	61.1
3			6.0	58.7
+10			11.2	53.5
+25			13.3	51.4
T.P	0.14	52.31	12.57	52.17
+45			2.2	50.1
+50			4.4	47.9
+60			8.4	43.9
+75			9.2	43.1
4			9.4	42.9
+15			10.1	42.2
+20			10.8	41.5
+25			8.9	43.4
+50			8.1	44.2
+60			6.3	46.0
T.P	12.41	64.52	0.20	52.11
+75			11.0	53.5

		64.52		
5			0.3	64.2
TP	4.78	69.09	0.21	64.31
+10			2.4	66.7
+50			2.0	67.1
6			3.4	65.7
+10			5.6	63.5
+25			8.8	60.3
+35			12.2	56.9
TP	0.19	56.52	12.66	56.43
+51 Wl. 33d St.			2.3	54.3
+80			4.6	52.0
+83			6.0	50.6
7			7.7	48.9
+25			11.3	45.3
TP	0.21	45.90	10.93	45.69
+40			1.7	44.2
8			5.6	40.3

		45.90		
+50			7.0	38.9
9			8.2	37.7
+50			9.8	36.1
10			11.1	34.8
TP	1.02	33.92	13.0	32.90
+25			2.2	31.7
+50			3.6	30.3
11			4.7	29.2
12			4.6	29.3
13			4.7	29.2
+525 = Trunkline Sewer			4.3	29.6
TP	6.26	39.80	4.35	29.54
14			4.9	29.9
15			4.4	30.4
16			4.3	30.5
17			3.8	31.0
TP	5.51	36.81	3.50	31.30

	3681		
+15		6.6	31.3
+25		3.6	33.8
+50		4.6	32.2
18		4.7	32.1
+25		6.6	30.2
+50 creekbed.		80	28.8
TP		70.2	29.79 on top of hill.

2/14 Hatch
1/10 Moore
Homes

Line between P & I in McLaren Addt.

BM	9.65	47.91		38.26	Spike in tenu. SW 33d
TP	10.24	57.89	0.26	47.65	
0+00 = Cr. Alley bet.			9.3	48.6	
+60			10.7	47.2	
+65			13.5	44.4	
+75			11.7	46.2	
1			12.2	45.7	
+25			12.5	45.4	
+50			6.4	51.5	
+70			2.2	55.7	
+80			3.0	54.9	
2			9.7	48.2	
+10			11.7	46.2	
TP	0.68	45.97	12.60	45.29	
+50			2.8	43.2	
3			4.6	41.4	
+25			7.3	38.7	

Profile Flatted 3-5

		45.97		
+50			8.8	37.2
4			9.2	36.8
5			9.5	36.5
+10 = WL 33d				
+25			10.4	35.6
+50			9.7	36.3
+65			10.6	35.4
+85			10.9	35.1
6			9.8	36.2
+25			10.2	35.8
+50			11.5	34.5
+75			10.6	35.4
7			11.3	34.7
+50			9.9	36.1
8			9.8	36.2
TP	7.24	43.36	9.85	36.12
+20 edge of creek			7.5	35.9
+25			9.4	34.0

		43.36			
+60			7.8	35.6	
+70			9.2	34.2	
9			11.5	31.9	
+15			11.4	32.0	
+20	edge of creek		9.1	34.3	
+50			6.4	37.0	
10			4.5	38.9	
+35			4.2	39.2	
+40	wash		2.7	40.7	
+50	wash		6.5	36.9	
+75	wash		5.3	38.1	
11	wash		5.9	37.5	
+10	wash		6.4	37.0	
+20	wash		5.0	38.4	
+50	wash		4.9	38.5	
12			2.7	40.7	
T.P.			12.6	42.10	

3/10 Hatch
10 Moore
Thomas

Line between I and J from Alley to 34th St. in McLarens Addt.

T.P.	9.54	73.37		63.83	on top of Board at Fence Cor Alley Between H-I - 32d-33d
T.P.	1.06	68.10	6.33	67.04	
Cr. N & S Alley			0.4	67.7	
+50			6.8	61.3	
+75			10.5	57.6	
1			12.4	55.7	
T.P.	0.60	55.83	12.87	55.23	
+25			1.6	54.2	
+50			5.0	50.8	
T.P.	0.95	43.82	12.96	42.87	
+80			3.2	40.6	
2			4.0	39.8	
+50			4.2	39.6	
3			5.2	38.6	
+40			5.8	38.0	
+70			8.0	35.8	
4			8.5	35.3	

Profile Slotted B-6

		43.82		
5			9.5	34.3
+15	WL 23d		9.5	34.3
+45			9.2	34.6
+75	EL 23d		9.6	34.2
6			11.1	32.7
+40			11.5	32.3
7			12.4	31.4
TL	7.06	38.55	12.33	31.49
+40			7.3	31.3
+57			9.3	29.3
+65			5.4	33.2
+80			5.0 8.2	33.6 30.4
+85			10.4	28.2
8			10.9	27.7
+20			10.2	28.4
+30			11.5	27.1
+40			9.7 5.8	28.9 32.8

	38.55		
+55		5.0	33.6
9		5.2	33.4
+25		3.8	34.8
+50		3.7	34.9
+75 Force.		3.4	35.2

3/10 Hatch / 10 Thomas	Wire M	between Larens	J - K. Addt.	in
TP.	7.98	75.02		67.04
Cr. of alley at W. end of Tract			3.8	71.2
+38			11.0	64.0
TP.	0.80	63.26	12.56	62.46
+50			5.8	57.5
TP	0.53	51.35	12.44	50.82
+65			1.9	49.5
+80			8.3	43.1
+95			13.0	38.4
TP	0.0	38.91	12.44	38.91
1			1.2	37.7
+30			3.3	35.6
2			4.4	34.5
3			4.2	34.7
4			5.6	33.3
5			7.0	31.9
+15 W.L	33d		7.4	31.5

Profile plotted B-6

		38.91		
+45			6.9	32.0
+75	El. 33d		7.7	31.2
6			8.1	30.8
+30			9.4	29.5
7			9.1	29.8
TP.	5.66	35.04	9.53	29.38
+80			5.6	29.4
+89			4.1	30.9
+93			8.5	26.5
8			10.6	24.4
+15			10.5	24.5
+30			7.0 5.2	28.0 29.8
+35			4.1	30.9
+65			4.8	30.2
9			4.2	30.8
+50			3.8	31.2
+75			3.4	31.6

3/14 Hatch
10 Thomas

Line between F and G from 32d to 30th

BM	7.04	88.28		81.24	Nails in Cor of Fence G and 32d
WL - 32d			4.4	83.9	
+25			3.0	85.3	
+50			1.1	87.2	
T.P.	12.80	100.93	0.15	88.13	
+75			12.0	88.9	
1			10.2	90.7	
+25			8.6	92.3	
+50			4.9	96.0	
+75			3.2	97.7	
T.P.	11.84	112.46	0.31	100.62	
2			11.2	101.3	
+25			9.5	103.0	
+50			7.5	105.0	
+75			5.4	107.1	
3			3.5	109.0	
+25			1.3	111.2	

Profile Slotted B.7

		112.46		
T.P.	12.93	125.29	0.10	112.36
+50			11.8	113.5
+75			9.1	116.2
4			4.9	120.4
+25			0.4	124.9
T.P.	12.81	137.98	0.12	125.17
+50			7.0	131.0
+75			2.7	135.3
T.P.	12.60	150.37	0.21	137.77
5			10.6	139.8
+25			7.8	143.6
+50			6.0	146.4
+75			4.9	145.5
6	EL 31st		3.6	146.8
+30	Cr 31st		2.1	148.3
T.P.	12.41	162.23	0.55	149.82
+60	WL 31st		11.4	150.8

		162.23		
+85			10.4	151.8
7			7.2	156.0
+25			4.4	157.8
+50			5.7	156.5
+75			8.2	154.0
8			8.4	153.8
+25			6.8	155.4
+50			3.9	158.3
+75			1.9	160.3
9			0.1	162.1
+70	163	163.43	0.43	161.80
+25			0.2	163.2
+50			2.5	160.9
+75			5.0	158.4
10			1.8	161.6
+25			2.1	161.3
+50			2.3	161.1

		163.43		
+75			1.9	161.5
11			2.5	160.9
+25			4.1	159.3
+50			5.6	157.8
+75			8.6	154.8
12			15.9	147.5
+10			15.9	147.5
+25			9.9	153.5
+50			7.7	155.7
+62 = El. 30 ft			3.1	160.3

3/14/10 Hatch Moore Thomas	Line between F and G from 32d to 35th				
BM	390	85.14		81.24	32d G see P. 32
WL 32d			1.3	83.8	
+ 30	Cr.		1.9	83.2	
+ 50			2.7	82.4	
+55			5.1	80.0	
+60 = 0+00 EL			5.5	79.6	
+25			6.9	78.2	
+50			6.7	78.4	
+75			4.7	80.4	
			5.1	80.0	
+25			7.3	77.8	
+40			9.3	75.8	
+50			13.0	72.1	
+60			13.6	71.5	
+65			11.5	73.6	
+75			12.0	73.1	
T.P.	1.63	73.76	13.01	72.13	

Profile platted B-7

		73.76			
2			6.5	66.3	
+05			8.3	65.5	
+20			10.8	63.0	
+25			9.4	64.4	
+50			9.1	64.7	
+75			9.7	64.1	
+81 = 12+72 on line in Cañon East of 32d Street			9.9	63.9	
3			7.6	66.2	
T.P.	11.22	84.52	0.46	73.30	
+25			6.9	77.6	
+50			4.6	79.9	
+75			5.3	79.2	
4			4.5	80.0	
+25			5.5	79.0	
+50			6.2	78.3	
+75			5.9	78.6	
5			6.6	77.9	

		84.52		
+25			6.4	78.1
+50			6.7	77.8
+75			7.2	77.3
6	Rt 32°		6.9	77.6
+20			6.5	78.0
+30			7.8	76.7
+60	Rt 133°		8.0	76.5
7			8.2	76.3
TP	2.09	77.46	9.15	75.37
			0.2	77.3
+17			9.3	68.2
	Reservoir		9.9	67.6
+45			0.4	77.1
+65			1.2	76.3
+70			6.4	71.1
8			7.6	69.9
+50			9.2	68.3
9			10.6	66.9
+50			13.2	64.3

		77.46		
TP	0.36	64.81	13.01	64.45
10			2.7	62.1
+59			3.9	60.9
+65			6.1	58.7
+80			10.9	53.9
TP	0.84	52.19	13.01	51.35
+90			5.6	46.6
11			7.7	49.5
+10			8.8	43.4
TP	2.81	47.49	7.51	44.68
+50			5.7	41.8
12			5.4	42.1
TP	5.94	48.03	5.40	42.09
13			5.8	42.2
14			5.7	42.3
15			4.3	43.7
16			4.1	43.9

		4803		
17			3.2	44.8
18			3.3	44.7
19			3.4	44.6
+21	Fence near creek		2.7	45.3

3 Hatch
15 Moore
10 Thomas

Line E. of 32d from I to Brooklin Hts following Cañon

BM	278	41.04		38.26	Spk in Fence Cor SW H-33d
Cr. 33d I = 0+00			5.2	35.8	
+30 = WL 33			4.8	36.2	
1			3.7	37.3	
2			2.5	38.5	
3			0.4	40.6	
TR	1303	53.60	0.47	40.57	
+30			12.0	41.6	
+40			13.1 11.9	40.5 41.7	
+58	∠ 62°00' R		11.1	42.5	
+90			10.6	43.0	
+95			12.3	41.3	
4			12.3	41.3	
+50			11.2	42.4	
+80			11.0	42.6	
5			9.1	44.5	
+10			8.1	45.5	

Profile plotted

B-8

		53.60		
+50			7.6	46.0
+90			6.6	47.0
6			7.9	45.7
+10			7.9	45.7
+20			6.0	47.6
+50			5.8	47.8
+95			4.9	49.2
7			2.0	51.6
T.P.	5.97	59.37	0.20	53.40
+10			2.1	57.3
+20			1.7	57.7
+29	∠ 19°20'	R.	5.9	53.5
+35			5.8	50.6
+60			9.9	49.5
+80			8.7	50.7
8			8.0	51.4
+25			7.5	51.9

		59.37		
+50			8.5	50.9
+60			7.3	52.1
+90 =	Sta 4 Line bet. G-H		6.5	52.9
9			6.2	53.2
+50			4.7	54.7
10			3.1	56.2
+15			3.4	56.0
+25			5.1	54.3
+35			2.7	56.7
+50			1.4	58.0
T.P.	13.00	7.37	1.00	58.37
11			1.4	60.0
+50			1.0.2	61.2
12			8.6	62.8
+50			7.8	63.6
+72 =	2+81.4 Line bet F-G		7.5	63.9
13			6.5	64.9

		71.37		
+50			4.5	66.9
14			3.4	68.0
+40			2.6	68.8
TP	9.59	80.81	0.15	71.22
+53			5.3	75.5
+67 ∠	24°30R		4.4	76.9
+80			5.5	75.3
+90			12.6	68.2
15			11.5	69.3
+50			9.9	70.9
16			8.8	72.0
+50			8.9	71.9
+75			6.2	74.6
17			5.7	75.1
+50			4.7	76.1
18			3.9	76.9
+40			4.3	76.5

		80.81		
+50			1.7	79.1
TP	12.90	92.65	1.06	79.75
+70			11.3	81.4
+80			15.0	77.7
19			12.8	79.9
+50			10.9	81.8
+75			9.2	83.5
+55			6.5	86.2
20			5.4	87.3
+50			6.4	86.3
21			6.4	86.3
+50			5.2	87.5
22			3.6	89.1
+25			1.0	91.7
+50			1.3	91.4
+56 ∠	20°30L		3.6	90.1
TP	12.87	104.20	1.32	91.33

		104.20		
+65			13.8	90.4
23			12.7	91.5
+35			11.9	92.3
+40			12.8	91.4
+50			11.2	93.0
24			9.6	94.6
+50			7.3	96.9
25			6.5	97.7
+25			5.0	96.2
+35			5.9	98.3
+50			7.3	96.9
+60			5.3	98.9
26			4.0	100.2
+20			5.5	98.7
+36	∠ 19°30'		3.6	100.6
+50			2.9	101.3
27			1.5	102.7

		104.20		
TP	12.95	115.69	1.46	102.74
+40			13.5	102.2
+15			12.7	103.0
+50			11.3	104.4
28			9.8	105.9
+50			9.2	106.5
+75			9.6	106.1
29			8.0	107.7
+50			6.5	109.2
30			4.8	110.9
+54			5.0	110.7
+65			5.9	109.8
+75			4.0	111.7
31			2.9	112.8
+15			3.1	112.6
+20			3.8	111.9
+50			3.0	112.7

		115.69		
+70			1.7	114.0
TP	12.93	128.09	0.53	115.16
32			12.5	115.6
+50			11.2	116.9
+75			9.7	118.4
+92 ∠	20°30'R		9.6	118.5
33			10.9	117.1
+30			8.6	119.5
+50			7.4	120.7
34			5.8	122.3
+20			6.4	121.7
+50			8.4	119.7
+60			6.2	121.9
+80			4.9	123.2
35			3.4	124.7
TP	11.98	139.73	1.34	127.75
+50			12.2	127.5

		139.73		
+83 ∠	21°00'L		11.2	128.5
36			12.1	127.6
+35			10.9	128.8
+50			12.5	127.2
+65			9.0	130.7
37			7.9	131.8
+25			6.6	133.1
+50			6.1	133.6
38			5.3	134.4
+50			3.6	136.1
+75			3.6	136.1
39			4.3	135.4
+35			1.9	137.8
+50			1.2	138.5
TP	1.29	152.35	0.30	139.43
40			12.1	140.3
+50			10.1	142.3

		152.35		
41			8.8	143.6
+50			6.9	145.5
+85			6.9	146.0
42			5.7	146.7
+50			3.2	149.2
+69	< 19°30'		2.4	150.0
43			1.5	150.8
+50			1.3	151.0
TP	11.77	163.78	0.34	152.01
44			10.9	152.9
+50			9.7	154.1
+75			11.2	152.6
45			9.1	154.7
+50			5.7	158.1
+75			4.7	159.1
46			5.9	157.9
+05			6.9	156.9

Profile Started B-8

		163.78		
+20			4.8	159.0
+50			3.5	160.3
47			1.6	162.2
+50			0.7	163.1
+65			2.0	161.8
+75			0.3	162.5
TP			0.36	163.42

3/10 Hatch
3/10 Moore
3/10 Thomas

Line between E & F from 32d to sewer bet. 29½-30½.

T.P.	12.55	84.07		71.52
=	12.30	96.28	0.09	83.98
Cr. 32d St. Sp. Cast Sewer pipe			3.40	92.9
Ground			6.0	90.3
West line = 0+00			7.9	88.4
+25			4.7	91.6
+50			0.8	95.5
T.P.	12.74	108.83	0.19	96.09
+75			4.3	104.5
1			1.2	107.6
T.P.	13.04	121.25	0.62	108.21
+25			12.1	109.1
+50			10.6	110.6
+75			9.1	112.1
2			6.9	114.3
+25			9.9	116.8
T.P.	12.76	133.85	0.16	121.09

		133.85		
+50			12.8	121.0
+75			9.0	124.8
3			4.6	129.2
TP	12.89	146.19	0.55	133.30
+25			10.9	135.8
+50			3.0	143.2
TP	12.66	146.27	0.24	133.61
+75			9.0	137.3
4			1.6	144.7
TP	13.00	159.17	0.10	146.17
+25			9.6	149.6
+50			4.3	154.9
+75			0.7	158.5
TP	7.10	166.14	0.13	159.04
5			5.7	160.4
+25			4.6	161.51
+50			4.6	161.5

		166.14		
+75			5.2	160.9
6 = EL 31.0			6.0	160.1
+30	Cr.		7.4	158.7
+60	WL		8.4	157.7
7			10.0	156.1
+50			6.3	159.8
8			1.2	164.9
TP	7.38	173.10	0.42	165.72
+50			6.1	167.0
+75			4.7	168.4
9			5.7	167.4
+50			5.4	167.7
10			5.5	167.6
+50			5.5	167.6
11			6.0	167.1
+50			6.6	166.5
12			7.2	165.9

		173.10		
+50			9.8	163.3
+60 Ek 30 14			8.8	164.3
+90 Cr			8.7	164.4
13			8.8	164.3
+20 WL			8.2	164.9
+25			7.0	166.1
+50			6.9	166.2
14			7.2	165.9
+50			8.2	164.9
15			9.6	163.5
TP	1.11	164.31	9.90	163.20
+50			4.2	160.1
+75			9.7	154.6
TP	0.24	152.75	12.30	152.01
16			2.0	150.2
+25			5.3	146.9
+50			10.0	142.2

		152.25		
TP.	0.47	140.66	12.0C	140.19
+75			5.6	135.0
17			12.2	128.5
TP	0.96	128.94	12.68	127.98
+25			5.5	123.4
+50			11.0	117.9
+75			12.8	116.1
+90			14.3	114.6
18			12.7	116.2
+12 Man Hole			12.3	116.6

3 Hatch
17 Movy
10 Thomas

Line between E and F from 32d to 33d

T.P.	2.39	98.48		96.09
Wh. 32d = 0+00			10.1	88.4
0+50			3.9	94.6
+60 = EL 32d			4.0	94.5
+75			2.5	96.0
1			2.5	96.0
+50			4.3	94.2
2			5.7	92.8
+50			9.3	89.2
+75			9.8	88.7
3			12.6	85.9
T.P.	0.85	86.45	12.88	85.60
+25			5.8	80.6
+50			13.2	73.2
+65 = 16+63 on line E of 32d in Cañon			14.0	72.4
+75			13.3	73.1
4			12.5	73.9

		86.45		
+25			7.7	78.7
+50			4.2	82.2
+75			1.3	85.1
T.P.	7.15	93.38	0.22	86.23
5			6.2	87.2
+50			5.8	87.6
6			5.5	87.9
+50			4.5	88.9
+60 = Wh. 33d			3.5	89.9
T.P.	1.58	94.09	0.87	92.51

3/17 Hatch Line on ℄ of Lemon Grove Blvd
3/10 thence from 23° E

		94.09		
0+00 = El. 33.8			1.5	92.6
+50			0.9	93.2
1			0.7	93.4
+50			1.1	93.0
+75			1.5	92.6
2			2.8	91.3
+50			6.0	88.1
3			9.1	85.0
+50			12.5	81.6
T.P.	0.24	81.63	12.70	81.39
4			3.6	78.0
+50			7.1	74.5
5			10.0	71.6
+50			12.7	68.9
T.P.	0.64	69.47	12.80	68.83
6	Wk. 34.4		3.4	66.1
+30	Cr.		4.5	65.0

		69.47		
+60	El. 34.4		5.5	64.0
7			7.0	62.5
+50			9.1	60.4
8			10.6	58.9
+50			11.7	57.8
9			12.2	57.3
T.P.	0.93	58.13	12.27	57.20
+50			2.3	55.8
10			4.1	54.0
+50			5.0	53.1
11			5.8	52.3
+50			5.9	52.2
12			5.6	52.5
+60	Wk. 35.1		5.1	53.0
+90	Cr.		4.8	53.3
13			4.6	53.5
+20	El.		4.5	53.6

		5813			
+70			4.3	53.8	
14			4.1	54.0	
+20 Bridge -			4.0	54.1	

3/17/10 Halch Inwood Thomas — Line bri ℄ Benesch Ave. from 33d East

TP	11.40	103.91		92.51
0+00 = East Line 33d			8.6	95.3
+50			7.7	96.2
1			6.1	97.8
+50			4.4	99.5
2			2.7	101.2
+50			3.5	100.4
3			4.8	99.1
+50			7.3	96.6
4			10.8	93.1
TP	0.28	91.45	12.74	91.17
+50			5.2	86.2
5			8.0	83.4
+50			11.2	80.2
6	WL 34th		12.5	78.9
TP	0.25	79.40	12.30	79.15
+30 ℄			1.4	78.0

		79.40		
+60 WL 34			3.0	76.4
7			5.1	74.3
+50			7.0	72.4
8			8.8	70.6
+50			10.1	69.2
9			11.2	68.2
+50			12.0	67.4
10			13.0	66.4
TP	1.25	67.80	12.85	66.55
+50			2.8	65.0
11			4.3	63.5
+50			5.7	62.1
12			7.9	59.9
TP	2.07	57.10	12.77	55.03
+40			3.3	53.8
+60 WL 35			4.0	53.1
+90 C			4.6	52.5

		57.10		
13			4.8	52.3
+20 EL			4.9	52.2
+50			5.6	51.5
14			6.0	51.1
+25			5.1	52.0
+50			7.7	49.4
+75			6.8	50.3
15			5.9	51.2
+05 Creek bed			12.1	35.0

3/17/10 Natch Moor Thomas — Line between D-E 33d West

T.P.	6.04	98.55		92.51
0+00 = WL 33d			0.2	97.4
+50			1.5	97.1
1			2.7	95.9
+25			4.5	94.1
+50			8.0	90.6
+89 = 20+56 on line East of 32d in Cañon			12.1	86.5
2			12.4	86.2
+25			14.1	84.5
+50			14.0	84.6
+75			12.1	86.5
3			3.8	94.67
+10			0.2	98.4
T.P.	12.99	110.84	0.70	97.85
+25			10.8	100.0
+50			9.6	101.2
+75			9.7	101.1

3/18/10		110.84		
4			8.2	102.6
+25			6.2	104.6
+50			4.5	106.3
+75			3.0	107.8
5			1.1	109.7
T.P.	12.70	123.46	0.08	110.76
+25			10.9	112.6
+50			6.0	117.5
+80			1.5	122.0
T.P.	12.70	135.96	0.20	123.26
6 = EL 32d			10.3	125.7
+30 Cr.			4.0	132.0
T.P.	12.59	148.31	0.24	135.72
+60 WL			10.4	137.9
+80			4.9	143.4
T.P.	12.71	160.37	0.65	147.66
7			11.2	149.2

		160.37		
+25			6.2	154.2
+50			2.9	157.5
T.P	12.64	172.47	0.54	159.83
+75			11.9	160.6
8			7.7	164.8
+25			13.1	169.4
+50			2.4	170.1
+75			4.0	168.5
TP.	0.76	164.13	9.10	162.37
9			1.3	162.8
+25			6.7	157.4
+50			11.6	152.5
TP	0.28	151.39	13.02	151.11
+ 75			4.5	146.9
10			10.1	141.3
+25			13.1	138.3
TP.	0.77	139.06	13.10	138.29

		139.06		
10+50			9.1	130.0
TP.	0.23	126.29	13.00	126.06
+75			3.9	122.4
+90			10.1	116.2
11			7.5	118.8
+25			8.1	118.2
+45			11.4	114.9
+50			9.5	116.8
+75			2.5	123.8
TP	12.49	138.52	024	126.85
12			7.6	130.9
TP	12.18	150.40	032	138.32
+30			12.9	137.5
+60 EL 31st			6.6	143.8
TP	13.02	163.20	022	150.18
+90			9.5	153.7
13			7.6	155.6

		163.20			
+20 WL			4.0	159.2	
TP	12.82	175.75	0.27	162.93	
+50			8.0	167.7	
+75			0.5	175.2	
TP	12.63	188.02	0.36	175.39	
14			8.9	179.1	
+25			6.6	181.6	
+50			4.0	184.0	
15			0.6	187.4	
TP	8.87	196.63	0.26	187.76	
+25			5.6	182.6	
+50			3.2	184.8	
+78 Manhole			2.2	185.8	

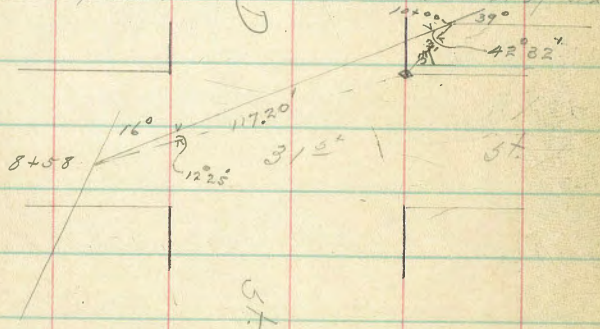
3 Hatch
26 Moore
10 Thomas

Line between C-D from 32d East

TP	13.01	123.77		110.76	
=	13.07	136.59	0.25	123.52	
	12.99	149.42	0.16	136.43	
	12.32	161.33	0.41	149.01	
TP at 32d and Alley	11.73	171.19	1.87	159.46	
WL 32d = 0+00			6.6	164.6	
+25			9.9	161.2	
+50			14.6	156.6	
+75			15.7	155.5	
1			14.4	156.8	
+25			13.0	158.2	
+50			11.8	159.4	
+75			12.7	158.5	
TP	0.11	158.51	12.79	158.40	
2			2.2	156.3	
+25			5.0	153.5	
+50			8.1	150.4	
TP	0.07	145.77	12.81	145.70	Continued on P.59

Alignment for Levels on P.S.S

0+00 = Pt on ℄ 32d on Alley between D-E		
0+73	33°10 R.	N72°15W
3+50	22°30 R	N49°45W
5+77	27°50 L	N77°30W
7+50	19°20 R	N58°00W
8+58	16°00 R	N42°00W
10+00	39°00 R	N3°00W
13+35 ℄ C St.	12°30 L	N15°30W
15+25 ℄ Alley	34°30 L	N50°00W
17+58 ℄ B.	19°40 R	N30°20W = 101.1 N of NW 31st



3 Hatch
31 Moore
10 Thomas

Line in Court from 32d between E-F
To 4 St between 30-31

Sidewalk State 200'W of SW Cor 31st B -	2.78	208.28		205.50
20+50			9.0	199.3
20+25			13.2	195.1
T.P.	0.39	195.45	13.22	195.06
20			1.8	193.6
19+75			4.3	191.1
19+50			6.0	189.4
19+25			6.5	188.9
19			6.4	189.0
18+75			8.3	187.1
18+50			10.2	185.2
18+38			10.4	185.0
18+25			7.0	188.4
TP	12.71	208.02	0.14	195.31
18			3.4	204.6
17+75			4.1	203.9
17+58 < 19°40 R			4.3	203.7

		20802		
17+25			4.9	203.1
17+13			4.6	203.4
17			11.8	196.2
T.P.	0.0	19542	12.60	195.42
16+75			13.6	182.4
T.P.	0.11	183.05	12.48	182.94
16+50			9.4	173.6
16+25			11.1	171.9
T.P.	1.20	171.19	13.06	169.99
16			3.2	168.0
15+75			5.6	165.6
15+50			7.2	164.0
15+25 ∠	34°30' L		8.3	162.9
15+10			9.9	161.3
15			9.1	162.1
T.P.	3.84	16530	9.73	161.46
14+75			2.9	162.4

		16530		
14+50			6.3	159.0
14+25			9.6	155.7
14			10.6	154.7
13+95			10.3	155.0
T.P.	6.32	170.92	0.70	164.60
13+75			1.5	169.4
13+50			1.9	169.0
13+35 ∠	12°30' L		1.7	169.2
13			2.4	168.5
12+95			3.5	167.4
T.P.	0.0	157.95	12.97	157.95
12+75			2.2	155.7
12+50			11.2	146.7
12+25			12.6	145.3
T.P.	3.55	148.65	12.85	145.10
12+00			4.5	144.1
11+75			2.6	146.0
11+50			5.5	143.1

		148.65		
11+25			8.6	140.0
11			9.1	139.5
10+75			10.7	137.9
10+50			10.2	138.4
10+25			12.9	135.7
10+00 ∠ 39°00' R.			13.2	135.4
T.P.	0.410	135.85	13.20	135.45
9+75			0.6	135.2
9+50			0.0	135.8
9+25			2.9	132.9
9			5.1	130.7
8+75			4.9	130.9
8+58 ∠ 16°00' R.			6.3	129.5
8+50			10.1	125.7
T.P.	2.30	128.21	9.94	125.91
8+25			2.1	126.1
8			1.8	126.4

		138.21		
7+75			7.2	131.0
7+50 ∠ 19°20' R			9.9	118.3
7+25			9.0	119.2
7			11.8	116.4
6+75			13.2	115.0
T.P.	2.38	117.72	12.87	115.34
6+72 = 11+46 Alley Line			2.7	115.0
6+50			3.4	114.3
6+25			1.6	116.1
6			2.2	115.5
5+77 ∠ 27°50' L			3.7	114.0
5+50			4.1	113.6
5+25			6.4	111.3
5			8.6	109.1
4+82			9.4	108.3
4+75			7.2	110.5
4+65			5.4	112.3

		117.72		
4+50			9.2	108.5
4+25			11.6	106.1
4			12.7	105.0
TP	4.09	109.15	12.66	105.06
3+75			6.7	102.4
3+50 ∠	22°30' R		4.9	104.2
3+25			9.0	100.1
3			8.9	100.2
2+75			11.1	98.0
2+50			11.8	98.3
2+25			11.0	98.1
2			13.2	95.9
1+75			11.7	97.4
1+50			9.1	100.0
1+25			6.0	103.1
1+20			4.9	104.2
1			10.1	99.0

		109.15			
TP	0.94		13.05	96.10	96.09
0+73 ∠	33°0' R		3.0	106.1	

3 Hatel
31 Morel
10 Thomas

Continued from P 54

		145.77		
+75			1.3	144.5
3			10.2	135.6
T.P.	0.25	133.17	12.85	132.92
+25			9.4	123.8
T.P.	0.03	120.28	12.92	120.25
+50			6.8	113.5
+75			12.6	107.7
T.P.	2.44	109.89	12.83	107.45
4			7.5	102.4
+25			10.4	99.5
+50	=24+47	Cañon line	13.2	96.7
+75			13.8	96.1
5			14.2	95.7
+25			12.4	97.5
+50			1.3	108.6
T.P.	10.85	120.35	0.39	109.50
+75			9.4	110.9

		120.35		
6			9.5	110.8
+30	℄ 33d		10.3	110.0
+60			10.5	109.8
7			10.6	109.7
+50			10.2	110.1
8			8.5	111.8
+25			5.9	114.4
+50			5.2	115.1
+75			7.5	112.8
9			7.7	112.6
+50			5.6	114.7
10			6.7	113.6
+50			6.8	113.5
11			8.1	112.2
+50			7.4	112.9
12			8.1	112.2
			9.4	110.9
T.P.	0.15	111.04	9.46	110.89

		111.04		
+90			2.3	108.7
13			2.8	108.2
+20			3.0	108.0
+50			2.5	108.5
14			3.8	107.2
+50			9.0	102.0
15			10.2	100.8
+50			13.0	98.0
TP	1.58	99.92	12.70	98.34
16			6.2	93.7
+50			9.9	90.0
17			12.0	87.9
TP	0.09	86.94	13.07	86.85
+25			0.6	86.3
+30			1.6	85.3
+35			5.7	81.2
+40			6.8	80.1

		86.94		
+50			12.8	74.1
TP	0.36	74.50	12.80	74.14
+75			7.3	67.2
+90			13.0	61.5
TP	1.69	63.27	12.92	61.58
18			2.8	60.5
+50			3.8	59.5
19			4.6	58.7
+50	King of Lincoln 35th St.		6.0	57.3
TP	1.65	57.66	7.26	56.01

3/31/10 Hatch Move Thomas — Line between B-C from 32d East.

T.P.	12.46	172.92		159.46	
0+00 = El. 32d			6.9	162.0	
T.P.	0.26	161.84	11.34	161.58	
+25			3.7	158.1	
+50			10.4	151.4	
T.P.	1.18	150.31	12.71	149.13	
+75			5.1	145.2	
1			10.6	139.7	
T.P.	2.38	139.72	12.97	137.34	
+25			4.0	135.7	
+50			8.2	131.5	
+75			11.9	127.8	
T.P.	1.12	128.40	12.44	127.28	
2			2.1	126.3	
+25			3.1	125.3	
+50			4.1	124.3	
+75			7.6	120.8	

		128.40			
T.P.	2.90	118.57	12.73	115.67	
3			4.5	114.1	
+25			10.8	107.8	
+49 = 28+47 Cañon line.			11.2	107.4	
+75			10.5	108.1	
4			5.5	113.1	
+25			3.7	114.9	
+50			4.2	114.4	
+75			7.8	110.8	
+85			9.1	109.5	
5			4.3	114.3	
T.P.	12.44	130.45	0.56	118.01	
+25			11.6	118.8	
+50			4.5	125.9	
T.P.	10.98	141.19	0.24	130.21	
+75			9.8	131.4	
6			5.4	135.8	

		141.19			
+30			3.4	137.8	
+60			1.7	139.5	
TP	11.20	151.78	0.61	140.58	
7			8.9	142.9	
+50			5.0	136.8	
8			0.0	151.8	
TP	13.90	164.44	0.34	151.44	
+50			5.3	159.1	
9			0.5	163.9	
TP	8.83	173.06	0.21	164.23	
+50			5.7	167.4	
10			3.5	169.6	
+50			4.2	168.9	
11			7.1	166.0	
+50			12.5	160.6	
TP			11.86	161.20	Fence Cor.

Nat. & 16th N W cor. Hd. spk pote grd.					4.106
N & 16th N E cor. brass plg.					12.52
	+	H.I.	−		
	3.86	7.97		4.11	
Nat + "N"			3.87	4.1	
+50			4.55	3.4	
1			4.72	3.2	
+50			4.54	3.4	
2			4.42	3.5	
+50			4.40	3.5	
3+00			4.50	3.4	
+50			4.30	3.6	
4+00			4.25	3.7	
+50			4.20	3.7	
5+00			4.10	3.8	
+50			4.05	3.9	
Inter. 16th			3.70	4.2	
+50			5.65	2.3	
1+00			6.70	1.2	

Commence at Nat. 1 + N. thence E on Nat. 1 to 16th thence S. on 16th to alley thence E. on alley

1+50			7.30	0.6
2+00			8.10	−0.2
+50			7.50	0.4
3+00			6.05	1.9

0.6
2.4
3.0

.6
1.2
1.8

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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.		