UNIVERSITY HEIGH.

BLAINE ST.
CENTER ST
LINCOLN AV
TYLER AVE
VAN BUREN AVE

185

400

LEVEL

F.B.185

185

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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DEC 8 1964

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

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

185

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

7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

In th

Angle

0
4
5
6
7
8
9
10

340.11
5.56
349.67
5.16
344.51
4.07
~~3[illegible] 0.44~~
348.58
11.10
337.48
0.68
338.16
12.89
325.27
0.15
325.42
10.90
314.52
1.01
315.53

Levels on Blaine Street

Childs
Gunn
Munson

June 13, 1905

So. line Blaine

W.L.U. Boulevard	H.I. 309.81	5.3	304.5
50' W. " "		5.6	305.2
100' W. " "		7.3	302.5
140' W. " " (E. line alley)		8.0	301.8
160' W. " " (W " ")		8.0	301.8
200' W. " "		8.2	301.6
250' W. " "		8.7	301.1
300' W. " "		8.8	301.0
342' W. " " = E. line Cleveland		8.9	300.9

~~North~~ line Blaine

W.L.U. Boulevard.	H.I. 309.81	4.2	305.6
50' W. " "		5.1	304.7
100' W. " "		6.2	303.6
150' W. " "		7.4	302.4
200' W. " "		7.5	302.3

H.I. 309.81

North line Blaine

250' W.	U. Boulevard H.I. 309.81	6.7	303.1
300' W.	" "	8.0	301.8
306' W	" " (E. line Glenwood)	8.4	301.4

Center Blaine

W. L.	U. Boulevard H.I. 309.81	4.9	304.9
50' W.	" "	6.0	303.8
100' W.	" "	7.0	302.8
150' W.	" "	7.4	302.4
200' W.	" "	7.8	302.0
250' W.	" "	7.9	301.9
300' W.	" "	8.3	301.5
324' W.	" " (E line Glenwood)	8.8	301.0
Center	" "	3.9	305.9
E. line	" "	3.9	305.9
50' E.	" "	2.9	306.9
100' E.	" "	3.0	306.8

Center Blaine

140' E.	U. Boulevard (W. line alley)	3.3	306.5
160' E.	" " (E. " ")	3.7	306.1
200' E.	" "	4.5	305.3
250' E.	" "	5.3	304.5
300' E.	" " (W. line Center St.)	6.4	303.4
Center of Center St.		7.9	301.9
E. Line Center St.		9.6	300.2

So. line Blaine

Center	U. Boulevard	4.2	305.6
E. line	" "	4.6	305.2
50' E.	" "	3.6	306.2
100' E.	" "	3.4	306.4
140' E.	" " (W line alley)	3.5	306.3
160' E.	" " (E. " ")	3.6	306.2
200' E	" "	5.4	304.4
250 E.	" "	5.8	304.0

H.I. 309.81

So. line Blaine Street

300' E. U. Boulevard (West line center)		7.1	302.7
Center Center St.		9.0	300.8
E. line " "		10.4	299.4

North line Blaine

Center U. Boulevard		3.3	306.5
E. line " "		3.45	306.36
50' E " "	H.I. 311.82	3.3	308.0
100' E " "		4.7	306.6
140' E " "	(W line alley)	5.5	305.8
160' E " "	(C line alley)	6.3	305.0
200' E " "		6.7	304.6
250' E " "		7.0	304.3
300' E " "	(W line center St)	7.1	304.2
Center of Center St.		8.6	302.7
E. line " "		11.0	300.3

H.I. 304.91 July 16. 1905

North line Blaine

25' E	Center St.		5.3	299.6
50' E	"	"	5.7	299.2
75' E	"	"	5.3	299.6
100' E	"	"	5.3	299.6
125' E	"	"	4.7	300.2
150' E	"	"	4.1	300.8
175' E	"	"	4.2	300.7
200' E	"	" (W line alley)	4.7	300.2
220' E	"	" (E line alley)	4.5	300.4
25' E.	alley		3.7	301.2
50' E	"		2.3	302.6
75' E	"		1.7	303.2
100' E	"		0.8	304.1
125' E	"	H.I. 311.29	6.5	304.8
150' E	"		3.6	307.7
175' E	"		1.2	310.1
214.4 E	"		0.5	310.8

H.I. 304.91 Childs Gunn Munson

South line Blaine

25' E.	Center St.		6.0	298.9
50' E	"	"	6.9	298.0
75' E	"	"	7.6	297.3
100' E	"	"	9.0	295.9
125' E	"	"	9.8	295.1
150' E	"	"	7.9	297.0
175' E	"	"	8.0	296.9
200' E	"	"	8.0	296.9
246.5 E	"	"	5.32	299.59

Center Blaine Street

50' E	Center St.		6.2	298.7
100' E	"	"	6.7	298.2
150' E	"	"	6.1	298.8
200' E	"	"	5.1	299.8
250' E	"	"	3.7	301.2
300' E	"	"	2.5	302.4
340.5 E	"	"	1.0	303.9

June 17 1905

H.I. 328.41

East line Center Street.

So. line Lincoln St.		4.3	324.1
50' So. "		7.7	320.7
100' " "		9.4	319.0
150' " "		11.1	317.3
200' " "		13.7	314.7
250' " "	H.I. 318.73	5.5	313.2
300' " "		8.9	309.8
350' " "		11.4	307.3
400' " "		12.9	305.8
450' " "		14.3	304.4
500' " "		15.3	303.4
550' " "		17.2	301.5
600' " "	(N. line Blaine)	18.4	300.3
Center Blaine		18.5	300.2
So. line "		19.3	299.4

Childs
Gunn
Munson

East line Center Street.

50' So. Blaine		18.4	300.3
104.6 " " (N. line University)		18.1	300.6

West line Center Street

So. line Lincoln St.	(H.I. 328.41)	4.9	323.5
50' So. " "		8.0	320.4
100 So. " "		8.7	319.7
150' So. " "		9.5	318.9
200' So. " "		12.4	316.0
250' So. " "	H.I. 318.73	5.0	313.7
300' So. " "		7.2	311.5
350' So. " "		8.7	310.0
400' So. " "		9.6	309.1
450' So. " "		11.3	307.4
500' So. " "		12.0	306.7
550' So. " "		13.2	305.5
600' So. " "	(N. line Blaine)	14.5	304.2

H.I. 318.73

West line Center Street.

Center	Blaine	15.3	303.4
So. line	"	16.0	302.7
50' So.	"	14.3	304.4
100' So.	"	14.2	304.5
138.5 So	"	13.1	305.6

H.I. 328.41

Center Center Street

So. line	Lincoln St.	5.6	322.8
50' So.	" "	7.4	321.0
100' So.	" "	9.4	319.0
150' So.	" "	11.0	317.4
200' So.	" "	12.9	315.5
250' So.	" " H.I. 318.73	6.1	312.6
300' So.	" "	8.7	310.0
350' So.	" "	10.4	308.3
400' So.	" "	11.8	306.9

H.I. 318.73

Center Center Street

450' So.	Lincoln St.	12.0	306.7
500' So.	" "	14.5	304.2
550' So.	" "	14.3	304.4
600' So.	" " (N. line Blaine)	16.0	302.7
Center	Blaine	16.8	301.9
So. line	"	17.9	300.8
50' So.	"	15.8	302.9
100' So.	"	16.4	302.3
121.5 So.	"	15.6	303.1

June 19. 1908.

H.I. 338.24

East line Center Street

Center	Lincoln St.		10.9	327.3
N. line	"	"	7.9	330.3
50' N.	"	"	6.0	332.2
100' N.	"	"	4.6	333.6
150' N.	"	"	4.2	334.0
200' N.	"	"	4.3	333.9
250' N.	"	"	3.4	334.8
300' N.	"	H.I. 347.81	11.41	336.40
350' N.	"	"	10.5	337.3
400' N.	"	"	9.2	338.6
417' N.	"	" (W. line Park B.)	9.1	338.7

Childs
Gunn
Jennison

H.I. 338.29

Center Center Street

Center	Lincoln St.		12.7	325.5
N. line	"	"	10.5	327.7
50' N.	"	"	8.7	329.5
100' N.	"	"	7.3	330.9
150' N.	"	"	6.5	331.7
200' N.	"	"	6.1	332.1
250' N.	"	"	4.1	334.1
300' N.	"	H.I. 347.81	11.8	336.0
350' N.	"	"	9.7	338.1
400' N.	"	"	8.9	338.9
450' N.	"	"	7.9	339.9
500' N.	"	"	6.7	341.1
509.7 N.	"	(W line Park B.)	6.6	341.2

H.I. 338.24

West line Center Street

Center Lincoln St.			14.4	323.8
N. line "	"		12.2	326.0
50' N "	"		11.1	327.1
100' N "	"		11.4	326.8
150' N "	"		8.1	330.1
200' N "	"		4.7	333.5
250' N "	"		2.9	335.3
300' N "	"	H.I. 347.81	10.7	337.1
350 N "	"		9.1	338.7
400' N "	"		7.9	339.9
450' N "	"		8.1	339.7
500' N "	"		6.1	341.7
550' N "	"		6.6	341.2
600' N "	"	(So. line Campus)	5.3	342.5

H.I. 324.22

North Line Lincoln Street

E. line University Boul.			6.4	317.8
50' E "	"		3.1	321.1
100' E "	"		3.2	321.0
140' E "	"	(W. line alley)	4.3	319.9
160' E "	"	(E. " ")	3.7	320.5
200' E "	"		3.6	320.6
250' E "	"		0.8	323.4
300' E "	"	H.I. 335.70 (W. line Center)	9.7	326.0
Center Center Street			8.0	327.7
E. line "	"		5.4	330.3
50' E "		H.I. 335.70	3.3	332.4
100' E "	"		2.0	333.7
150' E "	"		1.3	334.4
176.9 E "	"	(W. line Park B.)	2.9	332.8

Plat

H.I. 324.22

Center Lincoln Street

E. line University Boulevard	7.9	316.3
50' E " "	6.3	317.9
100' E " "	5.4	318.8
140' E " " (W. line alley)	4.8	319.4
160' E " " (E " ")	4.7	319.5
200' E " "	3.8	320.4
250' E " "	2.3	321.9
300' E " " (W. line Center) H.I. 335.70	11.9	323.8
Center Center Street	10.2	325.5
E. line " H.I. 335.70	8.4	327.3
50' E " "	6.0	329.7
100' E " "	4.3	331.4
150' E " "	3.6	332.1
193.8 E " " (W. line Park B)	4.2	331.5

Plat

H.I. 324.22

South Line Lincoln Street

E. line University Boulevard.	10.6	313.6
50' E. " "	9.3	314.9
100' E " "	7.0	317.2
140' E " " (W line alley)	7.2	317.0
160' E " " (E " ")	6.7	317.5
200' E " "	4.8	319.4
250' E " "	3.0	321.2
300' E " " (W. line Center) H.I. 335.70	12.2	323.5
Center Center Street.	12.9	322.8
E. line " "	11.6	324.1
50' E " H.I. 335.70	9.7	326.0
95.4 E " (W line alley)	7.8	327.9
115.4 E " (E line alley)	7.3	328.4
160.8 E " "	5.4	330.3
210.8 E " (W line Park Boul.)	6.2	329.5

Plat

June 21, 1905

H.I. 315.90

South line Lincoln Street

Center University Boul.		2.0	313.9
West line " "		5.4	310.5
50' W. " "		8.2	307.7
100' W " "		9.5	306.4
138.8 W " "	(E. line Cleavland)	11.4	304.5
Center Cleavland ave.		11.6	304.3
W. line	H.I. 306.72	5.2	301.5
50' W.	" "	5.6	301.1
100' W.	" "	5.1	301.6
147.27 W	" (E. line alley)	5.1	301.6
167.27 W	" (W line ")	5.0	301.7
200' W	" "	5.2	301.5
250 W	" "	6.0	300.7
299.27 W	" (E line Hendricks	6.0	300.7
Center Hendricks		6.1	300.6
W. line	"	6.5	300.2

Plat

Childs
Gunn
Munson

H.I. 315.90

Center Lincoln Street

Center University Boul.		0.9	315.0
W. line " "		4.2	311.7
50' W. " "		6.2	309.7
100' W. " "		8.8	307.1
144.5 W " "	(E. line Cleavland)	10.5	305.4
Center Cleavland ave.		11.7	304.2
W. line "	H.I. 306.72	3.4	303.3
50' W. " "		3.7	303.0
100' W " "		3.5	303.2
150 W " "		3.7	303.0
200' W " "		4.1	302.6
250' W " "		4.6	302.1
300' W " "	Plat	4.8	301.9
350' W " "		5.0	301.7
400' W " "		5.3	301.4
450' W " "		5.9	300.8
500' W " "		6.2	300.5

H.I. 306.72

Center Lincoln Street

550' W.	Cleavland ave.	6.4	300.3
600' W.	" "	7.0	299.7
650' W.	" "	7.8	298.9
700' W.	" "	8.7	298.0
750' W	" "	9.1	297.6
766' W	" angle point	9.3	297.4

Plat.

H.I. 315.90

North line Lincoln Street

Center University Boul.	-0.7	316.6
W. line " "	1.9	314.0
50' W " "	4.6	311.3
100' W " "	6.6	309.3
150' W " " (E. line Cleavland)	9.3	306.6
Center Cleavland ave.	9.7	306.2
W. line " "	10.07	305.83
50' W " H.I. 306.72	1.8	304.9
100' W " "	1.8	304.9
150' W " "	2.3	304.4
200' W " "	3.5	303.2
250' W " "	4.0	302.7
300' W " "	4.8	302.9
350' W " "	3.6	303.1
400' W " "	4.3	302.4
450' W " "	5.2	301.5
500' W " "	5.5	301.2

Plat

H.I. 306.72

North line Lincoln Street

550' W.	Cleveland ave.	6.7	300.0
596.2 W	" " (E. line Maryland)	7.6	299.1
Center	Maryland St.	7.8	298.9
W. line	" "	8.7	298.0
E. line	Buchanan	9.8	296.9
Center	"	10.4	296.3
W. line	"	9.5	297.2

H.I. 306.72

South line Lincoln Street

50' W.	Richmond Street	7.3	299.4
100' W.	" "	7.2	299.5
150' W	" "	7.3	299.4
200' W	" "	7.8	298.9
250' W	" "	8.6	298.1
300' W	" "	8.7	298.0
350' W	" "	9.0	297.7
362' W	" " angle point	8.98	297.74

Plat

June 22 1905

H.I. 301.91

South line Lincoln Street

Center	Vermont Street		9.7	292.2
E line	"	"	13.4	288.5
27' E.	"	"	17.7	284.2
50' E.	"	"	14.6	287.3
100' E	"	"	9.8	292.1
150' E	"	"	7.4	294.5
200' E	"	"	5.8	296.1
250' E	"	"	4.7	297.2
300' E	"	"	4.2	297.7
350' E	"	"	3.8	298.1
400' E	"	"	4.2	297.7
450' E	"	"	4.2	297.7
491.9 E	"	" angle point	4.2	297.7

Plat

H.I. 293.93 {Childs, Gunn, Munson}

South line Lincoln Street

W. line	Vermont Street		1.1	292.8
50' W.	"	"	2.4	291.5
100' W.	"	"	3.6	290.3
150' W	"	"	4.5	289.4
200' W	"	"	5.3	288.6
250' W	"	"	6.5	287.4
300' W.	"	"	7.5	286.4
350' W	"	"	8.5	285.4
400' W	"	"	9.8	284.1
450' W	"	"	10.4	283.5
500' W	"	"	11.3	282.6
537.57 W	"	H.I. 287.19	8.0	279.2

Plat

North line Lincoln Street

W. line Vermont Street	H.I. 301.91	9.2	292.64	
50' W	"	H.I. 294.07	1.8	292.3
100' W	"	"	3.4	290.7
150' W	"	"	4.8	289.3
200' W	"	"	6.5	287.6
250' W	"	"	7.1	287.0
300' W	"	"	11.2	282.9
350' W	"	"	15.3	278.8
400' W	"	"	14.3	279.8
450' W	"	"	12.7	281.4
500' W	"	"	15.5	278.6
538.65 W	"	H.I. 287.19	13.6	274.6

Plat

H.I. 301.91

North line Lincoln Street

Center Vermont Street			10.7	291.2
E. line "	"		12.0	289.9
50' E	"	"	10.2	291.7
100' E	"	"	8.5	293.4
150' E	"	"	6.7	295.2
200' E	"	"	4.9	297.0
250' E	"	"	4.3	297.6
300' E	"	"	3.9	298.0
350' E	"	"	4.1	297.8
400' E	"	"	4.0	297.9
445.29 E	"	" (W line Buchman)	4.7	297.2

Plat

H.I. 294.07

Center Lincoln Street

W. line	Vermont	Street	2.0	292.1
50' W	"	"	2.3	291.8
100' W	"	"	3.4	290.7
150' W	"	"	4.5	289.6
200' W	"	"	5.2	288.9
250' W	"	"	6.6	287.5
300' W	"	"	8.0	286.1
350' W	"	"	8.9	286.2
400' W	"	"	10.0	284.1
450' W	"	"	11.2	283.9
500' W	"	"	11.5	283.6
538.1 W	"	"	14.9	279.2

Plat

H.I. 301.91

Center Lincoln Street

Center	Vermont	Street	10.6	291.3
E. line	"	"	11.6	290.3
50' E	"	"	11.1	290.8
100' E	"	"	8.9	293.0
150' E	"	"	7.0	294.9
200' E	"	"	5.3	296.6
250' E	"	"	4.1	297.8
300' E	"	"	3.3	298.6
350' E	"	"	3.1	298.8
400' E	"	"	3.7	298.2
450' E	"	"	4.3	297.6
496.35 E	"	" angle point	4.5	297.4

Plat

June 24 1905

H.I. 313.01

South line Tyler Street

E. line Maryland Street	12.4	300.6
30' E " "	12.8	300.2
50' E " " H.I. 302.63	5.1	297.5
75' E " "	13.0	289.6
100' E " " H.I. 294.49	10.0	284.5
130' E " " Canyon	17.1	277.4
140' E " " (W. line alley)	13.7	280.8
160' E " " (E line ")	8.5	286.0
200' E Maryland St,	-3.2	297.7
227' E " " H.I. 313.01	9.6	303.4
250' E " "	7.8	305.7
300' E " " (W. line Cleavland)	5.2	307.8
Center Cleavland Ave.	1.4	311.6
E line " H.I. 324.46	8.3	316.2
50' E " H.I. 335.31	12.4	322.9
100' E " "	6.9	328.4
114' E " " (W. line alley)	5.6	329.7

H.I. 346.18 Childs Gunnison

South line Tyler Street

134' E Cleavland Ave (E. line alley)	13.7	332.5
184' E " "	9.2	337.0
234' E " "	7.2	339.0
264.8' E " " (W line Campus)	5.3	340.9

Plat.

H. I. 313.01

North line Tyler Street,

E. line Maryland Street	11.3	301.7	
50' E " "	10.4	302.6	
100' E " "	9.8	303.2	
140' E " " (W. line alley)	9.4	303.6	
160' E " " (E. line alley)	10.3	302.7	
175' E " "	11.9	301.1	
200' E " " H. I. 302.63	8.7	293.9	
235' E " " curve	14.5	288.1	
250' E " "	8.3	294.3	
280' E " " H. I. 313.01	7.8	305.2	
300' E " " (W. line Cleaveland)	5.9	307.1	
Center Cleaveland ave	1.2	311.8	
E. line " H. I. 324.46	8.0	316.5	
50' E " H. I. 335.31	13.5	321.8	
71' E " " (W. line alley)	11.1	324.2	
91' E " " (E. line ")	9.1	326.2	

H. I. 346.18

North line Tyler Street

141' E. Cleaveland ave	12.4	333.8
191' E " "	7.8	338.4
243.8' E " " (W. line campus)	5.5	340.7

H.I. 313.01

Center Tyler Street

E. line Maryland Street	12.0	301.0
50' E " "	11.5	301.5
100' E " "	12.2	300.6
140' E " " H.I. 302.63 (W. line alley)	7.2	295.4
160' E " " (E line alley)	11.5	291.1
186' E " " canyon	21.4	281.2
200' E " "	14.8	287.8
240' E " " H.I. 313.01	11.1	301.9
250' E " "	9.9	303.1
300' E " " (W. line Cleaveland)	6.0	307.0
Center Cleaveland ave.	1.4	311.6
E. line " H.I. 324.46	8.3	316.2 ~~304.7~~
50' E " H.I. " 335.31	12.5	322.8 ~~300.5~~
92' E " " (W. line alley)	8.2	327.1 ~~304.8~~
112' E " " (E line ")	4.6	330.7 ~~308.4~~

H.I. 346.18

Center Tyler Street

162' E. Cleaveland ave.	10.2	336.0
212' E " "	8.3	338.9
254' E " " (W line canyon)	5.7	340.5

H.I. 348.58

July 3rd 1905

South line Van Buren St.

W. line Campus	5.0	343.6
50' W. "	5.4	343.2
100' W "	6.0	342.6
140' W " (E line alley)	7.0	341.6
160' W " (W " ")	7.2	341.4
200' W "	7.2	341.4
250' W "	9.3	339.3
300' W " (E. line Cleaveland)	10.1	338.5
Center Cleaveland ave.	12.1	336.5
W. line Cleaveland H.I. 338.16	5.3	333.9
50' W "	10.1	328.1
100' W "	15.0	323.2
140' W " (E line alley) H.I. 325.42	5.6	319.8
160' W " (W. " ")	6.5	318.9
200 W "	12.3	313.1

H.I. 315.53

South line Van Buren St.

250' W	8.0	307.5
300' W (E. line Maryland)	14.6	300.9

Plat.

H.I. 348.58

Center Van Buren Street

W. line Campus		4.5	344.1
50' W.	"	4.7	344.9
100' W.	"	5.5	342.9
140' W	" (E line alley)	6.2	342.4
160' W.	" (W " ")	6.5	342.1
200' W	"	7.1	341.5
250' W	"	8.3	340.3
300' W	" (E. line Cleaveland)	9.6	339.0
Center Cleaveland ave.		11.0	337.6
W. line Cleaveland	H.I. 338.16	2.2	336.0
50' W.	"	7.2	331.0
100' W.	"	12.7	325.5
140' W.	" (E. line alley) H.I. 325.42	3.3	322.1
160' W.	" (W. line ")	4.6	320.8
200' W.	" Plat	9.8	315.6
250' W	"	15.6	309.8
300' W	" (E. line Maryland) H.I. 315.53	9.4	306.1

H.I. 348.58

North line Van Buren Street

W. line campus		4.2	344.4
50' W	"	3.9	344.7
100' W	"	4.6	344.0
140' W	" (E. line alley)	5.7	342.9
160' W	" (W. " ")	5.8	342.8
200' W	"	6.3	341.7
250' W	"	7.0	341.6
300' W	" (E. line Cleaveland)	8.0	340.6
Center Cleaveland ave.		9.8	338.8
W. line "	H.I. 338.16	0.5	337.7
50' W.	"	4.6	333.6
100' W.	"	9.4	328.8
140' W.	" (E. line alley) H.I. 325.42	1.0	324.4
160' W	" (W. " ")	3.2	322.2
200' W	" Plat	6.4	319.0
250' W	"	12.8	312.6
300' W	" (E. line Maryland) H.I. 315.53	6.7	308.8

185

Childs
Dunn
Munson

June 13 1905

Wooden Water Pipe line on University Ave. Starting at Boulevard.

Sta.	Grade H.I.	Rod	Elev.	cut
0 at University Boulevard.				
+50				
1+05				
+50				
2				
+50				
3				
+50				
4.				
+10.35 Cross in Richmond				
+50				
5				
+50				
6				

June 15 1905

Childs
Gunn
Munson

Sta.		Grade	H.I.	Rod	Elev.	cut
+50						
7						
+50						
8						
+50						
9						
+50						
10						
+50						
+90.1	Cross in Vermont					
11						
+50						
12						
+50						
13						

June 13, 1905

Childs
Grunn
Munson

Wooden Water Pipe line on University Boulevard beginning University ave.

Sta	Grade	H.I.	Rod	Elev.	Cut
0 at University ave.					
+50					
1					
+50					
2					
+50					
3					
+50					
4					
+50					
5					
+50					
6					
+50					
7					

June 14 1905

Childs
Gunn
Munson

64

Sta		Grade	H.I.	Rod	Elev.	cut
+50						
8						
+50						
9						
+50						
10						
+07.3	Cross in Lincoln St.					
+50						
11						
+50						
12						
+50						
13						
+50						
14						

June 16, 1905

Sta.		Grade	H.I.	Rod	Elev.	cut
+50						
15						
+50						
16						
+50						
+85.25	Cross in Campus					
17+50						
18						
+50						
19						
+50						
20						
+50						
21						
+50						

Sta.		Grade	H.I.	Rod	Elev.	Cut
22						
+65	Cross					
23						
+50						
24						
+50						
25						
+50						
26						
+38.8	angle point					
27						
+38.8	Cross,					

185

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

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.		

Published by H. S. Crocker Company, Stationers, Drawing Materials, Mathematical Instruments, etc., San Francisco.