

5th St. Parving
Grades

9

TRANSIT

F.B. 634

634

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	2½	21	49	41	95½
2	4½	22	51½	42	98
3	7	23	53½	43	100½
4	9½	24	56	44	102½
5	11½	25	58½	45	105
6	14	26	60½	46	107½
7	16½	27	63	47	109½
8	18½	28	65½	48	112
9	21	29	67½	49	114½
10	23½	30	70	50	116½
11	25½	31	72½	51	119
12	28	32	74½	52	121½
13	30½	33	77	53	123½
14	32½	34	79½	54	126
15	35	35	81½	55	128½
16	37½	36	84	56	130½
17	39½	37	86½	57	133
18	42	38	88½	58	135½
19	44½	39	91	59	137½
20	46½	40	93½	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.
0		0		0		0	
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	13-57
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

MICROFILMED
DEC 14 1964

Handwritten notes and calculations on the right page of the notebook, including various numbers and scribbles.

$$\begin{array}{r} 200 \\ 15 \\ \hline 215 \\ 14 \\ \hline 229 \end{array}$$

$$\begin{array}{r} 73.33 \\ 5.00 \\ \hline 78.33 \\ 6.49 \\ \hline 84.82 \end{array}$$

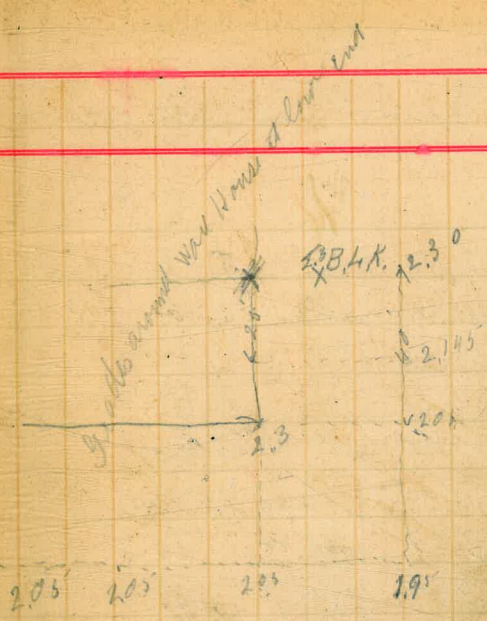
$$\begin{array}{r} 5.9 \\ 5.7 \\ \hline 11.6 \\ 8.0 \\ \hline 20.6 \end{array}$$

$$\begin{array}{r} 4.6 \\ 1.9 \\ \hline 6.5 \end{array}$$

$$\begin{array}{r} 10.8 \\ 11.26 \\ 12.24 \\ 13.57 \\ 14.34 \\ 15.47 \\ 22.07 \end{array}$$

Grades from N. Side of
 1st to S. side of K St.

C.S.	C.S.G.	G.G.	C.G.	C.S.G.	Sta.
2,300	0,800	1,634	2,300	1,467	0
2,525	1,025	1,859	2,525	1,692	+25
2,750	1,250	2,084	2,750	1,917	+50
2,975	1,475	2,309	2,975	2,142	+75
3,200	1,700	2,534	3,200	2,367	+1
3,425	1,925	2,759	3,425	2,592	+25
3,650	2,150	2,984	3,650	2,817	+50
3,875	2,375	3,209	3,875	3,042	+75
4,100	2,600	3,434	4,100	3,267	2
4,325	2,825	3,659	4,325	3,492	+25
4,550	3,050	3,884	4,550	3,717	+50
4,775	3,275	4,109	4,775	3,942	+75
5,000	3,500	4,334	5,000	4,167	3



Interpolation of 5740 K.

5016 at center
of intercalation 57 K.
M. 5367 side
J. 4900.

93
14
29.7

40
27.5
167

5377
428
11,66
8.1

7377
40
11,637
8967
21690

Grades from N. side
of "K" to S. side of J. St.

C.S.	C.S.P.	P.P.	C.P.	C.S.P.	Sta.
570	4.20	5.034	5.367	4.534	0
600	4.50	5.334	5.667	4.834	+26
630	4.80	5.634	5.967	5.134	+50
660	5.10	5.934	6.267	5.434	+75
690	5.40	6.234	6.567	5.734	1
720	5.70	6.534	6.867	6.034	+20
750	6.00	6.834	7.167	6.334	+40
780	6.30	7.134	7.467	6.634	+75
810	6.60	7.434	7.767	6.934	2
840	6.90	7.734	8.067	7.234	+20
870	7.20	8.034	8.367	7.534	+50
900	7.50	8.334	8.667	7.834	+75
930	7.80	8.634	8.967	8.134	3

X

12,222

5,387

6,835

6,32

57

72,00

502

12,705

curb at (sta) 1004 low on W side

curb at sta 2 all O.K. on W side

" " " " 2+50 1/2' low " " "

" " " " 3 all O.K.

Intersection of 4.7 f.

869867

8.867

860

8967

450

9.417

9.417 center grade

Grades from N side of
Jct. of S side of Jct.

11.428

C.S.	C.S.	C.S.	C.S.	C.S.	Sta.
			x		
10.2	8.7	9.534	9.867	9.034	0
10.6	9.1	9.934	10.267	9.434	+25
11.0	9.5	10.334	10.667	9.834	+50
11.4	9.9	10.734	11.067	10.234	+75
11.8	10.3	11.134	11.467	10.634	1
12.2	10.7	11.534	11.867	11.034	+25
12.6	11.1	11.934	12.267	11.434	+50
13.0	11.5	12.334	12.667	11.834	+75
13.4	11.9	12.734	13.067	12.234	2
13.8	12.3	13.134	13.467	12.634	+25
14.2	12.7	13.534	13.867	13.034	+50
14.6	13.1	13.934	14.267	13.434	+75
15.0	13.5	14.334	14.667	13.834	3
			x		

omit at Sta 0+5 0.28 low on W side

1 0.17 low " " "

57

15,000
14,887
1,000

22,251
13,187
7,044

Grade at center

15,167

20,617

Grades from the W side of
 N D S side of G st

H
 23,023. G
 28,329

cg	C.S.G.	G.G.	cg.	C.S.G.	Sta.
			X		
21,5	20.0	20,834	21,167	20,334	0
21,9	20,4	21,234	21,567	20,734	+75
22,3	20,8	21,634	21,967	21,134	+50
22,7	21,2	22,034	22,367	21,534	+75
23,1	21,6	22,434	22,767	21,934	1
23,5	22,0	22,834	23,167	22,334	+25
23,9	22,4	23,234	23,567	22,734	+50
24,3	22,8	23,634	23,967	23,134	+75
24,7	23,2	24,034	24,367	23,534	2
25,1	23,6	24,434	24,767	23,934	+25
25,5	24,0	24,834	25,167	24,334	+50
25,9	24,4	25,234	25,567	24,734	+75
26,3	24,8	25,634	25,967	25,134	3
			X		

cut on W side 0.11 low
 " " E " 0.10 high

cut on W side 0.04 high on E side

cut on E side 0.21 high

cut on " " 0.29 high on E side 0.06 low

2041 30.370
233
487

28.329

2407 30.336
243
60.36

28.329

center grades 26.467

Grades from W side of
S. 17.8. S side of T. st.

C.G. C.S.G. 9.9. on.9. on.9.9.

			X		
27,500	26,800	26,630	26,900	26,133	0
27,766	26,266	27,099	27,432	26,599	+10
28,233	26,733	27,566	27,899	27,066	+10
28,700	27,200	28,033	28,366	27,633	+10
29,166	27,666	28,499	28,832	27,999	1
29,633	28,133	28,966	29,299	28,466	+10
30,100	28,600	29,433	29,766	28,933	+10
30,566	29,066	29,899	30,232	29,399	+10
31,033	29,533	30,366	30,699	29,866	2
31,500	30,000	30,833	31,166	30,333	+10
31,966	30,466	31,299	31,632	30,799	+10
32,433	30,933	31,766	32,099	31,266	+10
32,900	31,400	32,233	32,566	31,733	3

X

T
33,425
380
37,280
32,500
4,780

27081
26,453
415

curb on east side all OK

curb on W side 0.02 high

curb on W side 0.10 high
curb on W side 0.00 low

curb on E side, 0.07 high

" " " " all OK

curb on W side 0.19 high

curb on W side 0.16 high

Grades from N line F St to
the South line of E St.

for 25' = 1.458

curb grade	lower gutt. grade	Gutter grade	lower street grade	Street grade	Stw.
34.1	34.6	33.43	32.934	33.767	0
34.558	33.058	33.888	33.392	34.225	+25
35.016	33.516	34.346	33.850	34.683	+50
35.474	33.974	34.804	34.302	35.141	+75
35.932	34.432	35.262	34.760	35.599	1
36.390	34.890	35.720	35.218	36.057	+25
36.848	35.348	36.178	35.676	36.515	+50
37.306	35.806	36.636	36.134	36.973	+75
37.764	36.264	37.094	36.592	37.431	2
38.222	36.722	37.552	37.050	37.889	+25
38.680	37.180	38.010	37.508	38.347	+50
39.136	37.638	38.468	37.966	38.805	+75
39.6	38.1	38.93	38.424	39.267	3

Grades on opp sides =

N line F St.

5813
3257
556

33767
32566
66333
3317

3567
246
3813
3317
496

South line of E St.

Grades between E & F

19.	1899.	1900.	1901.	1902.
			X	
34,100	32,600	33,434	33,767	0
34,578	33,058	33,892	34,225	+25
34,717	33,317	34,351	34,684	+50
35,475	33,976	34,809	35,142	+75
35,933	34,433	35,267	35,600	1
36,392	34,892	35,726	36,059	+25
36,850	35,350	36,184	36,517	+50
37,308	35,808	36,642	36,975	+75
37,767	36,267	37,101	37,434	2
38,225	36,725	37,559	37,892	+25
38,683	37,183	38,017	38,350	+50
39,142	37,642	38,476	38,809	+75
39,600	38,100	38,934	39,267	3
			39,767	+40

N. line P. D.

S. line P. D.

C. D.

from D. & E.

C.G.	C.S.G.	G.G.	CR.G.	CR.S.G.	
40.8	39.300	40.133	40.466		0
41.292	39.792	40.625	40.958		+25
41.784	40.284	41.117	41.450		+50
42.275	40.775	41.608	41.941		+75
42.766	41.266	42.099	42.432		1
43.258	41.758	42.591	42.924		+25
43.750	42.250	43.083	43.416		+50
44.242	42.742	43.575	43.908		+75
44.733	43.233	44.066	44.399		2
45.225	43.725	44.558	44.891		+25
45.717	44.217	45.050	45.383		+50
46.208	44.708	45.541	45.874		+75
46.7	45.200	46.033	46.366		3
			46.752		
			46.917		+40
			46.982		
			47.274		+61.25

N line C St

S line B St

S Truck

B St

North Truck

B

01376-

Grades on 5th St Between

H & C St

C.S.	S.S.	Curb.	
47.18	47.133	47.467	0
48.183	47.516	47.850	+ 25
48.566	47.899	48.233	+ 30
49.950	48.283	48.617	+ 75
49.333	48.666	48.999	1.
49.716	49.049	49.383	+ 25
50.10	49.433	49.766	+ 50
50.483	49.816	50.150	+ 75
50.866	50.199	50.533	2.
51.25	50.583	50.917	+ 25
51.633	50.966	51.299	+ 50
52.016	51.350	51.683	+ 75
52.40	51.733	52.067	3.
	52.117	52.317	+ 40

N. line H St

0.9433 - 25'

0.7666 - 50'

S line C. St

center line C St

Sta	Dist N of Corl m N of S line H	Dist E or W of E line Metric Sta	Grade
0 B 0	62.5 N	62.5 E	11.70
17.43	40.98 [✓] N	45.14 E	11.51 [✓]
34.85	35.47 [✓] N	28.3 E	11.19
52.29	29.1 N	12.5 E	10.88
69.72	19.1 W	1.78 W	10.36 ⁿ
97.152	6.78 N	14.1 W	9.94
1+04.38	12.5 from R.L.	24.1 W	9.76
1+22.01	3.5 S. P.L.	31.47 W	9.83
1+39.44	A.P.L. 0	30.2 W	
1+57.87	E.C.		

Grades on 5th from

C to B str.

L.S.	L.S.	L.S.	Sta
52.90	52.233	52.567	0
52.942	52.324	52.658	+ 25
53.083	52.416	52.750	+ 50
53.175	52.508	52.842	+ 75
53.267	52.599	52.933	1
53.358	52.691	53.025	+ 25
53.450	52.783	53.117	+ 50
53.542	52.874	53.208	+ 75
53.633	52.966	53.300	2
53.725	53.058	53.392	+ 25
53.816	53.149	53.483	+ 50
53.908	53.241	53.575	+ 75
54.00	53.333	53.667	3

N line of C str.

0.09165 25 - 25
0.1833 50 - 50

S line B str.

+ 40

center line of B str.

D St Grades N. Side

Sta.	Left		Center	
	Grade	Rod	Grade	Rod
		(31.53)		
2	29.83	1.70	30.25	1.28
Front +37.5	30.25	1.28	30.	1.53
0	29.33	2.20	29.75	1.78
+50	28.71	2.82	29.12	2.41
1	28.08	3.45	28.50	3.03
+50	27.46	4.07	27.87	3.66
2	26.83	4.70	27.25	4.28
Union +37.5	27.00	4.53	26.87	4.66
0	25.83	5.70	26.50	5.03
+50	25.08	6.45	25.75	5.78
1	24.33	7.20	25.	6.53
+50	23.58	7.95	24.25	7.28
2	22.83	8.70	23.50	8.03

State

Apr 22.

WTS Book

Oxton Level

Findley Rod

Hinsley Stakes

Transcribed

B.M.	+	N.I.
27.014	4.520	31.534
24.906	6.624	31.530

Paving Grades 1982

North End South Sta

N.E.	S.E.	N.E.	S.E.	Sta
7.60	6.933	7.00	6.333	7.00 0
7.437	6.770	7.375	6.645	7.312 +25
7.475	7.204	7.750	6.958	7.625 +50
8.312	7.645	8.125	7.270	7.937 +75
8.750	8.083	9.000	7.583	8.250 1
9.187	8.520	8.875	7.895	8.562 +25
9.625	8.958	9.250	8.204	8.875 +50
10.062	9.395	9.625	8.520	9.187 +75
10.500	9.833	10.00	8.833	9.500 2
11.000				10.000
10.833		10.50		9.833 +375
11.50	10.833	11.00	9.833	10.50 +75
25 - 0.4375	"	"		
50 - 0.8750	"	"		
25 - 0.375	"	"		
50 - 0.750	"	"		
25 - 0.3125	"	"		
50 - 0.625	"	"		
25 - "	"	"		
50 - "	"	"		

Cal. to Arctic

East line Calif St

West line Arctic St

Arctic St

East line Arctic St

Paving Grades H St

North Side Elev. South Side Sta

b.b.	b.b.		b.b.	b.b.	
11.50	10.933	11.00	9.933	10.50	0
11.75	11.083	11.281	10.145	10.812	+25
12.00	11.333	11.562	10.458	11.125	+50
12.25	11.583	11.843	10.770	11.437	+75
12.50	11.833	12.125	11.083	11.750	1
12.75	12.083	12.406	11.395	12.062	+25
13.00	12.333	12.687	11.708	12.375	+50
13.25	12.583	12.968	12.020	12.687	+75
13.50	12.833	13.250	12.333	13.00	2
13.750				13.250	
13.543		13.50		13.043	+37.5
14.00	13.333	13.75	12.933	13.50	+75
25 = 0.25					
50 = 0.50					
"	"				
"	"				
25 = 0.28125					
50 = 0.56250					
25 = 0.3125					
50 = 0.6250					
"	"				
"	"				

Arctic to India.

East line Arctic St.

West line India St.

India St.

East line India St.

Paving Grader Rd

North Side Curb South Side Sta.

l.c. l.c. l.c. l.c.

14.00	13.333	13.750	12.833	13.50	0
14.412	13.745	14.131	13.183	13.85	+25
14.825	14.158	14.512	13.533	14.20	+50
15.237	14.570	14.893	13.883	14.55	+75
15.650	14.983	15.275	14.233	14.90	1
16.062	15.395	15.656	14.583	15.25	+25
16.475	15.804	16.037	14.933	15.60	+50
16.887	16.220	16.418	15.283	15.95	+75
17.30	16.633	16.800	15.633	16.30	2
17.750	16.912				
17.583	17.50			17.250	+137.5
	18.088			17.093	
18.20	17.533	18.20	17.533	18.20	+75
25 - 0.4125	"	25 - 0.38125			
50 - 0.825	"	50 - 0.76250			
		25 - 0.35			
		50 - 0.70			
		25 - 0.35			
		50 - 0.70			

India to Columbia

East Line India St

West Line Columbia St

Columbia St

East line Columbia St

Paving Grades H St.

North Side b.w.G. South Side Sta

b.G.	b.G.		b.G.	b.G.	
18.20	17.533	18.20	17.533	18.20	0
18.65	17.983	18.65	17.983	18.65	+25
19.10	18.433	19.10	18.433	19.10	+50
19.55	18.883	19.55	18.883	19.55	+75
20.00	19.333	20.00	19.333	20.00	1
20.45	19.783	20.45	19.783	20.45	+25
20.90	20.233	20.90	20.233	20.90	+50
21.35	20.683	21.35	20.683	21.35	+75
21.80	21.133	21.80	21.133	21.80	2
22.650		21.935		22.650	
22.483		22.65		22.483	+37.5
23.50	22.833	23.50	22.833	23.50	+75
			21.55		
			21.133		
			19		
25-0.45	"	"	"	"	"
50-0.90	"	"	"	"	"

Columbia to State

East Line Columbia St.

West Line State St.

State Street

East Line State St.

Paving Grades S.E. St
 North Side b.c.g. South Side Sta

b.c.g.	b.c.g.	b.c.g.	b.c.g.	b.c.g.	
23.50	22.833	23.50	22.833	23.50	0
23.875	23.208	23.875	23.208	23.875	+25
24.250	23.583	24.250	23.583	24.250	+50
24.625	23.958	24.520	23.958	24.625	+75
25.00	24.333	25.000	24.333	25.00	1
25.375	24.708	25.375	24.708	25.375	+25
25.750	25.083	25.750	25.083	25.750	+50
26.125	25.458	26.125	25.458	26.125	+75
26.50	25.833	26.50	25.433	26.50	2
27.00				26.75	
26.83		26.875		26.583	+375
27.50	26.833	27.25	26.333	27.00	+75
25-0.375	"	"	"	"	"
50-0.150	"	"	"	"	"

State to Union

East Line State St

West Line Union St

Union St

East Line Union St

Paving Grader H. St

North Side Lev & South Side Sta

h.l.	S.G.	S.G.	h.l.		
27.50	26.833	27.25	26.333	27.00	0
27.812	27.145	27.562	26.645	27.312	+25
28.125	27.458	27.875	26.958	27.625	+50
28.437	27.770	28.187	27.270	27.937	+75
28.750	28.083	28.500	27.583	28.250	1
29.062	28.395	28.812	27.895	28.562	+25
29.375	28.708	29.125	28.208	28.875	+50
29.687	29.020	29.437	28.520	29.187	+75
30.00	29.333	29.750	28.833	29.50	2
30.083		30.00		29.583	+37.3
30.50	29.833	30.25	29.333	30.00	+75

0.3125 - 25
4.6250 - 50

Union to Front

East Line Union St

West Line Front St

Front St

East Line Front St

Cross-walk grades S side of 10 Frank St

Station	Grade	Rod			
	(32.606)				
Frank St	Back	29.333 ^v	3.278 ^v	B.M. + H.O.	Elev
	Center	29.543 ^v	3.023 ^v	32.146	0.46
	West	28.833 ^v	3.773 ^v	32.606	
				5.59	27.010
10 St	South	29.333 ^v	3.273 ^v		
	+ 20	29.791 ^v	2.815 ^v		
	+ 31	30.044 ^v	2.562 ^v		
	Center	30.250			
10 St	South	29.833 ^v	3.773 ^v		
	+ 26	29.291 ^v	3.315 ^v		
	+ 31	29.544 ^v	3.062 ^v		
	Center	29.750			

Excavation grades I indicate State on S side of 10 St

Sta	Grade	Rod	Sta	Grade	Rod
	(24.501)				
St of State	S. Comb 9				
2	21.133	3.368	2	21.800	2.701
+ 50	20.233	4.268	+ 50	20.900	3.601
1	19.333	5.168	1	20.000	4.501
+ 50	18.433	6.068	+ 50	19.100	5.401
E of Column	0	17.533	0	18.226	6.475

Center grades IR State to Columbia

Sta	Grade	Rod	Grade	Rod
		(24.497)		
0	18.075 ^{5.00}	1.416 ✓		
+50	18.925 ^{9.00}	5.316 ✓	East of Colo	19.641
1	19.575 ^{9.00}	4.516 ✓		4.85
+50	20.775 ^{9.00}	3.716 ✓	West of Indin	10.96
2	21.675 ^{9.00}	2.816 ✓	West of State	13.651
				24.491

D St Grades N. Side

Sta	Grade	Rod	Grade	Rod				
	Gutters (23.70)		Centers			B.M.	+	N.I.
2	23.50	0.20	23.50	0.20		18.51	5.19	23.70
State						13.61	10.10	23.71
+37.5	22.65	1.05	22.65	1.05				
0	21.13	2.57	21.80	1.90				
+50	20.23	3.47	20.90	2.80				
1	19.33	4.37	20.00	3.70				
+50	18.43	5.27	19.10	4.60				
2	17.53	6.17	18.20	5.50				
Column								
+37.5	17.75	5.95	17.50	6.20				
0	16.63	7.07	16.80	6.90				
+50	15.81	7.89	16.04	7.66				
1	14.98	8.72	15.27	8.43				
+50	14.16	9.54	14.51	9.19				
2	13.33	10.37	13.75	9.95				
India								
Apr 6.								
WTS	Book							
Wton	Level							
Friedley	Rod							
Hmsley	Stakes							

Transcribed

D 5+ Grades N. Side

Sta	Grade	Rod	Grade	Rod
	Center (17.15) Center			
2	13.33	3.82	13.75	3.40
+37.5	13.75	3.40	13.50	3.65
0	12.83	4.32	13.25	3.90
+50	12.33	4.82	12.69	4.46
1	11.83	5.32	12.12	5.03
+50	11.33	5.82	11.56	5.59
2	10.83	6.32	11.00	6.15

(Active)
 GNS
 Bork
 Loran
 Seal
 Findley
 Rod
 Kinsey
 Stakes
 Apr 13/89

↑
 Transcribed

B.M.	+	H.I.
13.614	3.535	17.149
10.330	6.82	17.150
8.433	8.742	17.175

D St Grades N. Side

Sta	Grade	Rod	Grade	Rod
	Center	(14.07)	Center	
2	10.83	3.24	11.00	3.07
Arctic				
+37.5	11.00	3.07	10.50	3.57
0	9.83	4.24	10.00	4.07
+50	8.96	5.11	9.25	4.82
1	8.08	5.99	8.50	5.57
+50	7.21	6.86	7.75	6.32
2	6.33	7.74	7.00	7.07

Calif.
Apr 16/89
WMS Book
Wm Level
Williams Rod
Husby Stakes

Transcribed

B.M.	+	H.I.
10.33	3.74	14.07
8.433	5.637	14.07

Grades + lines for Crosswalk on D.

Station	Grade	Rod		BM	+	NS	-	EL
N. Side on Front	East	29.83	✓ 4.74	7.25' from N Prop. line	32.15	2.42	34.57	
	Cent.	30.08	✓ 4.49					
	West	29.33	✓ 5.24					
N Side	West	25.83	✓ 6.31	7.25' from N Prop. line	27.01	5.13	32.14	
W. side	Cent.	26.83	✓ 5.31					
	East	26.83	✓ 5.31					
E Side on Front	N	29.83	✓ 5.15	7' from E prop line	32.15	2.83	34.98	
	+20	30.04	✓ 4.94					
	Cent	30.25	✓ 4.73					
W Side on Front	N	29.33	5.65	Produced from E 7' line North of D St.				
	+20	29.54	5.44					
	Cent.	29.75	5.23					
E Side on Union	N	26.83	3.43	E prop line N of D produced	27.01	3.25	30.26	
	+20	27.04	3.22					
	Cent	27.25	3.01					
W side on Union	N	25.83	4.43	6' from W prop line				
	+20	26.17	4.09					
	Cent	26.50	3.76					

Check on next page

18 St Gutter on side N side

BM + H^o Grade Rad Sta

32.146 0.97 30.116

26.883	6.283	0
27.195	5.971	+25
27.454	5.654	+50
27.770	5.346	+75
28.083	5.033	✓
28.395	4.721	+25
28.709	4.404	+50
29.020	4.096	+75
29.333	3.783	✓
-	3.47	

East line Union St

27.01 3.49 30.50

4.01	26.49
4.33	26.17
4.67	25.83
3.67	26.43
3.47	27.03
3.26	27.24

W line Front

W side of Union Cross Walks

E side of Union Crosswalks

May 7 1889

Crosswalks & Sides of roads walk on

12th State N. Side

Station	Grade	Rod	
N side	(29.767)		
N side East	22.833	6.934	
State Center	22.443	7.284	
West	21.133	8.634	
S. side N side	22.833	6.934 ✓	
E Side + 20	23.166	6.601 ✓	
Center	23.50	6.267 ✓	
State N side	21.133	8.634	
N side + 20	21.466	8.301	
Center	21.400	7.967	
12 th State Road	Center		
Centerline			
W of State	6.30	21.76	
Center	6.62	21.44	
East	6.94	21.12	
Crosswalks on			
456	23.50		
412	23.14		

B. M. + H. J. - Elev

27.014 2.758 29.767

use barometer.

14.56 9.50 29.06

Hamlin
Finley
Cotton
Hensley

May 7 1889

Grades N side of SB between State & Union

Sta	Grade	Rod	Sta	Grade	Rod
		(28.66)			
0	22.83	5.83 ✓	+ 25	24.71	3.95 ✓
+ 25	23.21	6.45 ✓	+ 50	25.083	3.54 ✓
+ 50	23.54	5.08 ✓	+ 75	25.454	3.20
+ 75	23.96	4.70 ✓		25.833	2.83
1	24.33	4.33 ✓			

BM + HI - Elev
27.01 1.65 28.66

Cross walk on State & SB S side

Sta	Rob	Elev	Sta	Rob	Elev
N	5.83	22.83	+ 20	5.50	23.11
Center	5.16	23.50			

Cross-walk on State & B W side

N	W	Center
7.53	21.13	+ 20
7.19	21.47	
6.46	21.90	

Cross walk SB & State N side

W	Center
7.53	21.13
6.14	22.44

- East
Hamlin
Finley
Clrton
Hensley

Check of cross walk grades & elevations

May 8 1889

Hamilton
Timley
Orton
Hensley

Grades & Lines for Cross-walks at

Columbia & 18 North Side

Station	Grade	Rod	
NSide of 18 St	17.533		
18 St. W. Side East	17.533	3.191	
Center	17.583	3.191	0.05
West	16.633	4.091	0.95
Columbia St			
North	17.533	3.191	
+ 20	17.466	2.958	0.333
Center	14.20	2.529	0.339
W Side			
North	16.633	4.091	
+ 20	16.716	4.008	0.083
Center	16.40	3.929	0.089
Own walk at 18 St			
Rod	6.38		
C heck elev	17.53		
	6.38		
	7.27		
W Side of Colum			
to Center of 18	7.28	16.65	
	7.19	16.72	
	7.11	16.80	

B.M.	+	H.O.	-	Elev
		7.11	20.724	
B.M.				1.083
#	4.27	23.91		
B.M. C & Columbia.				16.2
				22.29

Rod Elev
Columbia East Side
E Center of 18

Cross-walks Indian & 28th St Sids

Station	Grade	Rods		
S side	North	13.333	16.398 3.065 ✓	From bottom of page
	+16.61	13.542	2.856 ✓	
	Center	13.750	2.648 ✓	
N St side	East	13.333	6.787 ✓	
	Center	13.583	6.537 ✓	
	West	12.433	7.287 ✓	
Crawthorn Hill Col & Arctic				
Sta	North Grade	Rods	Center	Rods
0	6.333	7.195	7.00	6.528 ✓
+50	7.208	6.320	7.750	5.778 ✓
1	8.093	5.445	8.500	5.028 ✓
+30	8.456	4.570	9.250	4.278 ✓
2	9.833	3.695	10.000	3.528 ✓
+375	10.833	2.695	10.50	3.028 ✓
+75	10.833	2.695	11.00	2.528 ✓
0+30	11.333		11.562	4.540 ✓
1	11.833	4.565	12.125	4.273 ✓
+30	12.333	4.065	12.647	3.711 ✓
2	12.833	3.565	13.250	3.148 ✓

13324
11.333
2.195

BM + H. 9 - Elev
20.12 - from preceding page

4.433 5.090 13.528

Wanne Arctic
Arctic
Edine Arctic

4.44 16.398 1.57 11.958
2.78 19.618

Cross-walk grades W side of Inuit Rd

Station	Grade	Rod	
			(16.352) from preceding page
North	12.833	3.366	
+16.61	13.042	3.356	2.09
Center	13.250	3.148	2.09

Gutter grades N side of Ld from Arctic to Inuit

Sta	Grade	Rod	Sta	Grade	Rod
0	10.833	5.167	+25	12.083	3.917
+25	11.083	4.917	+50	12.333	3.667
+50	11.333	4.667	+75	12.583	3.416
+75	11.583	4.417	2	12.833	3.166
1	11.833	4.167			

B.M. + H.O. - Elev

13.61 2.39 16.00

Cross-walk across Arctic N of Ld

Station	Grade	Rod
East	10.833	5.167
Center	10.833	5.167
West	9.833	6.167

2.57 13.15 5.92 10.58
B.M. Cal & H. Sta 4.74 8.91

30.00
 666
 25 337

+	H 9	-	Elev	Inch	Cut	Sta	+	H 9	-	Elev
	33.106									
							0.96	33.106		32.146
	33.11	6.03	27.08	26.333	0.75	0			6.08	27.026
		5.38	27.73	26.96	0.77	+50				
		4.76	28.35	27.58	0.77	1				
		4.16	28.95	28.21	0.74	+50				
		3.65	29.46	28.83	0.63	2				
										+40
		3.14	29.97	29.307	0.63	0				
Center Cuts.										
		5.41	27.70	27.25	0.45	0				
		4.95	28.16	27.88	0.28	+50				
		4.34	28.77	28.50	0.27	1				
		3.93	29.18	29.13	0.05	+50				
		3.57	29.60	29.75	-0.15	2				
										+40
		2.72	30.39	30.25	-0.14					+80
Cross Walk grades Section 28										
Sta			Grade	Prod						
	Center		10.833	3.720			6.12	14.553		8.433

Cuts on E side of H State to Union

+	H ₂ O	-	Elev	Grade	Cut
2.53	29.54		27.01		
		5.97	23.57	22.83	.74
		5.28	24.26	23.58	0.68
		4.62	24.92	24.33	0.59
		3.90	25.64	25.08	0.56
		3.22	26.32	25.83	0.49
				26.54	^{road} 2.46
		5.60	23.94	23.50	0.44
		4.92	24.72	24.25	0.57
		4.00	25.51	25.07	0.57
		3.32	26.22	25.75	0.47
		2.54	26.96	26.50	0.46
				26.475	^{road} 2.665
2.06	25.66	5.94	23.60		
		6.03	19.63		

Sta 0 9m cor Union & 18
 0 Cor'd State St
 +50
 1
 +50
 2 West Union St
 +37.5 Center of Union
 0 Cor'd line State
 +50
 1
 +50
 2 West line Union
 +37.5 Union St
 #

S. side

Center

Grade stakes for excavation S side of RR Union to Front
Gutter Center.

Sta	Grade	Rod	Sta	Grade	Rod	B.M.	+	H.I.	-	Elev
0	26.333	6.363	0	27.25	5.496	32.146	0.55	32.696		
+50	26.954	5.734	+50	27.975	4.921	Union S B			5.68	27.016
1	27.583	5.113	1	28.50	4.196					
+50	28.204	4.488	+50	29.125	3.571					
2	28.833	3.863	2	29.75	2.946					
Center +40 W. S. Front	29.583	3.113	+40	30.00	2.696					
0	29.333	3.363	0	30.25	2.446					

Gutter grades of bed to street W side

Sta	Grade	Rod	B.M.	+	H.I.	-	Elev
0	6.333	7.270	8.433	5.170	13.603		
+25	6.770	6.833					
+50	7.208	6.395					
+75	7.645	5.954					
1	8.083	5.520					
+25	8.520	5.083					
+50	8.958	4.645					
+75	9.395	4.208					
2	9.833	3.770					
+37.5	10.663	2.940					

Cross-walk East & West of Arctic on 18

Station	Grade	Rod	
			(15.764)
West	N	9.833	5.931
	+17.61	9.917	5.847 0.084
	Center	10.000	5.764 0.083
East	N	10.833	4.931
	+17.61	10.917	4.847 0.084
	Center	11.000	4.764 0.083
Excavation Grades S side of 18 State to Union			
Sta	Gutter	Center	
	Grade	Rod	Grade Rod
			(26.756)
2	21.133	✓ 7.623	21.800 ✓ 6.956
	1.850	1.350	75 0.460
+37.5	22.483	✓ 6.273	22.650 ✓ 6.106
	35	0.350	45 0.450
0	22.833	✓ 5.923	23.500 ✓ 5.256
	0.750	0.750	0.750
+50	23.583	✓ 5.173	24.250 ✓ 4.506
	0.750	0.750	0.750
1	24.333	✓ 4.423	25.000 ✓ 3.756
	0.750	0.750	0.750
+50	25.083	✓ 3.673	25.750 ✓ 3.006
	50	50	0.750
2	25.833	✓ 2.923	26.500 ✓ 2.256
	0.750	0.750	0.750
+37.5	26.583	✓ 2.173	26.875 ✓ 1.491
	750	750	

B.M.	+	H 9	-	Elev
13.614	2.15	15.764		
			7.345	8.419

West line of State				
State				
East line of State				
27.014	1.742	28.756		
#	5.24	32.656	1.34	27.316

West line of Union
Union St

Center grades 18 State to Union

Sta	Grade	Rod	Sta	Grade	Rod
0	27.250	5.406	+50	29.125	3.531
+50	27.875	4.741	2	29.750	2.906
1	28.500	4.156			

(32.656)

32.656 from preceding page

B.M. Union S. 10 0.52 32.136

Center grades bal to Arctic on 18

Sta	Grade	Rod	Sta	Grade	Rod
0	7.000	7.553	+50	9.250	5.303
+50	7.750	6.803	2	10.00	4.553
1	8.500	6.053			

B.M. 6.12 14.558 4.433
 # 4.80 16.153 3.12 11.333
 B.M. 2.51 13.623

Center grades 18 north to Union

Sta	Grade	Rod	Sta	Grade	Rod
0	29.333	3.423	+75	27.270	5.486
2 1/2 of 50	29.433	3.923	+50	26.954	5.792
+75	29.520	4.236	+25	26.645	6.111
+50	29.204	4.548	0 E of Union	26.333	6.423
+25	27.895	4.461			
1	27.583	5.173			

(32.756)

0.61 32.756 32.146

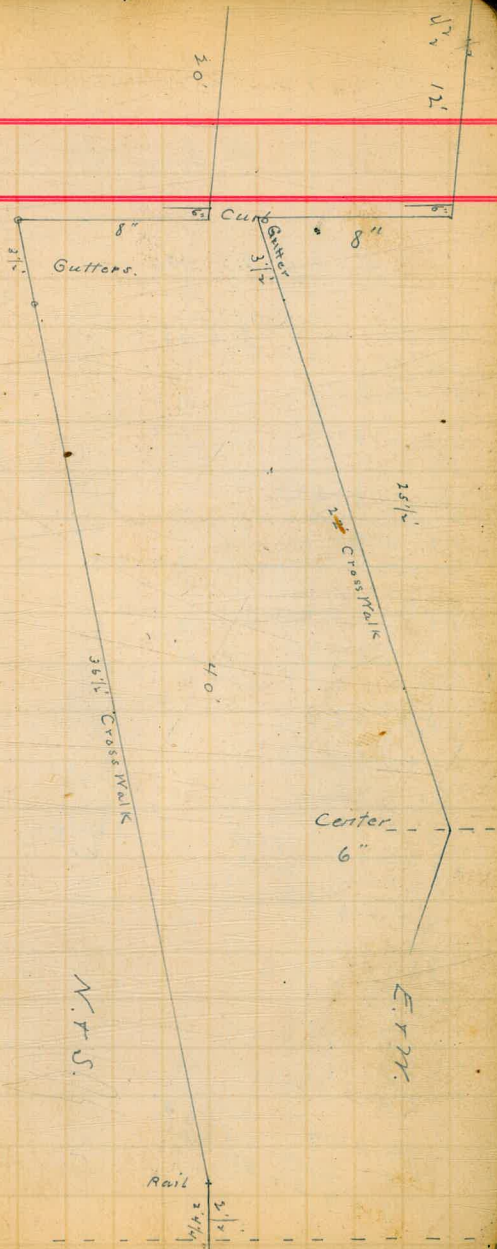
5.74 27.016

St. 756
 29.250
 3.006

Center of E+M Cross Walks 7.25'
 from prop. line
 Center of N+S Cross Walks 6.0'
 from property line
 E+M Cross Walks have 6" Crown

Cross Walks grades at S side D			
SW	S	8.83	6.18
at	+16.5	9.50	5.51
Actual	+3'	10.08	4.93
are			
0	8.833	6.18	
+25	8.572	6.49	
+50	8.208	6.80	
+75	7.845	7.12	
1	7.583	7.43	
+25	7.270	7.74	
+50	6.958	8.05	
+75	6.645	8.37	
2	6.333	8.68	
Calif			

Rod
 658
 843
 1501
 13614
 110
 15014



Sta	H ₀	Obs
5.67	39.095 32.366	33.425
39.095 - 33.17	5.625	59.095 H.O. 25.65
37.125		38.53 0 8 4.80
39.095 - 32.767		41.33 34.94 H.O.
3.328 + 0		2.85
39.095 - 34.1684	4.528 4.916 4.62	41.33 2.95 34.93 4.38 2.40 2.402
4.411	4.472	
39.095 - 35.600	3.495	
3.495	34.095 34.426	
39.095 - 36.194	2.995	
2.911	38.939	
39.095 - 34.642	4.453	
2.453 - 39.095	4.638	
37.10	61	
1.995 + 2		
39.095 + 24		
37.56	4.995 4.536	
1.535 + 25		
39.095 - 38.02	1.075	
1.075 + 50	1.77	

41.33 H.O.	41.33	
36.275	36.14	
4.355 + 75	7.69	
41.33	4.30	
37.434	4.46	
3.90 + 2	3.90	4.82 4.229
41.33	0.65	4.45
37.85	41.635	37.49
3.49 + 25	42.283	
41.33	3.4	42.28
38.35	39.245	5.82
2.98 + 5.0	42.29	37.87
41.33	3.47	
38.81 + 25	39.82	42.29
2.52	42.283	5.16
41.33	3.923	37.11
39.27	38.360	4.23
2.06 - 5.0	42.29	4.84
	4.38	
	38.15	
	42.29	
	3.80	
	38.49	
	42.22	
	3.35	
	38.54	

Curve LB to Aetic's for Paomy

Sta + H-I Grade Rod Elev

Sta	H-I	Grade	Rod Elev
0			11.70
17.43			11.51
34.86			11.19
52.29			10.83
69.72			10.36
87.15			9.94
1+04.58			9.76
1+17.04	2.5		9.83
1+22.01			
1+39.44			
1+56.87			

1+17.04 P.L. 3 line 7.85

grade P.dime

P.C. 62.5' East of East line of Aetic's

P.T. 37.5' S of South line of LB Dr

Nov. 22, 1888

Sidewalk grades on
Blk. C Lots 4x57 647
Middletown add
for Haskins.

4,400 22.91

18.67

25.33
21.33
20.66
-0.33

18.45 4.46

19.35 3.56

20.25 2.66

21.15 1.76

22.05 0.86

25.33
21.33
20.66
-0.33
29.33
28.81
-0.52
28.29

29.08
28.56

10.033
2831

1.00 28
21

1.00

24 1.00 4
84

C st

Columbia st

18.2

18.45

19.35

20.25

21.15

22.05

21.8

Slab st

D st

