OLD TOWN WAGON ROAD

Capps

UNIVERSITY ROAD

MAIN STREET

MASON ST CROSSING R.R. OLD TOWN

F.B. 99

~~369~~ 99

CAPPS ENG

TRANSIT.

WAGON ROAD TO ROSEVILLE

NATIONAL AVE EAST OF 3

FOOT BRIDGE ON IVY BET 4 - 3

LINDA VISTA WAGON ROAD

OLD TOWN DYKE 42

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

Minutes.	Links.	Minutes.	Links.	Minutes.	Links.
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 2/3
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

MICROFILMED 1964
Return to City Engineers Office
City Hall, San Diego, Cal.

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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

99

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

6.00
6
11.00
84
2.6

Book no. 99.

name

date

Levels from Kalmia to Witherbee, Old Snow Wagon Road
July 1893

STAT	B.S.	H.I.	F.S.	EL	GRADE	CUT	FILL	
		INDIA ST						
	B.M.							B.M. NW Cor Kalmia & INDIA Spike in tree
××	8.18	46.16	6.38	39.78				Station ×× = South End Bridge
××			6.32	39.84				" ×× = North " "
0+0			10.52	35.64			4.36	0+0 just off of North end Bridge
1+00			8.50	37.66			9.10	
2+00	10.44	55.76	0.840 Δ	45.32			7.00	
2+64	10.08	65.40	0.440 Δ	55.32				
3+00			2.98	62.42				
3+26	10.04	75.42	0.02 Δ	65.38				
4+00			4.18	71.24				
4+67	10.81	85.76	0.47 Δ	74.95				
5+00			9.55	76.21				
6+00			6.78	78.98				
7+00	8.915	94.10	0.570 Δ	85.19				
8+00			5.08	89.02				
9+00			8.45	85.65				
10+00	11.44	101.84	3.70 Δ	90.40				
11+00			6.30	95.54				
12+00	6.18	107.42	0.600 Δ	101.24				
13+00			4.45	102.97				
14+00			6.45	100.97				
15+00			5.06	102.37				

India Street from Kalmia to Winder

Stat	B.S.	H.I.	F.S.	El.	grade	Cut fill
16+00	1.51	101.00	7.93 A	99.49		
16+50			3.65	97.35		
17+00			8.45	92.55		
17+50			9.30	91.70		
18+00			6.95	94.05		
18+50	9.55	110.24	0.31 A	100.69		
19+00			3.25	106.99		
19+15			2.45	107.79		
19+50			3.20	107.04		
20+00			5.40	104.84		
21+00			7.25	102.99		
22+00			10.20	100.04		
23+00			10.50	109.74		
24+00			9.15	101.09		
25+00	2.46	100.74	11.96 A	98.28 A		
26+00	1.70	92.19	10.25 A	90.49		
26+50	0.77	82.35	10.61 A	81.58		
26+88	7.360	77.95	11.76 A	70.59		
27+00			10.50	67.45		
27+15			11.90	66.05		
27+60			8.50	69.45		

India Street from Kalmia to Winder

Sta.	B. S.	H. I.	F. S.	El	grade	Cut fill
28+00	10.55	88.34	0.16	77.79		
28+60			3.75	84.59		
29+00			0.45	87.89		
30+00			0.90	87.44		
31+00	0.920	85.74	3.62	84.82		
31+85			6.25	79.49		
32+00			9.35	76.39		
32+20			9.70	76.04		
33+00			3.15	82.59		
34+00	7.910	92.25	1.40	84.34		
35+00			6.80	85.45		
36+00			4.30	87.95		
37+00			2.65	89.60		
38+00	3.60	93.35	2.50	89.75		
39+00			3.85	89.50		
89.50			6.95	86.40		
39.85	1.22	82.82	11.75	81.60		
40+00			4.30	78.52		
40+30			12.70	70.12		
40+50			12.70	70.12		
40+80			12.20	70.62		

India Street from Kalmia to Hinder

Stat	B.S	H.I.	F.S.	El	grad	Cut	fill
41+00			7.85	74.97			
41+38	11.680	94.07	0.43	82.39			
42+00			3.36	90.72			
42+50	2.21	96.09	0.190	93.88			
43+00			2.70	93.39			
43+40			3.10	92.99			
× ×			11.57	84.52			
× ×			8.64	87.45			
44+00	0.180	86.40	9.87	86.22			
44+50	0.190	75.43	11.16	75.24			
44+80	4.41	71.11	8.73	66.70			
45+00			10.30	60.81			
45+79	7.010	77.76	0.36	70.75			
46+00			4.55	73.21			
47+00			1.45	76.31			
47+42.8			0.80	76.96			
48+00			7.66	70.21			
48+47	4.19	70.07	11.88	65.88			
49+00			8.30	61.77			
50+00			7.45	62.62			
51+00			2.20	67.87			

"India Street from Kalmia to Winder

Stat	B.S.	H.I.	F.S.	El	grade	Cut fill
52+00	10.18	80.03	Δ 0.22	69.85		
53+00			9.18	70.85		
54+00			4.50	75.53		
54+58	2.93	82.67	Δ 0.29	79.74		
55+00			1.40	81.27		
55+23.6			0.40	82.27		55+23.6 center of WINDER & INDIA
× ×			0.17	82.50		B.M. Spike, in post N.W. Cor WINDER & INDIA

Winder Street from India to 2ND ST

56+00			5.15	77.52		
57+00	0.160	71.20	Δ 11.63	71.04		
58+00			7.60	63.60	62.91	Center Arctic
58+61	0.08	59.28	Δ 12.00	59.20	56.05	
59+00			2.95	56.33	49.19	
60+00	0.360	49.64	T.P. 10.00	49.28		
60+74			5.25	44.03		Center R.R. track
61+00			7.80	41.48	42.85	
61+16.6			8.60	40.68		Center of WINDER & 2ND ST
62+00			9.20	40.08	41.48	
63+00			9.30	39.98	40.11	

2ND Street from California to Witherbee

Stat	B.S.	H.I.	F.S.	El	grade	Cut fill
64+00	3.28	42.44	Δ 10.12	39.16	38.74	
65+00			3.40	39.04	37.37	
65+90			5.75	36.69		
66+00			8.60	33.84	36.00	
66+20			13.30	29.14		
66+32			6.75	35.16		
67+00			8.10	34.34	33.75	
68+00			10.10	32.34		
68+76	3.77	34.29	Δ 11.92	30.52		
69+00			4.65	29.64	29.25	
70+00			7.25	27.04	27.00	
71+00			7.45	26.84	26.85	
72+00			9.05	25.24	26.71	
73+00			8.10	26.19	26.56	
74+00			7.20	27.09	26.42	
75+00			6.20	28.09	26.27	
75+67	1.05	30.44	Δ 4.905	29.39		
76+00			3.80	26.64	26.13	Ravine
76+12			1.80	28.64		
77+00			5.40	25.04	25.98	
78+00			5.90	24.54	25.84	

Dono Street from California to Witherbee

Stat	B.S.	H.I.	F.S.	El	grade	Cut fill
79+00			5.80	24.64	25.69	
80+00	6.10	31.28	5.26	25.18	25.55	
81+00			5.25	26.03	25.40	
82+00			3.90	27.38	25.26	
83+00			4.50	26.78	25.11	
84+00			6.60	24.68	24.56	
85+00			8.45	22.88	22.40	
86+00			10.50	20.78	20.24	
86+74	2.33	21.72	11.89	19.39		
87,00			3.00	18.72	18.08	
88+00			5.10	16.62	15.92	
89+00			7.30	14.42	13.76	
90+00			10.00	11.72	11.60	
91+00	7.19	17.89	11.02	10.70	11.32	
92+00			7.20	10.69	11.04	
93+00			7.40	10.49	10.76	
94+00			7.45	10.44	10.48	
95+00			7.40	10.49	10.20	
95+17.8			9.55	8.34		
X X			8.01	9.88		

Center Witherbee Ry 2nd st

XX B.M. center of WITHERBEE 2nd

Cross Section Old Road

Stat		West Rod	Center Rod	East Rod		CUT	FILL
	25	10	x	10	25		
0+0	10 / 25	11.50	10.10	10.1	14 / 25		4.36
1+00	8.8 / 25	8.60	8.10	8.1	7.4 / 25		8.38
2+00	5.2 / 25	7.40	8.70	9.5	10.7 / 25		9.10
2+70	8.1 / 25	8.70	9.60	11.5	11.4 / 25	0.00	6.92
2+85	5.6 / 25	4.70	5.90	6.40	7.6 / 25	0.00	7.70
3+00	3.8 / 25	2.60	2.50	2.80	3.7 / 25		
3+26	10.5 / 25	9.30	9.20	8.90	9.2 / 25	3.82	
4+00	7.1 / 25	4.80	3.40	2.60	11. / 25		
4+67	11.1 / 25	7.10	7.00	7.00	5.7 / 12 4.0 / 25	6.44	
5+00	9.1 / 25	6.00	5.80	6.00	4.6 / 12 3.3 / 25		
6+00	7.1 / 25	5.20	2.90	2.70	0.0 / 25	5.21	
7+00	11.7 / 25	9.20	7.70	7.60	6.4 / 12 4.8 / 25	2.30	
8+00	7.0 / 25	4.90	3.90	3.50	1.2 / 12 0.0 / 20	2.80	
8.20	7.9 / 25 6.4 / 13	4.90	4.30	3.90	1.6 / 14 0.0 / 23	1.00	
9+00	12.3 / 25 8.8 / 14	7.70	7.20	6.50	5.6 / 12 3.2 / 25	0.00 0.00	
10+00	4.8 / 25	2.60	2.60	2.30	0.8 / 12	4.50	
10+70	17.2 / 25	14.70	13.30	12.80	11.3 / 15 9.9 / 25	1.90	
11+00	16.6 / 25	13.60	11.70	11.50	9.3 / 16 8.1 / 25	0.00 0.00	
12+00	13.6 / 25	9.10	6.10	6.20	4.0 / 13 1.9 / 25	1.10	
13+00	9.0 / 25	6.20	4.30	3.90	2.0 / 12 0.3 / 25	4.6	
13+64.6	8.6 / 25	5.70	4.60	4.20	3.0 / 10 2.9 / 25	4.2	
						1.8	

Cross Section Notes — Old Town Road.

		West	Center Road	East		cut	fill
	25	‹---10----	----X----	----10---›	25		
14+00	10.1 / 25	7.3	6.4	5.7	3. 29 / 10 25	1.0	
15+00	9.2 / 25	6.8	5.0	4.9	3.0 0.7 / 12 25	2.6	
15+55	9.7 / 25 — 6.2 / 6	8.0	6.2	5.9	4.3 2.2 / 12 25	—	
16+00	10.2 / 25	8.7	7.9	7.4	5.5 3.5 / 12 25	0.0	
16+50	11.6 / 25	10.4	10.0	9.8	7.0 4.9 / 12 25		3.12
17+00	7.0 / 25	3.5	3.4	2.8	4.1 2.9 / 14 25		6.82
17+50	13.6 / 26	4.4	4.1	4.0	11.0 10.2 / 22 25		7.57
18+00	10.6 / 25 — 10.1 / 14	11.9	11.7	11.3	8.4 / 25		5.12
18+45	3.4 / 25 — 1.9 / 11	6.4	5.6	5.3	0.0 1.0 / 12 25		0.00
18+50	—	—	—	—	—	8.00	
19+00	7.7 / 25	5.1	4.6	4.0	1.9 0.2 / 11 25	8.00	
19+15	—	—	—	—	—	—	
19+50	9.8 / 25 — 7.4 / 14	5.4	4.9	4.00	2.7 0.9 / 11 20	8.13	
20+00	11.7 / 25 — 9.8 / 14	7.5	6.9	6.10	4.5 1.6 / 11 25	6.07	
21+00	12.5 / 25 — 10.6 / 14	9.2	8.7	8.90	6.5 4.3 / 11 25	4.43	
22+00	16.5 / 25 — 18.6 / 18	12.00	11.80	11.00	9.2 5.8 / 11 25	1.64	
23+00	16.5 / 25 — 14.5 / 15	12.4	12.1	11.5	10. 8.0 / 12 25	1.74	
24+00	14.6 / 25	12.2	10.7	9.3	6.6 / 25	3.10	
25+00	9.1 / 25	6.8	5.2	3.0	4.00 / 25	5.30	
26+00	9.4 / 25	8.0	6.2	4.8	2.6 / 25	2.6	
26+05	14 / 25	11.7	10.4	8.6	7.0 / 25	0.00	0.00

		West-	Center Rod	East		CUT	FILL
	25	10		10	25		
26+50	—	—	—	—	—		
26+88	11.9 / 25	10.3	9.8	9.1	7.7 / 25		12.9
27+00	13.3 / 25	13.00	13.00	12.6	11.9 / 25		15.6
27+15	14.9 / 25	14.80	14.50	13.7	12.5 / 25		16.2
27+60	13.3 / 25	12.30	11.00	9.4	7.4 / 25		10.55
28+00	15.4 / 25	12.2	10.8	8.9	6.8 / 25		2.5
28+25	11.4 / 25	8.00	6.10	4.60	2.1 / 25	0.00	0.00
28+60	7.4 / 25	5.3	4.10	2.20	1.1 / 16	3.90	
29+00	13.4 / 25	10.6	7.4	5.4	3.6 / 25	6.80	
30+00	13.0 / 25	9.6	7.8	5.7	1.7 / 25	5.70	
31+00	15.3 / 25	12.2	10.5	8.0	4.2 / 25	2.30	
31+30	15.4				10.6	0.00	0.00
31+88							3.60
32+00	25	13.8	13.2	12.7	25		6.80
32+20	16.5 / 25	14.3	13.6	13.00	10.8 / 25		7.30
33+00	13.7 / 25	11.0	8.5	6.60	3.2 / 25		1.40
34+00	13.1 / 25	9.3	6.9	4.40	1.5 / 25		0.40
35+00	13.1 / 25	10.0	8.2	6.20	3.2 / 25		0.65
36+00	12.0 / 25	7.9	5.6	2.90	1.4 / 16	3.16	
37+00	15.9 / 25	10.9	8.2	5.70	2.3 / 25	4.8	
38+00	14.5 / 25	11.1	8.1	5.4	1.3 / 25	4.95	
39+00	15.6 / 25	10.8	8.4	5.6	1.6 / 25	4.7	
39+50	11.6 / 25	7.8	5.7	3.2	0.2 / 21		

		West	Center Road	East		center line CUT	FILL
	25	10		10	25		
					4.8		
39+85	15.5 18.2	12.10	10.2	8.00	25		6.2
40+00	18.2 17.5	15.60	13.5	11.4	9.7		6.28
40+30	11.5 11.6	9.70	8.9	7.4	5.8		14.68
40+50	11.6 11.0	9.70	9.0	7.9	6.7		14.68
40+80	11.0 10.6	9.60	8.5	7.5	6.0		14.18
41+00	7.0 13.8	5.4	4.2	3.0	1.5		9.83
41+38	13.8 10.6	10.70	9.4	8.0	5.5		2.4
41+50	10.6 10.3	7.10	5.00	3.30	0.5		0.00
42+00	14.3 11.8	10.40	8.10	5.60	2.4	5.92	
42+50	11.3 11.2	7.3	4.9	3.2	0.2	9.08	
43+00	11.2 10.5	7.5	5.3	3.5	0.0	8.40	
43+40	10.8 16.5	7.4	5.2	3.6	0.5	8.59	
44+00	16.5	14.3	12.2	10.2	8.7	4.26	
44+40	7.4	5.1	3.8	2.4	1.2	0.00	
44+50	11.9	10.5	9.8	9.2	8.2		4.70
44+80	4.8	4.2	3.5	2.2	2.5		12.08
45+00	11.4	10.0	9.5	9.10	8.1		17.11
45+79	11.2	10.8	9.2	8.00	6.2		3.95
46+00	10.2	8.0	6.7	5.55	3.1	0.67	
47+00	10.1	7.5	5.9	4.10	1.4	6.47	
47+28	12.1	7.90	4.3	2.10	0.0	8.8	

		West	Center Road	East	
	25	10		10	25
47+63.1	16.2 / 25	11.7	9.3	6.8	3.3 / 21
48+00	16.8	11.7	8.5	5.2	1.3
48+47	—	—	—	—	—
48+55	17.0	14.00	10.5	7.20	2.2
49+00	14.7	11.90	10.2	8.00	4.3
50+00	10.6	9.90	9.3	8.40	6.2
50+50	8.6	7.70	6.1	6.3	5.8
51+00	6.5	5.0	4.1	3.0	1.5
52+00	11.9	10.7	10.0	9.1	8.1
53+00	10.1	9.6	8.9	8.4	7.9
54+00	5.3	4.6	4.3	3.8	3.0
54+20	—	—	—	—	—
54+58	7.3	6.3	5.6	5.10	4.0
55+00	5.3	4.5	4.0	3.3	2.6
55+236	4.1	3.7	3.1	3.3	1.2
55+234	3.4	3.3	3.1	2.4	1.6
56+00	8.4	8.1	7.8	7.7	7.2
57+00	15.7	14.9	14.2	14.1	13.8
58+00	1.0	0.4	0.3	0.0	0.0
58+61	—	—	—	—	—
59.00	8.3	7.6	7.6	7.3	7.1

center line
CUT FILL

4.52

0.00

3.2 The center plug on India
2.4 and Chalmers st is set
0.00

2.2 from Station No 51+00 to
Station 58+00 is on
India & Winder and abandoned
to take line, down Chalmers
to Arctic out Arctic to Winder
Cross section and Level
Notes will be found in the
back of this Book in "Red"

0.80

0.30

		West	Center Rod	East		Cumulative CUT	Cumulative FILL
	25	10		10	25		
60+00	2.1	2.4	1.9	1.7	1.6	0.30	
60+74	—	—	—	—	—		
61+00	9.1	9.2	9.3	9.2	8.9		1.4
61+16.6	10.5	10.5	10.1	10.0	10.1		1.89
61+16.6	11.8	10.9	10.1	9.6	8.9		1,89
	20	10		10	20		
62+00	4.0	3.3	2.8	2.4	1.9		1.40
63+00	4.1	3.3	2.9	2.5	2.0		0,13
64+00	4.3	4.1	3.9	3.5	3.2	0.42	
65+00	4.6	4.2	3.8	3.7	3.3	1.67	
66+00	8.5	8.9	8.9	9.5	11.6		2,16
66+20	14.1	13.7	13.8	10.5	9.6		6,21
66+32	8.0	7.4	7.0	6.4	5.7	0,44	
67+00	9.1	8.9	8.5	8.3	7.7	0,59	
68+00	14.9	14.0	10.5	10.0	9,5	0,84	
69+00	4.9	4.5	3.8	3.0	2.2	0,39	
70+00	7.9	6.9	6.4	6.0	5.7	0.04	
71+00	7.6	7.2	6.5	5.7	5.3	0.00	
71+60	9.9	8.4	6.6	4.2	2.7	—	
72+00	10.1	9.3	8.1	6.3	4.5		1,47
73+00	8.4	7.5	7.1	6.6	5.7		0.37
73+50	7.8	7.0	6.6	6.0	5.5		

		West	Center Rod.	East	
	20	10		10	20
74+00	7.5	6.8	6.3	5.7	5.2
75+00	6.2	5.5	5.0	4.4	3.8
75+67	4.4	4.1	3.6	3.2	4.6
76+00	43/20 4.0/11	6.0	6.3	5.8	4.1
76+12	—	—	—	—	—
76+70	7.0	9.1	9.8	7.2	6.6
77+00	11.3	8.6	8.0	7.9	6.8
78+00	9.7	9.2	8.6	8.4	8.3
79+00	9.5	8.9	8.4	7.8	7.7
80+00	9.2	8.5	7.8	7.7	6.7
80+50	7.7	7.0	6.5	6.2	5.1
81+00	7.6	6.9	6.2	6.0	4.1
82+00	5.9	5.4	4.9	3.4	2.6
83+00	5.0	5.0	3.8	3.1	2.4
84+00	5.2	5.3	4.4	3.3	2.6
85+00	7.0	6.5	6.4	5.3	4.6
86+00	9.4	8.9	8.4	8.2	7.7
87+00	11.8	11.0	10.5	9.7	9.0
88+00	3.9	3.2	2.5	1.8	1.2
89+00	6.0	5.5	4.7	4.3	3.5
90+00	8.1	7.5	6.9	6.4	5.9

Centerlines

CUT	FILL
0.67	
1.82	
3.22	
0.51	
—	
—	
	0.94
	1.30

		West	Center Rod	East	
	20	10		10	20
91+00	10.1	9.8	9.1	8.1	7.9
92+00	11.4	10.9	10.7	10.0	9.5
93+00	11.4	10.9	10.6	10.2	10.2
94+00	6.5	6.4	6.2	5.9	5.4
95+00	7.3	6.4	6.2	5.9	5.5
96+00	7.1	6.6	6.2	6.0	5.8
96+77.8	10.5	9.2	8.3	7.4	6.7

Wagon Road to Old Town

Starting from the intersection of Winder and India Street July 6th 1894 Capps & Party

Station	B. S	I. S	F. S.	El	
0+0					
50					
1+00					
50					
2+00					
50					
3+00					
50					
4+00					
50					
+69.4					Center Pierce & Arctic
+80					
5+00					culvert, = Bottom Ravine
50					
6+00					
50					
7+00					
50					
8+00					
50					

Old Town Road

Stat	B.S.	I.S.	F.S.	El.
9+00				
9+38.3				
9+50				
10+00				
50				
11+00				
50				
12+00				
50				
13+00				
13+17.7				
13+93.3				
14+98				
15+48				
15+93				
16+48				
16+78				
17+28				
17+78				
18+28				
18+78				

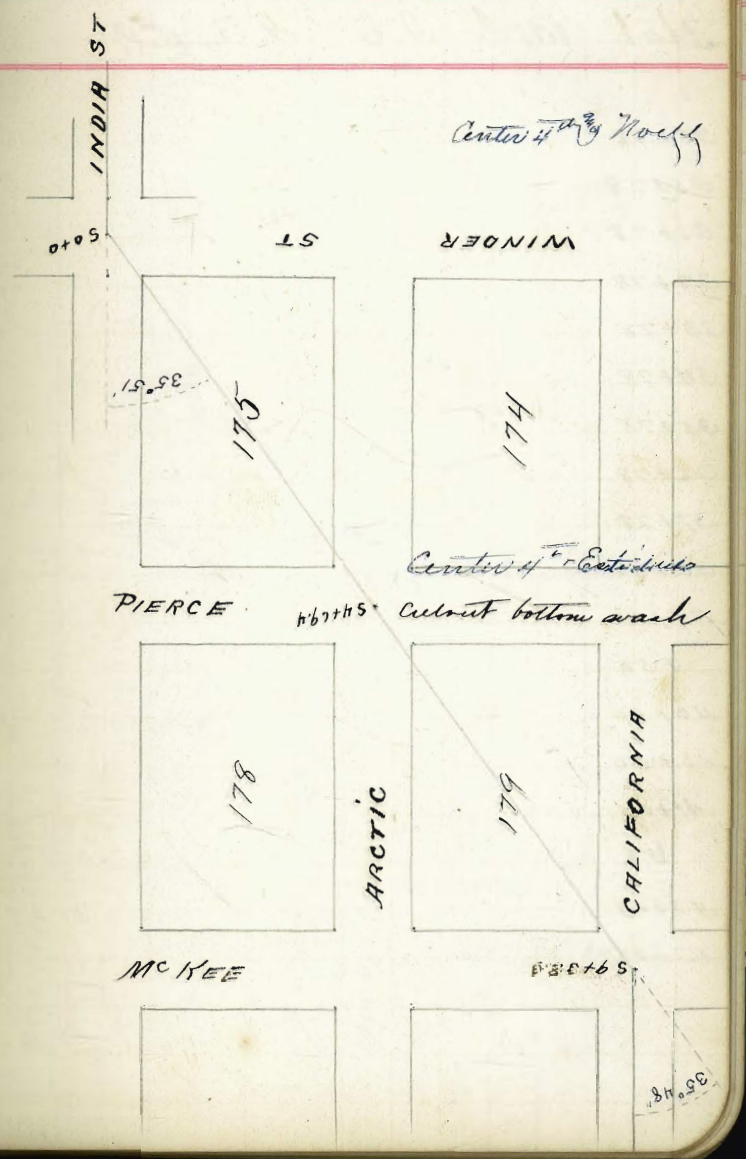
Center of McKee - Cal

Center Cal - McKee

Center Cal - 4th St

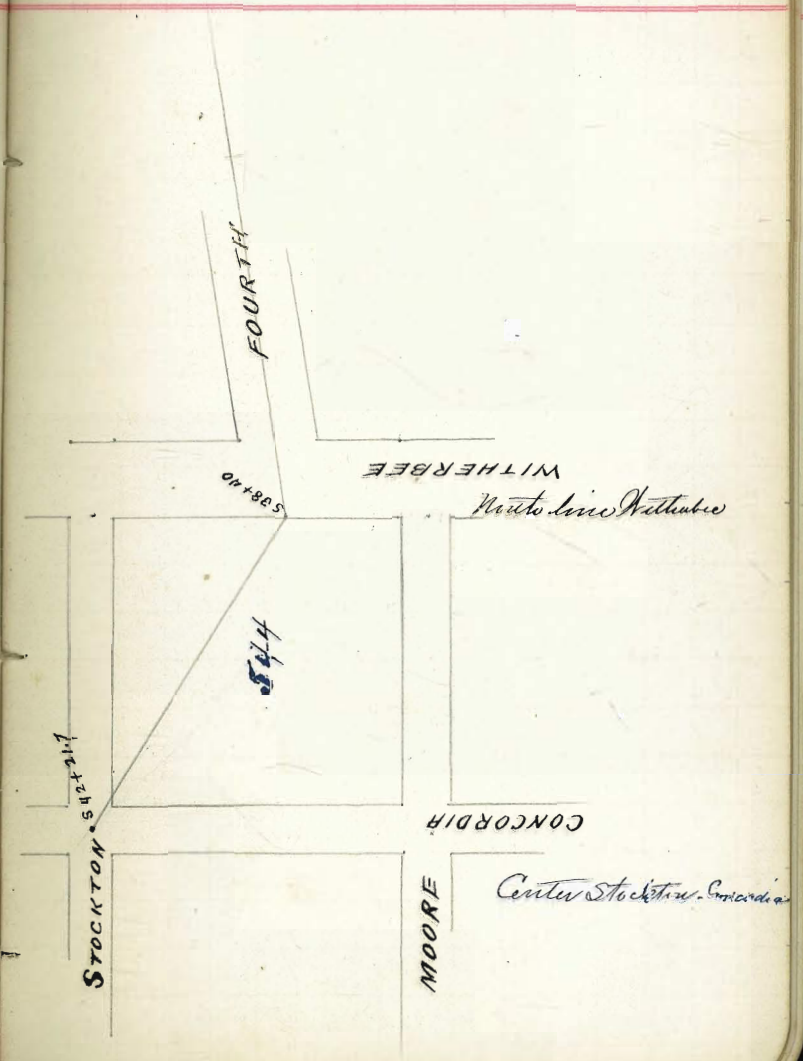
Old Town Road

Stat	B.S.	I.S.	F.S.	Sf
19+05.5				
19+28				
19+78				
20+28				
20+78				
21+28				
21+78				
22+28				
22+78				
22+87				
23+28				
23+78				
24+28				
24+78				
25+78				
26+78				
27+78				
28+78				
29+28				
29+78				
30+28				



Old Town Road

Stat	B.S.	I.S	F.S.	El.
30+78				
31+28				
31+78				
32+78				
33+78				
34+78				
35+78				
36+78				
37+78				
38+40				
39+00				
+50				
40+00				
40+50				
41+00				
50				
42+00				
42+21.7				



"Linda Vista Wagon Road

Stat	Angle	Bearing	Dist	Southing	Easting	Westing
0+00						Stat 0+0 = South East Cor Lot 1203
26+40		South	2640'	2640'		
36+40		West	1000'			1000'
48+00		South	1160'	1160'		
60+46	41°21'L	S41°21'E	1246.	935.4'	823.2	Head of 6% grade
61+71	15°47'L	S67°8'E	125'	67.8'	105.0	
63+44	34°45'R	S22°23'E	173'	160.0'	66.9	
66+00	24°37'R	S2°14'W	256'	255.8'		10.0'
67+24	47°35'R	S49°49'W	124'	79.1'		94.7'
68+99	38°5'R	S82°54'W	175'	21'6'		173.6'
73+69	109°52'L	S26°58'E	470'	418.9'	213.1'	
75+69	35°15'L	S62°13'E	200'	93.2'	176.9'	
77+89	40°00'R	S22°13'E	220'	203.6'	83.2'	
80+14	23°33'R	S1°20'W	225'	224.9'		5.2'
83+27	13°56'R	S15°16'W	313'	301.9'		82.4'
87+42	36°14'L	S20°58'E	415'	387.5'	148.5'	
89+94	3°14'L	S24°12'E	252'	229.8'	103.3'	
91+22	33°17'L	S7°55'E	128'	126.8'	17.8'	
94+47	47°38'R	S41°16'E	325'	244.3'	214.4'	
95+28	36°18'R	S6°22'W	81	80.5'		9.00'
99+36	31°32'L	S42°40'W	408'	296.3'		276.5'

OVER

OVER

"Linda Vista Wagon Road.

Stat	Angle	Bearing	Dist	Southing	Easting	Westing
100+69	37°35R	S 11°8W	133'	130.50'		26.70
102+69	20°15R	S 28°40W	200'	175.50'		95.9
104+40	27°3L	S 48°55W	171'	112.40		128.9
110+34	56°25L	S 21°52W	594'	551.3'		221.2'

End of 6% grade

This survey begins at the South East Corner of Pueblo Lot 1203 thence south along pueblo line to the South East Cor of Pueblo Lot No Thence West along South line of said Pueblo Lot 1000 ft, Thence South 1160 ft to Station 48+00, Thence South 41°21'E 1246 ft to Station 60+46 the head of 6% grade, in running this grade begin at this Station and run down grade.

Capps

Survey Made Oct 1894
Edwin M Capps
City Engineer

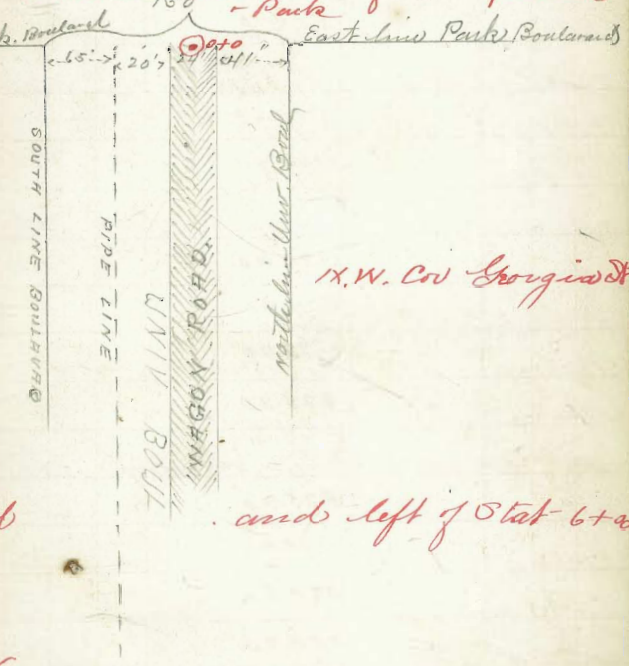
Williams Shaw and Rumsey

Notes, (Levels) on University Boulavard Jan 1894

Black figures represent Elevation of ground

Capps - party

Stat	B.S	I.S.	F.S.	EL		
		(341.82) H1				
	1.22			340.60 = B.M.		SE Cor Park & University, plug at Block Cor
0+0		340.02 1.80				Stat 0+0 is in the termination of University Boulavard & Park
1+0		333.52 8.30				
T.P.	1.39	H1 (331.30)	11.91	329.91		
1+87		317.80 13.50			Bottom	Ravine
2+00		318.30 13.00				
3+00		319.10 12.20				
T.P.	1.13	H1 (321.55)	10.88	320.42	Blk	Cor plg
4+00		314.30 7.20				
5+00		312.50 9.00				
5+75		312.50 9.00				
6+00		311.00 10.50				
T.P.	0.55	H1 (311.27)	10.83	BM 310.72	plug	marked
7+00		303.60 7.70				
T.P.	1.86	H1 (302.09)	11.04	300.23		
8+00		291.90 10.20			Bottom	Ravine
9+00		299.00 3.10				
T.P.	11.40	H1 (311.97)	1.52	300.57		
10+00		300.60 11.40				
11+00		304.60 7.40				
12+00		308.60 3.40				



N.W. Cor Georgia St

and left of Stat 6+00

University Bulaba & Continued

Black figures represent Ground Elevations

Stat	B.S	H.I.	F.S.	EL		
		311.90				
13+00		0.10				
T.P.	11.37	(323.20)	0.14	311.83		
14+00		320.10				
		3.10				
T.P. B.M.	11.02	(333.46)	0.76	322.44	B.M.	spike & witness stake marked left of Stat 14+
15+00		323.60				
		9.90				
16+00		329.90				
		6.60				
T.P. B.M.	6.68	(338.20)	1.64	331.82	B.M.	spike & plug marked left of Stat 16+00
17+00		334.30				
		3.90				
17+60		334.90				
		3.30				
18+00		332.20				
		6.00				
19+00		328.20				
		10.00				
T.P. B.M.	2.59	(328.59)	11.90	326.30	B.M.	spike & Plug marked, left of Stat 19+00
20+00		325.30				
		3.60				
21+00		321.90				
		7.00				
21+50		320.60				
		8.30				Bottom Ravine
22+00		325.20				
		3.70				top of dam
23+00		324.90				
		4.00				
24+00		328.50				
		0.40				
T.P. B.M.	11.00	(339.06)	0.83	328.06	B.M.	spike & plug Marked, left Station 24+00
25+00		331.10				
		8.00				
26+00		335.10				
		4.00				

University Boulevard — Wagon Road Continued

Black figures represent Ground Elevations

Stat	B.S	H.I. / I.S.	F.S.	EL		
T.P.	11.69	(349.38)	1.37	337.69		
		343.00				
27+00		6.40				
T.P.	11.52	(360.20)	0.65	348.73		
		354.10				
28+00		6.20				
T.P.	10.98	(370.32)	0.91	359.34		
28+50		359.70				
		10.60				
		364.40				
29+00		5.90				
		369.10				
29+50		1.20				
		369.70				
30+00		0.60				
T.P.	8.18	(377.85)	0.65	369.67		
		373.80				
31+00		4.00				
		374.30				
32+00		3.50				
T.P.	5.40	(380.24)	3.01	374.84	B.M.	Spike, plug marked left of Stat 32+0
		375.60				
33+00		4.60				
		375.50				
34+00		4.70				
		375.20				
35+00		5.00				
		375.70				
36+00		4.50				
		375.40				
37+00		4.80				
		375.40				
38+00		4.80				
		375.10				
39+00		5.10				
		375.76				
40+00		4.50				
		373.70				
41+00		6.50				

University Boula

Stat	B.S.	H.I.	F.S.	El.		
		370.80				
42+00		9.40				
		369.90				
43+00		10.30				
T.P.	3.75	(373.37)	10.62	369.62	B.M.	Spike in Stake Marked, left of Stat 43+00
		368.90				
44+00		4.60				
		368.30				
45+00		5.10				
		367.60				
46+00		5.90				
		366.20				
47+00		7.20				
		366.10				
48+00		7.30				
		364.20				
49+00		9.20				
		368.90				
50+00		9.50				
		363.90				
51+00		9.50				
		364.40				
52+00		9.00				
T.P.	9.51	(373.24)	9.64	363.73	B.M.	S.W. Cor Ohio - Univ Boul, plg at Blk Cor
		364.60				
53+00		8.60				
		365.00				
54+00		8.20				
		365.20				
55+00		8.00				
		366.00				
56+00		7.20				
		368.10				
57+00		5.10				
		368.70				
58+00		4.50				
		371.70				
59+00		1.50				
T.P.	9.26	(381.59)	0.91	372.33		

University Boulevard

Stat	B.S.	I.S.	F.S.	EL	
		HI (381.59)			
T.P.	9.26		0.91	372.68	
60+00		374.10 7.50			
		377.00			
61+00		4.10			
		377.90			
62+00		3.70			
		377.60			
63+00		4.00			
			3.78	377.81	BM

Spike driven in top plank at SW Cor of Meter house

Main Street from East line Siva to National line

Stakes set 22 feet North of center of Main Street Feb 7 1894

Capps

Stat	B.S.	I.S. center Street	F.S.	EL	
B.M. △	10.76	(9.36)		−1.40	B.M. −1.40 El on Culvert at Belt R.R. - Main St
0+0		1.50 / 7.90			Station 0+0 is East line Siva St
50		1.80 / 7.60			
1+00		1.70 / 7.70			
50		1.00 / 8.40			
2+00		1.40 / 8.00			
50		1.30 / 8.10			
3+00		1.10 / 8.30			
50		0.90 / 8.50			
4+00		1.00 / 8.40			
50		2.50 / 6.90			
5+00		5.30 / 4.10			
50		7.10 / 2.30			
6+00		8.50 / 0.90			West line Thor St
X X	11.37	(20.27)	0.46	8.90	
0+0		9.60 / 10.70			East " " "
50		10.70 / 9.60			
1+00		12.90 / 7.40			
50		14.60 / 5.70			
2+00		15.00 / 5.30			
50		15.30 / 5.00			

Main Sheet

Stat	BS.	HI. CENTER ST	F.S.	EL
		15.60		
3+00		4.70		
50		15.80		
		4.50		
4+00		15.00		
		5.80		
50		14.10		
		6.20		
5+00		13.60		
		6.70		
50		13.30		
		7.00		
6+00		13.60		
		6.70		
0+0		13.10		
		7.20		
50		13.10		
		7.20		
1+00		13.20		
		7.10		
50		13.00		
		7.30		
2+00		13.20		
		7.10		
50		13.30		
		7.00		
3+00		14.30		
		6.00		
X X	5.88	(20.13)	6.02	14.25
50		13.10		
		7.00		
4+00		13.40		
		6.70		
50		14.20		
		5.96		
5+00		14.10		
		6.00		
50		14.90		
		5.20		
6+00		16.30		
		3.80		

West line Union St
East " " "

West line Vista Street

Main St

Stat	B.S.	F.S. CENTER ST	H.I.	El.	
		17.40			
0+0		2.70			
50		17.70			
		2.40			
1+00		18.50			
		1.60			
50		18.50			
		1.60			
2+00		17.40			
		2.70			
50		15.60			
		4.50			
3+00		13.90			
		6.20			
50		12.80			
		7.30			
4+00		12.70			
		7.40			
50		12.70			
		7.40			
5+00		12.40			
		7.70			
50		12.10			
		8.00			
6+00		12.20			
		7.90			
0+0		12.40			
		7.70			
50		12.60			
		7.50			
1+00		11.90			
		8.20			
50		8.00			
		12.10			
X X	1.94	(10.35)	11.72	8.41	
2+00		5.80			
		4.60			
50		5.00			
		5.40			
3+00		3.30			
		7.10			

West line Woodward St
East " " "

Main Street

Stat	B.S.	I.S. CENTER ST	F.S.	El.
		2.30		
50		8.10		
		2.00		
4+00		8.40		
		2.20		
50		8.20		
		2.40		
5+00		8.00		
		3.00		
50		7.40		
		3.60		
6+00		6.80		
		4.10		
0+0		6.30		
		4.70		
50		5.70		
		4.80		
1+00		5.60		
XX	8.98	(13.18)	6.13	4.20
		3.60		
50		9.60		
		3.50		
2+00		9.70		
		3.20		
50		10.00		
		3.70		
3+00		9.50		
		4.80		
50		8.40		
		7.60		
4+00		5.60		
		11.90		
+60		1.30		
			0.30	12.88 B.M

West line Yamal St
East " " "

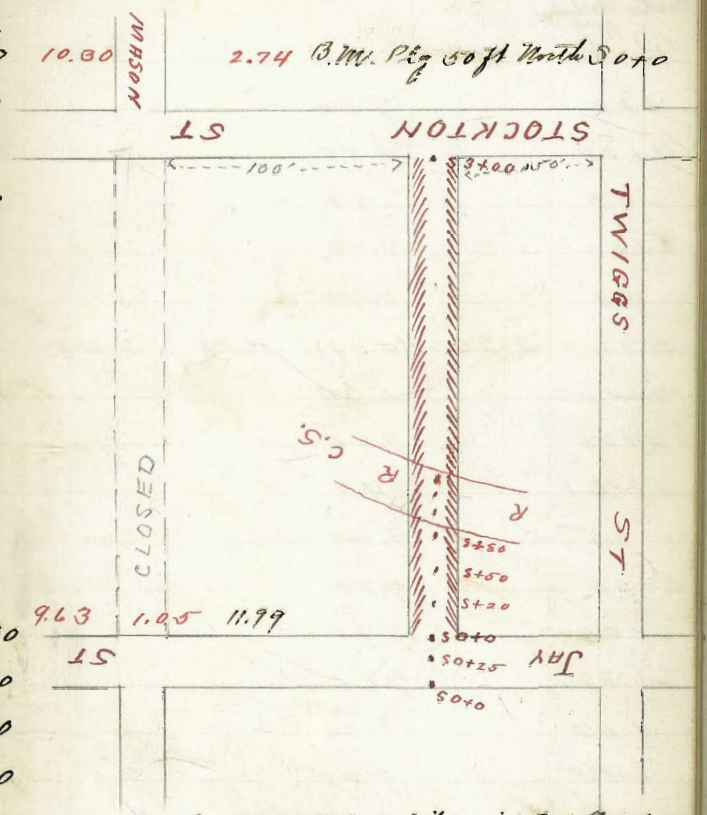
Stat 4+60 National Ranch line
B.M top of peg driven on
National Ranch line 22 feet North
of Center Main street

Mason St Crossing R.R. Old Town

Surveyed Feb 8th 1894 Capps.

Sta	SOUTH Rod	El	CENTER Rod	El	NORTH Rod
	(13.04)				
0+0	10.80	2.20	10.70	2.30	10.60
+25	10.40	2.60	10.50	2.50	10.30
0+0	11.80	1.20	11.30	1.70	11.40
+20	12.00	1.00	11.80	1.20	11.70
+50	10.30	2.70	10.30	2.70	10.40
+80	12.00	1.00	10.70	2.30	10.80
+90	12.50	0.50	13.00	0.00	10.70
1+05	R.R. 8.20	4.80	R.R. 8.30	4.70	R.R. 8.60
+20	R.R. 8.50	4.50	R.R. 8.10	4.90	R.R. 8.20
+30	11.00	2.00	10.00	3.00	10.00
+60	7.50	5.50	7.20	5.80	6.70
+80	2.60	10.40	2.00	11.00	1.10
+90	8.20	13.40	(21.62) 7.20	14.40	7.30
2+10	4.80	16.80	4.60	17.00	4.20
2+60	1.70	19.90	1.60	20.00	1.20
3+00	1.00	20.60	0.70	20.90	0.40

El	B.S.	F.S.	EL
2.40	10.80		
2.70			
1.60			
1.80			
3.60			
2.20			
2.30			
4.40			
4.80			
3.00			
6.80			
11.90			
14.30	9.63	1.05	11.99
17.40			
20.40			
21.20			



Center Levels over line surveyed by Shaw. See Book 40 Pages 18 to 21

Road to Roseville of Miscellaneous Surveys

Capps party 50 Feb 24th 1894.

Stat	B.S	I.S.	F.S.	El.	
Center Wilhelmina 2nd.					
B.M.	3.46	(13.71)		10.25	
0+0		3.81 9.90			
1+00		10.31 3.40			
50		12.21 1.50			
2+00		11.01 2.70			
50		5.91 7.80			
XX	2.36	(4.99)	11.08	2.63	
3+00		-0.20 5.20			
4+00		-2.80 7.80			
4+16.7		-3.10 8.10			
85		-4.10 9.10			
5+00		-2.70 7.70			
6+00		-3.90 8.90			
+32		-2.60 7.60			
+42		0.00 5.00			R.R
+55		-4.20 9.20			
+70		-4.80 9.80			
7+00		-1.90 6.90			
8+00		-2.40 7.40			
9+00		-2.60 7.60			
10+00		-2.60 7.60			

Roseville Wagon Road

Station	B.S.	I.S.	F.S.	El.	
		-2.00			
11+00		7.00			
		-2.50			
12+00		7.50			
		-2.70			
13+00		7.70			
		-2.20			
14+00		7.20			
XX	8.22	(6.39)	6.82	-1.83	B.M. Staked 25 ft left Station 14+00
		-2.40			
15+00		8.80			
75		-2.40			
		8.80			
		-4.60			
16+00		11.00			
		-2.60			
50		9.00			
		-3.30			
75		9.70			
		-5.00			
17+00		11.40			
		-2.20			
25		8.60			
		-3.20			
18+00		9.60			
		-4.80			
70		10.70			
		-3.60			
19+00		10.00			
		-2.40			
70		8.80			
		0.00			
20+00		6.40			
		1.00			
50		5.40			
		1.80			
21+00		4.60			
		2.00			
22+00		4.40			
		1.80			
23+00		4.60			

Roseville Wagon Road

Capps, Shaw and Williams

Stat.	B.S.	I.S.	F.S.	El.	
		1.60			
24+00		4.80			
		1.50			
25+00		4.90			
		1.80			
26+00		4.60			
		1.90			
27+00		4.50			
××	4.20	(5.81)	5.28	1.11	B.M. Spike 25' left of Station 27+00
		1.80			
28+00		4.00			
		0.80			
29+00		4.50			
		0.70			
30+00		4.60			
		0.80			
31+00		5.00			
		0.60			
32+00		4.70			
		0.50			
33+00		4.80			
		0.00			
34+00		5.40			
		−0.40			
35+00		5.70			
		−1.10			
36+00		6.40			
		−1.70			
37+00		7.00			
		−2.30			
38+00		7.60			
		−3.00			
39+00		8.30			
		−3.40			
40+00		8.70			
		−2.50			
41+00		7.80			
		−2.50			
42+00		7.80			
××	8.46	(5.81)	7.96	−2.65	B.M. Spike 25' ft left of Station 42+00

Roseville Wagon Road

Feb 24th 1894

Station	B.S.	I.S.	F.S.	El	
43+00		-1.00 6.80			
44+00		-0.60 6.40			
45+00		-0.70 6.50			
46+00		-1.30 7.10			
47+00		-2.30 8.10			
48+00		-1.00 7.10			
49+00		-0.90 6.70			
50+00		-0.20 6.00			
51+00		-0.40 6.20			
52+00		+0.50 5.30			
53+00		-1.20 7.00			
54+00		-1.30 7.10			
55+00		-0.50 6.30			
XX	4.68	(4.64)	5.85	-0.04	B.M. Spike 25 ft left Station 55+00
56+00		0.64 4.00			
57+00		0.34 4.30			
58+00		-2.00 6.60			
59+00		-2.40 7.00			
60+00		-0.50 5.10			
61+00		-1.40 6.00			
62+00		-2.20 6.80			

Roseville Road 1894

Stat	B.S	I.S.	F.S.	El.	
		−1.70			
68+00		6.30			
		−1.60			
+22		6.20			
			6.23	−1.59	B.M. Spike 25 ft. left Station 68+22

National Ave East

of 32nd Street Cross Reclaimed
20 feet on Each side of the Center Line
March 1894 - Party

Station	South 20'	10 ft	Center	10 ft	North 20'
32nd St.			(66.21)		
0+0	6.00	5.80	60.71 5.60	5.20	5.10
60	6.90	6.80	59.71 6.60	6.30	6.10
1+00	7.60	7.30	59.11 7.10	7.00	7.10
60	7.50	7.60	58.71 7.50	7.70	8.10
2+00	8.80	8.90	57.01 9.20	9.40	10.00
+20	9.90	10.20	55.71 10.60 (56.40)	10.80	11.20
+40	2.30	2.60	53.40 3.00	3.30	3.60
+60	7.90	7.70	48.70 7.70 (46.48)	8.20	9.40
+80	4.30	4.00	39.48 4.00	4.60	5.60
3+00	10.40	12.50	32.88 12.10 (34.41)	12.10	12.00
+13	5.20	4.30	30.91 3.50	5.20	7.20
+20	6.60	6.10	26.81 8.10 (22.87)	9.70	10.70
+60	2.60	4.30	18.17 4.70	5.00	5.00
4+00	11.90	11.90	10.97 11.90 (11.82)	11.80	11.30
+60	3.90	3.60	7.92 3.40	3.30	3.10
+75	5.30	5.10	6.42 4.90	4.60	4.60
5+00	9.20	8.80	3.02 8.30	8.20	8.00
33rd St.	11.60	11.60	−0.08 11.40	11.00	10.70
6+00	10.60	10.40	0.92 10.40	10.60	10.60
30	10.30	10.00	1.42 9.90	9.80	9.70
0+0	10.00	10.00	1.42 9.90	10.20	9.70

National Ave

Station	South 20	10'	Center	10'	North 20'
			1.82		
+50	9.80	9.60	9.50	9.40	9.30
			2.22		
1+00	9.30	9.40	9.10	9.30	9.30
			2.42		
50	9.50	9.20	8.90	8.70	8.90
			-0.18		
2+00	11.40	11.40	11.50	11.40	11.20
			0.12		
+50	10.90	11.10	11.20	11.00	10.60
			3.02		
+50	8.50	8.40	8.30	8.50	11.20
			3.02		
3+00	9.60	8.90	8.30	8.40	8.30
			2.82		
50	8.70	8.50	8.50	8.50	8.20
			(7.05)		
4+00	4.70	4.50	4.60	4.70	4.70
			1.90		
50	5.30	5.10	5.10	5.00	4.90
			1.80		
5+00	5.20	5.30	5.20	5.20	5.10
			0.80		
50	6.50	6.40	6.20	6.20	6.10
			1.60		
95	5.50	5.50	5.40	5.20	5.20
			0.00		
6+00	7.10	6.90	7.00	6.90	6.80
			-0.10		
20	7.30	7.50	7.10	7.40	6.90
			4.50		
35	R.R. 2.60	R.R. 2.60	R.R. 2.60	RR 2.50	RR 2.50
			2.00		
45	4.60	5.80	5.00	5.80	5.40
			-0.10		
55	7.20	7.20	7.10	7.00	6.80
			1.70		
0+05	5.60	5.50	5.30	5.50	5.50
			(15.13)		
+40	10.40	10.80	3.80 11.80	12.20	12.50
			12.10		
+60	1.40	2.40	3.50	5.70	8.00

34th Street

National Ave

Capps, Williams and Shaw
Mch 1894

Station	South 20'	10'	Center	10'	North
			(25.86)		
			19.70		
+80	3.10	5.80	6.20	6.80	7.90
			(36.86)		
			27.30		
1+00	8.90	9.30	9.60	10.20	11.10
			31.60		
50	5.80	5.70	5.80	5.00	5.00
			34.00		
2+00	3.50	3.20	2.90	2.70	2.30
			36.10		
50	1.60	1.10	0.80	0.50	0.70
			(47.31)		
			37.10		
3+00	10.40	10.20	10.20	10.40	10.30
			39.50		
50	9.40	8.40	7.80	7.70	7.80
			39.80		
4+00	7.60	7.20	7.50	7.50	7.60
			41.20		
50	7.30	6.80	6.10	5.50	5.50
			41.50		
5+00	6.80	6.30	5.80	5.80	5.80
			42.20		
50	5.00	5.20	5.10	5.00	4.70
			44.50		
6+00	4.00	3.40	2.80	3.00	2.80
			44.60		
35th St 30	3.90	3.40	2.70	2.50	2,20
			46.00		
0+0	2.70	2.00	1.30	1.20	1,20
			(57.43)		
			46.50		
50	11.70	11.30	10.90	10.80	10.50
			46.90		
1+00	10.00	10.50	10.50	10.30	10.10
			49.70		
50	8.70	8.20	7.70	7.30	7.30
			51.40		
2+00	6.90	6.50	6.00	5.60	5.50
			51.90		
50	6.00	5.80	5.50	5.30	5.30
			51.90		
3+00	6.30	6.00	5.50	4.80	4.30
			53.60		
50	3.90	3.80	3.80	3.50	3.30

National Ave

Mch 1894

Station	South 20'	10'	Center	10	North 20
4+00	2.20	2.20	54.90 2.50	2.60	2.50
50	2.30	1.80	56.10' 1.30 (57.33)	1.00	0.50
5+00	2.40	2.10	55.70 1.60	1.10	1.20
50	6.70	6.70	50.60 6.70	6.50	6.00
6+00	12.50	12.40	45.00 12.30 (46.30)	12.50	13.40
36th st 30	1.40	1.90	43.70 2.60	3.20	3.40
0+00	6.70	6.60	39.80 6.50	6.50	6.50
50	14.00	13.70	33.30 13.00	12.50	12.50
1+00	13.70	13.50	32.30 14.00	12.50	11.60
50	9.30	9.40	36.50 9.80	10.20	10.30
2+00	4.80	3.40	43.60 2.70	2.60	3.00
30	6.50	5.40	41.90 4.40	4.20	3.70
50	10.50	9.30	38.20 8.10 (45.38)	7.60	6.60
3+00	14.00	13.70	32.80 12.60	12.30	11.70
+10	13.70	13.70	32.40 13.00	12.50	12.10
+50	6.50	7.50	36.30 9.10 (54.92)	10.30	11.00
4+00	9.10	8.60	46.00 8.90	10.50	12.80
50	9.40	8.30	47.50 7.40	6.90	7.50
5+00	8.60	8.60	46.70 8.20	7.40	6.80
50	4.40	4.00	50.60 4.30	3.80	3.80
6+00	0.50	0.60	53.70 1.20	1.10	0.50

National Ave — East of 32nd Street

Station	South 20	10'	Center	10'	North
			(60.19)		
6+50	5.20	4.10	57.50 2.70	1.90	1.30
0+0	6.50	4.20	57.30 2.90	2.20	1.70
50	10.00	8.70	52.80 7.40	6.40	5.70
1+00	10.30	10.10	50.50 9.70	9.40	8.50
50	6.60	6.60	52.90 7.30	7.00	6.70
2+00	1.20	2.10	57.20 3.00	3.70	4.20
50	6.50	6.70	(70.47) 62.80 7.70	8.70	10.20
3+00	0.60	2.70	65.50 4.70	5.90	6.70
50	8.60	9.00	(81.21) 70.50 10.70	11.70	12.10
4+00	5.30	6.00	74.70 6.50	6.40	6.00
50	5.00	4.70	76.50 4.70	4.70	4.60
5+00	6.40	6.30	75.10 6.10	5.80	5.30
50	3.80	4.50	76.50 4.70	4.00	2.80
6+00	2.40	1.60	79.90 1.30	2.00	2.40
50	1.00	0.80	80.60 0.60	0.70	0.80
0+0	8.00	7.80	(89.16) 81.60 7.60	7.80	7.70
50	6.40	6.50	88.10 6.10	6.50	4.80
1+00	4.60	3.90	85.20 4.00	4.10	3.70
50	4.20	4.10	85.70 3.50	3.20	3.40
2+00	6.00	5.60	84.00 5.20	4.50	4.00
50	6.10	5.90	83.50 5.70	5.10	4.60

National Ave

East of 32nd Street

Station	South 20'	10'	Center	10'	North 20'
			82.90		
3+00	7.20	6.70	6.30	6.70	6.00
50	7.80	7.60	81.90 7.30	7.10	6.50
			85.70		
4+00	4.20	4.00	3.50	3.40	3.80
50	1.50	1.20	87.90 1.30	1.10	1.40
			87.50		
5+00	1.80	1.60	1.70	1.40	1.30
50	3.40	3.10	86.60 2.60	2.20	1.50
			86.70		
6+00	3.50	3.00	2.50 (88.64)	2.30	2.40
50	2.80	2.70	86.30 2.30	1.90	2.00
			84.40		
7+00	3.20	4.20	4.20	4.20	4.50
50	7.00	7.10	81.60 7.00	6.80	6.60
			79.40		
8+00	8.80	8.90	9.20	9.00	8.80
50	10.70	10.20	78.00 10.60	10.70	9.80
			78.60		
9+00	10.70	10.30	10.00	10.40	10.30
50	13.00	12.60	76.40 12.20 (77.43)	12.00	11.80
10+00	2.50	1.50	75.30 1.10	1.30	1.20
50	2.50	2.60	74.40 3.00	2.80	2.50
			72.60		
11+00	5.60	5.60	4.80	4.30	4.50
50	8.20	8.30	69.40 8.00	8.00	7.60
			66.40		
12+00	11.00	11.00	11.00	10.50	9.90
			67.50		
+88.5	12.40 Short 10	11.20	9.90	8.50 East	7.50 East
+88.5	9.60	9.60	67.50 9.90	10.00	10.10

Southern 40' street to N. st

40th Street South to W Street Thence East on W to City line

Station	West 20	10'	Center	10'	East
			(66.12)		
13+50	4.70	5.40	60.40 5.70	5.90	6.80
14+00	5.20	6.80	58.20 7.90	8.70	9.50
50	7.00	8.00	57.10 9.00	9.50	9.70
15+00	7.50	8.30	56.80 9.30	10.10	11.20
50	10.80	11.30	54.20 11.90	12.60	13.50
			(55.24)		
16+00	1.60	2.40	52.40 2.80	3.40	3.70
50	3.50	4.40	50.20 5.00	5.20	5.40
16+69	4.40	5.40	49.30 5.90	6.30	6.40
	West 20'	10'	Center	10	South
16+69	4.90	5.40	49.30 5.90	6.00	6.40
17+00	6.00	6.20	48.40 6.80	7.20	7.70
50	8.60	9.20	45.90 9.30	9.60	10.00
18+00	10.40	10.70	44.10 11.10	11.60	12.00
			(44.60)		
50	0.70	1.30	42.90 1.70	2.30	2.40
19+00	2.00	2.20	42.00 2.60	3.00	3.60
50	3.40	3.60	41.10 3.50	4.30	4.50
20+00	9.70	7.20	38.60 6.00	6.10	6.10
50	12.50	12.90	30.10 14.50	13.40	13.60
21+00	8.40	9.90	33.20 11.40	12.50	14.00
+30	10.70	7.70	35.40 9.20	11.30	12.80
+50	7.80	8.30	34.60 10.00	11.60	13.40

Center of W and 40th streets

Station	North 20'	10	Center	10'	South
			(33.50)		
			31.50		
+70	−1.00	0.40	1.70	3.50	5.00
			27.70		
+80	2.80	3.40	5.80	6.60	6.70
			27.10		
22+00	5.60	6.10	6.40	6.20	6.00
			28.50		
50	5.00	5.00	5.00	5.00	5.00
			27.00		
23+00	5.60	6.00	6.50	7.00	7.10
			25.90		
10	6.00	6.50	7.60	7.10	6.50
			28.60		
23+50	6.00	5.30	4.90	4.70	4.70
			29.50		
24+00	4.20	4.20	4.00	4.10	4.30
			29.60		
50	3.80	3.70	3.90	3.90	3.90
			30.00		
25+00	6.00	4.30	3.50	3.60	3.80
			30.00		
50	4.10	3.80	3.50	3.50	3.50
			30.00		
80	5.20	3.70	3.50	3.80	3.60
			27.00		
26+00	7.00	6.50	6.50	6.60	6.00
			26.20		
+10	7.00	7.20	7.80	7.80	7.40
			28.20		
+30	4.70	5.20	5.30	5.60	6.40
			27.90		
+50	5.00	6.50	5.60	5.60	5.50
			27.90		
+80	5.50	5.40	5.60	5.80	5.80

pueblo line

B. M. 31.37 tack in S W post of Wind Mill in Truckey's field

Levels over Center line of Ivy sheet Bet 3rd & 4th preliminary to Locating foot Bridge across Canon Mch 16th 1894 Capps. Bents 12 feet apart

Stat	B.S	I.S	F.S.	El.		Length Plumb Post
B.M	1.00	(207.00)		206.00		
45' →		195.10 11.90				
Δ 45'	0.70	(195.15)	11.92	195.08		
65=Bent 1		189.45 5.70				0.55
" 2		187.15 8.00				2.85
" 3		184.95 10.20				5.05
Δ	0.42	(183.88)	11.69	183.46		
" 4		181.40 2.50				8.60
" 5		176.90 7.00				13.10
" 6		173.40 10.50				16.60
Δ	0.63	(172.51)	12.00	171.88		
" 7		168.40 4.10				21.60
" 8		163.60 8.90				26.40
Δ	6.69	(167.49)	11.71	160.80		~~[illegible]~~
" 9		158.70 8.80				31.30
" 10		157.00 10.50				33.00
" 11		155.80 11.70				34.20
" 12		157.70 9.80				32.30
" 13		161.40 6.10				28.60
" 14		165.30 2.20				24.70

					Length Point
△	10.62	(178.12)	0.00	167.49	
		169.60			20.40
" 15		8.20			
		174.70			
" 16		6.40			15.30
△	12.02	(190.20)	0.11	178.00	
		180.60			
" 17		9.60			9.40
		188.10			
" 18		2.10			1.90
△	11.45	(201.47)	0.00	190.20	
		198.50			
" 19		8.00			
△	8.88	(208.62)	1.33	200.14	
B.M.		(207.04)	1.48		

B.M 207.04 on step of Mrs Kellogg house

Bents 12 feet center to center.

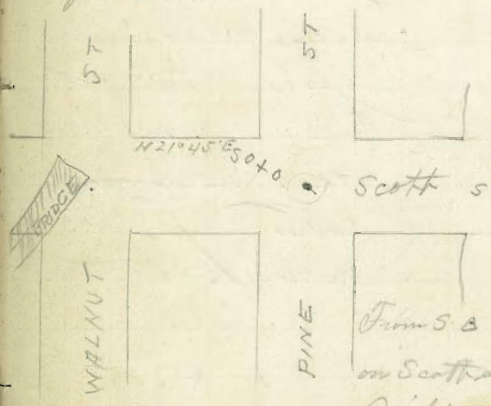
Capps Shaw. Williams

Notes of Country North of Old Town Bridge

		M.B.	Book 2.	Dist	to Station	Dist
From						
S.0+0		S. 22° W	0,00	274.00	1.00	2.74
		S 23°45'E		288.00	3.00	2.88
	L	S 50°E		360.00	3.00	3,60
	L	S 71°15'E		350.00	4.00	3.50
	L	N 83°30'E		375.00	5.00	3.75
	L	N 57°E		410.00	6.00	4,10
	L	N 40°15'E		435.00	7.00	4,35
	L	N 35°E		435.00	8.00 check	4.35
S △	L	S 14°45'E		197.00	8.00	1.97
	L	S 61°E		185.00	9.00	1.85
	L	S 75°E		175.00	10.00	1.75
	L	N 83°E		303.00	11.00	3.03
	L	N 76°30'E		500.00	12.00	5.00
	L	N 61°30'E		505.00	13.00	5,05
	L	N 45°30'E		500.00	14.00	5,00
	L	N 28°E		585.00	15.00	5,85
	L	N 8°15'E		500.00	16.00	5.00
	L	N 53°30'W	Right 104°34'	410.00	△ check	4.10
S △ ▷	L	N 58°30'E		470.00	16.00	4.70
	L	N 70°E		280.00	17.00	2.80
	L	N 38°E		190.00	18.00	1.90

Station 0+0. is at center of Scott & Pine Base Line Scott Street

Station △ is intersection East Boundary of Old Town & Center line Scott Street moved Northward from 0+0 to S △ (Station 10 Lowest point



From S △ B.S. on Bridge on Scott St three angles Right without averaging Except to S △ ▷ = 104°34'

	M.B.	R or L.	Dist	to Station	Stadia	
From ✓	N29°30'E		350.00	19.00	3.50	Station 19 Jones Gate
✓	N7°W		248.00	20.00	2.48	" 20 Inside Jones Orchard
✓	N21°45'W		335.00	21.00	3.35	" 21 Mouth of Draw in Jones Orchard
✓	N42°45'W		400.00	22.00	4.00	" 22 Inside Jones field
✓	N45°W		217.00	23.00	2.17	
✓	N69°30'W		460.00	24.00	4.60	
✓	N77°W		720.00	25.00	7.20	
✓	N67°45'W		680.00	26.00	6.80	Station 26 Cor to Pueblo Lot No 300
✓	N78°15'W		940.00	27.00	9.40	Road Crossing, old Channel S 27.00
From S 27.0 ✓	N76°45'W		245.00	28.00	2.45	
✓	N62°30'W		400.00	29.00	4.00	Station 29.00 on point Butte,
✓	N39°W		630.00	30.00	6.30	" 30.00 point where wagon Road ascends
	N7°15'W		420.00	31.00	4.20	From S 27.00 Old Channel Bears S 85°W
	S31°30E	line for Bridge	210.00	32.00	2.10	
	S31°30'E	" "	170.00	33.00	1.70	
	S31°30'E	" "	210.00	34.00	2.10	
	S31.30E	" "	1030.00	35.00	10.30	Station 35 on End Bridge

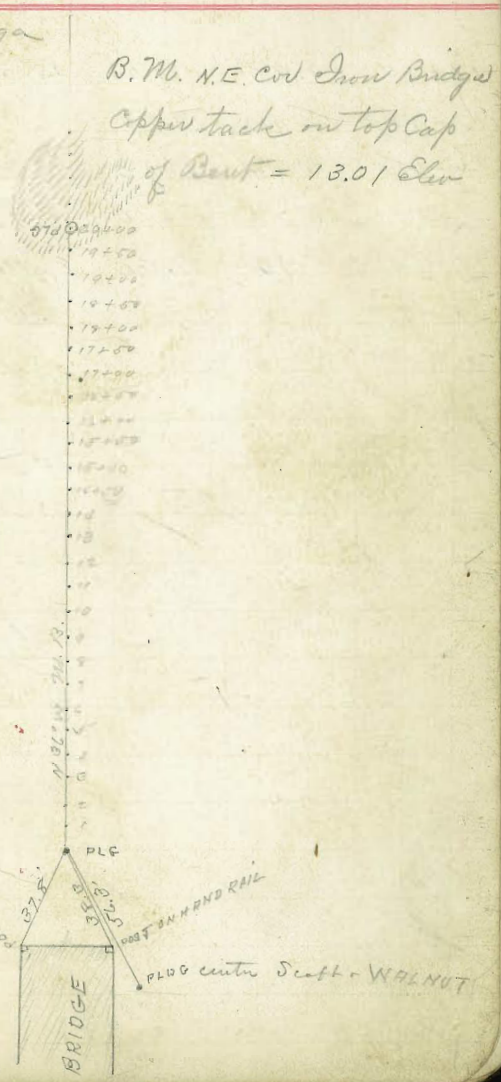
4th Line No 1 from End Bridge to high point Nov 1893.
Levels & X sections
Capper Party

Station	20 ft left Rod	10' left Rod	Center Rod	10' right Rod	20 ft Right Rod
			(15.29)		
Δ. Δ			13.80 14.50		
0+0	—	3.10	3.70	2.70	—
			7.50		
1+00	7.10	7.50	7.80	7.60	7.60
			7.90		
2+00	7.90	7.70	7.40	7.00	7.10
			8.00		
3+00	7.10	8.00	7.30	8.00	7.90
			6.80		
4+00	9.45	8.00	8.50	7.30	8.40
			6.80		
5+00	8.30	9.00	8.50	8.40	8.60
			7.30		
6+00	7.70	8.40	8.00	8.20	8.10
			6.46		
7+00	8.70	9.00	8.90	8.90	9.10
			8.30		
8+00	7.30	8.30	7.00	7.90	7.40
			6.40		
9+00	7.20	7.60	8.90	8.90	7.50
			6.90		
10+00	8.30	8.40	8.40	7.90	8.30
			8.40		
11+00	8.20	7.40	6.90	7.40	7.90
			(14.02)		
			7.70		
12+00	6.80	6.50	6.30	6.00	5.50
			5.70		
13+00	9.60	7.90	8.10	7.80	7.40
			8.00		
14+00	11.40	8.70	6.00	5.50	7.80
50	11.90	10.70	4.50	8.00	8.10
			3.80		
15+00	11.80	11.40	10.20	8.40	7.70
			2.00		
50	10.40	11.40	12.00	10.10	9.80
			2.90		
16+00	8.90	10.00	11.10	10.30	11.40
			3.80		
17+00	9.80	10.60	10.20	10.10	10.00

B S F.S. EL

Δ Δ floor Bridge
2.28 on B.M. 13.01

B.M. N.E. Cor Iron Bridge
Copper tack on top Cap
of Bent = 13.01 Elev



Continuation No 1

Station	20 left Rod	10' Left Rod	Center Rod	10 Right Rod	20' Right Rod
			1.00		
17+40	10.90	11.90	13.00	12.40	10.80
			2.60		
17+50	12.40	12.80	11.40	10.30	10.20
			3.20		
18+00	10.40	10.60	10.80	11.30	10.90
			4.20		
18+50	10.30	10.10	9.80	9.60	9.80
			5.60		
19+50	5.90	7.00	8.40	9.50	9.70
			14.00		
19+90			0.00	3.30	6.60

Bottom Ranno
Station 19+40 is 33 feet
West from Station 28 on
Stadia Survey

Level No 2 to J. P. Jones

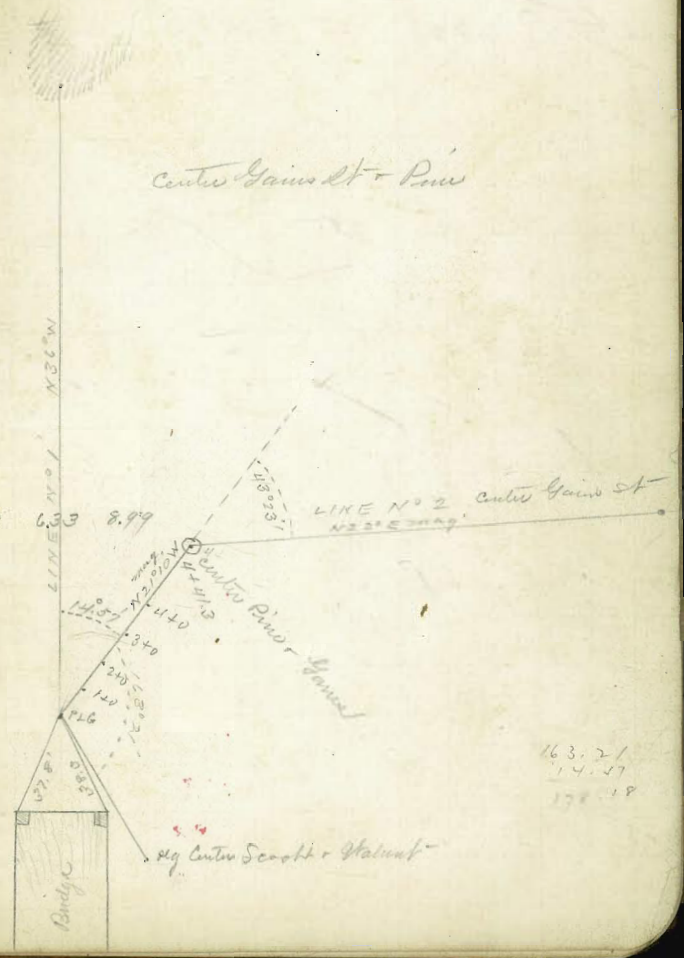
Return to City Engineers Office
City Hall, San Diego, Cal.

Station	20 left Rod	10 Left Rod	Center Rod	10 Right Rod	20 ft Rod
			(15.32)		
			12.22		
0+0			8.10		
	7.52		7.52		
1+0	7.80	—	7.80	—	7.60
	7.62		8.02		
2+0	7.70	—	7.80	—	7.40
	8.12	—	7.82		
3+0	7.20	—	7.50		7.50
	9.02	—	8.72		
4+0	6.30	—	6.60		7.10
	7.22	—	8.02		
4+41.3	8.10		7.80		7.20
	7.12		7.82		
5+00	8.20	—	8.00	—	7.70
	7.92	—	7.82	—	
6+00	7.40		7.50		7.90
	7.12		7.02		
7+00	8.20	—	8.30	—	8.00
	8.12		8.12		
8+00	7.20	—	7.20	—	7.50
	8.52		8.52		
9+00	6.80	—	6.80	—	6.50
	8.92		8.92		
10+00	6.40	—	6.40	—	6.40
	8.62		8.42		
11+00	6.70	—	6.90	—	6.70
			(14.82)		
			8.92		
12+00	5.00	—	5.40	—	5.60
			8.62		
13+00	7.70	—	7.70	—	7.90
	7.80	—	8.92	—	
13+50			7.40		7.00
			1.32		
13+60	11.50	—	13.00	—	11.10
			2.12		
14+00	11.90	—	12.20	—	14.00
			1.82		
14+15	12.50	—	12.50	—	14.00
			15.52		
14+80	8.80	—	8.80	—	8.80

Levels Capps Nov 1890

B.S. F.S. EL

2.31 on B.M. 13.01



45

	20ft left	10 left	Center	10 Right	20ft	offset
			6.52	—	7.80	
			7.80			
14+50	6.70	—	7.82	—	6.50	60
			6.50			
15+00	6.40	—	10.62	—	4.80	40
15+50	1.90	—	8.70			50
						40
						0
						0
						0
						0
						0
						0

Elevation of Stadia Stations on Pages 40 & 41.

Station	Rod	Rod on Bottom River opposite Station	H. I.		
	13.12				
19.00	1.20		(14.32)		same H. I. as on page 44.
	2.12				
14.00	12.20				
	3.72				
17.00	10.60				
	11.22				
16.00	3.10				
	6.22				
15.00	8.10				
	9.62				
14.00	4.70				
	7.02				
13.00	7.30				
	~~top bank~~	Bottom River			
	8.92	5.42			
12.00	5.40	8.90			
	9.02	4.72			
11.00	5.30	9.60			
	6.32	5.02			
10.00	8.00	9.30			
	9.52	5.12			
9.00	4.80	9.20			
	9.02	3.32			
8.60	5.30	11.00			
	9.02	3.32			
7.00	5.30	11.00			
	8.22	3.32			
6.00	6.10	11.00			
	8.62	2.82			
5.00	5.70	11.50			
	8.92	3.42			
4.00	5.40	10.90			
	9.02	3.72			
3.00	5.30	10.60			
	7.72				
0+0 △	6.60				Center Scott and Pine = S 0+0 △

Stadia Dist from S 0+0 of Line No 1 and No 2 as per pages 42-44
to get levels down River bed from Iron Bridge

From Station	M.B.	Dist	To Station	El.	Rod	B.S.	F.S.	EL	H.I
				(H.T 14.83)					
0+0	S 3° W	270	1.00	3.43	11.40	1.82		13.01	(14.83)
	S 32°30' W	3.80	2.00	3.83	11.00				
	S 47° W	560	3.00	2.83	12.00				
	S 55° W	745	4.00	2.83	12.00				
	S 64°30' W	970	5.00	2.83	12.00				
	S 70° W	1140	6.00	2.83	12.00				
	S 76° W	1070	7.00	6.43	8.40				
	S 81° W	900	8.00	7.63	7.20				
	S 87°30' W	510	9.00	7.93	6.90				
	S 55° E	325	10.00	3.33	11.50				

Station 7 out on bank to the North of River
8 " " " " "

Station 10 above bridge in Bed river

STATION	LEFT 20'	LEFT 10'	CENTER (69.95)	RIGHT 10'	RIGHT 20'	+	HI	—	ELE.
									CHALMERS + INDIA ST.
51+43.5	1.0	0.9	0.9	0.6	0.0	2.37	69.95		67.58 B.M.
	68.95	69.05	69.05	69.35	69.95				
52	5.9	5.8	5.4 (60.49)	5.2	5.1				
	64.05	64.15	64.55	64.75	64.85	2.48	60.49	11.94	78.01
53	4.2	4.0	3.3	3.1	2.8				
	56.3	56.5	57.2	57.4	57.7				
54	9.7	9.3	8.8	8.7	8.3				
	50.8	51.2	51.7	51.8	52.2				
54+18.1	11.8	10.3	9.9	9.4	9.1				
	49.7	50.2	50.6	51.1	51.4				
54+18.1	11.0	10.5	9.9	9.6	8.6				CENTER LINE OF ARCTIC STREET
	49.5	50.0	50.6	50.9	51.9				
55	7.9	7.7	7.0	6.6	6.2				
	52.6	52.8	53.5	53.9	54.3				
56	4.9	4.2	3.6 (67.53)	3.0	2.8	9.65	67.53	2.61	57.88
	55.6	56.3	56.9	57.5	57.7				
57	8.6	7.8	6.8	6.2	5.7				
	58.9	59.7	60.7	61.3	61.8				
57+98.5	5.1	4.5	3.8	3.0	2.4				INTERSECTION OF WINDER + ARCTIC STREETS
	62.4	63.0	63.7	64.5	65.1				

Mag Bearing of Scott Street N21°45'E

99
Return to City Engineers Office
City Hall, San Diego, Cal.

B. M. 11.73 on bridge

El flow Bridge 13.90 ft

B. M. at Cor Lyon Tower 17.52

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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