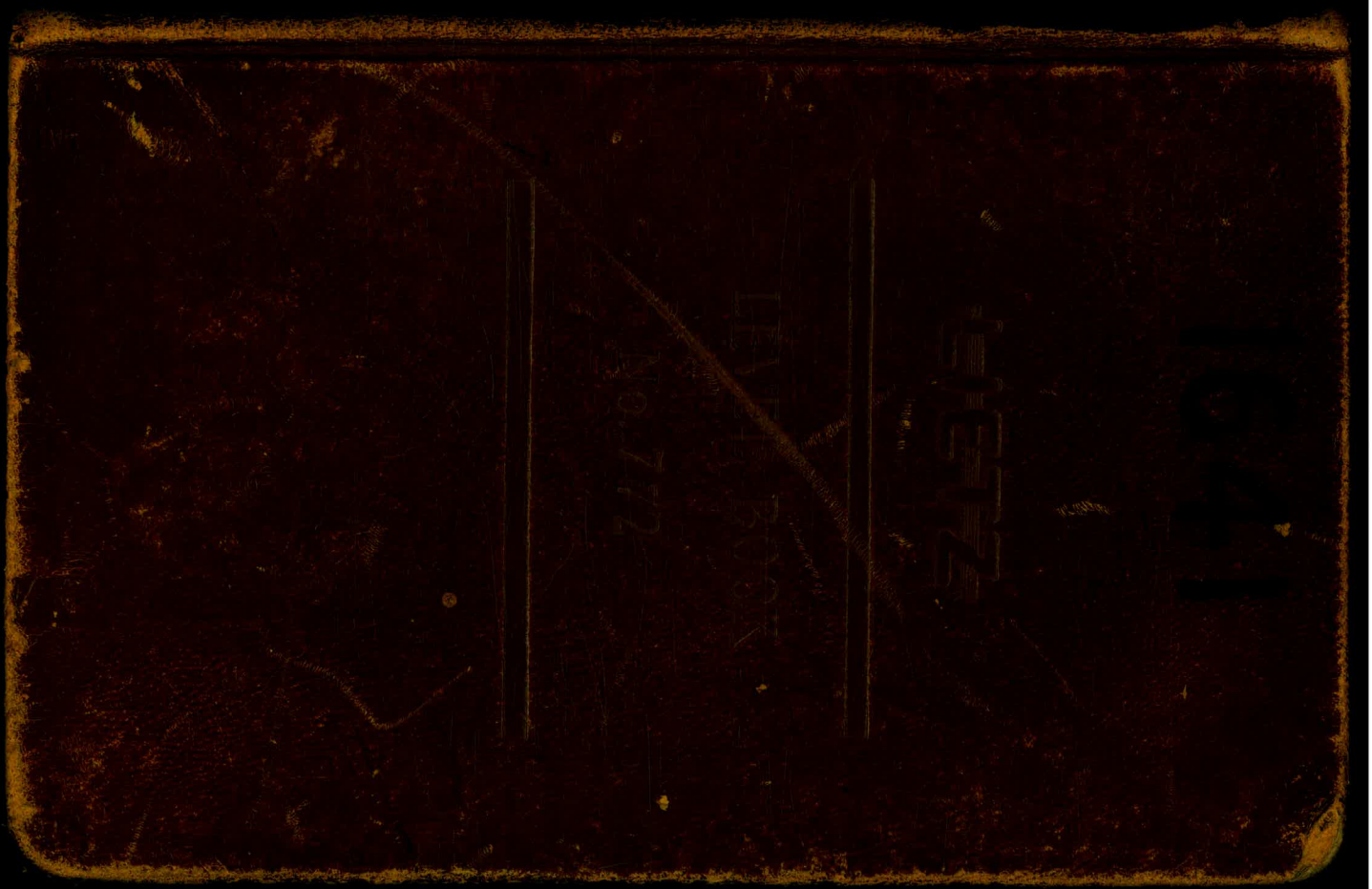

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	1 DEGREE.		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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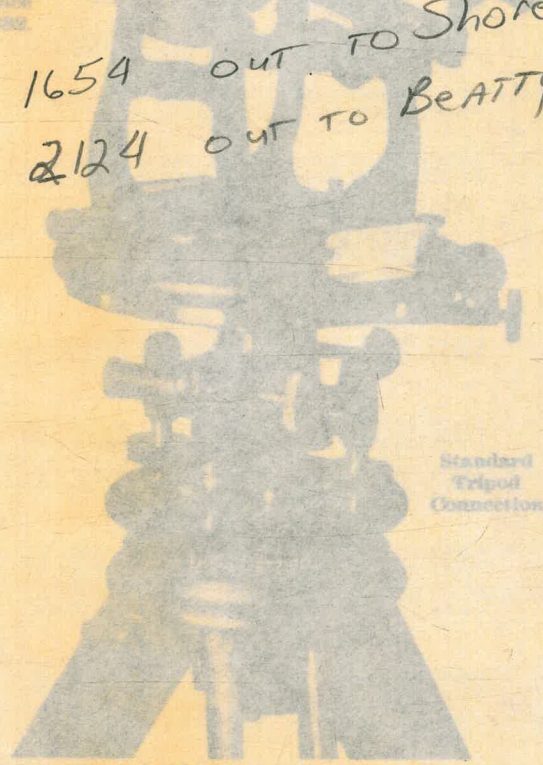
MADE IN
U. S. A.

FB 1654 out to Shorey

FB 2124 out to Beatty



LIETZ STANDARD ENGINEERS' TRANSIT
With U Shaped Standards

No. 5E with 6¼" limb. No. 11E with 6" limb.

Furnished with either Internal or External
Focusing Telescope.

TABLE OF STADIA REDUCTIONS

For a Constant of 100.

ROD VERTICAL.

Min.	0°		1°		2°		3°	
	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff Elev.	Hor Dist.	Diff. Elev.
0'	100.00	.00	99.97	1.74	99.88	3.49	99.73	5.23
2	100.00	.06	99.97	1.80	99.87	3 55	99.72	5.28
4	100.00	.12	99.97	1.86	99.87	3.60	99.71	5.34
6	100.00	.17	99.96	1.92	99.87	3.66	99.71	5.40
8	100.00	.23	99.96	1.98	99.86	3.72	99.70	5.46
10	100.00	.29	99.96	2.04	99.86	3.78	99.69	5.52
12	100.00	35	99.96	2.09	99.85	3.84	99.69	5.57
14	100.00	.41	99.95	2.15	99.85	3.90	99.68	5.63
16	100.00	.47	99.95	2.21	99.84	3.95	99.68	5.69
18	100.00	.52	99.95	2.27	99.84	4.01	99.67	5.75
20	100.00	.58	99.95	2.33	99.83	4.07	99.66	5.80
22	100.00	64	99.94	2.38	99.83	4.13	99.66	5.86
24	100.00	.70	99.94	2.44	99.82	4.18	99.65	5.92
26	99.99	.76	99.94	2.50	99.82	4.24	99.64	5.98
28	99.99	.81	99.93	2.56	99.81	4.30	99.63	6.04
30	99.99	.87	99.93	2.62	99.81	4.36	99.63	6.09
32	99.99	.93	99.93	2.67	99.80	4.42	99.62	6.15
34	99.99	.99	99.93	2.73	99.80	4.48	99.62	6.21
36	99.99	1.05	99.92	2.79	99.79	4.53	99.61	6.27
38	99.99	1.11	99.92	2.85	99.79	4 59	99.60	6.33
40	99.99	1.16	99.92	2.91	99.78	4.65	99.59	6.38
42	99.99	1.22	99.91	2.9/	99.78	4.71	99.59	6.44
44	99.98	1.28	99.91	3.02	99.77	4.76	99.58	6.50
46	99.98	1.34	99.90	3.08	99.77	4.82	99.57	6.56
48	99.98	1.40	99.90	3.14	99.76	4.88	99.56	6.61
50	99.98	1.45	99.90	3.20	99.76	4.94	99.56	6.67
52	99.98	1.51	99.89	3.26	99.75	4.99	99.55	6.73
54	99.98	1.57	99.89	3.31	99.74	5.05	99.54	6.78
56	99.97	1.63	99.89	3.37	99.74	5:11	99.53	6.84
58	99.97	1.69	99.88	3.43	99.73	5.17	99.52	6.90
60	99.97	1.74	99.88	3.49	99.73	5.23	99.51	6.96
c= .75	.75	.01	.75	.02	.75	.03	.75	.05
c=1.15	1.15	.01	1.15	.03	1.15	.05	1.15	.07
c=1.90	1.90	.02	1.90	.05	1.90	.08	1.90	.12

Min.	4°		5°		6°		7°	
	Hor. Dist.	Diff. Elev.	Hor. Dist.	Diff. Elev.	Hor. Dist	Diff. Elev.	Hor Dist.	Diff. Elev.
0'	99.81	6.96	99.24	8.68	98.91	10.40	98.51	12.10
2	99.51	7.02	99.23	8.74	98.90	10.45	98.50	12.15
4	99.50	7.07	99.22	8.80	98.88	10.51	98.48	12.21
6	99.49	7.13	99.21	8.85	98.87	10.57	98.47	12.26
8	99.48	7.19	99.20	8.91	98.96	10.62	98.46	12.32
10	99.47	7.25	99.19	8.97	98.85	10.68	98.44	12.36
12	99.46	7.30	99.18	9.03	98.83	10.74	98.43	12.43
14	99.46	7.36	99.17	9.08	98.82	10.79	98.41	12.49
16	99.45	7.42	99.16	9.14	98.81	10.85	98.40	12.55
18	99.44	7.48	99.15	9.20	98.80	10.91	98.39	12.60
20	99.43	7.53	99.14	9.25	98.78	10.96	98.37	12.66
22	99.42	7.59	99.13	9.31	98.77	11.02	98.36	12.72
24	99.41	7.65	99.11	9.37	98.76	11.08	98.34	12.77
26	99.40	7.71	99.10	9.43	98.74	11.13	98.33	12.83
28	99.39	7.76	99.09	9.48	98.73	11.19	98.31	12.88
30	99.38	7.82	99.08	9.54	98.72	11.25	98.29	12.94
32	99.38	7.88	99.07	9.60	98.71	11.30	98.28	13.00
34	99.37	7.94	99.06	9.65	98.69	11.36	98.27	13.05
36	99.36	7.99	99.05	9.71	98.68	11.42	98.25	13.11
38	99.35	8.05	99.04	9.77	98.67	11.47	98.24	13.17
40	99.34	8.11	99.03	9.83	98.65	11.53	98.22	13.22
42	99.33	8.17	99.01	9.88	98.64	11.59	98.20	13.28
44	99.32	8.22	99.00	9.94	98.63	11.64	98.19	13.33
46	99.31	8.28	98.99	10.00	98.61	11.70	98.17	13.39
48	99.30	8.34	98.98	10.05	98.60	11.76	98.16	13.45
50	99.29	8.40	98.97	10.11	98.58	11.81	98.14	13.50
52	99.28	8.45	98.96	10.17	98.57	11.87	98.13	13.56
54	99.27	8.51	98.94	10.22	98.56	11.93	98.11	13.61
56	99.26	8.57	98.93	10.28	98.54	11.98	98.10	13.67
58	99.25	8.63	98.92	10.34	98.53	12.04	98.08	13.73
60	99.24	8.68	98.91	10.40	98.51	12.10	98.06	13.78
c= .75	.75	.06	.75	.07	.75	.08	.74	.10
c=1.15	1.15	.09	1.14	.11	1.14	.13	1.14	.15
c=1.90	1.89	.15	1.89	.18	1.89	.21	1.88	.25

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TABLE OF STADIA REDUCTIONS.—Continued.

Min.	24°		25°		26°		27°	
	Hor Dist.	Diff. Elev.	Hor. Dist.	Diff Elev.	Hor. Dirt.	Diff. Elev.	Hor. Dist.	Diff. Elev.
0'.....	83.46	37.16	82.14	38.30	80.78	39.40	79.39	40.45
2.....	83.41	37.20	82.09	38.34	80 74	39.44	79.34	40.49
4.....	83.37	37.23	82.05	38.38	80.69	39.47	79.30	40.52
6.....	83.33	37.27	82.01	38.41	80.65	39.51	79.25	40.55
8.....	83.28	37.31	81.96	38 45	80 60	39.54	79.20	40.59
10.....	83.24	37.35	81.92	38.49	80 55	39.58	79.15	40.62
12.....	83.20	37.39	81.87	38.53	80.51	39.61	79.11	40.66
14.....	83.15	37.43	81.83	38.56	80.46	39.65	79.06	40.69
16.....	83.11	37.47	81.78	38.60	80.41	39.69	79.01	40.72
18.....	83.07	37.51	81.74	38.64	80.37	39.72	78.96	40.76
20.....	83.02	37.54	81.69	38.67	80.32	39.76	78 92	40.79
22.....	82.98	37.58	81.65	38.71	80.28	39.79	78.87	40.82
24.....	82.93	37.62	81.60	38 75	80.23	39.83	78.82	40.86
26.....	82.89	37.66	81.56	38.78	80.18	39.86	78.77	40.89
28.....	82.85	37.70	81.51	38.82	80.14	39.90	78.73	40.92
30.....	82.80	37 74	81.47	38 86	80.09	39.93	78.68	40.96
32.....	82.76	37.77	81.42	38.89	80 04	39.97	78.63	40.99
34.....	82.72	37.81	81.38	38.93	80.00	40.00	78.58	41.02
36.....	82.67	37.85	81 33	38.97	79.95	40.04	78.54	41 06
38	82.63	37.89	81 28	39.00	79.90	40.07	78.49	41.09
40.....	82.58	37.93	81 24	39 04	79.86	40.11	78 44	41.12
42.....	82 54	37.96	81.19	39 08	79 81	40.14	78.39	41.16
44	82.49	38.00	81.15	39 11	79.76	40.18	78.34	41.19
46.....	82 45	38.04	81.10	39.15	79 72	40.21	78.30	41.22
48.....	82 41	38 08	81 06	39.18	79.67	40.24	78.25	41.26
50.....	82.36	38 11	81 01	39.22	79.62	40.28	78 20	41.29
52.....	82.32	38.15	80 97	39.26	79.58	40.31	78 15	41.32
54	82.27	38.19	80.92	39.29	79.53	40 35	78.10	41.35
56.....	82.23	38.23	80.87	39.33	79.48	40.38	78 06	41.39
58.....	82.18	38.26	80.83	39.36	79 44	40.42	78.01	41.42
60.....	82 14	38.30	80.78	39.40	79 39	40.45	77 96	41 45
c= 75....	68	31	.68	32	67	.33	.66	.35
c=1.15....	1.05	48	1.04	50	1.03	51	1 02	.53
c=1 90....	1.73	79	1.72	82	1.70	85	1 69	.88

Min.	28°		29°		30°	
	Hor. Dist	Diff Elev.	Hor. Dist	Diff Elev.	Hor. Dist.	Diff. Elev.
0'.....	77 96	41 45	76.50	42 40	75.00	43 30
2.....	77.91	41.48	76.45	42.43	74.95	43.33
4.....	77.86	41 52	76.40	42.46	74.90	43.36
6	77.81	41.55	76 35	42.49	74.85	43 39
8.....	77.77	41 58	76.30	42.53	74 80	43.42
10.....	77.72	41.61	76.25	42.56	74.75	43.45
12.....	77.67	41.65	76.20	42.59	74.70	43 47
14.....	77.62	41.68	76.15	42.62	74.65	43.50
16.....	77.57	41.71	76.10	42.65	74.60	43 53
18.....	77.52	41.74	76.05	42 68	74.55	43 56
20.....	77.48	41.77	76.00	42.71	74.49	43 59
22.....	77.42	41.81	75.95	42 74	74.44	43 62
24.....	77.38	41.84	75.90	42.77	74.39	43 65
26.....	77.33	41.87	75.85	42.80	74.34	43.67
28.....	77.28	41.90	75.80	42.83	74.29	43 70
30.....	77.23	41.93	75.75	42.86	74.24	43 73
32.....	77.18	41 97	75.70	42.80	74.19	43.76
34.....	77.13	42 00	75.65	42.92	74.14	43 79
36.....	77.09	42.03	75.60	42.95	74.09	43.82
38.....	77.04	42.06	75.55	42 98	74.04	43 84
40.....	76.99	42.09	75.50	43.01	73.99	43.87
42.....	76.94	42.12	75 45	43 04	73.93	43 90
44.....	76.89	42.15	75.40	43 07	73 88	43.93
46.....	76.84	42.19	75.35	43.10	73 83	43 95
48.....	76.79	42 22	75.30	43.13	73.78	43.98
50.....	76.74	42.25	75 25	43.16	73.73	44 01
52.....	76.69	42.28	75 20	43.18	73.68	44 04
54.....	76.64	42.31	75.15	43.21	73.33	44 07
56.....	76.59	42.34	75.10	43.24	73.58	44 09
58.....	76.55	42.37	75.05	43 27	73.52	44.12
60.....	76.50	42.40	75.00	43 30	73.47	44.15
c= .75..	.66	.36	.65	.37	.65	38
c=1.15....	1 01	55	1.00	.57	0.99	.58
c=1.90..	1.67	91	1.65	.94	1 64	.95

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Sommermeyer, Begg, Fox. — X-Sec. Alley Blk 102 Univ. Hts.

7/8/42

Louisiana × Meade S.E.B.P. — 332.70

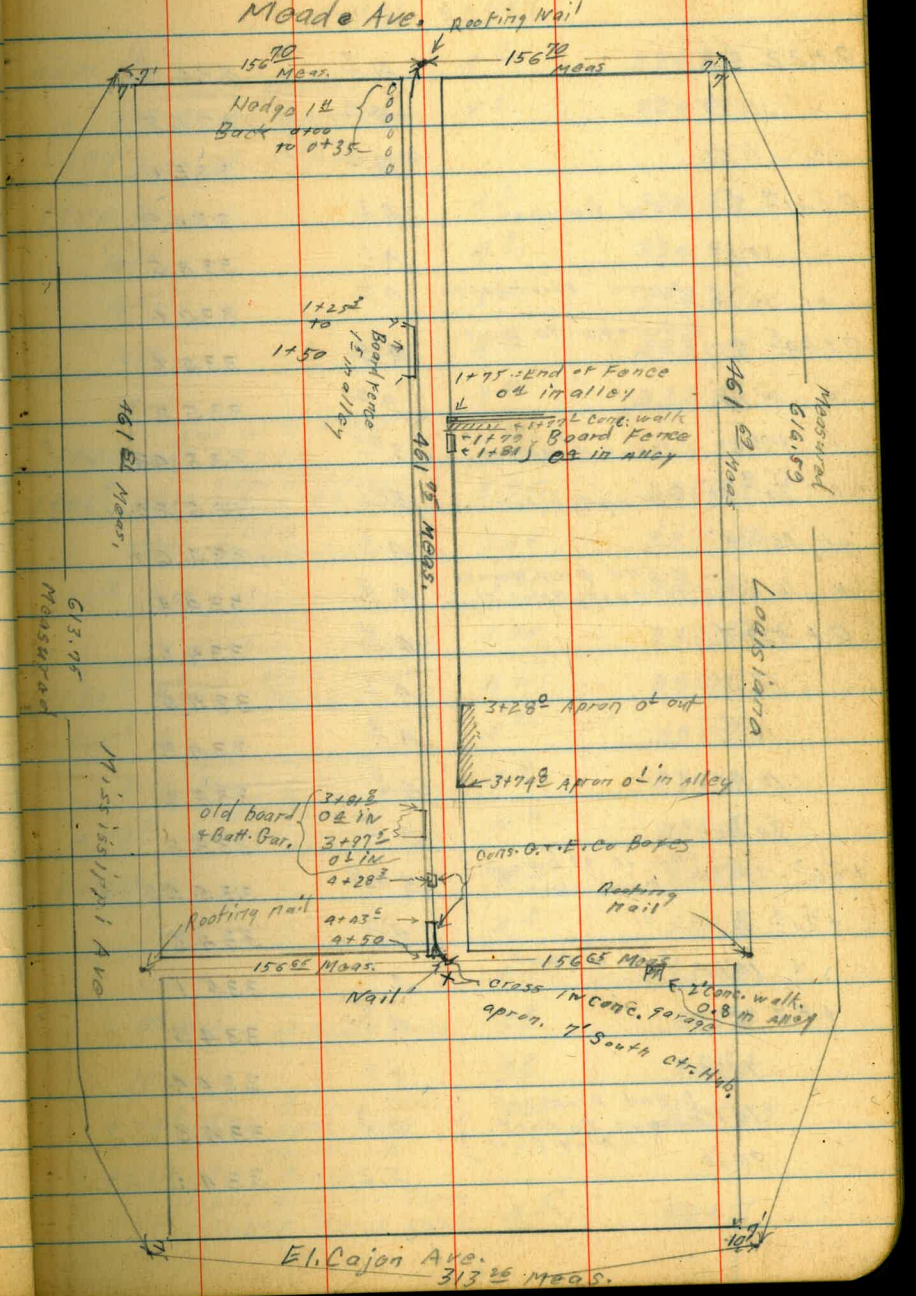
6.53 — 339.23

S. curb Meade ℄ top curb	6.76	332 47
10' Lt.	6.12	333 11
10' Lt gutter	6.67	332 56
35' Lt. Top curb	6.14	333 09
" gutter	6.62	332 61
10' Rt. top curb	6.17	33306
" gutter	6.76	33247
35' Rt top curb	6.25	332 98
" gutter	6.83	332 40
0+00 S. Line Meade ℄	6.40	332 83
10' Lt Gutter	6.21	333 02
10' Lt Top Curb	5.96	333 27
15' Lt	5.6	333 6
10' Rt Gutter	5.95	333 28
10' Rt top curb	6.00	333 23
0+03 16' Lt. start proposed Garage. Approx. Floor	4.6	334 6
0+05 ℄	5.2	333 3
" 8' Lt Brk	5.2	333 5
" 10' Lt	5.1	3341
" 16' Lt	4.6	334 6
" 2' Rt.	5.6	333 6
" 5' Rt Brk	4.3	3347
" 10' Rt	4.1	335.1

Red'd Plot. Folio 2745 7-10-42

Indexed C.S.K.

1



Alley Blk 102 U.H.

339.23

0+22 ℄		A 3	334.9
∨ 10'Lt		A 1	334.8
∨ 10'Rt		A 1	335.1
0+44½ ℄	S.End Garages	A 3	334.9
∨ 10'Lt		4 6	334.6
∨ 16'Lt	Aprox Floor-Level	A 8	334.4
0+44⅝ ℄	℄Garage to west	A 4	334.8
∨ 10'Rt.		4 0	335.2
∨ 19'Rt	Edge of 9' apron	3 80	335.43 ✓
∨ 21'Rt.	Garage Floor	3 41	335.82 ✓
∨ 10'Rt		A 6	334.6
∨ 16'Rt	N.End prop. garage To East Aprox. Floor.	A 8	334.4
0+50 ℄		A 4	334.8
10'Lt.		A 7	334.5
16'Lt		A 2	334.3
10'Rt		A 0	335.2
30'Rt		3 7	335.5
+66'-13'Rt	Floor of 7' Garage Conc. Floor	3 68	335.55 ✓
+76½ ℄		4 6	334.6
↓ 10'Rt	Start Wire + post Fence	A 1	335.1
+83 ℄		A 7	334.5
10'Lt		4 8	334.4
16'Lt	S.End proposed Garage to east Aprox Floor	4.9	334.3
30'Lt		5.2	334.0

Blk 102 - U.H.

339.23

0+91 ℄		4 7	334.5
∨ 16'Lt.	Start proposed Garage. Aprox Floor.	5 0	334.2
↓ +97 9'Rt.	ctr. 1' diam power pole		
1+00 ℄		4 2	334.5
10Lt		4 9	334.3
16'Lt		5 0	334.2
10Rt		4 2	335.0
20'Rt		4 0	335.2
↓ 1+02 16'Rt.	End wire + post Fence		
1+06½ 10'Rt	Edge of Garage apron 8' wide	3.95	33528 ✓
12'Rt	Conc. Garage Floor	3.68	33555 ✓
+15⅝ 12'Rt	Ground	3 8	335.4
∨	conc. Floor garage - 17'5 wide	3.70	33553 ✓
↓ 1+25⅜ 8½'Rt.	Start board Fence	4 1	335.1
+29½ ℄		4 5	334.7
16Lt	End proposed garage to east. Aprox - Floor.	4 8	334.4
+34⅝	Staart proposed garage to east Aprox. Floor.	4 6	334.6
1+50 ℄		4 2	335.0
16'Lt		4 5	334.7
16'Lt		4 7	334.5
↓ 8½'Rt.	End of board fence	3 8	335.4
10'Lt		3 8	335.4
+59⅜ 11½'Rt	Garage 7' wide Conc. Floor	3 50	335.73
↓ +64⅜ 11½'Rt	Start Lath Fence		
+72½	End proposed Garage to east. Aprox Floor.	4 5	334.7

	↑ 339.23		
1+75 ℄		4 2	335.0
9 Rt.	Post at Batting Fence running to east	4 4	334.8
10 Rt.		4 3	334.9
40 Rt.		5 5	333.7
10 Lt.		3 9	335.3
20 Lt.		3 9	335.3
+77 1 9 6 Lt.	℄ Edge of walk 3.8 wide	4 1A	335.09
+79 to +81 96 Lt.	Fence of 2 boards & 2 posts		
+81 ℄		4 1	335.1
10 Lt.		4 0	335.2
10 7 Lt.	Start of house & garage. (Board & Batt)	4 1	335.1
2+00 ℄		4 0	335.2
10 Lt		3 8	335.4
9 5 Rt.	14' Power pole	4 0	335.2
10 Rt.		4 0	335.2
10 5 Rt.	End of Lath Fence	4 1	335.1
20 Rt		4 2	335.0
T.P. Rock		4.01	335.22
	3.84 339.06		
2+19 ℄		4 1	335.0
5 Lt		4 0	335.1
10 4 Lt.	Garage 6 2 wide Ribbon drives -	4 45	334.61
+25 - 10 2 Lt.	End of house & garage		
+25	Start of Slat & Post fence. very poor.		

	↑ 339.06		
2+50		4 4	334.7
10 Lt.		4 7	334.4
35 Lt		5 1	334.0
10 Rt		4 2	334.9
35 Rt		4 0	335.1
+53 - 13 2 Rt.	Start of 5 garage Bldg. conc. floor	3.89	335.17
+74 2 - 9 8 Lt.	End Slat & post fence		
2+75 ℄		4 4	334.7
- 10 Lt	cone	4 5	334.6
- 11 8 Lt	Start of apron for double garage	4 5.0	334.52
- 15 2 Lt	Start of floor	4 1.9	334.87
2+94 4 11 9 Lt.	cone. End apron to double garage	4 5.6	334.50
- 15 3 Lt.	End double garage conc. floor	4 0.8	334.98
+96 8 ℄		4 3	334.8
13 9 Rt.	End of 5 car garage conc. floor	3 9.8	335.08
+98 13 2 Rt	ctr. 3 2 conc. walk	3 7.0	335.36
3+00 ℄		4 4	334.7
10 Lt		4 4	334.7
15 Lt		4 6	334.5
16 Lt		4 9	334.2
35 Lt		5 8	333.3
9 6 Rt	14' Power Pole.		
10 Rt		4 0	335.1
11 2 Rt	Start & Lath Fence	4 0	335.1
25 Rt.		4 4	334.7

	339 06		
3+06 -16 Rt. 2 Conc. walk ctr. of	4.16	334.90	
3+07 3 ℄	4 5	334.6	
10 Rt	4 3	334.8	
15 Rt	4 6	334.5	
18 R. start. 4 car garage. Conc. Floor	4.53	334 53	
+24 8 ℄	4 7	334.4	
10 Lt. N. Edge conc. walk	4 84	334 22	
+28 10 Lt. N. end apron S. Edge walk ℄ 5 car garage	4 69	334 37	
15 Lt. N. End 5 car garage Conc. floor	4 50	334 56	
+43 5 ℄	4 9	3342	
10 Rt	4 7	334.4	
18 Rt End. 4 Car garage Conc. floor	4 71	334 35	
+74 8 ℄	5 0	334.1	
9 Lt. S. end Apron 5 car garage. conc.	4 68	334 38	
15 Lt. S. end 5 car garage Conc. floor	4 58	334.48	
10 Rt	4 9	334.2	
+81 8 ℄	5 1	3340	
10 Lt. start board rence	5 0	334.1	
9 Rt. start board garage Ent. to front	4 9	3342	
+97 5 .9 Rt. End. of board Garage	5 3	3338	
+98 - 7 Rt ctr 1st power pole	~~5 2~~		
10 Lt End of board Fence + start	5 2	333.9	
Partly torn down chicken pen			
Same ends at 4+13			

	339 06		
4+00 ℄	5 3	333.8	
10 Lt	5 2	333.9	
10 Rt.	5 3	333.8	
20 Rt	5 5	333.6	
~~4+18 -9 Rt Double dead Man for pole guy~~			
4+13 10 Rt End of old chicken pen			
+18 ℄	5 6	333 5	
3 Lt	5 6	333 5	
5 Lt	5 4	333.7	
10 Lt	5 5	333.6	
40 Lt.	5 9	333.2	
9 Rt. Double dead man for Apple guy	5 6	333.5	
10 Rt	5 4	333.7	
40 Rt	6 4	332.7	
+28 3 ℄	5 3	333.8	
8 Rt ctr of 25x25 S.D.G+E. Box	5 19	333.87	
+43 6 .8 Rt. ℄ N. End G+E. Co. Box 3 x 6	5 18	333.88	
+49 75 End. of Alley. = N line East + west Alley			
℄	5 2	333.9	
10 Lt.	5 6	333 5	
6 Rt on G+E. Co. Power box	5 19	333.87	
9 " "	5 22	333.84	
4+50 .7 Rt = ℄ End of G+E. Co. box	5.20	333 86	
TP. 051 334.98	4.59	334.47	

	334.98		
T.P.		6.40	328.58
Starting East + West Portion of alley			
	3.27	331.85	
East curb Line Mississippi ℄		6.45	325.40
5'Lt Gutter		6.30	325.55
5'Lt top curb		5.58	326.27
30 Lt Gutter		5.84	326.01
v Top curb		5.09	326.76
5'Rt Gutter		6.50	325.35
v. curb		5.81	326.04
30'Rt gutter		7.05	324.80
v curb		6.29	325.56
0+00 W Prop. Block ℄		5.88	325.97
gutter		5.62	326.23
curb		5.40	326.45
10 Lt		5 2	326.6
5'Rt Gutter		5.78	326.07
v Curb.		5.68	326.17
6'Rt		5 3	326.5
10'Rt		5 3	326.5
0+00 5 ℄		5 5	326.3
3'Lt		5 6	326.3
5'Lt Ground		5 0	326.8
5½ Lt start cobble wall top wall		3 5	328.3
10 Lt		3 5	328.3

	331.85		
0+05 ℄		5 0	326.8
2'Lt		5 2	326.6
5'Lt		4 4	327.4
v top of wall		3 4	328.4
10 Lt		3 4	328.4
3'Rt		5 2	326.6
10 Rt		4 3	327.5
10½ Rt start with fence		4 3	327.5
0+10 ℄		4 6	327.2
2 Lt		4 9	326.9
5'Lt Ground		3 8	328.0
5'Lt End of cobble wall Top of wall		3 4	328.4
0+13 3 5½ Rt. start of Frame House		3 4	328.4
0+22 4 ℄		3 6	328.2
3'Lt		3 1	328.7
5'Lt 9" End of conc.		2.99	328.86
6½ Lt wall to North		3 7	328.1
2'Rt		3 1	328.7
4'Rt		3 2	328.6
5'Rt			
0+29 4 5 8 Rt. End of Frame House		2 7	329.1
0+31 ℄		2 6	329.2
5 Lt		2 6	329.2
10 Lt		2 8	329.0
2'Rt		2 7	329.1
5'Rt			

	331 65		
0+31	5 5/8 Rt Edge of Rot. wall at step.	2.60	329.25
	5 2/8 Rt Edge of wall	2.60	329.25
	5 2/8 Rt Step porch 3'X4'	3.04	328.81
0+40	℄	2 2/8	329.6
	5 Lt	2 0/8	329.8
	10 Lt	2 1/8	329.7
	3 Rt	2 2/8	329.6
	5 Rt	2 0/8	329.8
	20 Rt	2 4/8	329.4
+47 4/8	4' Rt ctr. 1' P. pole.	1 6/8	330.2
T.P. rock	5.68 335.63	1.90	329.95
	End of Lath fence		
0+50			
0+55	℄	5 5/8	330.1
	5 Lt	5 4/8	330.2
	10 Lt	5 4/8	330.2
	5 Rt.	5 3/8	330.3
	30 Rt	5 6/8	330.0
0+80	℄	4 5/8	331.1
	5 Lt	4 6/8	331.0
	29 3/8 Lt = ctr 8' Garage Dirt floor	4 3/8	331.3
	5 Rt	4 2/8	331.4
	6 2/8 Rt start garage face to west	4 2/8	331.4
	12 5/8 Rt ctr. of above garage door	4 0/8	331.6
+96 3/8	6 3/8 Rt End of above garage	3 5/8	332.1
+96 3/8 to +99 2/8	Chicken wire & 6 3/8 Rt board fence		

	335 63		
1+00	℄	3 7/8	331.9
	5 Lt	3 7/8	331.9
	25 Lt	3 8/8	331.8
	30 Lt	3 2/8	332.4
	5 Rt	3 3/8	332.3
	20 Rt	3 5/8	332.1
	30 Rt	3 5/8	332.1
1+20	℄	2 6/8	333.0
	5 Lt	2 9/8	332.7
	12 Lt	2 6/8	333.0
	5 Rt	2 6/8	333.0
	10 Rt	2 8/8	332.8
+27 2/8	℄	2 4/8	333.2
	5 Rt.	2 4/8	333.2
	15 6/8 Rt ctr. 8' garage conc. floor	2 57/8	333.06
1+39 65	℄ w. side alley to north.	1 9/8	333.7
	5 Lt	1 8/8	333.8
	10 Lt	2 0/8	333.6
	5 Rt.	1 8/8	333.8
	8' Rt	2 0/8	333.6
1+39 2/8	4 2/8 Lt. cor. S.P. con. & at cor. Box	1 79/8	333.84
1+40	4 2/8 Rt ctr 1 3/8 P. pole		
1+43 5/8	5 8/8 Rt. start conc. apron double garage & office	1.84	333.79
	7 6/8 Rt garage floor	1.86	333.77
T.P.		181	333.82

	3.40	337.22	333.82
	℄ Alley to North		
149.65 ℄		3.9	333.3
5 Lt		3.4	333.8
5 Rt		3.4	333.8
	E. Line Alley to North		
159.65 ℄		3.6	333.6
5 Lt		3.7	333.5
10 Lt		3.4	333.8
5 Rt		3.6	333.6
+73.1 ℄		4.0	333.2
4 Lt		4.0	333.2
5 Lt		3.5	333.7
15 Lt		3.4	333.8
5 Rt		3.8	333.4
	End of Conc Apron		
5.4 Rt		3.88	333.34
	End of garage + office Bldg.		
7.4 Rt		3.84	333.38
1+90 ℄		4.4	332.8
4 Lt		4.4	332.8
5.4 Lt		3.6	333.6
30 Lt		4.2	333.0
5 Rt		4.1	333.1
10 Rt		4.5	332.7
25 Rt.		4.6	332.6
	ctr. 1.2 A pole		
+90.3 5 Rt.			
2+05.1 ℄		4.9	332.3
5 Lt		4.6	332.6

		337.22	
2+05.1 5 Rt		4.2	332.3
8 Rt		5.2	332.0
15 Rt		5.3	331.9
	ctr. garage doors		
23.4	8' opening	4.75	332.46
2+10 ℄		5.1	332.1
5 Lt		4.9	332.3
20 Lt.		5.1	332.1
5 Rt		4.8	332.4
	start picket		
5 Lt Rt.	Fence	4.8	332.4
15 Rt		5.3	331.9
2+29.4 ℄		5.8	331.4
5 Lt		5.7	331.5
	ctr 10' Apron		
9 Lt	conc.	5.50	331.72
	ctr garage		
13 Lt	floor 8' wide	5.16	332.06
+40.3 ℄		6.1	331.1
5 Lt		6.0	331.2
	start conc		
7.8 Lt.	walk.	5.76	331.46
	End. Conc.		
+45.8 7.8 Lt.	walk	5.70	331.52
	start conc		
45.8 7.7 Lt	step + porch	5.24	331.98
+48.1 ℄		6.3	330.9
5 Lt		6.3	330.9
7.6 Lt.	Ground	6.1	331.1
7.6 Lt.	Top of 3' conc. porch	4.62	332.60
	Top step.		
+50.8 - 7.6 Lt.	End of 11 + porch	5.30	331.92
	Start of conc.		
+50.8 - 7.6 Lt.	walk	5.88	331.34

		337 22		
T.P.	334	334.33	6.23	330.99
2+51½ ℄			3 5	330.8
4½ Rt	Ground		3 0	331.3
4½ Rt	ctr. 2' walk o.g. in Alley		2.78	331.55
+74 ℄			4 4	329.9
5 Lt			4 2	330.1
7½ Lt.	Edge walk		3 90	330.43
+82 5 Rt	Picket fence crosses Alley line		4 2	330.1
+84 0 ℄			4 7	329.6
2' Lt			4 5	329.8
5 Lt			4 5	329.8
5½ Lt	ctr. Stucco pillar for Arch. 0.8 x 1.2		4 3	330.0
6½ Lt	Edge of bow in walk		4 12	330.21
1' Rt			4 2	329.4
4½ Rt	Picket Fence		4 5	329.8
5' Rt			4 5	329.8
10' Rt			4 6	329.7
+89-6½ Lt	walk curves to N. Away from Alley.		4 22	330.11
+97-4½ Rt.	ctr. 1 P. pole			
+98 ℄			5 5	328.8
2 Lt.			5 3	329.0
5 Lt.			5 2	329.1
6 Lt.			4 8	329.5
10 Lt.			4 8	329.5
2' Rt.			5 7	328.6

		334 33		
2+98 5' Rt			5 3	329.0
15 Rt			5 3	329.0
2+99 30 ℄	East prop. Line Block Dirt		5 6	328.7
5½ Lt.	Gutter		5 62	328.71
5½ Lt	top curb		5 44	328.89
6' Lt			4 2	329.4
4½ Rt.	Gutter		5 59	328.74
4½ Rt.	top curb		5 43	328.90
5' Rt			5 4	328.9
Prop. +08	paving on ℄ Broken to here		5.77	
" +72	4.8 Rt End picket fence			328.56
Louisiana St. west curb line	℄ Alley		6 29	328.04
5½ Lt	Gutter		6 15	328.18
✓	top curb		5 75	328.58
30' Lt	Gutter		5 93	328.40
✓	top curb		5 56	328.77
4½ Rt	Gutter		6 35	327.98
✓	top curb		5 87	328.46
30' Rt	Gutter		6 61	327.72
✓	top curb		6 16	328.17
T.P.	551	335.88	396	330.37
ch. BM			318	332.70 ok.
	4.02	332.60		328.58 = T.P. top Lt. page 5.
Set. BM.	"+" in conc. garage apron. 7' South of ctr. of alley ℄ intersection		4.72	327.88

Cross Section of Block 1 City Heights
From Dwight to Landis
Between Boundary & Hale.

BM	11.22	328.27		317.05	N.E. B.F. Dwight & Hale
		0+00 - N.L. Dwight			
-10			5.3	323.0	
E			4.4	323.9	
℄			5.8	322.5	
W			2.9	325.4	
+0.7	= Sly Picket Fence				
+5.3	= El. 3' Conc Wall		1.45	326.82	
+15.3	" " "		1.28	326.99	
		0+43			
-5.3	= ℄ Garage Conc Floor	7.6 opening	1.95	326.32	
-0.4	= Ely Conc Apron		2.37	325.90	
W			2.5	325.8	
℄			4.0	324.3	
E			4.8	323.5	
+10			6.0	322.3	
		0+49			
E -1.3	= Sly Lath Fence				
		0+50			
W -0.5	= Sly Board Fence				
		0+71			
-10			7.1	321.2	
-2			6.6	321.7	
E			5.6	322.7	
℄			4.7	323.6	

Reduced & Plotted Profile 7-28-42

Su 45-42
S. 15500
Bom 1.13
Hor

Indexed E.F.K.

L+T — 151.90 — Set Nail — 157.0 — L+T

Landis

5+98.47

Also
F.B. 1700
73+75
9-17-48

Block 1
City Heights

Boundary

0+92

Ed. N.T.

Dwight St
Hot Graded

151.34 — 223.0

Set Nail

Set Nail

		328.27		
W	= W/y Power Pole		5.8	324.5
	1+0			
-0.8	= W/y Board Fence			
W			4.7	323.6
℄			6.3	322.0
E			7.1	321.2
+1.0	= W/y Lath & S/y Board Fence			
+12			8.1	320.2
TP		5.75 327.47	6.55	321.72
	1+08			
W-	5.7 = ℄ Garage Dirt Floor		5.3	324.2
	1+34			
-10			7.4	320.1
E			7.0	320.5
+0.8	= W/y Board Fence			
℄			6.5	321.0
+3			6.5	321.0
W			4.3	323.2
+5			4.0	323.5
	1+50			
-6			3.7	323.8
W			5.5	322.0
+5			6.8	320.7
℄			7.5	320.0
E			7.4	320.1
+10			7.0	320.5

		327.47		
	2+0			
-10			8.4	319.1
E			8.2	319.3
℄			7.8	319.7
+5			7.2	320.3
W			6.6	320.9
+9			4.2	323.3
	2+05			
W-0.2	= W/y Power Pole			
	2+50			
-10			3.8	323.7
W			5.4	322.1
+5			6.6	321.2
℄			6.9	320.6
E			7.3	320.2
+10			7.5	320.0
	2+75			
W-0.5	= S/y Lath Fence			
	2+81			
-10	on Conc Walk		5.28	322.19
E+1.0	= W/y 2.3' Conc Walk		5.42	322.05
℄			6.1	321.4
W			5.4	322.1
+10			5.2	322.3

	327.47			
	3+00			
W		5.2	322.3	
℄		5.7	321.8	
E		5.4	322.1	
+10		5.2	322.3	
	3+06			
W-0.3 = W℄ Shed x Lath Fence				
	3+18			
W-9.0 = ℄ Garage Dirt Floor		4.6	322.9	
	3+24			
-10		4.6	322.9	
E		4.7	322.8	
+12 = S℄ Shed x Board Fence				
℄		4.9	322.6	
W		4.9	322.6	
+10		4.3	323.2	
	3+42			
W-0.5 = W℄ Power Pole				
	3+50			
-10		3.2	324.3	
W		3.5	324.0	
℄		3.8	323.7	
+9 = Board Fence				
E		3.6	323.9	
+10		4.2	323.3	

	327.47			
TP	6.84	331.45	2.86	324.61
	3+80			Nail Pole 3+42.07 LT
E+0.7 = W℄ Board x S℄ Lath Fence				
	4+00			
-10			6.6	324.8
E			6.4	325.1
℄			6.1	325.4
W			5.8	325.7
+10			6.0	325.5
	4+24			
W-0.5 = S℄ Wire Fence				
E = W℄ Lath				
	4+50			
W			4.6	326.9
℄			4.9	326.6
E			5.2	326.3
+10			5.1	326.4
	4+55			
W-0.3 = W℄ Shed x Wire Fence				
	4+62			
W-4.0 = E℄ Conc Apron			4.50	326.95
W-6.3 = ℄ Garage Conc Floor			4.39	327.16
	4+75			
W+0.2 = W℄ Power Pole				

	331.45		
	4+83		
E - 4.8 = ℄ Garage Dirt Floor	4.7	326 8	
	4+96 ✓		
E +0.2 = S ℄ Picket Fence			
	5+00		
E	4.7	326 8	
℄	4.4	327 1	
W	4.0	327 5	
+10	4.5	327.0	
	5+50		
-1.83 = S ℄ W E ℄ Garage Conc	3.42	328 03	
W SE ℄ 8' Conc Apron	3.96	327 49	
℄	4.4	327.1	
+9.4 = Picket Fence ✓			
E	4.6	326 9	
+10	4.7	326 8	
	5+75		
- 0.8 = N W Cor Garage	4.4	327 1	
E	4.3	327 2	
℄	4.5	327 0	
+8	4.3	327 2	
W	4.0	327 5	
+4 = E ℄ Storage House	3.6	327.9	

		331.45			
		5+98.47 = S L Landis ✓			
W Top Cb			4.61	326 84	
W on 0.1 Pav			4.7	326 8	
℄ " "			5.0	326 5	
E " " + Top Cb			4.96	326 49	
		6+12.47 = S Cb Line Landis St			
E = Top Cb			5.08	326 37	
E Gutter on 0.1 Pav			5.55	325 90	
℄ " "			5.87	326 08	
W " "			5.18	326 27	
W Top Cb			4.78	326 67	
TP	684	332.81	4.98	326.47	
BM			6.82	328.99	N E B.P. Landis Boundary 329.04

Cross Section Alley Block 194 City Heights
From University Ave to Wightman St
Between Boundary & Mile

BM	8.41	33056	322.15	SW BP University Ave
	0-14 = SCb Lip Cb University			
E	on Paving	4.62	325 94	
℄	"	4.43	326 13	
W	" "	4.03	326 53	
	0+0 = SL Univ			
W	= Top Cb + Paving	3.46	327.10	
℄	on "	3.96	326 60	
E	= Top Cb + "	4.08	326 48	
TP	8.52	33766	1.42	329 14
	0+04			
E		42	333 5	
+4		9.1	328 6	
℄		10.0	327 7	
+5		9.8	327 9	
W		7.9	329.8	
	0+14			
-1.0	= N Ely Stucco Bldg			
W		5.8	332 4	
+5		8.1	329 6	
℄		8.3	329 4	
+5		7.6	330 1	
E		8.4	334 3	
	0+26			
W L	= W ly Power Pole			

Reduced & Plotted Profile # 2949 C.S.K. 7-28-42

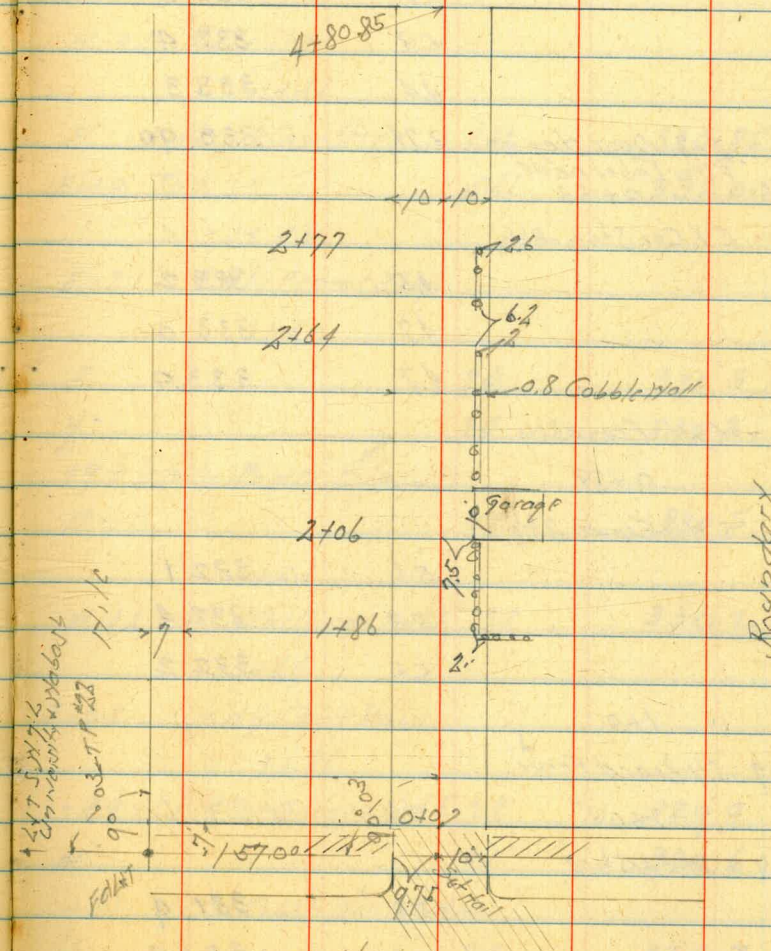
Indexed C.S.K.

July 29 1942
Survey Party
Hazard

13

Wightman

4+80.85



337.66

0+35

E	3.6	334.1
+5	5.5	332.2
℄	5.7	332.0
+5	5.3	332.4
W	4.4	333.3
+10 = ℄ 7' Door Way on Floor Tabernodi	3.76	333.90

0+53

−1.3 = SE Cor. Stone Bldg

W	4.5	333.2
℄	4.7	333.0
E	4.7	333.0

+10 = W W/y Frame Bldg

0+89

−0.8 = S W/y Frame Bldg

E	5.6	332.1
℄	5.3	332.4
W	5.5	332.2

1+0

W −1.9 = S W/y Board Fence

1+03

W −0.8 = W Fly Shed

W	5.8	331.9
℄	5.8	331.9
E	6.1	331.6
+1.8 = W W/y 3.8 Conc Walk	6.00	331.63

337.66

1+09

E = W W/y Conc Apron	6.23	331.43
E −1.4 = ℄ Garage Conc Floor	6.06	331.61

1+19

W −0.2 = S Fly Shed

1+36

E = Bottom 2 Conc Steps	6.81	330.85
E −1.9 Top " " "	5.66	332.00

1+45

E −2.1 = S W W/y Frame Bldg

1+50

E	7.4	330.3
℄	7.4	330.3

+9.3 = W W/y Power Pole ✓

W	7.2	330.5

1+53

W −1.4 = W W/y 4 Car Garage Dirt E 7.5 330.2

1+64

E −0.5 = W W/y Calif House

1+85

−8.9 = S W/y 4 Car Garage Dirt E	7.8	329.9 ✓
W	8.1	329.6

+2.1 = W Cor Cobble Wall 0.8 Wide

℄	8.4	329.3
E	8.5	329.2
+1.8 = W W/y Calif House ✓	8.3	329.4

	337.66			
TP	0.59	329.76	8.49	329.17
	1+93			
W-0.2 = Z.25 Conc Walk			0.55	329.21
	1+96			
E-2.3 = ℄ Garage Dirt Floor			0.9	328.9
	2+10			
E			1.0	328.8
℄			1.0	328.8
+7.6 = Ely Cobble Wall			0.4	329.4
W			1.2	328.6
	2+06			
E-6.8 = ℄ Garage Dirt Fl			1.5	328.3
	2+34			
W on Conc Wall			1.70	328.06
+3.3 = Ely 2' Conc Wall			1.73	328.03
℄			2.0	327.8
E			2.1	327.7
+1.2 = Lot 4 Fence				
	2+50			
E			3.1	326.7
℄			2.7	327.1
+6.3 = Wly Power Pole				
+7.6 = Ely Cobble Wall			2.7	327.1
W			2.5	327.3
	2+64			
E-1.6 = Wly Lot 4 Fence				

	329.76		
	2+88		
-0.2 = Wly Cobble Wall			
W	3.9		325.9
℄	4.6		325.3
E	4.0		325.8
	3+10		
-1.3 = Sly Lot 4 Fence			
E	4.6		325.2
℄	5.2		324.6
+5	4.5		325.3
W on Pile Rock	2.8		327.0
+0.2 = Ely Cobble Wall ✓			
+1.0	3.9		325.9
	3+25		
-4.2 = Wly Do Garage Dirt Floor	4.2		325.6
-0.9 = Sly Cobble Wall ✓			
W	4.9		325.4
+6	5.5		324.3
℄	5.9		323.9
+6	5.7		324.1
E	4.8		325.5
+10	5.3		324.5
	3+43		
W-5.6 = Sly Do Garage Dirt	4.6		325.2

329.76

		3+50			
-10			6.8	323.5	
E			6.8	323.0	
Z			6.8	323.5	
+5			5.2	324.6	
W			4.6	325.2	
		3+74			
-5.8 = Sly Bldg			4.8	325.0	
W			4.7	325.1	
+8			5.4	324.4	
Z			6.5	323.3	
E			7.5	322.3	
+10			7.3	322.5	
		3+89			
W +3.6 = Nly Power Pole					
		4+0			
-10			7.7	322.1	
E			7.3	322.5	
Z			6.6	323.2	
+3			5.8	324.0	
W			4.8	325.0	
+10			4.7	325.1	
		4+50			
W			5.4	324.4	
+5			6.8	323.5	

329.76

Z			8.7	321.1	
E			9.0	320.8	
+2			9.8	320.0	
+10			9.8	320.0	
		4+80.85 = NL Wig Stump			
-10			13.0	316.8	
-10			13.3	316.5	
E			12.2	317.6	
Z			10.4	319.4	
+4			7.6	322.2	
W			6.2	323.6	
TP	0.00	319.43	10.33	319.43	
		4+97			
W			+0.7	320.1	
Z			1.8	317.6	
+3			3.1	316.3	
E			5.1	314.3	
+15			6.0	313.4	
TP	0.41	308.99	10.85	308.58	
		5+21			
-15			8.3	300.7	
E			5.7	303.3	
Z			3.5	305.5	
+6.8 = Nly Power Pole					
W			2.3	306.7	
+10			2.2	306.8	

		308.99			
	5+33				
-15			4.8	304.2	
W			6.5	302.5	
L			7.4	301.6	
L			8.7	300.3	
+20			10.0	299.0	
	5+49	= Bottom Gulch			
-20			10.3	298.7	
E			9.9	299.1	
L			9.3	299.7	
W			8.9	300.1	
+20			6.7	302.3	
TP	11.50	318.46	2.03	306.96	
TP	7.20	325.06	0.60	317.86	
BM			2.88	322.18	SW BP Unix Nail 322.15

Indexed
C.S.K.

Cross Section "T" Alley Block 123 Univ Hts
Between Oregon & Hamilton, El Cajon & Howard

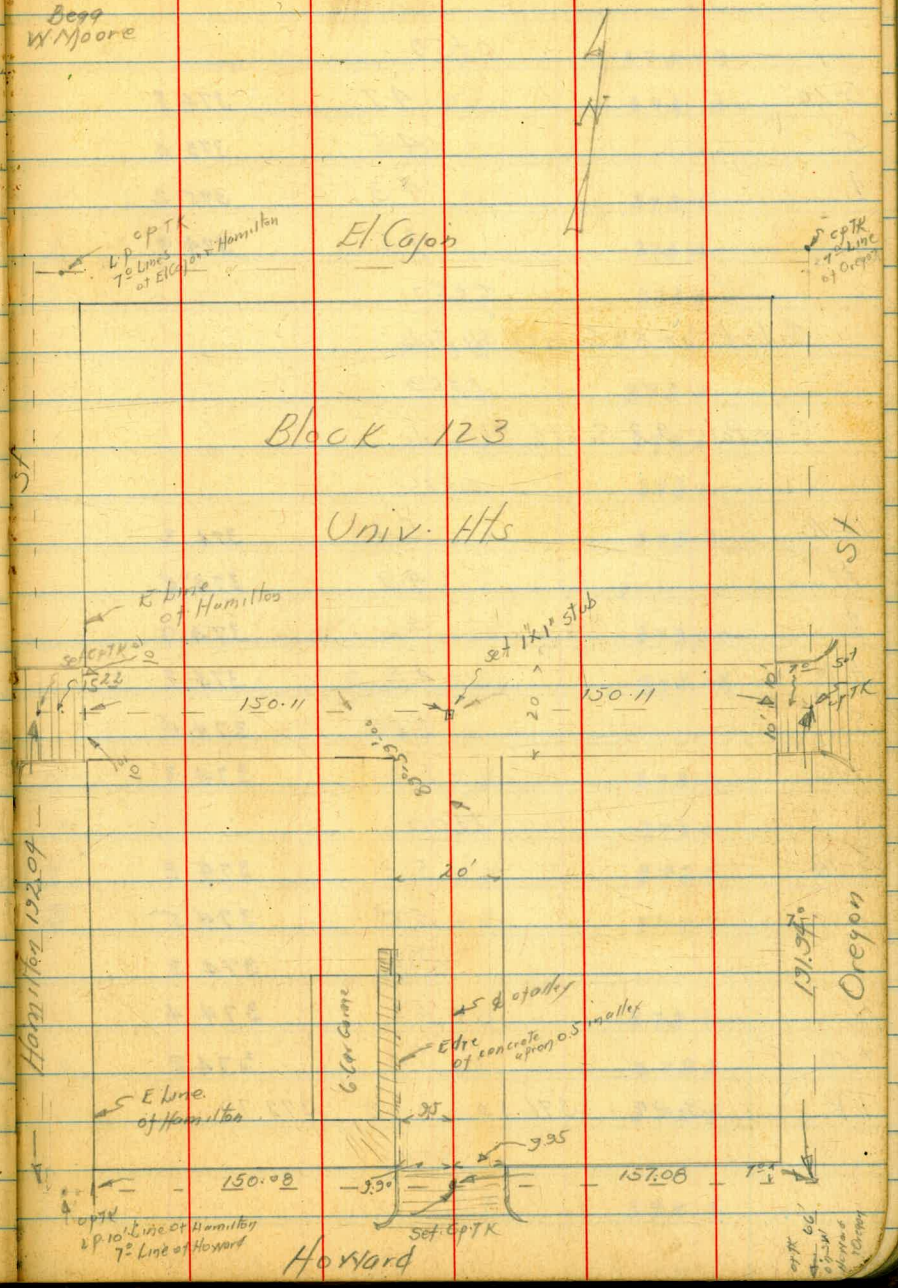
BM	468	373.03		368.35	N.E.cor El Cajon & Hamilton
TP	669	379.48	0.24	372.79	

0-14 W.C.6. Line of Oregon W. & East Alley

N-20			5.72	373 76
N			5.63	373 85
℄			5.65	373 83
S			5.75	373 73
S+20			5.87	373.61
+45			6.00	373 48
		0+00		
STopCb			4.71	374 77
Gutter			4.85	374 63
℄			5.19	374 34
N Gutter			4.96	374 52
N Top Cb			4.87	374.61
		0+25		
N-5			4.4	375 1
N			4.3	375 2
℄			4.5	375 0
+7			4.3	375 2
S			4.6	374 9
+10			4.6	374 9

Reduced & plotted on Profile #2706 8/26-42 (20 ft.)

Aug 24/42
Bliss
Begg
W. Moore



		379.98		
		0+50		
S-10		4.7	374.8	
S.		4.5	375.0	
℄		4.3	375.2	
N		4.6	374.9	
		0+52		
Gy Lt Pole 89 So. of ℄ Sly Side				
		0+69		
Guy Pole 92 So. of ℄ Sly Side				
		0+75		
N-10		5.2	374.3	
N		4.9	374.6	
℄		4.6	374.9	
+8		4.8	374.7	
S.		5.1	374.4	
+10		5.2	374.3	
		1+00		
S-10		5.3	374.2	
S.		5.0	374.5	
℄		5.2	374.3	
N		5.1	374.4	
+10		5.3	374.2	
TP	3.35	376.14	6.69	372.79

	376.14		
	1+06 Single Garage on N Concrete floor		
Single Garage. Lip 1.1 in alley	2.11	374.03	
" floor on line	2.00	374.14	
	1+40 E Line of N+S Alley		
N	2.5	373.6	
℄	2.7	373.4	
S	2.7	373.4	
	1+50 ℄ N+S Alley		
S	3.0	373.1	
℄	3.1	373.0	
N	3.1	373.0	
+5	2.8	373.3	
	1+56 Single Garage on on North		
Concrete Lip 0.3 in alley	3.14	373.00	
" floor Garage 2' Back	2.96	373.18	
	1+60		
N-5	2.8	373.3	
N	3.1	373.0	
℄	3.5	372.6	
S	3.4	372.7	
	1+75		
S	4.0	372.1	
℄	3.9	372.2	
N	3.3	372.8	
	1+77		
N	3.8	372.3	

	376.14		
℄	3.9	372.2	
1+91 Single Garage on North			
Concrete floor 6.3 Back	3.66	372.48	
" " 1/2 4' Back	3.66	372.48	
N	4.0	372.1	
℄	4.5	371.6	
S	4.6	371.5	
+10	4.0	372.1	
2+00			
S	4.5	371.6	
℄	4.6	371.5	
N	4.6	371.5	
+5	4.0	372.1	
2+10 Single Garage on North			
5.8 Back Dirt floor	4.4	371.7	
N	4.9	371.2	
℄	4.7	371.4	
+8	4.7	371.4	
S	4.4	371.7	
2+30			
-5	4.2	371.9	
S	4.5	371.6	
℄	4.4	371.7	
N	4.8	371.3	
+10	4.8	371.3	

	376.14		
2+50 Gr. Lt Pole			
S/f Edge 9.55 of ft			
2+51. East Edge con. Slab			
Slab 1.5 Back	4.45	371.69	
N	4.6	371.5	
℄	4.8	371.3	
S	4.6	371.5	
+5	4.8	371.3	
2+56 ℄ Single Garage on North			
Concrete floor 1.5' Back	4.34	371.80	
1/2 of slab 1.5 Back	4.45	371.69	
2+70			
S-5	5.8	370.3	
S	5.5	370.6	
+6	4.8	371.3	
℄	4.6	371.5	
N	4.8	371.3	
+1.4 Edge conWalk Parallelling ℄ of Alley	4.47	371.67	
2+80			
N-1.4 Edge conWalk Parallelling ℄ of Alley	4.44	371.70	
N	4.9	371.2	
℄	5.1	371.0	
+8	4.9	371.2	
S	5.5	370.6	
+5 N. Side of New Pos.	6.2	369.9	

T
376.14

2+90

S-5			67	369 4	
S			6.4	369 7	
+3			5.9	370 2	
℄			5.9	370 2	
+6			5.6	370 5	
N			5.0	371 1	
+1.5 walk paralleling ℄ of Alley			4.90	371.24	

3+00 22 E Line of Hamilton

N on grd			6.1	370.0	
N Top cb			6.99	369.15	
Gutter			7.25	368 89	
℄			7.41	368.73	
S Gutter			7.58	368.56	
S Top cb			7.24	368 90	

E Gutter line of Hamilton

S-10			8.69	367.45	
S			8.47	367 67	
℄			8.33	367 81	
N			8.16	367 98	
+10			8.15	367 99	
TP	4.08	372.73	7.49	368.65	
Check Starting BM			4.38	368 35	N.E. BP Hamilton Elgin

X-Sec N+S of "T" Alley

(TP page 18) 3.30 376.09 372.79

0+19 N ⊄ Line of Howard

E			6.20	369 89	✓
℄			6.62	369 47	
W			6.99	369.10	

0+00 N Line of Howard

W Top cb			6.12	369 97	
W Gutter			6.33	369 76	
℄			6.18	369.91	
E Gutter			5.81	370 28	J
E Top cb			5.37	370 72	J

0+05

E-4			4.4	371.7	✓
℄			4.6	371.5	✓
+5			5.8	370 3	
℄			6.1	370 0	
+9.7 Edge con slab			5.66	370 43	✓
W on c on slab			5.64	370 45	

0+15

W on con slab Paralleling ℄ alley			5.27	370 82	
W ℄			5.4	370 7	
+6			5.6	370 5	
℄			5.4	370.7	
+5			5.2	370 9	
E			4.5	371.6	

	of 20.5 End 6 Car Garage Concrete floor	
Apron 0.5 in alley	5.11	370.98
floor 2.5 Back	4.87	371.22
	of 35	
E	4.1	372.0
+5	4.8	371.3
℄	5.2	370.9
+5	5.0	371.1
+9.5 Edge of Apron	4.91	371.18
W on Con	4.89	371.20
+2.5 floor	4.80	371.29
	of 50	
W-2.5 floor Garage	4.55	371.54
W on concrete apron	4.60	371.49
+0.5	4.60	371.49
℄	4.7	371.4
+8	4.5	371.5
E	4.4	371.7
	of 60	
E-5	4.1	372.0 ✓
E	4.3	371.8 ✓
℄	4.4	371.7
+9.6 concrete apron	4.49	371.60
W	4.47	371.62
+1.5 floor Garage	4.37	371.72

	+70	
W-2.5 floor Garage	4.17	371.92
W	4.30	371.79
+0.5	4.32	371.76
℄	4.2	371.9
+7	3.7	372.4
E	3.7	372.4 ✓
+5	3.6	372.5 ✓
	of 74 N End 6 Car Garage	
floor 2.5 Back	4.16	371.93
	of 75 Gr Lt Pole	
Wsly Edge on Wmicofalt		
	at 87	
E-5	3.9	372.2 ✓
E	3.9	372.2 ✓
℄	3.9	372.2
W	4.1	372.0
	of 90	
N End Concrete slab 2' Back	4.16	371.93
	of 92 Gr Lt DM on	
93. W of ℄ to hot top		
	of 93 Single Garage on East	
1-4 Back Dirt floor	3.8	372.3 ✓
	1+00	
W-5	3.8	372.3
W	4.2	371.9

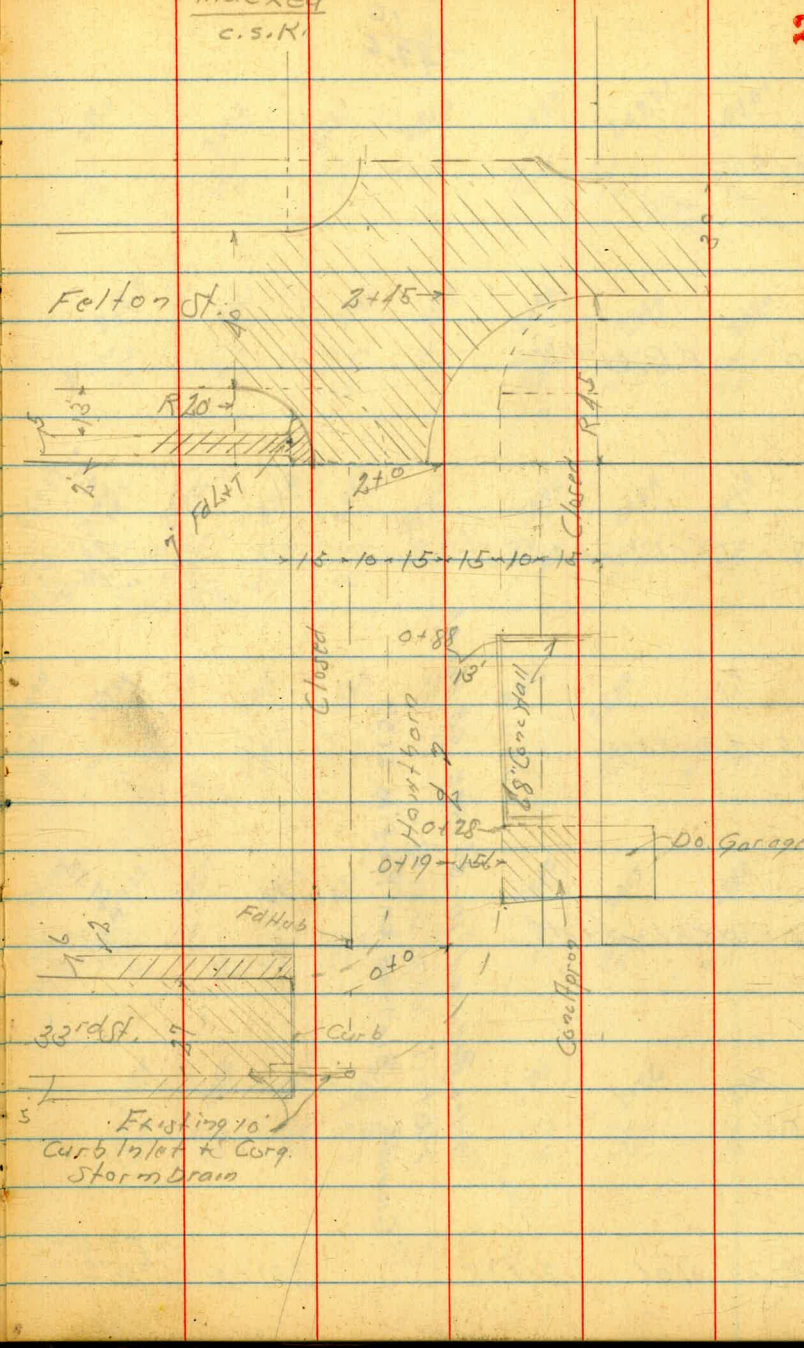
+3		4.0	372.1	
℄		4.0	372.1	
E		4.0	372.1	✓
+5		3.8	372.3	✓
	1+45			
E-5		3.2	372.9	✓
E		3.4	372.7	✓
℄		3.8	372.3	
W		3.8	372.3	
+5		3.7	372.4	
	1+35			
W-5		3.2	372.9	
W		3.2	372.9	
℄		3.1	373.0	
E		3.1	373.0	✓
+5		3.1	373.0	✓
	1+36.5 Sewer MH			
℄ 0.5 West of alley & Rim		2.50	373.59	✓
	1+52 Telephone Pole			
Wstly Edge 2.9 W of ch				
	1+60			
E-5		2.9	373.2	✓
E		2.9	373.2	✓
℄		2.9	373.2	
W		2.9	373.2	

	1+68 Telephone Guy & D'Hole		
2.9 W of ctr to ℄ of Guy			
	1+74 G & Lt Pole		
Wstly Edge 2.9 W of ℄			
	1+75 End N & S Alley		
W		3.9	372.7
℄		3.0	373.1
E		2.7	373.4
Clear Turn		3.30	372.79

Cross Section Hazelhorn St.
33rd St to Felton St.
Levels Next Page

Oct 2 1942
S. 5500
Hazard
Flint

Indexed
C.S.K.



492
1.6
47.6

Lt=N

Rt=S

0+19					259.0	254.2	253.1	251.2	249.0	249.21	249.01	247.41
					3.1	7.9	9.0	10.9	13.1	13.87	13.07	14.67
					4.0	2.5	1.5		1.5	15.6 = Elev. Hawthorn	15.5 = Hawthorn	15.5 = Garrett
0+40	= E.L. 33rd St.				258.3	256.1	254.6	252.3	249.4	248.4	247.0	
					5.8	6.0	7.5	9.8	12.7	13.7	15.1	
					4.0	2.5	1.5		1.5	2.5	3.5	
0-8	= ℄ Cb Line 33rd St.			259.91	260.39	257.76	258.26	256.4	255.1	252.7	249.6	248.4	241.9
				3.11	1.11	4.32	3.82	5.7	7.0	9.4	12.5	13.7	20.2
				6.5-Gu. Hy.	1.5-Cb	4.0-Gutter	4.0-Cb Grass	2.5	1.5		1.5	2.5	4.0
0-21.5	= ℄ Roadway				260.06	257.24	257.90	256.6	254.8	250.1	248.1	244.8	237.7
					2.04	4.74	4.18	5.5	7.3	13.0	14.0	17.3	24.4
					8.0 Pav.	4.0-Gutter	4.0-Cb Grass	2.5	1.5		1.5	2.5	4.0
0-35	= ℄ Cb Line 33rd			259.78	260.39	257.23	256.17	251.5	231.7	233.1	236.7	243.5	240.7	234.8
				2.30	1.71	4.75	3.91	10.6	30.4	30.0	25.4	18.6	21.4	27.3
				6.5-Gutter	0-Cb	4.0-Grass	4.0-Ditch	3.0	2.5	1.0		5	2.5	4.0
0-55					247.9	245.5	241.1	229.6	220.6	230.1	227.6	224.1	
					14.2	16.6	21.0	24.5	41.5	32.0	34.5	39.0	
					6.5	4.0	2.5	1.3	= Bottom	1.5	2.5	4.0	
BM	11.06	262.08		251.02	N E 7.47 Hawthorn & Fallon				262.08 ✓				

Notes Reduced 10-3-1942 GS Keogh
Plotted large scale
Ground Plotted on Profile 2139

	Lt.				Rt	
1+04	254.6 7.5 40	253.8 8.3 30	251.7 10.4 25	248.4 13.7 15	240.5 21.6	236.7 25.4 15	236.8 25.3 25	232.5 29.6 50
0+97	252.8 9.3 40	250.1 12.0 25	248.5 13.6 15	243.0 19.1	241.9 20.2 15	240.3 21.8 25	237.1 25.0 40	
0+88	256.0 6.1 40	249.2 12.9 25	247.7 14.4 15	246.4 15.7	245.67 16.41 30 - HFH Conc Wall	245.05 17.03 15 of Conc Wall	243.77 18.31 25 of Wall	242.5 19.6 35
0+75	258.2 5.29 40	250.4 11.7 25	248.9 13.2 15	247.3 14.8	246.55 15.53 15.5 - Top Conc Wall	245.9 16.2 15	245.21 16.87 25 of Conc Wall	
0+50	260.2 1.9 40	251.9 10.2 25	251.1 11.0 15	249.0 13.1	247.66 14.47 14.6 - Top Conc Wall	246.9 15.2 16	246.44 15.6 25 of Conc Wall	
0+28					251.39 10.69 15.6 - T. Wall 8" Conc Wall	493.6 T. Wall ??		

262.08 262.08

					Lt.			Rt.	
					251.14	250.99	250.59	251.20	251.1
					4.78	4.93	5.33	4.72	4.8
					35-BonPa	35-BonPa	35-Gutter	35-TopCb	
2+40	=/L Felton								
					252.1	251.2	251.0	251.1	250.6
					3.8	4.7	4.9	4.8	5.3
					25	21	15		15
1+95									
					254.5	252.9	251.2	251.0	250.8
					1.4	3.0	4.7	4.9	5.1
					30	25	20	15	
1+75									
								25592 ✓	
TP	4.90	25592	11.06	251.02					
					254.7	253.2	251.4	251.4	250.6
					7.4	8.9	10.7	10.7	11.5
					30	25	21	15	
1+50									
					254.8	252.8	251.7	251.7	251.2
					7.3	9.2	10.4	10.4	10.9
					30	25	22	20	
1+33									
					254.8	254.0	253.2	252.1	247.4
					7.3	8.1	9.9	10.0	19.7
					30	26	24	15	
1+15									
		26208						26208	

					Lt.			Rt.	
					250.5	249.6	248.6	247.5	246.5
					5.1	6.0	7.0	8.1	9.1
					30	25	20	15	
2+40	=/L Felton								
					250.7	249.8	248.0		
					4.9	5.8	7.6		
					25	15	10		
1+95									
					250.9	249.9	248.5		
					4.7	5.8	7.2		
					21	15	10		
1+75									
					251.2	250.1	249.3	246.7	
					4.7	5.8	6.6	9.2	
					20	15	15	10	
TP	4.90	25592	11.06	251.02					
					251.4	250.6	249.6	248.6	241.5
					10.7	11.5	12.5	13.5	20.6
					21	15	15	10	
1+50									
					251.7	251.2	250.2	249.6	241.2	230.1
					10.4	10.9	11.9	12.5	20.9	32.0
					22	20	15	15	10	5
1+33									
					253.2	252.1	247.4	236.0	232.1	224.1
					9.9	10.0	19.7	31.1	33.0	38.0
					24	15		15	25	50
1+15									
		26208						26208	

Lt

Rt

2+45 = MCb Line Fe Hom From South

2+20 = MCb Line Fe Hom From N

2+10

25592

250.79 250.50 249.88 248.90 247.98 246.62 246.16 244.58 244.09

5.13 5.42 6.04 7.02 8.00 9.30 9.76 11.34 11.85

25cy Pa 15cy Pa 0.0 cy Pa 15 25 40-Cb 40-Gutter 55-Cb 55-Gutter

252.29 251.66 251.85 251.27 250.90 250.67 250.89 250.25 249.9 249.2 247.8

3.63 4.26 4.07 4.65 5.01 5.95 5.03 5.69 6.0 6.7 8.1

70-Cb 40-Gutter 55-Cb BE 55-Gutter 25 15 0.0 Cb 0.0 Gutter 15 25 35

251.69 251.13 251.08 250.86 250.48 251.04 250.9 250.3 249.5 249.9

4.23 4.79 4.81 5.06 5.44 4.88 5.0 5.6 6.4 8.6

87.2-Cb 272-Gutter 25cy Pa 15cy Pa 8.7 Gutter 55-Cb 15 25 35

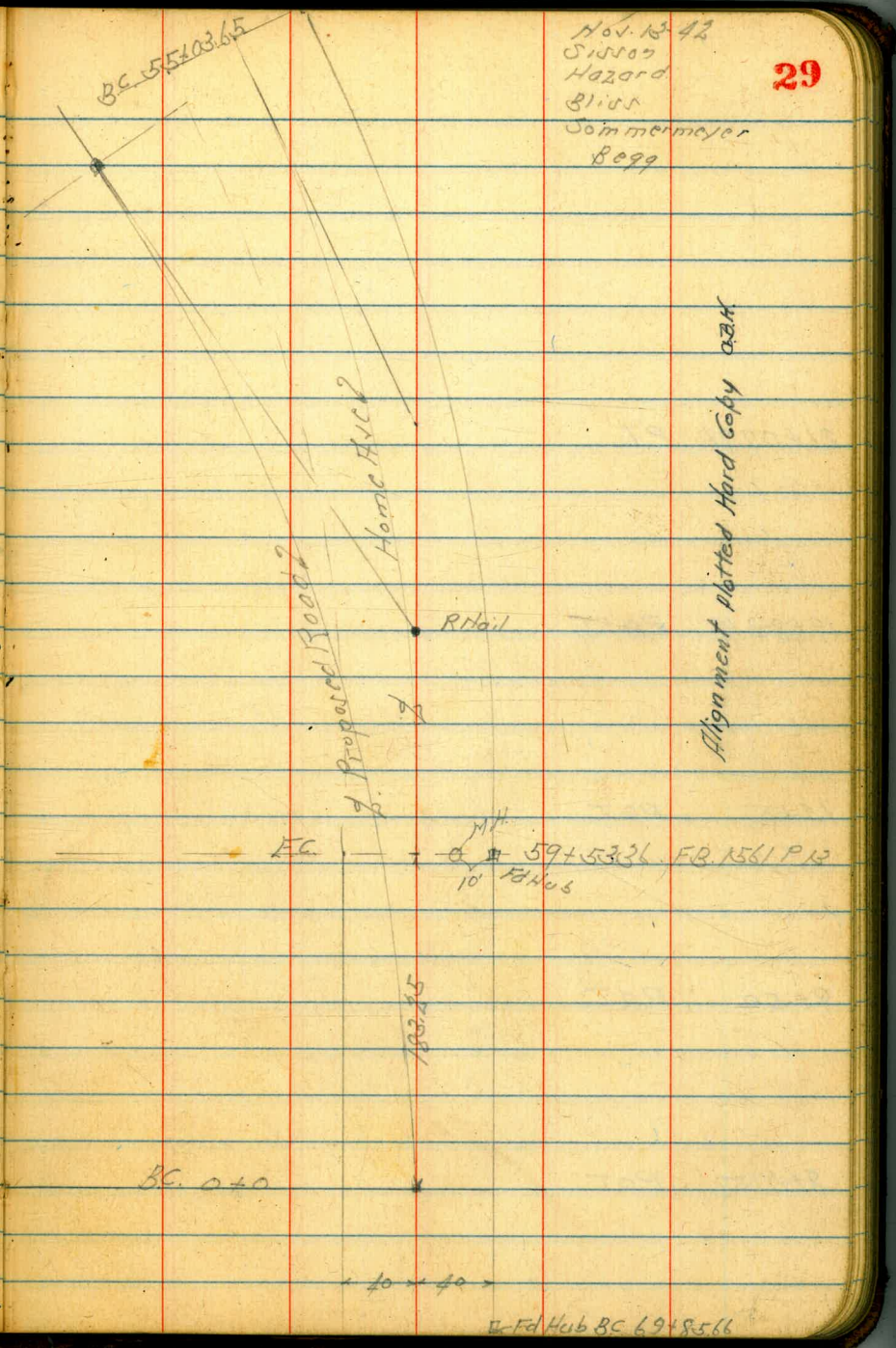
25592

Road Survey Connections Between Home Ave and Fairmount

indexed
C.S.K.

Lt.

5+88.76 =	E.C.	16°52'	
+50		15°46.38'	
5+0		14°19.44'	
+50		12°53.50'	Δ 33°44'
4+0		11°27.55'	R 1000.0'
+50		10°01.61'	T 303.19
3+0		8°35.66'	L 588.76
+50		7°09.72'	D 1°7188
2+0		5°43.78'	
+50		4°17.83'	
1+0		2°51.89'	
+50		1°25.94'	
0+0	B.C.	Lt.	



21+07.76 P.I.

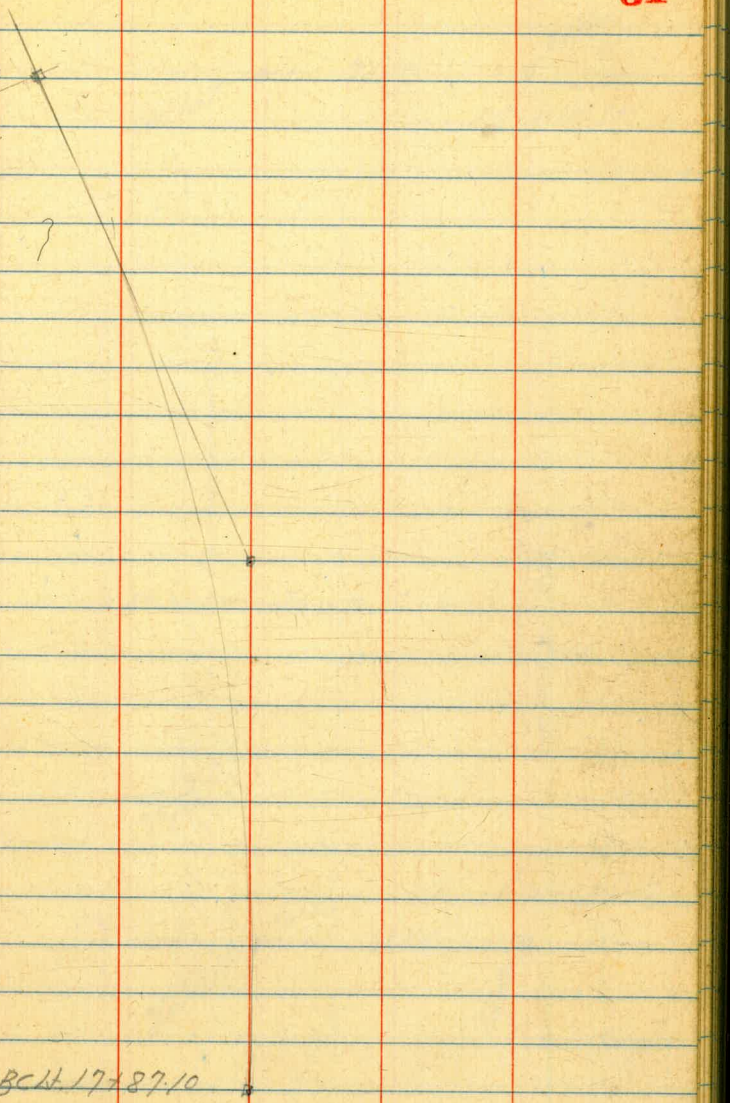
19+83.19 P.O.S.T.

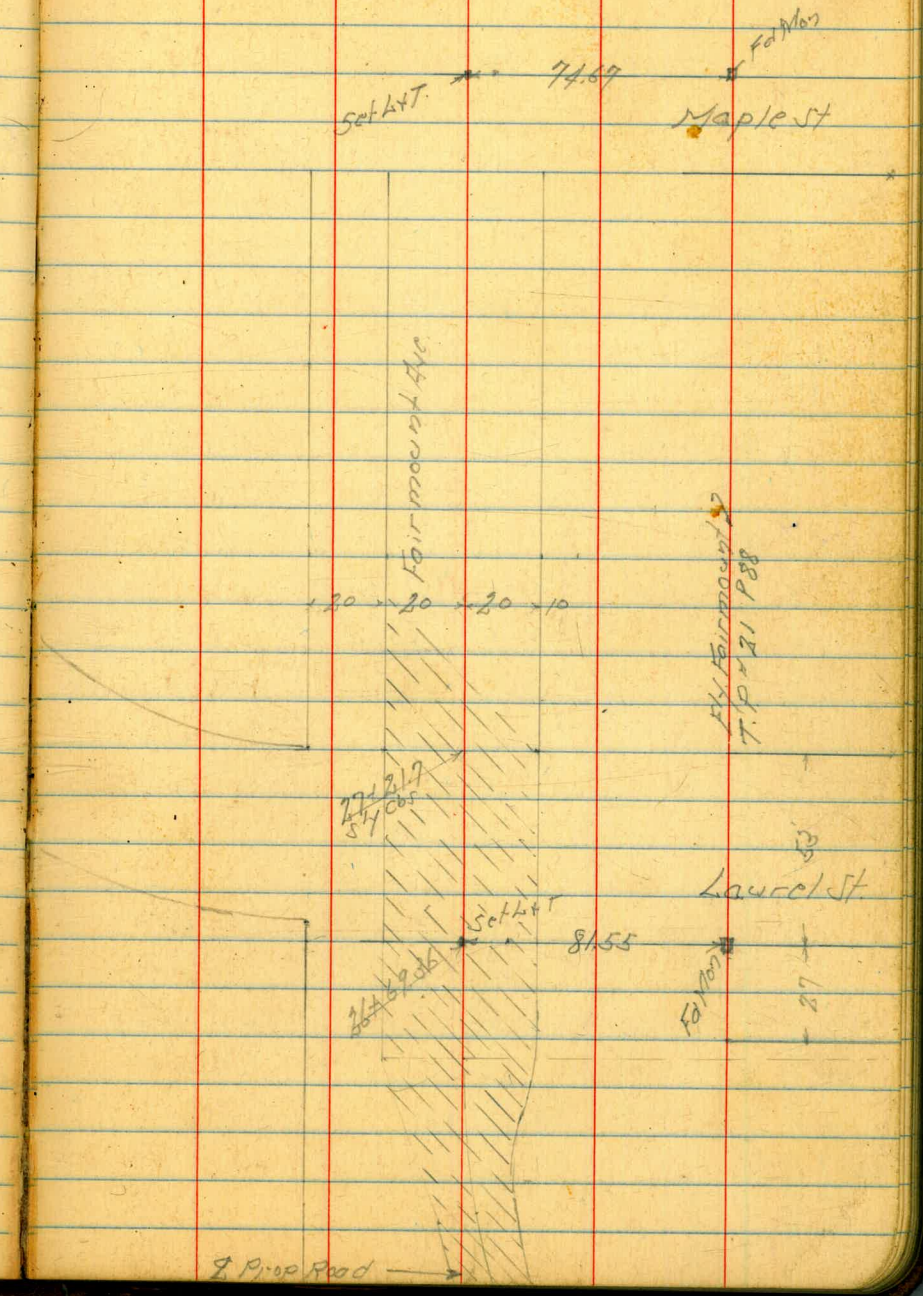
14+0 P.O.T.

9+50 P.O.T.

8+37.57 P.O.T.

		Lt.		
24+18.91	EC	12° 04'		
24+0		11° 42.32'		
+50		10° 45.03'		
23+0		9° 47.73'		
+50		8° 50.44'		
22+0	POC	7° 53.14'	Δ	24° 08'
+50		6° 55.85'	R	1500.0
21+0		5° 58.55'	T	320.66
+50	POC	5° 01.26'	L	631.81
20+0		4° 03.96'	D	1.1459
+50	POC	3° 06.67'		
19+0		2° 09.37'		
+50		1° 12.08'		
18+0		0° 14.78'		
17+87.10	BC Lt.			




Set H.T.
74.69
Fd Mon
Maple St
Fairmount Ave
1.20
20
20
10
Fd Fairmount
T. of 121 P88
Laurel St
Set H.T
81.55
Fd Mon
Prior Road

24+96.34 P.O.T

Center Line Levels Road Connection
Between Home Ave & Fairmount Ave

Nov. 20-42
S. Sloan
Hazard
Hiser

BM	8.49	156.54		148.05	BPF hydt Cor Conc. Curb Fairmount & Home Ave
TP	0.34	144.98	11.80	144.74	
TP	0.98	137.18	8.78	136.20	
TP	1.18	131.07	7.29	129.89	
TP	7.93	130.79	8.21	128.86	
BM			10.28	120.51	on N.H. Rim Pt 1783.25
0-200	on Paving		14.97	115.82	
0-100	"		14.03	116.76	
0+0	= BC Lt.		12.84	117.95	
+50			12.43	118.36	
1+0			12.12	118.67	
+50	= W/Pav.		11.8	119.0	
+90			11.5	119.3	
2+0			10.4	120.4	
+15			10.8	120.0	
+30			11.9	118.9	
+50			11.7	119.1	
+90			10.1	120.7	
3+05			4.3	126.5	
+50			2.7	128.1	
TP	11.48	141.18	1.09	129.70	
4+0			80	133.2	
+25			4.8	136.4	
TP	10.90	152.08	0.00	141.18	
+50			9.1	143.0	

Notes Red. TP plotted on Onion Profile 11-23-1942 C.S. Hough

		152.08			
TP	5.88	157.08	0.38	151.70	
5+0			2.7	154.4	
+25			1.3	155.8	
+50			2.6	154.5	
+88.76	E.C.		5.54	151.54	on EC Hub
6+0			8.0	149.1	
+25			13.5	143.6	
+55			15.9	141.2	
+60			18.3	138.8	
+68			22.8	1343	
+78			16.3	140.8	
+85			12.7	144.4	
7+0			7.0	150.1	
TP	11.87	168.91	0.04	157.04	
+50			7.0	161.9	
TP	11.80	180.65	0.06	168.85	
+85			8.8	171.8	
8+0			4.7	176.0	
TP	9.34	189.82	0.17	180.48	
+20			6.3	183.5	
+37.57	POT.		4.56	185.20	on Hub
9+0			3.8	186.0	
+50			4.2	185.6	
+70			8.2	181.6	
TP	2.08	179.68	12.22	177.60	

		179.68			
10+0			3.2	176.4	
+50			12.8	166.9	
+80			12.4	167.3	
11+0			9.5	170.2	
+50			2.2	177.5	
TP	11.98	191.04	0.62	179.06	
+80			7.7	183.3	
12+0			2.5	188.5	
TP	12.00	202.80	0.24	190.80	
+25			7.7	195.1	
+50			1.9	200.9	
TP	12.11	214.57	0.84	202.46	
13+0			8.5	206.1	
+25			5.7	208.9	
+50			5.7	208.9	
14+0	POT		4.32	210.3 on Hub	
+50			4.2	210.4	
15+0			5.1	209.5	
+50			7.0	207.6	
16+0			7.8	206.8	
+25			8.7	205.9	
TP	0.04	203.04	11.57	202.00	
+50			4.5	198.5	
+70			14.0	189.0	
+84			21.8	181.2	

		203.04			
17+0			14.8	188.2	
+20			6.0	197.0	
TP	12.15	215.13	0.06	202.98	
+35			11.5	203.6	
+50			4.8	210.3	
TP	12.03	227.13	0.03	215.10	
+87.10	BC.L		2.64	224.49 on Hub	
TP	11.53	238.62	0.04	227.09	
18+0			10.8	227.8	
+50			4.1	234.5	
+60			2.6	236.0	
TP	11.74	249.80	0.56	238.06	
+70			10.4	239.4	
19+0			2.9	246.9	
TP	8.21	257.28	0.73	249.07	
+25			5.7	251.6	
+50	POC		3.55	253.60 on Hub	
20+0			3.8	253.5	
TP +50	0.07	245.82	11.43	245.85 on POC Hub	
21+0			10.5	235.4	
TP	0.40	234.33	11.99	233.93	
+50			7.8	226.5	
TP	0.07	222.50	11.90	222.43	
+75			1.1	221.4	
22+0	POC		8.46	214.0 on Hub	

		222.50		
22+10			11.5	211.0
TP	0.17	211.31	11.36	211.14
+15			6.4	204.9
+30	=N'y Old Road		6.8	204.5
+38			12.0	199.3
TP	4.81	204.32	11.80	199.51
+50			8.2	196.1
+85			18.2	186.1
23+0			14.8	189.5
+10			11.6	192.7
TP	11.82	216.07	0.07	204.25
+50			11.0	205.1
TP	11.69	227.51	0.25	215.82
+87			8.9	218.6
24+0			5.6	221.9
TP	12.31	239.67	0.15	227.36
+18.93	E.C.		10.82	228.9 to Hub
+50			1.3	238.4
TP	12.03	251.65	0.06	239.62
+77			0.0	261.7
TP	11.43	262.99	0.09	251.56
+87			9.2	253.8
+96.34	P.O.T.		5.67	257.3 to Hub
25+05			2.0	261.0
+25			13.7	249.3

		262.99			
25+55	=N'y Paving		9.60	253.39	
TP	7.00	269.37	0.62	262.37	
26+0	" Paving		10.70	258.67	
+20	" "		8.39	260.98	
+40	" "		6.94	262.43	
+60	" "		6.11	263.26	
27+0	" "		5.37	264.00	
+50			4.09	265.28	S. End Cb N.E. Laurel & Fairmount
BM			4.73	264.64	
28+0			2.92	266.45	
TP	11.50	280.24	0.63	268.74	
TP	5.22	284.36	1.10	279.14	
BM			4.13	280.23	N.W. C.P. Maple & Fairmount 280.17

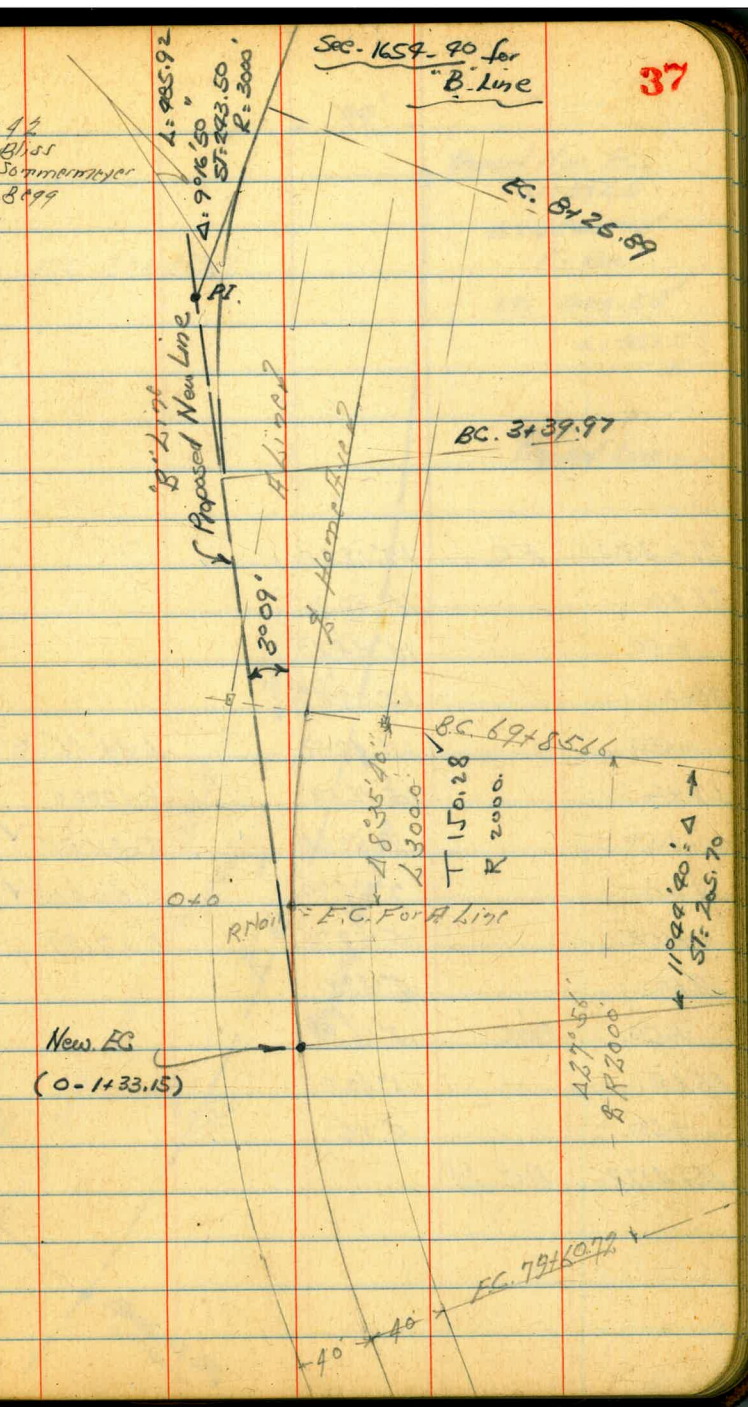
"A" Line
Home Ave And Fairmount Connection

13+87.97 P.O.T.

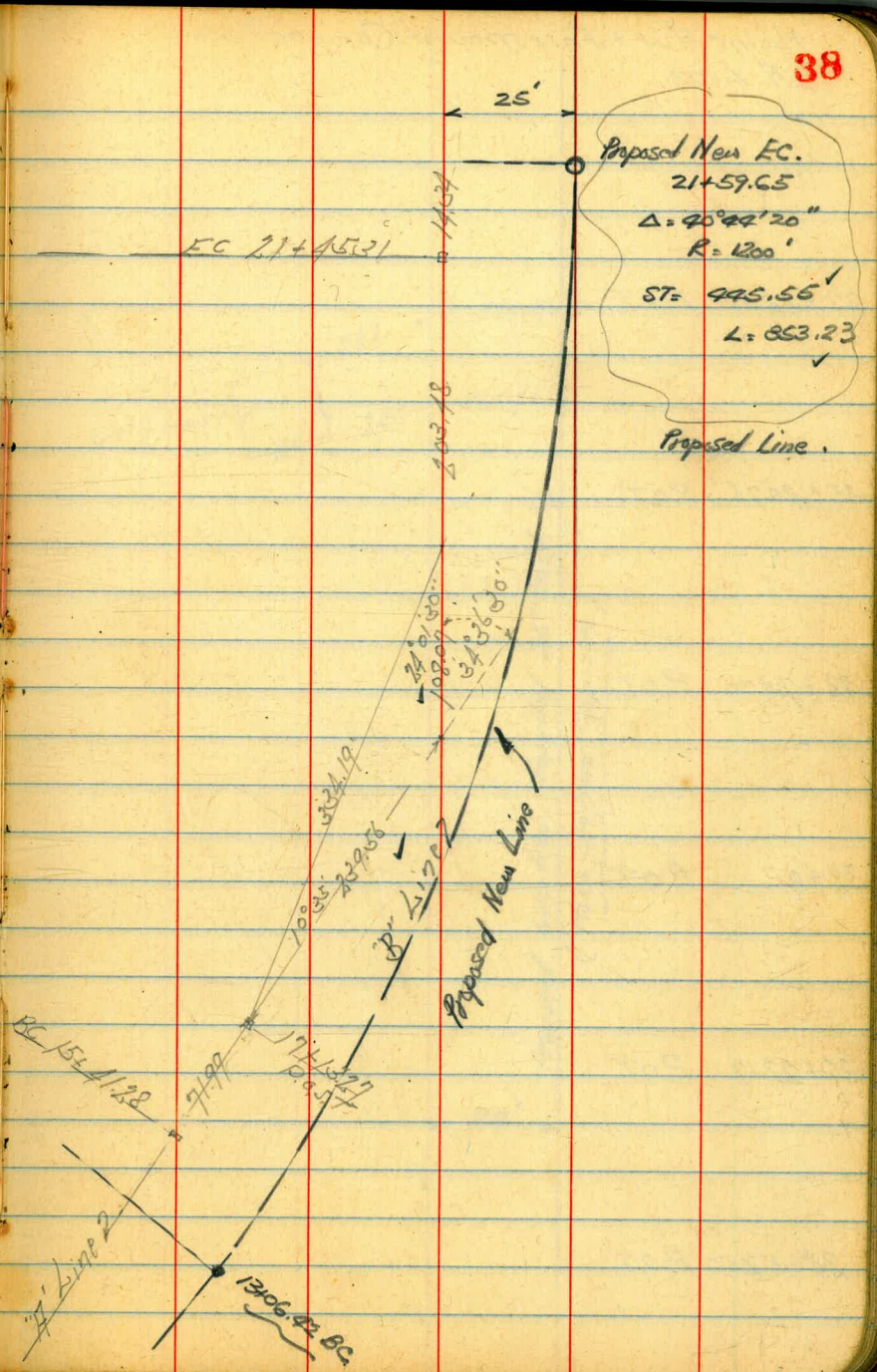
6+44.66 P.O.T.

0+0 E.C. = 72+85.66 Poc. Home Ave.

Dec. 2-4
Sisson Bliss
Hazard Sommermeyer
Hiser Begg



		Lt.		
21+45.31	E.C.	17°18.25'		
21+0		16°00.36'		
+50		14°34.41'		
20+0		13°08.47'		
+50		11°42.58'	Δ	34°36'30"
19+0		10°16.59'	R	1000.0'
+50		8°50.64'	T	311.55' ✓
18+0		7°24.70'	L	604.03' ✓
+50		5°58.76'	D	1.7189
17+0		4°32.81'		
+50	P.O.C.	3°06.87'		
16+0		1°40.93'		
+50		0°15'		
15+41.28	B.C. Lt			



Home Ave + Fairmount Connection
"A" Line

27+82.60 P.O.T.

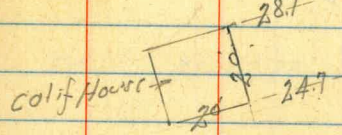
35+40.76 P.O.T.

32+73.00 P.O.T.

32+0 P.O.T.

30+22.17 P.O.T.

~~23~~+53.50 P.O.T.



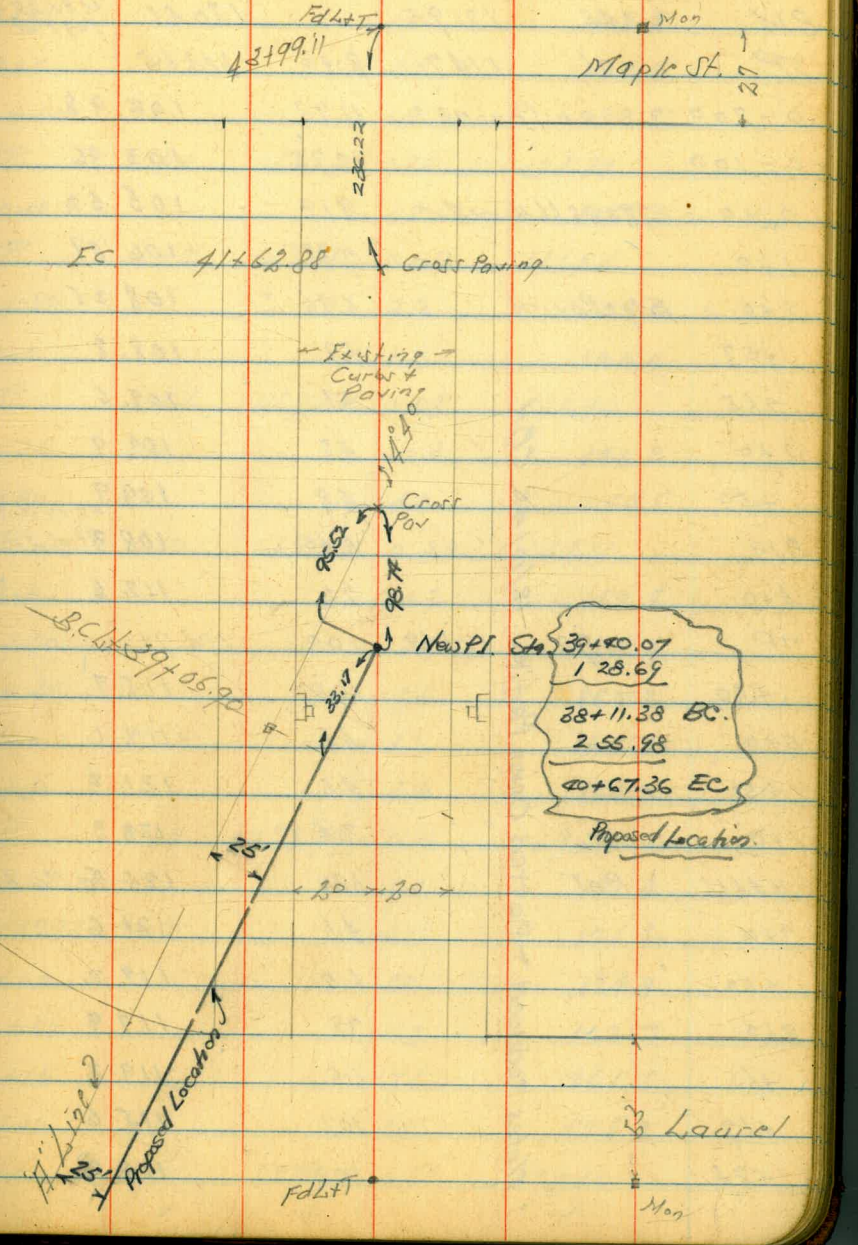
Proposed Location - Parallel 25' East
(Make Stations Opposite)

25'

"A" Line

		Lt.	
41+62.88	EC.	7°20	
+50		6°57.86	
41+0		5°21.91'	
			Δ 14°40'
+50		4°05.97	R 1000.0
			T 128.69 ✓
40+0		2°40.03'	L 255.98 ✓
+50		1°14.08	
39+06.90	BC Lt.		

Use Same Curve on Proposed Location



Levels "A" Line
Home Ave + Fairmount Connection

BM	1.44	121.95		120.51	on MH R.m 1+83.25 Page 37
TP	1.06	114.71	8.30	113.65	
0-200	on Paving		11.73	102.98	
0-100	"	"	10.75	103.96	
0+0 = 78+85.44 Home Ave			9.19	105.52	
1+0			7.82	106.89	
2+0 = Edge Paving			6.36	108.35	
+57			.59	108.8	
+65			.51	109.6	
3+0			.48	109.9	
+50			.48	109.9	on MH R.m
B.M			6.40	108.3	1+ of 3+00
4+0			2.1	112.6	
TP	1.98	125.69	1.00	113.71	
+50			1.00	115.7	
5+0			.66	119.1	
+50			.45	121.2	
6+0			2.4	123.3	
7+46	P.O.T.		1.30	124.5	2 Hubs
7+0			4.1	121.6	
+50			6.5	119.2	
8+0			7.8	117.9	
+65			6.5	119.2	
+67			10.1	115.6	
+84			10.8	114.9	

Notes Reduced + Plotted Onion Profile 12/10/42 COH

Dec 8-42 Sisson Hazor Hiser

		125.69		
8+86			.69	118.8
9+0			.55	120.2
+50			.19	123.8
TP	1.24	136.13	0.80	124.89
10+0			.68	129.3
TP	1.45	147.49	0.09	136.04
+50			.99	137.6
11+0			.35	144.0
TP	1.54	158.50	0.53	146.96
+25			10.3	148.2
+50			4.0	154.5
TP	1.60	169.71	0.39	158.11
12+0			10.2	159.5
+50			.48	164.9
+80			.25	167.2
13+0			.32	166.5
+30			.44	165.3
TP	9.30	178.90	0.11	169.60
+67			.75	171.4
+87.95 P.O.T.			3.11	175.8 on Hub
14+0			.40	174.9
+50			1.63	162.7
+60			1.71	161.5
15+0			3.1	175.8
TP	1.54 ✓	189.94 ✓	0.50	178.40 ✓

"H" Line

		189.94			
15+20			6.6	183.3	
15+41.28	BC. Lt		4.17	185.7	on Hub
+50			3.6	186.3	
16+0			2.4	187.5	
+50			3.6	186.3	
+75			5.4	184.5	
17+0			11.4	178.5	
TP	0.67	179.32	11.29	178.65	
TP	0.36	167.55	12.13	167.19	
+50			4.2	163.4	
18+0			16.8	150.8	
+16			21.2	146.4	
+18			23.2	144.4	
+24			23.0	144.6	
+28			20.0	147.6	
+50			13.7	153.9	
19+0			1.8	165.8	
TP	12.12	179.37	0.30	167.25	
+25			7.0	172.4	
+50			2.8	177.1	
TP	12.07	191.08	0.36	179.01	
+75			8.9	182.2	
20+0			6.0	188.1	
TP	11.62	202.14	0.56	190.52	
+25			8.7	193.4	

		202.14			
20+50			5.4	196.7	
+75			4.3	197.8	
21+0			4.4	197.7	
+45.31	E.C.		6.97	195.4	on Hub
+90			2.9	199.7	
TP	11.48	213.40	0.22	201.92	
22+10			8.1	205.3	
+50			5.1	208.3	
TP	11.59	224.73	0.26	213.14	
23+0			8.5	216.2	
+15			4.3	220.4	
+40			0.3	224.4	
TP	12.14	236.76	0.11	224.62	
+35.50	P.O.T.		11.24	225.5	on Hub
24+0			9.5	227.2	
+50			8.3	228.5	
25+0			6.3	230.4	
+50			4.6	232.1	
26+0			5.1	231.6	
+50			7.0	229.7	
27+0			8.0	228.7	
+50			8.5	228.2	
28+0			10.8	225.9	
+50			15.0	221.7	
+73			18.1	218.6	

Home Run + Fairmount Connection
"H" Line

		226.76			
29+0			17.1	219.6	
+10			16.8	219.9	
+30			9.6	227.1	
+40			12.6	224.1	
+50			7.4	229.3	
TP	11.57	248.11	0.22	236.54	
+75			10.6	237.5	
TP	11.18	258.99	0.30	247.81	
30+02			11.8	247.2	
+22.17	P.O.T.		8.54	250.5	⌀ Hub
+50			5.7	253.3	
31+0			1.5	257.5	
TP	0.72	259.31	0.40	258.59	
+50			0.5	258.8	
32+0	P.O.T.		2.85	256.5	⌀ Hub
+50			8.1	251.2	
TP	0.67	248.37	11.61	247.70	
+73			3.0	245.4	
33+0			10.6	237.8	
TP	0.97	237.27	12.07	226.30	on Rock 33+12.5
+25			5.8	231.5	
+45			13.5	223.8	
TP	1.00	226.52	11.75	225.52	
+48			7.3	219.2	
+67			7.0	219.5	

		226.52			
38+76			11.2	215.3	
39+03			18.0	208.5	
+12			24.8	201.7	
+19			26.2	200.3	
+23			29.2	197.3	
+40			19.4	207.1	
+50			13.2	213.3	
+80			0.0	226.5	
TP	11.50	238.00	0.02	226.50	
35+0			4.4	233.6	
TP	11.65	249.45	0.20	237.80	
TP	11.91	261.11	0.25	249.20	
+40.76	P.O.T.		5.32	255.8	⌀ Hub
+85			1.5	259.6	
TP	11.59	272.65	0.05	261.06	
36+12			10.3	262.3	
+38			7.8	264.8	
37+0			3.7	268.9	
+14			3.1	269.5	
+16 = Approx St. Laurel			8.1	264.5	
+64 = " N.L. "			7.6	265.0	
+67			0.9	271.7	
TP +82.60	3.32	274.30	0.67	271.98	on ⌀ Hub
38+0			2.1	272.2	
+60			2.2	272.1	

✓ ✓ ✓

"A" Line

		274.30			
38+85			6.3	268.0	
39+06.90	BC Lt		6.28	268.02	Hub
+50			5.3	269.0	
+63	= NCb Fairmount		5.05	269.25	
+63	= Gutter on Pav		5.57	269.73	
40+0	on Paving		4.49	269.81	
+50	" "		3.13	271.17	
41+0	" "		1.94	272.36	
+50	" "		0.80	273.50	
+62.88	EC " "		0.45	273.85	
TP		9.02	282.87	0.45	273.85
42+0	on Paving			8.08	274.79
43+0				5.54	277.33
+99.11	= 13.L			3.42	279.45
BM				2.72	280.15

NJ&P Maple & Fairmount 280.17

Topog "A" Line
Home Ave + Fairmount Connection

Dec-18-42
Simon
Blinn
Sommerman
Hunt

	Lt.			Δ	Rt			
9+0	125.0 85'	120.0 59	116.0 25-80/100ths	120.0 8	120.2	122.0 42	120.0 17.0	
8+0		130.0 57	125.0 40'	120.0 22'	117.9	115.0 40	114.0 42-80/100ths	115.0 51	115.0 96
7+0		125.0 61'	130.0 38	125.0 30'	121.6	120.0 21'	115.0 59'		
6+94.46		125.0 69	130.0 30'	125.0 4	124.5	120.0 26'	115.0 52		
6+0		125.0 82'	120.0 62	125.0 10	122.3	120.0 26	115.0 44		
5+0		130.0 81	125.0 48'	120.0 14	119.1	115 29.0	111.0 87'		
4+0		125.0 64	120.0 44'	115.0 17'	113.6	110.0 20			
3+0			120.0 56'	115.0 32'	109.9				

Plotted on Hard Copy 12/30/1942 GRH

	Lt								Rt							
147+60	195.0 106	190 72	185 55	180 44	175.0 33	170.0 23	165.0 10	161.5	160.0 5	155.0 18	150.0 40	145.0 57	140.0 81	135.0 100	130.0 115	
148+0		195.0 116	190.0 80	185.0 39		180.0 10	175.0		170.0 11	165.0 21	160.0 32	155.0 47	150.0 56	145.0 65	140.0 76	135.0 90
139+0		190.0 125.0	185.0 85	180.0 34	175.0 19	170.0 8	166.5		165.0 3	160.0 14	155.0 24	150.0 34	145.0 44	140.0 54	135.0 64	130.0 82
1210+0			175.0 64	170 27	165.0 15	160.0 2	158.5		155.0 10	150.0 20	145.0 31	140.0 45	135 60	130.0 70	125.0 91	
11+50			160.0 115	155.0 68	150.0 33	145.0 4	144.5		150.0 11	145.0 20	140.0 27	135.0 48	130.0 70	125.0 91		
11+00				140.0 145	145.0 100	145.0 9	144.0		140.0 22	135.0 44	130.0 61	125 78	120.0 92			
10+50				130.0 83		135.0 13	137.6		125.0 18	130.0 54	125.0 76	120.0 96				
10+00				124.0 100		125.0 39	129.3		120.0 18	125.0 90						

Lt									
20+0	185 7	160 69	155 83 = Bot Gulch	160 44	165 37	170 30	175 24	180 14	185 6	188.1
19+50	165 78	160 63	155 54	152.0 48 = Bot Gulch	155 44	160 33	165 23	170 13	175 4	177.1
19+0	150 77	145 66	140 56	? 155 43	150 34	155 26	160 16	165 4		165.8
18+20	180 73	175 62	170.0 52	165.0 44	160.0 34	155.0 20	150.0 10	145.0 3		144.4
17+70	195.0 86	190.0 70	185.0 55	180.0 44	175.0 34	170.0 25	165.0 14	160 4		157.2
17+0	205 94	200.0 74	195.0 60	190.0 33	185.0 16	180.0 4				178.5
16+0		210.0 136	205.0 84	200.0 61	195.0 38	190.0 8				187.5
15+20			200.0 110	195.0 75	190.0 36	185.0 10				182.3

Rt									
190 5	191 165 Top Ridge	190 23	185 40	180 53	175 62	170 72	165 81	160 92	
180 6	185 15	188 29 Top Ridge	185 44	180 54	175 62	170 71	165 80	160 90	
170 9	175 24	179 41	175 55	170 67	165 80				
145 6	150 14	155 31	? 155 57	150 69	145 82				
155.0 10	150.0 23	145.0 32	140.0 43	135.0 50 = Bot Marks	140 61	139.0 100			
175.0 7	170.0 19	165.0 29	160.0 39	155.0 54	150.0 72	145.0 84	140.0 107		
185.0 11	180.0 28	175.0 43	170.0 57	165.0 72	160.0 86	155.0 100	150.0 111.0		
180.0 11	175.0 23	170.0 37	165.0 53	160.0 62	155.0 72	150.0 81	145 91		

	Lt						Rt								
28+0	248 147	245 89	240 54	235 35	230 16	225.9	225 3	220 14	215 23	210 33	205 41	200 49	195 53 = Bot Gulch	200 58	205 76
27+0	242.5 110	240 59	235 28	230 10	228.7		225 25	220 59	215 90	210 115					
26+0	235 152	229.0 55	230.0 20	231.6			230 6	225 27	220 65	215 89	210 110				
25+0	230 107.0	225 47	230.4				230.0 2	225 22	220 55	215 82	210 130				
24+0	205 90	210 77	215 63	220 48	225.0 33	227.2	225 15	220 41	215 63	210 84	205 110				
23+0	190 80	195 71	200 60	205 48	210 35	215 16	216.2	215 20	210 40	205 48	200 59	195 67	190 77	185 84	180 90
22+0	175 86 = Bot Gulch	180 78	185 66	190 56	195 45	200 33	205 14 = Top Ridge	202.0	200 7	195 21	190 30	185 39	180 50	175 58	170 67	165 76	160 87
21+0	165 84 = Bot Gulch	170 75	175 66	180 57	185 37	190 24	195 13	197.7 = Top Ridge	195.0 8	190 19	185 29	180 42	175 53	170 63	165 74	160 85	

	Lt						Rt				
34+23	220 100	215 81	210 63	205 45	200 12	197.3	200.0 32	205 84	205 120		
33+76	240 160	235 145	230 125	225 58	220 22	215.3	210 17	205 38	200 52	195 84	190 110
33+0	255 130	250 90	245 42	240 12		237.8	235 17	230 40	225 80	220 108	
32+0			265 210	260 105		256.5	265 40	250 79	245 112	240 128	
31+0			265 180	260 125		257.5	260 73	255 140	250 165		
30+22.17		260 144	255 97	250 28		250.5	255.0 117.0	258.0 160			
29+50	255 135	250 93	245 62	240 27	235 17	230 6	229.3	230 1	235 30	240 40	245 115
29+0	250 110	245 81	240 59	235 40	230 20	225 9	220 1	219.6	215.0 8.0 Gravel	220 23	225 29	230 58	230.0 100

	Lt.			℄	Rt.						
39+50	273.5 / 75	274.0 / 20 = Top Cut	270 / 16	269.0							
38+60		271.1 / 100		272.1 = Top Cut	267.5 / 7						
37+82.60		270 / 95		272.0	272.5 / 23 = Top Pilot	266 / 24 = Bot Cut					
37+40		265 / 100	265 / 50	264.5	264.0 / 55						
37+0		265 / 173	268.1 / 100	268.9	270 / 27	270.5 / 44 = Top Cut	265.0 / 95				
36+14		255 / 120	260 / 60	262.3	265.0 / 60	266.5 / 90 = Top Cut	257 / 92				
35+40.76	245 / 100	250 / 57	255.0 / 13	256.8	255.0 / 19	250.0 / 120					
34+80	270 / 80	270 / 53	275 / 25	276.5	275 / 10	270 / 36	270 / 46	275 / 81	280 / 72	275 / 25	275 / 125

Walker
Osborne
Hazard
3-22-43

Cross Section India St. 75' wide from Shine Market St.; South for the purpose of Paving 20' strip from Shine Market To Connect with Existing Paving in Western Lumber Yards And Patching other Paving Torn up by Const. Intercepting 60" Sewer

#13
SW. BP Mkt. & India
181597-44

5.16 7.43 2.27

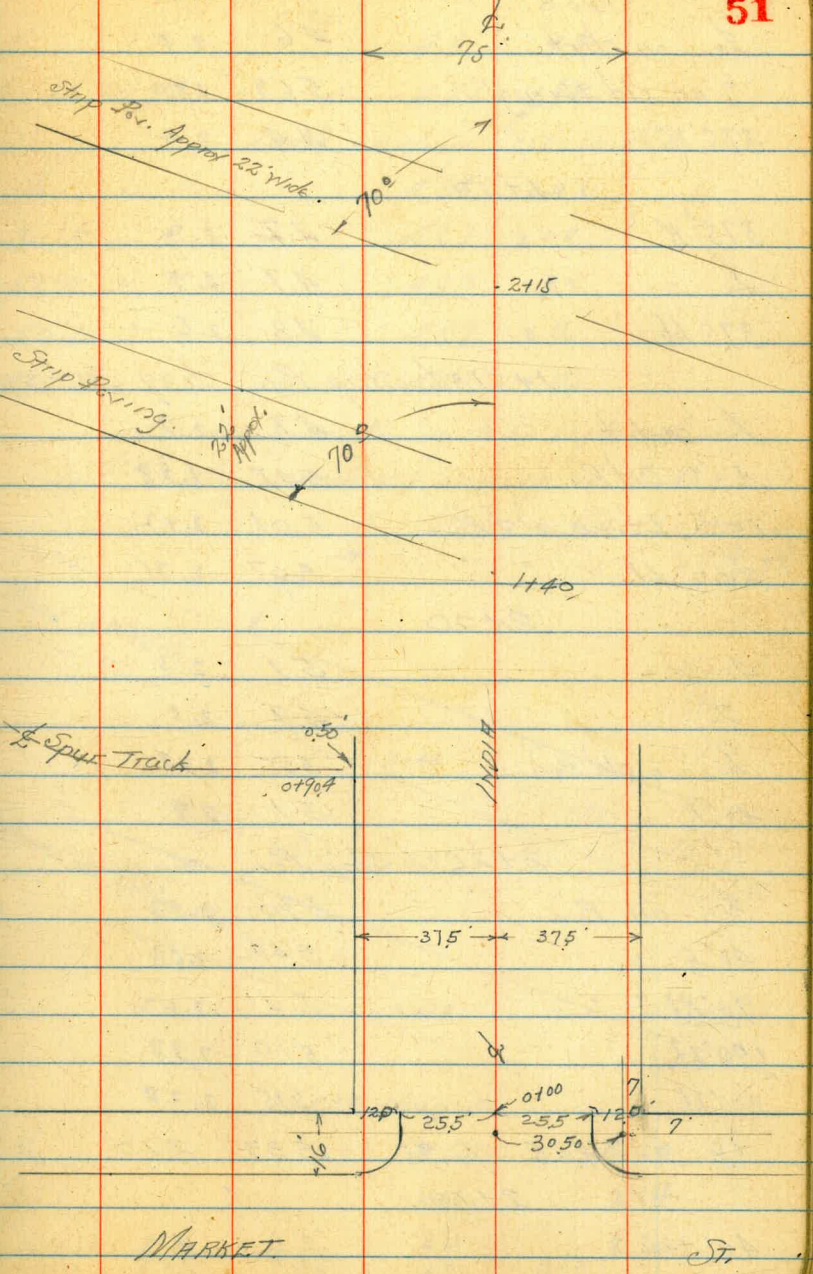
Sh. Market = 0+00

Plotted large scale.

℄	4.97	2.46
10' Lt.	5.01	2.42
25.5' Lt. on Gut.	5.39	2.04
" " cb.	4.74	2.69
37.5' Lt.	4.3	3.1
10' Rt.	5.29	2.14
25.5' Rt. on Gut.	5.86	1.57
" " " cb.	5.20	2.23
37.5' Rt.	4.8	2.6
0+50		
37.5' Rt.	4.5	2.9
℄	4.9	2.5
37.5' Lt.	5.0	2.4
0+90.4		
on Rail	5.55	1.88
1+00		
37.5' Lt.	5.7	2.2

Indexed
C.S.K.

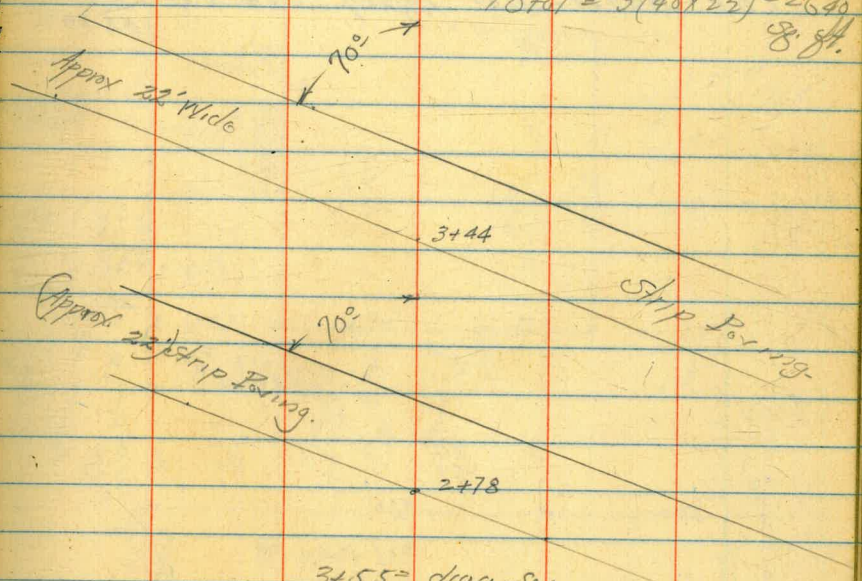
51



	1+00	7.43		
℄ on dirt			4.6	2.8
" on old Paving			5.63	1.80
37.5'R			4.4	3.0
	1+50			
37.5'R			4.2	3.2
℄			4.7	2.7
37.5'Lt.			4.8	2.6
	1+51=℄ Strip Pav.		drag Section	
℄ on dirt			4.7	2.7
" " old Pav.			5.45	1.98
100' Lt. on old Pav.			5.01	2.42
200' Lt. " " "			5.07	2.36
	2+00			
40' Lt.			5.1	2.3
℄			4.9	2.5
℄ on old Pav.			5.35	2.08
10'R			5.1	2.3
	2+26=℄ Strip Pav.		Drag Sec.	
℄ on Pav.			5.30	2.13
40'R " "			5.43	2.00
90'Rt " "			5.41	2.02
100'Lt.			5.10	2.33
200'Lt.			5.15	2.28
T.P.	4.65	6.75	5.33	2.10
	2+50			
40' Lt.			2.6	4.2

	6.75		
℄		4.8	1.9
40' Lt. on Pav.		4.77	1.98
2+89 on drag.		℄ Strip Pav.	
℄ on Pav.		4.74	2.01
30'R on Pav.		4.67	2.08
55'R " "		4.83	1.92
50'Lt. " "		4.59	2.16
130'Lt.		4.65	2.10

Note: for Approx. Paving to be replaced in the first 3 Strips each will averages about 40x22'
Total = 3(40x22) = 2640 sq. yds.



3+55 = drag. Sec.

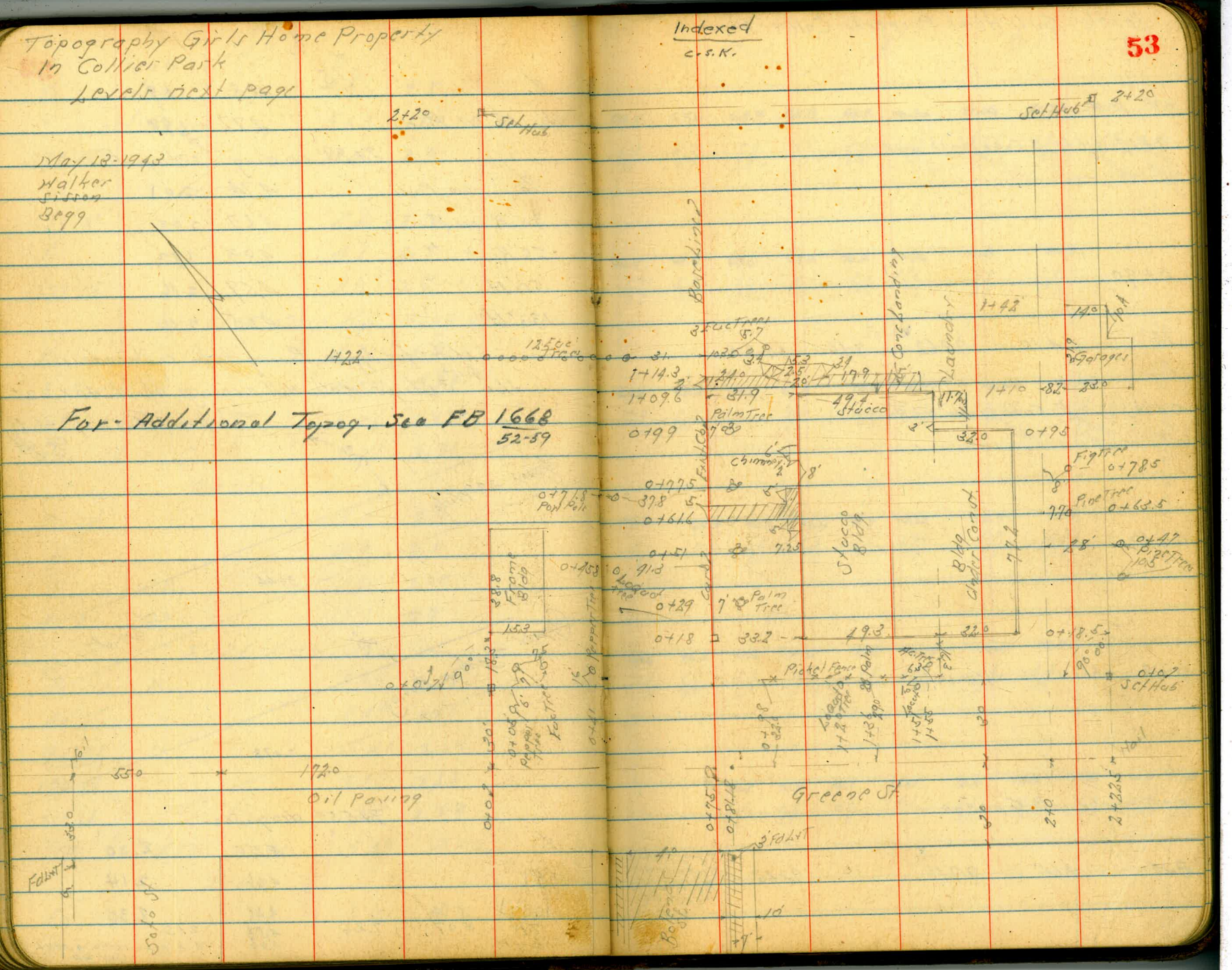
℄			4.55	2.20
55'R			4.61	2.14
100'Lt.			4.45	2.30
T.P.	5.07	7.26	4.56	2.19
Chk. BM.			4.99	2.27 — India + MKL SW BP

Topography Girls Home Property
In Collier Park
Levels next page

May 12-1943
Walker
Sisson
Begg

For - Additional Topog. See FB 1668
52-59

Indexed
C.S.K.



Levels - Girls Home Property Collier Park

1+12 = S/L 2' Conc Walk on Rt

0+90

TP	4.17	73.62 ✓	7.66	69.45

0+64.1 = L Conc Walk on Rt

0+40

0+18 = S/L Curb on Base Line

0+0 = M Line Green

B.M	3.66	77.11 ✓	73.45	S.E. Top of Green Bollard 1645.68

Lt = M

66.7	67.6	68.8	68.8	69.7	70.30	71.06	71.78	72.10	73.21
6.9 75	6.0 50	5.2 25	4.8 10	3.9 0.0	2.32 = CB End	2.56 25 on Wall	1.84 50 Wall	1.52 63 Base Wall	0.41 Conc Landing

66.7	68.3	69.0	69.5	70.4	70.96	71.8	71.8
6.9 75	5.3 50	4.6 25	4.1 10	3.2 0.0	2.66 = CB	1.8 25	1.8 33 Wall Base

73.62

67.3	68.8	70.1	69.8	70.8	71.71	72.52	73.06	
9.8 75	8.3 50	7.0 25	7.3 25	6.3 0.0	5.40 = CB	1.59 36 on Wall	1.05 Conc Landing	Top of Wall

69.0	69.7	70.6	70.9	71.7	72.22	72.9	72.9
8.1 60 = Fl Slab	7.4 50	6.5 25	6.2 10	5.4 0.0	4.89 CB	4.2 25	4.2 33

69.5	70.5	71.5	71.5	72.3	72.79	72.8	72.7	
7.6 75	6.6 50	5.6 25	5.6 10	4.8 0.0	4.32 on CB	4.3 25	4.4 33 Wall Base	Top of Wall

70.7	71.9	72.1	73.0	73.0	72.8	72.5	71.7	70.9	
1.4 75	5.2 35	5.0 10	4.1	4.1 25	4.3 50	4.6 75	5.4 100	6.7 125	Top of Wall

77.11

For 10 ft Wall

	Lt		B		Rt	
2+20						
2+00						
1+75						
1+50						
1+20						
1+17						

7362

58.8 15.7 75	59.9 13.7 50	61.8 12.2 25	62.6 11.0	63.6 10.0 25	64.6 9.0 50	65.3 8.3 75
60.6 13.0 75	61.9 11.7 50	63.0 10.6 25	64.1 9.4	65.1 8.4 25	66.1 7.4 50	67.0 6.6 75
61.8 11.8 75	63.3 10.3 50	64.9 8.7 25	66.1 7.4	67.6 6.0 25	68.7 4.9 50	69.7 3.9 75
64.2 9.2 75	64.9 8.7 50	66.7 6.9 25	67.9 5.7	69.1 4.4 25	70.0 3.6 50	70.6 3.0 75
65.1 8.5 75	65.8 7.8 50	67.8 5.9 25	69.1 4.5	69.5 4.1 25	70.1 3.4 50	70.8 2.8 75
66.6 7.0 75	67.6 6.0 50	68.8 4.8 25	68.9 4.7 10	69.5 4.1	70.3 3.3 25	70.8 2.8 50	71.6 2.0 75

7362

Levels of Ely of Bldg.

1+12

0+95 = N Ely Bldg under Const

0+64.1

0+40

0+18

0+0

TP	6.08	75.22 ✓	4.38	69.24
		73.62		

Rt = E

71.7	71.2	70.9	70.57	69.9
3.6	3.9	4.9	4.75	5.4
75	100	125	133 Conc Floor Garage	147.5

73.81	71.9	71.3	70.6	70.3
1.51	3.4	4.0	4.8	5.0
114.5 Floor Bldg Undercut	114.5	125	135	147.5

72.0	71.8	71.5	70.8	70.4
3.3	3.5	3.8	4.5	4.9
114.5	125	135	138	147.5

72.0	71.3	70.1
3.3	4.0	5.2
114.5	125	147.5

71.7	70.9	69.7
3.6	4.4	5.6
114.5 Ely Bldg	125	147.5

69.3	69.2
6.0	6.1
137	147.5

78.32 ✓

B RT

BM			2.33	72.47 ✓✓	Set by Topo Geodetic Bolt and 73.45
TP	7.45	75.80 ✓	4.98	68.35	
2+20					
2+0					
1+75					
1+50					
1+40					
TP	3.61	72.33 ✓ 75.32	5.60	69.72	

Notes Reduced 5-15-53

65.5	65.7	65.3
7.8	7.6	8.0
100	125	147.5
67.2	67.0	66.8
6.1	6.3	7.0
100	125	147.5
69.0	68.7	68.2
4.3	4.6	5.1
100	125	147.5
69.8	69.7	68.9
3.5	3.6	4.4
100	125	147.5
70.2	69.5	68.8
3.1	3.8	4.5
100	125	147.5

72.33 ✓

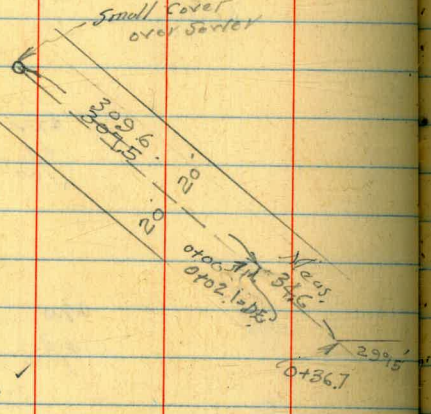
Walker
Osborne
Hazard
5-22-43.

Preliminary Sewer Levels.

In Scott st. And Block 9 of New Roseville Add.

Const. Notes. Grid Book, 210

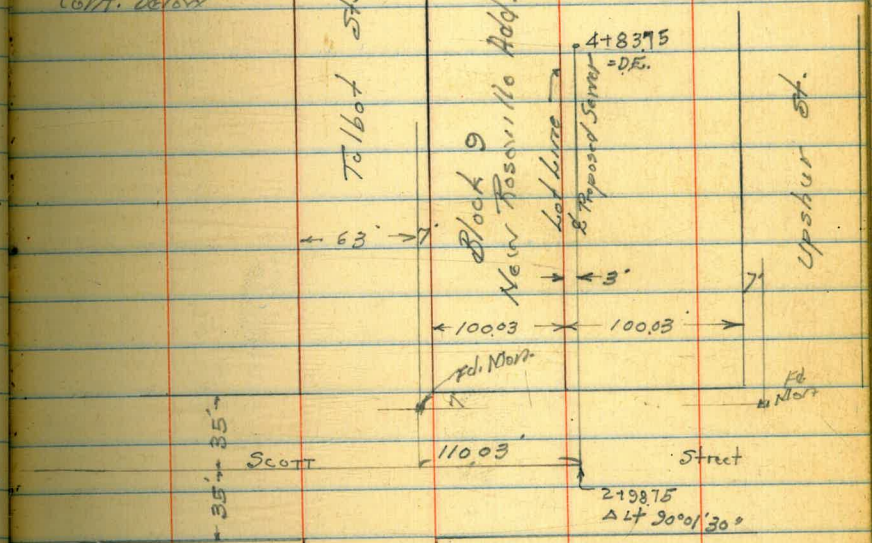
	0.42	(28.47)		28.05	Mkr. at Rose Lumber & Besser Mfg.
T.B	1.13	16.95	12.65	15.82	
TP	7.50	17.99	6.46	10.49	End W.C.B. on Scott opp. 0 too
0+00			7.8	10.2	
+36.7=ΔLt. 29°45			8.0	10.0	
+50			8.2	9.8	
Cont Below					



	17.99			
1+00		8.1	9.9	
+32		7.8	10.2	
+37 on Pav.		8.8	9.2	
+50 " "		8.2	9.8	
+72 " "		8.5	9.5	
+82		8.8	9.2	
+88		7.1	10.9	
2+00		7.8	10.2	
+50		7.9	10.1	

1799 Indexed C.S.K.

2+98.75=ΔLt 90°01'30"	7.4	10.6	
3+50	6.0	12.0	
4+00	5.0	13.0	
+50	3.9	14.1	
+83.75=D.E.	3.0	15.0	
Cont. Below			



T.P	8.50	26.16	0.23	17.66	SW Topcb Talbot & Rose Lumber
chk. Topcb			2.97	23.19	23.06 = 0.13 diff.
" Pav.			3.55	22.61	
				22.52	
				0.09 diff	

Copy in Book 1644 Ch. 66

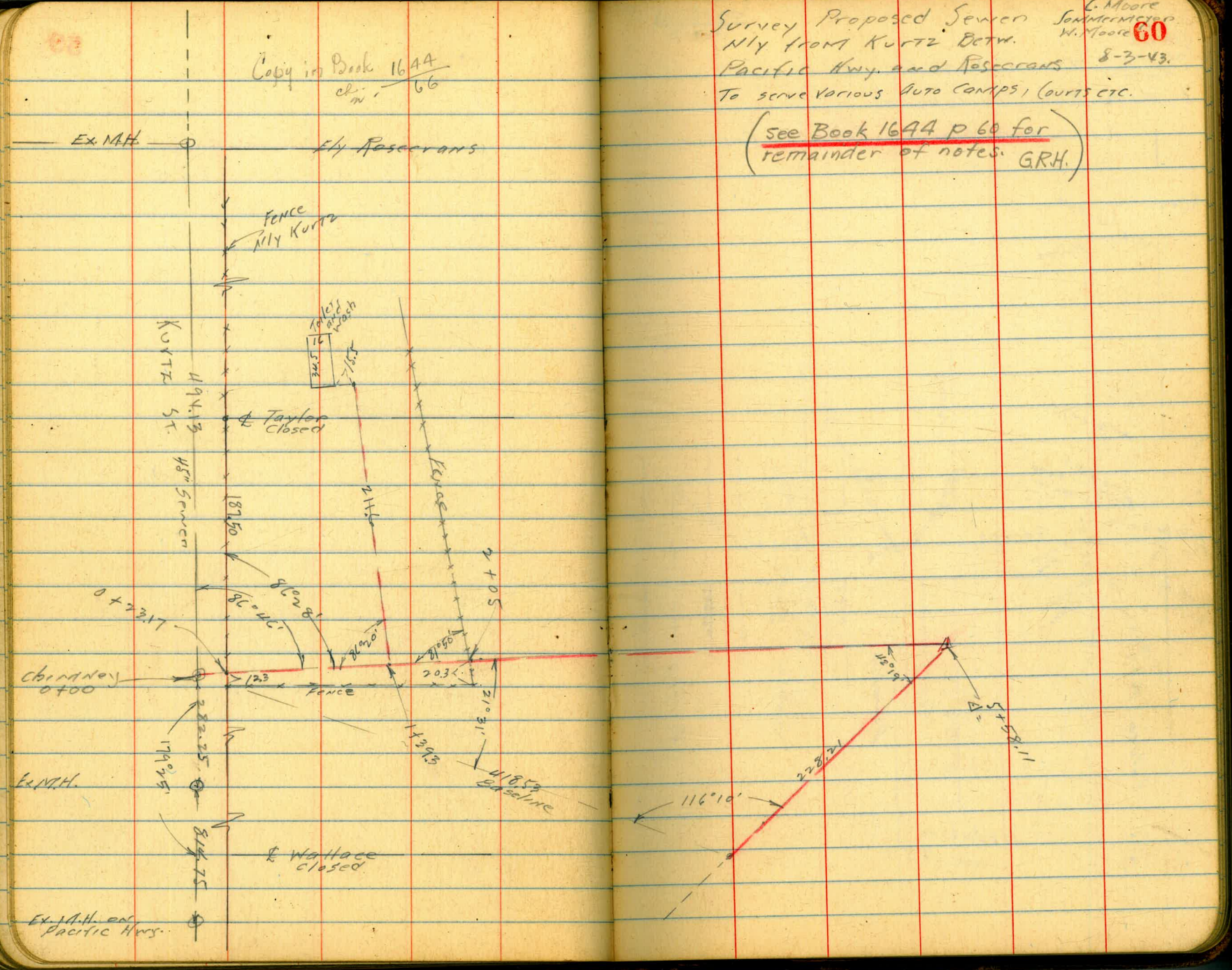
Survey Proposed Sewer N'ly from Kurtz Betw. Pacific Hwy. and Rosecrans To serve various Auto Camps, Courts etc.

L. Moore
Sanitary Inspector
W. Moore

60

8-3-43.

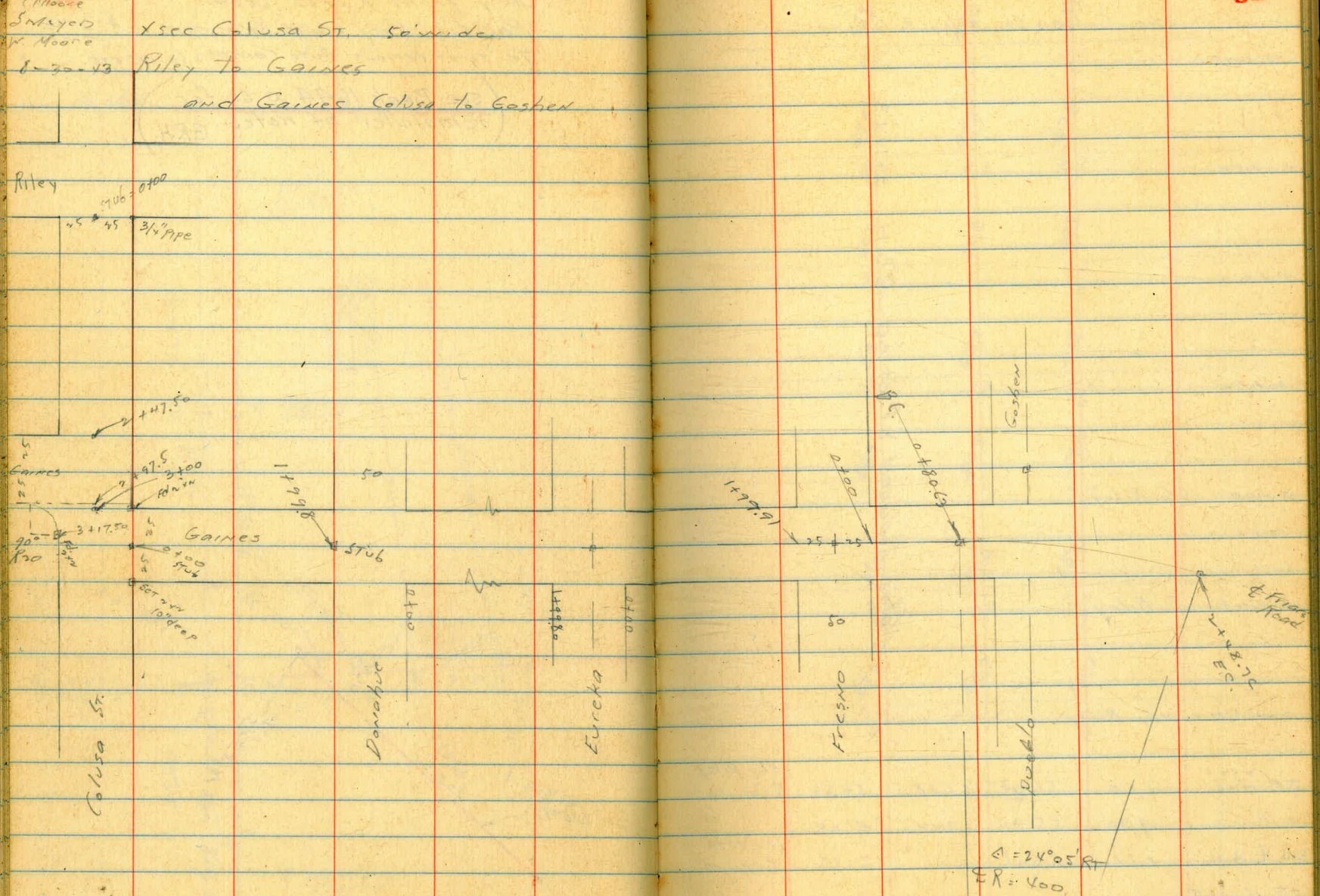
(See Book 1644 p 60 for remainder of notes. G.R.H.)



Indexed
C.S.R.

C Moore
S Mayer
W Moore
8-30-43

Xsec Colusa St. 50' wide
Riley to Gaines
and Gaines Colusa to Goshen



Xsec Colusa St., Riley to Gaines

Notes Reduced & Plotted C.B.H. 9-1-43.

2+00					
1+50					
1+00					
0+50					
0+00 S/y Riley					
0-25 E Riley					
0-50 N/y Riley					
T.P. "XX" Hub	1.65	56.21	1.38	54.56	S'ly Riley & Colusa
T.P.	9.90	55.94	9.XX	46.0X	
BM & Hub	0.61	55.26		54.65	Laureta Benicia
F.B. 1630-15					

E/y = LT	℄	RT = W/y
45.5	45.5	45.2
10.7 / 9	10.7	11.0 / 9
47.9	47.9	47.5
8.3 / 9	8.3	8.7 / 9
50.2	50.2	49.9
6.0 / 9	6.0	6.3 / 9
52.5	52.3	51.9
3.7 / 9	3.9	X.3 / 9
54.9	54.5	54.0
1.3 / 9	1.7	2.2 / 9
56.0	55.6	55.2
0.2 / 9	0.6	1.0 / 9
57.2	56.7	56.1
+1.0 / 9	+0.5	0.1 / 9

56.21

Colusa Levels
Riley to Gaines

3+50 Sly Gaines to East

3+25 ℄ Gaines to East

3+17.5 = opp. B.C. on W.L. Colusa

3+00 = Nly Gaines to East

2+97.5 Sly Gaines to West

2+72.5 ℄ Gaines to West

T.P. 0.67 43.98 1x.90 43.31

2+47.5 Nly Gaines to West

56x1

Lt	℄	Rt = W/y
39.7	39.8	39.8
4.3	4.2	4.2
41.6	41.7	41.5
2.4	2.3	2.5
41.8	41.9	41.8
2.2	2.1	2.2
41.9	42.3	42.4
2.1	1.7	1.6
42.0	42.4	42.5
2.0	1.6	1.5
42.4	42.8	43.1
1.6	1.2	0.9
	43.98	
43.3	43.5	43.4
1x.9	1x.7	1x.8
	56x1	

Xscc Gaines
Colusa Ely to Goshen

0+50

0+00 Ely Donahue

℄ Donahue

1+99.6 = wly Donahue

1+50

1+00

0+50

0+00 = Ely Colusa St.

Notes Reduced & Plotted 9-1-43 C.D.H.

43.98
P.63

indexed
C.S.R.

LT	℄	RT = S/y
36.4	36.5	36.2
7.6	7.5	7.8
9		9
34.7	34.8	34.4
9.3	9.2	9.6
9		9
34.2	34.1	33.6
9.8	9.9	10.4
9		9
33.8	33.5	33.2
10.2	10.5	10.8
9		9
33.7	33.7	33.5
10.3	10.3	10.5
9		9
35.3	35.5	35.1
8.7	8.5	8.9
9		9
37.9	38.1	37.8
6.1	5.9	6.2
9		9
40.1	41.0	40.7
3.0	3.0	3.3
9		9

43.98

Gaines St.
Colusa to Goshen

1+50

1+00

0+50

0+00 E/y Eureka

℄ Eureka

T.P. 12.23 55.60 0.61 43.37

1+99.8 W/y Eureka

1+50

1+00

43.98

LT ℄ RT = S/y

65

51.1 51.2 51.1
4.5 4.4 4.5

49.1 49.2 49.0
6.5 6.4 6.6

46.8 46.8 46.5
8.8 8.8 9.1

44.4 44.5 44.1
11.2 11.1 11.5

43.4 43.4 43.1
12.2 12.2 12.5

55.60

42.2 42.3 42.0
1.8 1.7 2.0

40.0 40.0 39.6
4.0 4.0 4.4

37.9 38.1 37.8
6.1 5.9 6.2

43.98

Gaines, Colusa Ely to Goshen

53.55
3.07
50.48
10.18
Ca.66
0.85
59.81 = B.M. Mo6
59.85

NW Cor Mo6
Gaines & Goshen

FBK. 1471-31

3+00

2+48.76 EC.

2+00

T.P. 3.07 53.55 5.1 N 50.48

1+50

1+00

0+80.63 = B.C. R.F. Beg. Friars Rd.

0+50

0+00 E/y Fresno

℄ Fresno

1+99.91 W/y Fresno

5560

W/y = ℄ 47.5 ℄ 47.4 P.T. 47.0 = 5/4

66

6.1	6.N	6.6
48.1	48.P	47.6
5.5	5.6	6.0
49.1	49.1	48.9
4.5	4.5	4.7

53.55

50.6	50.6	50.5
5.0	5.0	5.1
51.9	51.8	51.6
3.7	3.8	4.0
52.1	52.1	51.9
3.5	3.5	3.7
52.4	52.4	52.3
3.1	3.1	3.3
52.8	52.8	52.5
2.8	2.8	3.1
53.0	52.9	52.7
2.6	2.7	2.9
52.7	52.7	52.6
2.9	2.9	3.0

5560

Moore

8-31-43. Vicc Goshen ST.

Mildred to Linda Vista Rd.

Indexed C.S.K.

Notes Reduced & Plotted 9-1-1943

7+35

7+00

6+70

6+35

6+00

Property line elevs unchanged

5+70

Note! E.B. STATIONING.

5+39.68 = N/y Mildred

See 1630-6 V ← ? 63

B.M. ½" Pipe disk	9.79	184.84	175.05	NE Cor. Mildred Goshen

1630-36

LT. E RT. = To E/y. 67

181.2	181.4	181.9
3.6 / 19	3.4	2.9 / 20
181.7	182.5	182.8
3.1 / 20	2.3	2.0 / 21
181.8	183.1	184.0
3.0 / 21	1.7	0.8 / 20
180.4	182.3	183.7
4.4 / 25	2.5	1.1 / 20
177.3	178.9	180.4
7.5 / 25	5.9	4.4 / 22
174.6	176.0	177.1
Land / 25	8.8	7.7 / 22
172.1	173.2	173.7
17.7 / 25	11.6	11.1 / 23

184.84 / 5

Check to S. edge Pav. on R Goshen

17+.41 17+.43 17+.38

9+15

8+90

8+75

8+50

8+30

8+10.0± Rt L Ruby

7+85.0± Rt Ruby

EL STA.

7+60± Rt Ruby

18+.8±

18+.8±

Lt	℄	Rt
172.6	173.7	174.4
12.5	11.1	10.±
20		19
173.8	174.5	175.2
14.3	10.3	8.6
23		13
174.6	175.8	176.7
10.±	9.0	8.1
25		19
176.9	177.4	178.0
7.9	7.±	6.8
18		21
177.9	178.5	178.9
6.9	6.3	5.9
18		19
178.7	179.4	179.8
6.1	5.±	5.0
18		17
179.6	180.1	180.3
5.±	4.7	4.5
18		17
180.6	180.8	180.9
4.±	4.0	3.9
18		18

18+.8±

Walker
Osborne
Hazard
9-8-43

Preliminary Levels for Paving Strip on India through WESTERN UNION Yards - Reason new levels = New fills Made after levels were run as shown on Page 51

Additional levels at Market see P. 72

5.14 7.41 2.42 in Book 2.27 B.M. B.P. SW Market India

0-16 = SC. Line, Market

25.5' Rt.		
10' Rt.	5.00	2.41
℄	4.85	2.56
10' Lt.	4.85	2.56

0+00 = SL Market

10' Lt.	5.10	23.1
℄	5.13	2.28
10' Rt.	5.16	2.25
25.5' Rt.	5.39	1.56
0+50		
10' Rt.	4.8	2.6
℄	4.9	2.5
10' Lt.	4.8	2.6

1+09.82 = BC. Rt.

10' Lt.	4.6	2.8
℄	4.7	2.7
10' Rt.	4.7	2.7
17.5		
10' Rt.	4.6	2.8
℄	4.6	2.8
10' Lt.	4.7	2.7

Elevations for Grade raised 0.1 feet

1.5% Grade

Parallels columbia

1+90 = ▷ Lt.

2.42'

90°

indexed C.S.K.

2+50

Strip

20'

2+17.78 P.C.

Δ = 20°36'
R = 300'
T = 54.52
L = 107.86

54.52

Ret 1/2 5.70 1.71

Ret E.C. 5.69 1.72

B.C. 1+09.82

India

℄

0+00

54 Line 37.5' 37.5'

Market

7.41

1+50

10'Lt.		4.7	2.7
℄		4.7	2.7
10'R		4.6	2.8
	1+75		
10'R		4.7	2.7
℄		4.7	2.7
10'Lt.		4.7	2.7
	2+00		
10'Lt.		4.9	2.5
℄		5.8	2.4
10'Rt		5.0	2.4
	2+17.78 = EC		
10'Rt on Pav.		5.38	2.03
℄ " "		5.29	2.12
10'Lt " "		5.21	2.20
T.P.	4.91 6.92	5.40	2.01
	2+50		
-234 on Paving		4.63	2.29
-200		4.9	2.6
-100		4.8	2.1
-20		5.1	1.8
10'Lt " "		4.90	2.02
℄ " "		4.90	2.02
10'R " "		4.96	1.96

Elevations to be raised .15 feet

6.92

2+80 ℄ Doorway Shed on Rt

17'Rt. on Wood Floor.	5.08	1.84
10'Rt on Pav.	4.86	2.06
℄ " "	4.84	2.08
10'Lt " "	4.84	2.08
3+00		
10'Lt.	4.85	2.07
℄	4.83	2.09
10'R	4.96	1.96
3+25		
10 R	5.10	1.42
℄	4.98	1.94
10'Lt	4.96	1.96
60'Lt	5.0	1.97
100'Lt	5.0	1.92
135' "	5.1	1.8
210 "	4.76	2.20
250 "	4.97	1.95
3+35 = N edge Pav.		
-210 on Pav.	4.70	2.22
-150 " "	4.70	2.22
-100 " "	4.7	2.2
25 " dirt.	5.1	1.8

3+50

10' Lt	on Pav.	4.57	2.35	
℄	" "	4.58	2.34	
10' R	" "	4.66	2.26	
	4+00			
10' R	on Pav.	4.10	2.82	
℄	" "	4.03	2.89	
10' L	" "	4.05	2.87	
	4+25 = Approx ℄ Dmc to E+W.			
35 Lt	on Pav	4.14	2.78	
℄	" "	3.84	3.08	
30' Rt	" "	3.78	3.14	

Add'l. Levels on Pav.

2+50

240' Lt.	on Pav	4.83	2.09	
	2+75			
240' Lt.	on Pav	4.79	2.13	
225' Lt.	" " Wedge	4.79	2.13	
	2+95			
240' Lt		4.83	2.09	
220' Lt		4.95	1.97	
T.P.	4.89 7.10	4.71	2.21	

Elevations to be raised 0.15 feet

℄ Leads on Pav. Columbia

from Tracks South

157' 5.5 ℄ Market -0+00 = South Rail		4.93	2.17	℄ Columbia
0+10	on Pav.	4.71	2.39	
+50	" "	4.67	2.43	
1+00	" "	4.77	2.33	
+50	" "	4.93	2.17	
1+96 = ℄	" "	4.97	2.13	248 Lt of 2+50 p-70
2+00	" "	4.96	2.14	
+50	" "	5.09	2.01	
3+00	" "	4.78	2.32	
+30		4.59	2.51	
3+60 = ℄ E+W strip		4.69	2.41	
7.10 549 7.71		4.88	2.22	raise 0.15
Chk starting BM.		5.45	2.26	
			2.27	-2.4 in Bar
			001	

Additional Leads on Paving at India And Market Cont. P-72

Walker
Osborne
9-17-43

India & Market Street
Addition Levels on Existing Paving
Cont. from P-69

2.27 in Book S.W.B.P. India & Market

513	7.40			
		0-26' = 10' N of S C6 Market		
-10.7 = W. Rail		4.49	2.99	
E		4.70	2.70	
C6.		4.90	2.50	
1/4		4.83	2.57	
L		4.87	2.53	
1/4		5.06	2.34	
C6.		5.27	2.13	
W		5.33	2.07	
		0-16 = S C6. Market.		
W. Gut.		5.68	1.72	
C6.		5.50	1.90	
1/4		5.12	2.28	
L		4.83	2.57	
1/4		4.84	2.56	
C6.		5.12	2.28	
E		5.13	2.27	
" on C6.		4.54	2.86	
+13		4.98	2.42	
" on C6.		4.39	3.01	
+21.7 = W. Rail		4.59	2.81	
		S.L. Market		
E C6. on Top		4.81	2.59	
Gut.		5.30	2.10	

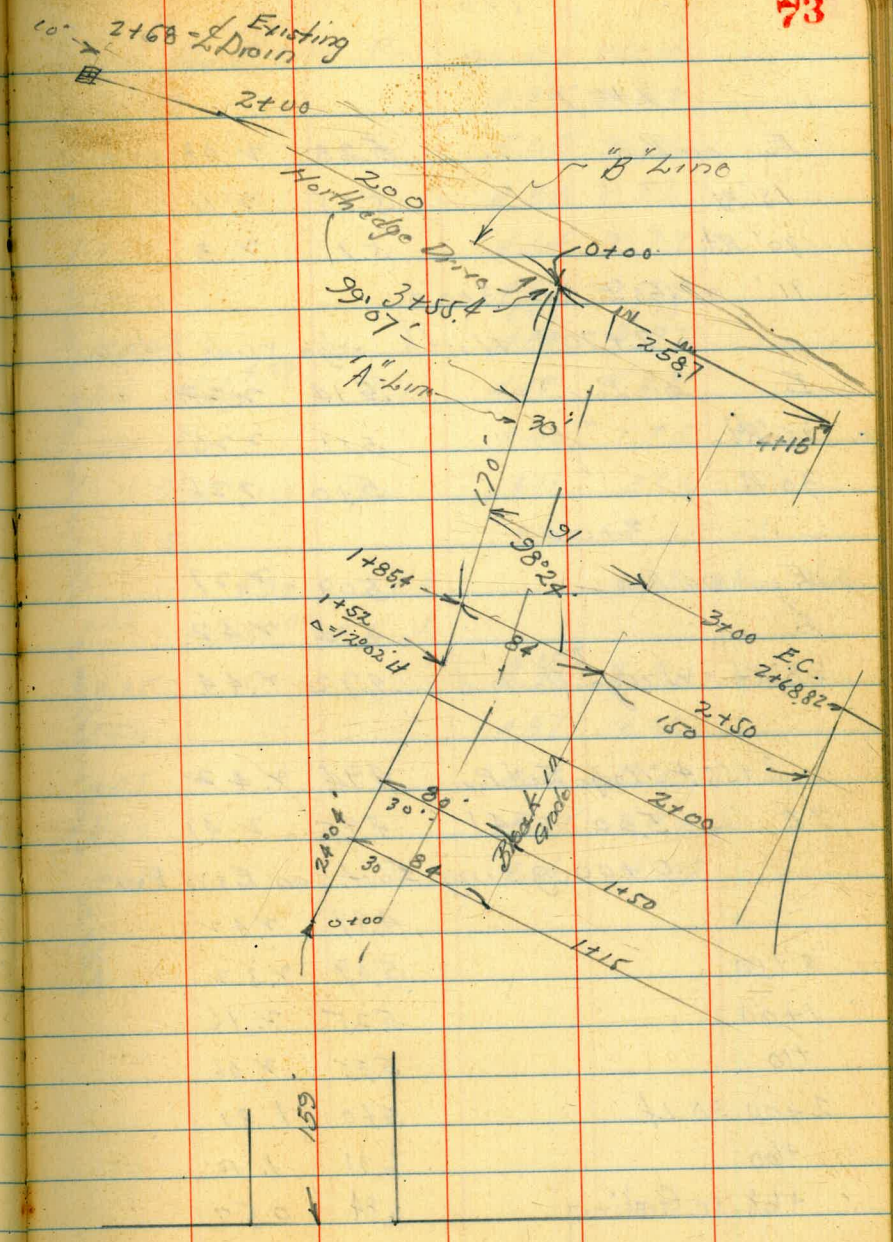
These Notes should be raised 1.5 ft.

7.40

1/4	5.15	2.25	
L	5.10	2.30	
1/4	5.24	2.16	
W. Gut.	5.87	1.53	
" C6.	5.20	2.20	

	5.09	7.36		2.27
	"A" Line			
0+00 on Roil			5.16	2.20
+03 " Pav			5.07	2.29
+50 "			4.91	2.45
15' Rt. on "			4.86	2.50
30' Rt. " Ground			4.80	2.56
89' Rt = at 150' E on Sta 1+15				
	0+85			
E	on Pav		4.96	2.40
15' Rt " "			5.03	2.33
30' Rt. " Ground			5.1	2.3
83' Rt. = at 1+50		150' E.		
	1+35			
E on Pav.			5.29	2.07
15' Rt. on Pav			5.02	2.34
30' Rt. " Ground			5.2	2.2
80' Rt. = 150' E	Sta 2+00			
	1+52 = Δ 12°02' Lt.			
E			5.20	2.16
15' Rt			5.15	2.21
	1+85.4			
E			5.25	2.11
15' Rt.			5.10	2.26
30' Rt.			5.30	2.1

These Elevations should be raised 0.15 feet



7.36

2+37

E on Pave	6.28	2.08
15' Rt " "	5.25	2.11
30' Rt	5.1	2.3
91' at 150' E on 3+00		
2+70 = North edge wide strip		
E on Pave	5.14	2.22
15' Rt " "	5.11	2.25
30' Rt " "	5.10	2.26
3+00		
E on Pave	5.09	2.27
C	4.94	2.42
28' Rt = W edge Drive Derrick	4.92	2.44
3+55.4 = W edge E & W Pave	4.94	2.42
T.P. 5.00 7.41	4.95	2.41
0+00 going East on E & W Pave		
	4.99	2.42
0+50	5.09	2.32
1+00	5.25	2.16
+50	5.35	2.06
2+00 = D Lt.	5.60	1.81
+60	6.31	1.10
+68 in Grating	6.84	0.57

These elevations should be raised 0.15 feet

7.41

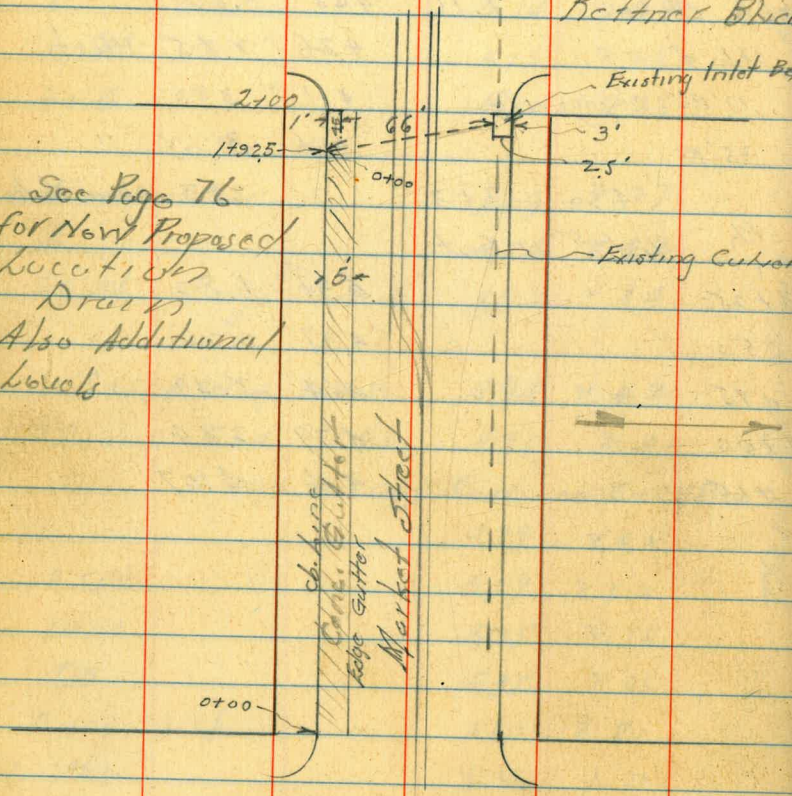
North Edge E & W Pave going West

0+00		4.99	2.42
+50		5.05	2.36
1+00		4.88	2.53
+50		4.64	2.77
2+00		4.63	2.78
		4.76	2.65
+58.7		4.64	2.77
chk Stake 4.28	7.11	4.58	2.83
chk C		4.26	2.85 Meet
17' Rt = W edge New		4.11	3.00
25' R		4.06	3.05 "
4.30	7.13		2.83 Above Stake
chk India on W Gut.			
3+25		5.31	1.82
+50		4.87	2.26
+75		4.64	2.49
4+00		4.29	2.84
+15		4.06	3.07

Western Lumber Yards
Cont.

	4.61	7.44		2.83	Lake P-78
150 E of Base					Raise rail 0.01
0+54	on Rail		5.40	2.04	
100 E					
0+55	"	"	5.38	2.06	
50 E					
0+66	"	"	5.28	2.16	
00					
0+85	"	"	5.52	1.92	

Levels for Drain
India & Kettner



See Page 76
for New Proposed
Location
Drain
Also Additional
Levels

INDIA St.

Walker
Osborne
9-21-93

Levels for Proposed Culvert
At Kettner And Market Street. 75
Sketch on opposite Page Indexed C.S.K.

BM. BP SW Indiana Market	4.89	7.31 7.16	~~2.27~~	2.42 in Rock
	Levels along Market St. on South cb			
WL. India				
=0+00	on cb.		4.90	2.41
	" Gutter		5.44	1.87
0+50	on cb.		5.12	2.19
"	" Gutter		5.55	1.76
1+00	on cb.		5.19	2.12
"	" Gutter		5.65	1.66
1+50	" cb.		5.30	2.01
"	on Gutter		5.80	1.51
1+85	on cb.		5.38	1.93
"	" Gutter		5.89	1.42
1+92.5	= ℄ Proposed Inlet on cb.		5.36	1.95
=0+00	" on Gutter joing North		5.93	1.38
0+05.1	= edge Conc. Gutter on Mkt Street		5.57	1.74
2+00	on cb.		5.39	1.92
"	" Gutter		6.35	0.96
1' Rt	" "		6.35	0.96
1.1'	" Pav.		5.44	1.87
5'	on Conc Gutter.		5.46	1.85
0+27	= South Rail S. Track		5.02	2.29
0+43	= N " N "		4.95	2.36
0+66	= South Inside edge Grating		6.07	1.24 on Grating
"	on Floor Existing Inlet Box		10.26	- 2.95

Walker Osborne Hazard 9-2-43

Levels on Existing Paving etc.

Portion of Intersection of Market and Kettner Blvd

2421 Book = B14

691

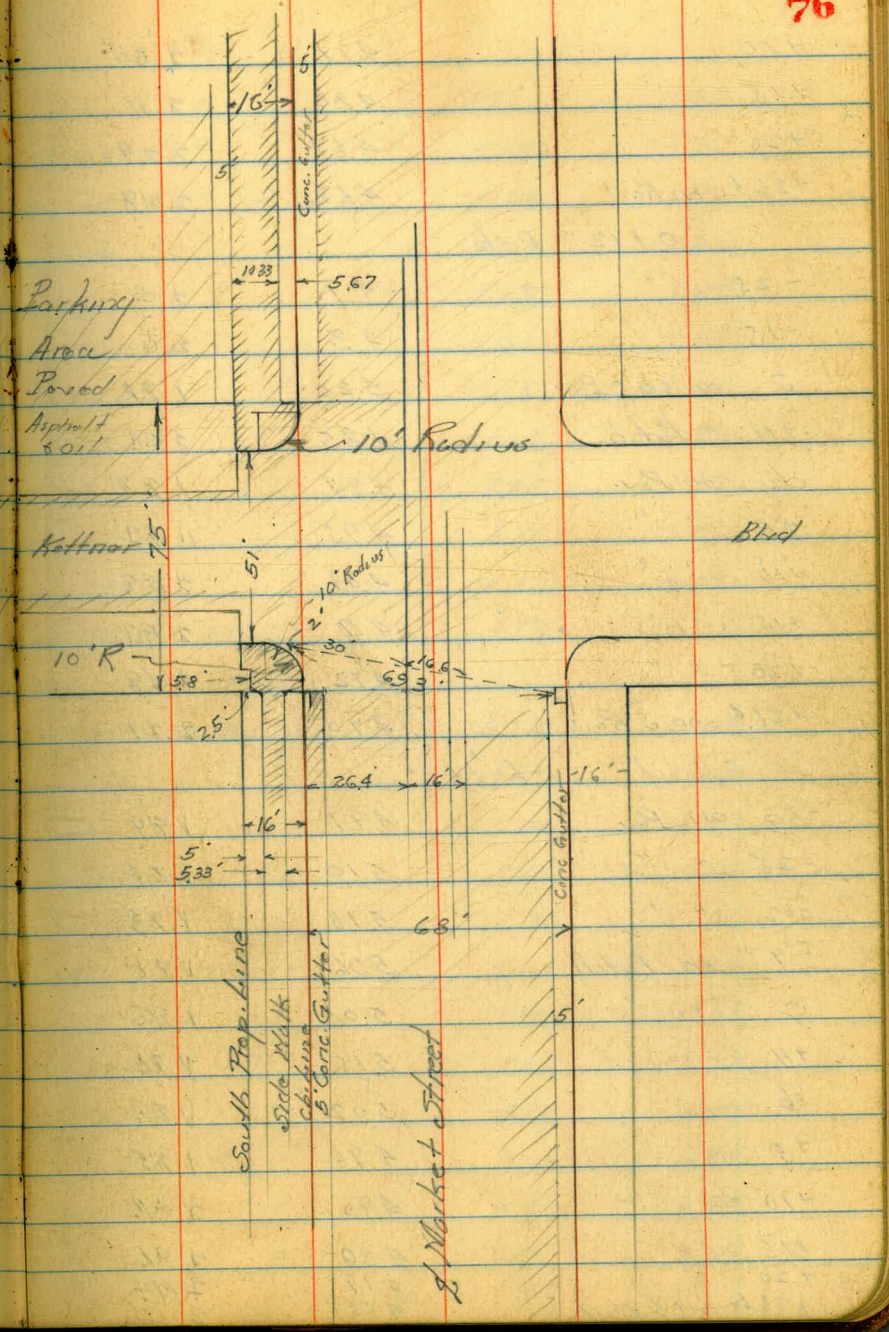
4.49 6.76 2.27 B.M. B.P. S.W. Market & India Sewer Bench

0-10' = 10' East of E.L. Kettner

S	4.9	20
+5 on S edge Walk	4.81	2.11
+10.33 " N " "	4.87	2.04
Cb.	4.96	1.95
Gut. on Conc. Gutter	5.52	1.39
+5' on N edge "	5.13	1.78
+7 on Patch Pav.	4.97	1.94
+10 " North "	5.04	1.87
+15	4.79	2.12
+20	4.66	2.25
+26.4 on South Rail	4.65	2.26

0+00 = E.L. Kettner

-25 on Dirt	5.0	1.91
-20	4.4	2.5
S	4.8	2.1
+2.5' on S edge Walk	4.86	2.05
+5 " " North "	4.83	2.08
+10.33 "N" " "	4.93	1.98
Cb. = Same as Top Hd. Wall	4.98	1.93
+4 on Gut. - edge Patch	5.07	1.84
+5 " Patch	4.98	1.93
+6 " "	4.83	2.08
+7	4.86	2.05



	676	691	
+10		4.91	2.00
+15		4.80	2 11
+20		4.67	2 24
+26.4 on Rail		4.62	2 29
0+12 = E cb			
-25		4.9	2 0
-15		4.3	2 6
5 on cb. Pav.		5.20	1 71
+11 " Patch		4.85	2 06
cb on Pav.		4.94	1 97
+5 " "		4.95	1 96
+10 " "		4.89	2 02
+15 " "		4.79	2 12
+20 " "		4.72	2 19
+26.4 on S Rail		4.70	2 21
I E 1/6			
-50 on Pav.		4.97	1 94
-25 " "		5.10	1 81
-12 " "		5.18	1 73
-9 on Patch		5.06	1 85
5 " "		5.01	1 90
+11		5.15	1 76
cb.		5.02	1 89
+5		4.96	1 95
+10		4.90	2 01
+15		4.80	2 11
+20		4.79	2 12
+26.4 on S Rail		4.75	2 16

	676	691	
L Kettner			
-50 on Pav.		4.98	1 93
-25 " "		5.15	1 76
-10 " " Patch		5.29	1 62
-2 " " "		5.09	1 82
5 " " "		5.13	1 78
+6 " "		5.32	1 59
cb.		5.10	1 81
+5 " "		5.06	1 86
+10		4.98	1 93
+15		4.90	2 01
+20		4.82	2 09
+26.4 = S Rail		4.79	2 12
W 1/4			
-50 on Paving		5.22	1 69
25 " "		5.42	1 49
-15 "		5.44	1 47
-4 on Patch		5.11	1 80
5		5.26	1 65
+6 on Tee "		5.51	1 40
cb. on Pav.		5.32	1 59
+5 " "		5.21	1 70
+10 " "		5.11	1 80
+15 " "		5.00	1 91
+20 " "		4.93	1 98
+26.4 on S Rail		4.82	2 09

676 691

W ¼ + 6

-50 on Pav.	5.20	171
-25 " "	5.39	152
-10 on Patch	5.54	137
-2 " "	5.24	170
5 " "	5.39	152
+5 " Too Patch	5.70	121
Cb. on Paving	5.49	142
W cb. Kettner		
-50 on Pav.	5.18	173
25 " "	5.41	150
-11 on "	5.58	133
-5 " Patch	5.28	163
SL. on cb.	5.85	106.
" " Gut.	6.05	086
+10 " "	6.04	087
cb. on Pav.	5.78	113
+5 " "	5.50	141
+10 " "	5.30	161
+15 " "	5.08	183
+20 " "	4.91	200
+26.4 on S Rail	4.86	205
W.L. Kettner		
-50 on Pav.	5.09	182
-25 " "	5.48	143
-6 " N edge Pav	5.82	109
-5	5.6	13

676 691

1.00 Walk has settled

SL. on Walk to E	5.85	
" " " " West	5.64	1.27
+5 on Walk	5.63	1.28
+5.1 " "	5.55	136
+11.67 = N edge Walk	5.53	138 Walk settled
+11.67 " "	5.45	146
S cb.	5.50	141 —
Gut.	6.02	089
+5	5.70	121
+10	5.44	147
+15	5.23	168
+20	5.02	189
+26.4 = S Rail	4.92	199
0+50 = 50' W WL. Kettner		
S cb.	5.70	121
" Gut.	6.18	073
1+00		
S cb.	5.90	101
" Gut	6.34	057
1+50		
S cb. Gut.	645	046
2+00		
S cb.	6.06	085
S Gut.	6.61	030

A.E.B
C.B.H

Sept 27 - 43

Hand level notes

Sta	+	H.I.	-	El.	B.M. 1.93
0+00	5.85	77.8	5.72	1.93	
0+19.3			5.60	2.18	
0+29.3			5.48	2.30	
0+32.6			5.44	2.34	
0+45.7			5.44	2.34	
0+53.6			5.78	2.00	
0+62.8			6.54	1.24	
0+70.9	gutter		6.58	1.20	
0+70.9	curb		5.75	2.03	

S.E. Curb Return 4 parts 5.93 = 23.71

0+00	5.42	7.35	5.42	1.93	1.93
0+5.93			5.40	1.95	
0+11.86			5.43	1.92	
0+17.99			5.53	1.82	
0+23.71			5.68	1.67	

S.W. Return 4 parts 5.93 = 23.71

1.40 Bench

0+00	5.11	6.51	5.11	1.40
0+05.93			5.09	1.42
0+11.86			5.16	1.35
0+17.79			5.21	1.30
0+23.71			5.44	1.07

S.E. Cor. Market & Kellner edge of proposed curb inlet

S 1/4 South Rail & Street North Rail N. 1/4

South Edge Cath Basin

N. Curb Line

B.M. 1.93 E. Line Kellner S. curb of Market = 0+00

B.M. West Line of Kellner S. curb line Market Brass Plug Buon 1.40 Thesentes

IMPROVED TABLES AND INFORMATION

HORIZONTAL STADIA CORRECTIONS

2°—00′	—	0.1	21°—00′	—	12.8	33°—00′	—	29.7
3°—00′	—	0.3	21°—30′	—	13.4	33°—15′	—	30.1
4°—00′	—	0.5	22°—00′	—	14.0	33°—30′	—	30.5
5°—00′	—	0.8	22°—30′	—	14.7	33°—45′	—	30.9
6°—00′	—	1.1	23°—00′	—	15.3	34°—00′	—	31.3
7°—00′	—	1.5	23°—30′	—	15.9	34°—15′	—	31.7
8°—00′	—	1.9	24°—00′	—	16.5	34°—30′	—	32.1
9°—00′	—	2.5	24°—30′	—	17.2	34°—45′	—	32.5
10°—00′	—	3.0	25°—00′	—	17.9	35°—00′	—	32.9
10°—30′	—	3.3	25°—30′	—	18.6	35°—15′	—	33.3
11°—00′	—	3.6	26°—00′	—	19.2	35°—30′	—	33.7
11°—30′	—	4.0	26°—30′	—	19.9	35°—45′	—	34.1
12°—00′	—	4.3	27°—00′	—	20.6	36°—00′	—	34.6
12°—30′	—	4.7	27°—30′	—	21.3	36°—15′	—	35.0
13°—00′	—	5.1	28°—00′	—	22.0	36°—30′	—	35.4
13°—30′	—	5.5	28°—30′	—	22.8	36°—45′	—	35.8
14°—00′	—	5.9	29°—00′	—	23.5	37°—00′	—	36.2
14°—30′	—	6.3	29°—30′	—	24.3	37°—15′	—	36.6
15°—00′	—	6.7	30°—00′	—	25.0	37°—30′	—	37.1
15°—30′	—	7.2	30°—15′	—	25.4	37°—45′	—	37.5
16°—00′	—	7.6	30°—30′	—	25.8	38°—00′	—	37.9
16°—30′	—	8.1	30°—45′	—	26.2	38°—15′	—	38.3
17°—00′	—	8.5	31°—00′	—	26.5	38°—30′	—	38.7
17°—30′	—	9.0	31°—15′	—	26.9	38°—45′	—	39.1
18°—00′	—	9.5	31°—30′	—	27.3	39°—00′	—	39.6
18°—30′	—	10.1	31°—45′	—	27.7	39°—15′	—	40.0
19°—00′	—	10.6	32°—00′	—	28.1	39°—30′	—	40.5
19°—30′	—	11.2	32°—15′	—	28.5			
20°—00′	—	11.7	32°—30′	—	28.9			
20°—30′	—	12.3	32°—45′	—	29.3			

Chains to Feet	
1	66
2	132
3	198
4	264
5	330
6	396
7	462
8	528
9	594
10	660

Feet to Chains	
100	1.515
200	3.030
300	4.545
400	6.060
500	7.575
600	9.090
700	10.606
800	12.121
900	13.636
1,000	15.151

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope 1½ to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE No. 9.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections.

Degree of curve with a given I may be found by dividing tangent, (or external), opposite I by given tangent, (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent lenth divided by twice the radius.

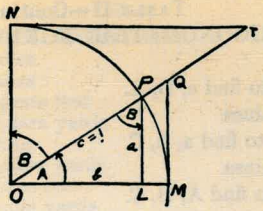


TABLE II

TRIGONOMETRIC FORMULÆ.

$\angle A = \angle MOP \qquad \angle B = \angle PON = \angle OPL$

$R = OB = c = 1$

$$\sin A = \frac{a}{c} = \frac{a}{1} = a = \cos B = LP$$

$$\cos A = \frac{b}{c} = \frac{b}{1} = b = \sin B = OL$$

$$\tan A = \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ$$

$$\cot A = \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT$$

$$\sec A = \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ$$

$$\csc A = \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT$$

$$\text{vers } A = \frac{LM}{OP} = LM = \text{covers } B \#$$

$$\text{covers } A = \frac{OP - LP}{OP} = OP - LP = \text{vers } B$$

$$\text{exsec } A = PQ = \text{coexsec } B$$

$$\text{coexsec } A = PT = \text{exsec } B$$

$$\sin \tfrac{1}{2} A = \sqrt{\frac{1 - \text{Cos } A}{2}} \qquad \cos \tfrac{1}{2} A = \sqrt{\frac{1 + \text{Cos } A}{2}}$$

$$\sin 2A = 2 \sin A \cos A \qquad \cos 2A = \cos^2 A - \sin^2 A$$

$$\text{Law of Lines} \quad \frac{\sin A}{a} = \frac{\sin B}{B} = \frac{\sin C^1}{C}$$

$$\text{Law of Cosines} \quad c^2 = a^2 + b^2 - 2ab \cos C$$

$$\text{Law of Tangents} \quad \frac{a+b}{a-b} = \frac{\tan \tfrac{1}{2}(A+B)}{\tan \tfrac{1}{2}(A-B)}$$

TABLE X.

MIDDLE ORDINATES OF RAILS

Length of Rail (feet)

C ° ′	R Feet	30 Inch	28 Inch	26 Inch	24 Inch	22 Inch	20 Inch	C °	R Feet	30 Inch	28 Inch	26 Inch	24 Inch	22 Inch	20 Inch
0–20	17189	.08	.07	.06	.05	.04	.03	8	716.8	1.88	1.64	1.42	1.20	1.01	.84
0–40	8594	.16	.14	.12	.10	.08	.07	9	637.3	2.12	1.84	1.60	1.35	1.14	.94
1–0	5730	.24	.20	.18	.15	.13	.10	10	573.7	2.36	2.05	1.78	1.50	1.27	1.04
1–20	4297	.31	.27	.23	.20	.17	.13	11	521.7	2.59	2.26	1.95	1.65	1.39	1.15
1–40	3438	.39	.34	.29	.25	.21	.17	12	478.3	3.83	2.47	2.15	1.81	1.54	1.26
2–0	2865	.47	.41	.35	.30	.25	.20	13	441.7	3.05	2.66	2.30	1.96	1.66	1.36
2–20	2456	.55	.48	.41	.35	.29	.23	14	410.3	3.30	2.87	2.48	2.10	1.78	1.46
2–40	2149	.63	.55	.47	.40	.33	.27	15	383.1	3.54	3.08	2.68	2.26	1.91	1.57
3–0	1910	.71	.62	.53	.45	.38	.31	16	359.3	3.76	3.28	2.83	2.40	2.04	1.67
3–20	1719	.78	.68	.59	.50	.42	.35	17	338.3	4.00	3.48	3.02	2.57	2.16	1.78
3–40	1563	.86	.75	.65	.55	.46	.38	18	319.6	4.21	3.67	3.18	2.70	2.28	1.87
4–0	1433	.94	.82	.71	.60	.50	.42	19	302.9	4.45	3.89	3.36	2.86	2.41	1.98
4–20	1323	1.02	.89	.77	.65	.55	.45	20	287.9	4.70	4.09	3.55	3.00	2.54	2.09
4–40	1228	1.10	.96	.83	.70	.59	.48	22	262.0	5.16	4.44	3.84	3.30	2.80	2.29
5	1146	1.18	1.03	.89	.75	.63	.52	24	240.5	5.64	4.92	4.20	3.59	3.04	2.50
6	955.3	1.41	1.23	1.06	.90	.76	.62	26	222.3	6.07	5.29	4.58	3.88	3.29	2.70
7	819.0	1.65	1.44	1.24	1.05	.89	.73								

TABLE XI.

SHORT RADIUS CURVES

Radius Feet	Chord Feet	Central Angle	Deflection Angle	Deflection for 1 Foot
35	10	16-26	8-13	49.3
45	10	12-46	6-23	38.3
50	15	17-16	8-38	34.5
60	15	14-22	7-11	28.8
75	15	11-30	5-45	23.0
100	20	11-30	5-45	17.3
120	20	9-34	4-47	14.3
150	20	7-39	3-49	11.5
190	25	7-32	3-46	9.15
200	25	7-10	3-35	8.6
225	25	6-25	3-12	7.7
240	25	5-58	2-59	7.2
250	25	5-44	2-52	6.9
275	25	5-12	2-36	6.2
288	50	9-58	4-59	6.0
300	50	9-32	4-46	5.7
350	50	8-12	4-06	4.9
376	50	7-40	3-50	4.6
400	50	7-10	3-35	4.3
410	50	7-00	3-30	4.2

To find length of curve divide angle from P. C. to P. T. by central angle of chord, and multiply by length of chord.

TABLE XII.

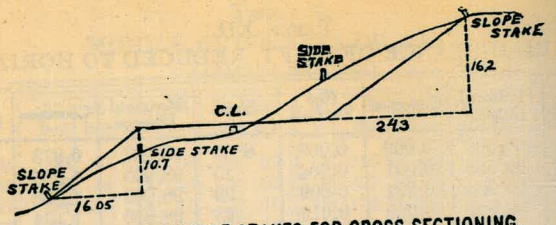
INCLINED DISTANCE OF 100 FT. REDUCED TO HORIZONTAL

Slope	Horizontal Distance	Correction	Rise Per Foot	Slope	Horizontal Distance	Correction	Rise Per Foot
0°00′	100.000	0.000	0.000	8°00′	99.027	0.973	0.139
15′	99.999	0.001	0.004	15′	98.965	1.035	0.143
30′	99.996	0.004	0.009	30′	98.902	1.098	0.148
45′	99.991	0.009	0.013	45′	98.836	1.164	0.152
1 00	99.985	0.015	0.017	9 00	98.769	1.231	0.156
15	99.976	0.024	0.022	15	98.700	1.300	0.161
30	99.966	0.034	0.026	30	98.629	1.371	0.165
45	99.953	0.047	0.031	45	98.556	1.444	0.169
2 00	99.939	0.061	0.035	10 00	98.481	1.519	0.174
15	99.923	0.077	0.039	15	98.404	1.596	0.178
30	99.905	0.095	0.044	30	98.325	1.675	0.182
45	99.885	0.115	0.048	45	98.245	1.755	0.187
3 00	99.863	0.137	0.052	11 00	98.163	1.837	0.191
15	99.839	0.161	0.057	15	98.079	1.921	0.195
30	99.813	0.187	0.061	30	97.992	2.008	0.199
45	99.786	0.214	0.065	45	97.905	2.095	0.204
4 00	99.756	0.244	0.070	12 00	97.815	2.185	0.208
15	99.725	0.275	0.074	15	97.723	2.277	0.212
30	99.692	0.308	0.078	30	97.630	2.370	0.216
45	99.657	0.343	0.083	45	97.534	2.466	0.221
5 00	99.619	0.381	0.087	13 00	97.437	2.563	0.225
15	99.580	0.420	0.092	15	97.338	2.662	0.229
30	99.540	0.460	0.096	30	97.237	2.763	0.233
45	99.497	0.503	0.100	45	97.134	2.866	0.238
6 00	99.452	0.548	0.105	14 00	97.030	2.970	0.242
15	99.406	0.594	0.109	15	96.923	3.077	0.246
30	99.357	0.643	0.113	30	96.815	3.185	0.250
45	99.307	0.693	0.118	45	96.705	3.295	0.255
7 00	99.255	0.745	0.122	15 00	96.593	3.407	0.259
15	99.200	0.800	0.126	15	96.479	3.521	0.263
30	99.144	0.856	0.131	30	96.363	3.637	0.267
45	99.087	0.913	0.135	45	96.246	3.754	0.271

TABLE XIII.

MINUTES IN DECIMALS OF A DEGREE.

0 30″	.00833	10′ 30″	.17500	20′ 30″	.34167	30′ 30″	.50833	40′ 30″	.67500	50′ 30″	.84167
1 00	.01667	11 00	.18333	21 00	.35000	31 00	.51667	41 00	.68333	51 00	.85000
30	.02500	30	.19167	30	.35833	30	.52500	30	.69167	30	.85833
2 00	.03333	12 00	.20000	22 00	.36667	32 00	.53333	42 00	.70000	52 00	.86667
30	.04167	30	.20833	30	.37500	30	.54167	30	.70833	30	.87500
3 00	.05000	13 00	.21667	23 00	.38333	33 00	.55000	43 00	.71667	53 00	.88333
30	.05833	30	.22500	30	.39167	30	.55833	30	.72500	30	.89167
4 00	.06667	14 00	.23333	24 00	.40000	34 00	.56667	44 00	.73333	54 00	.90000
30	.07500	30	.24167	30	.40833	30	.57500	30	.74167	30	.90833
5 00	.08333	15 00	.25000	25 00	.41667	35 00	.58333	45 00	.75000	55 00	.91667
30	.09167	30	.25833	30	.42500	30	.59167	30	.75833	30	.92500
6 00	.10000	16 00	.26667	26 00	.43333	36 00	.60000	46 00	.76667	56 00	.93333
30	.10833	30	.27500	30	.44167	30	.60833	30	.77500	30	.94167
7 00	.11667	17 00	.28333	27 00	.45000	37 00	.61667	47 00	.78333	57 00	.95000
30	.12500	30	.29167	30	.45833	30	.62500	30	.79167	30	.95833
8 00	.13333	18 00	.30000	28 00	.46667	38 00	.63333	48 00	.80000	58 00	.96667
30	.14167	30	.30833	30	.47500	30	.64167	30	.80833	30	.97500
9 00	.15000	19 00	.31667	29 00	.48333	39 00	.65000	49 00	.81667	59 00	.98333
30	.15833	30	.32500	30	.49167	30	.65833	30	.82500	30	.99167
10 00	.16667	20 00	.33333	30 00	.50000	40 00	.66667	50 00	.83333	60 00	1.00000



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1 65	1 80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3 45	3.60	3 75	3.90	4.05	4.20	4 35	2
3	4.50	4 65	4.80	4.95	5.10	5 25	5 40	5.55	5.70	5.85	3
4	6.00	6 15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7 50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9 00	9 15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10 65	10.80	10.95	11.10	11.25	11.40	11.55	11 70	11.85	7
8	12.00	12 15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13 50	13.65	13 80	13 95	14.10	14.25	14.40	14 55	14.70	14.85	9
10	15.00	15 15	15 30	15 45	15.60	15.75	15.90	16.05	16.20	16 35	10
11	16 50	16 65	16 80	16.95	17 10	17.25	17.40	17.55	17.70	17.85	11
12	18 00	18.15	18.30	18 45	18.60	18 75	18.90	19.05	19.20	19.35	12
13	19 50	19 65	19.80	19.95	20.10	20.25	20 40	20.55	20.70	20.85	13
14	21.00	21 15	21.30	21.45	21 60	21.75	21.90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24 15	24 30	24 45	24.60	24.75	24 90	25 05	25.20	25.35	16
17	25.50	25 65	25.80	25 95	26.10	26 25	26 40	26.55	26.70	26.85	17
18	27.00	27 15	27.30	27 45	27.60	27.75	27.90	28.05	28 20	28.35	18
19	28 50	28 65	28 80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30 00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31 50	31 65	31.80	31.95	32 10	32 25	32.40	32.55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33.60	33 75	33.90	34.05	34.20	34.35	22
23	34 50	34 65	34.80	34.95	35.10	35 25	35 40	35.55	35.70	35 85	23
24	36.00	36 15	36.30	36 45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37 80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39 00	39 15	39.30	39 45	39 60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40 65	40 80	40.95	41.10	41.25	41 40	41.55	41.70	41.85	27
28	42 00	42 15	42.30	42.45	42.60	42 75	42.90	43.05	43.20	43.35	28
29	43 50	43 65	43.80	43 95	44.10	44 25	44 40	44.55	44.70	44 85	29
30	45 00	45 15	45.30	45 45	45.60	45.75	45.90	46.05	46 20	46.35	30
31	46.50	46.65	46.80	46 95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48 00	48.15	48.30	48 45	48.60	48 75	48.90	49.05	49 20	49.35	32
33	49.50	49 65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51 00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52 50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54 00	54.15	54.30	54 45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55 50	55 65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57 45	57.60	57.75	57.90	58.05	58.20	58 35	38
39	58 50	58.65	58 80	58.95	59.10	59 25	59.40	59 55	59.70	59.85	39
40	60 00	60.15	60 30	60 45	60 60	60.75	60 90	61.05	61 20	61.35	40
41	61.50	61 65	61 80	61 95	62 10	62 25	62.40	62 55	62 70	62.85	41
42	63 00	63.15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64.35	42
43	64.50	64 65	64 80	64.95	65.10	65 25	65 40	65.55	65.70	65.85	43
44	66 00	66 15	66 30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67 50	67 65	67 80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69 00	69 15	69 30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70 65	70 80	70 95	71.10	71.25	71.40	71.55	71.70	71.85	47
48	72.00	72 15	72.30	72.45	72.60	72.75	72.90	73 05	73.20	73 35	48
49	73 50	73 65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

Computed by L. Leland Locke.

22
40
880
3
2641 0

533 ÷ 11.03 = 48.3

5.7
11.03
5
4.5
10.4

1+15

1904
692
3220

1547
15.34
2907
64
571

115 115 115 682
61 50 69
54 55 66

1571
8
4 | 3371
593