

1035



KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

Tables for Excavations and Embankments.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR SINGLE TRACK EXCAVATION.

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	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

1035



Series & Alley between Santa Monica & Newport
from M.H. & Bacon East for 4510 to Ft.

B.M. Brassery N.W. Santa Monica & Bacon	8.75				
070 M.H. & Bacon	6.97	9.98	4.80		
+27 bottom stk, +50	5.16	11.79	5.00		
1	4.69	12.26	5.13		
+50	4.57	12.38	5.30		
2	4.11	12.84	5.61		
+50	3.55	13.40	6.21		
3	2.87	14.08	6.57		
+30 M.H. Break	2.28	14.67	6.82		
+50	6.48	21.35	7.00		
4	5.72	15.63	7.18		
+35 bot stk			7.63		
+50	5.03	16.32	7.95		
5	4.61	16.74	8.09		
+50	4.43	16.92	8.54		
6	4.78	16.57	9.00		
+50	5.47	15.88	9.45		
+60 M.H. & Cable Break	5.05	16.30	9.90		
7	7.26	17.76	10.00		
+50	6.27	18.75	10.60		
8	5.47	19.55	11.36		

3.75	16.08	16.08	16.08		
3.25	5.13	5.30	5.61		
10.20	10.25	10.78	10.47		
11.79					
4.29					
16.08M	12.38	17.14	17.14	17.14	17.14
	4.76	5.91	6.21	6.52	
	17.14M	11.23	10.93	10.62	
	14.08				
	4.73	18.81	18.81	18.51	18.81
	18.81M	6.82	7.00	7.18	7.63
		11.99	11.81	11.63	11.18
	15.63				
	7.40	20.03			
	20.03M	7.95	20.36	7.95	
		12.08	12.41		
	15.63				
	4.73	20.36			
	20.36M	5.09	12.27		
	16.74				
	3.89	20.63	20.63	20.63	20.63
	20.63M	5.54	7.00	9.45	
		12.09	11.63	11.18	
	15.88	20.27	20.27	20.27	
	4.39	9.90	10.00	10.60	
	20.27M	10.37	10.27	7.67	
	18.75	24.03	24.03		
	5.28	11.36	12.12		
	24.03	12.67	11.91		

25.02

8+50			4.77	20.25	12.87
9			5.14	19.88	13.63
+50			4.70	20.32	14.39
+90 M.H. break			4.16	20.86	15.00
10			4.02	21.00	15.12
+50			3.80	21.22	15.72
11	7.70	29.84	2.88	22.14	16.33
+50			7.53	22.31	16.93
12			6.54	23.30	17.54
+50			5.21	24.63	18.14
13			5.62	24.22	18.75
+20 M.H. & De Foe break	9.68	34.63	4.89	24.95	19.00
+50			9.14	25.49	19.82
14			7.50	27.13	21.18
+50			5.97	28.66	22.54
15			4.47	30.16	23.90
+50			3.30	31.33	25.26
16			2.12	32.51	26.62
+50 M.H. break	12.06	46.26	0.43	34.20	28.00
17			10.54	35.72	29.97

15.15

12.1

2.727

3.94

7.38 ✓	20.25 4.25 24.50M	24.50 12.87 11.63 ✓	24.50 13.63 10.87 ✓	24.50 14.39 10.11 ✓	24.50 15.00 9.50 ✓	24.50 15.12 9.38 ✓	3
6.25 ✓	21.22 4.79 26.01M	26.01 15.72 10.29 ✓	26.01 16.33 9.68 ✓	26.01 16.93 9.08 ✓			
5.93 ✓	23.30 4.06 27.36M	27.36 17.54 9.82 ✓	24.63 4.96 29.59M	29.59 18.14 11.45 ✓	29.59 18.75 10.84 ✓	5.6 29.59 19.02 10.59 ✓	
5.86 ✓							
5.88 ✓							
5.50 ✓							
5.81 ✓	25.49 4.31 29.80M						
5.38 ✓	30.16 5.50 35.66M	35.66 23.90 11.76 ✓	35.66 25.26 10.40 ✓	32.51 6.20 38.71M	38.71 26.62 12.09 ✓	32.55 22.54 10.31 ✓	
5.76 ✓							
6.49 ✓							
5.47 ✓							
5.95 ✓							
5.67 ✓							
5.95 ✓							
6.12 ✓							
6.26 ✓							
6.07 ✓							
5.89 ✓							
6.20 ✓							
5.75 ✓							

		102.36					
26	12.47	108.39	6.44	95.92	88.82	10.43	7.10
+40 M.H. & Froode break			10.13	98.26	93.00		5.26
+50			9.48	98.91	94.03		4.88
27			3.12	105.21	99.18		6.03
T.P.	12.41	120.15	0.65	107.74			
+50			8.51	111.64	104.33	10.3	7.31
28			3.00	117.15	109.48		7.67
T.P.	12.25	131.93	0.47	119.68			
+50			9.42	122.51	114.63		7.88
29			4.03	127.90	119.78		8.12
+50	12.41	143.94	0.40	131.53	124.93		6.60
+70 M.H. break			11.22	132.72	127.00		5.72
30			7.97	135.97	128.72		7.25
+50			2.21	141.73	131.60		10.13
T.P.	12.16	155.89	0.21	143.73			
31			10.25	145.64	134.48	5.757	11.16
+50			6.89	149.00	137.36		11.64
32			4.92	150.97	140.24		10.73
+50			4.93	150.96	143.12		7.84
	12.74	167.24	1.39	154.50			9.60
33 to M.H. & Goizot break			12.25	159.99	146.00		8.99
+50			8.42	158.82	151.33	10.66	7.49
34			4.85	162.39	156.66		5.73
T.P.	12.58	179.01	0.81	166.43			
+50 break			11.34	167.67	162.00		5.67

167.24
2.91
164.33

5

		179.01				
35			6.93	172.08	165.61	6.47
+50			3.93	175.08	169.22	5.86
36	12.06	190.90	0.17	178.84	172.83	6.01
+30 M.H. break			9.84	181.06	175.00	6.06
+50			9.12	181.78	175.89	5.89
37			6.82	184.08	178.11	5.97
+50			4.04	186.86	180.33	6.53
38	8.53	197.71	1.72	189.18	182.55	6.63
+10 break			8.11	189.60	183.00	6.60
+50			6.88	190.83	184.33	6.50
39			5.42	192.29	186.00	6.29
+50			5.41	192.30	187.66	4.64
+60 M.H. Santa Barbara break			5.11	192.60	188.00	4.60
	12.44	205.04				
40			5.64	199.40	190.22	9.18
+50			3.57	201.47	193.00	8.47
T.P.	11.64	215.78	0.90	204.14		
41			11.65	209.13	195.77	8.36
+50			9.25	206.53	198.54	7.99
42			6.89	208.89	201.31	7.58
+30 M.H. break			5.33	210.45	203.00	7.45

197.71
7.49
190.22

3.93

215.78

7

42+50			4.18	211.60	203.79	7.91
43	10.46	224.55	1.69	214.09	205.75	8.34
+50			8.29	216.26	207.72	8.54
44			6.50	218.05	209.68	8.37
+50			4.97	219.58	211.65	7.93
45			3.18	221.37	213.61	7.76
+10 F.T.			4.48	220.07	214.00	6.07

9.08 215.47

Sewer & Alley between Newport & Niagara from
 M.H. & Bacon St East for 4550 To FT
 575' N of E from Bacon To Guit 26' 5" off from Guit to FT.
 B.M. N.E. Pig Newport & Bacon 11.05

Note - see page 16 for cuts west of Bacon 8

	B.M.	6.58	17.63	11.05	2.90	6.00	Cut
0+0 M.H. & Bacon		5.25	12.38	6.25		6.13	6.381
+115				6.31		5.89	
+50		4.14	13.49	6.51		6.98	
1		3.04	14.59	6.78		7.81	
+50		2.55	15.08	7.04		8.04	
2		2.57	15.06	7.31	0.53	7.75	
+50		2.10	15.53	7.57		7.96	
3	7.74	23.68	1.69	15.94	7.84	8.10	
+30 M.H. C102K		7.78	15.90	8.00		7.90	
+50		7.78	15.90	8.24		7.66	
4		7.60	16.08	8.85		7.17	
+50		7.14	16.54	9.45		7.235	
5		6.80	16.88	10.06	2.21	6.98	
+50		6.01	17.67	10.66		7.09	
6		5.07	18.61	11.27		6.82	
+50		6.01	17.67	11.87		7.01	
+60 M.H. & Cable		5.78	17.90	12.00		7.34	
7		4.50	19.18	12.48		5.80	
+50		4.11	19.57	13.09	1.21	5.90	
8		3.13	20.55	13.69		6.70	
						6.48	
						6.86	

1238
 510
 1748 +11

1748
 528
 1220
 621
 589

8+50	7.81	23.68 28.96	2.53	21.15	14.30	6.85
9			4.71	21.25	14.90	6.35
+50			7.18	21.75	15.51	6.27
+90 M.H.			6.61	22.35	16.00	6.35
10			6.51	22.45	16.12	6.33
+50			5.84	23.12	16.73	6.39
11			5.31	23.65	17.33	6.32
+50			4.86	24.10	17.94	6.16
12			4.15	24.81	18.54	6.27
+50			3.36	25.60	19.15	6.45
13			3.76	25.20	19.75	5.45
+20 M.H. & De Foe break	7.89	33.90	2.95	26.01	20.00	6.01
+50			7.05	26.85	20.54	6.31
14			6.08	27.82	21.45	6.37
+50			5.29	28.61	22.36	6.25
15			4.70	29.20	23.27	5.93
+50			4.08	29.82	24.18	5.64
16			2.85	31.05	25.09	5.96
+50 M.H. break			1.96	31.94	26.00	5.94
17	12.85	45.58	1.17	32.73	27.66	5.07

1.21

1.21

1.818

2.00

45.58

17+50			11.52	34.06	29.33	4.73
18			9.72	35.86	30.99	4.87
+50			8.73	36.85	32.66	4.19
19			6.89	38.69	34.33	4.36
+50			4.07	41.51	36.00	5.51
+80 M.H. & Egers			0.80	44.78	37.00	7.78
	12.64	57.42			40.00	4.78
20.			9.89	47.53	42.17	5.36
+50			2.94	54.48	47.60	6.88
T.P.	12.27	68.61	1.08	56.34		
21			5.91	62.70	53.04	9.66
T.P.	12.44	80.88	0.17	68.44		
+50			10.37	70.51	58.47	12.04
22			3.40	77.48	63.91	13.57
+10 break			2.77	78.11	65.00	13.11
T.P.	12.29	92.54	0.63	80.25		
+50			10.74	81.20	68.20	13.60
23			8.00	84.54	72.20	12.34
+10 M.H. break			7.34	85.20	73.00	12.20
+50			4.67	87.87	77.48	10.39
T.P.	12.48	104.96	0.56	91.98		
24			12.16	92.30	83.08	9.22
+50			5.91	98.55	88.68	9.87
25	12.62	116.71	0.37	104.09	94.28	9.81
+50			8.56	108.15	99.88	8.27

$$\begin{array}{r} 87.87 \\ 12.29 \\ \hline 100.16 \end{array}$$

$$\begin{array}{r} 100.16 \\ 7.94 \\ \hline 92.22 \\ 83.08 \\ \hline 9.14 \end{array}$$

$$\begin{array}{r} 100.16 \\ 1.61 \\ \hline 98.55 \end{array}$$

10

		116.71		G	P	
26+0			3.80	112.91	105.50	
T.P.	12.80	129.21	0.30	116.41		
+40 M.H. & Frodo's break			11.25	117.96	110.00	
+50			9.54	119.67	111.38	
27			1.30	127.91	118.28	
T.P.	12.45	141.50	0.16	129.05		
+50			5.12	136.35	125.18	
T.P.	12.74	153.44	0.20	140.70	1	
28			11.19	142.25	132.08	
+50 break			5.32	148.12	139.00	
29	12.59	164.94	1.09	152.35	143.16	
+50			10.29	164.65	147.33	
+70 M.H. break			7.78	157.16	149.00	
T.P.	12.23	176.94	0.23	164.71		
30			9.99	166.95	151.75	
+50			8.73	168.21	156.33	
+90 break			7.31	169.63	160.00	
31			6.56	170.38	160.52	
+50	11.52	185.20	3.26	173.68	163.14	
32			7.25	177.35	165.76	
+50			5.94	179.26	168.33	
B.M. N.E. Brass Mt. Guizot Cap. May 925		173.77		164.52		
+30 M.H. & Guizot break			6.00	167.77	171.00	
T.P.	12.95	186.47	5.38	168.39	171.68	
+50	6.46	190.56	0.25	173.52		
			2.37	184.10	172.36	
34			5.36	185.20	173.72	

Cut	
7.41	
7.96	
8.29	
9.63	
11.20	
10.17	
9.12	
9.19	
7.32	
8.16	
15.20	
17.88	
9.63	
9.86	
10.54	
11.59	
10.88	
Fill 3.23	
11.74	
11.48	

174.89
1.21
173.68

170.38
4.51
174.89
9.58
165.31
1.22
166.53

74.89
6.66
68.23
56.33
11.90

74.89
7.58
65.31
51.75
13.56

166.53
6.72
159.81
149.00
10.81

166.53
9.26
157.27
47.33
9.94

119.67
4.99
124.66
6.70
117.96

NEW CUTS
9.94
10.81
13.56
11.90

157.16
10.81
146.35

		190.56				
34+50			4.38	186.18	175.08	11.10
35			5.01	185.55	176.45	9.10
+50			5.61	184.95	177.81	7.14
36			4.43	186.13	179.17	6.96
+30 M.H. Creek			3.51	187.05	180.00	7.05
+50			2.98	187.58	180.48	7.10
37			1.56	189.00	181.69	7.31
+50	11.48	201.49	0.55	190.01	182.90	7.11
38			10.26	191.23	184.11	7.12
+50			8.93	192.56	185.32	7.24
39			7.64	193.85	186.53	7.32
+50			7.94	193.55	187.74	5.81
+60 M.H. & Santa Barbara Creek			7.69	193.80	188.00	5.80
40			4.95	196.54	190.79	5.75
+50	12.27	213.42	0.34	201.15	194.27	6.88
41			9.52	203.90	197.76	6.14
+50			6.55	206.87	201.24	5.63
42	12.17	223.86	1.73	211.69	204.73	6.93
+50			8.50	215.36	208.21	7.15
+90 M.H. Creek			6.36	219.50	211.00	8.50

2.727

2.42

6.97

6.9

5.8

6.1

223.86

43+0			5.80	218.06	211.42	4.23
+50	11.07	231.92	3.01	220.85	213.53	
44			8.50	223.42	215.65	
+50			6.25	225.67	217.76	
45			4.58	227.34	219.88	
+50 F.T.			3.82	228.10	222.00	

13

6.64
7.32
7.77
7.91
7.96
6.10

6.0

10.40

2470			5.66	4.77	-2.96 ✓
-25					-2.91 ✓
+50	4.82	9.79	5.46	4.77	-2.86 ✓
+59					-2.84 ✓
285			4.93	4.86	-2.76 ✓
					-2.70 ✓
+50			4.82	4.97	-2.65 ✓
	Line approx to left of mt.				
+55	M.H. & Santa Monica & Abbott		4.76	5.03	-2.63 ✓
+78					-2.58 ✓
26			4.58	5.21	-2.54 ✓
					-2.49 ✓
+50			4.45	5.34	-2.44 ✓
					-2.39 ✓
27			4.41	5.38	-2.33 ✓
					-2.28 ✓
+50			4.37	5.42	-2.23 ✓
					-2.18 ✓
28			4.20	5.59	-2.12 ✓
					-2.07 ✓
+50			3.93	5.86	-2.02 ✓
175					-1.97 ✓
+94					-1.92 ✓
29			3.41	6.38	-1.91 ✓
165					-1.89 ✓
					-1.86 ✓
+55	M.H. & New Port & T.E. of Abbott		3.40	6.39	-1.84 ✓
+53					-1.80 ✓

7.64	5.05	505	505	9.17	15
	4.69	4.69	1007 H1	2.76	
	9.74 H.L.	2.96	1298	11.93	
	12.66	12.70			
7.73					9.04 9.04
	5.05	9.69			2.65
7.83	5.05	2.86			11.69
	9.69 H1	12.55			9.88
					2.65
7.61	9.69	9.69			12.53
	2.84	2.76			8.28
7.62	12.53	12.45			2.65
					11.53
7.66	5.05	5.05			9.88
	5.11	9.22 H1			2.58
7.70	10.64 H1	10.16			12.46
7.78	6.50	10.18			6.50
	3.62	2.49			10.25
7.71	10.18 H1	12.67			10.25
					6.50
7.65	6.50	10.29			10.25
	3.72	2.32			6.50
	10.27 H1	12.68			4.33
7.77					10.83
					1.76
7.85	6.50	10.50			12.59
	4.00	2.18			
8.29	10.50 H1	12.68			
8.23	6.50	10.84			
	4.34	1.97			
	10.84 H1	12.81			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			
	10.50 H1	12.68			
	6.50	10.98			
	5.06	1.89			
	11.56 H1	13.45			
	6.50	10.98			
	4.00	2.18			

Alley bet Newport & Niagara from M.H. & Bacon st west for
 465' to M.H. & of N.B.S. Alley bet Bacon & Abbott
 stakes set 6' N of Φ
 B.M. 4.78 17.16 12.38

0+0 M.H. & Bacon	4.78	12.38	6.00 6.25
+50	4.64	12.52	6.49
1	5.59	11.57	6.73
+50	5.94	11.22	6.97
2	6.48	10.68	7.71
+50	6.84	10.32	7.46
3	6.55	10.61	7.70
+50	5.64	11.52	7.94
4	3.44	13.72	8.18
+50	1.38	15.78	8.42
+65 = M.H. & of N.B.S. Alley	1.46	15.70	8.50

Section of Alley between Bacon & Abbott from M.H. & Alley between
 Newport & Niagara sou. for 125' to D.E.
 stakes set 6' E of Φ

0+0 = M.H. & Alley bet Newport & Niagara	10.21	16.05	8.50
+50	7.71	18.55	11.50
1	5.44	20.82	14.50
+25 D.E.	4.10	22.16	16.00

18.55
 2.10
 20.65 H.M.
 20.65
 4.51
 16.14
 8.50
 7.64

12.38 st Newport to Niagara
 8.80
 21.18
 5.08
 16.10
 21.18
 2.97
 18.21
 21.18
 3.45
 17.73
 21.18
 3.00
 18.18

6.38						
6.10						
6.03						
4.84						
4.25						
3.47						
2.86						
2.76						
2.91						
3.58						
5.54						
7.36						
7.20						7.7
7.55						
7.05						
6.32						
6.16						6.0

Sewer & Alley bet Niagara & Narragansett from M.H.
 & Bacon west for 660' to D.E. Stakes set 6' N of & Alley
 B.M. 9.42 21.80 12.38

0+0=M.H. & Bacon			5.70	16.10	8.00	8.10
+50			4.07	17.73	8.27	9.46
1			3.61	18.19	8.54	9.65
+50			2.91	18.89	8.81	10.08
2			2.95	19.85	9.08	9.77
+50			3.00	18.80	9.35	9.45
3	8.02	28.16	2.66	19.19	9.62	9.52
+50			8.53	19.63	9.88	9.75
4			8.41	19.75	10.15	9.60
+50			7.72	20.44	10.42	10.02
+65=M.H. & No 350 Alley BIK 71			7.49	20.67	10.50	10.17
5			7.00	21.16	11.15	10.01
+50			5.18	22.98	12.08	10.90
6			3.59	24.62	13.01	11.61
+50			2.90	25.26	13.94	11.32
+60 D.E			2.23	25.93	14.13	11.80
+80 D.E					14.50	

0.537646
1.8496

Sewer & No 350 Alley BIK 71 from M.H. & Alley bet Niagara
 & Narragansett No. for 120' to D.E. Stakes set 6' E of & 20.67

0+0=M.H.	5.68	26.35	5.68	20.67	10.50	10.17
+50			4.20	22.15	11.12	11.03
1			2.99	23.36	11.75	11.61
+20 D.E			2.79	23.56	12.00	11.56

1.82570

12.7

11.70

Samer & Alley between Niagara & Narragansett from M.H.
 & Bacon St East for 4560' to F.T.
 5/8 lles set 6' N of & Alley

	13. M.	7.09	23.19	16.10		
040 = M.H. & Bacon		7.09	16.10	8.00		8.10
+50		5.01	18.18	8.53		9.65
1		5.29	17.90	9.06		8.84
+50		5.47	17.72	9.59		8.13
2		5.29	17.90	10.12		7.78
+50		5.07	18.12	10.65		7.47
3		4.50	18.69	11.18		7.51
+30 M.H.		4.77	18.42	11.50		6.92
+50		4.22	18.97	11.71	106.0%	7.26
4		4.02	19.17	12.23		6.94
+50	8.07	27.60	3.66	19.53	12.76	6.77
5		7.47	20.03	13.29		6.84 6.74
+50		6.98	20.62	13.82		6.80
6		5.87	21.73	14.35		7.38
+50		6.88	20.72	14.88		5.84
+60 M.H. & Peak & Cable		6.56	21.04	15.00		6.04
7		5.42	22.18	15.48		6.70
+50		4.01	23.59	16.08		7.51
8		4.12	23.48	16.69		6.79

2760

8450			3.63	23.97	17.29	6.68
9			3.42	24.18	17.90	6.28
+50	9.77	34.87	2.80	24.80	18.50	6.30
+90 M.H.			9.09	25.48	18.98	6.50
10			9.09	25.48	19.11	6.37
+50			8.62	25.95	19.71	6.24
11			7.96	26.61	20.32	6.29
+50			7.30	27.27	20.92	6.35
12			6.85	27.72	21.53	6.19
+50			5.62	28.95	22.13	6.82
13			7.07	27.50	22.74	4.76
+20 M.H. & De. Foc Break			5.98	28.59	23.00	5.59
+50			4.79	29.78	23.54	6.24
14			3.12	31.45	24.95	7.00
+50	8.73	40.22	3.08	31.49	25.36	6.13
15			8.05	32.17	26.27	5.90
+50			7.02	33.20	27.18	6.02
16			6.12	34.10	28.09	6.01
+50 M.H. Break			5.34	34.88	29.00	5.88
17			3.91	36.31	30.58	5.73

28.59
 5.55
 34.14 M,
 2.70
 31.44
 31.49
 7.91
 36.40 M,
 6.97
 29.43
 23.54
 5.89

31/41

2.70

28.79

37.14

2.65

31.49

19

57

		40.22					
17450	12.84	51.20	1.86	38.36	32.16		6.20
18			10.37	40.83	33.74		7.09
+40 Break			9.49	41.71	35.00		6.71
+50			8.86	42.34	36.14		6.20
19			2.73	48.47	41.86		6.61
	12.53	63.34	0.39	50.81			
+50			5.39	57.95	47.59		10.36
+80 M.H. & EGGS			0.50	62.84	51.00		11.84
		73.82					
2040 Break	12.64	78.52	7.94	65.88	53.00		12.88
+50			2.08	76.44	64.25		12.19
T.P.	12.70	90.96	0.26	78.26			
21			5.32	85.64	75.50		10.14
+70 Break			2.02	88.94	80.00		8.94
T.P.	12.66	100.23	0.39	90.57			
+50			8.87	94.36	85.10		9.26
T.P.	12.54	115.47	0.30	102.93			
22			11.98	103.49	93.60		9.89
+70 Break			9.30	106.17	97.00		9.17
+50			4.89	110.58	100.66		9.92
T.P.	12.07	127.28	0.26	115.21			
23			11.65	115.63	106.76		8.87
+10 M.H. Break			10.89	116.39	108.00		8.39

11.40

8.7

8.8

8.2

Continued on page 73

7'E of
 Semic. & Newport from M.H. & Abbott East for 573 to D.E.
 373 1/2 set 4' 500 of E ditch

B.M. N.E. brass sig Abbott & Newport	6.50			
6.90	13.40			
0+0 = M.H. & Abbott	7.01	6.39	-1.84	8.23
+10	6.89	6.51	-1.78	8.29
+20			-1.71 L	
+50	6.65	6.75	-1.52 L	8.27
+75			-1.36 V	
1	6.28	7.12	-1.19	8.31
106			-1.15 V	
+27			-1.02 V	
+50	5.83	7.57	-0.87 V	8.44
+66			-0.77 L	
+96			-0.57 V	
2	5.51	7.89	-0.54	8.43
B.M.	7.63	14.13		
+50	5.90	8.23		8.45
	5.10	8.30	-0.22	8.52
+83 M.H. break	5.62	8.51		8.51
	4.86	8.54	0.00	8.54
3	5.50	8.63		8.51
	4.75	8.65	0.12	8.53
+50	5.18	8.93		8.45
	4.38	9.02	0.48	8.54
4	4.79	9.34		8.51
	4.02	9.28	0.83	8.55
+50	4.34	9.79		8.62
	3.58	9.82	1.17	8.65
5	3.95	10.19		8.66
	3.19	10.21	1.52	8.69
+50	3.50	10.63		8.77
	2.74	10.66	1.86	8.80
+73 D.E	3.33	10.90		8.80
	2.58	10.82	2.00	8.82

6.50	11.30	11.30	
4.80	1.71	1.52	
11.30 M.	13.01	12.82	
	8.01	7.82	
6.50	12.20	12.20	
5.70	1.36	1.15	6.50
12.20 M.	13.56	13.35	5.73
1.52	8.56	8.35	12.23 M.
13.37			0.87
			13.10
			13.38
6.50	12.56	12.56	
6.06	0.77	0.57	
12.56 M.	13.33	13.13	
0.87	8.33	8.13	
13.43			

New cuts

283 M.H. 21
 290
 573 D.E.

7.6

Sower & Alley between Narragansett & Del Monte f m m. H. &
 Bacon st west for 640 To M.H. on N.S. Alley
 Note stakes set 6' S.W. of &
 B.M. Grass Plg. N.W. Del Monte & Bacon
 3.99 28.03

0+0 = M.H. & Bacon	6.33	21.70	13.00	8.70	
+50	3.97	24.06	13.30	10.76	
1	4.65	23.38	13.60	9.78	
+50	5.03	23.00	13.91	9.09	
2	5.29	22.74	14.21	8.53	
+50	4.72	23.31	14.51	8.80	
3	11.21	35.62	24.41	14.82	9.59
+30 M.H. & Bacon	9.70	25.92	15.00	10.92	
+50	9.97	25.65	15.94	9.46	9.71
4	8.54	27.08	18.28	8.80	
+50	5.68	29.94	20.62	9.32	10.55
5	9.75	43.68	33.93	22.96	10.77
+50	6.61	37.07	25.30	11.77	
+65 M.H. & North Alley North	5.39	38.29 ^D	26.00	12.29	
6	4.39	39.29	27.40	11.89	
+40 = M.H. & South Alley	3.31	40.37	29.00	11.37	

29.74
 11.12
 41.06
 7.55
 33.51

33.51
 22.96
 10.55

27.08
 2.00
 29.08
 3.68
 25.40
 15.92
 9.46

0.6066

2.6801

7.000

Sewer & Alley BIK 7 from M.H. & Alley bet Narragansett
& Del Monte North for 130'
stakes set 6' w of &
43.68

0+0 M.H.	3.31	40.37	29.00	11.37
0+06		40.40	29.05	11.35
+50	4.12	39.56	29.38	10.18
1	5.25	38.43	29.77	8.66
+30 D.E	6.25	37.43	30.00	7.43

Sewer & Alley BIK 70 from M.H. & Alley bet Narragansett
& Del Monte South for 120' stakes set 6' w of &
43.68

0+0 M.H.	5.39	38.29	26.00 30.00	12.29 8.29
+50	3.54	40.14	32.91	7.23
1	3.92	46.48	1.12 42.56	35.83 6.73
+20 D.E	2.89	43.59	37.00	6.59

Sewer & Alley between Narragan set & Del Monte from N.H.
 & Bacon St East for 4280 to F.T.
 Note - stakes set 6' 500' of & from 0+0 to 20+80 & 6' 500' of & from 20+80 to 42+80

B.M.	4.61	26.31	21.70
0+0 = N.H. & Bacon St	4.61	21.70	13.00
150	4.83	21.48	13.30
1	4.87	21.44	13.61
150	5.03	21.28	13.91
2	4.98	21.33	14.21
150	4.73	21.58	14.52
3	4.38	21.93	14.83
+30 M.H. Break	4.22	22.09	15.00
150	4.01	22.30	15.24
4+0	1.42	24.89	15.84
150	7.37	32.51	1.17
5	7.40	25.11	25.14
150	6.78	25.73	16.45
6	6.93	25.58	17.05
150	9.00	23.51	17.66
+60 M.H. & Cable	8.66	23.85	18.26
7	4.45	28.06	18.87
150	4.07	28.44	19.00
8	3.80	28.71	19.48

21.38	26.38	26.38	21.44	26.46	26.46	26.46
5.05	5.20	5.02	5.02	5.20	5.05	5.05
26.3844	21.18	21.36	26.46	21.26	21.41	21.41
8.70	21.58	26.26	26.26	21.07		
	4.68	4.98	5.19	14.21		
	26.26 N.H.	21.28	21.07	6.86		
8.18						
7.83						
7.37						
6.86						
7.12						
7.06						
7.10						
7.09						
7.06						
9.05						
8.69						
8.06						
8.07						
7.32						
4.64						
4.85						5.10
8.58						
8.36						
8.03						

32.51

8+50 3.09 29.42 21.29 8.13

9 6.40 36.33 2.58 29.93 21.90 8.03

+50 7.14 29.19 22.51 6.68

+90 M.H. 7.19 29.14 23.00 6.14

10 7.06 29.27 23.12 6.15

+50 6.47 29.86 23.72 6.14

11 5.98 30.34 24.33 6.02

+50 5.02 31.31 24.93 6.35

12 4.17 32.16 25.54 6.62

+50 3.27 33.06 26.14 6.92

13 3.58 32.75 26.75 6.00

+20 M.H. DeFoe break 2.56 33.77 27.00 6.77

11.14 44.91

+50 10.34 34.57 27.95 6.62

14 9.14 35.77 29.53 6.24

+50 7.57 37.34 31.41 6.23

15 5.69 39.22 32.67 6.55

+10 break 5.26 39.65 33.00 6.65

+50 3.47 41.44 35.00 6.44

16 12.39 56.48 0.82 44.09 37.50 6.59

+50 M.H. break 9.22 47.26 40.00 6.26

34+0			6.35	213.74	206.33	7.41
+50			4.92	215.17	207.99	7.18
35		231.17	3.39	216.70	209.66	7.04
+50			12.97	218.20	211.32	6.88
36			11.06	220.11	212.99	7.12
+30 M.H.			10.15	221.02	214.00	7.02
+50			9.63	221.54	214.66	6.88
37			8.10	223.07	216.33	6.74
+50			6.50	224.67	218.00	6.67
+80 break			5.74	225.43	219.00	6.43
38			5.17	226.00	219.33	6.67
+50			4.24	226.93	220.16	6.77
39			3.82	227.85	221.00	6.85
+50			4.11	227.05	221.83	5.22
12. Mi. S.W. Cross Rig Santa Barbara 22. N. Wagonsett				218.69		
+60 M.H. & Santa Barbara 2 break			4.27	227.44	222.00	5.44
40+0	7.52	236.91	2.32	229.39	222.37	7.02
+50			5.86	231.05	222.84	8.21
41			5.25	231.66	223.51	8.35
+50			5.17	231.74	223.78	7.96
42+0			5.41	231.50	224.24	7.26
+50			6.12	230.79	224.71	6.08
+80 F.T.			6.86	230.05	225.00	5.05

227.44
3.73
 231.17
12.97
 218.20
1.57
 220.09

5.7

4.9

Sewer & Santa Monica

STKS set 4' South of Φ

B.M. Grass plg Saratoga & Abbott

0+0 = M.H. Φ Abbott St

	5.43	10.48		5.05	
			East		
+10					-2.63
+25					-2.56
+50	5.03	5.43		5.17	-2.44 ✓
+75					-2.26 ✓
1					-2.08 ✓
+25				4.76	-1.90 ✓
+50					-1.72 ✓
+78				4.48	-1.53 ✓
2					-1.33 ✓
	6.36	12.65		4.19	-1.16 ✓
+06					-1.12 ✓
+25					-0.98 ✓
+50				6.10	-0.80 ✓
+78					-0.59 ✓
+90 M.H. break	4.42	13.17		5.89	-0.50 ✓
3 STKS changed to 6' N. of Φ				6.48	-0.43 ✓
+50				6.06	-0.10 ✓
4				5.78	+0.24 ✓
+50				5.49	+0.57 ✓
5				5.11	+0.91 ✓
+50				4.93	+1.24 ✓
+90 D.E.				4.62	+1.50 ✓

West
10.48

0+0 = M.H. Φ Abbott St

+10					-2.63
+25					-2.55 ✓
+50	6.05	4.43		5.55	-2.42 ✓
+75					-2.22 ✓
1+0 D.E.				9.02	-1.80 ✓

5.05	10.27	10.27	5.05	10.28	10.28	10.28	10.28	29
5.24	2.44	2.26	5.23	2.08	1.90	1.72	1.53	
10.27 M	12.71	12.53	10.28 M	12.36	12.18	12.00	11.81	
2.63			2.26					
12.90			12.54					

6.81	11.31	11.31	11.31	11.31				
4.50	0.98	0.80	0.59					
11.31 M	12.29	7.27	12.11	11.90				
11.2			7.11	6.90				
12.43								

6.81	11.63	11.63						
4.82	0.50	1.33						
11.63 M	12.13	12.96						
0.59	7.13							
12.22								

5.05	10.09	10.09	10.09	10.09				
5.04	2.42	2.22	2.01	1.80				
10.09 M	12.51	12.31	12.10	11.89				
	7.51	7.31	7.10	6.89				

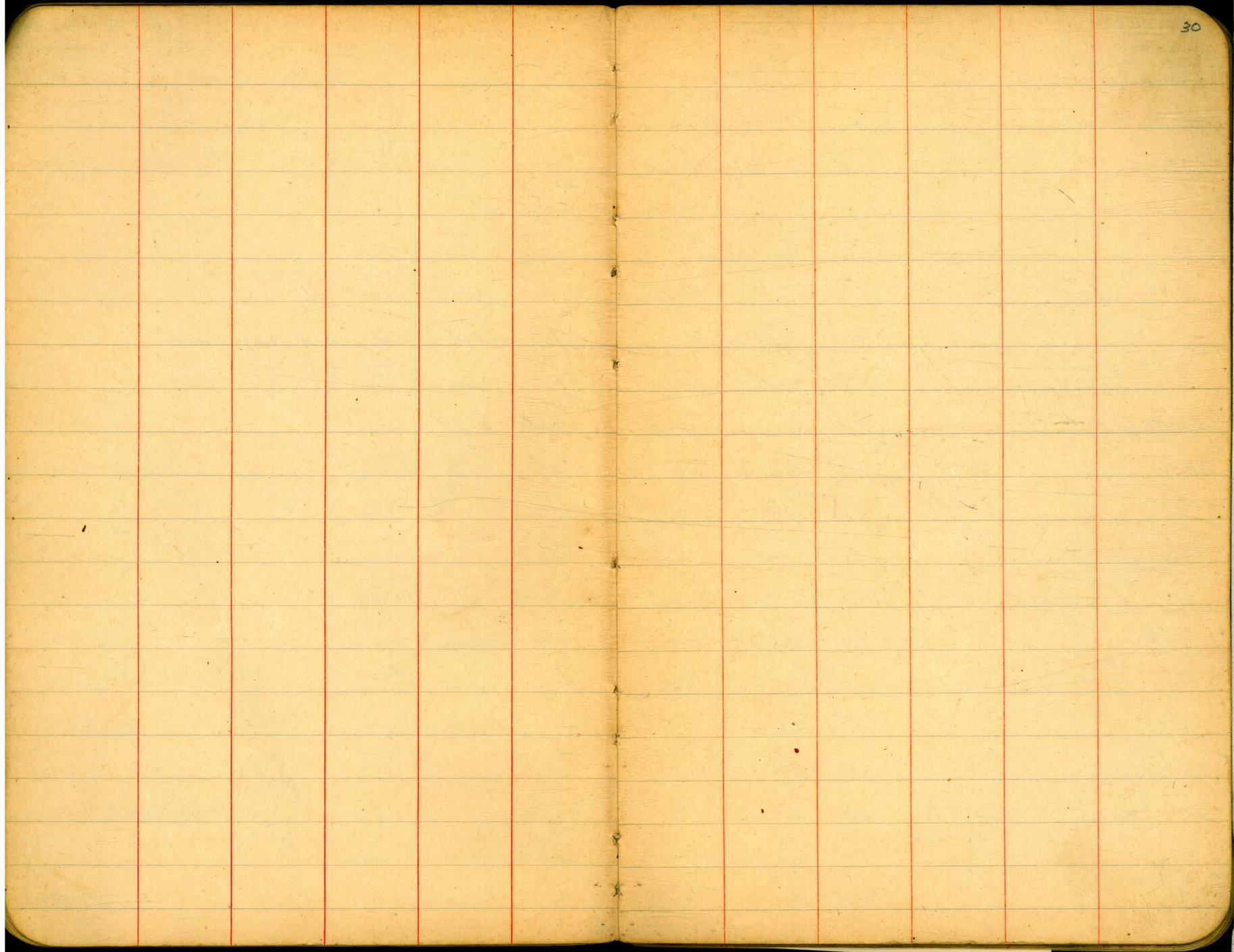
5.05	9.94							
4.89	1.80							
9.94 M	11.74							
2.01	6.74							
11.95								
6.95								

7.05	7.27							
7.11	7.25							
7.15	7.23							
7.00	7.12							
7.05	7.17							

13.17
6.36
6.81

7.1

5.8



Sewer & Alley between Del Monte & Santa Cruz from M.H.
 & Bacon St east for 316' to F.T.
 stakes set 6' south of &
 B.M. X.M. Brass pty Bacon & Del Monte
 7.17 31.21 24.04
 west 18.00

0+0 M.H. & Bacon St	4.23	26.98	Drop 15.00	8.98	11.98
+50	4.20	27.01	15.22	11.79	
1	4.11	27.10	15.45	11.65	
+50	4.78	26.43	15.68	10.75	
2	5.10	26.11	15.90	10.21	
+50	4.96	26.25	16.13	10.12	
3	4.72	26.49	16.36	10.13	
+30 M.H.	5.15	26.06	16.50	9.56	
+50	4.99	26.22	16.59	9.63	
4	4.68	26.53	16.81	9.72	
+50	4.00	27.21	17.04	10.17	
5	7.51	35.51	3.21	28.00	17.27
+50	6.90	28.61	17.50	11.11	
6	7.59	27.92	17.72	10.20	
+50	10.24	25.27	17.95	7.32	
+60 M.H. & Cable	9.92	25.59	18.00	7.59	7.9
			21.00	4.59	
7	4.38	31.13	21.73	9.40	
+50	4.40	31.11	22.64	8.47	
8	4.38	31.13	23.55	7.58	

0.454506

1.81896

8+50		35.51	3.28	32.23	24.46	7.77
9			3.05	32.46	25.36	7.10
+50	6.80	39.88	2.43	33.08	26.27	6.81
+90 M.H.			6.32	33.56	27.00	6.56
10			6.34	33.54	27.18	6.36
+50			6.22	33.66	28.08	5.58
11			5.55	34.33	28.99	5.39
+50			5.35	34.53	29.90	4.63
12			5.02	34.86	30.81	4.05
+50	12.51	50.43	1.96	37.92	31.71	6.21
13			6.87	43.56	32.62	10.94
+20 M.H. & De Foe break			5.45	44.98	33.00	11.98
+50			4.78	45.65	34.66	10.99
14			7.35	43.08	37.43	5.65
+10 break			6.88	43.55	38.00	5.55
+50			3.81	46.62	41.33	5.29
T.P.	12.31	62.36	0.38	50.05		
15			11.61	50.75	45.50	5.25
+50			6.93	55.43	49.66	5.77
16			2.75	59.61	53.53	5.78
T.P.	12.43	74.39	0.40	619.6		
+50 M.H.			9.66	64.73	58.00	6.73

44.98
+22
49.25
3.79
45.46
34.66
1080

59.61
5.05
64.66
0.16
64.50
58.00
6.50

1.88%

5.5%

8.33%

11.9

		74.39							
17	11.89	83.83	2.45	71.94	62.16	8.330/6	9.78		
+50			6.85	76.98	66.33		10.65		
+70 break			6.23	77.60	68.00		9.60		
18			5.38	78.45	69.14	3.800/6	9.31		
+50			4.99	78.84	71.04		7.80		
19	8.19	89.28	2.74	81.09	72.94		8.15		
+50			4.33	84.95 ^D	74.84		10.11		10.8
+80 M.H. Ebers	12.03	98.66	2.65	86.63 ^D	78.00		8.63		
20			10.66	88.00	79.57		8.43		
+50			7.39	91.27	83.51		7.76		
21			4.19	94.47	87.45		7.02		
+50			0.97	97.69	91.39		6.30		
22	12.75	110.44	8.41	102.03	95.33	7.87	6.70		
+50			4.52	105.92	99.27		6.65		
T.P	12.29	122.01	0.72	109.72					
23			12.39	109.62	103.21		6.41		
+10 M.H.			11.18	110.83	104.00		6.83		
+50			8.12	113.89	107.15		6.74		
24			5.04	116.97	111.09	7.88	5.88		
+50			1.47	120.54	115.03		5.51		
25	12.61	133.15	6.88	126.27	118.97		7.30		

84.95
6.72
91.67
3.67
88.00
79.57
8.43

89.28

76.53

133.15

25 + 50	12.41	143.39	2.17	130.78	122.91	8.07
26			7.09	136.20	126.85	9.45
+ 40 M.H. & Floude Greas			3.64	139.75	130.00	9.75
+ 50	10.79	151.84	2.34	141.05	131.00	10.05
27			13.23	138.61	132.00	2.61
+ 30 Greas			8.28	143.56	139.00	4.56
+ 50	12.86	162.10	2.60	149.24	141.75	7.49
28			6.08	156.02	148.63	7.39
T.P.	12.52	173.81	0.81	161.29		
+ 59			11.37	162.44	155.50	6.94
29			5.03	168.78	162.38	6.40
T.P.	11.02	184.08	0.75	173.06		
+ 50			9.44	174.64	169.25	5.39
+ 70 M.H. Greas			6.18	177.90	172.00	5.90
	12.82	190.72				
30			9.71	181.01	176.20	4.81
+ 50			3.10	187.62	183.20	4.42
+ 70 Greas	11.96	202.32	0.36	190.26	186.00	4.36
31			5.50	196.82	187.33	9.49
+ 30			2.36	199.96	188.67	11.29
+ 60 F.T.			9.48	192.84	190.00	2.84

7.88

10.00

13.23

10.00

4.49

162.44
8.57
 171.01
2.05
 168.96

167.85

34

156.02
11.23
 167.25
0.60
 166.65
5.90
 172.55
3.77
 168.78

167.25
9.80
 162.45

9.2

168.78
162.38
 6.40

12.00

1195
190.37

2.55

130.98
11.27
 142.25

142.25
5.95
 136.30

142.25
2.50
 139.75

6.4

9.45

136.20
10.53
 146.83

146.83
7.05
 139.75

177.90
12.16
 190.06
0.53
 189.52
12.80
 202.22

181.01
9.01
 190.06

1089

191.43

5

stakes set 3' No. 01 &

sewer $\frac{1}{2}$ Saratoga St. East from $\frac{1}{2}$ Abbott for 590'
 STWS set 6' 500 of $\frac{1}{2}$

B.M. Brass plg N.W. Saratoga & Abbott

5.05

East

6.67

11.72

5.05

DIP

+ 3.43

0+0 M.H. $\frac{1}{2}$ Abbott St Drop.

- 2.50

+10 6.19

11.24

~~6.52~~~~5.20~~

- 2.44

7.64

+50

~~5.90~~~~5.34~~

- 2.20

7.61

7.54

7.60

7.49

7.54

7.53

7.59

7.35

7.41

7.20

7.22

7.20

7.24

7.25

7.23

7.14

7.20

6.94

6.97

6.86

6.85

6.64

6.74

6.60

6.67

6.57

6.58

6.57

6.58

5.65

5.59

6.08

5.64

- 1.90

5.32

5.72

5.74

5.98

- 1.61

5.20

6.04

5.62

6.10

- 1.31

5.06

6.18

5.52

6.20

- 1.02

4.82

6.42

5.26

6.46

- 0.78

4.71

6.53

5.21

6.51

- 0.72

4.53

6.71

4.95

6.77

- 0.43

4.43

6.81

4.88

6.84

- 0.13

4.21

7.03

4.70

7.02

+ 0.17

4.14

7.10

4.52

7.20

+ 0.46

3.88

7.36

4.29

7.43

0.76

3.67

7.57

4.14

7.58

+ 1.00

5.05
+ 1.00
4.05

2.25

+90 D. E.

SEWCL ^E Saratoga St West from Abbott. for 290'

B.M. N.W. B.P. Abbott & Saratoga	3.74	8.79	5.05
0+0 = M.H. Abbott			
0+10	3.62	5.17	-3.43
+25			-3.38
+50	3.93	4.86	-3.31 ✓
+75			-3.19 ✓
1	4.31	4.48	-3.07 ✓
+25			-2.94 ✓
+50	4.64	4.15	-2.82 ✓
+60			-2.70 ✓
+65 M.H. ^E Saratoga Alley 61K 79	4.70	4.09	-2.65 ✓
+70			-2.62 ✓
2			-2.60 ✓
+25	5.10	3.69	-2.45 ✓
+50			-2.33 ✓
+75	5.42	3.37	-2.20 ✓
+90 M.H. ^E Saratoga Alley 61K 78	5.75	3.04	-2.08 ✓
			-2.00 ✓

Proposed Sewer ^{4.00} & ex Saratoga St from M.H. ^{9.05} West of Abbott ^{5.05}			
2+90 sec above	5.1	4.0	
3+15	5.5	3.6	
3+40	6.6	2.5	
3+65	7.2	1.9	
+90	8.0	1.1	
4+15	8.5	0.6	
+40	8.8	0.3	

see page 78 for X Sections

5.05	9.95	9.95	9.95
4.90	3.31	3.19	3.07
9.95	13.26	13.14	13.02
3.43			
13.38	8.26	8.14	8.02

8.55	5.05	9.58	5.05	
	4.53	2.94	4.59	9.64
8.05	9.58	12.52	9.64	2.92
	3.02	7.52	2.94	12.46
7.42	1.65		12.58	7.46
			7.58	

5.05	9.41	5.05	
4.36	2.70	4.48	9.53
9.41	12.11	9.53	2.65
2.82	7.11		12.18
12.23			7.18

5.05	9.15	9.15	
4.10	2.62	2.45	
9.15	11.75	11.60	
	6.75	6.60	

5.05	8.52	8.52	
3.47	2.33	2.20	
8.52	10.85	10.92	
	5.95		

8.36
4.97
3.37

5.05	8.36	8.36	
3.31	2.08	2.00	
8.36	10.44	10.36	
	5.49	5.36	

Sewer & Alley BIK 77 from M.H. & Saratoga south
for 180' to D.E.

stakes set 4' E of &

R.M. N.W. Abbott & Saratoga 5.05
3.74 8.79
0+0 M.H. & Saratoga 4.70 4.09 - 2.62 6.71

+10 5.23 3.56 - 1.67 6.12

+25 2.46 ✓

+50 4.02 4.77 - 2.31 7.08 ✓

+75 3.15 ✓

1 3.78 5.01 - 2.00 ✓ 7.01

-1.84 ✓

+50 4.09 4.70 - 1.69 ✓ 6.39

+80 D.E. 6.25 2.54 - 1.50 4.04

Sewer & Alley BIK 78 from M.H. & Saratoga
North for 160' to D.E.

stakes set 4' E of &
8.79

0+0 = M.H. & Saratoga 5.75 3.04 - 2.00 5.04

+10 5.52 3.27 - 1.94 5.21

+50 4.81 3.98 - 1.69 ✓ 5.67 ✓

1 4.51 4.28 - 1.38 5.66 ✓

+50 5.60 3.19 - 1.06 4.25

+60 D.E. 5.45 3.34 - 1.00 4.34 ✓

8.36
1.69
10.05
5.05 ✓

5.05
3.26
8.31 M, 8.31 8.31
1.38 1.06 1.00
9.69 9.37 9.31
4.69 4.37 4.31

5.05
4.05
9.10 M

9.10 9.10 9.10
2.46 2.31 2.15
11.56 11.41 11.25
6.56 6.41 6.25 ✓

5.05
4.87
9.92 M

9.92 9.92
2.00 1.84
11.92 11.76
6.92 6.76 ✓

5.05
5.02

10.07 M, 10.07 10.07
1.69 1.50
11.76 11.57
5. 6.76 6.57

Somer & Cape May from M.H. & Abbott west for
590 to D.E. - stakes set 4 S of &

S.M.H. & Brass plg. Abbott to Cape May		8.89		
	2.87	11.76		
0 to			- 4.24	
+10	3.12	8.64	- 4.00	
+25			- 3.96	
+50	3.35	8.41	- 3.79	✓
+75			- 3.69	✓
1	3.71	8.05	- 3.58	✓
			- 3.47	✓
+50	3.94	7.82	- 3.37	✓
			- 3.27	✓
2	4.45	7.31	- 3.16	✓
			- 3.05	✓
+50	5.01	6.75	- 2.94	✓
			- 2.84	✓
3	5.37	6.39	- 2.73	✓
+50	6.00	5.76	- 2.52	✓
+90 M.H. & Alley blk 78	6.37	5.39	- 2.36	✓
4	6.48	5.28	- 2.32	✓
+50	6.97	4.79	- 2.21	✓
5	7.43	4.33	- 2.01	✓
+50	9.62	2.14	- 1.79	✓
			- 1.58	✓
+90 D.E.	10.30	1.46	- 1.50	✓

Somer & Alley blk 78 from M.H. & Cape May sou pl 65 to D.E.
stakes set 4 E of &

0 to M.H. & Cape May	6.37	5.39	- 2.36	
+10	6.55	5.21	- 2.31	
+25			- 2.23	
+50	5.89	5.87	- 2.10	
			- 1.97	
1	6.93	4.83	- 1.84	
+25			- 1.71	
+50	8.30	3.96	- 1.58	
+65 D.E.	8.40	3.36	- 1.50	

8.89	13.07	13.07	13.07	13.07	13.07	38
4.18	3.90	3.79	3.69	3.58	3.58	
13.07 M	16.97	16.86	16.76	16.65	16.65	
	11.97	11.86	11.76	11.65	11.65	
8.89						
4.54	13.43	13.43	13.43	13.43	13.43	
13.43 M	3.79	3.69	3.58	3.58	3.58	
3.90						
17.33	17.22	17.12	17.01	17.01	17.01	
		12.12	12.01	12.01	12.01	
8.89						
3.79	12.68	12.68	12.68	12.68	12.68	
12.68 M	3.47	3.37	3.37	3.37	3.37	
3.58	16.15	16.05	16.05	16.05	16.05	
16.26	11.15	11.05	11.05	11.05	11.05	
17.26						
8.89	12.65	12.65	12.65	12.65	12.65	
3.76	3.27	3.16	3.05	3.05	3.05	
12.65 M	15.92	15.81	15.70	15.70	15.70	
3.37	10.92	10.81	10.70	10.70	10.70	
16.02						
8.89	12.17	12.17	12.17	12.17	12.17	
3.28	2.94	2.84	2.73	2.73	2.73	
12.17 M	15.11	15.01	14.90	14.90	14.90	
5.43	10.11	10.01	9.90	9.90	9.90	
5.79						
8.89	10.66	10.66	10.66	10.66	10.66	
1.76	1.14	1.14	1.14	1.14	1.14	
10.65 M	2.32	2.21	2.10	2.10	2.10	
2.42	12.97	12.87	12.76	12.76	12.76	
13.07	7.97	7.87	7.76	7.76	7.76	
8.89	10.27	10.27	10.27	10.27	10.27	
1.38	2.21	2.11	2.01	2.01	2.01	
10.27 M	12.48	12.38	12.28	12.28	12.28	
2.32	5	4.8	4.7	4.7	4.7	
12.59	7.48	7.38	7.28	7.28	7.28	
8.89	10.42	10.42	10.42	10.42	10.42	
1.88	1.53	1.53	1.53	1.53	1.53	
10.37 M	10.42	10.42	10.42	10.42	10.42	
	12.65	12.52	12.39	12.39	12.39	
	7.65	7.52	7.39	7.39	7.39	
	2.78	2.78	2.78	2.78	2.78	
8.89	10.42	10.42	10.42	10.42	10.42	
1.88	1.50	1.50	1.50	1.50	1.50	
10.37 M	11.92	11.92	11.92	11.92	11.92	
	6.92	6.92	6.92	6.92	6.92	

1035 p 43

966 p 64

Sewer & Long Branch from M.H. & Abbott St
 west for 522.5 to & Alley BIR 85286

B.M. N.E. Plg Abbott & Long Branch	3.38				
0+0 M.H. & Abbott	3.38	6.76			-5.58
+10	3.81	2.95			-5.17 ✓
+50	4.55	2.21			-5.12 ✓
+75					-4.96 ✓
1	4.74	2.02			-4.88 ✓
+25					-4.80 ✓
+50	4.89	1.87			-4.72 ✓
+75					-4.64 ✓
2	5.37	1.39			-4.55 ✓
+50	5.40	1.36			-4.47 ✓
+60 M.H.	4.65	2.11			-4.36 ✓
3	3.27	3.49			-4.30 ✓
+25					-4.23 ✓
+50	4.29	2.47			-4.15 ✓
4	4.87	1.89			-4.09 ✓
+50	5.48	1.22			-3.99 ✓
+84					-3.90 ✓
5	5.55	1.21			-3.82 ✓
+22 ⁵ M.H. & Alley BIR 85286	5.51	1.25			-3.74 ✓

East for 105'

B.M. 486	8.24				3.38
0+0 = M.H. & Abbott St					-5.20
+10	5.08	3.16			-5.14 ✓
+25	5.49	2.75			-4.89 ✓
1	5.50	2.74			-4.74 ✓
+05 end of existing sewer	5.52	2.72			-4.55 ✓

3.38	6.63	6.63	3.38	6.91	
3.25			3.99	4.53	
6.63 M			7.37 M	11.44	
5.20	11.53		-5.44 = bot 16" pipe		
11.83					
6.63			7.37	7.37	7.37
			5.12	5.12	5.04
			12.54	12.49	12.41
			7.54	7.49	7.41
8.12			7.37	7.37	7.37
			5.12	5.12	5.04
			12.54	12.49	12.41
			7.54	7.49	7.41
7.25			7.37	7.37	7.37
			5.12	5.12	5.04
			12.54	12.49	12.41
			7.54	7.49	7.41
6.90 ✓			3.38	6.77	6.77
			3.60	4.64	4.55
			6.98 M	6.77 M	
			4.76	11.41	11.32
			1.94	4.80	6.41
			3.38	11.54	6.32
			3.47		
			6.85 M	3.38	6.73
			5.20	3.35	4.47
			12.05	6.73 M	4.39
				4.55	11.20
				11.28	11.12
5.94			3.38	6.73	6.73
			3.38	4.47	4.39
			6.73 M	11.20	11.12
			4.55	6.20	6.12
			11.28		
5.75			3.38	6.67	6.67
			3.29	4.15	4.09
			6.67 M	10.77	10.70
			4.36	10.82	10.76
			11.03	5.97	5.90
6.47			3.38	6.44	6.44
			3.01	3.82	3.58
			6.39	6.44	6.44
			7.07	10.26	10.10
			10.48	10.34	10.11
7.74			3.38	6.44	6.44
			3.06	3.82	3.58
			6.39	6.44	6.44
			7.07	10.26	10.10
			10.48	10.34	10.11
6.54			3.38	8.20	8.20
			3.01	4.74	4.58
			6.39	8.20 M	8.20
			7.07	12.94	12.78
			10.48	7.94	7.78
5.77			3.38	8.20	8.20
			3.01	4.74	4.58
			6.39	8.20 M	8.20
			7.07	12.94	12.78
			10.48	7.94	7.78
5.02			3.38	8.20	8.20
			3.01	4.74	4.58
			6.39	8.20 M	8.20
			7.07	12.94	12.78
			10.48	7.94	7.78
4.79			3.38	8.20	8.20
			3.01	4.74	4.58
			6.39	8.20 M	8.20
			7.07	12.94	12.78
			10.48	7.94	7.78
4.75			3.38	8.20	8.20
			3.01	4.74	4.58
			6.39	8.20 M	8.20
			7.07	12.94	12.78
			10.48	7.94	7.78
			8.20		
			5.05		
			13.26		
8.30			8.20		
			7.64		
			7.32		
			7.27		

Senior & Alley 6/11/85 886

North in BIK 26. 1.25

0+0 M.H. & Long Branch	7.20	1.25	-3.50
+25	6.98	1.47	-3.33
+50	7.10	1.35	-3.17
+75 D.F.	7.77	0.58	-3.00

South in BIK 35

0+0 M.H. & Long Branch	7.20	1.25	+3.50
+10	7.15	1.30	-3.44
+21			-3.38
+50	7.08	1.37	-3.23
1	7.51	0.74	+2.95
+50	7.91	0.54	-2.68
2	6.77	1.68	-2.40
+50	5.09	3.36	-2.12
+70 M.H. & Brighton	5.29	3.16	-2.00

7.20 8.45

1.68	6.32	6.32	6.32	6.32
4.64	3.50	3.33	3.17	3.00
-6.32 M1	7.82	7.65	7.49	7.32
3.50	4.82	4.65	4.49	4.32
9.82				

6.32	6.32
3.38	3.23
9.70	9.55

3.16
2.15
5.31 M1
3.23
8.54

5.31	5.31	5.31
2.95	2.68	2.40
8.26	7.99	7.71
5.26	5.26	5.26
2.95	2.68	2.40
8.21	7.94	7.66

3.16	5.31
2.15	3.38
5.26	8.69
3.23	5.26
8.49	3.38
	8.64

3.16	8.32
5.16	2.12
8.32 M1	10.44
2.40	5.44
10.72	

Sewer & Brighton

8.45

West

0+0 = M.H. & Alley BIK 85	5.29	3.16	-2.00
+10	5.45	3.00	-1.93
+50	6.10	2.35	-1.63
+67.5 D.E.	6.28	2.17	-1.50

East

0+0 = M.H. BIK 85	5.29	3.16	-2.00
+04	5.29	3.16	-1.96
+25			-1.76
+50	4.64	3.81	-1.53
1	3.94	4.51	-1.30
			-1.06
+50	3.24	5.21	-0.59
			-0.35
2	2.51	5.94	-0.12
+12.5 M.H. Break	2.33	6.12	0.0
8.08	14.20		
+50	7.55	6.65	+0.47
+79.95	6.97	7.23	0.83
3			1.09
			1.40
+50	6.20	8.00	1.72
			2.03
4	5.54	8.66	2.34
+17			2.65
+52.5 D.E.	4.69	9.51	2.74

8.32	8.32	8.32
2.00	1.63	1.50
10.32	9.95	9.82
✓	4.95	4.82

4.51	8.38	8.38	4.51	8.44	8.44	8.44
3.87	1.76	1.53	3.93	2.00	1.76	1.53
8.38	10.14	9.91	8.44	10.44	10.20	9.97
2.40	5.14	4.91	4.65	5.44	5.20	4.97
10.38			3.79	✓	✓	✓

4.51	9.62	9.62	5.94	11.41	11.41	11.41	11.41	11.41
5.11	1.30	1.06	5.47	0.12	0.00	0.09	0.05	
9.62	10.72	10.68	11.41	11.53	11.41	11.45	11.36	
1.53	5.92	5.68	0.35	6.53	6.41	6.45	6.36	
11.15			11.76					

4.51	9.60	9.60	9.60
5.09	0.82	0.59	0.35
9.60	10.42	10.89	9.95
	✓	✓	4.95

6.65	11.42	7.23	12.46
4.77	0.83	5.23	1.03
11.42	10.59	12.46	11.43
0.97	5.59	0.83	6.43
10.95		11.63	

8.00	13.50	13.50	13.50	13.50	13.50	13.50	13.50
5.50	1.40	1.72	2.03	2.34	2.65	3.00	3.50
13.50	12.10	11.78	11.47	11.76	10.85	10.50	10.56
11.03	7.10	6.78	6.47	6.76	5.55	5.50	5.56
12.47			13.50				
7.47			6.15				
13.50			7.22				

Alley bet Long branch & Brighton-

7.50

10.88

3.38

15.81

- 4.93

bet 8" pipe

- 5.00

~~est~~ est grade

Muir st

3.67

7.05

3.38

12.80

- 5.75

Grade

west 6" pipe

East 8" "

12.87

- 5.82

- 5.60

Alley bet Muir & Voltaire pipes covered with concrete
est grade

12.86

- 5.81

- 6.00

4.56

7.03

2.47

est grade

13.64

- 6.61

- 5.50

sewer & Alley between Brighton & Long Branch from
M.H. & Abbott St East for 205'

B.M. N.E. brass plg Abbott & Long Branch 3.38
8.21 11.59 - 5.20

0+0 M.H. & Abbott - 5.00

+10 4.91 7.18 - 4.95 12.13

+25 - 4.89 ✓

+50 8.93 3.16 - 4.78 7.94

- 4.67 ✓

1 8.61 2.98 - 4.55 7.53

- 4.44 ✓

+50 8.75 2.84 - 4.33 ✓ 7.17

- 4.22 ✓

2 8.97 3.12 - 4.10 ✓ 7.22

- 4.08 ✓

+0.5 8.75 2.84 - 4.08 6.92

~~B.M. N.W. brass plg Muir~~ STKS 4' N of & St
sewer & Muir St from M.H. & Abbott St East for 155'

B.M. N.W. brass plg Muir & Abbott 1.94
4.95 6.89 - 6.14

0+0 M.H. & Abbott - 5.60

+10 4.76 2.13 - 5.49 7.62

+25 5.33 ✓

+50 4.94 1.95 - 5.06 ✓ 7.01

+75 4.79 ✓

1 4.28 2.61 - 4.51 ✓ 7.12

+25 4.24 ✓

+50 3.74 3.15 - 3.97 ✓ 7.22

- 3.92 ✓

+55 3.83 3.06 - 3.92 7.07

7.99
9.52
2.17

3.38
4.61
7.99M

7.99 7.99
4.89 4.78
12.95 12.77
7.88 7.77

3.38
4.43
7.81M
4.28
12.59

7.81 7.81 7.81 7.81 43
4.67 4.55 4.44 4.33
12.48 12.36 12.25 12.14
7.25 ✓

7.81 7.81
4.72 4.10
12.03 11.91
7.03 6.91

1.94
5.41
7.35M

7.35 7.35 2.35
5.33 5.06 4.79
12.68 12.41 12.14
7.68 7.41 7.14

7.35 7.35
4.72 4.10
12.03 11.91
7.03 6.91

1.94
5.72
7.66M

7.66 7.66
4.51 4.2
12.17 11.9
7.87

11.32

Sever & Main St from M.H. & Abbott west for 557.6
 To M.H. & west pt Loma Blvd - stakes set 4' N of C.

B.M. N.W. brass plg Main & Abbott 1.94
 4.93 6.89

old M.H. & Abbott 3/1 - 5.60

710	4.93	1.96	-5.57	7.53
+25			-5.58	
150	5.02	1.87	-5.46	7.33
+75			-5.39	
1	5.15	1.74	-5.32	7.06
+25			-5.25	
+50	5.16	1.73	-5.18	6.91
+75			-5.11	
2	5.82	1.57	-5.04	6.61
+50			-4.97	
+65	5.37	1.52	-4.90	6.42
+70 M.H.			-4.86	
+89	5.44	1.45	-4.84	6.29
3	4.81	6.34	-4.79	
+50			-4.76	6.29
4	4.85	1.49	-4.69	6.11
			-4.62	
			-4.55	
+50	5.08	1.26	-4.48	5.74
			-4.41	
	5.08	1.26	-4.34	5.60
			-4.27	
5	5.29	1.05	-4.20	5.25
+30			-4.12	
150	7.88	-1.54	-4.05	2.51
M.H. to be built to elev +0.50				
+57 M.H. & west pt Loma Blvd	8.01	1.6.7	-4.00	2.33

1.94	6.93	6.93	6.93	1.94	6.76
4.99	5.46	5.39	5.32	4.82	5.25
6.93 M.H.	12.39	12.32	12.25	6.76 M.H.	12.01
7.53	7.39	7.32	7.25	5.32	7.01
12.46				12.05	
7.46				7.08	

1.94	6.73	6.73	1.94	6.28
4.79	5.18		4.34	5.11
6.73 M.H.	11.91		6.28 M.H.	11.39
5.25	6.91		5.18	6.39
11.78			11.46	
			6.46	

1.94	6.43	6.43	6.43	1.94	6.51	6.51
4.49	5.04	4.97	4.90	4.57	4.86	4.79
6.43 M.H.	11.47	11.40	11.33	6.51	11.37	11.30
5.11	6.47	6.40	6.33	4.90	6.37	6.30
11.54				11.41		
8.54				6.41		

1.94	6.95	6.95	6.95	6.95
5.01	4.76	4.69	4.62	4.55
6.95 M.H.	11.71	11.64	11.57	11.50
4.79	6.71	6.64	6.57	6.50
11.74				
6.74				

0.97	5.93	5.93	5.93	0.97	6.06	6.06	6.06	6.06
4.96	4.48	4.41	4.34	5.09	4.34	4.27	4.20	4.12
5.93 M.H.	10.41	10.34	10.27	6.06 M.H.	10.40	10.33	10.26	10.18
4.55	5.41	5.34		4.55	5.40	5.33	5.26	5.18
10.48				10.61				

0.97								
5.09								
6.06								
4.91								
10.47								

44

N
A

sewer & West pt Loma Blvd from M.H. & Muir North
for 270' to D.E.
stakes so 74' E of &

- 0+10 = Hub & W. Pt. Loma Blvd.				
0+10 M.H. & Muir. Hub	6.34	8.01	1.67	- 4.00
	7.77		- 1.33	- 3.91
0+25				- 3.85
40				- 3.82
+60	6.61	- 0.27		- 3.78
1	5.37	0.97		- 3.63
450	5.21	1.13		- 3.45
2	4.97	1.37		- 3.26
450	4.64	1.70		- 3.08
470 D.E.	5.06	1.28		- 3.00

- 1.33	3.21	0.97	2.96	2.96
4.54	3.91	1.99	3.85	3.78
3.21	7.12	2.96	6.81	6.74
4.00				
7.21				
0.97	6.11	6.11	6.11	
5.14	3.63	3.45	3.26	
6.11	9.74	9.56	9.37	
	4.74	4.56	4.37	
0.97	6.35	6.35		
5.38	3.08	3.00		
6.35	9.43	9.35		
3.26	4.43	4.35		
9.61				

B.M. brass pig n. n. Abbott & Muir
5.63 7.57
East

1.94

0 to N.H. of Abbott

Diop. - 6.40
- 6.00

+10	5.27	2.30	-5.91	2.21	-5.58
+50	5.57	2.00	-5.55	2.55	-5.46
1	5.02	2.55	-5.09	7.64	-4.87
+50	4.68	2.89	-4.64	7.53	-4.47
2	4.57	3.00	-4.18	7.18	-4.08 = 4.100
+05 end of existing sewer	4.56	3.01	-4.13	7.14	

0.909

West

0 to N.H. of Abbott st

Diop. - 6.40
- 6.00

+10	5.62	1.95	-5.94	7.89	
+50	5.31	2.26	-5.73	7.99	
1	6.35	1.22	-5.45	6.67	
+50	6.10	1.47	-5.18	6.65	
2	5.63	1.94	-4.90	6.84	
+50	4.58	2.99	-4.63	7.62	
+70 D.E.	5.02	2.55	-4.50	7.05	

0.5516

194
436
230
104
452
New 6.47
5.66

1201 -5.07 -5.86 -5.73 -5.59
71 12.28 12.16 12.03 11.89

6.47	6.47	6.47	6.47	6.47	6.47	6.47	6.47
5.46	5.06	5.06	4.85	6.69	4.45	4.26	4.13
7.93	7.93	7.54	7.35	7.16	5.92	5.73	5.60

104
451
6.45
104
398
5.94

-5.46 -5.32 -5.16
11.91 11.97 11.61
6.91 6.77 6.61

-4.80 -4.75 -4.63 -4.47
10.82 10.67 10.55 10.40
5.82 5.67 5.58 5.42

Sewer & Alley between Lotus & Voltaire from M.H. & of Abbott St East for 105 ft to end of existing sewer

Note - stakes set 4' No. of & Alley
B.M. S.W. brass pig Voltaire & Abbott
4.71 7.18

0+0 M.H. & Abbott	2.47		Dip - 7.03	
			- 5.50	
			- 5.48	
+10	5.00	2.18	- 5.44	7.62
+25			- 5.91	
+50	4.54	2.64	- 5.12	7.76
+55.5			- 5.08	
+73			4.95	
1	4.25	2.93	- 4.74	7.67
			- 4.72	
+05	4.06	3.12	- 4.70	7.82

0.75%
Dip

2.47	-5.31	-5.48	-5.08	-4.95	-4.72
4.95	12.73	12.90	12.50	12.37	12.14
7.42	7.73	7.90	7.50	7.37	7.14

7.118 L 29
38

Sewer & Lotus St from & Abbott St east for 155' to end of existing sewer

Note - stakes set 4' S.W. of &
4.51 6.98

0+0 M.H. & Abbott			Dip - 7.31	
			- 6.50	
+10	4.89	2.09	- 6.38	8.47
			- 6.21	
+50	4.96	2.02	- 5.91	7.93
			- 5.62	
+10	4.35	2.63	- 5.32	7.95
			- 5.03	
+50	3.38	3.60	- 4.73	8.33
+55 = end of existing sewer	3.26	3.72	- 4.67	8.39

2.47	7.20	7.20	7.20	7.20	7.20
4.73	6.50	6.21	5.91		
7.20 M	13.70	13.41	13.11		
	8.70	8.41	8.11		

2.47	7.22	7.22
4.75	5.62	5.32
7.22 M	12.84	12.54
5.91	7.84	7.54
13.13		
8.13		

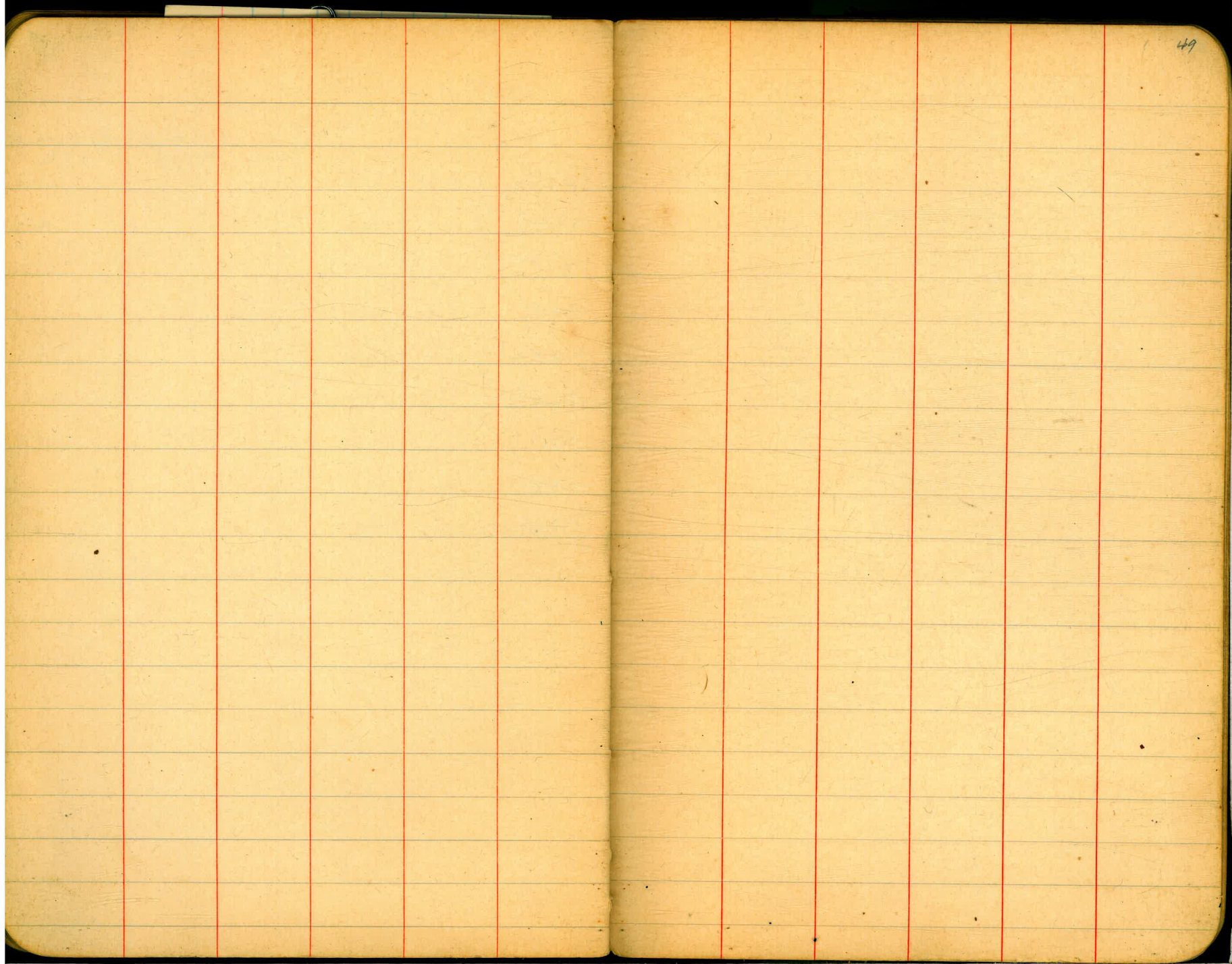
2.47	7.61	7.61
5.14	5.03	4.67
7.61 M	12.64	12.28
5.32	7.64	7.28
12.93		
7.93		

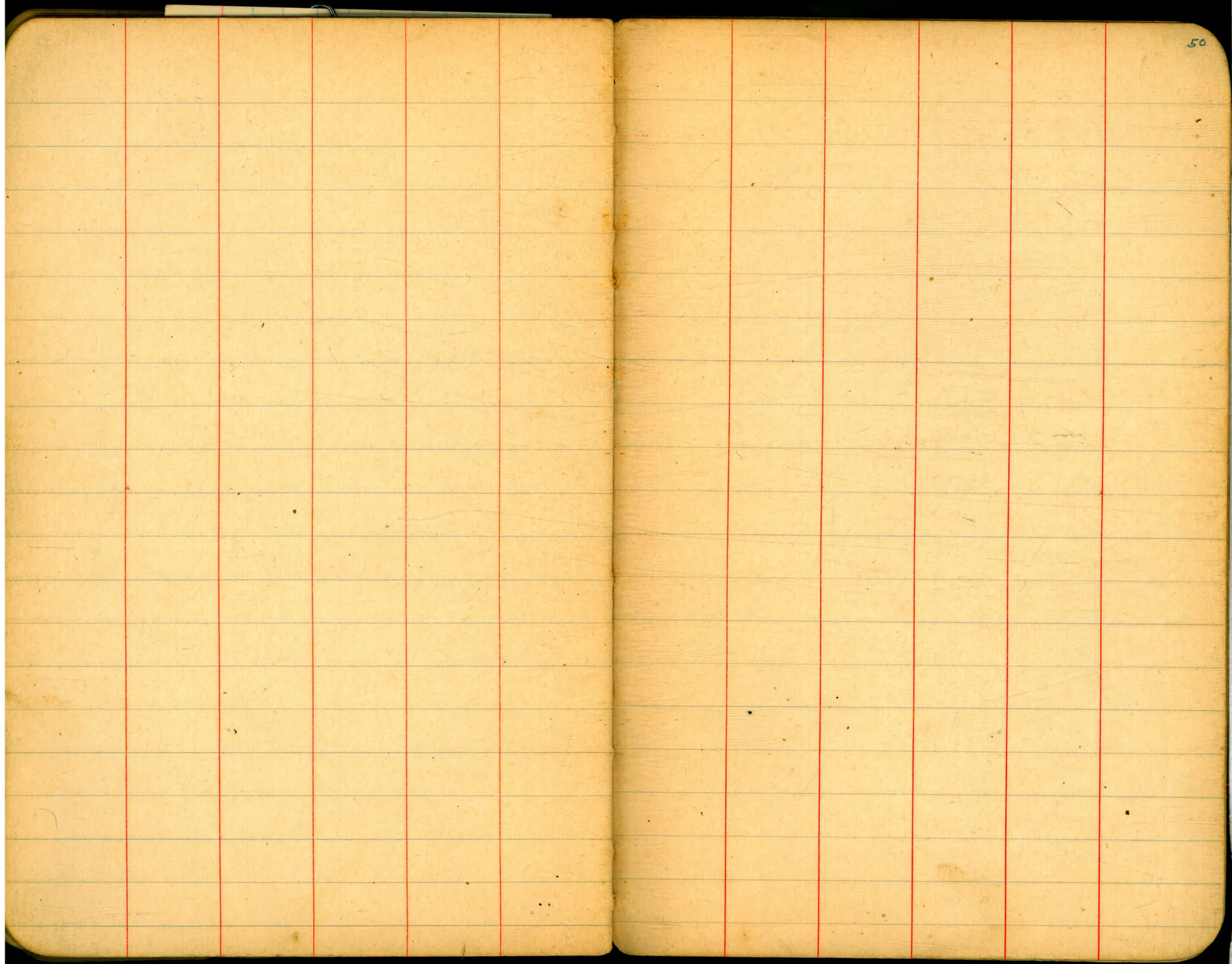
9/18/21

Gregory
Moore
Miller
Shaw

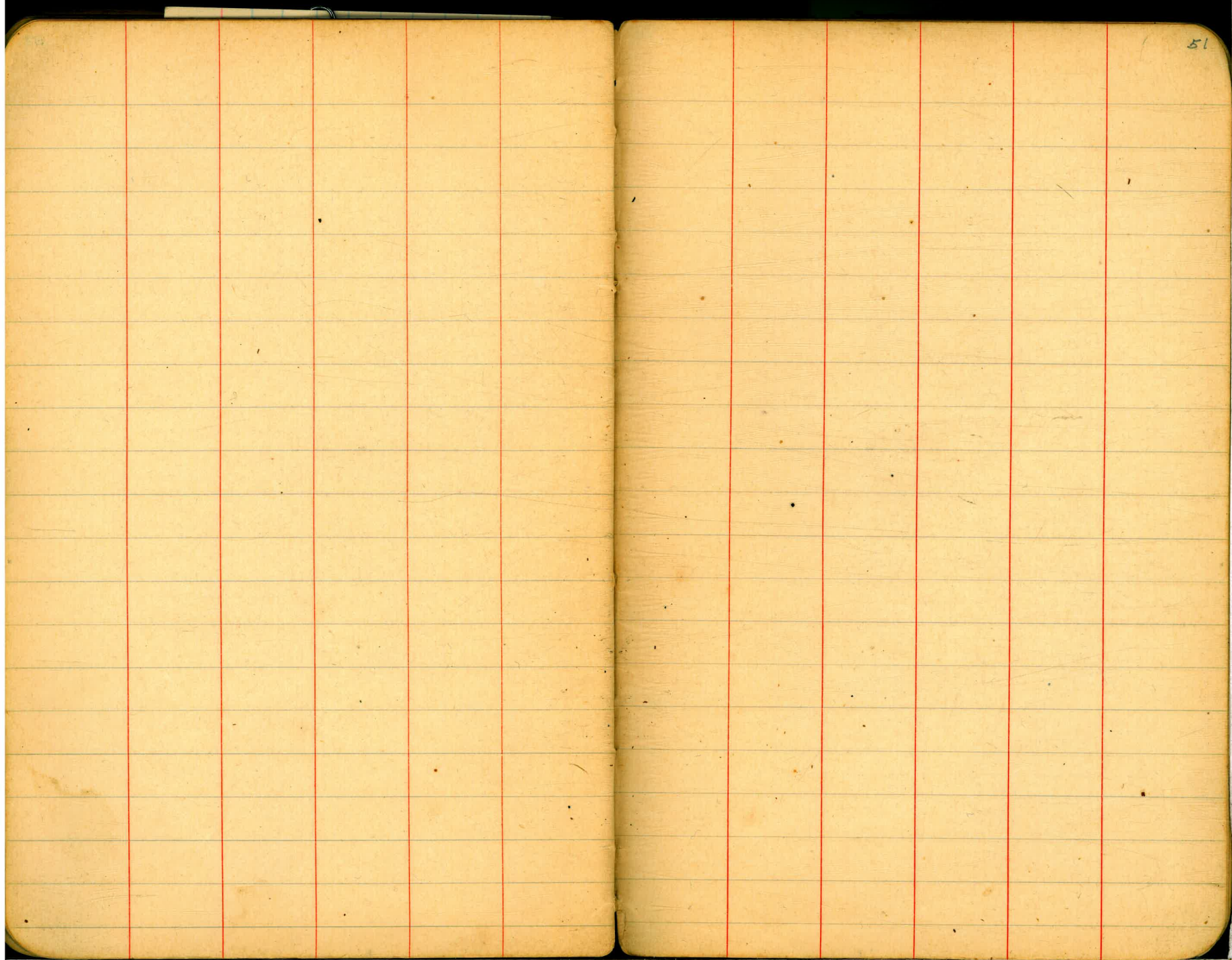
Sewer line from Sta 0+38.5 E. of Hwy page 48
out of Brighton To
v.d. Long Branch
Thru BIK 85 454 N. of W.L. Abbott
stakes set 3' E. of proposed line
or 451' W. of Abbott

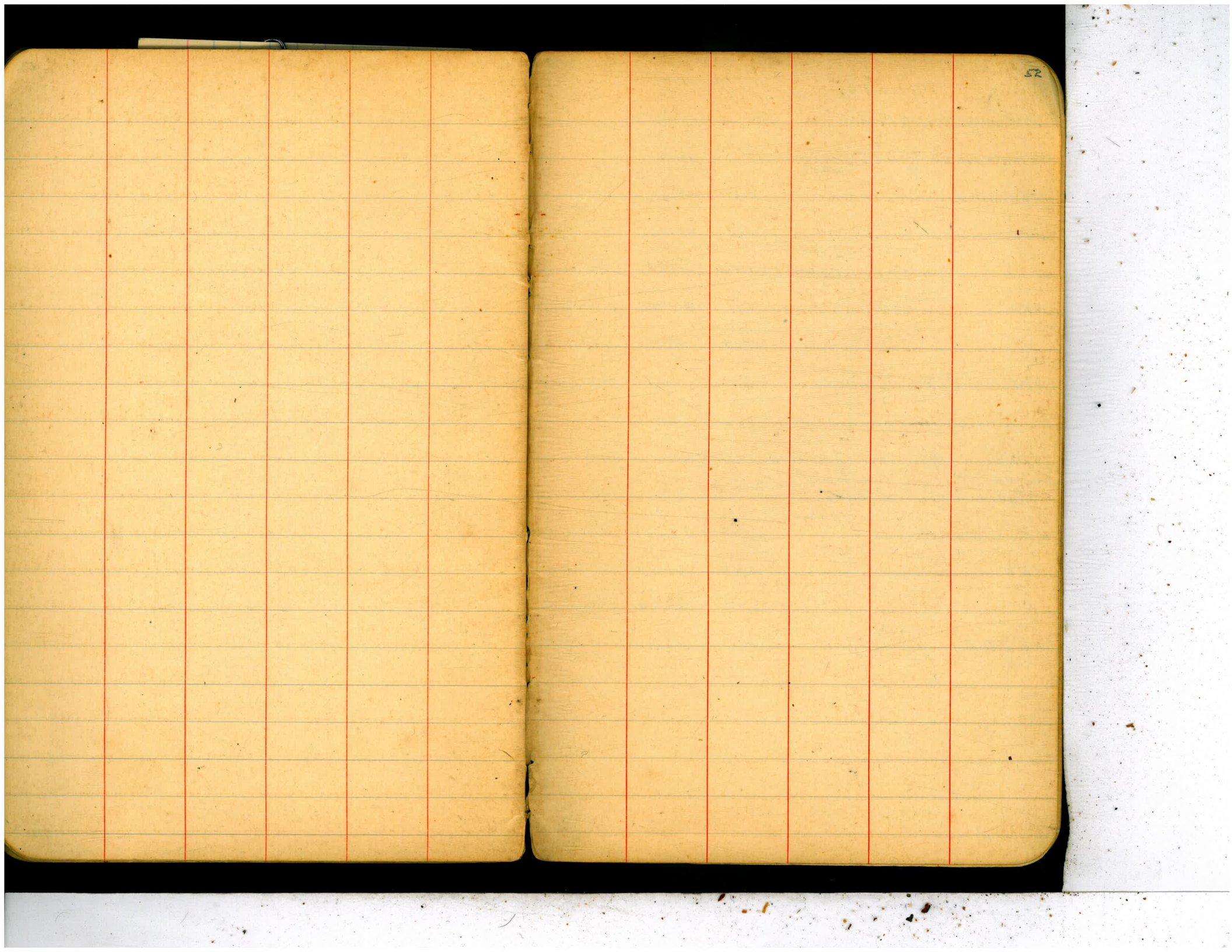
0+00 = Brighton Sta 0+38.5 page 41					
BM BP NE of pt 48	744	3.38	-1.64		
+25	4.00	3.44	-1.82	+5.26	
+50	5.73	1.71	-2.01	+3.72	
+75	3.27	4.17	-2.19	+6.36	
1	4.25	3.19	-2.38	+5.57	
+25	4.00	3.44	-2.56	+6.00	
+50	4.80	2.64	-2.75	+5.39	
+75	5.90	1.54	-2.93	+4.47	
2	6.45	0.99	-3.12	+4.11	
+35	9.37	-1.93	-3.38	+1.45	
+70 = Sta 4+84 page 39	10.20	-2.76	-3.63	+0.87	





50





Sewer & Alley between Delmar & Orchard from M.H. & Cable
St west for 215' to M.H. & E. W. Alley BIK 67
Stakes set 6' N of & Alley

B.M. brass pg. S.E. Cable	Delmar	33.12			
11.41	44.53		D	29.50	12.87
0+0 = M.H. & Cable		7.16	37.37	30.00	7.37
+50		3.73	40.80	32.09	8.71
1	11.13	54.72	0.94	43.59	34.19
+50		7.60	47.12	36.28	10.84
2		5.19	49.53	38.38	11.15
+15 M.H. & E. W. Alley,		4.32	50.40	39.00	11.40

Sewer & Alley BIK 67 from M.H. & Alley between
Delmar & Orchard north for 120' to D.E.
Stakes set 6' E of &

	54.72				
0+0 = M.H.		4.87	49.85	39.00	10.85
+50		4.99	49.73	39.41	10.32
1		6.74	47.98	39.83	8.15
+120 D.E		8.06	46.66	40.00	6.66

Saver & Alley between Del Mar & Orchard from M.H.
 & Cable East for 1885 to F.T.
 5710 set 6' N of P. Alley

	3.34	40.71	37.87		
0 to M.H. & Cable	3.34		37.37	Drop 30.00	24.50
+50		2.80	37.91		24.93
1		4.13	36.58		24.95
+50		5.12	35.59		25.18
2		6.10	34.61		25.40
+50		6.81	33.90		25.63
3		7.54	33.17		25.86
+30 M.H.	4.49	37.02	8.18	32.53	26.00
+50			4.65	32.37	26.08
4			4.78	32.24	26.31
+50			4.94	32.08	26.53
5			4.92	32.10	26.76
+50			5.11	31.91	26.98
6			4.94	32.08	27.21
+50			4.28	32.74	27.44
+60 M.H. Break & DeFoe	10.29	43.55	3.76	33.26	27.50
7			10.96	32.59	28.09
+50			10.60	32.95	28.83
8			9.80	33.75	29.57

~~33.12~~
~~9.26~~
~~42.38~~
~~5.12~~
~~37.26~~
~~24.50~~
~~12.76~~

33.12
 9.26
 42.38
 5.12
 37.26
 24.50
 12.76

5.81 36.57
 33.12
 9.41
 42.53
 5.13
 37.40
 24.73
 12.67

54

		43.55				
8150			8.80	34.75	30.20	4.45
9			6.82	36.73	31.04	5.69
+50			3.48	40.07	31.77	8.30
+65 M.H. Drop			2.14	41.91	32.00	9.41
	13.05	54.46			35.00	6.41
10			10.69	43.77	38.25	5.52
+50			5.57	48.89	42.90	5.99
11			0.25	54.21	47.55	6.66
	12.50	66.71				
+50			7.79	58.72	52.20	6.72
12			3.46	63.25	56.85	6.40
T.	12.65	75.90				
+50			7.90	68.00	61.50	6.50
13			3.69	72.21	66.15	6.06
+20 M.N. & Ebers break			2.66	73.24	68.00	5.24
T.P.	12.48	87.87	0.51	75.39		
+50			11.45	76.42	70.58	5.84
14			7.18	80.69	74.89	5.80
+50	12.68	97.26	3.29	84.58	79.20	5.38
15			8.06	89.20	83.50	5.70
+50	12.62	109.63	0.25	97.01	87.81	9.20
16			5.37	104.26	92.11	12.15
+45 M.N. break			6.65	102.98	96.00	6.98

73.24
 5.11
 78.35
 6.10
 72.21

73.35
 1.45
 61.80

78.35
 11.55
 66.80
 61.50
 5.30

55

7.0

5.5

6.5

109.63

16+50			6.35	103.28	96.50	6.78
17	12.54	119.81	2.36	107.27	101.50	5.77
+50			3.13	111.68	106.50	5.18
+85 break			5.31	114.50	110.00	4.50
78	12.41	131.52	0.70	119.11	113.90	5.21
T.P.	12.57	143.35	0.74	130.78		
+50			9.19	134.14	126.90	7.26
+85 F.T.			1.09	142.26	136.00	6.26

10.00

26.00%

56

Sewer & Alley bet Santa Cruz & Coronado from
M.H. & Cable west for 660' to M.H. & Bacon

	B.M. S.E. B.P. Called Santa Cruz 6.17	32.72	26.55						
0 to M.H. & Cable			5.74	26.78	20.50	6.48	now 6.56		
+50			5.33	27.39	20.80	6.59			
1			5.01	27.71	21.10	6.61			
+50			4.49	28.23	21.40	6.83			
2			5.10	27.62	21.71	5.91			
+50			5.10	27.62	22.01	5.61			
3			4.94	27.78	22.32	5.46			
+30 M.H. break			5.05	27.67	22.50	5.17			
+50			4.94	27.78	22.83	4.95			
4			4.43	28.29	23.16	4.63	4.63		
+50	12.49	42.17	3.04	29.68	24.49	5.19	5.19		
5			10.29	31.88	25.33	6.55	6.55		
+50			6.60	35.57	26.16	9.71	9.40		
6			2.55	39.62	27.00	12.62	12.12		
+50			4.37	37.80	27.83	9.97	9.96		
				28.00		10.14			
+60 M.H. & Bacon			4.03	38.14	32.00	6.14			

$$\begin{array}{r} 26.55 \\ 49.3 \\ \hline 31.50 \end{array}$$

$$\begin{array}{r} 444 \\ 2706 \\ 2050 \\ \hline 650 \end{array}$$

$$\begin{array}{r} 38.10 \\ 32.1 \\ \hline 11.31 \end{array}$$

$$\begin{array}{r} 352 \\ 37.79 \\ 27.5 \\ 996 \\ \hline 1303 \\ 2828 \\ 440 \\ \hline 3268 \end{array}$$

$$\begin{array}{r} 215 \\ 3913 \\ 21 \\ \hline 1412 \end{array}$$

$$\begin{array}{r} 575 \\ 3556 \\ 2616 \\ \hline 940 \end{array}$$

$$\begin{array}{r} 943 \\ 3188 \\ 246 \\ \hline 50 \\ 2765 \end{array}$$

7
 15/0
 8

Survey of Alky between Santa Cruz & Coronado from
 M.H. & Cable East for 1770 To D.E
 STAKES set 6' sou of 4'

B.M.	10.86	37.84		26.98		
+0 M.H. & Cable			10.86	26.98	20.50	6.48
+50			10.00	27.84	22.39	5.45
1:			7.10	30.74	124.28	6.46
+50			5.65	32.16	26.18	5.98
2			4.52	33.32	28.07	5.25
+50	7.96	42.71	3.09	34.75	29.96	4.79
3			5.80	36.91	31.86	5.05
+30 M.H. BREAK	12.57	51.27	4.01	38.70	33.00	5.70
+50			11.13	40.14	34.33	5.81
4			7.72	43.55	37.66	5.89
+50			3.98	47.29	41.00	6.29
T.P.	12.32	63.34	0.25	51.02		
5			12.00	51.34	44.33	7.01
+50			7.92	55.42	47.66	7.76
6			3.75	59.59	51.00	8.59
+50			3.58	59.76	54.33	5.43
+60 M.H. & De Foe break	12.50	72.78	3.06	60.28	55.00	5.28
7			3.04	69.74	60.45	9.29
T.P.	12.59	84.52	0.85	71.93		9.03
+50			9.32	75.20	67.26	7.94
+70 BREAK			6.84	77.68	70.00	7.68
8			2.86	81.66	73.50	8.16
T.P.	12.59	96.92	0.19	84.33		

60.28
 5.04
 65.32
 5.96
 59.36
 51.00
 8.36

77.68
 0.80
 78.48
 78.48 78.48
 3.51 9.00
 74.97 69.48
 67.26 60.45
 7.71 9.03

new cut,
 8.36
 new cuts
 9.03

37.27
 6.67
 13.63
 11.66

		96.92					
8+50			9.18	87.74	79.33	11.66	8.91
+90 M.H. break			4.92	92.00	84.00		8.00
9			3.90	93.02	84.08		8.94
T.P.	8.10	104.21	0.81	96.11			
+50			7.11	97.10	84.50		12.60
10			6.41	97.80	84.91		12.89
+50			7.40	96.81	85.33	0.833	11.48
11			9.59	94.62	85.75	0.833	8.87
+30 break			10.69	93.52	86.00		7.52
+50			10.48	93.73	87.05		6.68
12			8.90	95.31	89.68		5.63
+50			7.77	99.44	92.31	5.26	7.13
13	12.56	116.08	0.69	103.52	94.94		8.58
+20 M.H. break		£ Ebers	11.93	104.15	96.00		8.15
+50			9.22	106.86	98.28		8.58
14			4.83	111.25	102.08		9.17
+50	12.78	127.03	1.83	114.25	105.88	7.60	8.37
15			8.95	118.08	109.68		8.40
+50			5.12	121.91	113.98		8.43
+70 break			4.77	122.26	115.00		7.26
16	12.45	138.27	1.21	125.82	118.37	11.25	7.45

8.22

7.22

8.4

6.6

138.27

16450 M.H. break

T.P. 12.73 150.45

17 6.62 157.33

T.P. 7.47 157.33

+50 6.48 150.85

+70 D.F. 5.62 151.71

4.24 134.03 124.00

0.55 137.72

6.62 143.83 130.87

0.59 149.86

6.48 150.85 137.75

5.62 151.71 140.50

10.03

12.96

13.10

11.21

new cuts

11.67

11.07

9.00

134.03

3.37

137.40

11.54

125.86

134.03

12.87

146.90

4.36

142.54

30.87

11.67

142.54

9.42

152.03

146.90

4.36

142.54

30.87

11.67

52.03

3.21

48.82

37.75

11.07

52.03

2.53

49.50

40.50

9.00

149.50

4.51

154.01

2.30

151.71

60

9.4

9.0

sewer & Alley between Coronado & Del Mar from
 M.H. & Cable west for 465' to M.H.
 5' taken out 6' 5 of &

B.M. S.E. brass. plg Coronado Cable
 7.47 36.05

28.58

283

61

0 to M.H. & Cable

5.30 30.75 23.00 7.75

7.8

+50 4.54 31.51 23.94 7.57

1 5.19 30.86 24.88 5.98

+50 4.96 31.09 25.82 5.27

2 4.00 32.05 26.76 5.29

+50 1.92 34.13 27.71 6.42

11.34 45.47

+65 break 10.46 35.01 28.00 7.01

3 8.63 36.84 29.51 7.33

+50 4.97 40.50 31.67 8.83

4 1.50 43.97 33.84 10.13

break

+15 M.H. & Alley south 61K 66 0.80 44.67 34.50 10.17

5.34 50.01 39.00

7.6

+50 4.47 45.54 35.55 9.99

+65 M.H. & Alley North 61K 66 3.61 46.90 36.00 10.40

10.00

Sewer & Alley BIK 66 from M.H. & Alley bet Coronado
 & Del Mar South for 120' to D.E.
 stakes set 6' m of &

B.M.			44.67		
0+0 = M.H.	5.25	49.92	D ₁ 34.50	10.17	
			39.00	5.67	
+50			3.56	46.36	39.83
1			3.29	46.63	40.67
+20 D.E.			2.84	47.08	41.00

46.40
 2.83

49.23 M₁
 4.45
 44.78 44.78
 34.50 39.00
 10.28 5.78

44.89 50.07
 5.18 4.54
 50.07 M₁ 45.53
 3.77
 46.30
 46.30 36.00
 10.30

62

Sewer & Alley BIK 66 from M.H. & Alley bet Coronado & Del Mar
 North for 120' to D.E. - stakes 6' E of &
 B.M.

0+0 = M.H.	3.52	46.40	36.00	10.40
+50	5.03	44.89	36.41	8.49
1	6.62	43.30	36.83	6.47
+20 D.E.	7.31	42.61	37.00	5.61

Sewer & Alley between Coronado & Del Mar from
 M.H. & Cable East for 1915 to F.T.
 5 to 1105 set 6.5 of &

B.M. S.E. brass pig Coronado Cable		28.58				
	7.47	36.05				
0 to 0 M.H. & Cable		5.30	30.75	23.00	7.75	
+50		4.91	31.14	23.30	7.84	
1		4.61	31.44	23.61	7.83	
+50		4.77	31.28	23.91	7.37	
2		4.63	31.72	24.21	7.21	
+50		4.09	31.96	24.52	7.44	
3	12.30	44.60	3.75	32.30	24.82	7.48
+20 M.H. Break		12.27	32.33	25.00	7.33	
+50		12.06	32.59	25.48	7.06	
4		11.19	33.41	26.69	6.72	
+50		9.80	34.80	27.90	6.90	
5		8.98	35.62	29.11	6.51	
+50		7.91	36.69	30.32	6.37	
6		6.87	37.73	31.54	6.19	
+50		2.56	42.04	32.75	9.29 9.10	
+60 M.H. & De For Break	11.73	54.36	1.97	42.63	33.00	9.63 9.43
7			12.51	41.85	35.18	6.67
+50			10.11	44.25	37.90	6.35
8			6.75	47.61	40.63	6.98

31.14
 2.40
 35.54 M.
 4.83
 30.71
 23.00
 7.71

41.85
 5.00
 46.85 M.
 5.00
 41.85
 32.75
 9.10

46.85
 4.42
 42.43
 33.00
 9.43

		54.36				
8+50			3.33	51.03	43.35	
T.P.	12.34	65.95	0.75	53.61		
9			11.29	54.66	46.07	
+50			7.81	58.14	48.80	
+90 M.H. GREAT			5.32	60.63	51.00	
10			4.97	60.98	51.97	
+50	12.33	76.92	1.36	64.59	56.85	
11			8.05	68.87	61.73	
+50	12.27	86.83	2.36	74.56	66.60	
+95 GREAT			6.54	80.29	71.00	
12			5.90	80.93	71.72	
+50	12.65	98.98	0.50	86.33		
13			11.06	87.92	78.92	
+20 M.H. & Eberts GREAT			3.33	95.65	86.12	
+50	12.49	111.20	0.27	98.71	89.00	
14			7.38	103.82	92.90	
+50	12.50	123.35	0.35	110.85	99.40	
T.P.			5.54	117.81	105.90	
15	12.62	135.72	0.25	123.10		
+50			11.80	123.92	112.40	
T.P.			5.51	130.21	118.90	
16	12.32	147.64	0.40	135.32		
+35 M.H. GREAT			11.36	136.28	125.40	
			7.86	139.78	130.00	

	52.51	44.25			
	4.91	8.26			
	47.60	52.51			
7.68					
8.59		47.61			
9.34		6.20			
9.63		53.81			
9.01		2.77			
7.64		51.04			
7.14		43.35			
7.96		7.69			
9.29		60.63		63.31	
9.21		2.68		8.61	
9.00		63.31		54.70	
9.53		5.17		46.07	
9.71		58.14		8.63	
10.92					
11.45					
11.91					
11.52					
11.31					
10.88					
9.78					

64

9.7

147.64

16+50			5.69	141.95	132.25
T.P.	12.51	159.95	0.20	147.44	
17			11.89	148.06	139.75

+50			4.61	155.34	147.25
	12.46	171.63	0.78	159.17	
18			9.42	162.21	154.75

+50	11.27	180.79	2.11	169.52	162.25
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19			4.67	176.12	169.75
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+15 FT.			2.58	178.21	172.00
---------	--	--	------	--------	--------

9.70

8.31

8.09

7.46

7.27

6.37

6.21

169.52

5.01

174.53

12.46

162.07

54.75

7.32

new cot.

7.32

65

6.6

Survey of Guizot St beginning at M.H. & Alley bet Narragansett
 & Del Monte thence 500 to ^{M.H.} Del Monte thence east in &
 Del Monte to & Guizot thence south in & Guizot
 To D.E. Sta 5+91

13. M. 5 m. brass plg Santa Barbara Narragansett	218.69			
5.74	224.43			
T.P.	6.95	221.30	10.08	219.35
			11.91	D
0+0 = M.H. & Guizot & Alley bet Narragansett & Del Monte	209.39	200	203.00	205.00
+50		8.51	212.79	206.32
1		5.25	216.05	207.64
+50		4.91	216.39	208.96
190 M.H. & Del Monte	5.44	215.86	210.00	
2		5.51	215.79	210.20
+50		4.52	216.78	211.18
+94 M.H. & Guizot	3.45	217.85	212.00	
3		1.66	212.13	
+50	8.89	228.51	1.68	219.62
4		6.97	221.54	214.23
+50		6.04	222.47	215.28
+83 ⁹ M.H. & Alley bet Narragansett & Santa Cruz			216.00	
+89 ⁹ M.H. 5TK for the cot	5.65	222.86	216.00	
5		5.53	222.98	216.29
+50		5.23	223.28	217.24
+91 D.E.	5.10	223.41	218.00	

6.39
4.39
6.47
8.41
7.43
5.86
5.59
5.60
5.85
6.44
7.31
7.19
6.86
6.69
6.07
5.41

4.7
 6.0
 5.8
 7.0
 5.6

sewer & Alley bet Del Monte & Santa Cruz from M.H.
 & Guizot st east for 510' to D.E.
 STAKES 36' to 5' of &

255,80 67

B.M.	13.02	235.88		222.86		
0+0 M.H. & Guizot			13.02	222.86	216.00	6.86
+50			10.01	225.87	218.59	7.28
1			7.49	228.39	221.18	7.21
+50			5.37	230.51	223.77	6.74
2	12.47	246.09	2.26	233.62	226.36	7.26
+50			9.27	236.82	228.95	7.87
+70 M.H. Creek			7.52	238.57	230.00	8.57
3			5.83	240.26	231.75	8.51
+50	12.84	256.55	2.38	243.71	234.66	9.05
4			9.24	247.31	237.58	9.73
+50			6.13	250.42	240.49	9.93
5			3.69	252.86	243.41	9.45
+10 D.E.			3.10	253.45	244.00	9.45

518.10

7.7

7.3

sewer & Cable st from M.H. & Alley bet Del Monte
& Santa Cruz South for 1140' to M.H. & Alley
between Del Monte & Orchard
stakes set 6' w of & street

B.M. Brass pgs E. Called Santa Cruz	5.35	31.90	26.55		
0+0 = M.H. & Alley bet Del Monte & Santa Cruz	6.43	25.97	18.00	7.47	
150	6.24	25.66	18.33	7.33	
1	6.20	25.70	18.66	7.04	
150	5.97	25.93	18.99	6.94	
2	5.52	26.38	19.31	7.07	
150	5.44	26.46	19.64	6.82	
3	5.15	26.75	19.97	6.78	
150	5.04	26.86	20.30	6.56	
150 M.H. & Alley	4.96	26.94	20.50	6.44	
+86	4.95	26.95	20.54	6.41	
4	4.87	27.03	20.63	6.40	
150	4.61	27.29	20.99	6.30	
5	4.57	27.33	21.32	6.01	
150	4.30	27.60	21.64	5.96	
T.P.	9.34	37.92	28.58		
6	9.68	28.24	21.97	6.27	
150	8.93	28.99	22.30	6.69	
7	8.13	29.79	22.62	7.17	
150	7.58	30.34	22.99	7.44	
+60 M.H. & Alley	7.26	30.66	23.00	7.66	
+66	7.27	30.65	23.02	7.63	

37.92

2.10

6.89 31.03 23.16

7.87

+150

6.18 31.74 23.35

8.39

9

5.68 32.24 23.55

8.69

+50

5.23 32.88 23.75

9.13

10

4.46 33.46 23.94

9.52

+50

3.16 34.76 24.14

10.62

11

1.61 36.31 24.34

11.97

+34

0.69 37.23 24.48

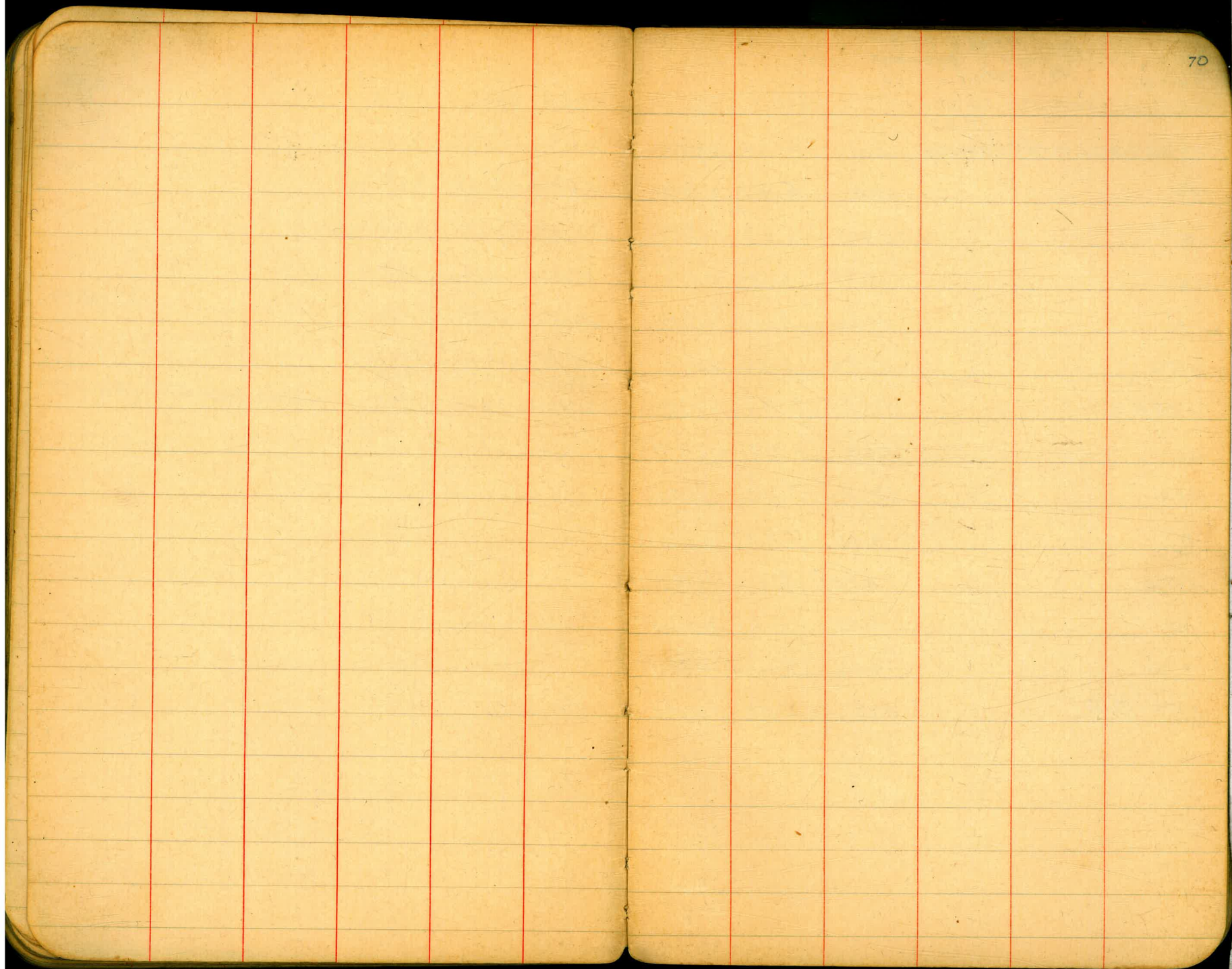
12.75

+40 M.H. Alley bet Del Mar & Orchard

0.50 37.42 24.50

12.92

69



May. M.H. 15' W of Φ Bacon
 sensor Φ Cape from 1300 ft west for 555'
 To D.E. N 5th set 6' N of Φ

B.M. brass pg 91. W. Cape May & Abbotts
 3.91 12.80

889

2.80

(71)

0 + 0 = N.H. 15' W of Φ Cape May	6.60	6.20	0.250	5.70	
+50	6.31	6.49	0.72	5.77	
+10	6.17	6.63	0.95	5.68	
+50	5.99	6.81	1.17	5.64	
2	5.66	7.14	1.40	5.74	
+50	5.45	7.35	1.62	5.73	
+75 M.H.	5.45	7.35	1.74	5.61	
3	5.33	7.47	1.85	5.62	
+50	5.17	7.63	2.07	5.56	
4	4.86	7.94	2.30	5.64	
+50	4.70	8.10	2.52	5.58	
5	4.48	8.32	2.75	5.57	
+50	4.26	8.54	2.97	5.57	
+55 B.F.	4.22	8.58	3.00	5.58	

M.E. 6.76

sewer & Brighton from M.H. 15' W of & Bacon west
for 55 to D.E. Note stks set 6' S of & Brighton.

B.M. brass sig Brighton & Bacon
7.91 12.74

0 to M.H. = 15' W of & Bacon

			4.53			
		7.72	4.72	-1.25		5.97
+50		7.67	4.77	-0.96		5.73
1		7.20	5.24	-0.66		5.90
+50		6.74	5.70	-0.37	5.90	6.07
2		6.31	6.13	-0.07	0	6.20
+50		5.88	6.56	+0.22		6.34
+95 M.H. Break	7.93	12.46	5.58	4.53		6.43
			5.52	6.92	+0.50	6.42
3			5.50	6.94		6.39
			5.46	6.92	+0.57	6.41
+50			5.06	7.40		6.16
			5.02	7.42	1.24	6.18
4			4.62	7.84		5.92
			4.53	7.97	1.72	5.99
+50			4.14	8.30		5.71
			4.01	8.43	2.59	5.84
5			3.77	8.69		5.42
			3.65	8.79	3.27	5.52
+50			3.30	9.16		5.21
			3.12	9.32	3.75	5.37
+55 = D.E.			3.27	9.19		5.19
			3.09	9.34	4.00	5.34

12.42
2.32
10.10

10.13

72

note - New stks set 8' N of &
New stks

Alley between Niagara & Kattagans etc. continued
from page 20

		127.28					
23410 M.H. break			10.89	116.39	108.00	8.39	
+50			7.17	120.11	112.36	7.75	
24			2.16	125.12	117.81	7.31	
T.P.	12.53	139.45	0.36	126.92			
+50			8.85	130.60	123.26	7.34	
25			2.03	137.92	128.71	8.71	
T.P.	12.53	151.71	0.24	139.18			
+50			6.83	144.88	134.16	10.72	
T.P.	11.23	162.64	0.30	151.41			
26			8.29	154.35	139.61	14.74	14.10
+40 M.H. & Froude break			11.58	158.16	144.00	14.16	14.00
+50			10.32	159.42	145.11	14.31	
27			9.53	165.21	150.66	14.55	
+50	2.06	169.74					
28			12.08	167.68	156.21	11.47	
			9.45	170.31	161.70	8.55	
+20 break			7.98	171.78	164.00	7.78	7.7
+50	1.50	179.76					
29			11.80	178.26	166.20	12.06	
+50			10.06	180.00	169.86	10.14	
			7.89	182.17	173.53	8.64	
+70 M.H. break			6.65	183.41	175.00	8.41	7.7
3040			4.48	185.58	176.45	9.13	
+50	0.56	190.06					
			11.64	189.50	178.87	10.63	
		201.14					

144.88

152.16
1.42
159.58
5.87
153.71
1.61
155.32
10.30
145.02

59.58
5.87
53.71
39.61
19.10

1.61
144.88
10.30
155.18
1.61

73
153.57
137.61
13.96

144.88
2.19
147.07
2.55
137.52

153.57
5.87
159.44
1.42
158.02
1.40

31+0			9.87	191.27	181.29	9.98	
+50			7.96	193.18	183.71	9.47	
32+0			6.15	194.99	186.13	8.86	
+50	2.36 4.15	201.14 211.25	3.93	197.21	188.55	8.66	
33+0	M.H. & Guizot	break	12.47	198.78	191.00	7.78	
+50			10.42	200.83	193.88	7.75	
34+0			8.30	202.95	195.17	7.78	
+20	break		7.48	203.77	196.08	7.77	
+50			6.89	204.36	196.57	7.79	
35			5.94	205.31	197.52	7.79	
+50			4.82	206.43	198.47	7.96	
36			4.42	206.83	199.42	7.41	
+30	M.H.	break	4.28	206.97	200.08	6.97	
+50			3.97	207.28	200.18	7.10	
37			3.37	207.88	200.63	7.25	
+50			2.90	208.35	201.09	7.26	
38			2.37	208.88	201.54	7.34	
+50			1.33	209.92	202.00	7.92	7.77

208.35
 4.02
 212.37M
 207.10
 5.27
 212.37
 199.78

212.37
 2.02
 202.00
 10.37
 2.42
 7.95

74

7.7

7.5

7.1

	4.15	211.25		207.10		
3910			1.50	209.75	202.45	0.90
+50			4.40	206.85	202.91	0.90
B.M. S.W. 11/20 +60 M.H. $\frac{1}{2}$ Santa Barbara	0.71	219.40	break	218.69		
			12.30	207.10	203.00	4.10
4040			8.44	210.96	203.17	7.79
+50			8.09	211.31	203.37	7.94
4140			7.70	211.70	203.58	8.12
+50			6.93	212.67	203.78	8.89
4240	7.93	220.92	6.41	212.99	203.99	9.00
+50			7.36	213.56	204.20	9.36
+60 M.H.			7.31	213.61	204.25	9.36
43			6.72	214.20	204.42	9.78
+50			5.49	215.43	204.62	10.81
44			5.21	215.71	204.82	10.89
+50			6.33	214.59	205.03	9.56
45			7.86	213.06	205.23	7.83
+50			10.64	210.28	205.45	4.83
+60 F.T.			10.96	209.96	205.50	4.46

208.35
4.02

212.37
202.45

9.92
2.50

7.42

75

7.75

41

Sewer & Alley between Del Monte & Santa Cruz
 stakes set 6' N of & Alley from N.H. & Bacon west

B.M. N.W. Bacon & Santa Cruz class. Plg 28.99

8.27 37.26

010 = N.H. 1' W of & Bacon st

Dip 15.00
 P. 18.00

+50 11.45 25.81 20.17 56.4

1 11.02 26.24 22.35 3.89

+50 7.51 29.75 22.52 5.23

T.R 11.12 48.04 0.34 36.92

2 9.45 38.59 26.70 11.89

+29 break 7.41 40.63 28.00 12.63

+50 6.79 41.25 29.51 11.74

+75 31.31

3 7.95 53.93 2.06 45.98 33.19 12.79

+25 34.99

+50 5.03 48.90 36.78 12.12

+89 N.H. & Alley South BIK 69 4.11 49.82 39.50 10.32

4 3.67 50.26 39.64 10.62

+30 N.H. 1' W of E.L. North Alley BIK 69 3.465 49.25 40.00 9.25

49.82
 4.65
 54.47
 40.00
 14.47

49.82 52.43 52.43 52.43 76
 2.61 3.57 4.49 11.22
 529.341 42.80 45.94 4.121
 4.107
 42.2817

42.28 42.28 42.28
 1.68 3.72 12.50
 40.60 48.99 27.73
 .53 .56

42.28
 33.19
 9.09
 new cuts
 10.63

45.99 45.99
 3.41 3.41
 42.52 49.39
 33.19 33.19
 9.37 15.20

28.99 40.52 40.52 40.52
 11.53 3.19 26.70 28.00
 40.52 N.H. 37.33 13.82 12.52
 29.319 26.70 6.82
 37.33 10.63

40.52
 0.61
 39.91 51.05 51.05 51.05 51.05
 11.14 8.22 9.84 8.08 5.58
 51.05 N.H. 41.06 41.21 42.97 45.47
 28.00 29.51 31.31 33.19
 13.06 11.70 11.66 12.28

51.05 51.05 51.05
 3.28 2.20 1.19
 47.77 48.85 49.86
 34.99 36.78 47.86
 12.78 12.07

Sewer Alleys in 1811 69

B.M. N.W. Brass Peg Beyond Santa Cruz 28.99

12.67 41.66

T.P. 11.68 53.05 0.29 41.37

T.P. 7.53 58.72 1.86 51.19

South Alley

stakes set 4' W of ϕ 39.50 12.27

0+0 M.H. 6.95 51.77 ^D 42.50 9.27

+10 5.25 53.47 43.60 9.87

+25 3.11 55.61 45.25 10.36

+50 = D.E. 4.23 54.49 48.00 6.49

58.72

North Alley

Note line 1' W of E.L. Alley stakes set 6' E of ϕ 9.25

0+0 = M.H. 5.42 54.67 9.47 49.25 40.00 9.25

+10 5.17 49.50 40.09 9.41

+50 6.26 48.41 40.45 7.96

1 9.14 45.53 40.91 4.62

+10 D.E. 10.02 44.65 41.00 3.65

49.25

4.88

54.13

7.47

46.66

77.50

71.6

54.13

0.66

53.47

46.66

42.50

4.16 New cut

3/20/24 Gregory Moore Miller Shaw
 CROSS SECTION OF SARATOGA
 from 240' W. of Abbott West
 to 440' W.

See page 36

400

9.05

5.05

BP NW Abbot

N

240' W. of Abbot

415' W

S

6.0

3.1

N

7.5

1.6

C

5.1

4.0

O

8.1

1.0

N

4.7

4.4

S

8.5

0.6

8.8

0.3

315' W

440' W

N

4.7

4.4

S

8.9

0.2

C

5.5

3.6

C

8.8

0.3

S

6.4

2.7

N

8.5

0.6

340' W

490' W

S

6.8

2.3

N

9.2

-0.1

C

6.6

2.5

C

9.4

-0.3

N

5.7

3.4

S

10.3

-1.2

365' W

N

6.4

2.7

C

7.2

1.9

S

7.8

1.3

390' W = approx line of High Tides

S

8.4

0.7

C

8.0

1.1

9/6/21
 Gregor
 Floor
 Miller
 Saw
 Sewer Line from Brighton to
 Long Branch running thru the Blk.
 396' W. of W.L. Abbott, from Sta 0+96.5
 page 41 this book to Sta 4+26 page 39 this book.

B.M. NE Abbott + Long Branch	5.91	9.29	3.38
0+00 = Brighton Sta 0+96.5			- 1.12
+26	4.85	4.14	- 1.37
+50	5.35	3.94	- 1.62
+75	5.36	3.93	- 1.87
1	4.60	4.69	- 2.12
+25'	5.10	4.19	- 2.37
+50	6.06	3.23	- 2.62
+75	6.40	2.89	- 2.87
2	6.90	2.39	- 3.12
+35	6.60	2.69	- 3.47
+70 = Long Branch Sta 4+26	8.80	0.49	- 3.81

A. E. Serran

B.M. = Bacon & Voltaire	9.52
	5.81
	5.56
	5.80
	6.81
	6.56
	5.95
	5.76
	4.51
	6.16
	4.30

11.54

Pump House
 19' 4" X 13' 8"
 60.00
 53.36
 6.64

B.M. Bacon & Santa Cruz	8.91	37.90	28.99		
0.40 m. 4.4 Bacon				18.50	
50					
1					
-50	12.08	49.65	8.9	29.0	24.57
2			0.83	37.57	
130 break			8.12	41.4	22.71
50			6.9	42.8	25.00
3			6.6	43.0	28.44
+50	10.15	59.11	0.6	49.0	33.93
+90 m.H.			0.83	49.02	
			7.6	51.6	36.62
			8.8	50.4	32.50
			2.7	49.2	30.0
B.M. N.E. Voltaire & Bacon	3.25	12.77	9.52		
T.P.	2.45	8.95	6.27	6.50	5.00
	4.05	3.44	9.56	-0.61	
				8.00	set pipe

B.M's Abbott st
 Cape May N.W. Brass Plg 8.890
 Santa Cruz " " " 5.052
 Santa Monica " " " 4.406
 Newport N.E. " " " 6.504

27053	6"	
3237	8"	including
380	10"	June 6 th
155	14"	25825 Total
56	M.H.'s	

27163'	of 6"	31921 Total
4223'	" 8"	
380'	" 10"	
155'	" 14"	
73	M.H.'s	
including June 30 th		

33724'	of 6"	including 315'
4222'	" 8"	of July
380'	" 10"	
155'	" 14"	
100	M.H.'s	

3.44

11.54

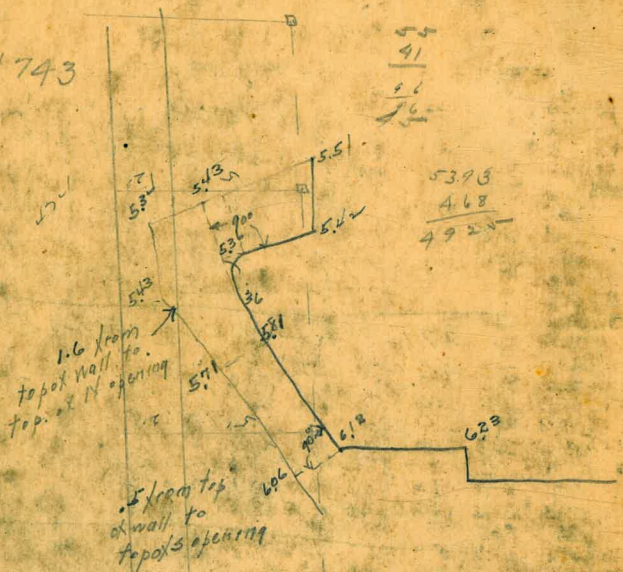
Pump House	60.00
19' 4" X 13' 8"	53.36
	<u>6.64</u>

5.05 Elev flow line at outlet N side S.M. 1.93
 4.14 1.93
 3.20 1.46

N. pipe 206 by W. of Abbott. Pipes are
 34.16 ✓ 41.340 ✓ 16" at end

14.13 14.13 5.25 3.25 10.12 10.12
 4.93 5.01 5.25 3.25 10.12 10.12
 9.20 9.12 5.02 3.25 10.12 10.12

Harvey
 Hillcrest 743



railing is 1.5 from outer edge of wall
 no rail on N. end of wall
 Elev. top of small CB. 5.11

return NW Abbott + Santa Mon.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
 ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.
 FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.