

979

979

F.B. 979

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.

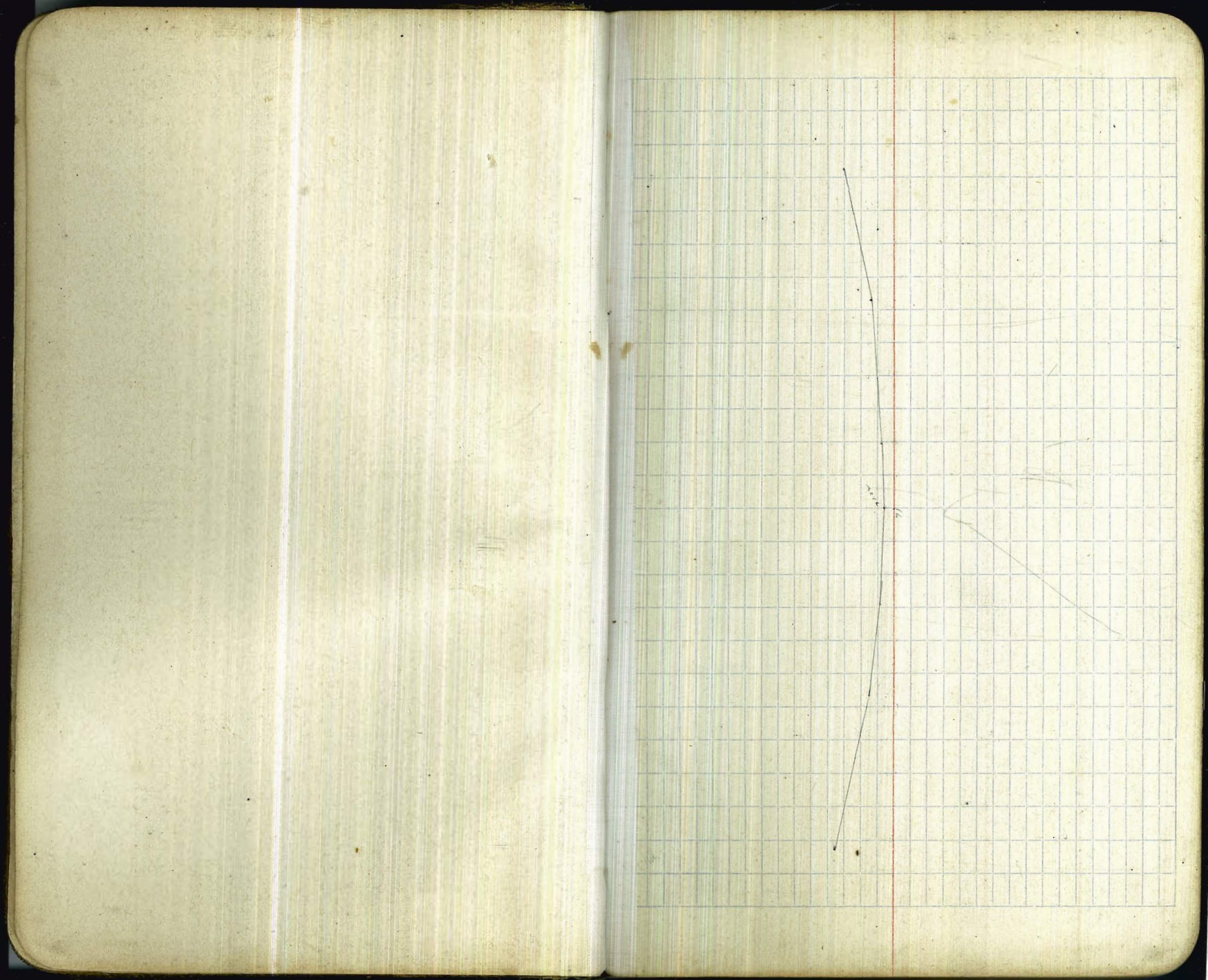
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	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	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.

For Keith's Railroad Curve Tables see end of book.

*Return to City Engineer's Office
City Hall 516*



H. N.E 35.45 Plg.

G N.W. 39.07 Plg. rt

35.45	5.44	6.71	6.20	4.72	0.98	35.45
40.15 M	34.68	33.20	32.98	35.45	45.07	
39.07	7.44	8.01	6.79	7.47	43.17	231
6.88	38.58	38.84	38.26	38.56	38.88	42.75
46.15 M		38.07		4.96		6.27
35.45	34.71	5.70		39.81	2.56	39.19
38.1	3.40	44.39				
35.45	4.91	5.03	4.90	4.52	3.88	
3.06	4.08	3.96	4.00	4.47	5.11	
38.99 M						
39.07	7.99	8.15	8.19	8.15	9.02	8.90
56.1	6.69	6.13	5.99	6.13	5.66	5.75
44.68 M						

St

1

39.00

38.50

41.00

40.07

41.00

G

St

38.50

38.00

39.25

39.17

40.00

38.00 37.99 38.50 38.89 39.07 38.90 38.80

30.28
cut 1.44207

cut 1.60027

16.34

cut 1.47217

30.98

33.47 33.88 34.12 34.90 35.05 34.97 34.75

37.00

37.00

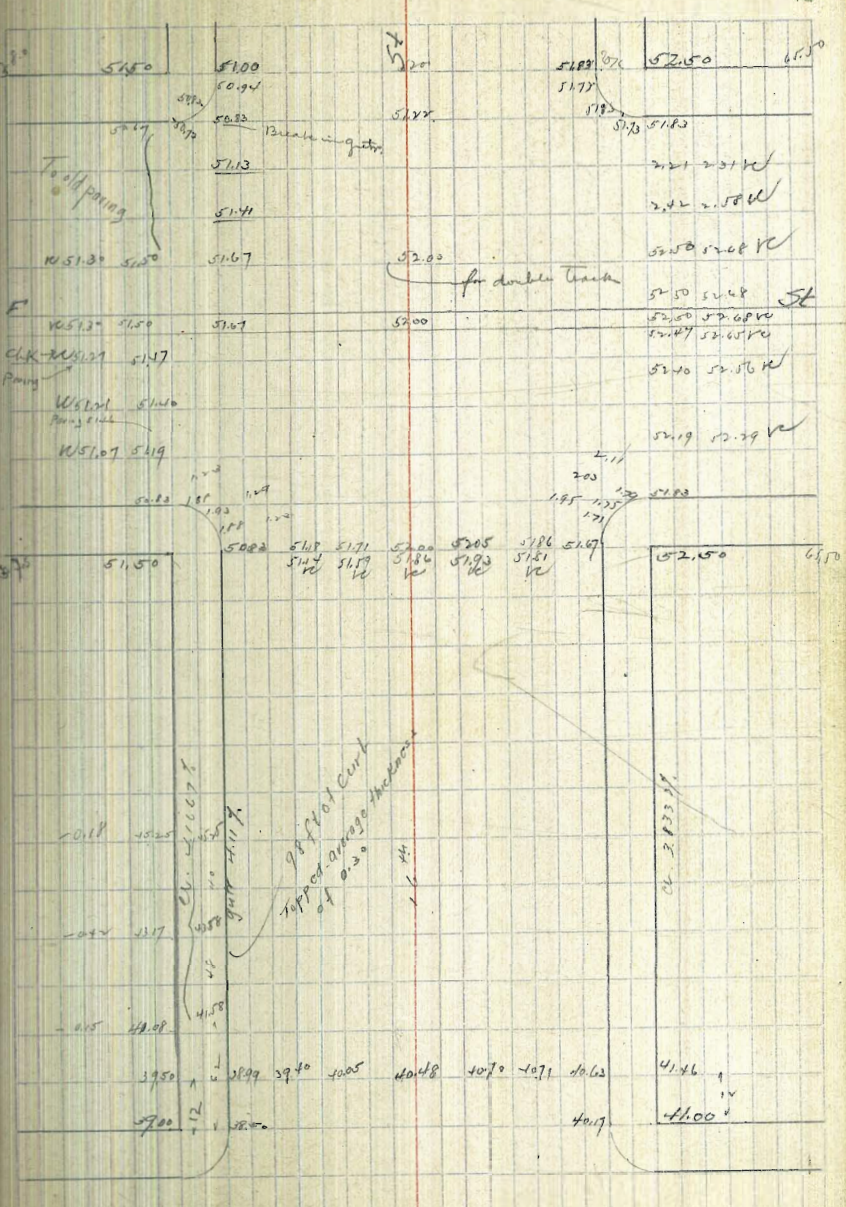
38.48

37.50

H

St

4600 Nt	512	6.28	5183	469	5107	5183
5144	4093	50.83	5.29	623	5.45	529
568						
57.12 Nt	5100	50.00	5.59		52.00	
	1.17	50.00	5.03			
39.07	7.18	40.05	4.48	50.70	50.71	
76.9	7.86	6.71	6.28	6.00	6.00	
41.76 Nt	41.08	43.78	4.25			
5144	518	3.18	1.51	52.0	50.13	
507	5043	5164	5.11	1.59	5.07	
55.98 Nt	307	423	4.74	432	4.05	
5144	5.67	1.01	0.92	2.21	2.57	2.67
4.80	4.57	4.83	5.11	5.47	3.93	3.86
56.24 Nt	265	276	2.79	2.11	2.03	1.95
5144	3.59	3.68	3.95	4.13	4.21	4.29
4.45	1.23	1.28	1.28	1.28	1.28	1.28
55.9 Nt	5.07	1.83	1.16	0.74	4.26	4.31
3.89	0.41	0.83	0.73	39.07	39.95	4.158
	5.00	5.41	5.51	6.36	6.50	3.87
			4.54 Nt			



D S.W. 55.89 P19.

5.2	5.77	55.89	5.22	5.70
61.07 Mt.	55.27	59.20 Mt.	5.29	4.79
55.89	55.27			
396	5.76	5.88	5.79	5.47
5.98 Mt.	4.42	4.09	3.97	4.06
				4.36
5.39	3.73	4.10	4.33	4.43
4.72	4.05	4.12	4.02	4.06
4.47	4.51	4.63	4.56	4.31
51.05 Mt.	3.94	3.87	3.89	4.14
				4.58

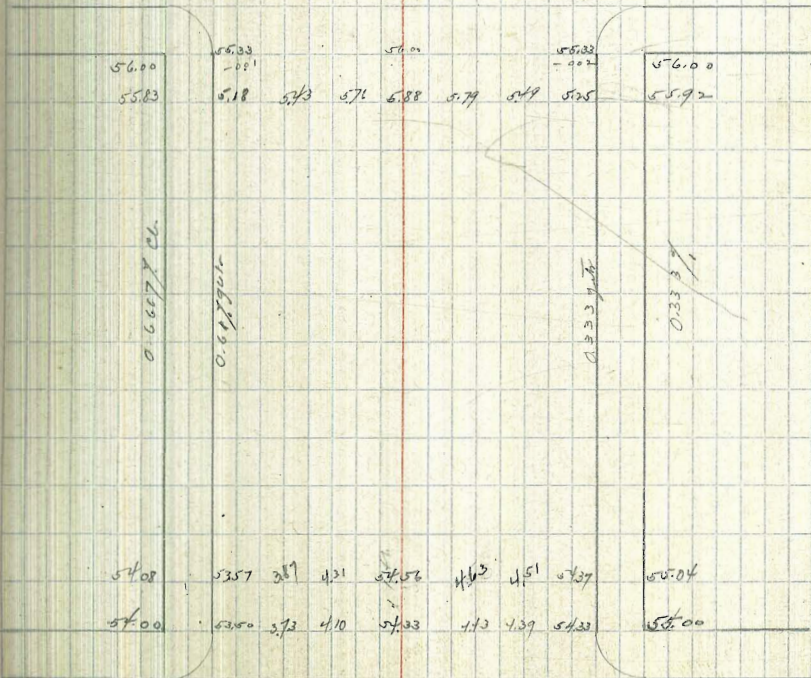
54

4



D

54



E

54

54.08	53.57	2.87	4.21	54.52	4.43	4.51	54.39	55.04
54.00	53.50	5.73	4.10	54.33	4.13	4.39	54.33	55.00

54.00

C N.W. P1g 60.59 P1g

5

60.52		57.75	57.17	56.88	56.00				
63.06 M1		5.21	5.89	6.57	7.06				
60.59		58.49	59.91	59.13	62.9	6.25	58.89		
61.46		60	5.17	5.32	58.72	57.90	7.86		
65.15 M1							62.97 M1		
58.88		56.88	57.27	57.2			6.31		
58.88		4.89	4.30	57.75			60.09		
61.47 M1		56.17	57.17	60.49		59.99	57.83		
55.89 M1		4.91	4.32	4.21		4.87	4.99	5.97	
61.09 M1		5.37	7.12	60.60 M1		59.10			
		63.07 M1	7.81	5.81					
60.59		1.79	6.18	9.10		9.21			
65.0		6.30	9.1	5.99		5.88			
65.07 M1									
58.89		5.87	6.18	6.29					
58.88		5.11 M1	4.835	4.72					
61.015 M1									

	6050	5999	75	7009	5983	6050	6100
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C

5t

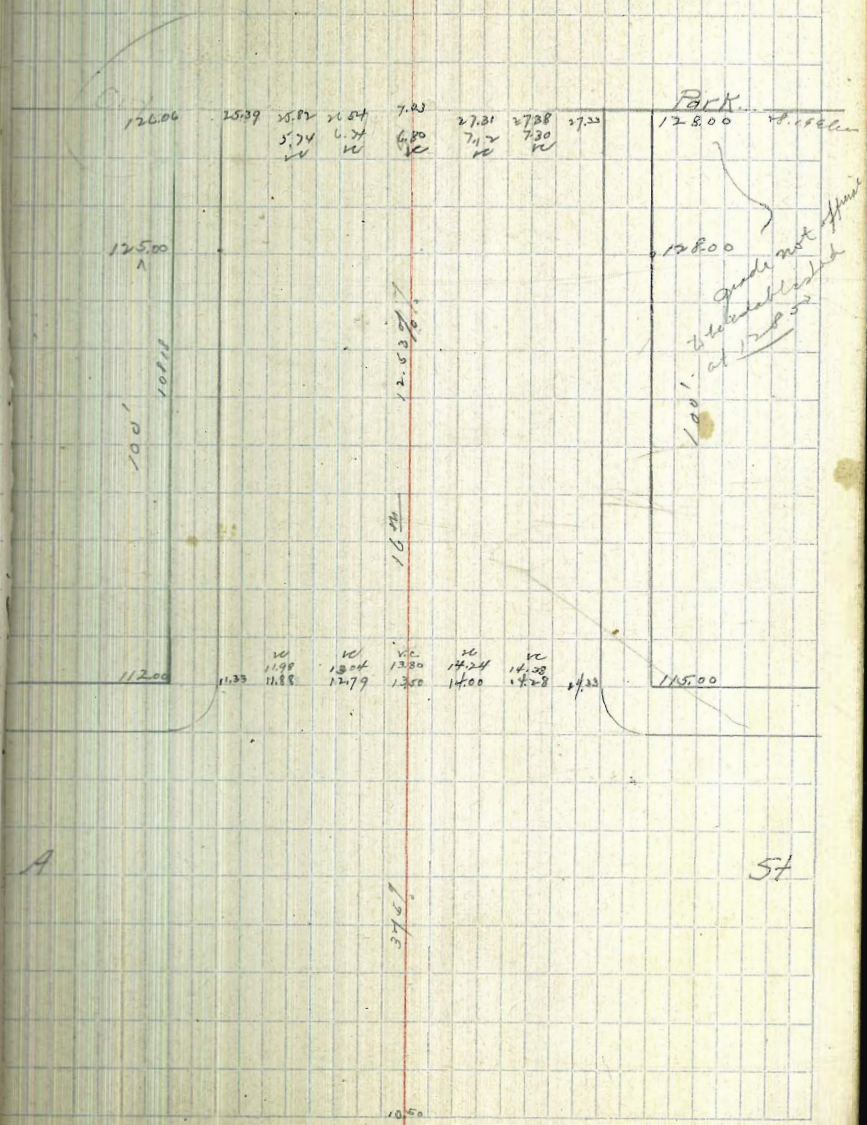
			4.03							
5950	5883	1007	5950	5883	1007	5950	5883	1007	5950	5883
		57.07	57.10	57.21	57.10	57.77				
							5944			
							5800			
							5775			
							5717			
							6579			
5600	5567	5507	5418	5418	5487	5507				
5600	5532					5500	5522	5600		

1149/0

D

5t

12.8.59	574	6.34	6.80	7.17	7.30	7.33	07.37
	2.85	2.25	1.79	1.47	1.29	1.26	3.20



Saw Side # 6

	6.59	N1 8.59		2.00	BRNW H1E	W		5.03	4.73
T.P	3.13	10.55	1.17	7.42		E		5.01	4.75
T.P. No. 1 ch. E. Dec. 4. 9.25		9.725	5.75	4.80	W		#7		
T.P	5.160	9.885	5.07	4.655		W		5.03	4.73
T.R	4.985	9.57	5.23	4.585	N.W. H. 701 of W.S. 50'	E		5.04	4.72
	4.88	N1 9.76	4.69	4.88	No. 1 ch. W.D.		No Side W. Door #1		
		W. Door				W		4.98	4.78
S.			4.88	4.88		E		5.01	4.74
N.			4.84	4.92			#2		
		S. Side W. Door #1				W		5.00	4.76
W			4.97	4.79		E		5.00	4.76
E			4.99	4.77			#3		
		#2				W		4.98	4.78
W			5.02	4.74		E		5.02	4.74
E			5.02	4.74			#4		
		#3				W		5.02	4.74
W			5.02	4.74		E		5.02	4.74
E			5.06	4.70			#5		
		#4				W		5.06	4.70
W			5.04	4.72		E		5.01	4.75
E			5.00	4.76			#6		
		#5				W		5.03	4.73
W			4.96	4.80		E		5.02	4.74
E			4.99	4.77					

		H1		
		9.76		
		H7		
W		5.03	4.73	
E		5.01	4.75	
Weep Holes #1-W E-L				
So	Concrete .07	5.14	4.62	
No	" .10	5.07	4.69	
		H2		
So	" .07	5.08	4.68	
No	Concrete flush	5.15	4.61	
		H3		
So	" .10	5.12	4.64	
No	" .10	5.18	4.58	
		H4		
So		5.10	4.62	
No		5.10	4.62	
		H5		
So		5.15	4.61	
No		5.09	4.67	
		H6		
So		5.13	4.63	
No		5.10	4.61	
		H7		
So		5.12	4.64	
No		5.07	4.69	

				H8	
So		5.10	4.66		
No		5.08	4.68		
		H9			
So		5.14	4.62		
No		5.09	4.67		
		H10			
T.P	5.04	9.71	5.09	4.67	
Door #8-So Side					
W		5.04	4.67		
E		4.96	4.75		
		H9			
W		5.00	4.71		
E		4.99	4.72		
		H10			
W		5.06	4.65		
E		5.02	4.69		
		H11			
W		5.01	4.70		
E		4.93	4.78		
		H12			
E		4.98	4.73		
W		4.96	4.75		
		H13			
W		4.98	4.73		
E		5.02	4.69		

971 H1

Door # 14 So Side

W	5.00	4.71
E	4.96	4.75

Door # 8 No Side

W	4.97	4.74
E	4.97	4.74

9

W	4.99	4.72
E	5.06	4.67

10

W	5.00	4.71
E	4.97	4.74

11

W	4.99	4.72
E	4.95	4.76

12

W	5.02	4.69
E	4.99	4.72

13

W	4.97	4.74
E	4.97	4.74

Door # 14 No Side

W	5.01	4.72
E	4.98	4.73

Warp hole # 10

So	5.10	4.61
N.	5.07	4.64

11

So	5.09	4.62
N.	5.05	4.61

12

S.	5.05	4.66
N.	5.01	4.70

13

So	5.08	4.63
N.	5.04	4.67

14

S.	5.07	4.69
N.	5.03	4.68

15

S.	5.03	4.68
N.	5.06	4.65

16

S.	5.03	4.68
N.	5.06	4.65

TP 506 971

Warp hole # 17

S.	5.01	4.70
N.	5.04	4.67

NJ
 971

Weep Hole #18

So 5.05 4.66

No 5.02 4.69

#19

So 5.01 4.70

No 5.03 4.68

#20

So 5.07 4.64

No - Hole covered 5.07 4.64

#21

So 5.05 4.66

No 5.07 4.64

#22

So 5.04 4.63

No 5.07 4.64

#23

So 5.07 4.64

No 5.06 4.65

#24

So 5.08 4.63

No 5.09 4.62

On W.H. Lines at end paring 15' W. of End W.H. #14

So 5.00 4.71

No 4.99 4.72

Door # 15 N. Side

W 4.98 4.73

E 4.98 4.72

#16

W 4.97 4.71

E 4.98 4.73

#17

W 5.00 4.71

E 4.96 4.75

#18

W 5.00 4.71

E 4.99 4.72

#19

W 5.04 4.67

E 4.99 4.72

#20

W 4.98 4.73

E 4.96 4.75

Door # 15 S. Side

W 4.93 4.78

E 4.95 4.77

#16

W 4.99 4.72

E 4.96 4.75

HA
9.71
Door # 17 S. Side

W		4.97	4.74
E		4.95	4.76

Door # 18

W		4.96	4.75
E		4.94	4.77

19

W		4.97	4.74
E		4.94	4.77

20

W		4.99	4.72
E		5.00	4.71

T.P.	5.09	9.73	5.07	4.64
------	------	------	------	------

Door # 21 N. Side

W		5.00	4.73
E		5.01	4.72

22

W		5.02	4.71
E		4.98	4.75

23

W		4.97	4.76
E		4.99	4.74

N. Side # 24

W		5.02	4.69
E		5.04	4.69

Door # 21 So Side

W		5.03	4.70
E		5.03	4.70

22

E		5.07	4.66
W		5.03	4.70

23

W		5.03	4.70
E		5.00	4.73

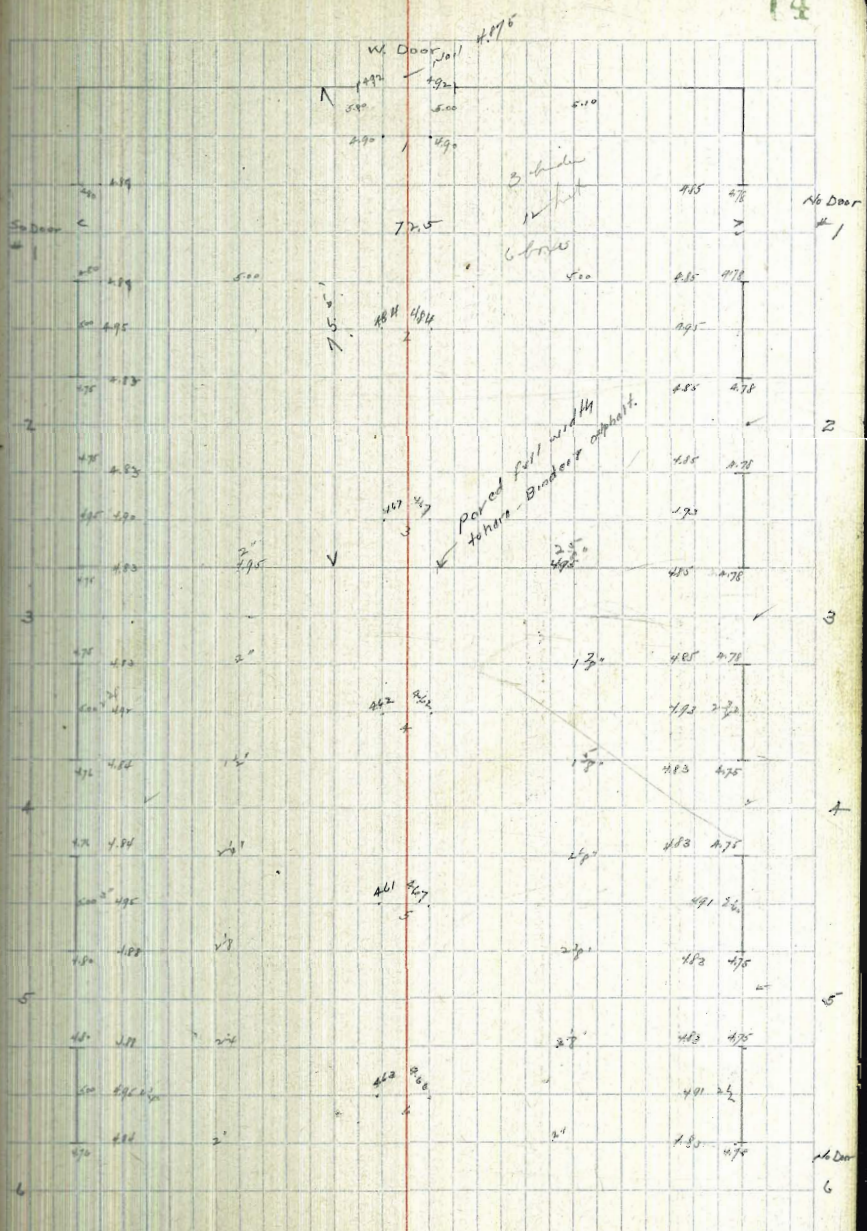
24 So Side

W		5.03	4.70
E		5.00	4.73

Door E. End Bldg

S.		4.93	4.80
N.		4.93	4.80
		4.935	4.795 4.80 N. Side

4.555	1.74	75	4.72	4.92	5.00	5.10	4.85	4.77
5.255			4.72	4.92	4.80	4.74	4.97	5.06
9.84	4.90	4.80	5.00	5.00	4.85	5.00	4.95	
4.965	4.90	5.00	4.80	4.80	4.89	4.85	4.89	
4.875	4.88	4.80	4.75	4.83	4.90	4.85	4.84	
	4.96	5.04	5.00	5.00	4.90	4.89	4.83	
		10.07	4.80	4.76	4.80	4.80	4.95	
4.695			5.23	5.31	4.67	4.74	5.17	5.12
5.085			4.88	4.80	4.95	4.84		
9.67	4.72	4.85	4.85	4.85	4.93	4.83	4.75	4.91
4.875	4.90	4.85	4.89	4.78	4.85	4.76	4.80	4.77
4.81		4.83	4.89	4.91	4.84	4.76	4.80	4.77
9.685	4.85	4.735						



	4.95	4.14	4.76	4.92	4.83	4.75	4.91
9.67 N7	4.72	5.23	5.31	5.16	5.24	5.32	5.46
4.95	4.95	4.75	4.83	4.91	4.78	4.70	4.92
5.12	5.1	5.21	5.23	5.15	5.28	5.36	5.12
10.06 N7	10.06 N7	9.95	9.86	9.78	9.78	9.76	9.71
4.95	4.95	5.1	5.19	5.27	4.75	4.91	4.95
5.10	5.085	5.085	5.085	4.86	4.94	4.78	4.74
10.06 N7	10.06 N7	4.75	4.83	4.91	4.14	4.76	4.92
4.95	4.75	4.83	4.91	4.14	4.76	4.92	4.92
4.665	4.87	4.79	4.71	4.78	4.86	4.78	
9.62 N7							

106	4.84					2"	483	4.75	No. Down
107	4.84					12"	483	4.75	6
108	4.84	2 1/2"					491	2 1/2"	
109	4.84					1 1/2"	483	4.75	
110	4.84	2 1/2"				2"	483	4.75	7
111	4.84						491	2 1/2"	
112	4.84					2 1/2"	475	4.75	
113	4.84	2 1/2"					483	4.75	8
114	4.84					1 1/2"	483	4.75	
115	4.84						491	2 1/2"	
116	4.84	2 1/2"				2"	483	4.75	9
117	4.84					4.95 2 1/2"	483	4.75	
118	4.84						491	2 1/2"	
119	4.84	2 1/2"				2"	483	4.75	10
120	4.84					2 1/2"	483	4.75	
121	4.84						491	2 1/2"	
122	4.84	2 1/2"				2 1/2"	483	4.75	No. Down
123	4.84						491	2 1/2"	11
124	4.84	2 1/2"				1 1/2"	483	4.75	

T.P. 4.625-Nail in Ctr W.L. Door #15

16

10.035	494	483	475	481	7.62	475
4.95	510	5.21	429	473		487
9.94	483	475	487	496	4.94	
4.95	491	4.99	487	478	4.82	
4.76	488	4.90	4.96	473	4.75	4.91
9.71	483	4.91	4.78	4.88	4.96	4.80
4.95	4.975	4.76	4.74	4.92	4.75	4.83
4.71	4.685	4.90			4.91	4.75
9.66	475	483	4.91			
4.685	475	483	4.91			
5.05	498	4.90	4.82			
9.73						

50 Door #11	27	486	27	15'	488	476	16 Door #11
	30	485	27	12'	491	482	
	25	480	27	12'	483	4.95	12
	27	483	27	22'	483	478	12
	28	488	27	22'	491	4.95	13
	27	483	27	24'	483	475	13
	27	483	27	24'	491	4.91	13
	27	483	27	24'	483	475	14
	27	483	27	24'	483	475	14
	27	483	27	24'	483	475	15
	27	483	27	24'	483	475	15
	27	483	27	24'	483	475	16
	27	483	27	24'	483	475	16
	27	483	27	24'	483	475	17
	27	483	27	24'	483	475	17

50 Door #11

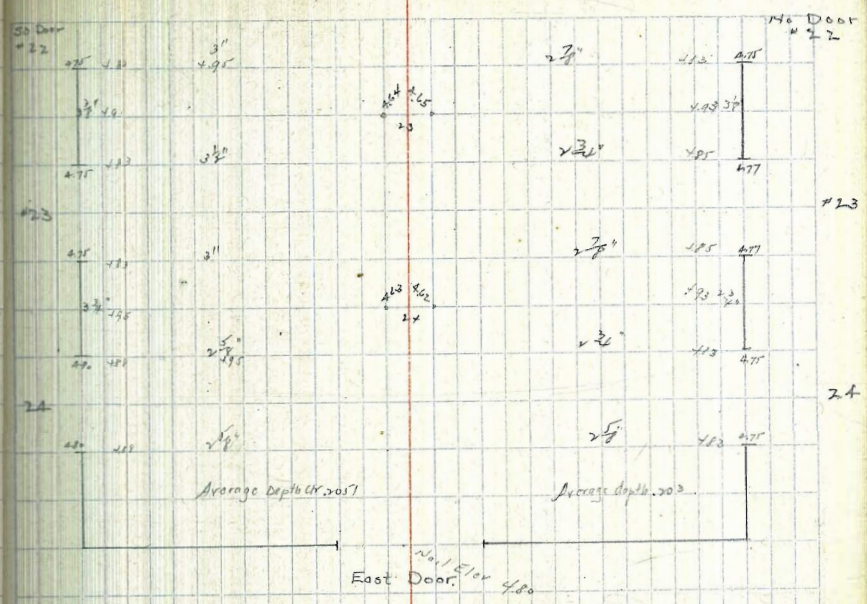
No Door #17

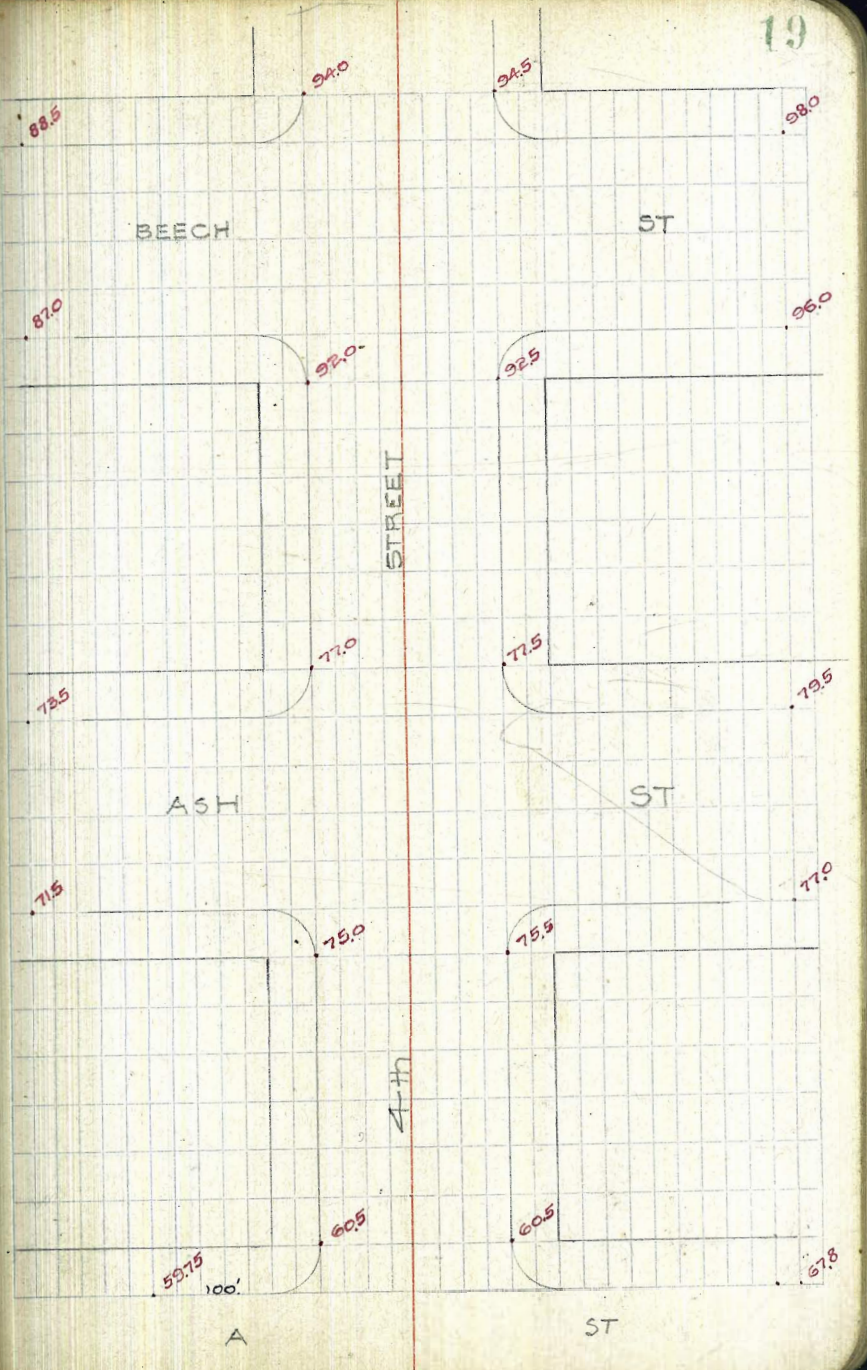
9.71 H1	4.15	4.77	4.94	4.86	4.78	4.16	4.94
	4.86	4.94	4.77	4.85	4.90	4.85	4.77
9.19 H1	4.91	4.93	4.75	4.94	4.86	4.78	4.91
	4.98	5.06	5.14	4.95	5.03	5.11	4.95

17	4.77	4.78	2 1/8"		2 1/8"	4.75	No Door
17	4.77	4.78	2 1/8"		2 1/8"	4.75	
18	4.77	4.78	2 3/8"		2 3/8"	4.75	
18	4.77	4.78	2 3/8"		2 3/8"	4.75	
19	4.77	4.78	2 1/2"		2 1/2"	4.75	
19	4.77	4.78	2 1/2"		2 1/2"	4.75	
20	4.77	4.78	2 1/8"		2 1/8"	4.75	
20	4.77	4.78	2 1/8"		2 1/8"	4.75	
21	4.77	4.78	2 3/8"		2 3/8"	4.75	
21	4.77	4.78	2 3/8"		2 3/8"	4.75	
22	4.77	4.78	2 1/8"		2 1/8"	4.75	No Door
22	4.77	4.78	2 1/8"		2 1/8"	4.75	
23	4.77	4.78	2 3/8"		2 3/8"	4.75	
23	4.77	4.78	2 3/8"		2 3/8"	4.75	



4.80									
4.94									
9.74	H1	4.95							
4.93		4.95							
4.90		4.98							
9.73	H1	4.95	4.93	4.93	4.95	4.92	4.92		
4.80		5.14	5.06	4.95	4.96	5.04	5.1	4.91	
5.09									
9.89	H1	4.95	4.95	4.95	4.95	4.95	4.91		
4.90		5.01	5.09	4.94	5.06	5.14	4.98		
4.93	H1								
5.06									
9.89	H1								





A

ST



DATE

ST



CEDAR

ST

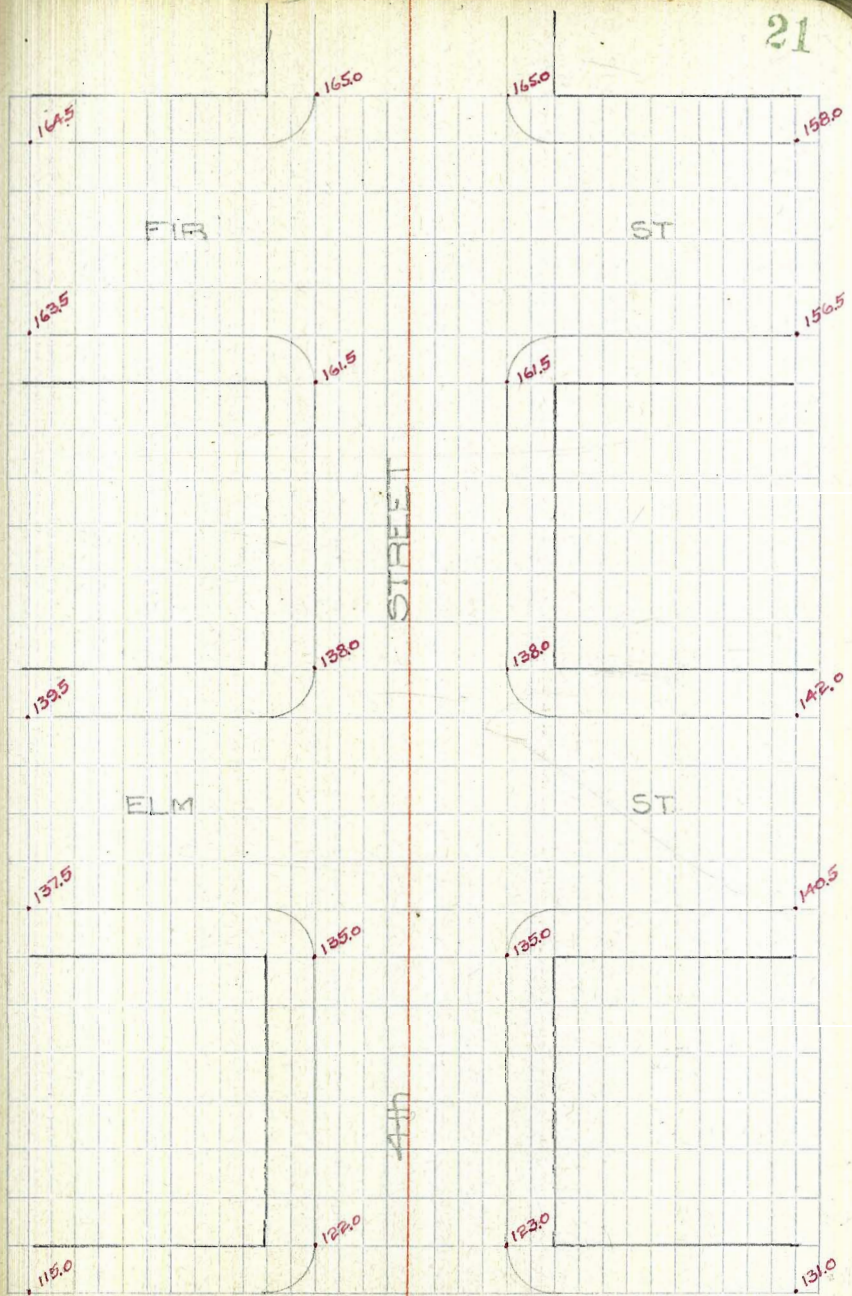


BEECH

ST

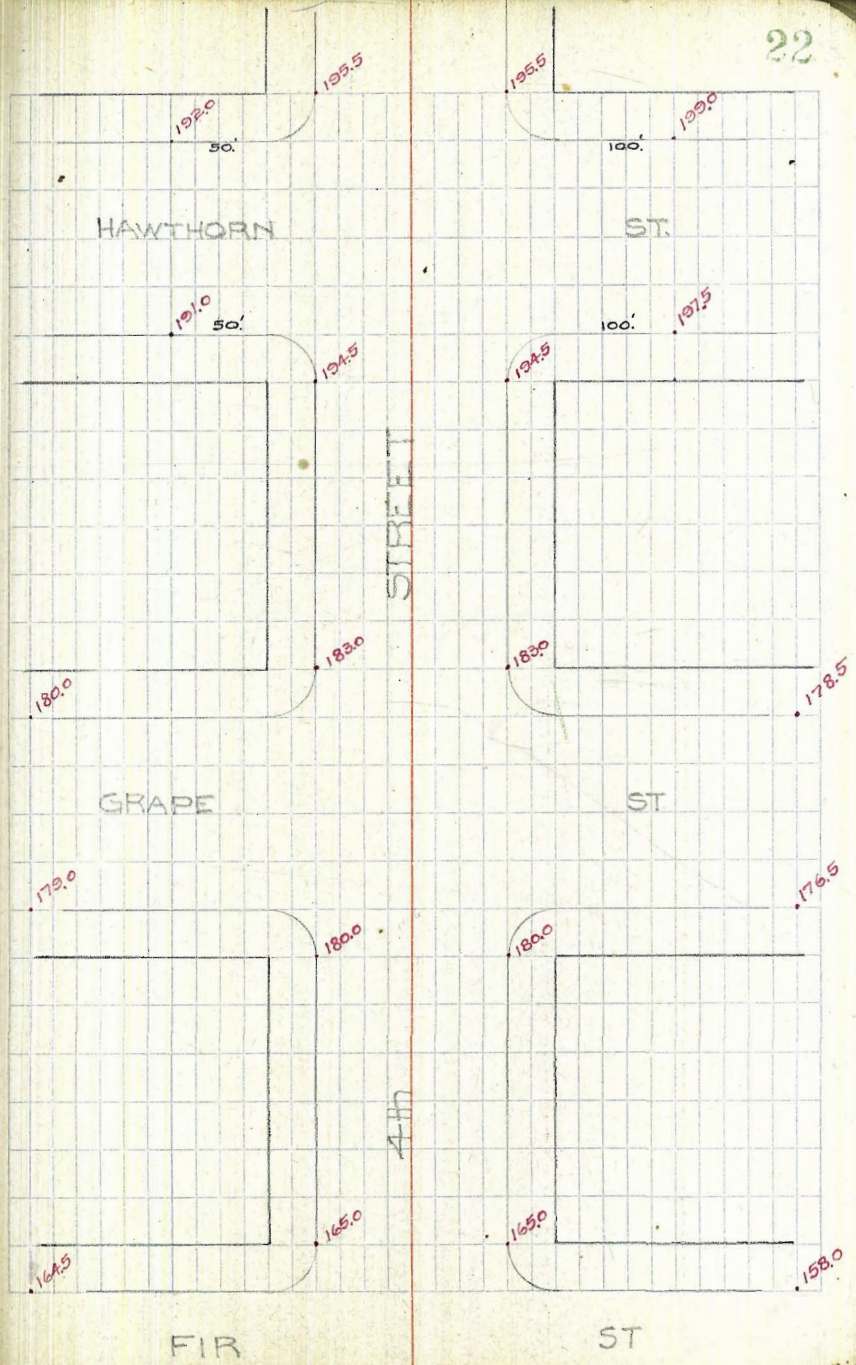
STREET

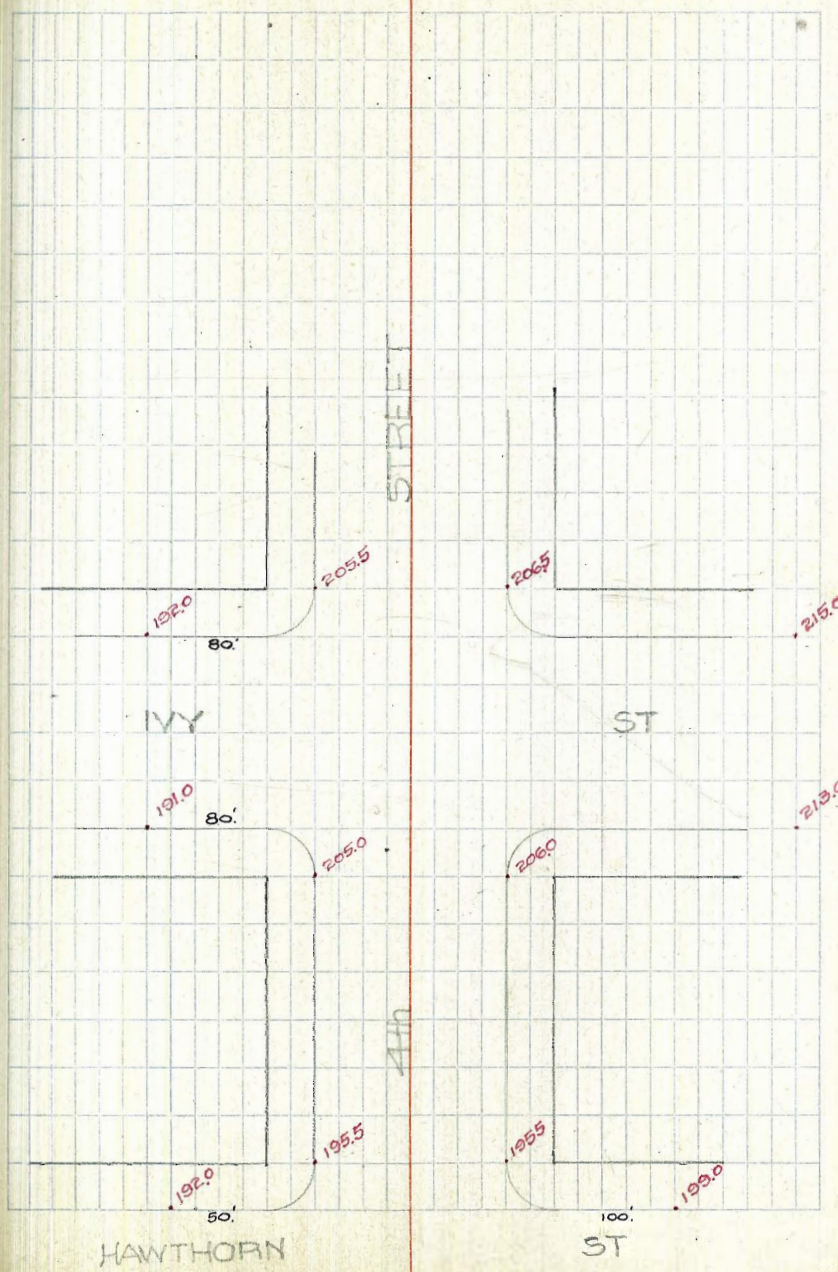
4th



DATE

ST.

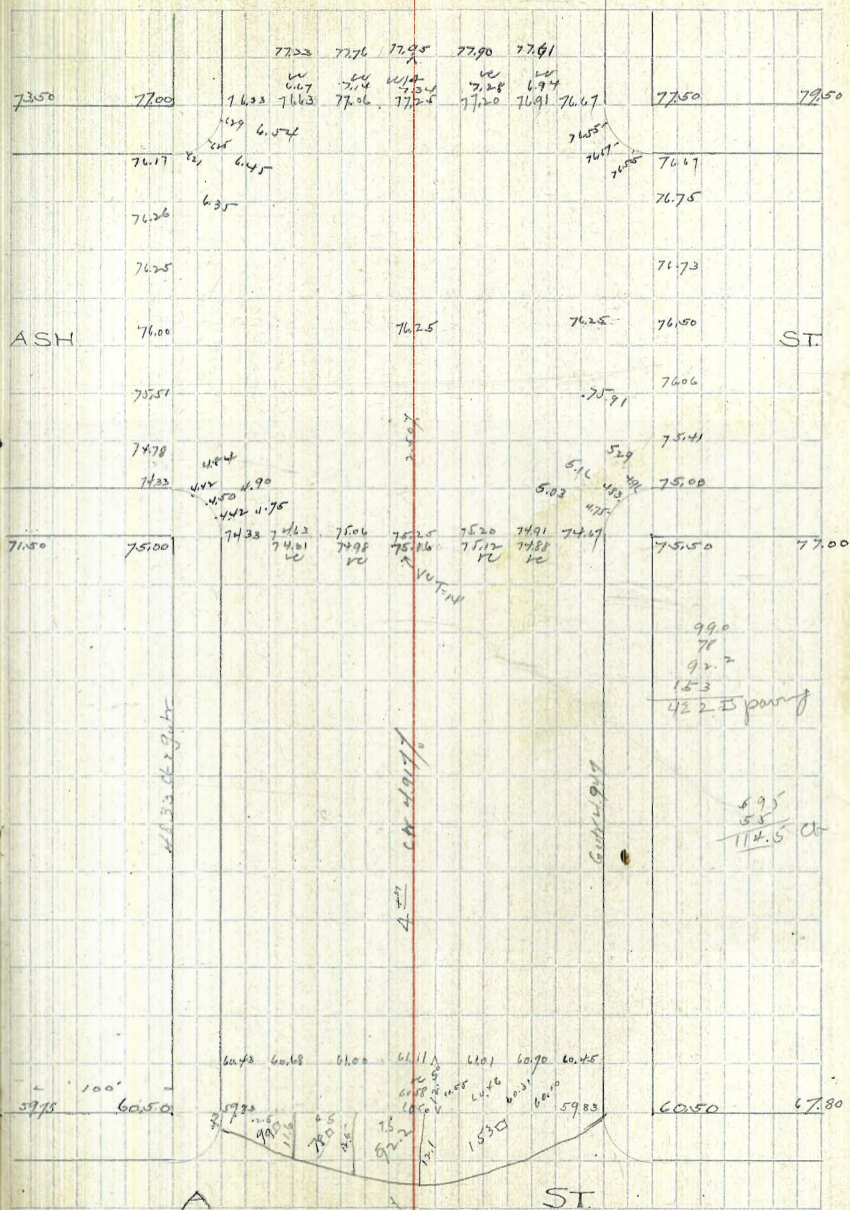




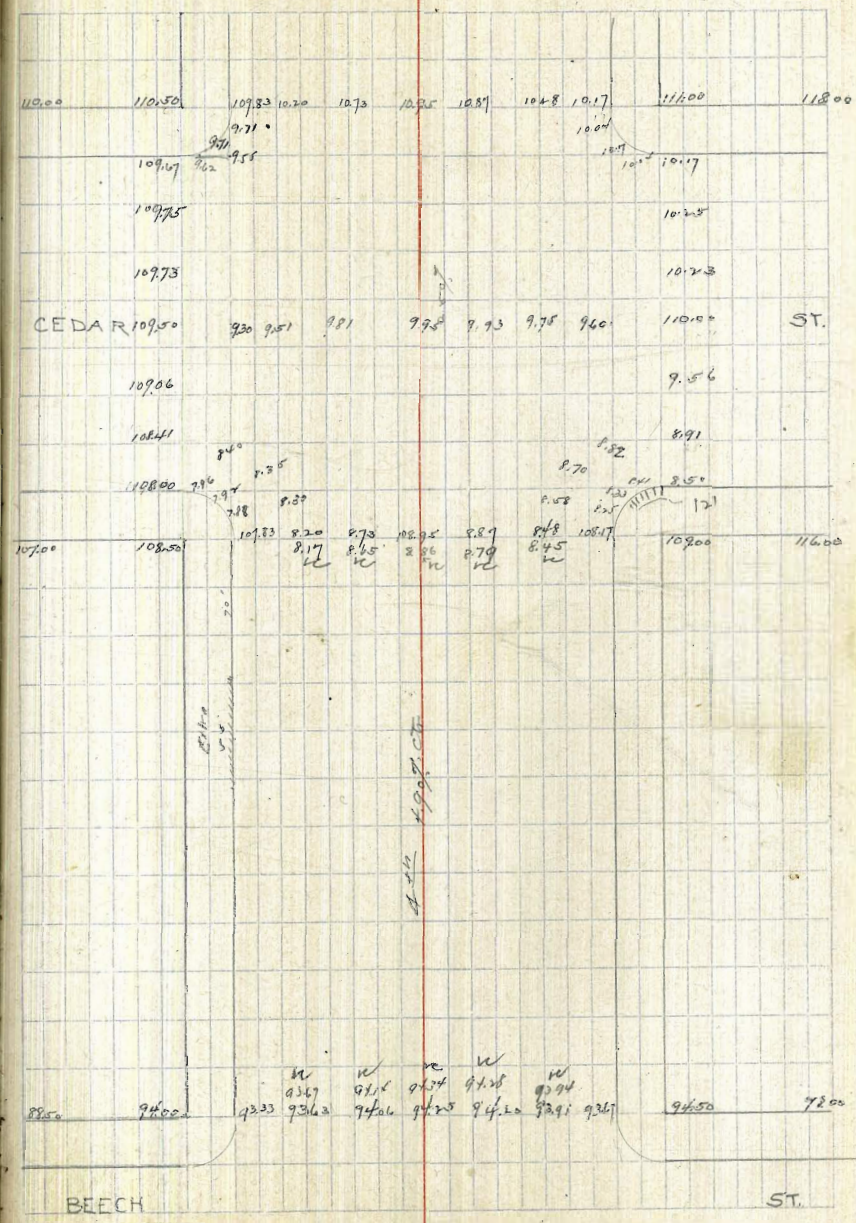
A NW p1grt 60.44

Ash SW 7497 p1grt

74.97	74.33	74.67	76.67	6.33	74.97			
6.78	7.37	7.05	5.05	5.39	3.98		5.983	
81.72 NJ	60.44	59.83	60.44		72.95 NJ			
74.07	6.42	4.59	4.04		4.22	8.11	80.72	
5.97	26.58	74.18	6.44	8.44	10.22	8.37	4.81	
80.92 NJ	4.06	4.36				4.04	75.91	
74.97	4.61	4.88	5.12	5.16	4.98			
4.82	5.18	4.91	4.67	4.63	4.81			
79.79 NJ	0.44	0.66	0.60	0.11	0.10		60.70	
60.44	4.24 NJ	4.26	3.94	3.83	3.94		4.24	
64.93 NJ	60.10	60.56	60.51	0.31	0.10			
74.97	4.93	4.57	4.38	4.62	4.93			
80.73 NJ	4.78	5.51	4.84	4.70	4.75	4.67	4.98	5.13
	5.95	5.22	5.29	5.83	5.98	6.12	5.78	5.57
	5.00	5.16	5.28	5.41	6.06	6.50	6.73	6.71
	5.70	5.87	5.74	5.32	4.67	4.22	4.00	3.98
	6.07	7.28	7.34	7.14	6.67	7.23	7.20	7.90
	8.77	3.45	3.59	3.59	4.06	3.40	2.97	2.82
	6.51	6.45	6.85	6.24	6.25	6.00	5.51	4.32
	4.19	4.28	4.38	4.47	4.48	4.73	5.22	6.06
	4.75	4.73	4.91	5.07	6.17	6.67	6.20	6.21
	5.08	5.90	5.82	5.72	4.22	4.18	4.52	4.48



108475 Cedar SW 1/4 H.									
587									
11435 H.	8.17	7.83	8.01		8.18				
	6.18	6.52	7.74		5.51				
				13.90 H.					
10848		8.95			8.17	8.65	8.86	8.79	8.55
4.52	5.63	4.28		108475		2.08	2.84	2.94	3.28
113.00 H.		4.72		3.35	3.56				
10849		10.95		111.73 H.		8.79	8.86		
6.21	4.04	10.95		4.7		4.32	4.35		
14.69 H.	10.65	3.74		3.74					
10847		10.17		13.71 H.					
5.85	9.13	10.17							
11432 H.	4.49	4.52							
108475	8.17	8.65	8.86	8.99	8.95	8.70	8.82	8.91	
5.195	5.50	5.02	4.81	4.88	5.22	5.04	4.97	4.85	4.96
113.64 H.	9.52	10.00	10.73	10.35	10.48	10.87	11.05	10.73	10.20
	4.71	3.07	3.54	3.42	3.42	3.50	2.97	2.92	3.47
108475	9.75	9.73	9.57	9.06	8.4	8.31	8.20	8.1	8.17
5.835	3.92	3.94	4.17	4.98	5.00	5.26	5.71	4.71	4.50
114.01 H.	4.95	4.73	4.75	4.60	4.02	4.17	4.50	4.41	4.33
	4.22	4.58	4.26	4.47	3.97	3.82	3.55	3.60	3.68
	7.88	7.92	7.86	8.00	8.22	8.67	9.15	9.1	8.76
	6.13	6.09	6.05	6.01	3.81	4.34	4.39	4.30	

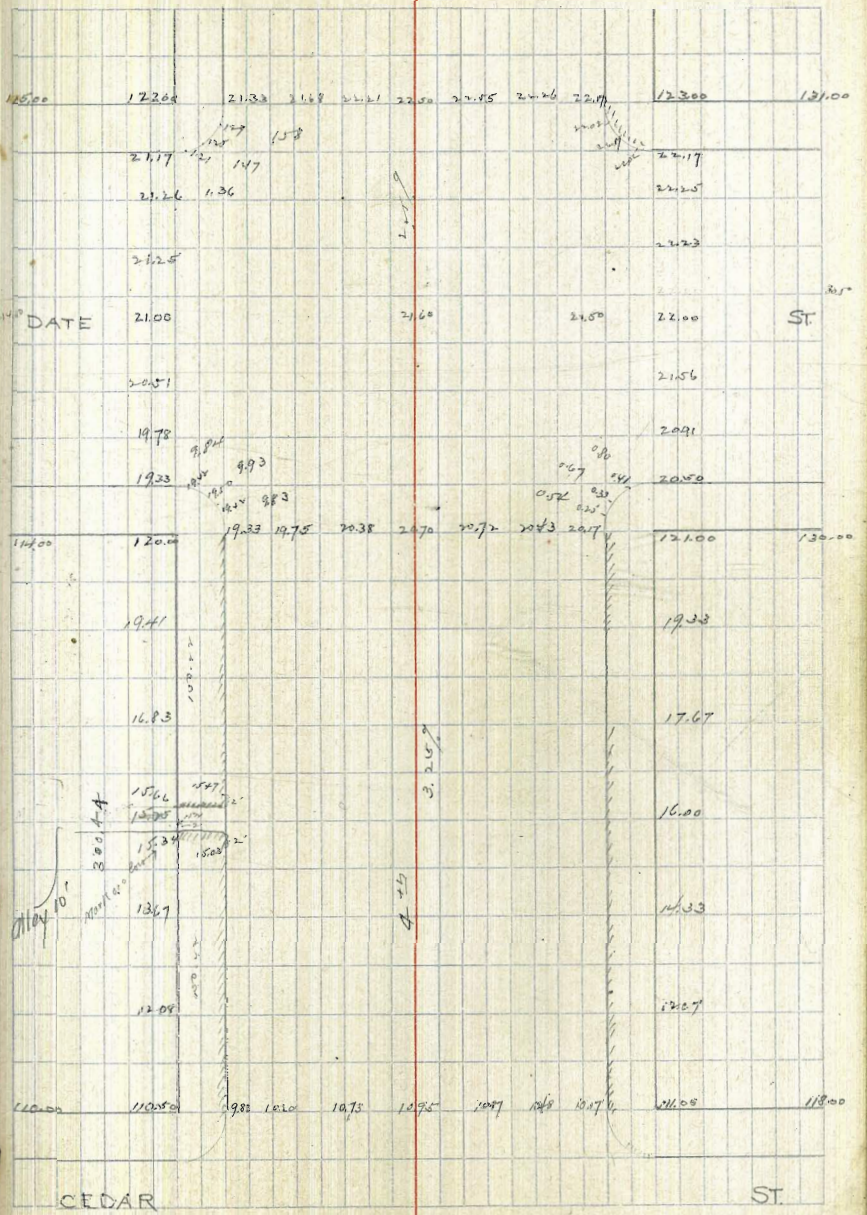


885	9402	9333	9363	946	9425	9410	9394	9450	7200
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Date 11.9.25 SW Pig 4

108.475 Cedar S.W Pig

108 UP									
9.31	11.00	14.67	17.33	16.00	17.47				
117.99	6.79	5.12	3.12	1.70	0.12				
16.83	7.29	12.08	13.07	15.25	16.83				
7.32	19.41	20.71	17.2	15.50	10.96				
24.15	4.74	4.15							
19.93	168.20	15.47	15.23	15.34	15.66				
8.22	5.70	5.26	5.70	5.59	5.07				
20.70	NT								
119.95	4.64	6.35	7.60	17.50	19.97	22.70			
6.85	22.09	10.28	5.13	4.23	5.71	4.92			
126.73	NT			4.90	25.6	3.47			
119.925	12.30	3.66				21.33			
6.35	4.76	19.94	19.23	20.7	22.17				
126.76	NT	5.90	5.29	5.65	3.65	5.43			
119.925	19.75	20.38	20.70	27.24	27.43	15.64			
4.68	4.93	4.22	3.90	3.88	4.17	4.09			
124.60	NT			19.76	NT	4.61			
6.12	10.70	10.73	10.95	10.82	10.88	11.29			
114.60	4.40	4.87	3.68	3.73	4.12	3.84			
119.925	9.22	9.44	9.50	8.20	8.20	8.20			
6.085	2.25	2.25	1.88	0.91	0.91	0.67			
126.01	3.76	4.01	4.08	5.10	5.12	5.32			
0.70	0.28	9.75	8.73	9.93	8.20	8.78			
5.31	5.63	6.26	6.18	6.01	6.19	6.23			
3.26	4.36	4.47	4.57	6.68	7.71	7.50			
4.75	4.65	4.56	4.43	6.33	3.80	3.51			

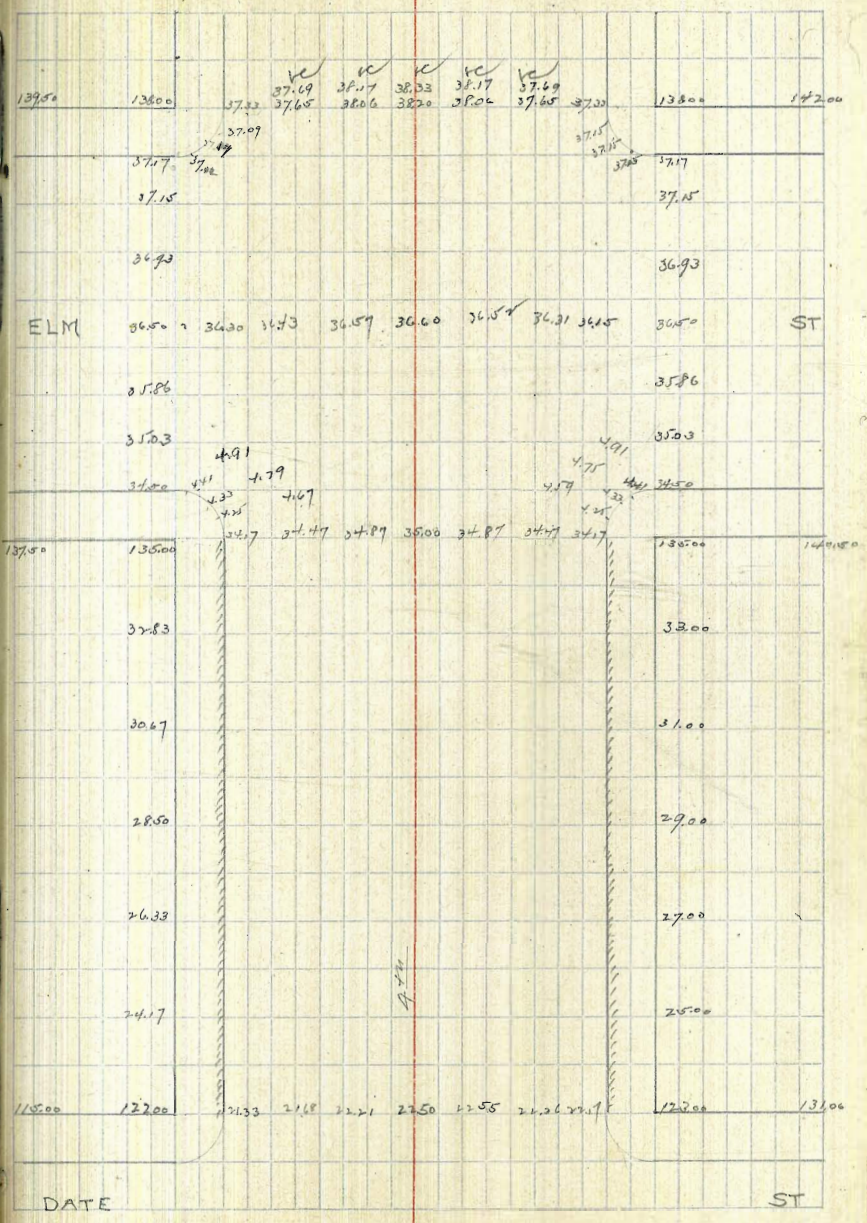


137.94	320	NW	ELM	1917	37.94	119.92	SW	Date
2.66	5.97	3.50	3.92	3.82	3.82	3.82	3.82	
40.60	52.43	5.60	41.82	47.96	37.96	37.96	37.96	
7.82								
29.47	12.00	2.50	27.00	2.00	2.50	2.50	2.50	
9.2	6.42	4.92	4.42	0.92	0.92	0.92	0.92	
26.50	38.67	32.12	35.00	3.00	27.94	27.94	27.94	
9.22	7.05	4.89	2.72	4.72	2.63	2.63	2.63	
37.72					48.57	48.57	48.57	

119.92	2.66	4.92	10.50	2.25	2.31	2.31	2.31
5.72	2.97	3.22	3.16	3.10	3.28	3.28	3.28
125.60							

137.94	34.47	34.87	3.12	5.03	4.91	4.79	4.67
2.70	5.60	5.20	0.16	5.24	5.06	5.48	5.60
140.16	7.05	6.03	6.05	5.86	4.47	4.87	5.48
37.94	2.12	3.24	2.72	4.41	4.50	5.27	5.27
2.33	7.57	4.75	4.91	5.03	5.00	6.20	6.20
40.27	5.68	5.52	5.36	5.24	4.47	3.77	3.24

6.15	6.31	6.52	6.60	6.57	6.43	6.20
4.12	3.96	3.75	3.67	3.40	3.24	3.97
7.69	8.17	8.33	8.25	8.03	7.77	7.17
7.58	2.10	1.92	2.02	1.92	1.86	2.10
7.15						
3.12						



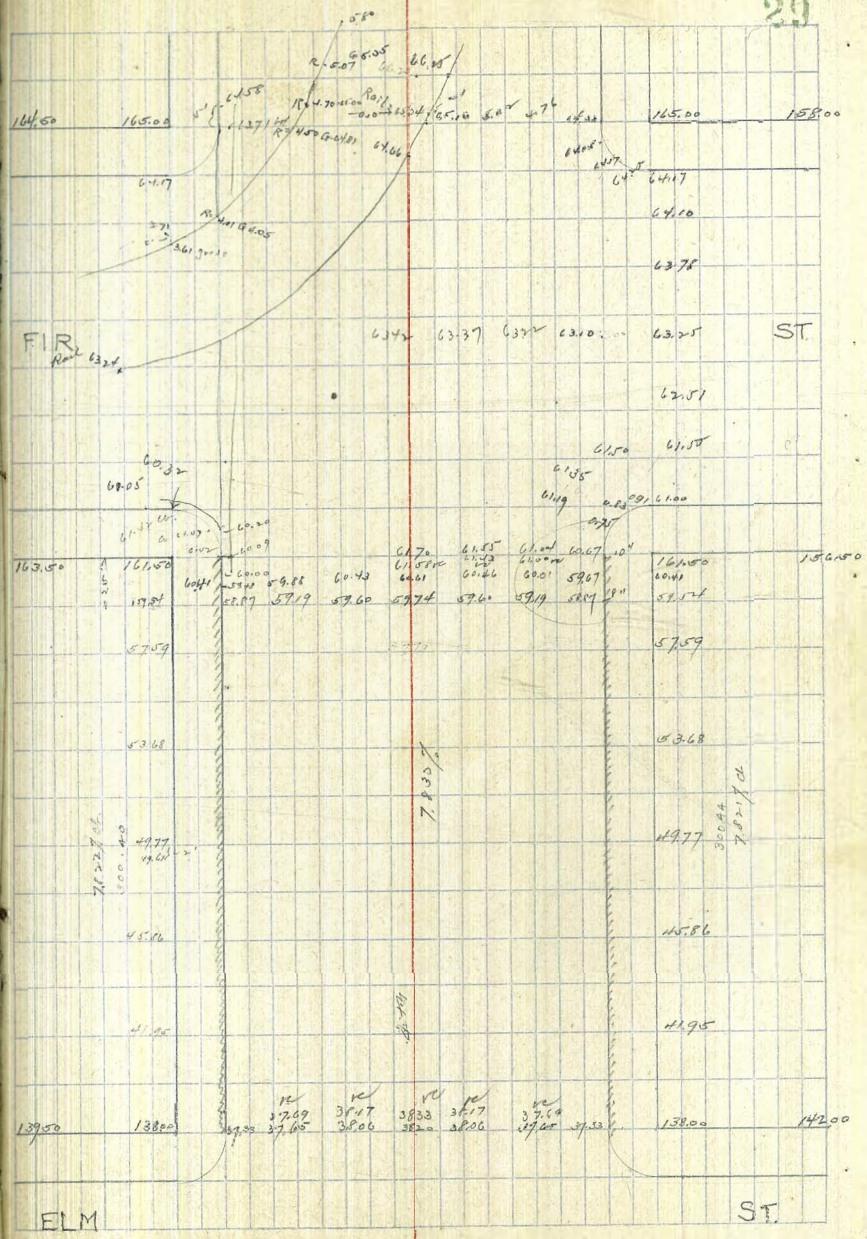
DATE

ST

Fir N.W. part 164.96

Elm N.W. part 137.94

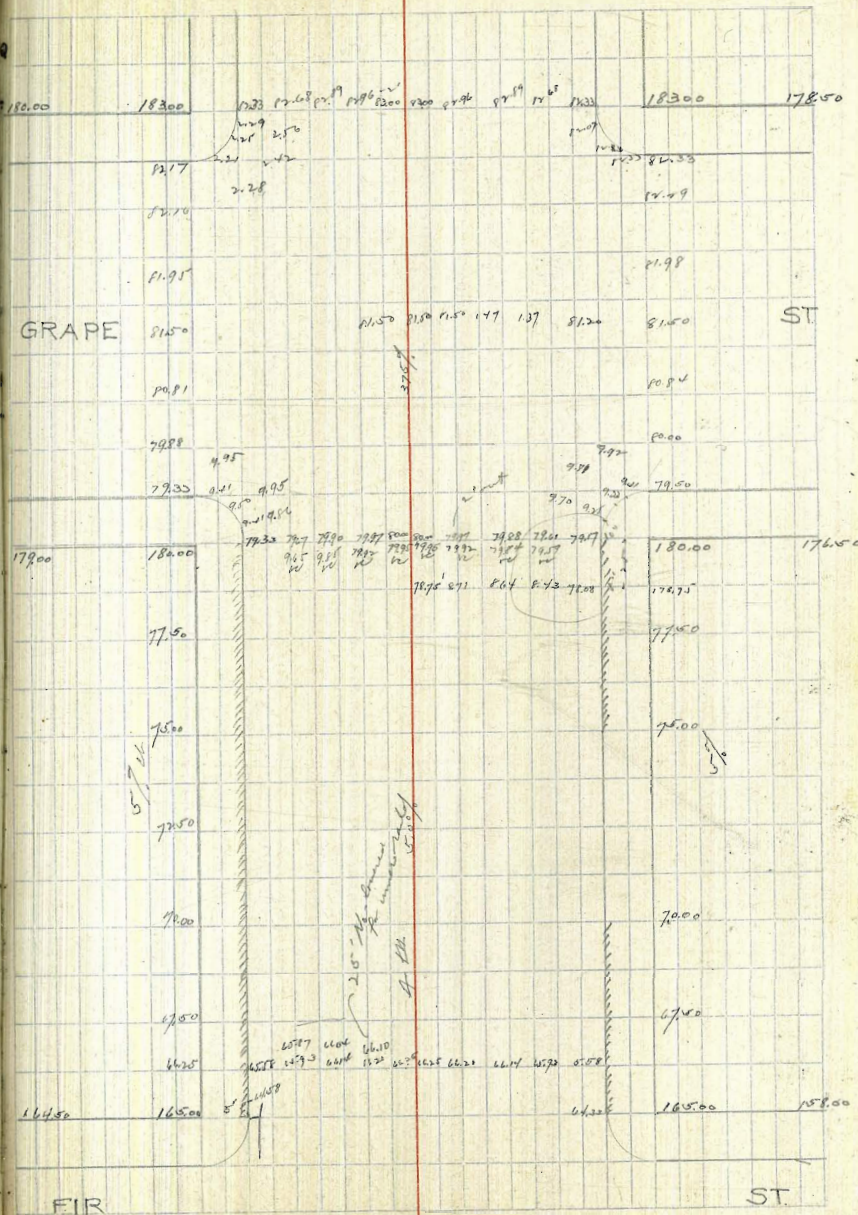
64.96 BM	58.00	41.95	45.80	49.77	50.21				
12.05	12.07	8.07	5.12	0.25	0.41				
77.94				6.96					
12.05				1.27		4.91	41.70		
60.02 M				66.34	4.85				
49.61 P	53.09	57.09	51.5						
12.05	7.99	4.08	0.17	66.34	4.85				
61.89 M	64.58	64.33	60.67	57.87					
4.96	64.23	3.60	6.30	8.10					
2.01	3.03	6.71	6.17	6.57					
66.97 M	67.99 M	4.26	6.10	6.17					
37.44		60.37	66.5	60.20					
3.76		7.17	6.94	7.79					
47.90 M	2.60	6.33	64.96	61.35	61.58				
64.06	4.01	3.58	2.39						
68.99 M	57.19	67.62	57.34	67.35 M	3.87	1.07	2.45	0.40	
2.91	6.38	6.17	6.03	64.10	3.78	1.37	2.51	1.1	34.26
2.91	19.25	2.01	2.09	2.01	3.33	3.86	2.51	1.1	34.26
67.77 M	60.0	60.6	60.6	61.1	0.91	0.13	1.7	6.03	9.88
	7.10	6.65	6.50	6.11	6.20	6.28	6.36	1.08	7.23
64.96	1.58	2.40	1.11	1.25	1.10	1.25	1.17	1.17	4.25
2.57	4.53	5.46	4.1	4.1	4.19	5.46	5.61	2.90	2.86
17.53 M	63.42	4.16	4.21	4.14					
64.96	64.96	10.5	1.8	5.25	2.30				
2.97	5.32	4.92	4.23	4.23	3.84	13.6	65.03	14.98	
68.93 M	63.67	4.61	4.50	4.70	5.04	3.13	3.60	3.98	
	4.15	4.17	3.71						
	4.08	4.76	5.22						



Grape N.W. pigt. 182.96

Grape N.W. pigt. 182.96		Fir N.W. Pigt 164.96	
82.96	17.5	75.00	72.5
17	3.13	8.13	10.63
63.13	5.63	8.13	10.63
13.13	1.96	17.33	9.7
72.50	3.14	3.77	2.93
20.74	6.10	6.77	8.27
67.35	1.14	1.14	1.02
82.96	2.00	2.00	1.95
17	1.75	1.82	1.82
63.13	9.57	9.57	9.71
13.13	4.01	4.01	4.01
72.50	1.47	1.37	1.20
20.74	3.21	3.21	3.21
67.35	6.11	5.93	5.93
82.96	3.79	3.79	3.79
17	2.37	2.37	2.37
63.13	2.96	2.96	2.96
13.13	2.37	2.37	2.37
72.50	9.81	9.81	9.81
20.74	4.72	4.72	4.72
67.35	2.29	2.29	2.29
82.96	3.06	3.06	3.06
17	1.00	1.00	1.00

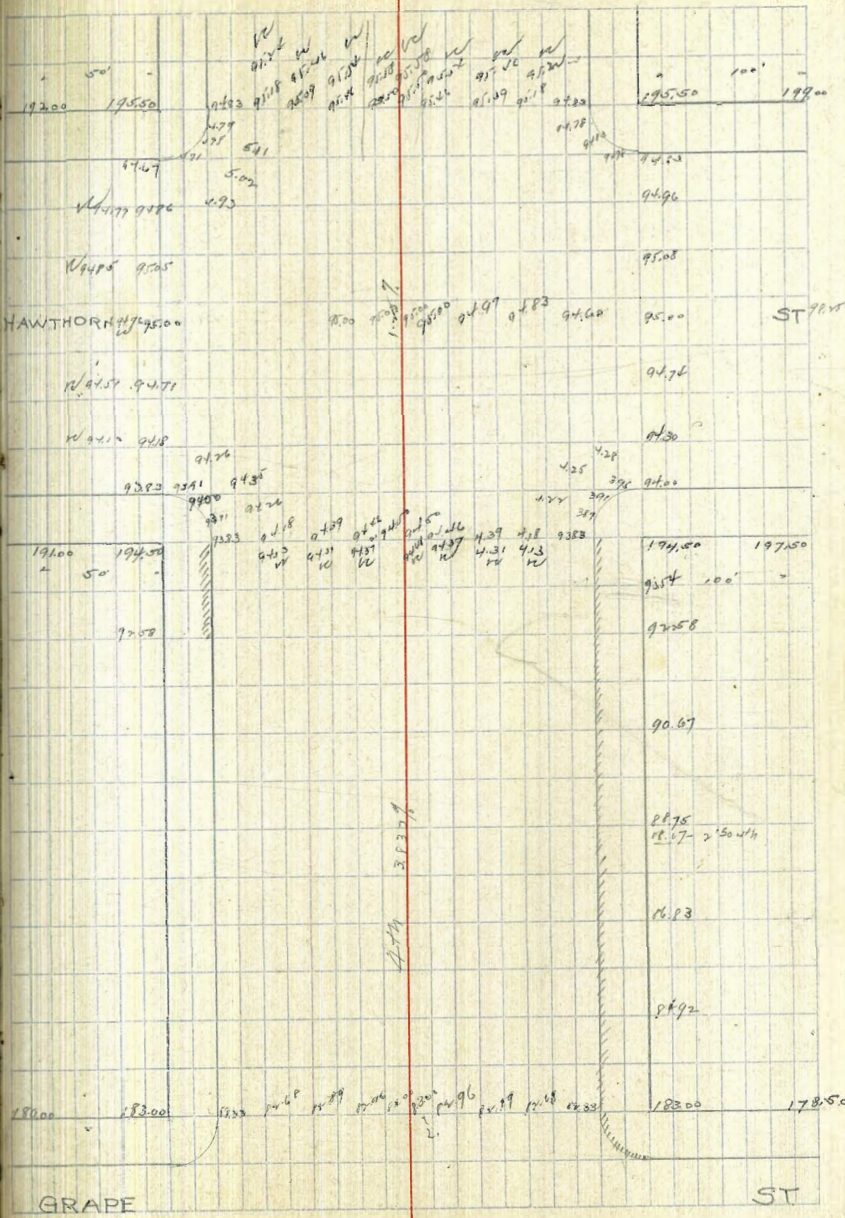
Fir N.W. Pigt 164.96



Hawthorn N.W. P14. 195.43

Grape N.W. P14. 182.96

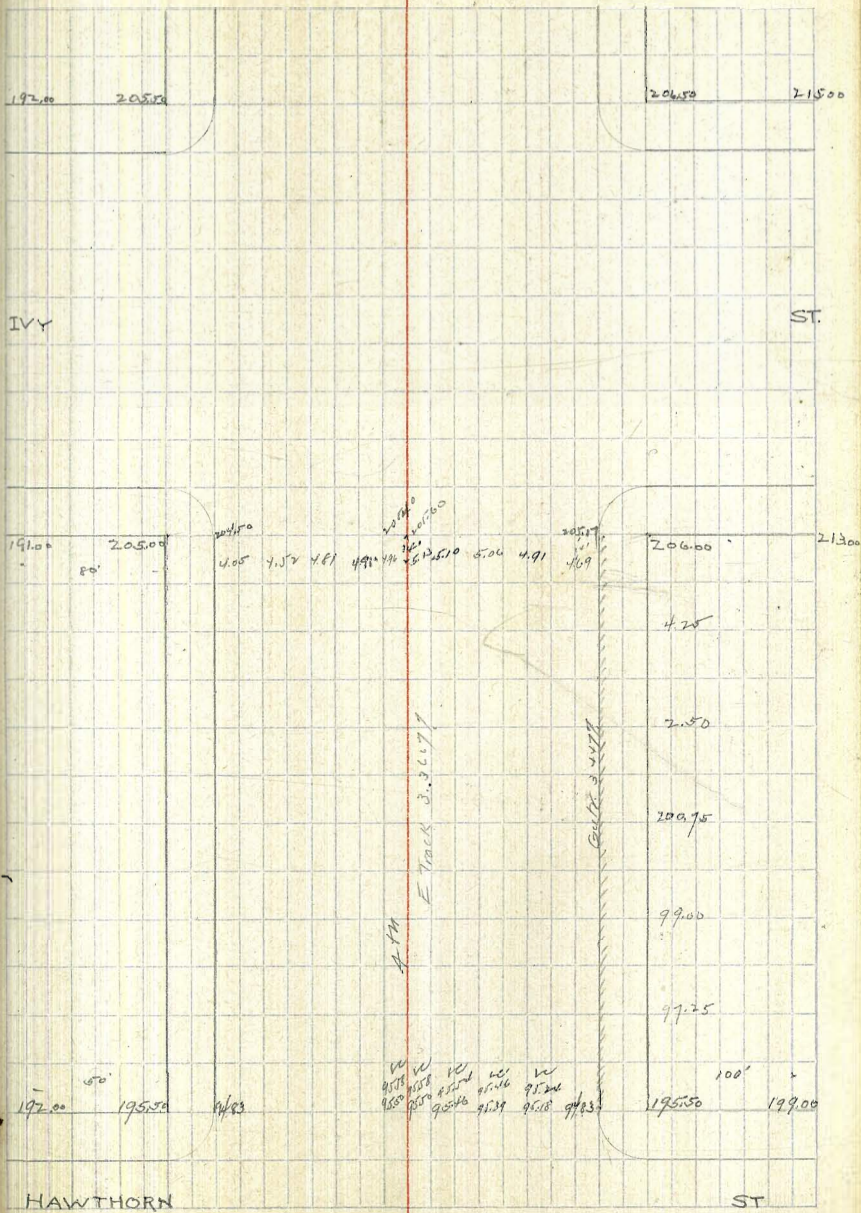
95.43	94.50	92.58	90.67	88.67	86.3	83.2	80.0	77.0
1.47	2.40	4.32	6.23	8.23	10.35	12.6	15.0	17.5
96.90	97.23	97.96	98.90	100.0	101.3	102.6	104.0	105.5
98.67	1.51	3.85	6.23	8.67	11.17	13.73	16.35	19.0
99.18	98.78	98.28	97.78	97.28	96.78	96.28	95.78	95.28
95.43	95.14	94.85	94.56	94.27	93.98	93.69	93.40	93.11
3.66	3.55	3.43	3.32	3.23	3.13	3.03	2.93	2.83
99.09	98.59	98.09	97.59	97.09	96.59	96.09	95.59	95.09
92.96	92.27	91.58	90.89	90.20	89.51	88.82	88.13	87.44
95.43	95.14	94.85	94.56	94.27	93.98	93.69	93.40	93.11
97.43	97.14	96.85	96.56	96.27	95.98	95.69	95.40	95.11
99.43	99.14	98.85	98.56	98.27	97.98	97.69	97.40	97.11
99.43	99.14	98.85	98.56	98.27	97.98	97.69	97.40	97.11



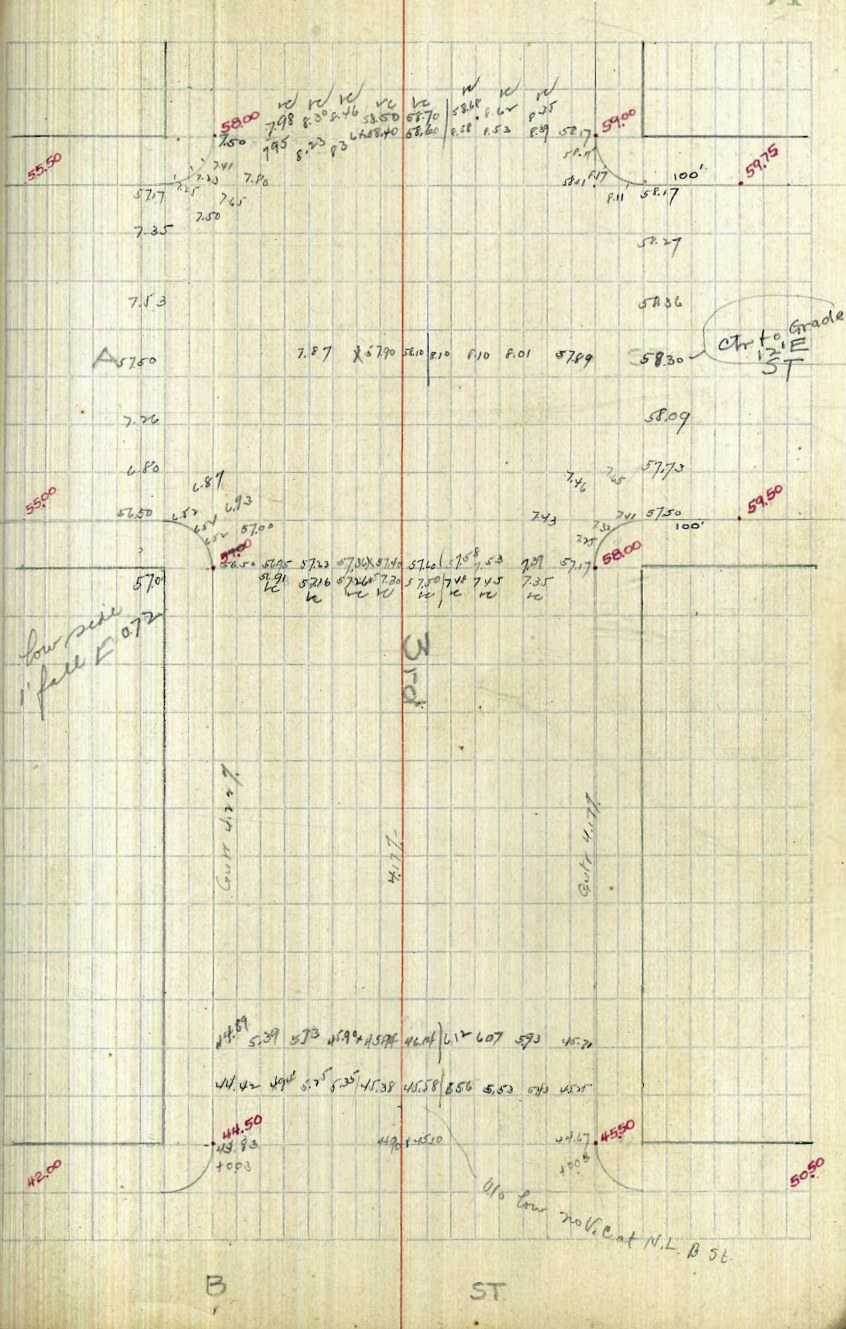
Ivy NW Pigt. 235.49

Hawthorn NW Pigt. 195.43

205.49	206.00	4.25	2.50	0.75	99.00
1.97	1.56	3.27	4.96	6.71	8.75
207.46	97.25	9.50	9.50		
199.00	4.66	6.41	6.48		3.00
201.91	5.10	6.06	4.91	4.69	5.00
205.49	3.64	8.68	3.83	4.05	
3.25	4.05	4.91	4.71	4.52	
209.74	5.51	4.05	4.55	4.64	
5.19					
3.27					
208.32					

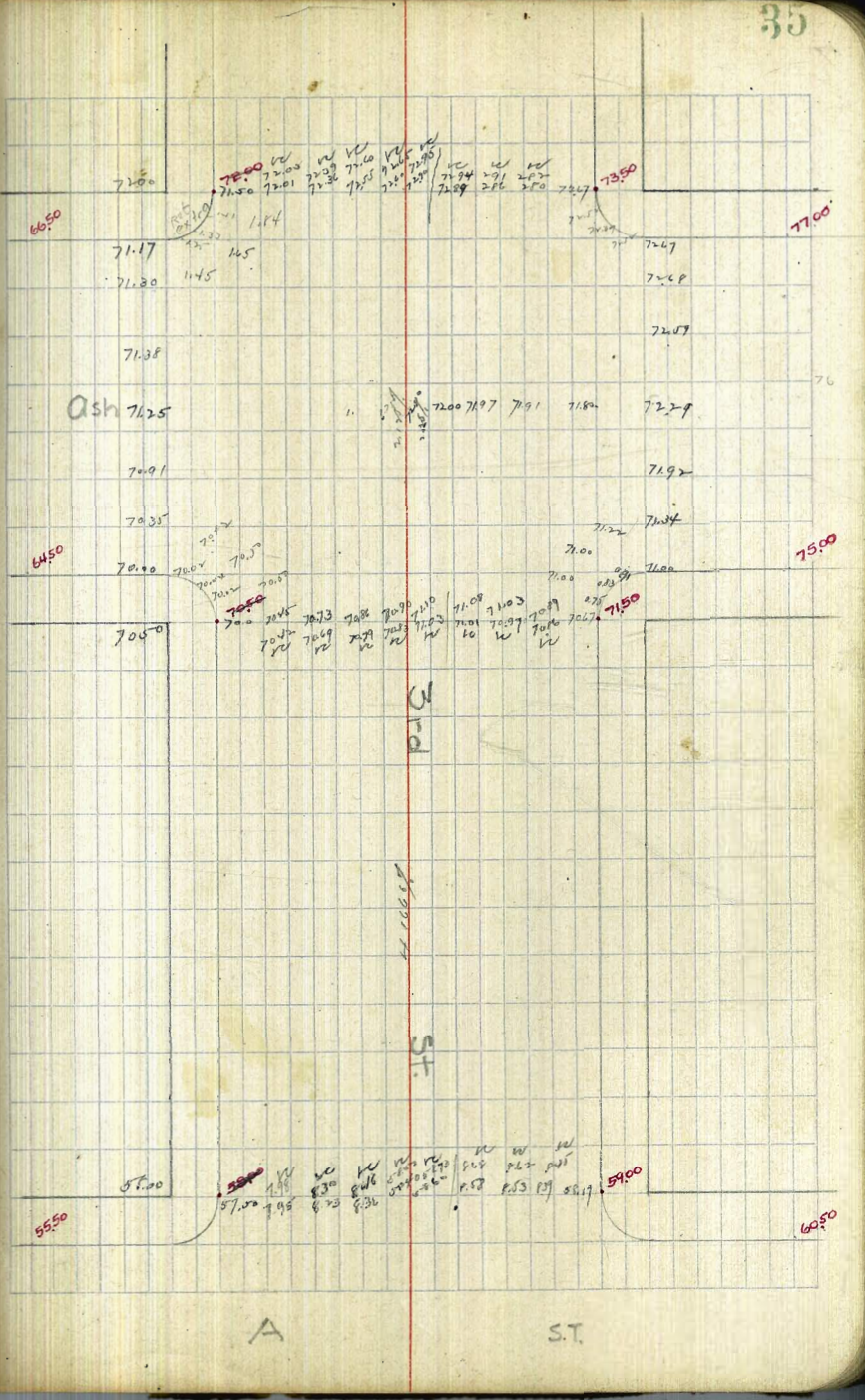


57.95	63.31	57.50	57.17	57.17	57.50
63.31	57.95	5.87	5.14	6.14	6.21
63.31	1.89	7.34	6.63	6.71	7.31
60.56	43.99	43.99	44.56	44.56	43.89
	49.71	44.71	43.33		
	49.13	44.70	43.82		
57.95	57.19	7.10	7.10	7.30	7.98
46.2	4.51	3.55	3.77	4.03	4.21
62.01	7.53	7.17	7.24	6.90	6.97
	4.08	4.51	4.75	5.27	5.14
	7.08	7.23	7.28	7.17	6.51
57.95	4.14	4.68	4.76	4.84	5.51
2.11	9.05	6.18	5.90	5.94	7.98
6.06	3.86	4.77	7.01	6.97	4.22
7.24					3.74
52.32	8.19	4.90	5.73	5.39	7.99
32.91	5.35	6.25	4.91	4.56	5.35
44.56	4.67	4.77	5.09	5.79	5.72
50.02	7.42	7.35	3.65	5.93	6.07
57.95	4.54	4.57	4.67	4.62	4.67
107	1.66	4.42	4.45	1.27	4.36
62.02	3.09	3.65	3.82	4.00	3.97
57.95	7.45	7.46	7.03	7.10	7.01
4.32	4.62	4.81	4.74	4.17	4.24
62.27	7.57	8.17	8.11	4.38	5.02
	4.77	4.10	4.12	4.92	4.86



Ash SW 70.41 Plg.

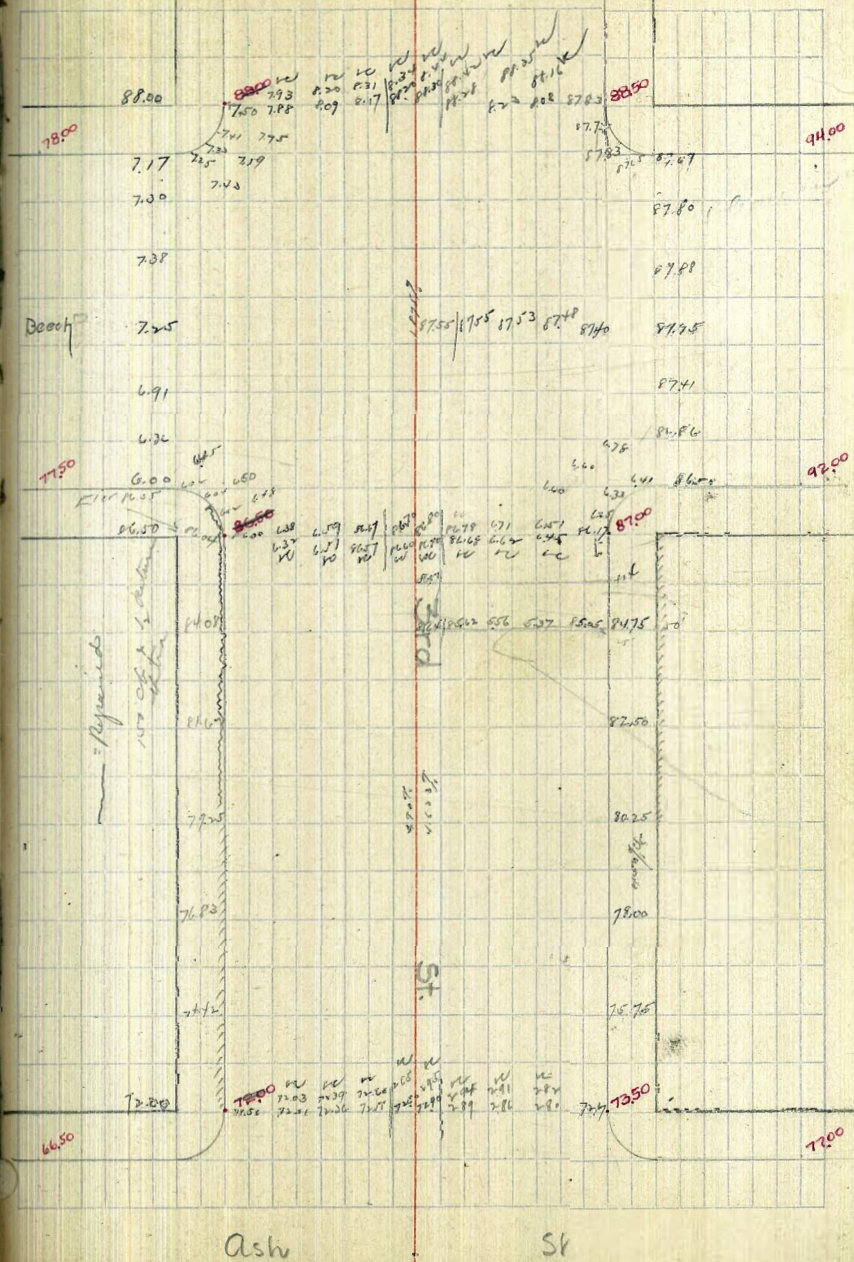
70.41 6.95	70.00	70.07							
70.41 5.36	70.41	70.41							
61.49 57.95		70.41	70.00	70.13	70.41				
63.31 70.41		70.79	70.69	70.41	70.41				
70.41 3.72		5.34	34.2	3.71	70.41				
50.41 5.44		0.4	0.9	0.79	2.5	2.04	0.5	0.9	1.1
75.25 1.20		1.45	1.65	1.84	2.03	2.29	2.50	2.70	2.90
70.41 3.28		4.4	13.3	1.5	1.7	2.0	2.2	2.4	2.6
70.41 2.68		71.01	70.97	70.94	57.95	7.8	5.7	5.19	4.19
70.41 6.40		70.41	70.41	70.41	70.41	70.41	70.41	70.41	70.41
70.41 5.93		76.81	72.97	70.86	71.00	71.4	1.24	1.82	2.4
76.3 2.75		3.57	3.4	3.25	3.1	3.04	2.9	2.8	2.7
		0.7	1.2	1.9	1.9	2.0	2.1	2.2	2.3
		5.59	7.5	4.3	4.3	4.3			



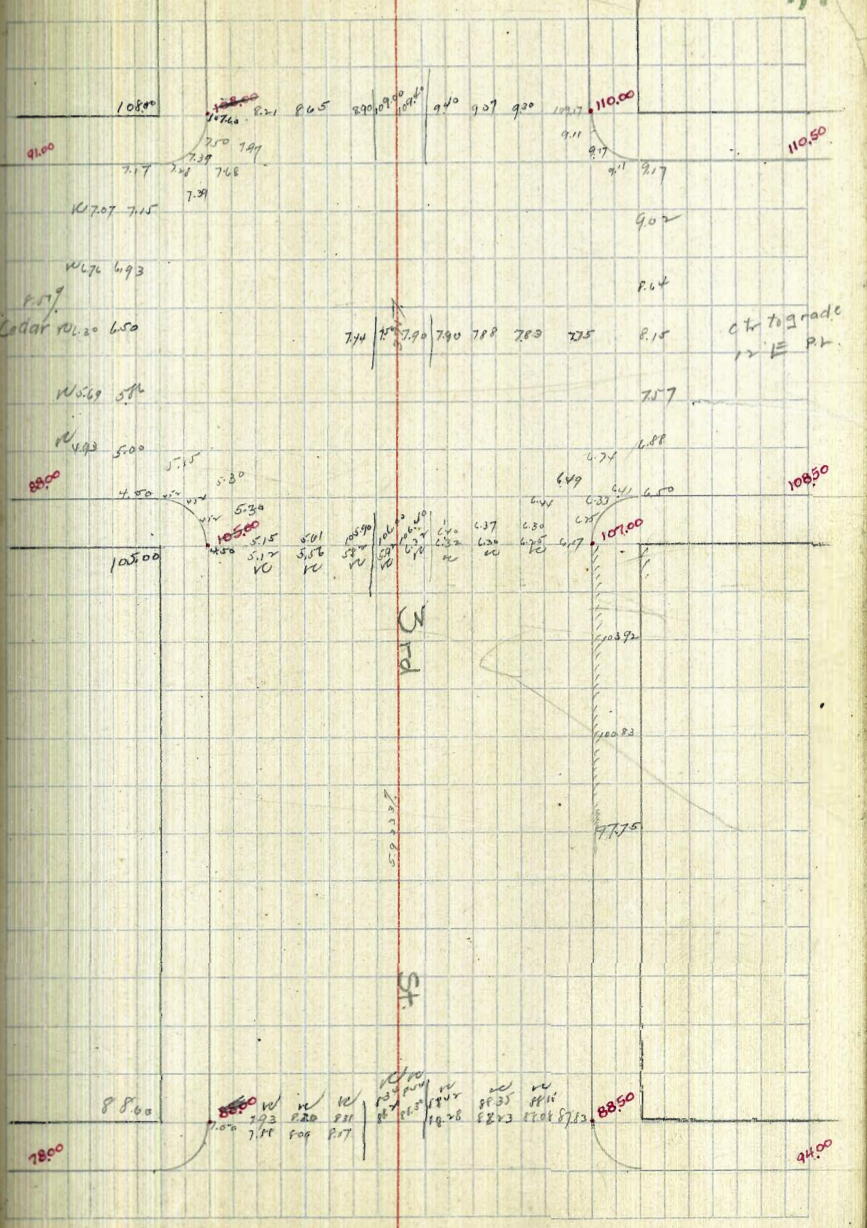
A

ST

88.01	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.05	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.02	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.06	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.03	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.07	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.04	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.08	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.05	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.09	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.06	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.10	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.07	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.11	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.08	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.12	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.09	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.13	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.10	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.14	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.11	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.15	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.12	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.16	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.13	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.17	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.14	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.18	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.15	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.19	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.16	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.20	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.17	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.21	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.18	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.22	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.19	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.23	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.20	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.24	7.25	8.05	8.90	9.70	10.50	11.30	12.10
88.21	7.25	8.05	8.90	9.70	10.50	11.30	12.10
90.25	7.25	8.05	8.90	9.70	10.50	11.30	12.10



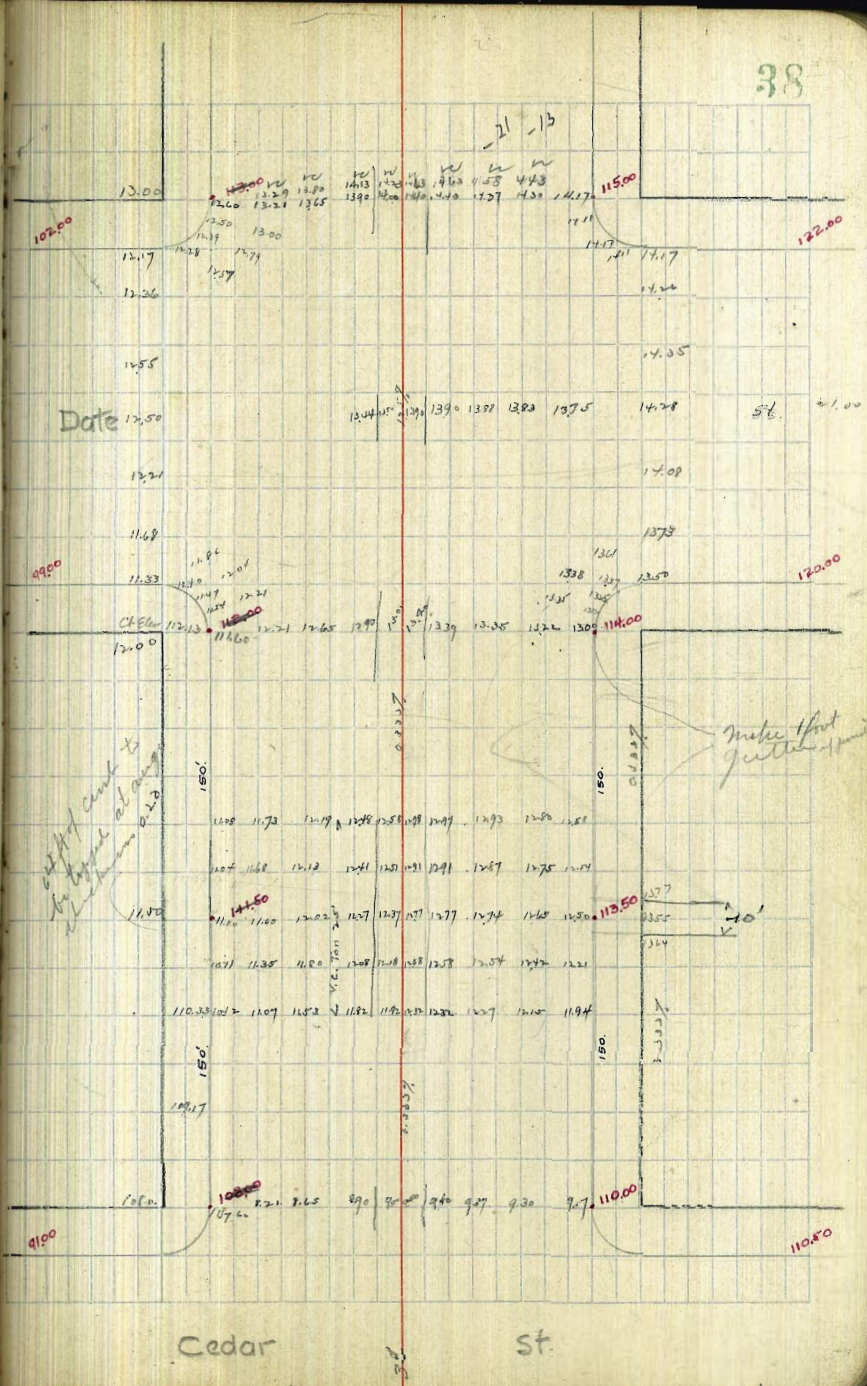
108.09 2.27		7.02	3.92	0.23	9.77	
108.09 M	1.37	4.48	7.54	10.62		
108.09 2.27	2.18	4.60	7.69	10.77		
112.24 M	5.82	4.99	5.12			
110.88 2.26	4.78	4.99	5.12			
110.55 M	1.90	2.69	3.38	3.62	3.71	4.20
108.09 3.50	6.76	6.30	5.69	4.93	5.15	5.30
111.59 M	4.43	5.24	5.96	6.66	6.29	6.15
108.09 7.76	4.09	4.50	4.37	4.02	4.12	4.01
115.81 M	5.30	6.17	6.32	6.22	6.22	6.21
108.09 4.20	10.81	6.12	5.94	6.01	6.03	6.08
112.29 M	2.24	3.50	3.77	4.20	4.75	5.30
108.09 4.81	6.74	6.41	6.46	6.60	6.74	7.00
112.90 M	1.16	1.77	2.38	3.02	3.60	4.14
112.90 M	0.71	0.77	0.78	0.77	0.77	0.77
	3.39	3.73	4.00	4.29	4.57	4.85



Beech

St.

108.09	116	12.67	6.32	11.60	12.60	1.01
771	4.81	11.13	12.13	6.85	6.85	1.85
115.90	4.17	12.17	5.11			
5.32	4.38	5.28	12.27	11.67	11.67	5.62
113.18	108.09			4.67	4.52	4.87
5.27	2.08			5.44		10.50
118.25	116.17			5.74	5.74	
108.09				7.70		
6.53	7.60	8.65	1.01			
114.23	7.82	7.60	7.16	6.91		
115.81	11.82	11.53	11.07	11.35	11.01	12.00
	4.90	4.74	4.46	4.21	3.73	3.54
	3.90				3.54	3.79
	4.17	3.83	3.41	3.19	2.73	2.50
112.13	4.73	4.40	4.03	3.62	3.21	2.97
5.34	12.90	12.65	12.21	11.68	11.21	10.75
17.47	4.57	4.22	3.86	3.49	3.11	2.72
	14.36	13.79	13.29	12.79	12.21	11.73
	5.11	4.90	4.68	4.47	4.27	4.07
111.13	4.03	3.93	3.83	3.73	3.63	3.53
5.53	1.33	1.33	1.33	1.33	1.33	1.33
117.66	4.27	4.21				
108.09	9.40	9.27	9.13	9.01	8.89	8.77
7.60	6.33	6.36	6.33	6.30	6.27	6.24
115.73	12.57	12.56	12.54	12.52	12.50	12.48
	3.18	3.14	3.09	3.05	3.00	2.96
	2.91	2.87	2.85	2.83	2.81	2.79
	2.62	2.60	2.58	2.56	2.54	2.52
4.81	3.25	3.21	3.17	3.13	3.09	3.05
11.13	4.69	4.73	4.86	4.73	4.67	4.55
5.95	4.08	4.28	4.35	4.26	4.14	4.03
18.08	4.00	3.80	3.73	3.62	3.50	3.41
	13.75	13.53	13.28	12.90	12.51	12.12
112.13	4.33	4.25	4.20	4.12	4.06	3.98
6.13	4.17	4.11	4.05	4.02	3.98	3.94
118.26	3.91	3.89	3.88	3.85	3.80	3.75
	4.63	4.58	4.53	4.48	4.43	4.38
	3.60	3.68	3.73			

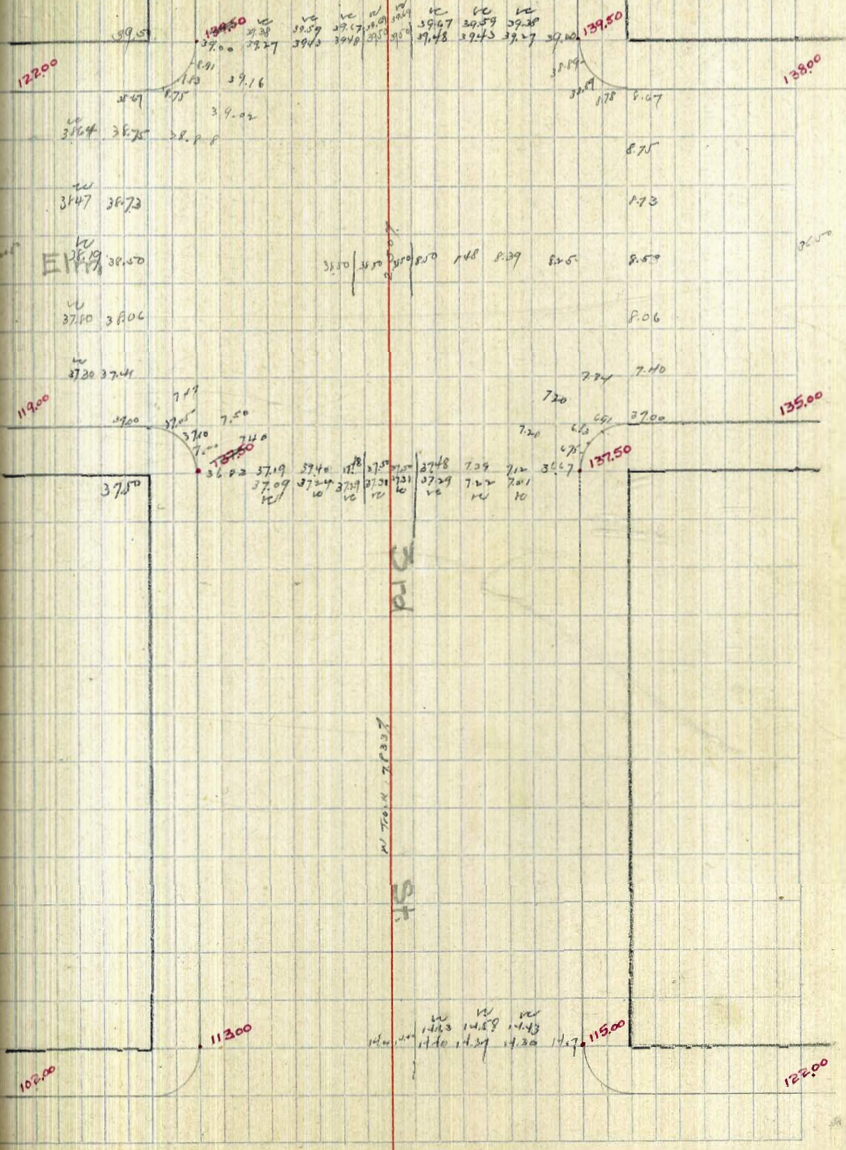


139.46 N.W. Elm

143.73	4.7	39.00	56.67	56.83					
39.46	4.73	7.09	7.22	7.06					
32.5									
42.71	M	5.62	5.47	5.42	9.16	2.00	8.17	2.00	
39.46		9.38	9.59	9.67	2.73	3.27	4.0	2.30	4.25
34.2		3.51	3.50	3.50	4.47	4.19	7.80	7.30	5.89
42.71	M	7.47	7.5	7.40	4.42	4.50	5.00	5.59	
39.46		5.40	5.34	5.48	8.41	8.13	8.27	8.67	
42.71	M	7.00	7.05	7.10	3.96	4.06	4.1	4.25	
139.46		5.80	5.80	5.79	5.80				
139.46		7.20	7.22	7.01	3.67	3.97	3.90		
31.0		5.31	5.31	5.34	3.90	3.92	4.00		7.00
142.66	M	4.20	4.20	4.20	4.39	4.39	4.51	4.91	4.4
139.46		4.60	4.60	4.60	4.60	4.60	4.60		
39.5		4.74	4.63	4.52	6.07	6.21	4.91	4.93	5.0
143.47	M								5.16

wp. 15

39



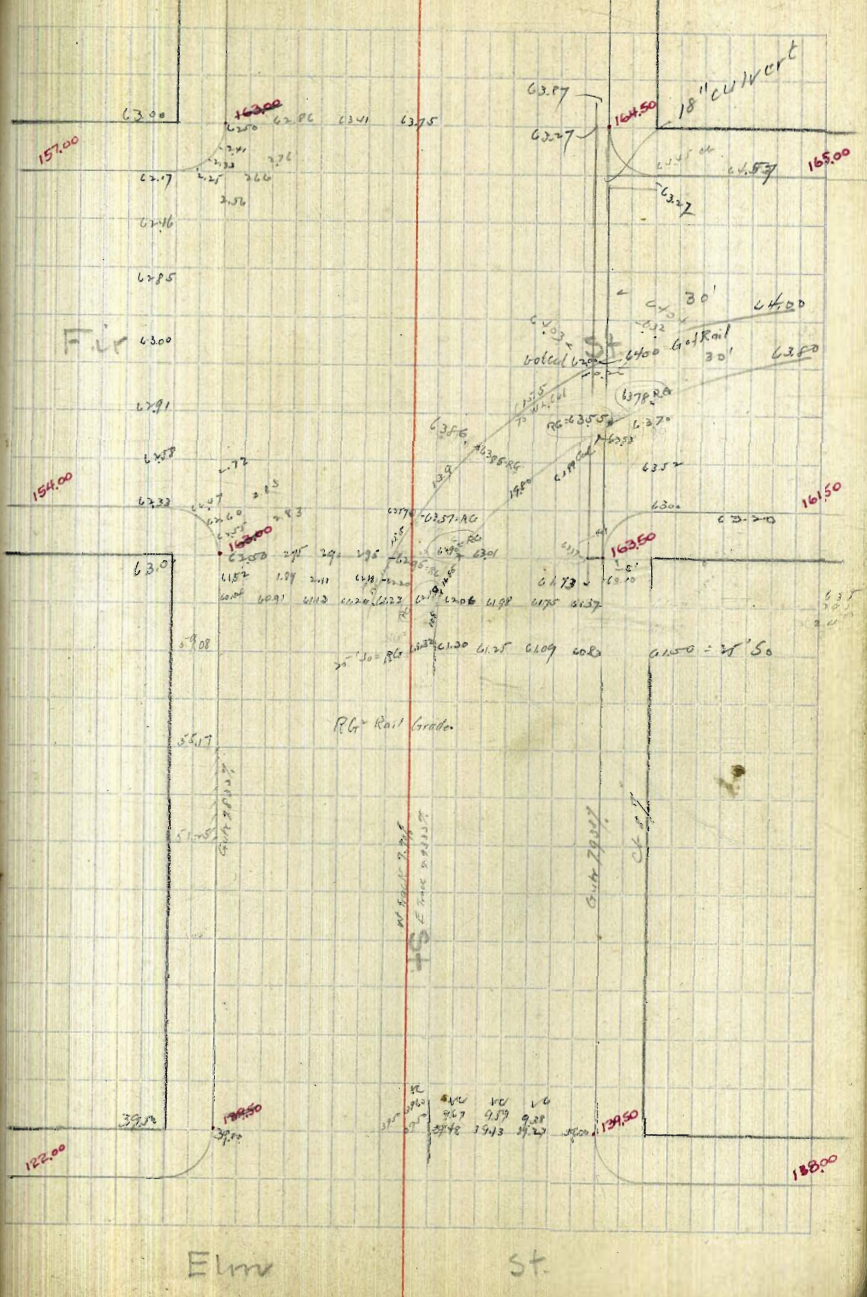
Date

St

Fir N^o 16201 12ly

62.04	62.00	62.50	62.52			
167.05	55.7	51.25	45.5			557
62.06	60.1	6.65	5.22			507
64.10	8.93	12.85	5.75			1.52
63.01						
63.06	327	327	62.00	61.99	1.78	173
69.07	580	520	7.17	7.18	7.29	7.04
63.07				64.00	5.30	
63.08	5.77	4.87		63.73	6.27	
68.17	63.00	63.73		63.73		
63.17	63.96			4.27	4.07	
63.83	68.97	4.12		63.22	4.3	
63.81		1.2		5.75		
71.18	6.54	62.75	64.20	5.07	63.67	63.67
63.21	8.64	7.43	6.68	5.07	5.00	
63.22	6.20	61.3	6.09	6.56	15	4.60
66.23	5.03	5.70	5.97	5.50	7.8	7.0
63.01	276	214	213	290	62.57	55
64.99	5.13	5.81	5.50	5.18	4.51	65
64.99						
163.01	63.01	63.57	4.84	4.37	4.13	
163.01	5.10	4.52	63.67	5.74	5.68	
163.01	468.114	3.75	3.71			
63.21	4.0	4.36	4.70	61.75	64.04	64.00
64.87	63.66	3.15	3.24	4.82	4.23	4.24
67.88		4.03	4.10	5.15	6.61	4.41
63.01	63.01	6.05	62.83	61.37	63.07	63.00
63.01	4.44	6.94	63.41	61.75	61.88	62.00
64.27	63.01	61.20	61.75	61.09	62.00	61.92
64.27	4.97	6.68	6.25	6.89	6.20	6.20
64.27	67.98	63.01	62.53	63.75	63.20	63.00
64.9		4.97	4.45	4.40	4.28	4.96
63.47						

53.41
73.10
7.1
7.8
7.9



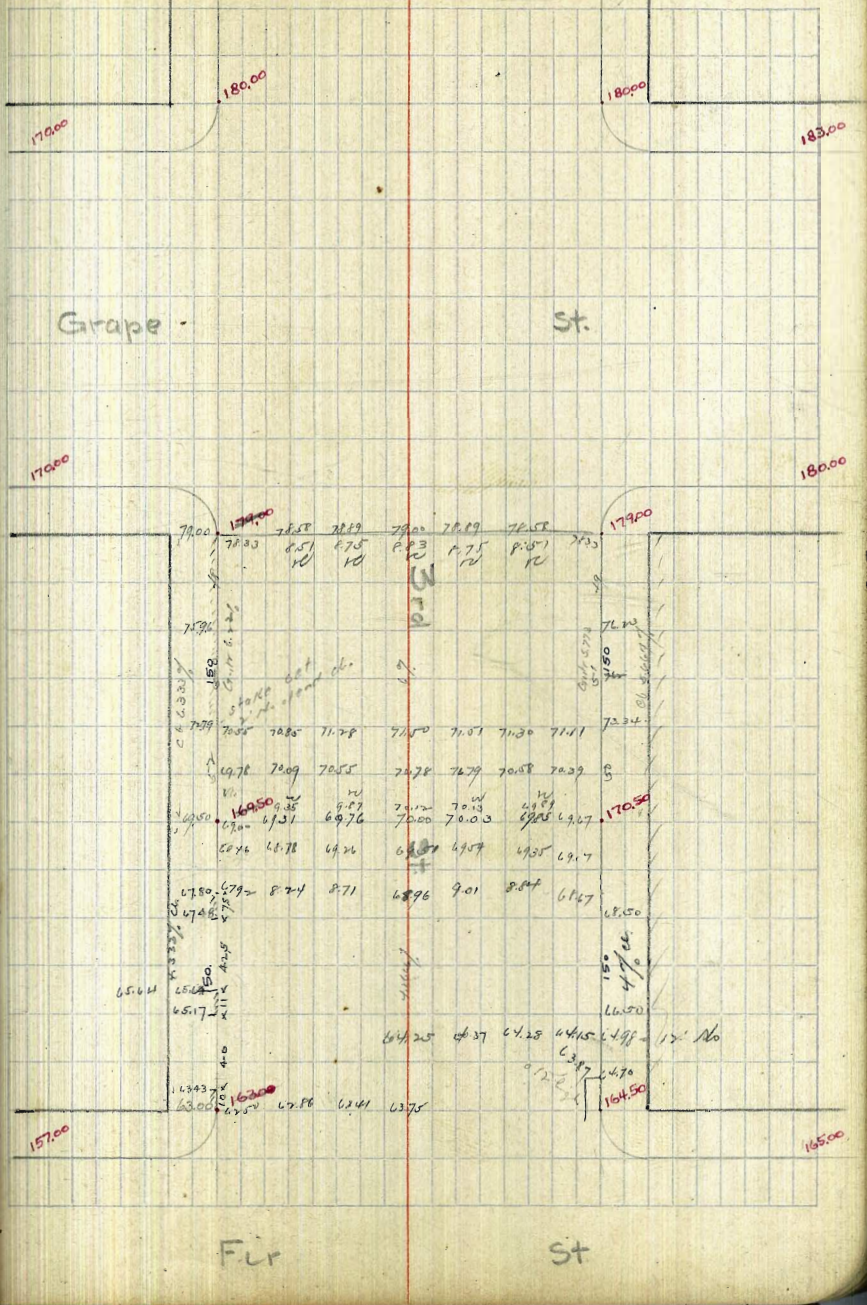
Elm

St.

178.99 Grape SW Plg.

63.91	63.00	62.17	63.53	65.64	67.41	67.81
72.11 MT	71.11	69.4	71.68	74.4	76.0	75.3
87.1	70.57	68.07	70.0	72.0	73.0	
71.00.710	71.1	69.61	71.61	73.79		
1013.0	73.36	72.23	73.00	75.91	77.79	
	73.6	74.7	77.0	79.2	81.1	
81.70 MT	81.67	79.00	81.00	82.9		
	1.51	1.18	1.18	63.99		
71.18 M		71.33	72.00			
	5.24	4.5				
70.91		7.24	8.41	9.75	11.37	12.2
83.57 MT	82.4	81.4	80.0	79.8	79.36	78.5
	2.2	2.01	1.96	1.91	1.85	1.8
1630.184	2.2	2.22	2.27	2.3	2.35	2.4
171.70 MT	1.84	1.80	1.81	1.86	1.9	1.95
	1.30	1.51	1.50	1.58	1.65	1.7
	0.43	0.22	0.23	0.25	0.28	0.3
2199	1.51	1.75	1.73			
1.97	2.35	2.11	2.03			
80.8 MT						

41

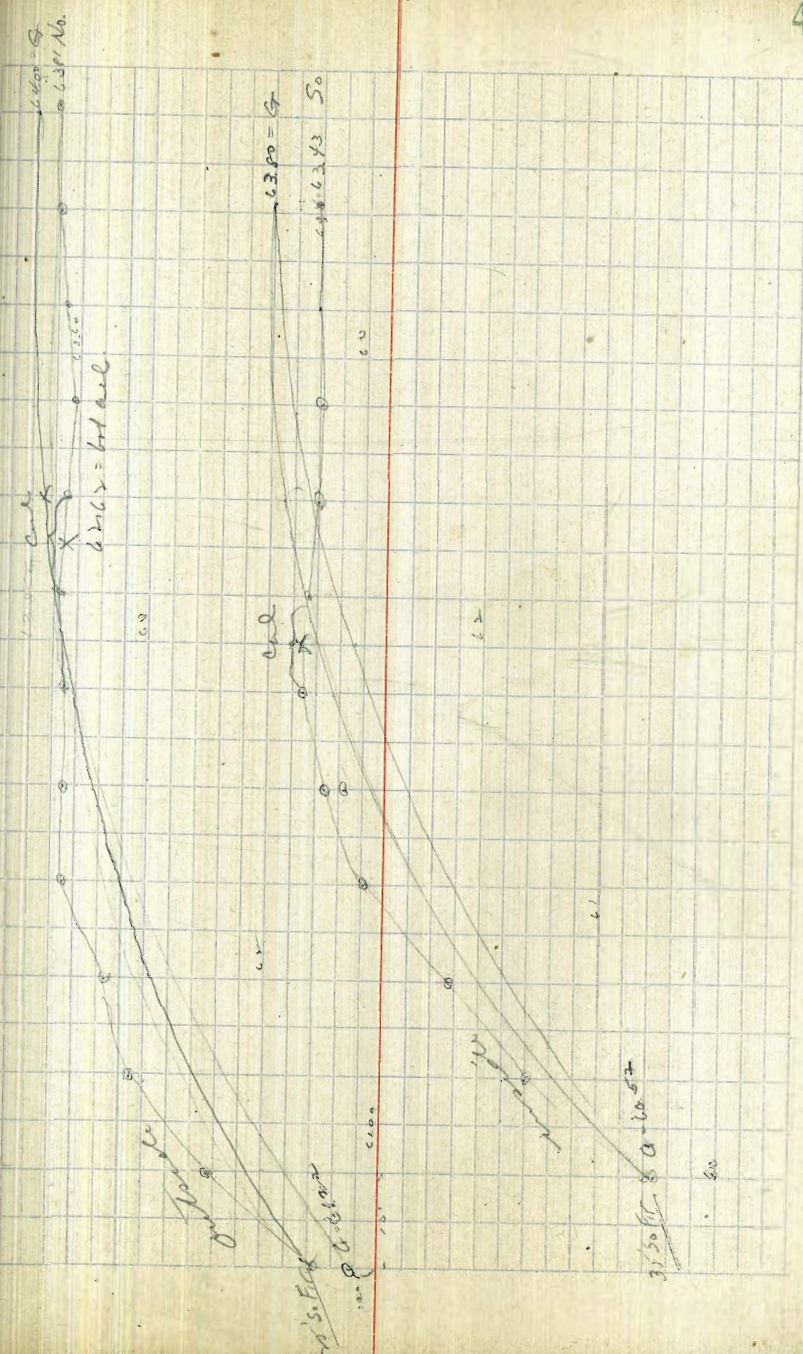


Levels oror. Curvas de Fir

125

Outside	583	68.24	63.01	24m 110' Fir
0400:25' 50' Fir		728	61.54	
+10		6.38	62.46	
+20		5.72	63.12	
+30		5.31	63.33	
+40		5.15	63.70	
+50		5.16	63.68	
+60		5.12	63.71	
+70		5.09	63.75	
cul } +P.		5.14	63.70	
+90		5.20	63.64	
+100		5.11	63.73	
+110		5.05	63.80	
30' E 33' 210'		5.03	63.81	
inside				
35' S. Fir		5.22	60.68	
+10		745	61.29	
+20		6.59	62.25	
+30		5.87	62.97	
+40		5.50	63.34	
+50		5.32	63.82	
cul } +6.		5.37	63.47	
+70		5.46	63.34	
+80		5.45	63.39	
+90		5.43	63.41	
+103'		5.41	63.43	

48

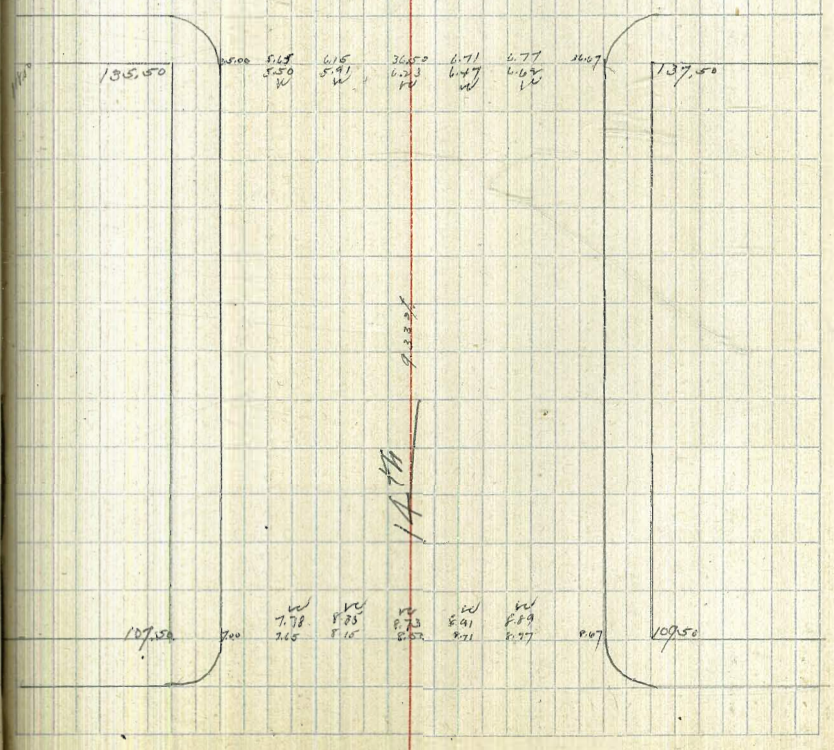


A NW 13747 part

44

13747	37.50	36.7	37.70		
3.25	6.22	4.68	3.50		
141.22			3.50		
37.47	5.50	5.91	6.23	6.47	6.67
1.68	3.65	3.24	2.94	2.68	2.54
39.15	7.78	6.35	6.73	8.91	6.89
107.41	4.67	4.10	3.72	3.52	3.56
5.00					
112.41					

A St St

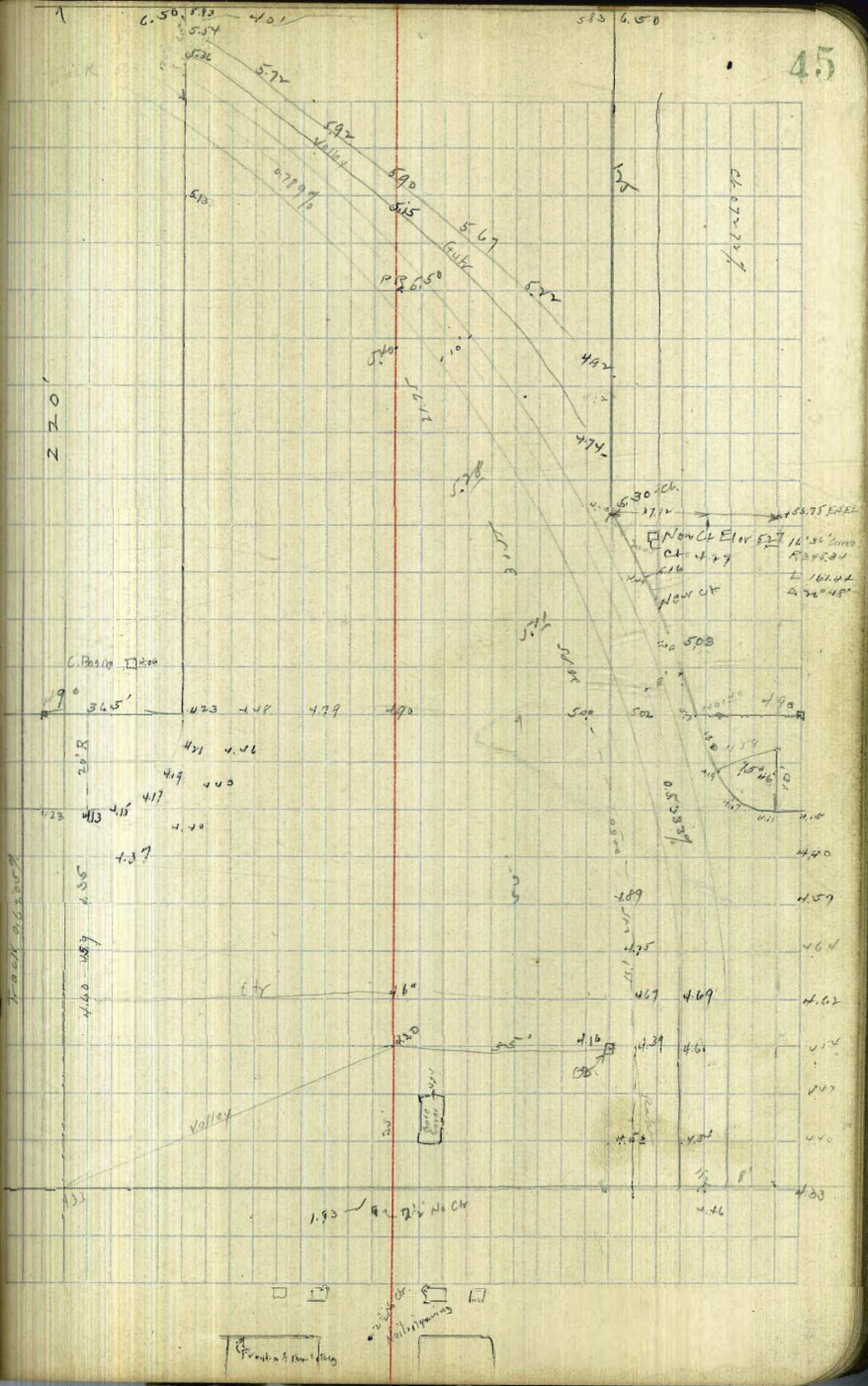


B St

H. 46 Top No. Rail So Track on Pier

6.1
3.15
9.7

UJ 6	4.90	5.11	5.03	5.16	5.00		
10.28 M	5.38	5.26	5.53	5.28	5.24		
UJ 6	4.90	5.11	5.03	5.16	5.00		
10.40 M	5.50	5.26	5.53	5.28	5.24		
4.46	12.12 M	5.45	4.40	5.73	4.20	4.10	4.17
6.10	5.46	6.29	5.80	4.91	5.71	5.50	5.33
10.56 M	5.58	4.27	4.33	4.20	4.79	4.20	4.36
4.09	10.84 M	5.67	5.67	5.71	5.71	3.76	5.81
7.50 M	4.22	4.20	4.47	4.51	4.64	4.67	4.57
4.37	4.23	4.15	4.02	4.07	3.93	3.91	3.88
4.46	4.23	4.21	4.15	4.48	4.79	4.90	
8.83 M	4.40	4.62	4.18	4.55	4.62	4.93	
4.46	4.40	4.42	4.20	4.31	4.69	4.60	4.59
8.86 M	4.37	4.40	4.66	4.51	4.17	4.26	4.27
6.89	4.49	4.40	4.43	4.00	4.31	4.89	
3.47	5.72	5.90	5.67	5.22	5.15		
10.06 M	4.64	4.50	4.66	4.29	5.14		
UJ 6	4.48	4.79	4.39	4.10	4.67	4.71	4.89
4.46	4.50	4.19	4.77	5.06	4.09	4.41	4.27
8.92 M	5.00	3.76	5.28	5.11	4.20		
UJ 6	4.16	5.20	5.58	4.08	4.51		
4.70	4.60	4.35	4.37	4.00	4.37	4.20	4.10
9.16 M	5.11	5.32	5.12	5.11	5.37	5.51	5.61
5.25	5.07	5.00	4.30	4.13			
4.40	5.07	5.00	4.60	5.27			
9.71 M	9.59						
6.16							
4.51							
10.60 M							
4.46							
6.94							
11.40 M							

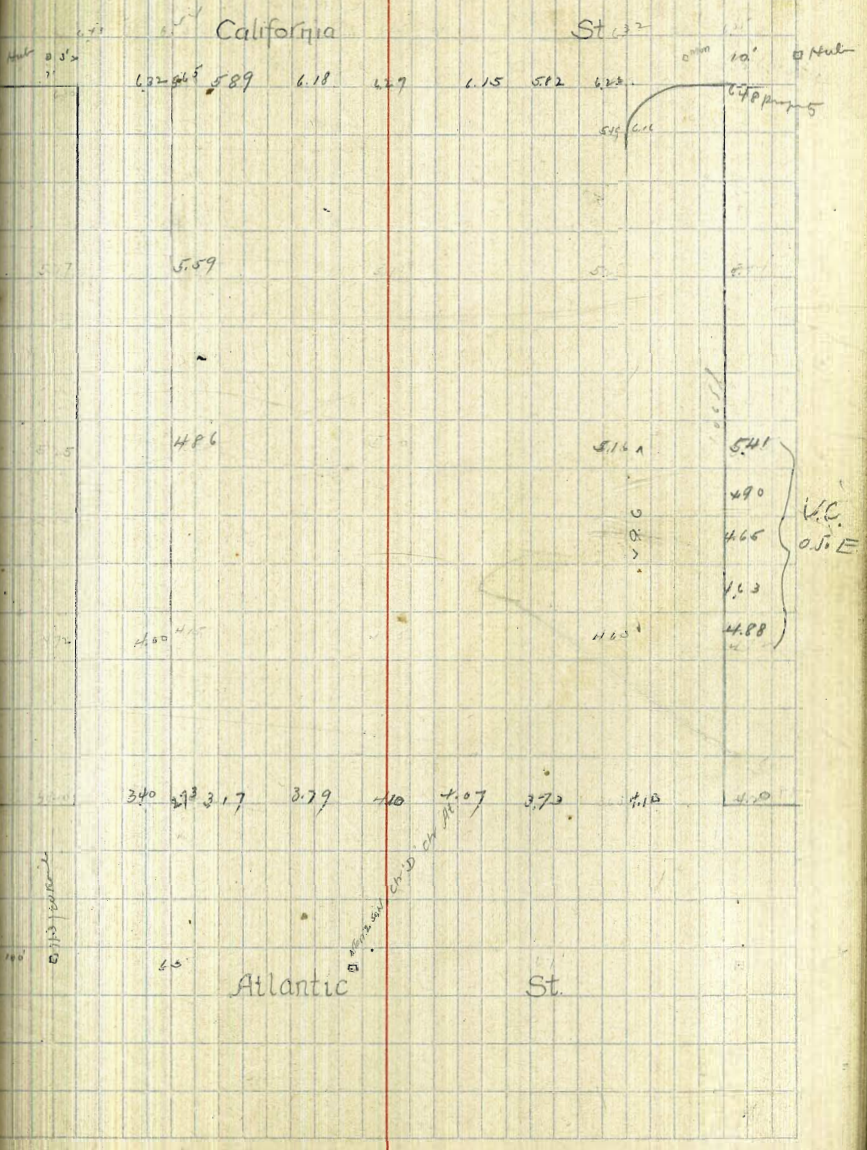


4.0Z BM Spk polo NW Atlantic

512 Spk SW Cal

47

5.02	4.48	4.20	3.60	4.15	4.72	5.71	4.70
9.24 MT	8.50 MT	4.30	4.90	4.35	3.78	3.25	3.80
5.25	5.77	6.38	5.50	3.40	3.07		
3.25	2.73	2.30	2.70	5.49	5.82		
4.02	5.72		5.21	4.02		4.10	4.20
4.87	5.71		4.53			4.45	4.31
8.89 MT	11.53	MT	6.32	8.55 MT			4.51
8.65	5.31		6.48	5.90	6.17		
11.27 MT	6.16		4.90	11.2	MT	5.35	
4.02	4.27						
8.29 MT	3.17	2.72	3.29	4.10	4.07	0.73	5.12
4.02	6.27		5.65	5.34	5.37	5.71	2.62
8.92	6.15	6.27	6.18	5.89	5.65	5.02	4.10
9.44 MT	3.27	3.17	3.26	3.55	2.79	7.07	4.94
5.17	3.40	3.30				7.24	
5.62	5.79	5.87					
9.19 MT	6.32	4.03	4.16	5.59	6.42		
3.65	3.15	5.47	4.61	3.88	3.05	9.24	
9.47 MT	5.10	4.62				6.34	
	4.87	5.40				4.88	
4.51							
10.03	MT	4.98	4.63	4.65	4.90	5.71	
4.20		5.14	5.29	5.27	5.12	4.61	
5.72							
10.02 MT							



Levels for Drain across St at Pier No Side

	H1	H2	H3	H4
	4.46	8.92	4.13 Grate	4.16 Run cut
0400 CB	4.88	1.25	3.63	
220	3.92	-0.12	4.04	
+40	3.90	-1.50	5.40	
+60	3.59	-2.88	6.47	
+80 BIKhd	4.35	-4.25	8.60	

Elevation of Hydt's Atlantic-Dto H

	4.38	N1. P.40		H.02 B4 NW A10
			6.26	3.60 2.14 1.46
				D.5F Rise
T.P.	4.51	8.32	4.59	3.81
			6.34	1.10 1.98
			7.52	2.12 E "
				4.10 2.20
				3.30 F " "
T.P.	3.45	6.99	4.78	3.54
			6.98	4.10 0.11
				3.99 -G " "

S.W. 1/4 Sec P19 7485

" " 157C " 7698

N " 41B " 107.42

423
1497 - SW Alley & B St.

95.97 - am. N. end cement stop
W. side Alley 50' N. C.

115.05	423	476							
114.67	1485	1415	1475	1517	1503	1555	1590		
119.20	1547	1570	1575	1517	1527	1555	1540	1407	
12.63	373	350	375	203	370	365	400	513	
10.65	660	623	693	99.20	95.17	1415	1410	1425	
107.05	1108	1185	1211	11.98	511	611	591		
1497	95.97	441	486						
423	1517	1501	1503	1501	1511	1591	1526	1497	1170
19.26	407	407	423	423	423	423	423	423	423
95.97	1260	1235	1247	399	374	401	511	519	
491	666	691	699						
10.091	90.87	90.87	90.87	90.87	90.87	95.5	95.5	95.17	
	10.04	10.35	10.49	10.48	10.29	541	526	574	

95.97	100.90	100.90	100.90	100.90	100.90	100.90	100.90	100.90	
493	90.42	90.42	90.42	90.42	90.42	90.42	90.42	90.42	
10.0904	100.03	100.34	104.8						
119.97	100.90	100.82	100.90	100.90	100.90	100.90	100.90	100.90	
409	90.50	90.25	90.17	90.20					
119.06	5.40	5.68	5.73						
19.06	19.06	19.06	19.06	19.06	19.06	19.06	19.06	19.06	
14.35	14.35	14.15	14.10	14.25	15.17	501	520	555	
4.21	4.66	4.91	4.96	4.81	3.29	4.05	4.03	3.26	3.51
19.06	19.06	19.06	19.06	19.06	19.06	19.06	19.06	19.06	
5.22	5.22	5.17	5.27	5.53	4.40	4.15	4.07	2.60	2.35
									2.27
									6.77

7-7-15 check grade Dunkle - Shaw - Bunker

95.97	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	
211	90.87	90.56	90.42	90.62	95.52	525	517		
98.08	7.21	7.52	7.66	7.46	2.58	2.93	2.91		
114.97	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37
340	14.85	14.40	14.15	14.10	14.25	517	501	503	520
178.37	3.52	3.97	4.32	4.27	4.12	3.20	3.36	3.34	3.17
18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37
5.90	5.60	5.47	5.50	5.70	5.45	5.22	5.17	5.27	5.55
2.97	2.77	2.90	2.87	2.67	2.92	3.15	3.20	3.10	2.82
18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37
4.40	4.15	4.07	4.15	4.40	12.60	12.35	12.77		
3.97	4.27	4.39	4.27	3.97	5.77	6.02	6.10		

grade checks fairly well but steel is rough
Dunkle
7/15/15 Shaw
Bunker

marked thus \bigcirc
note - measurements equal distance from \bigcirc
extreme edge of concrete

14.85	10.4	9.4	14.25
15.65	10.3	9.7	15.17
15.90	10.3	9.5	15.70
10.55	10.1	9.8	15.45
14.40	10.1	9.9	14.40
112.60	10.3	10.0	112.60
	9.9	9.9	
	9.3	9.7	
	9.4	10.1	
	9.8	10.0	
	7.4	9.9	
	9.6	9.7	
	9.6	9.6	
	9.7	9.7	
	9.7	9.7	

C St.

4.16			
5.45	5.28	5.32	5.20 5.12
<u>9.91</u>	<u>0.63</u>	<u>4.61</u>	<u>4.71 4.79</u>
	5.20	5.09	5.20 5.22
	4.81	4.57	4.59
	4.62	4.66	

4. Davis
7. Hancock
15. Keesick

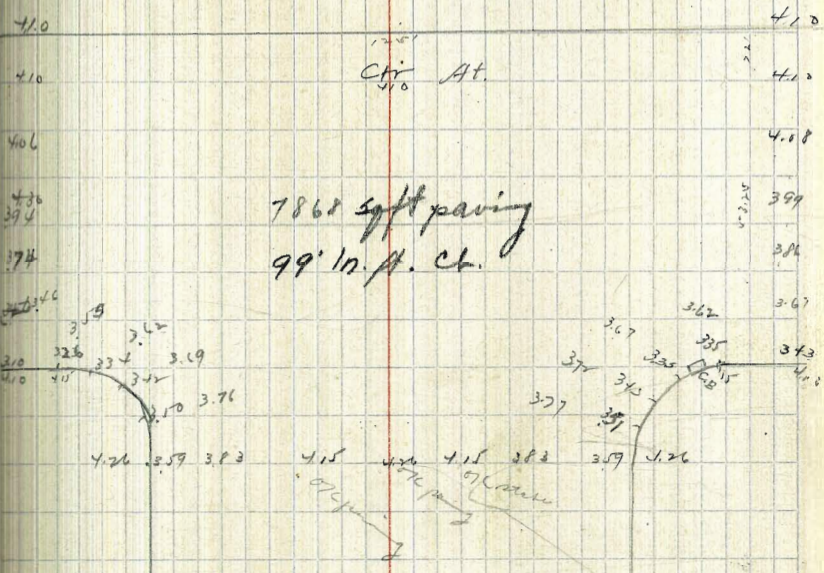
Portion of floor of Warehouse & Administration Building to be repaired



587 Spk SW Calif Bndy

3.47	4.10	4.08	3.99	3.86	3.67	3.62
9.29 AM	5.19	5.21	5.30	5.43	5.62	5.67
	3.07	2.72	3.77	5.11	5.03	
	5.62	5.57	5.52	4.18	4.26	
	3.76	3.69	3.62	3.58	3.44	3.41
	5.83	5.60	5.67	5.74	5.83	5.85
	4.10	3.76	3.50	3.42	3.34	3.21
	5.19	5.63	5.79	5.87	5.95	6.03
	5.25	3.41	3.43	3.35	3.32	3.43
	5.54	5.78	5.86	5.92	5.97	5.86

Intersection of Broadway
and Atlantic St
Parking.



410
410
406
430
394
174

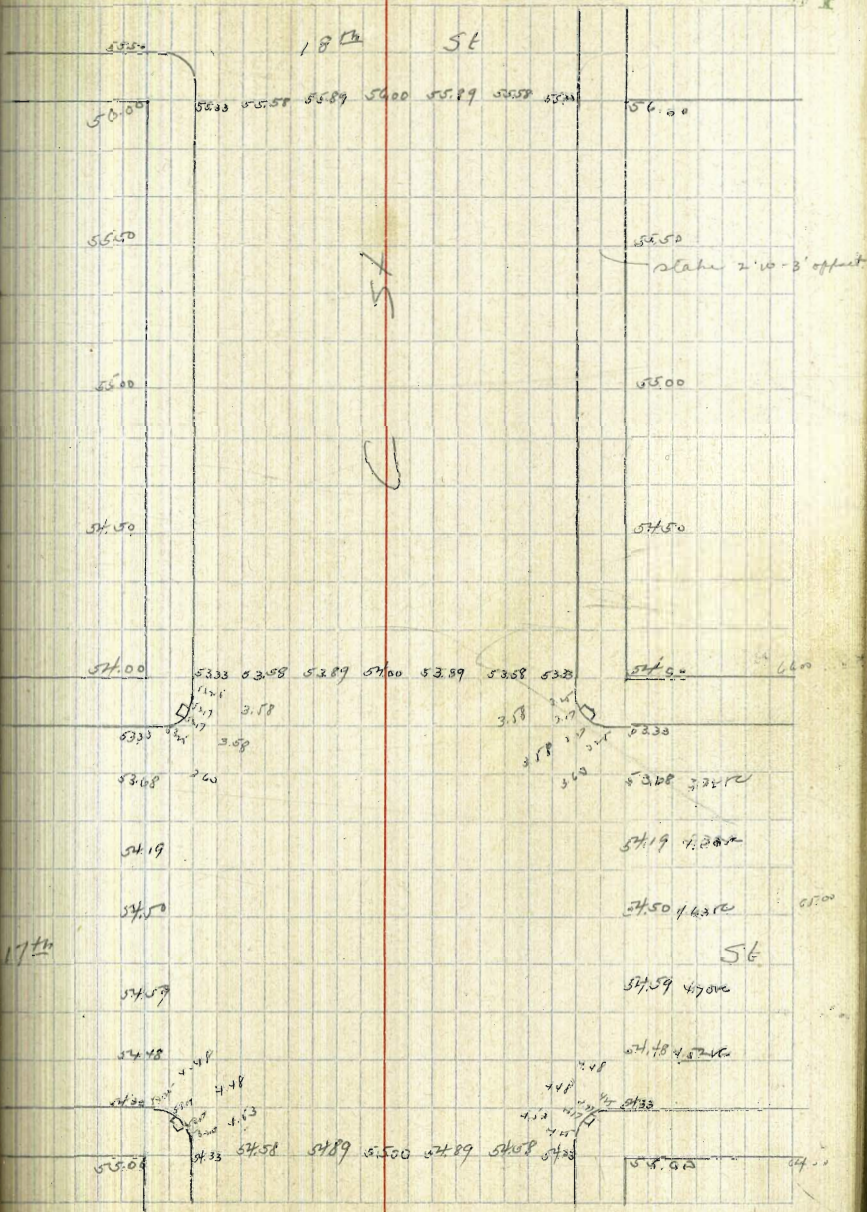
Ct. At.

410
410
4.08
3.99
3.86

7868 soft paving
99' 1/2" At. Ct.

55.13 SW. 17th Nail Elect. Rk.

4.73	54.00	54.50	55.00	55.50	56.00	56.50	57.00
50.86	5.86	5.36	4.86	4.36	4.08	4.71	4.71
56.63	55.50	56.63	57.50	58.00			
56.66	5.79	61.57	61.57	6.02	5.52		
62.29	56.03	55.53	56.50	57.00			
5.32	56.49	59.64	56.0	57.10	57.00		
60.51	56.63	56.58	56.79	57.00	57.33	57.58	57.79
3.8	57.05	56.58	56.79	57.00	57.01	57.65	57.45
50.13	59.34	57.6	57.45	57.34			
57.13	57.58	4.89	5.00	4.52	4.77	4.59	4.70
3.97	4.52	4.21	4.10	4.57	4.52	4.51	4.60
59.10	4.19	3.68	3.63	3.18	3.80	3.72	3.30
	4.91	4.42	5.47	5.52	5.21	5.47	5.38
55.13	4.70	4.52	4.52	4.52	3.33	3.25	5.17
4.0	4.40	4.5	4.62	4.17	4.57	5.77	5.85
59.13	4.23	4.28	4.94	5.80	3.25	2.17	5.93
	4.80	4.88	4.94	5.80	4.4	5.91	



60.59 P19 N.W. 16 1/2

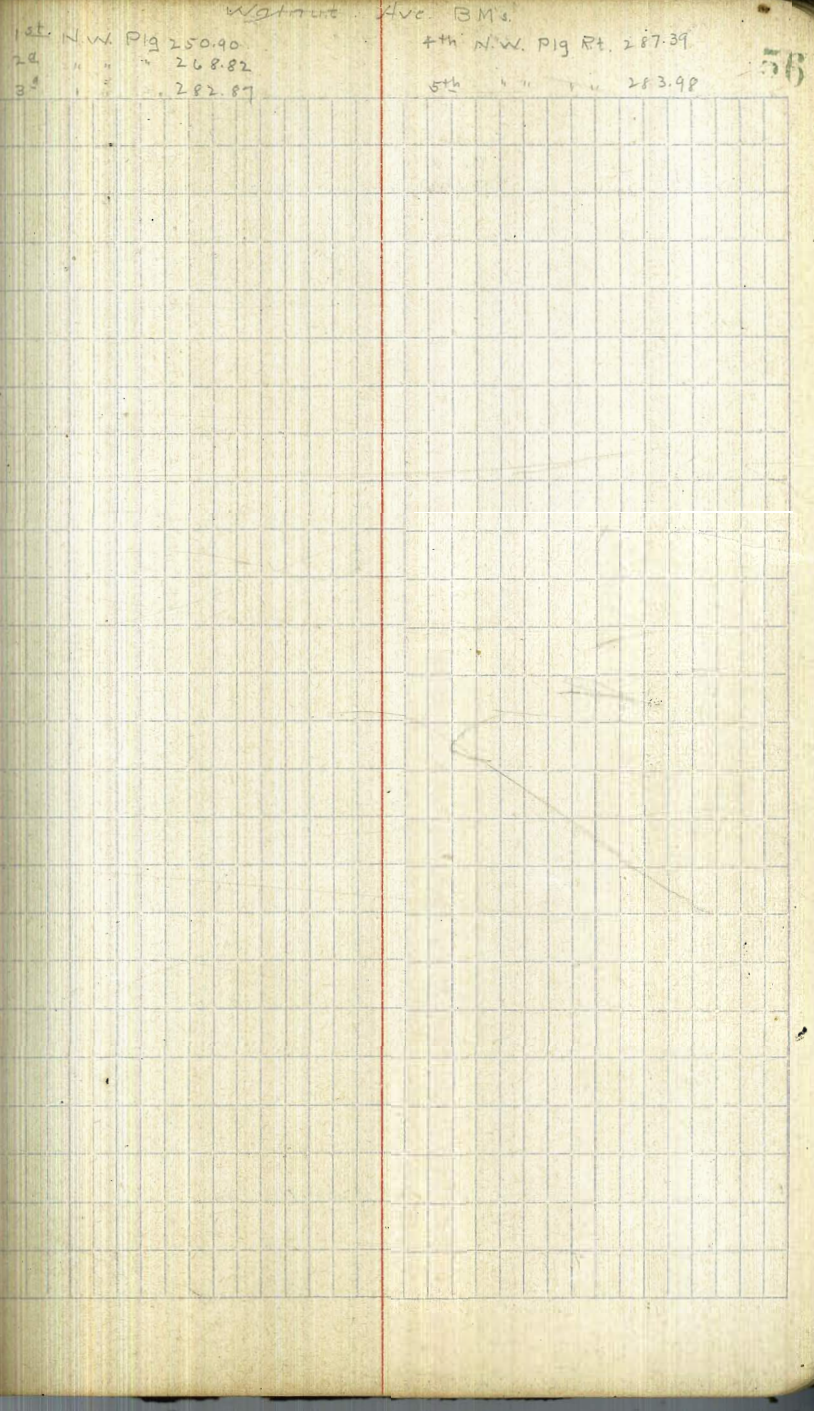
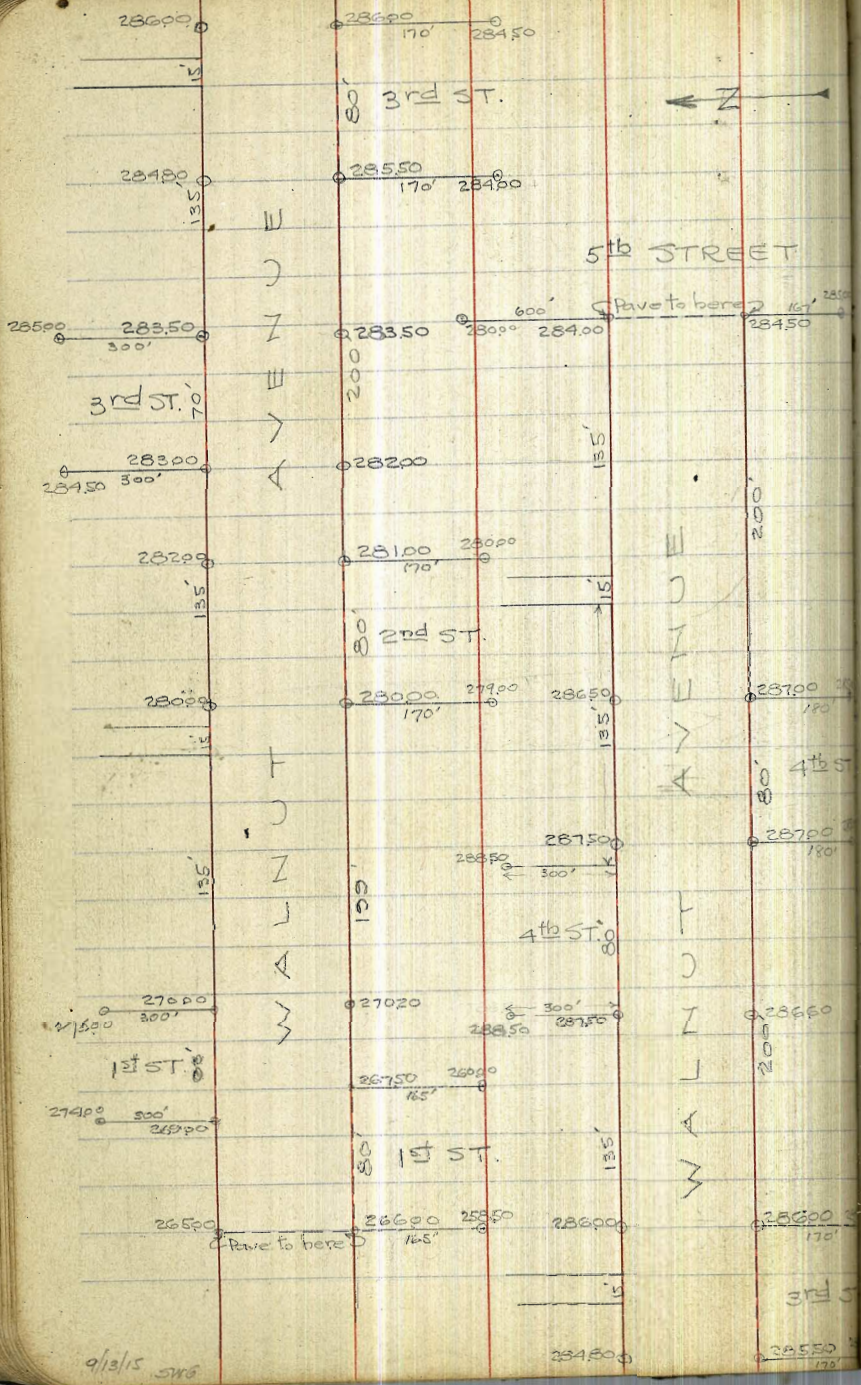
2.24	60.50	59.12	57.75	56.37	55.00	53.12	57.21
62.83 N1	2.33	3.71	5.08	6.46	7.83	6.91	5.58
	58.37	57.00	56.27	54.12	57.75		
56.13	4.46	3.83	5.97	3.72	4.59		
7.21	6.94	6.00	5.67				
62.34 N1	6.30	6.00	5.71				
60.76	9.19	9.37	9.38	9.15	8.71		
63.05 N1	3.86	3.66	3.67	3.90	4.33		
60.59	3.67	3.00					
3.55	4.47	5.14					
64.14 N1							

17th St

55.00	54.33	54.58	54.89	55.00	54.89	54.58	54.33	55.00
56.37								56.12
57.75								57.25
59.12								58.37
60.50	59.00	59.19	59.39	59.31	59.15	58.77	58.44	59.50
	59.67	59.85	60.03	60.00	59.76	59.31	59.00	

16th

St



5th N.W. P19 283.98

4th N.W. P19 287.39

57

4.50	5.52	15.91	0.32	11.79	16.33
291.89	4786.37	5.98	6.57	6.10	5.86
	6.21	5.74	16.73		6.57
283.98	83.39	83.91	3.97	84.16	
5.67		4.86	4.37	3.75	283.98
289.65	41.87.39	15.87	16.36	.09	6.72
87.39	334				290.70
8.31					11.
90.70	41 90.73 41	3.75	3.75	11.7	4.07
		6.95	6.95	6.50	6.50
					4.21
		6.67	4.06	4.06	4.06
		4.11	1.67	6.73	6.73
				6.08%	6.49%

284.00

old paving 15.74

10 { 13.91

1101 284.50

125 0.01

St old paving

13.91

14.02

14.07

14.17

14.27

14.30

14.32

Alley

86.46

55.19 86.09 86.51 86.73 86.73 86.52 86.33

+20.00 -0.02 -0.07 2.03 1.02

287.00

287.50

Paved

st.

4th

87.00

100

87.50

87.50

86.22 86.54 86.50 86.50 86.63 86.28 85.79

+0.05

100

P467	4.21	3.72	5.33	P811M	5.01
19.56M	4.89	85.31	5.24	4.23	3.82
21.71M	P506	P507	P508	4.08	3.90
P207	4.65	3.84	2.89	3.88	3.96
7.03	4.73	4.75	4.78	4.80	4.83
89.90	5.17	5.15	5.12	5.10	5.07
	5.23	5.26	5.30	6.17	6.10
	4.67	4.64	4.62	3.96	3.70
	5.69	5.77	5.83	5.91	5.97
	4.21	4.03	4.07	4.35	4.43
	5.73	5.75	5.71	5.72	5.73
	4.17	4.15	4.29	4.26	4.27
	5.04	5.06	4.77	4.77	4.77
	4.26	4.24	5.12	6.23	6.27
	P4.26	4.28	5.00	6.24	4.82
	5.71	5.19	4.91	4.93	5.10
	3.36			4.38	5.86
	2.61			6.58	4.70

4th St

87.50								
87.15	P107	P108	P109	P110	P111	P112	P113	86.50
	P114	P115	P116	P117	P118	P119	P120	
85.75	P121	P122	P123	P124	P125	P126	P127	86.00
85.47								
85.48								
85.50								
85.70								
85.75								3rd St
85.61								
86.30								
86.50	P128	P129	P130	P131	P132	P133	P134	85.50
	P135	P136	P137	P138	P139	P140	P141	
83.50	P142	P143	P144	P145	P146	P147	P148	83.70
	P149	P150	P151	P152	P153	P154	P155	

3rd St

3^d N.W. 282.87

2^d 26882 N.W. P13

277	2215	5.42	6.50	4.75				
21559 N1.	3.44	80.16	5.09	2.4				
6.09	6.17	10.03	29.33	79.20	78.7	79.83		
289.56 N1.	83.39	5.26	6.26	6.89	6.42	6.73		
29287	80.00	79.84	82.50	82.15				
29294	5.00	6.00	2.30	0.69				
28287	82.7	82.60	82.70	82.57	79.80	82.17		
6841	7.14	6.11	308	3.08	6.11	3.77		
289.71 N1.	83.60	85.98 N1						
6.01	5.28							
28287								
82.87 N1	2.87	2.54	2.57	2.20	1.78	2.30	2.65	2.75
82.87	4.04	3.82	3.84	4.11	3.63	4.11	3.76	3.66
82.87	3.54	3.29	3.57	3.15	1.26	2.6	2.91	2.00
86.41 N1	5.67	5.12	4.80	4.85	5.15	3.85	3.46	3.51
	2.06	2.27	2.12	2.22	2.60	2.53	3.19	2.91
	2.35	3.44	3.31	3.22	3.81	3.88	3.22	3.10
82.87	2.12	2.00	2.20	2.00	2.23	2.41	2.50	3.52
4.64	4.20	3.81	3.61	3.08	4.16	4.00	3.91	1.85
87.51 N1	2.83	2.79	3.10	3.07	3.60	3.53	3.19	
	3.58	3.62	4.11	4.02	3.91	3.98	4.02	
	3.06	2.90	2.60					
82.87	4.45	4.71	4.91	4.77	5.07	7.15	7.70	7.44
1.93					3.73	4.11	4.75	3.91
84.80 N1	5.23	6.20	7.70	8.45	7.87			
82.87	79.82	78.85	6.30	3.88				
2.18								
85.05 N1								

2817

85.50 59

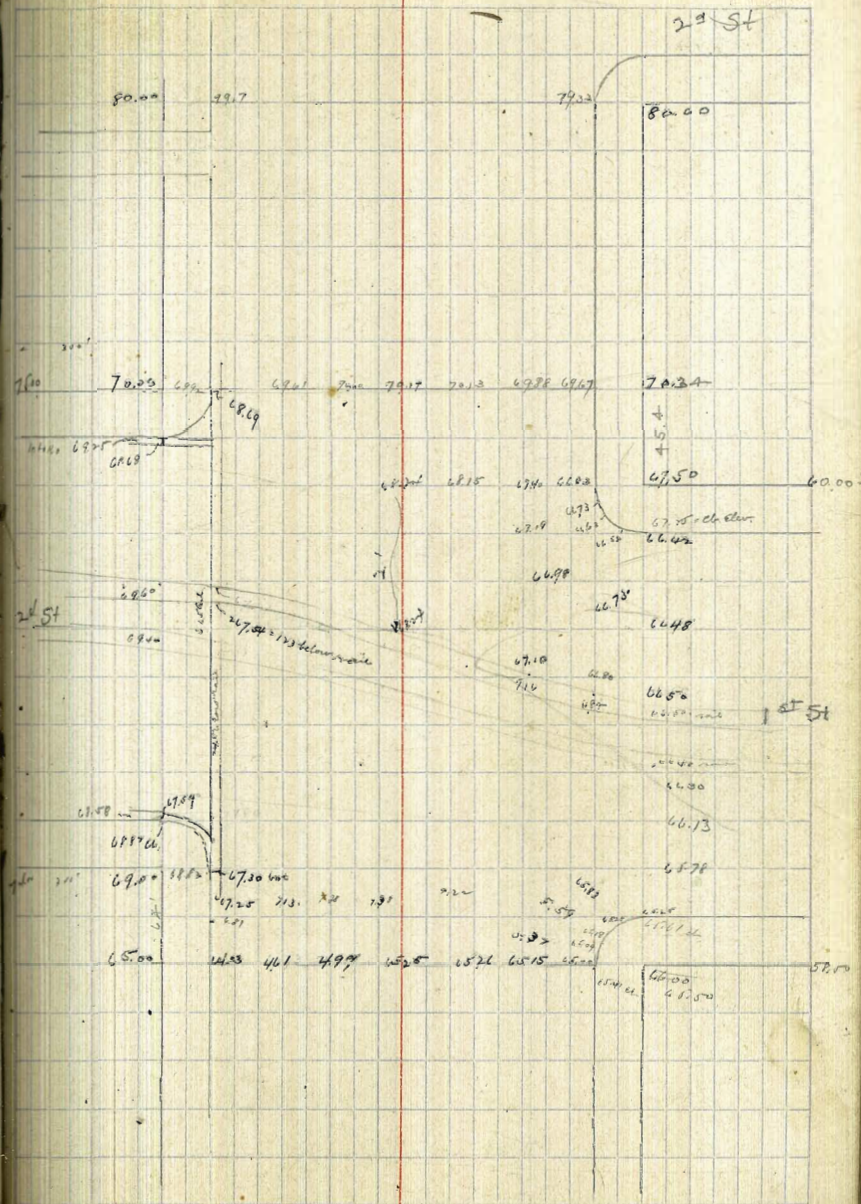
83.50	82.23	83.10	83.47	83.60	82.13	82.89	82.95	82.70
82.87								
82.87								
82.87								
83.06								
83.00	82.40	82.00	83.07					
82.95								
82.75								
82.50								
82.00	82.17	82.37	82.47	82.57	82.20	81.70	81.43	82.15
81.00								
81.00	81.36	81.50	81.67	81.79	80.72	80.33		81.00
80.75								
80.50								
80.50								
80.26								
80.00								
79.81								
79.66								
79.50								
79.33								
79.22								
79.10								
79.00								
78.91								
78.78								
78.50								
78.40								
78.30								
78.20								
78.10								
78.00								

1st NW P19 250.90

2d NW 2682

6882 6.05	605	5.84	6992	6992	1424	144
7487 M.	6882	69.03	119	495	174	6710
		67.59	68.73			671
6882 6.17	6873	6.05	5.52			
74994	6.14	6882	19.47	68.33		5.06
	70.10	70.7	4.1	7.66	4.8	1.23
	4.89	4.82	10.18	67.22		3.83
2682 5.23	5.28	4.15	6882	68.69	67.57	67.30
274.05 M.	6877	69.91	5.37	6.36	5.46	6.75
	6884	68.27				
6882 6.72	69.61	70.00	70.17	70.13	68.88	
7554 M.	5.93	6.56	5.34	5.41	5.03	
	7.11	7.20	6.26	6.2		
7678	66.50	66.41	6.22	5.31		
4.79					5.48	6.23
270.61 M.	6824	68.21	6.87	7.16	6.15	67.40
	5.23	5.56	6.71	6.41		
6882 6.71	67.9	69.2	7.10	6.80	6.72	6.57
7557 M.	6.44	6.65	6.52	6.83	6.90	7.13
	6.72	6.53	6.52	6.18	6.09	6.00
6882 4.81	7.21	7.10	6.38	6.46	6.54	6.60
	6.33	6.61	4.98	5.25	5.22	5.15
7563 M.	9.38	9.02	8.64	8.38	8.37	8.48
						8.26
6882 0.84	5.83	6.13	6.30	6.85	7.28	7.13
69.66 M.	7.80	7.50	7.38	6.81	7.38	7.22
						2.60

60

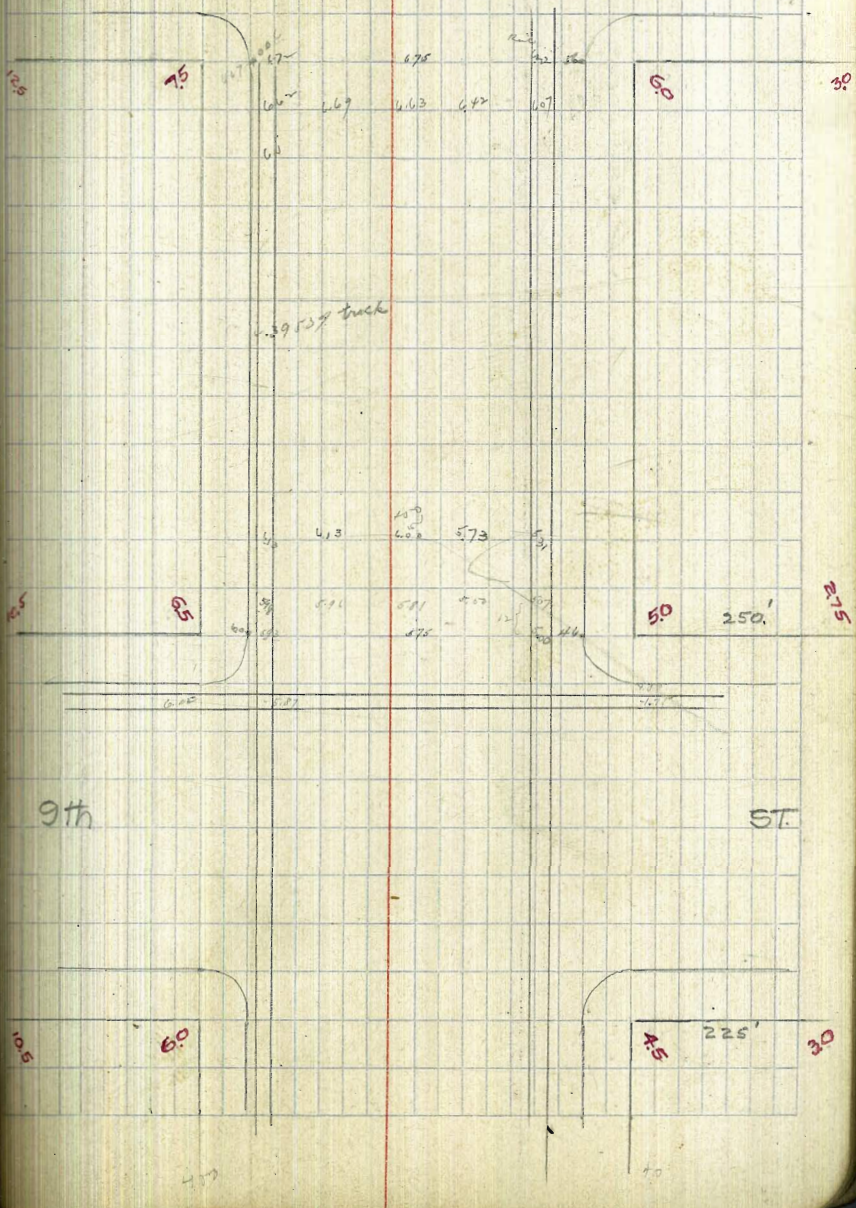


The Ordinance establishes the grade of the center

line of M St. at 18" above the average of gutter grades. ST

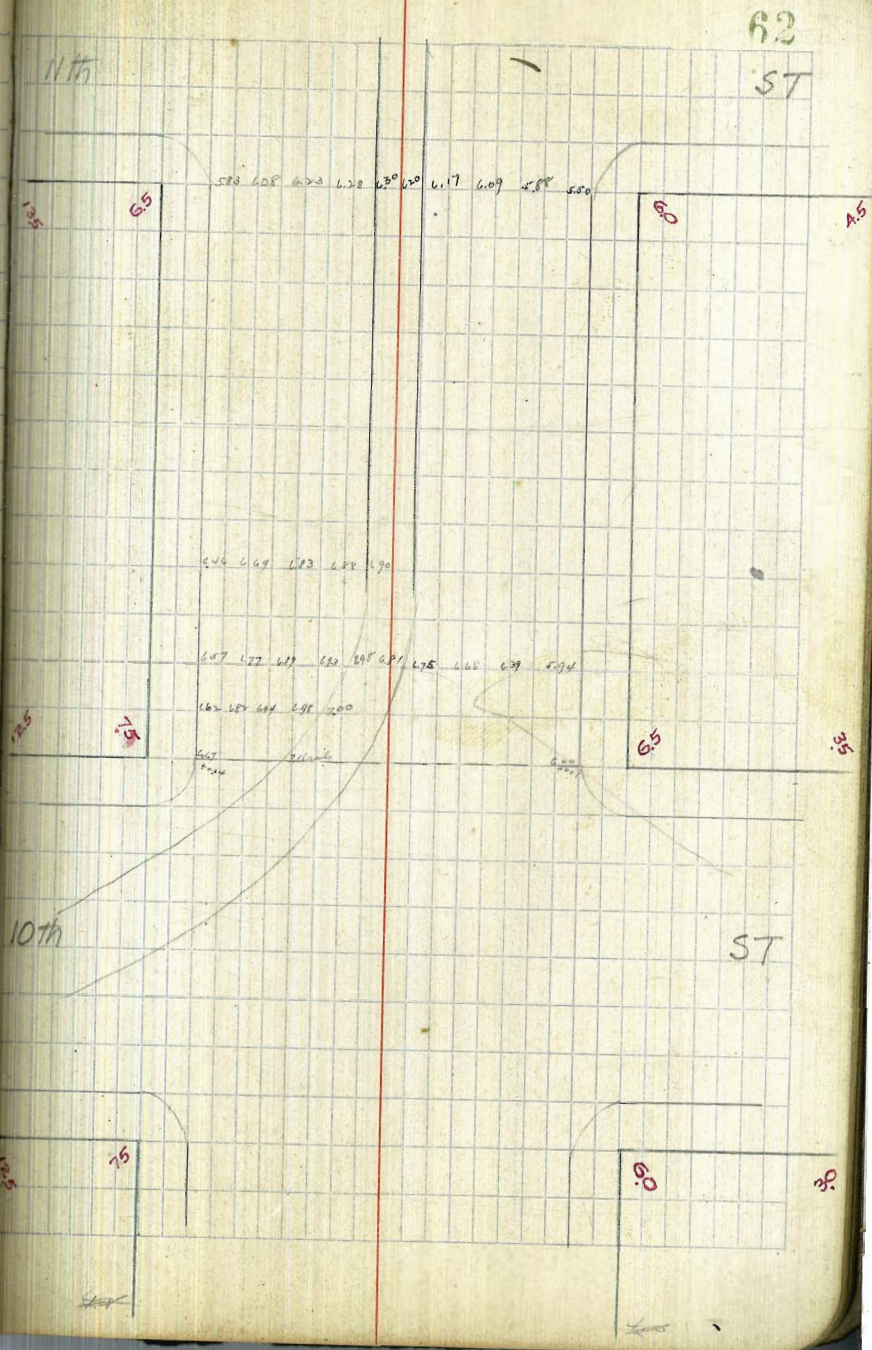
5.01	5.81	5.81	4.91				
5.71	4.91	4.91	5.01	5.01	5.01	5.01	5.01
10.72							
5.01		5.73	6.00	5.13	6.49	6.63	6.44
5.72		5.00	4.73	4.60	4.04	4.10	4.31
10.73	M						
5.01	4.10	4.37	5.50	5.81	5.96		
5.60	6.11	6.24	5.24	4.94	4.99		
10.61	4.78	6.00	5.18	4.60			
5.01	5.99	4.75	5.07	6.15			
5.74	5.11	4.02	4.13	6.00	5.73		
10.75	5.60	6.73	4.62	4.71	5.02		

5.01	4.56
5.93	5.38
10.44	



10th NE Pig 7.48

3.35	4.7	4.82	5.52	5.83
10.83	6.71	6.08	6.22	5.00
3.29	4.00	6.75	6.64	6.39
10.77	6.77	4.02	4.11	4.28
1.50	4.17	6.29	5.88	5.98
9.27	4.60	4.58	4.89	4.12
3.62	3.94	4.16	4.19	4.00
7.74	7.16	6.84	6.91	6.90
11.10	6.88	6.83	6.69	6.22
7.48	4.22	4.27	4.31	4.24
4.73	5.52	7.28	6.22	6.08
12.71	6.68	4.96	4.24	4.27



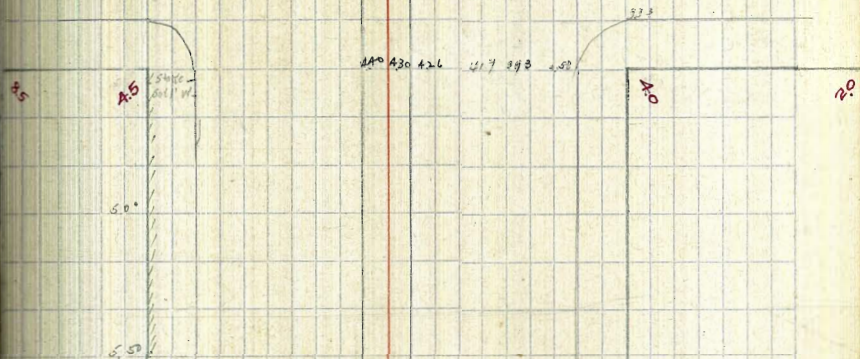
11th N W Spk 644

3.53	13th NW 12th St.								
4.91	4.50	5.00	5.50	10.77 MI.	4.92				
9.44	4.94	4.44	3.91		5.85				
3.53									
6.00	5.50	3.62	5.07	5.57	5.57				
9.53	6.03	4.03	5.91	5.70	4.23	5.27			
4.27	4.22	5.11	5.72	5.65	5.58	5.49	6.00	5.88	
1.29	6.22	4.75	4.83	4.94	4.98	4.67	4.12	4.08	
10.56	MI.								
	6.09	6.17	5.71	5.71	5.37	5.32			
9.27	4.47	4.59	5.11	5.15	5.19	5.23			
1.20	6.28	6.21	6.01	5.72	5.73	5.73	5.68		
10.27	4.10	4.26	4.26	5.22	4.74	5.37	5.42		
3.02	11.10	MI.	6.28	6.27	6.01	5.85	5.23	5.85	
			4.22	4.91	5.09	5.85	5.27	5.28	
	5.50	MI.	5.41	5.37	5.23	5.17			
	5.60	5.60	5.69	5.73	5.77	5.28			

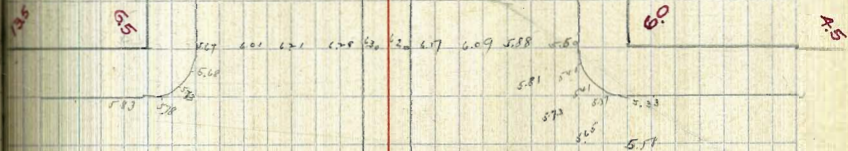
63

12th

ST.

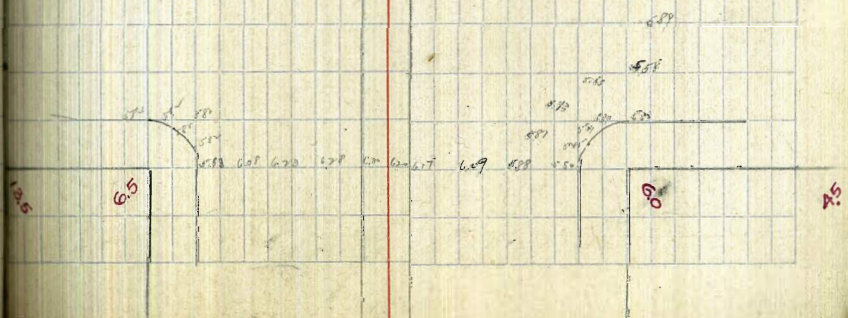


9.27 top hydr.



11th

ST.



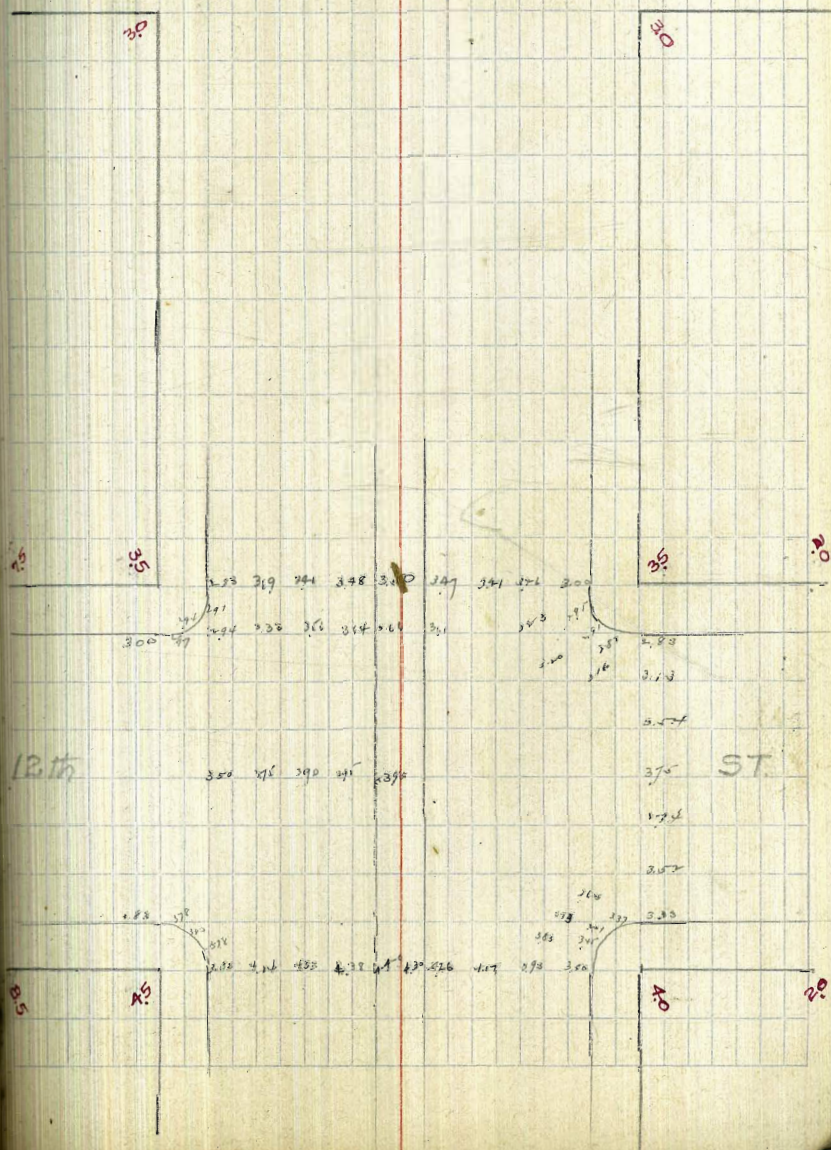
12th N. Spig 353

4.71	322	323	325	316	313	354	377	374	377
4.98	5.01	5.02	5.05	5.11	4.70	4.69	4.50	4.7	
3.62	2.70	3.01	3.0	4.08	4.17	3.93	3.83	3.75	
4.12	4.20	4.22	4.26	4.18	4.07	4.31	4.21	4.51	
3.03	3.44	4.28	4.26	4.22	4.17	4.25	4.15	3.33	
4.41	4.30	3.06	3.98	4.07		4.29	4.23	4.27	
3.53						4.12			
4.7	5.83	5.87	5.81	5.79	3.61	3.94	4.12		
5.03	5.41	5.39	5.33	5.32	4.63	2.88	3.8		
8.37									
5.13	3.60	3.76	3.33	2.94	3.95	3.90	3.75	3.50	
5.03	4.92	5.00	5.23	5.12	4.66	4.66	4.81	5.06	
8.56	4.82	4.14	4.25	4.38	4.97	4.9	4.9		
	4.73	4.42	4.23	4.18	5.59	5.62	5.64		

64

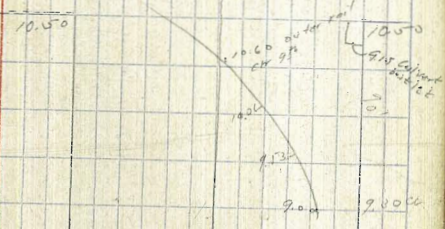
13th

ST



5.01	S.E. 9.7	11.19	1.99	3.44	9.00				
7.58		2.98							
12.59	HT	9.67	10.66	9.15	3.89				
		6.77	6.57	5.87					
		5.79	5.02	6.72					
5.01	Paris	7.13	10.05						
6.54		3.06							
11.55	HT	5.07	5.99	5.25	5.00				
		6.48	5.56	6.19	6.44				
				6.67	6.67				
5.01	4.56	4.12	4.28	4.68	5.05	5.43	6.86	7.17	7.36
5.43	5.79	6.04	6.16	5.76	5.05	5.43			
10.44				5.87	5.01				
5.01	6.50	4.50	4.37	4.25					
6.43	4.94	6.9	7.07	7.19					
11.44	HT								
5.01	6.5	10.50							
7.75	6.25	2.25							
12.75	HT								

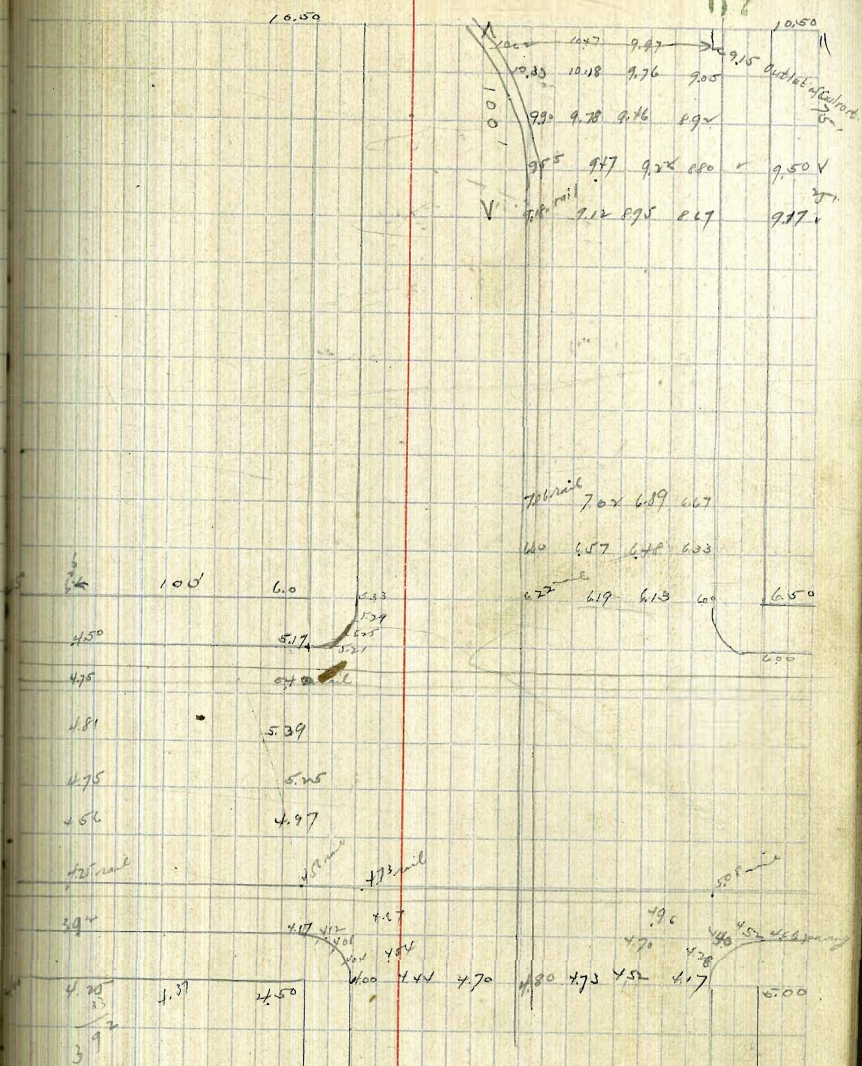
11.50 11.50



4.00	4.75	5.00	5.25	6.25	6.50
4.25	4.75	5.00	5.25	5.99	4.50
4.00	4.25	4.50	4.75	5.07	
4.00	4.25	4.50	4.75	4.75	5.00

5.01 S.E. 9th & M. Plug in Pt.

702	6.08	5.84	5.81	6.14	6.22	5.99	5.81	5.39	2.85
12.03 AM	5.95	6.19	6.22	5.89	5.81	5.95	9.18		
	9.12	8.95	6.22	6.17	6.13	6.48	2.57		
	2.91	3.08	5.87	5.82	5.72	5.58	5.46		
5.01	7.02	6.14	5.01	4.17	4.21	6.32			
4.56	5.01	5.14	4.50	5.40	4.76	4.25			
9.57 AM	5.39	5.75	4.97	4.56	4.75	4.91		9.67	
5.01	4.18	4.22	4.60	5.01	4.87	4.76		4.70	
9.59 AM	4.50	4.37	4.24	6.00			13.37		
	5.07	5.22	5.34	3.07			4.97		
5.26	5.18	5.75	5.29	5.21	5.17	4.50		3.50	
10.27 AM	5.39	5.07	4.78	5.06	5.10	5.77			
5.03	6.00	5.67	2.98	5.7	5.1	4.1	1.52		
14.12	6.13	3.47	4.16	9.55	9.90	10.33	11.62		
	9.12	8.5	9.2	9.47	9.73	9.46			
5.01	3.02	5.19	2.92	2.67	2.32	2.68			
4.95	9.76	10.18	10.47	9.97	5.15	4.89	5.34		
9.96 AM	2.38	1.96	1.67	2.17	4.61	5.08	5.31		
	5.23	4.17	4.52	4.73	4.48	4.40	4.12		
	4.73	5.79	5.44	5.23	5.68	5.56	5.44		
	4.96	4.90	4.0	4.5	4.0	4.01	4.08	4.12	
	5.00	5.26	5.52	5.22	5.72	5.92	5.88	5.24	
	4.17	3.92	4.5	4.67					
	5.99	6.04	5.22	5.29					

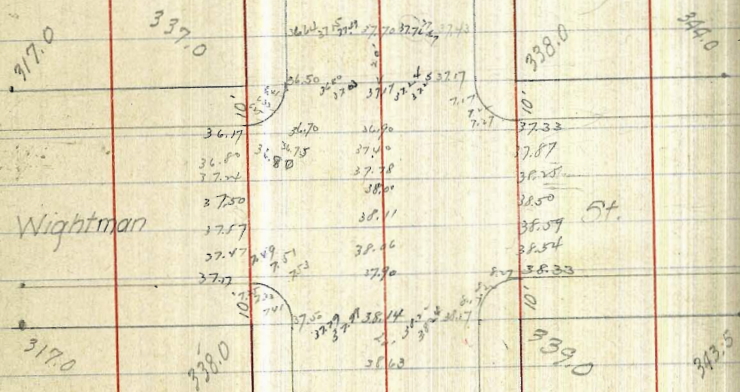


OREGON STREET.

University Ave.

322.0 338.66' 14' 37' 14' 341.30 345.0

250' OREGON 250'



338.0 Wightman S.W. Pigt.

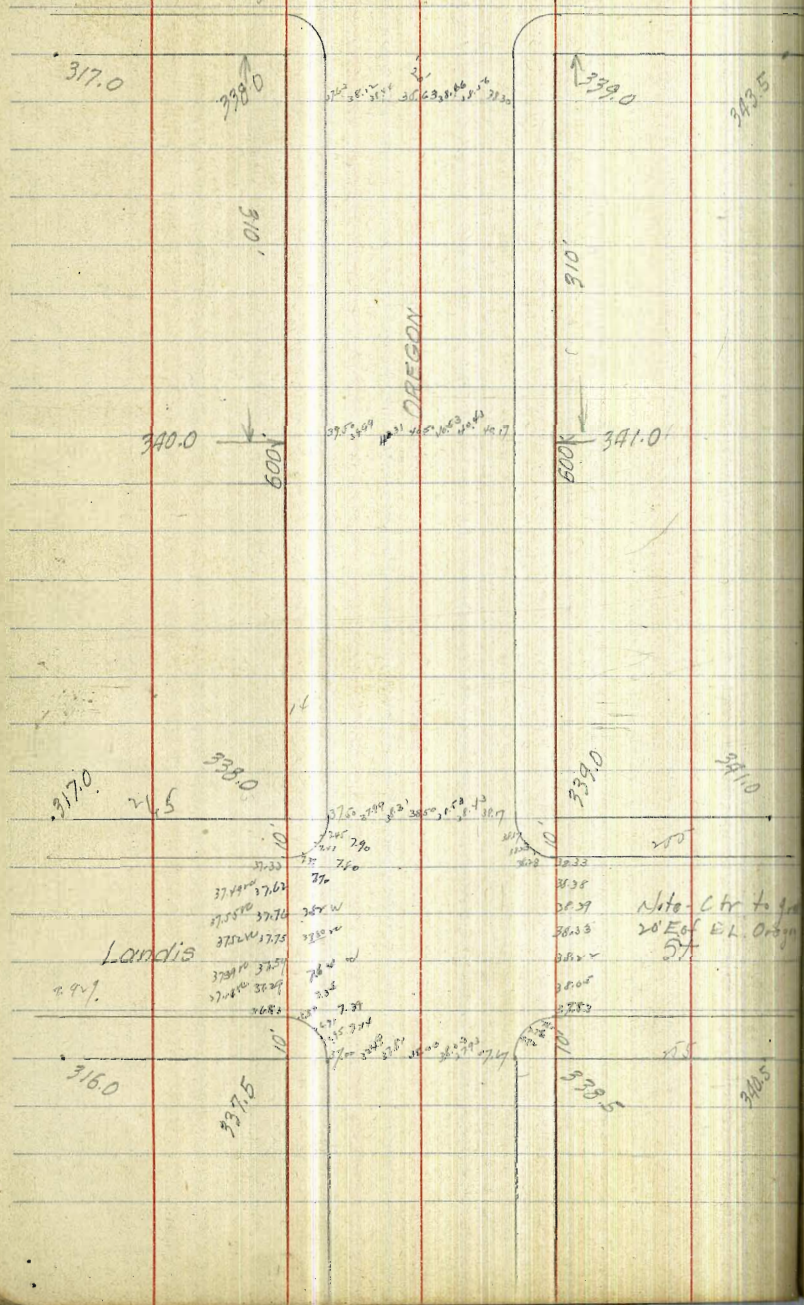
337.04	37.17	29.17	7.17	6.10	38.01	38.16	40.17
343.45	5.95	5.28	6.24	6.95	43.03	4.87	256
5.15	37.70	32.78	1.82	28.63			
43.16	5.46	3.18	42.84	42.1			
38.91	37.15	7.49	7.7	7.76	7.7		
43.48	6.33	5.99	5.75	5.72	5.41		
	40.16	40.06	39.73	39.30	32.72		
	3.32	3.42	3.75	4.18	4.72		
37.07	36.93	7.41	7.33	7.25	7.17	6.17	6.33
42.95	6.05	5.12	5.26	5.28	5.36	6.36	6.28
38.01	7.17	7.24	7.27	7.33	6.33	6.27	6.17
42.53	5.34	5.37	5.26	4.2	4.26	4.31	4.36
4.23	77.17	1.25	8.59	8.54	6.17	6.10	7.17
38.01	4.66	4.28	5.94	3.70	5.63	2.74	3.99
42.24	7.79	7.91	8.14	8.22	8.21	7.25	7.24
	4.5	4.25	4.10	4.0	4.97	5.00	5.07
	5.44	6.75	6.75	6.6	7.10	7.17	7.47
	7.49	7.51	7.53	7.70	8.06	8.11	8.0
40.16	4.75	4.71	4.37	4.15	4.13	4.7	4.66
39.0	7.17	7.24	7.03	6.2	6.2	3.65	3.65
44.06	5.07	5.00	5.21	5.52	5.5	3.16	3.16
4.9							

Wightman

ST

Landis SE. Pigt. 339.40

70



339.40	37.47	37.00	37.50	37.17	35.77		
339.40	4.67	5.24	4.78	4.11	340.79		
339.40	32.50	40.17	58.40	38.50	42.5		323.7
339.40	4.04	4.17	6.02	5.9	4.9		17.1
339.40			44.43				326.0
339.40	37.93	38.03	38.05	2.81	7.89		17.6
339.40	3.77	3.64	3.27	4.06	4.38		9.9
339.40	38.43	31.52	31.5	31.31	37.99		7.8
339.40	4.39	4.29	4.32	4.51	4.73		6.9
339.40							
339.40	39.99	41.31	40.50	40.53	40.73	38.03	38.00
339.40	5.20	4.88	4.67	4.66	4.76	5.00	5.00
339.40	3.01	3.12	3.41	3.63	4.06	3.74	3.44
339.40	5.44	5.12	4.93	4.50	5.60	5.59	5.60
339.40	7.34	7.16	7.39	7.52	7.55	7.49	7.20
339.40	5.74	5.92	5.89	5.56	5.53	5.59	5.39
339.40	7.13	7.70	7.67	7.32	7.42	7.05	7.60
339.40	5.25	5.26	5.39	5.36	6.15	6.51	6.57
339.40	7.32	7.37	7.41	7.45	6.17	6.23	6.28
339.40	5.75	5.71	5.67	5.63	5.71	5.75	5.66

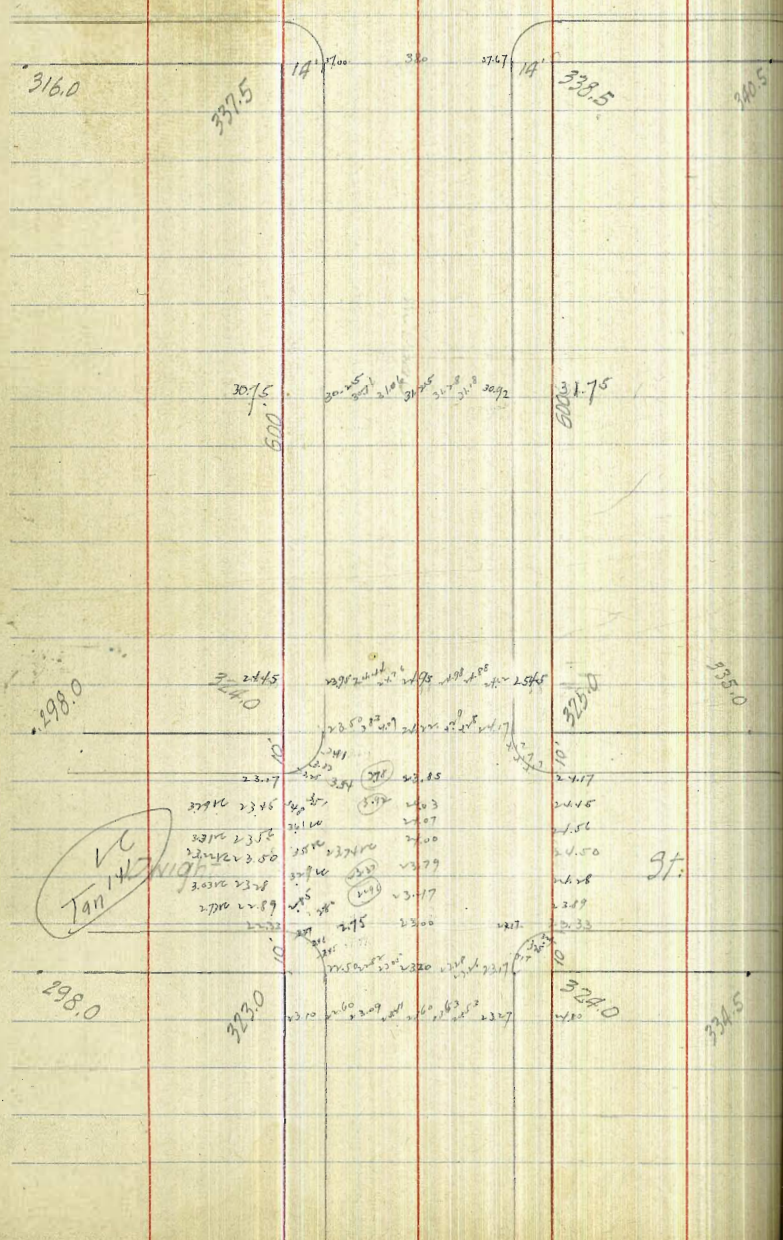
Note - Ctr to 40
 20' E of E.L. Oreg
 ST

Landis

St.

Dwight. 5E 32401 plgrt.

71



	4.17	4.10	3.25		
4.27	4.59	5.57	5.23		
307.4	310.6	312.1	312.8	31.18	
36.5	5.76	5.42	5.28	5.27	5.32
24.01	4.88	4.99	4.91	4.76	4.44
29.72	4.26	4.16	4.14	4.38	4.70
24.01	4.28	3.89	3.24	3.05	2.75
24.01	4.08	4.22	5.11	5.26	5.56
24.01	4.81	5.58	5.28	5.09	5.00
24.01	4.27	4.02	4.87	3.95	4.03
24.01	3.75	4.07	3.61	3.73	3.27
24.01	6.02	4.76	4.74	4.98	5.02
24.01	5.26	5.70	5.44	5.98	5.72
24.01	4.90	4.59	3.98	3.84	3.26
24.01	4.20	4.95	3.60	3.92	4.50
	3.26	4.01	5.01		

St.

334.0

334.5

3 24.00

Drought

J

321.00

2980

3230

14' 23.0 37' 23.0 14' 23.0

3240

3245

3240

800

OREGON

3250

Set from drought Myrtle

3255

301.0

3260

10'

3270

3275

Myrtle

10'

Ave

301.0

3260

10'

3270

3275

293.0

Park Line

324.0

3250 3260 3270 3280 3290 3300 3310 3320 3330 3340 3350 3360 3370 3380 3390 3400 3410 3420 3430 3440 3450 3460 3470 3480 3490 3500 3510 3520 3530 3540 3550 3560 3570 3580 3590 3600 3610 3620 3630 3640 3650 3660 3670 3680 3690 3700 3710 3720 3730 3740 3750 3760 3770 3780 3790 3800 3810 3820 3830 3840 3850 3860 3870 3880 3890 3900 3910 3920 3930 3940 3950 3960 3970 3980 3990 4000

325.0

Myrtle S.W. Spk pole 326.80

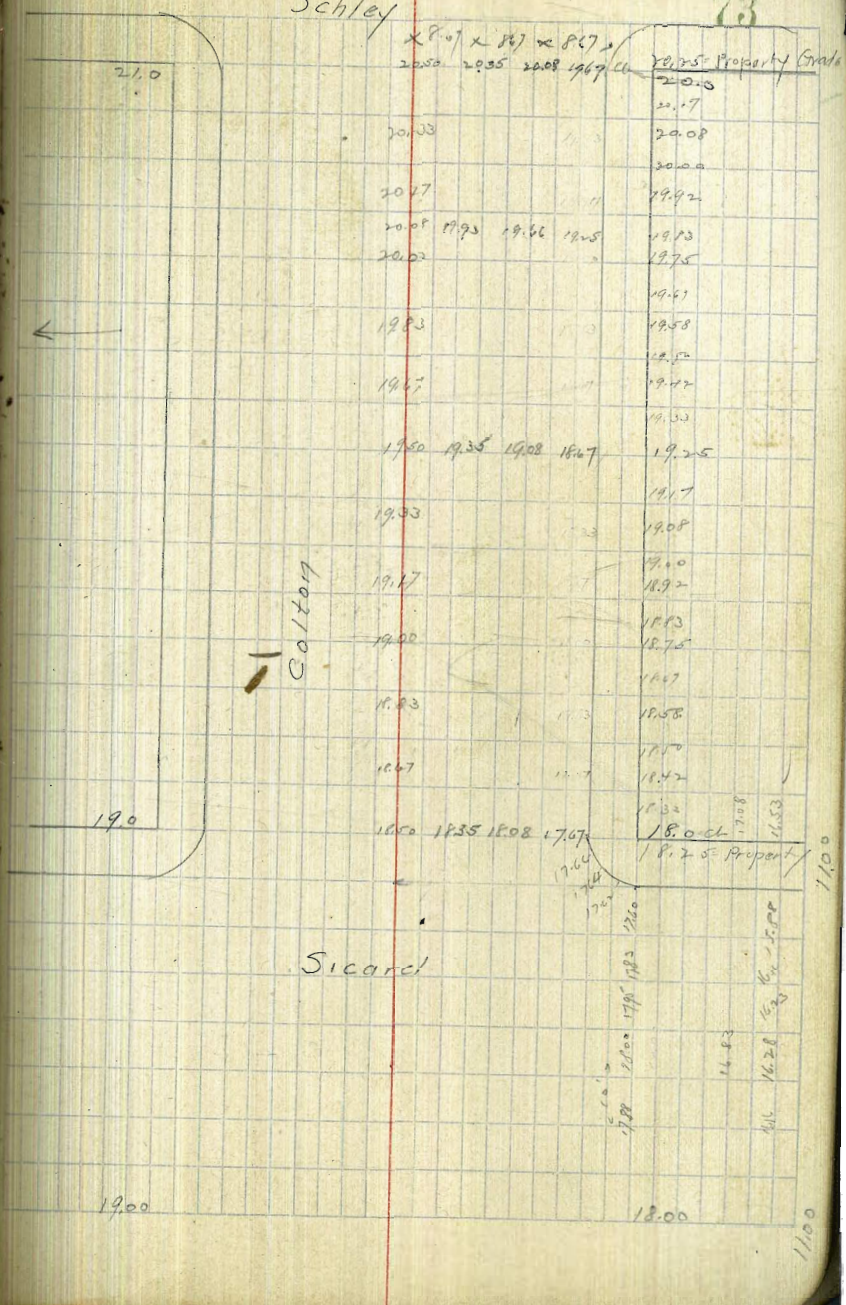
26.80	25.5	26.17	23.5	24.7	26.80	26.17	23.5
20.85	8.05	4.68	7.85	6.68	3.84	4.11	0.76
3.79	2.5	2.67	2.07	1.8	30.66		
30.58	4.07	5.92	5.57	5.59			
22.5	23.7	23.60	5.26	5.99	6.37	6.50	
4.71	6.21	5.54	5.16	5.15	4.82	4.62	
2.76	2.99	2.62	2.60	2.63	6.53	6.63	6.57
4.22	3.89	3.71	3.68	3.74	4.01	4.71	4.20 4.57
3.4	3.99	4.52	4.10	4.53	6.55	4.71	4.72 7.00
300.27	4.27	5.89	4.71	5.68	5.74	4.49	4.43 4.22 4.14
26.80	26.71	5.92	6.0	5.77	5.85	5.92	6.92 6.71
6.32	5.43	5.24	5.14	5.37	5.29	5.22	4.22 4.23
31.12	5.1	5.85	5.27	5.2	5.6	5.42	5.37 5.33
26.80	5.2	5.29	5.37	5.6	5.6	5.72	5.77 5.87
3.22	6.21	6.2	6.33	26.73	2.03	26.00	2.81 4.49
300.27	4.93	4.89	4.85	4.81	5.07	4.97	5.0 5.21 5.53
240.1	2.53	2.33	2.60	3.41	3.09	5.85	5.21 6.63
28.20	4.87	4.87	4.64	4.77	5.11	5.46	5.59 4.87
26.80							
300.27							

Main & Sicard S.E. Plg. rd. 27, 48

2748	19.58	18.67	18.13	19.00	19.17	19.33	19.18	19.67
096	5.48	5.31	5.18	4.77	4.81	4.65	4.48	4.31
2824	20.99	19.00	4.21	3.91	3.57	3.3	3.17	3.01
756	5.27	20.00	4.21	4.18	4.10	4.04	3.97	3.89
21.18	19.00	4.27	5.18	3.94	3.57			
23.98	19.23	4.2	4.6	4.4	4.27			
23.95	20.25	20.06	18.82	19.75	19.52	19.12	19.05	19.08
19.96	4.21	4.07	4.25	4.42	4.59	4.75	4.92	5.09
24.17	18.92	18.75	18.58	18.42	18.27	17.50	17.67	17.67
	5.25	5.42	5.59	5.75	4.67	6.67	6.50	5.09
						4.17	4.09	
21.18	18.83	18.00	18.17	18.33	18.50	18.67	18.83	19.00
180	6.34	6.12	6.80	6.55	5.62	5.50	5.34	5.17
22.98	5.8	4.8	4.7	4.63	4.15	4.07	3.97	3.85
22.98	19.17	19.32	19.50	4.75	18.50	17.50	17.02	
	5.00	4.8	4.67	18.23	4.58	4.78		
	5.15	5.3	5.2	4.05	4.05	4.05		
18.23	17.67	18.00	18.35	18.50	18.58	18.67	18.75	
504	5.57	5.16	4.99	4.74	4.66	4.57	4.49	
23.24	18.83	18.92	19.00	19.18	19.17	19.25		
	4.41	4.32	4.24	4.12	4.07	3.99		
19.96	18.67	19.08	19.35	19.50	19.15	19.35	19.27	
397	4.57	4.16	3.99	3.78	4.53	4.58	4.5	
23.98	20.50	20.35	20.48	19.67	19.67	19.17		
19.96	4.43	3.58	3.85	4.22	5.26			
4.31	20.25	20.17	20.05	20.00	19.90	19.83		
24.24	4.02	4.10	4.19	4.17	4.35	4.44		
18.23	17.67	18.08	18.50	17.65	17.65	17.62	17.60	
358	4.14	3.73	3.31	4.16	4.17	4.18	4.21	
21.81	18.05	17.82	17.95	17.80	17.82	16.16	16.28	
	3.73	3.98	3.86	3.87	3.93	5.15	5.53	
4.51	16.46	16.23	16.11	15.85	17.08	16.55		
358	5.35	5.88	5.7	5.93	4.73	5.28		
799								
4.70								

Schley

73



Years Property Grade
20.00
20.17
20.08
20.00
19.92
19.73
19.75
19.61
19.58
19.50
19.42
19.33
19.25
19.17
19.08
18.92
18.75
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18.50
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11.25
11.17
11.08
11.00

Colton

Sicard

163.01 NW 3rd Flr

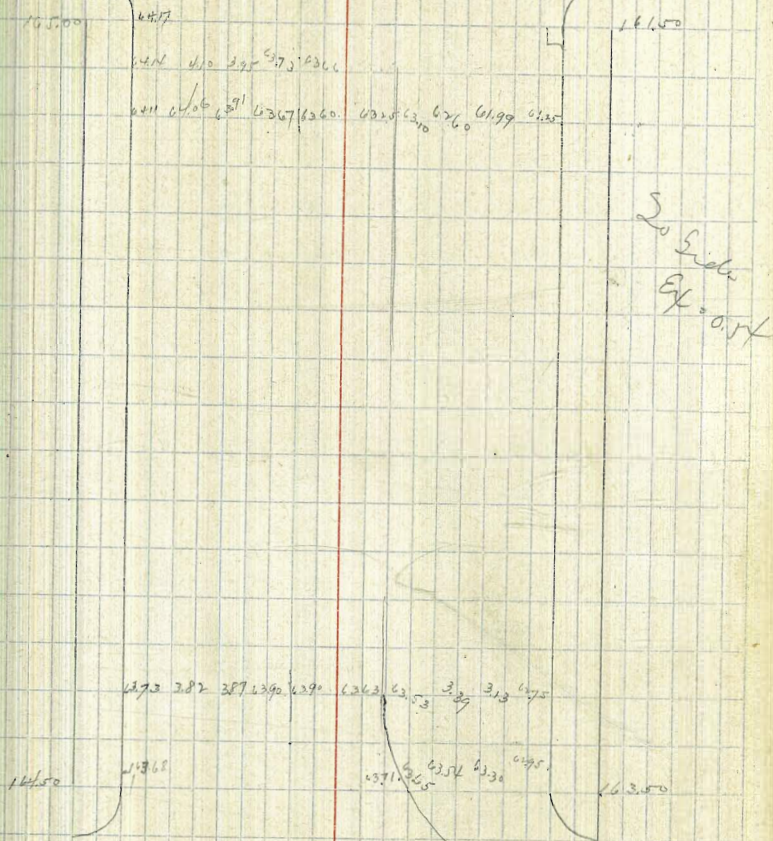
5.50

168.51 X1

11.05	2.07	3.37	16.168	5.41	4.41
11.55	1.41	2.41	16.95	3.83	163.90
12.26	4.88	4.10			1.360
13.25	6.263	13.71	4.75	3.73	3.95
3.80	0.87	3.82	4.3.26	4.78	4.56
4.61	4.64	4.69	4.47		
4.06	3.91	2.67	3.10		
4.45	4.68	4.84	5.471		5.3
3.10	2.0	1.99	3.50	3.05	
5.47	5.91	6.52	5.21	5.97	4.56
3.13	3.37	3.13	2.53		
5.38	5.12	5.38	5.98		

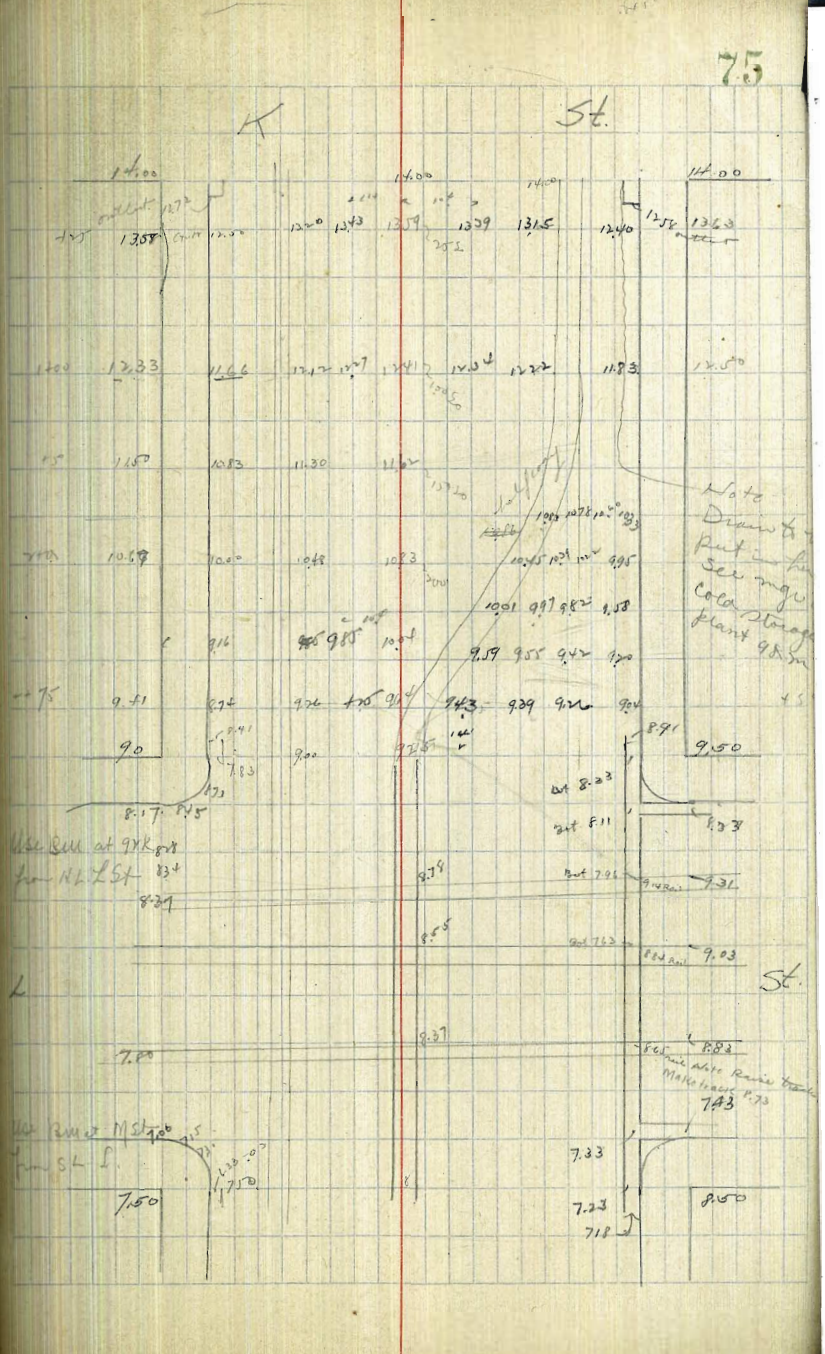
74

4th St

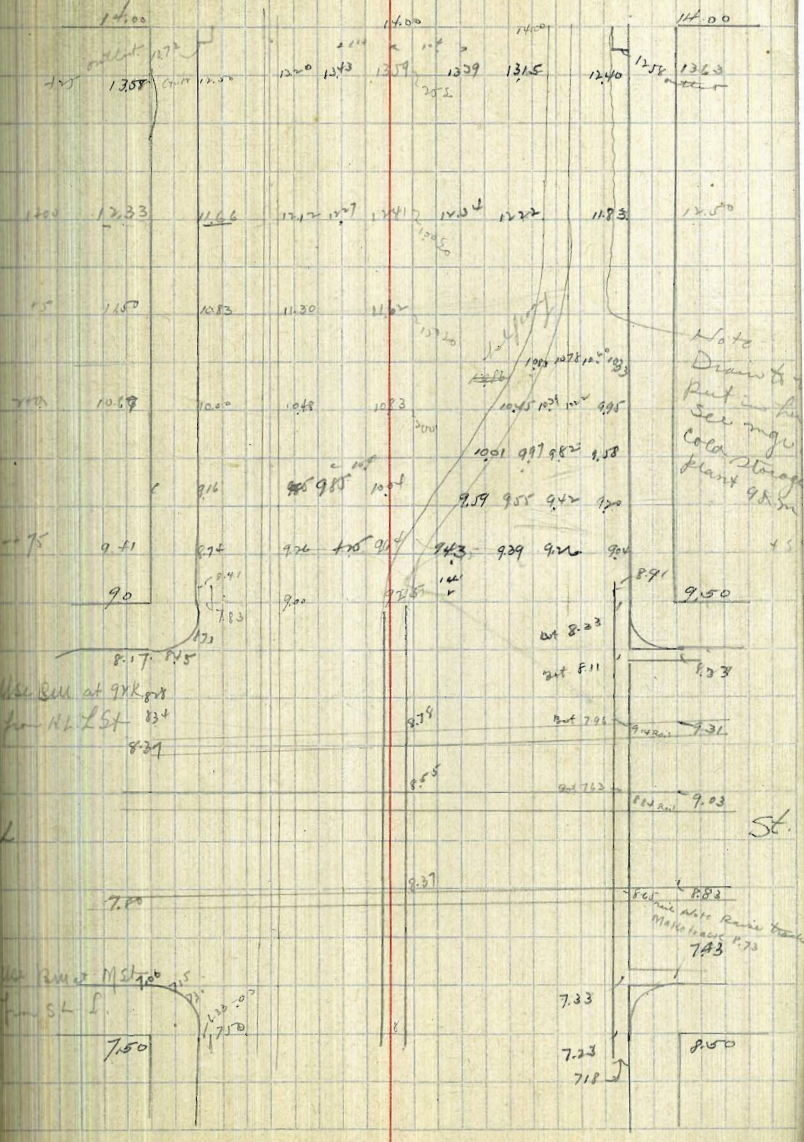


So Side
Ex = 0.154

1499	1320	1362	1447	1512	1630	1756	
1782	1750	1735	1705	1680	1650	1620	
1039	1047	1020	1000	975	950	925	
1389	1401	1415	1435	1460	1485	1510	
	1000	1000	1000	1000	1000	1000	
1499	1317	1283	1250	1217	1184	1151	1118
1501	1314	1280	1247	1214	1181	1148	1115
1499	1304	1265	1226	1187	1148	1109	1070
1501	1301	1262	1223	1184	1145	1106	1067
419	491	49	515	632	723	773	823
950	478	878	855	827	796	766	735
1366	783	241	633	577	630	683	736
	541	483	691	747	794	849	896
	668	1315		712		737	762
	1258	511		296		321	346
	460	1322	500	511	575	629	683
	1366	604	268	1258	199	629	683
1499	1339	1359	1373	1387	1401	1415	1429
269	429	409	425	440	455	470	485
768	1227	1241	1254				
695	541	527	534	540	547	554	561
1083	541	527	534	540	547	554	561
382	222	210	204	206	207	208	209
1465	1083	1040	1001	959	917	875	833
817	1004	983	961	939	917	895	873
944	461	442	424	406	388	370	352
	939	926	917	912	907	902	897
	526	539	468	483	498	513	528
	1878	1060	385	607	745	883	1021
1292	387	415	907	745	883	1021	1159
	832	878	817	847	877	907	937
	455	458	464	476	487	496	509
	645	700	715	730	745	760	775
	747	597	577	562			



St.



1400

St.

5.01 B.P.S.E 9 AM

5.25 North Pole NE 8 AM

5.27 5.91 5.73 4.15 2(3.07)
10.28 4.87 4.55 7.7667

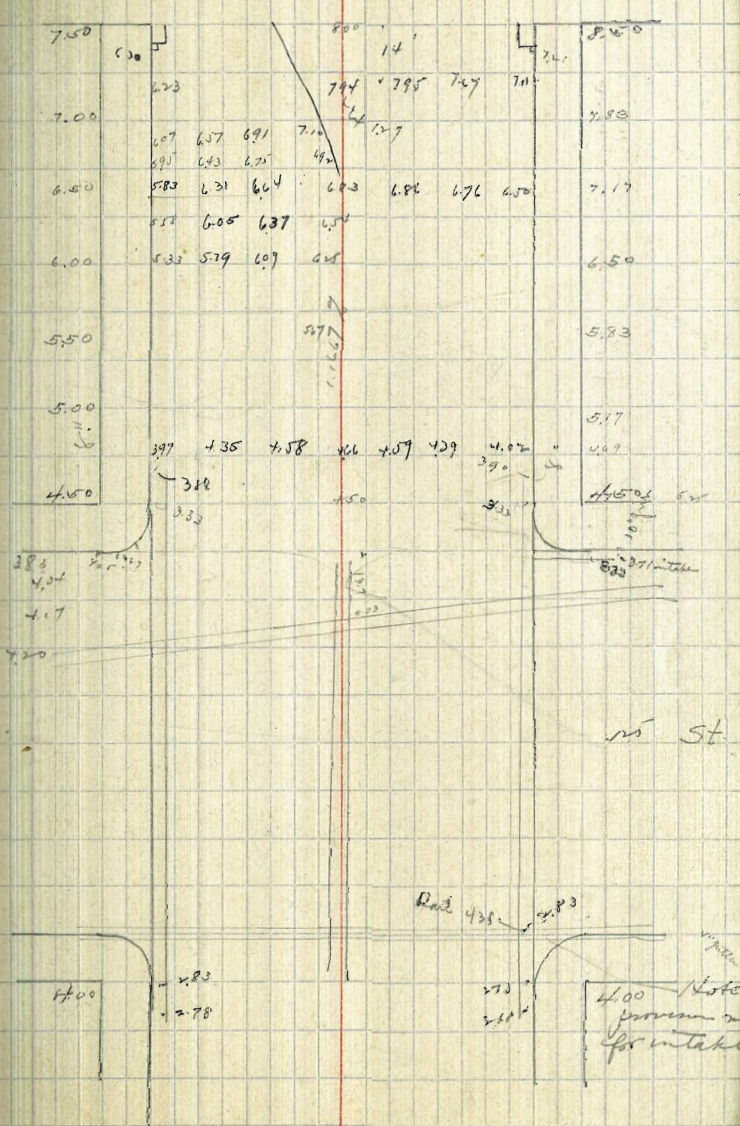
5.38 5.35	4.50	4.33	5.14	5.67	6.19	6.73
5.01	6.35	6.52	5.71	5.18	4.46	4.82
4.52	3.96	6.36	5.95	5.39	5.11	4.11
9.53 M	4.39	4.16	-2.20	-0.21	-0.45	-0.16
4.62	1.22	Comy				
4.89 10		8.00	4.50			
5.93	7.42	2.85	5.20	5.35	4.07	1.25 ch.
10.85 M	3.40	2.09		4.75	78	
	3.67			2.97		
	-1.24	40.16		2.8		

5.35	7.50	7.00	6.50	6.00	5.50	4.50
5.79	3.64	4.12	4.24	4.14	4.24	4.50
11.14						4.39
						2.73
						1.55

5.35	8.80	7.83	7.17	6.50	5.79	5.17	4.50
4.17	3.64	3.81	3.97	4.04	3.51	3.97	4.24
9.52 M	3.90	3.33	5.14	2.73	2.68	2.68	2.68
	5.62	6.19	4.38	6.79			

5.35	4.35	4.58	4.59	4.57	4.73	
3.50	6.40	6.17		4.72		
8.85 M	4.94	4.16	4.36	4.21	3.83	4.05
	4.01	4.30	4.17	4.20	5.02	4.80
5.35 NE 8 AM	4.65	4.17	4.01	4.35	4.27	5.18
4.30	4.50	5.68	4.68	4.50	4.58	4.47
9.65 M	5.14	5.68	4.81	4.50	4.58	4.47
	4.51	3.97	3.92			

L ST.



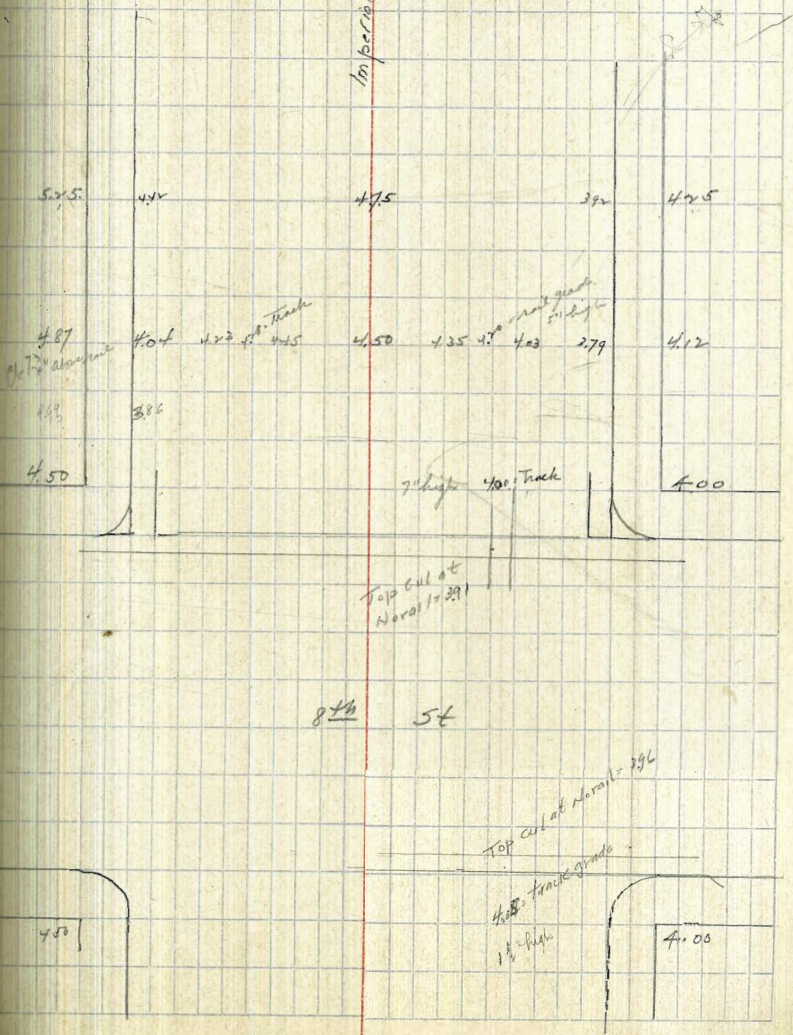
Spr	NE	PM
5.35	389	5.69
4.30	06	5.48
9.65	4.00	4.17
4.25	4.12	3.91
3.5	5.48	5.08
9.60	5.60	5.02
		4.77
		4.93

5.26	4.75	3.84	4.18	4.4	4.81	4.92	4.04	3.81	3.86	4.0	4.28
3.26	4.76	3.77	4.23	4.7	5.1	4.98	4.67	4.70	4.72	4.57	4.27
8.21	4.96										
4.0	2.70	2.6	3.7	3.8	3.88	3.92					
3.87	4.00	4.75	3.72	3.88	4.63	5.29					
4.0											
4.0											

6.00

4.50

Imperial Ave

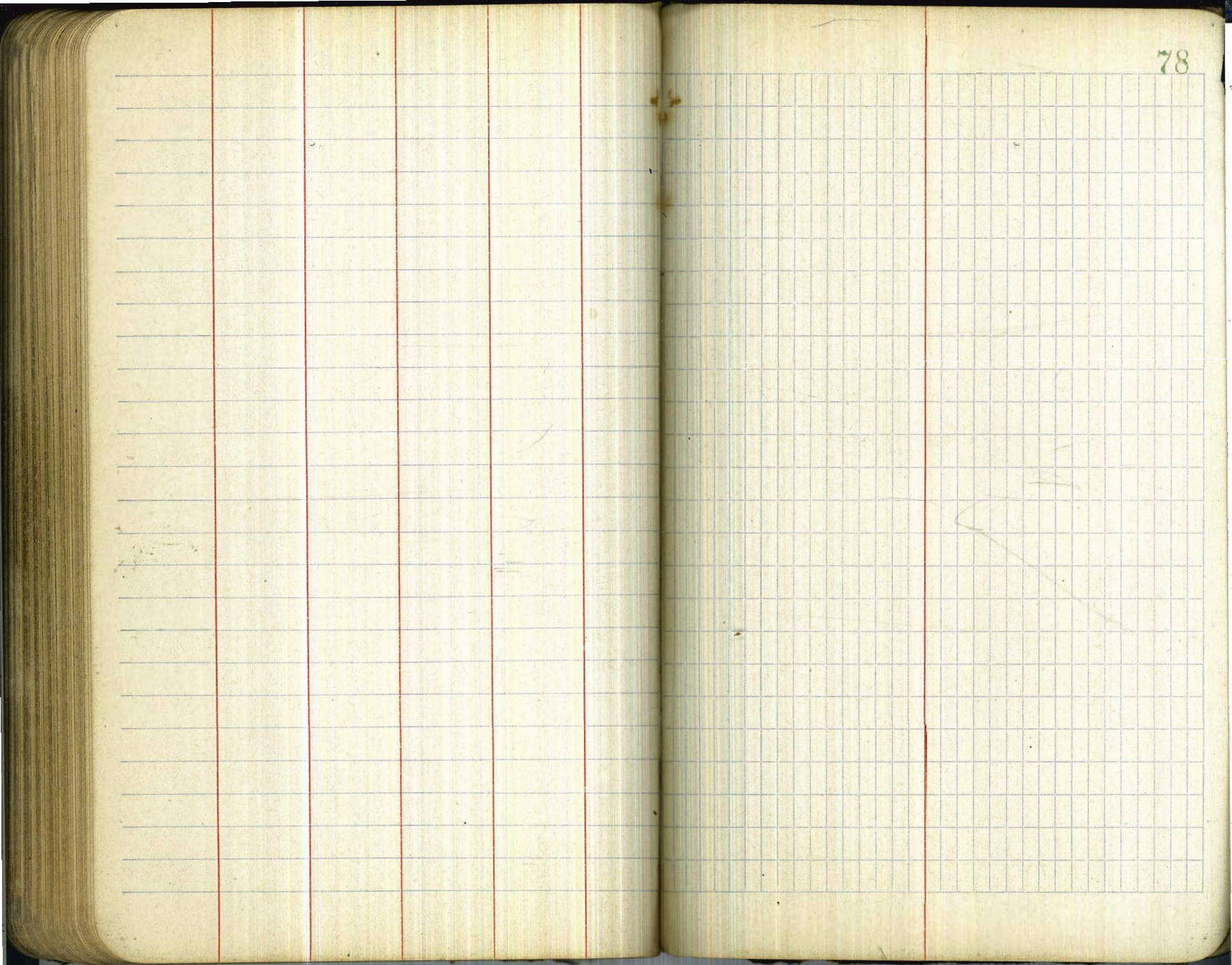


8th St

TOP CUT AT Naval = 296

4.50 Track grade

4.00

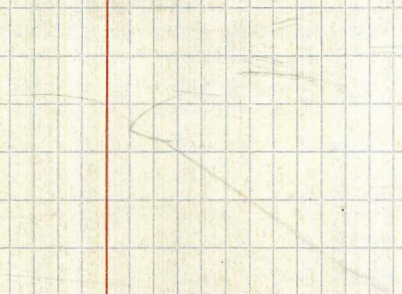


2- 80°
103-

79



1-
1-
1-
1-
1-



KEITH'S RAILROAD CURVE TABLES.

Published by KEUFFEL & ESSER CO., New York.

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HOW TO USE KEITH'S TABLES.

EXAMPLE.

Wanted a Curve with an Ext. of about 12 ft. Angle
of Intersection or I. P.= $23^{\circ} 20'$ to the R. at Station
542+72.

Ext. in Tab. IV opposite $23^{\circ} 20'$ =120.87
 $120.87+12=132.87$. Say a 10° Curve.

Tan. in Tab. IV opp. $23^{\circ} 20'$ =1183.1
 $1183.1+10=1193.1$.

Tab. V. correction for A. $23^{\circ} 20'$ for a 10° Cur.=0.16
 $1193.1+0.16=1193.26$ =corrected Tangent.

(If corrected Ext. is required find in same way)
Ang. $23^{\circ} 20'$ = $23.33^{\circ}+10=33.33^{\circ}$ =L. C.

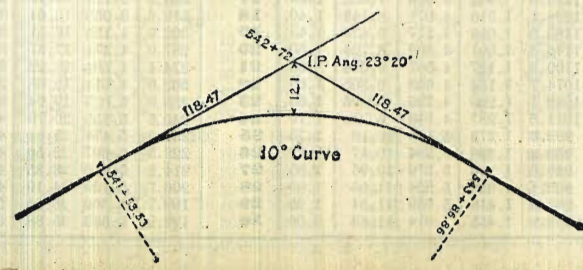
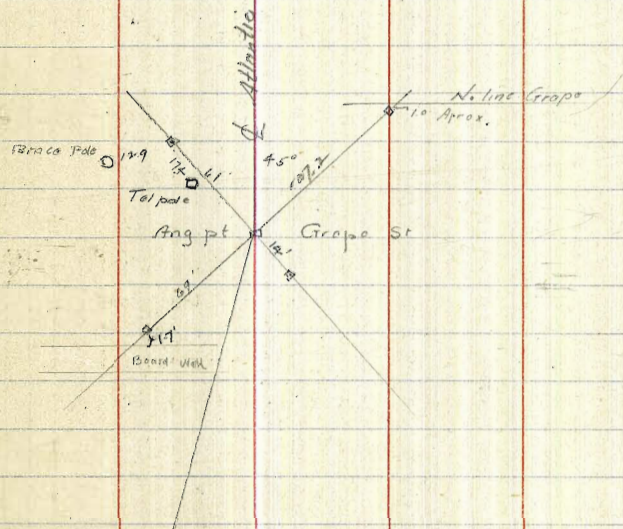
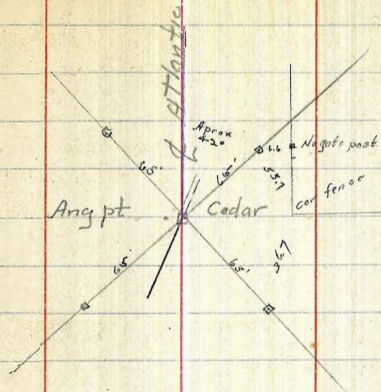
$2^{\circ} 19\frac{1}{2}'$ =def. for sta. 542	I. P.=sta. 542+72
$4^{\circ} 49\frac{1}{2}'$ = " " " +50	Tan.= 1,183.26
$7^{\circ} 19\frac{1}{2}'$ = " " " 543	B. C.=sta. 541+53.53
$9^{\circ} 49\frac{1}{2}'$ = " " " +50	L. C.= 2,333.33
$11^{\circ} 40'$ = " " " 543+	E. C.=sta. 543+86.86
86.86	

$100-53.53=46.47 \times 3'$ (def. for 1 ft. of 10° Cur.)=139.41'=
 $2^{\circ} 19\frac{1}{2}'$ =def. for sta. 542.

Def. for 50 ft.= $2^{\circ} 30'$ for a 10° Curve.

Def. for 36.86 ft.= $1^{\circ} 50\frac{1}{2}'$ for a 10° Curve

(These tables are published in Field Books of
KEUFFEL & ESSER Co., New York, N. Y.)



DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 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.

MADE IN GERMANY.

1047 - Handrioks
Dan Pedrin

Handwritten notes and calculations on the left page of the notebook. The page is filled with various numbers, including 21.36, 42.7, 17.70, 26.6, 10.35, 23.5, 31.7, 30.9, 31.1, 31.3, 31.5, 31.7, 31.9, 32.1, 32.3, 32.5, 32.7, 32.9, 33.1, 33.3, 33.5, 33.7, 33.9, 34.1, 34.3, 34.5, 34.7, 34.9, 35.1, 35.3, 35.5, 35.7, 35.9, 36.1, 36.3, 36.5, 36.7, 36.9, 37.1, 37.3, 37.5, 37.7, 37.9, 38.1, 38.3, 38.5, 38.7, 38.9, 39.1, 39.3, 39.5, 39.7, 39.9, 40.1, 40.3, 40.5, 40.7, 40.9, 41.1, 41.3, 41.5, 41.7, 41.9, 42.1, 42.3, 42.5, 42.7, 42.9, 43.1, 43.3, 43.5, 43.7, 43.9, 44.1, 44.3, 44.5, 44.7, 44.9, 45.1, 45.3, 45.5, 45.7, 45.9, 46.1, 46.3, 46.5, 46.7, 46.9, 47.1, 47.3, 47.5, 47.7, 47.9, 48.1, 48.3, 48.5, 48.7, 48.9, 49.1, 49.3, 49.5, 49.7, 49.9, 50.1, 50.3, 50.5, 50.7, 50.9, 51.1, 51.3, 51.5, 51.7, 51.9, 52.1, 52.3, 52.5, 52.7, 52.9, 53.1, 53.3, 53.5, 53.7, 53.9, 54.1, 54.3, 54.5, 54.7, 54.9, 55.1, 55.3, 55.5, 55.7, 55.9, 56.1, 56.3, 56.5, 56.7, 56.9, 57.1, 57.3, 57.5, 57.7, 57.9, 58.1, 58.3, 58.5, 58.7, 58.9, 59.1, 59.3, 59.5, 59.7, 59.9, 60.1, 60.3, 60.5, 60.7, 60.9, 61.1, 61.3, 61.5, 61.7, 61.9, 62.1, 62.3, 62.5.

Other notes include: "17° CURVE 10' Chord, cen 10.036", "20' ' ' 20.07", "140 24' Curve 10' Chord 10.026", "20' ' ' 20.05", "Old track 44777", "SE. Ditch D-1000", "No 17 11051", "Sta 52353", "1424 - 40° 36'".