

881
F.B.

LEVEL BOOK.

No. 410 T

28
 275600
 54
 20

MICROFILMED
 DEC 15 1964

EUGENE DIETZGEN CO.,
 Drawing Materials and Surveying Instruments.
 NEW YORK. CHICAGO. SAN FRANCISCO.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.
 DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING
 ROADWAY 20 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	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	0
1	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	1
2	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	2
3	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	3
4	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	4
5	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	5
6	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	6
7	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	7
8	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	8
9	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	9
10	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	10
11	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	11
12	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	12
13	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	13
14	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	14
15	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	15
16	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	16
17	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	17
18	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	18
19	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	19
20	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	20
21	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	21
22	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	22
23	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	23
24	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	24
25	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	25
26	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	26
27	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	27
28	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	28
29	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	29
30	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	30
31	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	31
32	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	32
33	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	33
34	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	34
35	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	35
36	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	36
37	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	37
38	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	38
39	49.0	49.1	49.2	49.3	49.4	49.5	49.6	49.7	49.8	49.9	39
40	50.0	50.1	50.2	50.3	50.4	50.5	50.6	50.7	50.8	50.9	40

Calculated by F. E. Paradis, C. E.

along X sec of Youngs St (90')
 Taylor through Western add
 Feb

1

	482	7091		6607	
	345	6318	11.18	59.73	6607
					482
					738
					11.18
					59.73
					345
n			9.6	53.6	0+6@18
			9.5		
			8.8		
b			8.6	54.6	
			9.5		
			11.4		
S			12.1	50.5	
	20	28	02		0+20
S			8.3	54.9	
			8.0		
			6.7		
b			5.4	57.8	
			5.0		
			5.4		
n			5.4	57.8	

PLOTTED

63.18

50 E y P2 0+50

n 37 59.5

35

38

b 43 58.9

46

45

S 41 59.1

100 E y P2 1+00

S 23 60.9

23

22

b 20 61.2

20

20

n 18 61.4

TP 1030 7211 137 6181

PLOTTED GET TO 10

72.11

Young

150 E y P2 1+50

n 90 63.1

90

95

b 95 62.6

97

95

S 96 62.5

200 E y P2 2+00

S 72 64.9

71

67

b 67 65.4

70

72

n 75 64.6

 2
 1+50
 137
 61.81
 1030
 72.11

PLOTTED GET TO 10

2211

250

E of Rd

2+50

n

60 66.1

54

50

b

45 67.6

43

46

s

47 67.4

300

E = W of Wells # (50) 3+00

s

32 68.9

35

34

b

33 68.8

42

50

n

58 66.3

Intersection of wells is

B 860

PLOTTED

PLOTTED

2211

E of Wells #

Change

3

3+50

Bm

n

602 66.09

57

55

b

53 66.8

49

45

s

43 67.8

50

E of Wells #

4+00

s

41 68.0

44

45

b

45 67.6

50

50

n

51 67.0

PLOTTED

PLOTTED

7211

100' E of Wells w 4+50

n 26 69.5

21

20

b 23 69.8

22

18

S 20 70.1

TP 9/10 7961 180 73.1

150' E of Wells w 5+00

S 56 74.0

52

50

b 55 74.1

57

61

n 64 73.2

PLOTTED

7961

200' E of Wells

n 49 74.7

45

39

b 33 76.3

28

28

S 28 76.8

250' E of Wells 6+00

S 43 75.3

46

54

b 52 74.4

64

70

n 70 72.6

TP 045 7386 620 73.41

Young

5+50 4

7211
1.80
70.37
9.10
79.61
6.20
73.41
4.45
73.86

PLOTTED

PLOTTED

7386

300 E = W of Warden (50) 6+50

n	75	66.4
	66	
	58	
b	50	68.9
	43	
	34	
S	34	70.5
W. 667 Warden		6+60
S	46	69.3
	52	
	58	
b	64	67.5
	72	
	79	
n	89	65.0

PLOTTED

7386

W. 149 Warden 6+67.5 5

n	97	64.2
	90	
	83	
b	76	66.3
	71	
	62	
S	59	68.0
center of Warden		6+75
S	70	66.9
	72	
	82	
b	92	64.7
	97	
	101	
n	112	62.7

PLOTTED

7386

E 144 Warden 6+82.5

n 118 62.1

113

110

b 103 63.6

95

85

S 83 65.6

E M of Warden 6+90

S 97 64.2

100

110

b 121 61.8

121

122

n 130 60.9

TP 050 6125 1243 6143

PLOTTED

6.93

7386

E line 1 Warden 7+00

n 48 57.1

30

22

b 22 59.7

15

06

S 10.10 62.0

TP 046 4210 1329 4864

50 E of Warden 7+50

S 10 48.1

13

31

b 49 44.2

77

87

n 97 39.4

TP 104 3741 1275 3637

PLOTTED

PLOTTED

3741

75 E of Wode 7+75

n 60 31.4

51

47

b 42 33.2

28

18

s 10 36.4

100 E of Wode 8+00

s 66 30.8

74

84

b 90 28.4

90

96

n 98 27.6

PLOTTED

3741

Young

6

125 E of Wode 8+25

n 124 25.0

121

119

b 124 25.0

125

120

s 110 26.4

150 E of Wode 8+50

s 119 25.5

124

130

b 139 23.5

144

148

n 147 22.7

PLOTTED

3741

200 E of Narden 9

n 55 31.9

62

68

b 76 29.8

76

70

S 72 30.2

TP $\frac{1266}{240}$ $\frac{4023}{E}$ $\frac{034}{E}$ $\frac{3707}{E}$

n 63 43.5

h

250' E of Narden 9+50

S 128 36.9

136

145

132

76

b 123 37.4

108

72

n 57 44.0

PLOTTED

4973

300 E = W of Warming to

S 57 44.0

58

62

b 55 44.2

40

16

TP 1254 $\frac{6218}{E}$ 009 4964

n 1164 5054

center of Warming to 10+25

n 50 57.2

b 116 50.6

S 128 49.4

E line of Warming to 10+50

S 70 55.2

b 25 59.7

TP 1215 $\frac{7316}{E}$ 117 6101

n 76 65.6

PLOTTED

Dunge

10+07

50 3741

57.07

1266

49.79

49.64

1266

62.18

1164

50.54

11

B m nw

Warming to

2316

	50	E of	Warrington	11+00
S			90	64.2
TP	1197	84.77	026	72.80
b			88	76.0
n			36	81.2
	35'	E of	W	
n			7.0	77.8
	100'	E of	Warrington	11+50
S			0.0	84.8
b			35	81.3
TP	1228	96.90	015	84.00
n			67	90.2
TP	1238	108.11	117	95.73
	150'	E of	Warrington	12+00
n			41	104.0
b			00	108.1
TP	1270	120.41	040	107.71
S			94	111.0
TP	1128	131.09	060	119.81

PLOTTED

1.31.09

Young

8

	200	E of	Warrington	12+50
S			57	125.4
b			91	122.0
n			107	120.4
	250	E of	Warrington	13+00
n			60	125.1
b			64	124.7
S			50	126.1
	270	E = PA	E of	Warrington
S			420	126.89
b			51	126.0
n			450	126.6
	250	13+00	149	125.61
			638	125.75
			STAPP 10 875	

PLOTTED

4/21/13
X sec Zouch St (70)
Through western add

64.90

touch

9

041 71.18 7077 Bm NW-K
Zouch + Well

100

E of

P.L.

1700

378 64.90 1006 61.12 n

47

60.0

P line W of Western add

48

n 61 58.8 0+00

52

57

b

57

59.2

55

59

b 53 59.6

58

50

s

58

59.1

50

150

E of

P.L.

1750

s 57 59.2

s

43

60.6

50 E of P.L. 0+50

45

s 46 60.3

42

46

b

41

60.8

52

43

b 55 59.4

45

60

n

45

60.4

62

n 63 58.6

PLOTTED

PLOTTED

PLOTTED

MAY 14-13- C.A.L.

1490

	200	E of	PL	2+00
n			25	62.4
			27	
			29	
b			30	61.9
			31	
			32	
S			33	61.6
TP	1240	7474	256	62.34
S	250	88	PL	2+50
			99	64.8
			96	
			94	
b			90	65.7
			90	
			92	
n			91	65.6

PLOTTL

7474

	300	E =	W of	Wells	Truck
					10
					3+00
n			40	70.7	7077
			42		1307
			47		8384
			54	69.3	
			56		
			65		
S			69	67.8	
TP	1307	8384	297	73.77	Bm NW
					Truck
					3+50
S			119	71.9	
			111		
			106		
b			106	73.2	
			103		
			95		
n			86	75.2	

PLOTTED

Intersect of wellset in Block 860

PLOTTL

8384

	50'	E	g Wells or	4+00	
n			59	77.9	8384
			67		548
			65		78.13
					3.79
					82.15
l			73	76.5	
			76		
			80		
s			85	75.3	
	100'	E	g Wells or	4+50	
s			37	80.6	
			26		
			20		
l			15	82.3	
			11		
			10		
n			07	83.1	
TP	379	8215	548	7836	

PLOTTED

8215

Zouch

11

	150'	Eg	Wells or	5+00	
n			05	81.7	8215
			15		126
			29		69.55
					20
					67.75
l			42	78.0	
			57		
			73		
s			88	73.4	
	200'	E	g Wells	5+50	
n			96	72.6	
ll			106		
y			124		
TP	020	6975	1260	69.55	
l			16	68.2	
y			38		
ll			51		
s			65	63.3	

PLOTTED

69.75

250 E of wells 6+00

n 69 62.9

71 19.75

82 12.96

97 60.1 56.79

116 59.65

134

TP 086 57.65 1296 56.79

S 24 55.3

300 E of W of Warden (50) 6+50

S 106 47.1

122

130

b 118 45.9

115

118

n 113 46.4

PLOTTED

57.65

Zuch

12

n W of Warden 6+60

n 133 44.4

138 57.65

136 12.27

b 147 43.0 45.38

140 89

134 46.12

S 124 45.3

TP 084 46.22 1227 45.38

n W of Warden 6+67.5

S 15 44.7

24

38

b 46 41.6

42

35

n 31 43.1

PLOTTED

PLOTTED

4622

Center of Warden 6+75

n 44 41.8

50

62

b 53 40.9

47

39

s 24 43.8

E 1/4 of Warden 6+82.5

s 29 43.3

50

60

b 61 40.1

66

63

n 57 40.5

PLOTTED

4622

E 1/4 of Warden 6+90

Touch

13

n 70 39.2

74

74

b 76 38.6

73

58

s 33 42.9

E 1/4 of Warden 7+00

s 42 42.0

70

85

b 94 36.8

92

90

n 86 37.6

TP 015 3577

1260

3362

PLOTTED

4622
1260
3362
33.77

3377

50 E f Warden 7+50

n

40 29.8

38

36

$$\begin{array}{r} 3377 \\ 11.92 \\ \hline 21.80 \\ 18.04 \\ \hline 31.84 \end{array}$$

b

39 29.9

40

41

S

40 29.8

100 E f Warden 8+00

S

121 21.7

122

123

b

118 22.0

117

120

n

118 22.0

TP

1004

31.84

11.97

21.80

PLOTTED

3184

Zouch

14

150 E f Warden 8+50

n

147 17.1

146

144

b

142 17.6

142

139

S

135 18.3

275 E f Warden 8+75

S

183 19.5

130

130

b

140 17.8

146

148

n

152 16.6

PLOTTED

31.84

200 E of Warden 9+00

n	120	19.8	3184
			<u>01</u>
	120		3153
			<u>1289</u>
	114		44.42

b	113	20.5	
	110		
	105		

S 102 21.6

225 E of Warden 9+25

S	52	26.6	
	45		
	44		

b	44	27.4	
	40		
	53		

n 60 25.8

TP 1289 44.42 031 31.53

PLOTTED

44.42

Zaach

15

250 E of Warden 9+50

n	73	37.1	4442
			<u>185</u>
	70		42.55
			<u>1281</u>
	70		55.38
			<u>583</u>
			49.55

b	73	37.1	
	82		
	95		

S 106 33.8

275 E of Warden 9+75

S	48	39.6	
	53		
	48		

b	50	41.4	
	15		
	04		

n 00 44.4

TP 1281 55.38 185 42.57
BM 583 49.55 ⁵⁶ Bm w
Wantage

PLOTTED

55.38

300

E = W of Warrington

10+00

N

583 49.6

55.38

6.7

85

85

54.53

12.90

66.93

60.67

b

93 46.1

95

98

S

86 46.8

TP

1240

66.93

085

54.53

Center of Warrington

10+25

S

100 56.9

103

110

b

114 55.5

135

138

n

132 53.7

PLOTTED

66.93

Zouch

16

E of Warrington

10+50

N

626 60.67

47

52

b

40 62.9

24

0.6

S

730 62.9

1301

73.68

62.6

60.67

1265

85.92

0.41

73.7

60.67

50

E of Warrington

10+00

n

72 78.7

b

17 84.2

TP

1250

98.05

0.37

85.55

S

87 89.4

TP

1268

110.47

0.26

97.79

100

E of Warrington

11+50

S

18 108.7

b

38 106.7

n

45 106.0

PLOTTED

TP	1264	12266	0.45	1100v	
	150	E of	Warrington		12400
n			59	116.8	11047
b			54	117.3	11802 1066
s			61	116.6	12266 1181 132.51 74
TP	1185	13457	0.0	12266	132.77
	200	E of	Warrington		12450
s			114	123.1	
b			105	124.0	134.5 12669 782
n			72	127.3	760
TP	1144	14521	1.74	12277	13377
	250	E of	Warrington		13400
s			120	133.2	
b			72	136.0	
n			61	139.1	
	270	E = Puello	in E of	Warrington	13+20
n			0.0	14520	132
b			56	139.6	
s			885	136.36	HS 2

PLOTTED

May -14-13
C.A.L.

4 Change
24 Taylor
13 July

Levels for Profile over Alcott St (70)
through Western Add

	0.1	70.07	69.86	near middle Alcott					
	0.91	58.75	11.73	58.34	S				
		Pdim NW of Western Add			L				
S		58.75							
			95	49.3	0+00	TP	4.46	5.643	6.78
L			140	44.8					5.197
n			18.0	40.8					1.23
	25	E of Rd				175	E of Rd		
					0+25	n			1.60
n			19.0	39.8					40.4
	50	E of Rd							1.10
					0+50	S			45.2
n			16.8	42.0					5.6
L			11.5	47.3		200	E of Rd		50.8
S			3.8	55.0					
	100	E of Rd							2+00
					1+00	n			1.58
S			0.7	58.1					40.6
L			2.6	56.2		235	E of Rd		
n			8.2	50.6					1.29
	125	E of Rd							43.5
					1+25	L			9.8
n			6.9	51.9					46.6
						S			7.20

PLOTTED May 25/13

5-8.75

Alcott

18

PLOTTED

PLOTTED

5-643

250 E of PL 2+50

S	56.43	72.0	58.5
b		87	47.7
n		83	48.1

265' E of PL 2+65

n		40	52.4
b		55	50.9
S		0.20	56.2

TP 1280 67.26 197 54.46

300' E of W of Wells (50) 3+00

S		4.2	63.1
b		4.8	62.5
n		4.9	62.4

TP 1265 75.02 489 62.37

E of Wells 3+50

n		520	69.82
b		27	72.3
S		15	73.5

1248 82.34 69.86 Brn e wells

PLOTTED

8239

alcott

19

50 E of well 4+00

n	82.34	40	78.3
b		24	79.9
S		14	80.9

TP 627 87.81 080 81.54

100 E of well 4+50

S		41	83.7
b		54	82.4
n		64	81.4

125 E of Wells 4+75

n		63	81.5
b		52	82.6
S		44	83.4

150 E of Wells 5+00

S		78	80.0
b		86	79.2
n		126	75.2

TP 115 76.52 1240 75.41

50 66.32 122 64.20

PLOTTED

PLOTTED

6632

200' E of Wellen 5+50

n 90 57.3

b 91 57.2

S 22 64.1

TP 0.30 5396 1266 5366

250' E of Wellen 6+00

S 54.0 30 51.0

b 95 44.5

n 138 40.2

TP 148 4262 1281 4155

n 300 E = W of Warden at (50') 6+50

n 128 29.8

b 90 33.6

S 47 37.9

TP 070 3051 1282 2981

E of Warden 7+00

n 80 22.5

b 57 24.8

S 22 28.3

PLOTTED

3051

Plot

20

50' E of Warden 7+50

S 104 20.1

b 124 18.1

n 134 17.1

TP 332 2072 1311 1740

100' E of Warden 8+00

n 82 12.5

b 71 13.6

S 52 15.5

150' E of Warden 8+50

S 84 12.3

b 91 11.6

n 90 11.7

175' E of Warden 8+75

n 53 15.2

b 48 15.9

S 58 14.9

TP 174 3238 098 2024

PLOTTED

PLOTTED

		<u>3238</u>		
	200	E of	Warden	9+00
S		32.2	118	20.6
b			80	24.4
n			105	21.9
	250	E of	Warden	9+50
n			25	29.9
TP	1225	<u>4463</u>	60	32.38
b			112	33.3
S			105	34.1
	275	E of	Warden	9+75
S			43	40.3
b			80	37.6
n			92	35.4
TP	1206	<u>3414</u>	255	42.08 <small>Bm NW Warrington</small>
	300		E-W of Warrington	10+00
n	12		120	42.1
b			104	43.7
S			40	50.1
TP	1258	<u>6652</u>	016	53.8

PLOTTED

		<u>6656</u>			date
					21
		E	E of Warrington		10+50
S			66.6	04	66.2
b				38	62.8
n				56	61.0
TP	1307	<u>7905</u>	058	65.98	
TP	1270	<u>9115</u>	060	78.45	
	50	E of	Warden		11+00
n			91.2	114	79.8
b				92	81.3
S				100	81.2
TP	1241	<u>10336</u>	020	90.95	
	100	E of	Warrington		11+50
S			103.4	38	99.6
b				36	99.8
n				34	99.8
TP	1285	<u>11598</u>	020	103.3	
TP	1220	<u>1277</u>	046	115.5	

PLOTTED

12772

150 E f Warrington 12+00

n 128 114.9

b 114 116.3

s 106 117.1

TP 1222 139.83 0.11 12762

200 E f Warrington 12+50

s 111 128.7

b 121 127.7

n 147 125.1

250 E f Warrington 13+00

n 62 133.6

b 30 136.8

s 50 139.8

TP 764 147.47 0.0 139.83

270 E = Poulton E & western side 13+20

s 03 139.5

b 45 135.4

n 940 128.3

1025 15-167 6.05 141.42

PLOTTED Mon 25/13 C.A.L. 640 145.37

13/14
13 Taylor
Fly

Profile of Browning St (70)

through western add

0.23	65.46		65.23	Am 2 E mills
0.73	53.86	1233	53.13	
0.24	41.66	1244	41.42	
3.14	32.42	1238	29.24	

Pueblo Lin W2 of Western add

n			152	17.2
b			96	22.8
S			49	27.5
	50	2 of	PS	
S			98	22.6
b			120	20.4
n			144	18.0
	100	2 of	PS	
n			95	22.9
b			95	22.9
S			72	
	125	2 of	PS	
S			42	
			42	
			40	28.4
TP	11.25	44.06	231	32.11

4406

Browning

23

	150	E	g	PS	
n				72	36.9
b				81	36.0
S				93	34.8
TP	12.65	56.11	0.0	44.06	
	200	E	g	PS	
S				79	48.2
b				52	50.9
n				52	50.9
TP	10.75	66.67	0.17	55.94	
	250	E	g	PS	
n				107	56.0
b				105	56.2
S				110	55.7
	300	E = W 2 of	Wells at (50)		
S				70	59.7
b				62	59.8
n				59	60.8

65.46
12.33
53.13
23
53.86
12.44
41.42
44.06
12.38
29.24
32.11
52.62
32.11
11.25
44.06
12.01
56.11
55.94
10.75
66.67
66.67
66.67

6667

		E of Wells		Wells	
n			146	65.2	W.H. Wells
b			27	64.0	
S			27	64.0	
TP	1237	7758	146	65.2	BM
		50	E of Wells		
S			82	69.4	
b			78	69.8	
n			67	70.9	
		100	E of Wells		
n			67	70.9	
b			50	72.6	
S			37	73.7	
		150	E of Wells		
S			54	72.2	
b			20	70.6	
n			10.0	67.6	
TP	103	6640	122	65.37	

6640

Browning

24

		E of Wells		Wells	
S			91	57.3	
b			130	53.4	
TP	095	5433	1300	53.40	
n			120		
TP	097	4295	1185	42.48	
TP	197	3217	1275	30.20	
		250	E of Wells		
S			02		
b			40	27.2	
n			113		
TP	136	2111	1242	19.75	
S	300	2 =	W L 8	Warden St (50)	
S			33		
b			79	13.2	
n			126		
TP	595	1457	1255	8.56	
		E	of Warden St 3+50		
n			93		
b			93	5.7	
S			53		

50' E of Warden St

S 7.6

b 7.8 6.7

n 6.5

100 E of Warden

n 3.0

b 4.6 9.9

S 6.1

125 E of Warden

S 3.2

b 1.3 13.0

n 0.8

TP 1236 2669 0.8 14.0

n 150 E of Warden

n 8.6

b 4.8 21.9

S 5.6

TP 920 34.12 1.47 25.2

200 E of Warden

S 0.0

b 2.0 32.4

n 12.3

250 E of Warden

n 9.1

b 5.5 29.9

S 0.0

300 E = W of Warrington St (50) 6+50

n 5.5

b 2.0 32.4

BWP 1305 4657 0.90 33.82

S 4.6

E line of Warrington

n 13.0

b 4.0 42.6

50 E of Warrington

n 5.7

TP 1260 5895 0.22 46.35

1451
1435
1236
21.69
1.47
25.22
2.22
24.14
20
33.52
15.05
46.57
22
46.21
12.60
58.95

BWP
Warrington

7+00

5895

E of Warrington
 S 64 52.5
 50' E of Warrington
 b 4.5 54.4
 100' E of W
 n 8.8
 150' E of W
 n 2.4
 160' E of W
 n 0.0
 200' E of W
 n 6.3
 210' E W
 n 8.6
 250' E
 n +4.5- 63.5
 270 = P.S. E of western add 9+70
 n +9.5 68.5
 TP 1248 7103 040 5-65-5

7102

Browning

26

50' E of Warrington
 S 44 66.6
 TP 1309 8379 033 7020
 1200 9465 114 8265
 100' E of Warrington
 S 6.5 88.1
 TP 10.00 10468 030 9435
 150' E of Warrington
 S 4.0 100.7
 200' E of Warrington
 S 0.0 104.7
 250' E of Warrington
 S 1.5 103.7
 270' E of Warrington = P.S. E of western
 S +1.0 105.7

5895
 40
 5855
 1148
 7103
 25
 7020
 1309
 8379
 114
 8265
 114
 9435
 30
 9405
 10.33
 104.69

4/30
13
5
Feb 1896
check X Dec of Rosecrans St (100)
leaves + centers
RR track is 3 to 4 lower than Center

800 4744 3944

Sd by the
E lb 83 39.1
f 64 41.
W or lb 580 41.6

N 2 Kingsley

W or lb 89 44.4
b 32 44.1
E lb 41 43.1

Sd of Kingsley

E 33 44.1
l 21 45.3
W or lb 13 46.1

TP 980 5596 130 46.14

N 2 of James

W or lb 68 42.1
b 71 48.9
E 84 47.5

4744
130
46.14
980
55.96

55.96

S 2 James

E l 71 48.9
b 55 50.5
W or lb 45 51.5

N 2 of James

W or lb 12 54.7
b 19 54.1
Ed low cant 20 53.9

S 2 of James

E l 29 53.1
b 58 54.2
W or lb 14 54.5

TP 143 53.97 142 54.50

N 2 of James

W or lb 492 51.0
b 53 50.5
Ed low cant 67 49.1

Submerged bound with low cant

53.96
51.5
10.52

51.96
14.4
54.12
1.43
55.97

S L Armer

E L	77	48.2
b	64	49.6
North	60	50.0

N L of Goldsmat

North	9	8.6	47.4
b	9.3	46.7	
E	10.8	48.1	

S L of Goldsmat

E	11.8	45.2	53.57
b	9.6	46.5	52.1
North	87	47.25	47.25

TP 634 53.59 87.2 47.25

Side with No 4 burbs are at in from

North
Slightly to S L Goldsmat
on mist side

N L of Truman

North	46	49.0
b	54	48.2
E	66	47.0

S L of Truman

E	56	48.0
b	43	49.3
North	38	50.0

N L of Elliott

North	2.7	50.9
b	3.3	50.3
E	4.5	49.1

S L of Elliott

E	44	49.2	53.59
b	33	50.3	56.0
North	25	51.1	49.99

TP 205 52.04 38.0 49.99

N L of Truman

North	38	48.2
b	46	47.5
E	59	46.1

52.04

S 2 of Ounas

E	69	45.1
b	55	46.5
W	5.1	46.9

n 2 of Curtiss

W	88	43.2
b	97	42.3
E	11.0	41.0

S 2 of Curtiss

E	118	40.2
b	108	41.2
W	99	42.1

140 41.91 1153 40.57

n 2 of Browning

W	48	37.1
b	57	36.0
E	68	35.1

5200
1153
40.57
41.91

41.91

S 2 of Browning

E	84	33.5
b	73	34.6
W	68	35.1

TP 070 34.0 857 33.40

n 2 of Alcott

W	30	31.1
b	38	30.3
E	50	29.1

S 2 of Alcott

E	70	27.1
I	57	28.4
W	48	29.2

TP 590 30.26 965 24.45

n 2 of Zouch

E	62	24.1
b	50	25.4
W	43	26.0

41.91
857
33.40
70
54.10
9.65
24.45
5.90
30.36

41.91
24.45
26 Zouch

S L of Zouch

W		43	26.0
b		49	25.5
E		62	24.1

N L of Youngs

E		9.0	21.3
b		7.3	23.1
W		62	24.1

S L of Youngs

W		63	24.0	
b	Butter	8.3	22.0	
E		8.2	22.1	
E		9.3	21.0	
TP	558	2640	959	2082

N L of Xenophon

E		9.3	17.1
b		7.8	18.6
	Butter	8.2	18.0
W		6.3	20.1

TP 072 1822 840 1800

The Sid walk from Youngs to Xenophon
should be lowered 1 ft

S L of Xenophon

W on bank		072	18.0
b		1.7	17.0
E		3.6	15.1

N L of Whittier

E		9.3	9.4
b		6.0	12.7
W		6.7	12.0

S L of Whittier

Level + Sid walk in alt. West side
Xenophon to Whittier
E Sid shows to raise 2' at Whittier

S L of Whittier

W		6.4	12.1
b		6.6	12.4
E		9.5	9.2

N L of Votaw

E		8.6	10.1
b		6.1	12.6
W		5.5	13.2

TP 355 1675 552 1320

2036
9.10
2082
26.40
8.40
18.00
18.22

1872
10.20
3.58
16.75

16.75

52g Voltan

W	2.5	15.3
H	28	14.0
Gutter	37	13.1
Y	33	13.5
L	37	13.1
7	43	
H	57	11.0
E	52	11.6

50 5g Voltan

E	47	12.1
H	48	
Y	46	
L	38	13.0
7	34	
Gutter	37	
H	19	
W	15	15.3

16.75

100 5g Voltan

W	12	15.6
H	17	
Gutter	33	
Y	34	
L	38	13.0
7	45	
H	50	
E	47	12.1

150 5g Voltan

E	50	11.8
H	53	
Y	53	
L	47	12.1
7	43	
Gutter	47	
H	24	
W	18	15.0

31

1675

200 S = 1/2 Adal

N		32	136
N		35	132
	Gutter	59	
Y		53	
b		54	114
4		64	
h		66	101
E		63	105

S 2 6 Adal

E		84	84
h		87	87
		84	
b		72	96
		70	
	Gutter	75	
h		52	115
W		51	117

Lower Side wall on W side 1 ft
Volley to wall

1675

50 S of Adal

N		70	9.8
h		74	9.3
	Gutter	90	
Y		80	
b		86	8.2
Y		97	
h		102	
E		100	68

100 S of Adal

E		119	4.9
h		117	
		113	
b		103	6.5
		97	
	Gutter	105	
		94	7.3
W		89	7.9
TP	010	96	9.23
		92	7.52

32

1675
9.23
7.52
7.62

150 S of Wdwin

W	15	6.1
H	22	5.4
South	3.0	
	2.0	
L	23	5.3
	3.1	
U	4.7	
E	4.3	3.3

200 S of Tennison

E	6.2	1.4
	6.1	
	4.8	
L	3.5	4.1
	3.0	
H	4.0	3.6
South	4.0	
W	3.5	4.1

S of Tennison

W	4.3	3.7
L	4.3	3.3
E	6.5	1.1
	N of	Stearnes
E	7.5	0.1 ✓
L	5.1	2.5
W	5.5	2.1

S of Stearnes

W	4.4	3.2
L	4.8	2.8
E	6.5	1.1 ✓

N of Russell

E	4.4	3.2
L	5.2	4.4
W	2.5	5.1
TP	5.60	10.22
	3.0	4.62

762
3.00
4.62
1.60
10.22

1012

S 2 of Russell

W	5.2	5.0
b	5.2	4.9
E	7.0	3.2

n 2 Dumbly

E	6.4	3.8
b	5.0	5.2
W	4.7	5.1

1022
4.6
5.00
4.50
10.10

7P

454
S 2

1014

46
Dumbly
4.5

W	5.60	5.6
b	5.2	4.9
E	6.6	3.5

n 2. Poe

E	6.7	3.4
b	5.5	4.6
W	5.0	5.1

S 2 of Poe

W	4.6	5.5
b	5.2	4.9
b	6.9	3.2

1014

n 2 of Olyphant

E	6.2	4.1
b	4.3	5.8
W	3.9	6.2

S 2 of Olyphant

W	3.8	6.3
b	4.0	6.1
E	6.0	4.1

1014
5.26
5.108
6.72
11.88
6.13

677

1185

5.06

5.08

Bm

5.72

6.13

Bm

n 2 of Maxwell

E	5.7	6.1
b	4.3	7.6
W	3.8	8.0

S 2 of Maxwell

W	2.7	9.1
b	3.2	8.7
E	4.7	7.2

1185

n s of Macaulay

E 3.8 80

b 1.8 10.1

W 1.6 10.2

S s of Macaulay

n 1.8 10.0

b 2.3 9.6

E 3.6 8.2

TP 468 1383 270 9.15

n s Lower

E 6.2 7.5

b 5.0 8.8

W 4.8 9.0

S s of Lower

W 5.3 8.3

E 5.7 8.1

E 6.6 7.2

1185
270
9.15
468
1383

1385

n s Keats

E 7.8 60

b 7.0 6.8

W 6.6 7.2

TP 325 1942 665 7.8

S s of Keats

W 4.10 6.2

b 4.4 6.0

E 5.2 5.2

n s of Jarvis

E 6.2 4.2

b 5.5 4.9

W 5.4 5.0

S s of Jarvis

W 6.2 4.2

b 6.3 4.1

E 7.3 3.1

1385
270
9.15
468
1383

35

n 2 f Ingelton

E			9.2	1.2
b			8.3	2.1
W			8.0	2.4
TP	4.5	6.28	8.28	2.88
S 2 f		Ingelton		
W			4.2	2.0
b			4.3	2.0
E			5.2	1.0

n 2 f Hugo

E			5.6	0.6
b			4.6	1.7
W			4.6	1.6

S 2 f Hugo

W			4.7	1.5
b			4.7	1.6
E			5.6	0.6
TP	5.14	5.94	5.48	0.80

n 2 f South st

E			5.7	0.2
b			4.7	1.2
W			5.0	1.0
S 2	South			
W			5.0	1.0
b			5.0	0.9
E			5.8	0.1

n 2 f Fenblon

E			5.2	0.6
b			4.5	1.4
W			4.1	1.8

S 2 Fenelton

W			4.0	1.9
b			4.4	1.5
E			5.1	0.8

TP 7.12 8.46

6.28
 5.46
 0.82
 5.17
 5.94
 5.1
 0.84
 7.62
 8.46

N L of Emerson

E	5.3	3.1
L	4.7	3.8
N	4.3	4.1

S L of Emerson

W	3.2	5.2	846
L	3.7	4.8	880
E	4.1	4.5	1726

N L of Dickens

E	0.8	7.6		
L	0.1	8.4		
TP	880	1726	0.0	846
N	8.5	8.7		

S L of Dickens

N	7.3	9.9 ^{10.0}
L	7.8	9.5
E	8.3	8.7

N L of Carleton

E	4.8	12.5
L	4.3	13.0
W	3.7	13.5

S L of Carleton

N	2.7	14.5
L	3.2	14.1
E	3.7	13.5

TP

790 2380

1726 1590

710 1670 ✓ Br

N L of Byron

E	7.3	16.5 ✓
L	6.7	17.1
W	6.3	17.5

S L of Byron

W	5.3	18.5 ✓
L	5.8	18.0
E	6.2	17.6

1726
1590
1590
290
2380
710
1670

N S of Addison

E	57	18.6
b	49	18.9
W	41	19.7

S S of Addison

W	42	19.6
b	46	19.2
E	52	18.6

N S of New Main

a	48	19.0
b	39	19.9
W	37	20.1

Cent of New Main

W	23	21.5
b	33	20.5
E	48	19.0

S S of New Main

W Prof on bent link	215	20.65	2150 <i>Grade</i>
---------------------	-----	-------	-------------------

Return of 70' st

W (320)	20.6
S (210)	20.3

2050 *Grade*

Eth

43	19.5
----	------

2677

1538

156

25' n n w } w s n P6
237' n n e

50	n of	PT	(1+241)
	24.3		
w	90	17.3	118'
	79	18.4	
	70	19.3	
b	58	20.5	(1+245)
	37	22.6	
	16	24.7	
E	0.5	25.8	1+35
98'	n = P6		(1+35)
E	59	20.4	1+83
	97	17.1	
y	123	14.0	
TP	154	13.58	1223 1404
		15.5	
b	43	11.3	174.5
	65	9.1	
	89	6.7	
w	112	4.4	144.0

50' on W = 47.3' on E side of

the curve

PLOTTED

w	135	2.1	191'
	122	3.4	
	107	4.9	
b	97	5.9	198.8
	78	7.8	
	60	9.6	
E	40	11.6	2+06.7
			50' n n w of P6
E	78	7.8	2+30.4
	86	7.0	
	97	5.9	
b	108	4.8	2+23.2
	120	3.4	
	125	3.1	
w	136	2.0	214'

PLOTTED

246' 15.58
15.5
100' n on w of P-6

W		120	3.6	246'
		114	4.2	
		107	4.9	
b		98	5.8	274.9
		90	6.6	
		85	7.1	
E		74	8.2	277.8

150' n on w of P-6

E		46	11.0	3+25.2
		49	10.7	
		64	9.2	
b		73	8.3	320.6
		89	6.7	
		88	6.8	
W		90	6.6	3+16'

TP 11.00 2394 264 1294

PLOTTED

364' 20.94
23.9
200' n on w of P-6
20.94

W		122	11.7	3+66
		118	12.1	
		96	14.3	
b		90	14.9	3+69.3
		76	16.3	
		63	17.4	
E		57	18.2	3+72.6

405' 20.94
250' n on w of P-6

E		00	23.9	4+200
		00	23.9	
		04	23.5	
b		20	21.9	418'
		30	20.9	
		48	19.1	
W		50	18.9	416'

TP 11.45 3537 000 2092

NOT PLOTTED

Warden
41

3+66
15.58
3.62
12.94
11.06
23.94
23.92
11.06
35.37
3+69.3

430 $\frac{3537}{354}$
 154
 275' norm of P.6

W	108	24.6	4+41
	91	24.3	
	89	24.5	
b	87	26.7	423
	80	27.4	
	74	28.0	
e	75	27.9	4+437

301 norm of P.6

E	42	31.2	4+674
	42	31.2	
	52	30.2	
b	60	29.4	4467
	67	28.7	
	75	27.9	
W	78	27.6	446

PLOTTED

$\frac{3537}{354}$
 35.4
 Warden
 42

350 norm of P.6

W	50	30.4	5+14
	38	31.6	3537 +24 34.09 588 39.97
	26	32.8	
b TP	588	34.09	5+15.4
	42	35.8	20.00
	28	37.2	
E	20	38.0	5+148

366 norm of P.6 = 15.1 on E

E	07	39.3	5+298
	20	38.0	
	42	35.8	
b	61	33.9	5+31
	75	32.5	
	88	31.2	
W	100	30.0	5+32

UNPLOTTED

3994

405' m on w = P.T.
384' n 20.0° E

W			130	27.0	5+71
			115	28.5	39.97 10.05
			110	29.0	29.92 2.85
b			100	30.0	31.77 5+49
			80	32.0	
			58	34.2	
E			46	35.4	5+67 41.14
	43' n on E 40' n on P				T = S.S. Nipoma St (60') m of west
E			83	31.7	
			104	30.0	
			126	27.4	
TP	285	3277	1005	29.9	
b		32.8	70	25.8	
			87	24.1	
			98	23.0	
W			107	22.1	

PLOTTED

3277

32.8

Warden

43

S 667 Nipoma
32.8

W			120	20.8
			105	22.3
			95	23.3
b			78	25.0
			58	27.0
			30	29.8
E			11	31.7
E			06	32.2
			25	30.3
			60	26.8
b			78	25.0
			97	23.1
			110	21.8
W			132	19.6

S 114 of Nipoma

PLOTTED

2561

50' n of Napoma

W 115 14.1

95

77

b 63 19.3

48

0.8

E 720 27.6

750' n of Napoma

a 41 21.5

68

83

b 100 15.6

118

132

W 147 10.9

NOT PLOTTED

2561

100' n of Napoma

W 136 12.0

123

120

b 110 14.6

90

82

E 72 18.4

150' n of Napoma

E 67 18.9

80

89

b 105 15.1

115

128

W 140 11.6

NOT PLOTTED

Warden

45

25-61

200 mg Piperna

W 145 11.1

124

90

b 66 19.0

50

25

E 02 25.4

250 mg Piperna

E 12 24.4

30

58

b 83 17.3

98

119

W 130 12.6

TP 1291 2655 11.97 1364

PLOTTED

2655

Warden

46

300 mg Piperna

W 118 14.6

114

106

b 95 17.1

74

54

E 34 23.2

350 mg Piperna

E 24 24.2

40

57

b 70 19.6

75

79

W 86 18.0

PLOTTED

2655

400 mg Infoma

W

66 20.0

2655

58

2654
950
3608

52

b

44 22.2

38

29

E

TP

954

3608

15 25.1

2001 2654

450 mg Infoma

e

79 28.2

94

108

b

117 24.4

128

132

W

138 22.5

PLOTTED

3608

500 mg Infoma

W

100 26.1

89

78

b

68 29.3

55

36

E

22 33.9

TP

1200

4537

278

3333

550 mg Infoma

e

60 39.4

82

103

b

124 32.9

137

148

W

154 30.0

Warden

47

3608

278

3333

4537

Bm + SE
Infoma
wells

PLOTTED

4537

609 n = S 2 y on the West
Garavito St 60

n	118	33.6
	108	
	96	

b	84	37.0
	66	
	42	

E	0.8	44.6
---	-----	------

S 66 y Garavito

E	704	45.8
---	-----	------

28

53

b	72	38.2
---	----	------

82

99

n	107	34.7
---	-----	------

4537

S 1/4 y Garavito

W	97	35.7
	84	
	69	

b	68	39.6
	38	
	13	

TP	646	50.93	090	44.47
		50.93		

E	38	47.1
---	----	------

center of Garavito

E	30	47.9
---	----	------

60

82

b	104	40.5
---	-----	------

118

130

n	140	36.9
---	-----	------

Warden

48

45.37
30
44.47
6.46
50.93

PLOTTED

PLOTTED

5093

	N	1/4 of Garnets	
W		130	37.9
		120	
		105	
b		90	41.9
		68	
		50	
E		22	48.7
	N	1/4 of Garnets	
E		12	49.7
		38	
		62	
b		82	42.7
		98	
		113	
W		125	38.4

PLOTTED

5095

Wood 49

	N	1/2 of Garnets		H NW
W		117	39.26	
		101		
		85		
b		68	44.1	
		48		
		22		
E		705	51.4	
			51.4	
Bm	1290	4622	330.37	Bm SE H Garnets & Melt
			652	H + W G + Wood 22227
TP	1288	58.87	028	1290 346.27 652 339.75
	50	2 of Garnets		4627 66 45.99 12.88 58.87 1.95 56.92 9.19 66.11
W		128	46.1	
		120		
		107		
b		90	49.9	
		52		
		20		
TP	919	66.11		
		6611	195	56.92
E		6611	60.0	

PLOTTED

PLOTTED

6611

100 n f Savata

E 39 62.2

65

83

L 97 56.4

113

130

W 144 51.7

150 n f Savata

W 116 54.5

99

84

L 64 59.7

47

11

TP 673 7201 083 6528

E 49 67.1

7201

120 n f Savata

E 45 67.5

62

88

L 106 61.4

124

144

W 161 55.9

200 n f Savata

W 162 55.8

142

125

L 100 62.0

71

50

E 22 69.8

Warden

50

6611
83
65.28
673
72.01

PLOTTED

PLOTTED

7201

225 mg Same

E	75	+14	73.4
		0.0	
		5.0	
		6.8	
b		9.4	62.6
		11.4	
		12.8	
w		14.6	57.4

250 mg Same

w		15.0	57.0
		12.4	
		9.8	
b		5.2	66.4
		2.4	
TP	672	1.0	71.0
Eh		4.4	
E		1.6	76.1

PLOTTER
PLOTTED

7775

300

2		+15	79.2	72.01
		1.6		71.01
		4.4		67.0
				77.75
b		7.7	70.0	
		12.0		
		17.0		
w		18.0	59.7	

350 mg Same

h		13.2	64.5
		10.7	
		7.1	
b		4.1	73.6
		2.4	
h		0.0	
e		+3.1	80.8

PLOTTER
PLOTTED

51

7773

375' n of barometer

E	733	81.0
H	0.0	
	3.0	
b	64	71.3
	96	
	116	
W	152	62.5

400' n of barometer

W	122	65.5
	93	
	76	
b	56	72.1
	36	
	195	75.78
	98	
E	67	79.7

PLOTTED

8644

450' n of barometer

E	00	86.4
	25	
	48	
b	72	79.2
	92	
	120	
W	158	70.6

500' n of barometer

W	98	76.6
	83	
	55	
b	26	83.8
	180	84.64
	92	
U	75	
E	57	91.0

PLOTTED

52

7773
~~1.96~~
~~7.578~~
~~10.66~~
~~82.44~~
~~160~~
~~84.64~~
~~1208~~
~~96.7~~

96.7v

550 n of Garvata

E 00 96.7

22

49

b 70 89.7

102

128

w 158 80.9

600 n = S of Esperanza (60')

w 136 83.1

98

78

b 47 92.0

22

TP 414 99.86 100 95.7v

b 30

E 03 99.6

99.81

S of Esperanza

E 09 99.0

31

49

b 73 92.6

90

122

w 156 84.3

S 1/4 of Esperanza

w 146 85.3

110

89

b 70 92.9

46

24

E 12 98.7

Warden

53

96.7v
95.7v
414
99.86

PLOTTED

PLOTTED

9986

Center of Esperanza

E	0.8	99.1
	2.4	
	4.2	
b	6.7	93.2
	8.7	
	10.7	
W	15.0	84.9
W	14.4	85.5
	11.0	
	8.7	
b	6.6	93.3
	4.0	
	1.6	
E	0.9	99.0

PLOTTED

9986

Ward

54

n by Esperanza

E	0.8	99.1
	1.4	
	3.5	
b	6.6	93.3
	8.7	
	10.5	
W	14.0	85.9
W	13.5	86.4
	10.7	
	7.7	
b	5.2	94.7
	3.0	
	2.1	
E	2.1	97.8
	3.93	78.62
	5.17	94.69

9986
 5.17
 94.69
 3.93
 78.62

Ward

PLOTTED

98.62

50	n f	Esperanza	
E		03	98.3
		13	
		26	
b		44	94.2
		59	
		81	
w		106	88.0
100	n f	Esperanza	
w		134	85.4
		118	
		100	
b		84	90.2
		65	
		44	
Σ		35	95.1

PLOTTED

2862

Ward

55

150	n f	Esperanza	
E		44	94.2
		54	
		69	
b		91	89.5
		104	
		128	
w		149	83.7
TP	395	89.72	
		89.72	
200	n f	Esperanza	
w		1285	85.77
		85	81.2
		72	
		63	
b		48	84.9
		35	
		17	
Σ		00	89.7

98.62
1285
85.77
395
89.72

PLOTTED

	225	n f	Esperanza	
E			22	87.5
			39	
			62	
b			84	81.3
			100	
			114	
w			132	76.5
	250	n f	E	
w			140	75.7
			124	
			105	
b			98	79.9
			68	
			50	
E			33	86.4

PLOTTED

	300	n f	Esperanza	
E			08	88.9
			29	
			50	
b			72	82.5
			95	
			118	
w			140	75.7
	350	n f	Esperanza	
w			146	75.1
			127	
			100	
b			79	81.8
			55	
			32	
E			07	89.0

PLOTTED

8922

	400	n f	Esperanza	
E			31	86.6
			44	
			58	
b			70	82.7
			85	
			100	
w			116	78.1
	450	n f	Esperanza	
w			67	83.0
			56	
			44	
b			32	86.5
			23	
TP	168	8923	217	87.55 [✓] Rock
			18	
			10	
E			03	88.9

PLOTTED

8923

400

57

	500	n f	Esperanza	
E			27	86.5
			23	
			22	
l			25	86.7
			31	
			35	
w			41	85.1
	525	n f	Esperanza	
w			58	83.4
			52	
			50	
b			50	84.2
			52	
			58	
E			68	82.4
TP	184	7924	1186	77.37

PLOTTED

79.21

530 n of Espungo

E	45	74.7
	35	
	25	
B	16	77.6
	10	
HL	07	
W	06	78.6

580 n of Espungo

N	16.1	63.1
	17.7	
	18.5	
b	17.6	61.6
	17.7	
	18.1	
E	21.7	57.5

Taken with
Perm level

PLOTTED

None

79.21

600 n = Bodega St at 58

E	168	62.4
	207	
	244	
b	273	51.9
	288	
	303	
N	300	49.2

000 8755 8755
-001 7581 1203 2582
061 6383 1260 6322
076 5431 1048 5335
052 4444 989 4442
1157 3337

Pink P 57

8755
1203
8755
1203
7581
1260
6383
1048
5431
989
4442
3337

✓ 3m 44.44
SE H mells
Barometer

PLOTTED

5/7/5
blange
Tape
7/5

X line of Garroto St (60')
Well to Warden St

622 3959 3237 ✓ Bm SWA
Garroto & Warden

E of Wells St

INDEXED
WK
JAN 5 1949

S	62	33.4
	65	
	70	
b	76	32.0
	79	
	82	
n	81	31.5
	50	
n	60	33.6
	60	
	55	
b	53	34.3
	53	
	56	
S	61	33.5

PLOTTED
MAY 15-13
C.A.L.

3959

Garroto
59

100' E of Wells St

S	107	28.9
	101	
	95	
b	90	30.6
	83	
	71	
n	58	33.8
	150	
n	58	33.8
	66	
	77	
b	88	30.8
	99	
	109	
S	119	27.7

PLOTTED

3959

60

200 E of Wells st

S 89 30.7

80.

73

b 68 32.8

56

46

n 37 35.9

2529800 n y - w of Warden st
2490 E of S

n 40 39.7

11

19

b 27 36.9

39

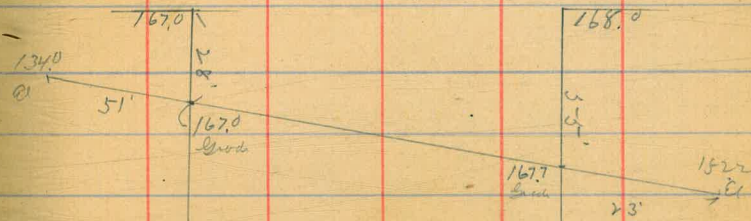
49

S 59 33.7

PLOTTED

MAY 15-13

1270	15215		13945	H SW Orange
1210	16385	040	15125	
903	17267	021	16364	
		539	16728	S W H Whitten
121	15986	1302	15965	



Collar

Willow St

Whitten

23 W J W A		77	1522		
W 2		89	1510		
b		138	1461		
E P.	091	14788	1289	14697	T.P.
E 2		55	14224		
50' E		139	1340		

S slopes next Bay

1650

1660

Slopes on Willow Bet Vallan
& Whittier

West line

045	16723	16728	KBW Whittier
644	16194	1223	15550
N line of Vallan			
15' w of rd		06	161.3
25' n of Vallan			
20' w of rd		40	157.9
40' n of Vallan			
25' w of rd		56	156.3
50' n of Vallan			
25' n of rd		70	154.9
60' n of Vallan			
25' w of rd		72	154.7
100' n of Vallan			
20' w of rd		30	158.9

Slopes are regular

✓

16194

East line

100	n of Vallan		
20'	E of rd	42	157.7
60'	n of Vallan		
30'	E of rd	138	148.1
Center of Vallan			
30'	E of rd	105	151.4
TP	104	15024	1274 14920
rd of Vallan			
30'	E of rd	63	143.9
15'	n of Vallan		
50'	E of rd	190	131.2
25'	n of Vallan		
50'	E of rd	127	137.5
40'	n of Vallan		
40'	E of rd	75	142.7
50'	n of Vallan		
35'		48	145.4

✓

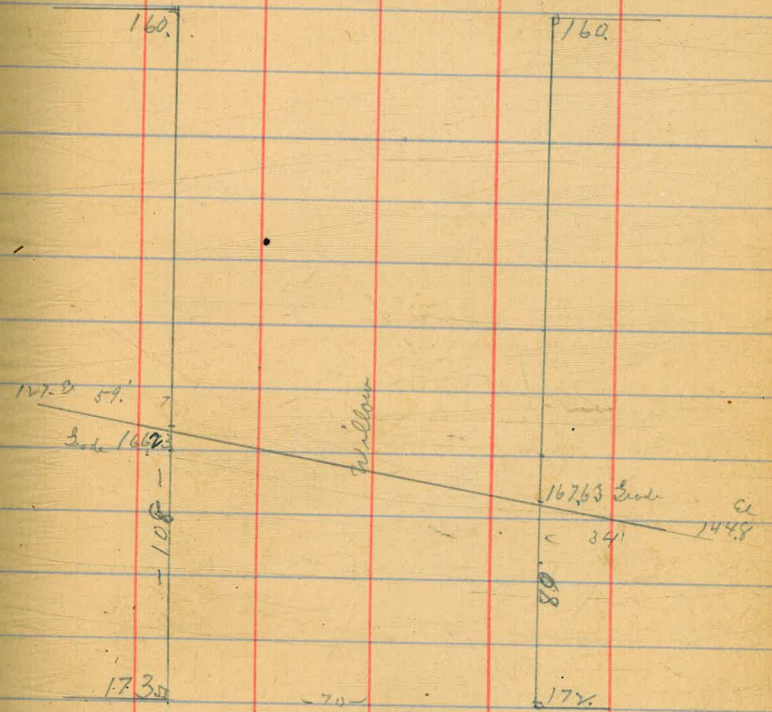
6
12
13
Blount
7
13
City
Levels for Culvert on Willow St
Bet Russell & Stearns St

782	17510		167.88
1247	186.97	060	17450
1264	199.30	031	186.66
307	200.99	132	197.92
094	189.57	1242	188.57
157	178.07	1295	176.56
015	165.66	1256	165.31
055	154.99	1122	154.44 TP Rock

34 W of W2
W2
TP
Leant
E2
1363.65

102	144.8
132	139.8
027	144.37
10.88	144.10
50	139.4
10.4	133.5
17.3	127.0

12' Culvert



Russell St

Stearns St

Slopes on Willow at Bethel
Russell + Skinning

570	16014	15445	TP 65
N of Russell			
10 E of EL		47	155.4
	25'	n of Russell	
15' E of EL		97	150.4
	50'	n of Russell	
24' E of EL		170	143.1
	75'	n of Russell	
10' W of WL		58	154.2
60' E of EL			1270
	125'	n of Russell	
30' E of EL		80	152.1
30' W of WL		150	145.1
	150'	n of Russell	
20' E of EL		730	1630
20' W of WL		78	152.3
	100'	n of Russell	
20' W of WL		82	151.9
TP	170	148.80	144.10
50' E of EL		0.0	1460

Slopes on Willow at Elephant St

66

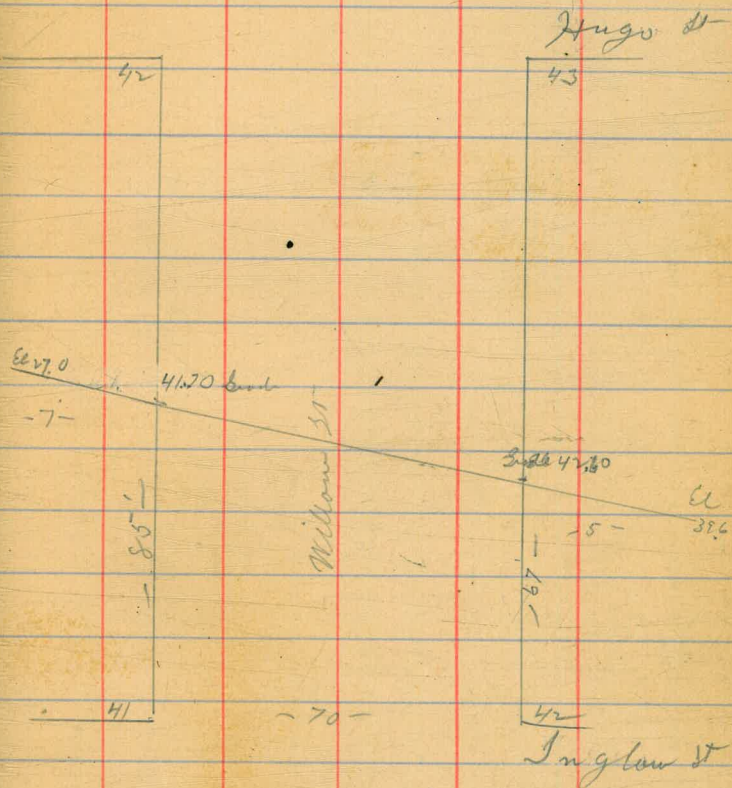
082	147.62	147.10	n of W
N of Elephant			
12' W of WL		36	144.0
TP	50	135.82	12.30 135.32
Center of Elephant			
40' W of WL		11.0	124.8
TP	075	125.19	11.38 124.44
S of Elephant			
57' W of WL		12.3	112.9
S of Elephant			
WL		60	118.2
TP	088	113.74	12.22 112.82
75' W of WL		133	100.1
S of Elephant			
WL		136	100.1
TP	025	101.0	130 100.74
75' W of WL		124	88.6
S of Elephant			
15' E of EL is nearly same as on bar			

6/ along levels for Culvert in Willow St
 13/ Taylor Bet Hugo + Inglow
 13/ Fly

	740	5056	4576	22w Hugo
5' w of W.L.		11.0		
W.L.		112		
Cent		118		
E.L.		133		
7' 9" of E.L.		135	270	

16' Culvert
 Not necessary here
 if Inglow is grided soon

67



6 Along Slopes on E side Willow St
 17 Taylor Fenelon Sault
 13 July

Bm NE
 Emerson
 & W

630	51.04	44.74	
S line of Fenelon st			
10' E of EL	42	46.8	
50	S of Fenelon		
15' E of EL	55	45.5	
100' S of Fenelon st			
15' E of EL	60	45.0	
150	S of Fenelon		
15' E of EL	85	42.5	
200' S = N 2 of Emerson to			
20' E of EL	108	40.2	
center of Emerson			
15' E of EL	75	42.5	
TP	1200	6220	290 4814
S line of Emerson			
15' E of EL	120	47.6	
50	S of Emerson		
20' E of EL	98	50.4	
100	S of Emerson		
20' E of EL	63	53.9	

6020

150	S of Emerson		
20' E of EL	60	54.2	
20	S = N 2 of Dickens		
20' E of EL	18	58.4	
TP	1177	7127	070 5950
center of Dickens			
20' E of EL	10.0	61.3	
S 2 of Dickens			
20' E of EL	78	63.5	
50' S of Dickens			
20' E of EL	57	65.6	
100' S of Dickens			
20' E of EL	44	66.9	
TP	1260	8087	300 6827
150' S of Dickens			
20' E of EL	11.0	69.9	
200' S = N 2 Bartlett			
20' E of EL	82	72.7	
center of Bartlett			
20' E of EL	67	74.3	

8087

5 Surf Barlett

10' E of Edin 28 78.1

50' 28 Barlett

10' E of Ed 0.0 80.9

No Slopes Acquired at Addison

70

$\frac{7}{19}$
 $\frac{13}{13}$

X 200 of Bay Ave (80)

Wd 32nd to 150' west

In John Englebertson

668. 2866 2298

W 2 of 32nd st

S

61 236

51 246

56 241

L

56 241

55 242

53 244

n

50 247

2 W of 32nd

n

09 288

18 279

20 277

L

22 275

25 273

33 264

S

32 260

2960

297

25'

W 8

32nd

st

41 255

37 260

31 266

26 271

21 275

18 279

10 287

50'

W 8

32nd

st

10 287

20 277

24 273

32 265

42 255

53 244

68 229

29.66

75' W of 32nd

S

99 19.8

78 21.9

64 23.3

b

46 25.1

32 26.5

22 27.6

N

12 28.6

100 W of 32nd

N

11 28.6

20 27.7

33 24.4

b

48 24.9

67 22.0

89 20.8

S

119 17.8

29.66

125 W of 32nd

S

114 18.3

85 21.2

66 23.1

b

52 24.5

38 26.9

20 27.7

N

1.0 28.7

150 W of 32nd

b

15 28.2

38 25.9

54 24.3

b

74 22.3

90 20.7

107 19.0

S

128 16.9

72

2966

175' W of 32nd

S		152	14.5
		130	14.7
		105	19.2
b		85	21.3
-		60	23.7
		42	25.5
n		19	27.8
	200' W of 32nd		
n		34	24.3
		56	24.1
		78	21.9
b		98	19.9
TP	441	2426	981 1985
		67	17.6
		86	15.7
S		111	13.2

2426

225' W of 32nd

S		132	11.1
		104	13.9
		80	16.3
b		61	18.2
		40	20.3
		22	22.1
n		00	24.3
	250' W of 32nd		
n		17	22.6
		44	19.9
		58	18.5
b		77	16.6
		94	14.9
		128	11.5
S		160	8.3

2966

981

1985

441

2426

16/ Blouy / Re X sec of Bay am 80
3/ 13/ July 32 m st 250 W

600 29.0 23.0

W of 32 m st

n 58 23.7

61 22.9

69 22.1

70 22.0

l 74 21.6

75 21.5

72 21.8

S 2' W of 32 m

S 75 25 24.5

74 21.6

72 21.8

74 21.6

70 22.0

69 22.1

73' 62 22.8

54 23.4

60 24.0

29.0

25' W of 32 m

n 04 28.6

45 55 23.5

60 23.0

62 22.8

65 22.5

74 21.6

77 21.3

79 73 21.7

S 35 25.5

50 W of 32 m

S 62 22.7

72 21.8

77 21.3

74 21.6

l 69 22.1

66 22.4

64 22.6

710 54 23.6

65 28.5

75' W of 32m

n		06	28.4
	75	53	23.7
		61	22.9

67 22.3

6 74 21.4

78 21.2

82 20.8

S 92 19.8

100' W of 32m

S 112 17.8

88 20.2

78 21.2

6 72 21.8

70 22.0

61 22.9

n 79 58 23.2

05 28.5

125' W of 32m

n		05	28.5
	75	48	24.2
		52	23.7

69 22.2

6 75 21.5

80 21.0

85 20.5

S 108 18.2

150' W of 32m

S 122 14.8

100 19.0

94 19.4

76 21.4

65 22.5

55 23.5

n 79 50 24.0

08 28.2

29.00

175 W J 32.00

n

+5

13 22.7

4.6 24.4

5.8 23.3

6.8 22.3

l

8.0 21.0

9.8 19.2

12.2 16.8

S

14.5 14.5

210 W J 32.00

S

Same as old

13.3 15.7

11.4 17.4

l

9.4 19.4

7.6 21.4

6.1 22.9

+9

4.6 24.4

n

2.8 24.2

29.00

76

225 W J 32.00

n

4.7 24.3

7.1 21.9

9.0 20.0

11.0 18.0

13.0 14.0

But same as before

77

78

Locate shack at Ocean
Bar 79

Beach

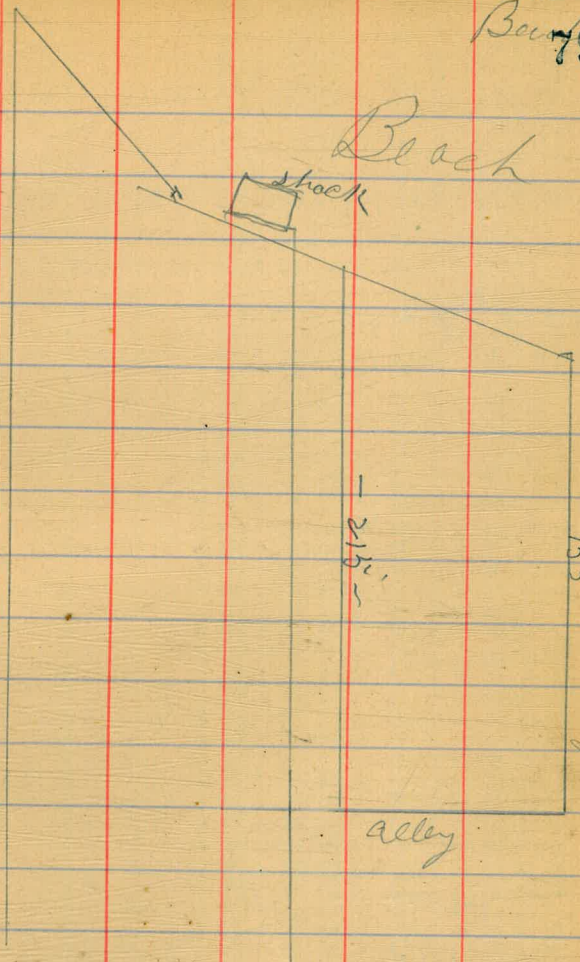
shack

- 212 -

- 155 -

Program 11

alley



2410 21 w

660 2418.60 2422.00

850 2437.50 El Point

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	7.00	7.15	7.30	7.45	7.60	7.75	7.90	8.05	8.20	8.35	0
1	8.50	8.65	8.80	8.95	9.10	9.25	9.40	9.55	9.70	9.85	1
2	10.00	10.15	10.30	10.45	10.60	10.75	10.90	11.05	11.20	11.35	2
3	11.50	11.65	11.80	11.95	12.10	12.25	12.40	12.55	12.70	12.85	3
4	13.00	13.15	13.30	13.45	13.60	13.75	13.90	14.05	14.20	14.35	4
5	14.50	14.65	14.80	14.95	15.10	15.25	15.40	15.55	15.70	15.85	5
6	16.00	16.15	16.30	16.45	16.60	16.75	16.90	17.05	17.20	17.35	6
7	17.50	17.65	17.80	17.95	18.10	18.25	18.40	18.55	18.70	18.85	7
8	19.00	19.15	19.30	19.45	19.60	19.75	19.90	20.05	20.20	20.35	8
9	20.50	20.65	20.80	20.95	21.10	21.25	21.40	21.55	21.70	21.85	9
10	22.00	22.15	22.30	22.45	22.60	22.75	22.90	23.05	23.20	23.35	10
11	23.50	23.65	23.80	23.95	24.10	24.25	24.40	24.55	24.70	24.85	11
12	25.00	25.15	25.30	25.45	25.60	25.75	25.90	26.05	26.20	26.35	12
13	26.50	26.65	26.80	26.95	27.10	27.25	27.40	27.55	27.70	27.85	13
14	28.00	28.15	28.30	28.45	28.60	28.75	28.90	29.05	29.20	29.35	14
15	29.50	29.65	29.80	29.95	30.10	30.25	30.40	30.55	30.70	30.85	15
16	31.00	31.15	31.30	31.45	31.60	31.75	31.90	32.05	32.20	32.35	16
17	32.50	32.65	32.80	32.95	33.10	33.25	33.40	33.55	33.70	33.85	17
18	34.00	34.15	34.30	34.45	34.60	34.75	34.90	35.05	35.20	35.35	18
19	35.50	35.65	35.80	35.95	36.10	36.25	36.40	36.55	36.70	36.85	19
20	37.00	37.15	37.30	37.45	37.60	37.75	37.90	38.05	38.20	38.35	20
21	38.50	38.65	38.80	38.95	39.10	39.25	39.40	39.55	39.70	39.85	21
22	40.00	40.15	40.30	40.45	40.60	40.75	40.90	41.05	41.20	41.35	22
23	41.50	41.65	41.80	41.95	42.10	42.25	42.40	42.55	42.70	42.85	23
24	43.00	43.15	43.30	43.45	43.60	43.75	43.90	44.05	44.20	44.35	24
25	44.50	44.65	44.80	44.95	45.10	45.25	45.40	45.55	45.70	45.85	25
26	46.00	46.15	46.30	46.45	46.60	46.75	46.90	47.05	47.20	47.35	26
27	47.50	47.65	47.80	47.95	48.10	48.25	48.40	48.55	48.70	48.85	27
28	49.00	49.15	49.30	49.45	49.60	49.75	49.90	50.05	50.20	50.35	28
29	50.50	50.65	50.80	50.95	51.10	51.25	51.40	51.55	51.70	51.85	29
30	52.00	52.15	52.30	52.45	52.60	52.75	52.90	53.05	53.20	53.35	30
31	53.50	53.65	53.80	53.95	54.10	54.25	54.40	54.55	54.70	54.85	31
32	55.00	55.15	55.30	55.45	55.60	55.75	55.90	56.05	56.20	56.35	32
33	56.50	56.65	56.80	56.95	57.10	57.25	57.40	57.55	57.70	57.85	33
34	58.00	58.15	58.30	58.45	58.60	58.75	58.90	59.05	59.20	59.35	34
35	59.50	59.65	59.80	59.95	60.10	60.25	60.40	60.55	60.70	60.85	35
36	61.00	61.15	61.30	61.45	61.60	61.75	61.90	62.05	62.20	62.35	36
37	62.50	62.65	62.80	62.95	63.10	63.25	63.40	63.55	63.70	63.85	37
38	64.00	64.15	64.30	64.45	64.60	64.75	64.90	65.05	65.20	65.35	38
39	65.50	65.65	65.80	65.95	66.10	66.25	66.40	66.55	66.70	66.85	39
40	67.00	67.15	67.30	67.45	67.60	67.75	67.90	68.05	68.20	68.35	40

Calculated by F. E. Paradis, C. F.

242.00
247.85

241.10

241.10

241.80

242.27

243.37

244.42

244.41

243.4

242.2

243.7

243.2

244.1

242.7

244.2

144

131

115

144

144

144

144

144

144

144

144

144

Thom St

80-

Part + Cords along

244.13

239.6

240.3

241.1

242.2

242.9

243.1

242.8

242

242.8

242.2

244.1

242.9

242.7

244.2

244.2



DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING
 ROADWAY 16 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.
 FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	25.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Calculated by F. E. Paradis. C. E.

NE Young + Wells 66.09
 NW Zouch " " 70.77
 NE Alcott " " 69.86
 NE Braung " " 65.23
 NW Alcott " " 64.30
 210 P L ES 210
 NW Young + Worthington 50.54
 NW Zouch " " 49.56
 SW Alcott " " 41.82
 NE " " 42.08
 NE Braung " " 33.52

