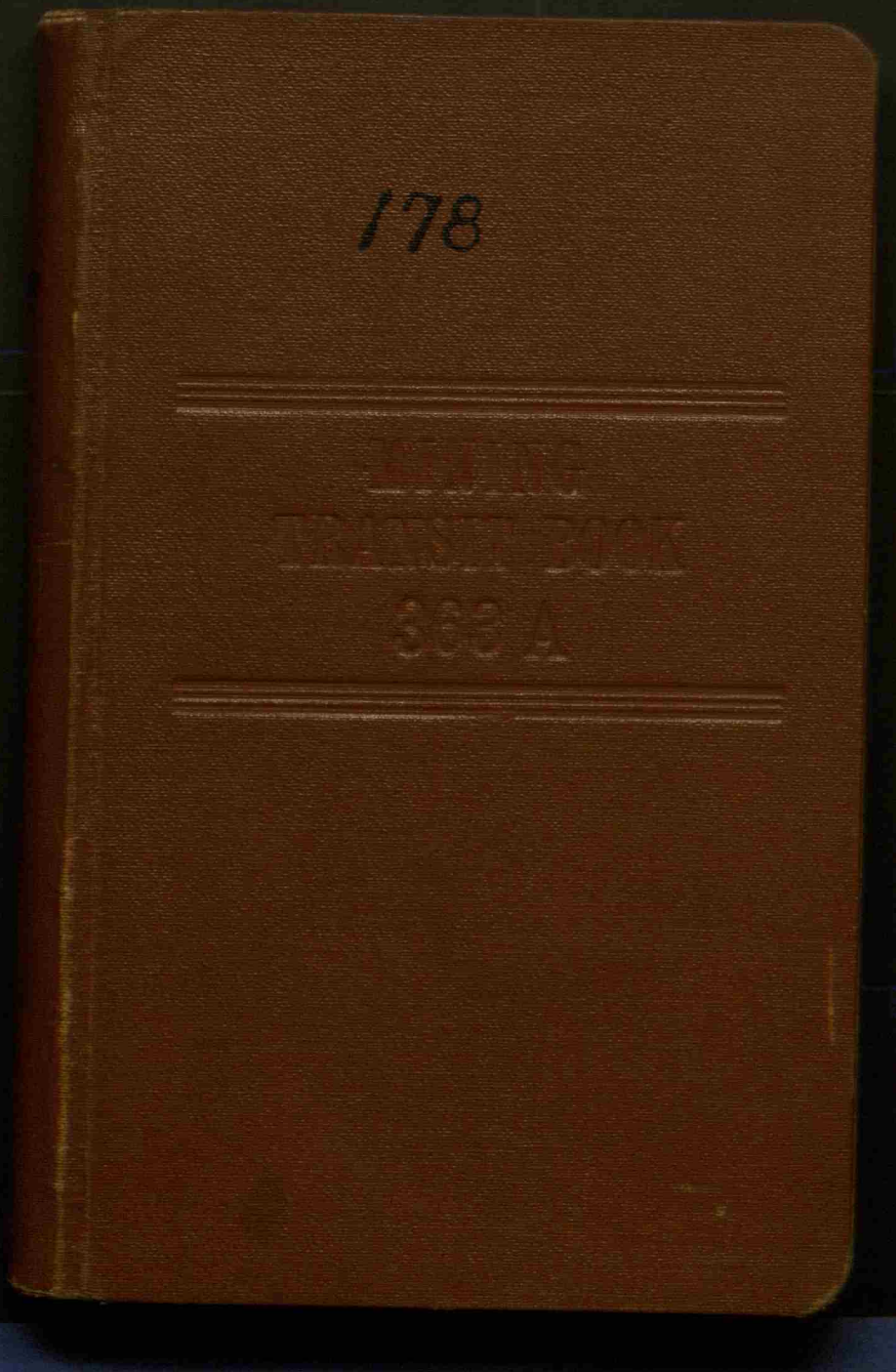

178

Cline Bridge
Marion

4' Rise
12' Span
20' Clear Roadway

Bridge Move 40' East
New channel, to be dug.

Completed

Spears Bridge
Red River

4'-6" Rise
12' Span
30° Skew
22' Clear Roadway
Present Road 30' between fences

Floor Poured June 8-1937

On Job April 15 50 kegs Kaye Cement

Repair on Steel bridge
On Lodge Rd.

4 plates 14"x14" x ½"
with 1" ⊓ Rod to hold
Hook
3 - 1" ⌀ Rods with threads
and hook. 24'-0"

4' Ext on Each Side

~~40'~~ Rit Wall on N/W

av. height 4' to 6'.

Free Bridge

Outside Cased	I	19"
Inside "	I	15"
Width "	I	12"

C to C of I's = 56"

Rise 72"

Span 20'-0"

Top abt Width = 20"

Parapet Wing 5'-0"

Completed

Rawlings Bridge
Middle

Rise 7'-2"

Roadway 14'-0"

45° New 15' Wing Nailed on SE

.75 Channel Ex. on Side Bridge

15' Wing on NE 5', fast Slope

Road

Rise 8'

Span 16'

about 14' wide

NE + NW 45° — 6'

Parker Bridge

Clay Twp.

4' Rise
20' Span

Channel Straightening

20 ± Clear Roadway

~~New~~

100 Cu. Yds. Exc

New. Rise 6'
22' Roadway
22 Span

Footings 3' Wide
2'-6" Deep.

Westerfield Bridge

Center Top

Upright Compression members and on the rod on N.E. Corner

Coble Steel Bridge
Paint Job
Franklin Twp.

Davis Bridge
Paint Job
Guilford Twp.

Kendall Bridge
Paint Job
Liberty Twp.

Aug — 1936

Chester + Bessie Martin

Completed

Inside of Curb Rail

Widen 5' to inside Curb Rail

8" Curb

Curb Rail 6" high

Slab Thickness 1'-0"

Rise 4'-6"

Span 12'

about 18" Thick

NE Wing due North 5' long

holes for 16" or 18" tile and dip

NW Wing 6' long due West

with road

Simmons Bridge
Old Bridge

Rise → 5'-6"
Span → 18'-0"
Roadway → 15'-6"

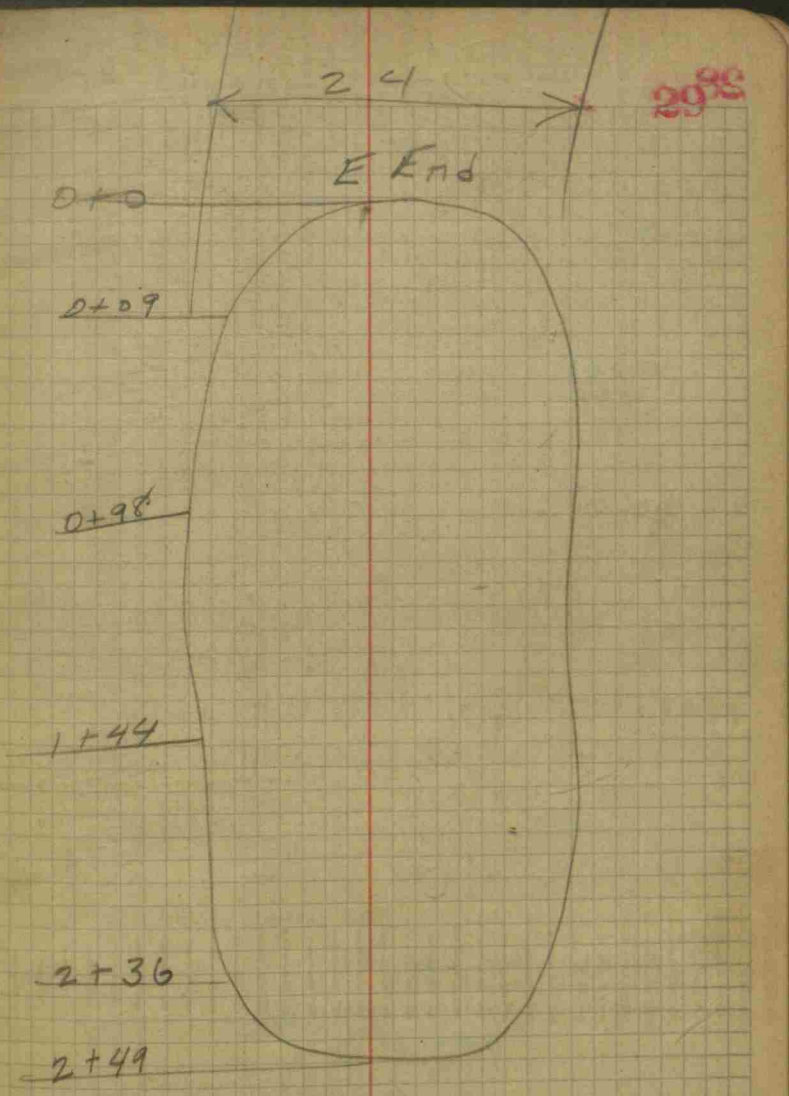
New Bridge

30° Skew

20 along Center of Road.
Roadway Clear 22'

Long bridge — 57 Sacks Cement

11.93
6.95
5965
10237
7158
82.3136.


2 4
E End
0+00
0+09
0+98
1+44
2+36
2+49

	−	℄	+	BM
		104.77	4.77	100.00
0+0				
0+09				
0+98				
1+44				
2+36				
2+49				
	1.89			102.88
		110.40	7.52	
W. End.	2+36			
	1+44			
	0+98			
E. End.	0+09			

S. Side

100.55
4.22

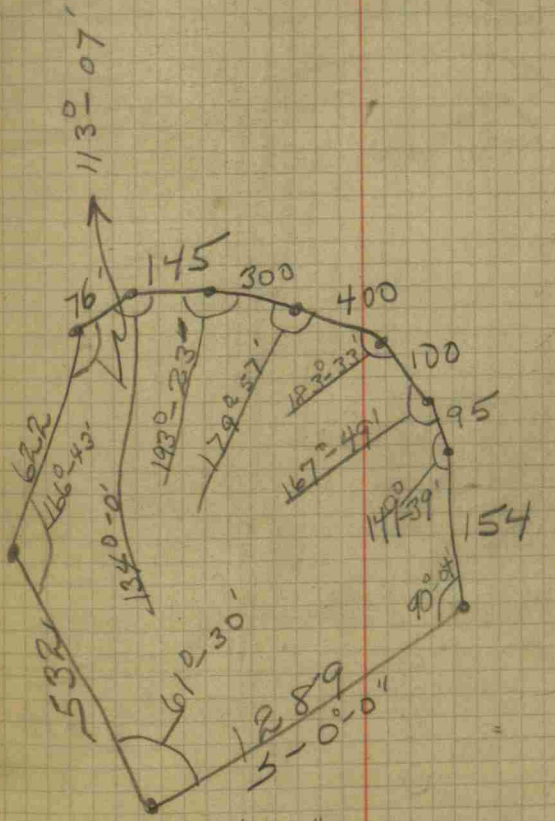
100.60
4.17
99.50
98.00
98.52
6.25

98.32
6.45

Top
106.20
4.20

10.5.42
4.98
107.60
2.80

10.8.22
2.18

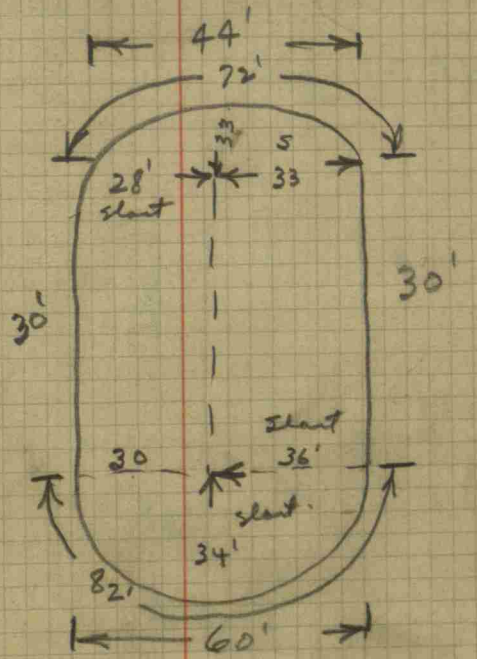


NW¼ NW¼ Sec 14-17-2N
Cor.

Sellers Gravel

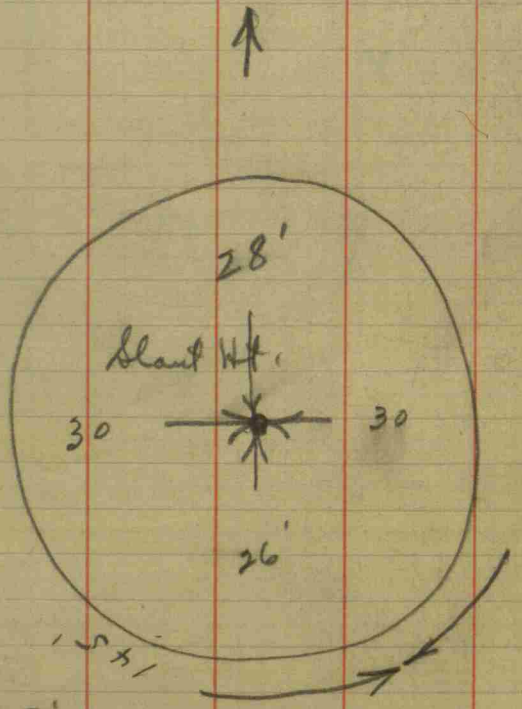
Sept 29, 1938

South Pile

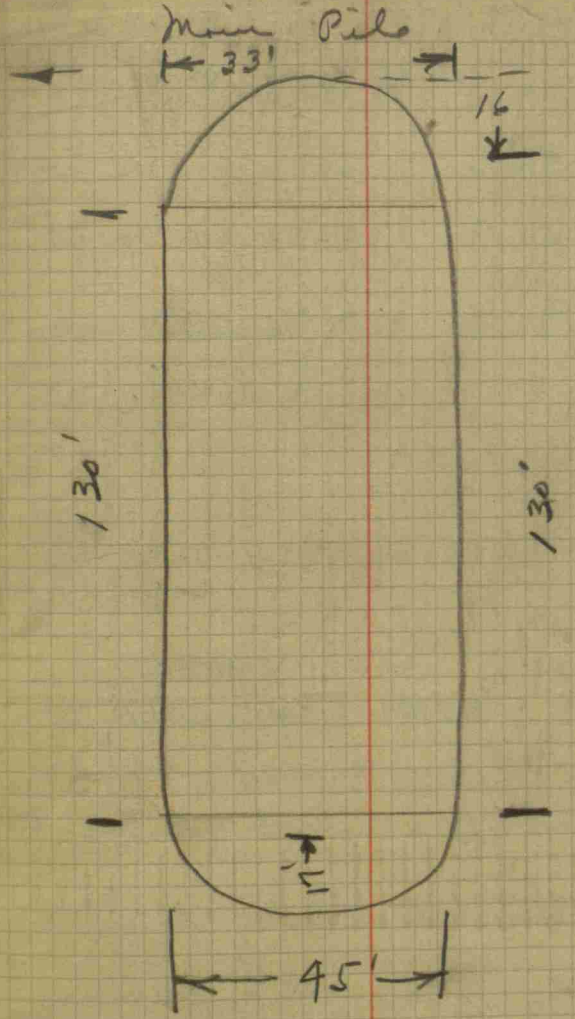


Sellers Tunnel

Sept 29, 1938



Sellers Private Pile



	−	℄	+	B.M
		110.33	10.33	100.00
	1.28			109.05
		118.01	8.96	
	11.60			106.41
		109.98	3.57	

118.01
11.60
106.41

Gd N. end S. Pile — 11.48 — 98.85

Gd. SW end S. Pile — 11.28 — 99.05

Gd SE end S Pile — 11.00 — 99.33

Gd S. side main. Pile 11.05 99.28

Gd N. side main. Pile 11.10 99.13

(Gd. at North pile Sulers. — 11.65 98.68

Top Sulers Pile 4.35 113.66

W. end top main 2.65 — 115.36

E. end top main 4.26 — 113.75

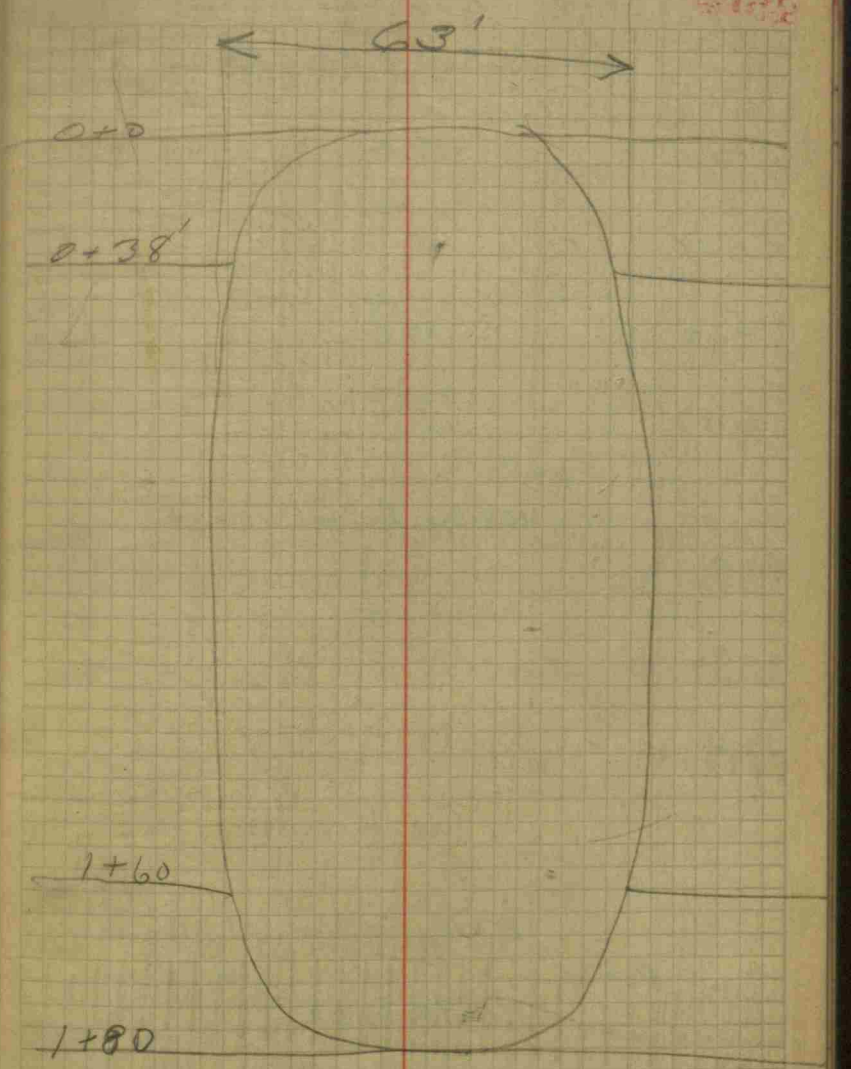
N. end top S. Pile 1.95 — 116.06

S. end top S. Pile 1.08 — 116.93

B.M. check 10.02

46

Pritchett Gravel



	−	℄	+	BM
		101.81	1.81	100.00
0+0				
0+38				
1+60				
1+80				
		102.36	2.36	100.00
0+0				
0+38				
1+60				
1+80				
		107.36	7.36	100.00
	0.62			106.74
		117.94	11.20	

96.96
20.30

West Side.

96.96
4.85

95.65
5.16

94.74
7.07

94.69
7.12

East Side

97.45
4.91

97.41
4.95

95.21
7.15

95.16
7.20

117.26
0+38 → 0.68
113.63
1+60 → 4.31

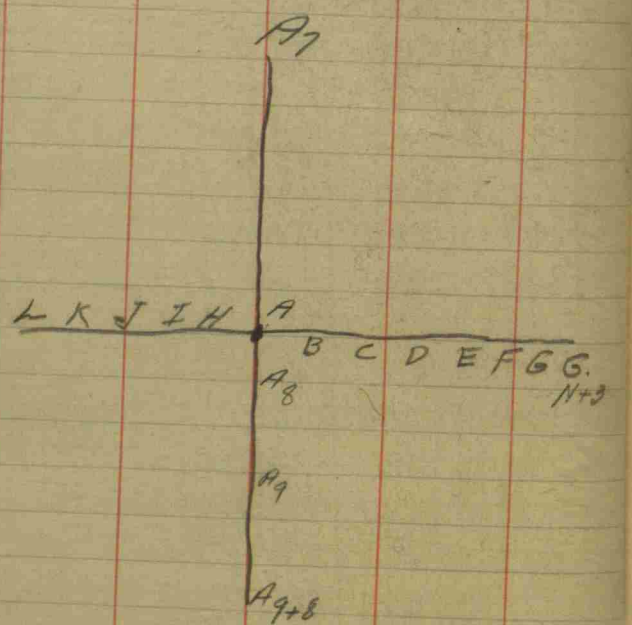
115.68
2.26
4.50 → 113.44
113.24
4.70

Chester Parsons.

July 14th - 1937 Travel

53

51



July 16th - 1937

57

B.M. on Nail in 10" diameter tree at S E. corner of gravel pile near base of tree. El. 20.00

Check B.M. 19.98

A	39.89	B	33.77	C	27.23
A1	37.24	B1	31.45	C1	26.34
Ar	35.34	Br	29.35	⊙ 24.94 Cr	23.93
A3	31.78	B3 ⊙ 26.67	25.95	C3	19.17
A4	25.68	B4	21.57	C4	15.75
A5	19.38	B5	17.74	C5	13.13
A6	12.37	B6	14.75	C6	8.65
A7 Gd	5.50	B7	Gd 5.57	C6+6W Gd	5.78
A8	34.60	⊙ B8	31.91	C8	26.43
A9	27.38	B9	25.71	C9	23.44
A9+8E	22.53 Gd.	B9+8E	Gd. 21.65	C9+7E	Gd. 19.29

D	21.87	E	14.97
D1	21.17	E1	14.46 ⊙ 15.19
Dr	17.20	Er	12.98
D3	14.04	E3	8.37
D4	9.61	E4	5.47
D5	8.65	E5 Gd -	4.87
D6-Gd-	4.77	E4+7N.-Gd-	3.81
D8 -	19.04	E8 -	13.87
D9 -	17.79	E9 -	12.71
D9-8E Gd-	14.51	E9+6N-Gd-	9.73
		E9+4E Gd-	10.91

⊙	11.14				
F	9.74	G	6.6γ	H	37.38
F1	10.38	G1	6.68	H1	36.32
F2	8.65	G2 Gd	4.87	H2	34.15
F3	5.71	G1+6N Gd. 4.78		H3	28.13
F3+6N	Gd. 4.03			H4	22.29
		G+3N Gd	5.81	H5	17.28
F8	10.11			H6	10.6γ
F8+6E	Gd. 9.40			H7 Gd.	4.78
		G8 Gd	7.45		
		[redacted]			
				H8	33.8γ
				H9	26.20
				H9+8E Gd	22.07

⊙I 31.70

I	31.28
I1	31.10
I2	33.04
I3	25.54 ⊙ 26.26
I4	20.60
I5	15.04
I6	8.58
I6+8W-Gd	4.08
I8	29.65 ⊙ 30.22
I9	24.00
I9+4E	21.30 Gd.
I9+8S	21.16 Gd.

J ⊙24.6γ

J	24.16
J1	24.6γ
J2	25.30
J3	22.46
J4	16.18
J5	11.81 - ⊙ 12.36
J6	6.40
J6+3W-Gd	4.41
J8	23.93
J8+9E	20.81 Gd.

K	16.35
K_1	17.76
K_2	19.70
K_3	15.93
K_4	12.20
K5	7.30
K4+8S	Gd. 7.30
K5+6S	Gd - 5.10
K5+7W	Gd: 4.26
K8	17.34
K8+6E	Gd. 16.40
K8+8S	Gd. 11.46

L+1S	Gd. 9.12
L	9.91
L1+2S	Gd - 8.95
L_1	10.12
L_2	13.65
L2+7S	Gd 8.44
L_3	10.54
L3+5S	Gd 6.98

⊙-14.52

7.00
2.50
4.20

Cline Gravel Pit
Measured Feb. 4, 1938
by Armstrong + Newman

25
25
125
50
625

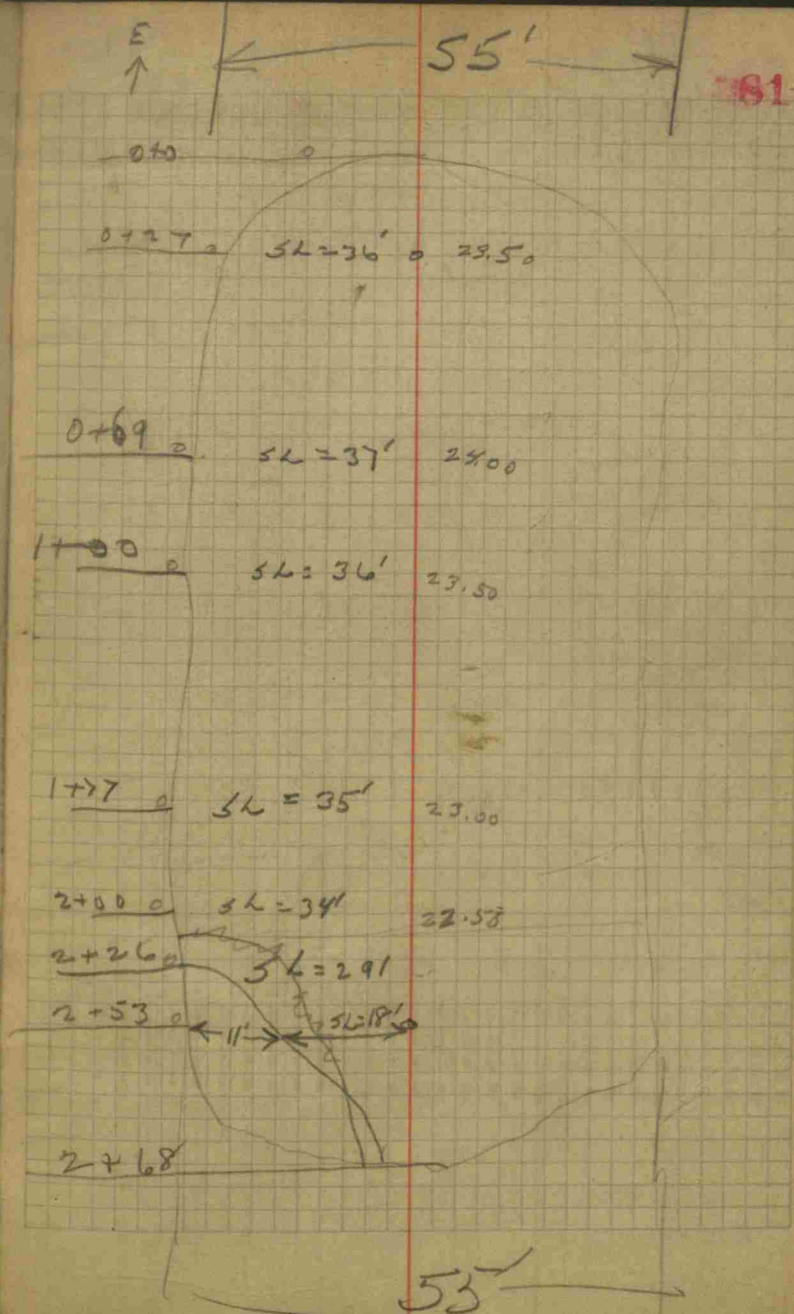
22
22
44
44
44

23
23
69
46
529

36
36
216
108
1296
756

27.5
27.5
1375
1925
550
756.25

540
4
140



736
.003
.2208

736
253
989

2.97.5

736
253
989

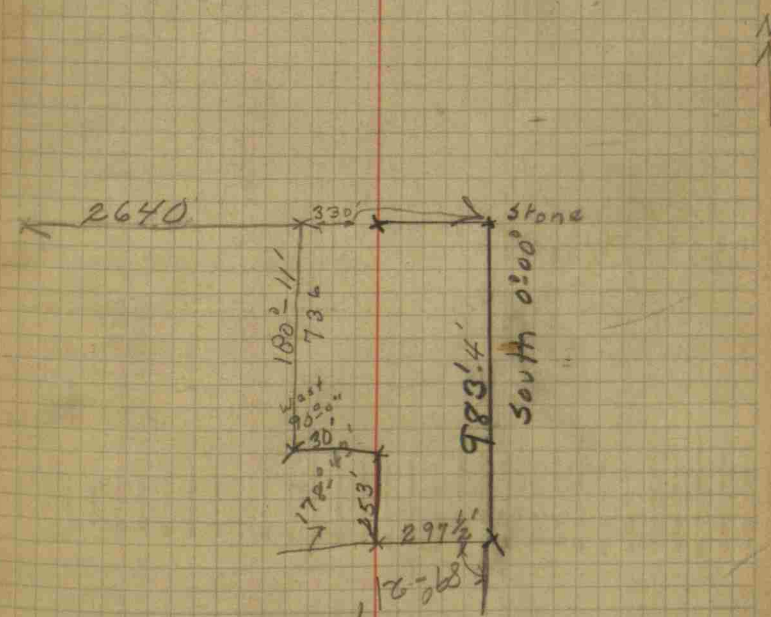
.53
.04
1.012

5.6
4.2
1.3

1.0
3.2
4.2

all angles asmuth
South = 0°-00'

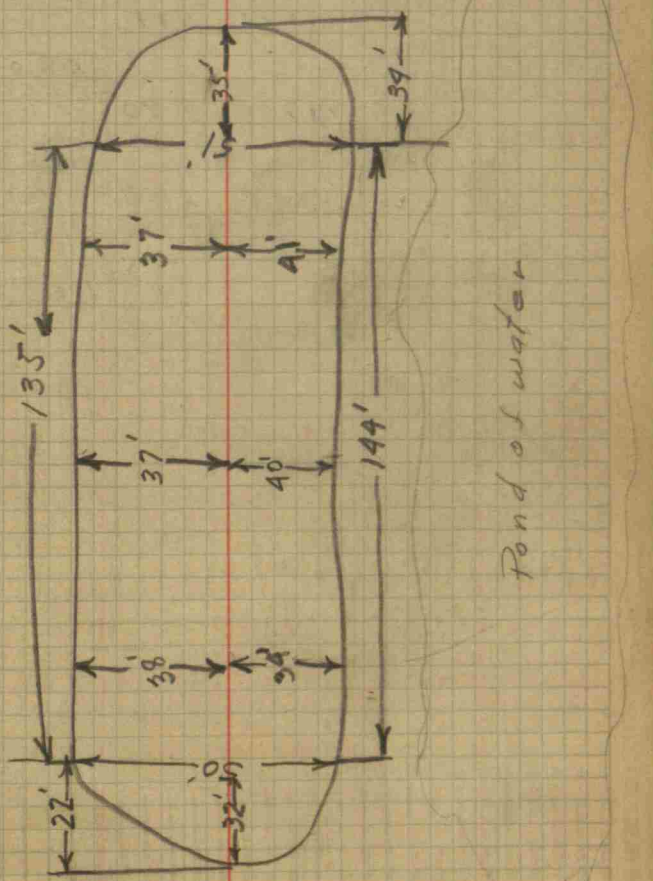
Clayton



Albertson Gravel Pile
Lincoln Twp.

M. Newman
Cloudy-Cool.

Mar. 10, 1939.



—	℄	+	BM 100	on Rock at Base of Pile
	108.44	8.44		
.35			108.09	
	107.89	9.80		
1.40			116.49	
	123.44	6.95		
12.19			111.25	
	111.58	.33		
11.58			100.00	

Elevation on Albertson Gravel

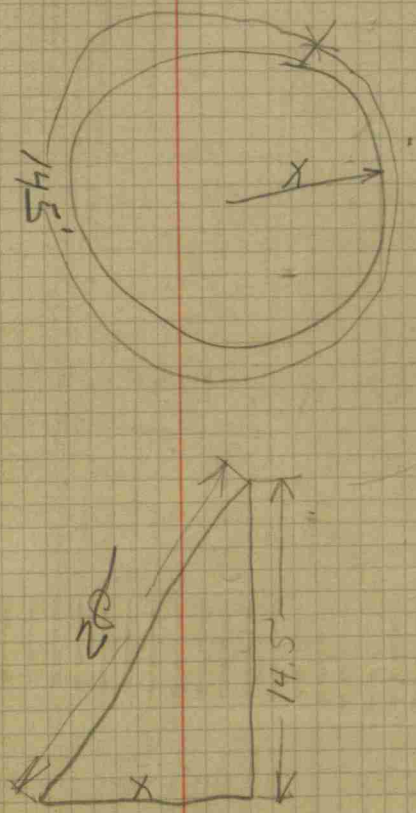
Top of Pile

120 62
2.82

121.69
1.75

121.30
2.14

Ragsdale Gravel Pile



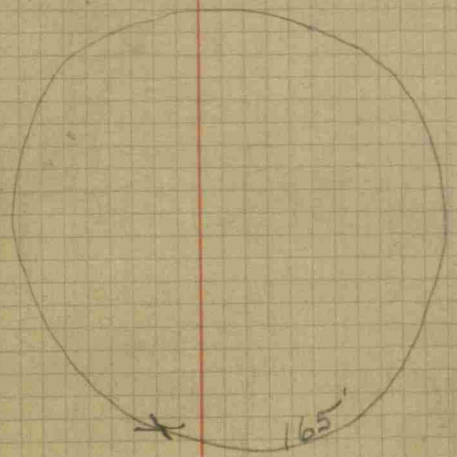
Slant Height

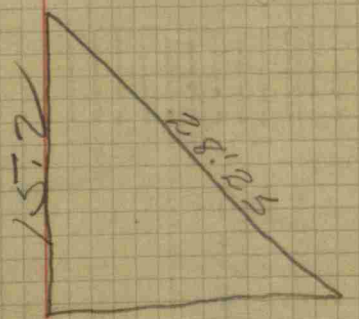
26'
30'
28'
29

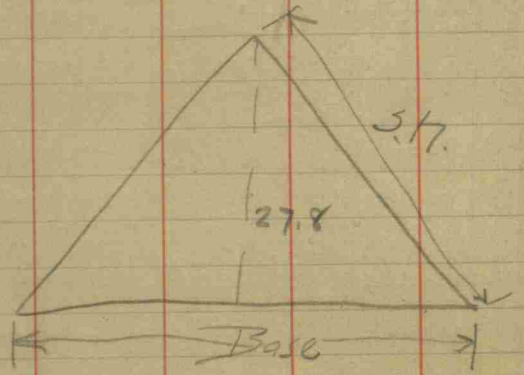
4 | 11 3 | 28

8

33



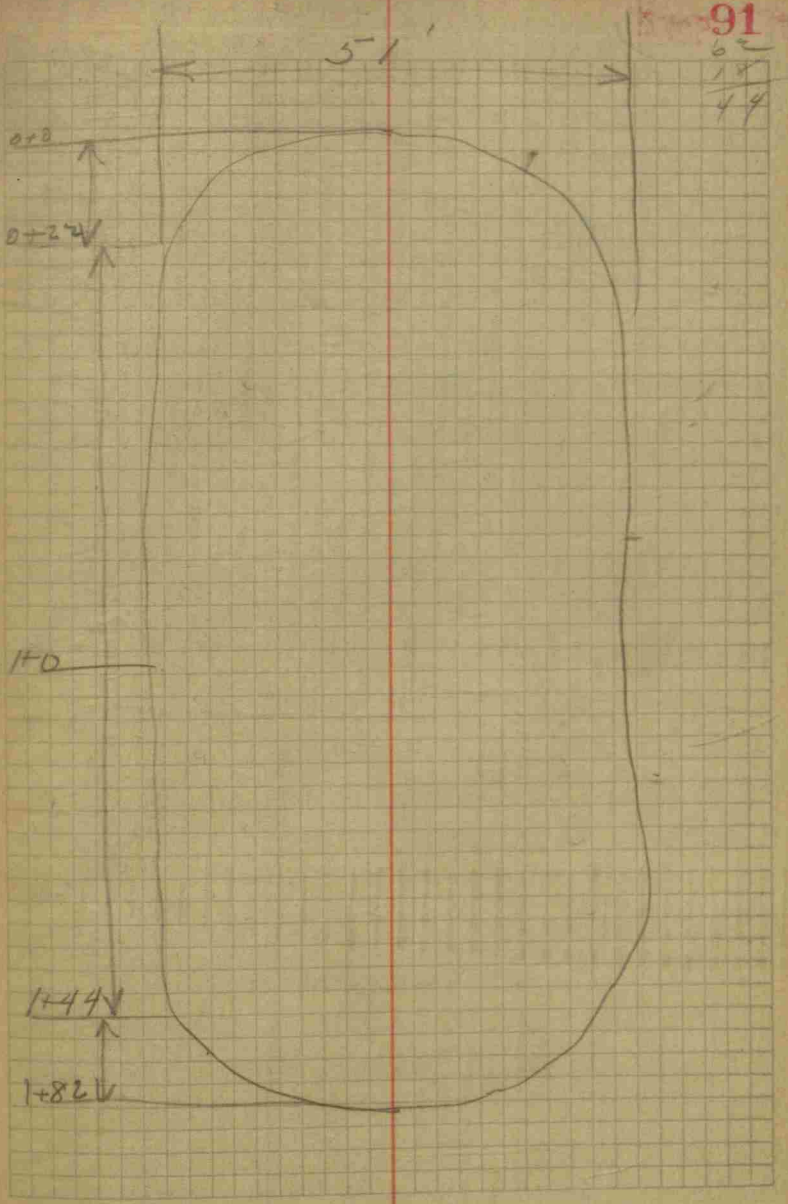




S.H.

37
37
37
32
30

5 | 17 3 34
15
23
20
3



4.

4.35
4.55

6 ½"

11.12
25
10.87
6.25
4.62

11.12

6.25

11.22
4.71

471
5
9.71
.55
10.26

10.35
6.00
4.35

5

4.10

3.75

4.35
3.75
.60

10.90
9.30
1.55

4.20
7.55
53.75

52.75

10.90 > 46.20
4.80 6.10
1.10 52-30

3.35

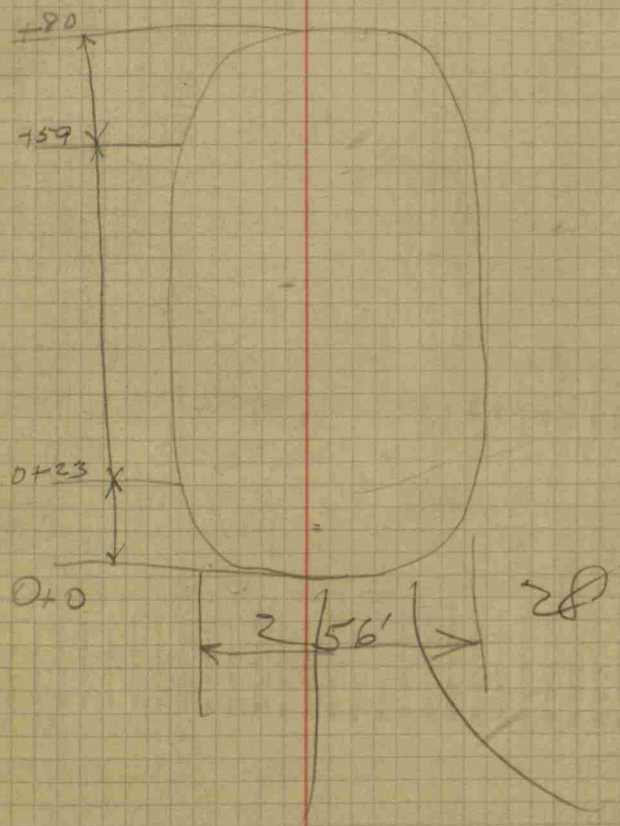
9.79
4.83
4.96

8.63
1.16
9.79

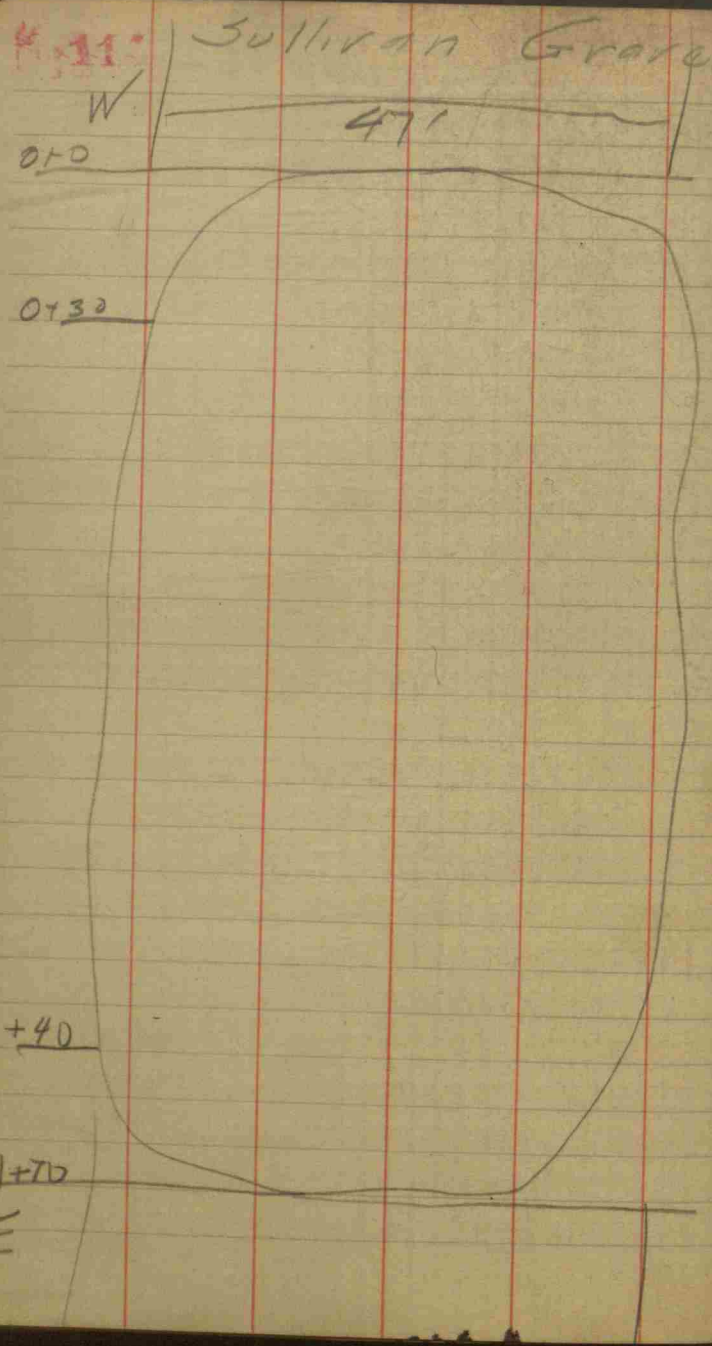
8.70

9.86
5.63
4.23

8.70
1.16
9.86


1.80
1.59
0.23
0.0
2
5.6'
28

#11 Sullivan Gravel



	−	⏥	+	BM
		104.47	4.47	100.01

Width of pile = 40'

0+0

0+30

1+40

1+70

Side Cuts

100.03
4.44

99.80
4.67

98.32
6.15

96.18
8.30

	—	℄	+	BM
		102.86	2.86	100
0+0				
0+30				
1+40				
1+70				

	—	℄	+	BM
		110.60	10.66	100.00
	-0.16			110.44
~~0+00~~		119.41	8.97	
~~1+40~~				
0+30				
~~1~~+40				

Sullivan

T.P.

98.46
+4.45

99.15
3.71

97.78
5.08

95.03
7.83

T.P. P.I.

116.80
2.61

113.70
5.71

Ave Height
115.88

4.14
5.02
2.84
2.49
2.58
4.15

	−	π	+	BM
		105.06	5.06	100.00
0+0				
1+0				
2+0				
3+0				
4+0				
5+0				
6+0				

5+K	Gd	+1
99.39		95.86
5.67		9.20
99.15	99.81	
5.90	6.25	
99.63	99.16	
5.43	5.90	
99.90	99.56	
5.16	5.50	
100.11	99.67	
4.95	5.39	
99.96	99.56	
5.10	5.50	
99.32	99.06	
5.74	6.00	

300 Easton to-fr, lc 94.96
10.10
94.42
£1. = 10.64

34
37
136
102
156
784
372

28
28
224
56
784

59
23
36

270

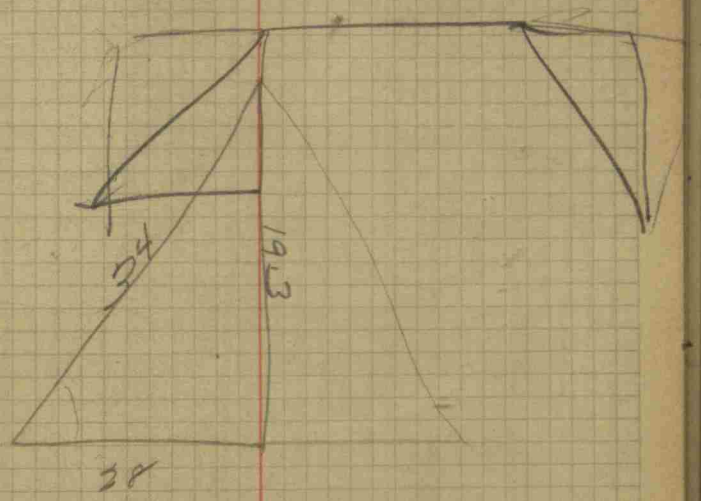
723
440
1163

19.3
14
772
193
270.2
2
5404
36
32424
16212
194 54.4

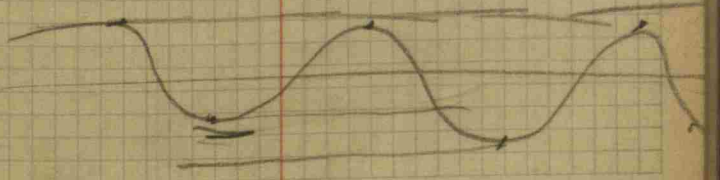
440
1866
2640
2640
3520
37 1040

723

540.4
22
10808
10808
11888.8



723
371
1094



5.15
6.00
N .15
6.65
4.50

Mar	23	Office
"	24	"
"	25	Guilford + Liberty 65 mi
"	26	Browns Lincoln + Middle - 72 mi
"	27	Iowa, Long, Simms Bridge 87 mi
"	28	Sunday
"	29	Rich Ditch 21 mi
"	30	Iowa + Sand Bridge + WPH 42 mi
"	31	Sulky + Bridge + Cline 6 Pm
April	1	Long + Iowa + WPa 36 mi
"	2	Office
"	3	Rich Union Twp 49 mi
"	4	Sunday
"	5	Union on Rich Bridge 22
"	6	" " " " "
"	7	Office
"	8	Office
"	9	Long Iowa + Parker B. 65
"	10	" " " " 65

April	11	Sunday
	12	Sick
	13	Long Iowa + Parker Bridge 65

78
05
270

989
78
967

65
72
81
21
42
68
36
49
22
22
65
65
65
83
72
65
65
71
879
05
44.45
39
48.35
65
49.00

April	14	Long + Parker Bridges and Clay Lump		83 mi	10 hr.
April	15	Long Bridge + Parker		72	mi
"	16	Long + Ferree bridges		65	mi
"	17	" + Sullivan channel	"	68	mi
"	19	"	"	71	mi
"	20	Ferree + Long Bridge	HWPA	27	mi
"	21	Parker Bridge Cagefish Channel		51	mi
"	22	Parker + Ferree + Long Bridge + Sullivan		69	mi
"	23	Parker + Ferree Bridge + Sullivan Line		72	mi
	24	Sunday			
	26	Parker + Simmons	HWPA	65	
	27	"	"	65	
	28	"	"	65	
	29	"	"	65	
	30	"	"	65	
	1	"	"	65	
	3	Goodwin Channel	"	85	
	4	Parker Simmons	"	65	
	5	"	"	65	
	6	"	"	65	

Master 28
Goodwin 2 8
50

Manning ½ day
Manning 8 hr John Burdine ½ day
Manning + Burdine ½ day

7	Parker Ferree + WPA	72
8	" " "	65
10	" " "	65
11	Marion Brand + WPA	52
12	Parker Ferree WPA	45
13	" " "	60
14	" " "	60
15	" " "	60
17	" " "	60
18	Parker Cline + Jones	73
19	WPA, Gulley + Parker	83
20	" "	92
21	" "	72
22	Indianapolis + WPA	~~62~~
		1661

30

~~Garry~~	~~27~~ hr.
Bob	
Newman	4 hr
Don	12 hr

Mar. 11-38	Richard G. York		3½ hr
	Noble Mason		5 hr
	Self		5 hr
12-38		York	3
		Green	3
	Self		3
14-38		York	7½
		Green	7½
	Self		7½

152

6'-8" + one Band - Ollie
22'-8" - 125 banks - } Smith
30'-8" - 1 - Castin - }

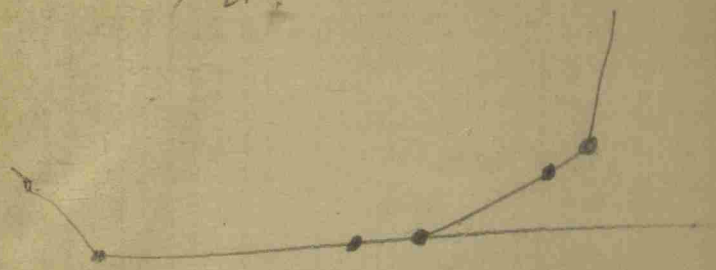
Copie Walls Labels

Newman

Aug 26 '39

El. tile at So. Drive	6.92
100' No.	6.53
50' No. (Head of tile)	6.98
50' No.	7.49
100' No	7.63
50' No	8.00
50'	8.74
50'	9.10
35+-	9.50

950
695
2.5 2



Cu. Yds

1094

1750 × (5/8) =

8) 8 750
6
.75
72
30

North line → 10.31 ch.

S line → 9.465 + 2.28 ch

Mi – 90.6

9500

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

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

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

MADE IN GERMANY.