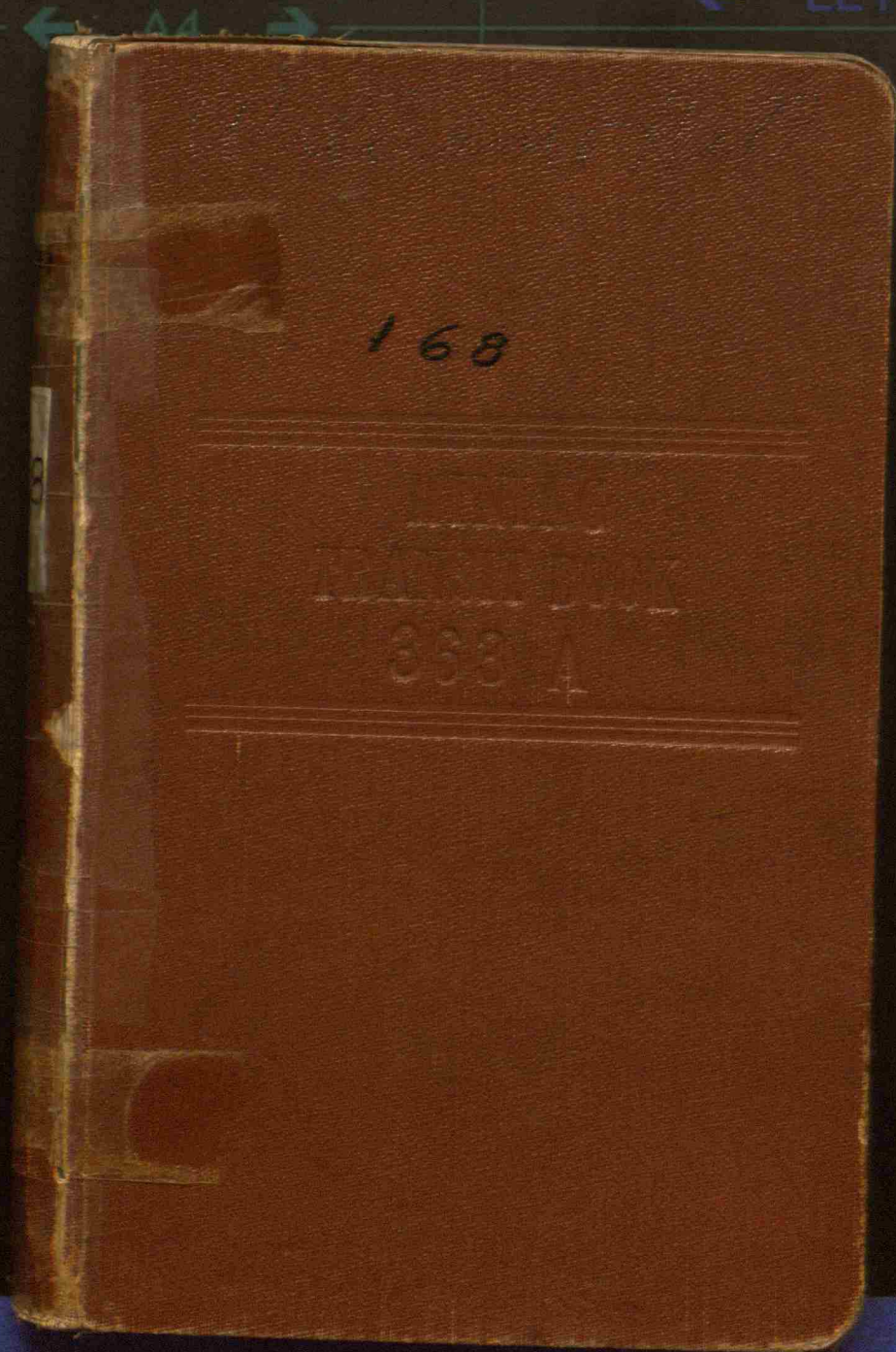




KEUFFEL & ESSER CO.

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.

"Copyright, 1885, by Keuffel & Esser Co."

	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.

ALBERT WALLACE

CHARLES FISHER

WALTER ALLEE

5.10

1.80

3.30

3.90

1.80

2.10

5.10

3.90

1.20

8.70

10.15

8.70

1.45

16.40

10.15

6.25

16.40

8.70

7.70

1.80

7.70

18.71

7.70

7.70

5-5-5-5-5-5-5-5

$$\begin{array}{r} 8.88 \\ 40.50 \overline{) 36000.0} \\ \underline{32400} \end{array}$$

$$\begin{array}{r} 8.88 \\ 40.50 \\ \hline 44400 \\ 35520 \\ \hline 3596400 \end{array}$$

$$\begin{array}{r} 40.50 \\ 8885 \\ \hline 20250 \\ 32400 \\ 32400 \\ \hline 984250 \end{array}$$

$$\begin{array}{r} 926 \\ \hline 99 \\ \hline 11 \\ 99 \end{array}$$

IIII
IIII
IIII
IIII
IIII
IIII
IIII

$$\begin{array}{r} 20.26 \\ 100300 \\ \hline 2026 \\ \hline 302900 \end{array}$$

IIII IIII IIII IIII
IIII IIII IIII IIII

IIII IIII IIII IIII
IIII IIII IIII IIII

IIII IIII IIII IIII
IIII

$$\begin{array}{r} 889 \\ 4050 \\ \hline 44450 \\ 35560 \\ \hline 3600450 \end{array}$$

✓

Williams & Hiels
 0+0 S 69°25' W
 2+70 Def L 35°31'
 3+75 No. Rd Fence
 4+09 E Rd
 4+31 To line of Rd
 5+20 Cross Section
 7+0 Def R 24°31'
 9+0 Def L 1°39'
 10+91 Def L 1°36'
 13+45 Def L 4°49'
 15+61 Cross Section
 18+23 E. & W Fence
 18+28 Def R - 3°48'
 20+0 Cross Section
 22+20 N & S Fence probably P.L.
 22+50 Def L 28°00'
 25+0 Cross Section
 28+42 E. Rd. Fence of N & S Rd
 28+50 Def L - 16°14'
 28+59 E Rd
 28+73 W. Rd. Fence
 31+65 Def L 29°37'
 32+38 N. & S. Fence
 34+0 Ssk. Cross Section
 36+70 Def R 12°15'

3

0+0 is 3' West of N & S
 Fence

Bridge 4+09

Span - 20'-0"

Rise - 5'-6"

Concrete flat top

Rdway 18'-0"

Arch - Concrete Bridge Sta 28+59

Rdway 21'-6"

Rise - 5'-0"

Sta 28+50 N to
 Evans No. line - 297'

A

- 38+50 Cross Section
 41+0 Def R. $30^{\circ}35'$
 42+90 Cross Section sth $28\frac{1}{2}'$ So. of Ditch
 44+0 Ditch and stream comes in
 from SW.
 44+22 Def R. $51^{\circ}25'$
 46+72 Def R. $25^{\circ}53'$
 49+0 Def L $22^{\circ}45'$
 50+34 S. fence of Rd.
 50+52 Def L - $39^{\circ}50'$
 51+78 Def R - $35^{\circ}13'$
 54+50 Def L - $26^{\circ}32'$
 56+40 Def R - $29^{\circ}16'$
 57+84 Def L - $28^{\circ}17'$
 59+10 Def R - $40^{\circ}44'$
 60+0 sth Cross Section, ditch
 goes to the East and leaves sth line
 60+50 sth Cross Sec.
 Ditch is 40' East of sth 60+50
 61+0 sth Cross Sec.
 Ditch is 20' East of sth
 61+85 sth + Cross Sec
 Ditch is 60' East of sth line
 62+57 Def L $21^{\circ}35'$
 63+23 John Long W. fence and
 Wm Reed E. line.

50+52 Top Rd + E + W
 between Evans + John Long
 468' West to Evans W. line

64+46 Def R $13^{\circ}53'$
 66+50 Def L $57^{\circ}53'$
 67+55 Def L $14^{\circ}25'$
 69+0 Stk Cross Section
 70+44 Def L $10^{\circ}30'$
 72+16 Def L $23^{\circ}47'$
 77+13 Def R $32^{\circ}48'$ (?)
 80+0 Stk Cross Section
 82+0 Stk Cross Section
 84+0 Stk Cross Section
 86+0 Def L $13^{\circ}16'$
 87+30 Def L $14^{\circ}33'$
 90+0 Stk Cross Sec
 91+0 Def R $13^{\circ}20'$

92+24 Reed W. line - Turn Cowley
E. line

94+15 Def R $15^{\circ}33'$
 96+42 Arm goes So.
 97+0 Stk Cross Sec.
 100+28 Def R $26^{\circ}02'$
 104+0 Def R $2^{\circ}55'$
 106+12 End of open ditch
 106+10 Cowley's W. line + Reed
E. line

Sta 66+50 is 120' West and
 32' So. of Reed NE. Cor.,
 Reed NE corner is 327' N
 of Sta 63+23

Ditch is 56' N. of Sta 69+0

418' North to Cowley's No
line

106+12 Zile starts.
Set stk every 100'

106+12 Def L - $20^{\circ}14'$
111+0 Def L - $9^{\circ}07'$
116+0 Def R - $9^{\circ}47'$
117+45 Def L - $30^{\circ}05'$
119+50 Def L - $57^{\circ}49'$
119+50 is Sam Leeks W line and

Blessing E. line.

121+50 Def R - $18^{\circ}22'$
124+0 Def R - $18^{\circ}57'$
125+50 Def L - $10^{\circ}40'$
127+0 Def R - $13^{\circ}45'$
129+0 Def L - $27^{\circ}00'$
129+55 Blessing So line & Hill

No line 519' E to Cen Sec 2

133+65 Def L - $21^{\circ}16'$
136+47 Def R - $89^{\circ}30'$
143+06 Def R - $40^{\circ}57'$
143+08 Harry Hill W line &

Frank Robbins E. line.

663' No to Hills No line

147+61 Def L - $19^{\circ}28'$
150+0 Def L - $9^{\circ}22'$

10

157+16 - Def L - 21° 10'

157+51 E Rd. Fence

157+68 E Rd.

157+76 Def.

357' N to Frank Robbins

No. line

16" at mouth to inside of
Blessings Woods (1 Rd.)

12" - to about 20 Rods of the Rd.

10"

8" probably W of Rd.

11

12
Levels on stream to the sea.

44+0

10" tide

Mouth of stream - 5450

50 up - 5590

100 up - 5610

150 up - 5685

185 up 190 up 5696

Flow line of tide 5722

13

○ 60.62 on Head Wall at mouth of
tub.

14				Levels						#1	15
Sta	3' ant	5th	Bank	Bottom Bank	E	Bot Bank	Bank	ant		B.M. on N.W. Cor of wing of Bridge Sta. 35.75	
0+00	44.50	45.06	44.48 ³	42.87 ⁵	42.32 ²	43.14 ¹⁴	44.89 ²⁵	45.70 ²⁵			
2+90	46.91	46.21	44.34 ¹	44.30 ⁵	43.77 ²	43.90 ²⁰	47.30 ³⁷	46.94 ⁴¹			
5+20	49.35	49.74	48.45 ³	44.37 ⁵	43.42 ²	43.27 ¹⁹	47.80 ²⁶	48.31 ³¹			
7+0	47.96	48.00	48.20 ¹³	44.25 ²	44.07 ¹⁰	44.14 ²⁰	46.64 ²⁹	48.25 ³⁸		⊙ 49.16	
9+0	53.00	52.10	50.22 ²	46.24 ⁴	45.90 ¹⁰	46.03 ¹⁹	48.24 ²⁵	49.35 ³⁶		⊙ 49.36	
10+91	49.62	49.64	48.01 ⁷	46.64 ¹⁰	46.55 ¹⁰	46.74 ¹⁹	49.33 ²²	49.26 ²⁸		⊙ 49.49	
13+45	53.58	53.56	49.76 ²⁵	47.45 ²⁹	46.90 ²²	47.30 ²⁶	49.15 ³⁸	50.55 ⁴⁴		⊙ 50.41	
15+61	52.51	52.73	51.60 ¹³	49.00 ¹⁵	47.66 ²⁵	48.26 ³⁹	50.30 ³⁵	51.37 ⁴⁰			
18+28	51.90	52.56	51.92 ²	49.07 ¹¹	48.56 ¹³	49.51 ²⁶	51.23 ¹⁹	51.48 ³²		⊙ 51.56	#2
20+0	52.48	52.90	51.63 ⁷	49.96 ¹⁰	49.16 ³	50.03 ¹⁴	52.11 ²⁵	52.50 ²⁵			
22+50	53.62	53.62	52.43 ⁹	50.92 ⁹	49.84 ¹⁴	50.64 ¹⁴	52.91 ¹⁶	53.20 ²⁴		⊙ 52.98	B.M. on N end of W Rail of Bridge Sta. 42.8+50
25+0	54.00	54.72	53.68 ⁵	51.40 ⁸	50.59 ¹¹	51.25 ¹⁴	53.37 ¹⁶	54.18 ²³		⊙ 58.56	El. 59.00
28+50		59.24	53.90 ⁰	52.44 ¹	51.60 ¹²	52.30 ¹⁴	54.01 ²⁶	56.75 ²³			
31+65	57.17	57.00	53.48 ¹²	52.44 ¹²	52.15 ¹⁴	52.58 ¹⁹	55.90 ²⁶	55.65 ³¹			
34+0	56.85	57.09	54.00 ¹⁰	52.75 ¹³	52.40 ¹⁴	53.01 ¹⁹	54.35 ²⁹	57.60 ³⁶			
36+70	57.30	57.10	54.18 ⁸	53.12 ¹³	52.95 ¹⁸	53.97 ³⁰	58.42 ³⁴	57.73 ⁴⁰		⊙ 57.12	
38+50	57.50	58.63	57.55 ³	53.40 ⁸	53.18 ¹⁶	53.42 ¹⁸	58.25 ²⁶	58.20 ³⁰			
41+0	58.50	59.35	58.20 ³	54.05 ⁸	53.60 ¹²	54.05 ¹⁴	57.10 ²⁵	59.70 ³³			
42+90	58.90	59.45	59.43 ⁹	54.55 ²⁹	54.00 ³²	54.48 ³⁷	58.82 ⁴⁵	59.44 ⁵¹			
44+22	59.62	60.26	59.10 ⁷	54.84 ¹⁰	54.42 ¹⁷	54.80 ¹⁹	59.82 ³⁴	59.69 ³⁹			
46+72	60.15	60.75	59.60 ²	55.30 ⁹	54.45 ¹²	55.20 ¹⁵	57.24 ¹⁸	62.62 ³³			
49+0	61.30	61.90	57.67 ⁹	55.73 ¹¹	54.52 ¹⁷	55.59 ¹⁹	57.97 ²⁰	59.93 ²⁷			
50+52	62.70	63.40	61.09 ⁴	56.17 ¹⁰	54.95 ¹⁸	56.08 ¹⁸	61.90 ²⁵	62.47 ³⁰		⊙ 63.37	
51+78	64.55	64.61	61.75 ⁴	56.16 ¹⁵	55.68 ¹²	56.25 ¹⁸	62.50 ³³	62.24 ³⁸			

16

Sta	3' ant	sth	Bank	Out	Bank
54+50	6275	6319	6838 ⁸	5666 ¹⁰	5600 ¹⁰
56+40	6310	6331	5840 ⁸	5660 ¹⁰	5615 ¹⁰
57+84	6340	6426	5880 ⁹	5648 ¹⁰	5646 ¹⁰
59+10	6248	6344	6290 ²	5682 ¹⁴	5673 ¹⁴
60+0	6324	6222	5980 ⁴	5736 ⁷	5690 ¹⁰
60+50	6300	6345	6410 ²⁵	5759 ⁴¹	5690 ²⁵
61+0	6357	6408	6410 ¹²	5805 ²⁰	5715 ²⁰
61+85	6409	6479	6520 ⁴⁰	5809 ⁵⁹	5728 ⁶⁰
62+57	6300	6362	5925 ⁸	5794 ¹⁰	5792 ¹⁰
64+46	6360	6381	6272 ¹⁰	5850 ¹⁰	5785 ¹⁰
66+50	6430	6485	6450 ¹⁰	5860 ²²	5814 ²⁴
67+55	6370	6417	6351 ⁶	5902 ¹⁵	5804 ¹⁷
69+0	6478	6520	6420 ⁸	5882 ⁵⁰	5801 ⁵⁷
70+44	6370	6445	6420 ³	5970 ¹²	5835 ¹⁴
72+16	6463	6535	6475 ¹⁵	5767 ¹⁵	5865 ¹⁹
77+13	6472	6590	6460 ³	5977 ⁵	5898 ¹¹
80+0	6342	6392	6325 ¹⁵	6084 ¹⁵	5955 ¹⁶
82+0	6550	6642	6543 ³	6090 ⁵	5960 ⁷
84+0	6584	6673	6530 ¹⁰	6103 ¹⁰	5975 ¹³
86+0	6533	6647	6560 ²	6110 ⁸	6030 ¹³
87+30	6522	6682	6494 ²	6102 ⁴	5970 ¹¹
90+0	6513	6599	6545 ⁵	6148 ⁵	6081 ¹⁰
91+0	6520	6612	6560 ²	6180 ⁵	6042 ¹¹
94+15	6577	6598	6577 ⁵	6163 ⁵	6074 ¹³

El. in Arm to So. - 6020
Sta 96+42

#1 17

Bank	Bank	Out
5644 ¹⁶	6320 ²⁸	6331 ³³
5662 ¹⁴	5835 ¹⁵	6305 ²⁵
5691 ¹⁶	6332 ²⁴	6315 ³³
5702 ¹⁷	6388 ³¹	6364 ³⁶
5732 ¹⁰	5966 ¹⁶	6330 ²⁷
5761 ⁴⁴	5442 ⁶⁰	6378 ⁶⁵
5810 ²³	5445 ³⁸	6380 ⁶⁵
5810 ⁶³	5455 ⁷⁵	6485 ⁸⁰
5801 ⁶	6307 ²⁸	6310 ³⁵
5849 ¹⁴	6527 ³⁰	6971 ³⁵
5890 ²⁶	6377 ³⁷	6360 ⁴⁰
5891 ¹⁹	4432 ²⁷	6402 ³¹
5900 ⁵⁹	6355 ⁶⁸	6340 ⁷²
5912 ¹⁶	6487 ²⁵	6480 ³⁰
5969 ²²	6412 ³⁰	6433 ³⁵
6033 ¹³	6530 ²⁰	6505 ²⁴
6080 ¹⁴	6485 ²²	6476 ²⁷
6090 ¹³	6533 ¹⁸	6522 ²³
6080 ¹⁴	6591 ¹⁹	6570 ²³
6100 ¹⁷	6478 ²²	6478 ²⁵
6121 ¹³	6490 ¹⁸	4492 ²¹
6152 ¹⁶	6541 ²⁰	6503 ²²
6158 ¹⁴	6590 ¹⁹	6530 ²⁴
6155 ¹⁵	6607 ²⁰	6535 ²⁴

B.M. El. 50.00
on N.W. Wing
of Bridge
Sta 3+75
63.19
64.25
FOR DINNER

66.00

66.36

64.34

Sta	3' out	5th	Bank	Out Bank	E
97+0	6567	6627	6596	6200	6080
100+28	6632	6688	6662 ³	6265 ⁷	6115
104+0	6702	6760	6742 ⁴	6296 ¹⁰	6215 ¹⁴
106+12	6705	6763	6655 ³	6291 ⁶	6130 ¹²
EL. on Top		File	-	6158	
EL. of Fl.		File	-	6018	

Out Bank	Bank	Out	① 6870 #3 B.M. South End of head wall at end of ditch - El. 6580
6182 ¹¹	6692 ¹⁴	6663 ¹²	
6232 ¹⁴	6780 ²⁰	6625 ²⁷	
6230 ²⁰	6770 ²⁴	6685 ²²	
6270 ¹⁸	6685 ²⁵	6633 ²⁸	

20	E L on file			
	Stn	Gr	Top 2 in	FL figured
106+12		63.55	61.58	60.18
107+0	66.73	64.00	61.75	60.35
108+0	66.66	64.42	61.85	60.45
109+0	66.66	64.75	61.91	60.51
110+0	66.97	64.97	62.08	60.68
111+0	67.17	65.12	61.87	60.47
112+0	66.05	65.20	62.18	60.78
113+0	66.25	65.27	62.27	60.87
114+0	66.32	65.32	62.35	60.95
0 115+0	66.74	65.38	62.35	60.95
116+0	66.76	65.41	62.39	60.99
117+0	66.40	65.30	62.45	61.05
117+45	66.35	65.42		
118+0	66.45	65.28	62.38	60.98
119+00	65.99	65.11	62.65	61.25
119+50	67.68	64.89	16" to 12"	
120+0	67.17	64.08	62.12	61.07
121+0	68.75	63.95	62.16	61.11
0 121+50	69.11	63.95		
122+0	69.48	63.75	62.34	61.29
123+0	69.24	63.63	62.31	61.26
124+0	69.22	63.67	62.30	61.25
125+0	69.25	63.81	62.25	61.20
125+50	69.05	63.48		

21				
	Top Till 61.58 6d	Bot Drain	Stk	Sta
	57.37	60.00	67.70	106+12
		60.52	68.05	104+0
	57.09	59.94 2.85	66.60	100+28
	56.95	59.10-2.15	66.55	97+00
	56.72	58.70	65.70	94+15
	56.47	58.55	65.70	94+00
	56.39	—	—	90+00
	56.17	58.30	65.48	87+30
	56.07	58.16	66.75	86+00
	55.91	57.90	65.95	84+00
	55.75	57.80	66.03	82+00
	55.59	57.90	64.20	80+00
	55.34	56.90	65.20	77+13
		56.50	65.95	72+16
	54.84	56	64.83	70+44
	54.67		65.36	69+0
	54.53		—	67+55
	54.38		—	65.48 66+50
	54.20		—	63.85 64+46
	54.07	55.00	—	62+57
	53.85		—	65.00 61+85
	53.81	54.85		

22

Sta	Stk	Gd.	2nd	FL
126+0	6900	63.55	62.25	61.20
① 127+0	68.79	63.80	62.20	61.15
128+0	6945	64.21	62.23	61.18
129+0	6890	64.36	62.28	61.23
130+0	6708	6610	62.20	61.15
131+0	6703	6611	6216	61.11
132+0	6720	6610	6230	61.25
① 133+0	6700	6602	6232	61.27
133+0	6730	6493		
134+0	6674	6390		
135+0	6735	6420		
136+0	6761	6493		
136+4)	6735	6531		
137+0	6679	6638	6232 ⁺¹⁵	61.29
138+0	6665	6630	6216 ⁺¹⁵	61.11
139+0	6660	6620	6211 ⁺¹⁵	61.06
140+0	6662	6615	6221 ⁺¹⁵	61.16
141+0	6666	6643	6240	61.35
142+0	6659	6648	6239	61.34
143+0	no sth			
143+06	6635	6480	6235	61.30
144+0	6675	6612	6247	61.42
145+0	6687	6635	6250	61.45
146+0	6663	6692	6263	61.58

23

129+60	2nd	62.25	
Gd	Bot	Stk	
53.73	—	—	61+00
53.68	—	—	60+50
53.63	54.20	63.67	60+00
53.54		64.20	59+10
53.41		65.10	57+84
53.27		64.10	56+40
53.08	53.50	62.88	54+50
52.80	53.95	65.75	51+78
52.62			50+52

24

Sta	Sub	Gal	Top Zile	FL Figured
147+0	6767	6723	6253	61.48
147+61	6740	6682		
147+0	6708	6628	6280	61.75
149+0	6756	6685	6294	61.89
150+0	6915	6508	6290	61.85
151+0	No tile		changes 12" to 10"	
151+16	6921	6506	6270	61.80
152+0	6860	6496	6260	61.90
153+0	6851	6597	6255	61.65
154+0	6817	6713		
155+0	6858	6735		
156+0	6785	6685	6265	61.75
157+0	6762	6681	6292	62.02
157+76	6852			

158+0	Pond	Pond	6579	6297	6207	10" to 8"
159+18	Pond		6560	6315	6240	
159+90	Pond		6542	8" to 5"		
160+20	Pond		6560	6330	6280	

Tile goes in - stopped up back 5' to 8'

EL low Dd in Pond 100'

No of tile - 64,40

25

6310 - Zile
149+0

Sta 149+50

6300 6370
78" Top

Tile flows into main from NW

#4

B.17 on N end
of E. rail of bridge
at Rd Sta 157+55
EL - 69.10

69.25

7" comes in from SW.

Prewitt Plainfield

A. Cen Plainfield Mooresville Rd
 270' S of W² Mi Stone Sec 35
 Def L 21° 49'

B Pt. Cen P.M. Rd and Fairfield Ch Rd
 NE cor Prewitt Tract is
 744' S 21° 49' E of A

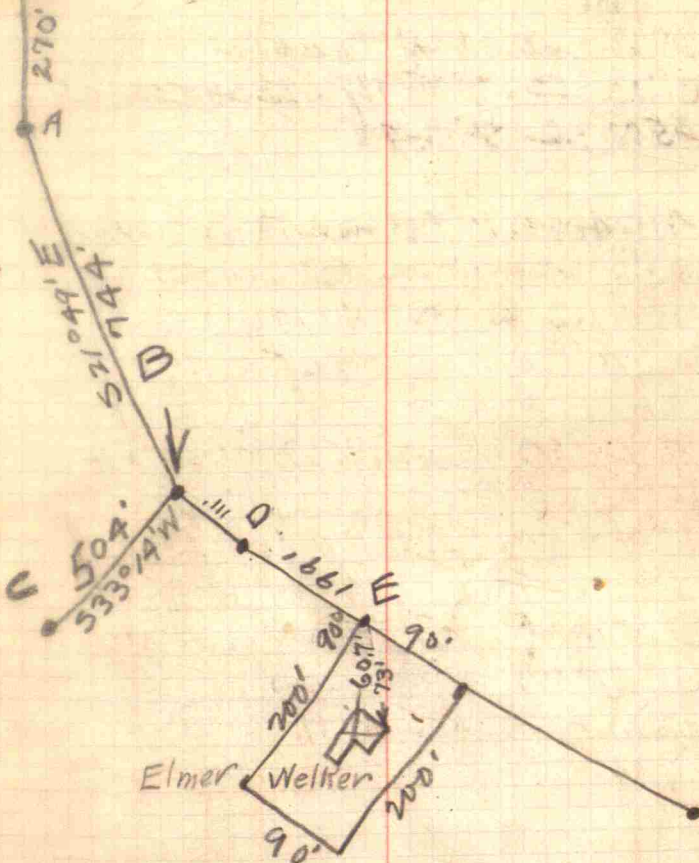
B is wit by 10" Syc S 71° 11' E - 30.5'

D Pt & P.M. Rd 111' S 54° 45' from
 B -

Ⓔ Pt of NE cor Welker Tract
 S 64° 07' E of D - stake Rt 20'

E 3rd I.P. Wit NE cor Welker
 SW Cor. Porch Foundation 60.7'
 DE cor Same 73'

W² Mi Stone Sec 35



$$\begin{array}{r}
 66 \overline{) 128} \quad \angle 18 \\
 \underline{66} \\
 540 \\
 \underline{528}
 \end{array}$$

$$\begin{array}{r}
 2.18 \\
 \underline{50} \\
 2.66 \\
 \underline{17.51} \\
 20.17
 \end{array}
 \qquad
 \begin{array}{r}
 2.68 \\
 \underline{17.51} \\
 20.19
 \end{array}$$

34

Survey for 1st Nat. Bank

Corrected Random as follows

at 60 set stk 24 L S of Random

at 55.00 set stone 23.2 L S of Random
in Rdat 40.40 set stone at 5th mi
stone Sec 11 on S line Sec
then Run N 10 ch. Set stk 2 ch
W of pt.Run E 1.50 ch - Def R 88° 38'
S 1° 22' E 5.00 ch pt 1.60 ch E
of W line of this tract. Thence
Def L 74° - Run S 75° 22' EThence Def R 38° 50' and run
S 36° 32' E to point on S line
Sec and on W bank stream
at 24+75, with stk at 25+00

Plainfield

at 30.30 set
stk on Earth
levee - 15 lbs
S of Cone Wallat 2.5 ch set
stk on line road
W of pt on Bank.

at 22.9

11-14-1E

80.80 - lat line 335 L N of line

35

5500 ch stk on Random
in Cent Rd N of line
45 ch stk 25 L S of Random41 ch set stk on Random
40 ch stk on
Random31.30 - stk on Levee
10 L S of Random25 ch - stk on W. Bank
on Random22.9 ch - stk on E Bank
10 L - S of Random
.006 LK. No. FOR CORRECTION20.5 ch stk on Random
20.0 ch stk on Random
AT 20.20 ch. MOVE
SO. .084 LKS.

SE cor sec - 11

From S² Sec 11 or N² Sec 14 —
 run S 22.41 ch set stp in fence
 measured E 20.25 ch and set
 stake. Measured W 12.06 to stone
 in cen Rd — to be corrected

Run S 22.41 ch set stp in fence
 measured E 20.25 ch and set
 stake. Measured W 12.06 to stone
 in cen Rd — to be corrected

	STK	CD	
106+12	65.93	58.30	7.13
106+50	66.00	58.30	7.70
107	66.50	58.34	8.14
107+50	66.22	58.36	7.86
108	66.35	58.38	7.97
+50	66.00	58.40	7.60
109	66.42	58.42	8.00
+50	66.29	58.44	7.85
110	66.46	58.46	8.00
+50	66.56	58.48	8.08
111	66.50	58.50	8.00
+50	66.70	58.52	8.18
112	66.62	58.54	8.08
+50	66.42	58.56	7.86
113	66.33	58.58	7.75
+50	66.15	58.60	7.55
114	66.66	58.62	8.04
+50	66.35	58.64	7.71
115	66.98	58.66	8.32
+50	66.18	58.68	7.50
116	66.81	58.70	8.11
+50	66.52	58.72	7.80
117	66.58	58.74	7.84
+50	66.04	58.76	7.28
118	66.14	58.78	7.36

67.36 Top
STK

40

Sta 6d

118+50	66.43	58.80	7.63	
119	66.06	58.82	7.24	
+50	66.45	58.84	7.61	
120	66.34	58.86	8.26	59.20 7.34
+50	67.95	59.23	8.72	8'-8 3/8"
121	66.92	59.26	7.66	7'-8"
+50	65.93	59.29	6.64	6'-7 3/4"
122	67.13	59.32	7.81	7'-9 3/4"
+50	66.89	59.35	7.54	7'-6 1/2"
123	67.18	59.38	7.80	7'-9 5/8"
+50	66.36	59.41	6.95	6'-11 3/8"
124	67.07	59.44	7.63	7'-7 1/2"
+50	67.15	59.47	7.68	7'-8 1/4"
125	67.33	59.50	7.83	7'-10"
+50	67.27	59.53	7.74	7'-9"
126	67.03	59.56	7.47	7'-5 5/8"
+50	67.20	59.59	7.61	7'-7 3/8"
127	67.45	59.62	7.83	7'-10"
+50	67.30	59.65	7.65	7'-7 3/4"
128	67.47	59.68	7.79	7'-9 1/2"
+50	67.65	59.71	7.94	7'-11 1/4"
129	67.36	59.74	7.62	7'-7 1/2"
+50	66.14	59.77	6.37	6'-4 1/2"
130	67.44	59.80	7.64	7'-7 5/8"
+50	67.14	59.83	7.31	7'-3 3/4"

← LETTER →

41

66.54
59.20
7.34

65.95
59.18

6.77

67.95

59.23

7 4

5 6

60.40

8 1.17

59.23

-7'-4"

19+70 Sta 6d 6'-9 1/4"
65.95 59.18-6.77

Stop Ad Cut

131	✓ 67.36	59.86	7.50	7'-6"
+50	✓ 67.24	59.89	7.35	7'-4 1/4" ✓
132	67.41	59.92	7.49	7'-6"
+50	67.45	59.94	7.51	7'-6 1/8"
133	67.41	59.97	7.44	7'-5 1/4"
+50	67.31	60.00	7.31	7'-3 3/4"
134	67.16	60.03	7.13	7'-1 7/8"
+50	66.97	60.06	6.91	6'-10 7/8"
135	68.36	60.09	8.27	8'-3 1/4"
+50	67.84	60.12	7.72	7'-9 5/8"
✓ 136	68.15	60.15	8.00	8'-0"
✓ +50	68.11	60.18	7.93	7'-11 7/8"
✓ 137	67.65	60.21	7.44	7'-5 1/4"
+50	67.42	60.24	7.18	7'-2 1/4"
138	67.40	60.27	7.13	7'-1 5/8"
+50	67.16	60.30	6.86	6'-10 3/8"
139	67.40	60.33	7.07	7'-0 7/8"
+50	67.05	60.36	6.69	6'-8 1/4"
140	67.15	60.39	6.76	6'-9 1/8"
+50	67.15	60.42	6.73	6'-8 3/4"
141	67.35	60.45	6.90	6'-10 3/4"
+50	66.89	60.48	6.41	6'-4 7/8"
142	67.10	60.50	6.59	6'-7 1/8"
+50	67.03	60.54	6.49	6'-5 7/8"
143	67.02	60.57	6.45	6'-5 3/8"
+50	66.81	60.60	6.21	6'-2 1/2"

7.24

59.89

7.35

	5th	Stk	Cut	
143+50	6686	6060	6.26	6'-3 1/8" <
144	67.18	6063	6.55	6'-6 5/8"
+50	67.22	6066	6.56	6'-6 3/4"
145	67.63	6069	6.94	6'-11 1/4"
+50	67.78	6072	7.06	7'-0 3/4"
146	68.04	6075	7.25	7'-3"
+50	69.29	6078	7.51	7'-6 1/8"
147	68.38	6081	7.57	7'-6 3/8"
+50	67.88	6084	7.04	7'-0 1/2"
148	67.39	6087	6.52	6'-6 1/4"
+50	67.64	6090	6.74	6'-8 1/8"
149	68.05	6093	7.12	7'-11 1/8"
+50	68.91	6096	7.95	7'-11 3/8"
150	69.03	6099	8.04	8'-0 1/2"
+50	68.97	6102	7.97	7'-11 5/8"
151	68.45	61.05		
+50	68.72	61.08		
152	68.63	61.11		
+50	68.79	61.14		
153	67.98	61.17		
+50	68.07	61.20		
154	68.55	61.23		
+50	68.40	61.26		
155	69.08	61.29		
+50	68.28	61.32		

check

Check Bench

69.22

Stk	Stk	Stk	Cut
6804	61.00	7.04	= 7' 1/2"
68.29	61.04	7.25	7' 3 1/8"
68.48	61.08	7.40	7' 7 3/8"
67.95	61.12	6.83	6' 10"
67.72	61.16	6.26	6' 3"
67.67	61.22	6.45	6' 8 1/4"
68.16	61.28	6.88	6' 11"
68.91	61.34	7.57	6' 7"
69.04	61.40	7.64	7' 7 3/4"
68.99	61.46	7.53	7' 6 1/2"
68.25	61.52	6.73	6' 8 3/4"
68.74	61.58	7.16	7' 2"
68.58	61.64	6.94	6' 11 1/4"
68.82	61.70	7.12	7' 1 1/2"
67.98	61.76	6.22	6' 2 1/2"
68.06	61.82	6.24	6' 3'
68.58	61.88	6.68	6' 8 1/4"
68.81	61.94	6.87	6' 10 1/2"
69.02	62.00	7.02	7' 4"
68.25	62.06	6.19	6' 2 1/4"

46

Sta Stk Gd Cut

156+0 68.10 62.12 6.08 6'1"

+50 67.98 62.18 5.80 5'9 $\frac{1}{2}$ "157+0 67.59 62.24 5.30 5'3 $\frac{1}{2}$ "

+50 68.54 62.30 6.24 6'3"

158+0 66.71 62.36 4.35 4'14" 66.01

+50

159+0

61.00

1.06

62.06

FL Culvert

65.35

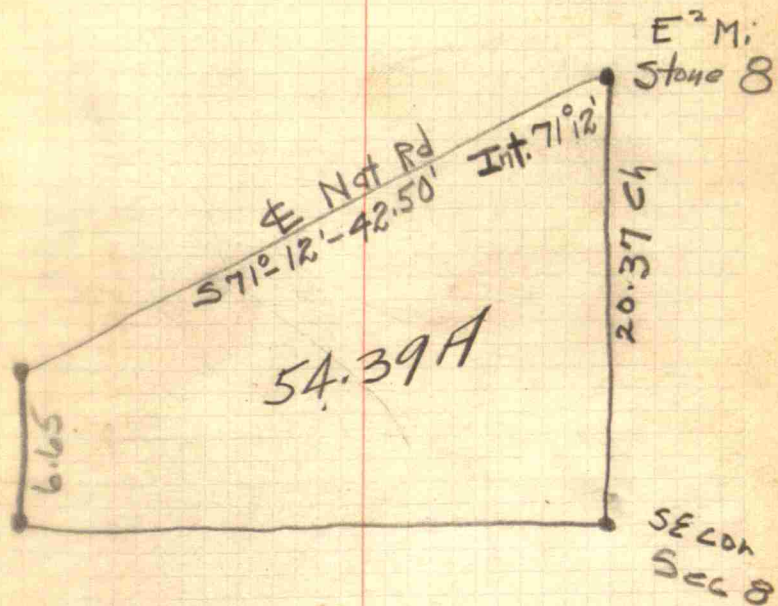
12

1.06

47

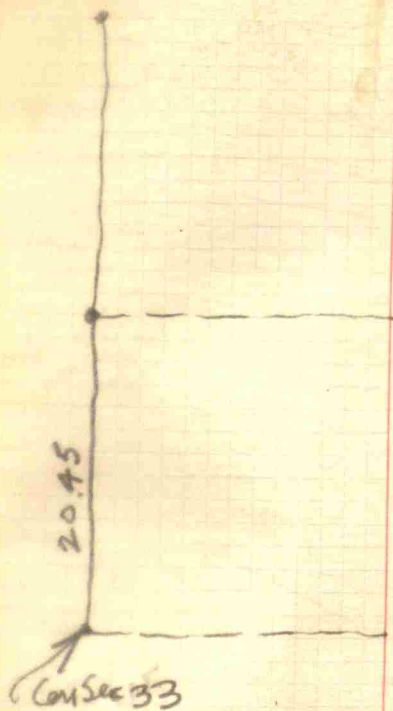
Little Survey
Sec 8-14-1W

Pvt - 29 Links N+S



48

49



50.

- ✓ Kelley Chas - Stilesville C 51
16 - Sept 17-1929
- ✓ Hatton Vincent SS
16 - Aug 11-1929
- ✓ Jordan Chesley 3rd
17 - ~~Oct~~ 28-1929
- ✓ Edwards Bennard 2nd
16 - Apr - 18-1930
- ✓ Blair - Arthur B C
14 - Aug 2 - 1929
- ✓ Kivett Robert Stilesville 3rd
17 Jan 29-1930 -
- ✓ Young Amos - 1st
17 - Oct 7-1929
- Franklin Jean
16 - Mar 30-1930 - O.F.
- ✓ Kersey Chas I.F.
15 - Oct 14 -

52

✓ Geo Ball O.F.
15 - June 24 - 1929

✓ Harry Ball
16 - Oct - 1929 - C

✓ Parker Kenneth I.F.
15 - Dec 22 - 1929

✓ Guthrie Edgar I.F.
15 - Jan 8 - 1930

✓ Armstrong Roscoe I.F.
15 - Oct 2 - 1929

✓ Hiatt Edgar O.F.
15 - Mich 21 - 1930

53

✓ Williams John O.F.
16 - Aug 24 - 1929

✓ Ross Chas - O.F.
16 - Mich 6 - 1930

✓ Hardesty James 2nd
15 - Nov 19 - 1929

✓ Armstrong Robert O.F.
13 - Dec 22 - 29

✓ Williams Woodrow O.F.
17 - Feb 21 - 1930

✓ Williams Milton O.F.
14 - Aug 18 - 1929

✓ Dunivan - Joe Stilesville R.F.
14 - Aug 16 -

56

① 14.93

A	21.90	B	16.25	C	9.00 ^{Gd.}
A'	19.30	B'	15.31	C'	10.50 ^{Gd.}
A''	14.08	B''	11.82	C'+2S	8.51 ^{Gd.}
A ³	9.39	B ³	8.62		
A ³ +SE	8.86 ^{Gd.}	B ³ +6E	8.10 ^{Gd.}		
A ⁴	16.56	B ³ +1S	7.88 ^{Gd.}		
A ⁵	9.27	B ³ +5S	8.50 ^{Gd.}		
A ⁵ +2W	7.96	B ⁴	13.94		
		B ⁴ +8S	8.56 ^{Gd.}		
		B ⁵	8.05 ^{Gd.}		
F	11.56	X			
F'	13.12				
F''	10.00				
F					
F+6N	9.20 ^{Gd.}				
F'+6N	9.38 ^{Gd.}				
F ² +6N	9.85 ^{Gd.}				
F ² +4E	8.13				
F ⁴	10.88				
F ⁴ +5N	9.16				
F ⁴ +8N	8.40				

North Pil
Heavit Rd.

D - 17.11
D' - 16.04
D² - 11.90
D³ - 11.90
D³+8E - 7.00

D⁴ - 12.95
D⁵ - 8.03^{Gd.}

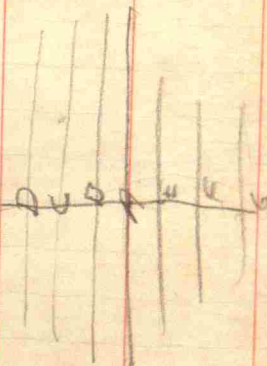
B. M. on tent 57
of stump. EL 10.00

E - 21.93
E' - 17.97
E² - 12.91
E³ - 8.36
E³+4E - 6.50

E⁴ - 15.50
E⁵ - 9.04
E⁵+7N - 8.40

E⁵+3W - 7.80^{Gd.}
E³+5N - 8.25^{Gd.}

A	26.25	B	20.16	C	24.56
A'	19.87	B'	16.65	C'	17.50
A''	13.20	B''	12.00 ^{Gd.}	C'+8S	12.39 ^{Gd.}
A ³	22.00	B ³	19.13	C ³	21.57
A ⁴	15.61	B ⁴	14.42 ^{Gd.}	C ⁴	15.35 ^{Gd.}
A ⁴ +6N	12.97 ^{Gd.}			C'+8S	12.40 ^{Gd.}
A ⁴ +2S	12.09 ^{Gd.}				
A ⁴ +4W	12.54 ^{Gd.}				



① 20.68

59

✓

D - 21.24

E - 14.21

D' - 17.65

~~E~~~~E~~~~E~~D³ - 17.68E³ - 13.24D⁴ - 14.40E³+2E - 12.44 Gd.D⁴+6N - 12.37 Gd.

E+2E - 12.45 Gd.

D⁴+8E - 12.53 Gd.

E+6S - 12.41 Gd.

D'+9S - 12.70 Gd.

D'+9E - 12.19 Gd.

F - 21.09

F' - 17.20

~~F~~F³ - 20.68F⁴ - 17.65F⁴+6N - 14.28 Gd.

F'+8W - 12.92 Gd.

F'+7S - 13.00 Gd.

G - 14.28

~~G~~~~G~~G³ - 14.78G⁴ - 15.64G⁴+7N - 13.39 Gd.G⁴+5W - 13.08 Gd.G³+3W - 12.29 Gd.

G+2W - 12.85 Gd.

Stilleville
4+93 Day L 28°22
7+62 END

Sta	30'W	20'W	10'W	E Point	50'W
0+0	99.94	99.92	99.92	99.90	99.70
1+00	98.56	97.32	96.57	96.00	96.19
1+50	95.92	95.53	94.00	93.92	93.61
2+00	92.56	92.33	91.90	92.07	91.75
2+50	90.20	90.11	90.00	90.10	89.95
3+00	89.11	88.50	87.98	88.42	88.06
3+39					
3+45	86.70	86.70		87.00	
3+50	86.82	86.65		86.76	
3+70	86.57	85.76		85.88	
4+00	86.54	86.21	4'E	84.33	
4+50	84.36	84.11	4'E	82.35	
4+93	81.70	81.15	12'E	81.24	80.93
5+50			80.18	80.18	79.97
6+00				79.85	79.50
6+50				79.34	78.58
7+00				79.00	78.05
7+50				78.62	77.65
7+62				78.42	77.50

30'E	50'E
99.70	99.70
98.79	98.79
95.63	95.63
93.43	94.37
92.04	92.60
90.33	91.77
88.17	88.65
85.14	84.40
86.43	86.04
83.73	83.71
82.00	81.98
80.53	80.53
79.08	79.08
78.66	78.66
78.48	78.48
77.97	77.97
78.28	78.28

BM. Gas Pipe
NE Con Pump
Platform 100.00
1+83 & alley

50'E
84.37
82.18
80.72

7L Ditch
9+58 - 74.22
& Rd - 9+58 - 78.07
Bem Mead E
Rail Culvert 9+58
79.13

W side

STA.	GUTTER LINE E-SIDE		
0+0	99.90	0+00	99.90
240 0+25	99.40	0+25	99.40
0+32	99.24		
VL 0+50	98.71	0+50	98.90
0+75	97.65	0+75	97.65
5% 1+0	96.40	1+0	96.40
1+25	95.15	1+25	95.15
VL 1+50	93.95	1+50	93.95
1+75	92.88	1+75	92.88
2+0	91.92	2+0	91.87
2+25	91.00	2+25	90.85
2+50	89.95	2+50	89.83
2+75	88.81	2+75	88.71
3+0	87.79	3+0	87.99
3+25	86.78	3+25	87.18
3+50	85.76	3+50	86.36
(PL) 3+75	84.74	3+75	85.54
4+0	83.72	4+00	84.52
4+25	82.71	4+25	83.51
VL 4+50	81.81	4+50	82.61
4+75	81.14	4+75	82.00
4+79	81.04	4+80	
5+0	80.82	5+00	81.50
5+25	80.26	5+25	81.00
VL 5+50	79.79	5+50	80.59
5+75	79.50	5+75	80.10

67

84.96 7L - Aranco Serran
N. side 3+44

84.26 7L - Aranco Pipa
S. side sta
3+68

W. side

$\Delta 28^\circ 24' L$

$D = 20^\circ$

$T = 72.5'$

$E = 9.0'$

$L = 142'$

$PC = 4+14.5$

$PI = 4+87$

$PT = 5+56.5$

$4+14.5 D_1 = 1^\circ 03'$

$4+25 D_2 = 3^\circ 33'$

$4+50 = 6^\circ 03'$

$4+75 = 8^\circ 33'$

$5+00 = 11^\circ 03'$

$5+25 = 13^\circ 33'$

$5+50 = 14^\circ 12'$

P.I. - $28^\circ 24' L$

STA.	Gutter Line E-Side		
6+0	79.30	+40 6+0	79.70 V
6+25	79.10	+20 6+25	79.30 V
6+37	79.00		
6+50	78.90	6+50	78.90 V
6+75	78.70	6+75	78.70 V
7+0	78.50	7+0	78.50 V
7+25	78.30	7+25	78.30 V
7+50	78.10	7+50	78.10 V
7+62	78.00	7+75	77.90 V
		8+00	77.70 V
		8+30	77.56 V

4+50 82.30
6- 79.30

139 | 3000 | 2.14
278

220
139

810
734

4 | 2.16

.54

3

162

82.30
71.62

	Sta	Bot	Hd	
106V	67.36	60.32	57.50	10.00
100V	67.25	60.45	57.24	10.11
95	66.73	59.10	56.84	9.89
90	65.67	58.68	56.54	9.13
85	66.13	58.30	56.24	9.89
80	64.80	57.70	55.94	8.86
75	65.28	56.70	55.64	9.64
70	64.98	55.75	55.34	9.64
67+10		54.70	55.20	
60			54.74	

93

Bwt Top Tile
 61.58 - 106+12
 old sta 67.63 - (2.6)

	stk	6dot	Drain	
0+0	100.00	99.40	93.10	Bed Stream
1+0	100.16	99.40		
2+0	100.66	99.35		
3+0	100.20	99.14		
4+0	99.86	98.85		
5+0	101.70	99.81		
6+0	102.78	100.60		
7+0	102.15	100.30	6dot	stk
8+75	102.28	100.70	101.75	

95.12	4.88	or	4'-11"
95.62	4.54	or	4'-7"
96.12	4.54	or	4'-7"
96.62	3.58	or	3'-7"
97.12	3.74	or	3'-9"
97.62	4.08	or	4'-1"
98.12	4.66	or	4'-8"
98.62	3.53	or	3'-7"
99.00	3.28	or	3'-4"

EASTES

EASTES

W^y mile stone 26-16-1W

WIT: -

CONC. COR. POST - N 18° E - 15.5'

WOODEN COR. POST - S 8° E - 14.8'

WOODEN COR. POST - W - 30.2'

S^y MILE STONE Sec 23-16-1W

N^y MILE STONE Sec 26-16-1W

WIT:

CONC. COR. POST - S, ~~15~~ 9'

WOODEN COR. POST N 8° E - 22.5'

CEN. So OF CEN of Sec 23-16-1W

WIT:

CONC. COR. POST W - 15.5'

CONC. COR. POST W - 29.5'

FENCE - E. SIDE ROAD 15'-9"

SEC. COR. - 26-27-22-23

WIT. CONC. COR. POST - S 55° W - 27.7'

CONC. COR. POST - S 27° E - 13'

WOODEN COR. POST - N 37° E - 22.3'

Line A

Bar at W^y mile stone

0+02-Fence

running East

14.5' South
of stone.

0+05-18.5'

South in SE

end of 15"

C.M. PIPE

H.W. END of

PIPE to 5'

S to 24' W.

of stone

4+87-10" Vit. Pipe

Flow S-21' long.

11+96-24' X 24" C.M. Pipe

Howells 12' long.

Flow North

13+53 - Fence along E. side
of N + S. Road.

2650' to cen of sec.

1325' is long way

13+23 CONC. COR. POST - 15' No

13+22.5 CONC. COR. POST 15' No

13+22.5

CEN. W OF CEN. of Sec.

CONC. COR. POST. - N - 11.9' 5'

CONC. COR. POST - 30.7 - S 82° E

SOUTH TO FENCE - 19'

Int L of Cen W of Cen of Sec - 89° 52'

Sewer

80

LINE "B"

Beg at Sec corner and run So.

0+12 - Fence runs East. 5.4' E of line

0+15 - Fence runs West - 22.8' W of line

13+36 Cem Post FT E 5'

13+38 " " and Fence W 23'

15+28 1/2 3x8 Box 20' Rdway Flow VV

16" Tile Drain Crosses Road From
E to SW -

19+98 - Cement Post 4.6' E

26+60 " " Cor Post 4.4' E

26+75.5 Cor Stone - Fence Post W 20.2'
FenceInterior angle between Line A
and B. is 90°-07'

81

Line C - Beg at Sec. Cor

Run E -

0+5.4 - Cem Post 11.7' S

0+14 - Cor Post 17.5' N

6+20 - H Pt on line

8+70 - Low pt on line - Pond Each side

13+04 - Cement Post 15.5' N

11+04 " " 13.5' S

13+17.5 Cor Post + Fence 16.5' N } unit

13+17.5 Cem Post + Rd Fence 13.5' S

13+30 " " 15' N

13+48 Rd Fence — S

13+52 Cem Post 13.2' S

18+11 " " + Line 7 - 16.6' N

19+06 " " 15.3' N

19+48 115' N to Bend Res -

No Fence N side from 19+06 - to 20+01

20+01 Cem post 27.7' N and Fence N

20+15 " " 27.7' N —

20+24 Iron Post 20' N and 7 East

21+15 SE Cor Barn 310' N

25+87 Iron Post 20.4' N

26+03 Iron Post 35' N - Ina Cor N on W side

Road
26+35 Cor Stone -

Set Axel at 13+17.5 as withered above

Line D - Running N

- 0+12 - Con Post on line W side Rd
 4+20 Walnut 3' W
 8+06 15" Amro - + Hwls 24' - long Flow W
 10+20 Con Post 28' E
 10+36 " " 28' E
 11+96 24' x 24" Amro - Flow W
 13+24 - Con Post on line W
 13+39 " " " " "
 " + 39 " " 14' W of line
 13+86 Wild cherry W 40
 18+50 Elm 15' W
 19+90 - 22' x 19" V.T. Flow W - app
 location to Drain
 20+00 Walnut 60' W
 26+76.5 Corner

E Running S

- 8+15 - Oak - 35' W
 9+20 - Con Post 30.5' W and Tend W
 10+10 - to 13+06 15' Ash Tree 35' W
 13+06 - Iron post 31.7'
 13+19 - Con Post E - 17.8' - and Rd Turn E
 13+41.5 Cor Stone

Stone Cen W. SW⁴ Sec 23

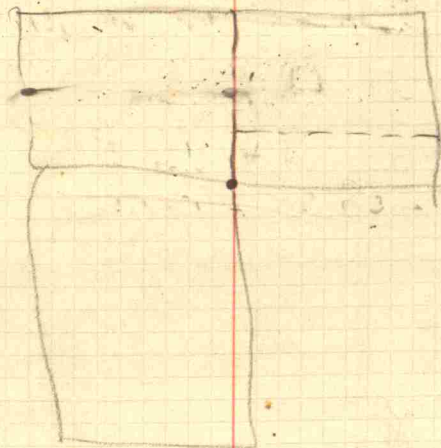
Con Post E 15.7'
Fence W 14.7'

S. on line F
6460 Since ^{Runs} E 80 Rds

13+19 - Con Post E - 13.5'

13+22 - " " W 16.7'

13+37 - Cor Stone



Maplewood Ave
Fence in 200.5' west of the
SE Cor of Lot 16 - Block 7.

Willow Ave. East side ^{width 48.00}
Frontage of Lot ~~15~~ 16 Blk - 47.75'
to fence

From East side of Willow Ave
West to E. Wire Fence on Maplewood
Ave - 452.65 - To West wire fence
is 30.7' at N. end of Maplewood Ave
Maplewood Ave lots in Blocks
1 and 7 to be 180' deep.

West fence line ^{Elm Ave} (extended) is 199'
East from SW Cor Lot 17 Blk 12

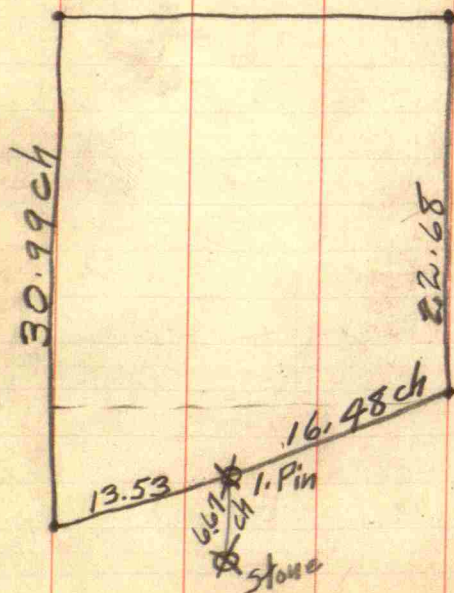
North fence B way is 10.8 to 11.1 feet
from South line lots in Blk 12

Curb offsets at Lot 17/18 Block 11.

AJ. Shaw }
Ella Shaw }

90 Survey for E.W + Ida M. Foltz

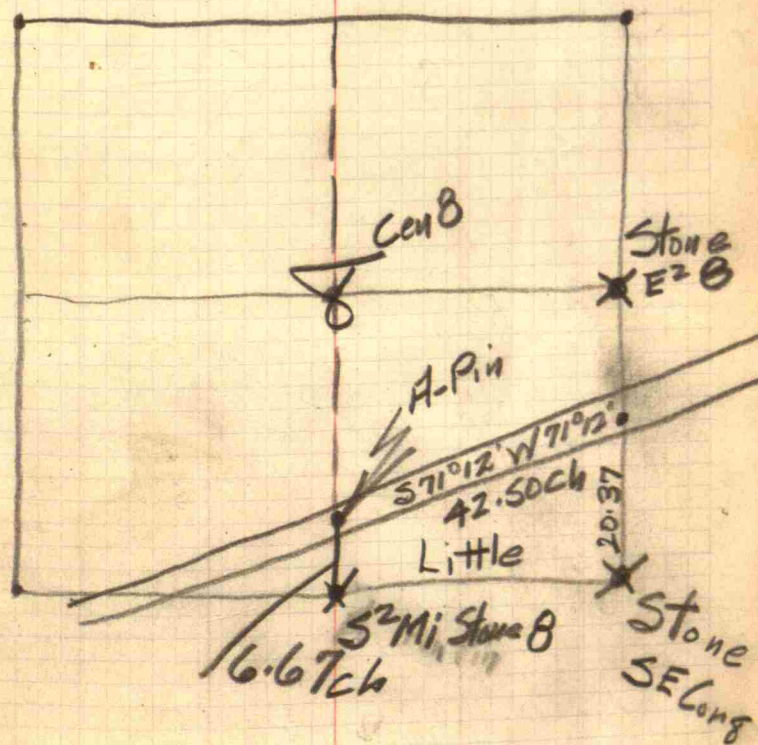
Begin at iron pin in cen of part 6.67
ch. north of S² mile stone Sec 8.
Thence running N 71° 12' E in the
center thereof 16.48 ch. thence
N 22.68 ch — Thence W 21.08 ch
Thence S 12.45 to line fence. Thence
continue S. 18.54 ch to cen Nat
Road. Thence N 13.53 E in center
thereof to place of beg



91

12.45
18.54
30.99

8-14-1W

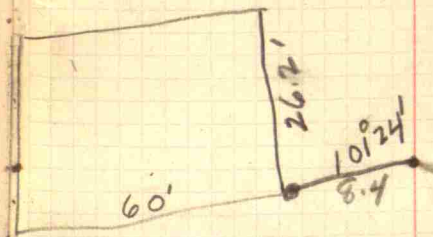


ROY HODSON
COATESVILLE

188
76
274

~~X~~

274'



$$\begin{array}{r} 4051 \\ 2026 \\ \hline 2025 \end{array}$$

$$\begin{array}{r} 2495 \\ 1913 \\ \hline 582 \end{array}$$

$$\begin{array}{r} 6680 \\ 5280 \\ \hline \end{array}$$

$$\begin{array}{r} 2025 \\ 291 \\ \hline 2025 \\ 18225 \\ 4050 \\ \hline 589275 \end{array}$$

$$\begin{array}{r} 2025 \\ 1913 \\ \hline 6075 \\ 2025 \\ 18225 \\ \hline 3873125 \\ 589275 \\ \hline 4463100 \end{array}$$

$$2260 \sqrt{1,068,000}$$

$$\begin{array}{r} 51.50 \\ 45.63 \\ \hline 5.87 \end{array}$$

$$\begin{array}{r} 2495 \overline{) 587.00} \\ 4990 \\ \hline 8800 \\ 7475 \\ \hline 13150 \\ 14880 \\ \hline \end{array}$$

$$\begin{array}{r} 2025 \\ 235 \\ \hline 2260 \end{array}$$

$$\begin{array}{r} 2495 \\ 2025 \\ \hline 470 \end{array}$$

$$\begin{array}{r} 2025 \overline{) 470.00} \\ 4050 \\ \hline 6500 \\ 6075 \\ \hline 4250 \end{array}$$

$$\begin{array}{r} 5150 \\ 5040 \\ \hline 110 \end{array}$$

$$\begin{array}{r} 235 \\ 232 \\ \hline 470 \\ 705 \\ \hline 470 \\ \hline 154520 \end{array}$$

$$\begin{array}{r} 2495 \\ 545 \\ \hline 25495 \end{array}$$

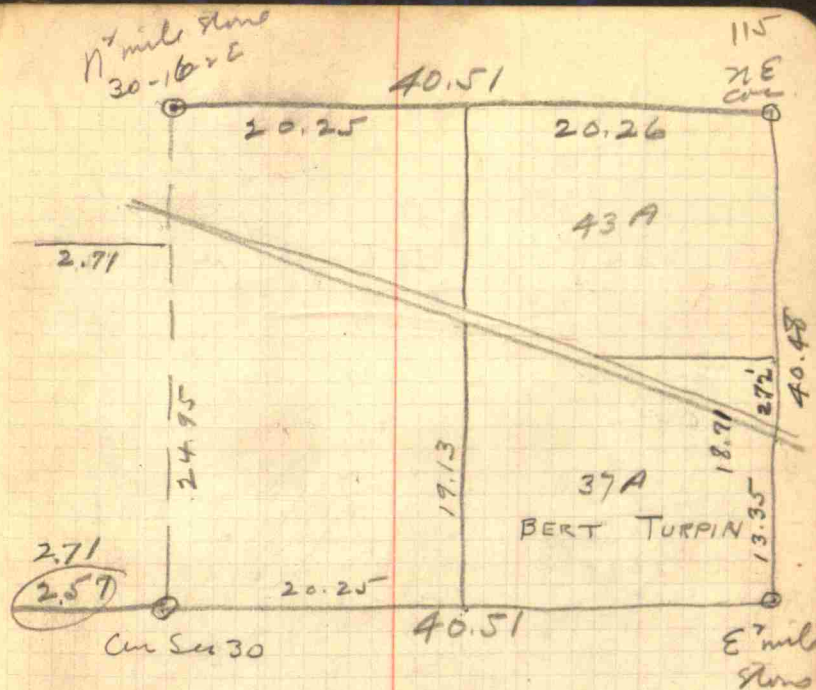
$$\begin{array}{r} 1913 \\ 2260 \\ \hline 114780 \\ 3826 \\ \hline 4323310 \\ 719 \\ \hline 5042 \\ 232 \\ \hline 1160 \\ 232 \\ \hline 3410 \end{array}$$

$$\begin{array}{r} 2260 \\ 318 \\ \hline 18080 \\ 2260 \\ \hline 6780 \\ 718680 \end{array}$$

$$\begin{array}{r} 232 \\ 105 \\ \hline 1160 \end{array}$$

$$\begin{array}{r} 2549 \\ 1913 \\ \hline 636 \\ 25495 \\ 116 \\ \hline 25611 \end{array}$$

N 1/4 mile Stone
30-162E



Right of way 80' wide on E line
of Sec. or 1.21 ch.

$$\begin{array}{r} 22.65 \\ 1913 \\ \hline 6795 \\ 2265 \\ \hline 20395 \\ 2265 \\ \hline 4323945 \\ 73386 \\ \hline 5066805 \end{array}$$

$$\begin{array}{r} 2561 \\ 1913 \\ \hline 6448 \end{array}$$

$$\begin{array}{r} 2280 \\ 1913 \\ \hline 6840 \\ 2280 \\ \hline 20520 \\ 2280 \\ \hline 4361600 \\ 779 \\ \hline 514064 \end{array}$$

$$\begin{array}{r} 2265 \\ 324 \\ \hline 9060 \\ 4330 \\ \hline 6795 \\ 733860 \end{array}$$

$$\begin{array}{r} 2561 \\ 35 \\ \hline 2596 \\ 1913 \\ \hline 683 \end{array}$$

$$\begin{array}{r} 2280 \\ 3415 \\ \hline 11400 \\ 2280 \\ \hline 9120 \\ 6940 \\ \hline 7786200 \end{array}$$

$$\begin{array}{r} 232 \\ 103 \\ \hline 10696 \end{array}$$

$$\begin{array}{r} 2607 \\ 1913 \\ \hline 6.94 \end{array}$$

20

$$\begin{array}{r} 22.85 \\ 347 \\ \hline 15995 \\ 9140 \\ 6853 \\ \hline 7.92895 \end{array}$$

$$\begin{array}{r} 2600 \\ 1913 \\ \hline 6.87 \end{array}$$

$$\begin{array}{r} 2282 \\ 3435 \\ \hline 11410 \\ 6846 \\ 9128 \\ 6846 \\ \hline 7.838670 \end{array}$$

$$\begin{array}{r} 22.85 \\ 19.13 \\ \hline 6855 \\ 20565 \\ 2285 \\ \hline 43.71205 \\ 7.92 \\ \hline 51.63 \end{array}$$

$$\begin{array}{r} 22.82 \\ 19.13 \\ \hline 6846 \\ 20538 \\ 2282 \\ \hline 43.65466 \\ 78367 \\ \hline 51.4913 \end{array}$$

$$\begin{array}{r} 2282 \\ 2025 \\ \hline 2.57 \end{array}$$

40.50
10.50

66
30
7980

8.89
66
5334
5334
596.74

8.89
4.
35.56

17.45
17.70

17.45
2.50
14.95
2.17
12.78

19.15
12.78

6.37

1300

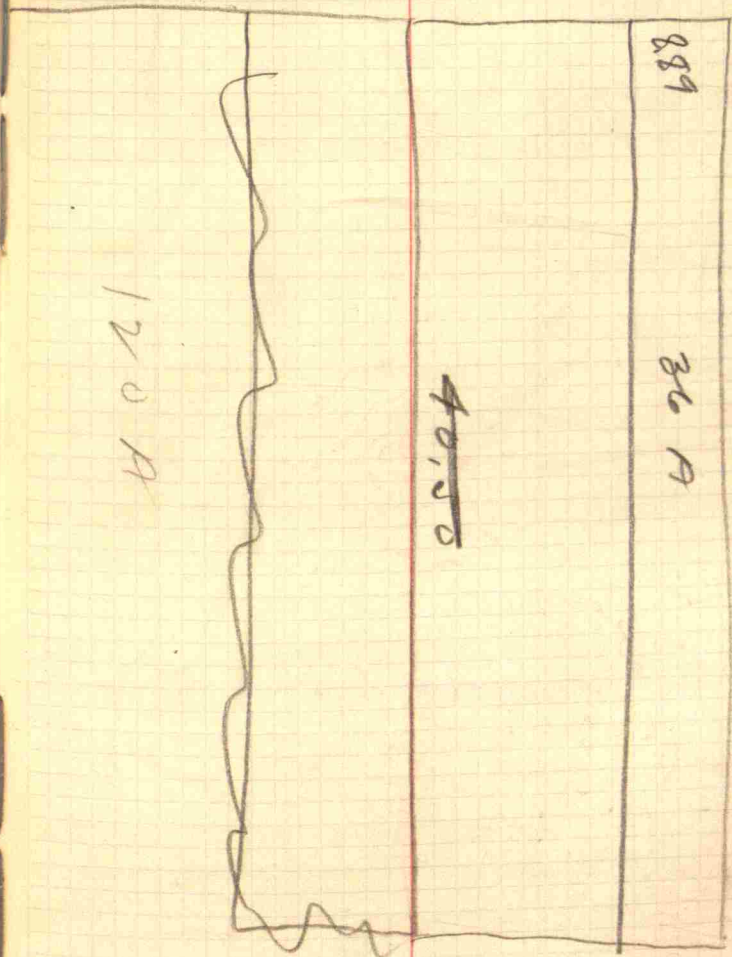
26"

1915
1745
1.70

121



40.32 ch.



889

36 ft

40.50

40.50

120 ft

$$\begin{array}{r}
 4.12 \\
 66 \overline{) 272.0} \\
 \underline{264} \\
 80 \\
 \underline{66} \\
 140
 \end{array}$$

$$\begin{array}{r}
 1.212 \\
 66 \overline{) 80.0} \\
 \underline{66} \\
 140 \\
 \underline{132} \\
 80 \\
 \underline{66} \\
 140
 \end{array}$$

$$\begin{array}{r}
 18.71 \\
 4.15 \\
 \underline{14.56} \\
 124 \\
 \underline{133.5}
 \end{array}$$

$$\frac{5}{8}$$

20

Natural Trigonometrical Ratios.

Angle.	Sine.	Tan.	Sec.	Cosec.	Cotg.	Cosin.	Angle.	Sine.	Tan.	Sec.	Cosec.	Cotg.	Cosin.	
0°							0°							
16	.2756	.2867	1.0403	3.628	3.487	.96126	74	.4087	.4452	1.0946	2.459	2.248	.91355	
10	.2784	.2899	1.0412	3.592	3.450	.96048	50	10	.4094	.4487	1.0961	2.443	2.228	.91236
20	.2812	.2931	1.0423	3.556	3.412	.95964	40	20	.4120	.4522	1.0975	2.427	2.211	.91116
30	.2840	.2962	1.0429	3.521	3.376	.95882	30	30	.4147	.4557	1.0989	2.411	2.194	.90996
40	.2868	.2994	1.0438	3.487	3.340	.95799	20	40	.4173	.4592	1.1004	2.396	2.177	.90875
50	.2896	.3026	1.0448	3.453	3.305	.95715	10	50	.4200	.4628	1.1019	2.381	2.161	.90753
17	.2924	.3057	1.0457	3.420	3.271	.95630	73	25	.4228	.4663	1.1034	2.366	2.145	.90631
10	.2952	.3089	1.0466	3.388	3.237	.95545	50	10	.4253	.4699	1.1049	2.351	2.128	.90507
20	.2979	.3121	1.0476	3.357	3.204	.95459	40	20	.4279	.4734	1.1064	2.337	2.112	.90383
30	.3007	.3153	1.0485	3.326	3.172	.95372	30	30	.4305	.4770	1.1079	2.323	2.097	.90259
40	.3035	.3185	1.0495	3.295	3.140	.95284	20	40	.4331	.4806	1.1095	2.309	2.081	.90133
50	.3062	.3217	1.0505	3.265	3.108	.95195	10	50	.4358	.4841	1.1110	2.295	2.066	.90007
18	.3090	.3249	1.0515	3.236	3.078	.95106	72	26	.4384	.4877	1.1126	2.281	2.050	.89879
10	.3118	.3281	1.0525	3.207	3.048	.95015	50	10	.4410	.4913	1.1142	2.268	2.035	.89752
20	.3145	.3314	1.0535	3.179	3.018	.94924	40	20	.4436	.4950	1.1158	2.254	2.020	.89623
30	.3173	.3346	1.0545	3.152	2.989	.94832	30	30	.4462	.4986	1.1174	2.241	2.006	.89493
40	.3201	.3378	1.0555	3.124	2.960	.94740	20	40	.4488	.5022	1.1190	2.228	1.991	.89363
50	.3228	.3411	1.0566	3.098	2.932	.94646	10	50	.4514	.5059	1.1207	2.215	1.977	.89232
19	.3256	.3443	1.0576	3.072	2.904	.94552	71	27	.4540	.5095	1.1223	2.203	1.963	.89101
10	.3283	.3476	1.0587	3.046	2.877	.94457	50	10	.4566	.5132	1.1240	2.190	1.949	.88968
20	.3311	.3508	1.0598	3.020	2.850	.94361	40	20	.4592	.5169	1.1257	2.178	1.935	.88835
30	.3338	.3541	1.0608	2.996	2.824	.94264	30	30	.4617	.5206	1.1274	2.166	1.921	.88701
40	.3365	.3574	1.0619	2.971	2.798	.94167	20	40	.4643	.5243	1.1291	2.154	1.907	.88566
50	.3393	.3607	1.0631	2.947	2.773	.94068	10	50	.4669	.5280	1.1308	2.142	1.894	.88431
20	.3420	.3640	1.0642	2.924	2.747	.93969	70	28	.4695	.5317	1.1326	2.130	1.881	.88295
10	.3448	.3673	1.0653	2.900	2.723	.93869	50	10	.4720	.5354	1.1343	2.119	1.868	.88158
20	.3475	.3706	1.0665	2.878	2.699	.93769	40	20	.4746	.5392	1.1361	2.107	1.855	.88020
30	.3502	.3739	1.0676	2.856	2.675	.93667	30	30	.4772	.5430	1.1379	2.096	1.842	.87882
40	.3529	.3772	1.0688	2.833	2.651	.93565	20	40	.4797	.5467	1.1397	2.085	1.829	.87743
50	.3557	.3805	1.0700	2.811	2.628	.93462	10	50	.4823	.5505	1.1415	2.073	1.816	.87603
21	.3584	.3839	1.0711	2.790	2.605	.93358	69	29	.4848	.5543	1.1434	2.063	1.804	.87462
10	.3611	.3872	1.0723	2.769	2.583	.93253	50	10	.4874	.5581	1.1452	2.052	1.792	.87321
20	.3638	.3906	1.0736	2.749	2.560	.93148	40	20	.4899	.5619	1.1471	2.041	1.780	.87178
30	.3665	.3939	1.0748	2.729	2.539	.93042	30	30	.4924	.5658	1.1490	2.031	1.767	.87036
40	.3692	.3973	1.0760	2.709	2.517	.92935	20	40	.4950	.5696	1.1509	2.020	1.756	.86892
50	.3719	.4006	1.0773	2.689	2.496	.92827	10	50	.4975	.5735	1.1528	2.010	1.744	.86748
22	.3746	.4040	1.0785	2.670	2.475	.92718	68	30	.5000	.5774	1.1547	2.000	1.732	.86603
10	.3773	.4074	1.0798	2.650	2.455	.92609	50	10	.5025	.5812	1.1566	1.990	1.720	.86457
20	.3800	.4108	1.0811	2.632	2.434	.92499	40	20	.5050	.5851	1.1586	1.980	1.709	.86310
30	.3827	.4142	1.0824	2.613	2.414	.92388	30	30	.5075	.5890	1.1606	1.970	1.698	.86163
40	.3854	.4176	1.0837	2.595	2.394	.92276	20	40	.5100	.5930	1.1626	1.961	1.686	.86015
50	.3881	.4210	1.0850	2.577	2.375	.92164	10	50	.5125	.5969	1.1646	1.951	1.675	.85866
23	.3907	.4245	1.0864	2.559	2.356	.92050	67	31	.5150	.6009	1.1666	1.942	1.664	.85717
10	.3934	.4279	1.0877	2.542	2.337	.91936	50	10	.5175	.6048	1.1687	1.932	1.653	.85567
20	.3961	.4314	1.0891	2.525	2.318	.91822	40	20	.5200	.6088	1.1707	1.923	1.643	.85416
30	.3987	.4348	1.0904	2.508	2.300	.91706	30	30	.5225	.6128	1.1728	1.914	1.632	.85264
40	.4014	.4383	1.0918	2.491	2.282	.91590	20	40	.5250	.6168	1.1749	1.905	1.621	.85112
50	.4041	.4417	1.0932	2.475	2.264	.91472	10	50	.5275	.6208	1.1770	1.896	1.611	.84959
						.66								
Cosin.	Cotg.	Cosec.	Sec.	Tan.	Sine.	Angle.	Cosin.	Cotg.	Cosec.	Sec.	Tan.	Sine.	Angle.	

Natural Trigonometrical Ratios.

Angle.	Sine.	Tan.	Sec.	Cosec.	Cotg.	Cosin.	Angle.	Sine.	Tan.	Sec.	Cosec.	Cotg.	Cosin.		
0°							0°								
32	.5299	.6249	1.1792	1.887	1.600	.84805	58	30	.8225	.7954	1.2778	1.608	1.257	.78261	30
10	.5324	.6289	1.1813	1.878	1.590	.84650	50	40	.8248	.8002	1.2808	1.601	1.250	.78079	20
20	.5348	.6330	1.1835	1.870	1.580	.84495	40	50	.8271	.8050	1.2838	1.595	1.242	.77897	10
30	.5373	.6371	1.1857	1.861	1.570	.84339	30	39	.8293	.8098	1.2868	1.589	1.235	.77715	51
40	.5398	.6412	1.1879	1.853	1.560	.84182	20	10	.8316	.8146	1.2898	1.583	1.228	.77531	50
50	.5422	.6453	1.1901	1.844	1.550	.84025	10	20	.8338	.8195	1.2929	1.578	1.220	.77347	40
33	.5446	.6494	1.1924	1.836	1.540	.83867	57	30	.8361	.8243	1.2959	1.572	1.213	.77162	30
10	.5471	.6536	1.1946	1.828	1.530	.83708	50	40	.8383	.8292	1.2991	1.567	1.206	.76977	20
20	.5495	.6577	1.1969	1.820	1.520	.83549	40	50	.8406	.8342	1.3022	1.561	1.199	.76791	10
30	.5519	.6619	1.1992	1.812	1.511	.83389	30	40	.8428	.8391	1.3054	1.556	1.192	.76604	50
40	.5544	.6661	1.2015	1.804	1.501	.83228	20	10	.8450	.8441	1.3086	1.550	1.185	.76417	50
50	.5568	.6703	1.2039	1.796	1.492	.83066	10	20	.8472	.8491	1.3118	1.545	1.178	.76229	40
34	.5592	.6745	1.2062	1.788	1.483	.82904	56	30	.8494	.8541	1.3151	1.540	1.171	.76041	30
10	.5616	.6787	1.2086	1.781	1.473	.82741	50	40	.8517	.8591	1.3184	1.535	1.164	.75851	20
20	.5640	.6830	1.2110	1.773	1.464	.82577	40	50	.8539	.8642	1.3217	1.529	1.157	.75661	10
30	.5664	.6873	1.2134	1.766	1.455	.82413	30	41	.8561	.8693	1.3251	1.524	1.150	.75471	49
40	.5688	.6916	1.2158	1.758	1.446	.82248	20	10	.8583	.8744	1.3284	1.519	1.144	.75280	50
50	.5712	.6959	1.2183	1.751	1.437	.82082	10	20	.8604	.8796	1.3318	1.514	1.137	.75088	40
35	.5736	.7002	1.2208	1.743	1.428	.81915	55	30	.8626	.8847	1.3352	1.509	1.130	.74896	30
10	.5760	.7046	1.2233	1.736	1.419	.81748	50	40	.8648	.8898	1.3386	1.504	1.124	.74703	20
20	.5783	.7089	1.2258	1.729	1.411	.81580	40	50	.8670	.8952	1.3421	1.499	1.117	.74509	10
30	.5807	.7133	1.2283	1.722	1.402	.81412	30	42	.8691	.9004	1.3456	1.494	1.111	.74314	48
40	.5831	.7177	1.2309	1.715	1.393	.81242	20	10	.8713	.9057	1.3492	1.489	1.104	.74120	50
50	.5855	.7221	1.2335	1.708	1.385	.81072	10	20	.8734	.9110	1.3527	1.483	1.098	.73924	40
36	.5878	.7265	1.2361	1.701	1.376	.80902	54	30	.8756	.9163	1.3563	1.480	1.091	.73728	30
10	.5901	.7310	1.2387	1.695	1.368	.80730	50	40	.8777	.9217	1.3600	1.476	1.085	.73531	20
20	.5925	.7355	1.2413	1.688	1.360	.80558	40	50	.8799	.9271	1.3636	1.471	1.079	.73333	10
30	.5948	.7400	1.2440	1.681	1.351	.80386	30	43	.8820	.9325	1.3673	1.466	1.072	.73135	47
40	.5972	.7445	1.2466	1.675	1.343	.80212	20	10	.8841	.9380	1.3711	1.462	1.066	.72937	50
50	.5995	.7490	1.2494	1.668	1.335	.80038	10	20	.8862	.9435	1.3748	1.457	1.060	.72737	40
37	.6018	.7536	1.2521	1.662	1.327	.79864	53	30	.8884	.9490	1.3786	1.453	1.054	.72537	30
10	.6041	.7581	1.2549	1.655	1.319	.79688	50	40	.8905	.9546	1.3824	1.448	1.048	.72337	20
20	.6065	.7627	1.2577	1.649	1.311	.79512	40	50	.8926	.9601	1.3863	1.444	1.042	.72136	10
30	.6088	.7673	1.2605	1.643	1.303	.79335	30	44	.8947	.9657	1.3902	1.440	1.036	.71934	46
40	.6111	.7720	1.2633	1.636	1.295	.79158	20	10	.8967	.9713	1.3941	1.435	1.030	.71732	50
50	.6134	.7766	1.2661	1.630	1.288	.78980	10	20	.8988	.9770	1.3980	1.431	1.024	.71529	40
38	.6157	.7813	1.2690	1.624	1.280	.78801	52	30	.9009	.9827	1.4020	1.427	1.018	.71325	30
10	.6180	.7860	1.2719	1.618	1.272	.78622	50	40	.9030	.9884	1.4061	1.422	1.012	.71121	20
20	.6202	.7907	1.2748	1.612	1.265	.78442	40	50	.9050	.9942	1.4101	1.418	1.006	.70916	10
									.7071	1.	1.414	1.414	1.	.70711	45
															0°
															Angle.

$$\begin{array}{r} 31.3 \times 33.5 \\ \hline 80.8 \end{array}$$

$$\begin{array}{r} 10.05 \\ 33.5 \\ \hline 10.05 \end{array}$$

$$\begin{array}{r} 15 \\ 36 \end{array}$$

$$\begin{array}{r} 67.12 \ 808 \\ 59.20 \\ \hline 792 \end{array}$$

$$\begin{array}{r} 25 \\ 808 \end{array}$$

$$\begin{array}{r} 33.5 \\ 25 \\ \hline 1675 \\ 670 \end{array}$$

$$\begin{array}{r} 808 \ 8375 \\ 808 \\ \hline 2950 \\ 2424 \\ \hline 5260 \end{array}$$

$$\begin{array}{r} 10.36 \end{array}$$

$$\begin{array}{r} 3 \times 53 \\ 39 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 7482 \\ 3850 \\ \hline 3632 \end{array}$$

$$\begin{array}{r} 96646 \\ 42.5 \end{array}$$

$$\begin{array}{r} 483320 \\ 193292 \\ 376584 \\ \hline 41074640 \end{array}$$

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1. CENTER OF ROADWAY FOR CROSS-SECTIONING.

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

FOR SINGLE TRACK EMBANKMENT.

.2	.3	.4	.5	.6	.7	.8	.9	
7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
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.

$$\begin{array}{r} 31.3 \times 33.5 \\ \hline 80.8 \end{array}$$

$$\begin{array}{r} 67.12 \ 808 \\ 59.20 \\ \hline 792 \end{array}$$

$$\begin{array}{r} 33.5 \\ 25 \\ \hline 1675 \\ 670 \end{array}$$

$$\begin{array}{r} 808 \ 8375 \\ 808 \\ \hline 2950 \\ 2424 \\ \hline 5260 \end{array}$$

$$\begin{array}{r} 3 \times 53 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 7482 \\ 3850 \\ \hline 3632 \end{array}$$

$$\begin{array}{r} 96646 \\ 42.5 \\ \hline 483320 \\ 193292 \\ \hline 376584 \end{array}$$

$$\begin{array}{r} 483320 \\ 193292 \\ \hline 376584 \end{array}$$

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.