

Chillicothe Road  
Russell Twp.  
Sec. E.

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LEVEL BOOK

743

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TABLE FOR REDUCING PERCHES TO FEET AND INCHES.

PERCH	FEET.	PERCH.	FEET.	PERCH.	FEET.	PERCH.	FEET.	PERCH.	FEET.
1	16.6 in.	21	3.46 6 in.	41	6.76 6 in.	61	10.06 6 in.	81	13.36 6 in.
2	33.0	22	3.63 0	42	6.93 0	62	10.23 0	82	13.53 0
3	49.6	23	3.79 6	43	7.09 6	63	10.39 6	83	13.69 6
4	66.0	24	3.96 0	44	7.26 0	64	10.56 0	84	13.86 0
5	82.6	25	4.12 6	45	7.42 6	65	10.72 6	85	14.02 6
6	99.0	26	4.29 0	46	7.59 0	66	10.89 0	86	14.19 0
7	1.15 6	27	4.45 6	47	7.75 6	67	11.05 6	87	14.35 6
8	1.32 0	28	4.62 0	48	7.92 0	68	11.22 0	88	14.52 0
9	1.48 6	29	4.78 6	49	8.08 6	69	11.38 6	89	14.68 6
10	1.65 0	30	4.95 0	50	8.25 0	70	11.55 0	90	14.85 0
11	1.81 6	31	5.11 6	51	8.41 6	71	11.71 6	91	15.01 6
12	1.98 0	32	5.28 0	52	8.58 0	72	11.88 0	92	15.18 0
13	2.14 6	33	5.44 6	53	8.74 6	73	12.04 6	93	15.34 6
14	2.31 0	34	5.61 0	54	8.91 0	74	12.21 0	94	15.51 0
15	2.47 6	35	5.77 6	55	9.07 6	75	12.37 6	95	15.67 6
16	2.64 0	36	5.94 0	56	9.24 0	76	12.54 0	96	15.84 0
17	2.80 6	37	6.10 6	57	9.40 6	77	12.70 6	97	16.00 6
18	2.97 0	38	6.27 0	58	9.57 0	78	12.87 0	98	16.17 0
19	3.13 6	39	6.43 6	59	9.73 6	79	13.03 6	99	16.33 6
20	3.30 0	40	6.60 0	60	9.90 0	80	13.20 0	100	16.50 0

PLEASE RETURN TO  
 GEauga COUNTY ENGINEER  
 COURT HOUSE  
 CHARDON, O.  
 PHONE 2501X

B. K. ELLIOTT COMPANY, PITTSBURG, PA.  
 DRAWING MATERIALS AND SURVEYING INSTRUMENTS

Please Return  
 to  
 F.R. Zethmayr  
 Chardon, O  
 Office-327  
 Phone Res. - 98

Note:  
 Iron pipe were set  
 at all PI and POT after  
 pavement was laid  
 1"0 by 18" flush with pot.

Chil. Road  
Survey  
Russell Trug

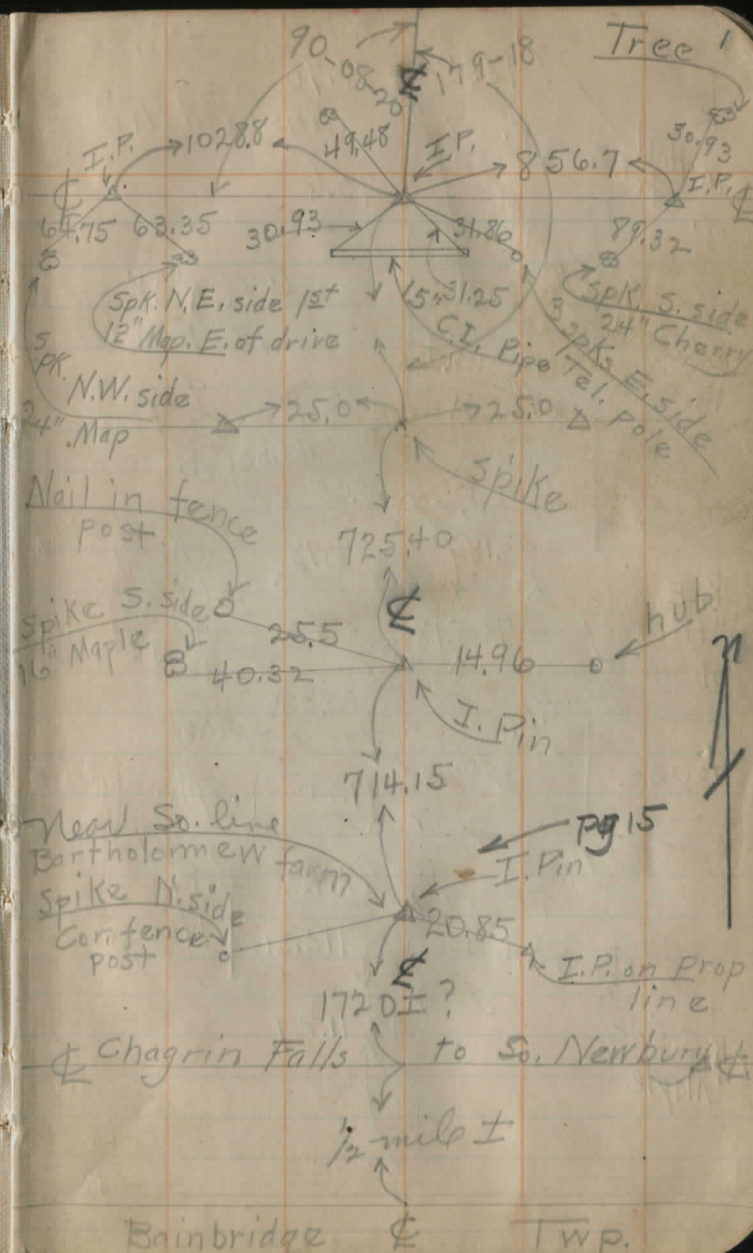
Mentor on the Lake -  
Aurora Rd. from  
Bainbridge - Russell  
Twp line north to  
Cleveland - Burton  
Rd.

Pg 1-20 Alignment

Pg 21-38 Lines of SEC

Pg 71-73 B.M.s

Pg 40 Alignment Bell Rd. Nth



Tree 1

I.P.

I.P.

I.P.

Spk. N.E. side 1st  
 12" Map. E. of drive

Spk. S. side  
 24" Cherry

Spk. N.W. side

Spk. E. side  
 24" Pole

24" Map

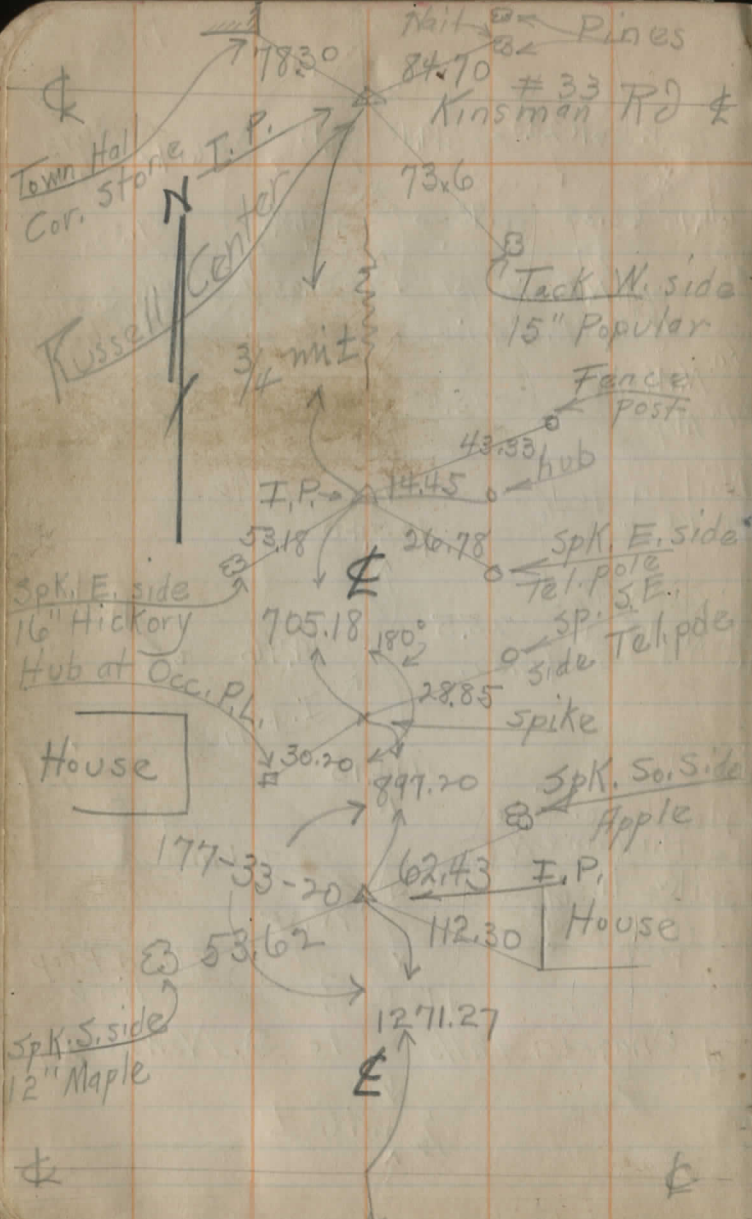
Nail in fence post

Spike S. side  
 16" Maple

Near So. line  
 Bartholomew farm  
 Spike N. side  
 Conference post

Chagrin Falls to So. Newbury

Bainbridge & Twp.





X 10+00

X X 9+57

X  
OTP 3170 X 9+00

X

X X 8+00

X

X X 7+18

X

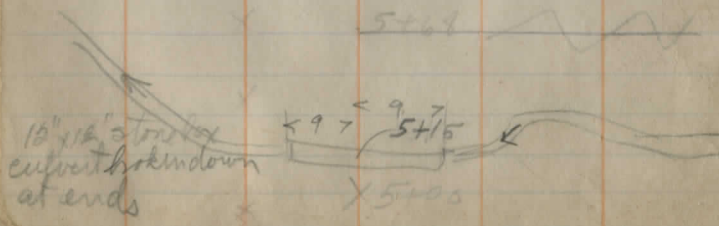
X X 7+00

OTP 1110  
← 22 →

fence ← 22 → X 29 Orchard

X X 6+00

X 5+68



X 14+00

X 13+00

OTP 2140

X 12+00 No culvert  
DRIVE  
11+71  
Spike SE side  
14" Maple

Barn  
11+26

X 11+00

House  
W.X  
Foundation 10+18

OTP 10135  
← 25 →

Spring House

P.I. 10+44.15

Spike S side  
18" Maple

1.79+09  
359-19

X 3+00

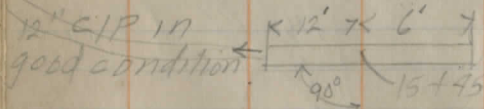
Y19100

Y18400

O.T.P. 17115

X17100

X16100



O.T.P. 14198

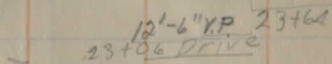
X15100

X14100

X22100

House

O.T.P. 23150  
25'



X23100

22198

Barn  
Probably Prop  
Line Shed

22119

8' - 12\"/>

Church

X22100

22103

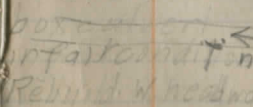
21149

O.T.P. 21130  
25'

X21100

X20100

12\"/>



O.T.P. 19110

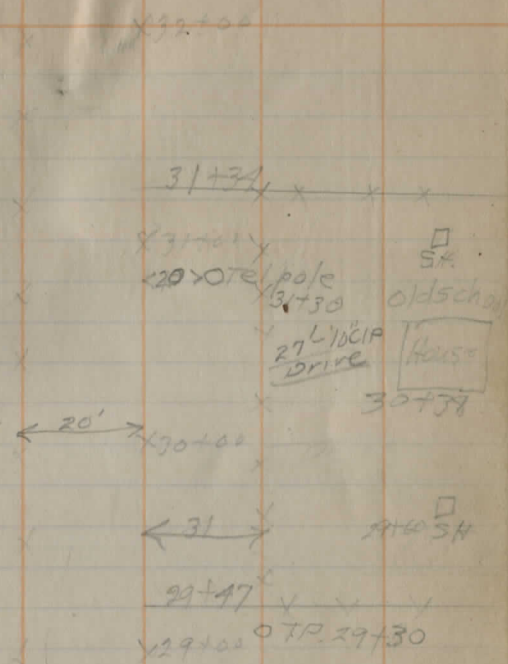
X19100

Curve Data:-

PI-24+45.20  
 $\Delta - 1^{\circ} - 33' L$   
 $D - 1^{\circ} - 00'$   
 $L - 155.0'$   
 $T - 77.51'$   
 $E - 0.53'$   
 PC-23+67.69  
 PT-25+22.69  
 Def/Harc-0.3"



Orchard  
 26+77  
 No culvert Drive  
 House  
 25+30



SEE PG 40 For 1953 ref

X29+00

O.T.P. 27+10

X27+00

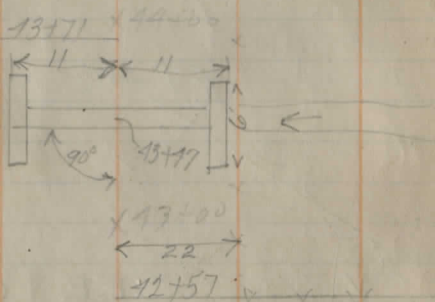


House

43+57

18'-10" CIP  
DRIVE 45+51

4' x 3' deep  
stone box culvert  
stone grading  
in road condition



X42+00 O.T.P. 41+90

X41+00

X O.T.P. 46+30

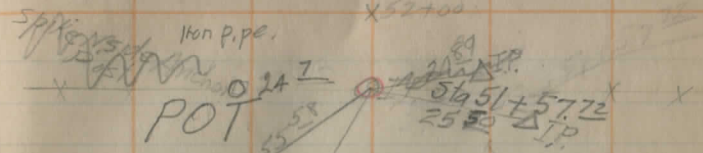
X46+00

X45+00

< 21' X O.T.P. 44+30

X44+00

Note: - North Line of South<sup>8</sup>  
Russell Village = Sta 51+55.57 15



spike N.W. side  
20' Maple

spike N.W. side  
24' Maple

SEE PG 40  
For 1953 ref.

X50+00

⊙

⊙

⊙

⊙

no culvert  
Drive 44+44

< 21' X O.T.P. 48+60

X48+00

Barr

47+25

X47+00

X57+00

OTP 56755

X56+00

X55+00

&lt; 18' XOTR 54+98

18'-18" CIP  
DRIVE 54+25

X54+00

Boulder box  
culvert in poor  
condition broken  
down completely

OTP 53+95

53+70

42 X 53+00

X52+00

X61+00

House  
60+21

X60+00

72.5<sup>20</sup>Spike W  
side  
Tel pole

X59+00

Spike N side

Anchor

Post 58776

I.P. X 25.2<sup>20</sup>

40.35

Spike S side

24" Maple

POT

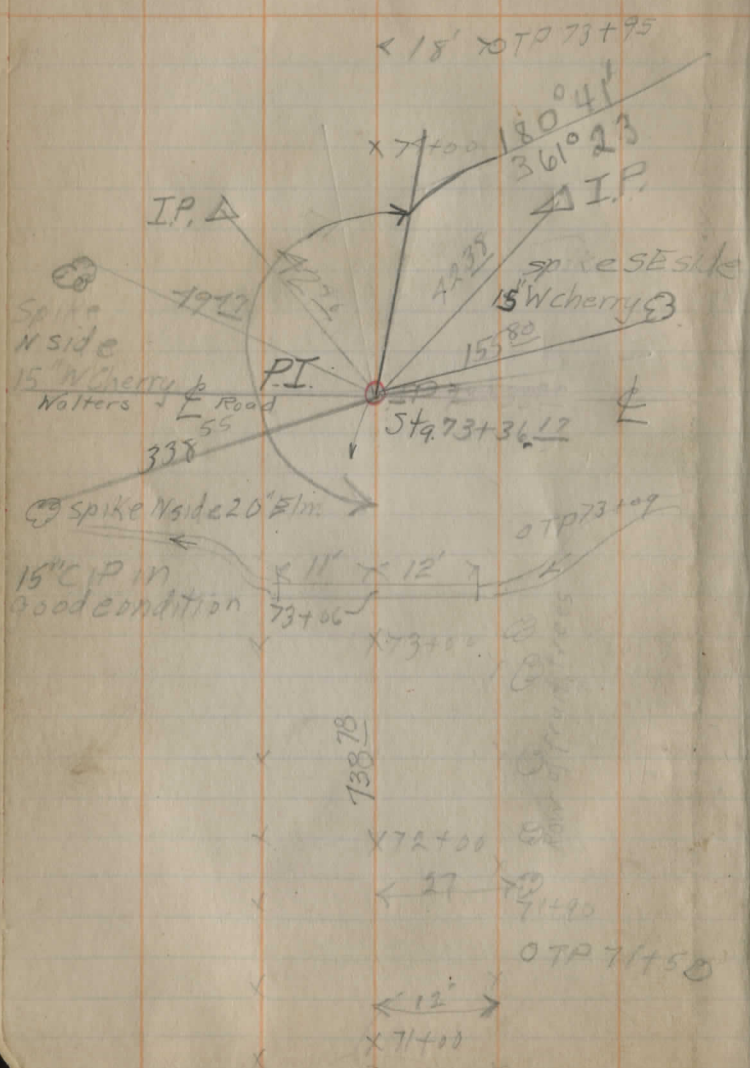
Tacked  
Hub30.00  
52.5872.0771.4<sup>35</sup>

X58+00

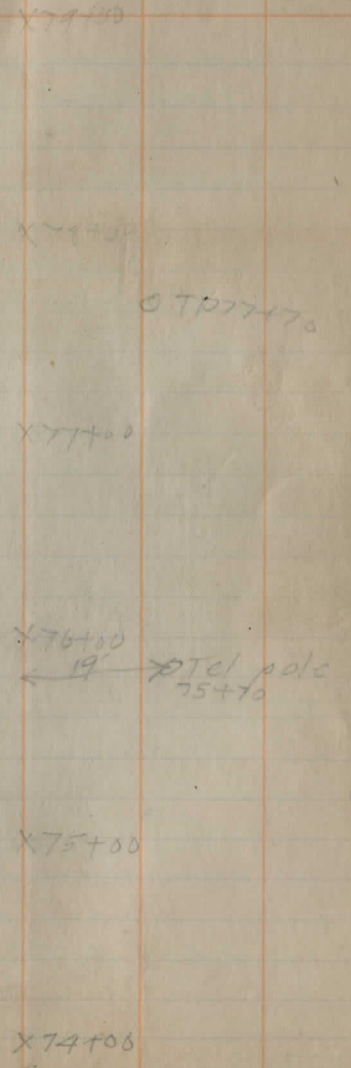
Spike W side  
Tel pole

X57+00





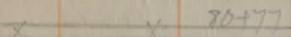
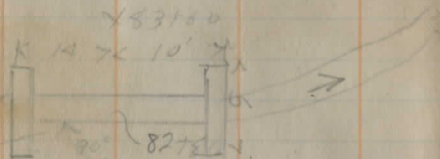
7336.17  
 659739  
 738.78



86+08.52  
 73+36.17  
 ---  
 12 72 15

X84+00

3x3 stone box  
 Culvert with  
 stone headwalls  
 in good condition



X80+00

OTP 79+85

X79+00

Curve Data

PI-86+08.32  
 $\Delta$ -2°-26' L  
 D-1°-00'  
 L-243.33'  
 T-121.68'  
 E-1.29'  
 PC-84+86.64  
 PT-87+29.27  
 Def/ft arc-0.3

X87+00

No culvert  
 86+63 DRIVE

86+75  
 177-34  
 ---  
 355-07

slope S side  
 15" Apple

slope S side  
 12" Maple

House  
 85+76

slope S side  
 12" Maple

DRIVE 85+75  
 40'-8" CIP

X86+00

X87+00

X87+00

OT 86+30

5' x 5" CIP  
 87+71 DRIVE

85+17

85+05 DRIVE

X85+00

OTP 84+30

X84+50

X84+00

X92+00

X91+00

< 14 XOTP90+90

X90+00

59+75  
26 →

X89+00

OTP88+50

6

58+103

L979

X88+00

13

57+100

X87+00

X97+00

X96+00

→ 31 → O.T.P.95+30

95+06.98  
~~95+00~~

0.3

95+18

Spike found bent  
straightened spike in.  
same hole

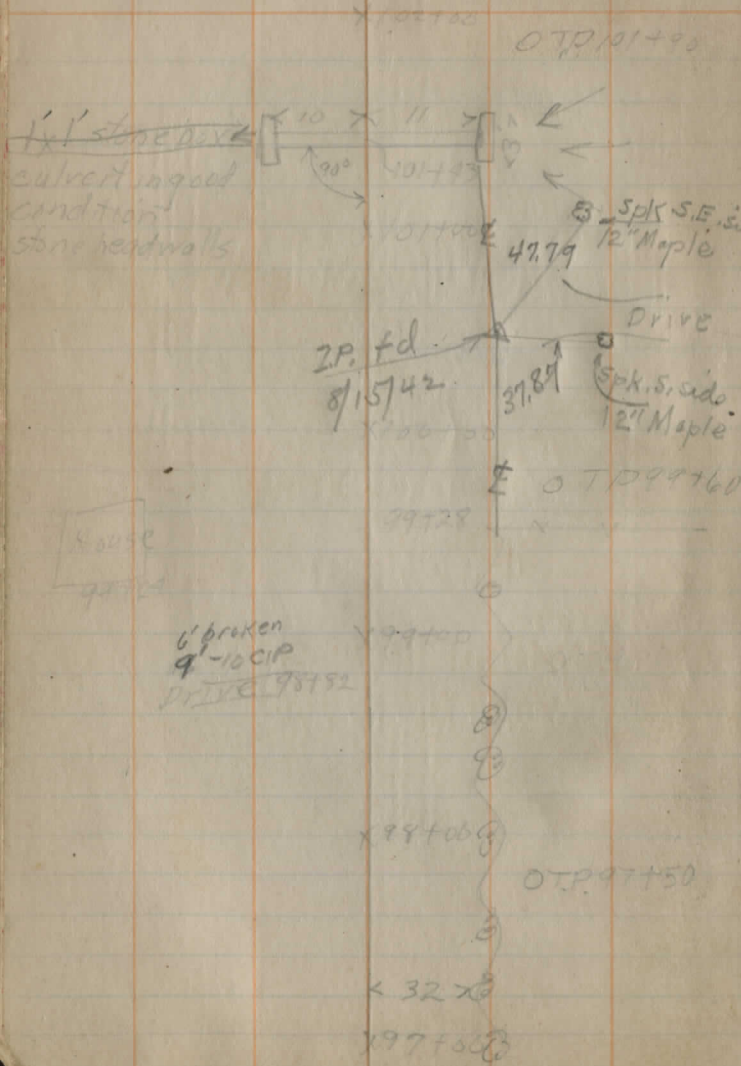
X95+00

X94+00

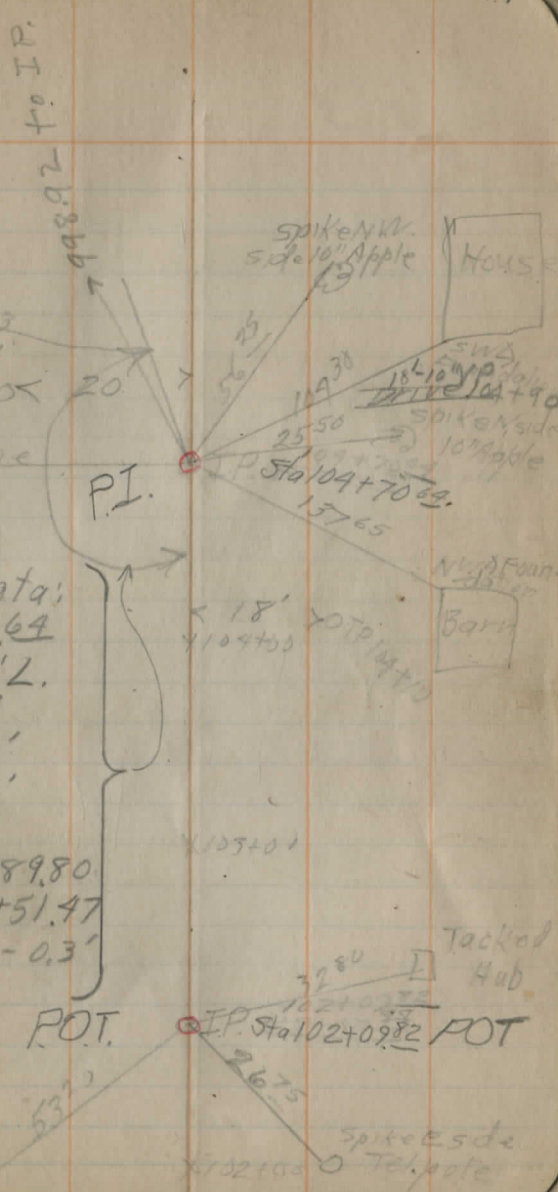
O.T.P.93+30

X93+00

X92+00



Curve Data:  
 PI-104+70.64  
 $\Delta - 1^\circ - 37' L.$   
 $D - 1^\circ - 00'$   
 $L - 161.67'$   
 $T - 80.84'$   
 $E - 0.57'$   
 $PC - 103+89.80$   
 $PT - 105+51.47$   
 $Def/ft. arc - 0.3'$



7/7/27

Richey  
Pomeroy  
Canfield

X109+00

X108+00

~~107+19~~ x x x

X107+00

X106+00

House  
105+12

X105+00

14400 DRIVE

CIP 104+70

X113+00

112+94 x

House

112+34

15'-8" cor TP

112+00 DRIVE

X111+97

O  
TP  
11+50

X111+00

← 24' →  
110+10

X110+00

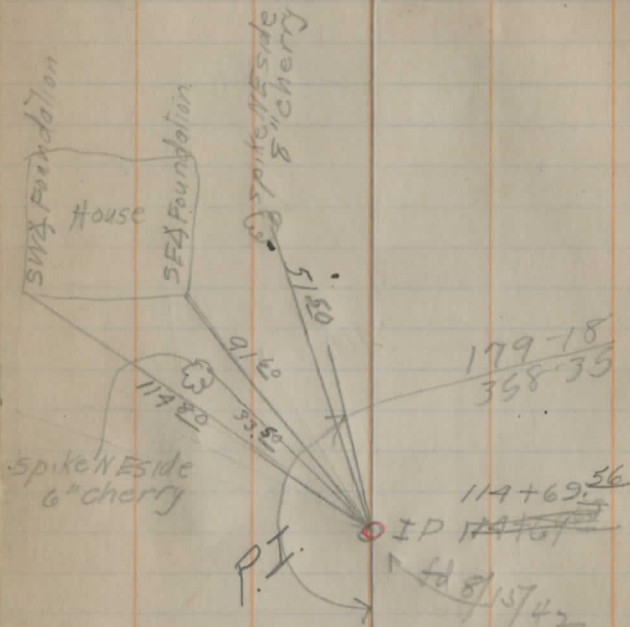
X X  
109+90.5  
30'  
Drive 109+63  
15'-18" cor TP

House

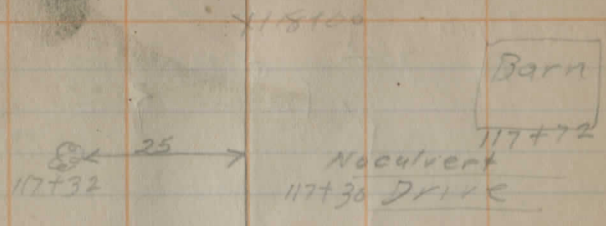
109+77

O  
TP  
109+20

X109+00



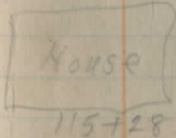
179-78  
 358-35  
 114+69.56  
 114+00  
 113+00  
 TP 17' 7  
 113+50  
 PI



Landowner on South  
 Says his N- is about  
 here

OK 17' 7  
 TP  
 116+0

20'-10" VP  
 DRIVE 115+19



115+28

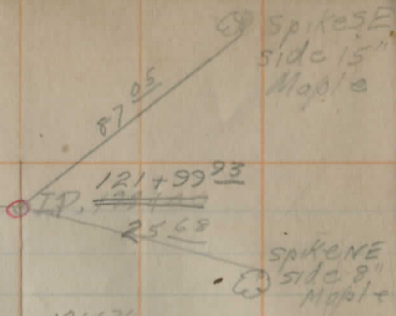
obs  
 N3E  
 115+00

IP 114+69.56

Tacked hub  
A

30°

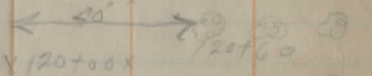
P.O.T.



121+70

X 121+00

TP  
120+90



Y 120+00

X 19+50

X 119+00

TP  
118+60

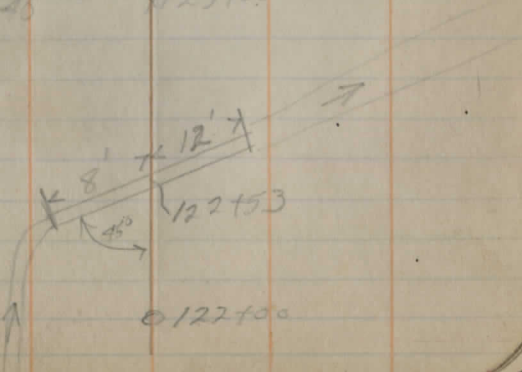
X 118+00

SPKONE  
side 15"  
Maple

SPKONE  
side 8"  
Maple

Orchard

10' corrugated  
I.P. in good  
condition



O 122+00

Y 123+00

X 122+00

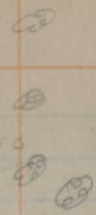
← 32' →  
123+50

House  
124+68

Barn  
124+37

18'-10" Cor I.P.  
DRIVE  
124+21

X 125+00



X130+00

X129+00

TP  
128+05

← 23' →

X128+00

Rock Outcrop  
Sta 127+15 to  
127+35

15'-12" CIP  
127+15 DRIVE

X127+00

X126+00

126+85

TP  
125+60

X125+00

X134+00

House

← 23' → BAVA  
133+75 DRIVE  
No Culvert  
133+71

133+62  
18'-8" CIP  
DRIVE 133+52.

Telp. 18'  
Elev 133+35

X133+00

House

132+72

132+62 DRIVE  
No Culvert

Telp. 18'  
132+15

X132+00

131+03 131+12 Probable Line

15" CIP  
good condition

← 18' →

← 23' →

← 75' →

X131+00

TP  
130+35

X130+00

House

136+90

EP 20' → 137+00

136+85

← 36'

136+58 Drive

x x x x

136+42

House

← 22'

136+12

136+30

x 136+60

15' 8" Cor IP  
Drive 135+12

Propable Line 135+27

EP  
135+20

x 135+60

TO  
134+92

10" CIP in  
good condition ←

x 10' x 10'

134+70

x 134+00

House

137+00

Bar

135+12

E. Kinsman Road

S. Line pavement

IP 138+21.29

138+14.29

EP 30'

Filling  
Station

137+98

Nappe  
Drive 137+30

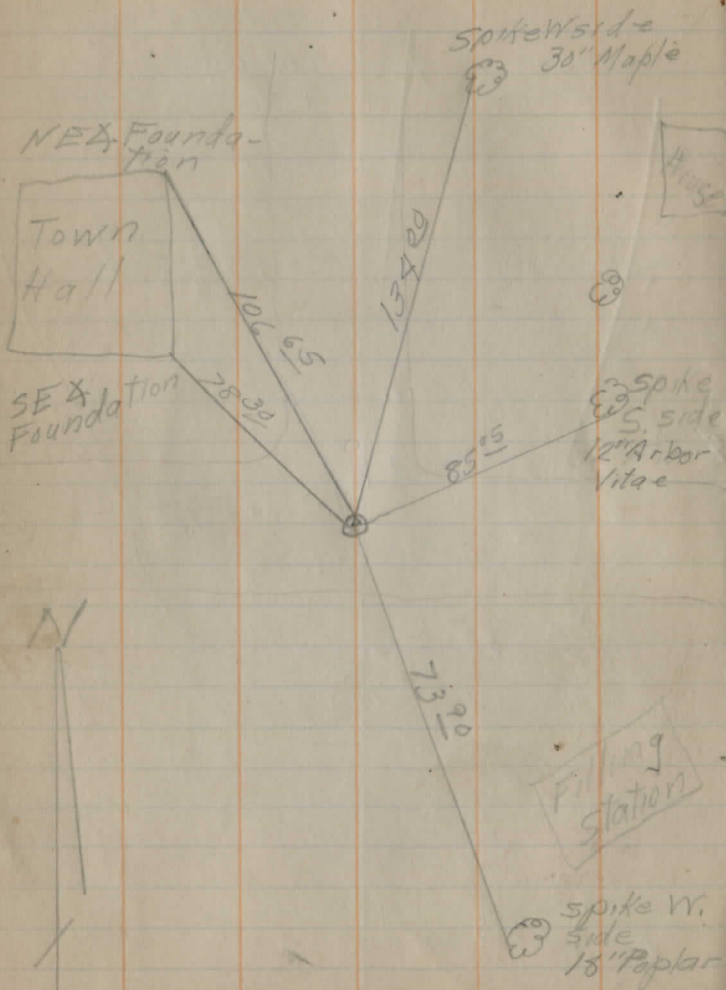
House

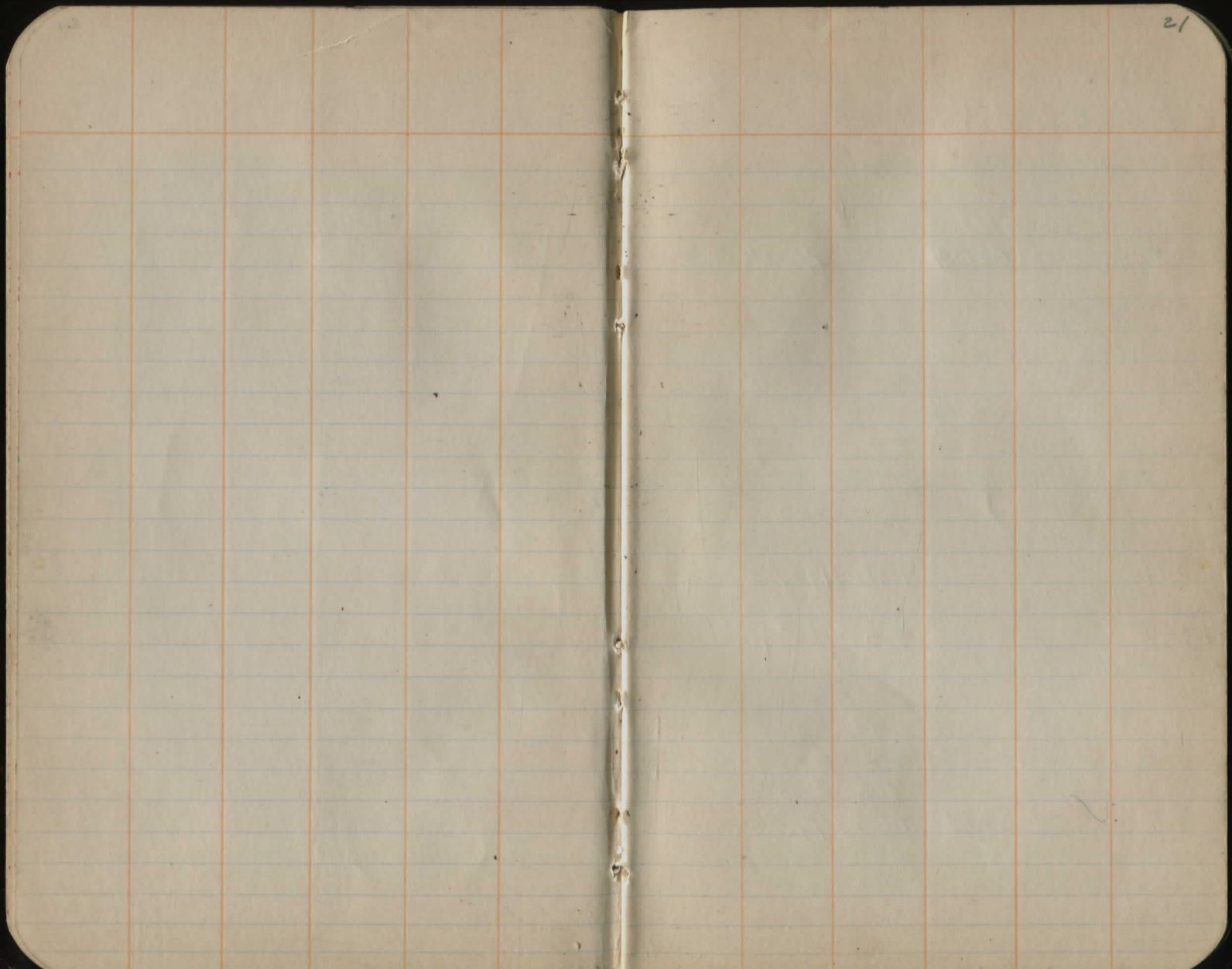
137+00

x 137+00

see next page  
for references to  
IP at Sta 138+21.36

138+21.29	25179
138+21.29	10560
138+21.29	2612
138+21.29	1650
138+21.29	9329
138+21.29	6283
138+21.29	4049





Levels and Cross Sections on  
Chillicothe Rd from Russell  
Bainbridge Trps. Line North

Sta	BS	HI	#5	Elev
BM	2.11	0239		1200.28 1200.24
Bobea			3.8	9859
0+00			4.2	9819
0+40			6.5	9589
BM			7.36	1195.03
1+00			7.5	9989
2+0			7.9	9949
Flow E. subject to 21 in			9.70	9269
Flow W.			9.65	9279
T.P.	3.95	98.41	7.93	1199.46
3+0			4.5	9391
4+0			4.0	9491

East

Note: -

cross sections + = East or Right  
- = West or Left

Pichey 22  
Rand

West

BM on East 18" Maple 25' W of E	Sta 298+70	Bobea Survey	Bainbridge TWP
+25	-17	+3	-10 -12 -30
30	38	74	75 34
+8	+0	-0.6	-0.7 -0.1 +0.4
-30	+16	-13	-3
-77	90	57	77 72 72
-0.5	+0.2	-1.5	-0.5 +0.0 +0.0
+30	-24	-19	+12 +10 -5 -5
67	67	70	78 70 70 75
-0.7	+0.9	-0.5	-1.3 -0.5 -0.5 -1.3 -1.0 +0.2 +1.7
	-24	-28	
	37	35	
	+2.8	+3.0	
# BM on West 36' Elm 30' E of E	Sta 0190		
+30	+23	+12	+11 +9 +6 -9 +9 -18 -21 -25
85	83	80	83 82 73 87 81 71 67 63
-1.0	-0.8	-0.7	-1.0 -0.7 -0.8 -1.2 -0.6 -0.6 +0.6 +1.2
	+14		
+30	+21	+14	+15
91	91	88	83 85 97 101 101
-1.2	-1.2	-1.3	-1.9 -0.9 -0.6 -1.8 -2.2 -2.2
	80		
	83		
	188		
	+19	+15	+10 +7 -9 -11 -14 -18 -23
+30	34	39	54 51 52 57 72 75 30
+2.1	+1.3	+0.6	+0.9 -0.6 -0.7 +1.2 +0.3 +0.1 +1.5
+30	+20	+17	+13 +0 7 -11 -14 -29 -30
13	21	27	22 17 26 49 40 27 22
+2.2	+1.9	+0.9	-0.2 -0.7 -0.6 -0.9 +0.0 +1.2 +1.2

5+0 1198.41 4.9 1193.51

6+0 5.1 933.1

7+0 4.1 94.31

TP 6.34 99.93 4.82 1193.59

8+0 5.2 94.73

9+0 4.7 95.23

10+0 4.9 95.53

11+0 4.01 95.93

13M 3.94 105.99 ✓

12+0 6.7 93.23

13+0 9.4 90.53

TP 5.56 93.76 11.73 1188.20

14+0 5.03 88.76

15+0 6.1 87.66

East & West

+30 4.9 -1.0 -1.7 -3.0  
5.3 5.9 6.3 5.5 6.1  
-0.4 -1.0 -1.1 -0.6 -1.2

+30 4.8 4.2 4.0 4.7 6 -8 -12 -21  
3.1 3.7 3.1 2.2 3.3 3.5 3.8 3.2 3.7  
+2.0 +1.4 -0.5 -1.1 -0.9 -0.9 -0.7 +0.7 +1.0  
4.3 +0.9

+30 4.9 4.7 4.2 4.9 4.7 4.9 3.9 3.6 3.7  
+1.6 +0.6 -0.6 -1.4 -0.5 -0.8 +0.2 +0.5 +0.9  
4.3 4.9 4.2 4.8 4.6 4.8 4.9 3.0

+0.9 -0.5 -1.1 -0.2 -0.7 -0.9 -0.8 -0.5  
+30 4.2 4.3 4.1 4.8 4.7 4.8 4.5 4.1 3.7  
4.0 4.3 3.8 3.7 3.1 3.8 3.2 3.1 3.7  
+0.7 +0.2 -0.7 -1.1 -0.9 -1.1 -0.5 -0.9 -0.9

+30 4.5 4.1 4.7 4.8 4.2 4.2 4.0 3.0  
3.0 3.3 3.9 3.5 3.6 3.0 3.2  
+1.4 +0.1 -1.0 -0.1 -1.1 -0.6 -0.8  
4.0 4.3 4.8 4.9 4.1  
+1.8 +0.9 +0.1 +0.0 -0.1

2<sup>nd</sup> X cut on SE A station top of well 23 in 1<sup>st</sup> E

5.8 11+90  
+30 4.2 4.7 4.0 4.9 4.5 4.9 -1.5 -2.6 -3.0  
3.6 2.1 4.3 6.9 7.6 7.0 7.3 6.3 4.7 3.4  
+3.1 +2.6 +2.4 -0.2 -0.9 -0.3 -0.6 +0.9 +1.8 +1.3

+30 4.2 4.5 4.0 4.8 4.6 4.9 4.3 4.8 4.0  
3.1 3.4 3.9 4.0 4.0 4.2 4.9 4.7 4.2 3.6  
+3.3 +3.0 +2.5 -0.6 -1.4 -0.8 -0.5 -0.5 +1.2 +1.8

+30 4.2 4.5 4.1 4.7 4.4 4.1 4.2 4.5 3.0  
3.0 3.2 3.7 4.9 6.0 6.5 5.4 6.1 5.0 4.9  
+2.0 +1.8 +1.1 +0.1 -0.0 -0.5 -0.9 -1.0 -0.1 +0.5  
+30 4.8 4.8 4.6 4.3 4.0 4.5 4.5 4.0  
6.3 6.6 6.3 7.1 6.2 6.9 6.6 7.3 6.3  
-0.2 -0.4 -0.9 -1.0 -0.1 -0.9 -0.5 -1.2 -2.2

East &amp; West

9376

Flow E	8.50	1185.26
Flow W	8.75	848.1
16+0	6.8	86.96
17+0	6.2	87.56
18+0	6.3	87.46
B.M. 496	94.97	3.75
1940	8.8	86.17
Flow E	11.15	835.2
Top headroll E	8.30	86.67
Flow W	11.95	830.2
Top headroll W	7.65	87.32
20+0	8.7	86.27
21+0	8.16	86.87
22+0	5.5	89.47
B.M.	0.24	94.73
23+0	3.5	91.47

Culvert 15+45

	100	102	W of	4				
+30	92.0	+1.8	+5	-6	-1.9	-1.8	-3.0	
5.3	5.7	6.5	7.7	8.4	7.7	7.1	7.1	
+1.5	+1.1	+0.3	-0.9	+0.2	-0.9	-0.3	-0.3	
+30	+1.8	+1.9	+1.9	-6	-1.5	-1.9	-3.0	
3.5	3.8	4.9	6.9	5.9	6.7	5.8	5.6	
+2.7	+2.4	+1.3	-0.7	+0.3	-0.5	+0.4	+0.6	
+30	+1.0	+6	-6	+5	-1.8	-3.0		
3.2	4.2	8.1	3.9	6.9	5.9	5.7		
+3.1	+2.1	+0.2	+0.4	-0.6	+0.4	+0.6		

Top Iron pipe 30' E of 6 Sta 18+50

+30	+1.1	+7	+3	-5	-1.0	-1.4	-2.0	-3.0
8.9	9.2	10.1	9.2	8.6	8.3	10.3	9.8	9.9
+0.4	-0.4	-1.3	-0.4	+0.2	-0.5	-1.5	-1.0	-1.1

Culvert 19+60

50 100  
11.0 12.7 W of 4

+30	+1.0	+7	+2	-5	-1.9	-3.0	
8.8	8.7	10.2	8.7	8.3	10.6	10.0	
-0.1	-0.2	-1.5	-0.2	+0.9	-1.3	-1.3	
+30	+1.3	+6	-5	-1.3	-1.5	-2.1	-3.0
4.9	6.4	9.0	8.0	8.6	7.7	6.2	6.1
+3.2	+1.7	-0.9	+0.1	-0.7	+0.4	+1.9	+2.0
+30	+1.3	+8	+9	+2	-1.5	-3.0	
1.7	3.5	6.2	5.6	6.2	3.6	4.0	
+3.8	+2.0	-0.7	-0.1	-0.7	+1.9	+1.5	

5# Top NW X stone step NW X church

	45' E of 4	Sta 22+35				
+30	+1.7	+7	-5	-1.4	-2.0	-3.0
1.6	2.9	4.3	3.3	4.6	3.6	3.6
+1.9	+0.6	-0.8	+0.2	-1.1	-0.1	-0.1

24+0 94.97 3.00 191.97

T.P. 509 95.68 4.38 90.59

Flow W. 8.12 87.56

Top headwall E 3.74 91.94

Flow E 6.83 88.85

± X road 24+45 4.20 91.98

Flow W. 7.83 87.85

Top head wall W 5.30 90.38

Flow E 6.16 89.52

Top head wall E 3.46 92.22

0.0 95.68

25+0 4.0 91.68

26+0 4.4 91.28

27+0 5.3 90.38

T.P. 2.01 90.91 6.78 88.90

28+0 3.4 87.51

29+0 5.9 85.01

B.M. 5.06 1185.85V

East & West

+1.30 +.49 -.44 -.22 -.30  
1.2 3.1 4.1 6.3 4.8  
+1.15 -.01 -.11 -.33 -.18

Top NE & concrete headwall Wend  
Culvert 20' W of ± Sta 24+28  
Culvert Sta 24+28

+1.00 +.30 -.30 -.50 -1.00  
1.5 3.5 5.5 7.0 9.7  
Culvert ± Sta 24+60

ground at house 50' E of Sta 24  
+1.88 +.30 +.18 +.15 -.15 -.19  
0.4 2.2 4.2 5.7 5.9 4.9  
+1.36 +.18 -.02 -.11 -.19 -.09

+1.30 +.14 -.10 -.20  
3.9 4.5 5.3 5.2  
+1.05 -.01 -.09 -.08  
1.80 +.16 +.13 +.9 2.7 -1.1 -2.0  
3.2 5.5 7.3 6.0 6.5 5.7 5.8  
+2.1 -.02 -.20 -.07 -1.2 -.09 -.05

+1.30 +.21 +.15 +.13 +.10 -.7 -.8 -1.2 -1.9  
8.0 1.8 3.6 4.6 3.8 4.2 5.0 2.9 2.2  
+3.4 +1.6 -.02 -.12 -.09 -.08 -.16 +1.0 +1.2  
1.30 +.16 +.13 +.11 -.7 -.0 -1.9  
3.9 5.4 7.3 6.3 6.9 5.1 4.4  
+2.0 +.05 -.19 -.09 -1.0 +.08 +1.0

4" X cut on 24" boulder 33' E of ± Sta 29+62  
17' N of 5 1/2" X school yard

30+0  
Ground  
at school  
BM  
90.91 7.2 118371  
45 86.41  
300 1187.91  
31+0 8.6 8221

7/9/27

BM 1.67 87.52 118585  
32+0 6.3 81.22  
33+0 7.6 79.92  
34+0 8.4 79.12  
TP 2.97 81.33 8.66 78.86  
35+0 2.9 78.43  
36+0 3.4 77.93  
37+0 3.6 77.73  
38+0 4.2 77.13  
39+0 4.2 77.13

East & west

+30 +16 +14 +11 -6 -19  
59 76 55 28 83 70  
+1.3 -0.9 -1.3 -0.6 -1.1 +0.2  
5# X cut in K14 stone steps school/house  
90'E of E Sta 30+38  
+30 +25 +15 +8 -7 -19  
73 51 77 89 97 88  
+1.3 -0.2 -1.1 -0.3 -1.1 -0.2

4# X cut in boulder 33'E of E Sta 29+62  
+30 +16 +13 +3 -7 -9 -19  
57 66 76 55 73 66 63  
+0.6 -0.3 -1.3 +0.8 -1.0 -0.3 +0.0  
+30 +16 +17 +4 -8 -10 -19  
68 75 89 77 89 76 73  
+0.8 +0.1 -1.3 +0.5 -0.8 +0.0 +0.3  
+30 +16 +13 +8 -7 -10 -19  
71 55 92 85 89 83 83  
+0.7 -0.1 -1.0 -0.1 -0.5 -0.1 +0.1  
+30 +16 +12 -9 -12 -10  
29 31 37 37 31 26  
+0.2 -0.3 -0.8 -0.8 -0.2 +0.3  
+30 +16 +14 +9 -6 -9 -11 -19  
35 35 45 37 37 43 37 38  
-0.1 -0.1 -1.1 -0.3 -0.3 -0.9 -0.3 -0.4  
+30 +15 +13 +9 -7 -9 -11 -19  
42 40 48 38 46 49 42 42  
-0.6 -0.4 -1.2 -0.2 -0.4 -1.3 -0.6 -0.6  
+30 +15 +12 +10 -8 -10 -12 -19  
45 43 53 49 47 52 47 44  
-0.3 -0.3 -1.1 -0.5 -0.5 -1.0 -0.5 -0.2  
+30 +13 +11 +9 -8 -11 -12 -19  
52 49 58 51 51 55 52 45  
-1.0 -0.7 -1.6 -0.9 -0.9 -1.3 -1.0 +0.2

40+0	81.33	4.6	1176.73
Flow E		7.60	73.73
Flow W		8.02	73.31
BM		3.28	1178.05
41+0		4.6	76.73
42+0		5.3	76.03
43+0		4.8	76.53
TP	665	85.76	282
Flow E		11.45	74.31
Flow W		11.58	74.8
Headwall W.		6.65	79.11
44+0		8.5	77.26
45+0		8.2	77.56
46+0		7.2	78.56
47+0		6.4	79.36
48+0		4.8	80.96

East & West

+30	+31	18	-9	-13	-23
59	62	49	52	60	60
-0.8	-1.6	-0.3	-0.6	-1.8	-1.4

culvert Sta 40+15

+30	+30	+30	+30	+30
29	29	29	29	29
-0.7	-0.7	-0.7	-0.7	-0.7

6# 18" Maple 39' E of E

Sta 40+50					
+30	+12	+10	-12	-15	-20
50	54	61	64	56	57
-0.9	-0.8	-1.5	-1.8	-1.0	-0.5
+30	+15	+11	-13	-15	-19
50	54	69	64	59	57
-0.3	-0.1	-1.6	-1.1	-0.6	+0.2
+30	+15	+11	-10	-13	-19
58	59	66	65	57	54
-1.0	-1.1	-1.8	-1.7	-0.9	-0.6

Top NW & E. head wall culvert 43+47

+30	+30	+30	+30	+30
73	72	78	78	78
-0.3	-0.2	-0.8	-0.8	-0.8

+30	+15	+13	-9	-12	-30
72	80	77	103	88	91
-0.7	-0.1	-0.9	-1.8	-0.3	-0.6
+30	+16	+14	-8	-10	-30
89	80	90	93	82	78
-0.2	+0.2	-0.8	-1.1	+0.0	+0.9
+30	+16	+14	-6	-9	-30
75	78	84	83	78	69
-0.3	-0.6	-1.2	-1.1	-0.6	+0.3
+30	+16	+14	+5	+5	+8
60	65	73	61	72	63
+0.4	-0.1	-0.9	+0.3	-0.8	+0.1
+30	+15	+16	+15	+7	+7
74	49	58	53	42	62
+0.4	-0.1	-1.0	-0.5	+0.6	-1.4

8576

BM 628	89.34	2.70	118306 ✓
49+0		6.7	82.64.
50+0		5.1	84.24
TP 8.89	98.89	0.14	89.20
51+0		10.4	87.69
52+0		7.1	90.99
53+0		4.6	93.99
TP 7.48	120.49	1.08	97.01
Top slope E.		6.6	97.89
Top slope W.		6.6	97.89
Flow ditch W.		8.6	95.89
Ground at house		4.0	100.49
54+0		6.3	98.19
55+0		5.7	98.79
56+0		4.3	100.19
57+0		3.2	101.29

East & West

7<sup>th</sup> Spike NE root 18' staple 24' W of E

Sta 47+71

+1.2	+1.2	+1.5	+7	-5	-7	-20
+30	+13	+5	63	79	66	41
55	64	77	63	79	66	41
+1.2	+0.3	-0.1	+0.1	-1.2	+0.1	+2.6
+30	+20	+16	+6	4	-8	+12
23	37	50	43	37	43	31
+2.8	+2.0	+0.1	+0.8	-0.6	+0.8	+2.0
+3.2	+4.3	+1.9	+0.8	+3.2	+4.3	+1.9

+1.6	+1.0	-0.9	+0.5	-1.5	+3.1	+3.6
+30	+15	+9	-11	-19	-23	-30
36	46	71	82	60	43	45
-0.5	-0.5	+0.0	-1.1	+1.1	+2.6	+2.6
+30	+15	+13	+10	+4	-12	-19
37	35	52	43	72	49	31
+0.9	+1.1	-0.6	+0.3	+0.1	-0.3	+1.5
+2.5	+4.6	+0.0	+2.5	+4.6	+0.0	+2.5

cut over sta 53+70 ground at same

House 80' W of E Sta 53+0

+1.2	+1.2	+1.5	+7	-5	-7	-20
+30	+13	+5	63	79	66	41
67	66	59	58	57		
-0.4	-0.3	+0.9	+0.5	+0.6		
+30	+12	+10	-13	-16	-30	
58	47	65	68	54	33	
+0.9	+1.0	-0.8	-1.1	+0.3	+2.4	
+30	+13	+11	-10	-13	-17	-20
46	41	53	53	60	73	37
-0.3	+0.1	-1.2	-1.0	-1.7	+0.0	+0.6
+30	+12	+10	-10	-13	-15	-30
47	39	44	40	48	29	21
-1.5	-0.7	-1.2	-0.8	-1.6	+0.3	+1.1

East E west

	1204.49		
T.P.	6.93	09.66	126120323
58+0			7.9 02.26
BM			3.00 05.76
59+0			5.7 03.96
60+0			4.7 04.96
61+0			4.3 05.36
62+0			7.5 05.14
63+0			6.1 03.56
64+0			8.0 01.66
65+0			10.01 99.66
TP	2.61	01.80	10.47 1199.19
66+0			4.1 97.70
67+0			5.4 96.40

+30	+12	+0	-12	-14	-20	-25	-30
80	82			78	63	60	53
-06	-06	-1.3	-08	-0.9	+1.1	+1.4	+2.1

8# spike root 18 Maple 38 W of

+30	+11	+9	-8	-12	-19	-30	
80	60	70	62	72	58	51	
+0.1	-0.3	-1.3	-0.9	-1.5	-0.1	+0.6	
+30	+12	+0	+8	-8	+11	-25	-30
46	50	60	53	53	60	50	43 37
+0.1	-0.3	-1.3	-0.5	-0.5	-1.3	-0.3	+0.7 +1.0
+30	+14	+12	+9	-7	-10	-12	-20 -30
37	49	52	47	47	50	43	38 35
+0.5	+0.0	-0.9	-0.9	-0.9	-0.7	+0.0	+0.5 +0.8
+30	+15	+11	+8	-11	-20	-30	
38	41	54	54	59	48	48	
+0.9	+0.9	-0.9	-1.0	-1.9	-0.3	-0.3	
+30	+15	+11	+7	-9	-11	-15	-19 -30
43	54	71	69	70	73	63	57 57
+1.3	+0.7	-1.0	-0.3	-0.9	-1.9	-0.9	+0.9 +0.9
+30	+22	+12	+9	-8	-12	-18	-30
40	51	92	86	87	95	70	70
+2.0	+1.9	-1.2	-0.6	-0.7	-1.5	+1.0	+1.0
+30	+23	+12	+8	-7	-11	-15	-18 -30
47	80	112	106	108	116	81	82 83
+2.3	+2.0	-1.2	-0.6	-0.8	-1.6	+0.9	+1.9 +1.5
+30	+22	+10	+7	-11	-16	-25	
46	20	55	48	53	37	23	
+2.5	+2.1	-1.4	-0.7	-1.2	+0.9	+1.6	
+30	+12	+0	+0	-1.7	-20		
54	36	66	69	58	56		
+0.6	-0.2	-1.2	-1.0	-0.9	-0.2		

68+0	01.80	6.9	1194.90
69+0		8.7	93.10
B.M.	2.15	96.06	7.89 1193.91
70+0		6.0	900.6
71+0		10.6	854.6
72+0		11.9	891.6
Flow E		4.00	920.6
Flow W		4.93	916.3
67770		4.2	918.6
T.P.	1.96	85.44	12.08 83.98
Flow E		4.78	806.6
Flow W		5.35	800.9
EX road		3.4	81.99
73+0		2.7	82.79
74+0		3.9	81.54
75+0		4.5	80.94

East  $\frac{E}{\text{west}}$

+30	+12	+10	+7	-10	-12	-30
88	77	52	7	79	71	71
+0.1	+0.2	-1.3	-0.7	-1.0	-0.2	-0.2
+30	+12	+10	+7	-10	-12	-30
82	53	72	93	83	79	
+0.5	+0.9	-0.9	-0.6	+0.9	+0.8	

9# BM spike SW root 24" Maple 30' E of  $\frac{E}{\text{west}}$

Sta 69+69									
+20	+30	+17	+12	+6	+4	+10	-13	-15	-30
0.3	29	43	42	27	60	67	80	62	73
+5.7	+3.1	+1.7	+1.8	-0.7	+0.0	-0.7	-2.0	-0.2	+1.7
30	+16	+8	+2	+8	+23	+30			
75	73	110	114	100	80	77			
+3.1	+3.3	-0.9	-0.8	+0.6	+2.6	+2.9			
+30	+16	+7	+3	-16	-20	-39			
110	110	126	129	125	115	115			
+0.9	+0.9	-0.7	-1.0	-0.6	+0.9	+0.9			

Corrugated IP Sta 69+33

$\frac{E}{\text{west}}$  Y sect same as Sta 69

Top Point SWA largest rock End culvert 73+06

Culvert Sta 73+06

Sta 73+06								
50	100	150	130	50	100	150		
72	79	80	W of $\frac{E}{\text{west}}$					
1150	1100	150	130	50	100	150		
11	78	33	34	56	66	69		
+23	+1.6	+0.5	+0.0	-2.2	-3.2	-3.5		
+30	+19	+10	+5	-10	-13	-15	-20	-30
30	30	34	28	29	53	32	37	36
-0.3	-0.3	-1.2	-0.1	-0.2	-2.8	-0.5	-0.7	-0.8
+30	+18	+15	+11	+0	-13	-18		
32	35	50	42	46	51	53		
+0.7	+0.9	-1.1	-0.3	-0.7	-1.2	-1.4	-1.7	
+30	+21	+16	+11	+6	+8	-11	-14	+20
30	34	39	64	50	51	58	46	48
+1.5	+1.1	+0.6	-1.9	-0.5	+0.6	-1.3	-0.1	-0.3

E&W of  $\frac{E}{\text{west}}$

T.P. 85.44 5.90 1180.09

7/9/27

T.P. 351 83.55 1180.09

76+0 5.0 98.55

77+0 7.5 76.05

78+0 10.0 73.55

79+0 12.3 71.25

T.P. 435 79.99 12.91 70.69

80+0 5.9 69.09

BM 2.61 1172.38

81+0 7.1 67.89

BM 4.03 1170.96

82+0 7.9 67.09

83+0 7.6 67.39

East & west

→ top boulder 8'E of Sta 75+60

+30	+17	+10	+6	-9	-12	-15	-30
28	33	69	53	56	63	75	71

+2.2	+1.7	-1.9	-0.5	-0.6	-1.3	+0.5	+0.9
------	------	------	------	------	------	------	------

+30	+6	+10	+8	-1	-19	-21	-30
46	56	91	87	84	75	74	68

+2.9	+1.9	-1.6	-0.7	-0.9	+0.0	+0.1	+0.7
------	------	------	------	------	------	------	------

+30	+5	+9	+7	-11	-16	-20	-30
77	94	111	102	105	101	95	98

+2.2	+0.6	-1.1	-0.2	-0.5	-0.1	+0.5	+0.2
------	------	------	------	------	------	------	------

+30	+2	+5	+4	-12	-16	-20	-30
90	107	135	125	132	121	118	119

+3.3	+1.4	-1.2	-0.2	-0.9	+0.2	+0.5	+0.9
------	------	------	------	------	------	------	------

+30	+19	+14	+7	-8	-12	-16	-20	-30
13	21	31	67	62	68	53	46	45

+4.4	+3.8	+2.8	-0.6	-0.3	-0.9	+0.6	+1.3	+1.4
------	------	------	------	------	------	------	------	------

10# x cut in top boulder 26'E of Sta 80+71

+30	+19	+9	-12	-15	-26	-30
37	45	76	80	70	57	60

+3.2	+2.6	-0.5	-0.9	+0.1	+1.4	+1.1
------	------	------	------	------	------	------

11# spike S. side 2nd post fence W

+30	+12	+7	-19	-26
84	84	80	86	91

-0.5	-0.5	-0.1	-0.7	-1.2
------	------	------	------	------

+30	+13	+8	-11	-24
110	93	78	84	98

-3.4	-1.7	-0.2	-0.8	-2.2
------	------	------	------	------

Flw W	79.99	12.12	116287
Tophead mill		732	67.67
Flw E		12.10	62.59
T.P.	11.94	79.53	7.90 69.59
84+0		16.2	69.33
85+0		68	72.73
85+50		41	75.93
TP	10.85	88.92	1.96 78.07
86+0		10.1	78.82
86+35		8.2	80.72
86+50		8.5	80.92
87+0		11.3	77.62
B.M.		173	1184.19
T.P.	0.55	78.10	11.37 77.55
88+0		8.4	69.70
89+0		12.9	65.20
T.P.	1.35	66.62	12.83 65.27

East  $\frac{E}{}$  west

culvert Sta 87+00

50	100								
123	131								
E of E									
Top N.E. A.E. 100 ft									
+30	+23	+9	-1	-25					
137	137	105	106	120					
-3.5	-3.7	-0.3	-0.6	-1.8					
+30	+8	+6	+14	+30					
33	7	77	67	50					
-2.5	-0.3	-0.9	+0.1	+1.8					
165	+30	+10	+9	+7	10	-14	-19		
47	41	39	46	41	36	42	0.5		
-0.6	+0.0	+0.2	-0.5	100	+0.5	-0.1	+3.6		
+30	+11	+7	71	-16	-17	-30	-10	-50	
107	102	106	95	100	84	5.2	13	0.5	
-0.6	-0.1	-0.9	+0.6	+0.1	+1.7	+4.9	+8.8	+9.6	
+30	+13	+6	-12	-13	-42	-70			
72	70	83	90	82	0.7	0.3			
+4.3	+0.9	+0.2	-0.5	+0.3	+7.8	+8.2			
+30	17	44	12		36	-73			
66	122	130	131		33	45			
+4.7	+0.1	-0.7	-0.8		+7.0	+6.8			

12# 2 spikes E root 24 Maple 35 W of  
E. Sta 87+00

+30	+25	+8	-10	-11	-17	-21	-30
39	19	86	88	91	32	56	57
+7.5	+9.5	-0.2	-0.9	-0.7	+3.2	+2.8	+2.7
+30	+2.2	+12	+10	+5	-9	-11	-15
103	116	123	140	131	159	147	17
+2.6	+1.3	+0.5	-1.1	-0.2	-0.5	-1.1	+1.2

90+0	66.62	49	161.72
91+0		9.1	57.52
92+0		12.2	59.92
TP	0.34	59.29	12.67
93+0		3.2	51.09
94+0		5.8	48.49
95+0		7.9	46.39
BM	3.00	50.52	6.77
96+0		5.75	44.82
97+0		7.3	43.22
BM		3.96	1197.06
98+0		8.2	42.32
TP	2.68	44.30	8.90
99+0		3.1	41.20
100+0		3.5	40.50

East      E      West

+1.9	+0.4	-1.1	-0.7	-0.5	-1.5	+1.2	+1.3	+0.9
+2.6	+1.6	-0.7	-0.2	-0.7	-1.3	+1.4	+1.3	
+2.8	+1.7	-1.3	-0.6	-0.8	-1.7	+1.6	+1.4	
+2.6	+2.0	-1.0	-0.3	-0.7	-1.2	+2.0	+1.6	
+1.7	+1.0	-1.3	-0.5	-1.0	+0.9	+0.6		
+1.3	+0.9	-0.9	-0.3	-0.5	+0.9	+0.6		
13# + cut in boulder - 30 E of 6.50 95+30								
+0.2	+0.6	-1.3	-0.5	-0.7	+0.7	-0.1	-0.5	
+0.7	+0.3	-1.0	-0.2	-0.7	+0.7	+0.0		
14# SW root 42' middle 100' E of E Sta 97+10								
+1.2	-0.2	-1.6	-0.7	-0.7	-0.3	-1.0		
+0.3	-0.2	-1.1	-0.6	-0.1	+0.3	+1.7		
-0.9	-0.3	-1.7	-0.6	-0.3	-0.8	-1.2		

101+0	44.30	47.11	139.60
Flow W	7.18		3712
Headwall W	4.30		40.00
Flow E	7.05		37.25
Headwall E	3.15		40.85
102+0	4.8		39.50
103+0	3.9		40.40
T.P.	5.56	49.38	43.82
104+0	6.9		42.98
B.M.	0.71		48.67
105+0	4.7		44.68
106+0	4.3		45.08
107+0	4.2		45.18
108+0	4.2		45.18
109+0	3.6		45.78
T.P.	6.37	53.16	259.46.79

East		West	
+30	+12	+10	+5
56	46	59	46
-0.9	+0.1	-1.2	+0.1
+0.1	+0.1	-0.7	+0.1
-0.8	-1.9		
culvert 101+43			
50	100	150	
7.28	8.2	8.9	W of E
+30	+12	+9	-9
58	50	54	53
-1.0	-0.2	-0.6	-0.6
-0.5	-1.0		
+30	+13	+9	+5
17	26	27	40
+2.2	+1.3	-0.8	-0.1
-0.7	+0.9	+1.4	+1.4
+30	+17	+14	+7
39	42	48	50
+3.0	+2.7	+2.1	-1.1
-0.2	-0.7	-1.4	+1.6
15# cut SW Δ stepping stone			
+30	+30	+17	+11
10	30	37	54
+3.1	+1.7	+1.0	-0.7
+0.1	-0.5	-1.8	-0.3
+0.2			
+30	+13	+10	+2
31	42	54	47
+1.1	+0.1	-1.1	-0.4
-0.7	-1.5	-0.7	-0.8
+30	+12	+10	+7
33	43	51	45
+0.9	-0.1	-0.9	-0.3
-0.4	-1.5	-0.5	
+30	+13	+11	+7
36	40	51	43
+0.6	+0.2	-0.8	-0.1
-0.1	-0.1	-0.9	
+30	+12	+11	+8
30	36	47	40
+0.0	+0.0	-1.1	-0.4
-0.6	-1.1	-0.1	

	53.16	47	1148.16	
110+0		68	4636	
111+0		60	4716	
112+0		54	4776	
		4.1	4906	
113+0		50	4816	
114+0		51	4806	
115+0		5.7	4716	
		3.3	4986	
B.M.	310	51.46	480	48.36
116+0		5.1	4636	
117+0		6.5	4496	
118+0		8.9	4256	
TP	640	46.29	1157	39.89
119+0		6.5	39.79	

East  $\frac{1}{2}$  West

front of house 100W of E 109+19

+30	+19	+11	+9	-10	-30	
56	69	70	72	77	65	
+1.2	-0.1	-1.2	-0.9	-1.1	+0.3	
+30	+16	+12	+9	-8	-13	-30
73	53	40	44	70	38	27
+0.7	+0.8	-1.0	-0.9	-1.0	+0.2	+1.3
+30	+12	+12	+7	-15	-30	
71	49	60	64	51	72	
+0.7	+0.5	-0.6	+0.0	+0.3	+1.2	

front of house 110E of E 112+50

+30	+15	+9	-9	-20	-30	
47	52	59	60	44	41	
+0.3	-0.2	-0.9	-1.0	+0.6	+0.9	
+30	+14	+11	-8	-10	-19	-34
50	52	59	55	63	75	44
-0.1	-0.5	-0.8	-0.4	-1.2	+0.6	+0.7
+30	+13	+9	-9	-11	-20	
58	60	65	63	70	52	
-0.1	-0.3	-0.8	-0.8	-1.3	+0.5	

16# front of house @ 80W of E 115+28

X cut on boulder 25W of E

+30	+10	+6	-12	-14	-20	
77	52	36	38	61	46	
+0.9	-0.1	-0.5	-0.7	-1.0	+0.5	
+30	+10	+6	-13	-26		
78	50	71	75	53		
+1.7	+1.5	-0.6	-1.0	+1.2		
+30	+17	+8	+4	-10	-13	-21
76	70	102	92	94	106	69
+2.3	+1.9	-1.3	-0.3	-0.5	-1.7	+2.0

+30	+18	+9	+6	-10	-17	-24
32	32	80	77	83	79	41
+3.3	+3.3	-1.5	-0.6	-1.8	+2.3	+2.9

120+0 46.29 10.1 1136.19

TP 691 4218 11.10 35.19  
BM 183 140.27

121+0 74 3470

122+0 93 3280

123+0 10.9 3120

BM 066 32.12 10.64 31.46

124+0 6.2 2592

125+0 11.5 2062

Flow E 19.5 3017

Flow W 15.4 30.58

TP 192 2181 12.23 19.89

BM 1.75 20.06

126+0 5.9 15.91

E

East West

+30	+20	+10	-9	-15	-30
52	53	112	114	91	91
+4.9	+9.8	-1.1	-1.3	+1.0	+1.0

17<sup>#</sup> spikes W root 35" Apple 30' E of E

Sta 120+60								
+30	+22	+12	+10	-9	-16	-26	-30	
5.8	6.6	8.3	8.1	7.3	7.7	7.0	6.5	
+1.6	+0.8	-1.4	-0.7	-1.6	-0.3	+0.9	+0.9	

+30	+13	+10	+8	-7	-10	-15	-20	-30
1.0	96	106	9.7	10.0	10.7	9.0	8.2	7.9
-1.7	-0.3	-1.1	-0.4	-0.7	-1.4	+0.3	+1.1	+1.9

+30	+14	+11	+8	-10	-13	-24	-30	
11.7	10.7	12.0	1.4	11.6	12.6	7.8	7.1	
-0.8	+0.2	-1.1	-0.5	-0.7	-1.7	+3.1	+3.8	

18<sup>#</sup> spikes W root 24" Maple 30' E of E

Sta 123+80								
+30	+18	+12	+7	-10	-13	-23	-30	
3.7	3.8	2.9	6.1	6.6	7.3	8.7	2.0	
+3.8	+3.7	-0.2	+0.1	-0.4	-1.0	+4.1	+4.2	

+30	+16	+11	+7	-10	-15	-23	
6.4	9.2	12.6	14.1	12.3	13.3	9.3	
+1.7	+2.3	-1.1	-0.6	-0.8	-1.8	+2.2	

culvert Sta 122+53

59	100	E of E
31	74	

19<sup>#</sup> spikes W side 12" Maple 25' E of E

Sta 125+65							
+30	+18	+14	+9	-11	-20		
8.3	5.0	7.2	6.5	6.3	7.2	2.1	
+0.6	+0.9	-1.3	-0.6	-0.4	-1.3	+3.8	

127+0 2181 106 1121

BM 509 1392 1293 108.88

128+0 8.0 0592

129+0 11.9 0203

TP 1.60 0301 1251 01.91  
130+0 3.7 99.31

131+0 6.0 9701

Flow W 2.30 95.71  
Flow E 8.56 94.45

132+0 7.5 95.51

BM 209 98.58 652 1096.49

133+0 1.8 96.78  
4.1 94.48

134+0 4.5 99.08

Flow E 7.51 910.7  
Flow W 7.66 90.92

### East & West

+30 7.6 713 40 -10 -12 -28 -30  
98 10.1 11.0 10.5 10.0 10.6 4.6 60

+0.8 +0.5 -0.9 +0.1 +0.6 +0.0 +5.0 +4.6

20# 30' Maple 30' Maple 30' E of E

Sta 127+97  
+30 11.5 11.0 4.8 -7 -11 -22 -30 -40  
50 6.9 9.7 8.7 8.9 9.5 4.0 3.8 3.4  
+2.1 +1.6 -1.7 -0.7 -0.4 -1.5 +4.0 +4.2 +4.6

+30 2.1 7.1 4.9 -5 -8 -21 -30  
50 4.3 13.4 12.9 11.6 13.8 7.2 6.0  
+1.9 +2.4 -1.5 -0.5 +0.3 -1.9 +4.7 5.9

+30 4.6 4.13 4.10 -5 -8 -20  
50 2.8 4.8 4.3 3.9 3.2 0.7  
+0.3 +0.9 -1.1 -0.6 -0.2 -1.5 +3.3

+30 4.9 4.17 4.2 -8 -30  
7.1 6.0 7.3 6.2 7.2 4.3  
-1.1 +0.0 -1.3 -0.2 -1.2 +1.7

Culvert Sta 131+0.3

50 12.2 E of E  
10.7 12.0

+30 4.9 4.15 4.10 -13 30  
3.7 7.9 8.1 8.9 8.2 6.5  
-1.9 +0.1 -0.6 -1.4 -0.7 +1.0

21# spike E root 12' Ash 40' W of E

Sta 132+00  
front house 70' E of E

+30 4.5 4.13 -8 -11 -14 -30  
4.4 7.1 4.3 4.5 3.4 4.4 4.5  
-0.2 +0.0 -0.2 -0.4 -1.3 -0.3 -0.4  
+30 4.5 4.13 4.10 -9 -12 -14 -30 -40  
50 5.0 5.5 4.7 5.0 6.8 5.5 5.5 4.7  
-1.1 -0.5 -1.0 -0.2 -0.5 -1.3 -1.0 -1.0 -0.2

Culvert Sta 134+70

50 7.9 W of E

135+0 9858 50109358

136+0 45 94.08

TP 366 9814 410 94.48

137+0 32 94.94

Edge pave 5.04 93.10

to Kad 4.95 93.19

Spave. N 50' of E 6.82 91.32

" " 100 8.55 89.59

" " 150 9.62 88.52

B14 4.11 94.03 109403

East & West

+30 +15 +14 -11 -13 -15 -30  
33 57 54 56 69 58 67

-03 -07 -04 -06 -1.9 -08 -1.7

+30 +16 +13 +10 -10 -12 -15 -30  
43 63 61 53 52 58 52 39

+02 -08 -1.6 -05 -0.7 -1.3 -0.7 -0.9

+30 +14 +12 +10 -9 -14 -19 -30  
32 38 45 40 38 46 40 30

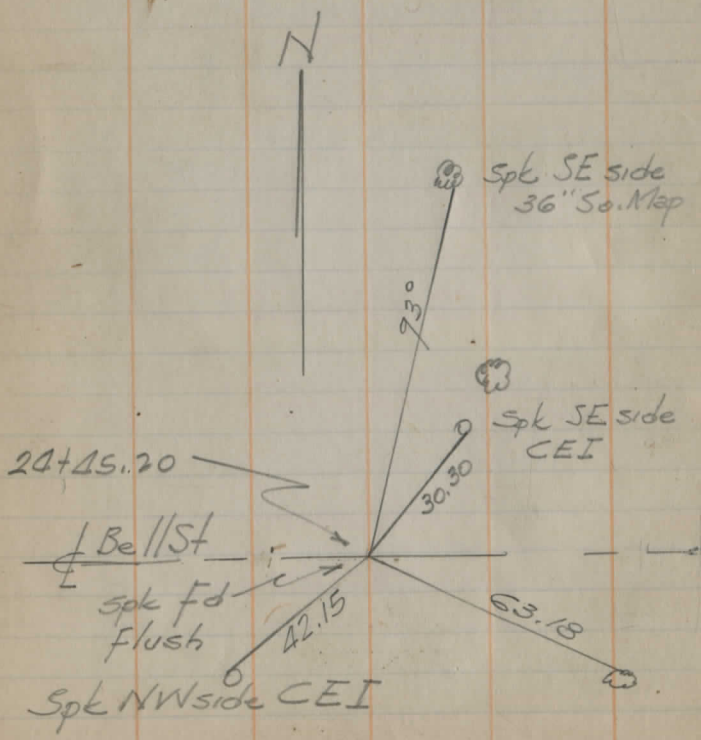
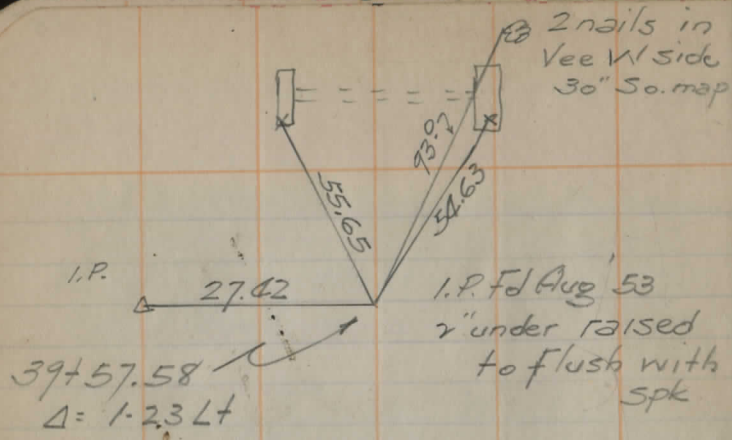
+00 -06 -1.6 -08 -0.6 -1.9 -0.8 +0.2

+30 30  
54 5.30  
-1.0 5.30  
35 35 +5.0 +1.00  
5.40 5.60

22# U.S.G.S.-B.M. Alum. tablet stamped (1094. ADJ.-1903) in SE A Foundation of Town Hall

Data on Chellicothe Rd. Imp.  
in Bainbridge Twp. as given  
to Fiedler by Sobean, Engineer  
on said Imp.

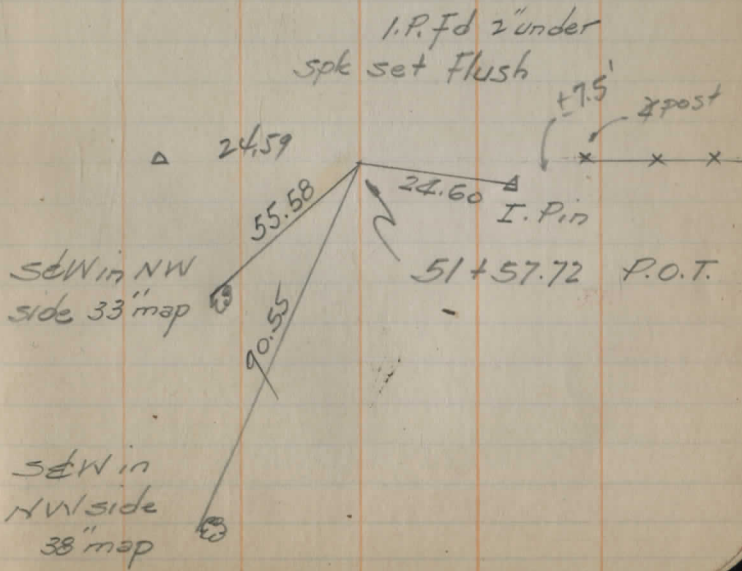
BM No 17. - 15" Maple W. side Chille.  
Rd 100' N. of Socco drive = 1200.243  
Grade elevation at Russell-  
Bainbridge Twp's line = 1197.37  
Vertical curve from Sta 279  
to Sta 281  
Grade of -1.35% from Sta 281  
to N. end



CHILlicothe ROAD  
FROM BELL ST. northerly

Aug. 29, 1953

Maynard  
Temple  
Pomeroy









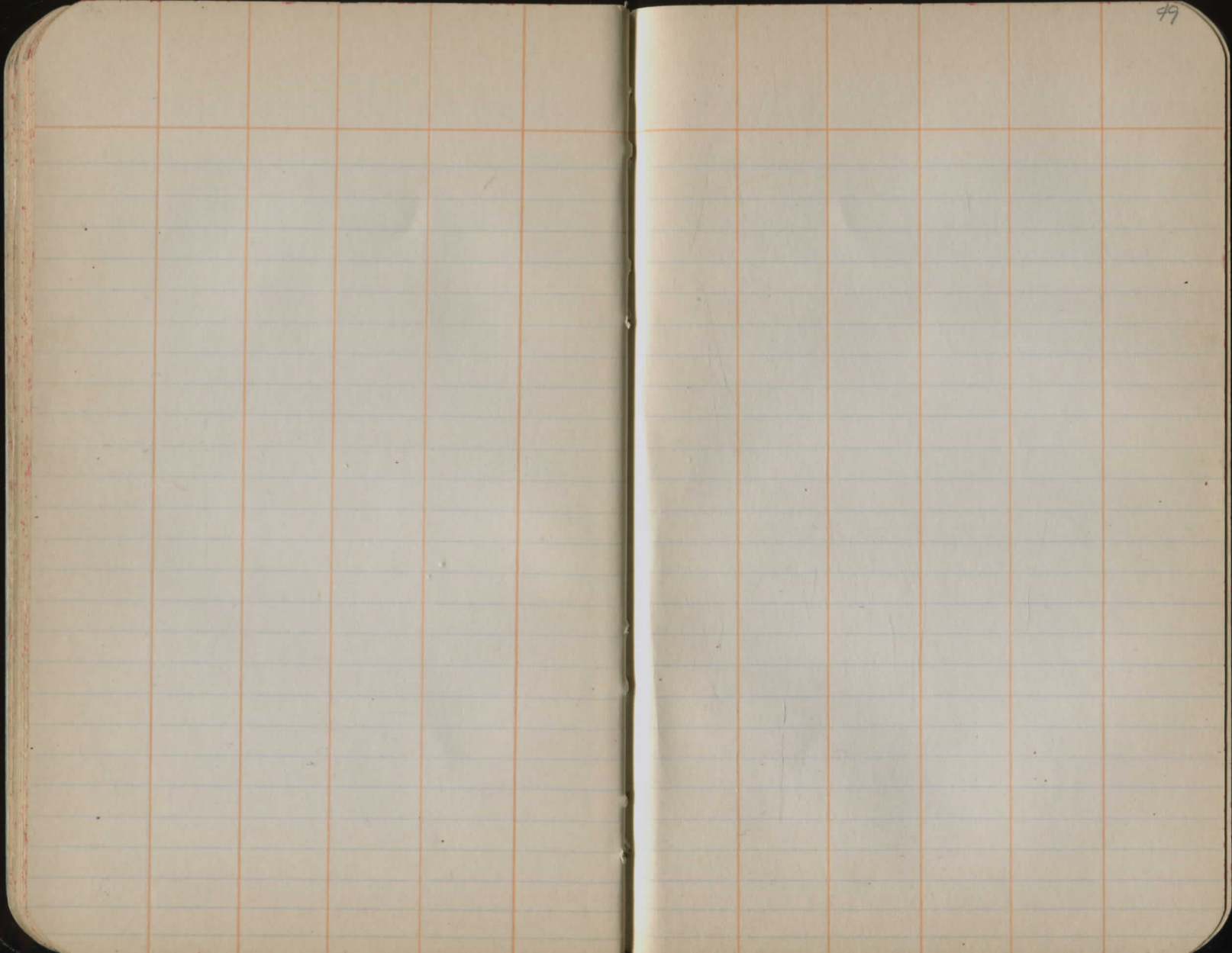












99













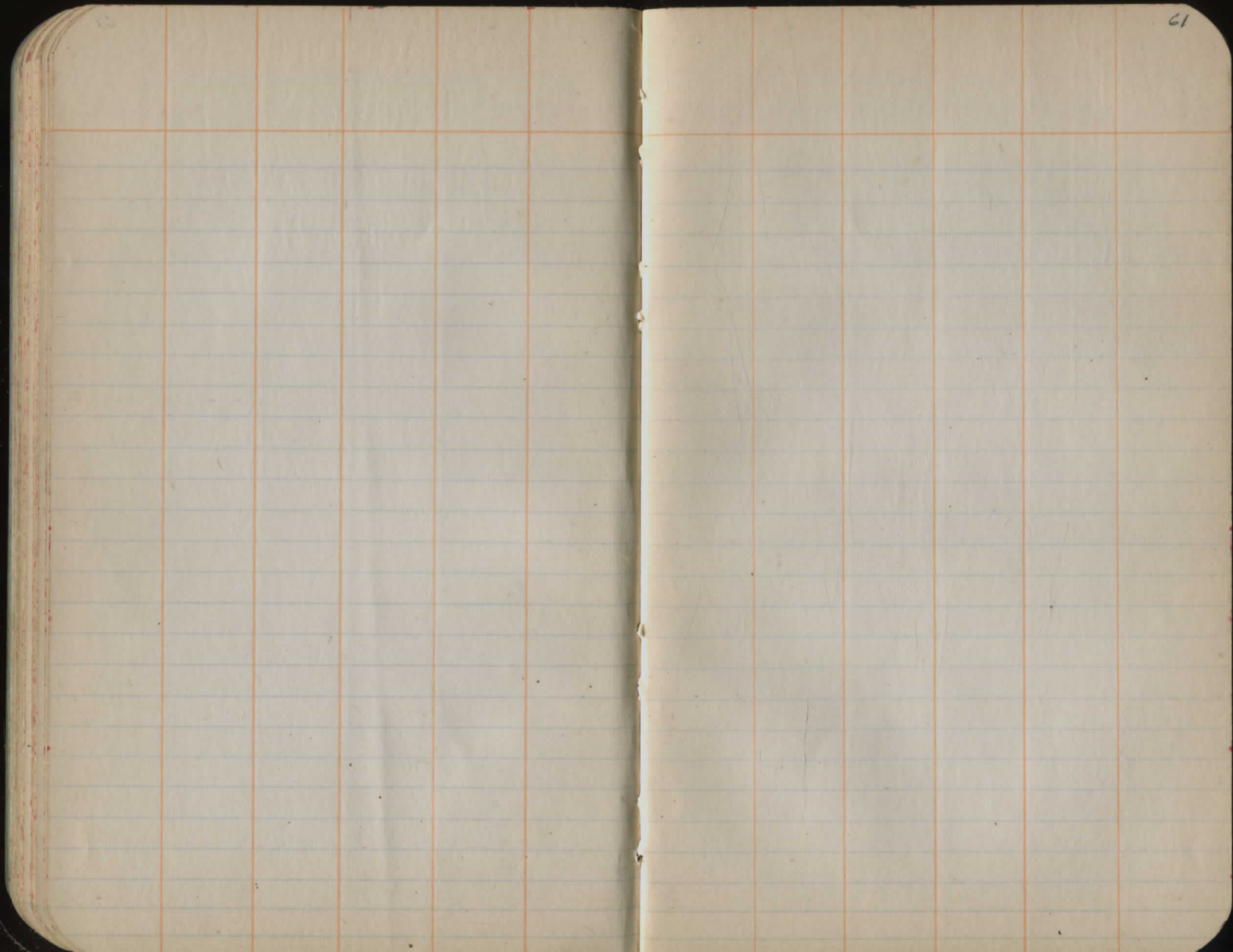
























Decisions arrived to by  
EAFiedler & MBRiehey

Sta 2+00 New structure  
15" V.P. encased.

Sta 5+15 New structure  
15" VP Encased

Sta 15+50 New structure  
15" VP Encased.

Sta 19+60 New structure  
15" VP Encased

Sta 24+45 Turnouts 16' on each  
side for 14' (?) improvement

Sta 40+15 15" VP Encased

Sta 43+50 Extend 6' on each side  
4' x 7' concrete box culvert.  
Standard headwalls

Raise grade at 43+50 Make  
ditch 2' wide, probably 6" except  
over culvert & there raise 10"

Take levels on ditch to obtain  
yardage & length of outlets at  
Sta 40 (also 43+50)

Sta 54 Eliminate present  
structure

Sta 69+30 Eliminate present  
structure

Sta 73+06 New structure 15" V.P.  
 Encased. side road headwalls.  
 Also new structure 73+19  
 Sta 82+80 extend to the ends.  
 with 3x3 concrete box using  
 present parapets  
 Sta 86 Present grade OK.  
 Sta 101+43 New structure  
 15" V.P. Encased  
 Sta 122+50 New structure 60" sheet  
 15" V.P. Encased.  
 Make note to use present structure  
 for driveways Hillside type  
 headwalls.  
 Sta 131+40 extend with more 15" pipe  
 from X roads. Hillside type headwalls  
 Sta 134+70 extend with pipe from  
 Best of job. Standard headwalls.  
 If still lacking for length extend  
 with V.P. Note 150' 10" farm tile on  
 W. for outlet.  
 Sta 138+14 turnouts 20' each  
 side + 1/2 W  
 Sta 137+50 south to culvert at 134+70  
 special drainage ditch.



# Check Levels Chillicothe

B.S. H.I. F.S. Elev.

B.M.	+4.59	1098.62	(nothing)	1094.028
B.M.	12.59	1109.08	-2.13	<del>1091.77</del> 1096.79
B.M.	12.60	1121.50	-0.18	1108.90
B.M.	+12.64	1133.73	-1.41	1120.09
B.M.	9.99	1141.47	-1.25	1131.98
B.M.	12.89	1153.21	1.15	1140.32
B.M.	5.38	1153.79	4.80	1148.41
B.M.	2.97	1151.73	5.03	1148.76
B.M.	12.65	1160.34	4.04	1147.69

From  
Rd Russell-Bainbridge Trps.  
Line North 7/7/27  
Goodrich  
Rand

Alum. tablet stamped (1094. #D J-1903)  
in S.E. Cor. foundation of Town Hall.

{ B.M. on W. side of road. (35' from  $\phi$ ) on  
E root of 36" ash. 600' from corner

{ B.M. on E side of road on S.W.  
root. 30" maple. 1200' from corner

{ B.M. on W root of 18" maple  
E side of  $\phi$  25'

{ B.M. on S. root of 30" Maple 30' E  $\phi$   
50 ft S. of drive.

{ B.M. S.W. root of 30" apple.  
30' E.  $\phi$

{ B.M. on X top of boulder 25' W  $\phi$   
N of Chas Ebsch's drive

{ B.M. Cross on S.W. corner of stepping  
stone. D.H. Dumont's drive. 80' from  $\phi$   
Sta. 104+96

B.M. Cross on Stone. Sta. 95+30.  
30' from  $\phi$ . N. of drive

BS	HI	FS	Elev
12.65	1160.39		1147.69

TP	12.35	1172.14	0.545	1159.79
TP	12.17	1183.75	0.56	1171.58
BM	9.26	1181.79	11.22	1172.53
TP	9.13	1189.31	1.61	1180.18
TP	9.19	1195.61	2.89	1186.92
BM	4.91	1198.99	1.53	1194.08
TP	11.95	1209.30	1.64	1197.35
BM				

BM	0.50	1206.45	3.35	1205.95
TP	0.89	1198.95	8.39	1198.06
TP	0.15	1186.94	12.16	1186.79

BM	0.75	1183.99	3.70	1183.24
TP	5.27	1181.81	7.45	1176.54
TP	8.77	1188.61	1.97	1179.89

BM	5.14	1191.19	2.56	1186.05
TP	5.005	1196.10	0.09	1191.10

BM	6.94	1192.16	5.88	1190.22
----	------	---------	------	---------

BM	4.92	1201.12	0.96	1196.20
----	------	---------	------	---------

{ B.M. cross on Stone 26' E φ  
Sta. 80+71'

{ B.M. W. root of 24" maple.  
Sta. 70-31' E φ 38'  
N. of Chas Ward's. drive 5'

{ B.M. root of 20" maple.  
38' W φ. Sta. 59-26.  
3' S. line fence.

{ B.M. in N.E. root of 30" maple.  
37' W φ Sta. 48-19'

{ B.M. cross on Stone 33' E φ  
Sta 30-38' ; 17' N from <sup>SW</sup> corner  
of school yard

{ B.M. iron pipe. 30' E φ  
Sta. 18+50'. Wilber farm

{ B.M. cross on S.E. cor. of Stone.  
27' W φ. 4' from N.E. cor. of Wilber's  
Barn Sta 12-10'

BS	#I	FS	Elev
9.92	1201.12	F5	1196.20
TP	4.95	1198.27	7.80 1193.32
BM	8.35	1203.62	3.00 1195.27
B			

{ BM on N.W. root of 36" elm.  
30' E of Sta. 1-10'

{ BM on E root, maple.  
25' W of 278+70 - Bobo survey

BM.  
(Bobo) 3.09 1200.53











check Level

BM	667	5480	1801	← <sup>114</sup> 28 BM
old TP	1289	6735	234	59.46
old TP	1170	7747	158	65.77
	1234	8195	186	75.61
3M			328	84.67
old TP	138	7993	940	78.55
old TP	668	74.76	1185	68.28
BM			189	72.87

30  
122

$$\begin{array}{r} 9 \\ 144 \times 130 \\ \underline{1170} \phantom{8} \\ 1168 \end{array}$$

87-08<sup>79</sup>  
86½ - 83  
86 - 1.67  
85½ - 28  
85 - 00

$$\begin{array}{r} 120 \\ 954 \\ \underline{1440} \end{array}$$

$$\begin{array}{r} 80 \\ 122 \end{array}$$

$$\begin{array}{r} 64 \\ 144 \times 130 \\ \underline{64} \end{array}$$

$$\begin{array}{r} 520 \\ 780 \\ \underline{8320} \end{array}$$

$$\begin{array}{r} 114 \\ 114 \end{array}$$

$$456$$

$$14$$

$$\begin{array}{r} 14 \\ 2996 \\ \underline{144} \end{array}$$

$$\begin{array}{r} 130 \\ 144 \times 130 \\ \underline{130} \\ 3900 \end{array}$$

$$\begin{array}{r} 13 \\ 144 \times 117 \\ \underline{16700} \\ 144 \end{array}$$

$$\begin{array}{r} 64 \\ 64 \end{array}$$

$$256$$

$$384$$

$$4096$$

$$144$$

$$1096$$

$$288$$

$$1216$$

$$1252$$

28

$$\begin{array}{r} 250 \\ 144 \\ \underline{1060} \\ 68 \end{array}$$

$$14$$

$$14$$

$$56$$

$$196$$

$$14400$$

09

TABLE OF INCHES REDUCED TO DECIMALS OF A FOOT.

Inch	Dec.	Inch	Dec.	Inch	Dec.	Inch	Dec.	Inch	Dec.	Inch	Dec.
1 <sup>1</sup> / <sub>16</sub>	.0625	1 <sup>1</sup> / <sub>8</sub>	.1250	1 <sup>1</sup> / <sub>4</sub>	.2500	1 <sup>3</sup> / <sub>8</sub>	.3750	1 <sup>1</sup> / <sub>2</sub>	.5000	1 <sup>5</sup> / <sub>8</sub>	.6250
1 <sup>3</sup> / <sub>16</sub>	.0750	1 <sup>3</sup> / <sub>8</sub>	.1500	1 <sup>3</sup> / <sub>4</sub>	.3750	1 <sup>7</sup> / <sub>8</sub>	.4375	1 <sup>1</sup> / <sub>2</sub>	.5000	1 <sup>9</sup> / <sub>8</sub>	.6125
1 <sup>1</sup> / <sub>4</sub>	.1250	1 <sup>1</sup> / <sub>2</sub>	.2500	1 <sup>3</sup> / <sub>4</sub>	.3750	1 <sup>5</sup> / <sub>4</sub>	.4375	1 <sup>3</sup> / <sub>4</sub>	.5000	1 <sup>7</sup> / <sub>4</sub>	.6125
1 <sup>5</sup> / <sub>16</sub>	.0938	1 <sup>5</sup> / <sub>8</sub>	.1875	1 <sup>5</sup> / <sub>4</sub>	.3125	1 <sup>3</sup> / <sub>2</sub>	.4063	1 <sup>5</sup> / <sub>4</sub>	.4688	1 <sup>9</sup> / <sub>4</sub>	.5625
1 <sup>3</sup> / <sub>4</sub>	.2500	1 <sup>3</sup> / <sub>2</sub>	.5000	1 <sup>7</sup> / <sub>4</sub>	.6875	1 <sup>1</sup> / <sub>2</sub>	.7500	1 <sup>1</sup> / <sub>2</sub>	.8125	1 <sup>1</sup> / <sub>2</sub>	.8750
1 <sup>7</sup> / <sub>16</sub>	.1042	1 <sup>7</sup> / <sub>8</sub>	.2083	1 <sup>7</sup> / <sub>4</sub>	.3125	1 <sup>5</sup> / <sub>4</sub>	.4063	1 <sup>3</sup> / <sub>2</sub>	.5000	1 <sup>7</sup> / <sub>4</sub>	.6125
1 <sup>9</sup> / <sub>16</sub>	.1104	1 <sup>9</sup> / <sub>8</sub>	.2208	1 <sup>9</sup> / <sub>4</sub>	.3375	1 <sup>3</sup> / <sub>2</sub>	.4375	1 <sup>5</sup> / <sub>4</sub>	.5375	1 <sup>9</sup> / <sub>4</sub>	.6375
1 <sup>5</sup> / <sub>8</sub>	.1563	1 <sup>5</sup> / <sub>4</sub>	.3125	1 <sup>3</sup> / <sub>2</sub>	.4063	1 <sup>3</sup> / <sub>2</sub>	.5000	1 <sup>3</sup> / <sub>2</sub>	.6000	1 <sup>3</sup> / <sub>2</sub>	.7000
1 <sup>11</sup> / <sub>16</sub>	.0672	1 <sup>11</sup> / <sub>8</sub>	.1344	1 <sup>11</sup> / <sub>4</sub>	.2016	1 <sup>11</sup> / <sub>4</sub>	.2688	1 <sup>11</sup> / <sub>4</sub>	.3360	1 <sup>11</sup> / <sub>4</sub>	.4032
1 <sup>3</sup> / <sub>2</sub>	.2500	1 <sup>3</sup> / <sub>2</sub>	.5000	1 <sup>3</sup> / <sub>2</sub>	.7500	1 <sup>3</sup> / <sub>2</sub>	.8125	1 <sup>3</sup> / <sub>2</sub>	.8750	1 <sup>3</sup> / <sub>2</sub>	.9375
1 <sup>13</sup> / <sub>16</sub>	.0813	1 <sup>13</sup> / <sub>8</sub>	.1625	1 <sup>13</sup> / <sub>4</sub>	.2438	1 <sup>13</sup> / <sub>4</sub>	.3250	1 <sup>13</sup> / <sub>4</sub>	.4063	1 <sup>13</sup> / <sub>4</sub>	.4875
1 <sup>7</sup> / <sub>8</sub>	.1875	1 <sup>7</sup> / <sub>4</sub>	.3750	1 <sup>3</sup> / <sub>2</sub>	.5625	1 <sup>3</sup> / <sub>2</sub>	.7500	1 <sup>3</sup> / <sub>2</sub>	.9375	1 <sup>3</sup> / <sub>2</sub>	1.0000
1 <sup>15</sup> / <sub>16</sub>	.0938	1 <sup>15</sup> / <sub>8</sub>	.1875	1 <sup>15</sup> / <sub>4</sub>	.2813	1 <sup>15</sup> / <sub>4</sub>	.3750	1 <sup>15</sup> / <sub>4</sub>	.4688	1 <sup>15</sup> / <sub>4</sub>	.5625
1 <sup>1</sup> / <sub>2</sub>	.5000	1 <sup>1</sup> / <sub>2</sub>	.7500	1 <sup>1</sup> / <sub>2</sub>	1.0000	1 <sup>1</sup> / <sub>2</sub>	1.0000	1 <sup>1</sup> / <sub>2</sub>	1.0000	1 <sup>1</sup> / <sub>2</sub>	1.0000

B. K. ELLIOTT COMPANY, PITTSBURG, PA.  
DRAWING MATERIALS AND SURVEYING INSTRUMENTS

68 X 4  
136  
272  
490.2856

136  
53  
76  
26  
4900

