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FIELD BOOK

740

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B. K. ELLIOTT COMPANY

PLEASE RETURN TO  
GEAUGA COUNTY ENGINEER

TABLE FOR REDUCING PERCHES TO FEET AND INCHES.

PERCH.	FEET.	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	82.0	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		

COURT HOUSE  
CLARION, O.  
PHONE 250-X

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

C.H.#6 Old State Road Sec A.

Trumbull Co. Line NW 1/4 to Boon School House

NR 5 Project 4944

Marg. St. for Schultz on old St. Rd.

Old State in vicinity of TRENDLE PROP. 1944  
Topo Pgs 19-20  
Sect. " 36-38

Old State Road Page 2  
Parkman Middlefield Twp. Line Road Shedd Rd. Sec D T.H. 126 Page 68

Parkman Middlefield Twp Line T.H. 126 Road Sec B. Page 40

Bridge on Old State Road Page 29

CHs #46716

SEE NEXT PAGE Pg 46

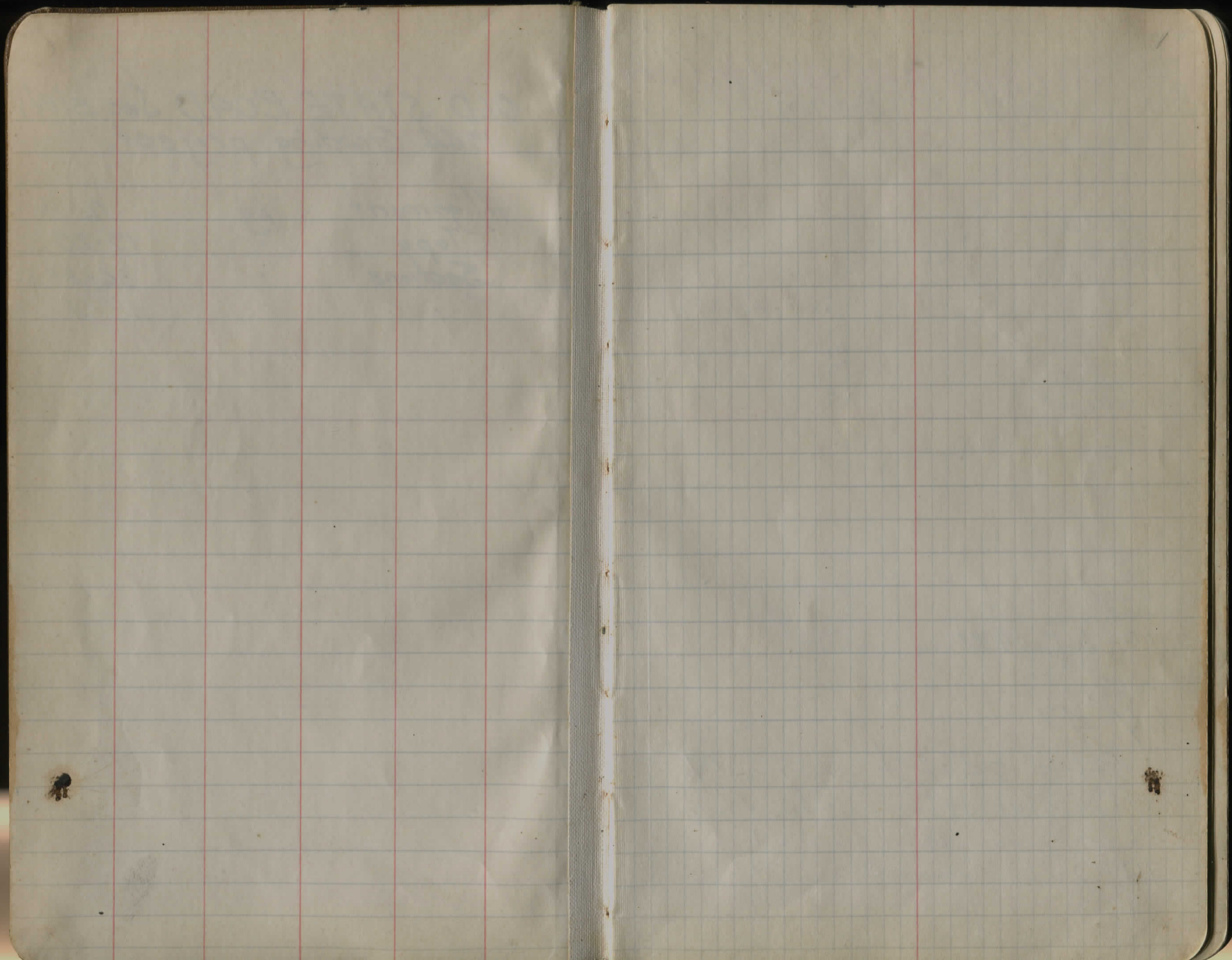
148

20" I Beams  
168<sup>0</sup>

20' span

OLD STATE ROAD Sec B (Pt 1)  
1944 Grading project.

Alignment	pg	2-18
Topo	"	19-20
Sections	"	36-38-52
Slopes	"	48-49



Ch 6 Old State Road, Middlefield Twp  
(Copy of Notes of State Highway Dept.)

Sta Angle Bearing

6+298 APOT

N 33° W

0+00 Δ 1°-04' Rt

July '47

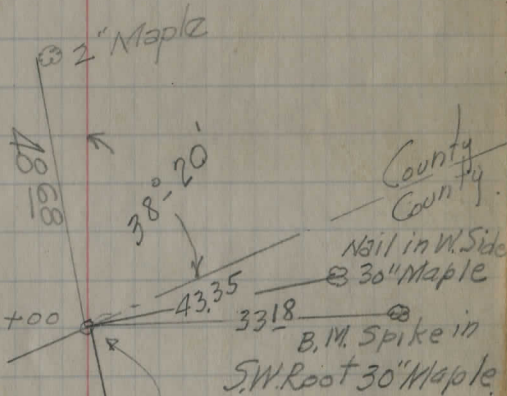
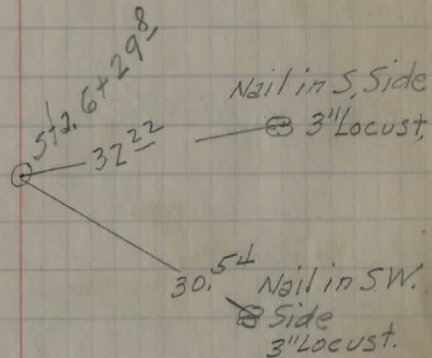
Stks 25' Rt every 100' to  
47+0 then 49+0 - 52+00 then  
every 200 92+0 = 20' Rt  
94 = 20' Lt then all 20' Rt

(Copied 12-23-35)  
CCG.

2

E

No Find ref  
Mar '46

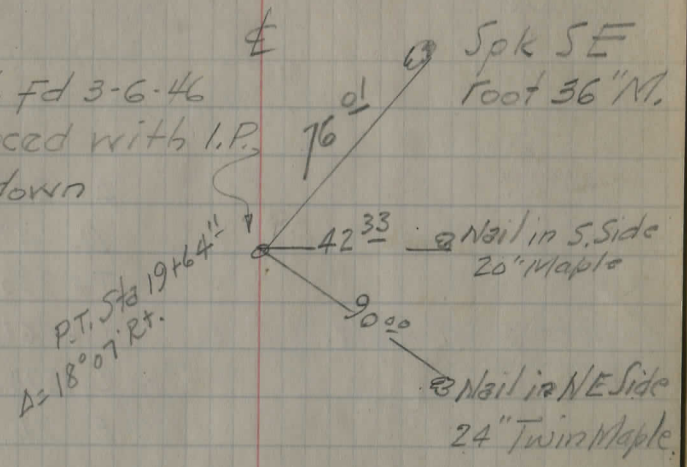


Georg J.  
Trumbull

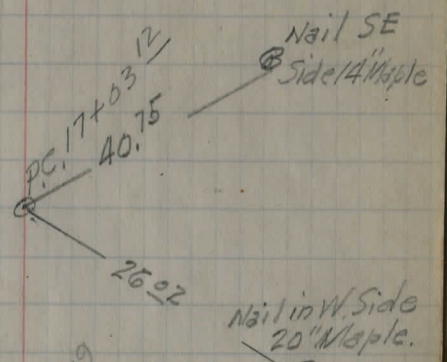
19+64" Δ 18°-07' RT

A = 18°-07' RT  
D = 3°-30'  
T = 260.99  
L = 517.62  
R = 1637.02  
E = 20.67

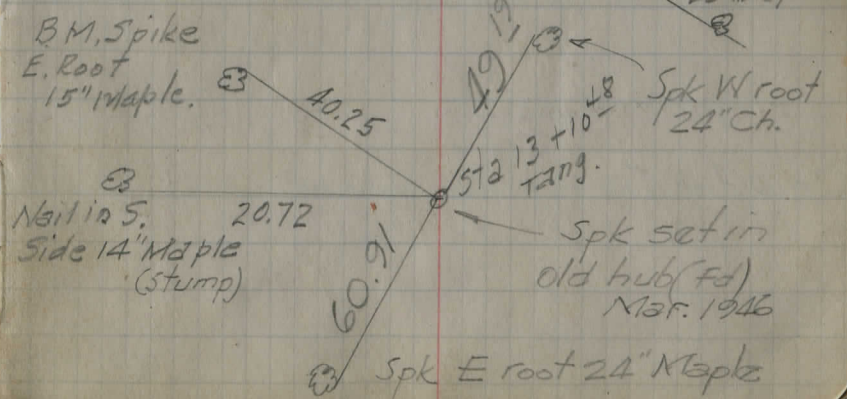
Hub Fd 3-6-46  
Replaced with I.P.  
+ 6" down



17+03<sup>12</sup> PC.



13+10<sup>48</sup> A POT.



10-19-1933  
Damp Dark  
Raw.

24+0-86.77-1-57  
25+0-4-12  
26+0-6-27  
27+0-8-42

27+74.71-10-23

$A = 20^{\circ} 46' Lt.$

$D = 4^{\circ} 30'$

$T = 233.30$

$L = 461.48$

$R = 1273.24$

$E = 21.20$

25+46<sup>53</sup>  $\Delta$  20° 46' Lt.

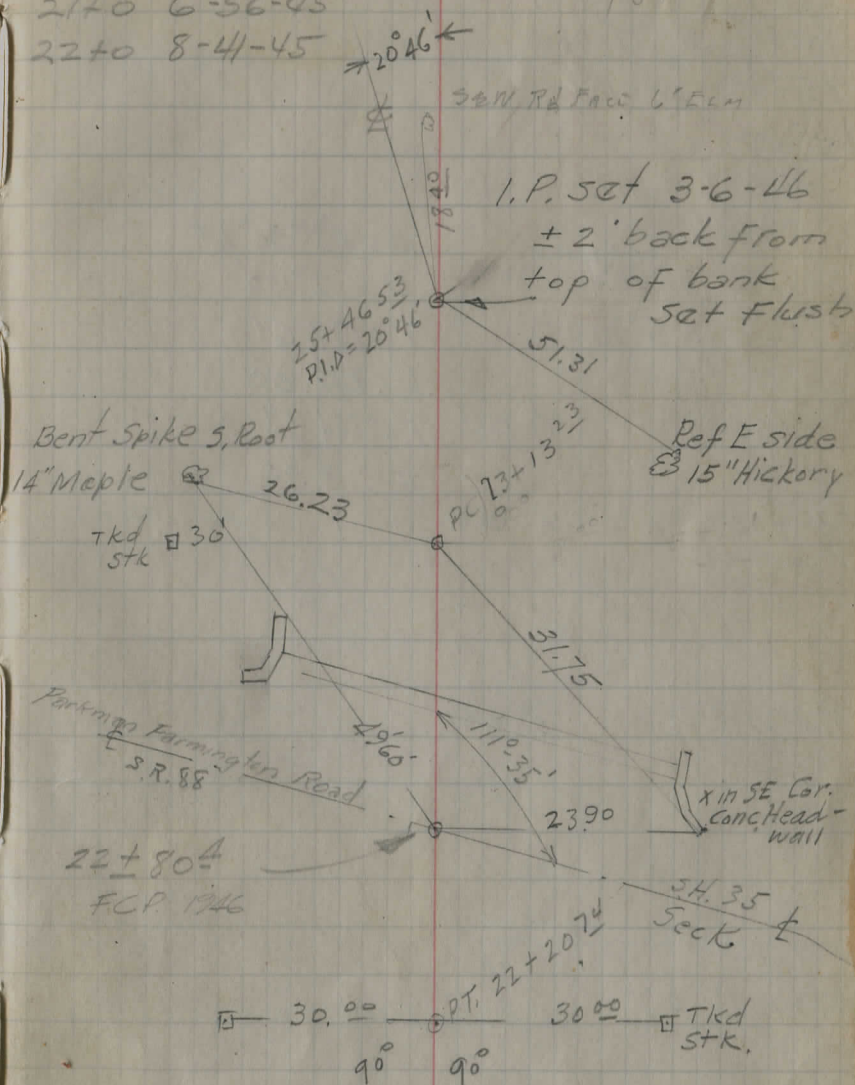
23+13<sup>23</sup> PC.

Spike set  $\frac{1}{2}$ " down  
3-6-46

22+20<sup>74</sup> PT

18+0-96.88-1-41-45  
19+0-3-26-45  
20+0-5-11-45  
21+0-6-56-45  
22+0-8-41-45

20-46  
150-14



(946)

35+05<sup>39</sup> PT. 2-45'

35+00 2-41<sup>77</sup>

+50 2-11<sup>77</sup>

34+00 1-41<sup>77</sup>

33+68<sup>00</sup> Δ 5°30' Lt.

+50 P-11<sup>77</sup>

33+00 0°-41<sup>77</sup>

+50 (1961) 0° 11<sup>77</sup>

32+30<sup>39</sup> PC, 0° 00'

(2529)

27+74<sup>71</sup> PT

A = 5°30' Lt

D = 2° 00'

T = 137.61

L = 275.00

R = 2864.79

E 3.30

894.92

5

Tkd  
stk. [ ]

30.0

Tkd  
Stake

Ref. N. Side  
6' Elm. stub

15<sup>30</sup>

50.48

Pl. 33+68<sup>00</sup>

NO FIND  
65 Set M.B.

Spk set in old  
hub  
Mar 46

Spk N Side  
20" Hick  
Fd'39

82.39

77.28

46<sup>70</sup>  
Spk N Side  
8" Hick

PC. 32+30<sup>39</sup>

Spk set

83.02  
Spk SW side  
10" Oak

Ref N.W.  
Side 15" Elm.

Spk set 1/2" under  
3-8-46

PT. 27+74  
25<sup>88</sup>

30<sup>25</sup>

Ref. N. Side  
10" Elm.

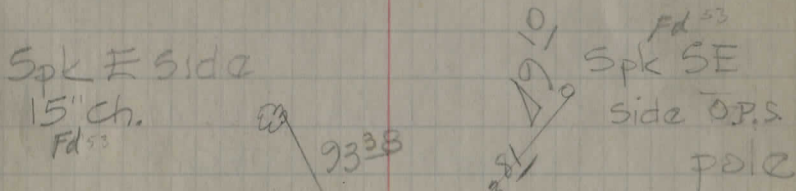
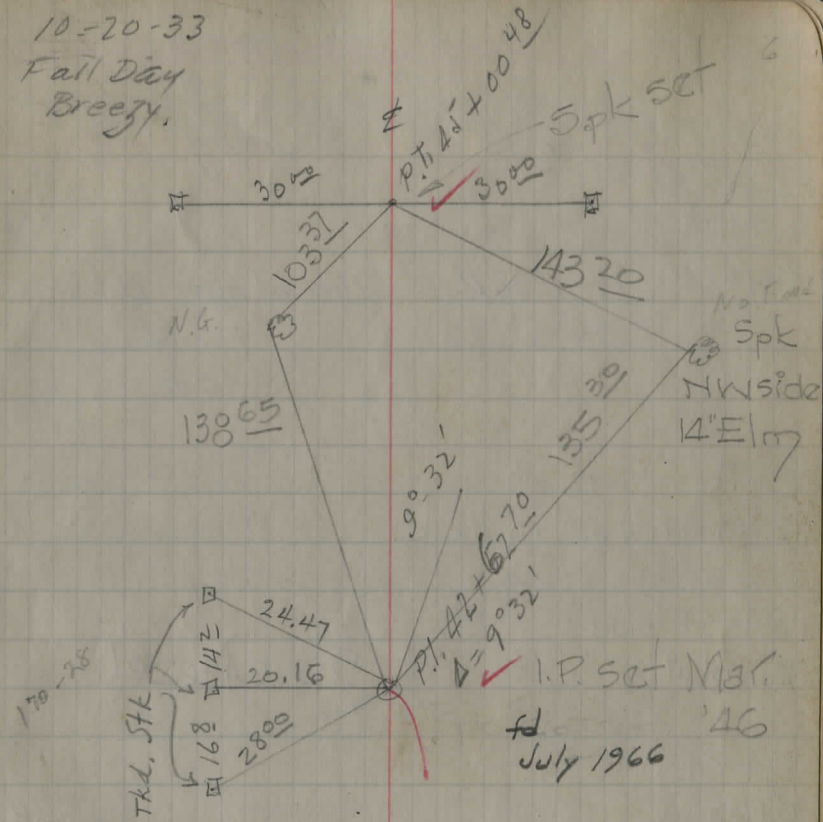
56<sup>36</sup>

Ref N.E. Side  
24" Elm.

Sta	Angle	Bearing	
45+00.48 PT.	4° 46'		
45	4° 49.71"		
+50	4° 15.71"		
44	3° 45.71"	1-00	
+50	3 15.71"	$\Delta = 9^{\circ} - 32' \text{ RT.}$	
		$D = 2^{\circ} 00'$	
43	2° 45.71"	$T = 238.89$	
		$L = 476.67$	
42+62.70 PIA	9° - 32' RT	$R = 2864.79$	
+50	2° 15.71"	$E = 9.94$	
42	1° 45.71"		
+50	1° - 15.21"		
41	0° 45.71"		
	0° 15.71"		
(26.15) +23.81	0 - 00		
40			

42+62.70  
238.89  
4023.81

10-20-33  
Fall Day  
Breezy.



Spk SET  
Mar 46  
894.92

Sta 60  
(3225)  
59+6775 Δ P1 1°08' Lt. Pipe set from ref.

9-15-44  
F.C.P.

Spike S. root 1853  
12" (twin) Pig Hick.

Spk SE side  
12" Walnut 8745

64°01' Sta 54+6287

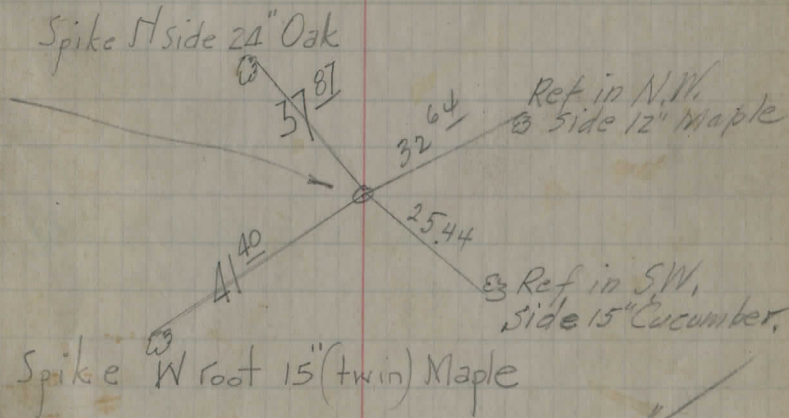
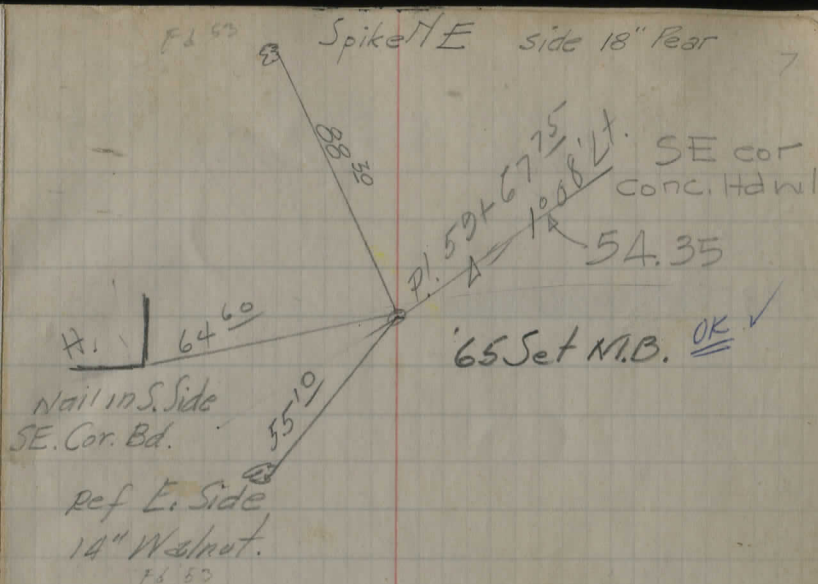
Spk SE side  
10" Map 61°00'

10" Map 1853

Same

54+6287 Δ POT. Reref 9-15-44 Hub fd.  
F.C.P.

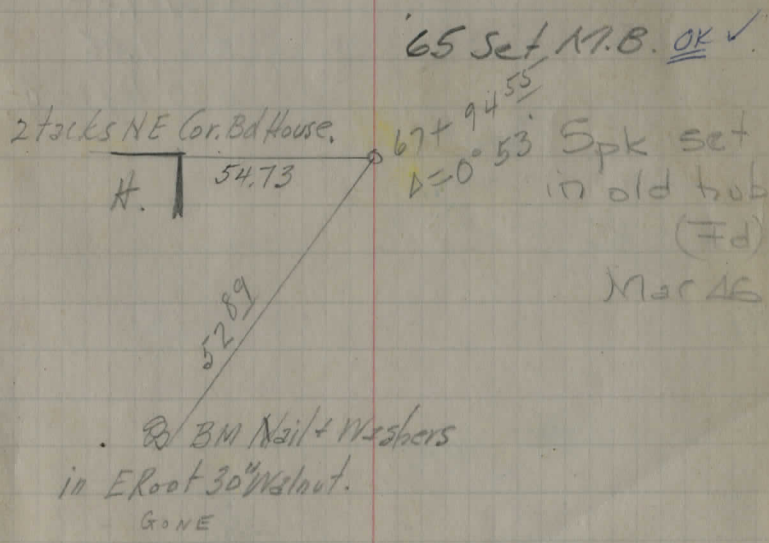
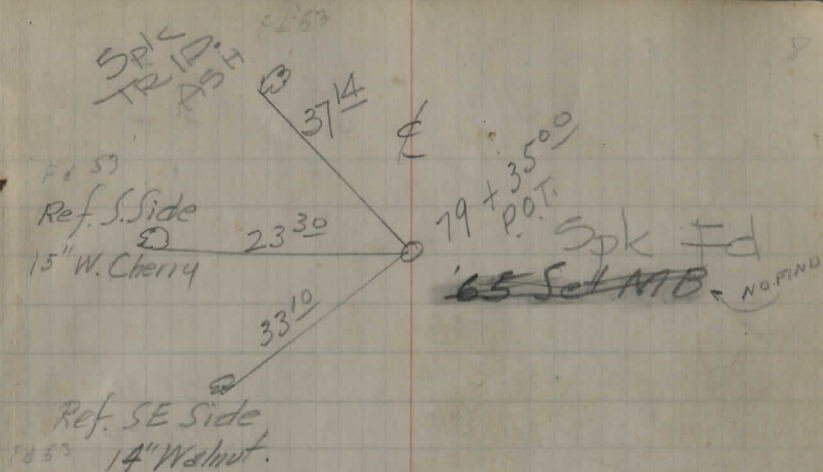
47 to quit 7-21-47



Sta      Angle      Bearing

79+35<sup>00</sup> Δ P.O.T.

(5.95)  
67+94<sup>55</sup> Δ 0°-53' Rt.



Sta Angle Bearing

102

(6552)

101+3448 PT 1° 06'

101+00 0 5566

150 0 4066

100+245 Δ P.I. 2' 12' Lt

100+00 0 2566

+50

(3552)

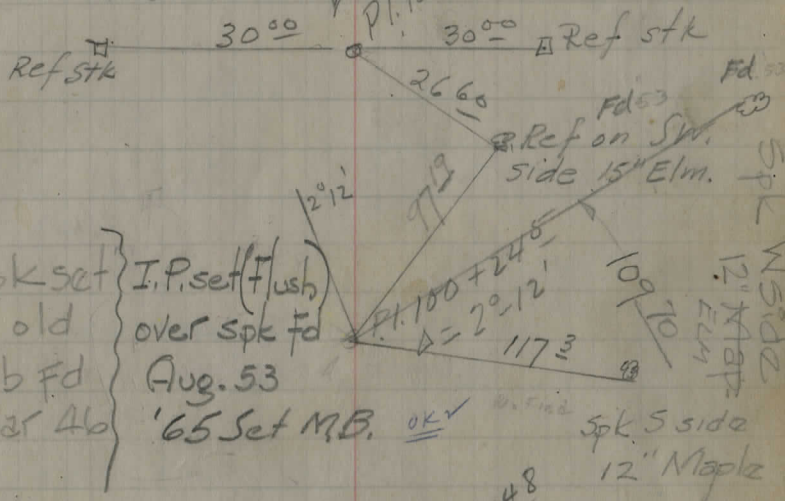
99+1448 PC

0° 1066'

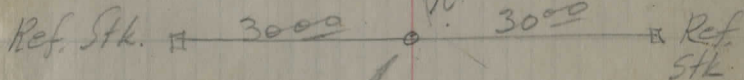
94+1140 POT.

A = 2° 12'  
 D = 1° 00'  
 T = 110.02  
 L = 220.00  
 R = 5729.50  
 E = 1.86  
 0.30' Def per ft.

Spk Set  
 Mar. 46

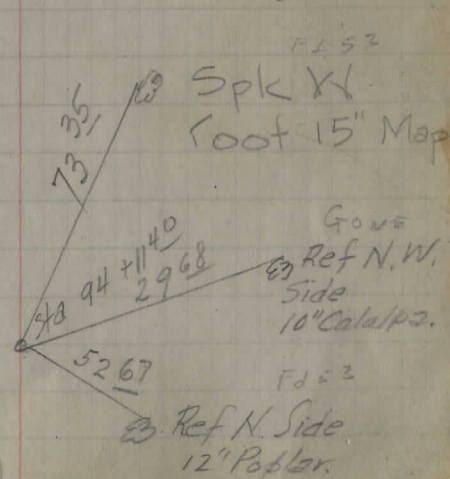


Spk set } I.P. set (F/ush)  
 17' old } over spk fd  
 hub fd } Aug. 53  
 Mar 46 } '65 Set M.B. OK



Spk Set  
 Mar. 46

Spk set  
 5" Under  
 (May not be  
 on exact Sta.)



36.19

115+6381 Δ P.O.T.

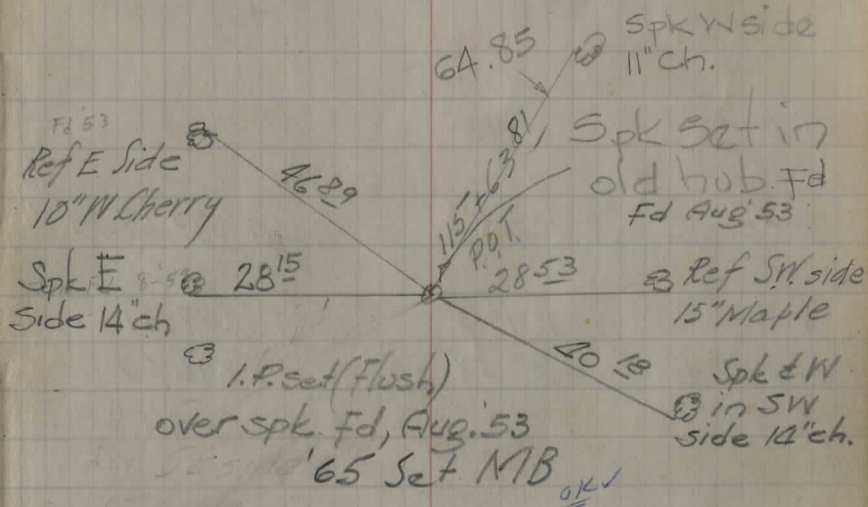
108+2727 Δ P.O.T.

10-23-33  
Fair

2

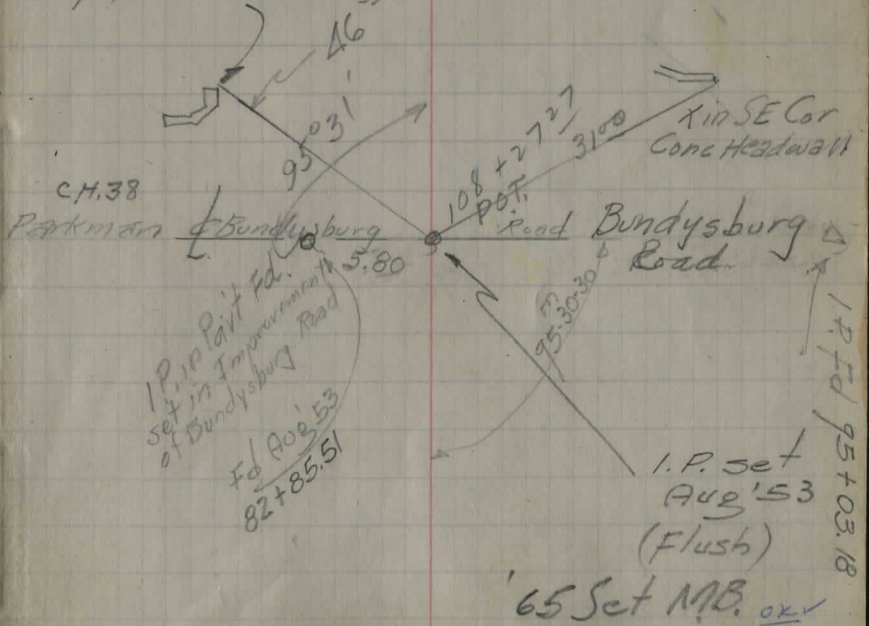
Hanna  
Davidson  
Sperry  
Graw.

10



Cross

Nly & conc. hdwl 30



+50 1°-43'6"

131+0 1°-28'6" A = 30.58 RT  
D = 10.00  
T = 198.41  
L = 396.67  
R = 5729.58  
E = 3.44

+50 1°-13'15" RT.

130 + 04'53" Δ ✓ 3°-58' RT.

130 + 0 0-58'6"

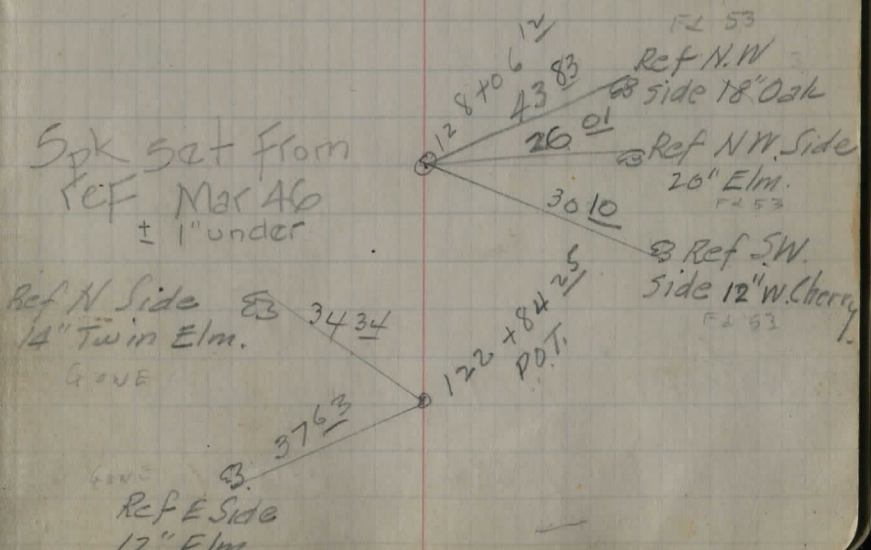
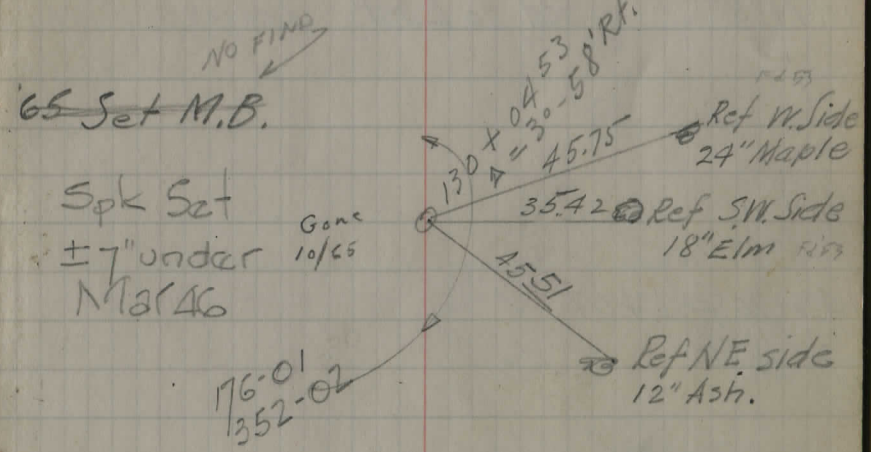
+50 0°-43'6"

129 0-28'6"

+50 0°-13'6"  
(4388)

128 + 06'13" PC 0°-00'

122 + 84'25" POT.



147+85<sup>4</sup>

Rd to East (Reeves)  
Rd

144

(7997)

143+20<sup>03</sup> Δ P.O.T. ✓

(972)

132+02<sup>29</sup> P.T. ✓

1°59'

132

1°58'<sup>16</sup>

10-24-33

Cloudy-Rain.

⊕

Hanna  
Davidson  
Sperry  
Graw

12

T.H. 213 ⊕

P.O.T.

143+20<sup>03</sup>  
2844

Ref. W. Side  
12" W. Cherry

2835

Ref. SW  
Side Triplet  
Maple.

F1 53

P.T. 132+02<sup>29</sup>  
3650

Ref. N.W. Side  
20" Twin Maple

3252

Ref. SE Side  
20" Maple

4759

F1 43

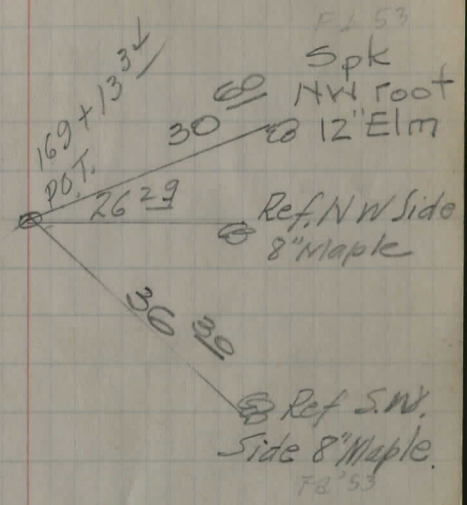
Ref. SW. Side  
15" Twin Maple

Spk Set 6" under  
Mar 46

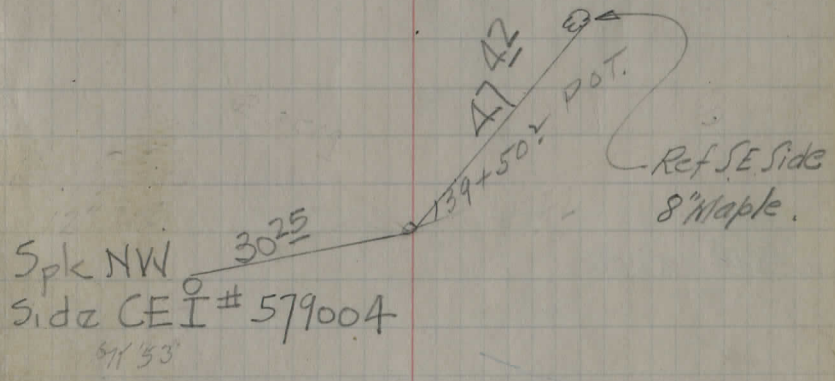
Sta Angle Br.

8660

163+13<sup>34</sup> A POT. Spk set on line  
± Sta 163+14  
1" down



159+50<sup>2</sup> A POT. ✓ Spk set Mar 46  
7" under



3.673 miles Parkman  
5284 / 19394

13-20-11

191+85<sup>17</sup> Δ POT.

19185  
290  
16895

176+84<sup>15</sup> Δ POT.

Spk W side  
End (15") Map.

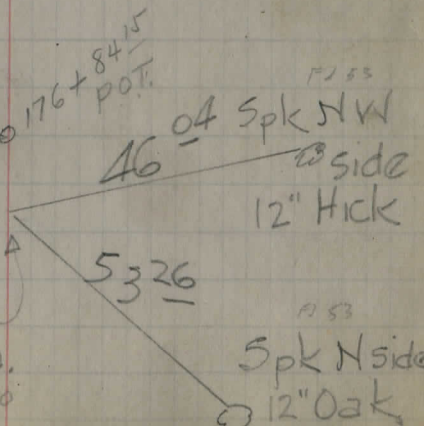
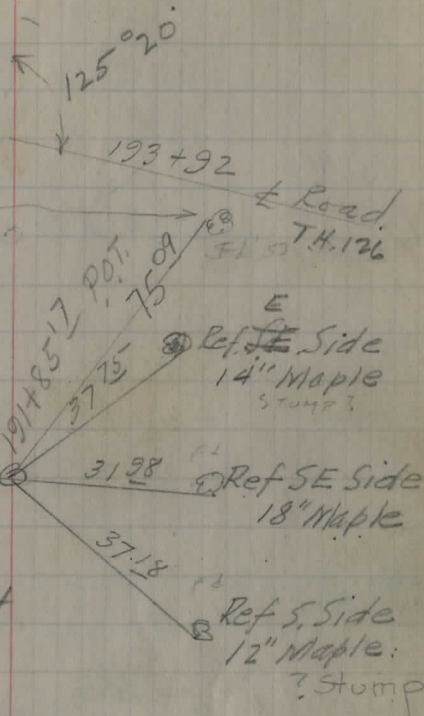
Spike set 1" under

65 Set M.B. or at  
163 + 13.34

Ref NE Side  
18" Maple

Ref SE Side  
12" Maple

Spk Set  
No sta.  
Probably right 163+50



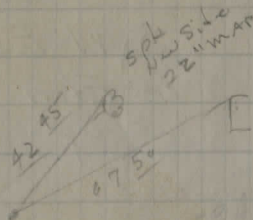
34  
(5094)  
219+4966

0° 4' Rt. Spk set wedge  
of old hub

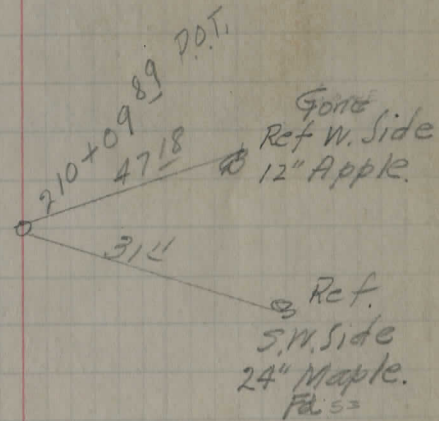
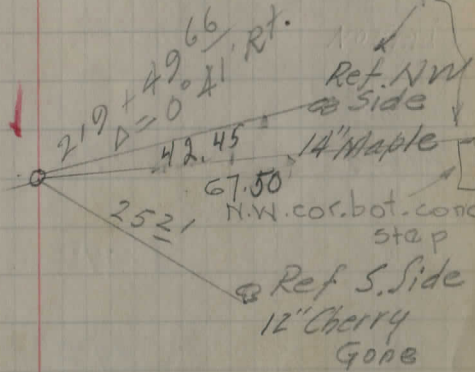
210+0989 A POT.

Spk Set

42.45  
NW 1/4  
of 30" maple



15  
let  
5/23/59



Hosmer Rd.  
104° 10'  
T.H. 220  
Road  
199+28

10-25-33  
cold & damp  
sleet

(45<sup>39</sup>)

227+54<sup>6</sup> PT 3:17<sup>50</sup>

+50 8:09<sup>20</sup>

227 6:39<sup>20</sup>

+50 5:09<sup>30</sup>

226+17<sup>39</sup> Δ P.L. 16°-35' Lt.

226 3:39<sup>20</sup>

+50 2:09<sup>20</sup>

225 0°-39<sup>20</sup>

21.78

224+78<sup>22</sup> PC

S&W Eside  
10" Elm @  
5' up

Fd 53

Ref W. Side

10" Butternut

6' up. 56.88

Fd 69

Ref NE Side

18" Maple

Spoke in  
NW side  
of P.L. #594609

Fd 53

Fd 59

I.P. Fd

± 20' Down

5/2/59

Hanna  
Davidson  
Sperry  
Graw

16

36.43

54.54

16°-35'

27°-03'

34.52

56.08

226+17<sup>39</sup>

Ref. S.L.

Ref. N. Side

16" Apple

Fd 53

Fd 59

No. 12

Ref. S.W. Side

Triple Elm

46.53

28.57

Ref. N Side 6" Cedar

No. 12

Ref. S.W. Side

Triple Elm

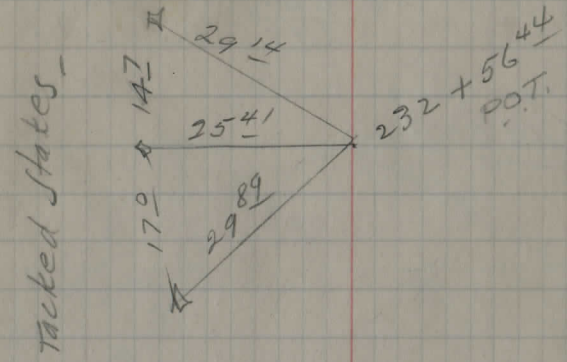
PC

227+62<sup>6</sup>

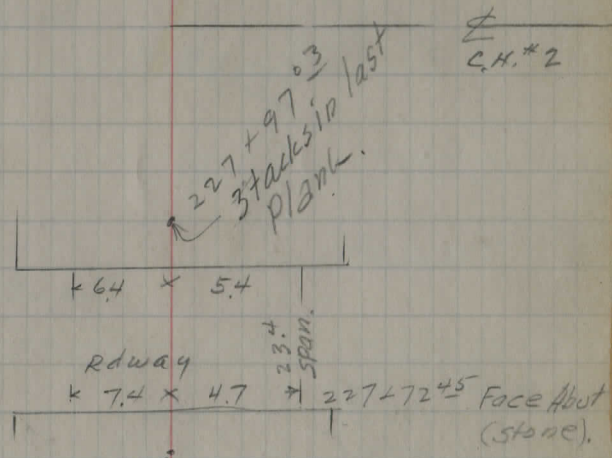
Boat spike

fd 8-21-42

233  
(4356)  
232+5644 Δ POT.



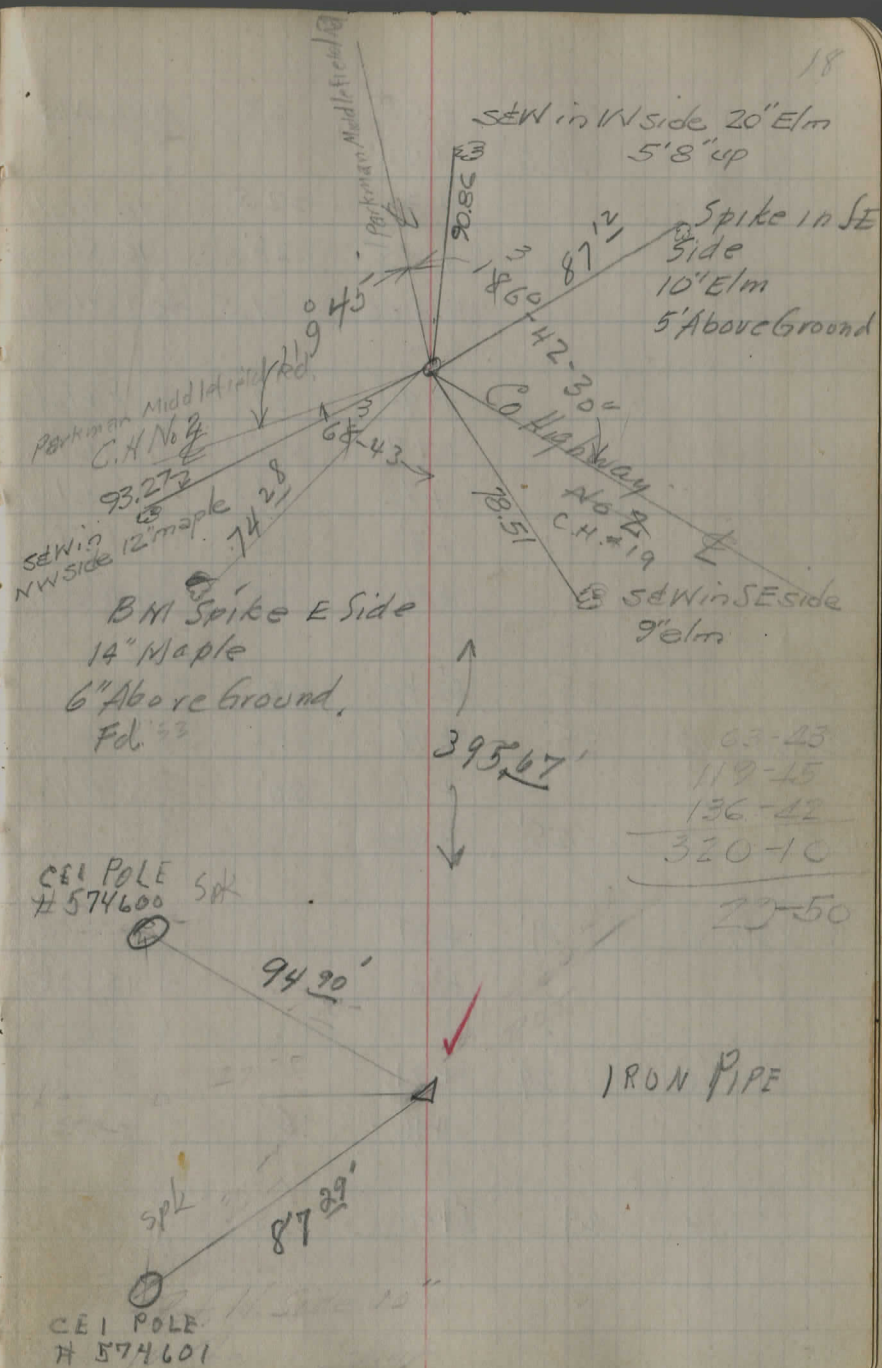
228+65 Rd to East.



3 tacks in  
1st plank  
227+70.35

4.646 miles total  
 3.673 Parkman  
 .973 Middlefield

245+32<sup>15</sup> The end.



N.S.  
 241+604 W.P.O.T.

10" P. Hick		+65	23	18" Map
+ fence	22.5'	+42		
		+30	22.5'	10" Wal
		+15	23'	16" Stump
		53+06	21.5'	17" Wal
		+94	27.5'	7" Wal
		+78	27.5'	7" Wal
		+72	27.5'	8" Wal
		+37	25'	Wal. Cl
		+31	25'	10" Elm
	25'	52+0	24'	
12" Ash	25'	+97		
		+61	20'	36" P. Hick
15" oak	25'	+52		
12" Map	29'	+37		
		+30	20'	15" oak
12" Map	29'	+21		
		+16	25'	20" Elm
	29'	51+0	23.5'	

+ Topo Old State Road + Sta 51 to 60 7-15-44 19  
Pom. Hall - Maynard

		+82	28'	36" Will
		+78	25'	36" Will
20" Oak	33.5'	+53		
Pig Hick	27.6'	+52		
		+48	22	12" Map
10" P. Hick	29	+30		
8" P. Hick	26'	+28		
		+23	25.6	12" Wal
		+22	21.6	12" Map
14" Map	30'	+13		
		55+02	22'	9" Wal
12" Map	32'	55+0		
12" Map	30'	+99		9" Wal
26" oak	26	+85		
		+85	23'	12" Map
		+51	22'	26"
12" Map	33'	+40		W+nd
12" Map	30'	+40		
14" Bass	24.5'	+40		
12" W. Ch	23'	+19		
9" Map	25'	+12		
7" Map	25'	+10		
		54+08	24'	12" Wal dead
12" Map	23.5'	+97		
		53+95	23.5'	15" Map

prob. end of ditch  
W ditch

59 to start of back was  
58 ± 20

12" Bass ⊗ ✓ 24.5' +81

Take out +79

Smiewski S.P.L.  
± 57+50 +65 24.6'

+47 19' ⊗ 15" Map

+43 19' × 12" Map

+40 19' 8" Map

+37 18.5' × 15" Map

+33 19' ⊗ 9" Map

8" Map ⊗ 25' +18

57+11 20.6' ⊗ 12" Map ✓

+90 21' ⊗ 6" Map ✓

20" P. Hick ⊗ 26' +79 22' ⊗ 10" Map ✓

+75

12" Map ⊗ 29.5' +62

18" Elm ⊗ 31' +15

← 19' → 56+09

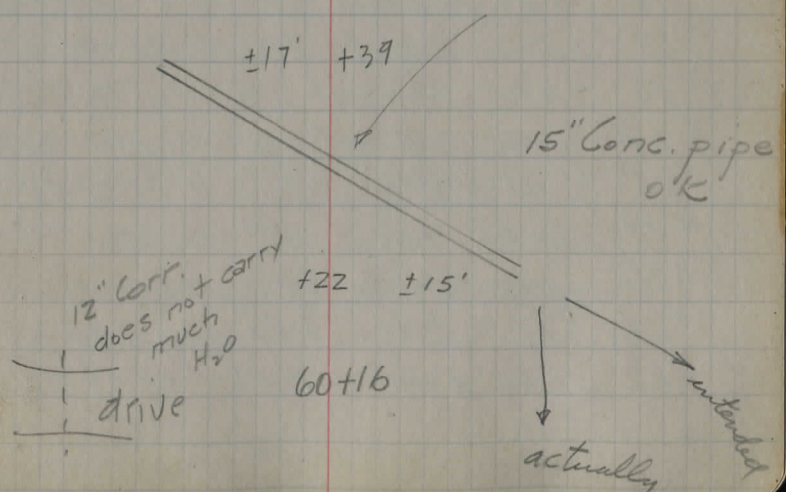
18" Conc. pipe  
OK +99 17.5'

E ditch Stake in E ditch  
58 ± 75 n wly

Spring fed H<sub>2</sub>O down W ditch

See page 36 for  
Sections

apparently adequate



Bench Marks  
description

BM #1	Spike SW root 30" Maple 35' RT &
#2	Spike NE root 15" Maple 22' Lt &
#3	X on SE Cor. E Sideroad Cdv. Headwall
#4	Spike E root 18" Elm 27' Lt &
#5	Spike S root 24" Elm 25' RT &
#6	Spike W root 36" Bitter Hickory 25' RT &
#7	Spike E root 30" Walnut 30' Lt &
#8	Spike SE root 36" Elm 35' Lt &
#9	Spike root large Maple 200' Lt &
#10	X cut SE Cor. Headwall N end 30' RT
#11	Spike S root 18" Elm 20' RT &
#12	Spike NE root 40" Elm 55' RT &
#13	X cut SW Cor. Lt. Headwall
#14	Spike NE root 40" Oak 50' Lt &
#15	Spike E root 24" Maple 50' Lt &
#16	Spike NW root 15" Maple 30' RT &
#17	Spike NE root 18" Maple 30' Lt &
#18	X cut NW Cor. Headwall 14' Lt &
#19	Spike SE root 28" Maple 28' Lt &
#20	Spike N side 15" Apple 50' RT &
#21	Spike NW root 24" Elm 25' RT &
#22	Spike E root 48" Elm 25' Lt & 145' NW

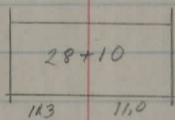
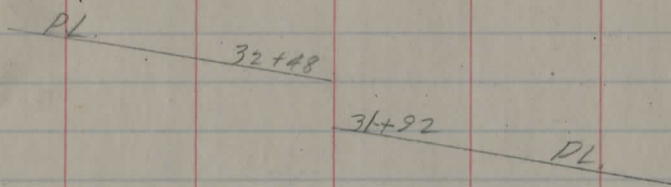
SEC A B C D E F G

OLD STATE RD

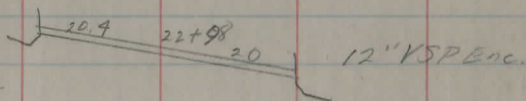
station	Elevation
Sta 0+05	- 907.51
Sta 13+40	- 914.11
Sta 22+92	- 925.96 ✓
Sta 29+10	- 896.94
Sta 38+60	- 943.94
Sta 51+65	- 977.92
Sta 67+50	- 1090.54
Sta 88+15	- 1114.68
Sta 108+27	- 1144.36 ck. 01
Sta 108+32	- 1139.63 ✓
Sta 121+85	- 1130.82
Sta 135+25	- 1157.04 -
Sta 146+54	- 1162.76
Sta 161+50	- 1175.67
Sta 173+65	- 1158.67 -
Sta 189+40	- 1196.06
Sta 201+80	- 1168.89
Sta 214+40	- 1132.88
Sta 220+45	- 1141.75
Sta 228+50	- 1105.56
Sta 236+60	- 1146.99
Sta 246+67	- 1148.29



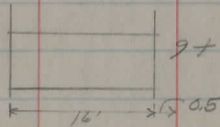
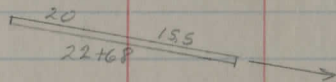
# Topography



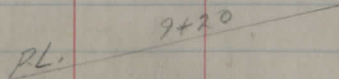
4x4 Stone Box



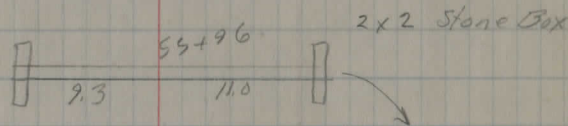
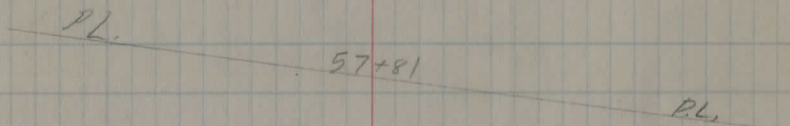
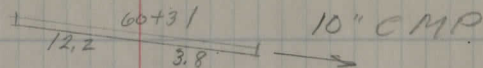
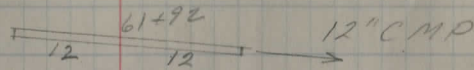
1/2" ICB 35



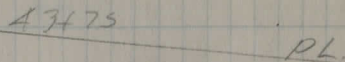
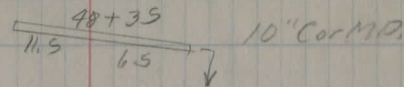
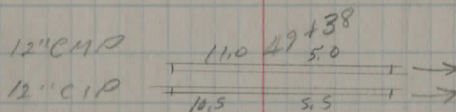
6" Stone Arch

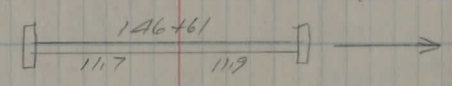
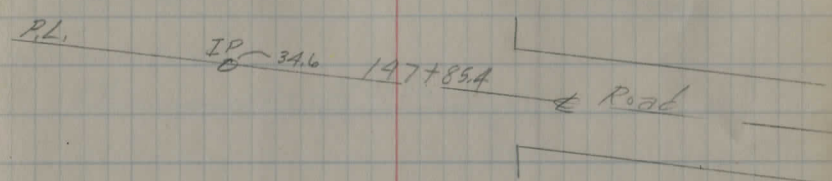
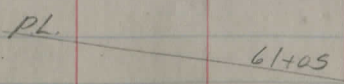
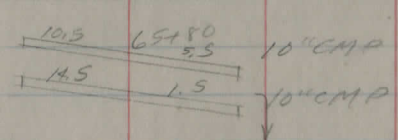
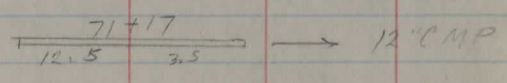
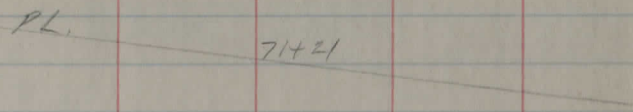
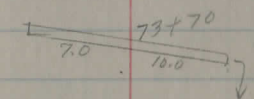
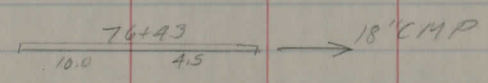
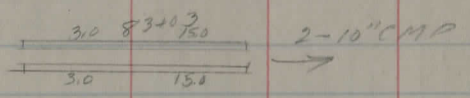
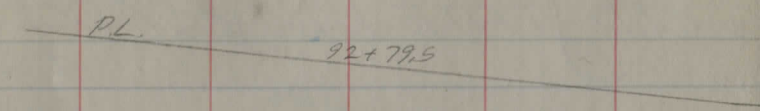


# OLD STATE RD SEC ABCDEF & G

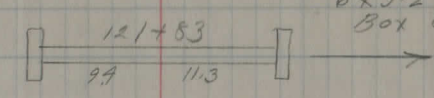


2x2 Stone Box

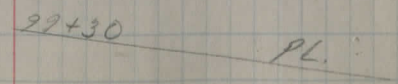
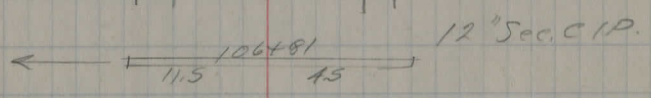
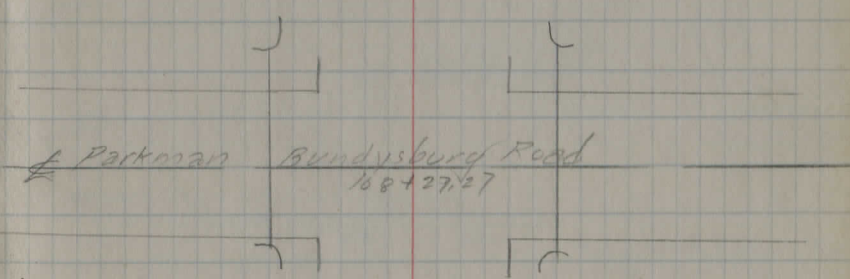




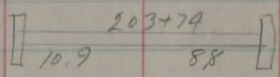
4x2 1/2 Conc. Box



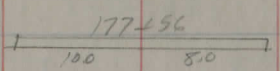
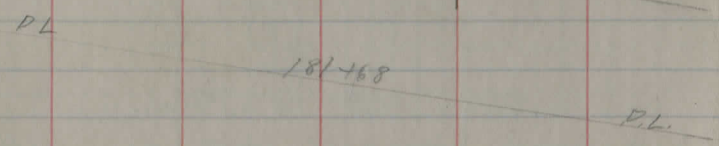
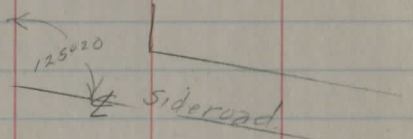
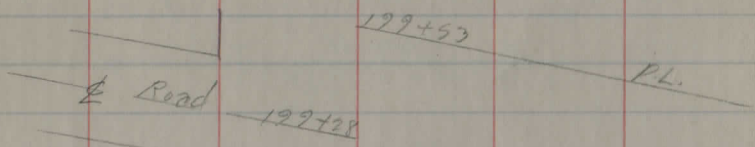
6x3 1/2 Conc. & Stone Box Culv.



204+32 PL.

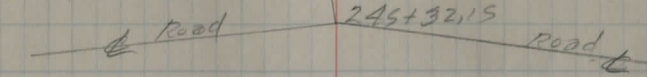
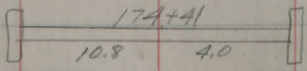


2 x 2 Conc. Box.



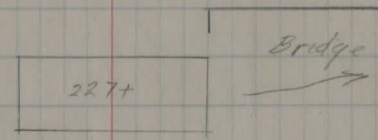
12" CMP

5.4 x 3 Stone & Conc. Box



PL. 242+98

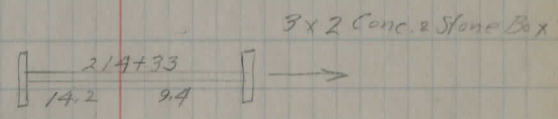
228+65 Road



Bridge

PL. 229+85 PL. 220+42

217+38 PL.



3 x 2 Conc. & Stone Box

PL. 211+08



Culvert Data  
Completed Project

OLD STATE RD  
SEC. ABCDEF&G

- Sta 4+39 New 15" x 37' Conc. pipe culvert
- Sta 9+30 Stone arch extended 14' on Right  
with 6' Cor. M.P.
- Sta 22+63 12" x 36' C.M.P. Culvert
- Sta 28+10 4x4x22<sup>6</sup> Stone Box No work
- Sta 49+38 Twin 12" x 36' C.M.P. Culvert
- Sta 56+06 18" x 37' Conc. pipe skew.
- Sta 60+32 15" x 36<sup>6</sup> Conc. pipe skew
- Sta 71+16 12" x 36' C.M. Pipe skew
- Sta 76+61 15" x 36' Conc. pipe
- Sta 83+03 18" x 37' Conc. pipe
- Sta 106+81 12" x 36' C.M.P. Pipe
- Sta 121+83 Box culvert No work
- Sta 146+61 Box culvert No work
- Sta 147+85 15" x 36<sup>5</sup> Conc. pipe sideroad  
culvert on Right ↓
- Sta 174+41 Stone Box Culvert extended  
10' Rt with Conc.
- Sta 177+57 15" x 37' Conc. pipe
- Sta 193+92 12" x 39<sup>5</sup> C.M.P. sideroad  
culvert on Rt ↑
- Sta 199+28 15" x 37<sup>5</sup> Conc. pipe sideroad  
culvert on Lt ↑ old S.P. used

Sta 203+74 Conc. Box extended 5<sup>5</sup>' RT.

Sta 214+33 Stone Box extended 6' RT.  
with concrete

Sta 227+84 Plank bridge No work

Sta 228+65 15" x 36<sup>8</sup>' Conc. pipe sideroad  
culvert on RT ↓

8-11-38

Graber  
Richards  
Diets  
Clause

OLD STATE ROAD  
MIDDLEFIELD

Stakes set every 50' on 25' offset right

232+56.44 = POT.

229+0

228+50

228+34.3 = Pt on center bridge

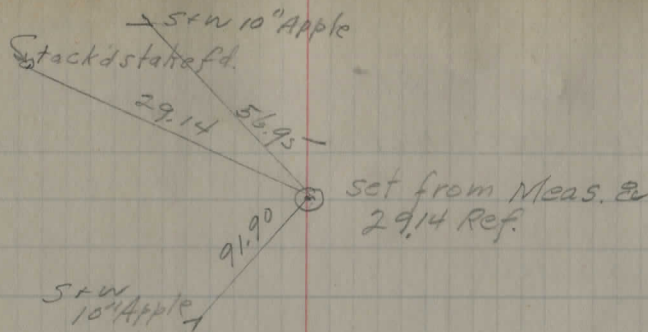
227+54.61 Pt.

227+50 on tang.

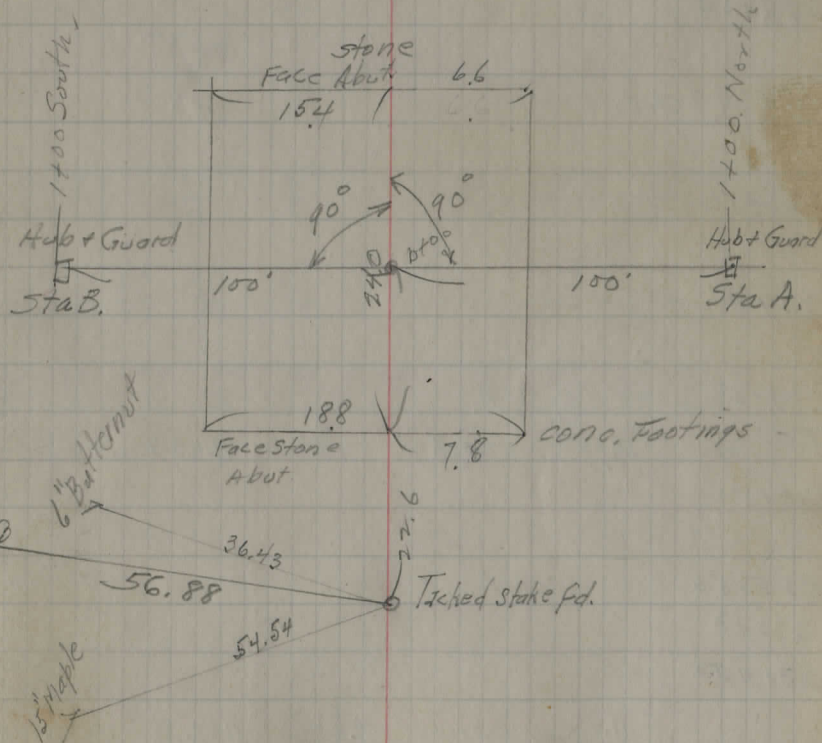
227+0 on tang.

226+50 on tang.

S & W E side  
10" Elm



29



8-11-38

BM#20  $\perp$  H.I. - Ele. 1105.56

226+50  
226+60 = end cut.  
226+75

227+0

227+50

228+34.3 Cr Br.

228+50

229+0

229+50

TR. 13.05 1124.08 0.08 1111.03

226+50

225+50

230+0

230+50

11.12 1134.98 0.82 1123.86

224+50

232+35

S.W.

LT

NE

30

RT

on 16" Apple 60' Rt. 228+50

E

$\frac{1.3}{25}$   $\frac{0.5}{18}$  0.0  $\frac{0.1}{6}$   $\frac{1.6}{11}$   $\frac{2.6}{25}$   $\frac{6.4}{50}$

$\frac{2.5}{25}$   $\frac{2.0}{14}$  1.5  $\frac{2.0}{7}$   $\frac{4.3}{13}$   $\frac{5.3}{25}$   $\frac{7.1}{50}$

Flt  $\frac{11.1}{25}$   $\frac{7.2}{20}$   $\frac{4.1}{14}$   $\frac{3.7}{9.0}$  3.5  $\frac{3.8}{8}$   $\frac{8.0}{19}$   $\frac{8.2}{25}$   $\frac{8.6}{50}$

1106.8  
12.5 FL 4.3

12.9 = F.L.L

$\frac{7.8}{50}$   $\frac{7.4}{50}$   $\frac{7.2}{25}$   $\frac{8.4}{19}$   $\frac{4.1}{8}$  1.2  $\frac{4.4}{5.0}$   $\frac{9.8}{10}$   $\frac{12.2}{25}$  FL  $\frac{10.5}{50}$

$\frac{5.8}{50}$   $\frac{3.9}{25}$   $\frac{4.5}{22}$   $\frac{6.3}{20}$   $\frac{4.5}{16}$   $\frac{4.3}{10}$  4.0  $\frac{4.5}{11}$   $\frac{5.3}{18}$   $\frac{8.2}{25}$  8.4  $\frac{8.4}{50}$

$\frac{2.4}{25}$   $\frac{2.6}{22}$   $\frac{4.4}{18}$   $\frac{3.4}{16}$   $\frac{3.1}{10}$  3.0  $\frac{3.7}{10}$   $\frac{3.7}{18}$   $\frac{5.8}{20}$   $\frac{5.1}{22}$   $\frac{3.1}{25}$

$\frac{12.9}{27}$   $\frac{11.4}{24}$  10.6  $\frac{10.7}{5}$   $\frac{12.5}{9}$   $\frac{12.4}{11}$   $\frac{10.2}{14}$

1.1

1.30

4.7

0.0

5.7

0.0



Sta	H.I.	Hor. Ang.	Interval	—	Ele.
5.1 + stad 200	1107.56				1105.56
		57° 26'	9.01 852	8.8	
		70-30	4.52 378	4.1	
		60°-0	770 748	7.6	
		60°		15 5.2	
		256°-30'	625 568	6.0	
		256°	518 390	4.4	
		293°	310 181	2.4	
			10.49 9.62	10.1	
TP sta C			3.53		1104.03

vert L = 0°-00°

Sta	H.I.	Hor. Ang.	Interval	—	Ele.
5.1 201	1106.04				
		124°	846 799	8.3	
				5.8	
		152°	990 906	9.5	
		156° 58'	1072 948	10.1	
		170°	1190 899	10.0 m.w.	
		192°	1272 800	10.1 m.w.	
		185°	832 762	8.0	
		199-45'	1120 928	10.2	
		333-35'	538 492	5.2	

1+0 to cr.	35'
1+50	29'
2+0	58'
3+0	41'
4+0	95'

B.S. toward Sta B  
= B.M.

creek Fl

Foot bank 20' high.

" " " "

Creek Fl Fence 20' W. bank 3' above Cr. 4 7/8 up

BS toward "B"

creek Fl. Fence + West bank is 40' ± W  
bank 10' E. above reading channel approx 25' wide

creek. 40' channel 15' E + 25' W of reading

"

"

in old channel 10' wide

"

"

beg of old channel

Sta. I. 70	H1	Hor.	Int or dist	
	1108.5			1106.8
0+25		0-0	8.6	
		11230	4.0	6.6
			5.0	1.9
	√2.46	211°	120'	7.6 mm.

ctr of Bridge 135 to Sta "A" zero L

creek  
same 40' East,  
15 W of E Cr.

W. footing 16' long  
 { top step 13' high  
 { bot " 6 high  
 { ext to bed rock

+50 creek 50' E  
 1+00 (stab) " 38' E  
 1+44 = " 00  
 -

9-28-38

Graber  
Richards  
Root. Gr.

H.I.

598

1111.54

4.58

F 5.50

1105.56

1107.46

1106.96

B = 9.58

F 5.5

D 8.08

F 4.0

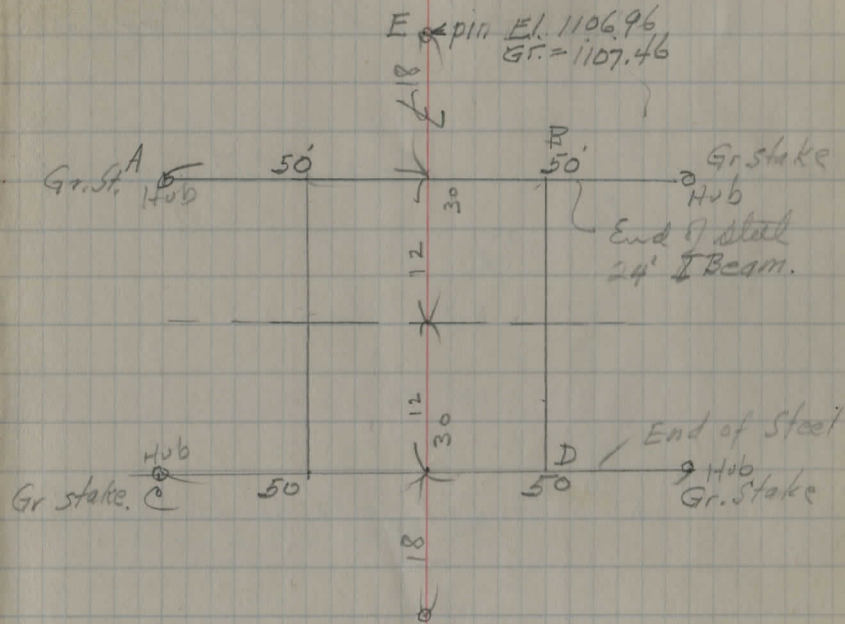
C 8.08

F 4.0

A 7.08

F 3.0

### Grades to Bridge Floor



9.28	9.58			
4.08	4.08	8.08	7.98	7.08
5.3	5.5	4.98	4.08	4.00
			3	

Marg. Stakes for Schultz  
on Old State Rd. Parkman

Sta. 94 + 11<sup>40</sup>

Reset I.P. to replace Hub

Pike

I.P. 7

0 33'

0 33' 33" 0

Sta 67 + 94<sup>55</sup>

$\Delta 0^{\circ} 53' \text{ Rt.}$

0 33'

Spike set for Ref.

0 33' 33" 0

0 33' 53" 0

0 33' 33" 0

59 + 67<sup>75</sup>

Old State Rd.

SECTIONS OLD STATE  
SEC. B (Pt)

± 1944

36

22.25

10.3

BM # 7	0.12	1090.66		1090.54
T.P.	0.30	1081.21	9.75	1080.91
T.P.	0.77	1070.51	11.47	1069.74
T.P.	5.24	1063.07	12.68	1057.83
± 62+0			1.2	1061.9
T.P.	2.90	1060.73		1057.83
± 61+0			5.0	1055.7
F.L. outlet			12.2	1048.5
" inlet			11.1	1049.6
60+50±			7.8	1052.9
T.P.	1.26	1050.77	11.22	1049.51
60+0			1.90	1048.9
59+50			6.70	1044.1
59+0				1038.0
T.P.	0.13	1037.64	13.26	1037.51
58+0				1024.7
T.P.	0.55	1025.25	12.94	1024.70
57+50				1019.2
57+0				1015.0

W (L)		E (Pt)	
5.1	4.8	12.9	12.7
40	30	15	11
13.5	15.7	11.0	11.2
13.5	15-17	22.5	30
114	11.7	17.6	14.3
30	26	17	16
40	19	11.6	6
5.0	2.0	1.6	7.1
40	30	25	16.5
6.6	6.3	6.1	6.8
8.5	13.6	19.5	30
	17.6		
11.3	9.3	11.2	12.0
40	30	18	16.5
10.4	10.3	11.1	13.6
10.5	9	12.5	17
		14.5	30

? Switched?



789.71

BM Set

6.03 983.88

38

Spike 50+30 28 Lt 22' Elm E root



T.H. 126

5/6/57

Robert  
Markel  
Strong.

40

Location Middlefield Parkman Twp Line Road Sec B

8 Note: sidestakes set 25' Rt.  
at odd stations as 1, 3, 5, 7, 9, 11 etc.

7

6

5

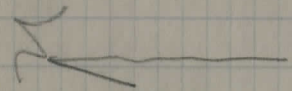
4

3

2

1

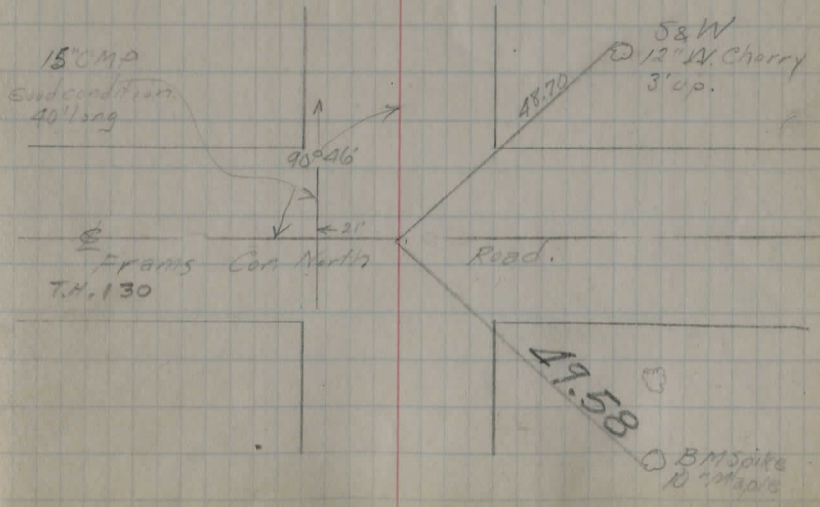
5+70  
Drainage can be  
turned to NE



S 86° E

Sta 0+00 Beginning of Project

Pipe  
Fd.



20

19

18

17

16

15

14

13

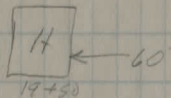
12

11

10

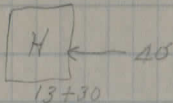
9

8



$$\times P.L. \times 17+65$$

Perce 12+50



$$\frac{7+23}{\times} \times \times$$

32

31

30

29

28

27

26

25

24

Sta 23+74<sup>54</sup>

POT

23

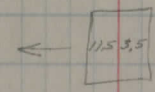
Pipe Set  
Fd Sept 51  
5' under

22

21

20

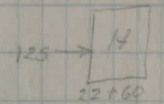
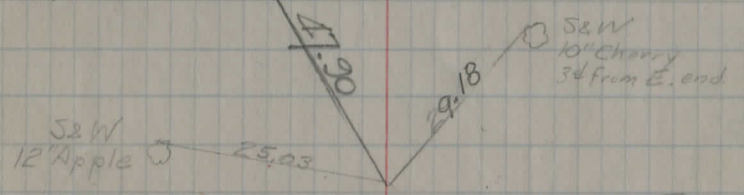
29+88  
Plank Bridge  
Stone Abutments  
Timber Stringers



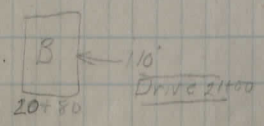
~~27+91~~ x P.L.

P.L. 26+58

Spk road face  
CEI # 583641X



~~22+40 Drive~~



44

43

42

41

Sta 40+82.58 PI Det. Lt. 0°10' Pipe Set

40

39

38

37

36

35

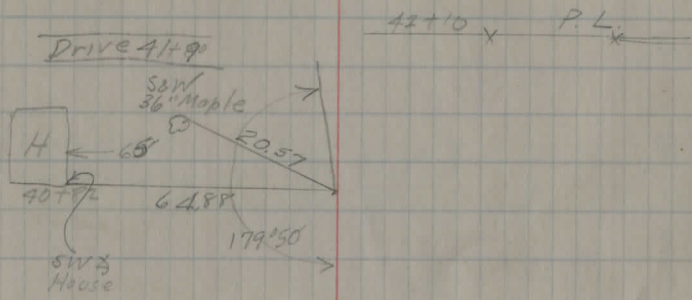
34

33

32

10" CMP & VSP  
fair condition  
relocate to 42+90

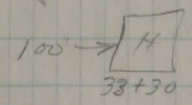
$\frac{43+88}{45} = 17 \rightarrow$



P.L.

$\frac{35+43}{x}$

34+80 Drive



56

55

54

53

52

51

50

49

48

47

46

45

44

12" VSP&CMP

fair condition ←

$$\frac{52+71}{9.5 \quad 10}$$

3x2 Stone Box

Conc. Slab ←

& Curb  
Good condition

$$\frac{18+26}{10 \quad 8}$$

1,065 miles  
 528 | 56225  
 528  
 3425  
 3168  
 -----  
 2570

Note: Last tangent in line with fence corner on east side of road

Twipline  
 56W  
 15" W. Cherry

34.05

CH.#2

Middlefield

Parkman Road.

90°02'

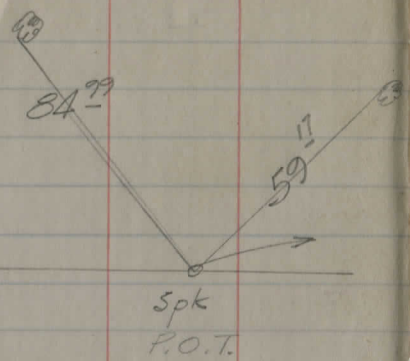
50.02

56W

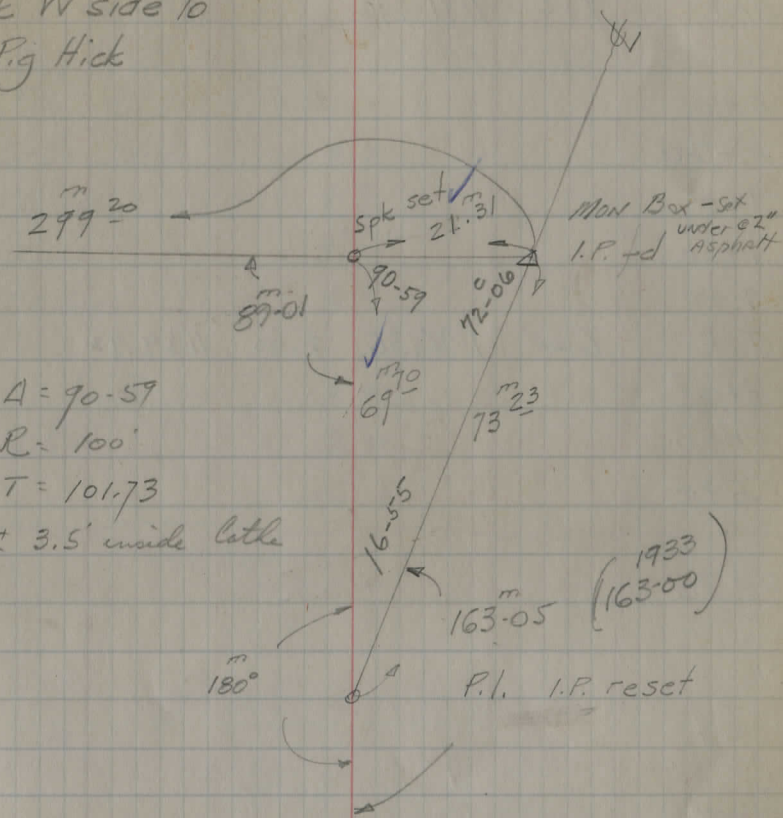
Sta 56+22.50 End of Project

Spk  
 Set in Pnt.

Spk SW side  
14" Apple



Spk W side 10"  
Pig Hick



A = 90.57

R = 100'

T = 101.73

± 3.5' inside cattle

I.P. Δ 30.00

V. Kochier  
M.B. Close

CH\*4 - CH\*16  
CHARDON-AUBURN-NORTH  
WOODLAND INTERSECTION  
Sept 44  
Pom. Hall - Maynard

Chardon. Aub.

LEVELS H. WOODLAND

Werly from #4

BM. 1.52 1191.92 1184.50

0+0 10.4

0+20

1+0

1+50

2+0

T.P. 6.44 1196.36 2.00 1189.92

3+0

4+0

5+0

6+30

= P.I. Es 10.4

± So. Bank 9.9

1.5' high 3.8

level 3.2

1.0' high 2.1

1.5' high 3.4

2.5" 8.2

16.8

10-27-44  
Pom - Steeley Slope Stakes  
OLD STATE RD  
SEC B (Pt)

Stakes set 2' beyond slope termination  
graded to finished grade 48

T.P. 11.62 1030.54 0.15 1018.92

57 1020.0

+0.93  
1.57  
F 2.50 ✓

27 30 20.0  
19.07  
+0.93 ✓  
F 3.50 ✓

B.M. 2.55 1016.52 (1016.51)

56 1016.1 ✓

7.47  
2.97  
F 4.50 ✓

19.07 32 42  
2.97 ✓  
11.79  
2.79  
F 9.00 ✓

T.P. 7.76 1019.07 6.91 1011.31

T.P. 4.66 1018.22 1013.56

55 1012.1 ✓

8.78  
1.28  
C 7.50 ✓

30 23.5 20.88  
10.21 ✓  
8.78  
6.53  
C 2.25 ✓

+50 1010.15

10.73  
+0.02  
C 10.75 ✓

1020.88  
10.15 37.5 32  
10.73 ✓  
10.73  
0.98  
C 9.75 ✓

54 1008.2 ✓

12.68  
0.43  
C 12.25 ✓

39 33 1020.88  
08.20  
12.68 ✓  
12.68  
5.43  
C 7.25 ✓

T.P. 7.32 1020.88 0.78 1013.56

53 1004.2 ✓

10.14  
2.39  
C 7.75 ✓

1014.34  
04.20 33 28  
10.14 ✓  
10.14  
6.39  
C 3.75 ✓

T.P. 10.21 1014.34 0.06 1004.13

52+0 998.1 ✓

6.09  
0.59  
C 5.50 ✓

29 26 1004.19  
998.1  
6.09 ✓  
6.09  
2.59  
C 3.50 ✓

T.P. 11.64 1004.19 0.17 992.55

B.M. 8.84 992.72 983.88

58+0

1026.7

$$\begin{array}{r}
 3.84 \\
 3.34 \\
 \hline
 C 0.50 \checkmark
 \end{array}$$

20 28

$$\begin{array}{r}
 30.54 \\
 26.70 \\
 \hline
 3.84 \checkmark
 \end{array}$$

$$\begin{array}{r}
 3.84 \\
 2.59 \\
 \hline
 C 1.25 \checkmark
 \end{array}$$

57+50

1022.7

21.5 22

1030.54

C. Pomeroy  
R. Hanna  
T. Thresher  
J. Road 125

3-18-46  
Fair-Windy 50

Sta B.M. #3 H.L. 928 4 3' I.S. E/O.V. 925.96  
X on SE Cor. E. side road Cebu. Headwall.

23+00 2.5 925.9

22+80 3.17 925.26 E.P.V.

22 3.4 925.0  $\frac{4.1}{30}$   $\frac{4.2}{19}$   $\frac{4.5}{16.5}$   $\frac{4.0}{14}$   $\frac{3.7}{4}$   $\frac{3.4}{13}$   $\frac{4.3}{13}$   $\frac{4.9}{16}$   $\frac{4.2}{17}$   $\frac{4.0}{19.5}$   $\frac{4.9}{30}$

21 3.8 924.6

20 4.2 924.2

19 4.3 924.1

18 5.4 923.0

17 8.6 919.8

SEE FO. BK. #169 for  
drainage structures, etc.

PROFILE OLD STATE  
C.H. N=6 ABCDEFG

16 11.9 916.5

T.P. 0.46 917 0.3 11.86 916.57

15 2.7 914.3

912.9

14 4.1 2.37 914.6 914.11

B.M. #2 2.92 911.2

13 5.8 911.2

18+40 Top new spike set in N.E. corner 24' N of 13+40-22' 44"

917 93

12			11.3	905.7
T.P.	1.09	906.57	11.55	905.48
11			9.7	896.9
T.P.	0.41	895.20	11.78	894.79
10			7.5	887.7

9+28 <sup>0</sup>			10.3	884.9
-------------------	--	--	------	-------

9			10.5	884.7
---	--	--	------	-------

8			6.3	888.9
---	--	--	-----	-------

T.P.	6.04	900.13	1.11	894.09
------	------	--------	------	--------

7			2.0	898.1
---	--	--	-----	-------

6			0.3	899.8
---	--	--	-----	-------

5			4.5	895.6
---	--	--	-----	-------

4+47 <sup>5</sup>			5.8	894.3
-------------------	--	--	-----	-------

4			5.7	894.4
---	--	--	-----	-------

3				
---	--	--	--	--

20.3
F.L.

10.42
Top Post

4
culvt.

12.00
Top Post

20.5
F.L.

6' Corro Pipe Rt  
C' Stone Arch Lt

10.5 8.8
F.L.

5.8

11.7
F.L.

Sta C.H.#6

900<sup>✓</sup>13

E/CJ.

52

3

4.1 896.0

2

1.4 898.7

T.P.

10.44 909<sup>✓</sup>61

0.96 899.17

1

8.0 901.6

0

6.9 902.7

J.M.#1

1.82907.79

2.10 <sup>94</sup> 907.71

→ New Ref. spike set above old R.M. 0105 Rt.

$\frac{9.3}{30-25.5}$	$\frac{8.6}{20}$	$\frac{8.8}{18}$	$\frac{8.4}{9}$
-----------------------	------------------	------------------	-----------------

$\frac{8.4}{2.5}$	$\frac{8.8}{1.5}$	$\frac{6.2}{1.95}$	$\frac{5.5}{30}$
-------------------	-------------------	--------------------	------------------

3-13-45  
P.M.

B.M.#3	2.57	928	53		925.96
24				1.4	927.1
25				6.5	922.0
T.P.	0.15	917	08	11.60	916.93
26				2.5	914.6
T.P.	0.02	905	34	11.76	905.32
27				1.3	904.0
28				7.9	897.4
28+92				8.0	897.3
29				7.2	898.1
30				2.6	902.7
T.P.	2.02	906	64	0.72	904.62
JM#4				9.66	896.94
T.P.	11.76	916	38	2.02	904.62
31				4.0	912.4
T.P.	11.06	927	36	0.08	916.30
32				5.4	922.0

x in 55 Cor E. side Ctr. Wood 22+92 At Route 288

14.6  
Cov. H.  
Fl.

8.56  
P.M.

80  
Cov.

7.12  
P.M.

14.4  
Fl.  
Dist

ok. 04 High spike end - film cut down -

		927	36		
33				0.8	926.6
T.P.	11.51	938	75	0.12	927.24
34				10.5	928.2
35				7.4	931.3
36				2.9	935.8
37				0.8	938.0
T.P.	11.91	950	46	0.20	938.55
38				10.3	946.2
39				7.6	942.9
40				5.0	945.5
41				2.5	948.0
42				-0.1	950.6
T.P.	11.18	961	28	0.36	950.10
43				8.2	953.1
44				5.9	955.4

$\frac{2.0}{30}$   $\frac{1.4}{23}$   $\frac{1.1}{18}$   $\frac{3.0}{76}$   $\frac{1.4}{135}$   $\frac{1.1}{9}$   $\frac{0.8}{11}$   $\frac{1.6}{11}$   $\frac{2.3}{15}$   $\frac{1.7}{18E}$   $\frac{2.5}{22}$

961 <sup>✓</sup>29

45			3.0	958.3
T.P.	11.66	972 <sup>✓</sup> 72	0.22	961.06
46			10.1	962.6

47			4.6	968.1
----	--	--	-----	-------

7P	11.26	983 <sup>✓</sup> 67	0.91	972.41
48			10.5	973.2

49			6.4	977.3
----	--	--	-----	-------

486			5.1	978.6
-----	--	--	-----	-------

50			2.0	981.7
T.P.	11.80	995 <sup>✓</sup> 23	0.24	983.43

51			5.5	989.7
----	--	--	-----	-------

T.P.	11.30	1006 <sup>✓</sup> 65	0.38	994.85
------	-------	----------------------	------	--------

B.M. #6			8.73	997.92
---------	--	--	------	--------

52			8.6	998.0
----	--	--	-----	-------

53			2.7	1004.0
----	--	--	-----	--------

T.P.	11.84	1018 <sup>✓</sup> 37	0.12	1006.53
------	-------	----------------------	------	---------

54			10.8	1007.6
----	--	--	------	--------

$\frac{7.2}{FL}$	$\frac{6.2}{FL}$	$\frac{5.1}{FL}$	$\frac{7.5}{FL}$	$\frac{8.6}{FL}$
------------------	------------------	------------------	------------------	------------------

1018 37

55

6.9 1011.5<sup>v</sup>

56

2.7 1015.7<sup>v</sup>

567 065

2.4 1016.0<sup>v</sup>

B.M.

S.P. 8.92 1025 43

1.87

1016.40

1016.51

57

4.7 1020.7<sup>v</sup>T.P. 10.77 1036 09<sup>v</sup>

0.11 1025.32

58

8.0 1026.1<sup>v</sup>T.P. 11.36 1047 21<sup>v</sup>0.24 1035.85<sup>v</sup>

59

9.0 1038.2<sup>v</sup>T.P. 11.61 1058 82<sup>v</sup>

0.00 1047.21

60

10.0 1048.8

+303

7.4 1051.4

61

3.2 1055.6

T.P. 10.53 1069 03<sup>v</sup>0.32 1059.50<sup>v</sup>

62

7.2 1061.8

63

1.0 1068.0<sup>v</sup>T.P. 11.87 1080 74<sup>v</sup>

0.16 1068.87

C. Pomeroy  
G.R. Hanks  
T. Thresher  
d. ThresherFair - 10/11/11  
3-12-11

56

102	86	47	34	28	24	41	56	78	118	133
Fl.	Pipe	Pipe	Fl.	Fl.		Fl.	Pipe	Pipe	Pipe	Fl.

(6R.11)

Spike in E. root 15' oak

93	76	74	89	103
Fl.	Pipe	Fl.	Pipe	Fl.

1080.74

64

7.5 1073.2

65

3.0 1077.7

T.P.

11.65

1092

10

0.29 1080.45

66

10.4 1081.7

67

6.8 1085.3

B.M. 7

1.62 1090.48

68

2.3 1089.8

Spike in E. root 30" Walnut 30' Lt. 07+50

69

1.1 1091.0

70

0.6 1091.5

71

1.6 1090.5

T.P.

7.04 1096

35

2.72 1089.31

+ 165

5.7 1090.4

82  
F.L.      T.P.      caly.      7.3  
Pipe      Pipe      Pipe      Pipe

72

5.4 1091.0

1089.8      5.6  
Ditch

73

4.6 1091.8

1090.5      5.9  
Ditch

74

3.6 1092.8

1091.2      5.2  
Ditch

1096<sup>✓</sup>35

75

2.2 1094.2

1092.5  $\frac{3.9}{Ditch}$

76

1.8 1094.6

+61'

1.7 1094.7

T.P. 10.07 1102 83'

3.59 1092.76<sup>✓</sup>

$\frac{4.7}{F.L.}$   $\frac{2.9}{Pipe}$   $\frac{1.7}{Pipe}$   $\frac{3.6}{Pipe}$   $\frac{4.9}{FL}$

77

7.5 1095.3

78

4.3 1098.5

79

1.9 1100.9

80

1.9 1100.9

81

4.1 1098.7

82

6.2 1096.6

83

Noon

6.9 1095.9

+03

T.P. 11.39 1105 69'

8.53 1094.30<sup>✓</sup>

$\frac{9.2}{F.L.}$   $\frac{7.5}{Pipe}$   $\frac{8.5}{Pipe}$   $\frac{10.3}{FL}$

84

8.5 1097.2

85

6.4 1099.3

86

3.7 1102.0

1105 69

87				0.1	1105.6
T.P.	11.19	1116	70	0.18	1105.51
88				7.5	1109.2

B.M.#8 is gone-

B.M.#300				0.76	1115.94
89				3.8	1112.9

Spike set in E. foot 14" Nutcrack 88+90-25' Lt.

90				1.0	1115.7
T.P.	11.80	1128	41	0.09	1116.61
91				9.9	1118.5

92				5.3	1123.1
T.P.	10.04	1137	29	1.16	1127.25
93				8.4	1128.9

94				4.2	1133.1
----	--	--	--	-----	--------

95				4.4	1132.9
----	--	--	--	-----	--------

96				4.1	1133.2
----	--	--	--	-----	--------

5.8	5.7	4.7	4.4	4.4	4.9	5.5	4.8	5.2
30	15	12	5	7	14	16.5	18.5	30

97				2.7	1134.6
----	--	--	--	-----	--------

98				0.2	1137.1
T.P.	9.69	1146	54	0.44	1136.85

1146 54

99			7.0	1139.5
100			3.5	1143.0
101			2.3	1144.2
102			3.4	1143.1
103			5.3	1141.2
104			7.7	1138.8
T.P.	2.91	1140	81	8.64 1137.80
105			3.2	1137.6
106			5.3	1135.5
+81			6.0	1134.8
107			5.8	1135.0
108			2.9	1137.9
T.P.	9.55	1149	16	1.20 1139.61
B.M. #10				9.53 1139.63
109			8.0	1141.2

$\frac{8.64}{FL}$   $\frac{7.3}{FL}$   $\frac{8.3}{FL}$   
 $\frac{8.64}{FL}$   $\frac{7.3}{FL}$   $\frac{8.3}{FL}$

(113763)  
 X Cot S.E. Cor. Hdw. N. end 30' Rt.

1149<sup>1</sup>16

61

110 5.0 1144.2

111 1.8 1147.4

T.P. 10.63 1159 48<sup>1</sup> 0.31 1148.85

112 9.5 1150.0

113 6.9 1152.6

114 5.0 1154.5

115 3.8 1155.7

116 3.6 1155.9

117 5.8 1153.7

118 9.1 1150.4

T.P. 1.85 1151 04<sup>1</sup> 10.29 1149.19

119 5.4 1145.6

T.P. 0.65 1140 51<sup>1</sup> 11.18 1139.86

120 2.9 1137.6

121 9.1 1131.4

T.P. 3.24 1134 20<sup>1</sup> 9.99 1130.96

1134 20

B.M. #11 ✓

121+832 ↘

3.34 1130.86  
1130.82

Spike in W. root 20' Elm 90' Pt. 121+85

10.5	33	41	3.1	9.6
F.L.	Ppt.		Ppt.	F.L.
(Hole)				

122

4.2 30.0

123

3.1 31.1

124

0.5 33.7

T.P. 9.01 1142 55

0.66 1133.54

125

3.2 39.3

T.P. 10.98 1153 42

0.11 1142.44

126

7.7 45.7

127

2.8 50.6

128

0.9 52.5

129

0.8 52.6

130

0.8 52.6

T.P. 8.56 1161 06

0.92 1152.50

131

8.0 53.1

132

6.6 54.5

1161.06

133

5.3 55.8

134

4.8 56.3

135

4.5 56.6

8-16-46  
fall  
W. M. Bell  
W. M. Bell  
W. M. Bell  
W. M. Bell  
W. M. Bell

B.M. #12

S.P. 5.52 1162.56

3.96 1157.04

1157.10  
Spike in N. West 45' Elm 59' Rt. 135+25

136

4.5 1157.1

56.1 6.5  
Pitch

137

4.6 1158.0

57.0 5.6 6.3

138

4.4 1158.2

56.9 5.7 6.0

139

4.5 1158.1

56.8  
2.7 6.8 5.5  
2.30 1.80 5.5  
200' 211' Swamp 20

140

3.6 1159.0

57.8 4.8 4.7

141

1.9 1160.7

58.9 3.7 3.2

T.P. 5.80 1166.23

2.13 1160.43

142

4.0 1162.2

60.6 5.6 5.6

143

3.2 1163.0

62.3 3.9 4.4

144

3.6 1162.6

61.5 4.7 5.3

1166<sup>✓</sup> 23

145 5.0 1161.2

146  
B.M. #13 ✓  
+60<sup>2</sup>  
4.9 1161.3  
3.48 1162.75  
3.8 1162.4

147 4.0 1162.2

148 3.7 1162.5

149 2.3 1163.9

T.P. 8.72 1173<sup>✓</sup> 83 1.12 1165.11

150 7.8 1166.0

151 5.0 1168.8

152 1.6 1172.2

T.P. 11.80 1185<sup>✓</sup> 63 0.00 1173.83

153 10.3 1175.3

154 7.3 1178.3

155 4.0 1181.6

156 0.8 1184.8

T.P. 11.43 1197<sup>✓</sup> 06 0.00 1185.63

6.1

6.5

x cut SW Cor Lt. Haml. 146+5A

$\frac{7.0}{\text{F.H.}} \frac{2.1}{\text{Cor.}} \text{C.H.V.} \frac{2.5}{\text{Cor.}} \frac{6.8}{\text{F.L.}} \rightarrow$

side rd -  
to Rt.

$\frac{5.5}{\text{inlet F.L.}} \frac{5.9}{\text{outlet F.L.}} \left. \begin{array}{l} \text{side rd} \\ \text{cutlet} \end{array} \right\}$

157			8.8	1188.3
158			5.4	91.7
159			2.4	94.7
160			1.5	95.6
161			1.8	95.3
T.P.	4.29	1199.21	2.14	1194.92
J.M.#14			3.65	1195.56
Narr.#14	✓		3.57	1195.67
162			4.3	94.9
163			4.5	94.7
164			6.6	92.6
165			10.5	88.7
T.P.	1.67	1189.03	11.85	1187.36
166			3.9	85.1
167			6.0	83.0
168			7.7	81.3
169			8.6	79.4

$\frac{24}{30}$   $\frac{26}{18}$   $\frac{36}{16}$   $\frac{30}{15}$   $\frac{23}{9}$   $\frac{18}{9}$   $\frac{24}{14}$   $\frac{30}{16}$   $\frac{19}{19.5}$   $\frac{1.3}{30}$

Tree cut stump deep spike (?)  
 spike set in root 16" Maple 22" RB 5/9/14/95

1189 08

T.P. 1.02 1179 07 10.98 1178.05  
170 2.4 76.7

171 7.5 71.6

T.P. 0.89 1168 12 11.84 1167.23  
172 3.1 65.0

173 ✓ 8.1 60.0  
B.M. #15 6.94 1165 61 9.52 1158.67  
174 8.0 57.6

+38<sup>3</sup> 8.2 57.4

175 5.6 60.0  
T.P. 7.99 1173 60 0.00 1165.61  
176 5.6 68.0

177 3.8 69.8

+54<sup>9</sup> Pipe 4.5 69.1

178 4.0 69.6

179 2.2 71.4  
T.P. 10.06 1183 65 0.00 1173.60

Spike in E. root 29" Maple 50' Lt 173465

14.6  
Fl.  
on Rock

8.0  
Par.

8.0  
Par

15.7  
Fl.

→

8.0  
Fl.

6.2  
Pipe

8.0  
Pipe

9.8  
Fl.

→

1183 65

67

180 9.3 1174.3

181 6.3 77.3

182 4.1 79.5

183 2.5 81.1

184 0.9 82.7

T.P. 11.58 1195 23 0.00 1183.65

185 10.8 84.4

186 8.4 86.8

187 5.7 89.5

188 2.7 92.5

189 0.4 94.8

T.P. 7.30 1201 92 0.61 1194.62

B.M. #16 ✓ 5.86 1196.00

190 5.1 1196.8

191 3.9 1198.0

192 See Page 73 4.0 1197.9

Spike in W. root 15" Maple 30' Rt. 189+90

Location Parkman Middlefield  
 Old State Road Easterly  
 Note: sidestakes set 25' Lt. or North

8

7

6

5

4

3

2

1

Sta 0+00 Beginning of Project Poc  
Set

10/20/36 Richey 68  
 Gould  
 Richards

Twp. Line Road

Sec. C (for Shedd Rd #127A?)

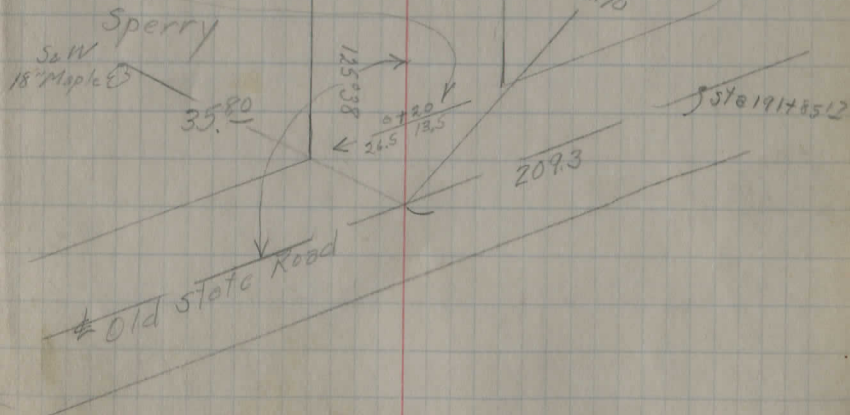
Salona

Approx RL 4765

Kinston

Approx P.L. 2+21

12" C.M.P. 40' long  
 Flow Lt.



Sta 20+8302

POT

Pipe set

20

19

18

17

16

15

14

13

12

11

10

9

8

Vert. SPK.  
SE root  
36" Maple

34.52'

SPK w. side 20" Maple  
Wedge House

25.06'

46.55'

S root  
Vert. SPK  
24" Maple

69  
I Pipe fd 10" down

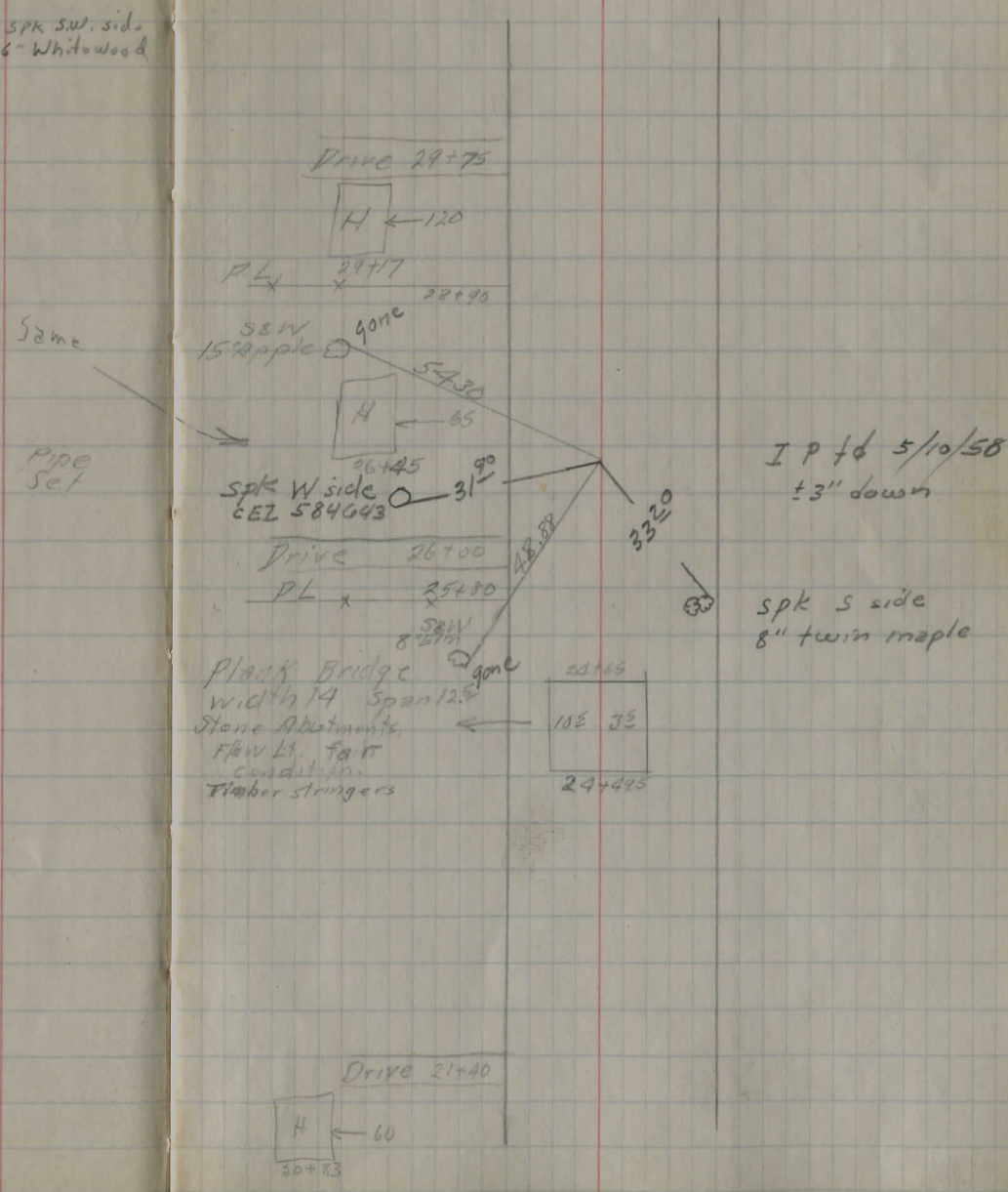
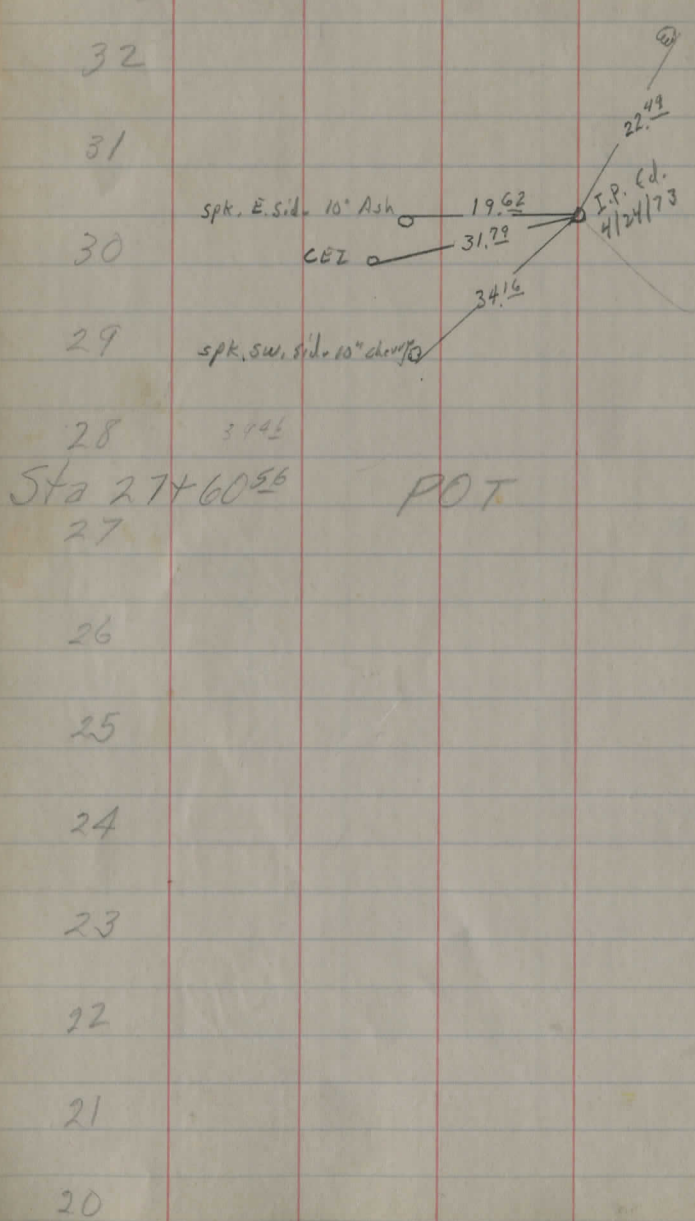
5/3/58

I.P. fd. 7/24/73

Salona

Sperry

Drive 12750



44

18" CMP  
Good condition  
30' skew 20' long  
FlowLT

43+85  
45 155

43

42

41

40

39

38+20 App. Lat line

38

8" CMP  
16' long  
Poor condition

77+93  
8 10  
37+93

Lucht

PL.

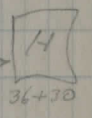
Lucht

37

36

12" VSP Skew 250  
FlowLT 20' long  
fair condition

35+85 DRIVE  
250' →



35+69  
3

35

34

Lucht

33+96

Sperry

33

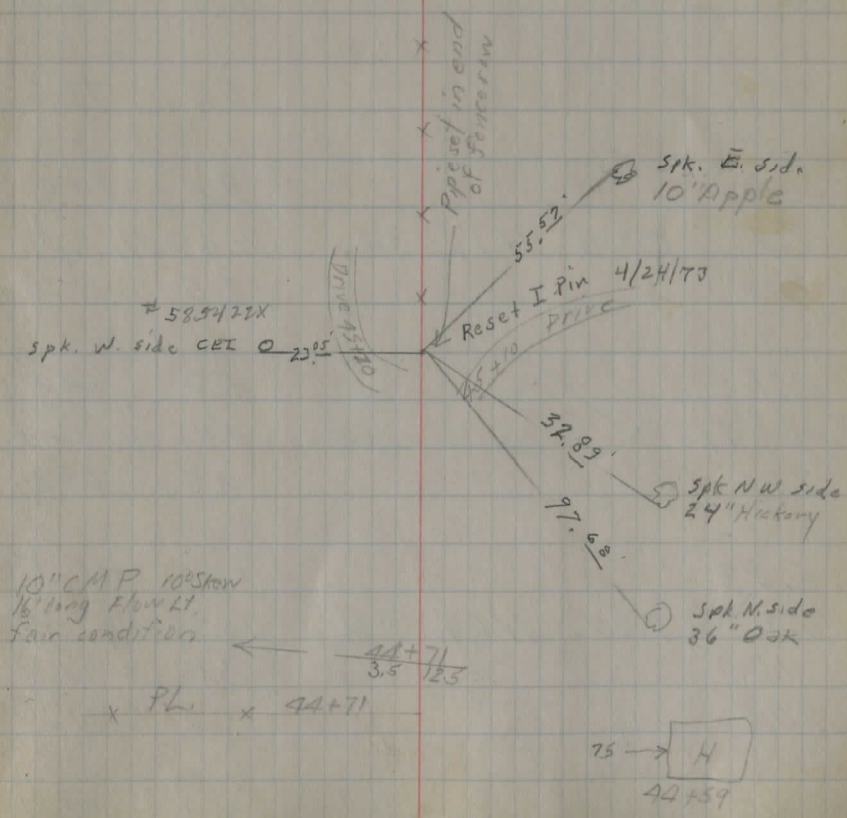
32

857 miles  
 528 | 452945  
 9229  
 3059  
 2690  
 4140

Sta 45+29.45 End of Project Pipe Set

45

44



from 1201 92<sup>v</sup>  
Pg 67

193 6.1 1195.8

194 ✓ 8.8 93.1

T.P. 1.55 1194 22 9.25 1192.67

195 4.5 89.7

196 ✓ 8.0 86.2

T.P. 0.51 1184 04 10.69 1183.53

197 1.5 82.5

198 5.4 78.6

199 ✓ 9.4 74.6

T.P. 0.99 1173 34 11.69 1172.35

200 2.5 70.8

201 ✓ 5.3 68.0

J.M. #17 ✓ 4.46 1168.94 1168.89

202 8.3 65.0

203 ✓ 10.8 62.5

T.P. 2.22 1164 79 10.77 1162.57

+70 3.1 61.7

204 3.4 61.4

205 5.1 59.7

Spice Me. coat 12" Maple 30'4" 201480

cult.

5.9  
Fl. Par. 3.1  
2.6  
Par. 5.7  
FL

206 8.0 1156.8

207 10.5 54.3

T.P. 1.82 1155 02 11.59 1153.20

208 2.8 52.2

209 4.8 50.2

210 6.7 48.3

211 10.2 44.8

T.P. 0.20 1143 73 11.49 1143.53

212 4.3 39.4

213 8.3 35.4

214 10.2 33.5

B.M. #18 ✓ 1132.97

10.76 1132.88

S.P. 9.47 1142 35 1182.88

+32.6 9.2 33.1

x cut H.W. Car Hdwl 14' 17" 214+40

14.2	81	84	14.2
FL	FOR	FOR	FI

215 9.3 33.0

216 7.1 35.2

217 2.9 39.4

1142 35

218 1.3 1141.0

219 0.5 41.8

220 2.1 40.2

221 5.5 36.8

T.P. 0.71 1136 56 6.50 1135.85

222 2.7 33.9

223 4.8 31.8

224 6.7 29.9

P.C. 9.5 27.1

T.P. 0.76 1126 25 10.77 1125.79

225 0.3 26.0

226 8.0 18.2

T.P. 0.93 1115 92 11.26 1114.79

227 6.2 09.7

+84! 8.2 07.7

$$\frac{184}{Fib. Crack}$$

82

$$\frac{191}{Fib. Crack}$$

228 8.5 07.4

(1107.30)

B.M. 21 (New)

8.55 11 07.37 X in Conc. - S.W. cor N. Abert Bridge

229

7.4 08.5

230

1.6 14.3

T.P. 10.78 11 26 05

0.65 1115.27

231

2.8 23.7

T.P. 10.99 11 36 40

0.64 1125.41

232

3.9 32.5

T.P. 9.80 11 45 86

0.34 1136.06

233

7.8 38.1

234

5.6 40.3

235

3.7 42.2

236

2.0 43.9

237

0.2 45.7

T.P. 8.97 11 54 78

0.05 1145.81

B.M. #21

B.M. - Galle

238

7.3 47.5

239

5.3 49.5

240

2.9 51.9

1154<sup>1</sup>78

T.P.	4.91	1158 <sup>1</sup> 84	0.85	1153.93
241			3.6	55.2
+50			2.2	56.6
248			2.7	56.1
243			4.4	54.4
244			7.5	51.3
245			9.3	49.5

+32<sup>15</sup> The End

8.9	49.9
8.8	50.0
4.9	53.9
0.4	58.4
10.33	1148.31
	1148.29
10.5	48.3
9.9	48.9
8.6	50.2
8.3	50.5
6.3	52.5

B.M.#22

245+32<sup>15</sup>  
 L.P. +150 on Point  
 +200 " "  
 +300 " "

Spike Rod E. root 48" Elm stump 25'4" 246+67  
 L.P. East 100 on E side Rd  
 " " 200 " " " "  
 " " 300 " " " "  
 " " 400 " " " "  
 " South 100 " " " " to Parkman

} Swing  
 CE Rd

T.P.	6.63	1162 <sup>1</sup> 58	2.89	1155.95
			5.2	56.4
			4.7	57.9
			5.3	57.3

" 1/ 200 " " " " "  
 " " 300 " " " " "  
 " " 400 " " " " "

Old State ABCDEFG  
4-22-46 Pam-Bandles

1.69 909.48 907.79

0-100 Trumb. Co. (Grave / d / slag) 901.0

0-200 899.6

300 10.0 899.5

400 9.0 900.5

500 7.3 902.2

6+30

PROFILE #88

BM #3 4.43 930.39 925.96

31+0

BM 3.1 1016.51

56+0

126+0

X

±

E

76

BM #1 (New)

92 8.9 8.7 9.6 9.0 8.6 8.5 8.7 8.4 5.8 5.0  
30 25 20 17 14 6 edge 10 edge 18 24 30

12.4 12.4 10.6 9.9 9.9 10.2 11.0 10.8  
30 20 14 7 edge 11 14 30  
21

X

10.7 higher than ±

E

+6.4 4.9 4.6 4.3 4.9 5.6 2.5 3.2  
29 14 7 10 16 21 26

28.3 28.5 x 28.4 27.4 22.2 19.0 E 15.5 12.1  
down 2.1 1.9 2.0 3.0 ± 8.2 11.4 ±14.9 ±18.3  
400 300 200 100 100 200 300 400

8.2 8.9 11.7 11.1 10.0 10.6 11.2 10.8  
27 22 17 13 15 17 30

9.3 10.0 4.4 4.1 3.9 5.1 11.4 ±13.9  
33 30 14 10 14 36 39

4.0 4.1 7.2 6.7 6.1 5.7 6.0 6.6 7.5 4.2 3.0  
30 19 16 14 7 7 13.5 15 21 30

BM 4.32 67.08 1162.76  
Reeves Rd (gravel)

± 176 to

BM 6.07 1202.13 1196.06

192 to

Sperry Farm Rd (Dirt)  
(SHEDD)

BM 8.78 1177.68 1168.90  
T.P. 6.78 1183.74 0.72 1176.96

BM 8.27 1107.30

230 ± 0

79

	W	±E	E		
	62.5	62.3	64.5	63.9	61.9
	4.6	4.8	2.6	3.2	5.2
±E	100	200	300	400	

0.9	2.0	7.4	6.9	6.7	6.9	7.4	2.2
30	23	15	7		7	15	25
		ditch					30

33	3.9	5.3	5.0	4.6	4.2	4.6	5.2	5.6	4.4	4.6
30	18.5	15	14	9		8	14	16	18	30

9.0	8.3	11.4	15.0	18.4
±E	100	200	300	400
93.1	93.8	90.7	87.1	83.7
			76.1	73.5

Hosmer Rd (Dirt) <sup>Δ</sup>

1.6	4.2			
81.0	78.7	77.5	100	±E
2.7	5.0	6.2		
400	300	200		

S ±E N

43.1	2.6	2.1	1.7	1.6	2.2	2.5	3.7	0.9
28	17.5	16	9		9	13	15	21

92+0 20' Rt

94+00 20' Lt

228 14<sup>5</sup>/~~15~~ Rt

INSTRUCTIONS FOR USE OF TABLES

TABLE No. 1.

Distances of slope stake from side or shoulder stake for any width roadway, slope 1:1 to 1:1. If ground is nearly level, the cut or fill at side stake is located by the double way method in left column and top row. The number in body of table in same row and column gives distance

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IMPROVED TABLES

AND

INFORMATION

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TABLE No. 2.

To find tangent and external for curve of any other degree divide by degree of curve and add a certain found in table.

Degree of curve with a given tangent is found by dividing tangent by tangent opposite to given tangent (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

48' E F279W

51 S. = Dr.

18" 1/2 x 15" long

lump into 500 lbs

229 1/2 Dr. N

Fence 2294 06

3.  
5000  
5840  
61400

1-57 191.50  
2-15 2280  
4-12 169.00

1964.11  
1310.48

992-15

653.63

10-7 6-27  
4-3 2-15  
6 8-42  
1-4

74.71  
1.35  
37355.

161.53  
18-07

22413  
7471  
1008585

340-54 = 30  
170-27 = 15  
9-32 = 45

92976  
2197  
92853  
11.62  
916.93  
0.15  
91708

86.77

135

43385  
26031  
8677

1177395

60  
57

# PLEASE RETURN TO GEAUGA COUNTY ENGINEER

## COURT HOUSE CHARDON O. PHONE 250-X

TABLE OF INCHES REDUCED TO DECIMALS OF A FOOT.

Dec.	0052	Inch	1 1/16	Dec.	1.1094	Inch	2 1/8	Dec.	2.1355	Inch	3 11/16	Dec.	3.3177	Inch	5 1/16	Dec.	4.2119	Inch	6 1/16	Dec.	5.2606	Inch	7 1/16	Dec.	6.3024	Inch	8 1/16	Dec.	7.3444	Inch	9 1/16	Dec.	8.3855	Inch	10 1/16	Dec.	9.4271	Inch	11 1/16	Dec.	10.4688
Dec.	0104	Inch	1 1/8	Dec.	1.1146	Inch	2 1/8	Dec.	2.1888	Inch	3 1/8	Dec.	3.3229	Inch	4 1/8	Dec.	5.3313	Inch	6 1/8	Dec.	6.4066	Inch	7 1/8	Dec.	7.4488	Inch	8 1/8	Dec.	8.4900	Inch	9 1/8	Dec.	9.5311	Inch	10 1/8	Dec.	10.5722	Inch	11 1/8	Dec.	11.6133
Dec.	0156	Inch	1 1/4	Dec.	1.1198	Inch	2 1/4	Dec.	2.2440	Inch	3 1/4	Dec.	3.3281	Inch	4 1/4	Dec.	4.4323	Inch	5 1/4	Dec.	5.5417	Inch	6 1/4	Dec.	6.6458	Inch	7 1/4	Dec.	7.7500	Inch	8 1/4	Dec.	8.8542	Inch	9 1/4	Dec.	9.9583	Inch	10 1/4	Dec.	11.0625
Dec.	0208	Inch	1 1/2	Dec.	1.1302	Inch	2 1/2	Dec.	2.2922	Inch	3 1/2	Dec.	3.3385	Inch	4 1/2	Dec.	4.4727	Inch	5 1/2	Dec.	5.5821	Inch	6 1/2	Dec.	6.6862	Inch	7 1/2	Dec.	7.7904	Inch	8 1/2	Dec.	8.8945	Inch	9 1/2	Dec.	10.0000	Inch	11 1/2	Dec.	11.1041
Dec.	0260	Inch	1 5/8	Dec.	1.1406	Inch	2 5/8	Dec.	2.3444	Inch	3 5/8	Dec.	3.3885	Inch	4 5/8	Dec.	4.5311	Inch	5 5/8	Dec.	5.6729	Inch	6 5/8	Dec.	6.8166	Inch	7 5/8	Dec.	7.9604	Inch	8 5/8	Dec.	9.1041	Inch	10 5/8	Dec.	10.2479	Inch	11 5/8	Dec.	11.3916
Dec.	0312	Inch	1 3/4	Dec.	1.1510	Inch	2 3/4	Dec.	2.4488	Inch	3 3/4	Dec.	3.4990	Inch	4 3/4	Dec.	4.6416	Inch	5 3/4	Dec.	5.7842	Inch	6 3/4	Dec.	6.9268	Inch	7 3/4	Dec.	8.0694	Inch	8 3/4	Dec.	9.2116	Inch	10 3/4	Dec.	10.3541	Inch	11 3/4	Dec.	11.4967
Dec.	0364	Inch	1 7/8	Dec.	1.1614	Inch	2 7/8	Dec.	2.5500	Inch	3 7/8	Dec.	3.5944	Inch	4 7/8	Dec.	4.7370	Inch	5 7/8	Dec.	5.8796	Inch	6 7/8	Dec.	7.0222	Inch	7 7/8	Dec.	8.1648	Inch	8 7/8	Dec.	9.3074	Inch	10 7/8	Dec.	10.4500	Inch	11 7/8	Dec.	11.5926
Dec.	0416	Inch	2	Dec.	1.1718	Inch	3	Dec.	2.6604	Inch	4	Dec.	3.6998	Inch	5	Dec.	4.8424	Inch	6	Dec.	5.9850	Inch	7	Dec.	7.1276	Inch	8	Dec.	8.2702	Inch	9	Dec.	9.4128	Inch	10	Dec.	10.5554	Inch	11	Dec.	11.6980
Dec.	0468	Inch	2 1/8	Dec.	1.1822	Inch	3 1/8	Dec.	2.7600	Inch	4 1/8	Dec.	3.8033	Inch	5 1/8	Dec.	4.9459	Inch	6 1/8	Dec.	6.0885	Inch	7 1/8	Dec.	7.2311	Inch	8 1/8	Dec.	8.3737	Inch	9 1/8	Dec.	9.5163	Inch	10 1/8	Dec.	10.6589	Inch	11 1/8	Dec.	11.8015
Dec.	0520	Inch	2 1/4	Dec.	1.1926	Inch	3 1/4	Dec.	2.8596	Inch	4 1/4	Dec.	3.9006	Inch	5 1/4	Dec.	5.0432	Inch	6 1/4	Dec.	6.1858	Inch	7 1/4	Dec.	7.3284	Inch	8 1/4	Dec.	8.4710	Inch	9 1/4	Dec.	9.6136	Inch	10 1/4	Dec.	10.7562	Inch	11 1/4	Dec.	11.8988
Dec.	0572	Inch	2 1/2	Dec.	1.2030	Inch	3 1/2	Dec.	2.9592	Inch	4 1/2	Dec.	4.0010	Inch	5 1/2	Dec.	5.1436	Inch	6 1/2	Dec.	6.2862	Inch	7 1/2	Dec.	7.4288	Inch	8 1/2	Dec.	8.5714	Inch	9 1/2	Dec.	9.7140	Inch	10 1/2	Dec.	10.8566	Inch	11 1/2	Dec.	11.9992
Dec.	0624	Inch	2 3/8	Dec.	1.2134	Inch	3 3/8	Dec.	3.0588	Inch	4 3/8	Dec.	4.1018	Inch	5 3/8	Dec.	5.2444	Inch	6 3/8	Dec.	6.3870	Inch	7 3/8	Dec.	7.5296	Inch	8 3/8	Dec.	8.6742	Inch	9 3/8	Dec.	9.8168	Inch	10 3/8	Dec.	10.9594	Inch	11 3/8	Dec.	12.1020
Dec.	0676	Inch	2 1/2	Dec.	1.2238	Inch	3 1/2	Dec.	3.1584	Inch	4 1/2	Dec.	4.2048	Inch	5 1/2	Dec.	5.3474	Inch	6 1/2	Dec.	6.4900	Inch	7 1/2	Dec.	7.6326	Inch	8 1/2	Dec.	8.7752	Inch	9 1/2	Dec.	9.9178	Inch	10 1/2	Dec.	11.0604	Inch	11 1/2	Dec.	12.2046
Dec.	0728	Inch	2 5/8	Dec.	1.2342	Inch	3 5/8	Dec.	3.2580	Inch	4 5/8	Dec.	4.3054	Inch	5 5/8	Dec.	5.4400	Inch	6 5/8	Dec.	6.5826	Inch	7 5/8	Dec.	7.7252	Inch	8 5/8	Dec.	8.8698	Inch	9 5/8	Dec.	10.0124	Inch	10 5/8	Dec.	11.1550	Inch	11 5/8	Dec.	12.2976
Dec.	0780	Inch	2 3/4	Dec.	1.2446	Inch	3 3/4	Dec.	3.3576	Inch	4 3/4	Dec.	4.4028	Inch	5 3/4	Dec.	5.5374	Inch	6 3/4	Dec.	6.6770	Inch	7 3/4	Dec.	7.8166	Inch	8 3/4	Dec.	8.9602	Inch	9 3/4	Dec.	10.1050	Inch	10 3/4	Dec.	11.2476	Inch	11 3/4	Dec.	12.3902
Dec.	0832	Inch	2 7/8	Dec.	1.2550	Inch	3 7/8	Dec.	3.4572	Inch	4 7/8	Dec.	4.5000	Inch	5 7/8	Dec.	5.6770	Inch	6 7/8	Dec.	6.8166	Inch	7 7/8	Dec.	7.9602	Inch	8 7/8	Dec.	9.1038	Inch	9 7/8	Dec.	10.2464	Inch	10 7/8	Dec.	11.3890	Inch	11 7/8	Dec.	12.4826
Dec.	0884	Inch	3	Dec.	1.2654	Inch	4	Dec.	3.5568	Inch	5	Dec.	4.6000	Inch	6	Dec.	5.7416	Inch	7	Dec.	6.8852	Inch	8	Dec.	8.0288	Inch	9	Dec.	9.1724	Inch	10	Dec.	10.3150	Inch	11	Dec.	11.4576	Inch	12	Dec.	12.5742
Dec.	0936	Inch	3 1/8	Dec.	1.2758	Inch	4 1/8	Dec.	3.6564	Inch	5 1/8	Dec.	4.6998	Inch	6 1/8	Dec.	5.8362	Inch	7 1/8	Dec.	6.9798	Inch	8 1/8	Dec.	8.1234	Inch	9 1/8	Dec.	9.2670	Inch	10 1/8	Dec.	10.4096	Inch	11 1/8	Dec.	11.5522	Inch	12 1/8	Dec.	12.6668
Dec.	0988	Inch	3 1/4	Dec.	1.2862	Inch	4 1/4	Dec.	3.7560	Inch	5 1/4	Dec.	4.7990	Inch	6 1/4	Dec.	5.9398	Inch	7 1/4	Dec.	7.0798	Inch	8 1/4	Dec.	8.2200	Inch	9 1/4	Dec.	9.3572	Inch	10 1/4	Dec.	10.5024	Inch	11 1/4	Dec.	11.6470	Inch	12 1/4	Dec.	12.7596
Dec.	1040	Inch	3 1/2	Dec.	1.2966	Inch	4 1/2	Dec.	3.8556	Inch	5 1/2	Dec.	4.8982	Inch	6 1/2	Dec.	6.0806	Inch	7 1/2	Dec.	7.2196	Inch	8 1/2	Dec.	8.3602	Inch	9 1/2	Dec.	9.4946	Inch	10 1/2	Dec.	10.6450	Inch	11 1/2	Dec.	11.7374	Inch	12 1/2	Dec.	12.8520

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

