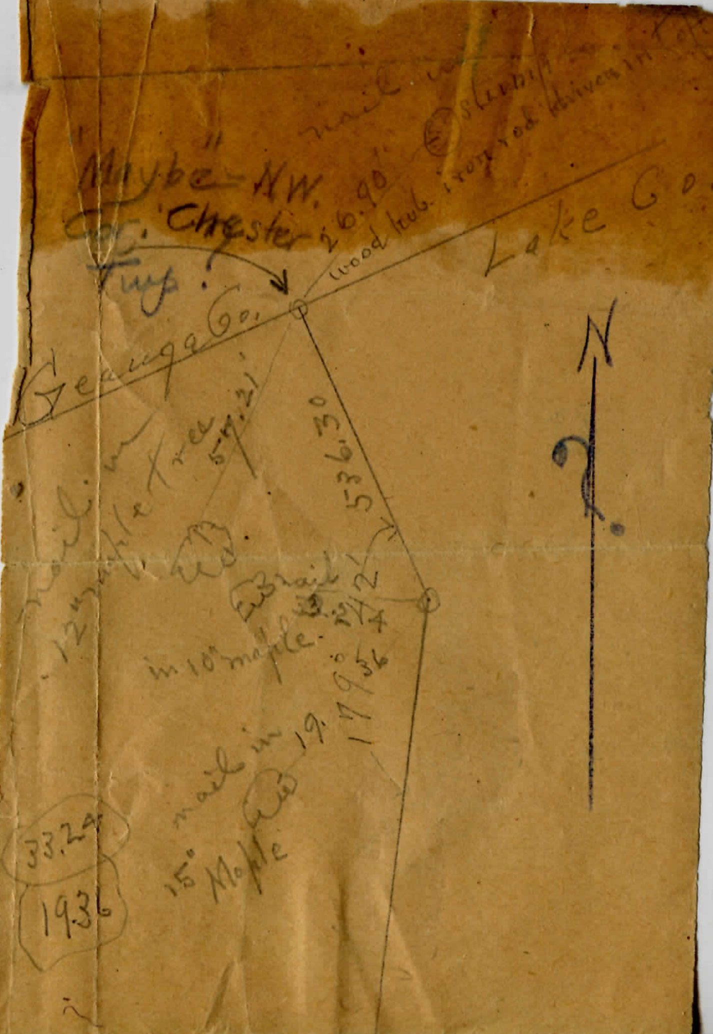
DIETZGEN

TRADE MARK

ENGINEERS' LEVEL BOOK No. 410



"Maybe" – NW. Cor. Chester Twp.
nail in stump
26.90' wood hub. iron rod driven in
Lake Co.
Geauga Co.
nail in 12" maple tree 5.7.21'
536.30
nail 33.24' in 10" maple
1936
179
nail in 19" 15" Maple
33.24
1936
N
2

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be 30.6+(20—16)÷2 or 2 ft. added to 30.6 =32.6. For slopes of 1 on 1½ see inside of back cover.

140A

Please Return to

F. A. Zethmayr

Chardon. O.

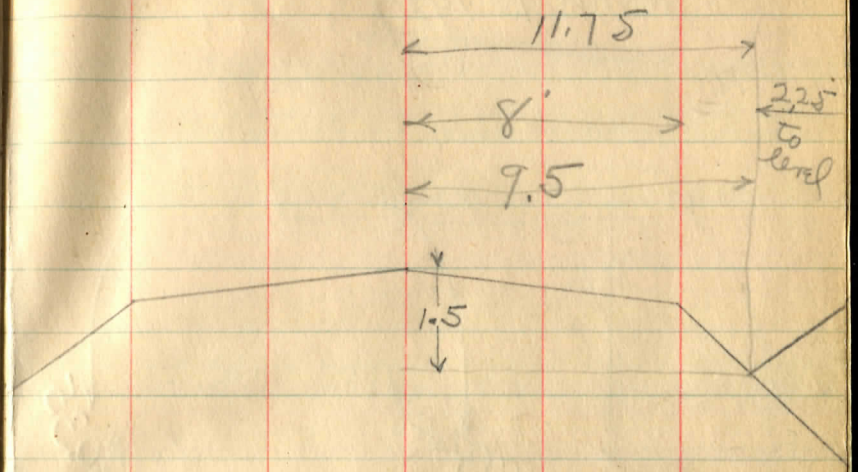
98

phone 327

Bottles Cottrell Subdivision Chester x Roads

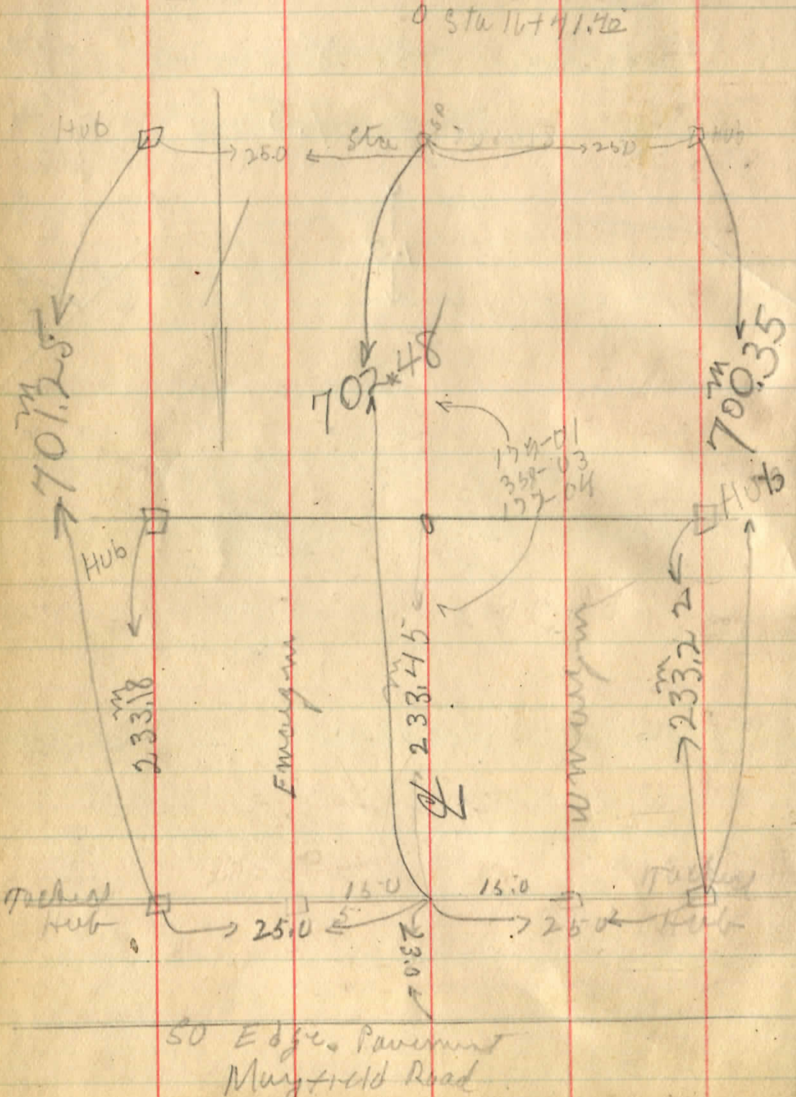
See over for Index.

Index Book 140A



Frank Battles Allotment Road

APRIL 1st 1927



Bliss
Goodrich
Clause

12" Tile Culvert about Sta 1226

Creek at 12+55 (Culvert about 1226.)

Bottom steep Bank 1265

Top " "

About 10 nice Hard maple 20" Stumps

Bet Stas 6+00 & 12+00

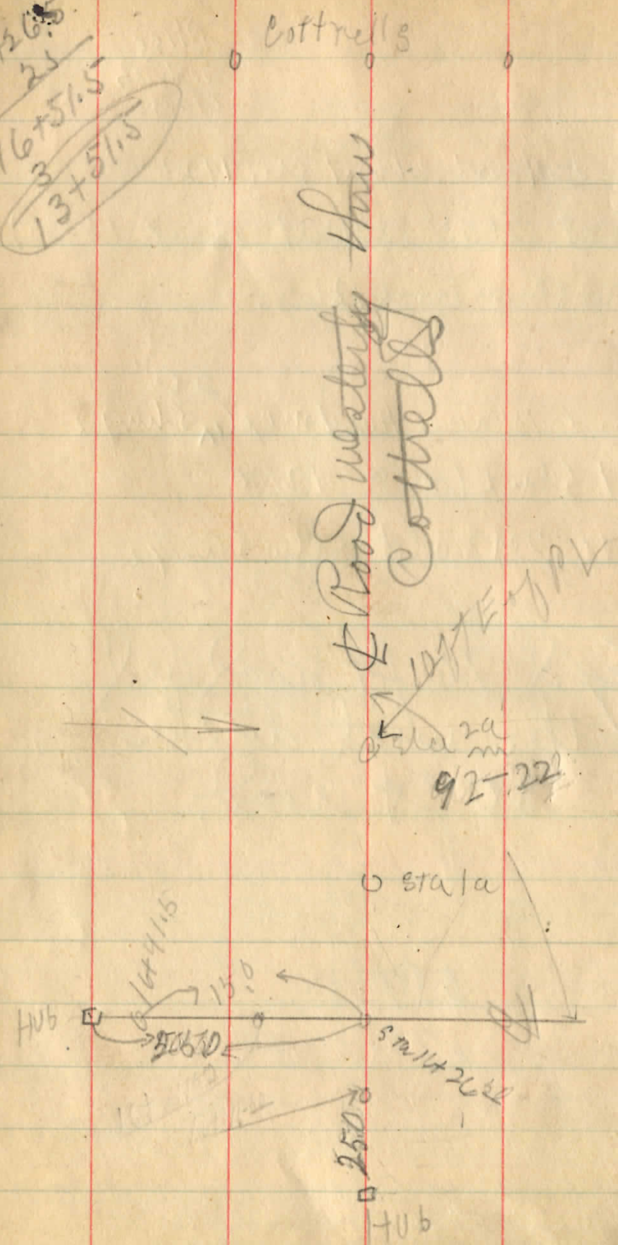
Also 30 + old rotten stumps

Req'd 16 ft road bed together with ditches on 30 ft road.

537-04

179-01-20

16+26.5
25
16+51.5
3
13+51.5



Sta	BS	FS	HI	El
BM	5.75		1222.63	1216.88
TP	1.90	2.15	1222.38	1220.48
T.P	0.34	8.00	1214.72	1214.38
BM set		0.86		1213.86
0-28		2.99		1211.73
0-				
0-15		4.35		1210.37
0-0		5.70		09.02
0+50		7.2		1207.52
1+00		8.9		1205.82
1+35		9.4		1205.32
1+50		8.9		1205.82
2+00		5.65		1209.07
2+33.50		5.4		1209.32
TP	0.36	4.91	1210.17	1209.81
3+00		1.80		1208.37
3+50		2.60		1207.57
4+00		3.30		1206.87
4+50		4.13		1206.04

7

Cottrell's store

U.S.G.S. BM. NW corner stone foundation

NE cor. conc. step to church

on Boulder

NE corner Foundation mound well. Rear of store

S Edge Pavement on ℄

	E			℄		W		
-.15	4.50/15.0	-.05	4.40/15.0	4.35	4.30/10	+.05	4.25/15	+0.1
-.20	5.40/15.0	-.16	5.36/10.0	5.20	5.05/10	+.15	5.40	+.30
+.10	7.10/15.0	+.10	7.10/10	7.20	7.30/15	-.10	7.30/15	-.10
+.20	8.26/15	+.10	8.30/15	8.46	9.0/10.0	-.10	9.06/15.0	-.10
+.70	8.70/15	+.30	9.10/10	9.40	9.60/10	-.20	9.75/15.0	-.35
+1.40	7.34/15	+.70	8.20/10	8.40	9.60/10	-.70	9.60/15	-.70
+.10	5.55/15	+.10	5.5 /10	5.65	6.00/10	-.35	6.40/15	-.75
+.10	5.30/15	+.10	5.30/10	5.40	5.65/10	-.25	5.20/15	-.35
00	1.80	00	1.80/10	1.80	1.80/10	00	1.80/10	00
-.10	2.70/15	-05	2.66/10	2.60	2.55/10.0	+.05	2.50/15.0	+.10
-.10	3.40/15	00	3.30/10	3.30	3.16/10	+15	3.10/15	+20
+23	3.40/15	+23	3.40/10	4.13	4.30/10	-.17	4.40/15	-.27

Sta.	BS	FS	HI	EL	E				C	W			
5+00		5.10	1210.17	1205.07	+.05	5.05 / 15	-.05	5.15 / 10	5.10	5.20 / 10	-.10	5.10 / 15	00
5+50		6.00		1204.17	-.20	6.20 / 15	-.10	6.10 / 10	6.00	5.40 / 10	+.10	5.95 / 15	+.05
6+00		7.00		1203.17	+.90	6.10 / 15	+1.05	5.95 / 15	7.00	6.35 / 10	+.65	6.00 / 15	+1.00
6+50		7.40		1202.77	-1.30	9.70 / 15	-1.30	8.70 / 10	7.40	7.60 / 10	-.20	7.20 / 15	+.20
7+00		10.25		1199.92	+.25	10.00 / 15	-.45	10.70 / 10	10.25	10.20 / 10	+.05	9.65 / 10	+.60
TP	0.70	9.92	1200.95	1200.25									
7+50		3.90		1197.05	+.40	3.50 / 15	+.40	3.50 / 10	3.90	3.50 / 10	+.40	3.50	+.40
8+00		5.60		1195.35	-.20	5.80 / 15	-.10	5.70 / 10	5.60	5.30 / 10	+.30	5.40 / 15	+.20
8+50		7.95		1193.00	+.60	7.35 / 15	.00	7.95 / 10	7.95	8.60 / 10	+.65	8.60 / 15	+.65
9+00		11.70		1189.25	+.50	11.20 / 15	+.40	11.30 / 10	11.70	12.40 / 10	-.70	12.40 / 15	-.70
TP	0.23	11.13	1190.05	1189.82									
9+25		3.30		1186.75	+1.50	1.80 / 15	+.90	2.40 / 10	3.30	5.20 / 10	-.90	5.00 / 15	-1.70
9+45		6.10		1183.95	+2.30	3.80	+1.80	4.30 / 10	6.10	8.10 / 10	-2.00	8.10 / 15	-2.00
9+70		7.60		1182.45	+2.25	5.30 / 15	+1.65	5.95 / 10	7.60	8.35 / 10	-.75	8.50 / 15	-.90
10+00		7.60		1182.45	+1.40	6.20	+1.00	6.60 / 10	7.60	7.50 / 10	+.10	9.20 / 15	-1.60
10+50		9.40		1180.65	00	9.40 / 10	-.10	9.50 / 10	9.40	10.20 / 10	-.80	10.10 / 15	-.70
11+00		11.00		1179.05	-.20	11.20 / 15	-.30	11.30 / 10.0	11.00	9.90 / 10	+1.10	10.10 / 15	+.90
TP	3.15	9.70	1183.50	1180.35									
BM set		3.60		1179.90									

1179.90 B.M. + on stone 33.0' W of line (15" E of 12" Ash)

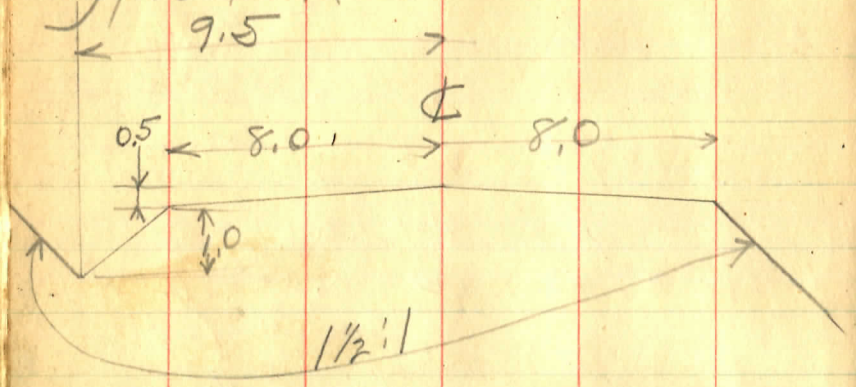
	BS	FS	HI	EL
11+50		7.20	1183.50	1176.30
12+00		6.70		1176.80
12+25		7.90		1175.60
12+50		7.50		1176.00
12+65		8.10		1175.40
12+63		6.20		1177.30
TP 13.00	12.95	1.40	1195.05	1182.10
13+00		6.90		1188.15
13+50		4.85		1190.20
14+00		3.75		1191.30
TP	4.60	2.62	1197.03	1192.43
14+50		6.20		1190.83
15+00		6.70		1190.33
15+50		7.30		1189.73
16+00		7.00		1190.03
16+41.40		7.10		1189.93
Sta 1a		5.70		1191.33
2a		3.40		1193.63
BM set		5.60		1191.43

E 15'		E 10'		℄	W 10'		W 15'	
-40	▷60	-40	▷60	▷20	▷40	-20	▷00	+20
+20	6.40	+70	6.40	6.70	6.20	+50	6.40	+60
00	▷90	+10	▷80	▷90	▷20	+70	▷60	+30
E Bot. Creek								
+1.20	6.30	-95	8.[illegible]	▷50	▷60	+40	▷70	+30
				8.10 Bot. Creek				
+50	5.20	+70	5.50	6.20	5.60	+60	6.10	+10
-1.00	▷40	-80	▷70	6.40	6.20	+70	5.25	+1.15
+05	4.20	+45	4.40	4.85	3.40	+95	3.40	+95
-1.05	4.30	-65	4.40	3.25	3.30	+45	3.30	+45
-60	6.80	-40	6.40	6.20	5.40	+1.40	5.30	+95
-50	▷20	00	6.70	6.70	5.50	+1.15	6.90	-20
-60	▷90	-20	▷50	▷30	6.70	+60	6.40	+90
-80	▷[illegible]	00	▷00	▷00	6.20	+30	6.60	+50
00	▷10	+20	6.40	▷10	▷60	-50	▷30	-20
		South			North			
+10	5.40	+10	5.40	5.70	5.10	+60	5.00	+70
+10	3.30	+60	2.80	3.40	3.00	+40	2.80	+60

On Boulder 60' E of Fence 100 ft 50 ft E ℄ Road

Frank Battles Chester

Typical X Sec.



Sta	BS	HI	F.S.	Elev
BM	—	—		
		"		

	BS	HI	FS Rod	Elev	
B.M.	−0.4	1213.45		1213.86	N.E. Cor found iron of Bottles Store
0+50W			5.67	1209.80	3.65 F 2.0
0+50E			5.18	"	" F 1.5
1+00W			6.76	08.19	5.26 F 1.5
1+00E			6.76	"	" F 1.5
1+50W			7.82	07.15	6.30 F 1.5
1+50E			5.30	07.15	" C 1.0
2+00W	slope 14.75	4.8	4.76	06.69	6.76 C 2.0
2+00E	slope 15.5	4.3	3.27	06.69	C 3.5
3+00W	"		4.27	07.20	6.25 C 2.0
3+00E			4.75	07.20	6.25 C 1.5
4+00W			5.71	07.25	6.20 C 0.5
4+00E			6.22	"	" G
5+00W			7.66	05.80	7.65 G
5+00E			7.68	05.80	" G
6+00W			8.58	03.40	10.05 C 1.5
6+00E			9.05	03.40	" C 1.0
T.P.	2.07	~~06.27~~ 1206.09	9.43	~~04.20~~ 04.02	on boulder 10ft E of ℄ at Sta 6+15

~~1206.27~~ 1206.09

7+00W			6.22	1199.55	6.72
7+00E			5.76	99.55	"
8+00W			10.52	94.25	12.02
8+00E			10.51	94.25	"
T.P.	0.58	~~1196.88~~ 1196.70	9.97	~~1196.30~~ 1196.12	
9+00W			7.63	88.75	8.13
9+00E			5.64	88.75	8.13
B.M.	0.60	~~1186.50~~ 1186.32	10.98	~~1185.90~~ 1185.72	
10+00W			3.97	83.54	2.96
10+00E			1.95	83.54	"
11+00W			6.66	80.36	6.14
11+00E			6.15	80.36	"
12+00W			8.81	79.67	6.83
12+00E			10.84	79.67	"
B.M.			9.02	~~1177.48~~ 1177.30	
T.P.	11.32	1194.05	3.59	1182.73	
B.M.			2.61	1191.44	1191.43

B.M.	6.78	~~1184.26~~ 1184.08		~~1177.48~~ 1177.30	
B.M.			4.15	1179.93	1179.90

C 0.5
C 1.0
C 1.5
C 1.5
Top boulder 8+07+18 ft E of ℄
C 0.5
C 2.5
Spk on S Root 36" Maple 9+80+44 E of ℄
F 1.0
C 1.0
F 0.5
G
F 2.0
F 4.0

These stakes set 0.18 ft. to low on check of comp.

Spk in N.W. root 30" Map 11+75+40 ft E of ℄

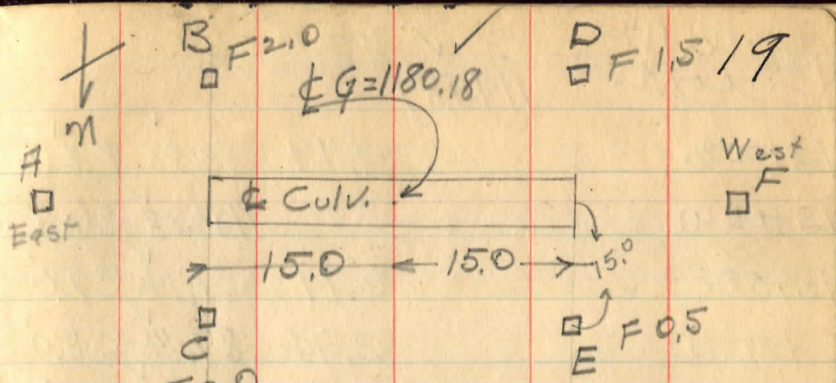
on Boulder 60 ft E. of Cottrell E fence and 45 ft S. of ℄ E+W RR

Spk N.W. root 38" Map Sta 11+75 + on Boulder 11+15+35 ft W. of RR ℄

Battles Subdiv.

5/20/27 F.T.
Rod — M. Richey, R. Sperry

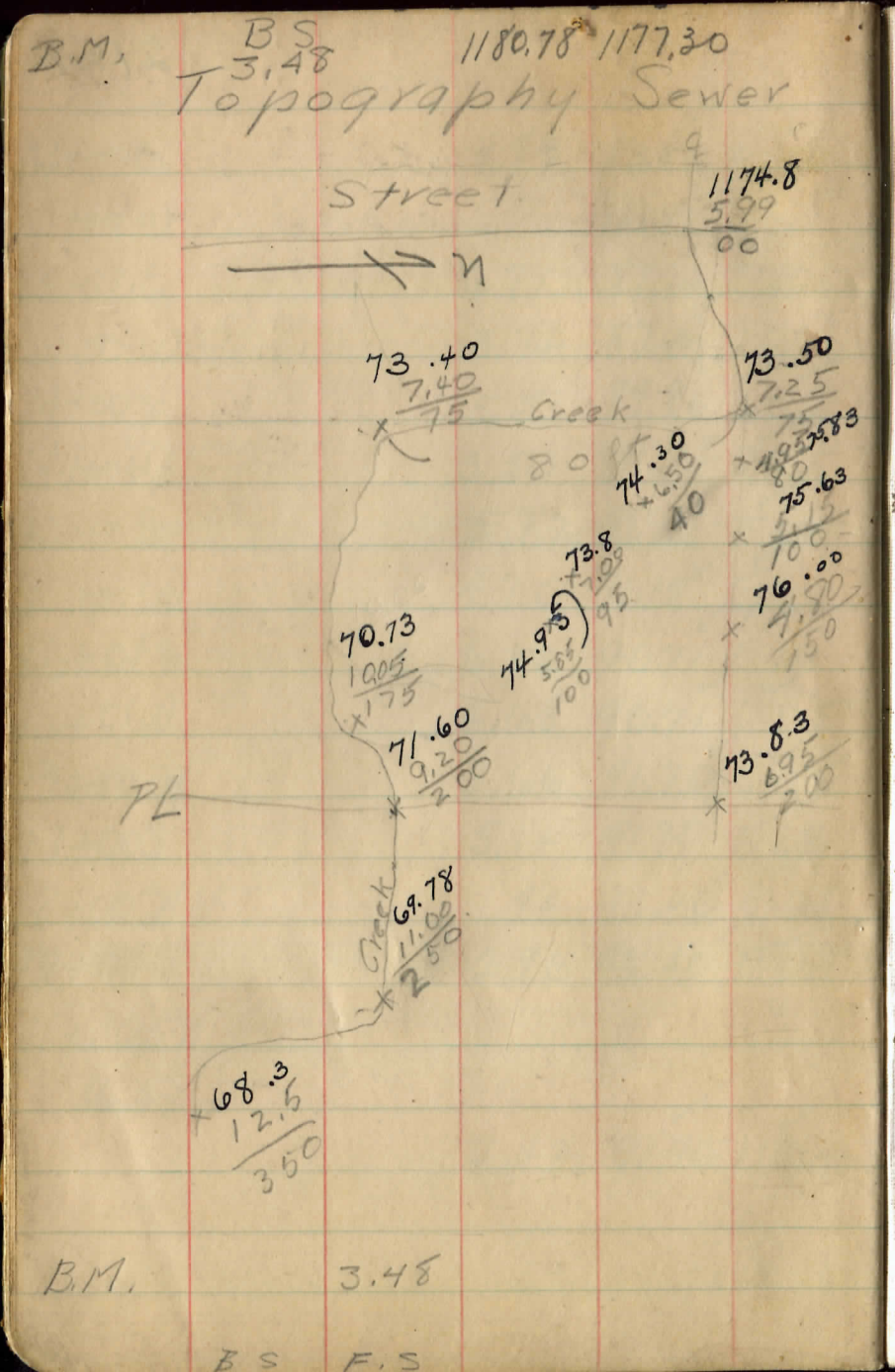
Box Culv.				
B.M.	4.51	1181.81		1177.30 on Maple
12+23 = Culvert				
A-		4.63	80.18	℄ = F 3.0
F		3.63	80.18	℄ = F 2.0
Elev of top inside bbl. on ℄ Rd				1178.18
E Elev of " " " " W. End		4.03	1178.28	F 0.5
C " " " " bbl on E. end		5.73	1178.08	F 2.0
D " " " " " " W "		5.03	1178.28	F 1.5
B " " " " " " E "		5.73	1178.08	F 2.0
12+50E		3.23	81.08	F 2.5
12+50W		4.72	81.08	F 4.0
B.M.	10.45	1187.75		1177.30
T.P.	9.67	95.87	1.55	86.20



Battle Rd cont

1195.87

13+00 E	9.99	83.88	C 2.0
13+00 W	5.96	1183.88	C 6.0
13+50 E	6.71	87.14	C 2.0
+50 W	3.74	87.14	C 5.0
14+00 E	5.53	89.84	C 0.5
14+00 W	3.50	89.84	C 2.5
15+00 E	5.72	91.15	F 1.0
15+00 W	4.70	91.15	G
16+01 E	6.16	90.71	F 1.0
16+01 W	4.68	90.71	C 0.5
17+00 N	3.66	91.70	C 0.5
17+00 S	5.14	91.70	F 1.0
18+00 N	1.94	93.40	C 0.5
18+00 S	2.96	93.40	F 0.5
18+36.5 N			
+36.5 S			
	4.42	91.45	1191.43



Battles + Cottrell Allotment
Preliminary Sewer Elev.

Weather:
Cold + Snow

Goodrich
Clause
Rand

Battles + Cottrell Survey

Sta	BS	HI	FS	Elev	Remarks
BM.	10.83	1188.13		1177.30	Spk in NW Root 30" Map 11+75+ 40 ft E of ℄ (Road notes)
TP	11.19	1198.16	1.16	1186.97	
TP	12.70	1209.05	1.81	1196.35	
TP	8.05	1217.02	0.08	1208.97	
0+00		"	2.46	1214.56	On ℄ of View Drive E Margin of chill. Road (Hub #1)
0+50		"	2.00	1215.02	
1+00		"	2.37	1214.65	
1+50		"	3.70	1213.32	
2+00		"	5.20	1211.82	
2+50		"	6.62	1210.40	
3+00		"	9.05	1207.97	
3+50		"	11.17	1205.85	
TP	0.25	1207.12	10.15	1206.87	
4+00		"	4.50	1202.62	
4+50		"	6.67	1200.45	
5+00		"	9.35	1197.77	

Over

Battles + Cottrell Sewers

Sta	BS.	HI	FS	Elev	Remarks
5+50		1207.12	12.07	1195.05	
TP	5.48	1201.87	10.73	1196.39	
6+00		"	8.85	1193.02	
6+43		"	9.40	1192.47	{End of View Drive Hub on diner-section 3 (Hub #2)
0+00		"	9.40	1192.47	Going S from same point above on N.+S. Drive
0+16		"	10.65	1191.22	
0+50		"	9.00	1192.87	
1+00		"	6.65	1195.22	
1+50		"	6.55	1195.32	
2+00		"	5.27	1196.60	
2+50		"	5.70	1196.17	
3+00		"	5.85	1196.02	
3+50		"	6.50	1195.37	
3+91		"	6.75	1195.12	← Hub #4
TP	12.43	1207.55	6.75	1195.12	→ on Hub at Cottrell Drive + St. 90m N. on W Line of Battles

Battles & Cottrell Sewers

Sta	BS	HI	FS	Elev	Remarks
TP	8.18	1215.58	0.15	1207.40	
0+00		"	3.55	1212.03	On ℄ of Cottrell Drive E Margin of Ch. rd. (Hub #3) going E
0+50		"	3.95	1211.63	
1+00		"	3.80	1211.78	
1+50		"	4.45	1211.13	
2+00		"	6.15	1209.43	
2+50		"	7.65	1207.93	
3+00		"	9.25	1206.33	
3+50		"	11.20	1204.38	
TP	2.16	1204.99	12.75	1202.83	
4+00		"	3.65	1201.34	
4+50		"	5.95	1199.04	
5+00		"	5.80	1199.19	
5+50		"	6.95	1198.04	
6+00		"	8.95	1196.04	
TP 6+47.6	1.54	1196.66	9.86	1195.12 1195.13	Hub #4

Battles & Cottrells Sewers

Sta.	B.S.	H.I.	F.S.	Elev.	Remarks
0+00		1196.66	1.54	1195.12	Hub #4 going E on Cottrell Drive
0+50		"	3.23	1193.43	Sta 6+47 on tan from Chill. Rd.
1+00		"	4.10	1192.56	
1+50		"	4.70	1191.96	
2+00		"	5.36	1191.30	Sta 8+76 " " " " "
2+29.5		"	5.82	1190.84	Hub #5 Battles Drive ¢
0+00		"	11.25	1185.41	Hub #6 on E end Cottrell Drive going W ~~E~~
0+50		"	9.00	1187.66	
1+00		"	8.15	1188.51	Omit
1+50		"	8.05	1188.61	Not Needed.
2+00		"	6.20	1190.46	
2+10.1		"	5.82	1190.84	Hub #5
0+00		"	5.00	1191.66	S end of Battles Drive goin N (¢ Marker)
0+50		"	5.20	1191.46	
1+00		"	6.45	1190.21	
1+50		"	6.50	1190.16	
2+00		"	9.50	1187.16	
2+50		"	13.80	1182.86	

Battles & Gittell Sewers

Sta	BS	HI	FS	Elev	Remarks
		1196.66			
3+00			11.50	1185.16	
3+50			8.75	1187.91	
4+00			6.40	1190.26	
4+50			6.75	1189.91	
4+59.8				1190.84	Hub # 5
5+00			5.95	1190.71	
5+50			5.85	1190.81	
6+00			5.80	1190.86	
6+50			6.30	1190.36	
7+00			7.25	1189.41	
7+50			10.00	1186.66	
TP	1.09	1188.15	9.60	1187.06	
7+75			3.00	1185.15	
8+00			4.60	1183.55	
8+25			6.15	1182.00	
8+52			7.15	1181.00	5' S 66 (S side) Culvert on ℄ of road
8+70			7.90	1180.25	5' N (N side) " " " "
8+90			8.60	1179.55	

Battles & Cottrells sewer

Sta	BS	HI	FS	Elev	Remarks
		1188.15	9.25	1178.90	top of culvert E side
		"	12.90	1175.25	Flow line E side
TP	3.57	1184.00	7.72	1180.43	
0+00				1179.55	Going E from Sta 8+90 along N side
0+10		"	6.05	1177.95	of lot #36
0+20		"	7.10	1176.90	
0+55		"	8.70	1175.30	
0+75		"	8.80	1175.20	N. Edge of creek
0+95		"	8.45	1175.55	
1+27		"	8.00	1176.00	
1+52		"	8.20	1175.80	
1+72		"	7.60	1176.40	Fence line
0+00				1180.25	Going E from Sta 8+70 (11 to Lot line)
0+10		"	9.95	1179.05	
0+20		"	9.20	1174.80	
0+36		"	9.25	1174.75	℄ of creek
0+56		"	8.30	1175.70	
0+91		"	9.50	1174.50	℄ of creek

Battles & Cottrells Sewer

Sta	BS	HI	FS	Elev	Remarks
1+14		1184.00	8.70	1175.30	
1+34			8.40	1175.60	
1+58			8.20	1175.80	
BM.			6.60	1177.40	Spk N.W. Riot 30" Maple Sta 1+75 40' E of ℄ (Road Notes)
0+00		1193.45	0.98	1192.47	Hub #2 going E
0+25			3.10	1190.35	
0+50			3.40	1190.05	
0+75			4.00	1189.45	
1+00			2.90	1190.55	
1+25			3.10	1190.35	
1+50			3.40	1190.05	
1+75			3.40	1190.05	
2+00			5.00	1188.45	
2+10			6.00	1187.45	top of bank.
2+14			9.30	1184.15	
2+19			11.30	1182.15	Ditch
2+29			10.10	1183.35	℄ of Drive 58' S of Middle of culvert

Battles & Cottrells Survey

Sta	BS	HI	FS	Elev	Remarks
0+00				1192.47	Hub #2 going E to 5' N of culvert
0+50			3.2		
0+00			6.4		
1+32			6.0		
1+46			10.45		top of creek bank
1+61			16.50		℄ of creek
1+92			15.30		point 20 W of Point 5' N of culvert (Set line on W Margin of road
0+00			0.98	1192.47	Hub #2 going E to Sta 8+98
0+50			2.90		
0+75			6.30		
1+00			7.40		
1+21			8.60		top of bank
1+49			15.80		
1+59			17.1		℄ of creek

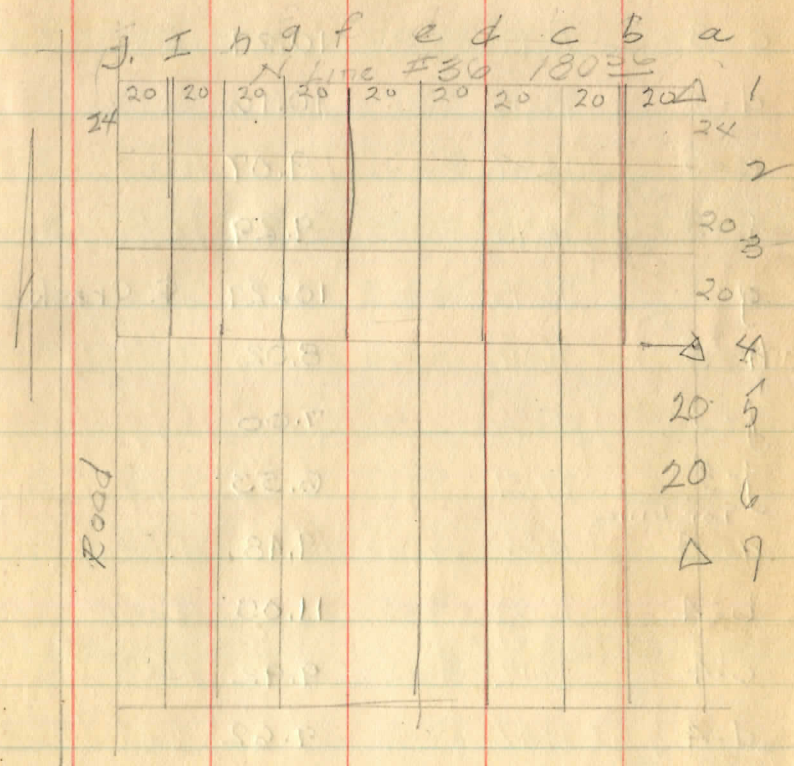
Battles Sufd. | Topo for Septic tank

	F.S.	HI	B.S.	Elev.
	6.74	1184.04		1177.30
a-1			9.04	75.00
b-1			6.83	77.21
c-1			7.95	76.09
d-1			7.83	76.21
e-1			7.28	76.76
f-1			8.21	75.83
g-1			9.91	(℄ Creek 74.13
h-1			9.21	(N. Edge H_2O 74.83
i-1			8.65	(12 feet North of Creek 75.39
j-1			7.21	76.83
a-2			9.98	74.06
b-2			8.74	75.30
c-2			8.24	75.80
d-2			8.40	75.64
e-2			9.28	74.76
f-2			8.79	75.25 →
g-2			7.94	76.10
h-2			8.76	75.28
i-2			8.15	75.89
j-2			8.78	(3' N. ℄ H_2O) 75.26

2-17-28 Root (road) Stark of Level

Opalocka Dr.

Spk N.W. root 30" Map 40 ft E. ℄ + 48 ft N. of Culv.



—(F-2 + 12 (West) — 10.01 — ℄ CREEK) (74.03)

(continued)

TOPO — Battles Septic Tank

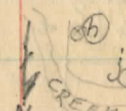
	Elev.	B.S.	Elev
a-3	74.21	9.83	
b-3	73.08	10.96	
c-3	73.75	10.29	
d-3	73.88	10.16	
e-3	74.97	9.07	
f-3	74.75	9.29	
g-3	73.75	10.29	℄ Creek
h-3	76.02	8.02	
j-3	77.04	7.00	
j-3	77.51	6.53	
LOT LINE			
a-4	74.56	9.48	
b-4	72.99	11.05	
c-4	74.12	9.92	
d-4	74.42	9.62	
e-4	74.80	9.24	
f-4	74.64	9.40	
g-4	74.39	9.65	E. Edge Creek
h-4	77.84	6.20	
i-4	77.55	6.49	
j-4	77.42	6.62	

(Continued)

43

	Elev	B.S.
a-5	73.11	10.93
b-5	72.92	11.12
c-5	74.72	9.32
d-5	74.03	10.01
e-5	74.69	9.35
f-5	73.96	10.08
g-5	74.84	9.20
h-5	81.72	2.323
i-5	83.12	0.92
j-5		—
a-6	73.06	10.98
b-6	72.72	11.32
c-6	74.39	9.65
d-6	74.40	9.64
e-6	72.03	12.01
f-6	74.13	9.91
g-6	75.48	8.56
h-6	81.85	2.19
i-6	83.99	0.05
j-6		

E. Edge Creek
W. Edge Creek & 7' E. of Foot of Bank
Top of Bank



Top Bank

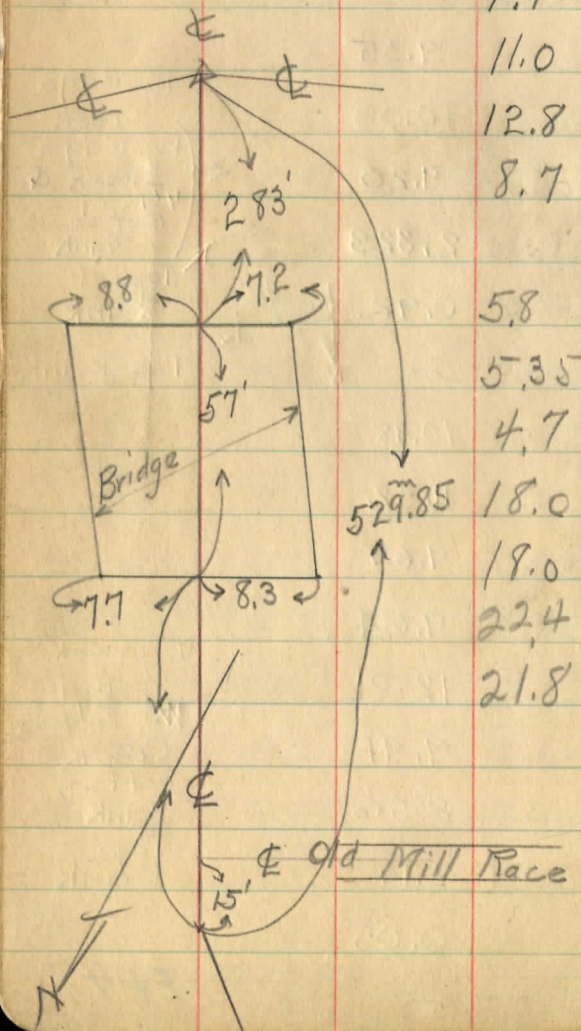
℄ Creek Bed
W. Edge Creek Bottom Bank
Top Bank

See 3 pages OVER PP47

Continued

Levels at Fullertown Bridge

Sta	BS	HI	FS	Elev
BM	2.93	1095.08		1092.15
BM	0.43	1094.90	0.61	1094.47 (1094.74)
TP	0.53	1082.45	12.98	1081.92
			4.4	1078.0
			11.0	1071.4
			12.8	1069.6
			8.7	1073.7
			5.8	1076.6
			5.35	1077.10
			4.7	1077.7
			18.0	1064.4
			18.0	1064.4
			22.4	1060.0
			21.8	1060.6



11/29/2745

Spike on E root pine 50' N Store
← top of IP on ℄ cor. SE Store.

15 ft N.W. on Rd ℄ from ℄ old Mill race
40 ft S.W. of Rd ℄ in ℄ Race
80 " " " " " " " " " "
On old dam Embkmt 150' N.W. of N. end bridge
+ 75' N.E. of Rd ℄
100 + 150 N.W. of N. end bridge on Rd ℄
N. end bridge
S. " "
Surface Water W. side bridge
" " E. " "
Creek bed W. " "
" " E. " "

1111

continued from 3 47 Pages back

	Elev	B.S.	
Lot Line a-7	72.04	12.00	
b-7	72.40	11.64	
c	72.00	12.04	& CREEK
d	77.63	6.41	Top Bank
e	79.35	4.69	
f	81.08	2.96	
g	82.04	1.20	
h		—	
i		—	
j		—	

Levels for H.S. Kent 3-20-28 around
Fullertown Pond F.P.Z.
D.R. Stark

B.S.	4.29	1096.44		1092.15
T.P.	0.16	83.80	12.80	83.64
			7.16	76.64
			6.46	77.34
T.P.+B.M.	6.65	80.59	9.96	73.84
			12.3±	68.3
			6.0	74.59
			6.0	74.59
T.P. on stone	3.29	76.63	7.25	73.34
			2.04	74.59
			7.5	69.13
			8.2	68.4
T.P. on Stone	3.47	76.81		73.34
			5.5	71.3
			9.07	67.74
			4.40	72.41

1 1
3.96

Spk on E. Root of Pine 50 ft N.W. of Store

℄ Rd N.W. End bridge

℄ S.E. " " Remainder of Dam

Bent Spk set top stump S.W. of N.E. end of

Spk set in stump for high water Hinckley & Fiedler

high pt on old dam

Pts. set on both banks at this Contour

Surface water at 2nd bend on Blacks to West

" " " 1st " " " to East

Cor. fence post between Danforth Black on E. bank River

Surface H2O at ¼ Danforth Black

N.W.¼ Danforth Garden 100 ft N. of ℄ Rd

+40 ft E of ℄ Creek (from So.) +25 ft

So of ℄ Riv.

Kent (Nichols farm) Fullertown

	1076.81	9.19	67.6
		0.57	76.24
		3.82	73.0
		8.82	68.0
T.P.	5.64	78.96 3.49	73.32
		9.25	69.71
B.M.		5.07	73.89
B.M.		3.09	75.87
		15.29	63.67
		16.21	62.75

12.65 2.64
.92

Danforth

Surf. H_2O Int. River + Creek at W. End

℄ Rd of Culvert at W. End Danforth

Top throat N. end Culvert (4 ft wide)

Bot. " " " "

High ground 150± E. of old Dam

Bent 5pk on Stump on Old Dam

S.E. ∠ of N.W. Bridge abutmt. (Not parapet)

Surface H_2O at N.E. side bridge

Top grillage N.W. End bridge

Frank Battles Chesterland

Grade Stakes for Sewer

Sta.	B.S	H.I	F.S	Elev	Mark
B.M	6 27	83 57 / 3 57		77 30 / 8 00 / 79 50	4
11+97					
11+48½			4 29	79 23	3
11+00			2 99	80 59	4
10+25	10 04	93 06	0 57	83 20	6
9+50			7 16	85 90	5
9+00			4 56	88 50	5
8+50			0 96	92 10	6
T.P.	12 92	104 93	1 05	92 01	16
8+00			9 23	95 70	17
7+50			6 63	98 30	17
7+00			4 03	100 9	17
6+50			1 73	103 20	18
6+00			0 43	104 5	18
T.P	7 76	111 74	0 95	103 94	
5+50			5 94	105 80	18
5+00			4 64	107 10	15
4+50			5 34	106 2	16

Con. 2 pgs over

5/22/28 & 5/23

53

on Battle Opp. Locke Alley" Stks 5' W of ℄

11+75 40' E

Spk NW root 30" Maple Stump 50' NE Culvert

M.H #7 (2 stks ~~to same grade~~ 3' apart See Next Page for

M.H

83.5

86.1

88.7

91.3

M.H 93.9

95.2

96.5

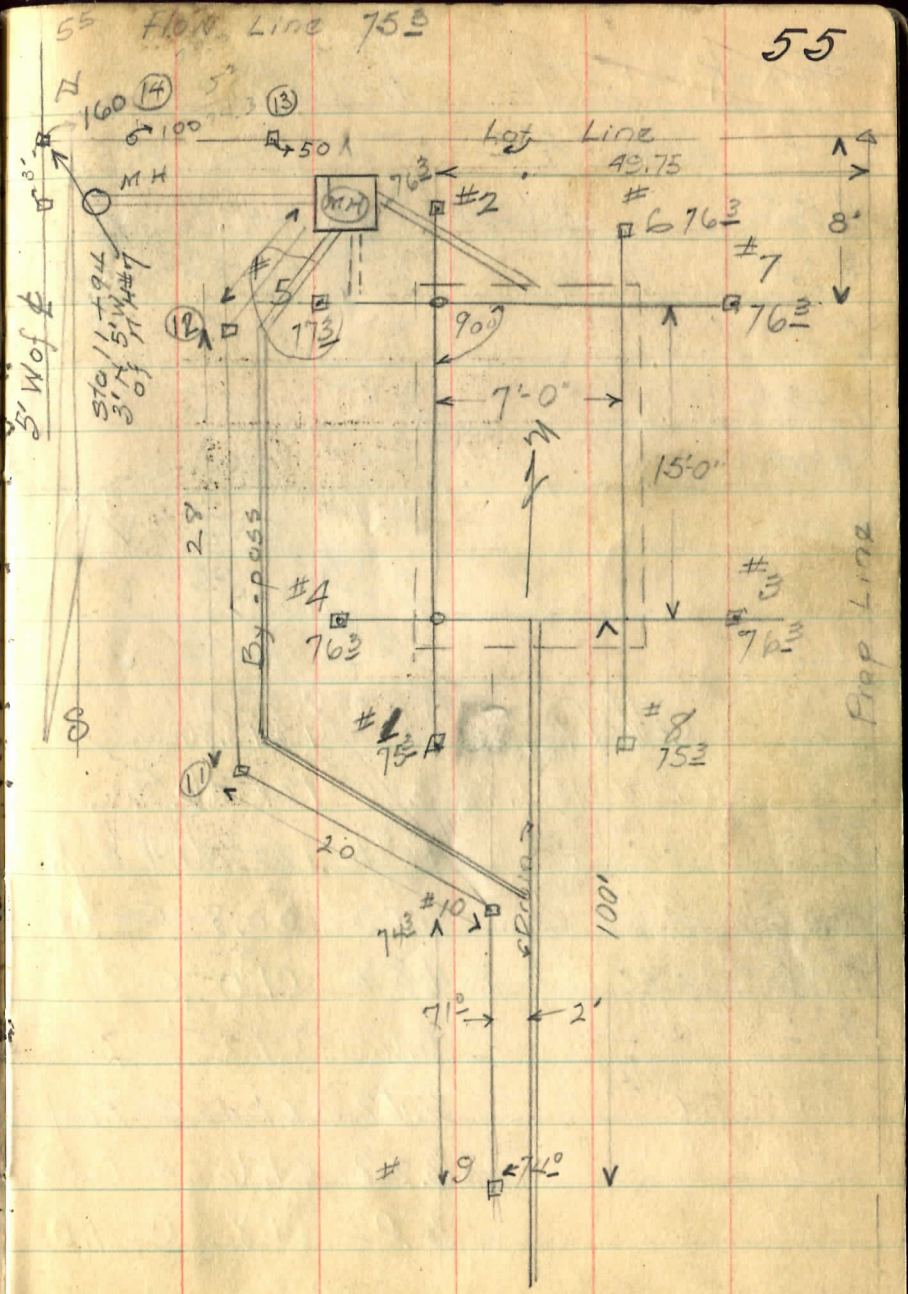
97.8

99.1

M.H 00.4

Frank Battles Chesterland

	F.S.	H.I.	B.S.	Elev.	Mark
B.M.		79.51	2.21		77.30
#1	4.21			75.30	G
#2	3.21			76.30	
#3	3.21			76.30	
#4	3.21			76.30	
#5	2.21			77.30	
#6	3.21			76.30	
#7	3.21			76.30	
#8	4.21			75.30	G
	6.5	Low ground N edge H.O. S. of tank		73.0	
#9	5.51			74.0	
#10	5.16			74.35	
#11	4.69			74.82	
#12	2.13			77.38	
#13	2.81			76.70	
	3.67			75.84	G



Frank Battles Chesterland

Sta	BS	HI	FS	Elev	Mark	Grade Flowline
4+00		1211.74	4.14	1207.6	7	00.6
3+50			2.94	1208.8	8	00.8
3+00			2.74	1209.0	8	01.0
2+50			3.54	1208.2	7	01.2
BM			1.42	1210.32		Top NW cor Stone pillar under NW cor porch house Lot 8
2+00			3.34	1208.4	7	01.4
1+50			3.14	1208.6	7	01.6
1+00			2.94	1208.8	7	01.8

-0.04 7/2/28 FR3 + 2 Pm.

		1213.82		1213.86		NE ∡ Well foundation rear Battles store		
		1213.82	3.46	1210.36	1210.32			
4+00			4.85 +8.00	1200.97	= 4" high	B.M. 0.70 1214.56	1213.86 1213.86	NE ∡ well foundation
3+50			5.02	00.8	C = 8.0	1+50	6.46 1201.6	C = 6.5
3+00			4.82	01.0	C = 8.0		5.76 01.8	C = 7.0
2+50			5.60	01.2	C = 7.0			
2+00			5.42	01.4	C = 7.00			
1+50			6.22	01.6	C = 6.00			
1+00			5.02	01.8	C = 7.0			

Auburn (C.H. #4 Sec. R) Road.

18201
9668
8533
13948
4279
9668

Spk. N. side 12" Apple — 53.01 — No Find

60+33.7
Δ = 0-00
I.P. = Top hump (between Houses)

Spk. SE. side 15" Maple — 81.74

Spk fd in old stump

chaining spk sunk at 1.56+00

53+87
3x3½ stone

Spk. S. side 8" Apple — 42.10 — 61.06

Mon. Box Set "G"

137+46.67

42+79.0
Δ = 0-16-30 Rt.
I.P. (Top hump

Spk. N.W. side 6" Apple — 68.25 — 68.75

40+91
10" Coor.

137+56 calc't

Spk Fd
no Fd. I.P.

Mon. Box Set "G"

26+66
6" V.S.P.

23+93.1
Top. hump
±300' N. of
CEI "High Line"

Δ = 0-00

16+21
3'x2½ conc

Spk. N. side 8" Maple

6+51
10" C.I.P.

Spk

IP & Spk

Spk. N. side 18" Map

44.62
49.31
36.30
41.65

0+00
℄ Chardon Road

Route 6 ℄

30.22
31.06
37.58

38.34
Spk
20.18
CLONE 6.5
31.06
+ on headwall

Spk W side CEI

106.43

℄ Mentor Road

Mon. Box Set "G"

Iron 85+42.13

2-Boxes Set 87
1-Meter
1-Nail w/ 1" Iron pin

-87

13.55 Iron

Spk. N. side CEI #551655

61.80
60.15

I.P. = S. line pymt.

Spk. S. side
CEI #551657
Anchor pole

27.02
27.90

SE cor. H at porch level

182+00.95
1" pin Fd
1/27/50

61.44
61.07

Spk. N. side Tel. pole

65 SP

8533
7454
1079

79+43
12" C.I.

13756
4091
9665

Stake ?

32.99

74+54.4
Δ = 0-00
I.P. Top hump

70+49
12" V.S.P.

58.19

66+39
2x2½ stone

Spk. E side 10" Apple

Possell Farms Bench Marks
5/28/28 G.L. Bliss & H. Clause

Sta	BS	HI	FS	EL		
BM	12.97	1095.13		1082.16		+ On SW Cor. N. Headwall. 3rd Tier From Top Culvert At Foot Manchester Hill
TP	3.76	1091.10	7.78	1087.35		
#7 BM	0.16	1084.35	6.91	1084.19		On Boulder 75 ft W of Line. 10 ft S of Fence wall
TP	0.47	1072.07 → 33	12.49	1071.86		
TP	1.48	1061.44 → 76	12.06	1059.96 → 1060.28		
#6 BM	2.37	1056.68 → 1057.00	7.13	1054.31 → 63	1055.66	Two spikes in NW Root 36" Maple. 50' N of Creek
TP	12.41	1068.44 → 76	0.65	1056.03 → 35		
TP	11.82	1078.92 → 79.24	1.34	1067.10 → 42		
TP	11.18	1088.90 → 89.22	1.20	1077.72 → 78.04		
#5 BM	12.85	1101.49 → 31	0.76	1088.14 → 46		2 Spikes in E Root 30" Elm. W of Ravine. (W. Part split off)
TP	11.38	1112.40 → 22	0.47	1101.02 → 1100.84		
TP	5.50	1117.10 → 16.92	0.80	1111.60 → 42		
#4 BM	11.78	1126.42 → 24	2.46	1114.64 → 46	✓	2 spikes in E Root 30" Maple 75' W of Line at KA 50 of Ravine
TP	11.86	1136.59 → 41	1.69	1124.73 → 55		
TP	11.92	1147.87 → 69	0.64	1135.93 → 77		
#3 BM	8.54	1156.34 → 16	0.07	1147.80 → 62		2 spikes in W Root 24" Cherry 50' E of HA
TP	10.12	1163.02 → 62.84	3.42	1152.98 → 72		
TP	11.57	1173.68 → 50	0.91	1162.11 → 61.93		

	BS	HI	FS	EL
TP	0.99	1167.~~75~~ 77	6.22	1166.~~96~~ 78
#2 BM	9.27	1176.~~75~~ 68	0.46	1167.~~44~~ 31
TP	0.12	1172.~~65~~ 47	4.23	1172.~~55~~ 35
TP	11.41	1177.85 67	6.21	1166.~~44~~ 26
TP	5.83	1181.~~78~~ 50	2.00	1176.~~80~~ 67
#1 BM			5.48	1175.~~70~~ 52
	Return			
#1 BM	5.48	1181.68		1175.~~70~~ 52
TP	0.80	1178.68	3.80	1177.~~77~~ 70
TP	10.41	1178.74	11.35	1167.~~77~~ 15
TP	1.20	1174.44	4.50	1173.24
BM #2			6.44	1167.~~80~~ 32 ✓
TP	2.71	1167.53	9.42	1164.82
TP	4.19	1171.32	0.40	1167.13
TP	1.33	1161.00	11.65	1159.67
TP	0.06	1148.71	12.35	1148.65
#3 BM			0.93	1147.~~78~~ 60 ✓
TP	0.31	1137.77	11.25	1137.46

Take 0.18 From these readings.

#2 BM
2 SPIKES IN E Root 20" Maple 50 W of DA

BM #1 ton Rock 75' N of NW corner Barn

	BS	HI	FS	EL	
TP	0.15	1125.57	12.36	1125.42	
TP	1.70	1117.96	9.32	1116.26	
#4 BM			4.28	1113.49	1114.46
TP	1.76	1111.07	8.64	1109.31	
TP	0.41	1100.22	11.26	1099.81	
#5 BM	0.56	1088.27	12.60	1087.54	1088.46
TP	0.36	1078.15	9.99	1077.79	
TP	0.43	1068.62	11.00	1068.15	
TP	0.08	1056.46	12.24	1056.38	
#6 BM			2.61	1053.67	1044.31
TP	10.86	1066.22	1.04	1055.42	
TP	12.76	1078.54	0.24	1065.78	
TP	13.03	1091.32	0.45	1078.29	
#7 BM			7.88	1083.44	1084.14
TP	6.30	1092.93	4.64	1086.63	
BM			12.44	1080.49	1092.16

LEVELS ON CREEK – RUSSELL FARMS

Bliss Root Stark

6/11/28

	B.S.	H.I.	F.S.	ELEV.	
B.M. #	5.64	1061.30		1055.66	
T.P.	9.91	1066.86	4.35	1056.95	
T.P.	3.84	1063.18	7.52	1059.34	
			5.28	1057.90	WATER SURFACE AT PROP LINE
			6.53	1056.65	CREEK BED AT PROP LINE
			2.47	1060.71	TOP BANK SOUTH SIDE CREEK
				4.06	

BLISS C.P.
STARK
RAND

MAY 29, 1928
COOL - CLOUDY

[1.17 MILES]

ROAD - RUSSELL FARMS (Russell Twp)

STATION	B.S.	H.I.	F.S.	Elev.	
B.M. #1	12.28	1189.84		1177.56	B.M. #1
T.P	2.54	1185.32	7.06	1182.78	
T.P.	0.53	1172.79	13.06	1172.26	
T.P.	2.21	1162.65	12.35	1160.44	

℄

STATION	Left (West)			Rt (East)		
0+00	-01 / 3.5 / 30		2.8	+1.0 / 1.8 / 30		℄ of E.&W. Road
0+14.	-.5 / 2.5 / 30		2.0	+0.8 / 1.2 / 30		Top Ditch Bank
1+00	+0.3 / 4.2 / 30		3.9	4.5 +0.6 / 30		
2+00	8.0 / 30		8.8	8.2 +0.6 / 30		
2+40	+0.2 / 10.8 / 30	10.1 / 15	11.0	+1.5 / 9.5 / 15	+1.8 / 9.2 / 30	
3+00	-.9 / 10.2 / 30	-0.5 / 9.8 / 15	9.3	+0.5 / 8.8 / 15	+1.2 / 8.1 / 30	
4+00	-0.9 / 8.9 / 30	-0.3 / 8.3 / 15	8.0	+0.2 / 7.8 / 12	+0.6 / 7.4 / 30	
5+00	+.1 / 6.8 / 30	-0.3 / 7.0 / 15	6.7	0 / 6.7 / 15	+0.2 / 6.5 / 30	
5+35	9.2 -1.5 / 30	8.8 -0.1 / 15	8.7	7.8 +0.9 / 15	6.8 +1.9 / 30	
6+00	-0.8 / 7.5 / 30	7.0 -0.3 / 15	6.7	6.2 +0.5 / 15	6.0 +0.1 / 30	
6+60	7.0 -2.3 / 30	5.6 -0.9 / 15	4.7	4.3 +0.4 / 15	4.5 +0.2 / 30	Top Knoll
7+00	9.0 -2.2 / 30	7.6 -0.9 / 15	6.8	+0.5 / 6.3 / 15	6.1 +0.1 / 30	
7+60	-1.0 / 3.2 / 30	-0.7 / 2.9 / 15	2.2	+0.7 / 1.8 / 15	+1.5 / 0.7 / 30	Top South Bank of Ravine
7+85	-2.2 / 10.2 / 30	-1.6 / 9.6 / 15	8.0	8.1 -0.1 / 15	8.9 -0.9 / 30	
8+00	0 / 3.2 / 30	+0.8 / 2.4 / 15	3.2	3.1 +0.1 / 15	3.1 +0.1 / 30	

℄

(CONTINUED FROM PAGES 72-73)

ROAD - RUSSELL FARMS

STA.	B.S.	H.I.	F.S.	ELEV.
T.P.	0.39	1152.62	10.42	1152.23
T.P	2.11	1143.99	10.74	1141.88
T.P.	9.53	1151.76	1.76	1142.23
T.P.	11.12	1162.55	0.33 (3.03)	1151.43
T.P.	11.07	1172.86	0.76	1161.79
T.P. "A"	15.73	1179.09	9.50	1163.36
T.P. "A" (Above)	7.96	1171.32		

Note: 8+58 and 8+90 taken with H.I. - 1143.99

Note - Error in this F.S. of 2.70 feet Correct figure is F.S. 0.33 DR Stark

Note:— No new F.S. used B.S. taken on last T.P. as shown 7.96 B.S. on this elevation

Add 7.96 to this elev. for H.I.

℄ West East

STA.				
8+25	+1.8 9.5 30	+1.9 9.4 15	11.3	-1.6 12.9 15
	-2.0 7.1 30	-0.8 6.3 15		+0.8 4.5 15
8+58	-1.2 6.5 40	-1.1 6.4 30	5.1	+0.5 4.7 15
8+90	-3.5 12.2 40	-3.4 11.7 30	5.3	-1.3 9.9 15
9+00	-0.8 5.1 30	-0.5 3.8 15	4.3	+0.7 2.1 15
9+70	-4.7 14.3 40	-2.8 12.5 30	3.3	+0.6 4.0 15
10+00	-6.5 13.5 40	-4.4 11.1 30	9.6	+1.2 5.8 15
10+60	-4.6 13.0 40	-3.1 11.5 30	7.0	+1.2 7.1 15
11+00	-4.8 13.1 40	-4.3 12.9 30	8.4	+2.7 5.9 15
12+00	-5.5 14.1 40	-4.4 12.9 30	8.6	+2.7 5.8 15
12+40	-3.7 13.7 40	-3.0 13.0 30	8.5	+1.8 8.2 15
13+00			10.0	
13+40	See 13+40 & 14+00 below			
14+00			8.6	
Repeat Station 13+40	-6.0 13.3 45	-3.7 11.0 30	9.0 -1.7 7.3	
14+00	-10.4 11.2 50	-8.1 8.4 40	-6.5 1.9 30	-3.0 3.8 15
15+00	4.4 50	3.4 40	1.9 30	

STA.				
8+25	-3.1 14.4 30	+3.0 2.1 40	Bottom of Ravine South Side	
8+58	+1.6 3.1 30	+1.8 3.1 40		
8+90	-2.2 10.6 30	-2.2 10.8 40		
9+00	0 4.3 30			
9+15	+1.4 1.9 30	+1.4 1.9 40		
9+70	+2.3 8.9 30	+2.7 6.9 50		
10+00	+3.7 3.5 35	+4.8 2.2 45		
10+60	+5.7 3.9 30	+3.3 5.1 40		
11+00	+5.3 3.3 30	+7.3 1.3 40		
12+00		+7.0 1.5 40		
12+40		+5.7 4.3 40		
13+00				
13+40	+1.6 13.5 10	+4.9 10.2 30	+6.4 8.7 40	+8.7 6.4 50	+10.5 4.6
14+00	+2.4 6.2 15	+4.5 4.1 30	+6.3 2.3 40	+7.9 0.7 50	
Repeat Station 13+40					
14+00					
15+00					

℄

 (Continued from pgs. 74 & 75)

ROAD – Russell Farms

STA.	B.S.	H.I.	F.S.	ELEV.
T.P.	10.49	1180.47	1.34	1169.98
B.M. (Set)			5.96	1174.51
T.P.	4.79	1181.68	3.58	1176.89
T.P.	5.92	1181.11	6.49	1175.19
T.P.	6.48	1181.18	6.41	1174.70
T.P.	6.97	1181.34	6.81	1174.37
B.M. #2			12.04	1169.30

MAY 31st 1928 — BLISS C.P., STARK ⊼, CLAUSE — {Cool, Clear, Windy}

B.M. #2	6.80	1176.16		1169.36
T.P.	2.62	1167.75	11.03	1165.13

660

(West) ℄ (East)

STATION					℄				
15+00	~~5.6~~ 50 −5.6; +2.2 50	5.6 40 −5.6; +1.2 40	3.0 30 −4.1; /30	8.8/15 −1.9	6.9	4.6/15 +1.7	2.3/30 +4.6	0.8/40 +6.1	

B.M. Spike N.E. Root 10" Hard Maple Stump (Sta. 15+10)

STATION					℄				
15+50	11.7/50 −6.0	8.9/30 −3.8	7.7/15 −2.6		5.1	3.0/15 +2.1	0.6/30 +4.5		
16+00	12.7/40 −5.7	10.4/30 −3.4	8.6/15 −1.8		7.0	5.0/15 +2.0	2.4/30 +4.6	1.4/40 +5.6	0.0/50 +7.0
17+00	16.7/50 −8.0	14.5/40 −5.8	13.5/30 −4.8	10.8/15 −2.1	8.7	7.2/15 +1.5	5.3/30 +3.4	3.6/40 +5.1	1.9/50 +6.3
17+50	16.0/50 −8.7	14.6/40 −7.3	12.8/30 −5.5	9.5/15 −2.2	7.3	4.9/15 +2.4	3.4/30 +3.9	2.2/40 +5.1	0.0/53 +7.3
18+00	14.2/40 −7.4	12.8/30 −6.0	9.9/15 −3.2		6.8	5.2/15 +1.6	3.5/30 +3.3	2.3/40 +4.5	
19+00	18.3/40 −8.9	15.8/30 −6.4	12.7/15 −3.3		9.4	6.4/15 +3.0	4.3/30 +5.1	3.3/40 +6.1	1.4/50 +8.0

B.M. #2 30' West Sta. 18+80. El. = 1169.36

B.M. #2 ✓ (See Above)

STATION					℄				
19+50 OK	~~7.8/50~~	~~6.5/40~~	~~5.3/30~~	~~3.7/15~~ 3.6	12.0 ~~1174.2~~ 1164.2	9.2/15 +2.8	5.3/30 +6.7	3.5/40 +8.5	1.8/50 +10.2
Repeat Sta. 19+50	11.4/50 19.8	10.1/40 15.5	8.9/30 17.3	6.8/15 15.2					
20+00	11.9/40 −4.6	11.0/30 −3.7	8.9/15 −1.6		7.3 1160.5	5.2/15 +2.1	3.4/30 +3.9	2.3/40 +5.0	1.4/50 +5.9
20+50	11.6/45 −4.1	9.6/30 −2.7	7.9/15 −1.0		6.9 1160.9	5.4/15 +1.5	4.0/30 +2.9	2.7/40 +4.2	1.1/50 +5.8

℄

(Continued from pg's 76-77)

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ROAD - Russell Farms

STA.	B.S.	H.I.	F.S.	ELEV.
T.P.	7.20	1170.05	4.90	1162.85
T.P.	8.20	1174.91	3.34	1166.71
T.P.	6.65	1176.58	4.98	1169.93
T.P.	2.98	1173.84	5.72	1170.86
T.P.	7.06	1170.79	10.11	1163.73
T.P.	5.49	1166.42	9.86	1160.93
T.P.	3.10	1162.06	7.46	1158.96
		Bottom Ravine		
T.P.	2.50	1156.66	7.90	1154.16

79

West ℄ East

STATION

21+00
-4.1 -3.1 -2.1 +2.8 +4.8 -0.1
10.7 9.7 8.7 1163.5 3.8 1.8 7.0
40 30 15 6.6 15 30 40

22+00
-6.3 -5.6 -3.9 -2.1 +2.5 +5.0 +5.6 +6.9
13.7 13.0 11.3 9.5 1167.5 4.9 2.4 1.8 0.5
50 40 30 15 7.4 15 30 40 50

23+00
-5.2 -3.8 -2.1 +1.9 +3.4 +3.9
10.2 9.4 7.7 1171.0 3.7 2.2 1.7
40 30 15 5.6 15 30 40

(Note:- STA 23+65 ℄ depression 10' wide and 1' feet deep (Old wagon road)

24+00
-5.0 -4.1 -2.9 -1.4 +1.5 +2.6 +3.7
11.3 10.4 8.2 5.7 1169.5 2.8 1.5 0.6
50 40 30 15 4.8 15 30 40

25+00
-5.6 -4.0 -2.1 +1.7 +3.8 +4.6
13.2 11.6 9.7 1163.2 5.9 3.8 3.0 1.6 +6.0
40 30 15 7.6 15 30 40 50

26+00
-4.6 -3.1 -1.3 +2.1 +3.5 +4.4
11.9 10.4 8.6 1159.1 5.2 3.8 2.9
40 30 15 7.3 15 30 40

Note- Sta 26+00 - 26+50
Outcrop of bedrock (Sandstone)

26+50
-5.5 -4.1 -3.3 -1.3 1157.3 +0.8 +1.8 +2.5 2.1 +2.7
50 40 30 15 4.8 15 30 40 50

26+80
-4.1 -4.6 -3.7 -3.9 1151.3 +2.7 +6.4 +6.5 4.0 +6.8
50 40 30 15 10.8 15 30 40 50

27+00
-5.8 -4.3 -2.0 1153.9 +1.9 6.3 5.6 +2.6 +2.5 5.4 +2.8
40 30 15 8.2 15 30 40 50

27+15
-5.5 -3.6 -1.4 +0.9 +0.9 +1.4
8.5 6.6 4.1 1153.7 2.1 2.1 1.6 1.9 +1.1
40 30 12 3.0 15 30 40 50

℄

Continued from page 78

ROAD - RUSSELL FARMS

STA.	B.S.	H.I.	F.S.	ELEV.
T.P.	3.53	1152.49	7.70	1148.96
				RAVINE
T.P.	5.24	1150.00	7.73	1144.76
B.M.#3			0.39	1149.61
B.M. #3	0.39 (Sea F.S. on B.M.#3 above)	1150.03		1149.64
T.P.	3.80	1146.42	7.41	1142.62
T.P.	1.35	1135.83	11.94	1134.48
				Small Gully West of ℄
T.P.	1.45	1127.41	9.87	1125.96

℄

STATION							
P.C. 27+26	-2.9 (8.3)	-1.5 (1.0)	-0.1 (5.5)	1151.3	+0.9 (4.5)	+1.9 (3.5)	+2.7 (2.7)
27+50	-1.7 (10.1)	-1.7 (10.8)	-1.7 (10.2)	-0.5 (5.1)	+2.4 (9.1)	+5.3 (3.8)	+6.8 (2.3)
27+62	-6.2 (14.0)	-6.8 (14.8)	-0.9 (8.7)	1148.9	+2.8 (7.8)	+3.4 (4.4)	+4.7 (3.1) +6.5 (1.3)
28+00	-10.4 (18.2)	-6.9 (14.7)	-4.5 (12.3)	-1.6 (9.4)	1144.7 +2.1 (7.8)	+4.3 (5.7)	+4.6 (3.2) +6.2 (1.6)
28+20	-7.3 (11.8)	-5.3 (13.8)	-2.9 (12.5)	1142.0	+1.8 (10.5)	+4.1 (6.9)	+4.5 (6.4)
28+35	-4.1 (6.6)	-3.9 (7.9)	+1.5 (6.4)	1147.6	+0.5 (4.9)	+1.1 (3.8)	+1.8 (3.2)
BM#3 - West Side 24" Cherry - 50' E. of P.I. of curve	B.M. El. = 1149.64						
29+00	-6.9 (11.6)	-4.9 (10.5)	-3.6 (9.2)	-0.7 (4.3)	1144.4 +1.9 (5.6)	+3.0 (4.0)	+2.1 (2.1) +3.5 (2.1)
P.T. 29+71.8	-3.3 (8.3)	-1.8 (6.8)	1141.4	+1.5 (3.5)		+3.7 (1.8)	
30+00	-3.8 (4.9)	-2.8 (8.2)	-1.6 (7.7)	1140.3	+1.9 (4.2)	+3.1 (3.0)	+4.0 (1.5)
31+00	-2.1 (10.8)	-1.3 (10.1)	1137.7	+1.1 (7.6)		+2.9 (6.3)	
32+00	-0.6 (4.4)	-0.1 (3.9)	1132.0	0 (3.8)		+0.2 (3.6)	
33+00	-0.9 (11.5)	+0.1 (11.2)	-0.6	1125.2	+0.1 (10.6)	+1.9 (8.7)	+2.1 (7.9)
33+35	-2.5 (14.7)	-2.1 (14.7)	1123.6	+0.9 (11.3)		+0.3 (10.3)	
33+65	-5.5 (10.3)	-2.3 (7.1)	-1.0 (5.8)	1122.6	+1.0 (4.8)	+1.8 (3.0)	+2.6 (2.8)

℄

Cont. from pgs. 80-81

ROAD – Russell Farms

STA.	B.S.	H.I.	F.S.	ELEV.
B.M.#4			11.94	1115.47
JUNE 2-1928 –			BLISS C.P. STARK ⊼ CLAUSE [Cool-Cloudy-Rain]	
B.M.#4	2.25	1117.73		1115.48
T.P.	1.16	1111.86	7.03	1110.70
		17. 1094.9		
Temporary B.M. "4A"			10.21	1101.65

Note! 1127.41

℄

STATION	West			℄	East	
34+00	7.0/30	6.1/15	1121.8 5.6	4.6/15	3.8/30	
34+00	−1 4/30	−0 5/15		+1 0/15	+1 8/30	
35+00	8.1/30 −1 7	7.9/15 −1 0	1120.5 6.9	5.5/15 +1 4	5.0/30 +1 9	
36+00	10.8/30 −1 1	10.2/15 −0 5	1117.7 9.7	9.5/15 +0 2	9.4/30 +0 3	

BM. El. = 1115.48

(B.M.#4) 75' W. Sta. 36+50 E. Root 24" Maple

JUNE 2-1928 – NORTHERLY FROM STA. 36+52.50

B.M. EL. = 1115.48

B.M.#4 – See Above

STATION					℄				
37+00	4.1/50 +0 4	3.1/40 +0 8	4/30 +0 5	4.1/15 +0 4	1113.2 4.5	4.6/15 −0 1	4.4/30 +0.1	5.0/40 −0 5	4.4/50 +0 1
37+50	5.7/50 +0.4	6.5/40 −0.4	6.3/30 +0.1	6.2/15 −0.1	1111.6 6.1	6.3/15 −0.2	6.4/30 −0.3	6.6/40 −0.5	6.3/50 −0.2
	+0 4	−0 4	+0 1	−0 1		−0 2	−0 3	−0 5	−0 2
38+00	2.5/40 +0 6	2.5/30 +0 6	2.3/15 +0 8		1108.8 3.1	2.6/15 +0 5	2.5/30 +0 6	2.9/40 +0 2	2.7/50 +0 4	3.1/75 0
38+20	4.2/50 −1 4	4/40 +1 2	3./30 −0 6	2.7/15 −0	1109.1 2.8	4./15 −1 4	5.5/30 −2 7	5.2/40 −2 4	10.2/50 −7 4	5.9/60 −3 1	−3 9/75
38+40	4/50 +1 1	4./40 +1 4	30 +1 2	5.2/15 +0 6	1106.1 5.8	11./10 −5 5	14.2/20 −8 4	15.2/30 −9 4	15.9/40 −10 1	17.2/50 −11 4
								12.5/60 −6 7	13.5/70 −7 7
38+50	5.0/50 +5 6	4.9/40 +5 7	5.4/30 +5 2	8.1/15 +2 6	1101.3 10.6				
38+60	5.2/45 +11 2	6./38 +10 8	8.2/30 +8 8	11.3/20 +5 7	13.7/10 +3 3	1094.9 17.0			
38+70	8.0/65 +15.4	7.6/55 +15.8	8.0/45 +15.4	13.3/35 +10.1	15.7/20 +7 5	19.5/10 +4 1	1088.5 23.4		
38+90	9.0/65	10.2/50							

℄

Cont. From pg's 82.83

ROAD - Russell Farms

STA.	B.S.	H.I.	F.S.	ELEV.
T.P.	2.24	1101.29	12.81	1099.05
		C.S. 69+18		
T.P.	8.60	1105.02	4.87	1096.42
T.P.	7.45	1104.91	7.56	1097.46
39+80 ℄ Gully running west				
Check on Temporary B.M. "4A" See pg. 82 For first shot on this bench Use elevation obtained by			3.27	1101.64

El. = 1101.65
F.S. 10.21 (on pg. 82)

STATION	West	East
39+00	10.6 / 65	11.5 / 50
Repeat 38+50		
38+60		
38+70		
38+90		
39+00		
39+20		
39+35		
39+45		
+60		
+80		
+95		

SILVERCREEK ROAD - (Russell Farms)

STA.	B.S.	H.I.	F.S.	ELEV.
TEMP. BENCH "4-A" See pg. 82 for elevation	3.69	1105.34		1101.65
T.P.	0.73	1094.64	11.43	1093.91
T.P. "Z"			2.12	1092.52

BLISS ROOT STARK — JUNE 7th 1928 -

T.P. "Z"	8.78	1101.30		1092.52

JUNE 8, '28

T.P. "Z"	6.69	1099.21		1092.52

West ℄ East

STATION

40+05
-7.0 -5.4 -3.3 -2.3 -1.5 +0.6 +1.8 +1.8 +2.7
10.6 9.0 6.9 5.9 5.1 3.0 1.8 1.8 0.9
1101.7
60 50 40 30 15 3.6 15 30 40 50

40+50
-2.2 -1.6 -0.6 +0.5 +0.7 +0.6 +0.4 +0.1
7.7 7.1 6.1 1099.8 5.0 4.8 4.9 5.1 5.6
-1.2
50 40 30 15 5.5 15 30 40 50 60

41+00
-1.0 -0.8 -0.5 0 0 -0.2 -0.6 -0.3 -0.2
11.3 11.1 10.8 10.3 10.3 1095.0 10.5 10.6 10.5
60 50 40 28 12 10.3 15 30 40 55

41+50
-10.4 -7.1 -2.4 -1.3 -1.0 +0.9 +1.9 +2.2 +2.7
15.2 11.9 7.2 6.1 5.8 1089.8 3.9 2.9 2.6 2.1
65 50 43 30 15 4.8 15 30 40 50

41+65
-14.4 -9.3 -5.3 -2.0 +1.4 +2.5 +3.1 +3.8
21.1 14.9 10.9 1089.0 4.2 3.1 2.5 1.8
50 40 30 17 5.6 15 30 40 50

41+80
-11.9 -5.8 -2.5 -0.8 +1.2 +1.6 +2.2 +3.1 +3.9
16.1 10.0 6.7 5.0 1089.4 3.0 2.6 2.0 1.1 0.3
46 35 28 15 4.2 7 20 30 40 50

T.P. On Hardhead 6 feet E. Sta. 42+00

42+00
1091.1 +1.3 +2.0 +2.8 +2.9
8.9 8.2 7.4 7.3
10.2 15 30 40 50

42+5
1089.4 +2.3 +3.9 +4.7 +5.2 +5.8
9.6 8.0 7.2 6.9 6.1
11.9 5 15 30 40 50

+30
1087.1 +4.8 +6.9 +8.5 +8.9
8.6 6.7 5.1 4.7
13.6 10 20 40 50

42+50
1086.5 +2.7 +8.5 +10.7 +11.3 +12.0
10.0 4.2 2.0 1.4 0.7
12.7 5 25 40 50 60

℄

SILVERCREEK ROAD - (Russell Farms)

STA.	B.S.	H.I.	F.S.	ELEV.
T.P. "Z"	0.31	1092.83		1092.52
T.P.	2.48	1090.47	4.84	1087.99
T.P.	2.35	1080.30	12.52	1077.95

West ℄ East

STATION	West (cut/fill, rod/dist.)	℄ rod	Elev.	East (cut/fill, rod/dist.)	
42+65		11.9	1087.3	+6.5 5.4/25; +6.9 5.0/40; +7.4 4.5/50	✓
42+85		10.6	1088.6	+1.1 9.5/10; +1.0 9.6/20; +1.4 9.2/30; +2.3 8.3/40; +2.2 8.4/50	✓
42+00	−25.2 27.0/55; −15.5 17.3/40; −13.5 15.3/30	1.8	1091.0		✓
+15	−22.5 26.0/55; −20.0 23.5/47; −16.4 19.9/30	3.5	1089.3		✓
+30	−20.0 25.1/50; −17.0 22.1/30	5.1	1087.7		✓
+50	−18.9 25.2/50; −17.1 23.4/30	6.3	1086.5		✓
+65	−18.0 23.5/50; −17.7 23.2/40; −16.1 21.6/30	5.5	1087.3		✓
+85	−13.2 17.5/55; −10.9 15.2/45; −10.5 14.8/33	4.3	1088.5		✓
43+00	−9.5 12.6/60; −4.1 7.2/40; −2.0 5.1/30; +0.3 2.8/18	3.1	1087.4	−0.5 3.6/18; +0.7 2.4/30; +0.6 2.5/40; +0.4 2.7/50	✓
43+10	−9.2 12.7/60; −6.0 9.5/50; −3.4 6.9/40; −0.9 4.4/30; +0.5 3.0/20	3.5	1087.0	~~+1.0~~ −1.0 4.5/15; −0.5 4.0/30; −0.6 4.1/40; −0.8 4.3/50	✓
43+25	−1.4 8.7/50; +0.7 6.6/40; +0.2 7.1/30; +0.1 7.2/15	7.3	1083.2	~~+1.0~~ 8.3/15; −1.0 [illegible]/30; −0.9 8.1?/40; −1.4 8.7/50; −2.5 9.8/60	Edge of Bank ✓
43+45	+1.0 10.9/50; +0.8 11.1/40; +0.8 11.1/27; 0 11.9/15	11.9	1078.6	−2.2 14.1/15; −2.3 14.2/30; −2.7 14.6/40; −4.4 16.3/50	✓
43+55	+5.7 1.0/50; +5.4 1.3/40; +3.5 3.2/20; +1.4 5.3/10	6.7	1073.6	−1.2 7.9/15; −1.1 7.8/30; −2.8 9.5/40; −4.1 10.8/50	Edge of Bank ✓
43+68	+8.7 4.1/60; +8.5 4.3/40; +6.7 6.1/30; +1.3 11.5/15	12.8	1067.5	+0.8 12.0/15; +1.1 11.7/30; −0.4 13.2/40; −4.1 16.9/50	✓
43+85	+8.2 6.8/65; +7.2 7.8/53; +1.9 13.1/30; −0.7 15.7/15	15.0	1065.3	−1.5 16.5/15; −2.2 17.2/30; −1.9 16.9/40	✓

SILVERCREEK ROAD - (Russell Farms)

STA.	B.S.	H.I.	F.S.	ELEV.
	1.86	1069.81	12.35	1067.95
T.P.	0.47	1059.70	10.58	1059.23
T.P.	4.22	1058.96	4.96	1054.74
B.M. #6			3.34	1055.62
B.M. #6	3.34	1059.00		1055.66 →
T.P.	10.23	1066.36	2.87	1056.13

West ℄ East

STATION

44+00: +5.2 4.2/60, +2.9 6.5/40, +2.6 6.8/30, +0.8 8.6/15, 1060.4 9.4, −0.4 9.8/15, −0.9 10.3/30, 0 9.4/40, −0.8 10.2/50 SWAMP ✓

44+50: E. bank Stream +1.3 4.9/55, +3.5 2.7/40, +1.1 5.1/30, +0.6 5.6/20, 1053.5 6.2, +0.7 5.5/15, +1.0 5.2/30, +0.9 5.3/40, +2.7 3.5/50, +1.7 4.5/60 ✓

44+70: S. Bank Creek −0.8 7.4/39, 1053.1 6.6

44+80: 1053.5 Bank. 6' S. H_2O 6.2 — El. = 1051.65 {Water Surface at ℄ Road} (8.05 Surface H_2O)

44+90: 1049.4 10.3 — {Creek-bed In ℄ Creek}

B.M. #6 — 2 Spks NW Root 36" Maple 50' N. of Creek

B.M. EL. = 1055.66

45+10: −0.8 5.5/60, −0.4 5.1/50, −0.7 5.4/30, −0.1 4.8/15, 1054.3 4.7, +0.5 4.2/15, +0.9 3.8/30, +1.2 3.5/40, +1.1 3.6/60 ✓

+85: +1.0 4.7/50, +0.7 5.0/40, +0.4 5.3/20, 1053.3 5.7, +0.3 5.4/25, +1.8 3.9/40, +2.7 3.0/50 ✓

46+50: +1.7 11.1/50, +1.6 11.2/40, +0.8 12.0/30, +0.4 12.4/15, 1053.6 12.8, +0.5 12.3/15, +2.2 10.6/30, +2.7 10.1/40, +2.8 10.0/50 ✓

+65: −1.8 11.5/60, −1.8 11.5/50, −1.4 11.1/40, −1.2 10.9/33, −0.7 10.4/15, 1056.7 9.7, −0.3 10.0/15, +0.5 9.2/30, +1.0 8.7/40, +1.6 8.1/50, +0.7 9.0/60 ✓

+90: −3.7 6.2/50, −2.6 5.1/40, −2.0 4.5/30, −0.5 3.0/15, 1063.9 2.5, +1.1 1.4/15, +1.1 1.4/35, +0.7 1.8/45 ✓

92 Bliss Root Stark — June 11, 1928 (continued)

Silvercreek Road

STA.	B.S.	H.I.	F.S	ELEV.
B.M. #6	11.59	1067.25		1055.66
T.P.	10.81	1072.95	5.11	1062.14
T.P.	12.20	1083.45	1.70	1071.25
T.P.	7.89	1088.59	2.75	1080.70
B.M. #7			3.36	1085.23

B.M. #7

93

℄

West East

STA.

B.M. #6 El. = 1055.66

47+00 — 1064.8

47+40 — 1065.9

47+95 — 1060.8

48+50 — 1062.5

49+00 — 1062.6

49+40 — 1065.3

50+00 — 1073.6

50+50 — 1077.3

51+00 — 1079.0

51+50 — 1077.8

52+00 — 1073.9

B.M. #7 El. = 1085.22

52+30 — 1071.2

52+60 — 1075.3

℄ Swale To East Of Road ℄

℄

 (continued)

SILVERCREEK ROAD

STA.	B.S.	H.I.	F.S.	ELEV.
T.P.	12.69	1089.26	12.01	1076.57
T.P.	11.95	1093.49	7.72	1081.54

℄

West | East

STA.	West 60	West 40	West 20	℄	East 20	East 40	East 60	
53+00	+6.3 2.0/60	+4.9 3.4/41	+3.0 5.3/20	1080.3 8.3	-1.4 9.7/20	-2.0 10.3/40	-2.3 10.6/60	✓
53+40	-4.2 [illegible]/60	+3.4 3.1/40	+2.2 4.3/20	1082.1 6.5	~~+1.9~~ -1.9 [illegible]/20	~~+2.8~~ -2.8 9.[illegible]/40	~~+3.0~~ -3.0 9.5/60	✓
54+00	+3.5 6.3/60	+2.6 7.2/40	+1.2 8.6/20	1078.8 9.8	-0.4 10.2/20	-0.7 10.5/40	-0.7 10.5/60	✓
54+40	+2.3 8.4/60	+1.6 9.1/40	+0.3 10.4/20	1077.9 10.7	-1.8 12.5/20	+3.2 [illegible]/38	-5.0 15.7/50	✓
54+65				1076.6 12.0	-3.1 15.1/20	-5.4 17.[illegible]/40 ← Bottom Gully		
55+00	+0.2 15.7/60	+0.1 15.8/40	+0.5 15.4/20	1073.4 15.9	+1.1 17.0/18	+0.2 15.7/32	+1.1 14.8/50	✓
55+20 SWALE			+0.3 15.7/20	1073.3 16.0	+0.6 15.4/20	+2.4 13.6/40	+2.9 13.1/60	✓
56+00	~~+1.4~~ -1.4 10.6/60	~~+0.6~~ -0.6 9.[illegible]/40	~~+0.6~~ -0.6 9.8/20	1080.1 9.2	+0.9 8.3/20	+1.2 8.0/40	+1.3 7.9/60	✓
56+60	-1.0 3.3/60	-0.1 2.[illegible]/40	-0.3 2.6/20	1087.0 2.3	-0.6 2.9/20	-1.5 3.8/40	-3.0 5.3/60	✓
57+00	+1.7 1.0/60	+2.4 0.3/30	+1.5 1.2/20	1086.6 2.7	-2.1 4.8/20	-3.6 [illegible]/40	-4.3 7.0/60	✓
57+60	+3.8 6.1/60	+3.1 6.8/40	+1.7 8.1/20	1083.6 9.9	-0.9 10.8/20	-2.0 11.9/40	-2.3 12.2/60	✓
58+00	+2.3 7.2/60	+2.0 7.5/40	+0.8 8.1/20	1084.0 9.5	-0.6 10.1/20	-1.5 11.0/50	-0.6 10.1/52 ← Edge Bank	✓
58+70	+2.8 4.3/60	+1.9 [illegible]/40	+0.3 [illegible]/20	1086.4 7.1				✓
59+00	+11.4 [illegible]/60	+9.3 5.0/35	+8.3 6.0/14	1079.2 14.3				✓
+38	+6.6 2.8/60	+4.8 4.6/40	+4.0 5.4/20	1084.1 9.4				✓
+50	+10.0 [illegible]/55	+8.3 [illegible]/40	+5.6 8.7/20	1079.2 14.3				✓

℄

STA.	B.S	H.I.	F.S.	ELEV.
	6.06	1094.02	5.53	1087.96
South Edge Pavement			11.84	1082.18
B.M.	5.15	1087.31		1082.16

℄

West East

Sta.	West			℄	East			
59+60	+5.3 3.3/55	+3.8 4.8/40	+1.8 6.8/20	1085.4 8.6				✓
59+80	+5.6 3.1/60	+4.0 4.9/40	+2.4 6.3/20	1085.3 8.7				✓
60+00	+8.8 2.8/60	+6.9 4.7/30	+5.3 6.3/11.	1082.4 11.6				✓
+35	11.3 1.8/60	+8.8 4.3/30	+6.9 6.2/13	1080.9 13.1				✓
+60	+7.1 1.1/60	+5.5 2.7/40	+3.5 4.7/20	1085.8 8.2				✓
61+00	+5.7 0.5/52	+4.4 1.8/40	+2.3 3.9/20	1087.8 6.2	−2.4 8.6/20	−4.5 10.7/40 ← Top Bank	−9.0 15.2/60	✓
61+50		+3.2 /40	+1.9 1.8/20	1090.3 3.7	−2.1 5.8/20	−4.4 /40	−6.7 10/60	✓
61+60			+1.2 0.9/20	1091.9 2.1	−1.7 3.8/20			✓

B.M. on culvert on pavement El. 1082.16

Sta.	℄	East			
Repeat <58+70	1086.4 0.9	−17.4 18.3/30	−17.9 18.8/40		✓
59+00	1079.1 8.2	−9.9 18.1/20	−10.6 18.1/30		✓
59+38	1083.5 3.8	−10.0 13.8/20	−13.2 17.0/30		✓
59+50 Not taken					✗
59+60	1083.9 3.4	−2.9 6.3/14	−14.6 18.0/40	−15.1 18.5/60	✓
59+80	~~1086.5~~ 1085.5 1.8	−16.7 /25	17.8 −16.0 /50		✓
60+00	1083.0 4.3	−13.0 17.3/25	17 −13.3 −13.3 /40	17 −13.4 /60	✓
60+35	1081.1 6.2	−10.0 16.2/21	−11.2 17.4/40	17.2 −11.0 /60	✓
60+60	1086.4 0.9	−14.3 15.2/22	17.2 −16.4 /40 −16.4	16.8 −15.9 /60	✓

℄

98 Elevations – Russell Farms

	B.S.	H.I.	F.S.	Elev
B.M.	5.15	1087.31		1082.16
			13.8	1073.5
			19.4	1067.9
			14.8	1072.5
			3.33	1084.0

C.W. Courtney's B.M. = 459.91
U.S.G.S. Elev some B.M. = 1085.34
Diff in Datum 625.43

El. = 1082.16
B.M. on Culvert – N-Side Road
Top Box – Culvert at foot of hill
" Bottom " – " " " " "
W. Bank Creek 15' South Culvert
Center of pavement at Culvert

Russell Farms 7/2/28 F.R.B. C. Foms

	B.S.	H.I.	F.S.	Elev	
B.M. #6	9.27	1064.93		1055.66	
Ground			10.1	54.8	Toe bank 300± W. of Rd ℄ + 200 S. of fence
T.P.	3.60	63.25	5.28	59.65	
B.M.			4.90	58.35	High pt on flat white granite boulder (12 ft E. of N. end dam) 200± E. of W. prop. line + 100± N. of creek (near small sycamore trees)
along ℄ Dam	0.59	58.94		58.35	
0+00			1.2	57.7	0+00 = N. end
0-50			+3.0±	61.9	
0+40			10.5	48.4	
1+00			12.9	46.0	
1+55			12.4	46.5	N. bank creek
			14.0	44.9	surface H_2O
			14.3	44.6	bottom creek
1+85			10.6	48.3	S. bank creek
2+00			11.6	47.3	
3+00			11.4	47.5	
3+65			9.6	49.3	
4+00			4.1	54.8	
4+12			0.8	58.1	
4+60			+5±	64	
			13.1	45.8	Creek bank at W. prop line
			15.6	43.3	surface H_2O at W. prop line

(50± trees to grub + lots of brush.)

Levels for John Hinckley & Harry Fisher along Silver Creek
102
on old Fisher farm in Russell Twp 3/30/'29

	BS	HI	FS.	
B.M. #1	6.10	106.10		Assumed 100.0
			9.6	96.5
			8.12	97.98
			2.7	103.4
			5.1	101.0
			5.0	101.1
T.P.	2.91	104.16	4.85	101.25
			4.18	99.98
			1.10	103.06
			0.91	103.25
			1.36?	102.80
B.M. #2			2.17	101.99
B M #1	6.49	106.49	100.00	
			6.51	99.98

99.98

103

Sp. W. side 15" Willow 16ft W. of E. prop line, fence 200ft N of Channel.
Bot. Channel at E prop line fence
Top H2O " " " " "
Top bank & natural ground South side creek at E. prop line fence
Ground 150ft North main Channel at E. prop line
" 50" " " " " " " " "

Several stakes set around edge proposed lake
North End high part old dam embankment
Middle " " " "
South End " " " "
Spike N. side E. root 36 Elm E. toe steep bank 800± from Rd.

Auburn center — Chardon center

Sta	BS	HI	FS	Elev.
BM	4.84	1253.63 ~~1272.715~~		1263.74 ~~1262.825~~
TP	8.83	1281.57 1272.63	0.935	1272.63 ~~1271.780~~
0.0			6.25	1275.23 ~~1274.38~~
			5.44	1276.99 ~~1276.09~~
2 TP	6.80	1285.41 ~~1284.52~~	2.91	1278.61 1277.72
3			3.9	1281.5
6			4.9	80.5
TP	6.63	1286.65 ~~1285.76~~	5.24	1281.12 1279.23
11				
TP	2.05	1282.43 ~~1281.54~~	6.27	1280.38 ~~1279.49~~
16+21				
TP	4.67	1283.55 ~~1282.86~~	2.35	1280.08 ~~1279.19~~
21			6.8	1282.95
TP+ BM	11.20	1295.42 ~~1294.53~~	5.63	1284.22 ~~1283.33~~
TP	8.58	1301.73 ~~1300.89~~	2.23	1293.15 ~~1292.30~~
22			11.00	1290.77
TP	10.60	1311.31 ~~1310.42~~	1.06	1300.71 ~~1299.82~~
23			10.2	1301.1

Road May 5 1924

W ℄ E

On 36" Sycamore Tree West of Huff House

℄ EL. 1275.13 from Plan

6.25 N. Edge Pavement

On N.W corner Conc Hdwall

2.91

3.95

4.96

3.26

5.16 Top culvert Barrel

6.8 / 30	6.6 / 15	7.80 / 10	6.80	7.4 / 10	6.60 / 15	5.80 / 30

Close to ℄ steel Leg

On Conc Base To ~~NE~~ N Leg CEI Tower No 20119

6.80 / 30	7.10 / 15	12.3 / 10	11.00	11.90 / 9	7.15 / 15	6.80 / 30
9.30 / 30	5.40 / 15	11.50 / 12	10.20	11.80 / 10	7.30 / 15	9.80 / 30

	BS	HI	FS	EL
24		1311.31	6.0	1305.3
25			8.60	1302.7
TP	1.05	1306.81 ~~1305.42~~	5.56	1305.76 ~~1304.85~~
26			7.80	1299.0
28			7.0	1299.8
30			4.10	1302.7
TP	6.51	1310.58 ~~1309.64~~	2.74	1304.07 ~~1303.18~~
36			3.0	1307.6
TP	3.06	1308.44 ~~1307.60~~	5.14	1305.44 ~~1304.55~~
40			6.0	1302.5
42+74			4.2	1304.3
44			11.10	1297.4
TP	1.14	1298.14 ~~1297.25~~	11.49	1297.00 ~~1296.11~~
TP BM	3.03	1291.53 ~~1290.64~~	9.64	1288.50 ~~1287.61~~
48			6.2	1285.3
TP	0.58	1282.42 ~~1281.53~~	9.14	1281.84 ~~1280.95~~
50			7.0	1275.4
TP	2.00	1275.49 ~~1274.60~~	8.93	1273.49 ~~1272.60~~
51			8.7	1266.8

W			℄	E			
5.20/30	5.20/12	7.00/10	6.00	7.00/11	4.50/15	4.20/30	
7.80/30	7.20/15	9.80/12	8.60	4.80/9	6.50/16	5.81/30	
	8.20/20		7.80	8.40/20			
5.80/20	6.2/14	8.60/8.0	7.00	8.0/4.0	5.40/20		
			4.10				
			3.0				
Top of Large stone 20 ft Rt 38+80							
			6.0				
		4.40/20	4.20	2.40/20 Extreme top of Hill			
		10.70/20	11.10	10.10/20			
On Large stone 5' So. of ? Fence Post 25' Left of 47+00							
5.40/30	6.30/10	9.0/7	6.20	7.60/11	4.60/17	3.60/30	
3.70/30	3.30/11	8.40/6	7.00	6.70/10	8.80/15	4.3/19	2.60/30
3.30/30	3.40/12	4.30/6	8.70	8.40/13	10.30/15	3.80/22	3.60/30

	BS	HI	FS	EL
		1265.28		1264.86
TP	0.34	1264.31	10.63	1263.97
52			9.0	1256.2
52+50			11.9	1253.3
TP		1260.67		1255.46
	5.21	1259.73	9.34	1254.67
54			10.5	1250.2
54+65			8.9	1251.8
		1270.33		1268.20
TP+BM	11.63	1269.44	1.93	1257.81
56			8.7	1261.6
		1278.50		1268.49
TP	10.21	1272.91	1.84	1267.60
58			6.5	1272.2
59			3.9	1274.8
60+33.2			1.9	1276.8
		1272.06		1271.34
TP	0.75	1271.12	2.39	1270.42
62			2.8	1269.3
64			11.9	1260.2
		1263.28		1262.08
TP	1.19	1262.36	9.93	1261.20
65			11.10	1252.2
		1258.56		1250.34
TP	8.22	1253.62	12.94	1249.76
66			10.7	1247.9

3.70	5.40	9.5	—	9.00	9.80	4.60	5.20	
30	14	6.0	9.00	11	14	21	30	
11.3	10.5	12.3		12.10	11.20	9.90		
30	15	50	11.90	10	20	30		
			10.80					
7.10	5.60	9.80		10.00	9.10	4.30		Now stump 11/11/50
30	23	10	8.40	10	15	25		
Centerline								½ up N hill
Spike in N Root 15" Cherry 25ft W of STA 55+00								
8.30	7.60	10.40		10.6	6.40	4.50		
30	13	5	8.70	12	20	30		
7.60	6.20	8.00		7.20	4.60	2.80		
30	12	9	6.60	13	16	30		
6.00	4.10	5.0	3.90	4.40	2.20	1.30		
30	10	8.0		11	20	30		
			1.40					
3.60	3.10	4.20		4.40	1.00	0.40		
30	10	8	2.80	12	18	30		
10.0	10.4	13.5		14.2	10.8	10.0		
30	10	5	11.9	14	15	30		
8.60	10.10	12.6		13.10	9.10	6.80		
30	10	6	11.10	11	15	30		
13.6	11.9	12.6		11.60	11.00	12.60		
30	10	8	10.70	12	14	30		

	BS	HI	FS	EL
TP&BM	7.16	1258.56 ~~1257.67~~	7.16	1251.41 ~~1250.52~~
67+60			8.1	1250.5
68+00			4.0	1254.6
TP	12.28	1268.78 ~~1267.89~~	2.06	1256.50 ~~1255.61~~
69			4.9	1263.9
TP	9.78	1275.88 ~~1274.99~~	2.68	1266.10 ~~1266.21~~
69+60			8.0	1267.9
70			7.6	1268.3
TP	9.98	1282.60 ~~1281.71~~	3.26	1272.62 ~~1271.73~~
71			11.9	1270.7
72			5.3	1277.3
TP	10.17	1290.78 ~~1289.89~~	1.99	1280.61 ~~1279.72~~
73			6.5	1284.3
TP&BM	7.11	1290.78 ~~1289.89~~	7.11	1283.67 ~~1282.78~~
75			5.9	1284.9
TP	0.84	1284.36 ~~1283.47~~	7.31	1283.47 ~~1282.58~~
77			3.2	1281.2
78			3.9	1280.5

℄

in Creek 16.80 — on W Headwall 11.2 — in Creek 16.20

40 ft to E of sta 66+80

On Blue Stone with Red Knobs. On Top Knob

11.70/30 8.30/9 9.30/7 8.10 9.05/15 2.80/30

2.30/30 1.10/10 5.2/5 4.0 4.90/18 0.10/30

2.50/30 2.0/10 5.70/4 4.90 5.20/12 2.20/22 1.20/30

4.0/30 6.50/12 8.80/7 8.00 8.80/15 3.70/30

Hole 8.80/10 7.60 8.80/18 5.10/25 3.80/30

5.80/30 7.40/15 13.50/7 11.90 13.4/18 12.90/~~20~~ 30 10.70/30

0.90/30 2.20/15 6.2/10 5.30 5.4/12 2.6/15 2.10/30

5.20/30 5.40/11 7.2/40 6.60 7.90/13 5.30/18 4.40/30

On Red Boulder 100 ft W of Sta 73+00

5.90

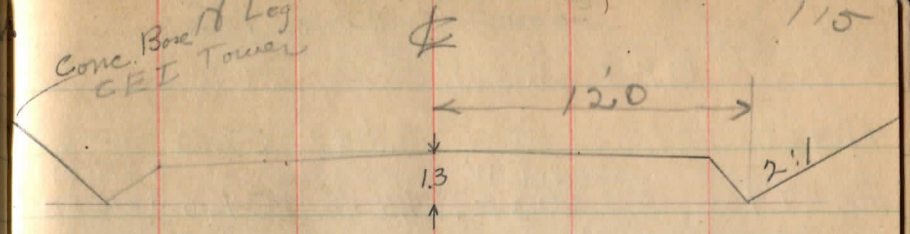
3.20

3.90

STA	BS	HI	FS	EL		℄	
		1284.36					
83			1.5	1282.9		1.50	
TP		1288.79		1283.37			
	6.42	1287.90	0.99	~~1292.48~~			
			3.22	1285.57		3.22	So Edge Pavement
				1284.35			
BM			4.44	~~1293.46~~	1284.37		2 nails in NE Root 40" Elm Stump 100' So of King Hgway — Gone
BM				1270.13			Nail S root 48" Chestnut ± 2000' NWly on N side King Memorial just north of CEI pole # 551671

5/22/29 Chardon-Auburn Center Rd
FRZ & C.L. Bliss

B.M.	9.79	1294.01		1284.22	
22+00			2.8 ℄	91.2	
T.P.	11.04	1304.65	040	1293.61	
22+00			13.4 ℄	91.2	
			9.6 E		S = 22.0
22+00		TP	9.9 W		S = 22.0
		1.2 W			S = 20.0
23+00		1.1 E	3.3 ℄	01.3	S = 20.0
T.P.	5.80	1309.0	1.45	1303.20	
23+50			4.8 ℄	04.2	
		2.4 E			S = 20.0 E
24+00		2.7 W	3.6 ℄	05.4	S = 20.0 W
		4.1 E			S = 18.0 E
25+00		5.3 W	6.0 ℄	03.0	S = 16.0 W
T.P.	5.62	07.25	7.37	01.63	
28+00			7.2 ℄	00.0	
29+00			4.1 ℄	03.1	
30+00			4.8 ℄	02.4	
B.M.			4.59	1302.66	



Note: Slope stakes set back 3'-00" from top of slope to be and Rdgs in last col.

cut ℄ 0.0

cut ℄ 0.5

cut 2.2 West side

East side

4.0/25 3.6/15 6.5/12.5 5.5/9 4.8 ✓ 5.3/7 6.2/9.5 3.1/14 2.6/25

cut ℄ 2.0

cut ℄ 0.0

6.7/20 6.3/15 6.5/14 8.9/12 7.7/8 7.2 ✓ 7.9/9 8.5/12 6.1/16 5.7/20 5.6/25

4.0/25 3.9/20 4.0/14 6.4/12 5.1/8 4.1 ✓ 5.1/10 6.2/13 3.1/18 2.7/25

5.4/20 5.9/12 6.6/10 5.7/8 4.8 ✓ 5.9/14 4.7/15 5.1/20 4.8/25

Spk on S. rod 30" Elm 30 West 29+90

5/22/29 Chard-Auburn RD

T.P. (B.M.?)	0.27	1305.71		1305.44	
42+00			3.4 ℄	02.3	
		Rd			S=16.0W
42+79		1.6W	1.4 ℄	04.3	S=18.0E
		0.3E			
43+00			2.2 ℄	03.5	
43+50			6.0 ℄	99.7	
T.P.	1.14	1298.80	8.05	1297.66	
			10.25	1288.55	1288.50
B.M.	6.00		1289.67	1283.67	
		3.8E			S=15.0E
74+00		4.2W	3.8 ℄	85.9	S=15.0W
		3.4E			S=18E
73+50		3.6W	3.8 ℄	85.9	S=17W
		4.2E			S=19E
73+00		4.2W	5.3 ℄	84.4	S=19W
		9.2E			S=20E
72+00		8.1W	12.2 ℄	77.5	S=22W
T.P.	0.16	1278.49	11.34	1278.33	
71+00		2.0W	8.0 ℄	70.5	S=24W
70+00			10.2 ℄	68.3	
69+50		9.5W	10.9 ℄	67.6	S=19.0W
T.P.	0.02	67.99	10.52	67.97	

West

Top large Stone 20'Rt.(E) 39+80

Cut=0.0 $\frac{4.2}{2.5}$ $\frac{4.1}{9}$ $\frac{4.7}{10}$ 3.4 ✓ $\frac{4.4}{9}$ $\frac{3.2}{11}$ $\frac{1.9}{25}$

cut ℄=1.0 $\frac{2.0}{25}$ $\frac{1.9}{20}$ $\frac{1.3}{15}$ $\frac{2.6}{10}$ 1.4 ✓ $\frac{1.5}{9}$ $\frac{2.0}{10}$ $\frac{0.5}{12}$ $\frac{0.0}{20}$ $+\frac{0.5}{25}$

cut ? $\frac{2.0}{25}$ $\frac{1.6}{20}$ $\frac{2.0}{13}$ $\frac{3.9}{10}$ $\frac{3.1}{8}$ 2.2 ✓ $\frac{2.8}{7}$ $\frac{3.6}{10}$ $\frac{1.0}{13}$ $+\frac{0.5}{25}$

$\frac{4.9}{25}$ $\frac{4.9}{12}$ $\frac{7.4}{9}$ $\frac{6.8}{7}$ 6.0 ✓ $\frac{6.6}{7}$ $\frac{7.2}{10}$ $\frac{5.4}{13}$ $\frac{4.2}{25}$

on Red boulder 100'W. of 73+00

Cut ℄ 0.0 $\frac{4.1}{25}$ $\frac{4.3}{11}$ $\frac{5.0}{10}$ 3.8 ✓ $\frac{4.8}{13}$ $\frac{3.9}{15}$ $\frac{3.4}{25}$

cut ℄ 1.0 $\frac{3.5}{25}$ $\frac{3.7}{11}$ $\frac{4.8}{10}$ 3.8 ✓ $\frac{4.4}{12}$ $\frac{5.0}{15}$ $\frac{3.7}{17}$ $\frac{2.9}{25}$

cut ℄ 1.0

cut 0.0

cut 0.0

cut 0.0

cut 1.0

East 117

9/22/29		1267.99			
		2.2 E			S=20.E
69+00		1.4 W	3.9¢	64.1	S=22W
68+00		11.3W	13.4¢	54.6	S=18W
T.P.	1.59	56.50	13.08	54.91	
B.M.			5.00	51.50	1251.41
T.P.	12.61	1266.65	2.46	54.04	
		8.2 W			S=20 W
64+50		8.0 E	10.6¢	56.0	S=20 E
		4.7 W			S=20W
64+00		5.1 E	6.6¢	60.0	S=20E
		1.3 W			S=15W
63+00		0.0 E	1.6¢	65.0	S=18.0E

West East 119

cut¢=1.0

cut¢ 0.0

cut¢=0.0 $\frac{8.3}{25}$ $\frac{9.1}{9}$ $\frac{11.4}{6}$ 10.6 $\frac{11.0}{11}$ $\frac{12.2}{14}$ $\frac{8.5}{18}$ $\frac{7.5}{25}$

cut¢=1.0

cut¢=0.0 $\frac{1.3}{20}$ $\frac{1.6}{9}$ $\frac{3.0}{7}$ $\frac{2.1}{5}$ 1.6 $\frac{2.0}{12}$ $\frac{2.9}{14}$ $\frac{0.0}{20}$

cut 0.0 } 59
" 1.5 } 60
cut 2.3 } 60+33
" 0.0 } 61+00

5/23/29 P.M. Chardon-Auburn Center Rd.

B.M.	12.60	1271.30		1258.70	
T.P.	9.28	1280.25	0.33	1270.97	
59+00		6.1 W 4.2 E	5.4	1274.8	S=13W S=16E
60+00		4.6W 1.4E	3.1	77.15	S=15W S=24E
B.M. set 5/23			5.83	1274.42	
60+70		4.5W 1.9E	3.3	76.95	S=16W S=21E
61+50		8.0W 5.9E	8.6	71.65	S=16W S=20E

FRZ GLB
H. Clouse
West & East

Bent Spk N. root 15" Cherry 25' W 55+00

cur 0.0	7.0/25	5.7/9	6.6/7.5	5.4	6.4/12	4.2/16	3.5/25
cur 1.5	5.5/25	4.4/9	4.7/8	3.1	3.7/12	1.6/17	0.9/25

bent Spk. in X 38' W of Sta 59+65 in E. root 12" Maple

cur 2.0	5.2/25	4.7/20	4.5/10	5.6/8	3.3	5.1/14	2.4/18	1.6/25
cur 0.0	8.5/25	8.0/9	9.7/7		8.6	9.8/15	5.9/20	5.4/25

5/31/29 CLB # Clouse

	BS	HI	FS	EL	
BM	2.10	1290.60		1288.50	
TP	2.07	1285.46	7.31	1283.29	
49		3.3 W 3.2 E	4.0	81.5	S 18 W S 18 E
50		0.3 W 8.2 E	10.0		S 32 W S 18 E
TP	2.43	1275.48	12.43	1273.03	
51		3.0 W 9.2	8.20		S 25 W 15 E
TP	9.43	1284.15	1.28	1274.20	
60		5.0 W 5.3 E	8.70		24 W 24 E
TP	9.64	1291.61	2.18	1291.97	
BM			3.02	1288.59	

6/3/29 FRZ # Clouse cold

B.M.	7.96	1284.95	~~7.96~~	1276.99
Int. E #85			8.68	1276.27
1+00			7.5	77.45
2+00			5.4	79.55
3+00			2.7	82.25
4+00			2.6	82.35
5+00			3.5	81.45
6+00			3.6	81.35
7+00			3.6	81.35

West ℄ East

On Stone 5' 30 of ℄ Fence Post 25' L of Sta 47+00

OUT ℄ = 0.0 $\frac{3.4}{30}$ $\frac{3.3}{20}$ $\frac{3.5}{8}$ $\frac{4.8}{6}$ $\frac{4.2}{4}$ 4.0 $\frac{4.6}{15}$ $\frac{5.3}{16}$ $\frac{3.2}{18}$ $\frac{1.5}{25}$ $\frac{0.1}{30}$

CUT ℄ = 1.0

CUT ℄ = 0-0

CUT ℄ = 1.0

N.W.I. Conc. Head w'l Sta. 0+10

$\frac{6.9}{25}$ $\frac{7.5}{17}$ $\frac{9.2}{15}$ $\frac{8.2}{10}$ 7.5 $\frac{8.1}{10}$ $\frac{9.3}{12}$ $\frac{8.0}{15}$ $\frac{6.8}{25}$

$\frac{4.3}{25}$ $\frac{4.4}{15}$ $\frac{6.8}{13}$ $\frac{5.7}{10}$ 5.4 $\frac{5.7}{10}$ $\frac{7.1}{12}$ $\frac{5.7}{15}$ $\frac{5.4}{20}$ $\frac{4.8}{25}$

$\frac{2.1}{25}$ $\frac{2.5}{17}$ $\frac{4.3}{15}$ $\frac{3.0}{12}$ 2.7 $\frac{3.1}{10}$ $\frac{5.0}{12}$ $\frac{3.3}{15}$ $\frac{3.2}{25}$

$\frac{2.0}{25}$ $\frac{2.7}{15}$ $\frac{4.2}{13}$ $\frac{3.4}{10}$ 2.6 $\frac{3.1}{10}$ $\frac{4.2}{12}$ $\frac{3.1}{15}$ $\frac{2.3}{25}$

$\frac{3.8}{25}$ $\frac{4.0}{15}$ $\frac{5.3}{13}$ $\frac{4.1}{10}$ 3.5 $\frac{3.6}{10}$ $\frac{5.3}{13}$ $\frac{3.7}{15}$ $\frac{3.2}{25}$

$\frac{3.7}{25}$ $\frac{4.2}{15}$ $\frac{5.3}{13}$ $\frac{4.0}{10}$ 3.6 $\frac{4.2}{10}$ $\frac{4.9}{13}$ $\frac{3.7}{15}$ $\frac{2.9}{25}$

$\frac{4.0}{25}$ $\frac{4.0}{17}$ $\frac{4.5}{15}$ $\frac{4.1}{13}$ 3.6 $\frac{3.9}{10}$ $\frac{5.1}{12}$ $\frac{4.4}{15}$ $\frac{4.3}{25}$

Chardon-Auburn Center Road
X Secs After Grading

	BS	HI	FS	
BM	9.38	1286.37		1276.99
1			℄ 8.80	77.6
2			℄ 6.9	79.5
3			℄ 5.1	81.3
4			℄ 4.2	82.2
5			℄ 4.6	81.8
6			℄ 4.5	81.9
7			3.9	82.5
BM	13.04	1297.26		1284.22
22			℄ 4.7	92.6
TP	12.69	1307.17	2.78	1294.48
23			6.9	1300.3
23+50			4.1	1303.1
TP	4.24	1304.34	2.52	1304.65
24			4.9	04.4
25			6.1	03.2

6/15/29

June 15 1929
C.F.B.
H.C.

℄

West			℄	East		
On NW & conc. Hdwall						
9.0/15	10.7/13	9.2/10	8.80	9.7/10	10.73/13	9.1/16
5.7/17	8.5/14	6.7/10	6.9	7.0/10	8.5/13	7.3/16
3.9/16	6.5/13	5.2/10	5.1	5.3/10	6.7/13	4.6/15
4.2/16	6.0/13	4.5/10	4.2	4.9/10	6.2/13	4.4/13
5.5/16	6.8/13	4.8/10	4.6	5.0/10	6.6/13	5.1/15
5.6/16	6.5/13	4.7/10	4.5	4.7/10	6.8/13	5.1/15
5.4/16	6.3/13	4.2/10	3.9	4.6/10	6.6/13	5.8/15
Conc Base N Leg C.E.I. Tower						
2.3/25	6.6/15	4.8/4.0	4.7	5.7/50	6.9/10	2.3/21
3.8/22	7.5/15	7.3/10	6.9	6.8/5	7.0/10	2.6/22
2.0/27	5.8/13	4.7/10	4.1	4.0/10	5.0/15	1.7/22
3.5/22	7.0/15	5.6/10	4.9	5.3/10	6.5/15	2.6/22
5.8/18	8.2/13	7.2/10	6.1	6.4/50	7.7/10	4.5/20

	BS	HI	FS	EL	
		1305.84			
TP	6.45	1302.45	6.84	1302.00	
28 ✓			4.79	1300.05	
29 ✓			4.48	03.15	
30 ✓			4.61	02.85	
BM			5.26	1302.69	FRZ 1302.66
TP (BM)	2.05	1302.49	2.05	1305.44	
42 ✓			4.57	02.8	
42+79 ✓			4.1	03.4	
43+00 ✓			4.57	02.8	
43+50 ✓			4.72	1300.3	
TP	0.66	1243.52	10.62	1296.87	
TP BM ✓	1.36	1284.38	9.0	1288.52	1288.50
48			4.40	85.5	
49 ✓			8.20	81.7	
TP	2.46	1280.63	11.67	1278.21	
5-0 ✓			5.5	75.2	
TP	2.76	1282.85	10.58	1280.09	
51 ✓			4.8	68.05	?

X Sec. after grading

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West			℄	East		
7.2 / 15	9.4 / 13	8.4 / 10	7.9	8.2 / 10	9.5 / 13	6.6 / 16
4.7 / 15	6.7 / 13	5.4 / 10	4.8	5.2 / 10	6.4 / 15	3.6 / 19
6.4 / 15	7.6 / 13	6.0 / 10	5.1	5.5 / 10	6.6 / 12	5.8 / 16

SPOT Spruce 30" Elm 30' W 25+50

TOP Large Stone 20 RT(E) 35+70

5.8 / 15	7.0 / 13	5.2 / 10	4.7	5.4 / 10	6.1 / 13	4.4 / 16
3.4 / 17	6.8 / 13	4.2 / 10	4.1	4.1 / 8	5.3 / 11	1.9 / 20
3.5 / 18	6.5 / 13	5.2 / 10	4.7	5.6 / 10	6.0 / 13	2.4 / 18
6.6 / 13	9.0 / 13	7.9 / 10	7.2	7.8 / 10	9.2 / 13	6.3 / 16

4.3 / 13	6.0	4.8 / 10	4.40	4.9 / 10	6.2 / 13	3.2 / 17
8.2 / 16	9.8 / 13	8.4 / 10	8.2	8.6 / 14	10.3 / 16	8.2 / 20

INC Dist Moved

2.2 / 23	6.2 / 13	5.5 / 11	5.5	5.4 / 12	7.0 / 14	3.6 / 19
1.3 / 19	6.0 / 13	4.9 / 10	4.8	5.2 / 10	7.2 / 14	

Chordon-Auburn Center Rd

	BS	HI	FS		
TP	0.87	1262.64	11.08	1261.77	
52			℄ 3.30	59.3	
52+30			℄ 7.0	55.6	
TP	9.58	1261.30	10.42	1251.72	
54+65			℄ 7.90	53.4	
TP BM	12.55	1271.22	2.43	1258.67	1258.70
56			℄ 9.40	61.8	
TP	9.46	1280.48	0.20	1271.02	
58			℄ 8.20	72.3	
59			5.8	74.7	
60			℄ 4.3	76.2	
60+70			5.1	75.4	
61+50			8.3	72.2	
TP	1.08	1272.06	9.50	1270.98	
62			℄ 2.80	69.3	
TP	June 16/29 1.46	1267.96	5.56	1266.50	
63			℄ 3.0	65.0	
64			℄ 8.6	59.4	
TP	1.14	1259.01	10.17	1257.82	

X secs. after grading

West ℄ East

2.0/23 5.3/15 3.9/13 3.3 4.0/50 6.3/16 Bank untouched

4.5/25 9.9/15 7.4/5.0 Fill here 7.0 7.6/8 9.9/13

4.6/16 10.6/14 8.6/10 7.5 8.7/10 10.4/13

8.6/17 11.2/12 9.70/9 ℄ 9.40 10.0/10 11.5/14 8.6/17

8.0/20 9.9/18 8.8/15 8.20 8.7/5.0 11.0/14 6.4/17

6.7/17 8.1/11 6.4/8 3.8 5.8/10 7.3/14 4.5/14

5.0/18 6.5/13 5.1/10 4.3 7.6/8 5.5/11 1.70/20

4.8/17 7.6/13 6.1/10 5.1 5.4/8 6.6/11 2.2/21

8.4/18 10.1/13 8.9/10 8.3 8.6/8 10.4/13 6.1/20

3.0/17 4.3/11 3.1/8 2.80 2.80/10 4.3/14 1.4/20

Bent SPIKE NE Root 18" Maple 25' RT 62+60

2.7/15 5.0/10 3.7/17 3.0 3.0/10 4.5/13 1.4/20

6.2/20 10.9/10 7.8/8 8.6 8.8/11 10.5/15 6.5/20

Chardon-Auburn Center Road

	BS.	HI	FS	EL	
64+50		1254.01	℄ 2.41	56.6	
65			℄ 5.3	53 x7	
66			℄ 10.2	48 x8	
TP				41	
BM	9.57	1260.98	2.6	1251.35	1251.41
67+30			℄ 8.7	52 x3	
68			℄ 5.4	55 x6	
TP	12.63	1272.03	0.98	1260.00	
69			℄ 8.7	63 x3	
69+50			℄ 5.7	66 x3	
70			℄ 3.6	68 x4	
TP	10.62	1282.00	0.65	1271.38	
71			℄ 9.3	72 x7	
72			℄ 3.3	78 x7	
TP	2.17	1288.70	0.47	1281.53	
73			℄ 5.2	83 x5	
+58			℄ 3.7	85.0	
74			℄ 2.9	85 x8	
BM			5.12	1283.58	1283.67

X secs. after grading

13/

West			℄	East		
0.7 / 20	3.7 / 10	2.8 / 8	2.4	2.8 / 11	4.5 / 15	0.3 / 21
6.0 / 14.5	7.2 / 12	5.5 / 4	5.3	6.0 / 4	8.5 / 14	Boards not Cut
12.4 / 11	10.6 / 6.0		10.2	10.3 / 11	12.0 / 15	
12 / 14	9.6 / 11		8.7	9.7 / 14	11.7 / 18	
11.1 / 14	9.6 / 11		8.7	9.2 / 14	11.2 / 18	
4.2 / 14	2.0 / 14	5.4 / 11	5.4	6.0 / 15	7.4 / 17	
—		—		—		—
5.8 / 23	10.7 / 12	4.0 / 4	8.7	9.4 / 16	10.8 / 19	
3.4 / 14	6.6 / 14	5.7 / 11	5.7	6.0 / 14	7.1 / 17	
	7.2 / 12	4.4 / 4	3.6	3.6 / 14	5.0 / 15	3.6 / 20
6.0 / 28	10.7 / 12	4.4 / 9	4.3	10.2 / 8	12.6 / 14	
0.9 / 21	5.0 / 12	3.7 / 9.0	3.3	4.4 / 12	5.9 / 14	1.9 / 21
3.4 / 17	6.4 / 12	5.4 / 8	5.2	5.2 / 5	6.3 / 9	3.4 / 20
2.8 / 10	4.9 / 13	4.2 / 11	3.7	4.5 / 10	5.4 / 12	2.3 / 20
3.5 / 16	5.0 / 14	1.2	2.9	3.5 / 10	4.8 / 12	3.2 / 18

On Boulder 10' W 53+00

BLISS C.R. ROOT Rod STARK

CHECK LEVELS — Russell Farms

JUNE 7, 1928

	B.S.	H.I.	F.S.	ELEV.
B.M.	12.00	1094.16		1082.16
B.M.			8.82	1085.34
T.P.	6.74	1092.90	8.00	1086.16
B.M. #7	1.04	1086.26	7.68	1085.22
T.P.	0.33	1074.21	12.38	1073.88
T.P.	5.16	1066.48	12.89	1061.32
B.M. #6	2.88	1058.54	10.82	1055.66
T.P.	12.25	1068.82	1.97	1056.57
T.P.	11.54	1078.69	1.67	1067.15
T.P.	12.19	1090.25	0.63	1078.06
B.M. #5	11.14	1100.64	0.75	1089.50
T.P.	10.66	1111.04	0.26	1100.38
T.P.	8.32	1118.14	1.22	1109.82
B.M. #4			2.66	1115.48

B.M. — "X" on S.W. Cor. N. Headwall of Culvert at Manchester Hill. — 3rd Tier Stones

COURTNEY BENCH — Hdw'l on S. Side Rd. "X" on S.W. Corner top stone.

ELEVATION PER C.W.C. = 459.91

B.M. #7 — Boulder 75' W. of ℄ and 10' South 1st Wire Fence.

B.M. #6 — 2 Spikes N.W. Root 36" Maple — 50' N. Creek

B.M. #5 — 2 Spikes E. Root 30" Elm — West of Ravine

B.M. #4 — 2 Spikes E. Root 30" Maple 75' W. Sta. 36+50

Bliss, Stark & Root

PROFILE CHECK — 6/11/28

SILVERCREEK ROAD — (Russell Farms)

	B.S.	H.I.	F.S.	ELEV
BM #2	8.13	1172.69		1164.56
B.M. 2A.			2.90	1169.79
B.M. "2 A"	2.63	1172.40		1169.77
			6.55	1165.85
			12.98	1159.42
T.P.	3.30	1163.57	12.13	1160.27
			5.07	1158.50
T.P.	12.28	1171.55	4.30	1159.27
			5.78	1165.77
			11.87	1159.68
T.P.	0.97	1161.56	10.96	1160.59
			6.89	1154.67
T.P.	0.74	1150.37	11.93	1149.63
			3.60	1146.77
			16.4	1133.97
			12.09	1138.28
			7.64	1142.73

B.M. #2 El. 1164.56 (Arbitrary figure)

1169.77 — BM #2A per D.R. Stark

Arb. Elev.

Sta 14+00

" 12+00

Sta. 10+00

Sta 7+60

℄ Sta. 7+85

℄ Sta 8+00

Sta. 8+25

8+58

9+00

9+15

NOTE

DO NOT USE FIGURES AND COMPUTATIONS APPEARING ON PAGES 136, 137, 138 and 139.

ELEVATIONS USED HERE ARE ARBITRARY FIGURES EMPLOYED FOR PURPOSES OF A CHECK ONLY,

D.R. Stark

PROFILE CHECK - continued

B.S.	H.I.	F.S.	Elev.	
1.97	1161.24		1159.27	
		6.73	1154.51	
			El. 7+60	
11.74	1177.51		1165.77	
		3.77	1173.74	7+00
		3.57	1173.94	6+00
		.55?	1176.96	4+00
		4.68	1172.83	BM #1

Sta 9+70

C Error on turn to Sta. 9+70

Sta. 7+00

6+00

4+00

See Note on page 137

2/4/29 F.R.Z. Levels for Joe Bloc for H.I. on farm (S. Folger pokel Chester, for possible lake)

		assumed 100.0	7.8	92.2	on Grd. So. side 30" Maple in ℄ Valley 75 ft No. of So. Prop line
			10.4	89.6	Bank of Creek at toe of W. ft at Dam site
			12.0	88.0	Creek bot. at Dam site
			8.5	91.5	E. End Dam site
T.P.	9.0	105.3	3.7	96.3	on knoll in ℄ Valley 600± N. of So Prop line
			8.2	97.1	Surface Grd. near E. line + 200± So of Rd
			10.4	94.9	Creek bot " " " " " " " "

Dam = about 220 ft long

12
2
24
80
1920

83.57
96.50
6.98

83.57
4.29
79.28

83.57
79.50
4.07

3.57

83.57
3.92
79.65
76.00

83.57
79

83.57
4.10
79.47

83.57
76.50
7.07

3.65

1.72) 1.000
860
140

172) 48
172

172) 48.000
344
1360
1204

.557
48
4456
2228
27736

76.28
83.57
76.28
7.29
4.29

90.06
83.50
6.56

90.06
80.90
9.16

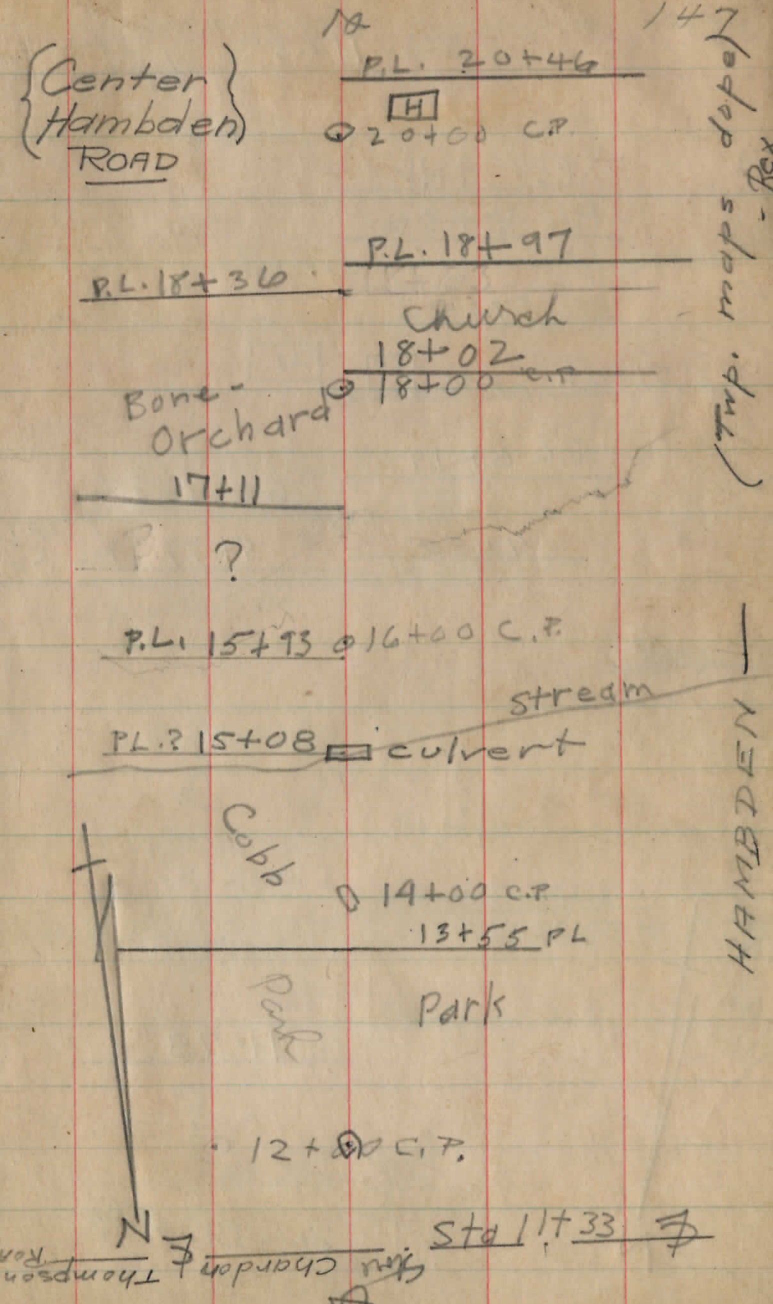
78.3
83.5
161.8
80.9

44.56
2.60

1.96
11.74
97.80
13.94

93.06
4.56
88.50
88.70
16.23
2.60
13.63
2.60
11.03
1.30
9.73

95.2
5.94
1.30
4.64



Center Hambden ROAD
P.L. 20+46
H
20+00 C.P.
P.L. 18+97
P.L. 18+36
Church
18+02
18+00 C.P.
Bone-Orchard
17+11
?
P.L. 15+93
16+00 C.P.
stream
P.L.? 15+08
culvert
Cobb
14+00 C.P.
13+55 PL
Park
Park
12+00 C.P.
N
Sta 11+33
Chardon Thompson Road
HAMBDEN
(Twp. maps dope) - Rex

148

Sta. 11+33 ℄ E&W Rd.

10+00

P.L. 9+16

P.L. 8+36

P.L. 7+72 8+00 C.P.

P.L. 7+56

P.L. Ditch 6+96 H H

P.L 6+19

6+10 P.L.

C.P. T.B.V. Co.

4+85 4+79 P.L

King

4+00 C.P.

HAMBDEN

N

1+78

Ransome

Sta 0+00.

149

(Dope for township maps) Rex

26+03 P.L Sta 26+00

25+56 P.L

Chamberlain

N

24+16 P.L.

Sta 24+00 C.P.

St. John

22+95 P.L.

HAMBDEN

Carver

Sta 22+00 C.P.

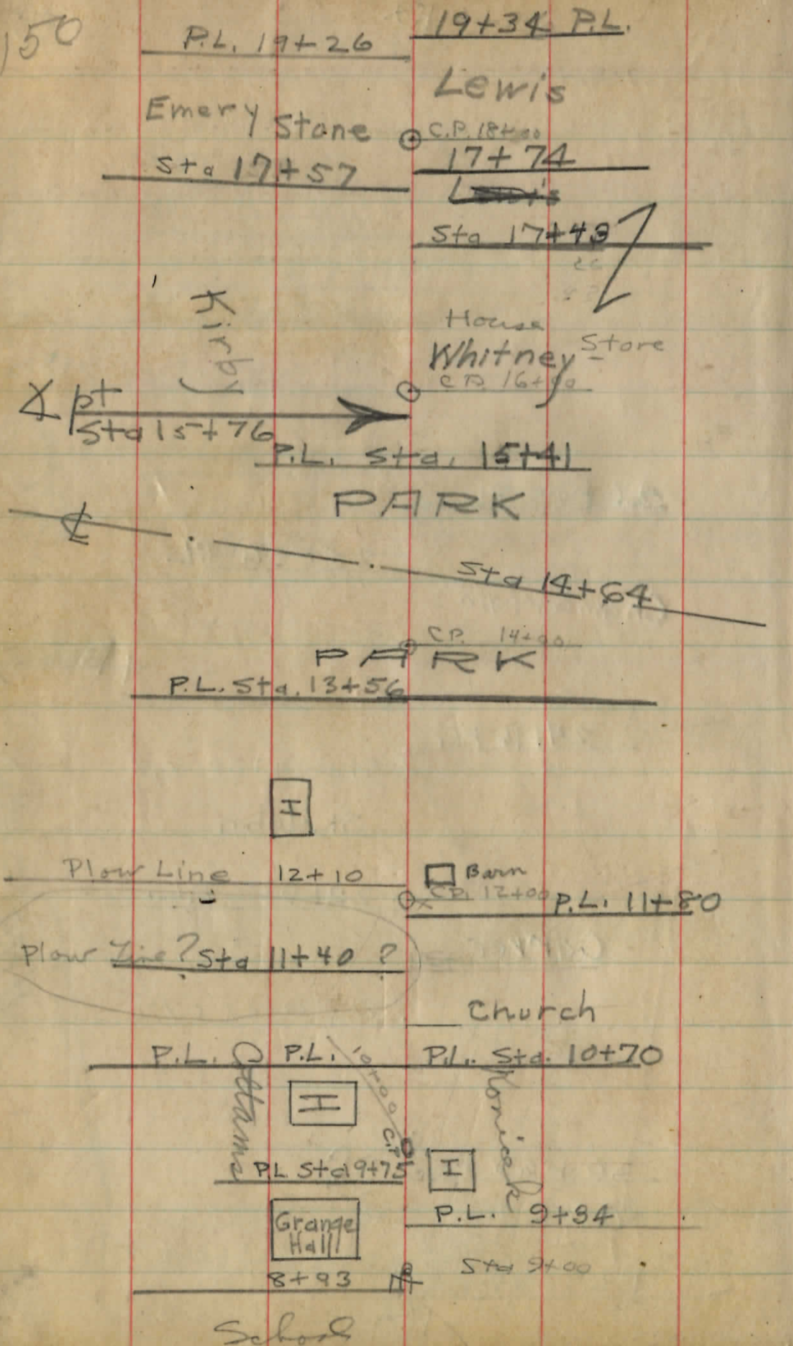
20+69 P.L.

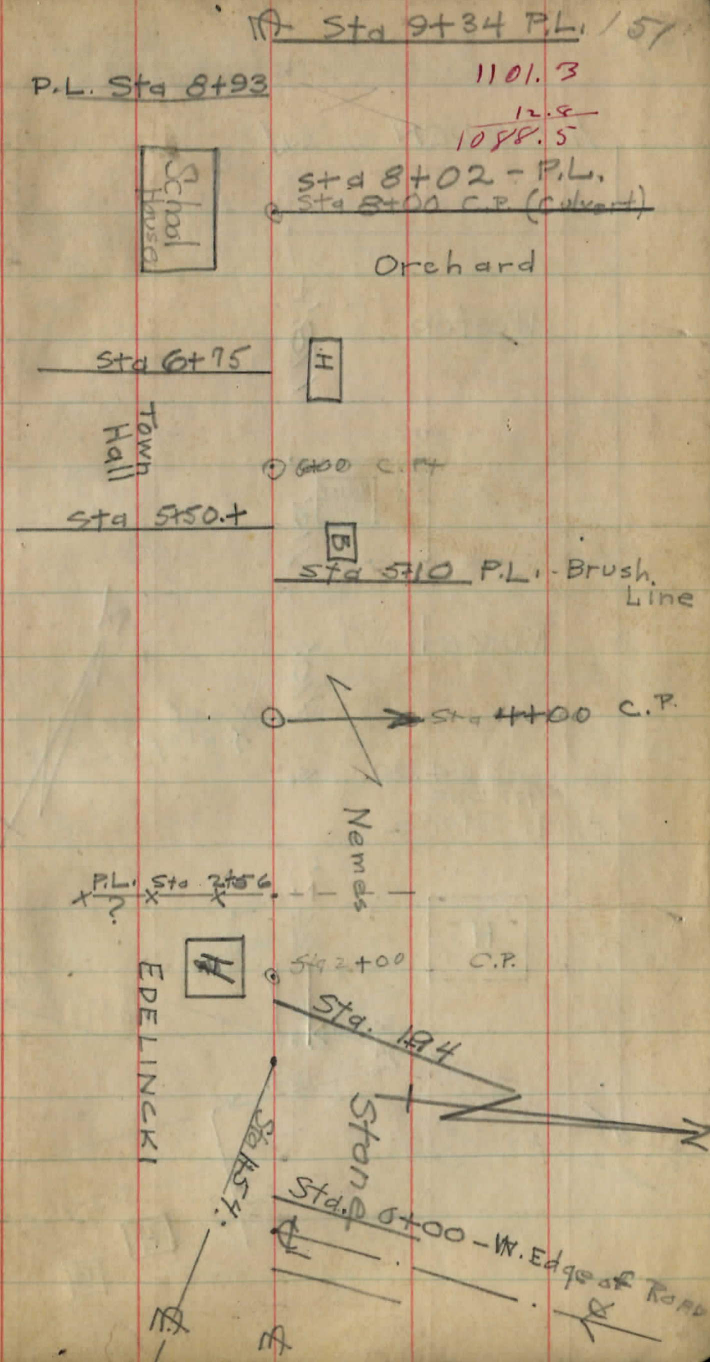
C.E. King

Old Cutts place (now Kirby)

Sta 20+00 C.P.4.

P.L. 19+62


P.L. 19+26
19+34 P.L.
Lewis
Emery Stone
C.P. 18+00
Sta 17+57
17+74
Sta 17+43
Kirby
House
Whitney
Store
C.P. 16+00
℄ pt
Sta 15+76
P.L. Sta. 15+41
PARK
Sta 14+64
C.P. 14+00
PARK
P.L. Sta. 13+56
H
Plow Line 12+10
Barn
C.P. 12+00
P.L. 11+80
Plow Line? Sta 11+40 ?
Church
P.L.
P.L.
P.L. Sta 10+70
Adams
Wenick
C.P. 10+00
H
P.L. Sta 9+75
I
P.L. 9+34
Grange Hall
Sta 9+00
8+93
School


Sta 9+34 P.L.
1101.3
12.8
1088.5
P.L. Sta 8+93
School House
Sta 8+02 - P.L.
Sta 8+00 C.P. (Culvert)
Orchard
Sta 6+75
H
Town Hall
6+00 C.P.
Sta 5+50.+
B
Sta 5+10 P.L. - Brush Line
Sta 4+00 C.P.
Nemes
P.L. Sta 2+56
?
EDELINCKI
Sta 2+00 C.P.
Sta. 1+94
Stone
Sta 1+54
Sta 0+00 - W. Edge of Road

153
(1)

~~Battles Road~~

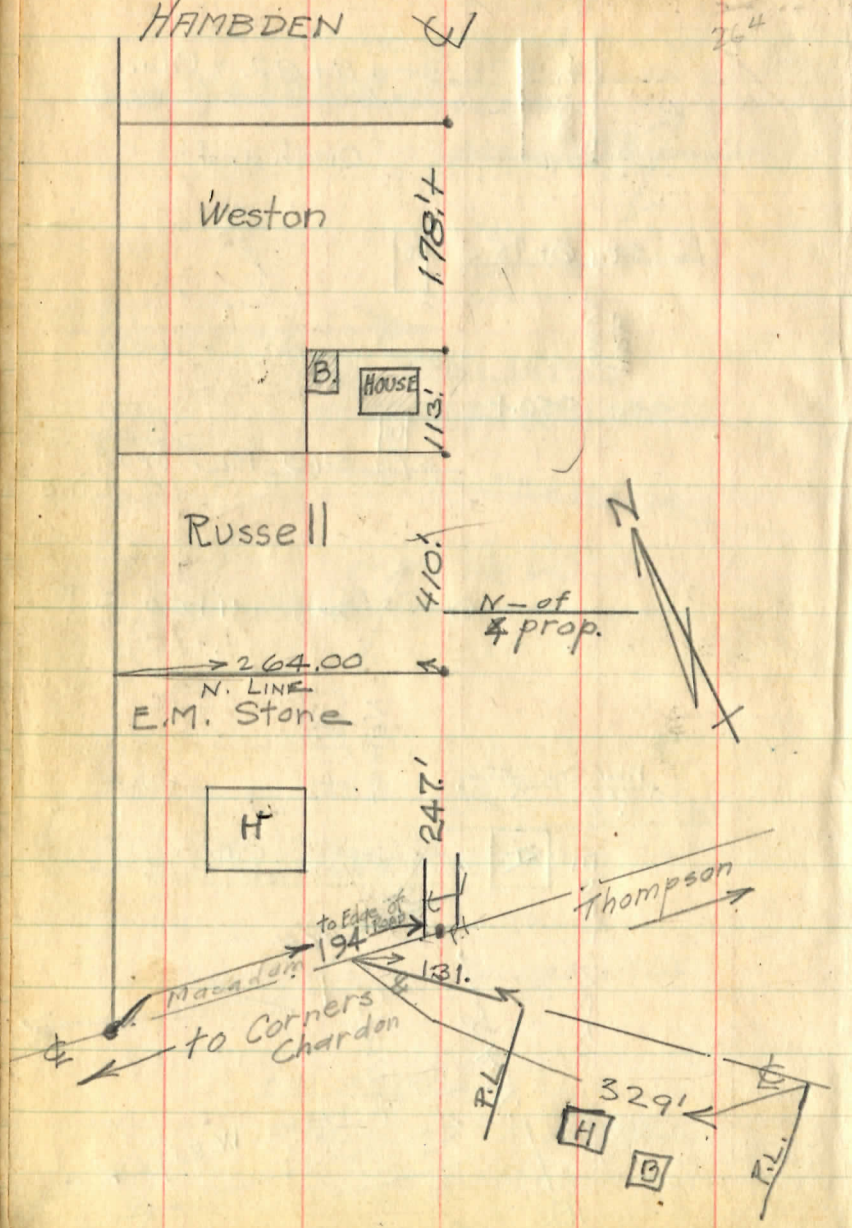


Table IX.—Calculation of Earthwork.

Width	HEIGHT														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.02	.04	.06	.07	.09	.11	.13	.15	.17	.18	.20	.22	.24	.26	.28
2	.04	.07	.11	.15	.18	.22	.26	.30	.33	.37	.41	.44	.48	.52	.56
3	.06	.11	.17	.22	.28	.33	.39	.44	.50	.56	.61	.67	.72	.78	.83
4	.07	.15	.22	.30	.37	.44	.52	.59	.67	.74	.81	.89	.96	1.04	1.11
5	.09	.19	.28	.37	.46	.56	.65	.74	.83	.93	1.02	1.11	1.20	1.30	1.39
6	.11	.22	.33	.44	.56	.67	.78	.89	1.00	1.11	1.22	1.33	1.44	1.55	1.67
7	.13	.26	.39	.52	.65	.78	.91	1.04	1.16	1.30	1.42	1.55	1.68	1.81	1.94
8	.15	.30	.44	.59	.74	.89	1.04	1.19	1.33	1.48	1.63	1.78	1.92	2.08	2.22
9	.17	.33	.50	.67	.83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50
10	.18	.37	.56	.74	.93	1.11	1.30	1.48	1.67	1.85	2.04	2.22	2.41	2.59	2.78
11	.20	.41	.61	.82	1.02	1.22	1.43	1.63	1.83	2.04	2.24	2.44	2.65	2.85	3.06
12	.22	.44	.67	.89	1.11	1.33	1.56	1.78	2.00	2.22	2.44	2.67	2.89	3.11	3.33
13	.24	.48	.72	.96	1.20	1.44	1.68	1.92	2.16	2.41	2.65	2.89	3.13	3.37	3.61
14	.26	.52	.78	1.04	1.30	1.55	1.81	2.08	2.33	2.59	2.85	3.11	3.37	3.63	3.89
15	.28	.56	.83	1.11	1.39	1.67	1.94	2.22	2.50	2.78	3.06	3.33	3.61	3.89	4.17
16	.30	.59	.89	1.18	1.48	1.78	2.07	2.37	2.67	2.96	3.26	3.56	3.85	4.15	4.44
17	.31	.63	.94	1.26	1.57	1.89	2.20	2.52	2.83	3.15	3.46	3.78	4.09	4.41	4.72
18	.33	.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.67	4.00	4.33	4.67	5.00
19	.35	.70	1.06	1.41	1.76	2.11	2.46	2.82	3.17	3.52	3.87	4.22	4.57	4.92	5.28
20	.37	.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.81	5.18	5.56
21	.39	.78	1.17	1.55	1.94	2.33	2.72	3.11	3.50	3.89	4.28	4.67	5.06	5.44	5.83
22	.41	.81	1.22	1.63	2.04	2.44	2.85	3.26	3.67	4.07	4.48	4.89	5.30	5.70	6.11
23	.43	.85	1.28	1.70	2.13	2.56	2.98	3.41	3.83	4.26	4.68	5.11	5.54	5.96	6.39
24	.44	.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00	4.44	4.89	5.33	5.78	6.22	6.67
25	.46	.92	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94
26	.48	.96	1.44	1.92	2.41	2.89	3.37	3.85	4.33	4.82	5.30	5.78	6.26	6.74	7.24
27	.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
28	.52	1.04	1.55	2.07	2.59	3.11	3.63	4.15	4.67	5.18	5.70	6.22	6.74	7.26	7.78
29	.54	1.07	1.61	2.15	2.68	3.22	3.76	4.30	4.83	5.37	5.91	6.44	6.98	7.52	8.06
30	.56	1.11	1.67	2.22	2.78	3.33	3.89	4.44	5.00	5.55	6.11	6.67	7.22	7.78	8.33
31	.57	1.15	1.72	2.30	2.87	3.44	4.02	4.59	5.17	5.74	6.32	6.89	7.46	8.04	8.61
32	.59	1.18	1.78	2.37	2.96	3.56	4.15	4.74	5.33	5.92	6.52	7.11	7.70	8.30	8.89
33	.61	1.22	1.83	2.44	3.05	3.67	4.28	4.89	5.50	6.11	6.72	7.33	7.94	8.55	9.17
34	.63	1.26	1.89	2.52	3.15	3.78	4.40	5.04	5.67	6.29	6.93	7.56	8.18	8.81	9.44
35	.65	1.30	1.94	2.59	3.24	3.89	4.53	5.18	5.83	6.48	7.13	7.78	8.42	9.08	9.72
36	.67	1.33	2.00	2.67	3.33	4.00	4.66	5.33	6.00	6.67	7.33	8.00	8.67	9.33	10.00
37	.68	1.37	2.06	2.74	3.42	4.11	4.79	5.48	6.17	6.85	7.54	8.22	8.91	9.59	10.28
38	.70	1.41	2.11	2.82	3.52	4.22	4.92	5.63	6.33	7.03	7.74	8.44	9.15	9.85	10.56
39	.72	1.44	2.17	2.89	3.61	4.33	5.05	5.78	6.50	7.22	7.95	8.67	9.39	10.11	10.83
40	.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.67	7.41	8.15	8.89	9.63	10.37	11.11

Table gives cu. yds. in 1 ft. of a triangle of given width and height. Corrections for tenths of width are one tenth the values found under each height considering the widths from 1 to 9 as tenths and similarly the corrections for tenths of height are one tenth the figures opposite width considering the heights from 1 to 9 as tenths. Thus if w =16.2 and h =5.3, cu. yds. =1.48+.028+.089 =1.597 cu. yds. or practically 160 cu. yds. per 100 ft. If w exceeds 40 ft., use one half and multiply result by 2, if both w and h are large use one half of each and multiply result by 4. Any cross-section may be divided into triangles by the following rule. To the triangle of the sum of the outside cuts (or fills) =h, and ½ the roadbed =w, add the triangles formed by taking the distance out to each break in turn (=w's) by the difference between the cuts (or fills) on each side of it (=h's) always subtracting the outer from the inner.

Distances from Center of Roadway for Cross-Sectioning.

Roadway 16 feet wide. Side Slopes 1 on 1½.
For Single Track Embankment.

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

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9+(20—16)÷2 or 2 ft. added to 41.9 =43.9. For slopes of 1 on 1 see inside of front cover.

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