

WILSON MILLS
ROAD
CHESTER TWP

LEVELL BOOK

373

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY TO TOP CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SLOPE 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

Copyright 1900, by Keuffel & Esser Co.

COURT HOUSE

CHARDON, O.

PHONE 250-X

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

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

Book #50

Wilson Mills Road No. 8

Chester Twp.

X-Sections

Corrected BM Elevations - page 37
Herzer pond (S. side Wilson Mills) - " 72
1500 ft. W. of 306

Wilson Mills Rd. (Elev. N. & S. Ditches - P. 74
Sta 189+87 to 203+00)

Return to the
County Surveyors Office
Court House
Chardon
Ohio

Cuyahoga Co. BM. 5100100
29" Maple NE of Brigham Rd
& Co. Line Rd Elev 497.20

Cuy. Co. Datum

our elevation — 1072.36

Cuy. Co. Datum computes $1072.36 - 497.20 = 575.16$

Corrected
Elevations

Nov. 5, 1930 D. Parks
R. Russell
T. Snyder

bold 35'

B.M.	#	Scotland Sta BM			
B.M. 6	5.13	1190.29		1185.16	
	1.26	1180.69	10.86	1179.43	
	6.96	1185.63	2.02	1178.67	
B.M. 7 = Our BM #11		6.92		1178.71	1177.78
	3.74	1189.00	0.37	1185.26	
	2.51	1178.80	12.71	1176.29	
B.M. 10			3.38	1175.42	1174.51
	0.00	1166.09	12.71	1166.09	
	2.39	1158.73	9.75	1156.34	
B.M. 9			3.17	1155.56	1154.41
	0.40	1146.52	12.61	1146.12	
	0.13	1134.18	12.47	1134.05	
B.M. 8			7.78	1126.40	1125.43
	0.75	1122.58	12.35	1121.83	
	1.56	1111.05	13.09	1109.49	
B.M. 7	1.61	1102.00	10.66	1100.39	1099.32
	2.54	1092.77	11.79	1090.23	
B.M. 6			2.23	1090.54	1089.46
	1.88	1082.03	12.62	1080.15	

W. root 30" Oak Lt. sta. 56 on Scotland
Station Rd. North

N. root 14" Maple Lt. sta 76+14 on Scotland
Station Rd. = 60' RT & Sta 76+20

Sta. 70+80

S. root 12" Elm Stump 700' ± S of Cross Rd
20' Lt. of E

Sta. 65+00

W. root 12" Maple ^{30'} RT of E 1400' ± S of Cave Rd

N. Root 12" Maple RT. of E 28' Sta. 59+80

S. root 18" Maple 25' ± Lt. of E Sta. 48+15

W. root 35" Maple 30' RT. Sta. 41+50

fd Aug 58

1147

1082.03

Corrected
Elevations

B.M. 5 3.93 1080.15 5.81 1076.22 1075.11

B.M. 4 0.17 1075.13 4.85 1075.30 1074.21

B.M. 3 2.39 1068.04 8.48 1066.65

B.M. 2 5.07 1072.14 1.97 1067.07 1066.34

4.93 1075.26 1.81 1070.33

B.M. 1 2.14 1073.12 1072.36

N.W. root 24" Maple 27' RT sta. 32+90

N. root 24" Maple 30' RT sta. 26+30

→ S&W inside 10" Hickory 30' LT Sta 20+80

S. root 24" Maple 60' LT sta. 9+60

S. root 18" Maple 36' LT sta. 0+90 B.M.

Corrected
Elevations

Nov. 4, 1930 D. Parks
T. Snyder 4

Cloudy 35°

N. root 15" Maple 60' RT & Sta 76+20

B.M. 11 6.29 1185.00 1178.71 1177.78

11.68 1196.11 0.57 1184.43

5.99 1201.95 0.13 1195.98

B.M. 12 6.81 1201.95 6.81 1195.14 1194.24

12.39 1208.38 5.96 1195.99

8.34 1216.43 0.29 1208.09

B.M. 13 6.01 1216.43 6.01 1210.42 1209.50

11.48 1226.93 0.98 1215.45

8.98 1235.26 0.65 1226.28

B.M. 14 1.88 1235.26 1.88 1233.38 1232.45

12.69 1247.32 0.63 1234.63

0.00 1236.08 11.24 1236.08

2.34 1229.81 8.63 1227.45

B.M. 15 1.04 1225.99 4.86 1224.95 1223.77

0.25 1213.83 12.41 1213.58

0.05 1202.36 11.52 1202.31

0.20 1190.45 12.11 1190.25

0.00 1181.53 8.92 1181.53

B.M. 16 5.89 1175.64 1174.37

N. root 18" Elm 25' RT, Sta 134+01

N. root 25" Apple 60' RT, Sta 83+60

N. root 38" Twin Elm 30' RT, Sta 91+25

N. root 48" Elm 50' RT, Sta 100+90

2 spikes inside
N. side 6" Maple 30' RT, Sta 118+40

Corrected
Elevation

B.M. 16-4.60 1180.24 1175.09 1174.37

4.50 1183.27 1.47 1178.77

6.19 1176.42 13.04 1170.23

B.M. 17 6.21 1176.92 6.21 1170.21 1168.92

4.14 1179.89 0.67 1175.75

B.M. 18 3.89 1176.80 1174.73

1174.73 record

N. root 12" Elm 23' RT, sta 134+07

45' RT E
2 Horizontal spike N.W. side 24" Ash RT, sta 145+00

N.W. root 14" Maple R sta. 142+10 Chillicothe R.

from Chillicothe plans = 300' L & Sta 145+50

Simon Mills

Check levels on Chillicothe rd

Nov. 7, 1930 D. Parks
T. Snyder

South to Govt B.M. at Chesterland

Clear 40° 40°

B. M 1184.04 1178.77 1174.73

staple in N.W. root 14" Maple Chillicothe rd

0.41 1166.31 12.87 1165.90

= 300' Lt & Sta 149+50 Wilson Mills Rd

11.87 1176.85 1.33 1164.98

13.07 1189.57 0.35 1176.50

10.55 1198.65 1.47 1188.10

B. M 11.19 1207.86 1.98 1196.67 1196.66

staple in W. root 30" Elm

12.37 1220.07 0.16 1207.70

11.81 1231.61 0.27 1219.80

12.18 1242.96 0.83 1230.78

11.67 1254.14 0.49 1242.47

12.58 1266.31 0.41 1253.73

3.66 1269.75 0.22 1266.09

1.06 1257.83 12.98 1256.77

0.00 1245.94 11.89 1245.94

1.65 1234.65 12.89 1233.05

3.86 1225.79 12.72 1221.93

B. M 8.97 1216.82 1216.88

Govt B.M. Cottrells store Chesterland

Nov. 7, 1930 D. Parks
T. Snyder

Corrected
Elev.

Clear 40°

B. M. 18	3.42	1148.15	1174.73	
	0.07	1166.01	12.21	1165.94
	1.00	1155.97	11.04	1154.97
B. M. 19		4.49	1151.48	1151.45
	1.50	1146.00	11.47	1144.50
	0.27	1133.32	12.95	1133.05
	9.05	1134.40	7.97	1125.35
B. M. 20		6.77	1127.63	1127.53
	12.31	1146.32	0.39	1134.01
	8.49	1154.62	0.19	1146.13
	2.66	1147.52	9.76	1144.86
B. M. 21		3.67	1143.85	1143.76
	2.09	1139.13	10.48	1137.04
	2.73	1130.11	11.75	1127.38
B. M. 22		4.46	1125.65	1125.55
	0.85	1118.44	12.52	1117.59
	3.27	1108.89	12.82	1105.62
B. M. 23		0.55	1108.34	1108.21
	0.64	1097.11	12.42	1096.47

Stake N.W. root 14" Maple
= 300' Lt & Sta 145+50

spike N. root 24" Maple 24' FT. sta. 150+01

Bent
spike N. root 20" Maple 25' FT. sta. 158+70

spike S. root 24" Elm 25' LT. sta. 168+40

20' N of & 30' W of corner of house
spike N. root 20" Maple 35' FT. sta. 177+30.

spike S.E. root 24" Apple 60' Lt. sta. 183+30

corrected
Elev

1097.11

3.14 1090.21 10.04 1087.07

B.M. #24

5.06 1085.15 1084.94

X-N.E. cor. N. Headwall Sta 189+90 124±

1075.16

3 5.7 69.5

$\frac{30}{7.7}$ $\frac{16.5}{7.9}$ $\frac{7}{6.4}$ $\frac{7}{5.7}$ $\frac{8}{6.6}$ $\frac{9.5}{5.5}$ $\frac{30}{5.8}$

2.51 1071.35 6.32 1068.84

4 2.7 68.7

$\frac{30}{0.8}$ $\frac{20}{4.8}$ $\frac{11}{1.8}$ $\frac{8}{4.5}$ $\frac{6}{3.5}$ $\frac{7}{2.7}$ $\frac{4.5}{3.0}$ $\frac{8}{3.8}$ $\frac{11}{1.5}$ $\frac{30}{1.7}$

5 5.3 66.1

$\frac{30}{5.8}$ $\frac{14}{5.8}$ $\frac{10}{6.2}$ $\frac{8}{5.5}$ $\frac{8}{5.3}$ $\frac{4}{5.6}$ $\frac{8}{6.2}$ $\frac{9}{5.9}$ $\frac{30}{6.4}$

5+25 V.S.P. current 5.3 66.1

$\frac{100}{5.5}$ $\frac{30}{6.6}$ $\frac{7}{7.3}$ $\frac{7}{5.6}$ $\frac{7}{5.3}$ $\frac{8}{5.8}$ $\frac{8}{7.1}$ $\frac{8}{8.2}$ $\frac{50}{9.4}$ $\frac{100}{10.9}$
FL 1064.1
FL 1063.2

6 4.8 66.4

$\frac{30}{2.9}$ $\frac{11}{3.9}$ $\frac{9}{5.8}$ $\frac{9}{4.8}$ $\frac{6}{5.3}$ $\frac{8}{6.2}$ $\frac{12.5}{3.1}$ $\frac{30}{3.6}$

6+75 2.9 68.5

$\frac{30}{1.9}$ $\frac{11}{2.9}$ $\frac{10}{4.1}$ $\frac{7}{2.9}$ $\frac{6}{3.5}$ $\frac{9}{4.5}$ $\frac{11}{2.2}$ $\frac{30}{3.0}$

7 3.5 67.9

$\frac{30}{2.1}$ $\frac{13}{3.3}$ $\frac{10.5}{5.0}$ $\frac{7}{3.5}$ $\frac{5}{4.2}$ $\frac{8.5}{5.1}$ $\frac{11}{2.7}$ $\frac{30}{3.2}$

3.36 1069.10 5.61 1065.74

8 3.5 65.6

$\frac{30}{1.9}$ $\frac{14}{4.0}$ $\frac{11}{5.3}$ $\frac{7}{3.5}$ $\frac{5.5}{4.2}$ $\frac{8}{5.3}$ $\frac{9.5}{4.2}$ $\frac{30}{4.8}$

9 6.6 62.5

$\frac{30}{5.5}$ $\frac{25}{5.5}$ $\frac{18}{7.1}$ $\frac{10}{7.0}$ $\frac{9}{7.5}$ $\frac{6}{6.6}$ $\frac{6.5}{7.1}$ $\frac{8.5}{7.7}$ $\frac{10}{7.3}$ $\frac{30}{7.5}$

9+23 7.0 62.1

$\frac{50}{7.5}$ $\frac{30}{8.0}$ $\frac{11}{7.8}$ $\frac{10}{7.8}$ $\frac{7}{7.0}$ $\frac{6}{7.5}$ $\frac{9}{8.5}$ $\frac{9}{8.8}$ $\frac{9}{9.0}$ $\frac{30}{8.9}$ $\frac{50}{10}$ $\frac{100}{14.2}$
FL 1060.4
FL 1064.1

1069.10

B.M. 2 2.64 1068.98 2.64 1066.46 1066.34

10 5.4 63.4

11 5.1 63.9

4.44 1068.50 4.92 1064.06

12 5.3 63.2

12+70[±] 1X1 stone box 4.9 63.6

13 5.3 63.2

14 4.7 63.8

15 4.3 64.2

16 4.3 64.2

2.91 1069.36 2.05 1066.45

17 3.9 65.5

Spike in 24" Maple 60LT ± Sta 9+60

$\frac{30}{3.1}$	$\frac{26}{3.5}$	$\frac{23}{4.7}$	$\frac{9}{6.3}$	$\frac{7}{5.6}$	$\frac{7}{6.2}$	$\frac{13}{4.6}$	$\frac{30}{5.4}$
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$\frac{30}{4.5}$	$\frac{20}{4.4}$	$\frac{11}{5.9}$	$\frac{10}{4.2}$	$\frac{7}{5.7}$	$\frac{7}{5.1}$	$\frac{8}{5.7}$	$\frac{18}{5.5}$	$\frac{30}{6.6}$	$\frac{30}{6.2}$
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$\frac{30}{4.2}$	$\frac{11}{5.6}$	$\frac{9}{4.7}$	$\frac{7}{5.6}$	$\frac{7}{5.3}$	$\frac{10}{6.0}$	$\frac{12}{5.9}$	$\frac{30}{7.1}$
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$\frac{30}{4.5}$	$\frac{20}{5.9}$	$\frac{30}{6.1}$	$\frac{9}{4.7}$	$\frac{8}{5.7}$	$\frac{8}{5.0}$	$\frac{8}{4.9}$	$\frac{6.5}{5.3}$	$\frac{7}{5.9}$	$\frac{6.9}{6.9}$	$\frac{25}{7.1}$	$\frac{50}{8.4}$	$\frac{100}{10.0}$
St. out	pitdy W	D. Nth E	F. L.	T. D			T. D	F. L.				1061.6

$\frac{30}{5.0}$	$\frac{13}{5.5}$	$\frac{10}{6.2}$	$\frac{9}{5.7}$	$\frac{9}{5.3}$	$\frac{8}{6.0}$	$\frac{9}{5.8}$	$\frac{30}{6.2}$
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$\frac{30}{4.6}$	$\frac{13}{5.4}$	$\frac{11}{6.3}$	$\frac{8}{4.7}$	$\frac{7}{6.0}$	$\frac{8}{5.9}$	$\frac{30}{6.0}$
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$\frac{30}{4.5}$	$\frac{12}{5.2}$	$\frac{10}{6.0}$	$\frac{8}{5.2}$	$\frac{8}{4.3}$	$\frac{9}{5.9}$	$\frac{10}{5.5}$	$\frac{30}{6.0}$
------------------	------------------	------------------	-----------------	-----------------	-----------------	------------------	------------------

$\frac{30}{4.5}$	$\frac{13}{4.5}$	$\frac{11}{5.2}$	$\frac{9}{4.7}$	$\frac{9}{4.3}$	$\frac{8}{5.3}$	$\frac{9}{4.9}$	$\frac{30}{4.5}$
------------------	------------------	------------------	-----------------	-----------------	-----------------	-----------------	------------------

$\frac{30}{4.0}$	$\frac{11}{4.4}$	$\frac{9}{5.3}$	$\frac{9}{3.9}$	$\frac{8}{4.9}$	$\frac{9}{4.7}$	$\frac{30}{4.0}$
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1069.36

18 3.5 65.9

19 4.2 65.2

19+46 2'x1½' stone box 3.8 65.6

20 4.0 65.4

21 3.1 66.3

22 1.2 68.2

6.27 107538 0.25 1069.11

23 5.9 69.5

24 5.5 69.9

25 4.1 71.3

26 2.9 72.5

12

$$\begin{array}{r} 30 \\ 3.9 \end{array} \quad \begin{array}{r} 12 \\ 4.3 \end{array} \quad \begin{array}{r} 10 \\ 4.8 \end{array} \quad \begin{array}{r} 8 \\ 3.5 \end{array} \quad \begin{array}{r} 9 \\ 4.6 \end{array} \quad \begin{array}{r} 30 \\ 4.1 \end{array}$$

$$\begin{array}{r} 30 \\ 4.1 \end{array} \quad \begin{array}{r} 12 \\ 4.7 \end{array} \quad \begin{array}{r} 11 \\ 5.1 \end{array} \quad \begin{array}{r} 4.2 \\ 4.2 \end{array} \quad \begin{array}{r} 8 \\ 4.8 \end{array} \quad \begin{array}{r} 11 \\ 4.4 \end{array} \quad \begin{array}{r} 30 \\ 4.7 \end{array}$$

$$\begin{array}{r} 30 \\ 4.4 \end{array} \quad \begin{array}{r} 20 \\ 4.9 \end{array} \quad \begin{array}{r} 10 \\ 5.4 \end{array} \quad \begin{array}{r} 8 \\ 4.0 \end{array} \quad \begin{array}{r} 8 \\ 3.8 \end{array} \quad \begin{array}{r} 4 \\ 3.7 \end{array} \quad \begin{array}{r} 6 \\ 4.7 \end{array} \quad \begin{array}{r} 6 \\ 6.1 \end{array} \quad \begin{array}{r} 14 \\ 6.4 \end{array} \quad \begin{array}{r} 14 \\ 6.0 \end{array} \quad \begin{array}{r} 14 \\ 5.3 \end{array} \quad \begin{array}{r} 100 \\ 6.2 \end{array} \quad \begin{array}{r} 200 \\ 7.5 \end{array}$$

STONEX FL, TO
10635
10630 (% Drain P.P.O.)

$$\begin{array}{r} 30 \\ 4.0 \end{array} \quad \begin{array}{r} 12 \\ 4.7 \end{array} \quad \begin{array}{r} 10 \\ 5.3 \end{array} \quad \begin{array}{r} 8 \\ 4.7 \end{array} \quad \begin{array}{r} 4.0 \\ 4.0 \end{array} \quad \begin{array}{r} 10 \\ 4.9 \end{array} \quad \begin{array}{r} 11 \\ 4.4 \end{array} \quad \begin{array}{r} 30 \\ 4.6 \end{array}$$

$$\begin{array}{r} 30 \\ 3.4 \end{array} \quad \begin{array}{r} 12 \\ 3.6 \end{array} \quad \begin{array}{r} 9 \\ 4.3 \end{array} \quad \begin{array}{r} 8 \\ 3.6 \end{array} \quad \begin{array}{r} 3.1 \\ 3.1 \end{array} \quad \begin{array}{r} 10 \\ 4.4 \end{array} \quad \begin{array}{r} 12 \\ 3.2 \end{array} \quad \begin{array}{r} 30 \\ 2.5 \end{array}$$

$$\begin{array}{r} 30 \\ 0.1 \end{array} \quad \begin{array}{r} 19 \\ 0.1 \end{array} \quad \begin{array}{r} 10 \\ 2.9 \end{array} \quad \begin{array}{r} 7 \\ 1.8 \end{array} \quad \begin{array}{r} 8 \\ 1.2 \end{array} \quad \begin{array}{r} 10 \\ 1.7 \end{array} \quad \begin{array}{r} 12 \\ 2.6 \end{array} \quad \begin{array}{r} 30 \\ 1.5 \end{array} \quad \begin{array}{r} 1.6 \\ 1.6 \end{array}$$

$$\begin{array}{r} 30 \\ 7.1 \end{array} \quad \begin{array}{r} 11 \\ 7.0 \end{array} \quad \begin{array}{r} 9 \\ 7.5 \end{array} \quad \begin{array}{r} 5.9 \\ 5.9 \end{array} \quad \begin{array}{r} 10 \\ 7.4 \end{array} \quad \begin{array}{r} 11 \\ 6.1 \end{array} \quad \begin{array}{r} 30 \\ 6.7 \end{array}$$

$$\begin{array}{r} 30 \\ 5.3 \end{array} \quad \begin{array}{r} 12 \\ 5.9 \end{array} \quad \begin{array}{r} 9 \\ 4.6 \end{array} \quad \begin{array}{r} 5.5 \\ 5.5 \end{array} \quad \begin{array}{r} 10 \\ 6.5 \end{array} \quad \begin{array}{r} 12 \\ 6.0 \end{array} \quad \begin{array}{r} 30 \\ 5.1 \end{array}$$

$$\begin{array}{r} 30-25 \\ 3.5 \end{array} \quad \begin{array}{r} 10 \\ 5.5 \end{array} \quad \begin{array}{r} 7.1 \\ 7.1 \end{array} \quad \begin{array}{r} 1.12 \\ 5.5 \end{array} \quad \begin{array}{r} 15 \\ 3.8 \end{array} \quad \begin{array}{r} 30 \\ 3.6 \end{array}$$

$$\frac{7}{3.6}$$

$$\begin{array}{r} 30 \\ 3.4 \end{array} \quad \begin{array}{r} 12 \\ 4.0 \end{array} \quad \begin{array}{r} 10 \\ 4.3 \end{array} \quad \begin{array}{r} 2.9 \\ 2.9 \end{array} \quad \begin{array}{r} 10 \\ 4.4 \end{array} \quad \begin{array}{r} 13 \\ 3.4 \end{array} \quad \begin{array}{r} 30 \\ 3.4 \end{array}$$

1075.38

B.M.# A

1.13 1074.25 1074.21

4.22 1078.43

27

5.7 72.7

$$\frac{30}{6.1} \quad \frac{13}{6.5} \quad \frac{12}{7.0} \quad \frac{10}{6.4} \quad \frac{9}{5.7} \quad \frac{9}{6.9} \quad \frac{10}{6.5} \quad \frac{30}{6.4}$$

28

4.9 73.5

$$\frac{30}{4.9} \quad \frac{14}{5.7} \quad \frac{12}{6.3} \quad \frac{10}{6.7} \quad \frac{9}{7.9} \quad \frac{8}{6.2} \quad \frac{9}{5.6} \quad \frac{30}{5.3}$$

29

4.4 74.0

$$\frac{30}{4.0} \quad \frac{18}{4.8} \quad \frac{13}{5.3} \quad \frac{9}{4.7} \quad \frac{9}{4.4} \quad \frac{30}{4.4}$$

30

3.4 75.0

$$\frac{30}{3.0} \quad \frac{14}{3.7} \quad \frac{12}{4.6} \quad \frac{9}{3.9} \quad \frac{9}{3.4} \quad \frac{8}{4.8} \quad \frac{12}{3.7} \quad \frac{30}{3.5}$$

31

74.7

$$\frac{3.9}{3.0} \quad \frac{12}{4.2} \quad \frac{11}{5.2} \quad \frac{9}{3.7} \quad \frac{8}{5.1} \quad \frac{11}{4.5} \quad \frac{30}{6.4}$$

T.P

5.68 1079.76 4.35 1074.08

32

5.4 74.4

$$\frac{30}{5.4} \quad \frac{13}{6.5} \quad \frac{11}{7.3} \quad \frac{9}{5.4} \quad \frac{9}{7.2} \quad \frac{10}{6.7} \quad \frac{30}{6.7}$$

B.M.5

4.65 1079.76 4.65 1075.11 1075.11

33

5.9 73.9

$$\frac{30}{5.9} \quad \frac{14}{6.8} \quad \frac{12}{7.3} \quad \frac{9}{5.9} \quad \frac{7}{7.6} \quad \frac{10}{6.8} \quad \frac{15}{6.9} \quad \frac{20}{6.0} \quad \frac{30}{6.2}$$

33+60

12" V.S.P 5.7 74.1

$$\frac{150}{6.6} \quad \frac{100}{7.2} \quad \frac{30}{7.0} \quad \frac{10}{7.3} \quad \frac{10}{6.5} \quad \frac{7}{5.7} \quad \frac{9}{5.7} \quad \frac{8}{5.9} \quad \frac{9}{6.9} \quad \frac{9}{7.4} \quad \frac{30}{8.0} \quad \frac{100}{8.7}$$

FL 7.0
1072.5
T.P
FL 200
1072.4
9.7

34

5.8 74.0

$$\frac{30}{6.3} \quad \frac{14}{6.1} \quad \frac{12}{6.7} \quad \frac{9}{6.0} \quad \frac{9}{5.8} \quad \frac{6}{6.4} \quad \frac{7}{6.3} \quad \frac{14}{6.9} \quad \frac{21}{5.4} \quad \frac{30}{5.3}$$

Check Bench

B.M. #3	1.13	1075.16		1074.03	
	0.16	1069.05	6.27	1068.89	
	2.42	1068.65	2.82	1066.23	
B.M. #2	3.86	1069.66	2.52	1066.13	1065.80
	5.64	1073.86	1.44	1068.22	
B.M. #1			2.08	1071.78	1071.85

1079.60
1079.76

35 4.6 75.2

T.P 7.79 1083.93 3.62 1076.14

36 7.7 76.2

37 7.1 76.8

38 6.0 77.9

39 4.3 79.6

40 1.4 82.5

T.P 9.77 1093.12 0.58 1083.35

41 7.1 86.0

B.M 6 3.66 1089.46 1089.46

$\frac{30}{5.2}$ $\frac{13}{5.5}$ $\frac{11}{4.3}$ $\frac{9}{5.4}$ $\frac{7}{4.6}$ $\frac{8}{6.1}$ $\frac{10}{5.6}$ $\frac{18}{3.7}$ $\frac{30}{3.5}$

$\frac{30}{6.1}$ $\frac{12}{8.7}$ $\frac{10.5}{9.7}$ $\frac{9}{8.7}$ $\frac{7}{7.7}$ $\frac{8}{8.5}$ $\frac{10.5}{9.5}$ $\frac{11}{8.9}$ $\frac{16}{8.7}$ $\frac{30}{8.8}$

$\frac{30}{7.5}$ $\frac{11}{8.3}$ $\frac{9}{8.8}$ $\frac{6}{7.7}$ $\frac{7}{7.1}$ $\frac{11}{8.0}$ $\frac{13}{7.8}$ $\frac{30}{8.2}$

$\frac{30}{6.3}$ $\frac{11}{7.0}$ $\frac{9}{7.6}$ $\frac{6}{6.0}$ $\frac{7}{6.6}$ $\frac{10}{7.3}$ $\frac{12}{6.6}$ $\frac{30}{7.0}$

$\frac{30}{4.2}$ $\frac{12}{5.0}$ $\frac{9}{6.0}$ $\frac{6}{4.9}$ $\frac{7}{4.3}$ $\frac{7.5}{4.8}$ $\frac{14.5}{5.8}$ $\frac{12}{5.0}$ $\frac{30}{4.2}$

$\frac{30}{0.5}$ $\frac{14}{0.8}$ $\frac{10}{3.3}$ $\frac{7}{2.4}$ $\frac{7}{1.4}$ $\frac{7.5}{2.0}$ $\frac{11}{3.2}$ $\frac{14}{1.4}$ $\frac{30}{0.8}$

$\frac{30}{5.7}$ $\frac{15}{6.8}$ $\frac{10}{9.2}$ $\frac{8}{8.0}$ $\frac{7}{7.1}$ $\frac{10}{8.8}$ $\frac{13}{6.4}$ $\frac{30}{5.7}$

Spike, N.W. Root 24" Maple, Right 5th 41+50

Stopped, Nov. 8, 1930. 3 o'clock

Nov. 14, 1930
 D. Parks
 R. Hassel
 T. Snyder

B.M. 6 6.91 109637 1108946

42 6.6 89.8

43 3.8 92.6

44 3.3 93.1

44+80± side Road 3.2 93.2

45 2.9 93.5

8.18 110344 1.11 1095.26

46 8.3 95.1

46+02± ^{60' Ditch to North} ^{Pass Rd. Culvert} ^{from P.R.} 8.2 95.2

47 5.8 97.6

48 3.8 99.6

B.M. 7 4.15 1099.29 109932

$\frac{30}{6.5}$ $\frac{11}{7.6}$ $\frac{10}{8.4}$ $\frac{6}{7.6}$ $\frac{7}{6.6}$ $\frac{7}{7.3}$ $\frac{10}{8.7}$ $\frac{12}{7.3}$ $\frac{17}{6.4}$ $\frac{30}{6.0}$

$\frac{30}{4.0}$ $\frac{12}{4.1}$ $\frac{10}{5.3}$ $\frac{4}{3.8}$ $\frac{8}{4.8}$ $\frac{11}{5.9}$ $\frac{20}{3.5}$ $\frac{1.7}{1.7}$ $\frac{30}{1.4}$

$\frac{30}{4.7}$ $\frac{12}{3.7}$ $\frac{10}{4.2}$ $\frac{3.3}{3.3}$ $\frac{7}{4.1}$ $\frac{9}{3.4}$ $\frac{30}{2.3}$

$\frac{200}{4.4}$ $\frac{150}{4.3}$ $\frac{100}{3.8}$ $\frac{50}{3.5}$ $\frac{3.2}{3.2}$

$\frac{30}{3.5}$ $\frac{20}{2.6}$ $\frac{13}{4.1}$ $\frac{10}{3.3}$ $\frac{2.9}{2.9}$ $\frac{6}{3.5}$ $\frac{12}{2.4}$ $\frac{25}{1.4}$ $\frac{30}{1.4}$

$\frac{30}{8.5}$ $\frac{14}{8.2}$ $\frac{11}{9.6}$ $\frac{8}{8.7}$ $\frac{7}{8.3}$ $\frac{8}{8.7}$ $\frac{8}{8.3}$ $\frac{30}{7.1}$

$\frac{30}{6.9}$ $\frac{4.1}{7.5}$ $\frac{5.2}{9.2}$ $\frac{7.0}{8.3}$ $\frac{9}{8.2}$ $\frac{8.2}{8.2}$ $\frac{7.8}{8.8}$ $\frac{F.L.}{10.0}$ $\frac{13}{10.1}$ $\frac{18}{8.3}$ $\frac{50th. W. D. T. H.}{10.6}$

$\frac{30}{6.5}$ $\frac{12}{5.6}$ $\frac{7}{7.7}$ $\frac{7}{6.5}$ $\frac{8}{5.8}$ $\frac{10}{6.6}$ $\frac{14}{7.4}$ $\frac{30}{5.6}$ $\frac{5.0}{5.0}$

$\frac{30}{5.8}$ $\frac{10}{4.7}$ $\frac{9}{5.6}$ $\frac{6}{4.5}$ $\frac{3.8}{3.8}$ $\frac{8}{4.4}$ $\frac{10}{5.5}$ $\frac{13}{4.8}$ $\frac{20}{5.0}$ $\frac{30}{4.1}$

B.M. 7 4.15 1103.47 1099.32

49 3.0 00.5

$\frac{30}{4.6} \frac{9}{3.7} \frac{7.5}{4.4} \frac{6}{3.7} \frac{8}{30} \frac{11}{35.4.2} \frac{12}{3.8} \frac{17}{4.2} \frac{30}{4.3}$

50 1.8 01.7

$\frac{30}{2.6} \frac{9}{2.5} \frac{7}{3.2} \frac{6}{2.3} \frac{9}{1.8} \frac{11}{2.2} \frac{12}{3.1} \frac{12}{2.4} \frac{30}{3.1}$

12.47 1114.93 1.01 1102.46

51 11.4 03.5

$\frac{30}{11.8} \frac{13}{12.6} \frac{10}{12.0} \frac{8}{7.9} \frac{6}{12.2} \frac{7}{11.4} \frac{11}{12.2} \frac{12}{13.1} \frac{30}{12.2} \frac{30}{11.9}$

52 9.3 05.6

$\frac{30}{9.0} \frac{11}{9.4} \frac{9}{11.0} \frac{6}{9.9} \frac{7}{9.3} \frac{12}{9.8} \frac{13}{11.0} \frac{19}{9.9} \frac{30}{8.3} \frac{30}{8.2}$

53 5.9 09.0

$\frac{30}{5.2} \frac{11}{5.8} \frac{8}{8.1} \frac{6}{7.0} \frac{9}{5.9} \frac{11}{6.3} \frac{13}{7.2} \frac{14}{4.7} \frac{20}{3.9} \frac{30}{3.1}$

12.31 1125.05 2.19 1112.74

54 12.6 12.5

$\frac{30}{11.9} \frac{9}{12.4} \frac{7}{15.1} \frac{5}{13.2} \frac{11}{12.6} \frac{12}{13.0} \frac{13}{13.8} \frac{19}{12.7} \frac{19}{11.3} \frac{30}{11.1}$

55 9.8 15.3

$\frac{30}{8.6} \frac{9}{10.1} \frac{7}{11.3} \frac{4}{10.4} \frac{9}{9.8} \frac{9}{10.2} \frac{12}{11.2} \frac{14}{9.2} \frac{20}{8.8} \frac{30}{8.8}$

56 7.2 17.9

$\frac{30}{5.6} \frac{12}{6.0} \frac{7.5}{8.3} \frac{4}{7.7} \frac{10}{7.2} \frac{12}{7.9} \frac{14}{8.5} \frac{17}{6.9} \frac{20}{6.1} \frac{30}{5.6} \frac{30}{5.6}$

57 3.4 21.7

$\frac{30}{1.3} \frac{13}{1.7} \frac{8.5}{5.1} \frac{6}{3.9} \frac{9}{3.4} \frac{9}{4.1} \frac{12}{4.9} \frac{17}{1.3} \frac{30}{1.0}$

10.37 1135.21 0.21 1124.84

1135.21

58 9.0 26.2

$\frac{30}{6.0} \frac{14}{6.5} \frac{10}{10.9} \frac{7}{9.8} \frac{9}{9.0} \quad \frac{10}{10.6} \frac{15}{6.5} \frac{20}{6.2} \frac{30}{5.5}$

59 5.5 29.7

$\frac{30}{2.0} \frac{30}{2.4} \frac{12}{6.0} \frac{11}{6.9} \frac{9}{6.3} \frac{9}{5.5} \quad \frac{9}{6.2} \quad \frac{30}{12.2} \frac{50}{16.7}$

B.M. # 8 9.80 1125.41 1125.43

9.80 1135.23

59+85± 4.6 30.6

off. Park
 $\frac{30}{0.0} \frac{25}{0.5} \frac{15}{3.4} \frac{11}{5.8} \frac{FL}{5.9} \frac{T.P.P.}{9} \frac{7}{4.6} \quad \frac{T.P.P.}{7.5} \frac{FL}{6.5} \frac{25}{10.1} \frac{50}{16.8}$
inlet-ditch west 129.3 1128.7

60 4.2 31.0

$\frac{30}{0.1} \frac{21}{0.3} \frac{22}{2.6} \frac{14}{3.4} \frac{11}{5.6} \frac{9}{4.9} \frac{9}{4.2} \quad \frac{6}{4.8} \frac{8}{4.6} \frac{22}{7.3} \frac{30}{9.2}$

10.01 1141.74 3.50 1131.73

61 7.2 34.5

$\frac{30}{4.2} \frac{15}{7.0} \frac{15}{7.8} \frac{8}{7.3} \frac{8}{7.2} \quad \frac{8}{8.1} \frac{30}{10.8} \frac{50}{13.9}$

8.17 1146.64 3.27 1138.47

62 8.3 38.3

$\frac{30}{1.5} \frac{23}{3.2} \frac{15}{7.2} \frac{10}{10.1} \frac{7}{8.3} \frac{7}{7.3} \frac{13}{9.8} \frac{18}{8.1} \frac{30}{7.9} \frac{30}{8.8}$

11.39 1157.60 0.43 1146.21

63 3.2 43.4

$\frac{+2.0}{30} \frac{16}{1.4} \frac{10}{5.0} \frac{3.2}{3.2} \quad \frac{8}{4.7} \frac{10}{4.2} \frac{30}{6.1}$

64 10.2 47.4

$\frac{30}{4.7} \frac{22}{5.9} \frac{10}{12.2} \frac{7}{11.6} \frac{7}{10.2} \quad \frac{7}{11.2} \frac{10}{12.0} \frac{12}{11.6} \frac{14}{10.1} \frac{18}{10.1} \frac{30}{11.3}$

65 3.6 54.0

$\frac{35}{0.1} \frac{15}{5.0} \frac{12}{5.8} \frac{6}{3.6} \frac{6}{4.5} \frac{9}{5.7} \frac{12}{3.2} \frac{30}{3.5}$

B.M. # 9 2.99 1157.60 2.99 1154.61 1154.61

1157.60

9.77 1166.73 0.64 1156.96

66 9.5 57.2

67 1.56 1155.37 12.92 1153.81

67 4.5 50.9

67+60 ± 5.5 49.9

68 4.5 50.9

9.29 1164.62 0.04 1153.35

69 6.9 57.7

11.44 1175.62 0.44 1164.18

69 6.7 5.8 4.3

70 9.4 66.2

B.M. 10 1.12 1175.63 1.12 1174.50 1174.51

12.65 1186.12 2.16 1173.47

71 12.1 74.0

30 25 14 12 11 8 12 30
2.9 3.3 9.7 10.8 10.3 9.5 11.4 7.7 12.7

35 20
4.3 10.6

14 12 6 0 2 20 30
5.0 4.5 3.7 4.5 4.6 13.9 17.5

Total (wall) Total Headwall
50 F.L. Total 21 20 16 10 11 Total F.L. 50 100
12.3 15.4 11.2 7.3 7.7 5.6 5.5 8.0 7.3 12.1 15.3 16.5 17.7
1140 1140.1

30 24 11 3 3 17 30
11.4 10.9 4.9 4.2 4.5 5.2 6.6 12.4

50 40 36 29 6 2
11.3 6.3 6.3 7.4 6.3 6.9 7.5

30 24 13 4 3 4 16 30 40
1.8 1.8 10.2 8.9 9.4 10.3 8.3 0.60 0.02 0.00

30 14 12 9 7 14 30
14.9 11.6 13.8 13.2 12.1 13.7 9.7 8.2

1186.12

72

5.2 80.9

13.03

1195.51 3.64 1182.78

T.P.

5.63 1189.88

$\frac{30}{6.1}$	$\frac{15}{4.5}$	$\frac{11}{7.3}$	$\frac{7}{5.9}$	$\frac{7}{5.2}$	$\frac{8}{7.0}$	$\frac{15}{1.9}$	$\frac{30}{0.7}$
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R.P. Hub 30' Lt. sta. 73+20

Nov. 15, 1930
 D. Parks
 R. Hassel
 T. Snyder

21

T.P. 6.14 119602 1189.88

73 8.8 87.2

0.20 1187.07 9.15 1186.87

74 6.6 80.5

74+92 Culvert 10.7 76.4

75 10.8 76.3

7.56 1183.99 10.64 1176.43

76 7.9 76.1

B.M. #11 6.19 1183.97 6.19 1177.80 1177.78

76+76± Cross road 5.1 78.9

77 4.2 79.8

11.47 1192.55 2.89 1181.08

78 8.8 83.8

79 5.1 87.5

$\frac{30}{6.5}$ $\frac{14}{6.2}$ $\frac{10}{9.9}$ $\frac{8}{8.8}$ $\frac{16}{9.9}$ $\frac{30}{4.7}$ $\frac{30}{3.9}$

$\frac{30}{7.4}$ $\frac{13}{5.6}$ $\frac{10}{8.5}$ $\frac{5}{6.9}$ $\frac{10}{6.6}$ $\frac{16}{7.9}$ $\frac{30}{2.6}$ $\frac{30}{1.5}$

$\frac{100}{15.8}$ $\frac{50}{15.1}$ $\frac{20}{13.8}$ $\frac{F.L.}{13.3}$ $\frac{T.P.}{8}$ $\frac{8}{12.3}$ $\frac{10.7}{10.7}$ $\frac{8}{10.6}$ $\frac{T.P.}{12.1}$ $\frac{F.L.}{12.8}$ $\frac{B}{11.8}$ $\frac{30}{12.3}$
 1173.8 1174.3 1012.1 from d.

$\frac{30}{11.6}$ $\frac{15}{12.2}$ $\frac{12-8}{13.4}$ $\frac{6}{11.8}$ $\frac{10.8}{10.8}$ $\frac{8}{10.6}$ $\frac{15}{12.7}$ $\frac{17}{12.0}$ $\frac{30}{12.2}$

$\frac{30}{8.0}$ $\frac{16}{8.9}$ $\frac{13-9}{9.7}$ $\frac{7}{8.6}$ $\frac{7}{8.9}$ $\frac{6}{7.5}$ $\frac{18}{8.0}$ $\frac{20}{8.2}$ $\frac{30}{8.7}$

$\frac{100}{0.7}$ $\frac{150}{2.3}$ $\frac{100}{3.3}$ $\frac{50}{4.4}$ $\frac{5.1}{5.1}$ $\frac{50}{3.9}$ $\frac{100}{2.7}$ $\frac{150}{1.4}$ $\frac{175}{1.3}$ $\frac{200}{1.8}$ $\frac{230}{4.2}$

$\frac{30}{3.0}$ $\frac{14}{3.7}$ $\frac{8}{4.9}$ $\frac{4.2}{4.2}$ $\frac{16}{5.2}$ $\frac{20}{3.6}$ $\frac{30}{2.3}$

$\frac{30}{6.7}$ $\frac{16}{6.7}$ $\frac{12}{11.2}$ $\frac{10}{8.6}$ $\frac{8}{8.8}$ $\frac{7}{9.9}$ $\frac{8}{10.1}$ $\frac{16}{6.0}$ $\frac{30}{5.1}$

$\frac{30}{5.2}$ $\frac{14}{4.3}$ $\frac{13}{6.1}$ $\frac{11}{5.6}$ $\frac{8}{4.6}$ $\frac{5.1}{5.1}$ $\frac{4}{5.5}$ $\frac{7}{6.2}$ $\frac{10}{4.4}$ $\frac{13}{3.9}$ $\frac{30}{2.9}$

119255

80 2.8 89.8

9.35 1200.85 1.05 1191.50

81 9.4 91.5

82 6.9 94.0

83 4.8 96.1

3.79 1198.99 5.65 1195.20

B.M. #12 4.77 1199.01 4.77 1194.22 1194.24

84 6.2 92.8

85 7.2 91.8

85+63+ 5.7 93.3

86 5.0 94.0

12.93 1210.67 1.27 1197.74

87 13.0 97.7

30 14 13 12 5 3 5 8 30
3.6 2.7 3.6 3.0 2.3 2.8 3.1 3.8 1.9 1.3

30 17 15 6 5 18 30
8.8 8.7 14.1 8.8 9.4 10.2 8.5 8.5

30 17 13 4 6 9 19 28 30
6.0 6.0 7.8 6.5 6.9 7.9 5.9 5.2 6.1 5.9

30 18 14 4 5 7 30
3.9 4.1 4.8 4.4 4.8 5.1 3.5 4.2

30 19 12 7 15 30
1.6 2.3 6.9 6.2 7.2 3.8 7.6

30 18 15 12 4 5 21 30
6.7 7.5 7.8 7.3 6.8 7.2 7.5 9.5 9.7

Front to ditch
65 80 FL 11.13 11 6 75 Total
7.0 7.6 9.1 6.9 4.8 5.9 5.7 5.7 4.6 6.9 8.7 9.2 9.6 11.1
1139.9 1190.3

30 14 10 7 27 40
6.4 6.0 5.1 5.0 5.4 5.5 1.7

30 20 14 10 6 9 14 30
13.8 12.4 12.5 13.5 13.0 14.5 13.7 10.7 8.8

1210.67

88 8.1 02.6

12.12 1218.29 4.50 1206.17

89 11.8 06.5

90 7.2 11.1

91 7.9 10.4

B.M #13 6.02 1215.52 8.86 1209.43 1209.50

91+47[±] 4.9 10.6

92 4.6 10.9

93 3.5 12.0

11.11 1225.72 0.91 1214.61

94 9.4 16.3

95 5.4 20.3

96 3.7 22.0

$$\begin{array}{cccccccc} 30 & 21 & 12 & 8 & & 7 & 8-10 & 16 & 30 \\ 10.1 & 8.4 & 7.6 & 9.1 & 8.7 & 8.6 & 9.1 & 5.5 & 4.2 \end{array}$$

$$\begin{array}{cccccccc} 30 & 9 & 6 & & & 9 & 12 & 17 & 26 & 30 \\ 14.3 & 11.3 & 12.3 & 11.8 & & 12.1 & 12.8 & 9.2 & 7.0 & 7.4 \end{array}$$

$$\begin{array}{cccc} 30 & 19 & 7 & \\ 15.1 & 7.1 & 8.4 & 7.2 \end{array} \qquad \begin{array}{ccc} 11 & 17 & 30 \\ 8.3 & 4.2 & 2.5 \end{array}$$

$$\begin{array}{cccc} 30 & 10 & 8 & \\ 11.0 & 9.8 & 8.8 & 7.9 \end{array} \qquad \begin{array}{cccc} 8 & 14 & 24 & 30 \\ 8.4 & 8.3 & 3.2 & 2.7 \end{array}$$

$$\begin{array}{cccccccc} \text{D.M.} & \text{T.F.H.W.} & & & & & & & & \\ 150.122 & 75 & 30 & \text{FL T.O.} & & & & & & \\ 12.8 & 12.2 & 9.9 & 9.1 & 9.0 & 6.5 & 4.3 & 5.1 & 4.9 & 4.9 & 4.7 & 6.2 & 8.9 & 7.3 & 7.1 \end{array}$$

1206.5

1206.6

$$\begin{array}{cccc} 30 & 12 & 11 & 9 \\ 6.8 & 5.7 & 6.2 & 5.5 & 4.6 \end{array} \qquad \begin{array}{ccc} 10 & 11 & 19 & 30 \\ 5.5 & 4.9 & 6.0 & 6.4 \end{array}$$

$$\begin{array}{cccc} 30 & 13 & 9 & 7 \\ 0.4 & 2.4 & 4.8 & 3.7 & 3.5 \end{array} \qquad \begin{array}{ccc} 18 & 20 & 30 \\ 4.2 & 3.6 & 5.1 \end{array}$$

$$\begin{array}{cccc} 30 & 21 & 12 & 9 \\ 4.7 & 5.1 & 11.0 & 9.8 & 9.4 & 9.6 & 11.5 & 7.0 & 7.7 \end{array}$$

$$\begin{array}{cccc} 30 & 13 & 11 & 7 \\ 4.2 & 6.2 & 7.1 & 5.7 & 5.7 & 6.1 & 7.2 & 5.8 & 6.2 \end{array}$$

$$\begin{array}{cccc} 30 & 12 & 10 & 7 \\ 2.6 & 4.0 & 5.6 & 4.2 & 3.7 \end{array} \qquad \begin{array}{ccc} 8 & 11 & 30 \\ 5.0 & 4.1 & 5.1 \end{array}$$

1225.72

8.24 1232.13 1.83 1223.89

97 80 24.1

98 5.5 26.6

99 4.5 27.6

99+21[±] Culvert 4.2 27.9

100 3.4 28.7

5.45 123434 3.24 122889

B.M. 14 1.94 123439 1.94 123240 1232.45

101 4.9 29.5

102 3.2 31.2

103 1.5 32.9

13.07 1246.71 0.75 123364

104 11.6 35.1

$\frac{30}{4.9} \frac{13}{8.0} \frac{11}{9.4} \frac{9}{8.7} \frac{7}{8.0} \frac{7}{8.6} \frac{9}{9.7} \frac{13}{7.7} \frac{30}{8.8}$

$\frac{30}{3.7} \frac{13}{5.3} \frac{9}{7.6} \frac{7}{6.3} \frac{7}{5.5} \frac{8}{6.2} \frac{10}{7.6} \frac{13}{6.3} \frac{30}{6.9}$

$\frac{30}{4.3} \frac{12}{5.3} \frac{10}{6.1} \frac{7}{4.8} \frac{7}{4.5} \frac{6}{4.8} \frac{9}{5.9} \frac{11}{5.0} \frac{30}{6.3}$

Bank Ditch E. 107
 $\frac{50}{3.3} \frac{15}{4.9} \frac{50}{5.4} \frac{FL.}{6.0} \frac{107}{4.9} \frac{7}{4.2} \frac{8}{5.0} \frac{FL.}{6.3} \frac{20}{6.8} \frac{50}{7.7} \frac{100}{8.5} \frac{200}{10.4}$
1226.1 1225.8

$\frac{30}{3.6} \frac{12}{4.0} \frac{10}{4.7} \frac{7}{4.0} \frac{7}{3.4} \frac{5}{3.5} \frac{8}{4.9} \frac{10}{3.9} \frac{20}{4.6} \frac{30}{3.8}$

$\frac{30}{4.5} \frac{12}{5.0} \frac{10}{5.9} \frac{8}{5.4} \frac{7}{4.9} \frac{8}{5.3} \frac{12}{6.0} \frac{17}{5.6} \frac{30}{5.4} \frac{30}{3.9}$

$\frac{30}{2.9} \frac{12}{3.4} \frac{10}{4.7} \frac{7}{3.2} \frac{10}{3.6} \frac{16}{4.4} \frac{30}{2.7} \frac{30}{2.0}$

$\frac{30}{2.0} \frac{15}{2.1} \frac{9}{2.8} \frac{7}{1.5} \frac{11}{2.5} \frac{15}{1.6} \frac{30}{1.3}$

$\frac{30}{10.4} \frac{15}{10.4} \frac{10}{13.1} \frac{8}{12.5} \frac{7}{11.6} \frac{12}{13.1} \frac{16}{11.3} \frac{30}{11.2}$

124671

105

95 37.2

106

65 402

107

3.1 436

108

2.3 444

T.P.

3.10 124361

$$\begin{array}{r} 30 \\ 8.3 \end{array} \quad \begin{array}{r} 16 \\ 8.3 \end{array} \quad \begin{array}{r} 12 \\ 11.1 \end{array} \quad \begin{array}{r} 9 \\ 10.3 \end{array} \quad \begin{array}{r} \\ 9.5 \end{array}$$

$$\begin{array}{r} 10 \\ 10.7 \end{array} \quad \begin{array}{r} 15 \\ 8.5 \end{array} \quad \begin{array}{r} 30 \\ 8.5 \end{array}$$

$$\begin{array}{r} 30 \\ 5.5 \end{array} \quad \begin{array}{r} 15 \\ 5.3 \end{array} \quad \begin{array}{r} 11 \\ 8.3 \end{array} \quad \begin{array}{r} 8 \\ 7.5 \end{array} \quad \begin{array}{r} \\ 6.5 \end{array}$$

$$\begin{array}{r} 11 \\ 7.9 \end{array} \quad \begin{array}{r} 15 \\ 5.2 \end{array} \quad \begin{array}{r} 30 \\ 5.1 \end{array}$$

$$\begin{array}{r} 38 \\ 2.9 \end{array} \quad \begin{array}{r} 14 \\ 2.7 \end{array} \quad \begin{array}{r} 10 \\ 4.6 \end{array} \quad \begin{array}{r} \\ 3.1 \end{array}$$

$$\begin{array}{r} 11 \\ 4.8 \end{array} \quad \begin{array}{r} 15 \\ 2.4 \end{array} \quad \begin{array}{r} 30 \\ 2.0 \end{array}$$

$$\begin{array}{r} 30 \\ 2.7 \end{array} \quad \begin{array}{r} 13 \\ 2.3 \end{array} \quad \begin{array}{r} 10 \\ 3.3 \end{array} \quad \begin{array}{r} \\ 2.3 \end{array}$$

$$\begin{array}{r} 11 \\ 3.7 \end{array} \quad \begin{array}{r} 14 \\ 2.4 \end{array} \quad \begin{array}{r} 30 \\ 2.0 \end{array}$$

R.P. Hub 1st sta 108+65± 30' Lt of E

D. Parks
R. Hesse
T. Snyder

R.P. Hub Lt. sta. 108+65 ± 30' L₁E

T ₁ P	2.27	124588		1243.61
109			4.1	418
110			8.6	373
111			10.9	35.0
	1.17	123475	12.30	1233.58
112			1.8	33.0
113			4.0	30.8
114			5.5	29.3
115			6.7	28.1
116			8.0	26.8
	4.04	1230.55	8.24	1226.51
117			4.8	25.8

$\frac{30}{3.1}$	$\frac{16}{3.1}$	$\frac{13}{2.5}$	$\frac{8}{5.6}$	$\frac{7}{4.7}$	$\frac{10}{5.2}$	$\frac{13}{2.9}$	$\frac{30}{2.9}$
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$\frac{30}{7.2}$	$\frac{10}{8.1}$	$\frac{7}{9.3}$	$\frac{6}{8.6}$	$\frac{9}{9.7}$	$\frac{14}{7.4}$	$\frac{30}{7.2}$
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$\frac{30}{11.8}$	$\frac{9}{11.3}$	$\frac{8}{12.0}$	$\frac{6}{11.5}$	$\frac{7}{10.9}$	$\frac{9}{12.2}$	$\frac{14}{10.0}$	$\frac{30}{9.6}$
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$\frac{30}{2.0}$	$\frac{9}{1.9}$	$\frac{7}{2.8}$	$\frac{6}{1.8}$	$\frac{7}{3.1}$	$\frac{12}{1.1}$	$\frac{30}{0.4}$
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$\frac{30}{4.5}$	$\frac{8}{3.8}$	$\frac{6}{4.9}$	$\frac{5}{4.5}$	$\frac{4}{4.0}$	$\frac{8.5}{4.7}$	$\frac{14}{2.4}$	$\frac{30}{1.7}$
------------------	-----------------	-----------------	-----------------	-----------------	-------------------	------------------	------------------

$\frac{30}{6.2}$	$\frac{9}{5.7}$	$\frac{7}{6.4}$	$\frac{6}{5.5}$	$\frac{10}{6.3}$	$\frac{14}{4.2}$	$\frac{30}{3.4}$
------------------	-----------------	-----------------	-----------------	------------------	------------------	------------------

$\frac{30}{7.4}$	$\frac{10}{7.2}$	$\frac{7}{7.9}$	$\frac{4}{6.9}$	$\frac{4}{6.7}$	$\frac{8}{7.1}$	$\frac{11}{7.7}$	$\frac{12}{6.7}$	$\frac{30}{6.2}$
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$\frac{30}{7.2}$	$\frac{9.5}{7.7}$	$\frac{8}{7.2}$	$\frac{6}{8.7}$	$\frac{6}{8.0}$	$\frac{9}{8.6}$	$\frac{11}{8.9}$	$\frac{12.5}{8.2}$	$\frac{30}{8.8}$
------------------	-------------------	-----------------	-----------------	-----------------	-----------------	------------------	--------------------	------------------

$\frac{30}{2.7}$	$\frac{13}{3.1}$	$\frac{6}{6.1}$	$\frac{4}{5.3}$	$\frac{4}{4.8}$	$\frac{2}{4.4}$	$\frac{11}{5.5}$	$\frac{12.5}{4.6}$	$\frac{30}{4.4}$
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1230.55

118		9.1	21.5
B.M. #5	6.78	1230.55	6.78
			1223.77
119		14.6	16.0
	1.24	1218.82	12.97
			1217.58
120		6.0	12.8
121		8.7	10.1
122		11.0	07.8
	3.69	1209.69	12.82
			1206.00
123		4.7	05.0
124		7.4	1202.3
125		11.0	1198.7
	1.14	1198.56	12.27
			1197.42
126		4.8	23.8
127		9.7	88.9

$\frac{30}{5.7}$	$\frac{20}{4.8}$	$\frac{12}{10.0}$	$\frac{9}{9.6}$	$\frac{5}{9.1}$	$\frac{6}{8.4}$	$\frac{10}{8.5}$	$\frac{13}{9.7}$	$\frac{18}{5.9}$	$\frac{30}{5.2}$
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$\frac{30}{11.4}$	$\frac{23}{11.0}$	$\frac{15}{7.5}$	$\frac{10}{15.6}$	$\frac{8}{14.9}$	$\frac{7}{14.6}$	$\frac{10}{14.8}$	$\frac{15}{15.4}$	$\frac{30}{12.3}$	$\frac{30}{12.0}$
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$\frac{30}{5.9}$	$\frac{17}{5.2}$	$\frac{13}{6.0}$	$\frac{10}{7.8}$	$\frac{8.5}{6.8}$	$\frac{6.0}{6.0}$	$\frac{4}{6.5}$	$\frac{6.5}{7.2}$	$\frac{10}{5.5}$	$\frac{30}{5.6}$
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$\frac{30}{9.0}$	$\frac{16}{8.0}$	$\frac{12}{8.9}$	$\frac{10}{10.5}$	$\frac{8}{9.6}$	$\frac{8.7}{8.7}$	$\frac{5}{9.1}$	$\frac{7}{10.2}$	$\frac{10}{7.8}$	$\frac{30}{7.7}$
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$\frac{30}{10.3}$	$\frac{18}{9.6}$	$\frac{13}{11.1}$	$\frac{11}{12.9}$	$\frac{8}{12.1}$	$\frac{8}{11.0}$	$\frac{4}{11.5}$	$\frac{7}{14.6}$	$\frac{13}{9.4}$	$\frac{30}{8.4}$
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$\frac{30}{3.4}$	$\frac{19}{2.3}$	$\frac{11}{6.6}$	$\frac{9}{5.2}$	$\frac{9}{4.7}$	$\frac{4}{7.9}$	$\frac{7}{6.3}$	$\frac{12.5}{3.3}$	$\frac{30}{2.8}$
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$\frac{30}{5.0}$	$\frac{21}{7.6}$	$\frac{13}{9.0}$	$\frac{5}{7.2}$	$\frac{5}{7.4}$	$\frac{4}{7.7}$	$\frac{7}{9.0}$	$\frac{13}{6.0}$	$\frac{30}{5.3}$
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$\frac{30}{7.2}$	$\frac{21}{6.9}$	$\frac{14}{12.1}$	$\frac{10}{11.3}$	$\frac{10}{11.0}$	$\frac{3}{11.3}$	$\frac{5}{12.2}$	$\frac{12}{8.5}$	$\frac{30}{8.0}$
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$\frac{30}{0.6}$	$\frac{20}{1.1}$	$\frac{12}{6.3}$	$\frac{9.5}{5.0}$	$\frac{9.5}{4.8}$	$\frac{3}{5.1}$	$\frac{4}{6.2}$	$\frac{7}{4.6}$	$\frac{13.5}{2.1}$	$\frac{30}{2.3}$
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$\frac{30}{4.7}$	$\frac{20}{4.9}$	$\frac{16}{8.6}$	$\frac{12.5}{11.2}$	$\frac{10}{10.0}$	$\frac{5}{9.2}$	$\frac{9.7}{9.7}$	$\frac{4}{10.3}$	$\frac{4.5}{11.0}$	$\frac{11}{7.2}$	$\frac{30}{7.5}$
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119856

128 14.0 84.6

$\frac{30}{10.5}$ $\frac{23}{14.3}$ $\frac{17}{12.3}$ $\frac{13}{15.1}$ $\frac{11}{14.4}$ $\frac{5}{13.6}$ $\frac{14.0}{14.0}$ $\frac{3}{14.1}$ $\frac{5.5}{14.5}$ $\frac{10}{12.6}$ $\frac{30}{14.0}$

1.58 118740 12.74 1185.82

129 4.9 82.5

$\frac{30}{3.8}$ $\frac{19}{5.0}$ $\frac{17}{6.2}$ $\frac{13}{5.1}$ $\frac{7}{4.5}$ $\frac{7}{4.9}$ $\frac{3.5}{5.7}$ $\frac{6}{5.2}$ $\frac{30}{6.1}$

130 6.6 80.8

$\frac{30}{7.9}$ $\frac{18}{7.0}$ $\frac{16}{8.3}$ $\frac{14}{7.4}$ $\frac{14}{6.6}$ $\frac{7}{6.8}$ $\frac{30}{7.9}$

130+68 7.5 79.9

$\frac{300}{13.5}$ $\frac{200}{11.5}$ $\frac{100}{10.9}$ $\frac{50}{7.1}$ $\frac{FL, T.O.}{10.2}$ $\frac{7 H.W.}{9.6}$ $\frac{16}{6.9}$ $\frac{7}{7.4}$ $\frac{4}{6.7}$ $\frac{7 H.W. T.O.}{9.3}$ $\frac{FL.}{11.2}$ $\frac{50}{8.7}$ $\frac{100}{8.8}$
1177.2 1077.2

131 8.0 77.4

$\frac{30}{9.0}$ $\frac{22}{7.9}$ $\frac{15}{8.6}$ $\frac{13}{7.9}$ $\frac{5}{7.6}$ $\frac{5}{8.0}$ $\frac{2}{7.9}$ $\frac{4}{8.4}$ $\frac{8}{8.6}$ $\frac{13.5}{7.2}$ $\frac{30}{6.9}$

132 8.0 77.4

$\frac{30}{9.2}$ $\frac{12}{8.6}$ $\frac{9}{9.3}$ $\frac{7}{8.5}$ $\frac{7}{8.0}$ $\frac{8}{8.3}$ $\frac{12}{8.7}$ $\frac{15}{8.2}$ $\frac{30}{7.4}$

4.60 1179.74 12.26 1175.14

133 3.1 76.6

$\frac{30}{3.3}$ $\frac{10}{2.8}$ $\frac{6.5}{7.1}$ $\frac{4}{3.2}$ $\frac{4}{3.1}$ $\frac{11.5}{3.7}$ $\frac{14}{4.7}$ $\frac{16}{3.1}$ $\frac{20}{2.0}$ $\frac{30}{0.5}$

134 5.1 74.6

$\frac{30}{4.7}$ $\frac{13}{6.7}$ $\frac{10}{7.0}$ $\frac{8}{6.1}$ $\frac{8}{5.1}$ $\frac{8}{5.7}$ $\frac{10}{6.2}$ $\frac{13}{6.0}$ $\frac{30}{5.5}$

B.M. #16 5.39 1179.76 5.39 1174.35 1174.37

134+55 5.2 74.6

$\frac{100}{10.2}$ $\frac{50}{8.3}$ $\frac{FL. T.O.S.P.}{7.5}$ $\frac{7.0}{6.2}$ $\frac{7.0}{5.2}$ $\frac{80}{6.0}$ $\frac{T.O.S.P.}{6.4}$ $\frac{FL.}{7.3}$ $\frac{15}{6.9}$ $\frac{30}{6.3}$ $\frac{30}{6.7}$
1172.3 1172.5

4.85 118016 4.45 117531

1172.3

1172.5

1180.16

135 5.5 74.7

$$\begin{array}{cccccccccc} \frac{30}{7.6} & \frac{13}{7.1} & \frac{12}{7.6} & \frac{10}{6.6} & \frac{6}{5.5} & \frac{9}{6.2} & \frac{12}{6.8} & \frac{13}{7.0} & \frac{13}{6.4} & \frac{30}{6.1} \end{array}$$

136 5.7 74.5

$$\begin{array}{cccccccc} \frac{30}{7.1} & \frac{13}{6.7} & \frac{11}{7.5} & \frac{9}{6.7} & \frac{8}{5.7} & \frac{8}{6.9} & \frac{13}{6.3} & \frac{30}{5.7} \end{array}$$

137 4.6 75.6

$$\begin{array}{cccccccc} \frac{30}{5.2} & \frac{12}{5.1} & \frac{10}{6.6} & \frac{8}{5.8} & \frac{8}{4.6} & \frac{11}{6.0} & \frac{13}{5.3} & \frac{30}{4.6} \end{array}$$

138 4.3 75.9

$$\begin{array}{cccccccc} \frac{30}{5.2} & \frac{13}{4.9} & \frac{10}{5.9} & \frac{7}{4.9} & \frac{7}{4.3} & \frac{13}{5.4} & \frac{15}{4.9} & \frac{30}{4.6} \end{array}$$

139 4.1 76.1

$$\begin{array}{cccccccc} \frac{30}{5.5} & \frac{12}{5.0} & \frac{10}{5.6} & \frac{7}{4.9} & \frac{7}{4.1} & \frac{9}{4.8} & \frac{13}{5.1} & \frac{15}{4.7} & \frac{30}{4.2} \end{array}$$

140 3.6 76.6

$$\begin{array}{cccccccc} \frac{30}{3.8} & \frac{12}{3.8} & \frac{9.5}{5.0} & \frac{7}{3.6} & \frac{12}{4.7} & \frac{16}{3.6} & \frac{30}{2.8} \end{array}$$

5.91 1184.07 2.00 1178.16

141 6.2 77.9

$$\begin{array}{cccccccc} \frac{30}{5.3} & \frac{11}{6.1} & \frac{9}{7.1} & \frac{7}{4.2} & \frac{12}{7.0} & \frac{15}{5.4} & \frac{30}{4.3} \end{array}$$

142 4.5 79.6

$$\begin{array}{cccccccc} \frac{30}{4.4} & \frac{16}{4.2} & \frac{10}{4.6} & \frac{8}{6.0} & \frac{8}{4.5} & \frac{12}{5.7} & \frac{16.5}{4.1} & \frac{30}{3.5} \end{array}$$

143 8.6 75.5

$$\begin{array}{cccccccc} \frac{30}{6.6} & \frac{12}{7.3} & \frac{9}{9.1} & \frac{6}{9.6} & \frac{5}{9.2} & \frac{8}{8.6} & \frac{13.5}{9.0} & \frac{17}{9.8} & \frac{30}{7.4} & \frac{30}{7.1} \end{array}$$

144 13.3 70.8

$$\begin{array}{cccccccc} \frac{30}{9.2} & \frac{16}{78.5} & \frac{10}{75.0} & \frac{8}{13.9} & \frac{5}{13.3} & \frac{11}{14.9} & \frac{15}{11.9} & \frac{30}{11.5} \end{array}$$

1184.07

2.15 1173.58 12.64 1171.43

145 5.8 67.8

145+12 Culvert 6.0 67.6

145+28.31 6.5 67.1

B.M.#17 4.71 1173.63 4.71 1168.87 1168.92

T.P 5.37 1179.00 0.00 1173.63

B.M.#17 4.28 1174.72 1174.73

B.M.#17 0.10 1169.02 1168.92

146 5.1 63.9

147 7.8 61.2

148 10.1 58.9

3.68 1159.75 12.95 1156.07

149 4.0 55.8

150 8.4 51.4

30 13 8 12.5 18 30
3.9 6.6 6.3 5.8 7.7 7.1 6.4

50 25 F.L. T.P. 12.5 11 14 T.P. 15 F.L. 25 50
6.1 7.2 8.5 7.9 6.9 6.0 7.2 7.5 8.0 8.7 9.4 10.6
1165.1 11.40 7.5 100
11.3 12.3

200 175 150 100 50 1167.08 100 200
0.0 0.5 1.1 2.5 4.7 6.5 10.1 13.1

30 26 23 15.5 14 (1164.92) 7 10 30
2.0 2.5 4.6 5.8 5.2 5.1 5.6 4.6 4.7

30 24 16 14 13 (1162.22) 7.5 9 30
5.7 6.1 7.8 8.8 7.9 7.8 8.5 7.9 9.4

30 15 13 11 (1159.92) 5.7 21 30
7.8 10.1 10.9 10.4 10.1 10.7 10.3 10.5 11.6

30 28 15.5 13 12 (1155.75) 6 8.5 15 30
0.2 0.4 7.2 5.3 4.5 4.0 4.7 3.6 3.5 5.0

30 15 12 6 (1151.35) 4 7 30
4.7 8.8 8.6 7.9 8.4 8.7 8.0 10.3

1159.75

B.M.#19

8.34 1157.41 1151.45

B.M. ¹¹19 3.07 1154.52 1151.45

151 6.9 47.7

152 10.4 44.2

3.66 1145.42 12.69 1141.83

153 9.9 35.6

154

155

1.58 1134.53 12.54 1132.95

154 4.0 30.6

155 4.0 30.6

156 7.4 26.7

3.48 1130.10 7.91 1126.62

156+70 3.9 26.2

Nov. 19, 1930
D. Parks
T. Snyder
F. Gray

(1147.62)

$\frac{30}{2.7} \frac{27}{4.3} \frac{17}{7.1} \frac{14}{6.3} \frac{7}{6.0} \frac{7}{6.9} \frac{4}{7.2} \frac{7}{6.5} \frac{30}{10.6}$

$\frac{30}{7.2} \frac{20}{9.5} \frac{13}{9.9} \frac{12}{10.7} \frac{5}{10.2} \frac{5}{10.4} \frac{6}{10.8} \frac{10}{9.2} \frac{30}{11.7}$

$\frac{40}{0.8} \frac{30}{1.8} \frac{15}{9.7} \frac{11.5}{9.7} \frac{9}{11.0} \frac{7}{10.2} \frac{1135.60}{9.9} \frac{7}{10.3} \frac{8}{8.4} \frac{16}{4.5} \frac{30}{4.7}$

$\frac{40}{4.9} \frac{30}{7.1} \frac{22}{9.2}$

$\frac{35}{+4.3} \frac{25}{2.8} \frac{16}{5.6}$

see additional levels
at back of book

$\frac{14}{3.3} \frac{5}{3.6} \frac{3}{5.0} \frac{2}{4.2} \frac{1130.57}{4.0} \frac{6}{3.6} \frac{14}{4.2} \frac{10}{3.9} \frac{30}{4.8}$

$\frac{1130.53}{7.0} \frac{5}{6.9} \frac{13}{5.8} \frac{30}{6.6}$

(1126.63)
 $\frac{35}{+6.5} \frac{25}{0.9} \frac{15}{8.3} \frac{10}{9.0} \frac{8}{8.2} \frac{8}{7.9} \frac{4}{7.4} \frac{10}{7.9} \frac{21}{9.0} \frac{25}{12.1} \frac{34}{12.2} \frac{40}{10.8}$

(1126.20)

$\frac{150}{8.5} \frac{100}{8.4} \frac{50}{8.6} \frac{20}{8.6} \frac{F.L. T. + 0}{8.6} \frac{9.5}{4.9} \frac{7.5}{3.4} \frac{7.5}{3.4} \frac{7.5}{3.9} \frac{7}{3.8} \frac{9.5}{3.2} \frac{7.0 + 0}{4.8} \frac{F.L.}{8.5} \frac{25}{8.1} \frac{30}{6.3} \frac{50}{7.9}$
 $\frac{1120}{10.0} \frac{200}{9.7} \frac{1121.5}{1125.2} \frac{1125.3}{1125.3}$

1130.10

157 47 25.4

(1125.40)
 $\frac{30}{6.2} \frac{9}{5.5} \frac{7}{4.9} \frac{7}{4.7} \frac{10}{5.1} \frac{13.5}{5.7} \frac{26}{6.2} \frac{30}{5.5}$

158 43 25.8

(1125.80)
 $\frac{30}{6.2} \frac{17}{5.7} \frac{14}{4.8} \frac{14}{4.3} \frac{30}{5.4}$

10.24 1138.04 2.30 1127.80

B.M. #20 10.51 1138.04 10.51 1127.53 1127.53

(1127.44)

159 10.6 27.4

$\frac{30}{11.6} \frac{15}{10.8} \frac{5}{10.2} \frac{5}{10.6} \frac{12}{10.1} \frac{23}{3.6} \frac{30}{1.1} \frac{40}{12.1}$

8.27 1145.99 0.32 1137.72

(1133.49)

160 12.5 33.5

$\frac{30}{13.8} \frac{15}{10.8} \frac{9}{11.0} \frac{5}{13.6} \frac{5}{12.5} \frac{10}{12.6} \frac{14}{13.2} \frac{17}{9.4} \frac{21}{7.5} \frac{30}{4.9}$

161 79 38.1

(1138.09)

$\frac{30}{7.6} \frac{24}{6.9} \frac{5}{7.1} \frac{5}{7.9} \frac{5}{5.8} \frac{30}{2.8}$

162 2.9 43.1

1143.09

$\frac{30}{4.4} \frac{28}{3.9} \frac{26}{3.4} \frac{19}{3.2} \frac{16}{3.7} \frac{12}{3.2} \frac{12}{2.9} \frac{4.5}{2.6} \frac{8}{3.0} \frac{11}{2.1} \frac{30}{0.5}$

9.76 1154.90 1.05 1144.84

(1137.50)

163 7.2 47.5

$\frac{30}{5.2} \frac{23}{5.3} \frac{17}{7.8} \frac{14}{6.9} \frac{14}{7.2} \frac{5.5}{7.8} \frac{11}{3.9} \frac{30}{3.0}$

163750 4.9 49.8

(1144.80)

$\frac{30}{5.7} \frac{27}{5.2} \frac{18}{5.2} \frac{14.5}{5.8} \frac{13}{5.1} \frac{3.5}{4.5} \frac{3.5}{4.9} \frac{7.5}{5.7} \frac{10.5}{3.2} \frac{18}{2.1} \frac{30}{2.0}$

164 4.6 50.1

(1150.10)

$\frac{30}{6.2} \frac{23}{5.4} \frac{14}{5.6} \frac{10}{5.2} \frac{10}{4.6} \frac{11}{5.5} \frac{16}{3.5} \frac{30}{2.9}$

4.32 1154.09 5.03 1149.67

1154,09

165

166

167

Void

168

3.04 1144,30 12,83 1141,26

B.M. #20

1144,31 0.46 1143,84 1143,85

169

170

2.12 1137,60 8,83 1135,48

171

39

$\frac{30}{5.6}$	$\frac{25}{5.3}$	$\frac{15}{5.3}$	$\frac{14}{5.4}$	$\frac{12}{4.2}$	$\frac{12}{5.3}$	$\frac{18}{3.7}$	$\frac{30}{2.5}$
------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------

$\frac{30}{3.7}$	$\frac{18}{3.5}$	$\frac{10}{4.2}$	$\frac{4}{7.0}$	$\frac{4}{6.7}$	$\frac{5}{5.9}$	$\frac{15}{6.3}$	$\frac{19}{7.4}$	$\frac{27}{3.3}$	$\frac{8}{3.0}$
------------------	------------------	------------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	-----------------

$\frac{30}{7.9}$	$\frac{18}{7.7}$	$\frac{7}{8.2}$	$\frac{4}{7.0}$	$\frac{4}{6.2}$	$\frac{5}{9.5}$	$\frac{15}{10.1}$	$\frac{16.5}{11.6}$	$\frac{18}{9.8}$	$\frac{30}{9.4}$
------------------	------------------	-----------------	-----------------	-----------------	-----------------	-------------------	---------------------	------------------	------------------

Void

$\frac{30}{9.8}$	$\frac{15}{9.8}$	$\frac{11}{10.1}$	$\frac{6}{11.1}$	$\frac{3}{13.3}$	$\frac{4}{12.1}$	$\frac{11}{12.9}$	$\frac{14}{14.3}$	$\frac{18}{11.3}$	$\frac{30}{10.6}$
------------------	------------------	-------------------	------------------	------------------	------------------	-------------------	-------------------	-------------------	-------------------

$\frac{30}{3.9}$	$\frac{10}{4.2}$	$\frac{5}{6.5}$	$\frac{3}{7.1}$	$\frac{3}{6.9}$	$\frac{5}{6.7}$	$\frac{13}{6.9}$	$\frac{18}{6.7}$	$\frac{22}{4.5}$	$\frac{30}{3.7}$
------------------	------------------	-----------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	------------------

$\frac{30}{9.3}$	$\frac{16}{9.1}$	$\frac{8}{8.4}$
------------------	------------------	-----------------

$\frac{18}{8.2}$	$\frac{30}{8.7}$
------------------	------------------

$\frac{18}{3.4}$	$\frac{19}{3.0}$	$\frac{30}{2.0}$
------------------	------------------	------------------

3.93 1153.60 1149.67

165 3.8 49.8

(1149.80)
 $\frac{30}{5.2} \frac{25}{4.8} \frac{16}{4.8} \frac{13.5}{5.0} \frac{3.8}{3.8} \frac{12 \cdot 18}{4.9} \frac{30}{3.3} \frac{30}{2.1}$

166 5.4 48.2

(1148.20)
 $\frac{30}{3.8} \frac{25}{3.0} \frac{19}{3.8} \frac{12}{6.6} \frac{7}{5.4} \frac{10-11}{5.9} \frac{13}{7.0} \frac{22}{5.1} \frac{30}{2.6} \frac{30}{2.9}$

167 9.1 44.5

(1144.50)
 $\frac{30}{7.6} \frac{25}{7.2} \frac{17}{7.7} \frac{12}{10.1} \frac{9.1}{9.1} \frac{8.5}{10.2} \frac{11}{9.3} \frac{22}{9.0} \frac{30}{9.4}$

168 16.9 41.7

(1141.70)
 $\frac{30}{9.6} \frac{22}{9.7} \frac{15}{10.6} \frac{11}{13.0} \frac{9.5}{12.3} \frac{11.9}{12.5} \frac{3.5}{13.9} \frac{6}{14.0} \frac{9}{10.2} \frac{22}{10.7} \frac{30}{10.7}$

3.05 1144.22 12.43 1141.17

B.M. #21 0.47 1144.23 0.47 1143.75 1143.76

169 6.5 37.7

(1138.73)
 $\frac{30}{4.0} \frac{19}{4.3} \frac{10.5}{7.1} \frac{6.5}{6.5} \frac{9.5}{6.8} \frac{14}{4.4} \frac{23}{3.3} \frac{30}{3.9}$

170 7.9 36.3

(1136.30)
 $\frac{30}{9.2} \frac{10.5}{8.7} \frac{7.9}{7.9} \frac{10}{8.2} \frac{20}{8.9} \frac{30}{8.9}$

171 8.7 35.5

(1136.50)
 $\frac{30}{9.7} \frac{7}{9.8} \frac{8.7}{8.7} \frac{7}{9.2} \frac{9.5}{10.1} \frac{17}{8.9} \frac{30}{8.9}$

2.73 1136.73 10.23 1134.00

172 2.6 34.7

(1134.13)
 $\frac{30}{1.9} \frac{19}{2.3} \frac{12}{4.3} \frac{10.5}{3.9} \frac{2.6}{2.6} \frac{9.5}{3.9} \frac{13}{2.4} \frac{22}{2.1} \frac{30}{2.4}$

173 4.0 32.9

1132.77
 $\frac{30}{3.0} \frac{24}{3.4} \frac{12}{5.2} \frac{4.0}{4.0} \frac{7}{4.6} \frac{9}{5.5} \frac{11}{15.3} \frac{30}{5.3}$

1136.73

174

5.1 31.6

(1171.53)

$$\frac{30}{7.2} \frac{25}{7.2} \frac{11}{6.5} \frac{8}{5.1} \frac{10-11}{5.6} \frac{14}{6.4} \frac{17}{5.8} \frac{30}{5.9}$$

175

7.9 28.8

(1128.83)

$$\frac{30}{7.5} \frac{17}{7.5} \frac{13}{8.8} \frac{10}{7.8} \frac{7.9}{7.9} \frac{11.5}{9.4} \frac{17}{6.6} \frac{30}{6.9}$$

176

10.4 26.3

(1126.33)

$$\frac{30}{11.1} \frac{18}{11.1} \frac{10}{11.2} \frac{10.7}{10.7} \frac{30}{11.0}$$

3.99 1130.22 10.50 1126.23

(1125.70)

177

4.5 25.7

$$\frac{30}{6.7} \frac{17}{6.1} \frac{10}{5.6} \frac{9.5}{5.9} \frac{8}{5.1} \frac{10}{5.5} \frac{12}{5.6} \frac{14}{5.1} \frac{16}{5.6} \frac{30}{6.3}$$

B. M. #22

4.70 1125.52 1125.55 record

	BS Chalk	HI Levels	FS	Richey Grou Elev.	Corrected Elev.	
BM 1	303	107488		107185	1072.36	Spike in root 18" Maple 30' Lt E Sta 0+90
	565	107140	913	106575		
Sta 7			40	10674		
BM 2	1.45	106728	557	106583	1066.34	Spike in root 24" Maple 60' Lt E Sta 9+60
	522	106884	366	106362		
Sta 7			38	10650	199	
	7.76	107334	326	106558		
BM 3			7.10	106624	1066.75	SEW side 10" Hickory 30' Lt E Sta 20+80
			4.0	10693		
	554	107672	2.16	107118		
BM 4			3.02	107370	1074.21	Spike in root 24" Maple 30' Lt E Sta 26+30
	3.46	107787	2.31	107441		
BM 5			3.27	107460	1075.11	Spike in root 24" Maple 27' Lt E Sta 32+90
	7.00	108097	3.90	107397		
	1082	109047	1.32	107965		
BM 6	8.05	108960	1.52	108895	1089.46	Spike in root 24" Maple 30' Lt E Sta 41+50
	8.89	110365	2.24	109476		
BM 7			4.84	109881	1099.32	Spike in root 18" Maple 25' Lt E Sta 48+15
	1026	111186	2.05	110160		

Corrected
Elev

	1111.86					
	1022	1121.82	0.26	1111.60		
	1162	1133.39	0.05	1121.77		
BM 8			8.47	1124.22	1125.43	Spike in root 12" Maple 28' RTE Sta 59+40
	1218	1144.74	0.83	1132.56		
	1330	1157.41	0.63	1144.11		
BM 9			3.31	1154.10	1154.61	Spike in root 12" Maple 30' RTE Sta 65+00
	1241	1164.76	5.06	1152.35		
	1332	1177.69	0.39	1164.37		
BM 10			3.69	1174.00	1174.51	Spike in root 12" Elm stump. 20' L & E Sta 70+80
	1156	1188.58	0.67	1177.52		
BM 11	9.82	1187.09	11.61	1177.27	1177.78	Spike in root 15" Maple 60' RTE Sta 76+20
	9.25	1195.76	0.58	1186.51		
	4.54	1199.83	0.47	1195.29		
BM 12			6.10	1193.73	1194.24	Spike in root 20" Maple 60' RTE Sta 83+60
	1234	1208.67	3.70	1196.13		
	6.89	1214.76	0.80	1207.87		
BM 13			5.77	1204.99	1209.50	Spike in root 30" 4" twin Elm 30' RTE Sta 91+20
	11.62	1225.51	0.37	1213.87		
	8.65	1233.34	0.82	1224.69		

				corrected		
		1233.39		Elved		
BM 14	444	1236.38	140	231.99	1232.45	Spike in root 48" Elm 50' RHE Sta 100+90
	988	1244.43	183	1234.55		
	242	1244.93	192	1242.51		
T.P.			183	1243.10	1243.27	= 12 Top RP Pop 30' LHE Sta 108+65
	185	1235.79	1099	1233.94		
Sta 114	253	1231.05	727	1228.52		
BM 15	046	1223.72	779	1223.26	1223.77	2 spikes inside 6" Maple 30' RHE Sta 118+90
	092	1212.18	1246	1211.26		
	-0.01	1202.74	945	1202.73		
	1.01	1192.72	1103	1191.71		
	1.16	1183.34	1054	1182.18		
BM 16	3.92	1177.75	945	1173.86	1174.37	Spike in root 18" Elm 25' RHE Sta 134+01
	5.06	1180.04	280	1174.99		
	3.10	1180.34	280	1177.24		
BM 17			11.93	1168.41	1168.92	2 spikes inside 24" Ash 45' RHE Sta 145+00
BM 18			6.12	1174.22	1174.73	Spike in root 14" Maple 300' LHE Sta 145+50 = Sta 162+10 Chilled the Road Imp. 25' RHE

Park's
Elev

BM 17 062 116954 1168.92

125 078 113956 10.76 115875

BM #19 811 115145 11

065 114833 1188 114768

072 113630 1275 113558

BM #20 933 113686 8.77 1127.53

10.71 1147.38 0.19 1136.67

6.66 1153.57 0.47 1146.91

1.05 1144.45 10.17 1143.40

BM 21 0.69 1143.76

0.98 113670 8.73 1135.72

2.03 1129.48 9.25 1127.45

BM #22 3.93 1125.55

0.33 1112.20 10.61 1118.87

BM #23 0.28 1108.42 10.99 1108.21

0.90 112670 12.69 1095.80

BM #24 11.76 1084.24

Spike in root 24" Maple 24' RT & Sta 150+01

Spike in root 20" Maple 25' RT & Sta 158+70

Spike in root 24" Elm 25' Lt & Sta 168+40

S
Spike in root 20" Maple 35' RT & Sta 177+30

Spike in root 24" Apple 60' Lt & Sta 183+30

X cut NE & NW headwall 12' Lt & Sta 189+20

Corrected
Elev

41

BM #29 419 1089.13 108494 108494

1019 1098.96 036 108877

BM #25 449 1101.35 210 107686 107686

277 1096.4 719 107416

077 1085.17 1244 108420

013 107246 1284 107233

BM #26 950 1072.46 950 1062.76 1062.75

028 1059.96 1278 1059.68

028 1047.98 1276 1047.20

022 1034.70 1280 1034.68

070 1023.76 1234 1022.76

BM #28 200 1023.26 200 1021.26 1021.05

058 1014.84 9.00 1014.26

146 1007.84 846 1006.38

BM #29 041 1007.84 041 1007.43 1007.22

-0.05 1001.23 666 1001.18

084 993.17 870 992.33

269 986.04 782 983.35

BM #31 364 986.04 364 982.40 982.19

X NE & N Headwall 126' E Sta 189+90

Spike in root 36" Elm 25' E Sta 197+05

Spike in root 8" Maple 35' RT E Sta 207+50

(note:
BM #27 2 spikes inside 6" Maple 50' E Sta 211+50 Elev - 1036.37

Spike in root 24" Hickory 40' RT E Sta 214+52

Spike in root 18" Ash 40' RT E Sta 219+60

(note:
BM #30 = 2 spikes inside 8" Maple 40' RT E Sta 226+50 Elev 990.76

Spike in root 18" Maple 50' RT E Sta 231+25

				Corrected Elev	
	98609				
	314	98302	616	97988	
	270	97652	920	97382	
BM#32	308	97652	308	97344	973.23
	142	97156	678	97014	
	115	96659	612	96544	
	354	96502	5.11	96148	
BM#33	953	96502	753	95549	955.28
	682	96235	249	96253	
BM#34	820	97522	233	96702	966.81
	1197	98668	051	97971	
	1200	99860	008	98660	
	1140	1010.00	0.00	99860	
BM#35	278	1010.00	278	100722	1007.01
	941	1010.72	1.69	100831	
BM#36			278	101494	1014.73
					Spike in root 18" Ash 45' RT & Sta 237+15
					Spike in root 18" Willow 25' RT & Sta 248+10
					Spike in root 6" Sycamore 30' RT & Sta 255+50
					Spike in side 10" Apple 28' LT & Sta 261+90
					Spike in root 24" Apple 200' RT & Sta 265+55 = Elev on Munson Imp 1014.83

BM-32

973.23

93

B.M. 22 3.88 1129.43 1125.55

178 3.9 1125.5

(1125.53)
30 19 15 7 4
3.1 5.3 5.0 4.5 3.9
13 30
4.4 3.7

178+60 4.4 1125.0

(1125.03)
30 18 14 7 4 9 10 16 30
2.8 2.9 4.0 4.7 4.4 4.7 4.9 2.8 2.7

179 6.7 22.7

(1122.73)
30 25 5 10 13 22 30
3.5 3.6 6.6 6.7 7.2 6.2 5.0 5.0

180 10.5 18.9

(1118.93)
30 16 11 9 5 10 30
9.0 9.3 11.2 11.8 10.8 10.5 10.7 12.5

0.62 1119.58 10.47 1118.96

181 2.5 17.1

(1117.08)
30 27 12 9 9 12 30
0.4 0.7 2.0 2.9 2.5 3.4 3.0 4.8

182 7.5 12.1

(1112.08)
30 20 8 6 6.5 8 11 15 30
2.2 2.7 7.6 7.3 7.5 7.6 8.0 8.7 5.1 6.4

183 12.6 07.0

(1106.98)
30 17 12 11 9 8 9.5 8.5 10 15 30
10.9 11.1 13.9 14.5 13.5 13.0 12.6 13.0 13.5 14.2 11.5 11.0

1.89 1108.42 13.05 1106.53

B.M. 23 0.17 1108.38 0.17 1108.25 1108.21

184 6.6 01.8

(1101.78)
30 15 10.5 10 7 10 16 30
6.2 5.9 8.2 7.2 6.6 7.5 8.0 4.5 4.2

185 12.1 1096.3

(1096.28)
22 17 9.5 8 4.5 4 10.5 16 30
8.3 7.3 12.3 13.7 12.5 12.1 12.1 13.7 10.3 10.4

110838

0.37 1096.19 12.56 1095.82

186 4.4 91.8

187 7.3 88.9

188 9.7 86.5

189 11.2 85.0

BM #24 2.44 1087.38 11.17 1085.02 118499

189+90 Stone Culvert 3.8 83.6

190 4.4 83.0

191 4.1 83.3

6.48 1091.17 2.49 1084.69

191+50 7.7 83.5

191+65 7.6 83.6

(1091.79)

30 12 12.5 9 7.5 10 14.5 30
5.4 5.8 5.5 5.0 4.4 5.1 5.2 3.8 3.4

(1088.89)

30 15 11 7 5 9 11 30
8.2 8.2 8.9 7.5 7.3 7.8 8.6 8.2 8.3

(1086.49)

30 16 11 9.5 8 8 11 15 30
9.7 10.4 11.9 11.2 10.2 9.7 10.3 10.7 10.6 10.7

(1085.00)

30 19 13 11 8 14 30
13.1 13.0 12.5 12.9 11.8 11.2 12.4 12.8

0.1111 Fl. 9.12 1077.4 1082.1 (1083.58) 1082.3 1079.2
110 30 Fl. 7.0 + 2.7 11 10 12.5 7.0 Fl. 30
14.4 9.8 16 8.0 8.3 2.5 3.6 3.8 3.5 2.6 5.1 8.2 7.9
T.P.H.W. Long Fl.

(1088.00)

25 19.5 12 9 6 2.5 2.5 14 16 30
6.6 5.8 4.9 4.3 4.4 4.2 5.3 6.0 7.2 6.3 5.6

(1082.28)

30 20 13 12 10 5 6.5 8.5 11 30
6.7 6.0 5.1 5.7 4.9 4.1 4.8 5.2 4.8 4.3 5.0

(1083.47)

8 2 12 16 23 30
7.7 8.1 8.5 7.5 7.4 1.4 0.4

(1083.57)

100 30 Fl. 21 20 14.5 10 11 Fl
12.1 10.8 14.0 9.2 8.2 7.8 7.6 7.0 7.4 8.4
Fl. T.P.H.W. G T.P.H.W. Fl.

1081.2

1082.8

1091.17

192 5.9 85.3

11.06 1100.19 2.04 1089.13

193 12.0 88.2

194 8.9 91.3

195 5.1 95.1

196 4.4 95.8

197 4.4 95.8

B.M 25 6.89 1103.75 3.31 1096.88 1096.86

198 7.7 96.1

V. Pipe Culvert 18'

198+27 8.0 95.8

199 7.4 96.4

(1085.27)

30 20 13 11 8 6 7 9 15 30
7.5 6.7 6.7 7.2 6.6 5.9 6.5 6.7 6.2 5.1 4.6

(1088.19)

30 20 16 12.5 9 7 4 5 6 8 12 17 30
10.8 10.5 10.5 11.0 13.2 12.7 12.1 12.1 13.8 12.6 10.8 7.1 8.6

(1091.29)

30 23 13 9 7.5 5.5 7.5 11 13 30
7.3 6.9 7.3 10.5 8.9 8.9 9.7 10.6 8.5 7.9 7.2

(1095.09)

30 21 12 10 8 5 7 10 16 30
4.9 4.1 4.9 6.5 6.0 5.1 6.0 6.8 5.3 4.4 3.6

(1095.79)

30 23 14 12.5 9 5 4 7 9 15 30
5.7 5.1 4.7 5.6 5.1 4.1 4.4 5.0 5.6 4.6 3.0 2.1

(1095.79)

30 15 10 6.5 8 12 30
3.9 3.9 4.6 4.4 5.1 5.0 3.3 2.6

(1096.05)

30 20 16 13 9 4 8 10 13 30
9.2 9.0 9.0 8.8 8.0 7.7 7.7 8.8 8.9 8.4 8.2

(1095.25)

60 50 11 8 6 7 10 FL 50 100
10.4 4.7 9.0 8.8 7.9 8.0 7.6 8.4 9.2 3.5 7.7
Fl. 3000 110

(1096.35)

30 22 13 9 8 10 11 13 130
5.6 5.9 7.5 8.1 7.6 7.4 7.6 8.1 5.6 5.1

1094.6

1103.75

200

6.5 97.3

201

8.7 95.1

202

9.7 94.1

2.43

1097.03

9.15 1094.60

203

3.3 93.7

203+40

4.9 92.1

204

9.4 87.4

204+30

11.5 85.5

3.29

1087.26

13.01 1084.02

205

5.0 82.3

206

12.3 75.0

207

47

$$\begin{array}{cccccccccccc} \frac{30}{4.8} & \frac{19}{4.9} & \frac{11}{6.1} & \frac{10}{5.9} & \frac{6}{6.4} & \frac{6}{6.5} & \frac{7}{6.5} & \frac{8}{6.6} & \frac{13}{6.2} & \frac{30}{6.3} \end{array}$$

(1097.25)

$$\begin{array}{cccccccccccc} \frac{35}{7.8} & \frac{30}{7.5} & \frac{17}{7.8} & \frac{11}{9.9} & \frac{6}{9.2} & \frac{6}{8.7} & \frac{9}{9.1} & \frac{11}{9.3} & \frac{14}{8.1} & \frac{20}{6.9} & \frac{30}{7.2} \end{array}$$

(1094.05)

$$\begin{array}{cccccccccccc} \frac{30}{8.9} & \frac{13}{10.2} & \frac{11}{10.5} & \frac{10}{10.1} & \frac{10}{9.7} & & & & \frac{11}{10.4} & \frac{19}{10.7} & \frac{30}{11.4} \end{array}$$

1100.43

$$\begin{array}{cccccccccccc} \frac{30}{0.9} & \frac{17}{1.4} & \frac{11}{3.6} & \frac{9}{4.6} & \frac{8}{3.8} & \frac{6}{3.3} & \frac{8}{4.0} & \frac{9}{4.2} & \frac{11}{3.2} & \frac{30}{4.5} \end{array}$$

(1092.13)

$$\begin{array}{cccccccccccc} \frac{30}{2.4} & \frac{15}{2.4} & \frac{11}{6.5} & \frac{8}{5.3} & \frac{6}{4.9} & \frac{7}{5.1} & \frac{8}{5.6} & \frac{13}{3.3} & \frac{30}{4.7} \end{array}$$

(1087.43)

$$\begin{array}{cccccccccccc} \frac{30}{7.1} & \frac{19}{6.5} & \frac{10}{10.5} & \frac{8}{9.8} & \frac{6}{9.6} & \frac{6}{10.0} & \frac{7.5}{10.4} & \frac{16}{5.5} & \frac{30}{6.0} \end{array}$$

(1085.53)

$$\begin{array}{cccccccccccc} \frac{30}{12.0} & \frac{16}{12.6} & \frac{11}{12.0} & \frac{9}{12.1} & \frac{6}{11.5} & \frac{5}{11.8} & \frac{7}{10.8} & \frac{11}{10.7} & \frac{13}{9.3} & \frac{30}{9.4} & \frac{35}{8.3} \end{array}$$

(1082.26)

$$\begin{array}{cccccccccccc} \frac{30}{0.7} & \frac{20}{1.2} & \frac{13.5}{4.4} & \frac{10.5}{5.4} & \frac{9}{5.1} & \frac{6}{5.0} & & & \frac{7}{5.5} & \frac{12}{3.8} & \frac{30}{4.9} \end{array}$$

(1075.00)

$$\begin{array}{cccccccccccc} \frac{45}{7.9} & \frac{40}{2.1} & \frac{30}{3.4} & \frac{26}{4.6} & \frac{10}{13.0} & \frac{8}{12.5} & \frac{6}{12.3} & \frac{4}{12.4} & \frac{5}{10.7} & \frac{10}{9.1} & \frac{30}{11.9} \end{array}$$

$$\begin{array}{ccc} \frac{45}{4.2} & \frac{40}{9.6} & \frac{30}{13.9} \end{array}$$

1077.26

0.86 1075.31 12.75 1074.51

207 8.8 66.6

207+30 10.0 1065.4

3.47 1066.33 12.51 1062.86

134*26 3.56 1066.31 3.56 1062.77 1062.75

208+00 4.6 1061.7

208+50 6.2 60.1

209 11.4 54.9

811*26 3.56 1062.75

1066.51

165 135 11 3 4 10 30 35
8.2 9.8 8.7 8.8 8.9 7.7 6.4 10.0 11.5

50
1074.0

(1065.31)

43 31 18 135 11 5 10 20 30
1074.5 21 8.8 10.6 9.8 10.0 10.0 11.2 12.3 12.5

50
1073.5

(1061.21)

45 30 22 17 15 11 30
1073.2 11.15 3.2 3.2 4.7 3.9 4.6 8.2

50

55

(1060.11)

1074.4 1075.4
40 30 25 17 16 4 4 18 30
1074.6 12 9.6 5.8 5.4 0.8 6.2 6.2 10.5 10.6

50

1068.6

(1054.91)

40 35 30 25 6 5 12 30
1068.3 0.9 0.8 1.5 11.0 10.5 11.7 10.2 13.3

BM#26 2.36 1065.11 1062.75

209+25 12.3 52.8

1.55 1054.58 12.08 1053.03

209+50 50.2

209+70 48.5

210 47.0

210+25 45.3

210+65 41.9

3.76 1045.73 12.41 1042.17

211 7.4 38.5

B.M#27 9.56 1036.37

211+25 10.5 35.4

47 60
1067.1 1062.8
(1052.81) 47
13.7

39 26 20 16 5 34-20 3 6 14 17 26 30 33
1065.6 11.1 17.3 112 12.7 12.3 12.8 12.2 12.6 12.4 13.4 14.2 13.7

30 37 50
1061.1 1064.2 1066.9
(1056.18) 50
3.5

23 11 7 4 1 38 4 6 10 15 21 5
1057.4 1058.6 1057 3.1 3.7 4.4 4.3 4.4 4.7 4.4 4.4 4.7

40 40 51 5 65
1053.3 1054.7 1064.8 1055 1064.1
36 30 26 14 9 3 5 11 16 17 18 30 32-33
1056.8 1058.7 1.0 4.5 5.3 6.1 6.2 6.5 6.3 6.6 7.2 6.3 6.0 5.5

47 60
1054.3 1064.8
(1049.00) 60 48 39 34 30
1057.2 1.2 3.9 4.7 6.2

36 30 23 18 10 3 2 25 11-15 17 19 24 25-26
1055.5 1062.4 6.7 6.6 7.1 7.6 7.9 7.6 7.4 8.1 7.5 7.3 10.4

76 68 60 54
1064.2 1062.7 1059.9 1056.5

30 42 30 30 17 3 2 2 11 15 18-24 22 30-32 37
2.7 4.0 6.5 4.9 2.8 7.6 4.4 4.3 4.5 3.4 9.2 12.5 4.0 3.0 0.2

40 58
1060 1063
80 70 62 49
1066.4 1065.5 1064.6 1062.0

30-27 135 115-2 3 2 9 125-145 16 22 27 35
11.9 14.8 9.6 13.3 13.1 14.7 12.5 16.3 12.5 4.8 2.3 1056.7

39 46 52
4.8 7.5 7.9
80 70 58 51 43
1066.3 1064.8 1062.4 1060.6 1055.8

30 24 125 95 8-7 4 (1035.5) 6 8 12 20 30 36
4.9 4.5 5.7 6.9 9.7 7.5 7.4 7.5 10.3 10.7 9.9 10.9 1052.5

3 Horiz. Spikes in 6" Maple 50' Lt & Sta. 211+50

30 60 48
1066.1 1059.5 1052.2

2 105 13 17 26 40
12.7 10.5 10.4 12.7 12.5 4.3 10.4 9.8

1045.93

211+70

212+80

3.01 1037.81 11.13 1039.80

211+70 8.0 29.8

211+80 5.8 32.0

212+20 5.4 32.4

212+50 8.6 29.2

212+60 11.1 26.7

2.19 1027.01 12.99 1029.32

212+50

212+60

212+70 Creek 8.1 18.9

212+75 W. Bank 5.1 15.9

34	48	64	80
13.3	4.5	105.7	106.4

55	59	67	80
12.3	8.4	3.8	2.4

48	36	245	10	1.5	3	7	105	13	29	27	30	
1.7	3.5	5.3	7.5	8.0	3.2	6.7	6.7	7.8	7.4	7.1	26	6.0

47
0.2

45	27	11	5	8	11	36.5	30	37.5	40	
1.5	2.6	2.1	5.8	8.8	8.8	7.9	7.7	9.5	9.4	4.3

(1032.41)

30	25	12	14	19.5	36	38	41	44	48	
3.6	2.9	2.9	5.4	12.8	11.3	11.2	12.9	12.9	11.2	10.5

32	24	12	9	8.5	15.5	
5.1	4.9	5.4	3.9	8.6	8.0	12.0

30	26	21	2	11	
5.1	5.1	6.4	11.3	11.7	13.2

75	67	60	47
3.3	1.6	3.6	4.2

17	18-19	21	35	38	42-46
2.2	3.1	2.0	2.1	5.1	5.7

50	Stagn
2.0	

15	17-19	21	33	38	41
3.0	3.8	2.3	2.2	5.2	6.5

30	21-23	35	50	40	100		
8.8	8.1	7.7-2.8	2.4	7.2	7.0	6.4	5.5

30	23	8.0
2.4	4.4	3.6

102701

212+80 6.7 20.3

6.7 5.3 3.7 3.7 5.4 6.2

213 6.5 20.5

(1020.51)

channel 26 25 18 11 9 16 22 32 40 50
8.9 8.3 6.5 6.1 6.5 5.5 5.0 5.3 4.0 3.5 3.6

214 7.7 19.3

(1019.21)

chan 37 30 23 16 6 3 25 11 17 30 50
nel 9.9 9.2 8.7 7.7 7.0 7.9 7.7 7.5 7.9 5.6 5.2 4.8

BM# 28 1.51 1022.56 5.95 10 21.06 1021.05

214+60 4.5 18.1

channel

30 24 21 14 4 3 9 10 13 25 30
5.5 5.9 6.1 7.3 4.1 3.8 4.5 4.5 4.2 4.6 3.9 3.7 4.4

215 5.4 17.2

(1017.16)

5.5 stream 7.6 stream
45 30 22 24 22 9 4 9 10.5 13 21 30
6.6 6.4 7.0 7.0 6.1 6.4 4.6 5.4 4.9 5.3 4.3 3.7 3.7
16.0 16.2 15.4 16.6 16.5 16.2 18.0 17.7 17.3 18.3 18.9 18.9

BM# 29 1.51 1021.05

BM 28 0.53 1021.58 1021.05

215+50 5.4 1016.2

216 1015.08
6.5 1015.1

217 1011.58
10.0 1011.6

136 1012.10 10.84 1012.74

218 1008.66
3.5 1008.6

219 1006.00
6.1 1006.0

219+50 1004.40
7.7 1004.4

BM 29 4.82 1012.11 4.89 1007.21 1007.22

220 1003.41
8.7 1003.4

1.38 1004.27 2.22 1002.99

221 1002.12
2.0 1002.3

221+50 2.7 1001.6

-24 20 12-10 8 4 5 7 9 12 20 30
65 83 82 75 53 52 54 53 41 32 29
15.1 13.3 15.4 17.1 16.3 16.4 16.2 16.6 11.5 14.4 18.7

-30 26 13 10 3 2 4.5 7 14 30
65 47 47 65 63 64 60 58 53 50
15.1 16.7 16.8 15.1 15.3 15.2 15.0 15.8 16.3 16.6

channel 20 30 27 12 8 7 12 30
76.5 27 87 83 10.0 29 79 70
11.9 12.7 13.3 11.6 11.7 14.3 14.0

channel 30 23 7 9 5 11 17 23 30
43 26 23 23 31 29 37 27 03 05
9.5 9.8 9.8 9.0 09.2 9.0 11.4 11.9 11.0

-30 17 10 4-3 15 6 11 13 18 22-
41 32 26 7.7 62 27 25 26 10 67

30 13 6-5 3 10 15.6 18 30
57 34 82 74 30 68 78 76

30 19 9.5 5 9 13 14.7 12 30
27 63 70 36 83 79 66 81 30

30 4 3 1.5 13 15.5-16 20.5 30
1.4 2.4 1.9 2.0 2.0 0.6 2.2 2.1

30 6 4 3 9 11 15 18 30 47
3.2 2.1 3.0 2.6 2.6 2.8 1.8 2.7 27 101.6
0.78

1004.27

3.8
0.5

1001.27
3.0

1001.3

$\frac{30}{3.4}$ $\frac{16}{3.2}$ $\frac{53}{24}$ $\frac{2}{34}$ $\frac{6}{3.0}$ $\frac{10}{2.7}$ $\frac{11}{3.1}$ $\frac{18}{0.0}$ $\frac{30}{10.87}$ $\frac{45}{1813.6}$

221+90

$\frac{100}{6.6}$ $\frac{30}{5.3}$ $\frac{F1}{4.3}$ $\frac{F1}{3.8}$

222

1000.27
3.9

1000.4

$\frac{30}{3.8}$ $\frac{20}{3.8}$ $\frac{15}{3.2}$ $\frac{11}{4.4}$ $\frac{6.5}{3.6}$ $\frac{11}{2.8}$ $\frac{22}{2.7}$ $\frac{27}{2.0}$ $\frac{39}{0.5}$

222+74

5.6

998.7

$\frac{100}{7.6}$ $\frac{100}{7.7}$ $\frac{30}{6.5}$ $\frac{30}{2.8}$

222+74

120 ft

Left of E.

F1 West
11.5

223

997.87
6.4

997.9

$\frac{30}{6.7}$ $\frac{22}{6.4}$ $\frac{14.5}{7.2}$ $\frac{12}{8.6}$ $\frac{10.5}{7.5}$ $\frac{7.5}{5.6}$ $\frac{9.5}{6.3}$ $\frac{13}{4.7}$ $\frac{30}{3.3}$

223+65

9.0

995.3

$\frac{30}{7.9}$ $\frac{20}{7.7}$ $\frac{16}{8.3}$ $\frac{14}{9.9}$ $\frac{12.5}{9.6}$ $\frac{2.5}{9.1}$ $\frac{4}{9.6}$ $\frac{7}{6.6}$ $\frac{12}{4.4}$ $\frac{15}{5.3}$ $\frac{18}{4.5}$ $\frac{30}{3.7}$

224

994.27
10.0

994.3

$\frac{30}{10.3}$ $\frac{20}{8.0}$ $\frac{16}{8.5}$ $\frac{13.5}{9.5}$ $\frac{12}{10.6}$ $\frac{4}{9.7}$ $\frac{6}{10.5}$ $\frac{9}{7.9}$ $\frac{17}{8.0}$ $\frac{23-30}{3.5}$

222+74

12.42

1016.29

0.00

1014.27

$\frac{100}{7.3}$ $\frac{150}{1.8}$ $\frac{160}{0.0}$

1.51

99528

10.50

993.77

945.28

224+20 993.25
1.5 993.8

224+85 2.9 992.4

225 992.28
3.0 992.3

225+75 4.9 990.4

226 989.58
5.7 989.6

226+25 6.3 989.0

227 986.88
8.4 986.9 corrected Elev

BM 30 4.56 990.79 990.76

227+43 Culvert 8.1 987.2

227+85 983.58
11.7 983.6

994.5 994.9 2.0 $\frac{13}{3.7}$ $\frac{11}{2.1}$ $\frac{45}{1.0}$ $\frac{9}{1.9}$ $\frac{12}{0.3}$ $\frac{26}{0.0}$ $\frac{30}{993.8}$

$\frac{31}{996.3}$ $\frac{15}{996.3}$ $\frac{13}{2.0}$ $\frac{8}{2.4}$ $\frac{7}{2.2}$ $\frac{7}{3.2}$ $\frac{9}{2.2}$ $\frac{13}{1.2}$ $\frac{30}{1.0}$

$\frac{30-25}{994.8}$ $\frac{17}{995.0}$ $\frac{115}{0.0}$ $\frac{6}{3.3}$ $\frac{7}{2.4}$ $\frac{9}{3.2}$ $\frac{145}{2.4}$ $\frac{145}{0.5}$ $\frac{18}{996.5}$

Chan. $\frac{30}{8.6}$ $\frac{20-16}{4.4}$ $\frac{12-10}{2.8}$ $\frac{7-4}{4.7}$ $\frac{7-4}{5.8}$ $\frac{7}{2.9}$ $\frac{7}{5.5}$ $\frac{12.5}{1.0}$ $\frac{17}{996.1}$ $\frac{30}{993.8}$

$\frac{30}{3.6}$ $\frac{17}{3.5}$ $\frac{13-14}{5.0}$ $\frac{8-5}{5.2}$ $\frac{8-5}{6.1}$ $\frac{7}{5.2}$ $\frac{9}{5.9}$ $\frac{10-11}{5.9}$ $\frac{16}{2.8}$ $\frac{30}{0.0}$

$\frac{31}{7.3}$ $\frac{17}{6.9}$ $\frac{16}{5.3}$ $\frac{11}{5.5}$ $\frac{9-7}{6.0}$ $\frac{7}{6.0}$ $\frac{8.5}{6.4}$ $\frac{9.5}{5.8}$ $\frac{13}{9.9}$ $\frac{30}{4.9}$

$\frac{30}{8.6}$ $\frac{13.5}{5.0}$ $\frac{14}{8.5}$ $\frac{8}{7.4}$ $\frac{8}{7.6}$ $\frac{9}{7.9}$ $\frac{10}{7.0}$ $\frac{2.5}{7.2}$ $\frac{30}{7.4}$

2 Shakes in 2' deep Mud = 40' Ht Sta 226+50

$\frac{30}{10.2}$ FLT $\frac{11}{11.7}$ $\frac{HW}{3.9}$ $\frac{Gr}{6.9}$ $\frac{Gr}{7.8}$ $\frac{Gr}{8.0}$ $\frac{HW}{7.1}$ $\frac{T.L.}{9.2}$ $\frac{FI.}{11.1}$ $\frac{So.}{10.5}$ $\frac{25}{11.2}$ $\frac{125}{12.0}$
43.6 48

$\frac{30}{8.9}$ $\frac{22}{9.4}$ $\frac{18.5}{10.5}$ $\frac{11}{11.0}$ $\frac{8}{11.3}$ $\frac{5}{16.3}$ $\frac{10}{10.9}$ $\frac{15}{10.0}$ $\frac{30}{10.2}$

228+60 same as 227+85

995.28

248 987.49 10.27 985.01

228+75 4.5 983.0

982.59

229 4.9 982.6

981.08

230 5.8 981.7

981.38

231 6.7 980.8

BM[#]31 5.42 987.61 5.42 982.07 982.19

231+30 Culvert 6.5 981.1

231+65 7.8 979.8

5.42 982.19

BM[#]31 285 985.04 982.19

979.54

232 5.5 979.5

978.44

233 6.6 978.4

976.94

234 8.1 976.9

30	18	10-7	12	14	18	20	14	20	25
4.1	5.7	4.7	4.1	3.5	2.9	7.0	7.0	5.2	3.0

30	20	17-135	9	12	5	10	13.5-17.5	24	30
5.4	6.1	4.3	5.3	4.8	4.9	5.1	3.9	4.6	4.8

30	15	10	8-7	3	5	10	16	30
6.2	6.2	6.2	6.5	5.6	5.8	6.1	5.8	6.2

30	9	45	3	4	6-8	12	15	30
6.7	6.0	7.0	6.8	6.7	6.2	7.0	6.5	6.7

125	200
12.0	974.0

271+40 corner of 271

100	50	20	EL	TL	HW	Gr	HW	TL	FL	30	
12.2	11.9	11.9	11.6	7.7	5.5	6.5	6.3	5.3	7.3	11.0	10.5

976.0

976.0

33	21	16	14	12	12	23	30	40	50
11.5	10.1	7.3	7.4	7.6	4.2	0.0	14.5	998.5	1000.0

976.1

30	12	0.8	7	3	11	22	27	4.1	1:1+
5.8	5.6	5.9	5.5	5.5	5.7	5.2	2.3	999.0	

30	18	11-13	10-5	14	25	37	—
6.9	6.4	7.1	6.2	6.7	5.8	0.2	

30	18	14	13	2	5-7	10	21	30	1:1 up
8.2	7.8	2.1	5.2	8.1	8.8	7.9	6.9	0.8	

985.04

1.71 978.68 8.07 976.97

234+90 36 975.1

235 984.58
4.1 974.6

236 972.68
6.0 72.7

237 971.28
6.9 71.8

BM+32 54.5 973.23 973.23

238 971.00
7.7 71.0

BM+32 0.45 973.68 973.23

239 970.25
3.4 70.3

239+55 3.5 70.2

239+85 3.1 70.6

240+50 970.15
3.5 70.2

30' creek
channel
- 3

$\frac{60}{65} \frac{10}{47} \frac{Fl.}{74} \frac{70}{36} \frac{70}{36} \frac{Fl.}{45}$

974.3

974.4

$\frac{30}{44} \frac{10}{36} \frac{8}{43} \frac{3}{41} \frac{5}{32} \frac{20-30}{25}$

$\frac{30}{73} \frac{12}{93} \frac{13-9}{47} \frac{5-3}{56} \frac{6}{55} \frac{14}{36} \frac{20}{5.0} \frac{30}{52}$

236+30 same as 236 level outlet

$\frac{30}{70} \frac{20}{61} \frac{9}{65} \frac{2-6}{64} \frac{9-10}{68} \frac{13}{63} \frac{30}{61}$

$\frac{30}{80} \frac{14}{78} \frac{102}{71} \frac{23}{84} \frac{30}{82}$

$\frac{30}{46} \frac{17}{40} \frac{14}{31} \frac{4}{30} \frac{28-35}{44}$

239+60 same as 239

$\frac{100}{86} \frac{60}{61} \frac{Fl.}{51} \frac{70}{45} \frac{70}{44} \frac{Fl.}{50} \frac{3}{3}$

68.6

96.87

$\frac{30}{48} \frac{19}{45} \frac{9}{32} \frac{5}{28} \frac{10}{0.0} \frac{21}{97.7} \frac{40}{98.7}$

$\frac{30}{56} \frac{14}{50} \frac{9}{42} \frac{7}{28} \frac{16}{00} \frac{22}{97.1} \frac{36}{97.4} \frac{42}{97.2}$

97368

241

968.05
5.6 68.1

Top stake
+ 241750

1.69

969.75

5.62 968.06

242

966.00
3.8 66.0

243

965.00
4.8 65.0

244

964.45
5.3 64.5

244+96

245

964.75
5.0 64.8

1.66

965.55

5.86 963.89

246

961.95
3.8 61.8

247

960.35
5.2 60.4

+ 247 + 85

5.4 60.2

Seat SW

6.5 59.1

" NW

6.0 59.6

30 5 5 13 22 28-30 40
65 58 54 44 972.6 9737 976.5

30 4-14 18-21 34 30
37 3.6 41 34 2.8

30 8 6 6 16 30
60 58 52 48 55 51

30 1 15 8-10 12 25-30
59 50 57 44 52 34

275 225 150 100
9740 9733 33 5.3

30 21 20 13 7 4 30
55 50 66 61 69 66 44

30 12 17 11 7-9 3 4 14 30
39 37 46 37 41 38 42 24 1.9

30 4-8 6 3 9 16 30
35 47 35 49 62 58 50

247+50 same as 247 except 30/20 left

	765.55	961.75	
±248+19	44	961.2	
ScatSE	5.3	60.3	
" NE	5.4	60.2	
Flow W	17.6	48.0	
BM #33	10.26	955.29	95528
Flow E	17.4	48.2	
Flow E	12.0	53.6	
248+30	45	61.1	
249	56	60.0	

					H ₂ O
<u>50-30</u>	<u>17.55</u>	<u>7</u>	<u>17</u>	<u>24</u>	<u>39</u> - 50
<u>18.2</u>	<u>102.25</u>	<u>48</u>	<u>82</u>	<u>103</u>	<u>158</u>
<u>55.5</u>	<u>55.61.4</u>	<u>609</u>	<u>56.8</u>	<u>55.4</u>	<u>499</u>
					H ₂ O
<u>30</u>	<u>9</u>	<u>4</u>	<u>3</u>	<u>10</u>	<u>18</u> <u>27</u> - 40
<u>100</u>	<u>71</u>	<u>57</u>	<u>53</u>	<u>3.6</u>	<u>172</u> <u>765</u>

59
48
11

BM#33 9.70 964.98 955.28

249+60 5.2 59.8

250 960.08 4.9 60.1

6.33 966.99 4.32 761.66

251 964.08 5.9 61.1

251+50 961.39 5.6 61.9

252 961.99 5.0 62.0

253 963.39 3.6 63.4

253+75 2.6 64.4

254 964.79 2.2 64.8

254+30 1.8 65.2

$\frac{30}{8.5}$ $\frac{20}{7.6}$ $\frac{11}{7.0}$ $\frac{9-3}{5.0}$ $\frac{2-9}{4.7}$ $\frac{6.5}{5.7}$ $\frac{9}{5.0}$ $\frac{11.5}{5.5}$ $\frac{27}{5.5}$ $\frac{37}{14.4}$ $\frac{43-18}{15.4}$

$\frac{30}{6.1}$ $\frac{15}{5.7}$ $\frac{12-9}{6.5}$ $\frac{7}{5.9}$ $\frac{3}{4.8}$ $\frac{2.5-3.5}{4.5}$ $\frac{6.5}{5.0}$ $\frac{8}{4.7}$ $\frac{12}{5.9}$ $\frac{22}{6.2}$ $\frac{30}{6.1}$

$\frac{30}{8.0}$ $\frac{18}{7.2}$ $\frac{15}{7.3}$ $\frac{13}{6.9}$ $\frac{3.5}{6.3}$ $\frac{7.5}{6.6}$ $\frac{10}{6.5}$ $\frac{12}{6.9}$ $\frac{14.5}{6.6}$ $\frac{21}{7.1}$ $\frac{30}{7.2}$

$\frac{30}{4.2}$ $\frac{14}{4.2}$ $\frac{12}{4.5}$ $\frac{9.5}{5.7}$ $\frac{2}{5.3}$ $\frac{5.5}{5.9}$ $\frac{13}{6.0}$ $\frac{17.5}{5.0}$ $\frac{23}{4.8}$ $\frac{26}{4.4}$ $\frac{30}{4.4}$

$\frac{30}{3.1}$ $\frac{14}{2.6}$ $\frac{12}{2.7}$ $\frac{9}{5.1}$ $\frac{5}{5.3}$ $\frac{11}{5.4}$ $\frac{11}{2.1}$ $\frac{26}{2.1}$ $\frac{30}{2.5}$

$\frac{30}{3.6}$ $\frac{12.5}{3.6}$ $\frac{8.5}{3.1}$ $\frac{7}{3.9}$ $\frac{2}{4.1}$ $\frac{4-7}{4.0}$ $\frac{7.5}{3.3}$ $\frac{20}{3.6}$ $\frac{29}{3.7}$ $\frac{30}{3.3}$

$\frac{30}{2.7}$ $\frac{8}{2.3}$ $\frac{6}{3.0}$ $\frac{5}{3.0}$ $\frac{10}{3.1}$ $\frac{16}{2.6}$ $\frac{23}{3.2}$ $\frac{30}{5.2}$

$\frac{30}{1.7}$ $\frac{22}{1.6}$ $\frac{11}{2.0}$ $\frac{6.5}{2.7}$ $\frac{4}{2.1}$ $\frac{8}{2.6}$ $\frac{14}{2.3}$ $\frac{23-30}{5.8}$

$\frac{30}{1.9}$ $\frac{21}{1.6}$ $\frac{11}{1.7}$ $\frac{7}{2.3}$ $\frac{4}{2.4}$ $\frac{7}{2.2}$ $\frac{13}{0.9}$ $\frac{20}{0.9}$ $\frac{30}{1.4}$

966.99

6.91 973.29 0.61 966.38

255 966.29 7.0 66.3

$\frac{30}{7.0}$ $\frac{12}{7.7}$ $\frac{6}{7.7}$ $\frac{5-9}{7.5}$ $\frac{15}{7.2}$ $\frac{20}{6.6}$ $\frac{30}{7.0}$

255+65 6.0 67.3

$\frac{30}{7.1}$ $\frac{11}{6.9}$ $\frac{6.5}{6.3}$ $\frac{3}{6.4}$ $\frac{8}{6.5}$ $\frac{19}{6.7}$ $\frac{30}{10.9}$

BM^F 34 6.42 973.23 6.42 966.87 966.51

256 968.23 5.0 68.2

$\frac{30}{66.9}$ $\frac{23}{6.0}$ $\frac{12}{6.0}$ $\frac{8}{5.2}$ $\frac{6}{5.5}$ $\frac{2}{5.6}$ $\frac{8.5}{5.7}$ $\frac{19}{6.2}$ $\frac{30}{10.2}$ $\frac{3.5}{10.7}$

257 970.33 2.9 70.3

$\frac{30}{3.8}$ $\frac{18}{3.5}$ $\frac{12}{2.8}$ $\frac{6}{2.5}$ $\frac{3}{3.0}$ $\frac{5}{2.4}$ $\frac{7}{2.8}$ $\frac{11}{2.6}$ $\frac{14}{3.1}$ $\frac{16}{2.7}$ $\frac{25}{3.6}$ $\frac{30}{4.7}$

12.54 975.16 0.61 972.62

257+50 12.6 72.6

$\frac{30}{10.0}$ $\frac{11}{11.5}$ $\frac{5.5}{12.1}$ $\frac{5}{13.4}$ $\frac{11}{12.2}$ $\frac{14}{12.8}$ $\frac{15-19}{12.1}$ $\frac{30}{13.1}$

258 976.56 8.6 76.6

$\frac{30}{3.2}$ $\frac{18}{3.9}$ $\frac{9}{10.1}$ $\frac{6}{9.1}$ $\frac{6}{8.3}$ $\frac{9}{9.9}$ $\frac{14}{20.7}$ $\frac{30}{2.5}$

12.99 977.77 0.38 974.78

258+80 13.5 84.3

$\frac{30}{6.7}$ $\frac{18}{7.6}$ $\frac{10}{14.6}$ $\frac{7}{13.5}$ $\frac{5}{17.8}$ $\frac{7}{14.7}$ $\frac{14}{9.7}$ $\frac{20}{10.3}$ $\frac{30}{12.9}$

259 986.27 11.5 86.3

$\frac{30}{6.1}$ $\frac{13}{6.6}$ $\frac{11}{12.9}$ $\frac{8}{11.6}$ $\frac{1-4}{12.0}$ $\frac{6.5}{12.5}$ $\frac{13}{7.5}$ $\frac{19}{7.5}$ $\frac{30}{11.2}$

11.50 1004.45 0.72 996.95

260 995.25 13.2 95.3

$\frac{30}{10.2}$ $\frac{16}{10.2}$ $\frac{11}{14.7}$ $\frac{7}{13.6}$ $\frac{6}{13.4}$ $\frac{11}{14.4}$ $\frac{13.5}{12.7}$ $\frac{20}{12.7}$ $\frac{30}{13.5}$

1008.45

261 1008.05 5.4 1003.1

B.M. 35 1.41 1008.42 1.41 1007.04 1007.01

261+35 3.5 1004.9

262 1006.06 2.5 05.9

B.M. 35 9.44 1016.45 1007.01

263 999.12 9.3 07.2

264 1008.45 7.8 08.7

265 1011.35 5.1 11.4

265+86.7 1012.06 4.5 12.0

Profile East

B.M. 36 1.71 1014.74 1014.73

30 18 5.5 2 9 13 16.5 30 44
3.2 3.1 6.5 5.6 5.7 6.7 3.3 3.7 3.5

30 9 2.5 11 16 18.5 30
2.6 1.8 4.1 3.2 4.4 1.9 2.0

30 5 1.5 7 12 13.5 16 30
4.4 3.6 4.1 1.9 2.3 2.2 2.1 2.5

30 18 10 4 6 13 30
7.4 9.0 8.8 4.3 2.7 4.5 4.7

30 22 10 4 3 1.5 5 10 12 30
7.4 6.8 6.6 7.4 8.7 7.7 7.3 2.1 6.4 5.7

30 9 6 3 9 12 18 30
5.3 4.6 5.8 5.1 5.0 5.3 4.1 3.6

30 25 17 15-18 11.5 30 50 100 200 250
4.1 3.6 4.1 5.7 4.5 3.8 3.1 3.9 4.2 10.6

50 100 150 200
3.3 2.2 1.4 0.5

Cross Sections after Storm
R Goodrich

BM^E 28 4.52 1025.57 1021.05

212+90 4.1 1021.5

213 5.0 1020.6

213+50 4.8 1020.8

214+60 7.7 1017.9

4.34 1021.73 8.18 1017.39

215 4.7 1017.0

215+50 6.0 1015.7

215+90 6.4 1015.3

+83 6.7 1015.0

216 7.5 1014.2

T.P 3.55 1016.6 8.62 1013.11

change $\frac{120}{78} \frac{15}{5.8}$ $\frac{10}{4.5} \frac{17}{3.3} \frac{22}{3.6} \frac{30}{3.5}$
 $\frac{17.3}{19.8} \frac{21.1}{22.3} \frac{21.0}{22.1}$

$\frac{25}{7.6} \frac{22}{6.2} \frac{12}{4.5}$ $\frac{6}{4.0} \frac{16}{3.6} \frac{18}{4.8} \frac{27}{4.6} \frac{30}{3.3}$
 $\frac{18.0}{19.4} \frac{21.1}{22.0} \frac{20.8}{21.9} \frac{22.3}{22.9}$

$\frac{23}{6.5} \frac{12}{3.5} \frac{5}{3.7}$ $\frac{6}{5.1} \frac{14}{5.7} \frac{16}{5.0} \frac{19}{5.1} \frac{22}{3.7} \frac{30}{2.8}$

$\frac{12}{8.5} \frac{11}{7.1} \frac{4}{6.7}$ $\frac{7}{7.5} \frac{7}{7.2} \frac{11}{7.6} \frac{13}{6.9}$
 $\frac{17.1}{18.5} \frac{18.9}{18.0} \frac{18.7}{18.1}$

$\frac{21}{5.9} \frac{17}{5.1}$ $\frac{7}{5.4} \frac{4}{3.6} \frac{2}{4.0}$ $\frac{7}{4.5} \frac{9}{4.1} \frac{12}{4.3} \frac{14}{3.9} \frac{20}{3.0} \frac{30}{3.0}$
 $\frac{15.8}{16.6} \frac{16.7}{18.1} \frac{17.7}{17.7} \frac{17.2}{17.6} \frac{17.4}{18.3} \frac{18.3}{18.7} \frac{18.7}{18.7}$

$\frac{19}{7.0} \frac{13-10}{3.2} \frac{7}{4.8}$ $\frac{6}{5.7} \frac{7-10}{5.4}$ $\frac{18}{4.2} \frac{17}{4.0} \frac{30}{3.5} \frac{30}{3.0}$
 $\frac{14.7}{13.5} \frac{16.9}{16.0} \frac{16.3}{17.5} \frac{17.7}{18.2}$

$\frac{22}{3.2} \frac{15}{4.4} \frac{8}{6.7} \frac{5}{3.4}$ $\frac{5}{6.4} \frac{6}{6.4} \frac{8}{4.8}$

$\frac{22}{5.2} \frac{8}{6.2}$ $\frac{7}{6.4} \frac{5}{6.5} \frac{4}{7.5} \frac{1}{7.6}$ $\frac{5}{6.5} \frac{6}{6.8} \frac{8}{5.8} \frac{12}{4.4}$
 $\frac{15.7}{15.9} \frac{16.2}{15.2} \frac{14.2}{14.2}$

$\frac{25}{3.2} \frac{16}{5.0}$ $\frac{4}{6.4} \frac{9}{6.5} \frac{4}{6.9} \frac{3}{7.5}$ $\frac{5}{7.0} \frac{6}{6.2} \frac{13}{5.7}$
 $\frac{14.7}{15.3} \frac{16.7}{15.2} \frac{14.8}{14.2} \frac{14.2}{16.0}$

10/6.66

216+36 2.6 1014.1

$\frac{13}{1.7} \frac{9}{2.6} \frac{6}{2.7} \frac{.8}{1.3}$

216+40 4.5 1012.2

$\frac{11}{2.3} \frac{10}{2.9} \frac{8}{2.9} \frac{7}{4.1} \frac{1}{2.6} \frac{6}{2.8} \frac{8}{1.5}$

216+52 3.3 1013.4

$\frac{11}{2.6} \frac{7}{3.3} \frac{8}{4.6} \frac{6}{5.1} \frac{4}{4.4} \frac{1}{4.0} \frac{3}{3.0} \frac{7}{3.0} \frac{9}{1.5}$

216+63 3.9 1012.8

$\frac{11}{3.1} \frac{9}{4.1} \frac{5}{4.3} \frac{6}{4.0} \frac{6}{3.5} \frac{7}{2.4} \frac{11}{1.0}$

217+00 5.3 1011.4

$\frac{11}{2.6} \frac{8}{5.0} \frac{5}{5.1} \frac{7}{4.8} \frac{10}{3.7} \frac{14}{11.7} \frac{11.7}{11.6} \frac{11.9}{13.0}$

217+15 6.2 1010.5

$\frac{8}{4.1} \frac{7}{5.3} \frac{2}{5.6} \frac{1}{6.0} \frac{1}{5.8} \frac{7}{5.6} \frac{9}{5.8} \frac{12}{3.2}$

217+25 6.9 1009.8

$\frac{7}{4.0} \frac{1}{5.7} \frac{9}{6.6} \frac{1}{7.1} \frac{5}{6.8} \frac{6}{6.0} \frac{9}{6.0} \frac{10}{6.2} \frac{15}{3.4}$

+28 7.1 1009.6

$\frac{8}{4.0} \frac{9}{5.4} \frac{2}{5.9} \frac{1}{6.8} \frac{2}{7.5} \frac{6}{6.8} \frac{7}{6.0} \frac{9}{6.3} \frac{15}{3.8}$

217+47 6.5 1010.2

$\frac{8}{4.9} \frac{6}{6.2} \frac{1}{7.0} \frac{9}{7.1} \frac{5}{6.8} \frac{7}{6.7} \frac{10}{7.1} \frac{15}{4.7}$

+50 6.6 1010.1

$\frac{7}{5.0} \frac{5}{6.4} \frac{6}{7.0} \frac{8}{6.8} \frac{7}{7.3} \frac{14}{4.7}$

218 8.2 1008.5

$\frac{9}{7.0} \frac{7}{7.8} \frac{5}{7.9} \frac{4}{8.1} \frac{8}{8.0} \frac{9}{8.2} \frac{15}{5.4} \frac{11.3}{11.3}$

101666

218428 9.5 1007.2

+30 11.6 1005.1

218450 12.2 1004.5

6.61 1011.70 11.57 1005.09

218466 5.2 1006.5

218470 5.5 1006.2

219 6.1 1005.6

+50 7.6 1004.1

B M 29 4.47 1011.69 4.47 1007.23 1007.22

219+75 8.1 1003.6

220 8.6 1003.1

4.54 1007.23 9.00 1002.69

$\frac{10}{7.8} \frac{7}{8.7} \frac{3}{8.8} \frac{7}{9.4} \frac{5}{8.6} \frac{4}{9.1} \frac{4}{7.5} \frac{7.9}{8.9} \frac{9}{7.5}$

$\frac{10}{8.0} \frac{7}{9.7} \frac{6}{8.6} \frac{1}{9.5} \frac{8}{11.7} \frac{8}{7.6}$

$\frac{14.15}{8.5} \frac{17}{6.0}$

$\frac{13-10}{8.7} \frac{8}{9.1} \frac{7}{9.5} \frac{6}{9.2} \frac{4}{9.0} \frac{4}{11.7} \frac{9}{12.5} \frac{4}{9.8} \frac{15}{8.5}$

$\frac{25}{3.1} \frac{20}{1.6} \frac{15}{4.5} \frac{13}{3.0} \frac{11}{4.0} \frac{7-8}{6.2} \frac{5}{4.7} \frac{1}{3.5} \frac{1}{6.8} \frac{4}{7.6} \frac{6}{8.0} \frac{10}{7.9} \frac{10}{3.5}$

$\frac{21}{2.0} \frac{15}{3.7} \frac{11}{4.2} \frac{10}{7.1} \frac{8}{7.2} \frac{5}{6.7} \frac{4}{5.3} \frac{3}{5.7} \frac{3}{7.5} \frac{11}{8.2} \frac{11}{3.5}$

$\frac{11}{8.2} \frac{7}{6.6} \frac{3}{6.9-6.2} \frac{5}{4.8} \frac{5}{5.1} \frac{5}{4.9} \frac{6}{7.4} \frac{9}{8.0} \frac{9}{4.1} \frac{15}{4.0} \frac{19}{4.3} \frac{24}{5.7} \frac{30}{7.6}$

$\frac{13}{5.3} \frac{10}{6.6} \frac{7-6}{7.3} \frac{4}{8.1} \frac{4}{7.2} \frac{5}{3.6} \frac{10}{8.4} \frac{11}{6.9} \frac{14}{6.0} \frac{17}{7.5} \frac{17}{4.2}$

$\frac{9}{6.2} \frac{6}{7.5} \frac{5}{8.8} \frac{2}{8.0} \frac{5}{8.6} \frac{12}{8.6} \frac{12.5}{7.4} \frac{14}{6.5}$

$\frac{7}{6.5} \frac{3.5}{8.0} \frac{3}{8.9} \frac{2}{8.7} \frac{8}{2.8} \frac{10}{2.3} \frac{11}{2.8} \frac{14}{3.0} \frac{15}{7.8} \frac{16}{6.5} \frac{20}{7.3} \frac{25}{8.9} \frac{30}{5.2} \frac{30}{4.4}$

1007.23

220+25

4.6 1002.6

+50

4.5 1002.4

+62

4.8 1002.4

+70

4.8 1002.4

221

5.8 1001.4

+50

6.3 1000.9

+77

6.7 1000.5

+80

6.7 1000.5

+90

7.3 999.9

222

7.5 999.7

27 30
4.0 4.5

65

$$\begin{array}{r} 7 \quad 2 \quad 11 \quad 12 \quad 13-14 \quad 15 \quad 15 \quad 22 \\ 2.7 \quad 4.5 \quad 5.2 \quad 4.4 \quad 4.8 \quad 3.7 \quad 3.0 \quad 3.8 \end{array}$$

$$\begin{array}{r} 7 \quad 2 \quad 1 \quad 5 \quad 10 \quad 10.5-11 \quad 11-15 \quad 15 \\ 3.7 \quad 4.2 \quad 4.8 \quad 5.4 \quad 5.2 \quad 5.7 \quad 5.2 \quad 4.0 \end{array}$$

$$\begin{array}{r} 3 \quad 2 \quad 2 \quad 4 \quad 12 \quad 10 \quad 15.5 \\ 4.2 \quad 4.6 \quad 5.2-5.9 \quad 6.0-5.6 \quad 5.7 \quad 5.2 \quad 4.1 \end{array}$$

$$\begin{array}{r} 3 \quad 2 \quad 2 \quad 3 \quad 5 \quad 10 \quad 11 \quad 14 \quad 15 \\ 4.2 \quad 4.7 \quad 5.5 \quad 6.7 \quad 5.9 \quad 5.8 \quad 5.2 \quad 5.0 \quad 4.0 \\ 0.3 \quad 0.2 \quad 0.17 \quad 0.02 \quad 0.3 \quad 0.2 \quad 0.3 \quad 0.1 \quad 0.3 \end{array}$$

$$\begin{array}{r} 10 \quad 4 \quad 2 \quad 2 \quad 4 \quad 9 \quad 11 \quad 13 \quad 14 \\ 1.3 \quad 4.6 \quad 5.3 \quad 5.6 \quad 6.6 \quad 6.0 \quad 5.5 \quad 5.8 \quad 4.4 \\ 2.9 \quad 2.6 \quad 1.9 \quad 1.6 \quad 0.6 \quad 1.2 \quad 1.7 \quad 1.4 \quad 2.8 \end{array}$$

$$\begin{array}{r} 23 \quad 14 \quad 9 \quad 6 \quad 3 \quad 6 \quad 9 \quad 10 \quad 12 \\ 6.0 \quad 5.5 \quad 5.0 \quad 6.3 \quad 6.5 \quad 6.1-5.7 \quad 5.8 \quad 5.3 \quad 4.9 \\ 1.2 \quad 1.7 \quad 2.2 \quad 0.9 \quad 0.7 \quad 1.1 \quad 1.6 \quad 1.4 \quad 2.3 \end{array}$$

$$\begin{array}{r} 30 \quad 27 \quad 25 \quad 12 \quad 9 \quad 8 \quad 5 \quad 4 \quad 2 \quad 4 \quad 4-6 \quad 6.5 \\ 6.4 \quad 6.8 \quad 6.8 \quad 5.4 \quad 7.6 \quad 6.8 \quad 6.7 \quad 6.5 \quad 5.8 \quad 6.2 \quad 7.0 \quad 5.7 \\ 0.8 \quad 1.2 \quad 0.4 \quad 1.8 \quad 0.6 \quad 0.4 \quad 0.3 \quad 0.7 \quad 1.4 \quad 1.0 \quad 0.2 \quad 1.5 \end{array}$$

$$\begin{array}{r} 11 \quad 11 \quad 7 \quad 1 \quad 4 \quad 5.7 \quad 7 \\ 5.7 \quad 10.1 \quad 8.4-6.4 \quad 6.1 \quad 5.9 \quad 7.1 \quad 5.7 \end{array}$$
2.9
6.3
$$\begin{array}{r} 20 \quad 24 \quad 19 \quad 15 \quad 14 \quad 6 \quad 6-1 \quad 3 \quad 4 \quad 7 \\ 5.7 \quad 6.3 \quad 5.7 \quad 6.6 \quad 9.7 \quad 9.3 \quad 7.8 \quad 6.5 \quad 6.8 \quad 6.3 \end{array}$$
3.0
5.5
$$\begin{array}{r} 20 \quad 16 \quad 15 \quad 11 \quad 9 \quad 5 \quad 2 \quad 2 \quad 3 \\ 5.6 \quad 6.8 \quad 9.1 \quad 8.6 \quad 7.7 \quad 7.4 \quad 7.9 \quad 7.3 \quad 6.6 \\ 1.6 \quad 0.7 \quad 0.8 \quad 0.6 \quad 0.5 \quad 0.8 \quad 0.9 \quad 0.9 \quad 0.6 \end{array}$$

Y T

✓ 222+13 1007.23 7.4 999.8

✓ 3.05 1002.48 7.80 999.43
+50 3.9 999.6

✓ +90 4.6 997.9

✓ 495 4.6 997.9

✓ 223 5.0 997.5

✓ +10 5.3 997.2

✓ +14 5.6 996.9

5.32 997.14

✓ +38 6.9 995.6

✓ 56 7.9 994.6

✓ 224 9.0 993.5

$\frac{30}{6.6} \frac{29}{6.3} \frac{18}{7.4} \frac{11}{7.4} \frac{7}{8.4} \frac{2}{7.9} \frac{1}{7.0} \frac{4}{6.6}$

$\frac{30}{31} \frac{16}{3.0} \frac{11}{3.7} \frac{8}{35} \frac{6}{4.1} \frac{2}{4.2} \frac{3}{3.2} \frac{7}{2.6}$

$\frac{17}{4.6} \frac{11}{5.9} \frac{8}{5.2} \frac{5}{5.8} \frac{2}{5.0} \frac{6}{3.6}$

$\frac{23}{48} \frac{18}{4.7} \frac{10}{5.8} \frac{9}{8.1} \frac{8}{9.2} \frac{3}{8.7} \frac{2}{5.1} \frac{6}{5.9} \frac{7}{4.4} \frac{10}{3.0}$

$\frac{21}{50} \frac{17}{5.1} \frac{14}{6.3} \frac{10}{7.8} \frac{5}{9.4} \frac{2}{8.1} \frac{6}{5.3} \frac{4.3}{98.2}$
97.5 97.4 96.2 95.4 94.2 93.1 94.4 97.2

$\frac{18}{5.5} \frac{16}{6.5} \frac{10}{6.8} \frac{10-7}{8.1} \frac{3}{7.1} \frac{4}{5.9} \frac{7}{5.0} \frac{9}{5.3} \frac{9}{3.6}$

$\frac{18}{5.5} \frac{15}{7.2} \frac{7}{7.4} \frac{5}{6.1} \frac{4}{5.3} \frac{6-7}{5.5} \frac{8}{4.0}$

$\frac{14}{5.4} \frac{15}{6.1} \frac{13}{9.1} \frac{9}{9.3} \frac{6}{8.7} \frac{6}{7.7} \frac{3}{6.5} \frac{4-6}{6.9} \frac{7}{5.2}$

$\frac{15}{6.1} \frac{13}{8.1} \frac{7.5}{8.3} \frac{9}{9.1} \frac{7}{9.2} \frac{5}{8.5} \frac{6}{7.9} \frac{7}{4.7}$

$\frac{17}{6.8} \frac{14}{8.8} \frac{10}{8.9} \frac{10}{10.0} \frac{4}{10.1} \frac{4}{94.7} \frac{11}{6.9} \frac{7}{95.6}$
95.7 93.7 93.6 92.5 92.4

1002A5

✓ 224+30 0.05 997.21 5.32 997.16
4.5 992.7

✓ 225 5.2 992.0

✓ +50 6.5 990.7

✓ 226 7.8 989.4

✓ +22 9.5 987.7

+50 8.9 988.4

227 10.4 986.8

2.78 989.51 10.48 986.73

+30 2.9 986.6

✓ +40 2.8 986.7

$\frac{13}{2.2}$ $\frac{11}{4.0}$ $\frac{8-8.6}{3.7-1.5}$ $\frac{2}{3.5}$ $\frac{5}{2.7}$ $\frac{8}{3.2}$ $\frac{10}{3.0}$ $\frac{13}{2.1}$

$\frac{11}{2.2}$ $\frac{5}{5.7}$ $\frac{7}{4.9}$ $\frac{5-10}{5.6}$ $\frac{10}{4.4}$
 $\frac{95.0}{91.5}$ $\frac{92.3}{91.4}$ $\frac{92.8}{92.8}$

$\frac{12}{3.9}$ $\frac{8}{6.7}$ $\frac{7}{7.0}$ $\frac{6}{7.9}$ $\frac{3}{7.7}$ $\frac{7}{6.1-6.5}$ $\frac{13}{5.0}$

$\frac{14}{7.0}$ $\frac{8}{7.8}$ $\frac{6}{10.0}$ $\frac{3}{10.3}$ $\frac{3}{8.4}$ $\frac{6}{7.7}$ $\frac{7-8}{7.1}$ $\frac{10-11}{7.9-7.3}$
 $\frac{90.2}{89.2}$ $\frac{87.2}{86.9}$ $\frac{86.9}{87.2}$ $\frac{87.2}{86.9}$ $\frac{88.9}{87.2}$ $\frac{88.9}{87.2}$ $\frac{89.5}{90.1}$ $\frac{89.9}{89.9}$

$\frac{12}{2.3}$ $\frac{10}{7.6}$ $\frac{8}{10.7}$ $\frac{4}{10.6}$ $\frac{1}{9.2}$ $\frac{1}{8.5}$ $\frac{5}{8.2}$ $\frac{7}{7.9}$ $\frac{8-10}{8.1}$ $\frac{11}{7.7}$
 $\frac{89.9}{89.9}$ $\frac{89.6}{89.6}$ $\frac{86.5}{86.5}$ $\frac{86.6}{86.6}$ $\frac{88.0}{88.0}$ $\frac{88.7}{88.7}$ $\frac{88.0}{88.0}$ $\frac{89.3}{89.3}$ $\frac{89.1}{89.1}$ $\frac{89.5}{89.5}$

$\frac{12}{8.2}$ $\frac{11-9}{8.8}$ $\frac{8}{8.7}$ $\frac{6}{8.6}$ $\frac{5}{9.1}$ $\frac{4}{8.9}$ $\frac{6}{8.5}$ $\frac{9}{8.2}$

$\frac{17}{8.6}$ $\frac{8}{9.1}$ $\frac{3}{10.5}$ $\frac{7}{9.5}$ $\frac{8}{10.1}$ $\frac{12}{8.9}$
 $\frac{88.6}{88.6}$ $\frac{88.1}{88.1}$ $\frac{86.7}{86.7}$ $\frac{87.7}{87.7}$ $\frac{87.1}{87.1}$ $\frac{87.3}{87.3}$

$\frac{16}{2.4}$ $\frac{8}{3.2}$ $\frac{7}{4.0}$ $\frac{5}{3.8}$ $\frac{4}{3.0}$ $\frac{8}{1.7}$ $\frac{5}{2.0}$

$\frac{9}{1.8}$ $\frac{7}{1.8}$ $\frac{5}{2.4}$ $\frac{9}{3.3-4.3}$ $\frac{14}{4.1}$ $\frac{10}{3.2}$

989.51

✓ +48	0	5.6	983.9
✓ +56		5.4	984.1
✓ 228		6.6	982.9
✓ +19		6.8	982.7
✓ +25		7.8	981.7
✓ +50		7.0	982.5
✓ +75		7.0	982.5
✓ 229		7.5	982.0
✓ 230		8.3	981.2
✓ 230+98	4.14	985.66	7.99
		5.6	980.1

$$\frac{30}{3.5} \quad \frac{10}{2.0} \quad \frac{5}{2.7} \quad \frac{5}{5.4} \quad \frac{5}{5.8} \quad \frac{5}{2.7} \quad \frac{7}{2.1}$$

$$\frac{17}{2.1} \quad \frac{11}{2.9} \quad \frac{8}{4.1} \quad \frac{5}{4.0} \quad \frac{4}{4.6} \quad \frac{5}{5.5} \quad \frac{6}{3.4} \quad \frac{11}{3.4}$$

$$\frac{15}{5.1} \quad \frac{10}{5.8} \quad \frac{3}{6.7} \quad \frac{5}{6.1} \quad \frac{11}{5.3}$$

$$\frac{84.4}{82.8} \quad \frac{83.7}{82.8} \quad \frac{83.4}{84.2}$$

$$\frac{14}{5.6} \quad \frac{6}{6.3} \quad \frac{7}{6.0}$$

$$\frac{14}{5.4} \quad \frac{4}{6.0} \quad \frac{4}{6.5} \quad \frac{4}{7.4} \quad \frac{3}{7.7} \quad \frac{3}{6.6} \quad \frac{8}{5.8}$$

$$\frac{18}{5.5} \quad \frac{9}{6.3} \quad \frac{4}{6.9} \quad \frac{10}{6.2}$$

$$\frac{18}{5.6} \quad \frac{11}{6.6} \quad \frac{6}{6.6} \quad \frac{5}{7.1} \quad \frac{6}{6.5} \quad \frac{10}{6.7} \quad \frac{13}{5.6} \quad \frac{18}{5.9} \quad \frac{15}{8.8}$$

$$\frac{83.9}{82.9} \quad \frac{82.9}{82.9} \quad \frac{82.9}{82.9} \quad \frac{82.1}{82.1} \quad \frac{83.0}{82.8} \quad \frac{84.1}{84.1} \quad \frac{84.1}{80.7}$$

$$\frac{7}{6.7} \quad \frac{5}{7.4} \quad \frac{3}{7.6} \quad \frac{4}{7.0}$$

$$\frac{82.8}{82.8} \quad \frac{82.1}{82.1} \quad \frac{81.9}{81.9} \quad \frac{82.5}{82.5}$$

$$\frac{2}{7.7} \quad \frac{8}{8.4} \quad \frac{9}{7.8}$$

$$\frac{81.8}{81.8} \quad \frac{81.1}{81.1} \quad \frac{81.7}{81.7}$$

$$\frac{10}{7.2} \quad \frac{6}{4.8} \quad \frac{9}{5.3} \quad \frac{6}{4.4}$$

$$\frac{81.5}{80.9} \quad \frac{81.3}{81.3}$$

975.66
5.12

231

6.3 979.4

$$\begin{array}{r} 6 \\ 4.7 \\ 81.0 \end{array} \quad \begin{array}{r} 2 \\ 5.5 \\ 80.2 \end{array} \quad \begin{array}{r} 2 \\ 6.7 \\ 79.0 \end{array} \quad \begin{array}{r} 1 \\ 5.3 \\ 80.4 \end{array} \quad \begin{array}{r} 5 \\ 4.9 \\ 80.8 \end{array} \quad \begin{array}{r} 6 \\ 4.5 \\ 81.2 \end{array}$$

231+16

5.1 980.6

$$\begin{array}{r} 18 \\ 5.0 \end{array} \quad \begin{array}{r} 16 \\ 7.0 \end{array} \quad \begin{array}{r} 10 \\ 7.8 \end{array} \quad \begin{array}{r} 5 \\ 7.4 \end{array} \quad \begin{array}{r} 1 \\ 6.1 \end{array} \quad \begin{array}{r} 5.2 \\ 4.6 \end{array} \quad \begin{array}{r} 7 \\ 4.3 \end{array}$$

+20

5.0 980.7

$$\begin{array}{r} 21 \\ 5.0 \end{array} \quad \begin{array}{r} 19 \\ 7.1 \end{array} \quad \begin{array}{r} 14 \\ 7.5 \end{array} \quad \begin{array}{r} 9 \\ 6.1 \end{array} \quad \begin{array}{r} 6 \\ 4.2 \end{array} \quad \begin{array}{r} 3 \\ 5.2 \end{array}$$

+28

7.3 978.4

$$\begin{array}{r} 7 \\ 4.7 \end{array} \quad \begin{array}{r} 3 \\ 5.4 \end{array} \quad \begin{array}{r} 3 \\ 7.3 \end{array} \quad \begin{array}{r} 5 \\ 6.6 \end{array} \quad \begin{array}{r} 5 \\ 4.5 \end{array}$$

+40

8.3 977.4

$$\begin{array}{r} 13 \\ 8.5 \end{array} \quad \begin{array}{r} 9 \\ 8.7 \end{array} \quad \begin{array}{r} 2 \\ 8.7 \end{array} \quad \begin{array}{r} 2 \\ 6.1 \end{array} \quad \begin{array}{r} 4 \\ 5.7 \end{array} \quad \begin{array}{r} 4.8 \end{array}$$

+42

8.3 977.4

$$\begin{array}{r} 13 \\ 8.5 \end{array} \quad \begin{array}{r} 4 \\ 8.7 \end{array} \quad \begin{array}{r} 2 \\ 8.7 \end{array} \quad \begin{array}{r} 2 \\ 6.1 \end{array} \quad \begin{array}{r} 4 \\ 5.7 \end{array} \quad \begin{array}{r} 4.8 \end{array}$$

3.98 981.68 982.19

BM#32 4.18 977.41

973.23

236

$\frac{6}{4.8}$

235

3.2

$\frac{4}{3.0}$

234

$\frac{9}{0.9}$

9.21 985.95 0.67 976.79

233

7.6

232

6.7

231450

6.6

BM 31

4.17 981.78 982.19

Rock Sections

Aug. 20, 1931
 R Goodrich
 S Merritt
 H Barton
 W Chapman

Slope Staff

66-R. 9.82 // 66.03 1156.21

66+50 10.8

66+65 12.0

772 12.6

8.65 1063.92 10.76 1055.27

779 11.1

67 12.7

7.73 1156.19 1156.21

(R)
 $\frac{7}{10.7} \frac{12}{14.5} \frac{14}{9.9} \frac{16}{6.0} \frac{22}{3.8} \frac{28}{3.0}$

Ledge
 (R) (R) (R) (R)
 $\frac{10}{12.2} \frac{13}{13.2} \frac{15}{10.0} \frac{15.2}{8.1} \frac{16}{7.7} \frac{20}{6.2} \frac{26}{3.3}$

Ledge
 (R) (R) (R)
 $\frac{11}{12.9} \frac{13}{13.4} \frac{17}{11.8} \frac{19}{9.2} \frac{19.2}{7.3} \frac{20}{6.1} \frac{30}{2.7}$

Ledge
 (R) (R) (R)
 $\frac{10}{11.3} \frac{13}{12.0} \frac{14}{11.1} \frac{16}{9.9} \frac{17}{7.6} \frac{30}{0.6}$

Top of Ledge
 (R) (R) (R) (R) (R)
 $\frac{5}{12.1} \frac{13}{12.9} \frac{18}{12.4} \frac{21}{10.7} \frac{25}{7.8} \frac{28-28}{7.0} \frac{28}{5.9}$

over

2+21

1+90 = E. end drive pipe

1+75 = E drive way

1+62 = E. edge pond

1+50 = outlet pipe & W. end drive pipe

14" drive pipe

outlet

1+0

0+85

0+50

B.M. + 6.03 HI 106.03 100.0

0+0 = W. line Herzer property

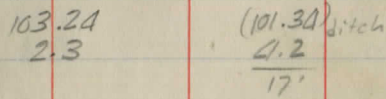
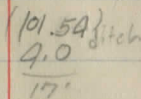
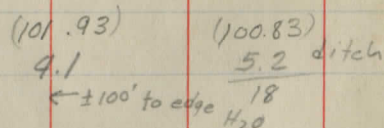
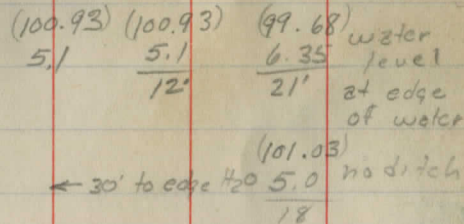
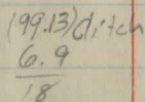
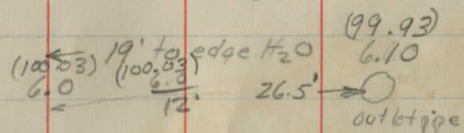
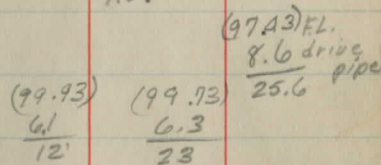
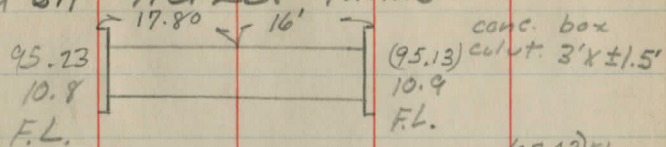
B.M. + 5.54 HI 105.54
sw. & S. head wall. 100.0
sta 2+21

6-21-55

Profile & Ditch elev.

Wilson Mills Rd. ± 1500' W Chillicothe 72

Res. pond on Herzer lands



N

E

S

2+50

2+0

$$\begin{array}{r} 96.23 \\ 98 \\ \hline 18' \end{array}$$

N

$$\begin{array}{r} 98.73 \\ 7.3 \end{array}$$

$$\begin{array}{r} 99.38 \\ 6.65 \end{array}$$

E

$$\begin{array}{r} 95.53 \\ 10.5 \\ \hline 25' \end{array}$$

S

4/10/56

MERTON
PATTERSON

± Sta 189+87 to 203+00

N
DitchRoad
ES
Ditch

74

Wilson Mills Rd HE
+

- ELEV.

Sta

Sta 198+26

B M A

5.51

1102.39

105.51

1096.88

100.00

X cut in NE 4 N. Hdwl.

Sta. 198+26 Per Rd Plan

Sta 203

€ 1093.99

 $\frac{6.3}{23}$ $\frac{9.8}{15}$

8.4

 $\frac{10.1}{17}$ $\frac{9.9}{20}$

202+50

€ 1094.59

 $\frac{7.2}{21}$ $\frac{8.5}{16}$

6.8

 $\frac{9.1}{17}$ $\frac{9.6}{25}$

202+0

€ 1096.29

 $\frac{7.5}{25}$ $\frac{8.0}{18}$

6.1

 $\frac{8.2}{18}$ $\frac{9.8}{28}$

201+0

€ 1097.04

 $\frac{6.1}{20}$

7.25

5.25

 $\frac{6.8}{17}$ $\frac{5.6}{23}$

200+0

€ 1097.84

 $\frac{3.5}{25}$

6.35

4.6

 $\frac{5.9}{17}$ $\frac{9.2}{22}$ Drive-N
199+66

€ 1097.79

 $\frac{3.6}{32}$ $\frac{3.5}{26}$

6.7

4.7

4.6

 $\frac{5.6}{18}$ $\frac{4.2}{22}$ Ditch
W. End Over
12" pipe Drive

199+0

€ 1096.59

 $\frac{5.4}{30}$ $\frac{5.2}{20}$

6.8

4.8

 $\frac{5.95}{18}$ $\frac{3.7}{28}$

Lawn

€ Culvert
198+26

€ 1097.23

 $\frac{11.7}{150}$

8.0

 $\frac{6.25}{30}$

6.6

8.0

8.4

5.16

 $\frac{7.9}{18}$ $\frac{7.6}{30}$

6.8

Lawn

Ditch

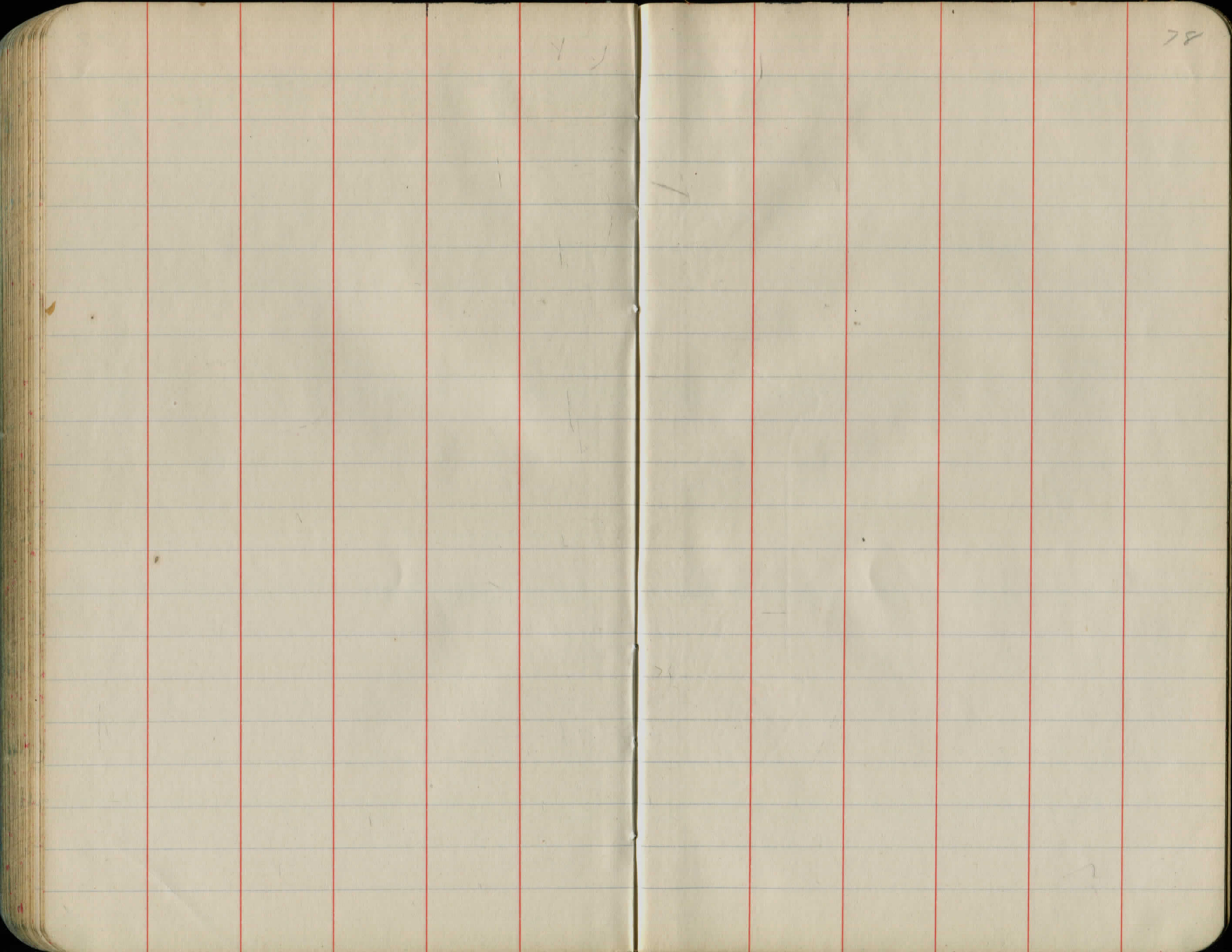
190
Swamp

Sta.		H.I.		ELEV.
Drive N. 198ts	+	105.51 1102.39		€1097.14
Drive-S. 197+46				€1096.99
197+0				€1096.79
T.P.	1.50	1098.09 101.21	5.80	1096.59 99.71
Drive-S. 196+70				€1096.66
196+0				€1096.29
195+0				€1094.89
194+0				€1092.59
Drive N. 193+05				€1088.59
193+0				€1089.49

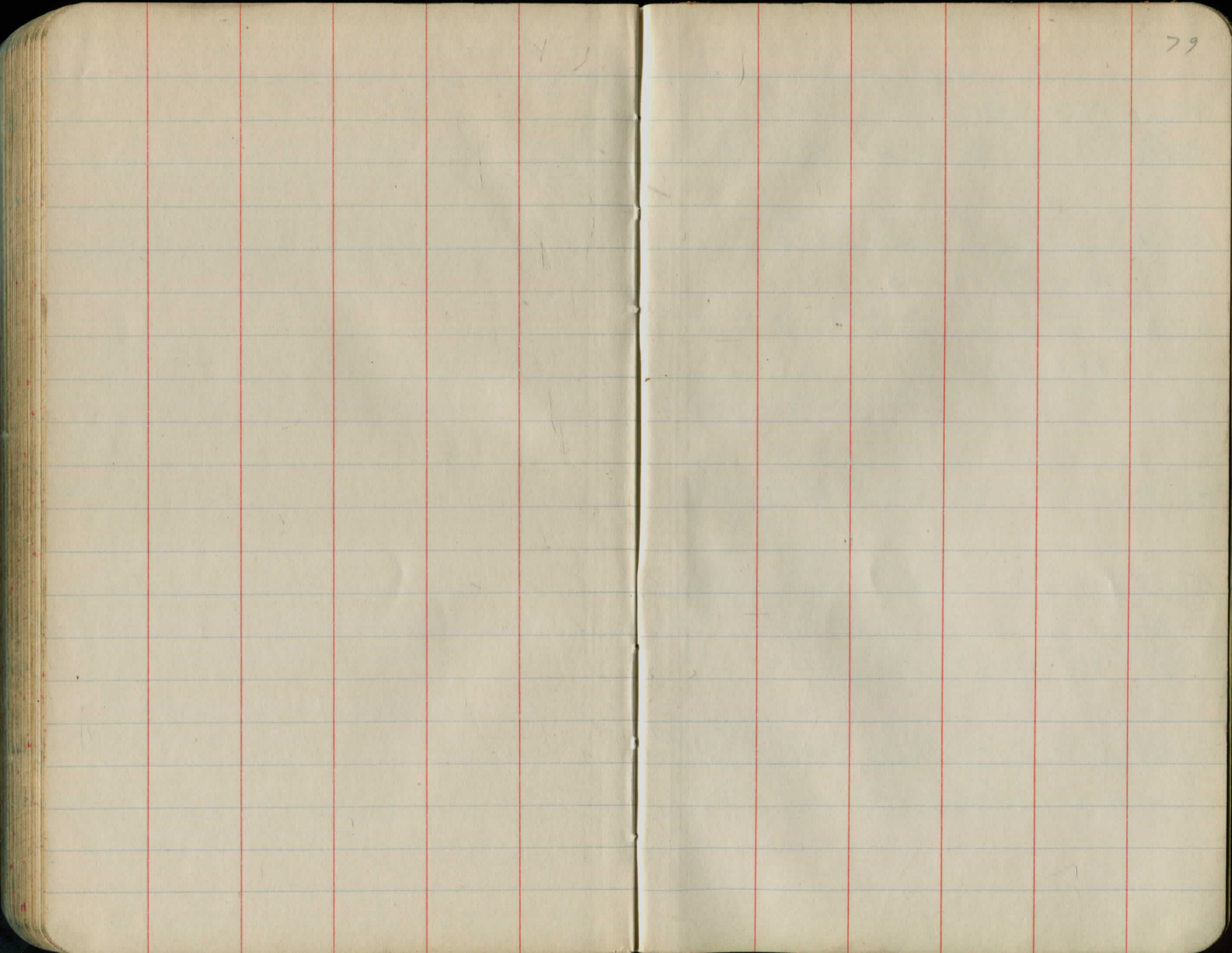
75

Ditch N	Road 4	Ditch S			
7.2 80 Garage	6.4 30	7.2 Ditch W End	7.5 Ditch E End	6.1 Drive & Pipe 17	5.25 <u>17</u>
5.0 60 House 4	5.5 30 Lawn	6.2 16	5.4	5.6 18 4 Drive	7.3 Ditch W End 30
6.5 60 House 4	6.0 30 Lawn	6.5 17	5.6	7.3 18	4.3 24
5.0 65 Lawn	3.5 30	3.1 17	1.97	1.3 18 4 Drive	3.1 Ditch W End 25
2.7 21	3.8 17	1.8	3.55 17	0.0 25	
2.0 22	5.0 17	3.2	4.7 17	1.5 25	
4.8 25	7.6 18	5.5	8.85 17	4.9 25	
10.2 75	9.6 30	13.8 W End Ditch	8.6 18 4 Drive	8.5 18	10.2 28 6.2 28
Same	8.6	Same			

		H.I		ELEV.		N Ditch	Road	S Ditch		
Drive S. 192+20	+	111.21 1098.09	-	1087.19		$\frac{13.5}{60}$ $\frac{12.3}{30}$	$\frac{11.4}{22}$ $\frac{12.8}{18}$	$\frac{10.9}{17}$	$\frac{11.1}{17}$ $\frac{12.9}{17}$ W End Pipe	$\frac{8.5}{4.0}$
T.P.	2.62	1089.52 92.64	11.17	1086.90 90.02						
192+00				1086.72		$\frac{5.3}{30}$	$\frac{4.9}{17}$	$\frac{2.8}{17}$	$\frac{9.8}{17}$	$\frac{3.3}{2.4}$
Hillside culvt. 191+62				1087.52		$\frac{11.2}{150}$ $\frac{9.9}{100}$ $\frac{9.0}{75}$	$\frac{8.4}{20}$	$\frac{3.0}{17}$	$\frac{9.6}{17}$ Inlet Pipe	$\frac{3.4}{21}$ $\frac{2.8}{25}$
191+00				1085.02		$\frac{8.8}{75}$	$\frac{7.6}{20}$	$\frac{4.5}{17}$	$\frac{6.3}{17}$	$\frac{6.9}{30}$
189+87				1084.49		$\frac{11.3}{250}$ $\frac{10.9}{150}$ $\frac{10.1}{75}$	$\frac{10.25}{18}$	$\frac{5.03}{17}$	$\frac{10.1}{17}$ Flow Line	$\frac{9.8}{50}$ $\frac{8.3}{100}$
{ 189+87 B.M.B	(+cut in NE & S. Hdw)	5.13	87.51	1084.39						
T.P.	10.11	1097.41 100.53	2.22	1087.30 90.42						
B.M. A			.53	1096.88 100.00						



78



79

5M20 563 113316 112753

156+15 6.6 26.6

155+50 60 27.2

1182 114293 205 1131.11

153+50 10.8 32.1

888 115162 019 114274

155

155+50

156

152 2.5 11467 1144.2

152+50 6.0 1140.7

10:1+ $\frac{34}{0.0}$

£

$\frac{28}{80} \frac{24}{81} \frac{12}{77} \frac{12}{81} \frac{9}{75} \frac{3}{68} \frac{5}{62} \frac{13}{67} \frac{16}{75} \frac{22}{79} \frac{24}{108} \frac{29}{106}$

$\frac{19}{0.1} \frac{16}{2.2} \frac{7}{55} \frac{4}{6.2} \frac{2}{58} \frac{3-5}{60} \frac{6}{56} \frac{12}{54} \frac{22}{59} \frac{30}{70}$

$\frac{31}{24} \frac{23}{66} \frac{15}{109} \frac{11}{101} \frac{7.5}{103} \frac{6}{112} \frac{4}{106} \frac{10}{112} \frac{11}{108} \frac{16}{113} \frac{38}{128}$

$\frac{60}{20} \frac{30}{31} \frac{26.5}{36} \frac{23}{73}$

$\frac{60}{1.5} \frac{46}{2.3} \frac{41}{5.0} \frac{30}{11.9}$

10:1 up $\frac{45}{6.5} \frac{39}{106} \frac{28}{15.3}$

$\frac{12}{39} \frac{17.5}{56} \frac{13.5}{65} \frac{14}{58} \frac{10.5}{56} \frac{9}{66} \frac{4}{60} \frac{6}{58} \frac{7}{65} \frac{8}{57} \frac{15}{26} \frac{30}{30}$

BM 17 062 116954 116892

145770 4.3 1165.2

$\frac{70}{10}$ $\frac{20}{17}$ $\frac{18}{48}$ $\frac{15}{53}$ $\frac{13}{48}$ $\frac{4}{43}$ $\frac{10}{50}$ $\frac{12}{35}$ $\frac{17}{40}$ $\frac{30}{53}$

1457273 240 116714

1457373 253 1167.01

30

24.3

14.3

0.7

5.6

66.52

0.89

65.63

7.0

1072.6

4.8

1068.6

$\frac{8}{1.5}$ $\frac{6}{2.8}$ $\frac{1}{2.6}$ | $\frac{7}{4.2}$ $\frac{8}{2.9}$ $\frac{10}{2.9}$ $\frac{11}{2.3}$

5.3 11.4

$\frac{7}{2.6}$ $\frac{3}{3.2}$ | $\frac{2}{4.2}$ $\frac{6}{4.1}$ $\frac{8}{3.5}$ $\frac{11}{3.7}$ $\frac{16}{3.0}$ $\frac{30}{3.1}$

1104.27
12.42

95.3

65.36
62.96

98.10
90.0

11.6
10.5
1172.1
6.5
105.6

95.2
2.6
98.10

1103.6
16.5
18.1
2.6

1097.8
2.0

94.3
6.2
1100.5
2.2
8.6

187.61
12.7
1000.3
1.8
48.5

PLEASE RETURN TO
GAUGA COUNTY ENGINEER
DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 12 FEET WIDE. SIDE SLOPE 1 TO 1.
FOR SPACING EACH END OF INSTRUMENT.
CHARDON, O.
PHONE 250-X

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

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

MADE IN GERMANY.

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