

OFFICE OF
RAMSEY COUNTY ENGINEER

FINAL NOTES

ANOKA CUT-OFF

CO. PROJ. No 26-62

FILE No

MINI BOOK

360 A

DIV. "D"

KEUFFEL & ESSER CO.

DRAWING MATERIALS AND SURVEYING INSTRUMENTS. NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR SINGLE TRACK EXCAVATION.

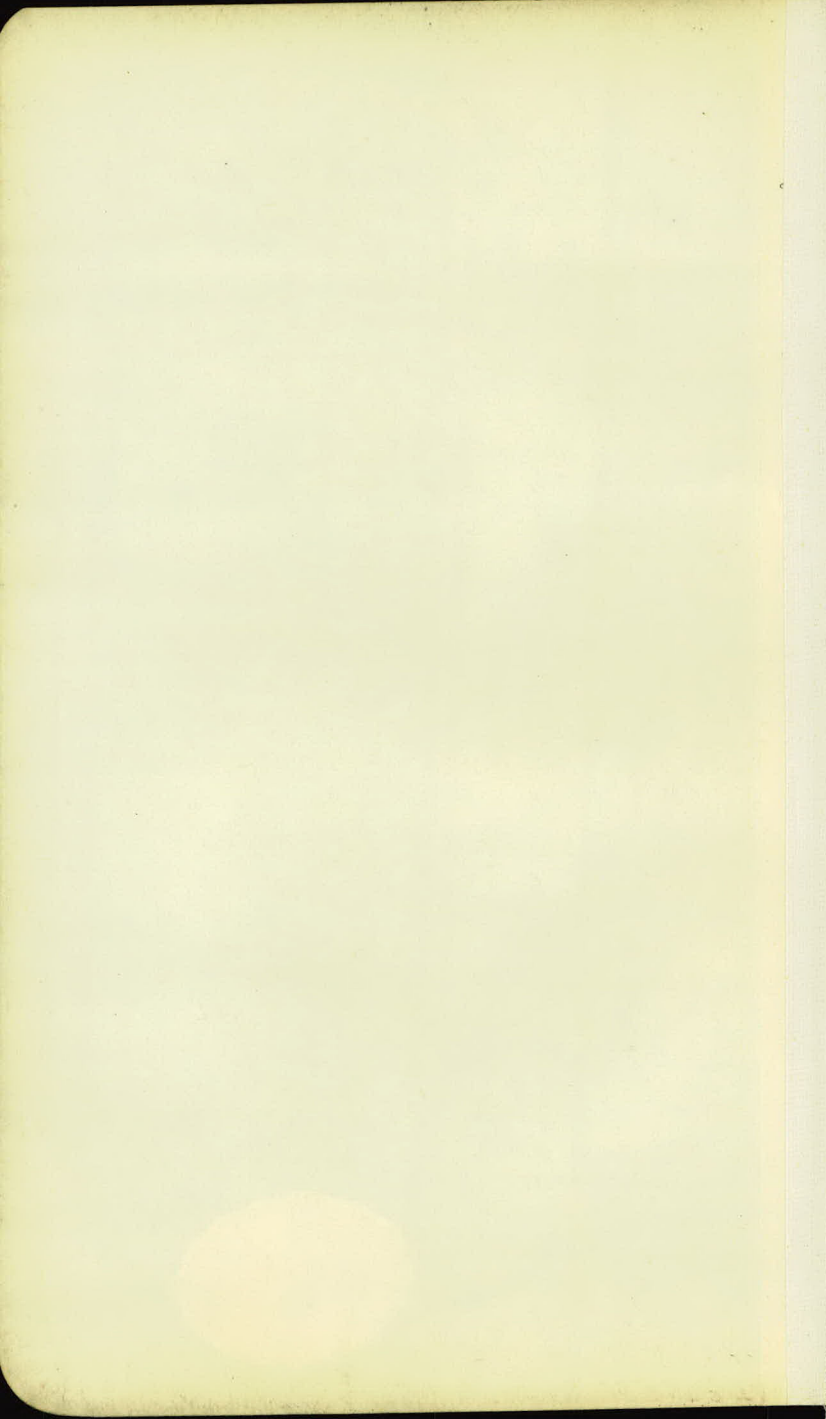
"Copyright, 1895, by Keuffel & Esser Co."

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

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

For Keith's Railroad Curve Tables see end of book.

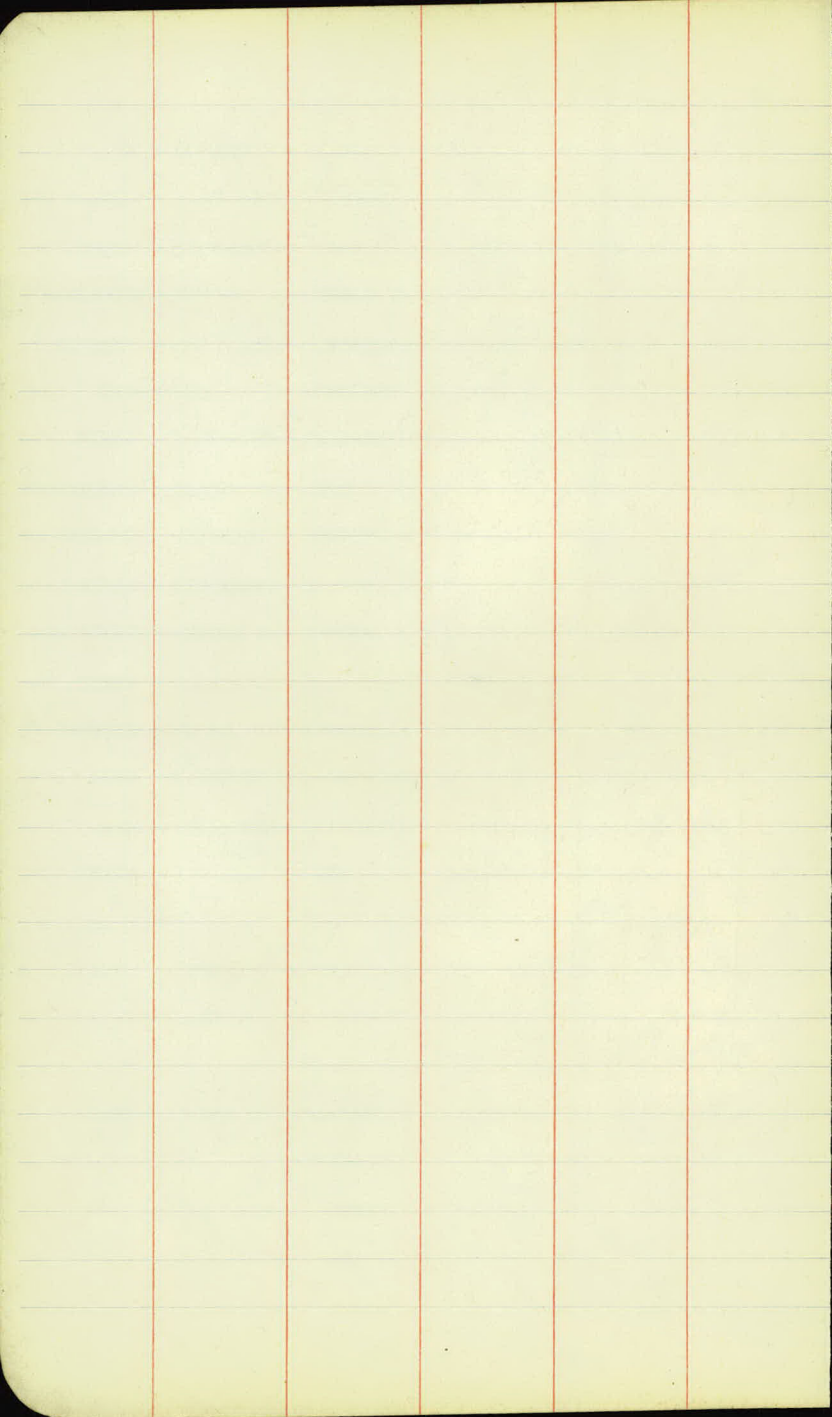


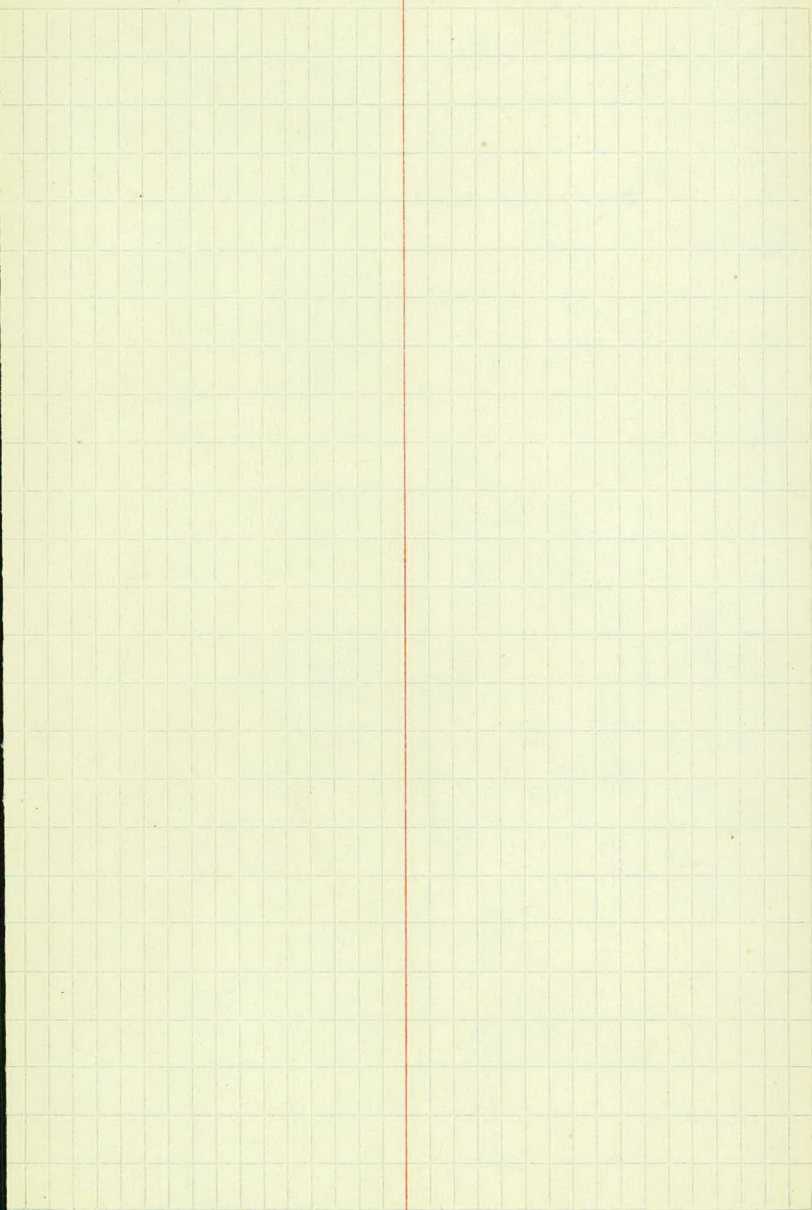


1

Proj. # 26-62 "D"

Sta. to	Sta.	Description	Page	to	Page
809	1084	Final X Sections.	13		40
809	1084	Farm Ent. Quantities.	41		
821	823	Final X Sec. of Borrow	49		
		Final X Sec. Borrow Pit # 1.	50		51
		Final X Sec. Borrow Pit # 2.	52		
		Final X Sec. Borrow Pit # 3.	53		
		Final X Sec. Borrow Pit # 4	54		
		Final X Sec. Borrow Pit # 5.	55		





Sta.	+	H.I.	-	Elev.	
P.M. 837 + 842 = 809 + 15 ²	4.21	865.61 ✓		859.40	
	Beginning of Div. "D"			58.7	59.3
810				59.6	60.2
811				60.5	61.0
812				61.1	61.6
813				61.6	62.2
B.M. Equ.	4.42	867.79 ✓	4.29	861.32 ✓	861.33 861.37
814				62.0	62.5
815				62.2	62.8
816				62.3	62.9
817				62.4	63.0
818				62.5	63.1
819				62.6	63.2
T.P.	5.18	868.41 ✓	4.56	863.23 ✓	
820				62.7	63.3

H.

RT.

11-8-26

P.R. Split in 30" Oct. H. Sta. 836 +20.

<u>5.6</u>	<u>8.6</u>	<u>8.7</u>	<u>6.6</u>	<u>6.42</u>	(6.9)	<u>6.48</u>	<u>6.6</u>	<u>7.6</u>	<u>7.7</u>	<u>8.2</u>
33.2	29	24	19.4	13.5	6.29	13.5	19.3	27.5	29.8	33

<u>5.6</u>	<u>8.6</u>	<u>8.5</u>	<u>5.6</u>	<u>5.54</u>	(6.0)	<u>5.55</u>	<u>5.6</u>	<u>8.6</u>	<u>8.8</u>	<u>8.2</u>	<u>5.8</u>
33.4	30.5	27	19.4	13.5	5.46	13.5	19	27	29.6	32	33.6

<u>4.9</u>	<u>7.9</u>	<u>8.0</u>	<u>4.7</u>	<u>4.72</u>	(5.1)	<u>4.74</u>	<u>4.8</u>	<u>7.9</u>	<u>8.0</u>	<u>4.7</u>
33.2	29.4	27	18.4	13.5	4.62	13.5	19	27	27	33.6

<u>4.7</u>	<u>7.5</u>	<u>7.5</u>	<u>4.2</u>	<u>4.11</u>	(4.5)	<u>4.10</u>	<u>4.2</u>	<u>7.1</u>	<u>7.1</u>	<u>4.7</u>
33.5	30	28	19	13.5	4.02	13.5	19	28	30.5	33.6

<u>4.6</u>	<u>6.7</u>	<u>6.7</u>	<u>3.6</u>	<u>3.59</u>	(4.0)	<u>3.58</u>	<u>3.5</u>	<u>7.1</u>	<u>7.1</u>	<u>4.6</u>
33	30	27	19.3	13.5	3.45	13.5	19.2	28	31	33.5

Nail in T. 12 RT. Sta. 813 +60

<u>7.1</u>	<u>9.2</u>	<u>9.2</u>	<u>5.5</u>	<u>5.35</u>	(5.8)	<u>5.35</u>	<u>5.4</u>	<u>8.7</u>	<u>8.7</u>	<u>6.7</u>
33.2	31	27.4	19	13.5	5.25	13.5	18.8	27.4	30.4	33

<u>6.2</u>	<u>8.5</u>	<u>8.4</u>	<u>5.2</u>	<u>5.13</u>	(5.0)	<u>5.15</u>	<u>5.3</u>	<u>8.5</u>	<u>8.5</u>	<u>6.8</u>
33.4	31	28	19	13.5	5.01	13.5	19	27.5	30.4	33

<u>5.9</u>	<u>7.9</u>	<u>7.8</u>	<u>5.1</u>	<u>5.05</u>	(5.5)	<u>5.04</u>	<u>5.0</u>	<u>6.6</u>	<u>6.4</u>	<u>5.4</u>	<u>5.2</u>
33.4	30	28	19	13.5	4.94	13.5	18.7	22.4	24	25.6	33

<u>5.5</u>	<u>7.6</u>	<u>7.7</u>	<u>5.2</u>	<u>4.95</u>	(5.4)	<u>4.94</u>	<u>5.1</u>	<u>5.5</u>	<u>5.5</u>	<u>3.7</u>	<u>3.4</u>
33.2	30	26	19.5	13.5	4.82	13.5	18.6	23	24	24.4	33

<u>6.6</u>	<u>7.8</u>	<u>4.8</u>	<u>4.9</u>	<u>4.83</u>	(5.2)	<u>4.85</u>	<u>5.1</u>	<u>7.2</u>	<u>7.4</u>	<u>5.5</u>	<u>5.5</u>
33	30	27.4	19.5	13.5	4.72	13.5	19.4	24.5	27.5	30.4	33

<u>6.0</u>	<u>7.7</u>	<u>7.7</u>	<u>4.6</u>	<u>4.71</u>	(5.2)	<u>4.73</u>	<u>4.8</u>	<u>7.5</u>	<u>7.6</u>	<u>4.7</u>
33	30	27	19	13.5	4.60	13.5	18.5	26.5	30.6	33.6

<u>5.2</u>	<u>8.1</u>	<u>8.2</u>	<u>5.1</u>	<u>5.21</u>	(5.1)	<u>5.23</u>	<u>5.3</u>	<u>7.6</u>	<u>7.7</u>	<u>5.1</u>
33.2	29.3	27.0	19.4	13.5	5.12	13.5	19	24.4	30	33.7

Sta.	+	H. I.	-	Elev.
		868.41 ^v		
821				62.8 63.4
822				62.9 63.5
	+60			63.0 63.6
823				63.0 63.6
	+30			63.0 63.6
	+82	Cross Drain	24" X 46 P ³	
824				63.1 63.7
	+60			63.2 63.8
825				63.2 63.8
	+50			63.2 63.9
T.P.	3.92	868.91 ^v	3.42	864.99 ^v
826				63.3 63.9
827				63.3 64.0
B.M.	4.92	869.08 ^v	4.74	864.12 ^v 864.14
828				63.4 64.0

828 + 80.8 =
Elev. 828 + 77.5

Lt.

Rt.

11-8-26

$\frac{4.4}{53.5}$	$\frac{7.7}{28.8}$	$\frac{7.8}{26.5}$	$\frac{5.2}{19}$	$\frac{5.09}{13.5}$	$\frac{5.6}{4.99}$	$\frac{5.10}{13.5}$	$\frac{5.2}{19}$	$\frac{7.9}{24}$	$\frac{7.9}{28}$	$\frac{4.8}{33}$
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$\frac{7.9}{33}$	$\frac{7.9}{26.4}$	$\frac{5.2}{19}$	$\frac{4.99}{13.5}$	$\frac{5.5}{4.89}$	$\frac{5.01}{13.5}$	$\frac{5.1}{19}$	$\frac{7.1}{25}$	$\frac{7.1}{29.5}$	$\frac{4.4}{33}$
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$\frac{7.8}{53}$	$\frac{7.6}{28.4}$	$\frac{5.1}{18.8}$	$\frac{4.95}{13.5}$	$\frac{5.4}{4.83}$	$\frac{4.91}{13.5}$	$\frac{5.0}{19}$	$\frac{7.2}{25.2}$	$\frac{7.3}{28.5}$	$\frac{6.9}{30}$	$\frac{4.6}{33}$
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$\frac{7.5}{33}$	$\frac{7.3}{32}$	$\frac{6.1}{24}$	$\frac{4.7}{18.8}$	$\frac{4.92}{13.5}$	$\frac{5.4}{4.79}$	$\frac{4.90}{13.5}$	$\frac{5.02}{19}$	$\frac{7.9}{26}$	$\frac{7.7}{28}$	$\frac{7.0}{33}$
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$\frac{10.7}{33}$	$\frac{6.4}{24.4}$	$\frac{4.9}{18.8}$	$\frac{4.89}{13.5}$	$\frac{5.4}{4.77}$	$\frac{4.90}{13.5}$	$\frac{4.9}{18.8}$	$\frac{8.8}{28.8}$	$\frac{9.0}{33}$
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Outlet = 14.37

10.38 = Intake

3.34

32.6

$\frac{12.5}{33}$	$\frac{12.5}{32}$	$\frac{4.8}{19.2}$	$\frac{4.78}{13.5}$	$\frac{5.3}{4.70}$	$\frac{4.79}{13.5}$	$\frac{4.9}{18.8}$	$\frac{6.2}{24}$	$\frac{7.1}{30}$	$\frac{9.3}{33}$
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$\frac{10.8}{30}$	$\frac{11.2}{31}$	$\frac{6.5}{24}$	$\frac{4.8}{18.8}$	$\frac{4.73}{13.5}$	$\frac{5.2}{4.63}$	$\frac{4.74}{13.5}$	$\frac{4.8}{19}$	$\frac{7.7}{26.6}$	$\frac{8.2}{36}$	$\frac{7.3}{37.6}$
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$\frac{10.7}{33}$	$\frac{10.7}{30.6}$	$\frac{6.3}{23.2}$	$\frac{4.8}{19}$	$\frac{4.67}{13.5}$	$\frac{5.2}{4.59}$	$\frac{4.67}{13.5}$	$\frac{4.7}{19.2}$	$\frac{7.4}{27}$	$\frac{7.6}{30.1}$	$\frac{5.6}{33}$
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$\frac{4.4}{33}$	$\frac{4.5}{26}$	$\frac{4.62}{13.5}$	$\frac{5.2}{4.50}$	$\frac{4.60}{13.5}$	$\frac{4.8}{30}$	$\frac{4.6}{33}$
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$\frac{8.7}{33}$	$\frac{8.3}{24}$	$\frac{5.2}{18.7}$	$\frac{5.10}{13.5}$	$\frac{5.6}{4.98}$	$\frac{5.05}{13.5}$	$\frac{5.4}{31}$	$\frac{5.3}{33}$
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$\frac{6.5}{33}$	$\frac{7.8}{31}$	$\frac{7.8}{24}$	$\frac{5.1}{18.8}$	$\frac{5.06}{13.5}$	$\frac{5.6}{4.94}$	$\frac{5.02}{13.5}$	$\frac{5.1}{18.8}$	$\frac{8.1}{27}$	$\frac{7.7}{31}$	$\frac{5.3}{33}$
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R. P. Spk. Rt. Sta. 828 + 25

$\frac{6.8}{34}$	$\frac{8.5}{31.5}$	$\frac{8.1}{27}$	$\frac{5.3}{18.5}$	$\frac{5.18}{13.5}$	$\frac{5.2}{5.07}$	$\frac{5.16}{13.5}$	$\frac{5.3}{18.4}$	$\frac{8.1}{26}$	$\frac{8.2}{29.5}$	$\frac{7.9}{31}$	$\frac{6.0}{33}$
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Sta.	+	H. I.	-	Elev.
		869.08 [✓]		
829				63.4 64.0
830				63.5 64.1
831				63.5 64.1
832				63.6 64.2
833				63.6 64.2
834				63.7 64.3
T.P.	4.98	869.91 [✓]	4.75	864.93 [✓]
835				63.7 64.4
836				63.7 64.4
837				63.8 64.5
838				63.9 64.6
839				63.9 64.6
840				64.0 64.6
T.P.	4.90	869.51 [✓]	4.70	864.61 [✓]

Lt.

Rt.

11-9-26

<u>5.6</u>	<u>8.1</u>	<u>8.0</u>	<u>5.0</u>	<u>5.12</u>	<u>(5.7)</u>	<u>5.14</u>	<u>5.1</u>	<u>7.6</u>	<u>8.3</u>	<u>7.7</u>	<u>5.6</u>
33.5	31	26.5	17	13.5	3.04	13.5	17	26.5	30	31	33

<u>5.7</u>	<u>8.0</u>	<u>7.8</u>	<u>5.0</u>	<u>5.05</u>	<u>(5.6)</u>	<u>5.09</u>	<u>5.1</u>	<u>8.1</u>	<u>8.2</u>	<u>5.9</u>
33.4	30.5	28	20	13.5	4.77	13.5	17	26	29.5	33

<u>5.6</u>	<u>8.1</u>	<u>8.0</u>	<u>4.9</u>	<u>5.04</u>	<u>(5.6)</u>	<u>5.06</u>	<u>5.1</u>	<u>7.6</u>	<u>7.7</u>	<u>5.9</u>
33	30.5	27.5	18.8	13.5	4.74	13.5	19.5	26.5	30	33

<u>6.0</u>	<u>7.9</u>	<u>7.6</u>	<u>5.0</u>	<u>4.98</u>	<u>(5.5)</u>	<u>5.01</u>	<u>5.1</u>	<u>8.0</u>	<u>7.9</u>	<u>6.2</u>
33	30.5	26	19	13.5	4.90	13.5	19	28.5	31	33.5

<u>6.3</u>	<u>8.1</u>	<u>8.0</u>	<u>4.9</u>	<u>4.94</u>	<u>(5.5)</u>	<u>4.94</u>	<u>4.8</u>	<u>7.8</u>	<u>8.0</u>	<u>6.6</u>
33	30.5	28	19.5	13.5	4.85	13.5	17	27.5	31.5	33

<u>6.3</u>	<u>8.1</u>	<u>7.8</u>	<u>4.9</u>	<u>4.88</u>	<u>(5.4)</u>	<u>4.88</u>	<u>5.0</u>	<u>7.9</u>	<u>8.0</u>	<u>6.2</u>
34	32	28	20	13.5	4.75	13.5	17	28	31	33

<u>6.0</u>	<u>7.6</u>	<u>7.5</u>	<u>5.2</u>	<u>5.06</u>	<u>(5.6)</u>	<u>5.06</u>	<u>5.0</u>	<u>7.8</u>	<u>8.0</u>	<u>5.8</u>
34	31.5	28	20	13.5	4.94	13.5	19	27.5	30.5	33.5

<u>5.8</u>	<u>8.1</u>	<u>7.8</u>	<u>5.2</u>	<u>5.02</u>	<u>(5.5)</u>	<u>5.01</u>	<u>5.0</u>	<u>7.5</u>	<u>7.6</u>	<u>5.6</u>
34.5	32	28	19	13.5	4.92	13.5	19	27.5	31	33

<u>6.1</u>	<u>7.6</u>	<u>7.5</u>	<u>5.0</u>	<u>4.94</u>	<u>(5.5)</u>	<u>4.94</u>	<u>4.9</u>	<u>7.6</u>	<u>7.9</u>	<u>5.7</u>
34	32	29	19.5	13.5	4.85	13.5	19.2	28.5	31.5	34

<u>5.4</u>	<u>7.8</u>	<u>7.7</u>	<u>4.9</u>	<u>4.80</u>	<u>(5.4)</u>	<u>4.88</u>	<u>4.7</u>	<u>7.5</u>	<u>7.4</u>	<u>5.5</u>
33	31	27.5	19.2	13.5	4.73	13.5	19.4	28.5	31	33

<u>5.5</u>	<u>7.9</u>	<u>7.9</u>	<u>4.8</u>	<u>4.84</u>	<u>(5.4)</u>	<u>4.84</u>	<u>4.8</u>	<u>7.9</u>	<u>7.8</u>	<u>5.7</u>
33.5	31	27.5	19	13.5	4.75	13.5	19.5	27.5	31	33

<u>5.7</u>	<u>8.2</u>	<u>8.0</u>	<u>4.7</u>	<u>4.80</u>	<u>(5.3)</u>	<u>4.80</u>	<u>4.8</u>	<u>7.8</u>	<u>7.7</u>	<u>5.2</u>
33	31	27	19	13.5	4.70	13.5	19.3	28	31.5	33.5

Sta.	+	H. I.	-	Elev.
		869.51 ^v		
841				64.1 64.6
842				64.2 64.6
843				64.3 64.6
844				64.4 64.6
845				64.5 64.6
846				64.6 64.7
847				64.7 64.7
T.P.	6.39	870.44 ^v	5.46	864.05 ^v
848				64.8 64.8
849				64.9 65.0
850				65.1 65.2
851				65.3 65.5
852				65.6 65.6

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<u>6.1</u>	<u>7.4</u>	<u>7.5</u>	<u>5.1</u>	<u>5.01</u>	<u>(5.4)</u>	<u>5.00</u>	<u>5.0</u>	<u>7.6</u>	<u>7.7</u>	<u>4.4</u>
33.5	31.5	28	19	13.5	4.90	13.5	19	28	31	33

<u>5.9</u>	<u>7.7</u>	<u>7.3</u>	<u>5.1</u>	<u>4.95</u>	<u>(5.3)</u>	<u>4.89</u>	<u>4.8</u>	<u>7.6</u>	<u>7.7</u>	<u>4.7</u>
33.5	31	28.5	19.5	13.5	4.87	13.5	19.5	28	31	33.5

<u>6.0</u>	<u>8.1</u>	<u>8.1</u>	<u>5.1</u>	<u>5.00</u>	<u>(5.2)</u>	<u>4.98</u>	<u>5.0</u>	<u>7.7</u>	<u>7.8</u>	<u>5.9</u>
33.5	31	28.5	19	13.5	4.89	13.5	19.5	27.5	31	33

<u>6.2</u>	<u>8.0</u>	<u>8.0</u>	<u>5.0</u>	<u>4.98</u>	<u>(5.1)</u>	<u>4.99</u>	<u>4.8</u>	<u>7.8</u>	<u>8.0</u>	<u>6.2</u>
33	30.5	27.5	19.5	13.5	4.89	13.5	19.5	27.5	31	33

<u>6.5</u>	<u>7.9</u>	<u>7.8</u>	<u>5.0</u>	<u>4.96</u>	<u>(5.0)</u>	<u>5.00</u>	<u>4.9</u>	<u>8.0</u>	<u>8.2</u>	<u>6.7</u>
33	30	27	19	13.5	4.88	13.5	19.5	28.5	31.5	33.5

<u>6.4</u>	<u>7.7</u>	<u>7.5</u>	<u>5.0</u>	<u>4.97</u>	<u>(4.9)</u>	<u>4.95</u>	<u>4.9</u>	<u>8.0</u>	<u>8.2</u>	<u>6.1</u>
33	31	24	19	13.5	4.86	13.5	19.5	28	30.5	33.5

<u>7.0</u>	<u>7.5</u>	<u>7.4</u>	<u>4.9</u>	<u>4.98</u>	<u>(4.8)</u>	<u>4.94</u>	<u>5.0</u>	<u>7.2</u>	<u>7.3</u>	<u>5.3</u>
33	30	28	20	13.5	4.83	13.5	19.5	28	32	33.5

<u>8.0</u>	<u>7.8</u>	<u>8.3</u>	<u>8.3</u>	<u>5.6</u>	<u>5.72</u>	<u>(5.6)</u>	<u>5.69</u>	<u>5.6</u>	<u>7.9</u>	<u>7.9</u>	<u>5.8</u>
33	31.5	30	27	19.5	13.5	5.61	13.5	19.5	29	30.5	33

<u>7.2</u>	<u>7.8</u>	<u>8.0</u>	<u>5.6</u>	<u>5.59</u>	<u>(5.5)</u>	<u>5.50</u>	<u>5.3</u>	<u>7.3</u>	<u>7.2</u>	<u>5.6</u>
33	31.7	28.1	19.8	13.5	5.41	13.5	19.4	26.8	31.8	34

<u>8.4</u>	<u>7.6</u>	<u>7.3</u>	<u>5.3</u>	<u>5.32</u>	<u>(5.3)</u>	<u>5.30</u>	<u>5.4</u>	<u>7.4</u>	<u>7.5</u>	<u>6.0</u>
33	31.8	26.3	19.4	13.5	5.21	13.5	19.5	27.7	31.2	33.5

<u>7.3</u>	<u>7.4</u>	<u>7.1</u>	<u>5.1</u>	<u>5.09</u>	<u>(5.1)</u>	<u>5.09</u>	<u>5.0</u>	<u>6.6</u>	<u>6.8</u>	<u>4.8</u>
33	31.4	27.7	20	13.5	4.99	13.5	19.7	28.8	31	33

<u>4.8</u>	<u>6.7</u>	<u>6.7</u>	<u>4.8</u>	<u>4.88</u>	<u>(4.8)</u>	<u>4.91</u>	<u>4.8</u>	<u>6.4</u>	<u>6.6</u>	<u>3.9</u>
33.8	32	26.5	20	13.6	4.80	13.5	20	27.4	31	34

Sta.	+	H.I.	-	Elev.	
		870.44 [✓]			
853				65.9	65.9
B.M.	3.74	871.72 [✓]	2.45	867.99 [✓]	867.99
854				66.2	66.2
855				66.5	66.6
856				66.8	67.0
856				67.0	67.2
857				67.1	67.4
858				67.4	67.8
T.P.	7.94	874.22 [✓]	5.44	866.28 [✓]	
859				67.7	68.2
860				68.0	68.6
861				68.4	69.0
862				68.8	69.4
863				69.2	69.8
	6.37	875.67 [✓]	4.92	869.50 [✓]	

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<u>4.7</u>	<u>5.0</u>	<u>7.1</u>	<u>7.0</u>	<u>4.5</u>	<u>4.64</u>	(45)	<u>4.63</u>	<u>4.5</u>	<u>6.1</u>	<u>6.3</u>	<u>5.1</u>
33	32	293	268	193	13.5	4.52	13.5	18.8	264	31.5	344

split in 12" Oak Rt. Sta. 852 + 92.

<u>5.5</u>	<u>6.8</u>	<u>7.6</u>	<u>7.5</u>	<u>5.5</u>	<u>5.63</u>	(55)	<u>5.59</u>	<u>5.4</u>	<u>7.4</u>	<u>7.4</u>	<u>5.4</u>
33	30	287	26	197	13.5	5.51	13.5	19.6	26.7	30.5	33

<u>5.2</u>	<u>5.4</u>	<u>7.2</u>	<u>7.2</u>	<u>5.4</u>	<u>5.24</u>	(57)	<u>5.21</u>	<u>5.1</u>	<u>7.1</u>	<u>7.5</u>	<u>6.6</u>	<u>6.6</u>
33	31.5	28	26.7	30	13.5	5.12	13.5	19.8	25.4	31	32	33

<u>4.5</u>	<u>4.7</u>	<u>6.2</u>	<u>6.0</u>	<u>4.9</u>	<u>4.81</u>	(49)	<u>4.81</u>	<u>4.8</u>	<u>7.2</u>	<u>7.4</u>	<u>6.5</u>	<u>6.9</u>
33	27	25.7	23.4	197	13.5	4.71	13.5	19.6	26.7	29	30.4	33

<u>4.2</u>	<u>4.3</u>	<u>6.0</u>	<u>6.0</u>	<u>4.5</u>	<u>4.65</u>	(47)	<u>4.67</u>	<u>5.1</u>	<u>7.4</u>	<u>7.4</u>
33	31.5	24	23	30	13.5	4.57	13.5	30	38	47

<u>3.4</u>	<u>3.3</u>	<u>5.2</u>	<u>5.2</u>	<u>4.3</u>	<u>4.44</u>	(46)	<u>4.44</u>	<u>4.5</u>	<u>6.8</u>	<u>7.0</u>
33	25	22.7	21.7	193	13.5	4.35	13.5	24	30	33

<u>2.6</u>	<u>2.7</u>	<u>5.3</u>	<u>5.3</u>	<u>4.0</u>	<u>4.03</u>	(43)	<u>4.00</u>	<u>4.1</u>	<u>6.6</u>	<u>6.7</u>	<u>5.7</u>
33	27.8	23.6	22.6	192	13.5	3.91	13.5	19.8	29	32	29.6

<u>5.2</u>	<u>5.6</u>	<u>8.2</u>	<u>8.1</u>	<u>6.2</u>	<u>6.11</u>	(65)	<u>6.12</u>	<u>6.1</u>	<u>8.4</u>	<u>8.8</u>	<u>6.7</u>
33	27	26.5	24	175	13.5	6.01	13.5	19	24	29	33

<u>5.1</u>	<u>5.2</u>	<u>8.3</u>	<u>8.1</u>	<u>5.7</u>	<u>5.73</u>	(67)	<u>5.71</u>	<u>5.6</u>	<u>8.0</u>	<u>8.2</u>	<u>3.8</u>
33	30.5	28	25	19	13.5	5.61	13.5	19	25.5	28.5	33

<u>5.5</u>	<u>8.3</u>	<u>8.3</u>	<u>7.6</u>	<u>5.4</u>	<u>5.52</u>	(58)	<u>5.29</u>	<u>5.4</u>	<u>8.2</u>	<u>8.4</u>	<u>5.4</u>
33	27	27	25.5	18.8	13.5	5.31	13.5	18.6	27	30.5	33.3

<u>4.7</u>	<u>8.6</u>	<u>8.5</u>	<u>5.1</u>	<u>4.90</u>	(54)	<u>4.91</u>	<u>5.0</u>	<u>8.5</u>	<u>8.6</u>	<u>6.2</u>
33	27.1	27	19.2	13.5	4.82	13.5	19	27	27.7	33

<u>4.0</u>	<u>8.2</u>	<u>7.7</u>	<u>4.5</u>	<u>4.57</u>	(50)	<u>4.51</u>	<u>4.5</u>	<u>7.9</u>	<u>8.2</u>	<u>5.4</u>
33	27.4	27	19	13.5	4.45	13.5	19	27	27.6	33

Sta.	T	H.I.	-	Elev.
		875.67 ✓		
864				696 70.5 ✓
865				70.0 70.6
866				70.4 71.0
867				70.8 71.4
868				71.2 71.8
T.P.	5.73	877.83 ✓	3.57	872.10 ✓
869				71.6 72.2 ✓
870				72.0 72.5 ✓
871				72.2 72.8
872				72.4 73.0
+65				72.5 73.1
873				72.6 73.2 ✓
+25				72.6 73.3

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<u>5.7</u>	<u>6.3</u>	<u>9.3</u>	<u>9.0</u>	<u>5.7</u>	<u>5.55</u>	(6.1)	<u>5.55</u>	<u>5.6</u>	<u>9.1</u>	<u>9.5</u>	<u>7.5</u>
33	32.5	27	26.7	17	13.5	5.45	13.5	19	27	30	33

<u>5.7</u>	<u>8.4</u>	<u>8.1</u>	<u>5.3</u>	<u>5.17</u>	(5.7)	<u>5.14</u>	<u>5.2</u>	<u>8.8</u>	<u>9.1</u>	<u>8.1</u>	<u>8.1</u>
33	31	27.6	17	13.5	5.06	13.5	18.4	26.5	30	31	33

<u>5.0</u>	<u>6.5</u>	<u>8.1</u>	<u>7.8</u>	<u>5.0</u>	<u>4.75</u>	(5.2)	<u>4.76</u>	<u>4.9</u>	<u>8.0</u>	<u>8.3</u>	<u>8.0</u>	<u>8.1</u>
33	31	28.5	26	18.7	13.5	4.64	13.5	19	27	30	31	33

<u>4.7</u>	<u>7.7</u>	<u>7.7</u>	<u>4.6</u>	<u>4.35</u>	(4.9)	<u>4.40</u>	<u>4.4</u>	<u>7.8</u>	<u>8.0</u>	<u>7.6</u>
33	27.5	26.5	18.4	13.5	4.28	13.5	19	28	31.7	33

<u>4.7</u>	<u>7.6</u>	<u>7.5</u>	<u>4.1</u>	<u>3.97</u>	(4.2)	<u>3.97</u>	<u>4.1</u>	<u>7.2</u>	<u>7.6</u>
33	27	25.5	17	13.5	3.88	13.5	19.8	26.5	33

<u>7.6</u>	<u>7.8</u>	<u>9.4</u>	<u>8.7</u>	<u>5.9</u>	<u>5.75</u>	(6.7)	<u>5.73</u>	<u>5.8</u>	<u>9.4</u>	<u>9.7</u>	<u>8.7</u>
33	32	30	25	19	13.5	5.67	13.5	19	28	30.5	33

<u>6.3</u>	<u>8.8</u>	<u>8.6</u>	<u>5.6</u>	<u>5.39</u>	(5.8)	<u>5.40</u>	<u>5.5</u>	<u>9.1</u>	<u>9.4</u>	<u>6.2</u>
33	30.5	27.6	19.5	13.5	5.31	13.5	19	26.4	29	33

<u>5.9</u>	<u>8.4</u>	<u>8.0</u>	<u>5.1</u>	<u>5.14</u>	(5.6)	<u>5.09</u>	<u>5.1</u>	<u>7.9</u>	<u>8.6</u>	<u>6.6</u>
33	30.8	28.4	17.8	13.5	5.03	13.5	19	26	29.5	33

<u>4.6</u>	<u>7.6</u>	<u>7.5</u>	<u>4.7</u>	<u>4.91</u>	(5.4)	<u>4.95</u>	<u>5.0</u>	<u>8.5</u>	<u>4.8</u>
33	27.4	25.4	18.8	13.5	4.85	13.5	19	29	33.8

<u>5.2</u>	<u>6.7</u>	<u>6.6</u>	<u>4.7</u>	<u>4.74</u>	(5.3)	<u>4.76</u>	<u>4.9</u>	<u>7.3</u>	<u>7.5</u>	<u>2.4</u>
33	29	24	19	13.5	4.69	13.5	19	27.7	29.5	34

<u>5.1</u>	<u>7.7</u>	<u>7.9</u>	<u>4.6</u>	<u>4.67</u>	(5.2)	<u>4.73</u>	<u>4.6</u>	<u>6.8</u>	<u>6.7</u>	<u>2.9</u>
34.5	30.2	27	19	13.5	4.64	13.5	19	24	28	33.5

<u>5.7</u>	<u>7.9</u>	<u>7.9</u>	<u>4.6</u>	<u>4.66</u>	(5.2)	<u>4.66</u>	<u>4.7</u>	<u>6.7</u>	<u>6.9</u>	<u>2.0</u>
33.5	30	27	19	13.5	4.58	13.5	19.5	26.4	29	33.8

Sta.	+	H.I.	-	Elev.	
		877.83 ✓			
874				727	73.3
875				72.6	73.1
T.P.	4.25	877.24 ✓	4.84	872.99 ✓	
876				72.4	72.9
877				722	72.7
B.M.	4.84	876.98 ✓	5.10	872.14 ✓	872.12
878				72.0	72.4
879				71.8	72.2
880				71.6	72.0
881				71.4	71.8
882				71.2	71.6
T.P.	4.39	875.80 ✓	5.57	871.41 ✓	
883				71.0	71.4
884				70.6	71.2
885				70.4	71.0

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<u>5.5</u>	<u>8.0</u>	<u>7.8</u>	<u>4.9</u>	<u>4.61</u>		<u>4.63</u>	<u>4.6</u>	<u>8.0</u>	<u>9.8</u>
35.5	32.5	29	19	13.5	4.53	13.5	19	28	33

(5.2)

<u>6.5</u>	<u>8.2</u>	<u>8.0</u>	<u>4.9</u>	<u>4.78</u>		<u>4.78</u>	<u>4.7</u>	<u>8.0</u>	<u>8.4</u>	<u>7.9</u>	<u>8.1</u>
35	32	29	19	13.5	4.70	13.5	19	28	31	32	33

(4.8)

<u>6.8</u>	<u>8.1</u>	<u>8.0</u>	<u>4.8</u>	<u>4.71</u>		<u>4.41</u>	<u>4.4</u>	<u>8.1</u>	<u>8.4</u>	<u>7.3</u>	<u>7.3</u>
33.5	31.5	28	19	13.5	4.33	13.5	19	28	31	32	33

(5.0)

<u>6.0</u>	<u>8.1</u>	<u>7.9</u>	<u>4.8</u>	<u>4.68</u>		<u>4.68</u>	<u>4.8</u>	<u>8.3</u>	<u>8.4</u>	<u>7.5</u>	<u>7.5</u>
34	30.5	27.8	19	13.5	4.57	13.5	19	27	29.4	31	33

Spok. in 10" Oak Lt. Std. 877+60.

<u>6.5</u>	<u>6.9</u>	<u>8.0</u>	<u>7.8</u>	<u>4.8</u>	<u>4.66</u>	(5.0)	<u>4.66</u>	<u>4.7</u>	<u>8.1</u>	<u>8.2</u>	<u>7.7</u>	<u>6.6</u>	<u>6.8</u>
33	31.3	29.5	26.7	19	13.6	4.57	13.5	18.8	26.4	29.5	31	31.8	33

(5.2)

<u>4.9</u>	<u>8.2</u>	<u>8.1</u>	<u>4.7</u>	<u>4.84</u>		<u>4.86</u>	<u>4.9</u>	<u>7.9</u>	<u>8.2</u>	<u>7.0</u>	<u>7.3</u>
33.4	30	28	19.2	13.5	4.75	13.5	18.6	26	29.8	31.2	33

(5.4)

<u>4.7</u>	<u>8.4</u>	<u>8.2</u>	<u>5.1</u>	<u>5.05</u>		<u>5.08</u>	<u>5.1</u>	<u>8.6</u>	<u>8.8</u>	<u>7.1</u>	<u>7.4</u>
33.3	30	27.6	19	13.6	4.98	13.5	18.4	26.8	29.2	31.3	33

(5.6)

<u>7.1</u>	<u>7.3</u>	<u>8.6</u>	<u>8.3</u>	<u>5.4</u>	<u>5.30</u>		<u>5.28</u>	<u>5.3</u>	<u>8.8</u>	<u>9.0</u>	<u>7.0</u>	<u>7.2</u>
33	31.7	30	27.5	19	13.5	5.21	13.5	18.4	25.7	29.5	31.5	33

(5.8)

<u>7.7</u>	<u>7.8</u>	<u>8.5</u>	<u>8.2</u>	<u>5.6</u>	<u>5.48</u>		<u>5.48</u>	<u>5.5</u>	<u>8.5</u>	<u>8.8</u>	<u>5.8</u>
33	30.5	29	27	19.5	5.39	13.5	18.5	25.8	28	33	

(4.8)

<u>5.9</u>	<u>7.4</u>	<u>7.2</u>	<u>4.6</u>	<u>4.50</u>		<u>4.50</u>	<u>4.5</u>	<u>7.5</u>	<u>7.7</u>	<u>5.2</u>
33	30.5	28	19.2	13.5	4.40	13.5	18.8	25.4	27.5	33

(5.2)

<u>5.2</u>	<u>7.6</u>	<u>7.4</u>	<u>4.7</u>	<u>4.71</u>		<u>4.71</u>	<u>4.8</u>	<u>7.7</u>	<u>8.1</u>	<u>5.2</u>
33.4	30.4	29	19.4	13.5	4.61	13.5	19.5	27.7	29.2	33

(5.4)

<u>5.8</u>	<u>5.8</u>	<u>8.1</u>	<u>7.9</u>	<u>4.8</u>	<u>4.88</u>		<u>4.87</u>	<u>5.1</u>	<u>8.5</u>	<u>6.0</u>
33	32.4	30	29.4	20	4.79	13.5	18.8	29	33	

Sta.	+	H. I.	-	Elev.
		875.80 ✓		
886				70.3 70.9
887				70.3 70.9
888				70.3 70.9
889				70.3 70.9
+50				70.3 70.9
T.P.	4.87	875.78 ✓	4.91	870.89 ✓
890				70.3 70.9
891				70.3 70.9
892				70.3 70.9
893				70.3 70.9
894				70.3 70.9
895				70.3 70.9
Elev. 895 + 94 = 875 + 98				
896				70.3 70.9
T.P.	4.88	875.79 ✓	4.87	870.91 ✓

H.

H. 11-10-24

<u>6.2</u>	<u>6.2</u>	<u>8.3</u>	<u>8.2</u>	<u>4.8</u>	<u>4.97</u>	(5.5)	<u>4.99</u>	<u>5.1</u>	<u>8.3</u>	<u>8.5</u>	<u>6.1</u>	<u>6.1</u>
33	32	276	286	194	13.5	4.89	13.5	19.5	27	29.3	32	33

<u>6.2</u>	<u>6.4</u>	<u>7.2</u>	<u>7.6</u>	<u>4.8</u>	<u>4.96</u>	(5.5)	<u>4.96</u>	<u>5.1</u>	<u>8.3</u>	<u>8.6</u>	<u>5.6</u>	<u>5.6</u>
33	31.4	277	28	19.5	13.5	4.87	13.5	19	274	284	32.2	33

<u>5.3</u>	<u>8.1</u>	<u>7.9</u>	<u>4.9</u>	<u>4.97</u>	(5.5)	<u>4.94</u>	<u>4.9</u>	<u>8.0</u>	<u>8.1</u>	<u>4.8</u>	<u>4.8</u>
33	293	284	19.5	13.5	4.87	13.5	19	26	28	32.4	33

<u>5.2</u>	<u>5.2</u>	<u>7.6</u>	<u>7.6</u>	<u>5.0</u>	<u>4.96</u>	(5.5)	<u>4.96</u>	<u>4.8</u>	<u>7.7</u>	<u>7.8</u>	<u>4.2</u>
33.8	324	273	28	19.8	13.5	4.89	13.5	18.8	25.8	27.5	33

<u>4.5</u>	<u>7.7</u>	<u>7.6</u>	<u>5.0</u>	<u>4.94</u>	(5.5)	<u>4.94</u>	<u>4.9</u>	<u>7.6</u>	<u>7.7</u>	<u>4.1</u>	<u>4.1</u>
36	302	284	194	13.5	4.84	13.5	19.2	26.6	27.8	32.5	33

<u>5.1</u>	<u>8.0</u>	<u>8.0</u>	<u>4.9</u>	<u>4.98</u>	(5.5)	<u>4.96</u>	<u>4.8</u>	<u>7.4</u>	<u>8.2</u>	<u>4.8</u>
35.5	31	29	19.5	13.5	4.90	13.5	18.8	25.6	28.8	35.

<u>5.7</u>	<u>8.5</u>	<u>8.2</u>	<u>4.9</u>	<u>4.94</u>	(5.5)	<u>4.94</u>	<u>5.1</u>	<u>8.3</u>	<u>8.6</u>	<u>6.2</u>	<u>6.4</u>
35.5	308	27.5	19	13.5	4.87	13.5	19.5	26.5	27.9	32.2	33

<u>6.1</u>	<u>8.4</u>	<u>8.1</u>	<u>5.0</u>	<u>4.96</u>	(5.5)	<u>4.94</u>	<u>5.0</u>	<u>8.2</u>	<u>8.5</u>	<u>7.2</u>	<u>7.2</u>
34	31	27.5	19.2	13.5	4.88	13.5	18.8	26.7	28.3	31.4	33

<u>7.2</u>	<u>7.2</u>	<u>8.2</u>	<u>8.1</u>	<u>4.9</u>	<u>4.96</u>	(5.5)	<u>4.98</u>	<u>5.0</u>	<u>8.5</u>	<u>8.9</u>	<u>7.6</u>	<u>7.0</u>
33	32	30	26.5	19	13.5	4.87	13.5	19.4	25.8	27.2	30	33

<u>7.0</u>	<u>7.0</u>	<u>8.6</u>	<u>8.6</u>	<u>5.0</u>	<u>4.96</u>	(5.5)	<u>4.98</u>	<u>5.1</u>	<u>8.1</u>	<u>8.1</u>	<u>6.1</u>	<u>6.0</u>
33	324	307	27.5	19	13.5	4.89	13.5	18.2	25.7	28.5	31.5	33

<u>6.9</u>	<u>6.9</u>	<u>8.4</u>	<u>8.3</u>	<u>5.1</u>	<u>5.00</u>	(5.5)	<u>4.98</u>	<u>5.0</u>	<u>7.8</u>	<u>8.2</u>	<u>6.2</u>	<u>5.7</u>
33	32	277	27	19.2	13.5	4.71	13.5	18.8	25.6	28	31	33

<u>6.3</u>	<u>6.3</u>	<u>8.2</u>	<u>8.0</u>	<u>5.0</u>	<u>4.96</u>	(5.5)	<u>4.97</u>	<u>5.0</u>	<u>7.8</u>	<u>7.9</u>	<u>5.3</u>
33	32	30	26.8	19	13.5	4.89	13.5	19	26	27.7	33

Sta.	+	H.I.	-	Elev.	
		875.79 [✓]			
897				70.3	70.9
898				70.3	70.9
B.M.			5.13	870.66 [✓]	870.66
899				70.3	70.9
				70.3	
900				70.3	70.9
901				70.3	70.9
902				70.3	70.9
T.P.	4.53	875.43 [✓]	4.89	870.90 [✓]	
†47				70.3	70.9
903				70.3	70.9
904				70.3	70.9
905				70.1	70.7
906				69.9	70.5
907				69.7	70.3
T.P.	5.11	874.41 [✓]	6.13	869.30 [✓]	

Lt.

Tt.

11-10-26

<u>5.8</u>	<u>8.1</u>	<u>7.8</u>	<u>5.1</u>	<u>4.96</u>	(5.5)	<u>4.98</u>	<u>5.2</u>	<u>8.0</u>	<u>8.0</u>	<u>4.7</u>
33	30	28	19.2	13.5	4.88	13.5	19.2	25.7	28.2	33

<u>6.3</u>	<u>8.1</u>	<u>7.7</u>	<u>5.0</u>	<u>5.00</u>	(5.5)	<u>4.95</u>	<u>4.9</u>	<u>7.4</u>	<u>7.6</u>	<u>5.5</u>	<u>5.7</u>
33	30.5	28	19.2	13.5	4.88	13.5	18.5	24	28	31.5	33

SpN. in 12" Tree Lt. Sta. 898 + 55.

<u>5.8</u>	<u>7.1</u>	<u>7.8</u>	<u>5.1</u>	<u>4.98</u>	(5.5)	<u>4.95</u>	<u>5.0</u>	<u>7.8</u>	<u>7.9</u>	<u>5.4</u>
34.6	32.2	26.8	18.4	13.5	4.88	13.5	18.8	26.5	28.5	33

<u>5.6</u>	<u>7.2</u>	<u>7.1</u>	<u>5.0</u>	<u>5.00</u>	(5.5)	<u>4.98</u>	<u>5.0</u>	<u>7.9</u>	<u>7.8</u>	<u>6.5</u>	<u>6.5</u>
33	29.5	25.8	19	13.5	4.90	13.5	19	25.8	28.8	31	33

<u>5.9</u>	<u>6.6</u>	<u>7.6</u>	<u>7.4</u>	<u>5.0</u>	<u>5.00</u>	(5.5)	<u>4.96</u>	<u>5.0</u>	<u>7.7</u>	<u>8.1</u>	<u>7.7</u>
33	31.5	29.2	25.5	19	13.5	4.84	13.5	18.8	26.2	31	33

<u>5.6</u>	<u>7.9</u>	<u>8.0</u>	<u>5.0</u>	<u>5.00</u>	(5.5)	<u>4.98</u>	<u>5.0</u>	<u>8.0</u>	<u>8.1</u>	<u>7.2</u>	<u>7.2</u>
33	30	26.5	19.4	13.5	4.88	13.5	18.8	26.4	30	32	33

<u>4.7</u>	<u>7.5</u>	<u>7.3</u>	<u>4.7</u>	<u>4.58</u>	(5.1)	<u>4.62</u>	<u>4.5</u>	<u>7.3</u>	<u>7.5</u>	<u>5.0</u>
33	29.8	27	18.4	13.5	4.52	13.5	18.8	26.0	28	33

<u>5.0</u>	<u>7.5</u>	<u>7.2</u>	<u>4.7</u>	<u>4.62</u>	(5.1)	<u>4.62</u>	<u>4.7</u>	<u>7.1</u>	<u>7.2</u>	<u>4.0</u>
33	29	26.8	19	13.5	4.54	13.5	18.8	25.4	27.3	33

<u>4.7</u>	<u>5.6</u>	<u>7.3</u>	<u>7.3</u>	<u>4.6</u>	<u>4.68</u>	(5.1)	<u>4.66</u>	<u>4.5</u>	<u>6.7</u>	<u>6.8</u>	<u>3.3</u>
34	30.3	27.5	24	19	13.5	4.58	13.5	18.8	25	27	33

<u>4.9</u>	<u>5.5</u>	<u>7.1</u>	<u>7.2</u>	<u>4.9</u>	<u>4.84</u>	(5.5)	<u>4.84</u>	<u>4.9</u>	<u>7.6</u>	<u>7.7</u>	<u>5.0</u>
33	31	27	24	19	13.5	4.75	13.5	19	26.5	28.5	33

<u>5.6</u>	<u>8.0</u>	<u>7.3</u>	<u>5.0</u>	<u>5.00</u>	(5.5)	<u>5.03</u>	<u>4.9</u>	<u>8.0</u>	<u>7.9</u>	<u>5.9</u>
33	30	26	18.8	13.5	4.92	13.5	18.5	25.5	29	33

<u>6.5</u>	<u>8.1</u>	<u>7.7</u>	<u>5.4</u>	<u>5.22</u>	(5.7)	<u>5.25</u>	<u>5.4</u>	<u>8.6</u>	<u>8.7</u>	<u>7.0</u>
33	29.8	25.5	18.8	13.5	5.15	13.5	19	26	29	33

Sta.	T	H. I.	-	Elev.
		874.41 [✓]		
908				69.5 70.1
909				69.3 69.9
910				69.1 69.7
911				68.9 69.5
+50				68.8 69.4
912				68.7 69.3
913				68.5 69.1
+50				68.4 69.1
+77	Cross Drain 24" x 60" P ³			
914				68.4 69.0
T.P.	5.86	874.91 [✓]	5.36	669.05 [✓]
+65				68.5 69.1
915				68.6 69.2
914				68.9 69.5

Sta.	+	H. I.	-	Elev.	
		974.71 ✓			
917				69.2	69.8
918				69.5	70.1
919				69.8	70.3
920				70.1	70.4
921				70.2	70.4
T.P.	4.96	875.32 ✓	4.55	870.36 ✓	
922				70.2	70.4
923				70.1	70.4
924				69.8	70.4
B.M.	7.14	875.30 ✓	7.14	868.18 ✓	868.10
925				69.5	70.4
926				69.2	70.4
927				69.1	70.4
+45	Cross Grain 24" x 48" P ³				
928				69.3	70.4

Lt.

Rt.

11-10-26

7.2	7.4	8.1	8.0	5.1	5.25	(5.7)	5.25	5.3	7.7	7.7	3.4
33	31	29.8	26.7	19.2	13.5	5.16	13.5	19	25.7	27.5	33

8.0	8.0	8.3	7.7	5.0	4.97	(5.4)	4.94	5.0	7.6	7.9	5.3
33	30	29.2	25.5	19	13.5	4.84	13.5	19.2	25.8	30.2	33

5.2	8.5	8.3	4.7	4.70	(5.1)	4.71	4.7	7.7	8.1	5.4
36.5	32.5	24	18.8	13.5	4.20	13.5	19	25.5	29.5	33

4.6	6.9	6.9	4.5	4.60	(4.8)	4.62	4.5	6.7	7.0	4.3
33	30.5	26.3	19.2	13.5	4.52	13.5	18.8	23.3	30.5	34

4.4	7.3	7.2	4.6	4.62	(4.7)	4.65	4.6	6.9	7.1	5.1
33.5	31	26.5	19	13.5	4.55	13.5	19.2	25.2	30.3	33

4.4	7.1	7.1	4.8	5.08	(6.1)	5.06	5.0	7.8	8.0	4.9
33.7	31	26.8	19.5	13.5	4.96	13.5	19.2	24	29.7	33

5.0	7.6	7.6	4.9	5.04	(5.7)	5.04	5.1	7.9	7.8	5.3
33.5	31	28	19.5	13.5	4.95	13.5	19.5	24	31	33.5

4.0	7.7	7.7	5.0	5.04	(5.5)	5.07	5.2	8.4	8.6	7.1	2.1
34	29	26.5	19.2	13.5	4.96	13.5	18.8	26.5	30	32	33

5/10 N. in 8" D. N. Pt. Sta. 9.44 + 30.

4.6	7.7	7.8	5.0	5.04	(5.8)	5.06	5.1	8.9	9.0	8.3	8.3
33.5	31	25.5	19	13.5	4.95	13.5	19	27.4	29.2	30.7	33

6.2	9.1	9.1	5.3	5.00	(6.1)	5.06	5.0	8.5	8.8	7.8	7.8
33	27.8	26.5	19.3	13.5	4.94	13.5	17.8	27	29.8	31.5	33

8.5	8.5	9.3	9.2	5.0	5.00	(6.7)	5.06	5.0	8.9	8.6	7.2	7.2
33	30.5	28.8	26.5	18.8	13.5	4.94	13.5	19.4	27.5	31	32.4	33

Outlet = 10.10
7.65 = Intake

8.0	8.6	8.7	5.0	5.02	(6.0)	5.00	5.1	7.4	7.6	5.0
33	27.5	26.4	18.8	13.5	4.92	13.5	19.4	26.7	30.7	33.4

Sta.	+	H. I.	-	Elev.	
		875.30 ✓			
929				69.8	70.7
T.P.	7.54	876.47 ✓	6.39	848.91 ✓	
930				70.6	71.2
931				71.5	71.8
932				72.2	72.3
933				72.7	72.7
T.P.	4.90	877.79 ✓	3.58	872.87 ✓	
934				73.0	72.9
935				73.1	72.9
936				72.9	72.9
937				72.7	72.9
938				72.3	72.8
939				71.9	72.5
T.P.	4.82	876.86 ✓	5.75	872.04 ✓	
940				71.5	72.2

Lt.

Tpt.

11-12-26

4.9	7.5	7.2	4.7	4.74	(5.5)	4.76	4.6	7.1	7.5	4.0
34	38.6	26.8	19.4	13.5	4.65	13.5	19.7	26.4	29.8	33

Nov 14 12.10 14 14.1 14.1

5.7	8.2	8.0	5.2	5.38	(5.9)	5.38	5.1	7.7	7.8	7.0	5.2	5.2
34.3	32	25	19	13.5	5.30	13.5	19.3	26.4	30	31	32	33

5.8	5.8	7.1	6.8	4.7	4.79	(5.0)	4.78	4.7	7.1	7.1	4.1
33	32	30.2	25	19	13.5	4.70	13.5	19.7	26.7	31.5	33

4.5	4.5	6.3	6.3	4.3	4.26	(4.3)	4.27	4.2	6.8	6.9	5.2
33	31	27	25	19	13.5	4.19	13.5	19.8	27	30.5	33

4.5	4.5	6.2	6.2	3.6	3.83	(3.8)	3.85	3.8	6.2	6.3	2.7
33	32	30	25.5	19	13.5	3.73	13.5	19.5	27	30	33.2

5.9	5.9	7.2	7.2	4.9	5.01	(4.8)	5.01	5.0	7.6	7.6	4.2
33	32.5	30.5	27	19.4	13.5	4.91	13.5	19.3	26.5	29	33

5.9	5.9	7.3	6.9	4.9	5.00	(4.7)	5.02	4.9	7.5	7.6	4.1
33	32.5	30	24.5	19	13.5	4.92	13.5	19	26	29.5	33

5.8	7.6	7.3	4.9	4.99	(4.9)	5.04	5.0	7.5	7.5	4.1
33	31	26.5	19.5	13.5	4.91	13.5	19.3	26.5	30	33

5.9	7.7	7.4	5.1	5.02	(5.1)	5.05	5.0	7.5	7.7	5.8	5.7
34	32	27	19.5	13.5	4.94	13.5	19.2	26	29	31.5	33

6.2	7.9	7.5	5.0	5.07	(5.5)	5.12	4.9	8.0	8.1	2.8	7.8
33.2	31.4	26.3	19	13.5	5.02	13.5	19.3	26	30.5	31.5	33

7.7	7.5	8.7	8.5	5.4	5.36	(5.9)	5.34	5.4	6.6	7.6	10.0	9.5
33	30	28.5	26	19.5	13.5	5.24	13.5	19.6	24	28	32	33

6.3	6.5	7.8	7.5	4.8	4.75	(5.4)	4.79	4.8	8.2	7.5	7.3
33	32.5	30.3	25.6	19.4	13.5	4.68	13.5	19.4	27.6	32	33

Sta.	+	H. I.	-	Elev.	
		876.89 ✓		71.3	71.9
941					
942				71.3	71.9
943				71.3	71.9
B.M.	6.40	876.87 ✓	6.40	870.49 ✓	870.47
944				71.3	71.9
945				71.3	71.9
T.P.	6.04	877.95 ✓	4.98	871.89 ✓	
946				71.3	71.9
947				71.4	71.9
948				71.6	72.3
949				72.2	72.8
950				72.8	73.4
951				73.4	73.9
159				73.7	74.1

Lt.

Tt.

11-12-24

5.4	5.4	7.0	6.7	4.9	5.01	(5.6)	5.07	5.0	7.5	7.2	5.9	5.9
33	32	29.2	25	19.8	13.5	4.97	13.5	19.2	25.8	29.8	31.5	30

4.6	5.0	7.2	7.2	5.0	5.09	(5.6)	5.11	5.0	7.1	7.2	5.4	5.4
33	32	29.2	26	19.3	13.5	5.00	13.5	19.3	26.5	29.8	31.5	33

4.1	4.1	7.3	7.2	4.8	5.05	(5.6)	5.03	4.9	7.0	7.3	6.6	6.8
33	31.5	28	25	19.2	13.5	4.95	13.5	19	25.8	30.5	31	33

split in 44" Oak Pt. Sta. 943710.

5.3	5.3	7.0	6.9	4.8	5.07	(5.6)	5.05	4.9	7.6	7.5	7.0
33	32.5	29.1	25	18.8	13.5	4.99	13.5	19	26.2	32	33

5.3	7.6	7.2	5.0	5.09	(5.6)	5.08	5.0	7.7	8.1	6.9	6.5
33.4	31.4	26.8	19.5	13.5	5.00	13.5	18.8	25.2	30	31.4	33

8.1	8.1	9.1	8.9	6.1	6.16	(6.7)	6.15	6.3	9.3	9.5	7.9	7.8
33	32	30.3	26.7	19.3	13.5	6.08	13.5	19	25.8	29.3	30.2	33

8.0	8.0	8.8	8.8	6.1	6.10	(6.6)	6.13	6.2	8.8	9.0	7.6	7.6
33	32.5	31.2	26.8	20	13.5	6.04	13.5	18.8	25.6	30.5	31.4	33

7.1	8.5	8.3	5.8	5.79	(6.4)	5.79	5.6	8.3	8.4	6.5	6.5
33	32.2	29.5	19.5	13.5	5.70	13.5	19	26.8	30.5	32	33

8.0	8.0	8.5	5.2	5.24	(5.8)	5.26	5.2	8.7	8.7	8.4
33	32.3	29.8	19.7	13.5	5.18	13.5	19.6	26.8	31	33

5.4	7.0	7.9	7.8	4.6	4.65	(5.2)	4.66	4.7	7.3	7.7	7.5	7.5
34.4	33.5	31.4	28.4	19.6	13.5	4.57	13.5	19.6	26.8	29	30.2	33

5.0	7.5	7.3	4.1	4.17	(4.6)	4.17	4.1	6.4	6.3	3.8	4.0
34.3	32	29.8	19.8	13.5	4.08	13.5	19.5	25	27.8	30.2	33

4.0	6.7	6.7	4.0	3.97	(4.3)	3.96	3.9	6.0	6.1	3.0	3.0
34.5	32	28	19.8	13.5	3.90	13.5	19.9	24	29.4	32.2	33

Sta.	+	H. I.	-	Elev.	
		877.95 ✓			
952				74.0	74.1
+20				74.1	74.2 ✓
T. P.	5.54	879.79 ✓	3.70	874.25 ✓	
953				74.4	74.3
954				74.6	74.5
955				74.6	74.7
956				74.6	74.8
957				74.6	74.8
958				74.6	74.8
T. P.	4.13	879.76 ✓	4.14	875.63 ✓	
959				74.6	74.9
960				74.6	74.9
961				74.6	74.8
962				74.6	74.8

LT.

RT.

11-12-36

<u>9.1</u>	<u>5.4</u>	<u>6.5</u>	<u>6.3</u>	<u>3.9</u>	<u>3.89</u>	(4.0)	<u>3.89</u>	<u>3.7</u>	<u>5.7</u>	<u>5.7</u>	<u>3.7</u>	<u>3.3</u>
34.5	33	30.8	26.8	19.5	13.5	3.51	13.5	19.4	26	28.5	31	33

<u>4.6</u>	<u>5.5</u>	<u>6.3</u>	<u>6.0</u>	<u>3.9</u>	<u>3.96</u>	(3.9)	<u>3.89</u>	<u>3.8</u>	<u>5.7</u>	<u>5.6</u>	<u>2.9</u>	<u>2.9</u>
39.5	32.8	30.8	26.5	19.4	13.5	3.75	13.5	19.5	25	29	31	33

<u>8.1</u>	<u>8.2</u>	<u>7.4</u>	<u>5.4</u>	<u>5.54</u>	(3.4)	<u>5.57</u>	<u>5.6</u>	<u>7.5</u>	<u>7.9</u>	<u>5.4</u>	<u>5.4</u>
33	31.4	26.4	19.6	13.5	5.48	13.5	19.5	24.9	29.8	31.5	33

<u>8.2</u>	<u>8.7</u>	<u>9.1</u>	<u>5.3</u>	<u>5.36</u>	(3.1)	<u>5.35</u>	<u>5.2</u>	<u>7.3</u>	<u>7.5</u>	<u>5.8</u>	<u>5.8</u>
33	31.8	29.2	19.5	13.5	5.27	13.5	19.2	25.8	29.8	32	33

<u>8.6</u>	<u>8.7</u>	<u>5.2</u>	<u>5.20</u>	(5.1)	<u>5.21</u>	<u>5.1</u>	<u>7.2</u>	<u>7.2</u>	<u>5.6</u>	<u>5.6</u>
33	27.8	19.4	13.5	5.13	13.5	19.4	25	30.5	32	33

<u>8.1</u>	<u>8.9</u>	<u>8.1</u>	<u>5.2</u>	<u>5.06</u>	(5.1)	<u>5.09</u>	<u>5.0</u>	<u>6.4</u>	<u>6.4</u>	<u>4.7</u>	<u>4.5</u>
33	28.5	26	19.4	13.5	4.99	13.5	30	26	29.8	31.8	33

<u>8.7</u>	<u>7.6</u>	<u>7.3</u>	<u>5.2</u>	<u>5.03</u>	(5.1)	<u>5.04</u>	<u>4.9</u>	<u>6.1</u>	<u>6.4</u>	<u>4.4</u>
33	30.6	26.5	19.7	13.5	4.96	13.5	20.5	27.5	29.8	33

<u>6.1</u>	<u>5.9</u>	<u>6.7</u>	<u>6.6</u>	<u>5.0</u>	<u>5.02</u>	(5.1)	<u>5.02</u>	<u>5.0</u>	<u>6.5</u>	<u>6.7</u>	<u>4.9</u>	<u>4.9</u>
33	31.3	28.7	24.8	19.4	13.5	4.97	13.5	19.3	25.4	29.8	31	33

<u>5.0</u>	<u>4.6</u>	<u>6.4</u>	<u>6.1</u>	<u>4.8</u>	<u>4.98</u>	(5.2)	<u>5.01</u>	<u>5.0</u>	<u>6.5</u>	<u>6.7</u>	<u>5.2</u>	<u>5.1</u>
33	31.4	29	24.2	17	13.5	4.91	13.5	18.8	25.5	29	30.8	33

<u>3.6</u>	<u>5.5</u>	<u>5.8</u>	<u>4.9</u>	<u>4.98</u>	(5.2)	<u>4.99</u>	<u>4.7</u>	<u>6.8</u>	<u>6.6</u>	<u>4.4</u>	<u>4.4</u>
34.6	32.8	26.8	19.6	13.5	4.90	13.5	19.5	26.5	30	32.5	33

<u>4.3</u>	<u>6.1</u>	<u>5.8</u>	<u>4.8</u>	<u>4.99</u>	(5.2)	<u>5.01</u>	<u>5.0</u>	<u>6.8</u>	<u>7.2</u>	<u>6.1</u>	<u>6.1</u>
30.2	34.4	26.5	19.4	13.5	4.94	13.5	19.4	24.9	30.5	31.7	33

<u>4.8</u>	<u>6.0</u>	<u>5.9</u>	<u>4.8</u>	<u>5.02</u>	(5.2)	<u>5.00</u>	<u>5.1</u>	<u>7.1</u>	<u>6.9</u>	<u>5.6</u>	<u>5.6</u>
34.3	32.5	25.5	19.3	13.5	4.93	13.5	19.2	25.8	29	31.2	33

Sta.	+	H. I.	-	Elev.	
963		879.76 ✓		74.6	74.8
964				74.6	74.8
T.P.	4.84	879.67 ✓	4.93	874.83 ✓	
965				74.6	74.8
966				74.6	74.8
967				74.6	74.7
B.M.	4.92	879.68 ✓	4.92	874.75 ✓	874.76
968				74.6	74.5
969				74.6	74.3
970				74.5	74.0
T.P.	3.72	877.89 ✓	5.51	874.17 ✓	
971				74.1	73.8
972				73.6	73.5
973				72.8	73.0
974				72.1	72.2

Lt.

PT.

11-12-26

<u>44</u>	<u>6.0</u>	<u>58</u>	<u>49</u>	<u>4.98</u>	(5.1)	<u>5.01</u>	<u>4.9</u>	<u>6.8</u>	<u>7.0</u>	<u>5.2</u>	<u>5.2</u>
34	33	258	173	13.5	4.92	13.5	19.3	251	30	32	33

<u>6.5</u>	<u>6.2</u>	<u>4.8</u>	<u>4.99</u>	(5.2)	<u>4.99</u>	<u>5.0</u>	<u>6.9</u>	<u>7.2</u>	<u>6.1</u>	<u>6.1</u>
33	257	19	13.5	4.92	13.5	19.5	256	30.6	32	33

<u>6.3</u>	<u>6.9</u>	<u>6.5</u>	<u>4.9</u>	<u>4.87</u>	(5.1)	<u>4.90</u>	<u>4.9</u>	<u>6.5</u>	<u>7.1</u>	<u>7.1</u>	<u>6.3</u>	<u>6.3</u>
33	27	252	188	13.5	4.81	13.5	19.2	22.5	266	298	312	33

<u>6.6</u>	<u>6.6</u>	<u>7.1</u>	<u>6.8</u>	<u>4.9</u>	<u>4.91</u>	(5.1)	<u>4.93</u>	<u>5.0</u>	<u>7.0</u>	<u>7.4</u>	<u>6.6</u>	<u>6.6</u>
33	31.5	30	24	173	13.5	4.85	13.5	188	24.7	28.9	30.4	33

<u>6.8</u>	<u>7.5</u>	<u>7.3</u>	<u>5.1</u>	<u>5.04</u>	(5.1)	<u>5.03</u>	<u>5.0</u>	<u>7.2</u>	<u>7.4</u>	<u>7.1</u>
33	31	25	19	13.5	4.94	13.5	187	24.2	29.3	33

SPK. in 10" Oak Lt. 5th. 966 + 45

<u>5.7</u>	<u>7.6</u>	<u>7.0</u>	<u>5.3</u>	<u>5.27</u>	(5.1)	<u>5.29</u>	<u>5.2</u>	<u>7.3</u>	<u>7.2</u>	<u>5.1</u>	<u>5.1</u>
34.3	324	25	19	13.5	5.20	13.5	19	26	30.3	32.5	33

<u>6.5</u>	<u>7.3</u>	<u>7.2</u>	<u>5.6</u>	<u>5.49</u>	(5.1)	<u>5.51</u>	<u>5.5</u>	<u>7.4</u>	<u>7.4</u>	<u>4.2</u>
33.5	31	26	19.5	13.5	5.43	13.5	19.4	26.5	30.6	33

<u>6.7</u>	<u>7.6</u>	<u>7.8</u>	<u>5.6</u>	<u>5.74</u>	(5.2)	<u>5.74</u>	<u>5.7</u>	<u>8.0</u>	<u>7.7</u>	<u>5.1</u>
33	31	254	173	13.5	5.65	13.5	19.5	26.7	30.5	33

<u>5.3</u>	<u>5.3</u>	<u>5.9</u>	<u>5.7</u>	<u>3.8</u>	<u>3.90</u>	<u>4.18</u>	(3.8)	<u>4.17</u>	<u>3.89</u>	<u>3.8</u>	<u>5.9</u>	<u>6.0</u>	<u>5.0</u>	<u>5.0</u>
33	314	276	25	19	13.5	12.5	4.12	12.5	13.5	19.4	26	30	31.5	33

<u>5.6</u>	<u>6.1</u>	<u>5.9</u>	<u>4.1</u>	<u>4.19</u>	<u>4.50</u>	(4.2)	<u>4.47</u>	<u>4.21</u>	<u>4.3</u>	<u>6.6</u>	<u>6.4</u>	<u>4.1</u>	<u>4.1</u>
33	31	28	19	13.5	12.5	4.41	12.5	13.5	19.6	27	30	32	33

<u>3.7</u>	<u>7.0</u>	<u>7.0</u>	<u>5.7</u>	<u>4.6</u>	<u>4.70</u>	<u>4.97</u>	(5.1)	<u>4.96</u>	<u>4.66</u>	<u>4.8</u>	<u>7.0</u>	<u>7.2</u>	<u>4.6</u>
33	30	268	24.5	19.4	13.5	12.5	4.89	12.5	13.5	19.3	27	30	33

<u>6.2</u>	<u>8.1</u>	<u>8.2</u>	<u>5.6</u>	<u>5.51</u>	<u>5.78</u>	(5.8)	<u>5.79</u>	<u>5.51</u>	<u>5.7</u>	<u>8.2</u>	<u>8.4</u>	<u>6.6</u>	<u>6.6</u>
33	31	24	173	13.5	12.5	5.73	12.5	13.5	19	25.4	29	30.5	33

Sta.	+	M.I.	-	Elev.	
		877.89 ✓		70.9	71.2
975					
T.P.	1.84	873.86 ✓	5.89	872.00 ✓	
976				69.9	70.2
978				69.6	69.9
977				68.9	69.2
978				67.9	68.2
979				66.9	67.2
	3.14	870.00 ✓	7.00	846.84 ✓	
980				65.9	66.2
981.				64.9	65.2
982				63.9	64.2
983				62.9	63.3
B.M.	0.41	866.51 ✓	3.91	846.09 ✓	866.10
984				61.9	62.3
985				60.9	61.4

+75 Cross Drain 24" x 56 P³.

Lt.

Pt.

11-12-26

7.7	9.2	9.5	6.7	6.49	6.76	7.0	6.76	6.50	6.5	9.4	9.1	6.4	6.4
3.9	3.1	2.4	19.3	13.5	12.5	6.70	12.5	13.5	19	26	30	3.4	3.3

5.6	6.7	6.5	3.6	3.53	3.77	4.0	3.79	3.50	3.6	6.4	6.5	1.5	1.5
3.3	3.15	2.8	20.5	13.5	12.5	3.71	12.5	13.5	19.5	25.5	27.8	32.5	3.3

5.7	6.9	6.6	3.7	3.80	4.06	4.3	4.05	3.81	3.8	6.8	6.7	1.1	1.1
33.5	32	28.5	19.5	13.5	12.5	3.99	12.5	13.5	19	25	28	32.5	3.3

6.3	7.8	7.7	4.5	4.51	4.76	5.0	4.77	4.51	4.5	7.2	7.2	3.3	
3.3	3.2	2.7	19.5	13.5	12.5	4.70	12.5	13.5	19.5	24	28.6	3.3	

7.8	8.8	9.1	5.5	5.44	5.73	6.0	5.79	5.52	5.7	8.3	8.4	6.8	6.8
3.3	3.15	26.5	19	13.5	12.5	5.19	12.5	13.5	19.3	26.6	30	32.5	3.3

10.3	11.5	11.2	6.8	6.45	6.90	7.0	6.75	6.45	6.6	10.0	9.9	8.2	8.2
3.4	3.15	28.5	19.5	13.5	12.5	6.63	12.5	13.5	19.5	27	31	32.5	3.3

7.2	7.7	8.2	3.7	3.55	3.81	4.1	3.88	3.62	3.7	6.6	6.8	4.2	
3.3	3.2	28.5	19	13.5	12.5	3.79	12.5	13.5	19	25.5	30	3.3	

8.3	8.9	9.0	4.7	4.55	4.81	5.1	4.82	4.56	4.8	7.3	7.2	4.7	
3.3	3.0	28.5	19.3	13.5	12.5	4.77	12.5	13.5	19.5	26.5	30	3.3	

8.9	10.2	10.3	5.7	5.53	5.82	6.1	5.82	5.54	5.7	7.9	8.1	5.7	
3.3	29.5	29	19.5	13.5	12.5	5.74	12.5	13.5	19.5	27	30	3.3	

10.3	10.6	11.2	7.7	6.7	6.50	6.74	7.1	6.79	6.50	6.4	8.7	8.8	6.6
3.3	3.4	29	20	19	13.5	12.5	6.71	12.5	13.5	19.5	26	30	3.3

Spk. in 15" Opk. Pt. Sta 982 +00.

7.3	8.1	4.7	4.1	3.99	4.25	4.6	4.25	3.95	3.7	6.1	6.0	3.5	
3.3	27.5	21.4	19.3	13.5	12.5	4.17	12.5	13.5	19.3	26.7	29.5	3.3	

9.8	9.8	8.9	5.9	5.0	4.92	5.19	5.6	5.18	4.92	4.9	7.3	7.3	4.6
3.3	3.4	27.6	22.5	19.4	13.5	12.5	5.12	12.5	13.5	19.3	27	30	3.3
					11.1			7.75					
					29.5			16.5					

Sta.	+	H.I. ✓	-	Flex.	
		866.51			
984				60.1	60.7
760				60.1	60.4
987				59.9	60.3
T.P.	4.94	865.25 ✓	6.22	860.27 ✓	
988				59.9	60.1
989				59.9	60.1
990				59.9	60.1
991				60.0	60.2
992				60.1	60.2
993				60.3	60.5
994				61.1	61.5
T.P.	10.21	872.01 ✓	3.45	861.80 ✓	
995				62.6	63.1
996				64.7	65.2
B.M.	4.45	872.00 ✓	4.45	867.54 ✓	867.5

Lt.

74.

11-16-24

<u>111</u>	<u>97</u>	<u>66</u>	<u>57</u>	<u>504</u>	<u>591</u>	(64)	<u>591</u>	<u>562</u>	<u>56</u>	<u>66</u>	<u>87</u>	<u>88</u>	<u>63</u>
39	28	225	197	135	125	584	125	135	185	23	28	50	39

<u>46</u>	<u>46</u>	<u>528</u>	<u>619</u>	(64)	<u>620</u>	<u>591</u>	<u>57</u>	<u>70</u>	<u>88</u>	<u>86</u>	<u>50</u>
39	288	135	125	614	125	195	192	29	268	285	39

<u>70</u>	<u>68</u>	<u>92</u>	<u>92</u>	<u>60</u>	<u>602</u>	<u>631</u>	(616)	<u>636</u>	<u>608</u>	<u>60</u>	<u>73</u>	<u>90</u>	<u>88</u>	<u>50</u>
39	31	285	24	197	135	125	625	125	135	192	29	265	285	32.5

<u>57</u>	<u>57</u>	<u>75</u>	<u>72</u>	<u>61</u>	<u>52</u>	<u>527</u>	(54)	<u>529</u>	<u>510</u>	<u>63</u>	<u>73</u>	<u>73</u>	<u>57</u>
39	312	29	264	238	176	135	520	135	19	255	278	29	38

<u>56</u>	<u>56</u>	<u>74</u>	<u>74</u>	<u>51</u>	<u>526</u>	(54)	<u>529</u>	<u>51</u>	<u>63</u>	<u>72</u>	<u>72</u>	<u>48</u>
39	32	308	265	193	135	520	135	19	247	272	30	38

<u>58</u>	<u>58</u>	<u>74</u>	<u>73</u>	<u>51</u>	<u>522</u>	(54)	<u>521</u>	<u>51</u>	<u>64</u>	<u>75</u>	<u>74</u>	<u>55</u>
39	32	308	25	192	135	513	135	193	24	27	276	33.3

<u>62</u>	<u>62</u>	<u>74</u>	<u>76</u>	<u>51</u>	<u>512</u>	(53)	<u>519</u>	<u>52</u>	<u>76</u>	<u>77</u>	<u>59</u>
39	32	297	254	192	135	508	135	194	278	31	29.5

<u>67</u>	<u>66</u>	<u>70</u>	<u>70</u>	<u>48</u>	<u>481</u>	<u>509</u>	(52)	<u>513</u>	(541)	<u>49</u>	<u>74</u>	<u>75</u>	<u>54</u>
39	29	270	253	20	135	125	503	125	135	197	225	22	34.5

<u>69</u>	<u>75</u>	<u>69</u>	<u>44</u>	<u>453</u>	<u>480</u>	(50)	<u>482</u>	<u>455</u>	<u>45</u>	<u>52</u>	<u>71</u>	<u>72</u>	<u>51</u>
39	31	253	195	135	125	475	125	135	193	23	274	30	33

<u>68</u>	<u>48</u>	<u>55</u>	<u>556</u>	<u>385</u>	(40)	<u>387</u>	<u>362</u>	<u>34</u>	<u>43</u>	<u>63</u>	<u>61</u>	<u>51</u>	<u>47</u>
39	27	193	135	125	380	125	135	194	24.5	27	31	32	33

<u>122</u>	<u>129</u>	<u>128</u>	<u>79</u>	<u>86</u>	<u>813</u>	<u>902</u>	(44)	<u>902</u>	<u>874</u>	<u>87</u>	<u>95</u>	<u>114</u>	<u>115</u>	<u>96</u>
39	297	28	253	197	135	125	875	125	135	195	23	27	31	33.6

<u>95</u>	<u>97</u>	<u>103</u>	<u>77</u>	<u>67</u>	<u>656</u>	<u>682</u>	(73)	<u>691</u>	<u>660</u>	<u>66</u>	<u>73</u>	<u>95</u>	<u>93</u>	<u>68</u>
39	31.5	28	24	20	135	135	680	125	135	194	22.5	29	33	34.8

Spk. in 18" depth 194. 579. 996 +00.

Sta.	+	M. I.	-	Flev.	
		872.00			
997				66.9	67.4
998				69.1	69.6
	9.07	879.62	1.45	870.55	
999				71.3	71.8
1000				73.7	73.6
1001				74.4	74.8
1002				74.9	75.3
T.P.	5.10	880.67	4.05	875.57	
1003				75.1	75.4
1004				75.3	75.6
1005				75.6	75.8
1006				75.8	76.0
1007				76.1	76.2
1008				76.2	76.2
T.P.	5.01	891.22	4.46	876.21	

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6.9 7.5 7.1 5.1 4.3 4.41 4.68 (5.1) 4.66 4.39 4.3 7.2 7.2 1.7
33 29 25 21.5 19 19.5 12.5 4.61 12.5 13.5 19.4 26.2 27 33

4.7 5.5 5.3 3.6 2.2 2.25 2.54 (3.1) 2.47 2.20 2.1 4.8 4.9 1.0
32.5 27.8 26.5 23 19 13.5 12.5 2.73 12.5 13.5 19.3 27 29.6 33

7.4 7.4 10.2 10.3 8.7 7.4 7.65 7.92 (8.3) 7.94 5.68 7.7 10.6 10.6 7.6 7.4
33 31.5 29 26.4 23.5 19.5 13.5 12.5 7.84 12.5 13.5 18.8 25.7 29 31.7 33

5.5 5.5 8.8 8.7 5.7 5.81 6.06 (6.4) 6.15 5.89 6.0 7.1 9.3 5.5 5.5
33 32.5 29.7 24 18.8 13.5 12.5 6.04 12.5 13.5 18.5 25 28 31.6 33

6.1 7.8 7.6 4.6 4.66 4.92 (5.7) 4.92 4.65 4.8 7.4 7.9 4.8
33 30.5 27 18.7 13.5 12.5 4.85 12.5 13.5 18.8 25 29.5 33

6.1 6.1 7.1 7.1 4.3 4.12 4.39 (4.7) 4.45 4.22 4.4 7.3 7.2 6.4
33 32.0 31.5 28.4 19.5 13.5 12.5 4.33 12.5 13.5 18.5 26.4 32.3 33

Nail in P.P. at Sta.

6.9 8.3 8.3 7.8 8.0 5.4 5.54 (5.6) 5.37 5.5 2.1 2.3 6.7
34 32 31 29 26 20 13.5 5.25 13.6 20 27 30 33

6.9 7.5 7.5 7.3 5.2 5.12 (5.4) 5.14 5.1 7.2 7.4 7.4 6.7
34 33 29 26 20 13.5 5.04 13.5 20 25 27 30 33

5.1 6.5 6.7 5.0 4.99 (5.1) 4.74 4.7 7.0 7.0 2.1
33 30 25 20 13.5 4.86 13.5 20 26 28 33

5.4 6.5 6.6 4.7 4.73 (4.9) 4.75 4.8 6.5 6.5 2.1
33 30 26 20 13.5 4.65 13.5 20 26 28 33

5.4 6.4 6.2 4.5 4.54 (4.6) 4.53 4.3 6.5 6.3 3.8
33 29 26 21 13.5 4.46 13.5 20 27 29 33

6.0 6.6 6.2 4.6 4.53 (4.5) 4.53 4.7 6.6 6.6 5.4
33 31 25 21 13.5 4.44 13.5 20 26 30 33

Sta.	+	H. I.	-	Elev.	
		881.22			
1009				76.2	76.7
1010				76.1	76.1
B.M.	4.39	881.12	4.42	876.80	876.79 876.73
1011				75.9	76.1
1012				75.7	76.1
1013				75.5	76.0
1014				75.3	75.9
	5.85	881.80	5.17	875.95	
1015				75.2	76.0
	Cross Drain.				
1016				75.4	76.7
1017				75.7	76.4
1018				76.0	76.6
1019				76.2	76.7
	3.15	881.03	3.92	877.88	
750				76.2	76.7

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5.9	7.2	7.4	5.2	5.09	5.0	5.09	5.1	7.4	7.4	4.9
33	30	25	21	13.5	5.00	13.5	20	26	28	33

5.0	7.4	7.3	5.2	5.12	5.1	5.13	5.2	7.5	7.3	5.7
33	30	26	21	13.5	5.08	13.5	20	27	31	33

Spk. in 30" Oak Lt. Sta. 1010

6.8	6.8	7.6	7.6	5.4	5.09	5.2	5.12	5.0	7.3	7.3	4.7
33	31	29	27	20	13.5	5.04	13.5	21	27	29	33

10.5	11.4	11.4	7.3	5.3	5.16	5.4	5.18	5.3	7.6	7.9	6.0
39	38	34	27	21	13.5	5.07	13.5	20	27	31	33

7.6	8.2	8.6	7.8	7.9	5.5	5.22	5.6	5.20	5.1	7.9	8.0	6.6
35	32	30	27	26	20	13.5	5.14	13.5	20	26	30	33

8.5	8.7	8.4	5.4	5.23	5.8	5.28	5.1	8.6	8.7	7.3
33	31	27	19	13.5	5.19	13.5	19	28	30	33

9.0	10.6	10.6	5.8	5.89	6.6	5.87	5.8	8.8	8.8	6.8
33	30	28	20	13.5	5.81	13.5	20	25	28	33

			10.66			10.17						
			24			24						
7.4	8.6	8.2	5.7	5.74	6.4	5.73	5.6	8.0	7.9	6.2	6.2	
33	31	26	19	13.5	5.64	13.5	16	25	28	30	33	

6.7	8.4	8.2	5.6	5.54	6.1	5.51	5.3	7.6	7.8	5.6
33	31	27	20	13.5	5.42	13.5	19	25	31	34

5.7	8.0	7.8	6.9	5.3	5.2	5.27	5.8	5.25	5.4	7.2	7.2	4.8
33	31	27	24	20	19	13.5	5.19	13.5	20	24	30	33

5.6	5.6	6.4	6.4	4.8	5.09	5.6	5.10	5.2	6.8	6.8	4.4
33	29	28	23	19	5.09	5.09	13.5	20	25	28	33

Spk. in T.P. 1st Sta. 1019 + 2.5.

5.6	6.2	7.3	7.1	4.5	4.34	4.8	4.36	4.2	5.7	5.0	5.7
33	31	30	28	20	13.5	4.35	13.5	19	24	29	33

Sta.	+	H. I.	-	Elev.
		881.03		
1020				76.1 76.6
	+25			76.0 76.5
1021				75.7 76.2
1022				75.2 75.7
1023				74.7 75.2
1024				74.2 74.6
T.P.	3.10	877.43	6.70	874.33
	+50			74.0 74.5
1025				73.7 74.1
	Cross P rd			
1026				73.3 73.7
1027				73.3 73.7
B.M.	2.55	877.42	2.55	874.88 874.8
1028				73.5 74.0
1029				73.9 74.8
T.P.	6.91	882.02	2.37	875.05

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<u>5.1</u>	<u>5.6</u>	<u>7.2</u>	<u>6.7</u>	<u>4.4</u>	<u>4.48</u>	(4.9)	<u>4.47</u>	<u>4.2</u>	<u>4.8</u>	<u>5.1</u>	<u>5.3</u>	<u>5.0</u>
<u>3.4</u>	<u>3.1</u>	<u>2.8</u>	<u>2.5</u>	<u>1.9</u>	<u>1.5</u>	<u>4.41</u>	<u>1.5</u>	<u>1.9</u>	<u>2.3</u>	<u>2.7</u>	<u>2.9</u>	<u>3.3</u>

<u>5.3</u>	<u>5.8</u>	<u>7.8</u>	<u>7.8</u>	<u>4.6</u>	<u>4.58</u>	(5.0)	<u>4.57</u>	<u>4.4</u>	<u>5.0</u>	<u>5.1</u>	<u>6.5</u>	<u>6.5</u>	<u>7.6</u>
<u>3.3</u>	<u>3.1</u>	<u>2.9</u>	<u>2.7</u>	<u>1.9</u>	<u>1.5</u>	<u>4.49</u>	<u>1.5</u>	<u>2.0</u>	<u>2.3</u>	<u>3.1</u>	<u>3.4</u>	<u>3.6</u>	<u>3.7</u>

<u>5.1</u>	<u>5.3</u>	<u>8.1</u>	<u>8.0</u>	<u>5.1</u>	<u>4.74</u>	(5.3)	<u>4.91</u>	<u>5.0</u>	<u>8.0</u>	<u>8.0</u>	<u>6.6</u>	<u>6.2</u>
<u>3.3</u>	<u>3.2</u>	<u>2.9</u>	<u>2.9</u>	<u>1.9</u>	<u>1.5</u>	<u>4.84</u>	<u>1.5</u>	<u>1.9</u>	<u>2.4</u>	<u>2.8</u>	<u>3.1</u>	<u>3.3</u>

<u>6.6</u>	<u>9.5</u>	<u>9.4</u>	<u>7.7</u>	<u>5.4</u>	<u>5.42</u>	(6.8)	<u>5.42</u>	<u>5.1</u>	<u>9.1</u>	<u>7.2</u>	<u>5.6</u>
<u>3.3</u>	<u>3.0</u>	<u>2.8</u>	<u>2.4</u>	<u>1.9</u>	<u>1.5</u>	<u>5.35</u>	<u>1.5</u>	<u>1.9</u>	<u>2.7</u>	<u>3.0</u>	<u>3.3</u>

<u>7.2</u>	<u>9.8</u>	<u>10.4</u>	<u>9.7</u>	<u>5.7</u>	<u>5.95</u>	(6.3)	<u>5.95</u>	<u>6.0</u>	<u>8.9</u>	<u>9.0</u>	<u>5.7</u>
<u>3.3</u>	<u>3.1</u>	<u>2.7</u>	<u>2.6</u>	<u>1.9</u>	<u>1.5</u>	<u>5.78</u>	<u>1.5</u>	<u>1.9</u>	<u>2.6</u>	<u>2.9</u>	<u>3.3</u>

<u>6.6</u>	<u>6.5</u>	<u>9.5</u>	<u>9.5</u>	<u>6.3</u>	<u>6.46</u>	(6.8)	<u>6.48</u>	<u>6.5</u>	<u>8.9</u>	<u>9.1</u>	<u>5.0</u>
<u>3.3</u>	<u>3.1</u>	<u>2.8</u>	<u>2.4</u>	<u>1.8</u>	<u>1.5</u>	<u>6.42</u>	<u>1.5</u>	<u>2.0</u>	<u>2.5</u>	<u>2.9</u>	<u>3.3</u>

<u>5.5</u>	<u>5.5</u>	<u>6.3</u>	<u>6.3</u>	<u>3.1</u>	<u>3.15</u>	(3.4)	<u>3.15</u>	<u>2.9</u>	<u>5.11</u>	<u>5.4</u>	<u>0.7</u>
<u>3.3</u>	<u>3.1</u>	<u>3.0</u>	<u>2.8</u>	<u>2.0</u>	<u>1.5</u>	<u>3.10</u>	<u>1.5</u>	<u>1.9</u>	<u>2.5</u>	<u>2.9</u>	<u>3.3</u>

<u>8.5</u>	<u>8.2</u>	<u>3.3</u>	<u>3.42</u>	(3.7)	<u>3.40</u>	<u>3.4</u>	<u>5.9</u>	<u>6.0</u>	<u>3.2</u>
<u>3.3</u>	<u>2.9</u>	<u>2.0</u>	<u>1.5</u>	<u>3.34</u>	<u>1.5</u>	<u>1.9</u>	<u>2.6</u>	<u>3.0</u>	<u>3.3</u>

	<u>9.70</u>		<u>5.08</u>	
	<u>3.0</u>		<u>2.4</u>	
<u>9.6</u>	<u>8.5</u>	<u>3.8</u>	<u>3.76</u>	<u>4.1</u>
<u>3.3</u>	<u>2.9</u>	<u>2.1</u>	<u>1.5</u>	<u>3.70</u>
			<u>1.5</u>	<u>1.9</u>
			<u>3.7</u>	<u>6.2</u>
			<u>6.2</u>	<u>5.0</u>
			<u>4.9</u>	<u>4.9</u>

<u>7.5</u>	<u>7.0</u>	<u>3.8</u>	<u>3.74</u>	(4.1)	<u>3.75</u>	<u>3.6</u>	<u>6.0</u>	<u>6.2</u>	<u>6.0</u>
<u>3.3</u>	<u>2.6</u>	<u>2.0</u>	<u>1.5</u>	<u>3.74</u>	<u>1.5</u>	<u>1.9</u>	<u>2.6</u>	<u>3.1</u>	<u>3.3</u>

Sp. N. in 18' Oak. Pt. Sta. 10 28 700

<u>3.2</u>	<u>3.2</u>	<u>6.1</u>	<u>6.0</u>	<u>3.5</u>	<u>3.31</u>	(3.9)	<u>3.30</u>	<u>3.1</u>	<u>5.7</u>	<u>5.7</u>	<u>3.3</u>	<u>3.3</u>
<u>2.3</u>	<u>3.0</u>	<u>2.7</u>	<u>2.3</u>	<u>1.9</u>	<u>1.5</u>	<u>3.23</u>	<u>1.5</u>	<u>1.9</u>	<u>2.5</u>	<u>2.7</u>	<u>3.0</u>	<u>3.0</u>

<u>6.5</u>	<u>2.5</u>	<u>5.3</u>	<u>5.5</u>	<u>2.8</u>	<u>2.75</u>	(2.5)	<u>2.73</u>	<u>2.7</u>	<u>5.1</u>	<u>5.1</u>	<u>2.1</u>	<u>2.1</u>
<u>3.3</u>	<u>2.8</u>	<u>2.7</u>	<u>2.4</u>	<u>1.9</u>	<u>1.5</u>	<u>2.66</u>	<u>1.5</u>	<u>1.9</u>	<u>2.5</u>	<u>2.8</u>	<u>3.0</u>	<u>3.3</u>

Sta.	+	H.I.	-	Elev.
		882.02		
1030				74.7 75.4
1031				75.6 76.0
1032				76.5 76.6
1033				77.2 77.2
1034				77.9 77.8
1035				78.6 78.4
7.12	5.68	884.54	3.14	878.86
1036				79.2 78.9
1037				79.4 79.1
1038				79.5 79.2
1039				79.4 79.4
1040				79.5 79.5
1041				79.4 79.5

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<u>82</u>	<u>82</u>	<u>90</u>	<u>85</u>	<u>68</u>	<u>670</u>	<u>73</u>	<u>6.70</u>	<u>70</u>	<u>95</u>	<u>95</u>	<u>75</u>	<u>75</u>
33	28	27	24	19	13.5	6.65	13.5	19	24	27	30	33

<u>70</u>	<u>68</u>	<u>90</u>	<u>90</u>	<u>60</u>	<u>611</u>	<u>6.4</u>	<u>6.11</u>	<u>6.2</u>	<u>8.5</u>	<u>8.5</u>	<u>68</u>	<u>68</u>
33	28	25	24	19	13.5	6.03	13.5	19	24	27	30	33

<u>65</u>	<u>65</u>	<u>63</u>	<u>81</u>	<u>81</u>	<u>56</u>	<u>550</u>	<u>5.5</u>	<u>5.51</u>	<u>54</u>	<u>73</u>	<u>72</u>	<u>77</u>	<u>51</u>	<u>49</u>
33	31	28	25	24	19	13.5	5.45	13.5	19	25	26	29	31	33

<u>59</u>	<u>59</u>	<u>70</u>	<u>75</u>	<u>75</u>	<u>69</u>	<u>49</u>	<u>473</u>	<u>4.8</u>	<u>4.91</u>	<u>4.9</u>	<u>68</u>	<u>68</u>	<u>51</u>	<u>48</u>
33	28	27	26	25	24	19	13.5	4.85	13.5	20	26	28	31	33

<u>65</u>	<u>65</u>	<u>63</u>	<u>67</u>	<u>6.7</u>	<u>4.1</u>	<u>4.30</u>	<u>4.1</u>	<u>4.30</u>	<u>40</u>	<u>6.1</u>	<u>6.1</u>	<u>38</u>	<u>36</u>
33	29	27	26	24	19	13.5	4.23	13.5	20	26	28	30	33

<u>43</u>	<u>43</u>	<u>59</u>	<u>5.9</u>	<u>3.6</u>	<u>5.65</u>	<u>3.4</u>	<u>3.68</u>	<u>3.5</u>	<u>5.7</u>	<u>5.7</u>	<u>2.9</u>	<u>2.9</u>
33	28	24	23	19	13.5	3.62	13.5	20	25	27	30	33

<u>65</u>	<u>65</u>	<u>66</u>	<u>66</u>	<u>5.7</u>	<u>5.74</u>	<u>5.3</u>	<u>5.75</u>	<u>5.7</u>	<u>68</u>	<u>7.3</u>	<u>7.3</u>	<u>6.2</u>	<u>3.2</u>	<u>3.1</u>
33	32	27	23	19	13.5	5.68	13.5	20	24	25	27	29	31	33

<u>7.5</u>	<u>7.4</u>	<u>5.6</u>	<u>5.50</u>	<u>5.1</u>	<u>5.48</u>	<u>5.4</u>	<u>6.5</u>	<u>7.5</u>	<u>7.7</u>	<u>5.1</u>	<u>4.6</u>
33	25	19	13.5	5.43	13.5	19	22	24	26	29	33

<u>7.4</u>	<u>7.7</u>	<u>7.7</u>	<u>5.2</u>	<u>5.36</u>	<u>5.0</u>	<u>5.37</u>	<u>5.6</u>	<u>7.6</u>	<u>7.9</u>	<u>7.9</u>	<u>7.6</u>	<u>8.0</u>
33	28	25	19	13.5	5.32	13.5	20	25	27	28	29	33

<u>6.1</u>	<u>6.1</u>	<u>6.0</u>	<u>6.6</u>	<u>5.0</u>	<u>5.29</u>	<u>5.1</u>	<u>5.22</u>	<u>5.2</u>	<u>6.6</u>	<u>7.2</u>	<u>7.4</u>	<u>6.4</u>	<u>6.5</u>
33	31	26	24	19	13.5	5.15	13.5	20	25	26	29	30	33

<u>3.4</u>	<u>3.9</u>	<u>6.8</u>	<u>6.6</u>	<u>6.0</u>	<u>4.8</u>	<u>5.10</u>	<u>5.0</u>	<u>5.10</u>	<u>5.1</u>	<u>6.9</u>	<u>7.1</u>	<u>5.5</u>	<u>5.7</u>
33	29	27	24	22	19	13.5	5.01	13.5	19	23	27	29	33

<u>3.2</u>	<u>3.3</u>	<u>6.0</u>	<u>6.3</u>	<u>6.7</u>	<u>6.1</u>	<u>4.9</u>	<u>5.10</u>	<u>5.1</u>	<u>5.14</u>	<u>5.0</u>	<u>6.1</u>	<u>6.7</u>	<u>7.0</u>	<u>5.3</u>	<u>5.6</u>
33	30	28	27	26	22	19	13.5	5.04	13.5	19	24	26	29	30	33

Sta.	+	H.I.	-	Elev.	
		884.54			
1042				78.7	79.1
1043				77.8	78.4
B.M.	2.01	881.28	5.25	879.29	879.27
1044				76.9	77.5
1045				76.0	76.6
+50				75.6	76.1
1046				75.1	75.7
+50				74.7	75.2
1047				74.2	75.0
+50				73.8	74.3
1048				73.3	73.9
T.P.	5.56	879.12	7.72	873.66	
+50				72.9	73.5
1049				72.5	73.1
	Cross Drain				

63 7.9 8.0 5.7 5.47 **5.8** 5.47 5.2 5.3
 33 31 26 20 5.40 135 21 33

7.1 9.0 9.1 8.4 6.2 6.20 **6.7** 6.20 6.2 7.8 8.1 8.3 8.5 6.2
 33 30 26 24 19 135 6.12 135 19 23 26 29 32 35

SpK in 14" Tree Pt. Sta. 1043 + 25

4.7 6.5 6.4 5.7 3.8 3.90 **4.4** 3.89 3.7 6.6 6.6 5.8 5.8 2.7
 33 32 28 24 19 135 3.82 135 19 26 30 31 32 34

4.7 6.6 7.3 7.2 6.5 4.5 4.49 **6.0** 4.87 4.62 4.5 7.1 7.1 5.3
 33 32 30 27 25 19 135 4.68 13.0 14.0 20 26 32 34

4.5 7.0 7.2 6.5 4.9 5.74 **5.1** 5.59 5.33 5.2 8.0 8.4 5.0
 33 30 27 25 20 135 5.17 14.2 15.2 21 28 31 34

5.0 6.7 7.0 7.0 5.0 5.17 **6.2** 6.04 5.76 5.8 8.4 7.4 4.9
 33 31 28 25 19 135 5.61 14.6 15.2 21 28 31 34

5.4 6.7 8.1 8.0 7.4 5.5 5.57 **6.6** 6.53 6.28 6.1 9.4 9.3 8.4 5.4
 33 31 29 27 24 20 135 6.04 14.5 15.5 21 29 31 32 35

6.1 7.2 7.2 8.3 8.5 8.2 5.8 6.03 **7.0** 6.93 6.68 6.8 9.3 9.3 8.5 4.8
 33 32 31 29 27 25 18 135 6.49 14.5 15.5 21 28 30 31 34

8.6 9.4 9.3 8.5 6.5 6.46 **7.5** 7.39 7.15 7.3 9.3 9.7 9.7 5.4
 33 31 28 25 20 135 6.99 13.5 14.5 20 26 27 28 33

12.3 11.8 7.0 6.93 **8.0** 7.83 7.56 7.4 10.0 10.1 7.6 7.6
 33 30 20 135 7.42 13.3 14.3 20 27 29 32 33

12.8 5.3 5.42 **6.7** 5.85 5.54 5.3 9.2 9.2 7.6 7.6
 33 20 135 5.67 13.6 14.6 19 27 29 31 33

11.9 11.9 5.7 6.06 **6.6** 6.10 5.29 5.7 9.6 9.6 8.4 8.4
 33 32 19 135 6.04 12.5 13.5 19 24 27 31 33
 10.72 10.10
 24 24

Sta.	+	H. I.	-	Elev.
		879.12		
1050				72.4 72.9
1051				73.1 73.5
1052				74.6 74.8
+50				75.4 75.5
T.P.	6.29	882.24	3.17	875.95
1053				76.2 76.0
				7
1054				77.1 76.9
1055				76.7 76.7
+50				76.3 76.4
1056				75.9 76.1
+50				75.6 75.9
1057				75.4 75.8
+25				75.4 75.8
T.P.	6.27	882.57	4.14	876.10

80 87 86 82 64 628 6.7 6.29 6.1 9.2 9.1 8.2
33 31 27 24 19 13.5 6.79 13.5 19 27 29 33

58 78 77 72 56 528 6.0 5.70 5.88 5.6 8.0 8.1 7.7 7.6
33 31 28 25 20 13.5 5.61 12.5 13.5 19 26 28 30 33

51 66 61 57 45 437 4.5 4.37 4.09 3.9 6.1 6.1 6.7 3.3
33 30 29 23 19 13.5 4.33 12.5 13.5 19 24 26 29 33

33 5.7 6.1 6.1 5.6 3.7 3.65 3.7 3.71 3.44 3.3 5.6 4.8 1.1
33 31 29 24 24 19 13.5 3.61 12.5 13.5 19 24 27 33

5.1 8.2 8.9 8.6 6.1 5.21 6.0 6.25 6.00 6.2 8.0 8.1 7.4 2.7
33 30 29 25 19 13.5 6.07 12.5 13.5 19 24 27 27 33

4.5 7.1 8.0 8.0 7.5 5.0 5.07 5.1 5.46 5.22 5.6 8.0 7.2 5.7
33 31 29 26 25 19 13.5 5.30 12.5 13.5 19 24 27 33

3.7 6.6 7.8 7.7 7.0 4.7 4.94 5.5 6.07 5.83 5.8 8.4 8.3 4.1
33 31 29 26 24 19 13.5 5.54 13.4 14.4 20 25 28 33

4.7 7.7 8.1 8.1 6.7 5.0 5.05 5.9 6.63 6.44 6.5 8.8 8.8 4.5
33 30 29 28 24 19 13.5 5.85 14.6 15.6 21 27 31 35

7.6 8.0 8.7 8.7 8.3 8.0 5.3 5.27 6.3 6.77 6.78 7.1 9.5 9.4 8.1 5.4
35 33 32 31 30 25 20 13.5 6.12 14.7 15.7 21 24 29 31 33

8.7 9.1 9.2 9.2 7.7 5.4 5.4 5.47 6.6 7.20 6.95 7.2 9.6 9.5 7.8
48 47 42 35 29 24 20 13.5 6.31 15.0 16.0 22 27 30 33

10.3 8.9 8.5 8.1 6.6 5.6 5.16 6.8 7.27 7.06 7.4 10.5 10.7 10.5 9.3
79 74 48 38 32 23 13.5 6.44 14.6 15.6 21 28 30 33 35

11.2 9.9 9.0 8.6 6.7 5.6 5.64 6.8 7.32 7.12 7.5 10.5 10.5 9.5
67 66 55 46 33 22 13.5 6.48 14.7 15.7 21 28 33 37

Sta.	+	H. I.	-	Elev.	
		882.37			
+50				75.3	75.8
		Cross Prain.			
1058				75.3	75.8
B.M.	6.27	882.36	6.27	876.10	876.09
+50				75.4	75.9
1059				75.6	76.1
+50				75.8	76.4
1060				76.2	76.8
1061				76.8	77.4
1062				76.4	77.0
1063				74.9	75.5
1064				73.2	73.8
+50				72.3	72.9
T.P.	3.38	876.59	9.17	873.19	
1065				71.5	72.1

8 96 91 89 82 73 59 595 (7.1) 745 726 71 10.1 10.0 10.2
 5 46 55 50 38 32 22 135 6.58 147 15.7 21 26 28 33
 12.30 12.03
 41 35

123 99 63 57 572 (7.1) 740 720 75 11.2 11.6 10.3 10.2
 49 36 31 20 135 6.54 147 15.7 21 26 27 31 33

SpK in 24" Oak 65 Lt. Str 1059+03

110 97 55 552 (7.0) 729 706 72 9.2 9.1 8.7
 33 27 21 135 6.42 147 15.7 21 25 31 34

75 75 80 74 74 56 536 (6.8) 707 684 71 7.9 7.2 6.1
 33 31 30 27 25 20 135 6.22 147 15.7 21 23 31 33

49 50 67 70 62 54 532 (6.6) 650 621 58 7.0 7.3 7.2 44
 33 31 29 26 24 17 135 5.92 138 142 20 24 27 30 33

34 61 62 59 53 512 (6.2) 589 563 57 6.9 6.8 4.1
 33 30 26 24 20 135 5.59 125 135 19 24 30 33

23 58 57 50 502 (5.6) 502 476 50 6.0 6.3 4.5
 33 30 29 20 135 4.75 125 135 19 22 26 30 33

45 56 65 62 56 547 (6.0) 545 56 6.7 6.9 5.6 5.6
 33 32 29 22 19 135 5.38 135 19 24 30 32 33

32 79 80 67 675 680 (7.5) 692 687 65 7.3 7.7 7.3 53
 33 28 24 20 135 7.7 6.87 12.9 13.5 21 24 27 31 33

33 94 77 77 85 850 865 (7.2) 866 852 85 9.4 9.6 9.6 86
 33 29 24 23 20 135 12.7 8.59 12.7 13.5 19 22 27 32 33

7.3 103 104 73 936 963 (10.1) 962 936 94 10.7 10.9 11.2
 33 29 24 19 135 12.7 9.44 12.7 13.5 20 24 31 33

43 57 62 45 444 459 (6.1) 435 440 46 8.4 8.5
 32 30 23 20 135 12.7 4.30 12.7 13.5 19 27 33

Sta.	+	H.I.	-	Elev
		876.57		
1068				70.6 71.7
1066				70.5 71.1
137				70.4 71.0
1067				70.9 71.5
135				71.4 71.9
	2.46	876.55	2.46	874.11 874.09
1068		882.63		72.7 73.3
	6.97	882.24	0.89	875.66
1069				75.2 75.8
150				76.3 76.9
1070				77.0 77.6
179				77.4 78.0
B.M.				874.09
195				77.4 77.9
1071				77.4 77.8

4-22-27

<u>11.5</u>	<u>10.6</u>	<u>5.4</u>	<u>5.45</u>	<u>6.0</u>	<u>5.44</u>	<u>5.6</u>	<u>14.1</u>	<u>14.1</u>
34	28	20	13.5	5.33	13.5	19	33	37

<u>7.7</u>	<u>5.6</u>	<u>5.62</u>	<u>6.1</u>	<u>5.62</u>	<u>5.4</u>	<u>14.0</u>	<u>14.0</u>
33	19	13.5	5.52	13.5	19	33	37

<u>10.1</u>	<u>9.6</u>	<u>5.3</u>	<u>5.64</u>	<u>6.2</u>	<u>5.62</u>	<u>5.6</u>	<u>11.1</u>	<u>11.4</u>
33	26	19	13.5	5.53	13.5	20	31	37

<u>9.2</u>	<u>9.3</u>	<u>5.0</u>	<u>5.03</u>	<u>5.15</u>	<u>5.7</u>	<u>5.01</u>	<u>5.0</u>	<u>9.9</u>	<u>8.2</u>
34	28	19	13.5	12.7	5.10	12.7	13.5	19	25
									33

<u>6.8</u>	<u>6.9</u>	<u>4.6</u>	<u>4.56</u>	<u>4.72</u>	<u>5.2</u>	<u>4.70</u>	<u>4.55</u>	<u>4.4</u>	<u>6.4</u>	<u>6.1</u>
33	24	19	13.5	12.7	4.64	12.7	13.5	19	24	33

<u>4.2</u>	<u>4.0</u>	<u>2.7</u>	<u>3.32</u>	<u>3.16</u>	<u>2.9</u>	<u>3.26</u>	<u>3.09</u>	<u>2.9</u>	<u>4.0</u>	<u>4.0</u>	<u>3.7</u>	<u>2.8</u>
33	23	19	13.5	12.7	3.23	12.7	13.5	19	22	27	32	33

5 p.k. in 14" Oak 65 Lt. Stg. 1068+00

<u>6.8</u>	<u>6.8</u>	<u>7.7</u>	<u>7.7</u>	<u>8.0</u>	<u>6.6</u>	<u>6.74</u>	<u>6.70</u>	<u>7.4</u>	<u>6.92</u>	<u>6.76</u>	<u>6.5</u>	<u>7.5</u>	<u>7.7</u>	<u>3.6</u>
33	32	31	27	24	19	13.5	12.7	6.83	12.7	13.5	19	22	27	33

<u>7.5</u>	<u>7.7</u>	<u>6.7</u>	<u>6.0</u>	<u>5.64</u>	<u>5.81</u>	<u>6.3</u>	<u>5.76</u>	<u>5.61</u>	<u>5.4</u>	<u>7.0</u>	<u>6.6</u>	<u>5.7</u>	<u>3.2</u>
34	31	24	20	13.5	12.7	5.72	12.7	13.5	19	24	28	30	33

<u>9.0</u>	<u>7.9</u>	<u>5.0</u>	<u>4.96</u>	<u>5.12</u>	<u>5.6</u>	<u>5.12</u>	<u>4.95</u>	<u>4.9</u>	<u>6.9</u>	<u>6.4</u>	<u>2.3</u>
33	25	19	13.5	12.7	5.05	12.7	13.5	19	28	27	33

<u>10.5</u>	<u>8.8</u>	<u>4.8</u>	<u>4.76</u>	<u>5.2</u>	<u>4.75</u>	<u>4.9</u>	<u>4.3</u>
34	25	19	13.5	4.68	13.5	19	34

5 p.k. in 14" Oak 65 Lt. Stg. 1068+40

<u>10.5</u>	<u>9.1</u>	<u>5.1</u>	<u>4.87</u>	<u>5.2</u>	<u>4.82</u>	<u>4.7</u>	<u>4.7</u>	<u>4.5</u>
33	27	19	13.5	4.76	13.5	18	24	33

<u>10.1</u>	<u>9.4</u>	<u>5.2</u>	<u>4.90</u>	<u>5.2</u>	<u>4.83</u>	<u>4.8</u>	<u>4.37</u>	<u>4.5</u>	<u>4.1</u>
33	27	19	13.5	4.77	13.5	19.7	19.7	31	33

Sta.	+	H. I.	-	Elev
		882.63		
		882.26		
	+11			77.3 77.8
	+95			76.9 77.5
1072				77.0 77.5
	+16			77.0 77.4
1073				76.6 77.1
	+82			76.2 76.7
1074				76.2 76.7
	+28			76.2 76.6
	+43			76.1 76.5
1075				76.4 76.9
J. 12	7.69	884.90	5.42	877.21
	+14			76.5 77.0
	+43			76.8 77.2

Sta.	+	H.I.	-	Elev.	
		884.90			
	+56			76.7	77.3
1076				77.3	77.9
	+24			77.5	78.2
1077				78.7	79.3
	+11			78.8	79.4
	+24			78.9	79.5
	+44			78.9	79.7
	+56			78.9	79.8
	+70			78.9	79.8
1078				79.1	79.7
1079				78.8	79.4
B.M.	1.74	884.91	1.74	883.16	883.17
	+53			78.7	79.3

<u>11.0</u>	<u>106</u>	<u>74</u>	<u>7.34</u>	<u>7.79</u>	<u>8.2</u>	<u>7.68</u>	<u>7.22</u>	<u>74</u>	<u>68</u>	<u>6.7</u>
<u>33</u>	<u>28</u>	<u>21</u>	<u>17</u>	<u>17</u>	<u>7.39</u>	<u>17</u>	<u>17</u>	<u>20</u>	<u>27</u>	<u>33</u>

<u>96</u>	<u>9.1</u>	<u>6.9</u>	<u>6.75</u>	<u>7.20</u>	<u>7.6</u>	<u>7.10</u>	<u>6.62</u>	<u>6.3</u>	<u>6.2</u>	<u>6.1</u>
<u>33</u>	<u>24</u>	<u>19</u>	<u>17</u>	<u>17</u>	<u>7.04</u>	<u>17</u>	<u>17</u>	<u>19</u>	<u>27</u>	<u>33</u>

<u>7.5</u>	<u>6.9</u>	<u>7.5</u>	<u>7.5</u>	<u>6.45</u>	<u>6.94</u>	<u>7.4</u>	<u>6.73</u>	<u>5.23</u>	<u>5.7</u>	<u>5.7</u>	<u>5.6</u>
<u>33</u>	<u>24</u>	<u>22</u>	<u>21</u>	<u>17</u>	<u>17</u>	<u>6.69</u>	<u>17</u>	<u>17</u>	<u>21</u>	<u>27</u>	<u>33</u>

<u>5.8</u>	<u>5.5</u>	<u>5.45</u>	<u>5.95</u>	<u>6.2</u>	<u>5.63</u>	<u>5.14</u>	<u>4.7</u>	<u>4.6</u>	<u>4.6</u>
<u>33</u>	<u>26</u>	<u>17</u>	<u>17</u>	<u>5.65</u>	<u>17</u>	<u>17</u>	<u>19</u>	<u>27</u>	<u>33</u>

<u>5.5</u>	<u>5.32</u>	<u>5.80</u>	<u>6.1</u>	<u>5.50</u>	<u>4.98</u>	<u>4.6</u>	<u>4.5</u>	<u>4.5</u>
<u>33</u>	<u>17</u>	<u>17</u>	<u>5.50</u>	<u>17</u>	<u>17</u>	<u>20</u>	<u>27</u>	<u>33</u>

<u>5.4</u>	<u>5.16</u>	<u>5.63</u>	<u>6.0</u>	<u>5.31</u>	<u>5.29</u>	<u>4.78</u>	<u>4.60</u>	<u>4.6</u>
<u>33</u>	<u>17</u>	<u>17</u>	<u>5.36</u>	<u>17</u>	<u>22</u>	<u>22</u>	<u>28</u>	<u>33</u>

<u>5.4</u>	<u>5.3</u>	<u>5.40</u>	<u>6.0</u>	<u>5.25</u>	<u>4.77</u>
<u>33</u>	<u>22</u>	<u>17</u>	<u>5.20</u>	<u>17</u>	<u>33</u>

<u>5.5</u>	<u>5.31</u>	<u>6.0</u>	<u>5.25</u>	<u>5.07</u>
<u>33</u>	<u>17</u>	<u>5.15</u>	<u>17</u>	<u>33</u>

<u>4.9</u>	<u>4.9</u>	<u>5.4</u>	<u>4.7</u>	<u>4.68</u>	<u>5.19</u>	<u>6.0</u>	<u>5.29</u>	<u>4.78</u>	<u>4.5</u>	<u>4.4</u>
<u>33</u>	<u>30</u>	<u>27</u>	<u>19</u>	<u>10</u>	<u>17</u>	<u>5.11</u>	<u>17</u>	<u>17</u>	<u>27</u>	<u>33</u>

<u>4.7</u>	<u>5.1</u>	<u>4.9</u>	<u>4.9</u>	<u>5.1</u>	<u>4.77</u>	<u>5.24</u>	<u>5.8</u>	<u>5.39</u>	<u>4.88</u>	<u>4.7</u>	<u>4.6</u>	<u>4.5</u>
<u>33</u>	<u>29</u>	<u>24</u>	<u>24</u>	<u>18</u>	<u>17</u>	<u>17</u>	<u>5.16</u>	<u>17</u>	<u>17</u>	<u>19</u>	<u>27</u>	<u>33</u>

<u>4.4</u>	<u>5.0</u>	<u>5.4</u>	<u>5.12</u>	<u>5.67</u>	<u>6.0</u>	<u>5.63</u>	<u>5.14</u>	<u>5.0</u>	<u>4.8</u>	<u>4.7</u>
<u>33</u>	<u>23</u>	<u>18</u>	<u>17</u>	<u>17</u>	<u>5.48</u>	<u>17</u>	<u>17</u>	<u>19</u>	<u>27</u>	<u>33</u>

Top of Hyd. N. E. Cor. Cross St. & 5th Ave.

<u>4.7</u>	<u>4.96</u>	<u>5.29</u>	<u>6.2</u>	<u>5.75</u>	<u>5.54</u>	<u>5.13</u>	<u>4.9</u>	<u>4.8</u>
<u>33</u>	<u>19</u>	<u>19</u>	<u>5.67</u>	<u>17</u>	<u>20</u>	<u>17</u>	<u>17</u>	<u>33</u>

Sta.	+	H. I.	-	Elev.
		884.91		
	+70			78.6 79.2
1080				78.5 79.1
	+04			78.5 79.1
	+21			78.5 79.1
	+40	4.29 885.33	5.87	879.04 78.4 79.0
	+55			78.4 79.1
	+85			78.3 79.0
1081				78.3 78.5
	+87			77.9 78.5
	+95			77.8 78.4
1082				77.8 78.4
	+09			77.7 78.4
	+16			77.7 78.3
1083				77.3 77.9
	+83 ³	End of Proj.		76.5 77.1
B.M.			2.01	881.32 881.31

<u>55</u>	<u>588</u>	<u>63</u>	<u>585</u>	<u>584</u>	<u>51</u>	<u>49</u>	<u>48</u>
<u>33</u>	<u>17</u>	<u>569</u>	<u>17</u>	<u>17</u>	<u>24</u>	<u>27</u>	<u>33</u>

<u>57</u>	<u>579</u>	<u>64</u>	<u>585</u>	<u>546</u>	<u>55</u>	<u>50</u>	<u>49</u>
<u>33</u>	<u>17</u>	<u>580</u>	<u>17</u>	<u>17</u>	<u>24</u>	<u>27</u>	<u>33</u>

<u>57</u>	<u>596</u>	<u>64</u>	<u>592</u>	<u>546</u>	<u>50</u>	<u>49</u>
<u>33</u>	<u>17</u>	<u>580</u>	<u>17</u>	<u>17</u>	<u>27</u>	<u>33</u>

<u>54</u>	<u>54</u>	<u>545</u>	<u>604</u>	<u>64</u>	<u>597</u>	<u>548</u>	<u>50</u>	<u>49</u>
<u>33</u>	<u>22</u>	<u>17</u>	<u>17</u>	<u>584</u>	<u>17</u>	<u>17</u>	<u>27</u>	<u>33</u>

<u>37</u>	<u>40</u>	<u>38</u>	<u>400</u>	<u>447</u>	<u>49</u>	<u>446</u>	<u>398</u>	<u>35</u>	<u>34</u>
<u>33</u>	<u>29</u>	<u>19</u>	<u>17</u>	<u>17</u>	<u>431</u>	<u>17</u>	<u>17</u>	<u>27</u>	<u>33</u>

<u>39</u>	<u>39</u>	<u>45</u>	<u>401</u>	<u>452</u>	<u>49</u>	<u>431</u>	<u>459</u>
<u>33</u>	<u>25</u>	<u>18</u>	<u>17</u>	<u>17</u>	<u>426</u>	<u>17</u>	<u>33</u>

<u>37</u>	<u>39</u>	<u>45</u>	<u>414</u>	<u>464</u>	<u>50</u>	<u>435</u>	<u>425</u>
<u>33</u>	<u>21</u>	<u>18</u>	<u>17</u>	<u>17</u>	<u>437</u>	<u>17</u>	<u>33</u>

<u>38</u>	<u>42</u>	<u>45</u>	<u>430</u>	<u>468</u>	<u>50</u>	<u>457</u>	<u>408</u>	<u>42</u>	<u>27</u>	<u>26</u>
<u>33</u>	<u>20</u>	<u>18</u>	<u>17</u>	<u>17</u>	<u>488</u>	<u>17</u>	<u>17</u>	<u>18</u>	<u>27</u>	<u>33</u>

<u>39</u>	<u>42</u>	<u>48</u>	<u>452</u>	<u>499</u>	<u>51</u>	<u>508</u>	<u>462</u>	<u>47</u>	<u>49</u>	<u>47</u>
<u>33</u>	<u>23</u>	<u>19</u>	<u>17</u>	<u>17</u>	<u>488</u>	<u>17</u>	<u>17</u>	<u>18</u>	<u>27</u>	<u>33</u>

<u>41</u>	<u>44</u>	<u>56</u>	<u>503</u>	<u>55</u>	<u>513</u>	<u>51</u>	<u>39</u>	<u>38</u>
<u>33</u>	<u>25</u>	<u>19</u>	<u>17</u>	<u>492</u>	<u>17</u>	<u>18</u>	<u>27</u>	<u>33</u>

<u>43</u>	<u>48</u>	<u>509</u>	<u>55</u>	<u>515</u>	<u>52</u>	<u>40</u>	<u>38</u>
<u>33</u>	<u>19</u>	<u>17</u>	<u>494</u>	<u>17</u>	<u>18</u>	<u>27</u>	<u>33</u>

<u>42</u>	<u>42</u>	<u>52</u>	<u>509</u>	<u>50</u>	<u>576</u>	<u>469</u>	<u>42</u>	<u>40</u>	<u>39</u>
<u>33</u>	<u>26</u>	<u>20</u>	<u>17</u>	<u>491</u>	<u>17</u>	<u>17</u>	<u>23</u>	<u>27</u>	<u>33</u>

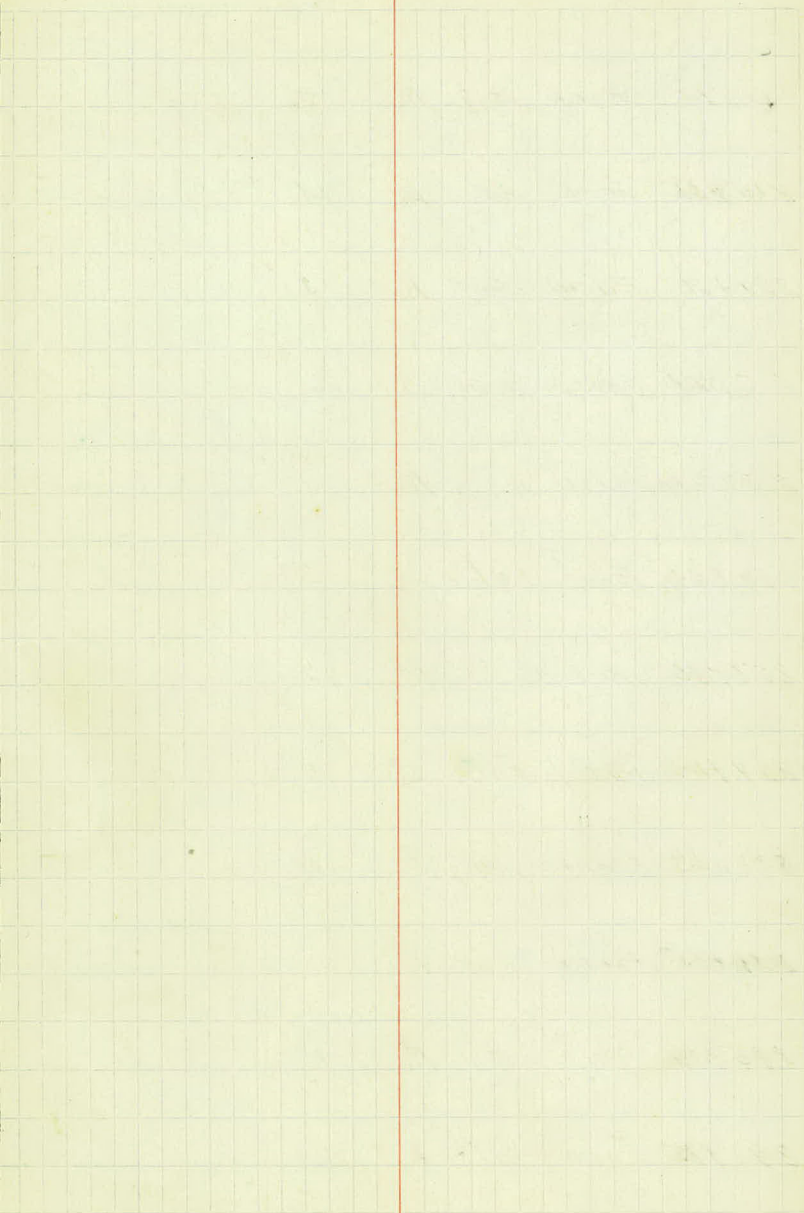
<u>40</u>	<u>41</u>	<u>45</u>	<u>464</u>	<u>512</u>	<u>56</u>	<u>517</u>	<u>472</u>	<u>43</u>	<u>40</u>	<u>39</u>
<u>33</u>	<u>27</u>	<u>23</u>	<u>17</u>	<u>17</u>	<u>501</u>	<u>17</u>	<u>17</u>	<u>23</u>	<u>27</u>	<u>33</u>

<u>45</u>	<u>46</u>	<u>51</u>	<u>512</u>	<u>564</u>	<u>50</u>	<u>559</u>	<u>460</u>	<u>45</u>
<u>33</u>	<u>27</u>	<u>19</u>	<u>17</u>	<u>17</u>	<u>544</u>	<u>17</u>	<u>27</u>	<u>33</u>

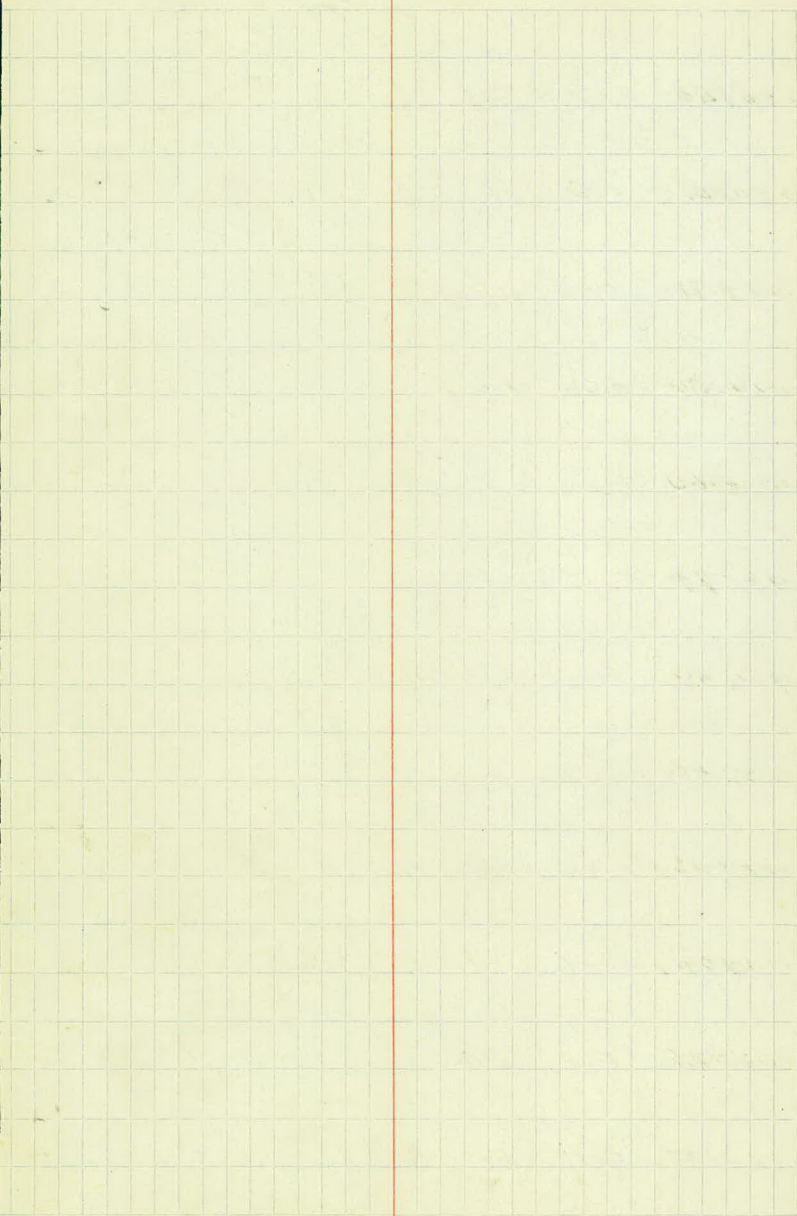
<u>54</u>	<u>54</u>	<u>58</u>	<u>608</u>	<u>649</u>	<u>58</u>	<u>633</u>	<u>594</u>	<u>53</u>	<u>54</u>
<u>33</u>	<u>27</u>	<u>23</u>	<u>17</u>	<u>17</u>	<u>630</u>	<u>17</u>	<u>17</u>	<u>27</u>	<u>33</u>

Top of Hyd. S.E. Cor. at Main St. & 5th Ave.

		Emb.	Ex.
813+70	Farm Ent. R.	14	
815+38	Farm Ent. L.	10	
816+64	Farm Ent. L.	13	
817+50	Farm Ent. R.	3	
818+96	Farm Road R.	17	
825+50	Side Road L.	5	
827+73	Field Ent. R.	13	
829+80	School Ent. L.	17	
831+33	Farm Ent. R.	14	
834+15	Farm Ent. L.	13	
836f	Road R.	25	
846+74	Farm Ent. R.	12	
846+95	Farm Ent. L.	¹² 30	



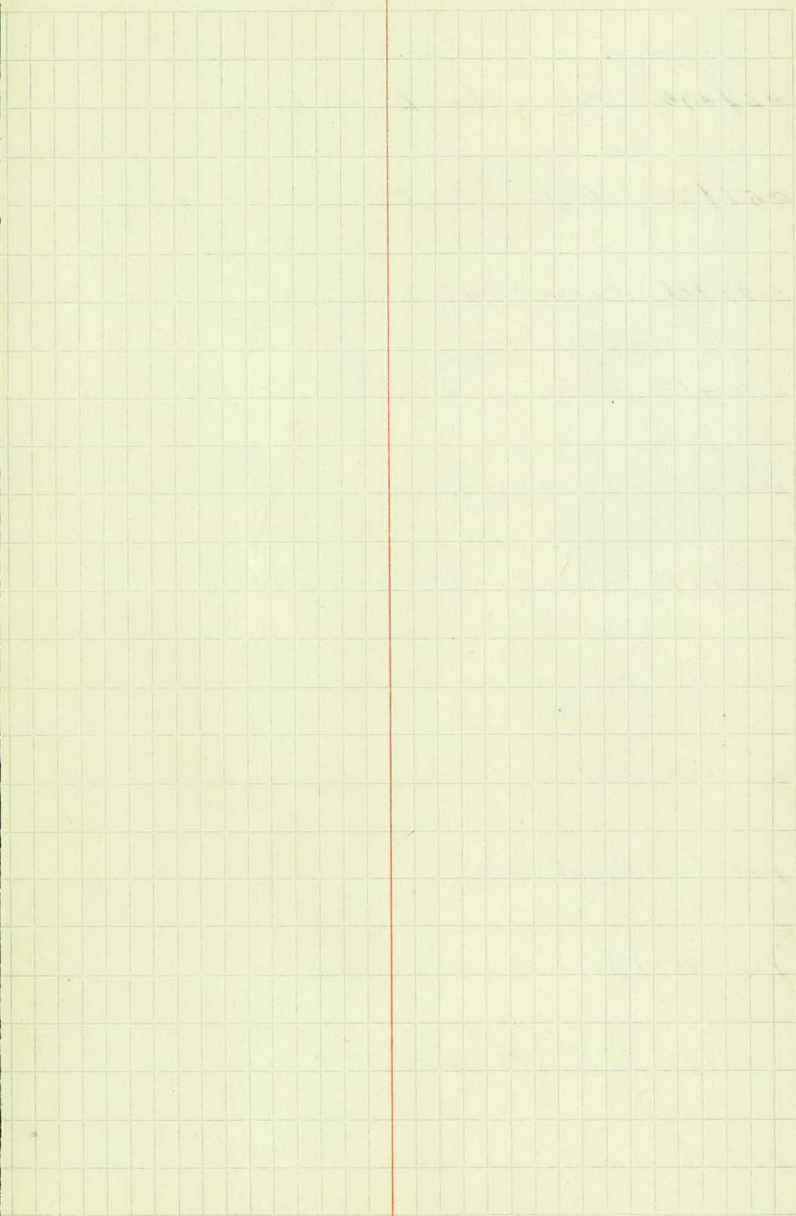
		Emp	Ex.
848758	Farm Ent. R.	10	
848768	Farm Ent. L.	24	
851791	Farm Ent. R.	13	
856730	Farm Ent. L.	6	
856760	Road R.	171	
856794	Foot Path L.	3	
858780	Farm Ent. R.	12	
864740	Field Ent. L.	17	
872742	Farm Road L.	10	
872792	Farm Road R.	13	
887773	Farm Ent. L.	10	
891785	Farm Ent. R.	11	



		Emp	EX.
896+38	Farm Ent. L.	12	
899+12	Farm Ent. L.	17	
900+53	Town Hall Ent. R.	10	
904+15	Farm Ent. R.	17	
908+13	Farm Ent. R.	12	
911+06	Farm Ent. L.	10	
919+65	Farm Ent. R.	17	
919+81	Farm Ent. L.	13	
923+02	Farm Rd. R.	23	
923+13	Foot Path L.	7	
925+04	Farm Ent. L.	12	
932+23	Field Ent. R.	14	17

The image shows a page of graph paper with a grid. A vertical red line is drawn down the center of the page, creating two columns of 10 squares each. The page is numbered 43 in the top right corner. There are some faint pencil markings on the right side of the grid, possibly representing a series of data points or a simple graph. The markings are most visible in the right half of the page, showing a series of small, irregular shapes that could be interpreted as a rough sketch of a curve or a set of points.

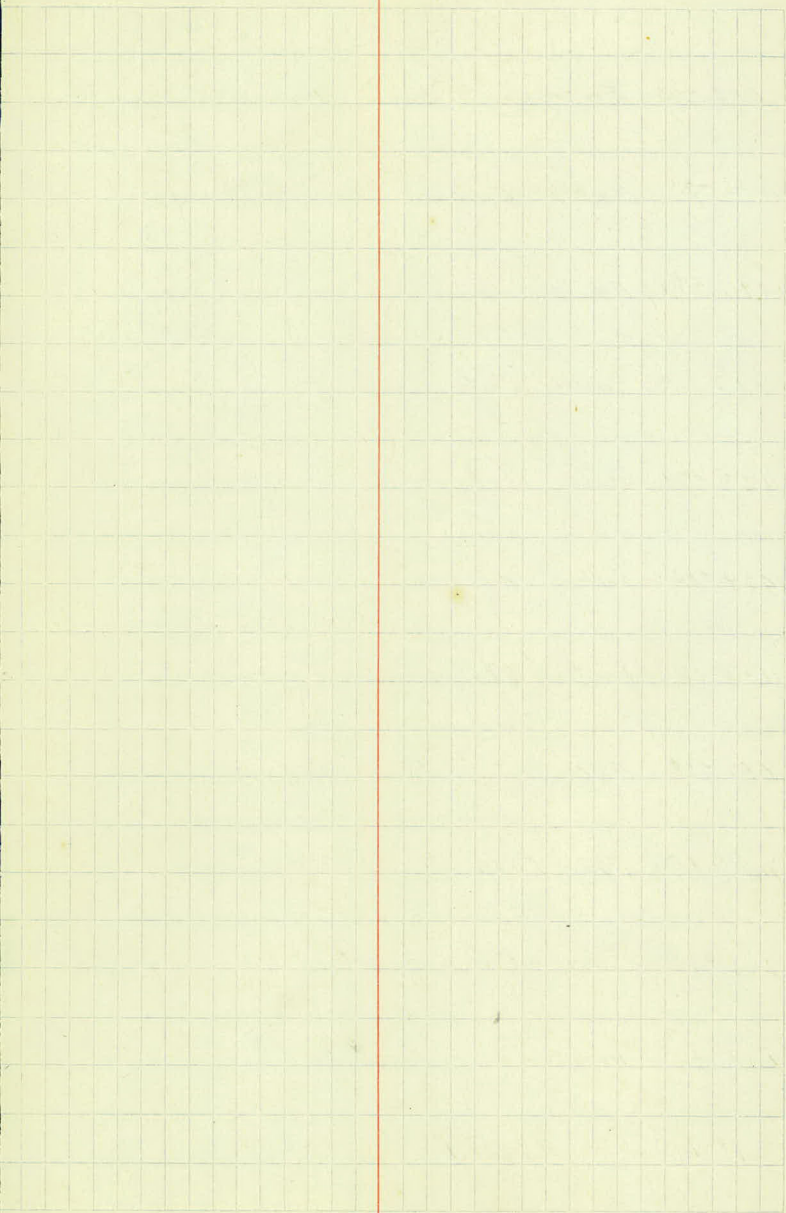
		Emp.	EX.
944+02	Farm Ent L.	14	11
951+90	Road. R.	18	
972+08	Farm Ent. L.	15	
974+68	Farm Ent R.	13	
975+94	Farm Ref. L.	16	
981+49	Farm Ent. R.	14	
986+60	Farm Ref. L.	240	
987+00	Hand Pitch L.		10
991+79	Field Ent. R.	15	
993+82	Farm Ent. R.	15	
996+46	Farm Road. R.	15	
999+27	Farm Ent. L.	21	27
999+44	Farm Ent. R.	15	



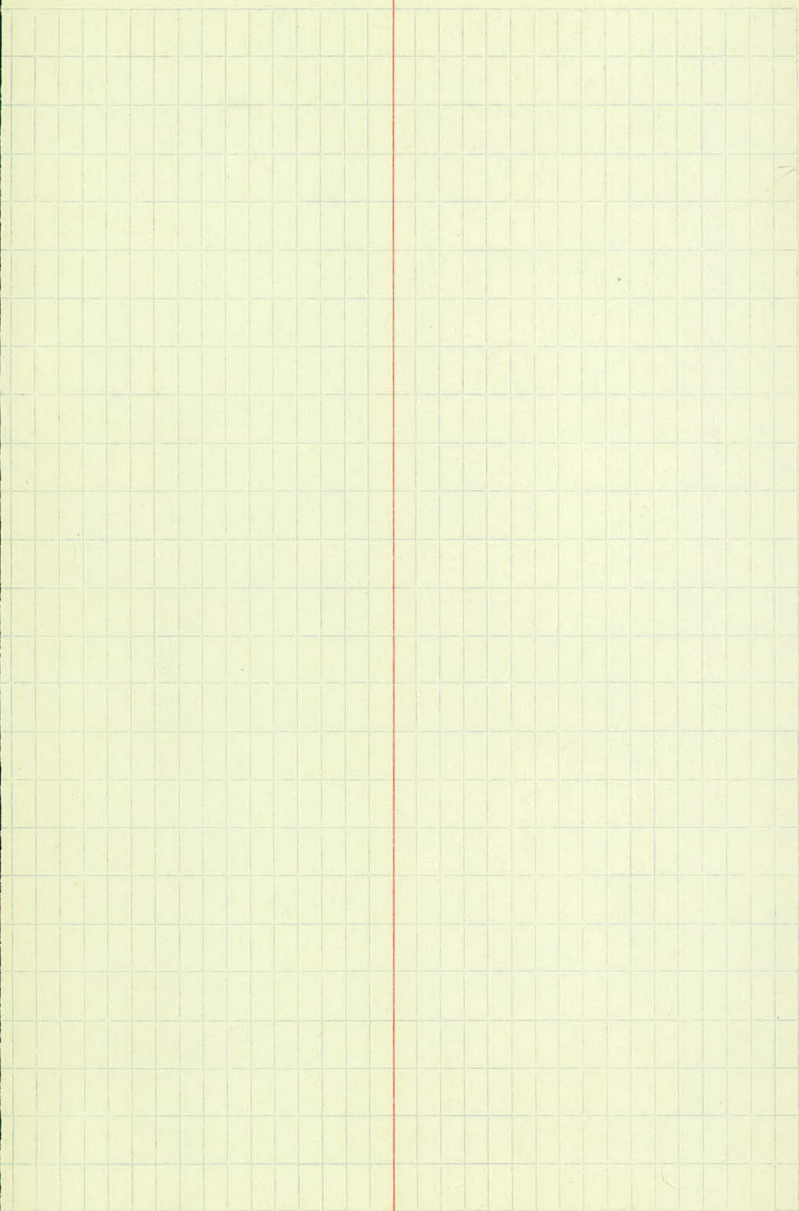
		Emp	Ex.
999+76	Foot Path R.	9	
1000+56	Farm Ent. L.	10	
1000+81	Farm Ent. R.	20	
1010+70	Farm Rd. L.	17	
1011+03	Field Ent R.	18	
1014+17	Field Ent L.	14	
1015+05	Hand Pitch L.		23
1015+20	Farm Ent R.	11	
1015+47	Farm Ent L.	6	
1015+90	Farm Ent. L.	14	
1018+21	Field Ent L.	15	
1019+00	Farm Ent R.	11	
1019+80	Pitch R.		4

The image shows a page of graph paper with a grid pattern. A vertical red line is drawn down the left side, creating a margin. The grid consists of small squares. There are some faint pencil markings and smudges on the page, particularly in the upper left and middle sections. The page number '45' is written in the top right corner.

		Emb.	Ex.
1019+93	Farm Ent L.	4	
1026+00	Field Ent R.	4	
1028+23	Farm Ent R.	8	
1029+09	Farm Ent R.	8	
1029+79	Farm Ent L.	7	
1034+38	Farm Ent. L.	7	
1034+62	Foot Path. L.	3	
1035+00	Farm Ent. R.	8	
1035+53	Foot Path. R.	3	
1037+29	Field Ent. R.	4	
1039+21	Farm Ent. L.	4	
1043+46	Farm Ent. L.	8	



		Emp	Ex.
1045	Farm Ent. R.	17	
1046	Farm Ent. L.	11	
1049	Farm Ent. L.	16	
1052	Farm Ent. R.	26	
1053	Foot Path. R.	4	
1054	Farm Ent. L.	10	
1054	Foot Path R.	4	
1055	Farm Ent. R.	10	
1057	Side Road R.	26	
1059	Farm Ent. R.	7	
1064	Road R.	7	
1066	Side Road L.	65	



T.P.	4.04	868.33		864.27
821714	⁰⁰	oo section		
821731	00			
821770	✓		62.9	5.4
822	✓		62.9	5.4
822725	✓		62.9	5.4
822760	✓		63.0	5.3
823	⁰⁰	oo section.	63.0	5.3
			4.06	864.27

On Tree Mt. Sta. 824

$\frac{5.4}{57}$	$\frac{5.4}{55}$	$\frac{5.4}{51}$	$\frac{4.3}{48}$	$\frac{4.2}{33}$
------------------	------------------	------------------	------------------	------------------

~~| | | | | |
|------------------|------------------|------------------|------------------|------------------|
| $\frac{5.5}{57}$ | $\frac{5.5}{53}$ | $\frac{5.9}{50}$ | $\frac{7.6}{43}$ | $\frac{8.0}{33}$ |
|------------------|------------------|------------------|------------------|------------------|~~

$\frac{5.4}{57}$	$\frac{5.7}{53}$	$\frac{7.7}{48}$	$\frac{8.1}{33}$
------------------	------------------	------------------	------------------

$\frac{5.4}{57}$	$\frac{5.6}{53}$	$\frac{8.0}{48}$	$\frac{7.8}{33}$
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$\frac{5.4}{57}$	$\frac{5.3}{52}$	$\frac{7.6}{47}$	$\frac{7.5}{33}$
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$\frac{5.4}{56}$	$\frac{5.7}{52}$	$\frac{7.6}{48}$	$\frac{8.2}{45}$	$\frac{7.6}{33}$
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$\frac{5.5}{53}$	$\frac{5.5}{50}$	$\frac{10.2}{41}$	$\frac{10.6}{39}$	$\frac{9.3}{33}$
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Final X Sections of Borrow Pit #1

Sta.	+	H.I.	-	Rod	Elev.
B.M.	2.08	876.17		874.09	
0+00					
0+50					
1+00					
1+50					
1+82					
2+00					
T.P.	5.65	877.52	4.90	871.87	
2+30					
2+50					
2+82					
3+00					
3+25					
3+50					

Lt.

Ft.

4-22-27

SpK in 14" Oak Lt. Sta 1068-40.

$\frac{110}{33}$	$\frac{95}{22}$	$\frac{95}{17}$	$\frac{75}{12}$	$\frac{90}{7.6}$	$\frac{72}{6}$	$\frac{90}{10}$	$\frac{92}{17}$	$\frac{102}{20}$	$\frac{102}{23}$	$\frac{100}{33}$
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$\frac{12.2}{33}$	$\frac{127}{30}$	$\frac{126}{24}$	$\frac{12.1}{21}$	$\frac{11.4}{6}$	$\frac{11.2}{3}$	$\frac{11.5}{11.4}$	$\frac{11.2}{1}$	$\frac{11.6}{4}$	$\frac{12.3}{19}$	$\frac{160}{27}$	$\frac{15.2}{33}$
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$\frac{93}{33}$	$\frac{112}{24}$	$\frac{111}{21}$	$\frac{110}{9}$	$\frac{111}{11.7}$	$\frac{11.8}{7}$	$\frac{11.6}{14}$	$\frac{14.5}{20}$	$\frac{11.3}{30}$	$\frac{11.3}{33}$
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$\frac{5.5}{33}$	$\frac{6.9}{19}$	$\frac{7.3}{27}$	$\frac{8.0}{26}$	$\frac{8.2}{20}$	$\frac{8.4}{10}$	$\frac{7.4}{8.2}$	$\frac{8.6}{12}$	$\frac{9.8}{22}$	$\frac{9.7}{25}$	$\frac{10.0}{33}$
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$\frac{2.8}{33}$	$\frac{3.0}{31}$	$\frac{6.3}{29}$	$\frac{7.4}{26}$	$\frac{7.6}{12}$	$\frac{5.9}{7.5}$	$\frac{7.6}{14}$	$\frac{7.8}{21}$	$\frac{7.6}{26}$	$\frac{5.7}{28}$	$\frac{6.0}{33}$
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$\frac{1.2}{33}$	$\frac{1.4}{30}$	$\frac{7.3}{25}$	$\frac{7.5}{11}$	$\frac{5.5}{7.4}$	$\frac{7.4}{19}$	$\frac{7.8}{21}$	$\frac{7.6}{26}$	$\frac{7.1}{28}$	$\frac{5.0}{30}$	$\frac{3.9}{33}$
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$\frac{0.2}{33}$	$\frac{0.5}{32}$	$\frac{8.8}{25}$	$\frac{8.8}{15}$	$\frac{6.4}{9.0}$	$\frac{9.0}{14}$	$\frac{8.8}{21}$	$\frac{8.9}{28}$	$\frac{8.3}{29}$	$\frac{4.8}{32}$	$\frac{4.7}{33}$
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$\frac{0.2}{33}$	$\frac{0.2}{32}$	$\frac{8.7}{24}$	$\frac{8.8}{17}$	$\frac{8.9}{7}$	$\frac{6.5}{8.9}$	$\frac{8.9}{11}$	$\frac{8.9}{22}$	$\frac{9.0}{30}$	$\frac{6.1}{32}$	$\frac{6.4}{33}$
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$\frac{1.6}{33}$	$\frac{1.9}{20}$	$\frac{8.7}{24}$	$\frac{8.8}{12}$	$\frac{6.7}{8.8}$	$\frac{9.1}{12}$	$\frac{9.1}{23}$	$\frac{9.5}{30}$	$\frac{9.1}{33}$
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$\frac{2.7}{33}$	$\frac{3.2}{29}$	$\frac{6.7}{27}$	$\frac{8.9}{24}$	$\frac{8.8}{13}$	$\frac{7.0}{9.0}$	$\frac{9.5}{13}$	$\frac{9.7}{23}$	$\frac{10.6}{30}$	$\frac{10.9}{33}$
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$\frac{4.6}{33}$	$\frac{5.0}{28}$	$\frac{8.8}{25}$	$\frac{9.0}{10}$	$\frac{8.1}{9.5}$	$\frac{9.9}{11}$	$\frac{10.8}{21}$	$\frac{12.5}{31}$	$\frac{12.6}{33}$
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$\frac{6.6}{33}$	$\frac{7.2}{28}$	$\frac{8.8}{27}$	$\frac{9.0}{17}$	$\frac{9.6}{8}$	$\frac{10.2}{10.4}$	$\frac{11.7}{9}$	$\frac{12.5}{16}$	$\frac{12.7}{26}$	$\frac{13.2}{28}$	$\frac{13.6}{33}$
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Sta	+	H.I	-	Rod	Elev.
		877.52			
3+99					
B.M.			3.43	874.09	874.09

Lt.

Rt.

4-22-27

9.4	10.2	10.8	11.7	12.5	11.8	12.5	12.7	12.9	12.8	12.3
33	27	25	19	9	12.6	6	16	20	23	33

Spk in 14" Oak Lt. Sta. 1068+40.

Final X. Sec. Barrow Pit. # 2.

Sta.	+	H.I.	-	Ref	Elev
B.M.	2.38	878.47		876.09	
0 + 40					
0 + 65					
1 + 00					
1 + 50					
1 + 72					
2 + 00					
2 + 50					
3 + 00					
3 + 40	= 0.0 section.				
B.M.			3.70	874.77	874.78

4-25-27

Lt.

Rt.

Spk. in 24" Tree Lt. 574. 10 59 700
49 54 62 74 68 68
 26 4.9 6 14 20 26 30

5.6 5.4 4.9 4.6 5.1 **5.3** 5.8 7.3 7.6 7.4 6.3
 33 20 17 12 11 5.2 13 21 25 28 29

3.7 3.5 5.7 6.9 6.7 6.0 5.2 **5.1** 5.3 5.7 6.8 6.9 5.0 5.0
 33 31 29 28 27 20 7 5.0 8 14 21 27 29 30

1 2.1 5.6 5.2 6.5 6.1 5.5 5.2 5.0 **4.8** 5.2 5.8 6.3 6.5 5.7 5.7 3.6 3.5
 33 30 25 23 22 17 14 11 6 4.6 9 17 20 24 25 26 27 31

1.5 1.6 5.5 5.4 6.0 5.7 5.2 5.0 **4.9** 5.2 5.6 6.4 6.9 5.5 5.8 3.9
 33 30 25 22 20 16 15 10 4.7 11 16 18 21 24 25 33

1.8 1.8 5.2 5.6 6.4 5.1 **4.8** 5.0 5.4 6.2 6.6 4.0 4.3
 33 30 24 22 20 10 4.6 8 14 19 24 27 33

4.1 4.0 6.1 6.6 6.5 6.3 5.7 **5.5** 5.7 6.0 6.2 6.1 5.1 4.2
 33 28 26 24 19 15 10 5.2 12 19 22 25 28 33

6.5 6.5 7.8 7.8 7.2 6.2 **5.7** 6.0 6.0 5.2 3.8
 33 28 25 23 18 10 3.6 9 14 17 33

7.6 7.5 7.9 7.9 7.6 6.5 5.9 6.3 6.1 5.9 5.1 4.5
 33 26 24 21 19 11 5.8 4 7 13 17 19 33

Spk. in P.P. Rt. Sta. 3+40.

Final x Sec. Barrow Pit #3.

Sta.	+ B.M.	H.I. 879.26	-	Rod. 874.78	Elev.
5+00					
5+25					
5+65					
6+00					
6+50					
7+00					
7+50					
8+00					
8+20	= 0.0 section				
B.M.			4.48	874.78	

4-25-27

RT.

RT.

Spk. in P.P. RT. Sta. 3+40.

7.7	8.5	7.9	7.8	7.4	7.6	7.7	8.5	8.3	7.8
33	17	11	6	7.4	10	13	17	21	33

4.9	5.2	5.6	7.0	6.9	7.1	6.7	7.0	6.9	6.9	6.7	6.8	5.9	5.5
33	24	18	16	11	7	6.8	9	11	14	16	20	21	33

1.7	1.9	2.3	5.0	5.4	5.8	5.9	6.2	5.4	5.6	2.6	2.2	2.4
33	19	16	12	10	9	5.6	14	16	18	20	24	33

1.5	1.7	4.4	4.5	5.1	5.4	5.5	5.4	4.9	5.3	1.8	2.0
33	14	11	8	7	5.2	10	14	17	19	20	33

3.6	3.2	4.8	5.1	5.3	5.3	5.1	5.4	4.9	5.0	3.0	3.0
25	13	12	8	7	5.2	6	15	19	22	23	33

3.0	3.1	5.1	6.3	5.6	5.9	5.7	5.8	5.2	5.5	3.6	3.6
33	13	12	7	6	5.9	6	16	21	23	24	33

3.2	3.8	4.5	6.1	6.8	6.8	6.3	6.9	6.9	6.8	7.1	5.8	6.2
24	17	14	12	8	6.8	8	15	21	25	27	29	33

5.4	7.0	7.7	7.7	8.0	8.0	7.9	8.2	8.6	8.4	8.7
24	16	15	11	8	8.0	9	17	22	28	33

7.3	8.1	8.1	8.4	8.4	8.1	8.9	9.3	9.3
25	18	14	11	8.4	7	17	22	33

Spk. in P.P. RT. Sta. 3+40.

Final X Sec. of Borrow Pit #4.

Sta.	+	H.I.	-	Rod	Elev
B.M.	6.27	884.09		877.82	
2+50					
2+75					
3+00					
3+25					
3+50					
3+65					
4+00					
4+50					
5+00					
B.M.			6.27	877.82	

4-25-27

Lt.

Rt.

Nail in P.P. Lt. 5 to 0 + 75

<u>6.9</u>	<u>6.7</u>	<u>6.6</u>	<u>6.8</u>	<u>6.6</u>
<u>22</u>	<u>14</u>	<u>6.6</u>	<u>13</u>	<u>22</u>

<u>6.5</u>	<u>6.3</u>	<u>6.5</u>	<u>6.3</u>	<u>6.6</u>	<u>6.5</u>	<u>6.4</u>	<u>6.2</u>
<u>22</u>	<u>16</u>	<u>15</u>	<u>6.3</u>	<u>11</u>	<u>16</u>	<u>17</u>	<u>22</u>

<u>5.1</u>	<u>5.7</u>	<u>5.7</u>	<u>6.1</u>	<u>5.9</u>	<u>5.9</u>	<u>4.6</u>	<u>6.0</u>	<u>6.0</u>	<u>5.1</u>	<u>5.2</u>	<u>4.1</u>	<u>4.1</u>
<u>22</u>	<u>21</u>	<u>19</u>	<u>18</u>	<u>13</u>	<u>8</u>	<u>6.7</u>	<u>7</u>	<u>15</u>	<u>16</u>	<u>20</u>	<u>20</u>	<u>22</u>

<u>3.6</u>	<u>4.6</u>	<u>4.6</u>	<u>5.4</u>	<u>5.2</u>	<u>3.4</u>	<u>5.1</u>	<u>5.2</u>	<u>4.0</u>	<u>4.0</u>	<u>2.9</u>	<u>2.9</u>
<u>22</u>	<u>20</u>	<u>18</u>	<u>17</u>	<u>9</u>	<u>5.1</u>	<u>9</u>	<u>14</u>	<u>15</u>	<u>20</u>	<u>21</u>	<u>22</u>

<u>3.2</u>	<u>3.1</u>	<u>3.8</u>	<u>3.8</u>	<u>4.7</u>	<u>4.7</u>	<u>2.5</u>	<u>4.5</u>	<u>4.6</u>	<u>3.5</u>	<u>3.5</u>	<u>2.0</u>	<u>2.0</u>
<u>22</u>	<u>19</u>	<u>18</u>	<u>17</u>	<u>16</u>	<u>8</u>	<u>4.4</u>	<u>8</u>	<u>15</u>	<u>16</u>	<u>20</u>	<u>21</u>	<u>22</u>

<u>2.3</u>	<u>2.9</u>	<u>4.6</u>	<u>4.7</u>	<u>2.5</u>	<u>4.7</u>	<u>4.4</u>	<u>4.5</u>	<u>3.5</u>	<u>3.7</u>	<u>2.4</u>	<u>2.4</u>
<u>22</u>	<u>14</u>	<u>14</u>	<u>7</u>	<u>4.5</u>	<u>9</u>	<u>10</u>	<u>15</u>	<u>16</u>	<u>20</u>	<u>21</u>	<u>22</u>

<u>4.1</u>	<u>4.1</u>	<u>5.2</u>	<u>5.2</u>	<u>6.1</u>	<u>5.8</u>	<u>4.0</u>	<u>5.9</u>	<u>5.9</u>	<u>4.8</u>	<u>4.8</u>	<u>3.7</u>	<u>3.7</u>
<u>22</u>	<u>19</u>	<u>18</u>	<u>16</u>	<u>15</u>	<u>8</u>	<u>5.7</u>	<u>8</u>	<u>16</u>	<u>17</u>	<u>20</u>	<u>21</u>	<u>22</u>

<u>6.7</u>	<u>7.8</u>	<u>7.8</u>	<u>8.6</u>	<u>8.3</u>	<u>7.3</u>	<u>8.3</u>	<u>7.5</u>	<u>8.2</u>	<u>7.8</u>	<u>7.8</u>
<u>22</u>	<u>21</u>	<u>18</u>	<u>17</u>	<u>9</u>	<u>7.8</u>	<u>7</u>	<u>9</u>	<u>18</u>	<u>19</u>	<u>22</u>

<u>9.8</u>	<u>9.9</u>	<u>9.8</u>	<u>10.0</u>	<u>10.3</u>	<u>10.5</u>
<u>22</u>	<u>19</u>	<u>9</u>	<u>10.0</u>	<u>11</u>	<u>23</u>

Nail in P.P. Lt. 5 to 0 + 75.

Final x Sec. of Borrow Pit # 5.

Sta.	+	H.I.	-	Rod	Elev.
B.M.	4.27	881.00		876.73	
1012					
1012 +50					
1013					
1013 +50					
1014					
B.M.			4.27	876.73	

4-25-27

SpA. in 30" Oak. Lk. Sta 1010.

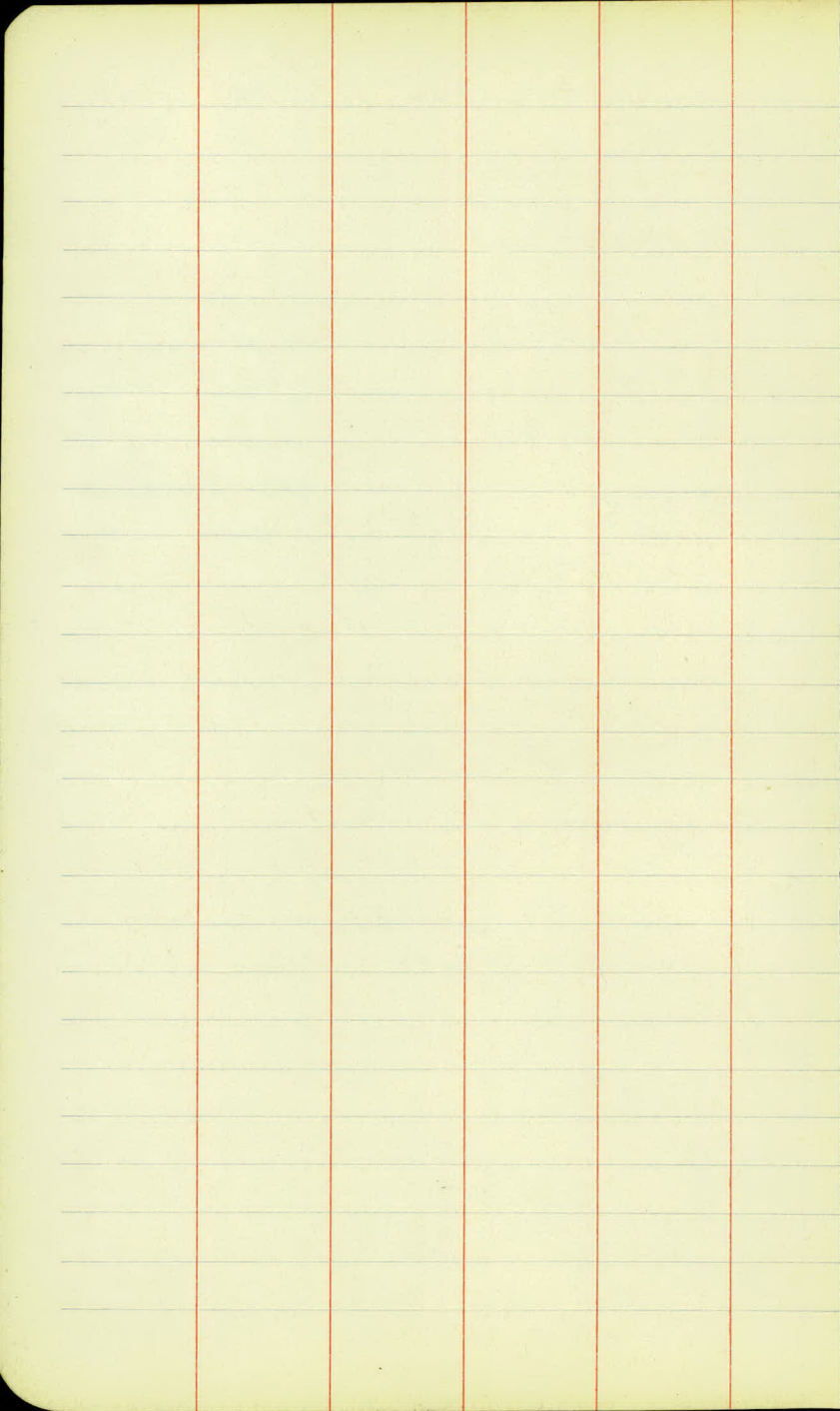
$\frac{120}{115}$	$\frac{120}{100}$	$\frac{118}{87}$	$\frac{102}{54}$	$\frac{104}{39}$	$\frac{114}{35}$	$\frac{104}{33}$	5.3
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$\frac{7.6}{100}$	$\frac{7.4}{93}$	$\frac{7.2}{78}$	$\frac{8.7}{50}$	$\frac{8.9}{37}$	$\frac{9.4}{35}$	$\frac{9.1}{33}$	$\frac{9.1}{28}$	5.4
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$\frac{8.4}{100}$	$\frac{7.8}{89}$	$\frac{8.1}{88}$	$\frac{8.0}{65}$	$\frac{7.3}{37}$	$\frac{8.5}{52}$	$\frac{7.7}{28}$	5.5
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$\frac{8.9}{100}$	$\frac{7.6}{85}$	$\frac{8.0}{83}$	$\frac{7.6}{40}$	$\frac{7.4}{37}$	$\frac{8.3}{30}$	$\frac{7.6}{28}$	5.6
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$\frac{7.7}{100}$	$\frac{8.4}{80}$	$\frac{8.5}{78}$	$\frac{8.1}{65}$	$\frac{7.7}{46}$	$\frac{8.3}{37}$	$\frac{8.4}{28}$	5.7
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KEITH'S RAILROAD CURVE TABLES.

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HOW TO USE KEITH'S TABLES.

EXAMPLE.

Wanted a Curve with an Ext. of about 12 ft. Angle
of Intersection or I. P.= $23^{\circ} 20'$ to the R. at Station
542+72.

Ext. in Tab. IV opposite $23^{\circ} 20'$ =120.87
 $120.87 \div 12 = 10.07$. Say a 10° Curve.

Tan. in Tab. IV opp. $23^{\circ} 20'$ =1183.1
 $1183.1 \div 10 = 118.31$.

Tab. V. correction for A. $23^{\circ} 20'$ for a 10° Cur.=0.16
 $118.31 + 0.16 = 118.47$ =corrected Tangent.

(If corrected Ext. is required find in same way)
Ang. $23^{\circ} 20' = 23.33^{\circ} \div 10 = 2.3333$ =L. C.

$2^{\circ} 19\frac{1}{2}'$ =def. for sta. 542	I. P.=sta. 542+72
$4^{\circ} 49\frac{1}{2}'$ = " " " +50	Tan.= 1.18.47
$7^{\circ} 19\frac{1}{2}'$ = " " " 543	B. C.=sta. 541+53.53
$9^{\circ} 49\frac{1}{2}'$ = " " " +50	L. C.= 2.33.33
$11^{\circ} 40'$ = " " " 543+	E. C.=sta. 543+86.86
86.86	

$100 - 53.53 = 46.47 \times 3$ (def. for 1 ft. of 10° Cur.)= 139.41 =
 $2^{\circ} 19\frac{1}{2}'$ =def. for sta. 542.

Def. for 50 ft.= $2^{\circ} 30'$ for a 10° Curve.

Def. for 36.86 ft.= $1^{\circ} 50\frac{1}{2}'$ for a 10° Curve

(These tables are published in Field Books of
KEUFFEL & ESSER Co., New York, N. Y.)

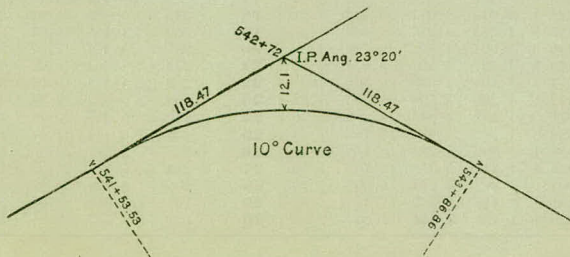


TABLE I. — Minutes in Decimals of a Degree.

1'	.0167	11'	.1833	21'	.3500	31'	.5167	41'	.6833	51'	.8500
2	.0333	12	.2000	22	.3667	32	.5333	42	.7000	52	.8667
3	.0500	13	.2167	23	.3833	33	.5500	43	.7167	53	.8833
4	.0667	14	.2333	24	.4000	34	.5667	44	.7333	54	.9000
5	.0833	15	.2500	25	.4167	35	.5833	45	.7500	55	.9167
6	.1000	16	.2667	26	.4333	36	.6000	46	.7667	56	.9333
7	.1167	17	.2833	27	.4500	37	.6167	47	.7833	57	.9500
8	.1333	18	.3000	28	.4667	38	.6333	48	.8000	58	.9667
9	.1500	19	.3167	29	.4833	39	.6500	49	.8167	59	.9833
10	.1667	20	.3333	30	.5000	40	.6667	50	.8333	60	1.0000

TABLE II. — Inches in Decimals of a Foot.

1-16	3-32	1/8	3-16	1/4	5-16	3/8	1/2	5/8	3/4	7/8
.0052	.0078	.0104	.0156	.0208	.0260	.0313	.0417	.0521	.0625	.0729
1	2	3	4	5	6	7	8	9	10	11
.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167

TABLE III. — Radii, Ordinates and Deflections.

Deg.	Radius	Mid. Ord.	Tan. Def.	Chd. Def.	Def. for 1Foot	Deg.	Radius	Mid. Ord.	Tan. Def.	Chd. Def.	Def. for 1Foot
0° 10'	34377.	.036	.145	.291	0.05'	7°	819.0	1.528	6.105	12.21	2.10'
20	17189.	.073	.291	.582	0.10	20'	781.8	1.600	6.395	12.79	2.20
30	11459.	.109	.436	.873	0.15	30	764.5	1.637	6.540	13.08	2.25
40	8594.4	.145	.582	1.164	0.20	40	747.9	1.673	6.685	13.37	2.30
50	6875.5	.182	.727	1.454	0.25	50	716.8	1.746	6.976	13.95	2.40
1	5729.6	.218	.873	1.745	0.30	8	688.2	1.819	7.266	14.53	2.50
10	4911.2	.255	1.018	2.036	0.35	30	674.7	1.855	7.411	14.82	2.55
20	4297.3	.291	1.164	2.327	0.40	40	661.7	1.892	7.556	15.11	2.60
30	3819.8	.327	1.309	2.618	0.45	9	637.3	1.965	7.846	15.69	2.70
40	3437.9	.364	1.454	2.909	0.50	20	614.6	2.037	8.136	16.27	2.80
50	3125.4	.400	1.600	3.200	0.55	30	603.8	2.074	8.281	16.56	2.85
2	2864.9	.436	1.745	3.490	0.60	40	593.4	2.110	8.426	16.85	2.90
10	2644.6	.473	1.891	3.781	0.65	10	573.7	2.183	8.716	17.43	3.00
20	2455.7	.509	2.036	4.072	0.70	30	546.4	2.292	9.150	18.30	3.15
30	2292.0	.545	2.181	4.363	0.75	11	521.7	2.402	9.585	19.16	3.30
40	2148.8	.582	2.327	4.654	0.80	30	499.1	2.511	10.02	20.04	3.45
50	2022.4	.618	2.472	4.945	0.85	12	478.3	2.620	10.45	20.91	3.60
3	1910.1	.655	2.618	5.235	0.90	30	459.3	2.730	10.89	21.77	3.75
10	1809.6	.691	2.763	5.526	0.95	13	441.7	2.839	11.32	22.64	3.90
20	1719.1	.727	2.908	5.817	1.00	30	425.4	2.949	11.75	23.51	4.05
30	1637.3	.764	3.054	6.108	1.05	14	410.3	3.058	12.18	24.37	4.20
40	1562.9	.800	3.199	6.398	1.10	30	396.2	3.168	12.62	25.24	4.35
50	1495.0	.836	3.345	6.689	1.15	15	383.1	3.277	13.05	26.11	4.50
4	1432.7	.873	3.490	6.980	1.20	30	370.8	3.387	13.49	26.97	4.65
10	1375.4	.909	3.635	7.271	1.25	16	359.3	3.496	13.92	27.84	4.80
20	1322.5	.945	3.718	7.561	1.30	30	348.5	3.606	14.35	28.70	4.95
30	1273.6	.982	3.926	7.852	1.35	17	338.3	3.716	14.78	29.56	5.10
40	1228.1	1.018	4.071	8.143	1.40	18	319.6	3.935	15.64	31.29	5.40
50	1185.8	1.055	4.217	8.433	1.45	19	302.9	4.155	16.51	33.01	5.70
5	1146.3	1.091	4.362	8.724	1.50	20	287.9	4.374	17.37	34.73	6.00
10	1109.3	1.127	4.507	9.014	1.55	21	274.4	4.594	18.22	36.44	6.30
20	1074.7	1.164	4.653	9.305	1.60	22	262.0	4.814	19.08	38.16	6.60
30	1042.1	1.200	4.798	9.596	1.65	23	250.8	5.035	19.94	39.87	6.90
40	1011.5	1.237	4.943	9.886	1.70	24	240.5	5.255	20.79	41.58	7.20
50	982.6	1.273	5.088	10.18	1.75	25	231.0	5.476	21.64	43.28	7.50
6	955.4	1.309	5.234	10.47	1.80	26	222.3	5.697	22.50	44.99	7.80
10	929.6	1.346	5.379	10.76	1.85	27	214.2	5.918	23.35	46.69	8.10
20	905.1	1.382	5.524	11.05	1.90	28	206.7	6.139	24.19	48.38	8.40
30	881.9	1.418	5.669	11.34	1.95	29	199.7	6.360	25.04	50.07	8.70
40	859.9	1.455	5.814	11.63	2.00	30	193.2	6.583	25.88	51.76	9.00

TABLE IV. — Tangents and Externals to a 1° Curve.

Angle	Tangent	External	Angle	Tangent	External	Angle	Tangent	External
1°	50.00	.22	11°	551.70	26.50	21°	1061.9	97.57
10'	58.34	.30	10'	560.11	27.31	10'	1070.6	99.16
20	66.67	.39	20	568.53	28.14	20	1079.2	100.75
30	75.01	.49	30	576.95	28.97	30	1087.8	102.35
40	83.34	.61	40	585.36	29.82	40	1096.4	103.97
50	91.68	.73	50	593.79	30.68	50	1105.1	105.60
2	100.01	.87	12	602.21	31.56	22	1113.7	107.24
10	108.35	1.02	10	610.64	32.45	10	1122.4	108.90
20	116.68	1.19	20	619.07	33.35	20	1131.0	110.57
30	125.02	1.36	30	627.50	34.26	30	1139.7	112.25
40	133.36	1.55	40	635.93	35.18	40	1148.4	113.95
50	141.70	1.75	50	644.37	36.12	50	1157.0	115.66
3	150.04	1.96	13	652.81	37.07	23	1165.7	117.38
10	158.38	2.19	10	661.25	38.03	10	1174.4	119.12
20	166.72	2.43	20	669.70	39.01	20	1183.1	120.87
30	175.06	2.67	30	678.15	39.99	30	1191.8	122.63
40	183.40	2.93	40	686.60	40.99	40	1200.5	124.41
50	191.74	3.21	50	695.06	42.00	50	1209.2	126.20
4	200.08	3.49	14	703.51	43.03	24	1217.9	128.00
10	208.43	3.79	10	711.97	44.07	10	1226.6	129.82
20	216.77	4.10	20	720.44	45.12	20	1235.3	131.65
30	225.12	4.42	30	728.90	46.18	30	1244.0	133.50
40	233.47	4.76	40	737.37	47.25	40	1252.8	135.35
50	241.81	5.10	50	745.85	48.34	50	1261.5	137.23
5	250.16	5.46	15	754.32	49.44	25	1270.2	139.11
10	258.51	5.83	10	762.80	50.55	10	1279.0	141.01
20	266.86	6.21	20	771.29	51.68	20	1287.7	142.93
30	275.21	6.61	30	779.77	52.89	30	1296.5	144.85
40	283.57	7.01	40	788.26	53.97	40	1305.3	146.79
50	291.92	7.43	50	796.75	55.13	50	1314.0	148.75
6	300.28	7.86	16	805.25	56.31	26	1322.8	150.71
10	308.64	8.31	10	813.75	57.50	10	1331.6	152.69
20	316.99	8.76	20	822.25	58.70	20	1340.4	154.69
30	325.35	9.23	30	830.76	59.91	30	1349.2	156.70
40	333.71	9.71	40	839.27	61.14	40	1358.0	158.72
50	342.08	10.20	50	847.78	62.38	50	1366.8	160.76
7	350.44	10.71	17	856.30	63.63	27	1375.6	162.81
10	358.81	11.22	10	864.82	64.90	10	1384.4	164.86
20	367.17	11.75	20	873.35	66.18	20	1393.2	166.95
30	375.54	12.29	30	881.88	67.47	30	1402.0	169.04
40	383.91	12.85	40	890.41	68.77	40	1410.9	171.15
50	392.28	13.41	50	898.95	70.09	50	1419.7	173.27
8	400.66	13.99	18	907.49	71.42	28	1428.6	175.41
10	409.03	14.58	10	916.03	72.76	10	1437.4	177.55
20	417.41	15.18	20	924.58	74.12	20	1446.3	179.72
30	425.79	15.80	30	933.13	75.49	30	1455.1	181.89
40	434.17	16.43	40	941.69	76.86	40	1464.0	184.08
50	442.55	17.07	50	950.25	78.26	50	1472.9	186.29
9	450.93	17.72	19	958.81	79.67	29	1481.8	188.51
10	459.32	18.38	10	967.38	81.09	10	1490.7	190.74
20	467.71	19.06	20	975.96	82.53	20	1499.6	192.99
30	476.10	19.75	30	984.53	83.97	30	1508.5	195.25
40	484.49	20.45	40	993.12	85.43	40	1517.4	197.53
50	492.88	21.16	50	1001.7	86.90	50	1526.3	199.82
10	501.28	21.89	20	1010.3	88.39	30	1535.3	202.12
10	509.68	22.62	10	1018.9	89.89	10	1544.2	204.44
20	518.08	23.38	20	1027.5	91.40	20	1553.1	206.77
30	526.48	24.14	30	1036.1	92.92	30	1562.1	209.12
40	534.89	24.91	40	1044.7	94.46	40	1571.0	211.48
50	543.29	25.70	50	1053.3	96.01	50	1580.0	213.86

TABLE IV. — Tangents and Externals to a 1° Curve.

Angle	Tangent	External	Angle	Tangent	External	Angle	Tangent	External
31°	1589.0	216.3	41°	2142.2	387.4	51°	2732.9	618.4
10'	1598.0	218.7	10'	2151.7	390.7	10'	2743.1	622.8
20	1606.9	221.1	20	2161.2	394.1	20	2753.4	627.2
30	1615.9	223.5	30	2170.8	397.4	30	2763.7	631.7
40	1624.9	226.0	40	2180.3	400.8	40	2773.9	636.2
50	1633.9	228.4	50	2189.9	404.2	50	2784.2	640.7
32	1643.0	230.9	42	2199.4	407.6	52	2794.5	645.2
10	1652.0	233.4	10	2209.0	411.1	10	2804.9	649.7
20	1661.0	235.9	20	2218.6	414.5	20	2815.2	654.3
30	1670.0	238.4	30	2228.1	418.0	30	2825.6	658.8
40	1679.1	241.0	40	2237.7	421.4	40	2835.9	663.4
50	1688.1	243.5	50	2247.3	425.0	50	2846.3	668.0
33	1697.2	246.1	43	2257.0	428.5	53	2856.7	672.7
10	1706.3	248.7	10	2266.6	432.0	10	2867.1	677.3
20	1715.3	251.3	20	2276.2	435.6	20	2877.5	682.0
30	1724.4	253.9	30	2285.9	439.2	30	2888.0	686.7
40	1733.5	256.5	40	2295.6	442.8	40	2898.4	691.4
50	1742.6	259.1	50	2305.2	446.4	50	2908.9	696.1
34	1751.7	261.8	44	2314.9	450.0	54	2919.4	700.9
10	1760.8	264.5	10	2324.6	453.6	10	2929.9	705.7
20	1770.0	267.2	20	2334.3	457.3	20	2940.4	710.5
30	1779.1	269.9	30	2344.1	461.0	30	2951.0	715.3
40	1788.2	272.6	40	2353.8	464.6	40	2961.5	720.1
50	1797.4	275.3	50	2363.5	468.4	50	2972.1	725.0
35	1806.6	278.1	45	2373.3	472.1	55	2982.7	729.9
10	1815.7	280.8	10	2383.1	475.8	10	2993.3	734.8
20	1824.9	283.6	20	2392.8	479.6	20	3003.9	739.7
30	1834.1	286.4	30	2402.6	483.8	30	3014.5	744.6
40	1843.3	289.2	40	2412.4	487.2	40	3025.2	749.6
50	1852.5	292.0	50	2422.3	491.0	50	3035.8	754.6
36	1861.7	294.9	46	2432.1	494.8	56	3046.5	759.6
10	1870.9	297.7	10	2441.9	498.7	10	3057.2	764.6
20	1880.1	300.6	20	2451.8	502.5	20	3067.9	769.7
30	1889.4	303.5	30	2461.7	506.4	30	3078.7	774.7
40	1898.6	306.4	40	2471.5	510.3	40	3089.4	779.8
50	1907.9	309.3	50	2481.4	514.3	50	3100.2	784.9
37	1917.1	312.2	47	2491.3	518.2	57	3110.9	790.1
10	1926.4	315.2	10	2501.2	522.2	10	3121.7	795.2
20	1935.7	318.1	20	2511.2	526.1	20	3132.6	800.4
30	1945.0	321.1	30	2521.1	530.1	30	3143.4	805.6
40	1954.3	324.1	40	2531.1	534.2	40	3154.2	810.9
50	1963.6	327.1	50	2541.0	538.2	50	3165.1	816.1
38	1972.9	330.2	48	2551.0	542.2	58	3176.0	821.4
10	1982.2	333.2	10	2561.0	546.3	10	3186.9	826.7
20	1991.5	336.3	20	2571.0	550.4	20	3197.8	832.0
30	2000.9	339.3	30	2581.0	554.5	30	3208.8	837.3
40	2010.2	342.4	40	2591.0	558.6	40	3219.7	842.7
50	2019.6	345.5	50	2601.1	562.8	50	3230.7	848.1
39	2029.0	348.6	49	2611.2	566.9	59	3241.7	853.5
10	2038.4	351.8	10	2621.2	571.1	10	3252.7	858.9
20	2047.8	354.9	20	2631.3	575.3	20	3263.7	864.3
30	2057.2	358.1	30	2641.4	579.5	30	3274.8	869.8
40	2066.6	361.3	40	2651.5	583.8	40	3285.8	875.3
50	2076.0	364.5	50	2661.6	588.0	50	3296.9	880.8
40	2085.4	367.7	50	2671.8	592.3	60	3308.0	886.4
10	2094.9	371.0	10	2681.9	596.6	10	3319.1	892.0
20	2104.3	374.2	20	2692.1	600.9	20	3330.3	897.5
30	2113.8	377.5	30	2702.3	605.3	30	3341.4	903.2
40	2123.3	380.8	40	2712.5	609.6	40	3352.6	908.8
50	2132.7	384.1	50	2722.7	614.0	50	3363.8	914.5

TABLE IV. — Tangents and Externals to a 1° Curve.

Angle	Tangent	External	Angle	Tangent	External	Angle	Tangent	External
61°	3375.0	920.2	71°	4086.9	1308.2	81°	4893.6	1805.3
10'	3386.3	925.9	10'	4099.5	1315.6	10'	4908.0	1814.7
20	3397.5	931.6	20	4112.1	1322.9	20	4922.5	1824.1
30	3408.8	937.3	30	4124.8	1330.3	30	4937.0	1833.6
40	3420.1	943.1	40	4137.4	1337.7	40	4951.5	1843.1
50	3431.4	948.9	50	4150.1	1345.1	50	4966.1	1852.6
62	3442.7	954.8	72	4162.8	1352.6	82	4980.7	1862.2
10	3454.1	960.6	10	4175.6	1360.1	10	4995.4	1871.8
20	3465.4	966.5	20	4188.5	1367.6	20	5010.0	1881.5
30	3476.8	972.4	30	4201.2	1375.2	30	5024.8	1891.2
40	3488.3	978.3	40	4214.0	1382.8	40	5039.5	1900.9
50	3499.7	984.3	50	4226.8	1390.4	50	5054.3	1910.7
63	3511.1	990.2	73	4239.7	1398.0	83	5069.2	1920.5
10	3522.6	996.2	10	4252.6	1405.7	10	5084.0	1930.4
20	3534.1	1002.3	20	4265.6	1413.5	20	5099.0	1940.3
30	3545.6	1008.3	30	4278.5	1421.2	30	5113.9	1950.3
40	3557.2	1014.4	40	4291.5	1429.0	40	5128.9	1960.2
50	3568.7	1020.5	50	4304.6	1436.8	50	5143.9	1970.3
64	3580.3	1026.6	74	4317.6	1444.6	84	5159.0	1980.4
10	3591.9	1032.8	10	4330.7	1452.5	10	5174.1	1990.5
20	3603.5	1039.0	20	4343.8	1460.4	20	5189.3	2000.6
30	3615.1	1045.2	30	4356.9	1468.4	30	5204.4	2010.8
40	3626.8	1051.4	40	4370.1	1476.4	40	5219.7	2021.1
50	3638.5	1057.7	50	4383.3	1484.4	50	5234.9	2031.4
65	3650.2	1063.9	75	4396.5	1492.4	85	5250.3	2041.7
10	3661.9	1070.2	10	4409.8	1500.5	10	5265.6	2052.1
20	3673.7	1076.6	20	4423.1	1508.6	20	5281.0	2062.5
30	3685.4	1082.9	30	4436.4	1516.7	30	5296.4	2073.0
40	3697.2	1089.3	40	4449.7	1524.9	40	5311.9	2083.5
50	3709.0	1095.7	50	4463.1	1533.1	50	5327.4	2094.1
66	3720.9	1102.2	76	4476.5	1541.4	86	5343.0	2104.7
10	3732.7	1108.6	10	4489.9	1549.7	10	5358.6	2115.3
20	3744.6	1115.1	20	4503.4	1558.0	20	5374.2	2126.0
30	3756.5	1121.7	30	4516.9	1566.3	30	5389.9	2136.7
40	3768.5	1128.2	40	4530.4	1574.7	40	5405.6	2147.5
50	3780.4	1134.8	50	4544.0	1583.1	50	5421.4	2158.4
67	3792.4	1141.4	77	4557.6	1591.6	87	5437.2	2169.2
10	3804.4	1148.0	10	4571.2	1600.1	10	5453.1	2180.2
20	3816.4	1154.7	20	4584.8	1608.6	20	5469.0	2191.1
30	3828.4	1161.3	30	4598.5	1617.1	30	5484.9	2202.2
40	3840.5	1168.1	40	4612.2	1625.7	40	5500.9	2213.2
50	3852.6	1174.8	50	4626.0	1634.4	50	5517.0	2224.3
68	3864.7	1181.6	78	4639.8	1643.0	88	5533.1	2235.5
10	3876.8	1188.4	10	4653.6	1651.7	10	5549.2	2246.7
20	3889.0	1195.2	20	4667.4	1660.5	20	5565.4	2258.0
30	3901.2	1202.0	30	4681.3	1669.2	30	5581.6	2269.3
40	3913.4	1208.9	40	4695.2	1678.1	40	5597.8	2280.6
50	3925.6	1215.8	50	4709.2	1686.9	50	5614.2	2292.0
69	3937.9	1222.7	79	4723.2	1695.8	89	5630.5	2303.5
10	3950.2	1229.7	10	4737.2	1704.7	10	5646.9	2315.0
20	3962.5	1236.7	20	4751.2	1713.7	20	5663.4	2326.6
30	3974.8	1243.7	30	4765.3	1722.7	30	5679.9	2338.2
40	3987.2	1250.8	40	4779.4	1731.7	40	5696.4	2349.8
50	3999.5	1257.9	50	4793.6	1740.8	50	5713.0	2361.5
70	4011.9	1265.0	80	4807.7	1749.9	90	5729.7	2373.3
10	4024.4	1272.1	10	4822.0	1759.0	10	5746.3	2385.1
20	4036.8	1279.3	20	4836.2	1768.2	20	5763.1	2397.0
30	4049.3	1286.5	30	4850.5	1777.4	30	5779.9	2408.9
40	4061.8	1293.6	40	4864.8	1786.7	40	5796.7	2420.9
50	4074.4	1300.9	50	4879.2	1796.0	50	5813.6	2432.9

TABLE IV. — Tangents and Externals to a 1° Curve.

Angle	Tangent	External	Angle	Tangent	External	Angle	Tangent	External
91°	5830.5	2444.9	101°	6950.6	3278.1	111°	8336.7	4386.1
10'	5847.5	2457.1	10'	6971.3	3294.1	10'	8362.7	4407.6
20	5864.6	2469.3	20	6992.0	3310.1	20	8388.9	4429.2
30	5881.7	2481.5	30	7012.7	3326.1	30	8415.1	4450.9
40	5898.8	2493.8	40	7033.6	3342.3	40	8441.5	4472.7
50	5916.0	2506.1	50	7054.5	3358.5	50	8468.0	4494.6
92	5933.2	2518.5	102	7075.5	3374.9	112	8494.6	4516.6
10	5950.5	2531.0	10	7096.6	3391.2	10	8521.3	4538.8
20	5967.9	2543.5	20	7117.8	3407.7	20	8548.1	4561.1
30	5985.3	2556.0	30	7139.0	3424.3	30	8575.0	4583.4
40	6002.7	2568.6	40	7160.3	3440.9	40	8602.1	4606.0
50	6020.2	2581.3	50	7181.7	3457.6	50	8629.3	4628.6
93	6037.8	2594.0	103	7203.2	3474.4	113	8656.6	4651.3
10	6055.4	2606.8	10	7224.7	3491.3	10	8684.0	4674.2
20	6073.1	2619.7	20	7246.3	3508.2	20	8711.5	4697.2
30	6090.8	2632.6	30	7268.0	3525.2	30	8739.2	4720.3
40	6108.6	2645.5	40	7289.8	3542.4	40	8767.0	4743.6
50	6126.4	2658.5	50	7311.7	3559.6	50	8794.9	4766.9
94	6144.3	2671.6	104	7333.6	3576.8	114	8822.9	4790.4
10	6162.6	2684.7	10	7355.6	3594.2	10	8851.0	4814.1
20	6180.2	2697.9	20	7377.8	3611.7	20	8879.3	4837.8
30	6198.3	2711.2	30	7399.9	3629.2	30	8907.7	4861.7
40	6216.4	2724.5	40	7422.2	3646.8	40	8936.3	4885.7
50	6234.6	2737.9	50	7444.6	3664.5	50	8965.0	4909.9
95	6252.8	2751.3	105	7467.0	3682.3	115	8993.8	4934.1
10	6271.1	2764.8	10	7489.6	3700.2	10	9022.7	4958.6
20	6289.4	2778.3	20	7512.2	3718.2	20	9051.7	4983.1
30	6307.9	2792.0	30	7534.9	3736.2	30	9080.9	5007.8
40	6326.3	2805.6	40	7557.7	3754.4	40	9110.3	5032.6
50	6344.8	2819.4	50	7580.5	3772.6	50	9139.8	5057.6
96	6363.4	2833.2	106	7603.5	3791.0	116	9169.4	5082.7
10	6382.1	2847.0	10	7626.6	3809.4	10	9199.1	5107.9
20	6400.8	2861.0	20	7649.7	3827.9	20	9229.0	5133.3
30	6419.5	2875.0	30	7672.9	3846.5	30	9259.0	5158.8
40	6438.4	2889.0	40	7696.3	3865.2	40	9289.2	5184.5
50	6457.3	2903.1	50	7719.7	3884.0	50	9319.5	5210.3
97	6476.2	2917.3	107	7743.2	3902.9	117	9349.9	5236.2
10	6495.2	2931.6	10	7766.8	3921.9	10	9380.5	5262.3
20	6514.3	2945.9	20	7790.5	3940.9	20	9411.3	5288.6
30	6533.4	2960.3	30	7814.3	3960.1	30	9442.2	5315.0
40	6552.6	2974.7	40	7838.1	3979.4	40	9473.2	5341.5
50	6571.9	2989.2	50	7862.1	3998.7	50	9504.4	5368.2
98	6591.2	3003.8	108	7886.2	4018.2	118	9535.7	5395.1
10	6610.6	3018.4	10	7910.4	4037.8	10	9567.2	5422.1
20	6630.1	3033.1	20	7934.6	4057.4	20	9598.9	5449.2
30	6649.6	3047.9	30	7959.0	4077.2	30	9630.7	5476.5
40	6669.2	3062.8	40	7983.5	4097.1	40	9662.6	5504.0
50	6688.8	3077.7	50	8008.0	4117.0	50	9694.7	5531.7
99	6708.6	3092.7	109	8032.7	4137.1	119	9727.0	5559.4
10	6728.4	3107.7	10	8057.4	4157.3	10	9759.4	5587.4
20	6748.2	3122.9	20	8082.3	4177.5	20	9792.0	5615.5
30	6768.1	3138.1	30	8107.3	4197.9	30	9824.8	5643.8
40	6788.1	3153.3	40	8132.3	4218.4	40	9857.7	5672.3
50	6808.2	3168.7	50	8157.5	4239.0	50	9890.8	5700.9
100	6828.3	3184.1	110	8182.8	4259.7	120	9924.0	5729.7
10	6848.5	3199.6	10	8208.2	4280.5	10	9957.5	5758.6
20	6868.8	3215.1	20	8233.7	4301.4	20	9991.0	5787.7
30	6889.2	3230.8	30	8259.3	4322.4	30	10025.0	5817.0
40	6909.6	3246.5	40	8285.0	4343.6	40	10059.0	5846.5
50	6930.1	3262.3	50	8310.8	4364.8	50	10093.0	5876.1

Table V. Corrections for use with table IV,

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For Tangents Add															
ANGLE	CURVE	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°		.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.38	.42	.46
15°		.04	.10	.14	.19	.24	.29	.34	.39	.45	.51	.53	.58	.63	.68
20°		.06	.13	.19	.26	.32	.39	.45	.51	.58	.65	.72	.79	.84	.90
25°		.08	.16	.24	.33	.40	.49	.58	.67	.75	.83	.90	.99	1.06	1.14
30°		.10	.19	.29	.39	.49	.59	.69	.79	.89	.99	1.09	1.20	1.29	1.39
35°		.11	.22	.34	.47	.58	.69	.79	.81	.92	1.04	1.29	1.42	1.54	1.66
40°		.13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°		.15	.30	.44	.60	.76	.91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°		.17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°		.19	.38	.57	.76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°		.21	.42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°		.23	.46	.69	.93	1.16	1.40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°		.25	.51	.76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°		.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°		.30	.61	.91	1.22	1.53	1.84	2.15	2.46	2.78	3.10	3.44	3.78	4.12	4.46
85°		.33	.66	1.00	1.33	1.68	2.02	2.36	2.70	3.05	3.40	3.77	4.14	4.55	4.89
90°		.36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32
95°		.39	.79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.49	4.98	5.38	5.83
100°		.43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34

For Externals Add

ANGLE	CURVE	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°		.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°		.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051
20°		.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°		.009	.018	.027	.036	.046	.056	.065	.074	.083	.093	.106	.120	.127	.135
30°		.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°		.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°		.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°		.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°		.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°		.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°		.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°		.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.771	.845	.922	1.01
70°		.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°		.095	.182	.286	.383	.480	.578	.678	.777	.877	.977	1.07	1.18	1.29	1.39
80°		.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°		.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°		.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°		.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°		.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96

Table VI. Deflections for Sub Chords for Short Radius Curves.

Degree of Curve	Radius 50 sin. def. ang.	$\frac{1}{2}$ sub chord R = sin of def. angle				Length of arc for 100 ft.
		12.5 Ft.	15 Ft.	20 Ft.	25 Ft.	
30°	193.18	1° 51'	2° 17'	2° 58'	3° 43'	101.15
32°	181.39	1° 59'	2° 25'	3° 10'	3° 58'	101.33
34°	171.01	2° 06'	2° 33'	3° 21'	4° 12'	101.48
36°	161.80	2° 13'	2° 41'	3° 33'	4° 26'	101.66
38°	153.58	2° 20'	2° 49'	3° 44'	4° 40'	101.85
40°	146.19	2° 27'	2° 57'	3° 55'	4° 54'	102.06
42°	139.52	2° 34'	3° 05'	4° 07'	5° 08'	102.29
44°	133.47	2° 41'	3° 13'	4° 18'	5° 22'	102.53
46°	127.97	2° 48'	3° 21'	4° 29'	5° 36'	102.76
48°	122.92	2° 55'	3° 29'	4° 40'	5° 50'	103.00
50°	118.31	3° 02'	3° 38'	4° 51'	6° 04'	103.24
52°	114.06	3° 09'	3° 46'	5° 02'	6° 17'	103.54
54°	110.11	3° 16'	3° 54'	5° 13'	6° 31'	103.84
56°	106.50	3° 22'	4° 02'	5° 23'	6° 44'	104.14
58°	103.14	3° 29'	4° 10'	5° 34'	6° 57'	104.43
60°	100.00	3° 35'	4° 18'	5° 44'	7° 11'	104.72

CURVE FORMULAS.

$T = R \tan \frac{1}{2} I$	$R = T \cot. \frac{1}{2} I$	Chord def. = $\frac{\text{chord}^2}{R}$
$T = \frac{50 \tan. \frac{1}{2} I}{\text{Sin. D}}$	$R = \frac{50}{\text{Sin. D}}$	No. chords = $\frac{\frac{1}{2} I}{D}$
$\text{Sin. D} = \frac{50}{R}$	$E = R \text{ ex. sec. } \frac{1}{2} I$	Tan. def. = $\frac{1}{2}$ chord def.
$\text{Sin. D} = \frac{50 \tan. \frac{1}{2} I}{T}$	$E = T \tan \frac{1}{4} I$	

The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

Table IV. contains Tangents and External to a 1° curve. Tan. and Ext. to any other radius may be found. nearly enough, by dividing the Tan. or Ext. opposite the given Central Angle by the given degree of curve.

To find Deg. of Curve, having the Central Angle and Tangent: Divide Tan. opposite the given Central Angle by the given Tangent.

To find Deg. of Curve, having the Central Angle and Tangent: Divide Ext. opposite the given Central Angle by the given External.

To find. Nat. Tan. and Nat. Ex. Sec. for any angle by Table IV.: Tan. or Ext. of twice the given angle divided by the radius of a 1° curve will be the Nat. Tan. or Nat. Ex. Sec.

To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for 1° for 1 ft.), and divide given deflection by the product.

Rule 2. Multiply given deflection by 57.3, and divide the product by the given distance.

To find deflection for a given angle and distance: Multiply the angle by .01745, and the product by the distance.

RIGHT ANGLE TRIANGLES.—Square the altitude, divide by twice the base. Add quotient to base for hypotenuse.

Given Base 100, Alt 10. $10^2 \div 200 = .5$. $100 + .5 = 100.5$ hyp.

Given Hyp. 100, Alt. 25. $25^2 \div 200 = 3.125$. $100 - 3.125 = 96.875 =$ Base.

Error in first example, .002; in last, .045.

To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

Natural Sines

DEG.	0'	10'	20'	30'	40'	50'	DEG.	DEG.	0'	10'	20'	30'	40'	50'	DEG.
0	0000	0029	0058	0087	0116	0145	89	40	6428	6450	6472	6494	6517	6539	49
1	0175	0204	0233	0262	0291	0320	88	41	6561	6583	6604	6626	6648	6670	48
2	0349	0378	0407	0436	0465	0494	87	42	6691	6713	6734	6756	6777	6799	47
3	0523	0552	0581	0610	0640	0669	86	43	6820	6841	6862	6884	6905	6926	46
4	0698	0727	0756	0785	0814	0843	85	44	6947	6967	6988	7009	7030	7050	45
5	0872	0901	0929	0958	0987	1016	84	45	7071	7092	7112	7133	7153	7173	44
6	1045	1074	1103	1132	1161	1190	83	46	7193	7214	7234	7254	7274	7294	43
7	1219	1248	1279	1305	1334	1363	82	47	7314	7333	7353	7373	7392	7412	42
8	1392	1421	1449	1478	1507	1536	81	48	7431	7451	7470	7490	7509	7528	41
9	1564	1593	1622	1650	1679	1708	80	49	7547	7566	7585	7604	7623	7642	40
10	1736	1765	1794	1822	1851	1880	79	50	7660	7679	7698	7716	7735	7753	39
11	1908	1937	1965	1994	2022	2051	78	51	7771	7790	7808	7826	7844	7862	38
12	2079	2108	2136	2164	2193	2221	77	52	7880	7898	7916	7934	7951	7969	37
13	2250	2278	2306	2334	2363	2391	76	53	7986	8004	8021	8039	8056	8073	36
14	2419	2447	2476	2504	2532	2560	75	54	8090	8107	8124	8141	8158	8175	35
15	2588	2616	2644	2672	2700	2728	74	55	8192	8208	8225	8241	8258	8274	34
16	2756	2784	2812	2840	2868	2896	73	56	8290	8307	8323	8339	8355	8371	33
17	2924	2952	2939	3007	3035	3062	72	57	8387	8403	8418	8434	8450	8465	32
18	3090	3118	3145	3173	3201	3228	71	58	8480	8496	8511	8526	8542	8557	31
19	3256	3283	3311	3338	3365	3393	70	59	8572	8587	8601	8616	8631	8646	30
20	3420	3448	3475	3502	3529	3557	69	60	8660	8675	8689	8704	8718	8732	29
21	3584	3611	3638	3665	3692	3719	68	61	8746	8760	8774	8788	8802	8816	28
22	3746	3773	3800	3827	3854	3881	67	62	8829	8843	8857	8870	8884	8897	27
23	3907	3934	3961	3987	4014	4041	66	63	8910	8923	8936	8949	8962	8975	26
24	4067	4094	4120	4147	4173	4200	65	64	8988	9001	9013	9026	9038	9051	25
25	4226	4253	4279	4305	4331	4358	64	65	9063	9075	9088	9100	9112	9124	24
26	4384	4410	4436	4462	4488	4514	63	66	9135	9147	9159	9171	9182	9194	23
27	4540	4566	4592	4617	4643	4669	62	67	9205	9216	9228	9239	9250	9261	22
28	4695	4720	4746	4772	4797	4823	61	68	9272	9283	9293	9304	9315	9325	21
29	4848	4874	4899	4924	4950	4975	60	69	9336	9346	9356	9367	9377	9387	20
30	5000	5025	5050	5075	5100	5125	59	70	9397	9407	9417	9426	9436	9446	19
31	5150	5175	5200	5225	5250	5275	58	71	9455	9465	9474	9483	9492	9502	18
32	5299	5324	5348	5373	5398	5422	57	72	9511	9520	9528	9537	9546	9555	17
33	5446	5471	5495	5519	5544	5568	56	73	9563	9572	9580	9588	9596	9605	16
34	5592	5616	5640	5664	5688	5712	55	74	9613	9621	9628	9636	9644	9652	15
35	5736	5760	5783	5807	5831	5854	54	75	9659	9667	9674	9681	9689	9696	14
36	5878	5901	5925	5948	5972	5995	53	76	9703	9710	9717	9724	9730	9737	13
37	6018	6041	6065	6088	6111	6134	52	77	9744	9750	9757	9763	9769	9775	12
38	6157	6180	6202	6225	6248	6271	51	78	9781	9787	9793	9799	9805	9811	11
39	6293	6316	6338	6361	6383	6406	50	79	9816	9822	9827	9833	9838	9843	10
DEG.	60'	50'	40'	30'	20'	10'	DEG.	DEG.	60'	50'	40'	30'	20'	10'	DEG.

DEG.	0'	10'	20'	30'	40'	50'	DEG.
80	98.48	98.53	98.58	98.63	98.68	98.72	9
81	98.77	98.81	98.86	98.90	98.94	98.99	8
82	99.03	99.07	99.11	99.14	99.18	99.22	7
83	99.25	99.29	99.32	99.36	99.39	99.42	6
84	99.45	99.48	99.51	99.54	99.57	99.59	5
85	99.62	99.64	99.67	99.69	99.71	99.74	4
86	99.76	99.78	99.80	99.81	99.83	99.85	3
87	99.86	99.88	99.89	99.90	99.92	99.93	2
88	99.94	99.95	99.96	99.97	99.97	99.98	1
89	99.98	99.99	99.99	99.99	I.0000	I.0000	0
DEG.	60'	50'	40'	30'	20'	10'	DEG.

Natural Cosines

Natural Tangents

DEG.	0'	10'	20'	30'	40'	50'	DEG.	0'	10'	20'	30'	40'	50'	DEG.	
0	0000	0029	0058	0087	0116	0145	89	40	8391	8441	8491	8541	8591	8642	49
1	0175	0204	0233	0262	0291	0320	88	41	8693	8744	8796	8847	8899	8952	48
2	0349	0378	0407	0437	0466	0495	87	42	9004	9057	9110	9163	9217	9271	47
3	0524	0553	0582	0612	0641	0670	86	43	9325	9380	9435	9490	9545	9601	46
4	0699	0729	0758	0787	0816	0846	85	44	9657	9713	9770	9827	9884	9942	45
5	0875	0904	0934	0963	0992	1022	84	45	1.0000	1.0058	1.0117	1.0176	1.0235	1.0295	44
6	1051	1080	1110	1139	1169	1198	83	46	1.0355	1.0416	1.0477	1.0533	1.0599	1.0661	43
7	1228	1257	1287	1317	1346	1376	82	47	1.0724	1.0786	1.0850	1.0913	1.0977	1.1041	42
8	1405	1435	1465	1495	1524	1554	81	48	1.1106	1.1171	1.1237	1.1303	1.1369	1.1436	41
9	1584	1614	1644	1673	1703	1733	80	49	1.1504	1.1571	1.1640	1.1708	1.1778	1.1847	40
10	1763	1793	1823	1853	1883	1914	79	50	1.1918	1.1988	1.2059	1.2131	1.2203	1.2276	39
11	1944	1974	2004	2035	2065	2095	78	51	1.2349	1.2423	1.2497	1.2572	1.2647	1.2723	38
12	2126	2156	2186	2217	2247	2278	77	52	1.2799	1.2876	1.2954	1.3032	1.3111	1.3190	37
13	2309	2339	2370	2401	2432	2462	76	53	1.3270	1.3351	1.3435	1.3514	1.3597	1.3680	36
14	2493	2524	2555	2586	2617	2648	75	54	1.3764	1.3848	1.3934	1.4019	1.4106	1.4193	35
15	2679	2711	2742	2773	2805	2836	74	55	1.4281	1.4370	1.4460	1.4550	1.4641	1.4735	34
16	2867	2899	2931	2962	2994	3026	73	56	1.4826	1.4919	1.5013	1.5108	1.5204	1.5301	33
17	3057	3089	3121	3153	3185	3217	72	57	1.5399	1.5497	1.5597	1.5697	1.5798	1.5900	32
18	3249	3281	3314	3346	3378	3411	71	58	1.6003	1.6107	1.6212	1.6319	1.6426	1.6534	31
19	3443	3476	3508	3541	3574	3607	70	59	1.6643	1.6753	1.6864	1.6977	1.7090	1.7205	30
20	3640	3673	3706	3739	3772	3805	69	60	1.7321	1.7437	1.7556	1.7675	1.7797	1.7917	29
21	3839	3872	3906	3939	3973	4006	68	61	1.8040	1.8165	1.8291	1.8418	1.8546	1.8676	28
22	4040	4074	4108	4142	4176	4210	67	62	1.8807	1.8940	1.9074	1.9210	1.9347	1.9486	27
23	4245	4279	4314	4348	4383	4417	66	63	1.9626	1.9768	1.9912	2.0057	2.0204	2.0353	26
24	4452	4487	4522	4557	4592	4628	65	64	2.0503	2.0655	2.0809	2.0965	2.1123	2.1283	25
25	4663	4699	4734	4770	4806	4841	64	65	2.1445	2.1609	2.1775	2.1943	2.2113	2.2286	24
26	4877	4913	4950	4986	5022	5059	63	66	2.2460	2.2637	2.2817	2.2998	2.3183	2.3369	23
27	5095	5132	5169	5206	5243	5280	62	67	2.3559	2.3750	2.3945	2.4142	2.4342	2.4545	22
28	5317	5354	5392	5430	5467	5505	61	68	2.4751	2.4960	2.5172	2.5386	2.5605	2.5826	21
29	5543	5581	5619	5658	5696	5735	60	69	2.6051	2.6279	2.6511	2.6746	2.6985	2.7228	20
30	5774	5812	5851	5890	5930	5969	59	70	2.7475	2.7725	2.7980	2.8239	2.8502	2.8770	19
31	6009	6048	6088	6128	6168	6208	58	71	2.9042	2.9319	2.9600	2.9887	3.0178	3.0475	18
32	6249	6289	6330	6371	6412	6453	57	72	3.0777	3.1084	3.1397	3.1716	3.2041	3.2371	17
33	6494	6536	6577	6619	6661	6703	56	73	3.2709	3.3052	3.3402	3.3759	3.4124	3.4495	16
34	6745	6787	6830	6873	6916	6959	55	74	3.4874	3.5261	3.5656	3.6059	3.6470	3.6891	15
35	7002	7046	7089	7133	7177	7221	54	75	3.7321	3.7760	3.8208	3.8657	3.9136	3.9617	14
36	7265	7310	7355	7400	7445	7490	53	76	4.0108	4.0611	4.1126	4.1653	4.2193	4.2747	13
37	7536	7581	7627	7673	7720	7766	52	77	4.3315	4.3897	4.4494	4.5107	4.5736	4.6382	12
38	7813	7860	7907	7954	8002	8050	51	78	4.7046	4.7729	4.8430	4.9152	4.9894	5.0658	11
39	8098	8146	8195	8243	8292	8342	50	79	5.1446	5.2257	5.3093	5.3955	5.4845	5.5764	10
40	60'	50'	40'	30'	20'	10'	DEG.	DEG.	60'	50'	40'	30'	20'	10'	DEG.
	DEG.	0'	10'	20'	30'	40'	DEG.	DEG.	60'	50'	40'	30'	20'	10'	DEG.
	80	5.6713	5.7694	5.8708	5.9758	6.0844	6.1970	90							
	81	6.3138	6.4348	6.5606	6.6912	6.8269	6.9682	8							
	82	7.1154	7.2687	7.4287	7.5958	7.7704	7.9530	7							
	83	8.1443	8.3450	8.5555	8.7769	9.0089	9.2553	6							
	84	9.5144	9.7882	10.078	10.385	10.711	11.059	5							
	85	11.430	11.826	12.250	12.706	13.197	13.727	4							
	86	14.300	14.924	15.605	16.350	17.169	18.075	3							
	87	19.081	20.206	21.470	22.903	24.542	26.432	2							
	88	28.636	31.242	34.368	38.189	42.964	49.104	1							
	89	57.290	68.750	85.940	114.588	171.885	343.770	0							
	DEG.	60'	50'	40'	30'	20'	10'	DEG.							

Natural Cotangents

11 11
11
11
11

11

913+10 Beg. of F. 30.5 L.

915 33 L

916 33.5 L

918 36.8 L

918+85 End of F. 38 L.

921+15 Beg. of F. 40.4 L

922 41.5 L

923+10 End of F. 40.5 L

925+12 Beg. of F. 39 L.

926 F. 37.5 L.

928+00 End of F. 33.8 L.

982+20 Beg. of F. 31.5 L.

same locat. from here on

940+34 Beg. of F. 37 L.

961+74 End of F. 37 L.

6

65

75

26

365

15

1825

365

1870

Clay Pit Borrow

Xsections.

0+00 to 4+00

From Ment Co Rd D

Left of Co. Rd. D.

C.W.S.

DS

AB

T.M

4/20/27

Sta	+	HI	-	Elev.
B.M.	9.14	309.14		300.00
0+00				96.3
+28				97.1
+70				97.8
+90				98.1
1+00				98.5
+25				99.1
+50				99.4
2+00				00.1
+50				00.7
T.P.	1.40	306.39	4.15	304.99
3+00				00.7
+15				00.8

Left.

spike in P.P. opposite Mont.

ft.

<u>145</u>	<u>114</u>	<u>148</u>	<u>144</u>	<u>130</u>	<u>128</u>
37	36	22	17	140	

<u>120</u>	<u>96</u>	<u>73</u>	<u>75</u>	<u>130</u>	<u>136</u>	<u>132</u>	<u>120</u>	<u>120</u>
41	31	29	28	26	23	17	14	

<u>10.5</u>	<u>93</u>	<u>114</u>	<u>114</u>	<u>107</u>	<u>103</u>	<u>133</u>	<u>130</u>	<u>115</u>	<u>113</u>
60	49	47	45	43	27	23	17	14	

<u>9.5</u>	<u>87</u>	<u>7.8</u>	<u>76</u>	<u>96</u>	<u>116</u>	<u>116</u>	<u>107</u>	<u>105</u>	<u>130</u>	<u>127</u>	<u>112</u>	<u>120</u>
72	63	62	58	55	54	52	50	27	23	17	14	

<u>94</u>	<u>86</u>	<u>90</u>	<u>112</u>	<u>115</u>	<u>110</u>	<u>103</u>	<u>116</u>	<u>128</u>	<u>122</u>	<u>110</u>	<u>106</u>
73	67	62	59	57	55	27	26	23	16	14	

<u>117</u>	<u>104</u>	<u>106</u>	<u>116</u>	<u>112</u>	<u>108</u>	<u>110</u>	<u>102</u>	<u>123</u>	<u>115</u>	<u>104</u>	<u>100</u>
88	77	71	68	66	50	40	28	24	16	14	

<u>126</u>	<u>110</u>	<u>112</u>	<u>125</u>	<u>120</u>	<u>118</u>	<u>116</u>	<u>24</u>	<u>23</u>	<u>122</u>	<u>112</u>	<u>102</u>	<u>97</u>
90	82	78	76	74	45	42	35	34	24	17	14	

175
720

<u>163</u>	<u>138</u>	<u>133</u>	<u>145</u>	<u>135</u>	<u>130</u>	<u>125</u>	<u>133</u>	<u>70</u>	<u>60</u>	<u>51</u>	<u>38</u>	<u>112</u>	<u>104</u>	<u>94</u>	<u>90</u>
109	114	100	98	95	70	66	65	59	52	50	33	24	17	14	

<u>192</u>	<u>176</u>	<u>154</u>	<u>150</u>	<u>140</u>	<u>150</u>	<u>151</u>	<u>96</u>	<u>86</u>	<u>77</u>	<u>65</u>	<u>43</u>	<u>110</u>	<u>102</u>	<u>92</u>	<u>84</u>
133	123	117	114	88	84	80	74	66	64	50	51	24	16	13	

<u>185</u>	<u>155</u>	<u>135</u>	<u>130</u>	<u>140</u>	<u>140</u>	<u>74</u>	<u>64</u>	<u>48</u>	<u>28</u>	<u>0.7</u>	<u>73</u>	<u>70</u>	<u>60</u>	<u>57</u>
145	140	130	106	104	104	94	89	85	50	30	23	17	12	

<u>200</u>	<u>176</u>	<u>160</u>	<u>142</u>	<u>138</u>	<u>147</u>	<u>150</u>	<u>90</u>	<u>70</u>	<u>60</u>	<u>20</u>	<u>80</u>	<u>67</u>	<u>60</u>	<u>56</u>
160	150	148	141	113	111	109	100	95	92	49	37	21	17	

5+9

+

H I
306.39

-

Elev

3+43

00.8

+75

01.1

4+00

01.4

BM

638 300.01

1+60

2+00

+50

3+00

Left. ♀

<u>195</u>	<u>176</u>	<u>168</u>	<u>152</u>	<u>140</u>	<u>122</u>	<u>152</u>	<u>92</u>	<u>74</u>	<u>72</u>	<u>53</u>	<u>88</u>	<u>83</u>	<u>65</u>	<u>56</u>
170	160	158	153	125	122	120	113	105	100	85	75	60	54	

<u>207</u>	<u>190</u>	<u>163</u>	<u>152</u>	<u>160</u>	<u>160</u>	<u>145</u>	<u>123</u>	<u>148</u>	<u>77</u>	<u>68</u>	<u>53</u>
183	179	168	139	137	134	131	125	114	100	50	

<u>209</u>	<u>194</u>	<u>185</u>	<u>175</u>	<u>160</u>	<u>82</u>	<u>74</u>	<u>67</u>	<u>50</u>
199	194	183	180	153	129	100	50	

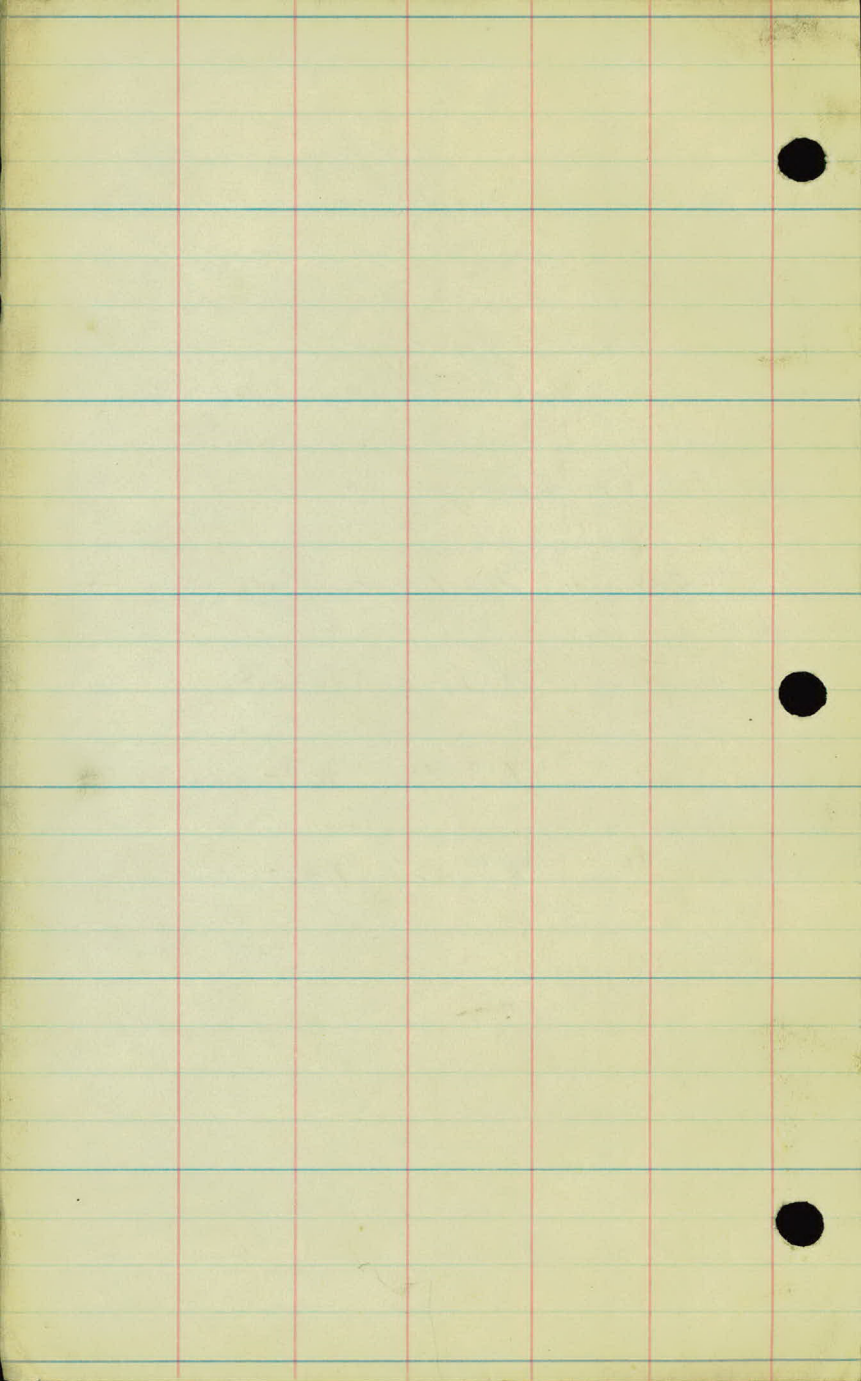
1' stripping

Sample No. 1 out 34' out ♀

" " No. 2 out 50' out ♀

" " No. 3 40' No. 3A 60' out ♀

" " No. 4 32' No. 4A 85' out ♀



7.3
7.4
20 ft
25 ft
11.1

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

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

FOR SINGLE TRACK EMBANKMENT.

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

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

MADE IN GERMANY.

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