

BRUCE L. F.
RANNEY CIVIL ENGINEER

CONSTRUCTION NOTES

ANDICA CUT-OFF

CO. 100. 119 16-92

FEB 19

ENGINEER'S

FIELD BOOK

No. 10205

DIV. 1

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

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

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

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

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Decl

Beckhoff. 1010+90 to 1017+95 ft

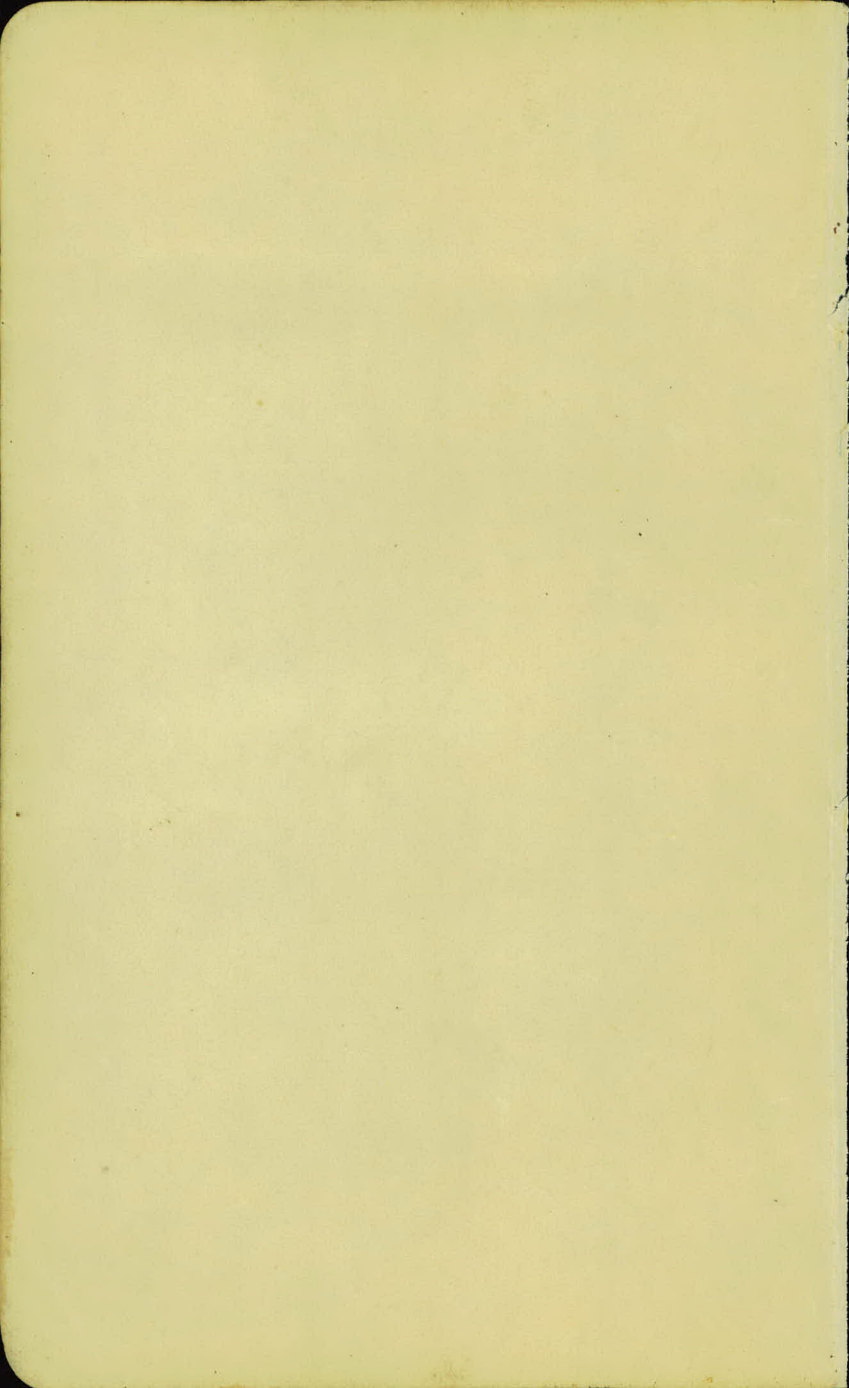
1016+50 1017+08 ft
0 2

1024 ft. 2.5'

883.17 Top of Hyd. Cross 51.8 5th Ave.
1.49
H.I. 884.66
4.87

879.79 = Top of Manhole 1079+15 ft.

884.66
5.31
879.35 = Top of Manhole 1080+70 ft.



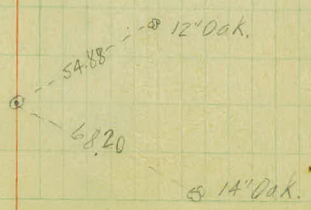
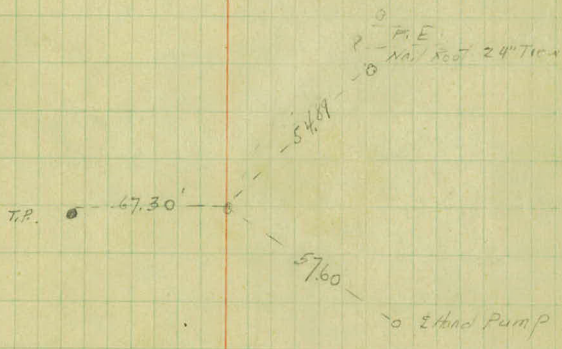
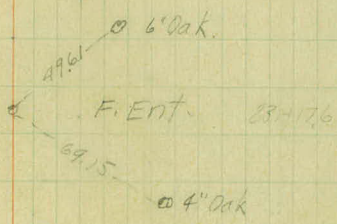
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1070+95 1083+83	Original X Sections	36 39
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840 860	Reset Slope Stakes Gr. Change	58 59
1027 1038	Reset Slope Stakes Gr. Change	60
	Location of Borrow Pit #1.	62
	Original X Sec. Borrow Pit #1.	63
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	Original X Sec. Borrow Pit #3	52
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709 823	Original X Sec. Extended on the left for Borrow.	41 42

Station	Point	ΔL_t	ΔR_t
833+04		0°35 1/2	
833+00		0°31 1/2	
+50			
832		0°24'	0°15' Lt.
+50			$\Delta 1°11'$
831+00		0°16 1/2	P.I. 831+17.6
830+50			T. 236.8
830		0°09 1/2	L. 473.3
+50		0	
829		0°01 1/2	
828+80.8	P.C.		
Eq- 822+79.6			
817+00	P.O.T.		
809+13.2	P.O.T.		
Eq 837+84.0			

W.H.C.
A.L.P.
F.H.F.
H.T.P.

July 26, 1926



Station	Point	Δ Lt.	Δ Rt.
902 + 947	P.T.	1° 44.5'	
902		1° 30.3'	
901		1° 15.3'	0° 30' C.Lt.
900		1° 00.3'	A 3° 29'
899		0° 45.3'	P.I. 899 + 46.4
898		0° 30.3'	T. 342.4
897		0° 15.3'	L. 696.7
896		0° 00.3'	
895 + 98.0	P.C.	0° 00'	
Eq = 895 + 94			
872 + 63.25	P.O.T.		
856 + 90.15	P.O.T.		

W.H.C. July 28 1926
A.L.P.
H.T.P.
W.H.

Town Hall
Mail room Bldg

Mail 20' Bldg

Hub 3' - 50' of Elec. R.R.

53.96

71.86

R.P. Hub

T.P.

60.23

37.13

56.45

Mail corner F.P.

to B' Oak

Hanson Depot

Elec. R.R.

41.93

42.05

to 10' Oak

7.30

Road.

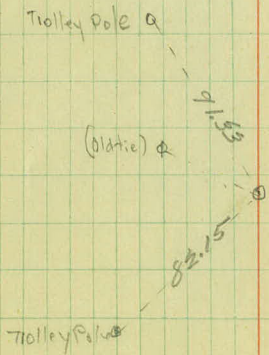
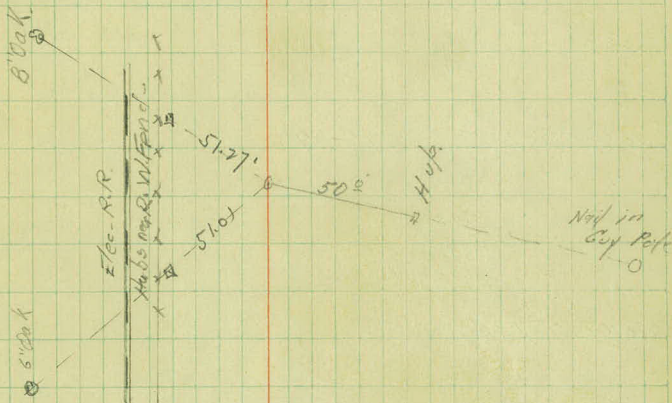
FENT Gate

Station	Point	Lt. Δ	Rt.
962+15.4	P.T.	3° 15'	
62		3° 10.4'	
61		2° 40.4'	1° C. Ct.
60		2° 10.4'	Δ 6° 30'
59		1° 40.4'	P.I. 958+90.8
58		1° 10.4'	S.T. 325.4
57		0° 40.4'	L. 650 $\frac{00}{00}$
56		0° 10.4'	
$\begin{array}{r} 955+65.4 \\ 955+63.5 \\ \hline \end{array}$	P.C.	0° 00'	

936+16.2	P.T.		1° 24'	
936			1° 21.6'	
935			1° 06.6'	0° 30' Rt.
934			0° 51.6'	Δ 2° 48'
933			0° 36.6'	P.I. 933+36.2
932			0° 21.6'	T. 280 $\frac{00}{00}$
931			0° 00.6'	L. 560 $\frac{00}{00}$
$\begin{array}{r} 930+56.2 \\ 930+55.8 \\ \hline \end{array}$	P.C.		0° 00'	

W.A.C.
A.L.P.
H.T.P.
W.A.

July 29, 1906



Sta. Point Lt. Rt.

1011789⁰⁸ P.T. = 1011790⁵⁵

1009459⁰⁸ P.I. 1°-09'

1007129⁰⁸ P.C.

1002100 P.O.T.

975100

8/3/25

1007+27⁰⁸

1008+00 0°-5'³

1009+00 0°-12'³

1010+00 0°-20'³

1011+00 0°-27'⁸

189⁰⁸ 0°-34'⁵

A-1°-09'

D-0°-15' H

T-230°⁰²

L-460°²

Nail in
13" Oak
G

50² Hub
B

Nail in 18" Oak
G

50² Hub
B

Nail in Cor
Burr
& up Grp.



Hub
77 41 23

77 95

Hub

Top Near
Edge of Chimney



Sta. Point Lt. Rt

1048453^L P. T.

1046775^E P. I. 12°-42'

1045715^E P. C.

1030701² P. O. T.

8/3/36

1045 + 15^c+50 - 0° - 41^s

Δ - 12° - 42

1046 - 1° - 41^s+50 - 2° - 41^sHub
□ 50^sNail in
Apple Tree
GD - 4° - 15^sT - 159^s1047 - 3° - 41^s+50 - 4° - 41^sL - 317⁵⁰1048 - 5° - 41^s+50¹⁰ - 6° - 21^sHub
60^s

Nail in 10" 09A

Sta. Point Lt. Rt.

1059+54⁶² P. T.

1057+43²¹ P. I. 44°-46'

1055+06⁹⁵ P. C.

1053+06³⁹ P. T.

1053+87² P. I. 4°-51'

1052+07⁸⁶ P. C.

8/9/26

Nail in 14" Oak

1055 + 06 ⁸⁵

150 - 2°-09'

1056 - 4°-39'

150 - 7°-09'

1057 - 9°-39'

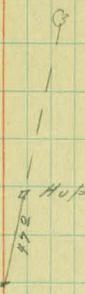
150 - 12°-09'

1058 - 14°-39'

150 - 17°-09'

1059 - 19°-39'

154 ⁸² - 22°-28'



A - 44°-46'

D - 10° 11'

T - 236 ⁸⁶

L - 447 ⁸⁷

11.

1052 + 09 ⁸⁶

1053 - 0°-19' ⁵

150 - 1°-50' Nail in 18" Oak

1054 - 1°-20' ⁵

150 - 1°-51'

1055 - 2°-21' ⁵

106 ⁵⁹ - 2°-25' ⁵



A - 42°-51'

D - 2°-12' RT

T - 119 ³⁴

L - 238 ⁵³

Sta. Point Lt. Rt.

1084108⁷ P.O.T.

1083182⁵ P.O.T. End. of Proj.

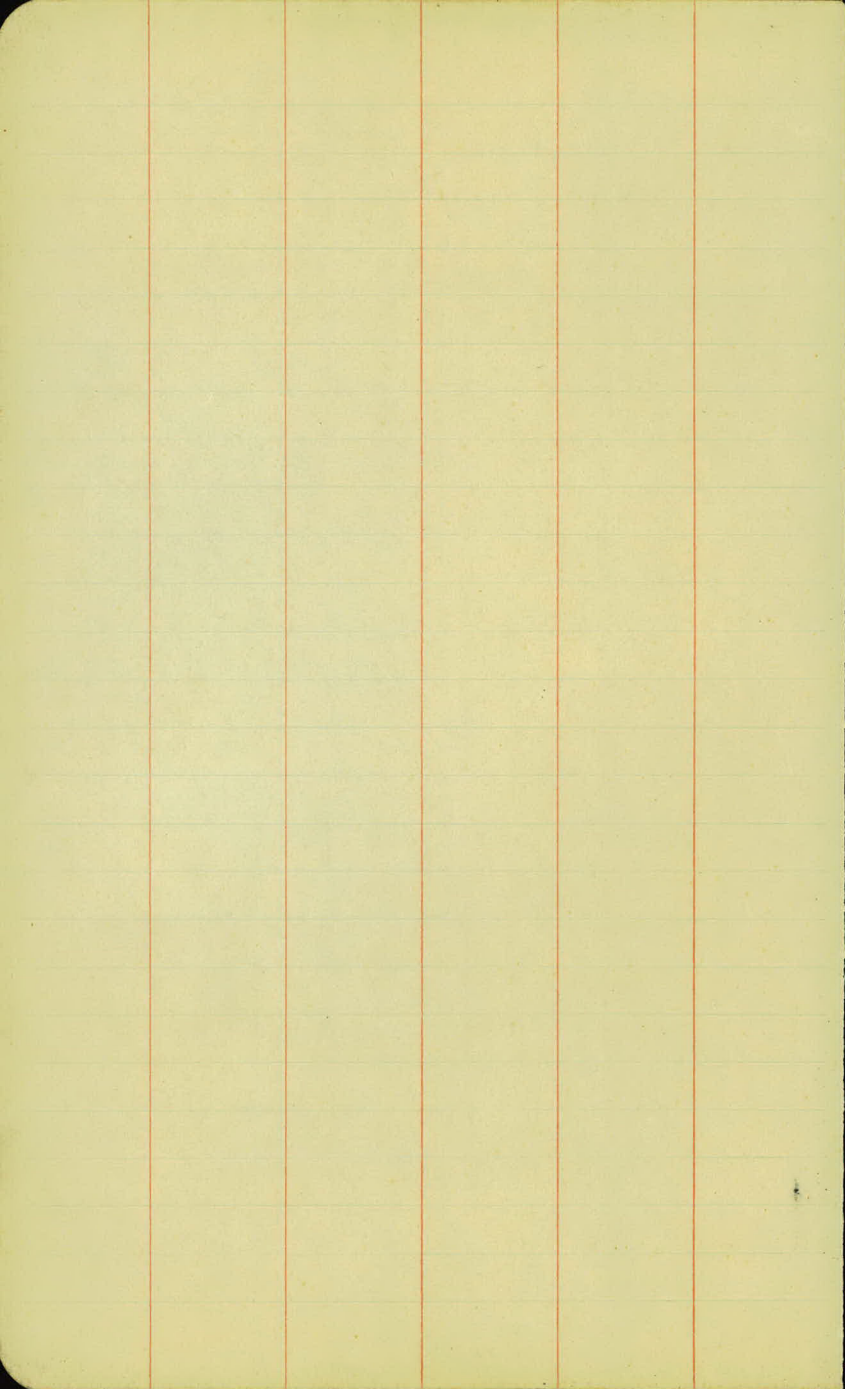
1071109²⁶ P.O.T.

7/16/26

• Hole in Pavement.

||||| Edge of Pavement.

• 26⁹ — Hub. — Nail in 3rd Tree. — ○



The image shows a page from a notebook with a grid of 20 columns and 30 rows. A vertical red line runs down the center of the page, between the 10th and 11th columns. The grid is formed by light blue horizontal and vertical lines. The paper is aged and yellowed. The number '8.' is written in the top right corner.

Original

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
B.M. 837+84.1 = 809+13.80	592	865.32		858.7	89.40 6.6
Beginning Division D.					
810				59.6	57.
811				60.5	48.
812				61.1	42.
813				61.6	37. 861.33 ✓ 861.37
B.M. Eq. =	576	867.13 ✓	3.99		
814				62.0	51.
815				62.2	49.
816				62.3	48.
817				62.4	47.
818				62.5	46.
819				62.6	45.
820				62.7	44.
T.P.	449	867.23 ✓	4.39		862.74 ✓

Rod. W.H.C. 27. L.P.

Chain. E.H.F. N.T.P.

July 27, 1926 9.

Left

G L

Right

R.R. Spike 28 Oak Lt Sta 836+20

33/114 $\frac{58}{21}$ $\frac{73}{18}$ $\frac{71}{12}$ $\frac{64}{10}$ $\frac{63}{10.3}$ $\frac{67}{12}$ $\frac{47}{20}$ $\frac{78}{13}$ $\frac{79}{33}$

33/117 $\frac{59}{24}$ $\frac{64}{21}$ $\frac{66}{15}$ $\frac{61}{13}$ $\frac{58}{10.1}$ $\frac{63}{15}$ $\frac{67}{17}$ $\frac{60}{13}$ $\frac{61}{30}$ $\frac{56}{33}$

33/102 $\frac{45}{20}$ $\frac{67}{20}$ $\frac{60}{17}$ $\frac{55}{13}$ $\frac{52}{10.4}$ $\frac{57}{13}$ $\frac{63}{15}$ $\frac{52}{21}$ $\frac{50}{27}$ $\frac{41}{33}$

33/100 $\frac{41}{26}$ $\frac{56}{22}$ $\frac{56}{18}$ $\frac{47}{16}$ $\frac{47}{10.5}$ $\frac{47}{12}$ $\frac{57}{15}$ $\frac{54}{18}$ $\frac{46}{22}$ $\frac{42}{33}$

33/110 $\frac{47}{27}$ $\frac{47}{24}$ $\frac{53}{20}$ $\frac{42}{16}$ $\frac{41}{10.4}$ $\frac{45}{10}$ $\frac{58}{14}$ $\frac{54}{13}$ $\frac{51}{20}$ $\frac{44}{27}$ $\frac{43}{33}$

Nantux T.P. Rt. Sta. 813+60

33/120 $\frac{61}{27}$ $\frac{72}{25}$ $\frac{72}{23}$ $\frac{66}{20}$ $\frac{57}{18}$ $\frac{55}{10.4}$ $\frac{57}{8}$ $\frac{48}{14}$ $\frac{69}{20}$ $\frac{64}{25}$ $\frac{61}{11.5}$ $\frac{61}{33}$

33/119 $\frac{57}{30}$ $\frac{64}{27}$ $\frac{64}{25}$ $\frac{58}{20}$ $\frac{55}{19}$ $\frac{52}{11}$ $\frac{53}{10.4}$ $\frac{56}{7}$ $\frac{65}{12}$ $\frac{65}{15}$ $\frac{61}{18}$ $\frac{62}{11.2}$ $\frac{62}{33}$

33/120 $\frac{53}{30}$ $\frac{57}{28}$ $\frac{57}{24}$ $\frac{51}{20}$ $\frac{50}{13}$ $\frac{52}{10.4}$ $\frac{55}{12}$ $\frac{51}{20}$ $\frac{47}{25}$ $\frac{45}{10.3}$ $\frac{45}{33}$

33/124 $\frac{49}{31}$ $\frac{57}{27}$ $\frac{53}{26}$ $\frac{51}{20}$ $\frac{50}{16}$ $\frac{50}{10.3}$ $\frac{50}{11}$ $\frac{53}{20}$ $\frac{27}{120}$ $\frac{27}{33}$

33/113 $\frac{58}{29}$ $\frac{58}{25}$ $\frac{51}{24}$ $\frac{47}{11}$ $\frac{50}{10.4}$ $\frac{53}{6}$ $\frac{56}{8}$ $\frac{56}{11}$ $\frac{53}{13}$ $\frac{51}{20}$ $\frac{48}{12.3}$ $\frac{48}{33}$

32/118 $\frac{58}{30}$ $\frac{55}{25}$ $\frac{53}{24}$ $\frac{50}{20}$ $\frac{47}{12}$ $\frac{48}{10.3}$ $\frac{50}{10}$ $\frac{46}{20}$ $\frac{41}{27}$ $\frac{38}{10.7}$ $\frac{38}{33}$

33/106 $\frac{59}{29}$ $\frac{51}{30}$ $\frac{51}{25}$ $\frac{46}{20}$ $\frac{44}{11}$ $\frac{47}{10.3}$ $\frac{47}{10}$ $\frac{52}{12}$ $\frac{45}{17}$ $\frac{41}{20}$ $\frac{37}{10.7}$ $\frac{37}{33}$

Original

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
------	-------	-------	-------	-------	--------

867.23

821				862.8	44.
822				62.9	43.
+60				63.0	42.
823				63.0	42.
TP	6.04	868.30	497		862.26
823+30				63.0	53.
824				63.1	52.
824+60				63.2	51.
825				63.2	51.
825+50				63.2	51.
826				63.3	50.
827				63.3	50.
828				63.4	49.
EQ. 828+03 828+16					
829				63.4	49.
B.M.	4.19	868.55	414		(864.16)
830				63.5	49.
831				63.5	49.
832				63.6	48.

W.M.C.
 Rod. Chain.

July 27, 1926 10.

A.L.P.
 E.H.F.
 H.T.P.
 1 est.

C L

Right

x														x		
23	24	30	46	52	48	47	45	45	48	52	40	30	26	26	108	33
	112	80	28	72	1	20	10	-0.1	10	14	20	22				
x														x		
23	28	30	50	51	45	42	45	41	42	31	31	31	31	31	108	33
	115	78	25	20	17	10.1	12	15	17	23						
3	4	38	50	51	46	40	44	53	47	24	24	24	24	24	108	33
	80	24	x	17	15	00	14	17	25							
53	53	50	69	62	58	40	45	60	63	51	42	59	51	42	108	33
		30	90	70	18	13	102	14	19	21	16	27	27	27		
RR Mt. Sta. 8237 x														x		
30	30	100	89	87	57	57	57	74	87	84	84	84	84	84	108	33
		294	47	20	73	10.1	17	20	23	21	26	26	26	26		
33	33	124	140	130	58	52	53	54	93	80	88	88	88	88	108	33
		72	27	21	9	00	12	19	27	42	28	28	28	28		
100	100	115	145	104	52	53	52	52	68	26	40	40	40	40	108	33
		27	24	19	8	-0.2	12	21	25	00	30	30	30	30		
33	33	108	73	55	64	43	51	53	48	50	51	57	60	55	108	33
		57	20	17	15	11	7	-0.2	12	20	22	25	30	20		
47	47	46	48	48	48	49	47	47						45		
		33	27	12	12	10.2	17	17						33		
82	82	50	50	59	51	54	53	46	48	51	47	47	47	47	108	33
		21	14	12	10	7	7	12	20	26				47		
33	33	26	21	14	12	7	7	-0.2	12	20	26			47	108	33
59	59	0.6	39	40	45	45	43	42	43	50	52	63	59	49	47	108
		39	11.6	30	20	16	13	8	6.	-0.1	10	20	25	29	31	103
33	33	44	45	48	65	65	51	50	50	52	60	66	62	51	53	108
		105	20	16	14	11	7	-0.1	10	18	20	22	26	28	21	103
30	30	49	55	64	51	49	50	62	61	50	47	47	47	47	108	33
		80	20	17	12	9	00	15	20	24	26			47		
RR Spike														At Sta. 828795		
30	30	53	67	68	61	49	46	48	64	62	57	57	57	57	108	33
		21	25	20	15	9	10.3	13	20	25	26	26	26	26		
30	30	47	51	57	56	47	45	49	50	62	61	50	47	47	108	33
		102	24	20	15	12	10.4	14	15	20	24	26		47		
30	30	55	56	66	66	49	48	52	65	67	53	53	53	53	108	33
		24	24	19	14	12	10	14	14	20	22	22	22	22		

Original..... Cross Sections

Sta.	P.S.	Original	Cross	Sections	Gr. R.
		868.35			
833				863.6	4.8.
833+54.1 =833+54.8	5.60	869.05	4.90	863.45	
834				63.7	5.4.
835				63.7	5.4.
836				63.8	5.3.
837				63.8	5.3.
838				63.9	5.2.
839				63.9	5.2.
840				64.0	5.1.
T.P. 841	4.12	848.64	4.53	844.52	
				64.1	4.5.
842				64.2	4.4.
843				64.3	4.3.

Inst.
 Rod.
 Chain.

Left

C L

Right

$\frac{50}{33}$	$\frac{5}{33} \frac{x}{5.6}$	$\frac{5.4}{20}$	$\frac{6.5}{19}$	$\frac{6.3}{14}$	$\frac{4.9}{12}$	$\frac{4.5}{10.5}$	$\frac{4.9}{13}$	$\frac{4.6}{17}$	$\frac{6.4}{19}$	$\frac{5.6}{21}$	$\frac{5}{33} \frac{x}{5.9}$	$\frac{5.9}{33}$
	$\frac{-0.8}{20}$										$\frac{-1.1}{21}$	

$\frac{6.2}{33}$	$\frac{5}{33} \frac{x}{6.2}$	$\frac{6.4}{20}$	$\frac{7.0}{19}$	$\frac{6.9}{14}$	$\frac{5.3}{12}$	$\frac{4.9}{10.5}$	$\frac{5.3}{14}$	$\frac{7.1}{17}$	$\frac{6.8}{20}$	$\frac{6.1}{22}$	$\frac{5}{33} \frac{x}{7.1}$	$\frac{6.1}{33}$
	$\frac{-0.8}{20}$										$\frac{-1.7}{22}$	

$\frac{5}{33} \frac{x}{5.7}$	$\frac{5.2}{21}$	$\frac{6.7}{19}$	$\frac{6.6}{14}$	$\frac{5.1}{13}$	$\frac{4.6}{10.8}$	$\frac{5.0}{14}$	$\frac{6.5}{17}$	$\frac{6.6}{19}$	$\frac{5.4}{21}$	$\frac{5}{33} \frac{x}{6.5}$
	$\frac{-0.5}{21}$									$\frac{-0.1}{21}$

$\frac{5}{33} \frac{x}{5.4}$	$\frac{5.8}{22}$	$\frac{6.7}{20}$	$\frac{6.5}{14}$	$\frac{5.1}{12}$	$\frac{4.7}{10.4}$	$\frac{5.0}{13}$	$\frac{5}{33} \frac{x}{5.3}$
	$\frac{-0.5}{22}$						$\frac{-0.0}{13}$

$\frac{5}{33} \frac{x}{5.8}$	$\frac{5.8}{23}$	$\frac{6.6}{17}$	$\frac{4.9}{12}$	$\frac{4.9}{10.4}$	$\frac{5.0}{14}$	$\frac{6.8}{17}$	$\frac{5.8}{24}$	$\frac{5}{33} \frac{x}{6.5}$
	$\frac{-0.5}{23}$							$\frac{-0.2}{24}$

$\frac{5}{33} \frac{x}{7.1}$	$\frac{5.2}{21}$	$\frac{6.1}{17}$	$\frac{4.8}{13}$	$\frac{4.5}{10.7}$	$\frac{4.8}{14}$	$\frac{6.3}{17}$	$\frac{6.3}{20}$	$\frac{5.3}{23}$	$\frac{5}{33} \frac{x}{7.2}$
	$\frac{-0.1}{21}$								$\frac{-0.0}{23}$

$\frac{5}{33} \frac{x}{5.1}$	$\frac{5.3}{21}$	$\frac{6.4}{20}$	$\frac{6.5}{17}$	$\frac{4.9}{12}$	$\frac{4.6}{10.6}$	$\frac{5.1}{14}$	$\frac{6.9}{19}$	$\frac{7.0}{20}$	$\frac{6.6}{23}$	$\frac{5.9}{26}$	$\frac{5}{33} \frac{x}{5.4}$
	$\frac{-0.1}{21}$										$\frac{-0.2}{26}$

$\frac{5}{33} \frac{x}{5.6}$	$\frac{5.6}{19}$	$\frac{6.6}{18}$	$\frac{6.5}{16}$	$\frac{5.2}{13}$	$\frac{4.7}{10.4}$	$\frac{5.1}{15}$	$\frac{6.7}{26}$	$\frac{7.1}{23}$	$\frac{5.5}{27}$	$\frac{5}{33} \frac{x}{7.7}$
	$\frac{-0.5}{19}$									$\frac{-0.4}{27}$

$\frac{5.3}{33}$	$\frac{5}{33} \frac{x}{5.4}$	$\frac{5.4}{29}$	$\frac{6.0}{27}$	$\frac{5.9}{22}$	$\frac{6.6}{19}$	$\frac{6.6}{18}$	$\frac{4.6}{12}$	$\frac{4.2}{10.3}$	$\frac{4.6}{14}$	$\frac{6.2}{20}$	$\frac{6.5}{22}$	$\frac{5.8}{29}$	$\frac{5}{33} \frac{x}{5.3}$
	$\frac{-0.9}{29}$												$\frac{-1.2}{29}$

$\frac{5.1}{33}$	$\frac{5}{33} \frac{x}{5.1}$	$\frac{5.9}{18}$	$\frac{5.7}{14}$	$\frac{4.5}{12}$	$\frac{4.2}{10.2}$	$\frac{4.7}{14}$	$\frac{5.9}{20}$	$\frac{6.3}{23}$	$\frac{5.9}{27}$	$\frac{5}{33} \frac{x}{6.8}$
	$\frac{-0.7}{18}$									$\frac{-1.6}{27}$

$\frac{5.2}{33}$	$\frac{5}{33} \frac{x}{5.2}$	$\frac{5.3}{19}$	$\frac{6.3}{18}$	$\frac{5.0}{11}$	$\frac{4.5}{10.2}$	$\frac{5.1}{15}$	$\frac{6.4}{18}$	$\frac{6.8}{20}$	$\frac{7.0}{22}$	$\frac{5.1}{28}$	$\frac{5}{33} \frac{x}{7.0}$
	$\frac{-0.9}{19}$										$\frac{-0.7}{28}$

~~Original~~ Cross Sections

Sta.	B. S.	H I	F S.	Grade	Gr. R.
844		868.64		864.4	4.2
T.P. 845	5.52	869.33	4.83	863.81	4.8
846				646	4.7
847				647	4.4
848				648	4.5
849				649	4.4
850				65.1	4.2
851				65.3	4.0
T.P. 852	5.72	871.05	4.00	865.33	6.5
853				65.9	5.2
B.M. 854	3.08	871.04	3.08	867.97	867.94
				66.2	4.8
B.M. 855	1.98	870.94	3.08	867.90	867.94
				66.5	4.4

Inst.
 Rod.
 Chain.

Left

C L

Right

$\frac{2}{3}$	$\frac{5.2}{5.0}$	$\frac{5.7}{30}$	$\frac{5.9}{26}$	$\frac{6.6}{20}$	$\frac{6.6}{19}$	$\frac{6.6}{14}$	$\frac{5.1}{12}$	$\frac{4.0}{-0.4}$	$\frac{4.9}{14}$	$\frac{6.0}{18}$	$\frac{5.4}{21}$	$\frac{2}{3}$	$\frac{5.2}{-10}$	$\frac{5.2}{33}$
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$\frac{4.3}{33}$	$\frac{2}{3}$	$\frac{6.3}{-1.5}$	$\frac{6.9}{18}$	$\frac{7.3}{17}$	$\frac{7.3}{16}$	$\frac{5.4}{11}$	$\frac{5.1}{10.3}$	$\frac{5.5}{14}$	$\frac{7.1}{17}$	$\frac{7.1}{18}$	$\frac{6.5}{19}$	$\frac{6.4}{20}$	$\frac{2}{3}$	$\frac{6.0}{-7.8}$	$\frac{6.0}{33}$
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$\frac{4.6}{33}$	$\frac{2}{3}$	$\frac{6.6}{-7.9}$	$\frac{6.6}{25}$	$\frac{7.3}{24}$	$\frac{7.4}{16}$	$\frac{5.3}{10}$	$\frac{4.9}{-0.2}$	$\frac{5.3}{13}$	$\frac{5.9}{18}$	$\frac{5.8}{24}$	$\frac{2}{3}$	$\frac{5.7}{-7.0}$	$\frac{5.7}{33}$
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$\frac{5.2}{33}$	$\frac{2}{3}$	$\frac{5.6}{-1.0}$	$\frac{5.7}{18}$	$\frac{5.2}{8}$	$\frac{4.7}{-0.1}$	$\frac{4.9}{14}$	$\frac{6.1}{20}$	$\frac{6.8}{24}$	$\frac{5.1}{28}$	$\frac{2}{3}$	$\frac{5.1}{-0.5}$
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$\frac{2.3}{33}$	$\frac{2}{3}$	$\frac{5.0}{-2.1}$	$\frac{5.0}{28}$	$\frac{6.3}{22}$	$\frac{6.3}{21}$	$\frac{6.3}{14}$	$\frac{5.0}{16}$	$\frac{4.8}{10.3}$	$\frac{5.0}{16}$	$\frac{5.1}{18}$	$\frac{5.6}{20}$	$\frac{6.1}{23}$	$\frac{6.1}{24}$	$\frac{2}{3}$	$\frac{4.0}{-7.0}$
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$\frac{5.7}{33}$	$\frac{2}{3}$	$\frac{5.3}{-0.9}$	$\frac{4.6}{30}$	$\frac{4.6}{24}$	$\frac{4.8}{14}$	$\frac{4.5}{21}$	$\frac{4.7}{10}$	$\frac{4.9}{17}$	$\frac{5.7}{20}$	$\frac{6.3}{23}$	$\frac{6.3}{25}$	$\frac{4.5}{28}$	$\frac{2}{3}$	$\frac{4.5}{-0.1}$
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$\frac{1.4}{33}$	$\frac{2}{3}$	$\frac{5.4}{-2.2}$	$\frac{5.3}{29}$	$\frac{5.3}{20}$	$\frac{5.3}{17}$	$\frac{5.0}{14}$	$\frac{5.9}{12}$	$\frac{4.5}{9}$	$\frac{4.4}{-0.2}$	$\frac{4.5}{18}$	$\frac{5.3}{20}$	$\frac{5.6}{22}$	$\frac{5.5}{25}$	$\frac{4.9}{29}$	$\frac{2}{3}$	$\frac{4.9}{-0.7}$
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$\frac{4.8}{33}$	$\frac{2}{3}$	$\frac{4.2}{-1.8}$	$\frac{4.1}{29}$	$\frac{4.9}{26}$	$\frac{4.2}{20}$	$\frac{5.2}{19}$	$\frac{5.1}{14}$	$\frac{4.3}{13}$	$\frac{4.1}{10}$	$\frac{4.2}{-0.1}$	$\frac{4.2}{11}$	$\frac{4.2}{18}$	$\frac{4.3}{20}$	$\frac{4.9}{22}$	$\frac{4.8}{25}$	$\frac{3.9}{28}$	$\frac{2}{3}$	$\frac{4.0}{-10.3}$
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$\frac{6.0}{33}$	$\frac{2}{3}$	$\frac{5.2}{-0.5}$	$\frac{5.2}{24}$	$\frac{5.6}{18}$	$\frac{6.7}{14}$	$\frac{6.7}{14}$	$\frac{5.8}{9}$	$\frac{5.8}{-0.3}$	$\frac{5.8}{11}$	$\frac{5.8}{20}$	$\frac{6.0}{25}$	$\frac{4.0}{30}$	$\frac{2}{3}$	$\frac{4.2}{-7.8}$
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$\frac{4.7}{33}$	$\frac{2}{3}$	$\frac{5.4}{-2.5}$	$\frac{5.4}{25}$	$\frac{5.2}{22}$	$\frac{5.6}{20}$	$\frac{5.7}{17}$	$\frac{6.4}{15}$	$\frac{6.4}{13}$	$\frac{5.6}{9}$	$\frac{5.3}{-0.1}$	$\frac{5.5}{9}$	$\frac{5.6}{19}$	$\frac{6.2}{22}$	$\frac{5.5}{25}$	$\frac{3.9}{28}$	$\frac{2}{3}$	$\frac{5.7}{-7.5}$
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Spot in 12" out. 8.5 + 4. 8.5 + 2 + 9.2.

$\frac{4.7}{33}$	$\frac{4.5}{27}$	$\frac{7.0}{23}$	$\frac{7.3}{18}$	$\frac{7.1}{14}$	$\frac{5.0}{9}$	$\frac{5.1}{-0.5}$	$\frac{5.0}{10}$	$\frac{5.0}{19}$	$\frac{6.1}{22}$	$\frac{6.1}{27}$	$\frac{5.0}{28}$	$\frac{4.7}{33}$
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$\frac{4.6}{33}$	$\frac{4.6}{30}$	$\frac{6.6}{27}$	$\frac{8.7}{25}$	$\frac{7.6}{23}$	$\frac{8.0}{19}$	$\frac{7.5}{15}$	$\frac{4.7}{8}$	$\frac{4.6}{-0.2}$	$\frac{4.6}{9}$	$\frac{4.8}{19}$	$\frac{5.2}{20}$	$\frac{5.9}{22}$	$\frac{5.9}{29}$	$\frac{2}{3}$	$\frac{5.9}{-7.5}$	$\frac{5.9}{33}$
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Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
856		270.94 ✓		66.8	4.1
+30				66.95	4.0
857				67.1	3.8
T.P.	6.13	273.10	3.97	66.97 ✓	
858				67.4	5.7
859				67.7	5.4
860				68.0	5.1
861				68.4	4.7
862				68.8	4.3
T.P.	6.01	274.97 ✓	4.14	68.96 ✓	
863				69.2	5.8
864				69.6	5.4
865				70.0	5.0
866				70.4	4.9
867				70.8	4.2

Inst.
Rod.
Chain.

Left

G L

Right

3.8	3.9	5.5	5.5	5.5	4.6	4.3	4.2	4.5	5.3	5.7	2.5	6.2
33	29	24	20	14	10	10.2	4	18	30	31	31	53

3.5	3.3	4.9	4.4	4.2	4.5	4.6	5.2					
33	29	18	7		10	22	33					
27	24	2.9	4.5	4.3	3.9	4.1	5.1	5.2	3	6.1	6.3	
33	25	10	15	9	-0.1	7	20	24	30	-2.5	5.3	

4.0	4.1	4.6	5.6	6.4	6.5	5.7	5.5	5.5	5.9	6.3	6.9	4.7	7.1
33	26	18	17	14	12	9	10.2	5	18	30	24	31	33
4.1	5.3	5.9	6.4	6.6	6.6	5.6	5.3	5.5	5.9	6.1	6.6	6.5	5.6
33	24	23	17	15	13	9	10.1	8	14	20	22	25	27

5.8	5.8	5.6	6.2	5.9	5.2	4.9	5.2	5.9	5.5	2.6	4.5	
33	32	28	20	17	10	10.2	15	20	25	31	31	33

3.0	4.3	4.7	5.3	6.2	6.4	4.9	4.5	4.5	4.6	5.7	6.1	5.9	4.4	4.5
33	10.4	31	23	20	14	10	10.2	6	17	20	22	24	27	10.4

3.0	4.2	3.4	3.3	5.2	5.2	4.4	4.3	4.6	5.8	6.0	5.6	4.8	1.5	0.0
33	10.1	32	27	17	12	9	10	18	20	24	24	27	3	-0.7

3.0	5.2	3.0	3.2	6.7	6.0	5.9	6.1	6.7	6.5	5.3	5.7	0.1
33	10.6	31	22	14	10	-0.1	17	20	24	24	29	-0.3

3.0	6.3	5.8	6.1	6.3	6.7	6.5	5.4	5.2	5.4	5.7	6.5	6.6	6.7	4.6	6.9
33	10.1	31	24	19	18	13	10	10.2	7	14	19	20	26	7.4	33

6.0	7.8	5.9	8.0	6.6	5.3	5.1	5.7	7.5	7.8	7.5	3.9	7.4		
33	31	2	2.9	20	14	11	-0.1	14	20	24	24	3	-2.2	33

3.0	4.4	5.7	5.8	6.4	6.6	6.4	5.2	4.9	5.0	5.2	6.7	7.4	6.7	7.3
33	10.2	31	28	18	17	13	10	-0.3	8	17	20	23	2	33

3.0	3.9	5.0	5.8	5.7	4.9	4.2	4.5	4.6	6.6	7.3	6.7	6.9		
33	10.3	17	14	14	10	0.0	8	14	10	23	2	33		

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		874.97			
868				871.2	3.8.
869				71.6	34.
T.P.	6.45	877.37	4.05	870.92	
870				72.0	5.4.
871				72.2	5.0.
872				72.4	5.0.
	+05			72.5	4.9
873				72.6	4.8
	+25				4.7
T.P.	3.45	876.71	4.11	873.29	
874				72.7	4.0
875				72.6	4.1.
876				72.4	4.3
877				72.2	4.5.
B.M.	4.08	876.20	4.57	872.12	
878				72.0	4.2.
879				71.8	4.4.

Invt.
 Rod.
 Chain.

8/15/26 14.

Left

GL

Right

3 ⁰ 40	40	48	53	52	41	40	41	45	65	68	70
5 ⁰ 40	39	20	17	13	10	7.02	7	15	20	21	30

4.7	3.51	5.4	5.2	5.4	4.0	3.7	3.9	5.1	5.6	4.6	5.9
23	3	12	23	20	13	11	03	16	18	20	22

3 ⁰ 50	66	66	70	70	59	50	58	58	70	72	50	5.7
5 ⁰ 50	29	18	14	14	11	02	5	16	20	22	26	0.3

3 ⁰ 55	60	59	63	63	53	50	54	54	64	67	59	4.1	51
5 ⁰ 55	28	18	14	14	11	10.2	8	14	20	24	28	0.9	53

3 ⁰ 41	47	50	50	46	45	47	48	55	58	43	4.5	51	
5 ⁰ 41	27	20	16	13	10.5	10	17	20	22	26	0.7	51	
3 ⁰ 42	47	48	43	43	41	4.4	4.5	3.2	19	21	33	51	
5 ⁰ 42	33	29	19	10	10.9	13	19	28	29	33	33	51	
3 ⁰ 31	35	37	45	53	53	45	39	39	34	5.2	3.3	51	
5 ⁰ 31	24	23	21	20	18	16	14	10.9	14	20	27	0.3	51
3 ⁰ 34	3.4	3.8	3.0	5.5	4.3	3.9	4.0	3.8	3.9	1.6	1.6	51	
5 ⁰ 34	27	27	21	17	12	10.8	10	16	24	29	33	51	

3 ⁰ 44	54	57	40	52	36	32	34	34	47	50	42	2.8	2.9
5 ⁰ 44	31	27	20	17	11	10.8	8	14	18	20	25	0.7	11.1
3 ⁰ 40	36	37	47	49	53	52	41	37	4.0	4.2	5.4	5.6	5.8
5 ⁰ 40	30	26	24	19	18	16	12	10.4	6	14	17	20	21

63	54	60	50	46	42	4.4	4.4	6.5	8.7	6.9
30	25	20	15	12	10.1	8	15	19	24	33

57	55.9	55	65	66	50	4.7	4.9	5.1	6.1	6.6	6.7	6.7	70
33	30	23	20	16	11	10.2	7	14	17	20	21	22	30

Spk. in 10" Oak. At Sta 877+60

57	57	57	64	65	5.7	46	40	45	52	5.6	6.0	6.0
30	31	23	22	20	14	12	0.4	13	15	18	18	33

4.0	4.1	65	65	49	46	4.9	4.9	4.8	5.7	6.0	6.0	6.3
3	24	29	17	18	13	10.2	7	12	14	14	13	14

Sta.	Original		Cross Sections		Gr. R.
	B. S.	H. I.	F. S.	Grade	
880		876.20		871.6	4.6
881				71.4	4.8
882				71.2	5.0
883				71.0	5.2
T.P.	5.03	875.43	5.80	870.40	
884				70.6	4.8
885				70.4	5.0
886				70.3	5.1
887				70.3	5.1
888				70.3	5.1
T.P.	4.47	875.35	4.87	870.54	
889				70.3	5.1
7.50				70.3	5.1
890				70.3	5.1
891				70.3	5.1

Invt.
 Rod.
 Chain.

8/13/36
 STATIONARY TRIANGULATION

15.

Left

G L

Right

$\begin{array}{r} x \\ 0.58 \\ 33/408 \end{array}$ 44 73 69 52 50 52 52 62 63 68 $\begin{array}{r} x \\ 4.5 \\ 25 \end{array}$
 29 24 18 4 -04 7 14 16 23 24 -17 33

$\begin{array}{r} x \\ 6.5 \\ 33/5 \end{array}$ $\begin{array}{r} x \\ 4.65 \\ 17 \end{array}$ 67 69 62 56 52 54 73 87 65 $\begin{array}{r} x \\ 5.64 \\ 6.5 \end{array}$
 26 19 15 13 -04 13 18 20 23 $\begin{array}{r} x \\ 3 \\ -1.6 \end{array}$ 33

64 6.9 $\begin{array}{r} x \\ 1/70 \end{array}$ 67 68 57 54 58 74 76 67 58 $\begin{array}{r} x \\ 9.50 \\ 33 \end{array}$
 32 $\begin{array}{r} x \\ 5 \\ -20 \end{array}$ 50 20 14 -04 14 20 24 26 28 $\begin{array}{r} x \\ 5 \\ 0.0 \end{array}$

67 $\begin{array}{r} x \\ 4.61 \\ 33 \end{array}$ 58 68 68 56 53 56 70 72 40 $\begin{array}{r} x \\ 0.56 \\ 3 \end{array}$
 $\begin{array}{r} x \\ 5 \\ -0.9 \end{array}$ 22 21 20 14 -0.1 14 19 24 27 $\begin{array}{r} x \\ 3 \\ 7.16 \end{array}$

Wail 100 71.0 84 519. 283+08. 1
 $\begin{array}{r} x \\ 0.48 \\ 33/20 \end{array}$ 46 56 58 59 47 47 51 61 58 47 $\begin{array}{r} x \\ 0.49 \\ 3 \end{array}$
 $\begin{array}{r} x \\ 1 \\ 20 \end{array}$ 19 19 15 12 10.1 14 18 20 23 $\begin{array}{r} x \\ 5 \\ -0.1 \end{array}$

$\begin{array}{r} x \\ 49.54 \\ 37 \end{array}$ $\begin{array}{r} x \\ 34 \\ -84 \end{array}$ 54 68 48 50 51 48 52 67 68 68 65 61 58 $\begin{array}{r} x \\ 0.55 \\ 3 \end{array}$
 21 20 18 14 11 +0.2 13 18 20 21 22 25 25 $\begin{array}{r} x \\ 2.5 \\ -2.5 \end{array}$

73 $\begin{array}{r} x \\ 1/6.2 \\ 33 \end{array}$ 57 64 65 51 50 53 66 69 68 54 $\begin{array}{r} x \\ 9.50 \\ 3 \end{array}$
 $\begin{array}{r} x \\ 5 \\ -1.1 \end{array}$ 21 20 18 12 +0.1 13 17 20 11 22 $\begin{array}{r} x \\ 5 \\ -0.5 \end{array}$

69 $\begin{array}{r} x \\ 5.59 \\ 33 \end{array}$ 56 66 67 50 49 53 63 64 60 55 $\begin{array}{r} x \\ 0.53 \\ 3 \end{array}$
 $\begin{array}{r} x \\ 5 \\ -0.8 \end{array}$ 23 20 17 12 +0.2 11 17 20 22 29 $\begin{array}{r} x \\ 3 \\ -0.2 \end{array}$

$\begin{array}{r} x \\ 0.47 \\ 3 \end{array}$ 56 61 50 47 51 57 59 54 47 $\begin{array}{r} x \\ 0.45 \\ 3 \end{array}$
 $\begin{array}{r} x \\ 5 \\ 70.2 \end{array}$ 22 20 13 +0.4 15 18 20 23 27 $\begin{array}{r} x \\ 5 \\ 40.9 \end{array}$

$\begin{array}{r} x \\ 3.9 \\ 3 \end{array}$ 3.9 61 61 50 4.7 5.0 5.8 5.6 3.5 $\begin{array}{r} x \\ 0.39 \\ 3 \end{array}$
 $\begin{array}{r} x \\ 5 \\ 71.2 \end{array}$ 24 20 19 14 +0.4 14 18 20 24 $\begin{array}{r} x \\ 5 \\ 71.4 \end{array}$
 21 29 57 59 53 4.9 5.2 5.8 4.6 2.9 2.8 3.5 5.5
 33 26 22 18 15 +0.2 17 18 23 24 31 32 33
 $\begin{array}{r} x \\ 3.9 \\ 3 \end{array}$ 3.3 5.8 5.9 5.9 4.9 5.1 6.0 6.1 3.8 4.0 $\begin{array}{r} x \\ 0.46 \\ 3 \end{array}$
 $\begin{array}{r} x \\ 5 \\ 71.4 \end{array}$ 25 21 20 13 +0.2 14 17 19 24 32 $\begin{array}{r} x \\ 5 \\ 70.5 \end{array}$

24.9 50 62 63 52 49 50 64 64 5.6 $\begin{array}{r} x \\ 1.59 \\ 3 \end{array}$ 61
 $\begin{array}{r} x \\ 5 \\ 70.2 \end{array}$ 24 22 19 15 +0.2 13 17 19 23 $\begin{array}{r} x \\ 5 \\ 70.8 \end{array}$ 23

Sta.	Original		Cross Sections		Gr. R.
	B. S.	H. I.	F. S.	Grade	
		875.35			
892				870.3	5.1
893				70.3	5.1
894				70.3	5.1
T.P.	4.14	875.19	4.30	871.05	
895				70.3	4.9
896				70.3	4.9
897				70.3	4.9
898				70.3	4.9
B.M.	4.42	875.08	4.54	870.65	870.66
899				70.3	4.8
900				70.3	4.8
901				70.3	4.8
902				70.3	4.8
T.P.	4.75	875.43	4.60	870.48	
447				70.3	5.1
903				70.3	5.1

In vt.
 Rod.
 Chain.

..... 9/12/36 16.

Left

C L

Right

57 33	85.7 3/0.6	60 22	69 20	69 18	55 13	5.2 -0.1	57 15	6.5 18	2/6.8 3/7.7	6.8 33					
73 33	8/4.8 3/7.7	48 19	72 18	54 14	5.1 0.0	5.3 13	68 16	67 19	81 22	80 27.5	2/6.5 3/1.4	6.5 30			
70 33	6/6.5 5/-1.4	45 20	68 18	54 13	5.2 0.1	5.5 13	68 16	68 20	67 24	5.0 30.5	0.5.0 3/-0.4	5.0 30			
64 33	4/6.3 3/-7.0	64 22	69 19	52 14	5.0 0.1	5.3 13	67 17	66 20	66 22	5.5 22	0.5.2 3/-0.3	5.5 22			
60 33	8/5.9 3/-1.0	61 22	63 22	42 19	5.3 14	5.1 -0.2	5.4 14	64 20	6.5 26	5.1 27.5	0.4.7 3/1.0.2	5.1 27.5			
51 31	5/5.2 3/-0.3	51 21	46 20	49 21	6.3 18	4.3 14	49 20	5.1 12	5.1 15	6.3 18	6.3 22	5.8 29.5	0.4.2 3/1.0.7		
S/10. 10 12" T-00 17. 514 898 + 557															
6.2 33	7/4.9 3/-1.9	60 30	66 24	60 17	5.5 15	5.0 -0.1	46 14	49 12	47 14	6.1 19	6.5 20	4.8 25	0.4.8 3/0.0		
33	9/5.9 3/-0.4	60 30	66 24	61 17	5.1 15	4.9 -0.1	50 14	6.2 18	2/5.8 3/-1.0	5.8 33					
5.4 33	9/6.0 3/-1.2	67 30	62 20	65 17	5.2 14	4.9 0.1	5.1 14	6.6 18	6.8 19	6.2 21	5.9 27.5	9/6.0 -1.2	6.0 33		
51 33	9/6.0 3/-1.2	66 26	5.6 24	5.4 22	6.3 19	6.2 17	4.9 13	4.8 0.0	5.1 13	6.5 17	6.5 18	5.8 20	5.9 24.5	4/6.5 -1.7	6.4 33
Q. →															
50 33	6.3 30	5.2 27	5.1 23	6.2 21	5.4 13	5.0 +0.1	5.1 14	6.3 16	6.5 19	5.0 22	5.1 23				
	20/50 3/1.0.1	40 31	3.9 23	6.1 20	5.5 14	5.2 -0.1	5.3 12	6.2 17	5.7 20	3.8 25	3/3.7 3/1.14				

Sta.	B. S.	Original H. I.	F. S.	Cross Grade	Sections	Gr. R.
		875.45				
904					870.85	5.2
905					70.1	5.3
906					69.9	5.5
907					69.7	5.1
T.P.	4.48	874.40	5.51	869.92		
908					69.5	4.9
909					69.3	5.1
910					69.1	5.3
911	?	look up 7			68.9	5.5
					68.7	5.7
912					68.7	5.7
913					68.5	5.9
T.P.	5.81	873.98	6.23	868.17		
	756				68.4	5.6
914					68.4	5.6
	745				68.5	5.4
915					68.4	5.4

Inpt.
 Red.
 Chain.

8/12/66

17.

Left

C L

Right

$\frac{0}{41} \frac{52}{30} \frac{4.4}{25} \frac{50}{22} \frac{57}{18} \frac{50}{14} \frac{4.7}{10.6} \frac{50}{13} \frac{4.8}{22} \frac{3.6}{25} \frac{0}{34} \frac{3}{11.8}$

$\frac{0}{43} \frac{50}{10.5} \frac{70}{32} \frac{6.2}{29} \frac{61}{28} \frac{5.2}{19} \frac{4.9}{10.4} \frac{50}{12} \frac{5.9}{14} \frac{5.9}{17} \frac{6.5}{20} \frac{4.9}{23} \frac{0}{20.4}$

$\frac{5.4}{29} \frac{5}{10} \frac{82}{29} \frac{70}{28} \frac{74}{25} \frac{6.6}{22} \frac{6.5}{20} \frac{5.4}{15} \frac{5.2}{10.3} \frac{5.5}{12} \frac{6.9}{16} \frac{6.9}{17} \frac{6.5}{20} \frac{0}{2.4} \frac{5.9}{3}$

$\frac{6.2}{29} \frac{85}{30} \frac{85}{29} \frac{79}{28} \frac{4}{2} \frac{7.8}{2.1} \frac{6.9}{20} \frac{5.8}{16} \frac{5.2}{10.1} \frac{5.7}{12} \frac{7.3}{16} \frac{6.5}{20} \frac{9}{3} \frac{6.9}{1.2} \frac{6.9}{33}$

$\frac{5.6}{30} \frac{0}{3} \frac{5.0}{10.7} \frac{7.1}{29} \frac{6.7}{27} \frac{5.6}{20} \frac{4.7}{14} \frac{4.5}{10.4} \frac{4.7}{10} \frac{5.2}{15} \frac{5.1}{18} \frac{4.4}{22} \frac{9}{3} \frac{4.5}{10.6}$

$\frac{5.8}{30} \frac{7}{3} \frac{5.7}{10.6} \frac{5.9}{28} \frac{6.4}{20} \frac{5.0}{16} \frac{4.8}{10.3} \frac{4.8}{11} \frac{6.3}{14} \frac{5.4}{20} \frac{4.9}{21} \frac{0}{3} \frac{4.6}{10.5}$

$\frac{6.1}{33} \frac{2}{3} \frac{5}{10.8} \frac{5.8}{20} \frac{5.2}{16} \frac{4.9}{10.4} \frac{4.9}{12} \frac{6.4}{16} \frac{6.0}{19} \frac{4.9}{21} \frac{0}{3} \frac{4.6}{10.9}$

$\frac{0}{3} \frac{0}{3} \frac{5.9}{21.4} \frac{5.1}{20} \frac{5.2}{19} \frac{5.1}{10.4} \frac{5.3}{11} \frac{6.2}{18} \frac{6.0}{20} \frac{4.1}{25} \frac{0}{3} \frac{5.5}{12.0}$

$\frac{6.3}{33} \frac{6.5}{30} \frac{5.4}{28} \frac{5.4}{26} \frac{6.3}{21} \frac{5.5}{16} \frac{5.1}{10.3} \frac{5.5}{12} \frac{6.7}{20} \frac{6.1}{23} \frac{5.3}{26} \frac{3.9}{27} \frac{5.3}{32} \frac{3.7}{33}$
 $\frac{6.6}{33} \frac{7}{3} \frac{7.7}{10.7} \frac{7.9}{30} \frac{6.9}{29} \frac{6.7}{30} \frac{5.7}{16} \frac{5.6}{10.1} \frac{5.8}{12} \frac{6.8}{14} \frac{7.2}{20} \frac{7.0}{22} \frac{5.6}{25} \frac{5.1}{30} \frac{5.4}{32} \frac{0}{3} \frac{5.4}{10.3}$

$\frac{8.0}{33} \frac{0}{3} \frac{10.0}{4.1} \frac{7.5}{27} \frac{7.3}{20} \frac{6.4}{17} \frac{6.1}{-0.2} \frac{6.3}{12} \frac{9.9}{20} \frac{0}{3} \frac{7.3}{3.4} \frac{7.5}{33}$

$\frac{7.2}{33} \frac{7.7}{33} \frac{9.0}{24} \frac{6.0}{18} \frac{5.9}{-0.3} \frac{6.0}{11} \frac{11.5}{21} \frac{11.7}{26} \frac{11.5}{33}$
 $\frac{8.0}{33} \frac{11.9}{2} \frac{9.5}{3.7} \frac{9.3}{27} \frac{8.9}{29} \frac{6.0}{18} \frac{5.7}{14} \frac{6.0}{21} \frac{10.0}{25} \frac{10.6}{25} \frac{10.9}{25} \frac{9.9}{25} \frac{9.9}{33}$
 $\frac{7.3}{33} \frac{8.1}{31} \frac{8.1}{27} \frac{7.4}{25} \frac{7.2}{22} \frac{5.7}{16} \frac{5.7}{-0.3} \frac{6.0}{12} \frac{7.1}{18} \frac{7.4}{21} \frac{6.0}{24} \frac{5.7}{30} \frac{5.1}{33}$
 $\frac{6.1}{33} \frac{5}{3} \frac{5.6}{10.8} \frac{6.8}{31} \frac{6.4}{20} \frac{5.8}{17} \frac{5.5}{-0.1} \frac{5.6}{12} \frac{6.8}{15} \frac{6.7}{18} \frac{6.4}{20} \frac{3.5}{25} \frac{3.3}{32} \frac{0}{3} \frac{5.6}{11.8}$

Original Cross Sections

Sta. B. S. H I S C Gr. R.

873.98

916					868.9	51
917					69.2	48
918					69.5	4.5
T.P.	5.52	875.07	4.43	869.55		
919					69.8	53
920					70.1	5.0
921					70.2	4.9
922					70.9	4.9
923					70.1	5.0
924					69.8	5.3
B.M.	5.69	873.85	6.14	868.19	868.16	
925					69.5	4.4
926					69.4	4.7
927					69.1	4.8

Inst.
 Rod.
 Chain.

8/12/21

Left

G. L

Right

$\frac{9}{3} \frac{5.1}{0.0}$ 44 45 53 57 52 5.2 5.2 50 18 $\frac{9}{3} \frac{1.4}{1.7}$

64 $\frac{3}{5} \frac{6.5}{-1.7}$ 62 57 52 49 4.9 48 5.9 5.3 28 22 $\frac{9}{3} \frac{2.3}{1.5}$

72 69 $\frac{4}{2} \frac{6.2}{-1.7}$ 59 47 4.7 47 6.5 6.8 54 50 $\frac{0}{5} \frac{0.5}{0.5}$

$\frac{9}{3} \frac{5.3}{0.0}$ 63 64 64 5.5 5.5 5.8 6.7 5.4 $\frac{9}{3} \frac{5.5}{-0.2}$

$\frac{9}{3} \frac{7.9}{-0.1}$ 49 53 5.3 5.1 5.3 5.8 4.4 $\frac{9}{3} \frac{4.5}{1.5}$

$\frac{9}{3} \frac{4.5}{-0.4}$ 46 5.3 6.1 50 4.9 5.0 5.9 5.6 4.7 $\frac{9}{3} \frac{5.2}{-0.5}$

$\frac{9}{3} \frac{4.2}{-0.7}$ 46 5.7 6.3 6.2 5.0 5.0 5.1 6.2 6.1 5.1 4.3 $\frac{9}{3} \frac{4.7}{-0.2}$

$\frac{9}{3} \frac{4.8}{-0.2}$ 52 6.4 6.3 5.1 4.9 5.1 5.0 $\frac{9}{3} \frac{5.1}{-0.1}$

$\frac{9}{3} \frac{5.8}{-1.6}$ 40 6.4 6.4 6.8 5.4 5.4 5.0 6.5 $\frac{5}{3} \frac{6.8}{-1.5}$
 sp. 11 8' 0.4 ft. 11.5 ft. 9.24 + 30.

$\frac{9}{3} \frac{4.2}{-0.2}$ 44 4.7 4.5 5.1 6.2 $\frac{4}{3} \frac{6.2}{-2.2}$ 6.9

$\frac{9}{3} \frac{4.9}{-0.2}$ 5.1 5.8 6.4 5.0 4.7 5.0 6.3 $\frac{7}{3} \frac{6.3}{-1.8}$ 6.5

72 $\frac{4}{3} \frac{7.4}{-2.6}$ 70 8.1 7.2 5.2 5.2 5.2 6.8 6.8 6.5 6.1 $\frac{2}{3} \frac{6.8}{-1.0}$ 5.9

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		873.85			
928				869.3	4.5
	6.82	876.38	4.29	869.56	
929				698	6.6
930				70.6	5.8
931				71.5	4.9
932				72.2	4.2
933				72.7	3.7
934				73.0	3.4
T.P.	4.55	877.42	3.51	872.87	
935				73.1	4.3
936				72.9	4.5
937				72.7	4.1
938				72.5	5.1
939				71.9	5.5

Inst.
 Rod.
 Chain.

516/26

19.

Left

C L

Right

70 67 70 73 70 52 49 49 62 40 42 0.36
 33 25 22 20 17 11 -0.2 14 18 24 28 3 71.0

67 72 73 75 72 66 64 66 70 75 57 0.52
 31 27 26 20 16 12 10.2 15 20 22 25 3 714

61 66 74 74 58 57 58 68 69 5.5 0.49
 31 25 24 24 17 12 10.1 17 20 23 26 3 70.9

65 59 58 69 52 50 51 65 64 52 4.7 0.42
 31 28 28 23 20 11 -0.1 17 19 23 26 27 3 70.7

66 65 70 49 49 41 3.9 40 48 48 5.3 0.31
 31 28 24 20 18 16 13 10.3 15 20 22 27 3 71.1

65 41 24 26 31 44 35 33 31 50 49 4.3 5.4 27.7 1.7
 33 31 28 27 24 21 20 17 13 10.4 17 20 23 26 27 30 32 110

42 29 28 24 45 41 34 3.3 3.5 4.9 48 5.1 0.28
 31 27 24 20 18 15 12 10.1 16 19 20 26 3 70.6

55 53 51 61 60 42 4.4 48 6.3 6.2 40 5.7 0.37
 33 31 30 29 22 19 18 13 -0.1 13 18 20 24 30 3 70.8

55 55 50 46 56 56 46 4.0 50 60 5.1 4.1 9.58
 33 31 29 24 19 18 14 -0.1 13 15 18 22 3 70.9

56 49 50 56 64 63 48 4.8 50 6.2 6.2 5.5 9.55
 33 31 27 27 20 24 20 18 13 13 14 18 20 3 70.8

57 60 74 56 5.2 5.5 7.5 7.7 0.72 7.2
 33 31 27 24 19 14 -0.1 13 18 20 3 71.1

71 84 86 59 5.7 5.9 7.5 8.7 9.7 8.1
 33 31 27 24 20 15 13 20 3 71.2

Sta.	<u>Original</u> Cross Sections			Grade	Gr. R.
	B. S.	H. I.	F. S.		
940		877.42		871.5	5.9
941	5.00	876.39	6.03	871.39	5.1
942				71.3	5.1
943				71.3	5.1
B.M. 944	5.96	876.43	5.96	870.43	870.47
944				71.3	5.1
945				71.3	5.1
946				71.3	5.1
947				71.4	5.0
T.P. 948	6.34	877.32	5.45	870.98	5.1
948				71.4	5.1
949				40 72.2	5.1
950				72.8	4.5
951				73.4	5.1
T.P. 951	5.84	879.85	5.33	873.99	5.1

Inst.
 Rod.
 Chain.

8/16/20

Left

G L

Right

6.8 47.3 7.8 8.5 8.7 6.0 5.7 6.1 8.3 9.1 2/8.9 8.7 7.8
 3.1 -1.4 2.5 2.2 1.9 1.5 10.2 1.3 1.8 20.2 2.5 2.9 2.6

0/5.0 5.2 6.7 6.4 5.2 4.8 5.1 6.6 5.2 0/5.6
 3/10.1 2.4 2.0 1.7 1.4 10.3 1.2 1.7 2.3 3/10.4

0/4.2 4.7 6.2 6.1 5.2 5.0 5.2 6.3 5.9 5.5 4.9 0/4.7
 3/10.9 2.5 2.2 1.8 1.5 10.1 1.3 1.8 2.0 2.2 2.3 3/10.2

0/3.3 5.6 5.8 6.2 6.0 5.1 4.9 5.0 6.4 5.4 5.9 9/6.3
 1.8 2.7 2.3 2.0 1.8 1.4 10.2 1.3 1.6 2.0 2.5 7.2
 Spot in 24' 0.9 ft. 11.5 ft. 9.4 ft. 9.4 ft. +10.

0/4.4 3.7 4.3 4.0 5.0 4.9 5.3 6.2 6.3 1/6.5 6.5
 3/10.9 3.0 2.7 2.2 1.2 10.2 1.3 1.7 2.0 -1.4 3.3

0/4.8 5.4 6.3 5.3 5.1 5.3 6.4 6.6 6.1 9/6.4 6.3
 3/10.3 1.5 1.8 1.4 1.0 1.2 1.5 1.7 1.9 1.3 3.3

6.6 0/6.6 6.7 5.2 5.1 5.4 7.6 7.4 7.0 9/6.1 6.1
 3.3 5.1 -1.5 1.9 1.5 0.0 1.1 1.8 2.0 2.1 3/10 3.3

0/6.4 6.2 5.1 5.0 5.1 6.6 6.3 1/6.1 6.1
 3/10.4 1.8 1.5 1.0 1.1 1.5 2.7 2.1 -1.1 3.3

Next in P.P. 12.5 ft. 9.4 ft. 10.0

6.4 0/6.4 6.4 5.5 5.4 5.6 6.8 6.6 0/6.7
 3.3 3/10.7 1.8 1.5 10.3 1.2 1.4 2.0 3/10.0

7.3 8/8.0 7.4 5.4 4.7 5.2 8.2 0/8.1 8.0
 2.3 6.1 2.7 2.0 1.4 10.2 1.2 1.8 2.1 2.5 3.3

0/4.8 4.7 5.8 5.7 4.5 4.1 4.3 7.2 7.3 5/6.7 6.5
 3/10.5 3.2 2.4 1.8 1.4 10.4 1.2 1.8 2.1 2.1 -2.2 3.3

0/4.4 4.4 4.9 5.6 5.4 4.0 3.7 3.9 5.3 5.4 5.5 4.5 3.3 0/3.1
 3/10.3 3.0 2.5 2.0 1.5 1.2 10.2 1.5 1.9 2.0 2.2 2.4 2.5 3/10.8

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		879.85			
759				873.7	6.2
752				74.0	5.9
720				874.1	5.8
953				74.4	5.5
954				74.6	5.3
955				74.6	5.3
956				74.6	5.3
T.P.	5.50	880.23	4.92	874.95	
957				74.6	5.6
958				74.6	5.6
959				74.6	5.6
960				74.6	5.6
961				74.6	5.6
962				74.6	5.6
T.P.	3.73	879.75	4.41	875.82	
963				74.6	5.6

Sta.	B. S.	Original Cross		Grade	Gr. R.
		H. I.	F. S.		
		879.95			
964				874.8	5.2
965				74.6	5.2
966				74.6	5.2
967				74.4	5.2
B.M.	4.40	879.16	5.00	874.75	874.74
968				74.6	4.6
969				74.6	4.4
970				74.5 x x x	4.7
971				74.1	5.1
972				73.6	5.4
T.P.	3.53	876.78	5.71	873.45	
973				72.8	4.2
974				72.1	4.9
975				70.9	5.1

Inst. Rod. Chain.

8/23/26

Left C L Right

$\frac{65}{33} \frac{9/24}{3/-12} \frac{62}{28} \frac{50}{19} \frac{51}{101} \frac{54}{8} \frac{70}{12} \frac{62}{16} \frac{4/6.1}{3/-0.9} \frac{6.1}{33}$

$\frac{63}{33} \frac{8/4.5}{3/-1.5} \frac{61}{30} \frac{52}{18} \frac{50}{102} \frac{5.5}{12} \frac{65}{14} \frac{5.9}{19} \frac{6.1/6.8}{303/-1.1}$

$\frac{66}{33} \frac{9/6.4}{3/-12} \frac{75}{29} \frac{75}{26} \frac{64}{18} \frac{53}{14} \frac{5.3}{21} \frac{55}{12} \frac{72}{14} \frac{72}{18} \frac{65}{21} \frac{6/7}{3/-1.5} \frac{67}{33}$

$\frac{63}{33} \frac{77}{32} \frac{5/2.0}{3/-2.0} \frac{77}{30} \frac{57}{14} \frac{55}{23} \frac{5.1}{12} \frac{7.7}{17} \frac{7.7}{21} \frac{72}{24} \frac{4/7.5}{3/-2.1} \frac{7.5}{33}$

s.p.k. in 10" coil at sta 966+45.

$\frac{63}{33} \frac{9/6.5}{3/-1.9} \frac{55}{30} \frac{40}{14} \frac{4.5}{13} \frac{4.7}{101} \frac{4.9}{13} \frac{4.2}{17} \frac{6.2}{20} \frac{5.0}{23} \frac{0/4.5}{3/10.1}$

$\frac{5.7}{33} \frac{1/5.7}{3/-1.1} \frac{53}{30} \frac{62}{16} \frac{4.9}{12} \frac{4.9}{25} \frac{5.1}{13} \frac{6.2}{16} \frac{6.2}{19} \frac{4.5}{24} \frac{3.7/5.7}{30/10.9}$

$\frac{78}{31} \frac{73}{38} \frac{4/2.4}{3/-2.7} \frac{72}{24} \frac{5.2}{22} \frac{31}{19} \frac{5.7}{14} \frac{5.2}{0.5} \frac{5.5}{13} \frac{7.1}{18} \frac{5.6}{23} \frac{4.3}{31} \frac{0/4.5}{3/10.2}$

$\frac{7.1}{33} \frac{7.1}{32} \frac{0/6.6}{3/-1.5} \frac{5.9}{31} \frac{60}{24} \frac{7.1}{17} \frac{5.6}{12} \frac{5.4}{2.9} \frac{5.2}{14} \frac{7.4}{18} \frac{7.4}{10} \frac{6.9}{22} \frac{9/6.4}{3/-1.3} \frac{6.5}{33}$

$\frac{0/5.3}{3/10.3} \frac{5.3}{25} \frac{5.6}{11} \frac{5.5}{10.1} \frac{5.7}{13} \frac{6.6}{19} \frac{5.3}{24} \frac{0/5.4}{3/10.2}$

$\frac{0/3.0}{3/7.2} \frac{24}{30} \frac{3.7}{23} \frac{4.4}{22} \frac{5.1}{19} \frac{5.1}{18} \frac{4.2}{12} \frac{4.0}{10.2} \frac{4.1}{14} \frac{5.1}{16} \frac{5.1}{18} \frac{4.0}{23} \frac{3.7/3.7}{29/7.05}$

$\frac{5.5}{33} \frac{0/5.5}{3/-0.6} \frac{5.4}{31} \frac{5.5}{31} \frac{6.5}{19} \frac{6.5}{17} \frac{5.4}{13} \frac{5.2}{-0.3} \frac{5.4}{13} \frac{6.9}{18} \frac{6.9}{21} \frac{5.7}{25} \frac{5/5.7}{3/-0.8} \frac{5.7}{33}$

$\frac{6.7}{33} \frac{7/6.8}{3/-0.7} \frac{7.4}{28} \frac{7.4}{19} \frac{6.5}{13} \frac{4.2}{-0.1} \frac{6.4}{15} \frac{7.1}{18} \frac{7.1}{21} \frac{5.5}{29} \frac{0/5.5}{3/10.6}$

Original..... Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		870.98			
976				869.9	7.1
728				869.6	7.4
977				62.9	8.1
T.P.	2.98	871.79	8.17	868.81	
978				67.9	3.9
979				64.9	4.9
980				65.9	5.9
981				64.9	4.9
T.P.	4.04	868.38	7.47	864.32	
982				63.9	4.5
983				62.9	5.5
B.M.	0.90	867.00	2.29	866.09	866.10
984				61.9	5.1
985				60.9	4.1
986				60.1	4.9
760				60.0	7.0
987				59.9	7.1
T.P.	4.34	864.81	6.55	860.45	

Rod.....
Chain.....

8/23/24

Left

C L

Right

		$\frac{0}{72}$	72	69	72	78	47		$\frac{0}{40}$
		$\frac{3}{201}$	14	102	15	18	26		$\frac{3}{12.5}$
		81	74	75	72	76	82	82	77
		33	30	14	10.2	15	17	18	27
72		$\frac{1}{72}$	102	102	83	81	82	92	72
33		$\frac{1}{-11}$	27	22	14	20	14	18	22

58	70	$\frac{2}{115}$	69	40	38	42	52	59	47	$\frac{2}{48}$	48
33	30	$\frac{2}{-36}$	20	13	10.1	13	17	20	23	$\frac{3}{-0.9}$	33

85		$\frac{0}{24}$	20	55	50	52	42	73	62	$\frac{4}{63}$	63
33		$\frac{2}{-45}$	21	13	10.1	13	17	20	23	$\frac{3}{-1.4}$	33

85		$\frac{6}{102}$	91	60	57	59	77	79	65	$\frac{0}{6.0}$	6.0
33		$\frac{2}{-43}$	17	12	10.2	13	18	20	24	$\frac{3}{-0.1}$	33

75		$\frac{0}{109}$	105	69	66	68	84	84	69	$\frac{0}{6.5}$	6.5
33		$\frac{2}{-40}$	20	12	10.3	14	17	19	23	$\frac{3}{+0.4}$	33

74	77	$\frac{8}{89}$	77	47	41	45	49	44	$\frac{0}{41}$	41
33	32	$\frac{2}{-44}$	18	10	10.4	13	12	24	$\frac{3}{+0.4}$	33

84		$\frac{6}{98}$	90	57	52	56	66	68	53	$\frac{0}{49}$	49
33		$\frac{2}{-43}$	30	12	10.3	15	18	21	26	$\frac{5}{+0.6}$	33

S.P.K. in 15' O.K. Rt. Sta. 982 + 00.

78		$\frac{4}{89}$	84	50	46	51	62	42	$\frac{0}{41}$	41
33		$\frac{2}{-58}$	21	12	10.6	15	19	26	$\frac{5}{+1.0}$	33

108	101	$\frac{6}{70}$	91	76	62	58	63	70	70	53	$\frac{0}{15.1}$	15.1
33	31	$\frac{2}{-2.9}$	27	17	14	10.3	14	19	20	24	$\frac{3}{+1.0}$	33

11.7		$\frac{6}{93}$	76	76	66	61	68	76	76	65	$\frac{0}{69}$	69
33		$\frac{2}{-24}$	32	17	12	10.8	14	20	21	22	$\frac{5}{+0.0}$	33

		$\frac{9.5}{33}$	65	65	65	66	74	74	53	57	
		$\frac{2}{-14}$	14	14	14	14	18	19	24	33	
		$\frac{0}{72}$	67	74	64	62	67	74	52	$\frac{0}{67}$	67
		$\frac{3}{-21}$	25	19	15	10.9	14	19	25	$\frac{3}{+1.0}$	33

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		864.81			
988				859.9	4.9
989				59.9	4.9
990				59.9	4.7
991				60.0	4.8
T.P.	5.32	864.79	5.34	859.47	
992				60.1	4.7
993				60.3	4.5
T.P.	5.49	865.92	4.36	860.43	
994				61.1	4.8
995				62.6	3.5
T.P.	7.73	872.54	1.11	864.81	
996				64.7	7.8
B.M.	5.00	872.55	5.00	867.54	867.55
997				66.9	5.7
T.P.	4.44	876.45	2.54	870.01	
998				69.1	7.4
999				71.3	5.2

Rod.....

Chain.....

8/24/26

Left

G L

Right

$\overset{x}{05.4}$	$\overset{x}{5.5}$	$\overset{x}{6.3}$	$\overset{x}{6.4}$	$\overset{x}{4.8}$	$\overset{x}{4.3}$	$\overset{x}{4.5}$	$\overset{x}{5.5}$	$\overset{x}{5.5}$	$\overset{x}{5.3}$	$\overset{x}{05.3}$
$\overset{3}{3} \overset{3}{-0.5}$	$\overset{3}{23}$	$\overset{3}{20}$	$\overset{3}{18}$	$\overset{3}{14}$	$\overset{3}{10.6}$	$\overset{3}{15}$	$\overset{3}{18}$	$\overset{3}{17}$	$\overset{3}{24}$	$\overset{3}{10.6}$

$\overset{x}{05.2}$	$\overset{x}{6.0}$	$\overset{x}{6.2}$	$\overset{x}{6.8}$	$\overset{x}{6.8}$	$\overset{x}{5.0}$	$\overset{x}{4.6}$	$\overset{x}{5.0}$	$\overset{x}{7.1}$	$\overset{x}{7.1}$	$\overset{x}{5.3}$	$\overset{x}{04.4}$
$\overset{3}{3} \overset{3}{-0.3}$	$\overset{3}{27}$	$\overset{3}{24}$	$\overset{3}{25}$	$\overset{3}{19}$	$\overset{3}{15}$	$\overset{3}{10.3}$	$\overset{3}{15}$	$\overset{3}{18}$	$\overset{3}{20}$	$\overset{3}{25}$	$\overset{3}{10.5}$

$\overset{x}{5.5}$	$\overset{x}{7.5}$	$\overset{x}{5.5}$	$\overset{x}{6.6}$	$\overset{x}{6.6}$	$\overset{x}{5.3}$	$\overset{x}{4.9}$	$\overset{x}{5.1}$	$\overset{x}{7.0}$	$\overset{x}{7.0}$	$\overset{x}{5.3}$	$\overset{x}{05.2}$
$\overset{3}{3} \overset{3}{-0.6}$	$\overset{3}{23}$	$\overset{3}{19}$	$\overset{3}{17}$	$\overset{3}{15}$	$\overset{3}{0.0}$	$\overset{3}{14}$	$\overset{3}{18}$	$\overset{3}{20}$	$\overset{3}{26}$	$\overset{3}{-0.3}$	

$\overset{x}{5.9}$	$\overset{x}{5.9}$	$\overset{x}{5.7}$	$\overset{x}{7.4}$	$\overset{x}{7.2}$	$\overset{x}{5.2}$	$\overset{x}{4.6}$	$\overset{x}{5.0}$	$\overset{x}{6.8}$	$\overset{x}{6.8}$	$\overset{x}{5.5}$	$\overset{x}{05.1}$
$\overset{3}{3} \overset{3}{-0.1}$	$\overset{3}{21}$	$\overset{3}{24}$	$\overset{3}{17}$	$\overset{3}{14}$	$\overset{3}{13}$	$\overset{3}{10.2}$	$\overset{3}{15}$	$\overset{3}{19}$	$\overset{3}{20}$	$\overset{3}{25}$	$\overset{3}{-0.3}$

Nail 10 7.00 11 5.0 7.7 1.50

$\overset{x}{6.7}$	$\overset{x}{6.7}$	$\overset{x}{5.9}$	$\overset{x}{6.8}$	$\overset{x}{6.7}$	$\overset{x}{5.0}$	$\overset{x}{4.6}$	$\overset{x}{4.9}$	$\overset{x}{6.6}$	$\overset{x}{6.4}$	$\overset{x}{4.7}$	$\overset{x}{04.8}$
$\overset{3}{3} \overset{3}{-0.7}$	$\overset{3}{22}$	$\overset{3}{17}$	$\overset{3}{17}$	$\overset{3}{13}$	$\overset{3}{10.1}$	$\overset{3}{16}$	$\overset{3}{17}$	$\overset{3}{23}$	$\overset{3}{28}$	$\overset{3}{-0.1}$	

$\overset{x}{6.8}$	$\overset{x}{6.8}$	$\overset{x}{6.8}$	$\overset{x}{7.4}$	$\overset{x}{7.3}$	$\overset{x}{5.1}$	$\overset{x}{4.8}$	$\overset{x}{5.1}$	$\overset{x}{6.2}$	$\overset{x}{6.2}$	$\overset{x}{4.8}$	$\overset{x}{04.7}$
$\overset{3}{3} \overset{3}{-0.3}$	$\overset{3}{26}$	$\overset{3}{24}$	$\overset{3}{14}$	$\overset{3}{17}$	$\overset{3}{0.3}$	$\overset{3}{14}$	$\overset{3}{20}$	$\overset{3}{24}$	$\overset{3}{28}$	$\overset{3}{-0.2}$	

$\overset{x}{7.3}$	$\overset{x}{4.7}$	$\overset{x}{7.3}$	$\overset{x}{4.6}$	$\overset{x}{7.6}$	$\overset{x}{6.0}$	$\overset{x}{5.5}$	$\overset{x}{5.4}$	$\overset{x}{7.6}$	$\overset{x}{5.5}$	$\overset{x}{5.5}$
$\overset{3}{3} \overset{3}{-0.7}$	$\overset{3}{24}$	$\overset{3}{17}$	$\overset{3}{17}$	$\overset{3}{13}$	$\overset{3}{-0.7}$	$\overset{3}{17}$	$\overset{3}{5}$	$\overset{3}{-0.7}$	$\overset{3}{33}$	

$\overset{x}{6.3}$	$\overset{x}{6.3}$	$\overset{x}{06.8}$	$\overset{x}{6.9}$	$\overset{x}{7.6}$	$\overset{x}{7.2}$	$\overset{x}{4.5}$	$\overset{x}{4.1}$	$\overset{x}{4.2}$	$\overset{x}{5.5}$	$\overset{x}{5.5}$	$\overset{x}{4.0}$	$\overset{x}{06.5}$
$\overset{3}{3} \overset{3}{-0.5}$	$\overset{3}{20}$	$\overset{3}{16}$	$\overset{3}{13}$	$\overset{3}{8}$	$\overset{3}{13}$	$\overset{3}{-0.8}$	$\overset{3}{14}$	$\overset{3}{21}$	$\overset{3}{23}$	$\overset{3}{27}$	$\overset{3}{-0.2}$	

$\overset{x}{10.4}$	$\overset{x}{10.4}$	$\overset{x}{11.1}$	$\overset{x}{11.2}$	$\overset{x}{10.7}$	$\overset{x}{8.5}$	$\overset{x}{8.0}$	$\overset{x}{8.1}$	$\overset{x}{7.2}$	$\overset{x}{10.1}$	$\overset{x}{10.6}$	$\overset{x}{8.6}$	$\overset{x}{06.5}$	
$\overset{3}{3} \overset{3}{-0.3}$	$\overset{3}{29}$	$\overset{3}{2}$	$\overset{3}{-3.6}$	$\overset{3}{25}$	$\overset{3}{42}$	$\overset{3}{15}$	$\overset{3}{-0.2}$	$\overset{3}{14}$	$\overset{3}{18}$	$\overset{3}{24}$	$\overset{3}{24}$	$\overset{3}{28}$	$\overset{3}{-0.5}$

3PK. 14 18 20 17. 5 10 996 100

$\overset{x}{7.6}$	$\overset{x}{4.7}$	$\overset{x}{7.9}$	$\overset{x}{5.5}$	$\overset{x}{5.1}$	$\overset{x}{5.2}$	$\overset{x}{6.5}$	$\overset{x}{2.5}$	$\overset{x}{2.5}$	$\overset{x}{06.2}$	$\overset{x}{06.2}$
$\overset{3}{3} \overset{3}{-0.1}$	$\overset{3}{24}$	$\overset{3}{19}$	$\overset{3}{10.6}$	$\overset{3}{15}$	$\overset{3}{21}$	$\overset{3}{31}$	$\overset{3}{45}$	$\overset{3}{73.5}$		

$\overset{x}{8.5}$	$\overset{x}{5.2}$	$\overset{x}{7.5}$	$\overset{x}{6.6}$	$\overset{x}{6.0}$	$\overset{x}{6.0}$	$\overset{x}{7.2}$	$\overset{x}{7.2}$	$\overset{x}{5.7}$	$\overset{x}{05.6}$	$\overset{x}{05.6}$
$\overset{3}{3} \overset{3}{-0.8}$	$\overset{3}{20}$	$\overset{3}{14}$	$\overset{3}{11.7}$	$\overset{3}{15}$	$\overset{3}{10}$	$\overset{3}{23}$	$\overset{3}{32}$	$\overset{3}{-0.5}$	$\overset{3}{11.8}$	

$\overset{x}{4.1}$	$\overset{x}{4.5}$	$\overset{x}{4.3}$	$\overset{x}{3.9}$	$\overset{x}{4.0}$	$\overset{x}{5.1}$	$\overset{x}{5.4}$	$\overset{x}{4.0}$	$\overset{x}{04.1}$	$\overset{x}{04.1}$
$\overset{3}{3} \overset{3}{-0.1}$	$\overset{3}{24}$	$\overset{3}{12}$	$\overset{3}{11.3}$	$\overset{3}{14}$	$\overset{3}{20}$	$\overset{3}{25}$	$\overset{3}{30}$	$\overset{3}{5}$	$\overset{3}{11.1}$

~~Original~~..... Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		876.45			
1000				873.2	3.3
T.P.	5.11	879.84	1.70	874.95	
1001				74.7	5.5
1002				74.9	5.0
1003				75.1	4.8
1004				75.3	4.4
T.P.	5.50	881.61	3.75	876.11	
1005				75.6	4.0
1006				75.8	5.8
1007				76.1	5.5
T.P.	4.68	881.19	5.10	876.51	
1008				76.2	5.0
1009				76.2	5.0
1010				76.1	5.1
B.M.	4.40	881.13	4.40	876.79 = 876.79	
1011				75.9	5.2

Left

C L

Right

$\begin{array}{r} 0/22 \\ 5 \end{array}$ $\begin{array}{r} 26 \\ 23 \end{array}$ $\begin{array}{r} 24 \\ 10 \end{array}$ $\begin{array}{r} 22 \\ 11 \end{array}$ $\begin{array}{r} 24 \\ 15 \end{array}$ $\begin{array}{r} 31 \\ 18 \end{array}$ $\begin{array}{r} 31 \\ 21 \end{array}$ $\begin{array}{r} 22 \\ 25 \end{array}$ $\begin{array}{r} 22 \\ 5 \end{array} / \begin{array}{r} 22 \\ 11 \end{array}$

$\begin{array}{r} 0/54 \\ 3 \end{array}$ $\begin{array}{r} 69 \\ 25 \end{array}$ $\begin{array}{r} 57 \\ 14 \end{array}$ $\begin{array}{r} 52 \\ 10.3 \end{array}$ $\begin{array}{r} 54 \\ 11 \end{array}$ $\begin{array}{r} 69 \\ 14 \end{array}$ $\begin{array}{r} 67 \\ 17 \end{array}$ $\begin{array}{r} 58 \\ 23 \end{array}$ $\begin{array}{r} 0/50 \\ 5 \end{array} / \begin{array}{r} 50 \\ 10.5 \end{array}$

$\begin{array}{r} 6.6 \\ 53 \end{array}$ $\begin{array}{r} 73 \\ 75 \end{array}$ $\begin{array}{r} 68 \\ 21 \end{array}$ $\begin{array}{r} 54 \\ 14 \end{array}$ $\begin{array}{r} 50 \\ 00 \end{array}$ $\begin{array}{r} 32 \\ 10 \end{array}$ $\begin{array}{r} 69 \\ 17 \end{array}$ $\begin{array}{r} 0/68 \\ 5 \end{array}$ $\begin{array}{r} 68 \\ 78 \end{array}$ $\begin{array}{r} 68 \\ 53 \end{array}$

$\begin{array}{r} 71 \\ 33 \end{array}$ $\begin{array}{r} 2/71 \\ 40 \end{array}$ $\begin{array}{r} 68 \\ 24 \end{array}$ $\begin{array}{r} 51 \\ 18 \end{array}$ $\begin{array}{r} 46 \\ 10.2 \end{array}$ $\begin{array}{r} 47 \\ 8 \end{array}$ $\begin{array}{r} 61 \\ 13 \end{array}$ $\begin{array}{r} 2/58 \\ 5 \end{array}$ $\begin{array}{r} 58 \\ 70 \end{array}$ $\begin{array}{r} 58 \\ 53 \end{array}$

$\begin{array}{r} 68 \\ 33 \end{array}$ $\begin{array}{r} 5/61 \\ 70 \end{array}$ $\begin{array}{r} 55 \\ 27 \end{array}$ $\begin{array}{r} 59 \\ 25 \end{array}$ $\begin{array}{r} 59 \\ 22 \end{array}$ $\begin{array}{r} 44 \\ 17 \end{array}$ $\begin{array}{r} 44 \\ 10 \end{array}$ $\begin{array}{r} 62 \\ 12 \end{array}$ $\begin{array}{r} 62 \\ 15 \end{array}$ $\begin{array}{r} 53 \\ 18 \end{array}$ $\begin{array}{r} 0/46 \\ 5 \end{array} / \begin{array}{r} 46 \\ 10 \end{array}$

$\begin{array}{r} 0/59 \\ 5 \end{array}$ $\begin{array}{r} 53 \\ 29 \end{array}$ $\begin{array}{r} 68 \\ 25 \end{array}$ $\begin{array}{r} 68 \\ 24 \end{array}$ $\begin{array}{r} 57 \\ 15 \end{array}$ $\begin{array}{r} 56 \\ 10.4 \end{array}$ $\begin{array}{r} 57 \\ 8 \end{array}$ $\begin{array}{r} 67 \\ 12 \end{array}$ $\begin{array}{r} 3.2 \\ 22 \end{array}$ $\begin{array}{r} 3.2 \\ 22 \end{array}$ $\begin{array}{r} 3.0 \\ 28 \end{array}$ $\begin{array}{r} 0/27 \\ 5 \end{array} / \begin{array}{r} 27 \\ 13.3 \end{array}$

$\begin{array}{r} 0/65 \\ 3 \end{array}$ $\begin{array}{r} 61 \\ 28 \end{array}$ $\begin{array}{r} 55 \\ 20 \end{array}$ $\begin{array}{r} 51 \\ 10.7 \end{array}$ $\begin{array}{r} 52 \\ 6 \end{array}$ $\begin{array}{r} 68 \\ 11 \end{array}$ $\begin{array}{r} 68 \\ 14 \end{array}$ $\begin{array}{r} 3.3 \\ 19 \end{array}$ $\begin{array}{r} 0/26 \\ 5 \end{array} / \begin{array}{r} 26 \\ 13.2 \end{array}$

$\begin{array}{r} 71 \\ 33 \end{array}$ $\begin{array}{r} 5/70 \\ 31 \end{array}$ $\begin{array}{r} 64 \\ 25 \end{array}$ $\begin{array}{r} 51 \\ 21 \end{array}$ $\begin{array}{r} 50 \\ 10.5 \end{array}$ $\begin{array}{r} 52 \\ 5 \end{array}$ $\begin{array}{r} 66 \\ 9 \end{array}$ $\begin{array}{r} 66 \\ 12 \end{array}$ $\begin{array}{r} 5.2 \\ 15 \end{array}$ $\begin{array}{r} 0/47 \\ 5 \end{array} / \begin{array}{r} 47 \\ 10.8 \end{array}$

$\begin{array}{r} 67 \\ 33 \end{array}$ $\begin{array}{r} 4/71 \\ 50 \end{array}$ $\begin{array}{r} 70 \\ 24 \end{array}$ $\begin{array}{r} 48 \\ 21 \end{array}$ $\begin{array}{r} 49 \\ 10.1 \end{array}$ $\begin{array}{r} 49 \\ 4 \end{array}$ $\begin{array}{r} 65 \\ 7 \end{array}$ $\begin{array}{r} 65 \\ 11 \end{array}$ $\begin{array}{r} 6.2 \\ 15 \end{array}$ $\begin{array}{r} 4/60 \\ 5 \end{array}$ $\begin{array}{r} 6.0 \\ 70 \end{array}$ $\begin{array}{r} 6.0 \\ 53 \end{array}$

$\begin{array}{r} 67 \\ 30 \end{array}$ $\begin{array}{r} 1/57 \\ 8 \end{array}$ $\begin{array}{r} 60 \\ 29 \end{array}$ $\begin{array}{r} 72 \\ 27 \end{array}$ $\begin{array}{r} 72 \\ 26 \end{array}$ $\begin{array}{r} 52 \\ 21 \end{array}$ $\begin{array}{r} 51 \\ 10.1 \end{array}$ $\begin{array}{r} 49 \\ 5 \end{array}$ $\begin{array}{r} 64 \\ 8 \end{array}$ $\begin{array}{r} 64 \\ 11 \end{array}$ $\begin{array}{r} 5.3 \\ 14 \end{array}$ $\begin{array}{r} 5.4 \\ 22 \end{array}$ $\begin{array}{r} 4.9 \\ 27 \end{array}$ $\begin{array}{r} 0/48 \\ 5 \end{array} / \begin{array}{r} 48 \\ 10.2 \end{array}$

$\begin{array}{r} 0/49 \\ 5 \end{array}$ $\begin{array}{r} 47 \\ 10.2 \end{array}$ $\begin{array}{r} 65 \\ 12 \end{array}$ $\begin{array}{r} 65 \\ 28 \end{array}$ $\begin{array}{r} 5.3 \\ 25 \end{array}$ $\begin{array}{r} 5.2 \\ 22 \end{array}$ $\begin{array}{r} 5.1 \\ 0.1 \end{array}$ $\begin{array}{r} 64 \\ 4 \end{array}$ $\begin{array}{r} 64 \\ 8 \end{array}$ $\begin{array}{r} 64 \\ 10 \end{array}$ $\begin{array}{r} 5.2 \\ 13 \end{array}$ $\begin{array}{r} 7/57 \\ 5 \end{array}$ $\begin{array}{r} 57 \\ 26 \end{array}$ $\begin{array}{r} 57 \\ 53 \end{array}$

SPK. in 50" OAK Lt. Stg. 10/10 f

$\begin{array}{r} 68 \\ 33 \end{array}$ $\begin{array}{r} 3/68 \\ 5 \end{array}$ $\begin{array}{r} 47 \\ 29 \end{array}$ $\begin{array}{r} 76 \\ 26 \end{array}$ $\begin{array}{r} 57 \\ 22 \end{array}$ $\begin{array}{r} 54 \\ 0.2 \end{array}$ $\begin{array}{r} 5.5 \\ 4 \end{array}$ $\begin{array}{r} 60 \\ 10 \end{array}$ $\begin{array}{r} 4.7 \\ 14 \end{array}$ $\begin{array}{r} 0/45 \\ 5 \end{array} / \begin{array}{r} 45 \\ 10.9 \end{array}$

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		881.13			
1012				875.7	5.4
T.P.	4.90	879.96	6.07	875.06	
1013				75.5	4.5
1014				75.3	4.7
1015				75.2	4.8
1016				75.4	4.6
1017				75.7	4.3
1018				76.0	4.0
T.P.	4.79	881.14	3.61	876.35	
1019				76.2	4.9
+50				46.2	4.9
T.P.	3.55	880.46	4.29	876.91	
1020				76.1	4.4
+25				76.0	4.5
1021				75.7	4.8
1022				75.2	5.3
1023				74.7	5.6

Inst.
 Rod.
 Chain.

4/26/26

Left:

C.L.

Right

113 4/11.4 11' 69 60 60 82 82 72 72 62 0/5.9
 33 3/-58 31 30 26 4 8 12 14 21 17 3/05

56 5/20 20 20 51 51 50 64 63 5.3 5/5.5 53
 33 3/-15 37 35 21 0.4 4 8 19 26 3/10 33

74 5/7.5 73 53 53 5.3 72 29 6.5 5/6.2 62
 33 2/-28 25 19 0.6 5 8 13 25 3/7.5 33

75 4/7.2 72 5.5 5.5 5.4 64 64 5.3 0/5.0
 33 2/-29 25 19 0.5 5 10 17 26 3/02

4/5.5 58 5.2 4.8 5.0 5.4 5.4 4.6 0/4.8
 3 3/-0.7 24 16 0.2 7 11 14 18 3/1.8

4/4.5 46 6.6 6.5 4.3 4.0 4.1 5.2 5.2 5.8 0/5.9
 3 3/-2.2 29 25 22 16 10.3 9 13 15 20 3/7.0

3/3.8 3.8 47 5.3 4.1 3.7 5.7 4.9 3.1 0/5.9
 3/10.0 29 26 24 16 10.3 9 14 22 3/11.1

3/5.2 50 5.5 4.6 4.3 4.5 0/3.9
 3/2.5 25 23 15 10.6 13.5 7/1.0
 56 3/5.0 58 4.0 4.4 5.4 4.0 0/3.7
 33 3/10.7 23 15 10.5 14 21 3/41.2

3/4.4 64 6.3 4.1 4.0 4.0 5.2 5.0 4.1 4.4 4.5
 3/00 27 19 17 10.4 9 13 17 22 27 3.8
 49 6.5 6.2 4.5 4.3 4.4 7.0 6.8 6.0 5.4
 33 3/4.5 33 27 19 14 10.2 10 14 24 29 3.3
 4.3 6.9 6.7 4.7 4.7 5.0 6.6 6.4 6.0 5/5.0 5.6
 30 3/10.5 27 22 17 13 10.1 11 14 21 25 3/08 5.0
 60 3/7.6 7.0 6.7 5.5 5.2 5.4 7.4 7.4 6.7 6.0 0/5.0
 33 3/10.7 24 16 10.1 12 17 19 20 27 3/10.3

65 7/6.5 75 8.1 6.0 5.7 5.8 4.2 7.2 4.7 0/4.7
 33 3/-0.4 24 16 10.1 14 17 19 20 3/10.9

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		880.44			
1024				874.2	6.5
T.P.	3.80	877.50	6.74	873.70	
+50				874.0	3.5
1025				73.7	5.8
1026				73.3	4.2
1027				73.3	4.2
1028				73.5	4.0
B.M.	4.70	879.77	2.63	874.87	874.87
1029				73.9	5.9
1030				74.7	5.1
1031				75.6	4.2
1032				76.5	3.3
T.P.	7.13	884.18	1.72	877.05	
1033				77.2	7.0
1034				77.9	6.3
1035				78.6	5.4

Inst.
 Rod.
 Chain.

4/26/26

Left

C L

Right

$\frac{0}{5} \frac{0}{10.3}$ 62 74 66 $\frac{6.5}{-0.2}$ $\frac{6.5}{14}$ 75 48 $\frac{0}{5} \frac{0}{11.7}$ 44

58 51 54 54 41 5.7 38 48 48 34 2.1 10 1.0
 39 29 18 16 10 -0.2 15 18 22 27 28 32 33
 87 $\frac{0}{5} \frac{0}{10.5}$ 79 76 43 4.1 4.5 6.6 42 32 $\frac{0}{5} \frac{0}{10.1}$
 33 $\frac{0}{5} \frac{0}{10.5}$ 25 18 10 -0.3 16 21 24 32 $\frac{0}{5} \frac{0}{10.7}$
 76 87 88 86 82 5.1 4.8 4.9 6.5 5.6 $\frac{0}{5} \frac{0}{10.5}$ 5.4
 33 30 $\frac{0}{5} \frac{0}{10.2}$ 34 18 11 -0.4 14 20 29 3 -1.3 33

52 $\frac{0}{5} \frac{0}{10.3}$ 66 49 4.1 $\frac{0}{5} \frac{0}{10.7}$ 4.7 6.4 $\frac{0}{5} \frac{0}{10.2}$ 5.9 7.1
 50 $\frac{0}{5} \frac{0}{10.1}$ 15 10 -0.5 16 21 5 -2.0 39 50

4 42.9 38 32 44 54 53 45 39 $\frac{0}{5} \frac{0}{10.4}$ 5.1 5.1 35 8 3.8 4.1
 25 $\frac{0}{5} \frac{0}{10.1}$ 54 30 20 17 14 10 10.1 15 19 22 27 $\frac{0}{5} \frac{0}{10.2}$ 50

Spr N in 18" diam. 87. 549. 1028 100.

54 $\frac{0}{5} \frac{0}{10.5}$ 49 57 72 69 5.5 5.4 5.5 5.9 5.9 4.6 $\frac{0}{5} \frac{0}{10.9}$ 5.0
 33 $\frac{0}{5} \frac{0}{10.5}$ 26 21 18 14 10 10.5 14 21 23 28 $\frac{0}{5} \frac{0}{10.0}$ 50

59 $\frac{0}{5} \frac{0}{10.0}$ 58 53 4.7 4.8 6.9 6.9 5.3 $\frac{0}{5} \frac{0}{10.5}$ 4.1
 50 $\frac{0}{5} \frac{0}{10.9}$ 22 7 10.4 14 17 24 28 $\frac{0}{5} \frac{0}{10.0}$ 5.0

41 $\frac{0}{5} \frac{0}{10.6}$ 42 55 58 4.1 4.0 4.0 6.8 6.2 4.9 $\frac{0}{5} \frac{0}{10.6}$ 5.2
 30 $\frac{0}{5} \frac{0}{10.4}$ 20 18 15 10 10.2 15 20 24 24 $\frac{0}{5} \frac{0}{10.4}$ 50

45 $\frac{0}{5} \frac{0}{10.5}$ 46 53 48 34 3.1 3.3 4.8 5.2 3.0 4 2.7 3.5
 50 $\frac{0}{5} \frac{0}{10.0}$ 20 18 14 11 10.2 15 20 22 27 $\frac{0}{5} \frac{0}{10.6}$ 50

80 $\frac{0}{5} \frac{0}{10.1}$ 48 89 88 72 70 7.2 7.0 7.0 7.4 $\frac{0}{5} \frac{0}{10.8}$ 7.7
 50 $\frac{0}{5} \frac{0}{10.1}$ 23 19 14 11 10 14 18 21 25 $\frac{0}{5} \frac{0}{10.2}$ 50

55 $\frac{0}{5} \frac{0}{10.6}$ 57 64 78 78 6.4 6.1 6.4 7.7 6.0 $\frac{0}{5} \frac{0}{10.9}$ 6.5
 50 $\frac{0}{5} \frac{0}{10.7}$ 30 21 17 14 11 10.2 13 18 23 $\frac{0}{5} \frac{0}{10.4}$ 50

6.5 $\frac{0}{5} \frac{0}{10.5}$ 6.8 5.7 5.4 5.4 5.3 4 5.3 5.1
 50 $\frac{0}{5} \frac{0}{10.9}$ 14 12 10.4 11 24 $\frac{0}{5} \frac{0}{10.3}$ 50

Original..... Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		884.18 ✓			
1036				879.2	50.
1037				79.4	4.8.
1038				79.5	4.7.
T. P.	4.78	884.07 ✓	4.89	879.29 ✓	
1039				79.4	4.7.
1040				79.5	4.4.
1041				79.4	4.7.
1042				78.7	5.4.
1043				77.8	6.3.
B. M.	1.55	880.83 ✓	4.79	879.28 ✓	879.27
1044				76.9	3.9.
1045				76.0	4.4 4.8.5
750				75.6	4.6 5.2.5
1046				75.1	5.0 5.7.6
750				74.7	5.4 6.1.6
1047				74.8	5.9 6.6.2
T. P.	4.00	877.98 ✓	7.45	873.38 ✓	

Inst.
 Rod.
 Chain.

Left G L Right

W. S.

67 8/63 62 53 47 50 50 3.5 47.2 28
 53 2/73 19 11 103 12 18 24 4/12.4 33

70 70 4/71 71 51 51 53 70 70 49 2/40 38
 50 31 4/-33 16 12 103 11 14 19 24 3/102 50

67 4/74 77 52 51 51 71 77 07.7 70
 50 2/-27 19 12 04 11 14 20 2/-30 50

Naïl in R.P. Lt. Sta. 1032+95

56 4/60 59 50 47 48 60 63 40.7 60
 33 4/73 17 11 00 11 14 19 2/-12 33

50 0/32 35 35 47 44 46 56 57 46 0/51 51
 33 5/74 28 20 19 10.2 12 15 17 21 2/-0.5 33

57 0/29 28 52 56 50 47 51 57 57 41 2/48 51
 33 3/71.8 28 20 18 17 00 12 15 17 20 2/-0.1 33

0/5 55 57 58 52 50 47 2/48
 3/-21 25 23 17 15 10.4 15 3/10.6

0/65 64 70 72 63 60 63 74 74 61 0/57
 3/22 25 20 16 18 10.5 10 15 17 23 3/10.6

SP.N. in 14" tree Rt. Sta. 1043+25

0/4 47 60 60 42 39 40 53 53 30 0/2.3
 3/-25 25 26 11 19 00 9 14 14 24 5/71.6

+38 0.5 -38 0/45 58 64 49 49 51 64 50 0/46
 3/01 28 18 13 -0.1 7 13 23 3/70.6

1.0 1.60 0/40 43 20 20 55 53 56 65 65 45 0/47
 3/10.6 27 20 19 14 -0.1 7 12 15 22 3/71.1

2.0 +70 0/47 48 71 71 57 57 60 68 64 0/45
 3/10.3 27 24 23 15 00 10 13 21 3/120.1

1.0 -70 0/50 51 79 76 62 61 64 72 46 0/48
 3/10.4 29 23 17 14 00 10 13 21 5/120

2.0 +70 0/58 55 84 80 69 69 68 79 79 48 0/40
 3/10.1 28 27 17 12 -0.1 13 15 18 23 5/125

Naïl in R.P. Lt. Sta. 1047

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		877.98			
1047				873.8	3.5 4.2
1048				73.3	4.0 4.7
1049				72.9	4.7 5.1
1050				72.5	5.5
				72.4	5.4
1051				73.1	4.9
1052	8.44	882.23	4.21	873.77	
				74.6	7.4
1053				75.4	6.6 6.8
				76.2	5.7 6.0
1054				77.1	4.8 5.1
1055				76.7	4.7 5.5
				76.3	4.7 5.9
1056				75.9	5.1 6.3
1057	2.70	878.31	6.82	875.41	
				75.6	1.5 2.7
1059				75.4	1.7 2.9

Inst.
 Rod.
 Chain.

7/15/26

W.	S.	G L										Right			
2.0	+1.70	54	51	56	58	56	44	44	46	5.5	5.5	28	30	32.0	
	-1.70	33	26	21	23	15	11	-22	13	16	19	25	31	3/129	
	+1.75	26	26	21	28	27	52	5.0	5.0	6.1	6.3	51	51	0/42	
1.5	+1.70	33	32	21	28	16	10	-23	15	19	24	27	31	3/112	
	+1.45								5.6	24	21	21	5.9	5.9	
0.5	-1.40			3/24	20	10	-24	14	19	21	21	30	32	33	
		109	109	102	41	58		60	8.3	6.8	8.3	8.3	71	71	
		33	31	-54	40	7	-23	14	31	31	31	129	31	33	
		3	6.5	20	27	5.9	5.5	5.5	71	8.5	0.81	71	71	71	
		1	1.2	27	15	11	10.1	15	16	21	2.5	30	33	33	
		0/45	50	51	60	60	48	44	45	53	4/61	6.6			
		3/104	29	35	20	14	10	10.5	13	18	21	1.2	13		
0.0		0/81	78	54	69	66	68	80	80	67	0/25				
		3/75	24	16	11	110	13	17	21	24	3/111				
	+0.2	0/45	45	75	75	60	57	58	62	46	0/43				
	-0.2	3/70.1	24	20	17	11	111	14	18	24	3/121				
0.0	+1.54	0/50	49	50	63	56	54	59	4.5	5.3	0/7				
	-1.4	3/70.7	26	20	15	11	108	74	79	25	26	3/136			
0.0	+1.34	0/49	45	59	52	48	51	54	32	0/35					
	-1.4	3/70.4	23	19	11	103	14	20	27	3/119					
0.9	+1.84	0/39	44	54	64	58	56	58	6.5	5.6	41	0/41			
	-1.00	3/70.8	24	23	13	10	102	14	19	24	26	3/124			
2.2	+1.20	0/47	47	55	77	73	63	59	61	71	71	46	0/44		
	-1.48	3/70.2	30	27	23	14	12	0.0	12	16	20	25	3/130		
0.3	+1.34	0/59	85	43	69	70	72	83	83	56	0/52				
	-1.52	33	31	2/38	24	17	8	-2.7	4	8	14	20	3/126		
0.3	+1.24	0/43	41	46	61	60	41	34	0/33						
	-1.52	33	2/23	12	8	-3.4	5	10	23	3/109					
0.3	+1.24	0/49	49	66	64	60	0/53								
	-1.52	30	39	3/33	24	19	-3.5	15	3/109						

~~Original~~ Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		878.31			
+23				875.4	2.9.
+50				75.3	18 30.4.
1058				75.3	18 30.4.
13. M.	5.82	881.91	2.23	876.08	876.09
+50				75.4	5.3 65.8
1059				75.6	5.1 63.7
+50				75.8	5.2 61.7
1060				76.2	5.1 57.0
1061				76.8	5.0 51.5
1062				76.4	5.5.
	4.48	881.14	5.25	876.94	
1063				74.9	6.2.
1064				73.2	7.9.
+50				72.3	8.1.
	3.40	874.79	9.75	871.39	

Inst.
 Rod.
 Chain.

7/15/06

30.

N.	S.	G. L.									
		Left					Right				
2.3	+1.24 -1.52	51 50	51 57	54 33	55 30	69 25	73 14	68	65 17	56 27	57 33
2.3	+1.24 -1.52	55 44	56 33	59 -4.1	61 20	64 7	72 -42	71 19	66 -23	65 30	62 33
2.3	+1.24 -1.52	53 42	58 33	51 -33	53 16	65 -38	61 19	66 -20	65 33	61	
Spt. in 24" on N. 65' Lt. 57.9 1059 + 00.											
2.3	+1.24 -1.52	10.9 33	11.2 2	12 -3.9	11 2.9	13 -2.0	15 10	15 15	14	14 28	11 3
2.3	+1.24 -1.52	73 33	71 2	70 -2.0	71 22	75 21	71 14	70 -0.8	50 15	54 23	54 24
1.3	+1.92 -1.16	44 3	42 18	53 17	54 9	52 10.9	51 15	43 19	37 25	37 3	38 3
0.0	+1.56 -1.64	30 3	31 18	44 14	44 +13	47 18	42 19	42 19	40 3	37 12.2	
	-1.14 -1.16	29 3	31 17	40 18	42 10.9	43 18	42 19	40 3	40 11.3		
		40 3	46 18	49 11	48 10.9	51 15	51 3	52 10.3			
		12 37	18 3	45 24	45 20	66 17	59 -0.6	61 9	65 15	35 20	34 3
		22 35	22 3	69 34	71 19	84 13	79 0.0	82 21	69 23	65 3	65 3
		45 45	42 3	87 37	88 19	95 16	92 10.4	95 18	85 22	88 30	92 3

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		874.99			
1065				871.5	3.5
	+68			70.6	4.4
1066				70.5	4.5
	+37			70.4	4.6
1067				70.94	4.1
	+35			71.40	3.6
1068				72.70	2.3
	7.87	881.05	-1.81	873.18	
1069				75.24	5.8
	+50			76.3	4.8
1070				77.03	4.0
	+79			77.42	3.4
B.M.			6.94	874.11	874.09
1071				77.36	
	+09			77.33	

Cont. on Page 56

Inst.
 Rod.
 Chain.

9/15/26

Left

C L

Right

$\frac{0}{33} \frac{2.6}{70.9}$	$\frac{3.2}{28}$	$\frac{4.4}{34}$	$\frac{5.3}{19}$	$\frac{4.6}{14}$	$\frac{4.4}{-0.9}$	$\frac{4.9}{17}$	$\frac{6.2}{22}$	$\frac{4.7}{21}$	$\frac{7.0}{53}$
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$\frac{7.6}{33}$	$\frac{8}{21} \frac{8.8}{-4.4}$	$\frac{8.5}{26}$	$\frac{7.1}{21}$	$\frac{5.5}{13}$	$\frac{5.0}{-0.6}$	$\frac{5.9}{14}$	$\frac{0}{3} \frac{2.7}{-8.3}$	$\frac{12.7}{95}$
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$\frac{7.8}{33}$	$\frac{4}{22} \frac{6.9}{-2.2}$	$\frac{5.5}{11}$	$\frac{5.2}{-0.7}$	$\frac{5.7}{15}$	$\frac{9.8}{22}$	$\frac{12.5}{30}$	$\frac{0}{3} \frac{12.8}{-8.3}$	$\frac{12.8}{95}$
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$\frac{8.8}{35}$	$\frac{6.0}{22}$	$\frac{5.7}{15}$	$\frac{5.2}{17}$	$\frac{6.0}{30}$	$\frac{10.3}{34}$
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$\frac{7.7}{33}$	$\frac{4}{21} \frac{4.9}{-5.8}$	$\frac{7.9}{26}$	$\frac{5.3}{19}$	$\frac{4.6}{-0.5}$	$\frac{5.0}{21}$	$\frac{25.7}{2} \frac{6.2}{-4.6}$	$\frac{6.7}{24}$	$\frac{6.7}{33}$
------------------	---------------------------------	------------------	------------------	--------------------	------------------	-----------------------------------	------------------	------------------

$\frac{5.2}{33}$	$\frac{4.0}{21}$	$\frac{4.9}{18}$	$\frac{4.4}{-0.8}$	$\frac{4.7}{15}$	$\frac{0}{3} \frac{4.5}{-0.9}$
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$\frac{0}{33} \frac{2.6}{-0.3}$	$\frac{2.5}{21}$	$\frac{3.4}{20}$	$\frac{3.9}{-0.6}$	$\frac{3.1}{17}$	$\frac{2.4}{29}$	$\frac{1.4}{30}$	$\frac{0}{3} \frac{1.1}{7.2}$
---------------------------------	------------------	------------------	--------------------	------------------	------------------	------------------	-------------------------------

$\frac{0}{33} \frac{5.3}{70.5}$	$\frac{4.8}{27}$	$\frac{6.3}{24}$	$\frac{6.7}{15}$	$\frac{6.1}{-0.3}$	$\frac{5.4}{22}$	$\frac{4.4}{23}$	$\frac{3.1}{29}$	$\frac{0}{3} \frac{1.8}{7.0}$
---------------------------------	------------------	------------------	------------------	--------------------	------------------	------------------	------------------	-------------------------------

$\frac{7.3}{30}$	$\frac{4}{21} \frac{6.4}{-2.2}$	$\frac{5.2}{15}$	$\frac{4.7}{-0.9}$	$\frac{5.0}{18}$	$\frac{3.4}{22}$	$\frac{1.5}{29}$	$\frac{0}{3} \frac{10.8}{7.2}$	$\frac{1.5}{33}$
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$\frac{8.9}{33}$	$\frac{8}{21} \frac{8.0}{-4.4}$	$\frac{4.5}{17}$	$\frac{3.9}{-0.3}$	$\frac{3.5}{18}$	$\frac{2.5}{33}$
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sp. N. in 14" O.K. 65 Lt. Sta. 1068 + 40

..... Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
1072				876.96	
1073				76.55	
+60				76.31	
1074				76.16	
1075				76.39	
+18				76.51	
1076				77.33	
1077				78.70	
1078				79.13	
1079				78.83	
+56				78.67	
1080				78.54	

Inst.

Rod.

Chain.

32

Left

C L

.....

Right

..... Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
1081				578.27	
1082				77.81	
+17				77.74	
1083				77.30	
+82.9				76.50	
1084					
1085					
1086					

Inst.
Rod.
Chain.

33.

Left

C L

Right

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
B.M.	4.48	876.60		872.12	
876				872.3	4.3
877				72.1	4.5
878				71.8	4.8
879				71.6	5.0
880				71.4	5.2
	4.82	875.81	5.61	870.99	
881				71.2	4.4
882				71.0	4.8
883				70.8	5.0
T.P.			5.40	870.41	870.40

Inst.
 Rod.
 Chain.

8/12/26

34.

C L

Right

Spt. in 10" Oak ft. Sta 877+60

$\begin{array}{r} 9/5.5 \\ 3' \\ \hline -1.2 \end{array}$	$\begin{array}{r} 4.1 \\ \hline 10.2 \end{array}$	$\begin{array}{r} 66.6 \\ 4' \\ \hline -2.3 \end{array}$
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$\begin{array}{r} 0/5.3 \\ 3' \\ \hline -0.5 \end{array}$	$\begin{array}{r} 4.5 \\ \hline 0.0 \end{array}$	$\begin{array}{r} 6/2.6 \\ 3' \\ \hline -2.1 \end{array}$
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$\begin{array}{r} 3/6.4 \\ 3' \\ \hline -1.6 \end{array}$	$\begin{array}{r} 4.8 \\ \hline 0.0 \end{array}$	$\begin{array}{r} 3/2.4 \\ 3' \\ \hline -1.6 \end{array}$
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$\begin{array}{r} 0/4.3 \\ 3' \\ \hline 10.7 \end{array}$	$\begin{array}{r} 5.0 \\ \hline 0.0 \end{array}$	$\begin{array}{r} 5/6.5 \\ 3' \\ \hline -1.5 \end{array}$
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$\begin{array}{r} 0/4.2 \\ 3' \\ \hline 11.0 \end{array}$	$\begin{array}{r} 5.4 \\ \hline -0.2 \end{array}$	$\begin{array}{r} 5/6.7 \\ 3' \\ \hline -1.5 \end{array}$
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$\begin{array}{r} 4/4.0 \\ 3' \\ \hline -1.4 \end{array}$	$\begin{array}{r} 4.8 \\ \hline -0.2 \end{array}$	$\begin{array}{r} 5/6.1 \\ 3' \\ \hline -1.5 \end{array}$
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$\begin{array}{r} 7/4.7 \\ 3' \\ \hline -1.9 \end{array}$	$\begin{array}{r} 5.0 \\ \hline -0.2 \end{array}$	$\begin{array}{r} 0/4.6 \\ 3' \\ \hline 10.2 \end{array}$
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$\begin{array}{r} 1/5.6 \\ 3' \\ \hline -0.6 \end{array}$	$\begin{array}{r} 4.9 \\ \hline 10.1 \end{array}$	$\begin{array}{r} 0/3.3 \\ 3' \\ \hline 11.9 \end{array}$
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Next 10 T.P. Sta 883+08.

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
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Inst.
Rod.
Chain.

.....

Left

C L

Right

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
B.M.	6.82	880.91 ✓		874.09 ✓	
1070+95				77.4	3.5
1071				77.36	3.5
+11				77.3	3.0
T.P.	3.77	881.59 ✓	3.11	877.80	
+95				76.9	4.7
1072				76.96	4.6
+16				77.0	4.6
1073				76.55	5.24
+82				76.2	5.4
1074				76.16	5.45
+28				76.2	5.4
+43				76.1	5.5
T.P.	4.84	883.10 ✓	3.35	878.24 ✓	

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		883.10			
1075				876.39	6.7
+14				76.5	6.6
+43				76.8	6.3
+54				76.7	6.4
1076				77.33	5.8
+24				77.5	5.6
1077				78.70	4.4
+11				78.8	4.3
+24				78.7	4.2
+44				78.9	4.2
+54				78.9	4.2
+70				78.9	4.2

Inst.
 Pod.
 Chain.

9/12/26 37.

Left C L Right

$\frac{156}{50}$ $\frac{137}{53}$ $\frac{590}{17}$ $\frac{65}{17}$ $\frac{64}{403}$ $\frac{65}{17}$ $\frac{578}{17}$ $\frac{63}{18}$ $\frac{56}{27}$ $\frac{55}{33}$

$\frac{78}{50}$ $\frac{77}{53}$ $\frac{67}{17}$ $\frac{65}{17}$ $\frac{64}{17}$ $\frac{576}{17}$ $\frac{62}{18}$ $\frac{60}{22}$ $\frac{55}{27}$ $\frac{54}{33}$

$\frac{92}{50}$ $\frac{78}{53}$ $\frac{68}{14}$ $\frac{61}{17}$ $\frac{62}{17}$ $\frac{557}{17}$ $\frac{52}{27}$ $\frac{52}{33}$

$\frac{104}{50}$ $\frac{94}{53}$ $\frac{82}{55}$ $\frac{57}{21}$ $\frac{559}{17}$ $\frac{61}{17}$ $\frac{59}{17}$ $\frac{60}{17}$ $\frac{546}{17}$ $\frac{60}{18}$ $\frac{53}{21}$ $\frac{51}{27}$ $\frac{50}{33}$

$\frac{79}{53}$ $\frac{78}{53}$ $\frac{56}{17}$ $\frac{491}{17}$ $\frac{59}{17}$ $\frac{54}{424}$ $\frac{54}{17}$ $\frac{54}{17}$ $\frac{482}{17}$ $\frac{44}{27}$ $\frac{44}{33}$

$\frac{53}{53}$ $\frac{47}{54}$ $\frac{50}{21}$ $\frac{50}{20}$ $\frac{48}{17}$ $\frac{463}{17}$ $\frac{50}{17}$ $\frac{48}{17}$ $\frac{50}{17}$ $\frac{445}{17}$ $\frac{41}{17}$ $\frac{40}{27}$ $\frac{39}{33}$

$\frac{40}{53}$ $\frac{36}{25}$ $\frac{43}{19}$ $\frac{362}{17}$ $\frac{37}{17}$ $\frac{34}{110}$ $\frac{35}{17}$ $\frac{337}{17}$ $\frac{38}{17}$ $\frac{29}{27}$ $\frac{25}{33}$

$\frac{37}{53}$ $\frac{34}{24}$ $\frac{42}{22}$ $\frac{353}{17}$ $\frac{34}{17}$ $\frac{34}{17}$ $\frac{30}{17}$ $\frac{320}{17}$ $\frac{28}{21}$ $\frac{27}{27}$ $\frac{27}{33}$

$\frac{35}{53}$ $\frac{35}{27}$ $\frac{45}{23}$ $\frac{333}{17}$ $\frac{35}{17}$ $\frac{34}{17}$ $\frac{35}{17}$ $\frac{27}{27}$ $\frac{27}{33}$

$\frac{35}{33}$ $\frac{34}{17}$ $\frac{32}{17}$ $\frac{35}{17}$ $\frac{33}{27}$ $\frac{32}{33}$

$\frac{37}{53}$ $\frac{35}{17}$ $\frac{32}{17}$ $\frac{35}{17}$ $\frac{29}{27}$ $\frac{27}{33}$

$\frac{35}{33}$ $\frac{31}{30}$ $\frac{37}{18}$ $\frac{291}{17}$ $\frac{34}{17}$ $\frac{33}{17}$ $\frac{35}{17}$ $\frac{301}{17}$ $\frac{27}{27}$ $\frac{26}{33}$

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		883.10 ✓			
1078				879.13	4.0
T.P.	4.45	884.50 ✓	3.05	880.05 ✓	
1079				78.23	5.7
B.M.	1.35	884.57 ✓	1.35	883.15 ✓	883.17 ✓
+53				78.7	5.8
+70				78.6	5.9
1080				78.54	6.0
+04				78.5	6.0
+21				78.5	6.0
+40				78.4	6.1
+55				78.4	6.1
+85				78.3	6.2
1081				78.27	6.2
T.P.	3.41	883.08 ✓	4.05	879.19 ✓	
+87				77.9	5.2

original..... Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		883.08 ✓			
795				77.8	5.3
1082				77.81	5.3
709				77.7	5.4
714				77.7	5.4
1083				77.30	5.8
783 ^E	End of Project.			76.5	6.4
1374			1.77	881.31 ✓	881.31

Inst.
 Rod.
 Chain.

9/10/26 39.

Left C L Right

38 48 44 47 38 37 56
33 17 17 17 27 27 33

40 48 45 47 38 36
39 17 408 17 27 33

40 41 47 45 47 444 48 47
38 28 17 17 17 27 33

40 39 437 50 46 48 447 38 37
38 27 17 17 17 17 27 33

43 44 35 52 487 56 53 54 531 43 42
39 27 17 17 17 17 17 17 27 33

52 51 583 62 595 61 570 51 51
38 27 17 17 17 17 27 33

Top of Hill, S.E. Cor. of Main St. & 5th Ave.

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
------	-------	-------	-------	-------	--------

Inst.
Rod.
Chain.

40

Left

C L

Right

Original..... Cross Sections

Sta.	B. S.	H. I.	E. S.	Grade	Gr. R.
P.M. 837+84 ² 809+13 ²	6.50	865.90		859.40	
810					
811					
812					
813					
B.M. 814	6.46	867.83	4.57	861.33 =	861.37
815					
816					
817					
818					
819					
820					
T.P.	5.64	868.51	4.99	862.87	

Inst.
 Rod.
 Chain.

41.

9/16/26

Left C L Right

P.P. SPX in 50" Oak H. Sta 836 + 20.

62	62	63	76	76	60	59
49	46	44	42	40	38	33

57	56	58
49	42	39

→ Q of Proj. x sec.
 Extended on Left.

51	50	63	63	54	52
50	46	44	42	40	33

48	46	63	63	51	49
50	45	43	41	39	33

48	42	63	62	47	48
51	46	44	41	39	33

Nail in T.P. Rt. Sta 813 + 60.

65	64	84	84	62	66
52	46	44	42	41	33

64	64	82	77	63	63
53	48	45	41	36	33

51	65
58	39

61	54	54	55
54	51	50	33

61	61	71	76	66	65
55	53	50	47	42	33

57	57	56
55	50	33

53	53	44	46
55	50	49	33

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
		868.51			
821					
X +70				62.9	5.6
822				62.9	5.6
+25				62.9	5.6
+60				63.0	5.5
X 823				63.0	5.5
T.P.			424	864.27	

Inst.
 Rod.
 Chain.

9/16/26 42.

Left

C L

Right

$\frac{57}{56}$ $\frac{55}{50}$ $\frac{45}{47}$ $\frac{44}{33}$

$\frac{58}{57}$ $\frac{65}{50}$ $\frac{45}{47}$ $\frac{44}{33}$

$\frac{56}{56}$ $\frac{57}{53}$ $\frac{78}{49}$ $\frac{67}{42}$ $\frac{43}{38}$ $\frac{42}{33}$

$\frac{57}{56}$ $\frac{55}{54}$ $\frac{66}{50}$ $\frac{65}{46}$ $\frac{54}{44}$ $\frac{53}{42}$ $\frac{45}{40}$ $\frac{46}{33}$

$\frac{57}{55}$ $\frac{58}{52}$ $\frac{76}{49}$ $\frac{75}{46}$ $\frac{69}{42}$ $\frac{59}{41}$ $\frac{54}{33}$

$\frac{57}{58}$ $\frac{59}{51}$ $\frac{106}{41}$ $\frac{107}{38}$ $\frac{88}{33}$

On Tree Mt. Sta. 824.

Cross Sections

Sta.

B. S.

H. I.

F. S.

Grade

Gr. R.

Inst.
Rod.
Chain.

43.

.....

Left

C L

Right

Cross Sections

Sta. B. S. H. I. F. S. Grade Gr. R.

Inst.
Rod.
Chain.

44

Left

C L

Right

..... Cross Sections
Sta. B. S. H. I. F. S. Grade Gr. R.

Inst.
Rod.
Chain.

45.

.....

Left

C L

Right

The page contains a large grid of graph paper. A vertical red line runs down the center of the page, dividing it into two equal halves. The grid is composed of small squares, with the vertical red line acting as a central column. The labels 'Left', 'C L', and 'Right' are positioned at the top of the grid, indicating the different sections for data recording.

Cross Sections

Sta. B. S. H. I. F. S. Grade. Gr. R.

Inst.
Rod.
Chain.

46.

.....

Left

C L

Right

Cross Sections

Sta.

B. S.

H. I.

F. S.

Grade

Gr. R.

Inst.
Rod.
Chain.

47.

.....

Left

C L

Right

Cross Sections

Sta. B. S. H. I. F. S. Grade Gr. R.

Inst.
Rod.
Chain.

48.

REGISTERED PATENT OFFICE

Left

C L

Right

The page contains a large grid of graph paper. A vertical red line runs down the center of the grid, dividing it into two equal halves. The grid is composed of small squares, with the vertical line acting as a central axis. The labels 'Left', 'C L', and 'Right' are positioned at the top of the grid, indicating the different sections for data recording.

Cross Sections

.....
Sta. B. S. H. I. F. S. Grade Gr. R.

Inst.
Rod.
Chain.

49

Left

C L

Right

..... Cross Sections

Sta.

B. S.

H. I.

F. S.

Grade

Gr. R.

Inst.

Rod.

Chain.

50.

Left

C L

Right

The page contains a large grid of graph paper. A vertical red line runs down the center of the page, dividing it into two equal halves. The left half is labeled 'Left' and the right half is labeled 'Right'. The grid consists of small squares, with the red line acting as a central axis. The labels 'C L' are positioned at the top of the red line.

Cross Sections

.....
Sta. B. S. H. I. F. S. Grade Gr. R.

Inst.
Rod.
Chain.

.....

Left

C L

Right

Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
B.M.	2.47	878.54		876.09	
B.M.	3.57	878.55	3.78	874.78	
5+00				71.9	
Original x Sections of					
425	Borrow Pit # 3.			72.6	
465				73.4	
T.P.	4.80	878.89	4.24	874.09	
6+00				73.9	
750				74.0	
7+00				73.4	
750				72.5	
8+00				71.3	
B.M.			4.12	874.77	874.78

..... Cross Sections

Sta.

B. S.

H. L.

E. S.

Grade

Gr. R.

5+00

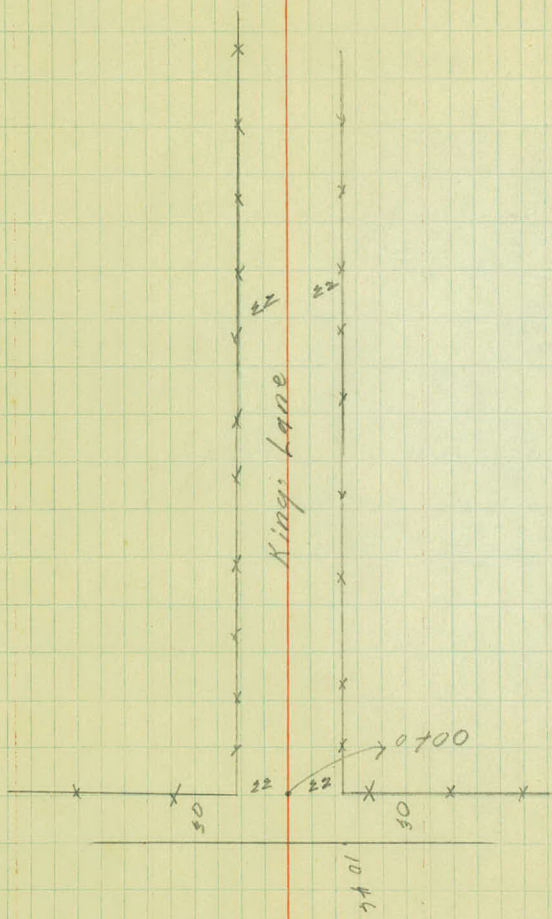
0+00

Inst.
Rod.
Chain.

Left

C L

Right



Sta.Original.....		Cross Sections		Gr. R.
	F. S.	H. I.	F. S.	Grade.	
B.M.	3.34	882.65.		879.29	
B.M.	6.85	884.67.	4.81	877.82.	
2+50				77.5	
		Borrow Pit, #4.			
2+75				77.8	
3+00				79.5	
3+25				80.7	
3+50				81.6	
3+65				81.6	
4+00				80.1	
4+50				76.8	
5+00				74.1	
			6.85	877.82.	

Inst.
 Rod.
 Chain.

54.

Left

C L

Right

Went in P.P. 17. Sta. 10 98 + 95.

Went in P.P. 17. Sta. 0 + 75.

$\frac{7.4}{22}$	$\frac{7.5}{14}$	7.2	$\frac{7.1}{22}$
------------------	------------------	-----	------------------

$\frac{7.1}{22}$	$\frac{6.8}{13}$	6.9	$\frac{7.0}{12}$	$\frac{6.8}{22}$
------------------	------------------	-----	------------------	------------------

$\frac{5.6}{21}$	$\frac{5.2}{15}$	$\frac{6.0}{12}$	$\frac{5.9}{4}$	5.2	$\frac{5.2}{10}$	$\frac{4.6}{22}$
------------------	------------------	------------------	-----------------	-----	------------------	------------------

$\frac{4.4}{22}$	$\frac{4.3}{15}$	$\frac{4.9}{11}$	$\frac{5.0}{4}$	4.0	$\frac{3.7}{7}$	$\frac{3.7}{13}$	$\frac{3.4}{22}$
------------------	------------------	------------------	-----------------	-----	-----------------	------------------	------------------

$\frac{3.8}{22}$	$\frac{3.4}{14}$	$\frac{4.4}{13}$	$\frac{4.4}{4}$	$\frac{3.2}{1}$	3.1	$\frac{3.0}{13}$	$\frac{2.6}{22}$
------------------	------------------	------------------	-----------------	-----------------	-----	------------------	------------------

$\frac{3.7}{22}$	$\frac{3.7}{15}$	$\frac{4.6}{12}$	$\frac{4.2}{2}$	$\frac{3.2}{1}$	3.1	$\frac{3.1}{15}$	$\frac{2.9}{22}$
------------------	------------------	------------------	-----------------	-----------------	-----	------------------	------------------

$\frac{4.8}{22}$	$\frac{4.7}{14}$	$\frac{5.9}{11}$	$\frac{6.1}{3}$	$\frac{5.5}{4}$	4.6	$\frac{4.6}{10}$	$\frac{5.4}{11}$	$\frac{5.0}{15}$	$\frac{5.9}{17}$	$\frac{4.4}{18}$	$\frac{4.3}{22}$
------------------	------------------	------------------	-----------------	-----------------	-----	------------------	------------------	------------------	------------------	------------------	------------------

$\frac{7.4}{22}$	$\frac{7.6}{13}$	$\frac{8.6}{10}$	$\frac{8.0}{3}$	7.9	$\frac{8.1}{13}$	$\frac{8.4}{22}$
------------------	------------------	------------------	-----------------	-----	------------------	------------------

$\frac{10.4}{22}$	$\frac{10.3}{15}$	10.6	$\frac{11.1}{22}$
-------------------	-------------------	------	-------------------

.....original..... Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
B.M.	2.57	879.50.		876.73.	
1012				75.7	
+50				75.6	
1013				75.5	
+50				75.4	
1014				75.3	
B.M.			2.57	876.73.	

Inst.

Rod.

Chain.

10/14/44

Left

C L

Right

<u>10.5</u>	<u>10.7</u>	<u>10.5</u>	<u>7.1</u>	<u>8.2</u>	<u>9.6</u>	<u>8.7</u>	
150	133	100	65	41	34	33	

3.6

→ 2 of project x sec. extended on left.

<u>9.6</u>	<u>8.2</u>	<u>7.4</u>	<u>6.4</u>	<u>7.6</u>	<u>7.4</u>	<u>7.3</u>	
150	100	70	39	57	53	38	

3.7

<u>6.4</u>	<u>7.5</u>	<u>6.8</u>	<u>5.7</u>	<u>4.4</u>	<u>5.0</u>	<u>5.5</u>	
150	150	100	70	39	33	31	

3.8

<u>7.8</u>	<u>8.8</u>	<u>7.1</u>	<u>5.7</u>	<u>4.4</u>	<u>5.4</u>	<u>5.8</u>	
150	143	100	74	39	33	28	

3.9

<u>10.8</u>	<u>10.6</u>	<u>8.7</u>	<u>7.8</u>	<u>6.6</u>	<u>5.7</u>	<u>6.8</u>	<u>6.8</u>
150	148	135	100	85	40	38	28

4.0

..... Cross Sections
Sta. B. S. H. I. E. S. Grade Gr. R.

..... Cross Sections

Sta.

B. S.

H. L.

F. S.

Grade

Gr. R.

Inst.

Rod.

Chain.

57

Left

C L

Right

The page contains a large grid of graph paper. A vertical red line runs down the center of the page, dividing it into two equal halves. The grid consists of small squares, with a larger margin at the top for text. The text 'Left' is printed on the left side of the grid, 'C L' is printed at the top center, and 'Right' is printed on the right side. The page number '57' is written in the top right corner.

Cross Sections

Sta.	B. S.	H. I.	E. S.	Grade	Gr. R.
B. M.	2.29	870.28		867.99	
	4.67	869.41	5.54	864.74	
	5.00	868.82	5.59	863.82	
841				864.0	4.8
842				64.0	4.8
843				64.0	4.8
844				64.0	4.8
845				64.0	4.8
T. P.	5.22	869.65	4.39	864.43	
846				64.0	5.7
847				64.0	5.7
848				64.0	5.7
849				64.0	5.7
850				64.1	5.4
851				64.4	5.3
	5.57	871.11	7.11	845.54	
852				64.8	4.3

Inst.
 Rod.
 Chain.

8/11/26

Left

C L

Right

$$\begin{array}{r} x \\ 32 \overline{) 75.5} \\ \underline{-0.7} \end{array}$$

$$\begin{array}{r} x \\ 53 \overline{) 0.53} \\ \underline{-0.5} \end{array}$$

$$\begin{array}{r} x \\ 33 \overline{) 0.53} \\ \underline{-0.5} \end{array}$$

$$\begin{array}{r} x \\ 8 \overline{) 5.4} \\ \underline{-0.6} \end{array}$$

$$\begin{array}{r} x \\ 32 \overline{) 5.8} \\ \underline{-1.0} \end{array}$$

$$\begin{array}{r} x \\ 52 \overline{) 6.5} \\ \underline{-0.8} \end{array}$$

$$\begin{array}{r} x \\ 53 \overline{) 0.60} \\ \underline{-0.3} \end{array}$$

$$\begin{array}{r} x \\ 31 \overline{) 2.3} \\ \underline{-1.6} \end{array}$$

$$\begin{array}{r} x \\ 53 \overline{) 0.59} \\ \underline{-0.2} \end{array}$$

$$\begin{array}{r} x \\ 31 \overline{) 7.1} \\ \underline{-1.5} \end{array}$$

$$\begin{array}{r} x \\ 32 \overline{) 4.3} \\ \underline{-1.0} \end{array}$$

$$\begin{array}{r} x \\ 53 \overline{) 0.61} \\ \underline{-0.2} \end{array}$$

$$\begin{array}{r} 4.8 \\ 0.0 \end{array}$$

$$\begin{array}{r} 4.8 \\ 0.0 \end{array}$$

$$\begin{array}{r} 4.6 \\ 10.2 \end{array}$$

$$\begin{array}{r} 5.2 \\ 10.5 \end{array}$$

$$\begin{array}{r} 5.0 \\ 10.7 \end{array}$$

$$\begin{array}{r} 5.1 \\ 10.6 \end{array}$$

$$\begin{array}{r} 4.8 \\ 10.9 \end{array}$$

$$\begin{array}{r} 4.7 \\ 10.9 \end{array}$$

$$\begin{array}{r} 4.3 \\ 11.0 \end{array}$$

$$\begin{array}{r} 5.8 \\ 10.5 \end{array}$$

$$\begin{array}{r} x \\ 3 \overline{) 0.35} \\ \underline{-1.3} \end{array}$$

$$\begin{array}{r} x \\ 33 \overline{) 4.0} \\ \underline{-70.8} \end{array}$$

$$\begin{array}{r} x \\ 33 \overline{) 0.53} \\ \underline{-0.3} \end{array}$$

$$\begin{array}{r} x \\ 32 \overline{) 5.4} \\ \underline{-0.6} \end{array}$$

$$\begin{array}{r} x \\ 1 \overline{) 6.1} \\ \underline{-1.3} \end{array}$$

$$\begin{array}{r} x \\ 31 \overline{) 0.61} \\ \underline{-0.4} \end{array}$$

$$\begin{array}{r} x \\ 3 \overline{) 0.34} \\ \underline{-70.3} \end{array}$$

$$\begin{array}{r} x \\ 33 \overline{) 0.50} \\ \underline{-70.7} \end{array}$$

$$\begin{array}{r} x \\ 33 \overline{) 0.48} \\ \underline{-70.9} \end{array}$$

$$\begin{array}{r} x \\ 3 \overline{) 0.52} \\ \underline{-0.4} \end{array}$$

$$\begin{array}{r} 1 \\ 3 \overline{) 9.40} \\ \underline{-71.3} \end{array}$$

$$\begin{array}{r} x \\ 5 \overline{) 0.44} \\ \underline{-71.9} \end{array}$$

..... Cross Sections

Sta.	E. S.	H. I.	F. S.	Grade	Gr. R.
		871.11			
853				865.2	5.9
13. M.	3.14	871.13	3.14	867.77	867.99
854				65.6	5.5
855				66.0	5.1
856				66.4	4.9
857				66.8	4.3
	5.91	872.74	4.32	866.81	
858				67.2	5.5
859				67.6	5.1
860				68.0	

Inst.
Rod.
Chain.

8/11/26

Left

C L

Right

$$\begin{array}{r} 5.4 \\ \hline 10.5 \end{array} \quad \begin{array}{r} \times \\ 33 \overline{) 3.7} \\ \underline{12.2} \end{array}$$

$$\begin{array}{r} 5.2 \\ \hline 10.3 \end{array} \quad \begin{array}{r} \times \\ 33 \overline{) 4.8} \\ \underline{10.7} \end{array}$$

$$\begin{array}{r} 4.8 \\ \hline 10.3 \end{array} \quad \begin{array}{r} \times \\ 52 \overline{) 6.2} \\ \underline{-1.1} \end{array}$$

$$\begin{array}{r} 4.5 \\ \hline 10.2 \end{array} \quad \begin{array}{r} \times \\ 61 \overline{) 6.1} \\ \underline{-1.4} \end{array}$$

$$\begin{array}{r} 4.1 \\ \hline 10.3 \end{array} \quad \begin{array}{r} \times \\ 30 \overline{) 6.3} \\ \underline{-3.0} \end{array}$$

$$\begin{array}{r} 5.2 \\ \hline 10.3 \end{array} \quad \begin{array}{r} \times \\ 31 \overline{) 6.8} \\ \underline{-1.9} \end{array}$$

$$\begin{array}{r} 5.0 \\ \hline 10.1 \end{array} \quad \begin{array}{r} \times \\ 33 \overline{) 5.1} \\ \underline{00} \end{array}$$

..... Cross Sections

Sta.	E. S.	H. I.	F. S.	Grade	Gr. R.
B.M.	4.47	877.34		874.87	
1027				73.3	
1028				73.5	5.8
1029				73.7	5.4
1030				74.6	4.7
1031				75.4	3.9
1032				76.3	3.0
	7.40	883.77	2.77	876.57	
1033				77.0	2.0
1034				77.7	6.3
1035				78.4	5.6
1036				79.0	5.0
1037				79.2	4.8
1038				79.3	4.7
T.P.			4.69	879.28	779.27

Inst.
 Rod.
 Chain.

Left

C L

Right

$$\begin{array}{r} \overset{\lambda}{0/51} \\ 5 \overline{) 70.7} \\ \hline \end{array} \quad \begin{array}{r} 5.2 \\ 0.0 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/5.2} \\ 5 \overline{) 70.6} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{0/47} \\ 5 \overline{) 70.7} \\ \hline \end{array} \quad \begin{array}{r} 5.0 \\ 10.4 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/4.3} \\ 5 \overline{) 71.1} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{4/53} \\ 2 \overline{) 28.1} \\ \hline \end{array} \quad \begin{array}{r} 4.3 \\ 70.4 \end{array} \quad \begin{array}{r} \overset{\lambda}{4/49} \\ 2 \overline{) -0.2} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{8/40} \\ 2 \overline{) -0.1} \\ \hline \end{array} \quad \begin{array}{r} 3.2 \\ 70.3 \end{array} \quad \begin{array}{r} \overset{\lambda}{2/43} \\ 2 \overline{) -0.4} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{4/38} \\ 2 \overline{) -0.8} \\ \hline \end{array} \quad \begin{array}{r} 2.6 \\ 70.4 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/2.5} \\ 5 \overline{) 70.5} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{8/79} \\ 2 \overline{) -0.9} \\ \hline \end{array} \quad \begin{array}{r} 6.7 \\ 70.8 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/7.2} \\ 2 \overline{) -0.2} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{0/53} \\ 3 \overline{) 70.8} \\ \hline \end{array} \quad \begin{array}{r} 5.9 \\ 70.4 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/5.8} \\ 5 \overline{) 70.5} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{2/62} \\ 2 \overline{) -2.6} \\ \hline \end{array} \quad \begin{array}{r} 5.2 \\ 70.4 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/5.2} \\ 5 \overline{) 70.4} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{4/61} \\ 2 \overline{) -1.1} \\ \hline \end{array} \quad \begin{array}{r} 4.6 \\ 70.4 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/2.7} \\ 5 \overline{) 72.3} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{4/69} \\ 5 \overline{) -2.1} \\ \hline \end{array} \quad \begin{array}{r} 4.9 \\ -0.1 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/2.5} \\ 5 \overline{) 70.5} \\ \hline \end{array}$$

$$\begin{array}{r} \overset{\lambda}{0/7.2} \\ 2 \overline{) -2.5} \\ \hline \end{array} \quad \begin{array}{r} 4.9 \\ -0.2 \end{array} \quad \begin{array}{r} \overset{\lambda}{0/7.5} \\ 2 \overline{) -2.8} \\ \hline \end{array}$$

Cross Sections

Sta. B. S. H. I. C. S. Grade Gr. R.

Inst.

Rod.

Chain.

61.

Left

C L

Right

The page contains a large grid of graph paper. A vertical red line runs down the center of the grid, dividing it into two equal halves. The grid is composed of small squares, with the vertical line acting as a central axis. The labels 'Left', 'C L', and 'Right' are positioned at the top of the grid, indicating the different sections for data recording.

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
------	-------	-------	-------	-------	--------

3798 ²	P.O.T.				
-------------------	--------	--	--	--	--

3700					
------	--	--	--	--	--

2700					
------	--	--	--	--	--

1700					
------	--	--	--	--	--

0700	P.O.T.				
------	--------	--	--	--	--

Inst.
Rod.
Chain.

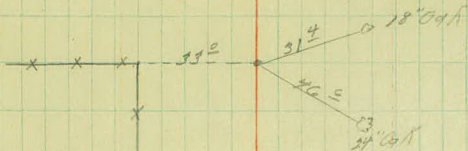
62.

10/4/66

Left

C L

Right



Borrow Pit #1.

+80 Brush 17

+10 Brush 17 L.



+100-14" Oak - 9'
+75-24" - Timber Co. 50'
+75-24" - Timber Co. 50'



Sta.	<u>Original</u> Cross Sections			Grade	Gr. R.
	B. S.	H. I.	F. S.		
B.M.	0.74	874.83.		874.09.	
0+00				7.4	67.2
0+50				10.1	64.7
	<i>Original x Sections of Borrow Pit # 1.</i>				
1+00				9.7	65.1
1+50				6.0	68.8
1+82				4.5	70.3
T.P.	5.85	878.49.	2.19	872.64.	
2+00				4.8	70.7
2+30				7.4	71.1
2+50				7.5	71.0
2+82				7.7	70.8
3+00				8.0	70.5
	3.49	874.45.	7.53	870.94.	
3+25				5.1	69.4
3+50				7.2	67.3
3+79				8.8	65.7
T.P.	3.85	874.21.	5.49	870.96.	
B.M.			0.72	874.09.	874.09.

Inst.

Rod.

Chain.

11/14/36

63

Left

C L

Right

SpA in 14" Jan 65 H. Sta. 1068 + 40

9.5 7.5 8.0 5.8
33 13 7.6 15 33

10.9 11.2 10.3 10.6 11.4 14.4 13.7
33 24 20 10.1 7.4 20 26 33

7.8 9.8 9.4 10.1 12.8 12.9
33 22 15 9.7 13 19 33

4.0 5.6 6.0 7.7 8.6 8.8
33 13 13 6.0 10 27 33

1.1 2.1 4.1 4.3 5.5 4.2
33 21 12 4.5 7 7 33

3.2 4.0 7.5 7.4 5.7 5.4 5.9 6.1
33 19 14 7.8 8 11 13 26 33

1.2 1.9 7.1 7.7 7.5 7.1 5.6 3.9 5.2 5.6
33 23 16 12 7 7.4 7 11 12 26 33

1.2 1.6 5.3 7.5 7.3 4.8 5.7 7.5
33 26 20 7.5 9 11 18 33

2.2 2.7 3.4 5.2 6.3 7.3 6.7 8.3 10.0
33 30 25 24 19 8 7.7 6 21 33

3.7 4.5 4.6 6.3 7.5 7.4 9.3 11.6
33 30 21 19 9 8.0 5 18 33

1.7 2.0 2.7 4.1 4.7 6.8 8.2 9.5
33 27 17 15 7 5.1 14 15 33
36 5.4 6.7 9.5 9.6 10.6
33 19 8 7.2 14 25 33
6.5 7.5 8.8 7.3 9.6 9.2
33 24 4 8.8 8 24 33



Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
------	-------	-------	-------	-------	--------

8+00	P.O.T.				
------	--------	--	--	--	--

3+12 [±]	P.O.T.				
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0+00					
------	--	--	--	--	--

Inst.
Rod.
Chain.

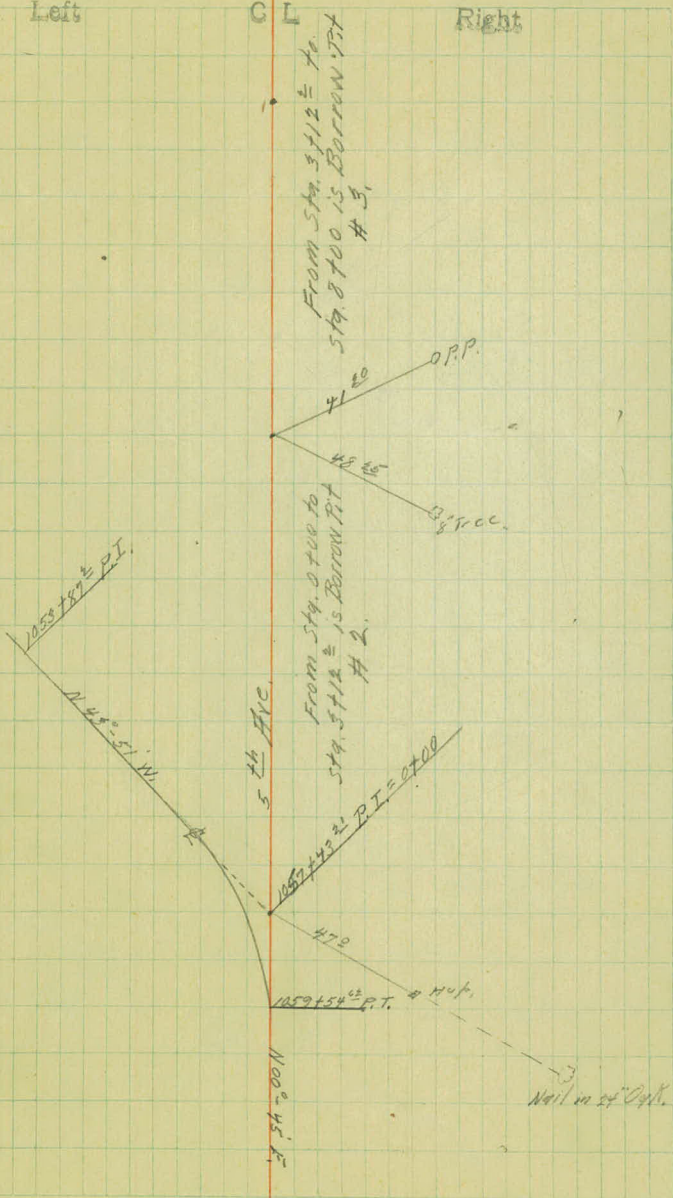
64.

RECORDS SECTION RECORDS

Left

CL

Right



Original Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
B.M.	2.93	879.02		876.09	
0+65				73.2	
Original x sections of					
1+00		Borrow Pit. #2.		73.4	
1+50				73.7	
1+74				73.6	
2+00				73.7	
2+50				73.0	
3+00				72.8	
B.M.			2.93	876.07	

Inst.

Rod.

Chain.

65

Left

C L

Right

<u>62</u>	<u>61</u>	<u>60</u>		<u>62</u>	<u>63</u>	<u>68</u>
33	28	12	58	10	25	295

<u>40</u>	<u>42</u>	<u>53</u>	<u>60</u>		<u>60</u>	<u>55</u>	<u>56</u>
33	24	15	9	54	9	15	295

<u>26</u>	<u>27</u>	<u>35</u>	<u>34</u>	<u>44</u>	<u>58</u>		<u>58</u>	<u>43</u>	<u>42</u>
33	21	18	14	13	9	53	12	16	305

<u>22</u>	<u>24</u>	<u>30</u>	<u>30</u>	<u>42</u>	<u>56</u>		<u>58</u>	<u>40</u>	<u>40</u>
33	21	20	15	14	10	54	12	14	30

<u>26</u>	<u>30</u>	<u>37</u>	<u>36</u>	<u>44</u>	<u>57</u>		<u>58</u>	<u>57</u>	<u>42</u>	<u>43</u>
33	20	18	14	13	8	53	13	15	155	31

<u>47</u>	<u>51</u>	<u>57</u>	<u>63</u>		<u>61</u>	<u>54</u>	<u>49</u>
33	20	17	8	60	14	20	39

<u>74</u>	<u>72</u>	<u>77</u>	<u>66</u>		<u>65</u>	<u>57</u>	<u>43</u>
33	19	18	13	62	14	16	33

Cross Sections

Sta.	B. S.	H. I.	F. S.	Grade	Gr. R.
B.M.	5.26	877.20		871.94	
	7.21	877.37	4.04	873.16	
	3.76	875.50	5.23	871.54	
	4.34	874.12	5.72	869.78	
	4.16	872.62	5.66	868.46	
	4.04	871.32	5.34	867.28	
	4.20	869.95	5.57	865.75	
B.M.	2.16	867.95	2.16	867.79	
	4.41	869.31	5.05	864.90	
	4.74	868.72	5.33	863.98	
B.M.			3.77	864.95	
	5.03	868.81	4.94	863.78	
	4.60	868.88	4.53	864.28	
	4.25	868.14	4.99	863.89	
	4.27	867.78	4.65	863.51	
B.M.			3.83	863.75	

Inst.
Rod.
Chain.

66.

8/9/26

Left

C L

Right

SpK. in 10" Oak. Lt. Sta. 877+60.

SpK. in 10" Oak. Rt. Sta. 852+92.

SpK. in Trolley Pole Lt. Sta. 844+00

SpK. in 10" Oak. Rt. Sta. 828+95.

Cross Sections

Sta.	B. S.	I. I.	F. S.	Grade	Gr. R.
B. M.	3.23	867.78		863.95	
	4.49	868.03	4.24	863.54	
	5.00	868.26	4.17	863.86	
	4.54	868.70	4.72	864.14	
	4.55	868.60	4.65	864.05	
B. M.	4.20	869.14	3.66	864.94	864.95
	5.53	869.90	4.77	864.37	
	5.47	870.64	4.71	865.19	
B. M.			2.88	867.78	867.79
	5.76	872.12	4.30	866.36	
	5.65	873.42	4.35	867.77	
	5.11	874.55	3.98	869.44	
B. M.			6.47	868.08	
	5.66	876.25	3.96	870.57	
	5.63	878.02	3.86	872.37	
	4.41	876.66	5.77	872.25	
B. M.			4.76	871.90	871.94

Inst.

Rod.

Chain.

67

8/17/16

Left

C L

Right

Spk. in 18" Oak Lt. Sta. 828+95

Spk. in Trolley Pole Lt. Sta. 844+00

Spk. in 12" Oak Rt. Sta. 854+92

Spk. in 12" Oak Rt. Sta. 865+00

Spk. in 18" Oak Lt. Sta. 877+00

Cross Sections

Sta. B. S. H. I. F. S. Grade Gr. R.

Inst.
Rod.
Chain.

68.

Left

C L

Right

The page contains a large grid of graph paper. A vertical red line runs down the center of the grid, dividing it into two equal halves. The grid is composed of small squares, with the left half being slightly wider than the right half. The labels 'Left', 'C L', and 'Right' are positioned at the top of their respective columns. The grid is otherwise empty.

B.M.	4.72	881.20		876.48
B.M.			4.48	876.72
	3.53	879.77	4.96	876.24
	0.61	871.62	2.76	871.01
B.M.			4.17	867.45
	4.73	864.69	11.66	859.96
	7.46	868.14	4.01	860.68
B.M.			2.15	865.99
	7.85	873.98	2.01	866.13
	5.78	878.75	0.99	872.97
B.M.	5.11	879.71	4.15	874.60
	5.07	880.07	4.71	875.00
B.M.	3.65	877.70	4.02	874.05
	5.04	876.14	6.60	871.10
B.M.			5.84	870.32
	6.26	877.82	4.40	871.56
	2.55	874.84	5.51	872.31
	5.77	874.62	6.01	868.85
B.M.			6.64	867.98
	4.15	873.89	4.88	869.74
	6.03	873.97	5.75	867.94
	5.29	875.04	4.22	869.95
	4.74	874.20	4.98	870.66
B.M.			4.52	870.48
	5.43	875.14	5.09	869.71

8/5/27

On Oak Tree 20' Lt. Sta. 1011+50.

Spk. in 30" Oak Lt. Sta. 1010+

Spk. in 18" Oak Lt. Sta.

Spk. in 15" Oak Lt. Sta. 982+00

Spk. in 15" Oak Lt. Sta. 966+40.

Spk. in P.P. Lt. Sta. 952+30.

Spk. in 24" Oak Lt. Sta. 943+10.

Spk. in 8" Oak Lt. Sta. 924+30.

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

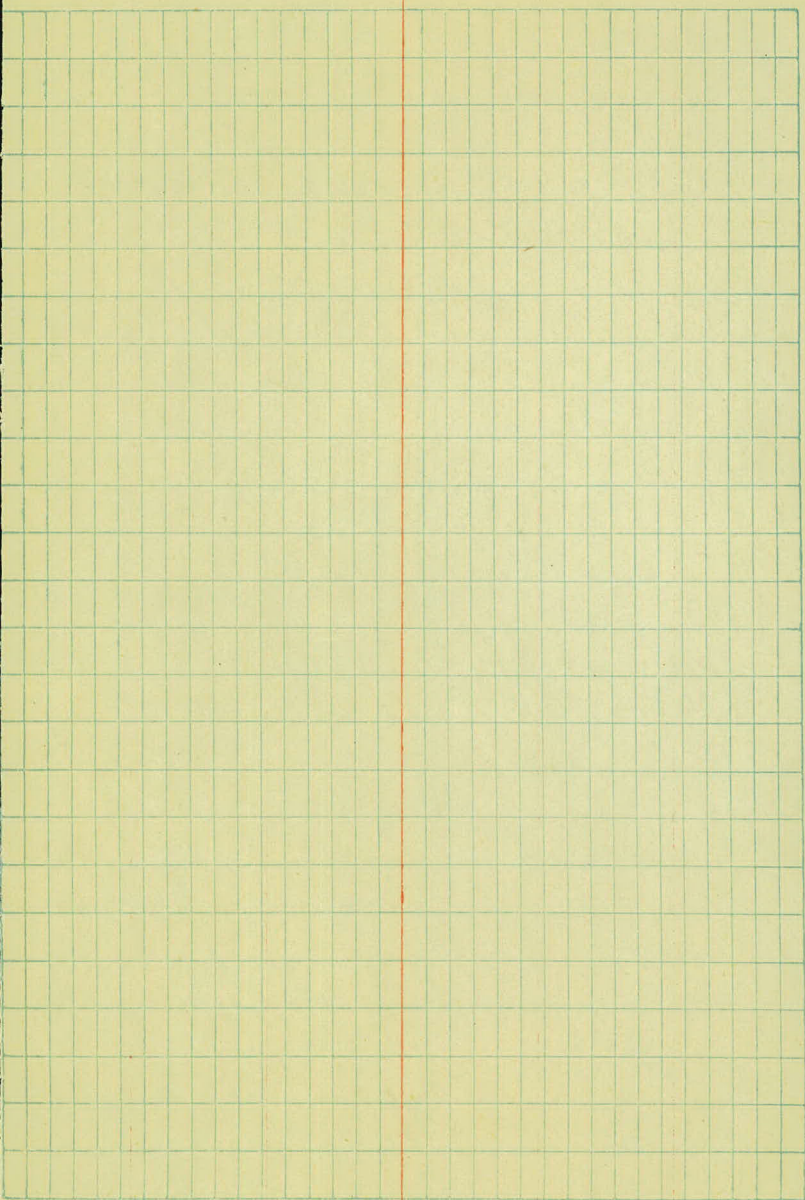
875.14

5.34	875.51	4.97	870.15
5.35	876.08	4.98	870.73
		4.14	871.94

11

Spelt in 10" Oyl. Lt. Sta. 877160.

B.M.	4.63	881.11		876.48
B.M.			4.71	
	3.74	880.02	4.85	876.24
	1.31	874.24	7.09	872.93
	2.97	868.42	8.77	865.45
B.M.			0.95	867.47
	3.83	864.76	7.49	860.93
	6.34	866.74	4.14	860.60
B.M.			0.92	866.02
	7.28	871.62	2.60	864.34
	7.34	876.91	2.05	869.57
	3759	879.25	3.25	873.66
			4.60	874.65
	5.55	880.23	4.57	874.68
	4.79	879.74	5.28	874.95
B.M.	3.29	877.40	5.63	874.11
	4.85	876.13	4.12	871.28
	5.89	877.61	4.41	871.72
	3.27	876.58	4.50	873.11
	4.49	873.72	7.15	869.23
B.M.			5.64	868.08



① B.M.	4.09	880.57		876.48
B.M.			3.25	876.74
	3.38	879.91	4.04	876.53
	0.60	871.61	8.90	871.01
② B.M.			4.13	867.48
	4.18	864.93	10.24	860.75
	7.15	867.89	4.19	860.74
③ B.M.	5.15	871.18	1.84	866.03
	8.11	877.80	1.49	869.67
	5.28	879.40	3.68	874.12
④ B.M.			4.72	874.68
	4.62	877.80	4.22	875.18
⑤ B.M.			5.69	874.11
	2.97	876.77	5.80	874.00
	4.76	870.20	5.53	871.44
⑥ B.M.			5.83	870.37
	5.45	877.98	3.67	872.53
	4.21	874.05	2.14	869.84
⑦ B.M.			5.99	868.04
	3.72	873.97	4.00	870.05
	5.53	874.53	4.77	867.00
	4.55	874.98	4.10	870.43
⑧ B.M.			4.44	870.54
	5.07	875.16	4.87	870.09
	4.75	875.34	4.57	870.59

7/29/26

On Oak Tree 20 Mt Sta. 1011+50

Spk in 30" Oak Lt. Sta. 1010

Spk in 18" Oak Mt. Sta. From East

Spk in 16" Oak Mt. Sta.

Spk in 10" Oak Lt. Sta. 996+40

Spk in P.R. Lt. Sta. 952+30

Spk in 24" Oak Mt. 943+10.

Spk in 8" Oak Mt. Sta. 924+30

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

875.34

6.02 876.91 4.45 870.89

B.M.

4.63 872.28

3.03 876.52 3.42 873.29

3.74 873.54 6.54 869.78

4.13 870.97 6.68 866.84

5.13 867.84

4.36 869.05 6.28 864.69

5.40 863.65

Spk in Trolley 1212 L.H. Sta. 877+50

Spk in 18" Galk. H. Sta. 852+90

	5.63	869.44		863.81
	5.70	871.04	4.08	865.36
B.M.			3.07	867.97
	6.35	873.41	4.00	867.04
	6.43	876.14	3.48	869.95
	5.70	877.11	2.75	873.41
			4.69	872.42
	4.48	875.50	6.09	871.02
	4.23	874.99	4.74	890.76
	4.95	895.04	4.70	890.09
			4.57	870.51
	4.50	874.75	4.79	870.25
	4.28	873.44	5.57	869.18
	5.53	875.11	3.88	869.58
			6.95	868.16
	6.62	875.57	4.14	868.95
	4.08	877.35	2.30	873.27
			5.53	871.82

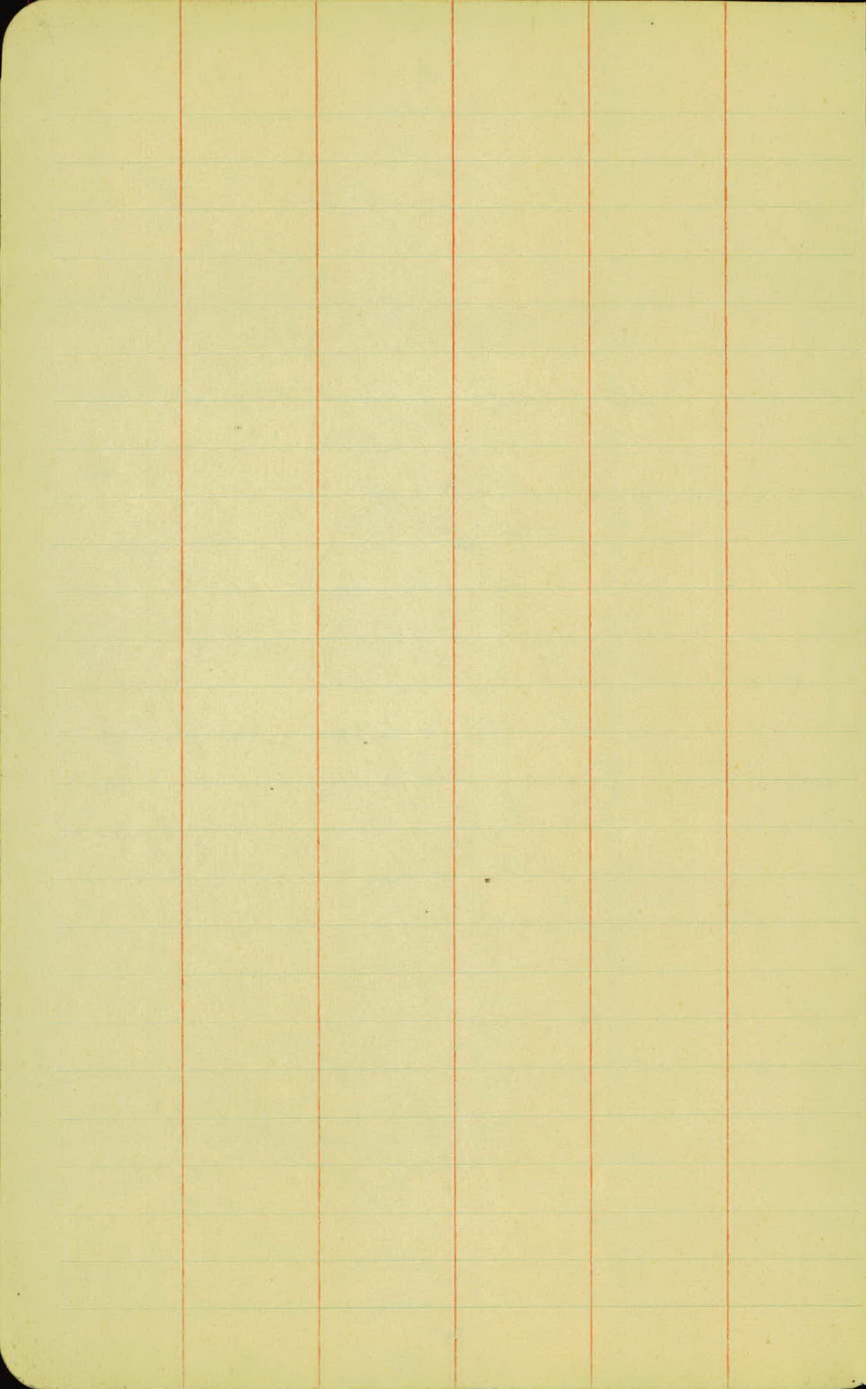
Went in E.P. at 314.998195.

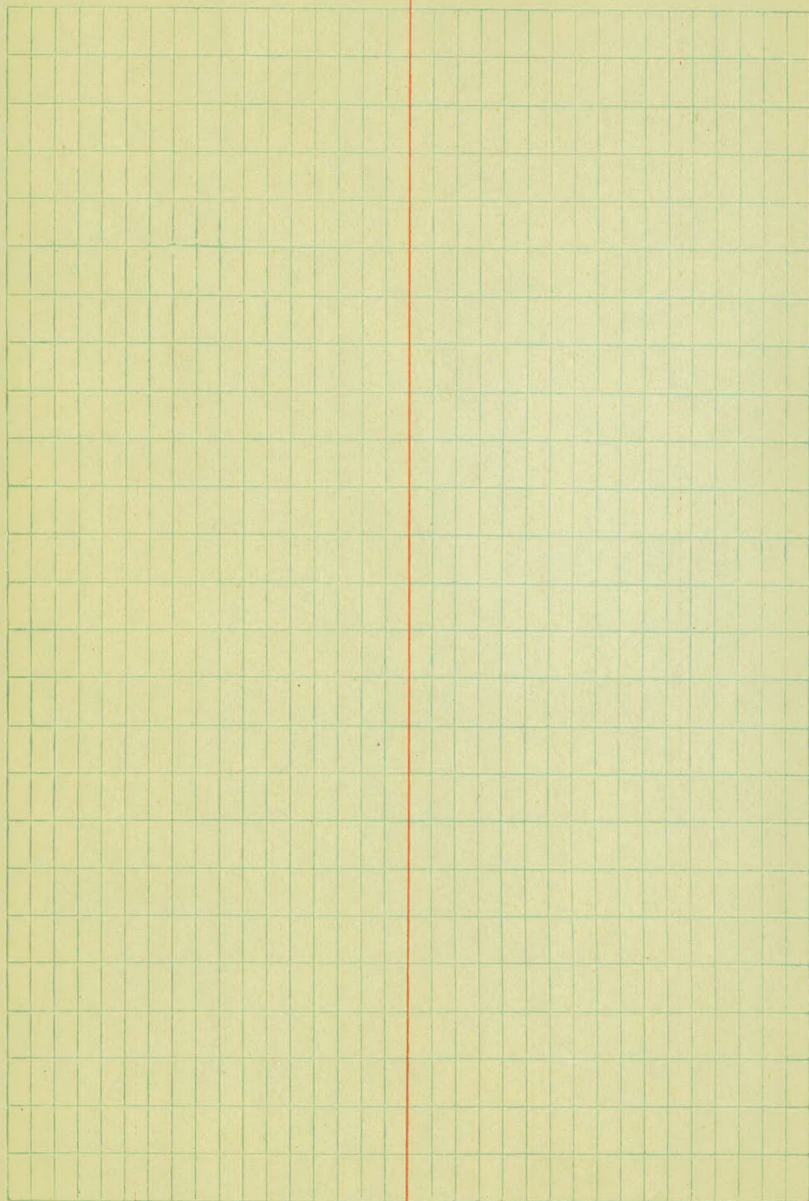
B.M.	3.39	877.87		876.48
	5.97	880.73	5.11	874.76
	3.61	880.64	3.70	877.03
	3.42	878.23	5.83	874.51
	6.28	879.14	5.37	872.86
B.M.			4.27	874.87
	6.44	882.07	3.51	875.63
	5.19	883.99	3.27	878.80
	4.64	884.12	4.51	879.48
B.M.			4.85	879.27 879.27

On Oak Tree 20' Mt. Sta. 1011 +50.

spk. in 18" Oak Mt. Sta. 1028 +00

spk. in 14" Tree Mt. Sta. 1043 +25





N 2494

DISTANCES FROM CENTER OF ROADWAY FOR
CROSS-SECTIONING.

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

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

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