

NAME Euclid Ave

Class _____ Course _____ Party _____

1287 614.5

256
FIELD NOTES

No. 403P

**ESPECIALLY ADAPTED
TO THE USE OF
ENGINEERING STUDENTS**

EUGENE DIETZGEN Co.

MANUFACTURERS

DRAWING MATERIALS

MATHEMATICAL AND SURVEYING INSTRUMENTS

MEASURING TAPES

**CHICAGO SAN FRANCISCO NEW YORK
NEW ORLEANS PITTSBURGH**

MICROFILMED

DEC 30 1964

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Slope stk. 0+00 - 32+96+- Pg. 1-8

Line change Pg. 8

Bridge # 2 - " 31

~~Line change~~ " 13-14

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" # 3 - " 33

Sta.	H.I.	East Prop.	West Prop.	East Rod	West Rod
5+00		39.9	39.6		
4+50		40.1	39.9		
6+00		40.3	40.1		
6+40.76	393.8 393.76	40.5	340.5	3.3	3.3
7+00		40.09 40.2		3.7	
7+20.20		39.95 40.1	39.95 40.0	3.9	3.9
7+36.81		39.82 40.0	39.82 39.9	4.0	4.0
7+50			39.74 39.8		4.1
8+00			39.39 39.6		4.4
8+45.46		39.5	39.08 39.7	4.7	4.7
8+93.50	Culvert C.B.	38.25 39.25	38.25 39.2	5.0	5.0
9+00		39.22 39.0	39.26 39.0		

Left			Right
$\frac{+3.6}{35.0}$	$\frac{+0.8}{30.0}$	0.0	$\frac{+1.2}{31.0}$ $\frac{+4.7}{35.0}$
$\frac{+4.0}{35.0}$	$\frac{+0.8}{30.0}$	0.0	$\frac{+0.6}{31.0}$ $\frac{+1.9}{35.0}$
$\frac{+3.7}{35.0}$	$\frac{+0.8}{30.0}$	-0.3	$\frac{+0.3}{30.0}$ $\frac{+2.3}{35.0}$
$\frac{+3.3}{35.0}$	$\frac{+0.4}{30.0}$	-0.2	$\frac{+0.1}{30.0}$ $\frac{+1.7}{35.0}$
$\frac{+3.0}{35.0}$	$\frac{+0.5}{30.0}$	0.0	
$\frac{+2.7}{35.0}$	$\frac{+0.4}{30.0}$	0.0	$\frac{+0.5}{30.0}$ $\frac{+1.0}{35.0}$
$\frac{+2.3}{35.0}$	$\frac{+0.5}{30.0}$	+0.2	$\frac{+0.8}{30.0}$ $\frac{+1.1}{35.0}$
		0.0	$\frac{0.0}{30.0}$ $\frac{+0.6}{35.0}$
		0.0	$\frac{+0.2}{30.0}$ $\frac{+0.4}{35.0}$
$\frac{-0.9}{35.0}$	$\frac{0.0}{30.0}$	+0.1	$\frac{0.0}{30.0}$ $\frac{-1.8}{35.0}$
$\frac{-1.1}{35.0}$	$\frac{+0.2}{30.0}$	+0.5	$\frac{-0.4}{30.0}$ $\frac{+0.2}{35.0}$

Sta.	H.I	F. Prop.	W. Prop.	E. Rod	W. Rod	Left	2.0	±	Right
	43.8 31.9 4.4								
9+50	T.P. 340.52	39.38 39.1	39.38 37.1	4.4	4.4	$\frac{-2.4}{35.0}$	$\frac{-0.5}{30.0}$	+0.6	$\frac{+0.1}{30.0}$
10+00	3.24 343.76	40.02 39.9	40.02 37.8	7.0 3.8	3.8	$\frac{-1.9}{35.0}$	$\frac{-0.3}{30.0}$	+0.1	$\frac{+0.1}{30.0}$
10+37.66	2.85 340.91	40.50 40.5	40.50 40.3	6.5	6.5	$\frac{+0.2}{35.0}$	$\frac{+0.2}{30.0}$	+0.1	$\frac{+1.1}{30.0}$
10+50	6.06 346.97		40.65 40.4	6.3	6.3				
11+00			41.28 41.1	5.7	5.7			+0.1	$\frac{+0.5}{30.0}$
11+22.28		41.56 41.5	41.56 41.4	5.4	5.4	$\frac{+3.6}{35.0}$	$\frac{+0.5}{30.0}$	0.0	$\frac{+0.5}{30.0}$
1+50		41.9 41.9	41.9 41.7	5.1	5.1	$\frac{+3.5}{35.0}$	$\frac{+3.5}{30.0}$	+0.5	$\frac{+0.5}{28.0}$
12		42.6	42.4			$\frac{+2.9}{35.0}$	$\frac{+0.6}{30.0}$	+0.2	$\frac{+0.3}{30.0}$
1+50		43.3	43.2			$\frac{+2.4}{35.0}$	$\frac{+2.2}{30.0}$	+0.5	$\frac{+0.5}{28.0}$
13		44.0	43.9	3.7	3.8			0.0	$\frac{0.0}{30.0}$
13+04.11		44.0 44.0	44.0 44.0	3.7	3.7	$\frac{+1.3}{35.0}$	$\frac{+1.3}{30.0}$	+0.5	$\frac{+0.5}{28.0}$

Sta.	H.I.	E. Prop.	W. Prop.	E. Rod	W. Rod	Left	±	Right
	346.54 2.03 348.57							
13+67.81	97.5	43.1	43.5	5.5	5.1	$\frac{+1.9}{35}$ $\frac{+1.7}{30}$	+1.7	$\frac{+0.4}{30.0}$ $\frac{+0.5}{35}$
13+95.96	338.82 2.60 341.42	42.7	43.0	5.9	5.6	$\frac{+2.3}{35}$ $\frac{+1.9}{30}$	+1.9	$\frac{+0.4}{30.0}$ $\frac{+0.3}{35.0}$
14+50	—	—	42.2	—	6.4		+1.3	$\frac{+0.3}{30}$ $\frac{+0.3}{35.0}$
14+79.98	—	41.4	41.7	7.2	6.9	$\frac{+2.0}{35.0}$ $\frac{+1.7}{30}$	+1.4	$\frac{+0.5}{30}$ $\frac{+0.5}{35.0}$
15	—	41.1	41.4	7.5	7.2	$\frac{+1.5}{35}$ $\frac{+1.3}{30}$	+1.2	$\frac{+0.6}{30}$ $\frac{+0.7}{35}$
15+50	—	40.3	40.6	8.3	8.0	$\frac{+1.7}{35}$ $\frac{+1.5}{30}$	+1.5	$\frac{+0.5}{30}$ $\frac{+0.5}{35}$
16	—	39.5	39.8	9.1	8.8	$\frac{+1.7}{35}$ $\frac{+1.5}{30}$	+1.6	$\frac{+0.7}{30}$ $\frac{+1.0}{35}$
16+50	—	38.7	39.0	9.9	9.6	$\frac{+1.7}{35}$ $\frac{+1.5}{30}$	+1.8	$\frac{+0.6}{30}$ $\frac{+0.7}{35}$
17	—	37.9	38.1	10.7	10.5	$\frac{+1.8}{35}$ $\frac{+1.7}{30}$	+2.0	$\frac{+0.7}{30}$ $\frac{+0.8}{35}$
17+50	341.42	37.1	37.2	11.5	11.4	$\frac{+2.3}{35}$ $\frac{+2.1}{30}$	+2.0	$\frac{+1.0}{30}$ $\frac{+1.0}{35}$
18	—	36.3	36.3	5.1	5.1	$\frac{+2.6}{35}$ $\frac{+2.5}{30}$	+2.3	$\frac{+1.4}{30}$ $\frac{+1.5}{35}$
18+17.81	—	36.0	36.0	5.4	5.4	$\frac{+2.5}{35}$ $\frac{+2.4}{30}$	+2.3	$\frac{+0.8}{30}$ $\frac{+0.7}{35}$

Sta.	H.I.	E. Prop.	W. Prop.	E. Rod	W. Rod	Left	±	Right	
18+50	341.4 ✓ 11.41 330.0	35.5	—	5.9	—	$\frac{+2.5}{35}$	$\frac{+2.5}{30.0}$	+1.5	Sheet
18+67.81		35 ✓	35.5	6.7	5.9	$\frac{+2.6}{35}$	$\frac{+2.5}{30}$	+1.8	$\frac{+0.5}{30}$ $\frac{+0.4}{35}$
19		34.7	34.9	6.7	6.5	$\frac{+1.7}{35}$	$\frac{+1.7}{30}$	+1.5	$\frac{+0.3}{30}$ $\frac{+0.3}{35}$
19+50		33.9	33.9	7.5	7.5				
19+67.73		33.6	33.6	7.8	7.8	$\frac{+1.4}{35}$	$\frac{+1.0}{30}$	+0.7	$\frac{0.0}{30}$ $\frac{0.0}{35}$
19+96.33		33.1	33.0	8.0	8.4	$\frac{+1.0}{35}$	$\frac{+0.9}{30}$	+0.3	$\frac{+0.4}{30}$ $\frac{+0.6}{35}$
20+33.62	East	32.8	32.3	8.6	9.1	$\frac{+0.5}{35}$	$\frac{+0.5}{30}$	+0.3	$\frac{-0.1}{20.0}$ $\frac{-0.2}{25.0}$
			(West Shoulder)						
+50		31.9	31.9						
20+76.41		31.7	31.7	9.7	9.7	$\frac{-0.2}{25.8}$	$\frac{-0.5}{20.8}$	-1.4	$\frac{-1.4}{22.1}$ $\frac{-1.7}{27.1}$
21+15		31.5				$\frac{-1.9}{28.3}$	$\frac{-2.2}{23.3}$		Didn't set stake

Br 9 #1 ↑

330.01
40.5
334.06
2.86
331.20

- Grade -

Sta.	H.I	E. Prop.	W. Should.	E. Rod.	W. Rod.	Left.		Right		
23+65	South Abut.	31.3	30.5		12.1	$\frac{-10.4}{49.5}$	$\frac{-9.6}{14.4}$	-2.1	$\frac{+0.8}{73.4}$	$\frac{+1.0}{20.4}$
24		31.6	31.0							
24+02.21 BK	Equation	31.6	31.0		11.6	$\frac{+1.7}{35}$	$\frac{+1.7}{30}$	+2.7	$\frac{+4.0}{17.0}$	$\frac{+4.4}{22.0}$
24+08.33 fwd.										
24+46.93	336.78 336.44 6.12	32.0	31.5		11.1	$\frac{+3.2}{35}$	$\frac{+3.3}{30}$	+4.3	$\frac{+6.1}{18.2}$	$\frac{+6.4}{23.2}$
25	342.59	Blank	32.1		10.5			+4.8	$\frac{+5.8}{17.9}$	$\frac{+5.8}{22.9}$
25+54.80		32.5	32.7		9.9	$\frac{+3.7}{35.0}$	$\frac{+3.7}{30}$	+3.9	$\frac{+4.8}{19.4}$	$\frac{+4.5}{22.4}$
26		33.0	32.2		4.8	$\frac{+3.8}{35}$	$\frac{+3.7}{30}$	+3.7	$\frac{+4.0}{17.0}$	$\frac{+3.9}{22.0}$
+50.		32.5	31.7		5.3	$\frac{3.4}{35.0}$	$\frac{+3.4}{30.0}$	+3.1	$\frac{+3.3}{16.7}$	$\frac{+3.2}{21.7}$
27		31.9	31.2		5.8	$\frac{+2.9}{35.0}$	$\frac{+2.1}{30.0}$	+1.4	$\frac{+1.8}{15.9}$	$\frac{+1.6}{20.9}$
+50		31.4	30.7		6.3	$\frac{+0.9}{35.0}$	$\frac{+0.7}{30.0}$	+0.2	$\frac{+1.0}{15.5}$	$\frac{+0.5}{20.5}$
28		29.9	29.1		7.9	$\frac{+0.8}{35.0}$	$\frac{+0.9}{30.0}$	+0.3	$\frac{-0.5}{15.9}$	$\frac{-0.6}{20.9}$

Stg.	H.I.	E. Prop.	W. Should.	E. Pod.	W. Pod.	Left	±	Right			
28+00		27.7	26.9		0.3	$\frac{40.6}{35.0}$	$\frac{+0.5}{30.0}$	-0.3	$\frac{-0.4}{25.6}$	$\frac{-0.3}{20.6}$	
29+00	308.72	24.8	24.0	3.2	3.2	$\frac{41.3}{35.0}$	$\frac{+1.0}{30.0}$	0.0	$\frac{0.0}{15.0}$	$\frac{-0.6}{20.0}$	
+00	305.32 21 305.11	21.9	21.1	5.3 5.1		$\frac{+2.0}{35.0}$	$\frac{+0.6}{30.0}$	+0.6	$\frac{+0.7}{15.4}$	$\frac{+0.7}{20.4}$	
30	315.95 0.20 315.75	19.0	18.2		9.0	$\frac{+2.3}{35.0}$	$\frac{+2.2}{30.0}$	+1.0	$\frac{+1.7}{15.9}$	$\frac{+0.6}{20.9}$	
+50	326.97 10.82 327.20	16.5	15.3		0.6	$\frac{+2.5}{35.0}$	$\frac{+2.4}{30.0}$	+0.8	$\frac{+0.4}{15.2}$	$\frac{-0.2}{20.2}$	
31	326.50 10.48 336.98	13.2	12.4	2.7	3.5	$\frac{+2.4}{35.0}$	$\frac{+2.3}{30.0}$	-0.1	$\frac{-3.0}{19.5}$	$\frac{-2.9}{24.5}$	
+50		10.3	09.5	5.6	6.4	$\frac{+1.2}{35.0}$	$\frac{+0.4}{30.0}$	-3.1	$\frac{7.1}{25.7}$	$\frac{-8.4}{30.7}$	
32		07.4	06.6	8.5 2.1	11.3		$\frac{-8.5}{20.0}$	-5.4	$\frac{-1.6}{30.0}$	$\frac{-1.1}{35.0}$	
32+50		04.5	03.7	0.8	1.6		$\frac{-5.1}{8.0}$	-4.6	$\frac{-0.8}{30.0}$	$\frac{-0.1}{35.0}$	
32+96.23		01.9	01.0	3.4	4.3	$\frac{-13.0}{34.5}$	$\frac{-4.3}{25.0}$	$\frac{-2.6}{15.0}$	-3.0	$\frac{+0.2}{30.0}$	$\frac{+0.8}{35.0}$
33+30.36		300.00	99.2								
+50		Blank	98.8								

See Page 25 - This Book for Continuation. 050

Line Change

Necessary to coincide with
"Islenair" Alignment

O. J. Shampson

Dec. 31, 1926

This line change was made
in order to coincide with
the West Line of "Islenair".
Then was cut-out account
changing bridge location. Not
practical.

However Grade stakes
set on the Prop. line of
"Islenair" are not 30' from
E of Euclid ~~line~~ but are
in direct relation to Prop.
line of Islenair. That is —
the street is not exactly the
same width at all points, but
is narrow at the South Boundary and
wide at the North Boundary (Islenair)

Line change (Cut-out)

0.78' $\left\{ \begin{array}{l} \Delta = 84^{\circ} 25' \\ R = \\ T = \\ L = \end{array} \right.$ P.I. Sta. 45+21.28
diff in
line at
So. Line
of Islenair made
no apparent difference
in Angle

VOID

South Line of Islenair
F.I.P. 37+94.02 Ahead
37+90.36 Back Equation.

$\angle = 0^{\circ} 30'$ Right

Fd. 2x2

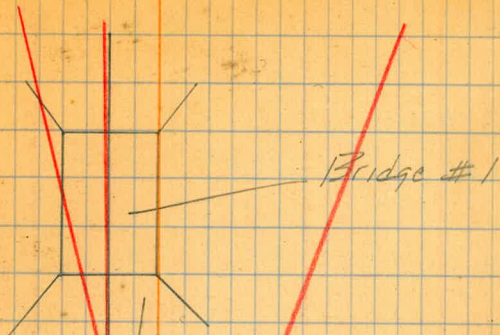
N. Line - Islenair

24+08.33 Fwd.
24+02.21 BK. Equation.

Established this
line by setting
points 30' West of
Iron pipes as
"found" in Islenair

ANGLE POINT

wide at the North Boundary (Islenair)



$L = 10.26'$ Left
 Old Angle = $1205''$

$19 + 67.73 = \text{Sta. PI}$

Void

~~Euclid per M. Coote~~

Sta.	H.I.	E. Prop.	W. Should.	E. Rod	W. Rod	Left	Right
34	100.36	98.5	97.8				
	+50	97.5	96.8				
35		96.5	95.8				
	+50	95.6	94.8				
36		94.0	93.2				
	+50	91.0	90.2				
37		86.3	85.5				
	+50	81.3	80.5				
37	90.36	77.3	76.5				
	= BK Equation						
37	94.02	77.3	76.5				
	Fwd.						
38	+50		70.5				
39			65.5				

Euclid Arc - Curve

also Ref. to P.I.

55144.37 Fwd.

Long - short -

55143.96 BK.

15° 56.5'

55414

14° 31'

54487

13° 05'

54462

11° 39'

54437

10° 13'

54412

8° 47'

53487

7° 21'

53462

5° 55'

53437

4° 29'

53412

3° 03'

+87

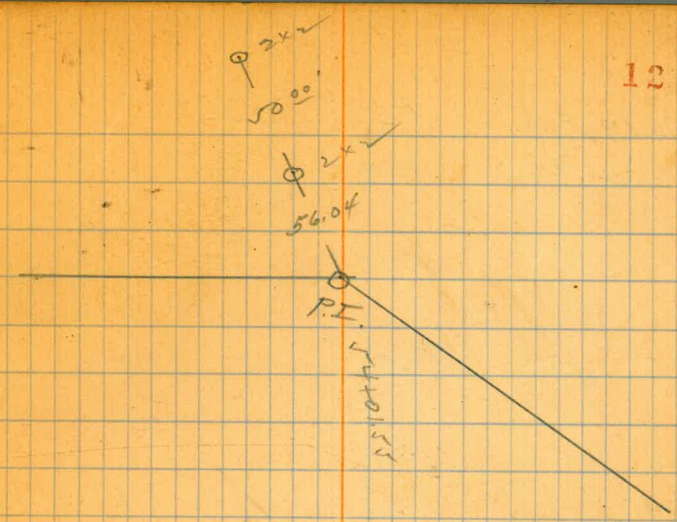
1° 37'

52458.73

0° 00'

28.94 27.59

25.60 = 24.40



P.I. 54401.55

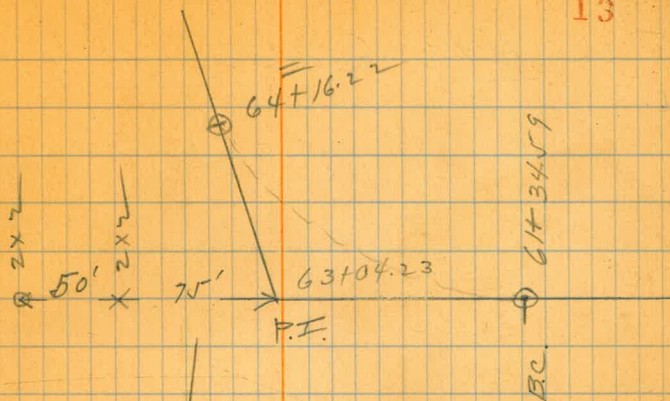
Decimals = 0.976 = 1.024

- $\Delta = 31253$
- $R = 500'$
- $T = 142.82$
- $L = 278.23$
- $C = 115.460$
- $I' = 3.438$
- $50' = 22.519'$

Euclid Arc
Line Change

64+73.87 Fwd.			
64+16.22 BK	40°-18'		
64	38°-01'		
+75	34°-26'		
+100	30°-51'		
+125	27°-16.5'	long	short
		26.50	23.50
63	23°-41.5'		
		26.50	23.50
+75	20°-06.5'		
		26.50	23.50
+100	16°-32'		
		26.50	23.50
+125	12°-57'		
		26.50	23.50
62	9°-22.9'		
		26.50	23.50
+75	5°-47.2'	10.60	9.40
61+6.2	4°-21.34'	15.90	14.10
+100	2°-12.5'	16.83	14.48
61+34.59	0°-00'		

13



P.I. - 63+04.23

Decimals for Headers
= 0.94 - 1.06

$$\left. \begin{aligned} \Delta &= 80^{\circ} 36' - 30'' \\ R &= 200' \\ T &= 169.64 \\ L &= 281.63 \\ C &= 28.648 \\ 1' &= 8.594' \\ 25' &= 3034.86 \end{aligned} \right\}$$

Enclit Line
Line Change

69+34.85 Fwd.

69+56.71 BK 2°30.5'
+25 2°09'

69 10.52'
+75 1°34.5'

+50 1°17.4'

+25 1°00'

68 0°43'

+75 0°25.7'

+50 0°08.5'

67+37.47 0°00'

500 Reference Pts.

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gfb

P.I. =

68+47.14

$$\Delta = 52^{\circ}01'30''$$

$$R = 2500'$$

$$T = 109.67$$

$$L = 219.24$$

$$C'' = 2.292''$$

$$1' = .6876$$

$$50' = 0^{\circ}34.38'$$

Sta. + H.I. - Grade Rod

Left

75.5
4.8
80.380.6
2.1
78.5
72.9
5.6
3.7P. 9/7
15

Continued from Book 246

Pg. 6 for Dope - 81+25.32 Fwd

81+30.39 Fwd.	182.20 6.40								
81+25.32 BK.	188.60 8.71	77.0	8.4	$\frac{+6.5}{22.9}$	$\frac{+5.7}{17.9}$	+4.4	$\frac{+3.2}{16.6}$	$\frac{+2.4}{21.6}$	
81+20	179.69 5.94	H.I.	77.0	8.6	$\frac{+6.4}{23.0}$	$\frac{+5.9}{18.0}$	+3.0	$\frac{+1.3}{15.7}$	$\frac{+1.3}{20.7}$
80+50	185.63 4.01	ERV.							
80+50	176.62 3.31		76.5	9.1	$\frac{+5.0}{22.0}$	$\frac{+4.0}{17.0}$	+0.4	$\frac{-0.6}{15.9}$	$\frac{-1.2}{20.9}$
80+00	180.13 5.22		76.0	9.6	$\frac{+7.5}{23.0}$	$\frac{+6.0}{18.0}$	+1.8	$\frac{-0.8}{16.2}$	$\frac{-1.1}{21.2}$
79+50	174.91 6.81	ELV	75.5	10.1	$\frac{+4.8}{21.8}$	$\frac{+3.5}{16.8}$	+0.3	$\frac{-2.1}{18.2}$	$\frac{-3.0}{23.2}$
79+00	181.72		74.9	5.2	$\frac{+3.9}{21.6}$	$\frac{+3.2}{16.6}$	-0.5	$\frac{-2.0}{18.0}$	$\frac{-2.5}{23.0}$
78+50			74.6	5.5	$\frac{+1.8}{21.6}$	$\frac{+1.1}{15.6}$	-1.4	$\frac{-1.6}{17.4}$	$\frac{-1.6}{22.4}$
78+00	75.2 4.0 80.2 2.9 77.3		74.9	5.2	$\frac{+0.3}{20.0}$	$\frac{0.0}{15.0}$	-1.4	$\frac{-1.5}{17.3}$	$\frac{-1.3}{22.3}$
77+50			75.4	4.7	$\frac{+0.2}{20.0}$	$\frac{0.0}{15.0}$	-1.5	$\frac{-1.4}{17.1}$	$\frac{-1.2}{22.1}$
77+25.31	80.0 7.9 72.1		75.6	4.5	$\frac{+0.4}{20.1}$	$\frac{+0.2}{15.1}$	-1.3	$\frac{-1.3}{17.0}$	$\frac{-1.1}{22.0}$
77+00	80.0 2.9 77.1		75.9	5.8	$\frac{+0.2}{20.3}$	$\frac{-0.2}{15.3}$	-1.6	$\frac{-1.3}{17.0}$	$\frac{-0.7}{22.0}$
76+50	74.9 3.0		76.4	5.3	$\frac{+0.4}{20.0}$	$\frac{+0.3}{15.2}$	-1.3	$\frac{-1.0}{16.5}$	$\frac{-0.8}{21.5}$
76+00			77.0	4.5	$\frac{+0.3}{20.0}$	$\frac{0.0}{15.0}$	-0.7	$\frac{-1.2}{16.8}$	$\frac{-1.0}{21.8}$

Sta	+	H.I.	-	Grade	Rod	Left		±	Right	
75+50		181.72 1.85 179.87 8.52		78.0	3.7	+0.4 20.7	0.0 15.0	-1.8	-1.5 19.3	-1.4 22.3
75+00		188.39 1.29 187.10 9.39 196.49	H.I.	78.8	2.9	+0.3 20.2	0.0 15.0	-1.3	-1.5 17.3	-1.5 22.3
74+50				79.6	2.1	+1.0 20.4	+0.7 15.4	-1.5	-1.6 17.4	-1.3 22.4
74+00				80.4	1.3	+1.3 20.3	+0.6 15.3	-1.4	-1.4 17.1	-1.0 22.1
73+50				81.2	7.2	+0.5 20.1	+0.2 15.1	-1.3	-1.2 16.8	-0.6 21.8
73+00		188.9		82.0	6.4	+1.0 20.4	+0.8 15.4	-0.8	-1.1 16.7	-0.8 21.7
72+50				82.8	5.6	+1.6 20.6	+1.1 15.6	-1.0	-0.8 16.2	-0.6 21.2
72+00				83.6	4.8	+0.8 20.3	+0.6 15.3	-2.0	-0.9 16.4	-1.8 21.4
71+50		190.17 89.17 3.00		84.4	4.0	+0.1 20.0	0.0 15.0	-1.7	-1.6 17.4	-2.5 22.4
71+00				85.2	3.2	+0.5 20.2	+0.3 15.2	-1.4	-1.0 16.5	-0.7 21.5
70+50				86.0	2.4	+1.0 20.3	+0.6 15.3	-0.1	-0.5 15.8	-0.2 20.8
70+00				86.8	9.7 1.6	+2.2 21.0	+2.0 16.0	+1.0	0.0 15.0	0.0 20.0

Sta.	+	H.I.	-	Grade	Red	Right		Left		
69+34.85	RO.T.	196.49 2.51 193.98	Temp BM Elev.	87.3	9.2	$\frac{+2.0}{20.9}$	$\frac{+1.7}{15.9}$	+3.1	$\frac{+4.8}{17.4}$	$\frac{+5.0}{22.4}$
69+56.71	EC.	199.49 11.49 188.00	H.I. Elev.	87.3	9.2					
		1.36 189.36	11.5							
69+00				87.0	9.5	$\frac{+3.6}{21.9}$	$\frac{+3.7}{16.9}$	+5.9	$\frac{+8.2}{18.1}$	$\frac{+8.7}{24.1}$
		203.7								
68+00			18.0	85.7	13.8	$\frac{+0.6}{20.6}$	$\frac{+1.1}{15.6}$	+7.0	$\frac{+12.0}{21.0}$	$\frac{+12.8}{26.0}$
		98.8								
68+25			17.8	84.6	14.9	$\frac{-0.5}{20.7}$	$\frac{+1.3}{15.7}$	+3.4	$\frac{+11.6}{20.8}$	$\frac{+13.5}{25.8}$
					4.8					
68+00			20.1	83.6	15.9	$\frac{-2.2}{21.2}$	$\frac{-0.8}{16.2}$	+0.6	$\frac{+10.4}{20.2}$	$\frac{+12.3}{25.2}$
					5.8					
67+75		88.9	20.8	82.9	16.6	$\frac{-1.3}{21.5}$	$\frac{-1.0}{16.5}$	-0.5	$\frac{+8.5}{19.3}$	$\frac{+10.7}{24.3}$
					6.5					
67+50		21.3		82.4	17.1	$\frac{-0.5}{20.5}$	$\frac{-0.3}{15.5}$	-1.1	$\frac{+4.1}{17.1}$	$\frac{+5.6}{22.1}$
					7.0					
67+37.5			6.9	82.2	7.2	$\frac{0.0}{20.5}$	$\frac{-0.3}{15.5}$	-1.0	$\frac{+2.0}{16.0}$	$\frac{+3.4}{21.0}$
					7.0					
67+00			7.0	81.9	7.5	$\frac{+0.3}{20.0}$	$\frac{0.0}{15.0}$	-0.7	$\frac{-0.4}{15.6}$	$\frac{-0.1}{21.6}$
					7.0					
66+75			7.1	81.8	7.6	$\frac{+0.6}{20.0}$	$\frac{0.0}{15.0}$	-0.3	$\frac{0.0}{15.0}$	$\frac{-0.2}{20.0}$

Sta.	H.I.	Grade	Red	Right	\pm	Left	
66+50	189.36 5.09 184.27 5.08 189.35	81.9	7.5	$\frac{+0.6}{20.2}$	$\frac{+0.3}{15.2}$	-0.2	$\frac{+0.5}{15.3}$ $\frac{+0.3}{20.3}$
725	Temp B.M.	82.1	7.3	$\frac{+1.6}{20.3}$	$\frac{+0.6}{15.3}$	-0.2	$\frac{+0.2}{15.3}$ $\frac{+0.4}{20.3}$
66+00		82.4	7.0	$\frac{+0.6}{20.3}$	$\frac{+1.5}{15.3}$	-0.2	$\frac{+1.2}{15.1}$ $\frac{+0.2}{20.1}$
65+30		83.0	6.4	$\frac{+0.2}{20.3}$	$\frac{+0.6}{15.3}$	+0.1	$\frac{0.0}{15.0}$ $\frac{0.0}{20.0}$
65+00		83.6	5.8	$\frac{+0.2}{20.0}$	$\frac{0.0}{15.0}$	-0.5	$\frac{+0.2}{15.1}$ $\frac{+0.6}{20.1}$
64+73 ^{End}		83.9	5.5	$\frac{+0.2}{20.3}$	$\frac{+0.5}{15.3}$	-0.6	$\frac{-0.8}{16.2}$ $\frac{-0.3}{21.2}$
63+6 ^{23A}						-0.5	
64+00	Super	84.1	5.3	$\frac{+0.3}{20.2}$	$\frac{+0.3}{15.2}$	-0.5	$\frac{-0.8}{16.2}$ $\frac{-0.6}{21.2}$
63+75	Super	84.4	5.0	$\frac{+0.3}{20.0}$	$\frac{0.0}{15.0}$	-0.6	$\frac{-0.9}{16.4}$ $\frac{-0.5}{21.4}$
63+50	Outside	84.7	4.7	$\frac{+0.6}{20.2}$	$\frac{+0.4}{15.2}$	-0.7	$\frac{-1.0}{16.5}$ $\frac{-1.0}{21.5}$
63+25	Outside	85.0	4.4	$\frac{+0.7}{20.3}$	$\frac{+0.6}{15.3}$	-0.6	$\frac{-1.0}{16.5}$ $\frac{-1.2}{21.5}$
63+00	IT	85.4	4.0	$\frac{+0.8}{20.4}$	$\frac{+0.8}{15.4}$	-0.4	$\frac{-0.9}{16.4}$ $\frac{-0.8}{21.4}$
62+75		85.7	3.7	$\frac{+0.7}{20.3}$	$\frac{+0.6}{15.3}$	0.0	$\frac{-0.6}{15.9}$ $\frac{-0.9}{20.9}$

Sta.	H.I.	Grade	Red	Right	d	Left
62+50	189.35 1.84 187.71 Elev. 8.55	86.0	3.4	$\frac{40.7}{20.4}$ +0.8 15.4	-0.3	$\frac{-0.2}{15.3}$ $\frac{-0.2}{20.3}$
425	196.26 8.91 187.35	86.3	3.1	$\frac{-0.2}{20.0}$ 0.0 15.0	+0.2	$\frac{-0.4}{15.6}$ $\frac{-0.4}{20.6}$
62+00	187.29 8.91 196.20 H.I.	86.6	2.8	$\frac{-0.1}{20.0}$ 0.0 15.0	+0.2	$\frac{-0.2}{15.3}$ $\frac{-0.4}{20.3}$
61+75	194.56 Elev 1.64 187.29 11.86	86.9	2.5	$\frac{40.1}{20.0}$ 0.0 15.0	-0.7	$\frac{-0.7}{16.1}$ $\frac{-0.3}{21.1}$
61+65	199.15 H.I. 0.57 198.56 Elev	87.0	2.4	$\frac{40.8}{20.7}$ +0.8 15.4	0.0	$\frac{0.0}{15.0}$ $\frac{+0.2}{20.0}$
61+34.5	210.58 12.02 29 210.29 Elev	87.9	8.4 1.5	$\frac{0.0}{20.1}$ +0.2 15.1	-0.8	$\frac{-0.6}{15.9}$ $\frac{-1.6}{20.9}$
61+00	221.86 11.57	89.9	6.4	$\frac{-2.6}{23.9}$ -2.6 18.9	-2.4	$\frac{-2.1}{18.2}$ $\frac{-2.1}{23.2}$
60+75		92.1	4.1	$\frac{-4.6}{27.2}$ -4.8 22.2	-5.2	$\frac{-4.4}{21.6}$ $\frac{-4.4}{26.6}$
59+50		99.4	+3.2	$\frac{-7.6}{31.4}$ -7.6 26.4	-7.7	
59+00		03.7 4.5	+4.5	$\frac{-8.4}{32.3}$ -8.2 27.3	-8.8	$\frac{-7.6}{26.4}$ $\frac{-7.5}{31.4}$
58+50		08.7	1.9	$\frac{-9.4}{34.3}$ -9.5 29.3	-10.3	$\frac{-8.2}{27.3}$ $\frac{-7.8}{32.3}$
58+00		13.7	+3.1	$\frac{-9.1}{33.2}$ -8.8 28.2	-10.1	$\frac{-9.1}{28.7}$ $\frac{-9.1}{33.7}$

Sta.	+	H.I.	-	Grade	Rob	Right		Left
		221.86						
		^{10.6} 221.80	Elev	18.7	3.2	$\frac{-5.0}{26.6}$	$\frac{-4.4}{21.6}$	$\frac{-2.8}{19.2}$
57+50		^{11.76} 233.56						$\frac{-2.8}{24.2}$
		^{6.9} 232.92	Elev	23.7	9.9	$\frac{+0.6}{20.8}$	$\frac{+1.5}{15.8}$	$\frac{+4.1}{17.1}$
57+00		^{11.93} 244.87						$\frac{+4.2}{22.1}$
		^{0.45} 244.42	Elev-	28.7	16.2	$\frac{+4.3}{22.2}$	$\frac{+4.4}{17.2}$	$\frac{+6.0}{18.0}$
56+50		^{11.92} 256.34						$\frac{+6.0}{23.0}$
		^{2.8} 256.06	Elev-	33.7	11.2	$\frac{+5.8}{23.0}$	$\frac{+6.0}{18.0}$	$\frac{+7.6}{18.7}$
56+00		^{8.76} 264.82						$\frac{+7.6}{23.7}$
55+50				38.7				
55+44 ³²	Fwd			39.3	17.0	$\frac{+7.3}{23.6}$	$\frac{+7.2}{18.6}$	$\frac{+8.7}{19.3}$
55+36 ⁹	OK							$\frac{+8.7}{24.3}$
55+00				42.9	13.4	$\frac{+9.0}{24.5}$	$\frac{+9.0}{19.5}$	$\frac{+10.1}{20.2}$
								$\frac{+10.5}{25.2}$
54+86 ⁹¹	Grade Change			44.2	12.1	$\frac{+9.1}{24.4}$	$\frac{+8.8}{19.4}$	$\frac{+11.4}{20.7}$
								$\frac{+11.5}{25.7}$
54+62				46.7	18.1	$\frac{+9.0}{24.5}$	$\frac{+8.9}{19.5}$	$\frac{+11.0}{20.5}$
								$\frac{+11.0}{25.5}$
54+37	Super			48.2	16.6	$\frac{+10.0}{25.0}$	$\frac{+9.9}{20.0}$	$\frac{+9.7}{19.9}$
								$\frac{+9.7}{24.9}$
54+12 ³				49.1	15.7	$\frac{+10.8}{25.4}$	$\frac{+10.8}{20.4}$	$\frac{+10.2}{20.1}$
								$\frac{+10.3}{25.1}$
53+87				49.5	15.3	$\frac{+11.1}{25.5}$	$\frac{+11.0}{20.5}$	$\frac{+10.0}{20.0}$
								$\frac{+10.3}{25.0}$

Sta.	+	H.I.	-	Grade	Red	Right	±	Left	21	
53+62		264.82 12.22 252.60	Elev-	49.2	15.6	(+12.3) 26.0	+11.9 21.0	+11.2	+9.3 19.7	(+9.2) 24.7
53+37		253.16 11.30 241.86	Tamp BM Sta 52+15 E	48.4	16.4	(+13.5) 26.0	+13.0 27.5	+10.3	+8.6 19.3	(+8.0) 24.3
53+12		261.46 11.02 262.48	BM #7	46.8	18.0	(+14.7) 27.0	+14.0 22.0	+10.8	+8.7 19.4	(+8.0) 24.4
52+87		250.87 11.61 251.59	H.I.	44.5	20.3	(+15.1) 27.2	+14.4 22.2	+9.0	+7.5 19.8	(+6.8) 23.2
52+58 ²³	✓	241.88 2.5 242.13	Elev	41.7	23.1	(+14.7) 26.7	+13.4 21.7	+10.0	+8.3 19.2	+7.5 24.2
52		230.62 11.51 231.14	Elev	35.8	15.8	(+8.6) 23.9	+7.8 18.9	+5.0	+3.5 16.8	(+3.2) 21.8
51+50		219.00 12.14 219.00 0.49 219.49	Elev-	30.8	11.3	(+1.7) 20.7	+1.3 15.7	-0.5	-1.8 19.7	(-2.6) 22.7
51+00				25.8	5.3	(-4.2) 26.5	-4.3 21.5	-6.0	-6.0 24.0	(-5.9) 29.0
50+50				20.8	+1.3	(-3.8) 25.7	-3.8 20.7	-5.0	-5.3 23.0	(-5.3) 28.0
50+11.91				17.0	2.5	(-2.2) 23.8	-2.5 18.8	-3.4	-3.7 20.6	(-3.6) 25.6
49+87				15.6	3.9	(-2.6) 24.1	-2.7 19.1	4.0	-4.8 22.2	(-5.4) 27.2
49+62		207.50		14.4	+0.9 5.1	(-3.3) 25.3	-3.5 20.3	-5.6	-10.8 31.2	(-10.4) 36.2

Sta.	+	H.I.	-	Grade	Red	Right	±	Left		
49+37		219.49 12.03 207.46 0.74 207.50 0.76 206.74 39.7 212.65 0.1 212.64 11.21 223.85 7.7 223.08 11.06 234.14 0.9 234.07 11.42 245.49 3.7 245.22 11.17 256.39 3.6 256.03 3.68 259.71			+6.1 5.9	(-4.7) 27.5	-5.2 22.5	-9.6	(-10.1) 30.2	(-10.0) 35.2
49+12			Elev.	13.2	+5.7	(-7.3) 33.1	-8.7 28.1	-11.7	(-10.0) 31.0	(-9.7) 35.0
48+87			Elev.	13.1	+5.6	(-10.0) 36.5	(-11.0) 31.5	-11.8	(-11.8) 32.7	(-12.0) 37.7
48+62			H.I.			(-11.7) 37.6	-11.7 32.6	-11.5	(-12.6) 33.9	(-12.6) 38.9
48+37			Elev.	13.8	+6.3	(-12.6) 38.6	-12.4 33.6	-12.8	(-11.8) 32.7	(-11.3) 37.7
48+12			Elev.	14.5	+7.0	(-13.4) 40.4	(-13.6) 35.4	-15.0	(-12.6) 33.9	(-12.7) 38.9
48+00			Elev.	14.9	+7.4	(-13.9) 40.7	(-13.8) 35.7	-15.9	(-13.3) 35.0	(-13.3) 40.0
47+50					+3.7 +8.9	(-17.9) 46.4	-17.6 41.4	-16.4	(-14.4) 36.6	(-14.0) 41.6
46+92	30' Fwd.	207.46 2.47 209.93		18.0	+5.3 +10.5	(-19.3) 49.4	-19.4 44.4	-14.0	(-11.7) 52.1	(-11.1) 37.1
46+55	29' Back			18.0						
46+00	divide			19.6	4.3	(+3.8) 21.5	+3.0 16.5	+3.8	(+2.8) 16.4	(+2.6) 21.4
45+75	divide			20.4	25.1 35.3 13.7	(+16.2) 28.3	+16.3 23.3	+15.0	(+13.7) 21.9	(+13.1) 26.9
45+50	m. outside			21.1	24.4	(+28.8) 34.5	+29.0 29.5	+25.4	(+24.0) 27.0	(+23.3) 32.0

Sta.	+	H.I.	-	Grade	Red.	Right		Left
45+25		259.71		21.9	37.8	+34.2 57.3	+34.5 32.3	+34.0 32.0
46+00		248.96	Elev.	22.6	37.1	+29.0 37.7	+29.4 29.7	+32.0 33.5
+75		251.80	28.9	23.4	36.3	+18.4 30.2	+20.4 25.2	+34.2 32.1
44+50		240.04		24.1	27.7	+13.3 27.7	+15.4 22.7	+27.7 28.9
+25		241.14	16.2	24.9	26.9	+10.3 25.8	+11.5 20.8	+23.8 26.9
44+00		229.85	15.5	25.6	26.2	+1.6 21.4	+2.2 16.4	+15.5 22.2
+75		230.45	H.I. 4.1	26.4	14.7	-8.7 21.3	-7.5 26.3	+8.2 19.1
43+50		220.22	Elev 3.4	27.1	14.0	-13.5 29.2	-12.8 34.2	+1.6 15.8
+25		224.32	+3.5	27.8	2.7	-16.3 43.7	-15.8 38.7	-2.5 18.8
42+6.67		220.05 18	+4.2	28.5	2.0	-15.5 44.5	-16.3 39.5	-3.5 20.3
		224.14						
42+75		235.74		29.7				
		235.59	Elev.		4.5			
42+50		245.78		31.2	+ 6.9	-16.2 44.0	-16.2 59.0	-4.5 21.8
		245.50	Elev		2.5			
42+25		257.13		33.2	8.9			
					0.2			
42+00		220.05		35.5	+11.2	-17.2 46.1	-17.4 41.1	-5.0 22.5
		231.21	H.I.	5.3				
41+50				40.5	+ 4.8	-22.2 55.1	-23.4 58.1	-3.7 21.6
				0.3	11.6			
41+00				45.5	+ 9.8	-26.8 61.0	-27.3 56.0	-0.3 15.5
					6.6			
40+50				50.5	+ 4.7	-15.9 42.8	-15.2 37.8	+6.6 18.3

3 dipper divide Curve
1 1/2 Outside

Sta.	+	H.I.	-	Grade	Rod	Right	±	Left
40+00		257.13 8.40 256.73	Elev.	55.5	12.8 1.6	$\frac{-5.4}{25.4}$	$\frac{-3.6}{20.4}$	+6.1 $\frac{+13.6}{21.8}$ $\frac{+14.7}{26.8}$
39+50		268.26 11.53 268.11		60.5	7.8	$\frac{-17.2}{44.9}$	$\frac{-16.6}{39.9}$	+2.0 $\frac{+10.6}{20.3}$ $\frac{+12.0}{25.3}$
39+00		279.69 11.38 279.31		65.5	14.2 2.8	$\frac{-1.2}{20.4}$	$\frac{+0.8}{15.4}$	+6.4 $\frac{+11.2}{20.6}$ $\frac{+12.0}{25.6}$
38+50		290.64 11.33 287.27	20' I	70.5	9.2 +2.2	$\frac{-9.6}{32.0}$	$\frac{-8.0}{27.0}$	+4.0 $\frac{+9.8}{19.9}$ $\frac{+11.2}{24.9}$
38+00		298.65 8.48 298.17	H.I.	75.5	15.1	$\frac{+1.9}{21.3}$	$\frac{+2.6}{16.3}$	+5.3 $\frac{+9.0}{19.5}$ $\frac{+9.6}{24.5}$
		305.32	H.I.					

Sta.	H.I.	E. Prop.	W. Should.	E. Rod	W. Rod			
37+94.02 Ahead	77.3	76.5	21.4	22.2		$\frac{+1.4}{21.2}$	$\frac{+2.3}{16.2}$	+4.6 $\frac{+9.1}{30.0}$ $\frac{+10.0}{35.0}$
37+90.36 Back	77.3	76.5						
37+50	81.3	80.5	17.4	18.2		$\frac{+0.2}{20.7}$	$\frac{+1.9}{15.7}$	+3.5 $\frac{+7.4}{30.0}$ $\frac{+8.4}{35.0}$
37+00	86.3	85.5	12.4	13.2		$\frac{-0.6}{20.2}$	$\frac{+0.4}{15.2}$	+2.9 $\frac{+8.3}{30.0}$ $\frac{+9.2}{35.0}$
36+50	91.0	90.2	7.7	8.5		$\frac{-0.9}{20.8}$	$\frac{-0.5}{15.8}$	+2.2 $\frac{+6.7}{30.0}$ $\frac{+7.5}{35.0}$
36+00	94.0	93.2	11.3	5.5		$\frac{+0.6}{20.5}$	$\frac{+0.9}{15.5}$	+3.9 $\frac{+6.6}{30.0}$ $\frac{+7.2}{35.0}$

Sta.	H.I.	E. Prop.	W. Should.	East Grade	West Rod	Right	±	Left
	305.32							25
34400	95.0	94.8	9.7	10.5	$\frac{+2.1}{21.3}$	$\frac{+2.5}{16.3}$	+4.6	$\frac{+7.6}{30.0}$
35400	96.6	95.8	8.7	9.5	$\frac{+2.1}{21.5}$	$\frac{+3.0}{16.5}$	+5.1	$\frac{+6.8}{30.0}$
34450	97.6	96.8	7.7	8.5	$\frac{+1.2}{20.7}$	$\frac{+1.4}{15.7}$	+2.1	$\frac{+5.5}{30.0}$
34500.36	98.5	97.7	6.8	7.6	$\frac{-0.9}{21.2}$	$\frac{-0.8}{16.2}$	-0.8	$\frac{+2.8}{30.0}$
33450	Blank	98.8		6.5	$\frac{+1.3}{21.5}$	$\frac{-1.0}{16.5}$	-1.4	
33430.36	300.00	99.2	5.3	6.1	$\frac{-1.8}{22.0}$	$\frac{-1.3}{17.0}$	-1.7	$\frac{+1.7}{30.0}$

Header Grades

Continued from Book 246 Pg - 33

Sta.	Elev.	Left	Right		
	252.13				
109+75 E.V.C.	248.30	48.20	48.20	3.93	3.93 ✓
110	48.10	48.00	48.00	4.13	4.13 ✓
+50	47.70	47.60	47.60	4.53	4.53 ✓
111	47.30	47.20	47.20	4.93	4.93 ✓
+50	46.90	46.80	46.80	5.33	5.33 ✓
112	46.50	46.40	46.40	5.73	5.73 ✓
+50	46.10	46.00	46.00	6.13	6.13 ✓
113 - G.C.	245.70	45.60	45.60	6.53	6.53 ✓
+50	45.45	45.35	45.35	6.78	6.78 ✓
114	45.20	45.10	45.10	7.03	7.03 ✓
+50	44.95	44.85	44.85	7.28	7.28 ✓
115	44.70	44.60	44.60	3.81	3.81 ✓
+50	248.41	44.45	44.35	4.06	4.06 ✓
116	44.20	44.10	44.10	4.31	4.31 ✓
+50	43.95	43.85	43.85	4.56	4.56 ✓
117	43.70	43.60	43.60	4.81	4.81 ✓
+50	43.45	43.35	43.35	5.06	5.06 ✓
118 - B.V.C.	243.20	243.10	243.10	5.31	5.31 ✓
+25	42.90	42.80	42.80	5.61	5.61 ✓
+50	42.50	42.40	42.40	6.01	6.01 ✓
+75	41.90	41.80	41.80	6.61	6.61 ✓
119	41.10	41.00	41.00	7.41	7.41 ✓
+25	40.10	40.00	40.00	8.41	8.41 ✓
+50 E.V.C.	39.0	38.90	38.90	9.51	9.51 ✓

T.P. on Grade Sta. 119+50 Right.
Elev = 238.91

Header Grades

Sto.		t	Left	Run
120	291.60	36.50	36.40	36.40
+50		34.00	33.90	33.90
121		31.50	31.40	31.40
+50	232.32	29.00	28.90	28.90
122 to 90 G.B		26.50	26.40	26.40
+50		26.03	25.93	25.93
123 to 90 G.B		25.50	25.40	25.40
+50		23.13	23.03	23.03
124		20.61	20.51	20.51
+50	221.06	18.09	17.99	17.99
125		15.57	15.47	15.47
+50		13.05	12.95	12.95
126		10.53	10.43	10.43
+50	BXC 211.14	208.00	07.90	07.90
+75		206.80	06.70	06.70
127		205.80	05.70	05.70
+75		204.90	04.80	04.80
+50		204.20	04.10	04.10
+75		203.70	03.60	03.60
128		203.30	03.20	03.20
+75		203.20	03.10	03.10
+50		203.10	03.00	03.00
+75		203.20	03.10	03.10
129		203.50	03.40	03.40

5.20 ✓	5.20 ✓
7.70 ✓	7.70 ✓
10.20 ✓	10.20 ✓
3.62 ✓	3.62 ✓
6.12 ✓	6.12 ✓
6.59 ✓	6.59 ✓
7.12 ✓	7.12 ✓
9.49 ✓	9.49 ✓
11.81 ✓	11.81 ✓
3.07 ✓	3.07 ✓
5.59 ✓	5.59 ✓
8.11 ✓	8.11 ✓
10.63 ✓	10.63 ✓
3.24 ✓	3.24 ✓
4.44 ✓	4.44 ✓
5.44 ✓	5.44 ✓
6.34 ✓	6.34 ✓
7.04 ✓	7.04 ✓
7.54 ✓	7.54 ✓
7.94 ✓	7.94 ✓
8.04 ✓	8.04 ✓
8.14 ✓	8.14 ✓
8.04 ✓	8.04 ✓
7.74 ✓	7.74 ✓

Header Grades

Sta.		Left	Right
129+25	Exo 21/14	03.70	03.80
129+50		04.35	04.25
130		05.25	05.15
+25	209.26	05.70	05.60
+50		06.10	06.00
+75	20 9.36	06.30	06.20
131		06.40	06.30
+25		06.40	06.30
+50		06.20	06.10
+75		05.90	05.80
132		05.50	05.40
+25		04.90	04.80
+50		04.25	04.15
133		02.95	02.85
+50		01.65	01.55
134		00.35	00.25
+50	209.56	99.05	98.95
135	198.70	97.75	97.65
+50	198.80	96.45	96.35
136		95.15	95.05
136+25	9.0	194.50	94.40
+50		93.50	93.40
137+00		91.50	91.40
137+50	9.13	189.50	89.40

7.34 ✓	7.34 ✓
6.89 ✓	6.89 ✓
5.99 ✓	5.99 ✓
3.66 ✓	3.66 ✓
3.26 ✓	3.26 ✓
3.16 ✓	3.16 ✓
3.06 ✓	3.06 ✓
3.06 ✓	3.06 ✓
3.26 ✓	3.26 ✓
3.56 ✓	3.56 ✓
3.96 ✓	3.96 ✓
4.56 ✓	4.56 ✓
5.21 ✓	5.21 ✓
6.51 ✓	6.51 ✓
7.81 ✓	7.81 ✓
9.21 ✓	9.21 ✓
10.61 ✓	10.61 ✓
1.05 ✓	1.05 ✓
2.45 ✓	2.45 ✓
3.75 ✓	3.75 ✓
4.40 ✓	4.40 ✓
5.40 ✓	5.40 ✓
7.40 ✓	7.40 ✓
9.40 ✓	9.40 ✓

Header Grades

213

$\frac{40.18}{4.73} = \frac{8.48}{93}$

12

29

Sta.	2	Left	Right
138	198.90	187.50	187.40
+50	187.73	185.50	185.40
139		183.50	183.40
+50		181.50	181.40
140		179.50	179.40
+50		177.50	177.40
141	176.87	175.50	175.40
+50		173.50	173.40
142		171.50	171.40
+50		169.50	169.40
143		68.06	67.96
+50		66.62	66.52
144		65.18	65.08
144+55 P.C.		63.60	63.20
144+80 $\frac{1}{4}$		62.88	62.48
145+05 $\frac{1}{2}$		62.16	61.76
145+30 $\frac{3}{4}$		61.48	61.23
145+55 P.R.C.		60.80	60.70
45+80		60.10	59.85
146+05.92		59.40	59.60
146+30		58.40	58.60
146+55.32 E.C.		57.20	57.40
Equation 146+53.99 Fwd			

11.50	41.50 ✓
2.33 ✓	2.33 ✓
4.33 ✓	4.33 ✓
6.33 ✓	6.33 ✓
8.33 ✓	8.33 ✓
10.33 ✓	10.33 ✓
1.47 ✓	1.47 ✓
3.47 ✓	3.47 ✓
5.47 ✓	5.47 ✓
7.47 ✓	7.47 ✓
8.91 ✓	8.91 ✓
10.35 ✓	10.35 ✓
11.79 ✓	11.79 ✓

Set T.P. on Sta 144+00 R.H. side

Elev = 165.08

Header Grades

Sta.	Left	Right
146+75	155.80	155.90
147+00	53.70	53.60
+50	49.00	48.90
148	44.30	44.20
+50	39.60	39.50
149	34.90	34.80
+50	30.20	30.10
150+00 P.V.C.	25.50	25.40

Continued Book 235-26

Euclid Ave.
BRIDGE # 4

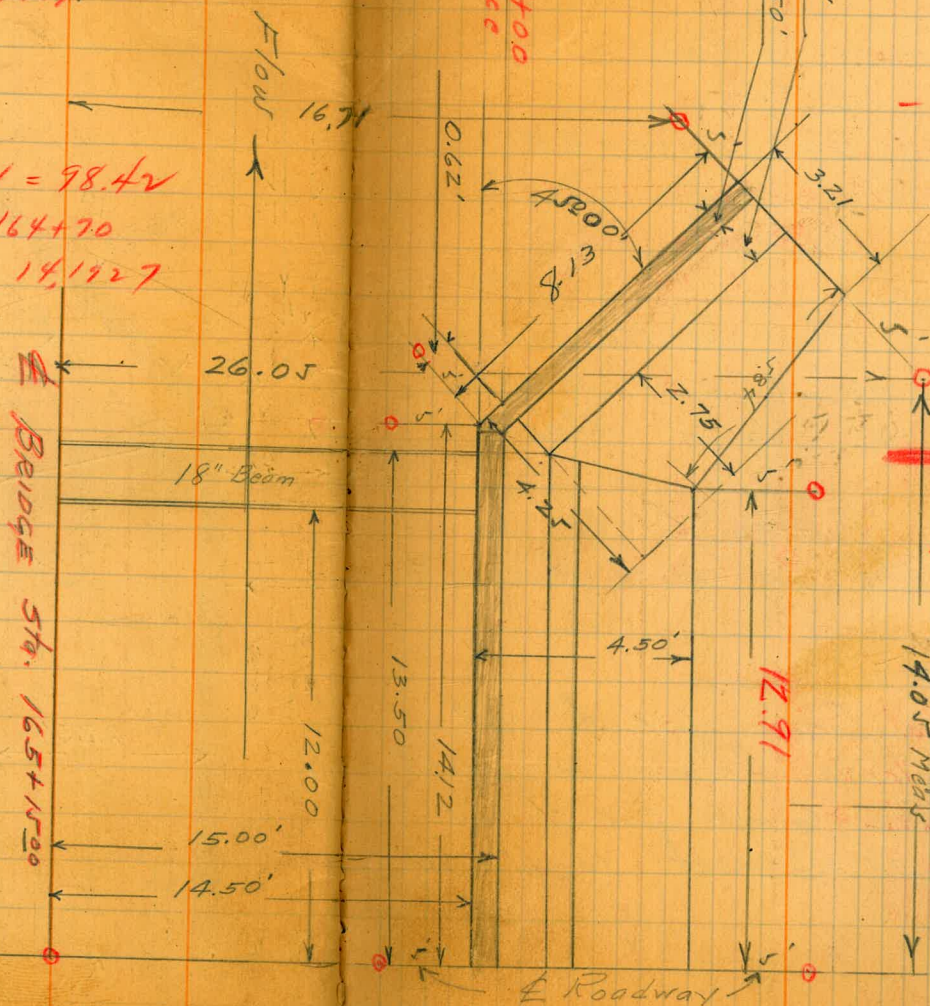
Typical 1/4 Plan

New B.M.'s

- ① Nail in Pole # 6 =
150' Rt. of Bridge # 4 = 98.42
- ② Hub. = 112 - 60' Rt. 164 + 70
= 99.61 - March 14, 1927
O.S.T.

- Note -
All Hubs. are
5' offset to Actual
footing line

Minimum Cut below
Natural Surface for
any one point is
apx. 4'-9"
O.S.T.



Jan. 12 1927³²
O.S. Thompson

- Note -
All Red
circles in-
dicate 2x2"
set 5' out
and at P.L.s
to respective
corners

- Elev. -
Bottom of footing
=

90.81

14.05' Mch

Sta. 165+00
N. Abut. face

Roadway

See Page 32 (This Book) for Lay-out.

Euclid Ave

Bridge # 3

Typical 1/4 Plan - 30' span

=
Same as Bridge #4

Except

That The South Abtment
of Bridge is 0.50' higher
than the North Abtment.

The footing Elev. is
the same on Both Abtments.

Finished Grade for $\frac{1}{2}$ at
the North Abtment is 114.00
Finished Grade for the $\frac{1}{2}$
at South Abtment is 114.50

$\frac{1}{2}$ of Bridge = Sta.
156 + 07.50 ←

Jan. 13, 1927
O. J. Thompson
33

Bottom of footing Elev.

=
101.31

for Both Abtments

- Note -

All Offset stakes are
set 5' out and at P.L.S
to respective lines and
points as indicated on
Lay-out plan - Previous
page

sgv
Minimum cut
is approx - 6'

New B.P. set = 2x2 - 50' P.L.
of $\frac{1}{2}$ Bridge Sta. 156 + 07.50
Elev. = 110.45

$$\begin{array}{r} 80.6 \\ 72.2 \\ \hline 8.4 \\ 2.3 \\ \hline 4 \end{array}$$
$$\begin{array}{r} 80.6 \\ 71.7 \\ \hline 8.9 \\ 3.1 \\ \hline 3 \end{array}$$
$$\begin{array}{r} 182.38 \\ 181 \\ \hline 184.19 \\ 72.2 \end{array}$$
$$\begin{array}{r} 84.2 \\ 77.3 \\ \hline 6.9 \end{array}$$
$$\begin{array}{r} 184.2 \\ 72.2 \\ \hline 12.0 \\ 7.4 \end{array}$$
$$\begin{array}{r} 184.2 \\ 71.7 \\ \hline 12.5 \end{array}$$
$$\begin{array}{r} 96.15 \\ 116.9 \\ \hline 97.6 \end{array}$$

34

Mr. Stebbins

Hilo - 3299w

Main - 3073

20'4" = 1 8 1/4

1" = 20

2" = 17

4
68

.5 = 6"

1" = 3
76

12

8.40

83
25.00
45
20

83

1.76

196.15

1.69

194.46

199.26

99.80

3.80

104.00

90.81

13-19

13-24

2.47

104.00

2.69 ✓

101.31

2827

1324

8

104.99

101.31

3.68 ✓

10.50

14.18

9.34

4.84

368

267

99

39

67

11.62

31.50

70.12

10.60

10.60