

El Capitan  
Pipe Line Survey—

~~Level Line~~

~~Station~~ ~~#5~~  
Levels & Cross Sections N<sup>o</sup> 6

WASTS

FIELD BOOK

No. 385

W196

86

MICROFILMED  
JAN 11 1965

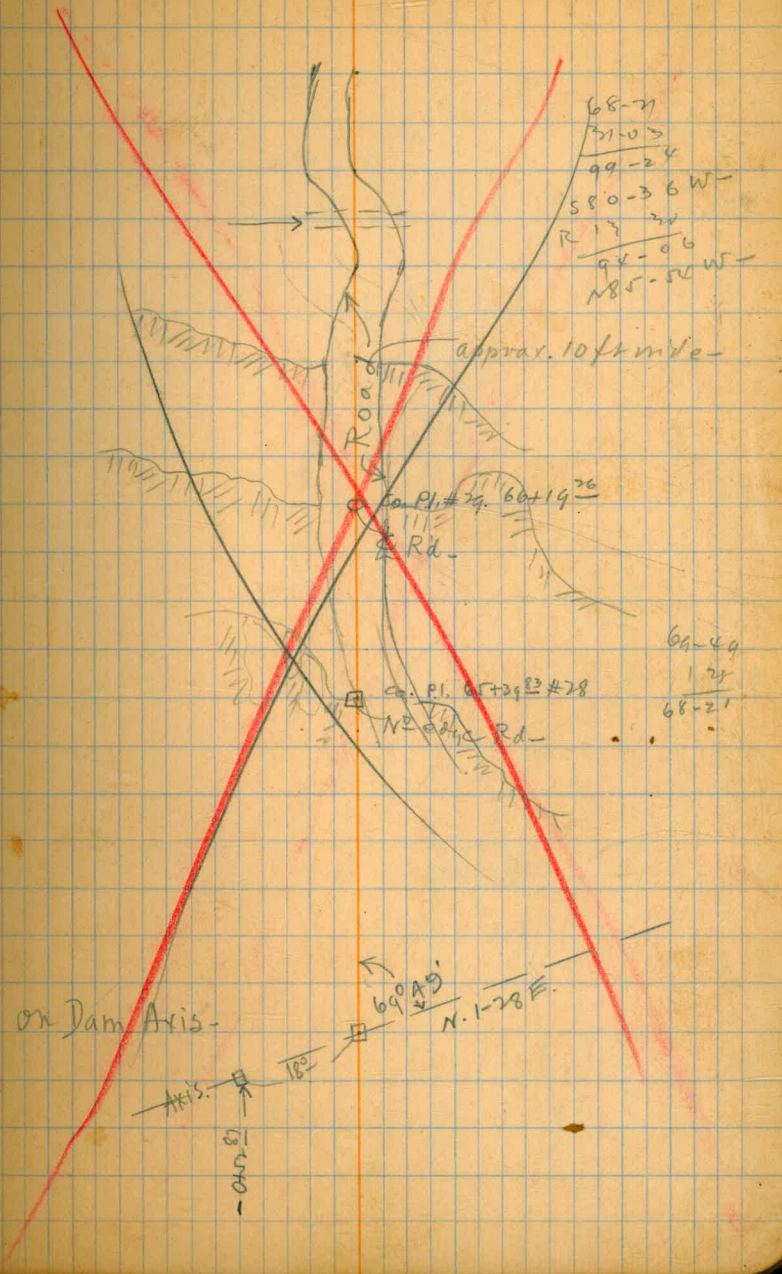
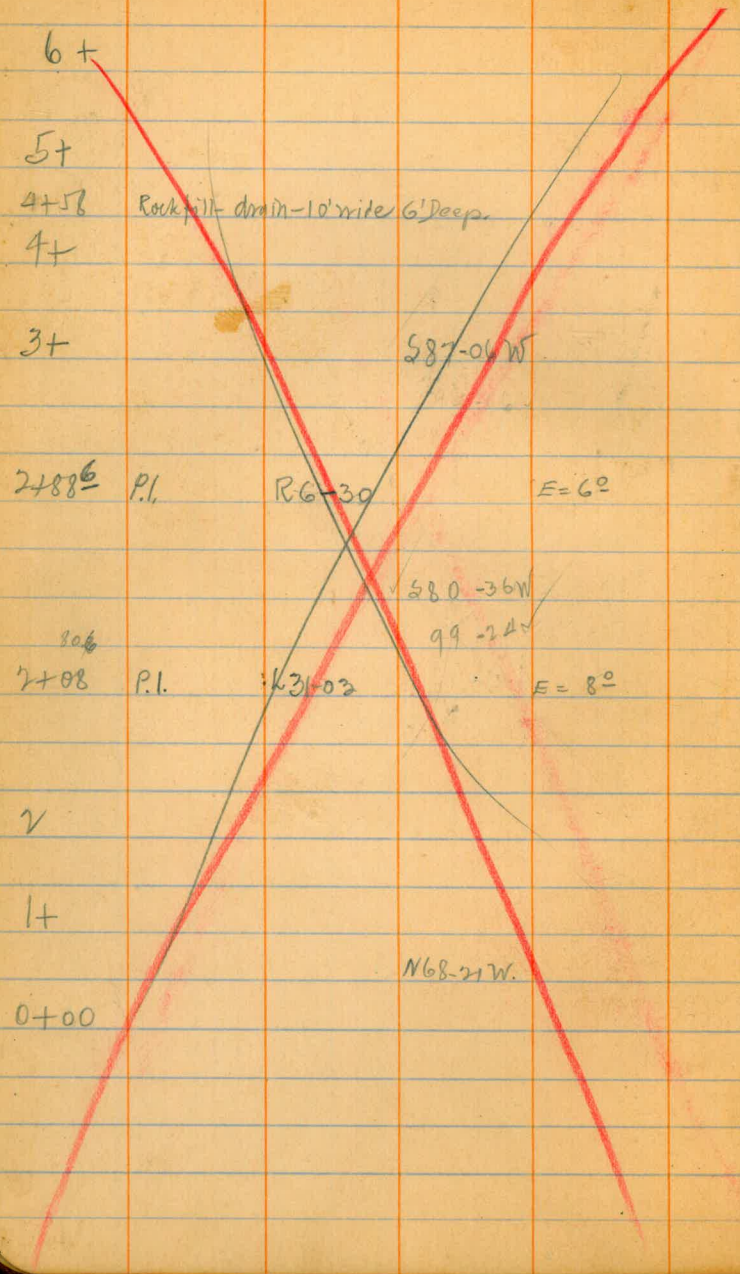
Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
- No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.
- No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

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**THE FREDERICK POST CO.**  
*ENGINEERING and DRAFTING SUPPLIES*  
IRVING PARK STATION  
CHICAGO, ILL.



13

12

11+ P.I.

R-16°-48'

A=12°

10

9

8+

S87-46W

331

S87-46W

7 Hld. 9 P.I.

✓ 4-20'

E=8°

7

6+

S87-06W

N80-26W

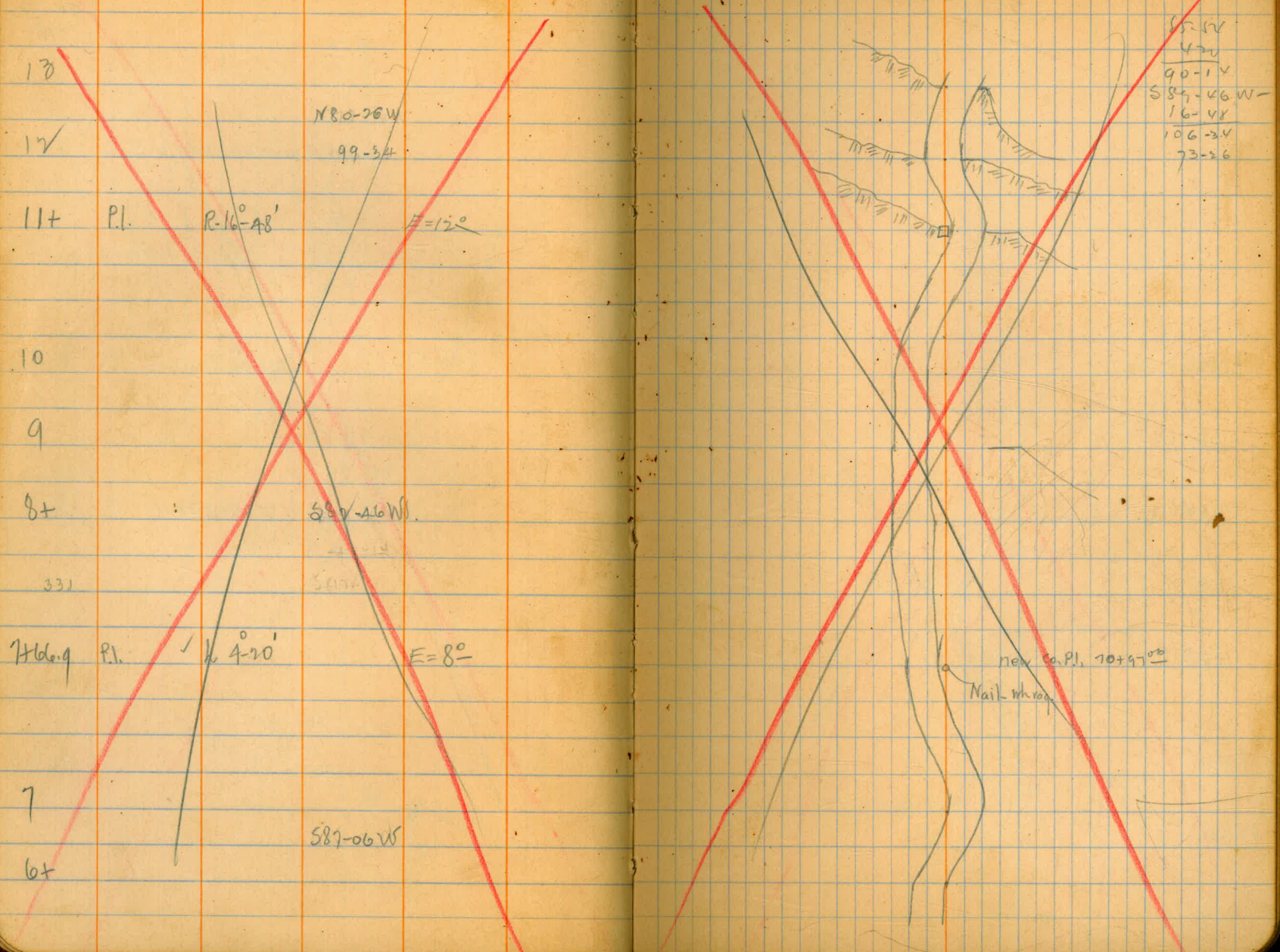
99-34

4 U-20

65-54
430
90-14
S87-46W-
16-48
106-34
73-26

new Co. P.I. 70+97<sup>00</sup>

Nail-wh. 100



15+04A

40.3

N88-35W.

+64' Pl.

h 4' 26"

32'

N83-09W

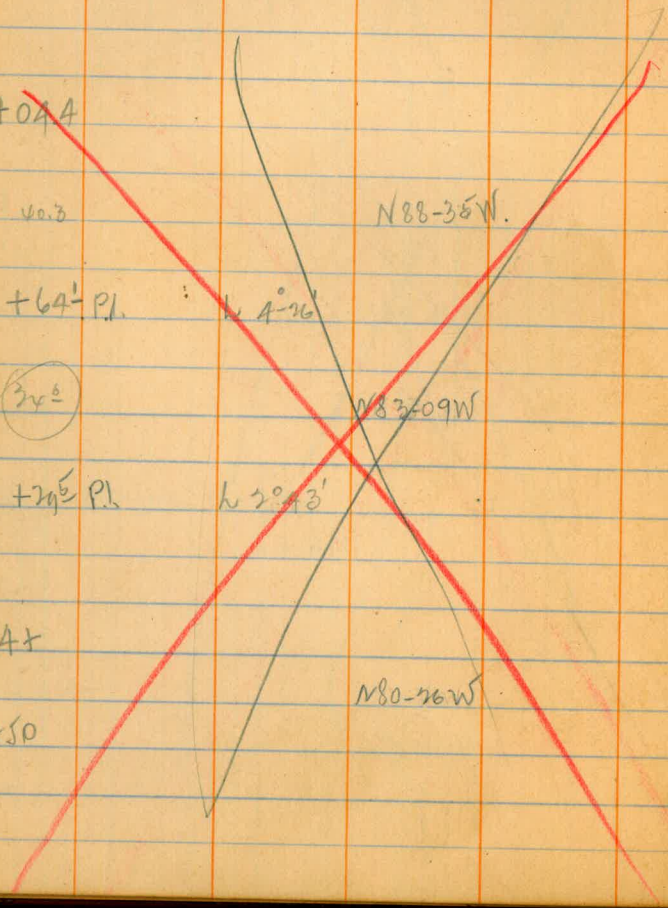
+29' Pl.

h 2' 43"

14+

N80-26W

13+50



(14-48 o.i.)

< 15'

10.4

ess on rock (140' o.l.)

Rocks -

Rocks

Rd.

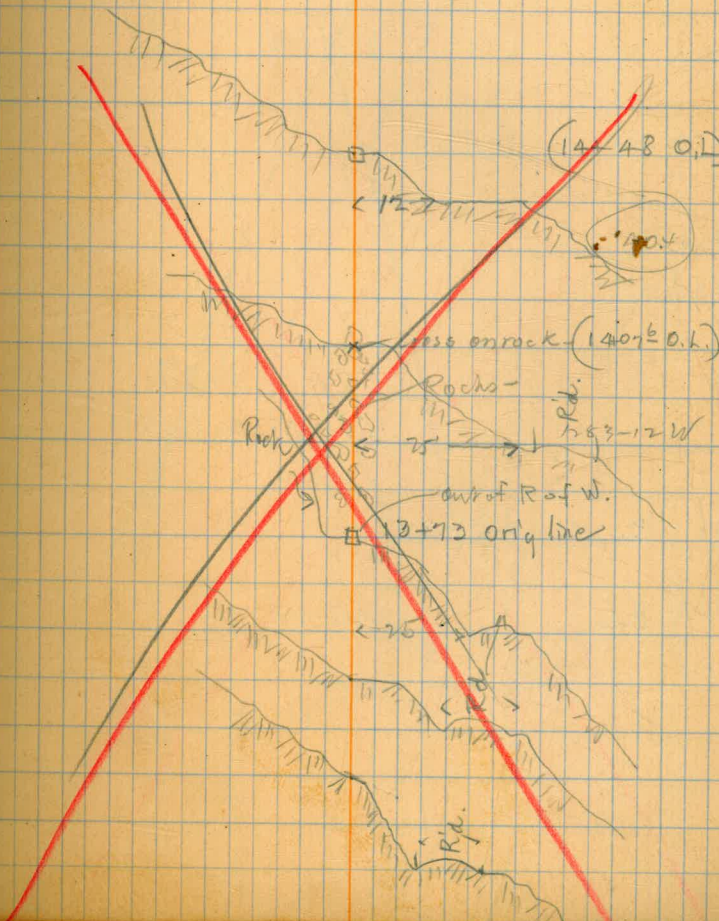
53-12W

out of Roof W.

13+73 orig line

< 25'

Rd.



2/22/11  
M  
24  
105  
Reynolds  
Kaplan

Location - from Capitan Dam site

5+39.1 P.I.

R5-20

N89-54W

90-06

5+

4+09.9 P.D.T.

120.4

S84-46W

2+85.5 P.I.

R4-10

17.0

2+68.5 E.C.

25° C.

T = 63°

E = 82

S80-36W L = 124°

99-20

2+08 P.I.

L31-03

637

1+44.3 B.C.

N68-21W

0+00

~~1443  
621  
206.4~~

31-03  
= 31.05  
1243.0

159107  
62668

217.  
8.66

AXIS

0+53.82

180°

69-19  
N 1-29 E

13+24.6 E.C.

10°C

12+26.6 P.I.

R15-42  
= 15.7

N73-12W.T = 79°

L = 157°

E. 54

11+47.6 B.C.

N.88-54W

91-00

+27 E P.I.

R5-00

11

10

9+

8+

7+18.9 P.I.

L.4-00

90-54

7+

N89-54W.

6+

S86-00W

11+27.7  
9.6  
12+26.6

12+26.6  
7.9  
11+27.6 B.C.  
5.7  
13+28.6 E.C.

□

□

□

□

□

62.5  
21+37.6 E.C.

20+77.8 P.L.  
60.3

17.0  
+17.5 B.C.

20

+34 Drain-

19

18

17

16+

65.7

15+34.3 E.C.

14+84 P.L.  
-53.1

+30.9 B.C.

14

S68-57W 10° C.

T=60°

E=32°

L=120°

L. 12-00

25° C

S80-57W T=53°

99-03 E=6°

L=103°

L. 25-51

N73-12W

14+84

53.1

14+30.9

103.2

15+34.3

51.7

14+84

21.6

20+77.8

60.3

20+17.5

17.0

21+37.6

G. 84+07.6 #35



76+2.2 E.C.

N67-76.W

117.35

30°C

T=45.8

E=5.3

L=88.9

74+69.1 P.I.

R26-40

+73.3 B.C.

75

74+88.5 E.C.

S65-55W.

91.8

94.05

70°C

T=46.3

E=3.7

L=91.8

74+43 P.I.

L18-20

46.3

73+96.7 B.C.

74

73

N75-43W.

+91.0 E.C.

104.17

40°C

T=46.3

E=7.1

L=88.3

+49.0 P.I.

R35-40

46.3

+07.1 B.C.

72

S68-57W

□ Hub  
○ Nail

72+4.0

46.3

74+0.2

55.3

+91.0

44.1

+46.9

Co. 89+03.85

71+0.3

46.3

73+96.7

91.8

74+88.5

opp 23+90? O.L.

73+96.7

46.3

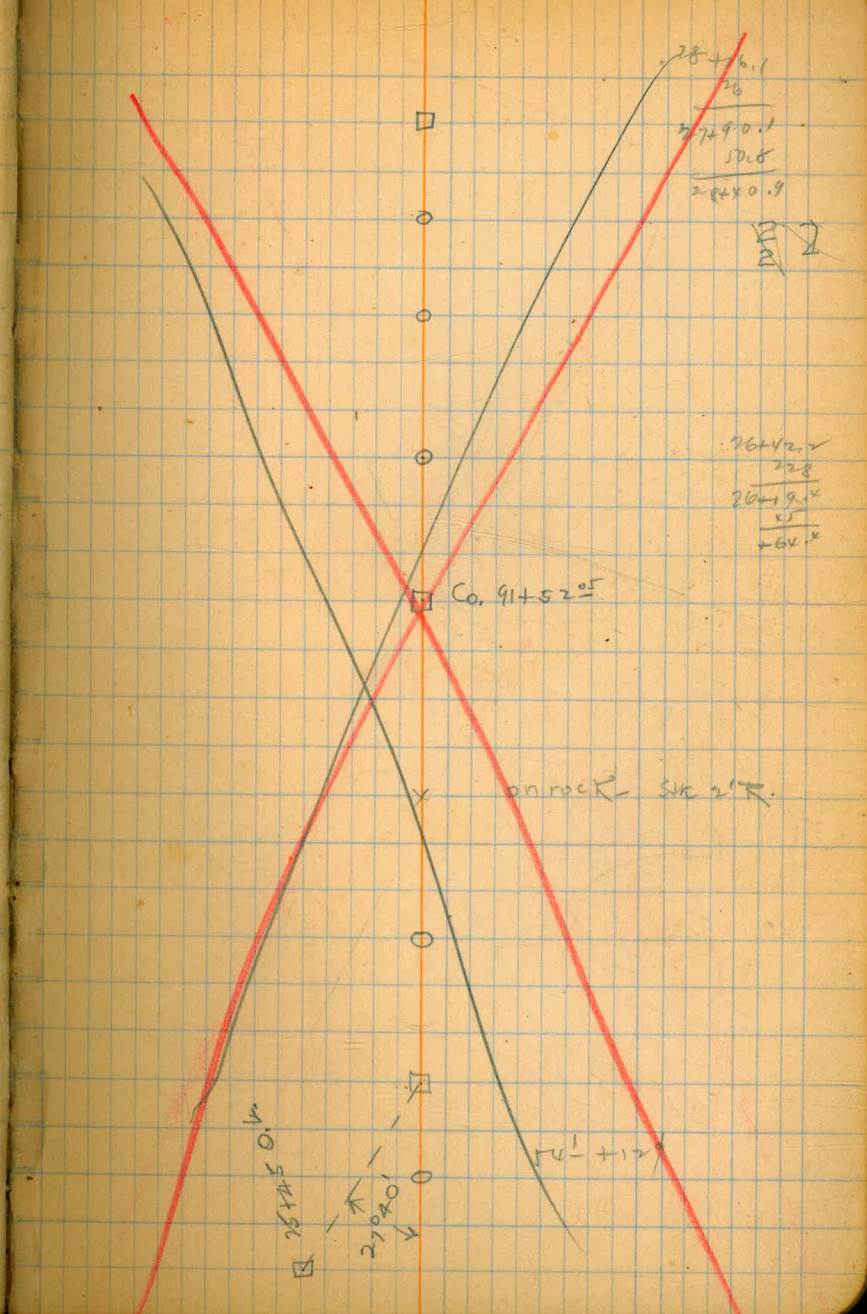
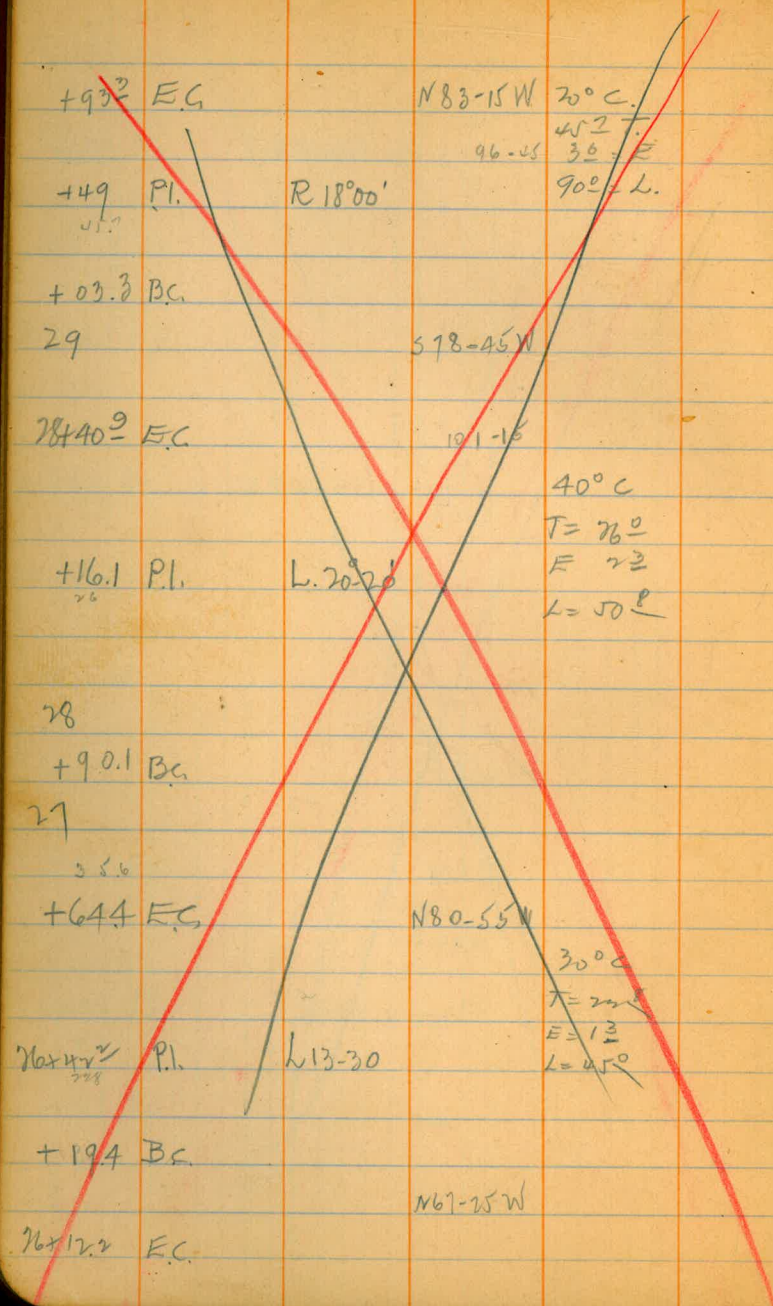
74+23.3

88.3

76+12.2

44.1

72+67.9



+16 P.I.

31

30

n83-15w

□ 11.7 □  
Co. 94+54.56

Cross Sections of Relocation  
of final location

From Sta. 810+00 - to Sta.  
1032+52.75

Note. This line follows the  
County Highway Right-of-Way  
from Sta. 810 above Mission Gorge  
to Point in Lot "E" of Lot 70  
Ex Mission Rancho.

Note - This Line Abandoned

March 19, 26

Party  
Reynolds Rd  
Leach T  
Ruplinger Rd

Cloudy and Warm

£

(1)

Sta.	+	T	-	Elev.
BM# 87				290.631
	7.265	297.896		
S10+00			4.509	293.387
	11.436	304.823		
B10+00			4.6	300.2
+42.87			5.4	299.4
+52			5.5	299.3
+62			5.6	299.2
+72			5.6	299.2
+82			5.7	299.1
+92			5.8	299.0
811+02.9			5.9	298.9
+12.			6.0	298.8
+22			6.0	298.8
+32			6.2	298.6

Left.

Right

$\frac{52}{100} 299.7$		$\frac{44}{50} 300.4$		$\frac{5}{55} 299.0$		$\frac{62}{100} 297.9$
$\frac{45}{100} 300.3$		$\frac{52}{80} 299.1$		$\frac{50}{75} 299.8$		$\frac{5}{100} 299.2$
$\frac{28}{100} 302.0$		$\frac{52}{85} 299.8$		$\frac{50}{75} 299.0$		$\frac{5}{100} 299.8$
$\frac{2}{100} 302.6$		$\frac{50}{85} 300.3$		$\frac{50}{75} 298.9$		$\frac{5}{100} 299.8$
$\frac{09}{100} 303.9$		$\frac{62}{69} 298.8$		$\frac{50}{75} 299.7$		$\frac{5}{100} 299.8$
$\frac{02}{100} 304.6$		$\frac{62}{69} 298.8$		$\frac{51}{100} 299.7$		$\frac{51}{100} 299.7$
$\frac{05}{90} 304.3$		$\frac{57}{60} 299.6$		$\frac{51}{100} 299.7$		$\frac{51}{100} 299.7$
$\frac{307.7}{80}$		$\frac{43}{75} 300.5$		$\frac{57}{60} 299.4$		$\frac{51}{100} 299.7$
$\frac{00}{85} 304.8$		$\frac{57}{60} 299.4$		$\frac{62}{50} 298.6$		$\frac{51}{100} 299.7$
$\frac{00}{100} 304.8$		$\frac{35}{80} 301.3$		$\frac{62}{45} 298.5$		$\frac{51}{100} 299.7$
$\frac{05}{80} 304.8$		$\frac{62}{95} 298.4$		$\frac{62}{95} 298.4$		$\frac{51}{100} 299.7$
$\frac{05}{80} 304.2$		$\frac{62}{95} 298.4$		$\frac{62}{95} 298.4$		$\frac{51}{100} 299.6$
$\frac{05}{80} 304.2$		$\frac{62}{45} 298.1$		$\frac{62}{45} 298.1$		$\frac{51}{100} 299.5$

	+	∏	-	Elev.
		304.823		
<del>+42</del>			6.4	298.4
<del>+52</del>			6.7	298.1
<del>+62</del>			7.1	297.7
<del>+70.87</del>			7.6	297.2
B12+00			8.8	296.0
T.P.			11.436	293.387
	10.020	A 303.407		
<del>+64</del>			9.1	294.3
<del>B13+00</del>			10.4	293.0
<del>+67</del>			12.4	291.0
B14+00			13.1	290.3
B.M.# 87				290.631
	2.764	293.395	<u>4.449</u>	288.946
+74			5.1	288.3
B15+00			5.4	288.0

②

Left		Right	
$\frac{0^\circ}{10^\circ}$ 304.8	$\frac{13}{75}$ 303.5	$\frac{72}{30}$ 297.8	$\frac{56}{109}$ 299.2
$\frac{0^\circ}{10^\circ}$ 304.5	$\frac{13}{75}$ 303.5	$\frac{74}{35}$ 297.7	$\frac{59}{109}$ 298.9
$\frac{0^\circ}{8^\circ}$ 304.8	$\frac{02}{65}$ 304.1	$\frac{74}{25}$ 297.4	$\frac{62}{109}$ 298.6
$\frac{0^\circ}{9^\circ}$ 304.8		$\frac{72}{20}$ 297.1	$\frac{65}{109}$ 298.3
$\frac{0^\circ}{75}$ 304.8	$\frac{04}{65}$ 304.4	$\frac{75}{40}$ 297.3	$\frac{72}{109}$ 297.1
		$\frac{92}{15}$ 295.6	
$\frac{85}{109}$ 294.9		$\frac{95}{80}$ 293.9	$\frac{90}{109}$ 295.8
$\frac{102}{109}$ 292.7			$\frac{102}{109}$ 293.1
$\frac{52}{109}$ 297.7	$\frac{110}{50}$ 292.4	$\frac{125}{30}$ 290.9	$\frac{124}{109}$ 291.3
$\frac{79}{109}$ 295.5	$\frac{88}{85}$ 294.6	$\frac{134}{55}$ 290.0	$\frac{122}{109}$ 291.2
$\frac{0^\circ}{70}$ 293.4	$\frac{30}{60}$ 290.1	$\frac{53}{25}$ 288.2	$\frac{52}{109}$ 298.2
$\frac{27}{109}$ 290.7		$\frac{53}{40}$ 288.1	$\frac{54}{109}$ 288.0

	+	̄	-	Elev.
		293.395		
B15+10			5.5	287.9
+24			5.7	287.7
B15+45.02			5.9	287.5
+70			5.5	287.9
B16+45				
T.P. on rock.		4.449		288.946
	4.315	293.261		sub set up
B15+95.02			5.6	287.7
B16+20.			5.2	288.1
+45			5.0	288.3
+70.02			4.9	288.4
+91.69			4.9	288.4
B17+00			4.8	288.5
B18			4.1	289.2
B16+45				
T.P. on rock				288.946

5.853 294.799

	Left	Right
	$\frac{4}{10} \frac{288.8}{00}$	$\frac{5}{10} \frac{288.0}{00}$
	$\frac{0}{95} \frac{293.4}{00}$	$\frac{14}{70} \frac{292.0}{00}$
	$\frac{0}{87} \frac{293.9}{00}$	$\frac{5}{40} \frac{287.9}{00}$
	$\frac{0}{82} \frac{293.4}{00}$	$\frac{5}{40} \frac{287.8}{00}$
	$\frac{4}{70} \frac{288.9}{00}$	$\frac{6}{40} \frac{287.3}{00}$
	$\frac{0}{72} \frac{293.4}{00}$	$\frac{5}{45} \frac{287.7}{00}$
	$\frac{3}{10} \frac{290.3}{00}$	$\frac{5}{85} \frac{287.7}{00}$
	$\frac{5}{100} \frac{287.9}{00}$	$\frac{4}{85} \frac{288.7}{00}$
	$\frac{5}{100} \frac{288.2}{00}$	$\frac{4}{50} \frac{288.6}{00}$
	$\frac{5}{100} \frac{288.0}{00}$	$\frac{4}{70} \frac{288.6}{00}$
	$\frac{4}{100} \frac{288.6}{00}$	$\frac{4}{90} \frac{288.7}{00}$
	$\frac{0}{65} \frac{293.3}{00}$	$\frac{5}{90} \frac{288.7}{00}$
	$\frac{1}{55} \frac{291.9}{00}$	$\frac{6}{100} \frac{286.7}{00}$
	$\frac{2}{40} \frac{291.2}{00}$	$\frac{3}{100} \frac{289.4}{00}$
	$\frac{9}{30} \frac{289.0}{00}$	

	+	T	-	Elev.
		294.799		
B19+00			4.9	289.9
B20+00			5.3	289.5
+32				
B21+00			4.7	290.1
B22+00			3.3	291.5
B22+30				
T.P. Lot 10'R			3.100	291.699
	10.476	B 302.175		
B23+00			9.4	292.8
B.M. #88			2.591	299.584
	5.909	305.500		299.591
+61.84			11.3	294.2
+86.84			9.9	295.6
B24+03				
+11.84			9.1	296.4
+36.84			8.0	297.5
61.84			7.5	298.0

95  
④

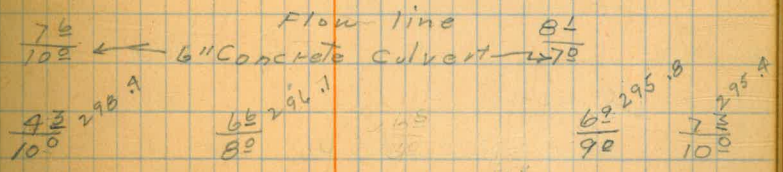
Left	Right
$\frac{0.8}{10.0} 294.8$	$\frac{4.8}{7.0} 290.0$
$\frac{7.6}{8.0} 290.2$	$\frac{5.2}{10.0} 289.1$
$\frac{5.1}{7.0} 289.7$	$\frac{5.2}{10.0} 289.6$
$\frac{0.2}{8.0} 291.8$	$\frac{5.8}{4.0} 289.0$
$\frac{1.2}{10.0} 291.4$	$\frac{15.5}{13.5} B$
$\frac{3.7}{10.0} 290.8$	$\frac{5.1}{10.0} 289.7$
$\frac{8.5}{10.0} 293.7$	$\frac{3.2}{10.0} 291.1$
$\frac{10.4}{10.0} 295.4$	$\frac{10.4}{9.0} 291.8$
$\frac{9.3}{10.0} 296.2$	$\frac{10.2}{10.0} 289.1$
$\frac{4.8}{19.0} 290.7$	$\frac{7.5}{7.5} 298.0$
	$\frac{13.2}{10.0} 292.4$
	$\frac{12.2}{7.5} 292.6$
	$\frac{13.4}{10.0} 292.1$
	$\frac{17.5}{6.5} 288.0$
	$\frac{9.3}{3.0} 296.2$
	$\frac{14.6}{8.5} 290.9$
	$\frac{14.6}{10.0} 290.9$
$\frac{2.8}{10.0} 297.7$	
$\frac{3.4}{10.0} 302.1$	
$\frac{4.3}{6.0} 301.3$	
$\frac{7.2}{2.0} 297.8$	
	$\frac{8.3}{10.0} 297.3$
	$\frac{7.3}{10.0}$

Flow Line →  
12" Concrete Culvert.



	+	T	-	Elev.
		305.500		
<del>+86.84</del>			6.0	299.5
<del>+95.67</del>			6.0	299.5
<del>825+00.00</del>			6.0	299.5
<del>+25.08</del>			5.1	300.4
<del>+50.08</del>			5.2	300.3
<del>+75.08</del>			5.5	300.0
<del>826+00.00</del>			6.0	299.5
<del>+19.78</del>			6.5	299.0
827+00			8.3	297.2
827+30				
T.P. stake		8.493		297.007
	5.735	302.742		
827+35				
828+00			6.2	
T.P. on rock		1.022		301.720
140' from EC. 1' from fence				

Left	Right
$\frac{10}{10} 304.5$	$\frac{6}{10} 299.3$
$\frac{0}{10} 305.2$	$\frac{5}{10} 299.7$
$\frac{1}{10} 304.2$	$\frac{5}{10} 299.9$
$\frac{0}{10} 305.1$	$\frac{5}{10} 300.2$
$\frac{0}{10} 305.5$	$\frac{5}{10} 300.8$
$\frac{0}{10} 305.2$	$\frac{4}{10} 300.7$
$\frac{5}{10} 299.7$	$\frac{4}{10} 300.2$
$\frac{6}{10} 299.4$	$\frac{7}{10} 292.9$
$\frac{6}{10} 298.8$	$\frac{10}{10} 295.0$
$\frac{8}{10} 296.8$	$\frac{11}{10} 294.5$
$\frac{7}{10} 298.1$	$\frac{8}{10} 297.9$
	$\frac{6}{10} 295.8$
	$\frac{7}{10} 295.4$



March 20, '26

Party  
Reynolds Rod  
Leach T.  
Ruptinger Rod

Warm and Clear.

(6)

March 20	+	T	-	Elev.
T.P. rock	831+50			301.720
	4.322	306.042	sub set up	
	828+68.07		9.5	296.5
	+93.07		9.9	296.6
	829+18.07		9.1	296.9
	+43.07		8.7	297.3
	+68.07		8.9	297.6
	+93.07		7.9	298.1
	830+10.85		7.6	298.4
	831+00		3.7	292.3
	831+96			
	832+00		5.5	300.5
T.P. on rock	831+50			301.720
	8.310	310.030	<del>0.551</del>	
	+65.3		7.4	302.6

Left

Right

$\frac{10}{100} 297.3$   
 $\frac{87}{100}$   
 $\frac{99}{100}$   
 $\frac{92}{100}$   
 $\frac{86}{100}$   
 $\frac{84}{100}$   
 $\frac{81}{100}$   
 $\frac{78}{100}$   
 $\frac{70}{100}$   
 $\frac{80}{100}$

$\frac{94}{90}$   
 $\frac{97}{90}$   
 $\frac{92}{100}$   
 $\frac{96}{100}$   
 $\frac{92}{90}$   
 $\frac{93}{100}$   
 $\frac{85}{80}$   
 $\frac{81}{80}$   
 $\frac{76}{100}$   
 $\frac{52}{100}$

$\frac{24}{100}$   
 $\frac{22}{100}$   
 $\frac{32}{50}$   
 $\frac{53}{50}$   
 $\frac{56}{30}$   
 $\frac{73}{55}$   
 $\frac{52}{100}$   
 $\frac{51}{100}$   
 $\frac{73}{100}$

72" Flow Line → 8"  
 22" 12" Conc Culvert → 17"

	+	+	-	Elev.
				310.030
	+90.3		6.3	303.7
	833+15.3		5.1	304.9
	+90.3		3.9	306.1
	T.P. rock 834+00		0.551	309.479
		10.260		319.739
	+65.3		12.4	307.3
	+90.3		11.0	307.7
	+96.7		10.7	309.0
	834+00		10.4	309.3
	+61		7.0	312.7
	+65		4.8	314.9
	835+00		3.2	316.5
	B.M# 90		0.150	319.589
		0.150		319.740
	+66		3.0	316.7

Left	Right
$\frac{2.3}{100}$ 307.7	$\frac{6.4}{100}$ 305.4
$\frac{3.2}{70}$ 306.4	$\frac{3.9}{100}$ 309.9
$\frac{6.3}{45}$ 307.7	$\frac{5.1}{100}$ 306.4
$\frac{1.2}{100}$ 309.1	$\frac{3.9}{100}$ 309.0
$\frac{1.2}{80}$ 308.1	$\frac{3.2}{55}$ 306.13
$\frac{4.6}{55}$ 305.4	
$\frac{0.5}{100}$ 309.5	
$\frac{1.2}{80}$ 309.0	
$\frac{3.2}{55}$ 306.13	
$\frac{9.4}{100}$ 310.3	$\frac{11.2}{70}$ 307.8
$\frac{9.3}{100}$ 310.4	$\frac{10.9}{70}$ 307.8
$\frac{9.0}{100}$ 310.7	$\frac{10.7}{70}$ 309.0
$\frac{8.4}{100}$ 311.3	$\frac{10.3}{65}$ 309.4
$\frac{3.5}{100}$ 316.1	$\frac{4.8}{20}$ 314.9
$\frac{3.6}{100}$ 316.1	$\frac{6.8}{15}$ 312.9
$\frac{1.4}{100}$ 318.1	$\frac{6.1}{25}$ 313.6
$\frac{1.5}{100}$ 318.2	$\frac{6.1}{23}$ 313.6
	$\frac{7.0}{100}$ 312.7
	$\frac{6.8}{100}$ 212.9
	$\frac{5.8}{100}$ 313.9
	$\frac{5.2}{100}$ 314.0

Recorded.  
319.590

Mar. 22 '26

Party  
Reynolds Rod  
Leach T.  
Ruplinger

Clear and Warm

(8)

	+	T	-	Elev.
		319.740		
<del>835+20</del>			3.0	316.7
<del>+30</del>			5.0	313.9
<del>836+00</del>			5.1	314.6
<del>837+00</del>			6.2	313.5
<del>T. P. stake changed set ups Mar. 22 '26</del>	3.993 +194	317.104	6.629	313.111
<del>+64.11</del>			4.9	302.2
<del>+89.1</del>			5.4	311.7
<del>38+14.1</del>			5.9	311.2
<del>+39.1</del>			6.2	310.9
<del>+64.1</del>			7.1	310.0
<del>+89.1</del>			8.0	309.1
<del>+96.3</del>			8.3	308.8
<del>839+00</del>			8.5	308.6

Left	Right
$\frac{10}{100}$ 318.7	$\frac{59}{20}$ 313.8
$\frac{08}{100}$ 318.9	$\frac{20}{20}$ 317.4
$\frac{54}{100}$ 314.3	$\frac{65}{100}$ 314.5
$\frac{62}{100}$ 313.0	$\frac{64}{70}$ 313.3
$\frac{06}{100}$ 316.5	$\frac{85}{55}$ 316.0
$\frac{14}{100}$ 316.0	$\frac{72}{15}$ 312.2
$\frac{14}{100}$ 316.1	$\frac{55}{100}$ 319.8
$\frac{10}{100}$ 316.1	$\frac{20}{100}$ 311.1
$\frac{23}{100}$ 314.9	$\frac{15}{50}$ 315.6
$\frac{35}{100}$ 313.6	$\frac{22}{80}$ 310.9
$\frac{74}{100}$ 310.0	$\frac{62}{45}$ 310.9
$\frac{79}{100}$ 309.2	$\frac{76}{80}$ 309.5
$\frac{79}{100}$ 309.2	$\frac{85}{90}$ 308.6
$\frac{79}{100}$ 309.2	$\frac{88}{90}$ 308.3
$\frac{79}{100}$ 309.2	$\frac{82}{69}$ 308.7
$\frac{79}{100}$ 309.2	$\frac{80}{90}$ 308.1
$\frac{79}{100}$ 309.2	$\frac{82}{60}$ 308.1
	$\frac{92}{100}$ 310.2
	$\frac{85}{60}$ 308.9
	$\frac{80}{100}$ 306.3
	$\frac{82}{115}$ 305.6
	$\frac{80}{100}$ 305.3
	$\frac{80}{100}$ 305.3

	+	T	-	Elev.
		317.104		
+28.3			9.6	307.5
+53.3			10.5	306.6
+78.3			11.4	305.7
840+03.3			12.3	304.8
T.P. rock in rd. 840+18			12.697	304.407
	2.108	306.515		
+28.3			2.4	304.1
+53.3			3.1	303.4
+61.67			3.4	303.1
+88				
+97				
841+00			4.6	301.9
T.P. rock in rd 840+18				304.407
	1.910	306.317		
+18.48			5.2	

Left		Right	
$\frac{7.5}{10.0}$	309.6	$\frac{10.4}{8.5}$	307.0
$\frac{5.3}{10.3}$	311.8	$\frac{11.0}{7.0}$	306.1
$\frac{8.0}{10.0}$	309.1	$\frac{11.6}{7.0}$	
$\frac{9.1}{10.0}$	308.0	$\frac{12.5}{8.0}$	304.6
$\frac{7.0}{10.0}$	305.5	$\frac{2.6}{8.0}$	303.9
$\frac{0.0}{9.9}$	306.5	$\frac{3.4}{7.0}$	303.1
$\frac{0.0}{8.0}$	306.5	$\frac{3.7}{7.0}$	302.8
		$\frac{6.7}{6.5}$	299.8
		$\frac{8.0}{12.0}$	298.5
$\frac{0.4}{10.0}$	306.1	$\frac{4.8}{8.0}$	301.7
		$\frac{6.4}{10.0}$	300.1
$\frac{30.63}{10.0}$		$\frac{3}{7.0}$	301.5
		$\frac{5.7}{6.0}$	300.6
		$\frac{4.3}{8.0}$	302.0
		$\frac{2.983}{10.0}$	

Flow line  
16' Culvert

	+	∏	-	Elev.
		306.317		
841+93.5			6.3	300.0
+68.5			7.4	298.5
T.P. rock in rd.			7.812	298.505
	1.020	299.525		
+93.5			1.6	301.7
842+18.5			2.9	303.4
+43.5			4.2	302.1
+47.31			4.4	
843+00			7.5	
T.P. in road.			12.994	286.531
	0.921	287.452		
844+00			3.1	
+43.66			6.4	
+68.7			8.3	
+93.7			9.8	

$\frac{0^{\circ}}{9^{\circ}}$	$\frac{6^{\circ}}{6^{\circ}}$	$\frac{5^{\circ}}{9^{\circ}}$	$\frac{7^{\circ}}{10^{\circ}}$
$\frac{2^{\circ}}{10^{\circ}}$	$\frac{7^{\circ}}{6^{\circ}}$		$\frac{7^{\circ}}{10^{\circ}}$
$\frac{0^{\circ}}{8^{\circ}}$	$\frac{1^{\circ}}{6^{\circ}}$	$\frac{1^{\circ}}{8^{\circ}}$	$\frac{2^{\circ}}{10^{\circ}}$
$\frac{0^{\circ}}{10^{\circ}}$	$\frac{3^{\circ}}{8^{\circ}}$	$\frac{2^{\circ}}{8^{\circ}}$	$\frac{6^{\circ}}{10^{\circ}}$
$\frac{3^{\circ}}{10^{\circ}}$	$\frac{4^{\circ}}{8^{\circ}}$		$\frac{3^{\circ}}{10^{\circ}}$
$\frac{3^{\circ}}{10^{\circ}}$	$\frac{4^{\circ}}{8^{\circ}}$	$\frac{4^{\circ}}{9^{\circ}}$	$\frac{4^{\circ}}{10^{\circ}}$
$\frac{7^{\circ}}{10^{\circ}}$		$\frac{7^{\circ}}{8^{\circ}}$	$\frac{14^{\circ}}{10^{\circ}}$
$\frac{0^{\circ}}{8^{\circ}}$	$\frac{3^{\circ}}{6^{\circ}}$	$\frac{2^{\circ}}{8^{\circ}}$	$\frac{4^{\circ}}{10^{\circ}}$
$\frac{0^{\circ}}{7^{\circ}}$	$\frac{4^{\circ}}{5^{\circ}}$		$\frac{6^{\circ}}{10^{\circ}}$
$\frac{0^{\circ}}{10^{\circ}}$	$\frac{8^{\circ}}{6^{\circ}}$	$\frac{7^{\circ}}{8^{\circ}}$	$\frac{12^{\circ}}{10^{\circ}}$
$\frac{6^{\circ}}{10^{\circ}}$	$\frac{10^{\circ}}{7^{\circ}}$	$\frac{9^{\circ}}{6^{\circ}}$	$\frac{12^{\circ}}{10^{\circ}}$

	+	T	-	Elev.
		287.452		
845+18.7			11.4	
T.P. in road.			11.992	275460
	.858	276.318		
+43.7			1.9	
+57				
+55.99			2.6	
846+00			4.9	
847+00			7.7	
T.P. rock in road.		8.350		267.968
	9.424	272.392		
B.M.#90(A) 847+2			12.480	259.962 259.949
	12.431	272.380		
848+00			5.3	
+56.45			5.6	
+83.4			5.5	
849+08.4			5.5	

Rock in  
River  
Bottom  
847+21  
35' R

$\frac{94}{10^0}$	$\frac{112}{7^0}$	$\frac{0^0}{7^0}$	$\frac{1^0}{10^0}$
$\frac{1^0}{10^0}$	$\frac{22}{9^0}$	$\frac{14}{8^0}$	$\frac{25}{10^0}$
$\frac{4^0}{65}$	← Flow line → 16" culvert		$\frac{6^0}{115}$
$\frac{0^0}{9^0}$	$\frac{34}{75}$	$\frac{2^0}{8^0}$	$\frac{5^0}{9^0}$ $\frac{5^0}{10^0}$
$\frac{0^0}{10^0}$	$\frac{42}{8^0}$	$\frac{4^0}{8^0}$	$\frac{6^0}{10^0}$
$\frac{8^0}{10^0}$		$\frac{7^0}{7^0}$	$\frac{12^0}{8^0}$ $\frac{13^0}{10^0}$
$\frac{2^0}{10^0}$	$\frac{5^0}{6^0}$	$\frac{5^0}{9^0}$	$\frac{7^0}{10^0}$
$\frac{2^0}{10^0}$	$\frac{5^0}{7^0}$		$\frac{5^0}{10^0}$
$\frac{2^0}{10^0}$	$\frac{5^0}{5^0}$		$\frac{4^0}{10^0}$
$\frac{2^0}{10^0}$	$\frac{5^0}{6^0}$		$\frac{5^0}{10^0}$

Mar. 23, '26

Party  
Reynolds Pa  
Leach T  
Ruplinger

Clear and Warm

2

(12)

	+	T	-	Elev.
		272.380		
<del>+33.4</del>			5.3	267.6
<del>+58.4</del>			5.2	267.2
<del>+83.4</del>			5.1	267.3
<del>850+00</del>			5.2	267.2
<del>851+00</del>			4.1	
<del>T.P. in road</del>			3.822	268.558
<del>Mar. 23, '26</del>				
<del>850+89.59</del>		275.230	7.1	268.1
<del>851+14.6</del>			6.7	268.5
<del>+39.6</del>			6.5	268.9
<del>+64.6</del>			6.2	269.0
<del>+89.6</del>			5.7	269.5
<del>+97.92</del>			5.7	269.5
<del>852+00</del>			5.6	269.6

$\frac{270.8}{1.5}$ $\frac{1.5}{100}$	$\frac{270.3}{2.1}$ $\frac{2.1}{90}$	$\frac{267.8}{5.6}$ $\frac{5.6}{70}$	$\frac{267.6}{4.8}$ $\frac{4.8}{85}$	$\frac{266.4}{6.0}$ $\frac{6.0}{100}$
$\frac{270.3}{2.1}$ $\frac{2.1}{100}$	$\frac{267.9}{5.5}$ $\frac{5.5}{80}$	$\frac{267.4}{5.0}$ $\frac{5.0}{85}$	$\frac{264.6}{7.0}$ $\frac{7.0}{70}$	$\frac{264.6}{7.0}$ $\frac{7.0}{80}$
$\frac{268.0}{4.1}$ $\frac{4.1}{100}$	$\frac{266.8}{5.1}$ $\frac{5.1}{85}$	$\frac{267.4}{5.0}$ $\frac{5.0}{85}$	$\frac{264.3}{8.2}$ $\frac{8.2}{100}$	$\frac{261.7}{10.7}$ $\frac{10.7}{100}$
$\frac{267.9}{5.5}$ $\frac{5.5}{100}$	$\frac{264.6}{4.8}$ $\frac{4.8}{70}$	$\frac{262.8}{9.5}$ $\frac{9.5}{80}$	$\frac{261.7}{10.7}$ $\frac{10.7}{100}$	
$\frac{0.4}{100}$	void	$\frac{4.0}{7.5}$	$\frac{3.6}{80}$	$\frac{4.4}{7.5}$
$\frac{270.9}{4.3}$ $\frac{4.3}{100}$		$\frac{268.0}{7.2}$ $\frac{7.2}{80}$	$\frac{268.9}{7.0}$ $\frac{7.0}{80}$	$\frac{263.4}{11.6}$ $\frac{11.6}{90}$
$\frac{268.5}{1.2}$ $\frac{1.2}{100}$		$\frac{268.5}{6.2}$ $\frac{6.2}{65}$	$\frac{268.9}{6.3}$ $\frac{6.3}{95}$	$\frac{263.9}{12.0}$ $\frac{12.0}{100}$
$\frac{275.9}{0.0}$ $\frac{0.0}{80}$		$\frac{268.6}{6.5}$ $\frac{6.5}{45}$	$\frac{265.4}{9.8}$ $\frac{9.8}{100}$	$\frac{267.6}{5.6}$ $\frac{5.6}{100}$
$\frac{275.2}{0.0}$ $\frac{0.0}{85}$		$\frac{268.6}{5.0}$ $\frac{5.0}{50}$	$\frac{269.9}{5.3}$ $\frac{5.3}{100}$	$\frac{269.9}{5.3}$ $\frac{5.3}{100}$
$\frac{276.2}{0.0}$ $\frac{0.0}{95}$		$\frac{269.0}{6.2}$ $\frac{6.2}{70}$	$\frac{269.8}{5.9}$ $\frac{5.9}{100}$	$\frac{269.8}{5.9}$ $\frac{5.9}{100}$
$\frac{263.3}{1.9}$ $\frac{1.9}{100}$		$\frac{269.1}{6.1}$ $\frac{6.1}{80}$	$\frac{269.5}{5.2}$ $\frac{5.2}{100}$	$\frac{269.5}{5.2}$ $\frac{5.2}{100}$
$\frac{272.0}{3.2}$ $\frac{3.2}{100}$	$\frac{269.4}{5.0}$ $\frac{5.0}{90}$	$\frac{269.8}{5.7}$ $\frac{5.7}{70}$	$\frac{269.8}{5.4}$ $\frac{5.4}{70}$	$\frac{268.5}{6.9}$ $\frac{6.9}{100}$



	+	T	-	Elev.
853+00		275.230	4.2	271.0
+10.04			4.1	271.1
+35.0			4.1	271.1
+60.0			4.1	271.1
+85.0			4.3	276.9
+93.37			4.5	270.7
854+00			4.6	276.6
+85				
+92	Bridge 14' long			
+99				
855+00			5.8	269.4
T.P. rock in head.		5.570		269.660
	1.064	270.724		
856+00			3.2	267.5
PT 856+50			4.9	265.8
857+00			6.3	261.4

Flow Line	267.9	267.4	269.3	PT side
opening	10.3	5.8	5.9	4.3
	9.0	9.2	11.8	11.8
Top of Bridge	269.2	267.4	269.3	267.9
	6.0	5.8	5.9	5.3
	10.0	9.2	11.8	10.0
267.4	270.7	267.3		267.9
3.3	6.0	3.4		2.8
10.2	7.5	6.2		10.0
269.3		265.6		266.3
1.4		5.5		4.4
3.2		6.0		10.0
10.0		6.5		264.8
266.6	266.5	264.2		5.2
3.5	4.2	6.5		10.0
10.0	9.2	7.0		

	+	π	-	Elev
		270.124		
858+00			8.2	262.5
B.M. 90B	858+42		10.121	260.533
	4.605	265.125		260.520
858+400			3.4	261.7
858+650			4.1	261.0
+90°			4.7	260.4
859+150			5.0	260.1
859+400			5.4	259.7
+650			6.2	258.9
EC +975			6.8	258.3
860+00			7.5	257.6
861+00			9.5	255.6

Rock on side  
of road 6 ft.

270.7  
 $\frac{0.9}{100}$

262.4  
 $\frac{8.3}{3.2}$

263.0  
 $\frac{7.2}{100}$

260.1  
 $\frac{0.2}{9.2}$

261.8  
 $\frac{3.3}{5.2}$

262.1  
 $\frac{3.2}{10.2}$

264.1  
 $\frac{1.4}{10.2}$

261.2  
 $\frac{4.1}{7.0}$

262.1  
 $\frac{3.1}{10.2}$

263.2  
 $\frac{1.3}{10.2}$   
262.9  
 $\frac{2.2}{10.0}$   
259.2

260.3  
 $\frac{4.8}{7.2}$   
259.9  
 $\frac{5.2}{8.5}$

260.9  
 $\frac{4.2}{10.0}$   
260.0  
 $\frac{4.4}{10.0}$

259.2  
 $\frac{5.2}{10.0}$   
259.1

259.8  
 $\frac{5.2}{8.0}$

259.0  
 $\frac{6.1}{10.0}$

257.7  
 $\frac{6.2}{10.2}$   
257.5  
 $\frac{4.4}{10.0}$

259.1  
 $\frac{6.2}{5.0}$

259.2  
 $\frac{7.2}{10.0}$   
258.8  
 $\frac{6.3}{10.0}$

257.0  
 $\frac{7.6}{10.0}$   
257.9

257.9  
 $\frac{7.2}{7.2}$

257.3  
 $\frac{7.8}{10.0}$

256.1  
 $\frac{8.4}{10.0}$   
 $\frac{9.2}{9.5}$

256.1  
 $\frac{9.0}{10.0}$

	+	T	-	Elev.
		265.125		
<del>B61+28</del>	<del>Culvert</del>			
			7.069	258.056
			9.541	257.584
	4.935	260.519		
B.M. # 93			2.450	258.069
	2.519	260.546		
P.I				
B62+00			4.8	255.7
63+00			5.4	255.1
64+0			5.1	255.4
B64+15	14" Culvert			
B65+00			4.6	255.9
66+40±			4.4	256.1
+ 65±			4.6	255.9
+ 90±			4.6	255.9

Flowline	18" Culvert	Flowline
253.6		256.0
$\frac{11.5}{32}$		$\frac{9.5}{21}$
256.0		255.8
$\frac{4.9}{10}$		$\frac{4.2}{10}$
255.1		254.7
$\frac{5.4}{10}$		$\frac{5.2}{8}$
255.4		255.5
$\frac{5.1}{10}$		$\frac{5.0}{10}$
253.7		
Flowline		Flowline
$\frac{6.8}{8}$		$\frac{9.3}{11}$
255.9		254.9
$\frac{4.6}{10}$		$\frac{5.4}{10}$
257.1		255.9
$\frac{3.4}{10}$		$\frac{4.4}{8}$
260.5		256.5
$\frac{4.2}{8}$		$\frac{4.2}{8}$
255.8		256.6
$\frac{4.2}{5}$		$\frac{3.3}{8}$
260.9		256.4
$\frac{4.5}{10}$		$\frac{4.1}{8}$
		255.7
		$\frac{4.8}{10}$

	+	π	-	Elev.
		260.546		
866+15 <sup>4</sup>			4.1	256.4
+41 <sup>4</sup>				
			3.9	256.6
E.C. 866+48 <sup>22</sup>			3.9	256.6
867+00			4.8	255.7
			6.445	254.091
				258.027 B.M.
2.683	260.710			
			6.620	254.090
4.093	258.183			
B.C. 866+57 <sup>84</sup>			1.4	256.8
+82 <sup>2</sup>			1.8	256.4
867+27 <sup>2</sup>			2.7	265.5
+32 <sup>2</sup>			3.9	264.3

Cloway  
Mch 2A  
Roy Red.  
B.M.

1257.5  
 $\frac{32}{100}$   
256.2  
 $\frac{43}{100}$   
256.9  
 $\frac{43}{100}$   
253.0  
 $\frac{53}{100}$

256.5  
 $\frac{42}{70}$

256.3  
 $\frac{42}{80}$   
256.6  
 $\frac{32}{80}$   
256.8  
 $\frac{32}{70, 100}$   
255.7  
 $\frac{46}{80}$

254.7  
 $\frac{58}{100}$   
255.0  
 $\frac{52}{100}$   
255.5  
 $\frac{50}{100}$   
254.8  
 $\frac{52}{100}$

256.5  
 $\frac{12}{100}$   
9

256.2  
 $\frac{22}{92}$

257.0  
 $\frac{12}{70}$

255.6  
 $\frac{24}{100}$

$\frac{23}{100}$

$\frac{12}{70}$

$\frac{23}{100}$

$\frac{34}{100}$

$\frac{23}{63}$

$\frac{38}{100}$

$\frac{12}{100}$

$\frac{43}{60}$

$\frac{23}{80}$

$\frac{30}{100}$

	+	π	-	Elev
		258.183		
<del>867+57<sup>2</sup></del>			4.9	253.3
<del>+82<sup>2</sup></del>			5.4	252.8
<del>868+01<sup>2</sup></del>				
<del>868+07<sup>2</sup></del>			5.2	253.0
<del>+92<sup>2</sup></del>			4.9	253.3
<del>868+35<sup>2</sup></del>			4.9	253.3
<del>869+00</del>			2.8	255.4
			0.826	257.17 TP
	10.551	267.268		
<del>869+98<sup>2</sup></del>			7.7	260.2
<del>870+23<sup>2</sup></del>			6.4	261.5
<del>+48<sup>2</sup></del>			5.4	262.5
<del>+73<sup>2</sup></del>			5.4	262.5

12' Culvert

$$\begin{array}{r} 257.1 \\ 12 \\ \hline 100 \\ 256.4 \\ 12 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 254.4 \\ 38 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 254.1 \\ 41 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 254.4 \\ 38 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 259.2 \\ 60 \\ \hline 85 \end{array}$$

$$\begin{array}{r} 260.2 \\ 53 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 261.9 \\ 02 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 261.3 \\ 06 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 266.1 \\ 18 \\ \hline 100 \end{array}$$

$$\begin{array}{r} \text{Flowing} \\ 60 \\ \hline 257.3 \end{array}$$

$$\begin{array}{r} 5.2 \\ 60 \end{array}$$

$$\begin{array}{r} 253.0 \\ 5.2 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 253.2 \\ 5.2 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 258.9 \\ 32 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 260.2 \\ 77 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 261.2 \\ 23 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 262.4 \\ 55 \\ \hline 60 \end{array}$$

$$\begin{array}{r} 262.2 \\ 57 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 253.2 \\ 52 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 252.8 \\ 52 \\ \hline 40 \end{array}$$

$$250.6$$

$$\begin{array}{r} 253.4 \\ 48 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 255.6 \\ 26 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 260.7 \\ 72 \\ \hline 90 \end{array}$$

$$\begin{array}{r} \text{Flowing} \\ 90 \\ \hline 252.9 \end{array}$$

$$\begin{array}{r} 53 \\ 100 \end{array}$$

$$\begin{array}{r} 252.4 \\ 55 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 252.6 \\ 36 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 260.2 \\ 72 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 262.7 \\ 53 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 263.4 \\ 44 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 262.7 \\ 53 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 263.2 \\ 40 \\ \hline 90 \end{array}$$

(17)

	+	+	-	Elev
		267.868		
			2.745	265.123
	10.168	275.291		10' L of B69
B.M. #94			2.865	272.426
				B.M. in Oak
				272.426
T.P.				259.317
	10.384	267.901		
Ec			5.4	262.3
870+8025				
			6.1	261.6
871+00				
Bc			7.9	259.8
871+6075				
+852			8.5	259.2
			8.224	258.777
	5.033	263.810		
872+102			5.2	258.6
+352			5.7	258.1
+69	culvert			12" Concrete
+857			5.8	258.0

$$\begin{array}{r} 263.5 \\ 42 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 161.2 \\ 65 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 262.6 \\ 52 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 263.3 \\ 49 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 263.8 \\ 00 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 263.8 \\ 2 \\ \hline 83 \end{array}$$

$$\begin{array}{r} 263.9 \\ 00 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 261.8 \\ 58 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 259.5 \\ 82 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 259.0 \\ 82 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 258.5 \\ 53 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 258.0 \\ 50 \\ \hline 32 \end{array}$$

$$\begin{array}{r} 257.8 \\ 70 \\ \hline 60 \end{array}$$

$$\begin{array}{r} 261.5 \\ 62 \\ \hline 50 \end{array}$$

$$\begin{array}{r} 259.4 \\ 83 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 262.4 \\ 5.3 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 256.2 \\ 75 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 256.0 \\ 112 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 256.4 \\ 112 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 259.5 \\ 43 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 258.8 \\ 50 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 258.4 \\ 94 \\ \hline 140 \end{array}$$

$$\begin{array}{r} 257.9 \\ 52 \\ \hline 100 \end{array}$$

	+	T	-	Flow
		243.810		
<del>873+102</del>			5.6	258.2
<del>E.C. 873+1908</del>			5.5	258.3
<del>874+60</del>			5.0	258.8
<del>B.C. 874+2824</del>			4.8	
<del>+534</del>			4.7	
<del>+784</del>			5.1	
<del>875+034</del>			5.7	
<del>+284</del>			6.4	
		8.235		255.575
	2.533	258.108		
<del>+284</del>				
<del>+534</del>			2.2	
<del>E.C. +7058</del>			3.4	

<del>4670</del>	<del>257.9</del>	<del>257.9</del>	<del>258.2</del>
<del>02</del>	<del>52</del>	<del>52</del>	<del>52</del>
<del>93</del>	<del>80</del>	<del>80</del>	<del>100</del>
<del>260A</del>	<del>258.1</del>	<del>258.1</del>	<del>257.8</del>
<del>32</del>	<del>57</del>	<del>57</del>	<del>70</del>
<del>100</del>	<del>90</del>	<del>90</del>	<del>100</del>
<del>250.1</del>	<del>259.3</del>	<del>259.3</del>	<del>259.7</del>
<del>51</del>	<del>43</del>	<del>43</del>	<del>41</del>
<del>100</del>	<del>60</del>	<del>60</del>	<del>100</del>
<del>42</del>	<del>52</del>	<del>43</del>	<del>70</del>
<del>100</del>	<del>90</del>	<del>80</del>	<del>100</del>
<del>02</del>	<del>44</del>	<del>45</del>	<del>37</del>
<del>52</del>	<del>80</del>	<del>70</del>	<del>100</del>
<del>02</del>	<del>54</del>	<del>45</del>	<del>40</del>
<del>65</del>	<del>53</del>	<del>70</del>	<del>100</del>
<del>05</del>	<del>59</del>	<del>47</del>	<del>47</del>
<del>80</del>	<del>50</del>	<del>70</del>	<del>100</del>
<del>02</del>	<del>14</del>	<del>04</del>	<del>100</del>
<del>70</del>	<del>60</del>	<del>100</del>	<del>100</del>
<del>00</del>	<del>22</del>	<del>39</del>	<del>34</del>
<del>85</del>	<del>70</del>	<del>83</del>	<del>100</del>
<del>03</del>	<del>40</del>	<del>32</del>	<del>75</del>
<del>100</del>	<del>80</del>	<del>77</del>	<del>100</del>

13' R of  
876+39

	+	∩	-	Elev.
BM. #94		258.108	6.803	251.305

876+00			5.4	
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877+00			12.3	
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$\frac{32}{100}$

$\frac{58}{80}$

$\frac{52}{70}$

$\frac{90}{100}$

$\frac{63}{100}$

$\frac{122}{40}$

$\frac{115}{100}$

	+	∩	-	Elev.
				251.305
	0.835	252.140	10.891	241.749
	1.615	243.361	6.199	237.165
	5.904	243.069	3082	239.987
	8.135	248.122	1.682	246.440
	12.488	258.928	1.780	257.148
	5.536	262.684	10.947	251.737



Apr. 12<sup>th</sup>Simpson-Inst.  
Reynolds Rod  
Isbell "

Sta	+	π	-	Elev.
		B.M. 876+39 13'R.	251.305	B.M. #94A
	0.343	251.648		
877+34 <sup>3</sup>			8.6	243.0
877+59 <sup>3</sup>			10.0	
TP			9.900	241.748
	2.295	244.043		
877+84 <sup>3</sup>			3.7	
878+09 <sup>3</sup>			4.9	
878+34 <sup>3</sup>			6.1	
+57 <sup>3</sup>			6.8	
+84 <sup>3</sup>	Culvert 12" Concrete			
879+00			6.9	
879+94 <sup>3</sup>			6.8	
TP			6.785	237.258
	6.701	243.959		
880+19 <sup>3</sup>			6.6	

$\frac{36}{10^2}$	$\frac{44}{9^2}$	$\frac{87}{5^2}$	$\frac{72}{10}$
$\frac{68}{10^2}$	$\frac{107}{5^2}$	$\frac{92}{10^2}$	
$\frac{07}{10^2}$	$\frac{43}{7^2}$	$\frac{35}{9^2}$	$\frac{37}{10^2}$
$\frac{24}{10^2}$	$\frac{52}{7^2}$	$\frac{45}{9^2}$	$\frac{48}{10^2}$
$\frac{24}{10^2}$	$\frac{49}{5^2}$	$\frac{64}{5^2}$	$\frac{52}{10^2}$
$\frac{02}{6^2}$	$\frac{37}{5^2}$	$\frac{67}{4^2}$	$\frac{62}{10^2}$
Flow line	$\frac{86}{3^2}$	$\frac{103}{21^2}$	
$\frac{20}{10^2}$	$\frac{22}{8^2}$	$\frac{73}{6^2}$	$\frac{65}{10^2}$
		$\frac{72}{10^2}$	$\frac{67}{6^2}$ $\frac{88}{10^2}$
		$\frac{68}{10^2}$	$\frac{62}{9^2}$ $\frac{60}{10^2}$

Sta	+ 243.959 T	- Elev.
880+49 <sup>3</sup>		6.3
881+69 <sup>3</sup>		6.1
882+99 <sup>3</sup>		5.8
883+04 <sup>3</sup>		5.7
884+00		4.5
885+00 TP	1.575	242.384
	8.917	251.301
883+57	Culvert 14" C.I.P.	
884+00		7.4
884+47 <sup>6</sup>		4.6
885+72 <sup>6</sup>		3.4
886+97 <sup>6</sup>		2.2
TP	1.812	249.489
	11.385	260.879

$\frac{6\frac{2}{10}}{10}$	$\frac{6\frac{2}{9}}{9}$	$\frac{5\frac{5}{9}}{9}$	$\frac{5\frac{2}{10}}{10}$
$\frac{2\frac{4}{10}}{10}$	$\frac{3\frac{3}{8}}{8}$	$\frac{6\frac{5}{6}}{6}$	$\frac{5\frac{2}{10}}{10}$
$\frac{1\frac{2}{10}}{10}$	$\frac{1\frac{2}{10}}{10}$	$\frac{6\frac{2}{5}}{5}$	$\frac{5\frac{2}{10}}{10}$
$\frac{1\frac{2}{10}}{10}$	$\frac{2\frac{6}{8}}{8}$	$\frac{5\frac{4}{6}}{6}$	$\frac{5\frac{2}{10}}{10}$
$\frac{1\frac{3}{10}}{10}$	$\frac{4\frac{3}{8}}{8}$	$\frac{4\frac{3}{9}}{9}$	$\frac{5\frac{2}{10}}{10}$
$\frac{0\frac{2}{7}}{7}$	$\frac{2\frac{2}{5}}{5}$	$\frac{1\frac{2}{10}}{10}$	
	$\frac{11\frac{1}{10}}{10}$	$\frac{12\frac{2}{13}}{13}$	
$\frac{7\frac{6}{10}}{10}$	$\frac{7\frac{2}{7}}{7}$	$\frac{6\frac{3}{10}}{10}$	
$\frac{0\frac{2}{6}}{6}$	$\frac{4\frac{3}{5}}{5}$	$\frac{4\frac{3}{10}}{10}$	
$\frac{0\frac{2}{5}}{5}$	$\frac{5\frac{5}{5}}{5}$	$\frac{2\frac{2}{10}}{10}$	
$\frac{0\frac{2}{6}}{6}$	$\frac{2\frac{5}{4}}{4}$	$\frac{1\frac{2}{10}}{10}$	

Sta	+	$\pi$	-	Elev.
		260.874		
885+22 <sup>2</sup>	B.C.		10.3	
+47 <sup>2</sup>			8.8	
+71 <sup>2</sup>	E.C.		7.5	
886+00			5.6	
887+00			4.2	
+15 <sup>2</sup>	B.C.		4.4	
+40 <sup>2</sup>			5.4	
+65 <sup>2</sup>			6.3	
TP+B.M.		1.675	259.199	Rock
		4.593	263.792	
TP+B.M.		12.032	251.760	
887+90 <sup>2</sup>			10.2	
888+06 <sup>2</sup>	E.C.		10.7	
888+12 <sup>2</sup>	B.C.		10.9	

				$\Sigma$
$\frac{61}{100}$	$\frac{68}{82}$	$\frac{102}{62}$	$\frac{101}{102}$	
$\frac{30}{102}$	$\frac{45}{72}$	$\frac{90}{62}$	$\frac{87}{92}$	$\frac{91}{102}$
	$\frac{05}{102}$	$\frac{74}{62}$	$\frac{68}{102}$	
	$\frac{02}{72}$	$\frac{62}{52}$	$\frac{52}{102}$	
		$\frac{45}{102}$	$\frac{42}{62}$	$\frac{81}{102}$
		$\frac{48}{102}$	$\frac{43}{62}$	$\frac{100}{102}$
	$\frac{55}{102}$	$\frac{52}{82}$	$\frac{62}{102}$	
	$\frac{65}{102}$	$\frac{62}{72}$	$\frac{102}{102}$	
		$\frac{34}{102}$	$\frac{102}{72}$	$\frac{100}{92}$
		$\frac{102}{102}$	$\frac{111}{92}$	$\frac{102}{102}$
		$\frac{96}{102}$	$\frac{116}{92}$	$\frac{112}{102}$

Sta 888+17  
17' Low

Sta	+	+	-	Elev.
		263.792		
888+37 <sup>2</sup>			11.6	
TP+B.M. #96			12.032	251.760
	1.621	233.381		
888+62 <sup>2</sup>			1.8	
888+74	Culvert 24" CIP			
888+81 <sup>2</sup>	E.C.		2.5	
889+00			2.9	
+58	B.C.		4.0	
+68			4.3	
+78			4.7	
+88			4.9	
+98			5.2	
890+00			5.6	
+18			5.9	

Flow line

$\frac{12^2}{10^2}$	$\frac{11^2}{10^2}$	
$\frac{2^2}{10^2}$	$\frac{1^2}{10^2}$	
$\frac{4^2}{5^2}$	$\frac{5^2}{14^2}$	
$\frac{0^2}{4^2}$	$\frac{2^2}{3^2}$	$\frac{2^2}{10^2}$
$\frac{0^2}{3^2}$	$\frac{3^2}{3^2}$	$\frac{2^2}{10^2}$
$\frac{4^2}{6^2}$	$\frac{4^2}{3^2}$	$\frac{3^2}{10^2}$
$\frac{0^2}{5^2}$	$\frac{4^2}{4^2}$	$\frac{3^2}{10^2}$
$\frac{0^2}{6^2}$	$\frac{4^2}{4^2}$	$\frac{4^2}{10^2}$
$\frac{0^2}{6^2}$	$\frac{5^2}{5^2}$	$\frac{4^2}{10^2}$
$\frac{0^2}{6^2}$	$\frac{5^2}{5^2}$	$\frac{4^2}{10^2}$
$\frac{0^2}{5^2}$	$\frac{5^2}{5^2}$	$\frac{4^2}{10^2}$
$\frac{0^2}{7^2}$	$\frac{6^2}{5^2}$	$\frac{5^2}{10^2}$

Sta	+ K	- Elev.
	253.381	
890+28	6.2	
+37 <sup>2</sup>	6.5	
+40 <sup>3</sup> E.C.	6.6	
891+00	7.0	
+69 <sup>0</sup> Culvert 14" C.I.P.		
+77 <sup>1</sup> B.C. (Ca. 43)	4.0	
892+02	1.8	
TP	1.061	252.320
	8.931	261.251
892+27 <sup>2</sup>	8.1	
+52 <sup>0</sup>	6.4	
+70 <sup>1</sup> E.C.	5.3	
893+00	4.9	
893+23 <sup>0</sup>	4.7	

$$\frac{0^0}{8^0} \quad \frac{6^0}{5^0} \quad \frac{5^0}{10^0}$$

$$\frac{1^4}{10^0} \quad \frac{6^0}{6^0} \quad \frac{6^0}{10^0}$$

$$\frac{2^0}{10^0} \quad \frac{6^0}{6^0} \quad \frac{6^0}{10^0}$$

$$\frac{6^1}{10^0} \quad \frac{7^0}{5^0} \quad \frac{6^0}{10^0}$$

Flow line  $\frac{6^0}{5^0} \quad \frac{8^0}{14^0}$

$$\frac{3^0}{10^0} \quad \frac{4^0}{8^0} \quad \frac{3^0}{10^0}$$

$$\frac{0^0}{1^0} \quad \frac{2^0}{3^0} \quad \frac{1^0}{10^0}$$

$$\frac{0^0}{8^0} \quad \frac{8^1}{4^0} \quad \frac{7^0}{10^0}$$

$$\frac{0^0}{7^0} \quad \frac{6^0}{6^0} \quad \frac{6^1}{8^0} \quad \frac{5^0}{10^0}$$

$$\frac{4^1}{10^0} \quad \frac{5^0}{8^0} \quad \frac{3^0}{10^0}$$

$$\frac{0^0}{10^0} \quad \frac{5^0}{9^0} \quad \frac{4^0}{10^0}$$

$$\frac{3^0}{10^0} \quad \frac{5^0}{9^0} \quad \frac{4^0}{8^0} \quad \frac{5^1}{10^0}$$

Simpson - Inst.  
Reynolds - Rod  
Isbell - "

Oct. 13<sup>th</sup>

Elev.

Sta	+	x	-	Elev.
		261.251		
893+48 <sup>6</sup>			5.0	
+73 <sup>6</sup>			5.1	
+98 <sup>6</sup>			5.5	
894+20 <sup>3</sup>	E.C.		5.6	
895+00			7.0	
FP		8.608		252.643
	4.000	256.643		
+44 <sup>2</sup>	Culvert 14" C.I.P.			
+712	B.C.		3.7	
+96 <sup>2</sup>			4.1	
896+21 <sup>2</sup>			4.4	
+46 <sup>2</sup>			4.9	
+712	F.C.		4.9	

E

$\frac{52}{102}$	$\frac{49}{70}$	$\frac{51}{90}$	$\frac{85}{102}$
$\frac{18}{102}$	$\frac{53}{82}$	$\frac{49}{102}$	
$\frac{32}{102}$	$\frac{57}{75}$	$\frac{56}{72}$	$\frac{73}{102}$
$\frac{31}{102}$	$\frac{57}{82}$	$\frac{55}{70}$	$\frac{63}{102}$
$\frac{36}{102}$	$\frac{74}{92}$	$\frac{63}{102}$	
Flow line	$\frac{56}{62}$	$\frac{70}{132}$	
$\frac{02}{102}$	$\frac{32}{62}$	$\frac{32}{102}$	
$\frac{02}{62}$	$\frac{77}{42}$	$\frac{25}{102}$	
$\frac{02}{72}$	$\frac{47}{42}$	$\frac{40}{102}$	
$\frac{02}{72}$	$\frac{52}{42}$	$\frac{44}{102}$	
$\frac{02}{102}$	$\frac{12}{72}$	$\frac{50}{62}$	$\frac{45}{102}$

Sta	+ T	- Elev.
	256.643	
897+00		5.1
+15	Culvert 12" Concrete	
898+00		5.5
FP	5.710	250.933
	0.335	259.268
899+00		7.1
+15	B.C	
		7.0
+26		6.4
+51		5.7
+76		5.0
900+01	Culvert 18" C.P.	
		4.5
+26		4.1
+38	Culvert Concrete	
+51		3.7

	$\frac{42}{102}$	$\frac{45}{65}$	$\frac{88}{82}$	$\frac{97}{102}$
Flowline	$\frac{78}{112}$	$\frac{93}{92}$		
	$\frac{29}{102}$	$\frac{59}{82}$	$\frac{54}{102}$	
	$\frac{32}{102}$	$\frac{35}{92}$	$\frac{73}{42}$	$\frac{66}{102}$
	$\frac{28}{102}$	$\frac{32}{92}$	$\frac{72}{42}$	$\frac{63}{102}$
	$\frac{02}{702}$	$\frac{08}{72}$	$\frac{62}{32}$	$\frac{59}{102}$
	$\frac{02}{102}$	$\frac{15}{82}$	$\frac{58}{32}$	$\frac{52}{102}$
	$\frac{23}{102}$	$\frac{31}{62}$	$\frac{47}{52}$	$\frac{43}{102}$
	$\frac{57}{102}$	$\frac{67}{82}$	$\frac{47}{62}$	$\frac{43}{82}$
Flowline			$\frac{72}{102}$	$\frac{72}{102}$
		$\frac{47}{102}$	$\frac{43}{102}$	
Flowline		$\frac{52}{102}$		
		$\frac{36}{102}$	$\frac{32}{102}$	

Sta	+	$\pi$	-	Elev.
		259.268		
900+61	E.C.		3.3	
901+00			2.9	
+175	B.C.		2.9	
TP			2.757	256.511
		4.160		260.671
901+275			4.3	
+375			4.3	
+475			4.5	
+575			4.7	
+675			5.0	
+735	E.C.		5.2	
902+00			6.3	
+870			7.9	
+630	P.I.		8.9	

$\frac{13}{102}$	$\frac{35}{82}$	$\frac{32}{70}$	$\frac{26}{102}$
$\frac{09}{82}$	$\frac{30}{62}$	$\frac{24}{102}$	
$\frac{09}{52}$	$\frac{28}{42}$	$\frac{24}{102}$	
$\frac{09}{62}$	$\frac{42}{42}$	$\frac{31}{102}$	
$\frac{09}{52}$	$\frac{43}{42}$	$\frac{31}{102}$	
$\frac{09}{52}$	$\frac{47}{40}$	$\frac{35}{102}$	
$\frac{09}{72}$	$\frac{44}{52}$	$\frac{32}{102}$	
$\frac{09}{72}$	$\frac{55}{52}$	$\frac{46}{102}$	
$\frac{09}{62}$	$\frac{52}{42}$	$\frac{43}{102}$	
$\frac{29}{102}$	$\frac{62}{82}$	$\frac{62}{62}$	$\frac{58}{102}$
	$\frac{83}{102}$		$\frac{80}{102}$
	$\frac{89}{102}$		$\frac{88}{102}$



Sta	+ $\pi$	-	Elev.
	260.671		
902+76	Culvert 18" C.I.P.		
+88		8.8	
903+00		8.8	
904+00		7.5	
TP + B.M. #98	9.250	261.786	251.836
904+29		6.8	
+59		5.3	
+79		4.2	
905+00		3.6	
906+00		3.1	
+15		3.1	
+36		3.4	
FP	3.004	258.782	

Flow line	$\frac{110}{150}$	$\frac{120}{140}$
	$\frac{91}{100}$	$\frac{92}{100}$
	$\frac{91}{100}$	$\frac{92}{100}$
	$\frac{19}{100}$	$\frac{75}{100}$
	$\frac{37}{100}$	$\frac{38}{80}$
	$\frac{41}{50}$	$\frac{68}{100}$
	$\frac{40}{100}$	$\frac{56}{60}$
	$\frac{57}{100}$	$\frac{57}{100}$
	$\frac{35}{100}$	$\frac{45}{60}$
	$\frac{37}{100}$	$\frac{37}{100}$
	$\frac{36}{100}$	$\frac{30}{100}$
	$\frac{02}{100}$	$\frac{13}{80}$
	$\frac{22}{100}$	$\frac{22}{100}$
	$\frac{00}{65}$	$\frac{07}{40}$
	$\frac{32}{100}$	$\frac{32}{100}$
	$\frac{00}{37}$	$\frac{38}{20}$
	$\frac{29}{100}$	$\frac{29}{100}$

Sta	+ T	-	Elev.		
			258.782		
	A. 427	263.209			
906+45		4.8		$\frac{00}{42}$	$\frac{50}{22}$ $\frac{47}{102}$
907+00		5.0		$\frac{00}{92}$	$\frac{15}{62}$ $\frac{52}{42}$ $\frac{47}{102}$
907+47	Culvert 12" concrete	5.1		Flowline	$\frac{70}{42}$ $\frac{98}{102}$
908+00		4.5		$\frac{00}{42}$	$\frac{45}{32}$ $\frac{42}{102}$
909+00		1.8		$\frac{00}{62}$	$\frac{22}{52}$ $\frac{13}{92}$ $\frac{17}{102}$
	1048	262.161			
	9.622	271.843			
B.M.		4.323	267.520 = Elev.	Sta. 911+25	34' L 2x2 Hub
910+00		5.7		$\frac{62}{102}$	$\frac{54}{102}$
+59	R.I.	4.0		$\frac{92}{102}$	$\frac{32}{102}$
911+00		5.8		$\frac{54}{102}$	$\frac{62}{102}$
912+00		8.1		$\frac{52}{102}$	$\frac{66}{52}$ $\frac{80}{22}$ $\frac{76}{102}$
		8.8		$\frac{72}{102}$	$\frac{70}{52}$ $\frac{88}{32}$ $\frac{86}{102}$

Sta.	+	π	-	Elev.
		271.893		
TP			8.075	263.768
	4.537	268.303		
913+64	Culvert 12"		5.5	
	Concrete			
914+00			5.0	
915+00			2.2	
915+99			1.8	
+74	P.I		1.8	
916+00			1.9	
TP			1.400	266.605
	8.687	275.292		
916+80	Culvert		10.2	
	Wooden			
916+82			9.7	
+70			14.5	
917+00			14.9	
917+22			13.6	

Flow	Size	Flow	Size
		261.1	
		$\frac{72}{42}$	$\frac{72}{152}$
		$\frac{57}{102}$	$\frac{47}{72}$
		$\frac{53}{42}$	$\frac{50}{102}$
		$\frac{02}{102}$	$\frac{05}{72}$
		$\frac{21}{42}$	$\frac{23}{102}$
		$\frac{00}{92}$	$\frac{02}{72}$
		$\frac{22}{42}$	$\frac{19}{102}$
		$\frac{02}{62}$	$\frac{12}{32}$
			$\frac{19}{102}$
		$\frac{12}{102}$	$\frac{23}{102}$
		$\frac{152}{282}$	$\frac{163}{42}$
		$\frac{91}{102}$	$\frac{147}{22}$
			$\frac{172}{102}$
		$\frac{92}{102}$	$\frac{96}{22}$
			$\frac{173}{102}$
		$\frac{56}{102}$	$\frac{98}{32}$
		$\frac{145}{12}$	$\frac{152}{102}$
		$\frac{72}{102}$	$\frac{82}{22}$
		$\frac{131}{12}$	$\frac{132}{102}$

Flow Size

Sta	+	X	-	Elev.
		275.292		
917+50			7.1	
918+00			3.2	
TP			0.907	274.385
	12.387	286.772		
918+30			11.7	
+55 P.I.			9.7	
480			7.6	
919+00			6.0	
TP			1.506	285.266
	11.485	296.751		
920+00			8.6	
TP			0.825	295.926
	11.900	307.826		
921+00			12.0	
922+00			6.1	
			0.764	307.062
	12.312	319.374		
B.M. #103			5.332	314.042

$$\frac{60}{100} \quad \frac{72}{100}$$

$$\frac{27}{100} \quad \frac{27}{100}$$

$$\frac{114}{100} \quad \frac{118}{100}$$

$$\frac{87}{100} \quad \frac{105}{70} \quad \frac{82}{100}$$

$$\frac{73}{100} \quad \frac{87}{40} \quad \frac{51}{80} \quad \frac{52}{100}$$

$$\frac{58}{100} \quad \frac{65}{40} \quad \frac{42}{100}$$

$$\frac{88}{100} \quad \frac{91}{20} \quad \frac{66}{60} \quad \frac{51}{90} \quad \frac{58}{100}$$

$$\frac{118}{100} \quad \frac{112}{40} \quad \frac{101}{60} \quad \frac{102}{100}$$

$$\frac{60}{100} \quad \frac{65}{40} \quad \frac{60}{60} \quad \frac{56}{100}$$

924+12 25' L Record Elev. 313.849

Simpson-Inst  
Reynolds-Rod  
Isbell - 4  
Elev.

Sta	+	$\pi$	-	Elev.
		319.374		
923+00			12.1	
	106	12" Concrete Culvert.	11.8	
924+00			6.4	
			0.882	315.492
	11.731	330.223		
925+00			10.8	
926+00			4.3	
			0.731	329.492
	6.651	336.143		
927+00			6.0	
928+00			4.5	
+21			5.6	
+46	P.I.		7.3	
+71			6.7	
929+00			7.7	
TP.			10.216	325.927

Flowline	$\frac{12^2}{10^2}$	$\frac{12^2}{4^2}$	$\frac{11^2}{6^2}$	$\frac{11^2}{10^2}$
	$\frac{50 \cdot 5.6}{16^2}$	$\frac{13^2}{4^2}$	$\frac{12^2}{4^2}$	
	$\frac{6^2}{10^2}$	$\frac{6^2}{4^2}$	$\frac{5^2}{6^2}$	$\frac{5^2}{10^2}$
	$\frac{10^2}{10^2}$	$\frac{11^2}{4^2}$	$\frac{9^2}{5^2}$	$\frac{9^2}{10^2}$
	$\frac{4^2}{10^2}$	$\frac{4^2}{4^2}$	$\frac{3^2}{5^2}$	$\frac{2^2}{10^2}$
	$\frac{5^2}{10^2}$	$\frac{5^2}{3^2}$	$\frac{7^2}{5^2}$	$\frac{4^2}{10^2}$
	$\frac{5^2}{10^2}$	$\frac{7^2}{4^2}$	$\frac{4^2}{10^2}$	
	$\frac{6^2}{10^2}$	$\frac{3^2}{1^2}$	$\frac{5^2}{7^2}$	
	$\frac{7^2}{10^2}$	$\frac{6^2}{6^2}$	$\frac{5^2}{10^2}$	
	$\frac{8^2}{10^2}$	$\frac{7^2}{4^2}$	$\frac{6^2}{7^2}$	$\frac{6^2}{10^2}$
	$\frac{8^2}{10^2}$	$\frac{8^2}{7^2}$	$\frac{7^2}{4^2}$	$\frac{8^2}{10^2}$

Sta	+	π	-	Elek
				325.927
930+00	0.761	326.688	2.7	
931+00			7.4	
+22			8.3	
+47 P.I.			9.0	
+72			10.0	
+83 <sup>E</sup>	14" Culvert concrete		10.4	
932+00			11.1	
932+00			10.448	316.240
	0.961	317.201		
933+00			6.0	
934+00			10.9	
			11.385	305.816
	0.643	306.459		
935+00			4.1	
+01	12" concrete culvert		4.2	

$\frac{27}{100}$	$\frac{28}{20}$	$\frac{14}{40}$	$\frac{07}{100}$
$\frac{71}{100}$	$\frac{71}{20}$	$\frac{57}{40}$	$\frac{48}{100}$
$\frac{78}{100}$	$\frac{85}{40}$	$\frac{62}{60}$	$\frac{60}{100}$
$\frac{96}{100}$	$\frac{91}{80}$	$\frac{94}{80}$	$\frac{73}{100}$
$\frac{103}{100}$	$\frac{101}{70}$	$\frac{87}{90}$	$\frac{80}{100}$
$\frac{131}{130}$	$\frac{117}{70}$		
$\frac{112}{100}$	$\frac{113}{60}$	$\frac{93}{80}$	$\frac{90}{100}$
$\frac{53}{100}$	$\frac{60}{50}$	$\frac{34}{80}$	$\frac{30}{100}$
$\frac{108}{100}$	$\frac{116}{50}$	$\frac{67}{70}$	$\frac{81}{100}$
$\frac{41}{100}$	$\frac{43}{30}$	$\frac{53}{40}$	$\frac{35}{100}$
$\frac{62}{100}$	$\frac{55}{40}$		

Flow line

Flow line

Sta	+	X	-	Elev.
		306.459		
936+00			7.3	
+55			9.2	
+80	P.I.		10.7	
937+00			11.9	
TP			11.457	295.002
	0.392	295.394		
B.M.			4.586	290.808
938+00			7.3	
+43 <sup>5</sup>	12" Concrete		9.9	
TP	culvert		11.605	283.789
	0.096	283.885		
939+00			8.2	
940+00			9.0	
			12.011	271.874
	1.247	273.121		
+50	14" Concrete		1.7	
	culvert			
941+00			4.3	

Station	Left	Right	Left	Right
936+00	$\frac{62}{102}$	$\frac{72}{32}$	$\frac{55}{52}$	$\frac{47}{102}$
+55	$\frac{102}{102}$	$\frac{82}{82}$		$\frac{102}{102}$
+80		$\frac{122}{102}$		$\frac{106}{102}$
937+00	$\frac{122}{102}$	$\frac{112}{82}$		$\frac{126}{102}$
TP				
B.M.				
938+00				
+43 <sup>5</sup>	$\frac{72}{102}$	$\frac{85}{12}$	$\frac{62}{12}$	$\frac{46}{102}$
TP				
939+00				
940+00				
+50				
941+00				

13'R 938+00 2 x 2 Hub

Flowline

Flowline

Sta	+	T	-	Elev.
		273.121		
942+00			10.7	
T.P.			11.101	262.020
	0.852	262.872		
942+54			8.4	
+55			10.5	
+73	4x4 Arch Culvert.		10.9	
+85			5.9	
943+00			5.4	
+70			3.5	
+95			2.5	
944+00			2.2	
T.P.			1.335	261.537
	10.548	272.115		
945+00			4.2	
T.P.			0.575	271.540
	10.020	281.560		
946+00			7.6	

R		L	
$\frac{140}{100}$	$\frac{106}{100}$		
$\frac{87}{100}$	$\frac{39}{100}$	$\frac{11}{72}$	$\frac{102}{100}$
$\frac{82}{100}$	$\frac{32}{100}$	$\frac{94}{72}$	$\frac{112}{60}$
$\frac{72}{100}$	$\frac{50}{100}$	$\frac{119}{50}$	$\frac{127}{300}$ ← Flow line
$\frac{49}{100}$	$\frac{48}{100}$	$\frac{68}{50}$	$\frac{76}{300}$ ← Top of Culvert
$\frac{47}{100}$	$\frac{48}{100}$		
$\frac{37}{100}$	$\frac{36}{100}$	$\frac{42}{20}$	
$\frac{01}{100}$	$\frac{29}{100}$	$\frac{37}{32}$	
$\frac{00}{100}$	$\frac{26}{100}$	$\frac{21}{40}$	
$\frac{00}{63}$	$\frac{42}{100}$	$\frac{41}{20}$	
$\frac{57}{100}$	$\frac{20}{100}$	$\frac{78}{72}$	



Sta	+	T	-	Elev.
		281.560		
946+74.5	12" concrete culvert,	3.5		
+59	should be before 946+74.5	4.5		
+84	P.I.	3.0		
947+00		1.7		
T.P.		1.015	280.545	
	10.321	290.866		
948+00		4.2		
T.P.		0.777	290.089	
	10.339	300.428		
949+00		7.2		
+15	P.I.	5.0		
+30		5.2		
T.P. + B.M.		0.769	299.659	
	11.075	310.754		
950+00		10.7		
+46	12" concrete culvert	7.1		
+49		7.0		

Flowline	$\frac{49}{20}$	$\frac{62}{170}$	
	$\frac{00}{85}$	$\frac{43}{30}$	$\frac{45}{100}$
	$\frac{00}{35}$	$\frac{28}{100}$	
	$\frac{00}{75}$	$\frac{19}{50}$	$\frac{16}{100}$
	$\frac{42}{100}$	$\frac{43}{35}$	$\frac{46}{100}$
	$\frac{42}{100}$	$\frac{57}{60}$	$\frac{71}{40}$
	$\frac{65}{100}$	$\frac{55}{50}$	$\frac{82}{100}$
	$\frac{28}{100}$	$\frac{55}{50}$	$\frac{46}{100}$
10' h Sta 949+58			2 X 2 Hub
	$\frac{72}{100}$	$\frac{82}{55}$	$\frac{102}{25}$
			$\frac{101}{100}$
Flowline	$\frac{100}{90}$	$\frac{130}{150}$	
	$\frac{93}{100}$	$\frac{73}{30}$	$\frac{77}{100}$

Sta	+	$\pi$	-	Elev.
		310.754		
950+69	P.I.		6.1	
	+89		4.6	
951+00			4.1	
	T.P.		0.625	310.129
	10.873	321.002		
952+00			7.8	
	+54		4.0	
	+74	P.I.	2.6	
	T.P.		1.051	319.951
	7.155	327.106		
953+00			7.8	
954+00			5.4	
955+00			3.7	
			0.575	326.531
	6.300	332.831		
956+00			7.3	
	+47		5.6	

$\frac{63}{100}$	$\frac{75}{80}$	$\frac{76}{70}$	$\frac{59}{100}$
$\frac{68}{100}$	$\frac{64}{80}$	$\frac{49}{70}$	$\frac{50}{100}$
	$\frac{58}{100}$	$\frac{44}{50}$	$\frac{44}{100}$
	$\frac{51}{100}$	$\frac{57}{30}$	$\frac{43}{100}$
	$\frac{30}{100}$	$\frac{50}{70}$	$\frac{35}{60}$
		$\frac{31}{100}$	$\frac{00}{70}$
$\frac{63}{100}$	$\frac{83}{70}$	$\frac{75}{50}$	$\frac{61}{100}$
$\frac{53}{100}$	$\frac{53}{95}$	$\frac{52}{50}$	$\frac{70}{100}$
	$\frac{37}{100}$	$\frac{63}{50}$	$\frac{74}{100}$
		$\frac{25}{100}$	$\frac{63}{100}$
$\frac{21}{100}$	$\frac{61}{60}$	$\frac{45}{100}$	

Sta	+	$\pi$	Elek.
		332.831	
956+00	P.I.		5.1
957+00			5.7
958+00			8.4
T.P.		8.275	324.556
	2.535	327.091	
959+00			5.9
960+00			11.5
T.P.		11.155	315.936
	0.697	316.633	
961+00			7.8
+28 P.I.			9.7
+48			11.4
T.P.		11.625	305.008
	1.659	306.667	
962+00			5.0
963+00			12.0
T.P.		11.308	295.359
	1.646	297.005	

$$\frac{52}{100} \frac{45}{25} \frac{108}{100}$$

$$\frac{28}{100} \frac{61}{75} \frac{50}{80} \frac{55}{100}$$

$$\frac{02}{72} \frac{62}{35} \frac{72}{100}$$

$$\frac{00}{72} \frac{56}{40} \frac{56}{100}$$

$$\frac{72}{100} \frac{28}{92} \frac{115}{65} \frac{112}{72} \frac{142}{100}$$

$$\frac{00}{72} \frac{71}{45} \frac{75}{100}$$

$$\frac{00}{80} \frac{93}{25} \frac{92}{100}$$

$$\frac{00}{72} \frac{112}{32} \frac{108}{100}$$

$$\frac{00}{63} \frac{50}{40} \frac{46}{100}$$

$$\frac{00}{82} \frac{89}{35} \frac{116}{35} \frac{113}{100}$$

Apr 15<sup>th</sup>

Simpson - Inst  
Reynolds - Rod  
Isbell - "

Sta	+ T	- Elev
	297.005	
964+00		9.9
+10 P.I.		10.5
T.P.		11.700
	1.833	287.138
964+25		1.6
965+00		5.8
B. M.		5.76
		281.962
966+00		9.3
T.P.		8.880
	2.159	280.417
967+00		6.5
+29 P.I.		7.3
+54		8.3
968+00		9.8
T.P.		9.953
	2.477	272.941
969+00		5.3

$\frac{0^{\circ}}{92}$   $\frac{91^{\circ}}{42}$   $\frac{82^{\circ}}{102}$

$\frac{0^{\circ}}{102}$   $\frac{105^{\circ}}{52}$   $\frac{96^{\circ}}{92}$   $\frac{102^{\circ}}{102}$

$\frac{0^{\circ}}{42}$   $\frac{15^{\circ}}{33}$   $\frac{0^{\circ}}{102}$

$\frac{0^{\circ}}{61}$   $\frac{36^{\circ}}{42}$   $\frac{51^{\circ}}{82}$   $\frac{62^{\circ}}{102}$

10' R Sta 965+00 2x2 Hub

$\frac{0^{\circ}}{92}$   $\frac{92^{\circ}}{52}$   $\frac{21^{\circ}}{92}$   $\frac{92^{\circ}}{102}$

$\frac{0^{\circ}}{52}$   $\frac{58^{\circ}}{32}$   $\frac{51^{\circ}}{102}$

$\frac{0^{\circ}}{72}$   $\frac{72^{\circ}}{32}$   $\frac{69^{\circ}}{82}$   $\frac{85^{\circ}}{102}$

$\frac{0^{\circ}}{82}$   $\frac{83^{\circ}}{42}$   $\frac{78^{\circ}}{82}$   $\frac{95^{\circ}}{102}$

$\frac{0^{\circ}}{102}$   $\frac{102^{\circ}}{52}$   $\frac{92^{\circ}}{72}$   $\frac{710^{\circ}}{82}$   $\frac{122^{\circ}}{102}$

$\frac{0^{\circ}}{82}$   $\frac{52^{\circ}}{72}$   $\frac{47^{\circ}}{72}$   $\frac{72^{\circ}}{102}$

Sta	+	T	-	Elev.
		272.941		
970+00			6.5	
+05	P.I.		6.4	
+20			6.8	
T.P.		6.153		266.788
	2.530	269.318		
970+60			3.4	
+80	P.I.		3.1	
971+00			4.5	
		11.217		258.101
	0.254	258.355		
972+00			0.5	
973+00			7.9	
+31			10.1	
+56	P.I.		12.0	
		12.095		246.260
	1.786	248.046		

$\frac{00}{87}$	$\frac{66}{45}$	$\frac{65}{85}$	$\frac{71}{102}$
$\frac{00}{85}$	$\frac{67}{55}$	$\frac{62}{92}$	$\frac{70}{102}$
$\frac{00}{75}$	$\frac{68}{35}$	$\frac{66}{102}$	
$\frac{00}{92}$	$\frac{38}{80}$	$\frac{27}{102}$	
	$\frac{40}{102}$	$\frac{32}{32}$	$\frac{73}{102}$
	$\frac{53}{102}$	$\frac{49}{102}$	
$\frac{00}{33}$	$\frac{02}{30}$	$\frac{01}{102}$	
$\frac{00}{62}$	$\frac{80}{40}$	$\frac{76}{102}$	
$\frac{00}{95}$	$\frac{107}{45}$	$\frac{97}{102}$	
$\frac{25}{102}$	$\frac{119}{53}$	$\frac{113}{102}$	

Sta	+	$\pi$	-	Elev.
		248.046		
973+01			2.8	
974+00			3.2	
+20			4.1	
+39	P.I.		4.8	
+59			4.6	
975+00			5.0	
+18			5.3	
+38			5.4	
976+00			4.9	
+20			4.7	
+40	P.I.		4.5	
+60			4.4	
T.P.			4.260	243.786

$$\frac{27}{100} \quad \frac{25}{60} \quad \frac{50}{100}$$

$$\frac{37}{100} \quad \frac{35}{30} \quad \frac{104}{53} \quad \frac{117}{100}$$

$$\frac{44}{100} \quad \frac{41}{100}$$

$$\frac{124}{100} \quad \frac{122}{70} \quad \frac{75}{50} \quad \frac{50}{20} \quad \frac{45}{100}$$

$$\frac{49}{100} \quad \frac{52}{95} \quad \frac{66}{100}$$

$$\frac{54}{100} \quad \frac{48}{50} \quad \frac{76}{100}$$

$$\frac{09}{60} \quad \frac{52}{35} \quad \frac{51}{100}$$

$$\frac{04}{40} \quad \frac{52}{40} \quad \frac{53}{100}$$

$$\frac{00}{60} \quad \frac{50}{35} \quad \frac{42}{100}$$

$$\frac{00}{50} \quad \frac{40}{30} \quad \frac{44}{100}$$

$$\frac{00}{40} \quad \frac{45}{25} \quad \frac{44}{100}$$

$$\frac{00}{50} \quad \frac{43}{40} \quad \frac{43}{100}$$

Sta	+	X	-	Elev.
				243.786
B.M.	5.967	249.753		
			6.365	243.388
977+00			5.8	
+60			4.9	
+81	F.I.		4.4	
978+00			4.4	
T.P.			2.405	247.398
	5.705	253.053		
+50			7.2	
+77	F.I.		6.3	
979+00			6.0	
+33	12" Concrete Culvert		5.7	
980+00			4.7	
981+00			3.0	
T.P.			2.410	250.643

13' R 976+39 2x2 HUB

$\frac{00}{52}$   $\frac{50}{32}$   $\frac{55}{102}$

$\frac{00}{92}$   $\frac{51}{72}$   $\frac{48}{72}$   $\frac{55}{102}$

$\frac{49}{102}$   $\frac{45}{32}$   $\frac{92}{102}$

$\frac{00}{82}$   $\frac{48}{62}$   $\frac{42}{102}$

$\frac{00}{52}$   $\frac{72}{12}$   $\frac{62}{102}$

$\frac{00}{102}$   $\frac{64}{52}$   $\frac{58}{102}$

$\frac{02}{52}$   $\frac{61}{32}$   $\frac{57}{102}$

$\frac{82}{32}$   $\frac{99}{182}$

$\frac{06}{102}$   $\frac{44}{52}$   $\frac{46}{92}$   $\frac{51}{102}$

$\frac{00}{72}$   $\frac{38}{42}$   $\frac{25}{102}$

Flowline →

Sta	+	π	-	Elev
	7.373	258.016		250.643
981+50			6.6	
+77	P.I.		6.8	
982+00			5.6	
983+00			3.7	
	7.244	262.437	2.823	255.193
+65			7.3	
+89	P.I.		6.7	
984+00			6.4	
985+00			4.2	
+18	12" Concrete Culvert		4.2	
	6.048	264.945	3.540	258.877

$\frac{00}{85}$	$\frac{67}{60}$	$\frac{64}{100}$	
$\frac{00}{62}$	$\frac{42}{40}$	$\frac{64}{20}$	$\frac{64}{100}$
$\frac{00}{35}$	$\frac{52}{45}$	$\frac{54}{100}$	
$\frac{00}{75}$	$\frac{38}{50}$	$\frac{35}{80}$	$\frac{52}{100}$
$\frac{15}{100}$	$\frac{40}{35}$	$\frac{64}{100}$	
$\frac{20}{100}$	$\frac{37}{95}$	$\frac{63}{40}$	$\frac{60}{100}$
$\frac{02}{95}$	$\frac{36}{95}$	$\frac{62}{45}$	$\frac{60}{100}$
$\frac{00}{55}$	$\frac{42}{40}$	$\frac{38}{100}$	
		$\frac{67}{30}$	$\frac{7}{212}$

Flowline →



Sta	+ T	- Elev.
	264.945	
986+00		6.0
987+00		5.3
+11 P.I.		5.0
+26		5.0
988+00		3.7
T.P. + B.M.	2.259	262.686
	5.001	267.687
989+00		4.7
990+00		5.5
+63 <sup>±</sup> 12" Concrete Culvert		6.2
991+00		5.9
T.P.	4.986	262.701
	11.592	273.293
991+80		9.9

$\frac{0.0}{92}$	$\frac{6.0}{42}$	$\frac{5.5}{102}$
$\frac{0.0}{92}$	$\frac{5.0}{62}$	$\frac{5.2}{92}$ $\frac{5.6}{102}$
$\frac{0.0}{100}$	$\frac{5.4}{68}$	$\frac{5.3}{92}$ $\frac{5.8}{102}$
$\frac{0.0}{78}$	$\frac{5.1}{52}$	$\frac{4.9}{102}$
$\frac{0.0}{65}$	$\frac{2.5}{43}$	$\frac{3.1}{102}$
10' R. 988+50 2 X 2 Hub		
$\frac{0.0}{83}$	$\frac{4.7}{32}$	$\frac{4.2}{102}$
$\frac{0.0}{92}$	$\frac{5.6}{33}$	$\frac{4.9}{102}$
	$\frac{9.0}{52}$	$\frac{10.4}{165}$
$\frac{0.0}{92}$	$\frac{5.9}{43}$	$\frac{5.4}{102}$
$\frac{2.5}{102}$	$\frac{9.9}{32}$	$\frac{9.0}{102}$

Flow line

Sta	+	X	-	Elev.
		273.293		
9992+00	P.I.		9.2	
9992+20			7.9	
9993+00			3.6	
9993+23			2.1	
9993+43	P.I.		1.0	
9993+63			0.2	
T.P.		0.581		272.712
9994+00	10.000	282.712		
9994+00			7.8	
9995+00			4.0	
9995+75	T.R. + B.M.		0.808	281.904
	9.604	291.508		
9995+54			10.2	

$$\frac{22}{100} \quad \frac{90}{90} \quad \frac{86}{100}$$

$$\frac{05}{100} \quad \frac{79}{40} \quad \frac{72}{100}$$

$$\frac{00}{60} \quad \frac{36}{40} \quad \frac{30}{100}$$

$$\frac{00}{90} \quad \frac{24}{40} \quad \frac{20}{90} \quad \frac{26}{100}$$

$$\frac{15}{100} \quad \frac{17}{40} \quad \frac{57}{100}$$

$$\frac{00}{90} \quad \frac{03}{85} \quad \frac{01}{80} \quad \frac{14}{100}$$

$$\frac{34}{100} \quad \frac{80}{50} \quad \frac{76}{100}$$

$$\frac{53}{100} \quad \frac{43}{70} \quad \frac{51}{90} \quad \frac{69}{100}$$

$\frac{100}{120} \leftarrow \leftarrow 2 \times 2$  Arch Culvert Flowline  $\rightarrow \rightarrow \frac{125}{120}$

10' R Sta 995+75 2x2 Hub

$$\frac{51}{100} \quad \frac{71}{40} \quad \frac{100}{100}$$

Sta	+	T	-	Elev.
		291.508		
995+71	P.I.		1.2	
996+00			8.3	
+82			1.5	
+97	P.I.		3.9	
997+00			3.9	
998+00			6.4	
T.P.			6.425	285.083
	0.997	286.080		
999+00			5.9	
+25			7.4	
+56	P.I.		8.9	
+75			10.5	
			11.522	274.558
	1.312	275.870		

$\frac{13}{100}$	$\frac{49}{25}$	$\frac{97}{100}$
$\frac{33}{100}$	$\frac{58}{80}$	$\frac{79}{20}$
$\frac{85}{100}$	$\frac{79}{20}$	$\frac{85}{100}$
$\frac{00}{60}$	$\frac{43}{30}$	$\frac{38}{100}$
$\frac{00}{80}$	$\frac{40}{45}$	$\frac{34}{100}$
$\frac{00}{70}$	$\frac{40}{50}$	$\frac{34}{100}$
$\frac{00}{84}$	$\frac{64}{40}$	$\frac{65}{100}$
$\frac{00}{80}$	$\frac{64}{40}$	$\frac{59}{100}$
$\frac{00}{100}$	$\frac{76}{40}$	$\frac{73}{100}$
$\frac{12}{100}$	$\frac{16}{80}$	$\frac{93}{30}$
$\frac{87}{100}$	$\frac{87}{30}$	$\frac{87}{100}$
$\frac{55}{100}$	$\frac{106}{50}$	$\frac{105}{100}$

Apr 16<sup>th</sup>

Simpson - Inst  
 Reynolds - Rod  
 Isbell - "

Sta	+	T	-	Elev.
				275.870
1000+00			2.0	
+59			6.2	
T.P.			12.711	263.159
	8.876			272.035
1000+79	P.I.		3.8	
1001+00			5.6	
		8.876		263.159
	0.666			263.825
+78 <sup>3</sup>	12' Concrete Culvert.		3.0	
1002+00			5.4	
1003+00			12.1	
			12.921	252.904
	0.438			253.342
+40			7.0	
+59	P.I.		5.6	

$\frac{0.9}{60}$	$\frac{2.5}{40}$	$\frac{1.8}{100}$
$\frac{2.9}{100}$	$\frac{6.8}{70}$	$\frac{5.8}{100}$
	$\frac{4.5}{100}$	$\frac{3.5}{100}$
$\frac{2.3}{100}$	$\frac{6.0}{60}$	$\frac{5.2}{100}$
	Flow line $\rightarrow$	$\frac{5.5}{70}$
		$\frac{7.1}{160}$
$\frac{1.6}{100}$	$\frac{2.5}{60}$	$\frac{5.5}{70}$
		$\frac{5.8}{100}$
$\frac{4.0}{100}$	$\frac{8.7}{80}$	$\frac{12.3}{70}$
		$\frac{11.8}{100}$
$\frac{0.0}{80}$	$\frac{4.0}{20}$	$\frac{3.8}{100}$
$\frac{0.0}{70}$	$\frac{5.4}{10}$	$\frac{5.6}{100}$

Sta	+	X	-	Elev
		253.342		
1003+80			7.0	
1004+00			8.7	
+47			12.0	
			12.626	240.716
T.P.	1.405	242.121		
+67	P.I.		1.9	
1005+00			4.5	
+79			8.9	
1006+00			10.0	
+05	P.I.		4.9	
+20			11.5	
T.P.			12.897	229.224
	0.412	229.636		
1007+00			5.3	

$$\frac{2.7}{100} \quad \frac{7.0}{40} \quad \frac{6.0}{100}$$

$$\frac{3.1}{100} \quad \frac{3.9}{80} \quad \frac{8.9}{50} \quad \frac{8.1}{100}$$

$$\frac{7.2}{100} \quad \frac{13.0}{53} \quad \frac{11.1}{100}$$

$$\frac{2.7}{100} \quad \frac{1.7}{80} \quad \frac{2.2}{100}$$

$$\frac{0.0}{72} \quad \frac{4.7}{40} \quad \frac{3.6}{100}$$

$\frac{12.6}{30}$  ← Flow line 14" Concrete Culvert →  $\frac{15.9}{190}$

$$\frac{5.2}{100} \quad \frac{10.4}{700}$$

$$\frac{5.6}{100} \quad \frac{10.7}{100}$$

$$\frac{6.0}{100} \quad \frac{11.5}{100}$$

$$\frac{0.9}{100} \quad \frac{1.1}{90} \quad \frac{5.1}{25} \quad \frac{5.1}{100}$$

Sta	+	-	Elev.
			229.636
1008+00		12.4	
		12.270	217.366
	0.644		218.010
+39		3.2	
+59 P.I.		5.0	
+79		6.7	
1009+00		8.2	
T.P.		12.714	205.296
	0.475		205.771
1010+00		2.8	
1011+00		9.1	
		12.322	193.449
	2.776		196.225
+42		5.2	
+62 P.I.		6.9	

$\frac{81}{102}$	$\frac{117}{32}$	$\frac{120}{102}$
	$\frac{00}{82}$	$\frac{31}{102}$
$\frac{22}{102}$	$\frac{51}{27}$	$\frac{45}{102}$
$\frac{33}{102}$	$\frac{40}{82}$	$\frac{64}{102}$
$\frac{52}{102}$	$\frac{72}{42}$	$\frac{77}{102}$
$\frac{82}{102}$	$\frac{09}{42}$	$\frac{19}{102}$
	$\frac{98}{102}$	$\frac{89}{65}$ $\frac{109}{102}$
$\frac{22}{102}$	$\frac{22}{42}$	$\frac{62}{102}$
$\frac{39}{332}$	$\frac{51}{102}$	$\frac{92}{102}$

Sta	+	-	Elev
	196.225		
1011+76		6.1	
+85		3.9	
1012+00		5.1	
1013+00		10.	
T.P.	10.477	185.748	
	3.495	189.243	
1013+58		6.4	
+80		2.8	
1014+00		3.6	
+16	Bottom of Wash	11.5	
+39		3.9	
T.P.	0.948	188.295	
	12.520	200.815	
	0.952	199.863	XX
	12.101	211.964	

$$\frac{40}{332} \frac{36}{50} \frac{79}{102}$$

$$\frac{48}{182} \frac{75}{102}$$

$$\frac{51}{102} \frac{48}{102}$$

$$\frac{93}{102} \frac{105}{42} \frac{138}{102}$$

$$\frac{04}{102} \frac{67}{102}$$

$$\frac{00}{92} \frac{95}{102}$$

$$\frac{08}{102} \frac{103}{102}$$

$$\frac{53}{102} \frac{72}{102}$$

$$\frac{72}{102} \frac{79}{72} \frac{13}{102}$$

Sta	+	X	-	Elev.
		211.964		
1015+00			9.2	
T.P.			0.972	210.992
	11.055	222.047		
+37			7.5	
+50			5.8	
T.P.+B.M.			0.905	221.142
	9.742	230.884		
T.P.			1.060	229.824 X
	11.272	241.006		
1016+00			7.6	
T.P.			0.774	240.322
	11.078	251.400		
T.P.			0.742	250.658
	11.124	261.812		
T.P.			0.463	261.349
	12.086	273.435		
1019+00			9.6	
T.P.			0.520	272.915
	11.717	284.632		

$$\frac{114}{100}$$

$$\frac{62}{100}$$

$$\frac{100}{100}$$

$$\frac{73}{100}$$

$$\frac{61}{100}$$

$$\frac{6}{100}$$

30' Sta 1015+52 2 X 2 Hub

$$\frac{94}{100}$$

$$\frac{66}{100}$$

$$\frac{110}{100}$$

$$\frac{70}{100}$$



Sta	+	X	-	Elev
		284.632		
T.P.			0.788	283.844
	11.290	295.134		
T.P.			0.886	294.248
	11.127	305.375		
1018+00			11.1	
T.P.			1.039	304.286
	12.096	316.332		
1019+00			2.7	
T.P.			1.168	315.214
	11.964	326.678		
T.P.			0.950	325.728
	11.643	337.371		
1020+00			8.0	
T.P.			1.229	336.142 X
	11.835	347.977		
+82			2.8	
1021+00			1.4	
			0.849	347.128
	3.503	350.631		

$$\frac{131}{100}$$

$$\frac{88}{100}$$

$$\frac{42}{100}$$

$$\frac{02}{100}$$

$$\frac{92}{100}$$

$$\frac{63}{100}$$

$$\frac{35}{100}$$

$$\frac{21}{100}$$

$$\frac{18}{100}$$

$$\frac{08}{100}$$

Sta	+	∓	-	Elev.
		350.631		
1021+80			4.7	
1022+00			7.7	
T.P.			12.067	338.564
	2.732	341.276		
T.P. + B.M.			11.187	330.109
	1.957	332.066		
T.P.			11.737	320.329
	2.499	322.828		
1023+00			8.9	
T.P.			11.567	311.261
	1.913	313.173		
T.P.			11.806	301.367
	1.032	302.379		
T.P.			11.505	290.874
	1.671	291.965		
1024+00			4.8	
T.P.			11.486	280.479
	2.563	283.042		
T.P.			11.329	271.713
	1.011	272.724		

8

$\frac{50}{100}$      $\frac{48}{100}$

$\frac{86}{100}$      $\frac{72}{100}$

10' Sta 1022+40 2 x 2 Hub

$\frac{98}{100}$      $\frac{78}{100}$

$\frac{52}{100}$      $\frac{36}{100}$

Apr. 17

SIMPSON-Inst.  
REYNOLDS-Rod  
Isbell—" "

Sta	+	∩	-	Elev.
		272.924		
T.P.			11.828	260.876 ✓
	3.957	264.853		
1025+00			7.3	
T.P.			11.758	253.075
	2.984	256.079		
T.P.			11.335	244.744
	0.918	245.662		
T.P.			11.632	234.030
	0.832	234.862		
1025+90	Bottom of Wash		11.0	
1026+00			8.1	
T.P.			0.889	234.023
	12.313	246.336		
T.P.			0.259	246.077
	9.083	235.160		
1027+00			1.4	
T.P.			0.362	254.798
	9.783	264.581		
1027+30			4.9	

$$\frac{76}{100}$$

$$\frac{66}{100}$$

$$\frac{97}{100}$$

$$\frac{107}{100}$$

$$\frac{55}{100}$$

$$\frac{100}{100}$$

$$\frac{02}{100}$$

$$\frac{40}{100}$$

$$\frac{29}{100}$$

$$\frac{72}{100}$$

Apr 19<sup>th</sup>

Simpson  
Reynolds  
Isbell  
Inst.  
Rod.  
"

Sta	+	π	-	Elev
		264.581		
1027+58			3.5	
1028+00			9.7	
T.P.		11.581	253.000	
	4.215	257.215		
T.P.		11.625	245.587	
	2960	248.547		
1028+47	P.O.T.		4.4	
T.P.		11.190	237.357	
	2.509	239.866		
T.P.		11.510	228.156	
	1.082	239.238		
1029+00			3.2	
T.P.+B.M.		11.370	217.868	
	2.425	220.293		
T.P.		11.864	208.429	
	3.124	211.555		
T.P.		11.235	200.320	
	2.798	203.118		
T.P.		11.310	191.808	
	1.890	193.698		

$\frac{21}{100}$      $\frac{33}{100}$

$\frac{86}{100}$      $\frac{110}{100}$

$\frac{27}{100}$      $\frac{61}{100}$

$\frac{32}{100}$      $\frac{33}{100}$

2<sup>nd</sup> Sta 1029+18    2x2 Hvb.

Sta.	+	$\pi$	-	Elek.
		193.678		
1030+00			3.1	
+33			6.2	
+36			8.3	
+45			8.8	
+46			5.9	
+74			3.5	
T.P.	1		0.809	192.889
	12.780	205.669		
T.P.			0.346	205.323
	9.510	214.833		
1031+00			10.4	
T.P.			0.320	214.513
	8.851	223.364		
1031+40			7.6	
1032+00			4.1	

$\frac{c}{\pi}$	
$\frac{2.7}{100}$	$\frac{3.2}{100}$
$\frac{6.0}{100}$	$\frac{7.1}{50}$ $\frac{8.9}{100}$
$\frac{5.8}{100}$	$\frac{8.2}{100}$
$\frac{7.9}{100}$	$\frac{8.0}{100}$
$\frac{8.0}{100}$ $\frac{8.8}{55}$	$\frac{6.1}{50}$ $\frac{6.1}{100}$
	$\frac{3.4}{100}$ $\frac{3.8}{100}$
$\frac{11.7}{100}$	$\frac{9.7}{100}$
$\frac{8.0}{100}$	$\frac{8.0}{100}$
$\frac{3.9}{100}$	$\frac{5.0}{100}$

Sta +  $\pi$  - Elev.

223.364

21032 + 52<sup>75</sup>

4.4

B.M. - Sta 1032 + 52<sup>75</sup> - P.I. Hub 4.337 219.027

$\frac{27}{102}$

$\frac{60}{102}$

Record Elev. 218.543 Bissels line

Sum

Sum

St. I. T. = 1.1.

7.351 2.1.246

90.000 100.000

1.300 500

1.200 500

1.000 500

1.500 1.000

1.000 1.000

1.000 1.000

1.000 1.000

B.M's set in advance of Transit  
Party from Sta. 835+00 -

	+	T	-	Elev.	
B.M# 90				319.590	
				T.P. stake	TP
0.150	319.740	6.629	313.111		
				TP rock in rd.	
1.070	314.181	10.424	303.757		
0.879	304.636	11.620	293.016	rock	
				TP	
.675	293.691	12.570	281.121	(rd)	
				TP	
.170	281.291	12.113	269.178	(rd)	
<sup>3.585</sup>					
3.585	272.763	12.814	259.949	BM # 90(A)	
			259.949		
12.431	272.380	3.822	268.558	TP	
7.932	276.490	7.162	269.328	F.P.	
1.582	270.910	10.390	260.520	BM. 90(B)	
			259.949		
12.363					

3957 ✓	11.758		
2784 ✓	11.335	260.896	
0.918 ✓	11.632	217.868	
0.832 ✓	0.839		
12.313 ✓	0.559	43.028	
9.023 ✓	0.362		
9.783 ✓	11.581		
4.215 ✓	11.628	2.425	11.864
2.960 ✓	11.190	3.126	11.235
2.309 ✓	11.510	2.798	11.310
1.082	11.370	1.890	0.809
50.436	43.464	1.890	0.346
	50.436	12.780	0.320
	43.028	9.512	4.337
		8.851	40.221
		41.380	
219.027		217.868	1.159
218.543		219.027	
484		<del>2.811</del>	
		41380	
		40.221	
		1.159	



MAY-8

## These Cross Sections

Sta	+	X	-	Elev.
		#		
		B.M. 97A	Sta. 902+75	251.665
	9.581	2.61.246		
901+272	B.C.		5.2	256.0
+37°			5.2	256.0
+47°			5.1	256.1
+57°			5.1	256.1
+67°			5.3	255.9
+77°			5.5	255.7
+87°			5.8	255.4
+93°	E.C.		6.0	255.2
902+00			6.4	254.8
+54° <sup>23</sup>	B.C.		8.5	252.7
+64° <sup>9</sup>			9.0	252.2

SIMPSON-INST.  
Isbell - Rod  
Andersen - "

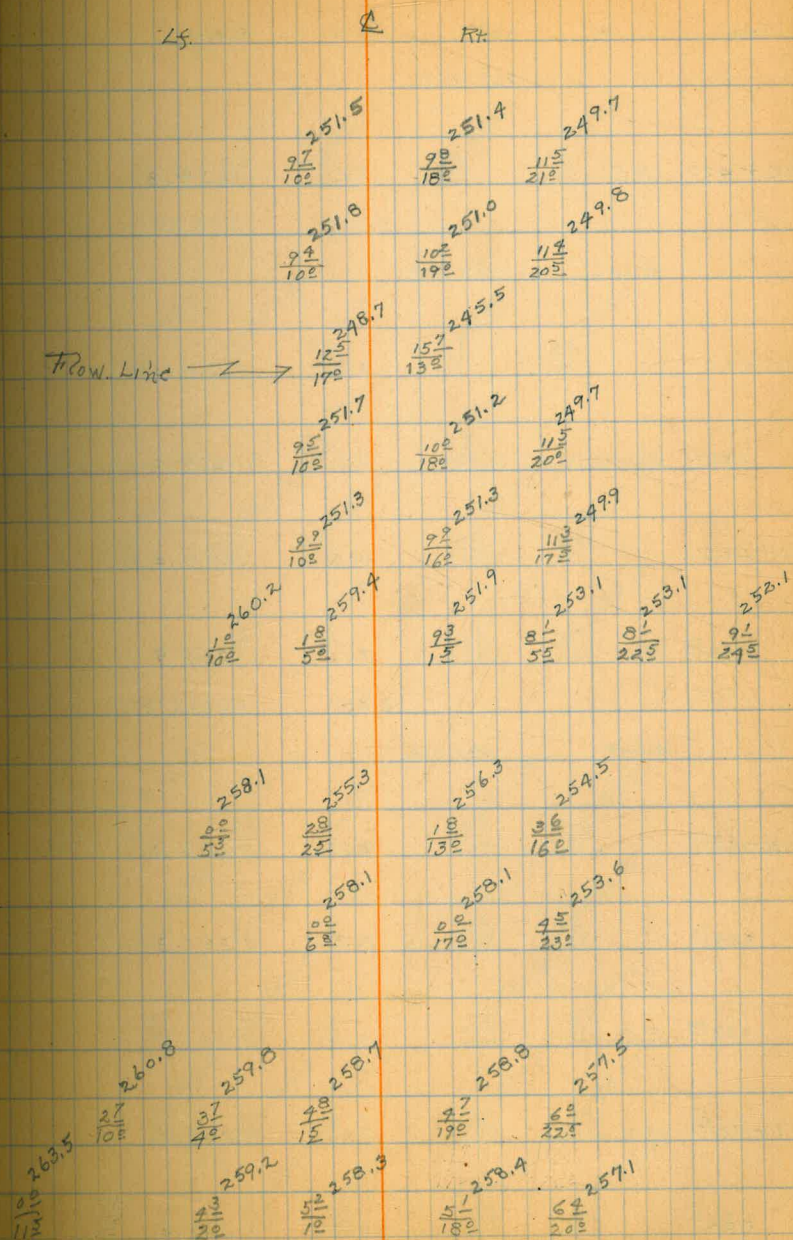
CHECK AND HOT.

## Copied in Book # 7

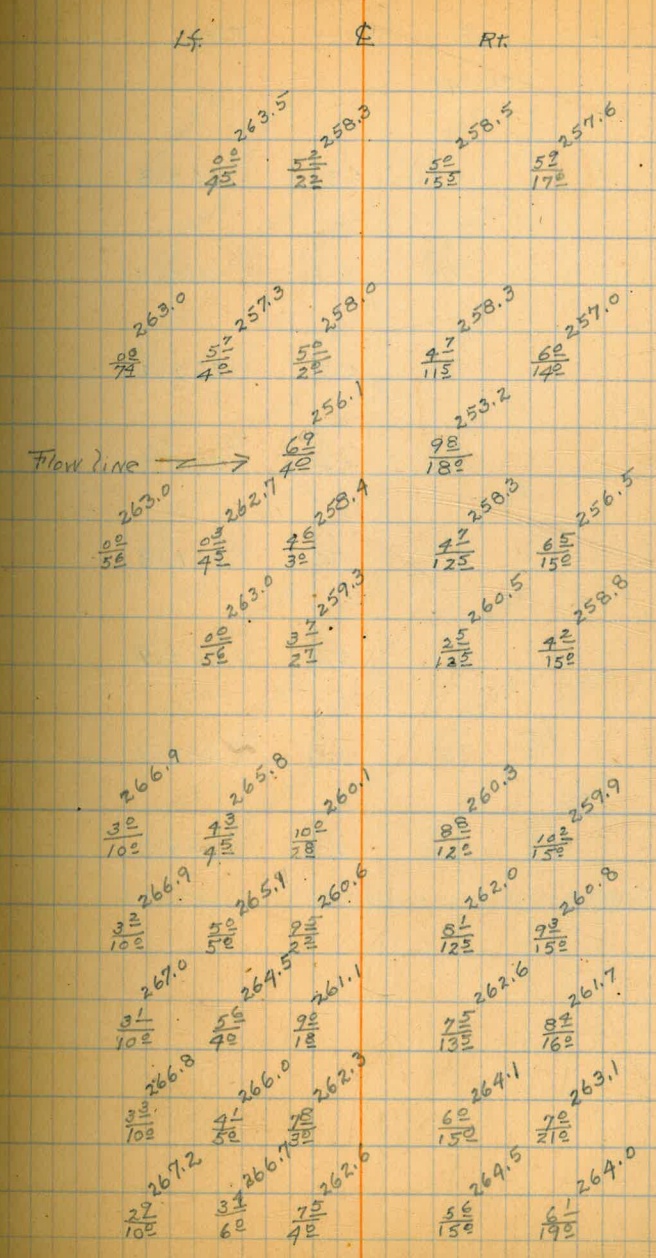
L.F.      Q      R.T.

$\frac{0.0}{9.7}$	$\frac{0.0}{5.3}$	$\frac{4.6}{10.2}$	$\frac{6.8}{18.0}$
261.2	255.9	256.6	259.4
$\frac{0.0}{7.2}$	$\frac{5.2}{2.5}$	$\frac{7.2}{14.0}$	$\frac{5.2}{16.5}$
261.2	256.0	257.0	255.8
$\frac{0.0}{5.2}$	$\frac{4.0}{3.0}$	$\frac{4.4}{14.5}$	$\frac{5.2}{16.5}$
261.2	256.3	257.1	256.0
$\frac{0.0}{7.7}$	$\frac{5.1}{3.0}$	$\frac{7.2}{15.2}$	$\frac{5.2}{18.5}$
261.2	256.1	257.0	257.8
$\frac{0.0}{6.2}$	$\frac{5.3}{7.0}$	$\frac{8.3}{17.2}$	$\frac{5.0}{20.0}$
261.2	255.9	256.9	256.2
$\frac{0.0}{6.7}$	$\frac{5.1}{5.0}$	$\frac{7.7}{20.0}$	$\frac{5.6}{23.0}$
261.2	256.1	256.8	255.6
$\frac{0.0}{7.1}$	$\frac{6.0}{5.0}$	$\frac{9.0}{21.0}$	$\frac{6.0}{29.0}$
261.2	255.2	256.1	255.2
$\frac{0.0}{7.2}$	$\frac{6.1}{7.0}$	$\frac{5.1}{23.0}$	$\frac{6.2}{29.0}$
261.2	255.1	256.1	255.0
$\frac{0.0}{8.5}$	$\frac{5.2}{6.5}$	$\frac{5.5}{24.0}$	$\frac{6.2}{27.0}$
261.2	256.1	255.7	254.3
$\frac{5.5}{14.5}$	$\frac{8.1}{12.0}$	$\frac{9.1}{19.0}$	$\frac{10.2}{18.0}$
255.7	253.1	252.1	250.8
$\frac{9.3}{10.0}$		$\frac{9.1}{17.5}$	$\frac{11.1}{20.0}$
251.9		252.1	250.1

Sta	+	π	-	Elev.
		261.246		
902+74 <sup>2</sup>			9.4	251.8
+84 <sup>2</sup>			9.7	251.5
+87 <sup>2</sup>	18" C.I.P. culvert, on curve.		9.7	251.5
+94 <sup>2</sup>			9.7	251.5
903+02 <sup>52</sup>	E.C.		9.8	251.4
904+00			6.4	254.8
T.P.			9.581	251.665
	6.451	258.116		
904+66 <sup>2</sup>	P.I.		2.0	256.1
905+00			0.3	257.8
T.P.			1.270	256.846
	6.631	263.477		
905+42 <sup>2</sup>	P.I.		9.6	258.9
906+00			5.1	258.4



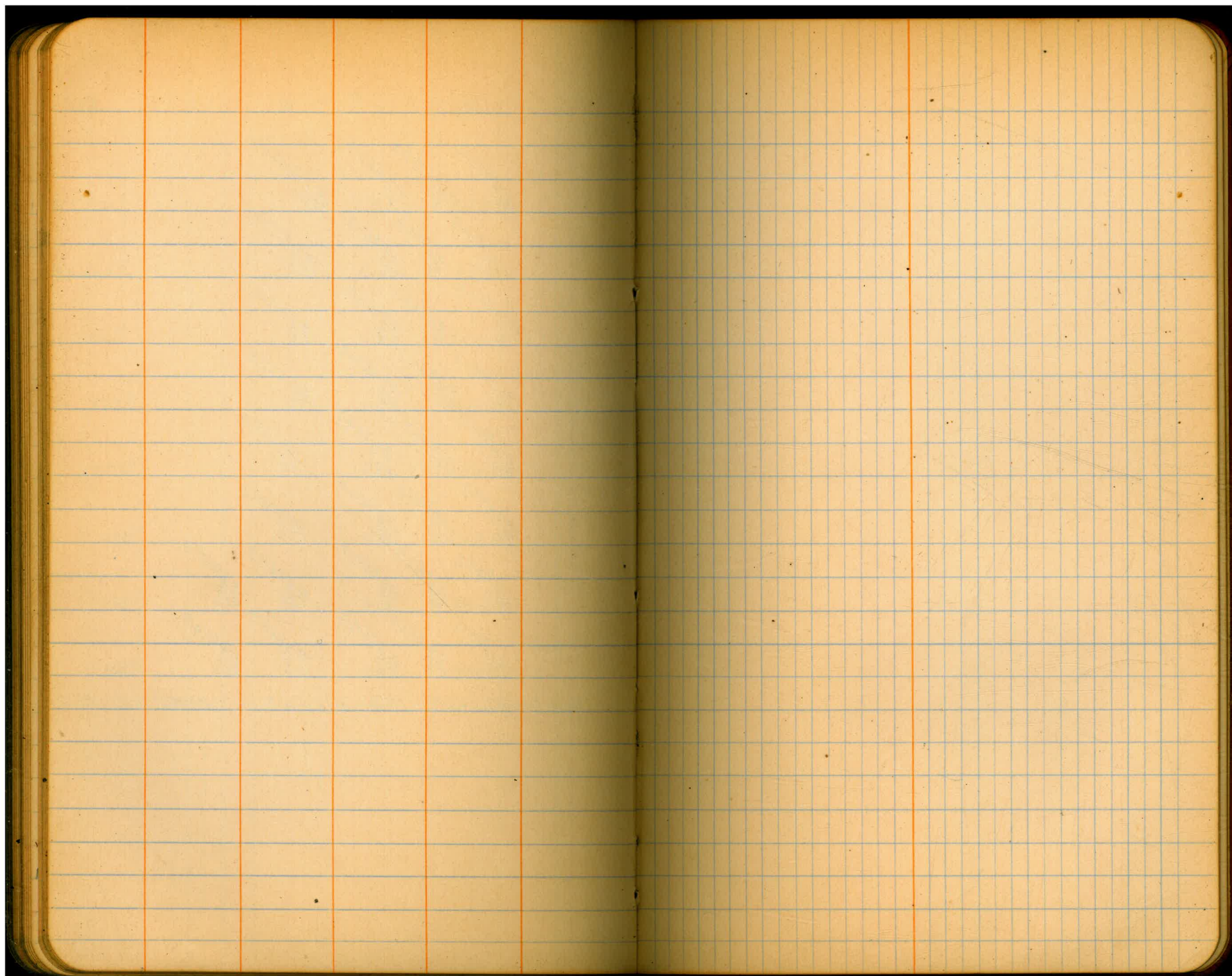
Sta	+	T	-	Elev.
		263.477		
906+42	P.I.		5.2	258.3
	T.P.		5.192	258.285
	4703	262.988		
907+00			4.8	258.2
+59	12" Concrete Culvert		5.0	258.0
908+00			4.6	258.4
+78 <sup>68</sup>	B.C.		3.1	259.9
	T.P.		2.351	260.637
	9.509	270.146		
909+03 <sup>2</sup>			7.5	260.6
+28 <sup>7</sup>			8.8	261.3
+38 <sup>94</sup>	E.C.		8.6	261.5
909+72 <sup>52</sup>	B.C.		7.2	262.9
+82 <sup>5</sup>			6.7	263.4

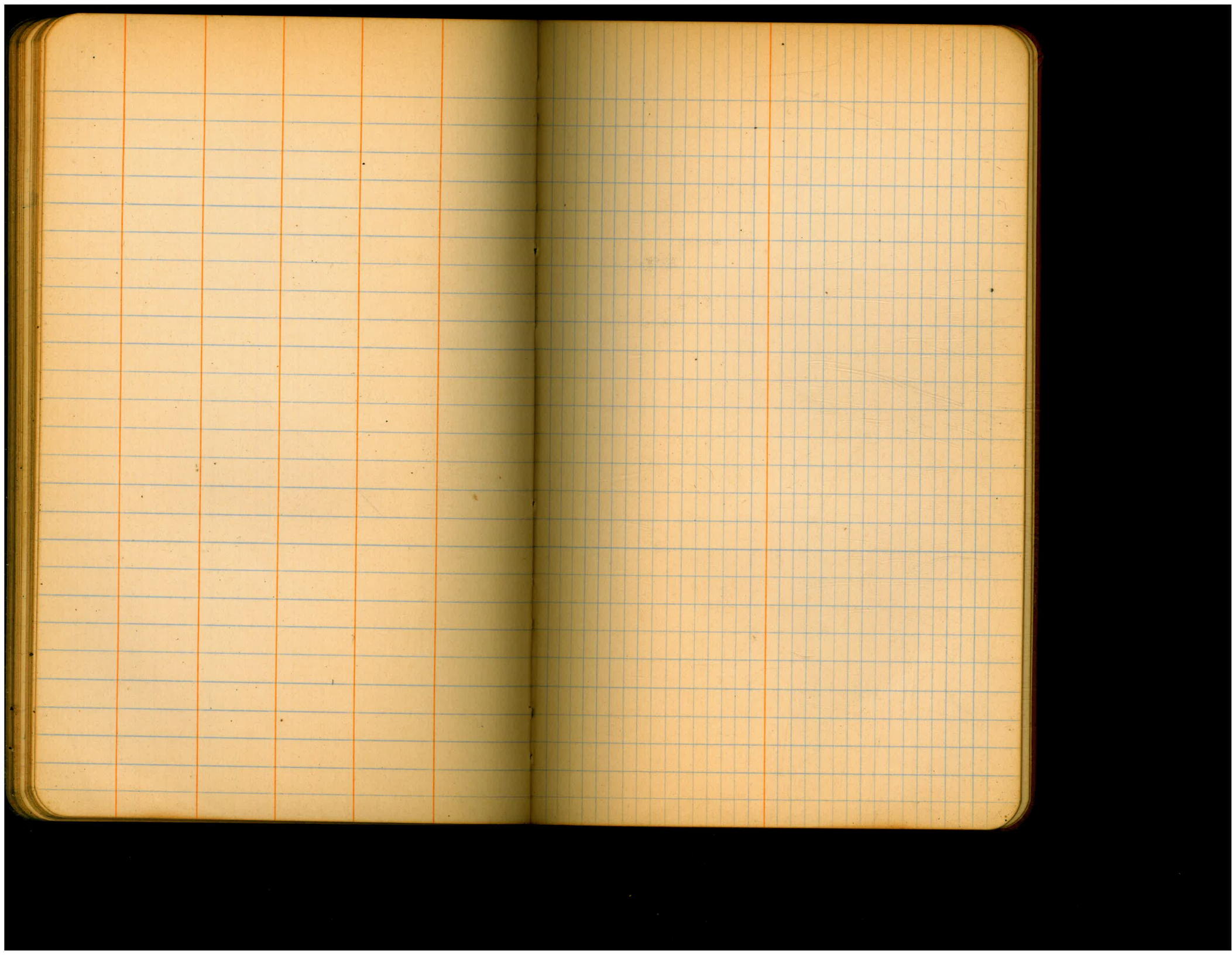


Sta	+ K	- Elev.
	270.146	
909+92.5	6.3	263.8
910+02.5	6.0	264.1
+12.5	5.7	264.4
+22.5	5.4	264.7
+32.5	5.3	264.8
+42.5	5.4	264.7
+52.5	5.4	264.7
+62.5	5.5	264.6
T.P. + B.M. # 97 B.	2.796	267.350

Lf.	Rt.
19 102	51 152
268.2	265.0
31 62	71 72
267.0	263.0
43 102	48 152
266.8	265.3
43 72	68 75
265.8	263.3
35 102	45 152
266.6	266.5
42 72	63 75
266.1	263.8
32 102	42 152
266.9	265.3
32 62	72 62
266.7	265.8
267.3	265.9
27 62	52 75
267.2	264.1
267.4	264.3
27 102	37 52
267.9	265.9
53 52	58 32
267.1	264.3
32 52	42 162
266.7	265.9
53 32	48 212
267.0	265.3
38 72	42 162
266.3	265.7
57 32	52 212
269.2	264.9

Hub Sta 910 + 37. - 7' L. Record Elev. 267.352





1.270

1.1751	0.731
6.651	10.216
6.761	10.448
0.961	11.385
0.643	11.457
0.392	11.605
0.096	12.041
1.247	11.101
0.852	1.335
10.578	0.575
<del>33.712</del>	<del>80.867</del>
	<del>38.712</del>
	46.952

318.472  
271.540  

---

46.952

T	π	-	Elev.
0.593	313.704		313.111
		9945	303.759
1.000	309.759		
		11.743	293.018

## DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope 1% to 1%. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body

## IMPROVED TABLES

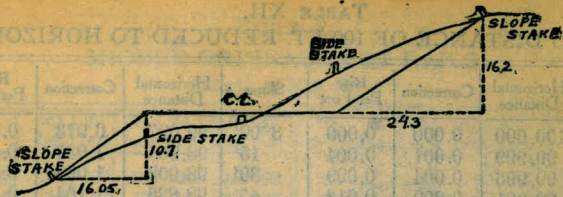
AND

## INFORMATION

To find Tangent and External for curve of any other degree, divide by degree of curve and add connection found in column of connections. Degree of curve with a given  $L$  may be found by dividing tangent (or external) opposite  $L$  by given tangent (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.





DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0 30	0 45	0 60	0 75	0 90	1 05	1 20	1 35	0
1	1 50	1 65	1 80	1 95	2 10	2 25	2 40	2 55	2 70	2 85	1
2	3 00	3 15	3 30	3 45	3 60	3 75	3 90	4 05	4 20	4 35	2
3	4 50	4 65	4 80	4 95	5 10	5 25	5 40	5 55	5 70	5 85	3
4	6 00	6 15	6 30	6 45	6 60	6 75	6 90	7 05	7 20	7 35	4
5	7 50	7 65	7 80	7 95	8 10	8 25	8 40	8 55	8 70	8 85	5
6	9 00	9 15	9 30	9 45	9 60	9 75	9 90	10 05	10 20	10 35	6
7	10 50	10 65	10 80	10 95	11 10	11 25	11 40	11 55	11 70	11 85	7
8	12 00	12 15	12 30	12 45	12 60	12 75	12 90	13 05	13 20	13 35	8
9	13 50	13 65	13 80	13 95	14 10	14 25	14 40	14 55	14 70	14 85	9
10	15 00	15 15	15 30	15 45	15 60	15 75	15 90	16 05	16 20	16 35	10
11	16 50	16 65	16 80	16 95	17 10	17 25	17 40	17 55	17 70	17 85	11
12	18 00	18 15	18 30	18 45	18 60	18 75	18 90	19 05	19 20	19 35	12
13	19 50	19 65	19 80	19 95	20 10	20 25	20 40	20 55	20 70	20 85	13
14	21 00	21 15	21 30	21 45	21 60	21 75	21 90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23 10	23 25	23 40	23 55	23 70	23 85	15
16	24 00	24 15	24 30	24 45	24 60	24 75	24 90	25 05	25 20	25 35	16
17	25 50	25 65	25 80	25 95	26 10	26 25	26 40	26 55	26 70	26 85	17
18	27 00	27 15	27 30	27 45	27 60	27 75	27 90	28 05	28 20	28 35	18
19	28 50	28 65	28 80	28 95	29 10	29 25	29 40	29 55	29 70	29 85	19
20	30 00	30 15	30 30	30 45	30 60	30 75	30 90	31 05	31 20	31 35	20
21	31 50	31 65	31 80	31 95	32 10	32 25	32 40	32 55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33 60	33 75	33 90	34 05	34 20	34 35	22
23	34 50	34 65	34 80	34 95	35 10	35 25	35 40	35 55	35 70	35 85	23
24	36 00	36 15	36 30	36 45	36 60	36 75	36 90	37 05	37 20	37 35	24
25	37 50	37 65	37 80	37 95	38 10	38 25	38 40	38 55	38 70	38 85	25
26	39 00	39 15	39 30	39 45	39 60	39 75	39 90	40 05	40 20	40 35	26
27	40 50	40 65	40 80	40 95	41 10	41 25	41 40	41 55	41 70	41 85	27
28	42 00	42 15	42 30	42 45	42 60	42 75	42 90	43 05	43 20	43 35	28
29	43 50	43 65	43 80	43 95	44 10	44 25	44 40	44 55	44 70	44 85	29
30	45 00	45 15	45 30	45 45	45 60	45 75	45 90	46 05	46 20	46 35	30
31	46 50	46 65	46 80	46 95	47 10	47 25	47 40	47 55	47 70	47 85	31
32	48 00	48 15	48 30	48 45	48 60	48 75	48 90	49 05	49 20	49 35	32
33	49 50	49 65	49 80	49 95	50 10	50 25	50 40	50 55	50 70	50 85	33
34	51 00	51 15	51 30	51 45	51 60	51 75	51 90	52 05	52 20	52 35	34
35	52 50	52 65	52 80	52 95	53 10	53 25	53 40	53 55	53 70	53 85	35
36	54 00	54 15	54 30	54 45	54 60	54 75	54 90	55 05	55 20	55 35	36
37	55 50	55 65	55 80	55 95	56 10	56 25	56 40	56 55	56 70	56 85	37
38	57 00	57 15	57 30	57 45	57 60	57 75	57 90	58 05	58 20	58 35	38
39	58 50	58 65	58 80	58 95	59 10	59 25	59 40	59 55	59 70	59 85	39
40	60 00	60 15	60 30	60 45	60 60	60 75	60 90	61 05	61 20	61 35	40
41	61 50	61 65	61 80	61 95	62 10	62 25	62 40	62 55	62 70	62 85	41
42	63 00	63 15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64 35	42
43	64 50	64 65	64 80	64 95	65 10	65 25	65 40	65 55	65 70	65 85	43
44	66 00	66 15	66 30	66 45	66 60	66 75	66 90	67 05	67 20	67 35	44
45	67 50	67 65	67 80	67 95	68 10	68 25	68 40	68 55	68 70	68 85	45
46	69 00	69 15	69 30	69 45	69 60	69 75	69 90	70 05	70 20	70 35	46
47	70 50	70 65	70 80	70 95	71 10	71 25	71 40	71 55	71 70	71 85	47
48	72 00	72 15	72 30	72 45	72 60	72 75	72 90	73 05	73 20	73 35	48
49	73 50	73 65	73 80	73 95	74 10	74 25	74 40	74 55	74 70	74 85	49
50	75 00	75 15	75 30	75 45	75 60	75 75	75 90	76 05	76 20	76 35	50

Computed by L. Leland Locke.

251.836  
251.627

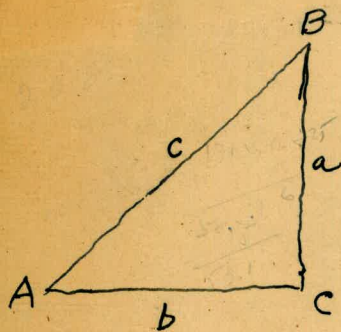
209

251760  
56.7

93

251738  
56.7

170



$$\frac{a}{c} = \sin A.$$

$$\frac{b}{c} = \cos A.$$

$$\frac{b}{a} = \tan A.$$

$$\frac{a}{b} = \cot A.$$