

PLANS SURVEY  
BRIDGE - CO. RD. "F"

0.57 miles East of Rice St.

CO. PROJ. 24-61

ROAD %c 56

AND

CONSTRUCTION NOTES

of Ramsay Co. Engineer  
ST. PAUL, MINN.

Date Filed 8-21-24

File No. 10 (24-61)

Proj. 24-61  
Road #56  
Bridge Survey.  
County Road "F"

0.57 Miles E. of Rice St.

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Office of Ramsey Co. Engineer  
ST. PAUL, MINN.  
Date Filed 8/21/24  
File No. "10" (24-61)

Station. Pt

50+34.19 Mo. n.  
(Assumed Stationing)

31+54.9 P.O.T.

30+15.4 E Culvert

27+73.7 P.O.T.

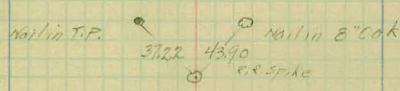
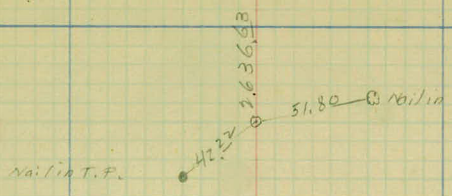
24+37.56 - Mo. n.  
(Assumed Stationing)

2437.56  
26 407  
20 149

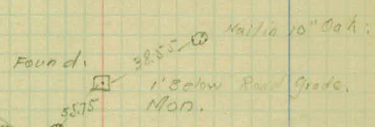
0+00 ( Mo. n.  
Assumed Sta.

Found. 5<sup>th</sup> Monemey

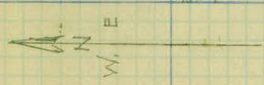
Mon.



sec. 19



sec. 30



2137.56  
E & Co. Rd. F.

W.H.C.  
Eck. Aug. 13, 1924  
Gavin  
Frooke

Found. Mon.

E & Rice St.

"A" + "B" Transit Lines  
for Creek Location +  
X-sections.

Road #56

X-Sections  
Channel Change

station	+	H.I	-	Elev.
B.M.	2.87	102.87 ✓		100.00 ✓

0+00 = '29+90 = 2 Co. Rd. 'F'

"B"

X-Sections on North Side Rd

0+00			6.4	96.5 ✓
------	--	--	-----	--------

0+10			6.7	96.2 ✓
------	--	--	-----	--------

T.P.	1.39	92.81 ✓	11.45	91.42 ✓
------	------	---------	-------	---------

0+33			10.0	82.8 ✓
------	--	--	------	--------

T.P.	8.78	91.33 ✓	10.26	82.55 ✓
------	------	---------	-------	---------

0+50			9.5	81.8 ✓
------	--	--	-----	--------

0+88			9.8	81.5 ✓
------	--	--	-----	--------

1+00 ✓			7.8	<del>82.5</del> 83.5
--------	--	--	-----	----------------------

1+30			6.8	<del>83.5</del> 84.5
------	--	--	-----	----------------------

1+42			9.6	81.7 ✓
------	--	--	-----	--------

1+90			11.0	80.3 ✓
------	--	--	------	--------

2+40			13.1	78.2 ✓
------	--	--	------	--------

T.P.	10.17	95.40 ✓	6.10	85.23 ✓
------	-------	---------	------	---------

T.P.	6.34	100.54 ✓	1.20	94.20 ✓
------	------	----------	------	---------

West      East

Nail in 12" Oak Rt. 28+3 ✓

W.H.G.  
Eck 8-15-24  
Calvin  
Franke  
Rain.

$\frac{45}{50}$        $\frac{64}{}$        $\frac{71}{25}$        $\frac{68}{50}$

$\frac{51}{50}$        $\frac{67}{0}$        $\frac{74}{25}$        $\frac{72}{50}$

$\frac{16}{40}$   $\frac{16}{30}$   $\frac{64}{21}$   $\frac{88}{10}$   $\frac{100}{}$   $\frac{100}{8}$   $\frac{113}{16}$   $\frac{130}{18}$   $\frac{145}{25}$   $\frac{130}{35}$

Both Creek

Top Stake 0+50

$\frac{10}{40}$   $\frac{15}{37}$   $\frac{53}{25}$   $\frac{93}{15}$   $\frac{95}{}$   $\frac{105}{18}$   $\frac{118}{22}$   $\frac{126}{28}$   $\frac{118}{37}$

$\frac{29}{40}$   $\frac{29}{30}$   $\frac{46}{26}$   $\frac{74}{14}$   $\frac{81}{7}$   $\frac{98}{}$   $\frac{102}{19}$   $\frac{118}{23}$   $\frac{135}{30}$   $\frac{118}{36}$

$\frac{29}{40}$   $\frac{42}{21}$   $\frac{56}{11}$   $\frac{74}{5}$   $\frac{78}{}$   $\frac{92}{6}$   $\frac{100}{21}$   $\frac{110}{25}$   $\frac{117}{27}$   $\frac{138}{36}$   $\frac{117}{41}$

$\frac{45}{42}$   $\frac{43}{29}$   $\frac{44}{12}$   $\frac{68}{}$   $\frac{97}{9}$   $\frac{110}{22}$   $\frac{117}{25}$   $\frac{132}{32}$   $\frac{117}{41}$

$\frac{54}{40}$   $\frac{61}{27}$   $\frac{73}{13}$   $\frac{96}{}$   $\frac{105}{12}$   $\frac{109}{18}$   $\frac{117}{20}$   $\frac{124}{30}$   $\frac{117}{40}$

$\frac{104}{46}$   $\frac{100}{23}$   $\frac{104}{5}$   $\frac{110}{0}$   $\frac{116}{1}$   $\frac{134}{10}$   $\frac{116}{18}$   $\frac{113}{20}$   $\frac{100}{35}$

$\frac{88}{40}$   $\frac{98}{13}$   $\frac{116}{10}$   $\frac{131}{}$   $\frac{116}{10}$   $\frac{108}{12}$   $\frac{90}{17}$   $\frac{88}{35}$

Both Creek

Stake 1+30

station + H.I. - Elev.

100.54 ✓

"A"

X-Sections So. Side Road.

0+00 = 29+90 & Co. Rd. "F"

0+08			4.5	96.0	✓	
T.P.	0.20	89.94	✓	10.80	89.74	✓
0+28			7.3	82.6	✓	
0+40			9.8	80.1	✓	
0+55			10.3	79.6	✓	
0+68			13.2	76.7	✓	
1+50			13.6	76.3	✓	
(checking)						
T.P.	11.79	99.78	✓	1.95	87.99	✓
T.P.	6.38	103.49		2.65	97.13	✓
B.M.		103.51		3.49	100.00	✓
					100.02	✓

West

E

East

15

$\frac{2.5}{50}$	$\frac{4.5}{6}$	$\frac{5.0}{25}$	$\frac{5.0}{50}$
------------------	-----------------	------------------	------------------

(4.5)

Both  
Creek

6.3	7.3	7.4	7.3	10.3	11.8	12.9	11.8
40	20		8	18	21	25	30

9.0	8.8	9.8	9.9	11.3	12.1	13.3	12.1
40	12		10	17	18	24	32

(13.7)

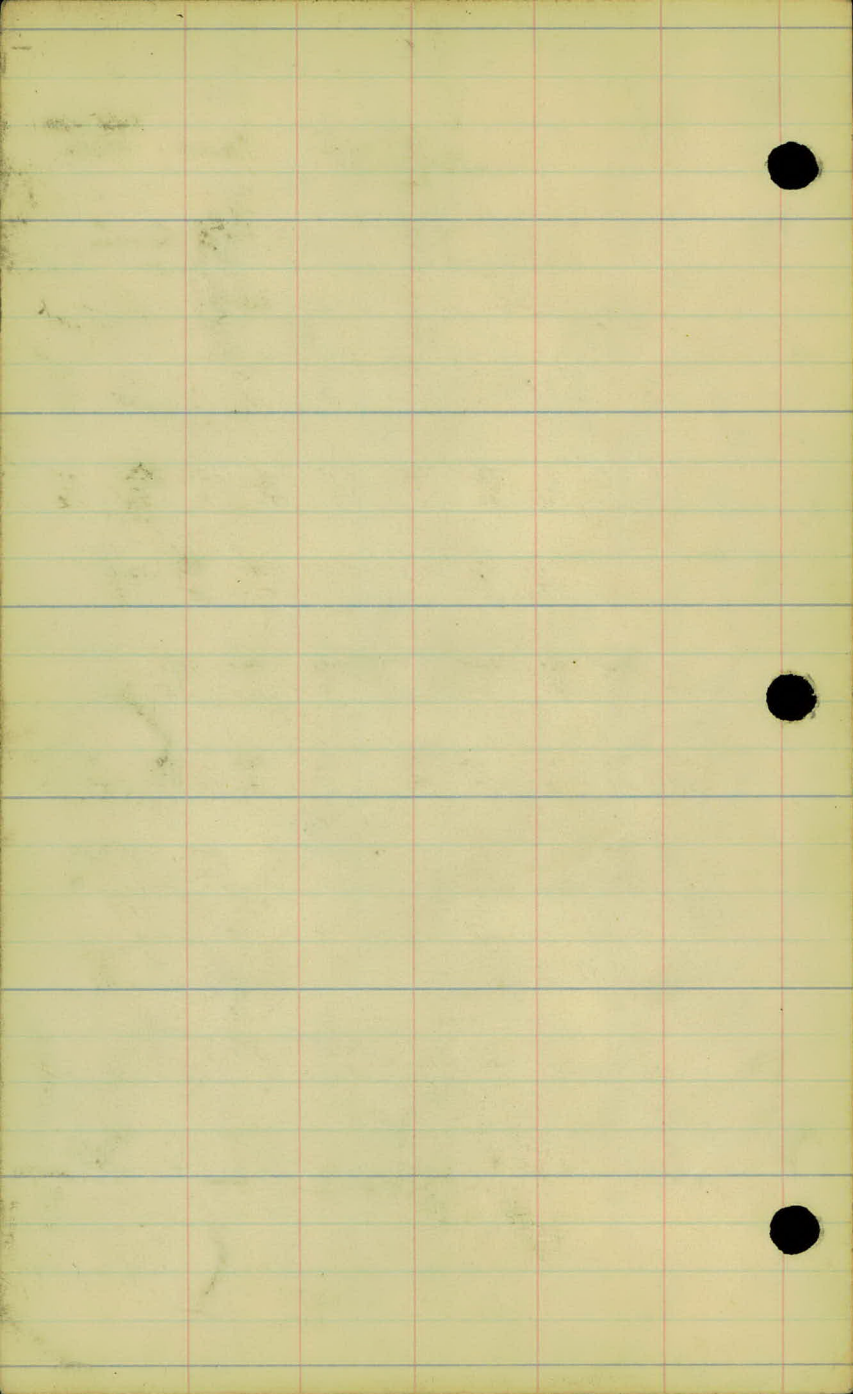
9.1	8.9	10.3	12.1	13.9	14.0	12.1
40	6		7	5	15	29

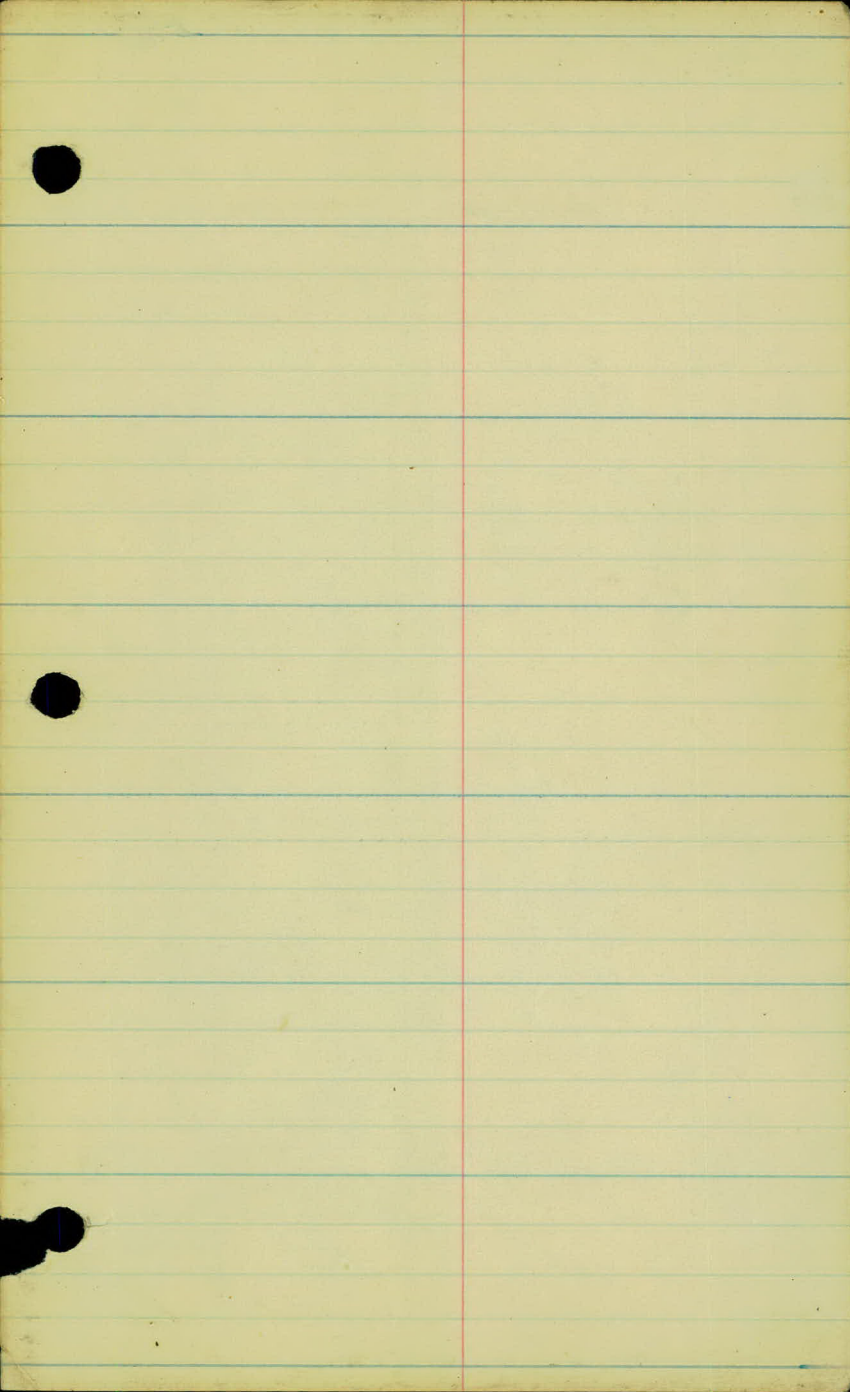
9.3	9.0	10.1	12.8	13.2	14.1	14.1	12.1
35	10	5	1		10	20	35

10.0	10.1	11.9	12.2	13.6	12.2	11.2	10.0	13.0
35	11	8	7	7	7	8	15	35

Both  
Creek

Initial B.M.





"A" line Proj - 24 - 61 Final X-Sections

Station	+	H.I.	-	Rod	Elev.
B.M.	0.69	100.69 ✓			Assumed 100.00
T.P.	1.97	90.70 ✓	11.96	88.73 ✓	
0 + 26					85.4
T.P.	2.01	85.56 ✓	7.15	83.55 ✓	
0 + 50					76.2
1 + 00 ✓					77.4
2 + 00					80.1
3 + 00					79.5

"B" line

B.M.	0.78	100.78 ✓			100.00
T.P.	0.26	92.58 ✓	8.46	92.32 ✓	(0.1)
T.P.	3.29	88.44 ✓	7.43	85.15 ✓	
0 + 50					76.2
1 + 00					77.2
+ 30					76.9
+ 60					77.2

Nail in 12" Oak Ft. 5 to 28+32

101	9.9	12.2	12.0	11.3	9.8
26.8	24.7	21.0	17.4	13.2	6.9

7.8	8.5	8.5	8.0	7.2	7.0	8.0	9.3	9.1	5.5	2.0
38.1	32.5	28.5	21.3	14.0	15.0	11.0	5.0	9.4	13.0	13.0

7.0	6.3
36.7	42.0

5.2	4.5	4.5	5.1	8.0	9.0	9.2	9.3	5.4	5.5
33.4	28.0	25.0	22.2	21.3	18.0	12.0	4.0	8.0	2.0

5.2
48.0

6.8	8.4	9.1	9.5	9.5	8.6	7.2	6.1	5.6
20.0	14.2	17.6	12.0	7.9	6.0	5.2	2.8	5.5

5.7	5.1	5.0
22.7	25.4	28.8

8.7	9.6	9.5	9.6	8.4	6.7	6.0	6.3
20.9	19.0	13.5	8.8	5.7	5.2	4.0	6.1
6.2	5.8						
22.0	29.2						

0.7	2.5	7.8	11.7	11.7	10.0	10.2
	6.1	13.5	30.0	31.4	36.5	46.0

1.0	3.5	6.5	9.5	11.2	11.3	11.9	11.1	11.1	10.7	8.1	6.8
21.6	17.4	8.9	8.3	4.9	2.7	11.8	5.6	8.9	12.0	13.5	16.0

0.8	7.0	9.5	11.2	11.7	11.5	11.0	11.0	9.7	7.7
12.0	4.0	3.0	1.5	11.2	5.6	11.1	13.6	16.0	18.8

7.7	8.2	9.8	11.2	9.8	8.2	6.9	7.1
60.6	53.0	50.0	44.6	38.3	34.4	29.3	22.0

2.3	7.0	9.2	10.6	11.4	11.1	10.6	9.2	8.5	7.1	8.0	7.6	9.8
21.6	15.0	14.3	13.0	9.1	4.6	11.5	11.4	14.5	17.4	22.2	26.2	34.6

7.3	8.0	8.0	9.0
59.0	36.0	49.0	47.1

7.7	8.0	9.0	10.3	11.1	11.3	11.0	9.2	9.0	10.4	10.3	10.0
25.6	21.0	16.8	15.6	14.0	4.9	11.2	3.5	4.0	10.0	13.2	17.6

7.0	7.3	7.8	8.0	8.5	9.7
26.8	33.0	47.1	31.0	27.0	24.1

Station + H.I. - Rod Elev

88.44 ✓

2 + 00

801

3 + 00

T.P. 12.25 100.24 ✓ 0.45 87.99 ✓

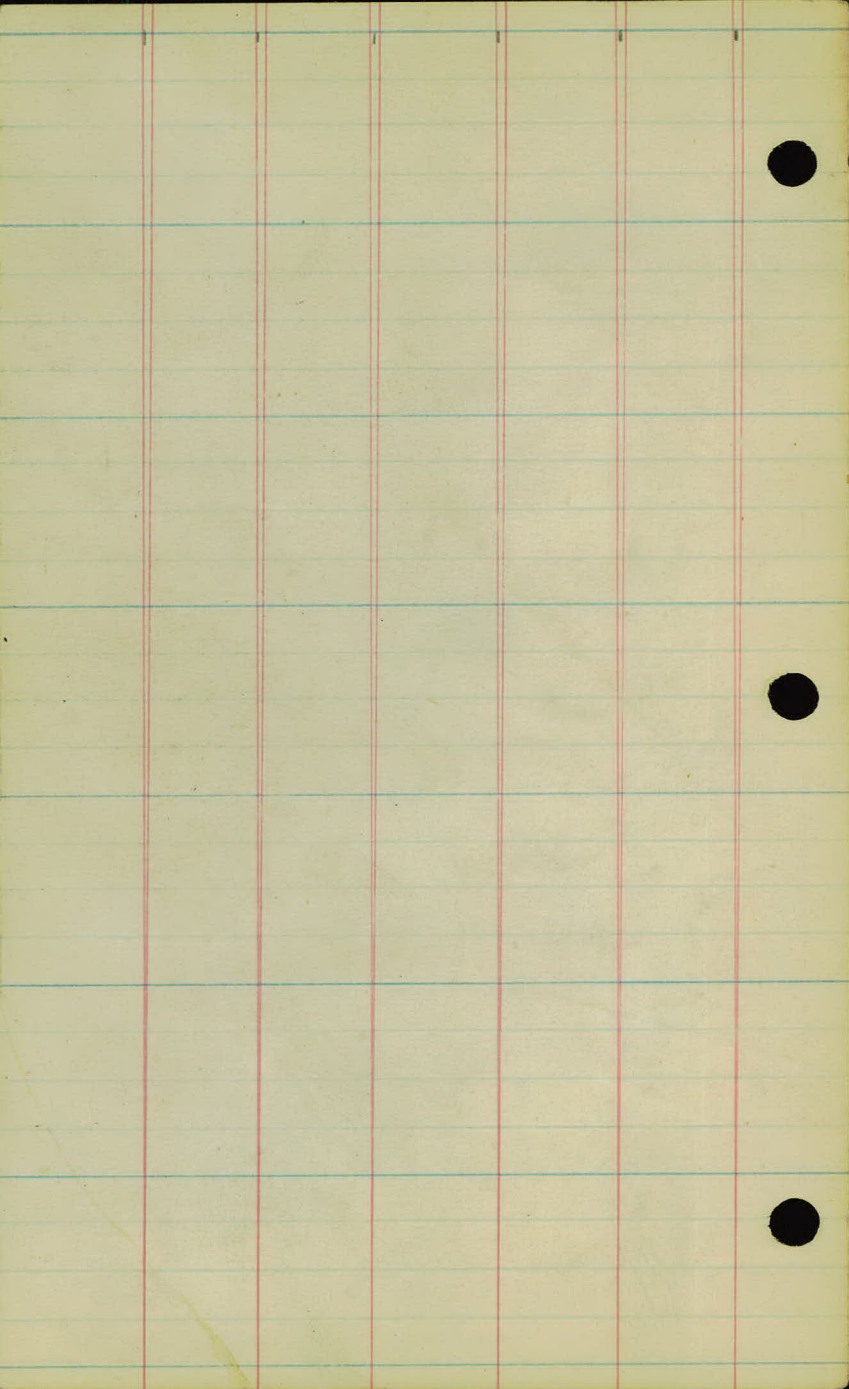
T.P. 7.43 104.68 ✓ 2.99 97.25 ✓

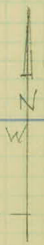
B.M. 4.66 100.00 ✓

$\frac{7.3}{23.0}$   $\frac{8.0}{29.5}$   $\frac{10.8}{26.0}$   $\frac{11.0}{16.7}$   $\frac{10.8}{7.5}$   $\frac{10.2}{4.6}$   $\frac{8.8}{3.5}$   $8.3$   $\frac{7.5}{5.4}$   $\frac{7.0}{20.0}$

$\frac{6.4}{41.8}$   $\frac{7.9}{40.4}$   $\frac{8.6}{38.3}$   $\frac{9.9}{37.3}$   $\frac{10.7}{35.0}$   $\frac{11.4}{29.3}$   $\frac{8.4}{23.0}$

Nail in 12" Oak P. Sta. 28+32





Sec. 20  
III  
Sec. 19

Sec. 19  
Sec. 30

McMe Treary St



30th St

30th St

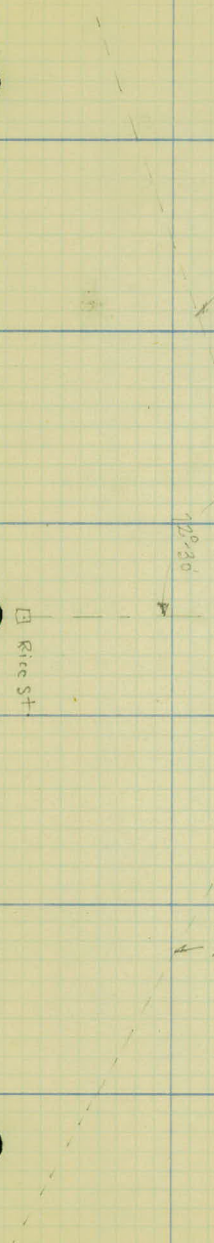
"B" Line

129.30'

69.30'

"A" Line

Rice St



A Line  
Creek Location

(4)

3700

2750

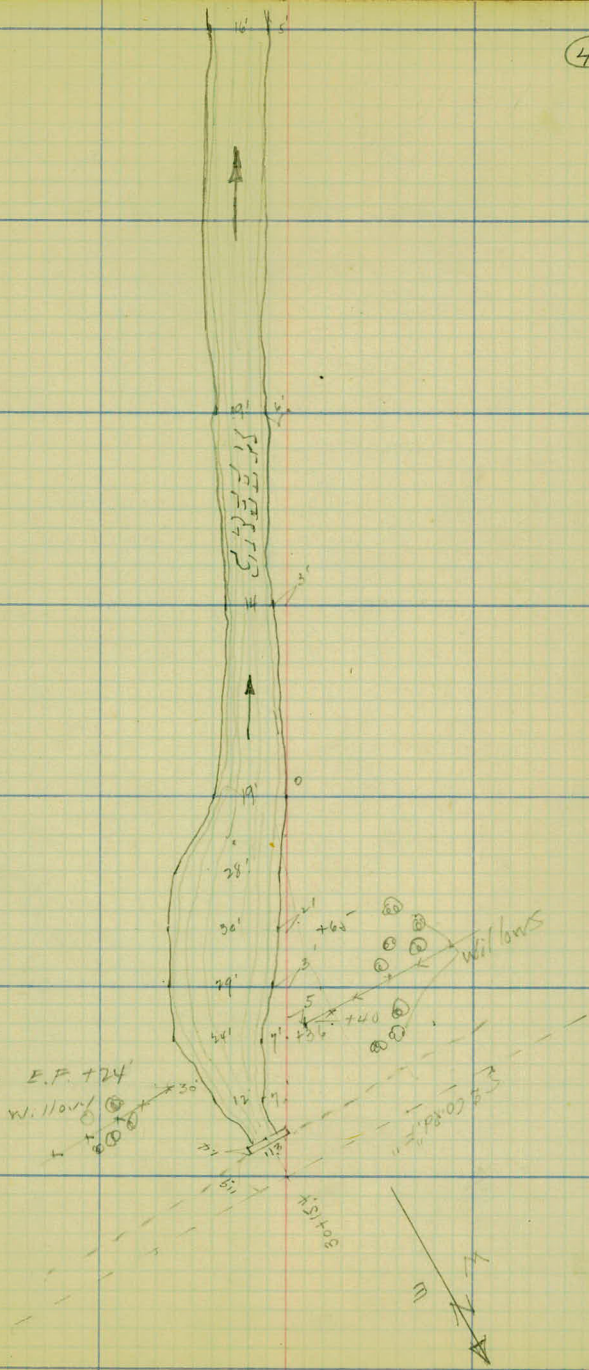
7700

1750

1400

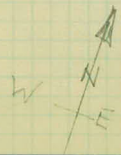
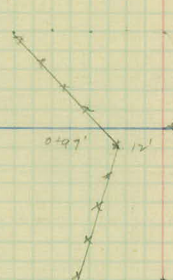
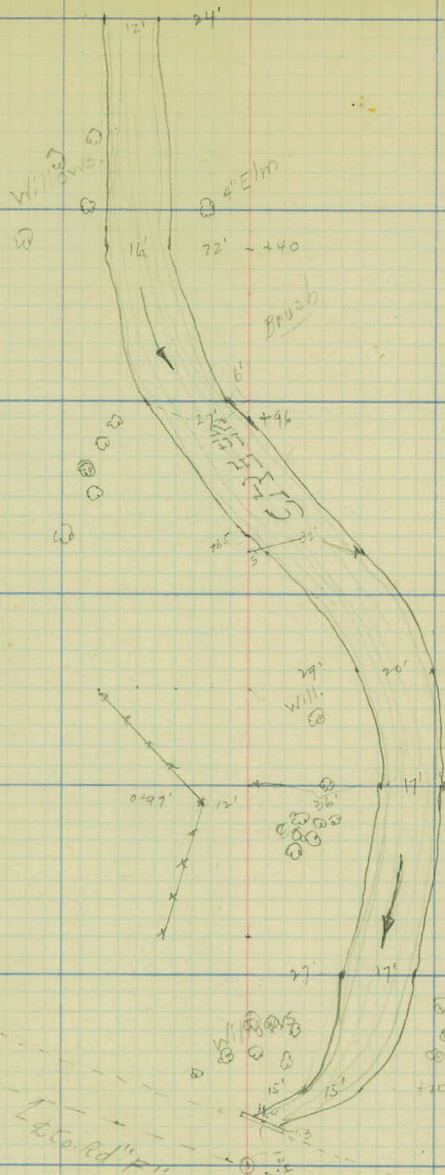
0700

0700



"B" Line  
Creek Location.

340  
(5)



Plan & X-Sections  
of Arch Culvert.  
Sta. 30+15.4

L. Levels & X-Sec.  
Co. Road "F"

Water Elev's & X-Sec.  
"A" & "B" Line.

Station	+	H.I	-	Elev.
B.M.	4.64	104.64 ✓		<sup>assumed</sup> 100.00 ✓

Levels & X-Sec. Along Co. Rd "F"

28+00			1.5	102.1 ✓
29+00			4.8	99.8 ✓
30+00			8.6	96.0 ✓
30+15.4			9.0	95.6 ✓
30+32			8.7	95.9 ✓
31+00			7.8	96.8 ✓
31+55			6.4	97.2 ✓
T.P.	0.26	93.73 ✓	11.27	93.37 ✓

X-Sections "A" Line

0+00 = 30+15.4

T.P.	6.51	88.29 ✓	11.95	81.78 ✓
0+26			5.9	82.4 ✓
0+50			9.3	79.0 ✓
1+00			10.7	77.6 ✓
2+00			8.3	80.1 ✓

Nail in 12" oak # Sta. 28+32

North ~~x~~ South

0.6	1.7	3.1	2.5	2.2	1.1	2.2	3.0	0.0	0.0
<u>35</u>	<u>24</u>	<u>20</u>	<u>15</u>	<u>11</u>		<u>11</u>	<u>14</u>	<u>21</u>	<u>50</u>

3.8	7.7	5.4	4.8	5.4	12.0	13.5	14.0
<u>60</u>	<u>19</u>	<u>10</u>		<u>11</u>	<u>24</u>	<u>34</u>	<u>60</u>

20.4	8.8	8.6	9.3	2.1
<u>38</u>	<u>10</u>		<u>8</u>	<u>28</u>

Top of conc. Hd. Wells

El. = 95.19 <sup>9.45</sup>/<sub>12.5</sub> 9.0 <sup>9.25</sup>/<sub>11.90</sub> = Elev. 95.39  
 No. — 50.

20.2	9.2	8.7	9.4	20.9	23.7
<u>26</u>	<u>9</u>		<u>9</u>	<u>24</u>	<u>30</u>

18.2	16.3	8.8	7.8	8.5	12.4	15.0
<u>40</u>	<u>22</u>	<u>10</u>		<u>14</u>	<u>27</u>	<u>40</u>

9.4	6.4	6.8	10.1	10.1
<u>50</u>		<u>14</u>	<u>20</u>	<u>40</u>

West ~~x~~ East

Note:

W.S. = Water Surface

Bot. = Bottom of Creek.

(2.9)

W.S.

W.S.

59	103	4.0	103	9.6	7.0
<u>0</u>	<u>8</u>	<u>12</u>	<u>17</u>	<u>17</u>	<u>22</u>

W.S.

W.S.

78	93	25	105	11.5	103	7.8	5.4	6.1
<u>15</u>	<u>2</u>	<u>5</u>	<u>17</u>	<u>17</u>	<u>33</u>	<u>45</u>	<u>70</u>	<u>100</u>

Bot.

W.S.

1.8	7.5	8.0	12.7	12.7	10.7	7.7	7.2	1.9
<u>65</u>	<u>35</u>	<u>2</u>	<u>0</u>	<u>10</u>	<u>70</u>	<u>24</u>	<u>60</u>	<u>84</u>

Bot.

W.S.

1.0	7.0	8.0	9.5	10.9	11.9	10.7	9.3	7.7	1.1
<u>93</u>	<u>62</u>		<u>3</u>	<u>6</u>	<u>12</u>	<u>10</u>	<u>21</u>	<u>27</u>	<u>90</u>

Bot.

Station + H.I. - Elev

88.29 ✓

"A" Line cont'd

3+00

T.P. 11.82 98.31 ✓ 1.80 86.49 ✓

T.P. 0.84 97.38 ✓ 1.77 96.54 ✓

T.P. 0.76 89.48 ✓ 1.66 88.72 ✓

X-sections "B" Line

0+00 = 30+00

0+20

0+50

1+00

1+60

2+00

3+00

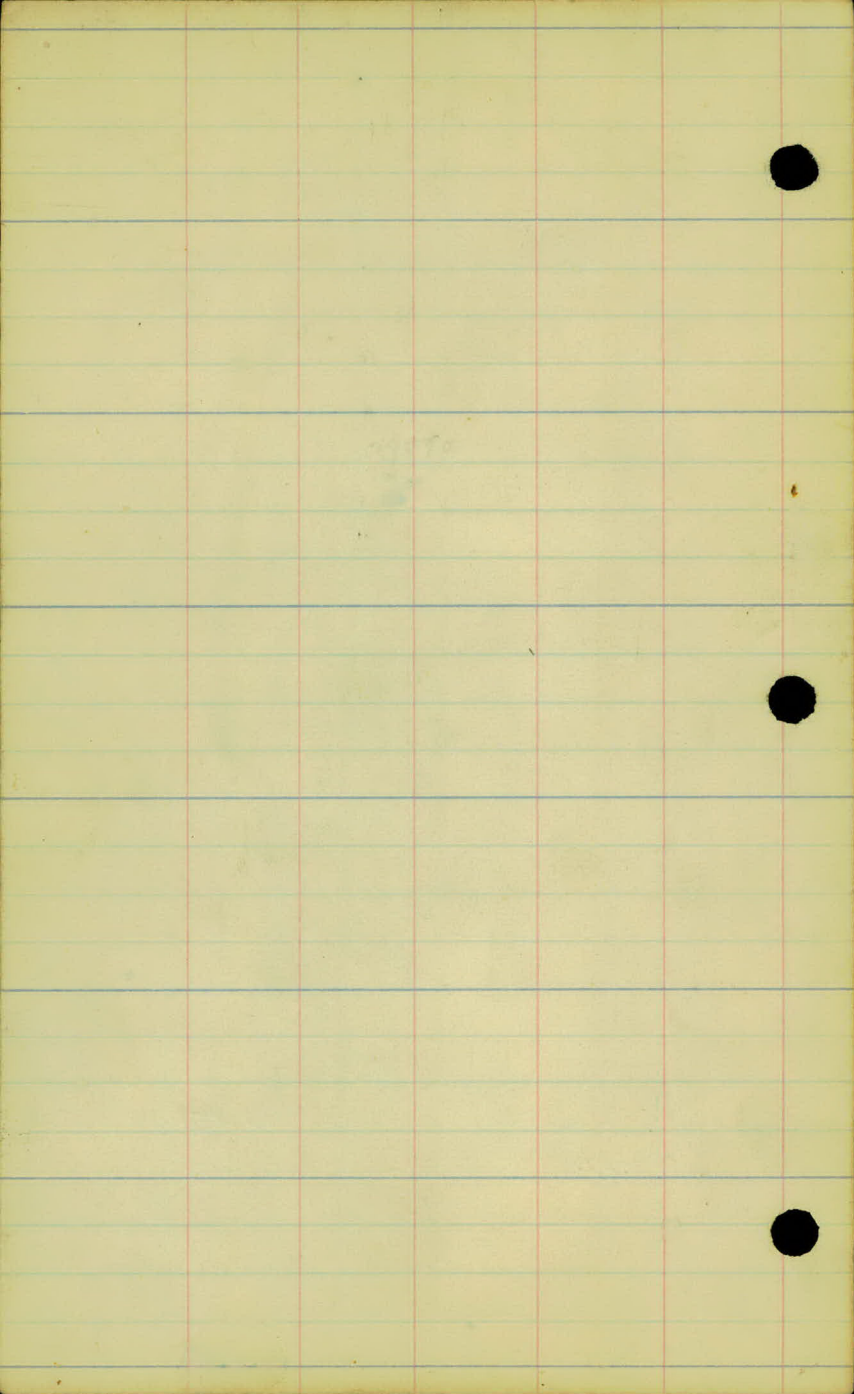
(checking)

T.P. 10.15 98.87 ✓ 0.76 88.72 ✓

T.P. 8.32 105.29 ✓ 1.90 94.97 96.97

B.M. 5.27 100.02 ✓





- PROJECT 24-61 -

- Finals Cross-sections -

C.R.D'F

Proj - 24-61  
Final X-Sections

BM. 6.95 106.95 100.00

28 + 00

T.P. 0.72 100.72 6.95 100.00

29 + 00

+ 60

T.P. 0.47 100.47 0.72 100.00

+ 70

+ 90

30 + 00

+ 150

+ 32.0

31 + 00 same as original

H.

H

Nail in 12" Oak R. 5 to 28 + 32

$\frac{2.3}{33.0}$	$\frac{4.0}{23.7}$	$\frac{5.7}{19.8}$	$\frac{5.0}{16.7}$	$\frac{4.8}{14.4}$	$\frac{4.4}{8.0}$	4.0	$\frac{4.1}{5.5}$	$\frac{4.6}{12.3}$	$\frac{5.2}{14.2}$	$\frac{4.8}{18.9}$	$\frac{4.0}{21.7}$	$\frac{3.4}{26.5}$
										$\frac{1.8}{33.0}$	$\frac{1.8}{30.0}$	
	$\frac{7.0}{33.0}$	$\frac{6.3}{24.2}$	$\frac{1.0}{14.2}$	$\frac{1.0}{5.0}$	0.9	$\frac{0.9}{8.0}$	$\frac{1.0}{13.7}$	$\frac{3.2}{17.3}$	$\frac{3.2}{19.0}$	$\frac{2.0}{21.0}$	$\frac{2.2}{23.2}$	

$\frac{11.3}{36.2}$	$\frac{8.6}{30.1}$	$\frac{7.1}{23.6}$	$\frac{3.0}{12.8}$	$\frac{2.8}{8.0}$	2.7	$\frac{3.0}{7.0}$	$\frac{3.7}{9.7}$	$\frac{10.0}{16.6}$	$\frac{10.4}{18.2}$	$\frac{10.5}{23.0}$	$\frac{12.0}{24.2}$
								$\frac{17.6}{37.0}$	$\frac{16.5}{33.8}$	$\frac{13.3}{28.0}$	$\frac{12.7}{26.0}$

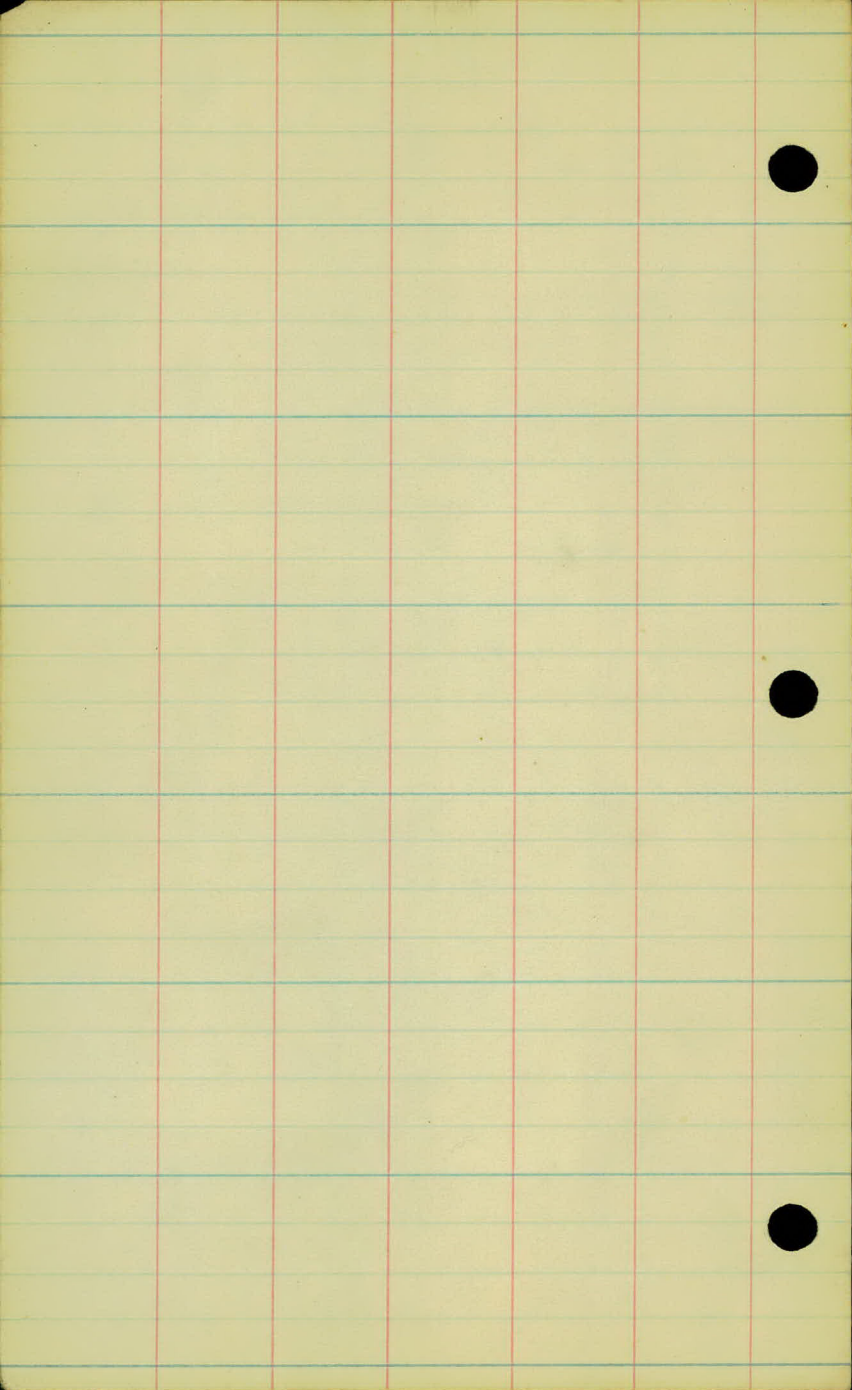
$\frac{17.0}{48.0}$	$\frac{15.1}{40.0}$	$\frac{12.0}{34.0}$	$\frac{7.5}{28.6}$	$\frac{4.9}{15.3}$	$\frac{3.8}{10.2}$	$\frac{3.1}{5.0}$	3.0	$\frac{3.0}{7.3}$	$\frac{4.4}{10.8}$	$\frac{7.8}{14.2}$	$\frac{9.5}{21.2}$	$\frac{12.0}{24.0}$	$\frac{16.3}{30.6}$
											$\frac{18.7}{44.0}$	$\frac{17.3}{36.8}$	

$\frac{15.3}{35.7}$	$\frac{11.9}{29.7}$	$\frac{9.6}{19.9}$	$\frac{4.4}{10.2}$	4.5	$\frac{4.7}{8.6}$	$\frac{6.2}{12.4}$	$\frac{6.6}{16.2}$	$\frac{10.0}{25.1}$	$\frac{12.0}{28.5}$	$\frac{15.6}{33.8}$
										$\frac{15.6}{36.0}$

$\frac{15.4}{36.0}$	$\frac{13.2}{28.0}$	$\frac{12.0}{24.0}$	$\frac{10.7}{21.5}$	$\frac{9.0}{17.4}$	$\frac{4.6}{10.0}$	4.7	$\frac{5.1}{8.5}$	$\frac{6.3}{11.4}$	$\frac{10.8}{18.2}$	$\frac{12.0}{21.7}$	$\frac{16.7}{29.8}$	$\frac{19.1}{36.3}$
---------------------	---------------------	---------------------	---------------------	--------------------	--------------------	-----	-------------------	--------------------	---------------------	---------------------	---------------------	---------------------

$\frac{21.4}{33.0}$	$\frac{21.4}{30.6}$	$\frac{12.0}{17.6}$	$\frac{4.7}{8.9}$	4.9	$\frac{5.0}{7.3}$	$\frac{12.0}{16.3}$	$\frac{21.8}{29.0}$	$\frac{22.6}{33.0}$
---------------------	---------------------	---------------------	-------------------	-----	-------------------	---------------------	---------------------	---------------------

$\frac{19.0}{33.0}$	$\frac{17.4}{28.9}$	$\frac{12.0}{18.5}$	$\frac{9.1}{15.0}$	$\frac{4.8}{9.0}$	4.6	$\frac{4.8}{9.5}$	$\frac{9.2}{15.4}$	$\frac{12.0}{18.6}$	$\frac{15.5}{22.6}$	$\frac{17.9}{30.6}$
---------------------	---------------------	---------------------	--------------------	-------------------	-----	-------------------	--------------------	---------------------	---------------------	---------------------



Road #56

Proposed

Channel Change

Station Point L R. Bear.

2140 P.I. = Approx Int. of Existing channel.

0488

P.I.  $29^{\circ}30'$

N.  $34^{\circ}10'$  W.

0433

P.I.  $4^{\circ}40'$

N.  $42^{\circ}10'$  W.

0400 = 29190 to Prop. Cult.

N.  $02^{\circ}00'$

0468

P.I. = Approx Int. of Existing channel.

S.  $0^{\circ}00'$

Old Creek Channel

2+40 APPROX P.I.

N. 101° 37' E 1/4

0+88  
494'

N. 41° 40' W. 1/4

0+33

105'-00"

0+00

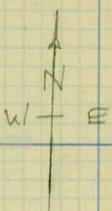
E. Co. Rd. "F"

0+00

500'-00"

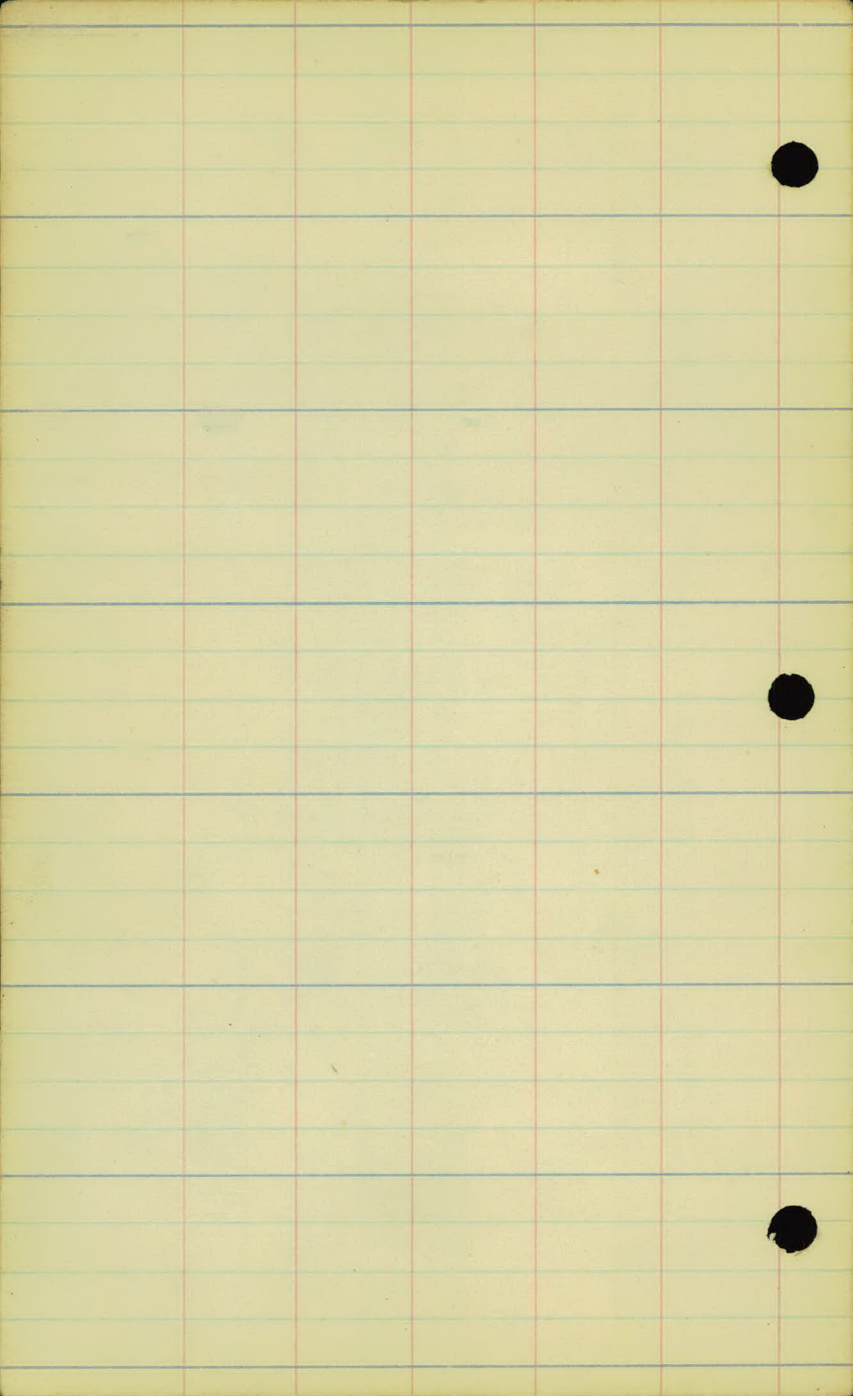
0+68

Old Creek Channel



W.H.C.  
Eck.  
Galvin  
Frankle

Aug 14, 1924



Proj-24-61

slope stakes

W.H.C.

Wilshusen

Pearson

Frankie

Oct 9, 1924

Station + H.I. - Grade G.R.

= Slope Stakes So. Side Co. Rd "F"

B.M.	1.56	85.13	✓	83.57	
-0+28				76.07	9.06
				83.2	
-0+40				76.06	9.07
				80.1	
-0+55				76.05	9.08
				79.2	
-0+68				76.03	9.1

North side co. Rd. "F"

B.M.	2.19	89.09	✓		
0+50				76.15	12.94
				81.8	
0+75				76.17	12.92
				80.7	
0+88				76.19	12.90
				81.5	
1+00				76.20	12.9
				83.5	
1+30				76.23	12.86
				84.5	
1+42				76.24	12.85
				81.6	
1+52				76.25	12.84
				80.8	
1+90				76.29	12.8
				80.5	
2+40				76.34	12.75

Lt  
West

Σ

Rt.  
East

23.57 - spike in Oak St. Side Road

$$11 \begin{array}{r} 1.2 \\ +7.9 \\ \hline \end{array}$$

$$1.9 \begin{array}{r} \\ +7.2 \\ \hline \end{array}$$

$$\begin{array}{r} 3.2 \\ +5.9 \\ \hline 11 \end{array}$$

$$17.7 \begin{array}{r} 3.4 \\ +5.7 \\ \hline \end{array}$$

$$\begin{array}{r} 5.0 \\ +4.1 \\ \hline \end{array}$$

$$14.7 \begin{array}{r} 4.4 \\ +4.7 \\ \hline \end{array}$$

$$\begin{array}{r} 5.9 \\ +3.2 \\ \hline \end{array}$$

$$14.9 \begin{array}{r} 4.2 \\ +4.9 \\ \hline \end{array}$$

80.9

86.91 R.R. spike in F.P.

$$17.9 \begin{array}{r} 5.4 \\ +7.5 \\ \hline \end{array}$$

$$10 \begin{array}{r} 7.3 \\ +5.6 \\ \hline \end{array}$$

$$\begin{array}{r} 7.3 \\ +5.6 \\ \hline \end{array}$$

$$\begin{array}{r} 8.0 \\ +4.9 \\ \hline 14.9 \end{array}$$

$$17.3 \begin{array}{r} 5.6 \\ +7.3 \\ \hline \end{array}$$

$$9 \begin{array}{r} 7.7 \\ +5.2 \\ \hline \end{array}$$

$$\begin{array}{r} 8.4 \\ +4.5 \\ \hline \end{array}$$

$$\begin{array}{r} 8.2 \\ +4.7 \\ \hline 14.7 \end{array}$$

$$19.4 \begin{array}{r} 3.5 \\ +9.4 \\ \hline \end{array}$$

$$8 \begin{array}{r} 5.6 \\ +7.3 \\ \hline \end{array}$$

$$\begin{array}{r} 7.6 \\ +5.3 \\ \hline \end{array}$$

$$\begin{array}{r} 7.7 \\ +5.2 \\ \hline 15.2 \end{array}$$

$$20.5 \begin{array}{r} 2.5 \\ +10.5 \\ \hline \end{array}$$

$$12 \begin{array}{r} 3.5 \\ +7.4 \\ \hline \end{array}$$

$$8 \begin{array}{r} 4.7 \\ +8.2 \\ \hline \end{array}$$

$$\begin{array}{r} 5.6 \\ +7.3 \\ \hline \end{array}$$

$$\begin{array}{r} 7.4 \\ +5.5 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 7.6 \\ +5.3 \\ \hline 15.3 \end{array}$$

$$20.9 \begin{array}{r} 2.0 \\ +10.9 \\ \hline \end{array}$$

$$12 \begin{array}{r} 2.2 \\ +10.7 \\ \hline \end{array}$$

$$\begin{array}{r} 4.6 \\ +8.3 \\ \hline \end{array}$$

$$\begin{array}{r} 7.5 \\ +5.4 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 8.1 \\ +4.8 \\ \hline 14.8 \end{array}$$

$$20.0 \begin{array}{r} 2.9 \\ +10.0 \\ \hline \end{array}$$

$$\begin{array}{r} 7.5 \\ +5.4 \\ \hline \end{array}$$

$$\begin{array}{r} 3.6 \\ +4.3 \\ \hline 14.3 \end{array}$$

$$14.8 \begin{array}{r} 8.0 \\ +4.8 \\ \hline \end{array}$$

$$\begin{array}{r} 8.3 \\ +4.5 \\ \hline \end{array}$$

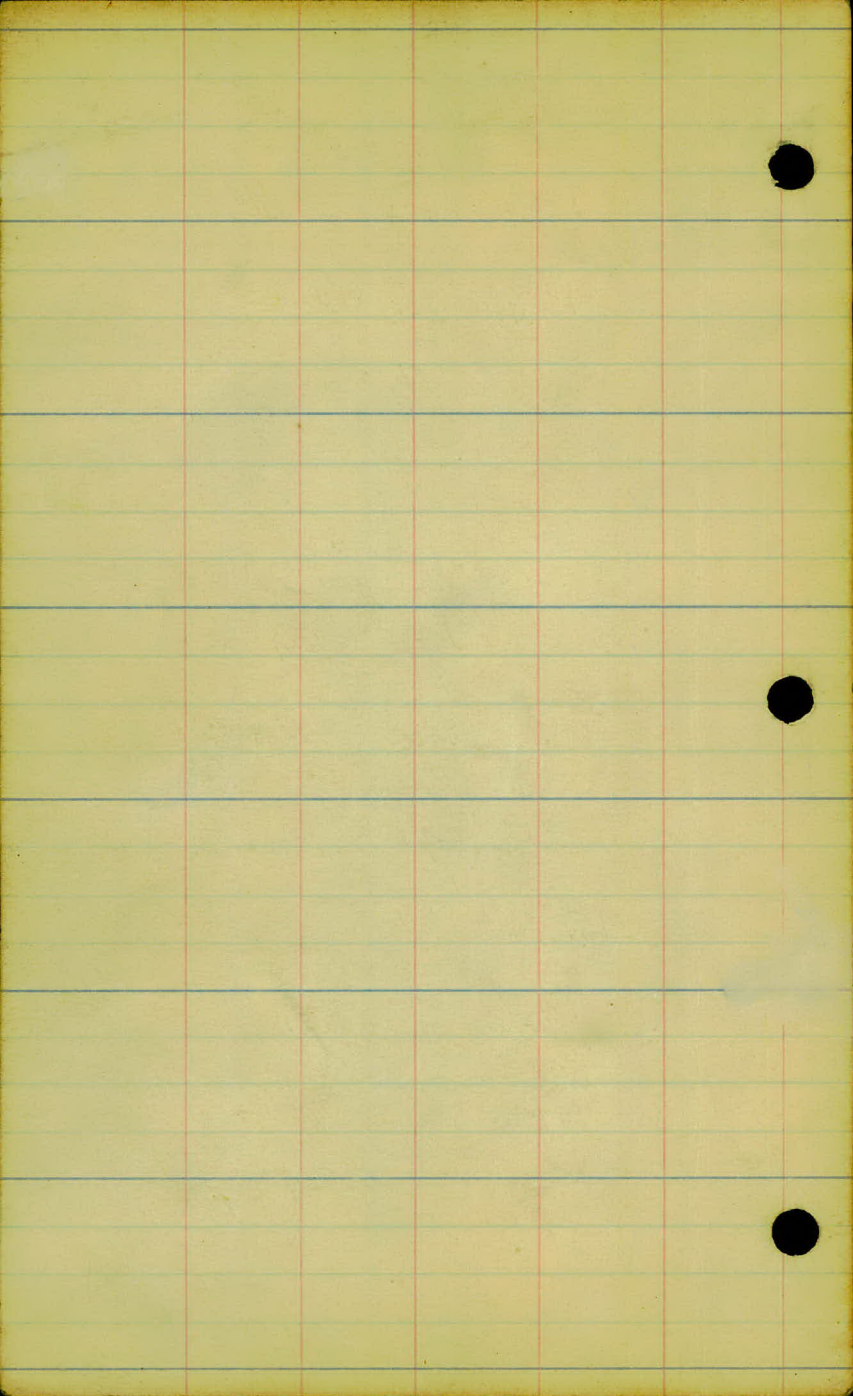
$$\begin{array}{r} 9.4 \\ +3.4 \\ \hline 13.9 \end{array}$$

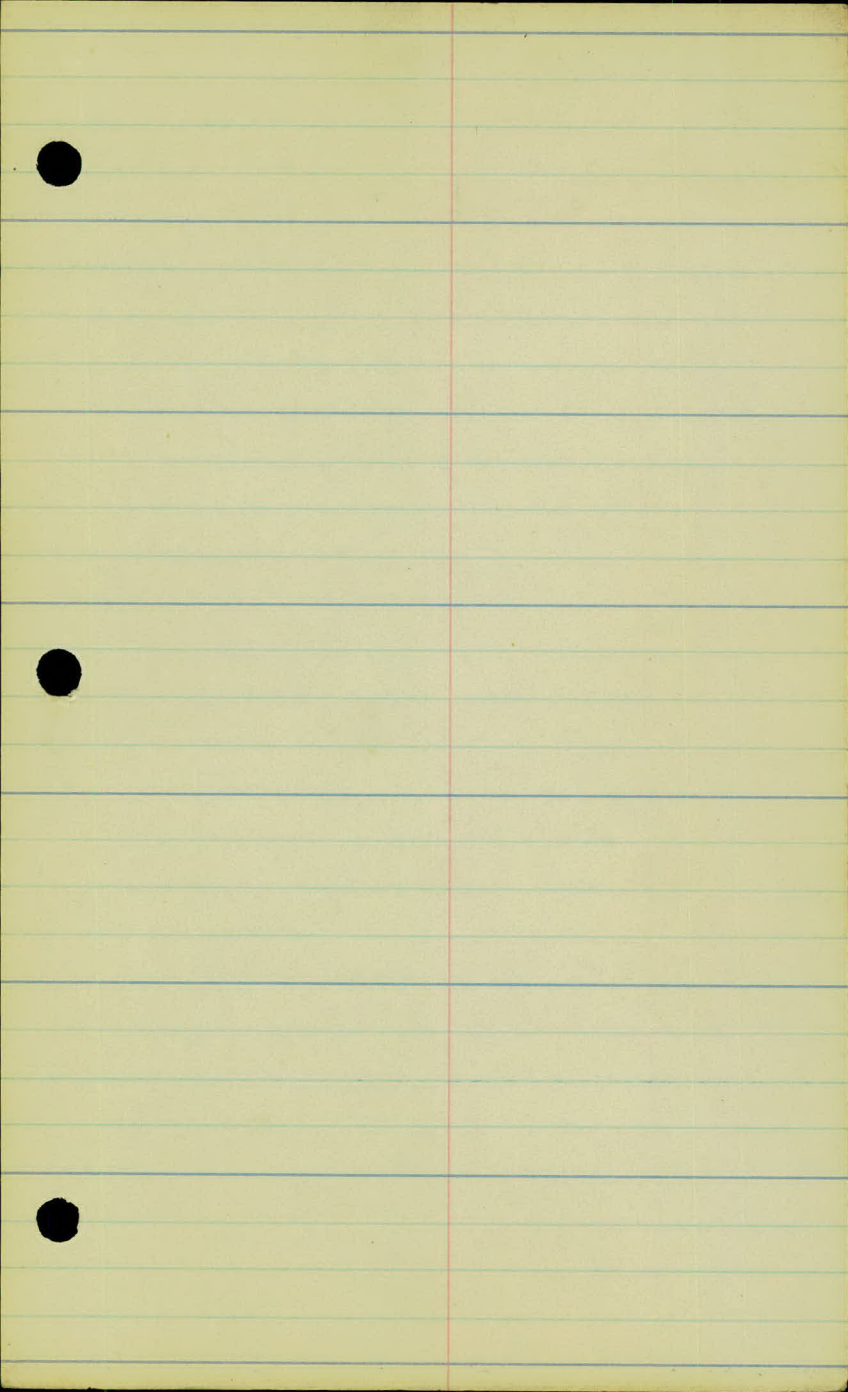
$$15.7 \begin{array}{r} 7.1 \\ +5.3 \\ \hline \end{array}$$

$$\begin{array}{r} 3.8 \\ +4.0 \\ \hline \end{array}$$

$$15.7 \begin{array}{r} 7.6 \\ +5.2 \\ \hline \end{array}$$

80.9





Final x Sections No. Side Co. Rd. F.

Sta.	+ H.I.	-	Elev.
P.M.	1.87	88.78	84.91

0+50

0+75

0+88

1+00

1+30

1+42

1+52

1+90

2+40

Final x sec, So. side Rd,

B.M.	6.82	90.39	83.57
------	------	-------	-------

-0+28

-0+40

-0+55

-0+68

6.82 83.57

LH.

RH.

R.R. SpK. in F.P.

$$\frac{2.1}{27} \quad \frac{6.2}{18} \quad \frac{11.6}{12} \quad \frac{12.0}{7}$$

(7.0)

$$\frac{12.3}{4} \quad \frac{11.5}{7} \quad \frac{11.1}{11.7} \quad \frac{8.4}{15} \quad \frac{7.2}{21} \quad \frac{8.5}{25}$$

$$\frac{28}{28} \quad \frac{5.1}{23} \quad \frac{11.0}{12} \quad \frac{12.1}{9}$$

(8.1)

$$\frac{11.2}{4} \quad \frac{11.2}{10} \quad \frac{7.7}{18} \quad \frac{8.4}{23} \quad \frac{8.9}{25}$$

$$\frac{2.4}{24} \quad \frac{11.1}{13} \quad \frac{12.4}{8} \quad \frac{12.2}{4}$$

(7.3)

$$\frac{11.3}{8} \quad \frac{10.3}{10} \quad \frac{8.1}{14} \quad \frac{7.4}{17} \quad \frac{8.8}{24}$$

$$\frac{1.9}{20.5} \quad \frac{7.5}{14} \quad \frac{11.0}{12} \quad \frac{12.0}{6}$$

(5.3)

$$\frac{11.8}{5} \quad \frac{11.2}{11} \quad \frac{7.6}{14} \quad \frac{7.2}{21} \quad \frac{8.1}{27}$$

$$\frac{1.7}{2.1} \quad \frac{7.0}{14} \quad \frac{10.9}{15} \quad \frac{11.7}{10}$$

(4.3)

$$\frac{11.3}{9} \quad \frac{11.0}{13} \quad \frac{9.4}{15} \quad \frac{7.8}{21} \quad \frac{7.8}{29}$$

$$\frac{2.6}{2.0} \quad \frac{6.5}{18} \quad \frac{11.0}{15} \quad \frac{11.7}{10} \quad \frac{11.4}{7}$$

(7.2)

$$\frac{11.0}{11.4} \quad \frac{8.5}{11} \quad \frac{8.9}{18} \quad \frac{8.9}{23}$$

$$\frac{7.5}{23} \quad \frac{7.5}{18} \quad \frac{10.7}{14} \quad \frac{7.14}{12}$$

(8.0)

$$\frac{11.4}{11.4} \quad \frac{8.5}{10} \quad \frac{9.5}{15} \quad \frac{9.5}{17}$$

$$\frac{7.3}{19} \quad \frac{6.9}{14} \quad \frac{5.0}{9} \quad \frac{11.7}{5}$$

(8.5)

$$\frac{11.4}{9} \quad \frac{11.1}{8} \quad \frac{11.4}{14} \quad \frac{11.4}{17} \quad \frac{8.9}{20}$$

$$\frac{7.5}{15} \quad \frac{10.5}{9} \quad \frac{11.3}{6}$$

(7.3)

$$\frac{11.4}{7} \quad \frac{10.5}{10} \quad \frac{6.6}{17} \quad \frac{5.3}{21} \quad \frac{3.9}{31}$$

SpK. in CqK. So. Side

$$\frac{2.7}{11}$$

(7.2)

$$1.2 \quad \frac{5.3}{11}$$

$$\frac{7.2}{18} \quad \frac{7.9}{10} \quad \frac{14.2}{10}$$

(10.3)

$$\frac{14.2}{10} \quad \frac{7.9}{10}$$

$$\frac{11.0}{14} \quad \frac{12.8}{13} \quad \frac{13.9}{11}$$

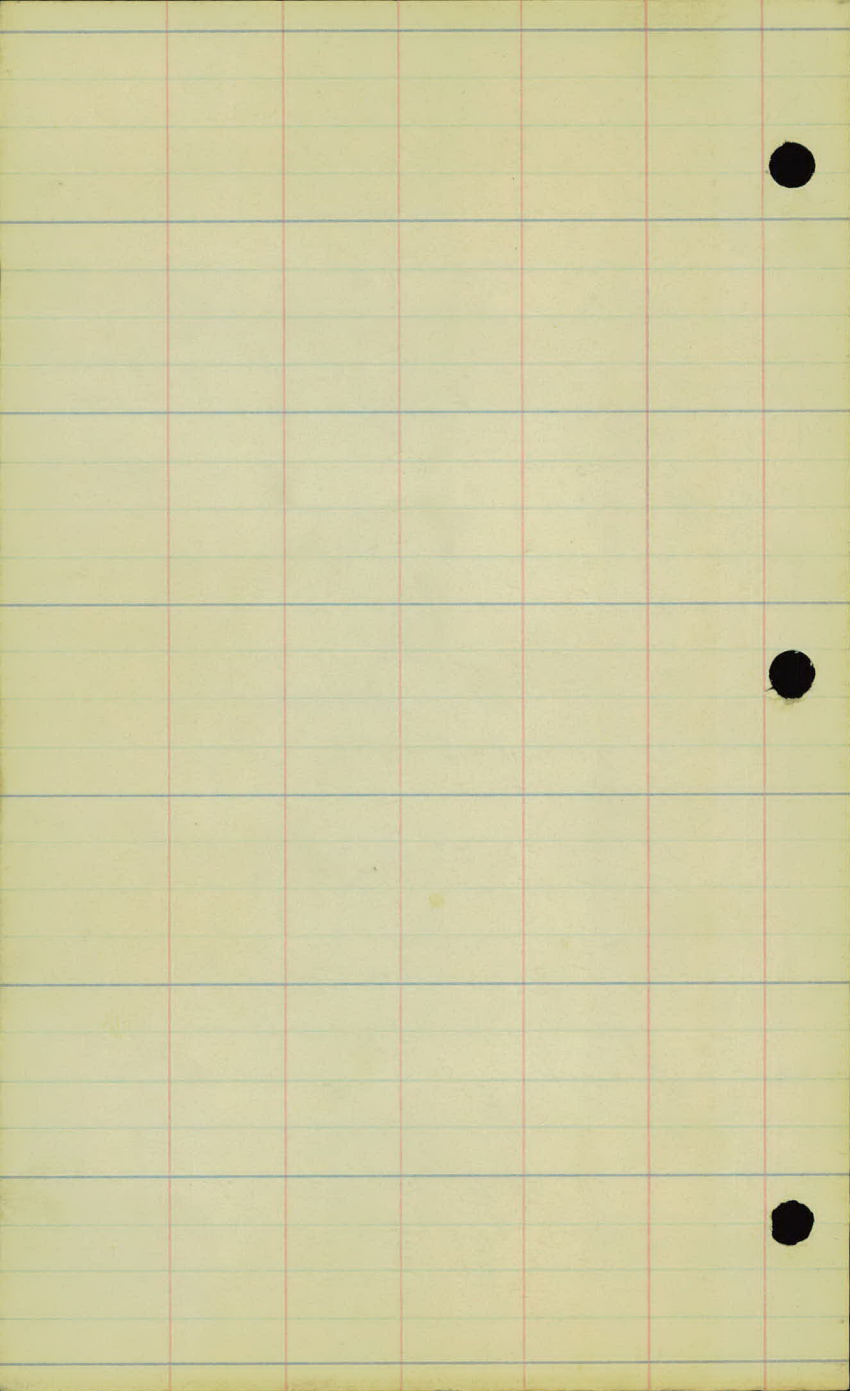
(7.2)

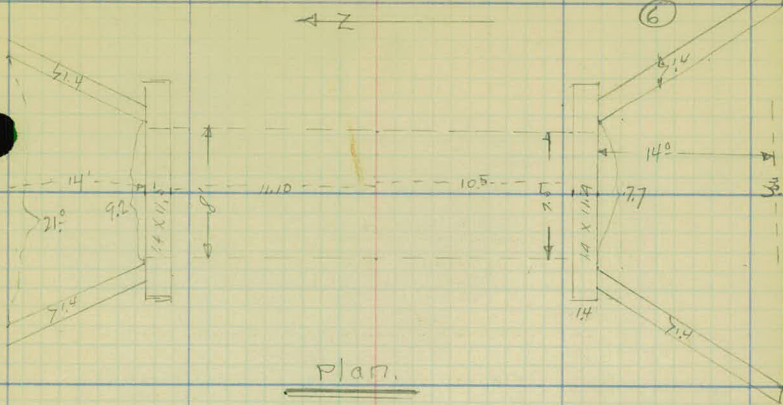
$$\frac{13.8}{12} \quad \frac{13.0}{14} \quad \frac{12.9}{18} \quad \frac{11.9}{20}$$

$$\frac{10.3}{14} \quad \frac{12.7}{14} \quad \frac{14.0}{12}$$

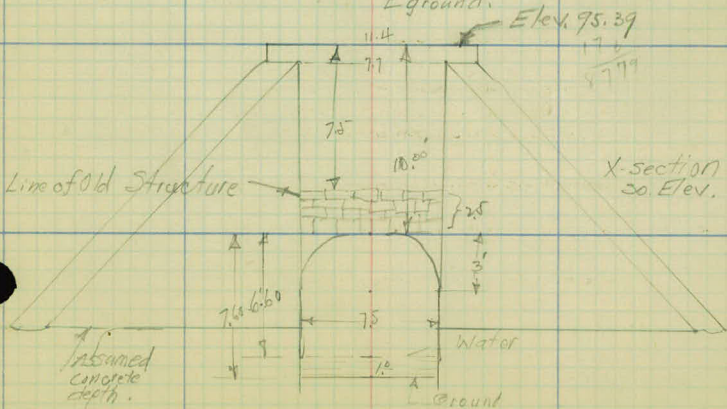
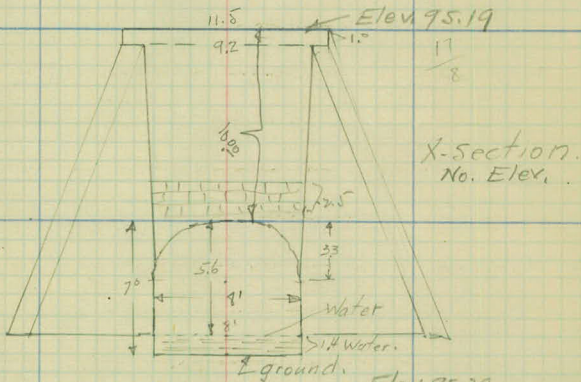
(9.5)

$$\frac{15.8}{8} \quad \frac{13.4}{10} \quad \frac{12.7}{14} \quad \frac{12.1}{15}$$





Note: Stone & Concrete Arch,  
 Concrete Head & Wing Walls.



Station.

Art. Topog.  
Co. Road "F"

31

30

29

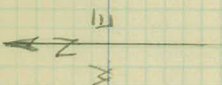
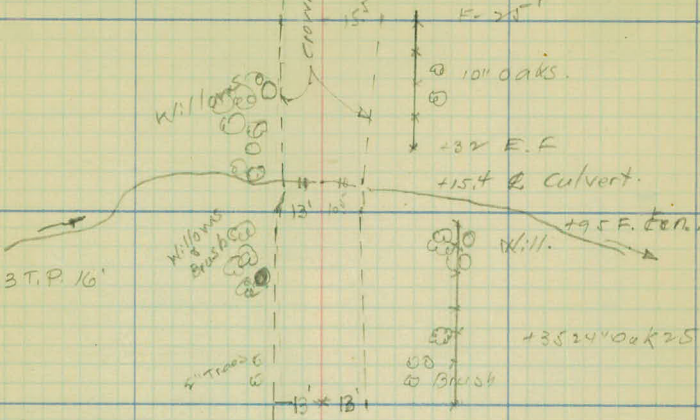
28

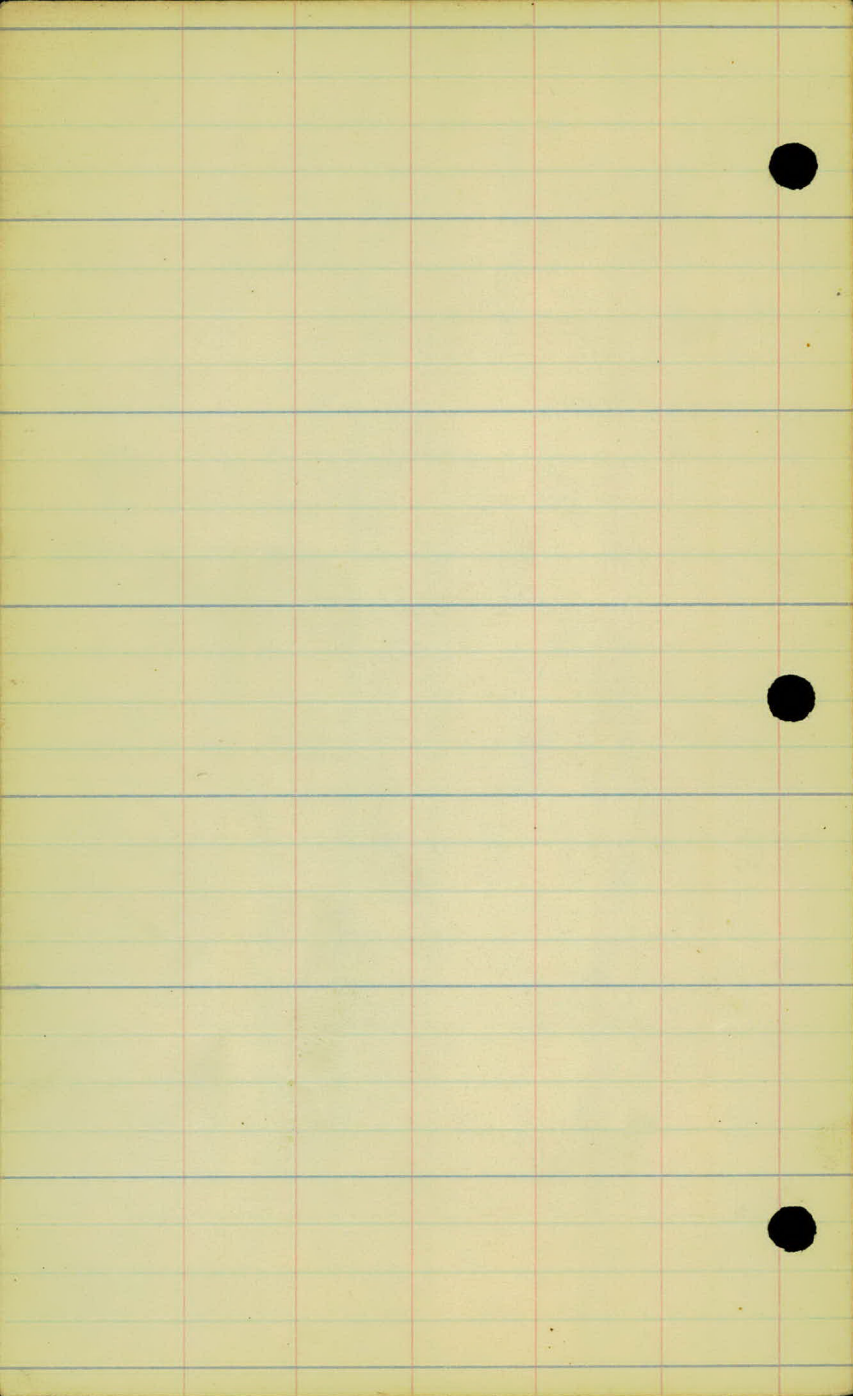
27

+55 R Riv Drive

+15 T.P. 16'

Crown Street Road





U 2474