

BK 43 Dr 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

_____ Ditch _____ Survey

Trn Hills & Bradley Prop.

From 400' E. N¹/₄ Sec To 2000' S.E.
24-29-22 to Omaha RR.

Road Acc't. No. _____

Date Filed. _____

File. _____

BK 43 Dr 16

PLAN SURVEY

DITCH

from

400' East of N $\frac{1}{4}$ Cor. sec. 24-29-22

to

2000' S.E.

Drains thru Bradley & Hill Prop.

INDEX.

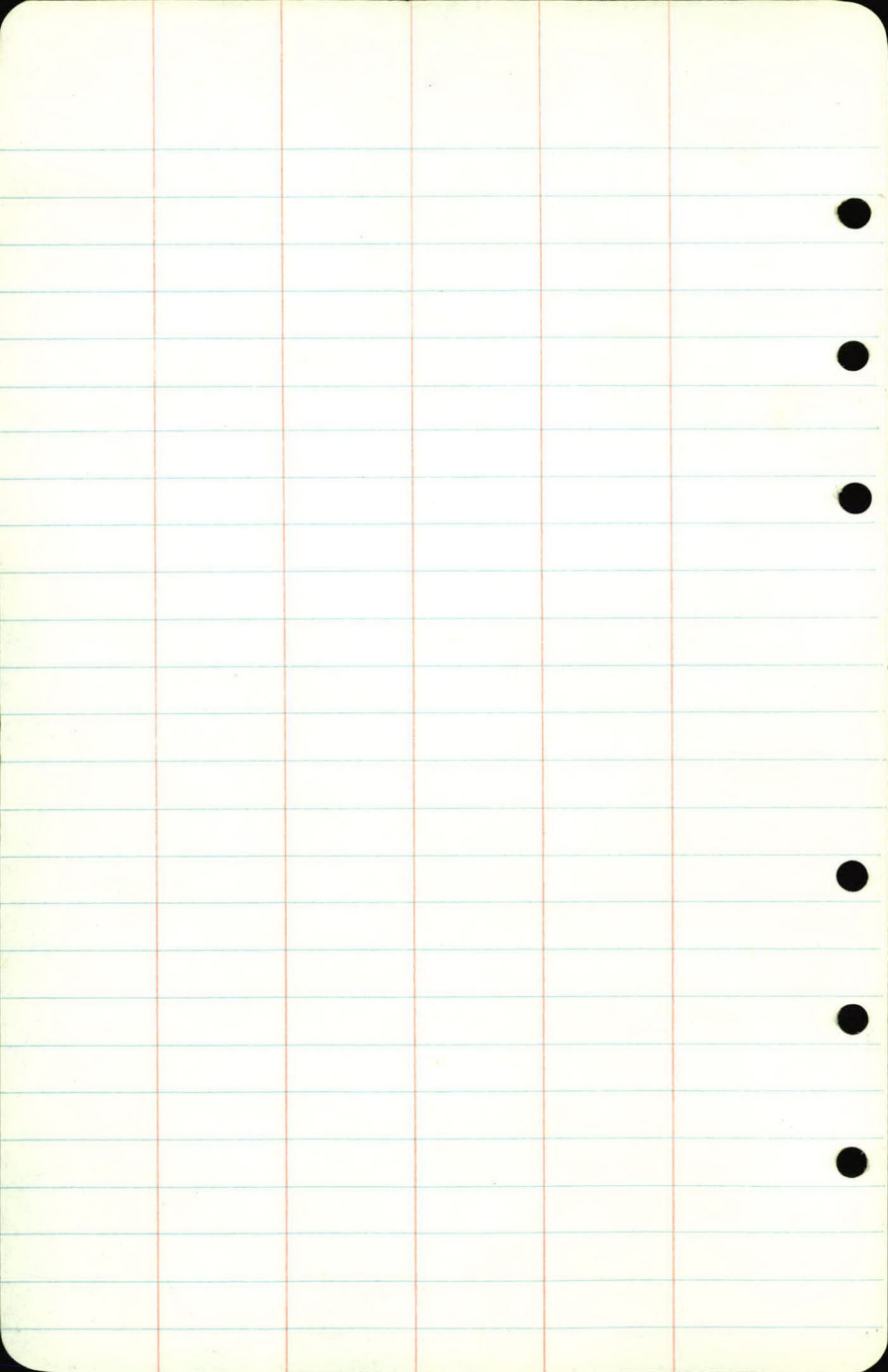
Align - 1-3

Topog - 4-5

Xsections - 6-12

5-27-40

Plan Completed
6/7/40



1

Alignment

Sta.	Point	ΔLt	ΔRt
11	+27.55 P.I.		58°04'

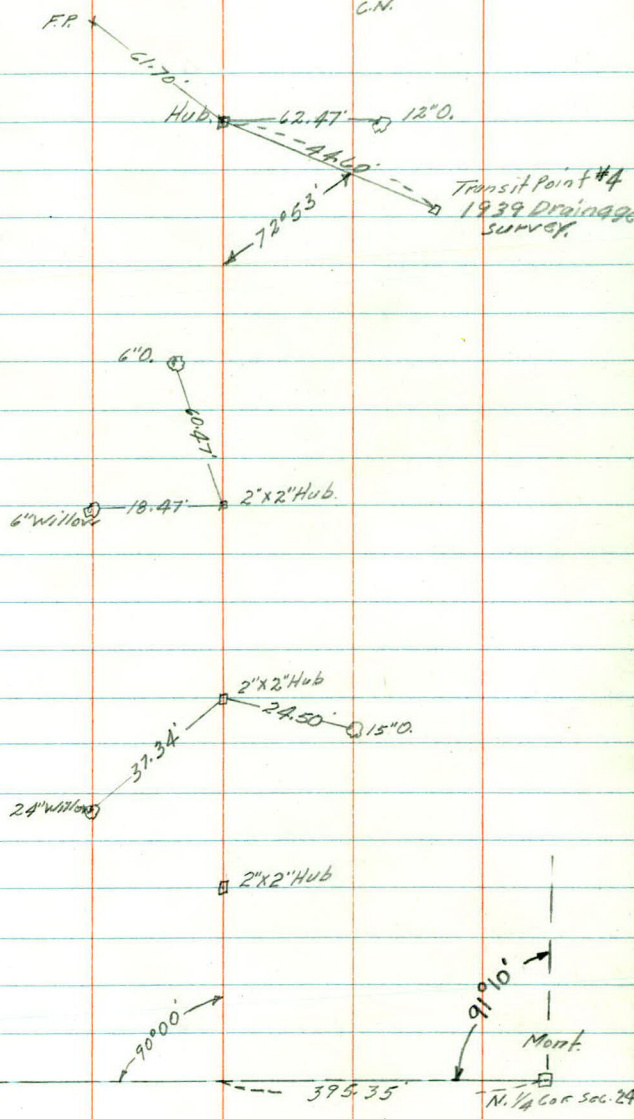
6	+71.95 P.I.	34°29'	
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1	+66.35 P.I.	14°09'	
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0	+60 P.I.	22°34'	
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0	+00 = E. Larpeur Ave.		
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5-24-40
K.H.
L.G.
M.B.
C.N.

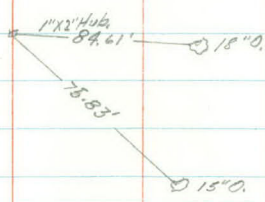
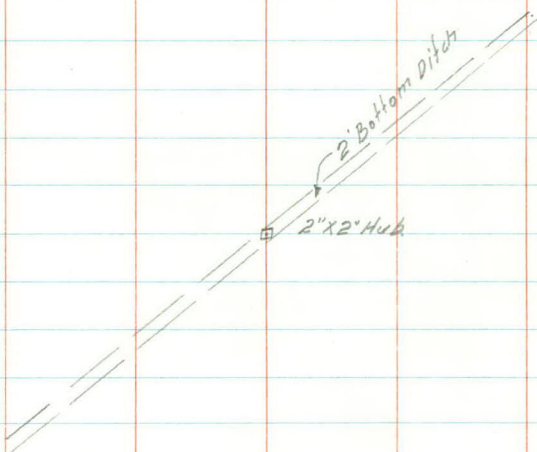


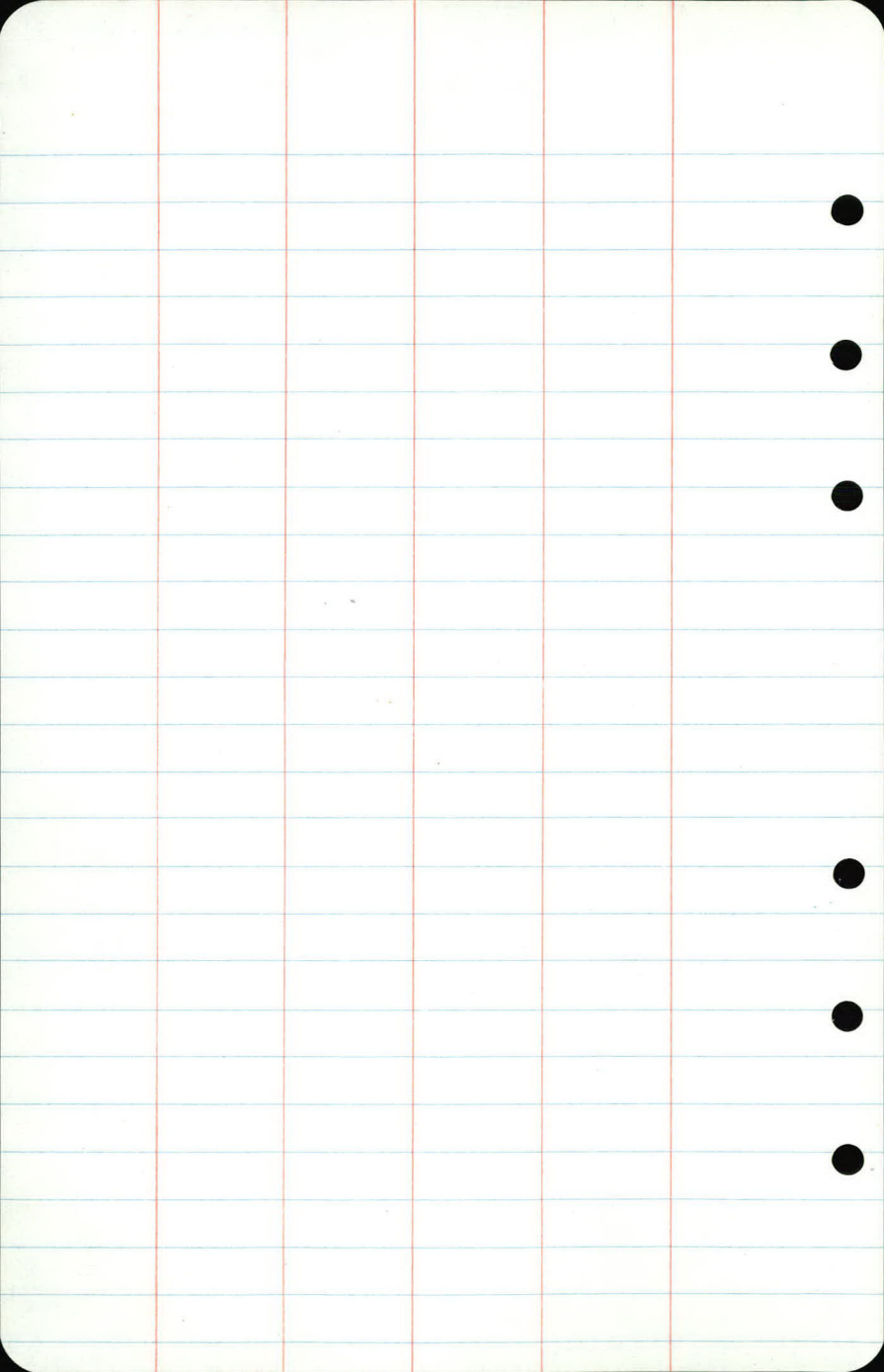
Sta	Point	$\Delta Lt.$	$\Delta Rt.$
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19	+85.09	P.I. = R Ditch	51°50'
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17	+53.42	P.O.T.	
----	--------	--------	--

17	+50.82	from 21.40' and 21.83' Rt.	
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Topography

Note. - For Location of Swamps
see 1939 Drainage Survey.

+55-Fe Xs &

+51-Fe Cor. - 20'

17

Fe. - 1' - 32'

+26-Bcg. Fe. - 0.0

16 Fe. - 17'

8

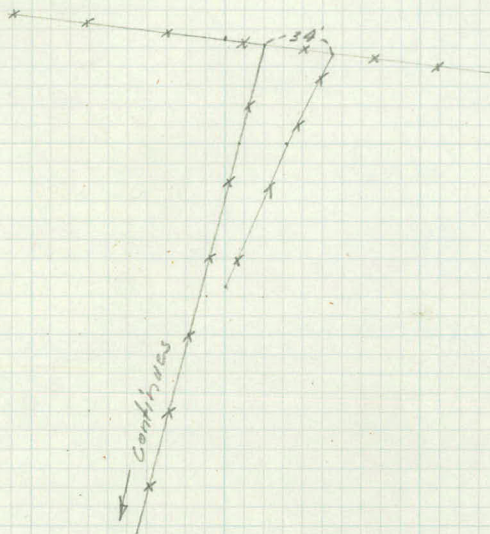
+42-12" Willow - 8'

+33-6" Willow - 17'

+29-24" Willow - 1'

+55-36" Willow - 6'

7





X sections

Sta	+	T	-	Elev.
B.M.	0.16	1002.61.		1002.45
T.P.	0.13	996.90	5.84	996.77.
		Elev. of water	8.21	983.90 6.3-40 per K.A. 5-25-40
0+00				96.77
0+19				96.3
0+32		S. End 18" C.M. Culv.		91.67
0+38				91.9
0+78				89.9
1+00				89.3
+66				86.7
T.P.	5.60	992.41.	10.09	986.81.
+77				84.0
2+00				83.9
+50				84.1

Top Mont N. 1/4 Cor Sec. 24

988.08

0.13

0.6

5.23

$\frac{2.7}{50}$ $\frac{4.0}{32}$ $\frac{5.4}{13}$ $\frac{5.1}{4}$ $\frac{5.7}{3}$ $\frac{5.7}{1}$ $\frac{5.0}{}$ $\frac{4.9}{11}$ $\frac{1.7}{11}$ $\frac{1.6}{30}$ $\frac{3.8}{30}$ $\frac{3.1}{37}$ $\frac{1.4}{40}$

$\frac{4.9}{50}$ $\frac{7.1}{17}$ $\frac{7.0}{}$ $\frac{6.5}{4}$ $\frac{3.8}{11}$ $\frac{3.0}{20}$ $\frac{0.0}{31}$

$\frac{7.2}{50}$ $\frac{7.7}{36}$ $\frac{7.9}{23}$ $\frac{7.6}{}$ $\frac{7.3}{2}$ $\frac{4.7}{23}$ $\frac{0.0}{35}$

$\frac{10.4}{50}$ $\frac{10.4}{20}$ $\frac{10.2}{}$ $\frac{9.0}{15}$ $\frac{7.0}{32}$ $\frac{4.8}{50}$

$\frac{6.4}{50}$ $\frac{6.6}{19}$ $\frac{8.0}{16}$ $\frac{8.4}{}$ $\frac{7.7}{11}$ $\frac{6.2}{14}$ $\frac{4.7}{35}$ $\frac{3.7}{50}$

$\frac{6.6}{50}$ $\frac{6.7}{39}$ $\frac{8.3}{14}$ $\frac{8.5}{}$ $\frac{9.3}{22}$ $\frac{9.0}{50}$

$\frac{6.5}{50}$ $\frac{8.2}{38}$ $\frac{8.5}{32}$ $\frac{7.3}{29}$ $\frac{7.3}{26}$ $\frac{8.7}{23}$ $\frac{8.7}{14}$ $\frac{7.3}{12}$ $\frac{8.3}{}$ $\frac{9.1}{1}$ $\frac{9.2}{17}$ $\frac{9.1}{50}$

Sta	+	T	-	Elev
		792.41		
3 + 00				83.1
+ 50				82.1
4 + 00				82.1
+ 50				83.0
5 + 00				83.2
+ 50				82.1
6 + 00				81.9
+ 50				82.2
T. P.	3.79	988.46 988.55	7.74	84.67 984.76
+ 72				83.0
7				83.4
+ 50				82.9

Lt.

E

Rt.

$$\frac{4.7}{50} \quad \frac{6.4}{32} \quad \frac{8.2}{28} \quad \frac{9.2}{10} \quad \frac{9.3}{10} \quad \frac{10.0}{14} \quad \frac{9.3}{32} \quad \frac{9.5}{50}$$

$$\frac{4.8}{50} \quad \frac{5.5}{40} \quad \frac{7.0}{37} \quad \frac{8.4}{23} \quad \frac{8.5}{5} \quad \frac{9.4}{4} \quad \frac{10.3}{10} \quad \frac{10.9}{15} \quad \frac{9.8}{24} \quad \frac{9.9}{50}$$

$$\frac{9.2}{50} \quad \frac{9.9}{34} \quad \frac{10.5}{18} \quad \frac{11.1}{6} \quad \frac{10.3}{10} \quad \frac{10.4}{9} \quad \frac{10.4}{24} \quad \frac{9.4}{50}$$

$$\frac{10.3}{50} \quad \frac{10.6}{34} \quad \frac{10.7}{24} \quad \frac{9.5}{18} \quad \frac{9.4}{10} \quad \frac{10.2}{8} \quad \frac{10.2}{30} \quad \frac{8.2}{31} \quad \frac{8.0}{39} \quad \frac{8.9}{43} \quad \frac{9.4}{50}$$

$$\frac{10.9}{50} \quad \frac{11.1}{35} \quad \frac{9.6}{21} \quad \frac{8.0}{20} \quad \frac{8.0}{12} \quad \frac{9.5}{11} \quad \frac{9.2}{10} \quad \frac{8.9}{19} \quad \frac{8.2}{35} \quad \frac{8.3}{50}$$

$$\frac{11.0}{50} \quad \frac{10.4}{39} \quad \frac{10.6}{29} \quad \frac{10.7}{20} \quad \frac{10.9}{13} \quad \frac{11.0}{7} \quad \frac{10.3}{10} \quad \frac{8.5}{4} \quad \frac{9.4}{15} \quad \frac{8.5}{26} \quad \frac{9.2}{42} \quad \frac{8.7}{50}$$

$$\frac{10.2}{50} \quad \frac{10.6}{33} \quad \frac{10.9}{20} \quad \frac{10.2}{11} \quad \frac{10.5}{10} \quad \frac{10.8}{16} \quad \frac{10.8}{27} \quad \frac{10.1}{41} \quad \frac{10.2}{50}$$

$$\frac{5.7}{50} \quad \frac{5.8}{39} \quad \frac{8.2}{29} \quad \frac{8.8}{23} \quad \frac{9.4}{13} \quad \frac{9.9}{7} \quad \frac{10.2}{10} \quad \frac{10.7}{14} \quad \frac{11.0}{30} \quad \frac{10.5}{42} \quad \frac{10.1}{50}$$

$$\frac{2.8}{25} \quad \frac{4.2}{19} \quad \frac{5.0}{11} \quad \frac{5.5}{12} \quad \frac{5.9}{25} \quad \frac{6.1}{25}$$

$$\frac{2.5}{25} \quad \frac{2.4}{13} \quad \frac{4.3}{6} \quad \frac{5.1}{4} \quad \frac{5.1}{9} \quad \frac{4.9}{18} \quad \frac{3.6}{25} \quad \frac{3.6}{25}$$

$$\frac{4.7}{25} \quad \frac{5.5}{12} \quad \frac{5.6}{25} \quad \frac{5.6}{25}$$

Sta	+	π	-	Elev
		988.46 988.55		
7	+82			81.0
	+90			79.2
8				80.9
	+50			80.7
9				80.5
	+50			80.4
10	+84			79.7
				79.7
	+32			78.0
I.R	447	986.79 986.88	614	982.32 982.41
	+50			80.6
	+70			80.4

Lt

K

Rt

$$\frac{66}{25} \quad \frac{71}{15} \quad \frac{74}{9} \quad \frac{75}{25} \quad \frac{77}{12} \quad \frac{70}{25}$$

$$\frac{90}{25} \quad \frac{93}{25} \quad \frac{98}{25}$$

$$\frac{75}{25} \quad \frac{76}{25} \quad \frac{76}{4} \quad \frac{94}{6} \quad \frac{102}{9} \quad \frac{102}{17} \quad \frac{93}{20} \quad \frac{93}{25}$$

$$\frac{78}{25} \quad \frac{78}{25} \quad \frac{77}{25}$$

$$\frac{80}{25} \quad \frac{80}{25} \quad \frac{79}{10} \quad \frac{76}{25}$$

$$\frac{81}{25} \quad \frac{81}{25} \quad \frac{81}{25}$$

$$\frac{87}{25} \quad \frac{83}{11} \quad \frac{85}{5} \quad \frac{88}{11} \quad \frac{85}{25} \quad \frac{84}{25}$$

$$\frac{86}{25} \quad \frac{88}{25} \quad \frac{86}{25}$$

$$\frac{89}{25} \quad \frac{95}{12} \quad \frac{100}{9} \quad \frac{105}{12} \quad \frac{103}{13} \quad \frac{94}{16} \quad \frac{97}{25} \quad \frac{95}{25}$$

$$\frac{72}{25} \quad \frac{71}{12} \quad \frac{62}{7} \quad \frac{62}{10} \quad \frac{63}{25} \quad \frac{58}{25}$$

$$\frac{68}{25} \quad \frac{64}{25} \quad \frac{63}{9} \quad \frac{55}{25}$$

Sta.	+	Σ	-	Elev
		986.77 986.88		
11				79.5
	+50			78.7
12				79.0
	+50			79.7
13				79.4
	+50			79.2
14				79.5
	+50			79.3
T.P.	3.60	984.89 984.98	5.50	981.29 981.38
15				79.2
	+50			78.9
16				78.8

Lt

R

Rt

$$\frac{76}{25} \quad \frac{73}{9} \quad \frac{70}{18} \quad \frac{63}{25} \quad \frac{55}{25}$$

$$\frac{68}{25} \quad \frac{68}{11} \quad \frac{80}{8} \quad \frac{81}{12} \quad \frac{73}{17} \quad \frac{62}{30} \quad \frac{57}{25}$$

$$\frac{71}{25} \quad \frac{70}{15} \quad \frac{80}{12} \quad \frac{78}{25} \quad \frac{81}{25}$$

$$\frac{79}{25} \quad \frac{71}{25} \quad \frac{72}{25}$$

$$\frac{72}{25} \quad \frac{74}{25} \quad \frac{74}{25}$$

$$\frac{72}{25} \quad \frac{76}{14} \quad \frac{74}{16} \quad \frac{80}{27} \quad \frac{87}{33} \quad \frac{60}{33}$$

$$\frac{74}{25} \quad \frac{73}{25} \quad \frac{72}{26} \quad \frac{84}{32} \quad \frac{89}{37} \quad \frac{60}{37}$$

$$\frac{74}{25} \quad \frac{75}{25} \quad \frac{74}{25}$$

$$\frac{57}{25} \quad \frac{57}{25} \quad \frac{55}{25}$$

$$\frac{59}{25} \quad \frac{60}{8} \quad \frac{60}{9} \quad \frac{72}{13} \quad \frac{88}{15} \quad \frac{94}{15}$$

$$\frac{69}{25} \quad \frac{61}{10} \quad \frac{61}{12} \quad \frac{71}{15} \quad \frac{75}{20} \quad \frac{65}{25} \quad \frac{54}{25}$$

Sta	+	π 984.89 984.98	-	Elev.
16	+50			77.8
	+87			78.2
17				77.3
	+25			78.1
B.M.			6.73	978.16 976.25
	+55			77.8
18				76.7
	+50			77.5
19				77.2
	+70			76.7
	+84			76.3
	+84		11.6	73.30

Lt.

L

Rt.

$$\frac{65}{25} \quad \frac{65}{8} \quad \frac{71}{6} \quad \frac{71}{5} \quad \frac{68}{5} \quad \frac{53}{9} \quad \frac{29}{25}$$

$$\frac{65}{25} \quad \frac{65}{21} \quad \frac{74}{20} \quad \frac{74}{3} \quad \frac{67}{6} \quad \frac{58}{8} \quad \frac{53}{25}$$

$$\frac{75}{25} \quad \frac{76}{7} \quad \frac{64}{7} \quad \frac{53}{14} \quad \frac{38}{25}$$

$$\frac{67}{25} \quad \frac{68}{3} \quad \frac{72}{6} \quad \frac{77}{6} \quad \frac{77}{25}$$

Elevations are

Top of Red inside of West from 21.83 Rt. of sta. 17+50.82

o.k.

$$\frac{72}{25} \quad \frac{71}{20} \quad \frac{76}{25}$$

$$\frac{73}{25} \quad \frac{82}{25} \quad \frac{79}{25}$$

$$\frac{75}{50} \quad \frac{74}{25} \quad \frac{73}{25}$$

$$\frac{78}{25} \quad \frac{77}{25} \quad \frac{75}{25}$$

$$\frac{84}{22} \quad \frac{113}{22} \quad \frac{114}{19} \quad \frac{85}{17} \quad \frac{66}{10} \quad \frac{82}{25} \quad \frac{81}{25}$$

$$\frac{80}{25} \quad \frac{86}{5} \quad \frac{115}{4} \quad \frac{114}{1} \quad \frac{86}{10} \quad \frac{68}{10} \quad \frac{83}{17} \quad \frac{83}{25}$$

Sta	T	π	-	Elev
		984.89 984.98		

19	+85.09		11.6	73.3
----	--------	--	------	------

Elev water in ditch	=	10.61		74.28
---------------------	---	-------	--	-------

20			11.6	73.7
----	--	--	------	------

	+50		11.9	73.0
--	-----	--	------	------

21			11.3	73.5
----	--	--	------	------

	+50		11.8	73.1
--	-----	--	------	------

22			11.3	73.6
----	--	--	------	------

	+50		12.3	72.5
--	-----	--	------	------

23			12.3	72.6
----	--	--	------	------

5-27-40

12

K.H.

L.G.

M.B.

C.N.

2 Ditch

"

"

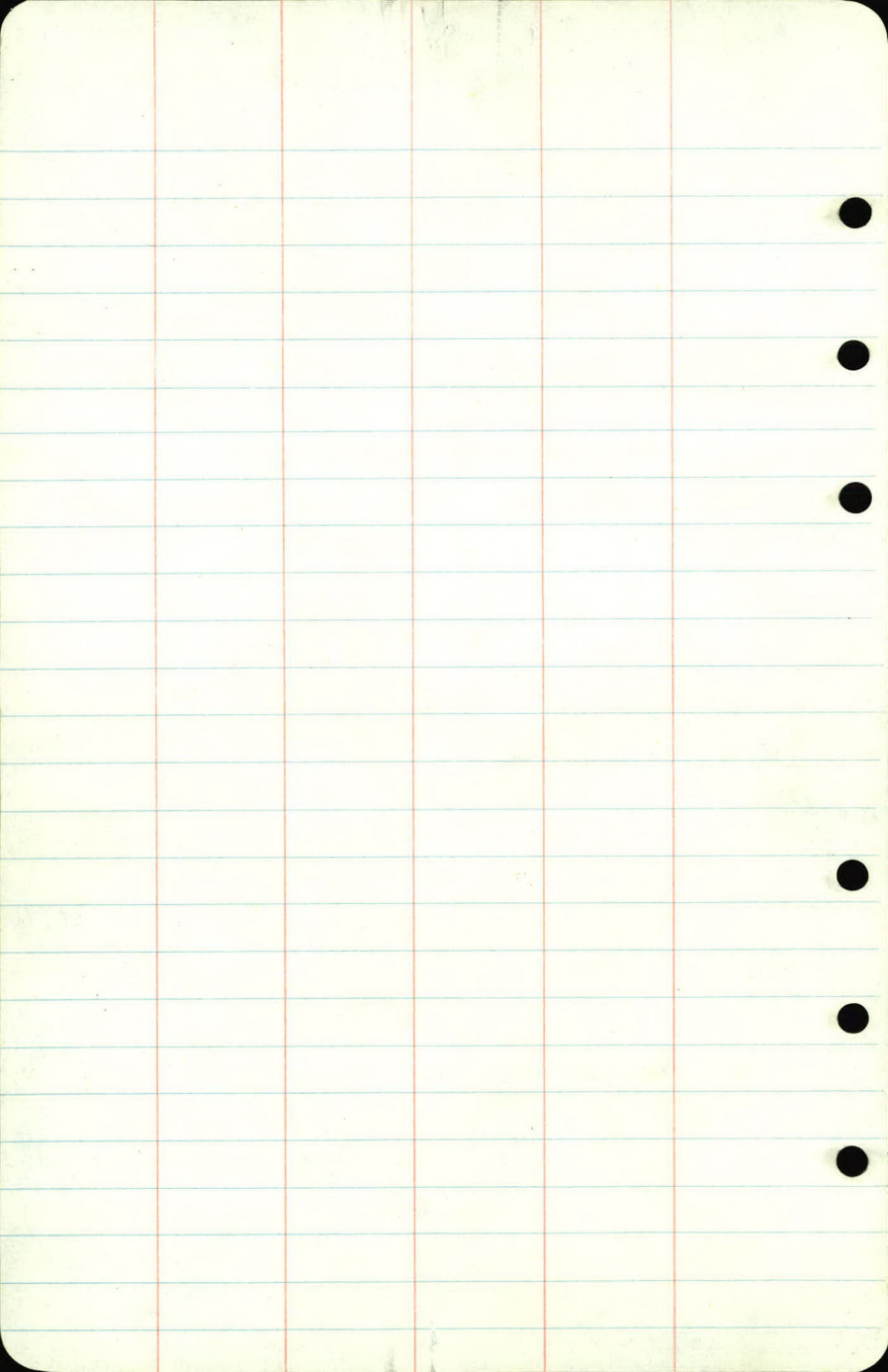
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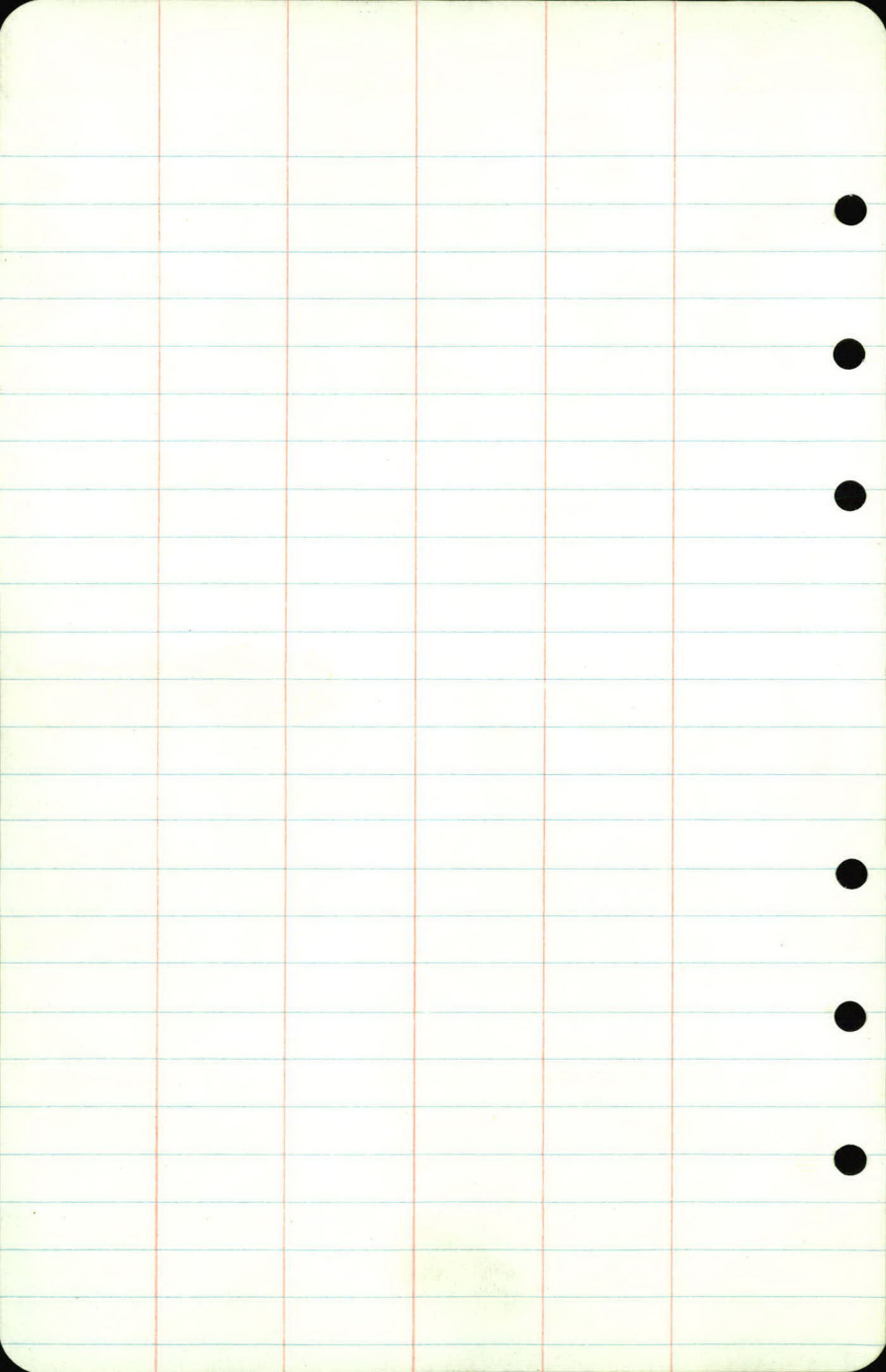
"

"

"



Crampton.



Line Division

Sta	Point	ΔLt	ΔRt
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19+88.09 Line #1
 19 +91.30 = P.I. = E Ditch

17	+52.75	P.I.	21°47'
----	--------	------	--------

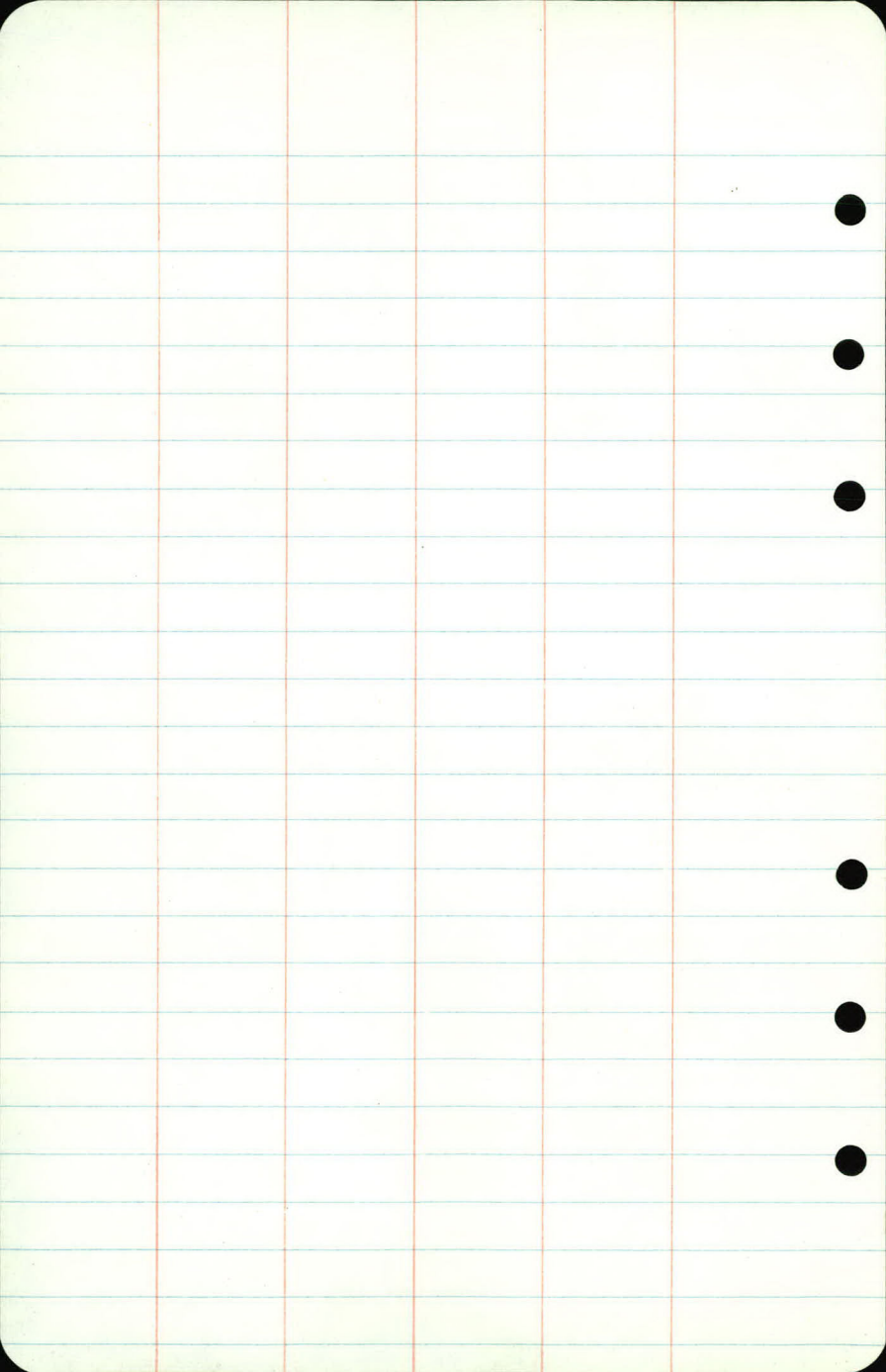
16	+27.29	P.I.	14°19'
----	--------	------	--------

Q 9.55' 10'

10'

Prop. Line B

2" X 2" Hub.



xsections

Sta	+	Σ	-	Elev.
B.M.	6.77	984.93		978.16
		983.02		976.25

16	+50			78.1
----	-----	--	--	------

	+80			80.0
--	-----	--	--	------

17				80.1
----	--	--	--	------

	+25			77.1
--	-----	--	--	------

	+53			77.1
--	-----	--	--	------

18				76.9
----	--	--	--	------

	+50			77.5
--	-----	--	--	------

19				76.7
----	--	--	--	------

	+50			77.0
--	-----	--	--	------

	+78			76.8
--	-----	--	--	------

	+85			78.0
--	-----	--	--	------

Lt.

E

Rt

Top Rod inside of W. Iron 9.53 Lt 17+52.75

$$\frac{66}{25} \quad \frac{67}{15} \quad \frac{62}{8} \quad \frac{73}{7} \quad \frac{68}{4} \quad \frac{54}{18} \quad \frac{40}{22} \quad \frac{30}{22}$$

$$\frac{74}{25} \quad \frac{72}{17} \quad \frac{59}{7} \quad \frac{54}{5} \quad \frac{49}{11} \quad \frac{33}{25} \quad \frac{0.6}{25}$$

$$\frac{76}{25} \quad \frac{73}{17} \quad \frac{58}{5} \quad \frac{48}{10} \quad \frac{34}{25} \quad \frac{0.7}{25}$$

$$\frac{71}{25} \quad \frac{75}{19} \quad \frac{78}{7} \quad \frac{69}{11} \quad \frac{56}{18} \quad \frac{49}{25} \quad \frac{3.5}{25}$$

$$\frac{71}{25} \quad \frac{71}{10} \quad \frac{78}{18} \quad \frac{81}{18} \quad \frac{66}{25}$$

$$\frac{80}{25} \quad \frac{80}{25} \quad \frac{80}{25}$$

$$\frac{75}{25} \quad \frac{75}{7} \quad \frac{82}{6} \quad \frac{74}{25} \quad \frac{82}{25}$$

$$\frac{76}{25} \quad \frac{79}{8} \quad \frac{82}{4} \quad \frac{82}{3} \quad \frac{82}{4} \quad \frac{77}{25} \quad \frac{86}{25}$$

$$\frac{79}{25} \quad \frac{79}{25} \quad \frac{78}{25}$$

$$\frac{85}{25} \quad \frac{112}{24} \quad \frac{114}{20} \quad \frac{85}{19} \quad \frac{65}{11} \quad \frac{81}{25} \quad \frac{88}{25}$$

$$\frac{81}{25} \quad \frac{84}{16} \quad \frac{112}{14} \quad \frac{113}{10} \quad \frac{83}{8} \quad \frac{69}{11} \quad \frac{83}{25} \quad \frac{83}{25}$$

Sta.	+	Σ	-	Elev.
		984.93		
		983.02		
19	+90			76.3
	+90		11.4	73.5
	+91.38		11.5	73.4
B.M.			6.77	976.25
				778.16
				(976.25)

6-14-40

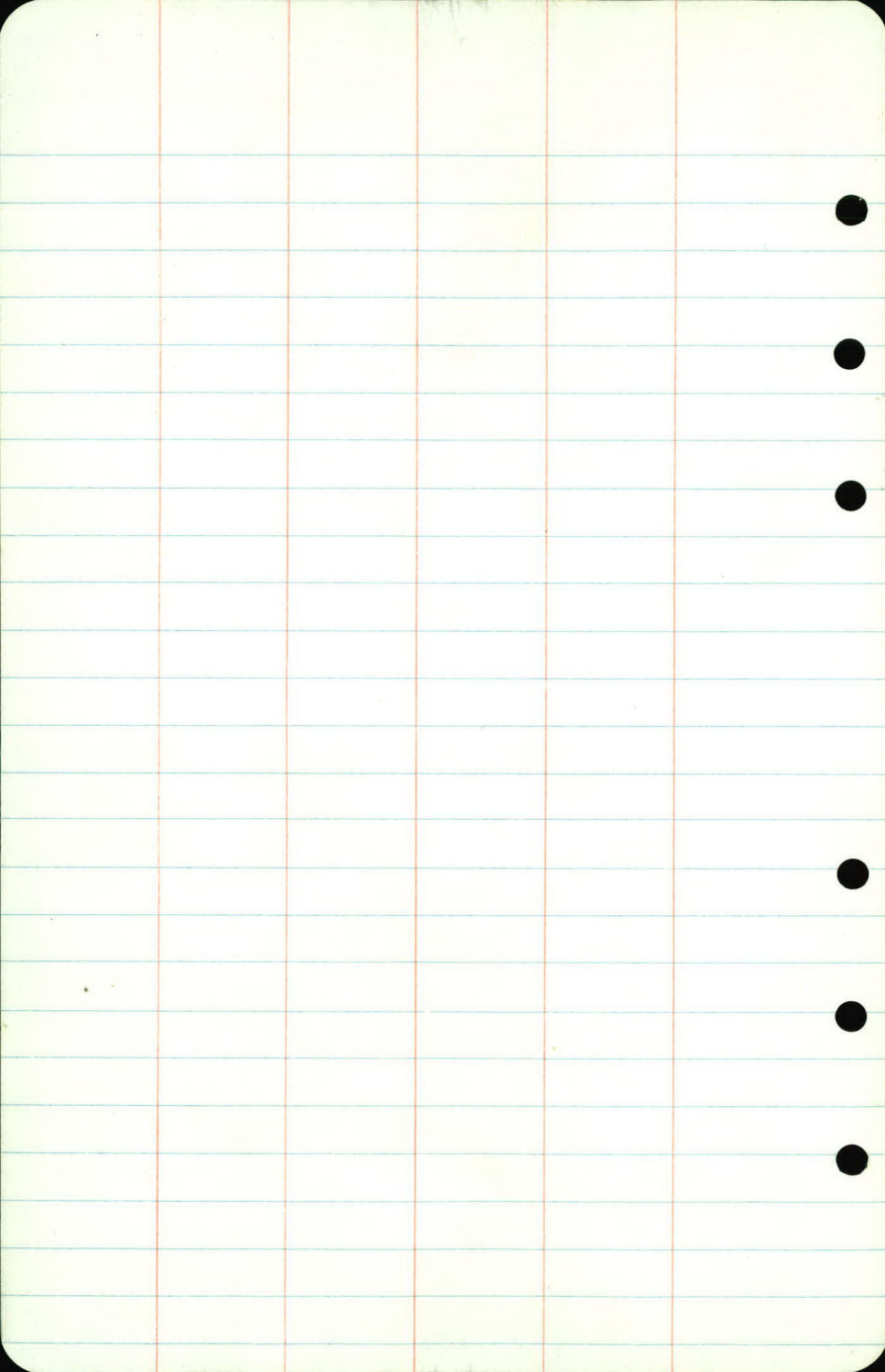
Lt.

L.

Rt.

$\frac{8.3}{25}$	$\frac{8.5}{5}$	$\frac{11.5}{5}$	$\frac{11.4}{0.0}$	$\frac{8.6}{9}$	$\frac{6.8}{21}$	$\frac{8.2}{25}$	$\frac{8.2}{25}$
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7



Slope stakes

DITCH

Bradley Prop.

Sta	+	π	-	Grade	
B.M.					1002.21
B.M.	3.22	992.07			988.85
4				81.5	
	+50			81.4	
5				81.3	
	+50			81.2	-0.27%
6				81.1	
	+50			81.0	P.I.
	+72			80.5	
7				79.8	-2.47%
B.M.	1.39	990.24			12.3
	+50			78.6	P.I.
	+82			78.4	
8				78.4	-0.57%

9-5-40
K. H.
M. B.
L. G.

Gr. Rod

Lt.

K

Rt.

Top Mark N. 1/4 Sec. 24

Spk. inside of stump 70' Lt. 7+00

10.6

$$\begin{array}{r} 98 \\ 108 \end{array} \quad \begin{array}{r} B.T. + 30 \\ 7.6 \end{array}$$

10.7

$$\begin{array}{r} 93 \\ 114 \end{array} \quad \begin{array}{r} B.T. + 30 \\ 7.7 \end{array}$$

10.8

$$\begin{array}{r} 87 \\ 121 \end{array} \quad \begin{array}{r} B.T. + 30 \\ 7.8 \end{array}$$

10.9

$$\begin{array}{r} 93 \\ 114 \end{array} \quad \begin{array}{r} B.T. + 30 \\ 7.9 \end{array}$$

11.0

$$\begin{array}{r} 101 \\ 109 \end{array} \quad \begin{array}{r} B.T. + 30 \\ 8.0 \end{array}$$

11.1

$$\begin{array}{r} 99 \\ 112 \end{array} \rightarrow \begin{array}{r} B.T. + 30 \\ 8.1 \end{array}$$

11.6

$$7.1 / \begin{array}{r} 88 \\ 128 \end{array}$$

$$\begin{array}{r} 88 \\ 128 \end{array}$$

$$\begin{array}{r} 7.5 \\ 128 / 7.1 \end{array}$$

12.3

$$13.7 / \begin{array}{r} 6.2 \\ 14.1 \end{array}$$

$$\begin{array}{r} 86 \\ 13.7 \end{array}$$

$$\begin{array}{r} 86 \\ 13.7 / 8.9 \end{array}$$

11.6

$$9.9 / \begin{array}{r} 74 \\ 112 \end{array}$$

$$\begin{array}{r} 74 \\ 112 \end{array}$$

$$\begin{array}{r} 7.3 \\ 112 / 10.1 \end{array}$$

11.8

$$6.5 / \begin{array}{r} 93 \\ 125 \end{array}$$

$$\begin{array}{r} 93 \\ 125 \end{array}$$

$$\begin{array}{r} 94 \\ 125 / 6.3 \end{array}$$

11.8

$$6.9 / \begin{array}{r} 91 \\ 127 \end{array}$$

$$\begin{array}{r} 96 \\ 122 \end{array}$$

$$\begin{array}{r} 9.7 \\ 121 / 6.1 \end{array}$$

Sta	+	π	-	Grade	
		990.24			
8	+50			78.1	
9				77.9	
	+50			77.6	
	+84			77.4	-0.59%
10				77.4	
	+32			77.2	
	+50			77.1	P1
T.P.	6.21	987.99	8.46	981.78	
	+70			77.0	
11				77.0	
	+27.55			76.9	-0.28%
	+50			76.8	

Gr. Red

Lt.

K

Rt.

12.1

$$6.3' / \frac{9.7}{12.9}$$

$$\frac{9.5}{12.6}$$

$$\frac{9.5}{12.6} / 6.7'$$

12.3

$$6.1' / \frac{10.0}{12.9}$$

$$\frac{10.0}{12.3}$$

$$\frac{10.0}{12.3} / 4.1$$

12.6

$$6.7' / \frac{10.0}{12.6}$$

$$\frac{9.9}{12.7}$$

$$\frac{10.0}{12.6} / 6.7'$$

12.8

$$6.3' / \frac{10.4}{12.9}$$

$$\frac{10.6}{12.2}$$

$$\frac{10.4}{12.4} / 6.3'$$

13.0

13.1

$$8.9' / \frac{9.4}{12.7}$$

$$\frac{9.4}{12.7}$$

$$\frac{9.8}{12.3} / 8.1'$$

11.0

$$7.1' / \frac{8.2}{12.8}$$

$$\frac{7.7}{12.3}$$

$$\frac{7.4}{12.6} / 8.7'$$

11.0

$$6.5' / \frac{8.5}{12.5}$$

$$\frac{8.4}{12.6}$$

$$\frac{8.4}{12.6} / 6.7'$$

11.1

$$\begin{array}{r} 8.9 \text{ D.R. P.1} \\ + 2.2 \quad 1.0 \\ \hline \end{array}$$

11.2

$$6.5' / \frac{8.7}{12.5}$$

$$\frac{8.7}{12.5}$$

$$\frac{8.7}{12.5} / 6'$$

Sta	+	π	-	Grade
		987.99		
12				76.7
	+50			76.5
13				76.4
	+50			76.3
14				76.1
	+50			76.0
T.P.	6.47	986.17	8.29	979.70
15				75.8
	+50			75.7
16				75.6
	+27.29			75.4
	+50			75.4
	+80			75.3

-0.28%

Gr. Rod

L_t

E

R_t

11.3

$$6.9' / \frac{86}{+2.7}$$

$$\frac{91}{+2.2}$$

$$\frac{86}{+2.7} / \frac{8.7}{6'}$$

11.5

$$7.9' / \frac{89}{+3.2}$$

$$\frac{84}{+3.1}$$

$$\frac{84}{+3.1} / 7.7'$$

11.6

$$7.5' / \frac{86}{+3.0}$$

$$\frac{85}{+3.1}$$

$$\frac{87}{+2.9} / 7.3'$$

11.7

$$7.9' / \frac{85}{+3.2}$$

$$\frac{88}{+2.9}$$

$$\frac{86}{+3.1} / 7.7'$$

11.9

$$7.9' / \frac{87}{+3.2}$$

$$\frac{87}{+3.2}$$

$$\frac{88}{+3.1} / 7.7'$$

12.0

$$7.9' / \frac{85}{+3.2}$$

$$\frac{89}{+3.1}$$

$$\frac{89}{+3.1} / 7.7'$$

10.4

$$8.5' / \frac{79}{+3.5}$$

$$\frac{71}{+3.3}$$

$$\frac{71}{+3.3} / 6.1'$$

10.5

$$8.1' / \frac{72}{+3.3}$$

$$\frac{73}{+3.2}$$

$$\frac{74}{+3.1} / 7.7'$$

10.6

$$7.5' / \frac{76}{+3.0}$$

$$\frac{74}{+3.2}$$

$$\frac{74}{+3.2} / 7.9'$$

10.7

10.8

$$7.9' / \frac{76}{+3.2}$$

$$\frac{81}{+2.7}$$

$$\frac{58}{+5.0} / 11.5'$$

10.9

Sta.	+	π	-	Grade	
		986.17			
17				75.3	
	+25			75.2	
B.M.			8.07	978.10	978.16
	+53			75.1	
18				75.0	
	+50			74.9	
19				74.7	
	+50			74.6	
	+78			74.5	
	+85				
	+90				
B.M.			0.14		986.03

9-5-40

Gr. Red

Lt

E

Rt.

10.9

$$\begin{array}{r} 8.5' / 7.4 \\ \hline 13.5 \end{array}$$

$$\begin{array}{r} 40 \\ \hline 149 \end{array}$$

$$\begin{array}{r} 3.5 \\ \hline 12.4 / 16.3' \end{array}$$

11.0

$$\begin{array}{r} 5.9' / 8.8 \\ \hline 12.2 \end{array}$$

$$\begin{array}{r} 87 \\ \hline 12.3 \end{array}$$

$$\begin{array}{r} 77 \\ \hline 13.3 / 6.1 \end{array}$$

Top of Red inside of W. Iron. 10' Lt 17+50.92

11.1

$$\begin{array}{r} 5.7' / 9.0 \\ \hline 12.1 \end{array}$$

$$\begin{array}{r} 91 \\ \hline 12.0 \end{array}$$

$$\begin{array}{r} 8.9 \\ \hline 12.2 / 5.9' \end{array}$$

11.2

$$\begin{array}{r} 5.5' / 9.2 \\ \hline 12.0 \end{array}$$

$$\begin{array}{r} 93 \\ \hline 11.9 \end{array}$$

$$\begin{array}{r} 9.2 \\ \hline 12.0 / 5.5' \end{array}$$

11.3

$$\begin{array}{r} 5.1' / 9.5 \\ \hline 11.8 \end{array}$$

$$\begin{array}{r} 89 \\ \hline 12.4 \end{array}$$

$$\begin{array}{r} 94 \\ \hline 11.9 / 5.3' \end{array}$$

11.5

$$\begin{array}{r} 6.5' / 9.0 \\ \hline 12.5 \end{array}$$

$$\begin{array}{r} 95 \\ \hline 12.0 \end{array}$$

$$\begin{array}{r} 8.8 \\ \hline 12.7 / 6.9' \end{array}$$

11.6

$$\begin{array}{r} 6.7' / 9.1 \\ \hline 12.5 \end{array}$$

$$\begin{array}{r} 93 \\ \hline 12.3 \end{array}$$

$$\begin{array}{r} 99 \\ \hline 11.7 / 4.9 \end{array}$$

11.7

$$\begin{array}{r} 8.5' / 8.5 \\ \hline 13.5 \end{array}$$

$$\begin{array}{r} 86 \\ \hline 13.1 \end{array}$$

$$\begin{array}{r} 95 \\ \hline 12.2 / 5.9' \end{array}$$

11.7

$$\begin{array}{r} 102 \\ \hline 11.5 \end{array}$$

$$\begin{array}{r} 94 \\ \hline 12.3 / 6.1 \end{array}$$

Nail in 24" O. 30' Rt Sta 16+85

