

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

PLAN Survey

Co. Rd. "E2"

From New Brighton Rd To Snelling

Road Acc't. No. Book 55

Date Filed 3-8-65 File DR 9

1
Co Rd E²

New Brighton Rd to TH^{#51}

PLAN SURVEY

Alinement 1-11

Topography 12-23

Bench Levels 24-27

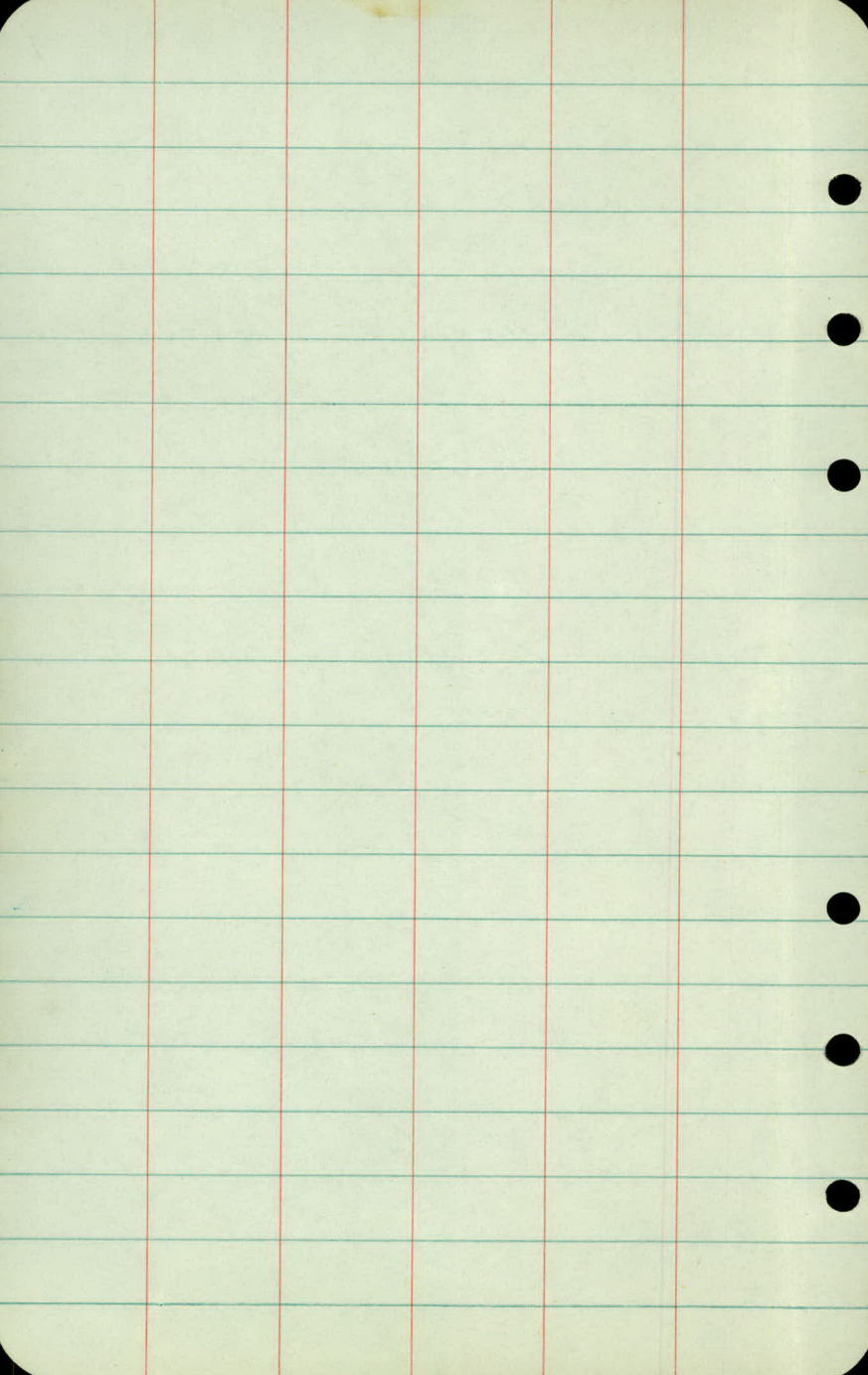
X-Sections 28-71 B

Swamp Borings 72-79

Swamp Soundings 80-88

X-Sec. 2+55 93

PCC. 11/26/62



Co. Rd E²

Alinement

Sta Point A.L.L. A.R.T.

13+66.44 P.O.T.

16.20
13.6
2.6
1.5

10+88.35 P.O.T.

9+33.35

8+21.94

8+00

1318.19

474.4
38.83

5+50

3+00

P.O.T.

0

2+22.51 P.O.T.

1+00 P.O.T.

0+00 P.O.T.

1318.09

W $\frac{1}{4}$ Cor. Sec. 28

FK
WM
MMc

Nov. 13, 1962
FOG

3

Disk
5" O 19.75

13.23

Disk
6" Pop.

East Side Swamp

Spike

In Swamp

1x2

West Side Swamp

Disk
6" BE

70.06

0.04

Iron

Spike

Disk
16" Oak

40.95

18.22

116.11
115.55

BM
Hub

Spike

6" Oak
Disk

18.5.9

P.I. of New Brighton Rd.

0.29

Iron

Iron pin

34.09

63.55

Disk
in R.P.

Disk
6" Elm

Iron

0.28

114.30

35.95

0.26

114.00

Drill hole

Cross

Mont.

Sta Point ΔL ΔR

P.I. = 14+69.19

16+19.19 P.O.E.S.T.

+65.02 P.T.

$11^{\circ}55\frac{1}{2}'$

+50

$11^{\circ}28.5'$ P.I. = 14+69.19

16

$9^{\circ}58.5'$ $\Delta = 23^{\circ}51' R$

+50

$8^{\circ}28.5'$ $\frac{1}{2}\Delta = 11^{\circ}55\frac{1}{2}'$

15

$6^{\circ}58.5'$ $D = 6^{\circ}-$

+50

$5^{\circ}28.5'$ $T = 201.67$

14

$3^{\circ}58.5'$ $L = 397.50$

+50

$2^{\circ}28.5'$ $R = 954.93$

13

$0^{\circ}58.5'$

12+67.52 P.C.

$0^{\circ}00'$

14+43.63

13+72.88

FK
WM
MMC

Nov. 14, 1962

4

Ctr. Sec 28

90° 43' 15"

90° 43' 15"

37.05 - O.P.T.

66.50

Ment

Nail

89° 16' 45"

150'

29° 51'

Tangent

Dist
6" P.P.

14.01

3705

1 1/4" IRON

Dist
6" P.P.

30.28

0.04

Iron

0.10

Iron

Sta Point Δ Lt Δ Rt

			P.I. = 19+57.82
+53.65 P.T.	11° 55' 1/2"		Δ = 23° 51' Lt.
21	10° 19'		1/2 Δ = 11° 55' 1/2"
+50	8° 49'		D = 6°
20	7° 19'		T = 201.67
+50	5° 49'		L = 397.50
19	4° 19'		R = 954.93
+50	2° 49'		
18	1° 19'		
17+56.15 P.C.	0°		

VOID See page 9
 See notes Rec'd 12-6-62

9267.52
 1.80
 201.67
 1819.19

FK
WM
MMc

Nov. 15, 1962

5

Iron pin

Sta Point ΔL ΔR

+01.97 P.T. $11^{\circ}08\frac{1}{2}'$

27 $11^{\circ}05\frac{1}{2}'$

P.I. = 24+81.98

+50 $9^{\circ}50\frac{1}{2}'$

$\Delta = 22^{\circ}17' Lt$

26 $8^{\circ}35\frac{1}{2}'$

$\frac{1}{2}\Delta = 11^{\circ}08\frac{1}{2}'$

+50 $7^{\circ}20\frac{1}{2}'$

$D = 5^{\circ}$

25 $6^{\circ}05\frac{1}{2}'$

$T = 225.68^{\circ}$

+50 $4^{\circ}50\frac{1}{2}'$

$L = 445.67^{\circ}$

24 $3^{\circ}35\frac{1}{2}'$

$R = 1145.92^{\circ}$

+50 $2^{\circ}20\frac{1}{2}'$

23 $1^{\circ}05.5'$

22+56.30 P.C. 0°

See page 9

FK
RG
WM
MMc

Nov. 19, 1962

6

5,276.00

527.50

225.68

301.82

27101.97

30403.79

225.68

2778.11

from

Sta Point ΔL ΔR

+23.78 P.T.

$11^{\circ}08\frac{1}{2}'$

32

$10^{\circ}33'$

+50

$9^{\circ}18'$ P.L. = 30+03.79

31

$8^{\circ}03'$ $\Delta = 22^{\circ}17'$ RT

+50

$6^{\circ}48'$ $\frac{1}{2}\Delta = 11^{\circ}08\frac{1}{2}'$

30

$5^{\circ}33'$ $D = 5^{\circ}$

+50

$4^{\circ}18'$ $T = 225.68$

29

$3^{\circ}03'$ $L = 445.67$

+50

$1^{\circ}48'$ $R = 1145.92$

28

$0^{\circ}33'$

27+78.11 P.C.

$0^{\circ}00'$

+45.67

3223.78

See page 9

178.11

178.11
178.11
178.11
178.11

78.11
2701.97
76.14

FK
WM
MMc
RB

Nov. 21, 1962

7

Good Ties $\frac{1}{4} \frac{1}{4}$ Cor

Disk
 $\frac{3}{4}$ " Elm 23.88
 $\frac{1}{4} \frac{1}{4}$ Cor.

Disk
1" Elm 8.66

Iron

128.10

Disk
3" Tw. Elm

Sta Point ΔL ΔR

36+60.10 West Edge Conc TH 51410

18, 11

+41.99 P.T. $\angle 7^{\circ} 22\frac{1}{2}'$ P.1 = 34+73.78

36 $15^\circ 16.5'$ $\Delta = 34^\circ 45' Lt$

+50	12° 46.5'	$\frac{1}{2}\Delta = 17^{\circ} 22\frac{1}{2}'$
-----	----------------------	---

35 $10^\circ 16.5'$ $D = 10^\circ$

+50	$7^{\circ}46.5'$	$T = 179.29$
-----	------------------	--------------

34 $5^{\circ}16.5'$ $L = 347.5'$

+50	$2^{\circ}46.5'$	$R = 572.96$
-----	------------------	--------------

33	$0^{\circ}16.5'$
----	------------------

32+94.49 P.C. 0°00'

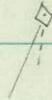
23 78
70 71

2. 1. 1.
 2. 1. 1.
 2. 1. 1.
 2. 1. 1.
 2. 1. 1.

Nov. 21, 1962

8

E 1/4 Cor
Sec. 28



West Edge Conc.

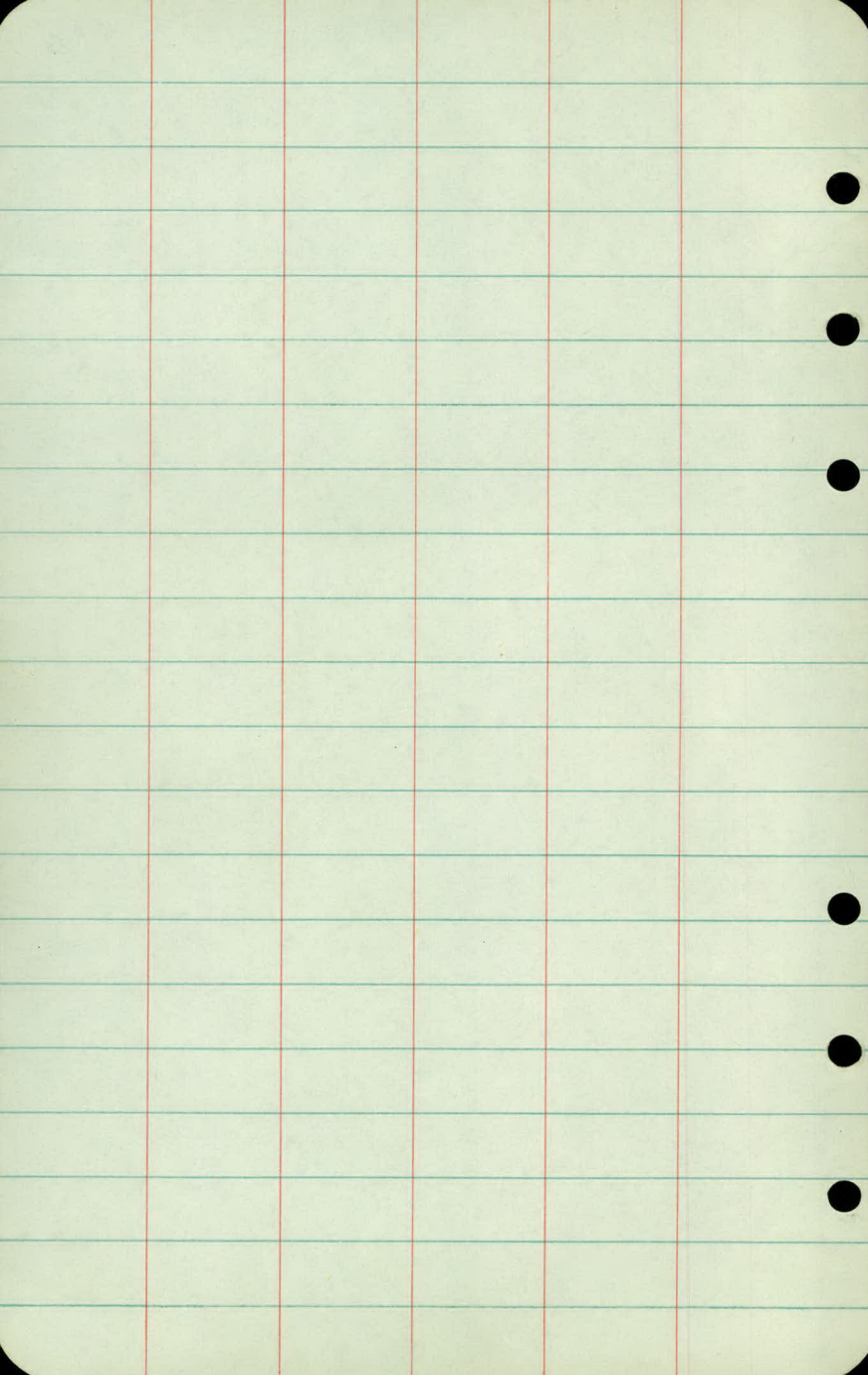
Void

130.45-
845.62



Iron

130.45-
845.62



New Curve

Rec. 12-6-62

Sta. Point ΔL ΔR

+07.89 P.T. $18^{\circ}42'$

24 $18^{\circ}28'$

+50 $16^{\circ}58'$

P.I. 21+07.79

23 $15^{\circ}28'$

$\Delta = 37^{\circ}24' Lt.$

+50 $13^{\circ}58'$

$\frac{1}{2}\Delta = 18^{\circ}42'$

22 $12^{\circ}28'$

$D = 6^{\circ}$

+50 $10^{\circ}58'$

$T = 323.23$

21 $9^{\circ}28'$

$L = 623.33$

+50 $7^{\circ}58'$

$R = 954.93$

20 $6^{\circ}28'$

$4^{\circ}58'$

19 $3^{\circ}28'$

$1^{\circ}58'$

18 $0^{\circ}28'$

17+84.56 P.C. $0^{\circ}00'$

FK
RG
WM

Dec 5, 1962
Snowing Cold 19°

10

118
80.24
198.24

Disk
2" Elm

198.18

Iron

198.18

Disk
1/2" Dead BE.

Sta Point ΔL ΔR

36+59.76

35+61.46 P.O.T.

6°02.4'

33+94.25 P.T. 5°57.4'

+50 5°17.4' P.I. = 31+96.50

33 4°32.4' $\Delta = 11^\circ 54\frac{1}{2}'$ Lt

+50 3°47.4' $\frac{1}{2}\Delta = 5^\circ 57' 15''$

32 3°02.4' D = 3°

+50 2°17.4' T = 199.19

31 1°32.4' L = 396.94

+50 0°47.4' R = 1909.86

30 0°02.4'

29+97.31 P.C. 0°00'

6093

FK
RG
WM

Dec. 5, 1962

Dec. 6, 1962

11

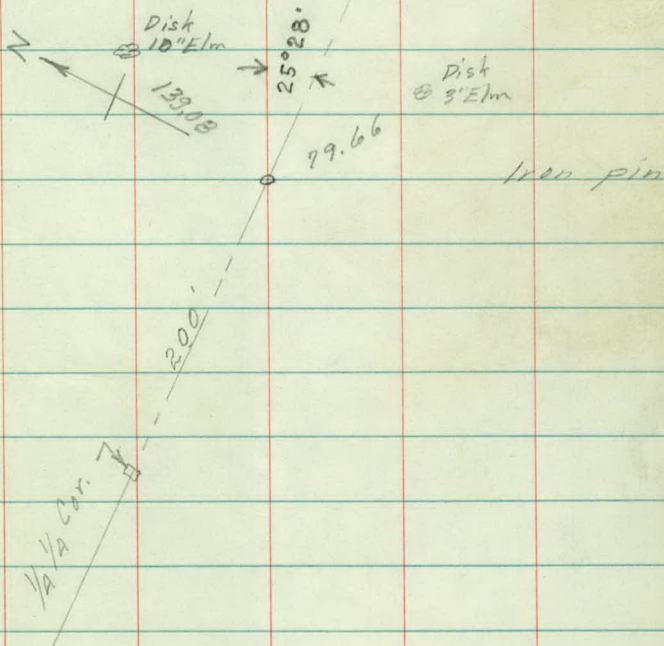
Disk
PP

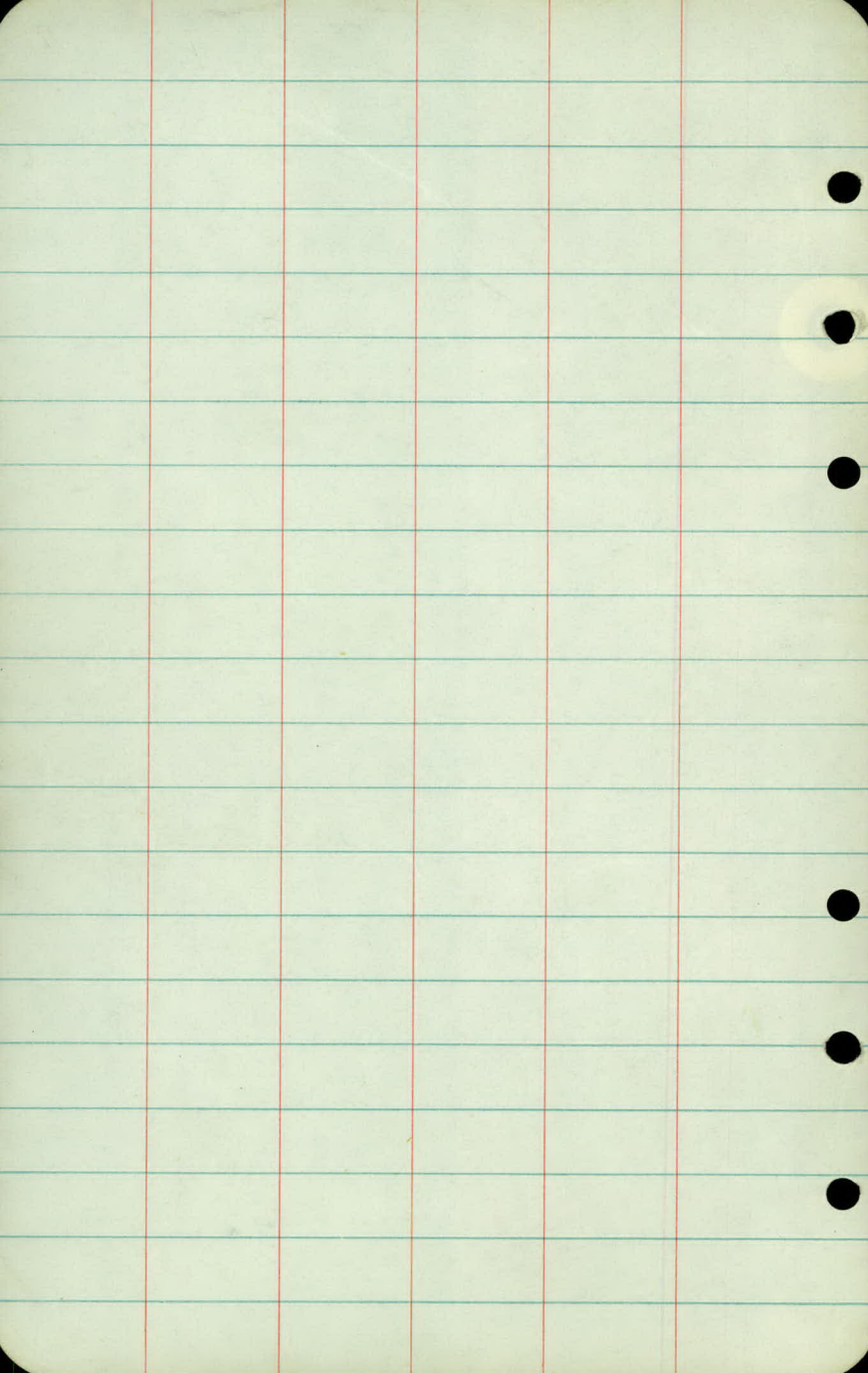
108.17

Lt. Turn
Lane Sign 2271

East Edge
T. H. # 51

East 1/4 Cor.
Sec. 28.





FK
RG
WM

Dec. 6, 1962

12

T-1

TOPOGRAPHY

Drawn 12-27-62
RFG & JS

	$+96 \frac{10^{\circ}0}{13}$			
$+23 \frac{10^{\circ}0}{11}$		$+34 \frac{51^{\circ}P}{9}$		
4	$+11 \frac{15^{\circ}0}{12}$	$+108 \frac{NW Cor Gar}{105}$		
		$+88 \frac{NW Cor Ho}{135}$		
		$+64 \frac{PP}{99}$		
	$+71 \frac{24^{\circ}0}{8}$			$+27 \frac{24^{\circ}E/m}{99}$
$+22 \frac{24^{\circ}0}{12}$		$+129 \frac{Tw 4^{\circ}0}{10}$	$+14 \frac{Ent 15^{\circ} 20^{\circ}CM}{122}$	
3	$+18 \frac{8^{\circ}0}{7}$		$+12 \frac{51^{\circ}P}{86}$	$3100 \frac{\$ Road South}{EGR}$
		$+100 \frac{? Wall}{200}$		$+92 \frac{EGR}{110}$
$+79 \frac{T.P.}{45}$		$+69 \frac{Arch?}{57}$		$+64 \frac{\$ Ent}{217}$
		$+50 \frac{BR}{A3}$	$Corre$	
	$+83 \frac{6^{\circ}E/m}{30}$		$42.8 - 23.5$	

[illegible]

FK
BG
WM

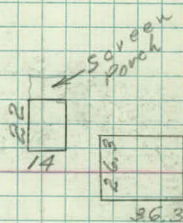
Dec. 7, 1962

13

T-2

→ Z

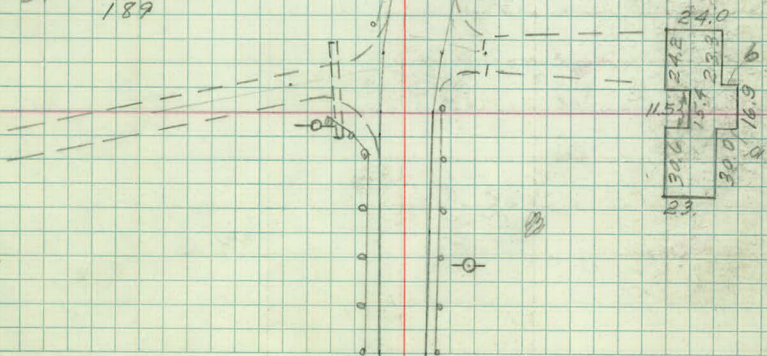
71' Rt. 4-13-73
Top of Bank



2+95 E.G.R. Rt 109.4'
GR 4' from Edge
Conc. 212 L.F.

Rt 1+91 NE Gr Ho
212
(See Page T-12)

Rt 1+39 NE Cor Gar
189



10

9

✓
+40 to +60 $\frac{2-4" BE}{35-70}$

✓
+33 $\frac{4" BE}{28}$

✓
+40 $\frac{SWP}{\cancel{2}}$

✓
+30 $\frac{4" BE}{11}$

✓
+20 $\frac{SWP}{100}$

8 +05 $\frac{2" Pipe Line}{8}$ +01.5 $\frac{12" Pipe Line}{\cancel{2}}$

✓
+89 $\frac{Gas Post}{9}$

✓
+70 $\frac{10" O}{14}$

✓
+76 $\frac{10" BE}{20}$

✓
+68 $\frac{6" O}{9}$

✓
+40 $\frac{16" O}{15}$

✓
+60 $\frac{24" O}{8}$

7 +06 $\frac{18" O}{7}$

✓
+76 $\frac{Base 6' Elm}{18}$

✓
+50 $\frac{Tr 16" O}{9}$

✓
+16 $\frac{18" O}{20}$

✓
+42 $\frac{3" O}{7}$

6 +10 $\frac{TV 14" O}{11}$

✓
+66 $\frac{18" O}{10}$

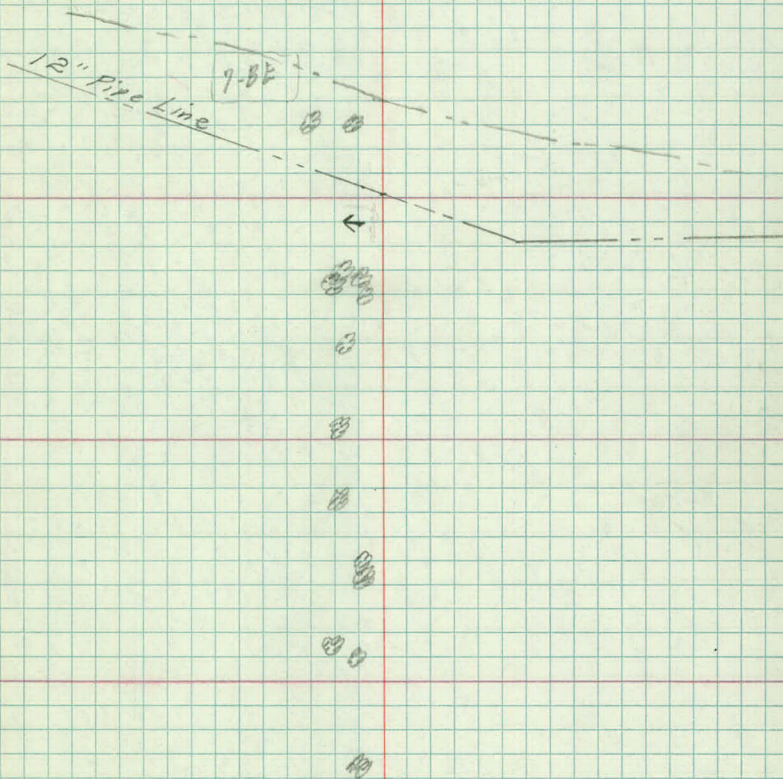
5

Dec. 7, 1962

14

T-3

SWAMP



15

$$\begin{array}{r} \text{Woods} \\ 130 - 2 \end{array}$$

$$\begin{array}{r} \text{Woods} \\ +50 \quad 110 - 2 \end{array}$$

14

$$\begin{array}{r} \text{Woods} \\ +100 \quad 86 \quad 12 \end{array}$$

$$\begin{array}{r} \text{Woods} \\ +50 \quad 85 - 3 \end{array}$$

13

$$\begin{array}{r} \text{Woods} \\ 71 - 17 \end{array}$$

$$\begin{array}{r} \text{Woods} \\ +30 \quad 5 \end{array}$$

$$\begin{array}{r} \text{A"BP} \\ +82 \quad 11 \end{array}$$

$$\begin{array}{r} \text{Corners Woods} \\ +76 \quad 58 - 16 \end{array}$$

$$\begin{array}{r} \text{A"BE} \\ +37 \quad 28 \end{array}$$

12

$$\begin{array}{r} \text{Tm 12"0} \\ +89 \quad 11 \end{array}$$

$$\begin{array}{r} \text{SWP} \\ +50 \quad 94 \end{array}$$

$$\begin{array}{r} \text{MH} \\ +50 \quad \text{£} \end{array}$$

11

$$\begin{array}{r} \text{SWP} \\ 36 - 105 \end{array}$$

$$\begin{array}{r} \text{SWP} \\ +87 \quad 59 \end{array}$$

$$\begin{array}{r} \text{SWP} \\ +85 \quad \text{£} \end{array}$$

$$\begin{array}{r} \text{Ditch} \\ +58 \quad \text{£} \quad 80 \end{array}$$

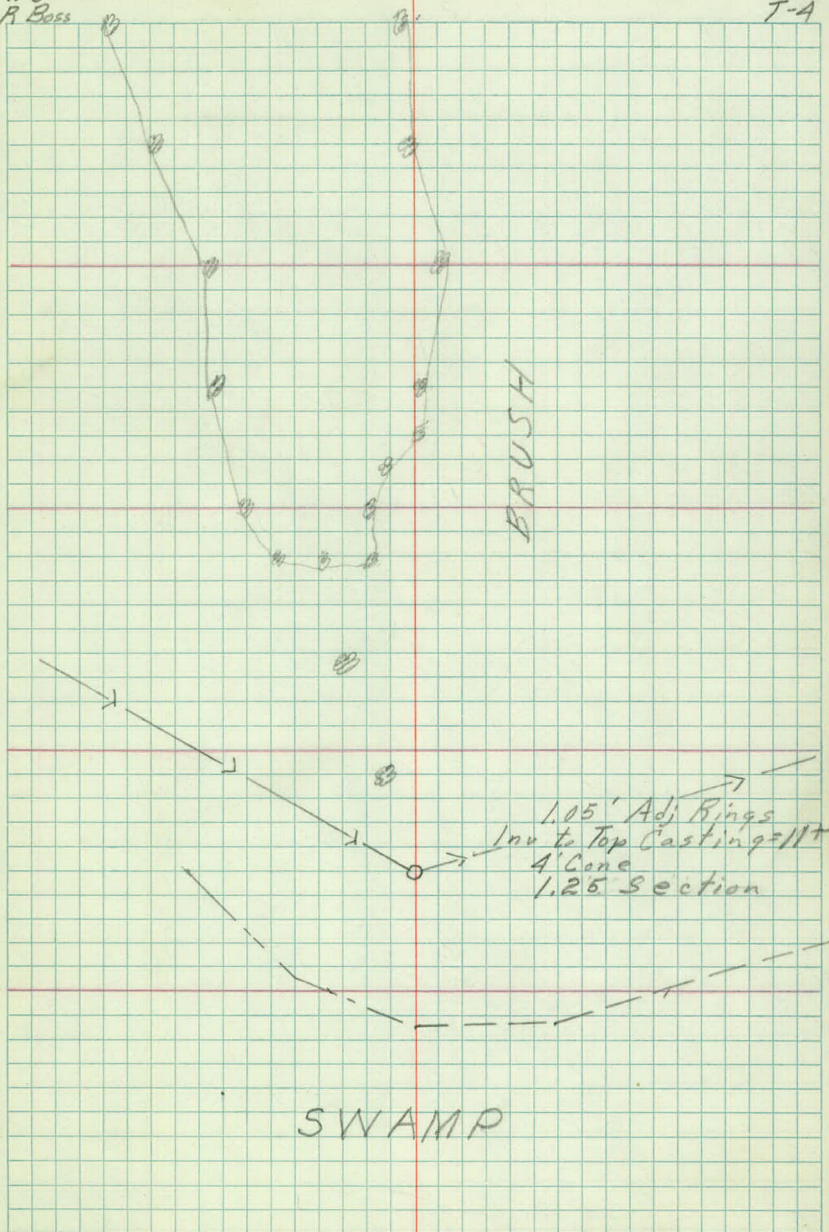
10

FK
WM
WS
R Boss

Dec. 13, 1962

15

T-4



Ditch Lines Directly to Culvert
Lt.

20

$\checkmark$
 $L+100 \frac{SwP}{84}$ $\checkmark$

Rt

$\checkmark$
 $+50 \frac{SwP}{85}$

19

$\checkmark$
 $\frac{SwP}{60}$

$\checkmark$
 $+50 \frac{SwP}{47}$

18

$\checkmark$
 $900 \frac{SwP}{64}$

17

$\checkmark$
 $+100 \frac{SwP}{75}$

$\checkmark$
 $+50 \frac{Swamp}{98}$

$\checkmark$
 $+10 \text{ to } +30 \frac{Woods}{Parallel \text{ secline}}$

16

$\frac{Woods}{69 - 4}$

$\checkmark$
 $+50 \frac{Woods}{110 - 15}$

15

25

$$L^+ \quad +100 \quad \overset{\checkmark}{\frac{SwP}{27}}$$

R+

24

$$+100 \quad \overset{\checkmark}{\frac{SwP}{70}}$$

$$+50 \quad \overset{\checkmark}{\frac{SwP}{67}}$$

23

$$+100 \quad \overset{\checkmark}{\frac{SwP}{68}}$$

$$+50 \quad \overset{\checkmark}{\frac{SwP}{75}}$$

22

$$+100 \quad \overset{\checkmark}{\frac{SwP}{73}}$$

$$+50 \quad \overset{\checkmark}{\frac{SwP}{112}}$$

21

$$+100 \quad \overset{\checkmark}{\frac{SwP}{92}}$$

$$+50 \quad \overset{\checkmark}{\frac{SwP}{94}}$$

20

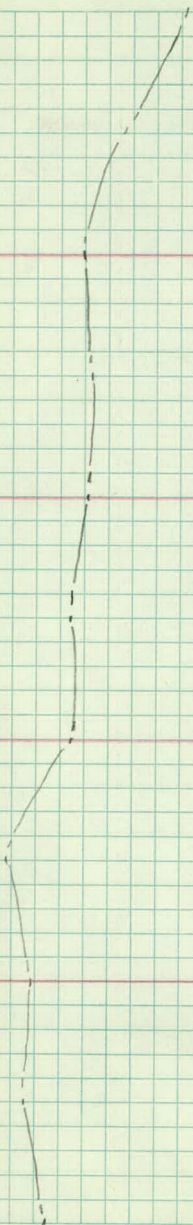
Lt

Dec. 13, 1962
Rt

17

T-6

SWAMP



30

Lt

£

100 $\frac{\text{SwP}}{97}$

Rt

29

100 $\frac{\text{SwP}}{83}$ 106 $\frac{4 \text{ Grad Elm}}{65}$

28

+85 $\frac{\text{Cor SwP}}{90}$ 100 $\frac{\text{SwP}}{85}$ $\frac{\text{Ditch}}{120}$
+98 $\frac{\text{Tw 4 Elm}}{15}$ 150 $\frac{\text{SwP}}{70}$ 150 $\frac{\text{SwP}}{35} - 125$

27

+25 $\frac{\text{SwP}}{\text{£}}$
Swamp
→ 88 $\frac{15}{\text{£}}$ ←+84 $\frac{\text{£ Ditch}}{\text{£}}$ 100 $\frac{\text{£ Ditch}}{17}$ $\frac{\text{SwP}}{77}$

26

 $\frac{\text{Ditch}}{84}$ 100 $\frac{\text{SwP}}{5}$ +83 $\frac{\text{SwP}}{\text{£}}$

25

Dec. 13, 1962

18

T-7

44

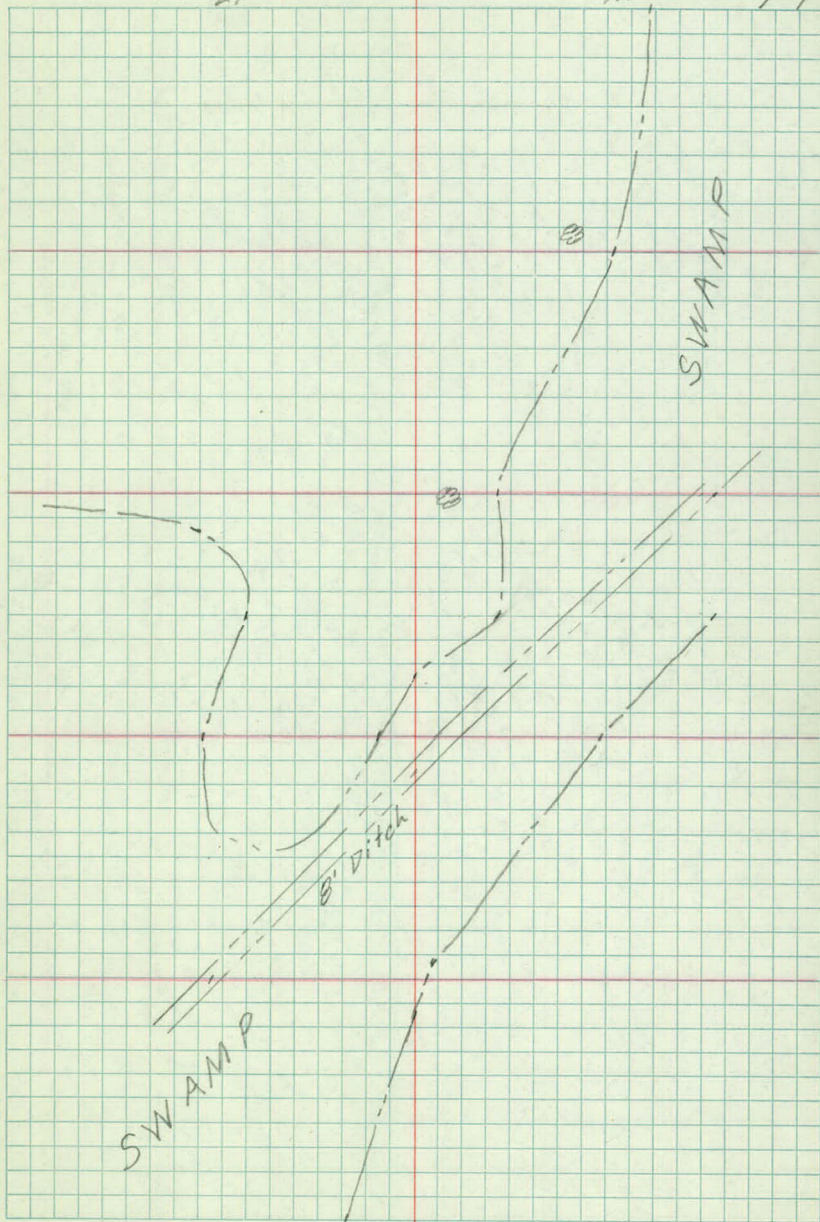
4

RT

SWAMP

SWAMP

8' Ditch



35

Lt

2

Rt

✓
+61 End Sign
52

✓
+27 R.Tie
Woods Lt

34

✓
+86 Cor W+L
47

✓
+75 E.W+L
2

✓
+50 E.W+L
69

33

✓
W+L
2

✓
+50 W+L
50

32

✓
Woods + Low Land
40

✓
+50 Begin Woods
82 - 37

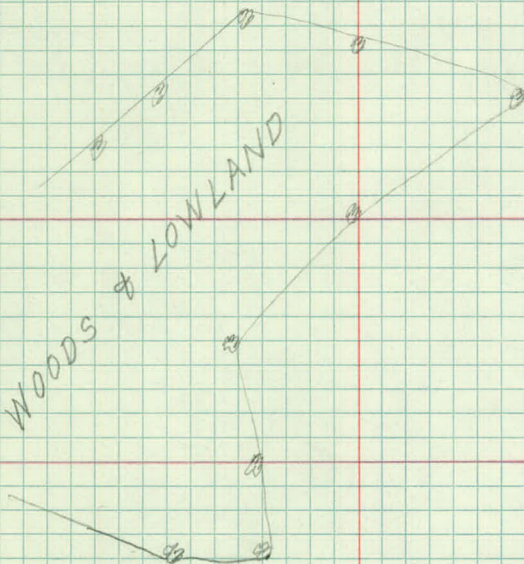
31

30

T-8

~~sign~~

WOODS & LOWLAND



37

+44.6 $\pm$ TH #51

+22 $\frac{GRP}{29-53}$ ✓
 +09 $\frac{TP}{95}$

+29 $\frac{Cone}{\#}$ ✓

36

+05 $\frac{TP}{63}$ ✓

35

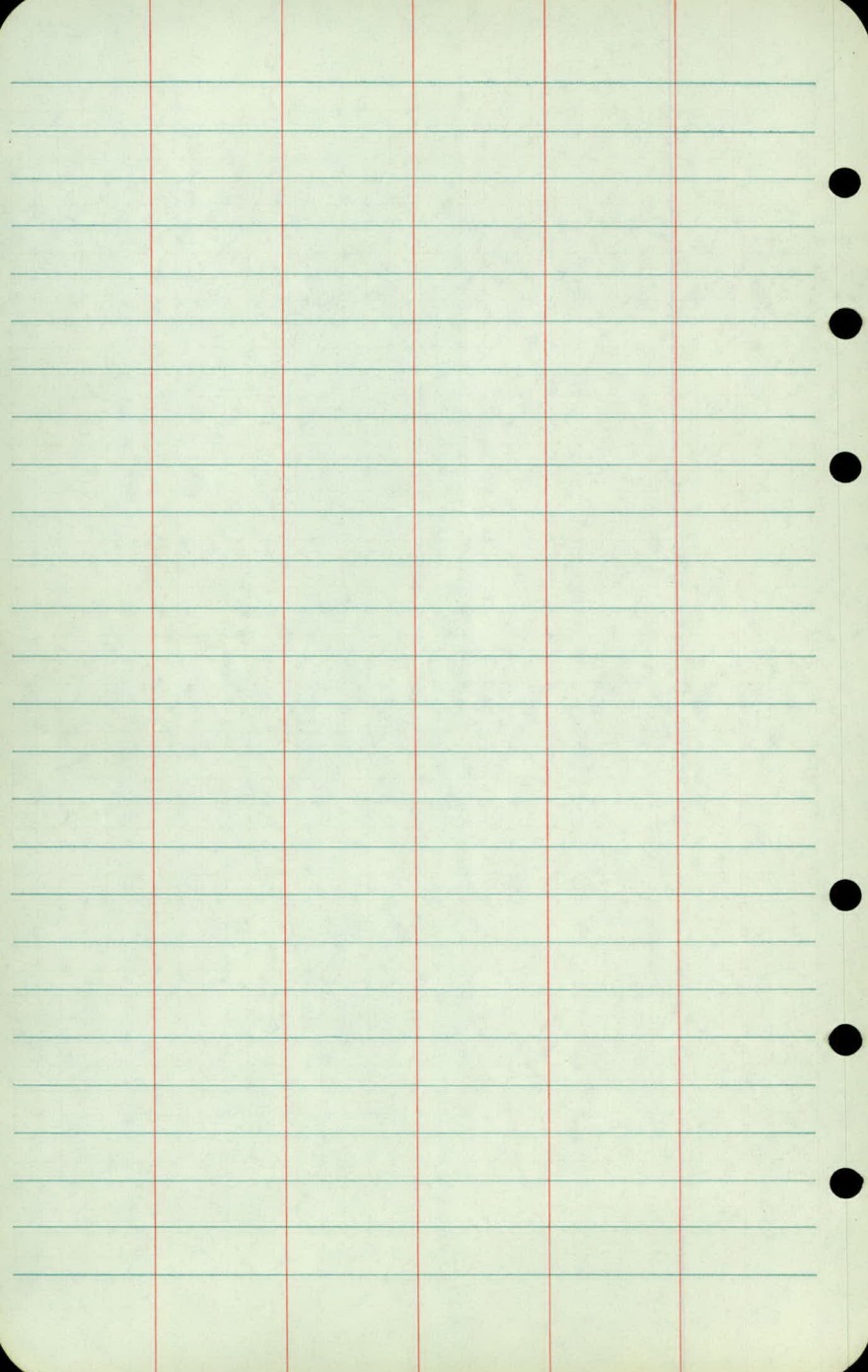
+06 $\frac{Sign \quad End}{22}$ ✓

Dec. 13, 1962

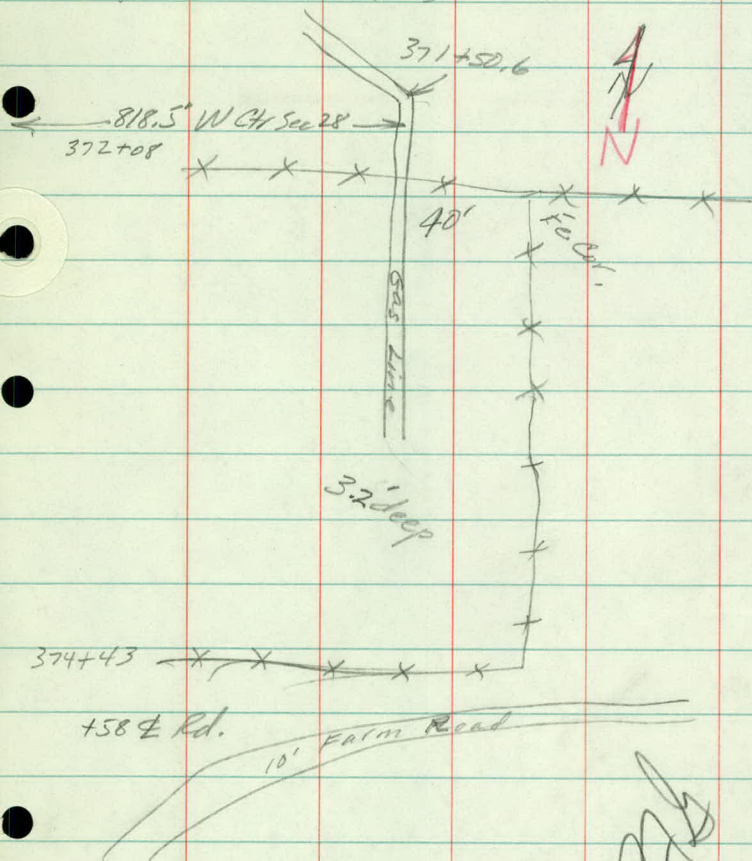
20

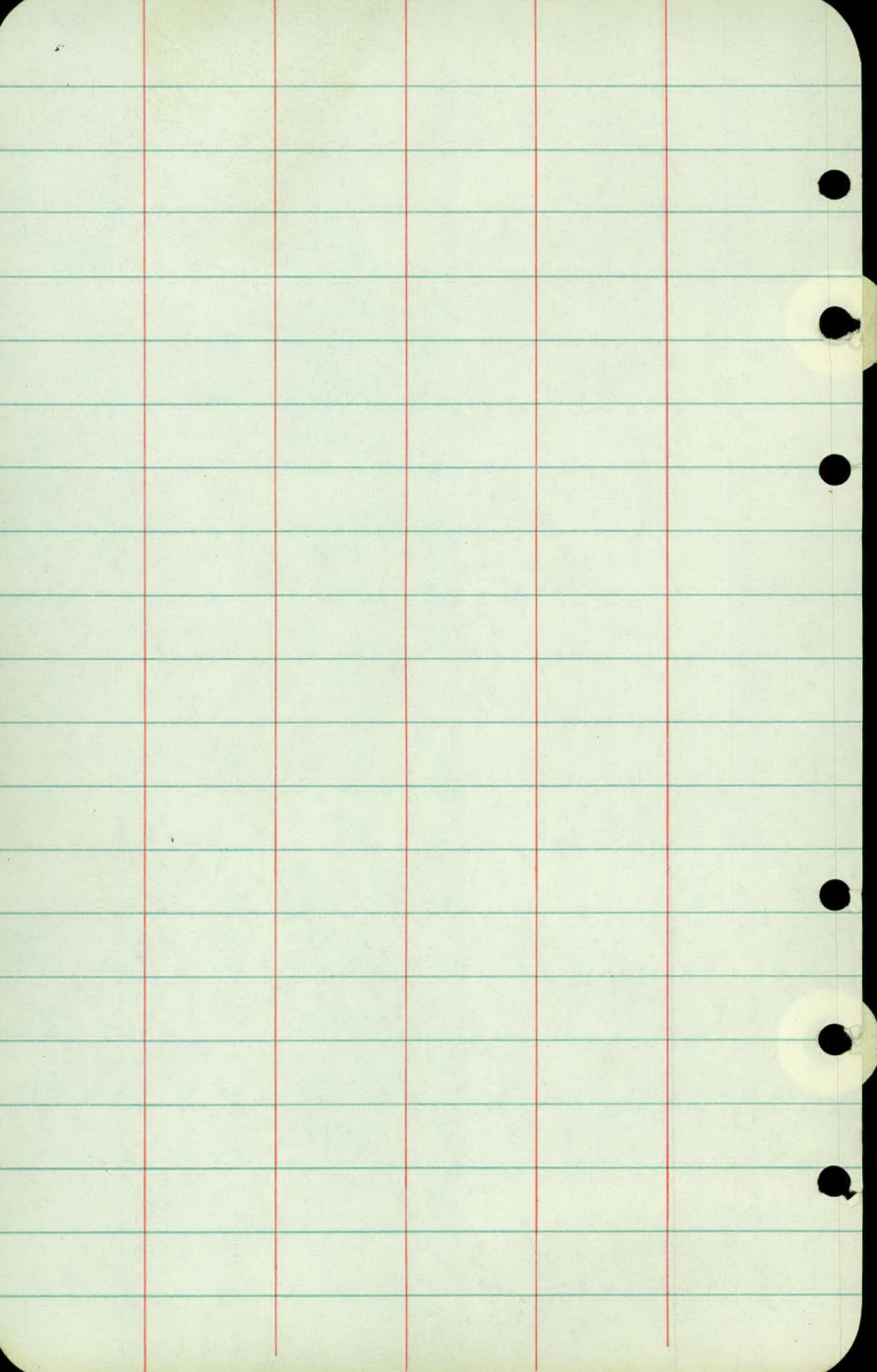
7-9

No Cable → . .



818.5' W of Ctr Sec 28





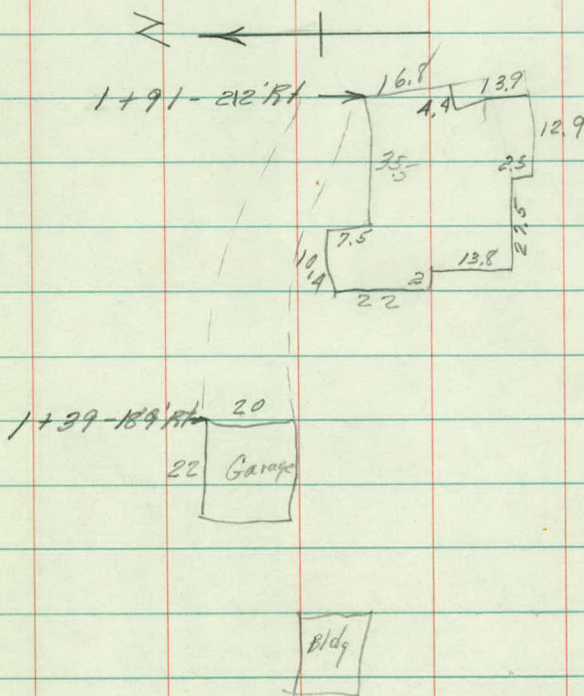
22

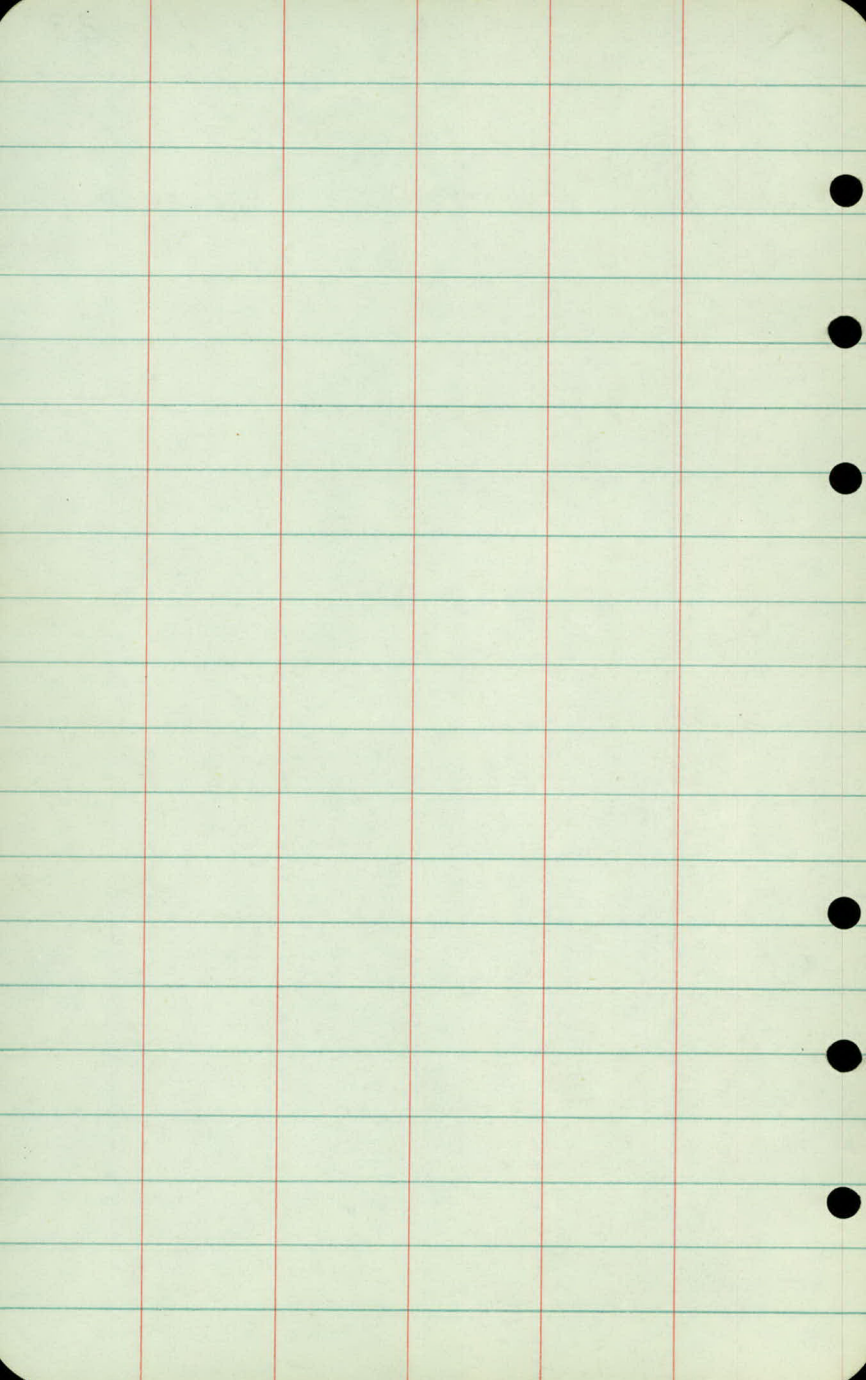
T-11

Sta	+	π	-	Elev.
BM	1.01	878.96		877.95
8+05			8.37	870.59
8+02	ϕ = ϕ Gas pipe			

Top T.C.A. Post

Top T.C.A. Gas pipe 80'ft





FK
RG
WM

Dec. 3, 1962

24

B-1

E2

BENCH LEVELS

4 pages

Sta	+	π	-	Elev.
BM	3.50	928.51		Bench Book 925.01

BM	0.21	915.79	12.93 11.99	915.58 Bench Book 915.58
----	------	--------	----------------	--------------------------------

T.P.	1.85	905.50	12.14	903.65
------	------	--------	-------	--------

BM	7.97	902.57	10.90	894.60
----	------	--------	-------	--------

BM			6.06	898.51
----	--	--	------	--------

BM			4.15	898.42
----	--	--	------	--------

T.P.	12.77	912.55	2.79 ⁵	899.78
------	-------	--------	-------------------	--------

BM	1.97 ⁵	914.22	0.30	912.25 912.24
----	-------------------	--------	------	------------------

BM	1.24	901.82	13.64	900.58 900.57
----	------	--------	-------	------------------

BM	0.34	888.93	13.23	888.59
----	------	--------	-------	--------

T.B.M.	0.94	878.89	10.98	877.95 2.93 886.88
--------	------	--------	-------	--------------------------

BM	5.61	880.87	3.625	875.265 2.61 881.27
----	------	--------	-------	---------------------------

			5.13	875.75
--	--	--	------	--------

T.P.	12.85	892.42	1.30	879.57
------	-------	--------	------	--------

BM	8.54	900.54	0.42	892.00
----	------	--------	------	--------

T.P.	0.40	887.24	13.70	886.84
------	------	--------	-------	--------

BM	3.96	882.33	8.67	878.57
----	------	--------	------	--------

T.P.	4.36	885.55	1.34	881.19
------	------	--------	------	--------

T.P.	2.77	882.47	5.85	879.70
------	------	--------	------	--------

BM			2.87	879.60
----	--	--	------	--------

Dec. 3, 1962

25

B2

Top Hyd N.E. Cor 6th St + 3rd Ave.

Lead Plug in $\pm$ Pavement 1st Ave + New B. Rd.

Top W. End Ent. Culvert

2 spikes in T.P. NE Cor 3825 New Brighton Rd.

Spike in P.P. 36 Lt. Sta 0+98

Top N.E. Cor Garage Apron 3817 New Br. Rd

Iron $\pm$

Walk West side of N. Ent. Ho. No. 3810 New B. Rd

2x2 100' Rt Sta 6+00

2x2 100' Rt Sta 7+00

Top T.C.A. Gas Main Post

2x2 12+10 115' Rt

Top MH

Sta 12 $\pm$ spike

2x2 100' Lt 113+50 $\pm$

Top N.E. Cor. Mont. Ck Sec. 28

Iron pin P.I.

Iron pipe P.I.

spike in Quad 4" Elm 85' Rt Sta 49+00

Sta	+	π	-	Elev
B.M.	10.79	890.39		879.60
T.P.	5.29	891.07	4.61	885.78
B.M.	7.37	887.47	10.97	880.10
T.P.	5.64	887.60	5.51	881.96
B.M.	6.30	887.64	6.26	881.34
T.P.	5.27	887.22	5.69	881.95
B.M.	10.45	890.54	7.13	880.09
T.P.	2.20	887.98	4.76	885.78
B.M.	2.43	882.03	8.38	879.60
T.P.	8.57	888.28	2.32	879.71
T.P.	2.47	883.66	7.09	881.19
B.M.	13.51	892.08	5.09	878.57
T.P.	10.59	902.54	0.13	891.95
B.M.	0.38	892.38	10.54	892.00
TP	5.46	885.03	12.81	879.57
B.M.			9.77	875.26
TBM	12.65	890.59	7.09	877.94
BM	13.57	902.15	2.01	888.58
BM	12.41	912.97	1.59	900.56 900.57

FK
RG
WM

Dec 4, 1962
Cloudy cold 31°

26
B3

Spike in Quad. 4" Elm 85' Rt Sta 29+00

Spike in chokecherry 40' Rt Sta 33+00

Spike in P.P. NE Cor. E² & TH #51

Nail in P.P.

RR Spike in P.P. = B.M. for Lake Elev. Valentine

Nail in P.P.

Spike in P.P. N.E. Cor. "E²" & T.H. #51

Spike in Chokecherry 40' Rt. Sta 33

Spike in Quad 4" Elm 85' Rt. Sta 29

Iron Pipe P.I.

Iron pin P.I.

Top N.E. Cor. Mant. Ctr. Sec. 28

Stamp

2x2 Hub 120' Lt Sta 13+25+

Spike & Sta 12

2x2 Hub 115' Lt Sta 12+10

Top T.C.A. Gas Main Post

2x2 Hub 100' Rt Sta 7

2x2 Hub 100' Rt Sta 6

		Σ			
Sta	+	912.97	-	Elev.	
BM	0.20	912.43	0.74	912.23	(912.24)
TP			12.66	899.77	
TP	0.37	899.67	13.13	899.30	
BM			1.25	898.42	
BM			3.17	896.50	
TP	9.63	903.92	5.38	894.29	
BM			9.31	894.61	
TP	10.53	911.15	3.30	900.62	
T.P.			7.49	903.66	
T.P.	8.97	917.59	2.53	908.62	
B.M.			2.00 ^s	915.58 ^s	(915.58)

Dec 4, 1962

27

B4

Walk West Side of No. Egt. Ho # 3816 N.B. Rd.

Iron E

Pt. on Rd.

Top NE Cor Garage Apron Ho # 3817 N.B. Rd.

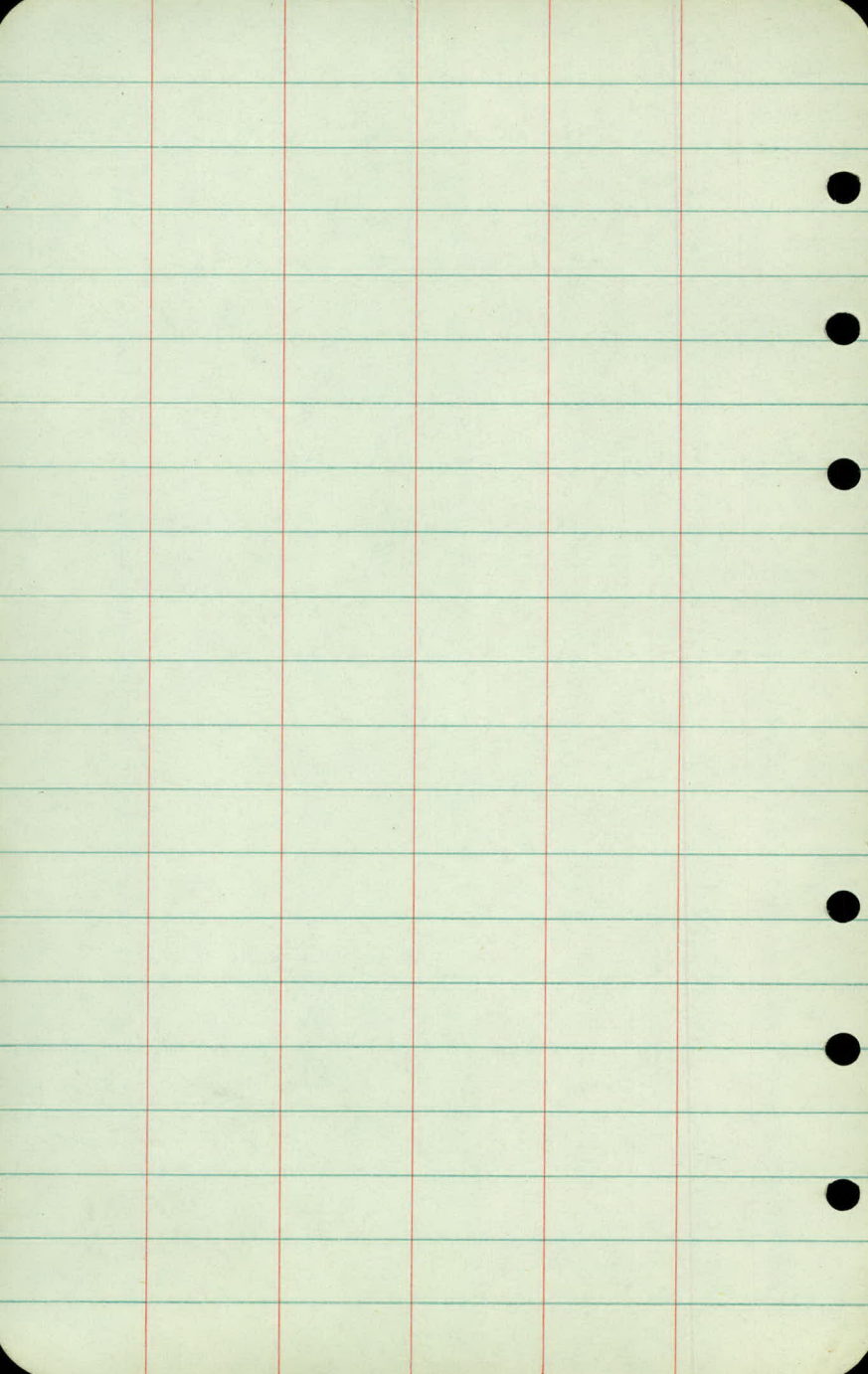
Spike in PP 3621 Sta 1+00 ±

Top G.R.P.

2 spikes in T.P. NE. Cor. Ho # 3825 N.B. Rd.

Top Culv. W. end.

Lead. plug E Pavement 1st Ave. N. & N.B. Rd.



FK
WM
DS
WS
RB

Dec 13, 1962
Cloudy 17°

28

X-Section Elevation
CHECK

Sta	B.S. +	H.I. +	F.S. -	Elev.	
BM	8.64	905.15			896.51
T.P.	12.12	914.83	2.44	902.71	
1400			4.50	910.33	10.2
BM	6.58	918.82	2.57	912.26	(912.24)
T.P.	1.56	911.23	9.15	909.67	909.66
BM	2.97	903.54	10.68	900.55	(900.52)
T.P.	1.38	898.14	6.78	896.76	(896.74)
T.P.			10.15	887.99	79
BM			9.56	888.58	(888.58)

Dec. 13, 1963

29

Spike in R.P. 36' Lt Sta 0+98

Top Iron $\pm$ Sta 3+00

$\pm$

Walk West side of No. Ent. Ho.² 3810 N.B. Rd

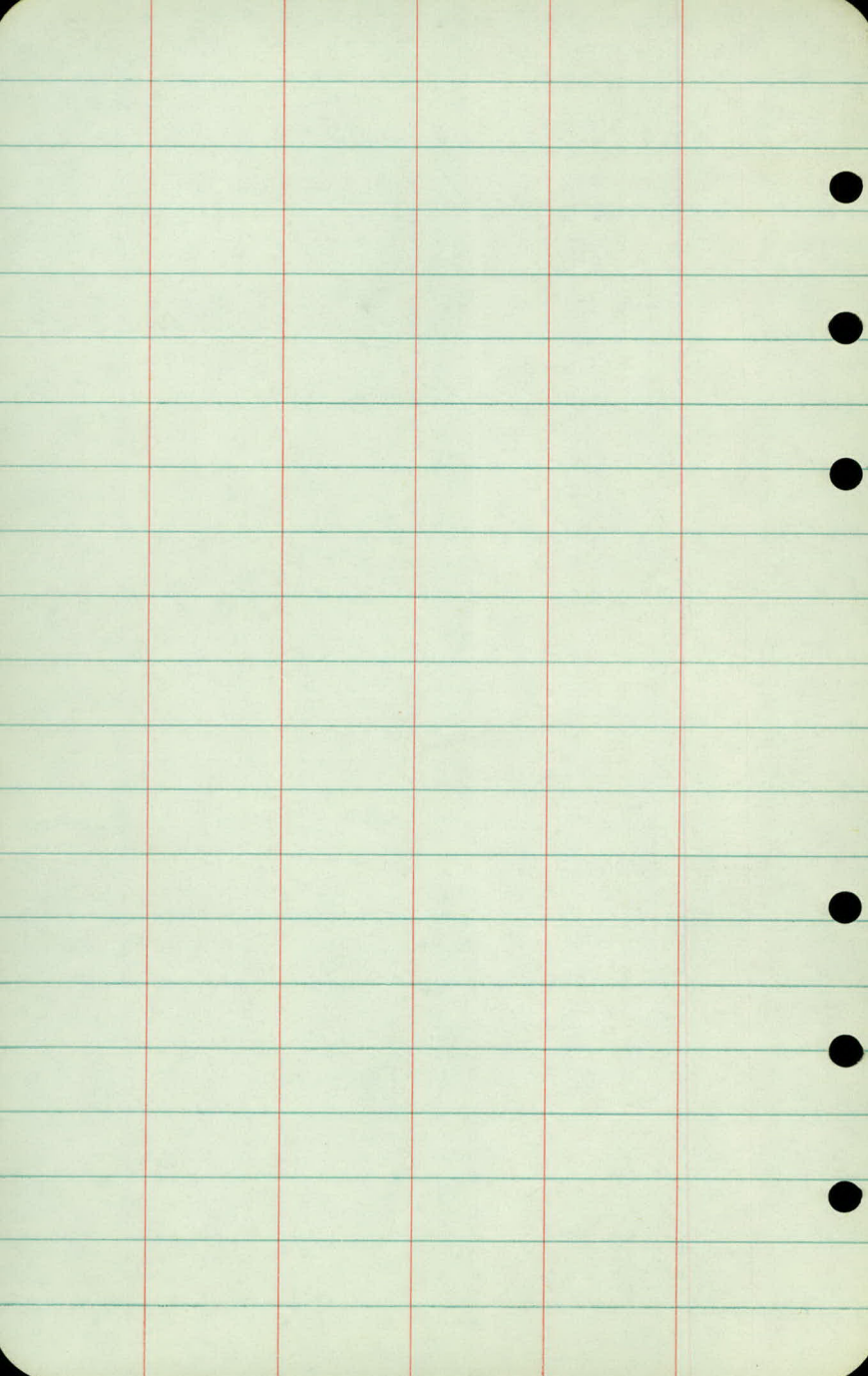
Top Rock 10' Lt Sta 5+70

2x2 Hub 100' Rt Sta 6+00

Top Nail $\pm$ Sta 6+50

Top Nail $\pm$ Sta 7+00

2x2 Hub 100' Rt Sta 7+00



KP
DS.

3 DEC. 1962
Cloudy 35°

1
30

WS
R. BOSS

CO. RD E2

NE COR. OF NW 1/4
300' W OF SW 1/4 SEC 28 TO STH # 10
T30 R23

X- SECTIONS

42 pages

STA	+	T	-	ELEV.
	4.97	901.48		896.51

0+00

0+27

✓

0+46

0+61

✓

3 DEC. 1962

31

LT

E

RT

X-2

SPIKE WPP 36.0 LT STA 0+98

94.1	93.5	93.71	93.76	93.65	93.1	91.1
13.8	8.0	7.77	7.72	7.83	8.1	13.8
25	15	9	✓	8	15	25
		RD	RD	RD		

97.7	94.2	94.54	94.54	94.34	94.6	94.1	91.0
13.8	7.3	6.94	6.94	7.10	6.87	7.4	10.5
25	15	10	✓	9	10	15	20
		RD	RD	G. RD	CURB RD		

97.7
13.8
24

91.7	95.3	95.28	95.20	94.94	95.17	94.6	91.7
13.8	6.2	6.20	6.28	6.54	6.31	6.9	13.8
27	15	10	✓	9	10	14	26
		RD	RD	G. RD	CURB RD		

95.0	94.3	95.1	95.91	95.61	95.34	95.55	95.2	91.7
16.5	14.2	5.8	5.57	5.81	6.14	5.93	6.3	13.8
55	32	16	10	✓	9	10	15	28
			RD	RD	G. RD	CURB RD		

94.8
16.7
75

96.1
95.0
91.7
91.0
5.4
6.5
13.8
14.5
75
63
49
31

STA	+	π	-	ELEV.
-----	---	-------	---	-------

		901.48		
--	--	--------	--	--

0+91				
------	--	--	--	--

✓				
---	--	--	--	--

1+00				
------	--	--	--	--

✓				
---	--	--	--	--

+18				
-----	--	--	--	--

✓				
---	--	--	--	--

3 DEC. 1962

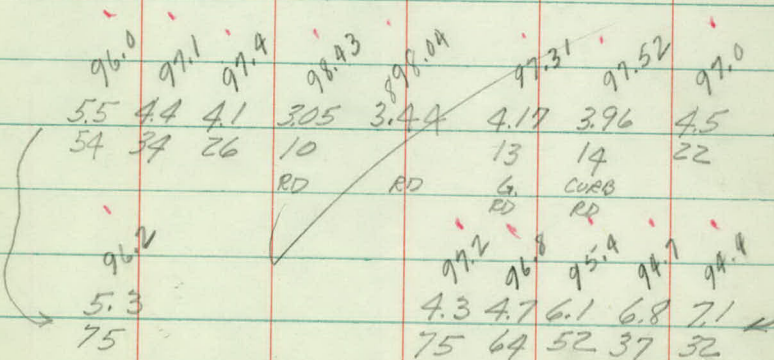
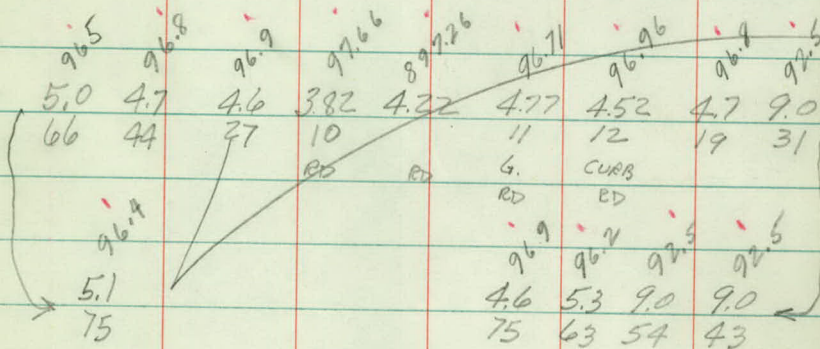
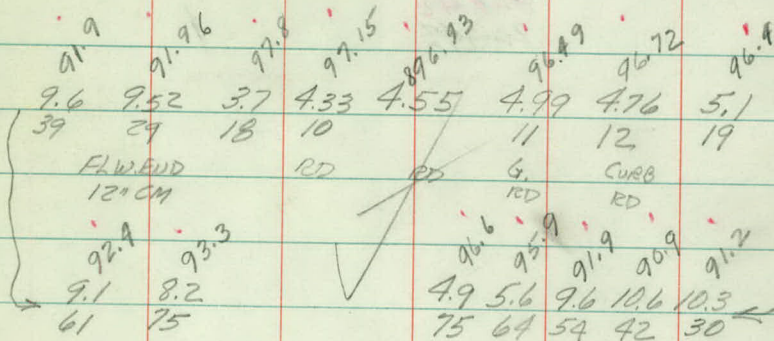
32

LT

✱

RT

X-3



STA	+	K	-	ELEV.
-----	---	---	---	-------

		901.48		
--	--	--------	--	--

1+22				
------	--	--	--	--

✓				
---	--	--	--	--

+32				
-----	--	--	--	--

✓				
---	--	--	--	--

+40				
-----	--	--	--	--

✓				
---	--	--	--	--

3 DEC. 1962

33

LT

X

RT

x-4

96.1	97.4	97.8	98.51	98.29	97.12	97.60	97.0	96.9
5.4	4.1	3.7	2.97	3.24	4.06	3.88	4.5	4.6
40	29	19	10		15	16	26	44
			RD	RD	G RD	CURB RD		
96.3	96.5					97.3	97.0	
5.2	5.0					4.2	4.5	
61	75					75	61	

95.27	99.0	99.8	97.02	98.70	97.73	97.93	96.9	97.3
6.21	2.5	2.7	2.46	2.78	3.75	3.55	4.6	4.2
28	16	14	8		16	17	41	62
FLE. END 12" MEM			RD	RD	G RD	CURB RD		
96.5	96.3	96.5					97.3	
5.0	5.2	5.0					4.2	
36	54	75					75	

96.3	99.6	99.9	99.38	99.12	98.06	98.21	97.3	97.1
5.2	1.9	2.1	2.10	2.36	3.42	3.27	4.2	4.4
22	14	10	6		18	19	35	54
			RD	RD	G RD	CURB RD		
96.6	96.9	97.0					97.2	
4.9	4.6	4.5					4.3	
40	66	75					75	

STA + π - ELEV.

901.48

1+50

✓

+65

✓

TP 1.21 891.8 11.51 889.97

0+00

0+27

3 DEC, 1962

34

LT

±

RT

X-5

97.9	96.7	900.0	99.88	99.59	99.44	98.58	97.5	95.4
3.6	4.8	1.5	1.60	1.89	3.04	2.90	4.0	6.1
47	21	11	6		20	21	31	36
			RD	RD	6.	CURB		

97.7	97.6	97.6		96.9	97.1	96.9
3.8	3.9	3.9		4.6	4.4	4.6
54	69	75		75	57	40

98.4	97.1	0.0	900.42	99.77	99.22	99.45
3.1	4.4	0.5	1.06	1.71	2.26	2.03
49	18	5		11	23	29
			RD	RD	G. RD	CURB RD

0.2		97.2	97.6	97.2	95.9	98.7
0.3		4.3	3.9	4.3	5.6	2.8
75		75	62	44	41	34

SPIKE IN GROUND

76.6	77.2	77.9	82.5	84.3
14.6	14.0	13.3	8.7	6.9
75	57	39	30	29

78.3	79.8	80.2
12.9	11.4	11.0
75	53	37

STA	+	X	-	ELEV.
-----	---	---	---	-------

		891.18		
--	--	--------	--	--

0+46				
------	--	--	--	--

TP	9.24	899.21	1.21	889.97
----	------	--------	------	--------

TP	0.81	887.03	12.99	886.22
----	------	--------	-------	--------

0+00				
------	--	--	--	--

0+27				
------	--	--	--	--

0+46				
------	--	--	--	--

TP	12.83	899.05	0.81	886.22
----	-------	--------	------	--------

BM	11.97	908.48	2.51	896.51 (896.51)
----	-------	--------	------	-----------------

3 DEC. 1962

35

LT

≠

RT

x-6

80.9	82.5	84.2
10.3	8.7	7.0
75	50	34

SPIKE IN GROUND

SPIKE IN GROUND

80.2	78.4	79.9	80.2
6.8	8.6	7.1	6.8
40	54	70	75

80.7	81.4	87.0
6.3	5.6	0.0
39	51	75

84.0	84.5	86.4	88.4
3.0	2.5	4.6	+1.4
32	45	55	75

SPIKE IN GROUND

SPIKE IN PP 36.0 LT STA 0+98

STA

+

T.

-

ELEV.

908.48

1+83

✓

2+00

✓

✓

36

LT

~~7~~

RT

 $x-2$ [illegible]

900.4	899.8	899.6	899.7	900.1	901.8	901.56	900.97	900.30
8.1	8.7	8.9	9.8	8.4	6.7	6.92	7.51	8.18
42	30	15	5		7	13	25	36
						RD	< RD	G RD

[illegible]

897.1

11.4

75

STA	+	K.	-	ELEV.
-----	---	----	---	-------

		908.48		
--	--	--------	--	--

		111.97		
--	--	--------	--	--

2+06

✓

✓

2+63

✓

3 DEC. 1962

37

LT

E

RT

X-8

904.6

903.7

900.2

899.9

898.9

903.1

901.75

901.10

3.9

4.8

8.3

8.6

9.6

6.4

6.73

7.38

61

48

39

15

10

17

28

RD

* RD

905.4

3.1
75

897.8

10.7
55

899.1

9.4
51

900.66

7.82
41

CURB

RD

900.42

8.06
40

6

RD

898.7

9.8
60

899.3

10.2
75

906.2

2.3

54

904.7

3.8

34

902.3

6.2

21

901.3

7.2

901.2

7.3

10

899.9

8.6

32

903.8

4.7

42

907.1

1.4

75

1.2

97

2.5

124

902.79

5.69

73

6

903.34

5.14

61

* RD

903.84

4.64

49

RD

903.00

5.48

74

CURB

STA + T - ELEV.

908.48
111.97

2+78

✓

3+00

✓

+13

914.79
~~920.79~~

902.69

TP 12.10 118.28 5.79 106.18

3 DEC. 1962

38

LT

£

RT

X-9

900.5	905.5	903.3	902.2	901.4	901.9	901.4	902.4	901.8
0.0	3.0	5.2	6.3	7.1	6.6	7.1	6.1	6.7
36	28	22	16		17	36	48	54

905.10	905.30	905.6
3.38	3.18	2.9
92	75	67
£ RD	RD	

907.7	903.4	902.5	902.7	903.3	903.9	905.2
0.8	5.1	6.0	5.8	5.2	4.6	3.3
24	12		13	28	48	75

906.90	906.70
1.58	1.78
133	113
FL. S. END	FL. N. END

904.0	903.9	904.3	905.6
4.5	4.6	4.2	2.9
27	54		75

TOP IRON £ STA 3400

STA

+

Δ

-

ELEV.

914.79

2+78

3+00

3+13

3+25

+50

✓

3 DEC. 1962

39

LT

✱

RT

X-10

		09.9	910.9	911.5
16.0	12.7	4.9	3.9	3.3
130	100	75	63	46

	08.2	09.3	00.1	10.7
10.6	9.2	6.6	5.5	4.7
30	100	75	61	45
				30

	07.4	07.7	09.1	02.9	05.8
9.7	7.4	7.1	5.7	4.9	9.0
100	75	70	47	26	12

	05.3	06.3	09.1	10.8	09.3	08.0	09.2	08.7	07.4
11.5	9.5	8.5	5.7	4.0	5.5	6.8	5.6	6.1	7.4
100	75	61	39	11		14	34	56	75

	05.3	08.6	09.5	10.4	10.3	09.9	09.9	09.4
	9.5	6.2	5.3	4.4	4.5	4.9	4.9	5.4
	51	30	13	10		20	46	75

02.7
12.4
75

STA + π - ELEV.

914.79

4+00

✓

+50

✓

TP 10.33 921.65 3.47 911.32

+75

✓

3 DEC. 1962

40

LT

L

RT

X-11

03.8	07.9	08.1	10.3	10.2	10.2	10.2	10.4
11.0	6.9	6.1	4.5	4.6	4.6	4.6	4.4
53	30	16	9		28	50	75

01.9

12.9	13.1	11.1	10.2	9.5	13.1
75	100	111	130	163	200

11.8

3.0
136
40

08.8	09.2	11.4	11.4	11.0	10.4	10.4	10.6
6.0	5.6	3.4	0.4	3.8	4.4	4.4	4.2
62	41	24	9		18	53	75

10.5

12.2

15.1

13.1

4.3	1.6	10.3	1.7	7.1
75	100	132	166	200

SPIKE IN GROUND

12.9	12.4	11.9	15.1	17.4	14.6	11.5	11.3	11.5	11.7
8.8	9.3	9.8	6.6	4.3	7.1	10.2	10.4	10.2	10.0
75	63	42	20	16		6	27	50	75

16.3

17.4

16.3

15.2

5.4	4.3	5.4	6.5	9.1	9.8
100	122	143	163	185	200

STA + π - ELEV.

921.65

4+86

✓

5+00

✓

+50

✓

TP 0.64 910.30 11.99 909.66

3 DEC. 1962

41

LT

L

RT

X-12

12.7	12.7	14.9	16.7	18.1	18.3	18.1	16.2
9.0	9.0	6.8	5.0	3.6	3.4	3.6	5.5
65	43	20	12		21	46	75

13.7	15.7	14.5	14.3				11.9
8.0	6.0	5.2	7.4	11.6	18.1	15.9	11.4
75	100	125	165	200	144	127	114

14.1	13.1	14.5	17.2	18.3	17.8	18.2	15.7
7.6	8.6	7.2	4.5	3.4	3.9	3.5	6.0
75	41	20	8		17	41	75

15.0	15.7	13.0	10.5				11.2
6.7	6.0	8.0	11.2	20.8	16.8	13.3	10.5
100	132	166	200	164	134	115	100

11.1	10.3	10.3	11.5	11.9	11.7	12.2	11.2
10.6	11.4	11.4	10.2	9.8	10.0	9.5	10.5
100	72	35	12		12	41	73

9.4	8.6	10.3
127	162	200

26.0	22.3	18.1	14.1
170	139	118	100

07.6

TOP ROCK 10.0 LT STA 5+70

STA + T - ELEV

910.30

6+00

+50

TP 0.80 897.54 13.56 896.74 ✓

7+00

TP 0.70 ~~888.49~~ ^{888.69} ? 9.75 887.79 (887.99)

7+50

RP
DS
WS
R. Boss

LT

4 DEC. 1962
CLOUDY 300
RT

42

X-13

902.5	901.8	901.2	902.5	902.4	902.9	904.0	904.0	904.0	903.4		
8.2	7.8	8.5	9.1	7.8	7.9	11.8	7.4	6.3	6.3	6.3	6.9
53	100	134	83	59	30	16	200	25	53	83	100
895.2	894.5	895.0	895.9	896.8	895.9	896.1	895.4	895.3	895.3		
14.7	15.1	15.8	15.3	14.4	13.5	14.4	14.2	14.9	15.0		
123	100	84	45	19		24	54	84	100		
14.6	15.7	15.8									
153	71	200									
TOP NAIL ± STA 6+50											

889.3	889.5	888.0	887.8	887.6	887.2	886.9	887.7	887.7
8.2	8.0	9.5	9.7	9.9	10.3	10.6	9.8	9.8
100	74	44	21		28	53	78	100

TOP NAIL ± STA 7+00

881.7	881.6	880.8	880.2	879.4	878.7	877.8	877.3	877.4	877.7
7.0	7.1	7.9	8.5	9.3	10.0	10.9	11.4	11.3	11.0
100	82	48	18	15		21	51	86	100

STA	+	-	ELEV.
			888.69
			888.49
			879.29
TP	0.62	10.02	878.47

+85 = T.C.A. PROPERTY MARKER 8.04

+22 = IRON ONE

+00

+50

+70 = IN SWAMP

9+26

10.62 868.67

LT

4 DEC. 1962

43

F

RT

X-14

TOP NAIL & STA 7+50

76.9	76.1	74.9	74.7	73.8	74.5	73.9	73.3	73.1
2.4	3.2	4.4	4.6	5.5	4.8	5.4	6.0	6.2
100	71	34	16		22	54	80	100
72.9	72.5	72.1	71.5	71.1	70.9	70.8	70.8	70.4
6.4	6.8	7.2	7.7	8.2	8.4	8.5	8.5	8.9
100	82	40	18		24	54	81	100
70.6				70.5				70.3
8.7				8.8				9.0
100								100

FL 48" X 14.0 CM 225.0 LT

H₂O FLOWS IN N.W DIRECTION

STA	+	T	-	ELEV.
		879.29		
		879.09		
		880.82		871.44
TP	9.38	880.62	7.85	871.24

10+67 = END SWAMP

				879.59	
12+00	1.23	880.80	1.23	879.39	(879.57)

11+00

11+40

+50

5.05 875.75

+73

4 DEC. 1962

44

LT

E

RT

X-15

TOP NAIL $\neq$ STA 10 + 88.35

10.2

TOP NAIL $\neq$ STA 12

70.5	71.4	71.4	72.3	72.3	72.1	71.4	71.1
10.3	9.4	9.4	8.5	8.5	8.7	9.4	9.7
54	39	14		28	53	78	100
SWAMP							

71.0	71.3	72.8	74.1	74.9	75.1	74.1	73.1	72.8
9.8	9.5	8.0	6.7	5.9	5.7	6.7	7.7	8.0
100	78	46	20		19	52	84	100

TOP NH ON $\neq$

73.3	73.4	74.5	76.1	76.3	76.2	75.6	75.2	74.7
7.5	7.4	6.3	4.7	4.5	4.6	5.2	5.6	6.1
100	84	54	22		27	62	85	100

STA	+	π	-	ELEV.
		880.80		

12+00

TP	13.32	892.89	1.23	879.57	879.57
----	-------	--------	------	--------	--------

12+50

TP	12.55	905.07	0.37	892.52	
----	-------	--------	------	--------	--

12+75

1

4 DEC. 1962

45

LT

E

RT

x-16

74.8	74.8	75.1	77.5	79.5	79.6	80.3	80.4	78.3	75.8	75.5
6.0	6.0	5.7	3.3	1.3	1.2	0.5	0.4	2.5	5.0	5.5
100	90	60	28	9		19	38	56	85	100



TOP NAIL E STA 12+00

79.1	82.7	85.7	88.1	88.3	90.0	89.5	45.5	84.1
13.8	10.2	2.2	4.8	4.6	2.9	3.4	7.4	8.8
100	64	36	18		26	55	90	100



TOP NAIL E STA 12+62.52

88.4	91.9	94.8	94.1	94.3	95.2	96.5	96.5	93.8
16.7	13.2	10.3	11.0	10.8	9.9	8.6	8.6	11.3
44	24	9	6		18	43	72	100

84.8	40.9
20.3	24.2
68	100



STA + π - ELEV

905.07

13+00

✓

TP 10.16 913.61 1.62 903.45

13+38

✓

5 DEC. 1962

46

LT

L

RT

X-12

892.1

893.6

897.2

900.1

900.2

901.7

903.1

903.1

904.8

13.0

11.5

7.9

5.0

4.9

3.4

2.0

2.0

3.3

42

37

20

9

26

59

80

100

887.6

882.1

17.5

23.0

65

100

SPIKE IN GROUND

896.8

900.6

903.8

906.8

907.3

908.3

908.6

908.1

908.5

16.8

13.0

9.8

6.8

6.3

5.3

5.0

5.5

5.1

52

35

19

11

18

46

84

100

894.2

893.6

19.4

20.0

70

109

STA + π - ELEV.

913.61

13+50

✓

TP 6.67 913.32 6.96 906.65

13+76

✓

5 DEC. 1962 47
RT x-18

LZ

✱

RT

x-18

96.7	00.6	04.9	07.8	08.2	09.4	08.7	08.3	09.1
16.9	13.0	8.7	5.8	5.4	4.2	4.9	5.3	4.5
54	37	19	10		15	36	77	100

94.4	03.2
19.2	10.4
71	100

TOP SPIKE ✱ STA 14

01.2	04.9	07.7	08.3	09.1	07.7	07.9
12.1	8.4	5.6	5.0	4.2	5.6	5.4
45	23	14		14	37	58

900.3	898.0	897.8
13.0	15.3	15.5
52	74	100

09.8	09.0
3.5	4.3
100	87

STA	+	π	-	ELEV
-----	---	-------	---	------

		913.32		
--	--	--------	--	--

14+00				
-------	--	--	--	--

✓				
---	--	--	--	--

+50				
-----	--	--	--	--

✓				
---	--	--	--	--

TP	1.17	904.31	10.18	903.14
----	------	--------	-------	--------

5 DEC. 1962

48

LT

E

RT

X-19

00.3	02.6	05.8	06.6	07.7	07.8	08.8
13.0	10.8	7.5	6.7	5.6	5.5	4.5
53	33	16		20	44	74

897.5	897.9
158	15.4
79	100

10.0
3.3
100

98.4	900.6	900.3	02.1	04.5	06.0	10.0	10.9
14.9	12.7	13.0	10.2	8.8	7.3	3.3	2.4
33	25	18		23	39	71	100

97.7	96.0	92.8	92.8
15.6	18.3	20.5	20.5
38	55	76	100

TOP NAIL E STA 14+50

STA + π - ELEV

904.31

15+00

✓

TP 0.86 893.07 12.10 892.21

15+50

✓

5 DEC. 1962

49

LT

E

RT

X-20

88.3	91.3	92.2	96.6	00.2	03.8	04.3
16.0	13.0	12.1	7.7	4.1	0.5	0.0
31	9		26	50	77	82

86.1	84.9	84.9
18.2	19.4	19.4
55	71	100

90.3
+3.0
100

TOP NAIL E STA 15

80.2	82.2	83.1	86.9	93.1	97.5	90.1
12.9	10.9	10.0	6.2	0.0	+4.4	+8.0
58	36	16		38	56	81

879.2	840.2
13.9	12.9
80	100

903.6
+10.5
100

STA + π - ELEV.

893.07

16+00

✓

TP 2.77 886.65 9.19 883.88

BM 9.55 888.12 8.00 878.65 (878.57)

+ 33

✓

5 DEC. 1962

50

LT

±

RT

X-21

79.1	80.9	82.1	83.9	86.7	90.5	92.0
13.4	12.2	11.0	9.2	6.9	2.6	1.1
55	34	19		21	50	56

77.7

15.4

100

89.5

89.0

+6.4

+2.9

100

79

TOP NAIL ± STA 16+00

TOP N.E. COR MART CTR 5-28-T30-R23

77.5	79.4	81.3	82.9	83.5	87.0	892.6	95.8
10.6	8.7	6.3	5.2	4.6	1.1	+4.5	+7.7
65	32	5	3		17	42	62

876.7

11.4

100

898.1

+10.6

100

STA

+

π

-

ELEV.

888.12

16+50

✓

17+00

✓

17+50

✓

XP
DS
WS
R. Boss

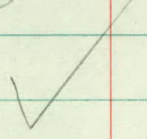
LT

E

6 DEC. 1962
SNOWY 250
RT

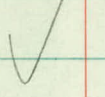
51
x-22

75.0	75.9	77.8	79.6	82.8	86.1	89.8	95.2
13.1	12.2	10.3	8.5	5.3	2.0	+3.7	+7.1
100	82	54	23		18	40	57



99.0 97.8
+10.8 +9.7
100 85

74.5	76.0	77.8	78.6	80.7	82.0	85.6	92.5
13.6	12.1	10.3	9.5	7.4	6.1	2.5	+4.4
85	57	34	20		11	31	53



74.0
14.1
100

99.1 95.7
+11.0 +7.6
100 76

74.3	75.1	76.3	78.1	78.7	80.4	81.7	86.9	890.2
13.8	13.0	11.8	10.0	9.4	7.7	6.4	1.2	+2.1
77	56	36	15		16	31	53	67



74.3
13.8
100

93.1
+5.0
100

STA	+	π	-	ELEV
-----	---	-------	---	------

		888.12		
--	--	--------	--	--

17+84

✓

TP	11.10	888.96	10.26	877.86
----	-------	--------	-------	--------

18+00

✓

6 DEC. 1962

52

LT

✱

RT

X-23

74.1	74.6	75.5	76.8	78.2	79.7	81.7	84.6	85.9
14.0	13.5	12.6	11.3	9.9	8.4	6.4	3.5	2.2
81	64	45	18		15	47	67	73

74.4

→ 13.7
100

89.4

← 1.3
100

TOP NAIL ✱ STA 18

74.4	74.8	75.6	76.9	77.9	79.0	80.8	82.9	84.5
14.6	14.2	13.4	12.1	11.1	10.0	8.2	6.1	1.5
81	59	36	19		15	35	53	81

74.1

→ 14.9
100

89.4

← 1.4
100

STA	+	π	-	ELEV.
-----	---	-------	---	-------

		888.96		
--	--	--------	--	--

18+50				
-------	--	--	--	--

✓				
---	--	--	--	--

19+00				
-------	--	--	--	--

✓				
---	--	--	--	--

BM	7.83	889.02	7.83	881.13	881.19
----	------	--------	------	--------	--------

6 DEC 1962

53

LT

f

RT

X-24

14.3	13.2	16.8	11.0	17.3	19.1	80.5	48.4	48.4
14.7	13.8	13.0	12.0	11.7	9.9	8.5	5.6	0.6
162	37	21	15		21	43	59	78

14.0	14.3	44.0
150	14.7	+5.0
84	100	100

14.3	14.3	16.1	16.8	18.0	19.0	80.9	43.5	48.8
14.7	14.7	13.3	12.2	11.0	10.0	8.1	5.7	0.2
100	80	45	20		16	34	51	68

17.0	43.1
+8.0	+4.1
100	83

1 ROW PIPE PI STA 19+55±

STA	+	π	-	ELEV.
-----	---	-------	---	-------

		889.02		
--	--	--------	--	--

19+50				
-------	--	--	--	--

✓				
---	--	--	--	--

20+00				
-------	--	--	--	--

✓				
---	--	--	--	--

20+50				
-------	--	--	--	--

✓				
---	--	--	--	--

6 DEC. 1962

54

LT

Z

RT

X-25

75.5	77.0	78.3	79.6	81.7	83.3	88.3	93.0
13.5	12.0	10.7	9.4	7.8	5.7	0.7	+4.0
68	36	20		18	32	50	65

74.6	74.6
14.4	14.4
89	100

98.7	97.3
+9.7	+8.3
106	83

75.2	76.1	77.8	79.2	80.9	83.8	85.7	88.3	92.0
13.8	12.8	11.2	9.8	8.1	5.2	3.3	0.7	+3.0
90	67	40	21		16	24	34	57

74.9
14.1
100

99.0	96.3
+10.0	+7.3
100	81

75.2	76.6	78.3	80.1	82.7	86.1	87.6	92.6	95.9
13.8	12.4	10.7	8.9	6.3	2.9	1.4	+3.6	+6.9
95	73	46	23		15	20	45	75

75.3
13.7
100

900.5
+11.5
100

STA	+	T	-	ELEV
-----	---	---	---	------

		889.02		
--	--	--------	--	--

TP	8.84	893.35	4.51	884.51
----	------	--------	------	--------

21+00

✓

21+50

✓

6 DEC. 1962

55

LT

L

RT

X-26

TOP NAIL L STA 21+00

79.6	81.0	82.3	84.6	86.7	89.6	90.9	91.8
13.9	12.4	11.1	8.8	6.7	3.9	2.5	1.6
42	21	11		18	22	32	40

77.5	76.1	75.7
15.9	17.3	17.7
70	90	100

99.0	95.4	93.4
+5.6	+2.0	0.0
100	75	55

78.7	79.7	81.0	81.6	84.0	86.7	88.7	91.2	94.4
14.7	13.7	12.4	11.8	9.4	7.2	5.2	2.2	+1.0
49	34	19	11		11	21	38	59

77.5	76.0	75.6
15.8	17.4	17.8
70	93	100

96.8	96.7
+5.4	+2.8
100	81

STA	+	π	-	ELEV
-----	---	-------	---	------

		893.35		
--	--	--------	--	--

22+00				
-------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

22+50				
-------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

TP				
----	--	--	--	--

5.91	886.22	13.04	880.31	
------	--------	-------	--------	--

6 DEC. 1962

56

LT

E

RT

X-27

76.7	78.0	79.1	80.6	82.1	83.7	85.6	88.3	91.6
16.7	15.4	14.3	12.8	11.3	9.7	7.8	5.1	1.8
71	46	32	15		10	17	27	40

15.8	15.2
17.8	18.2
90	100

99.1	98.0	94.5
+5.7	+4.6	+1.1
74	64	52

900.7	900.9
+7.3	+9.5
87	100

76.5	77.5	78.3	79.3	80.7	82.6	86.0	90.0
16.9	15.9	15.1	14.1	12.7	10.8	7.4	3.4
66	43	31	21		17	30	41

15.2	15.1
18.2	18.3
89	100

91.4	98.6	95.3	93.9
+8.0	+5.2	+1.9	0.5
77	66	55	48

902.7	905.0
+10.3	+11.6
88	100

TOP NAIL & SIA 23+50

STA

+

Δ

-

ELEV.

886.22

23+00

✓

✓

✓

23+50

✓

6 DEC. 1962

57

LT

E

PT

X-28

74.8	76.1	77.6	78.9	80.3	81.8	82.9	88.5	93.0
11.4	10.1	8.6	7.3	5.9	4.4	3.3	+2.3	+6.8
89	63	37	20		16	21	29	38

74.5
11.7
100

98.9 96.2 94.9
+12.7 +10.3 +8.7
58 51 48

902.6 905.0 905.5
+16.4 +18.8 +19.3
68 79 83

907.4 906.9
+21.2 +20.7
100 93

76.3	76.7	78.8	80.3	82.3	84.3	85.2	89.2
10.9	9.5	7.4	5.9	3.9	1.9	1.0	+3.0
72	44	19		22	29	32	42

74.6
11.6
100

902.6 900.6 912 93.9
+16.4 +14.4 +16.0 +7.7
74 65 57 53
+18.4 +19.5
49 100

STA	+	T	-	ELEV,
		886.22		

24+00

✓

+50

✓

+79

✓

Bm

6.53

879.69

879.71

6 DEC. 1962

58

LT

L

RT

X-29

74.6	75.5	76.3	77.6	79.1	80.1	81.8	83.8	85.9
11.6	10.7	9.7	8.6	7.1	6.1	4.4	2.4	0.3
86	65	37	19		13	37	51	56

74.6
11.6
100

902.1 982 952
+165 +120 +90
100 90 76

74.6	74.7	74.4	76.0	77.5	79.4	82.9	85.4
11.6	11.5	11.8	10.2	8.7	6.8	3.3	0.8
100	90	65	31		29	68	75

95.6 912
+9.4 +5.0
100 89

74.6	74.5	75.8	77.9	79.4	81.1	83.6	86.2
11.6	11.7	10.4	8.3	6.8	5.1	2.6	0.0
100	62	28		34	63	80	91

87.8
+1.6
100

TOP IRON RT STA 24+75

STA	+	π	-	ELEV.
-----	---	-------	---	-------

		886.22		
--	--	--------	--	--

25+00				
-------	--	--	--	--

✓				
---	--	--	--	--

+50				
-----	--	--	--	--

✓				
---	--	--	--	--

26+00				
-------	--	--	--	--

✓				
---	--	--	--	--

6 DEC. 1962 59

LT

±

RT

X-30

74.7	74.6	75.8	76.9	77.6	79.7	81.5	85.1
11.5	11.6	10.4	9.3	8.6	6.5	4.7	1.1
100	56	24		9	38	65	87

89.0

+2.8

100

74.6	74.6	74.6	75.1	76.2	77.6	78.7	80.1	82.1
11.6	11.6	11.6	11.1	10.0	8.6	7.5	6.1	4.1
100	93	61	34		22	45	60	81

84.8

1.4

100

73.6	74.6	74.9	75.0	75.4	76.6	78.0	79.0	80.6
12.6	11.7	11.3	11.2	10.8	9.6	8.2	7.2	5.6
92	87	62	30		24	51	70	86
± 10.0	TOP							
CREEK	BANK							

73.6

12.6

100

11.7

81.0

5.2

100

STA	+	T	-	ELEV.
-----	---	---	---	-------

		886.22		
--	--	--------	--	--

26+50				
-------	--	--	--	--

✓				
---	--	--	--	--

+85=	£	9.0 CREEK		
------	---	-----------	--	--

27+00				
-------	--	--	--	--

✓				
---	--	--	--	--

6 DEC. 1962

60

LT

E

RT

X-31

76.2	75.2	73.7	75.7	75.0	75.4	76.3	77.5	76.4
10.0	11.0	12.5	10.5	11.2	10.8	9.9	8.7	7.8
53	44	38	28		27	54	83	100
TOP BANK		10.0		TOP BANK				
75.4		75.9						
10.8		10.3						
78		100						

✓

73.2
13.0

75.8	76.4	77.7	76.5	75.8	75.1	73.8	75.1
10.4	9.8	9.0	9.7	10.4	11.1	12.4	11.1
100	73	46	27		15	23	32

TOP
BANK9.0
CREEKTOP
BANK

75.5	74.8	75.1
10.7	11.4	11.1
100	82	60

✓

STA

+

π

-

ELEV.

886.22

27+50

✓

28+00

✓

TP

12.27889.02 9.47 876.75

6 DEC 1962

61

LT

±

RT

X-32

74.9	75.1	76.0	77.4	76.9	76.1	75.1	74.6	73.6
11.3	11.1	10.2	8.8	9.3	10.1	11.1	11.4	12.6
100	88	66	38		23	46	77	82
							TOP	29.0
							BANK	Creek

74.8	74.9
11.4	11.3
100	89
	TOP
	BANK

75.2	75.4	75.6	76.2	76.7	76.0	75.7	74.8	74.7
11.0	10.8	10.6	10.0	9.5	10.2	11.0	11.4	11.5
100	84	62	37		34	62	84	100

TOP NAIL ± STA 28+00

STA

+

T

-

ELEV.

889.02

28+50

✓

29+00

✓

29+50

✓

KP
DS
WS
R. BOSS

LT

7 DEC. 1962
SUNNY 20°

62

X-33

RT

17.1	17.5	16.9	17.1	16.7	16.9	16.7	16.2
11.3	11.5	12.1	11.9	12.3	12.1	12.3	12.8
88	66	40	27		23	43	68

17.1
11.3
100

14.8 15.1
14.2 13.9
100 88

19.8	19.2	18.4	18.6	18.5	18.3	17.5	16.8
9.2	9.8	10.6	10.4	10.5	10.7	11.5	12.2
64	44	27	15		23	47	69

10.1 10.0
8.9 9.0
83 100

15.3 15.9
13.7 13.1
100 84

13.1	12.9	11.7	10.1	11.3	10.5	11.5	16.1	16.4
5.3	6.1	7.3	8.9	9.7	10.5	11.5	12.3	12.6
88	68	44	17		21	39	57	76

14.1
4.9
100

15.1
13.3
100

STA	+	π	-	ELEV.
-----	---	-------	---	-------

		889.02		
--	--	--------	--	--

30+00				
-------	--	--	--	--

+50				
-----	--	--	--	--

✓				
---	--	--	--	--

+75				
-----	--	--	--	--

✓				
---	--	--	--	--

7 DEC. 1962

63

LT

Z

RT

X-34

49.0	48.0	47.2	45.6	42.8	41.1	39.9	39.2	37.3	36.6
0.0	1.0	1.8	3.5	6.2	7.9	9.1	9.8	11.7	12.4
100	78	60	39	18		22	45	70	100

45.2	43.1	41.1	40.1	38.3
3.8	5.9	7.9	8.9	10.7
	15	29	57	84

11.1

48.8	47.4	44.0	41.7	40.4
0.2	1.6	5.0	7.3	8.6
	8	22	38	65

46.5	44.4
10.5	9.6
100	81

STA	+	π	-	ELEV.
-----	---	-------	---	-------

		889.02		
--	--	--------	--	--

31+00				
-------	--	--	--	--

✓				
---	--	--	--	--

+25				
-----	--	--	--	--

✓				
---	--	--	--	--

TP	13.75	899.01	3.76	885.26
----	-------	--------	------	--------

7 DEC, 1962

64

LT

£

RT

X-35

87.0	84.5	82.7
2.0	4.5	6.8
18	32	46
79.1	79.8	80.1
9.9	9.2	8.3
100	86	70

87.6	84.7	82.5	80.7
1.4	4.3	6.5	8.3
23	41	53	78
		79.4	
		9.6	
		100	

TOP NAIL £ STA 30+50

STA

+

K

-

ELEV.

899.01

30+50

✓

+75

✓

31+00

✓

7 DEC. 1962

65

X-36

LT

~~RT~~

RT

93.7	90.8	88.7	86.4
5.3	8.2	10.8	12.6
57	36	17	5

96.6	98.3
2.4	0.7
78	100

98.3	97.7	96.4	92.6	90.1
0.7	1.3	2.6	6.4	8.9
80	68	44	21	9

98.8
+ 0.2
100

98.0	97.1	96.6	95.4	91.7	90.0	88.6
1.0	1.9	2.4	3.6	7.3	9.0	10.4
86	69	46	29	11		9

99.0
0.0
100.

STA + π - ELEV.

899.01

31+25

✓

TP 2.38 891.17 10.22 888.79

BM 5.37 891.15 5.37 885.80 885.78

31+50

✓

7 DEC. 1962

66

LT

±

RT

X-37

91.6	92.0	92.4	91.3	90.3	89.4	88.3
7.4	7.0	6.6	7.7	8.7	9.6	10.7
71	46	23	8		7	14

93.6
5.4
100

TOP NAIL ± STA 31+50

SPIKE IN CHOKECITERRY 40' RT. STA 33

84.7	84.4	86.0	87.0	88.7	88.8	88.0	86.6	84.9	82.0
7.0	6.8	6.2	4.2	2.5	2.4	3.2	4.6	6.3	9.2
100	78	55	31	10		13	33	45	67

81.0
10.2
100

81.2
10.0
84

STA + π - ELEV

891.15

32+00

✓

+50

✓

33+00

✓

7 DEC. 1962

67

LT

E

RT

X-38

81.0	81.6	82.4	83.5	85.9	86.9	87.6	87.3	86.1	83.3	81.8
10.2	9.7	8.8	7.7	5.3	4.3	3.6	3.9	5.1	7.9	9.4
77	64	48	30	10		16	37	56	82	100

80.9
10.3
100

80.8	81.1	82.8	83.3	85.2	86.1	87.1	87.6	87.6	86.9
10.4	10.1	8.4	7.9	6.0	5.1	4.1	3.6	3.7	4.3
88	67	45	30	13		14	37	61	77

80.6
12.6
100

83.4
7.8
100

80.9	81.4	82.1	81.7	81.6	87.0	87.8	83.4	84.0
10.3	9.8	9.1	9.5	9.6	9.2	8.4	7.8	7.2
58	37	20	11		4	29	60	79

82.7
8.5
68

87.5
8.7
100

87.1
8.3
100

STA + A - ELEV.

891.15

33+50

✓

TP 13.33 897.66 6.82 884.33

34+00

✓

7 DEC. 1962

68

X-39

LT

E

RT

82.5	81.7	81.7	81.7	81.7	81.6	81.5	81.7	81.7
8.7	9.5	9.5	9.5	9.5	9.6	9.7	9.5	10.0
75	50	30	19		12	25	45	67

84.0
7.2
100

80.4 80.9
10.8 10.3
100 85

TOP NAIL E STA 34+00

83.6	84.0	84.4	84.4	84.7	84.6	87.9
14.1	13.7	13.3	13.3	13.0	13.1	14.8
65	39	14		17	42	68

83.6 83.4
14.1 14.3
77 100

81.5
16.2
100

STA + π - ELEV

897.66

34+50

35+00

✓

+45

✓

7 DEC. 1962

69

LT

E

RT

X-40

84.7	86.6	87.9	89.6	91.7	97.0	85.4	83.6	87.4
13.0	11.1	9.8	8.1	8.5	10.7	12.3	14.1	15.3
100	70	46	18		25	49	75	100

87.2	91.4	92.4	93.7	92.0	91.3	88.4	86.4	85.4	84.4
10.5	6.3	4.3	4.5	5.7	6.4	9.3	11.3	12.3	13.3
66	43	28	16	5		28	58	79	100

84.9	83.7
12.8	14.0
79	100

84.6	87.9	92.2	94.7	95.0	92.9	91.6	89.6	87.7
13.1	9.8	5.5	2.8	2.7	4.8	6.1	8.1	10.0
57	37	22	9		14	31	57	87

82.6	80.6
15.1	17.1
82	100

87.3
10.4
100

STA + π - ELEV.

897.66

35+75

+90

✓

TP 5.34 889.82 13.18 884.48

36+00

+06 = DITCH BOTTOM W. SIDE STA #51

7 DEC. 1962

70

LT

±

RT

x-41

80.6	82.0	84.0	89.5	94.7	94.6	90.9	89.6	88.4
17.2	15.7	13.7	8.2	3.0	3.1	6.8	8.1	9.3
100	75	49	21	23	56	78	100	

81.1	82.2	84.2	87.0	93.7	95.0	94.5	92.0	89.6
16.6	15.5	13.5	10.0	4.0	2.7	3.2	5.7	8.1
83	62	35	19	13	22	47	81	

80.3
17.4
100

87.7 87.8
10.0 9.9
100 95

TOP NAIL ± STA 36+00

80.3	81.0	81.6	81.5	82.4	84.5	84.8	83.7	83.1	83.1
9.5	8.8	8.2	8.3	7.4	5.3	5.0	6.1	6.7	6.7
100	88	69	42	19	27	53	77	100	

80.8	80.6	80.8	80.9	81.6	82.6	83.0	82.5	82.4	82.3
9.0	9.2	9.0	8.9	8.2	7.2	6.8	7.3	7.4	7.5
100	93	71	48	22	28	58	90	100	

STA + π - ELEV.

889.82

36+16

12.66 877.16

+26 = W. SHOULDER STA #51 (ALONG SHOULDER LINE)

+44 = ~~E~~ S.T.H. #51

+73

13.60 876.22

B.M.

9.66 880.16 (880.09)

7 DEC 1962

71

LT

~~E~~

RT

x-42

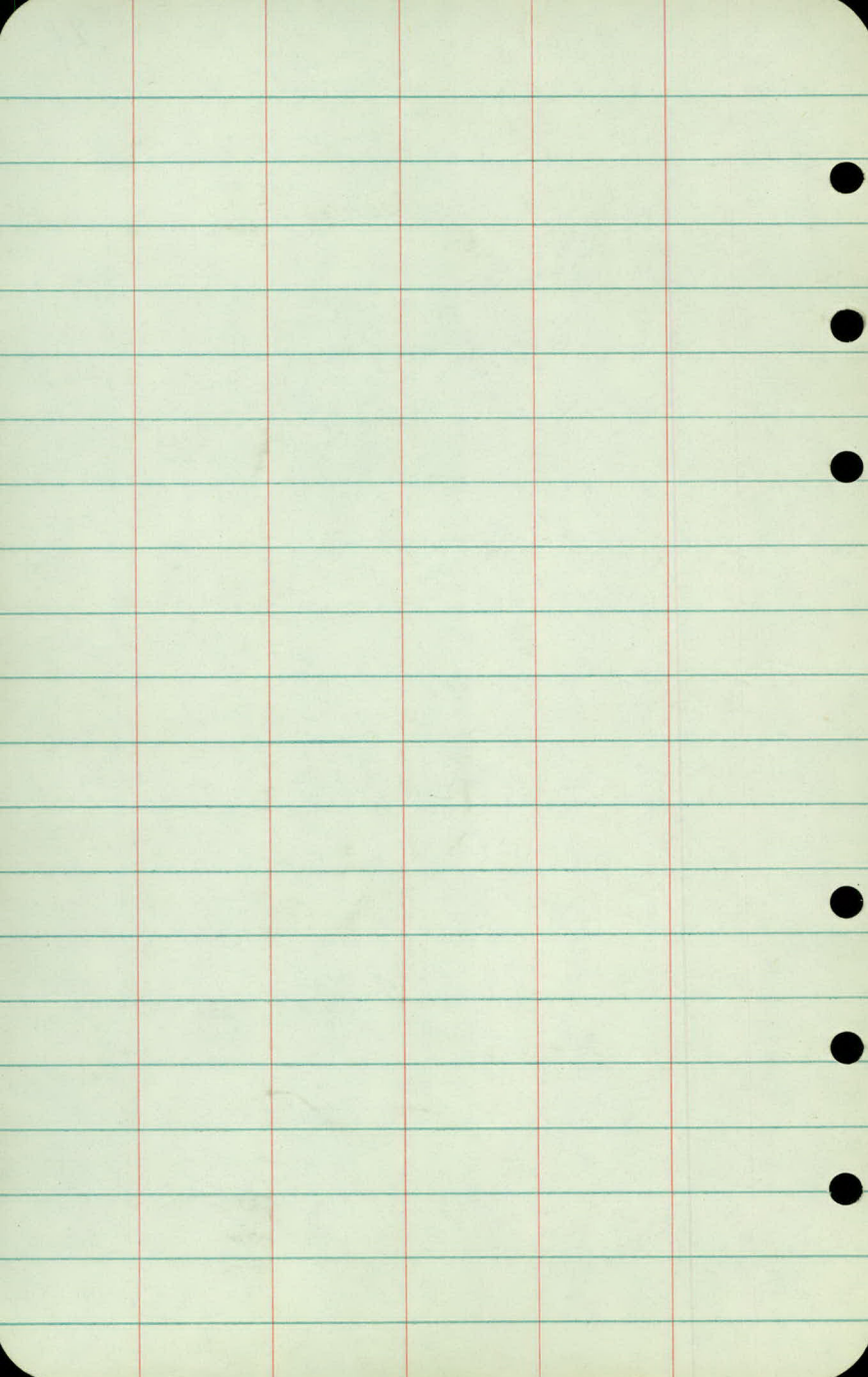
FL W. END 24" SCP 100' LT

86.7	86.3	86.4	86.4	86.3	86.7	86.6	86.6
3.6	3.5	3.4	3.4	3.5	3.6	3.2	3.2
100	88	61	25		32	74	100

84.4	84.5	84.7	84.9	85.0	85.1	85.7	85.1	85.7
5.4	5.3	5.1	4.9	4.8	4.7	4.6	4.7	4.6
200	150	100	50		50	100	150	200

FL E END 24" SCP 93.0 LT

SPIKE WPP N.E. COR E² 4 5TH⁴ 51



Jan 16, 1963

71A

E²

X- Sections - Swamp

9+00 - 10+88

Sta	+	π	-	Elev.
BM	0.01	877.96		877.95

9+00

+50

10+00

+35

7.9

870.1

+50

+88

It only

BM

0.01

877.95

R6
WM
WS

Lt.

±

Jan 16, 1963
Cold, Cl.
Rt.

71B

Top Pipe Marker Lt Sta 8400 ±

10.4	10.5	10.4	10.6	10.7	10.8	10.8	10.7	10.7
7.4	7.5	7.6	7.4	7.3	7.2	7.2	7.3	7.3
100	75	50	25		25	50	75	100

10.7	10.7	10.7	10.7	10.8	10.8	11.0	10.7	10.8
7.3	7.3	7.3	7.3	7.2	7.2	7.0	7.3	7.2
100	75	50	25		25	50	75	100

10.7	10.8	10.9	10.9	10.8	10.7	10.8	10.8	10.7
7.8	7.2	7.1	7.1	7.2	7.3	7.2	7.2	7.3
100	85	75	50	25		25	50	75

4 Ditch

± 4 Ditch

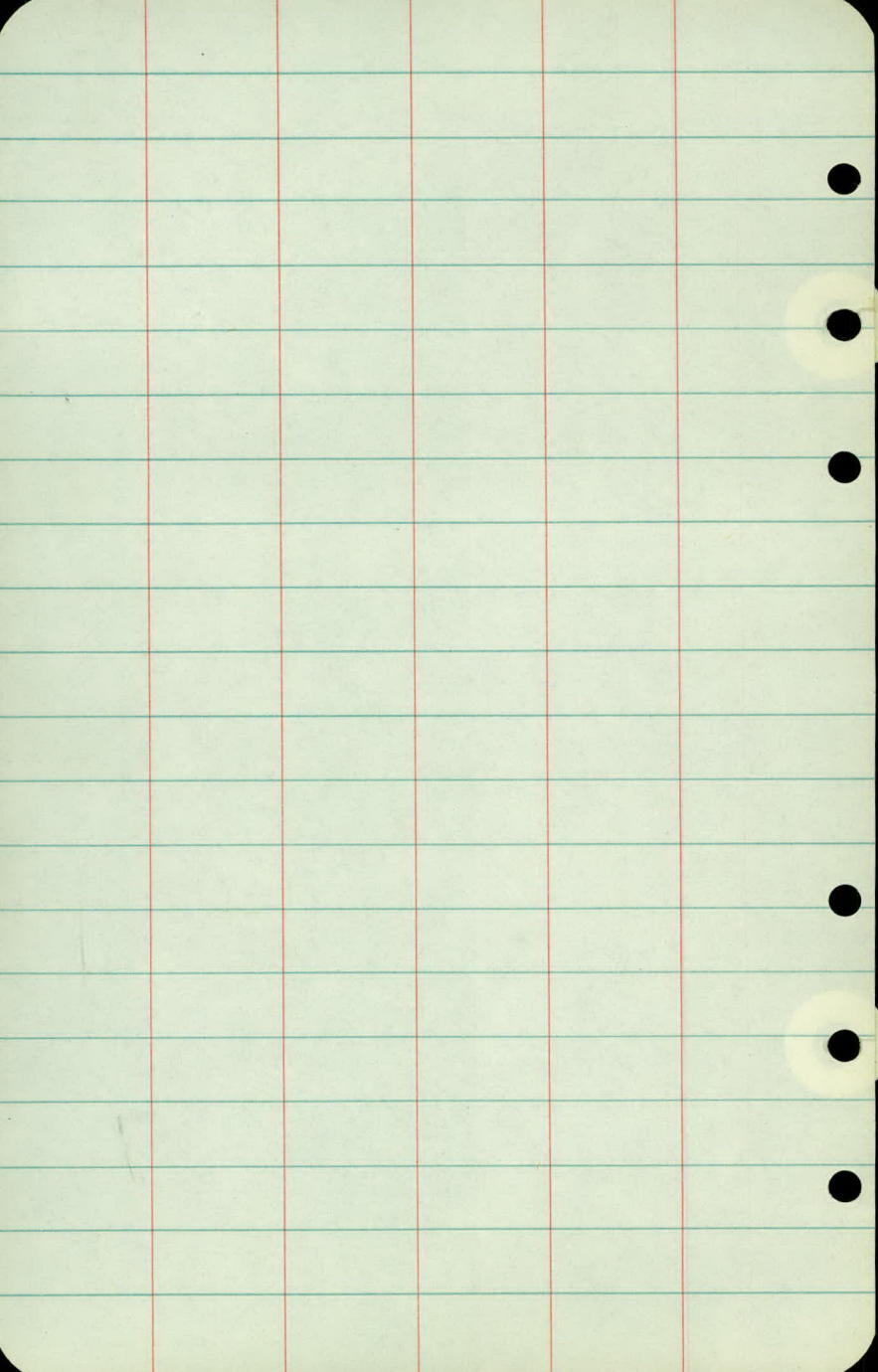
10.5	10.7	10.7	10.6	10.8	10.8	10.7	10.8	10.8
7.5	7.3	7.3	7.4	7.2	7.2	7.3	7.2	7.2
100	75	50	25		25	50	75	100

4 Ditch

10.6	10.5	10.8	10.9	11.7
7.4	7.5	7.2	7.1	6.3
100	75	50	25	

Duplicate 11700 Rt

ck.



23 APRIL 1963

£

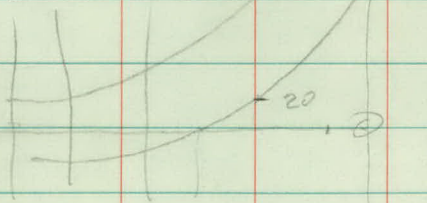
RT

Top iron & Sta 3+00

	02.45	03.15	05.45	04.75	05.35	06.05	
	13.6	12.9	10.6	11.3	10.7	10.0	
		36	86	92	98	100	
12.81	12.00	10.85	09.83	09.02	07.83	07.25	07.25
324	405	520	622	703	822	8.3	8.8
300	267	230	200	76	130	115	107
13.40	14.10	14.50	14.74	15.34	15.69		
265	1.95	1.55	1.31	0.71	0.36		
328	361	385	400	450	500		

Top iron Sta 3+00

2. 2. 2.



0+22
0+~~42~~
6+49

KP
US
WS
DS

30 APRIL 1963

1.

Co RD E²

X-SECTIONS

5 pages



3+00

X-Sections

0+00

3+00

Co RD E²

Sta + π - ELEV.

BM 9.98 912.67

(902.69)

0+00 = STA 3+00 C.O.D. E²

0+22

✓

0+47

✓

0+87

✓

30 APRIL 1963

2.

Lt

#

Rt

TOP IRON # STA 3+00 C.O.R.D. E²

09.9

2.8

49

09.8

2.9

73

09.3

3.4

31

10.2

2.5

100

04.5

8.2

18

03.2

9.5

9

04.2

8.5

11

03.0

9.7

25

04.1

11.26

100

EDG. RD CONC.

01.8

10.9

25

02.0

10.7

15

00.4

12.3

53

02.52

10.15

82

EDGE RD CONC.

99.8

12.9

56

03.4

9.3

72

04.6

8.1

45

10.1

2.6

85

09.9

2.8

60

08.9

3.8

31

04.4

8.3

18

04.2

8.5

11

03.7

9.0

15

01.2

11.5

100

EDGE CONC. & RD

RD

01.39

11.28

89

EDGE CONC. & RD

02.78

9.89

72

EDGE CONC. & RD

03.90

8.77

55

EDGE CONC. RD

10.3

2.4

100

10.7

2.0

73

09.2

3.5

51

10.5.7

7.0

25

05.3

7.4

10

10.5.1

7.6

10

04.3

8.4

3-5

DITCH

06.5

6.2

13

05.94

6.73

21

EDGE RD CONC.

04.93

7.74

35

RD

10.7

2.0

100

97.9

148

100

98.8

13.9

75

03.3

9.4

58

03.97

8.70

51

03.75

8.92

50

EDGE RD. TOP

STA	+	π	-	ELEV.
-----	---	-------	---	-------

		912.67		
--	--	--------	--	--

1+00				
------	--	--	--	--

✓				
---	--	--	--	--

1+13				
------	--	--	--	--

		6.18	906.49	
--	--	------	--------	--

✓				
---	--	--	--	--

1+30				
------	--	--	--	--

		5.90	906.77	
--	--	------	--------	--

✓				
---	--	--	--	--

30 APRIL 1963

Lt

#

Rt

3.

03.9	04.1	05.7	05.1	06.2	07.0	06.8	06.54	05.17
8.8	8.6	7.0	7.6	6.5	5.7	5.9	6.13	7.50
23	17	8	2-5		4	11	13	27
			DITCH				EDGERD	4 RD

05.2	10.1	10.9	11.3	95.6	96.9	03.9	04.68	04.52
7.5	2.6	1.8	1.4	17.1	15.8	8.8	7.99	8.15
34	53	75	100	73	60	47	41	40
				SWAMP			TOP	EDGERD.
							CRB	

FL 15" CM 9.0 Lt. (N.END)

FL 15" CM 17.0 Lt (S.END)

STA

+

π

-

Elev.

912.67

1+31

✓

+50

✓

2+00

✓

30 APRIL 1963

Lt

4

RT

4.

10.5	09.1	07.3	08.5	07.87	06.85	05.63	05.82
2.2	3.6	5.4	4.2	4.80	5.82	7.04	6.85
55	30	16-18	13	EDGE	14	26	27
		DITCH		RD	£ RD	EDGE RD	TOP CURB
11.82	12.1						
0.85	0.6						
72	100						
CONC.							

09.7	07.8	08.7	08.60	08.25	07.74	06.82	07.62	06.1
3.0	4.9	4.0	4.07	4.42	4.93	5.85	5.65	6.6
30	19-22	12	5		8	20	21	28
	DITCH		EDGE RD.		£ RD.	EDGE RD.	TOP CURB	

10.8	11.92	12.0						
1.9	0.75	0.7						
54	72	84						
CONC.		HO.						

11.7	10.5	09.3	10.2	10.19	09.79	09.79	09.22	09.45	09.6
1.0	2.2	3.4	2.5	2.48	2.88	2.92	3.45	3.22	3.1
57	33	25-27	19	11		1	12	13	20
		DITCH		EDGE RD.		£ RD	EDGE RD	TOP CURB	

210.7	10.5	07.4	06.8	05.9
2.0	2.2	5.3	5.9	6.8
100	86	71	54	32

12.7
0.0
83
HO

✓

STA	+	π	-	ELEV.
		912.67		

Z+25 = $\neq$ 10.0 DRIVEWAY

✓

Z+06		5.19	907.48
------	--	------	--------

TP	8.32	919.67	1.32	911.35
----	------	--------	------	--------

Z+67 = DITCH LT.

✓

TP	0.76	909.87	10.56	909.11
----	------	--------	-------	--------

BM		7.18	902.69	(902.69)
----	--	------	--------	----------

30 APRIL 1963 5.

Lt

+

Rt

12.2	11.6	9.9	11.2	10.99	10.67	10.30	10.17	10.5
0.5	1.1	2.8	1.5	1.68	2.00	2.37	2.50	2.2
62	35	25-27	18	10	10	10	11	31
		DITCH		EDGE RD		EDGE RD	TOP CURB	
	12.7					11.0	10.9	11.2
00						1.7	1.8	1.5
79						100	83	56

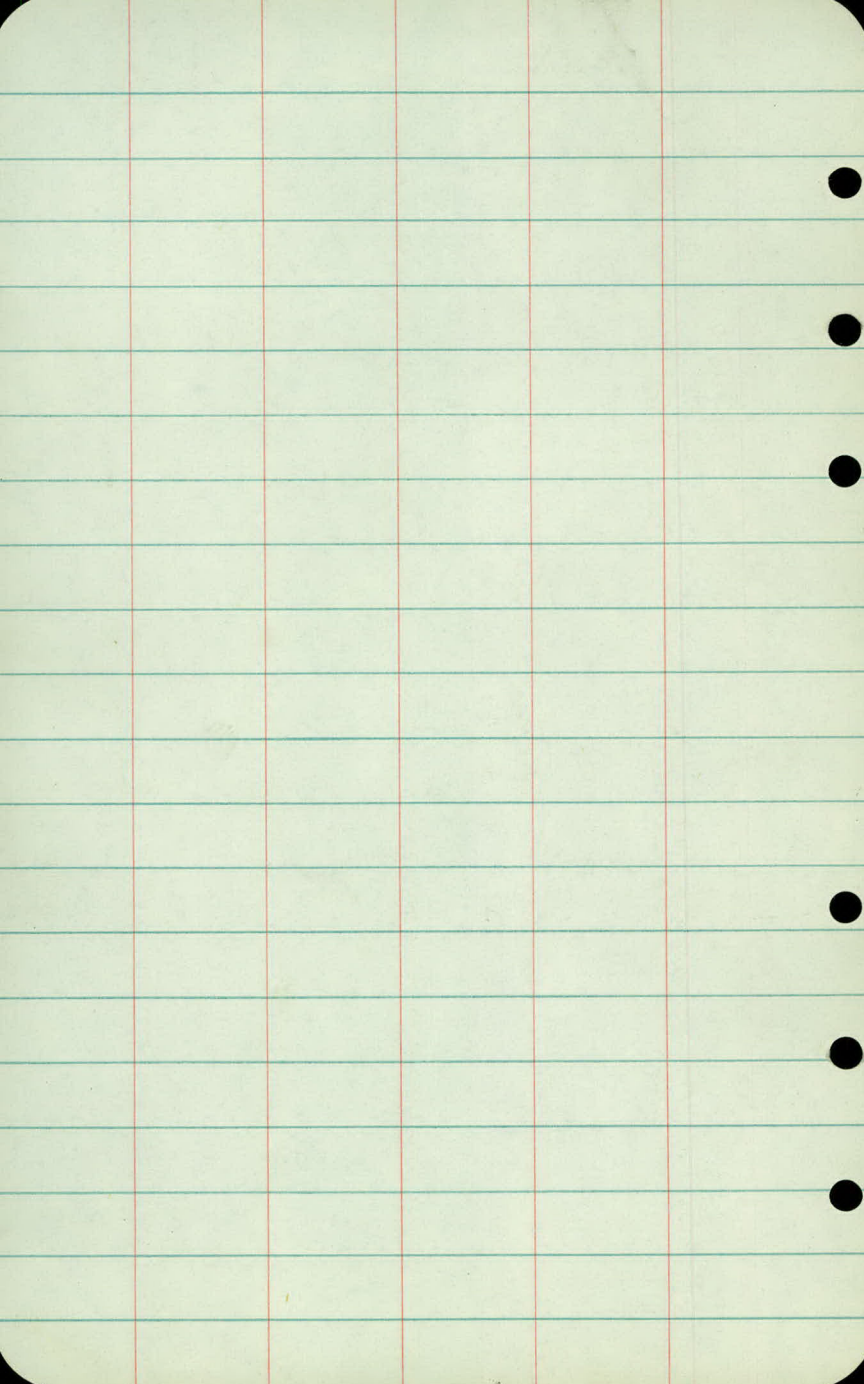
FL 15" CM 25.0 RT (N. END).

TOP 15" CM 25.0 RT STA 2+46 (N. END)

11.1	10.54	12.0	12.01	11.89	11.71	11.94	12.1
8.6	9.13	7.7	7.66	7.78	7.96	7.73	7.6
38	25		10	4 RD	10	TOP CURB	15
	FL 15" CM S. END		EDGE RD		EDGE RD		
	12.4				18.5	17.5	13.5
8.2	7.3				1.2	2.2	6.2
59	80				72	53	37
							21-23
							DITCH

EDGE RD.

TOP IRON & STA 3+00 CORDE²



26 APRIL 1963

1.

KP
VS
DS
WS

Co. RD E²

NEW BRIGHTON RD TO STH #10

DITCH

X- SECTIONS

2 PAGES

STA	+	π	-	ELEV.
-----	---	---	---	-------

BM	0.60	880.17		
----	------	--------	--	--

879.57

10436 = DITCH

✓

12.51 867.66

BM

0.60 879.57

879.57

26 APRIL 1963

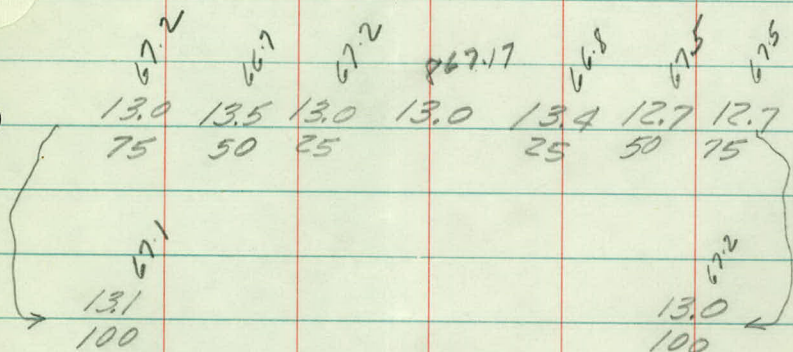
Lt

±

Rt

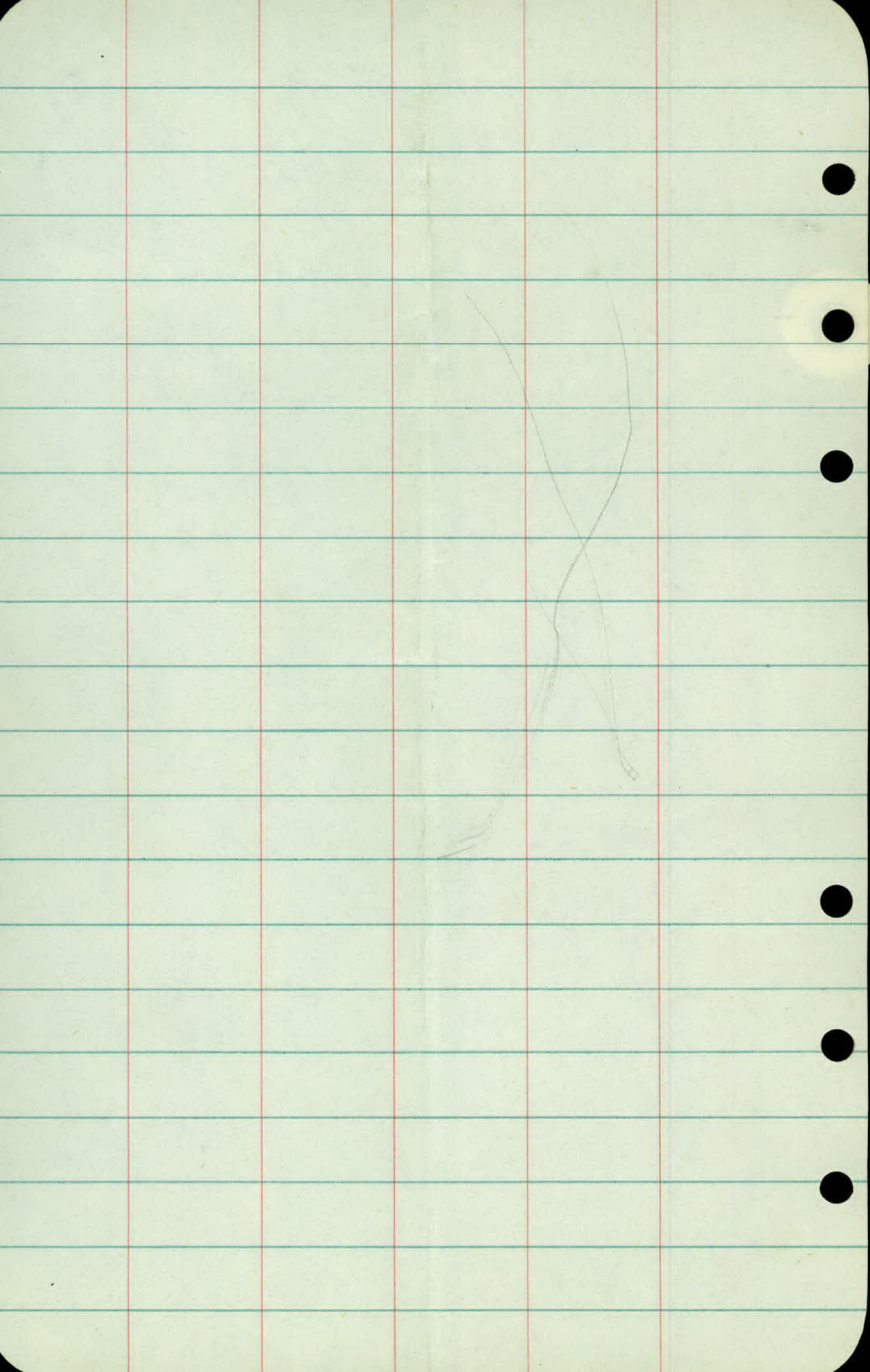
2.

TOP NAIL ± STA 12+00



FL 48" CM N. end. of Swamp.

TOP NAIL ± STA 12+00



23 April 1963

KP
JS
DS
WS.

Co. RD. E²

New Brighton Rd to StH[#] 10

Elevation of culvert
under Soo line RR tracks
north of Johanna Blvd.

Sta	+	π	-	Elev
BM	4.19	886.11		(881.92)
TP	4.22	880.90	9.43	876.68
TP	7.16	881.35	6.71	874.19
TP	3.17	880.56	3.96	877.39
			10.71	869.85
TP	1.19	873.05	8.70	871.86
			3.46	869.59
TP	8.04	879.90	1.19	871.86
TP	3.86	881.25	2.51	877.39 (877.39)
TP	6.05	880.24	7.06	874.19 (874.19)
TP	8.41	886.33	2.32	877.92
BM			4.41	881.92 (881.92)

23 April 1963

Description

S.W. Cor Outlet at Lake Johanna.

Spike in ground

Spike in 10" Elm 500'± N. of Johanna Blvd.

Spike in 40" Oak

FL S. END 48" CM under R.R. track.

Spike in 6" Willow 20' South of culvert.

FL N. END 48" CM under R.R. Tracks

Spike in 6" Willow 20' South of Culvert.

Spike in 40" Oak

Spike in 10" Elm 500'± N. of Johanna Blvd.

Spike in 24" Elm N. end Picnic Area

SW Cor Outlet at Lake Johanna

Normal El Lake Johanna = 877.5

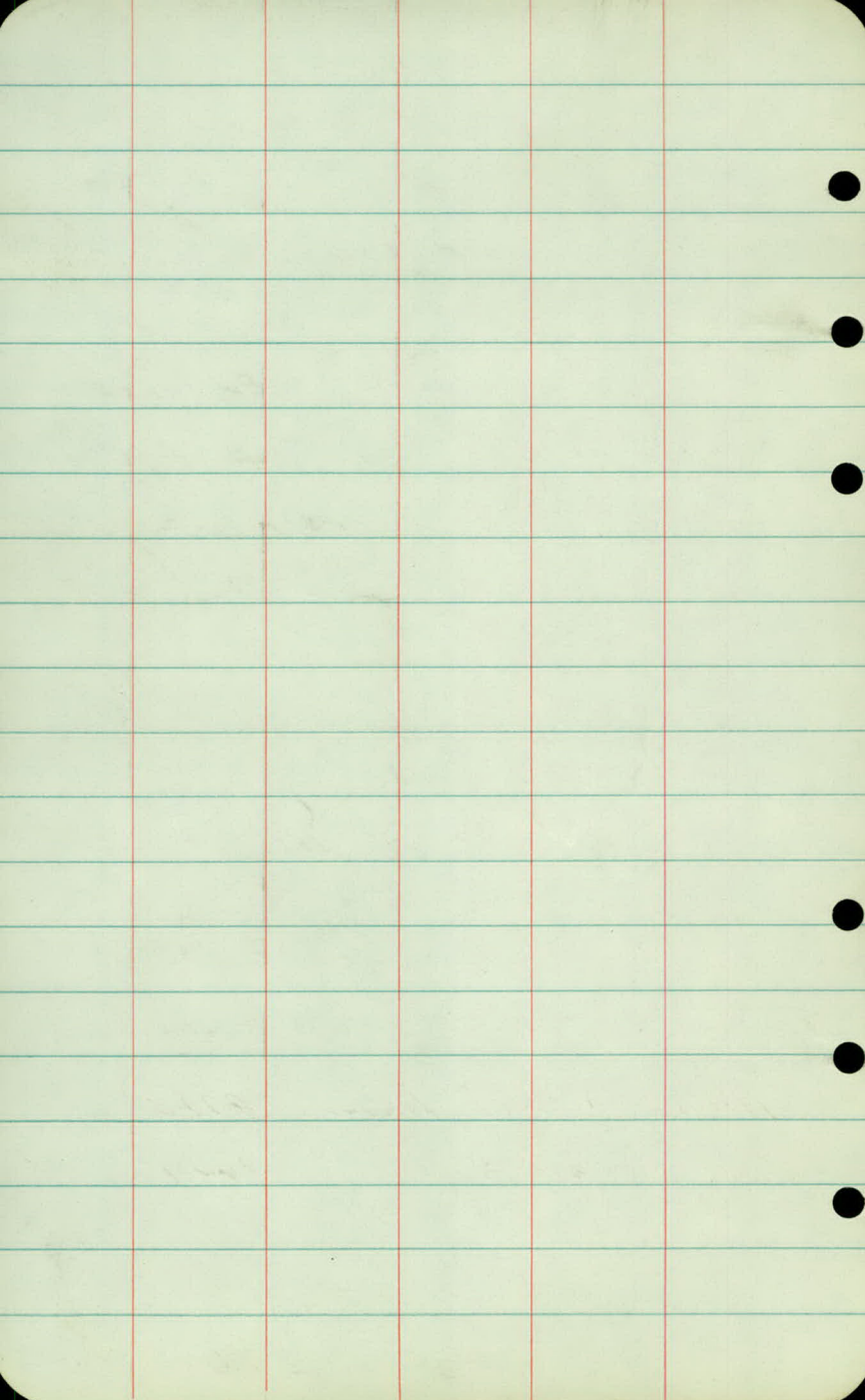
Under Co. Rd "F"

866.9

Diff = 2.7

Under R.R. =

869.6



KP WM
JS FS
DS R. Boss
WS

13 MAY 1963

1.

Co. Rd. E²
New Brighton Rd to STH #10

Profile & MISC. info.
(9 Pages)

STA	+	π	-	ELEV.	
BM	11.96	912.53			(900.57)
TP	3.62	915.66	0.49	912.04	
TP			12.97	902.69	
TP	0.60	912.64	3.42	912.04	
			9.73	902.91	
BM	0.57	901.14	12.04	900.60	(900.57)
			12.59	888.55	
TP	0.55	888.53	13.16	887.98	✓
TP	0.97	879.64	9.86	878.67	
			5.83	873.81	
			11.97	867.67	
8+50				70.7	
✓					
9+00				68.8	

13 MAY 1963

2.

Lt

£

Rt

2X2 hub 100' Rt Sta 6+00

TOP NAIL £ STA 5+50

TOP IRON £ STA 3+00

TOP NAIL £ STA 5+50

TOP NAIL £ STA 6+00

2X2 hub 100' Rt STA 6+00

2X2 hub 100' Rt STA 7+00

TOP NAIL £ STA 7+00

TOP NAIL £ STA 7+50

TOP NAIL £ STA 8+00

FL 48" CM 225' LT STA 9+26

8.9

10.8

STA	+	π	-	Elev
-----	---	-------	---	------

		879.64		
--	--	--------	--	--

9+50				
------	--	--	--	--

			70.4	
--	--	--	------	--

✓				
---	--	--	--	--

10+00				
-------	--	--	--	--

✓				
---	--	--	--	--

+25	=	W. EDGE OF DITCH		
-----	---	------------------	--	--

✓				
---	--	--	--	--

+36	=	$\neq$ DITCH		
-----	---	--------------	--	--

✓				
---	--	--	--	--

+47	=	E. EDGE OF DITCH		
-----	---	------------------	--	--

13 MAY 1963

3.

Lt

E

Rt

9.2

69.6
10.0

70.2
9.4

66.5
13.1

69.8
9.8

STA	+	x	-	Elev.
-----	---	---	---	-------

		87964		
--	--	-------	--	--

10+84	=	EDGE WATER		
-------	---	------------	--	--

v				
---	--	--	--	--

11+00				
-------	--	--	--	--

+50				
-----	--	--	--	--

		3.89	875.75	
--	--	------	--------	--

TP				
----	--	--	--	--

		0.08	879.56	879.57
--	--	------	--------	--------

BM				
----	--	--	--	--

				875.26
--	--	--	--	--------

13 MAY 1963

4.

Lt

£

Rt

8.8

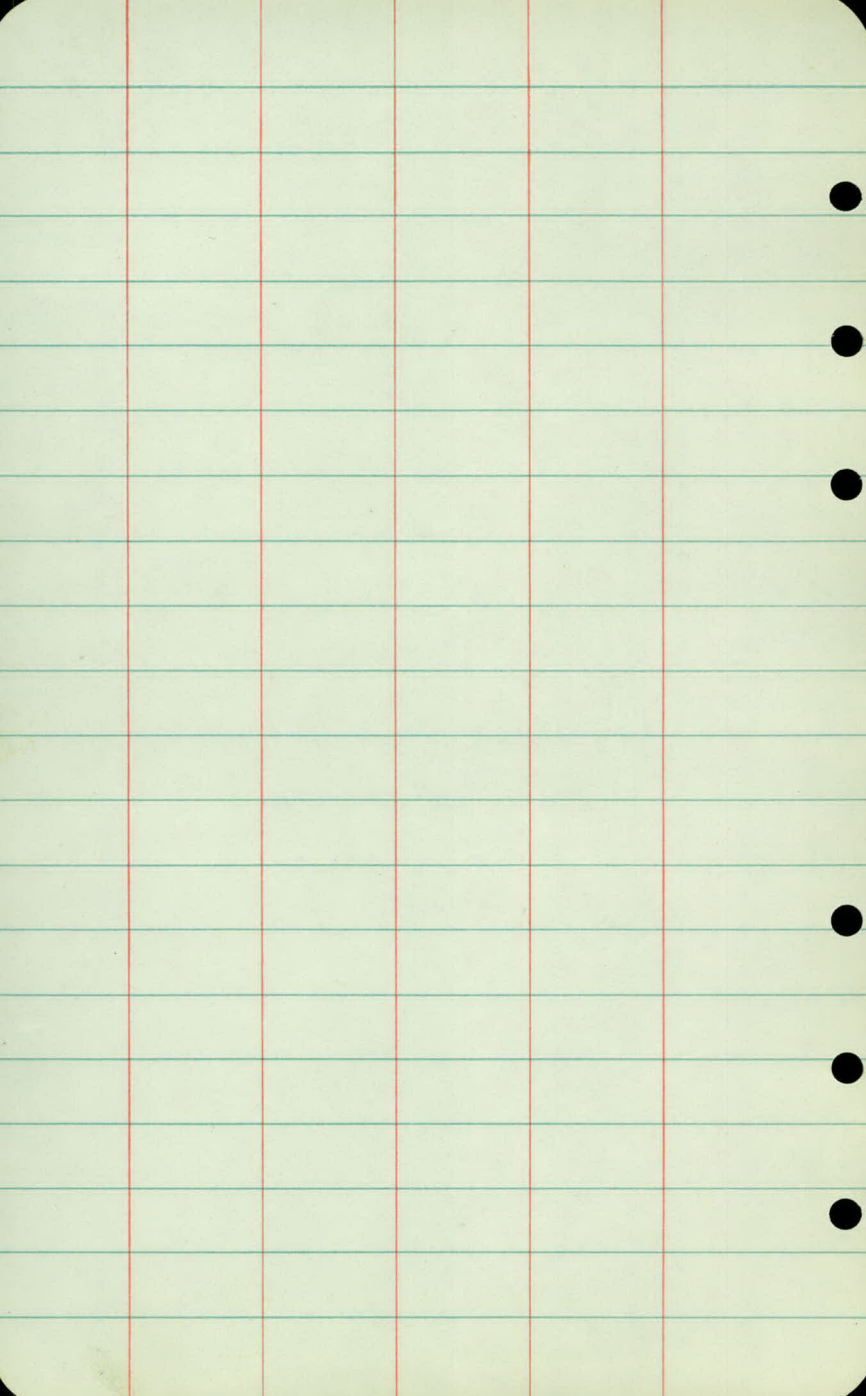
72.1

7.5

MH £

TOP NAIL £ STA 12

2X2 HUB 115' RT STA 12+10



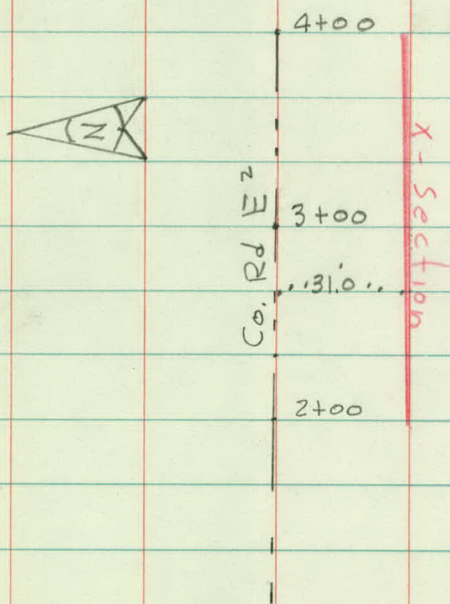
13 MAY 1963

5.

Co. Rd E²

New Brighton Rd to STH#10

X - Sections



STA	+	π	-	ELEV.
BM				
BM	8.35	911.04		902.69

New Brighton Rd.

3+00 Co. Rd E² @ 31.6 South = 0400

1170 Co. Rd E² Line

✓

✓

BM	8.35	902.69	902.69
----	------	--------	--------

13 MAY 1963

6.

Lt

±

Rt

2x2 Hub 100' Rt Sta 6+00

TOP IRON ± STA 3+00 Co. Rd E2

Rt, 


Lt.

02.2	00.2	01.2	00.9	01.9	03.2	03.4	03.9	03.9	06.5	09.2
8.8	10.8	9.8	10.1	9.1	7.8	7.6	7.1	7.1	4.5	1.8
57	47	40	36	20		11	13	16	22	29

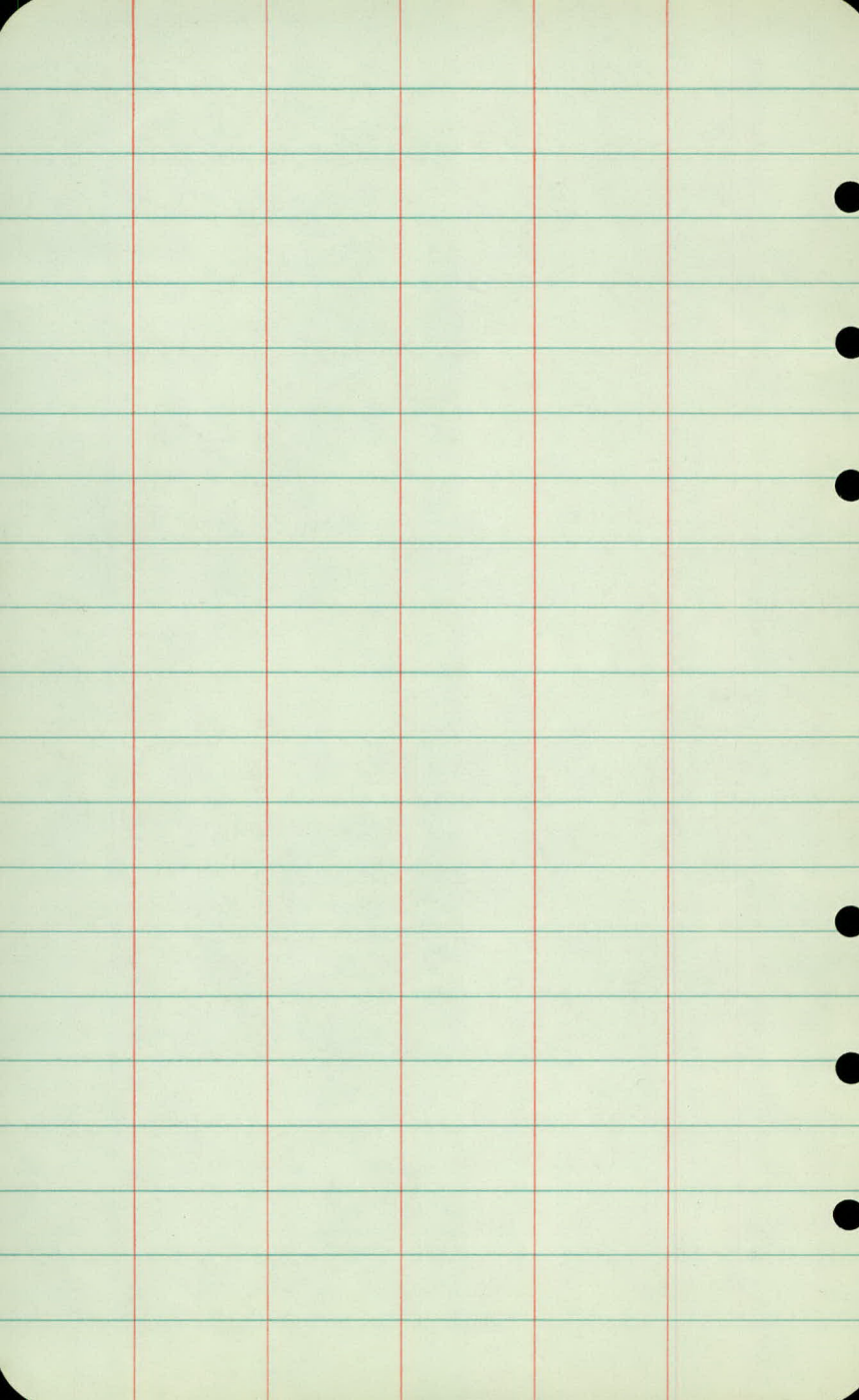
03.4	03.09	01.69
7.6	7.95	9.35
69	73	95

E. Edge conc. & Rd

10.2	10.1	09.9
0.8	0.9	1.1
	78	54

00.22	00.09
10.82	10.95
123	121
TOP curb	wedge conc Rd

TOP IRON ± 3+00 Co. Rd E2



13 MAY 1963

7.

Co. Rd E²

New Brighton Rd to STA#10

X- Sections

Sta	+	π	-	Elev.
BM	11.03	913.72		902.69

2463

✓

✓

✓

13 MAY 1963 8.

Lt

#

Rt

TOP 1400 # STA 3400

05.6	04.6	02.1	01.1	01.0	01.2	01.3	01.3	01.0
8.1	9.1	11.6	12.6	12.7	12.5	12.4	12.4	12.7
50	34	23	12	5		4	11	

06.0	06.0	06.1	03.6	00.9	01.3	00.9
7.7	7.7	7.6	10.1	12.8	12.4	12.8
70	91	100	49	40	33	30

05.2	04.90	04.64
8.5	8.82	9.08
56	61	79

Edge conc. & Rd

04.65	04.40
9.07	9.32
101	100

Top curb Edge Rd

Sta	+	π	-	Elev
-----	---	-------	---	------

		913.72		
--	--	--------	--	--

2+78				
------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

BM				
----	--	--	--	--

11.03	902.69	902.69
-------	--------	--------

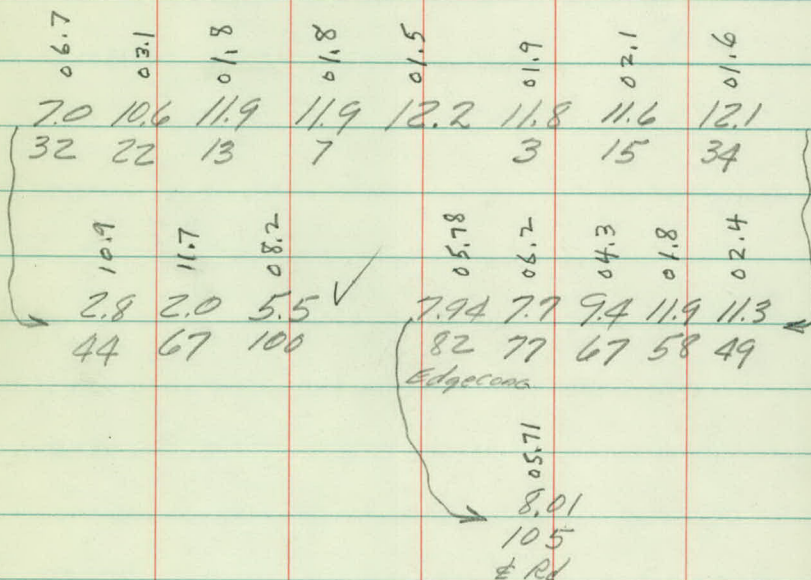
3.38	910.34	
------	--------	--

13 MAY 1963 9.

Lt

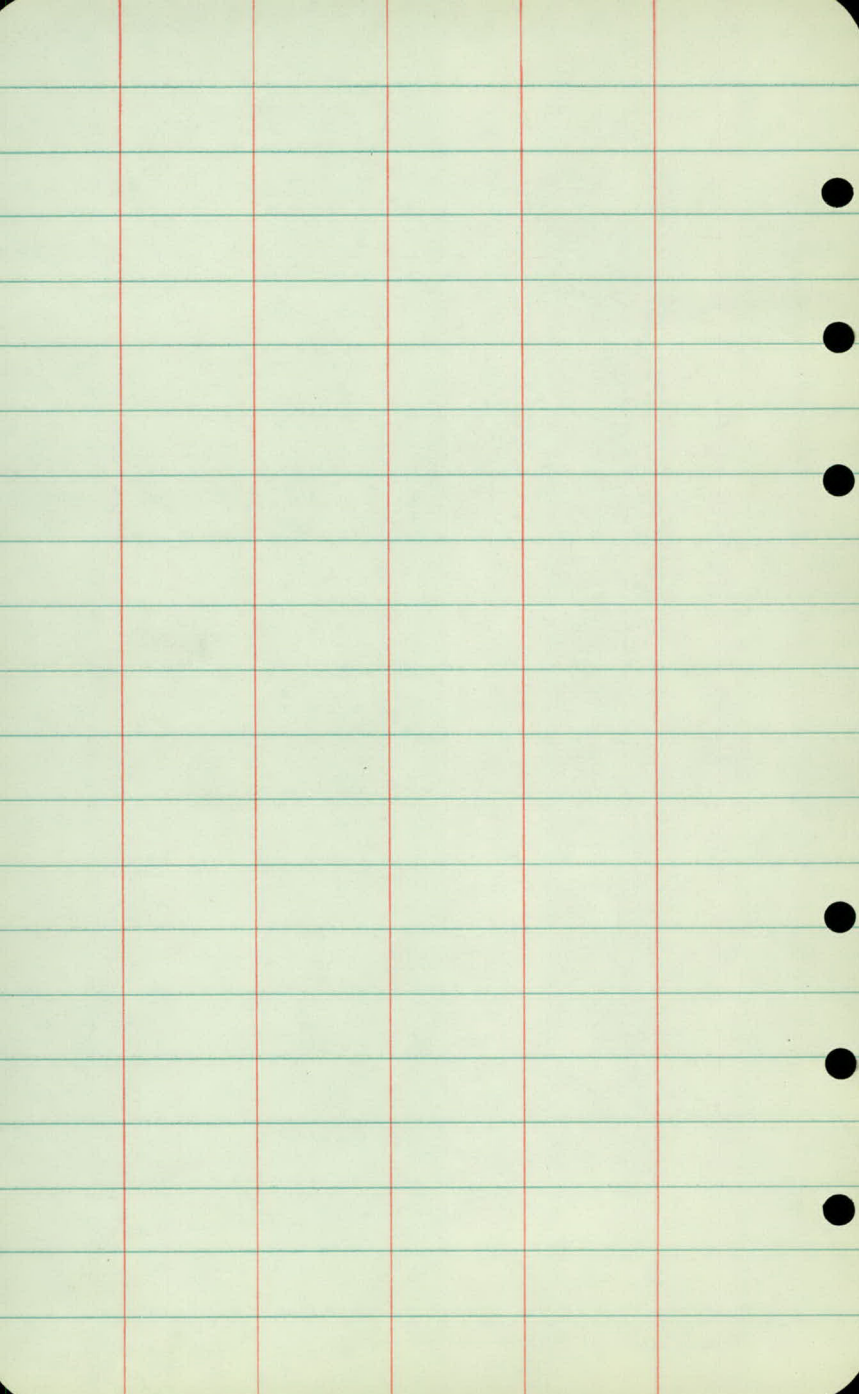
A

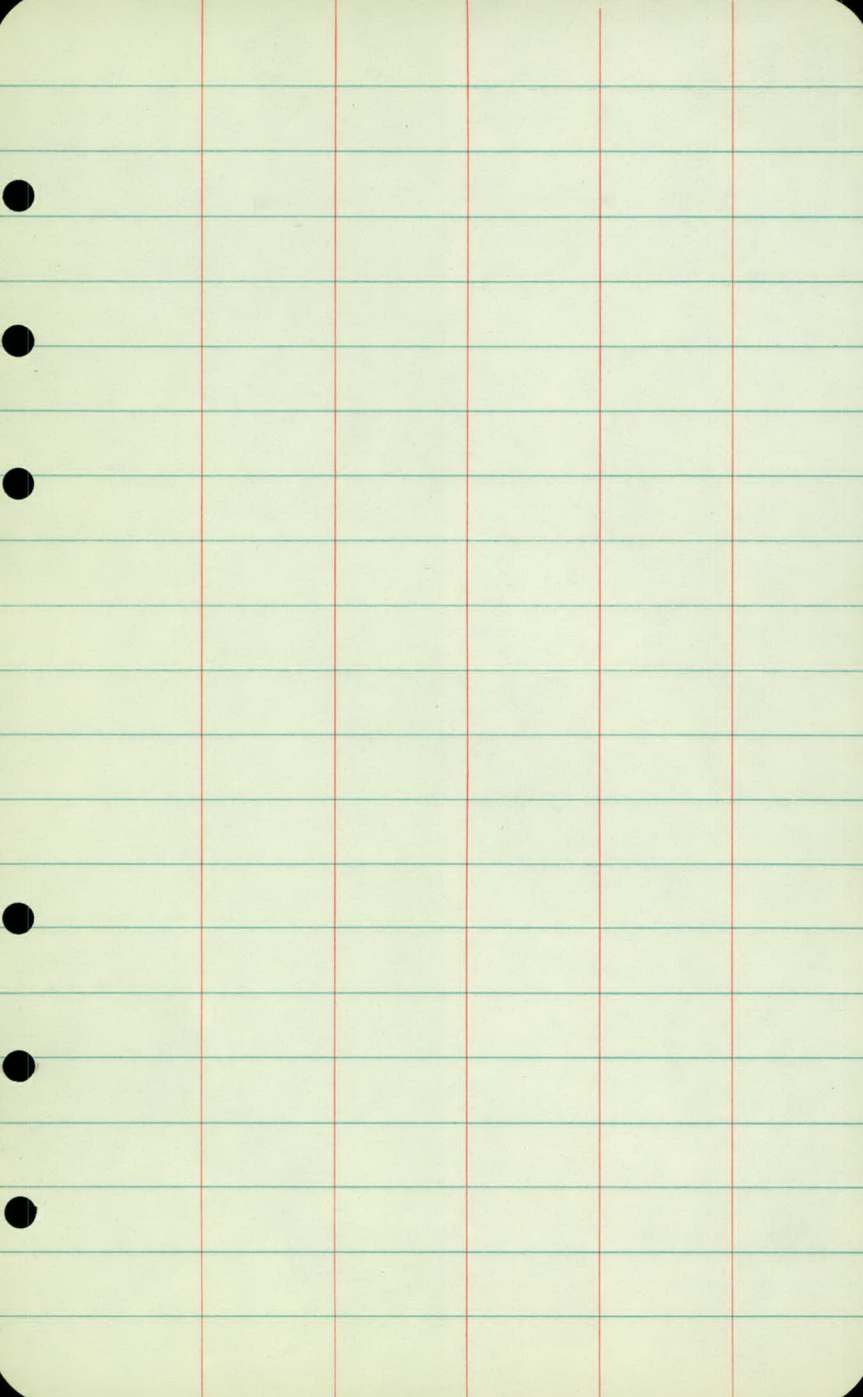
Rt

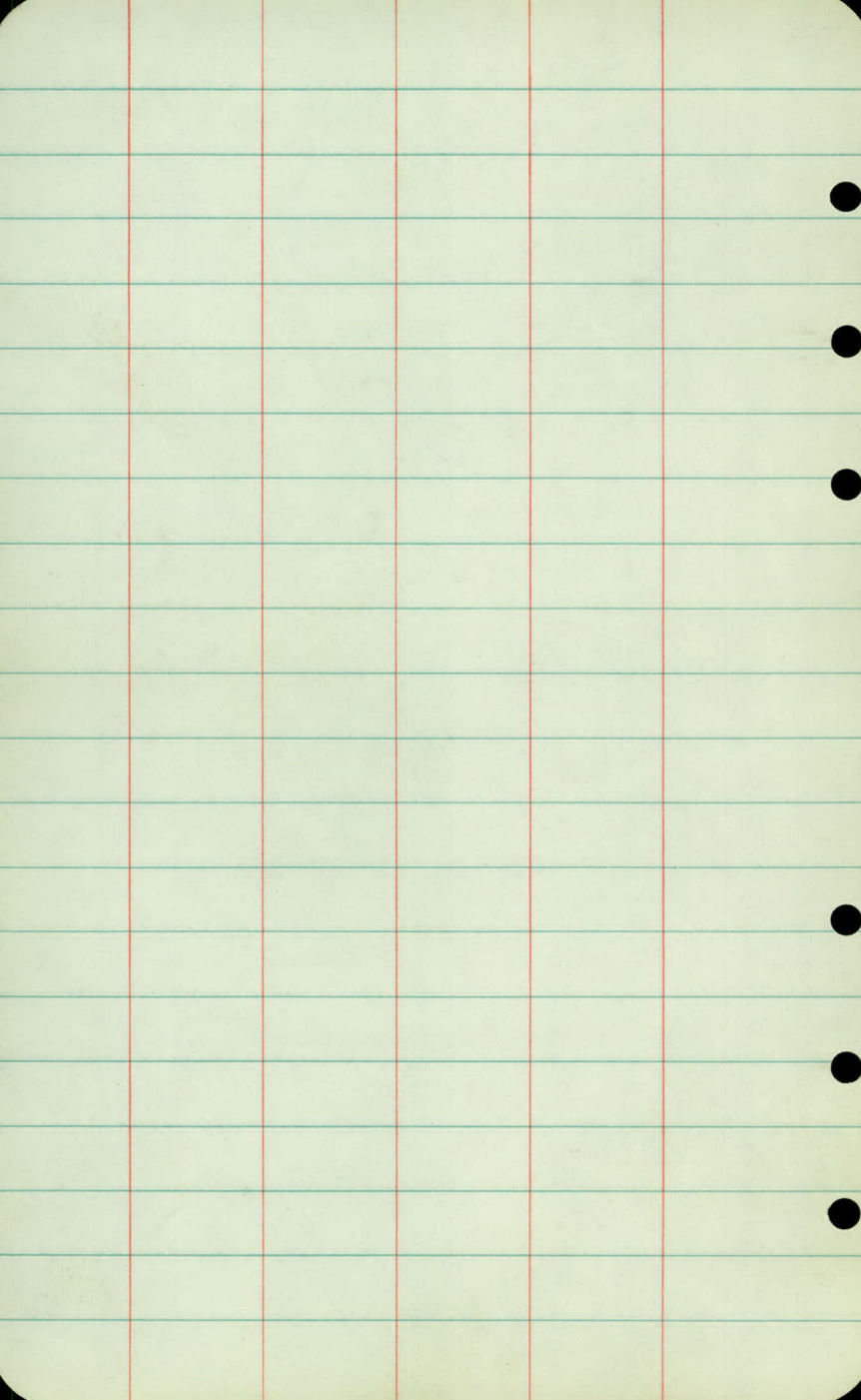


TOP IRON ± STA 3+00

TOP NAIL ± STA 4+00







BM 2x2 Hub 100' Rt Sta 6+00
Elev 900.57

6+50 Nail $\pm$ Elev =

2x2 Hub 100' Lt 7+00 Elev =

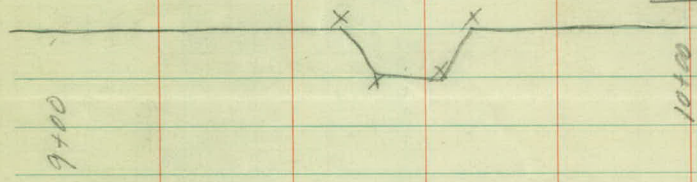
7+00 Nail $\pm$ Elev =

7+50 Nail $\pm$ Elev =

8+00 $\pm$ Elev =

9+26 F.L. 48" CM 225' Lt Elev =

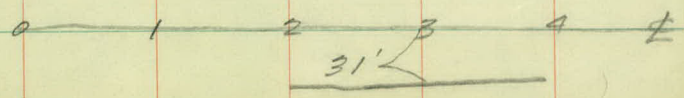
$\pm$ Profile across ditch at 9+35 ??

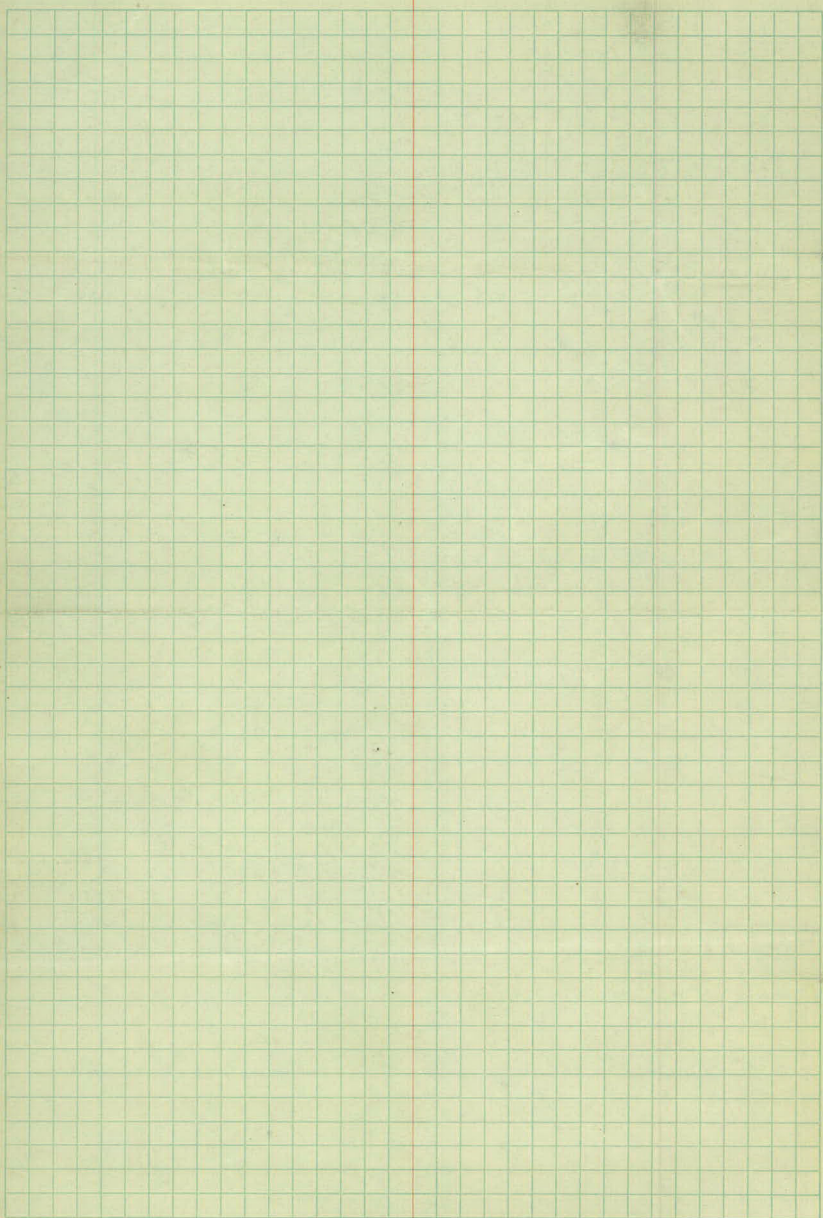


11+50 Top MH $\pm$ Elev =

B.M. 2x2 Hub 115' Rt Sta 12+10
Elev = 875.26

also Get x-section E+W
31' South of Sta 3+00





KP
JS
DS
WS

16 MAY 1963
SUNNY, CLEAR
60°

Co. RD E²
DITCH LOCATION
(STADIA)

OBJECT

AZ

STADIA

h, 5.0

Tat Sta 31+00

TO PC STA 29+97.31

270

102

DITCH

277°10'

~~559~~ 459

"

270°44'

415'

"

259°15'

363'

"

246°03'

327'

"

242°35'

326'

"

233°51'

246'

"

209°48'

165'

"

194°36'

147'

"

185°32'

132'

"

170°11'

176'

"

168°58'

168'

"

144°37'

257'

"

134°40'

344'

"

127°35'

472'

"

122°53'

620'

"

120°38'

750'

16 MAY 1963

DIST.

VERT.
ANGLEROD
EQUIV.

ROD

DIFF.

ELEV.

-1°40'

-1°40'

-1°35'

-1°30'

-1°45'

-1°45'

-2°20'

-3°10'

-3°15'

-4°25'

-4°30'

-4°20'

-2°05'

-1°25'

-1°15'

-1°00'

-0°40'

OBJECT

AZI

STADIA

DITCH

119°01' 860

11

117°40' 850

(culvert + S
2- 36" SCP)

107°38' 660

TO PI STA 31

+ 96.50

93°05'

TO STA 33

85°28'

16 MAY 1963

DIST

VERT.
ANGLEROD
EQUIV.

ROD

DIFF

ELEV

- 0°45'

- 0°40'

- 0°40'

11.6

96

200

OBJECT

AZI

STADIK

RP
US
DS
WS

16 MAY 1963

Co. RD E²
Swamp location

	LT	±	RT
17+00	55'		
18+00	31'		
19+00	28'		
20+00	73'		
21+00	92'		
22+00	103'		
23+00	74'		
24+00	57'		
25+00	26'		
26+00	9'		
27+00	150'+	±	150'+
28+00	77'		69'
29+00	84'		84'
30+00			93'
31+00			129'
32+00			146'
33+00	30'		150'+
34+00			150'+
35+00	140'		150'+
36+00	118'		150'+

EDGE OF
DITCH

KP
JS
ES
WS
DS
R. Cross

20 MAY 1963

Co. RD E²

NEW BRIGHTON RD TO STH #10

TREE COUNT

STA	TREES	STUMPS
0+00	0	0
1+00	0	0
2+00	1	0
3+00	5	0
4+00	3	1
5+00	1	0
6+00	9	1
7+00	6	0
8+00	7	0
9+00		2

20 MAY 1963

STA	TREES	STUMPS
11+00	2	
12+00		
	11	3
13+00		
	79	0
14+00		
	37	0
15+00		
	21	8
16+00		
	48	1
17+00		
	0	0
18+00		
	0	0
19+00		
	0	0
20+00		
	0	0
21+00		
	198	12

STA	TREES	STUMPS
22+00	0	0
23+00	0	0
24+00	0	0
25+00	0	0
26+00	0	0
27+00	0	0
28+00	2	0
29+00	0	0
30+00	1	0
	1	0

20 MAY 1963

STA

TREES

STUMPS

31+00

0

0

32+00

0

0

33+00

10

3

34+00

0

0

35+00

0

0

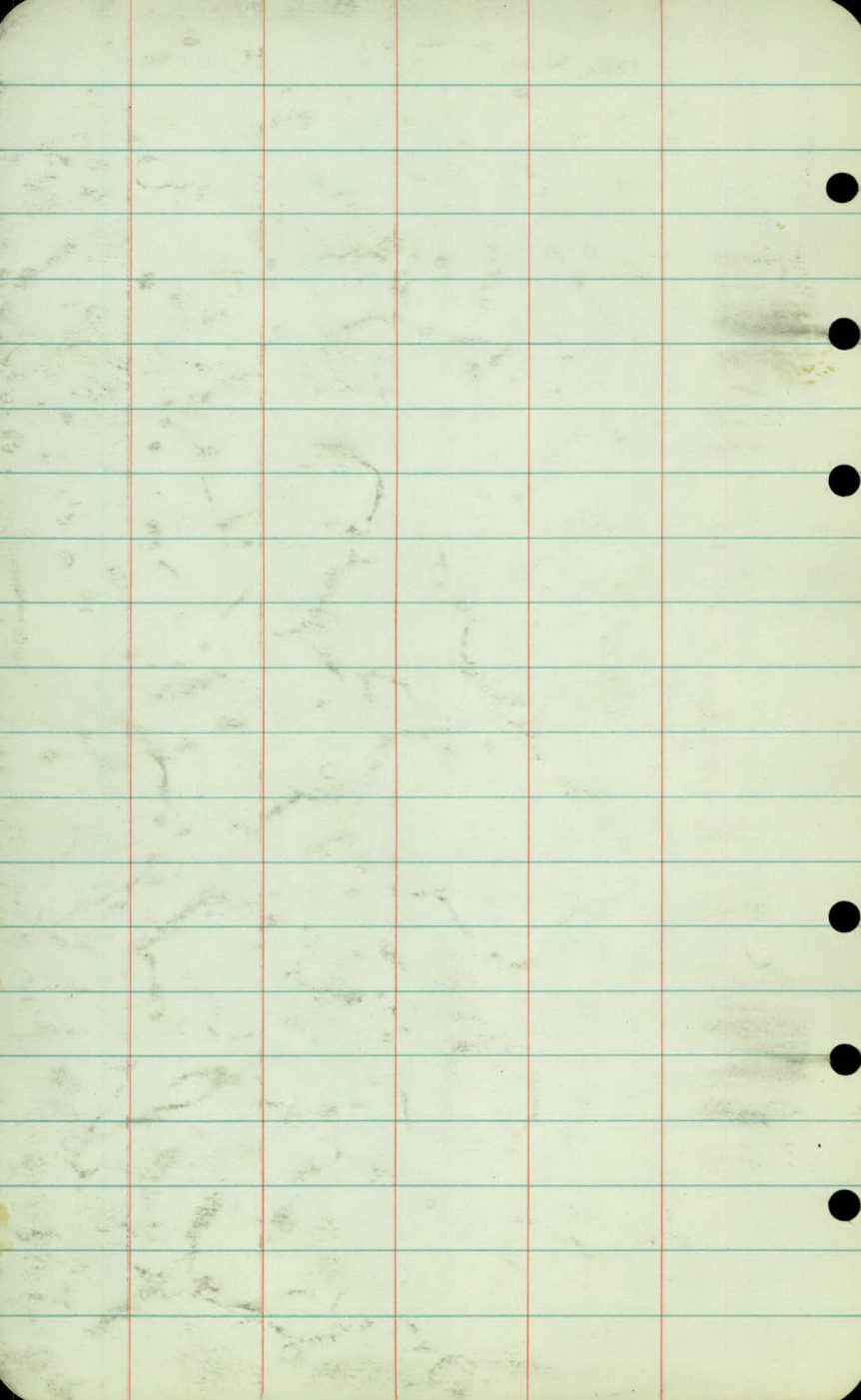
36+00

10

3

241 ✓

17 ✓



June 26, 1964

1

E²

Culvert Elev. Check

Sta	+	-	Elev.	
BM	1.25	897.76		(896.51)
TP	1.29	887.29	11.76	886.00
			12.31	874.98
				^{FL} (872.98)
T.P.	13.51	899.51	1.29	886.00
TP			3.43	896.08
				$\frac{5.76}{30}$ - sta. te
TP	7.09	897.77	8.83	890.68
BM			12.6	896.51
				(896.51)
BM			3.31	894.46
TP	2.38	887.92	12.23	885.54
TP	0.07	875.38	12.61	875.31
	PG		SGR	
	895.43	20.05	20.25	
			22.2	
			38.3	
			26	
			59.3	

Spike in P.P. 36' Lt Sta 0+98

Nail in PP

Top 24" CM S. End

8626
879.05 ✓
721

P.K. Nail RC. (State) Cleveland

895.06

37

Guard Rail Post

895.43

Spike in PP 36' Lt Sta 0+98

+0.2 at

26

1x2 stake 80' Rt 0+30

1 1/2' i

23' Lt

29

47

29

Call down

2.0
F22.2

Size Culvert
54" X

895.43

872.98

22.45

22.5

26

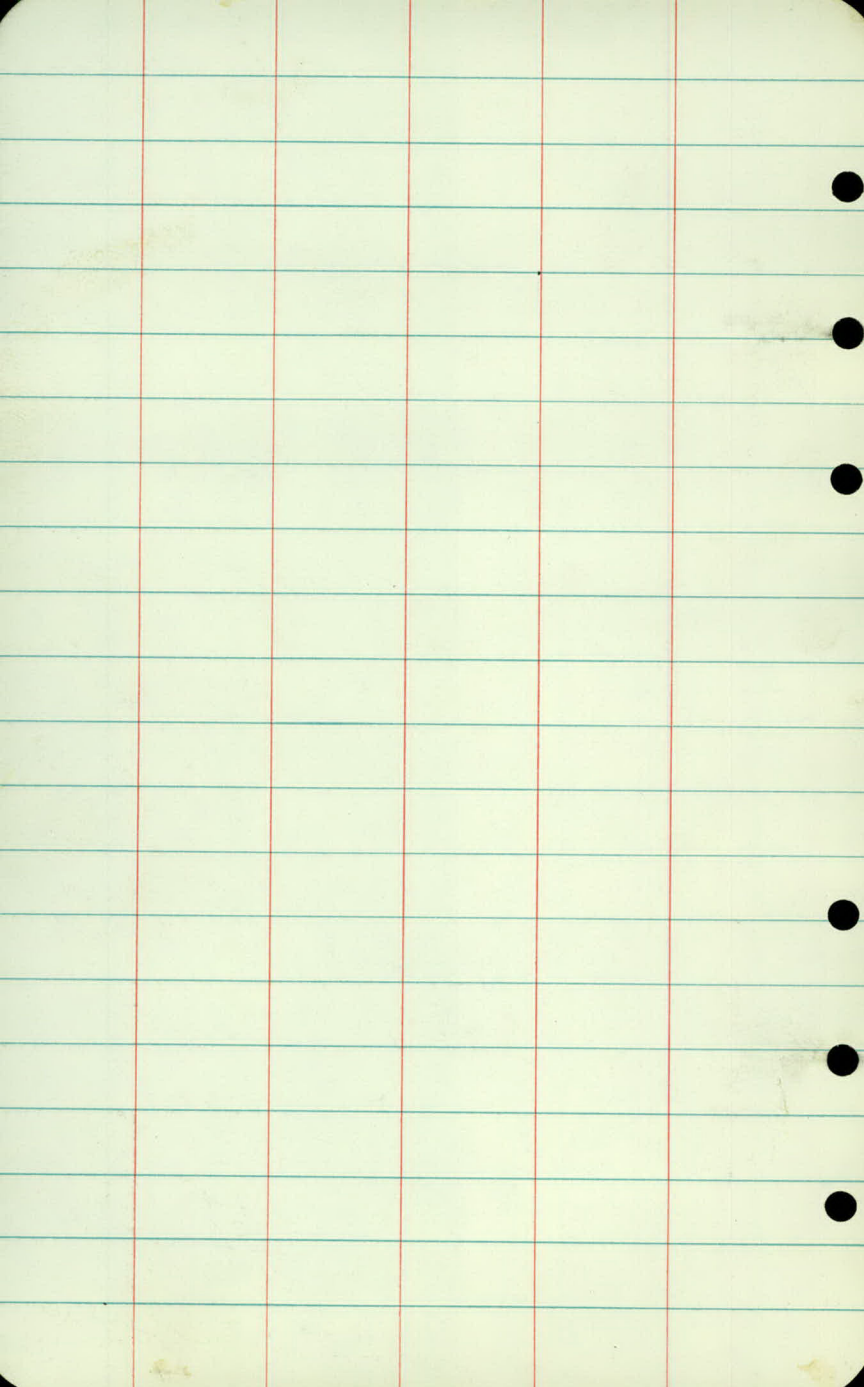
3.4

3.4

9.4

26

120



July 8, 1964

3

Ties

at Borrow Pit

Bolt
0+00
N
+

spike
1313.37 168.58

92
76.58

62.32'

109.74

PK nail
Disk
6" BE

1x2

PK
14+03.57

spike
14+05.61

Iron
26+26.00

Iron
26+85.00

Iron
Property Corner

29.22

56.90
55.27

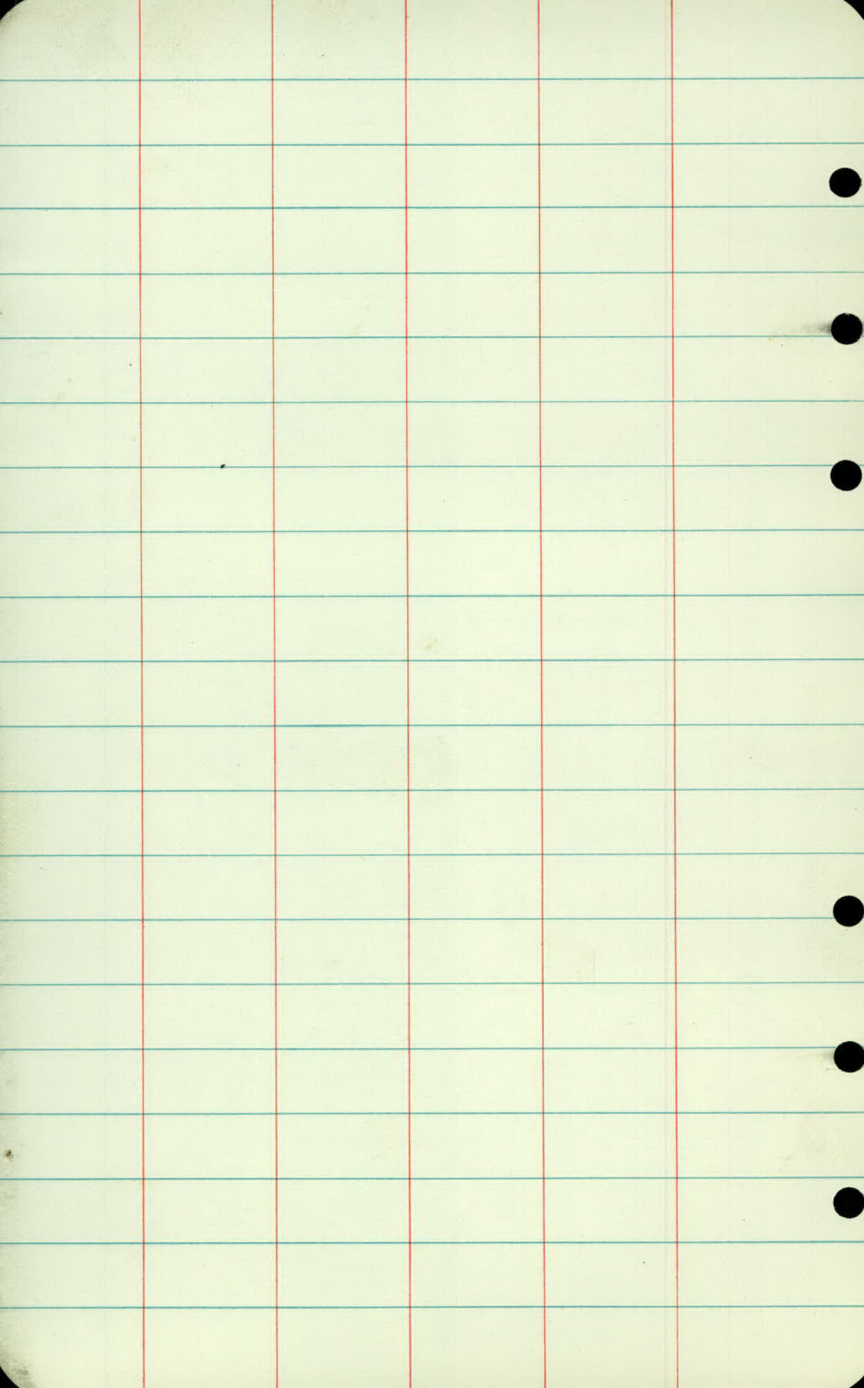
② Disk
Spike
30" Oak

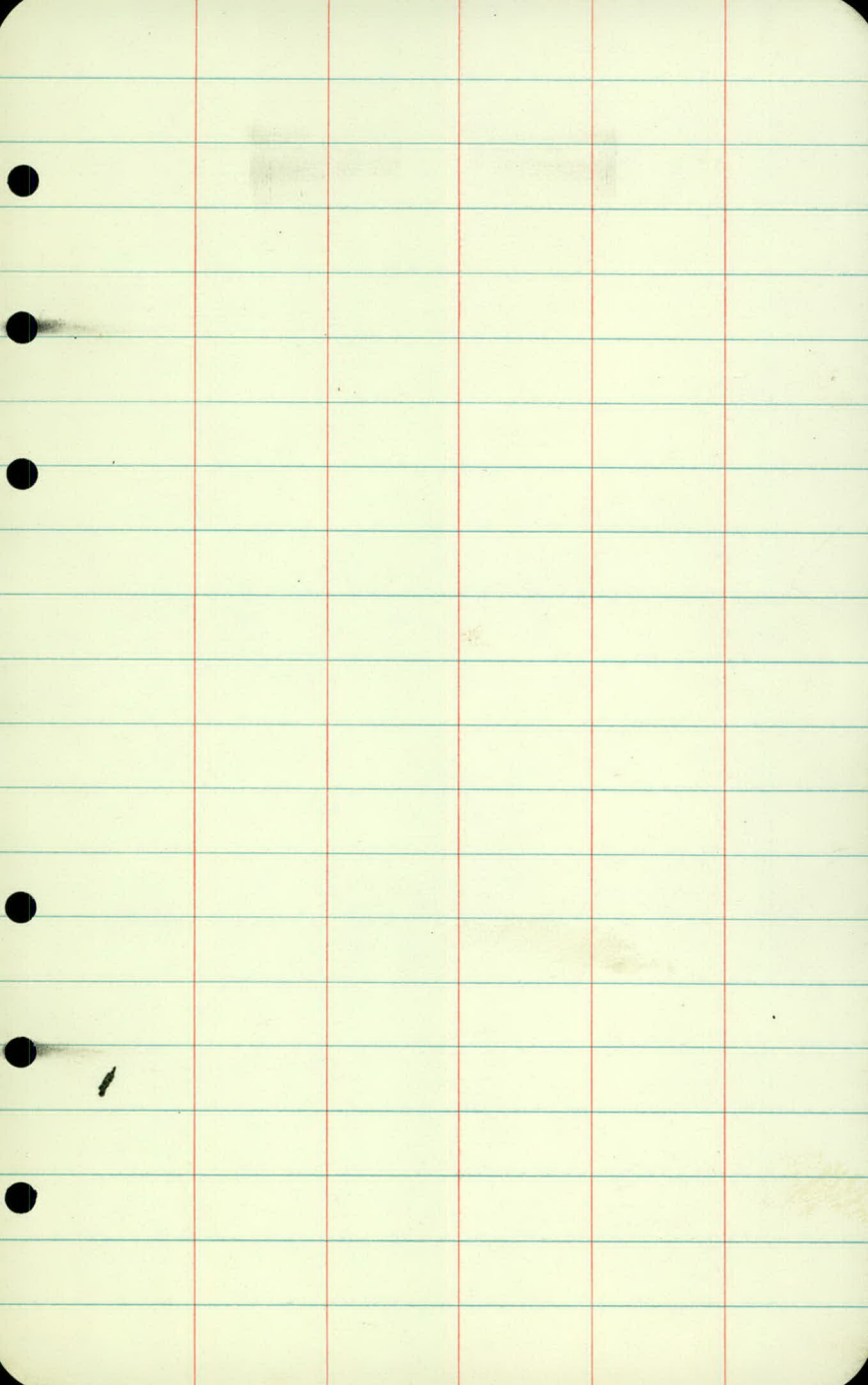
51.80
67.16
73.13

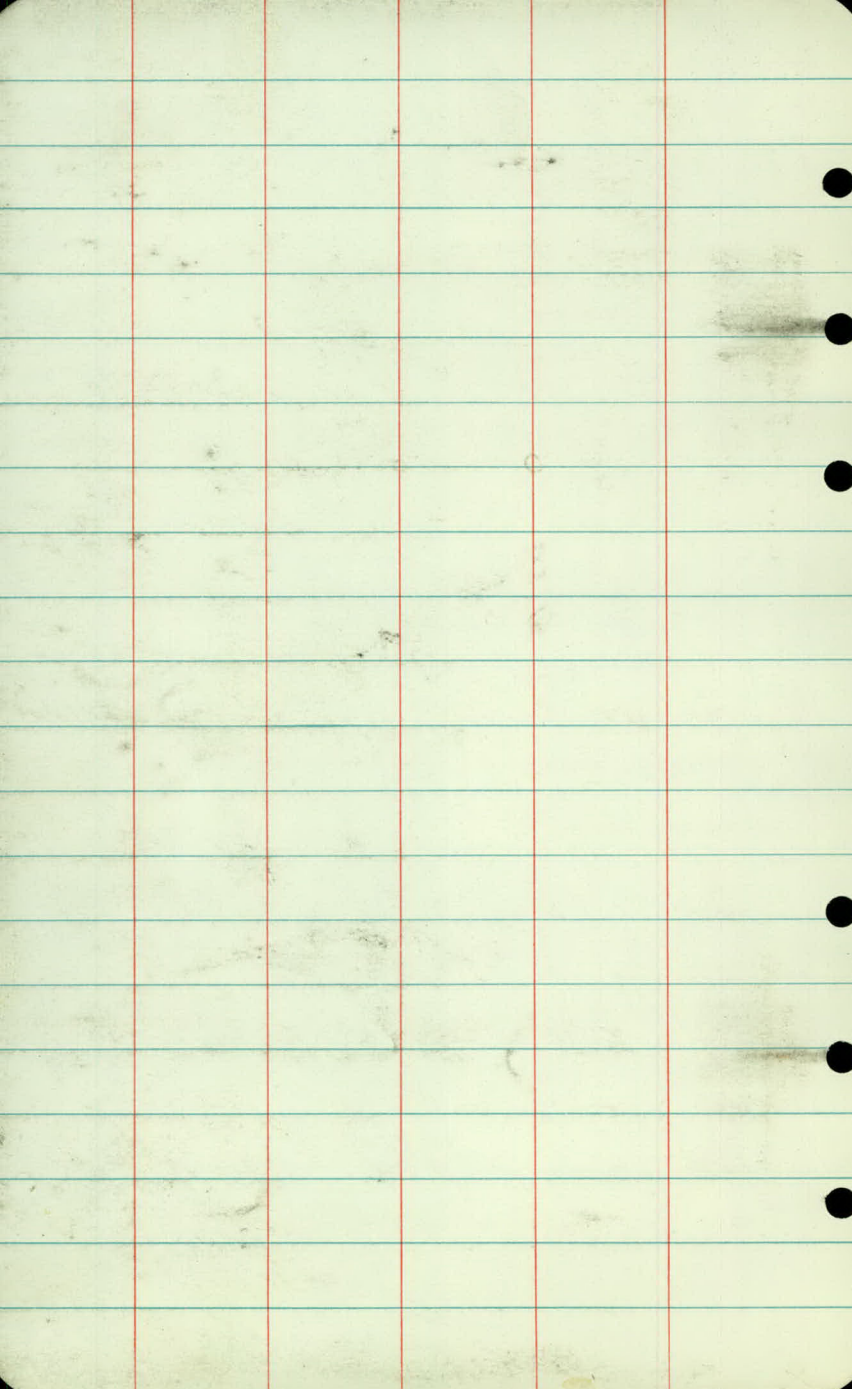
③ Disk
Spike
30" Oak

142

④







R6
DS
WS
R Boss

Dec 13, 1962
PC 40°

72
1

Co. Rd. "E²"

Swamp Borings

5 pages

Sta	Location	Depth	Material
8+50	20' Rt	0-6	Push Rod water to 1'
		0-2	Peat Bk
		2-6	S Bk NP to shpl.
		6+	Clay Gray

8+50	20' Lt	0-3	Push Rod water to 3'
		0-3	Peat Bk.
		3-4	Silt Bk.
		4-5	S Gray
		5+	C Gray

9+00	20' Rt	0-7	Push Rod Water to Top
		0-2.5	Muck Bk.
		2.5-5.5	Fibrous Peat Bwn.
		5.5-7	Silt / Fibrous strands Bk.
		7+	Silt

Sta	Location	Depth	Material
9400	20' Lt	0-7	Push Rod water to top
		0-2	Muck Bk
		2-4	Fibrous Peat Bwn.
		4-5	Silt/Fib. peat Bk
		5-6	Sic Bk
		6-7	Sand Gray
		7+	Clay Gray (stiff)
9450	20' Rt	0-7	Push Rod water to top
		0-2	Muck Bk.
		2-11+	Fibrous Peat-Bwn.
		11-16+	Push rod
9450	20' Lt	0-12+	Push Rod water to 1'
		0-2.5	Muck Bk
		2.5-11+	Fibrous Peat bwn
		11-16+	Push Rod

Sta	Location	Depth	Material
10+00	20' Lt	0-12+	Push Rod water to Top
		0-2.5	Muck B/K.
		2.5-11	Fibrous Peat Bwn.
		To 16+	Push Rod.

10+00	20' Rt	0-12+	Push Rod water to Top
		0-2.5	Muck B/K.
		2.5-10+	Fibrous Peat Bwn
		To 16+	Push Rod

10+50	20' Rt	0-10'	Push Rod water to Top
		0-2.5	Muck B/K
		2.5-4.5	Fibrous Peat Bwn.
		4.5-6	Silt Dark Gray / Fib. seams
		6-8	Sand Gray NP to sh. pl.
		8-10+	Sic Gray pl.
		to 14'	Push Rod

Sta	Location	Depth	Material
10+50	20' Lt	0-8	Push Rod water to Top
		0-2	Muck Blk.
		2-3	Fibrous Peat Bwn
		3-7.5	Silt Dark gray
		7.5-8.5	Sand Gray
		8.5+	Sic Gray pl.
10+88	Edge of Swamp		water to 2'
11+00	20' Lt	0-2	Sil Topsoil Blk. sl. pl.
		2-3	SL Gray sl. pl. ✓
		3-6+	C Bwn pl.
			water to 2.5'
11+00	20' Rt.	0-2	Peaty Topsoil (Semi Fibrous)
		2-6+	S Gray NP to Sl. pl. ✓
25+00	20' Lt	0-2	Peaty Topsoil
		2-2.5	SL Gray sl. pl.
		2.5-5	S Gray NP
		5-6	Fibrous Peat Dark Bwn stiff
		6+	Sic olive pl. stiff

Sta	Location	Depth	Material
25+50	20' Lt	0-1	Peat blk Water to 1'
		1-2.5	Silty peat blk.
	✓	2.5-4	Sic/ ^{sand} seams blk pl.
		4-6	Peat v. hard packed bwn olive drab
		6+	Silt (O.D) NP to sl. pl.

26+00	20' Lt	0-1	Peat water to 1'
	✓	1-3	Silty peat blk
	✓	3-4.5	Peat v. hard bwn.
		4.5+	Silt (O.D) NP to sl. pl.

26+50	20' Lt	0-2	Peat water to 1'
	✓	2-2.5	C blue v. pl.
	✓	2.5-3	S gray NP
		3-6+	C/sand seams gray pl.

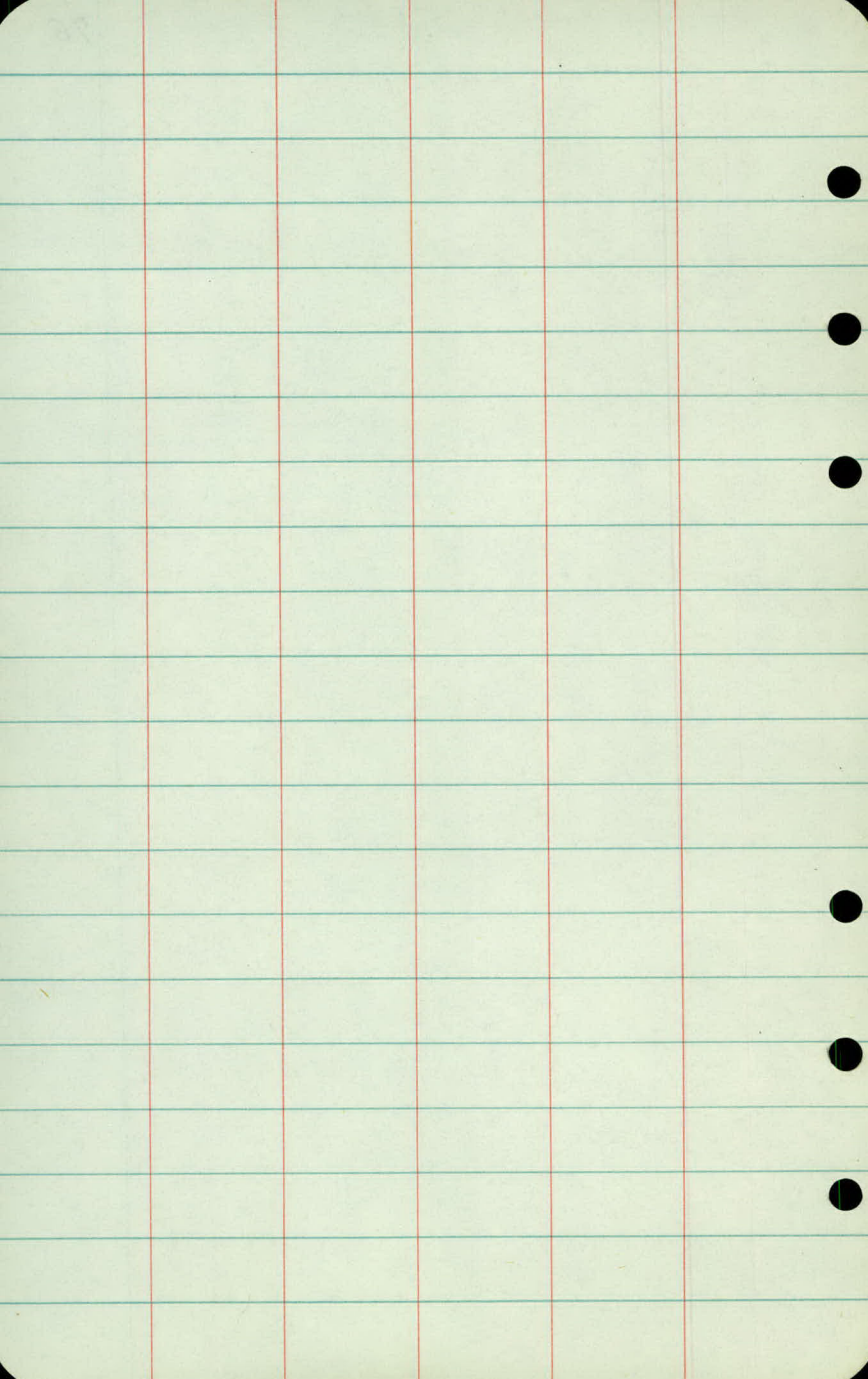
Sta	Location	Depth	Material
26+50	20' Rt	0-2	Peat water to 1'
		2-3.5	SiC Blk pl.
		3.5-4.5	Peat v. hard brown
		4.5-6+	SiC gray pl.
27+00	20' Rt	0-1	Peat water to 2'
		1-4+	C gray pl.
27+00	50' Rt	0-1	Peat water to Top
		1-2	SiC blk pl.
		2-2.5	muck
		2.5-3	SiC blk pl.
		3-6.5	peat v. hard brown
		6.5-7	silt (O.D.) sl. pl.
		7+	SiC (O.D.) pl.

Sta	Location	Depth	Material
27+50	20' Lt	0-1	Peaty Loam NP
	✓	1-4+	C Bwp. pl.
27+50	20' Rt.	0-1.5	Peat Loam water to 2' NP
	✓	1.5-5+	C gray pl.
28+00	20' Rt	0-.5	Peat Loam
	✓	.5-1.5	sil water to 2' B/k sl. pl.
		1.5-4+	Clay gray pl.
28+00	20' Lt	0-.5	Peat Loam
	✓		water to 3'
		.5-2	sil b/k sl. pl.
		2-4+	C gray pl.

Dec. 18, 1962

76

5



Co. Rd. "E2"

Soil Borings

Equipment used: Post hole digger

3 pages

Sta	Location	Depth	Material - Description
2+00	20' Lt	0-1	^{Mottled} C/G Bwn. pl.
		1-2	"
		2-3	"
2+50	20' Lt	0-.5	Topsoil
		.5-1	C mot. bwn pl.
		1-3	C/G " "
2+50	20' Rt.	0-.5	Topsoil
		.5-3	^{mottled} C/G Bwn. pl.
3+00	20' Lt	0-3	C/G ^{mottled} Bwn. pl. ✓
3+00	20' Rt	0-.5	Topsoil
		.5-1	C/G mottled bwn. pl. ✓
		1-3	" " "

R6
FS
WS

Dec. 14, 1962
PC 3°

78
2

Sta	Location	Depth	Material	
3+50	20' Lt	0-1	LS N.P. R/k.	✓
		1-1.5	SCL Bwn. sl. pl.	
		1.5-3+	C Bwn. pl.	
3+50	20' Rt	0-1.5	FS Lt. Bwn NP	✓
		1.5-2.5	LS Bwn sl. pl.	
		2.5-3.5+	C Bwn. pl.	
4+00	20' Lt.	0-.5	Topsoil	✓
		.5-4	FS NP to sl. pl. Bwn.	
		4-4.5+	C Bwn. pl.	
4+00	20' Rt	0-1	C Bwn. pl.	✓
		1-2	" "	
		2-3	" "	
		3+	" "	

Sta	Location	Depth	Material	
4+50	20' Lt	0-.5	LS Topsoil sh. pl.	✓
		.5-3.5	FS Bwn. NP	
		3.5-	C Bwn. pl.	
4+50	20' Rt.	0-3+	C Bwn. pl.	✓
5+00	20' Lt.	0-.5	LS Topsoil	✓
		.5-2.5	FS - NP to sh. pl.	
		2.5-3.5	S Bwn. NP	
		3.5-	C Bwn. pl.	
5+00	20' Rt.	0-.5	LS Topsoil	✓
		.5-3	FS Bwn.	
		3-	C Bwn. pl. some gravel	
5+50	20' Rt	0-1	LS Topsoil	✓
		1-1.5	FS	
		1.5-3+	ClG Bwn. pl.	

5+50 20' Lt 0-.5 LS Topsoil

.5-7 FS Bwn NP

Good Borrow-

7-9 S/FG DK Bwn Pit Possibility

9-10.5 S/CG DK Bwn.

10.5+ C Bwn. pl.

6+00 20' Lt 0-1 LS Topsoil

1-6 S/acc. Bwn NP to sl. pl.

6+ C bwn pl.

6+00 20' Rt 0-1 LS Topsoil

1-4 S NP

4+ C bwn pl.

6+50 20' Rt 0-1.5 LS Topsoil

1.5-3 SCL pl. dk. bwn

3-3.5 CL v. pl. bwn

3.5+ C bwn pl. v. stiff

sta

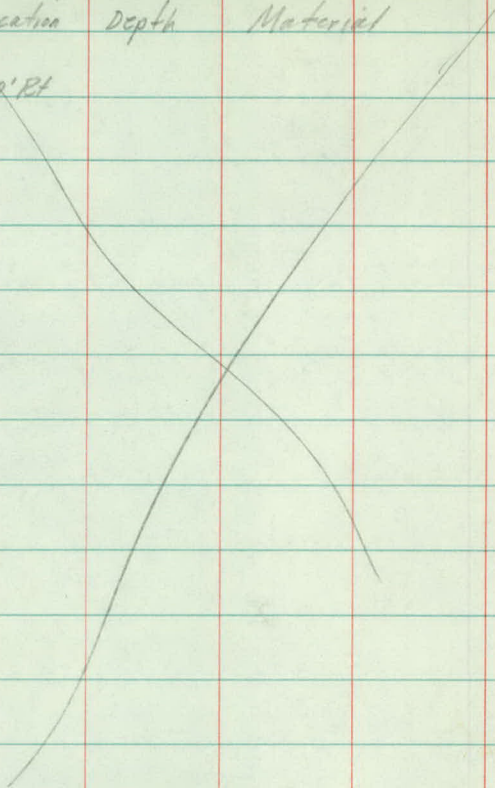
Location

Depth

Material

6+50

20' Rt



FK
WM
LB
MM₂

Oct. 29, 1962 80

Co Rd E²

New Brighton Rd

to

T.H. # 51

Swamp Soundings

Push Rod

Test No	Depth	AZ	stadia
---------	-------	----	--------

at Ctr. Sec 28

to E. $\frac{1}{4}$ Cor Sec 28 90° -

1	13'	91° -	98 ✓
10	18'	95° 55'	506 ✓
2	21'	91° 15'	212 ✓
11	24	93° 15'	500 ✓
3	18'	104° 10'	221 ✓
12	8'	101° 30'	534 ✓
4	15'	117° 50'	332 ✓
13	10'	100° 20	644 ✓
5	24'	100° 40'	321 ✓
14	23'	95° 25'	628 ✓
6	30'	93° 35'	313 ✓
15	30'	92° 40'	626 ✓
7	25'	94° 15	372 ✓
8	21'	100° -	382 ✓
9	10'	104° 45'	403 ✓

Oct 29, 1962

81₂

Test No	Depth	AZ	Stadia
---------	-------	----	--------

π at Ctr. Sec. 28

to E $\frac{1}{4}$ Cor. Sec 28 90° —

16	12'	100°50'	770 ✓	285 770
17	12'	98°20'	760 ✓	
18	21'	96°05'	763 ✓	
19	32'	92°05'	750 ✓	
20	11'	98°10'	870 ✓	
21	17'	95°55'	880 ✓	
22	20'	93°20'	860 ✓	
23	10'	98°40'	980 ✓	
} Half way Between Depth = 6'				
24	4'	96°—	980 ✓	

FK
WM
LB
MMc

Oct. 30, 1962

82₃

12' South Depth = 2'

470

9

16' South Depth = 4' ✓

16' South Depth = 4'

Test No	Depth	AZ.	Stadia	
---------	-------	-----	--------	--

25	12'	101°20'	1100	✓
----	-----	---------	------	---

26	15'	100°—	1090	✓
----	-----	-------	------	---

27	12'	98°30'	1080	✓
----	-----	--------	------	---

28	3'	96°30'	1080	✓
----	----	--------	------	---

P.O.T.		90°—	1432 ±	
--------	--	------	--------	--

⊥ at P.O.T. 1223.80' West of E 1/4 Cor

to Ctr Sec 28 270°—

29	11'	239°10'	275	✓
----	-----	---------	-----	---

30	15'	229°55'	300	✓
----	-----	---------	-----	---

31	16'	219°35'	340	✓
----	-----	---------	-----	---

32	11'	216°35'	360	✓
----	-----	---------	-----	---

Oct. 30, 1962 83
4

715
718
1633

26 4261
1321.30
1321.30

1432
1321
110

FK
RG
WM
LB
MM=

Nov. 5, 1962
Fair PC

Note: 2 man push

Test #	Depth	Az.	Stadia	
33	12'	219°15'	186	✓
34	17'	213°05'	206	✓
35	18'	203°—	244	✓
36	21'	199°25'	265	✓
37	10'	204°45'	293	✓
38	21	201°10'	315	✓
39	6	184°50'	244	✓
40	9	187°30'	207	✓
41	13	193°10'	171	✓
42	8	193°—	125	✓

FK
RG
WM
LB
MMc

Nov 5, 1962

84

5

Test No.	Depth	Az.	Stadia	
----------	-------	-----	--------	--

43	5'	160° —	146	✓
----	----	--------	-----	---

44	6	165° 45'	186	✓
----	---	----------	-----	---

45	6	167° 20'	222	✓
----	---	----------	-----	---

46	4	148° 55'	262	✓
----	---	----------	-----	---

47	7	145° 10'	236	✓
----	---	----------	-----	---

48	10	139° 40'	215	✓
----	----	----------	-----	---

49	6	132° 30'	195	✓
----	---	----------	-----	---

50	6	119 —	304	✓
----	---	-------	-----	---

51	6	123° 10'	325	✓
----	---	----------	-----	---

52	8	127° 45'	345	✓
----	---	----------	-----	---

Nov. 5, 1962

85⁶

Test No	Depth	Az	Stadia	
53	5'	132°55'	372'	✓
54	1'	137°55'	400'	✓
55	16'	110°15'	332'	✓
56	12'	104°-	316'	✓
57	18'	117°10'	356'	✓
58	14'	123°-	374'	✓
59	18'	127°10'	390'	✓
60	14'	132°-	400'	✓
61	3'	137°25'	411'	✓

Nov. 5, 1962

867

RG
WM
LF
HME

Nov. 6, 1962
windy cool

Test No.	Depth	Az.	Stadia
----------	-------	-----	--------

62	13'	134°35'	485' ✓
----	-----	---------	--------

63	13'	130°50'	465' ✓
----	-----	---------	--------

64	16'	126°05'	443' ✓
----	-----	---------	--------

65	23'	120°20'	432' ✓
----	-----	---------	--------

66	16'	115°15'	415' ✓
----	-----	---------	--------

67	14'	108°50'	402' ✓
----	-----	---------	--------

68	15'	103°50'	393' ✓
----	-----	---------	--------

69	10'	99°20'	384' ✓
----	-----	--------	--------

70	6'	97°10'	370' ✓
----	----	--------	--------

Nov. 6, 1962

87

8

Test. No.	Depth	Az.	Stadia	
71	5'	95°45'	337	✓
72	4'	250°15'	171	✓
73	3	242°30'	227	✓
74	3	256°55'	291	✓
75	2	256°40'	353	✓
76	3	260°50'	408	✓
77	2	245°30'	465	✓
78	3.5	257°25'	544	✓
79	7	254°—	538	✓
80	4	254°45'	585	✓
81	4.5	259°40'	800	✓
82	3'	260°40'	905	✓
83	2	262°55'	10.40	✓
84	2	262°55'	11.50	✓
85	8	262°10'	1230	✓
86	2	265°20'	1280	✓

Nov. 6, 1962

88

9

Plotted
K. J.
L. D. G.

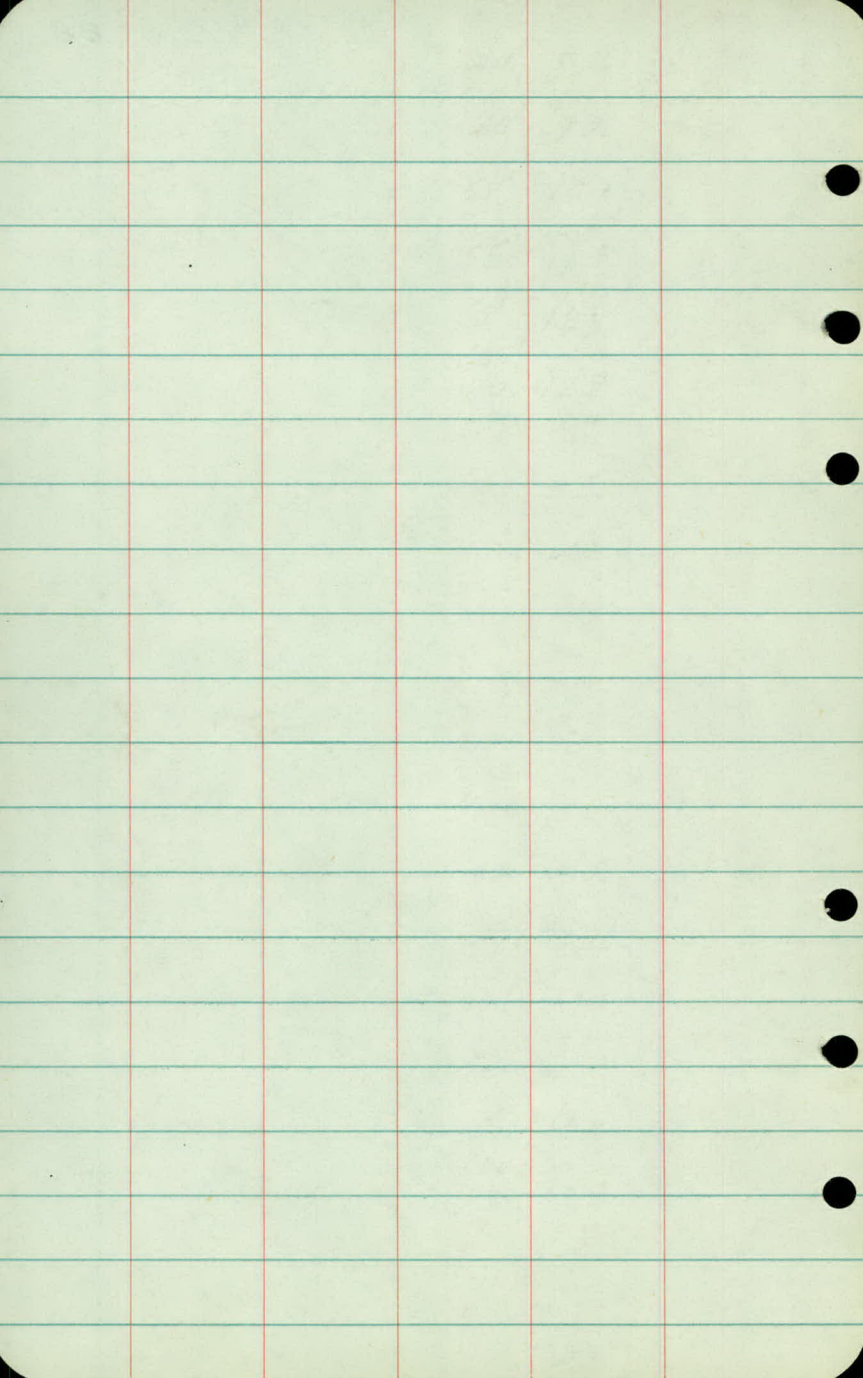
12' North Depth = 4'

12' North Depth = 8'

12' North Depth = 4'

Layers of Sand 12' South Depth = 1

12' North, Depth = 3' 24' North, Depth = 9'



G Rd "E"

Ditch location

OBJECT

AZI

STADIA

π at P.O.T 1223.80 West of E $\frac{1}{2}$ Cor

To C $\frac{1}{2}$ Sec 28 - 270°

$\frac{1}{2}$ Ditch

253°00' 409'

"

243°40' 367'

"

233°59' 346'

"

224°40' 332'

"

219°57' 293'

"

208°05' 227'

"

195°32' 192'

"

176°16' 163'

"

168°37' 154'

"

153°40' 192'

"

139°30' 237'

"

130°18' 289'

"

122°24' 355'

"

118°00' 417'

"

114°51' 473'

"

111°05' 567'

"

109°46' 622'

JS
WM
FS
WS
DS
RB

Jan 29, 1963
30

90

OBJECT

AZI

STADIA

E Ditch

E Ditch

108° 50' 664'

11

107° 00' 755'

11

S. N. # 10

Culvert

105° 20' 780'

JS
WM
FS
WS
DS
RB

Jan 29, 1963
30 91

OBJECT

AZI

STADIA

RG
FS
R.B.

April 11, 1963
Fair 50°

92

Calvert Elevations

South of Int. of "E²" + T.H.^H 10

2 pages

Sta	+	π	-	E/V.	
BM ₁	3.10	888.88		885.78	
Culv.			13.35	875.53	X
Culv.			13.57	875.31	
Culv.			13.60	875.28	
Culv.			13.12	875.76	-
BM ₂			8.79	880.09	(880.10)
BM ₃			7.44	881.44	

BM	8.06	910.75		(902.69)
----	------	--------	--	----------

2+55

✓

2+00	£		10.70	900.05
------	---	--	-------	--------

Apr. 11, 1963

93

Spk. in Chokecherry Tree 80' RT Sta 33

FL of Northern 36" SRCP W side TH^{#10} & So. of E²

" " Southern " " " " " "

FL of Northern 36" SRCP E. side TH^{#10} & E²

" " Southern " " " " " "

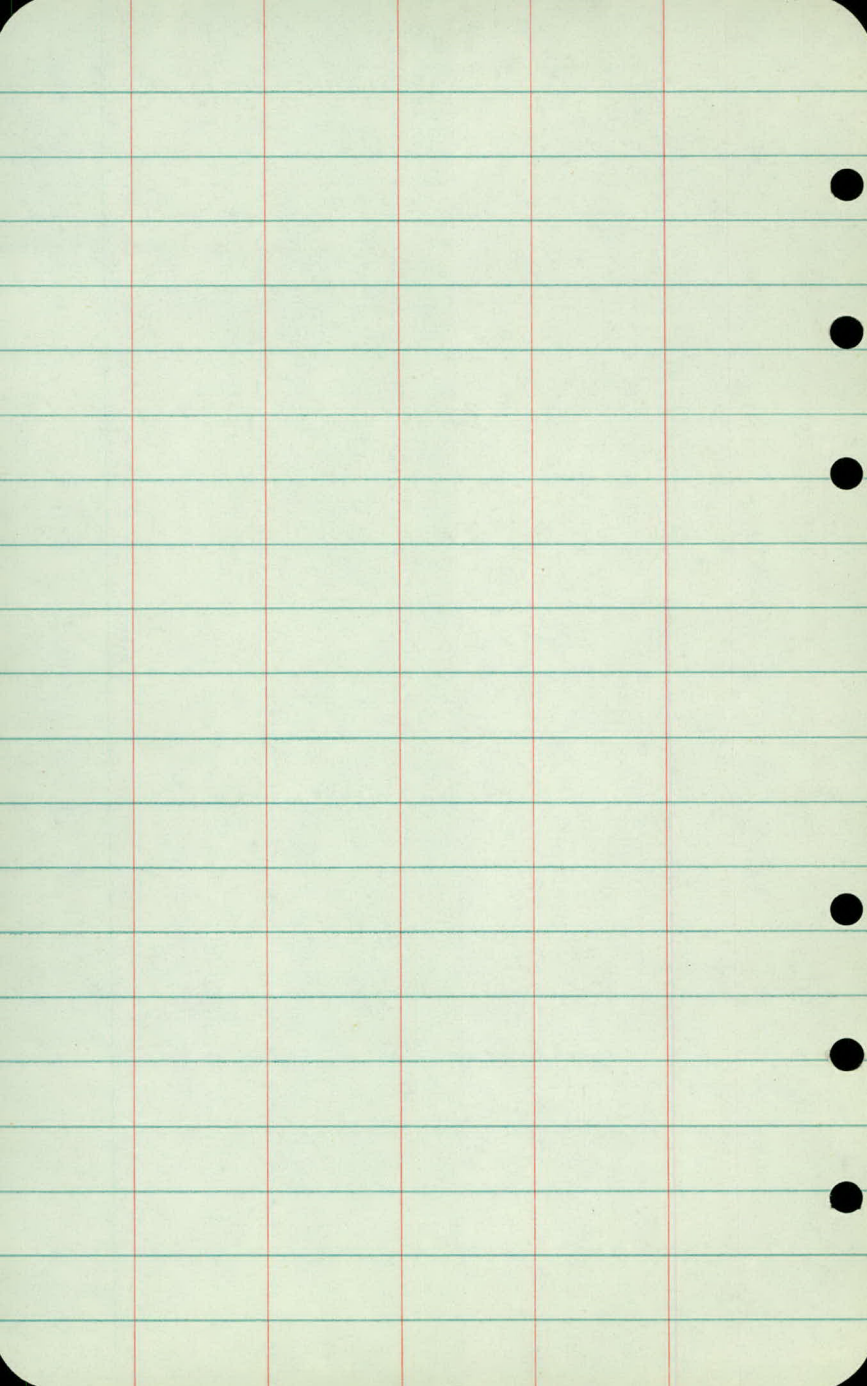
Spk. in T.P. NE of Int. E² & T.H. #10

Iron 100' RT Sta 34+50

Iron & Sta 3+00

05.9	05.8	04.7	01.7	00.9	00.9	00.8	01.0	00.3
4.9	5.0	6.1	9.1	9.9	9.9	10.0	9.8	10.5
75	59	35	24	12		17	30	33

03.91	04.27	04.48	04.4	02.8
6.84	6.48	6.27	6.4	8.0
91	73	54	47	41
G. Conc	L. Conc	Conc		



Co. Rd. "E²"

Soil Borings

(18+00 to 25+00)

5 pages

Equipment - post hole digger

Sta	Depth	Material	Position	
18+00	0-1	SCL bwn pl.	±	
	1-2	SiCL / occ. Lg. G. blk. pl.		✓
	2-3	LS gray		
	3+	SiC gray pl. Till		
18+00	0-1.5	Peat blk	25' Lt	✓
	1.5-3.5	LS Gray		
	3.5+	CS/G Till		
18+00	0-3.5	Peat blk	50' Lt	✓
18+50	0-1	SCL bwn pl.	±	
	1-2.5	SiCL blk pl.		✓
	2.5-4+	S water at 4"		
18+50	0-1	Peat	25' Lt	
	1-2.5	SiL blk sl. pl.		✓
	2.5-3	LS Gray		
	3-4+	SiC Gray pl. water at 3'		

R6
J5

R6; JS

Jan 3, 1963
30° Fair
Jan 4, 1963

93

18+50 0-3.5+ Peat blk 50' Lt. ✓

19+00 0-1 SL bwn sl. pl. £ ✓

1-2.5 CL bwn pl.

2.5-3.5 C bwn. pl.

3.5-4+ S gray Till

19+00 0-2 Peat 25' Lt.

2-3 SiCL gray Till water at 3' ✓

3+ SiC gray Till

water at 1.5'

19+00 0-2 Peat 50' Lt. ✓

2-2.5 S Gray

2.5-3.5+ SiCL Gray pl.

19+50 0-1 SL bwn sl. pl. £ ✓

1-2 CL bwn pl.

2-3+ C bwn v. pl.

Sta	Depth	Material	Position	By T.H. # 84
19+50	0-2	Peat	Blk 50' Lt.	✓
	2-2.5	SiCL Blk pl.		
	2.5-3.5	CL gray w/some gravel	Till	
20+00	0-1	SL	bwn sl.pl. &	✓
	1-3.5	C	bwn pl.	
20+00	0-1.5	SiL	blk. sl.pl. 50' Lt	✓
	1.5-2.5	CL	Gray pl.	
	2.5-3	S	Gray under at 3'	
	3-4	SCL	Gray	
20+50	0-2	SL	bwn sl.pl. &	✓
	2-4	C	O.D. pl.	
20+50 21+00	0-1.5	SiCL	blk vpl. 50' Lt	✓
	1.5-2	CL	Gray pl	
	2-2.5	S	Gray Till	
	2.5-3.5	CL	Gray pl. Till	

R6
J5Jan 4, 1963
25° C.

94

21+00

0-1

SL

sl. pl.

±

1-1.5

CL

bwn pl.

1.5-3.5

C

bwn pl.

21+00

0-1

Peat

blk.

50' Lt

1-2

sick blk. pl.

2-2.5

SCL

gray pl.

2.5-3.5

sick gray pl.

21+50

0-.5

SCL

bwn pl.

±

.5-1.5

SL

bwn sl. pl.

1.5-2

FLS

bwn W.P.

2-3.5

C

bwn pl.

21+50

0-1

SCL

bwn pl.

50' Lt

1-1.5

sick

blk. pl.

1.5-2

CL

Gray pl.

2-3.5

C

O.D./bwn pl.

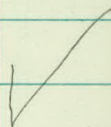
Sta	Depth	Material	Position	
22+00	0-1.5	SCL bwn. sl. pl.	±	✓
	1.5-2.5	C bwn pl.		
	2.5-3.5	C gray pl. stiff		
22+00	0-2	peat b/k	50' Lt	20' E of TH 82
	2-2.5	LS b/k		✓
	2.5-3.5	S gray		
	3.5-4	Sic gray		
22+50	0-2	SCL Bwn sl. pl.	±	✓
	2-3	C bwn pl.		
	3-4	C gray pl.		
22+50	0-1.5	Peat	50' Lt	✓
	1.5-2	C gray pl.		
	2-3	C/Sand seams gray		
	3-4	Sic gray pl.		

RG
JS
WM
R. Boss

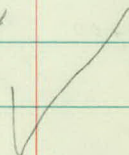
Jan 7, 1963
35°

95

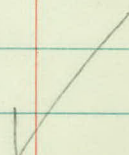
23+00	0-1	SCL	bwn sl. pl. &
	1-2	SL	bwn HPT sl. pl.
	2-3.5	C	bwn pl.



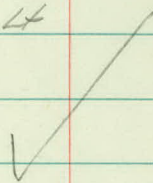
23+00	0-2	Peat blk.	50' LT
	2-3	S	gray
	3-4	SCL	gray wet



23+50	0-1	SCL	sl. pl. dk. bwn &
	1-2	LS	sl. pl. bwn
	2-3.5	C	bwn pl.



23+50	0-1.5	Peat blk.	50' LT
	1.5-2.5	CL	gray
	2.5-3	SICL	gray
	3-4	S	gray Till



Sta	Depth	Material	Position
24+00	0-1.5	SCL barn sl.pl.	E
	1.5-2	SL sl.pl.	
	2-3.5	C barn pl.	

24+00	0-1	Peat blk	50' Lt
	1-2	LS gray sl.pl.	
	2-3.5	Sic gray pl.	

24+50	0-1.5	CL blk. sl.pl. to pl. E	
	1.5-2	C gray pl.	
	2-3	LS gray sl.pl.	
	3-4	Sic gray pl.	

24+50	0-1.5	peat blk.	25' Lt.
	1.5-2	SicL blk. pl.	
	2-3	LS gray N.P.	
	3-3.5	Sic gray pl.	

Jan 7, 1963

96

24+50 0-4+ water to 1'
Peat blk 50' Lt

✓

25+00 0-1 sic blk. sl. pl. ~~2~~

1-3 LS gray water at 3'

3-4 c gray pl.

✓

24+00 0-1 Peat 25' Lt

1-1.5 CL gray pl.

1.5-3.5 LS gray sl. pl.

3.5-4 sic gray pl.

✓

23+50 0-1 SCL bwn sl. pl. 25' Lt

1-1.5 L blk.

1.5-3.5 S bwn

✓

23+00 0-1 SCL bwn sl. pl. 25' Lt

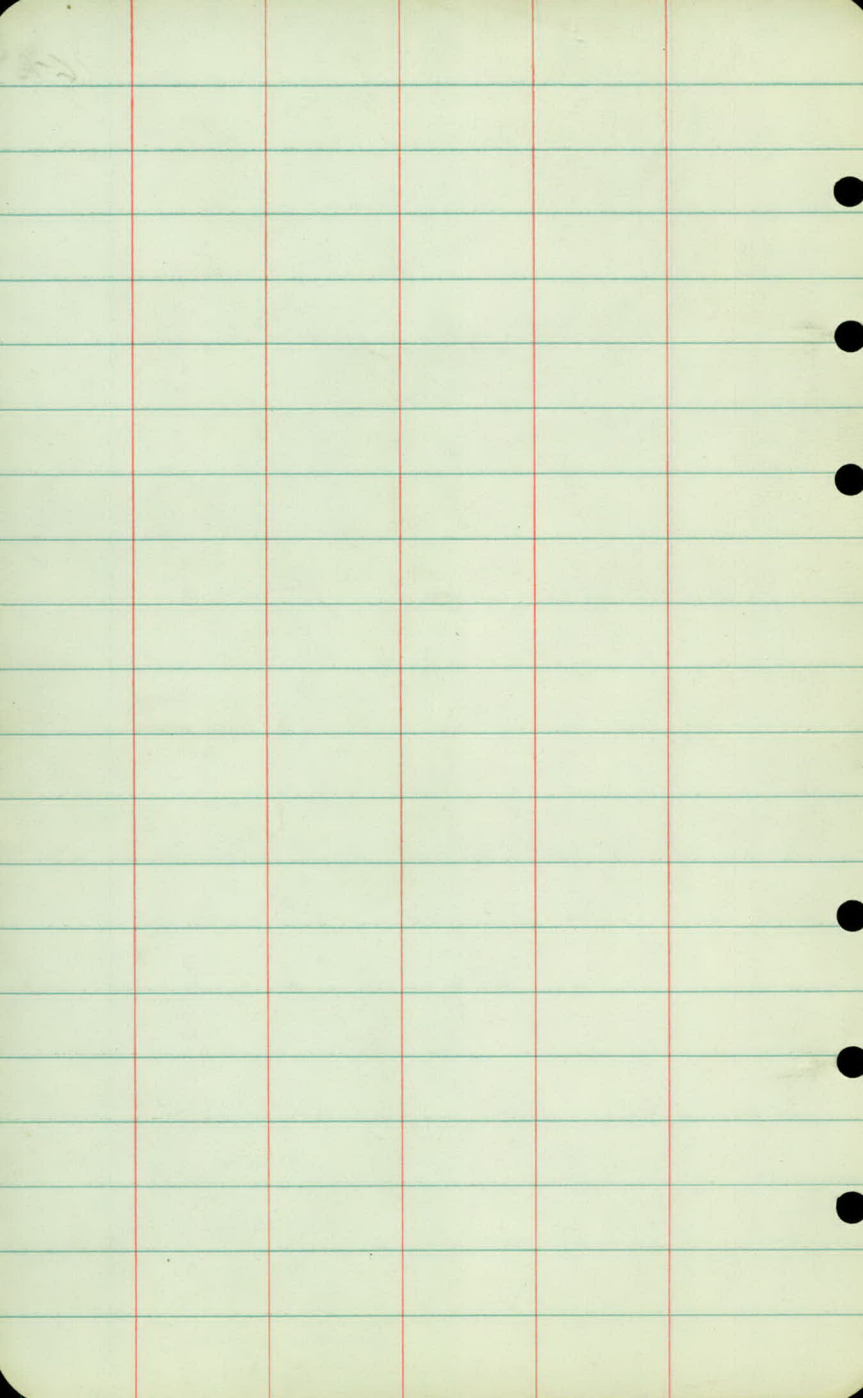
1-1.5 c gray pl.

1.5-2 LS gray

2-3 S gray

3-4 sic gray pl.

✓



RG
WM
FS

Mar. 18, 1963
30° C.

97

Co Rd E²

Soil Borings

Equip. - Donoran Const. Co. 12" Power Auger
64 holes

8 pages

plotted 3-19-63
RAB

Sta	Depth	Material	Location
5400	0-3	LS Bwn	22' RT
	3-5	C/G Bwn pl.	
	5-8	LS Bwn	✓
	8-16	C Bwn Pl.	

5400	0-2	LS	25' LT
	2-6	FLS bwn	✓
	6-8	S bwn NP	
	8-16	C bwn pl. (seams Red Sand)	

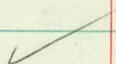
5450	0-1.5	FS NP	22' RT
	1.5-8	C/G Bwn pl.	
	8-10	LS Bwn sl.pl.	✓
	10-16	C Bwn pl.	

5450	0-1	LS sl.pl.	25' LT
	1-13	FS NP	✓
	13-16	C bwn pl.	

6400 0-1 LS bwn sl.pl. 22' RT

1-4 FS NP

4-13 C Bwn pl



6400 0-1 LS bwn sl.pl. 25' Lt

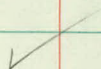
1-5 FS/acc. G. NP bwn

5-7 S/P G

7-8 CL Bwn pl.

8-15 S/med G

15-16 S Gray v. wet



6450 0-1.5 LS sl.pl Bwn 25' RT

1.5-3.5 SCL Bwn pl

3.5-8 LS sl.pl

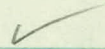
8-12 C Bwn, mottled pl



6450 0-2.5 LS bwn sl.pl. 25' Lt

2.5-6 C/G bwn pl

6-9 C mottled pl.



Sta	Depth	Material	Location
7+00	0-1	LS	25' RT
	1-6	C Bwn pl	✓

7+00	0-1	LS Dark bwn	25' Lt
	1-2	FLS Lt bwn	✓
	2-6	C Bwn pl.	

7+50	0-3	SL B/k	22' RT
	3-5	S Gray	✓

7+50	0-2	LS Bwn	24' Lt
	2-6	C mottled pl.	✓

8+00	0-2	SL B/k	22' RT
	2-2.5	S Gray	✓
	2.5-5	Sic Gray vpi.	

Mar 18, 1963

Sta	Depth	Material	Location	99
8+00	0-1.5	SL BLK	25' LT	
	1.5-3	SLC Gray vp'		✓
	3-5	C Mottled Bwn pl.		
6+00	0-1	LS	±	
	1-6	FS		✓
	6-14	C Bwn pl.		
4+00	0-1	SL bwn	25' LT	
	1-4	LS bwn sl. pl.		✓
	4-10	C bwn pl.		
12+00	0-1	SL BLK	18' RT	✓
	1-6	C bwn pl.		
12+50	0-.5	SL BLK	20' RT	
	.5-1.5	LS bwn		✓
	1.5-7	C bwn pl.		

Sta	Depth	Material	Position
13+00	0-1	SL blk. sl. pl.	25' RT
	1-16	C Bwn pl.	

13+50	0-.5	SL blk. sl. pl.	25' RT
	.5-1	SEL Bwn pl.	
	1-16	C Bwn pl.	

14+00	0-.5	SL blk. sl. pl.	50' RT
	.5-1.5	SEL bwn pl.	
	1.5-16	C bwn pl.	

14+50	0-1'	SL blk. sl. pl.	50' RT
	1-16	C Bwn pl.	

15+00	0-1	SL blk. sl. pl.	25' RT
	1-16	C Bwn pl.	

15+50	0-.5	SL blk. sl. pl.	25 RT
	.5-10	C bwn pl	

Mar 18, 1963

Sta	Depth	Material	Position	100
16+00	0-1	SL Blk. slip.	25' Rt	
	1-9	C bwn pl.		✓
16+50	0-1	SL Blk. slip.	25' Rt	
	1-2	LS Bwn. n.p.		✓
	2-5	CL/G (bwn & gray mottled) pl.		
	5-9	C bwn. pl.		
16+50	0-1	L Blk. sl. pl.	25' Lt.	✓
	1-5	C bwn pl. w/occ. Lg. G		
17+00	0-1	L Blk.	25' Lt	
	1-2	S Gray		✓
	2-5	SCL Gray		
17+00	0-3	C bwn pl.	25' Rt	✓
	3-7	C bwn mottled w/occ. Lg. G		

Sta	Depth	Material	Location	
17+50	0-1	L Blk. s. pl.	25' Lt.	
	1-4	C DK gray pl. + wet		✓
17+50	0-1	SCL bwn pl.	25' Rt	
	1-5	C/G bwn pl.		✓
18+00	0-2	CL Gray pl.	25' Rt	
	2-4	C Gray pl.		✓
18+50	0-2	CL Gray pl.	25' Rt	
	2-4	C Gray pl.		✓
19+00	0-2	SCL gray pl.	25' Rt	
	2-4	C gray pl.		✓
19+50	0-2	SL gray	25' Rt	
	2-8	C bwn pl. w/occ. G		✓

Sta	Depth	Material	Location
20+00	0-1	SL gray sl. pl.	25' Rt
	1-2	CL bwn pl.	✓
	2-9	C bwn pl.	
20+50	0-1	SL gray sl. pl.	25' Rt
	1-2	SCL bwn pl.	✓
	2-9	C bwn. pl.	
21+00	0-.5	SL gray sl. pl.	25' Rt.
	.5-1.5	SCL bwn pl.	✓
	1.5-9	C bwn pl.	
21+50	0-1	SL gray sl. pl.	25' Rt.
	1-9	C bwn pl.	✓
22+00	0-2	SCL Bwn pl.	30' Rt
	2-13	C bwn pl.	✓

Sta	Depth	Material	Location
22+50	0-2	SCL bwn pl.	25' Rt
	2-4	C bwn	✓
	4-8	C mottled w/oa B	(hit lg. rock at 8')

23+00	0-2	SCL bwn pl.	20' Rt
	2-4	C dk. bwn	✓
	4-8	C bwn/oo	

23+50	0-2	SCL bwn pl.	25' Rt
	2-3	CL lt. bwn.	✓
	3-8	C bwn.	

24+00	0-3	SCL Bwn pl.	25' Rt.
	3-4	C Bwn	✓
	4-7	C O.D.	

24+50	0-3	SCL Bwn pl.	25' Rt
	3-4	C Bwn	✓
	4-5	SC gray	
	5-8	C gray (wet)	

Mar 18, 1963

Sta	Depth	Material	Location	102
25+00	0-1	LS grey N.P.	25' Rt	
	1-4	C bwn		✓
	4-8	C gray-O.D. mottled		
29+00	0-.5	L Bk.	25' Rt	
	.5-4	C O.D.		✓
29+00	0-.5	L Bk. slpl.	25' Lt.	
	.5-4	C. Bwn		✓
	4-6+	Sic gray wet		
30+00	0-1	SL bwn	25' Lt	
	1-6	C bwn		✓
30+00	0-1.5	Sil Bk NP	25' Rt	
	1.5-6	C O.D.		✓

Sta	Depth	Material	Location
30+50	0-.5	L blk.	25' Rt
	.5-1	SL bwn sl. pl.	✓
	1-6	C bwn	

30+50	0-2	LS bwn sl. pl.	25' Lt
	2-4	C bwn	✓
	4-10	C loc & bwn	

31+00	0-1	SCL bwn pl.	25' Lt.
	1-16	C bwn	✓

31+00	0-.5	L blk	25' Rt
	.5-1.5	SCL bwn pl.	✓
	1.5-7	C bwn	

32+00	0-1.5	SCL bwn pl.	25' Rt
	1.5-8	C bwn	✓

Mar 18, 1963

Sta	Depth	Material	Location	103
32+00	0-.5	L B/k.	25' Lt	
	.5-1.5	SL bwn	✓	
	1.5-7	C bwn		
33+00	0-.5	L B/k	25' Lt	
	.5-1	SL bwn	✓	
	1-6	C bwn		
33+00	0-1	SL b/k	25' Rt.	
	1-6	C O.D. (wet)	✓	
34+00	0-1	LS bwn	25' Rt	
	1-3	CL bwn/Lt. gray	✓	
	3-7	C bwn		
34+00	0-.5	SL B/k.	25' Lt.	
	.5-1	LS bwn		
	1-4	CL Bwn pl.	✓	
	4-6	C Bwn		

Sta	Depth	Material	Location
35+00	0-6	SCL/bwn	25' Lt.
	6-12	C bwn	✓

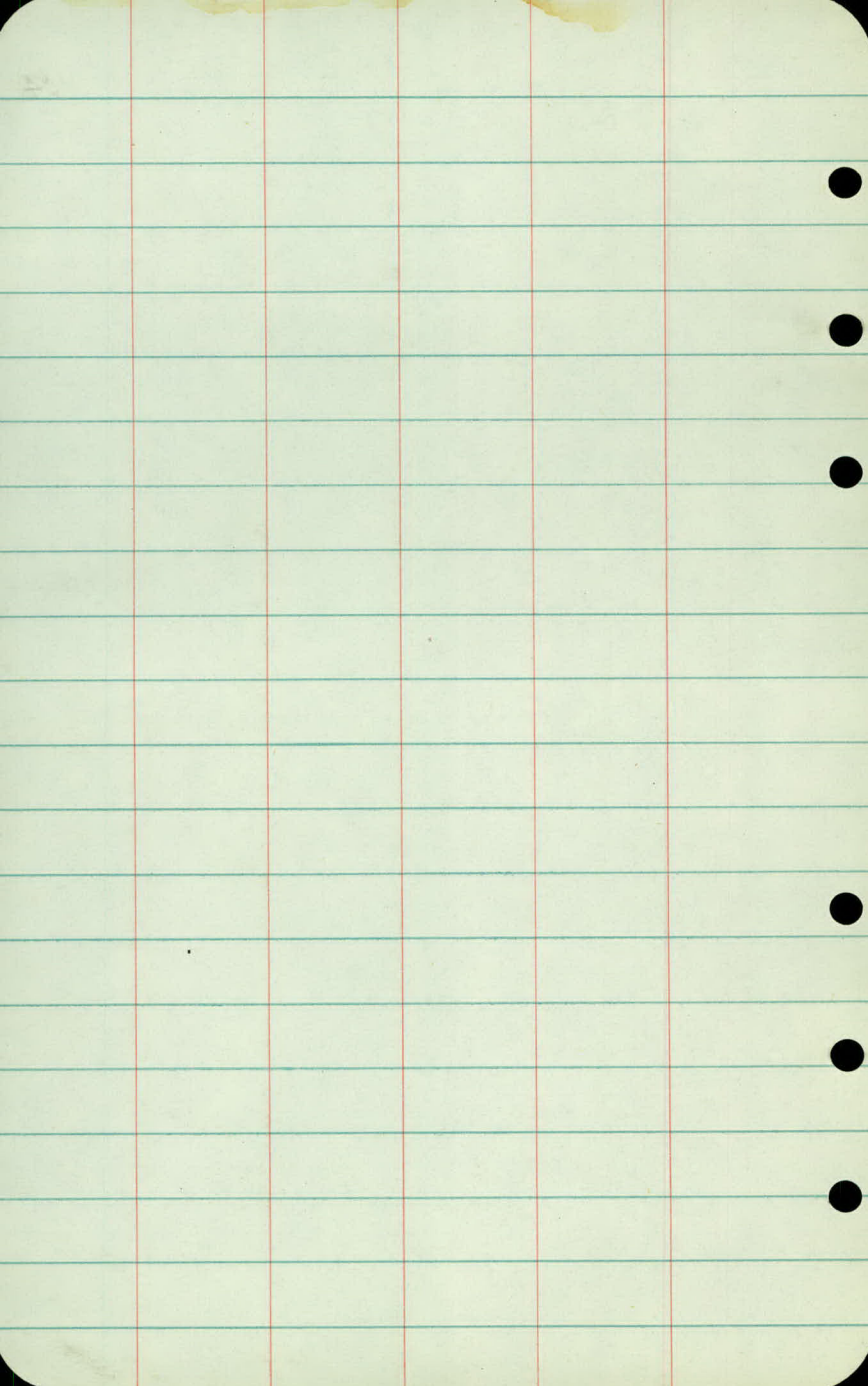
35+00	0-1	LS bwn NP	25' Rt
	1-5	C bwn	✓
	5-9	C gray-bwn mottled	

35+90	0-2	SCL bwn pl.	25' Rt
	2-11	C bwn	✓

35+90	0-3	LS bwn.	30' Lt
	3-7	C bwn.	✓

Mar. 18, 1963

104



KP
JS
DS
WS

23 APRIL 1963

Co. Rd. E2

New Brighton Rd to STH #10

Profile of New Brighton Rd.

Sta 3+00 $\pm$ to 500' Rd

Sta + π - Elev.

BM 13.36 916.05

902.69

3400

✓

✓

BM

13.36 902.69

902.69

KP
US
DS
WS

16 MAY 1963
SUNNY
55°

1.

C. RD E²

New Brighton Rd to STH #10

MISC. INFO.

(4 pages)

STA	+	π	-	ELEV.
BM	11.09	889.04		877.95

			1.02	888.02
--	--	--	------	--------

TP	0.69	879.39	10.34	878.70
----	------	--------	-------	--------

			5.55	873.84
--	--	--	------	--------

8+50				71.0
------	--	--	--	------

				71.0
--	--	--	--	------

✓

+70				69.4
-----	--	--	--	------

				69.4
--	--	--	--	------

✓

9+00				68.9
------	--	--	--	------

				68.9
--	--	--	--	------

16 MAY 1963

2.

Description

Top T.C.A. Gas main Post

Top nail $\frac{1}{2}$ STA 7+00

Top nail $\frac{1}{2}$ STA 7+50

Top nail $\frac{1}{2}$ STA 8+00

8.4

10.0

10.5

STA	+	$\bar{\Delta}$	-	ELEV.
-----	---	----------------	---	-------

		879.39		
--	--	--------	--	--

9+50				69.6
------	--	--	--	------

✓				
---	--	--	--	--

10+00				69.6
-------	--	--	--	------

✓				
---	--	--	--	--

+36	=	E	DITCH	67.0
-----	---	--------------	-------	------

✓				
---	--	--	--	--

+50				68.8
-----	--	--	--	------

✓				
---	--	--	--	--

+88				70.4
-----	--	--	--	------

16 MAY 1963

3.

LT

£

RT

02 1178

9.8

9.8

12.4

10.6

9.0

STA	+	K	-	ELEV.
-----	---	---	---	-------

		879.39		
--	--	--------	--	--

11+00				
-------	--	--	--	--

				72.3
--	--	--	--	------

✓				
---	--	--	--	--

+40				
-----	--	--	--	--

				75.0
--	--	--	--	------

✓				
---	--	--	--	--

+73				
-----	--	--	--	--

				76.3
--	--	--	--	------

✓				
---	--	--	--	--

		7.77	871.62	
--	--	------	--------	--

		11.77	867.62	
--	--	-------	--------	--

✓				
---	--	--	--	--

BM				
----	--	--	--	--

		3.64	875.75	(875.75)
--	--	------	--------	----------

BM				
----	--	--	--	--

		1.44	877.95	(877.95)
--	--	------	--------	----------

16 MAY 1963

4

Lt

£

Rt

7.1

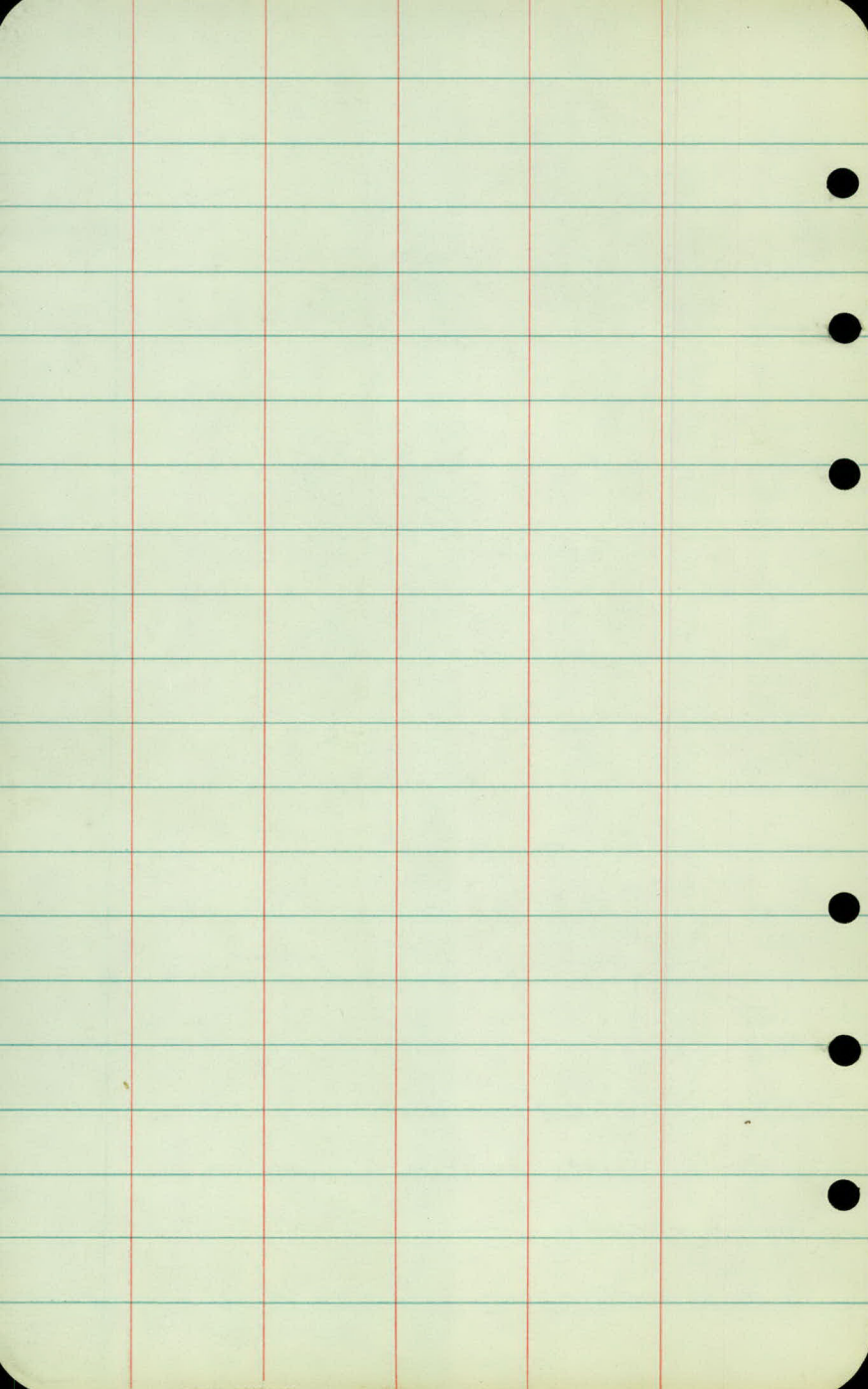
4.4

3.1

FL 48" CM LT STA 9+26

TOP MH £ STA 11+50

TOP TCA Gas main Post



May 13

May 13

5/11

Dec 4

8 +50 71.0

71.1

870.7

0.4' low

69.4

Jan. 16 70.5

9 +00 68.9

70.7

68.8 ✓

1.9' low

+50 69.6

70.8

70.4

0.4' low

10 +00 69.6

70.8

69.6

1.2' low

+25

70.2

+36 67.0

66.5

+47

+50 = 70.8

69.8

1' low

+50 68.8

Dec 4

11 +00 72.3

72.3

72.1

0.2' low

+50 Top/M.H.

75.75

75.75

KP
DS
FS

23 MAY 1963

7.

Co. RD E²

New Brighton Rd to STH[#] 10

Swamp Borings

Original Ext sections

Page 40

STA

LT

±

RT

25+50 20.0

BLACK

SANDY LOAM 1.3

H2O 1.3

BLACK

SANDY SILT 4.0

PEAT 6.3

BLUE-GRAY CLAY 7.6+

23 MAY 1963 Z.

LT

4

RT

26.50 . . 0 . 20.0 . .

H₂O 0.9

BLACK

SANDY LOAM 1.4

BLACK

SANDY SILT 2.4

SILTY, SANDY,

CLAY

4.5+

STA	LT	±	RT
-----	----	---	----

26+00 .0 . 20.0 . .

H ₂ O	0
BLACK	
SANDY LOAM	3.3
FIBROUS PEAT	4.9
SILTY, SANDY CLAY	5.5+

23 MAY 1963 3.

STA

LT

£

RT

27400

..20.0' . . .

BLACK
SANDY
LOAM

1.4

H2O

SILTY, SANDY,
CLAY

3.0+

STA	LT	E	RT
-----	----	---	----

27+30

...20.0...0...

1.4	BLACK SANDY LOAM
-----	---------------------

1.4	H ₂ O
-----	------------------

2.8+	GRAY CLAY
------	-----------

STA

KP
DS
FS

LT

E

24 MAY 1963

4.

RT

16400

. . 0 . 20.0 . .

BLACK

SANDY, LOAM

1.6

BROWN

SILT

2.2

SANDY

CLAY

2.6 +

STA

LT

£

RT

16750 . . 0 20.0 . .

BLACK

SANDY loam

1.1

clay

1.7 +

24 MAY 1963

5.

STA

LT

£

RT

17+00

20.0

BLACK

SANDY LOAM

1.0

BROWN

SANDY CLAY

2.0

CLAY

3.0+

STA	LT	±	RT
-----	----	---	----

17+50	.6	20.0	.
-------	----	------	---

BLACK SANDY			
-------------	--	--	--

LOAM	1.5		
------	-----	--	--

BROWN			
-------	--	--	--

SAND	3.0		
------	-----	--	--

CLAY	3.3+		
------	------	--	--

Sign at STA 35

Schmidt

Beer

(General Outdoor Adn. Co.)

Swamp Crosses

STA 25+90

STA 27+10

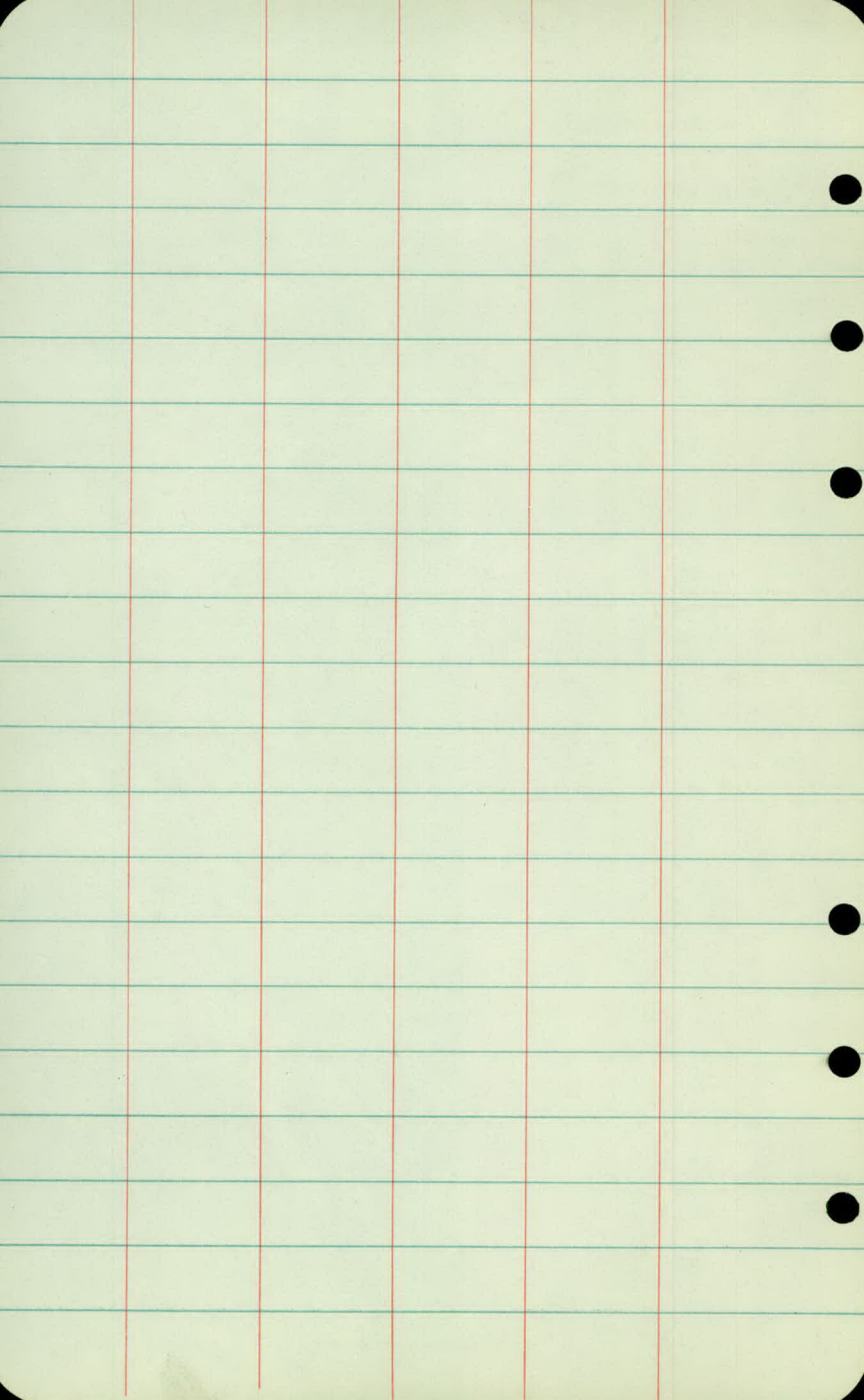
SWAMP

25

26

27

DITCH



KP
DS
FS
DS

21 MAY 1963

Ca. RD E²

New Brighton Rd to STH #10

Swamp Borings

STA	LT	£	RT
-----	----	---	----

25+00

20.0

0

black
Sandy
loam

1.0

light brown
sandy clay

1.8

2.5

Silty sand-clay

3.5

Silty sand

3.5

H₂O

3.5+

clay

STA

LT

E

RT

25+50

. . . 20.0 . 0 . .

1.1

Black
Sandy
loam

2.0

Light
Brown
Sandy clay

2.7

H₂O

2.7

SILTY
SANDCLAY

7.0+

clay

STA	LT	£	RT
-----	----	---	----

26+00

20.0 0

2.0

BLACK
SANDY
LOAM

2.2

H₂O

6.4+

SILTY SANDY
CLAY

STA

LT

E

RT

27+00

29.0

in ditch

STA	LT	E	RT
78+50	20.0	20.0	
BLACK SANDY LOAM	1.3	1.3	BLACK SANDY LOAM
BLACK SILTY CLAY	1.9	1.9	H ₂ O
H ₂ O	1.9	* 2.8+	SILTY SAND CLAY
SILTY SANDY CLAY	2.8+		

* Auger was ^{turned} pushed an additional 3.0 and the material felt the same, but the 2.8 sounding was visual.