

DR 9 BK 68

OFFICE OF COUNTY ENGINEER  
RAMSEY COUNTY, MINN.

PLAN Survey

McKNIGHT RD.

From HIGHWOOD To MAILAND

Road Acc't. No. 68

Date Filed \_\_\_\_\_

File \_\_\_\_\_

# PLAN SURVEY

Mc Knight Road

Highwood to Mailand

Alinement

| INDEX      | PAGE  |
|------------|-------|
| Align.     | 1-4   |
| Topog.     | 5-29  |
| X Sections | 30-63 |

Sta Point  $\Delta$  Lt.  $\Delta$  Rt.

P.O.T.  $\frac{1}{4} \frac{1}{4}$  Corner

P.O.T.

0+00  $\pm$  Highway

August 25, 1967

2

W  $\frac{1}{4}$  Cor. Sec. 13



C. I. Man.



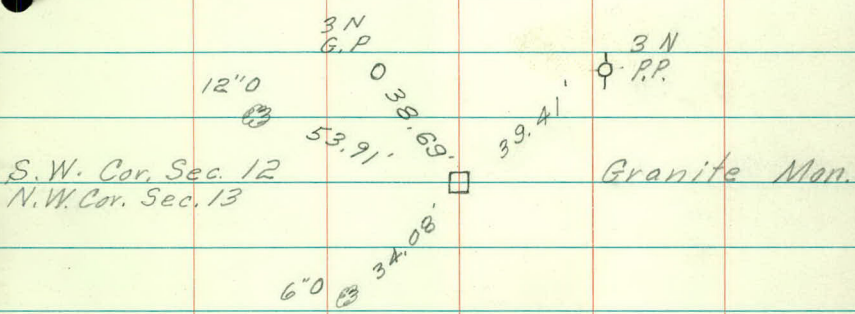
| Sta | Point | $\Delta L_t$ | $\Delta R_t$ |
|-----|-------|--------------|--------------|
|-----|-------|--------------|--------------|

26+26.92 P.I.

20+00 P.O.T.

August 25, 1967

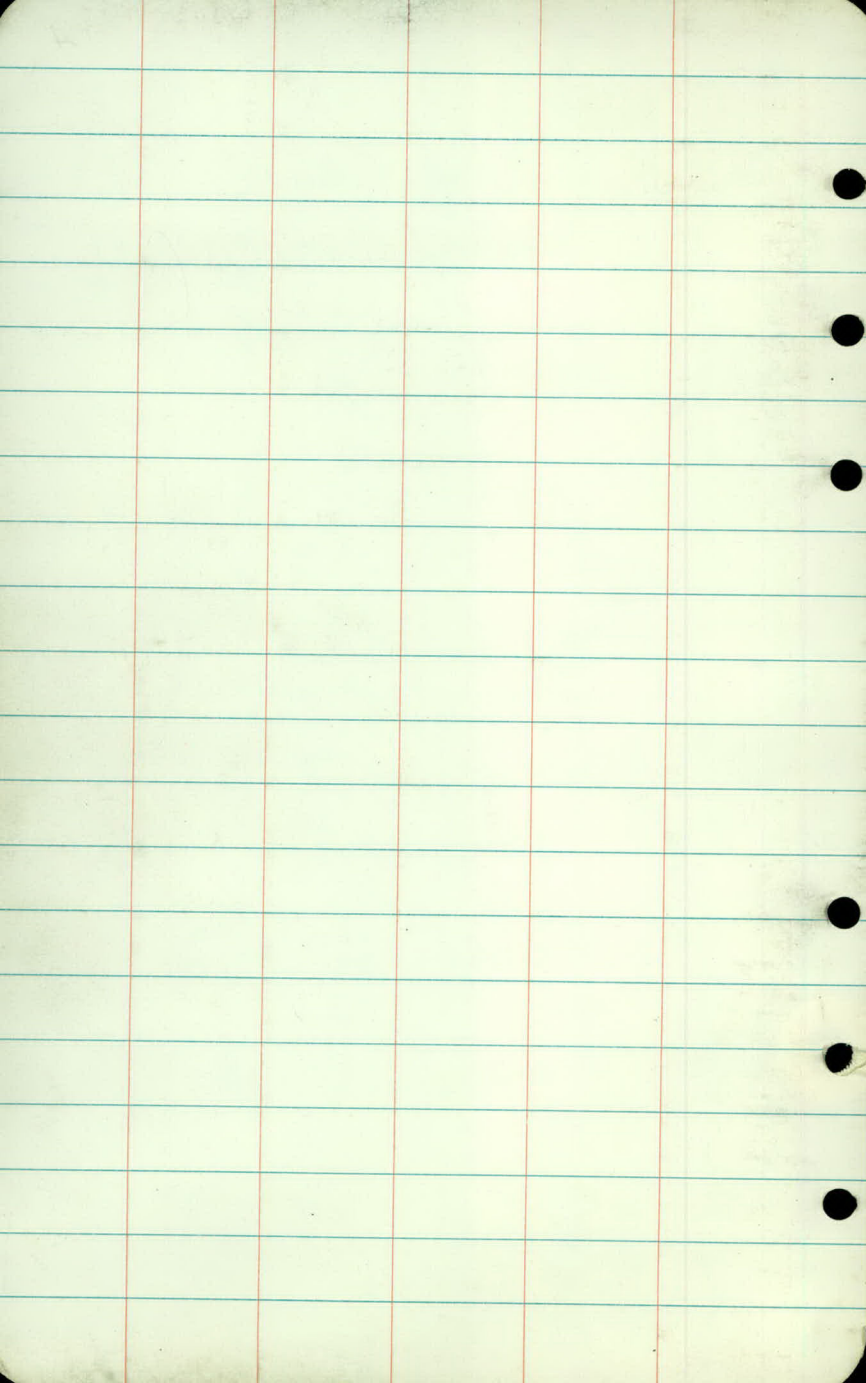
3



| Sta      | POINT | Δ Lt    | Δ Rt |
|----------|-------|---------|------|
| 52+50.51 | ±     | Mailand | Road |







FK  
WM  
LPD

Dec. 14, 1967

5  
+

Mc KNIGHT RD.

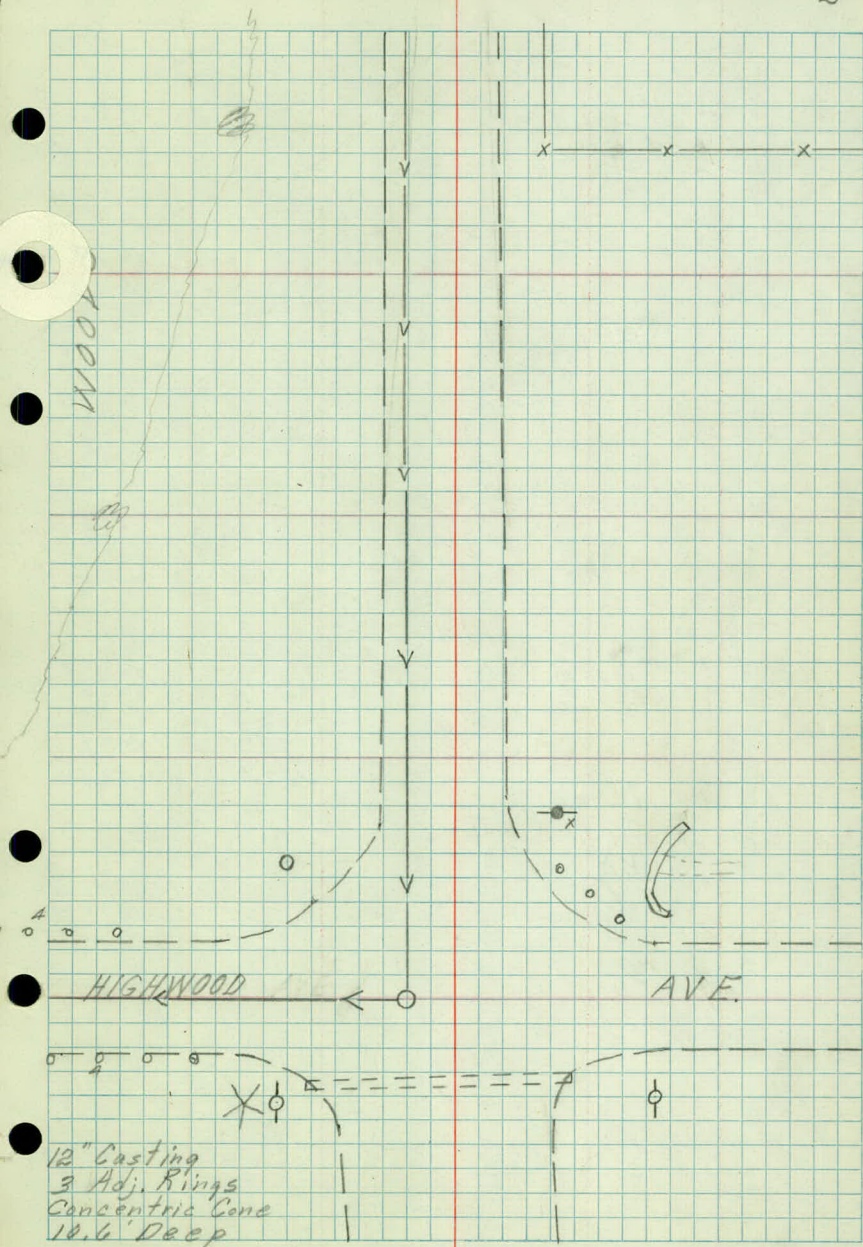
Highwood to Mailand

TOPOGRAPHY

|                     |                                  |                           |                      |                          |
|---------------------|----------------------------------|---------------------------|----------------------|--------------------------|
| 2                   | +100 $\frac{14''0}{14''0}$       | Road<br>15 8              | Fe<br>18             |                          |
|                     |                                  |                           |                      | +76 $\frac{FeCar}{18}$   |
|                     | +81 $\frac{12''0}{46}$           |                           |                      |                          |
| 1                   | +100 $\frac{Woods}{70}$          | Road<br>15 10             |                      |                          |
|                     | B Woods<br>+50 $\frac{100}{100}$ |                           |                      |                          |
|                     |                                  |                           |                      | +36 $\frac{HW}{48}$      |
|                     |                                  | +17 $\frac{B.21''HW}{44}$ |                      | +21 $\frac{HW}{41}$      |
|                     |                                  |                           |                      | +42 $\frac{ER}{11}$      |
| +28 $\frac{GP}{35}$ |                                  | +36 $\frac{ER}{16}$       | +37 $\frac{EFe}{24}$ | +39 $\frac{TP}{21}$      |
|                     | +20 $\frac{POK}{30}$             |                           |                      | +27 $\frac{GRP}{22}$     |
| +12 $\frac{BR}{49}$ |                                  | +14 $\frac{GR}{71}$       | +17 $\frac{GRP}{34}$ | +22 $\frac{GRP}{28}$     |
| 0                   | +100 $\frac{MH}{70}$             |                           |                      | +12 $\frac{BR}{42}$      |
|                     | -12 $\frac{BR}{46}$              |                           |                      |                          |
| -13 $\frac{ER}{54}$ |                                  | -21 $\frac{PP}{37}$       |                      |                          |
|                     | +22 $\frac{6''P}{44}$            |                           |                      | -10 $\frac{ER}{45}$      |
| +26 $\frac{ER}{25}$ |                                  | +18 $\frac{WE15''M}{31}$  | -20 $\frac{PP}{42}$  | -16 $\frac{EE15''M}{29}$ |
|                     |                                  | 22 22                     |                      | -26 $\frac{BR}{21}$      |

Dec. 14, 1967

6  
2





TP  
+46 22

+32 6" Cott  
30

+03 6" Cott  
26

| Fe | Road  | Fe |
|----|-------|----|
| 48 | 14 12 | 21 |

4  
+89 Stp  
31

+81 14" O  
49

+18 Gry 6" Cott  
39

+18 38

3

| Fe | Road | Fe |
|----|------|----|
| 50 | 14 9 | 18 |

+86 Stp  
46

+83 MH  
11

+50 Woods  
25

TP  
+48 22

+28 Fe Cor  
42

+09 15" O  
50

2



Dec 14, 1967

7  
3

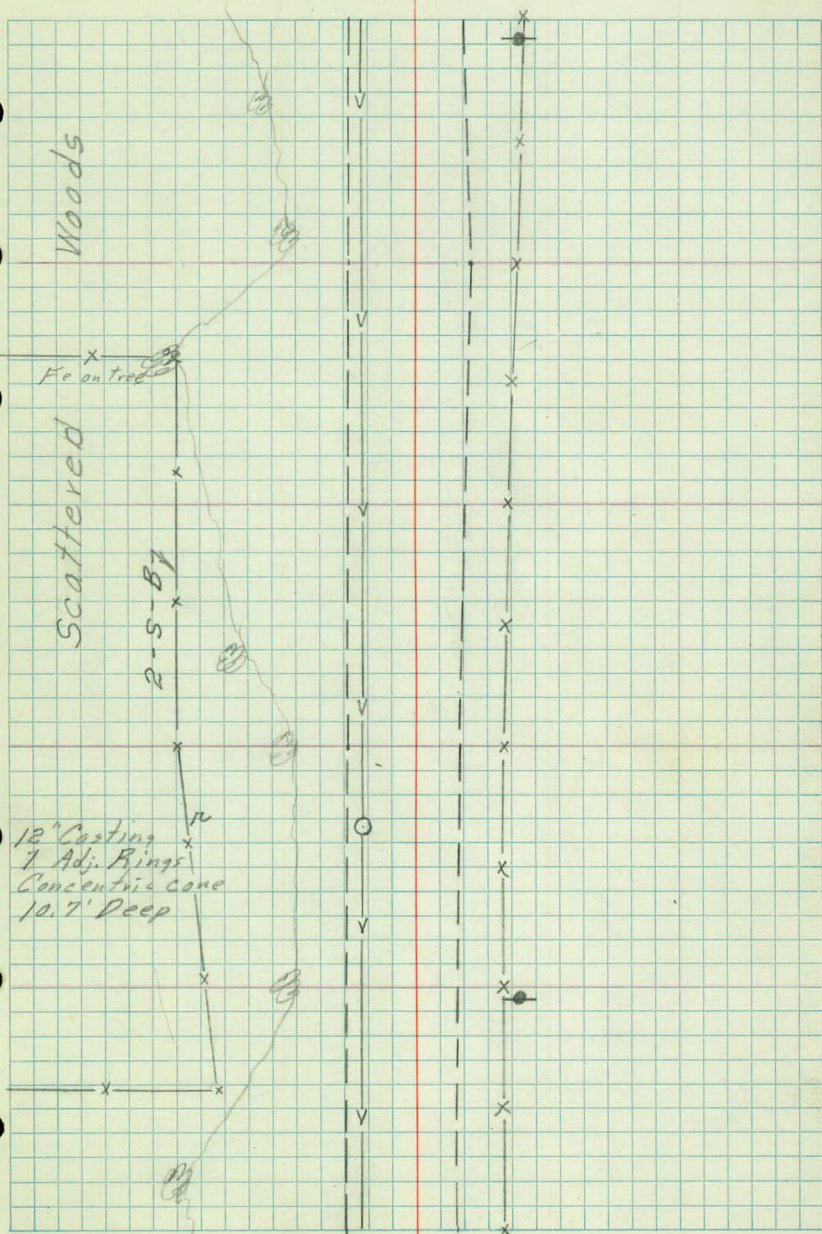
Woods

Fe on tree

Scattered

2-S-B7

12" Casting  
1 Adj. Rings  
Concentric cone  
10.7' Deep



7

Road  
8 11+91  $\frac{24^{\circ}0}{50}$ +66  $\frac{PP}{23}$ +64  $\frac{FeCor}{24}$ 

6

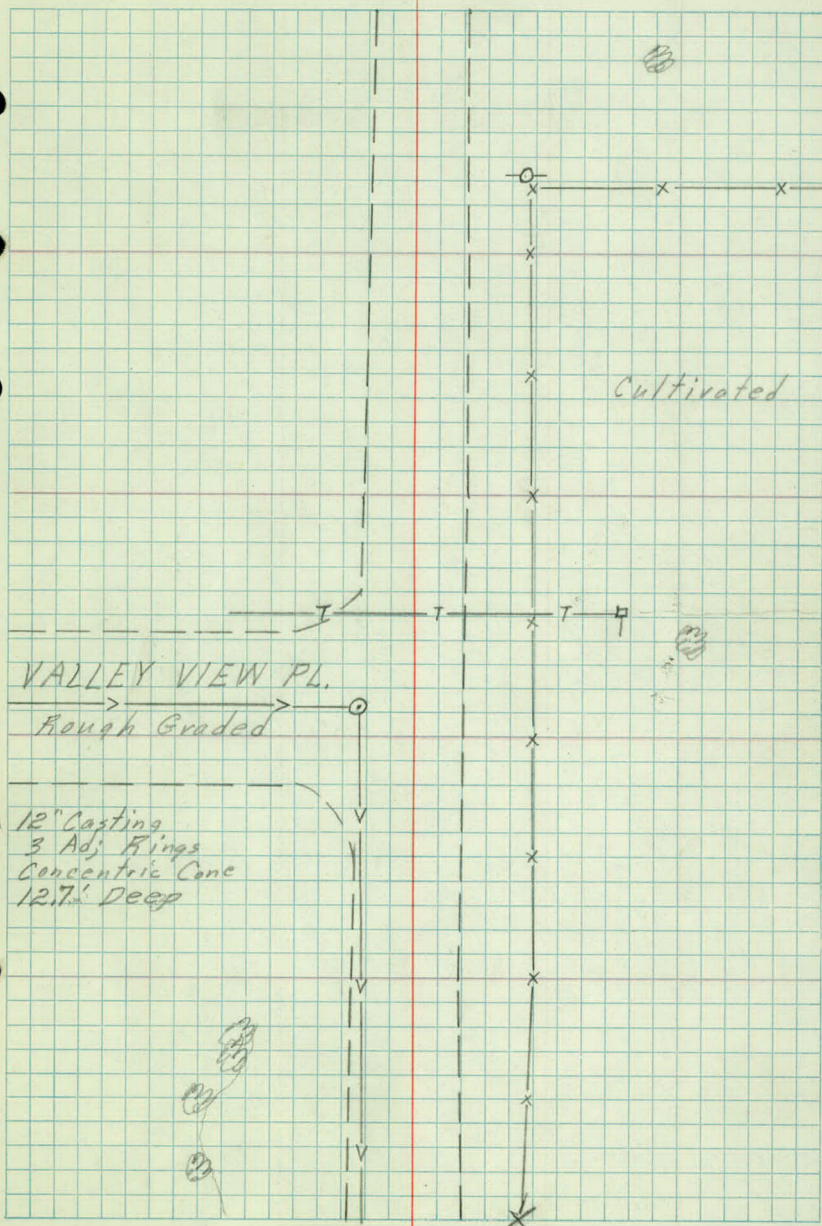
Road  
11 11Fe  
24+79  $\frac{PP}{23}$ +76 Underground  
Cable X-ing+76  $\frac{Tell Post}{42}$ +56  $\frac{MH}{12}$ +70  $\frac{22^{\circ}0}{57}$ +21  $\frac{24^{\circ}0}{71}$ +17  $\frac{24^{\circ}0}{54}$ 

5

Road  
13 9Fe  
25+88  $\frac{6^{\circ}0}{36}$ +83  $\frac{6^{\circ}0}{37}$ +60  $\frac{6^{\circ}0}{46}$ +75  $\frac{6^{\circ}0}{46}$

Dec. 14, 1967

8  
4

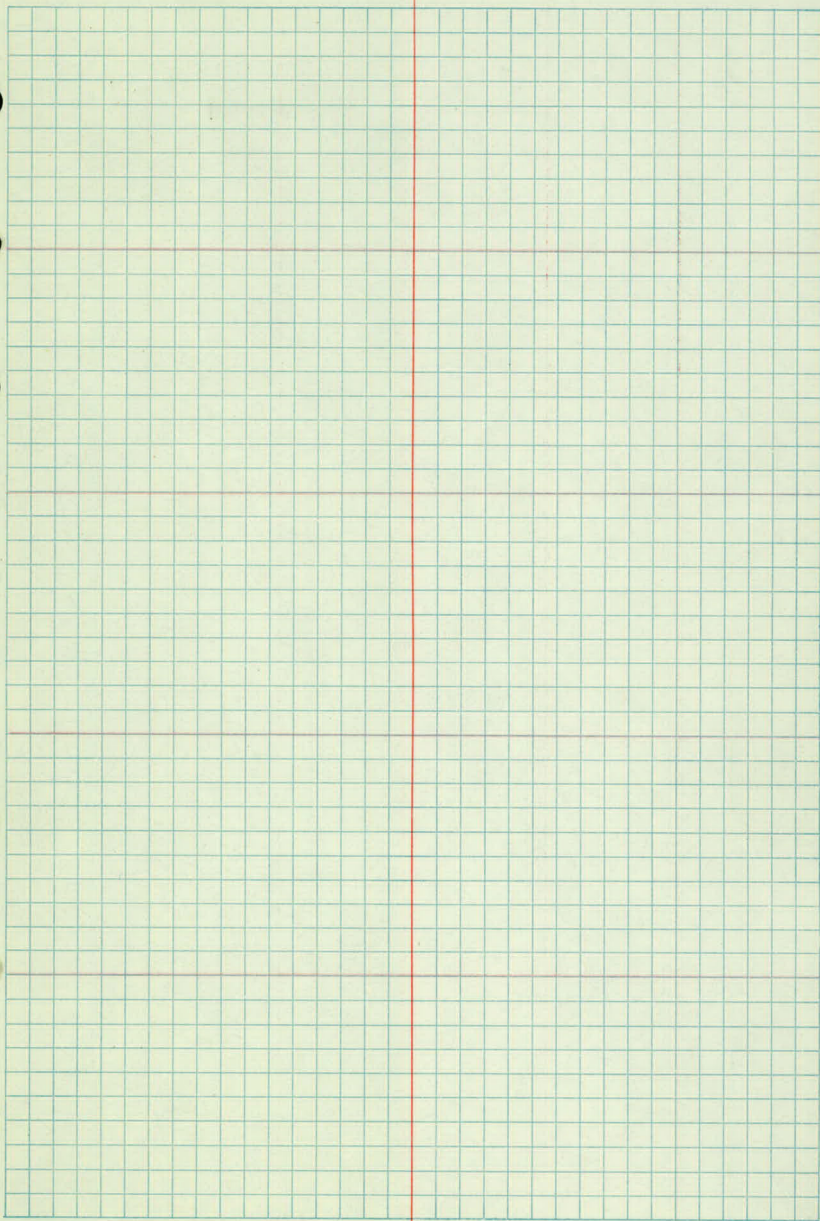


9

8

7



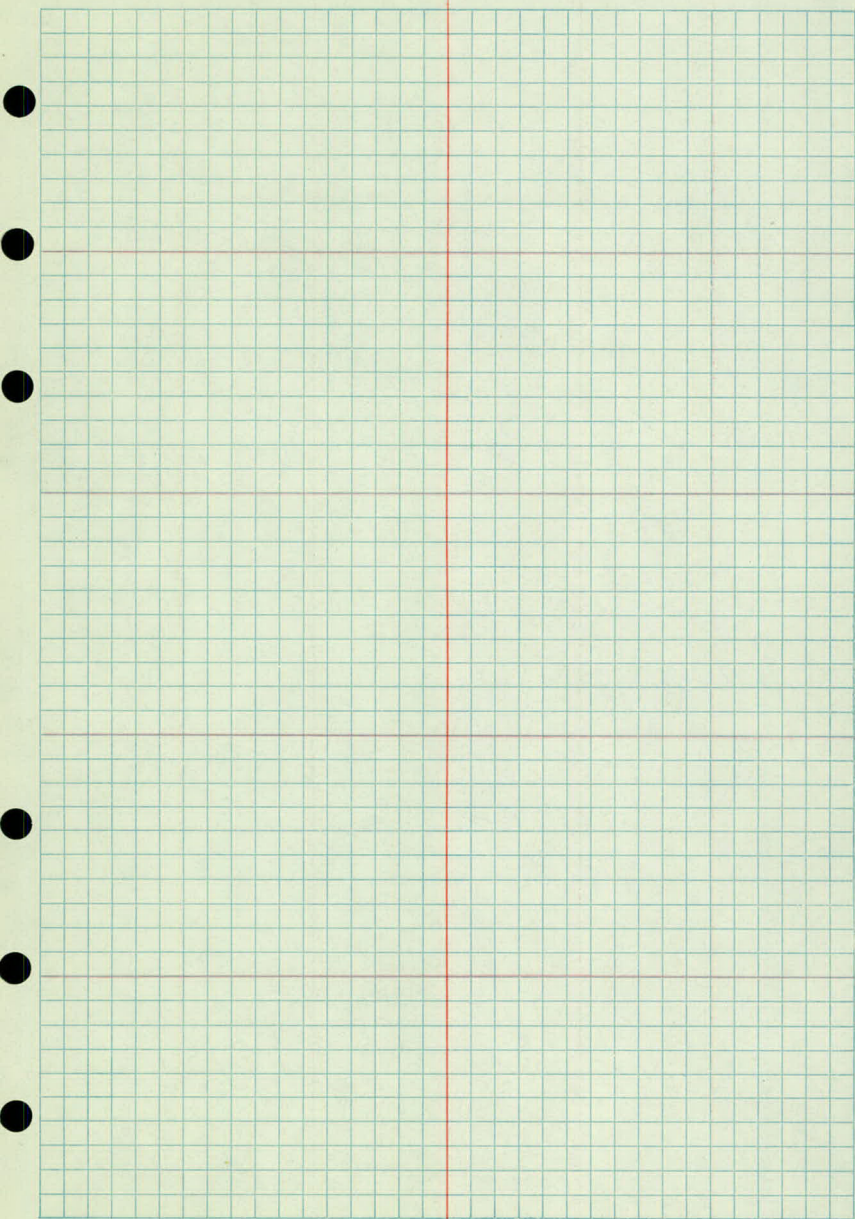




12

11

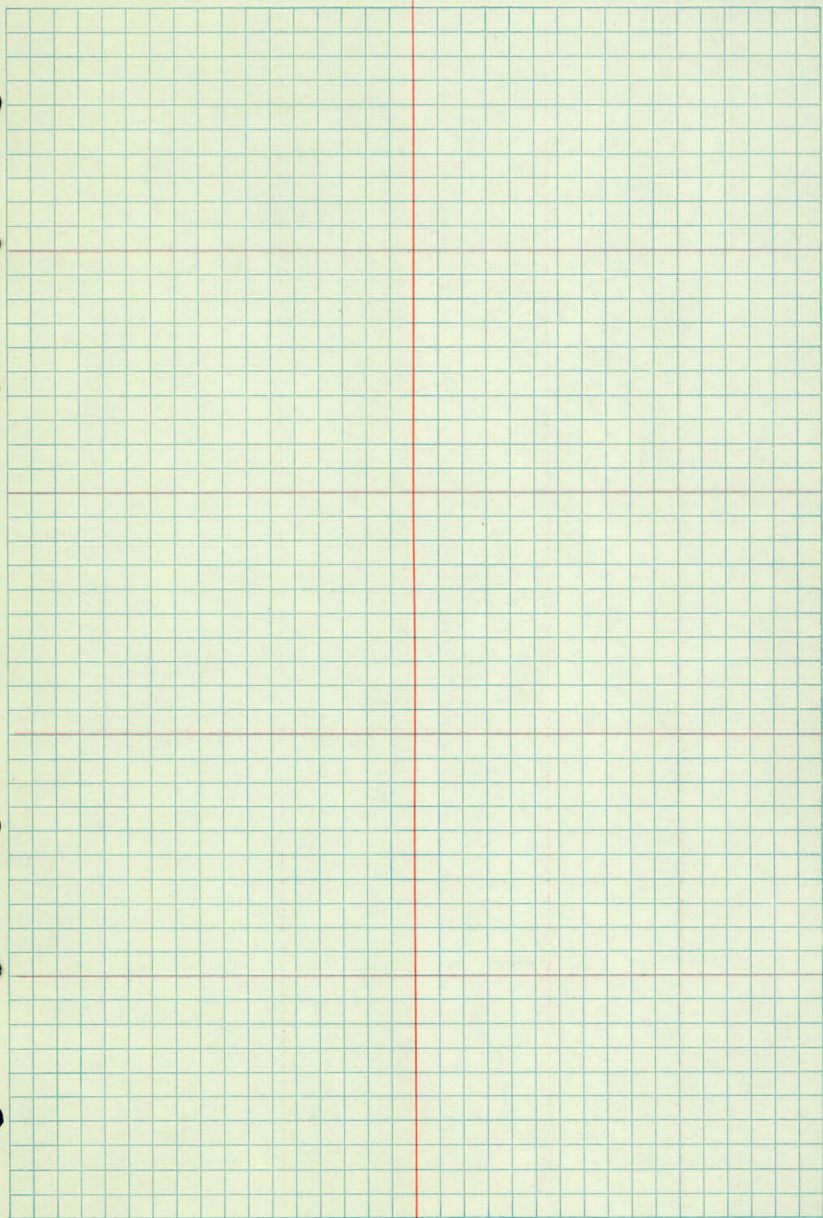
10



14

13

12



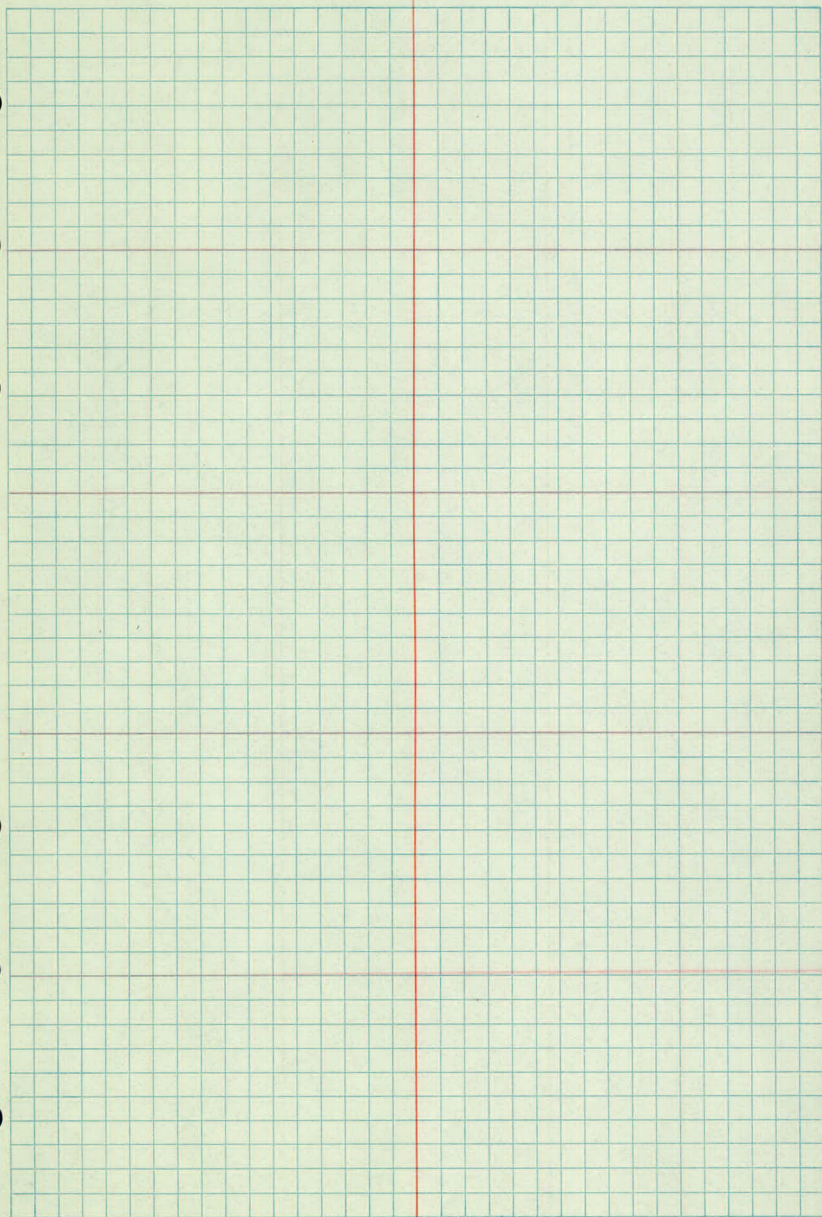


17

16

15

12  
8

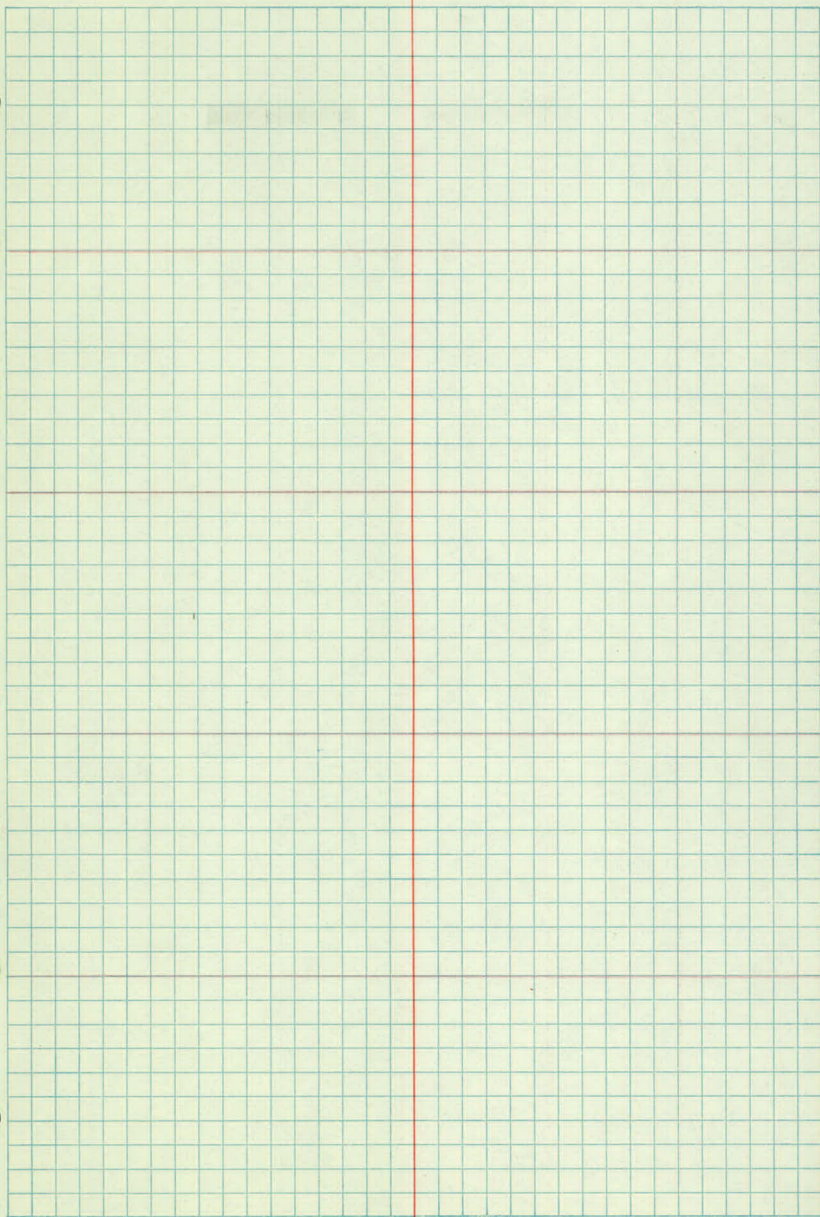


19

18

17

13  
9

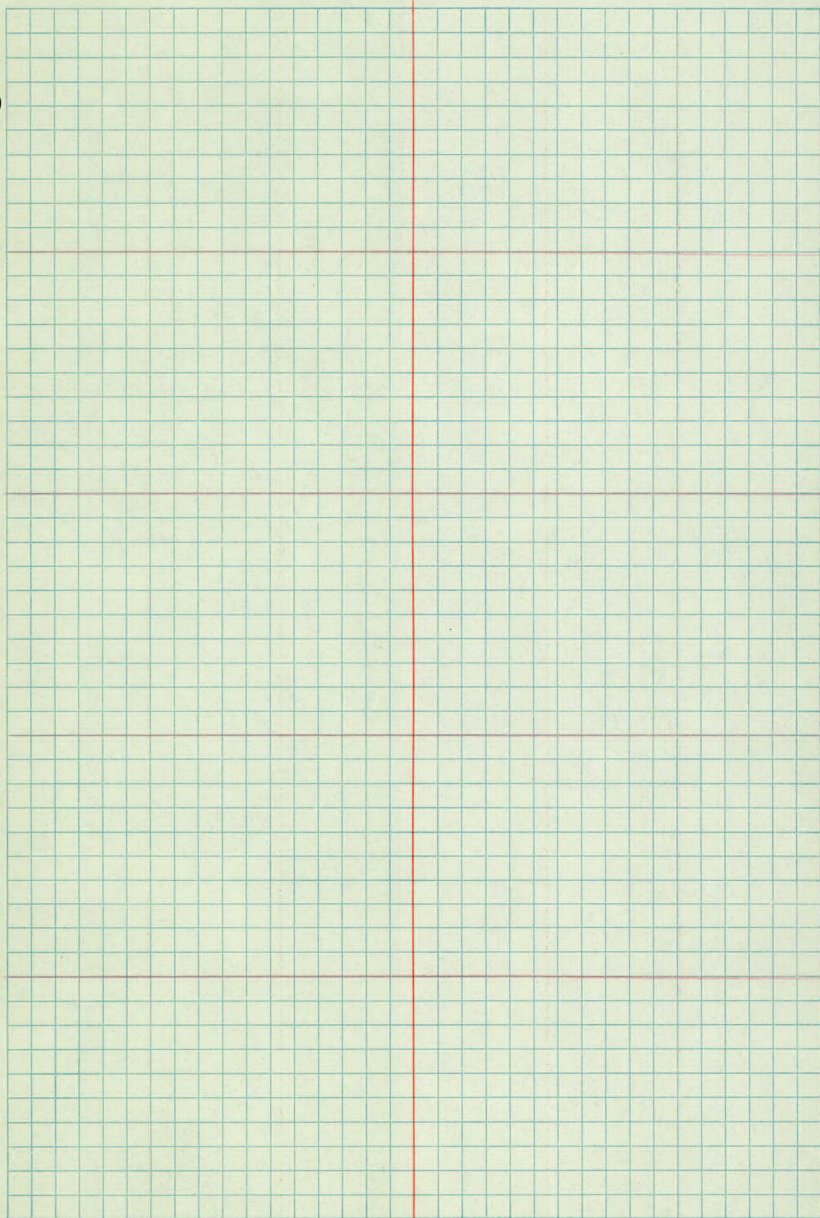




22

21

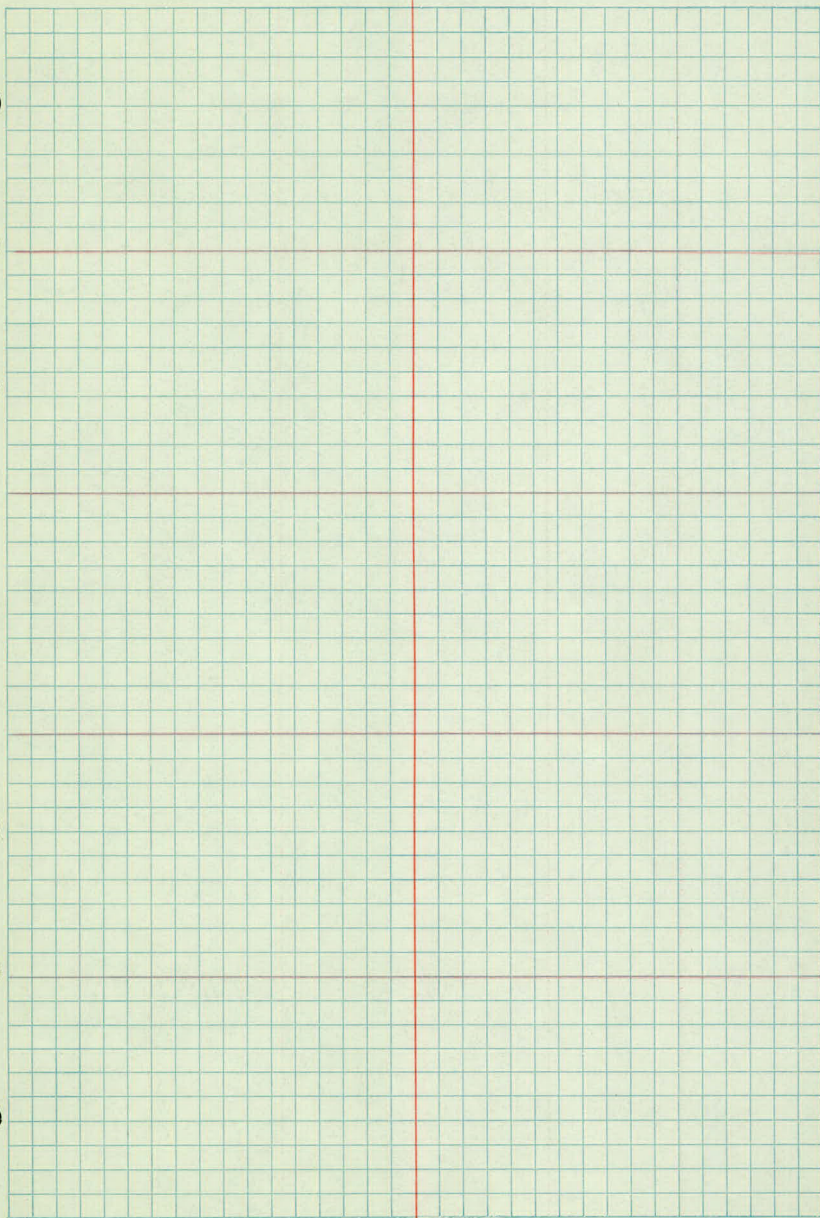
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24

23

22

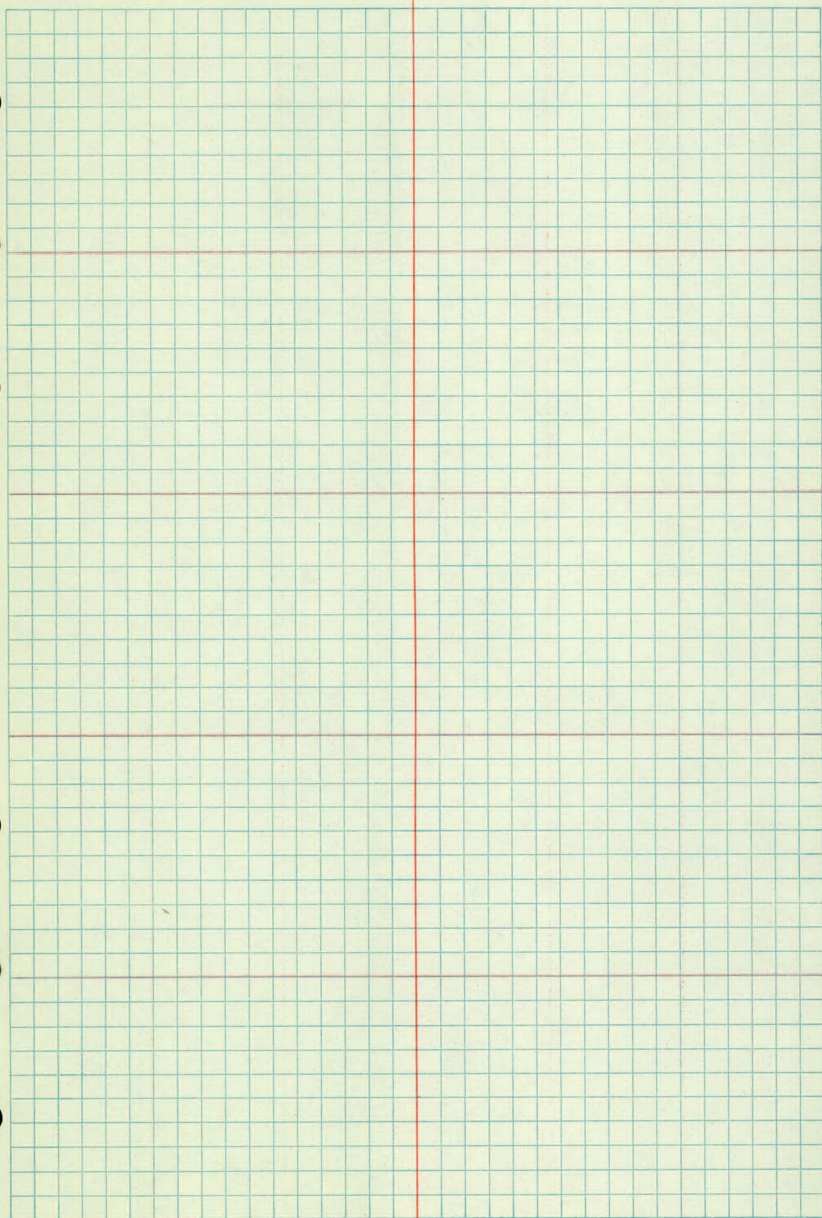




27

26

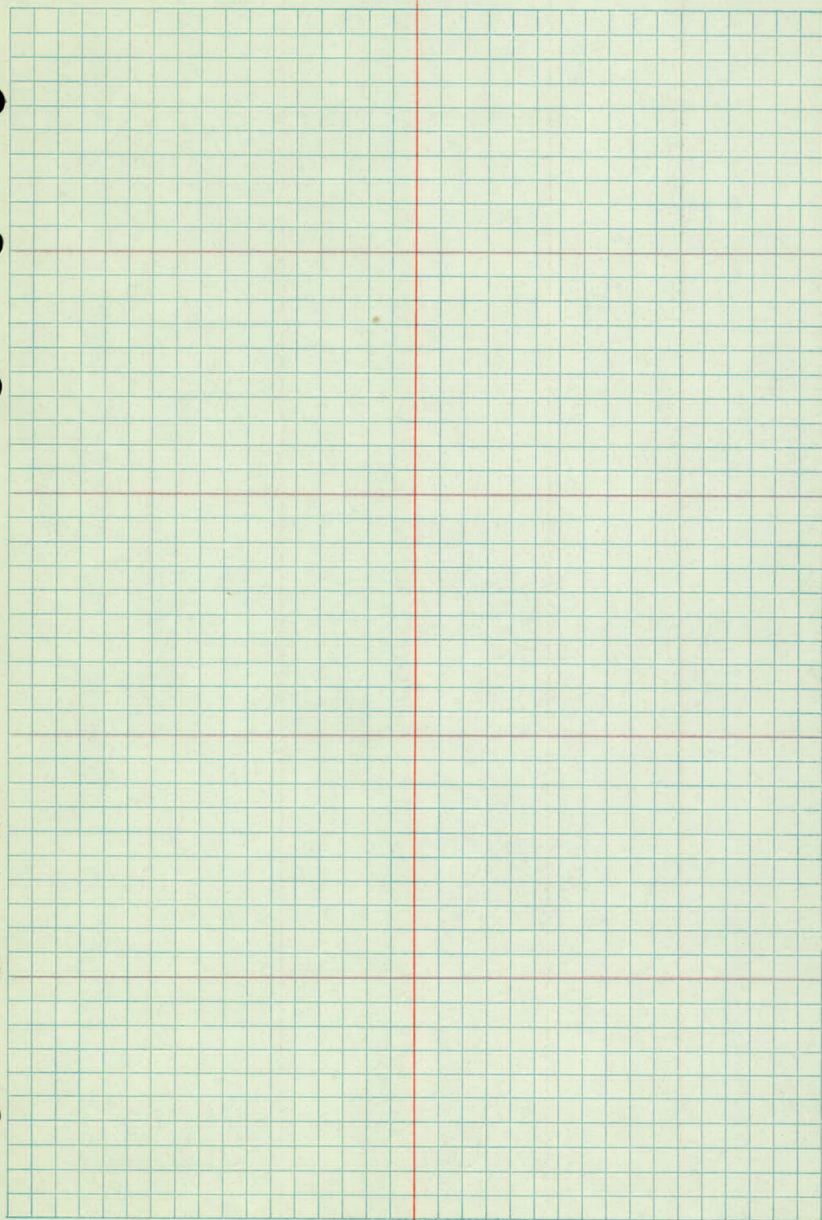
25



29

28

27



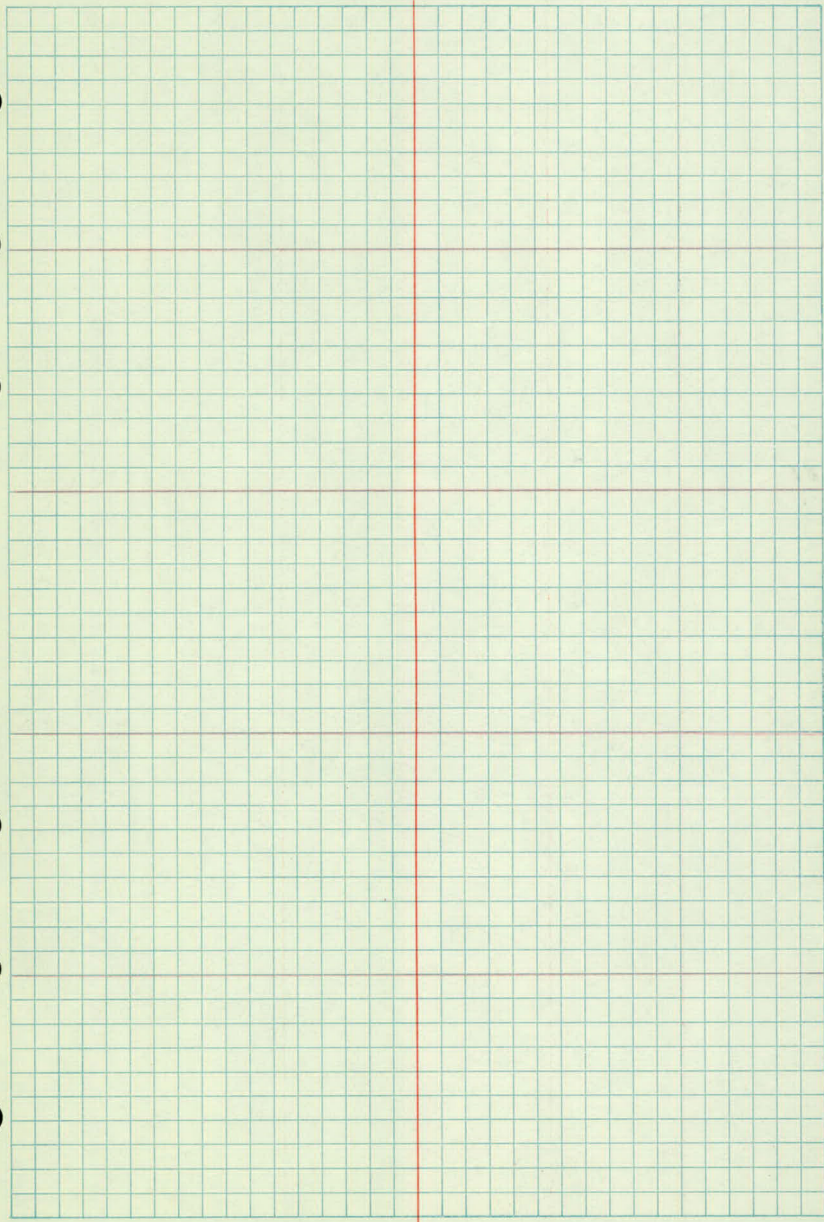


32

31

30

18  
~~14~~

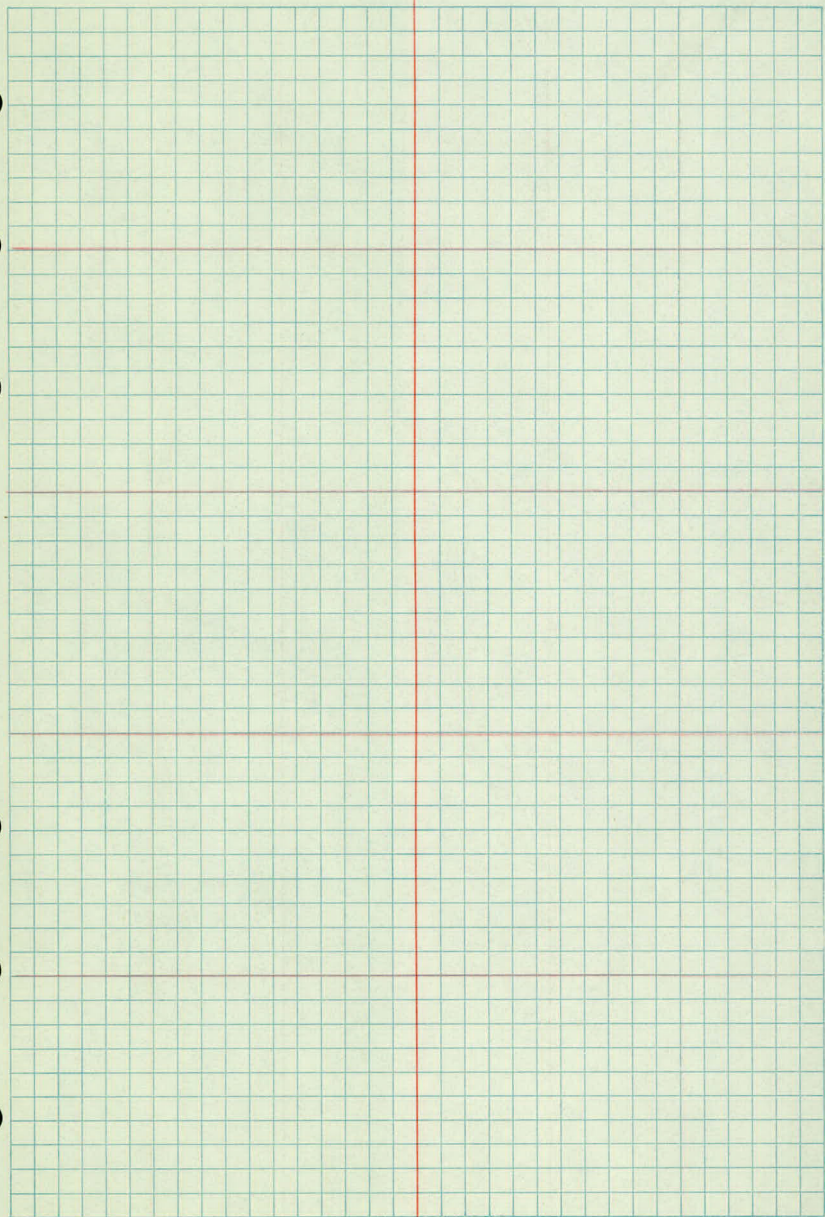


34

33

32

14  
15

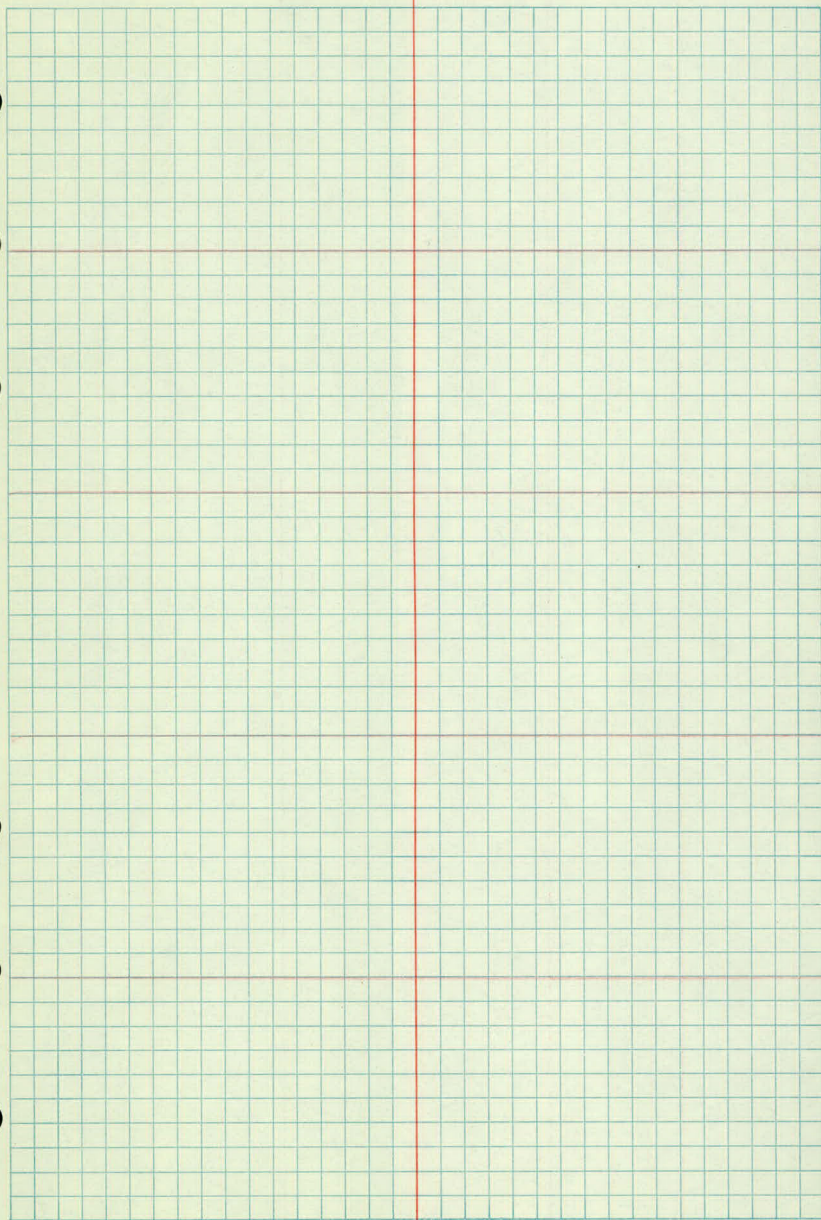




37

36

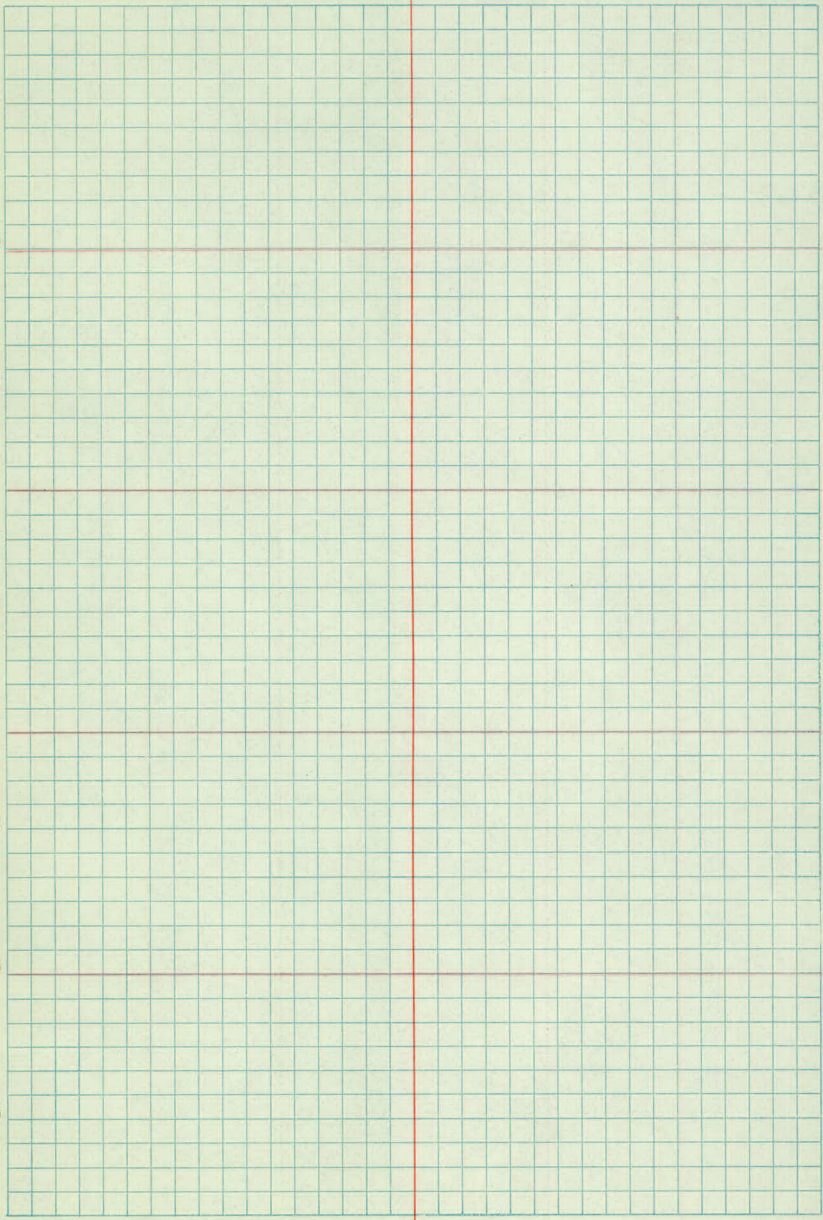
35



39

38

37



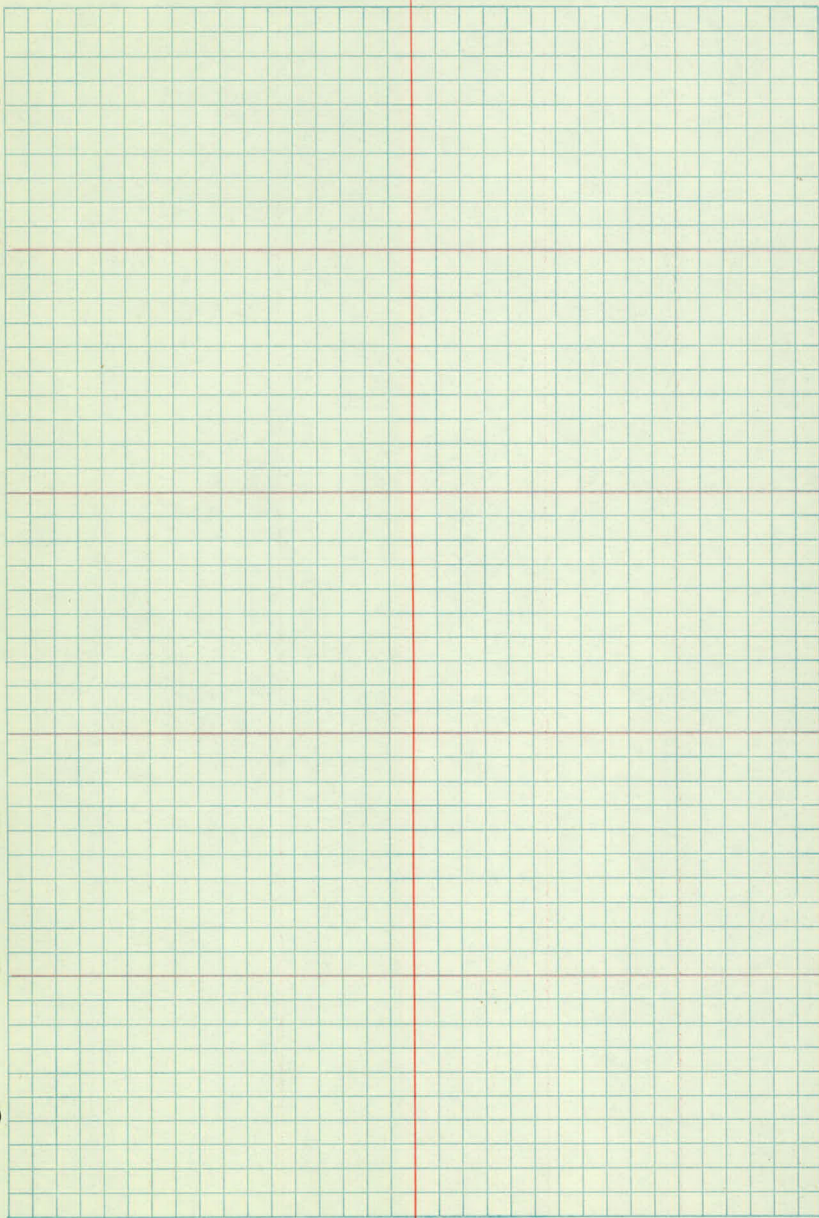


42

41

40

22  
18

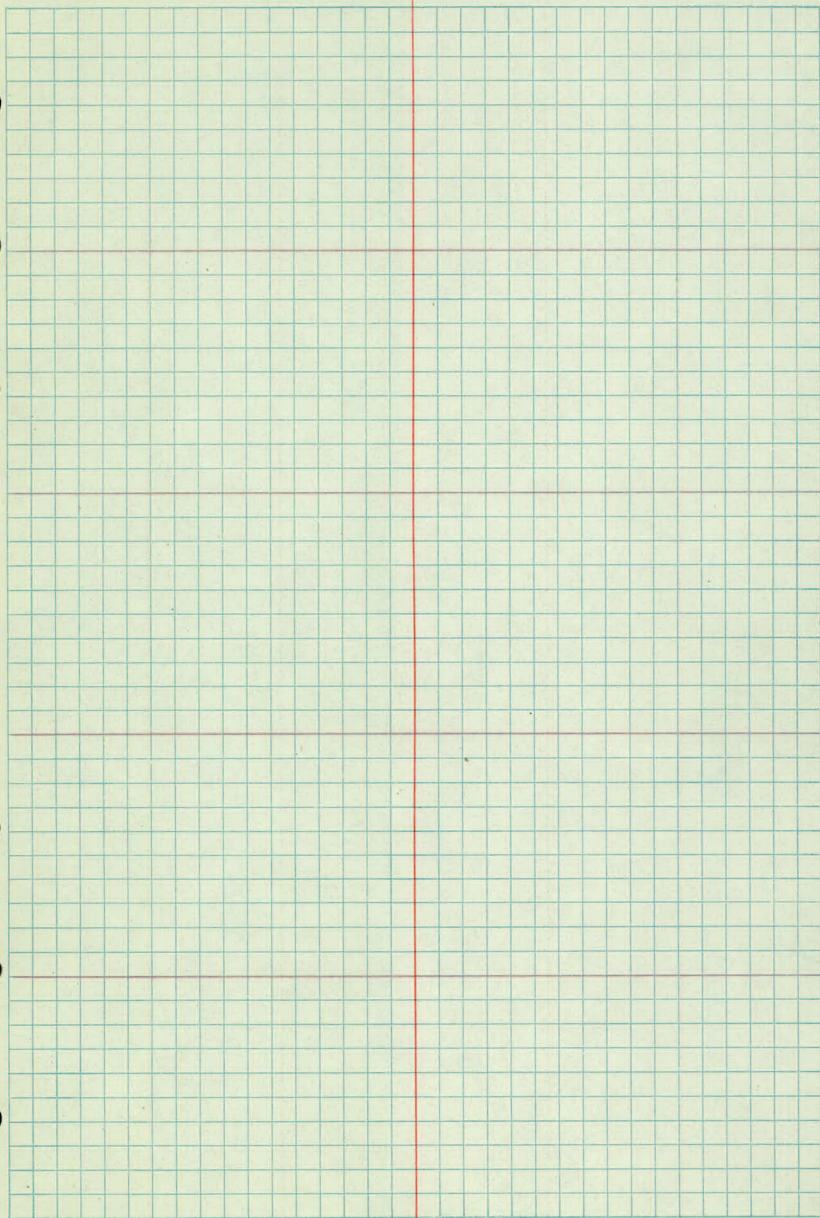


44

43

42

23  
19





47

$$+87 \frac{Tw \ 5\% off}{50}$$

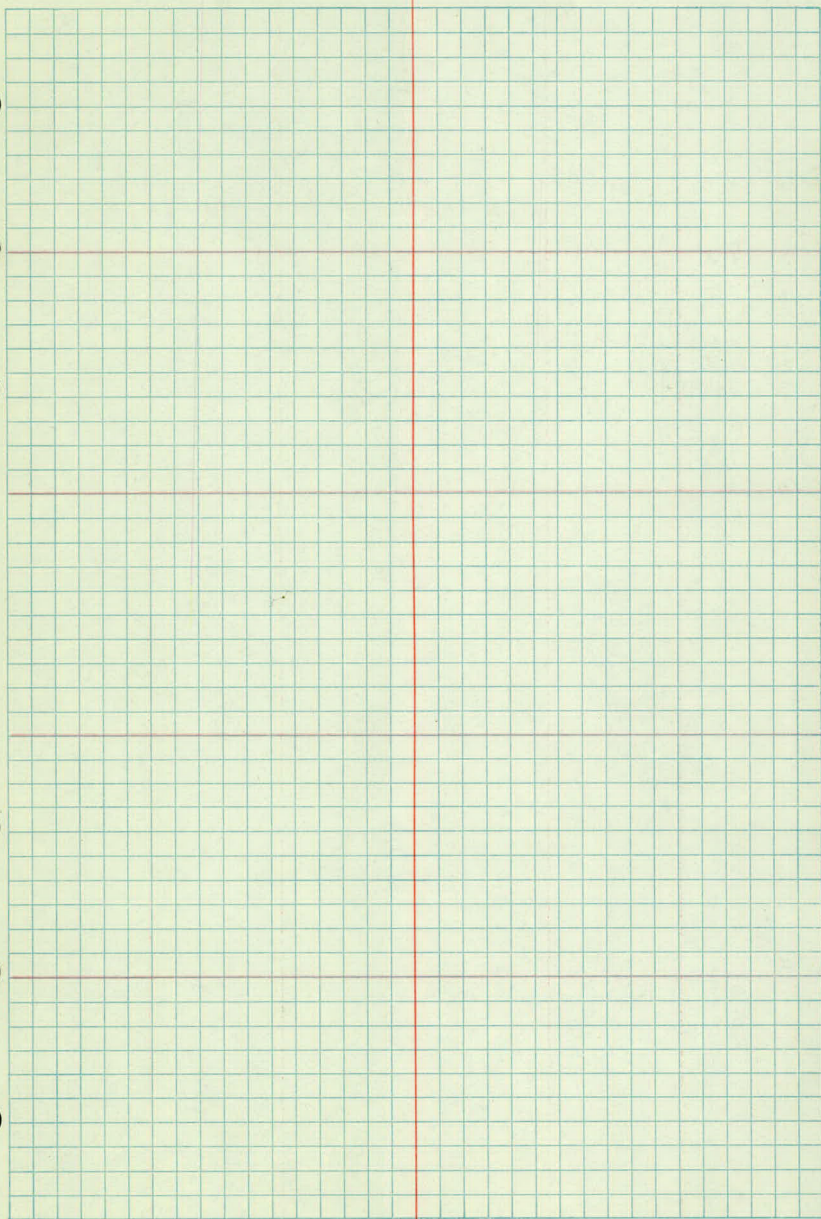
$$+82 \frac{12\% off}{45}$$

$$+46 \frac{12\% off}{77}$$

46

$$+42 \frac{10\% off}{51}$$

45



$$+50 \frac{4''P}{39}$$

$$+47 \frac{3''Birch}{48}$$

$$+21 \frac{5''Maple}{58}$$

$$+35 \frac{Bush}{28}$$

$$+40 \frac{2Ent}{22}$$

$$+20 \frac{5''Maple}{43}$$

$$+29 \frac{4CE}{48}$$

$$+12 \frac{S.E.CornHo}{77}$$

$$+14 \frac{B.Fe}{33}$$

$$+16 \frac{PP}{33}$$

$$+20 \frac{Ent}{42}$$

$$+49 \frac{K.Fe}{33}$$

$$+04 \frac{2Ent}{Gravel}$$

$$+9 \frac{Road}{12}$$

$$+08 \frac{6''P}{35}$$

$$+95 \frac{K.Fe}{33}$$

$$+99 \frac{Hedge}{44}$$

$$+95 \frac{Oak}{39}$$

$$+94 \frac{PP}{28}$$

$$+78 \frac{3''P}{38}$$

$$+89 \frac{4''P}{37}$$

$$+71 \frac{Tw4CE}{38}$$

$$+43 \frac{24''Oak}{39}$$

$$+62 \frac{4CE}{38}$$

$$+67 \frac{5TP}{26}$$

$$+39 \frac{B.Fe}{33}$$

$$+41 \frac{5TP}{26}$$

$$+09 \frac{10''Cott}{55}$$

$$+31 \frac{2Ent}{Gravel}$$

$$+31 \frac{Oak}{44}$$

$$+30 \frac{Woods}{44}$$

$$+04 \frac{10''Cott}{40}$$

48

$$+103 \frac{10''Cott Road}{54 \quad 8 \quad 13}$$

$$+60 \frac{Woods}{60}$$

$$+93 \frac{6''Cott}{63}$$

$$+58 \frac{12''Cott}{42}$$

$$+36 \frac{12''Cott}{28}$$

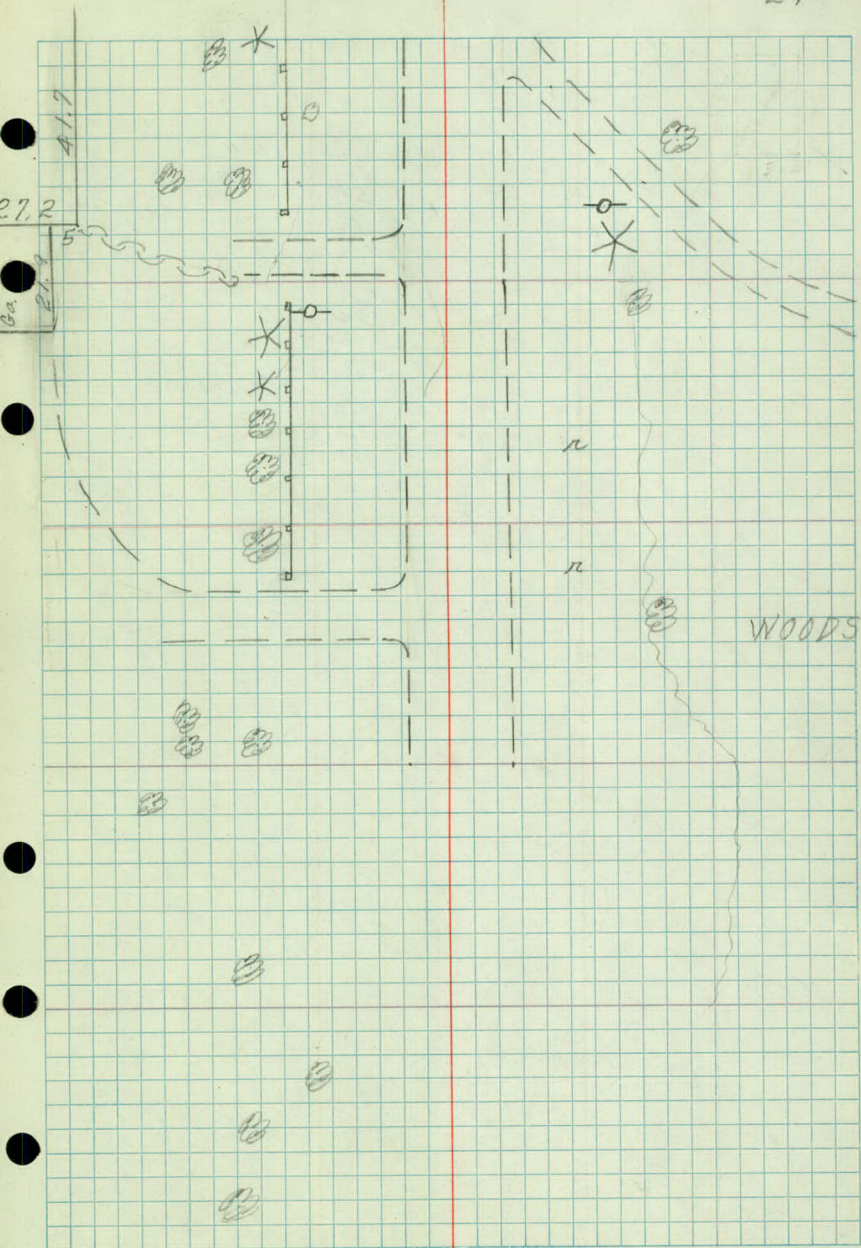
$$+25 \frac{6''Cott}{42}$$

$$+09 \frac{6''Cott}{44}$$

47

Dec. 14, 1967

24  
2+





52

14 8

+

✓ 6" SM  
+49 41

✓ 4" O  
+79 22

✓ 10" P  
+85 36

✓ 8" P  
+92 42

✓ 5" P  
+67 22

✓ 8" P  
+67 35

✓ 3" P  
+76 35

✓ 6" P  
+53 52

✓ 4" P  
+58 36

✓ 6" P  
+58 46

✓ 2" P  
+43 34

✓ 6" P  
+50 35

✓ 6" P  
+52 45

✓ E. Cedars  
+18 30

✓ 3" P  
+32 52

✓ E. Lilac  
+44 46

✓ 4" P  
+14 54

✓ 4" P  
+20 44

✓ 4" P  
+22 53

✓ 6" O  
+14 22

✓ 5" P  
+15 20

✓ 4" P  
+14 48

51

✓ S.E. Cor. Ho.  
+02 89

9 11

✓ E. Lilac  
+08 35

✓ Hedge  
29

+10

✓ E. Ent  
+79 Gravel

✓ 24" O  
+72 62

✓ 6" P  
+98 36

✓ 4-6" O  
+90 32

+12

✓ Oak  
+57 30

+14

✓ PP  
+68 26

✓ E. Wall  
+48 26

✓ E. Wall  
+56 26

✓ E. Ent  
+24 Dirt

✓ 6" Ash  
+07 52

✓ 16" Oak  
+23 55

✓ S.W. Cor. Ho  
+12 83

50

✓ 4" Wall  
+96 15

✓ Road  
8 12

✓ 16" P  
+99 40

✓ B. Cedar Hedge  
+00 32

+96

✓ S.E. Cor. Ho.  
+70 78

✓ 18" O  
+91 49

✓ 4" O  
+94 36

✓ 4" P  
+58 35

✓ 4" P  
+58 46

✓ E. Fe  
+63 33

✓ 24" O  
+62 54

✓ Oak  
+73 35

✓ S.W. Cor. Ho  
+74 62

✓ Bush  
+51 28

✓ 3" P  
+56 55

✓ Lilac  
+53 52

✓ Lilac  
+53 52

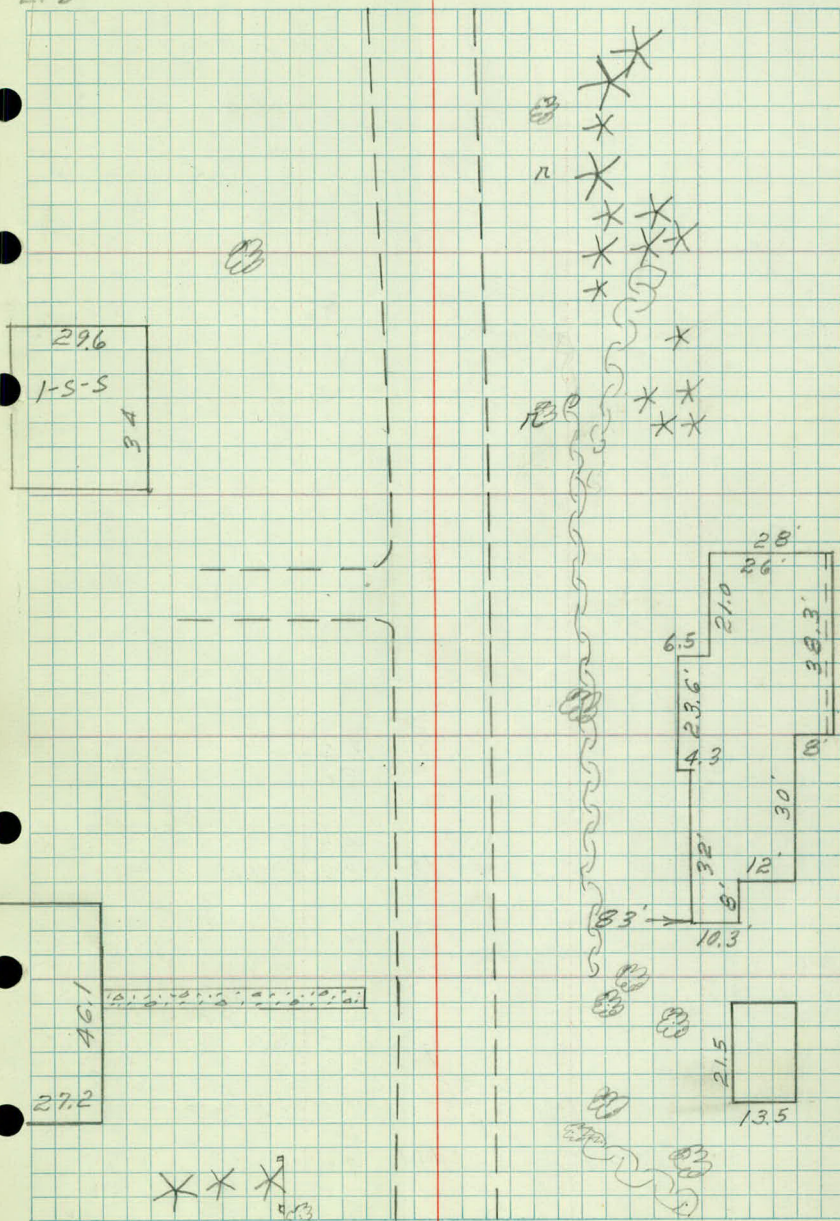
✓ Lilac  
+53 52

✓ Lilac  
+68 27

FK  
WM  
LPD

Dec. 15, 1967

25  
~~22~~



53

$$+75 \frac{GP}{32}$$

+52 BR  
43

$$\begin{array}{r} + 74 \text{ ER} \\ \hline 22 \end{array}$$

平

471  $\frac{BRC}{26}$

+24 Hedge 35

$$+17 \frac{6P}{50}$$
$$\begin{array}{r} 17 \\ + 17 \\ \hline 34 \end{array}$$

+46 Cor B. it  
24

$\int 10^u du$

417 BR  
8

$$\begin{array}{r} 10 \overline{) 88} \\ \underline{58} \end{array}$$

701 107  
48

401  $\frac{10^{12}}{35}$

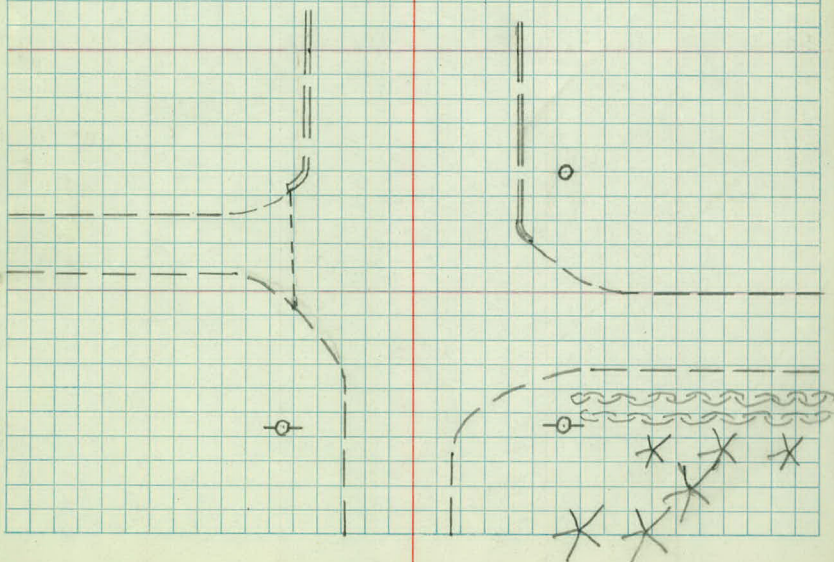
20

52

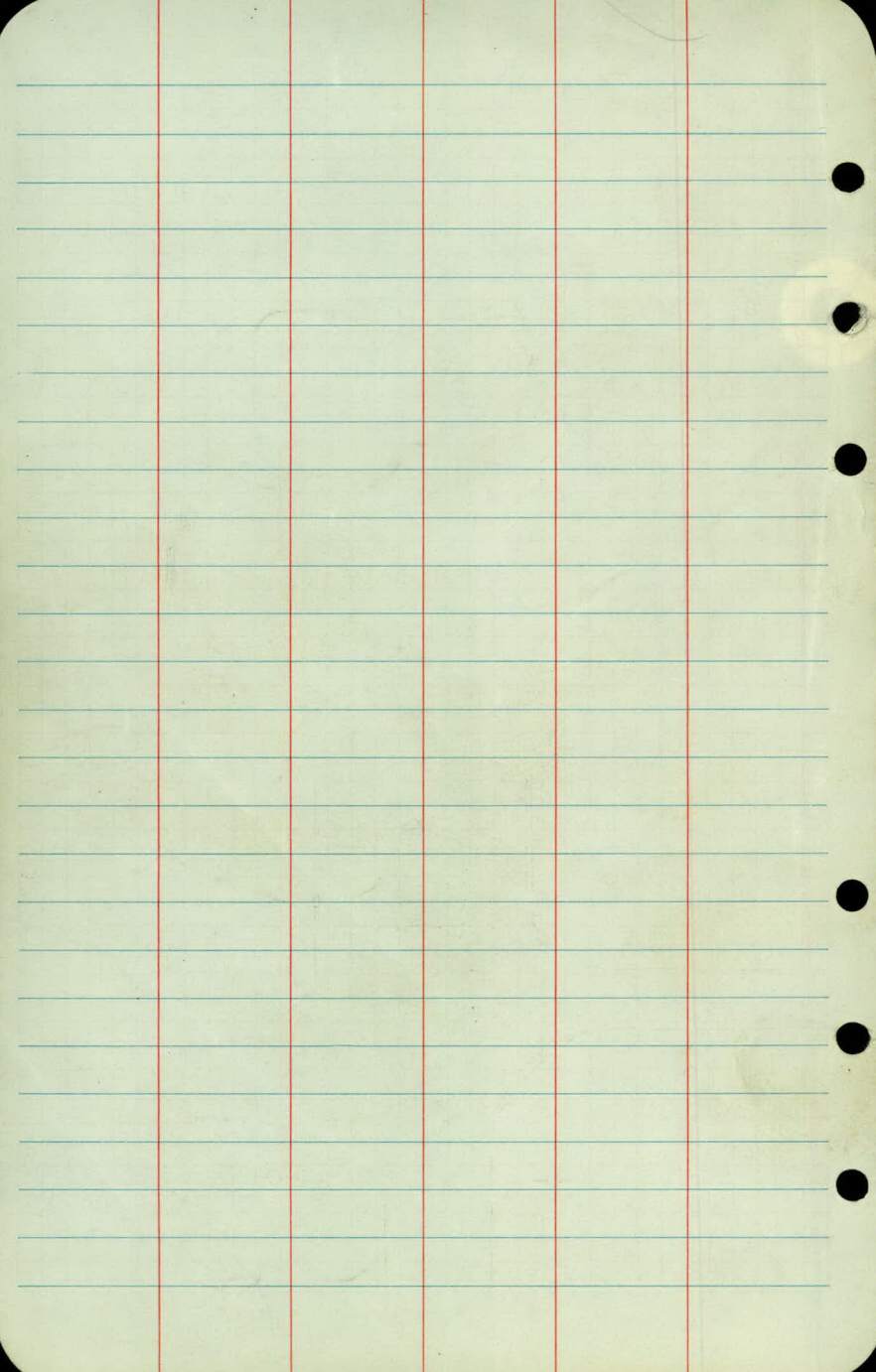


Dec. 15, 1967

23<sup>26</sup>









FK  
WM  
DM  
WF

OBJECT

AZ

STADIA

To at Sta 36+00

0°00'

To Sta 38+00

200'

Angle Pt

30°30' 1.95

To at Angle Pt, N. Edge of Dr. 210°30' 1.96'

N.E. Cor. Parking Lot 86°50' 2.96'

± Ent at W. Edge Parking Lot 85°30' 2.58

± Ent. 83°50' 2.16

± Ent. 83°00' 1.67

± Ent 83°40' 1.16

± Ent 84°00' .62

± Ent 120°00' .10

± Ent 219°10' .33

FX  
WM  
WF DIST  
DM

VERT. ROD June 18, 1968 28  
ANGLE EQUID ROD DIFF ELEV

H.I. = 884.6 H.I. = 5.5  
10.99  
979.1  
973.6  
973.6

193 +6°38' +22.4 2.0 +20.4 1005.00

H.I. = 910.2 1005.00

-5°59' +20.4 h.i. = 5.15  
11.0 31.4 979.1  
978.80

+7°57' +40.6 10.0 +30.6 1040.8

+6°47' +30.4 2.0 +28.4 1038.6

+6°47' +25.4 1.8 +23.6 1033.8

+6°28' +18.7 1.0 +17.7 1027.9

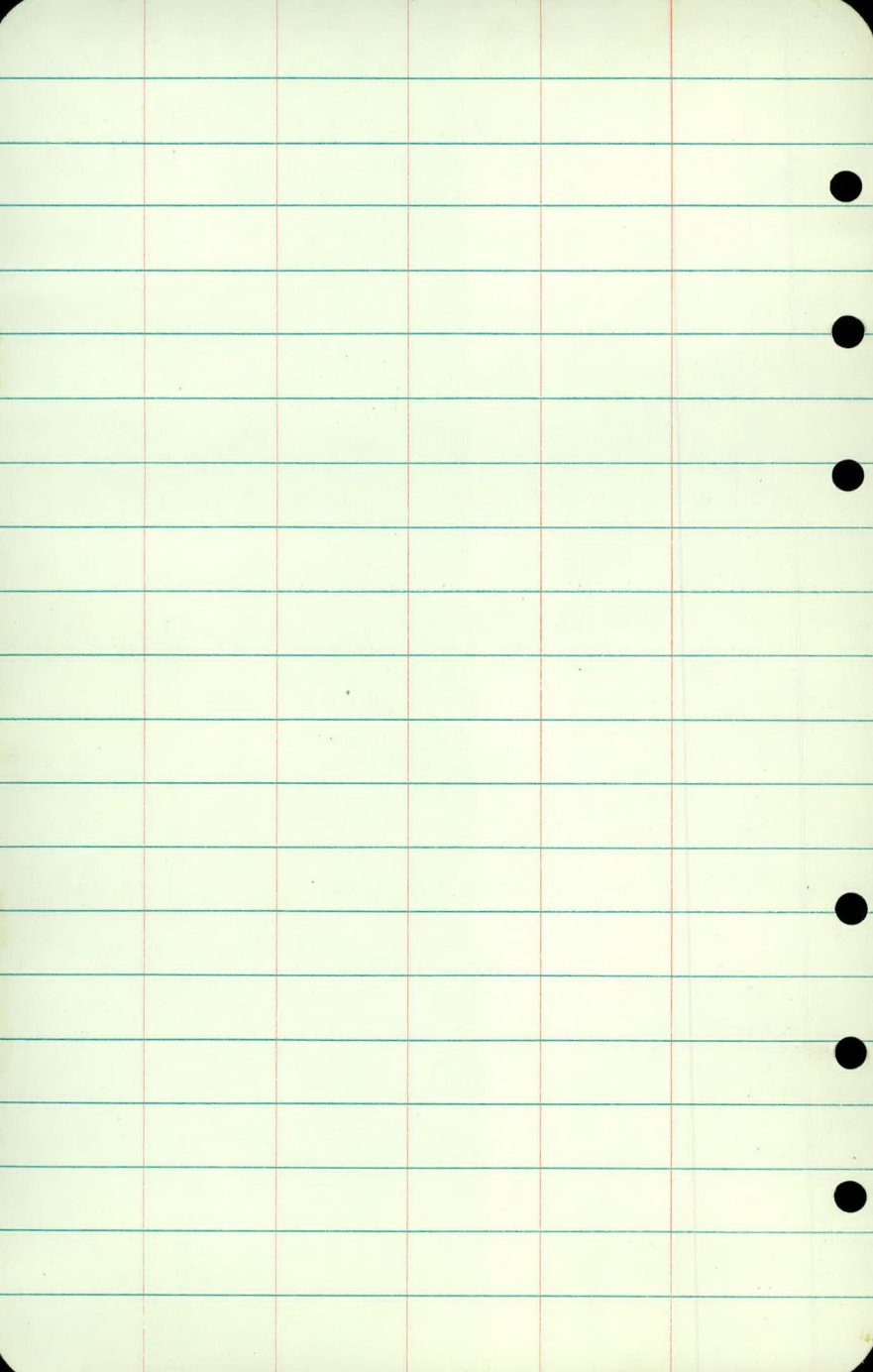
+6°06' +12.3 1.0 +11.3 1021.8

+4°17' +4.6 1.0 +3.6 1013.8

— 4.0 1006.2

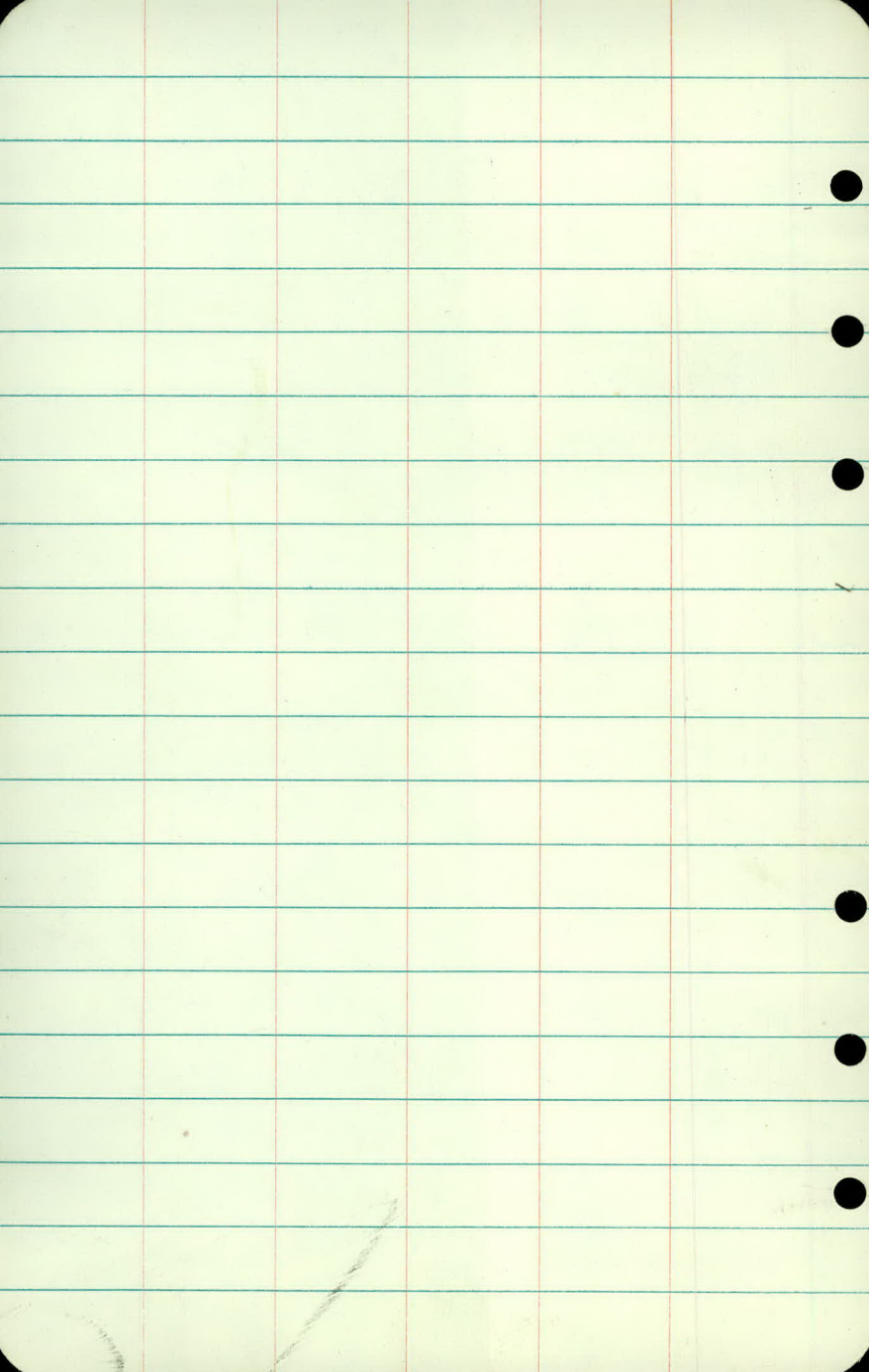
— 9.8 1000.4





# Locations from Monument at intersection of McKnight & Highwood

|                |                 |
|----------------|-----------------|
| 36' W + 29' N  | GP ✓            |
| 37' W + 21' S  | PP ✓            |
| 43' W + 22' S  | 6" Pine ✓       |
| 19' E + 39' N  | TP ✓            |
| 34' E + 41' S  | Tell. Post ✓    |
| 79' E + 31' N  | 26" Oak ✓       |
| 130' E + 19' S | PP ✓            |
| 204' E + 41' N | 16" Oak Dying ✓ |
| 292' E + 18' S | PP ✓            |



FK  
WM  
WS  
DM

May 22, 1968

30

New X-Sections



| Sta | + | $\pi$ | - | Elev |
|-----|---|-------|---|------|
|-----|---|-------|---|------|

|    |      |        |  |        |
|----|------|--------|--|--------|
| BM | 0.33 | 927.90 |  | 927.57 |
|----|------|--------|--|--------|

|        |      |        |      |        |
|--------|------|--------|------|--------|
| T.P. 1 | 0.04 | 918.26 | 9.68 | 918.22 |
|--------|------|--------|------|--------|

|        |      |        |       |        |
|--------|------|--------|-------|--------|
| T.P. 2 | 1.74 | 907.38 | 12.62 | 905.64 |
|--------|------|--------|-------|--------|

|    |  |  |      |        |
|----|--|--|------|--------|
| BM |  |  | 7.52 | 899.86 |
|----|--|--|------|--------|

|        |      |        |       |        |
|--------|------|--------|-------|--------|
| T.P. 3 | 0.77 | 895.32 | 12.83 | 894.55 |
|--------|------|--------|-------|--------|

|    |  |  |      |        |
|----|--|--|------|--------|
| BM |  |  | 7.25 | 888.07 |
|----|--|--|------|--------|

|        |      |        |       |        |
|--------|------|--------|-------|--------|
| T.P. 4 | 2.57 | 885.89 | 12.00 | 883.32 |
|--------|------|--------|-------|--------|

|      |            |  |  |  |
|------|------------|--|--|--|
| 0+00 | E Highwood |  |  |  |
|------|------------|--|--|--|

|     |          |  |  |  |
|-----|----------|--|--|--|
| +12 | Edge Bit |  |  |  |
|-----|----------|--|--|--|

|     |  |  |  |  |
|-----|--|--|--|--|
| +22 |  |  |  |  |
|-----|--|--|--|--|

✓

Highwood to Mailand 31  
 May 22, 1968 34  
 Mo Knight RT

LT

927.57 R.R. Spike in 24' Oak Rt Sta 5+65

Spike in P.P. Rt Sta 4+45

Small stone

Spike in TP 22' Rt Sta 2+48

Hatchet

R.R. Spike In 26" Oak E.N.E. Corner Highwood

Top Guard rail Post

| 72.3 | 73.1 | 74.5 | 76.1 | 78.0 | 79.1 | 80.4 | 82.4 | 83.9 | 85.6 |
|------|------|------|------|------|------|------|------|------|------|
| 13.6 | 12.8 | 11.4 | 9.8  | 7.86 | 6.8  | 5.5  | 3.5  | 2.0  | 0.3  |
| 80   | 68   | 50   | 32   | MH   |      | 15   | 38   | 55   | 74   |
|      |      |      |      | 11   |      |      |      |      |      |

| 72.6 | 73.8 | 75.7 | 77.5 | 79.0 | 80.5 | 82.1 | 83.9 | 85.5 |
|------|------|------|------|------|------|------|------|------|
| 13.3 | 12.1 | 10.2 | 8.4  | 6.9  | 5.4  | 3.8  | 2.0  | 0.4  |
| 74   | 57   | 39   | 17   |      | 17   | 35   | 55   | 74   |

| 73.7 | 75.3 | 76.7 | 77.9 | 79.0 | 79.7 | 80.2 | 80.6 | 80.4 |
|------|------|------|------|------|------|------|------|------|
| 12.2 | 10.6 | 9.2  | 8.0  | 6.9  | 6.2  | 5.7  | 5.3  | 5.5  |
| 56   | 43   | 27   | 14   |      | 9    | 21   | 23   | 31   |

77.6  
 14.3  
 73

85.0 87.8 89.5 90.6  
 0.9 2.1 3.4 5.3  
 69 53 40 39

| Sta | + | $\pi$ | - | Elev. |
|-----|---|-------|---|-------|
|-----|---|-------|---|-------|

|  |  |        |  |  |
|--|--|--------|--|--|
|  |  | 885.89 |  |  |
|--|--|--------|--|--|

|      |  |  |  |  |
|------|--|--|--|--|
| 0+33 |  |  |  |  |
|------|--|--|--|--|

|   |  |  |  |  |
|---|--|--|--|--|
| ✓ |  |  |  |  |
|---|--|--|--|--|

|     |  |  |  |  |
|-----|--|--|--|--|
| +60 |  |  |  |  |
|-----|--|--|--|--|

|   |  |  |  |  |
|---|--|--|--|--|
| ✓ |  |  |  |  |
|---|--|--|--|--|

|   |  |  |  |  |
|---|--|--|--|--|
| / |  |  |  |  |
|---|--|--|--|--|

|   |  |  |  |  |
|---|--|--|--|--|
| ✓ |  |  |  |  |
|---|--|--|--|--|

May 22, 1968

32  
35

LT.

RT.

| 12.4 | 14.1 | 16.2 | 17.2 | 18.2 | 19.1 | 19.5 | 19.7 | 19.9 | 19.5 |
|------|------|------|------|------|------|------|------|------|------|
| 13.5 | 11.8 | 9.7  | 8.7  | 7.7  | 6.8  | 6.4  | 6.2  | 6.0  | 6.4  |
| 60   | 37   | 35   | 24   | 14   |      | 8    | 14   | 18   | 26   |

| 85.4 | 84.2 | 82.8 | 79.9 |
|------|------|------|------|
| 0.5  | 1.7  | 3.1  | 6.0  |
| 66   | 55   | 44   | 39   |

| 13.6 | 15.3 | 17.4 | 18.9 | 19.5 | 20.1 | 20.4 | 20.3 | 19.9 | 19.6 |
|------|------|------|------|------|------|------|------|------|------|
| 12.3 | 10.6 | 8.5  | 7.0  | 6.4  | 5.8  | 5.5  | 5.6  | 6.0  | 6.3  |
| 30   | 25   | 22   | 19   | 14   |      | 8    | 14   | 26   | 35   |

| 12.8 | 13.6 | 11.7 | 85.1 | 82.9 | 79.9 |
|------|------|------|------|------|------|
| 13.1 | 12.3 | 14.2 | 0.8  | 3.0  | 6.0  |
| 40   | 51   | 64   | 60   | 48   | 42   |

| 16.0 | 17.1 | 18.0 | 18.4 | 18.0 | 18.9 | 18.4 | 18.0 | 18.3 |
|------|------|------|------|------|------|------|------|------|
| 9.9  | 8.8  | 3.9  | 3.5  | 2.9  | 3.0  | 3.5  | 5.9  | 5.6  |
| 46   | 26   | 18   | 14   |      | 9    | 13   | 18   | 35   |

| 14.9 | 17.7 |
|------|------|
| 11.0 | 8.2  |
| 64   | 75   |

| 18.2 | 18.2 | 18.3 |
|------|------|------|
| 2.7  | 5.7  | 5.6  |
| 74   | 63   | 50   |



Sta +  $\pi$  - Elev

885.89

+28

✓

TP 12.89 897.46 1.32 884.57 Rock

12.89

4.75

8.1

+58

✓

2

✓

Lt.

May 22, 1968 33  
RT 36

| 81.2 | 84.8 | 85.1 | 85.6 | 85.2 | 84.9 | 80.9 | 80.7 |
|------|------|------|------|------|------|------|------|
| 4.7  | 4.1  | 0.8  | 0.3  | 0.7  | 1.0  | 5.0  | 5.2  |
| 25   | 18   | 15   |      | 8    | 13   | 20   | 40   |

| 80.1 | 80.5 | 81.6 | 83.9 | 80.9 | 81.2 |
|------|------|------|------|------|------|
| 5.8  | 5.4  | 4.3  | 2.0  | 5.0  | 4.7  |
| 34   | 42   | 58   | 75   | 75   | 60   |

| 85.4 | 85.3 | 87.7 | 88.3 | 86.7 | 86.2 | 87.6 | 86.4 | 81.6 |
|------|------|------|------|------|------|------|------|------|
| 12.1 | 12.2 | 9.8  | 9.2  | 8.8  | 9.3  | 9.9  | 17.1 | 15.9 |
| 30   | 25   | 20   | 15   |      | 9    | 14   | 29   | 48   |

| 87.4 | 88.9 | 81.5    | 81.9 |
|------|------|---------|------|
| 10.1 | 8.6  | 16.0    | 15.6 |
| 35   | 41   | 80      | 70   |
|      | NG   | Crossed |      |

| 95.7 | 92.4 | 92.3 | 92.7 | 93.0 | 92.3 | 92.0 | 91.7 | 84.6 | 83.1 |
|------|------|------|------|------|------|------|------|------|------|
| 1.8  | 5.1  | 5.2  | 4.8  | 4.5  | 5.2  | 5.5  | 5.8  | 12.9 | 14.4 |
| 33   | 25   | 23   | 14   |      | 8    | 11   | 14   | 32   | 51   |

83.9  
13.6  
71

Sta +  $\pi$  - Elev.

897.46

2+35

✓

TP 12.78 908.88 1.36 896.10

BM

+65

BM

9.03 899.85

✓

+82 MH 11' Lt 7.96 900.92

3

✓

11.

May 22, 1968  
RT34  
37

| 97.5 | 95.9 | 96.3 | 96.4 | 95.9 | 96.2 | 94.9 | 92.4 |
|------|------|------|------|------|------|------|------|
| 0.0  | 1.6  | 1.2  | 1.1  | 1.6  | 1.3  | 2.6  | 5.1  |
| 25   | 23   | 14   |      | 9    | 13   | 18   | 31   |

87.8 90.1  
9.7 7.4  
66 48

| 04.6 | 99.8 | 99.5 | 99.3 | 99.0 | 98.9 | 98.3 | 99.7 |
|------|------|------|------|------|------|------|------|
| 4.3  | 9.1  | 9.4  | 9.6  | 9.9  | 10.0 | 10.6 | 9.2  |
| 28   | 24   | 14   |      | 8    | 12   | 18   | 21   |

Sp

92.8 96.6 97.9 99.1  
15.1 12.3 11.0 9.8  
55 42 35 27

| 02.7 | 05.9 | 02.8 | 02.8 | 02.9 | 02.6 | 02.3 | 04.2 | 03.5 |
|------|------|------|------|------|------|------|------|------|
| 0.2  | 3.0  | 6.1  | 6.1  | 6.0  | 6.3  | 6.6  | 4.7  | 5.4  |
| 30   | 25   | 23   | 13   |      | 8    | 14   | 20   | 33   |

95.5 98.8 01.1  
13.4 10.1 7.8  
71 55 45



Sta +  $\pi$  - Elev.

908.88

3+25

✓  
TP

11.24 908.72 1.40 907.48

+50

✓

+71

✓

Lt.

May 22, 1968 35  
RH 38

| 08.2 | 07.0 | 04.9 | 05.3 | 05.4 | 04.8 | 04.7 | 06.0 | 07.5 |
|------|------|------|------|------|------|------|------|------|
| 0.7  | 1.9  | 4.0  | 3.6  | 3.5  | 4.1  | 4.2  | 2.9  | 1.4  |
| 27   | 26   | 24   | 14   |      | 11   | 14   | 16   | 22   |

| 08.8 | 00.8 | 03.7 | 06.8 |
|------|------|------|------|
| 10.1 | 8.1  | 5.2  | 2.0  |
| 71   | 62   | 50   | 34   |

| 15.4 | 09.8 | 07.0 | 07.5 | 07.8 | 07.3 | 07.1 | 08.9 | 09.8 |
|------|------|------|------|------|------|------|------|------|
| 3.3  | 8.9  | 11.7 | 11.2 | 10.9 | 11.4 | 11.6 | 9.8  | 8.9  |
| 34   | 26   | 24   | 14   |      | 9    | 14   | 17   | 20   |

| 02.0 | 04.6 | 07.6 | 09.8 |
|------|------|------|------|
| 16.7 | 14.1 | 11.1 | 8.9  |
| 64   | 54   | 42   | 28   |

| 17.2 | 12.7 | 11.1 | 09.0 | 09.6 | 09.8 | 09.4 | 09.1 | 10.5 | 11.1 |
|------|------|------|------|------|------|------|------|------|------|
| 1.5  | 6.0  | 7.6  | 9.7  | 9.1  | 8.9  | 9.3  | 9.6  | 8.2  | 7.6  |
| 36   | 31   | 27   | 25   | 13   |      | 9    | 14   | 18   | 26   |

| 04.9 | 08.0 | 10.9 |
|------|------|------|
| 12.8 | 10.7 | 7.8  |
| 62   | 48   | 32   |

Sta +  $\pi$  - Elev.

918.72

4+00

✓

TP, 10.10 928.32 0.50 918.22

BM 11.57 929.14 0.75 927.57 (927.57)

4+50

✓

5

✓

BM 3.22 921.44 10.92 918.22 (918.22)

May 22, 1968

36  
39

17.

Rt

14.5

12.1

12.1

12.4

12.6

12.2

12.0

12.8

13.6

13.1

4.2

6.6

6.6

6.3

6.1

6.5

6.7

5.9

5.1

5.6

26

25

22

13

10

17

18

21

32

18.6

0.1

33

Spike in P.P.

05.1

09.1

13.6

9.6

72

54

R.R. Spike in 24" Oak Rt 15 Sta 5+70

17.8

17.4

16.1

16.8

17.0

16.5

15.8

18.0

19.1

11.3

11.7

13.0

12.3

12.1

12.6

13.3

11.1

10.0

31

26

25

13

10

17

20

22

25.9

3.2

43

12.6

15.4

16.7

17.7

16.5

13.7

12.4

11.4

58

45

37

29

28.6

21.5

19.9

21.0

21.2

20.6

20.2

22.7

22.1

20.0

0.5

7.6

9.2

8.1

7.9

8.5

9.1

6.4

7.0

8.4

36

26

24

13

10

19

24

25

36

15.3

17.8

138

113

66

54

Spike in T.P.



Sta      +       $\pi$       -      Elev.

921.44

2+65



Note

2+35



May 23, 1968

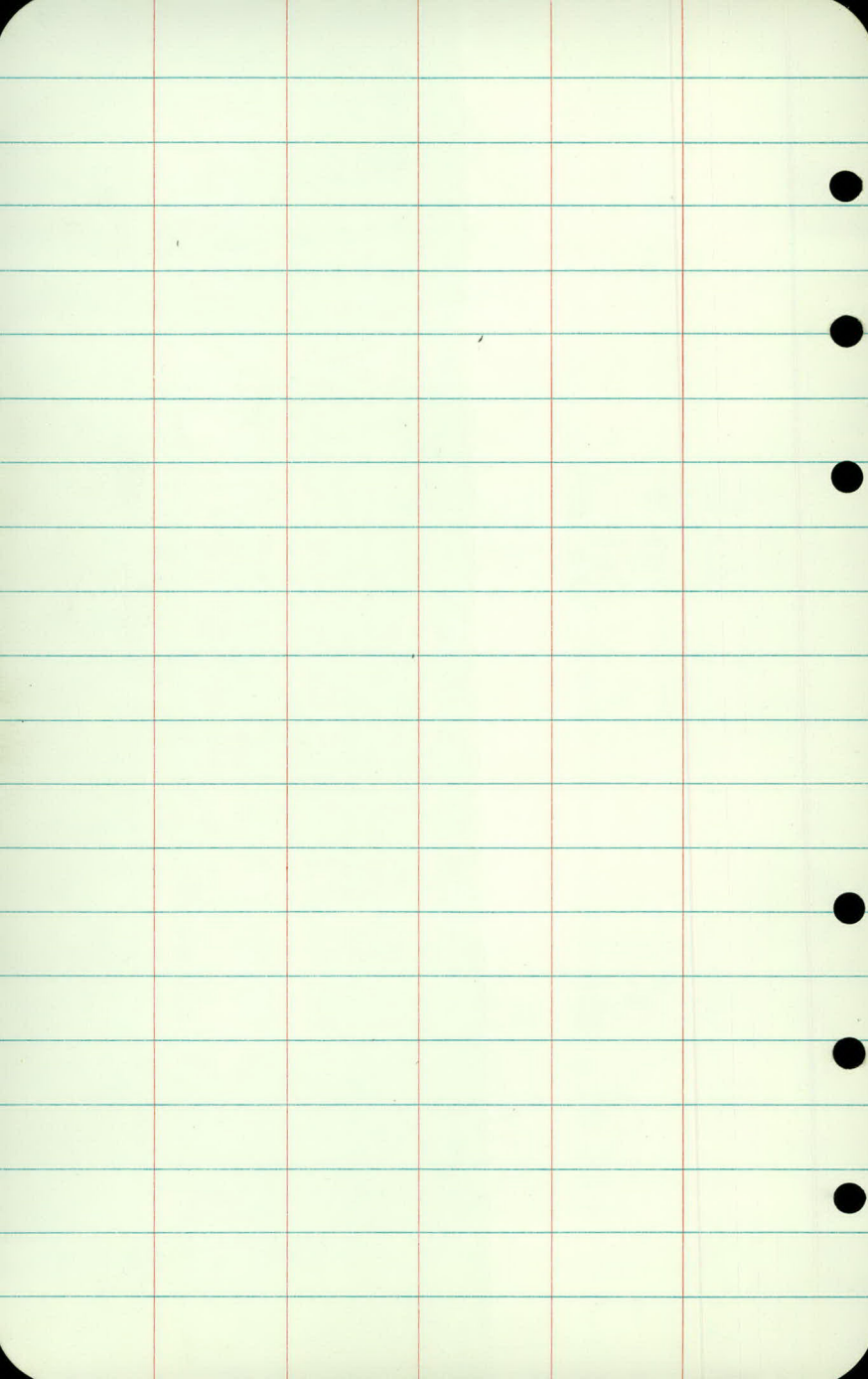
37

Lt

E

|      |      |      |      |      |
|------|------|------|------|------|
| 21.4 | 19.6 | 18.0 | 17.8 | 09.0 |
| 0.0  | 1.8  | 3.4  | 8.6  | 12.4 |
| 66   | 57   | 48   | 42   | 36   |

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 19.8 | 17.2 | 15.1 | 12.7 | 10.9 | 03.4 |
| 1.6  | 4.2  | 6.3  | 8.7  | 10.5 | 17.8 |
| 84   | 70   | 60   | 51   | 46   | 36   |



KP  
DS  
WS  
RB

19 JAN. 1968  
Sunny 30°

38  
~~28~~

Mc KNIGHT ROAD  
Highwood to Mailand Rd

X- Sections



| STA | +     | $\pi$  | - | ELEV  |
|-----|-------|--------|---|-------|
| BM  | 10.78 | 938.68 |   | 927.9 |

5420

✓

424

✓

156 - E Valley View PL

✓

LT

E

14 JAN. 1968

RT

39  
29

PK E STA 6+00 ✓

|      |      |      |      |      |      |       |      |
|------|------|------|------|------|------|-------|------|
| 26.3 | 22.1 | 21.9 | 22.6 | 22.8 | 22.2 | 21.7  | 23.9 |
| 12.4 | 16.6 | 16.8 | 16.1 | 15.9 | 16.5 | 17.0  | 14.8 |
| 34   | 24   | 19   | 12   |      | 11   | 19-21 | 25   |

DITCH

|      |      |      |      |  |      |      |
|------|------|------|------|--|------|------|
| 29.6 | 30.9 | 31.5 | 31.9 |  | 20.2 | 22.6 |
| 9.1  | 7.8  | 7.2  | 6.8  |  | 18.5 | 16.1 |
| 42   | 59   | 75   | 100  |  | 50   | 30   |

|      |      |      |      |      |      |      |       |      |
|------|------|------|------|------|------|------|-------|------|
| 26.2 | 25.1 | 24.0 | 22.5 | 22.8 | 23.4 | 23.0 | 21.9  | 23.7 |
| 12.5 | 13.6 | 14.7 | 16.2 | 15.3 | 15.3 | 15.7 | 16.8  | 15.0 |
| 100  | 74   | 43   | 23   | 12   |      | 11   | 19-21 | 24   |

DITCH

|      |      |
|------|------|
| 21.1 | 22.7 |
| 17.6 | 16.0 |
| 50   | 32   |

|      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|
| 26.0 | 25.3 | 25.0 | 24.9 | 25.0 | 25.2 | 24.9 | 24.1 | 24.6 | 24.8 |
| 12.7 | 13.4 | 13.7 | 13.8 | 13.7 | 13.5 | 13.8 | 14.6 | 14.1 | 13.9 |
| 100  | 75   | 50   | 26   | 11   |      | 11   | 19   | 23   | 50   |

|      |      |
|------|------|
| 28.9 | 33.6 |
| 9.8  | 5.1  |
| 150  | 200  |

STA

+

\*

-

ELEV.

938.68

5+72

✓

6+00

✓

422

✓

19 JAN. 1968 40  
RT 50

LT

E

| 25.8 | 25.5 | 25.7 | 26.3 | 26.2 | 25.7 | 25.2 | 26.2 | 27.3 |
|------|------|------|------|------|------|------|------|------|
| 12.9 | 13.2 | 13.0 | 12.4 | 12.5 | 13.0 | 13.5 | 12.5 | 11.4 |
| 79   | 59   | 32   | 12   |      | 12   | 17   | 31   | 50   |

| 26.8 | 26.7 | 26.9 | 26.2 | 27.7 | 27.9 | 27.4 | 26.2 | 28.8 | 28.6 |
|------|------|------|------|------|------|------|------|------|------|
| 11.9 | 12.0 | 11.8 | 12.5 | 11.0 | 10.8 | 11.3 | 12.5 | 9.9  | 10.1 |
| 84   | 63   | 38   | 20   | 11   |      | 11   | 18   | 23   | 36   |

30.1  
8.6  
50

| 30.0 | 29.0 | 29.4 | 28.0 | 28.7 | 29.0 | 28.8 | 28.3 | 31.4 | 31.7 |
|------|------|------|------|------|------|------|------|------|------|
| 8.7  | 9.7  | 9.3  | 10.7 | 10.0 | 9.7  | 9.9  | 10.4 | 7.3  | 7.0  |
| 75   | 50   | 31   | 20   | 11   |      | 11   | 15   | 22   | 31   |

32.0  
6.7  
50



STA

+

$\pi$

-

6+55

✓

6.72

931.9

LT

£

19 JAN 1968 41  
RT 34

| 33.5 | 33.6 | 33.8 | 29.5 | 30.1 | 30.5 | 30.4 | 30.0 | 33.8 | 33.8 | 34.2 |
|------|------|------|------|------|------|------|------|------|------|------|
| 5.2  | 5.1  | 7.9  | 9.2  | 8.6  | 8.2  | 8.3  | 8.7  | 4.9  | 4.9  | 4.5  |
| 45   | 30   | 21   | 15   | 10   |      | 11   | 14   | 22   | 35   | 50   |

32.4

6.3

75

£ STA 7+00

| STA | + | $\pi$ | - | Elev |
|-----|---|-------|---|------|
|-----|---|-------|---|------|

|    |      |        |  |  |
|----|------|--------|--|--|
| BM | 2.57 | 953.49 |  |  |
|----|------|--------|--|--|

950.92

26+00

27+00

28+00

29+00

+90 15" CM X- Drain

30+00

2.99

LT

E

19 JAN

196842

32

RT

McK. 9

SPIKE IN 18" OAK NW Cor LINWOOD E

50.46

3.03

49.16

4.33

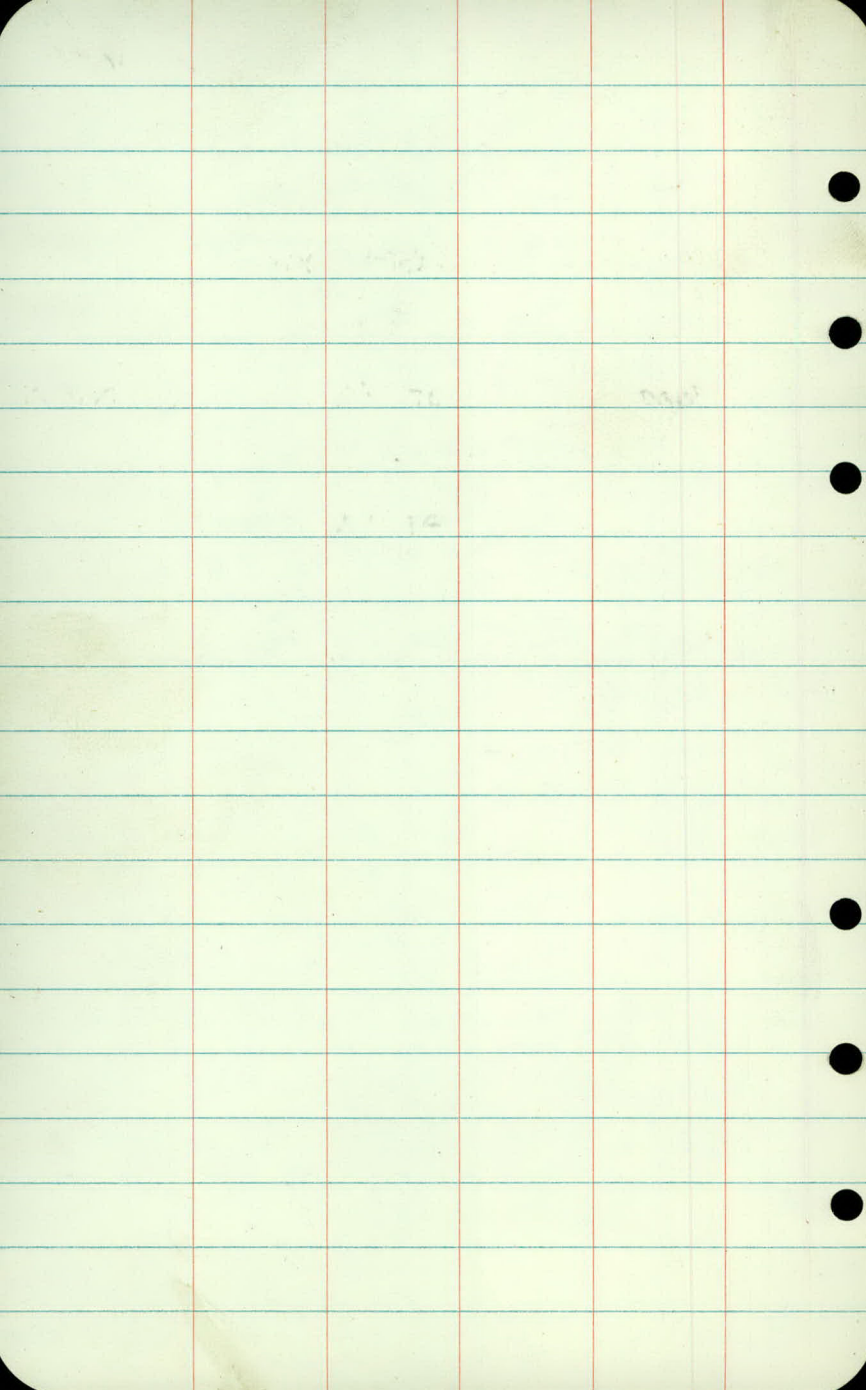
51.06

2.43

50.12

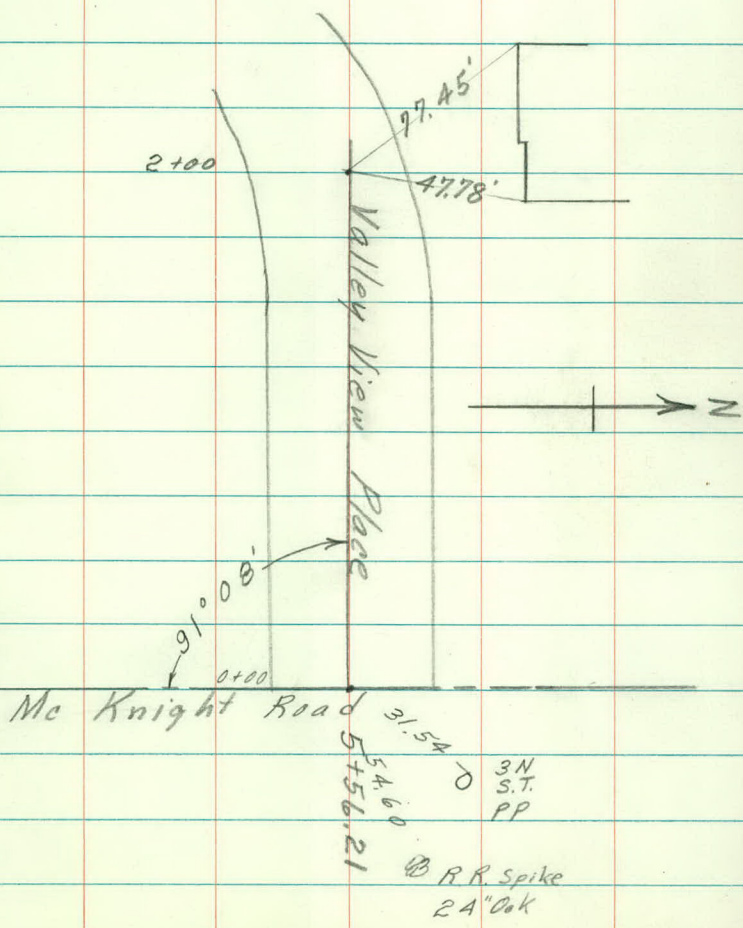
3.37





# VALLEY VIEW PLACE

Mc Knight to West 140'



Sta +  $\pi$  - Elev.

BM 5.43933.00

927.57

6+00 5.09 927.9

0+00  $\neq$  Mc Knight 7.82 25.2

0+50

1+00

+40

FK  
WM  
LPD

Lt

March 14, 1968  
Rt

44  
25

R.R. Spike in 24" Oak Rt Sta 5+65 Mc Knight

✓

| 30.1 | 30.5 | 24.2 | 24.7 | 23.8 | 24.7 | 24.8 | 25.2 | 25.8 | 26.5 | 26.8 |
|------|------|------|------|------|------|------|------|------|------|------|
| 29   | 25   | 8.8  | 8.3  | 9.2  | 8.3  | 8.2  | 7.8  | 7.2  | 6.5  | 6.2  |
| 50   | 37   | 29   | 18   | 16   | 8    |      | 15   | 18   | 31   | 50   |

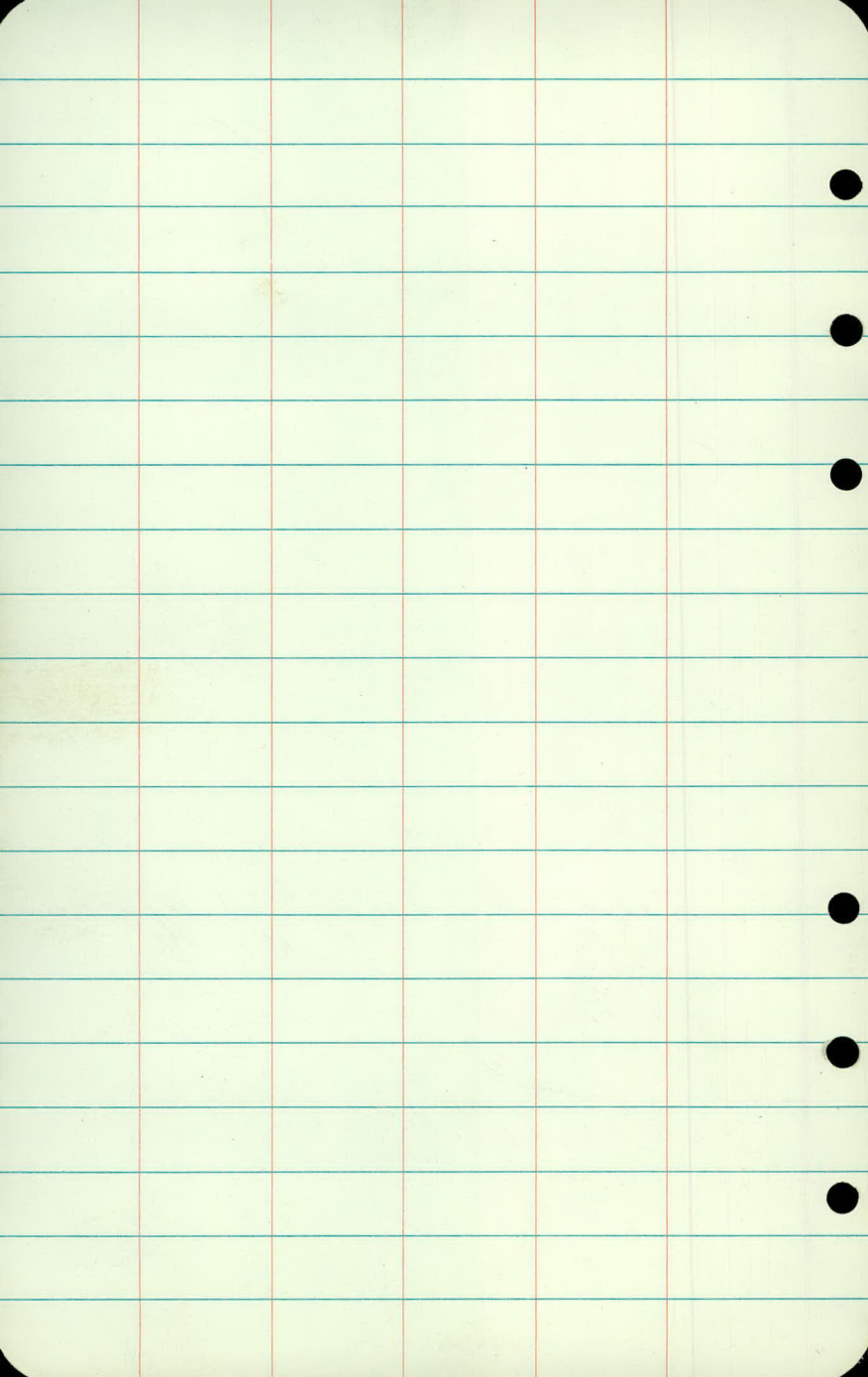
| 32.1 | 31.8 | 26.3 | 26.0 | 25.4 | 25.5 | 25.9 | 26.1 | 26.2 | 26.7 | 26.6 | 27.1 | 27.2 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0.9  | 1.2  | 6.7  | 7.0  | 7.6  | 7.5  | 7.1  | 6.9  | 6.8  | 6.3  | 6.4  | 5.9  | 5.5  |
| 50   | 39   | 31   | 20   | 17   | 11   |      | 11   | 16   | 18   | 32   | 48   | 50   |

| 29.3 | 28.9 | 27.7 | 27.9 | 28.1 | 28.0 | 27.9 | 28.6 | 28.7 | 29.7 |
|------|------|------|------|------|------|------|------|------|------|
| 3.7  | 4.1  | 5.3  | 5.1  | 4.9  | 5.0  | 5.1  | 4.4  | 4.3  | 3.8  |
| 31   | 21   | 17   | 10   |      | 10   | 16   | 19   | 39   | 50   |

31.8      32.4

→ 1.2      0.6  
35      50





May 22, 1968

42  
+

Highwood at Mc Knight

| Sta | +    | $\pi$  | - | Elev.  |
|-----|------|--------|---|--------|
| BM  | 0.78 | 888.85 |   | 888.07 |

2150  
50' E of  $\phi$  of McKnight

2170  
70' " " " " " "

2190  
90' " " " " " "

|      |      |        |       |        |                                 |
|------|------|--------|-------|--------|---------------------------------|
| T.P. | 1.56 | 879.59 | 10.82 | 878.03 | West Edge<br>M.H. 10' L to road |
|------|------|--------|-------|--------|---------------------------------|

1450  
50' West

1420  
80' West of  $\phi$  of McKnight

1400  
100' West

|      |     |   |              |       |        |        |
|------|-----|---|--------------|-------|--------|--------|
| 0496 | 104 | " | Top Headwall | 12.62 | 866.97 | 22' Lt |
|      | 104 | " | Inv 24" SCP  | 15.38 | 64.21  | North  |

FK  
WM  
WS  
DM

10  
1  
1  
3

May 22, 1968  
L (North) Beautiful Still Day

46  
2

R.R. Spike in 26" Oak E.N.E. Corner

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 81.6 | 83.1 | 83.3 | 83.6 | 83.5 | 83.9 |
| 7.3  | 5.8  | 5.6  | 5.3  | 5.4  | 5.0  |
| 75   | 59   | 38   | 17   | 11   |      |

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 87.3 | 85.7 | 85.6 | 85.2 | 85.2 | 85.3 |
| 1.6  | 3.2  | 3.3  | 3.7  | 3.7  | 3.6  |
| 62   | 42   | 23   | 21   | 11   |      |

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 88.7 | 88.2 | 87.4 | 86.6 | 86.8 | 86.8 | 86.9 |
| +0.2 | 0.7  | 1.5  | 2.3  | 2.1  | 2.1  | 2.0  |
| 63   | 42   | 23   | 20   | 16   | 11   |      |

|      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|
| 73.4 | 72.0 | 71.2 | 72.7 | 73.9 | 74.1 | 74.4 | 74.5 |
| 62   | 76   | 84   | 69   | 57   | 55   | 5.2  | 5.1  |
| 70   | 53   | 42   | 37   | 27   | 16   | 10   |      |

|      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|
| 70.5 | 70.4 | 69.6 | 68.5 | 68.6 | 68.9 | 71.7 | 72.1 | 72.3 |
| 9.1  | 9.2  | 10.0 | 11.1 | 11.0 | 10.7 | 7.9  | 7.5  | 7.3  |
| 48   | 43   | 39   | 33   | 30   | 25   | 16   | 9    |      |

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 69.8 | 69.1 | 67.4 | 66.5 | 70.6 | 70.8 | 71.0 |
| 9.8  | 10.5 | 12.2 | 13.1 | 9.0  | 8.8  | 8.6  |
| 49   | 38   | 33   | 21   | 14   | 9    |      |



Sta +  $\pi$  - Elev.

879.59

11.75

375

at 91  
109'

West Top Headwall 15.70 63.89 27' South

12.56

395

109'

South?

West Inv 24' SCP 16.51 63.08

0+00

W. Headwall

0.59

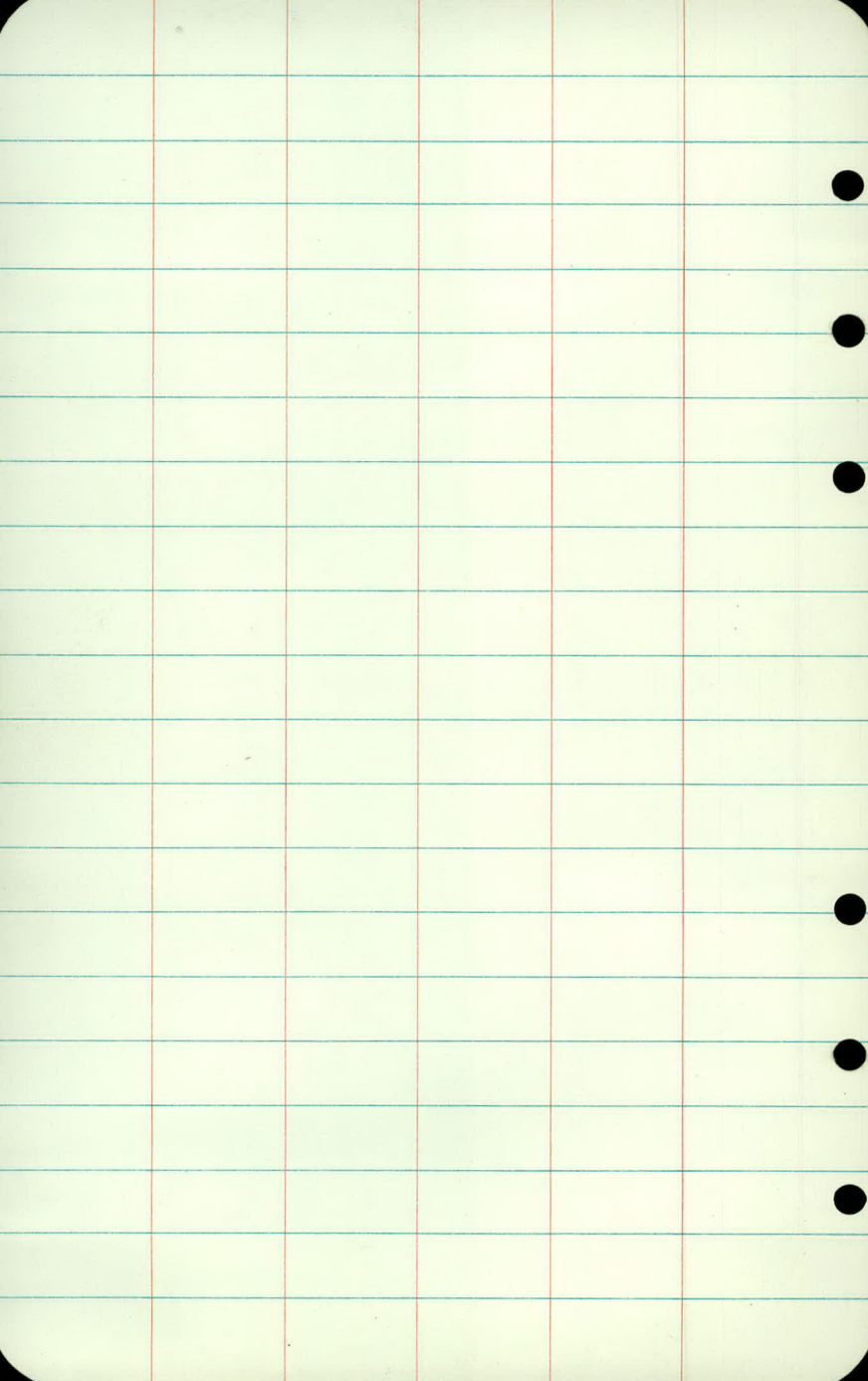
878.7

Continued for S. Side

May 22, 1968

47  
B

£ Mc Knight £ Highwood



Additional X-Sections

on

Highwood

S. Side

Sta +  $\pi$  - Elev

BM 1.18 889.25

888.07

2150  
50' East of McKnight

2170  
70' East of McKnight

2190  
90' " " " "

T.P. 0.51 878.54 11.22 878.03

W. Edge  
MH

1150  
50' West  $\angle$  of McKnight

1120  
80' West " " " "

1100  
100' W. " " " "

BM

3.29 895.25 875.25



FK  
GA  
DM

2

June 5, 1968  
R or South

49  
5

No Knight

RR Spike in 26" Oak NE Corner Highway &

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 83.5 | 83.3 | 82.3 | 8A.2 | 83.6 | 83.2 |
| 5.75 | 6.0  | 7.0  | 5.1  | 5.7  | 6.1  |
|      | 10   | 16   | 22   | 36   | 60   |

|      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|
| 85.3 | 85.0 | 8A.6 | 8A.9 | 8A.9 | 85.6 | 85.8 | 85.4 |
| 4.0  | 4.3  | 4.7  | 4.4  | 4.4  | 3.7  | 3.5  | 3.9  |
|      | 10   | 11   | 12   | 17   | 22   | 32   | 60   |

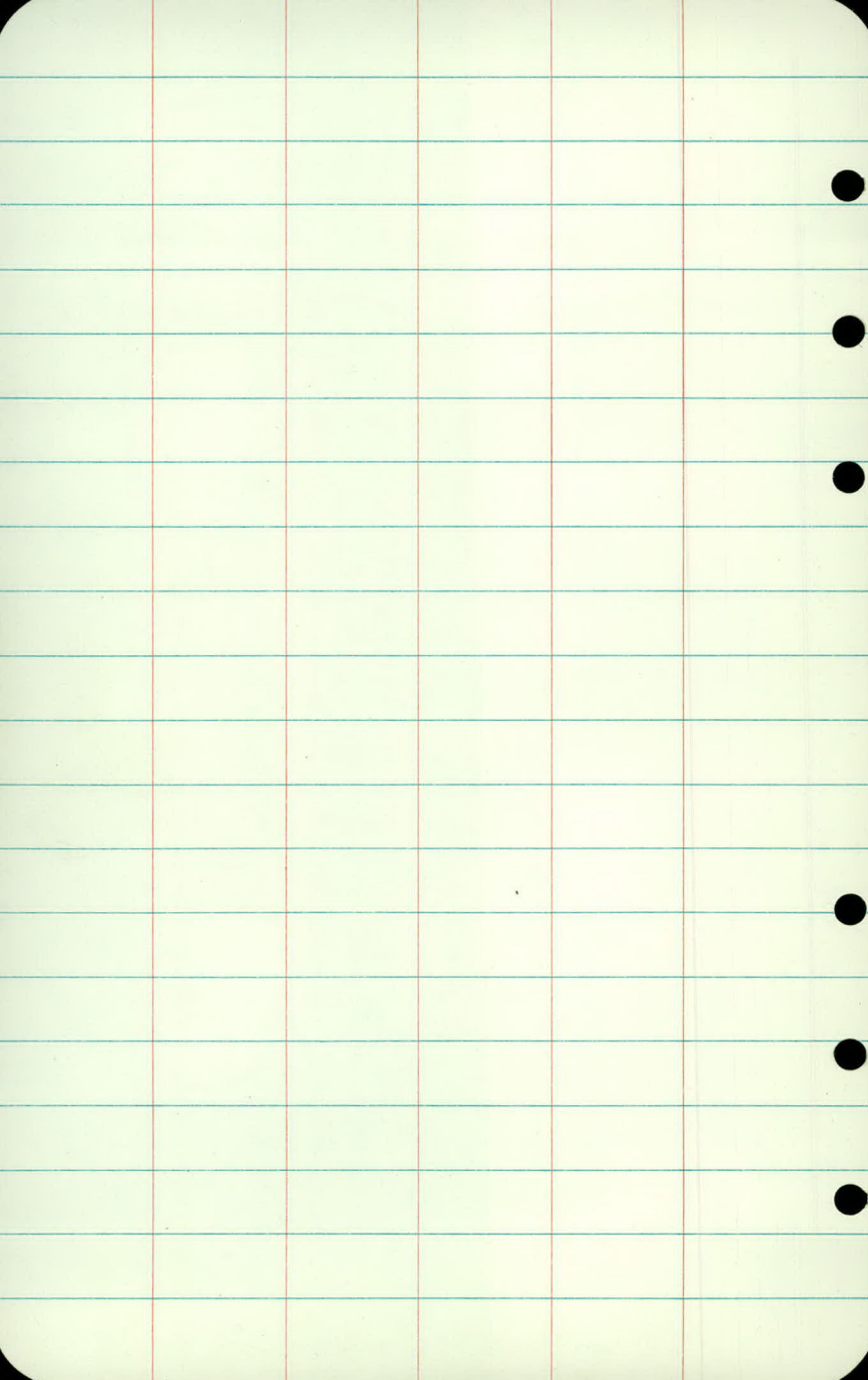
|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 87.0 | 87.0 | 86.7 | 86.7 | 87.9 | 87.7 | 87.7 |
| 2.3  | 2.3  | 2.6  | 2.6  | 1.4  | 1.6  | 1.4  |
|      | 9    | 12   | 16   | 22   | 37   | 60   |

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 7A.4 | 7A.3 | 7A.5 | 71.4 | 71.8 | 71.2 |
| 4.1  | 4.2  | 4.0  | 7.1  | 6.7  | 7.3  |
|      | 9    | 13   | 20   | 32   | 60   |

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 72.2 | 72.1 | 72.2 | 7A.7 | 72.3 | 60.5 |
| 6.3  | 6.4  | 6.3  | 13.8 | 16.2 | 18.0 |
|      | 11   | 14   | 29   | 43   | 50   |

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 70.9 | 70.6 | 71.2 | 66.2 | 63.2 | 61.8 | 60.2 |
| 7.6  | 7.9  | 7.3  | 12.3 | 15.3 | 16.7 | 18.3 |
|      | 12   | 15   | 22   | 30   | 44   | 56   |

Tap Culvert SW Corner Highway & McKnight



Mc Knight Road

| Sta | +    | $\pi$  | - | Elev   |
|-----|------|--------|---|--------|
| BM  | 0.97 | 889.04 |   | 888.07 |

47' S of Highway

✓

70' South of Highway

✓

100' South of Highway

|    |      |        |       |        |
|----|------|--------|-------|--------|
| BM | 0.52 | 875.76 | 13.80 | 875.24 |
|----|------|--------|-------|--------|

FK  
WM

June 4, 1968 51 +

West

East of Rt

R.R. Spike in Elm N.E. Corner Highwood

| 71.8 | 74.6 | 77.8 | 78.1 | 78.8 | 78.8 | 79.5 | 79.9 |
|------|------|------|------|------|------|------|------|
| 17.2 | 14.4 | 11.2 | 10.9 | 10.2 | 10.2 | 9.5  | 9.1  |
| 52   | 40   | 28   | 23   |      | 21   | 23   | 29   |

| 85.0 | 83.4 | 81.0 | 80.4 |
|------|------|------|------|
| 4.0  | 5.6  | 8.0  | 8.6  |
| 68   | 47   | 39   | 34   |

| 72.8 | 76.2 | 77.3 | 77.8 | 78.3 | 78.1 | 78.9 | 79.7 | 80.5 |
|------|------|------|------|------|------|------|------|------|
| 16.2 | 12.8 | 11.7 | 11.2 | 10.7 | 10.9 | 10.1 | 9.3  | 8.5  |
| 44   | 34   | 28   | 19   |      | 21   | 24   | 36   | 41   |

| 84.3 | 82.0 |
|------|------|
| 4.7  | 6.0  |
| 63   | 48   |

| 79.6 | 76.2 | 76.7 | 77.3 | 77.0 | 77.7 | 78.7 |
|------|------|------|------|------|------|------|
| 14.4 | 12.8 | 12.3 | 11.7 | 12.0 | 11.3 | 10.3 |
| 37   | 28   | 21   |      | 21   | 24   | 36   |

| 83.0 | 82.5 | 80.1 |
|------|------|------|
| 6.0  | 6.5  | 8.9  |
| 58   | 50   | 42   |

Top W.E. Culvert. S.W. Corner Highwood &amp; McKnight



Sta      +       $\pi$       -      Elev.

875.76

125' West of Mc Knight  $\pm$

✓  
150' West    "    "    "

200' West  $\pm$       11.1

Headwall N. Side      8.80      866.96      (866.97)

East From  $\pm$  Mc Knight

0+98    12" Pine 31.6' Lt

1+56    12" Pine 31.2' Lt

BM      11.93      900.00

888.07

3+00

1+00

South

June 4, 1968  
North

52  
2

| 61.2 | 62.8 | 68.6 | 68.9 | 69.3 | 69.3 | 69.0 | 67.9 | 68.6 |
|------|------|------|------|------|------|------|------|------|
| 146  | 130  | 72   | 6.9  | 6.5  | 6.5  | 6.8  | 2.9  | 72   |
| 43   | 29   | 18   | 10   |      | 11   | 16   | 24   | 33   |

73.6 69.7  
2.2 6.1  
50 41

| 63.0 | 65.7 | 67.3 | 67.4 | 67.7 | 67.6 | 67.1 | 67.7 | 72.7 |
|------|------|------|------|------|------|------|------|------|
| 12.8 | 10.1 | 8.5  | 8.4  | 8.1  | 8.2  | 8.7  | 8.1  | 3.1  |
| 43   | 30   | 19   | 10   |      | 13   | 20   | 30   | 40   |

Lf = North

Rf = South

R.R. Spike in E / m NE

| 89.4 | 88.2 | 87.4 | 87.6 | 87.6 | 87.6 | 87.6 | 89.2 |
|------|------|------|------|------|------|------|------|
| 10.6 | 11.8 | 12.6 | 12.4 | 12.4 | 12.4 | 12.4 | 10.8 |
| 40   | 24   | 20   | 12   |      | 9    | 16   | 22   |

90.3  
9.7  
58

88.7 88.7  
11.3 11.3  
62 41

Sta + \* - Elev

900.00

3+38  
1+38

3+76  
+76 E Ent Lt

✓

3+85  
+85 W. Edge Gutter Left

3+86  
+86 Bottom of 1' Bubble Gutter

3+87  
+87 Top of Wall

✓

June 4, 1968 53  
RT

LT

|      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|
| 93.0 | 92.2 | 91.0 | 90.2 | 90.2 | 90.3 | 90.2 | 90.0 | 91.3 | 95.1 | 95.4 |
| 70   | 78   | 90   | 9.8  | 9.8  | 9.7  | 9.8  | 10.0 | 5.7  | 4.9  | 4.6  |
| 60   | 41   | 24   | 21   | 13   |      | 9    | 15   | 25   | 36   | 60   |

|      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|
| 94.6 | 93.3 | 92.8 | 92.5 | 92.7 | 92.6 | 92.7 | 95.3 | 95.9 |
| 54   | 6.7  | 7.2  | 7.5  | 7.3  | 7.4  | 7.3  | 4.7  | 4.1  |
| 60   | 36   | 20   | 13   |      | 9    | 14   | 21   | 23   |

|      |      |
|------|------|
| 97.1 | 96.5 |
| 2.9  | 3.5  |
| 60   | 35   |

|      |      |      |      |      |      |                |
|------|------|------|------|------|------|----------------|
| 94.7 | 94.5 | 93.9 | 93.0 | 93.0 | 92.3 |                |
| 5.3  | 5.5  | 6.1  | 7.0  | 7.0  | 6.7  | Duplicate + 86 |
| 60   | 47   | 34   | 19   | 14   |      |                |

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93.9 | 93.5 | 93.2 | 93.0 | 92.5 | 92.1 | 92.0 | 93.1 | 93.3 | 93.2 | 93.0 | 93.1 | 94.1 | 96.1 | 97.0 | 97.4 |
| 6.1  | 6.5  | 6.8  | 7.0  | 7.5  | 7.9  | 7.0  | 6.9  | 6.7  | 6.8  | 7.0  | 6.9  | 5.9  | 3.9  | 3.0  | 2.8  |
| 10   | 50   | 42   | 33   | 23   | 19   | 17   | 14   | 8    | 11   | 14   | 19   | 26   | 35   | 60   |      |

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 94.3 | 92.8 | 92.6 | 92.2 | 93.1 | 93.1 |
| 5.7  | 7.2  | 7.4  | 7.8  | 6.9  | 6.9  |
| 24   | 23   | 20   | 19   | 16   | 15   |

Duplicate + 86

Wall

|      |      |      |
|------|------|------|
| 94.8 | 95.9 | 96.2 |
| 5.2  | 4.1  | 3.8  |
| 27   | 48   | 60   |

| Sta | + | $\pi$ | - | Elev. |
|-----|---|-------|---|-------|
|-----|---|-------|---|-------|

|  |  |        |  |  |
|--|--|--------|--|--|
|  |  | 900.00 |  |  |
|--|--|--------|--|--|

|              |  |             |  |  |
|--------------|--|-------------|--|--|
| 4+00<br>2+00 |  | Entrance Rt |  |  |
|--------------|--|-------------|--|--|

✓

|             |  |  |  |  |
|-------------|--|--|--|--|
| 4+15<br>+15 |  |  |  |  |
|-------------|--|--|--|--|

|             |  |  |  |  |
|-------------|--|--|--|--|
| 4+50<br>+50 |  |  |  |  |
|-------------|--|--|--|--|

|  |  |     |  |  |
|--|--|-----|--|--|
|  |  | 3.2 |  |  |
|--|--|-----|--|--|

|           |  |  |  |  |
|-----------|--|--|--|--|
| 5+00<br>3 |  |  |  |  |
|-----------|--|--|--|--|

|  |  |     |  |  |
|--|--|-----|--|--|
|  |  | 0.6 |  |  |
|--|--|-----|--|--|

|             |  |  |  |  |
|-------------|--|--|--|--|
| 5+12<br>+12 |  |  |  |  |
|-------------|--|--|--|--|

|  |  |     |  |  |
|--|--|-----|--|--|
|  |  | 0.0 |  |  |
|--|--|-----|--|--|

|    |  |  |  |  |
|----|--|--|--|--|
| BM |  |  |  |  |
|----|--|--|--|--|

|  |  |       |  |  |
|--|--|-------|--|--|
|  |  | 11.93 |  |  |
|--|--|-------|--|--|



LT

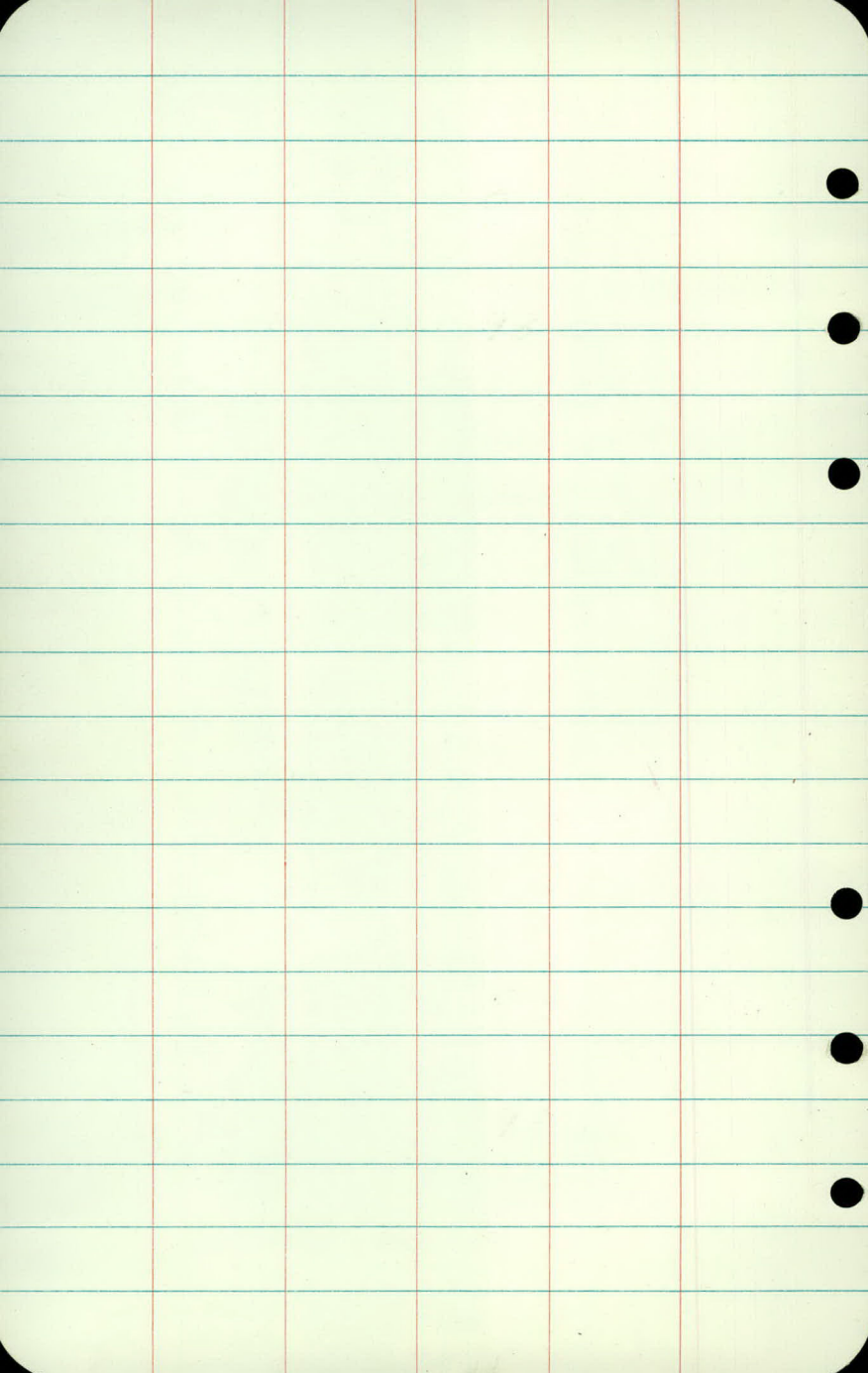
June 4, 1968  
St.

54  
e

| 98.4 | 98.1 | 97.6 | 97.7 | 97.9 | 94.1 | 94.1 | 93.9 | 94.7 | 96.0 |
|------|------|------|------|------|------|------|------|------|------|
| 1.6  | 1.9  | 2.4  | 6.3  | 6.1  | 5.9  | 5.9  | 6.1  | 5.3  | 4.0  |
| 60   | 42   | 28   | 21   | 14   |      | 8    | 15   | 26   | 39   |

| 96.2 | 96.6 |
|------|------|
| 3.8  | 3.4  |
| 95   | 60   |

| 99.5 | 99.7 | 99.0 | 94.6 | 94.7 | 95.0 | 94.9 | 94.1 | 98.1 | 99.1 | 98.4 |
|------|------|------|------|------|------|------|------|------|------|------|
| 0.5  | 0.3  | 1.0  | 5.4  | 3.3  | 5.0  | 5.1  | 5.9  | 1.9  | 0.9  | 1.6  |
| 61   | 45   | 30   | 22   | 13   |      | 8    | 14   | 22   | 38   | 62   |



June 14, 1968

55  
at

Additional X-Drain Info

Sta +  $\pi$  - Elev.

BM 3.96 954.88 950.92

28 3.84 951.04

29 4.79

30 4.36

29+88

TP 0.45 950.97 4.36 950.52

29+88

7.55 ✓ OK

BM 10.02 937.59 927.57

8 3.86 933.73

8+70

June 14, 1968

56  
b

Railroad Spike in 18" Oak N.W. Corner  
Linwood & Mc Knight

11.95

13

7.55

941.93

944.10

12.95

10.78

(Bent) Inv W.E. Culv.  
29.

Inv E. End Culv.  
19

18" CM Culv X-Drain

|     |    |     |     |     |     |     |     |     |     |     |     |     |
|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 105 | 98 | 8.7 | 7.9 | 7.6 | 1.7 | 1.3 | 0.7 | 1.6 | 5.2 | 6.3 | 5.8 | 5.3 |
| 75  | 55 | 40  | 33  | 29  | 17  | 13  |     | 10  | 19  | 20  | 25  | 41  |

R.R. Spike in 24" Oak Rt Sta 5+65

6.8

8.07

9.87

10.3

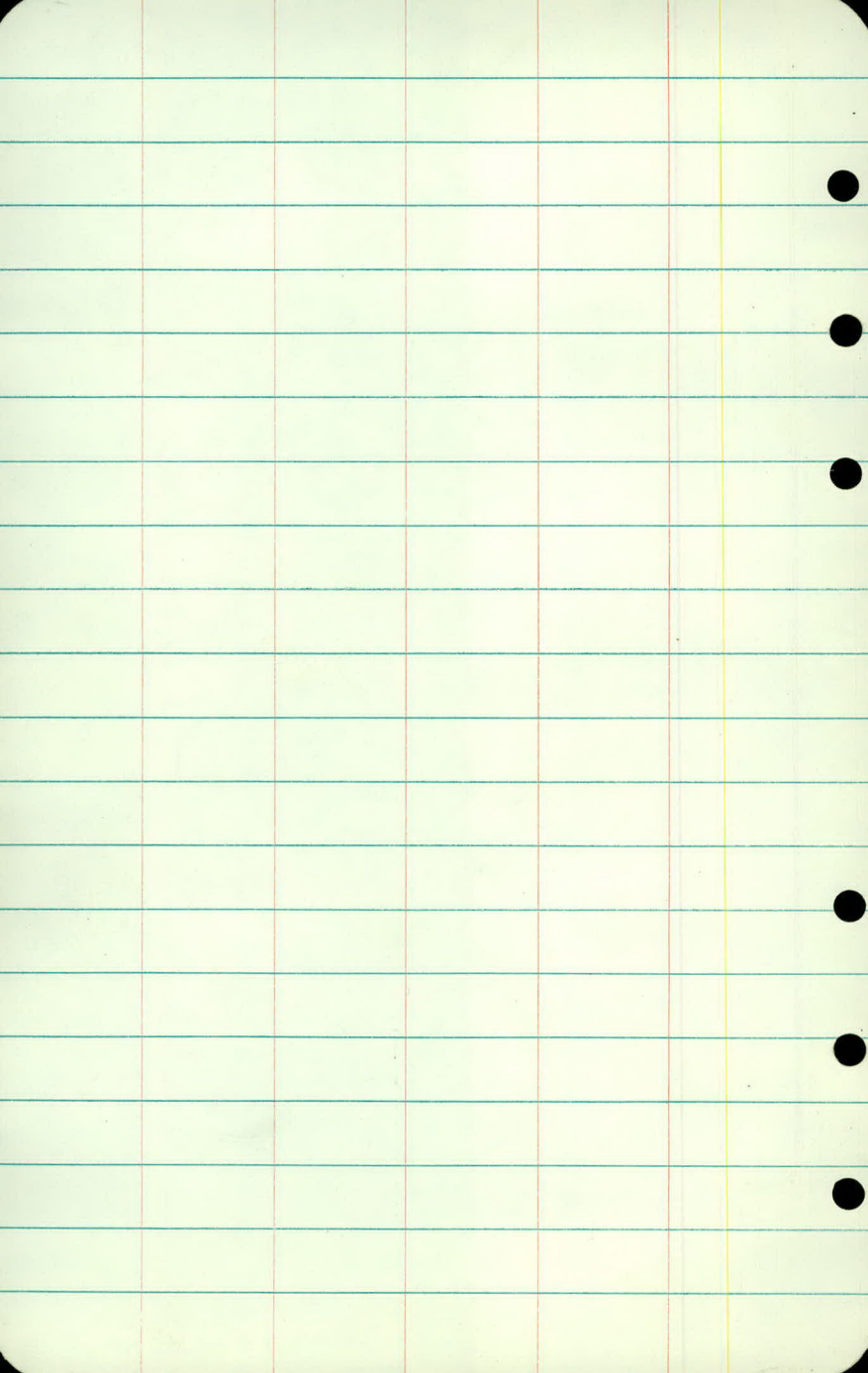
10' W of  
Culv

Inv. W.E.

12" CM Culvert  
X-Drain

Inv. E. End 10'  
E  
of  
Culv





June 19, 1968

57  
a

x-section Extensions

Sta +  $\pi$  - Elev.

BM 12.03 992.29 (980.26)

36 13.07 792.2 79.1

TP 12.91 1003.34 1.86 990.43

12.91  
186  
11.05

35+50

36+00

TP 13.44 1015.49 1.29 1002.05 Rock

+13

+34

TP 13.65 1023.69 5.45 1010.04

S. 2

+34

+68

59  
82

FX  
WM  
WF

4

June 19, 1968

58  
6

Rt.

Spike in Arc Light Pole Lt. Sta 36<sup>+</sup>

Wahin.PP.

|      |      |      |      |      |
|------|------|------|------|------|
| 86.0 | 87.1 | 89.8 | 91.1 | 96.0 |
| 17.3 | 16.2 | 13.5 | 12.2 | 7.3  |
| 70   | 82   | 100  | 111  | 130  |

991.0

92.2

95.5

|      |      |      |      |      |
|------|------|------|------|------|
| 97.9 | 99.8 | 99.9 | 01.3 | 03.4 |
| 54   | 3.5  | 3.4  | 2.0  | +0.1 |
| 87   | 100  | 113  | 120  | 129  |

12.4 10.1

7.8

76

98.6

99.1

01.4

04.1

04.8

06.4

08.1

16.9

16.1

14.1

11.4

10.7

9.1

7.4

71

75

85

100

109

116

131

02.5

05.2

07.3

09.6

12.9

13.0

10.3

8.2

5.9

2.6

77

84

92

100

115

Stake 100 Rt. 36+34

15.5

16.7

8.2

7.0

127

133

02.6

06.8

09.6

13.0

17.0

21.0

23.3

21.1

16.9

14.1

10.7

6.7

2.7

0.4

76

86

92

100

111

123

131

Sta +  $\pi$  - Elev.

102369

37

82

13.1

Angle Pt of Stadia

6.81

11.6

13

+36

T.P. 1.13 1012.07 12.75 1010.94 Rock

Angle Pt. of Stadia

6.81

1005.26

T.P. 0.99 999.98 13.08 998.99 stump

TP 1.54 990.94 10.58 989.40 Post <sup>622</sup> so.

BM 10.68 990.94 10.68 980.26 (980.26)

12.33 1001.73 1.54 989.40

27+72 12.46 1012.28 1.91 999.82

37+72

T.P. 10.55 1021.88 0.95 1011.33

✓

+36 100' Rt

13.2 1008.68 08.7



4

June 19, 1968

59  
4

~~BT~~

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 01.6 | 04.4 | 09.0 | 11.9 | 17.5 | 21.5 | 22.8 |
| 22.1 | 19.3 | 14.7 | 11.8 | 6.2  | 2.2  | 0.9  |
| 77   | 84   | 93   | 100  | 115  | 129  | 133  |

|      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|
| 98.9 | 98.8 | 00.1 | 06.6 | 08.7 | 13.3 | 15.8 | 17.9 |
| 24.8 | 24.9 | 23.0 | 17.1 | 15.0 | 10.4 | 7.9  | 5.8  |
| 63   | 67   | 82   | 91   | 100  | 117  | 131  | 142  |

Road

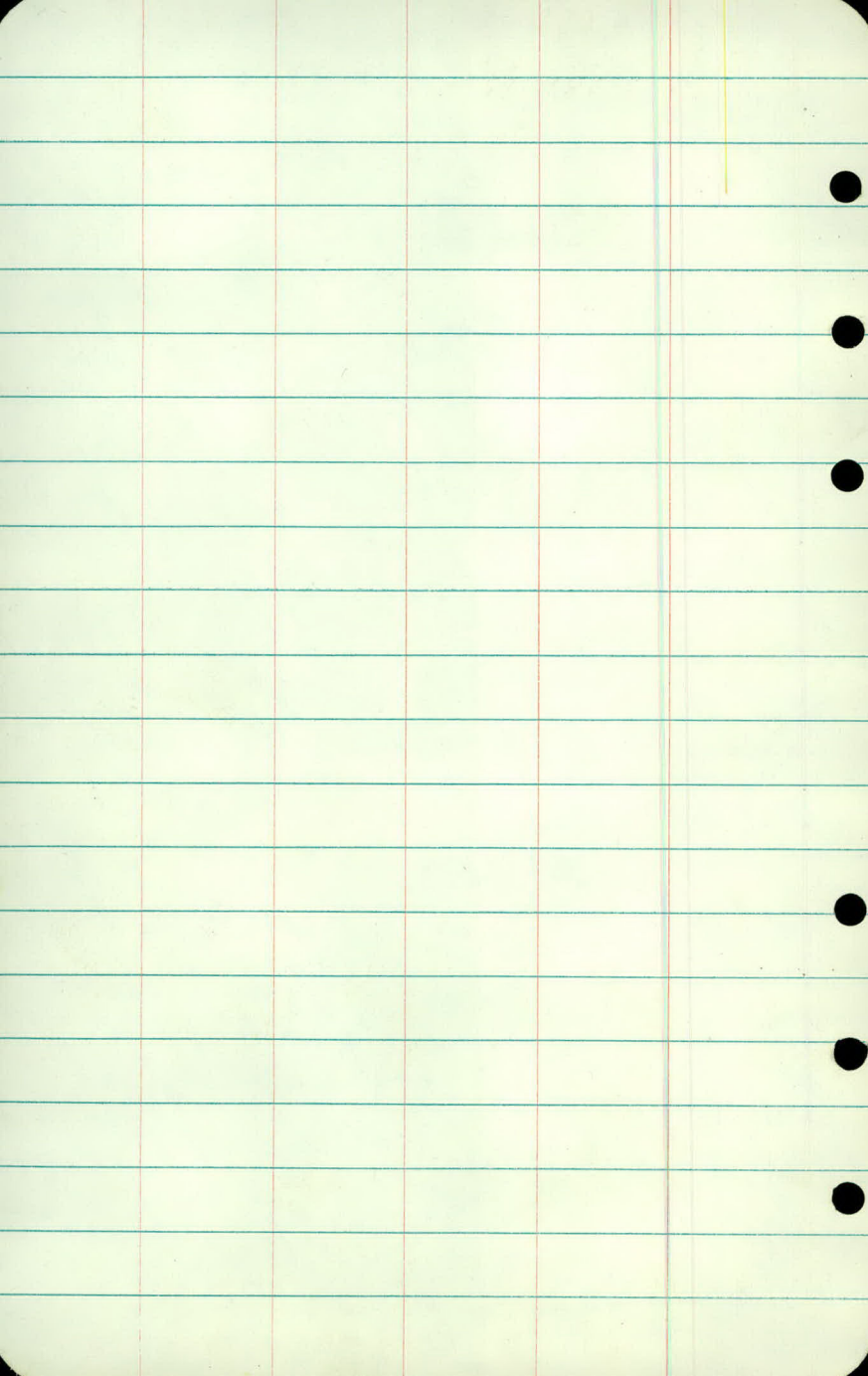
Spike in Arc Light Pole Lt sta 36±

|      |     |      |      |      |      |      |      |
|------|-----|------|------|------|------|------|------|
| 98.6 | 3.1 | 08.5 | 05.9 | 05.4 | 05.5 | 08.5 | 11.7 |
| 3.7  | 9.2 | 8.8  | 6.4  | 6.9  | 6.8  | 3.8  | 0.6  |
| 20   | 77  | 86   | 95   | 100  | 108  | 123  | 144  |

Edge Rd

|      |      |      |
|------|------|------|
| 14.1 | 17.3 | 19.7 |
| 7.8  | 4.6  | 2.2  |
| 161  | 183  | 200  |

on Road



KP  
D.S  
W.S  
R.B

22 JAN, 1968 60  
PTLY CLOUDY 31° 26

MC KNIGHT RD

FROM MAILAND RD TO HIGHWOOD

STADIA

R.P.  
R.B.  
P.S.  
W.S.

OBJECT

AZ

STADIA

at E STA. 41

hi 5.3

979.1

973.8

TD STA. 36

180

ENT.

178° 43' 480'

"

174° 50' 420'

"

168° 40' 360'

"

162° 38' 360'

"

155° 50' 360'

"

146° 18' 380'

"

143° 48' 400'

NW COR. HQ.

143° 50' 520'

DIST.

VERT  
ANGLEROD  
EQUID

ROD

DIFF

22 JAN 1968 61  
27  
ELEV

500

+0°20'

+2.8

3.0

-0.2

978.9

+1°40'

+11.8

6.0

+5.8

984.

+4°00'

+24.4

6.0

+18.4

997.5

+5°00'

+31.2

4.0

+27.2

1006.3

+5°55'

+37.0

4.0

+33.0

1012.1

+8°00'

+51.5

11.6

+39.9

1019.0

+10°30'

+71.8

11.0

+60.8

1039.9

+9°20'

83.2

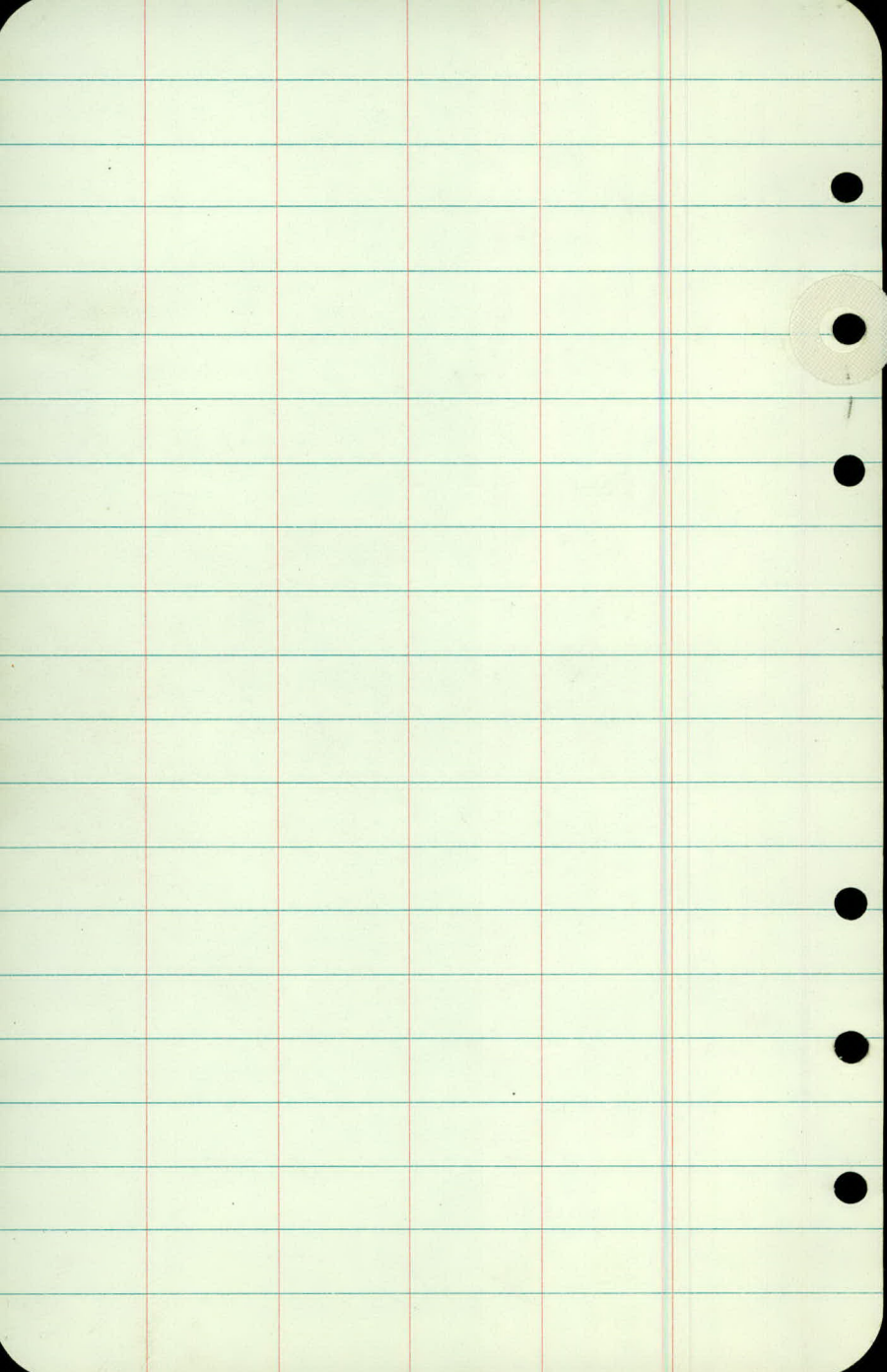
6.0

+77.2

1056.3

$$\begin{array}{r} 56 \\ 19 \\ \hline 17 \end{array}$$





June 10, 1968

62

Mc Knight Ave

Maitland → North

Sta +  $\Delta$  - Elev

BM 2.05 990.59

988.54

53+50

+75

54

+20

+35

+45

FX  
WM  
DM  
WF

June 10, 1968

63

Lt

+

Rt

2

Top Hyd N.W. Corner Mailand

85.38

85.42

|      |      |      |     |      |      |      |
|------|------|------|-----|------|------|------|
| 5.21 | 5.73 | 5.59 | 5.2 | 5.46 | 5.67 | 5.17 |
| 22.5 | 22   | 15   |     | 14   | 22   | 22.5 |

8

85.19

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 5.95 | 6.05 | 5.85 | 5.53 | 5.76 | 5.90 | 5.40 |
| 22.5 | 22   | 16   |      | 14   | 22   | 22.5 |

Ent

84.88

85.02

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 5.71 | 6.21 | 5.95 | 5.72 | 5.95 | 6.08 | 5.57 |
| 22.5 | 22   | 14   |      | 14   | 22   | 22.5 |

84.48

84.92

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 6.11 | 6.23 | 6.00 | 5.83 | 6.07 | 6.20 | 5.67 |
| 22.5 | 22   | 14   |      | 14   | 22   | 22.5 |

84.88

84.86

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 5.71 | 6.26 | 6.02 | 5.84 | 6.11 | 6.24 | 5.73 |
| 22.5 | 22   | 14   |      | 14   | 22   | 22.5 |

84.29

84.26

|      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|
| 6.41 | 6.30 | 6.12 | 5.98 | 5.84 | 6.06 | 6.16 | 6.33 | 6.49 |
| 24   | 22   | 18   | 12   |      | 12   | 18   | 22   | 24   |

Cone

Sta +  $\pi$  - Elev.

54+50

+65

55

7.7

6.3

4.5

$\frac{1}{2}$

5.4

6.8

4.7



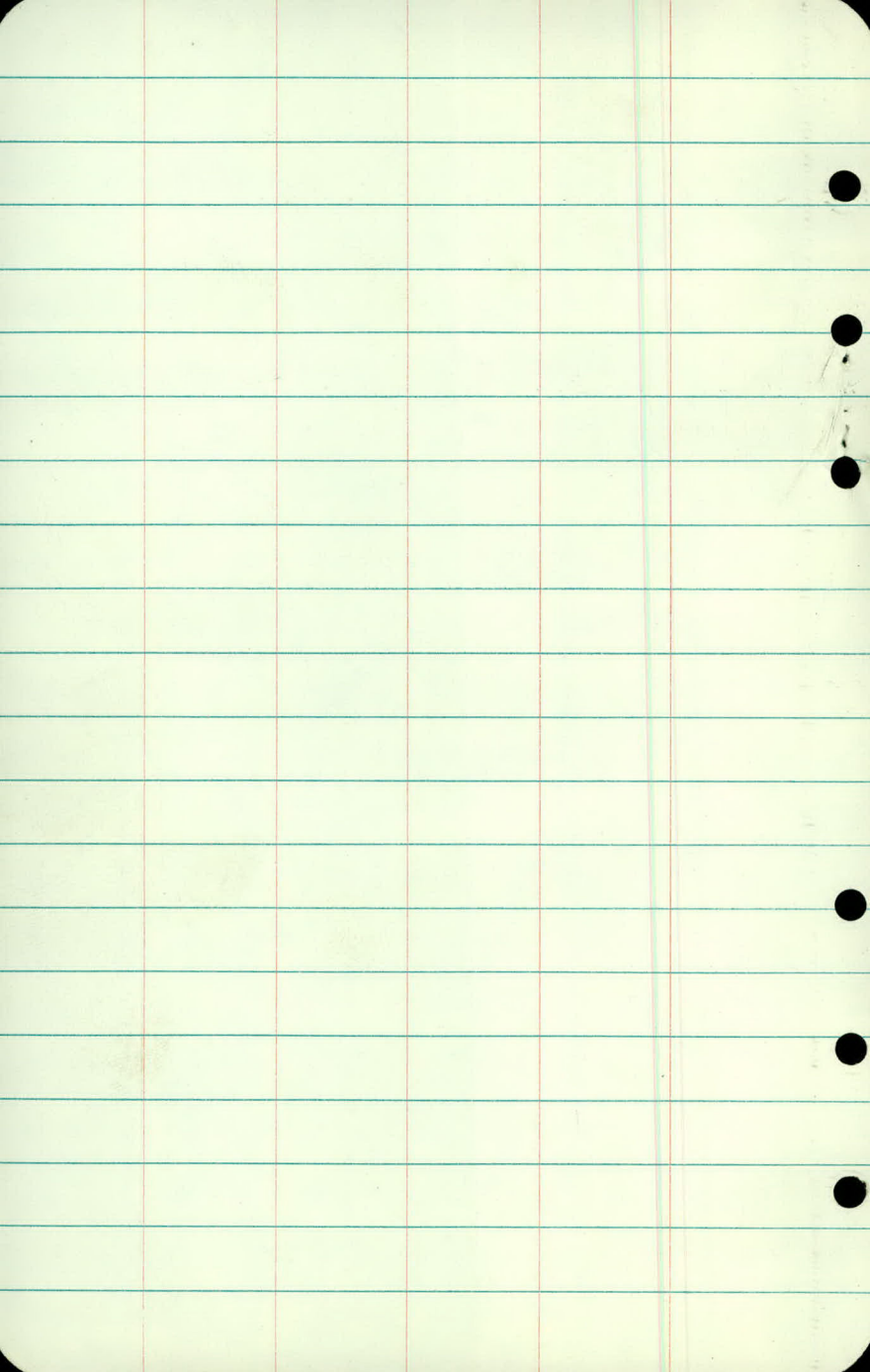
Lt. ~~E~~ June 10, 1968 Rt. 3

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 5.68 | 6.27 | 6.04 | 5.85 | 6.07 | 6.21 | 5.71 |
| 22.5 | 22   | 14   |      | 14   | 22   | 22.5 |

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| 5.70 | 6.23 | 6.04 | 5.83 | 6.03 | 6.12 | 5.58 |
| 22.5 | 22   | 14   |      | 14   | 22   | 22.5 |

|               |      |      |      |      |      |               |
|---------------|------|------|------|------|------|---------------|
| 85.10<br>5.49 | 6.03 | 5.88 | 5.67 | 5.92 | 6.01 | 85.11<br>5.48 |
| 22.5          | 22   | 14   |      | 14   | 22   | 22.5          |

No water standing from  
early morning rain.  $\frac{1}{2}$



FX  
LPD  
KG  
GV

Oct. 3, 1968

1

Mc Knight Road

62-668-08

x-section Rt

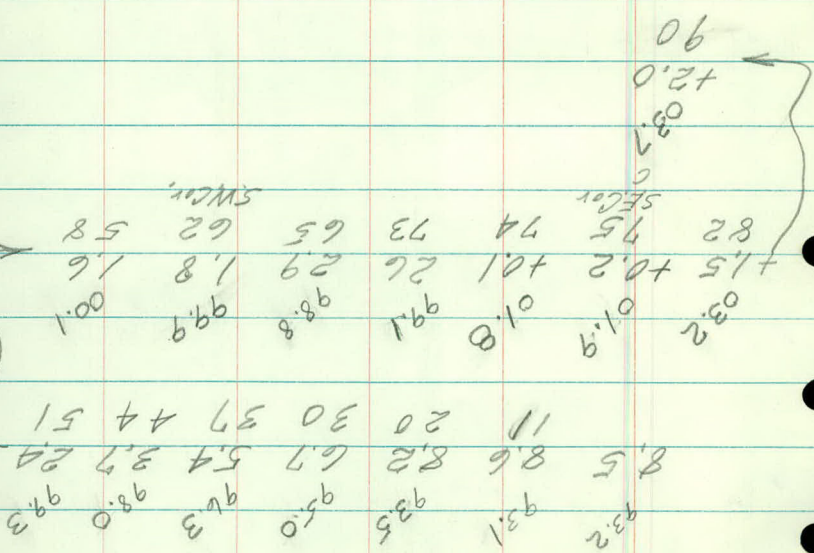
sta 49+77

7

Oct 3, 1968

RT

2



49 £

12.23

989.5

✓

92  
76

✓

72  
76  
+ 4.1

49+77

50 £ 8.00 1001.7

993.7

7

+

5fa



36+40

36+00

35+60

NE Cor Bottom Step

H<sub>0</sub><sup>±</sup> 475 984.90