

Kum's Rd.

137

363 A

7

87



# KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

## TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.  
FOR SINGLE TRACK EXCAVATION.

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5-5-5

|    | 0    | .1   | .2   | .3   | .4   | .5   | .6   | .7   | .8   | .9   |    |
|----|------|------|------|------|------|------|------|------|------|------|----|
| 0  | 9.0  | 9.1  | 9.2  | 9.3  | 9.4  | 9.5  | 9.6  | 9.7  | 9.8  | 9.9  | 0  |
| 1  | 10.0 | 10.1 | 10.2 | 10.3 | 10.4 | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 | 1  |
| 2  | 11.0 | 11.1 | 11.2 | 11.3 | 11.4 | 11.5 | 11.6 | 11.7 | 11.8 | 11.9 | 2  |
| 3  | 12.0 | 12.1 | 12.2 | 12.3 | 12.4 | 12.5 | 12.6 | 12.7 | 12.8 | 12.9 | 3  |
| 4  | 13.0 | 13.1 | 13.2 | 13.3 | 13.4 | 13.5 | 13.6 | 13.7 | 13.8 | 13.9 | 4  |
| 5  | 14.0 | 14.1 | 14.2 | 14.3 | 14.4 | 14.5 | 14.6 | 14.7 | 14.8 | 14.9 | 5  |
| 6  | 15.0 | 15.1 | 15.2 | 15.3 | 15.4 | 15.5 | 15.6 | 15.7 | 15.8 | 15.9 | 6  |
| 7  | 16.0 | 16.1 | 16.2 | 16.3 | 16.4 | 16.5 | 16.6 | 16.7 | 16.8 | 16.9 | 7  |
| 8  | 17.0 | 17.1 | 17.2 | 17.3 | 17.4 | 17.5 | 17.6 | 17.7 | 17.8 | 17.9 | 8  |
| 9  | 18.0 | 18.1 | 18.2 | 18.3 | 18.4 | 18.5 | 18.6 | 18.7 | 18.8 | 18.9 | 9  |
| 10 | 19.0 | 19.1 | 19.2 | 19.3 | 19.4 | 19.5 | 19.6 | 19.7 | 19.8 | 19.9 | 10 |
| 11 | 20.0 | 20.1 | 20.2 | 20.3 | 20.4 | 20.5 | 20.6 | 20.7 | 20.8 | 20.9 | 11 |
| 12 | 21.0 | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 12 |
| 13 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 | 22.5 | 22.6 | 22.7 | 22.8 | 22.9 | 13 |
| 14 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 14 |
| 15 | 24.0 | 24.1 | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 15 |
| 16 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 | 25.7 | 25.8 | 25.9 | 16 |
| 17 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 17 |
| 18 | 27.0 | 27.1 | 27.2 | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 18 |
| 19 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 | 28.9 | 19 |
| 20 | 29.0 | 29.1 | 29.2 | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 20 |
| 21 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 21 |
| 22 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 22 |
| 23 | 32.0 | 32.1 | 32.2 | 32.3 | 32.4 | 32.5 | 32.6 | 32.7 | 32.8 | 32.9 | 23 |
| 24 | 33.0 | 33.1 | 33.2 | 33.3 | 33.4 | 33.5 | 33.6 | 33.7 | 33.8 | 33.9 | 24 |
| 25 | 34.0 | 34.1 | 34.2 | 34.3 | 34.4 | 34.5 | 34.6 | 34.7 | 34.8 | 34.9 | 25 |
| 26 | 35.0 | 35.1 | 35.2 | 35.3 | 35.4 | 35.5 | 35.6 | 35.7 | 35.8 | 35.9 | 26 |
| 27 | 36.0 | 36.1 | 36.2 | 36.3 | 36.4 | 36.5 | 36.6 | 36.7 | 36.8 | 36.9 | 27 |
| 28 | 37.0 | 37.1 | 37.2 | 37.3 | 37.4 | 37.5 | 37.6 | 37.7 | 37.8 | 37.9 | 28 |
| 29 | 38.0 | 38.1 | 38.2 | 38.3 | 38.4 | 38.5 | 38.6 | 38.7 | 38.8 | 38.9 | 29 |
| 30 | 39.0 | 39.1 | 39.2 | 39.3 | 39.4 | 39.5 | 39.6 | 39.7 | 39.8 | 39.9 | 30 |
| 31 | 40.0 | 40.1 | 40.2 | 40.3 | 40.4 | 40.5 | 40.6 | 40.7 | 40.8 | 40.9 | 31 |
| 32 | 41.0 | 41.1 | 41.2 | 41.3 | 41.4 | 41.5 | 41.6 | 41.7 | 41.8 | 41.9 | 32 |
| 33 | 42.0 | 42.1 | 42.2 | 42.3 | 42.4 | 42.5 | 42.6 | 42.7 | 42.8 | 42.9 | 33 |
| 34 | 43.0 | 43.1 | 43.2 | 43.3 | 43.4 | 43.5 | 43.6 | 43.7 | 43.8 | 43.9 | 34 |
| 35 | 44.0 | 44.1 | 44.2 | 44.3 | 44.4 | 44.5 | 44.6 | 44.7 | 44.8 | 44.9 | 35 |
| 36 | 45.0 | 45.1 | 45.2 | 45.3 | 45.4 | 45.5 | 45.6 | 45.7 | 45.8 | 45.9 | 36 |

Calculated by Julien A. Hall, M. Am. Soc. C. E.

Kahnsville Road <sup>3</sup>

STONES

#111 Stone STA NO. 12+39.7

SYCAMORE  
WITH TREE 16.4' W 07  
LONGER LINE ETH  
WALNUT TREE 32.5'  
S 35' E

2 STA 770 26+07

Witness

COF POST 221 595° W

COF POST 16.3' E

3 STA 720 53+10

N Mark put N 60° W 19'  
Shot put S 85° W 15.7'

4 STA 770

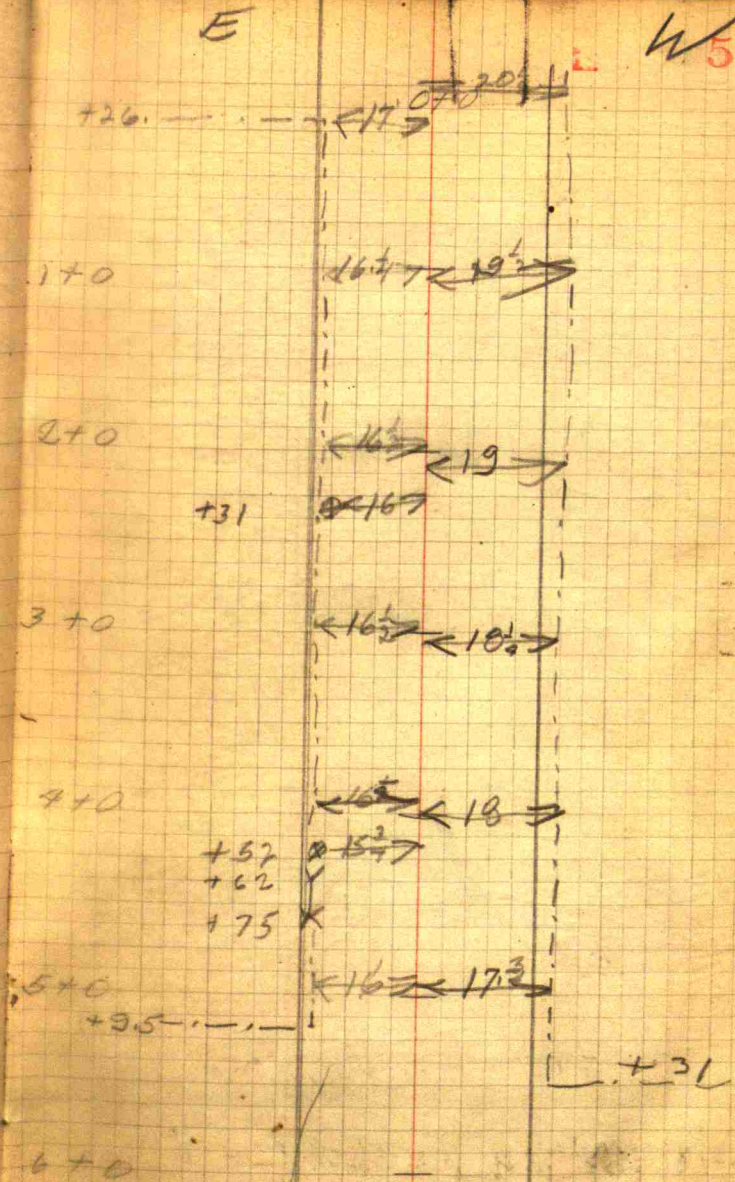
5 STATION

6



5+18 = 18" VIT TIRE  
 under ROAD 19 $\frac{1}{2}$ ' LONG  
 @ 7.5' from W END

5+18 ~~BOX~~ 4" A - skew R 40°  
 Type A Hdwls





5

H30-D-20' x 12" + L W side

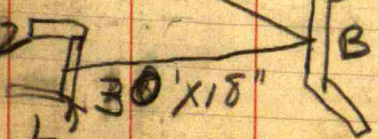
13+23 OK - E. side

13+48 L 8' x 12" + L W side

22+18 L 8' x 12" + L E side

22+41 OK W side

23+73 OK -

26+79  28' x 24"26+42  30' x 18"~~31+44 22'-18" + L S W~~

32+14 18' x 10" + L S W ✓

6+0

7+0

8+0

9+0

10+0

11+0

12+0

+83

+08

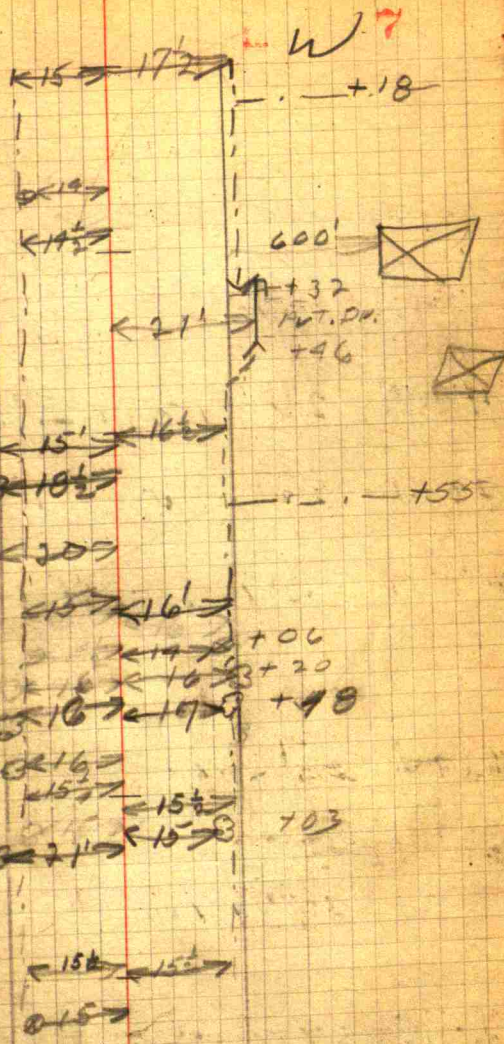
+59

+52

+90

+38

+29





- B5460 26' X 18" and B Hdwls ✓  
 40+55 16' X 12" and L W ✓  
 42+48 22' X 12" and Ls W ✓  
 49+48 22' X 10" and Ls E ✓  
 55+57 22' X 10" and Ls E ✓  
 56+54 16' X 10" and Ls W ✓  
 66+00 26' X 15" Annex + a hdw  
 66+31 16' X 12" and Ls W  
 70+87 22' X 12" and Ls E  
 71+49 22' X 12" and Ls W ✓  
 74+00 26' X 15" Annex + 5th Hdwr  
~~Sta 84+00 is 200' E of open ditch~~  
~~Two rock pillars here~~  
 86+34-16' X 10" Ls E

12+0

10157-147

+158-107

+307 PL

6 Traps

16'

90

5 Traps

14' 6" 90

AUTOMIVE

+54 91 90 95

+02

+25

+165.5

13+0

x 18 K 15-

14+0

157-157

15+0

167-167

15+0

177-177

16+0

187-187

17+0

197-197

18+0

5 Traps

16' 5" 75

3 Traps

16' 5" 54

4 Traps

15' 5" 7



10

Boards  
Loom

92+92 - 16' x 10" W ✓

100+13 - 18' x 10" W ✓

104+79 22' x 10" E ✓

186+35 16' x 10" N

110+41 - 30' x 18" and Blunka -  
Skew R 30°

112+85 20' x 10" N

116+30 22' x 10" N

119+70 10' x 10" S

120+51 18' x 10" N

1810 trees

1910

2010

2110

2210

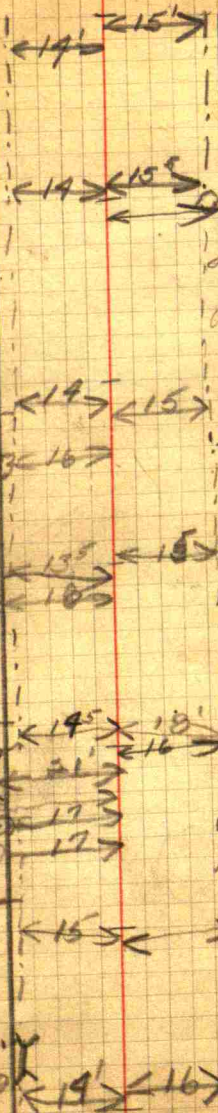
2310

2410

E

+ trees

11

1 Trees  
16'+ 027 trees  
17'2 Trees  
16'+ 59 RAIL  
3 Small  
Trees  
16'

3 + 96

+ 92

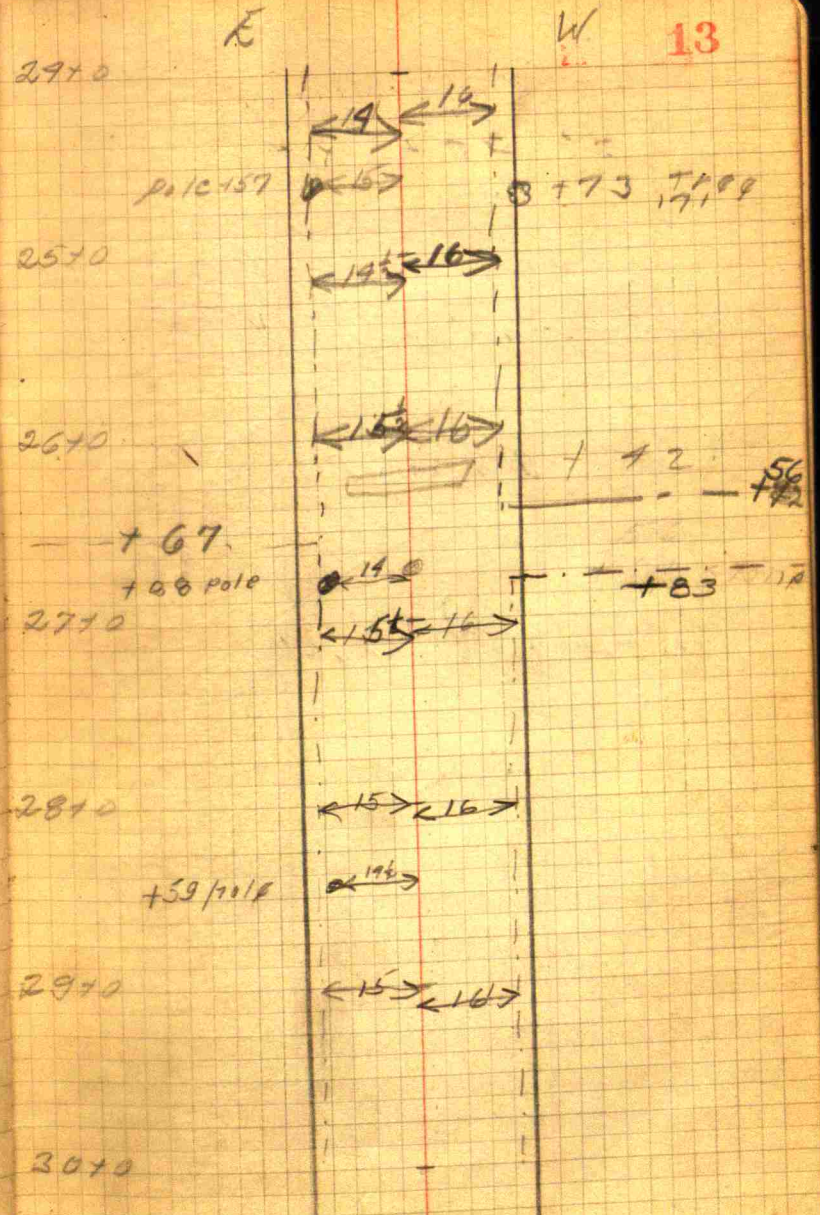
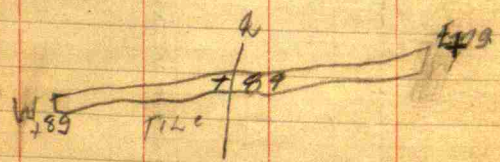
+ 53



07  
126  
83  
26+67 AT Stone  
4' def. RT

26+92 AT 1760  
PIPE 12"  
18' TT LONG  
Q 8.8 TT from  
W. 4069  
Fen

26+84  
COMBINATION 18" IRON  
PIPE + 18" VITV TILE  
FORM CULVERT, TOTAL  
22 TT Q CROSSES 8 1/2 TT  
FROM EAST SIDE





14

125+73-26'x15" and B  
under Rd

126+12-16'x10" N

130+48-26'x15" under Rd

Nothing at End

E

W

15

30+0

+37 hold

15' 16'

19'

31+0

15' 17'

+37 hold

+50

50'

+69

+85

32+0

15'

+20 hold

17'

+08

+22

+32

33+0

15'

16'

+23

+36

+76



+51

+57

+85

17'

17'

17'

34+0

+51 hold

16'

+33

+7

35+0

+06

37

16' 11'

23'

70

36+0

+55 hold

15'

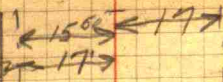


38 +60

12" Armo pipe  
20' long  
15 10' from W 9460

3670

+15 tree



← 165 → + 62 tree

3770



note + 74.5



3870



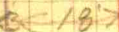
3970

note + 60



+ 22.5

tree + 92



4070

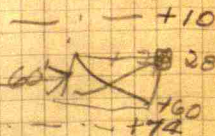


$67 + 19 = 86$   
 $86 + 10 = 96$   
 $96 + 69 = 165$

4170



tree + 16



4270

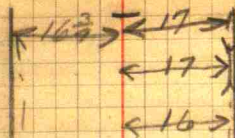


STA 42+46 Iron pipe  
 20 FT 16" pipe under driveway  
 0+ gate 13 FT W of R

E

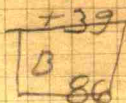
W

42+0



+92

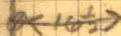
+54



43+0



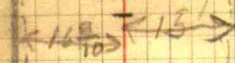
136 hole



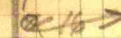
44+0



45+0



130 hole



46+0

16 1/2 - 15

47+0

16 1/2 - 15

160

48+0

16 1/2 - 15

+19

16

+92



4810

-

4910

 $16\frac{1}{2} - 15$ 

|     |   |   |
|-----|---|---|
| 200 | ↓ | $\begin{array}{r} +46 \\ +58 \\ \hline \end{array}$ |
|-----|---|---|

066

5010

 $16\frac{1}{2} - 14\frac{1}{2}$ +51

5110

 $16\frac{1}{2} - 14\frac{1}{2}$ 

060

5210

 $16\frac{1}{2} - 14\frac{1}{2}$ +91

5310

|    |
|----|
| 15 |
| 15 |

Stone & Rd  
East 5310

+26+10

067

5410

-



5410

|     |    |
|-----|----|
| +   | 92 |
| 001 |    |

5510

|     |     |     |
|-----|-----|-----|
| +57 | 12  | 80  |
| 107 | 101 | 151 |

5610

|     |
|-----|
| 500 |
| 13  |

|      |
|------|
| 1001 |
| 175  |

+175

5710

POINT 64

+84

5810

5910

|      |
|------|
| +66  |
| 0019 |

6010

|      |      |
|------|------|
| <95> | <14> |
|------|------|

|      |      |
|------|------|
| <18> | <14> |
|------|------|

|       |      |
|-------|------|
| <175> | <14> |
|-------|------|

+59 GATE

|      |      |
|------|------|
| <14> | <12> |
| <11> |      |

|       |      |
|-------|------|
| <195> | <12> |
|-------|------|

|       |       |
|-------|-------|
| <135> | <125> |
|-------|-------|

|      |
|------|
| <12> |
|------|



6070

13 - 12

6170

13 $\frac{1}{2}$  - 11

6270

①+57

13 $\frac{1}{2}$  - 11

6370

13 $\frac{1}{2}$  - 11

①58

6470

$$\begin{array}{r} \cancel{46} \\ 5+68 \\ \hline 7+76 \end{array}$$

14 - 11


6570

14 $\frac{1}{2}$  - 11

①+52

6670

15 - 11

$$\boxed{+31\frac{1}{2}}$$



6670

15 - 11

6770

16 - 11

⊙+69

⊕ Elm+90

6870

16 - 10 $\frac{1}{2}$ 

⊕ Elm+20

+90

6970

17 - 10 $\frac{1}{2}$ 

⊙+45

⊕ Elm+60

7070

16 $\frac{1}{2}$  - 10+70⊠+42  
300+75  
⊕+87

7170

20 - 10

⊠+20  
250

⊙+22

+29⊕+49

7270

17 $\frac{1}{2}$  - 10



7270

$17\frac{1}{2} - 10$

7370

$17\frac{1}{2} - 10$

+100  
400  
+21



7470

18 - 11

7570

19 - 12

7670

19 -  $11\frac{1}{2}$

7770

19 -  $11\frac{1}{2}$

7870

18 - 12



123-45

78+00

18 12

79+00

18 13 1/2

80+00

No Stone  
to be reset  
later

18 12

81+00

19 12

82+00

17 12

83+00

17 13

84+00

17 13 1/2

123-45

+68 Section  
Since W

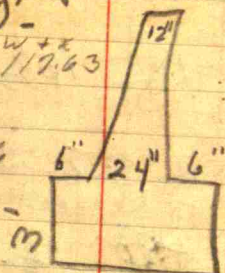


89+15 - Sand SW wing  
 inside face 10' W - extend  
 5 60'

RETAIN WALL  $w+x$   
 $Fl = 117.63$

$F_{foot} = 117.10$

B. ST. V. = 100.96



with inside face 17' from  
 E at end

Bridge 89+42 -

Span 14' - Rdwy 20' - Rise 5'  
 W. side at Back

89+72 - N and NE wing

90+10 - 20' x 10" Arms - Remove

85

16 1/2 - 14 1/2

86

16 1/2 - 14

+ 4972

stone

86+40  
 Stone  
 Comput E 17'  
 24 1/2  
 Diff L 7'

87

16 1/2 - 14 1/2

88

15 1/2 - 15

89+15  
 60  
 2 1/2

89

15 - 15

90

14 - 15 1/2

D volut + 96

D volut + 10

91

15 1/2

92

D + 23

D + 90



94+05 - ~~Repla~~ Brick  
 Arch - Replace with 14'  
 Span by — Rise 6'-  
 from Bed to Crown Rd —  
 skew R - 40° - All wings  
 at 45° - Run 18" into thru  
 N.E. wing —

Extend SE wing 20' along bank  
 of stream

~~7.5 113.44~~  
 B.S. 111.63 E  
 110.66 & 111.08 W

To H 12 IN CH TILE

94.05 E 5 10 0 0  
 113 44

92

14 - 15 1/2  
 29  
 230

93

282  
 14 - 16 1/2  
 $\frac{4+92}{+977W}$   
 2 + 44

94

~~water~~  
~~16~~  
 20

95

15 - 16

96

15 - 16

97

14 - 15 1/2

98

14 1/2 - 15 1/2



| 52 | Gd    | Sta/k |
|----|-------|-------|
| 53 | 11750 | 12108 |
| 54 | 11667 | 12183 |
| 55 | 11584 | 11958 |
| 56 | 11500 | 11844 |
| 57 | 11483 | 11709 |
| 58 | 11467 | 11676 |
| 59 | 11450 | 11723 |
| 60 | 11433 | 11656 |
| 61 | 11417 | 11649 |
| 62 | 11400 | 11728 |
| 63 | 11383 | 11850 |
| 64 | 11367 | 11618 |
| 65 | 11350 | 11642 |
| 66 | 11333 | 11635 |
| 67 | 11317 | 11644 |
| 68 | 11300 | 11737 |
| 69 | 11283 | 11809 |
| 70 | 11267 | 11896 |
| 71 | 11250 | 11775 |
| 72 | 11233 | 11799 |
| 73 | 11217 | 11740 |
| 74 | 11200 | 11726 |

99

14 1/2 - 15

+99  
100

15 - 15

+54  
E=73

101

15 - 15

102

16 1/2 - 14 1/2

103

17 - 14 1/2

+72  
60  
104+62  
14 - 14 1/2+79  
+94

105

14 - 15







Tile across Red Sta  
110 + 60

112 + 0

113 + 0

114 + 0

115 + 0

116 + 0

117 + 0

118 + 0

+ 58

200



$$\begin{array}{r} + 85 \\ + 92 \\ \hline \end{array}$$

20 - 14 @ + 0

20 - 13

+ 10 sup.

+ 36

20 - 13

+ 60

+ 20

20 ← 21 →

$$\begin{array}{r} + 22 \\ 60 \end{array}$$

+ 61

+ 87 + 03 + 5

+ 12

20 - 12

+ 26

+ 35

20 - 12



| 17n   | 7 1/2 n | €     | 5     | 17 1/2 |
|-------|---------|-------|-------|--------|
| 12573 | 11895   | 11893 | 12049 | 17858  |
|       |         |       |       | 11850  |

125+73-18' x 12" Arched

11970

~~1200~~ ~~4 1/2~~ ~~70~~

12470

12270

12370

12470

12570

20 - 12

⊕ +18

+56

+21

125



21 - 11 1/2

~~4~~ +51 +58

21 - 11 1/2

⊕ +18

+100

250

+26

20 - 12

19 - 13

⊕ +13

19 - 13 1/2

⊕ +02

19 - 14

178

---



|                  |                 |       |                  |        |      |
|------------------|-----------------|-------|------------------|--------|------|
| 19 <sup>th</sup> | 8 <sup>15</sup> | 2     | 10 <sup>15</sup> | 125    | 1280 |
| 11920            | 11892           | 12045 | 11893            | -11893 |      |
|                  | 19 <sup>5</sup> | 27    |                  |        |      |

130+48  
18' x 10" Amuro

1260

1270

1290

1300

1310

1320

19 - 14 $\frac{1}{2}$ 4+12

18 - 14

⊗ +42

18 - 14 $\frac{1}{2}$ 

18 - 15

⊗ +73

18 - 16

18 - 16

⊗ +40

18 - 14 $\frac{1}{2}$



132+88 Stone  
 Cor Post 545 W 24.2'  
 " " 445 W 23.4'

132+68 <sup>175</sup> 95 <sup>2</sup> <sup>11N</sup> <sup>14N</sup>  
 12012 12035 12110 12008 12098

132+83 <sup>50N</sup> <sup>50S</sup>  
 12060 12120 12098

12135  
 50 E of 57017.0

13270

13370

13270

13370

13470

13570

13670

+68 718 ~~717~~ +68



46

T 110 KUN'S ROOF  
 Tilt Gd STAKE CUT CORRECT TO/7 REOD

13640

STUMP  
 8966 47

(7410)

7540 11342 11621 375

7640 11324 11736 4.12

7740 11337 11706 3.65

7840 11349 11700 3.51

7940 11362 11726 3.64

8040 11374 11701 4.17

8140 11387 11703 4.06

8240 11399 11696 2.97

8340 11412 11709 2.97

8440 11424 11704 3.60

8540 11437 11758 3.21

8640 11450 11817 3.67

8740

8840

8940

9040

5440

5540

5640 11500 11263 4.63

5740 11489 11793 3.04

5840 11478 11711 2.33

5940 11467 11755 2.88

6040 11456 11786 3.30

13740

11700

11349

351

11726

11362

364

13840

11701

11374

417

11723

11387

406

13940

11696

11399

297

14040

11709

11412

297

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360

14140

14240

11621

11312

3.75

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4.12

9

11706

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3.65

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321

11817

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367

11263

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11989

304

11711

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11467

288

11786

11456

330



|      |       |       |     |
|------|-------|-------|-----|
| 61+0 | 11495 | 11730 | 285 |
| 62+0 | 11434 | 11795 | 361 |
| 63+0 | 11423 | 11820 | 397 |
| 64+0 | 11412 | 11699 | 232 |
| 65+0 | 11401 | 11664 | 263 |
| 66+0 | 11389 | 11616 | 227 |
| 67+0 | 11378 | 11640 | 262 |
| 68+0 | 11367 | 11721 | 354 |
| 69+0 | 11356 | 11800 | 444 |
| 70+0 | 11345 | 11868 | 523 |
| 71+0 | 11334 | 11761 | 427 |
| 72+0 | 11323 | 11731 | 408 |
| 73+0 | 11312 | 11763 | 451 |
| 74+0 | 11300 |       |     |

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|       |       |  |         |
|-------|-------|--|---------|
| 11795 | 11731 |  |         |
| 11434 | 11323 |  |         |
| 361   | 408   |  |         |
| 193+0 |       |  |         |
| 11820 | 11763 |  | 11640   |
| 11423 | 11312 |  | 11412   |
| 397   | 451   |  | 232     |
| 194+0 |       |  |         |
| 11664 |       |  | 11640   |
| 11401 |       |  | 11378   |
| 263   |       |  | 11640   |
| 195+0 | 11616 |  | 11378   |
| 11389 |       |  | 262     |
| 227   |       |  | 11721   |
|       |       |  | 11367   |
|       |       |  | 354     |
| 11800 |       |  |         |
| 11356 |       |  |         |
| 444   |       |  |         |
| 196+0 |       |  |         |
| 11868 |       |  | 68.59   |
| 11345 |       |  | 0666    |
| 523   |       |  |         |
| 197+0 |       |  | 0086    |
| 11761 |       |  |         |
| 11334 |       |  | 081.90  |
| 427   |       |  | 0666    |
| 198+0 |       |  | 0770    |
|       |       |  | 2215    |
|       |       |  | 5565    |
|       |       |  | 2(11130 |
|       |       |  | 21943   |
|       |       |  | 2215    |



070 Rd SOUTH 50' 03.86

5418 9278 9298 92.80 9909 9565 9610 95.20 9397 12 9207 99.73

0425 9379 0.92 99.32 9527 9632 490.10 9630 95.99 9525 100.64 100.97

26+42 10630 FL W. 105.72 105.35 EFL 1072

26+67 17 106.46 12 105.02 10920

26+89 17 10932 12 75 10967

105.00 105.08 1072

38+60 110.60 110.75 11285

89+15  
89+42  
89+72

94.06 74 71.10 W 108.74 51

95.20 9397 12 9207 99.73

9630 95.99 9525 100.64 100.97

17 107.12

25 106.98

14 105.23 105.60 106.50 105.80

107.30 107.50 107.72 106.9 105.90

11301 11278 1111.04 11192



52

|      | 371    | ST4     | DIT     | ST    | 371   |
|------|--------|---------|---------|-------|-------|
| 0+0  |        | 9511    | 9510    | 9510  |       |
| 170  | 99.25  | 159889  | 99762   | 99762 | 99.33 |
| 270  | 99.43  | 9947    | 1297.15 | 99.07 |       |
| 370  | 101.97 | 10203   | 1399.07 | 89978 |       |
| 470  | 96.98  | 96.75   | 95.75   | 89685 |       |
| 570  | 293.25 | 9372    | 193394  | 89565 |       |
| 670  |        | 9797    | 1295.24 | 99657 |       |
| 770  | 102.80 |         | 129948  | 79985 |       |
| 870  |        | 10239   | 1310143 | 95263 |       |
| 970  |        | 10545   | 10286   | 12487 |       |
| 1070 | 106.40 | 1310501 | 810537  |       |       |
| 1170 | 107.26 | 1310567 | 810686  |       |       |
| 1270 | 106.02 | 1310977 | 910616  |       |       |
| 1370 | 104.69 | 1310441 | 510556  |       |       |
| 1470 | 105.35 | 1210483 | 810540  |       |       |
| 1570 | 104.52 | 1210330 | 810519  |       |       |
| 1670 | 104.32 | 1210372 | 810498  |       |       |
| 1770 | 104.18 | 1110395 | 610588  |       |       |
| 1870 | 104.60 | 110499  | 710560  |       |       |
| 1970 | 106.15 | 120993  | 110625  |       |       |
| 2070 | 106.15 | 1110550 | 610657  |       |       |
| 2170 | 107.02 | 1210565 | 610647  |       |       |
| 2270 | 106.40 | 110628  | 410627  |       |       |
| 2370 | 106.59 | 1210580 | 610640  |       |       |

53

|         | DIT     | ST      | 371    |
|---------|---------|---------|--------|
| 9532    | 79331   | 29477   | 99.10  |
| 797.90  | 1299.30 | 1999.05 | 9932   |
| 199.21  | 19873   | 19975   | 9892   |
| 1001.12 | 99958   | 139835  | 100.10 |
| 9677    | 99662   | 129575  | 98.02  |
| 9580    | 19557   | 129500  | 9480   |
| 9667    | 89685   | 129570  | 9562   |
| 9153    | 29962   | 9872    | 10102  |
| 10297   | 810263  | 1310160 | 10218  |
| 105.10  | 610502  | 120357  | 10562  |
| 106.39  | 610575  | 110432  | 105.87 |
| 107.12  | 610693  | 120501  | 106.66 |
| 106.26  | 810597  | 10476   | 106.26 |
| 106.32  | 510550  | 110442  | 105.18 |
| 105.30  | 610520  | 910492  | 106.39 |
| 10532   | 410520  | 10398   | 105.30 |
| 10520   | 610481  | 910332  | 104.05 |
| 10530   | 410510  | 910395  | 105.80 |
| 10509   | 710545  | 1210977 | 106.50 |
| 10625   | 510599  | 1210543 | 107.03 |
| 10668   | 910664  | 1210536 | 106.20 |
| 10682   | 910667  | 1110536 | 106.30 |
| 10647   | 910617  | 1210479 | 106.03 |
| 10670   | 710663  | 130574  | 106.87 |

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 105.05

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|       | 3+T    | ST                   | DIT                  | SH                  |
|-------|--------|----------------------|----------------------|---------------------|
| 2970  | 106.84 |                      | <sup>11</sup> 105.91 | <sup>6</sup> 106.92 |
| 2570  | 107.12 |                      | <sup>12</sup> 105.50 | <sup>4</sup> 107.33 |
| 2670  | 107.10 |                      | <sup>12</sup> 105.95 | <sup>6</sup> 107.29 |
| 26+67 | 17     |                      |                      |                     |
| 2770  |        | <sup>12</sup> 105.08 | <sup>10</sup> 107.20 | <sup>6</sup> 109.30 |
| 2870  | 106.65 |                      | <sup>11</sup> 106.60 | <sup>7</sup> 107.17 |
| 2970  | 107.35 |                      | <sup>11</sup> 107.26 | <sup>8</sup> 107.92 |
| 3070  | 108.53 |                      | <sup>12</sup> 108.53 | <sup>8</sup> 108.76 |
| 3170  | 109.67 |                      | <sup>12</sup> 109.85 | <sup>8</sup> 109.80 |
| 3270  | 111.05 |                      | <sup>12</sup> 110.95 | <sup>8</sup> 111.03 |
| 3370  | 114.12 |                      | <sup>8</sup> 112.92  | <sup>5</sup> 112.95 |
| 3470  | 115.42 |                      |                      | <sup>7</sup> 115.01 |
| 3570  | 114.95 |                      | <sup>10</sup> 112.95 | <sup>4</sup> 114.20 |
| 3670  | 113.58 |                      | <sup>10</sup> 112.90 | <sup>6</sup> 113.53 |
| 3770  | 112.77 |                      | <sup>11</sup> 112.23 | <sup>6</sup> 113.21 |
| 3870  | 111.71 |                      | <sup>11</sup> 111.67 | <sup>5</sup> 112.78 |
| 3970  | 111.77 |                      | <sup>10</sup> 111.44 | <sup>4</sup> 112.86 |
| 4070  | 113.79 |                      | <sup>11</sup> 112.38 | <sup>6</sup> 113.05 |
| 4170  | 114.20 |                      | <sup>11</sup> 113.42 | <sup>7</sup> 114.83 |
| 4270  | 114.10 |                      | <sup>11</sup> 113.62 | <sup>5</sup> 114.15 |
| 4370  | 113.91 |                      | <sup>10</sup> 113.40 |                     |
| 4470  | 113.90 |                      | <sup>3</sup> 113.02  | <sup>9</sup> 114.27 |
| 4570  | 114.70 |                      | <sup>12</sup> 113.70 | <sup>9</sup> 114.71 |
| 4670  | 114.85 |                      | <sup>12</sup> 114.44 | <sup>7</sup> 115.33 |

|        | SH                   | DIT                  | ST                   | 3+T    |
|--------|----------------------|----------------------|----------------------|--------|
| 109.73 | <sup>7</sup> 106.91  | <sup>13</sup> 105.91 | 107.40               | 107.43 |
| 107.78 | <sup>5</sup> 107.18  | <sup>12</sup> 106.6  |                      | 107.52 |
| 107.65 | <sup>6</sup> 107.25  | <sup>13</sup> 105.80 |                      | 107.35 |
| 109.30 | <sup>6</sup>         | <sup>13</sup>        | <sup>1</sup> 106.50  | 105.80 |
| 107.50 | <sup>10</sup> 107.67 | <sup>10</sup> 107.12 |                      |        |
|        | <sup>5</sup> 107.92  | <sup>10</sup> 105.36 | <sup>10</sup> 107.10 |        |
| 108.30 | <sup>8</sup> 109.8   | <sup>12</sup> 107.10 |                      | 107.70 |
| 109.17 | <sup>5</sup> 108.83  | <sup>11</sup> 107.80 |                      | 108.87 |
| 110.14 | <sup>6</sup> 109.66  | <sup>9</sup> 109.07  |                      | 110.98 |
| 111.37 | <sup>6</sup> 111.10  | <sup>7</sup> 110.72  |                      | 111.97 |
| 113.30 | <sup>5</sup> 112.95  | <sup>13</sup> 112.80 |                      | 114.50 |
| 115.28 | <sup>8</sup> 114.80  | <sup>11</sup> 113.95 |                      | 115.57 |
| 114.58 | <sup>11</sup> 114.15 | <sup>11</sup> 113.47 |                      | 115.00 |
| 113.94 | <sup>6</sup> 113.61  | <sup>15</sup> 112.91 |                      | 113.71 |
| 113.41 | <sup>6</sup> 113.00  | <sup>10</sup> 112.30 |                      | 113.70 |
| 113.03 | <sup>7</sup> 112.66  | <sup>11</sup> 111.81 |                      | 112.59 |
| 113.04 | <sup>8</sup> 112.85  | <sup>12</sup> 111.80 |                      | 112.04 |
| 113.46 | <sup>8</sup> 113.18  | <sup>11</sup> 112.47 |                      | 113.59 |
| 114.67 | <sup>5</sup> 114.20  | <sup>11</sup> 113.10 |                      | 114.88 |
| 114.42 | <sup>4</sup> 114.18  | <sup>11</sup> 113.82 |                      | 114.38 |
| 114.15 | <sup>4</sup> 114.0   | <sup>10</sup> 113.42 |                      | 113.77 |
| 114.37 | <sup>4</sup> 114.25  | <sup>9</sup> 113.59  |                      | 114.31 |
| 114.97 | <sup>4</sup> 114.62  | <sup>10</sup> 113.81 |                      | 115.11 |
| 115.67 | <sup>6</sup> 115.24  | <sup>13</sup> 114.21 |                      | 115.63 |

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107.40.5

114.14

113.93



|      | 3H                   | ID                   | ID                  | SH |
|------|----------------------|----------------------|---------------------|----|
| 4770 | 115 47               | <sup>12</sup> 11525  | <sup>11</sup> 11594 |    |
| 4870 | 117 74               | <sup>11</sup> 11654  | <sup>6</sup> 11714  |    |
| 4970 | 120.45               | <sup>13</sup> 11860  | <sup>4</sup> 11930  |    |
| 5070 | 119 94               | <sup>11</sup> 11932  | <sup>7</sup> 11969  |    |
| 5170 | 120.63               | <sup>13</sup> 12008  | <sup>8</sup> 12057  |    |
| 5270 | 120.57               | <sup>12</sup> 120.08 | <sup>7</sup> 12077  |    |
| 5370 | <sup>19</sup> 119.00 |                      | <sup>12</sup> 12043 |    |
| 5370 | 50'                  | 119 86               |                     |    |
| 5470 |                      | <sup>12</sup> 1178   | <sup>9</sup> 121R   |    |
| 5570 | 120 45               | <sup>8</sup> 12007   | 1                   |    |
| 5670 | 119.01               |                      | <sup>9</sup> 11830  |    |
| 5770 | 117.68               | <sup>10</sup> 11738  | <sup>5</sup> 11795  |    |
| 5870 | 116 89               | <sup>10</sup> 11681  | <sup>4</sup> 11738  |    |
| 5970 | 117 27               | <sup>13</sup> 11679  | <sup>5</sup> 11747  |    |
| 6070 | 117 65               | <sup>9</sup> 11697   | <sup>5</sup> 11732  |    |
| 6170 | 117.01               |                      | <sup>9</sup> 11679  |    |
| 6270 | 117 60               | <sup>9</sup> 11687   |                     |    |
| 6370 | 118 00               | <sup>12</sup> 11678  | <sup>9</sup> 11741  |    |
| 6470 | 116 18               | <sup>10</sup> 11617  | <del>116</del>      |    |
| 6570 | 116 52               | <sup>12</sup> 11587  |                     |    |
| 6670 | 115 92               | <sup>12</sup> 11567  |                     |    |
| 6770 | 116 11               | <sup>11</sup> 11581  | <sup>8</sup> 11640  |    |
| 68   | 116 93               | <sup>13</sup> 11593  | <sup>0</sup> 11685  |    |
| 69   | 117 69               | <sup>13</sup> 11682  | <sup>10</sup> 11781 |    |
| 70   | 118 47               | <sup>14</sup> 11700  | <sup>10</sup> 11822 |    |

| R     | SH                  | ID                  | ST     | 3                   |
|-------|---------------------|---------------------|--------|---------------------|
| 11694 | <sup>6</sup> 11599  | <sup>19</sup> 11513 | 115 97 |                     |
| 11758 | <sup>9</sup> 11692  | <sup>11</sup> 11660 | 117 65 | <sup>0</sup> 119 19 |
| 11987 | <sup>8</sup> 11899  | 11847               | 119 80 |                     |
| 12046 | <sup>7</sup> 11977  | <sup>11</sup> 11999 | 120.00 |                     |
| 12097 | <sup>7</sup> 12058  | <sup>9</sup> 12011  | 120 78 |                     |
| 12137 | <sup>6</sup> 12065  | <sup>12</sup> 12003 | 121 52 | BIM                 |
| 12063 | <sup>9</sup> 12050  | <sup>9</sup> 12018  | 121.04 | THOS                |
| 12120 | <sup>9</sup> 12083  | <sup>9</sup> 12035  | 121 95 | CASSIN              |
| 11957 | <sup>10</sup> 11930 |                     | 119 69 | BATH                |
| 11821 | <sup>9</sup> 11818  |                     | 118 50 | STON                |
| 11785 | <sup>4</sup> 11783  | <sup>9</sup> 11722  | 117.08 | HITON               |
| 11763 | <sup>6</sup> 11749  | <sup>19</sup> 11712 | 116 78 | 122 00              |
| 11740 | <sup>6</sup> 11736  | <sup>10</sup> 11701 | 117 21 |                     |
| 11727 | <sup>6</sup> 11721  | <sup>9</sup> 11681  | 116 70 |                     |
| 11726 | <sup>10</sup> 11710 | <sup>6</sup> 11681  | 116 45 |                     |
| 11729 | <sup>7</sup> 11719  |                     | 117.37 |                     |
| 11722 | <sup>6</sup> 11737  | <sup>11</sup> 11804 | 118 58 |                     |
| 11655 | <sup>8</sup> 11619  |                     | 116 22 |                     |
| 11634 |                     | <sup>7</sup> 11595  | 116 90 |                     |
| 11611 | <sup>9</sup> 11601  |                     | 116 28 | BIM                 |
| 11632 | <sup>7</sup> 11600  |                     | 116 33 | 11991               |
| 11680 | <sup>6</sup> 11673  |                     | 117 30 | on                  |
| 11746 | <sup>8</sup> 11712  |                     | 118 09 | Fence               |
| 11860 | <sup>5</sup> 11815  |                     | 118 82 | 66705               |

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58

R  
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|      |   |  |
|------|---|--|
| 7170 | 11731                                   | <sup>19</sup> 11732                      |
| 7240 | <sup>14</sup> 11740 <sup>14</sup> 11685 | <sup>10</sup> 11706                      |
| 7370 | <sup>17</sup> 11730                     | <sup>14</sup> 11659 <sup>14</sup> 11698  |
| 7440 | <sup>15</sup> 11673                     | <sup>11</sup> 11660                      |
| 7510 | <sup>17</sup> 11672                     | <sup>11</sup> 11637 <sup>11</sup> 11670  |
| 7670 | <sup>20</sup> 11730 <sup>13</sup> 11690 | <sup>11</sup> 11662 <sup>8</sup> 11692   |
| 7740 | 11682                                   | <sup>7</sup> 11652 <sup>8</sup> 11680    |
| 7840 | 11741 11688                             | <sup>19</sup> 11676 <sup>9</sup> 11715   |
| 7970 | 11440 11605                             | <sup>13</sup> 11705 <sup>7</sup> 11743   |
| 8070 | <del>11810</del> 11730                  | <sup>14</sup> 11729 <sup>9</sup> 11790   |
| 8170 | <del>7180</del> 11735                   | <sup>13</sup> 11683 <sup>9.5</sup> 11759 |
| 8240 | 11710 11662                             | <sup>13</sup> 11648 <sup>7</sup> 11715   |
| 8310 | 11698                                   | <sup>12</sup> 11620 <sup>7</sup> 11705   |
| 8470 | 11762                                   | <sup>13</sup> 11650 <sup>8</sup> 11690   |
| 8570 | 11794                                   | <sup>19</sup> 11667 <sup>8</sup> 11687   |
| 8670 | 11798                                   | <sup>11</sup> 11712 <sup>6</sup> 11770   |
| 8740 | 11795                                   | <sup>10</sup> 11767 <sup>6</sup> 11684   |
| 8870 | 11752                                   | <sup>12</sup> 11718 <sup>8</sup> 11659   |
| 8970 | 11675                                   | <sup>4</sup> 11629 <sup>8</sup> 11682    |
| 9070 | 11603                                   | <sup>10</sup> 11530 <sup>5</sup> 11590   |
| 9170 | 11651                                   | <sup>5</sup> 11560 <sup>3</sup> 11698    |
| 9270 | 11727                                   | <sup>9</sup> 11624 <sup>3</sup> 11737    |
| 9370 | 11703                                   | <sup>9</sup> 11673 <sup>5</sup> 11799    |
| 9470 | 115.12                                  | <sup>3</sup> on Bm <sup>5</sup> 11872    |

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|--------|--|
| 11760  | 6117097                                  |
| 11700  | 6117075                                  |
| 11710  | 711667                                   |
| 11673  | 711630                                   |
| 11678  | 711635                                   |
| 11702  | 811652                                   |
| 11685  | 811665                                   |
| 11715  | 611672                                   |
| 11742  | 411732                                   |
| 11700  | 411792                                   |
| 11850  | 411832                                   |
| 11725  | 811675                                   |
| 11892  | 811670                                   |
| 11685  | 611677                                   |
| 11705  | 511699                                   |
| 11786  | 911725                                   |
| 11718  | <sup>5.5</sup> 11703 <sup>10</sup> 11670 |
| 11652  | 611690                                   |
| 11662  | <sup>2.5</sup> 11630                     |
| 11630  | 611626                                   |
| 11660  | 611653                                   |
| 11733  | 611738                                   |
| 11742  | 611791                                   |
| 11787B | <sup>13</sup> 11718 <sup>13</sup> 11994  |

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|-------|
| 11703 |
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|-------|---------|----------------------|---------------------|
| 9570  | 116 85  | <sup>10</sup> 116.01 | <sup>5</sup> 11631  |
| 9670  | 117 08  | <sup>10</sup> 116.19 | <sup>4</sup> 11716  |
| 9770  | 117.03  | <sup>9</sup> 116.50  | <sup>7</sup> 11750  |
| 9870  | 117.25  | <sup>8</sup> 116.35  | <sup>9</sup> 11807  |
| 9970  | 117 80  | <sup>10</sup> 119.09 | <sup>3</sup> 11798  |
| 10070 | 117 82  | <sup>10</sup> 117.91 | <sup>5</sup> 11787  |
| 10170 | 118 7.1 | <sup>8</sup> 117.75  | <sup>4</sup> 11898  |
| 10270 | 119 2 8 | <sup>8</sup> 118.59  | <sup>5</sup> 11978  |
| 10370 | 120 87  | <sup>8</sup> 120.00  | <sup>9</sup> 12032  |
| 10470 | 122 50  | <sup>7</sup> 121.57  | <sup>4</sup> 12127  |
| 10570 | 124 40  | <sup>8</sup> 123.50  | 1                   |
| 10670 | 122 53  |                      | <sup>13</sup> 12230 |

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70

50W 123.78

|        |                             |                      |                                       |
|--------|-----------------------------|----------------------|---------------------------------------|
| 106712 |                             | <sup>10</sup> 122.70 | on RP 50 W                            |
| 10770  | 122.01                      | <sup>9</sup> 122.07  |                                       |
| 10870  | 121 12                      | <sup>13</sup> 121.02 | <sup>8</sup> 12133                    |
| 10970  | 120 90                      | <sup>13</sup> 120.75 | <sup>8</sup> 12152                    |
| 11070  | 120 55                      | <sup>14</sup> 120.19 | <sup>8</sup> 12117                    |
| 11170  | 120 89                      | <sup>9</sup> 120.39  | <sup>9</sup> 12175                    |
| 11270  | 122 12                      | <sup>13</sup> 121.34 | <sup>9</sup> 12201 <sup>9</sup> 12242 |
| 11370  | <sup>2</sup> 121.50 122 01  | <sup>15</sup> 121.53 | <sup>9</sup> 12247                    |
| 11470  | <sup>21</sup> 121.87 122 25 | <sup>14</sup> 122.12 | <sup>9</sup> 12287                    |
| 11570  | 123.17                      | <sup>15</sup> 122.97 | <sup>10</sup> 12338                   |

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|       |                      |                      |        |
|-------|----------------------|----------------------|--------|
| 11678 | <sup>7</sup> 116.81  | <sup>11</sup> 117.00 | 116 85 |
| 11728 | <sup>8</sup> 117.09  | <sup>12</sup> 116.52 | 116 86 |
| 11753 | <sup>9</sup> 117.31  | <sup>12</sup> 117.32 | 117 20 |
| 11808 | <sup>7</sup> 117.82  | <sup>11</sup> 119.50 | 119 70 |
| 11789 | <sup>7</sup> 117.79  | <sup>11</sup> 117.90 | 117 62 |
| 11769 | <sup>10</sup> 117.71 | <sup>15</sup> 119.90 | 116 99 |
| 11832 | <sup>7</sup> 118.21  | <sup>11</sup> 118.03 | 117 87 |
| 11904 | <sup>8</sup> 119.00  | <sup>15</sup> 118.89 | 118 90 |
| 12218 | <sup>8</sup> 120.19  | <sup>12</sup> 120.16 | 120 67 |
| 12229 | <sup>6</sup> 122.20  | <sup>9</sup> 122.16  | 122 65 |
| 12341 | <sup>10</sup> 123.52 | <sup>15</sup> 122.91 | 122 32 |
| 12250 | <sup>4</sup> 122.10  | <sup>15</sup> 122.55 | 123 07 |

W

E

|       |                     |                      |                      |
|-------|---------------------|----------------------|----------------------|
| 12307 | <sup>9</sup> 122.92 | <sup>14</sup> 122.08 | <sup>29</sup> 121.97 |
| 12242 | <sup>8</sup> 122.11 | <sup>4</sup> 121.62  | 121 57               |
| 12192 | <sup>4</sup> 121.72 | <sup>10</sup> 120.25 | 121 79               |
| 12190 | <sup>4</sup> 121.61 | <sup>10</sup> 120.15 | 121 17               |
| 12176 | <sup>1</sup> 120.99 | <sup>9</sup> 119.90  | 120 71               |
| 12173 | <sup>9</sup> 121.40 | <sup>5</sup> 120.60  | 121 10               |
| 12209 | <sup>4</sup> 121.56 | <sup>8</sup> 121.04  | 122 00               |
| 12200 |                     | <sup>8</sup> 121.52  | 121 97               |
| 12295 | <sup>5</sup> 122.69 | <sup>9</sup> 122.03  | 122 34               |
| 12360 | <sup>9</sup> 123.39 | <sup>8</sup> 122.81  | 123 50               |

1739



|       | 3H    | 5H    | 10     | 15    |
|-------|-------|-------|--------|-------|
| 11640 | 12393 | 12337 | 129.08 |       |
| 11740 | 12522 | 12513 | 12998  | 12536 |
| 11840 |       | 12644 |        | 12570 |
| 11940 | 12619 | 12571 | 1266   | 12693 |
| 12040 | 12367 | 12365 |        | 12424 |
| 12140 | 12165 | 12190 | 12261  |       |
| 12240 | 12012 | 12058 | 12115  | 12160 |
| 12340 | 11980 |       | 12047  | 12092 |
| 12440 | 11935 | 11940 | 11944  | 12015 |
| 12540 | 11936 | 11906 | 11998  |       |
| 12640 | 11917 | 11876 | 11993  |       |
| 12740 | 12010 | 12015 | 11990  | 12028 |
| 12840 | 12012 | 11970 | 12077  |       |
| 12940 | 11976 | 11997 | 11920  | 12037 |
| 13040 |       | 11945 | 11901  | 11990 |
| 13140 |       | 11935 | 11983  | 11964 |
| 13240 | 12001 | 12030 | 11956  | 12055 |

| #     | ST      | 3H    | 10     | 15       |
|-------|---------|-------|--------|----------|
| 12434 | 1124.03 | 12535 | 12563  |          |
| 12537 | 12335   | 12476 | 120.09 | B.M.     |
| 12687 | 12688   | 12582 | 12736  | 127.57   |
| 12639 | 12605   |       | 127.63 | STUMP    |
| 12377 | 12483   |       | 12933  | E 5100   |
| 12564 | 12197   |       | 12731  | ST 11710 |
| 12132 | 12045   |       | 12041  | (Wiley)  |
| 12273 | 12407   | 12038 | 11992  | 0        |
| 12247 | 12261   | 11972 | 11932  | 12020    |
| 12017 | 12374   | 11932 | 11943  | 11934    |
| 12037 | 11973   | 11952 | 11953  | 0        |
| 12085 | 12055   | 12004 | 12094  | 11876    |
| 12132 | 12078   | 12006 | 12173  |          |
| 12036 | 12045   | 11969 | 12034  |          |
| 12340 | 11902   | 11972 | 11935  |          |
| 12045 | 11934   | 11995 | 11933  |          |
| 12125 | 12074   | 11980 | 12023  |          |

FOR E+W BRACE POST  
 B M OT SW COR  
 POST

STA 132+68

12394  
 # 2



DITCH TO OPEN  
DITCH 450 N.W.

0+0 AT W SIDE OF DITCH 10 FT  
W OF ROAD AT STA 7440

|      |        |                              |        |
|------|--------|------------------------------|--------|
| 0+0  | 116.97 | 10+0                         | 0      |
| 0+04 | 117.25 |                              | 118.68 |
| 1+0  | 116.75 |                              |        |
| 2+0  | 117.17 |                              |        |
| 3+0  | 117.38 |                              |        |
| 4+0  | 117.32 |                              |        |
| 5+0  | 118.51 |                              |        |
| 6+0  | 118.07 |                              |        |
| 7+0  | 116.58 |                              |        |
| 8+0  | 116.94 |                              |        |
| 9+0  | 114.72 | STA 110 SAT                  |        |
| 9+06 | 110.60 | BD STR W 115-WATSON<br>DITCH |        |

START 94.75

CROSSES E + W FALL

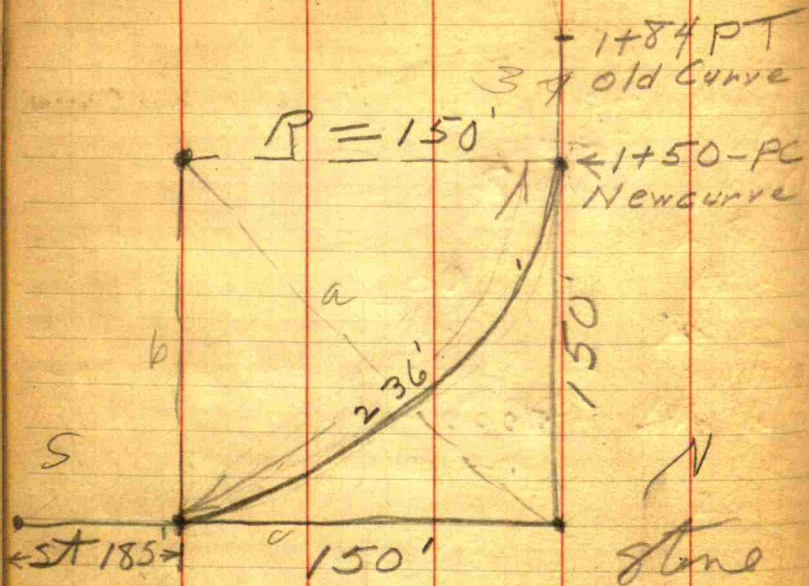
29' W of WILD  
CHERRY TREE  
TRUNK 10" D.

8+0 TOP OF BERM  
WILLIS + WATSON  
DITCH

E1 BOD of STREAM  
=



## Surber Road



$$2(236)$$

$$118$$

$$\frac{455 \text{ Old Curve} - 69}{34' \text{ Short on New Curve}}$$

$$421'$$

$$236' \text{ Length New Curve}$$

$$185'$$

$$a^2 = b^2 + c^2$$

$$a^2 = 45000$$

$$a = 212$$



## Kum Road Est.

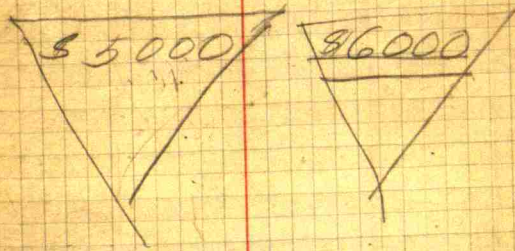
|                                |          |   |
|--------------------------------|----------|---|
| 926' X 10" Di Tile @ 19¢       | 175.94   | ✓ |
| 6000' X 6" Di Tile @ 115¢      | 690.00   | ✓ |
| 600' X 5" Di Tile @ 105¢       | 63.00    | ✓ |
| 4 std C. Basins @ \$40.00      | 160.00   | ✓ |
| Cut 5' 7.00 @ 40¢              | 2280.00  | ✓ |
| Spec Basin 860 @ 50¢           | 430.00   | ✓ |
| 206 Yds Conc @ 11.00           | 2266.00  | ✓ |
| Lorne Steel 4535# @ 4.5        | 204.07   | ✓ |
| 7170 Tons Macadam @ 2.80       | 20076.00 | < |
| 38' X 10" Armes Polaid @ 25¢   | 9.50     | ✓ |
| 89' X 12" " " @ 25¢            | 22.25    | ✓ |
| 222' X 10" " New @ 1.30        | 288.60   | ✓ |
| 98' X 12" " New @ 1.40         | 137.20   | ✓ |
| 104' X 15" " New @ 1.90        | 197.60   | ✓ |
| 86' X 18" " New @ 2.20         | 189.20   | ✓ |
| 28' X 24" " New @ 3.30         | 92.40    | ✓ |
| 15 Trusses for 14' span 7.50   | 112.50   | ✓ |
| 8850 Gallon Tar TM @ 14¢       | 1239.00  |   |
| 177 Tons Chips 20# sq yd @ 270 | 477.90   |   |

**\$ 29111.16**

Ret wall @ B-20 yds  
 9-20 yds  


---

 Total 40 yds  
 Steel 482#





W 74

12 UN<sup>s</sup>  
EXTRA T 1/4

|     | Stake | Ground |
|-----|-------|--------|
| 0+0 | 9552  | 95.47  |
| 1+0 | 9691  | 96.90  |
| 2+0 | 0847  |        |
| 2+  | 8.77  | 98.73  |

Stake Ground

711.64

Cut

|      |      |       |                  |       |
|------|------|-------|------------------|-------|
| 0+0  | 9877 | 9873  | <del>98.77</del> | 95.77 |
| 1+0  | 9779 | 9787  | <del>95.77</del> | 94.77 |
| 2+0  | 9691 | 9690  | <del>94.57</del> | 93.77 |
| 2+86 | 9552 | 95.47 | 94.06            | 92.91 |

4+44 92.40 90.55

|      |
|------|
| 2.86 |
| 1.50 |
| 4.4  |

100.00

E

75

Stake Ground

576

|       |       |       |
|-------|-------|-------|
| 98.82 | 98.75 | 95.75 |
| 97.92 | 97.89 | 94.67 |
| 96.84 | 96.60 | 93.59 |
| 95.15 | 95.19 | 92.66 |



78

Richardson Road

0+22 12" VIT T110

Str - No. ①

Sta 0+22

30' x 15" Anneo.

L-Hdwls.

N, + S

5+63

20' x 12" N. side

Sta 7+68

16' x 12"

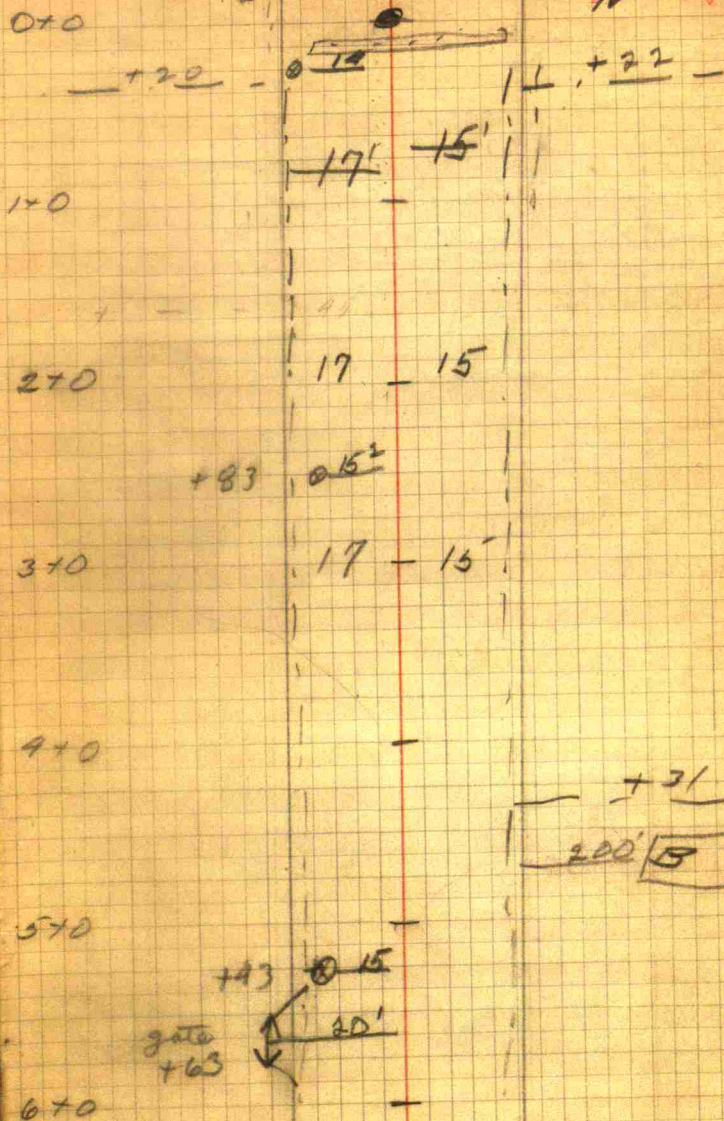
N. side

0+0

S

N

79





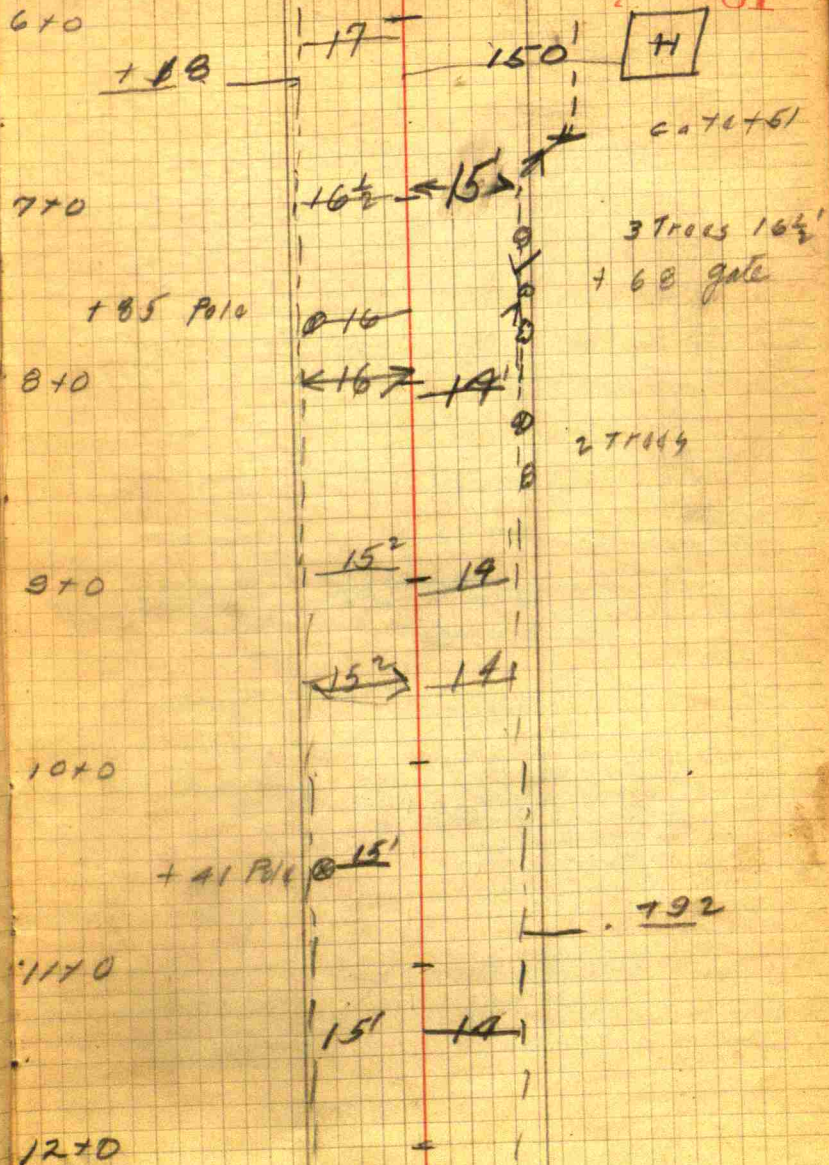
80

5  
 2  
 2  
 0  
 0  
 0  
 0  
 0  
 0  
 0  
 0

5

N

81





Gateway  
~~Sta 16 + 28~~ A. side  
~~16' x 70'~~

Gateway  
 Sta. 16 + 37 S. side  
 20' x 10''

12+0

15 19

13+0

Pole + 02

192

14+0 + 93

19  
 192 19

15+0

+ 05

B  
 10

120'

+ 76 P 142

16+0

192 192

17+0

+ 95

H  
 23

70

19 19  
 14 143  
 140 + 90  
 14 75

+ 65

18+0

163

////



Sta 20+50 - Across road

26' x 18" dimes

Sta 21+93 N. side  
16' x 12"

gateway

1870

T 100+30

Pole +35

3-16

①-16

1970

T 100+90

T 100+12

+20

3-16

1-17

①-17

③-18

1-17

2070

1-17

= 19

2170

Pole +20

1-17

①-17

2270

17

- 19

15

③

2370

17

- 19

17

①-17

Pole +72

2470

17

- 19

4 TRUSS  
on road

+93 Gate

+0.1

+367 feet

+65 TRUSS



Sta 27+47 N. side  
 18' x 10" Gateway  
 Sta 28+80 Cross road  
 26' x 15" Ames

|      |    |      |                              |
|------|----|------|------------------------------|
| 2410 | 17 | F151 | +277+99                      |
|      |    | 163  |                              |
| 2570 | 17 | F152 | +09 T+00                     |
|      |    | 163  |                              |
|      |    | 15   | +75 T+01                     |
|      |    | 152  |                              |
| 2640 | 17 |      | +40 T+00                     |
|      |    | 163  |                              |
|      |    | ⊕    | 1/2 M STONE                  |
|      |    | 162  | 26+44                        |
| 2740 | -  |      | +04 T+00                     |
|      |    | 152  |                              |
|      |    | 152  | +97 GATE                     |
|      |    | 152  |                              |
|      |    | 152  | +90 Tree                     |
| 2840 | 17 | 163  |                              |
|      |    | 152  |                              |
|      |    | 17   | 35 small<br>TUCKS<br>IN Road |
| 2940 | 17 |      |                              |
|      |    | ⊕    |                              |
|      |    | 17   |                              |
| 3040 | -  |      |                              |

CROWN POLE  
 + 94  
 150 POLE



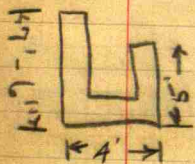
88

Rich Rd Extras

55 yds Man in Gate @

3550 Tons used as per Ft. Bills  
3337 " reqd

+213 Tons @ =



End Rd Side

$$1 \times 7.5 = 7.5 \text{ cu ft}$$

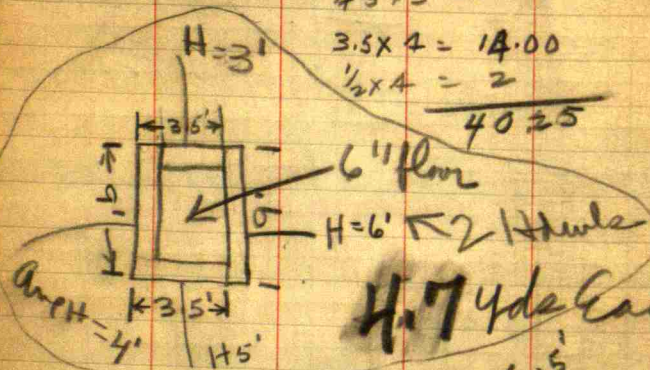
$$6'' \times 7.5 = 3.25 \text{ " "}$$

$$4.5 \times 3 = 13.50$$

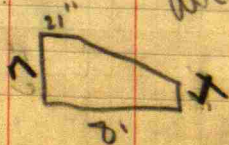
$$3.5 \times 4 = 14.00$$

$$\frac{1}{2} \times 4 = 2$$

$$\hline 40.25$$



H=7 yds Each / Head



3070

3170

3270

3370

3470

3570

3670

5

$$317 - 16 \frac{2}{4} \text{ @}$$

$$\hline 315$$

16 1/2

$$16 \frac{3}{4} - 19 \frac{2}{4}$$

$$\hline 16 \frac{1}{2} - 15 \frac{3}{4}$$

$$+ 6 - 16 \frac{3}{4}$$

$$\hline 19 \frac{2}{4}$$

15 3/4

15 3/4

15 3/4

$$16 \frac{2}{4} - 14$$

$$16 \frac{1}{4} - 17$$

$$18 \frac{5}{4} - 16 - 14 \frac{2}{4}$$

89

+20 Polt

+30 Trees

755 + 100

+203 Trees

+30

+00



Sta 37+07 Across road

26' x 15" Armes.

Sta 38+18 N. side

18' x 10'

Sta 42+79 South side

24' x 10'

37+0

S

P.O. +39

38+0

39+0

40+0

41+0

42+0

43+0

F 16 - F 15

P.O. 143

16 - 15

18

16 - 15

P.O.

F 16 - F 15

P.O. 163

15 - 16

F 16 - F 15

P.O. 163

N.

P.O. 357+19

P.O. +00

P.O. +95

P.O. 718

39+63

3/4 MI STONE

P.O. +00

P.O. 19+83



Sta 45+38  
26' x 24" across road

~~Sta 47+43~~ N. side  
20' x 10' gallery

Sta 48+66 across road  
26' x 10"

~~Sta 48+~~  
Sta 51+84  
20' of 18" relay adding  
6'

43+0

B

44+0

45+0

46+0

47+0

48+0

49+0

152  $\frac{F}{16}$ 

152

160

+ 43 Pol 10

300

B  
793

162

Gate

+ 43

20' of 18"

N

+ 83

172

Truck + 85

162

174'

Pol 127

16

152



Sta 52+80 S. side ditto  
28' X 15' Arneo  
L Hdws.

~~52+80~~

Sta 53+84 S side  
gateway  
18' X 10"

9970

S

$$\begin{array}{r} 715 \\ - 16 \\ \hline 716 \end{array}$$

N 95  
571005 + 15  
+ 29 0970

5070

5170

5270

+73  
Road  
5370  
+ 02

+19  
B  
30

5770

+34  
H  
+46

5570

$$\begin{array}{r} 152 \\ - 15 \\ \hline 15 \end{array}$$

1670

$$\begin{array}{r} 152 \\ - 16 \\ \hline 172 \end{array}$$

16

168

16 160

+ 96 Pol 4

+ 04 TFCU

Treat + 30

1 MI STONE  
52+90

+ 02 Pol 9



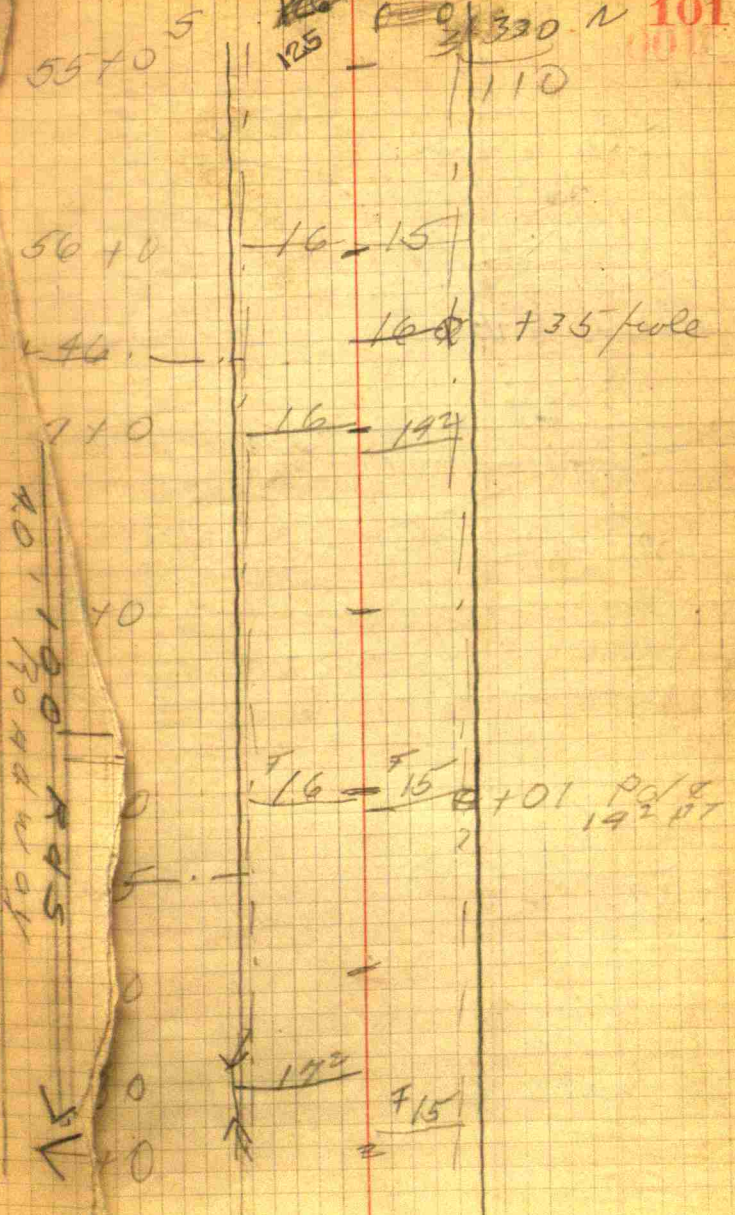
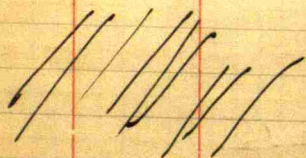
~~H. = House to be  
left in flight.~~

~~lots to be  
50 x 200'~~

~~ST~~

S1  
S2

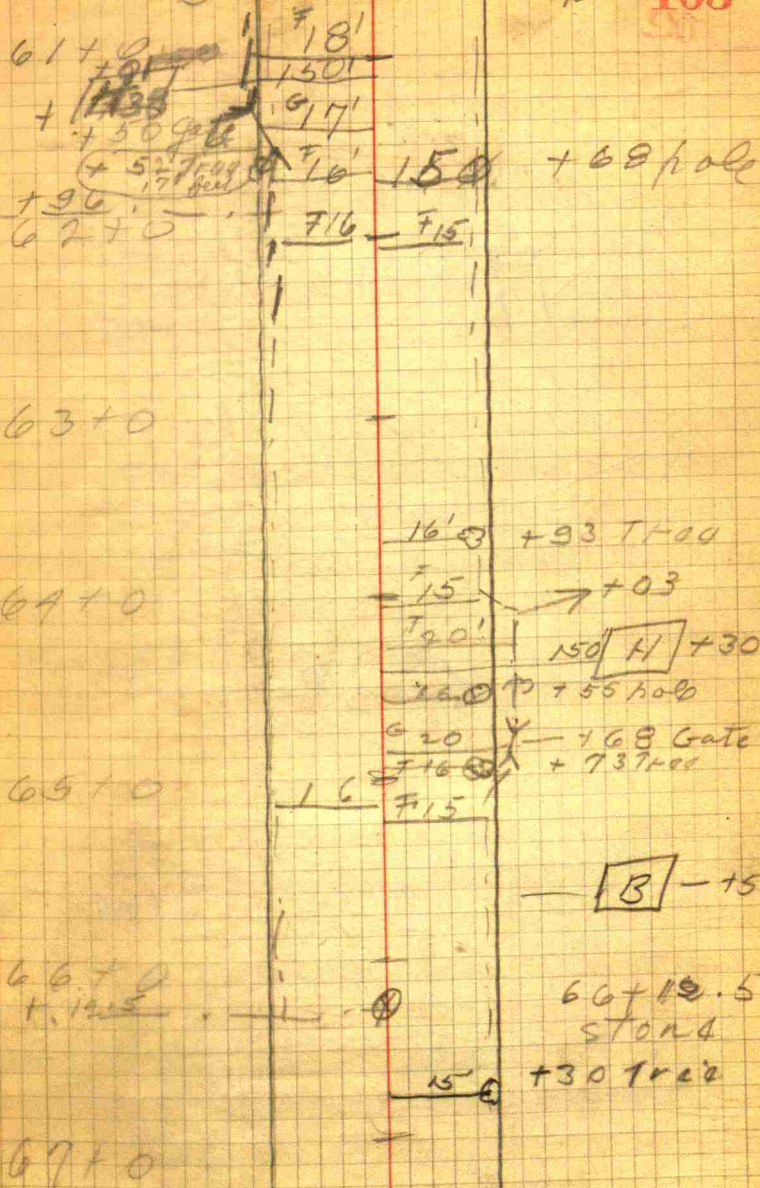
~~STROTS  
50 FT wide  
divided  
aquadistart~~





Sta 64+68 N. side  
20' x 10"

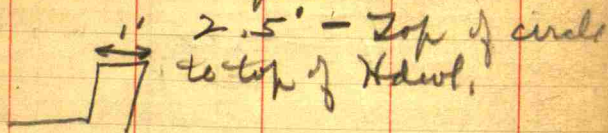
Sta 69+48 S. side  
20' x 12"



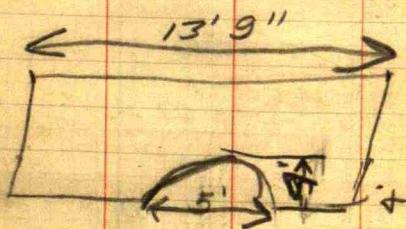


Sta 71+78

6.5' from Red stream  
to top of Xdwl.



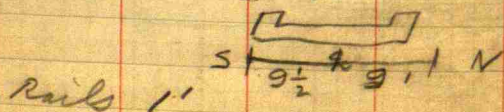
2.5' - Top of circle  
to top of Xdwl.



71+78

CONCRETE ARCH CULVERT  
Waterway 5' diameter

19 1/2' to outside faces  
to 1/2' off center 5'



67+0

68+0

+73

69+0

148' 11' 100'

75+0

70+0

71+0

+

+94

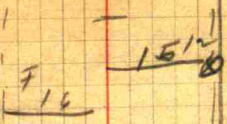
72+0

73+0

71+94 -  
NO Poles

S

N



15 1/2"

+12 pole

168

+097 pole

F 16

16

+89 Pole

F 152

F 15

F 152

F 15

+12 Tree

16 1/2"

+79 pole

16 1/2"

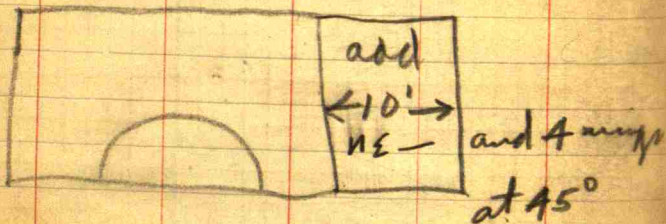
+84 tree

16 1/2"

F 15



71+78 - widen to 24'



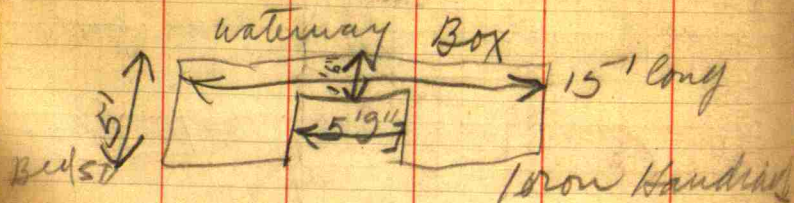
or replace with 8 span skewed 15° Right

Sta 73+54 N. side  
20' x 10"

73+0 S  
74+0  
75+0  
76+0  
77+0  
78+0  
79+0

N 107.  
- F15  
- 1653 + 38 Truss  
- F15  
- 618 + 154 GATG  
- F18 300' [H] 79+0  
+  
- 162  
- 100 + 30 pole  
- F18  
F16  
- 16 + 98 pole  
- F15 + 3  
+ 52 Truss 15



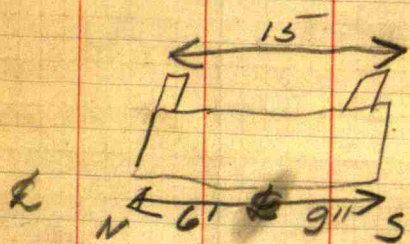


concrete Box

?

82+59

St concrete  
Iron Bridge



82+59  
Replace with  
10' span  
Fluttop  
Wings 45°

Sta 79+66 S. side  
20' x 12''

79+0

+39.2  
+39.2 fence  
beginning

69+4 766

80+0

81+0

+33 764

83+0

84+0

716

720 1/4

20

16'

15'

16'0

315

15'2

16'3

19'0

716

716

79+ +39.2  
-39.2  
STON4

+59 hole

+75 764

+46 Polg



Sta 85+07 N. side  
18' x 10" gateway

~~Sta 87+83 N. side~~

84 + 0 S

85  $\boxed{H}$  +16  
600

86

87

88

Treat 58 3  
89  $\frac{7}{14}$   $\frac{7}{15}$

90

001  $\boxed{H}$  727

F15  
15  
134  
F16

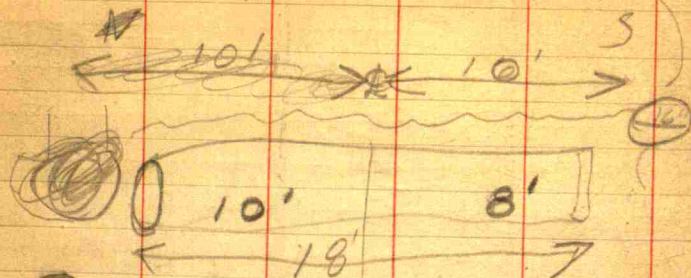
+07 gate  
729 hole  
+75 hole

F14  
102  
F16  
 $\boxed{B}$  +83 Gate  
+ Buns

116  
+20 hole  
14  
15

F14 120  
+78 Poto  
- F14



16 inch = 10 road  
culvert at 90+31

24" T110  
Sta 90+31  
Box culvert  
5' show

93 + 35.5  
12 inch Tile 20' long

92.80

92.77

~~Sta 92+24~~  
Sta 90+95  
18' x 10'

S. side

90

gate  
+93

91

+81 Trunk

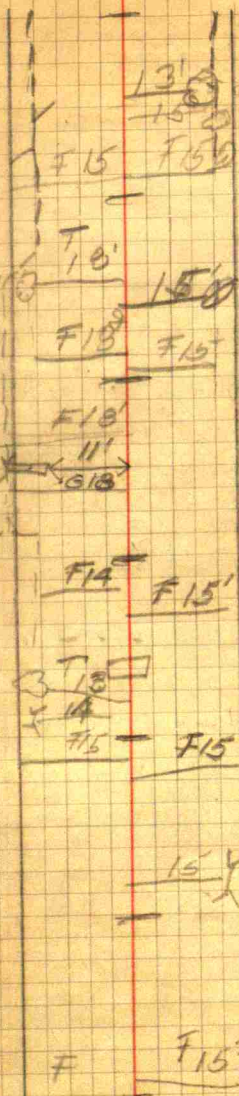
92

14 + 24 150  
+ 24  
House gate  
& concrete walk  
+ 65 9

tree  
+ 39  
Gate 82  
94

95

96



13' 10 + 28 Trunk  
15' 0  
+ 30 Trap  
+ 49 Trap  
15'

+ 80 pole

F14 F15'

T10  
14  
F14 F15

15' 0 + Gate 80

F F15'



Sta 93+35 across rd 96  
26' x 18"

Sta 94+88 N. side  
16' x ~~10~~ 10"

Sta 100+4.1 N. side  
16' x 12"

103+59 14" Tubs  
under Road  
on center  
18' long

Sta 103+59 across rd  
30' x 24" arched.  
Skewed R-30°

97

F15 - F15

98

F16 F16

99

100

14'

+35 Tree

G152

+41 Gate

+25

101

F15 - F15

102

F15 - F15



105 + 82 Stone

Sta 105 + 82 N. side  
16' x 10"~~Sta 109 + 60 N. side~~

102

5

103

104

105

106

107

108

STONE  $\oplus$  + + 82.4 + +F  
15 — F  
15F  
15



108

S

109

110

|          |   |                  |           |
|----------|---|------------------|-----------|
| Treat 50 | B | F17 <sup>2</sup> | F         |
|          |   | <u>17</u>        | <u>15</u> |

111

112

|           |
|-----------|
| F         |
| <u>B4</u> |

113

F14 - F16

|         |   |           |
|---------|---|-----------|
| +067100 | B | <u>17</u> |
|---------|---|-----------|

114

109 ~~113~~ No fence

113



+69 14' of 8"  
 drain TICA run  
 in side ditch on  
 side to cemetery  
 gate

Sta 114+69 South side 116  
 20' x 12"

118+99

16" culvert under  
 Ballavilla - Clayton  
 21' S with 10' R  
 Culvert runs E+W.

Retaining wall

114  
 gate

169

115

116

117

118

119

120

cemetery

church

+ 94  
 church

+ 93

192

F192

F162

142

162

15

16

+ 93

119+13.5

on

improvement



| Runs             | STK   | A     | B  | Cutto   |
|------------------|-------|-------|----|---------|
| 124              | Gd    |       |    | Subgd   |
|                  | Totl  |       |    |         |
|                  | Part  |       |    |         |
| 0+0              | 9550  |       |    | 0.67    |
| 0+ <sup>25</sup> | 9575  | 9575  | 6d |         |
| 0+0              | 9650  | 9725  |    | 9" 1.42 |
| 2+0              | 9750  | 9800  |    | 6" 1.17 |
| 3+0              | 9850  | 9900  |    | 6" 1.17 |
| 4+0?             | 9800  | 9825  |    | 3" 0.92 |
| 5+0              | 9750  | 9860  |    | 6" 1.17 |
| 6+0              | 9910  | 9860  | 6" | 6" 0.17 |
| 7+0              | 10070 | 10030 | 6" | 6" 0.17 |
| 8+0              | 10230 | 10270 |    | 5" 1.07 |
| 9+0              | 10390 |       |    |         |
| 10+0             | 10550 |       |    |         |

BM 0+0 Totl cor post 100.00

125  
 BM  
 Fiat Totl STG. 5718  
 5 and W Rail  
 EIV 98.78

40 10  
 8.  
 80  
 8  
 5 1/2" 2. 4 3/4

98



| Sta   | Ele. Stake | Ele. Finished Part. | Exc. To Part. | Cut To Subgrade | Fill To Part. | Grade Part | Grade Sub. Grade |
|-------|------------|---------------------|---------------|-----------------|---------------|------------|------------------|
| 0+00  |            | 95.50               |               |                 |               |            |                  |
| 0+25  | 101.00     | 95.75               | 5.25          | 5.92            |               |            |                  |
| 1+00  | 99.39      | 96.50               | 2.89          | 3.56            |               |            |                  |
| 2+00  | 99.21      | 97.50               | 1.71          | 2.38            |               |            |                  |
| 3+00  | 100.20     | 98.50               | 1.70          | 2.37            |               |            |                  |
| 4+00  | 98.62      | 98.00               | .62           | 1.29            |               |            |                  |
| 5+00  | 95.39      | 97.50               |               |                 | 2.11          | 1.44       |                  |
| 6+00  | 96.19      | 99.10               |               |                 | 2.91          | 2.24       |                  |
| 7+00  | 101.32     | 100.70              | .62           | 1.29            |               |            |                  |
| 8+00  | 102.32     | 102.30              | .02           | .69             |               |            |                  |
| 9+00  | 105.55     | 103.90              | 1.65          | 2.32            |               |            |                  |
| 10+00 | 105.97     | 105.50              | .47           | 1.14            |               |            |                  |
| 11+00 | 106.68     | 105.60              | 1.08          | 1.75            |               |            |                  |
| 12+00 | 106.30     | 105.70              | .60           | 1.27            |               |            |                  |
| 13+00 | 105.37     | 105.80              |               | .43             |               |            |                  |
| 14+00 | 106.74     | 105.90              | .84           | 1.51            |               |            |                  |
| 15+00 | 105.64     | 106.00              |               | .36             |               |            |                  |
| 16+00 | 104.88     | 106.10              |               | 1.22            |               |            |                  |
| 17+00 | 105.94     | 106.20              |               | .26             |               |            |                  |
| 18+00 | 106.66     | 106.30              | .36           | 1.03            |               |            |                  |
| 19+00 | 107.20     | 106.40              | .80           | 1.47            |               |            |                  |
| 20+00 | 106.47     | 106.50              |               | .64             | .03           |            |                  |
| 21+00 | 106.63     | 106.70              |               | .60             | .07           |            |                  |
| 22+00 | 106.42     | 106.90              |               | .48             | .78           |            |                  |

Kuno Rd

|        |
|--------|
| 0.754  |
| 0.4555 |
| 101.00 |
| 98.50  |
| 2.50   |
| 1.70   |
| 67     |
| 5.92   |
| 2.37   |
| 99.39  |
| 96.50  |
| 62     |
| 2.89   |
| 67     |
| 2.89   |
| 1.29   |
| 67     |
| 1.29   |
| 3.56   |
| 99.21  |
| 97.50  |
| 97.50  |
| 95.39  |
| 2.11   |
| 67     |
| 2.38   |
| 2.11   |
| 67     |
| 1.44   |
| 99.10  |
| 96.19  |
| 2.91   |
| 67     |
| 2.24   |
| 101.32 |
| 100.70 |
| 62     |



128

|      | Grade<br>st | Finish<br>Part | cut to<br>Part | cut to<br>Sub Grade | Fill to<br>Part | Fill to<br>Sub Gd. |
|------|-------------|----------------|----------------|---------------------|-----------------|--------------------|
| 23+0 | 107.21      | 107.10         | .11            | .58                 |                 |                    |
| 24+0 | 107.83      | 107.30         | .53            | 1.20                |                 |                    |
| 25+0 | 107.78      | 107.50         | .28            | .95                 |                 |                    |
| 26+0 | 107.65      | 107.70         |                | .62                 | .05             |                    |
| 27+0 | 106.64      | 107.90         |                |                     | 1.26            | .59                |
| 28+0 | 107.06      | 108.10         |                |                     | 1.04            | .37                |
| 29+0 | 107.84      | 108.30         |                | .21                 | .46             |                    |
| 30+0 | 109.21      | 109.50         |                | .38                 | .29             |                    |
| 31+0 | 110.99      | 110.70         | .29            | .96                 |                 |                    |
| 32+0 | 112.29      | 111.90         | .39            | 1.06                |                 |                    |
| 33+0 | 114.39      | 113.10         | 1.29           | 1.96                |                 |                    |
| 34+0 | 115.90      | 114.30         | 1.60           | 2.27                |                 |                    |
| 35+0 | 115.31      | 114.06         | 1.25           | 1.92                |                 |                    |
| 36+0 | 114.10      | 113.82         | .28            | .95                 |                 |                    |
| 37+0 | 113.92      | 113.58         | .34            | 1.01                |                 |                    |
| 38+0 | 112.59      | 113.34         |                |                     | .75             | .08                |
| 39+0 | 112.15      | 113.37         |                | <del>1.22</del>     | 1.72            | .55                |
| 40+0 | 113.80      | 113.70         | .10            | .77                 |                 |                    |
| 41+0 | 115.02      | 114.03         | .99            | 1.66                |                 |                    |
| 42+0 | 114.92      | 114.36         | .06            | .73                 |                 |                    |
| 43+0 | 113.91      | 114.69         |                |                     | .78             | .11                |
| 44+0 | 114.50      | 115.05         |                | .12                 | .55             |                    |
| 45+0 | 115.21      | 115.89         |                | .04                 | .63             |                    |
| 46+0 | 115.69      | 116.63         |                |                     | .94             | .27                |
| 47+0 | 115.96      | 117.42         |                |                     | 1.46            | .79                |

 129  
 010.926

142845

0 11739

0 594



|      | Gd     | 51     | wt to | cut. to | Fills | Fills   |
|------|--------|--------|-------|---------|-------|---------|
|      | Part   | Part   | Part  | Sub qd. | Part  | Sub qd. |
| 48+0 | 11969  | 11821  |       | .14     | .53   |         |
| 49+0 | 11968  | 11900  | .68   | 1.35    |       |         |
| 50+0 | 11988  | 11950  | .38   | 1.05    |       |         |
| 51+0 | 12103  | 12000  | 1.03  | 1.70    |       |         |
| 52+0 | 12154  | 12050  | 1.04  | 1.71    |       |         |
| 53+0 | 12100  | 12100  | .08   | .75     |       |         |
| 54+0 | 12183  | 12025  | 1.58  | 2.25    |       |         |
| 55+0 | 11958  | 11950  | .08   | .75     |       |         |
| 56+0 | 11844  | 11875  |       | .36     | .31   |         |
| 57+0 | 11708  | 11800  |       |         | .92   | .25     |
| 58+0 | 11676  | 11785  |       |         | 1.09  | .42     |
| 59+0 | 117.23 | 11770  |       | .20     | .47   |         |
| 60+0 | 11656  | 11755  |       |         | .99   | .32     |
| 61+0 | 116.49 | 11740  |       |         | .91   | .24     |
| 62+0 | 117.28 | 11725  | .03   | .70     |       |         |
| 63+0 | 118.50 | 117.10 | 1.40  | 2.07    |       |         |
| 64+0 | 116.18 | 11695  |       |         | .77   | .10     |
| 65+0 | 11642  | 11680  |       | .29     | .38   |         |
| 66+0 | 11635  | 11665  |       | .37     | .30   |         |
| 67+0 | 11644  | 11701  |       | .10     | .57   |         |
| 68+0 | 11737  | 11737  |       | .67     |       |         |
| 69+0 | 118.09 | 11773  | .36   | 1.03    |       |         |
| 70+0 | 118.96 | 11810  | .86   | 1.53    |       |         |
| 71+0 | 11775  | 11795  |       | .47     | .20   |         |
| 72+0 | 11729  | 11780  |       | .16     | .51   |         |

Gd Part

72 117.31  
0+0 .05

131  
0 117.50  
12053  
0, 119.02  
0 116.14



|      |                     |       |      |      |           |
|------|---------------------|-------|------|------|-----------|
| 73+0 | 11740               | 11765 |      | .42  | .25       |
| 74+0 | 11776               | 11750 |      | .43  | .24       |
| 75+0 | 11730               | 11760 |      | .37  | .30       |
| 76+0 | 11772               | 11770 | .02  | .69  |           |
| 77+0 | 11749               | 11780 |      | .36  | .31       |
| 78+0 | 11773               | 11790 |      | .50  | .17       |
| 79+0 | 11803               | 11800 | .03  | .70  |           |
| 80+0 | 11791               | 11810 |      | .48  | .19       |
| 81+0 | 11837               | 11820 | .17  | .84  |           |
| 82+0 | 11735               | 11810 |      |      | .75 .18   |
| 83+0 | 11658               | 11800 |      | 1.42 | .75       |
| 84+0 | 11670               | 11790 |      | 1.20 | .53       |
| 85+0 | 11747               | 11780 |      | .34  | .33       |
| 86+0 | 11790               | 11770 | .20  | .87  |           |
| 87+0 | 11730               | 11780 |      | .17  | .50       |
| 88+0 | 11692               | 11790 |      |      | .98 .31   |
| 89+0 | <sup>SM</sup> 11978 | 11800 | 1.78 | 2.49 | 1.72 E12  |
| 90+0 | 11628               | 11800 |      |      | 1.72 1.05 |
| 91+0 | 11709               | 11800 |      | .53  | .92 .25   |
| 92+0 | 11786               | 11800 | .13  | .53  | .74       |
| 93+0 | 11819               | 11800 | .19  | .86  |           |
| 94+0 | 11686               | 11800 |      |      |           |
| 95+0 | 11686               | 11800 |      |      | 1.14 .47  |
| 96+0 | 11704               | 11820 |      |      | 1.16 .49  |
| 97+0 | 11748               | 11840 |      |      | .92 .25   |

798

7.66

796

11740

11217

523

Toll BRIDGE HALL as stake



| 134   | 6d<br>STK | FIN<br>Finished<br>PART | CUT TO<br>PART | CUT TO<br>SubEd | FIN TO<br>PART | FIN TO<br>SubEd |
|-------|-----------|-------------------------|----------------|-----------------|----------------|-----------------|
| 9840  | 11779     | 11860                   |                |                 | .81            | .14             |
| 9940  | 11767     | 11880                   |                |                 | 1.13           | .46             |
| 10040 | 11709     | 11900                   |                |                 | 1.91           | 1.24            |
| 10140 | 11801     | 11920                   |                |                 | 1.19           | .52             |
| 10240 | 11844     | 11940                   |                |                 | .96            | .29             |
| 10340 | 12067     | 12020                   | .47            | 1.14            |                |                 |
| 10440 | 12292     | 12100                   | 1.92           | 2.59            |                |                 |
| 10540 | 12457     | 12180                   | 2.77           | 3.44            |                |                 |
| 10640 | 12239     | 12260                   |                | .46             | .21            |                 |
| 10740 | 12198     | 12270                   |                |                 | .72            | .05             |
| 10840 | 12122     | 12250                   |                |                 | 1.28           | .61             |
| 10940 | 12095     | 12230                   |                |                 | 1.35           | .68             |
| 11040 | 12074     | 12210                   |                |                 | 1.36           | .69             |
| 11140 | 12171     | 12220                   |                |                 | .99            | .32             |
| 11240 | 12215     | 12260                   |                | .22             | .45            |                 |
| 11340 | 12203     | 12300                   |                |                 | .97            | .30             |
| 11440 | 12235     | 12340                   |                |                 | 1.05           | .38             |
| 11540 | 12336     | 12380                   |                | .23             | .44            |                 |
| 11640 | 12424     | 12433                   |                | .58             | .09            |                 |
| 11740 | 12557     | 12500                   | .57            | 1.24            |                |                 |
| 11840 | 12676     | 12567                   | 1.09           | 1.76            |                |                 |
| 11940 | 12640     | 12550                   | .90            | 1.57            |                |                 |
| 12040 | 12385     | 12450                   |                | .02             | .65            |                 |
| 12140 | 12217     | 12350                   |                |                 | 1.33           | .66             |
| 12240 | 12068     | 12250                   |                |                 | 1.82           | 1.15            |

135

170.12  
 14332  
 12.825  
 126.03



136

Gd STR

EI

FINISHED  
PART

CUT TO

PART

CUT  
TO  
Sub-6dFILL  
TO  
PARTFILL TO  
Sub-6d

|        |       |       |     |      |     |
|--------|-------|-------|-----|------|-----|
| 12370  | 12000 | 12150 |     | 1.50 | .83 |
| 12470  | 11966 | 12087 |     | 1.21 | .54 |
| 12570  | 11966 | 12062 |     | .96  | .29 |
| 12670  | 11959 | 12065 |     | 1.11 | .94 |
| 12770  | 12030 | 12095 | .02 | .65  |     |
| 12870  | 12040 | 12125 |     | .85  | .18 |
| 12970  | 12025 | 12095 |     | .70  | .03 |
| 13070  | 11968 | 12065 |     | .97  | .30 |
| 13170  | 11962 | 12065 |     | 1.03 | .36 |
| 13270  | 12099 | 12095 | 21  | .46  |     |
| 132768 | 12033 | 12103 |     | .70  | .03 |
| 132783 |       | 12120 |     |      |     |

012079 137

012096



## Extension

Staka T 1/4 Kunstco

T 1/8

|      |     |       |       |        |       |     |
|------|-----|-------|-------|--------|-------|-----|
| 5    | 740 | 11709 | 11770 | 1120   | 11800 | 509 |
| 0+0  |     |       |       |        |       |     |
| 1+0  |     | 11703 |       |        | 11185 | 518 |
| 2+0  |     | 11722 |       |        | 11170 | 532 |
| 3+0  |     | 11702 |       |        | 11155 | 547 |
| 4+0  |     | 11736 |       |        | 11140 | 596 |
| 5+0  |     | 11718 |       |        | 11125 | 593 |
| 6+0  |     | 11751 |       |        | 11110 | 641 |
| 7+0  |     | 11730 |       |        | 11095 | 635 |
| 8+0  |     | 11631 |       | 111.74 | 11080 | 551 |
| 9+0  |     | 11508 |       | 110.57 | 11065 | 443 |
| 9+80 |     | 11539 |       |        |       |     |

11709

11200

11718

11125

11703

11539

11065

11185

593

474

11751

11095

518

11751

11722

11110

656

11170

641

552

11730

11095

11730

11702

11155

635

11080

547

11631

650

11736

11080

11140

551

11631

596

11508

11065

11065

566

11718

443

11110

11508

608

11064



|      |        |   |
|------|--------|---|
| 0+00 | 100.00 | ✓ |
| 0+25 | 100.18 | ✓ |
| 0+45 | 100.33 | ✓ |
| 0+75 | 100.17 | ✓ |
| 1+00 | 100.04 | ✓ |
| 1+25 | 99.92  | ✓ |
| 1+50 | 99.79  | ✓ |
| 1+75 | 99.67  | ✓ |
| 2+00 | 99.54  | ✓ |
| 2+25 | 99.42  | ✓ |
| 2+50 | 99.30  | ✓ |



Hodge FR 019/11 B911

148

June 11, unload  
\$93.50

tile in

no tile not  
string out  
till

22 of worked 1 1/2 days  
with out of  
out tile again  
will  
26 tile  
out

worked  
29 + 30 out of tile  
no 8"

July 3 half day  
home to thrash

X

19



~~800~~ 800 - 100 Rd  
 800<sup>th</sup>

Dr Tom o Guss  
 Belmont 1936 - R I

Claremont

1108, Central  
 Hospital

1131 W  
 Doleman

9.30 ~~at 1147~~  
 at ~~1147~~  
 Claremont  
 wants  
 Surray



152

East  
full cut  
17.5  
17.5

West  
full cut  
18

79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93

110 0.5  
102.20  
7.85  
8.70

Natural Trigonometrical Ratios.

| Sec.  | Cosec. | Colg. | Cosin. | Angle. | Sine. | Tan.  | Sec.  | Cosec. | Colg. | Cosin. |        |    |
|-------|--------|-------|--------|--------|-------|-------|-------|--------|-------|--------|--------|----|
| 1.    |        |       | 1.     | 90     | 0     |       |       |        |       | 1.     |        |    |
|       | 343.8  | 343.8 | L.     | 50     | 8     | .1392 | .1405 | 1.0098 | 7.185 | 7.115  | .98027 | 82 |
|       | 171.9  | 171.9 | .99998 | 40     | 10    | .1421 | .1435 | 1.0102 | 7.040 | 6.968  | .98986 | 50 |
|       | 114.6  | 114.6 | .99996 | 30     | 20    | .1449 | .1465 | 1.0107 | 6.900 | 6.827  | .98944 | 40 |
|       | 85.94  | 85.94 | .99993 | 20     | 30    | .1478 | .1495 | 1.0111 | 6.766 | 6.691  | .98902 | 30 |
| .0001 | 68.76  | 68.75 | .99989 | 10     | 40    | .1507 | .1524 | 1.0115 | 6.636 | 6.561  | .98858 | 20 |
| .0002 | 57.30  | 57.29 | .99985 | 89     | 50    | .1536 | .1554 | 1.0120 | 6.512 | 6.435  | .98814 | 10 |
| .0002 | 49.11  | 49.10 | .99979 | 50     | 9     | .1564 | .1584 | 1.0125 | 6.394 | 6.314  | .98769 | 81 |
| .0003 | 42.98  | 42.96 | .99973 | 40     | 10    | .1593 | .1614 | 1.0129 | 6.277 | 6.197  | .98723 | 50 |
| .0003 | 38.20  | 38.19 | .99966 | 30     | 20    | .1622 | .1644 | 1.0134 | 6.166 | 6.084  | .98676 | 40 |
| .0004 | 34.38  | 34.37 | .99958 | 20     | 30    | .1650 | .1673 | 1.0139 | 6.058 | 5.976  | .98629 | 30 |
| .0005 | 31.26  | 31.24 | .99949 | 10     | 40    | .1679 | .1703 | 1.0144 | 5.955 | 5.871  | .98580 | 20 |
| .0006 | 28.65  | 28.64 | .99939 | 88     | 50    | .1708 | .1733 | 1.0149 | 5.855 | 5.769  | .98531 | 10 |
| .0007 | 26.45  | 26.43 | .99929 | 50     | 10    | .1736 | .1763 | 1.0154 | 5.759 | 5.671  | .98481 | 80 |
| .0008 | 24.56  | 24.54 | .99917 | 40     | 20    | .1765 | .1793 | 1.0160 | 5.665 | 5.576  | .98430 | 50 |
| .0010 | 22.93  | 22.90 | .99905 | 30     | 30    | .1794 | .1823 | 1.0165 | 5.575 | 5.485  | .98378 | 40 |
| .0011 | 21.49  | 21.47 | .99892 | 20     | 40    | .1822 | .1853 | 1.0170 | 5.488 | 5.396  | .98325 | 30 |
| .0012 | 20.23  | 20.21 | .99878 | 10     | 50    | .1851 | .1883 | 1.0176 | 5.403 | 5.309  | .98272 | 20 |
| .0014 | 19.11  | 19.08 | .99863 | 87     | 11    | .1880 | .1914 | 1.0181 | 5.320 | 5.226  | .98218 | 10 |
| .0015 | 18.10  | 18.07 | .99847 | 50     | 10    | .1908 | .1944 | 1.0187 | 5.241 | 5.145  | .98163 | 79 |
| .0017 | 17.20  | 17.17 | .99831 | 40     | 20    | .1937 | .1974 | 1.0193 | 5.164 | 5.066  | .98107 | 50 |
| .0018 | 16.38  | 16.35 | .99813 | 30     | 30    | .1965 | .2004 | 1.0199 | 5.089 | 4.989  | .98050 | 40 |
| .0020 | 15.64  | 15.60 | .99795 | 20     | 40    | .1994 | .2035 | 1.0205 | 5.016 | 4.915  | .97992 | 30 |
| .0022 | 14.96  | 14.92 | .99776 | 10     | 50    | .2022 | .2065 | 1.0211 | 4.945 | 4.843  | .97934 | 20 |
| .0024 | 14.34  | 14.30 | .99756 | 86     | 12    | .2051 | .2095 | 1.0217 | 4.877 | 4.773  | .97875 | 10 |
| .0027 | 13.76  | 13.73 | .99736 | 50     | 10    | .2079 | .2126 | 1.0223 | 4.810 | 4.705  | .97815 | 78 |
| .0029 | 13.23  | 13.20 | .99714 | 40     | 20    | .2108 | .2156 | 1.0230 | 4.745 | 4.638  | .97754 | 50 |
| .0031 | 12.75  | 12.71 | .99692 | 30     | 30    | .2138 | .2186 | 1.0236 | 4.682 | 4.574  | .97692 | 40 |
| .0033 | 12.29  | 12.25 | .99668 | 20     | 40    | .2168 | .2217 | 1.0243 | 4.620 | 4.511  | .97630 | 30 |
| .0036 | 11.87  | 11.83 | .99644 | 10     | 50    | .2198 | .2247 | 1.0249 | 4.560 | 4.449  | .97566 | 20 |
| .0038 | 11.47  | 11.43 | .99619 | 85     | 13    | .2221 | .2278 | 1.0256 | 4.502 | 4.390  | .97502 | 10 |
| .0041 | 11.10  | 11.06 | .99594 | 50     | 10    | .2250 | .2309 | 1.0263 | 4.445 | 4.331  | .97437 | 77 |
| .0043 | 10.76  | 10.71 | .99567 | 40     | 20    | .2278 | .2339 | 1.0270 | 4.390 | 4.275  | .97371 | 50 |
| .0046 | 10.43  | 10.39 | .99540 | 30     | 30    | .2306 | .2370 | 1.0277 | 4.336 | 4.219  | .97304 | 40 |
| .0048 | 10.13  | 10.08 | .99511 | 20     | 40    | .2334 | .2401 | 1.0284 | 4.284 | 4.165  | .97237 | 30 |
| .0051 | 9.839  | 9.788 | .99482 | 10     | 50    | .2363 | .2432 | 1.0291 | 4.232 | 4.113  | .97169 | 20 |
| .0055 | 9.514  | 9.452 | .99452 | 84     | 14    | .2391 | .2462 | 1.0298 | 4.182 | 4.061  | .97100 | 10 |
| .0058 | 9.255  | 9.255 | .99421 | 50     | 10    | .2419 | .2493 | 1.0306 | 4.133 | 4.011  | .97030 | 76 |
| .0061 | 9.010  | 9.010 | .99390 | 40     | 20    | .2447 | .2524 | 1.0314 | 4.086 | 3.962  | .96959 | 50 |
| .0065 | 8.777  | 8.777 | .99357 | 30     | 30    | .2476 | .2555 | 1.0321 | 4.039 | 3.914  | .96887 | 40 |
| .0068 | 8.556  | 8.556 | .99324 | 20     | 40    | .2504 | .2586 | 1.0329 | 3.994 | 3.867  | .96815 | 30 |
| .0072 | 8.345  | 8.345 | .99290 | 10     | 50    | .2532 | .2617 | 1.0337 | 3.949 | 3.821  | .96742 | 20 |
| .0075 | 8.144  | 8.144 | .99255 | 83     | 15    | .2560 | .2648 | 1.0345 | 3.906 | 3.778  | .96667 | 10 |
| .0079 | 7.953  | 7.953 | .99219 | 50     | 10    | .2588 | .2679 | 1.0353 | 3.864 | 3.732  | .96593 | 75 |
| .0082 | 7.770  | 7.770 | .99182 | 40     | 20    | .2616 | .2711 | 1.0361 | 3.822 | 3.689  | .96517 | 50 |
| .0086 | 7.596  | 7.596 | .99144 | 30     | 30    | .2644 | .2742 | 1.0369 | 3.782 | 3.647  | .96440 | 40 |
| .0090 | 7.429  | 7.429 | .99106 | 20     | 40    | .2672 | .2773 | 1.0377 | 3.742 | 3.606  | .96363 | 30 |
| .0094 | 7.289  | 7.289 | .99067 | 10     | 50    | .2700 | .2805 | 1.0386 | 3.703 | 3.566  | .96285 | 20 |
|       |        |       |        | 82     | 16    | .2728 | .2836 | 1.0394 | 3.665 | 3.526  | .96206 | 10 |

Cosin. Colg. Cosec. Sec. Tan. Sine. Angle. Cosin. Colg. Cosec. Sec. Tan. Sine. Angle.