

Grades

4th St. Paving.

9

TRANSIT

F.B. 633

633

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

| Minutes. | Lks. | Minutes. | Lks. | Minutes. | Lks. |
|----------|------|----------|------|----------|------|
| 1 | 2½ | 21 | 49 | 41 | 95½ |
| 2 | 4½ | 22 | 51½ | 42 | 98 |
| 3 | 7 | 23 | 53½ | 43 | 100½ |
| 4 | 9½ | 24 | 56 | 44 | 102½ |
| 5 | 11½ | 25 | 58½ | 45 | 105 |
| 6 | 14 | 26 | 60½ | 46 | 107½ |
| 7 | 16½ | 27 | 63 | 47 | 109½ |
| 8 | 18½ | 28 | 65½ | 48 | 112 |
| 9 | 21 | 29 | 67½ | 49 | 114½ |
| 10 | 23½ | 30 | 70 | 50 | 116½ |
| 11 | 25½ | 31 | 72½ | 51 | 119 |
| 12 | 28 | 32 | 74½ | 52 | 121½ |
| 13 | 30½ | 33 | 77 | 53 | 123½ |
| 14 | 32½ | 34 | 79½ | 54 | 126 |
| 15 | 35 | 35 | 81½ | 55 | 128½ |
| 16 | 37½ | 36 | 84 | 56 | 130½ |
| 17 | 39½ | 37 | 86½ | 57 | 133 |
| 18 | 42 | 38 | 88½ | 58 | 135½ |
| 19 | 44½ | 39 | 91 | 59 | 137½ |
| 20 | 46½ | 40 | 93½ | 60 | 140 |

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Table for Running on Slopes.

In the following table the first column shows the angle, the second, the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

| Angle. | Cor. in links | Angle. | Cor. in links. | Angle. | Cor. in links. | Angle. | Cor. in links. |
|--------|---------------|--------|----------------|--------|----------------|--------|----------------|
| 0 | | 0 | | 0 | | 0 | |
| 4 | 0.24 | 11 | 1.88 | 18 | 5.14 | 25 | 10.54 |
| 5 | 0.38 | 12 | 2.24 | 19 | 5.76 | 26 | 11.26 |
| 6 | 0.55 | 13 | 2.63 | 20 | 6.42 | 27 | 12.24 |
| 7 | 0.76 | 14 | 3.06 | 21 | 7.11 | 28 | 13.37 |
| 8 | 0.98 | 15 | 3.53 | 22 | 7.85 | 29 | 14.34 |
| 9 | 1.24 | 16 | 4.02 | 23 | 8.64 | 30 | 15.47 |
| 10 | 1.55 | 17 | 4.56 | 24 | 9.47 | 35 | 22.07 |

4th Street
Grades for Paving

K. to Ivy Streets.

On high side of intersecting streets; make gutters 8" on both property lines, and 10" at intersection of curb lines.

On low side of intersecting streets make gutters 6" on E. or W. side, and 10" on South side, and 8" at intersection of curb lines.

MICROFILMED

DEC 14 1964

4th Street Paving

West - East

| Cent | Center | Center | Center | Cent | Sta |
|-------|--------|--------|--------|-------|-----|
| 1.500 | 0.833 | 1.167 | 0.833 | 1.500 | 3 |
| 1.417 | 1.083 | 1.417 | 1.083 | 1.417 | +40 |
| 2.000 | 1.333 | 1.667 | 1.333 | 2.000 | 0 |
| 2.25 | 1.583 | 1.917 | 1.583 | 2.25 | +35 |
| 2.506 | 1.833 | 2.167 | 1.833 | 2.50 | +50 |
| 2.75 | 2.083 | 2.417 | 2.083 | 2.75 | +15 |
| 3.00 | 2.333 | 2.667 | 2.333 | 3.00 | 1 |
| 3.25 | 2.583 | 2.917 | 2.583 | 3.25 | +35 |
| 3.50 | 2.833 | 3.167 | 2.833 | 3.50 | +50 |
| 3.75 | 3.083 | 3.417 | 3.083 | 3.75 | +75 |
| 4.00 | 3.333 | 3.667 | 3.333 | 4.00 | 2 |

South of R St

R Street

North of R St
 Look out for curb line on
 east side of St. 2" instead of 3"

10/12
 1/10

5550
 58 (3)

41th Street Parking

West East

| West | Center | Center | Center | Center | East |
|-------|--------|--------|--------|--------|------|
| Curb | Center | Center | Center | Curb | Sta |
| 4.25 | 3.583 | 3.917 | 3.583 | 4.25 | +25 |
| 4.50 | 3.833 | 4.167 | 3.833 | 4.50 | +50 |
| 4.75 | 4.083 | 4.417 | 4.083 | 4.75 | +75 |
| 5.000 | 4.333 | 4.667 | 4.333 | 5.000 | 0 |
| 5.067 | 4.733 | 5.067 | 4.733 | 5.067 | +40 |
| 5.800 | 5.133 | 5.467 | 5.133 | 5.800 | 0 |
| 6.15 | 5.483 | 5.817 | 5.483 | 6.15 | +25 |
| 6.50 | 5.833 | 6.167 | 5.833 | 6.50 | +50 |
| 6.85 | 6.183 | 6.517 | 6.183 | 6.85 | +75 |
| 7.20 | 6.533 | 6.867 | 6.533 | 7.20 | 1 |
| 7.55 | 6.883 | 7.217 | 6.883 | 7.55 | +25 |

5.13
33
4.80

5.13
33
5.46

South of Jst

4.53
50
4.67

J. Street

North of Jst

West

East

| Curb | Gutter | Curb | Gutter | Curb | Sta |
|--------|--------|--------|--------|--------|-----|
| 7.90 | 7.233 | 7.567 | 7.233 | 7.90 | +50 |
| 8.25 | 7.583 | 7.917 | 7.583 | 8.25 | +75 |
| 8.60 | 7.933 | 8.267 | 7.933 | 8.60 | 2 |
| 8.95 | 8.283 | 8.617 | 8.283 | 8.95 | +25 |
| 9.30 | 8.633 | 8.967 | 8.633 | 9.30 | +50 |
| 9.65 | 8.983 | 9.317 | 8.983 | 9.65 | +75 |
| 10.00 | 9.333 | 9.666 | 9.333 | 10.000 | 3 |
| 10.166 | 9.833 | 10.166 | 9.833 | 10.166 | +40 |
| 11.000 | 10.334 | 10.667 | 10.334 | 11.000 | 0 |
| 11.375 | 10.709 | 11.042 | 10.709 | 11.375 | +25 |
| 11.750 | 11.084 | 11.417 | 11.084 | 11.750 | +50 |

4th Street Paving

South line of 1st St

J Street

North line of 1st St

4th Street Paving

West East

| Curb | Gutter | Center | Gutter | Curb | Sta |
|--------|--------|--------|--------|--------|-----|
| 12.125 | 11.459 | 11.792 | 11.459 | 12.125 | +15 |
| 12.500 | 11.834 | 12.167 | 11.834 | 12.500 | 1 |
| 12.875 | 12.209 | 12.542 | 12.209 | 12.875 | +25 |
| 13.250 | 12.584 | 12.917 | 12.584 | 13.250 | +50 |
| 13.625 | 12.959 | 13.292 | 12.959 | 13.625 | +75 |
| 14.000 | 13.334 | 13.667 | 13.334 | 14.000 | 2 |
| 14.375 | 13.709 | 14.042 | 13.709 | 14.375 | +25 |
| 14.750 | 14.084 | 14.417 | 14.084 | 14.750 | +50 |
| 15.125 | 14.459 | 14.792 | 14.459 | 15.125 | +75 |
| 15.500 | 14.83 | 15.17 | 14.83 | 15.500 | 3 |
| 15.67 | 15.33 | 15.67 | 15.33 | 15.67 | +50 |

South of H St

H Street

West

East

| Curb | Gutter | Center | Gutter | Curb | Sta |
|--------|--------|--------|--------|--------|-----|
| 16.500 | 15.83 | 16.17 | 15.83 | 16.500 | .0 |
| 16.958 | 16.29 | 16.63 | 16.29 | 16.96 | +25 |
| 17.42 | 16.75 | 17.09 | 16.75 | 17.42 | +50 |
| 17.88 | 17.21 | 17.55 | 17.21 | 17.88 | +75 |
| 18.33 | 17.66 | 18.00 | 17.66 | 18.33 | 1 |
| 18.79 | 18.13 | 18.46 | 18.13 | 18.79 | +25 |
| 19.25 | 18.58 | 18.92 | 18.58 | 19.25 | +50 |
| 19.71 | 19.04 | 19.38 | 19.04 | 19.71 | +75 |
| 20.17 | 19.50 | 19.84 | 19.50 | 20.17 | 2 |
| 20.63 | 19.96 | 20.30 | 19.96 | 20.63 | +25 |
| 21.09 | 20.42 | 20.76 | 20.42 | 21.09 | +50 |

4th Street Paving

N line H Street

$$\begin{array}{r} 16.17 \\ 15.67 \\ \hline .50 \\ 28 \overline{) 10} \\ 28 \end{array}$$

$$\begin{array}{r} 15.67 \\ 15.21 \\ \hline .46 \end{array}$$

$$\begin{array}{r} 16.50 \\ .57 \\ \hline 16.17 \\ 15.83 \\ \hline .62 \end{array}$$

$$\frac{1}{23} \times 50$$

$$\begin{array}{r} 23 \overline{) 10.0} \\ 46 \\ \hline 54 \\ 57 \\ \hline 3 \end{array}$$

46

30

43

43

110

West

East

4th Street Parking

| Curb | Gutter | Curb | Gutter | Curb | Sta |
|-------|--------|-------|--------|-------|------|
| 21.54 | 20.88 | 21.22 | 20.88 | 21.54 | +75. |
| 22.00 | 21.33 | 21.67 | 21.33 | 22.00 | 3 |
| 22.17 | 21.83 | 22.17 | 21.83 | 22.17 | +50 |
| 23.00 | 22.33 | 22.67 | 22.33 | 23.00 | 0 |
| 23.50 | 22.83 | 23.17 | 22.83 | 23.50 | +25 |
| 24.00 | 23.33 | 23.67 | 23.33 | 24.00 | +50 |
| 24.50 | 23.83 | 24.17 | 23.83 | 24.50 | +75 |
| 25.00 | 24.33 | 24.67 | 24.33 | 25.00 | 1 |
| 25.50 | 24.83 | 25.17 | 24.83 | 25.50 | +25 |
| 26.00 | 25.33 | 25.67 | 25.33 | 26.00 | +50 |
| 26.50 | 25.83 | 26.17 | 25.83 | 26.50 | +75 |

South of 4th

G. Street

N of 4th

4th Street Paving

West East

| West | Gutter | Center | Gutter | East | Sta. |
|--------|--------|--------|--------|--------|------|
| 27.00 | 26.33 | 26.67 | 26.33 | 27.00 | 2 |
| 27.50 | 26.83 | 27.17 | 26.83 | 27.50 | 725 |
| 28.00 | 27.33 | 27.67 | 27.33 | 28.00 | 750 |
| 28.50 | 27.83 | 28.17 | 27.83 | 28.50 | 775 |
| 29.00 | 28.33 | 28.67 | 28.25 | 29.00 | 3 |
| | | | | | |
| 28.92 | 28.59 | 29.05 | 28.84 | 29.17 | 740 |
| 29.500 | 28.83 | 29.42 | 29.35 | 30.000 | 0 |
| 31.04 | 29.37 | 29.94 | 29.83 | 30.50 | 725 |
| 30.58 | 29.91 | 30.46 | 30.33 | 31.00 | 750 |
| 31.12 | 30.46 | 30.98 | 30.83 | 31.50 | 775 |
| 31.67 | 31.00 | 31.50 | 31.33 | 32.00 | 1 |

lowered 1"

lowered 1"

South of F St

F Street Dr

N of F St

4th Street Paired

West

East

| Curb | Center | Center | Center | Curb | Sta |
|--------|--------|--------|--------|--------|-----|
| 32.21 | 31.54 | 32.02 | 31.83 | 32.50 | +25 |
| 32.75 | 32.08 | 32.54 | 32.33 | 33.00 | +50 |
| 33.29 | 32.62 | 33.06 | 32.83 | 33.50 | +75 |
| 33.83 | 33.16 | 33.58 | 33.33 | 34.00 | 2 |
| 34.37 | 33.70 | 34.10 | 33.83 | 34.50 | +75 |
| 34.92 | 34.25 | 34.62 | 34.33 | 35.00 | +50 |
| 35.46 | 34.78 | 35.14 | 34.83 | 35.50 | +75 |
| 36.00 | 35.33 | 35.66 | 35.33 | 36.00 | 3 |
| 35.92 | 35.59 | 36.05 | 35.84 | 36.17 | +40 |
| 36.500 | 35.83 | 36.42 | 36.33 | 37.000 | 0 |
| 37.18 | 36.47 | 37.00 | | 37.558 | +25 |

South of 281

6 Street

North of 281

4th Street Railway

West East

| West | Center | Center | Center | Center | East |
|--------------|--------|--------|--------|--------|------|
| 37.85 .69 | 37.11 | 37.58 | | 38.116 | +50 |
| 38.53 .68 | 37.74 | 38.16 | 38.205 | 38.675 | +75 |
| 39.21 .68 | 38.38 | 38.74 | | 39.233 | 1 |
| 39.89 .67 | 39.02 | 39.31 | | 39.791 | +25 |
| 40.56 | 39.66 | 39.89 | | 40.350 | +50 |
| 40.70 .46 | 39.79 | | 39.79 | 40.46 | +55 |
| 41.16 .68 | 40.236 | 40.47 | 40.24 | 40.908 | +75 |
| 41.74 .68 | 40.795 | 41.05 | 40.80 | 41.466 | 2 |
| 42.32 .68 | 41.354 | 41.63 | 41.35 | 42.025 | +25 |
| 42.90 .68 | 41.910 | 42.21 | 41.91 | 42.583 | +50 |
| 43.48 .22 | 42.47 | 42.79 | 42.47 | 43.141 | +75 |
| 43.70 | | | | | +85 |
| 43.700 | 43.032 | 43.37 | 43.03 | 43.700 | 3 |

Street D Street

West

East

| Curb | Gutter | Center | Gutter | Curb | Sta. |
|--------|--------|--------|--------|--------|------|
| 43.77 | 43.43 | 43.77 | 43.43 | 43.77 | +140 |
| 44.500 | 43.83 | 44.17 | 43.83 | 44.500 | 0 |
| 44.75 | 44.08 | 44.42 | 44.08 | 44.75 | +25 |
| 45.00 | 44.33 | 44.67 | 44.33 | 45.00 | +50 |
| 45.25 | 44.58 | 44.92 | 44.58 | 45.25 | +75 |
| 45.50 | 44.83 | 45.17 | 44.83 | 45.50 | 1 |
| 45.75 | 45.08 | 45.42 | 45.08 | 45.75 | +25 |
| 46.00 | 45.33 | 45.67 | 45.33 | 46.00 | +50 |
| 46.25 | 45.58 | 45.92 | 45.58 | 46.25 | +75 |
| 46.50 | 45.83 | 46.17 | 45.83 | 46.50 | 2 |

4th Street Paving

B Street

North line of B Street

West East

| West | Gutter | Center | Gutter | East | Sta |
|--------|--------|----------------|--------|--------|-----|
| 46.75 | 46.08 | 46.42 | 46.08 | 46.75 | +25 |
| 47.00 | 46.33 | 46.67 | 46.33 | 47.00 | +50 |
| 47.25 | 46.58 | 46.92 | 46.58 | 47.25 | +75 |
| 47.500 | 46.83 | 47.17 | 46.83 | 47.500 | 3 |
| 47.42 | 47.08 | 47.65 | 47.67 | 47.40 | |
| 48.000 | 47.33 | 47.67 47.60 | 47.33 | 48.000 | 0 |
| 48.17 | 47.50 | 47.84 | 47.50 | 48.17 | +25 |
| 48.33 | 47.66 | 48.00 | 47.66 | 48.33 | +50 |
| 48.50 | 47.83 | 48.17 | 47.83 | 48.50 | +75 |
| 48.67 | 48.00 | 48.34 | 48.00 | 48.67 | 1 |
| 48.83 | 48.16 | 48.50 | 48.16 | 48.83 | +25 |

4th Street Paving

→ Grade of curble road 0.23 high

South Line of C Street

Center of C Street

→ Grade of curble road 0.25 high

North Line of C Street

grade of curble road 0.07 low.

4th Street Paving

| West | | East | | | |
|--------|--------|--------|--------|--------|-----|
| curb | gutter | center | gutter | curb | Str |
| 49.00 | 48.33 | 48.67 | 48.33 | 49.00 | +50 |
| 49.17 | 48.50 | 48.84 | 48.50 | 49.17 | +75 |
| 49.33 | 48.66 | 49.00 | 48.66 | 49.33 | 2 |
| 49.50 | 48.83 | 49.17 | 48.83 | 49.50 | +25 |
| 49.67 | 49.00 | 49.34 | 49.00 | 49.67 | +50 |
| 49.83 | 49.16 | 49.50 | 49.16 | 49.83 | +75 |
| 50.00 | 49.33 | 49.67 | 49.33 | 50.00 | 3 |
| 50.083 | 49.75 | 50.083 | 49.75 | 50.083 | +40 |
| 50.50 | 49.83 | 50.50 | 49.83 | 50.50 | 0 |
| 51.23 | 50.50 | 51.17 | 50.50 | 51.17 | +25 |
| 51.96 | 51.16 | 51.83 | 51.16 | 51.83 | +50 |

50.17
50.28
50.39

400

South Side of B Street

Center of B Street

North Side of B Street

Grades on west side changed to conform with walk in front of lot H

14th Street Paving

West East
 curb gutter curb gutter curb Str

| | | | | | |
|--------|-------|-------|-------|--------|-----|
| 52.48 | 51.83 | 52.50 | 51.83 | 52.50 | +75 |
| 53.00 | 52.50 | 53.17 | 52.50 | 53.17 | 1 |
| 53.71 | 53.16 | 53.83 | 53.16 | 53.83 | +25 |
| 54.42 | 53.83 | 54.50 | 53.83 | 54.50 | +50 |
| 55.12 | 54.50 | 55.17 | 54.50 | 55.17 | +75 |
| 55.83 | 55.16 | 55.83 | 55.16 | 55.83 | 2 |
| 56.50 | 55.83 | 56.50 | 55.83 | 56.50 | +25 |
| 57.17 | 56.50 | 57.17 | 56.50 | 57.17 | +50 |
| 57.83 | 57.16 | 57.83 | 57.16 | 57.83 | +75 |
| 58.500 | 57.83 | 58.50 | 57.83 | 58.500 | 3 |
| 59.50 | | 59.50 | 59.00 | 59.50 | +40 |
| 60.500 | 59.83 | 60.50 | 59.83 | 60.500 | 0 |

55.36
 54.42
 5.14

South line of A Street
 A Street
 North line of A Street

Cont grade on 4th St from Astor St to 3rd St

West

East

| Sta | Grade | Rod | Grade | rod | Sta | HO | Elev |
|-----|-------|-----------------|---------|----------------|------------------------|-------|--------------------|
| | | | | | | | |
| | | | (69.71) | | | | |
| 0 | 60.50 | 9.21 ✓ 1.50 | 60.50 | 9.21 ✓ 1.54 | North line of A Street | | |
| +25 | 62.00 | 7.71 ✓ 1.50 | 62.04 | 7.67 ✓ 1.54 | Bny | 11.53 | 69.71 |
| +50 | 63.50 | 6.21 ✓ 1.50 | 63.58 | 6.13 ✓ 1.54 | Standard St. | | 58.18 |
| +75 | 65.00 | 4.71 ✓ 1.50 | 65.12 | 4.59 ✓ 1.54 | | | |
| | | | | 1.55 | # | | |
| 1 | 66.50 | 3.21 ✓ 1.50 | 66.67 | 3.04 ✓ 1.54 | 11.12 | 79.16 | moved for a runway |
| +25 | 68.00 | 1.71 ✓ 1.50 | 68.21 | 1.50 ✓ 1.54 | | 79.28 | 1.55 |
| +50 | 69.50 | 9.68 ✓ 1.50 | 69.75 | 9.53 ✓ 1.54 | | | 68.16 |
| +75 | 71.00 | 8.18 ✓ 1.50 | 71.29 | 7.99 ✓ 1.54 | | | |
| | | | | 1.54 | | | |
| 2 | 72.50 | 6.68 ✓ 79.28 | 72.83 | 6.45 ✓ 1.54 | | | |
| +25 | 74.00 | 5.28 ✓ 1.50 | 74.37 | 4.91 ✓ 1.54 | | | |
| +50 | 75.50 | 3.78 ✓ 1.50 | 75.91 | 3.37 ✓ 1.54 | | | |
| +75 | 77.00 | 2.28 ✓ 1.50 | 77.45 | 1.83 ✓ 1.54 | | | |
| 3 | 78.50 | 0.78 ✓ 1.50 | 79.00 | 0.28 ✓ 1.54 | | | |

South line of B St

0.15 79.13

Center grades on 4th St bet
B and D Sts

| Sta | + | 100 | Grade | Red | BM |
|-----|------|-------|-------|-------|-------|
| Bm | 4.30 | 50.83 | | | 46.53 |
| 0 | | | 44.17 | 6.66 | L |
| +25 | | | 44.42 | 6.41 | L |
| +50 | | | 44.67 | 6.16 | V |
| +75 | | | 44.92 | 5.91 | V |
| 1 | | | 45.17 | 5.66 | V |
| +25 | | | 45.42 | 5.41 | V |
| +50 | | | 45.67 | 5.16 | V |
| +75 | | | 45.92 | 4.91 | V |
| 2 | | | 46.17 | 4.66 | V |
| +25 | | | 46.42 | 4.41 | V |
| +50 | | | 46.67 | 4.16 | V |
| +75 | | | 46.92 | 3.91 | V |
| 3 | | | 47.17 | 3.66 | V |
| Bm | 3.55 | 52.81 | | 1.57 | 49.26 |
| 0 | | | 47.33 | 5.48 | V |
| 1 | | | 48.00 | 4.81 | V |
| 2 | | | 48.66 | 4.16 | V |
| 3 | | | 49.33 | 3.48 | V |
| | | | 2.15 | 50.66 | |

4th and D St
N line of D St

South line of C St
4th and C St

} Center grades bet C & B on
West side

Levelling grades on H to St from May 19 1890
 B to C on West side

| Sta | T | H ₀ | Grade | rod |
|-----|------|----------------|-------|--------|
| Bm | 5.04 | 43.45 | | 38.41 |
| 0 | | | 36.50 | 6.95 ✓ |
| +25 | | | 37.18 | .68 |
| +50 | | | 37.85 | 6.27 ✓ |
| +65 | | | 38.26 | .67 |
| | | | | 5.60 ✓ |
| | | | | .41 |
| | | | | 5.19 |
| | | | | 4.83 |
| | | | | .36 |

3.19
 33
 2.86

Side walk at Sun Building is 0.36 high

| # | T | H ₀ | Grade | rod |
|----|------|----------------|-------|--------------|
| # | 5.01 | 46.93 | | 1.53 41.92 |
| Bm | | | | 0.405 46.525 |

Levelling grades on East side of H to St bet B & C.

| Bm | T | H ₀ | Grade | rod |
|----|------|----------------|-------|--------------|
| Bm | 3.25 | 52.52 | | 49.27 |
| 0 | | | 47.93 | 47.53 5.19 ✓ |
| 1 | | | 48.00 | .67 |
| 2 | | | 48.66 | 48.66 4.52 ✓ |
| 3 | | | 49.33 | .66 |
| | | | | 3.86 ✓ |
| | | | | .67 |
| | | | | 3.19 ✓ |

May 20 1890
 N of C

Levelling grades on H to St bet #

| Bm | T | H ₀ | Grade | rod |
|----|------|----------------|-------|--------------|
| Bm | 7.32 | 57.98 | | 1.86 50.66 |
| 0 | | | 49.43 | 49.43 8.15 ✓ |
| 1 | | | 52.50 | 2.67 |
| 2 | | | 55.16 | 55.16 5.48 ✓ |
| 3 | | | 57.83 | 2.86 |
| | | | | 2.82 ✓ |
| | | | | 2.16 ✓ |
| | | | | 0.15 |

S of B
 S of B on both sides. May 20 1890
 N of B

At the Royal side walk is 0.18 low at north and 0.13 high at south

Sta's 07.50 & 1+0

S of A # 6.25 63.13.110 56.88
 4.97 58.16

Center ginder on 4th
St bet C & D St

| Sta | + | NO | Grade | Red | Bm |
|-----|---|----|-------|-----|-------|
| Bm | | | | | 49.27 |
| 0 | | | 47.67 | | |
| +25 | | | 47.84 | | |
| +50 | | | 48.00 | | |
| +75 | | | 48.17 | | |
| 1 | | | 48.34 | | |
| +25 | | | 48.50 | | |
| +50 | | | 48.67 | | |
| +75 | | | 48.84 | | |
| 2 | | | 49.00 | | |
| +25 | | | 49.17 | | |
| +50 | | | 49.34 | | |
| +75 | | | 49.50 | | |
| 3 | | | 49.67 | | |
| +40 | | | 50.08 | | |
| 0 | | | 50.50 | | |

North line of C. St.

South line of B. St.

North line of B. St.

Gutter grades on 4th St
bet 0 & C

May 20 1820

| Sta | + | H ₂ | Grade | Prod. | |
|------|------|----------------|-------|-------|-------|
| 0.9m | 4.48 | 53.75 | | | 49.27 |
| 0 | | | 47.33 | 6.42 | |
| +25 | | | 47.50 | 6.25 | |
| +50 | | | 47.66 | 6.09 | |
| +75 | | | 47.83 | 5.92 | |
| 1 | | | 48.00 | 5.75 | |
| +25 | | | 48.16 | 5.59 | |
| +50 | | | 48.33 | 5.42 | |
| +75 | | | 48.50 | 5.25 | |
| 2 | | | 48.66 | 5.09 | |
| +25 | | | 48.83 | 4.92 | |
| +50 | | | 49.00 | 4.75 | |
| +75 | | | 49.16 | 4.59 | |
| 3 | | | 49.33 | 4.42 | |
| | | | 3.09 | 50.66 | |
| | | | | | 4.48 |

Center grades on 4th St. bet.
C St and D St.

May 22nd 1890

Hamlin. { Ontario,
Williams,
Hemsley.

| Sta | + | H ₂ | Grade | Rod | B.M. |
|------|-------|----------------|-------|--------|--------|
| B.M. | 4.205 | 50.73 | | | 46.525 |
| 0 | | | 44.17 | 6.56 ✓ | |
| +25 | | | 44.42 | 6.31 ✓ | |
| +50 | | | 44.67 | 6.06 ✓ | |
| +75 | | | 44.92 | 5.81 ✓ | |
| 1 | | | 45.17 | 5.56 ✓ | |
| +25 | | | 45.42 | 5.31 ✓ | |
| +50 | | | 45.67 | 5.06 ✓ | |
| +75 | | | 45.92 | 4.81 ✓ | |
| 2 | | | 46.17 | 4.56 ✓ | |
| +25 | | | 46.42 | 4.31 ✓ | |
| +50 | | | 46.67 | 4.06 ✓ | |
| +75 | | | 46.92 | 3.81 ✓ | |
| 3 | | | 47.17 | 3.56 ✓ | |
| +75 | | | | | |
| 0 | | | | | |
| B.M. | | | | 1.465 | 49.265 |

4th and D St.
North line of D St.

South line of C St.

North line of C St.
4th and C St.

50.73
4.205

Gutter grade in Hth St

| Sta | + | HD | Grade | rod | B.M. |
|------|-------|--------|-------|-------|--------|
| B.M. | 7.21 | 57.87 | | | 50.66 |
| 0 | | | 49.83 | 8.04 | |
| +25 | | | 50.50 | 7.37 | |
| +50 | | | 51.16 | 6.71 | |
| +75 | | | 51.83 | 6.04 | |
| 1 | | | 52.50 | 5.37 | |
| +25 | | | 53.16 | 4.71 | |
| +50 | | | 53.83 | 4.04 | |
| +75 | | | 54.50 | 3.37 | |
| 2 | | | 55.16 | 2.71 | |
| +25 | | | 55.83 | 2.04 | |
| +50 | | | 56.50 | 1.37 | |
| # | 5.985 | 63.075 | | 0.78 | 57.09 |
| +75 | | | 57.16 | 5.915 | |
| 3 | | | 57.83 | 5.245 | |
| | | | 4.895 | | 58.180 |

bet A and B St
 May 22 1890 Humlin

Editors
 William
 Beardsley

North line of B St

5.915
 67
 5.245

| Sta | + | HO | Grade | Rod | B.M. |
|------|-------|--------|--------|---------|-------|
| B.M. | 7.305 | 57.965 | | | 50.66 |
| 0 | | | 49.83 | 8.135 ✓ | |
| +25 | | | 50.50 | 7.465 ✓ | |
| +50 | | | 51.160 | 6.805 ✓ | |
| +75 | | | 51.83 | 6.135 | |
| 1 | | | 52.50 | | |
| +25 | | | 53.16 | | |
| +50 | | | 53.83 | | |
| +75 | | | 54.50 | | |
| 2 | | | 55.16 | | |
| +25 | | | 55.83 | | |
| +50 | | | 56.50 | | |
| +75 | | | 57.16 | | |
| 3 | | | 57.83 | | |

North line of B.M.

South line of B.M.

Butter grades on West side of
4th from 10th to 28th

| Sta | + | H ₀ | Grade | ave | B ₉₁ |
|-----------------|-------|----------------|--------|---------|-----------------|
| B ₉₁ | 8.355 | 46.765 | | | 38.41 |
| 0 | | | 35.80 | | X |
| +25 | | | 36.47 | | |
| +50 | | | 37.11 | | |
| +75 | | | 37.740 | 9.025 ✓ | |
| 1 | | | 38.380 | 8.385 ✓ | |
| +25 | | | 39.020 | 7.745 ✓ | |
| +50 | | | 39.660 | 7.105 ✓ | |
| +75 | | | 39.790 | 6.975 ✓ | X |
| 2 | | | 40.236 | 6.529 ✓ | |
| +25 | | | 40.795 | 5.970 ✓ | |
| +50 | | | 41.354 | 5.411 ✓ | |
| +75 | | | 41.910 | 4.855 ✓ | |
| 3 | | | 42.470 | 4.295 ✓ | |
| B ₉₁ | | | 43.030 | 3.735 ✓ | X |
| 0 | | | | 0.24 | 46.325 |
| +50 | | | 36.420 | 10.345 | |
| 1 | | | 37.580 | 9.185 ✓ | |
| +50 | | | 38.740 | 8.025 ✓ | |
| 2 | | | 39.890 | 6.875 ✓ | |
| | | | 41.050 | 5.715 ✓ | |

North line of 28th

South line of 10th

Curve in RR at foot of 4th St.

19.5' E of cur of St

40
19.5
20.5
12
08.5

| Sta | Dist | Def | Incl | Angle | course |
|-----|------|-----|------|-------|--------|
|-----|------|-----|------|-------|--------|

| | | | | | |
|------------|----|--------|--------|--|--|
| 0 = 3+21.5 | 25 | 7° 30' | 7° 30' | | |
|------------|----|--------|--------|--|--|

| | | | | | |
|------|----|--------|--------|--|--|
| + 25 | 25 | 7° 30' | 15° 0' | | |
|------|----|--------|--------|--|--|

| | | | | | |
|------|----|--------|---------|--|--|
| + 50 | 25 | 7° 30' | 22° 30' | | |
|------|----|--------|---------|--|--|

| | | | | | |
|------|----|--------|---------|--|--|
| + 75 | 25 | 7° 30' | 30° 00' | | |
|------|----|--------|---------|--|--|

| | | | | | |
|---|---------|--------|---------|--|--|
| 1 | + 12.88 | 3° 52' | 33° 52' | | |
|---|---------|--------|---------|--|--|

| | | | | | |
|---------|--|--|--|---------|--|
| + 12.88 | | | | 67° 44' | |
|---------|--|--|--|---------|--|

Grader for curve

| | | | | |
|-----|---|----|-----|-----|
| Sta | + | HD | Mod | mov |
|-----|---|----|-----|-----|

| | | | | |
|---|--|--|-------|--|
| 0 | | | 1.051 | |
|---|--|--|-------|--|

| | | | | |
|------|--|--|------|--|
| + 25 | | | 1.28 | |
|------|--|--|------|--|

| | | | | |
|------|--|--|------|--|
| + 50 | | | 1.52 | |
|------|--|--|------|--|

| | | | | |
|------|--|--|------|--|
| + 63 | | | 1.67 | |
|------|--|--|------|--|

| | | | | |
|------|--|--|------|--|
| + 75 | | | 1.65 | |
|------|--|--|------|--|

| | | | | |
|---|--|--|------|--|
| 1 | | | 1.55 | |
|---|--|--|------|--|

| | | | | |
|--------|--|--|--|--|
| + 12.9 | | | | |
|--------|--|--|--|--|

B.C. 60° 0' Curve to left 67° 44'

44+09
Sand
Tang

10.5

B.C. 0.21 East of west line of 4th St

B.C. 21.5 North of South of RR

North of RR

East of 4th St 30' North of N. of RR

West

East

4th Street paving

| Sta. | Curb | Gutter | Center | Gutter | Curb |
|------|-------|--------|--------|--------|-------|
| 0 | 60.5 | | 60.5 | | 60.5 |
| +25 | 62.0 | | 62.04 | | 62.04 |
| +50 | 63.5 | | 63.54 | | 63.58 |
| +75 | 65.0 | | 65.06 | | 65.12 |
| 1 | 66.5 | | 66.58 | | 66.67 |
| +25 | 68.0 | | 68.10 | | 68.21 |
| +50 | 69.5 | | 69.62 | | 69.75 |
| +75 | 71.0 | | 71.14 | | 71.29 |
| 2 | 72.5 | | 72.66 | | 72.83 |
| +25 | 74.0 | | 74.18 | | 74.37 |
| +50 | 75.5 | | 75.70 | | 75.91 |
| +75 | 77.0 | | 77.22 | | 77.45 |
| 3 | 78.5 | | 78.75 | | 79.0 |
| +14 | 78.85 | | 79.10 | | 79.35 |
| +40 | 79.50 | | 79.75 | | 80.00 |
| +66 | 80.15 | | 80.40 | | 80.65 |
| 0 | 80.5 | | 80.75 | | 81.00 |

80.15 - 80.80

North line a. st.

South line ash st.

Center of ash st.

North line ash st.

West

East

7th Street paving

| Sta | Curb | Gutter | Centre | Gutter | Curb |
|-----|--------|--------|--------|--------|-------|
| 0 | 80.5 | | 80.75 | | 81.0 |
| +25 | 81.625 | | 81.91 | | 82.21 |
| +50 | 82.75 | | 83.08 | | 83.42 |
| +75 | 83.875 | | 84.25 | | 84.62 |
| 1 | 85.000 | | 85.41 | | 85.83 |
| +25 | 86.125 | | 86.58 | | 87.04 |
| +50 | 87.25 | | 87.74 | | 88.25 |
| +75 | 88.375 | | 88.92 | | 89.46 |
| 2 | 89.50 | | 90.08 | | 90.66 |
| +25 | 90.625 | | 91.25 | | 91.87 |
| +50 | 91.75 | | 92.41 | | 93.08 |
| +75 | 92.875 | | 93.58 | | 94.29 |
| 3 | 94.0 | | 94.75 | | 94.21 |
| +14 | 94.35 | | 95.10 | | 95.50 |
| +40 | 95.00 | | 95.75 | | 95.85 |
| +66 | 95.65 | | 96.40 | | 96.5 |
| 0 | 96.0 | | 96.75 | | 97.15 |
| | | | | | 97.5 |

North line Ash Street

South line Buck Street

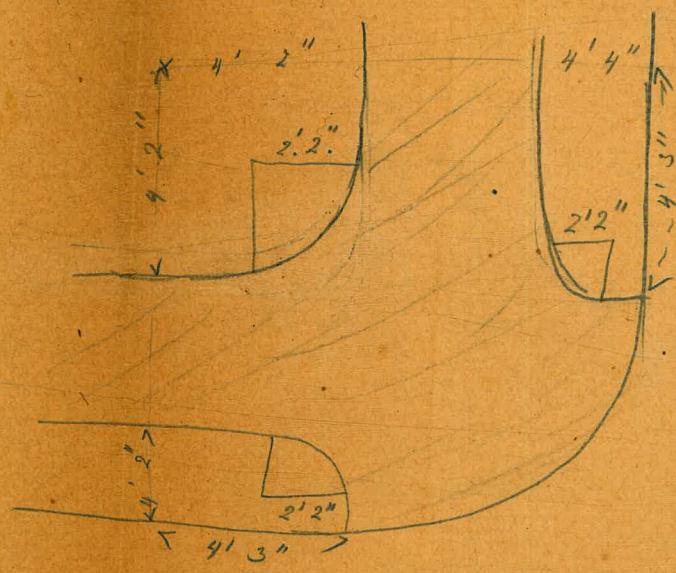
Centre line Buck Street

North line Buck Street

West

| Sta | Curb | Gutter | Centre |
|-----|--------|--------|--------|
| 0 | 80.5 | | 80.75 |
| +25 | 81.625 | | 81.91 |
| +50 | 82.75 | | 83.08 |
| +75 | 83.875 | | 84.25 |
| 1 | 85.000 | | 85.41 |
| +25 | 86.125 | | 86.58 |
| +50 | 87.25 | | 87.74 |
| +75 | 88.375 | | 88.92 |
| 2 | 89.50 | | 90.08 |
| +25 | 90.625 | | 91.25 |
| +50 | 91.75 | | 92.41 |
| +75 | 92.875 | | 93.58 |
| 3 | 94.0 | | 94.75 |
| +14 | 94.35 | | 95.10 |
| +40 | 95.00 | | 95.75 |
| +66 | 95.65 | | 96.40 |
| 0 | 96.0 | | 96.75 |

Measurements on Batavia walk
N.W. cor - 4th & Oak



97.5 North line Buck Street.

West

East

| Sta | Curb | Gutter | Centre | Gutter | Curb |
|-----|---------------------|--------|--------|--------|---------------------|
| 0 | 96.0 | | 96.75 | | 97.50 |
| +25 | 97.04 ^L | | 97.75 | | 98.46 |
| +50 | 98.09 ^L | | 98.75 | | 99.42 |
| +75 | 99.13 ^L | | 99.75 | | 100.38 ^L |
| 1 | 100.17 ^L | | 100.75 | | 101.33 ^L |
| +25 | 101.21 ^L | | 101.75 | | 102.29 ^L |
| +50 | 102.25 ^L | | 102.75 | | 103.25 ^L |
| +75 | 103.29 ^L | | 103.75 | | 104.21 ^L |
| 2 | 104.34 ^L | | 104.75 | | 105.17 ^L |
| +25 | 105.38 ^L | | 105.75 | | 106.13 |
| +50 | 106.42 ^L | | 106.75 | | 107.08 |
| +75 | 107.46 ^L | | 107.75 | | 108.04 |
| 3 | 108.50 | | 108.75 | | 109.0 |
| +14 | | | | | |
| +40 | 109.50 | | 109.75 | | 110.0 |
| +66 | | | | | |
| 0 | 110.5 | | 110.75 | | 111.0 |

7th Street paving

North line Bush Street

South line Cedar Street

Centre line Cedar Street

North line Cedar Street

West

East

| Sta. | Curb | Gutter | Center | Gutter | Curb |
|------|---------|--------|--------|--------|---------|
| 0 | 110.5 | 109.83 | 110.75 | 110.33 | 111.00 |
| +25 | 111.29 | 110.62 | 111.56 | 111.16 | 111.83 |
| +50 | 112.08 | 111.41 | 112.38 | 111.99 | 112.66 |
| +75 | 112.87 | 112.21 | 113.19 | 112.83 | 113.50 |
| 1 | 113.67 | 113.00 | 114.00 | 113.66 | 114.33 |
| +25 | 114.46 | 113.79 | 114.81 | 114.49 | 115.16 |
| +50 | 115.25 | 114.58 | 115.63 | 115.33 | 116.00 |
| +75 | 116.04 | 115.37 | 116.44 | 116.16 | 116.83 |
| 2 | 116.83 | 116.16 | 117.25 | 116.99 | 117.66 |
| +25 | 117.62 | 116.95 | 118.06 | 117.83 | 118.50 |
| +50 | 118.42 | 117.75 | 118.88 | 118.66 | 119.33 |
| +75 | 119.21 | 118.54 | 119.69 | 119.49 | 120.16 |
| 3 | 120.00 | 119.33 | 120.50 | 120.33 | 121.00 |
| +14 | | | | | |
| +40 | 121.00 | | 121.50 | | 122.00 |
| +66 | | | | | |
| 0 | 122.000 | | 122.50 | | 123.000 |

7th Street paving

North line Cedar Street

South line of Bate St

Center of Bate St

North line of Bate

West

East

| Curb | Gutter | Center | Gutter | Curb | Sta |
|---------|--------|--------|--------|---------|-----|
| 122.00 | 121.33 | 122.50 | 122.33 | 123.00 | 0 |
| 123.08 | 122.41 | 123.54 | 123.33 | 124.00 | +25 |
| 124.17 | 123.50 | 124.58 | 124.33 | 125.00 | +50 |
| 125.25 | 124.58 | 125.63 | 125.33 | 126.00 | +75 |
| 126.33 | 125.66 | 126.67 | 126.33 | 127.00 | 1 |
| 127.42 | 126.75 | 127.71 | 127.33 | 128.00 | +25 |
| 128.50 | 127.83 | 128.75 | 128.33 | 129.00 | +50 |
| 129.58 | 128.91 | 129.79 | 129.33 | 130.00 | +75 |
| 130.67 | 130.00 | 130.83 | 130.33 | 131.00 | 2 |
| 131.75 | 131.08 | 131.86 | 131.33 | 132.00 | +25 |
| 132.83 | 132.16 | 132.92 | 132.33 | 133.00 | +50 |
| 133.92 | 133.25 | 133.96 | 133.33 | 134.00 | +75 |
| 135.00 | 134.33 | 135.00 | 134.33 | 135.00 | 3 |
| | | | | | +14 |
| 136.50 | 135.83 | 136.50 | 135.83 | 136.50 | +40 |
| | | | | | +66 |
| 138.000 | 137.33 | 138.00 | 137.33 | 138.000 | 0 |

4th Street Paving

South Side of Elm St

Center of Elm St

North Side of Elm St

4th Street Paving

| Lev | Butte | Center | Butte | Lev | Str |
|---------|--------|--------|--------|---------|-----|
| 138.00 | 137.33 | 138.00 | 137.33 | 138.00 | 0 |
| 139.96 | 139.29 | 139.96 | 139.29 | 139.96 | +25 |
| 141.92 | 141.25 | 141.92 | 141.25 | 141.92 | +50 |
| 143.88 | 143.21 | 143.88 | 143.21 | 143.88 | +75 |
| 145.83 | 145.16 | 145.83 | 145.16 | 145.83 | 1 |
| 147.79 | 147.12 | 147.79 | 147.12 | 147.79 | +25 |
| 149.75 | 149.08 | 149.75 | 149.08 | 149.75 | +50 |
| 151.71 | 151.04 | 151.71 | 151.04 | 151.71 | +75 |
| 153.67 | 153.00 | 153.67 | 153.00 | 153.67 | 2 |
| 155.63 | 154.96 | 155.63 | 154.96 | 155.63 | +25 |
| 157.58 | 156.91 | 157.58 | 156.91 | 157.58 | +50 |
| 159.54 | 158.87 | 159.54 | 158.87 | 159.54 | +75 |
| 161.500 | 160.83 | 161.50 | 160.83 | 161.500 | 3 |
| | | | | | +14 |
| 163.25 | 162.58 | 163.25 | 162.58 | 163.25 | +40 |
| | | | | | +66 |
| 165.000 | 164.33 | 165.00 | 164.33 | 165.000 | 0 |

South Line of Third Street

Center of Third Street

North line of Third Street

4th Street Paving

| W | | | E | | |
|--------|--------|--------|--------|--------|-----|
| curb | Gutter | Center | Gutter | Curb | Sta |
| 165.00 | 164.33 | 165.00 | 164.33 | 165.00 | 0 |
| 166.25 | 165.58 | 166.25 | 165.58 | 166.25 | +25 |
| 167.50 | 166.83 | 167.50 | 166.83 | 167.50 | +50 |
| 168.75 | 168.08 | 168.75 | 168.08 | 168.75 | +75 |
| 170.00 | 169.33 | 170.00 | 169.33 | 170.00 | 1 |
| 171.25 | 170.58 | 171.25 | 170.58 | 171.25 | +25 |
| 172.50 | 171.83 | 172.50 | 171.83 | 172.50 | +50 |
| 173.75 | 173.08 | 173.75 | 173.08 | 173.75 | +75 |
| 175.00 | 174.33 | 175.00 | 174.33 | 175.00 | 2 |
| 176.25 | 175.58 | 176.25 | 175.58 | 176.25 | +25 |
| 177.50 | 176.83 | 177.50 | 176.83 | 177.50 | +50 |
| 178.75 | 178.08 | 178.75 | 178.08 | 178.75 | +75 |
| 180.00 | 179.33 | 180.00 | 179.33 | 180.00 | 3 |
| | | | | | +14 |
| 181.50 | 180.83 | 181.50 | 180.83 | 181.50 | +40 |
| | | | | | +66 |
| 183.00 | 182.33 | 183.00 | 182.33 | 183.00 | 0 |

North line of Fin St

180
 165.00
 5.15
 5

South line of Grape St

Center of Grape St

North line of Grape St

West

East

| curb | gutter | center | gutter | curb | Sta. |
|--------|--------|--------|--------|--------|------|
| 183.00 | 182.33 | 183.00 | 182.33 | 183.00 | 0 |
| 183.96 | 183.29 | 183.96 | 183.29 | 183.96 | +25 |
| 184.92 | 184.25 | 184.92 | 184.25 | 184.92 | +50 |
| 185.88 | 185.21 | 185.88 | 185.21 | 185.88 | +75 |
| 186.83 | 186.16 | 186.83 | 186.16 | 186.83 | 1 |
| 187.79 | 187.12 | 187.79 | 187.12 | 187.79 | +25 |
| 188.75 | 188.08 | 188.75 | 188.08 | 188.75 | +50 |
| 189.71 | 189.04 | 189.71 | 189.04 | 189.71 | +75 |
| 190.67 | 190.00 | 190.67 | 190.00 | 190.67 | 2 |
| 191.62 | 190.96 | 191.62 | 190.96 | 191.62 | +25 |
| 192.58 | 191.91 | 192.58 | 191.91 | 192.58 | +50 |
| 193.54 | 192.87 | 193.54 | 192.87 | 193.54 | +75 |
| 194.50 | 193.83 | 194.50 | 193.83 | 194.50 | 3 |
| | | | | | +14 |
| 195.00 | 194.33 | 195.00 | 194.33 | 195.00 | +40 |
| | | | | | +66 |
| 195.50 | 194.83 | 195.50 | 194.83 | 195.50 | 0 |

4th Street Paving

S.E. Cor 3rd & Hawth. = 181.0
$$\begin{array}{r}
 194.30 \\
 183.00 \\
 \hline
 3 \ 11.30 \\
 \hline
 3.83 \\
 \hline
 50
 \end{array}$$

| | | |
|----|---|----|
| 2 | | |
| 6 | 7 | 33 |
| 5 | | 05 |
| 33 | | 23 |
| 83 | | 38 |

South line of Hawthorn St

Center of Hawthorn St

North line of Hawthorn St

4th Street Paving

| West | | East | | | |
|---------|--------|--------|--------|---------|------|
| Lev | Center | Center | Lev | Sta | |
| 195.50 | 194.83 | 195.50 | 194.83 | 195.50 | 0 |
| 196.29 | 195.62 | 196.33 | 195.71 | 196.38 | +25 |
| 197.08 | 196.41 | 197.17 | 196.58 | 197.25 | +50 |
| 197.87 | 197.20 | 198.00 | 197.46 | 198.13 | +75 |
| 198.67 | 198.00 | 198.83 | 198.33 | 199.00 | 1 |
| 199.46 | 198.79 | 199.67 | 199.21 | 199.88 | +25 |
| 200.25 | 199.58 | 200.50 | 200.08 | 200.75 | +50 |
| 201.04 | 200.37 | 201.33 | 200.96 | 201.63 | +75 |
| 201.83 | 201.17 | 202.17 | 201.83 | 202.50 | 2 |
| 202.62 | 201.96 | 203.00 | 202.71 | 203.38 | +25 |
| 203.42 | 202.76 | 203.83 | 203.58 | 204.25 | +50 |
| 204.21 | 203.55 | 204.67 | 204.46 | 205.13 | +75 |
| 205.00 | 204.33 | 205.50 | 205.33 | 206.000 | 3 |
| | | | | | +114 |
| 205.25 | 204.58 | 206.75 | 205.58 | 206.25 | +40 |
| | | | | | +66 |
| 205.500 | 204.83 | 206.00 | 205.83 | 206.500 | 0 |

South line of Loy Street

Center of Loy St

North line of Loy St

Check of Walk on S side
of Pond bet end of 4th

Sta + HO Gentle Walk Elev

| | | | | |
|-------|------|--------|--------|--------|
| B.M. | 3.08 | 199.37 | | 196.29 |
| 1+435 | | | 190.68 | 8.69 |
| | | | 3.82 | 5.87 |
| | | | 194.50 | 4.87 |
| | | | 190.45 | 8.82 |

Oct 23 1890

4th & 1st
End of walk

8.69
12
8.57

194.5
181.00
13.5

36.5

200
36.5

143.5

181.
9.45
190.45

56.5 x 13.5
200

194.50
3.82
190.68

56.5
13.5
28.25
169.5
56.5
200) 762.75 | 3.81
600
1627
1600
275

200
36.5
143.5

143.5 x 13.5
200

181.00
9.68
190.68

143.5
13.5
717.5
430.5
143.5
200) 1937.25 | 9.68
1800
1372
1200
1725

149
200
135
14
570
135
200) 189.0 | 9.45
180
90
50
140

Lev. grades on 4th St from

At Ask

West

East

| Sta | Grade | rod | Grade | rod | + | H.D | - | Elev |
|-----|--------|------------------|--------|------------------|-------|--------|-------|--------|
| | | | | | | | | |
| | | (68.945) | | | | | | |
| 0 | 60.500 | 8.445 ✓ | 60.50 | 8.445 ✓ | | | | |
| +25 | 62.000 | 1.540 6.945 ✓ | 62.04 | 1.540 6.945 ✓ | | | | |
| | | 1.500 | | 1.540 | | | | |
| +50 | 63.500 | 5.445 ✓ | 63.58 | 5.368 ✓ | | | | |
| +75 | 65.000 | 1.540 3.945 ✓ | 65.12 | 1.540 3.820 ✓ | | | | |
| | | 1.500 | | 1.540 | | | | |
| 1 | 66.500 | 2.445 ✓ | 66.67 | 2.275 ✓ | | | | |
| +25 | 68.000 | 1.540 0.945 | 68.21 | 1.540 0.735 | | | | |
| | | | | | | | | |
| +50 | 69.500 | | 69.75 | | 11.99 | 80.200 | 0.735 | 68.210 |
| +75 | 71.000 | | 71.29 | | | | | |
| | | | | | | | | |
| 2 | 72.500 | | 72.83 | | | | | |
| +25 | 74.000 | | 74.37 | | | | | |
| | | | | | | | | |
| +50 | 75.500 | | 75.91 | | | | | |
| +75 | 77.000 | | 77.45 | | | | | |
| | | | | | | | | |
| 3 | 78.500 | | 79.000 | | | | | |

North Line of A Street

11.99 80.200 0.735 68.210

South Line of Ask Street

B.M. 1.02 79.180
 6% red sand top 7.98 70.32

Sub grades on 4th Street - from
West

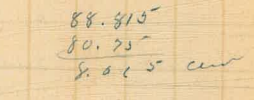
Ash to Beech St

| Sta | Grade | Rod | | Grade | Rod | | | | Elv | |
|------|----------|----------|-----------|----------|-------|---|---------|--------|-------|-----------|
| | | | | | | + | | HD | - | |
| B.M. | | (88.815) | | | | | | | | |
| 0 | 80.500 | 8.315 | 0.09 high | 81.00 | 7.815 | ✓ | 9.685 | 88.815 | | 79.113 |
| +25 | 81.625 | 7.190 | 1.125 | 82.210 | 6.605 | ✓ | | | | |
| +50 | 82.750 | 6.065 | 1.125 | 83.420 | 5.395 | ✓ | | 88.815 | | |
| +75 | 83.875 | | | 84.620 | 4.195 | ✓ | | 80.75 | | |
| 1 | 85.000 | 3.815 | | 85.830 | 2.985 | ✓ | | 79.0 | | 80.65 cur |
| +25 | 86.125 | 2.690 | 1.125 | 87.040 | 1.775 | ✓ | | | | |
| +50 | 87.250 | 1.565 | | (98.170) | 9.92 | ✓ | # 10.13 | 98.17 | 0.775 | 88.040 |
| +75 | (92.175) | 3.800 | | 88.250 | 2.715 | ✓ | # 4.135 | 92.175 | | |
| | 88.375 | | | 89.460 | | ✓ | # 6.965 | 96.870 | 2.250 | 89.925 |
| 2 | 89.500 | 2.675 | | (98.17) | 7.51 | ✓ | | | | |
| +25 | 90.625 | 7.545 | | 90.660 | 6.30 | ✓ | | | | |
| +50 | 91.750 | 6.420 | | 91.870 | 5.09 | ✓ | | | | |
| +75 | 92.875 | 5.295 | | 93.080 | 3.88 | ✓ | | | | |
| 3 | 94.000 | 4.170 | | 94.29 | 2.67 | ✓ | | | | |
| | | | | 95.500 | | ✓ | | | | |
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| | | | | | | | | | | |

North line of Ash Street

South line of Beech Street

B.M.



4th Street Paving grades
West

| Sta | Grade | Red | | Grade | Red |
|-----|-------|--------------------|---|-------|-----|
| | | 50.75 | | | |
| 0 | 43.83 | 6.92 | ✓ | | |
| +25 | 44.08 | 6.67 ²⁵ | ✓ | | |
| +50 | 44.33 | 6.42 ²⁵ | ✓ | | |
| +75 | 44.58 | 6.17 ²⁵ | ✓ | | |
| 1 | 44.83 | 5.92 ²⁵ | ✓ | | |
| +25 | 45.08 | 5.67 ²⁵ | ✓ | | |
| +50 | 45.33 | 5.42 | ✓ | | |
| +75 | 45.58 | 5.17 | ✓ | | |
| 2 | 45.83 | 4.92 | ✓ | | |
| +25 | 46.08 | 4.67 ²⁵ | ✓ | | |
| +50 | 46.33 | 4.42 ²⁵ | ✓ | | |
| +75 | 46.58 | 4.17 ²⁵ | ✓ | | |
| 3 | 46.83 | 3.92 ²⁵ | ✓ | | |

Gutter grades on 4th St West
46.935

0
+25
+50
+75
1

Same grade on curb side

from C to E St gutter

| Sta | + HO | - Elev. |
|-------|--------|---------|
| 4.225 | 50.750 | 46.525 |

North line of B Street

| | | |
|------------------------|------|--------|
| South line of C St | | |
| Side B to C | 1.49 | 48.260 |
| | 0.71 | 46.935 |
| South line of B Street | | 46.525 |

| Sta | + | H.O | Grade | rod |
|-----|-------|----------|--------|---------|
| | | (46.935) | | |
| +25 | | | | |
| +50 | | | | |
| +55 | | | | |
| +75 | | | 40.030 | 6.905 ✓ |
| | | | 40.490 | 6.745 ✓ |
| | | | | .580 |
| 2 | | | 41.070 | 5.865 ✓ |
| | | | | .580 |
| +25 | | | 41.650 | 5.285 ✓ |
| +50 | | | | .580 |
| +75 | | | 42.230 | 4.705 ✓ |
| | | | | .580 |
| +85 | | | 42.810 | 4.125 ✓ |
| | | | | .220 |
| # | 2.775 | 43.045 | 43.00 | 3.905 ✓ |
| | | | 6.665 | 40.270 |
| | | | 4.64 | 38.405 |

South line of B Street

Center Grade on 4th St from

E to 23 St

| Sta | + | HO | Grade | Level |
|-----|------|-------|-------|--------|
| B9m | 6.78 | 45.19 | | 38.41 |
| 0 | | | 36.42 | 8.77 ✓ |
| +25 | | } | 37.00 | 8.19 ✓ |
| +50 | | | 37.58 | 7.61 ✓ |
| +75 | | | 38.16 | 7.03 ✓ |
| 1 | | | 38.74 | 6.45 ✓ |
| +25 | | | 39.31 | 5.88 ✓ |
| +50 | | | 39.89 | 5.30 ✓ |
| +75 | | | 40.47 | 4.72 ✓ |
| 2 | | | 41.05 | 4.14 ✓ |
| +25 | | | 41.63 | 3.56 ✓ |
| +50 | | | 42.21 | 2.98 ✓ |
| +75 | | | 42.79 | 2.40 ✓ |
| 3 | | | 43.37 | 1.82 ✓ |

North Line of E St

Center grade on 4th St from E to

| | | | |
|-----|--|-------|--------|
| 0 | | 35.83 | 9.38 |
| +25 | | 36.42 | 8.74 |
| +50 | | 37.03 | 8.16 ✓ |
| +75 | | 37.63 | 7.56 ✓ |
| 1 | | 38.23 | 6.96 ✓ |
| +25 | | 38.83 | 6.36 ✓ |

Changed

checked in old stakes set
South Line of B St day before
B St

| Sta | + | H ₀ | Grade | rod |
|---|---------|----------------|-------|--------|
| | | 45.19 | | |
| +50 | | | 39.43 | 5.76 ✓ |
| +75 | | | 40.03 | 5.16 ✓ |
| 2 | | | 40.65 | 4.56 ✓ |
| +25 | | | 41.23 | 3.96 ✓ |
| +50 | | | 41.83 | 3.36 ✓ |
| +75 | | | 42.43 | 2.76 ✓ |
| 3 | | | 43.03 | 2.16 ✓ |
| Gutter grades on West side of 4th from E to SB. | | | | |
| 0 | 35.85 | 8.93 ✓ | 44.76 | |
| +25 | 36.47 | 8.29 ✓ | 40.24 | 4.52 ✓ |
| +50 | 37.11 | 7.65 ✓ | 40.80 | 3.96 ✓ |
| +75 | 37.74 | 7.02 ✓ | 41.35 | 3.41 ✓ |
| 1 | 38.38 | 6.38 ✓ | 41.91 | 2.85 ✓ |
| +25 | 39.02 | 5.74 ✓ | 42.47 | 2.27 ✓ |
| +50 | 39.66 | 5.10 ✓ | 43.03 | 1.73 ✓ |
| +55 | 39.79 X | 4.97 ✓ | | |
| # | 8.32 | 50.75 | 2.33 | 42.43 |
| Bm | | | 4.22 | 46.53 |

Change

452
 457
 55

40.74
 39.75
 45

South of SB St
 of 4th from E to SB.

| + | H ₀ | Elev |
|------|----------------|-------|
| 6.33 | 44.76 | 38.41 |

South of SB St

Center grader on 4th St from 18 to C.

| Sta | Grade | Prod | Sta | Grade | Prod |
|------|-------|------|-------------------------------|-------|-------|
| 0 | 43.37 | | (50.75) South line of 16th St | | |
| +40 | 43.67 | 7.08 | South track | | |
| +40 | 43.77 | 6.98 | North | | |
| 0 | 44.17 | 6.58 | +75 | 45.92 | 4.83 |
| +25 | 44.42 | 6.33 | 2 | 46.17 | 4.58 |
| +50 | 44.67 | 6.08 | +25 | 46.42 | 4.33 |
| +75 | 44.92 | 5.83 | +50 | 46.67 | 4.08 |
| 1 | 45.17 | 5.58 | +75 | 46.92 | 3.83 |
| +25 | 45.42 | 5.33 | 3 | 47.17 | 3.58 |
| +50 | 45.67 | 5.08 | | | |
| B.M. | | | | 1.48 | 49.27 |

~~Lowered center grader on 10th St bet on account of 8" x 4" curbs~~

~~1
+25
+50
+75
2~~

South line of C St

B.M. 1.48 49.27

2nd to 4th from Sta 1 to Sta 2 change

West line of 4th St

+ H O - Elev

| Stn | t | H ₂ | Grade | prod | |
|-----------------|------|----------------|---------------------|--------------------|---------|
| B _{9m} | 4.20 | 50.73 | | | 46.53 |
| 2150 | | | 42.21 | 8.52 | ✓ |
| | | | ⁵⁸ 42.79 | ⁵⁸ 7.94 | ✓ |
| | | | ⁵⁸ 43.37 | ⁵⁸ 7.36 | ✓ |
| | | | ⁴⁰ 43.77 | ⁴⁰ 6.96 | 7.06 S. |
| | | | 44.17 | ⁴⁰ 6.56 | ✓ |

4th and 16 St
50' south of 16 St

South line of 16 St

center grade on 3 cent line of 4th
0.62 47.145

1.47 49.26
46.525
43.77 3.375 3.475
7.125 40.010

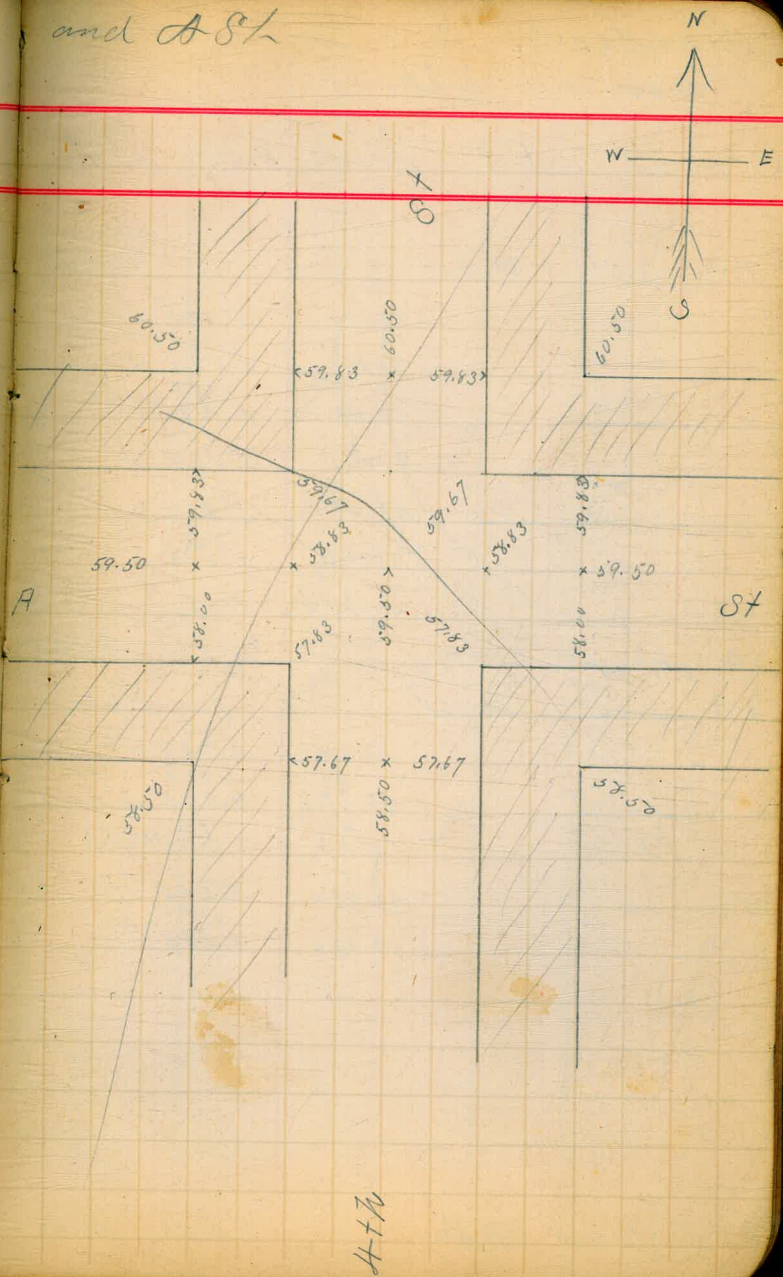
and 16 St

Leenta

| Sta | + | HO | Grade | Pool | |
|-----|-------|--------|-------|-------|--------|
| | 1.242 | 50.507 | | | 49.265 |
| 5 | | | 47.17 | 3.337 | |
| + | | | 46.92 | 3.587 | |
| + | | | 46.67 | 3.837 | |
| + | | | 46.42 | 4.087 | |
| 2 | | | 46.17 | 4.337 | |
| + | | | 45.92 | 4.587 | |
| + | | | 45.67 | 4.837 | |
| | 3.42 | 49.09 | | | 45.67 |
| 225 | | | 45.42 | 3.67 | |
| 1 | | | 45.17 | 3.92 | |
| + | | | 44.92 | | |
| + | | | | | |
| + | | | | | |
| 0 | | | 44.17 | 4.92 | v. |
| | 1.07 | 48.88 | | 1.23 | 47.86 |
| | | | 4.36 | | 46.56 |

Grades at intersection of HTH and A St

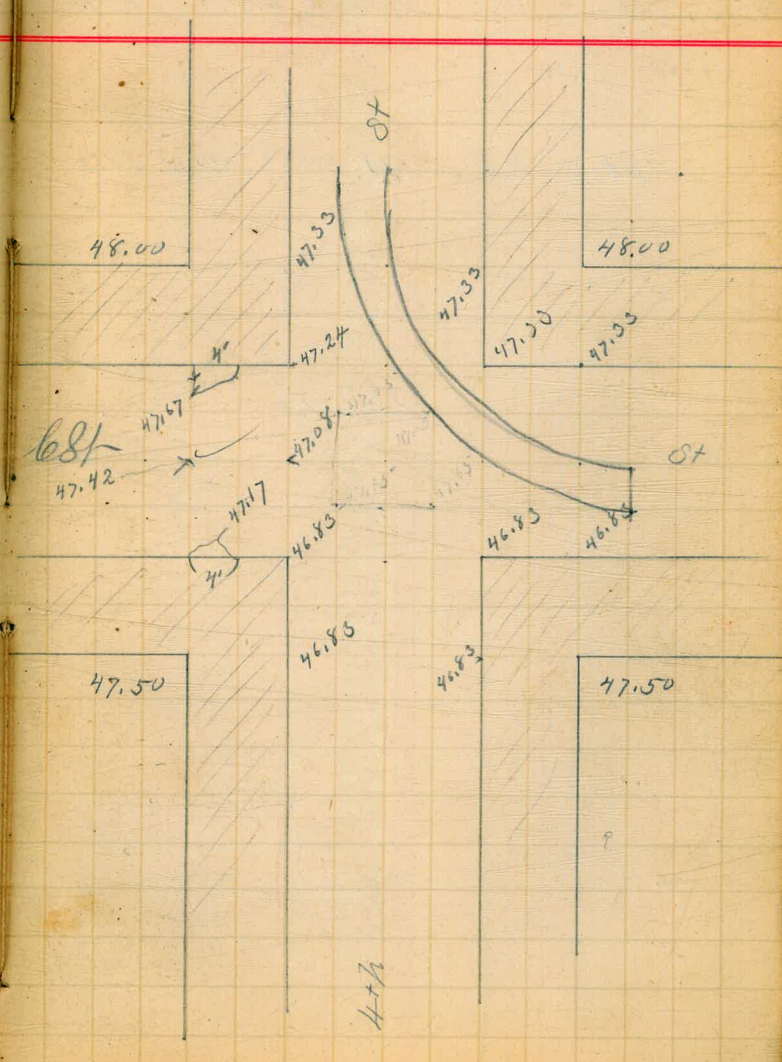
| Sta | + | H ₀ | Grade Rod | B.M. |
|-----|---|----------------|-----------|------|
|-----|---|----------------|-----------|------|



HTH

Grades at the intersection
of Hth and 6th St.

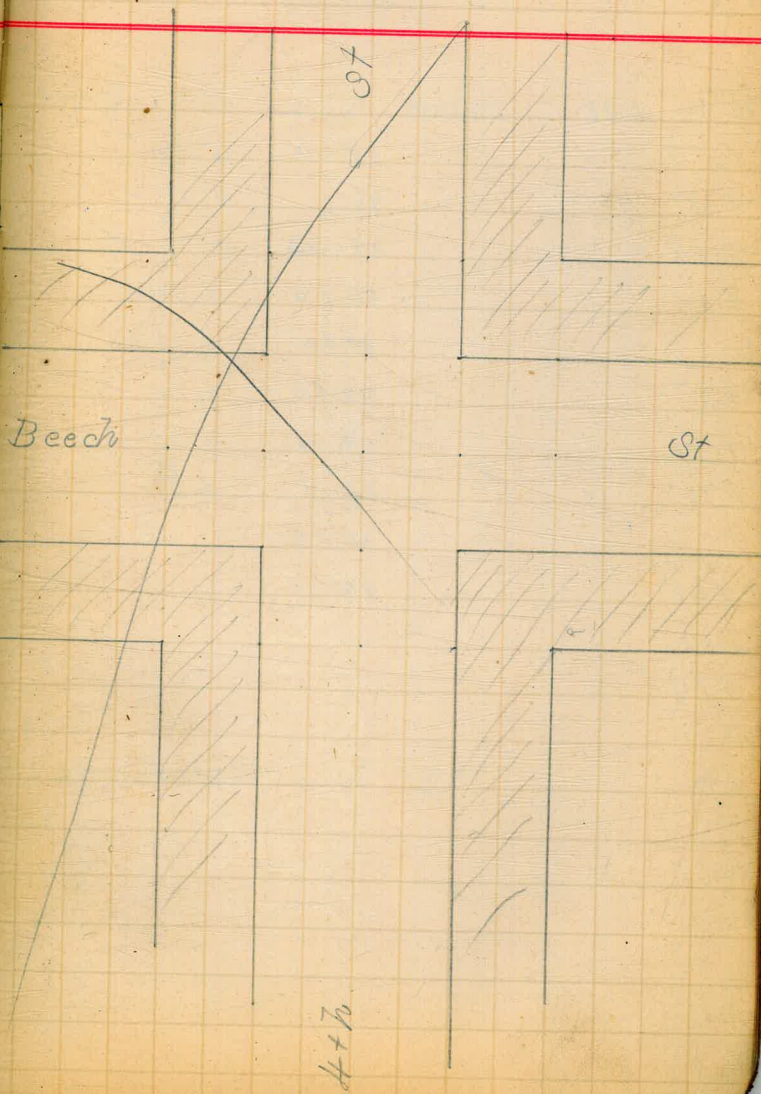
| Sta | + | H ² | Grade | Rod | B.M. |
|------|---|----------------|----------------------|-------------------------|--------|
| B.M. | 3.55 | 52.815 | | ~ | 49.265 |
| | | | 47.17 | 5.645 | |
| | | | 46.83 | 5.985 ^{.330} ✓ | |
| | | | 47.42 | 5.395 ^{.280} ✓ | |
| | | | 47.67 | 5.145 ^{.250} ✓ | |
| | | | 47.08 | 5.735 ^{.10} ✓ | 340 |
| | | | 47.24 | 5.575 ✓ | 330 |
| | | | 47.650 | 5.165 ✓ | |
| B.M. | H th and 6 th St | | 2.150 | | 50.465 |
| B.M. | 3.40 | 52.665 | | | 49.265 |
| | | | 47.24 ^{.43} | 5.425 ✓ | |
| | | | 47.67 ^{.54} | 4.995 ✓ | |
| | | | 47.33 | 5.335 ✓ | |
| B.M. | | | 47.420 | 5.245 ^{.390} ✓ | 50.465 |
| | | | 47.080 | 5.585 ✓ | |
| B.M. | 4 th and 6 th St. | | 2.005 | | 50.66 |



Grades at the intersection of
4th and Beech Sts.

| Sta | + | HO | Grade | rod | B.M. |
|-----|---|----|-------|-----|------|
|-----|---|----|-------|-----|------|

111.0 N.E. 3rd and cedar



Levelling grade on West side
of 4th St from B to C St

| Sta | + HD | Grade | rod |
|------|------|-------|--------------|
| B.M. | 2.38 | 53.04 | 50.66 |
| 0 | | 48.00 | 5.04 ✓ |
| +25 | | 48.17 | 4.87 ✓ |
| +50 | | 48.33 | 4.71 ✓ |
| +75 | | 48.50 | 4.54 ✓ |
| 1 | | 48.67 | 4.37 ✓ |
| +25 | | 48.83 | 4.21 ✓ |
| +50 | | 49.00 | 4.04 ✓ |
| +75 | | 49.17 | 3.87 ✓ |
| 2 | | 49.33 | |
| +25 | | 49.50 | |
| +50 | | | |
| +75 | | | |
| 3 | | | |
| B.M. | | | 3.765 49.275 |

B.M. 4th and 1st

B.M. 1st and 2nd

B.M.

B.M. 4th and C St

B.M.

Level grades on West side
of 4th St bet c and B St.

| Sta | + | #9 | Grade | rod | B.M. |
|------|------|--------|-------|----------------------|--------|
| B.M. | 3.55 | 52.815 | | | 49.265 |
| 3+14 | | | 47.17 | | |
| +25 | | | | | |
| +40 | | | 47.65 | | |
| +66 | | | 47.67 | | |
| 0 | | | 48.00 | | |
| +25 | | | 48.17 | 645 | |
| +50 | | | 48.33 | | |
| +75 | | | 48.50 | 4.315 | ✓ |
| 1 | | | 48.67 | 4.145 ^{17°} | |
| +25 | | | 48.83 | 3.985 ^{16°} | ✓ |
| +50 | | | 49.00 | 3.815 ^{17°} | ✓ |
| +75 | | | 49.17 | 3.645 ^{16°} | ✓ |
| 2 | | | 49.33 | 3.485 ^{17°} | ✓ |
| +25 | | | 49.50 | 3.315 ^{17°} | ✓ |
| +50 | | | 49.67 | 3.145 ^{16°} | ✓ |
| +75 | | | 49.83 | 2.985 ^{17°} | ✓ |
| 3 | | | 50.00 | 2.815 ^{17°} | ✓ |
| B.M. | | | 2.15 | 50.665 | |

4th and C St
Gutter grade on West line

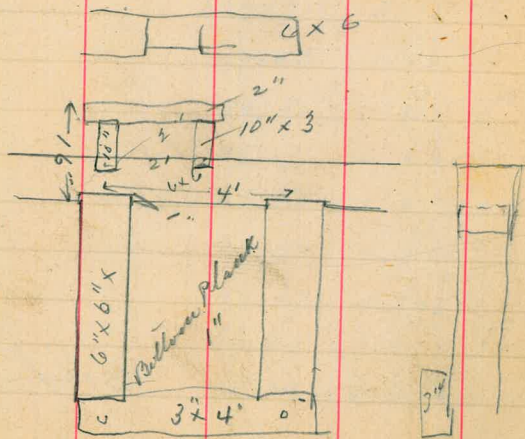
Center grade level from cable road
Gutter grade on West line
North line of C St

South line of B St.

4th and B St.

2.56
 22.64
 23.20
 22.00
 3.20

25.20
 18.33
 6.87



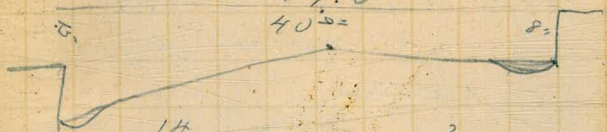
14.5
 12.5
 6.5
 19.0
 40

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

14/4.0 (2.0)
 2.8
 120.08

7) 40 (5.71)

12.5
 8.5
 19.0
 40



14.5
 1.5
 12.5
 22.3

$\frac{2}{2} \times 33$

7) 60 (8.57)
 40
 19.5
 20.5

40.40
 19.5
 20.5
 12.5
 8.0

140.9
 12.5

19.5
 8
 12.5
 40.0

8"

| Sto | + | BO | - | Elem. |
|-----|---|----|---|-------|
|-----|---|----|---|-------|

| | | | | |
|-----|-------|--------|--------|--------|
| 09m | 0.155 | 08.330 | | 67.675 |
| 09m | | | 10.155 | 58.18 |



| | | | | |
|-------------|-------|-------------|--|---------------------|
| 2.935 | 49.46 | | | 46.525 |
| 8 15 | | 44.17 | | 5.29 ^{.82} |
| 67 | | 41.75 | | 7.71 |
| <u>7.48</u> | | 2.42 | | |
| | | 83 | | |
| | | <u>1.59</u> | | |

15
25

15; 25; () .68

$\frac{.68}{.15}$
 340
 680
 $\frac{10.20}{20.00}$

$\frac{15}{25}$ $\frac{3}{5} \times$ 1
 5) 204
 200
 40

$\frac{10}{25}$ $\frac{2}{5} \times$ 1
 5) 136
 272
 408
 680

57.855
 408
 38.268
 272
 $\frac{2}{5}$ $\frac{68}{1}$

57
58
 1
 57

5th and H J



| | | |
|---------------|--------|--------|
| 58.175 | | 38.175 |
| 10.71 | | 10.71 |
| <u>68.885</u> | | |
| 0.755 | | |
| <u>68.130</u> | | |
| 11.99 | | |
| <u>14.0</u> | 38.175 | |
| | 10.71 | |

| | | |
|--------------|---------------|-------|
| 68.13 | | 38.18 |
| 11.99 | | 10.71 |
| <u>80.12</u> | | 68.89 |
| 102 | | 0755 |
| 791.2 | | |
| | 68.155 | |
| | 11.99 | |
| | <u>80.145</u> | |
| | 102 | |
| | <u>79.125</u> | |

Degress

E 37.5

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

| Degrees. | DEGREES. | | ¼ DEGREE. | | ½ DEGREE. | | ¾ DEGREE. | | Degrees. |
|----------|----------|-------|-----------|-------|-----------|-------|-----------|-------|----------|
| | Lat. | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | Dep. | |
| 0 | | | 100.00 | 0.44 | 100.00 | 0.87 | 99.99 | 1.31 | 88 |
| 1 | 99.98 | 1.75 | 99.98 | 2.18 | 99.97 | 2.62 | 99.95 | 3.05 | 87 |
| 2 | 99.94 | 3.49 | 99.92 | 3.93 | 99.91 | 4.36 | 99.88 | 4.80 | 86 |
| 3 | 99.86 | 5.23 | 99.84 | 5.67 | 99.81 | 6.10 | 99.79 | 6.54 | 85 |
| 4 | 99.76 | 6.98 | 99.73 | 7.41 | 99.69 | 7.85 | 99.66 | 8.28 | 84 |
| 5 | 99.62 | 8.72 | 99.58 | 9.15 | 99.54 | 9.58 | 99.50 | 10.02 | 83 |
| 6 | 99.45 | 10.45 | 99.41 | 10.89 | 99.36 | 11.32 | 99.31 | 11.75 | 82 |
| 7 | 99.25 | 12.19 | 99.20 | 12.62 | 99.14 | 13.05 | 99.09 | 13.49 | 81 |
| 8 | 99.03 | 13.92 | 98.97 | 14.35 | 98.90 | 14.78 | 98.84 | 15.21 | 80 |
| 9 | 98.77 | 15.64 | 98.70 | 16.07 | 98.63 | 16.50 | 98.56 | 16.93 | 79 |
| 10 | 98.48 | 17.36 | 98.40 | 17.79 | 98.33 | 18.22 | 98.25 | 18.65 | 78 |
| 11 | 98.16 | 19.08 | 98.08 | 19.51 | 97.99 | 19.94 | 97.90 | 20.36 | 77 |
| 12 | 97.81 | 20.79 | 97.72 | 21.22 | 97.63 | 21.64 | 97.53 | 22.07 | 76 |
| 13 | 97.44 | 22.50 | 97.34 | 22.92 | 97.24 | 23.34 | 97.13 | 23.77 | 75 |
| 14 | 97.03 | 24.19 | 96.92 | 24.62 | 96.81 | 25.04 | 96.70 | 25.46 | 74 |
| 15 | 96.59 | 25.88 | 96.48 | 26.30 | 96.36 | 26.72 | 96.25 | 27.14 | 73 |
| 16 | 96.13 | 27.56 | 96.00 | 27.98 | 95.88 | 28.40 | 95.76 | 28.82 | 72 |
| 17 | 95.63 | 29.24 | 95.50 | 29.65 | 95.37 | 30.07 | 95.24 | 30.49 | 71 |
| 18 | 95.11 | 30.90 | 94.97 | 31.32 | 94.83 | 31.73 | 94.69 | 32.14 | 70 |
| 19 | 94.55 | 32.56 | 94.41 | 32.97 | 94.26 | 33.38 | 94.12 | 33.79 | 69 |
| 20 | 93.97 | 34.20 | 93.82 | 34.61 | 93.67 | 35.02 | 93.51 | 35.43 | 68 |
| 21 | 93.36 | 35.84 | 93.20 | 36.24 | 93.04 | 36.65 | 92.88 | 37.06 | 67 |
| 22 | 92.72 | 37.46 | 92.55 | 37.86 | 92.39 | 38.27 | 92.22 | 38.67 | 66 |
| 23 | 92.05 | 39.07 | 91.88 | 39.47 | 91.71 | 39.87 | 91.53 | 40.27 | 65 |
| 24 | 91.35 | 40.67 | 91.18 | 41.07 | 91.00 | 41.47 | 90.81 | 41.87 | 64 |
| 25 | 90.63 | 42.26 | 90.45 | 42.66 | 90.26 | 43.05 | 90.07 | 43.44 | 63 |
| 26 | 89.88 | 43.84 | 89.69 | 44.23 | 89.49 | 44.62 | 89.30 | 45.01 | 62 |
| 27 | 89.10 | 45.40 | 88.90 | 45.79 | 88.70 | 46.17 | 88.50 | 46.56 | 61 |
| 28 | 88.29 | 46.95 | 88.09 | 47.33 | 87.88 | 47.72 | 87.67 | 48.10 | 60 |
| 29 | 87.46 | 48.48 | 87.25 | 48.86 | 87.04 | 49.24 | 86.82 | 49.62 | 59 |
| 30 | 86.60 | 50.00 | 86.38 | 50.38 | 86.16 | 50.75 | 85.94 | 51.13 | 58 |
| 31 | 85.72 | 51.50 | 85.49 | 51.88 | 85.26 | 52.25 | 85.04 | 52.62 | 57 |
| 32 | 84.80 | 52.99 | 84.57 | 53.36 | 84.34 | 53.73 | 84.10 | 54.10 | 56 |
| 33 | 83.87 | 54.46 | 83.63 | 54.83 | 83.39 | 55.19 | 83.15 | 55.56 | 55 |
| 34 | 82.90 | 55.92 | 82.66 | 56.28 | 82.41 | 56.64 | 82.16 | 57.00 | 54 |
| 35 | 81.92 | 57.36 | 81.66 | 57.71 | 81.41 | 58.07 | 81.16 | 58.42 | 53 |
| 36 | 80.90 | 58.78 | 80.64 | 59.13 | 80.39 | 59.48 | 80.13 | 59.83 | 52 |
| 37 | 79.86 | 60.18 | 79.60 | 60.53 | 79.34 | 60.88 | 79.07 | 61.22 | 51 |
| 38 | 78.80 | 61.57 | 78.53 | 61.91 | 78.26 | 62.25 | 77.99 | 62.59 | 50 |
| 39 | 77.71 | 62.93 | 77.44 | 63.27 | 77.16 | 63.61 | 76.88 | 63.94 | 49 |
| 40 | 76.60 | 64.28 | 76.32 | 64.61 | 76.04 | 64.94 | 75.76 | 65.28 | 48 |
| 41 | 75.47 | 65.61 | 75.18 | 65.93 | 74.90 | 66.26 | 74.61 | 66.59 | 47 |
| 42 | 74.31 | 66.91 | 74.02 | 67.24 | 73.73 | 67.56 | 73.43 | 67.88 | 46 |
| 43 | 73.14 | 68.20 | 72.84 | 68.52 | 72.54 | 68.84 | 72.24 | 69.15 | 45 |
| 44 | 71.93 | 69.47 | 71.63 | 69.78 | 71.33 | 70.09 | 71.02 | 70.40 | 44 |
| 45 | 70.71 | 70.71 | | | | | | | |
| Degrees. | DEGREES. | | ¼ DEGREE. | | ½ DEGREE. | | ¾ DEGREE. | | Degrees. |
| | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | |

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Handwritten notes and calculations on the left page of the notebook, including numbers like 442, 33, 4.09, 3.89, 36.50, 37.04, 27.85, 36.75, 39.89, 39.43, 51.41, 10.30, 4.8, 8.87, 8.69, 37.18, 37.58, 43.03, 1.18, 4.12, 37.85, 37.17, 37.02, 37.46, 39.07, 91.88, 41.07, 91.00, 41.47, 90.81, 41.87, 90.63, 42.26, 90.45, 42.66, 90.26, 43.05, 90.07, 43.44, 89.88, 43.84, 89.69, 44.23, 89.49, 44.62, 89.30, 45.01, 89.10, 45.40, 88.90, 45.79, 88.70, 46.17, 88.50, 46.56, 88.29, 46.95, 88.09, 47.33, 87.88, 47.72, 87.67, 48.10, 87.46, 48.48, 87.25, 48.86, 87.04, 49.24, 86.82, 49.62, 86.60, 50.00, 86.38, 50.38, 86.16, 50.75, 85.94, 51.13, 85.72, 51.50, 85.49, 51.88, 85.26, 52.25, 85.04, 52.62, 84.80, 52.99, 84.57, 53.36, 84.34, 53.73, 84.10, 54.10, 83.87, 54.46, 83.63, 54.83, 83.39, 55.19, 83.15, 55.56, 82.90, 55.92, 82.66, 56.28, 82.41, 56.64, 82.16, 57.00, 81.92, 57.36, 81.66, 57.71, 81.41, 58.07, 81.16, 58.42, 80.90, 58.78, 80.64, 59.13, 80.39, 59.48, 80.13, 59.83, 79.86, 60.18, 79.60, 60.53, 79.34, 60.88, 79.07, 61.22, 78.80, 61.57, 78.53, 61.91, 78.26, 62.25, 77.99, 62.59, 77.71, 62.93, 77.44, 63.27, 77.16, 63.61, 76.88, 63.94, 76.60, 64.28, 76.32, 64.61, 76.04, 64.94, 75.76, 65.28, 75.47, 65.61, 75.18, 65.93, 74.90, 66.26, 74.61, 66.59, 74.31, 66.91, 74.02, 67.24, 73.73, 67.56, 73.43, 67.88, 73.14, 68.20, 72.84, 68.52, 72.54, 68.84, 72.24, 69.15, 71.93, 69.47, 71.63, 69.78, 71.33, 70.09, 71.02, 70.40, 70.71, 70.71.