192
Sewers

Front Street.
Wal. st "
Alley bet. Albatross 1st

LEVEL

F.B. 192

192

*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 | 2 1/3 | 21 | 49 | 41 | 95 2/3 |
| 2 | 4 2/3 | 22 | 51 1/3 | 42 | 98 |
| 3 | 7 | 23 | 53 2/3 | 43 | 100 1/3 |
| 4 | 9 1/3 | 24 | 56 | 44 | 102 2/3 |
| 5 | 11 2/3 | 25 | 58 1/3 | 45 | 105 |
| 6 | 14 | 26 | 60 2/3 | 46 | 107 1/3 |
| 7 | 16 1/3 | 27 | 63 | 47 | 109 2/3 |
| 8 | 18 2/3 | 28 | 65 1/3 | 48 | 112 |
| 9 | 21 | 29 | 67 2/3 | 49 | 114 1/3 |
| 10 | 23 1/3 | 30 | 70 | 50 | 116 2/3 |
| 11 | 25 2/3 | 31 | 72 1/3 | 51 | 119 |
| 12 | 28 | 32 | 74 2/3 | 52 | 121 1/3 |
| 13 | 30 1/3 | 33 | 77 | 53 | 123 2/3 |
| 14 | 32 2/3 | 34 | 79 1/3 | 54 | 126 |
| 15 | 35 | 35 | 81 2/3 | 55 | 128 1/3 |
| 16 | 37 1/3 | 36 | 84 | 56 | 130 1/3 |
| 17 | 39 2/3 | 37 | 86 1/3 | 57 | 133 |
| 18 | 42 | 38 | 88 2/3 | 58 | 135 1/3 |
| 19 | 44 1/3 | 39 | 91 | 59 | 137 2/3 |
| 20 | 46 2/3 | 40 | 93 1/3 | 60 | 140 |

MICROFILMED DEC 8 1964

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*City Hall, San Diego, Cal.*

## 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 |
|---|---|---|---|---|---|---|---|
| o | | o | | o | | o | |
| 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 |

192

N.E. 252.83

W.W. 250.92

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# Index


Page 1 – 9 Front St. from Laurel to Walnut

" 11. Walnut St "L" Lots

" 13 "J" Lots in Alley but Albatross + 1 St "

# B.M.

263.14 Spk in Tel. Pole N.E. Cor. of Alley Bet. 1st + 2nd + Thornton

259.17 Spk in Elec. Pole in Alley 10' West of Stat. 15+15 "J" Line 300' So. of Robinson Bet. Albatross + 1st

253.95 Spk. in Elec. Pole S.W. Cor. of 1st + Brookes.

250.81 Spk in Elec. Pole S.W. Cor. 1st + Walnut

239.16 Hub 25' East of Stat. 82' of Front St. Sewer

237.21 Spk in Tel. Pole N E Cor. Spruce + Front.

230.84 Hub 10' East of Stat 21+60 Front St. Sewerline

217.84 Hub 20' East of Stat. 17+00 " " " "

220.17 " 30' " " " 14+25 " " " "

139.78 " 15' " " " 10+45 " " " "

214.84 Spk in Tel. Pole N.E. Cor. Maple + Front.

Front Street Profile No 8.

Stakes Set 2' East of Ct. Line

4.85
209.53 B.M. Front & Laurel

6/15/05 Hutchison Evans Sawyer

2

| | | | | | Grade | Cut. |
|---|---|---|---|---|---|---|
| | 6.12 | 214.38 | | 208.26 | | |
| 0 | Ct of Laurel | | 7.40 | 207.0 | 196.50 | 10.5 |
| +50 | | | 6.50 | 207.9 | 197.09 | 10.8 |
| 1 | | | 5.96 | 208.4 | 197.68 | 10.7 |
| +50 | | } | 6.0 | 208.4 | 198.28 | 10.1 |
| 2 | | | 4.9 | 209.5 | 198.87 | 10.6 |
| +50 | | | 5.62 | 208.75 | 199.46 | 9.3 |
| 3 | | | 5.80 | 208.6 | 200.05 | 8.6 |
| +40.8 | So. L. of Maple MH.161. | 215.76 | 7.50 | 208.26 | 200.53 | 7.7 |
| | 0.92 | 215.76 | | 214.84 | | |
| +80.8 | | | | | | |
| 4 | | | 5.34 | 210.4 | 201.24 | 9.2 |
| +50 | | | 3.55 | 212.2 | 201.83 | 10.4 |
| 5 | | | 3.97 | 211.8 | 202.42 | 9.4 |
| +50 | | | 3.49 | 212.3 | 203.01 | 9.3 |
| 6 | | | 4.76 | 211.0 | 203.60 | 7.4 |
| +44 | B.1. of Trestle | | 11.12 | 204.6 | 204.12 | 0.5 |

341

Front St Sewer.

Stakes Set 2' East of Center Line

| | | | | | Grade | Cut | | |
|---|---|---|---|---|---|---|---|---|
| B.M. | 8.19 | 228.36 | | 220.17 | | | | |
| 14+14 B.S. | | | | | 213.24 | | | |
| +6.4 | | | 6.7 | 221.4 | 213.66 | 7.8 | | |
| 14+83.2 M.H. 160 Manhole | | | 5.3 | 223.1 | 214.06 | 9.0 | | |
| 15+05 | | | 5.0 | 223.4 | 214.32 | 9.1 | | |
| +23.2 | | | | | 214.33 | | | |
| +50 | | | 4.8 | 223.6 | 214.85 | 8.8 | | |
| 16 | | | 5.85 | 222.51 | 215.44 | 7.0 | | |
| +50 | 1.23 | 221.64 | 7.95 | 220.41 | 216.03 | 4.0 | | |
| 17 Bent 1. | | | 7.26 | 214.4 | 216.63 | - 2.2 | | |
| 17 | | | 7.51 | 214.13 | | | | |

1.83
3.41
1.92

35

# Front Street Sewer.

Stakes Set 2' East of Line

| | | | | |
|---|---|---|---|---|
| | 3.24 | 233.84 | | 230.10 |
| B.M. | | | 2.49 | 230.85 |
| 20+30 BT. | | | 13.04 | 220.3 |
| +50 | | | 9.75 | 223.6 |
| 21 | | | 4.90 | 228.4 |
| +60 | | | 3.05 | 230.3 |
| | 0.93 | | 11.55 | 221.75 T.P. |
| 22 | | 222.68 | | |
| 22+02 | B.I. | | 12.80 | 209.8 |
| | | | 13.00 | 209.68 |

12.5 / 220.82

Grade Cut

HUB 10' East of 21+60 R.P.

| | |
|---|---|
| 220.54 | − 0.2 |
| 220.78 | + 2.8 |
| 221.37 | 7.0 |
| 222.08 | 8.2 |
| 222.55 ✓ | |
| 222.57 | − 12.8 |

# Front St Sewer

6/19/05

Stakes Set 3' East of Line

| | | | | Elevations |
|---|---|---|---|---|
| 24422 | B.5 | 5 | | 220,51 |
| 24450 | | | | 227,33 |
| | 2,87 | 240.08 | | 237,21 |
| 25 | | | 7,67 | 232,4 |
| +50 | | | 7,0 | 233,1 |
| 26 | | | 6,5 | 233,6 |
| +25,5 | M.H. 159 | | 6,26 | 233,8 |
| +65,5 | | | 6,46 | 233,6 |
| 27 | | | 4,32 | 235,7 |
| | 4,86 | 242.07 | | 237,21 |
| +50 | | | 4,7 | 237,4 |
| 28 | | | 4,44 | 237,6 |
| +50 | | | 4,86 | 237,2 |
| 29 | | | 5,77 | 236,3 |
| +35 | 6,27 | 240.32 | 8,02 | 234,05 |

Grades

Cuts

| | |
|---|---|
| 225,17 | |
| 225,50 | 1,8 |
| 226,09 | 6,3 |
| 226,68 | 6,4 |
| 227,28 | 6,3 |
| 227,58 | 6,2 |
| 228,05 | 5,6 |
| 228,46 | 7,2 |
| 229,05 | 8,3 |
| 229,64 | 8,0 |
| 230,24 | 7,0 |
| 230,83 | 5,5 |
| 231,24 | 2,8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| +85 | | 240.32 | 12.2 | 228.1 | 231.42 | −3.3 | |
| +80 | | | 20.0 | 220.3 | | | |
| 30 | | | 12.1 | 228.2 | 232.01 | −3.8 | |
| +35 | | | 6.2 | 234.1 | 232.42 | 1.7 | |
| +50 | | | 5.4 | 234.9 | 232.60 | 1.3 | |
| 30-85 | N.H. 1/8 | | 3.3 | 237.0 | 232.02 | 4.0 | |
| 31 | | | 3.9 | 236.4 | 233.19 | 3.2 | |
| +53 | | | 3.5 | 236.8 | 233.79 | 3.0 | |
| 32 | | | 3.9 | 236.4 | 234.38 | 1.0 | |
| +19 | B.I. | | 11.9 | 228.4 | 234.60 | −1.2 | |
| B.M. | 6.58 | 245.74 | 1.16 | 239.16 | Hub 2½' East of Sta. 32 | | |

Continued on Page 8

Front Street.

Trestle #4

22+02 Bent 1.

22+57 " 2

23+12 -

23+67

24+22 Bent 5

24+50

25

+50

26

+25.5 M.H. #69

+50

27

+50

28

+50

29

+50

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 30 | | | | | | | | | |
| +50 | | | | | | | | | |
| 31 | | | | | | | | | |
| +50 | | | | | | | | | |
| 32 | | | | | | | | | |
| | Trestle #5 | | | | | | | | |
| 32+19 1833 | Bent #1 | | | | | | | | |
| 32+37.33 | B #2 | | | | | | | | |
| 32+55.67 | " #3 | | | | | | | | |
| 32.74 | " #4 | | | | | | | | |
| 32+92.33 | " #5 | | | | | | | | |
| 33+10.67 1833 | " #6 | | | | | | | | |
| 33+29 | " 7 | 245.74 | 15.34 | 230.4 | | 235.91 | -5.5 | | |
| +50 | | | 8.2 | 237.5 | | 236.16 | 1.3 | | |
| +86.5 | M.H. #157 | | 5.24 | 240.5 | | 236.59 | +3.9 | | |
| 34 | | | 3.64 | 242.1 | | 236.75 | 5.3 | | |

36.74
33.29
3.45
1.18
1380
2760
345
345
4.08480

45.74
3.60
42.14
1184
110
11840
11840
1.30240

285.38 B.M. 8
4.03
289.41
7.50
281.91 T.P.
1.42
283.33 H.I.
12.23
271.10
0.45
271.55
12.88
258.67
0.19
258.86
11.63
247.23 T.P.
0.10
247.33

235.195
1302
236.497

3386
30

Note. Stakes set 2' East of line

4/17/05
6/19/05

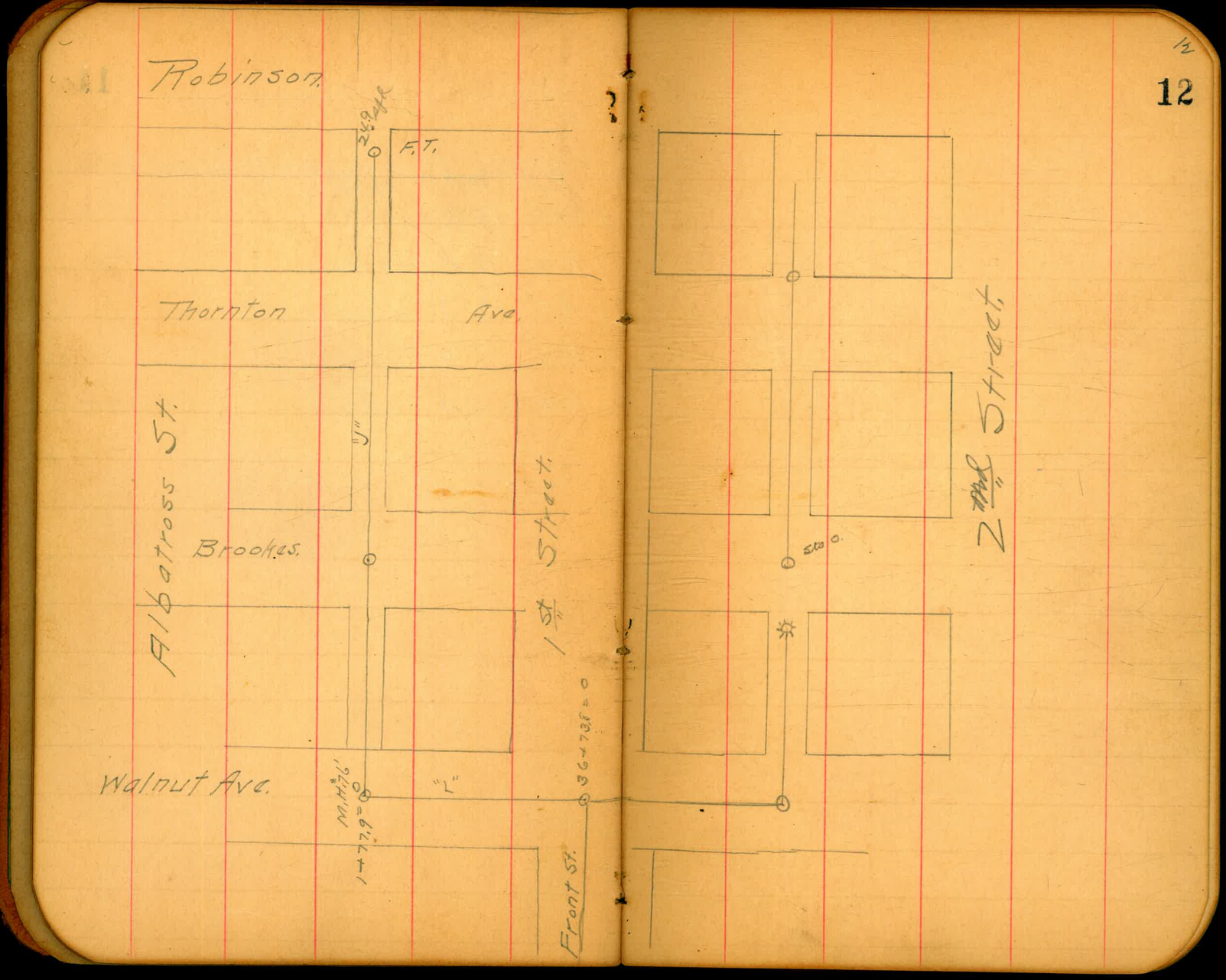
## Front Street.

| | | | Elevation | | Grade | Cut | |
|---|---|---|---|---|---|---|---|
| +68 | | 245.74 | 5.5 | 240.2 | 237.51 | 2.7 | |
| 85 | 12.62 | 253.38 | 4.98 | 240.76 | 237.92 | 2.9 | |
| +53 | | | 12.0 | 241.4 | 238.51 | 2.9 | 3877 3886 288 |
| 86 | | | 10.6 | 242.8 | 239.10 | 3.7 | |
| +50 | | | 3.2 | 250.2 | 239.69 | 10.5 | |
| 86+38.8 | M.H. | | 2.85 | 250.5 | 240.00 | 10.5 | |
| Center of Walnut | | | | | | | |
| B.M. | | | 2.57 | 250.81 | | | 2 Small nails in Elec Pole S.W. Cor. 14th & Walnut |

# Walnut Street

Note Stakes 2' North of Line

| 36+73.8 of Front Street Line = Sta. 0 of Walnut | | Grade | H.I. | | 6" "L" Elev. | Cut |
|---|---|---|---|---|---|---|
| 0 | | 240.0 | 253.39 | 2.8 | 250.6 | 10.6 |
| +50 | | 240.56 | | 3.4 | 250.0 | 9.4 |
| 1 | | 241.12 | | 3.6 | 249.8 | 8.7 |
| +50 | | 241.68 | | 4.7 | 248.7 | 7.0 |
| 1+77.9 | M.H. #76 | 242.0 | | 5.0 | 248.4 | 6.4 |


Robinson
F.T.
Thornton
Ave.
Albatross St.
Brookes.
"J"
1st Street.
2nd Street.
Walnut Ave.
"I"
Front St.

Alley bet. 1st + Albatross

B.M. 250.81 "J" Line

Note - Stakes 2' East of Line

1+77.9 of "L" Line = Stat 0 of "J" Line. M.H. #76.

| | |
|---|---|
| 0 | |
| +50 | |
| 1 | |
| +50 | |
| 2 | |
| +50 | |
| 3 | |
| +50 | |
| +65 | M.H. #77 |
| 4 | |
| +50 | |
| 5 | |
| +50 | |
| 6 | |
| 6+50 | |
| +70.2 | M.H. #80. |

Cl of Brookes

4/17/05. H. Hutchison

+75 248.74
+96 246.9
1+25 248.84

1024
245.30

252.90
2.64
255.54
8.64
246.9



| Grade | H.I. | Rod | Elev. | Cut |
|---|---|---|---|---|
| | | 246.5 246 | | |
| 242.00 | 253.39 | 5.0 | 248.4 | 6.4 |
| 242.22 | | 4.2 | 249.2 | 7.0 |
| 242.45 | | 3.0 | 250.4 | 8.0 |
| 242.67 | | 3.1 | 250.3 | 7.6 |
| 242.90 | | 2.9 | 250.5 | 7.6 |
| 243.12 | | 3.4 | 250.0 | 6.9 |
| 243.34 | | 4.0 | 249.4 | 6.1 |
| 243.57 | | 3.9 | 249.5 | 5.9 |
| 243.64 | | 3.9 | 249.5 | 5.9 |
| 243.79 | turn. | 3.9 | 249.5 | 5.7 |
| 244.01 | | 2.20 | 251.19 | 7.2 |
| 244.24 | | 2.8 | 250.6 | 6.4 |
| 244.46 | | 3.9 | 249.5 | 5.0 |
| 244.69 | | 4.1 | 249.3 | 4.6 |
| 244.91 | | 3.3 | 250.1 | 5.2 |
| 245.00 | | 3.2 | 250.2 | 5.2 |

"J" Line. 4/18/05

| | | | | | Elevation |
|---|---|---|---|---|---|
| | | | 4.1 | | |
| | 3.48 | 257.43 | Rod | | 253.95 |
| 7 | | | 7.2 | | |
| +10 | | | 5.8 | | |
| +50 | | | ~~5.7~~ 1 | | |
| 8 | | | 5.9 | | |
| +50 | 0.39 | 246.24 | 11.58 | | 245.85 |
| | | | 0.0 | | |

Trestle #5

| | | | | | |
|---|---|---|---|---|---|
| 8+78 | Bent 1 | | 5.84 | | 240.40 |
| 9 | | | 9.4 | | 236.8 |
| 9+33 | " 2 | 227.46 | 2.39 | | 220.07 |
| +75 | | 211.21 | 2.5 | | 208.7 |
| 9+88 | " 3 | | 7.6 | | 203.61 |
| 10+23 | " 4 | 199.90 | 8.53 | | 191.37 |
| +70 | | 191.27 | 5.3 | | 186.0 |
| +85 | | | 1.43 | | 177.5 |
| 10+98 | " 5 | | 9.01 | | 182.26 |
| 11+53 | " 6 | 202.42 | 2.31 | | 200.11 |
| 12+08 | " 7 | 214.74 | 0.43 | | 214.31 |
| 12+63 | " 8 | 225.16 | 5.94 | | 219.74 |
| 13+18 | " 9 | | 5.87 | | 219.31 |
| +40 | | | 2.0 | | 223.2 |
| 13+73 | " 10 | 236.80 | 1.70 | | 235.10 |
| 14+28 | " 11 | | 0.83 | | 235.97 |
| +50 | | 247.65 | 6.6 | | 241.1 |
| 14+83 | " 12 | | 0.54 | | 247.11 |

| H.I. | Rod | Elev. | Grade | |
|---|---|---|---|---|
| 254.97 | 4.7 | 250.3 | 245.34 | |
| | 2.8 | 252.2 | 245.93 | |
| | 3.6 | 251.4 | 246.63 | T.P. |
| | 7.7 | 247.3 | 247.12 | |

13+30 ℄ Penn. Grade 252.81

| | | |
|---|---|---|
| 246.24 | | |
| 12.25 | | |
| 233.76 | | |
| 0.35 | | |
| 234.31 | | |
| 12.61 | | |
| 221.70 | | 5.0 |
| 0.76 | | |
| 222.46 | | |
| 12.60 | | 6.3 |
| 209.86 | | |
| 1.85 | | |
| 211.21 | H.I. | 4.9 |
| 12.71 | | |
| 198.50 | | |
| 1.40 | | 0.2 |
| 199.90 | H.I. | |
| 12.18 | | |
| 187.72 | | |
| 3.55 | | |
| 191.27 | | |
| 0.17 | | |
| 191.10 | | |
| 11.32 | | |
| 202.42 | | |
| 0.48 | | |
| 201.94 | | |
| 12.80 | | |
| 214.74 | T.P. | |
| 0.43 | | |
| 214.31 | | |
| 10.85 | | |
| 225.16 | | |
| 1.25 | | |
| 223.91 | | |
| 17.89 | | |
| 236.80 | | |
| 0.83 | | |
| 235.97 | | |
| 11.68 | | |
| 247.65 | | |
| 0.54 | | |
| 247.11 | | |
| 10.21 | | |
| 257.32 | | |

4/24/05 Hutchison E + S.

Grade

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 15 | | | 257.32 | 4.3 | 253.0 | | | |
| +15 | | 7.07 | 264.02 | 0.37 | 256.95 | T.P. | | |
| | | | | 5.3 | | | | |
| +50 | | | | 4.5 | | | | |
| B.M. | | | | 4.87 | 259.15 | Spk in ~~[illegible]~~ South Elect Pole South Robinson | | |
| | May 20. 1905 | | H.I. | 2.93 | 261.09 Rod | Elev | Grade | Cut |
| 15+20 | | | 271.00 | | 11.7 | 259.3 | 255.06 | 4.2 |
| +50 | | | | | 11.1 | 259.9 | 255.42 | 4.5 |
| 16 | | | | | 10.4 | 260.6 | 256.01 | 4.6 |
| +50 | | | | | 9.5 | 261.5 | 256.61 | 4.9 |
| +85 | M.H. # 81 | | 4 | | 9.2 | 261.8 | 257.03 | 4.8 |
| 17 | | | | | 8.9 | 262.1 | 257.20 | 4.9 |
| +50 | | | | | 7.5 | 263.5 | 257.79 | 5.7 |
| 18 | | | | | 5.9 | 265.1 | 258.38 | 6.7 |
| +50 | | | | | 4.9 | 266.1 | 258.98 | 7.1 |
| 19 | | | | | 4.1 | 266.9 | 259.58 | 7.3 |
| +35 | F.J. # 24 | | | | 3.4 | 267.6 | 260.00 | 7.6 |

Childs
Gunn
Munson

1435
1685
670
1015
250

4/24/15 Hutchison

5/3/05 Hutchison Evans Scriven

(Front I/4 1st) Line Sewer in alley bet

1st + 2nd Streets from Brookes to

University Ave

| | | H.I. | Rod. | Elevations. | Grade | Cut |
|---|---|---|---|---|---|---|
| Sta 0 | | 264.40 | 5.26 | 259.14 | 253.00 | 6.2 |
| +50 | | | 5.21 | 259.19 | 253.29 | 5.9 |
| +60 | | | 6.1 | 258.3 | | |
| | Trestle #14 | | | | | |
| +70 | | | 11.0 | 253.4 | | |
| +92 | Bent 1 | 252.23 | 5.22 | 247.01 | 253.53 | |
| 1+47 | " 2 | 239.82 | 8.07 | 231.75 | | |
| 2+02 | " 3 | 228.83 | 3.27 | 225.56 | | |
| 2+57 | " 4 | 216.85 | 3.68 | 213.17 | | |
| 2+95 | | | 13.5 | 203.3 | | |
| 3+12 | " 5 | | 10.03 | 206.82 | | |
| 3+67 | " 6 | 229.30 | 7.67 | 221.63 | | |
| 4+22 | " 7 | 250.73 | 7.72 | 243.01 | | |
| 4+40.33 | " 8 | | 0.65 | 250.08 | | |
| 4+58.67 | " 9 | 262.88 | 7.98 | 254.90 | | |
| 5 | | | 3.8 | 259.1 | 255.90 | 3.2 |
| +50 | | | 2.86 | 260.02 | 256.19 | 3.8 |
| 6. | B.M. on Hut. | | 1.76 | 261.12 | 256.48 | 4.6 |
| +50 | | | | 261.7 | 256.77 | 4.9 |
| 6+90.1 | No Line Thornton. | | 0.38 | 262.50 | 257.00 | 5.5 |

Cont. in Book 191 ~~192~~ Pg 29

# Front Street Levels

| | | | | | |
|---|---|---|---|---|---|
| 34+00 | | | 247.33 | 5.15 | 242.18 |
| +50 | | 1.35 | 238.76 | 9.92 | 237.41 |
| | | Trestle #5 | | | |
| 33+29 | B7 | | | 8.38 | 230.38 |
| | | 0.95 | 227.84 | 11.87 | 216.97 |
| 33+10.67 | B#6 | | | 4.49 | 223.35 |
| 32+97.33 | B#5 | | | 12.54 | 210.80 |
| 32+82 | | | | | 210.6 |
| 32+74 | B4 | | | | 212.85 |
| 32+57.67 | B#3 | | | 10.24 | 217.60 |
| 32+37.33 | B2 | | | 5.88 | 221.96 |
| | | 12.54 | 239.85 | 0.53 | 227.81 |
| 32+19 | Bent 1 | | | 11.34 | 228.51 |
| +04 | | | | 4.3 | 235.76 |
| 31 | | | | 3.6 | 236.2 |
| | | 2.43 | 239.84 | | 237.41 |
| 31 | | | | 3.43 | 236.41 |
| +50 | | | | 5.1 | 234.7 |

5/4/05 Hutchinson Evans Service

| | | |
|---|---|---|
| FF 6 | 6.84 212.85 | 227.84 12.11 215.73 3.76 219.69 M.L. |

Front Street

| | | | | | | |
|---|---|---|---|---|---|---|
| 30+75 | | | 239,84 | 6,52 | 233,32 | |
| 30+60 | | | | 9.6 | 230,2 | |
| 29+90 | | | | 21,0 | 218,8 | |
| 29+35 | | | | 6,3 | | |
| 29 | | 6,11 | 242,34 | 3,61 | 236,23 | |
| 28 | | | | 4,92 | 237,42 | |
| +50 | | | | 5,2 | 237,14 | |
| B.M. | | | | 5,10 | 237,24 | Spk in tel pole M.E. Cor. Spruce + Front |
| 27 | | | | 6,64 | 235,70 | |
| | | | | ~~7.2~~ | | |
| +25.5 | So line of Spruce. | | | 8,57 | 233.77 | |
| 26 | | | | 8.84 | 233,50 | |
| +50 | | | | 9.25 | | |
| 25 | | 0,86 | 233.20 | 10,00 | 232.34 | |
| 24+65 | | | | 2,2 | 231,0 | |
| +60 | | | | 5-4 | | |
| +50 | | | | 6,90 | 226 3 | |

| | | | | | |
|---|---|---|---|---|---|
| | | Trestle #4 | | | |
| 24+22 | Bent #5 | | 233.20 | 12.64 | 220.56 |
| | | 0.495 | 221.055 | | |
| | | 0.53 | 209.02 | 12.585 | 208.49 |
| 23+85 | | | | 1.7 | 207.3 |
| 23+67 | B#4 | | | 10.93 | 198.09 |
| | | 0.57 | 197.50 | 12.09 | 196.93 |
| | | 0.475 | 185.445 | 12.53 | 184.97 |
| 23+12 | B#3 | | | 8.065 | 177.38 |
| 22+80 | | | | 15.4 | 170.0 |
| 22+57 | B#2 | | | 1.96 | 183.48 |
| | 12.11 | | 197.44 | 0.11 | 185.335 |
| | | 12.47 | 209.74 | 0.17 | 197.27 |
| | | 12.75 | 222.13 | 0.36 | 209.38 |
| 22+02 | Bent #1 | | | 13.44 | 209.69 |
| 21+80 | | 12.51 | 234.24 | 0.40 | 221.73 |
| 21+65 | | | | 5.1 | 229.1 |
| +60 | | | | 11.4 | 230.19 |

232.34
1.91
232.25

Front Street

| | | | | | |
|---|---|---|---|---|---|
| 21 | | | 234.25 | 5.96 | 228.29 |
| | | 0.46 | 221.81 | 12.90 | 221.35 |
| | | Trestle | 3 | | |
| 20+30 | Bent 7 | | | 0.99 | 220.82 |
| | | 0.28 | 209.25 | 12.82 5 | 208.97.5 |
| 19+75 | B 6 | | | 9.55 | 199.70 |
| | | 0.96 | 197.34 | 12.87 | 196.38 |
| | | 0.91 | 185.98 | 12.27 | 185.07 |
| 19+20 | B 5 | | | 10.62 | 175.86 |
| 19 | | | | 18.4 | 167.6 |
| 18+75 | | | | 11.4 | 175.6 |
| 18+65 | B 4 | | | 8.03 | 177.95 |
| | | 12.35 | 197.82 | 0.50 | 185.48 |
| 18+10 | B 3 | | | 7.42 | 190.40 |
| | | 12.48 | 210.23 | 0.07 | 197.75 |
| 17+55 | B#2 | | | 2.78 | 207.45 |
| 17 | B 1 | | | | 214.13 |

Front Street 5/5/05

Trestle No. 2.

| | | | | |
|---|---|---|---|---|
| | 3.065 | 255.10 | | 252.035 |
| | 1.73 | 250.725 | 6.105 | 248.995 |
| | 0.165 | 238.025 | 12.865 | 237.86 |
| | 0.27 | 226.12 | 12.175 | 225.85 |
| B.M. | 4.43 | 219.27 | 11.28 | 214.84 |
| 6 | | | 9.21 | 210.06 |
| | 1.265 | 207.675 | 12.86 | 206.41 |
| 6+44 B.1. | | | 3.50 | 204.18 |
| | 0.665 | 195.91 | 12.43 | 195.245 |
| | 0.99 | 184.35 | 12.55 | 183.36 |
| 6+99 B2. | | | 3.82 | 180.53 |
| | 0.715 | 172.315 | 12.75 | 171.60 |
| | 0.25 | 160.16 | 12.405 | 159.91 |
| 7+54 B3 | | | 12.565 | 147.595 |
| 8+09 B4 | | | 10.77 | 149.39 |
| 8+64 B5 | 1.16 | 152.43 | 8.89 | 151.27 |
| 9+19 B6 | | | 5.11 | 147.32 |

Hutchison
Evans
Scriven

22

N.E. Cor Maple + Front Sph in Tel Pole

# Front Street

## Trestle #2

| | | | | |
|---|---|---|---|---|
| 9+74 | B.7 | 152.43 | 4.72 | 147.71 |
| 10+29 | B8 | | 10.79 | 141.64 | HUB 15' East of 10+45 |
| B.M. | 0.86 | 140.64 | 12.65 | 139.78 |
| 10+84 | B9 | | 7.68 | 132.96 |
| | 7.75 | 136.13 | 12.26 | 128.38 |
| 11+39 | B10 | | 11.24 | 124.89 |
| | 12.65 | 148.73 | 0.55 | 135.58 |
| 11+94 | B11 | | 10.70 | 137.53 |
| | 12.71 | 160.56 ~~149.86~~ | 0.38 | 147.85 |
| 12+49 | B12 | | 12.35 | 148.21 |
| | 12.915 | 173.305 | 0.17 | 160.39 ~~160.39~~ |
| 13+04 | B13 | | 9.165 | 164.14 |
| | 12.725 | 185.53 | 0.50 | 172.805 |
| | 12.70 | 197.93 | 0.30 | 185.23 |
| 13+59 | B14 | | 6.73 | 191.20 |
| | 17.765 | 209.66 | 0.595 | 197.395 |
| | 12.56 | 221.41 | 0.81 | 208.85 |

Front St.

| | | | | | |
|---|---|---|---|---|---|
| 144+14 | B.S. | 221.41 | 7.68 | 213.73 | |
| B.M. | 7.58 | 227.75 | 1.24 | 220.17 | Hub 30' East of 144+25 |
| | 1.13 | 217.53 | 11.35 | 216.40 | |
| | | | 2.40 | 214.13 | |
| | | | 10.12 | 207.41 | |

Out Fall Sewer at foot of 22nd St.

| Soundings | Depth of water | | H.L. | 5/31/05 | Hutchison Evans Sawyer, | Elevation of Bottom of Bay |
|---|---|---|---|---|---|---|
| Bent 8 = Bent 53 | | 3.41 | 7.59 | | 4.18 Elevation of water, | |
| 12 | 4.0 | 2.71 | -2.01 | 12.31 | -4.72 | -11.4 |
| 1 | 4.2 | | | 5.4 | -7.4 | -11.6 |
| 2 | 4.5 | | | 5.4 | 7.4 | -11.9 |
| 3 | 4.6 | | | 5.4 | 7.4 | -12.0 |
| 4 | 5.2 | | | 5.5 | 7.5 | -12.7 |
| 5 | 5.3 | | | 5.5 | 7.5 | -12.8 |
| 6 | 6.0 | | | 5.5 | 7.5 | -13.5 |
| 7 | 7.5 | | | 5.5 | 7.5 | -15.0 |
| 8 | 8.0 | | | 5.6 | 7.6 | -15.6 |
| 9 | 8.8 | | | 5.6 | 7.6 | -16.4 |
| 10 | 9.4 | | | 5.6 | 7.6 | -17.0 |
| 11 | 10.5 | | | 5.7 | 7.7 | -18.2 |
| 12 | 11.2 | | | 5.7 | 7.7 | -18.9 |
| 13 | 12.2 | | | 5.7 | 7.7 | -19.9 |
| 14 | 12.8 | | | 5.7 | 7.7 | 20.5 |
| 15 | 13.2 | | | 5.7 | 7.7 | 20.9 |
| 16 | 14.0 | | | 5.8 | 7.8 | 21.8 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 17 | | | 15 | | -20.1 | 5.9 | -7.9 | 22.9 | |
| 18 | | | 15 | | | 5.9 | -7.9 | 22.9 | |
| 19 | | | 15 | | | 5.9 | -7.9 | 22.9 | |
| 20 | | | 15 | | | 5.9 | -7.9 | 22.9 | |
| 21 | | | 15.4 | | | 5.9 | -7.9 | 23.3 | |

Note.

75' from Bent 21.

150' from Bent 21

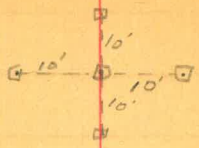
Grade of Bent 11

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 24.9 | |
| | | | | | | | | 30.9 | |
| | | | | | | 2.2 | -4.2 | | |

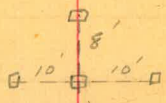
# Front St.

## Trestle #2. Tie Points

6+44 B.1.



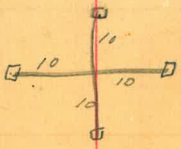

6+99 B 2



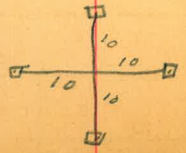

7+54 B 3

8+09 B#4

8+64 B#5

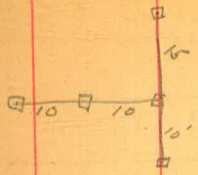



9+19 B#6

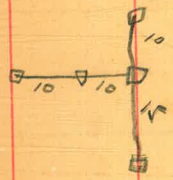



6/10/05 Schutchins Evans Sawyer

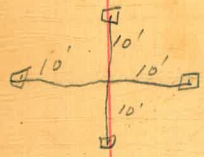
9+74 B#7



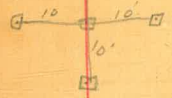

10+29 B#8



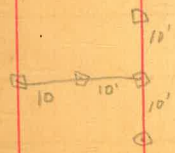

10+84 B#9




11+39 B#10



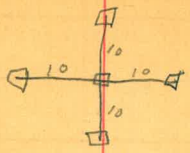

11+94 B#11



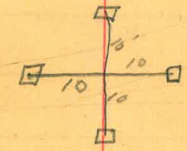
Front St.

Truth # 2 Tie Points

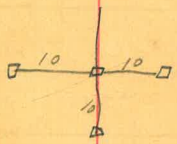
12+49 B#12



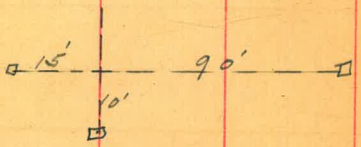

13+04 B#13




13+59 B#14

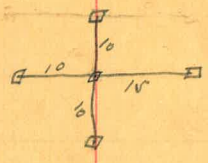



14+14 B#15

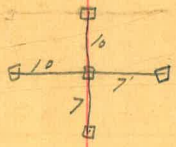


# Trestle No 3
## Front Street.
## Tie Points 6/12/05

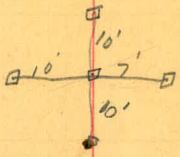
17 B.1.



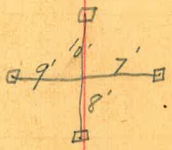

17+55 B#2



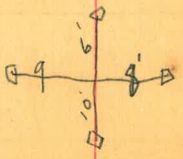

18+10' B#3



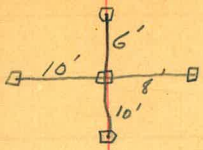

18+65 B#4



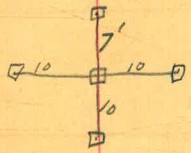

19+70 B#5




19+75 B6




20+30' B7

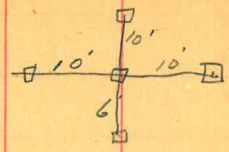


# Trestle No. 4.

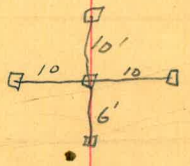
6/17/07

## Front Street

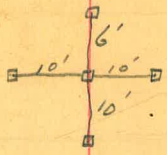
22+02 B.1



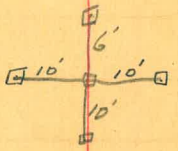

22+57 B#2



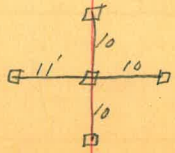

23+12 B#3




23+67 B#4



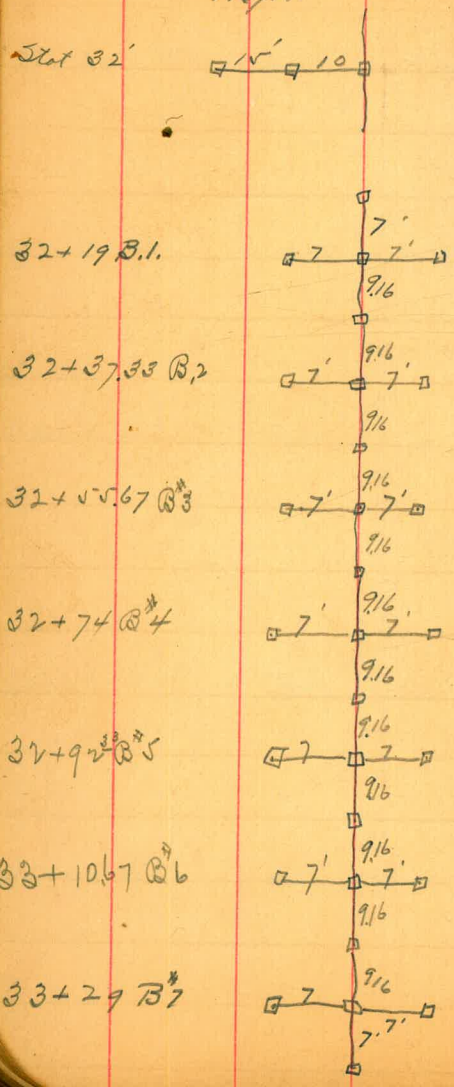

24+22 B#5



# Trestle No 5
# Front Street.

6/13/05



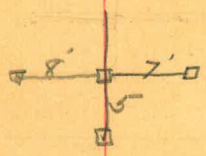


"J"

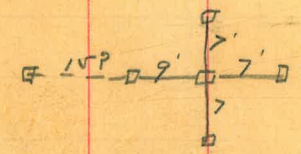
Trestle No 15

Alley bet 1st & Albatross

8+78 B#1.

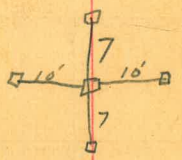



9+33. B#2

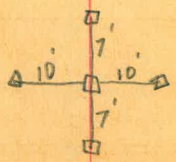



9+88 B#3

10+43 B#4



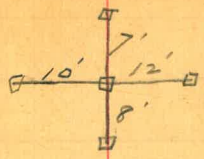

10+98 B#5




T.i.e Points 6/14/15

32

11+53 B#6

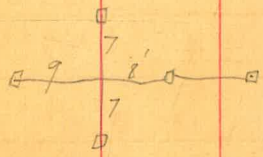



12+08 B#7

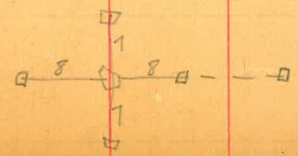
12+63 B#8

13+18 B#9

13+73 B#10




14+28 B#11



Trestle No 15



33

14+83 B#2

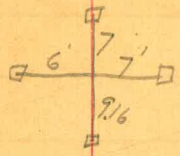
15+20.

I Line.

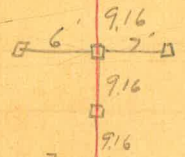
Sewer in Alley Bet 1st & 2nd

Trestle #4

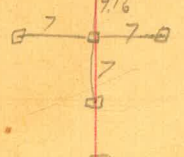
4+58.67 B#9



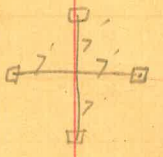

4+40.33 B#8



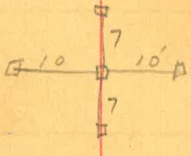

4+22 B#7



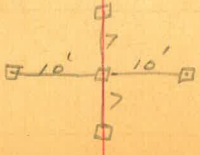

3+67 B#6




3+12 B#5




2+57 B#4



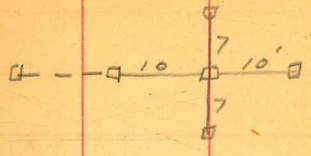

6/14/05

Hutchison
Evans
Sewer.

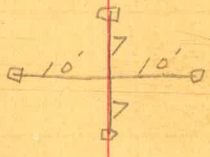
34



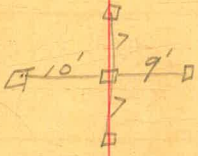
2+02 B#3




1+47 B#2




0+92 B.1.

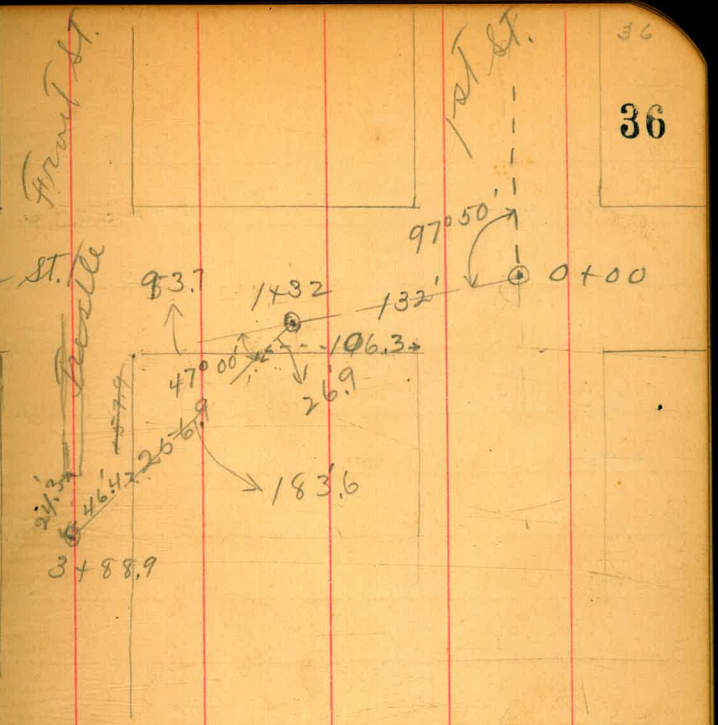


Childs
Brodes
Hawkins

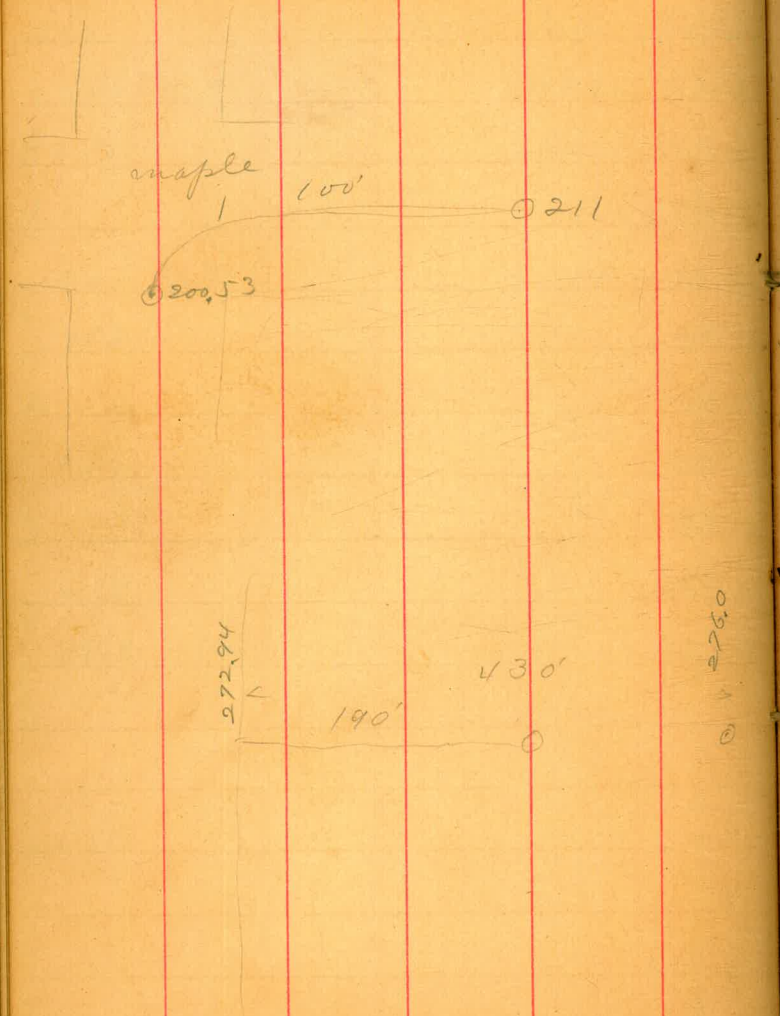
Jan 27, 1906

Proposed Sewer on
Quince Street. Bk. 334





| Sta. | | Grade | H.I. | Rod | Elev. | cut |
|---|---|---|---|---|---|---|
| 0+00 | M.H. | | 250.30 | 5.7 | 244.6 | |
| 0+50 | | | 243.18 | 3.4 | 239.8 | |
| 1 | | | | 11.8 | 231.4 | |
| +32 | M.H. | | 230.45 | 3.5 | 227.0 | |
| +50 | | | | 4.4 | 226.1 | |
| 2 | | | | 5.4 | 225.1 | |
| +50 | | | | 6.0 | 224.5 | |
| 3 | | | | 9.7 | 220.8 | |
| +50 | | | | 12.7 | 217.8 | |
| +88.9 | M.H. | | | 12.7 | 217.8 | |






276
272.94
430 ) 3.060 .71
3010
500

.71
39
639
213
.2769

288.2
6.9
281.3 ×

288.19
7.21
280.98
5.27
286.25
5.8
280.4

128'
214
342
.35
1710
1026
1.970

10.35
570
2450
175
1,99.50

280~~28~~
280.0
1.2
278.8
278.28
274.3
4.5

279.28
277.28

274.28
1.22
275.5

391
181
572

91
.35
455
273
3185

8th St. University ave

| Sta | | H.I. | | Elev. | |
|---|---|---|---|---|---|
| | 4.99 | 289.24 | | 284.25 | BM |
| 0+00 | | | 4.8 | 284.4 | |
| +50 | | | 5.6 | 283.6 | |
| 1+00 | | | 5.3 | 283.9 | |
| +50 | | | 5.4 | 283.8 | |
| +89 | ~~M.N.~~ | | 5.20 | 284.04 | |
| | 4.15 | 288.19 | | | |
| 0+00 = | M.N. = 1+89 | | | 284.0 | |
| +50 | | | 4.1 | 284.1 | |
| 1+00 | | | 4.1 | 284.1 | |
| +50 | | | 4.2 | 284.0 | |
| 2+00 | | | 4.2 | 284.0 | |
| +50 | | | 4.8 | 283.4 | |
| 3+00 | | | 4.9 | 283.3 | |
| +50 | | | 5.5 | 282.7 | |
| +91 | | | 5.4 | 282.8 | |

north to Sisters. 39

Nov. 8 1906 Childs Evans Bell

39

POSTED

| Grade | Cut | |
|---|---|---|
| 272.94 | 11.5 | |
| 273.30 | 10.3 | |
| 273.65 | 10.2 | |
| 274.0 | 9.8 | |
| 274.28 | 9.7 | |
| | | → drop M.N. |
| 274.28 | 9.7 | |
| 278.80 | 5.2 | |
| 278.97 | 5.1 | |
| 279.15 | 5.0 | |
| 279.32 | 4.7 | |
| 279.50 | 4.5 | 2+14 |
| 279.67 | 3.7 | |
| 279.85 | 3.4 | |
| 280.02 | 2.7 | |
| 280.34 | 2.5 | |

Maple Street Front

POSTED

| | | H.I. | Grnd | | Grade | Cut |
|---|---|---|---|---|---|---|
| Sta | 6.22 | 215.81 | 209.59 | B.M. | | |
| 0+00 | Ct. Front | | | | 201.0 | |
| +43 | East line Front | | 6.65 | 209.16 | 204.0 | 5.2 |
| +93 | | | 3.25 | 212.56 | 207.5 | 5.1 |
| JP 3 | 7.29 | H.I. 219.85 | | | | |
| 1+43 | | | 3.26 | 216.59 | 211.0 | 5.6 |

143' East

Schildts
Evans
Bell

8.1906



40

For outlet pipe at 6th & University ave, Childs & Evans Bell

| | H.I | | |
|---|---|---|---|
| 0.54 | 284.08 | Nov. 24. 1906 | 283.54 |

Grade M.H. 39 270.86

Distance on Mission Valley Road to same grade is 245.7

Sewer in walnut alley

bet. 1st + albatross to albatross.

| | West rim of M.H. 248.42 B.M. | Grade |
|---|---|---|
| 0+00 | M. H. center alley | 242.30 |
| +50 | | 242.50 |
| 1+00 | | 242.70 |
| +67.5 | E. line albatross center walnut | 242.85 |
| +67.5 | | 242.97 |
| +97 | N. line walnut. 2½' west of center of albatross | 243.09 |

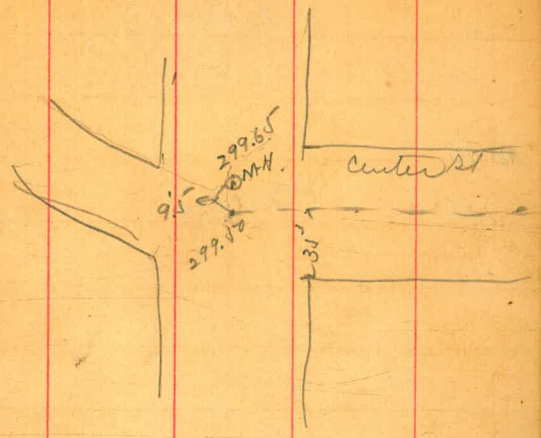
POSTED

POSTED

## Sewer Levels in Center Street,

| Sta | 3.24 | H.I. 310.24 | Grade | Rod 30697 | Elev. B.M. |
|---|---|---|---|---|---|
| 0 | Center of Remi. ave & center street | 299.50 | | 5.5 | 304.7 |
| 15' | gutter | | | 6.4 | 303.8 |
| 26 | curb | | | 5.6 | 304.6 |
| 40' | Pro. line Remi ave. | | | 5.4 | 304.8 |
| 43' | | | | 7.4 | 302.8 |
| 50' | | | | 7.2 | 303.0 |
| 100 | | | | 5.7 | 304.5 |
| 150 | | | | 4.3 | 305.9 |
| 200 | | | | 4.4 | 305.8 |
| 250 | | | | 5.3 | 304.9 |
| 300 | | | | 5.8 | 304.4 |
| 350 | | | | 5.7 | 304.5 |
| 400 | | | | 7.1 | 303.1 |
| 450 | | | | 8.8 | 301.4 |
| 500 | | | | 9.2 | 301.0 |
| 550 | | | | 11.0 | 299.2 |
| 600 | | | | 13.2 | 297.0 |

POSTED




POSTED

| Sta | H.I. 3107 | Grade | Rod | Grand |
|---|---|---|---|---|
| 650 | | | 15.2 | 295.0 |
| 675 | | | 15.6 | 291.6 |
| 700 | POSTED | | 15.0 | 295.2 |

Alley bet 2nd + 3rd

Work done by Stobler Measured 6/16/05

Cut

| | | |
|---|---|---|
| 12+76 | 12+87 | 2,7 |
| 12+67 | 12+76 | 3,5 |
| 12+35 | 12+67 | 2,5 |
| 12+24 | 12+35 | 0,6 |
| 12+13 | 12+24 | 2,0 |

Hutchison
Evans
Sawyer

Alley bet 2nd & 3rd

Work done by Statler.

| | | | |
|---|---|---|---|
| 12+09 | 12+13 | | 1.0 |
| 11+99 | 12+09 | | 3.4 |
| 11+80 | 11+99 | | 2.0 |
| 11+59 | 11+80 | | 1.1 |
| 11+45 | 11+59 | | 2.8 |
| 11+19 | 11+45 | | 0.5 |
| 11+08 | 11+19 | | 0.0 |
| 10+66 | 11+08 | | 1.1 |
| 10+49 | 10+66 | | 4.4 |
| 10+44 | 10+49 | | 00 |
| 10+23 | 10+44 | | 4.2 |
| 10+20 | M.H. #68 | 3.6' x 4' x 5' | |
| | | | |
| 9+74 | 10+18. | | 2.2 |
| 9+33 | 9+74 | | 4.8 |
| 9+05 | 9+33 | | 1.9 |
| 8+80 | 9+05 | | 1.0 |

C47,

| | | |
|---|---|---|
| 8+72 | 8+80 | 0.0 |
| 8+57 | 8+72 | 2.5 |
| 8+47 | 8+57 | 3.8 |
| 8+28 | 8+47 | 2.8 |
| 8+07 | 8+28 | 1.6 |
| 7+80 | 8+07 | 3.8 |
| 7+45 | 7+80 | 3.4 |
| 7+15 | 7+45 | 3.7 |
| C+93 | to 7+15 | 1.7 |

C490 MH.67. No 4. of Thornton 4 x 5 x 0.9

So Fork of Thornton,

| | | |
|---|---|---|
| 6+03 | C+27 | 4.6 |
| 5+49 | 6+17 | 3.0 |
| 5+35 | 5+49 | 2.8 |
| 4+92 | 5+35 | 2.6 |

Alley bet 2nd & 3rd



| | | Cut. |
|---|---|---|
| 4+59 | To 4+92 | V:0 |
| 4+49 | 4+59 | 2.9 |
| 4+12 | 4+49 | 3.5 |
| 4+10 | 4+12 | 00 |
| 4 | 4+10 | 3.9 |
| 3+95 | 4+00 | 00 |
| 3+85 | 3+95 | V:2 |
| 3+79 | To 3+85 | 00 |
| 3+69 | To 3+79 | 7' |
| 3+63 | 3+69 | 00 |
| 3+60 | M.H. 66 | 3.5' x 4.5' x 7.5' |
| ~~3+57~~ | | |
| 3+47 | 3+57 | 00 |
| 3+37 | 3+47 | 6.0 |
| 3+28 | 3+37 | 00 |
| 3+19 | To 3+28 | 6.0 |
| 3+04 | To 3+19 | 00 |

Alley bet
2nd + 3rd

| | | | |
|---|---|---|---|
| 3+04 to 2+94 | 10' x 6.5' | | |
| 2+94 to 2+88 | 6 x 00 | | |
| 2+88 to 2+80 | 8 x 5.7 | | |
| 2+80 to 2+76 | 4 x 00 | | |
| 2+76 to 2+68 | 8' x 8.2 | | |
| 2+68 to 2+47 | 21 x 4.6 | | |
| 2+47 to 2+22 | 25 x 6.6 | | |
| 2+22 " 2+00 | 22 x 4.5 | | |
| 2+00 1+85 | 15 x 1.7 | | |
| 1+85 to 1+08 | Canon | | |
| 1+08 to 0+96 | 2.6 | Down to grade | |
| 0+96 to 0+86 | 5.6 | | |
| 0+86 to 0+82 | 5.3 | | |
| 0+82 to 0+50 | 5.2 | | |
| 0+50 to 0+30 | 6.0 | | |
| 0+30 to 0+20 | 4.0 | | |

138
31
170
177
352
305
657

187
37
535
53
330
305
635
Cut

5+50
77
6+37

4.3
5.8
10.2

No pipe Laid



5.7
7.5
13.2
6.6

5.7
3.3
9
4.5

Cut

0+20 to 04 3.3

Slot 0 M.H. 5 x 6 x 4.3

Center of Brooks North

Note So from Ct of Brooks

153' of Pipe in place and Back filled

8". M.H. Excavated

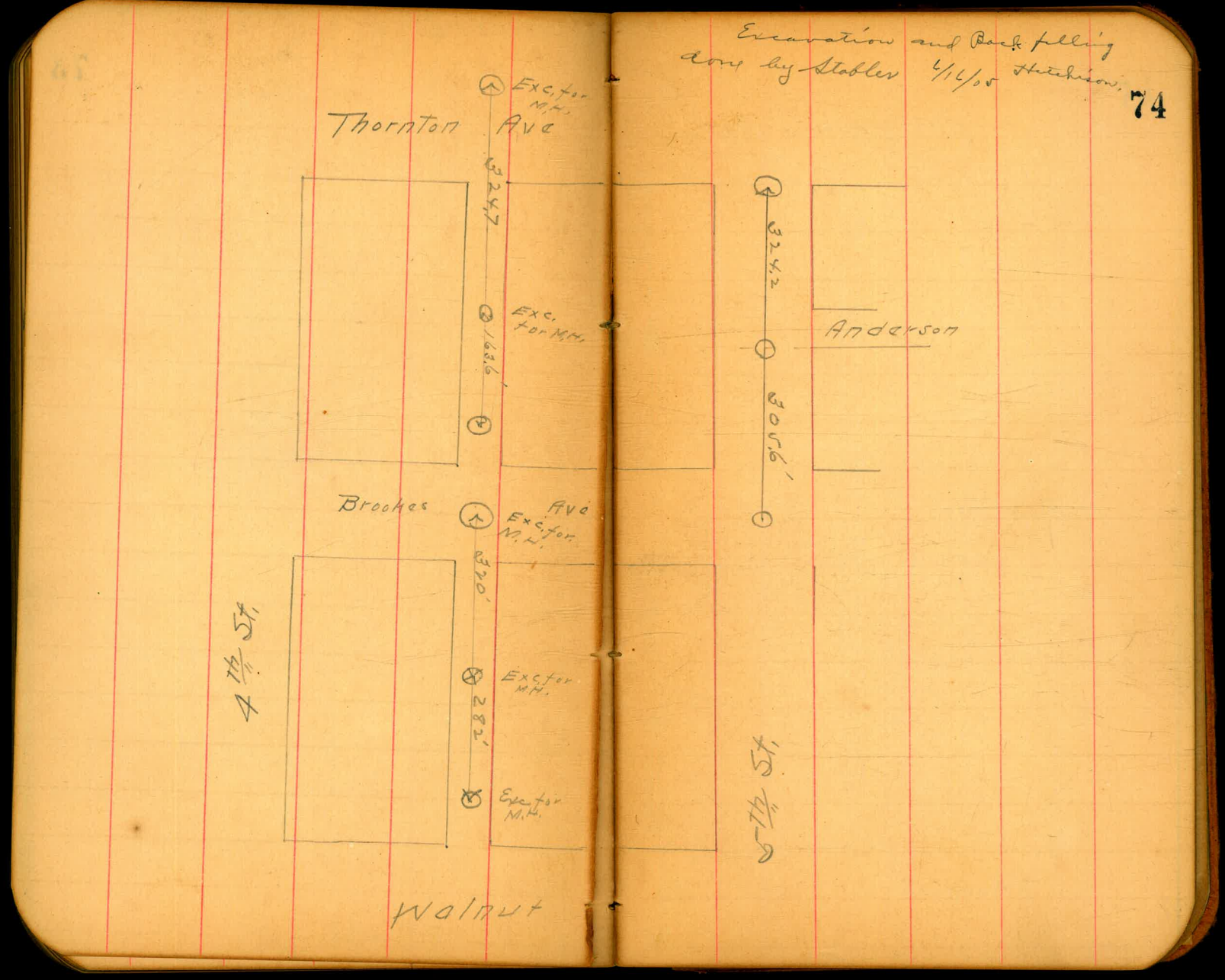
# Alley bet 3rd & 4th

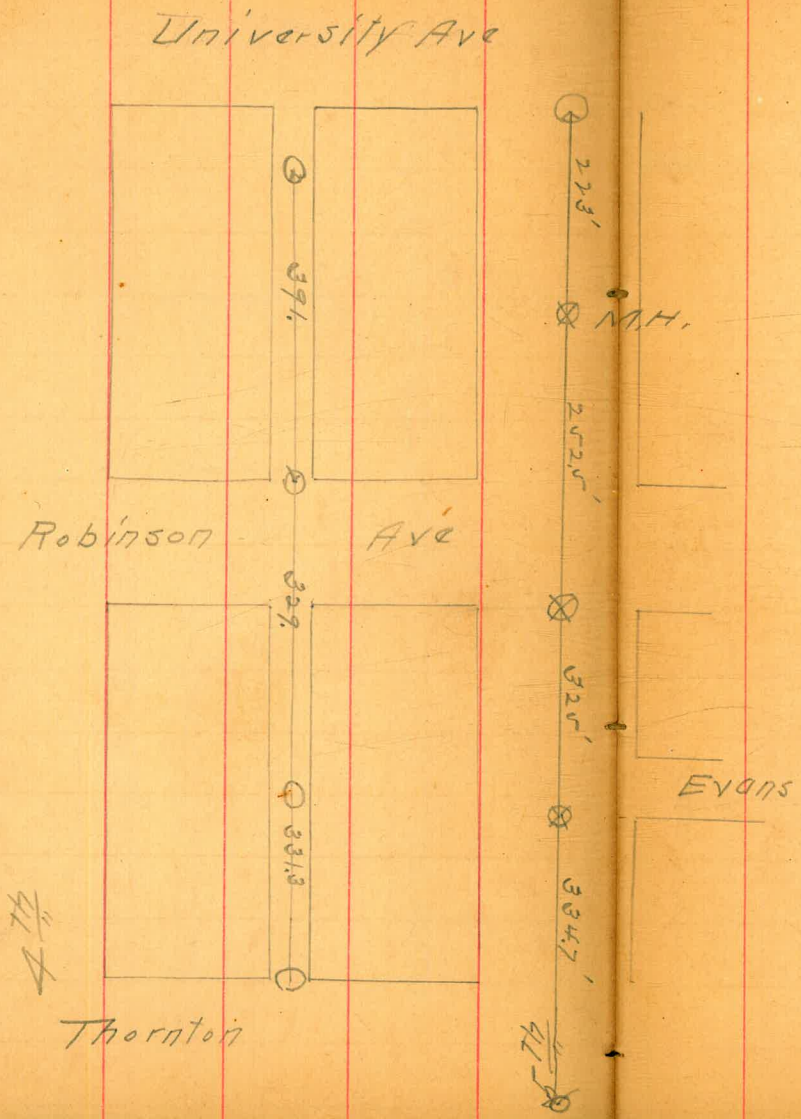
Work done by Station. 6/17/05

| | | | Cut |
|---|---|---|---|
| M.H. on Brooks | | | 2 x 3' x 4' |
| 0+10 | to | 0+19 | = 9 x 2. |
| 0+19 | to | 33 | = 14' x 9.7 |
| 0+33 | to | 0+75 | = 42 x 4.1 |
| 0+75 | to | 1+04 | 29 x 2.5 |
| 1+04 | to | 1+39 | 35 x 2.6 |
| 1+89 | to | 1+60 | 21' x 7.5 |
| 1+60 | to | 2+00 | 40' x 8.3 |
| 2 | | 2+50 | 50' x 7.8 |
| 2+50 | to | 3+00 | 50 x 6.0 |
| 3 | " | 3+17 | 17 x 6.1 |
| 3+20 | | M.H. Exc. | |
| 3+78 | | End of Pipe | Pipe in and Backfilled |
| 6+03 | | " " " | 1.400' |
| 6+05 | | M.H. Excavated | |

Excavation and Back filling done by Stables 4/14/05 Hutchison.

74




University Ave
Robinson
Ave
Thornton
391.
329.
331.3
223'
M.H.
252.5'
325'
334.7'
Evans
4th
5th

4" Sewer Line from MH #80 (page 14 this book)
to 75 West end of Brookes
AD

| | | | | Grade | Cut. |
|---|---|---|---|---|---|
| 0+00 = MH #80 | | 255.54 | | 245.30 | |
| 0+50 | | | 6.41 | 249.13 | 245.80 | 3.33 |
| 0+75 | | | 6.81 | 248.73 | 246.05 | 2.68 |

9/19/05 { Hutchison
Evans
Sawyer

B.M. 18.63
071
19.34 H.I.
811
11.23
208
13.31 H.I.
6.08
7.23
334
10.57 H.I.

7.10 / 12.24 — 7.30 / 04
5.14 / 8.17 — 5.17 / 8.14
538 / 793 — 5.50 / 781
586 / 745 — 6.07
5.70 / 487
6.20

"B" St.

E



West Line of India St.

237.3 — 12.24 Elevation Top of Rail — 237.3 — 12.04
Center Line La Jolla Ry.
247.2 — 8.21 — 247.2 — 8.17
Ct. of RR
14.9 — 8.25 — 14.9 — 8.14
Ct. of RR Main Line — St. Fe.
15.1 — 8.05 — 15.1 — 7.93
Ct. of RR
12 — 7.91 — 12 — 7.81
12 — 7.61 — 12 — 7.45
12 — 7.51 — 12 — 7.31
12 — 7.34 — 12 — 7.24
15.15 — 4.87 — 18.3 — 4.37
Ct. of RR

Chk. levels from 5+75

| | | | | | |
|---|---|---|---|---|---|
| | 5.97 | 288.41 | | 282.44 | |
| | 2.07 | 287.41 | 3.07 | 285.34 | |
| | 0.58 | 279.65 | 8.34 | 279.07 | |
| | 1.13 | 270.52 | 10.24 | 269.41 | |
| | | | 9.42 | 261.13 | |
| B.M. | 0.30 | 263.44 | 7.40 | 263.14 | Spk in Tel. Pole N.E. Cor. of Alley bet. 1st + 2nd, + Thornton. |
| | 2.17 | 261.31 | 4.80 | 259.14 | |
| B.M. | | | 2.14 | 259.17 | Spk in Elec. Pole in Alley. 10' west of Stat. 15+15 "J" Line |

| | | | | | |
|---|---|---|---|---|---|
| | 3.53 | 276.71 | | 273.18 | |
| | 3.17 | 279.22 | 0.66 | 276.05 | |
| | 0.90 | 271.88 | 8.24 | 270.98 | |
| | 0.65 | 260.11 | 12.42 | 259.46 | |
| | 1.53 | 250.90 | 10.74 | 249.37 | |
| | 2.42 | 243.30 | 10.02 | 240.88 | |
| BM. | | | 6.10 | 237.71 | Spruce + Front. |
| | 3.90 | 236.20 | 11.00 | 232.30 | |

264.395
10.445
253.95 B.M.

S.W. Cor. of 1st & Brookes
Spk in Elegl'ght pole.

240.365
0.305
240.06
10.675
~~9.385~~
250.735 H.I.
0.435
250.30
12.58
262.88 H.I.
3.70
259.18

279.39
6.52
285.91
2.58
283.33
1.49
284.82
8.72
276.10
0.37
276.47
12.37
264.10
0.295
264.395
12.375
252.02
0.21
252.23
12.53
239.80
0.02
239.82
12.075
227.745
1.09
228.835
12.305
216.53
0.32
216.85
0.31
216.54
12.76
229.30
0.915
228.385
11.98
240.365



| | | | | | |
|---|---|---|---|---|---|
| | | 236.20 | | | |
| B.M. | 2.155 | 232.985 | 5.37 | 230.8~~3~~4 | Hub. 10' East of 21+60. |
| | 2.115 | 222.90 | 12.20 | 220.785 | |
| B.M. | 9.89 | 227.72 | 5.07 | 217.8~~4~~4 | 20' East of Sta 17 |
| | | | 7.56 | 220.16 | |

| | | | | | |
|---|---|---|---|---|---|
| | | H.1. | | | |
| | V.93 | 260.03 | | 25410 | |
| 0490 | Bent 1 | | 11.8 | 248,2 | + 0,7 |
| | 0.17 | 247,63 | 12,53 | 247,50 | |
| | 0.28 | 235,52 | 12,43 | 235,24 | |
| 1+45 | B2 | | 3,4 | 232.1 | - 0,7 |
| 2 | B3 | | 9,8 | 225,6 | +0,4 |
| | 0,14 | 233,50 | 12,16 | 223,36 | |
| 2+55 | B4 | | 9,2 | 214,3 | + 7,5 |
| 3+10 | B5 | | 17,0 | 206,5 | 00 |
| 3+65 | B6 | | 2,4 | 221,1 | 00 |
| | 12,76 | 235,68 | 0,58 | 222,92 | |
| | 12,21 | 247,63 | 0,27 | 235,41 | |
| 4+20 | B7 | | 5,4 | 242,2 | +18 |
| | 10,52 | 256,86 | 1,26 | 246,36 | |
| 4+34 | B8 | | 7,7 | 249,2 | +2,7 |
| | B9 | | 1,9 | 255,0 | +3,4 |

82

81

690

| | | | | |
|---|---|---|---|---|
| B | 1 | 253,52 | -6, | 247,5 |
| | 2 | 253,84 | -21, | 232,8 |
| | 3 | 254,16 | -29, | 225,2 |
| | 4 | 254,48 | -47, | 207,5 |
| | 5 | 254,80 | -48, | 206,8 |
| | 6 | 255,12 | -34, | 221,1 |
| | 7 | 255,44 | -15, | 240,4 |
| | 8 | 255,54 | -9 | 246,5 |
| | 9 | 255,65 | -4, | 251,6 |

| | | | | | |
|---|---|---|---|---|---|
| | 4,11 | 258,21 | | 254,10 | |
| | 0,65 | 247,78 | 11,08 | 247,13 | |
| 8+70 | B.1 | | 5,0 | 242,8 | + 2,4 |
| | 0,29 | 235,56 | 12,51 | 235,27 | |
| 9+25 | B.2 | | 11,4 | 224,3 | + 3,3 |
| | 0,56 | 223,57 | 12,55 | 223,01 | |
| | 0,35 | 211,66 | 12,26 | 211,31 | |
| 9+80 | B3 | | 2,3 | 207,4 | + 3,7 |
| | 0,10 | 199,18 | 12,58 | 199,08 | |
| 10+35 | B4 | | 4,4 | 194,8 | + 4,5 |
| 10+90 | B5 | | 18,8 | 180,4 | - 0,6 |
| 11+45 | B6 | | 1,2 | 198,0 | + 0,4 |
| | 17,55 | 210,99 | 0,74 | 198,44 | |
| | 17,17 | 211,50 | 1,66 | 209,33 | |
| 12 | B7 | | 8,5 | 213,0 | - 0,3 |
| 12+55 | B8 | | 7,4 | 219,1 | + 0,2 |
| | 17,47 | 237,14 | 18,3 | 219,67 | |

| | | | | | |
|---|---|---|---|---|---|
| 13+10 | B9 | 232,14 | 13,3 | 218,8 | - 2,8 |
| 13+65 | B10 | | 7,4 | 224,7 | - 1,5 |
| | 12,12 | 243,32 | 0,74 | 231,20 | |
| 14+20 | 11 | | 8,6 | 234,7 | + 0,8 |
| 14+75 | 12 | | + 0,5 | 248,8 | - 4,7 |

192

Return to City Engineers Office
City Hall, San Diego, Cal.

# 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 | 89 |
| 1 | 99.98 | 1.75 | 99.98 | 2.18 | 99.97 | 2.62 | 99.95 | 3.05 | 88 |
| 2 | 99.94 | 3.49 | 99.92 | 3.93 | 99.91 | 4.36 | 99.88 | 4.80 | 87 |
| 3 | 99.86 | 5.23 | 99.84 | 5.67 | 99.81 | 6.10 | 99.79 | 6.54 | 86 |
| 4 | 99.76 | 6.98 | 99.73 | 7.41 | 99.69 | 7.85 | 99.66 | 8.28 | 85 |
| 5 | 99.62 | 8.72 | 99.58 | 9.15 | 99.54 | 9.58 | 99.50 | 10.02 | 84 |
| 6 | 99.45 | 10.45 | 99.41 | 10.89 | 99.36 | 11.32 | 99.31 | 11.75 | 83 |
| 7 | 99.25 | 12.19 | 99.20 | 12.62 | 99.14 | 13.05 | 99.09 | 13.49 | 82 |
| 8 | 99.03 | 13.92 | 98.97 | 14.35 | 98.90 | 14.78 | 98.84 | 15.21 | 81 |
| 9 | 98.77 | 15.64 | 98.70 | 16.07 | 98.63 | 16.50 | 98.56 | 16.93 | 80 |
| 0 | 98.48 | 17.36 | 98.40 | 17.79 | 98.33 | 18.22 | 98.25 | 18.65 | 79 |
| 11 | 98.16 | 19.08 | 98.08 | 19.51 | 97.99 | 19.94 | 97.90 | 20.36 | 78 |
| 12 | 97.81 | 20.79 | 97.72 | 21.22 | 97.63 | 21.64 | 97.53 | 22.07 | 77 |
| 13 | 97.44 | 22.50 | 97.34 | 22.92 | 97.24 | 23.34 | 97.13 | 23.77 | 76 |
| 14 | 97.03 | 24.19 | 96.92 | 24 62 | 96.81 | 25.04 | 96.70 | 25.46 | 75 |
| 15 | 96.59 | 25.88 | 96.48 | 26.30 | 96.36 | 26.72 | 96.25 | 27.14 | 74 |
| 16 | 96.13 | 27.56 | 96.00 | 27.98 | 95.88 | 28 40 | 95.76 | 28.82 | 73 |
| 17 | 95.63 | 29.24 | 95.50 | 29.65 | 95.37 | 30.07 | 95.24 | 30.49 | 72 |
| 18 | 95.11 | 30.90 | 94.97 | 31.32 | 94.83 | 31.73 | 94.69 | 32.14 | 71 |
| 19 | 94.55 | 32.56 | 94.41 | 32.97 | 94.26 | 33.38 | 94.12 | 33.79 | 70 |
| 20 | 93.97 | 34.20 | 93.82 | 34.61 | 93.67 | 35.02 | 93.51 | 35.43 | 69 |
| 21 | 93.36 | 35.84 | 93.20 | 36.24 | 93.04 | 36.65 | 92.88 | 37.06 | 68 |
| 22 | 92.72 | 37.46 | 92.55 | 37.86 | 92.39 | 38.27 | 92.22 | 38 67 | 67 |
| 23 | 92.05 | 39.07 | 91.88 | 39 47 | 91.71 | 39.87 | 91.53 | 40.27 | 66 |
| 24 | 91.35 | 40.67 | 91.18 | 41.07 | 91.00 | 41.47 | 90.81 | 41.87 | 65 |
| 25 | 90.63 | 42.26 | 90.45 | 42.66 | 90.26 | 43.05 | 90.07 | 43.44 | 64 |
| 26 | 89.88 | 43.84 | 89 69 | 44.23 | 89.49 | 44.62 | 89.30 | 45.01 | 63 |
| 27 | 89.10 | 45.40 | 88.90 | 45.79 | 88.70 | 46.17 | 88.50 | 46.56 | 62 |
| 28 | 88.29 | 46.95 | 88.09 | 47.33 | 87.88 | 47.72 | 87.67 | 48.10 | 61 |
| 29 | 87.46 | 48.48 | 87.25 | 48.86 | 87.04 | 49.24 | 86.82 | 49.62 | 60 |
| 30 | 86.60 | 50.00 | 86.38 | 50.38 | 86.16 | 50.75 | 85.94 | 51.13 | 59 |
| 31 | 85.72 | 51.50 | 85.49 | 51.88 | 85.26 | 52.25 | 85.04 | 52.62 | 58 |
| 32 | 84.80 | 52 99 | 84.57 | 53.36 | 84.34 | 53.73 | 84.10 | 54.10 | 57 |
| 33 | 83.87 | 54.46 | 83.63 | 54.83 | 83.39 | 55.19 | 83.15 | 55.56 | 56 |
| 34 | 82.90 | 55.92 | 82.66 | 56.28 | 82.41 | 56.64 | 82.16 | 57.00 | 55 |
| 35 | 81.92 | 57.36 | 81.66 | 57.71 | 81.41 | 58.07 | 81.16 | 58.42 | 54 |
| 36 | 80.90 | 58.78 | 80.64 | 59.13 | 80.39 | 59.48 | 80.13 | 59.83 | 53 |
| 37 | 79.86 | 60.18 | 79.60 | 60 53 | 79.34 | 60.88 | 79.07 | 61.22 | 52 |
| 38 | 78.80 | 61.57 | 78.53 | 61.91 | 78.26 | 62.25 | 77.99 | 62.59 | 51 |
| 39 | 77.71 | 62.93 | 77.44 | 63.27 | 77.16 | 63.61 | 76.88 | 63.94 | 50 |
| 40 | 76.60 | 64.28 | 76.32 | 64.61 | 76.04 | 64.94 | 75.76 | 65.28 | 49 |
| 41 | 75.47 | 65.61 | 75.18 | 65.93 | 74.90 | 66.26 | 74.61 | 66.59 | 48 |
| 42 | 74.31 | 66.91 | 74.02 | 67.24 | 73.73 | 67.56 | 73.43 | 67.88 | 47 |
| 43 | 73.14 | 68.20 | 72.84 | 68.52 | 72.54 | 68.84 | 72.24 | 69.15 | 46 |
| 44 | 71.93 | 69.47 | 71.63 | 69.78 | 71.33 | 70.09 | 71.02 | 70.40 | 45 |
| 45 | 70.71 | 70.71 | | | | | | | |
| Degrees. | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | Dep. | Lat. | Degrees. |
| | DEGREES. | | ¾ DEGREE. | | ½ DEGREE. | | ¼ DEGREE. | | |

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