

W. B. GIBB

ENGINEERS'  
LEVEL BOOK

No. 412 F

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1.

For Single Track Embankment.

| H  | 0    | .1   | MICROFILMED |      |      |      |      |      |      |      | .8 | .9 | H |
|----|------|------|-------------|------|------|------|------|------|------|------|----|----|---|
| 0  | 8.0  | 8.1  | 8.2         | 8.3  | 8.4  | 8.5  | 8.6  | 8.7  | 8.8  | 8.9  | 0  |    |   |
| 1  | 9.0  | 9.1  | 9.2         | 9.3  | 9.4  | 9.5  | 9.6  | 9.7  | 9.8  | 9.9  | 1  |    |   |
| 2  | 10.0 | 10.1 | 10.2        | 10.3 | 10.4 | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 | 2  |    |   |
| 3  | 11.0 | 11.1 | 11.2        | 11.3 | 11.4 | 11.5 | 11.6 | 11.7 | 11.8 | 11.9 | 3  |    |   |
| 4  | 12.0 | 12.1 | 12.2        | 12.3 | 12.4 | 12.5 | 12.6 | 12.7 | 12.8 | 12.9 | 4  |    |   |
| 5  | 13.0 | 13.1 | 13.2        | 13.3 | 13.4 | 13.5 | 13.6 | 13.7 | 13.8 | 13.9 | 5  |    |   |
| 6  | 14.0 | 14.1 | 14.2        | 14.3 | 14.4 | 14.5 | 14.6 | 14.7 | 14.8 | 14.9 | 6  |    |   |
| 7  | 15.0 | 15.1 | 15.2        | 15.3 | 15.4 | 15.5 | 15.6 | 15.7 | 15.8 | 15.9 | 7  |    |   |
| 8  | 16.0 | 16.1 | 16.2        | 16.3 | 16.4 | 16.5 | 16.6 | 16.7 | 16.8 | 16.9 | 8  |    |   |
| 9  | 17.0 | 17.1 | 17.2        | 17.3 | 17.4 | 17.5 | 17.6 | 17.7 | 17.8 | 17.9 | 9  |    |   |
| 10 | 18.0 | 18.1 | 18.2        | 18.3 | 18.4 | 18.5 | 18.6 | 18.7 | 18.8 | 18.9 | 10 |    |   |
| 11 | 19.0 | 19.1 | 19.2        | 19.3 | 19.4 | 19.5 | 19.6 | 19.7 | 19.8 | 19.9 | 11 |    |   |
| 12 | 20.0 | 20.1 | 20.2        | 20.3 | 20.4 | 20.5 | 20.6 | 20.7 | 20.8 | 20.9 | 12 |    |   |
| 13 | 21.0 | 21.1 | 21.2        | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 13 |    |   |
| 14 | 22.0 | 22.1 | 22.2        | 22.3 | 22.4 | 22.5 | 22.6 | 22.7 | 22.8 | 22.9 | 14 |    |   |
| 15 | 23.0 | 23.1 | 23.2        | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 15 |    |   |
| 16 | 24.0 | 24.1 | 24.2        | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 16 |    |   |
| 17 | 25.0 | 25.1 | 25.2        | 25.3 | 25.4 | 25.5 | 25.6 | 25.7 | 25.8 | 25.9 | 17 |    |   |
| 18 | 26.0 | 26.1 | 26.2        | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 18 |    |   |
| 19 | 27.0 | 27.1 | 27.2        | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 19 |    |   |
| 20 | 28.0 | 28.1 | 28.2        | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 | 28.9 | 20 |    |   |
| 21 | 29.0 | 29.1 | 29.2        | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 21 |    |   |
| 22 | 30.0 | 30.1 | 30.2        | 30.3 | 30.4 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 22 |    |   |
| 23 | 31.0 | 31.1 | 31.2        | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 23 |    |   |
| 24 | 32.0 | 32.1 | 32.2        | 32.3 | 32.4 | 32.5 | 32.6 | 32.7 | 32.8 | 32.9 | 24 |    |   |
| 25 | 33.0 | 33.1 | 33.2        | 33.3 | 33.4 | 33.5 | 33.6 | 33.7 | 33.8 | 33.9 | 25 |    |   |
| 26 | 34.0 | 34.1 | 34.2        | 34.3 | 34.4 | 34.5 | 34.6 | 34.7 | 34.8 | 34.9 | 26 |    |   |
| 27 | 35.0 | 35.1 | 35.2        | 35.3 | 35.4 | 35.5 | 35.6 | 35.7 | 35.8 | 35.9 | 27 |    |   |
| 28 | 36.0 | 36.1 | 36.2        | 36.3 | 36.4 | 36.5 | 36.6 | 36.7 | 36.8 | 36.9 | 28 |    |   |
| 29 | 37.0 | 37.1 | 37.2        | 37.3 | 37.4 | 37.5 | 37.6 | 37.7 | 37.8 | 37.9 | 29 |    |   |
| 30 | 38.0 | 38.1 | 38.2        | 38.3 | 38.4 | 38.5 | 38.6 | 38.7 | 38.8 | 38.9 | 30 |    |   |
| 31 | 39.0 | 39.1 | 39.2        | 39.3 | 39.4 | 39.5 | 39.6 | 39.7 | 39.8 | 39.9 | 31 |    |   |
| 32 | 40.0 | 40.1 | 40.2        | 40.3 | 40.4 | 40.5 | 40.6 | 40.7 | 40.8 | 40.9 | 32 |    |   |
| 33 | 41.0 | 41.1 | 41.2        | 41.3 | 41.4 | 41.5 | 41.6 | 41.7 | 41.8 | 41.9 | 33 |    |   |
| 34 | 42.0 | 42.1 | 42.2        | 42.3 | 42.4 | 42.5 | 42.6 | 42.7 | 42.8 | 42.9 | 34 |    |   |
| 35 | 43.0 | 43.1 | 43.2        | 43.3 | 43.4 | 43.5 | 43.6 | 43.7 | 43.8 | 43.9 | 35 |    |   |
| 36 | 44.0 | 44.1 | 44.2        | 44.3 | 44.4 | 44.5 | 44.6 | 44.7 | 44.8 | 44.9 | 36 |    |   |
| 37 | 45.0 | 45.1 | 45.2        | 45.3 | 45.4 | 45.5 | 45.6 | 45.7 | 45.8 | 45.9 | 37 |    |   |
| 38 | 46.0 | 46.1 | 46.2        | 46.3 | 46.4 | 46.5 | 46.6 | 46.7 | 46.8 | 46.9 | 38 |    |   |
| 39 | 47.0 | 47.1 | 47.2        | 47.3 | 47.4 | 47.5 | 47.6 | 47.7 | 47.8 | 47.9 | 39 |    |   |
| 40 | 48.0 | 48.1 | 48.2        | 48.3 | 48.4 | 48.5 | 48.6 | 48.7 | 48.8 | 48.9 | 40 |    |   |

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be  $30.6 + (20 - 16) \div 2$  or 2 ft. added to 30.6 = 32.6. For slopes of 1 on  $1\frac{1}{2}$  see inside of back cover.  
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LEVEL NOTES: #737

GRADING OF ROADWAYS AND

CONSTRUCTION AREAS AT

ALVARADO FILTRATION PLANT, 1948-49

LEFT SIDE.

48

49

52

CITY OF SAN DIEGO

RECD  
JUN 11 1948

RESIDENT ENGINEER

This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

INDEXED 1-30-51 con

CITY OF SAN DIEGO  
REC'D  
JUN 11 1951  
RESIDENT ENGINEER

The following is a reproduction of a letter  
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for your information.

1.

46. LEFT  
SIDE.

56

47-48

48-49

50-52

54

56

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|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
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X-SECTIONS ON SLOPE INTO LAKE MURRAY AT ALVARADO FILTRATION PLANT. JUNE 17, 1948 LEONARD NIENOW  
 LINES PARALLEL TO E-W AXIS OF FILTRATION PLANT. SHIPMAN  
 250 N. TOP OF FILL.

| B.M.        | +11.95 | H.d.<br>548.34  | 536.39          | ON DAM.       |
|-------------|--------|-----------------|-----------------|---------------|
| 200W        |        | -11.7           | 536.6           | ✓             |
| 180W        |        | -10.9           | 57.4            | ✓             |
| 160W        |        | -10.3           | 58.0            | ✓             |
| 140W        |        | -5.9            | 47.4            | ✓             |
| 120W        |        | -5.4            | 47.9            | ✓             |
| 100W        |        | -4.0            | 44.3            | ✓             |
| 80W         |        | -2.7            | 45.6            | ✓             |
| 60W         |        | -2.0            | 46.3            | ✓             |
| 40W         |        | -1.8            | 46.5            | ✓             |
| 20W         |        | -2.2            | 46.1            | ✓             |
| N-S<br>AXIS |        | -1.7            | 46.6            | ✓             |
| 20E         |        | <del>-2.6</del> | <del>46.8</del> | corr.<br>46.8 |
| 40E         |        | -1.8            | 46.5            | ✓             |
| 60E         |        | -1.2            | 47.1            | ✓             |
| 80E         |        | <del>-1.5</del> | <del>46.9</del> | corr.<br>46.9 |
| 100E        |        | -1.2            | 47.1            | ✓             |
| 120E        |        | -1.6            | 46.7            | ✓             |

|      | 250 N. | H.d.<br>548.34 |       |   |
|------|--------|----------------|-------|---|
| 140E |        | -1.8           | 546.5 | ✓ |
| 160E |        | -2.3           | 46.0  | ✓ |
| 180E |        | -3.0           | 45.3  | ✓ |
| 200E |        | -3.3           | 45.0  | ✓ |
| 220E |        | -4.1           | 44.2  | ✓ |
| 240E |        | -4.2           | 44.1  | ✓ |

260 N  
H.d. ✓  
548.34

|             |                 |                 |               |
|-------------|-----------------|-----------------|---------------|
| 200W        | -12.4           | 535.9           |               |
| 180W        | -11.5           | 36.8            |               |
| 160W        | -10.8           | 39.5            |               |
| 140W        | -6.8            | 41.5            |               |
| 120W        | <del>-6.7</del> | <del>41.6</del> | corr.<br>41.8 |
| 100W        | -6.9            | 41.4            |               |
| 80W         | <del>-6.5</del> | <del>41.5</del> | CORR.<br>42.1 |
| 60W         | -6.2            | 42.1            |               |
| 40W         | -5.9            | 42.4            |               |
| 20W         | -5.5            | 42.8            |               |
| N-S<br>AXIS | -5.4            | 42.9            |               |
| 20E         | -5.7            | 42.6            |               |
| 40E         | <del>-6.1</del> | <del>42.1</del> | corr.<br>42.4 |
| 60E         | <del>-6.0</del> | <del>42.3</del> | corr.<br>42.7 |
| 80E         | <del>-6.0</del> | <del>42.3</del> | corr.<br>42.7 |
| 100E        | <del>-6.0</del> | <del>42.3</del> | corr.<br>42.4 |
| 120E        | -5.6            | 42.7            |               |

260 N  
H.d. ✓  
548.34

|      |                 |                 |                |
|------|-----------------|-----------------|----------------|
| 140E | <del>-5.7</del> | <del>42.6</del> | corr.<br>542.7 |
| 160E | -5.8            | 42.5            |                |
| 180E | -5.0            | 43.3            |                |
| 200E | -4.8            | 43.5            |                |
| 220E | <del>-5.0</del> | <del>43.5</del> | corr.<br>43.0  |
| 240E | -4.7            | 43.6            |                |

corrected  
6/30/48 DML

N270  
H.d. ✓  
548.34

|             |       |         |
|-------------|-------|---------|
| 200W        | -13.0 | 535.3 ✓ |
| 180W        | -11.8 | 36.5 ✓  |
| 160W        | -11.7 | 36.6 ✓  |
| 140W        | -10.1 | 38.2 ✓  |
| 120W        | -9.5  | 38.8 ✓  |
| 100W        | -9.9  | 39.0 ✓  |
| 80W         | -9.2  | 39.1 ✓  |
| 60W         | -9.2  | 39.1 ✓  |
| 40W         | -8.9  | 39.4 ✓  |
| 20W         | -8.6  | 39.7 ✓  |
| N-S<br>Axis | -8.4  | 39.9 ✓  |
| 20E         | -8.8  | 39.5 ✓  |
| 40E         | -8.9  | 39.4 ✓  |
| 60E         | -9.0  | 39.3 ✓  |
| 80E         | -8.6  | 39.7 ✓  |
| 100E        | -8.9  | 39.4 ✓  |
| 120E        | -8.6  | 39.7 ✓  |

N270  
H.d. ✓  
548.34

4.

|      |      |         |
|------|------|---------|
| 140E | -8.5 | 539.8 ✓ |
| 160E | -8.6 | 39.7 ✓  |
| 180E | -7.9 | 40.4 ✓  |
| 200E | -8.3 | 40.0 ✓  |
| 220E | -8.1 | 40.2 ✓  |
| 240E | -7.3 | 41.0 ✓  |

N280

548.34 ✓

|             |       |         |
|-------------|-------|---------|
| 200W        | -13.6 | 534.7 ✓ |
| 180W        | -13.0 | 35.3 ✓  |
| 160W        | -12.2 | 36.1 ✓  |
| 140W        | -11.5 | 36.8 ✓  |
| 120W        | -11.8 | 36.5 ✓  |
| 100W        | -12.2 | 36.1 ✓  |
| 80W         | -12.2 | 36.1 ✓  |
| 60W         | -12.4 | 35.9 ✓  |
| 40W         | -12.1 | 36.2 ✓  |
| 20W         | -12.1 | 36.2 ✓  |
| N-S<br>Axis | -12.2 | 36.1 ✓  |
| 20E         | -12.0 | 36.3 ✓  |
| 40E         | -12.2 | 36.1 ✓  |
| 60E         | -12.0 | 36.3 ✓  |
| 80E         | -11.8 | 36.5 ✓  |
| 100E        | -12.0 | 36.3 ✓  |
| 120E        | -12.1 | 36.2 ✓  |

N280

548.34 ✓

|            |        |          |
|------------|--------|----------|
| 140E       | -11.7  | 36.6 ✓   |
| 160E       | -11.6  | 36.7 ✓   |
| 180E       | -11.0  | 37.3 ✓   |
| 200E       | -11.1  | 37.2 ✓   |
| 220E       | -11.0  | 37.3 ✓   |
| 240E       | -11.1  | 37.2 ✓   |
| CHECK R.M. | -11.25 | 536.39 ✓ |

5.



|             |       | N290     |               |
|-------------|-------|----------|---------------|
| B.M.        | +2.87 | 538.76 ✓ | 536.39 ON DAM |
| 200W        |       | -4.7     | 534.1 ✓       |
| 180W        |       | -4.2     | 34.6 ✓        |
| 160W        |       | -3.8     | 35.0 ✓        |
| 140W        |       | -4.7     | 34.1 ✓        |
| 120W        |       | -4.0     | 34.8 ✓        |
| 100W        |       | -3.8     | 35.0 ✓        |
| 80W         |       | -4.0     | 34.8 ✓        |
| 60W         |       | -4.9     | 34.5 ✓        |
| 40W         |       | -5.3     | 33.5 ✓        |
| 20W         |       | -5.3     | 33.5 ✓        |
| N-S<br>Axis |       | -5.3     | 33.5 ✓        |
| 20E         |       | -5.3     | 33.5 ✓        |
| 40E         |       | -5.6     | 33.2 ✓        |
| 60E         |       | -5.6     | 33.2 ✓        |
| 80E         |       | -5.8     | 33.0 ✓        |
| 100E        |       | -5.7     | 33.1 ✓        |
| 120E        |       | -5.4     | 33.4 ✓        |

|      |  | N290   |        |
|------|--|--------|--------|
|      |  | Hid. ✓ | 538.76 |
| 140E |  | -5.1   | 33.7 ✓ |
| 160E |  | -5.2   | 33.6 ✓ |
| 180E |  | -4.9   | 34.5 ✓ |
| 200E |  | -4.4   | 34.4 ✓ |
| 220E |  | -4.2   | 34.6 ✓ |
| 240E |  | -4.6   | 34.2 ✓ |
| 260E |  | -4.9   | 33.9 ✓ |

N300  
H. d. ✓  
538.76

|               |      |         |
|---------------|------|---------|
| • 200W        | -5.1 | 533.7 ✓ |
| • 180W        | -4.8 | 34.0 ✓  |
| • 160W        | -4.7 | 34.1 ✓  |
| • 140W        | -5.4 | 33.4 ✓  |
| • 120W        | -4.8 | 34.0 ✓  |
| • 100W        | -4.5 | 34.3 ✓  |
| • 80W         | -4.7 | 34.1 ✓  |
| • 60W         | -5.1 | 33.7 ✓  |
| • 40W         | -6.2 | 32.6 ✓  |
| • 20W         | -7.4 | 31.4 ✓  |
| • N-S<br>AXIS | -8.3 | 30.5 ✓  |
| • 20E         | -8.6 | 30.7 ✓  |
| • 40E         | -9.2 | 29.6 ✓  |
| • 60E         | -9.4 | 29.4 ✓  |
| • 80E         | -9.9 | 28.9 ✓  |
| • 100E        | -9.6 | 29.2 ✓  |
| • 120E        | -9.2 | 29.6 ✓  |

7.

N300  
H. d. ✓  
538.76

|        |      |         |
|--------|------|---------|
| • 140E | -8.8 | 530.0 ✓ |
| • 160E | -8.0 | 30.8 ✓  |
| • 180E | -8.0 | 30.8 ✓  |
| • 200E | -7.8 | 31.0 ✓  |
| • 220E | -7.8 | 31.0 ✓  |
| • 240E | -8.2 | 30.6 ✓  |
| • 260E | -9.3 | 29.5 ✓  |

NS10  
H.d. ✓  
538.76

|   |       |         |
|---|-------|---------|
| 200W  | -5.9  | 532.9 ✓ |
| 180W  | -5.7  | 33.1 ✓  |
| 160W  | -5.9  | 32.9 ✓  |
| 140W  | -5.9  | 32.9 ✓  |
| 120W  | -5.4  | 33.4 ✓  |
| 100W  | -5.5  | 33.3 ✓  |
| 80W   | -5.9  | 32.9 ✓  |
| 60W   | -6.4  | 32.4 ✓  |
| 40W   | -7.2  | 31.6 ✓  |
| 20W   | -8.1  | 30.7 ✓  |
| N-S<br>Axis                                   | -9.1  | 29.7 ✓  |
| 20E   | -10.6 | 28.2 ✓  |
| SURFACE WATER: 528.7 -10.59 528.17 12:30 P.M. |       |         |
| 40E   | -0.9  | 27.3 ✓  |
| 60E   | -2.5  | 25.7 ✓  |
| 80E   | -3.1  | 25.1 ✓  |
| 100E  | -2.9  | 25.3 ✓  |

NS10 SOUNDING BELOW WATER

|               |         |         |
|---------------|---------|---------|
| WATER SURFACE | 528.7 ✓ |         |
| 120E          | -2.6    | 525.6 ✓ |
| 140E          | -1.3    | 26.9 ✓  |
| 160E          | -1.2    | 27. ✓   |
| 180E          | -0.9    | 27.3 ✓  |
| 200E          | -0.7    | 27.5 ✓  |
| 220E          | -1.4    | 26.8 ✓  |
| 240E          | -1.5    | 26.7 ✓  |
| 260E          | -2.2    | 26.0 ✓  |

WATER'S  
EDGE.

N320  
H.d.  
538.76

|             |       |         |
|-------------|-------|---------|
| 200W        | -7.3  | 531.5 ✓ |
| 180W        | -6.7  | 32.1 ✓  |
| 160W        | -6.8  | 32.0 ✓  |
| 140W        | -6.5  | 32.3 ✓  |
| 120W        | -6.3  | 32.5 ✓  |
| 100W        | -6.5  | 32.0 ✓  |
| 80W         | -7.2  | 31.6 ✓  |
| 60W         | -7.4  | 31.4 ✓  |
| 40W         | -8.4  | 30.4 ✓  |
| 20W         | -9.1  | 29.7 ✓  |
| N-S<br>AXIS | -10.4 | 28.4 ✓  |

WATER SURFACE 528.8 SOUNDINGS BELOW WATER

|      |      |        |
|------|------|--------|
| 20E  | -1.1 | 27.1 ✓ |
| 40E  | -3.0 | 25.2 ✓ |
| 60E  | -5.4 | 22.8 ✓ |
| 80E  | -6.1 | 22.1 ✓ |
| 100E | -6.3 | 21.9 ✓ |

9,

N320 SOUNDINGS BELOW WATER

WATER SURFACE: 528.8

|      |      |        |
|------|------|--------|
| 180E | -6.4 | 21.8 ✓ |
| 140E | -5.6 | 22.6 ✓ |
| 160E | -4.6 | 23.6 ✓ |
| 150E | -4.7 | 23.5 ✓ |
| 100E | -4.4 | 23.8 ✓ |
| 220E | -4.4 | 23.8 ✓ |
| 240E | -4.3 | 23.9 ✓ |
| 260E | -3.3 | 24.9 ✓ |

N330  
H.d.  
538.76

| 20 | 200 W         | -8.6  | 30.2 ✓                |
|----|---------------|-------|-----------------------|
| 18 | 180 W         | -7.8  | 31.0 ✓                |
| 16 | 160 W         | -7.6  | 31.2 ✓                |
| 14 | 140 W         | -7.2  | 31.6 ✓                |
| 12 | 120 W         | -7.4  | 31.4 ✓                |
| 10 | 100 W         | -8.1  | 30.7 ✓                |
| 8  | 80 W          | -8.3  | 30.5 ✓                |
| 6  | 60 W          | -9.0  | 29.8 ✓                |
| 4  | 40 W          | -9.6  | 29.2 ✓                |
| 2  | 20 W          | -10.0 | 28.8 ✓                |
| A  | WATER SURFACE | 528.2 | SOUNDINGS BELOW WATER |
| W  | N-S<br>AXIS   | -1.0  | 27.2 ✓                |
| 2  | 20 E          | -2.7  | 25.5 ✓                |
| 4  | 40 E          | -4.2  | 24.0 ✓                |
| 6  | 60 E          | -6.6  | 21.6 ✓                |
| 8  | 80 E          | -7.9  | 20.3 ✓                |
| 10 | 100 E         | -8.4  | 19.8 ✓                |

N330

WATER SURFACE: 528.2

|       | SOUNDINGS | BELOW WATER |
|-------|-----------|-------------|
| 120 E | -9.2      | 19.0 ✓      |
| 140 E | -9.4      | 18.8 ✓      |
| 160 E | -9.6      | 18.6 ✓      |
| 180 E | -8.4      | 19.8 ✓      |
| 200 E | -7.8      | 20.4 ✓      |
| 220 E | -7.8      | 20.4 ✓      |
| 240 E | -7.8      | 20.4 ✓      |
| 260 E | -5.4      | 22.8 ✓      |

N340  
H. d. ✓  
528.76

|      |       |         |
|------|-------|---------|
| 200W | -9.7  | 529.1 ✓ |
| 180W | -8.7  | 30.1 ✓  |
| 160W | -8.8  | 30.0 ✓  |
| 140W | -8.8  | 30.0 ✓  |
| 120W | -8.9  | 29.9 ✓  |
| 100W | -9.3  | 29.5 ✓  |
| 80W  | -10.1 | 28.7 ✓  |
| 60W  | -11.0 | 27.8 ✓  |

WATERS  
EDGE

WATER SURFACE 528.7 SOUNDINGS BELOW WATER

|             |       |        |
|-------------|-------|--------|
| 40W         | -0.4  | 27.8 ✓ |
| 20W         | -0.9  | 27.3 ✓ |
| N-S<br>AXIS | -3.3  | 24.9 ✓ |
| 20E         | -4.1  | 24.1 ✓ |
| 40E         | -5.6  | 22.6 ✓ |
| 60E         | -7.5  | 20.7 ✓ |
| 80E         | -8.9  | 19.4 ✓ |
| 100E        | -10.1 | 18.1 ✓ |

11.

N340 SOUNDINGS BELOW WATER

528.7 ✓

|      |       |         |
|------|-------|---------|
| 140E | -11.5 | 516.7 ✓ |
| 140E | -12.5 | 16.7 ✓  |
| 160E | -12.0 | 16.2 ✓  |
| 180E | -12.3 | 15.9 ✓  |
| 200E | -11.5 | 16.7 ✓  |
| 220E | -10.2 | 18.0 ✓  |
| 240E | -10.0 | 18.2 ✓  |
| 260E | -5.0  | 22.7 ✓  |

N.P.50

528.76 ✓

|               |       |         | IN EDGE<br>WATER |
|---------------|-------|---------|------------------|
| W200          | -10.7 | 528.1 ✓ |                  |
| 180W          | -9.7  | 29.1 ✓  |                  |
| 160W          | -10.3 | 28.5 ✓  |                  |
| 140W          | -10.3 | 28.5 ✓  |                  |
| 120W          | -10.4 | 28.4 ✓  |                  |
| 100W          | 10.9  | 27.9 ✓  | IN EDGE<br>WATER |
| WATER SURFACE |       | 528.7 ✓ |                  |
| 80W           | -1.0  | 27.2 ✓  |                  |
| 60W           | -1.5  | 26.7 ✓  |                  |
| 40W           | -2.4  | 25.8 ✓  |                  |
| 20W           | -2.6  | 25.6 ✓  |                  |
| N-S<br>AXIS   | -4.7  | 23.5 ✓  |                  |
| 20E           | -5.4  | 22.8 ✓  |                  |
| 40E           | -6.4  | 21.8 ✓  |                  |
| 60E           | -9.0  | 19.2 ✓  |                  |
| 80E           | -10.5 | 17.9 ✓  |                  |
| 100E          | -13.0 | 15.2 ✓  |                  |

12.

N.P.50

WATER SURFACE: 528.7 ✓

|                        |                |          |                  |
|------------------------|----------------|----------|------------------|
| 120E                   | -15.0          | 513.2 ✓  |                  |
| 140E                   | -16.5          | 11.7 ✓   |                  |
| 160E                   | -15.8          | 12.4 ✓   |                  |
| 180E                   | -15.6          | 12.6 ✓   |                  |
| 200E                   | -14.5          | 13.7 ✓   |                  |
| 220E                   | -14.0          | 14.2 ✓   |                  |
| 240E                   | -9.0           | 19.2 ✓   |                  |
| 260E                   | -4.1           | 24.1 ✓   |                  |
| CHECK<br>WATER SURFACE | H.d.<br>528.76 | -10.61 ? | 528.15 2.45 P.M. |
| CHECK P.M.             |                | -2.37    | 536.39 ON DAM.   |

TURNS CHECKED 6-21-48 CON

ADDITIONAL X-SECTIONS IN N-E. 7/14/48

13.  
LEONARD  
SHIPMAN.

QUADRANT, ALVARADO FILTRATION PLANT.

|      |        |                        |       |        |                                       |
|------|--------|------------------------|-------|--------|---------------------------------------|
| R.M. | +11.86 | 549.25                 |       | 536.39 | ON DAM.                               |
| T.P. | +1.15  | <sup>H.O.</sup> 549.35 | -5.05 | 544.20 | IRON PIPE AT<br>S.W.<br>END OF HEDGE. |

2+80E

|      |  |  |      |       |
|------|--|--|------|-------|
| 280N |  |  | -9.8 | 534.5 |
|------|--|--|------|-------|

|      |                 |  |       |      |
|------|-----------------|--|-------|------|
| 295N | TOP OF<br>DITCH |  | -13.0 | 31.3 |
|------|-----------------|--|-------|------|

|      |             |  |       |      |
|------|-------------|--|-------|------|
| 300N | IN<br>DITCH |  | -14.7 | 29.6 |
|------|-------------|--|-------|------|

3+00E

|      |                 |  |      |      |
|------|-----------------|--|------|------|
| 280N | TOP OF<br>DITCH |  | -9.1 | 35.2 |
|------|-----------------|--|------|------|

|      |             |  |       |      |
|------|-------------|--|-------|------|
| 282N | IN<br>DITCH |  | -10.2 | 34.1 |
|------|-------------|--|-------|------|

|      |  |  |       |      |
|------|--|--|-------|------|
| 300N |  |  | -12.0 | 32.3 |
|------|--|--|-------|------|

|      |                   |  |       |      |
|------|-------------------|--|-------|------|
| 318N | EDGE OF<br>DITCH. |  | -12.9 | 31.4 |
|------|-------------------|--|-------|------|

3+20E

|      |                |  |      |      |
|------|----------------|--|------|------|
| 220N | TOP OF<br>FILL |  | -1.7 | 42.6 |
|------|----------------|--|------|------|

|      |                |  |      |      |
|------|----------------|--|------|------|
| 228N | TOP OF<br>BANK |  | -4.2 | 40.1 |
|------|----------------|--|------|------|

|      |                 |  |      |      |
|------|-----------------|--|------|------|
| 240N | BOTTOM<br>DITCH |  | -8.2 | 36.1 |
|------|-----------------|--|------|------|

|      |   |  |      |      |
|------|---|--|------|------|
| 259N | " |  | -8.8 | 35.5 |
|------|---|--|------|------|

|      |                |  |      |      |
|------|----------------|--|------|------|
| 275N | TOP OF<br>BANK |  | -6.7 | 37.6 |
|------|----------------|--|------|------|

|      |  |  |      |      |
|------|--|--|------|------|
| 300N |  |  | -8.2 | 36.1 |
|------|--|--|------|------|



X-SECTIONS - CONTD.

3+40E  
H.d. ✓  
544.95

|      |                |      |      |
|------|----------------|------|------|
| 205N | TOP OF BANK    | -1.1 | 43.2 |
| 207N | BOTTOM DITCH   | -7.9 | 36.4 |
| 228N | "              | -7.7 | 36.6 |
| 234N | TOP OF BANK    | -1.4 | 42.9 |
| 240N | "              | -1.8 | 42.5 |
| 260N | ON TOP OF FILL | -2.4 | 41.9 |
| 280N | DIRT FROM      | -3.2 | 41.1 |
| 300N | DITCH          | -3.8 | 40.5 |

T.P. +4.20 H.d. ✓ 548.17 -0.88 548.97 ✓ Rock IN FLAG POLE CAP

3+60E

|      |              |       |       |
|------|--------------|-------|-------|
| 186N | TOP OF DITCH | -4.0  | 544.2 |
| 188N | BOTTOM DITCH | -11.0 | 36.9  |
| 204N | "            | -11.2 | 37.0  |
| 206N | TOP OF DITCH | -4.6  | 43.0  |
| 220N | "            | -4.7  | 43.5  |
| 240N | HEDGE        | -5.1  | 43.1  |

14.

3+80E  
H.d. ✓  
548.17

|      |              |       |       |
|------|--------------|-------|-------|
| 170N | TOP OF DITCH | -9.9  | 544.3 |
| 171N | BOTTOM DITCH | -10.9 | 37.3  |
| 185N | "            | -10.9 | 37.3  |
| 186N | TOP OF DITCH | -3.2  | 45.0  |
| 200N | "            | -3.9  | 44.9  |
| 220N | "            | -3.5  | 44.7  |

NOTE: SW CORNER DAM BARRAGE HOUSE IS N280 - E378.6

4+00E

|      |               |       |      |
|------|---------------|-------|------|
| 155N | TOP OF DITCH  | -3.6  | 44.6 |
| 157N | BOTTOM DITCH  | -10.8 | 37.4 |
| 172N | "             | -10.4 | 37.8 |
| 174N | TOP OF DITCH  | -3.6  | 44.6 |
| 180N | "             | -3.0  | 45.2 |
| 220N | AGAINST HOUSE | -3.1  | 45.1 |

|      |              | 4+20E       |            |
|------|--------------|-------------|------------|
| 142N | TOP OF DITCH | H.d. 548.17 | -4.1 544.1 |
| 143N | BOTTOM DITCH |             | -10.8 37.4 |
| 157N | "            |             | -10.8 37.4 |
| 159N | TOP OF DITCH |             | -4.1 44.1  |
| 180N |              |             | -3.2 45.0  |
| 200N | UNDER TREES  |             | -2.4 45.8  |

|      |                      | 4+40E  |                              |
|------|----------------------|--------|------------------------------|
| 126N | TOP OF DITCH         |        | -4.2 <sup>W.M.</sup> 44.0    |
| 128N | BOTTOM DITCH         |        | -11.2 37.0                   |
| 143N | "                    |        | -10.8 37.4                   |
| 145N | TOP OF DITCH         |        | -4.5 43.7                    |
| 160N |                      |        | -4.0 44.2                    |
| 180N |                      |        | -3.5 44.7                    |
| 200N |                      |        | -2.7 45.5                    |
| 220N |                      |        | -2.9 45.9                    |
| T.P. | N 155.00<br>E 432.83 |        | -4.01 544.16 ON R.P.<br>HOR. |
|      | +4.97                | 548.53 |                              |

|      |              | 4+60E       |            |
|------|--------------|-------------|------------|
|      |              | H.d. 548.53 |            |
| 108N | TOP OF DITCH |             | -5.9 542.6 |
| 111N | BOTTOM DITCH |             | -11.5 37.0 |
| 128N | "            |             | -11.2 37.3 |
| 150N | TOP OF DITCH |             | -5.1 43.4  |
| 140N |              |             | -5.1 43.4  |
| 160N | ON FILL      |             | -3.6 44.9  |
| 180N |              |             | -4.1 44.4  |
| 200N |              |             | -3.5 45.0  |
| 220N |              |             | -2.8 45.7  |

|      |                              | 4+80E |           |
|------|------------------------------|-------|-----------|
| 160N | (see bottom PAGE 16<br>corn) |       | -4.6 43.9 |
| 180N |                              |       | -4.0 44.5 |
| 200N |                              |       | -3.5 45.0 |
| 220N |                              |       | -3.1 45.4 |

7-16-48

LEONARD  
SHIPMAN

16.

5+00E

H.d.

548.57

(see bottom left  
of page 17 con)

|      |      |       |
|------|------|-------|
| 200N | -3.8 | 544.7 |
| 220N | -3.1 | 45.4  |

5+20E

|      |     |      |
|------|-----|------|
| 200N | 3.8 | 44.7 |
| 220N | 3.2 | 45.3 |

5+40E

|      |      |      |
|------|------|------|
| 160N | -4.8 | 43.7 |
| 180N | -4.0 | 44.5 |
| 200N | -3.7 | 44.8 |
| 220N | -3.3 | 45.2 |

MON. 583E

CHECK B.M. ON L.O. AXIS

-10.07

538.46 = 538.47

RECORD

5+60E

H.d.

548.59

|      |        |        |
|------|--------|--------|
| B.M. | +10.17 | 538.47 |
| 73N  | -7.9   | 541.3  |
| 95N  | -6.6   | 42.0   |
| 132N | -5.3   | 43.3   |
| 140N | -5.0   | 43.6   |
| 160N | -4.5   | 44.1   |
| 180N | -3.7   | 44.9   |
| 200N | -3.5   | 45.1   |
| 220N | -3.2   | 45.4   |

MON. 583E

ON L.O. AXIS.

8-2-48 Baker  
Shipman

ADDITIONAL X-SECTIONS IN N-E.

QUADRANT, ALVARADO FILTRATION PLANT

|      |      |        |        |
|------|------|--------|--------|
| B.M. | 9.12 | 547.59 | 538.47 |
|------|------|--------|--------|

MON 583E

ON L.O. AXIS

4+80E

DITCH

|      |      |      |      |
|------|------|------|------|
| 116N | TOP. | 4.8  | 42.8 |
| 114N | BOT. | 10.4 | 37.2 |
| 97N  | BOT. | 10.8 | 36.8 |
| 93N  | TOP. | 5.3  | 42.3 |

(cont next page)

5+80E  
H.D.  
548.59

|      |       |       |
|------|-------|-------|
| 0N   | -10.3 | 538.3 |
| 20N  | -9.7  | 39.4  |
| 49N  | -8.0  | 40.6  |
| 60N  | -7.5  | 41.1  |
| 75N  | -6.9  | 41.7  |
| 90N  | -6.6  | 42.0  |
| 130N | -5.9  | 43.3  |
| 140N | -5.1  | 43.5  |
| 160N | -4.8  | 44.3  |
| 180N | -3.9  | 44.7  |
| 200N | -3.4  | 45.2  |
| 220N | -3.0  | 45.6  |

Cont From page 14

5+00E

+

547.59

ELEV.

|      |           |                       |                         |
|------|-----------|-----------------------|-------------------------|
| 100N | DITCH TOP | 3.8<br><del>4.3</del> | 43.8<br><del>41.3</del> |
| 97N  | BOT       | 12.0                  | 35.6                    |
| 84N  | BOT       | 12.8                  | 34.8                    |
| 80N  | TOP       | 6.3                   | 41.3                    |

(cont Page 18)

H. 6-02-98

17.

6+00E

548.59

|          |        |        |
|----------|--------|--------|
| 0N       | -9.7   | 538.9  |
| 20N      | -9.0   | 539.6  |
| 40N      | -8.0   | 40.6   |
| 60N      | -6.9   | 41.7   |
| 80N      | -6.3   | 42.3   |
| 97N      | -6.1   | 42.5   |
| 132N     | -5.2   | 43.4   |
| 140N     | -4.6   | 44.0   |
| 160N     | -4.4   | 44.2   |
| 180N     | -3.9   | 44.7   |
| 200N     | -3.4   | 45.2   |
| 220N     | -2.9   | 545.7  |
| CHECK RM | -10.12 | 538.47 |

TURNS CKD 7-16-48 CORN

Notes reduced 7-16-48 SHIPMAN  
CKD reducing 7-16-48 CORN  
Plotted 7-19-48 CORN

8-31-48

LEONARD  
DANKER  
SHIPMAN

18.

ADDITIONAL X-SECTION N. END  
OF 48" WASH WATER LINE

|                          | +    | x                   | ✓ | -    | ELEV.  | MM ON<br>DAM |
|--------------------------|------|---------------------|---|------|--------|--------------|
| B.M.                     | 1.49 | 537.88              |   |      | 536.39 |              |
| I.P.                     | 4.71 | 533.59              |   | 9.00 | 528.88 |              |
| END OF<br>PIPE<br>0+00 E |      | N 325.53<br>W 99.28 |   | 3.43 | 530.16 |              |
| 2.5' R                   |      |                     |   | 3.19 | 530.40 |              |
| 5.0' R                   |      |                     |   | 2.44 | 531.15 |              |
| 7.5' R                   |      |                     |   | 2.38 | 531.21 |              |
| 10.0' R                  |      |                     |   | 2.34 | .25    |              |
| 2.5' L                   |      |                     |   | 2.82 | 530.77 |              |
| 5.0' L                   |      |                     |   | 2.70 | .89    |              |
| 7.5' L                   |      |                     |   | 2.75 | .84    |              |
| 10.0' L                  |      |                     |   | 1.59 | 532.00 |              |
| 0+02 E<br>Q              |      |                     |   | 3.50 | 530.09 |              |
| 2.5' R                   |      |                     |   | 3.20 | .39    |              |
| 5.0' R                   |      |                     |   | 2.62 | .97    |              |
| 7.5' R                   |      |                     |   | 2.58 | 531.01 |              |
| 10.0' R                  |      |                     |   | 2.60 | .99    |              |
| 2.5' L                   |      |                     |   | 2.94 | 530.65 |              |
| 5.0' L                   |      |                     |   | 3.00 | .59    |              |

NOTE Q PIPE RUNS N 20° E TO L.O. AXIS.

507 E

|      |                                |        |       |        |        |
|------|--------------------------------|--------|-------|--------|--------|
| 90 N | END OF<br>PIPE<br>DITCH<br>BOT | 547.59 | 13.2  | 34.4   |        |
|      | TOP<br>BOT OF<br>PIPE          |        | 5.8   | 41.8   |        |
| B.M. |                                |        | 13.24 | 534.35 |        |
|      |                                |        | 9.12  | 538.47 | 538.47 |

|            | + | X      | -    | ELEV.  |
|------------|---|--------|------|--------|
|            |   | 533.59 |      |        |
| 01025      |   |        |      |        |
| 7.5'L      |   |        | 2.93 | 530.66 |
| 10.0'L     |   |        | 1.49 | 532.10 |
| 0105<br>E  |   |        | 3.24 | 530.35 |
| 2.5'R      |   |        | 3.09 | .50    |
| 5.0'R      |   |        | 2.89 | .70    |
| 7.5'R      |   |        | 2.88 | .71    |
| 10.0'R     |   |        | 2.80 | .79    |
| 2.5'L      |   |        | 3.28 | .31    |
| 5.0'L      |   |        | 3.32 | .27    |
| 7.5'L      |   |        | 3.34 | .25    |
| 10.0'L     |   |        | 2.14 | 531.45 |
| 01075<br>E |   |        | 3.51 | 530.08 |
| 2.5'R      |   |        | 3.37 | .02    |
| 5.0'R      |   |        | 3.28 | .31    |
| 7.5'R      |   |        | 3.03 | .56    |
| 10.0'R     |   |        | 3.07 | .52    |
| 2.5'L      |   |        | 3.54 | .05    |

19.

|            | + | X      | -    | ELEV.  |
|------------|---|--------|------|--------|
|            |   | 533.59 |      |        |
| 5.0'L      |   |        | 3.60 | 529.99 |
| 7.5'L      |   |        | 3.66 | .93    |
| 10.0'L     |   |        | 3.50 | 530.09 |
| 0110<br>E  |   |        | 3.59 | 30.00  |
| 2.5'R      |   |        | 3.61 | 529.98 |
| 5.0'R      |   |        | 3.75 | .84    |
| 7.5'R      |   |        | 3.65 | .94    |
| 10.0'R     |   |        | 3.62 | .97    |
| 2.5'L      |   |        | 3.90 | .69    |
| 5.0'L      |   |        | 3.98 | .61    |
| 7.5'L      |   |        | 4.00 | 529.59 |
| 10.0'L     |   |        | 3.91 | .68    |
| 01125<br>E |   |        | 4.28 | .31    |
| 2.5'R      |   |        | 4.30 | .29    |
| 5.0'R      |   |        | 4.15 | .44    |
| 7.5'R      |   |        | 3.83 | .76    |
| 10.0'R     |   |        | 3.82 | .77    |

|        | + | ↑      | -    | ELEV.  |
|--------|---|--------|------|--------|
|        |   | 533.59 |      |        |
| 0+12E  |   |        |      |        |
| 2.5'L  |   |        | 4.35 | 529.24 |
| 5.0'L  |   |        | 4.35 | .24    |
| 7.5'L  |   |        | 4.38 | .21    |
| 10.0'L |   |        | 4.33 | .26    |
| 0+15E  |   |        |      |        |
| 2.5'R  |   |        | 4.71 | 528.88 |
| 5.0'R  |   |        | 4.41 | 529.18 |
| 7.5'R  |   |        | 4.22 | .37    |
| 10.0'R |   |        | 4.33 | .26    |
| 2.5'L  |   |        | 4.74 | 528.85 |
| 5.0'L  |   |        | 4.77 | .82    |
| 7.5'L  |   |        | 4.69 | .90    |
| 10.0'L |   |        | 4.59 | 529.00 |
| 0+17E  |   |        |      |        |
| 2.5'R  |   |        | 5.20 | 528.39 |
| 5.0'R  |   |        | 5.05 | .54    |
| 7.5'R  |   |        | 5.0  | .59    |
|        |   |        | 4.88 | .71    |

20.

|        | +    | ↑      | -    | ELEV           |
|--------|------|--------|------|----------------|
|        |      | 533.59 |      |                |
| 0+17E  |      |        |      |                |
| 10.0'R |      |        | 4.89 | 528.70         |
| 2.5'L  |      |        | 5.36 | .23            |
| 5.0'L  |      |        | 5.35 | .24            |
| 7.5'L  |      |        | 5.32 | .27            |
| 10.0'L |      |        | 5.19 | .40            |
| 0+20E  |      |        |      |                |
| 2.5'R  |      |        | 5.58 | .01            |
| 5.0'R  |      |        | 5.5  | .09            |
| 7.5'R  |      |        | 5.37 | .22            |
| 10.0'R |      |        | 5.30 | .29            |
| 2.5'L  |      |        | 5.04 | .55            |
| 5.0'L  |      |        | 5.56 | .03            |
| 7.5'L  |      |        | 5.62 | 527.97         |
| 10.0'L |      |        | 5.66 | .93            |
|        |      |        | 5.63 | .96            |
| T.P.   | 2.88 | 531.76 | 4.71 | 528.88 ON ROCK |
| 0+22E  |      |        |      |                |
| 2.5'R  |      |        | 3.81 | 527.95         |
|        |      |        | 3.77 | .99            |

|           | +    | Σ      | -    | ELEY                    |
|-----------|------|--------|------|-------------------------|
| 0+22E     |      | 531.76 |      |                         |
| 5.0'R     |      |        | 3.78 | 527.98                  |
| 7.5'R     |      |        | 3.51 | 528.25                  |
| 10.0'R    |      |        | 3.40 | .36                     |
| 2.5'L     |      |        | 4.0  | 527.76                  |
| 5.0'L     |      |        | 3.98 | 527.78                  |
| 7.5'L     |      |        | 4.09 | .67                     |
| 10.0'L    |      |        | 4.20 | .56                     |
| 0+25<br>E |      |        | 4.20 | .56                     |
| 2.5'R     |      |        | 4.10 | .66                     |
| 5.0'R     |      |        | 3.96 | .80                     |
| 7.5'R     |      |        | 3.79 | .97                     |
| 10.0'R    |      |        | 3.92 | .84                     |
| 2.5'L     |      |        | 4.34 | .42                     |
| 5.0'L     |      |        | 4.43 | .33                     |
| 7.5'L     |      |        | 4.24 | .52                     |
| 10.0'L    |      |        | 4.25 | 527.51                  |
| T.P.      | 8.43 | 538.36 | 1.93 | 529.93 ON ROCK          |
|           |      |        | 1.97 | 536.39-536.39<br>ON DAM |



| ALVARADO FILTER PLANT.    |                   | 11-22-48 | LEONARD WEST PAYNE           |
|---------------------------|-------------------|----------|------------------------------|
| SLOPE STAKES FOR GRADING: |                   |          |                              |
| B.M.                      | +2.28             | 540.82   | 538.04 CONC. MON. 0+00 AXIS. |
| T.B.M.                    |                   | -10.01   | 530.81 M.H. RIM.             |
| COORDINATE:               | +4.19             | 534.50   |                              |
| 132 S                     |                   |          |                              |
| 47.08 E                   |                   | -3.10    | 531.40 TOE SLOPE S.W. COR.   |
| 132 S                     |                   |          |                              |
| 56.4 E                    |                   | -3.08    | 531.42 TOP.                  |
| 142.55                    |                   |          | AUG. ELEV.                   |
| 56.4 E                    |                   | -3.50    | 531.0 TOE SLOPE              |
| 144 S                     |                   |          |                              |
| 97. E                     |                   | -4.02    | 530.48 "                     |
| 144 S                     |                   |          |                              |
| 147 E                     |                   | -4.01    | 530.49 "                     |
| 145.55                    |                   |          |                              |
| 197 E                     |                   | -4.50    | 530.0 "                      |
| 145.55                    |                   |          |                              |
| 247 E                     |                   | -4.50    | 530.0 "                      |
| 144.15 S                  |                   |          |                              |
| 297 E                     |                   | -4.05    | 530.45 "                     |
| 141.9 S                   |                   |          |                              |
| 347 E                     |                   | -3.80    | 531.20 "                     |
| 140.7 S                   |                   |          |                              |
| 399 E                     |                   | -2.88    | 531.62 "                     |
| 132 S                     |                   |          |                              |
| 407.4 E                   |                   | -2.80    | 531.70 "                     |
| T.P.                      |                   | -2.80    | 531.70 ON HUB                |
|                           | +9.25             | 540.95   |                              |
| 72.7 S                    |                   |          |                              |
| 102.08 E                  |                   | -6.47    | 534.48 GRADE RECORD.         |
| CHECK R.M.                | CONG. MON. 5+85 E | -2.49    | 538.46 = 538.47              |

| LEONARD WEST PAYNE                                   |                 | 11-23-48 | LEONARD WEST PAYNE                             |
|--|-----------------|----------|--|
| GRADE: AROUND STRUCTURES:                            |                 |          |  |
| SALT STORAGE TANK TOP                                | -1.24           | 546.67   | 545.83 GRADE                                   |
| B.M.   | +12.19          | 548.58   | 536.89 ON DAM ON STEEL RIM S.E. COR. SALT TANK |
| SET B.M.   |                 | -1.92    | 546.66   |
|  | +4.66           | 551.82   |  |
| MARKS ON STR'S.                                      |                 | -5.99    | 545.83   |
| CHECK LEVELS ON BEAMS, N. SIDE PIT STR.              |                 |          |  |
| E. END   |                 | -6.03    | 545.29 .04 LOW                                 |
| CENTER   |                 | -5.99    | 545.83   |
| W. END   |                 | -5.99    | 545.83   |
| CHECK LEVELS STAIR WELL #21 N. SIDE BY-PASS CHANNEL. |                 |          |  |
| W. END - TOP WALL                                    |                 | -4.86    | 546.46 .04 LOW                                 |
| CORNER " "   |                 | -4.83    | 546.49 .01 LOW                                 |
| E. END - TOP STEP                                    |                 | -5.54    | 545.78   |
| 42" PIT N.W. COR.                                    |                 | -11.52   | 540.0  |
| " N 106'   | FROM COR. 8.5'  | -11.32   | 540.0  |
| " N 105.37   | FROM COR. 9.10' | -10.82   | 537.5  |
| CHECK B.M.   |                 | -4.66    | 546.66   |

| SLOPE STAKES, N.E. QUADRANT, GRADE = 545.88 |            |        |       | 11-24-48 LEONARD WEST PAYNE |           |        |  |
|---|------------|--------|-------|-----------------------------|-----------|--------|--|
| R.M.  | +2.67      | 549.33 |       | 546.66                      | SALT TANK |        |  |
| NORTH                                       | EAST       |        |       | TOE SLOPE                   |           |        |  |
| COORDINATE                                  | COORDINATE | GRADE  | -     | HUB ELEV.                   | REMARKS   |        |  |
|   |            |        |       |                             | FILL      | OFFSET |  |
| 224   | 349        | 545.88 | -6.88 | 548.00                      | 2.33      | 7.0    |  |
| B.C. 194.5                                  | 349        | "      | -4.81 | 544.52                      | 0.0       | 27.6   |  |
| Radius Pt.                                  |            |        |       |                             | 0.81      | 30.0   |  |
| N194.5 E 588                                | 575° W     | "      | -4.65 | 544.68                      | 0.0       | 31.05  |  |
| "   | 560° W     | "      | -4.88 | 545.00                      | 0.0       | 34.0   |  |
| "   | 845° W     | "      | -4.50 | 544.88                      | 0.0       | 34.5   |  |
| "   | 350° W     | "      | -4.50 | 544.88                      | 0.0       | 35.0   |  |
| "   | 515° W     | "      | -4.40 | 544.98                      | 0.0       | 35.8   |  |
| E.C. 151.5                                  | 386.0      | "      | -4.50 | 544.88                      | 0.0       | 35.0   |  |
| N. 151.5                                    | 411        | "      | -4.60 | 544.78                      | 0.0       | 35.2   |  |
| "   | 436        | "      | -5.29 | 544.04                      | 50        | 34.0   |  |
| "   | 461        | "      | -4.50 | 544.88                      | 0.0       | 15.2   |  |
| "   | 486        | "      | -5.80 | 544.88                      | .60       | 17.0   |  |
| "   | 511        | "      | -5.90 | 548.48                      | 1.29      | 6.7    |  |
| "   | 536        | "      | -5.80 | 548.58                      | 1.3       | 8.9    |  |
| "   | 561        | "      | -5.86 | 548.97                      | 1.9       | 5.7    |  |
|   |            |        |       |                             | 1.8       | 5.4    |  |
|   |            |        |       |                             | 1.36      | 4.1    |  |
| CHECK R.M.                                  |            |        | -2.67 | 546.66                      |           |        |  |

| SLOPE STAKES, N.E. QUADRANT - CONT'D. |            |        |       | Dec. 13, 1948 LEONARD WEST PAYNE |            | 15.    |  |
|---------------------------------------|------------|--------|-------|----------------------------------|------------|--------|--|
| R.M.                                  | +9.52      | 547.99 |       | 538.47                           | CONC. MON. |        |  |
| NORTH                                 | EAST       |        |       | 548° 05' E.                      |            |        |  |
| COORDINATE                            | COORDINATE | GRADE  | -     | HUB ELEV.                        | FILL       | OFFSET |  |
|                                       |            |        |       |                                  |            |        |  |
| N 151.6                               | E 561      | 545.88 | -9.69 | 544.50                           | 1.00       | 3.1    |  |
| 191.5                                 | 571        | "      | -3.92 | 544.07                           | 1.26       | 3.8    |  |
| 125.5                                 | 571        | "      | -8.26 | 544.78                           | 0.60       | 1.8    |  |
| 109.5                                 | 571        | "      | -4.59 | 548.40                           | 1.99       | 5.8    |  |
| 98.5                                  | 571        | "      | -5.16 | 542.88                           | 2.50       | 7.5    |  |
| 98.5                                  | 571        | "      | -4.92 | 548.07                           | 2.26       | 6.8    |  |
| 83.5                                  | 561        | "      | -6.50 | 541.49                           | 3.84       | 11.5   |  |
| 83.5                                  | 541        | "      | -6.79 | 541.20                           | 4.13       | 12.4   |  |
| 83.5                                  | 521        | "      | -6.69 | 541.80                           | 4.03       | 12.1   |  |
| 83.5                                  | 501        | "      | -6.57 | 541.12                           | 3.91       | 11.2   |  |
| 83.5                                  | 481        | "      | -5.79 | 542.20                           | 3.13       | 9.4    |  |
| 83.5                                  | 461        | "      | -5.56 | 542.48                           | 2.90       | 8.7    |  |
| 83.5                                  | 441        | "      | -5.76 | 542.28                           | 3.10       | 9.3    |  |
| 83.5                                  | 421        | "      | -5.59 | 542.40                           | 2.93       | 8.8    |  |
| 83.5                                  | 401        | "      | -6.99 | 541.00                           | 4.33       | 13.0   |  |
| CHECK R.M.                            |            |        | 9.52  | 538.47                           |            | 538.47 |  |

Dec. 16, 1948

LEONARD  
WEST  
PRYNE

RE-ESTAKE TOE OF SLOPE AROUND 48' R. CURVE IN N.E. QUAD.

B.M. +2.60 549.26 546.66 SALT 9TS,  
TANK.COORDINATES  
NORTH: EAST: GRADE - HUR ELEV. FILL OFFSET

194.5 386 RADIUS Pt. 6. Rod 3.93

194.5 348 R.C. 545.39 -5.26 544.00 1.33' 4.0'

575° W " -5.15 544.13 1.2' 3.6'

560° W " -4.63 544.63 0.7' 2.1'

645° W " -4.93 544.48 0.9' 2.7'

630° W " 4.73 544.53 0.8' 2.4'

515° W " -4.83 544.33 0.9' 2.7'

151.5 386 E.C. " -4.63 544.63 0.7' 2.1'

151.5 436 CHECK NO. -5.22 544.24 O.K. AS IS.

TOE OF SLOPE BETWEEN 18" DRAIN &amp; 54" RY PASS LINES,

B.M. +0.25 536.64 536.39 ON DAM,  
TOP OF RINGT.P. +1.32 525.02 -12.94 523.70 END 18" LINE  
FILL

N 19.0 524.0 -3.92 521.10 259 77.7

E 230.0 " " " " " "

N 19.0 " " " " " "

E 250.0 " " " " " "

N 19.0 " " " " " "

E 270.0 " " " " " "

Dec. 15, 1948

LEONARD  
WEST  
PRYNE

24.

GROUND PROFILE BEFORE GRADING  
SLOPE STATION, TURNING CIRCLE & ROADWAY, S.W. QUADRANT.B.M. +5.84 541.73 536.39 ON DAM,  
RIM. M.H.SET  
T.B.M. -7.39 534.40 SILL 17  
W 205.44

+0.90 535.30

SET  
T.B.M. -8.16 527.14 SPINE IN  
P.R. 277144

B.M. +0.49 527.63 527.14

CENTER OF  
CIRCLE  
OUTER EDGE -8.1 519.5

N 0° -5.2 522.4

15° -5.8 521.8

30° -5.7 521.9

45° -6.6 521.0

60° -7.9 519.7

75° -8.9 518.7

E 90° -10.2 517.4

105° -10.9 516.7

120° -12.7 514.9

135° -15.2 512.4

150° -13.9 513.7

165° -13.8 513.8

JAN. 3, 1949  
LEONARD  
WEST  
PRIME.

25.

TURNING CIRCLE, PROFILE AROUND EDGE BEFORE GRADING.

|  | 527.63 |        |
|--|--------|--------|
| OUTER EDGE                                   |        |        |
| S 180°                                       | -11.9  | 515.7  |
| 195°   | -10.7  | 516.9  |
| 210°   | -9.8   | 517.8  |
| 225°   | -8.8   | 518.8  |
| 240°   | -8.0   | 519.6  |
| 255°   | -7.4   | 520.2  |
| W 270°                                       | -7.1   | 520.5  |
| 285°   | -6.3   | 521.3  |
| 300°   | -5.9   | 521.7  |
| 315°   | -5.2   | 522.4  |
| 330°   | -4.8   | 522.8  |
| 345°   | -5.2   | 522.4  |
| CENTER OF ROAD:                              |        |        |
| R.C. 0+00 COLORADO AVE:                      | -6.97  | 520.66 |
| 0+32.17 START 570.00 GRADE.<br>COLORADO AVE. | -7.56  | 520.07 |
| 0+52.17 END POINT                            | -8.06  | 519.57 |
| 1+00   | -8.28  | 519.40 |

|                 | 527.63 |        |
|-----------------|--------|--------|
| 1+07.84         | -8.1   | 519.5  |
| 1+17.18 GATE    | -8.9   | 518.7  |
| 1+24.15         | -7.2   | 520.4  |
| 1+50            | -5.9   | 521.7  |
| 1+75            | -5.1   | 522.5  |
| 2+00            | -4.7   | 522.9  |
| 2+25            | -3.9   | 523.7  |
| 2+50            | -3.1   | 524.5  |
| 2+75            | -2.3   | 525.3  |
| 3+00            | -1.7   | 525.9  |
| R.C.<br>3+16.25 | -1.1   | 526.5  |
| CHECK R.M.      | -0.49  | 527.14 |

| SLOPE STAKES:                   |                    | JAN 4, 1949    |        | LEONARD WEST PAYNE |               |
|---------------------------------|--------------------|----------------|--------|--------------------|---------------|
| ROADWAY, COLORADO AVE ENTRANCE: |                    |                |        |                    |               |
| B.M.                            |                    |                |        |                    | SPIKE IN      |
|                                 | 0.78               | 527.92         |        | 527.14             | P.P. 277144   |
| T.P.                            |                    |                | -11.98 | 515.99             |               |
|                                 | 7.75               | H.S.<br>523.74 |        |                    |               |
| R.C. 300                        | 2                  | COLORADO AVE   | -3.08  | 520.66             |               |
| 0+52.17                         | 2                  | "              | 519.75 | -3.68              | 520.06 C 0.31 |
| "                               | 18.95 L.           | "              |        | -3.84              | 520.40 C 0.65 |
| "                               | 15.0 R.            | "              |        | -4.99              | 518.75 F 1.0  |
| 0+52.17                         | 2                  |                | 520.15 | -4.17              | 519.57 F 0.58 |
| "                               | CIRCLE<br>5.7 OFF  | LT "           |        | -1.69              | 522.05 C 1.9  |
| "                               | CIRCLE<br>15.5 OFF | RT "           |        | -8.77              | 514.92 F 5.18 |
| 0+74.78                         | CIRCLE<br>CENTER   |                | 520.60 | -4.58              | 519.16 F 1.44 |
| "                               | CIRCLE<br>7.9 OFF  | LT "           |        | 0.51               | 523.23 C 2.68 |
| "                               | RT SIDE OMITTED.   |                |        |                    |               |
| 1+00                            | 2                  |                | 521.02 | -4.34              | 519.40 F 1.62 |
| "                               | CIRCLE<br>8.3 OFF  | LT "           |        | -1.62              | 522.12 C 1.1  |
| "                               | CIRCLE<br>16.2 OFF | RT "           |        | -8.12              | 515.62 F 5.4  |
| T.P.                            | +7.88              |                | 520.17 | -1.45              | 522.29        |
| CHECK B.M.                      |                    |                | -3.08  | 527.14             |               |

NOTE: GRADES USED ARE .25' LOWER THAN SHOWN ON PLAN TO ALLOW FOR 3" PAVEMENT.

| SLOPE STAKES FOR ENTRANCE ROADWAY |          | JAN 6, 1949 |       | LEONARD WEST PAYNE |                               |
|-----------------------------------|----------|-------------|-------|--------------------|-------------------------------|
| B.M.                              |          |             |       |                    | 16.                           |
| STATION:                          | OFFSET   | GRADE:      |       |                    | SPIKE IN                      |
|                                   | +0.09    | 527.29      |       | 527.14             | P.P. 277144                   |
| 1+50                              | 2        | 523.10      | 5.55  | 521.68             | HURLEY, CUT OR FILL<br>F 1.68 |
| "                                 | 14.1 LT. | "           |       | -4.82              | 522.41 F 0.69                 |
| "                                 | 30.7 RT. | "           |       | -7.09              | 520.20 F 2.9                  |
| 1+75                              | 2        | 524.41      | -4.79 | 522.50             | F 1.91                        |
| "                                 | 15' LT.  | "           |       | -3.82              | 522.41 F 1.0                  |
| "                                 | 32.2 RT. | "           |       | -6.19              | 521.04 F 3.87                 |
| 2+00                              | 2        | 525.72      | 4.30  | 522.92             | F 2.79                        |
| "                                 | 16.2 LT. | "           |       | -2.91              | 524.32 F 1.4                  |
| "                                 | 33.3 RT. | "           |       | -5.28              | 521.95 F 3.77                 |
| 2+25                              | 2        | 527.03      | -3.50 | 523.73             | F 3.50                        |
| "                                 | 17.8 LT. | "           |       | -2.14              | 525.09 F 1.94                 |
| "                                 | 34.2 RT. | "           |       | -4.98              | 522.90 F 4.73                 |
| 2+50                              | 2        | 528.33      | -2.66 | 524.57             | F 3.76                        |
| "                                 | 18.6 LT. | "           |       | -1.10              | 526.18 F 2.20                 |
| "                                 | 34.5 RT. | "           |       | -3.01              | 524.22 F 4.11                 |
| CHECK<br>B.M.                     |          |             | -0.09 | 527.14             | O.K.                          |

NOTE: OFFSETS ARE FROM 2' ROADWAY 15' 24 FT. WIDE, WITH 10' SHOULDER ON RIGHT SIDE.

JAN. 6 1947

LEONARD  
WATSON

97.

## SLOPE STAKES IN ROADWAY, CONT'D.

| STA        | OFFSET         | GRADE  |       | HIGHER | CUT OR FILL |
|------------|----------------|--------|-------|--------|-------------|
|            | +5.80          | 532.94 |       | 527.14 |             |
| 2+75       | 0              | 529.64 | -7.65 | 525.29 | F4.35       |
| "          | 17.5 LT.       | "      | -6.56 | 526.58 | F3.06       |
| "          | 38.2 RT.       | "      | -8.70 | 524.24 | F5.40       |
| 3+00       | 0              | 530.95 | -7.0  | 525.9  | F5.0        |
| "          | 17.5 LT. 1/2 " | "      | 5.99  | 526.95 | F4.0        |
| "          | FROM CUT LINE  | "      |       |        |             |
| "          | 18.0 RT.       | "      | -8.00 | 524.94 | F6.0        |
| P.C.C.     |                |        |       |        |             |
| 3+16.75    | 0              | 531.83 |       |        |             |
| "          | 17.5 LT. 1/2 " | "      | 5.44  | 527.50 | F4.33       |
| "          | FROM CUT LINE  | "      |       |        |             |
| "          | 12.6 RT.       | "      | -5.81 | 527.63 | F4.2        |
| 3+41.75    | 0              | 533.13 |       |        |             |
| "          | 17.5 LT. 1/2 " | "      | -4.60 | 528.34 | F4.79       |
| "          | FROM CUT LINE  | "      |       |        |             |
| "          | 16.0 RT.       | "      | -4.81 | 528.13 | F5.0        |
| 3+66.75    | 0              | 534.44 |       |        |             |
| "          | 17.5 LT.       | "      | -3.85 | 529.09 | F5.35       |
| "          | FROM CUT LINE  | "      |       |        |             |
| "          | 15.6 RT.       | "      | -3.70 | 529.24 | F5.2        |
| E.C.       |                |        |       |        |             |
| 3+79.43    | 0              | 535.11 |       |        |             |
| "          | 17.5 LT.       | "      | -2.25 | 530.79 | F4.32       |
| "          | FROM CUT LINE  | "      |       |        |             |
| "          | 15.8 RT.       | "      | -3.10 | 529.84 | F5.27       |
| CHECK B.M. |                |        | -5.80 | 527.14 |             |

| POINTS     | IN CIRCLE, | PREVIOUSLY | PREVIOUSLY |        |        |
|------------|------------|------------|------------|--------|--------|
|            | OFFSET     | OMMITTED   | OMMITTED   |        |        |
| B.M.       | +0.09      | 527.23     |            | 527.14 |        |
| 1+07.84    | 0          | 521.42     | -8.04      | 519.19 |        |
|            | CIRCLE     |            |            |        |        |
|            | 1.05 LT.   | "          | -6.16      | 521.07 | F0.85  |
|            | CIRCLE     |            |            |        |        |
|            | 10.0 RT.   | "          | -9.15      | 518.08 | F3.34  |
| GATE       |            |            |            |        |        |
| 1+12.18    | 0          | 521.75     | -6.98      | 520.25 | F1.5   |
|            | 13.2 LT.   | "          | -5.88      | 521.25 | F0.4'  |
|            | 34.6 RT.   | "          | -9.68      | 517.55 | F4.2   |
| 1+24.18    | 0          | "          | -6.36      | 520.87 | F0.88  |
|            | 12.7 LT.   | "          | -5.70      | 521.53 | F0.22' |
|            | 31.8 RT.   | "          | -8.58      | 518.65 | F5.1   |
| CHECK B.M. |            |            | -0.09      | 527.14 |        |

SEE ADDITIONAL SLOPE STAKES ON PAGE 47.

SLOPE: CUT AREA 4:1  
FILL AREA 3:1

JAN 10, 1949

LEONARD  
WEST  
PARKING

SLOPE STAKES FOR FUTURE FILTERS AREA

|            |        |        |           | RIM. M.H.<br>511.17<br>W 225.44 |
|------------|--------|--------|-----------|---------------------------------|
| C.M.       | +9.14  | 548.54 | 534.40    |                                 |
| N 87.5     | OFFSET | GRADE  | HUB ELEV. | CUT OR FILL                     |
| W 47.08    | 0.4'   | 538.5  | 540.14    | C 1.64                          |
| N 87.5     |        |        |           |                                 |
| W 75.6     | 0.4'   | "      | 540.19    | C 1.69                          |
| N 87.5     |        |        |           |                                 |
| W 100.1    | 0.5'   | "      | 540.98    | C 1.88                          |
| N 87.5     |        |        |           |                                 |
| W 146.6    | 0.4'   | "      | 540.20    | C 1.70                          |
| N 87.5     |        |        |           |                                 |
| W 153.1    | 0.5'   | "      | 540.33    | C 1.85                          |
| W 47.08    |        |        |           |                                 |
| N 75.0     | 0.3'   | "      | 539.68    | C 1.18                          |
| W 47.08    |        |        |           |                                 |
| N 50.0     | 0.7'   | "      | 539.32    | C 0.82                          |
| W 47.08    |        |        |           |                                 |
| N 25.0     | 0.0    | "      | 538.50    | GRADE                           |
| W 47.08    |        |        |           |                                 |
| AXIS 0     | 1.9'   | "      | 537.37    | F 0.63                          |
| W 47.08    |        |        |           |                                 |
| S 25       | 6.4'   | "      | 536.36    | F 2.14                          |
| W 47.08    |        |        |           |                                 |
| S 50.0     | 10.4'  | "      | 535.04    | F 0.46                          |
| W 47.08    |        |        |           |                                 |
| S 75.0     | 13.2'  | "      | 534.09    | F 4.41                          |
| W 47.08    |        |        |           |                                 |
| S 94.19    | 15.2'  | "      | 533.44    | F 5.06                          |
| W 179.75   |        |        |           |                                 |
| N 75.0     | 0.8'   | "      | 541.70    | C 3.2                           |
| W 179.75   |        |        |           |                                 |
| N 50       | 0.6'   | "      | 540.94    | C 2.44'                         |
| W 179.75   |        |        |           |                                 |
| N 85       | 0.35'  | "      | 539.20    | C 1.4'                          |
| W 179.75   |        |        |           |                                 |
| S 25       | 6.8'   | "      | 536.22    | F 2.28                          |
| W 179.75   | 11.3'  | "      | 534.74    | F 3.76                          |
| S 75.0     |        |        |           |                                 |
| CHECK C.M. |        |        | 534.40    |                                 |

SLOPE 4:1

JAN 10, 1949

LEONARD  
WEST  
PARKING

29.

SLOPE STAKES FOR FUTURE PARKING AREA, S.W. QUAD.

|            |        |        |           | M.H. RIM<br>511.17<br>W 225.44 |
|------------|--------|--------|-----------|--------------------------------|
| C.M.       | +4.42  | 538.82 | 534.40    |                                |
| S 94.17    | OFFSET | GRADE  | HUB ELEV. | FILL                           |
| W 88.25    | 13.3'  | 537.90 | 538.46    | F 4.44                         |
| S 121.51   |        |        |           |                                |
| W 88.25    | 15.9'  | 537.25 | 532.45    | F 5.3                          |
| S 94.17    |        |        |           |                                |
| W 116.00   | 5.0'   | 537.40 | 533.54    | F 3.86                         |
| S 94.17    |        |        |           |                                |
| W 148.00   | 5.0'   | 536.94 | 533.40    | F 3.52'                        |
| S 94.17    |        |        |           |                                |
| W 170.00   | 5.0'   | 536.44 | 534.17    | F 2.27                         |
| S 94.17    |        |        |           |                                |
| W 197.00   | 5.0'   | 536.96 | 534.31    | F 1.65                         |
| S 94.17    |        |        |           |                                |
| W 224.00   | 3.8'   | 536.47 | 534.20    | F 1.27                         |
| S 94.17    |        |        |           |                                |
| W 251.25   | 0.0    | 534.98 | 534.98    | GRADE                          |
| S 165.17   |        |        |           |                                |
| W 100.33   | 5.0'   | 537.75 | 530.10    | F 7.65                         |
| S 165.17   |        |        |           |                                |
| W 126.00   | 5.0'   | 537.40 | 531.96    | F 5.44'                        |
| S 165.17   |        |        |           |                                |
| W 151.00   | 5.0'   | 537.04 | 531.77    | F 5.27'                        |
| S 165.17   |        |        |           |                                |
| W 176.00   | 5.0'   | 536.69 | 532.59    | F 4.10'                        |
| S 165.17   |        |        |           |                                |
| W 201.00   | 5.0'   | 536.33 | 532.25    | F 4.05'                        |
| S 165.17   |        |        |           |                                |
| W 226.00   | 5.0'   | 535.98 | 532.67    | F 3.31'                        |
| S 165.17   |        |        |           |                                |
| W 251.00   | 5.0'   | 535.62 | 531.92    | F 3.70'                        |
| S 165.17   |        |        |           |                                |
| W 276.00   | 5.0'   | 535.26 | 532.46    | F 2.80'                        |
| S 165.17   |        |        |           |                                |
| W 297.53   | 5.0'   | 534.97 | 531.94    | F 3.03'                        |
| CHECK C.M. |        |        | 534.40    |                                |

NOTE: Photos between W240 and W220 from about 5460 to 5485 were taken on top of about ten to twelve feet of fill dirt moved in before x-sections could be taken.

East side of x-sections is on natural ground, in each line. See x-sections taken by Nelson when transit line was put in from Lake Murray Blvd to Colorado St. in Racine, for original ground contour in this gully.

Jan 5, 1949

LEONARD WEST HOME

29.

X-SECTIONS IN GULLY - S.W. QUADRANT.

|                 |       |        |        |        |                         |
|-----------------|-------|--------|--------|--------|-------------------------|
| B.M.            | +0.48 | 525.62 |        | 527.14 |                         |
| SET T.P.        | +3.08 | 517.81 | -12.84 | 514.78 | SPIKE IN EUC. TREE.     |
| W153            |       |        |        |        |                         |
| 5425            |       |        | -0.3   | 517.5  |                         |
| 5450            |       |        | -3.9   | 513.9  |                         |
| 5475            |       |        | -7.3   | 510.5  |                         |
| 5500            |       |        | -12.5  | 506.9  |                         |
| 5525            |       |        | -15.0  | 502.9  |                         |
| W240            |       |        |        |        |                         |
| 5425            |       |        | -4.5   | 513.3  |                         |
| 5450            |       |        | -7.5   | 510.3  |                         |
| 5475            |       |        | -9.8   | 508.0  |                         |
| 5500            |       |        |        |        | Too low - see next page |
| <del>5525</del> |       |        |        |        |                         |
| W230            |       |        |        |        |                         |
| 5425            |       |        | -3.8   | 514.0  |                         |
| 5450            |       |        | -6.6   | 511.2  |                         |
| W220 ✓          |       |        |        |        |                         |
| 5450            |       |        | -9.2   | 509.6  |                         |
| W230 ✓          |       |        |        |        |                         |
| 5475            |       |        | 10.6   | 507.2  |                         |
| W220 ✓          |       |        |        |        |                         |
| 5475            |       |        | 10.7   | 507.1  |                         |
| W210 ✓          |       |        |        |        |                         |
| 5475            |       |        | 11.5   | 506.5  |                         |



X-SECTIONS IN GULLY, CONT'D.

517.91

|            |       |        |                 |
|------------|-------|--------|-----------------|
| T.P.       |       | -11.72 | 506.09          |
|            | +0.67 | 506.71 |                 |
| S500 ✓     |       |        |                 |
| W240 ✓     |       | -5.3   | 501.4           |
| S500 ✓     |       |        |                 |
| W280 ✓     |       | -7.5   | 499.2           |
| S500 ✓     |       |        |                 |
| W270 ✓     |       | -8.8   | 497.9           |
| S500 ✓     |       |        |                 |
| W210 ✓     |       | -10.6  | 496.1           |
| S500 ✓     |       |        |                 |
| W200 ✓     |       | -11.1  | 495.6           |
| S500 ✓     |       |        |                 |
| W190 ✓     |       | -10.4  | 496.3           |
| S525 ✓     |       |        |                 |
| W240 ✓     |       | -8.4   | 498.3           |
| S525 ✓     |       |        |                 |
| W230 ✓     |       | -10.5  | 496.2           |
| S525 ✓     |       |        |                 |
| W220 ✓     |       | -13.4  | 493.3           |
| S525 ✓     |       |        |                 |
| W210 ✓     |       | -14.9  | 491.8           |
| S525 ✓     |       |        |                 |
| W200 ✓     |       | -14.0  | 492.7           |
| S525 ✓     |       |        |                 |
| W190 ✓     |       | -17.1  | 489.6           |
| S525 ✓     |       |        |                 |
| W180 ✓     |       | -14.8  | 491.9           |
| T.P.       |       | -0.92  | 505.79          |
|            | +9.82 | 515.61 |                 |
| CHECK T.P. |       | -0.82  | 514.79 = 514.78 |

JAN 19, '49 LEONARD WEST HYNE, 80.

| SLOPE STAKES, |        | ZEOLITE GALLERY EXCAVATION |        |            |               |
|---------------|--------|----------------------------|--------|------------|---------------|
|               |        |                            |        | SIL. W305. | M.H. RIM CUT  |
| R.M.          | +6.80  | 541.20                     |        | 534.40     |               |
| N 12          | OFFSET | GRADE                      | -      | HUB ELEV.  |               |
| W47.08        | 5.12   | 525.67                     | -3.02  | 538.18     | 14.51         |
| N 12          |        |                            |        |            |               |
| W23.5         | 3.68   | "                          | -3.03  | 538.17     | 14.50         |
| N 12          |        |                            |        |            |               |
| O+O           | 3.57   | "                          | -3.25  | 537.95     | 14.28         |
| N 12          |        |                            |        |            |               |
| E23.5         | 3.55   | "                          | -3.34  | 537.86     | 14.19         |
| N 12          |        |                            |        |            |               |
| E47.08        | 4.22   | "                          | -5.55  | 535.65     | 11.98         |
| E 47.08       |        |                            |        |            |               |
| S 14.3        | 2.95   | "                          | -5.73  | 535.47     | 11.80         |
| E 47.08       |        |                            |        |            |               |
| S 40.6        | 2.88   | "                          | -6.02  | 535.18     | 11.51         |
| E 47.08       |        |                            |        |            |               |
| S 66.9        | 2.69   | "                          | -6.76  | 534.44     | 10.77         |
| E 47.08       |        |                            |        |            |               |
| S 98.2        | 2.56   | "                          | -7.28  | 533.22     | 10.25         |
| E 47.08       |        |                            |        |            |               |
| S 119.5       | 3.50   | "                          | -7.60  | 533.60     | 9.93          |
| S 119.5       |        |                            |        |            |               |
| E 23.5        | 2.29   | "                          | -8.61  | 532.59     | 8.92          |
| S 119.5       |        |                            |        |            |               |
| W47.08        | 3.03   | "                          | -8.94  | 532.26     | 8.59          |
| W47.08        |        |                            |        |            |               |
| S 98.2        | 2.47   | "                          | -7.63  | 533.57     | 9.90          |
| W47.08        |        |                            |        |            |               |
| S 66.9        | 2.70   | "                          | -6.72  | 534.48     | 10.81         |
| W47.08        |        |                            |        |            |               |
| S 40.6        | 2.92   | "                          | -5.85  | 535.35     | 11.68         |
| W47.08        |        |                            |        |            |               |
| S 14.3        | 3.37   | "                          | -4.05  | 537.15     | 13.48         |
| SET           |        |                            |        |            | M.H. ON       |
| T.R.M.        |        |                            | -10.80 | 530.40     | 21" Gas Drain |
| CHECK         |        |                            | -6.80  | 534.40     |               |
| R.M.          |        |                            |        |            |               |

JAN. 18, '49  
LEONARD  
WEST  
PAYNE

SLOPE STAKES FOR RAMP TO ZENITE GALLERY

RAMP GRADE 6:1 SIDE SLOPE  $\frac{1}{4}:1$

| R.M.       | 5.54   | 535.94 |       | 530.40    | RIM M.H.           |
|------------|--------|--------|-------|-----------|--------------------|
| W 3.0      | OFFSET | GRADE  | -     | HUB ELEV. | 21" SALT DRAIN CUT |
| S 119.5    | 2.1    | 534.03 | -3.58 | 532.86    | C 8.38             |
| W 27.0     |        |        |       |           |                    |
| S 119.5    | 1.7    | "      | -5.14 | 530.80    | 6.77               |
| W 3.0      |        |        |       |           |                    |
| S 117.8    | 1.0    | 527.36 | -4.59 | 531.25    | 4.0                |
| W 27.0     |        |        |       |           |                    |
| S 117.8    | OMIT.  | "      |       |           |                    |
| W 3.0      |        |        |       |           |                    |
| S 157.8    |        | 530.70 | -5.24 | 530.70    | GRADE              |
| W 27.0     |        |        |       |           |                    |
| S 157.8    | OMIT.  | "      |       |           |                    |
| CHECK R.M. |        |        | -5.54 | 530.40    |                    |

NOTE: BOTTOM OF RAMP IS AT S 117.8, ELEV. 523.67

JAN. 18, '49  
LEONARD  
WEST  
PAYNE

31.

X-SECTIONS OF FILTER AREA BEFORE BACKFILLING.

| B.M. | +8.53 | 542.83 | 534.40 | RIM M.H.     |
|------|-------|--------|--------|--------------|
| W 50 |       |        |        | SILL. WOODS. |
| N 90 |       |        | -3.9   | 539.6        |
| N 75 |       |        | -4.1   | 538.8        |
| N 60 |       |        | -4.2   | 538.7        |
| N 45 |       |        | -4.5   | 538.4        |
| N 30 |       |        | -4.8   | 538.1        |
| 0    |       |        | -5.7   | 537.2        |
| S 70 |       |        | -6.4   | 536.0        |
| S 40 |       |        | -8.1   | 534.8        |
| S 60 |       |        | -8.7   | 534.2        |
| S 70 |       |        | -9.2   | 533.7        |
| S 95 |       |        | -9.8   | 533.1        |
| W 60 |       |        | -8.6   | 539.3        |
| N 90 |       |        | -4.4   | 538.5        |
| N 75 |       |        | -4.7   | 538.2        |
| N 60 |       |        | -4.9   | 538.0        |
| N 40 |       |        | -5.8   | 537.1        |
| N 20 |       |        | -6.4   | 536.5        |
| 0    |       |        |        |              |

X-SECT, FILTER AREA CONT'D.

542.98

|     |       |       |   |
|-----|-------|-------|---|
| W60 |       |       |   |
| S20 | -7.2  | 535.7 | ✓ |
| S40 | -8.5  | 534.4 | ✓ |
| S60 | -8.9  | 534.0 | ✓ |
| S70 | -9.4  | 533.5 | ✓ |
| S95 | -9.9  | 533.0 | ✓ |
| W80 |       |       |   |
| N20 | -3.5  | 539.4 | ✓ |
| N25 | -4.2  | 538.7 | ✓ |
| N60 | -4.4  | 538.5 | ✓ |
| N40 | -4.9  | 538.0 | ✓ |
| N20 | -5.8  | 537.1 | ✓ |
| 0   | -6.9  | 536.0 | ✓ |
| S20 | -7.7  | 535.7 | ✓ |
| S40 | -8.2  | 534.0 | ✓ |
| S60 | -9.1  | 533.8 | ✓ |
| S80 | -10.0 | 532.9 | ✓ |
| S95 | -10.5 | 532.4 | ✓ |
| S86 | -8.3  | 534.6 | ✓ |
| S87 | -10.6 | 532.3 | ✓ |

32.

542.98

|      |       |       |   |
|------|-------|-------|---|
| W100 |       |       |   |
| S95  | -10.4 | 532.5 | ✓ |
| S87  | 10.7  | 532.7 | ✓ |
| S80  | 10.7  | 532.7 | ✓ |
| S60  | 9.5   | 533.4 | ✓ |
| S40  | 9.3   | 533.6 | ✓ |
| S35  | 8.7   | 534.2 | ✓ |
| S17  | 8.6   | 534.3 | ✓ |
| S14  | 7.6   | 535.3 | ✓ |
| 0    | 6.7   | 536.2 | ✓ |
| N20  | -5.6  | 537.3 | ✓ |
| N40  | -5.0  | 537.9 | ✓ |
| N60  | -4.1  | 538.8 | ✓ |
| N90  | -3.5  | 539.4 | ✓ |
| N86  | -2.9  | 540.0 | ✓ |
| N90  | -2.3  | 540.6 | ✓ |

X-SECT. FILTER AREA - CONT'D  
542.93

|      |       |       |
|------|-------|-------|
| W120 |       |       |
| N 90 | -2.9  | 540.0 |
| N 90 | -2.7  | 540.2 |
| N 60 | -4.7  | 538.7 |
| N 40 | -5.5  | 537.4 |
| N 20 | -5.9  | 537.0 |
| 0    | -6.8  | 536.1 |
| S 16 | -7.9  | 535.0 |
| S 21 | -9.2  | 533.7 |
| S 27 | -9.6  | 533.3 |
| S 29 | -9.2  | 533.7 |
| S 40 | -9.5  | 533.4 |
| S 60 | -10.1 | 532.8 |
| S 80 | -10.7 | 532.2 |
| S 88 | -10.4 | 532.5 |
| S 95 | -11.3 | 531.6 |

542.93

|       |       |       |
|-------|-------|-------|
| W140  |       |       |
| S 0.0 | -7.0  | 535.9 |
| S 20  | -8.3  | 534.6 |
| S 27  | -8.9  | 534.0 |
| S 33  | -10.1 | 532.8 |
| S 40  | -10.4 | 532.5 |
| S 60  | -10.8 | 532.1 |
| S 80  | -11.1 | 531.8 |
| S 89  | -11.5 | 531.4 |
| S 95  | -10.6 | 532.3 |
| N 20  | -6.1  | 536.8 |
| N 40  | -5.3  | 537.6 |
| N 60  | -4.6  | 538.3 |
| N 80  | -3.7  | 539.2 |
| N 90  | -3.3  | 539.6 |

OLD CESS POOL AT W 140 } APPROX CENTER,  
N 114 }

## X-SECT. FILTER AREA - CONT'D.

| X-SECT. | FILTER AREA - | CONT'D. |
|---------|---------------|---------|
|         | 542.99        |         |
| W160    |               |         |
| N90     | -3.4          | 539.5   |
| N80     | -3.8          | 539.1   |
| N60     | -4.6          | 538.5   |
| N40     | -4.9          | 538.0   |
| N30     | -5.8          | 537.1   |
| W150    |               |         |
| N20     | -6.0          | 536.9   |
| W150    |               |         |
| O.O     | -7.3          | 535.6   |
| W160    |               |         |
| S20     | -8.3          | 534.6   |
| S30     | -9.7          | 533.7   |
| S40     | -10.2         | 532.7   |
| S60     | -10.5         | 532.4   |
| S80     | -10.6         | 532.3   |
| S90     | -10.4         | 532.5   |

NOTE: EXCAVATION FOR CONDUIT EXTENSION  
EXTENDS IN A HALF CIRCLE FROM  
N20 <sup>W180</sup> TO S20, AND TO W150, WITHIN  
THE FILTER AREA.

|            |       | 542.99 |
|------------|-------|--------|
| W175       |       |        |
| N90        | -3.3  | 539.6  |
| N80        | -4.0  | 538.9  |
| W180       |       |        |
| N60        | -4.4  | 538.5  |
| N40        | -4.8  | 538.1  |
| N30        | -5.6  | 537.3  |
| S22        | -9.6  | 533.8  |
| S40        | -10.3 | 532.6  |
| S60        | -10.1 | 532.8  |
| S80        | -10.5 | 532.4  |
|            |       |        |
| CHECK B.M. | -8.53 | 534.40 |

Ckd 1-20-49  
EOM

| SLOPE STAKES N. EDGE |        | SETTLING BASINS. |       | LEONARD WEST PAVING |         |
|----------------------|--------|------------------|-------|---------------------|---------|
|                      |        |                  |       | COND. FROM          |         |
|                      | OFFSET | GRADE            |       | HIGH ELEV.          | CUT     |
| N 71.50              | +6.44  | 544.91           |       | 538.47              | 549.8E. |
| 396.08E              | 2.5'   | 534.5            | -3.26 | 541.65              | 7.15    |
| 350E                 | 1.4'   | "                | -4.88 | 540.09              | 5.59    |
| 300E                 | 1.9'   | "                | -2.89 | 542.02              | 7.52    |
| 250E                 | 1.6'   | "                | -4.14 | 540.77              | 6.27    |
| 200E                 | 1.0'   | "                | -6.25 | 538.66              | 4.16    |
| 150E                 | 0.9'   | "                | -6.79 | 538.12              | 3.62    |
| 100E                 | 1.1'   | "                | -6.17 | 538.74              | 4.24    |
| N 71.50              |        |                  |       |                     |         |
| 47.08E               | 1.3    | "                | -6.70 | 538.18              | 3.68    |
| CHECK B.M.           |        |                  | -6.44 | 538.47              |         |

FEB. 3, '49. LEONARD, WEST, PAVING.

| BLUE TOPS, TOP OF BANK |       | BETWEEN INFLUENT VENTURI |       | SALT STG. BASIN.   |                    |
|------------------------|-------|--------------------------|-------|--------------------|--------------------|
| STR. AND BY-PASS STR.  |       |                          |       | PAINT ON COR. STR. |                    |
| B.M.                   | +3.74 | 550.40                   |       | 546.66             |                    |
|                        |       |                          | -4.97 | 545.43             |                    |
|                        |       |                          | -4.97 | 545.43             | C.O. 38            |
|                        |       |                          | -4.97 | 545.43             | C.O. 27            |
|                        |       |                          | -4.97 | 545.43             | PAINT ON COR. STR. |

CUT SHOWS AMOUNT GROUND WAS HIGH WHEN BLUE TOPS WERE SET.

| CHECK TOP ELEV. OF MAN-HOLES IN FILL AREAS |       | LEONARD WEST PAVING |       | RIM M.H. AT SILENT W. 305.44 |           |
|--|-------|---------------------|-------|------------------------------|-----------|
| B.M.                                       | +5.81 | 539.71              |       | 534.40                       |           |
| M.H.                                       |       |                     |       |                              |           |
| COORDINATES                                |       |                     |       |                              |           |
| S111.17                                    |       |                     |       |                              |           |
| W305.44                                    |       |                     | -5.81 | 534.40                       |           |
| S107.17                                    |       |                     |       |                              |           |
| W302.47                                    |       |                     | -5.18 | 534.69                       |           |
| S107.17                                    |       |                     |       |                              |           |
| W177.66                                    |       | 536.55              | -3.94 | 536.87                       | 0.18 LOW. |
| S109.17                                    |       |                     |       |                              |           |
| W169.40                                    |       | 536.70              | -3.08 | 536.69                       | 0.07 LOW. |
| S174.85                                    |       |                     |       |                              |           |
| W110.00                                    |       |                     | -1.52 | 538.19                       |           |
| S181.85                                    |       |                     |       |                              |           |
| W100.17                                    |       |                     | -1.50 | 538.21                       |           |
| S76.50                                     |       |                     |       |                              |           |
| W267.75                                    |       |                     | -4.94 | 534.77                       |           |
| S10.42                                     |       |                     |       |                              |           |
| W267.75                                    |       |                     | -2.65 | 537.03                       |           |
| S10.42                                     |       |                     |       |                              |           |
| W328.02                                    |       |                     | -2.74 | 536.97                       |           |
| S16.60                                     |       |                     |       |                              |           |
| W330.02                                    |       |                     | -2.74 | 536.97                       |           |
| S17.19                                     |       |                     |       |                              |           |
| W334.02                                    |       |                     | -2.64 | 537.07                       |           |
| N64.57                                     |       |                     |       |                              |           |
| W334.02                                    |       |                     | -2.29 | 537.42                       |           |
| 48" WASTE WASH WATER LINE                  |       |                     |       |                              |           |
| RISE OVER VALVE ON 6" DRAIN.               |       |                     | -5.28 | 534.43                       |           |
| CHECK B.M.                                 |       |                     | -5.81 |                              |           |

R-1-49

LEONARD  
WEST

36.

| BLUE-TOPS IN SETTLING BASIN AREA |        |                 |                   |
|----------------------------------|--------|-----------------|-------------------|
| 5177<br>E 60                     | + 9.08 | 539.59          | 530.31            |
|                                  |        | GRADE<br>534.50 | GRADE ROD<br>4.89 |
| 1325.<br>56.4E                   | "      | "               | -4.89 534.50      |
| 100E                             | "      | "               | -4.90 534.49      |
| 150E                             | "      | "               | -4.89 534.50      |
| 200E                             | "      | "               | -4.90 534.49      |
| 250E                             | "      | "               | -4.89 534.50      |
| 300E                             | "      | "               | -4.89 534.50      |
| 350E                             | "      | "               | -4.89 534.50      |
| 1325<br>399E                     | "      | "               | -4.89 534.50      |
| 1075<br>099E                     | "      | "               | -4.90 534.49      |
| 051E                             | "      | "               | -4.90 534.49      |
| 300E                             | "      | "               | -4.90 534.49      |
| 250E                             | "      | "               | -4.89 534.50      |
| 200E                             | "      | "               | -4.89 534.50      |
| 150E                             | "      | "               | -4.89 534.50      |
| 100E                             | "      | "               | -4.89 534.50      |
| 1075<br>56E                      | "      | "               | -4.89 534.50      |

RIM M.H.  
8" DRAIN.TOP OF  
HALL.

ROBE TOPS IN SETTLING BASIN AREA - CONT'D

|                | H.d.<br>539.39  | B.P.P.<br>4.89 |        |          |
|----------------|-----------------|----------------|--------|----------|
|                | GRADE<br>534.50 |                |        |          |
| S 82           |                 |                |        |          |
| E 56           | "               | -4.89          | 534.50 |          |
| E 100          | "               | -4.89          | 534.50 |          |
| E 150          | "               | -4.89          | 534.50 |          |
| E 200          | "               | -4.89          | 534.50 |          |
| E 250          | "               | -4.89          | 534.50 |          |
| E 300          | "               | -4.89          | 534.50 |          |
| E 350          | "               | -4.90          | 534.49 |          |
| S 82           | "               | -4.89          | 534.50 |          |
| E 400          | "               | -4.89          | 534.50 |          |
| T.P.           | H.d.            |                |        | Rim. Ht. |
| CHANGES + 9.05 | 539.36          | -9.05          | 530.31 | 8" Sewer |
| S 57           |                 |                |        |          |
| E 56           | 534.50          | -4.86          | 534.50 |          |
| E 100          | "               | -4.86          | 534.50 |          |
| E 150          | "               | -4.86          | 534.50 |          |
| E 200          | "               | -4.86          | 534.50 |          |
| E 250          | "               | -4.87          | 534.49 |          |
| E 300          | "               | -4.87          | 534.49 | C.O.S.*  |
| E 350          | "               | -4.85          | 534.51 | C.O.4    |
| S 57           |                 |                |        |          |
| E 396          | "               | -4.86          | 534.50 | C.O.4    |

|       | H.d.<br>539.36  | B.P.P.<br>4.86 |        |        |
|-------|-----------------|----------------|--------|--------|
|       | GRADE<br>534.50 |                |        |        |
| S 82  |                 |                |        |        |
| E 396 | "               |                | OMIT   | C.O.9* |
| E 350 | "               | -4.86          | 534.50 | C.O.4  |
| E 300 | "               | -4.86          | 534.50 | C.O.3  |
| E 250 | "               | -4.86          | 534.50 | C.O.3  |
| E 200 | "               | -4.87          | 534.49 | C.O.3  |
| E 150 | "               | -4.86          | 534.50 |        |
| E 100 | "               | -4.86          | 534.50 | C.O.3  |
| S 82  | H.d. = 539.54   | B.P.P.         |        |        |
| E 48  | GRADE = 534.50  | -5.04          | OMIT   | C.O.6  |
| S 7   |                 |                |        |        |
| E 47  | "               |                | OMIT   | C.1.2  |
| E 100 | "               | -5.05          | 534.49 | C.O.4  |
| E 150 | "               | -5.03          | 534.51 | C.O.2  |
| E 200 | "               | -5.03          | 534.51 | C.O.3  |
| E 250 | "               | -5.04          | 534.50 | C.O.7  |
| E 300 | "               | -5.04          | 534.50 | C.O.6  |
| E 350 | "               | -5.05          | 534.49 | C.O.5  |
| S 7   |                 |                |        |        |
| E 396 | "               |                | OMIT   | C.O.6  |

\* NOTE: CUTS SHOW AMOUNT OF DIRT ABOVE GRADE AT EACH GRADE HOR LOCATION.



BLUE TOPS IN SETTLING BASIN AREA.

FEB. 8 '49. LEONARD  
WEST  
PAYNE

|          | 539.54<br>GRADE | GRADE ROD |        |        |
|----------|-----------------|-----------|--------|--------|
| N 18     | 534.50          | 5.04      |        |        |
| E 396.08 |                 |           | C 1.5  |        |
| E 350    |                 |           | C 0.5  |        |
| E 500    |                 | -5.03     | 534.51 | C 0.15 |
| E 250    |                 | -5.04     | 534.50 | C 0.3  |
| E 100    |                 | -5.03     | 534.51 | C 0.2  |
| E 150    |                 | -5.04     | 534.50 | F 0.05 |
| E 100    |                 | -5.03     | 534.51 | C 0.4  |
| N 18     |                 |           | OMIT   | C 2.1  |
| E 47     |                 |           |        |        |
| N 43     |                 |           | OMIT   | C 2.4  |
| E 47     |                 |           |        |        |
| E 100    |                 |           |        | F 0.35 |
| E 150    |                 |           | GRADE  |        |
| E 300    |                 |           |        | C 0.1  |
| E 250    |                 |           |        | C 0.35 |
| E 300    |                 |           |        | C 0.5  |
| E 350    |                 |           |        | C 0.2  |
| N 43     |                 |           |        |        |
| E 396.08 |                 |           |        | C 1.6  |

SEE PAGE 48

NOTE: CUT SHOWS AMOUNT ABOVE GRADE AT EACH POINT AT 3 P.M. FEB. 13. HUBS NOT SET AT THIS TIME.

SETTLING BASIN AREA - CONTD.

39.

|          | GRADE  | GRADE ROD |        |
|----------|--------|-----------|--------|
| N 70     | 534.50 |           |        |
| E 396.08 |        |           | C 2.9  |
| E 350    |        |           | C 0.65 |
| E 300    |        |           | C 0.45 |
| E 250    |        |           | C 0.2  |
| E 200    |        |           | C 0.1  |
| E 150    |        |           | F 0.2  |
| E 100    |        |           | C 0.1  |
| N 70     |        |           |        |
| E 47     |        |           | C 1.9  |

FEB. 9 '49 LEONARD, WEST, PAYNE

| CUT       | STAKES: E. END | SETTLING BASIN | 3.0' OFFSET |
|-----------|----------------|----------------|-------------|
| 3177 E 60 |                |                | RIM M.H. ON |
| R.M.      | +9.23          | 539.54         | 530.31      |
| N 63.6    |                | GRADE          | 8" SEWER    |
| E 396     |                | 534.50         | CUT         |
| N 46      |                | -0.27          | 539.27      |
| E 396     |                | "              | 4.77        |
| N 23      |                | -1.33          | 538.21      |
| E 396     |                | "              | 3.71        |
| N 0.0     |                | -2.05          | 537.49      |
| E 396     |                | "              | 3.0         |
| 523       |                | -2.80          | 536.74      |
| E 396     |                | "              | 2.24        |
| 523       |                | -3.83          | 535.71      |
| E 396     |                | "              | 1.21        |

NOTE: SLOPE STAKES NOT USED BECAUSE THEY INTERFERE WITH BLADING OPERATION.

FEBR, '49

LEONARD  
WEST  
PAYNE

89,

## X-SECTIONS IN FUTURE HEADHOUSE AREA

|        |        |        |      | AREA   |
|--------|--------|--------|------|--------|
| R.M.   | +10.24 | 544.64 |      | 534.40 |
| NIR    |        | GRADE  |      |        |
| E 0.0  |        | 537.5  | -7.7 | 536.9  |
| E 5.0  |        |        | -6.8 | 537.8  |
| E 10.0 |        |        | -7.3 | 537.3  |
| E 15.0 |        |        | -7.3 | 537.3  |
| E 20.0 |        |        | -7.1 | 537.5  |
| E 25.0 |        |        | -7.5 | 537.1  |
| E 30.0 |        |        | -8.2 | 536.4  |
| E 35.0 |        |        | -9.0 | 535.6  |
| E 40.0 |        |        | -8.9 | 535.7  |
| E 45.0 |        |        | -8.1 | 536.5  |
| NIR    |        |        |      |        |
| W 5.0  |        |        | -7.3 | 537.3  |
| W 10.0 |        |        | -8.4 | 536.2  |
| W 15.0 |        |        | -8.5 | 536.1  |
| W 20.0 |        |        | -8.1 | 536.5  |
| W 25.0 |        |        | -8.0 | 536.6  |
| W 30.0 |        |        | -7.9 | 536.7  |
| W 35.0 |        |        | -8.2 | 536.4  |

HEADHOUSE AREA.  
X-SECTIONS

|             | H.A.<br>544.64<br>GRADE |      | -CONTD. |
|-------------|-------------------------|------|---------|
| W40         | 537.5                   | -8.1 | 536.5   |
| W47         |                         | -6.5 | 538.1   |
| N 22<br>W47 |                         | -6.2 | 539.4   |
| W40         |                         | -6.6 | 539.0   |
| W30         |                         | -6.5 | 539.1   |
| W20         |                         | -6.6 | 539.0   |
| W10         |                         | -6.6 | 539.0   |
| 00          |                         | -6.8 | 538.8   |
| E10         |                         | -6.6 | 538.0   |
| E20         |                         | -6.6 | 538.0   |
| E30         |                         | -7.1 | 537.5   |
| E40         |                         | -7.6 | 537.0   |
| N 22<br>E45 |                         | -7.7 | 536.9   |
| N 47<br>E45 |                         | -7.4 | 537.2   |
| E40         |                         | -7.2 | 537.4   |
| E30         |                         | -6.9 | 537.7   |
| E20         |                         | -6.6 | 539.0   |
| E10         |                         | -6.8 | 538.8   |

|               | H.A.<br>544.64<br>GRADE |      |       |
|---------------|-------------------------|------|-------|
| N 47<br>0.0   | 537.5                   | -6.0 | 538.6 |
| W10           |                         | -6.8 | 538.8 |
| W20           |                         | -5.6 | 539.0 |
| W30           |                         | -5.4 | 539.2 |
| W40           |                         | -5.4 | 539.2 |
| N 47          |                         | -5.4 | 539.2 |
| N 71.5<br>W47 |                         | -5.3 | 539.3 |
| W40           |                         | -4.9 | 539.7 |
| W30           |                         | -5.1 | 539.5 |
| W40           |                         | -5.3 | 539.9 |
| W10           |                         | -5.5 | 539.1 |
| 0.0           |                         | -5.4 | 539.2 |
| E10           |                         | -5.6 | 539.0 |
| E20           |                         | -5.3 | 539.3 |
| E30           |                         | -6.4 | 538.2 |
| E40           |                         | -6.5 | 538.1 |
| E47           |                         | -6.3 | 538.3 |

CONT'D. NEXT PAGE.

FEB. 2, 1949

LEONARD  
WEST  
PRYNE

41.

| X-SECTIONS, Cont'd | H.d.           | HEADHOUSE AREA |        |
|--------------------|----------------|----------------|--------|
| N 105.4            | 544.64         |                |        |
| E 47               | GRADE<br>537.5 | -5.9           | 539.9  |
| E 40               |                | -4.0           | 540.6  |
| E 30               |                | -3.6           | 541.0  |
| E 20               |                | -3.8           | 540.8  |
| E 10               |                | -3.2           | 541.4  |
| O.D.               |                | -3.1           | 541.5  |
| W 10               |                | -2.5           | 542.1  |
| W 20               |                | -2.8           | 541.9  |
| W 30               |                | -3.2           | 541.4  |
| W 40               |                | -3.4           | 541.2  |
| W 47,              |                | -3.4           | 541.2  |
| CHECK P.M.         |                | -10.24         | 534.40 |

| BLUE-TOPS S. SIDE PARKING AREA. |            |        |          |        | Rim. M.H. |
|---------------------------------|------------|--------|----------|--------|-----------|
| O.M.                            | +6.35      | 540.75 |          | 534.40 | 511.17    |
| S 165.17                        |            | GRADE  | GRADE AD |        | W 105.44  |
| W 297.35                        |            | 534.97 | -5.78    | 534.97 | F 1.3'    |
| W 276.0                         |            | 535.26 | -5.49    | 535.26 | F 1.2'    |
| W 251.0                         |            | 535.62 | -5.15    | 535.62 | F 1.4'    |
| W 226.0                         |            | 535.98 | -4.77    | 535.98 | F 0.8'    |
| W 201.0                         |            | 536.33 | -4.42    | 536.33 | F 0.5'    |
| W 176.0                         |            | 536.69 | -4.06    | 536.69 | F 0.8'    |
| W 151.0                         |            | 537.04 | -3.71    | 537.04 | F 0.4'    |
| W 126.0                         |            | 537.40 | -3.35    | 537.40 | F 0.3'    |
| S 165.17                        |            |        |          |        |           |
| W 100.85                        |            | 537.75 | -3.00    | 537.75 | F 0.2'    |
| AROUND 25' RADII                |            |        |          |        |           |
| N 15° E                         |            | 537.91 | -3.44    | 537.91 | F 0.8'    |
| N 30° E                         |            | 536.87 | -3.98    | 536.87 | F 0.7'    |
| N 45° E                         |            | 536.45 | -4.32    | 536.45 | F 0.8'    |
| N 60° E                         |            | 535.99 | -4.76    | 535.99 | F 1.0'    |
| N 75° E                         |            | 535.55 | -5.20    | 535.55 | F 0.8'    |
| N 90° E                         | END RADII. | 535.11 | -5.64    | 535.11 | F 0.1'    |
| CHECK P.M.                      |            |        | -6.35    | 534.40 |           |

NOTE: FILE SHOWS AMOUNT BELOW GRADE AT EACH POINT ON FEB. 2.

FEB 16 '49.

LEONARD  
WEST  
PINE

42.

| FINAL      | BLUE TOPS, N. SIDE | SETTING | KLASIN | AREA.    |
|------------|--------------------|---------|--------|----------|
| R.M.       | +9.11              | 539.42  | 530.31 | RIM M.H. |
| N 18.      |                    | GRADE   | 6.00   | 8" DRAIN |
| 47 E       |                    | 534.5   | -4.92  | 534.50   |
| L400 E     |                    |         | -4.92  | 534.5    |
| L450 E     |                    |         | -4.92  | 534.5    |
| R400 E     |                    |         | -4.91  | 534.51   |
| R450 E     |                    |         | -4.92  | 534.49   |
| S400 E     |                    |         | -4.92  | 534.49   |
| S450 E     |                    |         | -4.92  | 534.5    |
| S+96.08 E  |                    |         | OMIT   |          |
| N 43.      |                    |         |        |          |
| 47 E       |                    |         | OMIT   |          |
| L400 E     |                    |         | -4.92  | 534.5    |
| L450 E     |                    |         | -4.92  | 534.5    |
| R400 E     |                    |         | -4.92  | 534.5    |
| R450 E     |                    |         | -4.92  | 534.49   |
| S400 E     |                    |         | -4.92  | 534.49   |
| S450 E     |                    |         | -4.92  | 534.49   |
| S+96.08 E  |                    |         | OMIT   |          |
| SPINE ON Q | at 96.08 E.        |         | -5.19  | 534.23   |
| CHECK R.M. |                    |         | -9.11  | 530.31   |

FEB 17 1949

LEONARD, WEST,  
PAVINE

48.

## BLUE TOPS, N. OF BY-PASS CHANNEL.

| COORDINATES |          | GRADE  | G. ROD | HUR ELEV. | E. END<br>SALT BASIN |
|-------------|----------|--------|--------|-----------|----------------------|
| NORTH       | E. OR W. |        |        |           |                      |
| R.M.        | +3.59    | 550.25 |        | 546.66    |                      |
| 91          | W 172.5  | 540    | -10.25 | 540.0     |                      |
| 124         | "        | 540    | -8.85  | 541.40    | C 1.4                |
| 161         | "        | "      | -8.95  | 541.30    | C 1.3                |
| 186         | "        | "      | -8.55  | 541.70    | C 1.7                |
| 220         | "        | "      | -8.55  | 541.7     | C 1.7                |
| 298.5       | "        | "      | -8.30  | 541.95    | C 2.0                |
| 112         | W 120    | 542    | -9.55  | 540.70    | F 1.3                |
| 112         | W 158.5  | "      | -9.25  | 541.0     | F 1.0                |
| 116         | W 162.5  | "      | -8.25  | 542.0     |                      |
| 161         | "        | "      | -8.25  | 542.0     |                      |
| 186         | "        | "      | -8.25  | 542.0     |                      |
| 220         | "        | "      | -7.65  | 542.60    | C 0.6                |
| 116         | W 120    | 544    | -8.25  | 542.0     | F 2.0                |
| 161         | "        | "      | -6.25  | 544.0     |                      |
| 186         | "        | "      | -6.25  | 544.0     |                      |
| 220         | "        | "      | -6.25  | 544.0     |                      |

FEB. 15, '49. LEONARD  
PAYNE.

44.

## BLUE-TOPS, N. OF BY-PASS CHANNEL - CONTD.

| H.d.         |          | 550.25. |        |           |
|--------------|----------|---------|--------|-----------|
| COORDINATES: |          |         |        |           |
| NORTH        | E. OR W. | GRADE   | G. ROD | HUB ELEV. |
| 124          | W 78     | 545.43  | -4.82  | 545.43    |
| 161          | "        | 545.33  | -4.92  | 545.33    |
| 186          | "        | 545.33  | -4.92  | 545.33    |
| 210          | "        | 546.23  | -5.02  | 545.23    |
| 124          | W 50     | 545.43  | -4.82  | 545.43    |
| 161          | "        | 545.33  | -4.92  | 545.33    |
| 186          | "        | 545.33  | -4.92  | 545.33    |
| 210          | "        | 545.23  | -5.02  | 545.23    |
| CHECK R.M.   |          |         | -3.59  | 546.66    |
|              | +3.72    | 550.38  |        |           |
| 124          | E 47     | 545.43  | -4.95  | 545.43    |
| 124          | 0-0      | "       | -4.95  | 545.43    |
| 161          | 0-0      | 545.33  | -5.05  | 545.33    |
| 186          | 0-0      | "       | -5.05  | 545.33    |
| 210          | 0-0      | 545.23  | -5.15  | 545.23    |
| N 210        | E 315    | "       | -5.15  | 545.23    |

FEB. 15, '49  
LEONARD  
PAYNE.

## BLUE-TOPS, N. OF BY-PASS CHANNEL, CONTD.

| H.d.         |       | 550.25 | G. ROD. | HUB ELEV. |
|--------------|-------|--------|---------|-----------|
| COORDINATES: |       | GRADE  |         |           |
| N 210        | E 50  | 545.23 | -5.15   | 545.23    |
| N 186        | "     | " .33  | -5.05   | " .33     |
| N 161        | "     | " .33  | -5.05   | " .33     |
| N 114.5      | E 55  | " .43  | -4.95   | " .43     |
| N 210        | E 100 | " .23  | -5.15   | " .23     |
| N 210        | E 150 | " .23  | -5.15   | " .23     |
| N 210        | E 200 | " .23  | -5.15   | " .23     |
| N 186        | "     | " .33  | -5.05   | " .33     |
| N 161        | "     | " .33  | -5.05   | " .33     |
| N 161        | E 250 | " .33  | -5.05   | " .33     |
| N 186        | "     | " .33  | -5.05   | " .33     |
| N 210        | "     | " .23  | -5.15   | " .23     |
| N 210        | E 300 | " .23  | -5.15   | " .23     |
| N 186        | "     | " .33  | -5.05   | " .33     |
| N 161        | "     | " .33  | -5.05   | " .33     |
| N 161        | E 350 | " .33  | -5.05   | " .33     |
| N 186        | E 343 | " .33  | -5.05   | " .33     |

PAINT  
ON STR.

BLUE-TOPS, N. OF RY-PASS CHANNEL - CONT'D.

| H.d.   | COORDINATES | GRADE  | G. ROD | HOR. ELEV. |               |
|--------|-------------|--------|--------|------------|---------------|
|        |             | 550.38 |        |            |               |
| N124   | E100        | 545.38 | 5.00   | 545.38     |               |
| "      | E150        | "      | "      | "          |               |
| "      | E200        | "      | "      | "          |               |
| "      | E250        | "      | "      | "          |               |
| "      | E300        | "      | "      | "          |               |
| "      | E350        | "      | "      | "          |               |
| N106   | W47.08      | 540.00 | -10.38 | 540.00     | L<br>RXP H.C. |
| "      | W23.5       | "      | "      | "          |               |
| "      | 0-0         | "      | "      | "          |               |
| "      | E23.5       | "      | "      | "          |               |
| "      | E47.08      | "      | "      | "          |               |
| NR27   | 0-0         | 547.0  | -9.38  | 547.0      |               |
| "      | W50         | "      | "      | "          |               |
| "      | W100        | "      | "      | "          |               |
| "      | W140        | "      | "      | "          |               |
| NR22.8 | W145.8      | "      | "      | "          |               |
| NR28.5 | W151.5      | "      | "      | "          |               |

|             |          | 550.38 |            |                    |                             |
|-------------|----------|--------|------------|--------------------|-----------------------------|
|             |          | GRADE  | G. ROD     | HOR. ELEV.         |                             |
| NR44.9      | W151.5   | 547.00 | -3.38      | 547.00             |                             |
| NR50        | W140     | "      | "          | "                  |                             |
| "           | W100     | "      | "          | "                  |                             |
| "           | W50      | "      | "          | "                  |                             |
| "           | 0-0      | "      | "          | "                  |                             |
| "           | E50      | "      | "          | "                  |                             |
| "           | E100     | "      | "          | "                  |                             |
| "           | E150     | "      | "          | "                  |                             |
| "           | E200     | "      | "          | "                  |                             |
| "           | E250     | "      | "          | "                  |                             |
| "           | E300     | "      | "          | "                  |                             |
| CHECK P.M.  |          |        | -9.72      | 546.66             |                             |
| COORDINATES |          |        | FEB 21 '99 | LEONARD-WEST-THYNE |                             |
| NORTH       | E. OR W. | GRADE  | G. ROD     | HOR. ELEV.         |                             |
| H.d.        |          | H.d.   |            |                    | SALT STG.<br>BASIN, E. END. |
|             | +3.59    | 550.25 |            | 546.66             |                             |
| NR50        | E328     | 547.00 | -3.25      | 547.00             |                             |
| NR40.0      | E338     | "      | "          | "                  |                             |
| NR32        | E338     | "      | "          | "                  |                             |
| NR27        | E333     | "      | "          | "                  |                             |



| COORDINATES |        | 550.25 |        |            |
|-------------|--------|--------|--------|------------|
| NORTH       | E OR W | GRADE  | G. ROD | HOB. ELEV. |
| N 227       | E 300  | 547    | -3.25  | 547.00     |
| "           | E 250  | "      | "      | "          |
| "           | E 200  | "      | "      | "          |
| "           | E 150  | "      | "      | "          |
| "           | E 100  | "      | "      | "          |
| "           | E 50   | "      | "      | "          |

FEB 21 '49

CHECK TOP OF GOTTAR FARMS, SALT STG. BASIN

|            |         |        |       |        |                      |
|------------|---------|--------|-------|--------|----------------------|
| EAST END   | S. COR. | 546.00 | -4.25 | 546.00 | O.K.                 |
| "          | S. RAIL | "      | -4.26 | 545.99 | 21 LOW               |
| "          | N. RAIL | "      | -4.25 | 546.00 | O.K.                 |
| "          | N. COR. | "      | -4.26 | 545.99 | 21 LOW               |
| WEST END   | S. COR. | "      | -4.35 | 545.90 | 10 LOW               |
| "          | S. RAIL | "      | -4.31 | 545.94 | 106 LOW              |
| "          | N. RAIL | "      | -4.28 | 545.97 | 23 LOW               |
| "          | N. COR. | "      | -4.25 | 546.00 | O.K.                 |
| CHECK B.M. |         |        | -3.59 | 546.66 | COR. SALT STG. BASIN |

FEB. 21, '49. LEONARD WEST PAYNE.

46.

BLUE TOPS IN FUTURE FILTER'S AREA

| B.M.     |         | 543.77 |        | 534.40 | RIM M.H. 511.17 |
|----------|---------|--------|--------|--------|-----------------|
|          |         | GRADE  | G. ROD | ELEV.  | W 806.44        |
| N 87.5   | W 47.1  | 538.5  | -7.17  | 539.6  | C 1.1           |
| "        | W 80    | "      | -3.40  | 540.37 | C 1.9           |
| "        | W 113   | "      | -3.24  | 540.53 | C R. 0          |
| "        | W 146   | "      | -3.35  | 540.42 | C 1.9           |
| "        | W 179.5 | "      | -3.40  | 540.37 | C 1.9           |
| N 50.00  | W 47.3  | "      | 5.27   | 538.5  |                 |
| "        | W 80    | "      | OMIT.  |        |                 |
| "        | W 113   | "      | -5.26  | 538.51 |                 |
| "        | W 146   | "      | -5.27  | 538.50 |                 |
| "        | W 179.1 | "      | -5.26  | 538.51 |                 |
| AXIS 0-0 | W 49.0  | "      | -5.27  | 538.50 |                 |
| "        | W 80    | "      | -5.27  | 538.50 |                 |
| "        | W 113   | "      | -5.27  | 538.50 |                 |
| "        | W 146   | "      | -5.26  | 538.51 |                 |
| "        | W 179.0 | "      | -5.27  | 538.50 |                 |
| 3.50     | W 57.5  | "      | -5.27  | 538.50 |                 |
| "        | W 80    | "      | -5.29  | 538.48 |                 |

BLUE-TOPS, FUTURE FILTER AREA - CONT'D.

| H.S.       |        | 543.77 |         |        |
|------------|--------|--------|---------|--------|
|            |        | GRADE  | G. ROD. | ELEV.  |
| 550        | W113   | 538.5  | -5.27   | 538.50 |
| "          | W146   | "      | -5.25   | 538.52 |
| "          | W170.8 | "      | -5.29   | 538.48 |
| 577        | W60.3  | "      | -5.28   | 538.49 |
| "          | W80    | "      | -5.28   | 538.49 |
| 592        | W101.5 | "      | -5.26   | 538.51 |
| "          | W113   | "      | -5.28   | 538.49 |
| "          | W146   | "      | -5.30   | 538.47 |
| "          | W166.9 | "      | -5.27   | 538.60 |
| CHECK R.M. |        |        | -9.37   | 534.40 |

FEB. 25 '49. LEONARD WEST FAYNE 47.

| SLOPE  | STAKES | AROUND | TURNING | CIRCLE     | SPINE IN P.P. |
|--------|--------|--------|---------|------------|---------------|
| R.M.   | +1.26  | 528.40 |         | 527.14     | " R27149      |
| T.P.   | +0.39  | 528.62 | -5.17   | 523.89     | GUINAE        |
|        |        | GRADE  | -       | HOR. ELEV. | COT OR FILL   |
| 0+35.8 | Lt.    | 519.75 | -3.07   | 520.55     | 2.08 (R.4)    |
| "      | Rt.    | "      | -4.87   | 518.75     | F1.0 OFF 3.0  |
| 0+44.8 | Lt.    | 519.96 | -1.86   | 521.76     | C1.8 5.4      |
| "      | Rt.    | "      | -6.96   | 516.66     | F3.3' 6.9     |
| 0+53.8 | Lt.    | 520.17 | -1.45   | 522.17     | C2.0' 6.0     |
| "      | Rt.    | "      | -7.15   | 516.47     | F3.7' 11.1    |
| 0+62.8 | Lt.    | 520.38 | -0.14   | 523.48     | C3.1 9.3      |
| "      | Rt.    | "      | -7.54   | 516.08     | F4.3' 12.9    |
| 0+71.8 | Lt.    | 520.59 | -0.13   | 523.49     | C2.9 8.7      |
| "      | Rt.    | "      | -8.93   | 514.69     | F5.9 17.7     |
| 0+80.8 | Lt.    | 520.80 | -0.52   | 523.10     | C2.3 6.9      |
| "      | Rt.    | "      | -9.32   | 514.30     | F6.5 19.5     |
| 0+89.8 | Lt.    | 521.01 | -0.71   | 522.91     | C1.9 5.7      |
| "      | Rt.    | "      | -12.61  | 511.01     | F10.0 30.0    |
| 0+98.8 | Lt.    | 521.22 | -1.30   | 522.32     | C1.1 3.8      |
| "      | Rt.    | "      | -8.70   | 514.92     | F6.3 18.9     |

SLOPE = 3:1

|            |     |        |       |        |           |
|------------|-----|--------|-------|--------|-----------|
| H.I.       |     | 528.62 |       |        |           |
| 1+07.34    | LT. | 521.42 | -2.20 | 521.42 | GRADE     |
| "          | RT. | "      | -7.60 | 516.02 | F54' 13.2 |
| 1+17.18    | LT. | 521.76 | -1.97 | 521.75 | GRADE     |
| "          | RT. | "      | -6.57 | 519.05 | F47' 14.1 |
| 1+24.18    | LT. | "      | -1.87 | 521.75 | GRADE     |
|            | RT. | "      | -1.87 | 521.75 | GRADE     |
| T.P.       |     |        | -1.56 | 522.06 | ROCK      |
|            |     | +6.87  |       | 529.93 |           |
| CHECK R.M. |     |        | -1.79 | 527.14 |           |

| SLOPE      | STAKES        | AROUND | WASH WATER STG. | TANK   | ON DAM.    |
|------------|---------------|--------|-----------------|--------|------------|
| R.M.       | +4.63         | 541.02 |                 | 536.39 | FILL OFF   |
|            |               | GRADE  |                 |        |            |
| S18°W      | 11.0' TO R.S. | 537.83 | -3.79           | 537.23 | F0.6' 1.8  |
| S36°W      | OFF           | "      | -4.49           | 536.55 | F1.3' 3.9  |
| S54°W      |               | "      | -5.40           | 535.62 | F2.2' 6.6  |
| S72°W      |               | "      | -6.09           | 534.93 | F2.9' 8.7  |
| WEST       |               | "      | -6.50           | 534.72 | F3.1' 9.3  |
| N72°W      |               | "      | -6.59           | 534.43 | F3.4' 10.2 |
| N54°W      |               | "      | -7.60           | 533.42 | F4.4' 13.2 |
| N36°W      |               | "      | -6.59           | 534.43 | F3.4' 10.2 |
| N18°W      |               | "      | -5.76           | 535.36 | F2.5' 7.5  |
| CHECK R.M. |               |        | -4.63           | 536.39 | ON DAM.    |
|            |               | +8.40  |                 | 544.79 |            |
| S18°W      |               | GRADE  |                 |        |            |
| S18°E      | 6' OFF        | 536.23 | -8.21           | 536.58 | C 0.35     |
| S36°W      | "             | 536.13 | -8.21           | 536.58 | C 0.45     |
| S36°E      | "             | 536.05 | -8.21           | 536.58 | C 0.55     |
| S54°W      | "             | 536.93 | -8.21           | 536.58 | C 0.65     |
| S72°W      | "             | 536.83 | -8.21           | 536.58 | C 0.75     |
| S90°E      | "             | 536.73 | -8.21           | 536.58 | C 0.85     |
| WEST       | "             |        |                 |        |            |
| EAST       | "             |        |                 |        |            |
| N72°W      | "             |        |                 |        |            |
| N72°E      | "             |        |                 |        |            |

OFFSETS FROM OUTER EDGE CONCRETE BASE.

SLOPE STAKES AROUND WASH WATER TANK, CONT'D.

|                  |        |        |       |        |        |
|------------------|--------|--------|-------|--------|--------|
|                  |        | 544.79 |       |        |        |
| N54°W            |        |        |       |        |        |
| N54°E            | 6' OFF | 535.69 | -8.21 | 536.58 | C 0.95 |
| N36°W            | "      |        |       |        |        |
| N36°E            | "      | 535.58 | -8.21 | 536.58 | C 1.05 |
| N18°W            | "      |        |       |        |        |
| N18°E            | "      | 535.48 | -8.21 | 536.58 | C 1.15 |
| NORTH            | "      |        |       |        |        |
| S18°W            |        |        |       |        |        |
| S18°E            | 5' OFF | 536.89 | "     | "      | C 0.25 |
| S36°W            |        |        |       |        |        |
| S36°E            | "      | "      | "     | "      | "      |
| S54°W            |        |        |       |        |        |
| S54°E            | "      | "      | "     | "      | "      |
| S72°W            |        |        |       |        |        |
| S72°E            | "      | "      | "     | "      | "      |
| WEST             |        |        |       |        |        |
| EAST             | "      | "      | "     | "      | "      |
| N72°W            |        |        |       |        |        |
| N72°E            | "      | "      | "     | "      | "      |
| N54°W            |        |        |       |        |        |
| N54°E            | "      | "      | "     | "      | "      |
| N36°W            |        |        |       |        |        |
| N36°E            | "      | "      | "     | "      | "      |
| N18°W            |        |        |       |        |        |
| N18°E            | "      | "      | "     | "      | "      |
| NORTH            | "      | "      | "     | "      | "      |
| GRADE, EDGE SLAB |        | 536.58 |       |        |        |
| CHECK B.M.       |        |        | -8.40 | 536.89 | DAM.   |

RESET SLOPE STAKES, N-SIDE PARKING AREA.

|            |       |        |       |           |         |        |  |
|------------|-------|--------|-------|-----------|---------|--------|--|
| B.M.       | +6.31 | 540.71 |       | 534.40    |         |        |  |
|            |       | GRADE  | -     | HUB ELEV. | CIT     | OFFSET |  |
| S94.17     |       |        |       |           |         |        |  |
| W116.00    |       | 537.40 | -2.21 | 538.50    | C 1.1'  | 3.8'   |  |
| W148.00    |       | 536.92 | -2.29 | 538.42    | C 1.5'  | 4.5'   |  |
| W170.00    |       | 536.44 | -2.77 | 536.94    | C 0.5'  | 1.5'   |  |
| W192.00    |       | 535.96 | -4.75 | 535.96    | GRADE   |        |  |
| W224.00    |       | 535.47 | -5.24 | 535.47    | GRADE   |        |  |
| WRS1.25    | B.C.  | 534.98 | -5.60 | 535.11    | C 0.18' | 0.4'   |  |
| 50' THOUS  |       |        |       |           |         |        |  |
| S15°W      |       | 534.84 | -5.87 | 534.84    | GRADE   |        |  |
| S30°W      |       | 534.70 | -6.02 | 534.69    | "       |        |  |
| S45°W      |       | 534.56 | -6.15 | 534.56    | "       |        |  |
| S60°W      |       | 534.42 | -6.29 | 534.42    | "       |        |  |
| S75°W      |       | 534.28 | -6.43 | 534.28    | "       |        |  |
| 564.67     |       |        |       |           |         |        |  |
| WRS1.25    | E.C.  | 534.15 | -5.96 | 534.75    | C 0.6'  | 1.8'   |  |
| CHECK B.M. |       |        | 6.31  | 534.40    |         |        |  |

P.M. M.H.  
511.17  
W 305.44

MARCH 3, '49. LEONARD  
PAYNE

RESET GRADE STAKES, S. SIDE PARKING AREA.

| R.M.    | +4.97 | 539.37 |        | 534.40 | RIM M.H.<br>3111.17 W 305.44 |
|---------|-------|--------|--------|--------|------------------------------|
| S165.17 |       | GRADE  | G. ROD |        |                              |
| W100.83 |       | 539.75 | -1.62  | 537.75 | GRADE                        |
| W126    |       | 537.40 | -1.97  | 537.40 | "                            |
| W151    |       | 537.04 | -2.33  | 537.04 | "                            |
| W176    |       | 536.69 | -2.68  | 536.69 | "                            |
| W201    |       | 536.33 | -3.04  | 536.33 | "                            |
| W226    |       | 535.98 | -3.39  | 535.98 | "                            |
| W251    |       | 535.62 | -3.75  | 535.62 | "                            |
| W276    |       | 535.26 | -4.11  | 535.26 | "                            |
| W297.33 |       | 534.97 | -4.40  | 534.97 | NOT SET F 2.9                |

SLOPE STAKES ACROSS WEST END PARKING AREA.

|            |           |        |       |        |        |
|------------|-----------|--------|-------|--------|--------|
| S165.17    |           |        |       |        |        |
| W297.33    | 7' OFF    | 534.97 | -8.04 | 531.33 | F 3.64 |
| S142.78    |           |        |       |        |        |
| W305.05    | 4' OFF    | 534.60 | -7.03 | 532.34 | F 2.26 |
| S116.78    |           |        |       |        |        |
| W312.78    | 3.3' OFF  | 534.22 | -6.25 | 533.12 | F 1.1  |
| S90.78     | 5' RADIUS |        |       |        |        |
| W320.50    | E.C.      | 533.85 | -5.52 | 533.85 | GRADE  |
| S87.45     | 5' RADIUS |        |       |        |        |
| W325.76    | B.C.      | 533.75 | -5.62 | 533.75 | "      |
| CHECK R.M. |           |        | -4.97 | 534.40 |        |

NOTE: 5:1 SLOPE NOT USED ON W. END DUE TO DRAINAGE DITCH AROUND ADJACENT PRIVATE PROPERTY PER ORDERS W.C. BROWN.

MARCH 3, '49 LEONARD  
PAYNE.

50.

PROFILE OVER OUTER EDGE FUTURE ROAD, N.W. QUAD.

| R.M.      | +12.06      | 546.46 |       | 534.40 | RIM M.H.<br>3111.17 W 305.44 |
|-----------|-------------|--------|-------|--------|------------------------------|
| N. 154.50 |             | GRADE  |       |        |                              |
| W122.5    |             | 540.0  | -5.1  | 541.4  | 20.75'                       |
| N154.5    | 112' RADIUS |        |       |        |                              |
| W199.25   | B.C.        |        | -6.4  | 540.1  | 17.6'                        |
| CURVE     |             |        |       |        |                              |
| N 90° W   |             |        | -7.2  | 539.3  | 17.6'                        |
| N 18° W   |             |        | -7.9  | 539.2  | 17.6'                        |
| N 27° W   |             |        | -7.9  | 538.6  | 17.6'                        |
| N 36° W   |             |        | -8.5  | 538.0  | 17.6'                        |
| N 45° W   |             |        | -9.0  | 537.5  | 17.6'                        |
| N 54° W   |             |        | -9.6  | 536.9  | 17.6'                        |
| N 60° W   |             |        | -9.8  | 536.7  | 17.6'                        |
| N 72° W   |             |        | -9.2  | 537.3  | 17.6'                        |
| N 81° W   |             |        | -9.7  | 536.8  | 17.6'                        |
| N 42.5    |             |        |       |        |                              |
| W305.25   | E.C.        |        | -9.5  | 537.0  | 24.0'                        |
| N18.5     |             |        |       |        |                              |
| W305.25   |             |        | -9.8  | 536.7  | 25.0'                        |
| S 6.5     |             |        |       |        |                              |
| W305.25   |             |        | -9.9  | 536.6  | 25.0'                        |
| S 31.46   | 32.75 RAD.  |        |       |        |                              |
| W305.25   | B.C.        |        | -10.3 | 536.2  |                              |
| S 75° E   |             |        | -10.7 | 535.9  |                              |
| S 60° E   |             |        | -11.1 | 534.4  |                              |

PROFILE OVER OUTER EDGE FUTURE ROAD-CONT'D.

|           |                    |        |        |
|-----------|--------------------|--------|--------|
| H.d.      | 546.46             |        |        |
| S45°E     | 32.75' RAD.        | -11.2  | 535.3  |
| S30°E.    | "                  | -11.5  | 535.0  |
|           | E.C.               |        |        |
| S120°30'E | PROP. LINE         | -11.7  | 534.8  |
|           | CROWN OF ASPHALT   |        |        |
|           | PVMT. WYOMING AVE. | -12.12 | 534.34 |

PROFILE OVER INNER EDGE OF FUTURE ROADWAY.

|         |            |       |       |
|---------|------------|-------|-------|
| S64.67  | GRADE      |       |       |
| W231.25 | 534.15     | -11.9 | 534.6 |
| S31.46  |            |       |       |
| W231.25 |            | -10.2 | 536.3 |
| S 6.5   |            |       |       |
| W231.25 |            | -9.7  | 536.8 |
| N18.5   |            |       |       |
| W231.25 |            | -9.5  | 537.2 |
| N42.5   | R.C.       |       |       |
| W231.25 | 72' RADIUS | -9.5  | 537.2 |
| N80°W   |            | -9.2  | 537.5 |
| N70°W   |            | -9.0  | 537.5 |
| N60°W   |            | -8.8  | 537.7 |
| N50°W   |            | -8.4  | 538.1 |
| N40°W   |            | -8.2  | 538.3 |
| N30°W   |            | -7.9  | 538.6 |
| N20°W   |            | -7.8  | 539.2 |

PROFILE OVER INNER EDGE FUTURE ROAD-CONT'D.

|                               |             |        |        |
|-------------------------------|-------------|--------|--------|
| H.d.                          | 546.46      |        |        |
| N10°W                         |             | -6.9   | 539.6  |
| N114.5                        | E.C.        |        |        |
| W229.25                       | 72' RADIUS  | -6.5   | 540.0  |
| N114.5                        |             |        |        |
| W193.25                       |             | -6.4   | 540.1  |
| N114.5                        | GRADE.      |        |        |
| W172.5                        | 540.0       | -5.5   | 541.0  |
| N114.5                        |             |        |        |
| W150.0                        |             | -4.9   | 541.6  |
| N114.5                        |             |        |        |
| W120.0                        |             | -5.4   | 541.1  |
| N154.5                        | NORTH       |        |        |
| W172.5                        | EDGE, QUART | -5.1   | 541.4  |
| N154.5                        |             |        |        |
| W150                          | "           | -5.5   | 543.0  |
| N154.5                        |             |        |        |
| W125                          | "           | -2.4   | 544.1  |
| N164.5                        |             |        |        |
| W100                          | "           | -1.6   | 544.9  |
| N154.5                        | R.C.        |        |        |
| W84                           | 10' RADIUS  | -1.2   | 545.3  |
| TOP COVER ON C.I. VALVE       |             |        |        |
| PIPE ON 6" OPEN FROM 42" LINE |             | -7.89  | 538.57 |
| CHECK                         |             |        |        |
| R.M.                          |             | -7.87  | 538.59 |
| CHECK                         |             |        |        |
| R.M.                          |             | -12.06 | 534.40 |

VENTURIA ST. CORNER BOX  
RIM M.H.  
SHI. W.305.

MARCH 10, 1949. LEONARD  
PAYNE  
CARVER.

52.

PROFILE OVER  $\frac{1}{2}$  OF FUTURE ROAD, N.W. QUAD.

| R.M.               | +7.92                | 546.52 |      | 538.60 | VENTURI<br>STR. |
|--------------------|----------------------|--------|------|--------|-----------------|
| 0+00               | N 134.50<br>W 84.0   |        | -1.2 | 545.5  |                 |
| 0+25               |                      |        | -1.8 | 544.7  |                 |
| 0+40               |                      |        | -2.5 | 544.0  |                 |
| 0+66               |                      |        | -3.6 | 542.9  |                 |
| 0+75               |                      |        | -4.1 | 542.4  |                 |
| 0+80               |                      |        | -4.3 | 542.2  |                 |
| 0+90               |                      |        | -6.0 | 540.5  |                 |
| 1+00               |                      |        | -6.1 | 540.4  |                 |
| 1+09 <sup>25</sup> | N 134.50<br>W 193.25 | R.C.   | -6.8 | 540.2  |                 |
| 1+22 <sup>75</sup> | 90                   |        | -6.7 | 539.8  |                 |
| 1+38 <sup>43</sup> | 180                  |        | -6.9 | 539.6  |                 |
| 1+53 <sup>25</sup> | 270                  |        | -7.4 | 539.1  |                 |
| 1+63 <sup>28</sup> | 360                  |        | -7.9 | 538.6  |                 |
| 1+89 <sup>50</sup> | 450                  |        | -8.5 | 538.0  |                 |
| 1+98 <sup>81</sup> | 540                  |        | -8.9 | 537.6  |                 |
| 2+14 <sup>33</sup> | 630                  |        | -9.2 | 537.3  |                 |
| 2+29 <sup>59</sup> | 720                  |        | -9.4 | 537.1  |                 |

NOTE: STATIONS ARE BY ADDING CHORD LENGTHS IN THE FIELD FOR THE ABOVE CURVE.

|                                  |                                       |      |        | 546.52 |                     |
|----------------------------------|---------------------------------------|------|--------|--------|---------------------|
| R+45 <sup>82</sup>               | 91°                                   |      | -9.3   | 537.2  |                     |
| R+61 <sup>23</sup>               | N 42.5<br>W 230.25                    | E.C. | -9.2   | 537.3  |                     |
| R+75                             |                                       |      | -9.6   | 536.9  |                     |
| R+100                            |                                       |      | -9.8   | 536.7  |                     |
| R+125                            |                                       |      | -10.3  | 536.2  |                     |
| R+135 <sup>16</sup>              | S 31.46<br>W 293.25                   | R.C. | -10.2  | 536.3  |                     |
| R+146 <sup>88</sup>              | 150                                   |      | -10.7  | 535.8  |                     |
| R+158 <sup>60</sup>              | 300                                   |      | -11.4  | 535.1  |                     |
| R+170 <sup>33</sup>              | 450                                   |      | -11.8  | 534.7  |                     |
| R+182 <sup>05</sup>              | 600                                   |      | -12.2  | 534.3  |                     |
| R+195 <sup>84</sup>              | 773.33" WYOMING ST.<br>E.C. ON CURVE. |      | -12.14 | 534.38 | CENTER OF<br>STREET |
| CHECK<br>R.M. 1.11 511.11 W.M.S. |                                       |      | -12.11 | 534.41 | 534.40              |

NOTE: STATIONS FOR CURVE STARTING AT R+35.16  
ARE CALCULATED ARC LENGTHS. RAD. = 44.75'

MARCH 11, '49. LEONARD  
PAYNE  
CARTER

GRADE STAKES ON ROADWAY, COLORADO ST. ENTRANCE.

| R.M.               |          | 522.61 |        | 527.14 | SPIKE IN<br>PP. 271149 |
|--------------------|----------|--------|--------|--------|------------------------|
|                    |          | GRADE  |        | HUB    |                        |
| 1+17 <sup>18</sup> | 12.5 Lt. | 521.75 | -10.86 | 521.75 |                        |
| "                  | 22.5 Rt. | "      | "      | 521.75 |                        |
| 1+24 <sup>18</sup> | 12.5 Lt. | "      | "      | 521.75 |                        |
| "                  | 22.5 Rt. | "      | "      | 521.75 |                        |
| 1+50               | 12.5 Lt. | 523.10 | -9.51  | 523.10 |                        |
| "                  | 22.5 Rt. | "      | "      | 523.10 |                        |
| 1+75               | 12.5 Lt. | 524.41 | -8.20  | 524.41 |                        |
| "                  | 22.5 Rt. | "      | -8.20  | 524.41 |                        |
| 2+00               | 12.5 Lt. | 525.72 | -6.89  | 525.72 |                        |
| "                  | 22.5 Rt. | "      | -6.89  | 525.72 |                        |
| 2+25               | 12.5 Lt. | 527.03 | -5.58  | 527.03 |                        |
| "                  | 22.5 Rt. | "      | -5.58  | 527.03 |                        |
| 2+50'              | 12.5 Lt. | 528.33 | -4.28  | 528.33 |                        |
| "                  | 22.5 Rt. | "      | -4.28  | 528.33 |                        |
| 2+75               | 12.5 Lt. | 529.64 | -2.97  | 529.64 |                        |
| "                  | 22.5 Rt. | "      | -2.97  | 529.64 |                        |
| T.P.               |          |        | -1.55  | 531.06 | Rock.                  |

53.

| T.P.               | +8.52    | 539.58 |       | 531.06          |
|--------------------|----------|--------|-------|-----------------|
|                    |          | GRADE  |       | HUB             |
| 3+00               | 12.5 Lt. | 530.25 | -8.63 | 530.95          |
| "                  | 12.0 Rt. | "      | -8.63 | 530.95          |
| P.O.C.<br>3+16.75  | 12.5 Lt. | 531.83 | -7.75 | 531.83          |
| "                  | "        | "      | -7.75 | 531.83          |
| 3+41 <sup>75</sup> | 12.5 Lt. | 533.13 | -6.45 | 533.13          |
| CHECK R. 17,       |          |        | -5.18 | 534.40 = 534.40 |



MARCH 14, '49.

LEONARD  
PAYNE  
CARVER.

| SLOPE STAKES FOR ROADWAY, N.W. QUADRANT |       |        |        |        |                     |
|---|-------|--------|--------|--------|---------------------|
| B.M.                                    | +7.81 | 546.41 |        | 538.60 | VENTURI<br>CHAMBER  |
| 0+00                                    | RD RT | 545.30 | -1.12  | 545.29 | GRADE               |
| 0+20                                    | RD RT | 544.81 | -1.60  | 544.81 | "                   |
| 0+50                                    | RD RT | 543.58 | -2.23  | 543.58 | "                   |
| 0+75                                    | RD RT | 542.55 | -4.16  | 542.25 | FO <sup>2</sup> 0.9 |
| 1+00                                    | RD RT | 541.52 | -6.09  | 540.92 | FI <sup>2</sup> 2.6 |
| "                                       | RD LT | 541.52 | -6.29  | 540.12 | FI <sup>2</sup> 4.2 |
| 1+25                                    | RT    | 540.49 | -7.52  | 538.89 | FI <sup>2</sup> 4.8 |
| "                                       | LT    | 540.49 | -6.92  | 540.09 | FO <sup>4</sup> 1.2 |
| 1+50                                    | RT    | 539.47 | -7.74  | 538.67 | FO <sup>2</sup> 2.4 |
| "                                       | LT    | 539.47 | -6.94  | 539.47 | GRADE               |
| 1+70                                    | RT    | 538.65 | -8.46  | 537.95 | FO <sup>2</sup> 2.1 |
| "                                       | LT    | 538.65 | -7.76  | 538.65 | GRADE               |
| 2+00                                    | RT    | 537.67 | -10.24 | 536.17 | FI <sup>2</sup> 4.2 |
| "                                       | LT    | 537.67 | -9.34  | 538.07 | CO <sup>4</sup> 1.2 |
| 2+30                                    | RT    | 537.22 | -9.19  | 537.22 | GRADE               |
| "                                       | LT    | 537.22 | -8.69  | 537.72 | CO <sup>5</sup> 1.2 |

|                    |    |         |        |        |                             |
|--------------------|----|---------|--------|--------|-----------------------------|
| H.d.               |    | 546.41  |        |        |                             |
|                    |    | GRADE   |        |        |                             |
| 2+50               | RT | 537.09  | -9.32  | 537.09 | GRADE                       |
| "                  | LT | 537.09  | -9.32  | 537.09 | "                           |
| 2+60               | RT | 537.02  | -9.39  | 537.02 | "                           |
|                    | LT | 537.02  | -9.19  | 537.22 | CO <sup>2</sup> 0.6         |
| 2+90               | RT | 536.71  | -9.70  | 536.71 | GRADE                       |
|                    | LT | 536.71  | -9.30  | 537.11 | CO <sup>4</sup> 1.2         |
| 3+20               | RT | 536.13  | -10.28 | 536.13 | GRADE                       |
| "                  | LT | 536.13  | -9.90  | 536.43 | CO <sup>5</sup> 1.05        |
| 3+50               | RT | 535.51  | -10.80 | 535.61 | CO <sup>2</sup> 0.9         |
| "                  | LT | *534.90 | -10.71 | 535.70 | CO <sup>2</sup> 2.4         |
| 3+80               | RT | 534.25  | -11.28 | 535.15 | CO <sup>2</sup> 2.2         |
| 3+95 <sup>24</sup> | RT | 534.58  | -11.50 | 534.89 | CO <sup>5</sup> 1.5         |
| CHECK B.M.         |    |         | -7.81  | 538.60 | COR. BOX ON<br>VENTURI STR. |

GRADES PROVIDED BY C.O. NELSON IN FIELD OFFICE.

\*NOTE: GRADE ON EAST, OR LT., SIDE SLOPED UNIFORMLY  
BETWEEN STA 3+20 AND ESTABLISHED GRADE OF  
534.15 AT 564.67.

54.

MARCH 15, '49.

LEONARD  
PAYNE  
CARRIER.

## GRADE STAKES AROUND TRUCK SCALES.

B.M. +11.40 549.87 538.47 CONC. MON.  
5+83 E.COORDINATES GRADE  
NORTH EAST83.5 380 545.33 -4.54 545.33 KEEL MARK  
ON WALL

" 420 " -4.54 545.33

" 460 " -4.54 545.33

" 500 " -4.54 545.33

" 540 " -4.54 545.33

" 561 " -4.54 545.33

93.5 571 " -4.54 545.33

98.0 380 546.0 -3.87 546.00 KEEL MARK  
ON WALL

" 420 " -3.87 546.00

" 460 " -3.87 546.00

" 500 " -3.87 546.00

" 517.5 " -3.86 546.00 ON WALL  
-3.87 546.00

" 536.0 " -3.87 546.00

102 517.5 " -3.79 546.08 ON TOP  
OMIT - PAYED. CONC. WALL

T.P. -3.30 546.57

+3.52 550.09

55.

H.d. 550.09  
COORDINATES GRADE  
NORTH EAST

111.0 438 545.33 -4.76 545.33

" 466 " -4.76 545.33

" 494 " -4.76 545.33 PAINT ON  
WALL

" 541 " -4.76 545.33 "

" 571 " -4.76 545.33

141.5 571 " -4.78 545.33

151.5 386 " -4.76 545.33

" 420 " -4.78 545.33

" 460 " -4.76 545.33

" 500 " -4.76 545.33

" 540 " -4.76 545.33

" 561 " -4.75 545.34

CHECK B.M. -11.62 538.47 CONC. MON.  
5+83 E.

| GRADE   | STAKES   | AROUND | TURNING | CIRCLE    |                         |
|---------|----------|--------|---------|-----------|-------------------------|
| B.M.    | +1.69    | 528.89 |         | 527.14    | SPIKE IN<br>P.P. 211141 |
| STATION | POSITION | GRADE  |         | HUR ELEV. |                         |
| 0+35.8  | C        | 519.75 | -9.08   | 519.75    |                         |
| "       | Lt.      | "      | -9.18   | 519.75    | SPIKE                   |
| "       | Rt.      | "      | -9.18   | 519.75    |                         |
| 0+44.8  | C        | 519.96 | -8.87   | 519.96    |                         |
| "       | Lt.      | "      | -7.18   | 521.75    | C 1.8                   |
| "       | Rt.      | "      | -8.87   | 519.96    |                         |
| 0+52.8  | C        | 520.17 | -8.66   | 520.17    |                         |
| "       | Lt.      | "      |         |           |                         |
| "       | Rt.      | "      | -8.68   | 520.15    |                         |
| 0+62.8  | C        | 520.38 | -8.45   | 520.38    |                         |
| "       | Lt.      | "      |         |           |                         |
| "       | Rt.      | "      | -8.46   | 520.37    |                         |
| 0+71.8  | C        | 520.59 | -8.24   | 520.59    |                         |
| "       | Lt.      | "      |         |           |                         |
| "       | Rt.      | "      | -8.24   | 520.59    |                         |

56.

|          |     |        |       |        |
|----------|-----|--------|-------|--------|
|          |     | 528.89 |       |        |
| 0+80.8   | C   | 520.80 | -8.08 | 520.80 |
| "        | Lt. | "      |       |        |
| "        | Rt. | "      | -8.04 | 520.79 |
| 0+89.8   | C   | 521.01 | -7.82 | 521.01 |
| "        | Lt. | "      |       |        |
| "        | Rt. | "      | -7.82 | 521.00 |
| 0+98.8   | C   | 521.22 | -7.61 | 521.22 |
| "        | Lt. | "      |       |        |
| "        | Rt. | "      | -7.61 | 521.22 |
| 1+07.8   | C   | 521.42 | -7.41 | 521.42 |
| "        | Lt. | "      | -7.41 | 521.42 |
| "        | Rt. | "      | -7.41 | 521.42 |
| CHECKRM. |     |        | -1.69 | 527.14 |

MARCH 30, '49.

L. LEONARD  
PAYNE  
CARVER

57.

| CHECK & RESET |        | GRADE STAKES, SETTLING BASIN AREA |        |              |
|---------------|--------|-----------------------------------|--------|--------------|
| R.M.          | + 9.22 | 589.53                            | 580.81 | RIM M.H. E60 |
| 5192          |        |                                   |        |              |
| 56.46         |        |                                   | -5.08  | 584.50       |
| 100E          |        |                                   | -5.03  | 84.50 P. 12  |
| 150E          |        |                                   | -5.03  | 84.50 P. 11  |
| 200E          |        |                                   | -5.02  | 84.51 P. 12  |
| 250E          |        |                                   | -5.03  | 84.50 P. 06  |
| 300E          |        |                                   | -5.03  | 84.50        |
| 350E          |        |                                   | -5.03  | 84.50        |
| 399E          |        |                                   | -5.04  | 84.49        |
| 5107          |        |                                   |        |              |
| 399E          |        |                                   | -5.04  | 84.49        |
| 360E          |        |                                   | -5.03  | 84.50        |
| 300E          |        |                                   | -5.03  | 84.50        |
| 250E          |        |                                   | -5.03  | 84.50        |
| 200E          |        |                                   | -5.03  | 84.50        |
| 150E          |        |                                   | -5.03  | 84.50 P. 12  |
| 100E          |        |                                   | -5.03  | 84.50        |
| 56E           |        |                                   | -5.03  | 84.50        |

539.53

|       |       |       |
|-------|-------|-------|
| S 82  |       |       |
| E 56  | -5.03 | 34.50 |
| E 100 | -5.04 | 34.49 |
| E 150 | -5.03 | 34.50 |
| E 200 | -5.03 | 34.50 |
| E 250 | -5.03 | 34.50 |
| E 300 | -5.03 | 34.50 |
| E 350 | -5.04 | 34.49 |
| E 400 | -5.03 | 34.50 |
| 557   |       |       |
| E 396 | -5.03 | 34.50 |
| E 350 | -5.03 | 34.50 |
| E 300 | -5.03 | 34.50 |
| E 250 | -5.04 | 34.49 |
| E 200 | -5.03 | 34.50 |
| E 150 | -5.03 | 34.50 |
| E 100 | -5.04 | 34.49 |
| E 50  | -5.03 | 34.50 |

539.53

58.

|       |       |       |
|-------|-------|-------|
| S 82  |       |       |
| E 50  | -5.03 | 34.50 |
| E 100 | -5.03 | 34.50 |
| E 150 | -5.04 | 34.49 |
| E 200 | -5.03 | 34.50 |
| E 250 | -5.03 | 34.50 |
| E 300 | -5.03 | 34.50 |
| E 350 | -5.03 | 34.50 |
| E 396 | -5.03 | 34.50 |
| 507   |       |       |
| E 396 | -5.03 | 34.50 |
| E 350 | -5.03 | 34.50 |
| E 300 | -5.03 | 34.50 |
| E 250 | -5.03 | 34.50 |
| E 200 | -5.03 | 34.50 |
| E 150 | -5.04 | 34.49 |
| E 100 | -5.05 | 34.48 |
| E 50  | -5.03 | 34.50 |

|       |        |        |  |
|-------|--------|--------|--|
|       | 539.50 |        |  |
| N 18  |        |        |  |
| E 50  | -5.00  | 534.50 |  |
| E 100 | -5.00  | 34.50  |  |
| E 150 | -5.02  | 34.51  |  |
| E 200 | -5.05  | 34.48  |  |
| E 250 | -5.03  | 34.50  |  |
| E 300 | -5.04  | 34.49  |  |
| E 350 | -5.04  | 34.49  |  |
| E 394 | -5.00  | 34.50  |  |
|       |        |        |  |
| N 43  |        |        |  |
| E 393 | -5.00  | 34.50  |  |
| E 350 | -5.04  | 34.49  |  |
| E 300 | -5.00  | 34.50  |  |
| E 250 | -5.04  | 34.49  |  |
| E 200 | -5.04  | 34.49  |  |
| E 150 | -5.00  | 34.50  |  |
| E 100 | -5.00  | 34.50  |  |
| E 50  | -5.04  | 34.49  |  |

59.

|        |        |        |  |
|--------|--------|--------|--|
|        | 539.50 |        |  |
| N 69   |        |        |  |
| E 57   | -5.00  | 534.50 |  |
| E 100  | -5.00  | 34.50  |  |
| E 150  | -5.04  | 34.49  |  |
| E 200  | -5.00  | 34.50  |  |
| E 250  | -5.00  | 34.50  |  |
| E 300  | -5.00  | 34.50  |  |
| E 350  | -5.04  | 34.49  |  |
| E 386  | -5.00  | 34.50  |  |
|        |        |        |  |
| CHECKS | -9.22  | 530.28 |  |

MARCH 30, 1949

LEONARD  
PAYNE  
DARYER.

CHECK &amp; RESET GRADE STAKES; FILTERS AREA

|       |        |                |        | P.M.H.<br>SILL<br>W. 205. |
|-------|--------|----------------|--------|---------------------------|
|       | + 8.96 | 543.36         | 534.40 |                           |
| N87.5 |        | GRADE<br>538.5 | -4.86  | 538.50                    |
| W47.1 |        |                | -4.86  | 38.50                     |
| W90   |        |                | -4.88  | 38.48                     |
| W113  |        |                | -4.85  | 38.51                     |
| W146  |        |                | -4.88  | 38.48                     |
| W180  |        |                |        |                           |
| N44   |        |                | -4.86  | 38.50                     |
| W179  |        |                | -4.86  | 38.50                     |
| N50   |        |                | -4.86  | 38.50                     |
| W146  |        |                | -4.86  | 38.50                     |
| W113  |        |                | -4.86  | 38.50                     |
| W80   |        |                | -4.86  | 38.50                     |
| W47.3 |        |                | -4.85  | 38.51                     |
| 0+0   |        |                | -4.88  | 38.48                     |
| W49   |        |                | -4.86  | 38.50                     |
| W80   |        |                | -4.86  | 38.50                     |
| W113  |        |                | -4.86  | 38.50                     |
| W146  |        |                | -4.86  | 38.50                     |
| W179  |        |                | -4.85  | 38.51                     |

543.36

|            |  |  |       |        |                   |
|------------|--|--|-------|--------|-------------------|
| 550        |  |  | -4.86 | 534.50 |                   |
| W57.5      |  |  | -4.86 | 34.50  |                   |
| W80        |  |  | -4.86 | 34.50  |                   |
| W113       |  |  | -4.89 | 34.47  |                   |
| W146       |  |  | -4.87 | 34.49  |                   |
| W171       |  |  |       |        |                   |
| 577        |  |  | -4.90 | 34.46  |                   |
| W60.3      |  |  | -4.88 | 34.48  |                   |
| W80        |  |  |       |        |                   |
| 592        |  |  | -4.86 | 34.50  |                   |
| W101.5     |  |  | -4.86 | 34.50  |                   |
| W113       |  |  | -4.86 | 34.50  |                   |
| W146       |  |  | -4.86 | 34.50  | LINE<br>ON LATHE  |
| W167       |  |  | -4.86 | 34.50  | LINE<br>ON LATHE. |
| CHECK R.M. |  |  | -8.96 | 534.40 |                   |

60.

N.P.E. LEVEL 106046

APRIL 28, 1950

LEONARD  
CARYER

61.

## X-SECTIONS OVER DIRT STOCK PILE

| COORDINATES. |       | H.d.   | -      | ELEV.  | NOTES:         |
|--------------|-------|--------|--------|--------|----------------|
| SOUTH        | WEST  |        |        |        |                |
| B.M. +0.29   |       | 538.49 |        | 538.20 | Rim.<br>m. H.  |
| T.P.         |       |        | -12.80 | 525.69 | HUB in<br>ROAD |
|              | +2.12 | 527.81 |        |        |                |
| 400          | 180   |        | -5.50  | 522.3  |                |
| 413          | 180   |        | -5.50  | 522.3  |                |
| 420          | 180   |        | -9.20  | 518.6  | O.G.           |
| 400          | 160   |        | -5.10  | 522.7  |                |
| 420          | 160   |        | -6.00  | 522.8  |                |
| 426          | 160   |        | -4.80  | 523.0  |                |
| 442          | 160   |        | -11.60 | 516.2  | O.G.           |
| 400          | 140   |        | -4.50  | 523.3  |                |
| 420          | 140   |        | -5.00  | 522.8  |                |
| 440          | 140   |        | -4.40  | 523.4  |                |
| 447          | 140   |        | 4.60   | 523.2  |                |
| 462          | 140   |        | -12.90 | 514.9  | O.G.           |
| 400.         | 120   |        | -3.70  | 524.1  |                |
| 420          | 120   |        | -4.3   | 523.5  |                |



## STOCK PILE X-SECT'S. CONT'D.

12.

MI-52781

| COORDINATES |      |        | ELEV  | NOTES |
|-------------|------|--------|-------|-------|
| SOUTH       | WEST | -      |       |       |
| 440         | 120  | -5.70  | 522.6 |       |
| 460         | 120  | -5.80  | 522.0 |       |
| 465         | 120  | -6.00  | 521.8 |       |
| 485         | 120  | -16.00 | 511.8 | O.G.  |
| 400         | 100  | -3.60  | 524.2 |       |
| 420         | 100  | -4.50  | 523.3 |       |
| 433         | 100  | -4.90  | 522.9 |       |
| 440         | 100  | -6.80  | 521.0 |       |
| 460         | 100  | -1.30  | 520.5 |       |
| 480         | 100  | -6.70  | 521.1 |       |
| 500         | 100  | -17.90 | 509.9 | O.G.  |
| 400         | 80   | -3.30  | 524.5 |       |
| 420         | 80   | -4.30  | 523.5 |       |
| 440         | 80   | -5.30  | 522.5 |       |
| 460         | 80   | -6.30  | 521.5 |       |
| 480         | 80   | -8.10  | 519.7 |       |
| 500         | 80   | -10.00 | 517.8 |       |

## STOCK PILE X-SECTS. CONT'D.

68.

HI. 527.81

| COORDINATES |      |        |       |       |
|-------------|------|--------|-------|-------|
| South       | West | -      | Elev. | Notes |
| 505         | 80   | -10.80 | 517.0 |       |
| 400         | 60   | -3.40  | 524.4 |       |
| 420         | 60   | -4.40  | 523.4 |       |
| 440         | 60   | -5.40  | 522.4 |       |
| 460         | 60   | -6.50  | 521.3 |       |
| 480         | 60   | -9.70  | 518.1 |       |
| 500         | 60   | -11.40 | 516.4 |       |
| 513         | 60   | -11.50 | 516.3 |       |
| 400         | 50   | -4.30  | 523.5 |       |
| 420         | 45   | -4.70  | 523.1 |       |
| 440         | 45   | -7.20  | 525.6 |       |
| 460         | 50   | -4.80  | 523.0 |       |
| 480         | 50   | -9.30  | 518.5 |       |
| 500         | 50   | -11.70 | 516.1 |       |
| 515         | 50   | -11.60 | 516.2 |       |
| 475         | 40   | -11.60 | 516.2 |       |
| 485         | 40   | -10.60 | 517.2 |       |

## STOCK PILE X-SECT'S, CONT'D.

H.J. 52781

64.

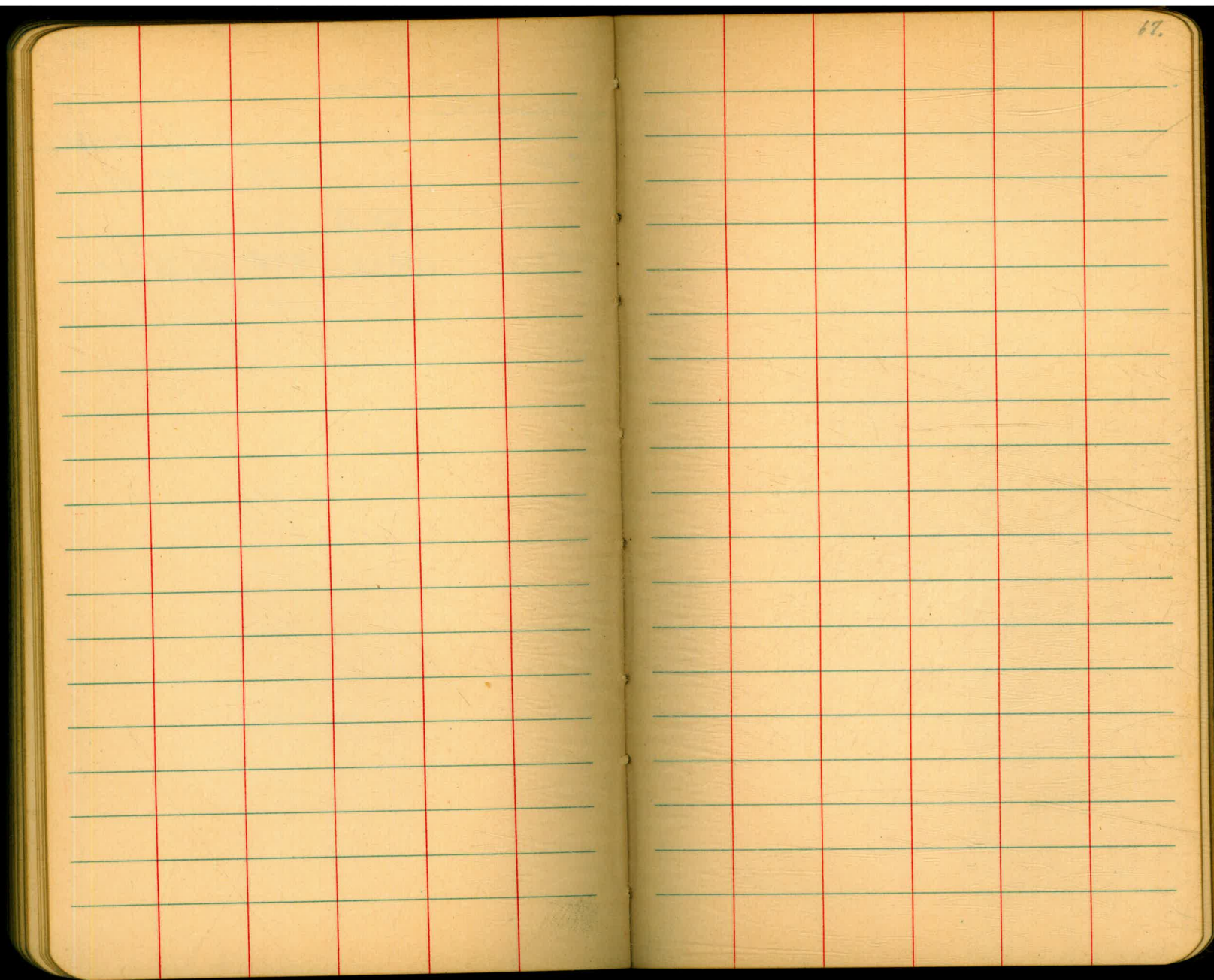
| Coordinates |        |        | Elev   | Notes   |
|-------------|--------|--------|--------|---------|
| South       | West   | -      |        |         |
| 500         | 40     | -12.20 | 515.6  |         |
| 516         | 40     | -12.00 | 515.8  |         |
| 400         | 40     | -8.70  | 519.1  |         |
| 400         | 20     | -8.60  | 519.2  |         |
| 420         | 20     | -9.60  | 518.2  |         |
| 440         | 20     | -9.80  | 518.0  |         |
| 400         | 2      | -8.10  | 519.6  |         |
| 420         | 2      | -9.10  | 518.7  |         |
| 440         | 2      | -9.50  | 518.3  |         |
| T.P.        |        | -11.46 | 516.35 | on rock |
|             | + 2.69 |        | 519.04 |         |
| 460         | 2      | -13.0  | 517.7  |         |
| 480         | 2      | -17.0  | 517.3  |         |
| 500         | 2      | -3.10  | 515.9  |         |
| 520         | 2      | -4.30  | 514.7  | 2       |
| 536         | 2      | -15.60 | 503.4  | O.G.    |
| 534         | 20     | -14.80 | 504.2  | O.G.    |

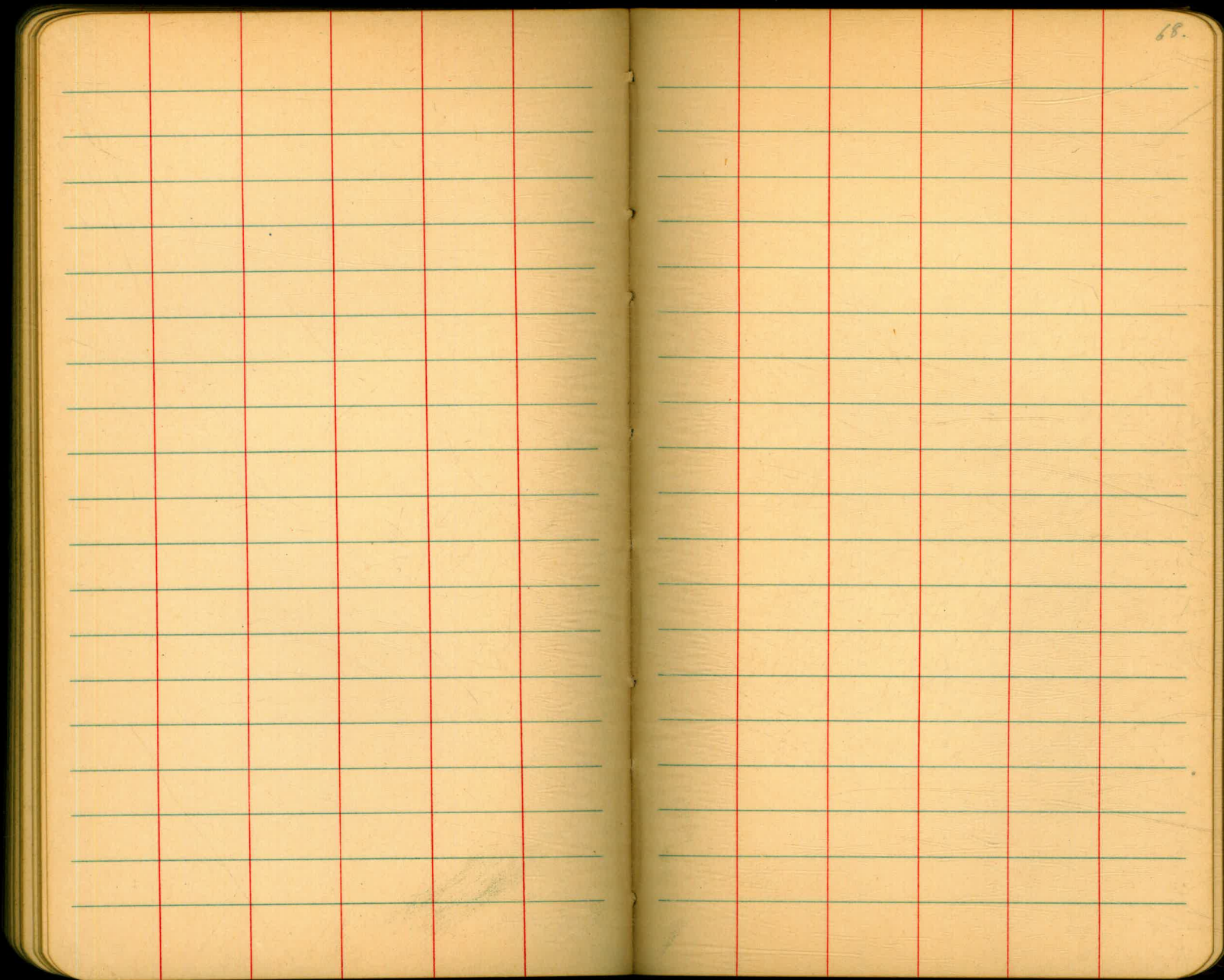
STOCK PILE X-SECTS, CONT'D.

H.I. - 51904

| Coordinates |                    |        | Elev. | Notes |
|-------------|--------------------|--------|-------|-------|
| South       | West               |        |       |       |
| 530         | 40                 | -13.90 | 505.1 | O.G.  |
| 529         | 60                 | -13.20 | 505.8 | O.G.  |
| 521         | 80                 | -11.60 | 507.4 | O.G.  |
|             | <sup>EAST</sup> 30 | -10.50 | 508.5 | O.G.  |
| 520         | 22                 | -14.00 | 505.0 | O.G.  |
| 500         | 18                 | -3.40  | 515.6 | Bc    |
| 480         | 12                 | -2.00  | 517.0 | Bc    |
| 480         | 20                 | -7.90  | 511.1 | O.G.  |
| 460         | 5                  | -1.70  | 517.8 | cc    |
| 460         | 12                 | -5.60  | 513.4 | O.G.  |
| 440         | 2                  | -1.00  | 518.0 | cc    |
| 440         | 5                  | -3.50  | 515.5 | O.G.  |
| 420         | 2                  | -0.40  | 518.6 | cc    |
| 420         | 3                  | -1.90  | 517.1 | cc    |
|             | <sup>West</sup> 20 | -2.50  | 516.5 |       |
| 500         | 20                 | -3.20  | 515.8 |       |
| 520         | 20                 | -3.80  | 515.2 | Bc    |

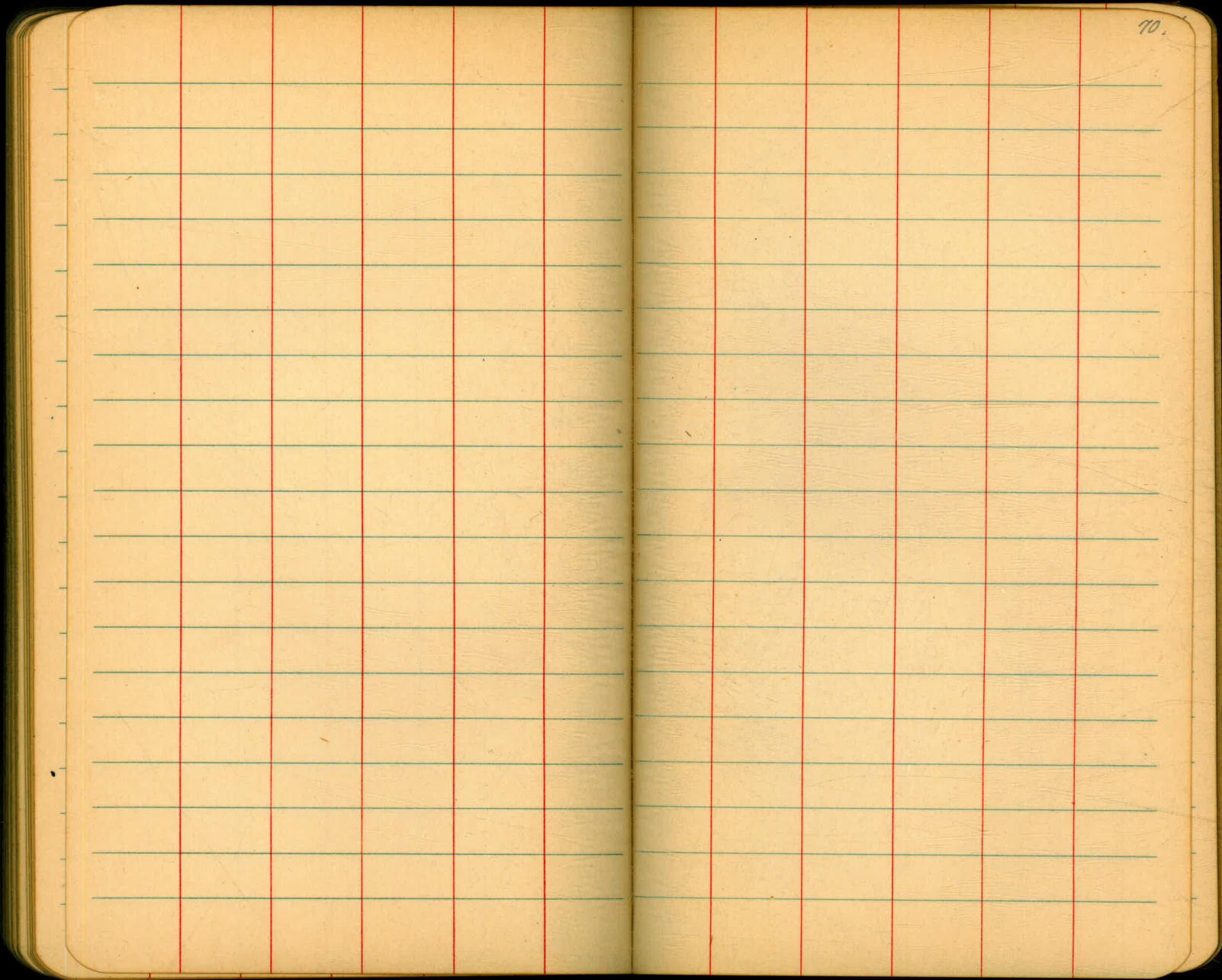
~~Coordinates~~ HI = 519.04  
 South West - elev. notes  
 T.P. -0.07 518.97 on.  
 +11.89 530.86  
 c.b.m. 530.32 -0.54 530.32 c.b.m. M.H.

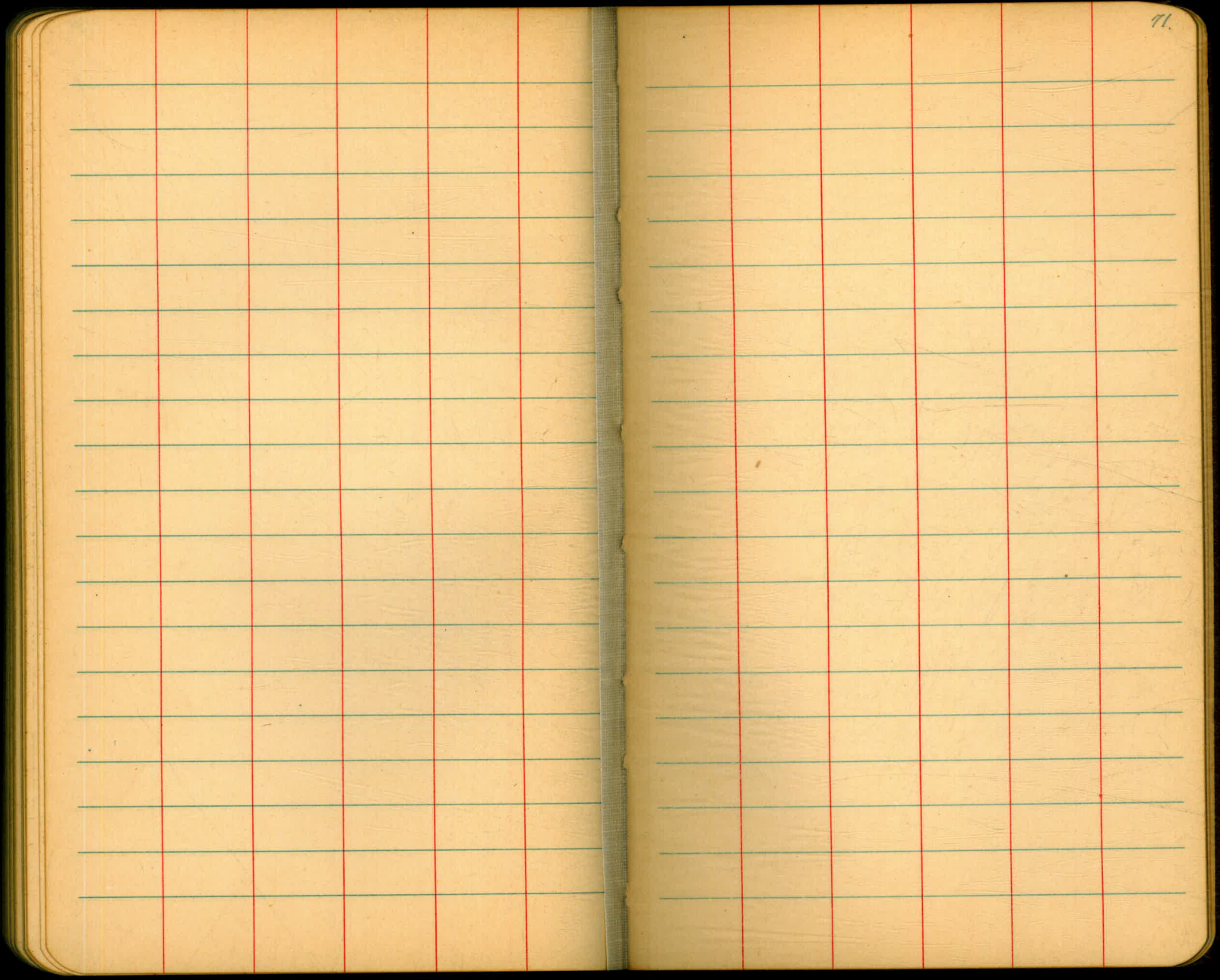




The image shows an open notebook with two facing pages. Both pages are cream-colored and feature horizontal green lines for writing. Each page is also ruled with vertical red lines, creating a grid-like structure with four columns on each page. The right page has the number '69.' written in the top right corner. The notebook is bound in the center, and the pages appear slightly aged or off-white.





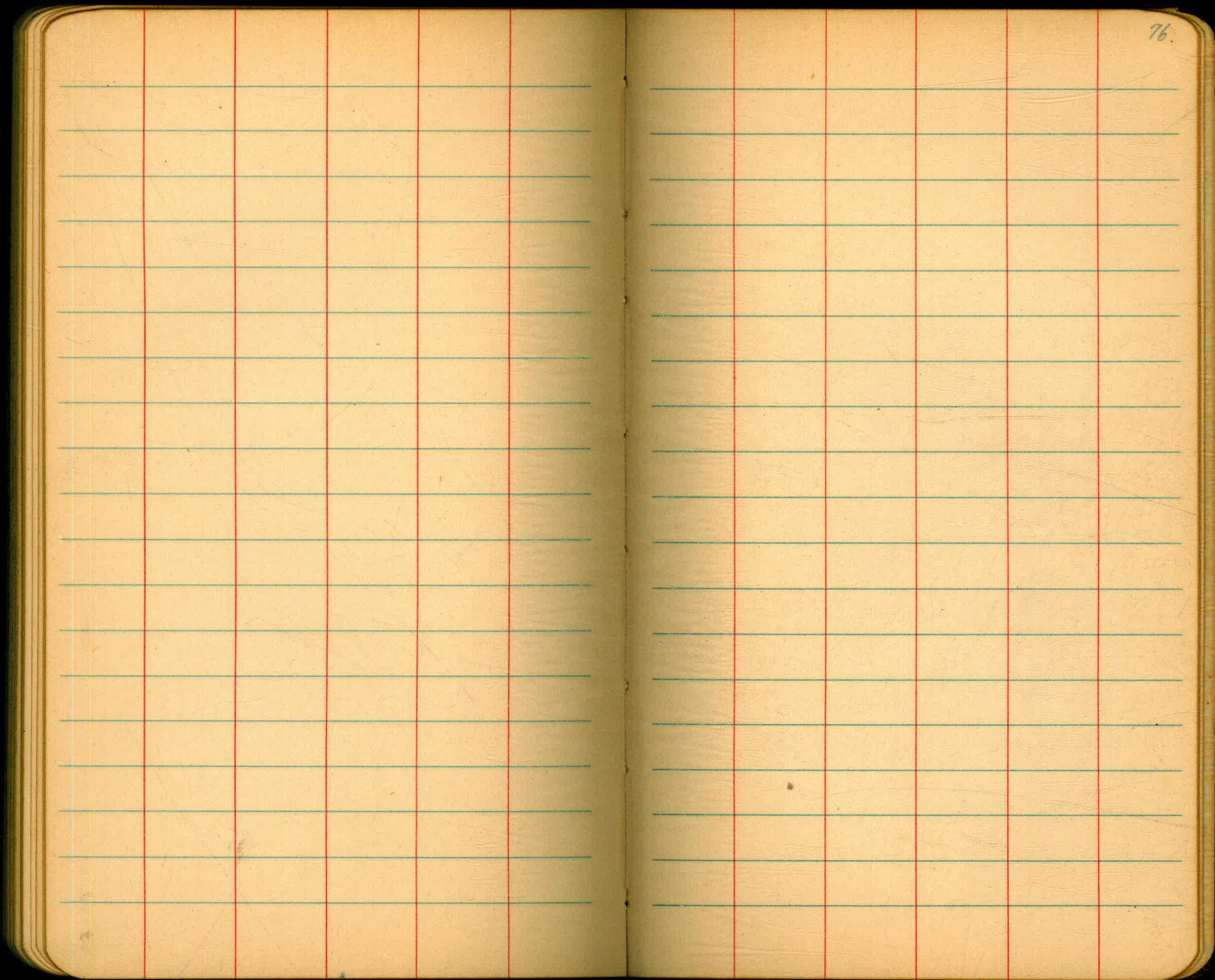




The image shows an open notebook with two facing pages. Both pages are cream-colored and feature horizontal green lines for writing. Each page is also ruled with vertical red lines to create margins. The right page has the number '73.' written in the top right corner. The notebook is bound in the center, and the pages appear slightly aged or used.











FEB. 11, 1949 LEONARD, WEST, MAINE.  
 FILTER PLANT, N.E. COR. TRUCK SCALE:  
 PROFILE OVER PROPOSED DITCH LINE TO DRAIN SUMP

|      | 548.9 |       |
|------|-------|-------|
| 0+00 | -4.7  | 544.2 |
| +10  | -4.8  | 544.1 |
| +20  | -4.8  | 544.1 |
| +30  | -4.9  | 544.0 |
| +40  | -4.8  | 544.1 |
| +50  | -4.8  | 544.1 |
| +60  | -5.1  | 543.8 |
| +70  | -5.5  | 543.4 |
| +80  | -5.8  | 543.1 |
| +90  | -5.8  | 543.1 |
| 1+00 | -6.2  | 542.7 |
| 1+10 | -6.2  | 542.7 |
| 1+20 | -6.1  | 542.8 |
| 1+30 | -6.5  | 542.4 |
| 1+40 | -6.8  | 542.1 |
| 1+50 | -7.4  | 541.5 |
| 1+60 | -8.1  | 540.8 |

FEB. 11, 1949 LEONARD, WEST, MAINE. 78.  
 CUT STAKES FOR  
 DITCH TO DRAIN SUMP NE OF TRUCK SCALE:

| R.M.  | +10.40 | 548.88       | 538.47 | 548.88 E           |
|-------|--------|--------------|--------|--------------------|
|       |        | DEEPEST HOLE | -5.37  | 543.5              |
| " #1  | = 0+00 | 543.4        | -8.83  | 545.04 CUT 1.6     |
| " #2  | = 0+10 | 543.3        | -9.73  | 545.14 1.8         |
| " #3  | = 0+20 | 543.2        | -4.42  | 544.45 1.3         |
| " #4  | = 0+30 | 543.1        | -4.68  | 544.19 1.1         |
| " #5  | = 0+40 | 543.0        | -4.79  | 544.08 1.1         |
| " #6  | = 0+50 | 542.9        | -5.00  | 543.87 1.0         |
| " #7  | = 0+60 | 542.8        | -5.29  | 543.58 0.8         |
| " #8  | = 0+70 | 542.7        | -5.63  | 543.24 0.5         |
| " #9  | = 0+80 | 542.6        | -5.72  | 543.15 0.6         |
| " #10 | = 0+90 | 542.5        | -6.05  | 542.82 0.3         |
| " #11 | = 1+00 | 542.3        | -6.35  | 542.52 0.2         |
| " #12 | = 1+10 | 542.2        | -6.25  | 542.62 0.4         |
| " #13 | = 1+20 | 542.1        | -6.27  | 542.60 0.5         |
| " #14 | = 1+30 | 542.0        | -6.62  | 542.25 0.3         |
| " #15 | = 1+40 | 541.8        | -7.07  | 541.80 END. GRADE. |
| " #16 | = 1+45 | 541.8        | -7.78  | 541.59 END.        |
|       |        | CHECK R.M.   | -10.40 | 538.47             |

QUINCE ST. 8" MAIN

FEB. 2, 1919

LEONARD  
WEST  
PRYNE,

79

CHECK LEVELS FROM T.B.M. AT EUCLID & HOME.

T.B.M. +4.85 222.92 217.97

T.P. +0.26 210.08 -13.00 209.87

T.P. +0.52 197.96 -12.64 197.44

T.P. +0.19 187.14 -11.01 196.25

T.P. +1.20 178.44 -9.90 177.24

T.P. +0.71 166.07 -13.08 165.36

T.P. +0.55 155.08 -11.54 154.53

CHECK

R.M.

-7.10 147.98 = 148.22

REC.

NOTE: T.B.M. IS TOP OF  $1\frac{1}{2}$ " PIPE IN OLD CEMENT

FOUNDATION IN BULLY, N.W. COR. EUCLID & HOME AVE.

B.M. IS BRASS PLUG IN N.E. LY. COR. OF BRIDGE

ON FAIRMONT, AT HOME AVE. CITY ENG. DATA.

CITY OF SAN DIEGO

**RECD**

JUN 11 1948

RESIDENT ENGINEER

170  
60  
110

190  
34  
136

68

60 5

10833

66.64 67

527.91  
11.46  
516.35  
26.94  
490.07  
0.07  
518.97  
11.89  
530.86

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1 1/2

For Single Track Embankment.

| H  | 0    | .1   | .2   | .3   | .4   | .5   | .6   | .7   | .8   | .9   | H  |
|----|------|------|------|------|------|------|------|------|------|------|----|
| 0  | 8.0  | 8.2  | 8.3  | 8.5  | 8.6  | 8.8  | 8.9  | 9.1  | 9.2  | 9.4  | 0  |
| 1  | 9.5  | 9.7  | 9.8  | 10.0 | 10.1 | 10.3 | 10.4 | 10.6 | 10.7 | 10.9 | 1  |
| 2  | 11.0 | 11.2 | 11.3 | 11.5 | 11.6 | 11.8 | 11.9 | 12.1 | 12.2 | 12.4 | 2  |
| 3  | 12.5 | 12.7 | 12.8 | 13.0 | 13.1 | 13.3 | 13.4 | 13.6 | 13.7 | 13.9 | 3  |
| 4  | 14.0 | 14.2 | 14.3 | 14.5 | 14.6 | 14.8 | 14.9 | 15.1 | 15.2 | 15.4 | 4  |
| 5  | 15.5 | 15.7 | 15.8 | 16.0 | 16.1 | 16.3 | 16.4 | 16.6 | 16.7 | 16.9 | 5  |
| 6  | 17.0 | 17.2 | 17.3 | 17.5 | 17.6 | 17.8 | 17.9 | 18.1 | 18.2 | 18.4 | 6  |
| 7  | 18.5 | 18.7 | 18.8 | 19.0 | 19.1 | 19.3 | 19.4 | 19.6 | 19.7 | 19.9 | 7  |
| 8  | 20.0 | 20.2 | 20.3 | 20.5 | 20.6 | 20.8 | 20.9 | 21.1 | 21.2 | 21.4 | 8  |
| 9  | 21.5 | 21.7 | 21.8 | 22.0 | 22.1 | 22.3 | 22.4 | 22.6 | 22.7 | 22.9 | 9  |
| 10 | 23.0 | 23.2 | 23.3 | 23.5 | 23.6 | 23.8 | 23.9 | 24.1 | 24.2 | 24.4 | 10 |
| 11 | 24.5 | 24.7 | 24.8 | 25.0 | 25.1 | 25.3 | 25.4 | 25.6 | 25.7 | 25.9 | 11 |
| 12 | 26.0 | 26.3 | 26.3 | 26.5 | 26.6 | 26.8 | 26.9 | 27.1 | 27.2 | 27.4 | 12 |
| 13 | 27.5 | 27.7 | 27.8 | 28.0 | 28.1 | 28.3 | 28.4 | 28.6 | 28.7 | 28.9 | 13 |
| 14 | 29.0 | 29.2 | 29.3 | 29.5 | 29.6 | 29.8 | 29.9 | 30.1 | 30.2 | 30.4 | 14 |
| 15 | 30.5 | 30.7 | 30.8 | 31.0 | 31.1 | 31.3 | 31.4 | 31.6 | 31.7 | 31.9 | 15 |
| 16 | 32.0 | 32.2 | 32.3 | 32.5 | 32.6 | 32.8 | 32.9 | 33.1 | 33.2 | 33.4 | 16 |
| 17 | 33.5 | 33.7 | 33.8 | 34.0 | 34.1 | 34.3 | 34.4 | 34.6 | 34.7 | 34.9 | 17 |
| 18 | 35.0 | 35.2 | 35.3 | 35.5 | 35.6 | 35.8 | 35.9 | 36.1 | 36.2 | 36.4 | 18 |
| 19 | 36.5 | 36.7 | 36.8 | 37.0 | 37.1 | 37.3 | 37.4 | 37.6 | 37.7 | 37.9 | 19 |
| 20 | 38.0 | 38.2 | 38.3 | 38.5 | 38.6 | 38.8 | 38.9 | 39.1 | 39.2 | 39.4 | 20 |
| 21 | 39.5 | 39.7 | 39.8 | 40.0 | 40.1 | 40.3 | 40.4 | 40.6 | 40.7 | 40.9 | 21 |
| 22 | 41.0 | 41.2 | 41.3 | 41.5 | 41.6 | 41.8 | 41.9 | 42.1 | 42.2 | 42.4 | 22 |
| 23 | 42.5 | 42.7 | 42.8 | 43.0 | 43.1 | 43.3 | 43.4 | 43.6 | 43.7 | 43.9 | 23 |
| 24 | 44.0 | 44.2 | 44.3 | 44.5 | 44.6 | 44.8 | 44.9 | 45.1 | 45.2 | 45.4 | 24 |
| 25 | 45.5 | 45.7 | 45.8 | 46.0 | 46.1 | 46.3 | 46.4 | 46.6 | 46.7 | 46.9 | 25 |
| 26 | 47.0 | 47.2 | 47.3 | 47.5 | 47.6 | 47.8 | 47.9 | 48.1 | 48.2 | 48.4 | 26 |
| 27 | 48.5 | 48.7 | 48.8 | 49.0 | 49.1 | 49.3 | 49.4 | 49.6 | 49.7 | 49.9 | 27 |
| 28 | 50.0 | 50.2 | 50.3 | 50.5 | 50.6 | 50.8 | 50.9 | 51.1 | 51.2 | 51.4 | 28 |
| 29 | 51.5 | 51.7 | 51.8 | 52.0 | 52.1 | 52.3 | 52.4 | 52.6 | 52.7 | 52.9 | 29 |
| 30 | 53.0 | 53.2 | 53.3 | 53.5 | 53.6 | 53.8 | 53.9 | 54.1 | 54.2 | 54.4 | 30 |
| 31 | 54.5 | 54.7 | 54.8 | 55.0 | 55.1 | 55.3 | 55.4 | 55.6 | 55.7 | 55.9 | 31 |
| 32 | 56.0 | 56.2 | 56.3 | 56.5 | 56.6 | 56.8 | 56.9 | 57.1 | 57.2 | 57.4 | 32 |
| 33 | 57.5 | 57.7 | 57.8 | 58.0 | 58.1 | 58.3 | 58.4 | 58.6 | 58.7 | 58.9 | 33 |
| 34 | 59.0 | 59.2 | 59.3 | 59.5 | 59.6 | 59.8 | 59.9 | 60.1 | 60.2 | 60.4 | 34 |
| 35 | 60.5 | 60.7 | 60.8 | 61.0 | 61.1 | 61.3 | 61.4 | 61.6 | 61.7 | 61.9 | 35 |
| 36 | 62.0 | 62.2 | 62.3 | 62.5 | 62.6 | 62.8 | 62.9 | 63.1 | 63.2 | 63.4 | 36 |
| 37 | 63.5 | 63.7 | 63.8 | 64.0 | 64.1 | 64.3 | 64.4 | 64.6 | 64.7 | 64.9 | 37 |
| 38 | 65.0 | 65.2 | 65.3 | 65.5 | 65.6 | 65.8 | 65.9 | 66.1 | 66.2 | 66.4 | 38 |
| 39 | 66.5 | 66.7 | 66.8 | 67.0 | 67.1 | 67.3 | 67.4 | 67.6 | 67.7 | 67.9 | 39 |
| 40 | 68.0 | 68.2 | 68.3 | 68.5 | 68.6 | 68.8 | 68.9 | 69.1 | 69.2 | 69.4 | 40 |

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be  $41.9 + (20 - 16) \div 2$  or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.