

W
179

1742

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS
Chicago New York San Francisco New Orleans Pittsburg Toronto

579

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	II
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

This Field Book is manufactured
of a high grade 50% Rag Paper
having a WATER RESISTING surface.

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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 1½ see inside of back cover.

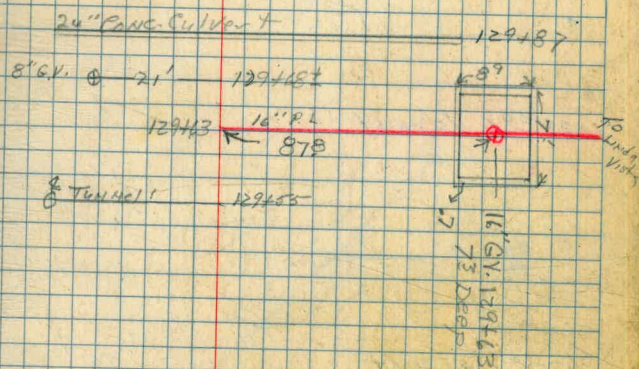
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Pipe line location from pumping plant site in
 Alvarado Canyon, down Mission Valley Road to
 Texas St. - M line 1-21
 Tie to Gate Valve, Texas
 2nd Camino Del Rio - 22
 M Line Profile - 23-69
 Line Change 70-71
 20+10.27 to 42+21.94 =
 22+14.49
 Profile of Above Line Chg - 72-76
 Mission Valley (Woodward) 77 ✓
 Mission Valley Pipe Lowmngs Reg. Box 77-79 ✓
 Mission Valley Pl. at 6th - Ties Linda Vista Pl. 0

King
 Woodward
 West
 Tinker

8-11-50

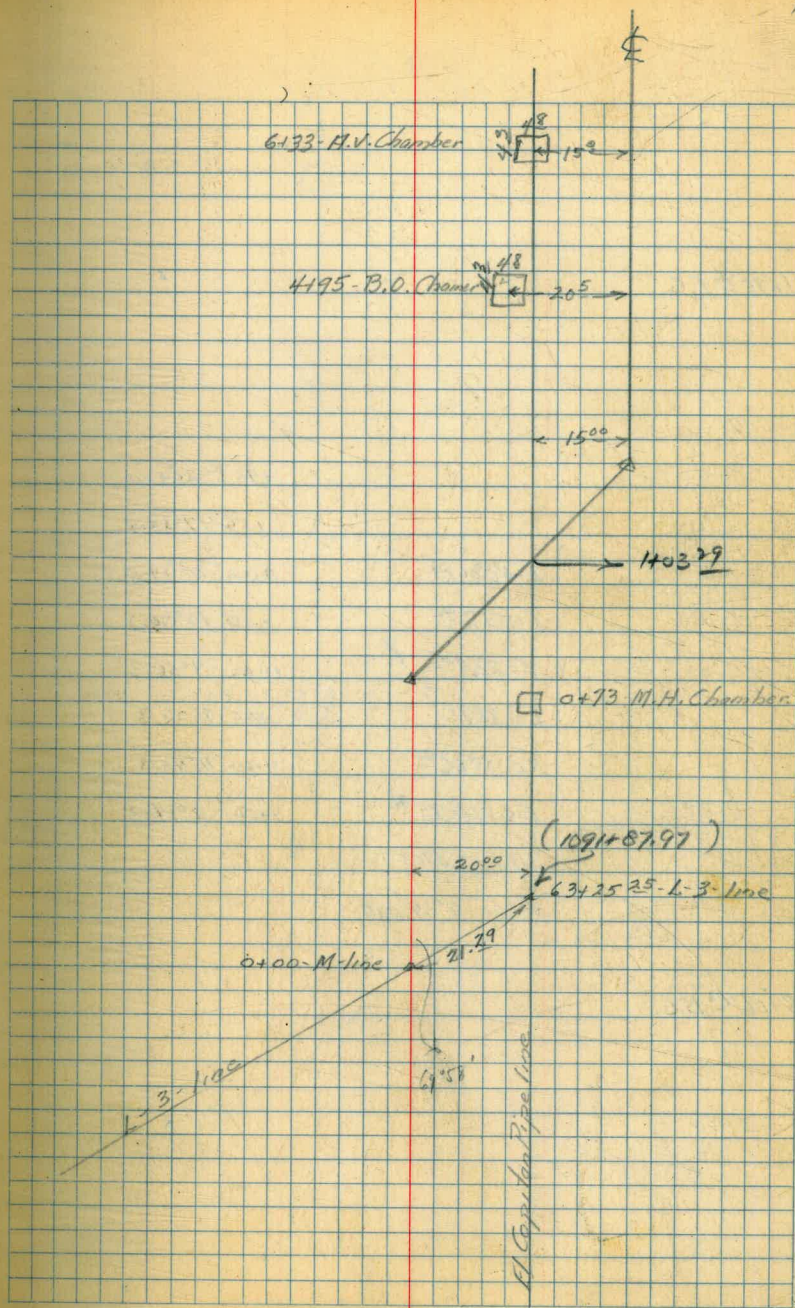
Mission Valley Pl. at 6th Ave. Eastside
 Ties to Linda Vista Pl. 0



Pipe line location from pumping plant site in
Alvarado Canyon, down Mission Valley Road to
Texas St. "M" line

1+24⁵⁰ / 45°00' Lt

0+75° / 45°00' Rt



11+95⁹⁶ F.C.

E=40°00'RT

R=557.96

T=263⁰⁸ ✓

L=389⁵⁴

B.C=8+06⁰²

E.C=11+95⁹⁶

def.1=3.0805

def.50=2°34'.025

195⁹⁶-20°00'.0

+50'17°38.4

11+00'15°24.4

+50'12°30.3

10+00'9°56.3

+50'7°32.3

9+00'4°48.3

8+50'2°14.2

8+06⁰² B.C.

12+33 B.O. Chamber [4] 16' →

15°

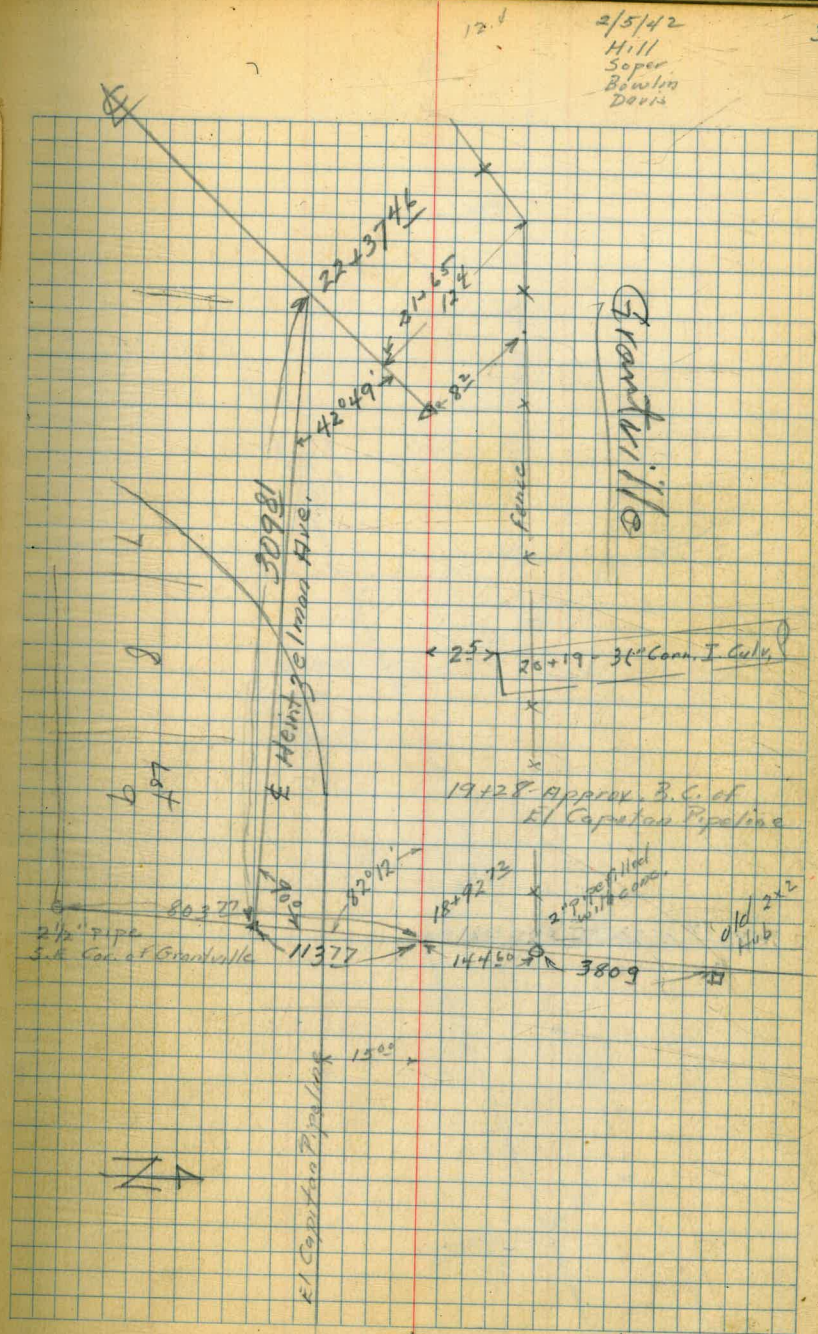
10+66 M.H. Chamber [8] 15' →

15°

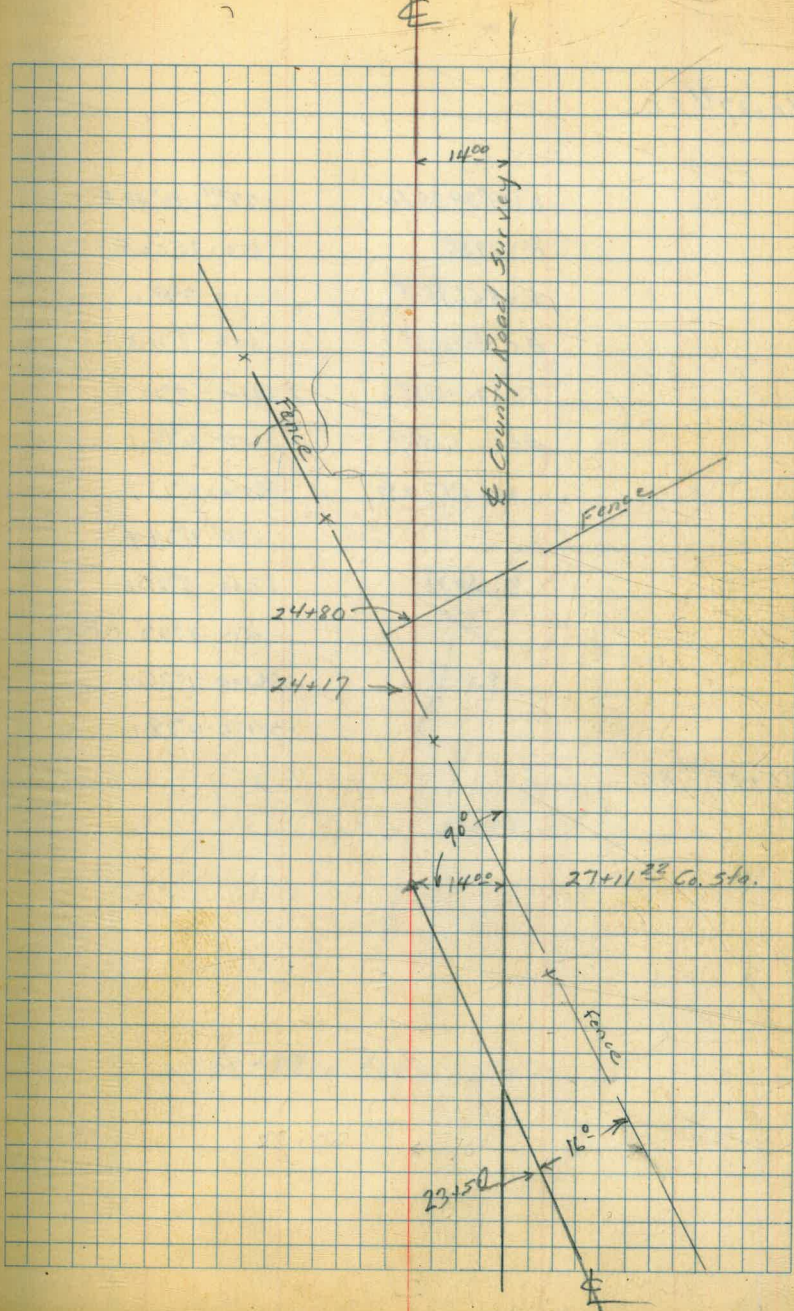
22+50 P.O.T.

21+14³² - \angle 35°00' Lt

18+92⁷² P.O.T.



23+90³⁹ 1.30°52' RT



40+87⁴⁴ - E.C.

A = 21° 39' 35" / 4

R = 1486

L = 561.76 ✓

B.C. = 35+25⁶⁸

E.C. = 40+87⁴⁴

del. 1 = 1.1567

" 50 = 0° 57' 8.35

St. 384.27

E. = 26.97

297⁴⁴ - 10° 49.8

450 - 10° 06.5

40100 - 9° 08.6

+ 50 - 8° 10.8

39100 - 7° 12.9

+ 50 - 6° 15.1

38100 - 5° 17.3

+ 50 - 4° 19.4

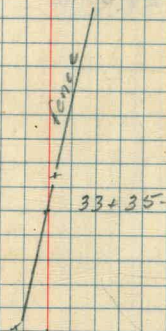
37100 - 3° 21.6

+ 50 - 2° 23.8 P.O.C

36100 - 1° 25.9

35+50 - 0° 28.1

35+25⁶⁸ - B.C.



x 30+89 - x fence x

$A = 33^{\circ}41' R+$
 $R = 1514$
By W. H. $T = 458.30$ ✓

$L = 890.06$ ✓

$B.C. = 42 + 14^{36}$

$E.C. = 57 + 04^{42}$

$d.p.l. = 1.1353$

" $50 = 0^{\circ}56.765$

$E = 67.85$

$42 + 14^{36} = B.C.$

$51 + 04^{42} = 16^{\circ}50.5$

51 - $16^{\circ}45.4$

+50 - $15^{\circ}48.7$

50 - $14^{\circ}51.9$

+50 - $13^{\circ}55.2$

49 - $12^{\circ}58.4$

+50 - $12^{\circ}01.6$

48 - $11^{\circ}04.9$

+50 - $10^{\circ}08.1$

47 - $9^{\circ}11.3$

+50 - $8^{\circ}14.6$

46 - $7^{\circ}17.8 P.O.G.$

+50 - $6^{\circ}21.0$

45 - $5^{\circ}24.3$

+50 - $4^{\circ}27.5$

44 - $3^{\circ}30.7$

+50 - $2^{\circ}34.0 P.O.G.$

43 - $1^{\circ}37.2$

$42 + 50 = 0^{\circ}40.4$

$44 + 50 = 9^{\circ}08.1$

x x x

51104⁴² E.C.

50+34 edge of 4" \pm
oil pausing

49+93 edge of 30rth oil pausing

49+77 edge of oil pausing

Moore
Rand
Hazard
3-5-44.

Carrasco del Rio
Pipe Line
141' 5" of R.O.W.

58 + 81.26 Δ 0° 07' Lt. = Road nail

Note! all Culv. at 90° or Road nail
unless otherwise shown

53 + 08.17 inside meas.

51 + 04.47 E.C.

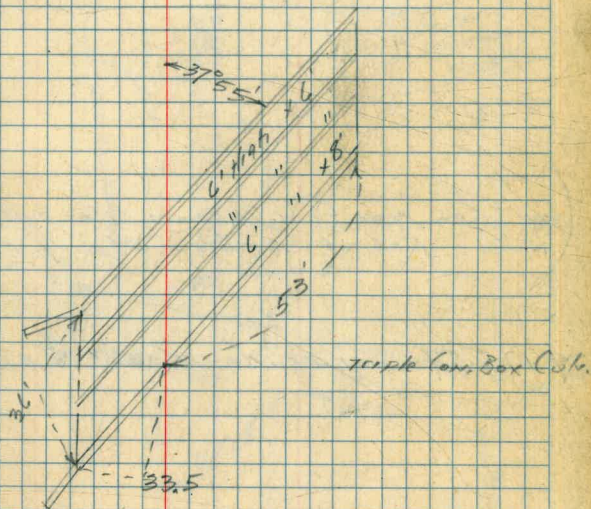
Proposed
WATER

2" 8
0.1
E Pav. & 80' ROW.

Ed.
Culv.
Man.

211

Ed.
Culv. Man.



Ed. spike in Pav.

79+50.89 Δ 1°50' Rt. 2xx Hub

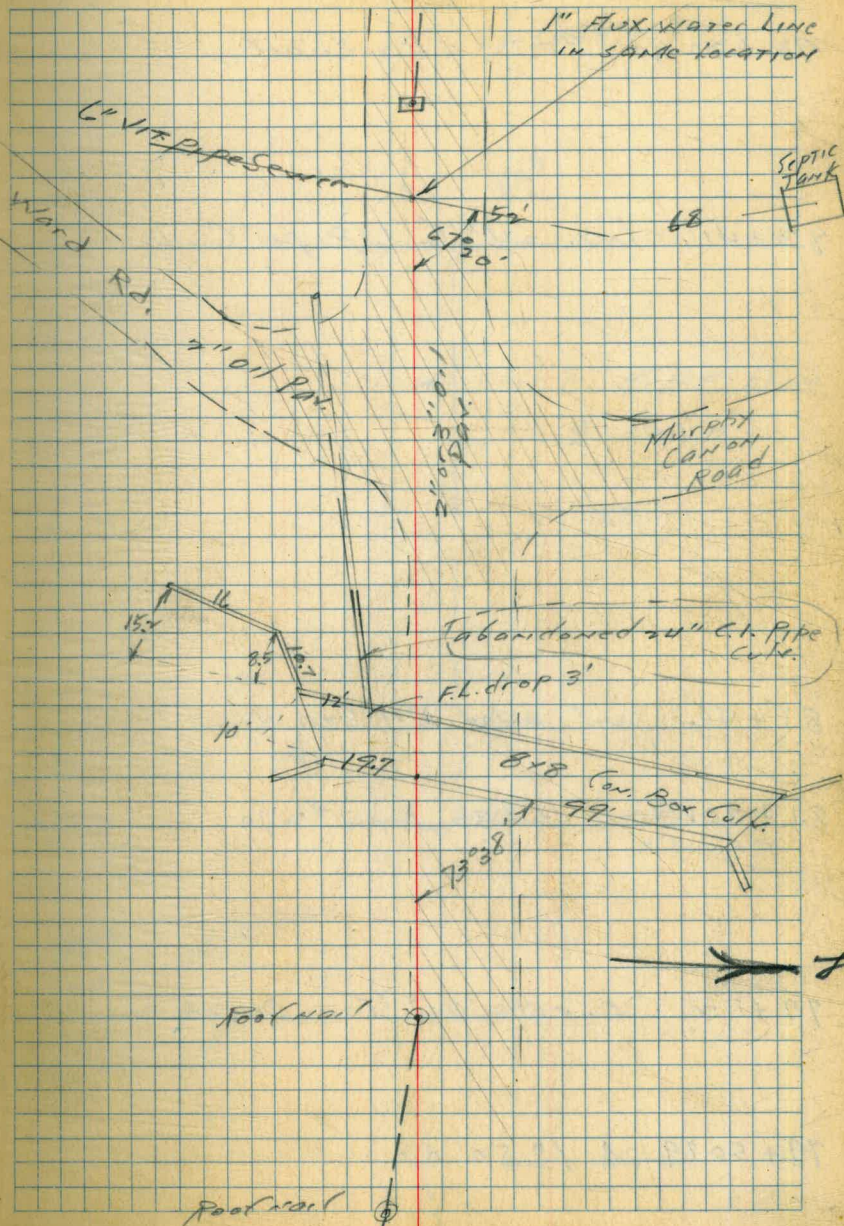
78+96.40 Int. 6" Sewer from Oil Sta.
and 1" water line from Dairy plant

(24" Con. pipe Culv. across Ward Rd.
I think has been abandoned.)

77+25.57 inside Meas. 8' x 8' Con. Box

76+50.75 Δ 1°44'30" Lt.

58+81.26 Δ 0°07' Lt.



93 + 30.90 P.O.T. Roof nail

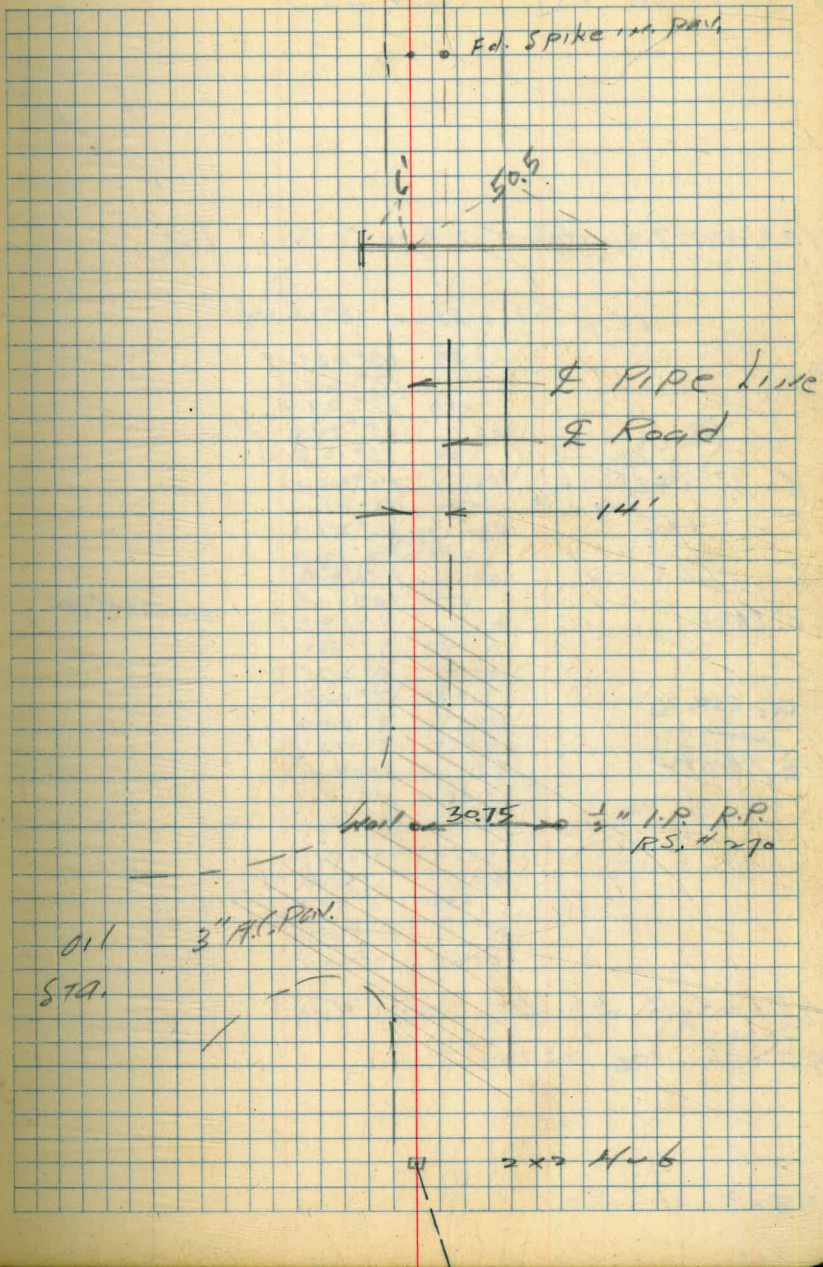
83 + 41 Int. 24" C.I. Pipe Culv.

81 + 46 W. edge Oil Sta Dr.

81 + 30.90 = 3 + 50 R.S. #270

79 + 72 E. edge Oil Sta Drive

79 + 50.89 Δ / 0° 50' Rt.



107+87.20 E.C. Roof wall

101+80.7 18" C.I. Pipe Culv

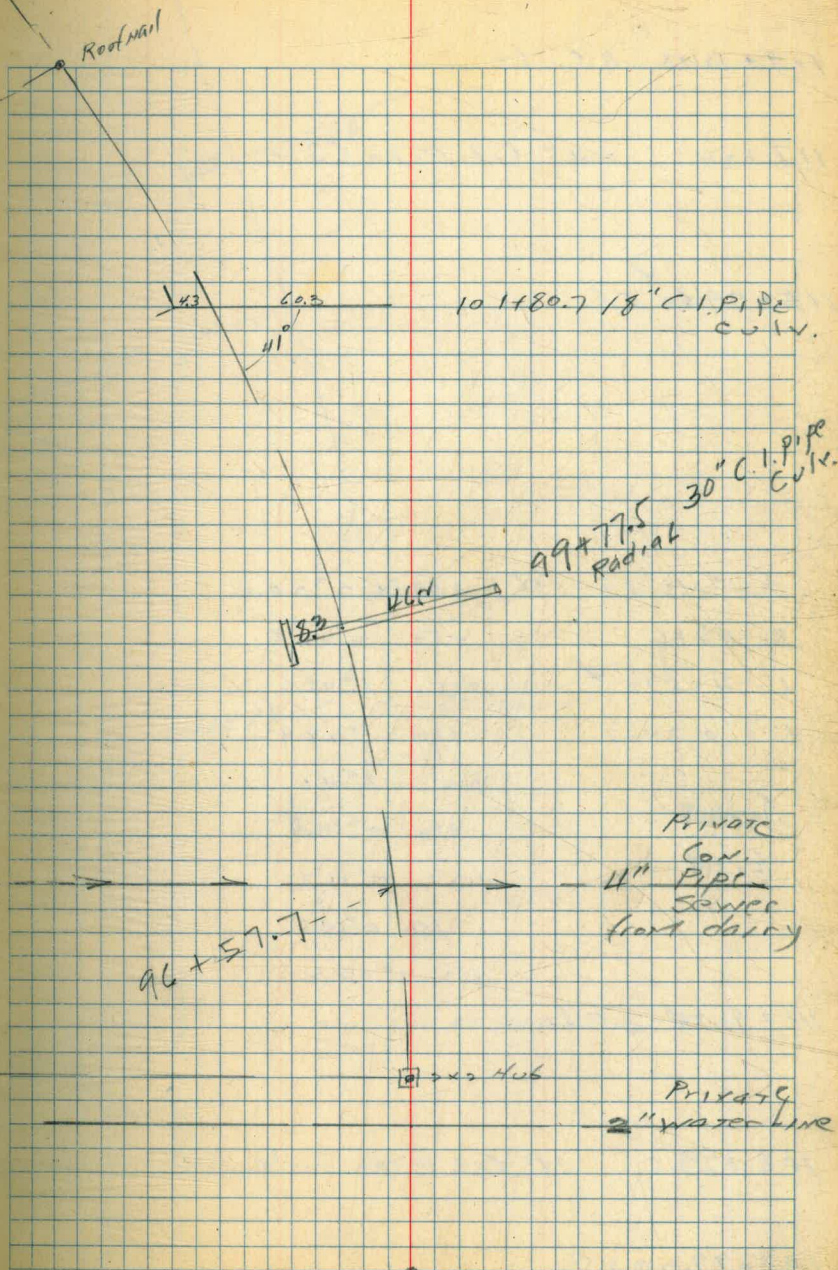
E.C. = 107+87.20 18°41.12

	+50	18°08.1
	107	17°23.7
	+50	16°39.2
	106	15°54.9
	+50	15°10.5
A = 37°22'15" LT	105	14°26.1
	+50	13°41.7
R = 1936	104	12°57.3
L = 1262.74 ✓	+50	12°12.9
D = 8878	103	11°28.5
	+50	10°44.1
	102	9°59.7
	+50	9°15.3
	101	8°31.0
ST = 659.76	+50	7°46.6
	100	7°02.2
E = 107.72	+50	6°17.8
	99	5°32.4
	+50	4°49.0
	98	4°04.6
	+50	3°20.2
	97	2°35.8
	+50	1°51.5
	96	1°07.0
	95+50	0°22.7

95+24.46 B.C. LT. 2x2 Hub

95+16 2" water line

93+30.90 POT.



119+13.18 B.C. LT

117+24 24" C.I. Pipe Culv.

115+99.64 ✓ E.C.

A. 4° 40' LT. E.C. +99.64 2° 20.0

R = 4986 +50 2° 02.8

L = 406.10 ✓ 115 1° 45.0

I' = 0.3427 +50 1° 28.4

T = 203.18 114 1° 11.1

E = 4.14 +50 0° 53.9

113 0° 36.7

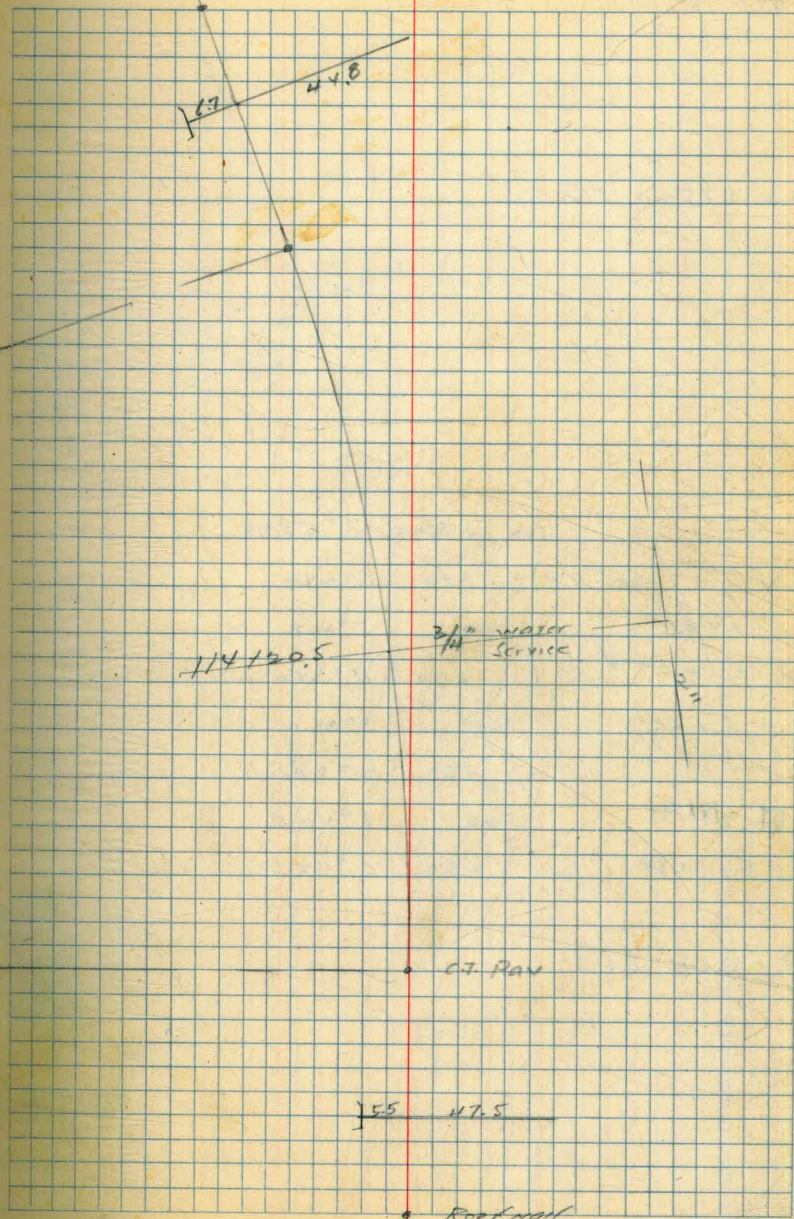
+50 0° 19.5

112 0° 02.2

111+73.54 B.C. LT

108+79.5 18" C.I. Pipe Culv.

107+87.20 E.C.

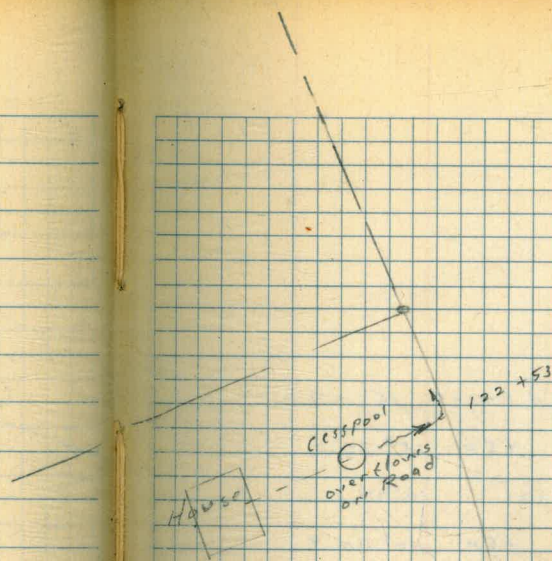


Sec. F.R. 1588
P 33 to 41

✓
122 + 7520 ES.

	122 + 7520	6° 58.75
$\Delta = 13^{\circ} 57' 30''$ LT	+50	6° 29.7
$R = 1486$	122	5° 31.8
$L = 3620$ ✓	+50	4° 34.0
$I' = 1.1567$	121	3° 36.2
	+50	2° 38.2
$ST_2 = 181.91$	120	1° 40.4
$E = 11.086$	+50	0° 42.6

119 + 13.18 BCLT.



130 + 82.20 E.C.

E.C. 130 + 82.20 16° 27.0

+50 15° 32.3

A = 32° 54' RT. 130 14° 07.6

R = 1014 +50 12° 42.8

L = 582.25 ✓ 129 11° 18.11

I' = 1.6951 +50 9° 53.3

128 8° 28.6

ST. 299.39

+50 7° 03.8

E = 43.28

127 5° 39.1

+50 4° 14.3

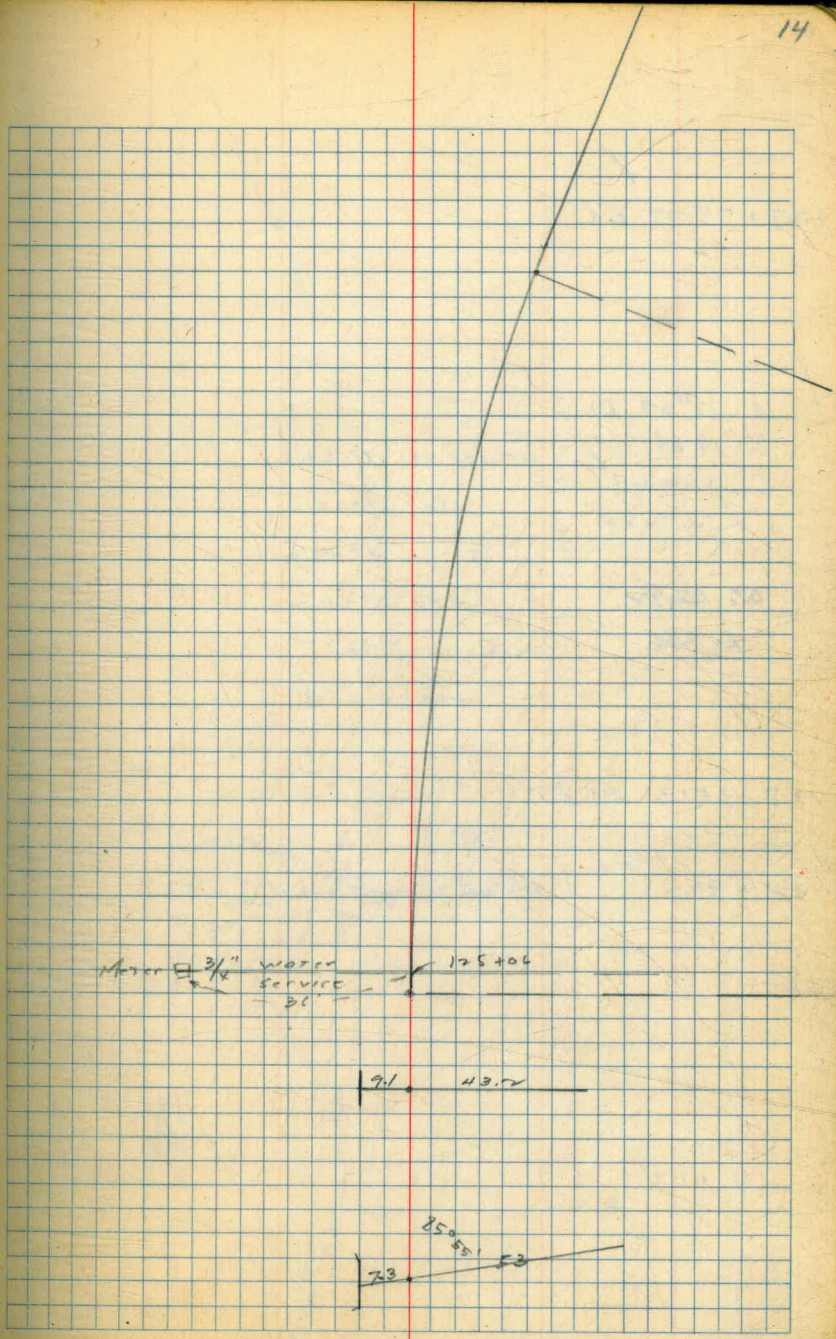
126 2° 49.6

125 + 50 1° 24.8

124 + 99.95 BC RT.

124 + 67 24" C.I. Pipe Curve

123 + 77 36" C.I. Pipe Curve



Meter $\frac{3}{4}$ " Water Service

125 + 06

91 43.28

73

85° 55'

✓
137+75.77 E.C.

$\Delta = 13^{\circ} 59'$ LT.

R = 980

L = 240.44

1' = 1.7432

137+75.77 $6^{\circ} 59.5'$

+50 $6^{\circ} 15.0'$

127 $4^{\circ} 47.4'$

ST. 120.92

+50 $3^{\circ} 20.2'$

E = 7.38

136 $1^{\circ} 53.1'$

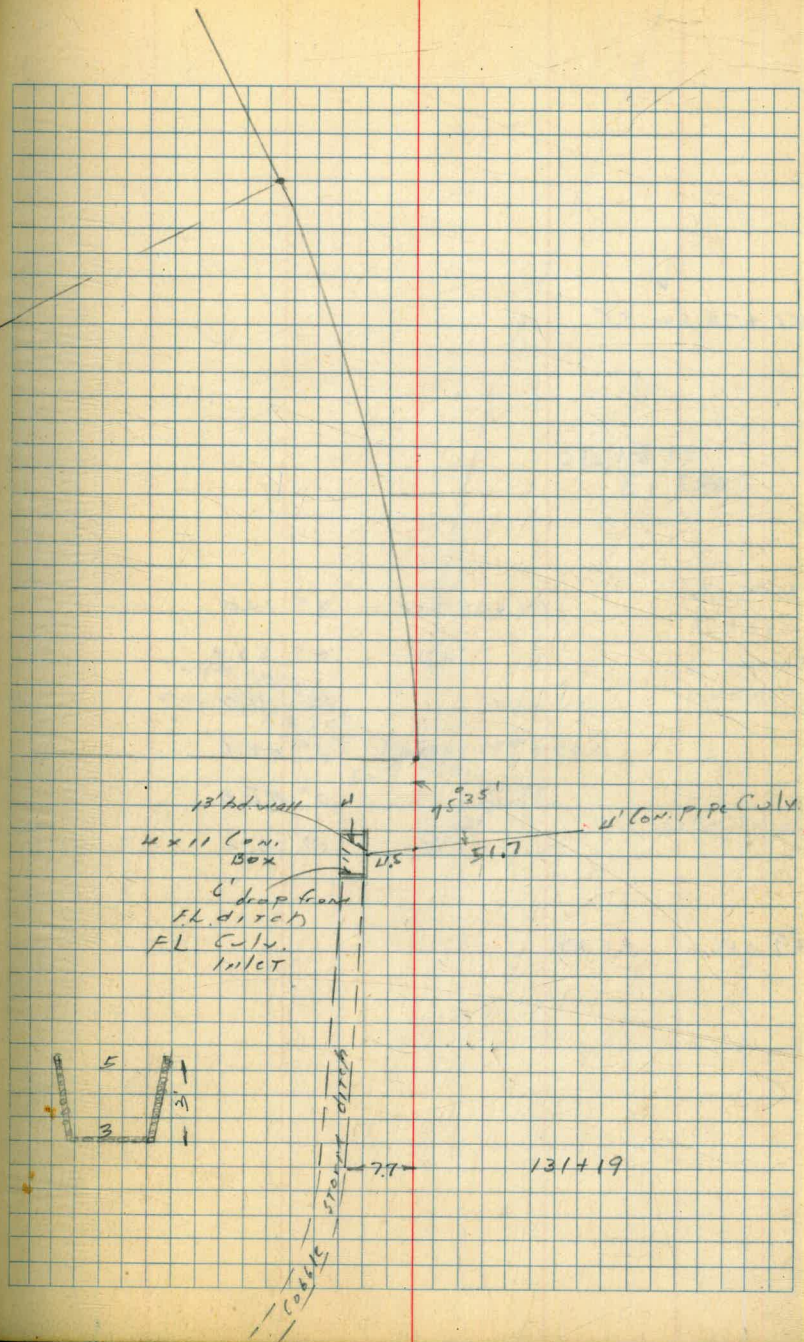
+50 $0^{\circ} 25.9'$

135+35.13 BCLT

132+90.23

4' Con. Pipe 12° 12°

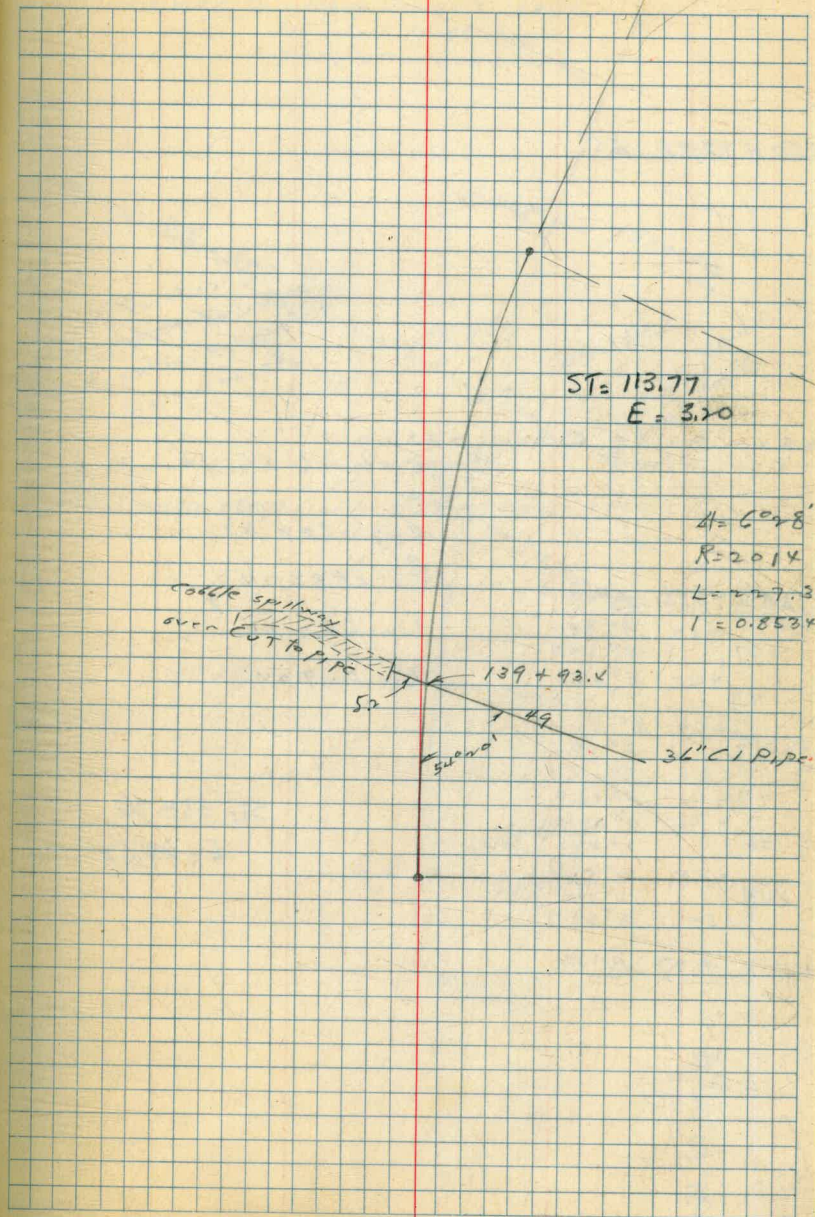
131+19



✓
141 + 73.52 E.C.

141 + 72.57	3° 14.0
+50	2° 53.9
141	2° 11.2
+50	1° 28.6
140	0° 45.9
+50	0° 03.2

139 + 46.21 B.C.R.T.



150 + 78.85 E.C.

4.5' left of Line
Bell of pipe is
Exposed. This should
be lowered

149 + 46.3 14" C.I. Water
please check this for size

$$A = 20^{\circ}09'RT$$

$$R = 1883.74$$

$$L = 667.48$$

$$I = 0.9124$$

150 + 78.85	10° 04.5
450	9° 38.1
150	8° 52.5
450	8° 06.9 ✓
149	7° 21.3 ✓
450	6° 35.6
148	5° 50.0
450	5° 04.4
147	4° 18.8
450	3° 33.2
146	2° 47.5
450	2° 01.9
145	1° 16.3
450	0° 30.7

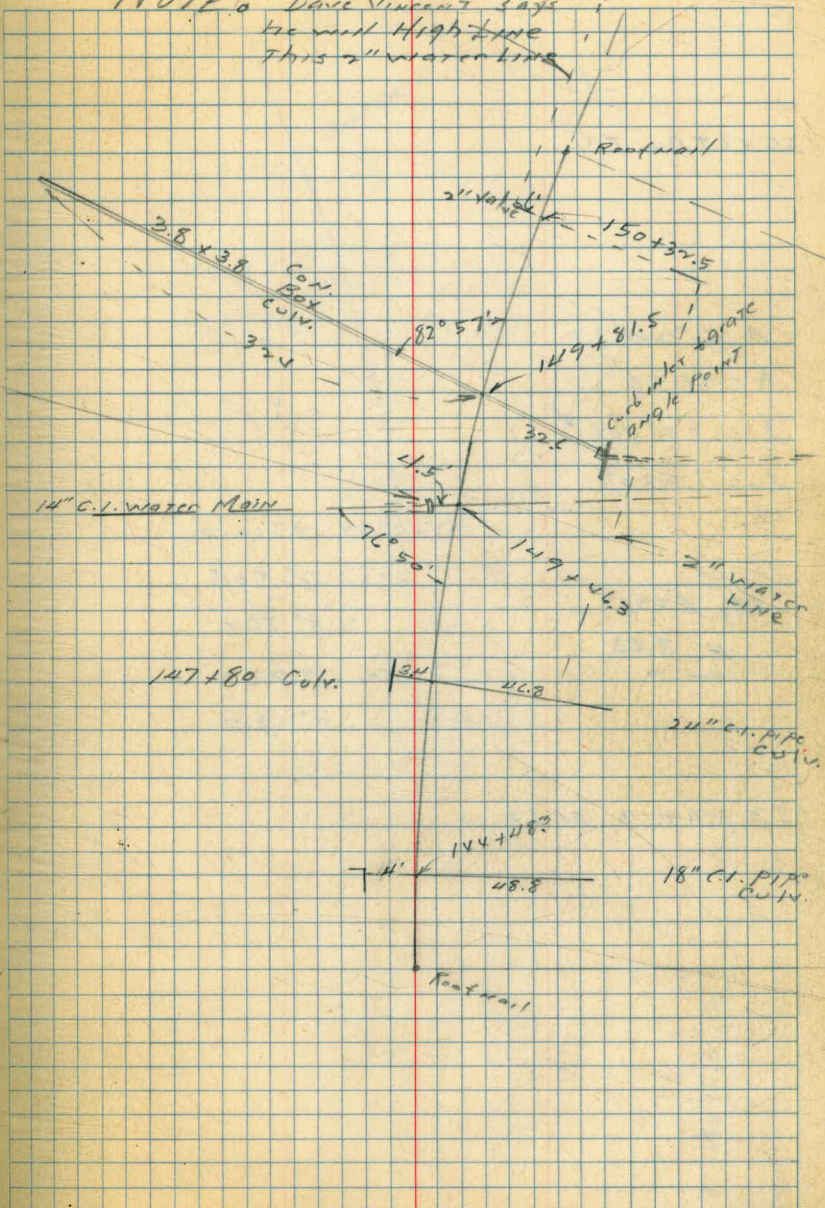
$$ST = 334.70$$

$$E = 29.52$$

144 + 16.37 B.C.R.T.

11-59 50' 30" E

NOTE! Dave Vincent says
he will High Line
This 2" water line



1
155 + 17.94 E.C.

$\Delta = 6^{\circ} 20' 17''$

$R = 1586$

$L = 175.31$ ✓

$l = 1.0837$

155 + 17.94 $3^{\circ} 10.0$

450 $2^{\circ} 50.5$

155 $1^{\circ} 56.4$

450 $1^{\circ} 02.2$

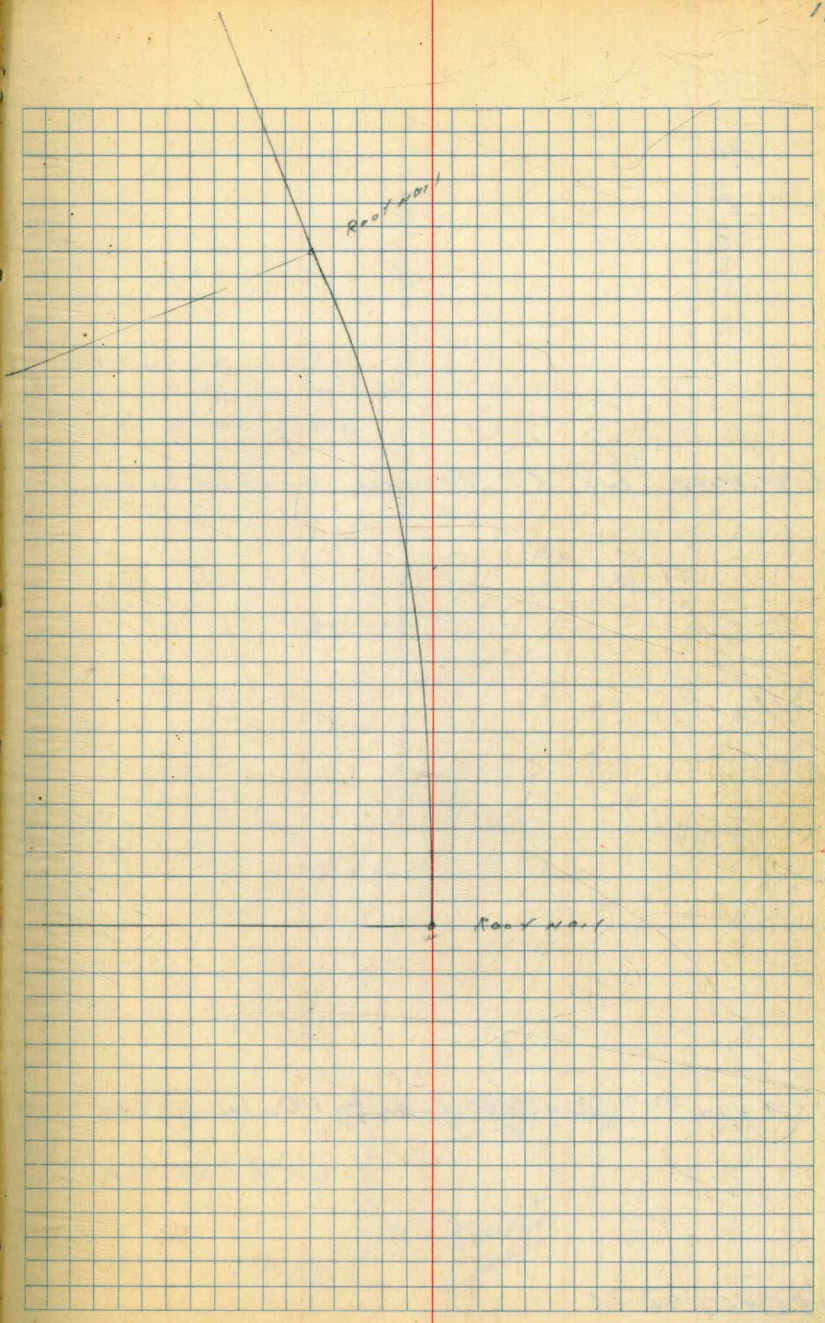
154 $0^{\circ} 08.0$

ST = 87.75

E = 2.93

153 + 97.63 B.C.L.T.

$R = 79^{\circ} 55' 30''$ E

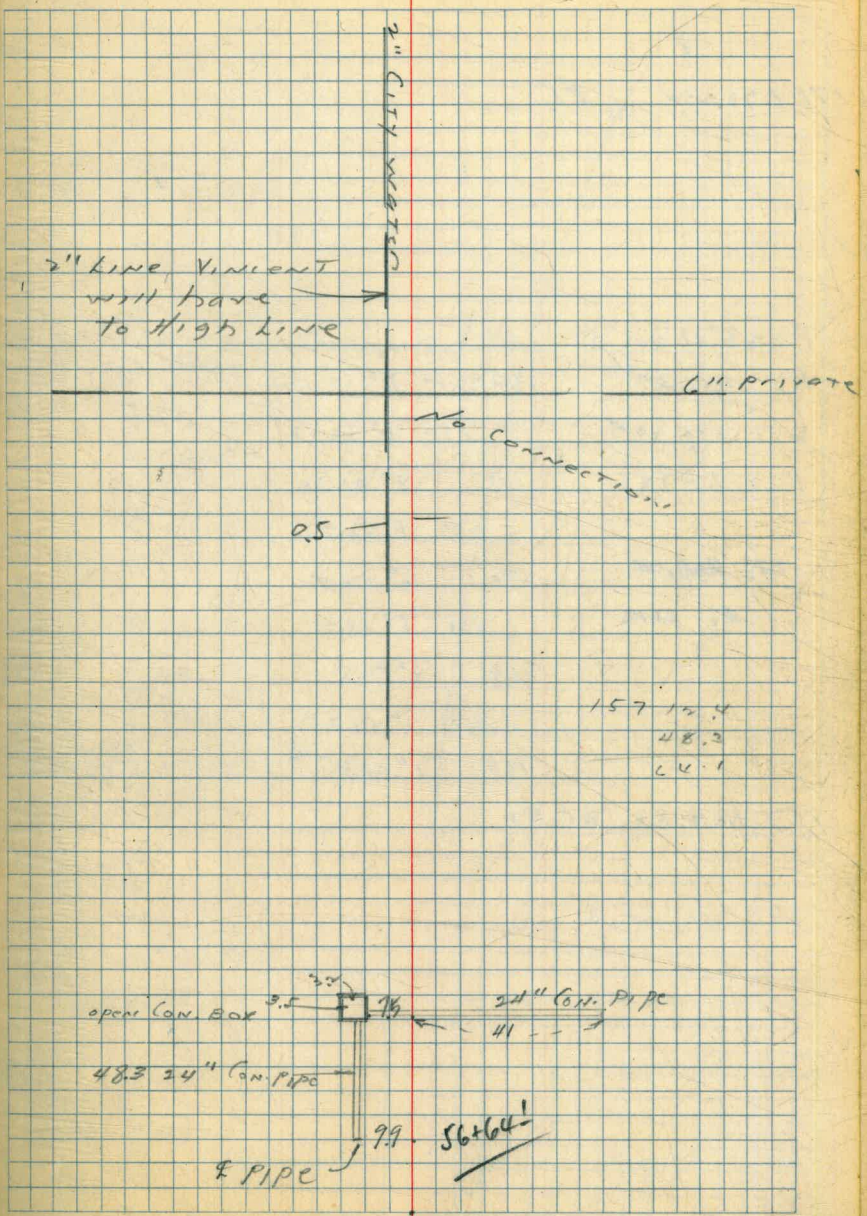


N. 73° 39' 30" E

163 + 37 Ins. 6" Private water line

157 + 12.4 147. 18" Con pipe Culv.

155 + 67.94 E.C.



171+73.24 E.C.

$A = 23^{\circ} 11' 20''$ RT

$R = 1014$ 171+73.24 $11^{\circ} 35.67$

$L = 410.39$ ✓ +50 $10^{\circ} 56.28$

$L' = 1.6951$ 171 $9^{\circ} 31.53$

+50 $8^{\circ} 06.76$

ST = 208.04 170 $6^{\circ} 42.01$

$E = 2112$ +50 $5^{\circ} 17.25$

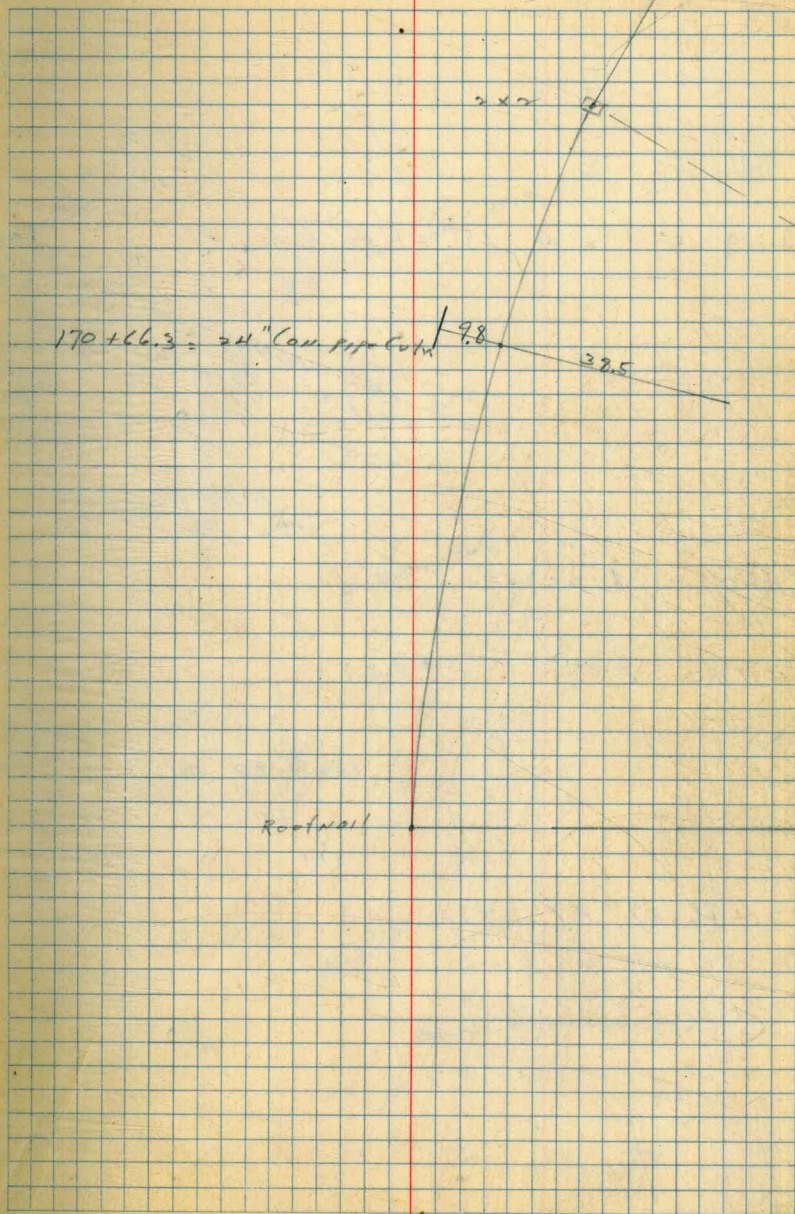
169 $3^{\circ} 52.5$

+50 $2^{\circ} 27.75$

168 $1^{\circ} 03.0$

167+62.83 B.C. RT

167 - SUR LINE 6



176+29.25 = A 15° 51' RT Roadway

24" WATER
TEXAS ST. PAT.
2" OIL PAT.

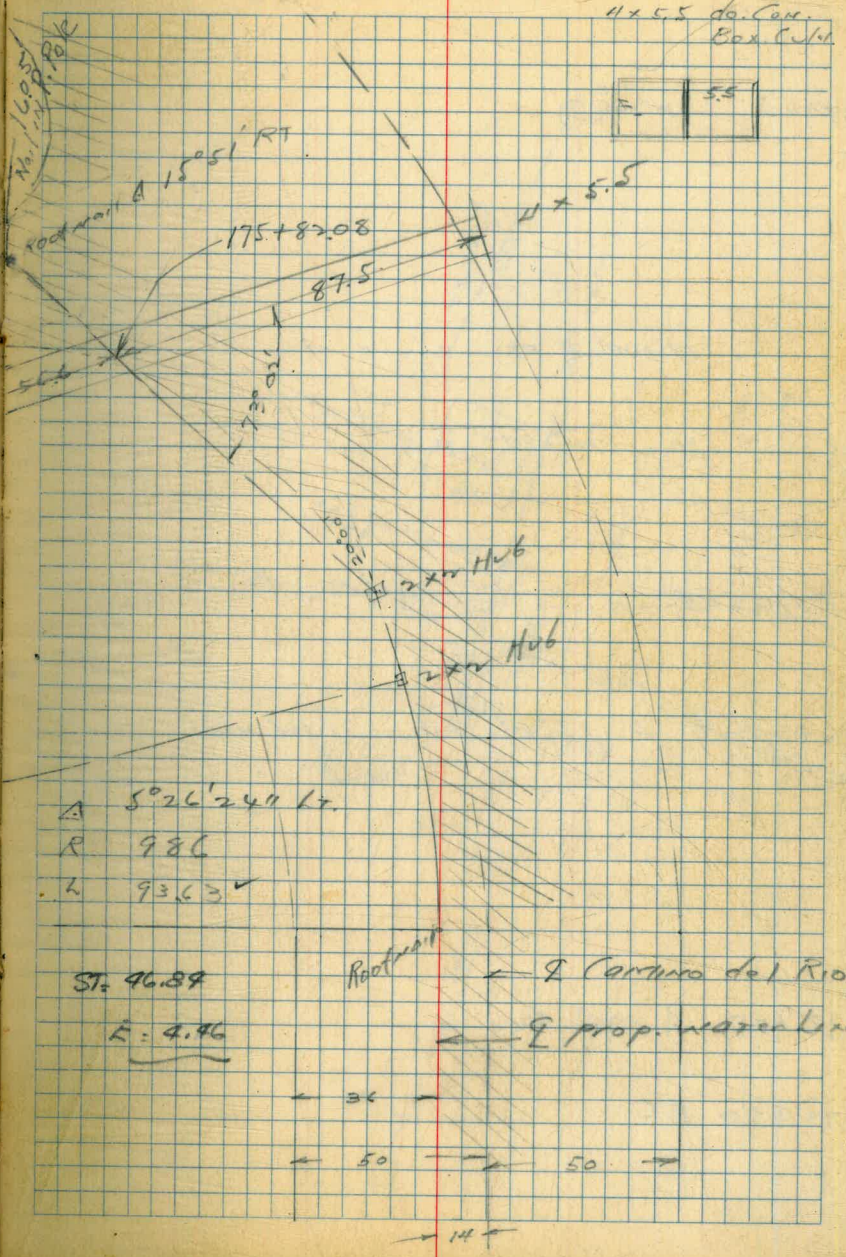
Inlet double
Can. Box Cully

175+00 Δ = 20° LT.

174+80 E.C. ✓

174+80 2° 42.4
+50 1° 50.9
174 0° 23.76

173+86.37 B.C. LT. =

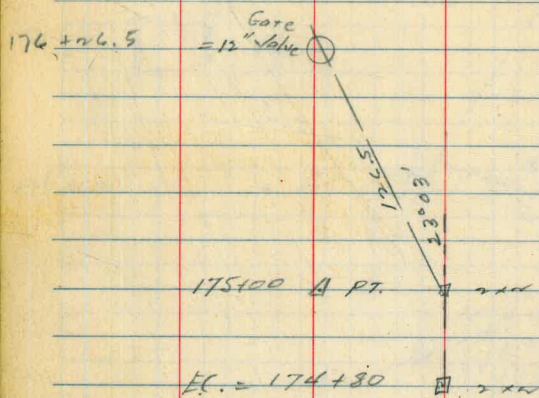


Δ 5° 26' 24" LT.
R 986
L 936.3 ✓

ST. 46.89
E. 4.46

Roadway ← Camino del Rio
← Prop. water line

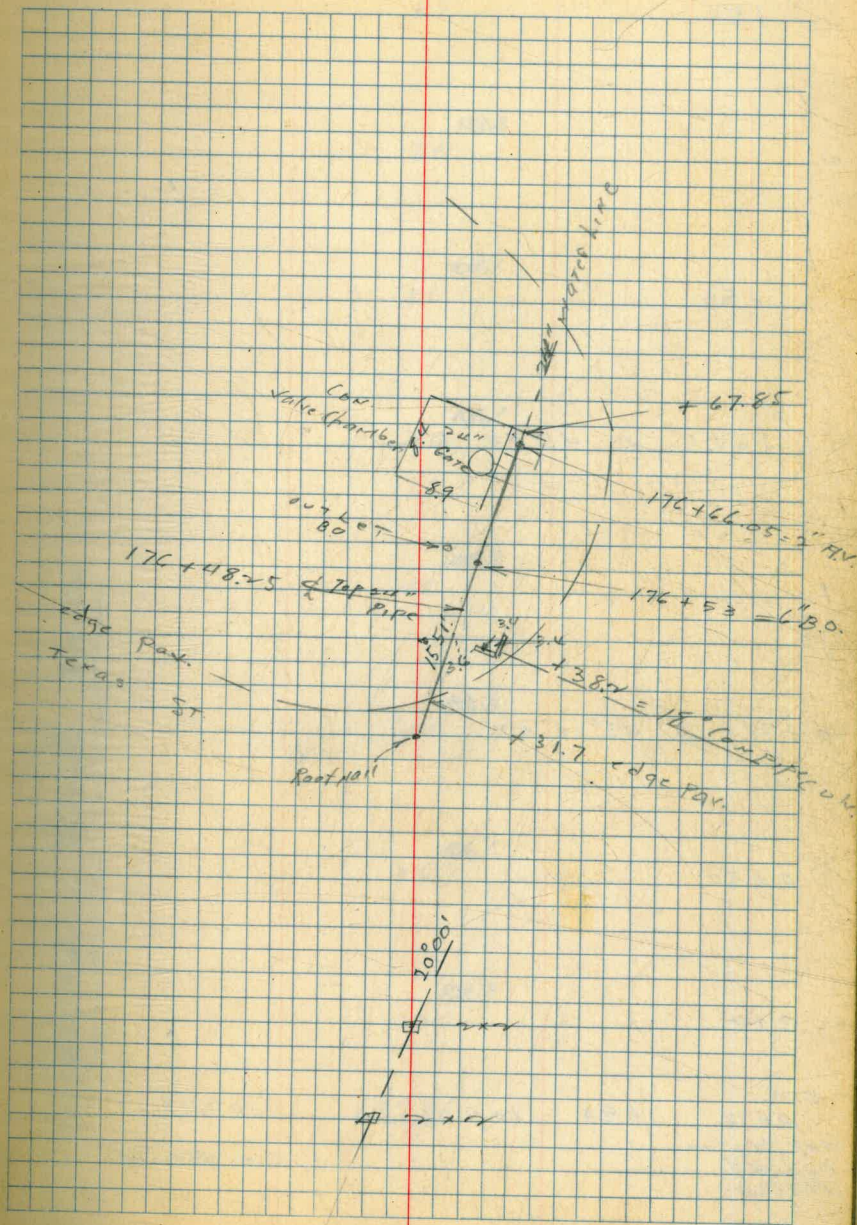
Tie to 12" Gate Valve on 24" water
line at Texas St. +
Continental Rio



176+29.25 Δ 15° 51' RT. roof nail

175+00 Δ 20° LT.

174+80 EC.



"M" Line Levels
CITY DATUM

+50

2

+50

+24.5 Δ 45°00' RT

1

0+75 Δ 45°00' RT

0+50

0+0

B.M.

0+73 1.93 109.71

Top Ely Con.
Comp. Mtg
Chamber

107.78
CITY DATUM

8.9 100.8

7.4 102.3

5.6 104.1

4.0 105.1

4.5 105.2

4.1 105.5

3.6 106.1

1.0 108.7

109.71

7

Level Notes Reduced. Datum E. 3.16.87

6

+ 50

5

+ 50

4

3 + 70 wash

T.P. #1 7.10 105.36 11.45 98.25

+ 50

3

109.71

101.7

3.7

96.7

8.7

95.9

9.5

97.8

8.0

96.6

8.8

96.2

9.4

105.36 ✓

97.0

12.7

99.2

10.5

109.71 ✓

9

TR #1 0.94 99.28 7.02 98.34

+50

8 + 0.644 BCRT

8

+50

7

+50

6 + 45

105.30

6.2 92.9

99.28 ✓
2

6.5 98.9

5.9 99.5

5.8 99.6

4.5 100.9

3.5 101.9

2.1 103.2

2.1 103.3

105.30 ✓
2

+10

10

+95.96 EC

+50

11

+50

10

T.P. H3 2.02 89.06 12.22 87.04

9+50

99.28

10.0 79.1

9.7 80.8

8.0 81.1

7.4 80.9

7.4 81.9

6.4 82.9

11.4 82.9

↓
89.06
2

11.4 80.9

99.28
2

+40

+20

+15

T.P.# 4 6.78 88.66 7.18 81.88

14

+50

13

+75

12 + 50 creek

89.00

10.4 78.2

10.0 78.7

8.4 80.5

88.66 ✓
7

7.8 81.3

8.1 81.0

8.4 80.5

9.4 79.9

10.5 78.6

89.00
7

18

+90

+50

17

+50

16

+50

15

14 + 50

88.22

LT

RT

28

80.7

8.0

79.0

9.7

77.2

11.5

77.9

10.8

77.9

10.8

78.0

10.7

77.7

11.0

76.8

13.4

10 creek

75.2

13.3

5

78.9

9.8

76.7

12.0

9

10 creek

76.2

12.3

5

79.2

9.3

88.22 ✓

20

+50

+30

+15

19

+92.77 POT

+50

T.P. #5 12.70 100.87 0.49 88.17

18 + 15

88.66

98.1
7.8

96.4
11.5

95.6
5.3

97.9
3.0

97.7
3.2

97.3
3.6

91.8
9.1

100.87 ✓
7

10 877

88.66 ✓
3

v.3

+50

T.P. #8 497 129.90 0.19 124.96

v.2

+50

21 + 14,32 A 35° LT.

v.1

T.P. #7 17.38 125.15 0.00 112.77

+50

70 + 35

T.P. #6
near inlet
of C. L. 17.96 112.77 1.06 99.81 20 + 19
100.87

127.6

v.3

126.9

3.0

129.93 ✓

125.0

0.4

120.6

11.6

116.5

8.7

112.7

10.5

125.15 ✓

107.6

5.1

101.9

10.9

112.77 ✓

+50

129.5

5x

nl

129.6

53

+50

125.3

11.6

v5

126.1

3.8

+50

126.3

3.6

v4

127.3

2.6

~3 + 90.39 Δ 30°52' RT

128.1

1.8

+50

127.3

4.6

Fd. B.M. 1.P. under fence
Mkd #4 134.47

3.49

126.44 U.S.G.S.

129.93

126.44
6.14
132.56

0.09 dif.

129.93

+50

30

T.P. #9 10.3w 131.63 8.6w 121.31

+50

29

+50

28

+50

27

129.93

119.7

11.9

120.6

11.0

131.63 ✓
7

9.0 120.9

121.8

8.1

122.9

7.5

123.1

6.8

123.6

6.3

124.1

5.8

129.93 ✓
7

+10

33

+95

+85

+65

+50

37

+50

31

131.63

31

128.5

127.9

40

127.8

40

128.9

37

127.0

40

126.8

48

129.9

67

123.0

86

120.6

110

131.63

7

+85

+80

+50

+08

34

+95

+50

T.P. #10 14.31 142.87 1.07 130.56

33 + 410

131.63

132.3

8.6

131.9

11.0

132.7

10.4

132.6

9.3

132.1

9.8

132.0

10.9

131.9

11.5

142.87 ✓

Σ

130.8

0.8

131.63 ✓

Σ

+ 50

TR # 11 2.54 134.11 11.30 131.57

37

+ 80

+ 50

26

+ 50

+ 25.08 BC 17

35

142.87

5.2 128.9

134.11 ✓
5

10.0 132.9

10.4 132.6

11.6 138.3

11.8 138.1

5.1 137.8

7.15 135.72
on Feb 6

8.1 134.7

142.87 ✓
5

41

+ 87.42 EC

+ 50

T.P. #12 0.23 121.59 12.75 121.36

40

+ 50

39

+ 50

38

134.11

120.0

1.6

119.81

1.78 on Hook

121.0

0.6

121.59 ✓

Σ

121.3

12.8

122.7

11.4

124.0

10.1

125.0

9.1

125.8

8.3

134.11

Σ

+50

T.P. 413 0.40 109.42 12.57 109.02

44

+50

43

+50

+1436 B.C. RT

42

+50

121.59

107.2

109.42

108.1
13.511.6
10.0112.8
8.8114.1
7.5112.22
7.7 on HUB115.0
6.6117.1
4.5

121.59

+50

T.P. #15 0.85 85.00 12.75 84.15

47

+50

+35

T.P. #14 0.41 96.90 12.93 96.49 1.21 40.8 109.42

+15

46

+50

51

109.42

81.0

4.0

85.00
7

14.3 82.6

10.1 86.8

8.4 88.7

96.90
7

10.9 98.5

99.4
10.0

102.8
7.0

109.8
4.6

109.42
7

+50

pay

+34

edge pay

50

+93

edge pay

+74

edge pay

+50

49

+50

48

85.00

8.7

76.3

8.5

76.5

8.0

77.0

8.1

76.9

8.6

76.0

8.3

76.7

7.7

77.8

6.2

79.0

5.2

79.8

85.00

+50

+44.12 Box Cult. 4ly inside line

Triple Con. Box Cult.

+08.12 2ly inside line
Box Cult.

53

+50

54

+50

Sitov. 4x E.C. Nowi on oil pav.

TR. #16					Fd. 30 ^o spite
FARMONT	0.20	77.92	7.28	77.72	PRK
+ CAMINO					# 79875
del Rio		85.00			

LT

4

RT

40

73.0

49

69.35

13.57

33.5

FL

4.7

13.21

33.5

FL

72.9

5.0

72.9

5.0

63.95

14.07

53

FL

4.7

12.45

53

FL

72.9

5.0

73.1

48

73.2

47

74.0

3.9

74.9

3.0

77.92

5

5

+50

57

+50

56

T.P. #17 12.84 90.57 0.17 77.75

+50

55

+50

54

Fd. chisel \boxtimes
 U.S. B.M.
 SW to P hd.
 wall triple
 Box Culv.

77.94

4.80

73.17

79.20
USGS83.9
6.7

8.4 82.9

9.8 80.8

11.5 79.1

90.57
2

0.3 77.6

1.4 76.5

7.9 75.0

4.4 73.7

73.17

6.14

79.24

0.04 dip

77.94
2

61

+50

60

+50

59

check to Cont. Mass. 39' RT.
of Δ - Co. B.M. #2 EB. 130-48

0.66 89.91 $\frac{89.89}{0.02}$
error

+81.26 Δ 0° 07' LT

+50

58

90.57

2.1 88.5

2.5 88.1

2.7 87.9

2.9 87.7

3.2 87.2

3.5 87.1

4.1 86.9

5.1 85.2

90.57

⚡

65

+50

64

+50

63

+50

62

T.P. #18 3.19 92.02 1.74 88.83

61+50

90.57

1.0 88.0

3.3 88.7

2.6 89.2

2.5 89.5

2.5 89.5

2.7 89.3

2.8 89.2

92.02

1.5 89.1

90.57

T.P. #19 1.86 82.25 11.63 80.39

69

+50

68

+50

67

+50

66

+50

92.00

44

11.3 80.7

10.3 81.7

9.4 82.6

8.3 83.7

7.1 84.9

6.2 85.8

5.1 86.6

4.5 87.5

92.00

+50

75

+50

77

+50

71

+50

70

69+50

82.25

45

5.4 76.9

11.8 77.5

11.5 77.8

11.3 78.0

11.0 78.3

3.4 78.9

2.9 79.9

2.5 79.8

2.0 80.3

1.5 81.28

3

77 +25.57 8'x8" Con. Box Culv.

T.P. #20
SE 1/4 Cor.

8.47 80.94 9.78 72.47

Set BM
Chisel Cross
Top of wall
of Box Culv.

77

76 +50.75 A 1'44"30" LT.

76

+50

75

+50

74

82.25

LT # RT 46
62.89 73.6 59.19
18.10 EL 73 21.75 EL
19.7 79

Camino del Rio
Ward Road &
Murphy Canyon Rd

80.94

8.7 73.6

8.5 73.8

8.4 73.9

7.9 74.2

7.3 75.0

6.9 75.2

6.2 76.1

82.25

+50

80

79 + 72 E.W. of Oil Sta Dr.

79 + 50.89 Δ 1° 50' RT.

79

+96.4 Int. of 6" V.I. Pipe Sewer from ^{Oil} STA.

+50

78

77 + 50

80.94

L+

E

R7

4)

2.4 78.5

3.8 77.1

4.6 76.3

5.2 75.7

6.4 74.9

6.8 74.2

TOP 6" Sewer
PIPE

7.3 73.6

7.3 73.6

7.7 73.6

80.94

7

+50

+41 24" C.I. Pipe Curve

82

+50

84

TP #21 797 8864 027 80.67

+50

+46

81 + 3090 = 3 + 50 R.S. 270

8090

LT

+

RT

48

83.2

5.4

79.22

9.44

C F.L.

83.1

5.5

79.70

13.94

50.5

F.L.

82.8

5.8

82.3

6.3

81.5

7.1

88.64

3

80.8

0.1

80.6

0.3

79.9

1.0

80.94

88

+50

87

+50

86

+50

85

+50

84

88.64

2.2 86.9

7.8 85.8

3.2 85.9

2.4 85.7

3.9 84.7

4.1 84.4

4.8 83.8

5.0 83.6

5.1 83.5

88.24

3

92

+50

91

+50

90

+50

T.P. Hwy 6.98 94.58 1.04 87.60

89

88 +50

88.64

11.8 89.8

5.0 89.6

5.4 89.2

5.8 88.8

6.1 88.5

6.4 88.2

94.58 ✓

1.0 87.6

1.6 87.0

88.64

+50

95+2446 B.C. LT.

+10 2" waste (private) pipe line

95

+50

94

+50

93

+50

94.58

7.0 87.6

6.5 88.1

81
TOP 2" PIPE

6.4 88.2

6.3 88.3

6.0 88.6

5.4 89.2

4.9 89.7

4.5 90.1

4.6 90.0

94.58

3

99

+50

98

+50

97

96 + 57.7 4" Cor. Sewer PRIVATE

T.P. #23 2.11 87.65 9.04 85.54

+50

96

94.58

79.0	78.9	81.9	81.8
8.7	8.8	8.8	5.9
10	12	5	

79.5	79.5	82.6	82.4
8.7	8.7	5.1	5.5
10	8	4	

80.5	80.2	83.0	82.9
7.4	7.3	4.7	4.8
10	12	5	

11.0 83.7

3.0 84.7

82.55
5.10 = Top 4" Cor. Pipe Sewer
PRIVATE

87.45 ✓
8

9.1 86.5

8.2 86.2

94.58
8

T.P. #24 6.77 85.47 8.95 78.70

103

+50

102

+80.7 18" C.I.P. pc Culv

+50

101

+50

Ed. B.M. S.E. Cor. Culv. hd. wall

yellow chalk 79+77.5 6.41 81.24 ^{Mkd.} 81.48

^{0.24}
41 f.

100

+77.5 30" C.I.P. pc Culv

+50

87.65

79.1

8.1

79.2

8.5

82.0 78.2 79.9
5.7 4.5 8.3
9 4

77.68 79.6 76.7
F.L. 9.97 8.1 11.0 F.L.

80.9 78.9 79.7
6.8 8.8 8.0
9 5

80.4 80.7 80.2
7.5 7.0 7.5
10 4

80.0 79.9 81.0 80.5
7.7 7.8 6.7 7.7
14 9 4

I don't know the origin of THIS

78.7 78.2 81.2 80.9
9.0 9.3 6.3 6.8
14 10 4

75.00 81.2 73.95
F.L. 17.15 6.5 13.7 F.L.
8.3 46.2

78.6 78.6 81.7 81.2
9.1 9.1 6.0 6.3
15 11 5

87.65 ✓

+79.5

18" Cl. Pipe Culv.

+50

108

107 + 87.20 FC,

+50

107

+50

106

+50

105

+50

104

103 + 50

85.47

LT

6.90
FL 5.5

78.67

Z

81.0

4.5

73.97

RT

54

11.50

17.5 FL

4.6 80.9

4.8 80.7

4.9 80.7

4.9

5.2 80.3

5.3 80.1

5.5 80.1

5.7 79.8

6.0 79.5

6.0 79.5

6.2 79.3

6.5 79.0

6.5 79.0

85.47 ✓

114

+50

113

+50

112

+93.54 BCLT

+50

111

+50

T.P. #45 921 90.10 4.58 80.89

110

+50

109

85.47

LT

L

RT

5576

6.0 84.1

6.1 84.0

6.5 83.6

6.9 83.4

7.3 82.8

7.4 82.7

7.8 82.3

8.4 81.7

8.7 81.4

90.10 ✓

4.3 81.2

4.5 81.0

4.5 81.0

85.47

3

119

+50

118

T.P. # 26 460 88.54 616 83.94

+50

+24 24" CI Pipe Culvert

117

116 +50

115 +99.64 E.C

+50

115

+50

114 +20.5 3/4" City Water Service

90.10

L+

2

RT

56

4.3

89.2

89.5

4.0

89.7

3.8

88.54

Σ

5.4

89.7

81.60

8.50

FL C7

89.6

78.27

5.5

11.83

44.8 FL

5.5

89.6

5.5

89.6

5.0

89.5

5.8

89.3

5.9

89.2

6.0

89.1

89.1

6.0

about 2' deep

90.10

Σ

123+77

36" C.I. Pipe Culv.

T.P. 427.

123+77 2.23 80.42 1035 78.19 SE. Top Cul. bottom

+50

123

+75.20 F.C.

+50

122

+50

121

+50

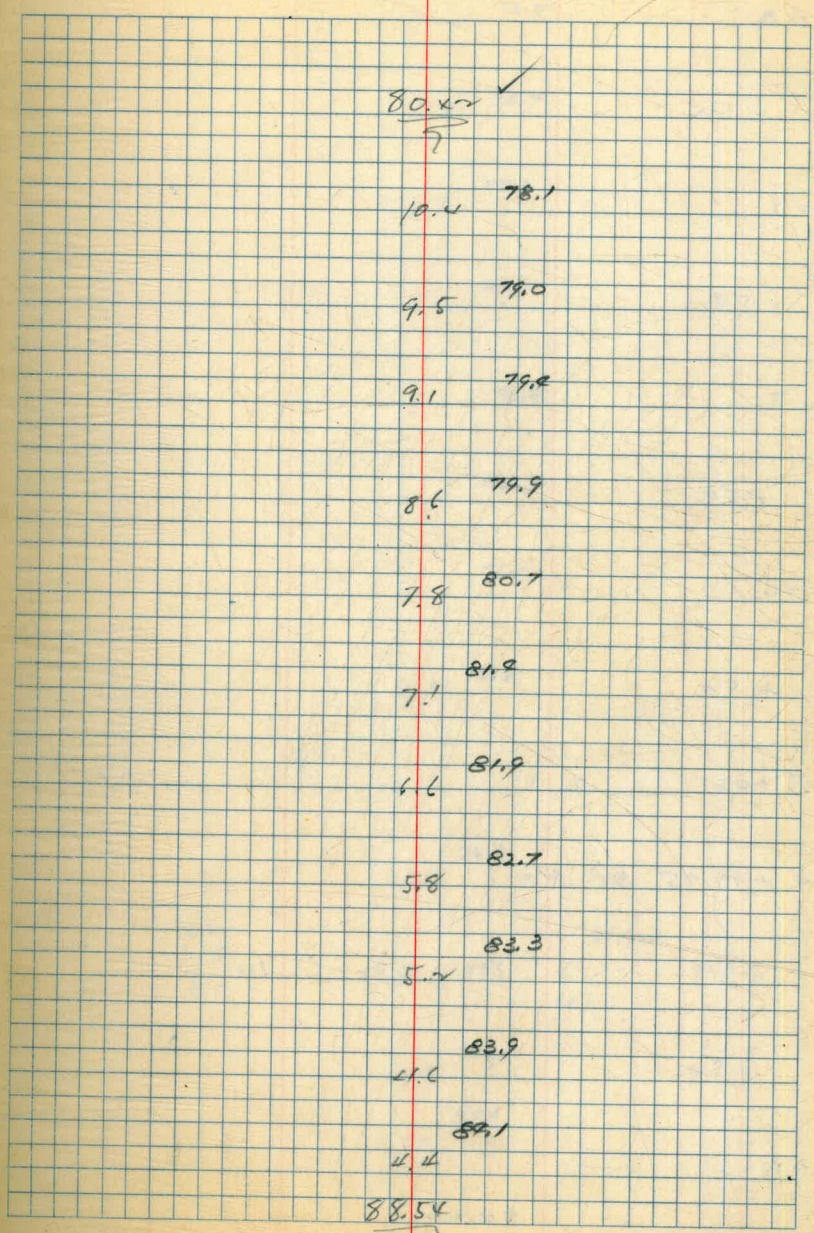
120

+50

119+13.18 BCLT

88.54

F.L. $\frac{76.3}{73}$ 72.79 27 77.7 $\frac{11.0}{53}$ 69.82 F.L. 57



80.42 ✓
 78.1
 79.0
 79.2
 79.9
 80.7
 81.2
 81.9
 82.7
 83.3
 83.9
 84.1
 88.54

129

+50

128

+50

127

+50

126

+50

125+06

124 +99.95 B.C. RT

+67

24" C.I. Pipe Culv

+50

124

80.42

7.2 73.2

6.5 73.9

6.1 74.3

5.6 74.8

5.0 75.4

4.6 76.8

4.1 76.3

3.8 76.6

2 1/4" water service 2' deep

3.6 76.8

73.62
6.80
9.1

3.3 77.2

68.92
11.50
43.7

3.4 77.2

3.0 77.4

80.42

7

+ 50

133

+ 90.23 4' Con. pipe culv.

+ 50

132

+ 50

+ 19

131

130 + 8x10 E.C.

T.P. #28 0.77 71.65 9.54 70.88

+ 50

130

129 + 50

80.42

LT

8

RT

59

66.7

5.0

64.7

67.0

67.2

7.0

4.7

4.5

56.90

67.00

54.10

12.75

16.5

67.3

17.55

F.L.

4.5

4.4

51.7

F.L.

Top of wall

4.0

67.7

11.0

67.7

4.7

68.8

68.9

2.9

2.8

5.5

69.9

69.9

1.8

2.3

67

70.3

69.9

Edge ditch

66

1.4

1.8

7.7

70.1

1.6

70.8

1.3

71.65

7

9.6

70.8

8.8

71.6

7.9

72.5

80.42

}

+ 50

138

137 + 75.77 E.C

+ 50

T.P. # 29 69.2 74.10 4.49 67.16

137

+ 50

136

+ 50

+ 35.13 130 LT

135

+ 50

134

71.65

L7

X

R7.

60

69.2
4.9
3.7

69.2
4.9

68.3
5.8
3.5

68.3
5.8

67.8
6.3
4

67.8
6.3

67.6
6.5
4

67.6
6.5

74.10
5

67.4
5.5
4

67.4
4.5

66.6
5.1
5

66.7
5.0

66.4
5.3
5

66.4
5.3

66.2
5.5
4

66.2
5.5

These Rods are beg.
of toe of .5 to 1 CUT

66.1
5.6

66.0
5.7

66.1
5.6

66.3
5.4

71.65
5

+50

143

+50

144

+73.57 E.C.

+50

141

+50

140

+93.4 36" CI pipe culv.

+50

+46.11 BC RT

139

7410

69.1

5.0

5.5

69.1

5.0

6

69.5

4.6

5.0

69.0

4.5

5.0

69.0

4.5

5.0

69.8

4.3

6

70.2

3.9

6

70.5

3.0

5.2

70.5

3.6

6

66.3

7.80

5.2

F.h.

70.1

4.0

5

70.1

4.0

5

69.7

4.4

5

69.1

5.0

69.2

4.9

69.5

4.6

69.0

4.5

69.0

4.5

69.8

4.3

70.2

3.9

70.5

3.6

70.5

3.6

70.5

3.6

70.1

4.0

70.1

4.0

69.7

4.4

74.10

5

74.10

5

74.10

5

74.10

5

74.10

5

74.10

5

148

+80

24" C.I. Pipe Cvt.

+50

147

+50

146

+50

145

+50

+48.3

18" CI Pipe Cvt.

144 + 16.37 B.C.R.T.

T.P. #30 25x 71.54 5.10 69.00

144

74.10

LT

E

RT

62

68.8

5.7

61.91

9.63

3.4

F.L.

66.1

5.4

57.69

13.90

46.8

F.L.

66.9

5.1

6.2

End of
5 to 1
C.V.T.

66.9

5.1

67.0

4.5

5.6

67.0

4.5

67.9

4.1

6.2

67.9

4.1

67.8

3.7

6.6

67.8

3.7

3.5 68.0

6.5

68.0

3.5

68.3

3.4

5.5

68.3

3.4

68.6

2.9

5.7

68.6

2.9

65.99

6.10

4

F.L.

68.6

2.9

60.7

10.8

48.0

F.L.

68.8

2.7

5.5

68.8

2.7

71.54

2

68.9

5.2

5.2

68.9

5.2

74.10

2

150

151

150+78.85 E.S.

+50

+30.5 CITY
2" Pipe Line + Valve

150

T.P. #31

Top Curb 0.28 65.19 6.63 64.91

chisel cross
2 1/4" top curb
or inlet
30.5 RT of
149+81.5

+81.5 3.8 x 3.8 Con. Box Culv.

+50

+46.3 CITY
14" C. Iron WATER MAIN

149

+50

71.54

64.91
11.27
76.18
0.00
76.18
11.87
88.05
0.01
88.04
6.73
94.77
7.13
87.64

LT

R

RT

63

41.1 61.5

3.1 62.5

2.7 62.8

2.2 63.0

61.9
TOP OF PIPE 3.8
3

63.9
1.8

64.2
1.0

65.19

F.L. El. = 87.64
32.4
inlet

69.5 63.62 65.39
7.0 79.0 16.15
32.6 32.6
inlet
F.L. Box

67 64.8

64 62.9

NOTE!
64.5
11.5
Top of Bell
Should be lowered 6.4

65.3

65.6
5.9

71.54

155 + 67.94 E.C.

+ 50

155

T.P. #34 0.56 53.08 12.47 52.57

+ 50

154

check to Bill Bliss B.M.
Hub 40' RT of B.C.

10.68 54.51 54.67
0.16

153 + 92.63 B.C. LT.

+ 50

153

+ 50

154

65.19

3.3 49.8

2.0 50.1

1.8 51.3

53.08 ✓

12.6 52.6

11.0 54.2

10.7 54.5

9.5 55.7

8.3 56.9

7.1 58.0

5.9 59.3

65.19

+ 50

160

+ 50

159

+ 50

158

+ 50

+ 12.4

JUNCTION Box 54" C.V.

157

+ 64.1

inlet of 24" Cast. pipe C.V.
Parallel with Camino del Rio

+ 50

156

53.08

6.6 46.5

6.5 46.6

6.4 46.7

6.1 47.0

5.8 47.3

5.4 47.7

5.1 48.0

49.85

8.23

F.L. 7.5

48.2

4.9

42.63

10.45

4.1 F.L.

4.9 48.2

45.70

7.38

F.L. 9.9

4.6 48.5

4.5 48.6

3.8 49.3

53.08

7

166

+ 50

165

+ 50

164

+ 50

+ 37

Top 6" Iron pipe PRIVATE WATER LINE

163

+ 50

162

+ 50

161

T.P.# 33 341 49.86 663 46.45
53.08

LT

±

RT

66

64 43.5

60 43.9

57 44.0

56 44.3

53 44.6

50 44.9

50 44.9

49 45.0

46 45.3

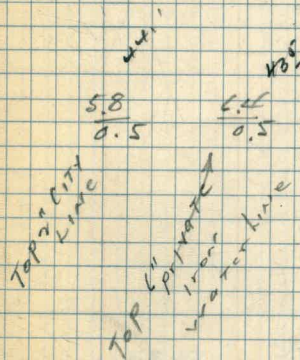
41 45.8

40 45.9

46.3

36

49.86



171

+ 50

170

+ 50

169

+ 50

168

167 + 67.63 D.C.R.T.

TP# 34 4.00 47.30 656 43.30

+ 50

167

+ 50

119.86

5.1 42.2

5.0 42.3

4.8 42.5

4.7 42.6

4.5 42.8

4.5 42.8

4.3 43.0

4.1 43.2

47.30 ✓

67 43.2

66 43.3

65 43.4

119.86 ✓

174 + 80 E.C.

+ 50

174

+ 86.37 B.C. LT.

+ 50

173

174 + 50

170 + 66.3 $\left(\begin{array}{l} \text{Please back up} \\ = 24'' \text{ Cor. pipe Cut.} \end{array} \right)$

174

171 + 73.44 E.C.

+ 50

47.30

LT

+

PT.

68

1.4 45.9

2.0 45.3

2.7 44.6

2.8 44.5

3.3 44.0

3.7 43.6

3.8 43.5

38.25
9.05
FL. 9.8

42.4
4.9

36.68
10.64
38.5 FL

4.0 43.3

4.4 43.1

4.5 42.8

47.30

5

check to B.M. Top disc.

Top. Culv. hd wall at outlet 9.45 42.84 $\frac{43.92}{0.16}$

check to B.M. ⁴nails in Cypress tree 4.87 47.42 $\frac{47.68}{0.26}$

176+26.5 = Cap over 12" Valve

176+48.25 Top 24" line on Texas

176+29.25 Δ 15° 51' RT

176

+87.08 double H x 5.5 Cor Box Culv.

+50

175+00 Δ 20° LT.

T.P. #35 L.V.C. 52.29 147 45.83
47.30

LT

R

RT

69

48.71
Top of Cap over 12" Gate 3.58 and pav. El.

Top 24" WATER LINE 9.58 42.71

4.0 48.3

48.7
3.6 Pav.

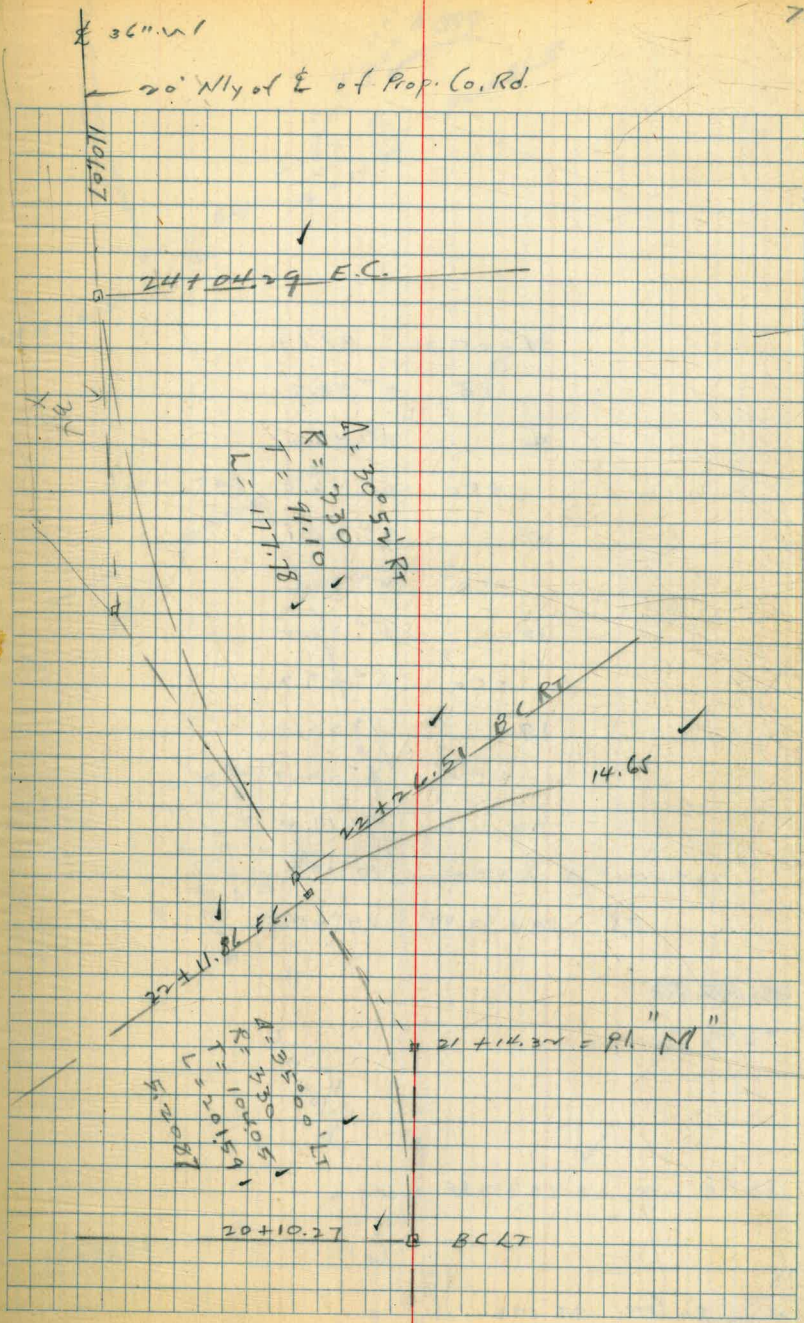
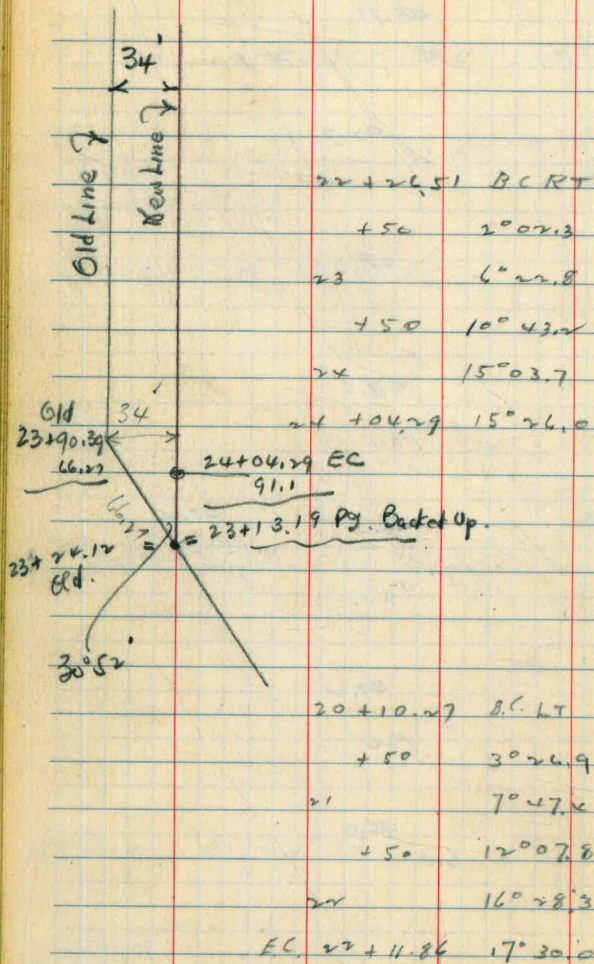
43.03 48.3 37.00
F.L. 9.26 15.23 F.L.
5.66 41.0 Pav. 87.5

47.2
5.1 Pav.

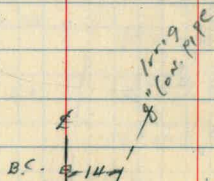
46.0
6.3

52.29 ✓

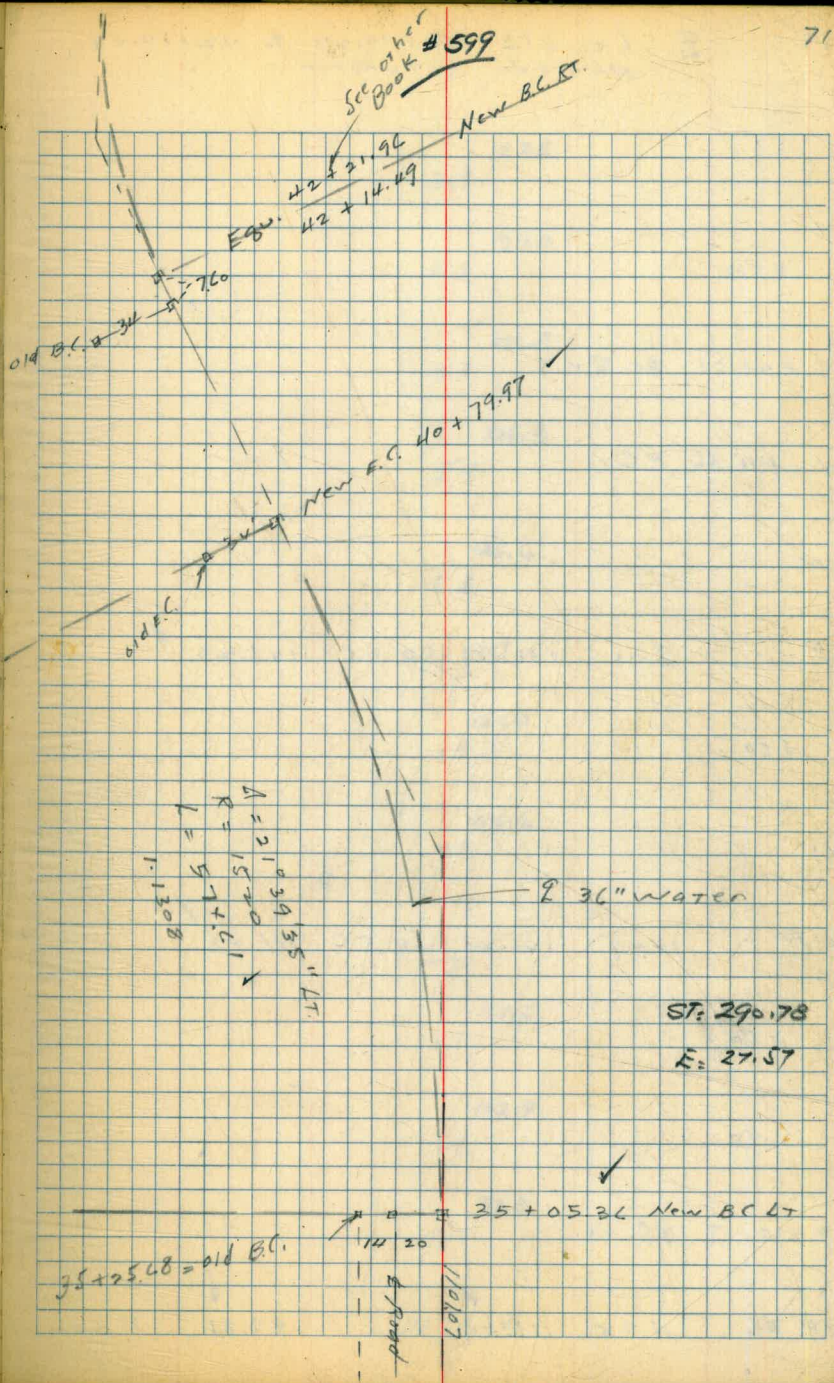
Moore Proposed change of line on
 Hazard Alvarado Cañon 31" water
 Hoopes 20+10.27 to Eqv. B.C. 42+21.96
 $\frac{42+21.96}{42+14.49}$
 C-6-42



35+05.36	BC LT
+50	0° 50.5
36	1° 47.0
+50	2° 42.5 POC Nail
37	3° 40.1
+50	4° 36.6
38	5° 32.2
+50	6° 29.7
39	7° 26.3
+50	8° 22.7
40	9° 19.2
+50	10° 15.7
E.C. 40+79.97	10° 09.5



Int. 8" Con. PIPE 35+73



Levels 24+10.27 to 42+14.49
Anorodo 36" water

v3

+50

v4 +26.51 BC RT

v4 +11.86 EC

v4

T.P. 8.11 131.37 0.06 123.26 ✓

+50

v1

T.P. 10.09 123.34 0.56 111.03 ✓

+50

+40

30+10.27 B.C. LT.

T.P. #C 11.78 111.59 ✓ 99.81 P 30 ✓

±

72

127.5
3.9

127.3
11.1

126.8
4.6

126.3
5.1

125.6
5.8

121.37

121.9
1.9

115.6
7.7

123.34

107.5
4.1

102.9
8.7

98.3
13.3

111.59 ✓

28

+ 50

TP 249 124.69 9.7 12270 ✓

27

+ 50

26

+ 50

25

+ 50

24 + 04.29 EC

24

23 + 50

131.37 ✓

4.5

120.2

120.8

3.9

124.69

121.4

10.0

121.9

9.5

120.1

8.4

120.1

8.4

123.7

7.7

124.1

7.3

124.1

7.3

124.3

7.1

126.1

5.3

131.37

34

+50

33

T.P. 11.11 134.49 1.31 123.38 ✓

+50

32

+50

31

+50

30

+50

29

28 +50

✓
124.69

2

126.0

8.5

125.9

8.6

124.2

10.3

134.29

2.2 122.5

120.8

3.9

119.3

5.4

118.0

6.7

117.2

7.5

116.9

7.8

117.8

6.9

118.8

5.9

119.7

5.0

124.69

+75

+50

+23

+21 Sly edge dirt Rd

T.P. 0.38 125.17 9.70 124.79 ✓

37

+50

36

+50

35 + 0.36 BC LT

35

+73 Int. 8" Con. corr. g. Pipe Line

+50

134.49 ✓

117.6	115.4	115.4
7.0	9.8	9.8
	1	2

120.2	120.2	118.7	118.6
5.0	5.0	2.5	2.6
	1	1	2

2.4 123.0

3.5 121.6

125.17
8

10.4 124.1

4.3 130.2

4.5 132.0

2.7 131.8

5.3 129.4

5.8 128.7

7.3 127.7
ground sande cl. = Top

7.8 126.7

134.49
}

check to T.P.
#13 P.37

947 10905 10902

$$\frac{42 + 2196}{42 + 1449} = \text{Eq. BC RT}$$

42

+50

41

40 + 79.97 EC nly edge Rd

+50 nly edge Rd

40

+50

TP 6.42 118.52 1307 11210 ✓

39 Mid Int Rd

+50

38

105.17 ✓

Notes Reduced. S. 12. 92

LT

R

R

76.

Continued - Book 599

109.12	108.8	nly edge	dir Rd	106.9
$\frac{9.3}{2}$	$\frac{9.7}{1}$	$\frac{107.9}{10.6}$	$\frac{11.2}{7}$	
109.6	109.1	108.4	106.8	
$\frac{8.9}{2}$	$\frac{9.4}{2}$	$\frac{10.1}{1}$	$\frac{11.7}{8}$	
110.4	110.2	109.1	107.4	
$\frac{8.1}{2}$	$\frac{8.3}{2}$	$\frac{9.4}{1}$	$\frac{11.1}{8}$	
111.5	111.3	110.3	109.0	
$\frac{7.0}{2}$	$\frac{7.2}{1}$	$\frac{8.5}{1}$	$\frac{9.5}{8}$	
112.4	112.3	111.2	110.9	109.5
$\frac{6.1}{2}$	$\frac{6.2}{1}$	$\frac{6.3}{1}$	$\frac{7.6}{3}$	$\frac{8.9}{8}$
113.5	113.4	112.3	110.1	
$\frac{5.0}{2}$	$\frac{5.1}{1}$	$\frac{5.2}{1}$	$\frac{8.4}{8}$	
113.7	113.7	112.7	110.8	
$\frac{4.8}{2}$	$\frac{4.8}{1}$	$\frac{4.8}{1}$	$\frac{7.7}{7}$	

5.8 112.7

118.52

112.7
13.0

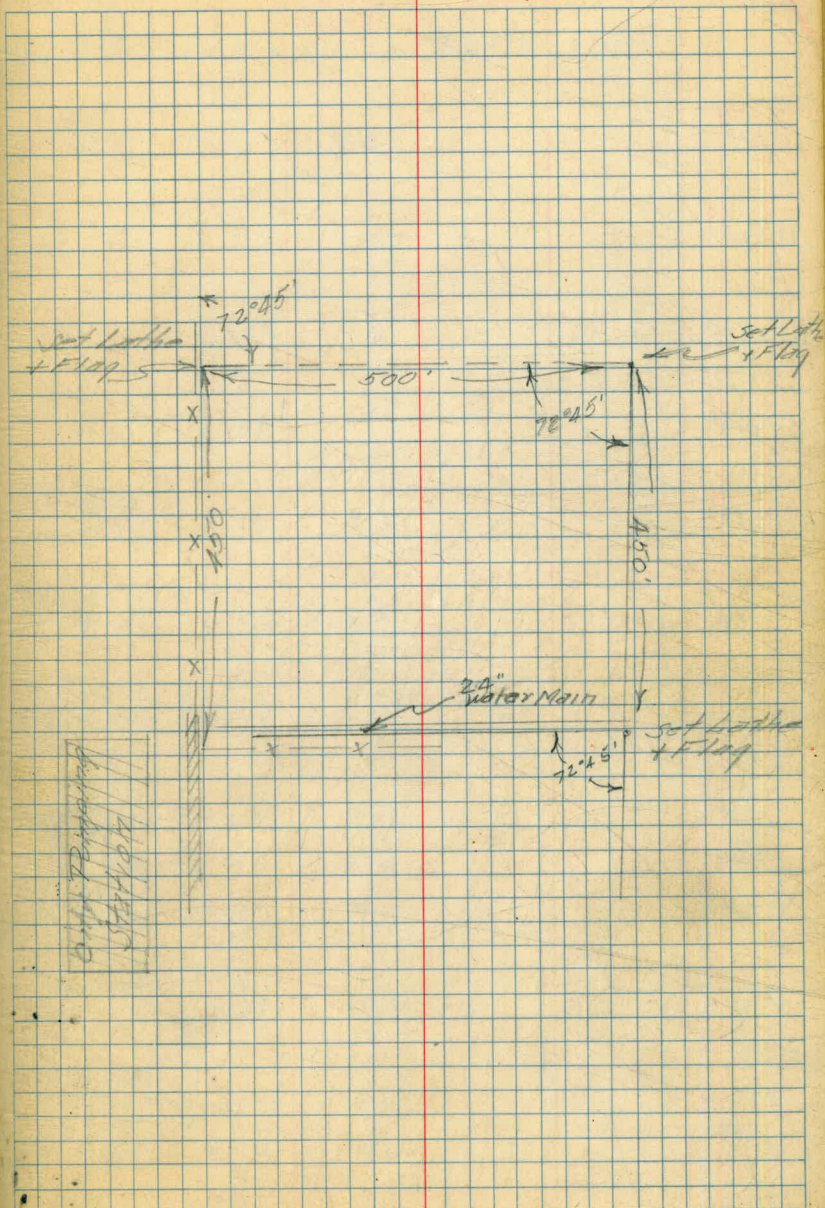
114.9	114.2	112.5	112.5	
$\frac{10.3}{2}$	$\frac{11.0}{4}$	$\frac{12.7}{3}$	$\frac{12.7}{1}$	
116.6	115.9	114.0	114.0	114.0
$\frac{8.5}{2}$	$\frac{9.3}{2}$	$\frac{11.2}{1}$	$\frac{11.4}{1}$	$\frac{11.2}{2}$

105.17

Woodward (Mission Valley)
Stadii Traverse

Rainey
King
Nixon
Wette

5-14-47 77



Oxley
Notes

Mission Valley ^{Alvarado} Pipe lowering

NOTE: Added 4' to each station.
(Arbitt) ^{EWE} 7/28/50

1.80 89.55 87.67 City P.
93.79

11178 ⁸²	6.5	83.1	75.9
112100 ⁰⁴	6.3	83.3	75.8
112450 ⁵⁴	5.8	83.8	75.3
112700 ⁰⁴	5.4	84.2	75.1
1130 ²⁴	5.3	84.3	74.5 75.1
1136 ⁴⁰	5.2	84.4	74.4 74.4
1132 ⁵⁶	5.1	84.5	74.3 73.9
1140 ¹²	5.0	84.6	74.2 73.7
1144 ⁸⁸	5.0	84.6	74.1 73.7
11400 ⁰⁴	5.0	84.6	74.0 73.6
116 ²⁰	5.0	84.6	74.5 73.1
132 ³⁶	5.0	84.6	75.3 73.9
140 ⁵²	5.0	84.6	76.5 75.2
166 ⁷⁰	5.0	84.6	76.8

King
Shipman
West

April 25, 1950

76

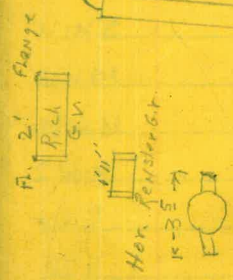
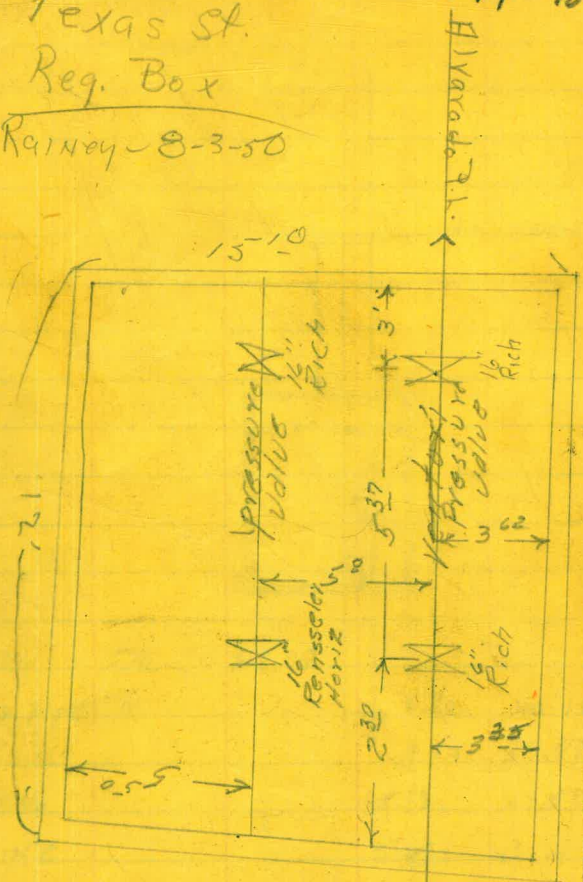
P.P. 4279208 - Nail in P.S. U.S. 9.5

7.8	
7.7	
8.5	
9.1	
9.3, 9.8	
9.8 10.0	Grades changed by Ben H. 4.24-50
10.6 10.2	
10.5 10.4	
10.8 10.5	
10.8 10.6	
10.5 10.1	
10.7 9.1	
9.4 8.1	
7.8	

King
West
Ship

attach to FB 579 pg. * 76

Texas St.
Reg. Box
Rainey - 8-3-50



- 43.02
- 33
- 35.10
- 35.10
- 34.60
- 34.60
- 35.10
- 35.10
- 35.30
- 35.30

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of $\frac{1}{2}$ stake from side or shoulder stake for any $\frac{1}{2}$ roadway, slope 1% to 1. If ground is nearly level, the cut or fill at the stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the top of the roadway, slope 1% to 1. Add this amount to cut, elevation of hill. Add this amount to cut or fill and find space in table. Set up rod at this point and line of sight should cut target. It does not make the slight adjustment necessary.

IMPROVED TABLES AND INFORMATION

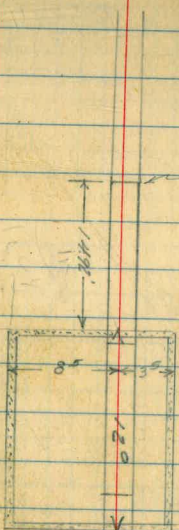
TABLE No. 2. *sharp gus*

To find Tangent and External for curve any other device divide by $\frac{1}{2}$ of curve and add correction found in column of correction. Length of curve with $\frac{1}{2}$ may be found by dividing tangent (or external) opposite given tangent (or external) by $\frac{1}{2}$. The distance from a point on the tangent to the curve is very nearly the square of the length divided by twice the $\frac{1}{2}$.

8.49 9.16
 8.39 9.06
 9.16 9.83
 9.13 9.79
 7.16 8.83
 6.68 7.35
 6.46 7.13
 7.11 7.78

Reg. Box - Near TCC93

King
West
Shipman



B.m.	596	48.98		43.02
Top Pipe		8.82	40.16	35
"		9.10	39.88	
NE No		5.39	43.59	35.10
N.H.E		5.49	43.49	35.10
N.N.W		5.22	43.76	34.60
N.W.N		5.26	43.72	34.60
S.W.W		6.72	42.26	35.10
S.W.E		7.70	41.78	35.10
S.S.E		7.22	41.76	35.30
S.E.S		6.57	42.41	35.30

KING WEST SHIPMAN

DIRECTIONS FOR USE OF TABLES

31.0
3.5

TABLE No. 1

Distance of top stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at the stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance

IMPROVED TABLES

AND

INFORMATION

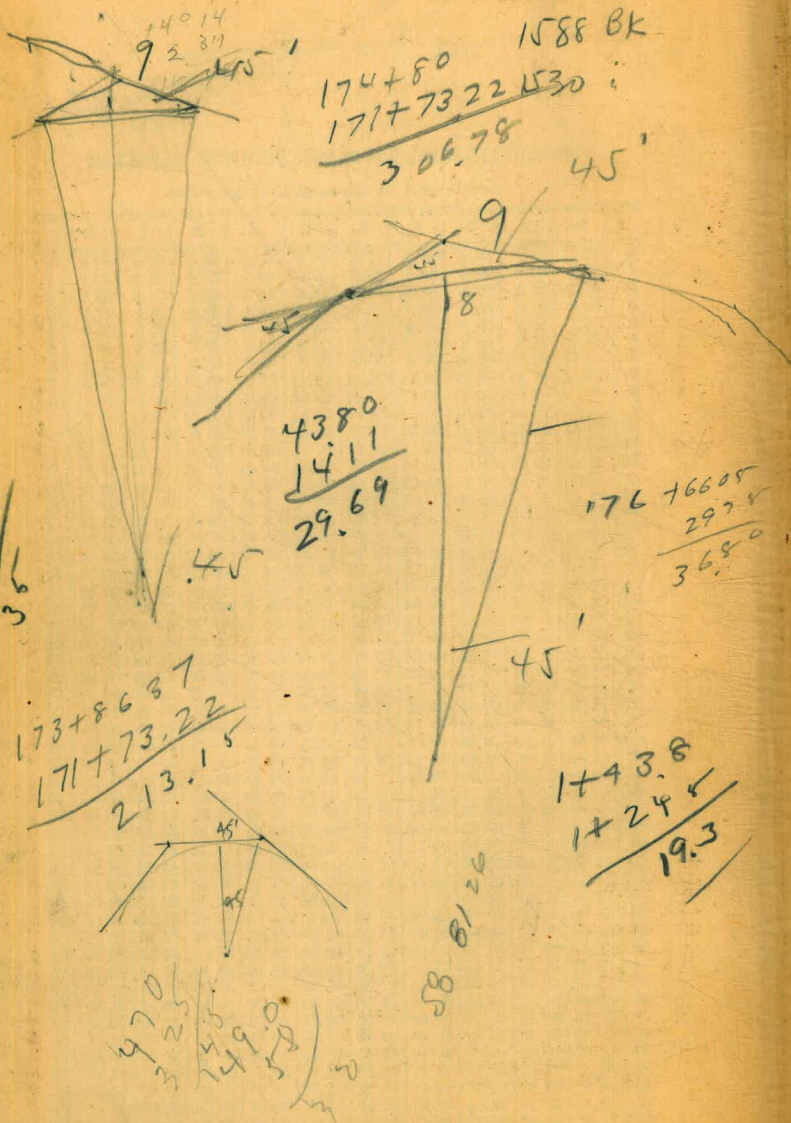
TABLE No. 2

8.49	9.16
8.39	9.06
9.16	9.83
9.12	9.79
7.16	8.83
6.68	7.85
6.46	7.73
7.11	7.78

To find Tangent and External for curve of any other degree divide by degree of curve and add correction found in column of correction. Tangent of curve will be found by dividing tangent (or external) opposite length divided by twice the radius of the curve is very nearly the square of the length divided by twice the radius of the curve. The distance from a point on the tangent to the curve (or external) may be found by dividing tangent (or external) by the square of the radius. (The square of the radius divided by twice the radius gives tangent (or external).)

3.8 x 3.8 Box Culv

6070 County
Plan



5926-30-L-Opas

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	25.2	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) ÷ 2 or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.

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