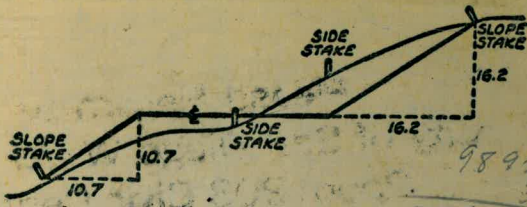


W 939



98957
3
296851

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	1
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	4.00
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	5.00
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	6.00
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	7.00
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	8.00
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	9.00
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	10.00
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	11.00
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	12.00
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	13.00
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	14.00
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	15.00
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	16.00
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	17.00
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	18.00
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	19.00
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	20.00
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	21.00
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	22.00
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	23.00
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	24.00
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	25.00
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	26.00
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	27.00
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	28.00
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	29.00
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	30.00
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	31.00
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	32.00
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	33.00
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	34.00
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	35.00
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	36.00
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	37.00
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	38.00
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	39.00
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	40.00
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	41.00
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	42.00
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	43.00
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	44.00
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	45.00
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	46.00
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	47.00
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	48.00
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	49.00
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	50.00
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	51.00

CROFTLAND

JAN 24 1955

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side 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 side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

5.1
228 / 273
2140
900

Please Return to
City of San Diego Water Dept.
Room 903 Civic Center

70
6314
6.86
175
111
64

130°

175
64
239

777 - 13.45
830.5 - 7.14
600 - 6.00

271 + 32.33
37.63

271 + 69.96
69.20

272 + 29.16
52.31

270 + 60.73
150

270 + 62.23

272 + 81.47
18.50

272.99.97

272 + 99

273
23.7
6.7

272 + 81.5
11.7
698

272 + 81.47

+ 49.89

273 31.36

45679
24783
637.62

134184

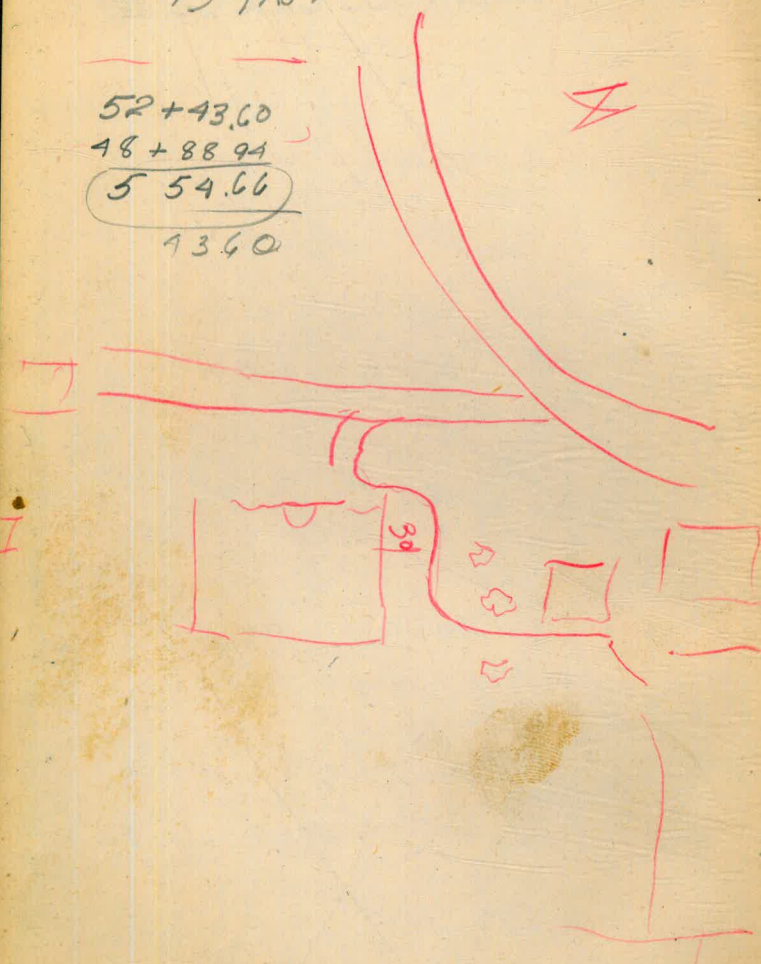
52+43.60

48+88.94

554.66

1360

Z



DIRECTIONS FOR USE OF TABLES

TABLE No. XIV

Distance of slope stake from side or shoulder
stake for any width roadway, slope 1% to 10%
This table is used to find the distance from the
stake to the side of the road when the width of the
roadway and the slope are known. It is used in
leveling the hillside between
from side stake to slope stake. If ground is not
level estimate the hillside elevation between
the side stake and slope stake lower than by
amount to cut or fill and this distance in table.

IMPROVED TABLES
AND
INFORMATION

If it does not make the slight ad-
justment necessary.

TABLE No. VII

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

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

FOR TANGENTS ADD

Central Angle	DEGREE OF CURVE															
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°		
10°	.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.38	.42	.46		
15°	.04	.10	.14	.19	.24	.29	.34	.39	.45	.51	.53	.58	.63	.68		
20°	.06	.13	.19	.26	.32	.39	.45	.51	.58	.65	.72	.79	.84	.90		
25°	.08	.16	.24	.33	.40	.49	.58	.67	.75	.83	.90	.99	1.06	1.14		
30°	.10	.19	.29	.39	.49	.59	.69	.79	.89	.99	1.09	1.20	1.29	1.39		
35°	.11	.22	.34	.47	.58	.69	.79	.81	.92	1.04	1.29	1.42	1.54	1.66		
40°	.13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94		
45°	.15	.30	.44	.60	.76	.91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21		
50°	.17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48		
55°	.19	.38	.57	.76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77		
60°	.21	.42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07		
65°	.23	.46	.69	.93	1.16	1.40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39		
70°	.25	.51	.76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72		
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09		
80°	.30	.61	.91	1.22	1.53	1.84	2.15	2.46	2.78	3.10	3.44	3.78	4.12	4.46		
85°	.33	.66	1.00	1.33	1.68	2.02	2.36	2.70	3.05	3.40	3.77	4.14	4.55	4.89		
90°	.36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32		
95°	.39	.79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83		
100°	.43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34		
110°	.51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4.76	5.31	5.86	6.43	7.01	7.60		
120°	.62	1.25	1.93	2.52	3.16	3.81	4.45	5.11	5.77	6.44	7.12	7.80	8.50	9.22		

FOR EXTERNALS ADD

Central Angle	DEGREE OF CURVE															
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°		
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020		
15°	.003	.007	.010	.014	.018	.023	.027	.032	.035	.039	.043	.047	.051	.055		
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083		
25°	.009	.018	.027	.036	.046	.056	.065	.074	.083	.093	.106	.120	.127	.135		
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188		
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264		
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341		
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445		
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550		
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700		
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851		
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.771	.845	.922	1.01		
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17		
75°	.095	.182	.286	.383	.480	.578	.678	.777	.877	.977	1.07	1.18	1.29	1.39		
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62		
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91		
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20		
95°	.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58		
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96		
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96		
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32		

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alice
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+ Zion St 64-66 ^{also}

Revised Alignment MPL 67 ✓
Sta 21+00 to 31+39.5 69 ✓

Revised Alignment MPL 70 ✓
Sta 167+95³⁰ to 266+39.8^{31.5} ^{256+96.1² AN} 74 ^{also}

Revised Alignment MPL 75 ✓
37+65 To 52+43 76 ✓

Revised Alignment MPL 77 ✓
Sta 31+45 to 38+73 78 ^{also}

MONTGOMERY Pipe Line

Alvarado Pump Plant to

see page 54 for revised Align

7+54 62

PO T set 1 1/2" x 1 1/2" Hub & Tack

5+95 52 X

28° 21' 40" RT

VIP

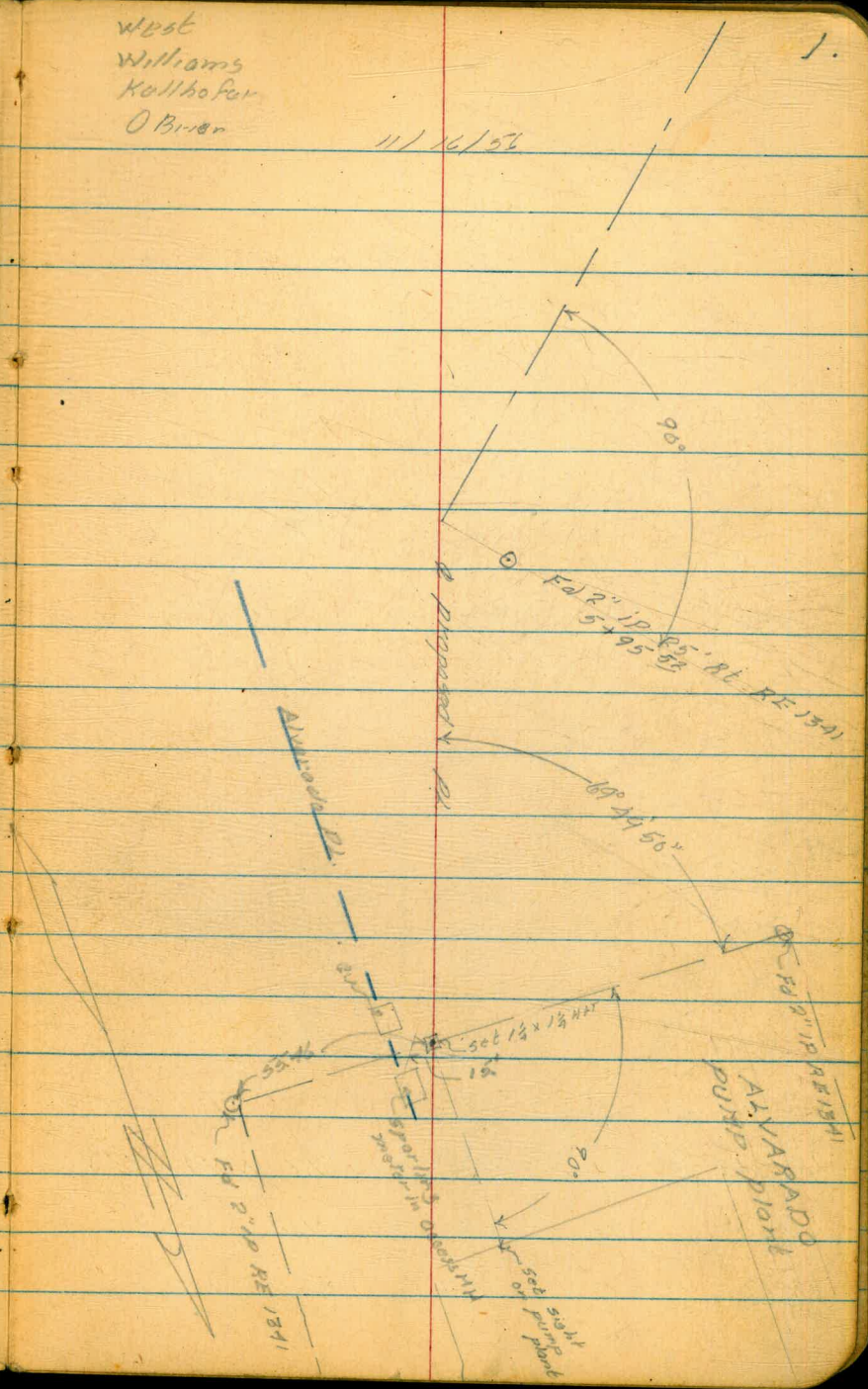
↓

1+50

West
Williams
Kullhofer
O'Brien

11/16/52

1.



Montgomery Pl. Cont

West
Williams
Kellhofer
O'Brien

2

11/19/56 645.18

VOID

Revised See page 67

21+00 \rightarrow $8^{\circ}48'50''$ \rightarrow $N 82^{\circ}45' W$

21+00

Golf Driving Range

16+66³⁰

set $1\frac{1}{2}'' \times 1\frac{1}{2}''$ H&T
intersection with prop line



see p. 57 (1/4)
Eq.

12+15 \rightarrow $15^{\circ}29'20''$ \rightarrow $N 74^{\circ}15' W$

12+15

11+00 POT set RN Nail

9+50 POT set $1\frac{1}{4}'' \times 1\frac{1}{4}''$ Hub + Tack

West
Williams
Kellhofer

Mag Bearing

32+89²⁵ $16^{\circ} 01' 26''$ N $41^{\circ} W$

31+31⁹⁸ $53^{\circ} 04' 4''$ R $N 29^{\circ} 45' W$

Revised See page 67

29+43⁸² intersection with prop line

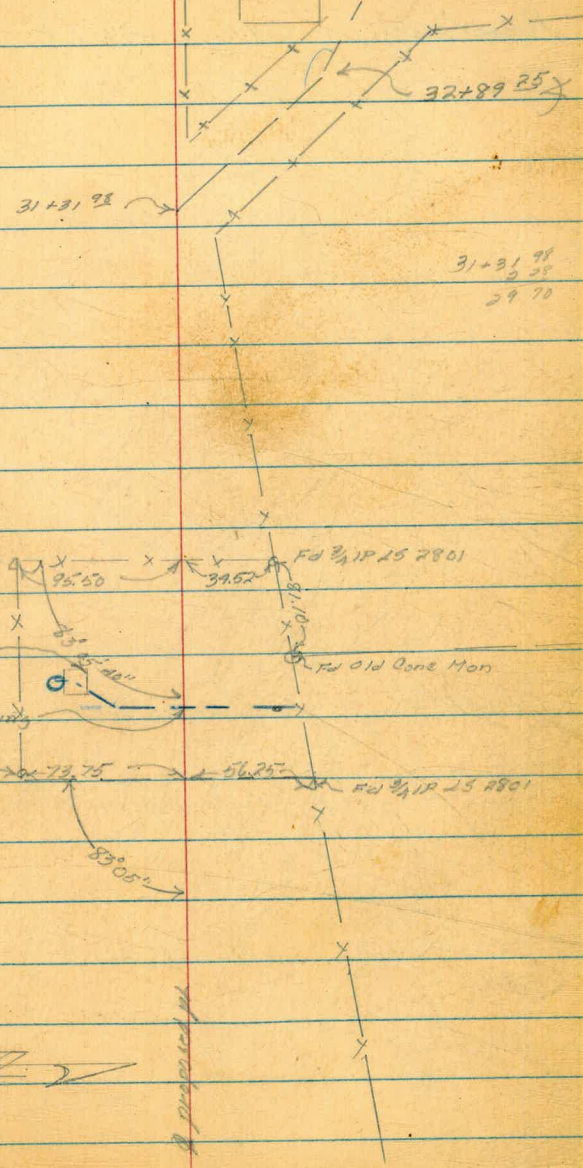
27+75⁰⁷ intersection with prop line

73.75	34.52
56.25	45.50
130.00	130.02

VOID

State of Calif
Road, Main St

11/20/56



31+31.98
29.70

Fd 3/4 IP 15 2801 95.50 39.52 Fd 3/4 IP 15 2801

78+82.45 Lt
To pump House

Fd Old Bone Man

28+61.4" pipe line

Fd 3/4 IP 15 2801 73.75 56.25 Fd 3/4 IP 15 2801

Proposed pt

Montgomery Pl. Cont

West
Williams
Kellhofer

1

see page 60 for

Revised alignment



REVISED
SEE P 75

37+67.03

intersection with R TWAIN ST

36+61.03 X

36+61.03

17° 34' 20" RL N 28° 30' W

Mission Range Rd

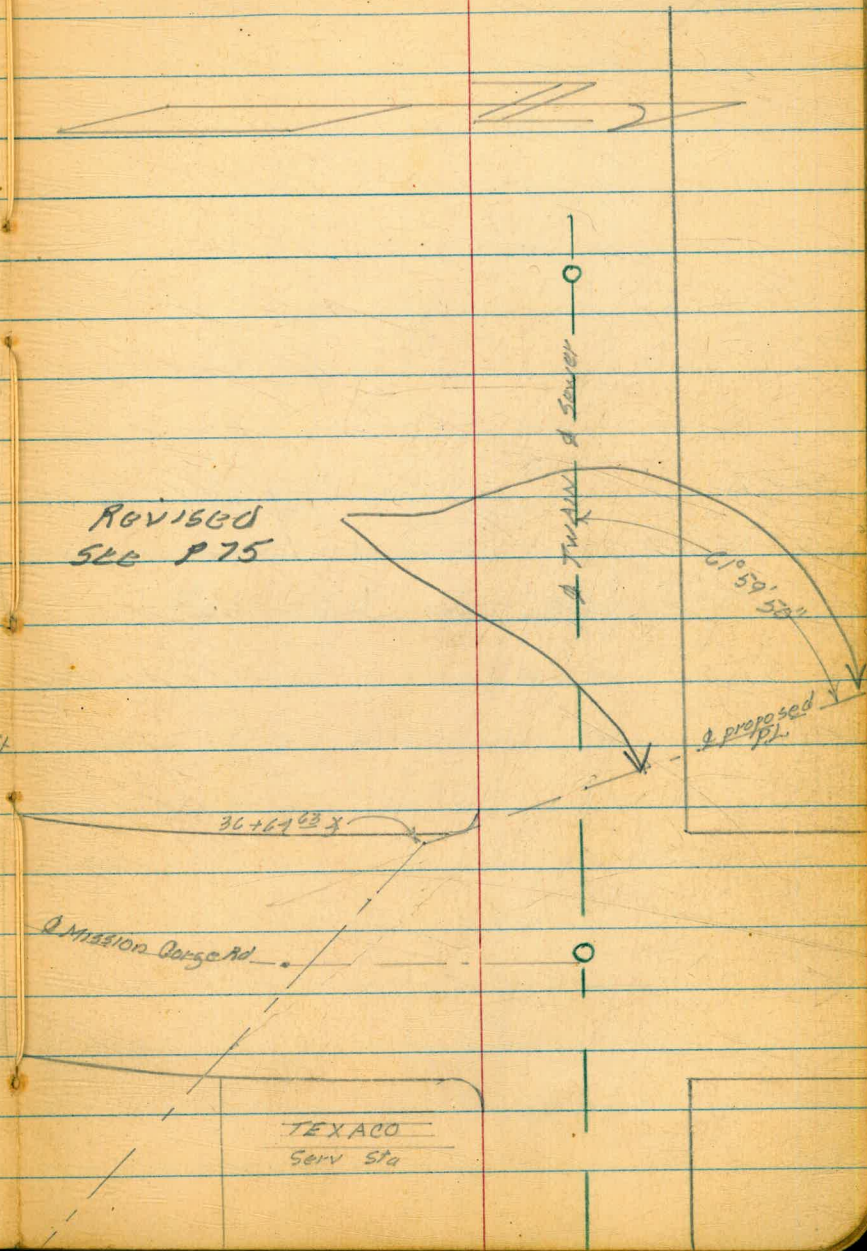
TEXACO
Serv Sta

R TWAIN ST

proposed
PL

61° 54' 50"

VOID



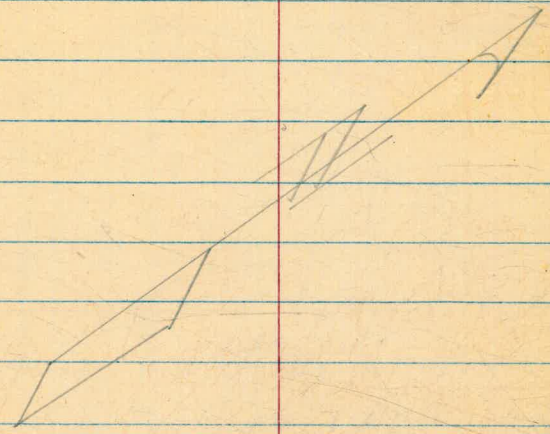
11/21/56

43+01

5' to Conc Slab of wall stand
9' to 2 Pump + well

42+98¹⁸ POT

5' to 1 water pressure tank



REVISED SEE PAGE 75

A proposed

Montgomery Pl. Cont

West
Williams
Kellhofer

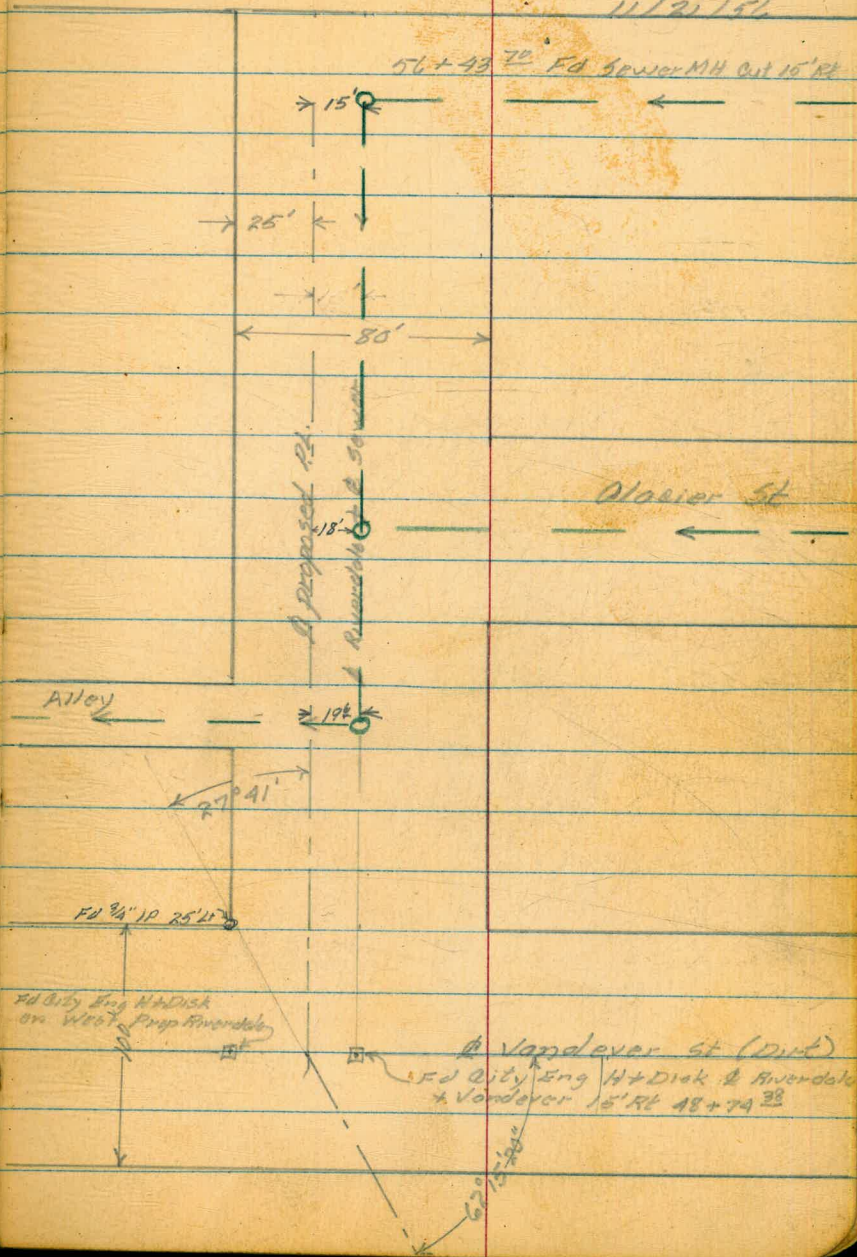
6

11/20/56

$N 20^{\circ} 30' W$
 $56+43^{70} \times 1^{\circ} 24' 40'' \text{ Lhd Riverdale St}$
 $54+60.56 \times \text{PLAN}$

$48+74^{38}$
 $\frac{25}{}$
 $48+49^{38}$

$N 0^{\circ} 30' W$
 $48+74^{38} \times 27^{\circ} 41' 00'' \text{ RE}$
 $\times \text{Vandever St } 15' \text{ west of}$
 $\# \text{ of Riverdale St}$



61+00

POT $1\frac{1}{2} \times 1\frac{1}{2}$ H+T

62+82²

pipe rail fence Xing

62+74²

pipe rail fence Xing

60+35⁴⁰

POT Nail Splice MH G'RL

7977

3540

1437

7

see page 6A
for Revised
Alignment

Revised
500 FB 940 P 35

73+50

72+57 83 pi

Sec FB 940 P 35

22° 59' 00" Rt. N 48° W

plan

71+09

5[±] Rt to Sly Gate Post

69+61 ⁸⁰

Intersection with Navy Prop. Line

See pg. 62

69+20

Fence along Sly side of

67+00

set 1"x1" Hub & Tack
69° 14' 00" Lt N 71° W

West
Williams
Kellhofer

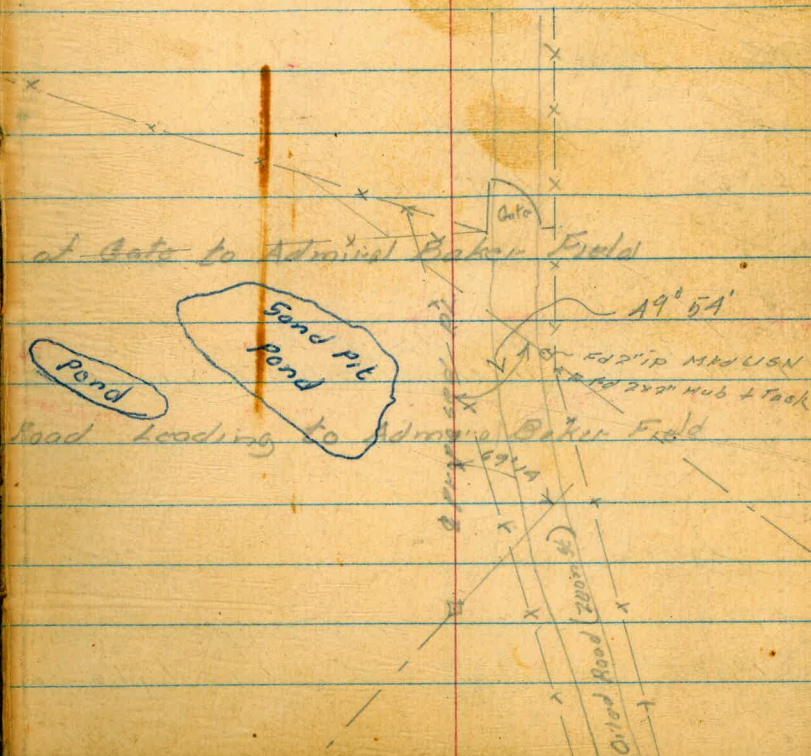
12/2/56

8

179.60

130° 06'

29.53



90+35¹³ 51°15'00" RT N 30° E

89+00 AH
= 88+83²⁰ BK

88+63 E corner of st.
88+80 OR POT

87+00 POT

86+00 POT Nail

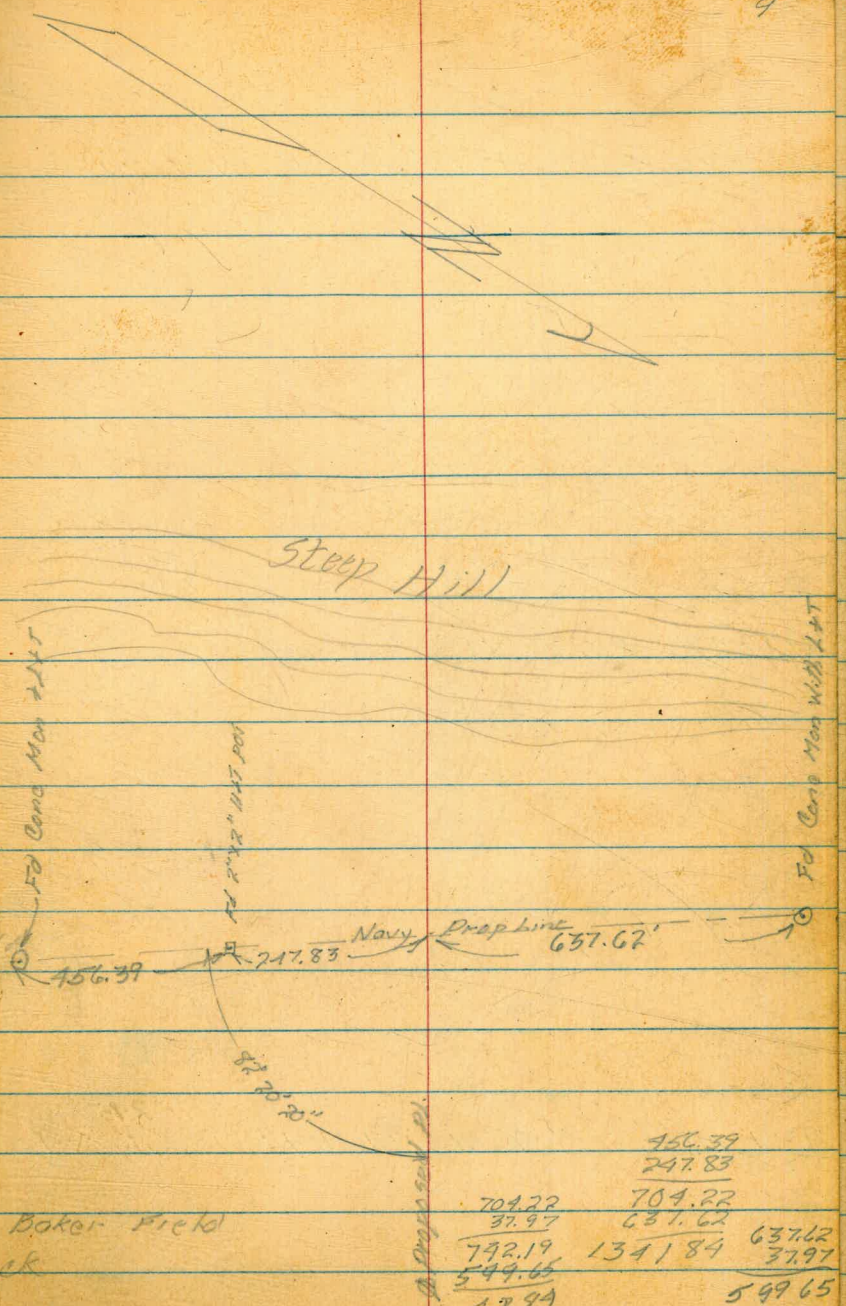
84+41¹⁵

Line Why Side Admiral Baker Field
intersection with Navy prop

83+00

End of Rec Orec Admiral Baker Field
POT Sol 1 1/2" x 1 1/2" Hub & Sack

Revised Sec FD 940
p 35



704.22	456.39
37.97	247.83
742.19	704.22
544.65	637.62
42.94	1341.84
	637.62
	37.97
	599.65

West
Williams
Kellhofer

10

12/5/56

110+90 Δ 4° 10' 20" Lt N 1° W

109+68 ³⁵ pi plan

101+52 PP 8' Lt # 379502

101+00 POT Nail

99+78 ³⁵ POT

93+47 ⁰⁸

90° Rt 114.21 Ft To City Δ Sta #9F245

92+25 ⁴³ POT plan

93+47 ⁰⁸

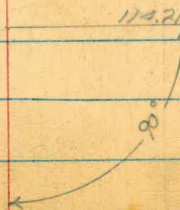
114.21

Δ
City Δ Sta
#9F 245

8°

proposed pt

121.65



140+27¹⁸ Δ 28° 35' 40" LL N 85° 30' W
502 1 1/2 x 1 1/2" Nub + Tank
6-3-71 CAW
138+99⁵⁶ P_i plan (Fd 2" IP W CITY DISK)

125+12
110+90
14 22

135+00 Δ 56° 41' 30" LL 502 1 1/2 x 1 1/2" Nub + Tank
N 58' W
133+78³¹ P_i plan (Fd 3/4" IP W CITY DISK)
6-3-71 CAW

125+12⁰³ POT Nail
123+90³⁸ plan

Montgomery Pl. Cont

West
Williams
Kellhofer

12

121 7156

155 61 40
187 + 15

46 90

157 15
155 61 40
183 60

154 + 35
1 53 60
152 + 81 40

35
18 60
43 00

157 + 15

POT set 1 1/4" x 1 1/4" Hub + Tack

155 + 61 40

154 + 35 POT

Nail

152 + 81 40 POT

N 67° W

151 + 70 63

X

74° 39' 20" R

150 + 23 12

Pi

Plan Sta

S 88° 15' W

Hub + Tack

144 + 87 09

X

6° 25' 50" L

set 1 1/4" x 1 1/4"

143 + 36 75

Pi

Plan

West
Williams
Kellhofer

13

166+30 P.O.T. set 1 1/4" x 1 1/4" Hub + Tack

165+89.67 on & Murphy Canyon Rd
intersection on Semi Tangent

Murphy Canyon Rd

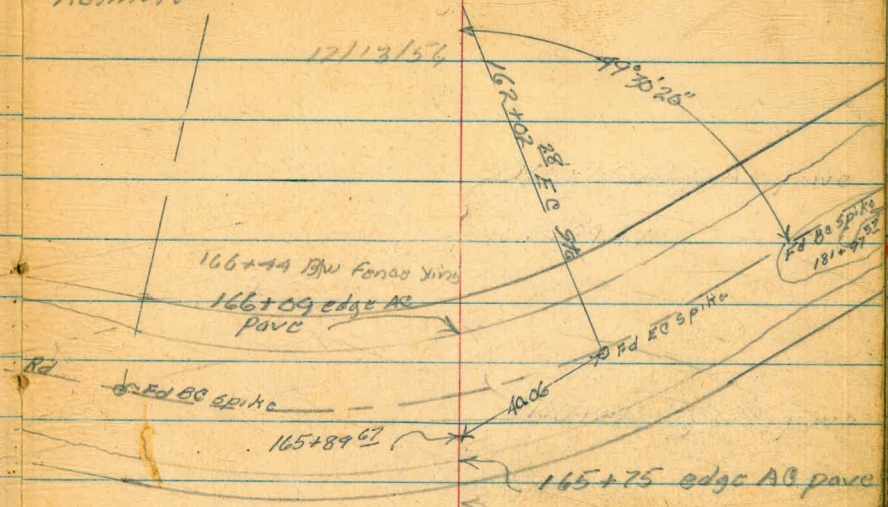
165+50 P.O.T. set 1 1/4" x 1 1/4" H.T. By Ely

side Murphy Canyon Rd

161+90 P.O.T.
53 60
160 36 40 plan

160+00 P.O.T. Nail

12/13/56



166+44 Bjw fence line

166+09 edge AB pave

E.O. spike

165+89.67

160+00

165+75 edge AB pave

E.O. spike
181+00

D.P. X 100 ft

Creek

160+00

157 15
5 80

178+51 ⁴¹ A

Top Wly Side Murphy Canyon
Set 1 1/2" x 1 1/2" Hub + Tack
10° 00' 50" Pt

176+10 P.O.T
2 41 47.

174+90 P.O.T
1 30

Revised see page 70
VOID

172+20 P.O.T set 1 1/2" x 1 1/2" Hub + Tack
2 70

178 51 47
174+90 04
34 67 43

170+40 P.O.T Nail
70

192+04 ⁹⁹

POT ~~Set~~ ^{No. 1} Hub + Tail

VOID

Revised See Page 10

185+00 POT Nail

194+97 ⁰⁶ intersection with City Bdry

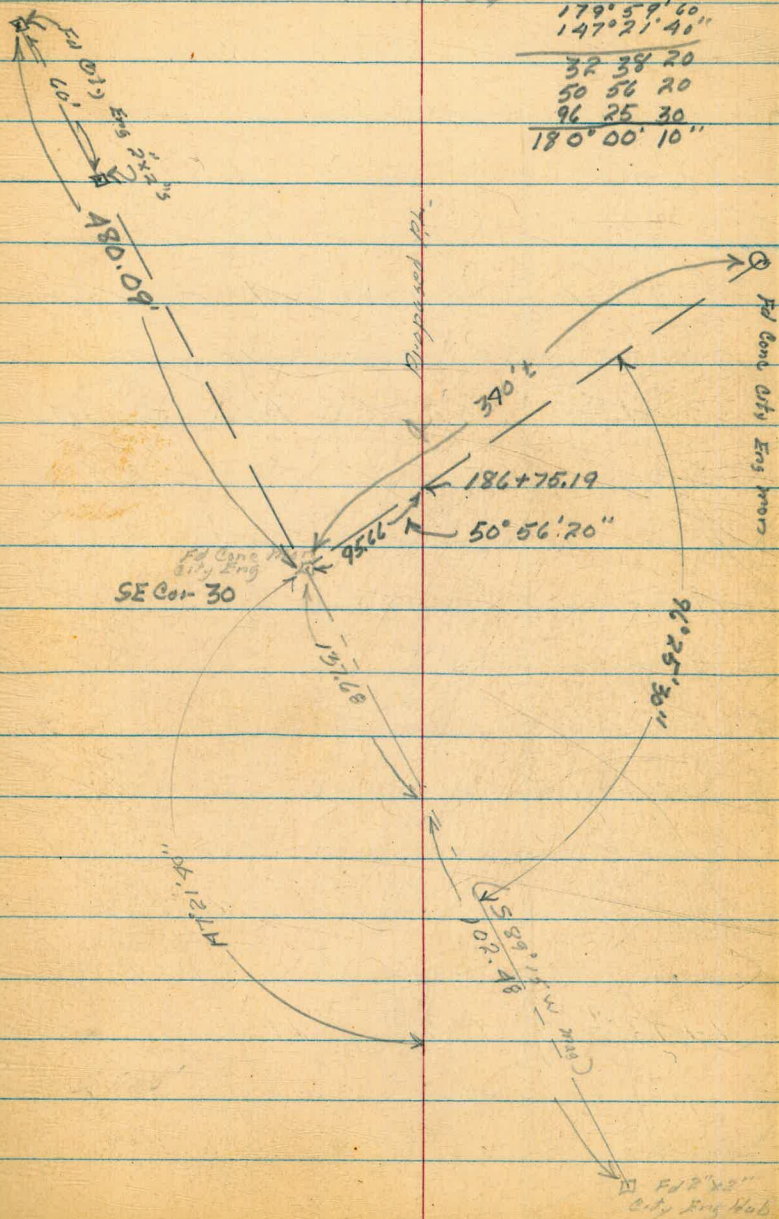
190+50 Tel. Line Xing

N 58' 30 W

West
Williams
Kellhofer

12/12/56

179° 57' 50"
147° 21' 40"
<hr/>
32 38 20
50 56 20
96 25 30
<hr/>
180° 00' 10"



West
Williams
Kellhofer

16

12/17/56

236+00 POT Set RH Nail

223+44[±] intersection with fence

223+42⁶⁶ POT Set 1 $\frac{1}{2}$ " x 1 $\frac{1}{4}$ " Hub + Tool

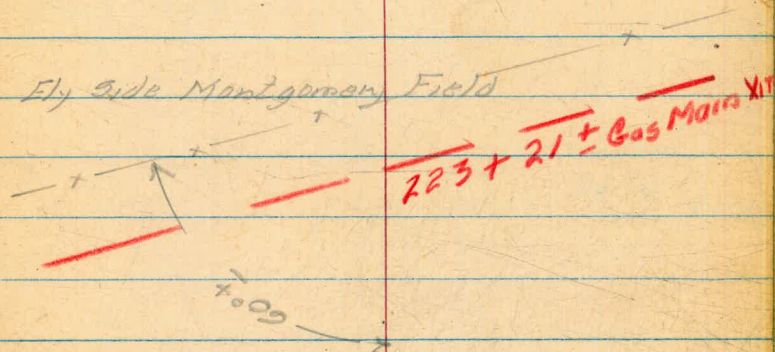
Revised
See page 70

VOID

N 58° 30' W

207+13²⁹ 1° 10' 00" LT

Line Fly Side Montgomery Field



A proposed

207 13 29
138427 87
29 61 92

Montgomery Pl. Corb

270+97 73

270+62 23
278+25 11

Cone Mon 25' RT @ 90°
Plan Sta

270+60 73
278+23 61

~~Fd Corb Mon 25' RT~~
~~Set 1 1/2" x 1 1/2" H&T~~

on Ely prop line
Atlas plant prolonged

257+02 61 X 3° 03' 30 Lt

N 61° 30' W
Fd Bone Mon 25' RT
Set 1 1/2" x 1 1/2" H&T

Revised
see page 7A
VOID

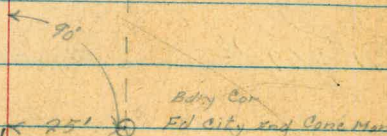
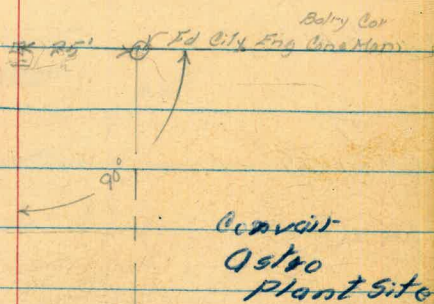
244+77 18

POI Set 1 1/2" x 1 1/2" H&T

West
Williams
Kellhofer

17

118/57



273+31 ³⁶ ± Wly edge AC pave access Rd

273+23 ² intersection with Water main

272+99 ⁹² Fly edge AC pave Access Rd

272+69 ² Wly edge AC pave Hwy 395

272+29 ¹⁴ ± Hwy 395

271+69 ⁹⁶ Fly edge AC Borm Hwy 395

271+32 ³³ Wly edge AC pave Linda Vista Rd

271+00 ² Fly edge AC pave Linda Vista Rd

West
Williams
Kellhofer

11/9/57

4/4/57 BEATTY 18.

See FB 940
pg 34
for elevs

20" C.I. WAT.

Access Rd

KEARNY VILLA ROAD WEST
?(Beatty)

273+23 ² Water Main Xing
273+25 ²⁵ = 80+87

20" C.I.
KEARNY
MESA
WATER MAIN

9302A

Wly Edge Hwy 395

Fly Lane Hwy 395

Vertical line with arrow pointing down, possibly a utility line or boundary.

Linda Vista Rd

271+03

PATCHED
TRENCH

KEARNY VILLA ROAD
(EAST)
?(Beatty)

2

2

2

2

2

2

2

2

Montgomery P2. Profile Comb

	1291	344.17		331.26
88+63.5			12.4	331.77
89+00 AH = 88+83.5 BK			5.9	338.27
TP	1309	355.27	1.99	342.18
	1276	367.17	0.86	354.41
89+50			10.6	356.57
	1294	378.54	1.57	365.60
90+00			3.2	375.34
TP	1275	390.77	0.52	378.02
90+35 ¹³ Δ			8.3	382.47
+50			8.5	382.27
91+00			8.6	382.17
+50			5.1	385.67
92+00			0.2	on & of Dirt Road 390.75
	988	400.05	0.60	390.17
+50			8.3	391.75
93+00			8.3	391.75
+50			6.9	393.15
TBM	5.44	402.42	307	396.98
				6.12
				1031.0

West
Williams
Kellhofer

20

1/18/57

TBM from FB 927

Barbed wire fence crossing

				6.9 20' RL
				11.5 20' RL 90° off Back Tang
				12.8 20' RL 90° off forward Tang
				13.2 20' RL
				0.8 8' RL
				0.9 6' RL
				12.7 20' RL
				7.4 w/ly 11' RL & edge of Road
				12.7 20' RL
				5.6 30' RL " " " "
				403.04
				245

103.04 245 Surveyor Cone Mon City Δ Sta 9E

	402.42			
94+00		8.2	394.22	$\frac{12.2}{20' \text{ etc.}}$
+50		8.3	394.12	
95+00		6.3	396.12	
+50		5.7	396.72	
96+00		6.0	396.42	
+50		5.7	396.72	
97+00		4.1	398.32	
+50		4.8	397.62	
98+00		4.6	397.82	
+50		2.7	399.72	
99+00		3.9	398.52	
+50		3.7	398.72	
100+00		4.1	398.32	
+50		4.2	398.22	
4.39	403.69	3.13	399.29	
101+00		4.6	399.08	
+50		6.4	397.28	
102+00		6.3	397.38	
+25		6.4	397.28	
+40		5.1	398.58	

40368

102 +55	6.4	397.28
+90	6.5	397.18
103 +10	5.1	398.58
+25	6.4	397.28
+50	6.5	397.18
104 +00	5.7	397.98
+14	5.2	398.48
+30	6.8	396.88
+50	6.6	397.08
105 +00	6.9	396.78
+50	6.6	397.08
106 +00	6.1	397.58
+16	8.0	395.68
+50	6.6	397.08
+67	7.4	396.08
107 +00	5.5	398.18
+30	7.5	396.18
+50	6.6	397.08
108 +00	6.8	397.48

West
Williams
Kellhofer

23

1/21/57

45
37
403.68

108+50 6.1 397.58

109+00 6.9 396.78

+50 6.6 397.08

110+00 7.0 396.68

+15 7.0 396.68

+42 4.0 399.68

+65 6.4 397.28

+90 ~~8.06~~ 408.19 3.55 400.13

Turn on 1 1/4" x 1 1/4" Hub + Track

111+09 10.0 398.19

+20 10.0 398.19

+35 8.7 399.49

+50 9.5 398.69

112+00 8.9 399.29

+50 8.3 399.89

113+00 8.5 399.69

+50 8.5 399.69

+90 8.0 400.19

114+10 6.4 401.79

+25 7.8 400.39

A0819

114+50	7.4	400.73
115+00	7.6	400.59
+50	6.9	401.29
+90	6.8	401.39
116+15	4.8	403.39
+36	6.8	401.33
+50	4.6	401.59
117+00	6.3	401.89
+50	6.3	401.89
118+00	6.3	401.89
+50	5.6	402.59
119+00	5.7	402.49
+20	4.0	404.19
+50	5.5	402.69
+85	3.8	404.39
120+05	5.4	402.79
7.95	41113 5.01	403.18
+18	8.2	402.33
+23	6.4	404.73

411.13

120+65	8.0	403.13
121+00	8.0	403.13
+35	6.0	405.13
+50	8.3	402.83
+86	5.9	405.23
122+12	8.5	402.63
+42	6.6	404.53
+56	8.1	403.03
123+00	8.1	403.03
+50	7.9	403.23
+68	7.7	403.43
+95	5.6	405.53
124+20	8.2	402.93
+45	6.6	404.53
+65	8.0	403.13
+90	7.7	403.43
125 +12	5.4	405.73
+35	7.4	403.73
+50	6.7	404.43

411.13

126+00	6.9	404.23
+20	7.0	404.13
+62	4.7	406.43
+82	7.1	404.03
127+00	5.5	405.63
+50	6.0	405.13
128+00	7.1	404.03
+50	5.9	405.23
129+00	6.7	404.43
+40	5.2	405.93
+56	7.2	403.93
130+00	7.8	403.33
+50	7.1	404.03
7.42	410.23	8.32
131+00	7.7	402.53
+50	7.4	402.83
132+00	7.1	403.13
+50	6.3	403.93
133+00	6.5	403.73

10.4
50' LL

410.23

133+50	6.6	403.63
134+00	6.4	403.83
+50	6.7	403.53
135+00	5.72	404.51
+50	9.1	401.13
136+00	11.9	398.33
+50	14.7	395.53
137+00	14.7	395.53
+50	13.1	397.13
138+00	12.1	398.13
+50	10.2	400.03
139+00	10.0	400.23
+50	10.5	399.73
140+00	11.0	399.23
+27 ³⁸³	402.94	11.12
+50	4.9	398.04
+71	4.0	398.94
+90	6.2	396.74
141+00	6.5	396.44

on 1/2" Hub

12.8
50' Lt

10.2
50' Lt Back Tangent

18.6
50' Lt 90' Lt to edge Canyon

17.1
24' Lt to edge of Canyon

Turn on Hub

	402.94		
141+25		5.1	397.84
+38		6.7	396.24
+50		8.7	396.24
142+00		7.4	395.54
+50		10.0	392.94
143+00		12.5	390.44
161	391.52	1303	389.91
+50		3.4	388.12
144+00		4.3	387.22
+50		4.9	386.62
+84 ⁰⁰		5.20	386.32
145+00		5.4	386.12
+50		6.0	385.52
146+00		6.5	385.02
+15			
+50		7.0	384.52
147+00		8.7	382.82
+50		10.3	381.22
123	380.14	1261	378.91

7.5
 20' Lt
 9.4
 20' Lt

Top of Canyon

70
 15' Lt

Dirt Road

5° RT to edge of

3' Lt + 8' RT to edge of Dirt Road

5' RT of edge of Dirt Road

Leave dirt road

380.14

1148+00		4.0	376.14
+50		10.3	369.84
149+00		15.3	364.84
+50		18.4	361.74
+86		18.5	361.64
150+00		16.8	363.34
+50		11.7	368.44
151+00		9.2	370.94
+50		6.5	373.64
+70 ⁶³ 2		6.42	373.72
152+00		8.3	371.84
+50		11.1	369.04
	0.57	368.71 12.00	368.14
153+00		21.	366.61
+50		8.5	360.21
	0.46	357.10 12.07	356.64
154+00		3.0	354.10
+50		11.1	346.00
	0.51	345.45 12.16	344.94

on Hub

West
Williams
Kellhofer

30

1/21/57

345.45

0.53 332.70 13.28 332.17

155+00 1.8 330.90

0.45 319.87 13.28 319.42

+50 8.4 311.47

0.37 307.76 12.48 307.39

156+00 12.5 295.26

0.15 294.96 12.95 294.81

+50 11.4 283.56

0.50 282.48 12.98 281.98

157+00 12.8 269.68

0.69 270.01 13.16 269.32
on Hub

157+15 POT 6.28 263.73

0.62 257.90 12.73 257.28

+50 7.9 250.00

0.60 246.57 11.93 245.97

0.78 234.76 12.59 233.98

158+00 8.4 226.36

0.33 222.18 12.91 221.85

0.48 209.91 12.75 209.13

Montgomery Pipe Line

Profile

209.91

31

158+50 2.1 207.81

0.09 197.21 12.79 197.12

159+00 2.7 194.51

0.50 186.94 10.77 186.44

+50 7.9 179.04

+62 12.1 174.84

160+00 4.1 182.84

12.01 198.05 0.90 186.04

+50 9.2 188.85

161+00 3.8 194.25

7.80 205.23 0.62 197.43

+50 4.7 200.53

+90 2.1 203.13

162+50 6.6 198.63

163+00 13.4 191.83

0.42 192.48 13.17 192.06

+50 8.1 184.38

0.72 179.87 13.33 179.15

164+00 3.5 176.37

Q of Creek Flows W to East

SEE PAGE # 49 FOR REVISED Alignment

	179.87				
164+50		12.5		167.37	
	4.93	171.93	12.87	167.00	
+59		5.9		146.03	Top of Gully bank
+76		13.5		158.43	2 Gullies
165+01		6.9		165.03	Top of Gully "
+50 pot 0.50	163.13	9.30		162.63	Turn on 1 1/4" x 1 1/2" Hub + track
+07		0.6		162.53	Top of Road bank
+13		6.7		156.43	Outer
+75		5.32		157.81	edge AC pave
166+09		6.05		157.08	WY " " " Murphy Canyon Road
		7.40	155.73		156.34 + 156.37 TBM on Culvert Midwall 500' North on Ely side Road
+30		5.2		157.93	wy edge of Road
+51		11.7		151.43	
	0.75	151.85	12.03	151.10	
167+00		11.1		140.75	
	0.67	140.82	11.70	140.15	
+50		3.7		137.12	
168+00		7.7		133.12	
+50		11.0		129.82	Begin Rocky River bed
169+00		10.4		130.42	

	140.82			
169+50		10.1	130.72	
170+00		9.4	131.42	
+50		9.7	131.12	
171+00		10.0	130.82	☐ of Stream
	1289	152.35	1.36	139.46
+09		81.2	131.15	Wly edge of Creek
+17		15.6	136.75	Top of Creek Bank
+50		6.0	146.35	2' RT to 3 8" Dia Willow Trees
	12.82	164.64		
		174.64	0.53	151.82
	12.59	176.38		163.79
		186.38	0.85	173.79
+81		9.1	167.28	
172+00		4.5	171.88	
+20	12.79	188.98		176.19
		198.98	0.19	186.19
+50		11.2	177.78	Turn on 1/4 x 1/4 Hub & Tack
+63		12.8	176.18	
+70		18.0	170.98	☐ steep Draw
	12.86	200.31		187.45
		210.31	1.53	197.45
173+00		11.5	188.81	
	13.25	213.37		200.12
		223.37	0.19	210.12

Montgomery Pl. 2 Profile

West
Williams
Kellhofer

34

1/22/57

	213.37		
	223.37		
173+50		9.2	204.17
	226.43		213.29
13.14	236.43	0.08	223.29
174+00		6.3	220.13
	239.50		226.27
13.23	249.50	0.16	236.27
	252.46		239.24
13.22	262.46	0.26	249.24
+50		11.5	240.96
	263.86		251.07
12.79	273.86	1.39	261.07
174+90		2.4	261.96
	276.00		263.16
12.84	286.00	0.70	273.16
	285.59		272.39
13.20	295.59	3.61	282.39
	297.93		284.74
13.19	307.93	0.85	294.74
175+50		4.3	293.63
	310.67		297.71
12.96	320.67	0.22	307.71
	323.34		310.02
13.32	333.34	0.65	320.02
176+00		3.5	319.84
	335.81		322.88
12.93	345.81	0.46	332.88
+10 Post		11.1	324.91
	347.47		334.83
12.64	357.47	0.98	344.83
+50		9.1	338.37

30'± RL 175+10
TBM on 6" x 2" stake driven into ground

0.0
15'± RL on Side Hill

18.4
15'± RL

	347.47		
	357.97		
	358.95		346.66
1829	368.95	0.81	356.66
177+00		9.2	349.75
+28		1.8	Q of Side Bully 357.15
1293	371.00		358.07
	381.00	0.88	368.07
+50		3.0	368.00
1286	383.19		370.33
	393.19	0.67	380.33
	395.93		382.89
1304	405.93	0.30	392.89
178+00		0.4	395.53
	408.15		395.50
1265	418.15	0.43	405.50
+15		3.9	409.25
	420.16		407.37
1279	430.16	0.78	417.37
+34		6.6	413.56
	423.74		419.59
4.15	433.74	0.57	429.59
+37.5		4.9	418.84
+38		2.9	420.84
+51 43 4		2.42	on Hub 421.32
179+00		3.0	420.74
+50		4.4	419.34
180+00		4.8	418.94

35

	0.0		16.2
	15' LE		15' RE
	+6.0		5.7
	15' LE		15' RE
	0.0		7.0
	15' LE		15' RE
	+1.0		10.6
	15' LE		15' RE
Top of Mesa	+0.4	2.6	13.7
	8' LE	6' LE	7' RE
			21.8
			15' RE
			38' RE to edge of Mesa
			14' RE " " " "

423.74
~~423.74~~

1122157

180+50	4.7	419.04
181+00	6.1	417.64
+50	8.5	415.24
182+00	11.7	412.04
+50	16.7	407.04
183+00	17.1	406.64
+50	12.5	411.24
184+00	8.5	415.24
+50	6.4	417.34
185+00	6.8	416.94
	419.78	413.53
6.25	429.78 10.21	423.53
+50	4.6	415.18
186+00	5.5	414.28
+50	7.1	412.68
+80	4.8	412.98
187+00	5.2	414.58
+18	6.8	412.98
+50	5.8	413.98
188+00	5.4	414.38
+50	4.4	414.98

See page 15
Turn on City Eng Cont Mon 137.68' 26

Montgomery Pl. 2 Profile Cont

37

419.78
~~429.78~~

189+00	5.8	413.98
+50	6.1	413.68
190+00	6.3	413.48
+50	4.2	415.58
191+00	1.5	418.28
739	425.52 435.52	418.13 428.13
+50	3.5	422.02
192+00	2.8	422.72
+50	3.8	421.72
193+00	6.4	419.12
+50	7.3	418.22
194+00	9.3	416.22
+50	8.8	416.72
+68	8.6	416.72
+80	10.7	414.82
195+00	10.8	414.72
+15	9.7	415.82
+50	10.9	414.62
196+00	11.5	414.02
+50	11.5	414.02

Dirt road

425.52
~~435.52~~

197+00		10.9	414.62
+50		11.4	414.12
	421.83		413.69
8.14	431.83	11.83	423.69
+86		6.2	415.63
198+05		8.4	413.43
+23		6.5	415.33
+50		8.8	413.03
+90		7.6	414.23
199+00		9.3	412.53
+50		9.3	412.53
200+00		10.4	411.43
+50		10.1	411.73
201+00		8.8	413.03
+50		7.4	414.43
202+00		5.2	416.63
+50		2.5	419.33
	432.68		420.08
12.60	442.68	1.75	430.08
203+00		10.7	421.98
+50		9.7	422.98

432.68
~~442.68~~

204+00	9.3	423.38
+50	8.9	423.78
205+00	8.2	424.48
+50	7.6	425.08
206+00	5.9	426.78
+50	4.4	428.28
207+00	3.7	428.98
+13 ²⁹ $\frac{1}{2}$	3.60	429.08
+50	3.9	428.78
208+00	6.7	425.98
+20	7.5	425.18
+50	6.6	426.08
+70	8.3	424.38
209+00	7.9	424.78
+50	7.3	425.38
210+00	7.0	425.68
+50	7.1	425.58
427	430.61	426.34
	440.61 6.34	436.34
211+00	4.5	426.11
+50	4.1	426.51
212+00	3.1	427.21
+50	3.7	426.91

on Hub

430.61
~~442.61~~

213+00		4.2	426.41
+50		5.3	425.31
214+00		6.1	424.51
+50		7.9	422.71
215+00		9.6	421.01
+50		9.2	421.41
216+00		10.2	420.41
+50		9.7	420.91
217+00		9.4	421.21
+50		10.3	420.31
218+00		10.9	419.71
+50	11.57	441.36 10.76	429.85 419.85
219+00		11.0	420.36
+50		10.5	420.86
220+00		8.4	422.96
+50		5.9	425.46
221+00		4.9	426.46
+50		4.5	426.86
222+00		4.4	426.96
+50		4.7	426.66

Turn on rail

431.36
~~441.36~~

223+00	5.1	426.26
^{P.O.S} 223+42 ⁶⁶	5.85	425.51 435.51
224+00	6.6	424.76
+50	7.7	423.66
225+00	8.5	422.86
+50	9.2	422.16
0.84	423.00 433.00	9.20 432.16
226+00	1.5	421.50
+50	2.2	420.80
227+00	3.0	420.00
+50	4.0	419.00
228+00	4.3	418.70
+50	4.4	418.60
229+00	6.2	416.80
+20	6.2	416.80
+38	5.1	417.90
+60	7.1	415.90
230+00	7.7	415.30
+50	7.8	415.20

ON Hub

423.00
~~433.00~~

231+00	9.3	413.70
+50	8.6	414.40
232+00	8.0	415.00
+33	7.8	415.20
+62	6.0	417.00
233+00	7.5	415.50
+28	5.4	417.60
+50	6.5	416.50
234+00	6.5	416.50
+50	5.5	417.50
235+00	5.4	417.60
+50	3.1	419.90
^{P.O.T.} 236+00 6.82	425.55 435.55 4.27	418.73 428.73
+50	7.3	418.25
237+00	7.0	418.55
+50	7.4	418.15
238+00	8.0	417.55
+50	8.3	417.25
239+00	8.2	417.32
+50	7.7	417.85

Turn on Nail

425.55
~~425.55~~

240+00		7.3	418.35
+50		6.7	418.85
241+00		6.6	418.95
+50		5.9	419.65
242+00		5.1	420.45
+50		4.6	420.95
243+00		4.5	421.05
+50		5.2	420.35
244+00		5.8	419.75
+50		6.2	419.35
+77 ¹⁸	424.03		420.50
3.53	431.03	5.05	430.50
245+00		4.0	420.03
+50		5.5	418.53
246+00		5.6	418.43
+50		6.0	418.03
247+00		6.2	417.83
+50		5.8	418.23
248+00		6.7	417.33
+50		6.9	417.13

Turn on Hub

West
Williams
Kellhofer

49

1/22/57

424.03

~~434.03~~

249+00	6.3	417.73
+50	7.9	416.13
250+00	8.5	415.53
+50	7.6	416.43
251+00	9.5	414.53
+50	10.1	413.93
252+00	10.4	413.63
+50	10.2	413.83
253+00	10.0	414.03
	417.68	414.07
361	427.68	424.07
+50	4.7	412.98
254+00	4.7	412.98
+50	5.2	412.48
255+00	5.8	411.88
+50	6.0	411.68
256+00	4.6	413.08
+50	6.2	411.48
257+02.61	6.8	410.88
257+02.61	6.11	418.57

Turn on 253+00 rail

418.57 = 418.02

~~421.57~~ Done Mon 25' RT

6.15

= 418.02

417.68
~~427.68~~

257+50	7.5	410.18
258+00	7.1	410.58
+50	6.5	411.18
259+00	7.0	410.68
+50	6.3	411.38
260+00	7.0	410.68
+50	6.9	410.78
261+00	5.4	412.28
1.89	412.77 422.77	410.88 420.88
+50	2.5	410.27
262+00	2.7	410.07
+50	3.6	409.17
263+00	4.4	408.37
+50	4.1	408.67
264+00	5.3	407.57
+50	5.3	407.47
265+00	5.6	407.17
+50	5.8	406.97
266+00	5.6	407.17
+50	6.2	406.57

412.77
~~422.77~~

28.2
~~28.8~~
3.4

267+00	6.5	406.27
+50	6.7	406.07
268+00	7.2	405.57
+50	8.0	404.77
269+00	9.2	403.57
+50	9.9	402.87
270+00	11.2	401.57

8.16 468.58
~~414.58~~ 12.35

400.42
~~416.42~~ 6.12

406.90 Turn on Cone Man 25' Rt 270+60⁷²

270+60	8.6	399.98
271+00 ²	7.39	401.19
	6.86	401.72
+32	7.29	401.29
+44		
+47	10.3	398.28
+69	5.0	403.58
+70	4.36	404.22
+71	5.08	403.50
+81 ³	4.60	403.98
272+03 ¹	4.33	404.25

406.54 = 6.12
401.78

Ely edge of Ac pave

R of Road

Wly Edge of Ac pave

B wire fence line

Q Cutter

Ely edge Ac Berm

" " "

edge Oil parking Strip

edge Ac pave Hwy 395

" " " " "

408.58
~~418.58~~

272+25	6.0	402.58
+45 ²	4.14	404.44
+70	4.53	404.05
+80	5.12	403.46
+94 ⁵		
273+00	7.11	401.47
+31	8.19	400.39
	8.16	400.42
		400.42
		+6.12
		406.54

West
Williams
Kellhofer

47

1122/57

	29.2
	16.5
	45.7
edge wly Lane Hwy 395	
" " " " "	
" oil parking strip	
B wire fence Xing	
edge oil Areas Road	
" " " "	
= 406.90 Cone man	

TIES TO City Annexation

181+97 06
Fd City Eng Hub + Disk

215.43

6th Ave.

PEACH AVE

786.0

POR of Lot #4
City Prop

89° 53' 18"

Fd City Eng
Hub + Disk
FB 1754 P44

487.0

West
Williams
Kellhofer

48.

218157

Fd City Eng Hub + Disk
FB 1754 P44

38° 19' 40"

216.20

180+19 32

Proposed Pt.

71° 03' 12" Arc
70° 58' 20" Turned

511

Fd City Eng Hub + Disk
P.O.J. See FB 1754 P44

Revised Alignment M.P.L.
Murphy Canyon Rd

West
Williams
Kellholer

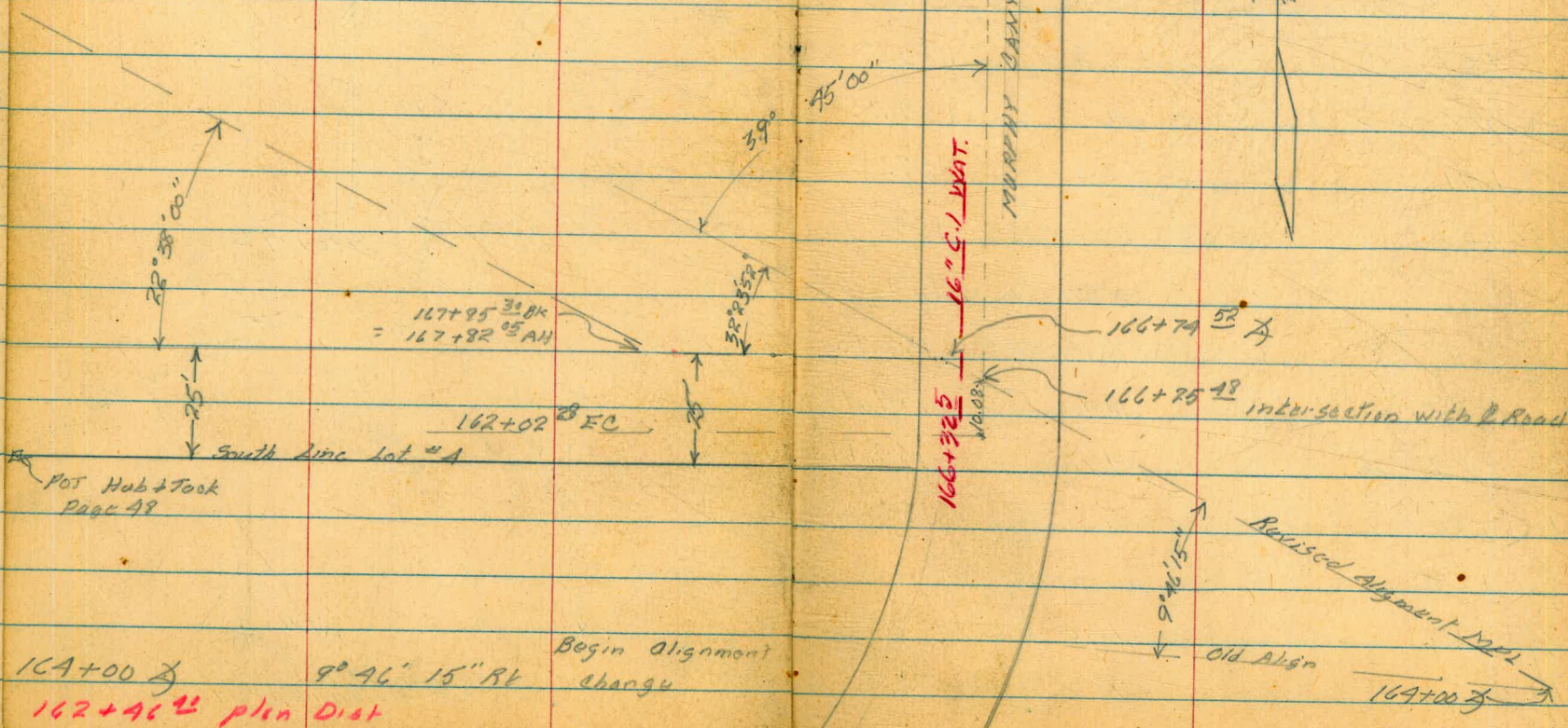
16400
21640
15360

167+95³⁵ BK intersection with Original Align
= 167+82⁰⁵ AH Δ 22° 38' 00" RL

211157

6 166+74⁵³ Δ 32° 23' 52" Lt 25' North of South Line of Lot #4

166+25⁴⁸ 10.08 South to BC
intersection with R Road



1299	175.62	162.63
164+45	8.7	166.92
+60	15.8	169.82
+81	8.6	167.02
165+00	7.2	168.42
+50	9.9	165.72
+77 0.61	163.83	1240 163.22
+83	1.3	162.53
+88	4.1	159.73
+91	6.6	157.23
166+04 ⁶	5.72	158.11
	5.81	158.02
+45 ³	6.05	157.78
+50	6.1	157.73
+74 ⁵² X	4.72	159.11
1 +80 ⁵	5.8	158.03
+85		
+86	10.0	153.83
167+00	10.3	153.53
+12	9.6	154.23

165+50 Pot Hub see page 32

Top of Gulley bank

Q bottom of Gulley

Top of Gulley

Barbed wire fence xing

Top of Road cut

edge AC pave

Q Road

edge AC pave

Top of Road bank

Fence xing

Top of Bank

163.83

0.87 153.39 1131 152.52

140

126

140.79

Bottom of Bank

2.11 142.57 1293 140.46

+50

28

139.77

167+ 95³⁰ BK= 167+ 82⁰⁵

28

134.77

244 140.13 =

140.15

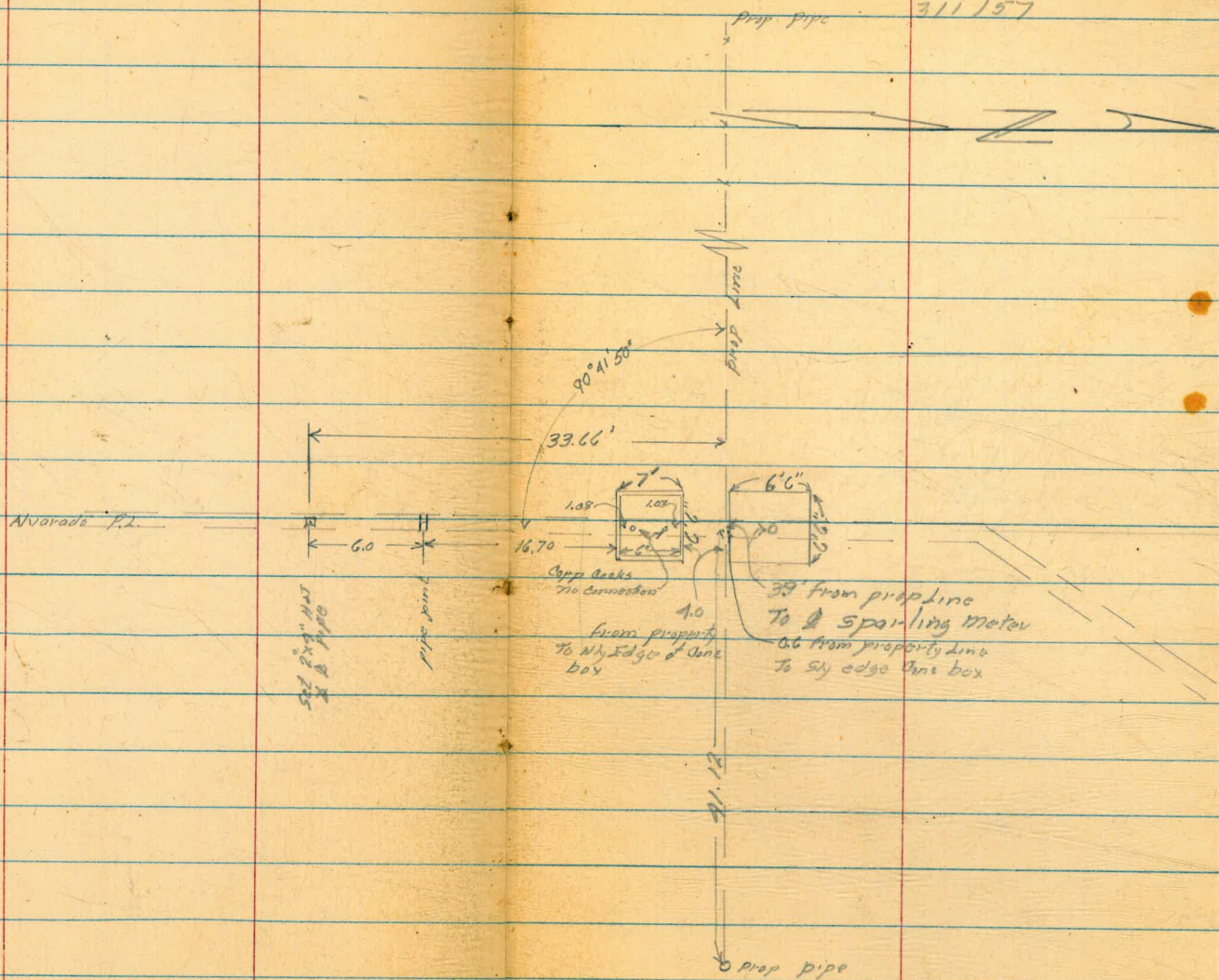
TP page 32

Ties To Alvarado PL
 AT Alvarado Pump plant

West
 Williams
 Kellhofer
 Smith

52

311157



+ 4.98	109.97	104.99
	12.18	97.79
	4.98	104.99 = 104.99

BM SW Cor Meter Box

Top of 42" Alvarado PL AT pipe joint

Elevation	Top Alvarado and Top El Capitan PL At Alvarado pumping plant		
376	108.75	104.99	
AT property line	8.09	100.66	
	5.0	Top of Ground	103.75
AT 23 ³ South	8.45	100.30	
	5.4	Top of Ground	103.35
AT 61 ³ South	10.23	98.52	
	6.1	Top of Ground	102.65
AT 63 ² South	11.21	97.54	
at pumping plant prop line	5.7	Top of Ground	103.05
BM.	3.76	104.99	104.99
BM	3.78	108.77	104.99
23 ³ Wly of R	8.47	100.30	
37 ⁵ Wly of R	9.25	99.52	
45 ² Wly of R	9.33	99.44	
CK BM	3.78	104.99	

West Williams Kellhofer Smith		53
	3/4/57	1.85 6.24 8.09
BM SW Cor. Sparking meter Box		
	Top El Capitan line at property line	
	" " " "	2.71 6.24 9.45
	at 23 ³ South	23 ³ 38
	" " "	
	at 61 ³ South	2.79 6.24 14.23
	Top of El Alvarado PL 4.97 Capitan PL 6.24 at 63 ² South of pumping plant prop line 11.21	

3/3/57
Beatty

Revised Alignment Montgomery Pl.
At Alvarado Pump Plant

3+89.90
0

3+95.90

A+19.63 BK
5+95.53 AH

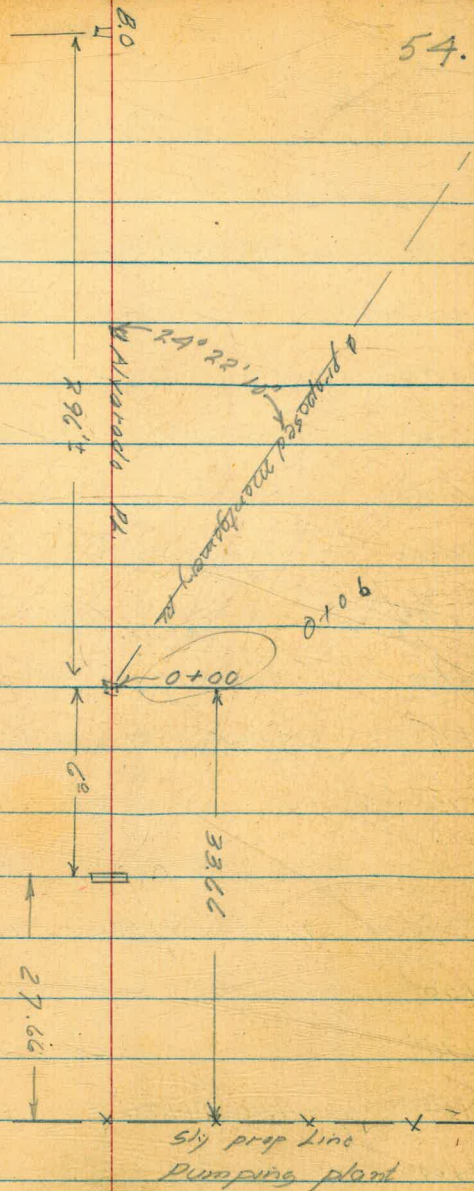
24° 52' 50" Rt

0+00 24° 22' 10" Rt

0+00 Alvarado Pl. 6' South of pipe joint

West
Williams
Kellhofer
Smith

54.



REVISED ALIGNMENT.
MONTGOMERY P.L. AT ALVARADO PUMP
PLANT.
PROFILE

WEST
WILLIAMS
KELLHOFFER
SMITH

55

3/4/57

B.M.	10.35	115.34		104.99
0+00			12.0	103.34
+50			13.0	102.34
1+00			12.8	102.54
+50			11.4	103.94
2+00			9.1	106.24
+35			6.4	108.94
+50			3.5	101.84
TP	12.46	127.57	0.23	115.11
+75			11.4	116.17
3+00			4.5	123.07
TP	12.60	139.62	0.55	127.02
+50			6.0	133.62
+70			2.7	136.92
TP	4.70	144.26	0.06	139.56
4+00			5.6	138.66
4+19.63 BK				
5+95.52 AH			5.4	138.86
CHK. T.B.M.			4.47	139.79 - 139.89
TP.	0.51	131.54	13.23	131.03

CHILD + ON CONC. VALVE CHAMBER. 0-23'

LT. E RT.

10.0 1.0
20' 20'

111.84 GA

9.5 0.7
20' 15'

11.2 0.5
20' 15'

T.B.M. SPIKE IN POWER POLE 25' RT. 6+50

3/4/57

	131.54		
TP	0.49	119.37	12.66 118.88
TP	3.14	109.62	12.89 106.48
			4.62 105.00 = 104.99

Stations on existing Pipe 9" 10"

4+82 ⁶	4" BB
1+86 ⁶	pipe Jt
1+68 ¹	1" Corp
1+64 ¹	1" Corp
1+59 ²	Sparking Meter in. Core Chart
1+43 ¹	Assumed Jt
1+13 ²	Assumed Jt
1+02	3/4" Corp Chlorine
0+83	4" AV
0+81	Access MH "18"
0+78	16" 50

Revised Alignment Montgomery

Pipe line 5+68.57 to 12+15±

3+89.90 BK
 = 5+68.57 AH Δ 24° 52' 50" RL
 3+95.90 PI PLAN.

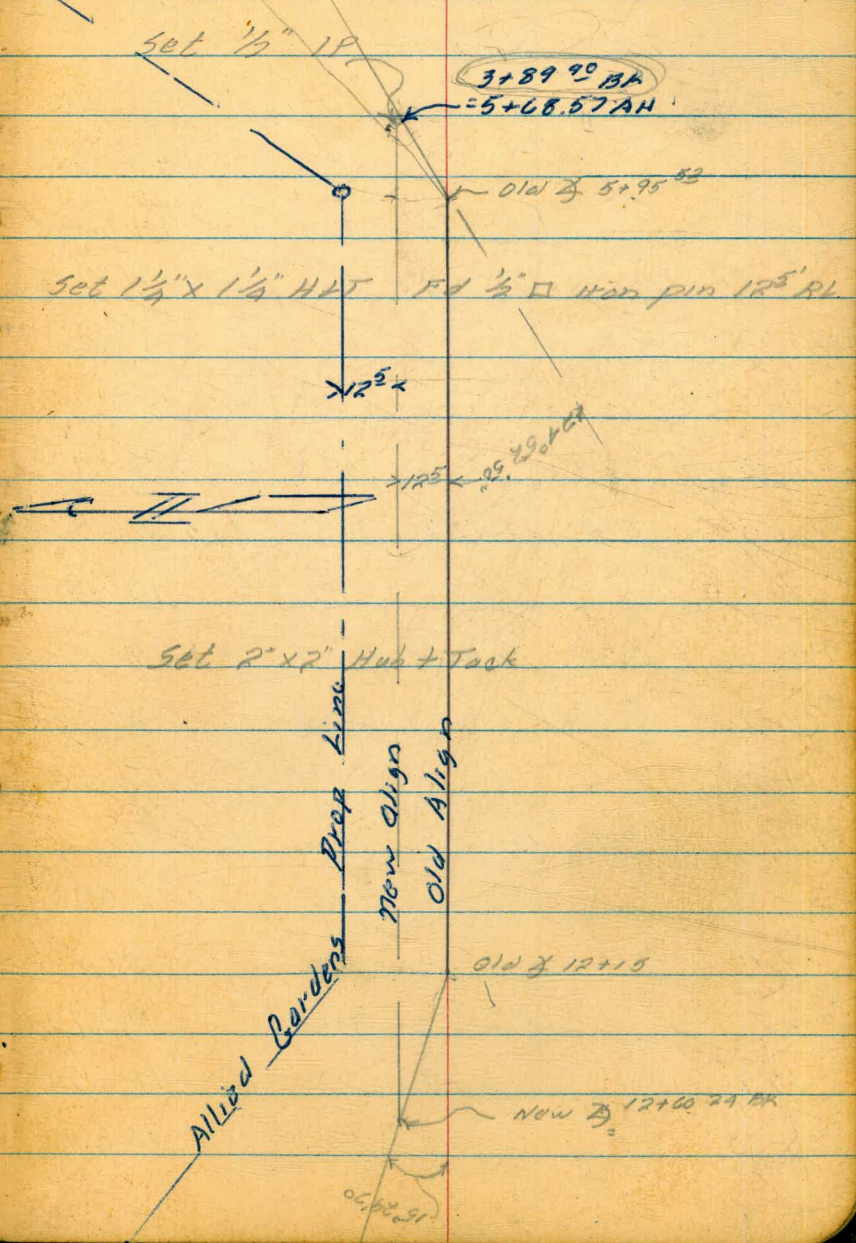
5+95 ⁵² OLD Δ 12° RL to 2" IP

7+54 ⁶² POT

10+71 ⁹⁶ POT

12+60 ²¹ BK
 = 12+61 ⁹⁸ AH Δ 15° 29' 20" RL
 10+86.31 PI PLAN

West Williams
 Kullhofer
 Smith 3/8/57



Q Profile of Realignment

West
Williams
Kullhofer

58

3+89	2.97	149.86	139.89
90 82			
-5+68		11.1	138.76
57 AN			
6+00		6.8	143.06
+50		2.2	147.66
	10.57	157.68	2.81
			147.05
7+00		7.6	150.02
+50		8.9	148.72
8+00		12.2	145.42
	0.86	146.15	12.33
			145.29
+50		7.1	139.05
TP	0.38	133.97	12.56
			133.59
9+00		2.9	131.07
+50		12.5	121.47
TP	0.39	122.60	11.76
			122.21
+58		3.2	119.40
+73		11.4	111.20
+75		12.9	109.70
+89		15.3	107.30
10+00		13.9	108.70

TBM in PP see FB 940 P#3

2.9
125 RL
+ 2.5
125 RL

3.4
125 RL

8.9
125 RL

0.9
125 RL

Top of creek bank

Q Bottom of Creek

12.72
1.17
13.89

59

122.60

10+06	130	109.60
+34	7.3	115.30
+50	4.7	117.90

TP 409 122.77 392 118.68

+70 3.4 119.37

11+00 4.8 117.97

+50 12.7 110.07

TP 0.42 110.34 1285 109.92

12+00 5.3 105.04

+40 10.2 100.14

12+60 2A BK

12+61 2B AH 13.89 96.45

401 106.33 = 106.34 Turn on 1" x 1" Gunney See FB 940 P²⁴

1.7
128² BK

2.3
128² BK

on Hub

Revised Alignment Mission Gorge Rd
+ Twain St

39+50 AH
= 39+47 ~~AK~~ Δ 3° 53' 30" RB

1011D

59° 10' 52"

Proposed

37+56 ²⁰ inter with Twain St
also sewer Xing

37+56 ²⁰

60.35'

Ed PK No. 1

Twain St

see page 78

36+43 ²³ inter with Mission Gorge Rd

35+83 Δ 13° 41' 20" RB

West Williams
Kellhofer

Mission Gorge Rd

60

3/11/57

3° 14' 40"

13° 20'

Ed PK No. 1

36+43 ²³

91.19'

37+56 ²⁰

35+83

Ed PK No. 2

**10" SEWER CROSSING
36x18
14.5' deep
Ready 4/6/57**

Chis # NE Cor Top Drain Culvert See FD 940

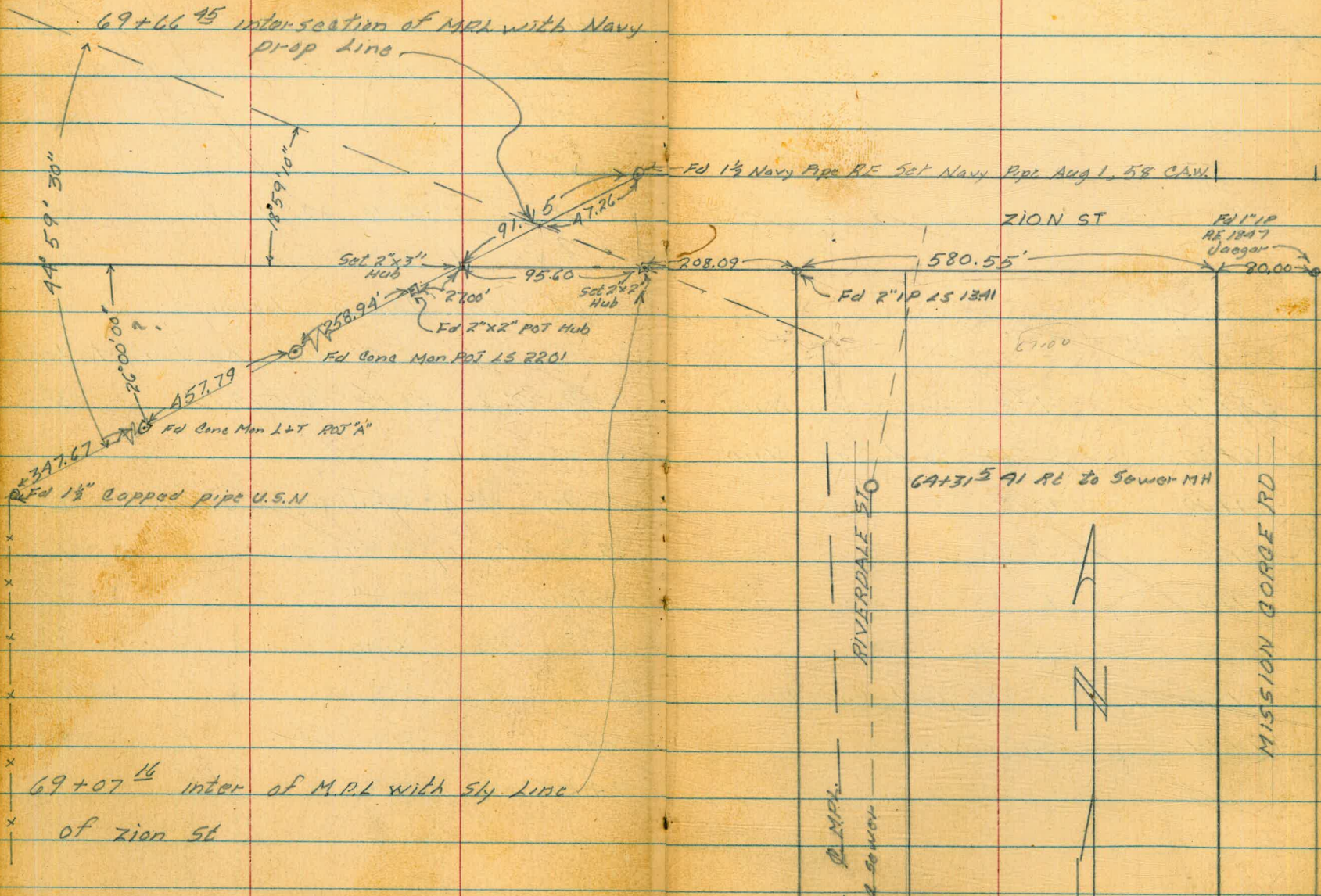
5.82	80.09	74.27	
35+83	5.99	74.10	Begin AC pave end 18" Conc Type C curb
36+00	5.11	74.68	
+50	5.07	75.02	
+93	5.22	74.87	begin 3' wide AC berm
37+00	4.48	75.61	Top of AC berm
+23	4.83	75.26	leaves Top AC berm
+29	5.51	74.58	Bottom of 3' wide AC berm to left
+29			43' 4' Lt to PP HP 7986 ✓
+50	5.77	74.32	
+83	6.82	73.27	Top of AC gutter }
+88	9.83	70.26	of " "
+91 ⁵	7.89	72.20	end of " "
39+00	8.1	71.69	fence xing
+50	8.9	71.19	
39+00	8.9	71.19	
	5.92	74.27 =	74.27

Property Ties M.P.L. Zion St
+ Admiral Baker Field

West
Williams
Kellhofer
Smith

62.

3/14/57



GAS MAIN LOCATION
RIVERDALE ST

West
Williams
Kellhofer
Smith

63

3/14/57

55+39	4 ⁵ RT end of Gas Main
55+00	5 ² RT to Q Gas Main
54+00	4 ⁵ RT " " "
53+00	5 ⁰ RT " " "
52+00	4 ⁸ RT " " "
51+00	5 ² RT " " "
50+00	5 ⁰ RT to Q Gas Main
49+14	Gas Xing

Revised Alignment MPL
Riverdale St. Zion St.

West
Williams
Kellhofer

64.

41.157

Admiral Baker Field

71+35 7.0RT
P.P. 672633H

Old Alignment

Zion St.

69+37.91 AH
= 70+29.21 BK

68+96.33 P1

18° 57' 50" RT

Plan

69+89 26.2T
P.P. 672632H

68+62 9.52T
P.P. 672631H

67+77.13

> 15'

67+77.13

90° 34' 50" LT

Set 1 1/2" x 1 1/2" H+T

Zion St
Sly prop line

67+67.15

65+94.01

Plan

65+40 Barbed wire Fence Xing

64+23

2 Sewer MH 225' BK

62+62.23 POT

60+79.08

Plan

Set 1 1/2" x 1 1/2" H+T

2 1/2" x 10" post

62+82.9

62+79.3

Pipe Rail + Pipe post
Fence

on 4" pipe post

60+49.77

2° 20' 00" RL

Set 1 1/2" x 1 1/2" H+T

58+46.63 PLAN

2° 20' 31"

Riverdale St

Q Profile
Revised Oligonierst

West
Williams
Kellhofer

65.

6.67	79.37	72.70
60+49 ⁷²	7.0	72.37
61+00	8.4	70.97
+50	7.1	72.27
62+00	5.9	73.47
+50	5.3	74.07
+83	4.3	73.07
63+00	4.9	74.47
+30 ⁺	6.5	72.87
+50	7.1	72.27
+51	8.01	71.36
64+00	8.4	70.97
+50	8.8	70.57
65+00	10.4	68.97
TP 4.01	71.66	11.72
		67.65
+50	3.9	67.76
66+00	4.5	67.16
+50	5.4	66.26
67+00	5.9	65.76

See FB 940 P 12

Top Wly Rim Sensor MH 62R+60+35²

8.4
10' Lt

6.6
10' Rt

7.0
10' Lt

3.9
10' Rt

7.7
10' Lt

2.2
10' Rt

6" Conc Tile dairy drain Xing

6' Lt Top 6" Conc Tile drain

8.9
10' Lt

7.7
10' Rt

10.9
10' Lt

10' Rt
10.1
10' Rt

71.66

67+45	5.7	65.96
+55 ³	4.0	67.66
+71	4.18	69.48
+77 ¹⁸ x	4.03	67.63
68+00	5.64	66.02
+50	9.34	62.32
69+00	12.18	59.48
+50	12.8	58.86
70+00	11.16	60.50
69+37 ² AM		
70+29 ¹⁷ BR x	9.08	62.58
	7.09	64.57 =

1341-foot wire fence line

Begin Oil pave

22' RT To Nly edge Oil

4' LL + 22' RT to edge Oil pave

4' LL + 22' RT to edge Oil pave

See FB 940 P14

64.59 Turn on 2" capped pipe

Revised Alignment MPL
Sta 21+00 to 31+39.59

31+29.28 AH
31+39.59 BK

Δ 60° 26' 00" RT set 1 1/2" x 1 1/2" NT

29+53.82

29+

FD 3/4" IP 12 1/2' Lt LS 2801
intersection with prop line

500 REVISION
FD 9/20 - 09
STA 29+00 - 76
52+81.79

26+01 Δ

15° 01' 35" Lt

set 1 1/2" x 1 1/2" NT

12 1/2' Rt to Prop Line

21+00

1° 07' 50" Lt

19-122 27 Δ PLAN

West
Williams
Ball
Kellhofer

67.

4/16/57

31+29.28 AH
31+39.59 BK

RE. 5833

FD 3/4" IP 12 1/2' Rt 31+11.83

12 1/2'

FD 3/4" IP 12 1/2' Lt 2801

FD 3/4" IP 12 1/2' Lt 2901

352.79

12 1/2'

Revised Profile

21+00 to 31+39.5

	1.47	99.89	98.42
21+50		5.5	94.4
+95		11.8	88.1
22+00		9.3	90.6
+50		7.9	92.0
23+00		8.8	91.1
+50		11.6	86.3
24+00		13.4	86.5
+50		11.6	88.3
25+00		8.1	91.8
+50		5.8	94.7
26+01	TP on Hub 0.69	98.20	2.38
			97.51
+50		5.8	92.4
27+00		12.0	86.2
TP	1.30	86.33	13.17
			85.03
+50		5.8	80.5
+87		Fence	Xino
28+00		9.8	on loose fill 2' 6" up
			76.5

1 1/2 x 1 1/4 Hub 21+00 Spc EB 940 P1

end of benched Area

13.0
5' LL

3.8
15' RL

14.9
15' LL

2.3
15' RL

18.5
15' LL

5.8
15' RL

13.9
15' LL

1.7
15' RL

7.8
15' LL

1.4 **Bottom of 18" H1**
2' RL **1 1/2 to 1 Slope**

11.5
15' LL

0.3 **Bottom of**
12' RL **Fill Slope**

7.9 **Bottom of**
12' RL **Fill Slope**

12.9 **edge fill**
17' LL

8.5
12' RL

86.33

28+16 9.9 76.4

14' RL to flow line 12" Conc Storm Drain

2.06 75.40 12.99 73.34

+50

2.9 72.5

+70

4" Pipe crossing from well 70' it

29+00 3.7 71.7

29+03

16' RL to Small Booster pump +

+16

14' RL Meter pole

+50

4.8 70.6

+57⁸

Fence Xing

+84

14' RL PP 279687

30+00 5.2 70.2

+50

5.0 70.4

31+00 5.8 69.6

+39⁵⁰

6.1 69.3

6.26 69.14 = 69.11 on old 2 Hub see FS 940 P 7

Revised Alignment M.P.L.
between Murphy Canyon Rd + Hwy 395
See page 49

176+35⁸⁹ Δ Plan Sta

177+90 Δ 51°19'10" RB Set 1 1/4" x 1 1/2" HHT

177+43⁹³ Col. Ed City Eng Hub (29.71 Lt. Col)

177+61⁹³ P.O.T. Top of Hill Set 1 1/4" x 1 1/2" HHT

175+50 P.O.T. Set 3/4" x 3/4" HHT

174+06 P.O.T. Set 1 1/4" x 1 1/2" HHT

172+45⁹¹ Plan

171+06 P.O.T. Set 1 1/4" x 1 1/2" HHT

169+45⁹¹ PIT Plan

170+33⁹⁵ Ed 3/4" IP 25' LT RE 9416

168+08⁹⁸ Ed 3/4" IP 25' LT RE 9416

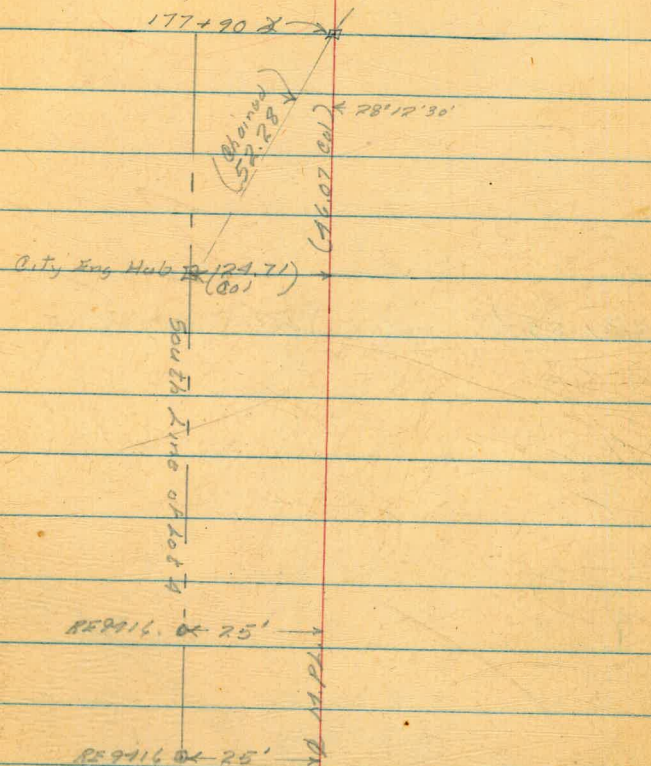
167+95⁹⁹ P.O.T. (old Δ)
166+41¹⁹ Plan

Old Δ at same angle
166+74⁵³ Δ 22°23'52" LT Set 1 1/4" x 1 1/2" HHT
165+20⁴¹ Δ Plan Sta

West
Williams
Kellhofer
Bull

70.

51°19'10" \uparrow 518157



MURPHY CANYON RD

West
Williams
Kellhofer
Bull

71

5/9/57

$32^{\circ} 20' 35''$

See also page 15 + 99 For Tics

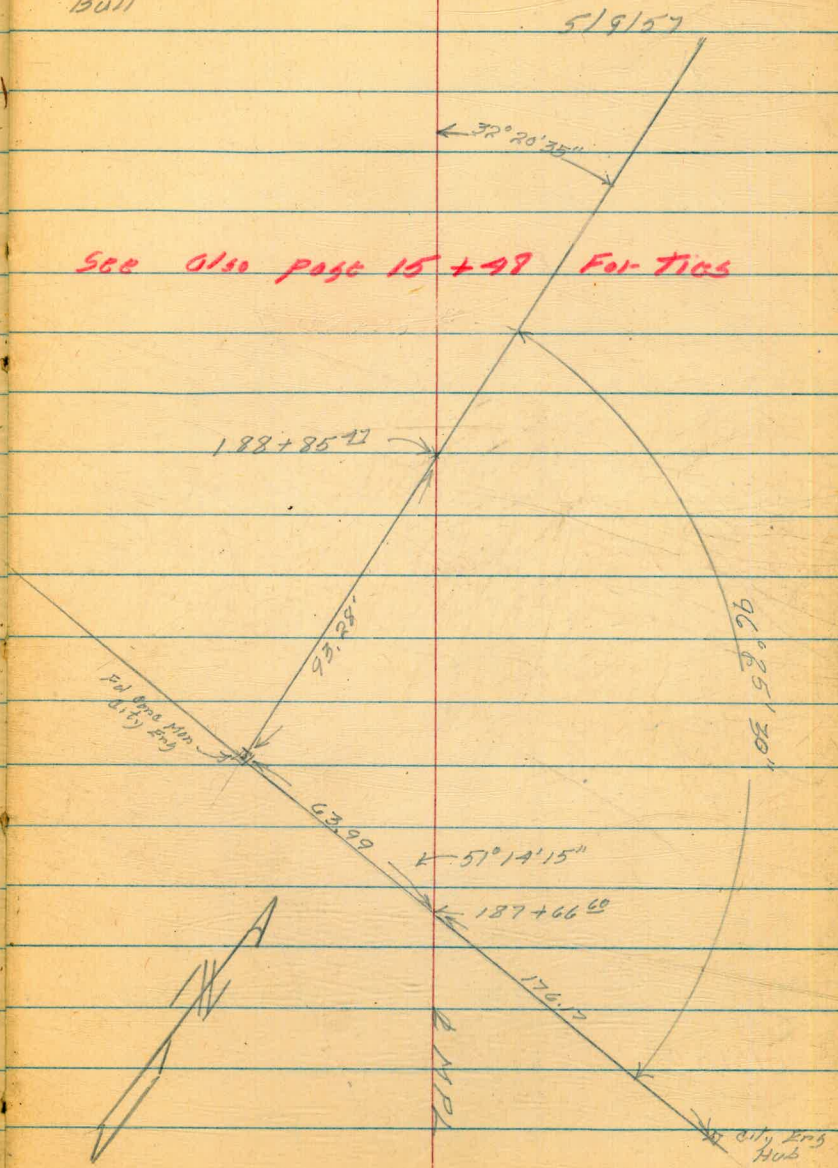
188+85⁴⁷ inter with city line

188+85⁴⁷

187+66⁶⁰ inter with city line

185+62⁸⁵ POT set $1\frac{1}{2}'' \times 1\frac{1}{2}''$ H+T

184+08¹⁹ PLAN STA

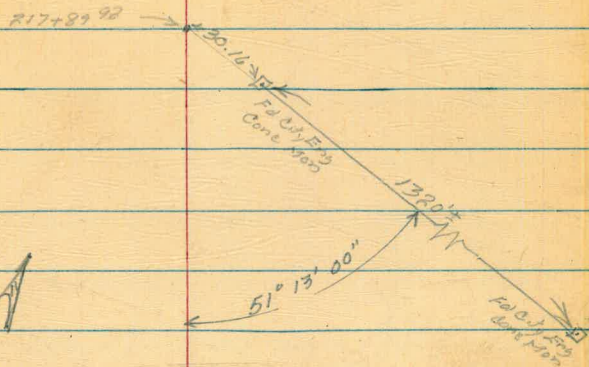


216+35⁸¹ Plan Sta217+89⁹² Inter with city man line

212+00 POT set 1 1/4" x 1 1/4" H&T

210+45⁸¹ Plan Sta

205+00 POT set 1 1/4" x 1 1/4" H&T

203+45⁸⁹ PLAN STA196+25²⁰ POT set 1 1/4" x 1 1/4" H&T194+70⁸⁹ POT Plan Sta

D.M.P.

West
Williams
Kellhofer
Bull

→ 25' ←

73

5/10/57

Montgomery
Field

General
Dynamics

General Dynamics Prop Line

237+81 Fence Xing

237+60 Gas Xing

235+11⁰³ Plan Sta

589° 15' W (mag)

→ 25' ←

236+45¹⁸

51° 11' 55" LE

Set 1 1/2" x 1 1/4" H+T

N 38° 30' W (mag)

For Done Mon City Eng POT

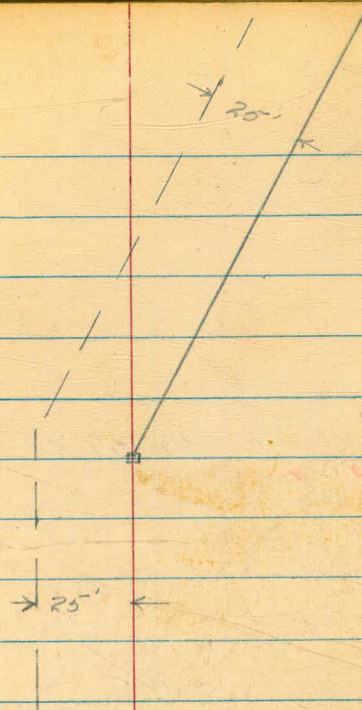
226+23⁶⁵ POT Set 1 1/2" x 1 1/4" H+T

224+69⁵³ POT Plan Sta

Revised Alignment MPL Cont

74.

256+96¹¹ AH set 1 1/2" x 1 1/2" H+T Mon 25.82 Rt Set Dist split of 2
 266+39²² AX 28° 51' 40" Rt Fd City Eng Conc
 264+59⁰² Plan Sta



25'

278+57²² POI Set 1 1/2" x 1 1/2" H+T Fd Conc Mon 25' Rt City Eng Conc Mon
 276+73⁴⁵ Plan Sta

25'

REVISED ALIGNMENT

M.P. 37+65 To 52+43

48+44.38 AH

52+43.60.8K 90° 08' 40" RT

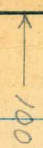
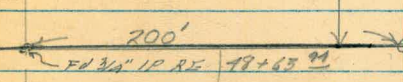
46+66.24 PLAN

West
Kellhofer
Bull

75

2/8/57

Vanderver St



48+88.94 X 90° 39' 15" LT

43+11.58 PLAN

48+63.24

Why prop line Vanderver St

80'

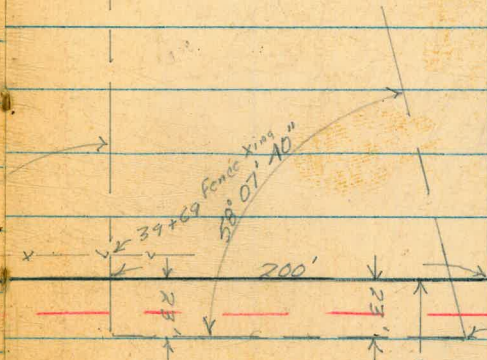
MISSION GORGE RD

39+40.31 X 90° 01' 55" RT

33+62.94 PLAN

Q Ga 5 42 to 6° RT

Twain St



37+56.80

8. 33

37+65.13 X 58° 07' 40" LT

Set Nail on Q M.P.
+ 7' N.W. of Q Twain St

REVISED ALIGNMENT CONT

West
Kellhofer
Bull

76

719157

547 1/2"
H+T

48+49.88 AH
= 52+43.60 BK

39+45.3 Gas Xing

RIVERDALE

Old Alignment M.P.

42+19.5 21' W Barn

42+38.5 21' W Barn



42+98 5' LT End
W Wire enclosure
42+96 7' RW 4" 5/8" W
42+68 6' LT Barn
W wire enclosure

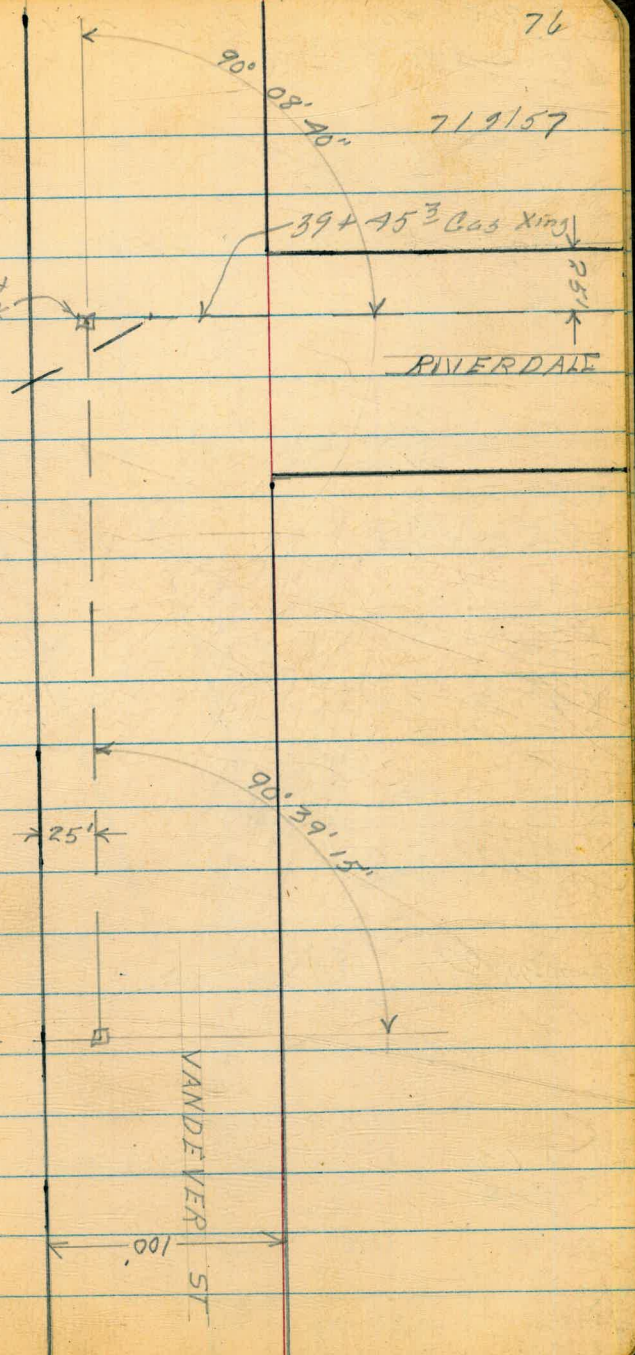
Proposed M.P.

25'

90° 39' 15"

VANDEVER ST

100'



REVISED LOCATION MPL
STA 31+45 TO 38+73

37+65¹³ AH
38+73¹² BK

36+88²⁵ \times 90° 09' 20" LT 7' North of 2 Twain
30+02.88 \times PLAN

35+73²⁵ Δ 27° 00' 00" RT Record
28+27.88 \times PLAN

31+45⁰² 62° 15' 15" RT New Angle PT
New Cone Warehouse 10' 11"

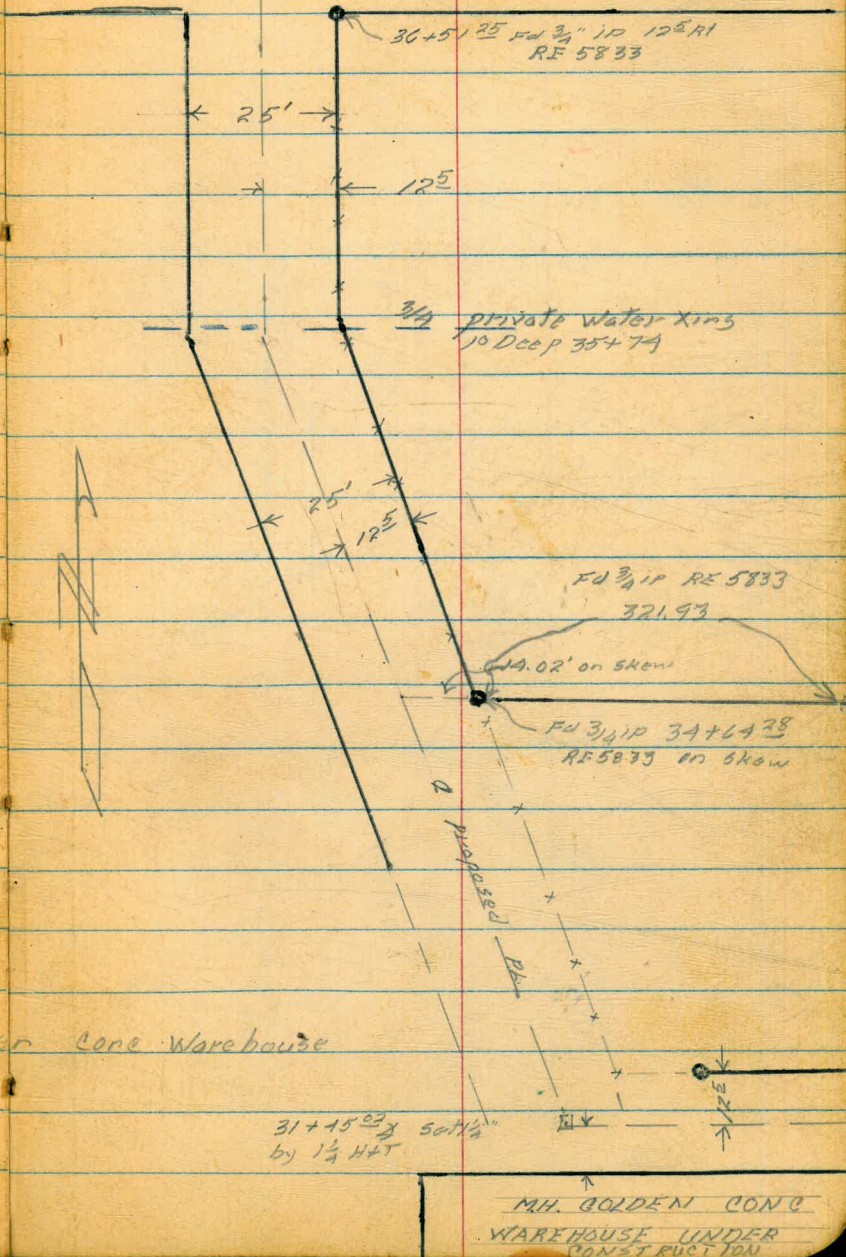
30+73 90° LT NE Cor of New Golden Cone Warehouse

31+45⁰² \times set 1/2" by 1 1/2" H&T

West
Kullhofer
Bull

TWAIN ST

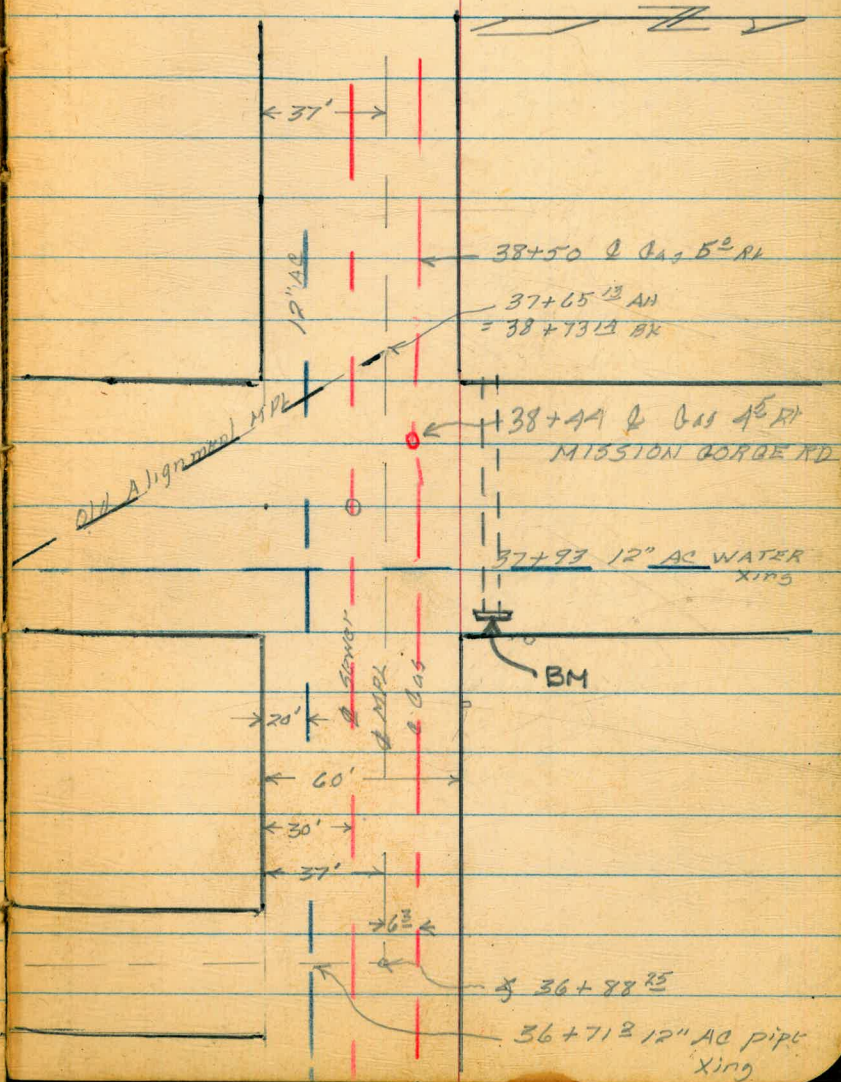
77



MH. GOLDEN CONE
WAREHOUSE UNDER
CONSTRUCTION

7/12/57

WYMAN ST



151.79 @ 23° 01' = 139.71
151.39 @ 22° 38' 139.72

USE + GS Murphy
422.4

9F 231 Δ 406.

Q 13

H 13

I 13

I 14

I 15

38 + 73.14 BK 31 + 31.98

5.52

31 + 37.50

31 + 39.50

5.52

31 + 45.62

37 + 92 12" Water Xing

.9	
1.35	0
2.85	1
4.35	2
5.85	3
7.35	4
8.85	5
0.35	6
1.85	7
3.35	8
4.85	9
6.35	10
7.85	11
9.35	12
0.85	13
2.35	14
3.85	15
5.35	16
6.85	17
8.35	18
9.85	19
1.35	20
2.85	21
4.35	22
5.85	23
7.35	24
8.85	25
0.35	26
1.85	27
3.35	28
4.85	29
6.35	30
7.85	31
9.35	32
0.85	33
2.35	34
3.85	35
5.35	36
6.85	37
8.35	38
9.85	39
1.35	40
2.85	41
4.35	42
5.85	43
7.35	44
8.85	45
0.35	46
1.85	47
3.35	48
4.85	49
6.35	50

35173.25
 78
 36+51.25
 37
 36+88.25

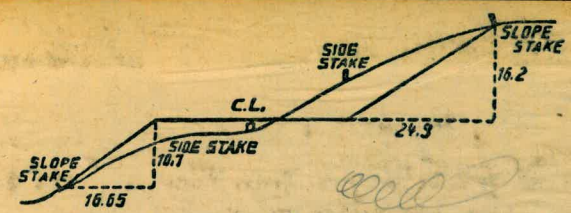
Please Return to
 City of San Diego Water Dept.
 Room 903 Civic Center
 Balboa Park -

36+64.63 273
 185
 88

257+02.61
 6.44 290
 256 96.17 3.30
 266+39.92 240
 56+96.17 36.58
 10 43.65
 20 1391.20 3.42

99791
 3
 29 9373
 69 49 50
 34 54 55
 139 30 50
 69 49 55 99797
 3

90°09'20"
 180 18' 40
 62°56' 20"
 125 52 30
 62 56 15



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.
 SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.25	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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