

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

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.

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

FB 941

FB # 941

DIRECTIONS FOR USE OF TABLES

TABLE No. XIV

Distance of slope stake from side or shoulder
Stake for any width roadway, slope 1 1/2 to 1.
If ground is nearly level, the cut or fill at side
stake is located by the double entry method in

IMPROVED TABLES
AND
INFORMATION

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

TABLE No. VIII

To find Tangent and External for curve of
any other degree, divide by degree of curve and
add correction found in column of corrections.
Degree of curve with a given E may be found
by dividing tangent (or external), opposite T 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.

Existing 12" B.I.; Existing 4" A.C.; Existing 6" A.C.

{ 12" x 8" Tapping Sleeve
8" A.V.

Proposed 8" A.C.

Surfacing in Dudley - 1" A.C. Pavement

Ref: Small Water Main Replacements

Group 17 Spec. No 63

Dwg. 6567-W

- 299.88 - TSNY

Nail in PP

P 1614

FB 715 P 13

757

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	.89	.99	1.09	1.20	1.29	1.42	1.54	
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	1.94	2.32	2.70	3.08	3.47	3.86	4.28	4.68	5.10	5.52	
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		
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	.266	.353	.440	.528	.618	.707	.797	.877	.971	1.07	1.18	1.29	
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	1.78	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	

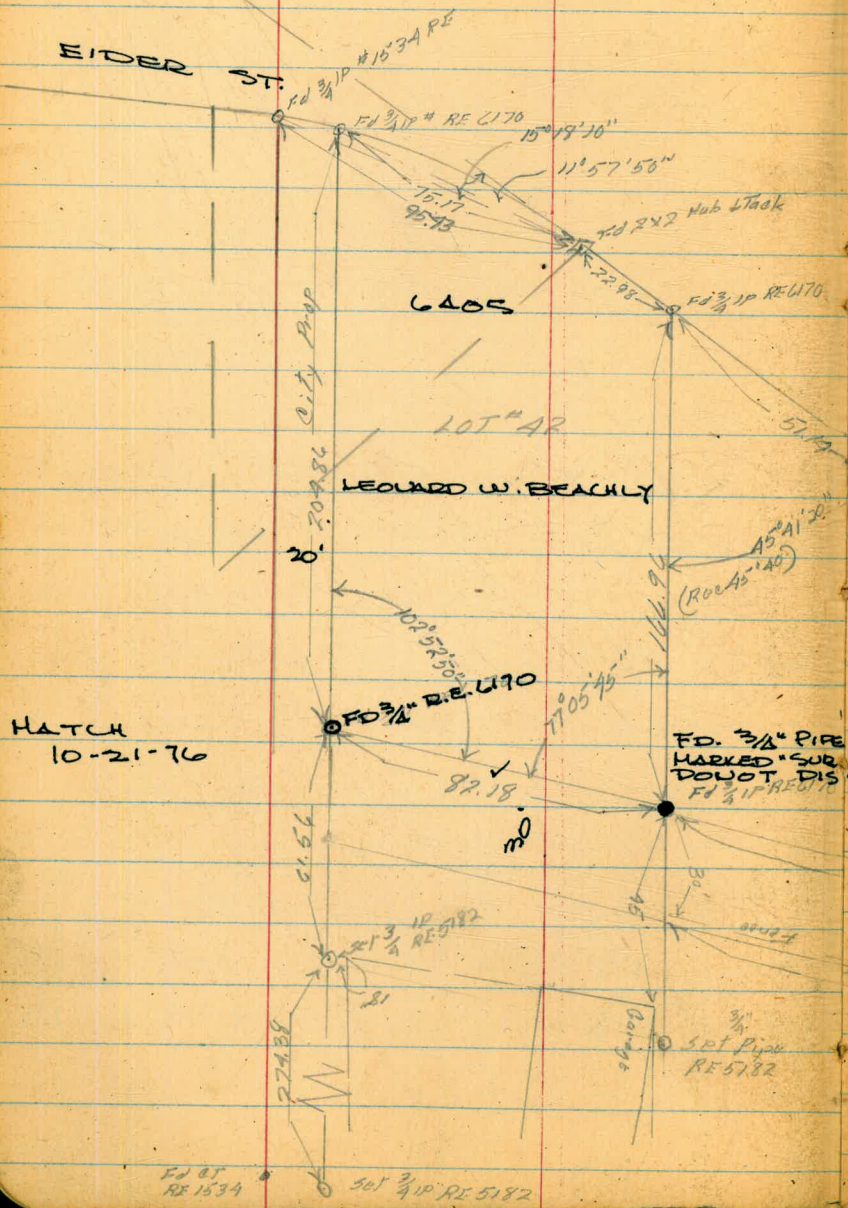
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alice
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alice

(OVER)

5ths for 6" AC MAIN Group 2A
 N of San Luis Obispo E of Strandway
 Alley BIK 127 + 128 Mission Beach 53 ✓
 N of Kingston Ct E of Strandway
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 alicia

North Fronto Elevated Tank



1134 156

West
Williams
Varonfiks Cal

98.37
68.59
126.96

Turned
EO 15° 22' 06" = 15° 28' 10"
to 1634 95.40 = 95.43
EO 12° 09' 18" = 11° 57' 50"
to RE 0170 75.77 = 75.17

179.60
102.54
77.06

MAP # 1134

589° 30' W
513° 24' E
102° 54'
90°
12° 54'
SUC 12° 54' = 1,025.89
30'
3077.670
197.70 Rec
-30.77
166.93 = 166.96 Chained
Koc
90°
12° 54'
77.06

FD 3/4" PIPE RE 4847

LOT #11

179.63
102.04
96.54

WATER TANK

FD 3/4" Prop Cor. RE 4847



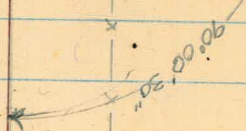
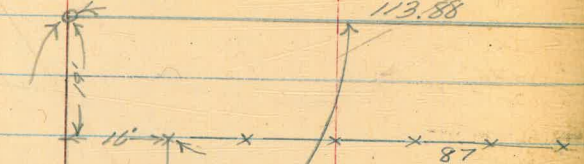
SOUTH ENCANTO TANK

Property Survey

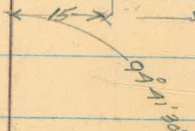
West
Williams
Voronakis
Kellner
1/25/56

Fd 1 1/2" IP RE 749

113.88



156.20



Fd 1 1/2" IP RE 749

38.49

$\Delta = 33^{\circ} 30' 50.45'' 10.21''$
 $R = 191.13$

Set 2" IP RE 514R

100.92'

AVIATION DR

Fd 2x2 City Eng Hub

Chord
38.52'

$\Delta = 20^{\circ}$
 $R = 176.91$
Chord = 76.63

Fd 1 1/2" IP RE 749

43.72

Chord

Fd 2x2 Hub 1 Disk

MAP # 1546

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

15'

113.88'

$\Delta = 117^{\circ}$
 $R = 222'$

Fd 2x2 Hub

RE 498

9" N 2x2 Hub

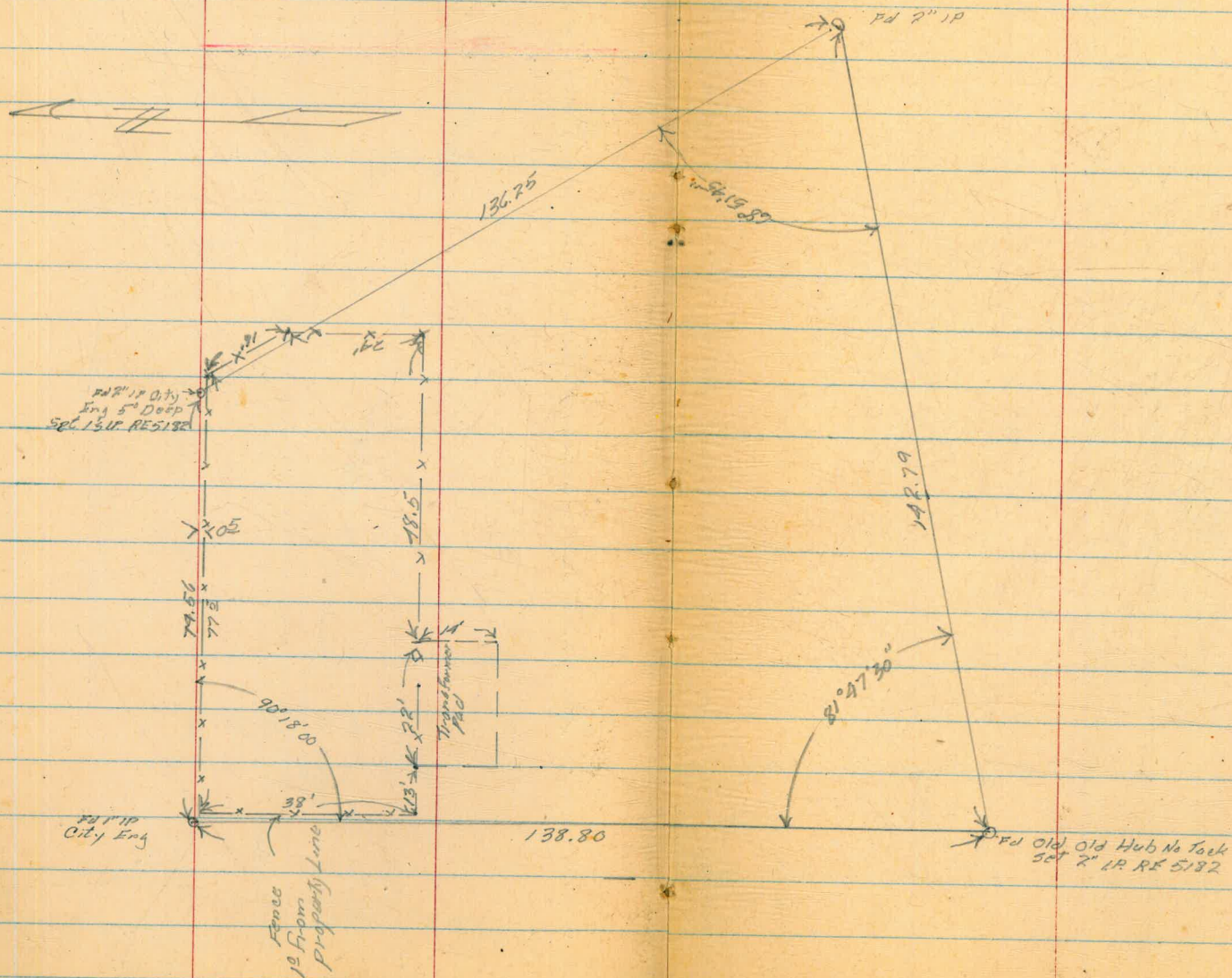


ENCANTO PUMP STATION
Property Survey

West
Williams
Varonfakis
Kellhofer

3

1/26/56



College Tank
property survey

West
Williams
Varonstake
Kullhofer

FD 3/4 IP 10. 2201

4

1/29/67

FD 3/4 prop Cor

71.40

19.91

Set L+T

50.06
FD 2x2 Hub + T

Set L+T

FD 3/4 IP 15 2201

Set L+T

20'

50'

Fence
100'
Alley

50'
FD 3/4 prop Cor

Set L+T

FD 3/4 prop Cor



LANDIS ST STKs for Lowering

Main Lemona to 52nd St

BC of 90° Curve on Landis at Lemona = 0+00

4.61	322.08	317.47	
0+00 BC	5.7	316.7	310.2
+25 West	5.4	316.7	311.3
+50 West	4.6	317.5	312.0
+100 West	3.2	318.9	314.0
0-50 East	6.1	316.0	310.6
11.56	327.71	593	316.15

0-50	4.5	323.2	319.2
0-29 MS	2.8	324.9	324.7
0-26 (5) REF	2.8	324.9	324.9
Flange on 0-26 existing EN	3.5	324.2	324.9
0-19 MN	2.3	325.4	325.9
0+00	1.4	326.3	320.3 322.3
10.37	338.03	005	327.66

+05 MS	9.6	328.1	326.6
+23 MN	9.3	328.7	328.3
+25	9.1	328.9	323.9 324.3
+50	7.4	330.6	325.4 326.2
+59 MS	5.3	332.7	330.4 330.0

West
Williams X
Varonakis &
Kullbofer

343.89 BWT
FB 2339 P 79

5.

2/1/56
SUNNY

3065.0 Meters set 5th Rt + 35th Lt of (5)

BM X on Driveway See FB 2338 page 57-64

2
C6 0+00 AT BC of Landis + Altadena Sta 14999

4
C5

5
C5

9
C4

4
C5

0
C4

2
C0

0
C0

7
F0

5
F0

0
~~C6~~ C40

Turn on LP prep Bar 80 South side 3'

8
C1

4
C0

6
~~C4~~ C50

4
~~C4~~ C52

3
C2

2
C2

3699

1 Fire Hyd 546 9.8 ft 0.2 from
51.72 prop line

80 South side 3'

5175

5186

5185

338.03

2/1/56

0+75 6.0 332.0 326.4

C5 ⁶1+00 1.4 333.6 ~~326.7~~
325.8~~C7~~ ¹⁰⁰ ~~C7°~~

+04 MS 2.6 335.4 331.1

C4 ³

5791

+25 3.7 334.3 327.0

C7 ³⁵⁰
521 333.0+50 2.9 335.1 ~~326.8~~
325.9~~C9~~ ² ~~C9°~~⁵⁰
521 332.8+75 4.6 333.4 ~~326.4~~
326.8~~C6~~ ⁶ ~~C6°~~ *Baro discharge*⁵⁰
521

+85 MF 0.8 337.2 331.0

C6 ²

3735

2+00 7.5 334.5 326.4

C8 ¹⁷³
821 330.7

+05 MF 1.5 336.5 330.5

C6 ⁰

+25 4.6 333.4 325.5

C7 ⁹⁹⁵
1021 328.5

+50 8.7 329.3 324.6

C4 ⁷¹¹³
621 326.7

+59 02 EC 9.9 328.1 324.0

C4 ¹¹¹³
521 326.2

10.19 347.57 065 337.38

3.70 343.87 = 343.89

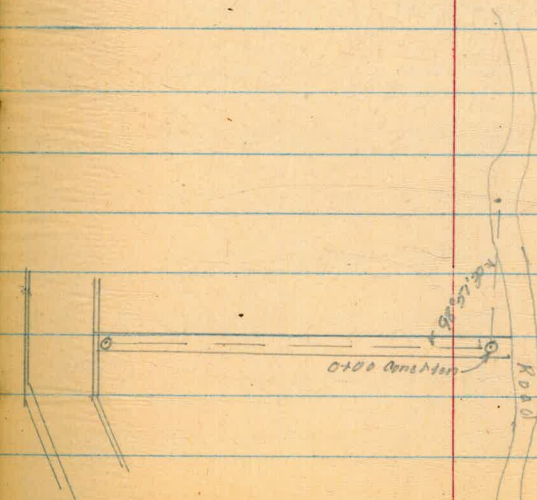
BM #9 EB 2339 Page 79

El Capitan Dam Road to Res Area		
Pi Station	Angle	Distance
14+02 ⁹¹	28° 25' 10" Rt	173.56 PP #24
		247.66
15+55 ²⁵ PI	35° 03' 30" Lt	
		561.70
9+93 ⁰³ PI	34° 13' 20" Rt	203.40
7+90 ¹⁵ PI	24° 46' 10" Rt	154.08
6+36 ⁰⁷ PI	43° 21' 46" Lt	135.16
5+00 ⁹¹ PI	16° 45' 00" Rt	154.18
3+46 ¹³ PI	17° 15' 15" Lt	171.88
1+79 ⁸⁵ PI	14° 17' 20" Rt	174.85
0+00	98° 51' 30"	South Axis Dam dona Men

Wlost
Williams
Varenfakis
Kallhofer

2/2/56
Set 1 1/2" x 1 1/2" Hubs on P19
unless otherwise noted
set 6" Deep

174.85
171.88
346.73
184.18
500.91
135.16
836.07
154.08
790.15
203.40
993.55
561.70
1555.25
397.66
1802.91
173.56
1976.47



36+83⁰⁸ PI 26° 43' 30" H

163.18

35+19⁹⁰ PI 26° 18' 45" RT

196.19

33+23⁷¹ PI 27° 26' 10" H

165.50

31+58²¹ PI 48° 58' 40" H

262.50

28+95⁷¹ PI 27° 30' 45" H

143.80

27+57⁹¹ PI 43° 56' 10" H

308.47

24+43⁴¹ PI 33° 37' 20" RT

138.56

23+04⁸⁸ PI 27° 04' 40" RT

209.75

21+00¹³ PI 62° 30' 00" H

123.66

19+76²⁷ PI 16° 47' 40" RT

19126.47
 1 23.61
 21-0013
 2 04.75
 230489
 232.56
 244344
 308.47
 275191
 143.80
 289571
 262.50
 315821
 165.50
 332371
 196.19
 351990
 143.80
 368308

El Capitan Cont

222.56

49+65¹⁶ P1 54° 09' 36" L

99.64

48+65⁵³ P1 26° 08' 00" R1

153.05

47+12⁴⁷ P1 23° 52' 15" L

195.88

45+16⁵⁹ P1 95° 21' 30" R

290.46

42+26¹³ P1 43° 28' 26" R1

165.24

40+60⁸⁹ P1 37° 29' 15" L

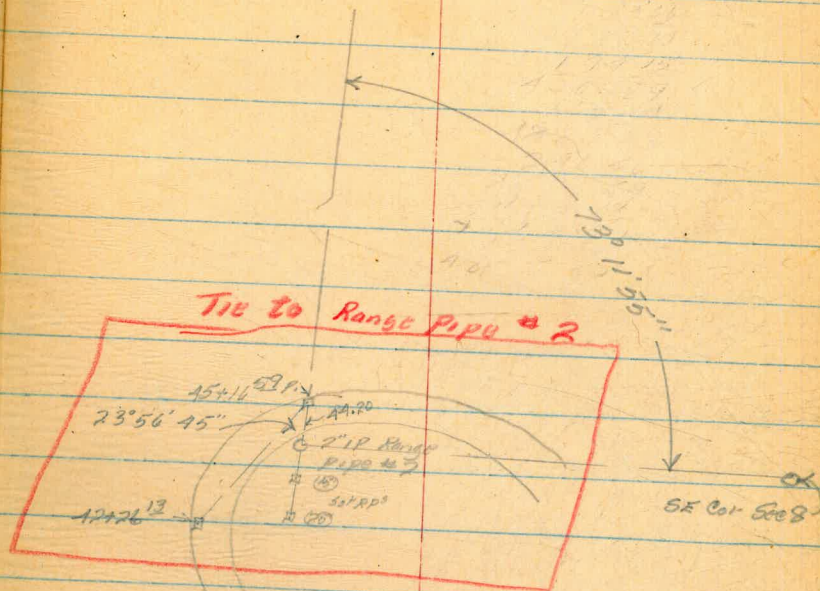
194.15

38+66⁷⁴ P1 39° 36' 00" R1

183.46

9.

1060 89
38 66 74
194 15



186552
9964
196516

141.28
65+16⁵⁴ P1 21° 36' 30" N

136.37

63+80¹² P1 33° 39' 10" N

245.90

61+34²⁷ P1 73° 07' 20" N

210.81

59+23⁴⁶ P1 19° 12' 30" N

191.16

57+32³⁰ P1 59° 22' 45" N

160.53

55+71⁷⁷ P1 44° 47' 52" N

384.05

51+87²² P1 45° 12' 40" N

10

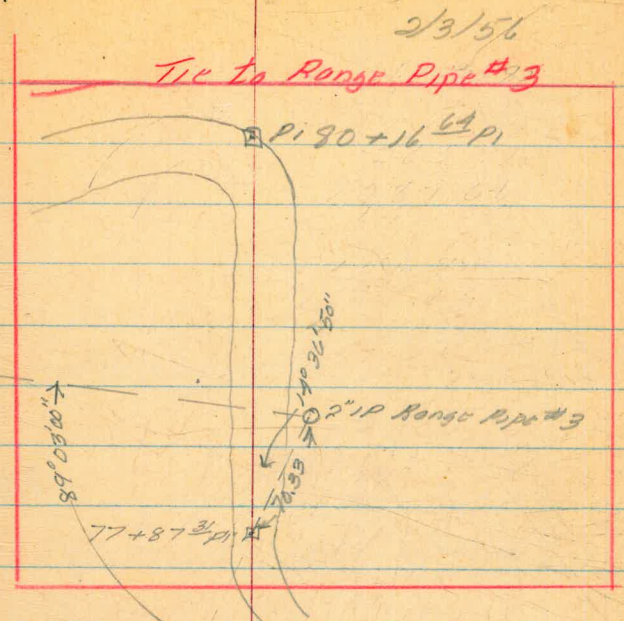
19 65 16
3 55 04
51 87 72
384.05
55 71 77
160 53
57 32 30
191 16
59 23 46
210 81
61 34 27
245 90
63 80 12
136 37
65 16 54
141 28
665782

El Capitan Cont

108.71

11

		138.21
82+78 ²⁶ PI	27° 57' 25" RT	
		152.93
81+25 ³³ PI	69° 34' 10" LT	
		108.69
80+16 ⁶⁴ PI	90° 03' 00" LT	3/4" IP
		229.33
77+87 ³¹	15° 18' 10" RT	
		402.15
73+85 ¹⁶ PI	34° 51' 30" RT	
		156.87
72+28 ²⁹ PI	77° 09' 15" LT	
		143.65
70+84 ⁶⁴ PI	75° 27' 10" RT	
		266.77
68+17 ⁸⁷ PI	62° 09' 40" LT	
		160.05
66+57 ⁸² PI	44° 33' 50" RT	



Water tank 400' South on hill
 PI under Power Lines to Rde Area

- 77+87 31
- 2 29 33
- 80+16 64
- 1 08.89
- 81 25 33
- 1 52.93
- 82 78 26
- 87 38 21
- 84 16 47

3/4" IP Set in bank 10' South of Road

West
Williams
Varantokis
Kellhofer

2/9/56

12

= 68+1787 Main Road Survey

95+13²⁵

79° 59' 15" RT

to 66+57⁸² PI

283.41

92+29⁰⁵ PI

41° 27' 15" L

129.01

91+00⁸⁴ PI

21° 55' 10" RT

321.47

87+79³⁷ PI

36° 15' 30" L

145.11

86+34²⁶ PI

30° 56' 40" RT

96.86

85+37⁴⁰ PI

46° 27' 00" L

120.93

84+16⁴⁷ PI

43° 04' 40" L

← Road branches to float area here

Traverse to Parking Area + Boat Dock

From Sta 85+37.40
Backsight on Sta 84+16.42

Sta 85+37.40 = Sta 0+00

West
Williams
Varonakis
Kallhefer

13

10+38⁵²

Edge of Lake
End of Small Mole Pier

8+25⁰⁵ PI

30° 12' 30" RL

224.97

6+00⁰⁸ PI

28° 32' 40" LL

370.24

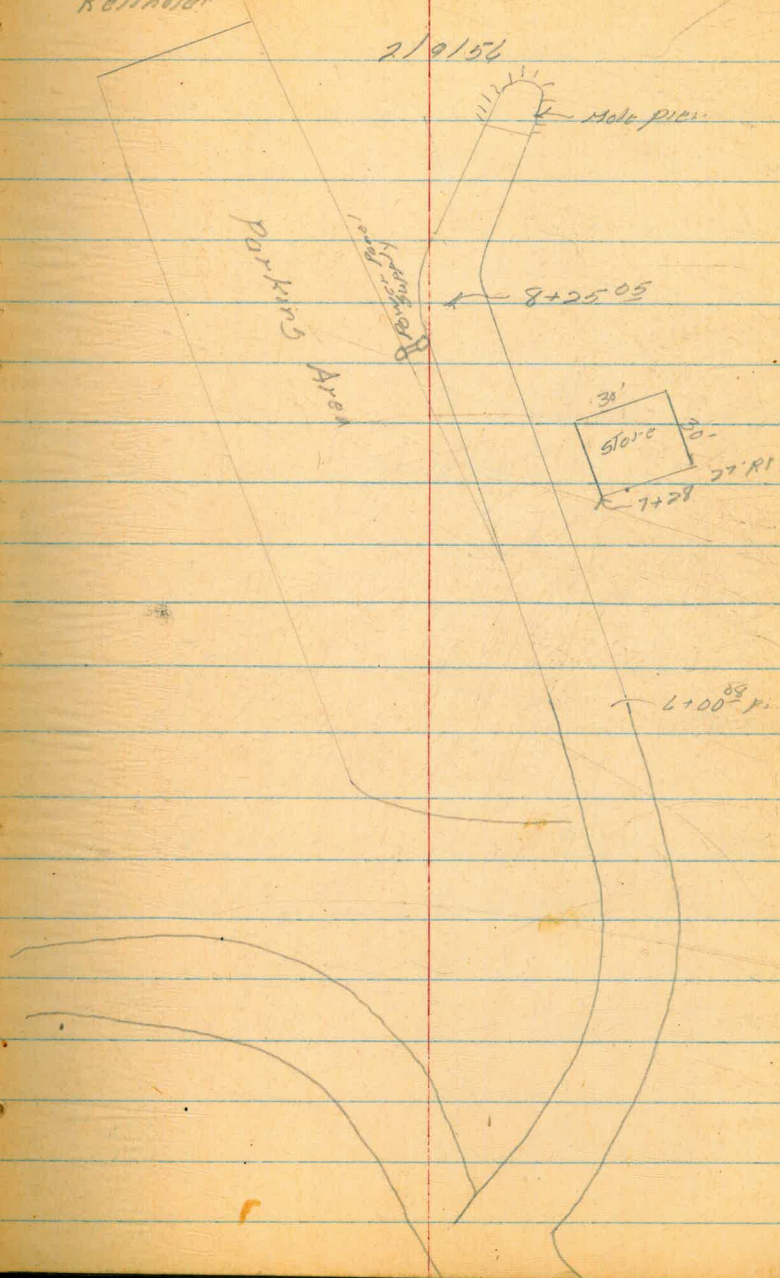
2+29⁸⁴ PI

36° 07' 10" LL

229.84

85+37.40 = 0+00

33° 19' 30" RL



Profile El Capitan Dam
Road to Res Area

0+00 Mon South End Axis of Dam

1.48 771.15 769.67

0+50

1+00

1+50

0.47 758.68 1294 758.21

2+00

2+50

3+00

3.68 759.53 283 755.85

3+50

4+00

West
Williams
Voropakis
Kellhofer

2/10/56

BM Cone Mon South End of Dam Axis

2.9 3.9
2.81 18.81 edge Road

Edge Road

7.7
7.11

Edge of Road

8.6
18.81

11.1
5.11

11.8
16.81

Turn on Pi Hub Sta 174⁸⁵

1.4
8.11

1.9
10.81

3.8
9.11

4.4
9.81

4.9
13.21

5.8
9.81

USGS BMT Gaging Sta Marked 756

5.7
15.21

6.6
15.81

6.0
14.21

5.7
16.81

759.53

4+50

5+00

+50

6+00

+50

7+00

+50

7+90¹⁵ 6.05 758.97 6.41 752.92

8+00

+50

Edge Road

5.2
16.2+

5.2
10.2+

5.6
10.1+

6.9
7.1+

7.0
9.1+

6.0
10.2+

6.0
8.1+

Total on P/Hubs 6.0
4.1+

6.5
6.0 2+

6.5
15.1+

Edge Road

5.7
14.8+

5.7
14.8+

6.1
8.8+

7.4 10.3 Flow line
9.8 14.8 24" Drain

7.6
9.8+

7.1
9.8+

7.0
12.8+

7.3
15.8+

6.7
12.8+

6.9
9.8+

758.97

9+00

Edge Road

Edge Road

$\frac{5.8}{79' L}$

$\frac{6.2}{8' R}$

+50

$\frac{5.1}{74' L}$

$\frac{6.3}{10' R}$

+93⁵⁵

$\frac{5.1}{4' L}$

$\frac{6.2}{21' R}$

10+00

$\frac{5.1}{4' L}$

$\frac{6.2}{22' R}$

+50

$\frac{5.4}{6' L}$

$\frac{6.0}{17' R}$

11+00

$\frac{5.1}{13' L}$

$\frac{6.1}{17' R}$

+50

$\frac{5.6}{10' L}$

$\frac{6.3}{14' R}$

12+00

$\frac{5.3}{5' L}$

$\frac{6.2}{18' R}$

+50

$\frac{5.1}{3' L}$

$\frac{6.3}{24' R}$

13+00

$\frac{5.3}{1' L}$

$\frac{5.3}{4' R}$ $\frac{6.9}{30' R}$

758.97

Edge Road

Edge Road

13+50

$\frac{5.2}{2'RT}$ $\frac{6.6}{28'RT}$

14+00

$\frac{5.1}{1'RT}$ $\frac{6.5}{28'RT}$

+50

$\frac{4.1}{5.0}$
 $\frac{5.0}{6.2}$

$\frac{6.3}{21'RT}$

15+00

$\frac{4.9}{8'RT}$

$\frac{6.2}{15'RT}$

A51 759.86 342 755.35

+50

$\frac{5.4}{21'RT}$

$\frac{6.6}{2'RT}$

16+00

$\frac{5.5}{9'RT}$

$\frac{6.7}{12'RT}$

+50

$\frac{5.5}{4'RT}$

$\frac{6.9}{29'RT}$

17+00

$\frac{5.3}{5'RT}$

$\frac{6.4}{28'RT}$

+50

$\frac{4.7}{2'RT}$

$\frac{6.3}{20'RT}$

18+02 ⁹¹

5.1

$\frac{5.1}{0}$

$\frac{6.4}{29'RT}$

75986

18+50

19+00

+50

19+76 $\frac{42}{2}$

20+00

+50

+60

21+00

+50

+59

22+00

Edge Road

 $\frac{5.1}{6.1}$ $\frac{4.8}{9.1}$ $\frac{4.9}{11.1}$ $\frac{4.8}{11.1}$ $\frac{4.8}{14.1}$ $\frac{6.0}{11.1}$

Flow line 24" steel Culvert 19' RT

 $\frac{6.1}{0.0}$ $\frac{5.6}{6.1}$

Flow line 24" Pipe steel Culvert 21' RT

 $\frac{6.2}{8.1}$

18

Edge Road

 $\frac{6.2}{22.1}$ $\frac{5.9}{14.1}$ $\frac{5.8}{13.1}$ $\frac{6.9}{12.1}$ $\frac{5.8}{9.1}$ $\frac{6.8}{12.1}$ $\frac{5.8}{29.1}$ $\frac{6.1}{14.1}$ $\frac{6.8}{23.1}$

759.86

22+50

Edge Road
7.2
4'LT

Edge Road
8.1
20'RT

23+04⁸⁸ 8.66

760.40

Man Pi Hail
8.12 761.74

7.8
7'LT

8.3
18'RT

+50

7.5
19'LT

8.9
21'RT

24+00

6.0
17'LT

8.0
16'RT

+13⁴⁴ X

5.0
9'LT

6.6
16'RT

+50

5.0
11'LT

6.6
14'RT

25+00

5.2
13'LT

6.2
10'RT

+50

5.8
10'LT

6.7
13'RT

26+00

← 5.8
10'LT

← 7.0
13'RT

+50

5.7
10'LT

6.8
11'RT

760.40

27+00

+57.91

+65

28+00

+50

+95.71 ^{1.98}

759.59

5.79 754.61

29+00

+50

30+00

+50

31+00

Edge Road

5.8
11.21

6.1
18.11

18.21 Flow line 24" steel pipe Culvert

6.0
8.11

5.5
13.11

5.4
6.11

4.6
7.11

4.1
12.11

4.3
10.11

4.0
12.11

4.1
10.11

Edge Road

7.0
11.21

7.5
9.21

7.3
15.21

6.9
14.21

6.7
21.21

5.9
19.21

5.3
14.21

5.4
17.21

4.9
14.21

5.0
15.21

759.59

31+58²¹

Edge Road
4.6
2 RT

Edge Road
3.7
23.21

32+00

3.9
13.21

4.5
8 RT

+50

4.2
9.21

4.8
13.21

33+00

4.3
19.21

5.1
10 RT

+23²¹ RT

4.4
17.21

4.9
7.81

+50

4.6
12.21

5.1
13.21

+96

8.6

17.81 24" steel pipe culvert

34+00

5.1
8.21

5.6
12.21

+50

4.4
12.21

5.1
10 RT

35+00

3.5
8.21

3.9
12.21

TP on Pin Hub

719⁹¹ 148 760 47 360 755.99

3.2
4.21

3.1
18.21

West
Williams
Kellhofer

77

760.47

2/14/56

35+50

4.0
7.4

4.6
7.4

36+00

4.4
9.4

5.0
12.4

+50

5.4
10.4

5.6
10.4

+83⁰⁹ DI

6.3
11.4

6.4
6.4

+90

7.5

15' RT 24" steel pipe culvert Flow line

6.0
13.4

6.3
8.4

37+00

+50

5.6
16.4

5.8
7.4

38+00

5.0
15.4

5.9
8.4

+50

4.8
8.4

5.9
15.4

+66⁷³ DI

0.0

6.0
22.4

39+00

4.8
11.4

6.0
13.4

760.47

39+50

 $\frac{45}{20' L}$ $\frac{57}{5' R}$

40+00

 $\frac{46}{14' L}$ $\frac{55}{10' R}$

+50

 $\frac{48}{9' L}$ $\frac{55}{13' R}$ 760⁸² $\frac{49}{15' L}$ $\frac{57}{10' R}$

41+00

 $\frac{48}{10' L}$ $\frac{56}{15' R}$

+50

 $\frac{42}{10' L}$ $\frac{47}{6' R}$

42+00

 $\frac{36}{10' L}$ $\frac{43}{12' R}$

JP on Hub

+26¹³

5.55 762.25

3.77 756.70

 $\frac{34}{2' L}$ $\frac{41}{20' R}$

+50

 $\frac{50}{11' L}$ $\frac{58}{14' R}$

43+00

 $\frac{47}{20' L}$ $\frac{55}{6' R}$

762.25

42+50

$\frac{4.5}{18.1}$

$\frac{5.1}{5.1}$

44+00

$\frac{4.5}{16}$

$\frac{5.1}{7.1}$

+50

$\frac{5.0}{16.1}$

$\frac{5.9}{8.1}$

45+00

$\frac{5.7}{8.1}$

$\frac{6.0}{26.1}$

+16 ^{5.9} PI

$\frac{5.4}{0.0}$ LT

$\frac{6.0}{37.1}$

8.81 769.06 200 760.25 = 760.70 Turn on Top of South end of Cone ^{structure} Siphon

5.34 763.72 = 763.67 Top 2" 110 Range #2 5pc FB 753 P31
(see pg. 21, 5, FB 753)

5.06 763.12 11.00 758.06

+50

$\frac{5.5}{24.1}$

$\frac{6.7}{18.1}$

46+00

$\frac{5.2}{30.1}$

$\frac{6.7}{3.1}$

+50

$\frac{5.1}{17.1}$

$\frac{6.6}{11.1}$

47+00

$\frac{5.2}{13.1}$

$\frac{6.2}{13.1}$

763.12

47+12.47

$\frac{5.1}{17.11}$

$\frac{5.8}{9.81}$

+50

$\frac{4.9}{16.11}$

$\frac{5.8}{9.81}$

48+00

$\frac{5.2}{14.21}$

$\frac{6.2}{9.81}$

+50

$\frac{5.3}{9.21}$

$\frac{6.5}{16.81}$

48+65 ⁵⁸ Pi

$\frac{5.4}{21.11}$

$\frac{6.5}{20.81}$

49+00

$\frac{5.4}{4.21}$

$\frac{6.5}{20.81}$

+50

$\frac{5.6}{12.21}$

$\frac{6.5}{9.81}$

49+65 ¹⁶

$\frac{5.7}{20.11}$

$\frac{6.6}{7.81}$

49+68

7.8

Flow Line 18" CMP Culvert 6' R1

50+00

$\frac{5.9}{11.11}$

$\frac{6.6}{13.81}$

+50

$\frac{5.7}{13.11}$

$\frac{6.6}{11.81}$

763.12

51+00

Edge of Road

 $\frac{5.7}{21.2}$

Edge of Road

 $\frac{6.3}{8.8}$

+50

 $\frac{5.2}{20.2}$ $\frac{6.6}{8.8}$

N on Hub

+87⁷² 6.48 763.56 5.98 757.17 $\frac{5.5}{11.2}$ $\frac{6.7}{20.8}$

52+00

 $\frac{6.0}{11.2}$ $\frac{7.1}{18.8}$

+50

 $\frac{6.9}{7.2}$ $\frac{7.8}{23.8}$

53+00

 $\frac{6.9}{7.2}$ $\frac{7.6}{18.8}$

+50

 $\frac{6.5}{16.2}$ $\frac{7.3}{9.8}$

54+00

 $\frac{6.4}{17.2}$ $\frac{7.3}{8.8}$

+50

 $\frac{6.3}{16.2}$ $\frac{7.3}{6.8}$

55+00

 $\frac{6.2}{17.2}$ $\frac{7.1}{5.8}$

763.56

55+50

Edge of Road
5.8
7.11

Edge of Road
6.1
13.81

+71¹² PI

5.6
7.11

6.8
21.81

56+00

5.8
8.11

6.8
16.81

+50

5.4
13.21

6.6
12.81

57+00

5.4
9.11

6.5
16.81

+32³⁰ PI

5.7
21.11

6.2
14.81

+50

5.7
17.11

4.9
31.81

+50

Gal

38.81 Flow Line 18" CMP Road Culvert

58+00

1.9
20.11

5.8
12.81

+50

5.8
17.11

6.2
9.81

59+00

5.5
12.11

6.6
16.81

743.56

59+23.52

+33

+50

60+00 ↘

60+50

61+00

TR on Hub

61+31 ²² 6.39 761.03 5.92 757.64

61+50

62+00

+50

63+00

9.6

Edge Road

5.7
12.17

26' RT Flow Line 18" CMP

5.6
11.17

4.5
19.17

3.5
17.17

Edge Road

6.8
16.87

Road Drain

6.5
17.87

5.8
10.87

4.6
9.87

3.1
3.87

4.4
29.87

3.2
13.87

3.1
11.17

4.9
15.87

4.0
20

5.7
11.87

4.6
21.17

6.1
20.87

764.40

67+00

+50

+50

68+00

68+17.82 PI

+50

+77

69+00

+50

70+00

+50

+84.64 PI

West
Williams
Varon Lakes
Kellhofer

Edge of Road

$\frac{5.6}{76.2L}$

$\frac{5.8}{102L}$

21' RT Flowline 24" Steel pipe Road Drain

$\frac{6.5}{122}$ $\frac{6.0}{20' 2L}$

$\frac{6.1}{9' 2L}$ $\frac{5.7}{28' 2L}$

$\frac{5.6}{172L}$

20' RT Flow Line 18" CMP Road Drain

$\frac{5.8}{102L}$

$\frac{5.7}{16' 2L}$

$\frac{5.3}{76' 2L}$

$\frac{5.2}{10' 2L}$

$\frac{5.2}{20' 2L}$

30

5/15/56

Edge of Road

$\frac{6.7}{11' 2L}$

$\frac{7.0}{128L}$

21' RT Flowline 24" Steel pipe Road Drain

$\frac{6.5}{122}$ $\frac{6.0}{20' 2L}$

$\frac{6.1}{9' 2L}$ $\frac{5.7}{28' 2L}$

$\frac{5.6}{172L}$

20' RT Flow Line 18" CMP Road Drain

$\frac{5.8}{102L}$

$\frac{5.7}{16' 2L}$

$\frac{5.3}{76' 2L}$

$\frac{5.2}{10' 2L}$

$\frac{5.2}{20' 2L}$

$\frac{6.8}{52' 2L}$ 91' Back Tangent

	764.40		Edge of Road	Edge of Road
71+00			$\frac{5.0}{9'RT}$	$\frac{6.8}{37'RT}$
+50			$\frac{5.4}{13'RT}$	$\frac{6.9}{16'RT}$
72+00			$\frac{5.8}{10'RT}$	$\frac{7.5}{19'RT}$
+24		9.0	17' RT 24" Steel pipe Road Drain Flow line	
72+28 ²⁹ pi.			$\frac{5.8}{27'RT}$	$\frac{6.8}{3'RT}$
+50			$\frac{5.8}{12'RT}$	$\frac{6.7}{14'RT}$
+70		8.9	29' RT Flow Line 18" CMP Road Drain	
73+00			$\frac{5.0}{12'RT}$	$\frac{6.1}{13'RT}$
+50			$\frac{4.9}{23'RT}$	$\frac{5.5}{12'RT}$
+85 ¹⁶ pi.			$\frac{5.0}{20'RT}$	$\frac{4.2}{26'RT}$
74+00			$\frac{4.4}{26'RT}$	$\frac{4.2}{20'RT}$

764.40

74+50

$$\begin{array}{r} 3.8 \\ 37.4 \end{array}$$

$$\begin{array}{r} 3.0 \\ 37.4 \end{array}$$

75+00

$$\begin{array}{r} 4.6 \\ 29.4 \end{array}$$

$$\begin{array}{r} 2.7 \\ 45.4 \end{array}$$

+50

$$\begin{array}{r} 4.6 \\ 23.4 \end{array}$$

$$\begin{array}{r} 3.8 \\ 37.4 \end{array}$$

6.13

764.45

6.08

768.32

76+00

$$\begin{array}{r} 5.3 \\ 7.4 \end{array}$$

$$\begin{array}{r} 5.2 \\ 50.4 \end{array}$$

+50

$$\begin{array}{r} 5.3 \\ 7.4 \end{array}$$

$$\begin{array}{r} 6.3 \\ 30.4 \end{array}$$

77+00

$$\begin{array}{r} 5.0 \\ 7.4 \end{array}$$

$$\begin{array}{r} 6.2 \\ 16.4 \end{array}$$

+50

$$\begin{array}{r} 4.8 \\ 9.4 \end{array}$$

$$\begin{array}{r} 6.5 \\ 14.4 \end{array}$$
+87^{3'} pi

4.7

5.7

10.4

16.4

FB 753 P29

0.78

763.67

763.67

Top 2" IP

Range #3

(see pg 5, 2)

FB 753

78+00

$$\begin{array}{r} 4.2 \\ 9.4 \end{array}$$

$$\begin{array}{r} 5.8 \\ 14.4 \end{array}$$

+79

57

33' RI Flow Line 18" CMP Road Drain

764.45

78+50

Edge of Road

 $\frac{5.0}{12'LT}$

Edge of Road

 $\frac{5.2}{12'RT}$

79+00

 $\frac{5.1}{22'LT}$ $\frac{4.6}{11'RT}$

+50

 $\frac{5.3}{12'LT}$ $\frac{3.9}{13'RT}$

80+00

 $\frac{3.5}{13'RT}$ +16^{GA} $\frac{3.4}{14'RT}$

+50

 $\frac{9.1}{22'LT}$ $\frac{8.7}{13'RT}$

0.60 752.57 12.48 751.97

81+00

 $\frac{6.2}{7'LT}$ $\frac{5.7}{11'RT}$ +25^{23 PI}

9.9

4.8
Edge of Road $\frac{10.1}{16'LT}$

0.23 740.94 11.86 740.71

+50

 $\frac{0.3}{6'LT}$ $\frac{1.1}{10'RT}$

82+00

 $\frac{3.2}{18'LT}$ $\frac{3.9}{11'RT}$

790.94

Edge of Road

Edge of Road

82 +50

$\frac{5.2}{6'LT}$

$\frac{6.3}{13'RT}$

+78²⁶ p)

6.9

pi on edge Road

$\frac{8.0}{16'RT}$

83+00

$\frac{8.5}{7'LT}$

$\frac{9.6}{13'RT}$

0.75 729.37 1232 728.62

+50

$\frac{3.0}{9'LT}$

$\frac{3.6}{7'RT}$

84+00

$\frac{10.5}{12'LT}$

$\frac{11.1}{7'RT}$

upon Hub
+16⁴²

0.80 718.06 1211 717.26

$\frac{11.9}{16'LT}$

$\frac{12.4}{8'RT}$

+50

$\frac{1.8}{7'LT}$

$\frac{2.1}{11'RT}$

85+00

$\frac{5.0}{9'LT}$

$\frac{5.6}{17'RT}$

⁴⁶
+37 p)

$\frac{1.4}{29'LT}$

+50

$\frac{4.4}{25'LT}$

718.06
 86+00
 11.22 728.41 0.87 717.19
 +34²⁶ pt

Edge of Road

$$\begin{array}{r} 1.9 \\ \hline 16'LT \end{array}$$

Edge of Road

$$\begin{array}{r} 2.5 \\ \hline 7'RT \end{array}$$

$$\begin{array}{r} 8.0 \\ \hline 8'LT \end{array}$$

$$\begin{array}{r} 9.1 \\ \hline 12'RT \end{array}$$

+50

$$\begin{array}{r} 6.6 \\ \hline 10'LT \end{array}$$

$$\begin{array}{r} 7.9 \\ \hline 8'RT \end{array}$$

87+00

$$\begin{array}{r} 5.0 \\ \hline 8'LT \end{array}$$

$$\begin{array}{r} 5.7 \\ \hline 6'RT \end{array}$$

+50

5.5 edge of Road on

$$\begin{array}{r} 4.6 \\ \hline 14'LT \end{array}$$
+79³⁷ pt
$$\begin{array}{r} 5.0 \\ \hline 19'LT \end{array}$$

$$\begin{array}{r} 5.5 \\ \hline 8'LT \end{array}$$

88+00

$$\begin{array}{r} 4.9 \\ \hline 15'LT \end{array}$$

$$\begin{array}{r} 5.7 \\ \hline 2'LT \end{array}$$

+50

$$\begin{array}{r} 5.1 \\ \hline 8'LT \end{array}$$

$$\begin{array}{r} 5.9 \\ \hline 7'RT \end{array}$$

89+00

$$\begin{array}{r} 5.5 \\ \hline 7'LT \end{array}$$

$$\begin{array}{r} 5.9 \\ \hline 9'RT \end{array}$$

+50

$$\begin{array}{r} 6.0 \\ \hline 6'LT \end{array}$$

$$\begin{array}{r} 6.1 \\ \hline 7'RT \end{array}$$

	728.41			Edge of Road	Edge of Road
90+00				$\frac{6.0}{5.71}$	$\frac{6.7}{15.81}$
+50				$\frac{5.5}{7}$	$\frac{5.9}{11.81}$
+68		15.2		29' LT	Flow line 24" steel pipe Road Drain
^{pi} 91+00 ⁸⁴				$\frac{2.9}{6.11}$	$\frac{2.4}{16.81}$
12.17	739.79	0.79	727.62		
+50				$\frac{10.5}{8.21}$	$\frac{9.6}{7.81}$
92+00				$\frac{7.4}{11.21}$	$\frac{6.7}{9.81}$
+29 ⁰⁶ pi		5.1	Q on edge of Road	$\frac{5.9}{19.11}$	
+50				$\frac{4.5}{10.11}$	$\frac{3.4}{7.81}$
12.09	751.57	0.31	739.48		
93+00				$\frac{12.7}{5.11}$	$\frac{11.7}{14.81}$
+50				$\frac{7.4}{7.11}$	$\frac{6.6}{10.81}$
94+00				$\frac{1.7}{9.11}$	$\frac{1.3}{7.81}$

757.57

18.46 763.67 036 757.21

94+71

8.9

Edge of Road on Q

8.9
17.82

5.51 758.16 = 758.19

TP Hub 66 + 57⁸² see page 29

Traverse to Parking Area
See page 13

	1.00	718.26	1276	717.26
0+50				
	0.13	705.63	1276	705.50
1+00				
+50				
2+00				
2+29 84				
+50				
	0.78	693.79	1262	693.01
3+00				
+50				
4+00				
	0.70	681.81	1268	681.11

West
Williams
Varonakis
Kellhofer

38

2/15/56

Edge of Road		Edge of Road
TP Hub PI 84+16 ⁴²	See page 24	
Light Oil Road	10.2	11.0
Beginning of	1.9 ⁴¹	8.8 ⁴¹
	1.0	1.1
	15 ⁴¹	6.8 ⁴¹
	4.3	4.2
	13 ⁴¹	10.8 ⁴¹
	7.6	7.4
	22 ⁴¹	70.8 ⁴¹
	8.2	9.1
	38 ⁴¹	4.8 ⁴¹
	9.7	11.3
	32 ⁴¹	6.8 ⁴¹
	3.6	1.3
	16 ⁴¹	7.8 ⁴¹
	9.5	9.5
	8 ⁴¹	9.8 ⁴¹
	11.2	12.2
	15 ⁴¹ entrance to parking Area	15.8 ⁴¹

681.81

4+50

5+00

+50

6+00⁰⁸ PJ

6+15

+50

0.09 668.65 13.25 669.56

7+00

+27

7+56

7+50

+85

8+00

+08

edge entrance parking Area

Edge of Road

$\frac{+08}{45'RT}$	$\frac{1.9}{12'}$	$\frac{2.6}{108'}$
---------------------	-------------------	--------------------

Begin Parking Area

Edge of Road

$\frac{0.6}{73'RT}$	$\frac{5.3}{8'RT}$	$\frac{5.3}{12'RT}$
---------------------	--------------------	---------------------

Edge of Road

$\frac{35}{93'RT}$	$\frac{8.2}{7'RT}$	$\frac{8.4}{10'RT}$
--------------------	--------------------	---------------------

East edge parking Area

$\frac{49}{105'RT}$	$\frac{10.2}{7'RT}$	$\frac{10.5}{5'RT}$
---------------------	---------------------	---------------------

11' RT begin pipe fence

West edge 100' wide Parking Area

$\frac{11.2}{28'RT}$	$\frac{12.6}{12'}$	$\frac{13.2}{7'}$
----------------------	--------------------	-------------------

West edge 100' parking Area

$\frac{11}{30'RT}$	$\frac{23}{12'RT}$	$\frac{23}{15'RT}$	16' RT to Fence
--------------------	--------------------	--------------------	-----------------

27⁵ RT Begin 24' deep safe

28⁵ RT end " " "

West edge parking Area

$\frac{30}{33'RT}$	$\frac{5.4}{14'RT}$	$\frac{5.7}{12'RT}$	15' RT to Fence
--------------------	---------------------	---------------------	-----------------

West edge 16' RT end of pipe fence

$\frac{40}{37'RT}$	$\frac{8.1}{7'RT}$	$\frac{8.9}{16'RT}$
--------------------	--------------------	---------------------

28' RT Double power pole power panel

668.65
 edge of Road
 ↓ on West
 8+25⁰⁵ PI 10.1
 0.46 655.95 13.16 655.49

8+50

9+00

+40 mole pier
 Begin Small

+47

10+38.57 End of Mole pier

0.15 642.95 13.15 642.80

5.66 638.11 10.50 632.45

9.20 628.91 =

West edge of 100' parking Area
 $\frac{1.8}{39.21}$

$\frac{10.9}{20}$

$\frac{+0.2}{5' 21"$

$\frac{+0.3}{14.81}$

$\frac{1.8}{8' 21"$

$\frac{5.0}{7' 81"$

$\frac{9.5}{7' 21"$

$\frac{10.0}{5' 81"$

power pole 15' 21" floats
 power pole for fishing

$\frac{13.7}{8' 21"$

$\frac{14.0}{8' 81"$

75.98 Base Reading Water Surface 2/15/56

204.53
 75.98 water surface
 128.55
 628.91
 757.46 HI
 - 1.61
 755.85 = 755.85

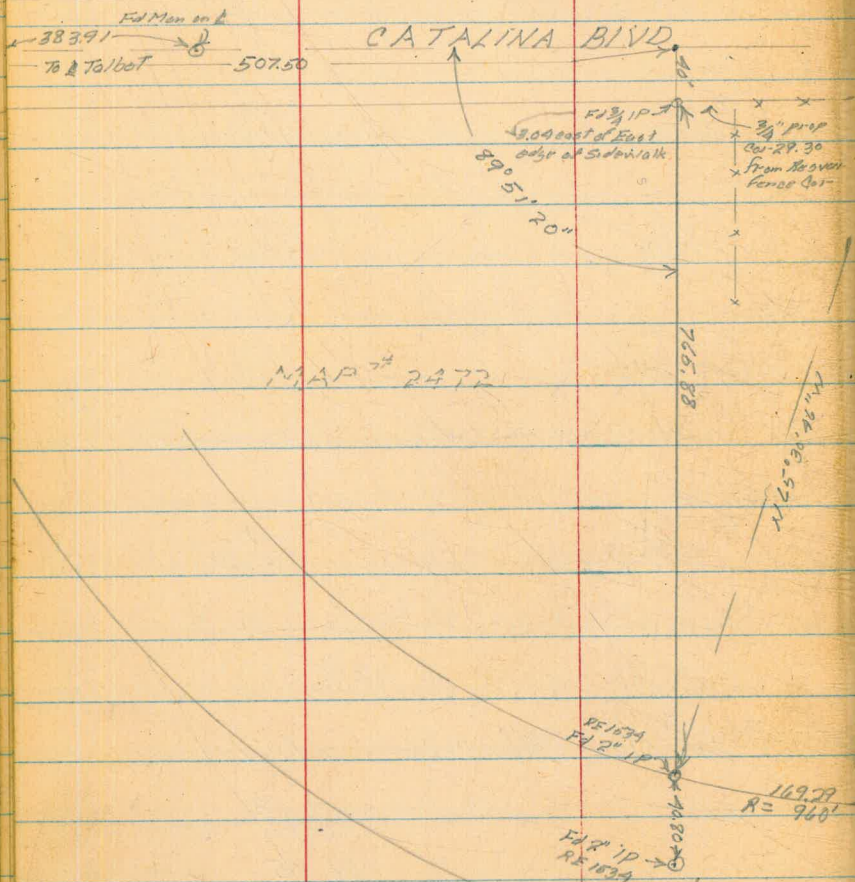
U345 BM see page 14

POINT LOMA RESERVOIR

Property Survey

West
Williams
Varonakis
Kellhofer

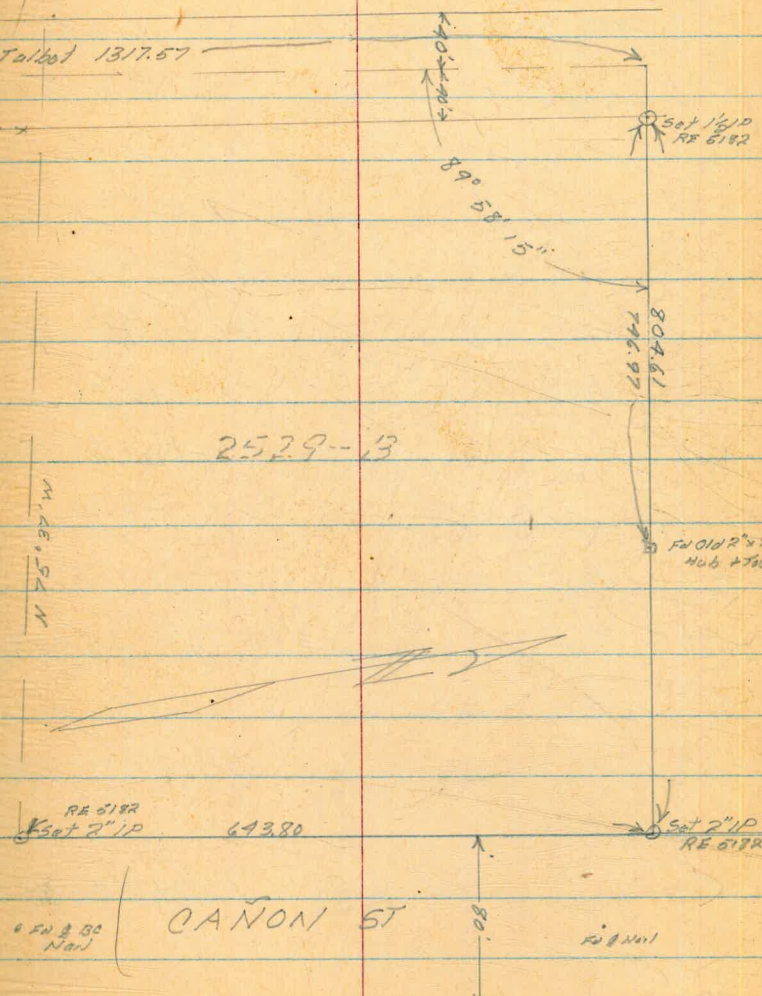
2/29/56



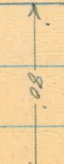
MAP # 2472

To Talbot 1317.57

2529-13



CANON ST



ALLEGHANY ST

RACHAEL TO REO
Stks for Meters North Side

0700 @ RACHAEL

10.55	190.74	180.19	
2+64 Top pave	5.8	184.9	1
2+64 W M	5.8	184.9	185.6
3+17 pave	4.5	186.2	
3+17	4.7	186.0	186.9
3+74 pave	3.0	187.7	
3+74	3.1	187.6	188.4
4+15 pave	2.1	188.6	
4+15	2.0	188.7	189.4
11.00	201.19	055	190.19
5+10 pave	10.3	190.9	
5+10 Met	9.6	191.6	191.7
6+06 pave	8.0	193.2	
6+06	7.9	193.3	194.0
7+04 pave	6.8	195.4	
7+04	5.7	195.5	196.5
7+56 pave	4.7	196.5	
7+56	4.4	196.8	197.8
8+58 pave	2.1	199.1	
8+58	1.8	199.4	200.4

West
Williams
Varonakys
Kellhofer

42

2/29/56

BM BP SE Cor Alleghany + Rachael

NOTE: Met. Stks revised to
24.5 from 2 St
2nd grades
adjusted
2/5/56
reality

~~F07~~ F06 (0' above
pavt) 5524

~~F09~~ F08 (0' below
pavt) 5536

~~F08~~ 06 (0' below
pavt) 5548

~~F07~~ F06 (0' above
pavt) 5604

5614

~~F07~~ F02 (0' above
pavt)

~~F07~~ v (0' above
pavt) 5628

~~F12~~ F05 (0' above
pavt) 5640

~~F12~~ F04 (0' above
pavt) 5710

~~F12~~ F02 (0' above
pavt)

Allegheny Cont

19

201.19

9+32 pave

0.3 200.9

9+32

~~0.7 201.0 202.9~~

~~F1³ F0²~~ (0.3 above
pave) 5732

1.12 189.81 12.50 188.69

9.63 180.18 = 180.19

PACIFIC BEACH RESERVOIR
Property Survey

West
Williams
Varonakis
Kullhofer

44

3/15/56



Fed Cont
Mar 1932

479.77

447.30

Fed Cont
Mar 1932

1280

Ed 2" IP. Nail in Corn

Dirt Road

Pump House



8088
100 House

House

LOS ALTOS

Pine Trees

1110'

Fed Cont
Mar 1932

Fed Cont
1932

88.35'

Fed Cont
Mar 1932

457.47

TOWN 27N 38
R. 7E 715 P. 15

KEARNY MESA STANDPIPE

Property Survey

U.S. 395 HWY

N 37° 13' 15" E



102576
Set 1/4 1/4 RE 5182

N 43° 14' 45" E

ESCONDIDO BLVD

West
Williams
Varonakis
Kellhafer

46

S. 12148.63 3/21/56

100.55'

Set 3/4 1/4 RE 5182

Set 1/4 1/4 RE 5182

N 46° 47' 15" W
186.64'

45' Standpipe

85'

1.5 MG
STANDPIPE

135'

N 46° 47' 15" W

259.34'

147.19'

100'

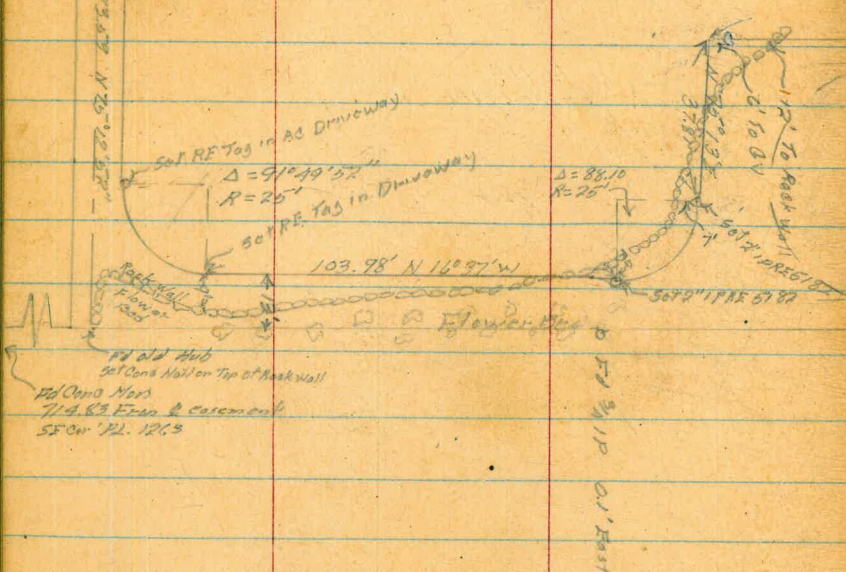
Set 3/4 1/4 City Eng

Set 3/4 1/4 RE 5182

ENCELLA DR

COUNTRY CLUB RESERVOIR
SURVEY

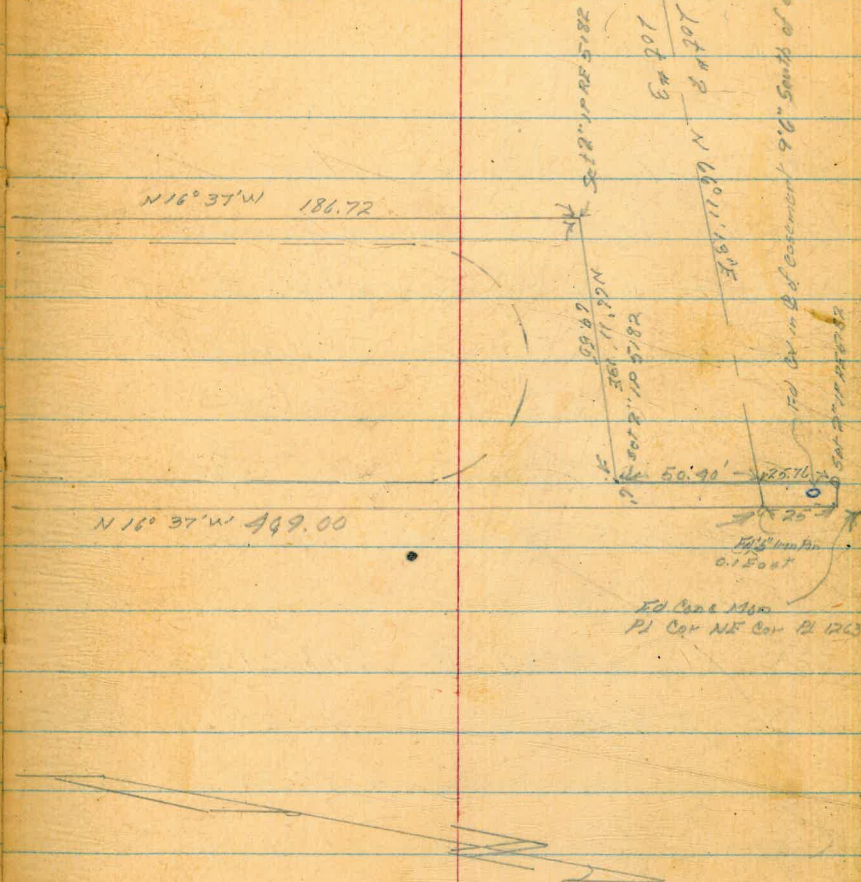
MAP # 1976



West
Williams
Voronfakis
Kellhofer

3/26/56

47



Shasta St 150' Sly of Roosevelt Ave
to Crown Point Dr.
(A Vertical Rise)

Stks for meters meters set 19' from St

	5.32	32.81	27.49	
0+81 M East		6.2	26.6	26.7
1+90 M West		5.1	27.7	27.0
2+20 M East		5.4	27.4	27.1
2+35 M West		4.8	28.0	27.1
2+78 M West		4.8	28.0	27.3
3+25 M West		4.8	28.0	27.4
3+35 M East		4.4	28.4	27.4
3+56 M West		4.2	28.6	27.5
4+39 M West		3.8	29.0	27.7
4+17 M West		6.3	26.5	26.4 27.4
6+29 M West		6.6	26.2	26.2 27.4
TP	5.26	29.59	24.33	
7+35 M West		4.5	25.1	24.1
		7.90	21.69	21.68

West
Williams X
Voronakis +
Kellhofer

126922

SW (2) Come Min La Playa + Shasta

FO ^L	3851
CO ^Z	3818
CO ³	
CO ²	3836
CO ^Z	3826
CO ⁶	3820
CO ¹⁰	3819
CO ¹¹	3816
CO ¹³	
CO ^L	3801
FO ⁹	3778
CO ²	
FO ⁸	3776
CO ¹⁹	3754

SW of Michael + Crown 48
51.68

412156

SW of Michael + Crown Point Dr.

Alley Blks 143 + 144 Mission Beach
N of E2 Carmel E of Strandway

Stks for 6" AC Main

32570

2.59

9.68

7.09

0+05

5.3 4.9

0+25

2.11

6.35

5.44 4.24 0.5

+50

3.3 3.1 -1.0

+62⁵

4.2 2.2 -1.6

1+00

4.5 1.9 -1.8

+50

5.2 1.2 -2.7

+55 met South

5.4 1.0 0.0

+77 met North

6.1 0.3 -0.7

2+00

6.5 -0.1 -4.2

+07 met South

6.9 -0.5 -1.7

+09 met North

7.1 -0.7 -1.8

+50

(4)

7.8 -1.4 -4.8

+76

6x6 Tee

8.0 -1.6

523

9.71

1.87 4.48

261 7.10 = 7.09

West
Williams x
Varanfakos +
Kullhofer

Cut Sheet Made

49

4/2/56

PARTLY CLOUDY

BM BP in Seawall S of E1 Carmel Pl

To EXISTING Begin Work

C3 ¹

C4 ¹

C3 ⁸

C3 ⁷

C3 ⁹

C1 ⁰

C1 ⁰

C4 ¹

C1 ²

C1 ¹

C3 ⁴

To EXISTING end of work

Alley BIKS 139 + 140 Mission Beach
North of Manhattan Court East of Strandway

STKS for 6" AC Group 2A 3256D

B.M.	4.12	7.89	3.77
0+05			3.6 4.3
0+50			5.5 2.4 -1.6
1+00			6.1 1.8 -2.2
+50			6.9 1.0 -3.1
+90 MET So.			8.1 -0.2 -1.4 -0.7
+95 MET No. ②			8.4 -0.5 -1.5 -0.8
2+00			8.6 -0.7 -4.4 -1.2
+17 MET So.			8.7 -0.8 -2.0
+30			8.5 -0.6 -5.0 -1.8
+41 MET No. ③			8.7 -0.8 -2.3
+50			9.1 -1.2 -4.8
+62.7			9.4 -1.5
T.P CHECK	7.50	9.59	5.80 2.09
B.M.			2.53 7.06 =7.09

West
Williams
Varonakis x
Kellhofer +

Cut sheet
made
1/3/56

50

B.M SW cor. El Carmel + Mission Top EV

C TO EXIST. BEGIN WORK

C4 ⁰
C4 ⁰
C4 ¹
C4 ¹
C1 ² C0⁵ ✓
C1 ⁰ C0^{3.7} ✓
C3 ¹
C1 ² C0⁴ ✓
C4 ⁴
C1 ⁵ C1⁰ ✓
C3 ⁶

C TO EXIST. END WORK

B.P. IN SEAWALL SLY OF EL CARMEL PL.

ALLEY BLKS. 135 + 136
 No OF LIVERPOOL E. OF STRANDWAY
 STRS. FOR 6" A.C.

3256 D

B.M.	3.39	7.16	3.77
0+06		2.3	4.9
0+12.5		2.4	4.8 1.8
0+45 M. So.		4.0	3.2 1.9
0+50		4.3	2.9 -1.0
0+62.5		5.6	1.6 -2.0
0+63.5		5.7	1.5 -2.0
0+63.5		5.2	2.0 2.0
1+00		5.5	1.7 -2.4
+50		6.3	0.9 -3.4
+52 M. No.		6.9	0.3 ← -0.2 ←
+54 M. So.		6.5	0.7 ← 0.4
90 M. So.		7.5	-0.3 -1.5 -1.0
95 M. No.		7.4	-0.2 -1.5 -1.2
2+00		7.7	-0.5 -4.4
+25		8.1	-0.9 -4.8 -2.0
+27 M. So.		8.2	-1.0 -2.5 -2.0
+50		8.7	-1.5 -5.0
+69		9.3	-2.1
CHECK B.M.	3.39	3.77 = 3.77	

WEST
 WILLIAMS
 VARONFAKIS †
 KELLHOPFER X

cut sheet made

51

4/13/56 SUNNY + WARM

SEE PAGE 50

S. W. TOP F.H. EL CARMEL + MISSION

C TO EXISTING

C	0	
C3	3	
C1	1	
C3	3	
C3	6	
C3	5	F.H. TEE
C0	0	⑤ F.H.
C4	1	
C4	3	
C4	1	
C1	1	009 ✓
C1	2	C07 ✓
C1	3	C10 ✓
C3	9	
C3	9	
C1	3	C10 ✓
C3	5	

C TO EXIST. 6" TEE END WORK

Alley BIKs 131 + 132 Mission Beach
North of Lido Court East of Strandway

5th rd for 6" AC Main

T.B.M.	6.09	6.72	0.63
0+05			2.3 4.4
+12			2.5 4.2 2.0
+25			2.8 3.9 0.2
+50			4.5 2.2 - 1.4
+49 M.No.			4.5 2.2 + 1.4 1.6
+66 M.No.			5.5 1.2 0.3 0.6
+75			5.9 0.8 - 2.9
1+00			5.8 0.9 - 3.0
+20			5.9 0.8
+50			6.4 0.3 - 3.2
+51 M.No.			6.2 0.5 - 0.4
+76 M.No.			7.3 - 0.6 - 1.3
2+00			7.6 - 0.9 - 4.9
+34 M.No.			8.2 - 1.5 - 3.3
+50			8.2 - 1.5 - 5.4
+90			8.5 - 1.8
T.P.	5.61	7.13	5.20 1.52
CHECK B.M.			3.41 3.72 = 3.77

West
Williams
Varen Kats X
Kullhofer P

cut sheet
Made

52

1/3/56

TBM NE Ch return Alley North of Lido Ct
+ Mission Blvd

C TO EXIST BEGIN WORK

C2 ²

C3 ²

C3 ⁶

C0 ⁸

C0 ⁹

C3 ²

C3 ⁹

C TO EXISTING

C3 ⁵

C0 ⁹

C0 ²

C4 ⁰

~~C0 8~~ C0 6 ✓

C3 9

C TO EXIST END WORK

SEE PAGE 50

Alley BIK 119 + 120 Mission Beach
N of Kennebeck Ct E of Strandway

Stks for 6" AD Main 3255 D

T.B.M.	4.70	10.07	5.37
0+05		5.0	5.1
+15		5.1	5.0 2.0
+29 M. No.		5.9	4.2 ^{3.6} _{3.1}
⊙		7.2	2.9 -0.6
+50		7.4	2.7 ^{2.3} _{1.8}
+50 M. So.		7.7	2.4 ^{1.4} _{1.1}
+65 M. So.		7.9	2.2 ^{1.4} _{1.0}
+67 M. No.		8.3	1.8 ^{0.8} _{0.4}
+78 M. No.		8.4	1.7 ^{0.2} _{-0.3}
+95 M. So.		8.3	1.8 -3.2
1+00		9.5	0.6 -0.7
+15 M. So.		9.8	0.3 -1.1
+36 M. No.		10.1	0.0 -1.4
✕		10.6	-0.5 -1.6
+50		11.2	-1.1 -4.6
+71 M. So.	4.25	3.69	10.63 -0.56
⊙			
+81			
T.P	4.25	3.69	10.63 -0.56
1+81		4.6	-0.9
2+00		4.5	-0.8 -4.8

West ♯
Williams
Varonakis ✕
Kellhofer

55

A/A 156 Sunny + Warm.

PAGE 54

N.E. COR. STRANDWAY + ALLEY 123 L.S. PIPE

(To EXIST. BEGIN WORK

C3⁰

C1¹ C0⁶ ✓

C3⁵

C0² C0¹ ✓

C1³ C1² ✓

C1² C0⁸ ✓

C1⁴ C1² ✓

C2⁰ C1⁵ ✓

C5⁰

C1² C1³ ✓

C1⁸ C1⁴ ✓

C4⁴

C1¹ C0⁹ ✓

C3⁵ FH TEE

F0¹ FH (5) C3² TO ELL

C4⁰

3.69

2+14	3.8	-0.1	-4.8
(4) +50	4.8	-1.1	-5.0
+58 M. No.	4.9	-1.2	-2.1
+83 M. So.	4.7	-1.0	-2.2
+87 M. No.	4.9	-1.2	-2.2
3+00	5.1	-1.4	-5.2
+12 M. No.	4.8	-1.1	-2.4
+35 M. So.	5.0	-1.3	-2.4
+38 M. No.	4.9	-1.2	-2.4
+40 M. So.	4.8	-1.1	-2.4
+50	4.9	-1.2	-5.4
4+00	5.5	-1.8	-5.6
2 MET.			-2.7
4+00 So	5.5	-1.8	-2.9
+43	5.8	-2.1	
T.P.	8.38	10.12	1.95 1.74
CHECK T.B.M.	4.74	5.38	

9/4/56

C4 ⁷
 22 1/2 BEND
 C3 ⁹
 C0 ⁹
 C1 ²
 C1 ⁰
 C1 ⁸
 C3 ³
 C1 ¹
 C1 ²
 C1 ³
 C4 ²
 C3 ⁸
 C1 ¹

CO² ✓

C. TO EXIST. END WORK

SEE PAGE 54

STKs for Water meter Vault

Mission Valley Inn

Set Vault 1° Back of Ob. Sec DWG 7100W

7.62 23.64 16.02

A+04²

2.9 20.7 21.2

A+16²

1.1 22.5 21.3

A+85 (5) LFH

3.44 20.30 21.4

7.61 16.03 = 14.02

West
Williams
Varonfakis

57

4/6/56

BM Cond. Map 38 East Sta O+28

F0²

A = 38° 11' 30"

R = 336.28

DEF = 5.111435

C-1B

F1²

ALLEY
 BLOCK 9 WILSHIRE PLACE
 N. of MEADE E. of 42ND
 STRS. for METS.
 PROFILE

WEST
 WILLIAMS +
 VARONFARIS X
 KELLHOFFER

58.

4-11-56
 COOL & CLOUDY

B.M.	4.58	369.24	364.66
0+35 M.W.	3.4	365.8	364.4
+32 M.E.	3.6	365.6	364.4
+92 M.E.	3.3	365.9	364.8
+94 M.W.	2.8	366.4	365.1
1+27 M.E.	3.2	366.0	365.4
+43 M.W.	2.7	366.5	365.7
+62 M.E.	2.7	366.5	365.7
+69 M.W.	2.3	366.9	365.9
+97 M.W.	2.3	366.9	366.3
2+26 M.E.	2.4	366.8	366.3
+67 M.W.	1.5	367.7	366.6
2+75	1.99	367.25 = 367.27	
CUR. B.M.	4.74	364.50 = 364.47	

N.W.B.P.	42 ND & MEADE	
C1 ⁴		
C1 ²		OK
C1 ¹		
C1 ³		OK
C0 ⁶		OK GRADE NOT LINE
C0 ⁸		OK GRADE NOT LINE
C0 ⁸		
C1 ⁰		OK GRADE NOT LINE
C0 ⁶		OK GRADE NOT LINE
C0 ⁵		OK GRADE NOT LINE
C1 ¹		OK LINE NOT GRADE
* ALLEY ON CONC. SHEET 3144 - D		
N.W.B.P. COPELAND & MEADE		

Gregory St Ocean View Blvd 51)
5TKs for meters
0+00 by Prop Oceanview
Vert Riser Set 19' from Q St 2967-68 D

West
Williams
Varonakis
Kullhofer

513156

912
913
914

1.01 18.19 17.18

SM SW BP Oceanview + Gregory

1+26 Met E	6.9	11.9	10.6	CO ²	517	
1+28 Met W	6.8	11.7	10.6	CO ²	520	
1+77 Met E	7.1	11.1	10.7	CO ²	529	
1+79 Met W	6.9	11.3	10.7	CO ²	no add	
2+40 Met E	7.7	10.5	10.1	CO ²	539	
2+48 Met W	7.3	10.9	10.0	CO ²	540	
2+97 Met W	7.5	10.7	9.6	CO ²	604	
3+03 Met E	7.9	10.3	9.6	CO ²	601	
3+52 Met E ⁹³³	13.48	8.04	10.15	9.3	CO ²	605
3+76 Met W	3.2	10.3	9.3	CO ²	612	
4+19 Met E	3.5	10.0	9.0	CO ²	625	
4+31 Met W	3.6	9.9	9.1	CO ²	620	
4+93 Met E	4.2	9.3	8.7	CO ²	631	
5+31 Met W	4.4	9.1	8.6	CO ²	638	
5+42 Met E	4.4	9.1	8.3	CO ²	639	
6+36 (6 th) Fil	4.3	9.2	8.7	CO ²	6 Fil Sets 21 ² from Q St	
6+42 Met W	4.9	8.6	7.8	CO ²	706	

13.48

6+13 Met E	4.7	8.8	7.5	C13	705	
6+97 Met W	5.3	8.2	7.6	C04	714	
7+31 Met W	5.3	8.2	7.4	C08	720	
7+70 Met E	4.6	8.9	6.9	C20	723	
7+88 Met W	11.60	5.62	7.86	7.1	C08	724
8+19 Met W	3.9	7.7	6.9	C08	730	
8+43 Met E	2.9	8.7	6.3	C21	733	
9+53 Met E	3.4	8.2	5.9	C23	741	
10+00 Met W	4.8	6.8	6.1	C02	804	
10+25	4.5	7.1	6.6	C05	Stat Taken on existing Flange of FH of FH 193 from S	
10+47 Met W	4.9	6.7	5.9	C08	820	

Torrey Pines Lockwood Mesa Cont

292+23.15 POT @ AT+SE RR Track

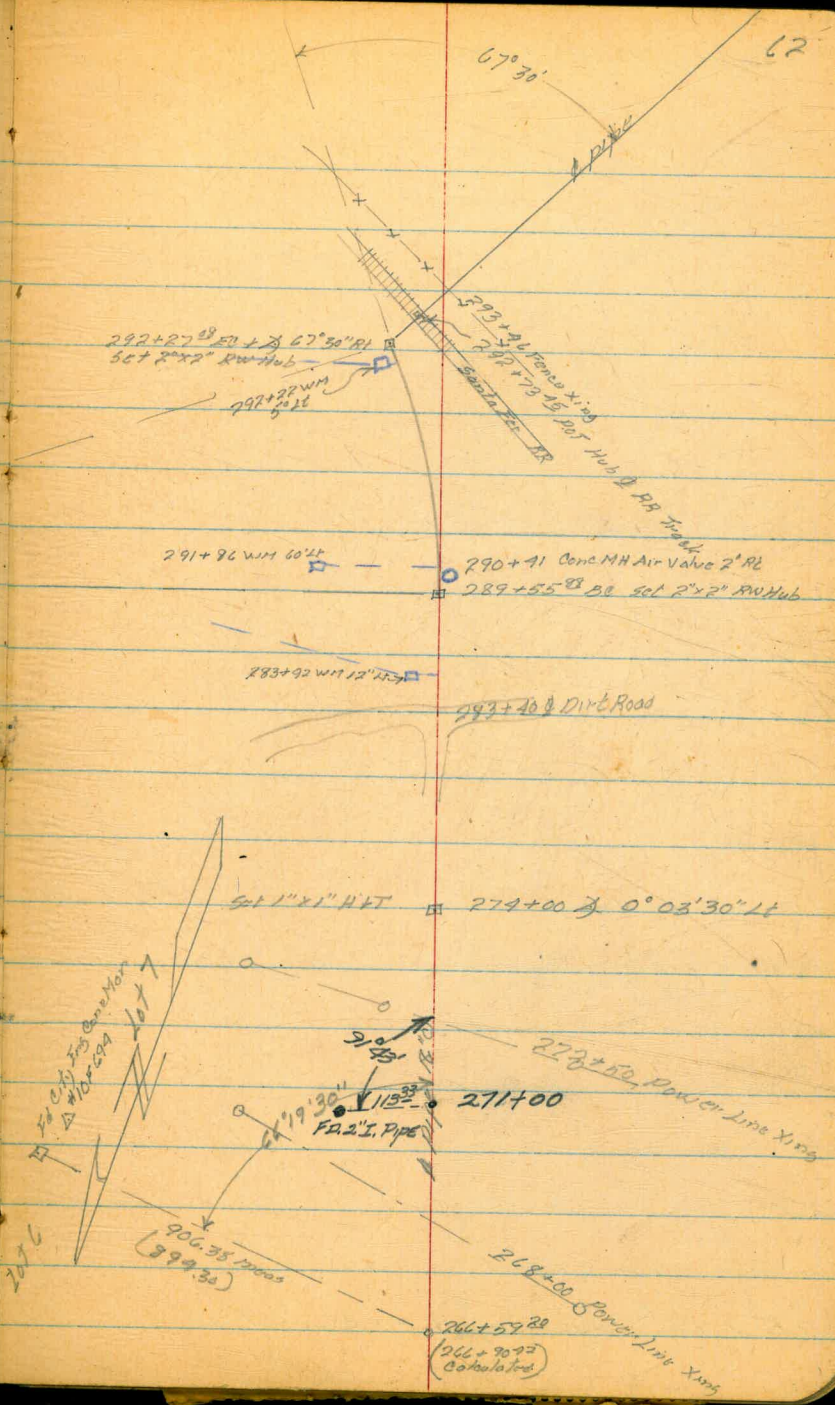
292+27.08 EC + Δ PT 67° 30' RT

$A = 5^{\circ} 02'$
 $R = 3110.2'$
 $T = 196.70'$
 $L = 273.2$

289+55.98 BC

283+10 Δ Dirt Access Road

274+00 Δ 0° 03' 30" RT To stay on Δ Pipe



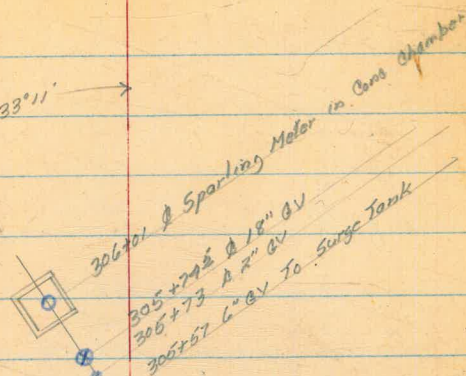
62

Torrey Pines Lookwood Mesa Cart

West
Williams
Kellhofer

63

305+53⁶⁰ \times 33° 11' 20"



305+53⁶⁶ \times In Kick Block
Set Cons Mail

\times 302+33⁵ Fence Xing
 \circ 302+06² 4" BO IERT

A pipe 18" ci

295+49⁷² POT Chis + on exposed 18" ci

Tarrey Pines Lockwood Mesa Cont.

See EB 561 271 line identical

476.91

227+92²⁸ EC

$\Delta = 16^{\circ}11'$
 $R = 1000'$
 $L = 282.45'$
 $LC = 281.51'$

225+10³³ BC

217+00

Shoreys Line

Same Party

F32+09²³ BK
233+00
AN

CA

EC 227+92²⁸

$\Delta = 16^{\circ}11'$
 $R = 1000'$
 $L = 282.45'$
 $LC = 281.51'$

225+10³³ BC

Shoreys Line

217+00 in Shoreys Line

ALBERMARLE ST

Hopkins St To Westwood St

Stks for 6" AC

3.13	185.50	182.37	
0+42	4.1	181.4	177.8
0+64 ² BL	3.8	181.7	178.0
0+64 ²	0.6	184.9	182.6
Top of CB	3.19	182.36	
1+00	3.7	181.8	177.7
+50	4.7	180.8	176.7
2+00	7.0	178.5	175.0
+50	9.5	176.0	172.6
3+00	12.0	173.5	170.2
+50	14.2	171.3	167.7
	31.2	182.38	= 182.37

West
Williams X
Kellhofer +

65

HOT
9/13/56

BM SWBP Albermarle St + Hopkins

C3⁶ Begin Work 6" X 4" ReducerC3²
C6² to F11C2³ to Flange (5) I Five HydC4¹C4¹C3⁵C3¹C3²C3⁴

POTOMAC ST

Morning Side To Flintridge

	12.73	196.74	174.01	
	12.41	199.03	0.12	186.62
6+15		0.6	198.4	
0+60		2.8	196.2	190.8
1+00		8.9	190.2	185.4
	0.34	186.48	1289	186.14
+50		2.1	184.4	180.0
2+00		6.5	180.0	174.5
+50		9.4	177.1	173.0
3+00		11.7	174.8	171.3
+10 ⁵		12.1	174.4	170.9
+35		12.6	173.9	
		12.45	171.03	= 171.0

West
Williams +
Kellhofer +

66

9/13/51
See FB 991

JBM SWAP Potomac + Flintridge

install 6"x8 reducer

@ 5'

@ 4'

@ 4'

@ 5'

@ 4'

@ 3'

@ 3' FH Tee

end of work install cross

11110N ST GARDENA

TO 1279' North

UNIT 205

3.22 26.82 23.60

0+00 3.22 6.2 20.6

+10 5.3 21.5

+14 6.09 20.7

+40 4.85 22.0

+50 2.9 23.9

TP 1299 38.77 1.04 25.78

1+00 8.1 30.67

12.87 50.81 0.83 37.94

+50 2.7 43.1

13.24 63.44 0.61 50.20

2+00 2.7 60.7

12.77 75.97 0.24 63.20

2+33 6.1 69.57

+50 4.1 71.87

+54 3.1 72.87

12.61 88.09 0.49 75.48

+58 10.2 77.9

2+80 4.7 83.4

West v

Williams

Kellhofer

67

9777.156

TBM Nail in Power pole

SE prop Line Gardena

Begin Oil pipe

End " "

TBM 2" iron pipe prop cor NE Cor

7.5
10' RL8.1
10' RL
30.678.2
10' RL7.4
10' RL
43.43.7 2.1 2.7
14' RL 7' RL 13' RL3.3
10' RL
60.146.6
10' RL2.7
10' RL
68.213.8
10' RL4.1
10' RL
71.37 (Alley?)

Bottom of North Side of Old road cut

Top of Road cut

9.5
14' RL 12' RL2.6
10' RL
85.5

		88.09		
3+00			2.8	85.3
+28			2.4	85.7
+50			0.8	87.3
	1322	101.24	0.07	89.02
4+00			5.1	96.14
	12.78	111.66	2.36	98.88
+50			7.9	103.7
5+00			0.8	110.8
	12.52	123.68	0.50	111.16
+50			8.3	115.4
6+00			6.5	117.2
+50			4.4	119.3
+96			1.3	122.25
	12.91			
7+00	JL	135.47	1.2	122.56
+50			7.66	127.81
8+00			1.61	133.86
	13.07	148.52	0.02	135.45
+50			8.82	139.7
9+00			2.72	145.8
	13.25	161.48	0.29	148.23

$\frac{2.2}{16.11}$ $\frac{6.8}{13.44}$ $\frac{5.4}{12.26}$

$\frac{+0.5}{10.94}$
88.6

$\frac{1.1}{10.24}$

$\frac{+1.3}{10.94}$
89.4

Begia dirt road

$\frac{1.6}{10.94}$
12851 96.6

JMM Nail in PP 20' at 4+00

$\frac{6.6}{10.94}$
117.08

Begia Al pavara

$\frac{1.1}{10.94}$ 122.57

$\frac{7.64}{10.94}$ 127.83

$\frac{1.75}{10.94}$ 133.72

$\frac{8.75}{10.94}$ 139.77

$\frac{2.67}{10.94}$ 145.85

161.48

9+50 9.79 151.69

10+00 9.84 156.64

10.68 171.94 0.88 161.26

+50 11.21 160.73

11+00 8.29 163.65

+50 6.32 165.62

12+00 5.35 166.59

+50 5.48 166.46

+79 5.95 166.

+79 8.32 163.6

1.70 167.44 6.20 165.74

0.52 154.95 13.01 154.43

7.31 152.72 9.54 145.41

1.19 148.52 5.39 147.33

13.34 135.18 = 135.06 BM Milton + Hartford SW PCO 15' RT

9.26
10' RT 157.68

4.98
10' RT 156.6

Top end of brick wall 20' RT 10+50

11.25
10' RT 160.69

8.26
10' RT 163.65

6.28
10' RT 165.66

5.33
10' RT 166.61

5.45
10' RT 166.49

6.11
10' RT 165.83

Top stem of 10' RT

Top End of Ob 20' RT 12+825

only 1/2 IP + D20

SW PCO 15' RT

12+79

End of Work

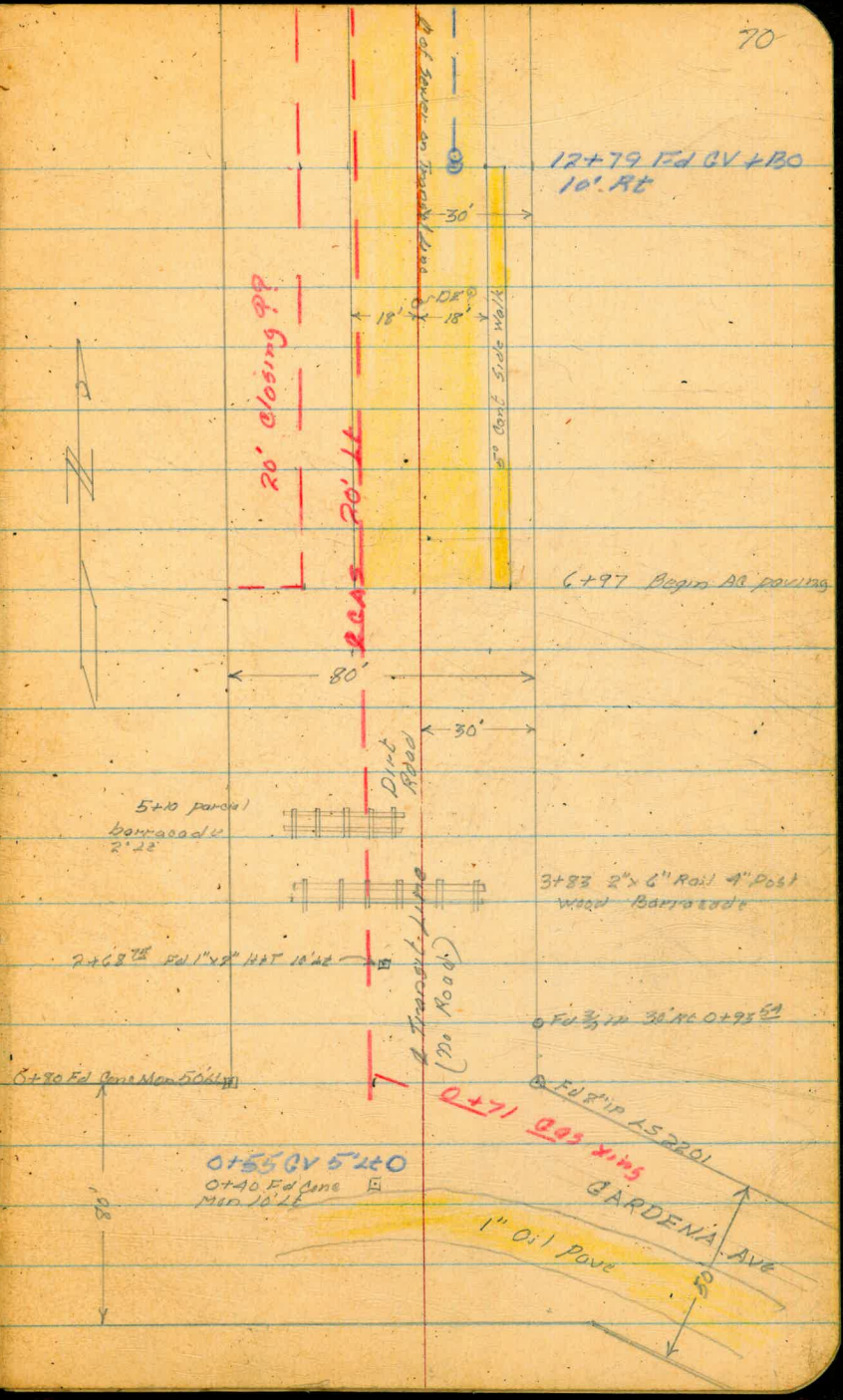
11+63 PA POT

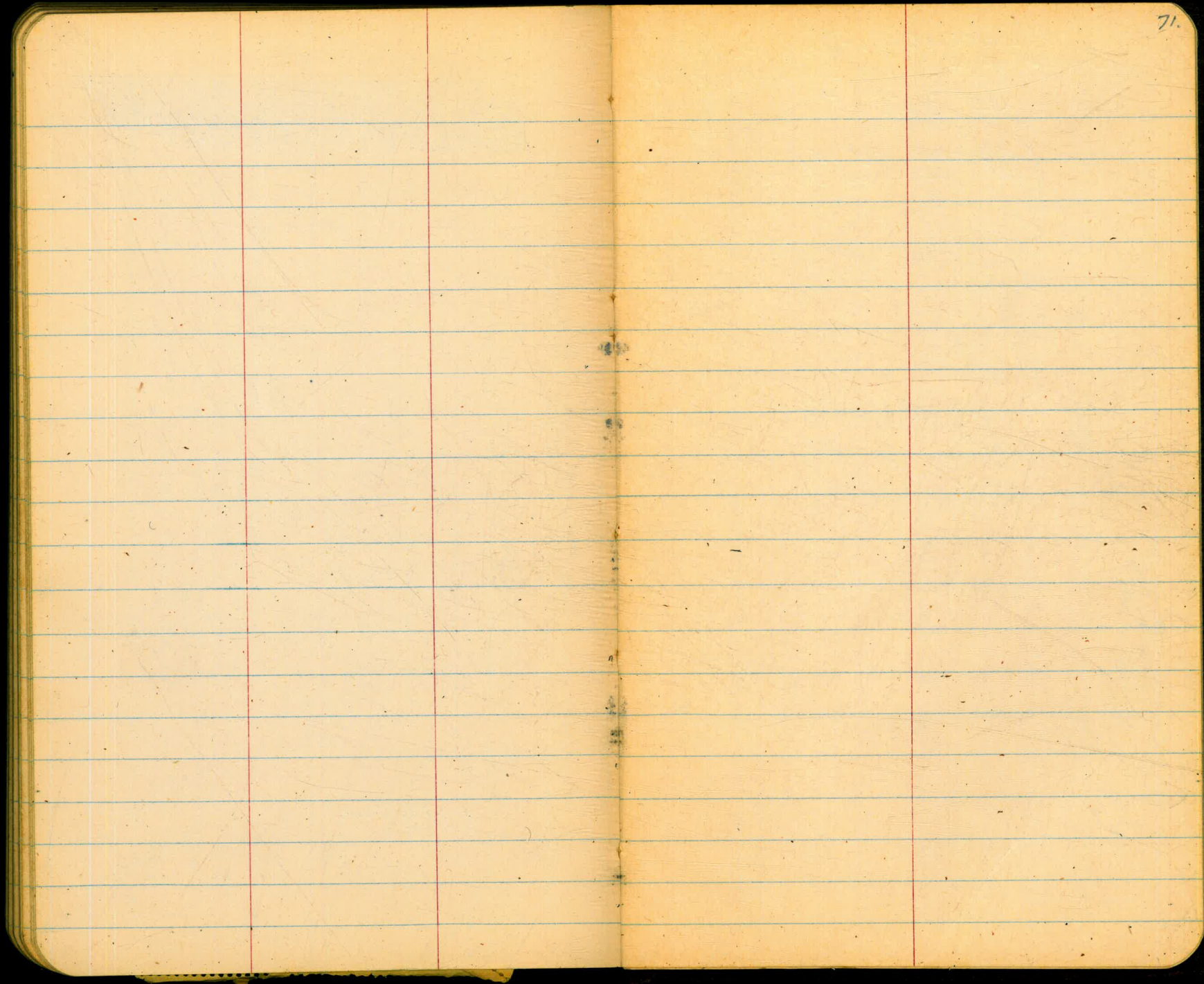
2+68 75 POT

0+40 POT

0+00

5214 prop line Gardena St





TORREY PINES LOCKWOOD Mesa Pl.

Ties in Del Mar Terrace

West
Williams
Kellhofer

3-18-57

73

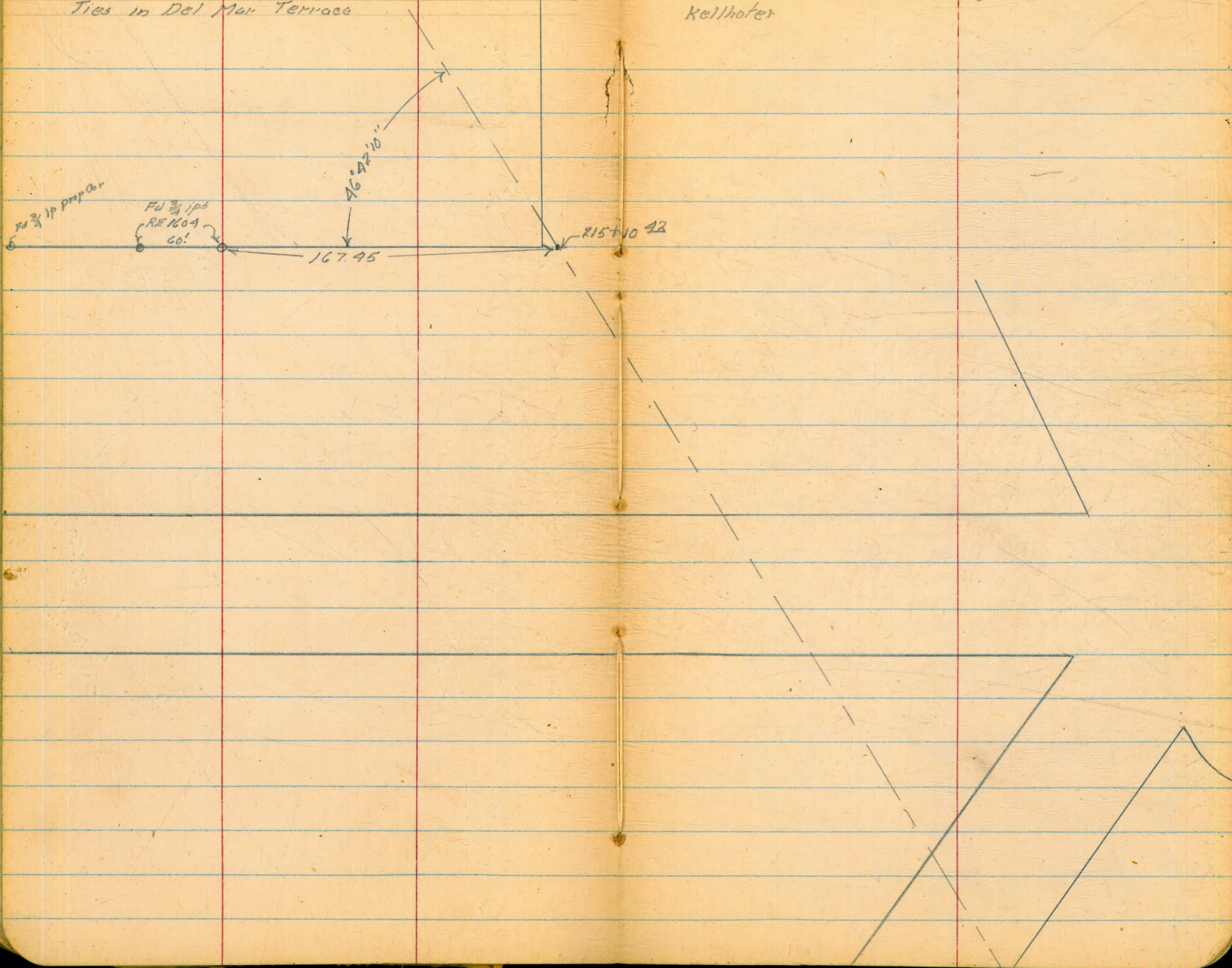
FD 2 1/2 ips
PROP Co.

FD 2 1/2 ips
REK Co.

167.95

R15+10 42

16° 42' 10"



ILLION ST.
12" A.C. MAIN - GARDENA TO 1280' NORTH
③ STK'S & GED.

3/18/57
SHOBEY
KEMP
O'BRIEN

RAIN

74

PRELIM. STA. 7400 Pg. 68

SPIKE IN P.P. JP2711 6+85 19' RT. ?

TP	0.86	123.42		122.56	
CK.			0.17	123.25	122.04
TP	0.69	111.56	12.56	110.86	
4+70	BEGIN WORK				97.9
4+71	F.H. TEE				97.9
	③	4.2	107.4		
4+75		3.5	108.1	99.0	09 ¹
TP	12.56	123.42	0.69	110.86	
5+25		10.2	113.2	106.0	07 ³
5+50		8.9	114.5	107.8	06 ⁷
6+00		5.6	117.8	111.6	06 ³
6+50		4.3	119.1	114.5	04 ⁶
6+75		3.1	120.3	115.9	04 ³
7400	TP 12.66	135.22	0.86	122.56	118.3
7450		7.5	127.7	123.5	04 ³
8400		1.5	133.7	129.5	04 ³
TP	12.71	147.89	0.04	135.18	
8+50		8.2	139.7	135.5	04 ³
9400		2.1	145.8	141.5	04 ³
TP	12.92	160.48	0.33	147.56	
9+50		8.9	151.6	147.50	04 ¹ 04 ⁴
10+00		3.9	156.6	152.0	04 ⁶
10+17	F.H. TEE				153.5
	③	2.4	158.1		04 ⁶
		1.6	158.9		
TP	10.57	170.81	0.22	160.24	
10+50		10.2	160.6	156.5	04 ¹ 04 ⁶
11+00		7.1	163.7	159.0	04 ²

09⁶
09⁵ TO BOTT. 04⁸ TO FLANGE

158.6

04¹ TO FLANGE 05⁴ TO BOTTOM

ILLION ST.
12" A.C. MAIN GARDENA TO 1280' NORTH
③ STK'S & GRD.

170.81

3/18/57
SHOREY
KEMP
O'BRIEN

75

11+50	5.2	165.6	161.4 ^{160.4}	C4² C5 ²	
12+00	4.3	166.5	161.9	C4 ⁶	
12+50	4.4	166.4	162.2	C4 ²	
12+79	CONN. TO EXIST. 12" A.C. MAIN	4.9	165.9	162.0	C3 ⁹⁺ CUT TO EXIST. MAIN
CK. TBM	5.08	165.73 = 165.74		END Cb. 20' LT. 12+82 (Pg. 69)	

WATER METERS

123.42

4+02 W.			87.6	
5+33 W.	8.8	114.6	110.3	C4 ³

195 17 20

97 53 40

28

97° 53' 40"

179 59 60

125 07 15

179 59 60

97 53 40

82 06 20

54 52 45

28

10 60 60

24 45

11 + 17.92

22

33+

179 59 60

96 49 40

83 16 20

28 00

82 48 20

125 07 15

207 49 35

82 06 20

289 55 55

70 03 50

359 59 45

266

244 58 08

22