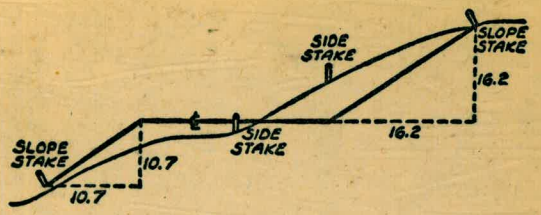
#787



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.

54" DI. PL
Elcajon - Univ

64.87 @ 23°14' =

24' W
46' W
61' W
81' W
112' W

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	.70	.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	.029	.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	.711	.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	.985	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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DEC. 28, 1947

LIETZ T. #10278 W-6867

BEATTY ROGERS PINNEY

54TH ST. PIPELINE

TRIDENT NEPTUNE METERS

5/28/51
Phoned Ted Roehrkasse, and informed 7x7 Conc. Chamber changed to 2' from face of Rubble masonry wall
Gilk.

5+68

Bottom Chamb. 7.1 lower than pavt.

Top 6"CI. 4.0 lower than pavt.

Top Chamber 0.7 lower than pavt

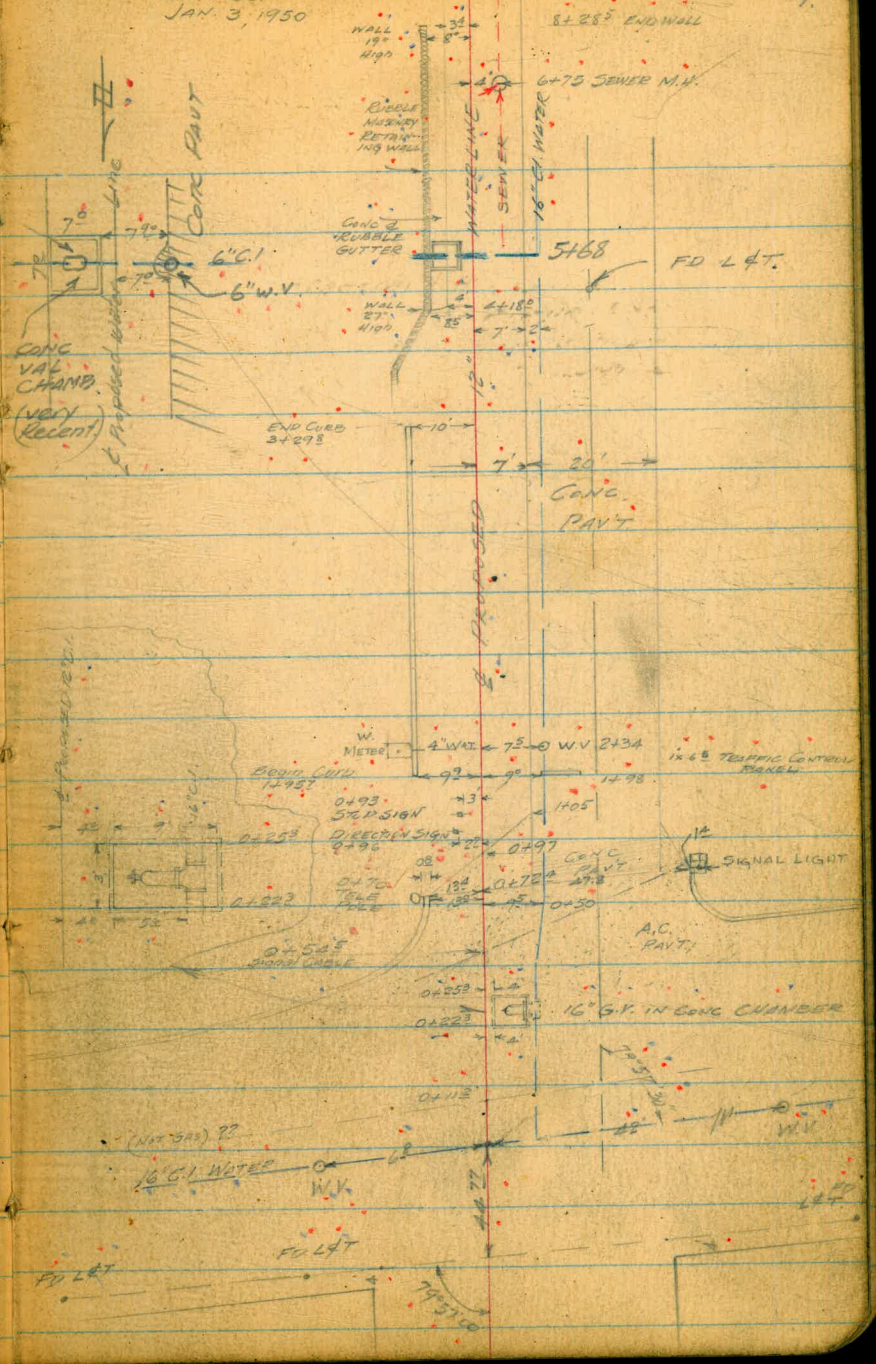
3+43.24 P.O.T.

0+00

REC
(Δ 79°57'30")

DETAILS
JAN. 3, 1950

1.



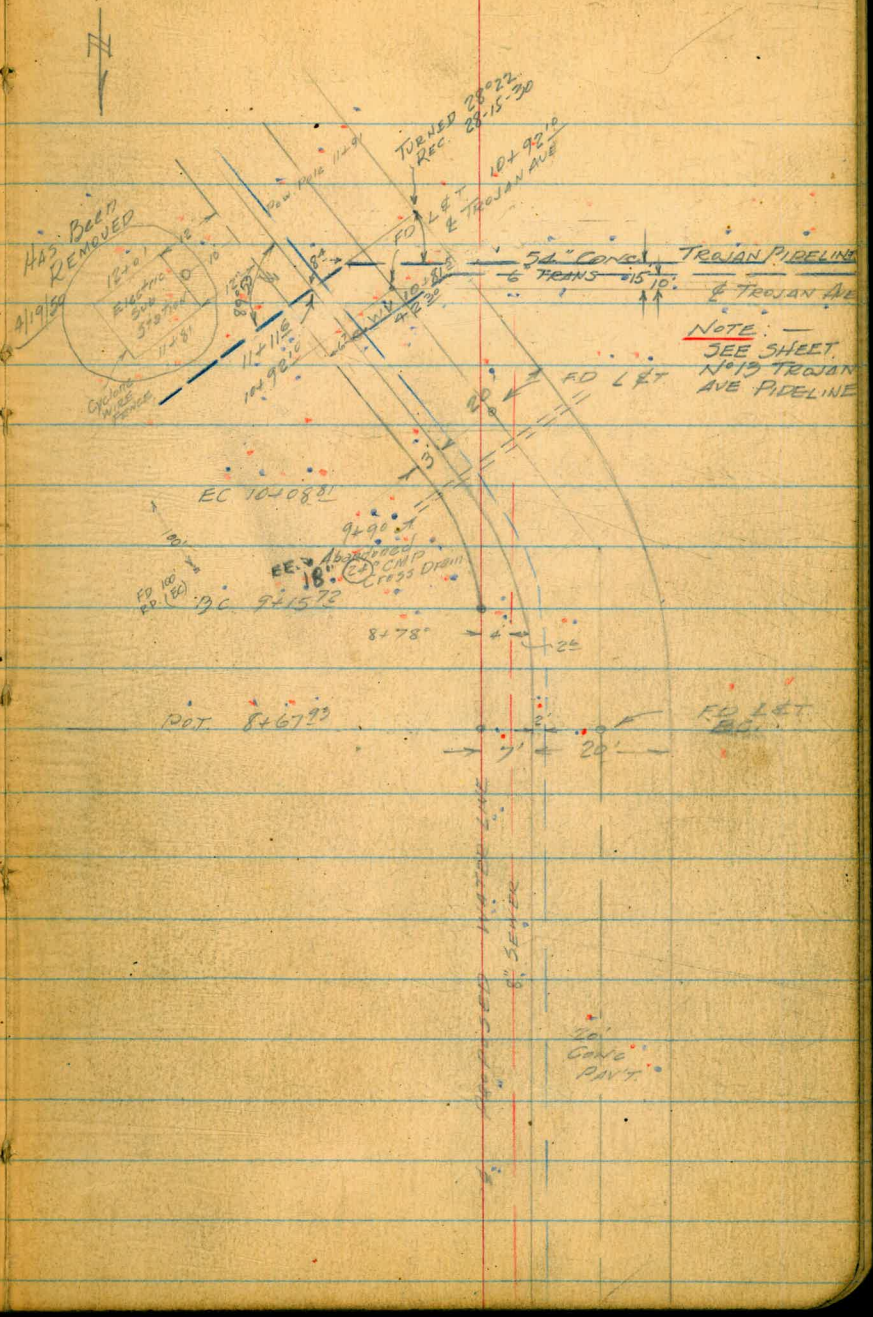
12/28/49

54th St. Pipeline

10+08.81	E.C.
10+00	Δ 18°35' LT
	R 287.00'
	T ~~46.94~~ 46.96' EE.
+50	L 93.09'
9+15.72	B.C.
9+15.72	℄ RT. 9°35' LT. (11¼ Bend)
8+67.93	P.O.T.

1/3/50

2.



12/28/49

1/3/50

3.

54th St. Pipeline

17+02.5± E.C.

17+00

+50

16+00

+50

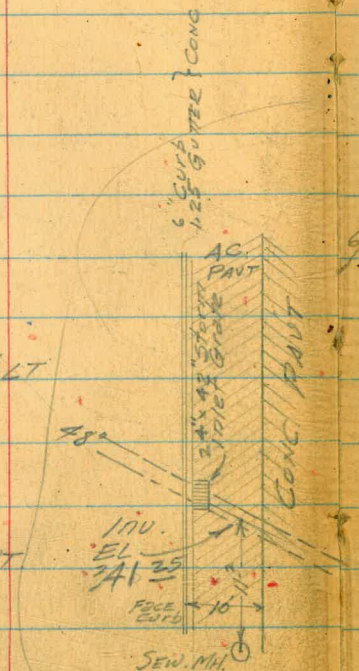
15+48.65 B.C.

Δ 28°10' RT
R ~~213.00~~ 313.00
T ~~75.52~~ 78.52 EE.
L 153.87

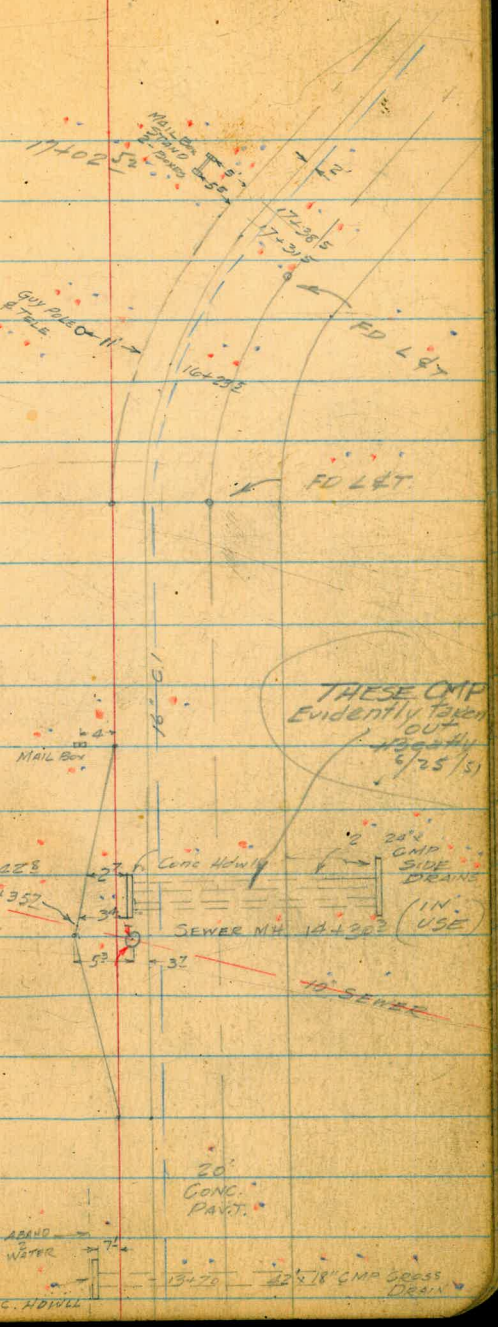
15+02.47 ℄ PI. 3°58'30" LT

14+30.29 ℄ PI. 7°57' RT

13+58.4± ℄ PT 3°58'30" LT



6/25/51 Beatty



12/29/49

54th ST PIPELINE

20+41.44 E.C.

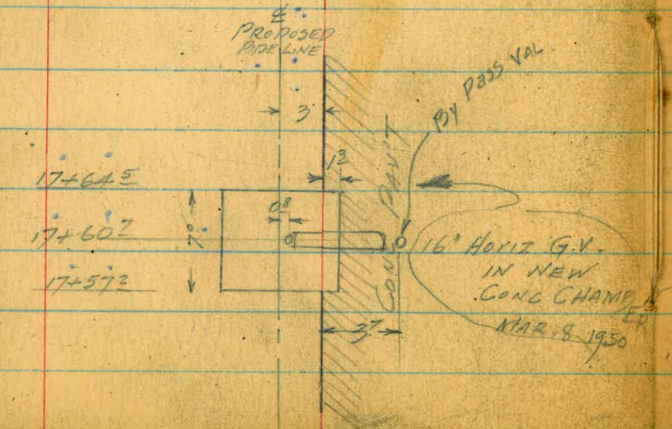
20+00

+50

19+00

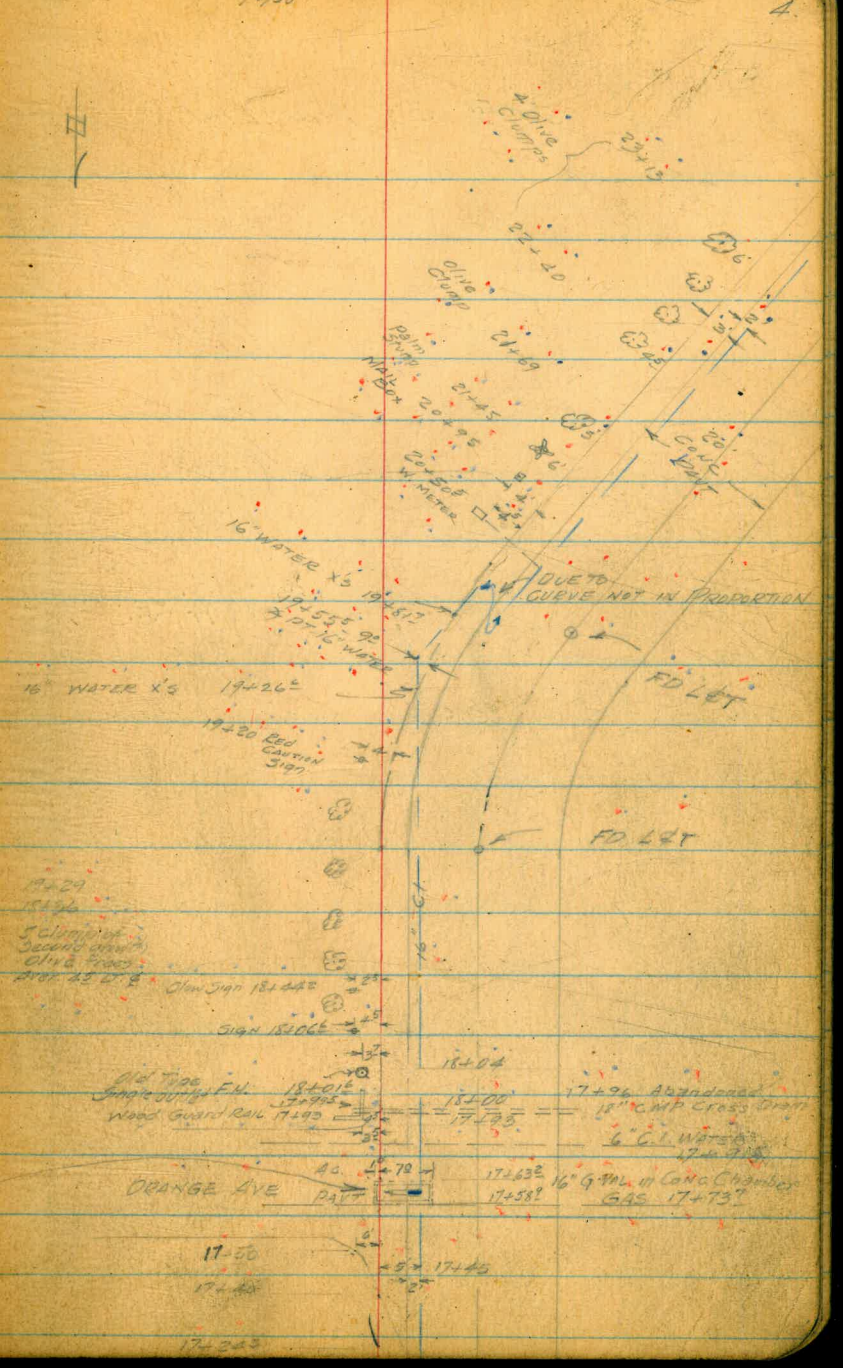
18+81.03 B.C.

Δ 43°09' RT
R 213.00
T 84.24 84.23' EE
L 160.41



1/3/50

4.



12/29/49

5.

54th ST. PIPELINE

25+00.85 EC.

+50

Δ 43°09'

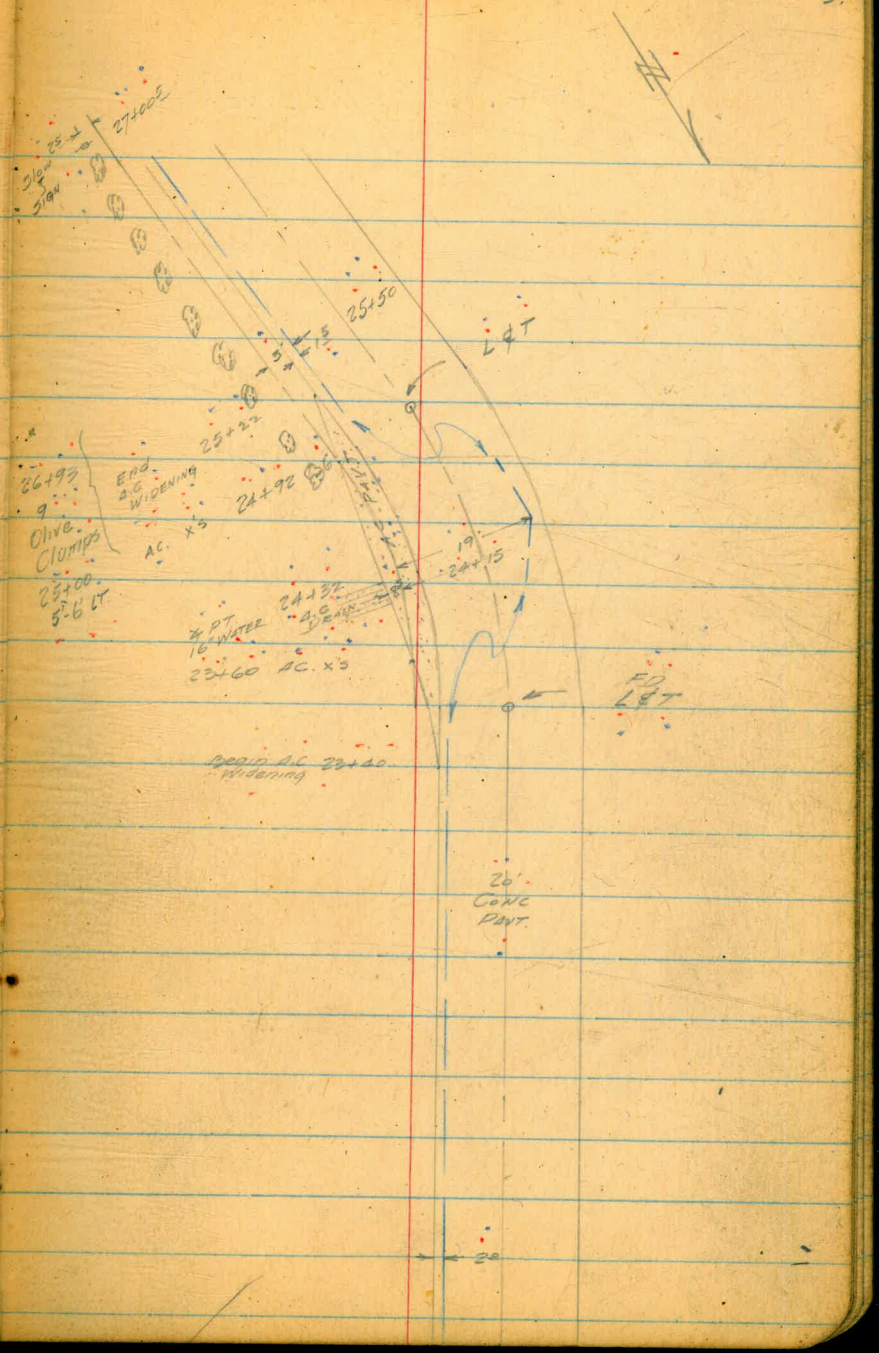
R 187.00

T 73.94' EE.

L. 140.83

24+00

23+60.02 B.C.



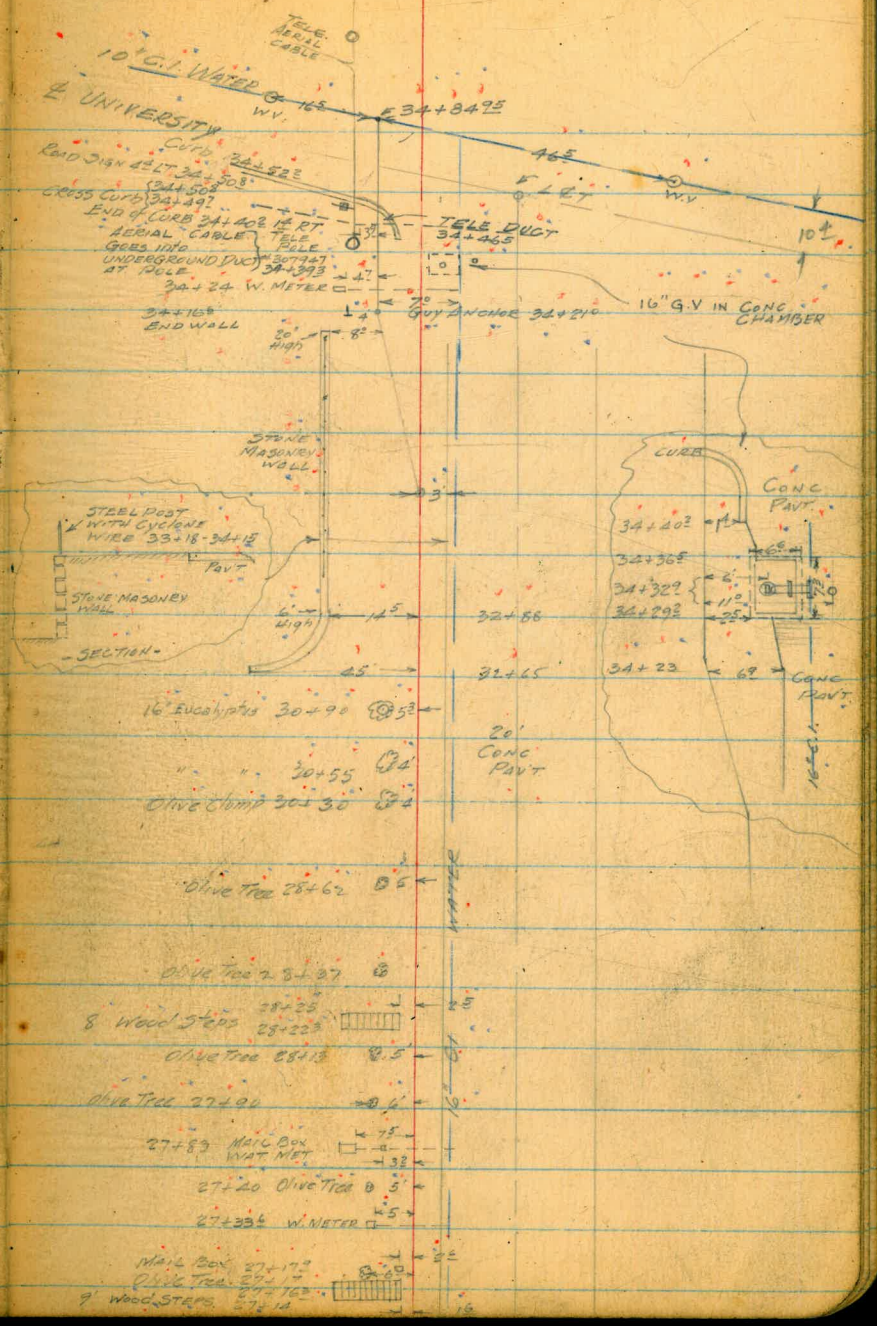
12/29/49.

54th St. Pipeline

34+84.95	End of line.
34+73.74	℄ University Ave (REC 68°03'30" LT)
34+25.23	℄ PT 2°17' Rt.
33+25.15	℄ PT 2°17' Lt.

1/3/49

6.



Dec 30, 1949
Fair & Warmer

Beatty
Rogers
Finney

54th St. Pipeline

Berger Wye #14897

℄ Profile & Levels

B.M.	2.00	424.12		422.12	B.P. NW Cor El Cajon at 55th St (also given as 422.19)
T.P.	0.07	415.70	8.49	415.63	
~~T.P. set~~	~~5.25~~	~~408.12~~	~~12.83~~	~~402.87~~	~~x on end curb SE Cor 54th at El Cajon~~ City Datum
0+00			4.76	403.36	
			5.76	402.36	SE Cor Val Chamber (12' Rt 0+20)
			9.34	398.78	℄ of Val ℄ 16" Pipe
0+50			5.99	402.13	
+97 ~~+95~~			5.75	402.37	Edge of AC
1+00			5.7	402.4	Edge of Pavt 7 Rt. 5.69
+50			5.1	403.0	5.30
2+00			4.7	403.4	4.96
+34	Top 4" C.I. Water		7.6	400.5	
+50			5.2	402.9	5.46
3+00			7.2	400.9	7.28
+50			10.2	397.9	9.88
T.P. Rock	0.34	395.48	12.98	395.14	
4+00			1.1	394.4	0.61
+50			5.1	390.4	4.59

54th St. Pipeline

℄ Profile

		395.48			Edge of Pavt ⓡ Rt.
5+00			9.2	386.3	8.81
TP. Rock	0.39	382.78	13.09	382.39	
+50			0.6	382.2	0.32
6+00			5.0	377.8	4.70
+50			9.4	373.4	8.95
			16.00	366.8	Inv. Sewer M.H.
+75			10.99	371.8	Ner Edge Rim. Sewer M.H.
11	0.53	370.21	13.10	369.68	7+00 ⓡ Edge Pavt.
7+00			0.90	369.3	1.36
+50			5.2	365.0	4.73
8+00			9.1	361.1	8.83
+50			12.9	357.3	12.54
12	1.13	358.80	12.50	357.67	Edge Pavt.)
9+00			4.1	354.7	3.58
+15 ±	on A.C. (B.C)		4.45	354.3	4.25

12/30/49

54Th ST. PIPELINE

℄ PROFILE & X-Sections

	358.80			Edge Pavt ® RT. 353.47		
9+50		5.54	353.26	5.33		
					LEFT	RT.
10+00		6.2	352.6	352.65 6.12	5.3/10 5.7/5 6.4/3 ×	
$+08^{81}$ (EC)		6.3	352.5	6.22		
+50		7.0	351.8	6.66	1.1/15 1.3/10 4.8/6 7.0/2 ×	
ck BM.		7.16	351.64 = 351.70	L & T ℄ 54Th & Trojan Ave		
+68		7.2	351.6	6.97	+04/10 +06/9 4.6/5 7.1/2 ×	
+76		7.3	351.5	7.12	4.8/10 6.4/3 7.2/2 ×	
✓ ($+92^{10}$ 67 RT Top of Stem of G.V.		8.56				
11+00		7.6	351.2	7.53	5.0/10 5.9/5 7.6/2 ×	
+25		8.1	350.7	7.93	3.2/12 3.9/8 8.0/2 ×	
+30		8.1	350.7	7.98	0.0/14 0.0/9 5.5/4 8.1/2 ×	

54th St. Pipeline & Profile

		358.80		
11+50		8.5	350.30	
12+00		9.3	349.5	
PI	2.68	352.51	8.97	349.83
+43		3.6	348.9	
+50		3.6	348.9	
13+00		4.4	348.1	
+50		4.9	347.6	
+58½	℄ Pt.	5.0	347.5	
		11.3	341.2	
+70		10.8	341.7	
14+00		5.0	347.5	
		12.20	340.31	
		5.41	347.10	
+30.29	℄ Pt.	5.3	347.2	
		8.8	343.7	
+38		8.1	344.4	

	LEFT	RT
Edge Pavt ③ RT.		
8.29	0.9 (12) 0.9 (7) 4.8 (4) 8.5 (2) ×	
8.97	4.7 (12) 4.6 (8) 9.0 (3) ×	
3.28	1.8 (10) 2.0 (4) 3.5 (2) ×	
3.34	2.8 (10) 3.2 (3) 3.6 (2) ×	
4.10		
4.70		342.25 + 6.00 = 336.25
4.80		
Outlet Flowline 18" CMP " " " " 339 RT 13+70		
Inlet Flowline 18" CMP Cross Drain 8 LT. 13+70		
5.11 ⑥ RT.	7.2 (10) 7.1 (5) 5.0 (2) ×	
Inv. M.H. Nor. Rim Sewer M.H 5.0 RT 14+30.29		
347.25		
5.26 ⑫ RT	6.2 (10) 5.4 (3) ×	
INLET Flowline Dbl. 24" Cross Drains 3° RT 14+35±		
5.24	6.7 (10) 7.3 (4) 8.1 (3) ×	8.8 (3) Hdwll (6.0 (3) 5.0 (4) 5.2 (7.5) (Rav

12/30/49

54th ST. PIPELINE

℄ Profile & X-Sections

Station			Rod	Elev.	Edge Pavt.	LT.	RT.
		352.51					
14+44			5.2	347.3	5.22 (65) RT	6.9/12 8.3/10 8.3/8 6.4/7	4.5/3 5.2/4 5.22/65
+61			4.3	348.2			
+68			5.0	347.5			
15+00			4.4	348.1	4.34 (3) RT	3.7/4 4.2/2	
+02^47 (℄ PT.)			4.3	348.2	4.27 (3) RT		
+48^65 (B.C.)			2.3	350.2	2.30 (3) RT		
TP Rock	12.00	364.37	0.14	352.37			
16+00			11.2	353.2	11.12 (3)	10.7/4 11.3/2	
+50			8.1	356.3	7.95		
17+00			5.1	359.3	4.84		
+38 (on A.C.)			2.72	361.65	2.83		

54TH ST. PIPELINE

℄ PROFILE

364.37

17+50			2.12	362.25
~~17+59~~ 17+63	Bottom of Conc Val. CHAMBER	original	7.1	357.3
+93			0.42	363.95
℄ ROCK	12.06	376.28	0.15	364.22
SET ℄			9.28	367.0
(17+96)	(TOP 1.8" CMP CROSS DRAIN 5' LT ℄)		14.2	362.1
18+00			11.4	364.9
+11			10.6	365.7
+50			9.3	367.0
+81.03	(B.C)		7.5	368.8
19+00			6.2	370.1
+26	Top 16" C.I WATER		7.2	369.1
+50			2.8	373.5
+50 (7° LT)	Top 16" C.I WATER		5.8	370.5
℄	5.58	381.54	0.32	375.96
20+00			4.4	377.1

Edge Pavt ⓒ RT.

	℄ Profile EL	Bottom Box EL
17+57.2	362.6	356.9
17+64.5	362.8	357.1

2.33

0.39

ON F.H.

	LEFT	RT
364.33		
11.95 364.33	12.0	11.9 11.95
356.9	3	1 3
11.39	11.5 11.0	10.6 11.3 11.39
	4 2	1 2 3
9.15		
8.90		
7.38		
6.02	6.9 6.0 6.2	
	3 2 1	
2.50		
4.38		

54th ST PIPELINE
℄ PROFILE & X-Sections

Station		Rod	Elev.	Edge Pavt (3) RT 379.66	LEFT	RT
	381.54					
20+41.44	(E.C.)	1.7	379.8	1.88	0.4/6 0.6/2 1.1/℄ 1.7/℄	1.88/3
+50		0.6	380.9	1.40	+0.2/6 0.0/3 ×	1.3/0.5 1.40/3
+62		+0.2	381.7	0.97	+2.1/8 +2.0/3 ×	0.7/0.5 0.97/3
+75	DRIVEWAY (+75 to +89)	0.4	381.1	0.70	0.0/10 ×	0.70/3
+89		0.3	381.2	0.85	+0.3/10 ×	0.85/3
21+00		0.4	381.1	1.15	+25/10 +2.4/4 ×	1.0/1 1.15/3
+50		3.5	378.0	3.58	uniform	
22+00		7.0	374.5	6.81	6.9/10 6.4/2 6.9/1 ×	
+50		9.4	372.1	9.24	12.0/10 11.6/6 8.6/2 9.4/1 ×	
23+00		10.6	370.9	10.43	12.8/10 13.6/7 10.1/2 10.7/1	

54TH ST. PIPELINE
& PROFILE & X-SECTIONS

					LEFT	RT.
			381.54		Edge Pavt @ RT	
23+60.22 (B.C)			11.9	369.6	11.79	13.2/12 11.3/7 12.0/6
P 1	3.16	372.91	11.79	369.75		
24+00 (on A.C)			3.70	369.2	3.57	
+50			3.5	369.4	3.41	
25+00.85 (E.C)			4.2	368.7	4.08	3.7/8 3.7/3 4.3/2
+50			6.3	366.6	5.88	
26+00			9.0	363.9	8.58	10.4/10 9.0/4 9.3/2
+50			12.3	360.6	11.61	
P 11	0.69	360.66	12.94	359.97	Edge Pavt 26+71	
27+00			3.0	357.7	2.38	6.8/10 4.4/5 3.0/2
+50			5.9	354.8	5.46	
28+00			9.0	351.7	8.54	13.7/12 12.4/9 8.9/2

12/30/49

54th ST. PIPELINE

℄ PROFILE & X-Sections

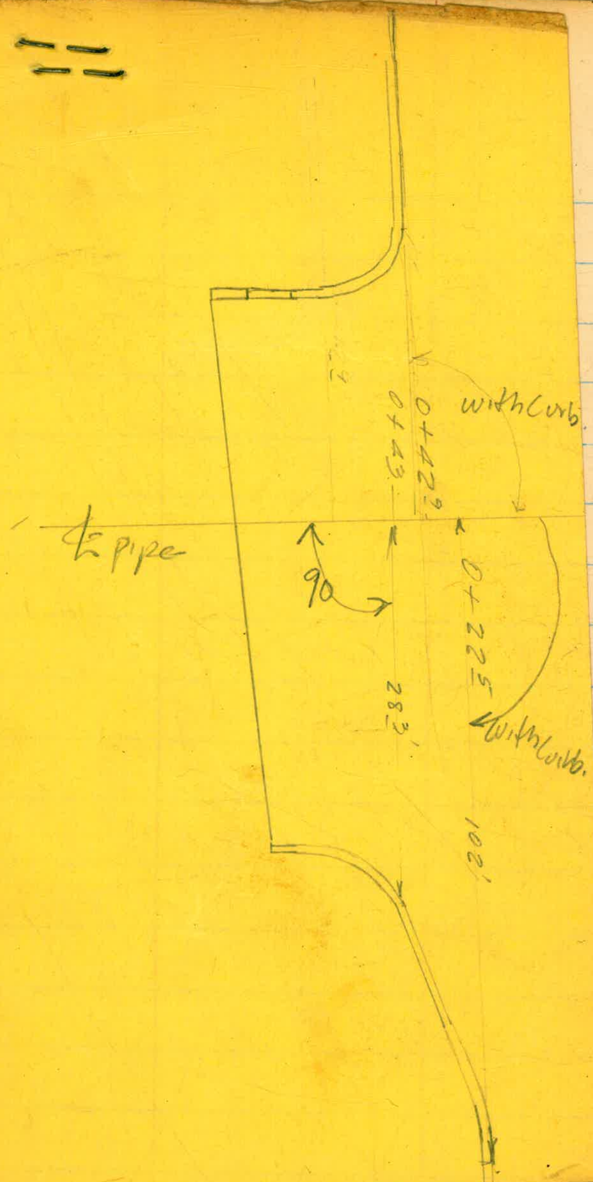
						LEFT	RT
		360.66			Edge Pav't ③ RT		
28+50			11.6	349.1	11.30		
TP	0.84	348.53	12.97	347.69	Edge Pav't 28+82.5		
29+00			2.2	346.3	1.73	3.4/10 3.4/5 2.3/2 ×	
+50			4.3	344.2	4.28		
30+00			6.9	341.6	6.96	9.8/17 4.8/8 5.0/5 6.0/2 6.8/1 ×	
+50			10.1	338.4	9.93		
TP	0.40	336.00	12.93	335.60	Edge Pav't 30+93		
31+00			1.2	334.8	0.96		
+50			5.4	330.60	5.11		
32+00			9.3	326.7	9.06		
TP	0.25	323.44	12.81	323.19			
+50			0.6	322.84	0.25		
33+00			4.5	318.9	4.20		

54th St. Pipeline

& Profile

323.44

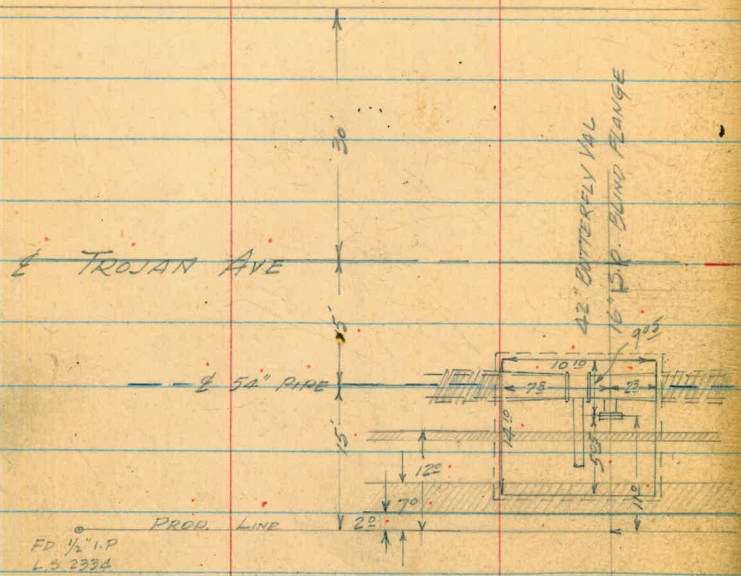
33+25.15	& PT.	6.3	317.1	Edge Pavt ③ 6.30
+50		8.3	315.14	④ 8.30
34+00		12.4	311.0	⑤ 12.09
⑪ 1	2.42 313.77	12.09	311.35	
+25.23	& PT.	4.6	309.2	⑦ 4.22
+49.7		5.0	308.8	
+49.7		4.72	309.1	Top Curb
+50.8		4.72	309.1	" "
+50.8		5.35	308.4	on conc gutter
+73.8		5.04	308.7	℄ University Ave. on pavt.
34+85		5.65	308.1	on pavt.
		4.88	308.9	E Rim of Val. Chamber
		8.2	305.6	℄ of 16" Val.
CK BM.		3.75	310.02	-310.02 Be. NW Cor University at 54th (5' Rt. 34+35.±) City Datum

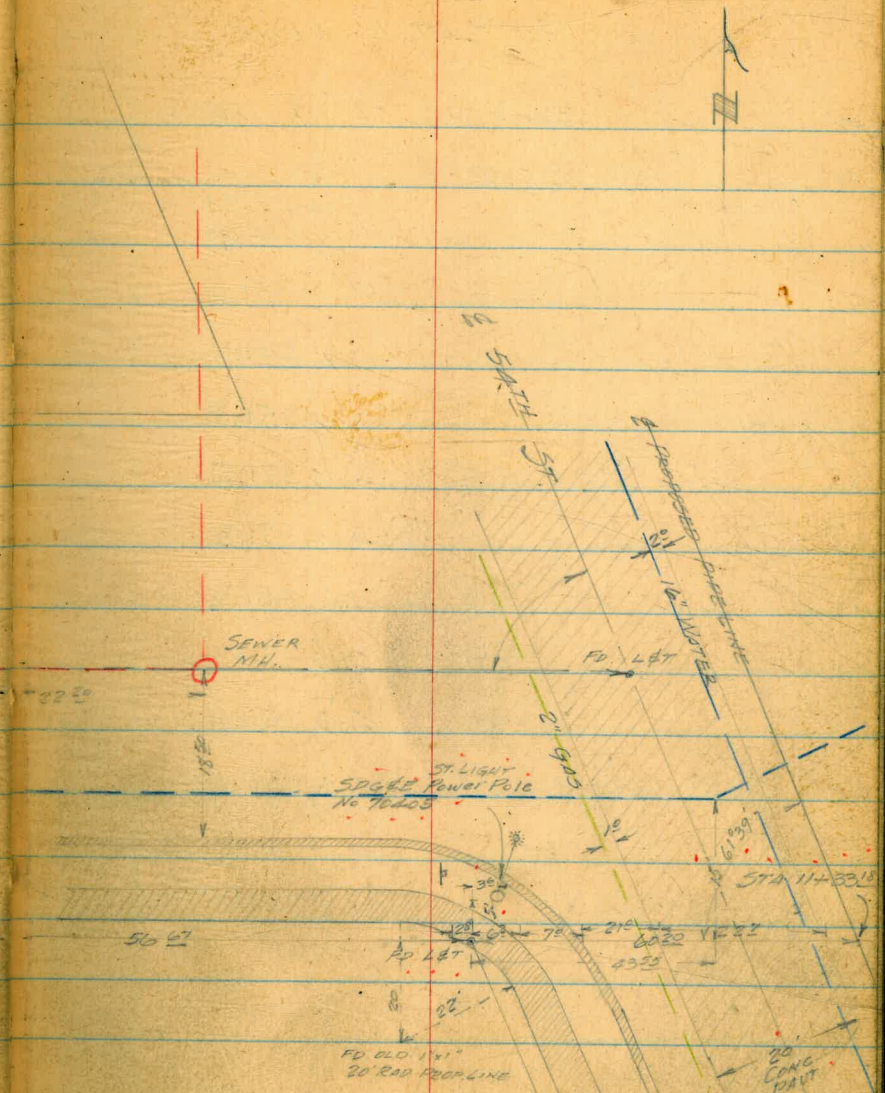

with Curb.
℄ pipe
90
0+43
0+225
283
with Curb.

4/19/50

18.

54TH ST. PIPELINE
CONNECTION TO TROJAN LINE
DETAILS AT 54TH & TROJAN





4/19/50

54TH ST. PIPE LINE

ELEVS AT 54TH & TROJAN

				Pg. 9 L & T Trojan & 54th
P	4.34	355.98	351.64	(SEE SKETCH Pg. 18)
		14.09	341.89	Bottom 16" S.O Flange
		12.09	343.89	Top " " "
		4.21	351.8	Edge Sidewalk – 9° from 16" SO.
		4.1	351.9	NAT. GRD. – Prop line – 11° from 16" SO.
		4.23	351.8	Edge SIDEWALK – 53.87 from ℄ 16" SO. along Prop Line
		4.48	351.5	" " 62.87 " " " " " " "
		4.68	351.3	Top Curb 69.87 " " " " " "
		5.00	351.0	NAT. GRD AT Gutter line – 69.87 " " " " " "
		5.05	350.9	Edge PAVT 90.87 " " " " " "
		5.18	350.8	Edge PAVT 113.87 " " " " " "
		5.4	350.6	at Intersection of Proposed pipeline 116.87 " " "

ORANGE AVE – EAST FROM 54th ST.
PROPOSED ~~8~~ 12" EWE. MAIN
Alignment

9+82.02 End

5+00.25 ℄ PT 5°43' LT

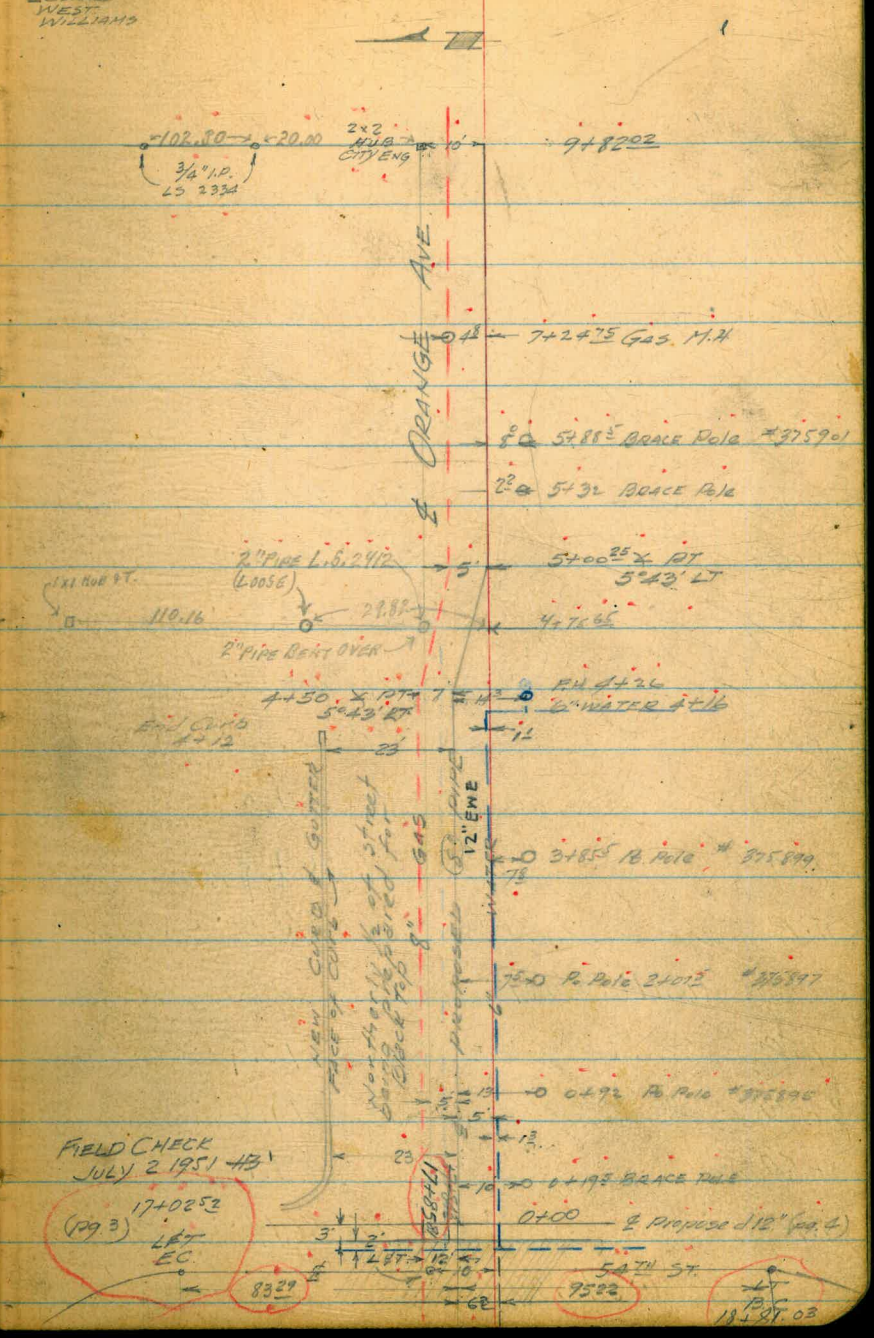
4+50 ℄ PT 5°43' RT

NOTE: ADDED 18+00 to this section Clk. 6/25/51
0+00 = EQ. = 18+00 Ahead.
~~17+84.3~~ Back
17+85.81 7/2/51 Clk.

Begin
0+00 = ~~17+84.3~~ on 12" proposed MAIN 54th ST.
17+85.81

JUNE 1, 1951 20.

BEATTY
LEONARD
WEST
WILLIAMS



LEONARD WEST

E PROFILE
Proposed 8" MAIN
ORANGE AVE
East From 54th ST

BM	+6.67	373.67	367.00	
0+00			-10.50	363.2
+50			-10.08	363.6
1+00			-10.10	363.6
+50			-10.45	363.2
2+00			-10.11	363.6
+50			-9.85	363.8
3+00			-9.28	364.4
+50			-9.03	364.6
4+00			-8.08	365.6
+50			-6.70	367.0
5+00.25			-3.81	369.9
T.P.			-0.55	373.12 Rock
	+13.19	386.31		
5+50			-12.45	373.9
6+00			-6.75	379.6
+50			-1.24	385.1
T.P.			-0.17	386.14 Rock
	+12.60	398.74		

367.56
1.67
374.23
10.5
363.73

℄ Profile
8" Main
Orange Ave
East from 54th St.

7+00	398.74	-8.50	390.2
+50		-4.62	394.1
T.P.		-0.21	398.53 Rock
	+11.84	410.37	
8+00		-11.00	399.4
+50		-5.12	405.3
9+00 Crest		-1.31	409.1
+50		-4.06	406.3
+81.77 End		-7.85	402.5
B.M. in P. Pole 25' Rt. End. Line		-10.89	399.48 2 Nails in Base
	+3.15	402.63	
T.P.		-13.08	389.55 Rock
	+0.02	389.57	
T.P.		-12.87	376.70 Rock
	+0.17	376.87	
Check B.M.		-9.89	366.98 = 367.00

℄ PROPOSED 12" PIPE
ORANGE AVE EXTENSION
TO 58TH PLACE
BELLVIEW HEIGHTS UNIT #6

16+76.35 — {CONNECTION TO 12" C.I. AS SHOWN Sheet #6 9097-L

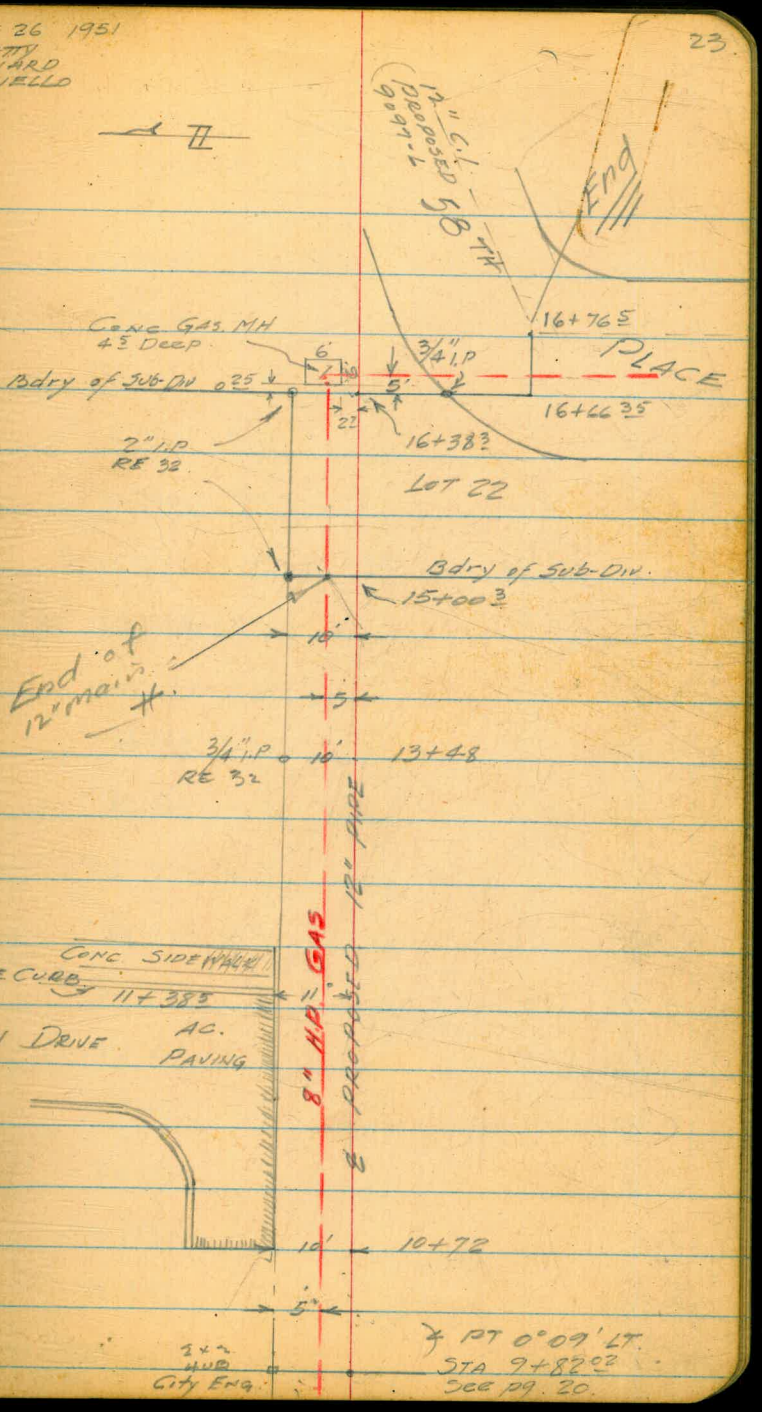
16+66.35 — 90° 00' LT

16+38.3 — 90° 06' RT

9+82.02 → — 0°09' LT

℄ = 27+82.02
on Plan

SEPT 26 1951
BEATTY
LEONARD
SEAVELLO



℄ PROFILE PROPOSED 12" PIPE ORANGE AVE EXTENSION TO 58TH PLACE

TBM	4.52	404.00		399.48
9+82.02			1.5	402.5
10+00			3.4	400.6
+25			5.8	398.2
+50			9.1	394.9
P Rock	0.88	391.78	13.10	390.90
+72			0.1	391.68
11+00			4.1	387.68
+06			4.4	387.38
+11			6.4	385.38
+22			6.6	385.18
+38.5			7.4	384.38
+50			7.3	384.48
12+00			6.8	384.98
+50			6.9	384.88
13+00			6.8	384.98
+18			7.3	384.48
+30			9.2	382.58
+50			13.0	378.78

NAIL IN POLE (See pg 22)

2.4 1.1
10 9 ℄

7.4 6.6 3.1
13 10 9 ℄

14.5 14.4 9.1
15 9 8 ℄

Edge Pavt 3.84 3.8 +02 0.1
10 9 8 ℄

6.09 4.3 4.1
Edge Pavt ⟶ 10.5 7 ℄

Edge Pavt 6.98
10.7 ℄

Top Curb 6.95
11.0 ℄

7.2 9.2 11.8
℄ 3 4 10

6.6 12.6 19.0
℄ 1 10 20

6.8 6.1 10.1 12.4
℄ 3 5 12 19

391.78
- 6.95
384.83

13+48 10' LT 3/4" I.P

℄ Profile Proposed 12" Pipe Orange Ave Extension To 58th Place

		391.78		
H (Rock)	1.54	380.30 ✓	13.02	378.76 ✓
13+75				
H	0.17	367.69 ✓	12.78	367.52 ✓
14+00			1.5	366.19 ✓
+50			8.8	358.89 ✓
+69			10.4	357.29 ✓
+84			9.8	357.89 ✓
+92			8.3	361.39 ✓
15+00			4.2	363.49 ✓
H (Rock)	12.16	378.22 ✓	1.63	366.06 ✓
+15			5.9	372.32 ✓
H (Rock)	12.89	390.32 ✓	0.79	377.43 ✓
+50			11.5	378.82 ✓
16+00			2.2	388.12 ✓
H	9.46	399.67 ✓	0.11	390.21 ✓
+38.3			5.6	394.07 ✓
SET TBM			5.06	394.61 ✓
+40			5.4	394.27 ✓

15+00 10 Lt 2° I.P. Toe Slope 7.4/10 C Edge F.L. 1.7/10 (4'± Fill on ℄)

Toe Slope 14.4/10 C 2.0/11 1.0/15

Toe Slope 20.1/12. C 3.7/10 0.0/15

Toe Slope 5.7 C C +8.0/15 Shldr of fill

SW Cor Gas M.H. (4'± deep)

℄ Profile Proposed 12" Pipe
Orange Ave Extension
58TH to PLACE

399.67

16+50	0.2	399.47
+66 35	0.2	399.47
16+76 35	0.1	399.57
4' East 16+38 3	5.2	394.47
10' East 16+38 3	1.9	397.77
24' East 16+38 3	0.0	399.67
	6.70	392.97
CK BM	0.17	399.50 - 399.48

Top 8" GAS MAIN 41' So 13+66 35

(7) (5) GRADES SET FOR 12" A.C. MAIN
54TH ST.

B.M.	1.15	423.27		422.12	
H	0.65	412.17	11.75	411.52	
CK BM.			10.16	402.01 =	
0+05			9.2	403.0	397.4
+25			9.85	402.3	396.6
+50			10.3	401.9	396.2
0+90	12×6 TEE				
1+00			9.7	402.5	395.4
+25			9.6	402.6	395.0
+75			9.1	403.1	393.4
2+25			9.1	403.1	391.8
+75			10.3	401.9	389.9
TP					
3+25	0.94	400.71	12.40	399.77	388.0
+75			4.0	396.7	385.5
4+25			7.8	392.9	383.0
4+75			11.9	388.8	380.1
TP	0.15	387.54	13.32	387.39	
5+25			3.0	384.5	377.2
5+75			7.3	380.2	374.3
6+00			9.4	378.1	372.8
H	0.62	374.90	13.26	374.28	

NOV. 20 1951
CLOUDY & RAINY
BEATTY N
LEONARD T
POWELL Φ

BP NW Cor 55TH & EL CAJON

CH13 II BM S.W Cor End of CURB 54TH & EL CAJON

C56

C57

C57

F.H 13.0 LT 0+90 C09 TO FLG C79 TO BOLT PIPE

C71

C76

C97

C113

C120

C118

C112

C99

C87

C73

C59

C53

(7) GRADES SET FOR 12" AC 54TH ST

		374.90			
6+50			11	373.8	367.8 C6.0
7+00			5.3	369.6	364.1 C5.5
+50			9.4	365.5	360.3 C5.2
PI	0.60	362.39	13.11	361.79	
8+00			1.0	361.4	356.5 C4.9
8+50			4.7	357.7	352.4 C5.3
CK PI	8.76	360.50	10.65	351.74	=351.70
9+00		(7) offsets	5.1	355.4	350.0 C5.4
+15			5.5	355.0	349.7 C5.3
			(5) 6.8	353.7	
+50			(7) 6.7	353.8	349.0 C4.8
10+00		(5) offsets	7.6	352.9	348.0 C4.9
+088'		EC.	7.7	352.8	347.9 C4.9
+28		℄ PT	7.9	352.6	347.5 C5.1
+75			(quint) 8.9	351.6	346.8 C4.8
11+22		℄ PT	9.5	351.0	346.1 C4.9
11+34		℄ PT	9.7	350.8	345.9 C4.9
+81			10.3	350.2	345.2 C5.0
12+28		℄ PT	10.9	349.6	344.5 C5.1

(5) GRADES SET FOR 12" A.C. 54TH ST

			360.50			
6	12+50		11.1	349.4	344.1	C5 3
7	13+00		11.8	348.7	343.4	C5 3
	+50		12.4	348.1	341.5	C6 6
7	+58	℄ PT	12.6	347.9	341.2	C6 7
8	14+00		12.9	347.6	339.6	C8 0
8	+38		13.2	347.3	338.2	C9 1
8	+62		12.9	347.6	339.0	C8 6
9	15+02		12.0	348.5	342.0	C6 8
	15+48.98	B.C.	10.1	350.4	345.5	C4 9
	16+00		7.1	353.3	348.5	C4 8
11	+50		4.0	356.5	351.6	C4 9
	17+00		0.8	359.7	354.6	C5 1
	17+02	℄ E.C.				
	PP		9.24	369.12	0.62	359.88
	+40	12" G.V.	7.3	361.8	357.0	C4 8
11	+45	F.H. TEE	7.1	362.0	357.3	C4 7
12	17+61.85	℄ PT	6.3	362.8	357.9	C4 9
	17+86.91	OR ℄ PT	5.3	363.8	358.5	C5 3
	18+00	AH.				
1				Corr. H.I.		
	CK TP		2.03	369.03	2.03	367.09 = 367.10 on F.4.

(5) GRADES SET FOR 12" AC ORANGE AVE

		~~369.12~~ 369.03				
18+50			5.3	363.7	358.8	C49
19+00		(5) offsets	5.5	363.5	359.1	C44
+50			5.0	364.0	359.4	C46
20+00			4.7	364.3	359.7	C46
+50			4.5	364.5	360.0	C45
21+00			4.2	364.8	360.3	C45
+47			4.0	365.0	360.7	C43
+87			3.5	365.5	361.2	C43
22+27			2.4	366.6	362.3	C43
+50	4 PT		1.6	367.4	363.2	C42
		381.76		368.81		
P	12.95	~~381.85~~	0.22	~~368.90~~		
+72			13.4	368.4	364.1	C43
23+00 25			11.6	370.2	364.8	C54
+12		(5)	10.6	371.2	366.4	C48
			~~10.7~~	~~371.1~~		
23+30 40	4 PT.		8.9	372.9	367.8	C51
+50		(8)	7.3	374.5	369.3	C52
24+00			1.8	380.0	373.2	C68
		394.75		381.48		
P	13.27	~~394.84~~	0.28	~~381.57~~		
+50			9.1	385.7	377.1	C86
~~P~~			~~0.02~~	~~391.89~~		
25+00		~~408.05~~	3.9	390.9	380.9	C100
P	13.32	~~408.14~~	0.02	~~394.82~~	~~394.73~~	

(8) GRADES SET 12" A.C ORANGE AVE

		~~408.14~~ 408.05				
25+52			12.9	395.2 ✓	382.8	
+92			9.1	399.0	387.6	
26+32			4.5	403.6 ✓	389.3	
~~CK BM~~						
TP	4.06	410.42 ~~410.51~~	1.69	~~406.36~~ ~~406.45~~		
26+72			2.4	408.0	390.0	
27+12			0.7	409.7 ✓	390.7	
+47			3.0	407.4	390.1	
27+82.02			7.1	403.3 ✓	389.4	
CK BM	2 NAIL IN POLE		10.30	400.12 ~~400.21~~	= 399.48 = 400.17	
TP	6.15	375.05		368.90		
			10.75	364.30	= 364.33	
			8.14	366.91	= 367.00	
			7.58	367.47		
			6.33	368.72	= 368.90	
TP	13.19	387.50	0.74	374.31		
			1.94	385.56		
TP	12.88	400.16	0.22	387.28		
			0.12	400.04		

C10 4	25+25	-2.3 390.00 EL Top 8" GAS
C11 4		
C14 3		
C18 0	-3.50	404.5 EL Top 8" GAS
C19 0		
C17 3	-2.65	404.95 EL Top 8" GAS
C13 9		Note CHECK SHOWS TOP OF F.H. USED instead of Flange pg. 22
Previous Elev. pg. 22 Mk'd on pole. ?		
Edge Pav't. 18+81.03 EC pg. 12		
" " 18+00		" "
on FH FLANGE Top of Stem of F.H		
CK TP on Rock		
(24+50)		

54TH ST. P.L.

ORANGE AVE

F.H. AT. 28+72℄

TP 28+82.02	2.1	405.4	403.3		
28+72 ⑤ for FH = 20' So ℄ ST	3.3	402.1		393.6	
				389.7	C 12± Bottom of F.H. ELL
				⑤ F.H.	C 8.5 EL of Flange.

JAN. 7 1952

(5) STAKES SET FOR 12" MAIN BYRON ST. ROSECRANZ TO SHAFTER

BM	2.08 ~~3.91~~	20.77 ~~22.40~~	18.69	City Datum	
0+61.9 =	℄ 12×12 Cross.	6.21			
0+64.3 =	Top 12" Nipple	6.12			
0+65 =	℄ 12" G.V.				
1+00		3.95	~~18.45~~ 16.8	12.7	~~C5.8~~ C4.1
+50		5.50	~~16.90~~ 15.3	11.1	~~C5.8~~ C4.2
2+00		7.10	~~15.30~~ 13.70	09.5	~~C5.8~~ C4.2
+50		8.70	~~13.70~~ 12.1	07.9	~~C5.8~~ C4.2
3+00		10.4	10.4	06.3	C4.1
+50		12.0	08.8	04.7	C4.1
P. 4+00	2.36	09.88	13.25	07.52	03.2 C4.2
+50		3.3	06.6	02.5	C4.1
+70				02.2	
5+00		5.0	04.9	01.5	C3.4
+50		5.8	04.1	00.4	C4.5
6+00		6.8	03.1	-00.7	C3.8
+50		7.4	02.5	-01.8	C4.3
7+00		7.8	02.1	-02.9	C5.0
+50		8.3	01.6	-04.0	C5.6
8+00		8.7	01.2	-5.1	C6.3
8+16		14.2	-04.3		Top 12" C.I.
		8.60	01.28		Top 2" I.P. Prop. Cor. RE 586

3.62 P.I.
17.15

02.2
.30
.660

④ STAKES FOR 6" MAIN 5' E. & Alley
Between BANCROFT & 33rd
ORANGE TO POLK

BM	0.61	367.27		366.66	BP NW Cor 33rd Orange
0+80			6.5	360.8	356.7 C4 1
	1+01 W		4.9	362.4	361.0 C1 4
	1+27 W		4.7	362.6	361.4 C1 3
1+27			4.5	362.8	357.7 C5 1
	1+30 E		4.5	362.8	361.6 C1 2
	1+45 W		5.4	361.9	361.4 C0 5
1+50			5.4	361.9	357.4 C4 5
	1+92 W/E		6.3	361.0	360.7 C0 3
	2+11 E		6.5	360.8	360.6 C0 2
2+00			6.3	361.0	356.7 C4 3
2+50			6.9	360.4	356.0 C4 4
	2+70 E		7.3	360.0	359.7 C0 3
3+00			7.7	359.6	355.3 C4 3
	3+15 5 E		7.4	359.9	359.1 C0 8
3+50			8.1	359.2	354.6 C4 6
	3+54 E		8.0	359.3	358.7 C0 6
4+00			8.0	359.3	353.8 C4 5 (?) OK
	4+21 E		9.2	358.1	357.5 C0 6
	4+42 5 W		10.3	357.0	356.9 C0 1
4+50			10.5	356.8	352.5 C4 3

23
.014
92
23
322

.026
13
78
26
338

④ STAKES FOR 6" MAIN IN ALLEY

367.27

	4+85.5 E		10.8	356.5	356.0	C0.5
5+00			11.3	356.0	351.2	C4.8
	5+09 W		11.9	355.4	355.0	C0.4
	5+10 E		11.4	355.9	355.4	C0.5
5+50			12.5	354.8	349.9	C4.9
	5+55 E		12.7	354.6	354.1	C0.5
TP		2.91	357.11	13.07	354.20	
	5+68.5 E		3.7	353.4	353.6	F0.2
6+00			3.8	353.3	348.1	C5.2
	6+00 E		3.6	353.5	351.9	C1.6
6+44	So Prop Line		8.2	348.9	345.1	C3.8
TP		10.02	359.29	7.84	349.27	
TP		9.21	368.36	0.14	359.15	
CK BM				1.70	366.66	

067 13 201 67 871 — 067 44 268 268 2948

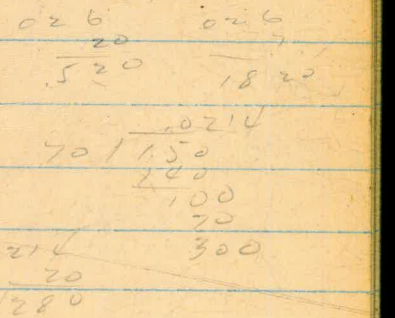
DEC. 4 1951

BEATTY
LEONARD
POWELL

(4) OFFSET STAKES FOR 6" MAIN IN ALLEY BETWEEN 42nd ST. & VAN DYKE THORN TO LEXINGTON

(FILE 5457 W)

BM.	1.18	319.20		318.02	BP SE Cor Thorn @ Fairmount
TP	0.14	308.93	10.41	308.79	SW Cor End SIDEWALK W. SIDE VAN DYKE & Thorn.
TP			3.12	305.81	Top F.H SE Cor Alley-Thorn Between-VAN DYKE 42nd
0+80			4.1	304.8	299.0 C58
1+00			4.4	304.5	298.6 C59
+50			7.2	301.7	297.5 C42
2+00			10.4	298.5	294.1 C44
WAT MET 2+05 E			10.7	298.2	297.9 CO3
TP	1.06	297.38	12.61	296.32	
+50			3.0	294.4	289.9 C45
WAT MET 2+62 E			3.8	293.6	292.1 C15
3+00			7.7	289.7	284.5 C52
WAT MET 3+41 E			12.2	285.2	283.7 C15
+50	0.02	284.23	13.17	284.21	279.0 C52
WAT. MET 3+55 W		(2' IN from Prop LINE)	2.1	282.1	282.2 FO!
" " 3+80 E			3.2	281.0	279.5 C16
4+00			4.4	279.8	274.4 C54
+50			6.5	277.7	270.6 C7!
5+00			12.5	271.7	264.2 C75



Alley - (Cont'd)

		284.23			
5+10	0.16	271.24	13.15	271.08	263.8
WAT. MET	5+02.5 W		5.6	265.6	270.9
5+50			2.2	269.0	262.0
6+00			6.5	264.7	259.8
6+40			13.0	258.2	254.0
P set			7.58	263.66	
P	12.98	283.99	0.23	271.01	
P	11.68	295.40	0.27	283.72	
P	12.87	308.15	0.12	295.28	
P	13.10	319.25	2.00	306.15	
ck P			10.48	308.77 = 308.79	
ck DMI.			1.25	318.00 = 318.02	

C73

F53

C70

C49

C42

Cor Conc Wall Nor End 6+25 ℄

JAN. 2 1952
Beatty
Leonard
Powell

④ OFFSET GRADES SET FOR 6" MAIN
FLORIDA ST.
UNIVERSITY TO ROBINSON

BM	12.03	277.99		265.96	BP NW Cor Alabama & University
TP	10.48	287.82	0.65	277.34	
0+00 = So PL Univ.					
0+14			3.6	284.2	280.0	C4.2
0+50			4.3	283.4	279.5	C3.9
1+00			5.1	282.7	278.8	C3.9
+50			5.7	282.1	278.1	C4.0
2+00			6.4	281.4	277.4	C4.0
+50			7.2	280.6	276.7	C3.9
3+00			8.0	279.8	276.0	C3.8
+50			8.7	279.1	275.3	C3.8
4+00			9.5	278.3	274.6	C3.7
+50			10.4	277.4	273.9	C3.5
5+00			11.0	276.8	273.2	C3.6
+50			11.7	276.1	272.5	C3.6
6+00			12.2	275.6	271.8	C3.8
6+44	Nor PL Robinson		13.1	274.7	271.2	C3.5
CK BM		4.23	280.24	11.81	276.01	BP NW Cor Robinson & FLORIDA ST
CK BM				6.31	273.93 = 270.90	BP SW Cor Robinson & FLORIDA.

54TH ST PIPELINE
16" CONNECTION TO EXISTING 16" C.I. IN 54TH & TO TROJAN AVE PIPELINE AT VAL. CHAMBER

JAN. 8, 1952
BEATTY
LEONARD
POWELL

BM.	5.24	356.94		351.70	
Top 16" OUTLET			13.25	343.69	
Bott 16" "			14.65	342.30	
0+10			5.13	351.81	342.3
+40			4.90	352.0	342.4
+60			5.02	351.9	345.8
+80			5.69	351.2	346.2
1+16.47 End of Work By Contractor			5.94	351.00	347.0
Top 16" C.I. } Existing 16" C.I. on 54TH ST			8.38	348.56	
Bott " C.I }			9.83	347.11	
Top 12" 12"x8" TEE			9.92	347.02	
Top of pipe at Flange of 8" G.V.			9.62	347.32	
BM	5.19	356.89		351.70	
			9.86	347.03	
			9.95	346.94	
			8.30	348.59	

LET & TROJAN & 54TH ST

} SIDE OUTLET STA 158+23.37 TROJAN AVE PIPE LINE

C 95
C 76
C 61
C 50
C 40

Top of flange 8" G.V. & of VAL = 346.49

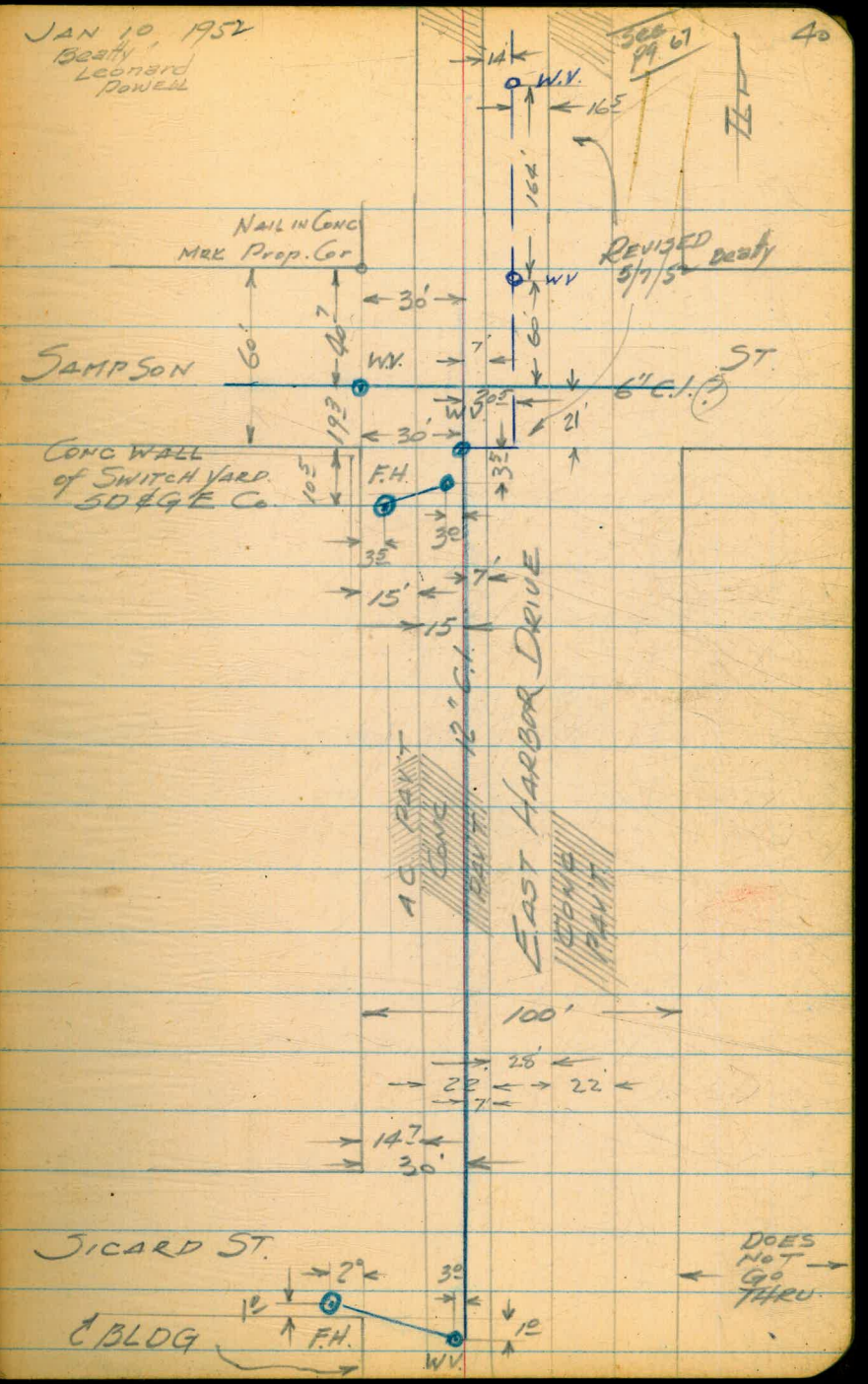
Top. 12 x 8 TEE & of 12" = 346.39

Top Exist 16" C.I.

LOCATION of 12" C.I.
E HARBOR DRIVE
Between
SAMPSON & SICARD ST.

SEE ALSO 66 & 67

JAN 10 1952
Beatty
Leonard
Powell



NEPTUNE PLACE
GRADES SET FOR 6" MAIN

(5)

	7.55	24.95		L&T. END PAVT NEPTUNE
B.M	12.11	29.51	17.40	
	Top 4" C.		5.09	24.42
0+00 ↙			1.3	28.2
			1.4	23.6
0+25.			5.81	23.7
0+53[23] BK			6.8	18.2
0+58[16] AH: 4 PT			11.20	18.3
			7.0	18.0
1+00			18.8	10.7
			4.5	20.5
+50			11.0	18.5
1+90[57]			6.9	18.1
~~1+84[87]~~	4x6 TEE		11.45	18.1
			11.35	18.2
2+25			11.2	18.3
~~+75~~			~~12.05~~	~~17.5~~
2+64[93]			11.74	17.8
~~2+78[55]~~	4 PT		12.14	~~17.4~~
3+00			11.68	17.8
+50			11.8	17.7
3+63[98]	(BC.)		10.96	18.6
4+37[06]	4 PT		10.85	18.7
4+50			10.61	18.9
5+00			7.43	22.1
+25			5.98	23.5
+50			4.64	24.9
+62	G.V.		3.95	25.6
6+02[5]	Begin	Exist 4x6 TEE	3.31	26.2

JAN. 14, 1952
BEATTY
LEONARD
POWELL

4-1

2-0276-5

C4.2	4x6 TEE BONAIR NEPTUNE	
E0.2		
~~E9.7~~ F3.3	F3.4	(10) 2.2 4.8 F1.4
F1.2	(10) C1.3	
E9.7 8.3		
4.0		
F0.2 C2.0	(10) C2.8	
C3.6		
0.9 C3.6		
C2.3 5.39		
~~C3.2 C3.2~~		
~~C3.2~~ C3.6		
C3.6		
C3.8		
C3.8		
C3.8		
C3.8		
C4.3		
C4.3		
C4.2		
C4.3		
C3.8	5.57 ON TOP TEE	

25
24.4
49.4 52.73
4.9
4.33

GRADES SET (5)
LA PLAYA DEL NORTE

1/15/52

BM 11.29	28.69		17.40		
	1+90^67 on Neptune				
0+00 4x6 TEE				14.4	
0+15		10.0	18.7	14.6	C4^1
0+61^8 ~~30~~		5.1	23.6	15.0	C8^6
0+89^07 ~~0+84~~	℄ PT Δ 40°16'	4.9	23.8	17.2	C6^6
1+09^21 ~~1+04~~ ~~EC~~		2.7	26.0	23.0 18.8	C7^2
1+56^51 ~~1+51^3~~	CONN TO EXIST. 4"	4.1	24.6	25.3 21.1	C3^5

109.2
61.6
47.4

3.0
4

61.8
25.43
87.23

183
184

25.43
1.84

27.27
61.80
89.07
1.84
90.91
18.30
109.21
47.3
1+56 51

.08
.32

.08
47.4 | 38.00
37.92
.08

.24
.08
.16

JAN. 14, 1952
BEATTY
LEONARD
POWELL

HONEYCUTT ST.
PAC. BEACH DRIVE - CROWN POINT DRIVE
GRADES SET FOR WATER METERS -

B.M	2.57	37.85		35.28	LGT NE COR LAMONT & PAC BEACH DR
0+00 = So P.L PAC B. DR.					
0+34 E	(2) WAT MET = 21' from P.L.		6.7	31.2	30.4 C0 8
0+56 E			7.2	30.7	29.9 C0 8
0+66 W			7.3	30.6	31.1 F0 5
1+08 E			8.7	29.2	28.4 C0 8
1+14 5 W			8.8	29.1	28.8 C0 3
1+68 5 E			10.0	27.9	26.9 C1 0
1+78 W			10.3	27.6	27.2 C0 4
2+18 43 W			11.4 ~~10.8~~	26.5 27.1	25.4 ~~26.1~~ C1 0 C1 1
2+53 E			11.7	26.2	24.6 C1 6
2+68 W			12.2	25.7	24.9 C0 8
3+40 W	(188 Sq. Ft.)	27.05	12.68	25.17	23.1 C0 4
3+48 5 E			3.6 3.9	23.5 23.2	22.4 C0 8
3+56 W			3.7	23.4	22.7 C0 7
3+54 E			4.1	23.0	22.3 C0 7
4+ ~~24~~ 38 E			5.7	21.4	20.8 ~~21.0~~ C0 6
4+35 W			5.4	21.7	21.2 C0 5
4+78 E			5.9	21.2	20.2 C1 0
5+07 W			6.1	21.0	19.7 C1 3
5+22 E			6.5	20.6	19.4 C1 2

HONEYCUTT ST.
WAT. METERS. CONT'D.

		27.05				
5+84 W			6.6	20.5	18.8	C23
5+85 E			7.0	20.1	17.5	C24
6+13 (75) = Nor. P.L. (Fortuna						
6+88 = (75)						
(1) 0+00 = So. P.L.						
0+18 W	6.84	25.90	8.49	18.56	18.1	CO5
0+58 E			7.9	17.5	17.8 +17.6	FO3
0+63 W			7.2	18.2	18.4	FO2
1+06 E			7.3	18.1	18.1 +17.8	CO9
1+52 E			7.7	17.7	18.4	FO7
1+92 E			6.8	18.6	18.6	CO8
1+99 W			6.0	19.4	19.2	CO2
2+36 E			5.5	19.9	18.9	C10
2+40 W			4.9	20.5	19.4	C11
3+15 W			4.3	21.1	19.9	C12
3+37 W			4.0	21.4	20.0	C14
3+94 W			4.0	21.4	20.3	C11
4+48 W			4.2	21.2	20.2	C10
℄ B.M.			4.53	20.87 =	20.69	Top Conc Mon 7' of N.E. Cor Crown Pt. Dr & Honeycutt
TP	6.24	25.49	6.15	19.25		
	12.47	36.93	1.03	24.46		
℄ B.M.			1.65	35.28 =	35.28	

JAN. 18, 1952
BEATTY
LEONARD

BEAUMONT ST.
COLIMA TO FOWARD
④ STAKES FOR 6" MAIN.

		86.92				(Base Book Lists SE BP 77.98 SW BP 75.96 This is gone)
BM	10.96	~~88.94~~		~~77.98~~	75.96	SE BP. Colima & LA Jolla Blvd
H	10.55	~~98.72~~	0.75	~~88.19~~	86.17	
H	5.10	~~99.73~~	+.11	~~94.63~~	92.61	NE Curb Colima & Beaumont
		97.71				
0+00			5.25	92.5	92.0 / ~~88.3~~	C42
+50			4.5	93.2	88.6 / ~~88.7~~	C45 C46
1+00			4.3	93.4	88.9 / ~~89.2~~	C43 C45
+50			4.4	93.3	89.2 / ~~89.6~~	C37 C41
2+00			4.1	93.6	89.5 / ~~90.1~~	C35 C41
+50			3.7	94.0	89.8 / ~~90.5~~	C35 C42
3+00			3.3	94.4	90.1 / 90.0	C34 C43
+50			3.2	94.5	90.2 / ~~91.2~~	C31 C41
4+00			2.9	94.8	90.8 / 91.9	C28 C40
+50	8.93	104.46 / ~~106.48~~	2.18	95.53 / ~~97.55~~	91.2 / ~~92.3~~	C33 C43
5+00			8.7	95.8	92.2 / ~~92.6~~	C29 C36
+50			8.0	96.5	93.2	C37
+84.5			6.3	98.2	97.2 / 93.5	C47
			5.54	98.92		Top Curb SE Cor MIDWAY & Beaumont
6+60			6.6	97.9	97.8 / 94.1	C38
7+00			5.5	99.0	92.6	C44
+50			5.0	99.5	95.2	C43

585) 5.200 .0089 / 4.680 / 52.00

7+06 = Begin 16" WALK

BEAUMONT ST
COLIMA – FOWARD (Cont'd)

		~~106.48~~ 104.26				
8+00			4.2	100.3	95.8	C 25
+50			3.3	101.2	96.2	C 28
9+00			2.5	102.0	97.0	C 50
+50			1.8	102.7	97.6	C 51
10+00			1.5	103.0	98.2	C 48
+50			0.8	103.7	98.8	C 49
H				104.30		
11+00	4.81	~~114.13~~ 109.11	0.16	~~106.32~~	99.4	C 49
+50			4.45	104.7	100.0	C 47
12+00			3.6	105.5	100.6	C 49
12+46	56. Propline Foward					
+53			3.85	105.3	105.0 / 101.3	C 40
SET TBM			1.43	107.68		Top F.H.
CK Curb			3.63	105.48 ~~107.50~~ = 105.50		SE Cor Foward & Beaumont
H	0.04	96.46 ~~98.48~~	12.69	96.42 ~~98.40~~		
H	0.24	~~83.36~~ ~~85.38~~	13.34	83.16 ~~85.14~~		
CK BM	2.02	77.01 ~~79.03~~	8.37	74.99 ~~77.01~~ = 75.33		BP SW Cor Foward & La Jolla Blvd.
H	903	~~82.16~~ ~~84.18~~	3.88	73.13 ~~75.15~~		
CK BM			6.18	75.98 ~~78.00~~ = 77.98	75.96	BP SE Cor Colima & La Jolla Blvd

101.3 − 94.1 = 7.2 (12+53 − 6+60 = 5.93)
7.2 − 5.93 = 1.27 (10+21 − 5.93 = 4.28)
11.86 − 8.20 = 3.66
77.98 − 75.96 = 2.02
77.01 − 75.33 = 1.68
DIF. 0.34

7/21/52

(2) STK'S FOR WATER METERS
L4 PLAYA DEL NORTE
Nor. SIDE of

B.M	12.66	30.06		17.40	LFT NEPTUNE
	Nor.		3.80	26.26	26.8
P	12.32	42.31	0.07	29.99	
	Nor.		5.9	36.4	37.2 ~~37.4~~
	Nor.		0.9	41.4	41.4 ~~37.2~~
P	12.42	54.61	0.12	42.19	
	Nor		11.2	43.4	43.1 ~~44.6~~
	Nor		10.1	44.5	44.0
	Nor.		9.8	44.8	44.4
	Nor.		8.6	46.0	45.6
	Nor.		8.0	46.6	46.3
	Nor.		6.5	48.1	47.8
	Nor.		6.2	48.4	48.2
	Nor.		2.9	50.7	50.5
	Nor (PRC)			51.5	51.1
	Nor.		2.0	52.6	52.3
	Nor.		0.3	54.3	54.2
P	12.55	66.83	0.33	54.28	
ck Curb Nor			6.92	59.91	
ck Curb So			6.24	60.59	

FO5	65'	westerly of	B.C R=299'
FO8	43'		
C2e	~~65~~	easterly of	E.C R 111.10
C3 CO	21.5		
	~~43~~	" of	BC.
CO3	65'		
C2e	~~215~~	Easterly of	EC
CO5	46'	" of	EC. RAD 133.
CO4	65'	" of	EC.
CO4	110	" of	EC
CO3	12.5	" of	BC.
CO3	2'	Easterly	E.C
CO2	20'	"	E.C RAD 152.
CO2	89'	"	E.C
CO4	at	PRC.	
CO3	45'	"	PRC
CO1	95'	"	PRC. RAD 150.2

32nd & Nutmeg
Curb Drain Elevs & Sewer MH. Elevs.

BM	3.26	304.37		301.11
TP	0.14	291.54	12.97	291.40
TP	1.40	281.63	11.31	280.23
TP	0.94	269.36	13.21	268.42
10" C.I. Cross Drain on Nutmeg			2.70	266.66
			20.70	248.66
TP	11.20	291.63		280.23
Sew MHs N&S 32nd & Nutmeg			8.58	
			2.48	
			10.55	
			6.40	
TP	12.45	303.84	0.24	291.39
CK BM			2.73	301.11

Jan 24 1952

BP SW Cor 32nd & Maple

Inv. 10" C.I. Inlet
Inv. 10" C.I. outlet
} SLOPE DISTANCE 46 50

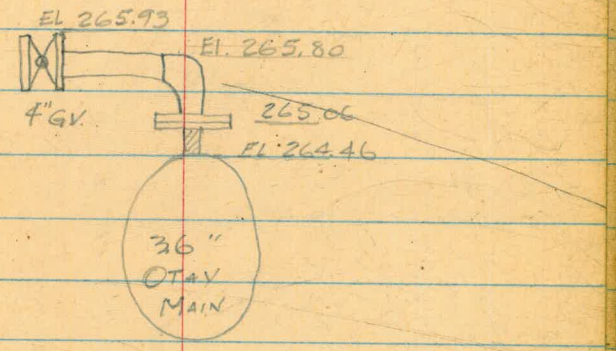
Inv 6" Sew M.H. 83' Nor of Water Xing
AC Pavt at M.H.

Inv. 6" Sew M.H. 217 5 South of
AC Pavt at MH.

ELEV. of Curb & FLANGE AT AIR VALVE BROOKLYN AVE. & OTAY

B.M.	3.97	274.17	270.20
Lip of Gutter (6" THICK)		7.88	266.29 (265.79)
Top Curb (15" THICK)		7.38	266.79 (265.46)
Top present 4" pipe To Air Valve		7.64	266.53 ~~268.53~~
Top Flange out of Otay Main		9.20	264.97
B.M.	3.38	273.58	270.20
Top 36" Otay Main		9.12	264.46
Flange out of 36" Main		8.52	265.06
Flange of 4" G.V.		7.65	265.93
Top of 4" Elbow		7.78	265.80
Lip of Gutter 4½' South of of 4" A.V. Take off from Otay Main		6.58	267.00

Top Hydt. 65TH & Brooklyn.



2680
267.20
.80

Cross Sections at Northerly Side Exchange Place Reservoir

BM	11.96	259.12		247.16
⊕	11.91	270.96	0.07	259.05
Set TBM	2.91	267.89	5.98	264.98

1+71^62 ~~1+64.5~~ (112'w)
℄ = 17' Sly of Prop. Line

1+40^62 ~~1+33.5~~ (81 w)
1+89.5
156.5
1935.8

1+20^62 ~~1+13.5~~ (61 w)
1427.8
1412.5

1+05^62 ~~0+98.5~~ (46 w)

℄ = 7' Sly of Prop Line

0+83^62 ~~0+76.5~~ (24 w)

0+59^62 ~~0+52.56~~ = @ 3/4" I.P. Prop Cor. (Al Bahr St.)
0+00 = " " " "
CK. 2.99 264.90 = 264.95

52.50
80
132.50

Feb. 23, 1954
Beatty
Shorey
Martell
Alexander

Rt. Nly — Lt. Sly

End Conc. Curb (NEly)

248.9 248.2 249.6 252.0 265.5 265.6 266.5 266.5 266.5 265.9 265.8
19.0 19.7 18.3 15.9 2.4 2.3 1.40 1.40 1.40 2.0 2.1
20 20. 15 14.5 2. 1. 0.5 C 0.3 0.5 12
Top Brick Wall — ← A.C. Curb →

247.2 252.2 265.2 265.3 266.4 266.4 265.5 265.7 265.7
20.7 15.7 2.7 2.6 1.52 1.52 2.24 2.24 2.2
28.5 16.5 4 2.5 2.4 1.8 1.3 C 12.1
Yard Level — Cor. Gar. — A.C. Curb

246.3 251.3 257.6 258.8 265.3 265.5 266.1 266.1 265.5 265.5 | 265.8 266.6 266.6 265.2 265.2 262.2 250.2
21.6 16.6 10.3 9.1 2.6 2.4 1.80 1.80 2.40 2.38 | 2.07 1.33 1.33 2.65 2.65 5.65 17.65
25. 23.5 15. 12. 4. 2.2 2. 1.6 1.4 C | 11.7 11.7 12.2 12.2 12.5 15.6 28.
Yard level — A.C. Curb — Fen. 9.0 — Wat. Level — Bott. Res.

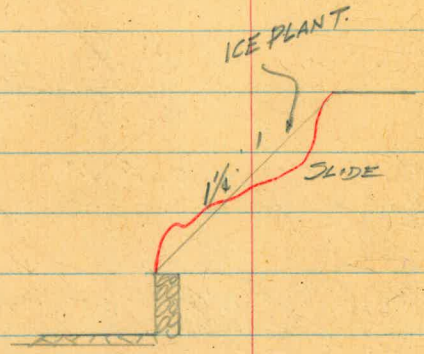
245.1 250.1 252.5 257.2 258.2 265.1 265.3 266.0 266.0 265.3 265.3 265.5
22.8 17.8 13.0 10.7 9.7 2.8 2.6 1.92 1.92 2.59 2.55 2.50
22 2.1 19.5 14.5 12. 3.5 2.4 2. 1.5 1.3 C 12.3
Yard level — A.C. Curb

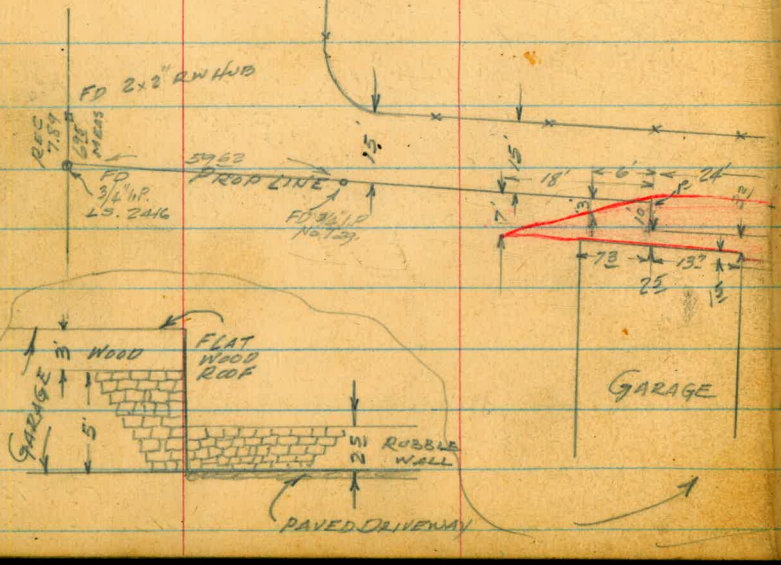
244.9 244.9 250.9 256.9 264.6 264.7 264.7 265.0 265.0 264.5 264.7
23.0 23.0 17.0 11.0 3.3 3.2 3.2 2.95 2.92 3.36 3.20
26 16. 16. 13. 2 C 1.2 1.8 1.80 1.8 19.3

243.8 243.8 254.8 260.4 262.7 262.6 262.8 262.8 262.4 262.0 262.7
24.1 24.1 13.1 7.5 5.2 5.3 5.03 5.05 5.52 5.88 5.24
28 18 16.5 5. C 7.1 7.1 7.80 7.80 21.8 21.9
Conc Curb — Top Conc Curb

F.B. 756
See Additional Sections. pg. 74-75

Survey of Slides
at ~~La Jolla~~ Reservoir
Exchange Place





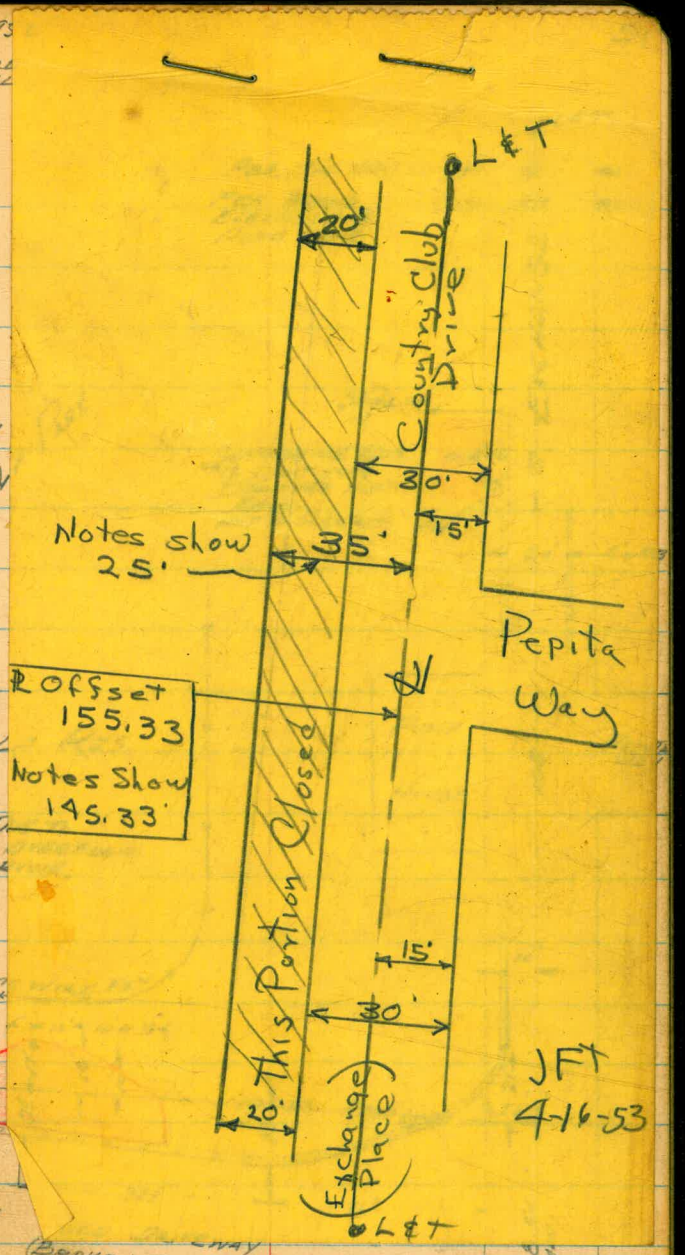
Jan. 28, 19[illegible]
Beatty
Leonard
Powell

MAP 1535
VILLA TRACT
LA JOLL
LOT G

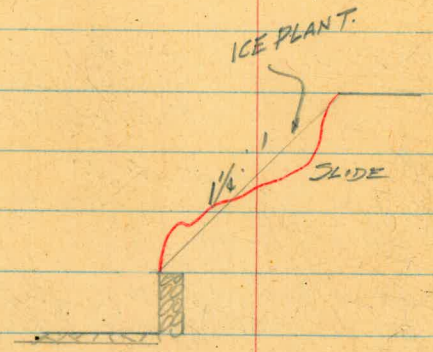
LA JOLL

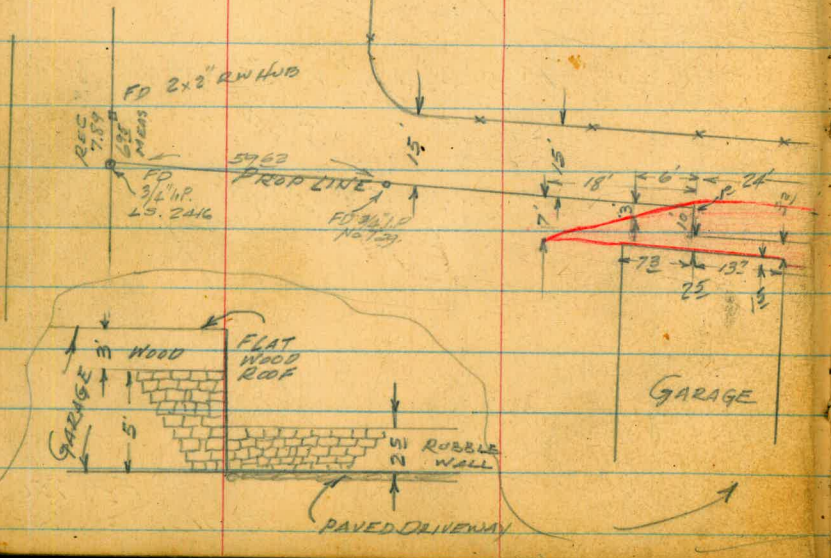
SLOUGHING D
ACCIDENTAL
OF RESE

(BROKEN CONC. SET IN CONC.

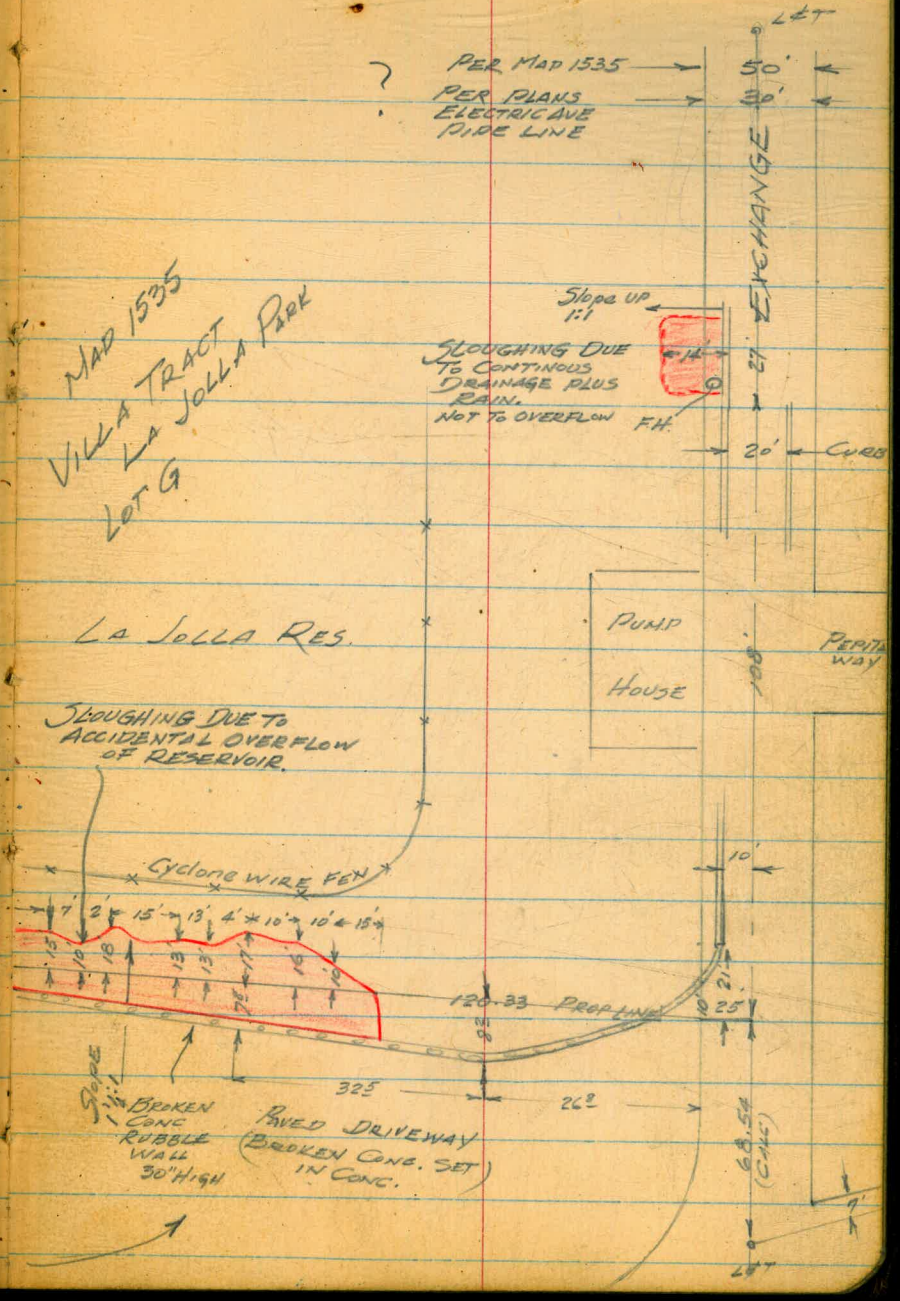


Survey of Slides
at ~~La Jolla~~ Reservoir
Exchange Place





Jan. 28, 19[illegible]
Beatty
Leonard
Powell



BEAUMONT

COLIMA TO FORWARD

(2) WATER METERS

TBM	1.60	109.28		107.68	Top FH SE Cor {Beaumont / FORWARD} pg. 46
12+53 = 5.05 Nor of So. RL Forward Back of WAT MET 22.5 from ℄					
11+49 W			5.8	103.5	103.3 CO 2
11+01.5 E ✓			6.6	102.7	102.7 102.6 CO 2
10+41.5 W			7.2	102.1	101.9 CO 2
TP	2.20	107.83	4.85	102.23	
10+36 E ✓			3.4	104.4	102.7 C 17
9+90 W			6.4	101.4	101.2 CO 2
9+40.5 W			6.75	101.1	100.6 CO 5
9+25 E			4.3	103.5	101.4 C 21
TP	2.56	105.41	4.98	102.85	
8+62 W			5.4	100.0	99.6 CO 4
8+12 E			4.1	101.3	99.8 C 15
7+62 E			5.2	100.2	99.0 C 12
TP	3.73	102.58	6.56	98.85	
6+77 W			5.6	97.0	97.0 CO 0
℄ TP			3.64	98.94	= 98.92

BEAUMONT ST
COLIMA TO FORWARD
(2) WATER METERS

TP	4.92	97.53	92.61	
0+00 = 17' NOR & LT. NOR RL Colima WATER MET. 22E from ℄				
0+42 E		3.7	93.8	92.9	CO 9
1+06 W		4.9	92.6	92.3	CO 3
1+50 E		3.6	93.9	93.6	CO 3
1+64 W		5.0	92.5	92.8	FO 3
2+09 E		3.3	94.2	92.1	CO 1
2+26 W		4.75	92.8	93.2	FO 4
2+39 E		2.4	95.1	94.3	CO 8
2+85 W		4.1	93.4	93.6	FO 2
TP	5.37	99.84	3.06	94.47	
3+38 E		4.2	95.6	94.8	CO 8
3+47 W		6.05	93.8	94.2	FO 4
4+10 W		5.6	94.2	94.6	FO 4
4+57 E		3.5	96.3	95.5	CO 8
4+66 W		4.5	95.3	95.2	CO 1
5+28 W		5.0	94.8	95.6	FO 8
5+36 E		2.4	97.4	97.8	FO 4
5+78 E (5) FH.		0.3	99.5	99.0	CO 5
		0.90	98.94	= 98.92	

CONGRESS ST.
TRIAS to HORTENSIA
℄ PROFILE FOR PROPOSED 6" WATER

BM	11.86	55.61 ✓	43.75	B.P. S.E. S.W. Cor Ardudia & La Jolla Blvd
P	13.37	68.88 ✓	0.10 55.51 ✓	
0+00			2.3 66.58	Northerly Prop Line TRIAS
+25			0.3 68.58	℄ TRIAS
+50			1.1 67.78	Southerly Prop. line Trias
+64			1.0 67.88	
1+00			0.3 68.58	TELE Guy pole 65 LT
				+95 " " " Anchor 68 LT
P	10.20	78.80 ✓	0.28 68.60 ✓	
+50			9.0 69.80	
2+00			7.9 70.90	
+50			7.2 71.60	
3+00			6.3 72.50	
+50			5.1 73.70	
3+85.55	(℄ PT 89°58'30" RT)		4.4 74.40	

HORTENSIA
CONGRESS to SAN DIEGO
℄ PROFILE PROPOSED 6" WATER

		78.80		
			4.4	74.40
0+00 = 3+85.55 Congres.				
0+15 ℄	RCD. "Storm Drain	Rim	1.16	77.64
		Inv.	10.16	68.64
		Rim	5.10	73.70
		Inv.	15.10	63.70
0+50			5.1	73.70
1+00			6.4	72.40
+50			7.8	71.00
2+00			9.4	69.40
+50			10.3	68.50
3+00			11.2	67.60
+55			13.55	65.25
+65.5			13.25	65.53
℄	1.10	69.77 ✓	10.13	68.67 ✓
SET TBM			4.64	65.13
℄	0.02	56.50 ✓	13.29	56.48 ✓
CK BM			12.77	43.73 ✓ = 43.75

Storm Drain M.H 183' LT

Storm " " " 27' RT

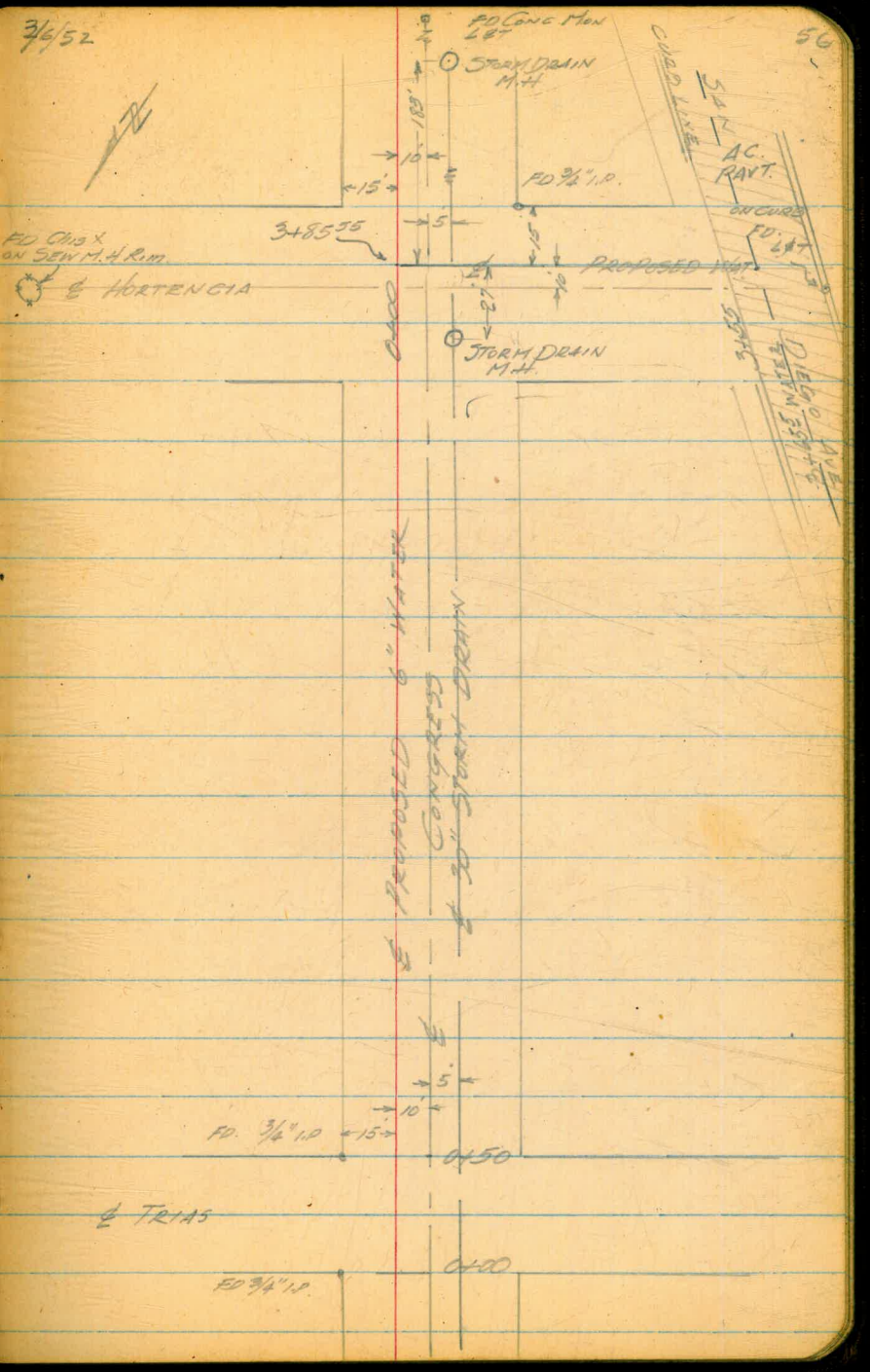
L℄T ℄ Hortensia

82 SE Cor.

CONGRESS & HORTENSIA

6" PROPOSED WATER

3/6/52



April 14, 1952
Beatty
Powell

Thomas St.
Haines To Ingram
(2) Stks & Grades Set For Water Meters
(Back Met. Set 23' from ℄ St. 3'-Back of curb)

B.M.	12.12	56.27		44.15		L.&T. ℄ Reed & Ingram
TP	5.82	61.36	0.73	55.54		
3+55 Nor.			5.82	55.54	54.2	C1.3
2+98.5 Nor			4.84	56.52	54.8	C1.7
2+27 So.			6.63	54.73	54.7	C0.0
2+04 Nor			5.33	56.03	55.2	C0.8
1+70 Nor			5.26	56.10	55.2	C0.9
1+27 So			6.30	55.06	54.5	C0.6
1+00 Nor			5.06	56.30	54.7	C1.6
0+87 So			5.82	55.54	54.1	C1.4
0+69 Nor			4.40	56.96	54.4	C2.6
0+23 So.			6.53	54.83	53.3	C1.5
0+00 = E Prop Line Haines						
ck Curb SE Cor.			8.16	53.20	= 53.19	

169.9
34.65
204.55
22.75
227.30
71.2
298.5
56.5
355.0
152.5
507.5

22.7
46.2
68.9
18.3
87.2
12
99.6
27.2
126.8
43.1
169.9

E. St.

(4) Stk's & Grades for 6" Main 30th To 31st

4-17-52

187.6
3.7
191.3
7

BM	2.28	189.91		187.63		NW BP. 30th & E		
13+40			5.9	184.0	181.1 ~~180.4~~	~~$C3^{6}$~~ Conn T. Main	Top Existing 6"	El. 181.73 Rod 8.18
+50			5.8	184.1	181.2 ~~180.3~~	~~$C3^{8}$~~ $C3^{6}$		Bot 181.1
14+00			5.44	184.5	181.7	~~$C2^{8}$~~ $C3^{8}$		
+50			4.94	185.0	182.2	~~$C2^{8}$~~ $C3^{8}$		
15+00			4.46	185.5	182.7	~~$C2^{8}$~~ $C3^{8}$		
+50			4.11	185.8	183.2	~~$C2^{6}$~~ $C3^{8}$		
16+00			4.06	185.8	183.2	~~$C2^{6}$~~ $C3^{8}$		
+50			4.67	185.2	182.7	~~$C2^{5}$~~ $C3^{8}$		
17+00			5.70	184.21	181.6	~~$C2^{6}$~~ $C3^{8}$		
+50	2.08	184.53	7.46	182.45	179.6	~~$C2^{9}$~~ $C3^{8}$		
18+00			3.43	181.10	177.3	~~$C3^{8}$~~ $C4^{6}$		
+50			4.55	180.0	175.0	~~$C5^{0}$~~ $C4^{4}$		
19+00			5.41	179.1	176.1	~~$C3^{8}$~~ $C3^{8}$		
+40 GV.			6.04	178.5	175.9	~~$C2^{6}$~~ $C3^{8}$		
CK BM			5.59	178.97 =	178.99	SW BP. 31st & E		

VOID

VOID

See Book 797 Pg 38

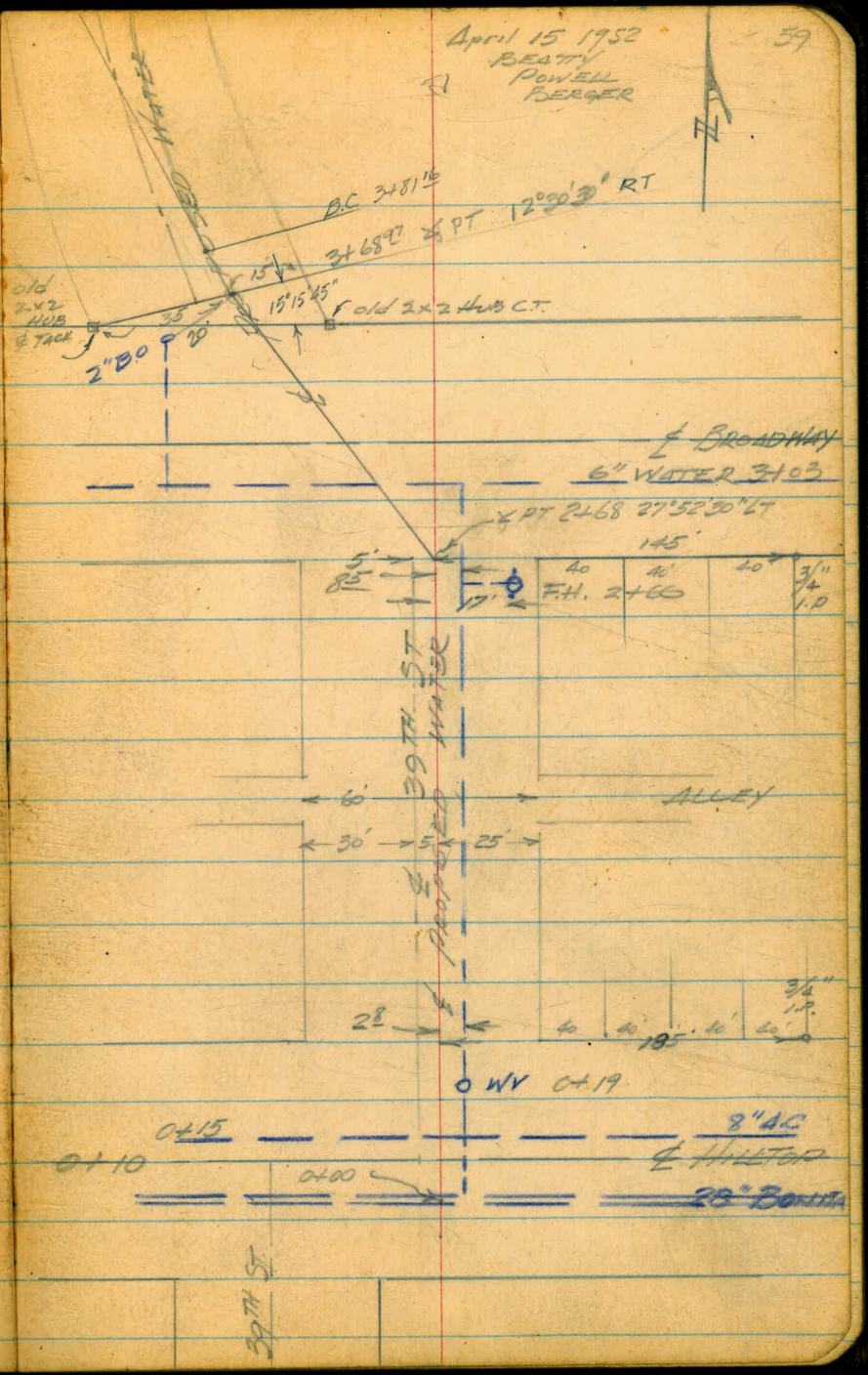
39TH ST
HILLTOP TO FEDERAL BLVD
PROPOSED 16" WATER

3+68.97 ℄ PT. 12°30'30" RT

2+68 ℄ PT. 27°52'30" LT.

0+00 ℄ 28" BONITA PIPELINE

April 15 1952
BEATTY
POWELL
BERGER



39TH ST
HILLTOP TO FED. BLVD
PROPOSED 16" WATER

10+19.96 POT

9+69.96 POT.

8+67.50 EC.

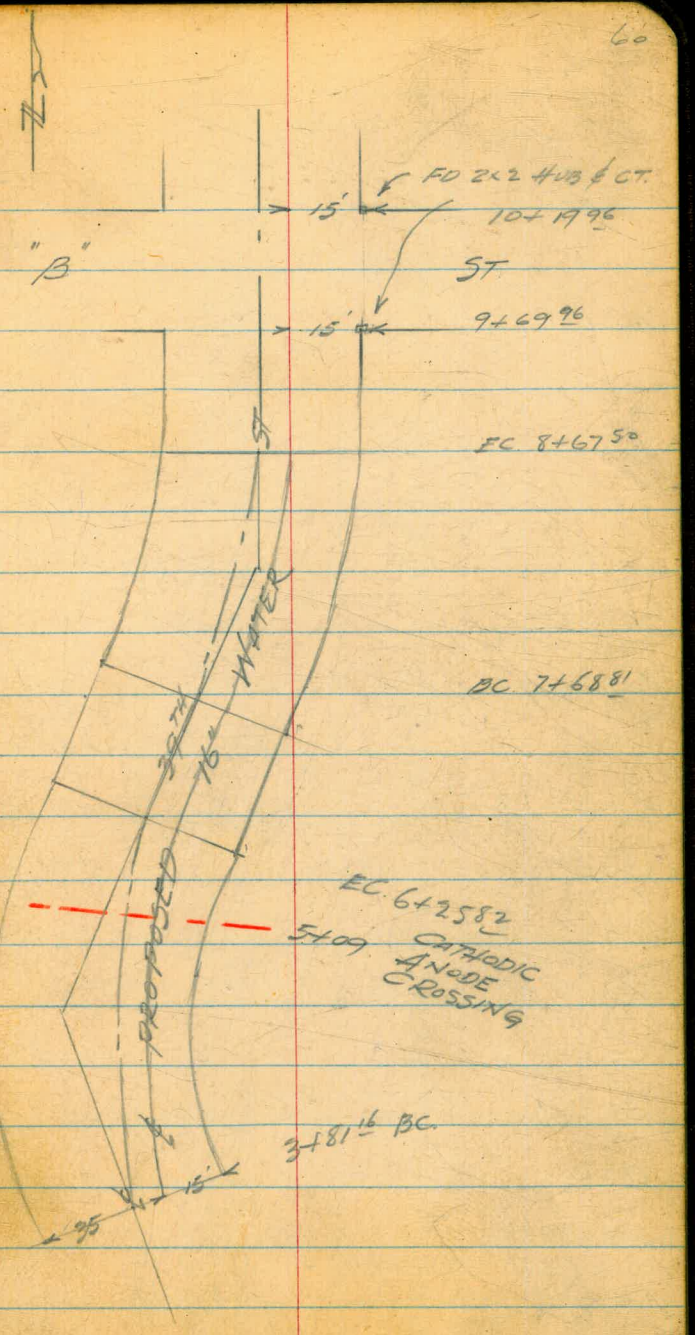
Δ = 27°47' LT
R = 201.22
T = 49.79
L = 97.62

7+68.81 BC.

6+25.82 EC.

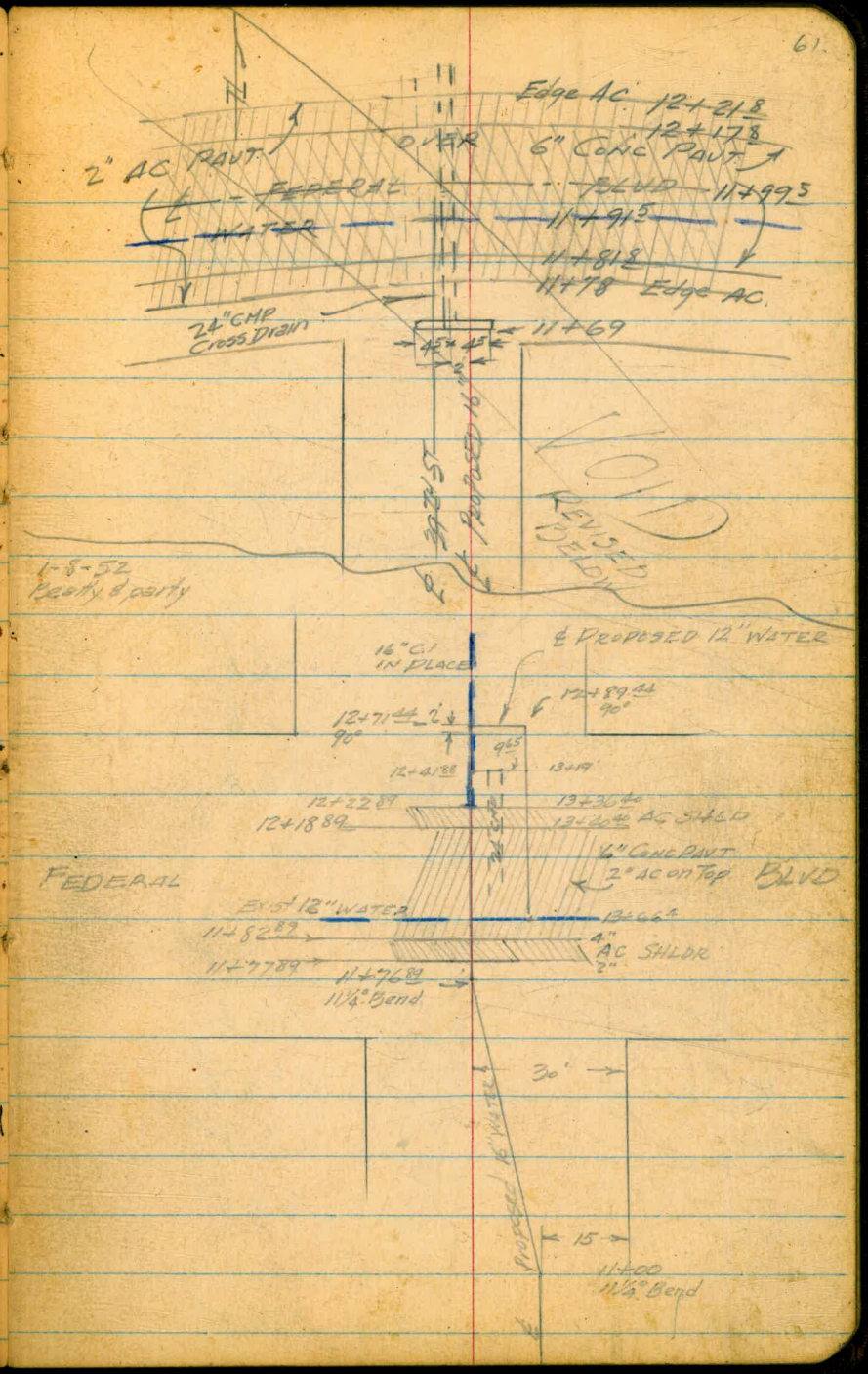
Δ = 43°28' RT
R = 322.5
T = 128.55
L = 244.66

3+81.16 BC.



39TH ST
HILLTOP TO FEDERAL BLVD
PROPOSED 16" WATER

BM	8.13	83.48	75.35
11+76.89	AT. & PT (11½ RT)	5.34	78.14
11+77.89	on AC Shldr	5.31	78.17
11+82.89	on Edge	5.10	78.38
12+00.89	& PAVT.	4.66	78.82
12+18.89		4.43	78.45
12+22.89		5.05	78.43
12+27		5.3	78.18
12+28		4.7	78.78
12+38		4.7	78.78
12+65	in bottom creek	8.6	74.88
12+68	" " "	8.8	74.68
12+71.44	& PT (90° RT)	7.8	75.78
12+94		5.7	77.78
12+89.46	& PT (90° RT)	4.8	78.66
13+00		4.7	78.78
	Top 24" C.M.P 9.65 RT 13+19	7.64	75.82
13+30		4.6	78.88
13+31		5.1	78.38
13+36.40	Edge Shld	4.86	78.62
13+40.40	Edge Pavt	4.75	78.73
13+58.40	& PAVT	4.43	79.05
13+66.40	& Exist WATER	4.60	78.88
CK. BM		8.13	75.35



APRIL 18, 1972

BEATTY
KING
POWELL

39TH ST.
HILLTOP TO FEDERAL BLVD
& PROFILE OF
PROPOSED 16" WATER

BM	6.22	172.75		166.53	BP S.W Cor 39TH & HILLTOP
0+00			5.6	167.2 ✓	
+50			5.75	167.0 ✓	
1+00			5.85	166.9 ✓	
+50			5.2	167.6 ✓	
2+00			5.2	167.6 ✓	
+50			6.8	166.0 ✓	
2+68	⊄ PT		7.3	165.5 ✓	2+66 17 RT FH = So prop line Broadway
3+00			9.9	162.9 ✓	
+03			10.0	162.8 ✓	WATER Xing
+31			12.25	160.5 ✓	
IP	0.83	162.05	11.53	161.22	
+50			5.7	156.4 ✓	
3+68 97	⊄ PT		7.9	154.2 ✓	20' LT 2" B.O
3+81 16	B.C		8.8	153.3 ✓	
4+00			10.4	151.7 ✓	
+50			13.3	148.8 ✓	
IP	Top grd Stk 1.88	151.31	12.62	149.43	
5+00			5.0	146.3 ✓	

39TH ST
CONT'D

		151.31		
5+08		4.3	147.0	✓
+14		4.3	147.0	✓
+23		6.8	144.5	✓
+50		8.7	142.6	✓
~~6+00~~				
6+00		13.0	138.3	
~~+50~~				
PI	0.84	139.63	12.52	138.79
6+25.82 EC.		4.5	135.1	
+50		7.8	131.8	
PI	0.76	127.28	13.11	126.52
7+00		3.5	123.8	✓
+50		9.8	117.5	✓
7+68	BC.	11.9	115.4	✓
PI	2.66	116.89	13.05	114.23
8+00		4.6	112.3	✓
+19		5.9	111.0	✓
+20		7.5	109.4	✓
+26		10.4	106.5	✓

10' RT To Anode point

5+09 ANODE Xing

143.6 7.1 10 — 148.3 — 144.5 C 3.0 10

142.4 8.9 10 — 142.6 C — 147.4 2.9 10

138.3 C — 137.2 14.1 3 — 138.3 13.2 8 — 140.6 10.7 10

134.4 5.2 10 — 133.7 5.9 7 — 133.7 5.9 5 — 134.6 5.0 2 — 135.1 X — 132.8 6.5 5 — 136.8 2.8 10

131.0 8.6 10 — 130.4 9.2 4 — 131.8 C — 128.2 11.4 4 — 133.6 6.0 11

Nail in Pole 40' RT 7+25
(4-30-52)

123.1 4.2 8 — 123.8 C — 123.8 3.5 2 — 122.5 4.8 4 — 125.0 2.2 8

120.4 6.7 10 — 117.5 C — 117.5 9.8 1 — 117.5 11.2 3 — 120.4 6.9 10

115.4 11.9 10 — 115.4 C — 115.6 11.7 3 — 118.8 8.5 10

112.0 4.9 10 — 112.3 C — 112.6 4.5 3 — 111.4 5.5 5 — 113.5 3.4 10

	116.89			
8+35		10.8	106.1	✓
+46		10.3	106.6	✓
+49		8.3	108.6	✓
8+50		8.2	108.7	✓
9+00		10.5	106.4	✓
+16		12.4	104.5	✓
P	0.69	104.50	13.08	103.81
+50		4.3	100.2	✓
10+00		10.9	93.6	✓
+25		14.2	90.3	✓
P	3.26	94.58	13.18	91.32
+32		5.0	89.6	✓
+35		6.2	88.4	✓
+41		4.9	89.7	✓
+50		5.6	89.0	✓

104.0 103.2 108.3 108.7 109.9 110.1 112.7
12.9 13.7 8.6 8.0 6.8 4.2
10 8 2 C 2 3 10

105.1 106.4 107.3
11.8 C 9.6
10 10

100.6 104.4 104.5 107.8
16.3 12.5 9.1
10 1 C 10

95.4 98.8 100.2 103.6
9.1 5.7 C 1.2
10 5 10

91.4 91.7 93.6 98.4
13.1 12.8 C 6.2
10 5 10

92.7 88.2 90.3 93.8 94.3
11.9 16.3 10.7 10.2
10 4 C 7 10

92.7 89.0 89.0 87.6 87.9 90.9
1.7 5.6 89.0 5.6 7.0 6.7 3.7
10 2 C 4 C 8 10

39TH ST

		92.58			
10+63			7.1	87.5 ✓	
+73			7.2	87.4 ✓	
+85			6.5	88.1 ✓	
11+00			8.4	86.2 ✓	
+15			8.3	86.3 ✓	
+25			9.8	84.8 ✓	
TP	1.04	82.77	12.85	81.73	
+55			2.6	80.2 ✓	
+62			5.3	77.5 ✓	
11+69			6.9	75.9 ✓	
+69			4.83	77.9	
+78			4.73	78.0	
CK BM			7.63	75.14 = 75.35	BP. SW. End Bridge Curb.
11+81.8	Edge Conc Pavt (Covered with AC.)				
11+91.5	WATER Xing				
11+99.8	℄ FEDERAL BLVD				
12+17.8	Edge Conc Pavt. Covered with AC				
12+21.8	Edge A.C. Shldr.				

91.6 86.2 84.3 82.1 81.6 83.8
3.0 10.3 12.5 13.0 10.8
10 C 5 6 8 10

88.8 84.8 82.3 78.8 82.1
5.8 12.3 15.8 12.5
10 C 7 8 12

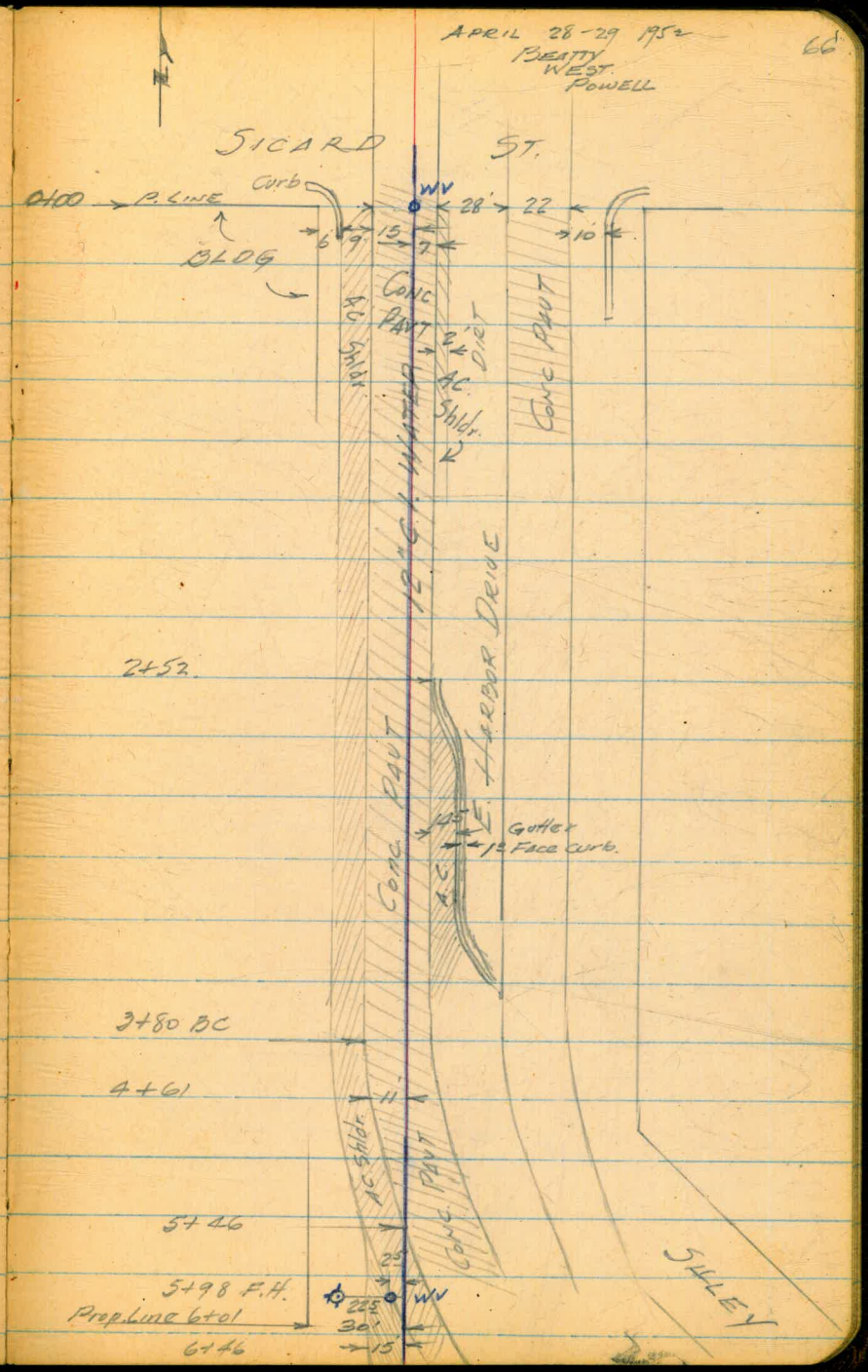
82.6 81.7 80.2 79.4 79.2 79.0
0.2 1.1 3.4 5.6 3.8
10 5 C 2 5 10

74.74
2' LT ℄ 24" CMP ℄ 8.03
(9' HdWL)

LOCATION OF 12" C.I.
EAST HARBOR DRIVE
SICARD ST - SHELEY ST.

APRIL 28-29 1952
BEATTY
WEST
POWELL

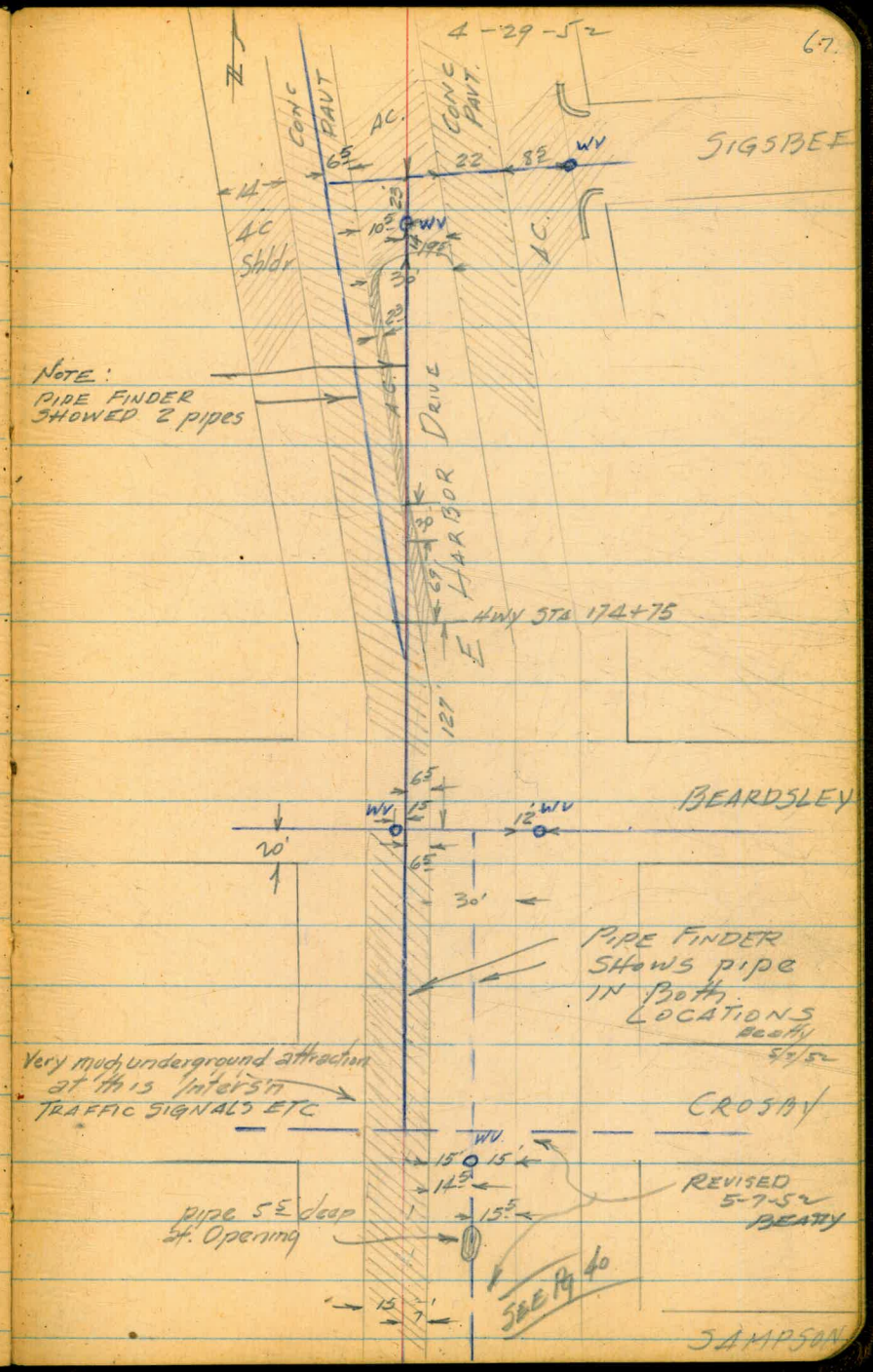
66



LOCATION 12" C.I.
EAST HARBOR DRIVE
SIGSBEE - SAMPSON

4-29-52

67.



Alley Blk 89
North of Myrtle E of Wilson
& PROPOSED WATER 5' E & Alley

6+13 South Line Myrtle

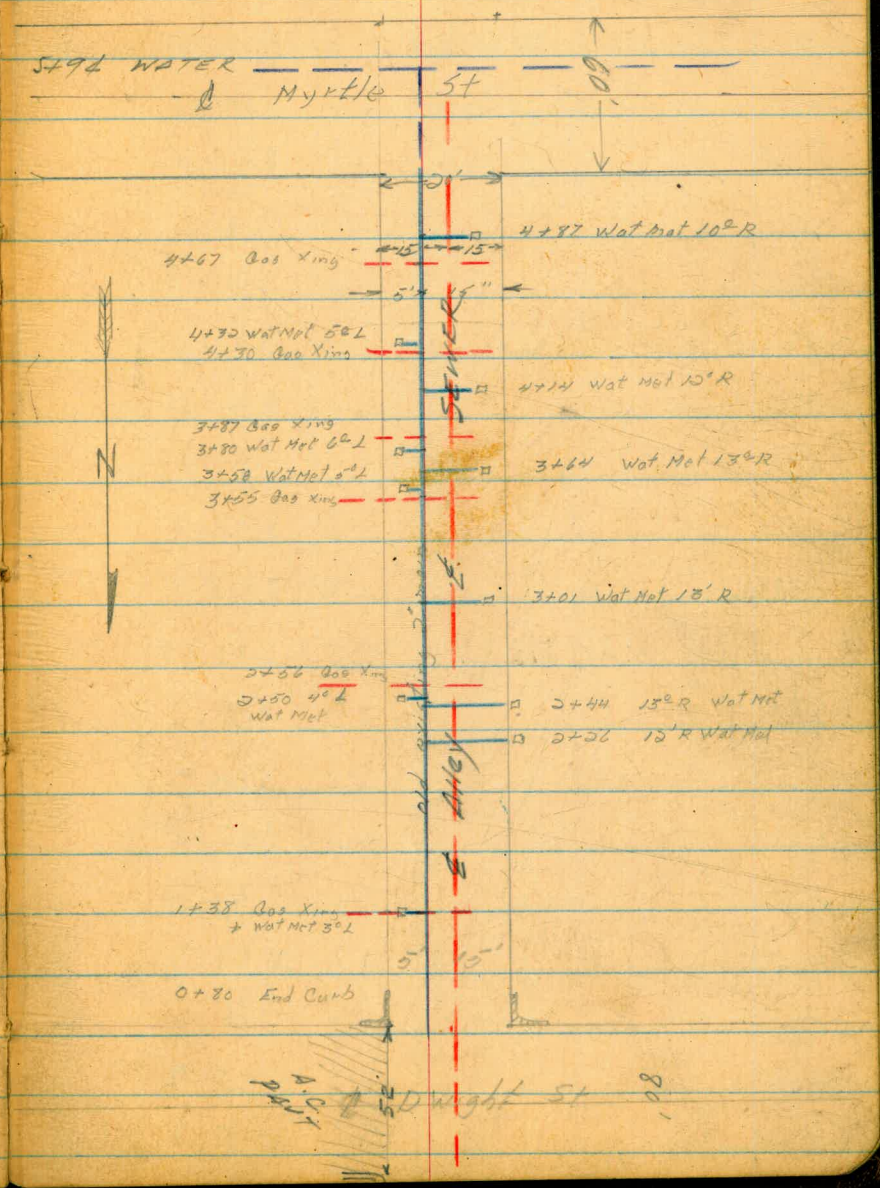
5+53 North Prop Line Myrtle

0+80 S prop line Dwight

0+00 North Prop Line Dwight

West
Powell
Kemp

7-28-52 68



Alley BLK 89
Nor of Myrtle, E of Wilson
& Profile - Proposed Water

	B.S.	H.I.	F.S.	ELEV.	
BM	0.61	326.94		327.55	BP NW Cor Dwight & 36th ST
0+00	N. Prop line Dwight		2.1	324.8	
+14			3.2	323.7	
+50			3.1	323.8	
+67			3.7	323.2	
+80	So. Prop line Dwight		3.6	323.3	
1+00			4.4	322.5	
+50			5.8	321.1	
2+00			8.2	318.7	
+50			11.2	315.7	
P	0.10	313.79	13.25	313.69	
3+00			1.5	312.2	
+50			3.5	310.2	
4+00			6.2	307.5	
+50			7.6	306.1	
5+00			8.0	305.7	
+50			8.1	305.6	
+55	Nor P.L. Myrtle		8.1	305.6	
+72			8.3	305.4	
6+00			8.4	305.3	

Alley BLK 89
& Profile
(Cont'd.)

313.79

6+13	So property line Myrtle	8.3	305.4
TP	13.26	0.35	
CR BM.	13.97	0.36	

ALLEY BLK 92
Nor of MRYTLE E. of 37TH
& PROFILE PROPOSED WATER

	B.S.	HI	F.S.	ELEV.
BM	2.48	322.47		319.99
0+00	Nor prop line Dwight		3.6	318.8
+10			4.8	317.6
+50			5.0	317.4
+65			5.8	316.6
+80	So. prop. line Dwight		5.2	317.2
1+00			4.8	317.6
+40			5.6	316.8
+43.5	Edge grease rock		5.8	316.6
+43.5			5.8	316.6
+58			6.9	315.5
+62			9.8	312.6
+70			10.3	312.1
P	0.03	309.45	13.05	309.42
2+00			5.3	309.1
P	0.00	296.67	12.78	296.67
+25			0.0	296.67
+45			4.6	292.0
+50			6.5	290.1

7-29-52
TRANSIT - West
Ch. POWELL
Ch. KEMP
A LEVEL BEATTY
FISH

BP NW COR DWIGHT & 37TH

7.8 7.3 8.5
C 1 7 8

2.0 8.5
5 C 5

+3.5 2.7
5 C 5

Alley BLK 92
& Profile
Cont'd

P	0.07	284.22	12.52	284.15
3+00			11.0	273.2
+13			12.3	271.9
+45			4.2	280.0
+63			1.0	283.2
+75			+1.8	285.0
P	12.49	294.64	2.07	282.15
P	11.16	302.33	3.47	291.17
+90			9.7	292.6
4+00			6.3	296.0
+17			2.1	300.2
P	8.23	309.73	0.83	301.50
+55			6.6	303.1
5+00			6.5	303.2
+50			5.6	304.1
+53	Nor. PL Myrtle		5.7	304.0
6+00			6.5	303.2
6+04			7.1	302.6

$\frac{5.3}{5}$ ℄ $\frac{4.9}{5}$

Alley Blk 92
& Profile
Cont'd

309.73

6+06			8.0	301.3
6+13	So prop. line Myrtle		8.3	301.4
〃	10.12	319.78	0.07	309.66
〃	5.40	324.32	0.86	318.92
CK BM.			4.33	319.99

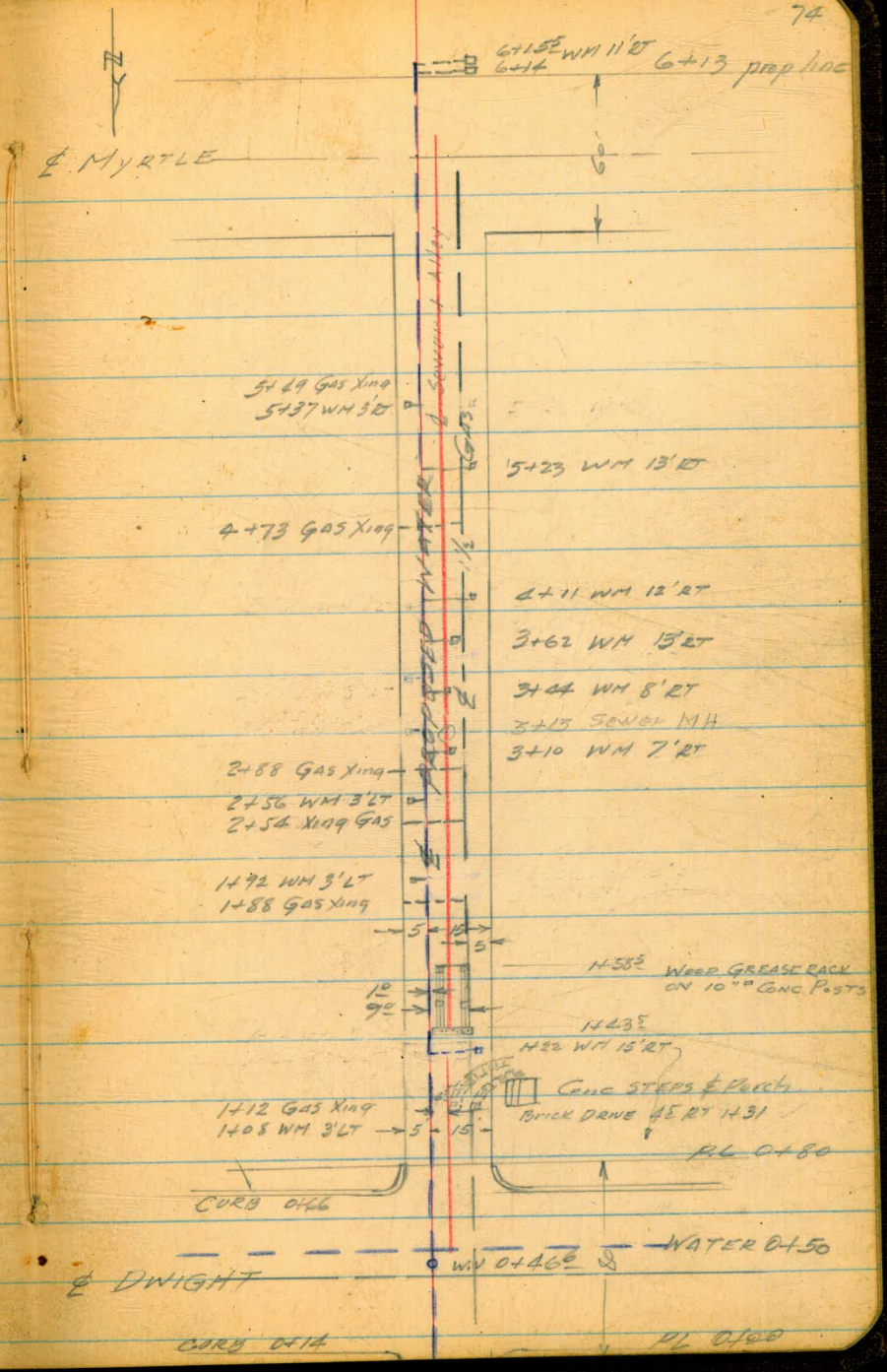
ALLEY BLK 92
Nor of Myrtle – East of 37th
℄ Proposed Water

6+13 So prop line Myrtle

5+53 Nor prop line Myrtle

0+80 So prop line Dwight

0+00 Nor prop line Dwight



Alley Blk 55

North of Wightman East of 38th.

Profile & Proposed PL

West
Martell
Varonfakis

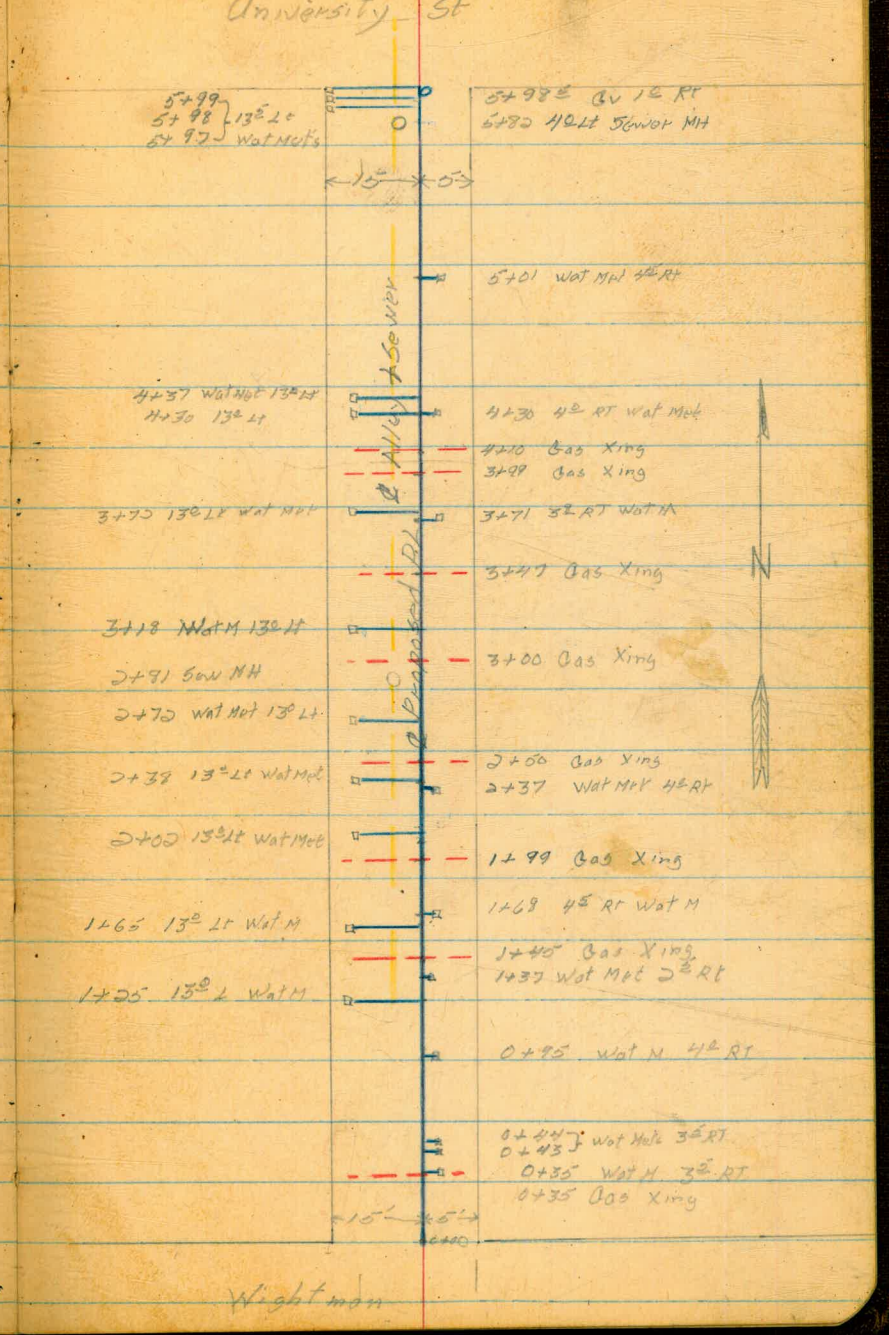
	+	Hi	−			
	+4.18	351.48		347.30	NW B.P. 347.30	39th & University
	1.15	341.25	11.38	340.10		
0+00	6.37	335.56	12.06	329.19	North Prop. line Wightman edge of oil	
+50			10.7	324.8		
1+00			10.7	324.8		
+50			7.4	328.1		
2+00			1.89	333.67	Turn on D-nail	
	12.15	345.82				
+50			6.6	339.2		
2+81			4.85	+6.65 341.0	South rim MH	
3+00			4.3	341.5		
+50			2.8	343.0		
4+60			1.5	344.3		
+50			0.41	345.41	Turn on nail	
	6.57	351.98				
5+00			5.3	346.6		
+50			4.6	347.3		
+82			4.0	+8.00 347.9	South rim MH	
6+00			5.6	346.3		
			4.67	347.31 = 347.30		

Alley Blk 55

North of Wightman East of 38th

6+00 South prop line University

0+00 North prop line Wightman



Alley Blk 54

North of Wightman East of 39th

Sta	+	Profile ℄ Proposed Hi	−	Water PL
	5.11	352.71		347.30
0+00			11.50	341.21
+50			9.3	343.41
1+00			8.5	344.21
+50			8.5	344.21
2+00			8.0	349.70
+50			7.8	344.91
3+00			7.4	345.31
+50			6.6	346.11
4+00			6.3	346.41
+50			5.6	347.11
5+00			4.6	348.11
+50			4.4	348.31
6+00			4.4	348.31
			5.11	347.30 = 347.30

West
Mortell
Varonfaking

5 Aug 52 — 77

BM NW BP 39th + University

8" Gate Valve North prop line Wightman

South prop line University

Alley Blk 57

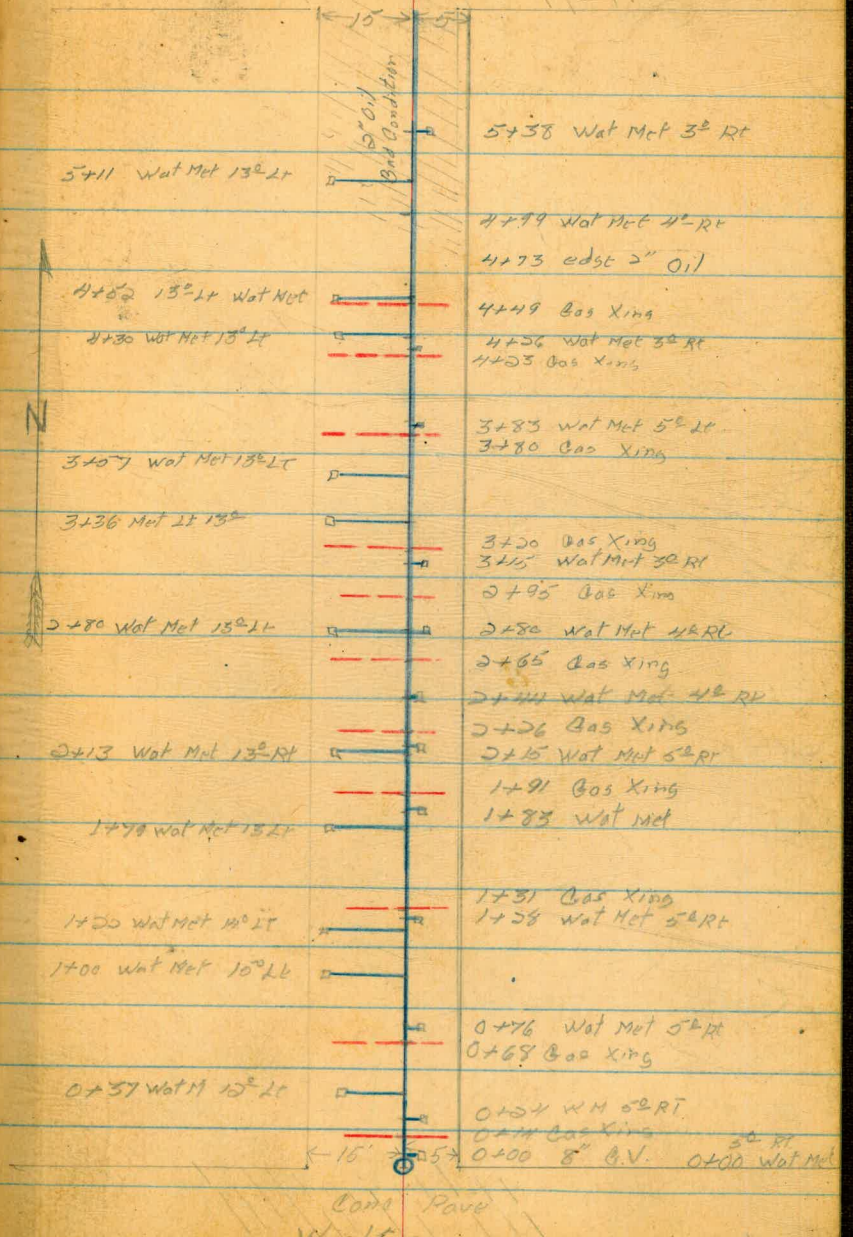
6+00 South prop line University

0+00 North Prop Line Wightman

University

Conc Pave

78



Stks for water
Meters
Santa Cruz E of

7+77	22.38		213.61
0+23		3.0	218.4
+42		2.3	219.1
0+73		6.1	215.3
+58		4.4	217.0
1+38		8.8	212.6
1+31		10.2	211.2
+59		11.9	209.5
1.04	209.49	12.94	208.45
1+96		2.5	207.0
2+33		5.4	204.1
2+70		6.3	203.2
2+91		9.7	199.8
+98		10.3	199.2
0.61	198.50	11.58	197.91
3+23		2.7	195.8
+50		5.2	193.3
+95		8.7	189.8
4+41		11.2	187.3
		11.80	186.72

West
Williams
Kemp
Vanderfakis

79

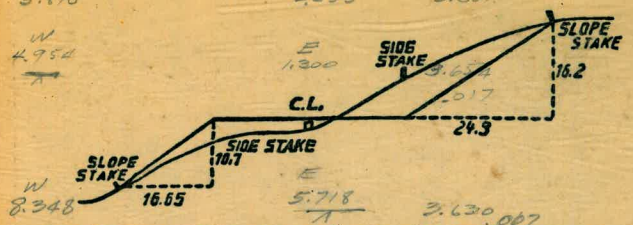
TBM Nail in Post

217.5	C0	9	WMS
216.8	C2	3	WMN
214.4	C0	9	WMS
215.9	C1	1	WMN
210.0	C2	6	WMN
210.2	C1	0	WMS
208.3	C1	2	WMS
205.8	C1	2	WMN
202.9	C1	2	WMS
201.5	C1	1	WMN
198.4	C1	4	WMS
197.0	C2	2	WMN
195.5	C0	3	WMS
192.1	C1	1	WMSN
189.2	C0	6	WMSS
183.9	C3	4	WMN

186.71 TBM Nail in Pole

.9	
1.35	0
2.85	1
4.35	2
5.85	3
7.35	4
8.85	5
10.35	6
11.85	7
13.35	8
14.85	9
16.35	10
17.85	11
19.35	12
20.85	13
22.35	14
23.85	15
25.35	16
26.85	17
28.35	18
29.85	19
31.35	20
32.85	21
34.35	22
35.85	23
37.35	24
38.85	25
40.35	26
41.85	27
43.35	28
44.85	29
46.35	30
47.85	31
49.35	32
50.85	33
52.35	34
53.85	35
55.35	36
56.85	37
58.35	38
59.85	39
61.35	40
62.85	41
64.35	42
65.85	43
67.35	44
68.85	45
70.35	46
71.85	47
73.35	48
74.85	49
76.35	50

SAN FRANCISCO



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ 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	71.20	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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