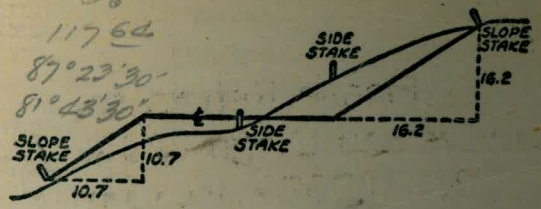
3404089 BC
68'
11764
87°23'30"
81°43'30"



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.

BM 434.76
4.01
438.77
4.32
434.45

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

INDEX

SEMINOLE Dr. Estelle St to El Cajon

Stks for Meters	Vert mov.		21' From Q St Set 1" Tubing Ob	
5.37	471.05		465.68	
2+92 Met East		7.4	463.7	462.4
3+53 Met East		7.4	463.7	462.7
4+25 Met East		6.3	464.8	463.1
4+58 (5') FH		6.0	465.1	464.4
6+33 Met West		4.8	466.3	464.0
6+65 Met Ely		4.9	466.2	464.0
7+41 Met Wly		5.2	465.9	464.4
7+59 Met Ely		5.1	466.0	464.5
8+44 Met Ely		5.1	466.0	464.7
8+59 Met Wly		5.6	465.5	464.7
9+22 Met Ely	468 65	4.95	466.10	464.3
9+42 Met Ely		2.9	465.8	463.6
11+53 Met Ely		5.1	463.6	461.8
13+66 Met Wly		6.9	461.8	458.6
14+36 Met Wly		8.4	460.3	457.9
15+18 Met Wly	46278	9.53	459.12	457.0
15+81 Met Wly		5.3	457.5	456.6
16+38 Met Wly		5.8	457.0	456.3

West
Williams
Varvanfakis
Kellhofer
H9301

1/16/51

See FB 2204

Spike in pole 5E Cor. Seminole & Adams

C L 3		4549
C L 2		4555
C L 1		4561
C O 1		2 existing FH 22° Rt
C R 3		4570
C R 3		4635
C L 5		4630
C L 5		4611
C L 3		4645
C O 8		4650
C L 8		4651
C R 3		4665
C L 8		6372
C R 3	461.7	4702
C R 1	460.1	4706
~~C R 1~~	C L 8 RE-STAKED	4742 ✓
~~C O 9~~	C O 2 RE-STAKED	4758 ✓
C O 1		4760

		462.78				
16+11	⑤ Q FH		8.0	454.8	452.2	
17+69	Met Ely		5.9	456.9	455.9	
20+84	Met Ely 7.3	465.36	4.73	458.05	457.0	
22+04	⑤ Q FH		6.6	458.8	458.7	
23+00	Met Ely		5.6	459.8	457.9	
23+52	Met Ely		4.7	460.7	458.0	
23+88	Met Ely		4.9	460.5	458.3	
24+11	Met Wly		5.0	460.4	458.8	
24+44	Met Ely		5.2	460.2	458.5	
	1.31	464.75	4.92	460.44		
25+57	Met Wly		4.3	460.5	459.2	
27+11	Met Ely		6.7	458.1	457.1	
			6.59	458.16	=	
			4.75	460.00	= 460.0	

7.7
1.8
= 4

E 2 4 — existing FH sets 16 9 From ℄ St

C 1 0

C 1 1 — 4777

C 0 4 — existing FH 23' from ℄ St

C 1 9 — 4789

C 2 7 — 4791

C 2 2 — 4797

C 1 6 — 4790

C 1 7 — 4799

C 1 3 — 4848

C 1 2

See FB 2254 P36

458.26 Sewer-MH 7'Lt 27+71.5

See FB 2254

26+63 38.9 Rt End 3.0 Conc Walk each P37

ACORN ST Seminole St to Virginia Ave

Stks for Vert Riser Set 16' from ℄ St 119332

TBM	1.51	466.17	463.66	
3+92	Meter South	8.8	457.4	455.6
4+91	" " South	10.1	456.1	453.7
5+51	Meter South	13.4	452.8	452.5
Check T.B.M		2.51	463.66 = 463.66	
	5.74	47 142	465.68	
1+16	(3) FH	1.9	466.5	466.1
		5.74	465.68	

West
Williams T
Varonfakis
kellhofer +

Cloudy

4/17/56
191 Rt 1+92.65

TBM Spike in power pole No 179009

C1	2	6515
C2	4	6519
CO	3	6535

+Acorn

TBM Spike in power pole SE cor. Seminole

CO 1 Betw 63rd & Acorn Sta from FB 234

52nd St TROJAN to EL Cajon

Stks for Meters

West
Williams
Varonfakas
Kellhofer

3868

0+00 Nly prop Line Trojan St

Vert Riser Set 18E Wly of ℄ FH			Set 20' Ely of ℄ 51'4		3/49D 11/9/56	
12.57	340.12		327.55		Spike in PP N 55455 T	SW Cor 52nd + Trojan
0+49 Met Wly		4.5	335.6	334.0	C1 6	4308
TP 0+85 Met Wly BO9	352.80	0.41	339.71	339.0	C0 7	4312
1+07 Met Wly		6.7	346.1	342.3	C3 8	
13.12	365.97	0.05	352.75			
1+87 Met Wly		4.6	361.3	351.4	C9 9	4322
3.22	365.39	3.70	362.17			
3+48 Met Wly		1.9	363.5	359.1	C4 4	4340
3+97 Met Wly		2.7	362.7	359.4	C3 3	
3+99 ⑤ ℄ FH		4.8	360.6	360.3	C0 3	existing FH 237 Rt
4+89 MET. WLY		3.8	361.6	360.5	C1 2	4364 52nd SWD 5/25
5+61 Met Wly		1.9	363.5	361.3	C2 ?	4372 -46 - 76 stk
13.20	378.16	0.13	364.96			
12.35	389.82	0.69	377.47			
		3.03	386.79 =		386.82	SW BT 51st + EL Cajon

ALLEY Blk #2 N of University
E of 44th St

0+00 Sty Prop Line Polk

Stks for Meters	Vert Riser	Set 3½ L 13½ Rt		
2.19	358.41	356.22		
0+15 Met Ely		4.5	353.9	352.7
0+36 Met Wly		4.6	353.8	352.8
0+49 Met Ely		4.8	353.6	352.7
0+68 Met Wly		4.6	353.8	352.8
0+83 Met Ely		4.1	354.3	352.9
1+25 Met Ely		4.8	353.6	352.6
1+21 Met Wly		5.1	353.3	352.6
1+61 Met Ely		5.4	353.0	352.0
1+75 Met Wly		5.8	352.6	351.8
2+19 Met Wly		6.1	352.3	351.2
2+29 Met Ely		5.7	352.7	351.1
2+72 Met Wly		6.1	352.3	350.9
5.63	358.02	6.02	352.39	
2+89 Met Ely		5.5	352.5	351.1
3+07 Met Ely		5.6	352.4	351.1
3+16 Met Wly		5.3	352.7	351.2
3+50 Met Ely		5.3	352.7	351.4
3+64 Met Wly		5.2	352.8	351.5

West
Williams
Varonpakis
Kellhofer

3214 D 4/19/56

BM Top FH 44th & Polk

C1 2	
C1 0	
C0 9	
C1 0	
C1 4	
C1 0	
C0 7	✓
C1 0	
C0 8	✓
C1 1	✓
C1 6	
C1 4	
C1 4	
C1 3	
C1 5	✓
C1 3	
C1 3	

Alley Blk. 2 cont

358.02

7+80 Met Ely	5.1	352.9	351.6	C 1 3
4+10 Met Ely	5.4	352.6	351.8	C 0 8
1+23 Met Wly	5.2	352.8	351.8	C 1 0
1+77 2 Mets Ely	4.9	353.1	352.1	C 1 0 ✓
4+76 Met Wly	4.8	353.2	352.0	C 1 2 ✓
191 357.06	2.97	355.15		
	7.51	349.55	=349.5	NW BP 45th & University

ELLIOTT St Chatsworth Blvd to
NW Terminus

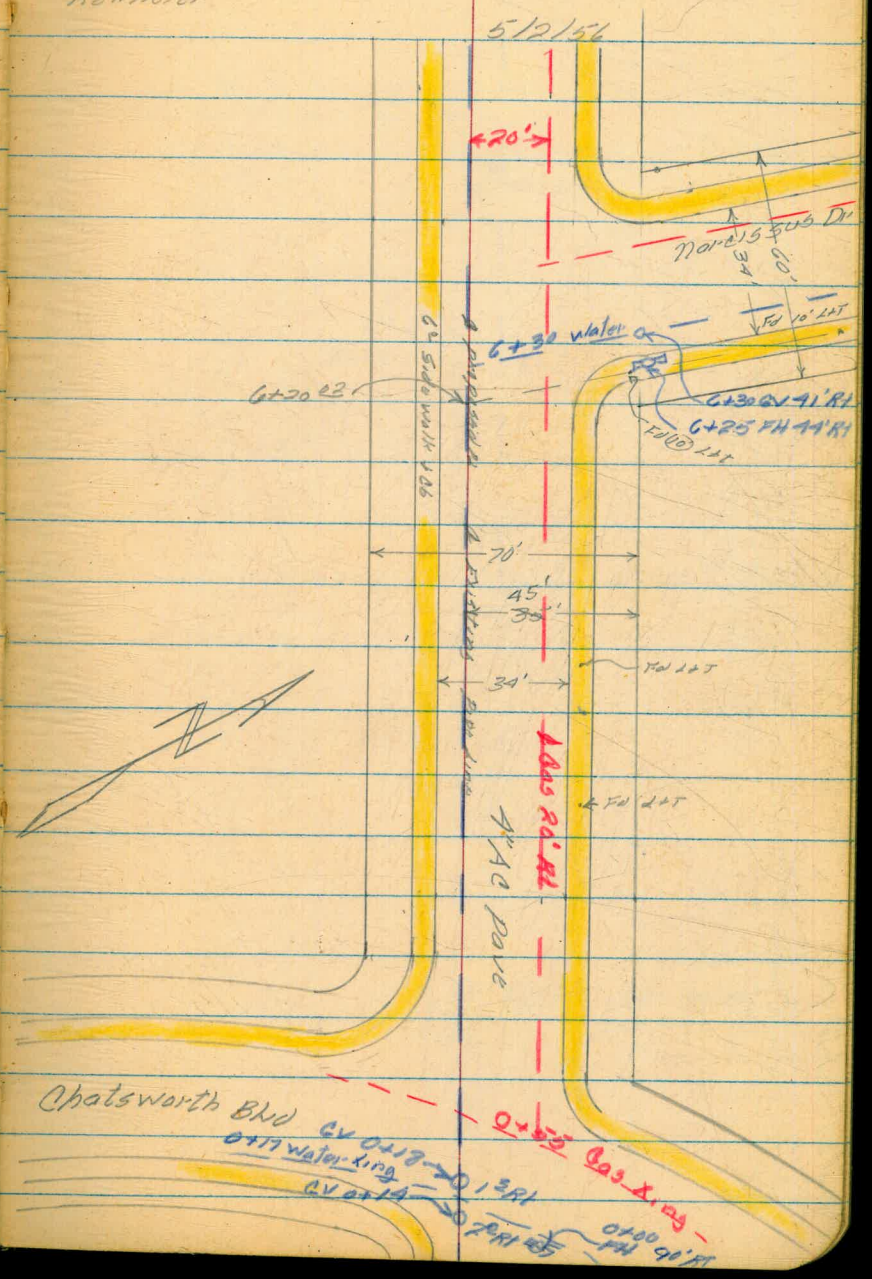
Palm City Force

6+20.02 intersection of
& prolongation of Ely (W) Line N 89°43'30" E

2+70.58 POT

West
Williams
Varantakis
Kellhofer

7



14+52 Barricade end of St at W'ly (10) Line Poinsettia Dr to North

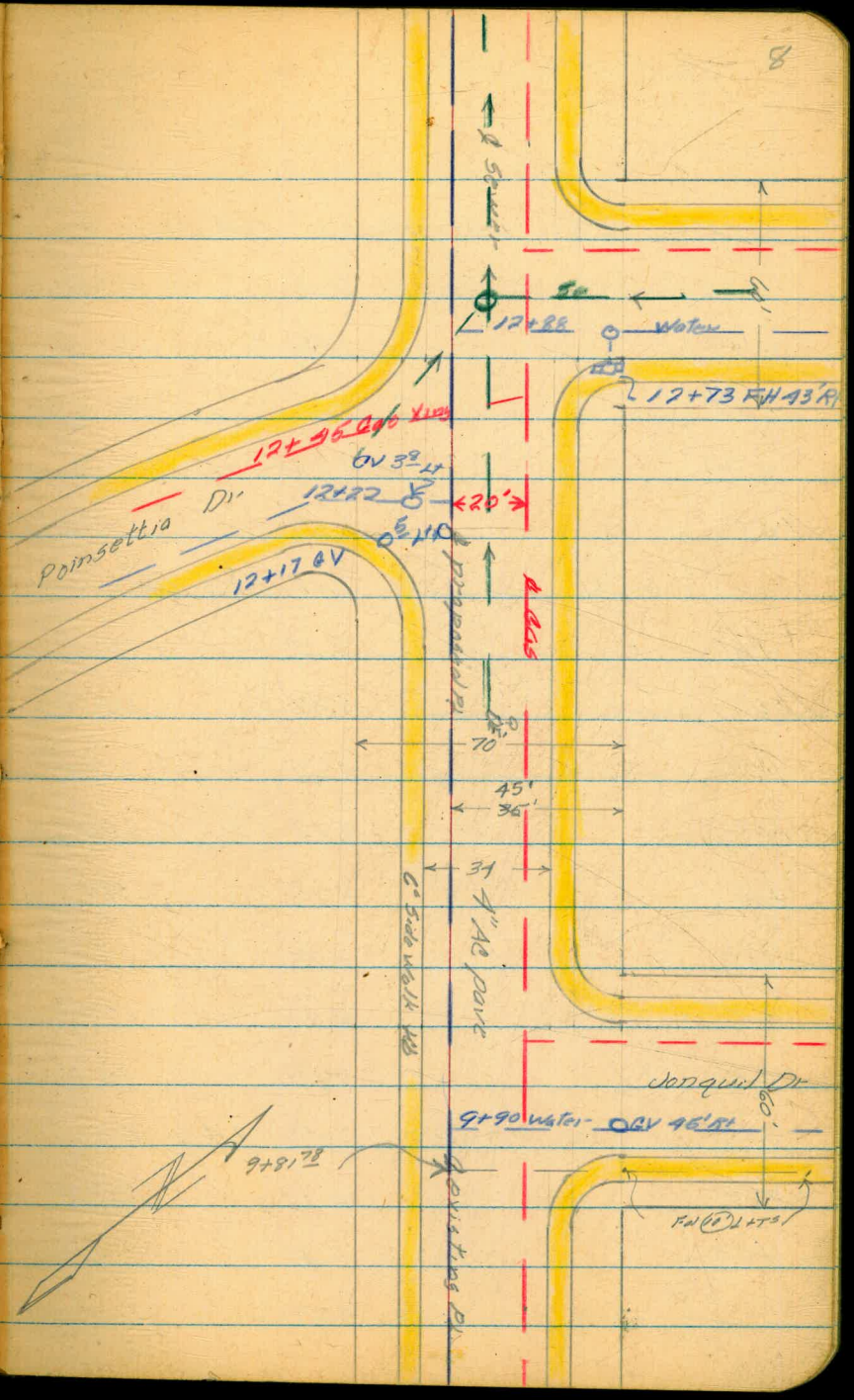
13+19.22 intersection with prolongation

12+88.90 POT

Jonquil St

9+81.78 prolongation of E'ly (10) Line

8+22.88 POT



Q Profile ELLIOTT

Redid by pacing

	1251	140.73	129.22
0+00		7.16	133.6
+39		5.44	135.3
+50		5.02	135.7
+64		4.84	135.9
1+00		1.48	139.3
	12.41	153.03	0.11 140.62
+50		9.75	143.3
2+00		6.29	146.7
+50		4.65	148.4
3+00		4.18	148.9
+50		3.73	149.3
4+00		3.30	149.7
+50		2.61	150.4
5+00		1.59	151.4
+50	11.34	163.97	0.40 152.63
6+00		10.13	153.8
+50		8.45	155.5
		6.77	157.20 = 157.14

West
Williams
Varon Fokis
Kalthafer

5/2/56

NE RP Chatsworth + ELLIOT St

El. prop Line Chatsworth ±

Q St

Gutter Line

BM Spk Nor Nor Arasus + ELLIOTT

		163.97		Redc'd by Rocky 4
7+00			6.13	157.5
+50			7.44	159.5
8+00			3.31	160.7
+50			2.95	161.0
9+00			3.30	160.7
+50			4.90	159.1
10+00			6.72	157.3
+50	0.68	156.17	8.48	155.49
11+00			2.73	153.4
+50			4.43	151.7
12+00			5.81	150.4
+50			7.16	149.0
13+00			8.58	147.6
				+1.8 To Flow
+00			8.39	147.78
+50			11.61	144.6
	0.78	143.94	13.01	143.16
14+00			3.96	140.0
+50			8.97	135.2.
	12.30	155.51	0.73	143.21
	10.85	165.47	0.89	154.62
			8.28	157.19 =

Water Meters W Ly

Add	Sta
Chatsworth 2630	1+78
Chatsworth 2630	3+39
3635	4+26
3641	5+13
3645	6+00
3645	6+51
3665	8+23
3663	8+44
2651	9+36
3733	9+51
3743	10+70
3799	11+20
3765	12+78
3771	13+22
Du Addresses	13+66
3777	14+21

Water Meters E Ly

Add	Sta
3602	0+99
3602	2+85
3620	3+00
3626	3+56
3630	4+14
3636	4+72
3640	5+29
3646	5+84
(Narcissus 2650)	7+20
3709	7+72
3714	8+22
3726	8+70
2650	11+15
3752 (Poinsettia 2655)	11+75
	12+31
(2650 Poinsettia)	13+54
3791	14+20

Top Wly Rim Sewer MH 10' Rt.

end of Work

157.14 SW Pr Hornsby + Elliott

Seminole Dr. Check Depth of existing Main

4+92	470.10	465.68
2+92	10.82	459.3
2+92	6.60	463.5
3+53	10.40	459.7
3+53	6.16	463.9
4+25	10.13	460.0
4+25	5.71	464.4
6+33	9.2	460.9
6+33	4.1	465.7

West
Williams
Varon Fabio
Kellhofer

5/7/56

TBM Seminole + Acorn St

Top Main Cl

Ground

Top Main Cl

Ground

Top Main

Top Ground

Top Main

Top Ground

Comp Collar Levels
Reservoir Wall + Base of Elevated Tank

	6.13	372.34	366.21
		5.59	366.75 =
TBM	11.90	~~383.37~~ ~~383.01~~	1.20 ~~371.14~~ See pg. 13 → 371.47
		1.34	~~378.70~~ 379.03
	13.01	~~386.26~~ ~~395.93~~	0.12 ~~382.92~~ 383.25
	13.02	~~407.30~~ ~~406.97~~	1.98 ~~392.95~~ 394.28
	13.09	~~419.91~~ ~~419.58~~	0.48 406.49 406.82
	11.58	~~431.41~~ ~~431.08~~	0.08 ~~419.50~~ 419.83
	3.93	~~433.21~~ ~~432.88~~	2.13 ~~428.95~~ 429.28
			3.90 ~~428.98~~ 429.33
			3.91 ~~428.97~~ 429.30
			3.91 ~~428.97~~ 429.30
	3.10	~~429.69~~ ~~429.36~~	6.62 ~~426.26~~ 426.59
	0.37	~~417.11~~ ~~416.78~~	12.95 ~~416.41~~ 416.74
	0.52	~~404.32~~ ~~403.99~~	13.31 ~~403.47~~ 403.80
	0.05	~~391.57~~ ~~391.24~~	12.80 ~~391.19~~ 391.52
	4.69	~~383.62~~ ~~383.29~~	12.64 ~~378.60~~ 378.93
	1.19	372.32	12.16 ~~371.46~~ = 371.47 ~~371.13~~ =
			6.11 366.21 =

West
Williams
Varentakis
Kellhofer

12

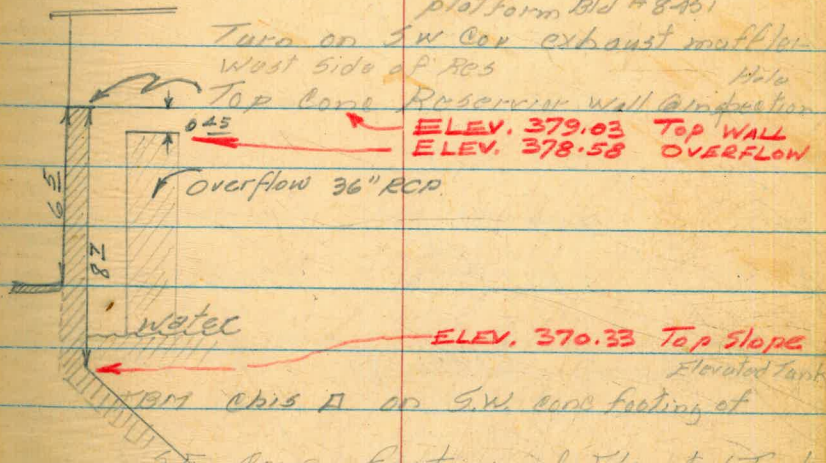
5/23/56

Top Rim Air 81+00 See FB 538-75

366.75 intersection of 11th & West St
platform Bld #8-451

Tuna on SW Cor exhaust muffler
West side of Res

Top Cone Reservoir wall @ junction



Hole

Elevated Tank

TBM Chis ☐ on SW cone footing of

SE cone footing of Elevated Tank

NE " " " " "

NW " " " " "

371.14 TBM on cone exhaust pad

366.21 Top Rim Air Valve

LEVELS AT CAMP CALLAN
(Check Levels)

				395.278
BM.	8.50	403.78		401.398
TP	2.67	401.11	5.34	398.44
TP	2.35	390.54	12.92	388.19
TP	0.04	378.96	11.62	378.92
TP	0.53	366.87	12.62	366.34
TP	9.09	368.55	7.41	359.46
TP	6.52	372.30	2.77	365.78
CK TBM			0.83	371.47 ✓
				See pg. 14
BM.	6.88	437.26		430.38
			6.08	431.18
			8.25	429.01
CK BM			6.88	430.38
				NG See pg. 14
BM	0.29	~~434.30~~		~~434.01~~
CK TBM			5.77	~~428.53~~
CK BM.			0.29	~~434.01~~

May 24 1956
Beatty
Kelhofer

13

City Datum USCGS BM Nwly Cor. Boundary Fence
USCGS SDGE Sub-station La Jolla Junct.
H 895
← City Datum

□ SW Cor Exhaust Muffler platform Bldg. #8451
CAMP CALLAN. RESERVOIR. Pump House

(BM #1-A 430.38 painted) BP on conc. ft. at Δ STA. "NE RANGE"
footing

Nor side of Res. Top curb at inlet pipe

Top 24"± Conc pipe over flow SE Cor Res } TORREY PINES RES.

CITY DATUM

BP on conc. ft. at Δ STA. SE RANGE
footing

CHIS □ on SW Conc. ftg of elev. tank

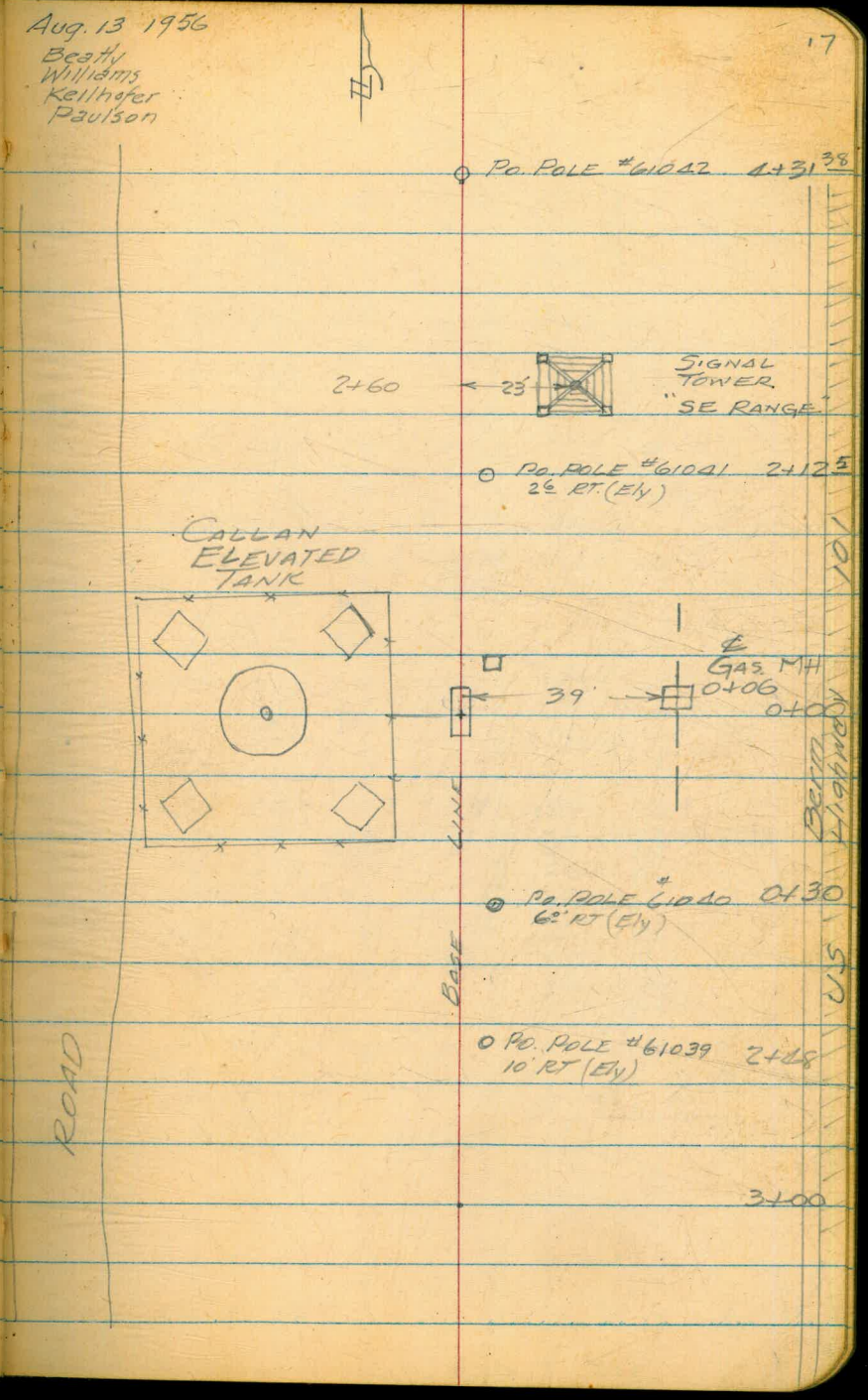
May 28 1956
Beatty
Kellhofer

Levels at Camp Callan
(Check Levels)

				Corrected Elev.	
TBM	6.20	435.48		429.28	See pg 12 Chis ▫ on SW Conc ftg. Camp Callan Elev. Tank
BM "SE RANGE"	10.21	444.97	0.72	434.76 =	= 434.01 {Fairchild Elev. — from City Engr.s. BP on NE Conc. ftg. △ Tower "SE RANGE" (434.68 Highway Dept.)
TP	1.72	437.87	8.82	436.15	
TP	0.04	428.43	9.48	428.39	
TP	12.38	430.78	10.03	418.40	
TP	12.93	431.29	12.42	418.36	
TP	6.97	437.33	0.93	430.36	
BM. "HIGHWAY"	1.98	435.46	3.85	433.48 =	= 433.44 Fairchild Elev. — from City Engr.s USCGS △ Mon "HIGHWAY"
TP	0.00	423.08	12.38	423.08	
TP	0.63	410.48	13.23	409.85	
TP	2.37	403.90	8.95	401.53	
CK BM			6.46	397.44 =	= 397.26 See pg 68 FB 538 Chis ▫ on Conc at former Chlorine houses
TP	12.64	416.51	0.03	403.87	
TP	13.05	429.03	0.53	415.98	
TP	6.34	433.00	2.37	426.66	
BM "NE RANGE"			2.62	430.38 =	= 429.89 Fairchild Elev. — from City Engr's. BP on NE Conc ftg. △ Tower NE RANGE = 430.38 BM #1-A painted in yellow paint.

CAMP CALLAN
Elevated Tank
TOPO.

Aug. 13 1956
Beatty
Williams
Kellhofer
Paulson



CAMP CALLAN
Elevated Tank
X-SECTS

8/13

TBM	4.56	433.84✓		429.28✓ (pg. 12)
~~3+00~~ (South)				
2+00 South				
1+00 (South)				
TP	6.46	434.46✓	5.84	428.00✓
0+00				
1+00 North				
2+00 North				
TP	9.62	442.77✓	4.31	433.15✓
3+00				
4+00				
CK BM			8.00	434.77✓ = 434.76

Chis ⊡ SW Conc Ftg (Rt. Ely)

426.57	426.2	427.7	427.2	424.4	422.8	Highway 101
7.27	7.6	6.1	6.6	9.4	11.0	
68	53	39	℄	71	73	
℄ Road	Gutter			Berm	Gutter	
427.18	426.6	428.2	426.6	424.6	423.1	"
6.66	7.2	5.6	7.2	9.2	10.7	
79	64	50	℄	70	72	
℄ Road	Gutter			Berm	Gutter	
427.4	427.1	428.5	427.5	425.4	423.8	
6.40	6.7	5.3	6.3	8.4	10.0	"
89	73	58	℄	68	71	
℄ Road	Gutter			Berm	Gutter	
427.7	427.4	428.8	428.6	428.35	427.35	425.7
6.8	7.1	5.7	5.9	6.09	7.11	8.8	"
104	88	77	48	℄	67	70
℄	Gutter		℄ Tank		Berm	Gutter
427.66	427.4	428.4	428.1	430.4	428.9	
6.80	7.1	6.1	5.4	4.1	5.6	"
111	95	81	℄	66	68	
℄ Road	Gutter			Berm	Gutter	
427.50	427.2	429.1	431.8	433.7	432.3	
6.96	7.3	5.4	2.7	0.8	2.2	"
118	107	94	℄	64	66	
℄ Road	Gutter			Berm	Gutter	
427.4	427.1	432.8	434.5	436.9	435.4	
15.4	15.7	10.0	8.3	5.9	7.4	"
132	116	96	℄	63	66	
℄ ROAD	Gutter			Berm	Gutter	
427.0	426.7	430.1	433.1	436.6	439.2	439.2	437.8	
15.8	16.1	12.7	9.7	6.2	3.6	3.6	5.0	"
143	119	117	5	℄	50	62	65	
℄ Road	Gutter					Berm	Gutter	

BR NE Ftg. "SE RANGE"

Reduced 8/13/56 MG

CAMP CALLAN
Additional Topo

26+00± South = ℄ 7TH ST.
(City Engr.'s ⊿ Mon ECC 1956
10' W of ℄

423.4	423.0	441.0	441.5	441.0	432	432
56	40	10	℄	10	30	57
℄	Gutter					Shldr
Road						Hwy 101

20+00± North = 200' Sly of 18TH ST.

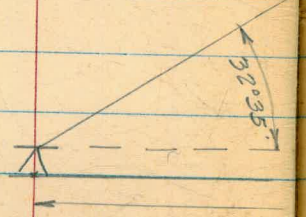
423.4	423.0	429.0	430.0	431.0	430.0
73	57	42	℄	43	93
℄				@ ROW	Shldr
Road				fen.	Hwy 101

CALLAN
ELEVATED TANK
Elevation top Tank

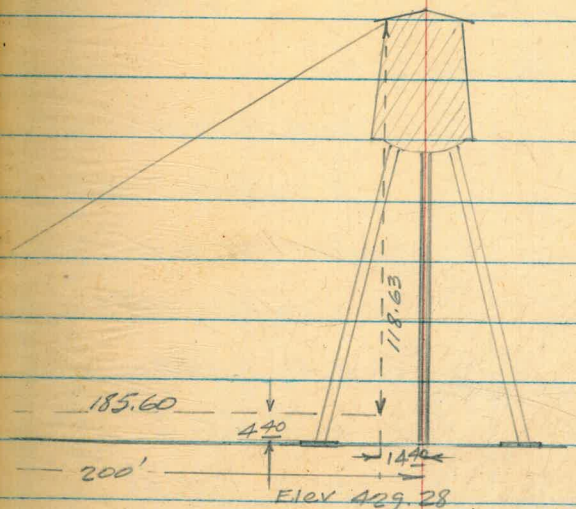
TBM 4.40 433.68 429.28

+118.63

Elev. 552.31
TOP of
Elev. Tank



Aug. 29 1956 (STIFF WIND BLOWING)
BEATTY
PAULSON



200.00
14.40
185.60

tan 32°35' .6391169 × 185.60 =

118.63

24.0 23.5
11.0 11.0
12.5

552.3
12.5
539.8

Top 12" C.I. Pipe in Alley Nor of University Blk 21 E. of Euclid

STATION	+BS	H.I.	-F.S	Elevation
BM	6.12	349.02		342.90
0+00 = Alley & Nly P.L Univ Ave			6.12	
0+68			5.56	343.46
0+68			2.1	346.9
0+69.8			5.51	343.51
0+69.8			1.8	347.2
ck BM.	6.99	349.89	6.12	342.90
6+01	Grd line		6.85	343.04
	Top pipe		9.53	340.36
5+05	Grd line		2.14	347.75
	Top pipe		6.48	343.41
4+52	GRD Line		3.45	346.44
	Top pipe		8.08	341.81
4+11	GRD LINE		6.9	343.0
	Top pipe		10.74	339.15
P	4.51	341.23	13.17	336.72
3+56	GRD Line		5.6	335.6
	Top pipe		9.76	331.47
2+69	Grd Line		14.1	327.1
	Top pipe		16.70	324.53
2+45	Top pipe		16.46	324.77
1+44	Grd line		1.7	339.5
	Top pipe		5.93	335.30
P	11.52	350.91	1.84	339.39
0+78.5	Grd line		5.1	345.8
	Top pipe		8.77	342.14
	Grd line		2.8	348.1
0+04	Top Pipe		5.65	345.26
0+00 on ℄			2.87	348.04
			2.67	348.24 = 348.26

9/7/56
Beatty
Paulson

3854-D Edge of pavt. Nly P/L Univ. Ave & Alley

Top 12" C.I. pipe

Ground line

Top 12" C.I. Pipe

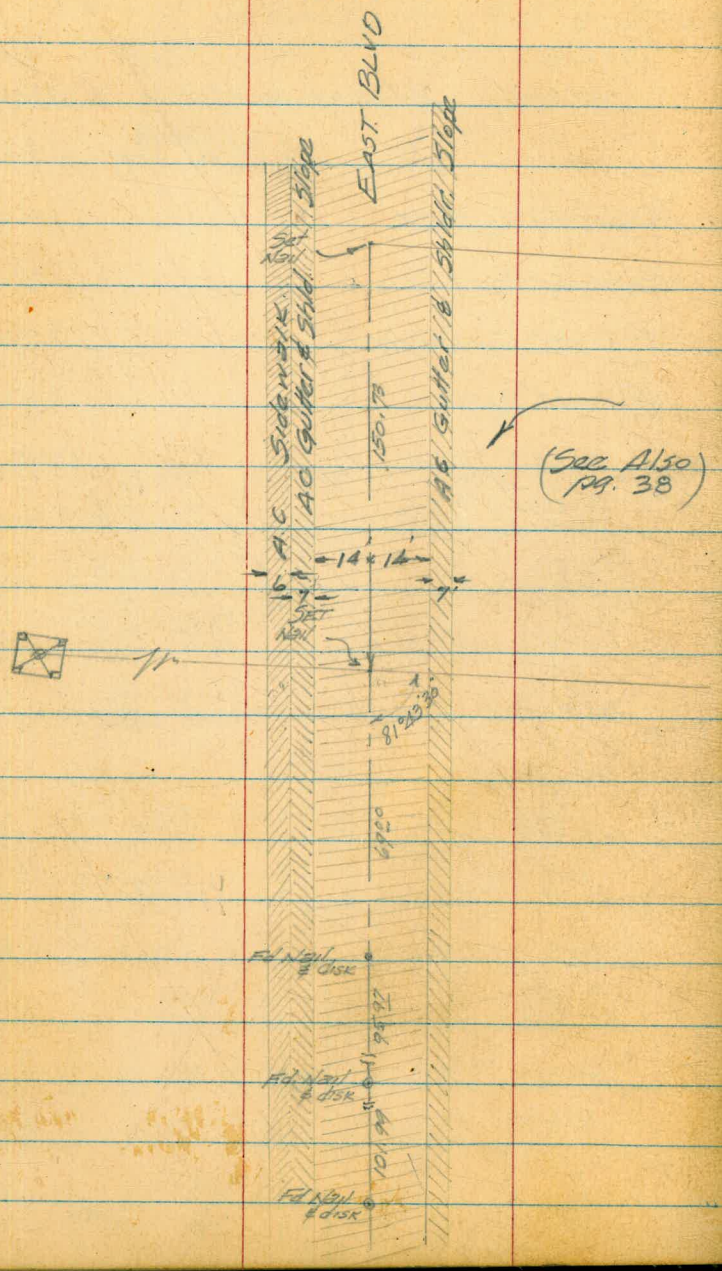
Ground line

3/28/57 Beatty Smith

349.89 4.86
5.88 1.62
344.01 6.48

Burned Pipe 11.60
4.86
10.46

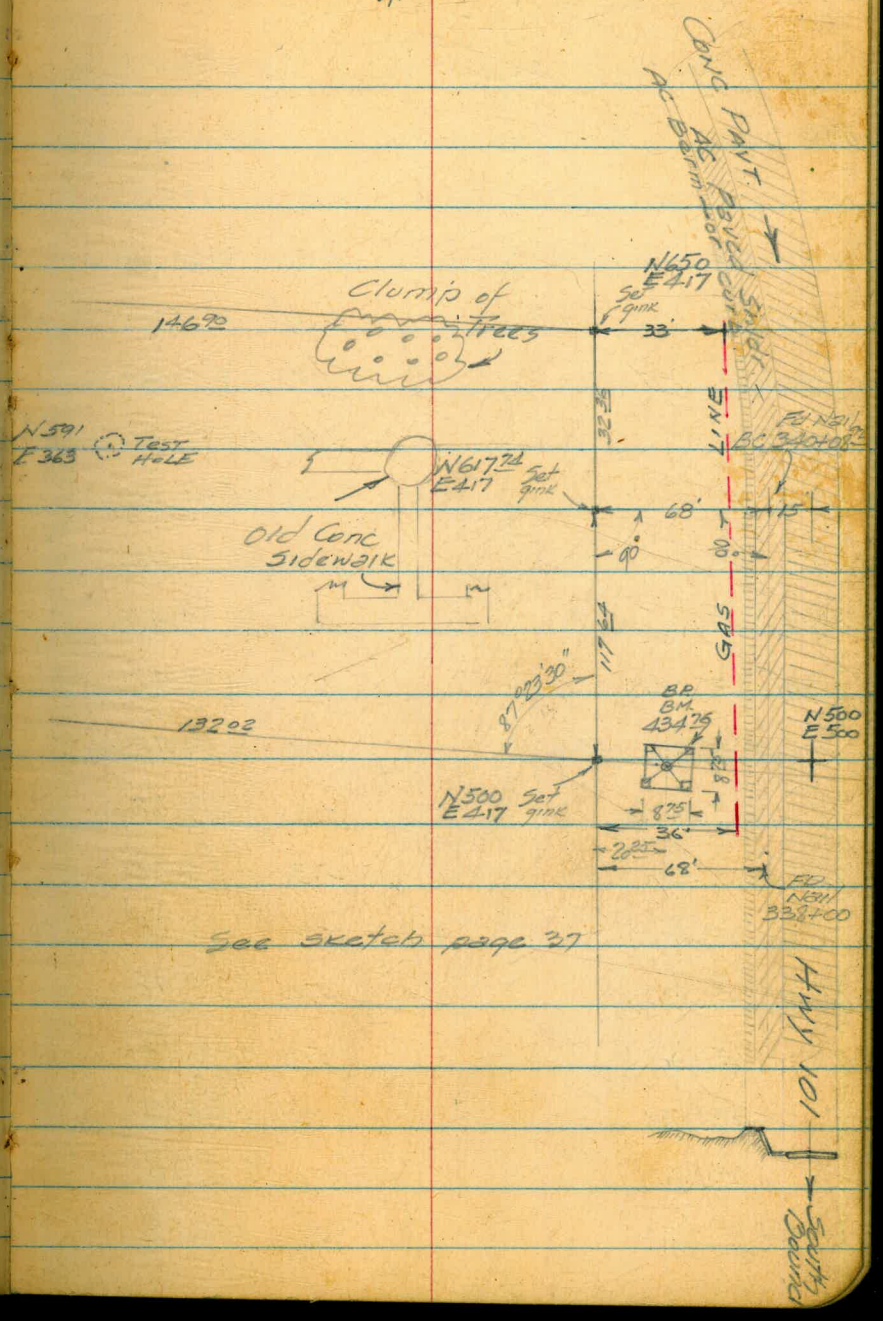
PROPOSED CALLAN STANDPIPE TOPO.



(See Also pg. 38)

SEPT. 14, 1956
BEATTY
PAULSON

22



Proposed Callan Standpipe Topo.

(Section taken along Sly Boundary is NOT on true grid line. (See sketch)

BM	3.82	438.58	434.76
N 500 E 490 (A.C on Conc.)	4.21	434.37	✓
N 500 E 480^5 (A.C.)	4.50	434.08	✓
N 500 E 478 (A.C)	3.01	435.57	✓
N 500 E 475	3.10	435.48	✓
N 500 E 470	3.80	434.78	✓
N 500 E 460	4.4	434.18	✓
N 500 E 450	4.5	434.08	✓
N 500 E 443	4.1	434.48	✓
N 500 E 440	4.1	434.48	✓
N 500 E 430	4.4	434.18	✓
N 500 E 420	4.9	433.68	✓
N 500 E 410	5.3	433.28	✓
N 500 E 400	5.3	433.28	✓
N 500 E 390	5.1	433.48	✓
E 380	5.3	433.28	✓
E 370	5.4	433 533.18	✓
E 360	5.6	432.98	✓
N 500 E 350	5.7	432.88	✓

Plotted 3/29/56 JKV

9/14/56

23

BP. on NEly Flg "SE RANGE" Navy Signal Tower
See pg. 14

N 500 E 340	5.8	432.78 ✓
N 500 E 330	5.6	432.98 ✓
N 500 E 321	6.0	432.58 ✓
N 500 E 310	10.1	428.48 ✓
Ner 500 E 305^5 (AC)	11.25	427.33 ✓
N 500 E 300 (AC gutter)	11.65	426.93 ✓
N 500 E 290 (AC)	11.32	427.26 ✓
N 500 E 285 AC & St.	11.22	427.36 ✓
or BM.	3.82	434.76

Plotted 9/21/56 JKV.

9/17/56
Beatty
Paulsen

			434.69				
BM	4.32	439.08	434.76	N510 E350		6.1	432.98 ✓
N510 E490		AC on Conc	4.28 434.80 ✓	" E340		6.3	432.78 ✓
" E481		AC	4.57 434.51 ✓	" E330		6.2	432.88 ✓
" E478		AC	3.08 436.00 ✓	" E321		6.5	432.58 ✓
" E475			3.1 435.98 ✓	" E310		10.4	428.68 ✓
" E472			4.1 434.98 ✓	" E305 AC begin		11.75	427.33 ✓
" E470			4.1 434.98 ✓	" E301 AC gutter		12.13	426.95 ✓
" E460			4.4 434.68 ✓	" E290 on AC		11.86	427.22 ✓
" E450			4.6 434.48 ✓	N510 E285 AC & St		11.75	427.33 ✓
" E440			4.7 434.38 ✓	" E272 AC gutter		12.35	426.73 ✓
" E430			4.9 434.18 ✓	" E266 Edge AC SW		11.55	427.53 ✓
" E420			5.2 433.88 ✓	N510 E259 " " "		11.65	427.43 ✓
" E417			5.3 433.78 ✓	CK BM 4.70 439.46		4.32	434.76
" E410			5.3 433.78 ✓	N520 E490		4.33	435.13 ✓
" E400			5.4 433.68 ✓	" E481		4.63	434.83 ✓
" E390			5.3 433.78 ✓	" E478		3.06	436.40 ✓
" E380			5.5 433.58 ✓	" E476 (℄ + 20" DIA Euc. Tree)		3.1	436.36 ✓
" E370			5.7 433.38 ✓	" E472		3.8	435.66 ✓
N510 E360			5.8 433.28 ✓	" E470		4.1	435.36 ✓

Plotted 9/24/56 JKV

Plotted 9/24/56 JKV

	439.26			
N520 E460		4.5	434.96	✓
" E450		4.7	434.76	✓
" E440		5.0	434.46	✓
" E430		5.1	434.36	✓
" E420		5.3	434.16	✓
" E410		5.5	433.96	✓
" E400		5.6	433.86	✓
" E390		5.6	433.86	✓
" E380		5.8	433.66	✓
" E370		6.1	433.36	✓
" E360		6.2	433.26	✓
" E350		6.1	433.36	✓
" E340		6.4	433.06	✓
" E330		6.5	432.96	✓
" E320		6.7	432.76	✓
" E310		10.2	429.26	✓
" E305	AC	11.91	427.55	✓
" E300	AC gutter	12.55	426.91	✓
N520 E290		12.27	427.19	✓

Plotted 9/24/56 JKV

	439.26			
N520 E 283±	AC & st+	12.15	427.31	✓
CK OH	4.99 439.75	4.70	434.76	
N530 E490		4.39	435.36	✓
" E481		4.67	~~434.79~~ 435.08	✓
" E478		3.15.	436.60	✓
" E475		3.3	436.45	✓
" E473		4.6	435.15	✓
" E470		4.6	435.15	✓
" E460		4.6	435.15	✓
" E450		4.9	434.85	✓
" E440		5.2	~~434.26~~ 434.55	✓
" E430		5.2	434.55	✓
" E420		5.3	434.45	✓
" E410		5.7	434.05	✓
" E400		5.7	434.05	✓
" E390		5.6	434.15	✓
" E380		5.8	433.95	✓
" E370		5.9	433.85	✓
N530 E360		6.0	433.75	✓

Plotted 9/24/56 JKV

	439.75		
N530 E350		6.3	433.45 ✓
" E340		6.7	433.05 ✓
" E330		6.8	432.95 ✓
" E320		6.9	432.85 ✓
" E318		7.0	432.75 ✓
" E310		10.2	429.55 ✓
" E303±	AC	12.30	427.45 ✓
" E298±	AC gutter	12.82	426.93 ✓
" E290	AC	12.65	427.10 ✓
N530 E287±	AC & st±	12.52	427.23 ✓
CK BM 5.10	439.86	199	434.76
N540 E490		4.21	435.65 ✓
" E480±		4.46	435.40 ✓
" E477		3.00	436.86 ✓
" E475		3.0	436.86 ✓
" E472		4.5	435.36 ✓
" E470		4.5	435.36 ✓
" E460		4.6	435.26 ✓
N540 E450		4.8	435.06 ✓

Plotted 9/25/56 JKV

	439.86		
N540 E440		5.1	434.76 ✓
" E430		5.1	434.76 ✓
" E420	℄ 2-2" dia Acacia Shrub	5.4	434.46 ✓
" E413		5.2	434.66 ✓
" E410		5.9	433.96 ✓
" E400		6.1	433.76 ✓
" E390		6.0	433.86 ✓
" E380		6.0	433.86 ✓
" E370		6.5	433.36 ✓
" E360		6.6	433.26 ✓
" E353		6.6	433.26 ✓
" E350		6.1	433.76 ✓
" E349		5.8	434.06 ✓
" E343		6.6	433.26 ✓
" E340		6.7	433.16 ✓
" E330		6.7	433.16 ✓
" E320		7.0	432.86 ✓
" E317.5		7.2	432.66 ✓
540 E310		10.0	429.86 ✓

Plotted 9/25/56 JKV

	439.86		
N540 E304	AC begin	12.35	427.51 ✓
" E297	AC gutter	12.95	426.91 ✓
" E290	AC	12.75	427.11 ✓
N540 E283.5	AC & str	12.63	427.23 ✓
CK BM 5.20	439.96	5.10	434.76
N550 E490	AC on Conc.	4.08	435.88 ✓
" E480.5		4.21	435.75 ✓
" E477		2.74	437.22 ✓
" E475		2.9	437.06 ✓
" E473		4.1	435.86 ✓
" E470		4.1	435.86 ✓
" E460		4.3	435.66 ✓
" E450		4.5	435.46 ✓
" E440		4.8	435.16 ✓
" E430		5.0	434.96 ✓
N550 E420		5.0	434.96 ✓
(N555 E420	℄ 3" dia Acacia Stump)		✓
N550 E410		4.6	433.36 ✓
" E400		4.5	433.46 ✓

Plotted 9/25/56 JH

	439.96		
N550 E390		6.4	433.56 ✓
(N556 E390	℄ 2-2" dia Euc. Saplings.)		
N550 E380		6.3	433.66 ✓
" E370		6.6	433.36 ✓
" E360		6.7	433.26 ✓
" E355		6.7	433.26 ✓
" E350		6.0	433.96 ✓
" E340		6.7	433.26 ✓
" E330		6.9	433.06 ✓
" E320		6.9	433.06 ✓
" E318		7.0	432.96 ✓
" E310		9.8	430.16 ✓
" E302.5	Begin AC	12.47	427.49 ✓
" E297	AC gutter	13.12	426.84 ✓
" E290	AC	12.91	427.05 ✓
N550 282.5	AC & str	12.72	427.22 ✓
CK BM 5.04	439.80	5.20	434.76
N560 E490	AC on Conc	3.71	436.09 ✓
" E380.5	AC	3.80	436.00 ✓

Plotted 9/25/56 JH

	439.80		
N560 E477.6		2.28	437.52
" E475		2.3	437.50
" E473		3.1	436.70
" E470		3.4	436.40
" E460		3.7	436.10
" E450		4.0	435.80
" E440		4.2	435.60
" E430		4.1	435.70
" E420		4.3	435.50
" E410		6.1	433.70
" E400		6.3	433.50
" E390		6.1	433.70
" E380		5.9	433.90
" E370		6.3	433.50
" E360		6.4	433.40
" E350		6.4	433.40
" E345		6.1	433.70
" E340		6.4	433.40
N560 E330		6.6	433.20

Plotted 9/25/56 JKW

	439.80		
N560 E320		6.6	433.20
" E317		6.9	432.90
" E310		9.2	430.60
" E299.5 begin A.C		12.28	427.52
" E295 AC gutter		13.00	426.80
" E290 A.C		12.84	426.96
N560 E280 AC & St+		12.64	427.16
CK BM 571	440.17	5.04	434.76
N570 E490		2.13	436.34
" E481		2.18	436.29
" E477		2.68	437.79
(N 568 E477 ℄ 24" dia Elec. Trac)			
N570 E475		2.7	437.77
E470		3.6	436.87
E460		4.0	436.47
E450		4.3	436.17
E440		4.4	436.07
E430		4.3	436.17
N570 E420		4.9	435.57

Plotted 9/25/56 JKW

9/17/56

	420.47		
N570 E410		6.7	433.77
" E400		6.7	433.77
(N571 E400	8"±2" dia Euc. sapling)		
N570 E392		6.7	433.77
N570 E392	(on SE Cor Conc Slab NE Cor 3'x	5.90	434.57
N570 E390	on Conc	5.85	434.62
N570 E380	on Conc	5.80	434.67
" E370	on Conc	5.90	434.57
" E364	on Conc	5.80	434.67
N570 E364		6.6	433.87
(N567.5 E364	ground	6.9	433.57)
N567.5 E364	on SW Cor Conc Slab NW Cor 5'x	5.80	434.67
N570 E360		7.0	433.47
" E350		7.3	433.17
" E344		6.3	434.17
" E340		6.8	433.67
" E336		7.2	433.27
" E330		7.2	433.27
" E320		7.4	433.07

Plotted 9/25/56 JKV

	420.47		
N570 E316		7.6	432.87
" E310		9.5	430.97
" E300 begin AC		12.80	427.67
" E294 AC gutter		13.62	426.85
" E290 AC		13.43	427.04
" E279 AC & St		13.32	427.15
CL BM 5.64	420.40	5.71	434.76
N580 E290 (on Conc)		3.82	436.58
" E280		3.88	436.52
" E278		2.40	438.00
" E275		2.6	437.80
" E273		3.5	436.90
" E270		3.6	436.80
" E260		3.3	437.10
" E250		3.9	436.50
" E240		4.0	436.40
" E230		3.9	436.50
" E220		4.3	436.10
" E217		4.6	435.80

Plotted 9/25/56 JKV

		440.20		
N 580	E 410		6.5	433.90 ✓
"	E 400		6.4	434.00 ✓
"	E 396		6.0	434.40 ✓
"	E 390		7.0	433.40 ✓
"	E 388		5.7	434.70 ✓
"	E 379.5	E edge Conc SW.	6.00	434.40 ✓
"	E 375	W. edge Conc SW	6.00	434.40 ✓
"	E 370		5.8	434.60 ✓
"	E 367		6.1	434.30 ✓
"	E 365		7.1	433.30 ✓
"	E 363		6.6	433.80 ✓
"	E 360		6.6	433.80 ✓
"	E 353		6.6	433.80 ✓
"	E 350		6.5	433.90 ✓
"	E 347		6.3	434.10 ✓
"	E 340		6.5	433.90 ✓
"	E 330		7.1	433.30 ✓
"	E 320		7.2	433.20 ✓
5.80	E 314		7.8	432.60 ✓

plotted 9/25/56 JAV

9/18/56
Beatty
Obrien

		440.20		
N 580	E 310		9.0	431.40 ✓
"	E 300		12.7	427.70 ✓
"	E 298.5	Edge AC	12.91	427.49 ✓
"	E 293.5	on AC gutter	13.60	426.80 ✓
"	E 290	on AC	13.45	426.95 ✓
N 580	E 278	AC & St.	13.26	427.14 ✓
ck BM		5.58	440.34	5.64 434.76
N 590	E 490	on Conc (edge paint)	3.56	436.80 ✓
"	E 481	AC	3.59	436.75 ✓
"	E 478	(AC Berm)	2.07	438.27 ✓
"	E 475	dirt	2.1	438.24 ✓
"	E 473		3.1	437.24 ✓
"	E 470		3.1	437.24 ✓
"	E 460		2.8	437.54 ✓
"	E 450		3.5	436.84 ✓
"	E 440		3.4	436.94 ✓
"	E 430		3.6	436.74 ✓
"	E 420		4.1	436.24 ✓
"	E 417		4.2	436.14 ✓
N 590	E 413	plotted 9/25/56 JAV	5.2	434.94 ✓

9/18/56
9/19/56
Basil Davison

		440.32		
N590	E410		5.6	434.74
"	E400		5.6	434.74
"	E390		6.1	434.24
"	E380	E Edge Conc S.W.	6.42	433.92
"	E375	W. Edg Conc SW.	6.41	433.93
N590	E370		6.2	434.14
N591	E363	& TEST HOLE	5.9	434.44
N590	E360		6.2	434.14
"	E350		6.3	434.04
"	E340		6.6	433.74
"	E330		6.9	433.44
"	E320		7.3	433.04
"	E313		7.7	432.64
"	E310		8.4	431.94
"	E300		12.3	428.04
"	E297.5	Begin AC	12.85	427.49
"	E292.5	AC gutter	13.51	426.83
"	E290	AC	13.43	426.91
"	E277.5	AC Est.	13.22	427.12
CK	BM	5.84	440.60	5.58	434.76

Plotted 9/25/56 JKV

		440.60		
N600	E490	on Conc	3.60	437.00
"	E481	AC	3.67	436.93
"	E478	AC berm	2.20	438.40
"	E476	dirt	2.2	438.40
"	E471		2.7	437.90
"	E470		2.6	438.00
"	E460		3.0	437.60
"	E450		3.2	437.20
"	E440		3.3	437.30
"	E430		3.7	436.90
"	E420		3.7	436.90
"	E417		4.5	436.10
"	E410		6.3	434.30
"	E400		6.4	434.20
"	E390		6.5	434.10
"	E380		7.1	433.50
"	E379.5 E375	Conc SW	7.06	433.54
"	E372		6.9	434.30
"	E370		6.3	434.30

Plotted 9/25/56 JKV

	440.60		
N 600 E 360		6.6	434.00
" E 350		6.6	434.00
" E 340		6.9	433.70
" E 330		7.3	433.30
" E 320		7.4	433.20
" E 313		7.9	432.70
" E 310		8.7	431.90
" E 300		11.7	428.90
" E 296	Begin AC	13.10	427.50
" E 291	AC gutter	13.82	426.78
" E 280	AC	13.50	427.10
" E 278	AC ℄ St	13.47	427.13
CK BM	5.38	440.14	5.84 434.76
N 610 E 490	on Conc	2.98	437.16
" E 481	AC	3.00	437.14
" E 478	AC berm	1.48	438.66
" E 475		1.5	438.64
" E 470		1.8	438.34
" E 460		2.1	438.04

Plotted 9/25/56 JKV

9/19/56

32

	440.14		
N 610 E 450		2.6	437.54
" E 440		2.7	437.44
" E 430		3.2	436.94
" E 420		3.6	436.54
" E 418		3.6	436.54
" E 410		6.3	433.84
" E 400		6.6	433.54
" E 390		6.7	433.84
" E 380		6.9	433.24
" E 378.3	Conc S.W	7.26	432.88
" E 374	Conc S.W	7.27	432.87
" E 370		6.5	433.64
" E 360		6.4	433.74
" E 350		6.4	433.74
" E 340		6.6	433.54
" E 326		7.5	432.64
" E 330		7.6	432.54
" E 320		8.1	432.04
" E 310		8.6	431.54

Plotted 9/25/56 JKV

	440.12		
N 610 E 300		10.6	429.54 ✓
" E 296	begin AC	12.83	427.31 ✓
" E 290	AC gutter	13.48	426.66 ✓
" E 280	AC	13.16	426.98 ✓
" E 275 E	AC & St+	13.15	426.99 ✓
CK BM	5.49	440.25 5.38	434.76
N 620 E 490	on Conc	2.87	437.38 ✓
" E 481	AC	2.88	437.37 ✓
" E 479	AC berm	1.43	438.82 ✓
" E 475	E* 15" dia. Euc. Tree		
" E 473		1.3	438.95 ✓
" E 470		1.6	438.65 ✓
" E 460		2.1	438.15 ✓
" E 450		2.5	437.75 ✓
" E 440		2.7	437.55 ✓
" E 430		3.0	437.25 ✓
" E 420		3.3	436.95 ✓
" E 417		3.5	436.75 ✓
" E 410		6.5	433.75 ✓

Plotted 9/25/56 JKV

9/19/56

33

	440.25		
N 620 E 400		7.4	432.85 ✓
" E 390		7.6	432.65 ✓
" E 380	E edge conc walk	7.78	432.47 ✓
" E 370	W. edge Conc SW	7.97	432.28 ✓
" E 360		8.2	432.05 ✓
" E 350		8.5	431.75 ✓
" E 340		8.7	431.55 ✓
" E 330		8.8	431.45 ✓
" E 320		9.1	431.15 ✓
" E 310		9.5	430.75 ✓
" E 300		10.1	430.15 ✓
" E 295 5	Conc walk	10.35	429.90 ✓
" E 295 5		13.06	427.19 ✓
" E 291 2	SW Edge SW	13.07	427.18 ✓
" E 291 2	AC gutter	13.40	426.85 ✓
" E 289	AC gutter	13.54	426.71 ✓
" E 280	AC	13.30	426.95 ✓
" E 273	AC & St+	1333	426.92 ✓
CK BM	5.38	440.14 5.49	434.76

Plotted 9/25/56 JKV

		Add. 1.2					
N630 E1892	on Conc	2.58	437.56 ✓	N630	E360	7.9	432.24 ✓
" E1815	AC	2.72	437.42 ✓	"	E350 {5½ edge Clump Cypress & Acacia trees	7.7	432.44 ✓
" E1786	Ac berm	1.15	438.99 ✓	"	E340	8.8	431.34 ✓
" E170		1.3	438.84 ✓	"	E330	9.5	430.64 ✓
" E160		1.5	438.64 ✓	"	E320	9.9	430.24 ✓
" E150		2.1	438.04 ✓	"	E310	10.0	430.14 ✓
" E140		2.0	438.14 ✓	"	E300	10.2	429.74 ✓
" E130		2.7	437.44 ✓	"	E295 Top Conc Wall	10.23	429.91 ✓
" E120		3.2	436.94 ✓	"	E295 conc SW	12.97	427.17 ✓
" E119	3" d.o.+ Acacia ~~Sapling~~			"	E290 Conc SW	13.01	427.13 ✓
" E117		3.5	436.64 ✓	"	E290 AC	13.46	426.68 ✓
N639 E1122 E1113	Top Conc Wall	6.10	434.04 ✓	"	E288 AC gutter	13.57	426.57 ✓
		6.10	434.04 ✓				
N630 E1122 E1113	Top Conc Wall	6.10	434.04 ✓	"	E280 on AC	13.24	426.90 ✓
		6.10	434.04 ✓				
" E1115		6.8	433.34 ✓	"	E273 AC & St. ?	13.28	426.86 ✓
" E110		6.8	433.34 ✓	CK BM 5.83 Add 0.59		5.38	434.76
" E100		7.6	432.54 ✓	N640	E189 ? on conc	2.86	437.73 ✓
" E390		7.7	432.44 ✓	"	E182 A.C	3.0	437.59 ✓
" E380		8.0	432.14 ✓	"	E178 6 AC berm	1.46	439.13 ✓
" E370		7.9	432.24 ✓	"	E170	1.40	439.19 ✓

Plotted 9/25/56 JKW

Plotted 9/25/56 JKW

		440.59					
N 660	E 460		1.7	438.89	N 640	E 293 Top Conc Wall	10.81 429.78
"	E 450		2.3	438.29	"	E 293 Conc Sw.	13.40 427.19
"	E 440		2.1	438.49	"	E 288± Conc Sw.	13.40 427.19
"	E 430		3.1	437.49	"	E 288± Ac	13.90 426.69
"	E 420		3.2	437.39	"	E 280 Ac.	13.87 426.72
"	E 418		3.7	436.89	"	E 271± Ac & St±	13.80 426.79
"	E 411.2	Top Conc Wall	6.56	434.03	CL BM	7.38 440.14	5.83 432.76
"	E 409.5		6.56	434.03			
"	E 410.3		7.6	432.99	N 650	E 489±	4.39 437.75
N 640	E 400		8.1	432.49	"	E 481 Ac	4.35 437.79
"	E 390		8.3	432.29	"	E 479 Ac berm	3.01 439.13
"	E 380		8.2	432.39	"	E 470	2.6 439.54
"	E 370	Begin dump + Cypress & Acacia trees	8.1	432.49	"	E 460	3.0 439.14
"	E 360		8.2	432.39	"	E 450	3.6 438.54
"	E 350	End dump + of trees.	6.8	433.79	"	E 440	3.6 438.54
"	E 340		9.8	430.79	"	E 430	4.3 437.84
"	E 330		10.3	430.29	"	E 420	4.4 437.74
"	E 320		10.5	430.09	"	E 418	4.9 437.24
"	E 310		10.6	429.99	CL BM	304 440.80	7.38 432.76
"	E 300		10.8	429.79	Plotted 9/25/56 JHN	E 410.2 Top Conc Wall	3.73 434.07
		Plotted 9/25/56 JHN				E 409.5 "	3.73 434.07
						E 409.5	4.6 433.20

437.80

N650	E405		5.3	432.50 ✓
"	E400		5.3	432.50 ✓
"	E390		5.4	432.40 ✓
"	E380	on Conc Sw.	5.40	432.40 ✓
"	E370	Begin clump trees.	5.40	432.40 ✓
"	E360		5.4	432.40 ✓
"	E350		4.0	433.80 ✓
"	E340		7.2	430.60 ✓
"	E330		7.7	430.10 ✓
"	E320		8.0	429.80 ✓
"	E310		8.0	429.80 ✓
"	E300		8.4	429.40 ✓
"	E293	Top Conc Wall	8.11	429.69 ✓
"	E293	SW	10.78	427.02 ✓
"	E288.5	SW	10.81	426.99 ✓
"	E288.5	AC	11.22	426.58 ✓
"	E286	AC	11.38	426.42 ✓
N650	E270	A & St. ±	11.10	426.70 ✓

plotted 9/25/56 JKV

437.80

N650	E256	(AC gutter)	11.70	426.10 ✓
"	E250	E Edge AC SW	10.90	426.90 ✓
	E243.5	W. Edge AC SW	11.00	426.80 ✓
CR BM			3.04	434.76 ✓

plotted 9/25/56 JKV

PROPOSED CALLAN STANDPIRE
Ties to A.R.L. Bdry.

(See 3668-AD EXHIBIT I Sheet 1 of 2.)

9/20/56 Beatty Paulson

P.L. 1326

See pg 22. N617.74 E417.

0.94

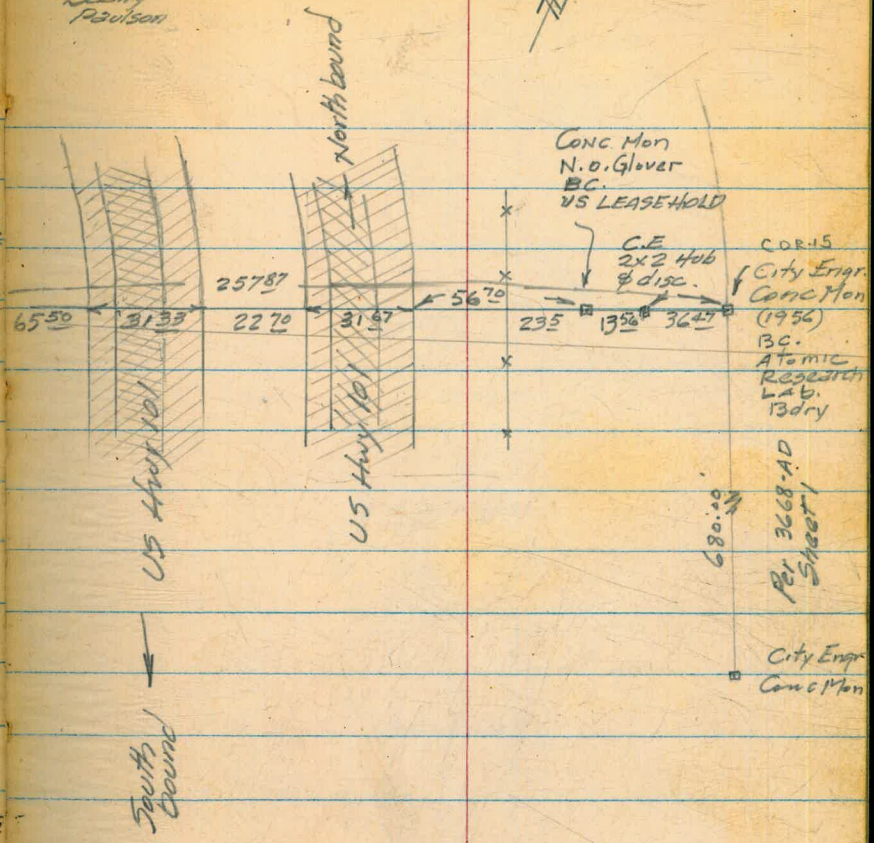
1.56

89° 50'

(P.L. Line Not found) See 3668-AD. Sheet 1

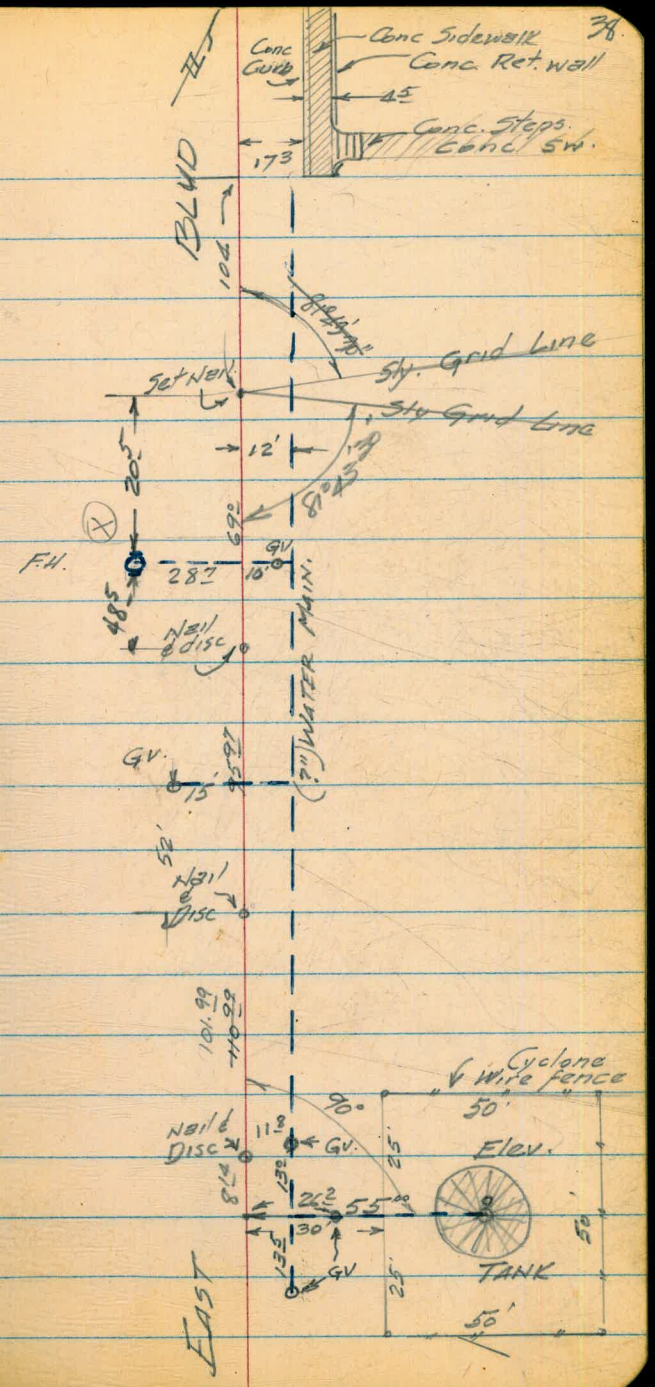
P.L. 1323

N500 E417



Proposed
CALLAN STANDPIPE
Additional Details

9/20/52
Beatty
Pawson



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

Hillside Dr & Soledad Ave
NW Top Hydt 215.58

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

THE NATIONAL BLANK BOOK COMPANY
HOLYOKE MASSACHUSETTS
NEW YORK CHICAGO BOSTON SAN FRANCISCO