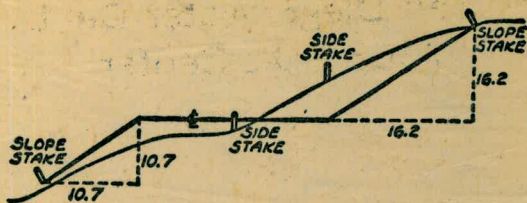


W

B
B

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



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.

2 1/2" Approp. Pipe USN Col-1918

1502.1.N
 11-17-65

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

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

FOR TANGENTS ADD

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

FOR EXTERNALS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.032	.035	.039	.043	.047	.051	.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	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

INDEX

alice 189c
 1-7
 CHOLLA STATION FENCES, ETC.
 Proposed Cholla Pump Plant, & Pipeline, Alignment 8-13 ✓
 " " " " " Profile & X-Sections 14-31 ✓
 " " " " " REV. ALIGNMENT 32 ✓
 " " " " " REV. PROFILE 33-34 ✓
 " " " " " REV. ALIGNMENT 35 ✓
 " " " " " REV. PROFILE & X-SECTIONS 36-37 ✓
 " " " " " REV. ALIGNMENT 38-39 ✓
 " " " " " REV. PROFILE 40-42 ✓
 CROSS SECTIONS 36" EXISTING CHOLLAS P.L. 45-46 ✓
 REVISED
 PROPOSED CHOLLA PUMP PLANT, & PIPELINE ALIGNMENT 47 ✓
 TREE LOCATIONS ON 36" CHOLLAS P.L. 48 ✓
 ADDITIONAL CROSS SECTIONS 36" CHOLLAS P.L. 49 ✓
 " " " " " STA. 42+33 TO 42+45 50 ✓
 " " " " " 50 ✓
 Air Valve Detail Sta 11+95 Kearney Mesa Ph 65 ✓
 alice

CHOLLA STATION FENCES

164927° FEN 186
 Cor. 76° 50.60 } GAT
 15 RT
 1540715 P.I. { 75 RT FEN COR. N 87° 00' E
 13° 22' RT

150 E FACE TANKS.
 132 Edge Rd. N 74° 30' E
 60° 48' RT. BK TANG
 1313588 P.I. 24907 LT
 15° 39' LT

74845 P.O.T. (88° 41' RT. TO FEN. LINE)
 N 89° 00' E

7425 P.I. 90° RT. N 1° 00' W

7400 P.I. 90° LT.

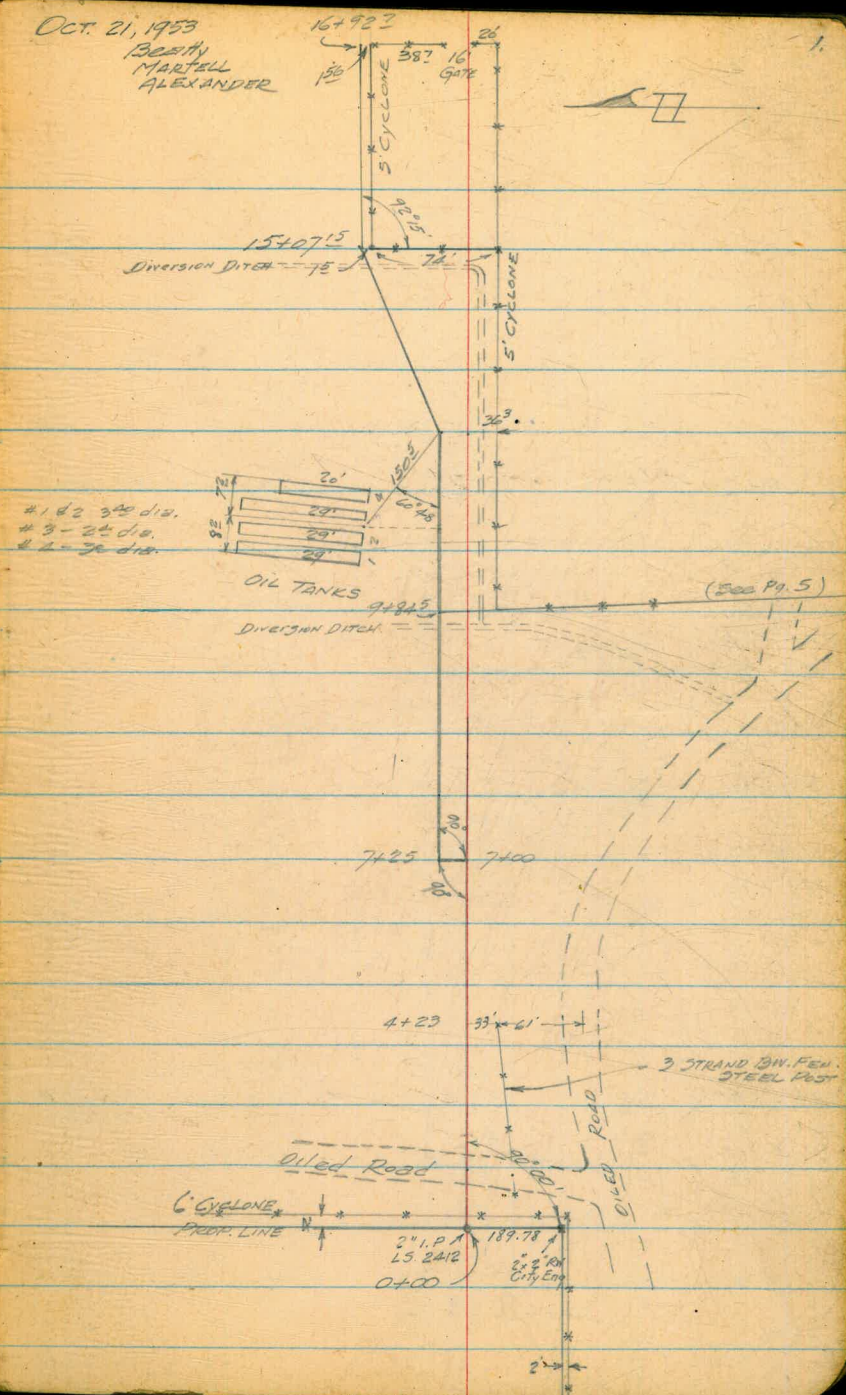
4+23 33' RT. End 3-BW FENCE
 94' RT. & Road

1450 P.O.T. & oiled Road N 89° 00' E

0+56 23.5 RT BEGIN 3-BW FENCE, STEEL PASTS

0+00 189.78 So. To City Engr. 2x2 Riv. Adv

OCT. 21, 1953
 BEATH
 MARTELL
 ALEXANDER



CHOLLA STATION FENCES.
(CONT'D)

36+00 POT. 4.12 To 6' Cyclone FEN

31 + 31.30 POT 320 To FEN
156 Conc. Man (City Engin.)

32+13 } GATE
32+03 }

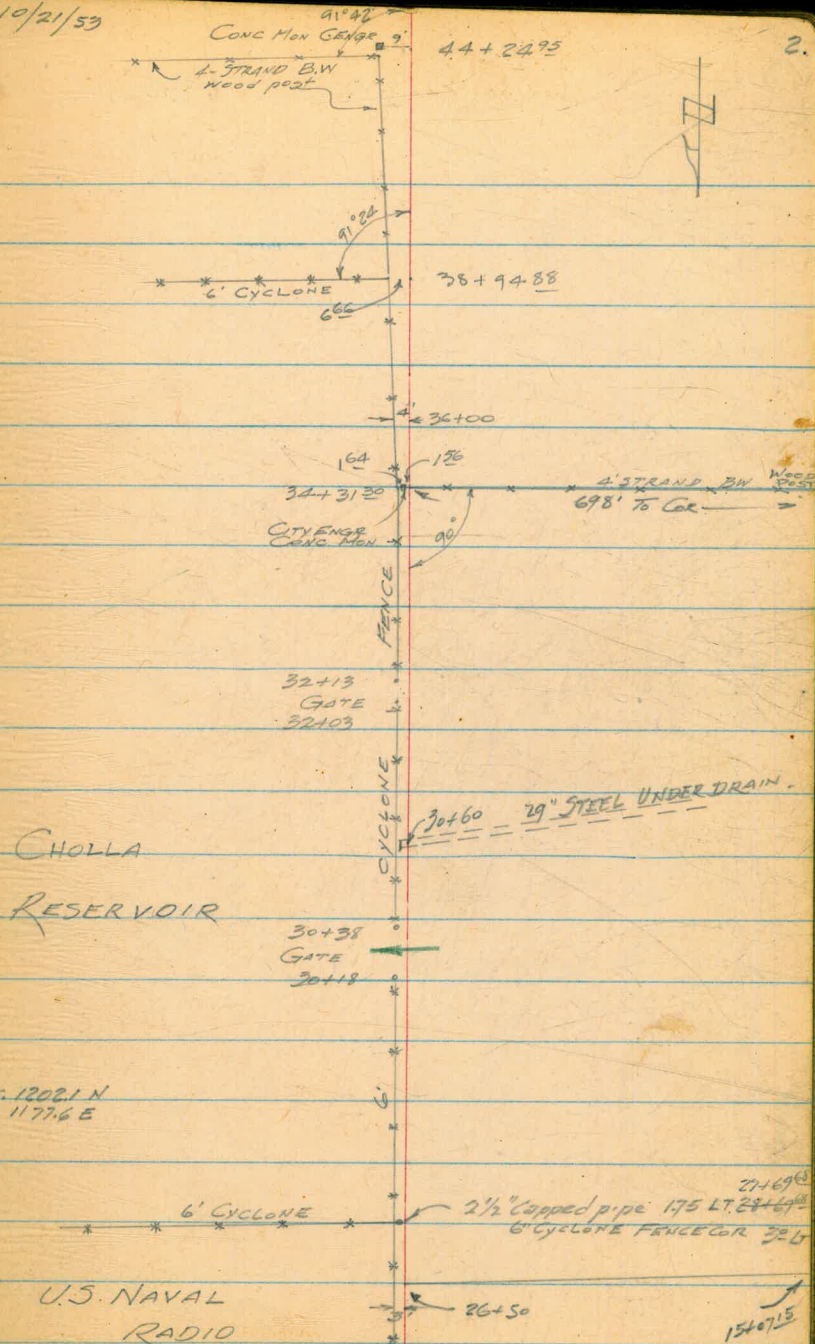
30+66 29" Steel pipe drain

30+38 } GATE
30+18 }

27
28+69.68 POT 3' LT To 6' Cyclone Fence
1.75 to 2 1/2" Capped Pipe U3 N 1918
LT. COR #1
27+68.7 (FEN TO E 91°25' LT.)

26+50 P.I. 92°30' RT. (To South.)
(See 109.7 for Line to Nor.)

10/21/53



10/22/53

3.

CHOLLA STATION FENCES
(Cont'd.)

91°22' LT 4-BW FEN TO EAST
92 RT. TO CITY ENGRG MEN.

44+24⁹⁵ POT. 90°00' LT.

50°30' E

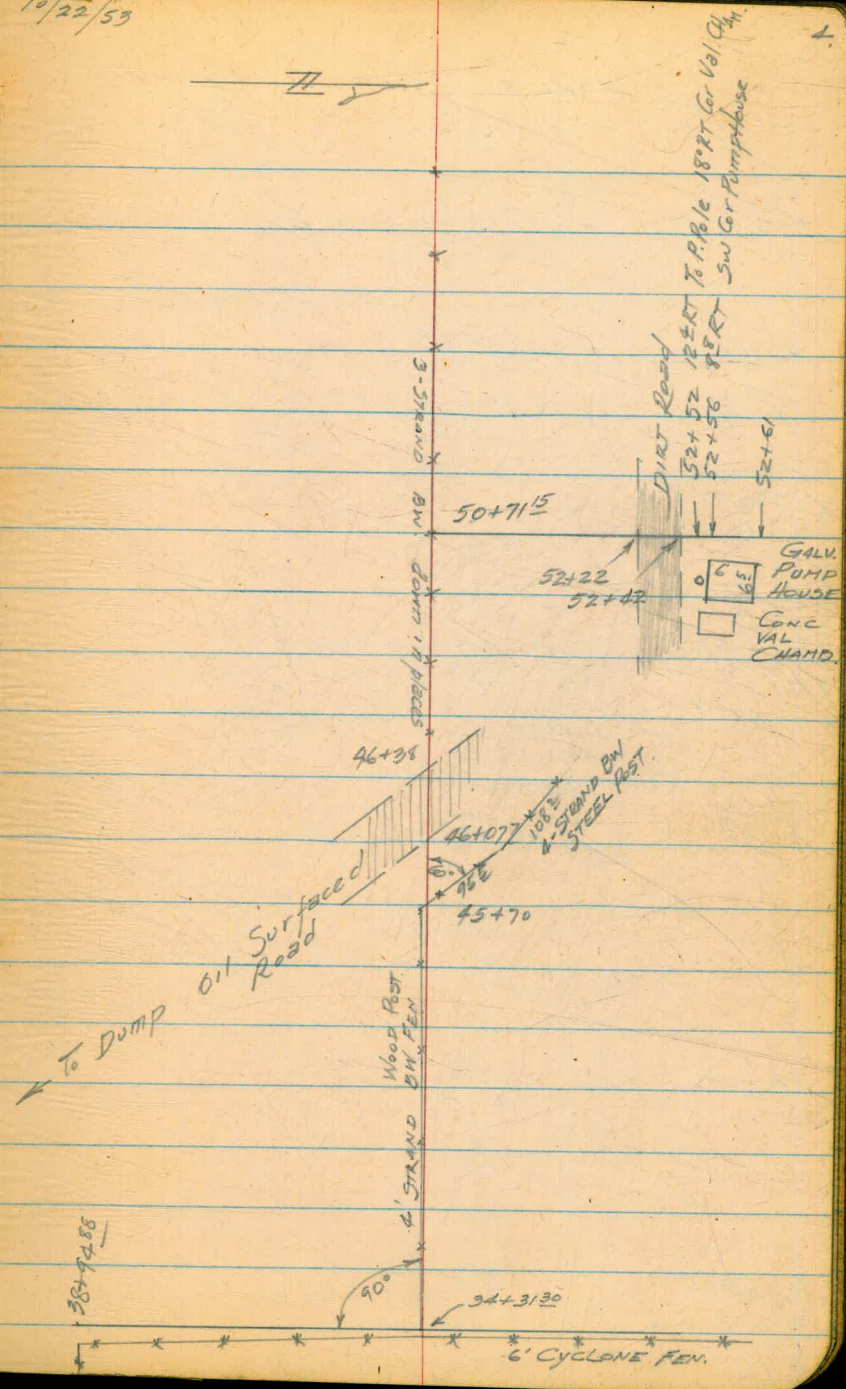
(91°24' LT. FEN. LINE)

38+94⁸⁸ POT. 60° To FEN. COR (CYCLONE)
(TURNS E.W.)

CHOLLA STATION FENCES (Cont'd.)

10/22/53

52+59.6 10' RT Cor. Pump House
 52+52 12' RT P. POLE, 18' RT CONC. VAL. BOX
 52+56 6.5' x 6' GALV. IRON PUMP HOUSE 8' RT (SW COR)
 52+42 } DIRT ROAD N 5° 00' W
 52+22 }
 50+71.5 P.I. 88° 30' RT
 49+28 POT S. 86° 30' W
 48+01.50 POT
 46+02 POT
 46+38 } oiled Road to Dump
 46+07.7 }
 45+70 0.85 LT Fence Cor
 40+45.02 POT
 38+48.02 POT (200' @ 9° 56')
 36+73.3 POT (176' @ 6° 54')
 35+00 POT (174.00 @ 5° 11')
 34+31.30 P.I. POT 90° RT
 S 89° 00' W



CHOLLA STATION FENCES.
(Cont'd.)

10/22/59

57+5530 = 9+8450 91°16' RT. To Fwd TBM

57+185 E DIVERSION DITCH

57+07 Cor Post 5' CYCLONE FENCE.

55+576 }
55+368 } GATE

54+932 SW Cor WAREHOUSE

40' RT FENCE COR

54+878 Cor Post 5' Cyclone Fence

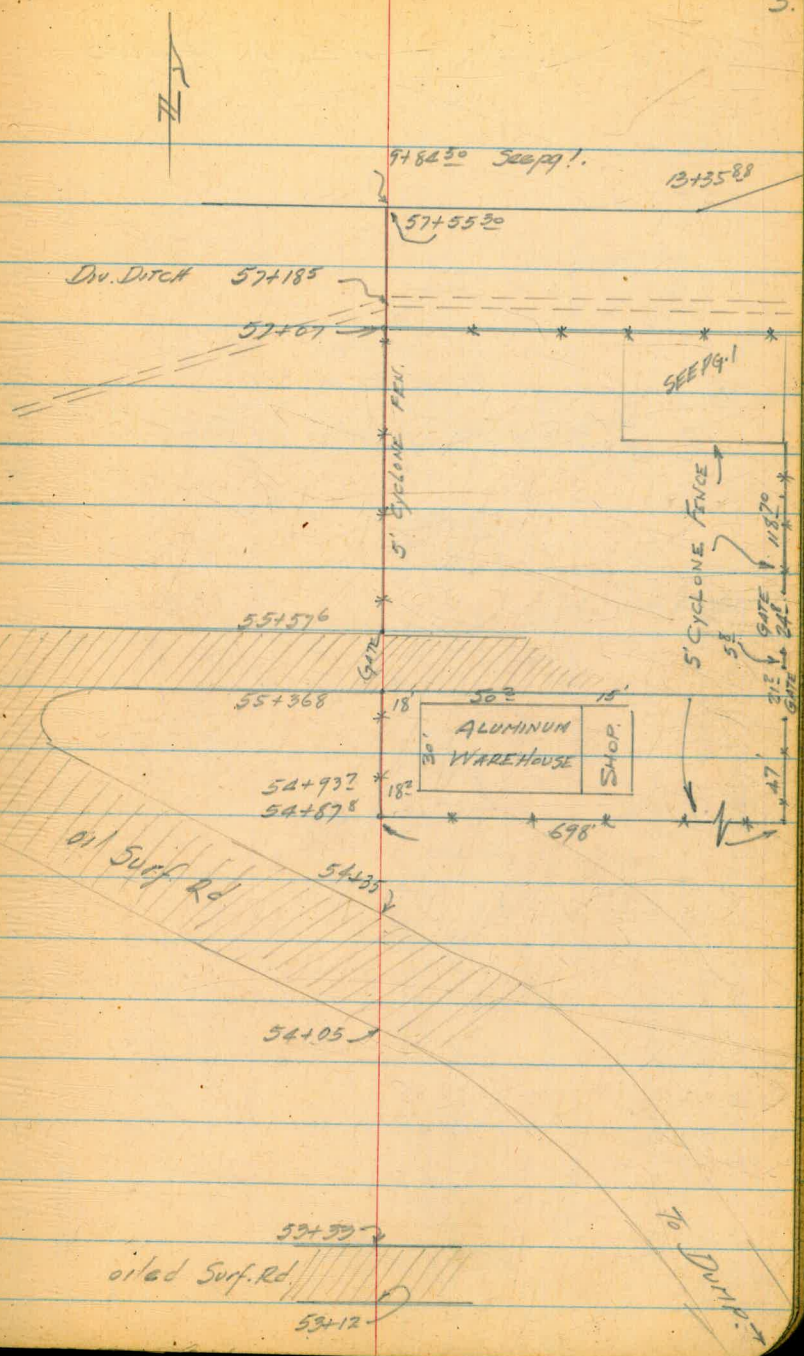
54+35 No Edge Road

(SEE Pg. 4.)

54+223 42' RT yard FEN. COR (□ MESH)

54+05 POT. So Edge Road

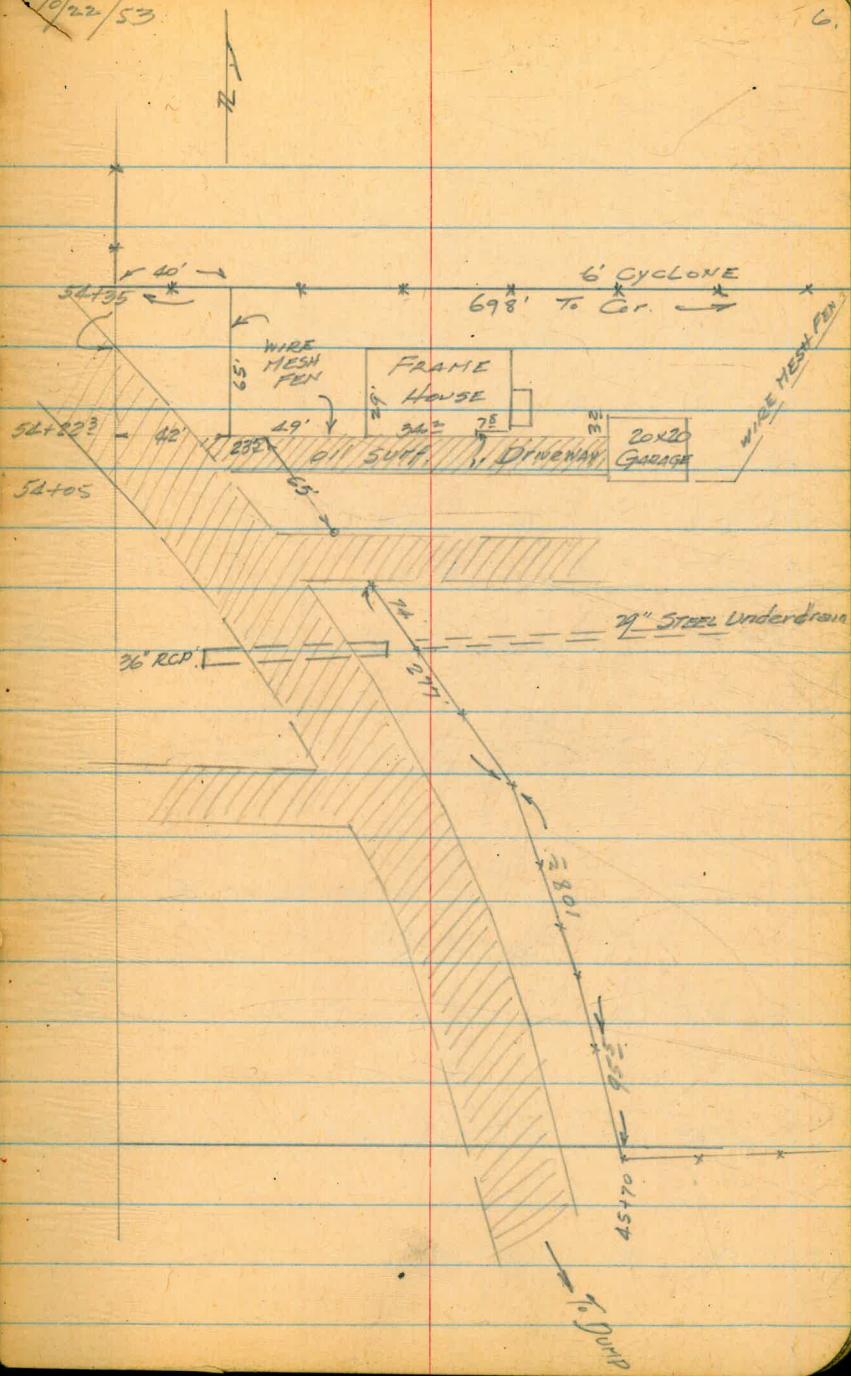
53+33 }
53+12 } Road.



CHOLLA STATION FENCES.
(Cont'd.)

10/22/53

6.



CHOLLA STATION FENCES
Cont'd

10/26/53

7.

- 46+91 End BW FENCE
- 45+90 E Juanita St to Nor.
- 45+45⁸⁰ 3/4" I.P.
- 43+58 Begin BW Fence
- 41+00 End Fence
- 35+22 Begin 3' strand BW Fen Wood Post
- 33+36 }
33+00 } ⁵⁴ Terminus of 60TH (Face of Curb.)
to North.
- 31+92⁵⁵ 2" I.P. RW & Copper TE
- 90°04' ^{LT} RT
- 31+88³⁵ P.I. (at 2" I.P. RE. 1530.) ^{6' CYCLONE} FEN
12' RT.
- 28+49⁸³ P.I. 0°20'30" RT 6' Cyclone Fen. 3 RT
- 26+50 P.I. 87°30' LT

PROPOSED
CHOLLA PUMP PLANT
&
PIPE LINE

4+2620 P.O.T.

0+100 P.O.T.

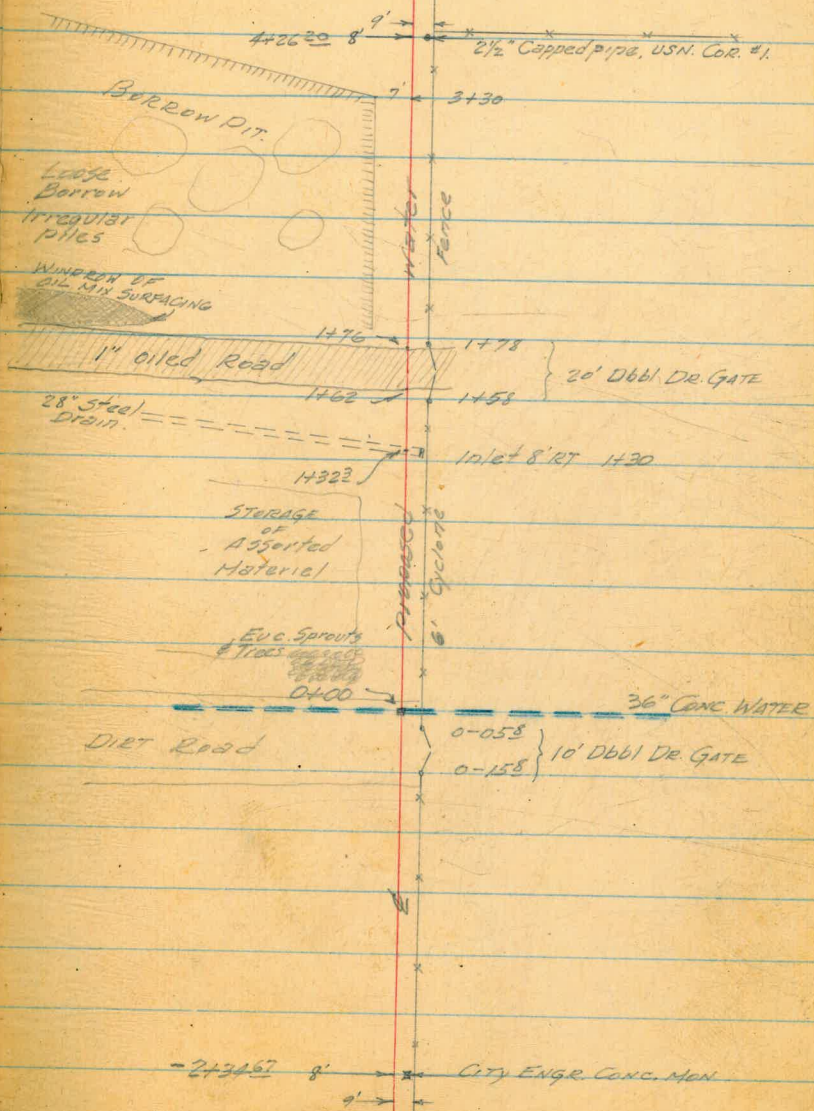
NOTE:
~~SEE REVISED
ALIGNMENT
0+100 - 4+20
PAGE 35~~

-2+3467

12/21/34

BEATTY
MARTELL
ALEXANDER

8.



-2+3467

CITY ENGR. CONC. MEN

CHOLLA RUMP PLANT
PIPELINE
(Cont'd)

NOTE:

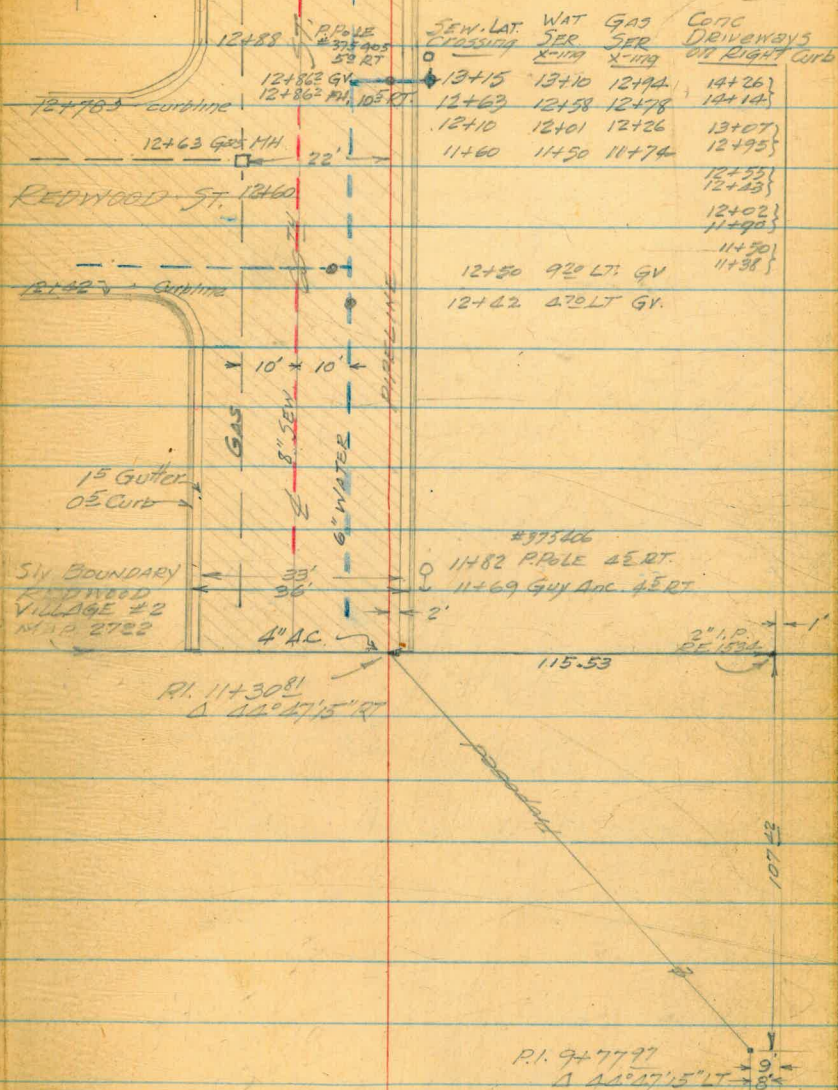
SEE REVISION 947797 -
page 38-39, T&E Book

11+30⁸¹ P.L. Δ 44°47'15" RT

9+77⁹⁷ P.L. Δ 44°47'15" LT

4+26²⁰ P.O.T

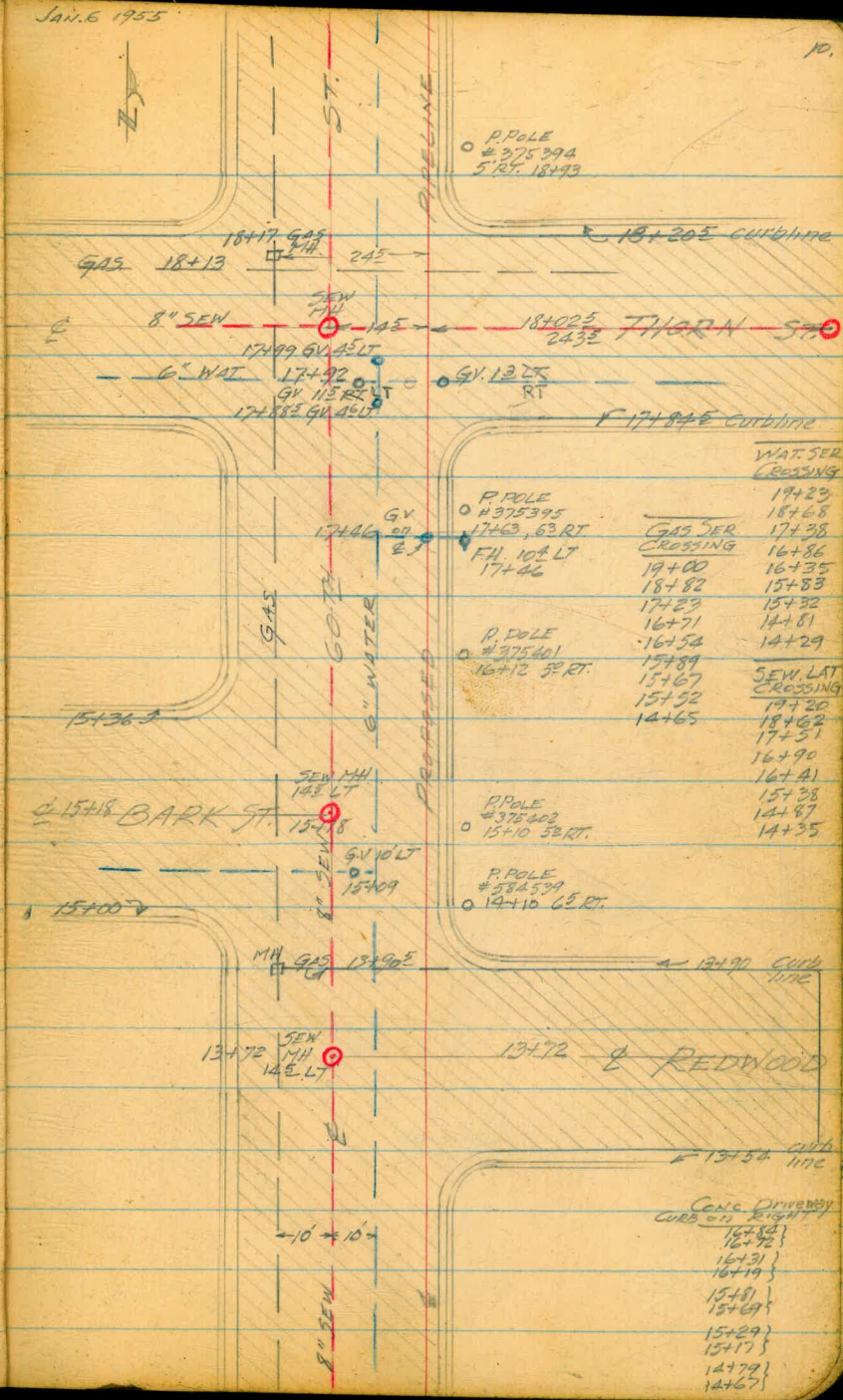
JAN. 5, 1958
DEATTY
SHOREY
MARTELL
ALEYANDER



CHOCLA PUMP PLANT & PIPELINE (Cont'd.)

Jan. 6 1955

10.



P. POLE
375394
5' RT. 18+93

18+205 CURBLINE

18+17 GAS
18+13

8" SEW

18+025 THORN ST.

17+99 GV 45 LT
17+92
GV 13 RT
17+88 GV 40 LT

GV 13 RT

17+845 CURBLINE

WAT. SER
CROSSING

P. POLE
375395
17+63, 63 RT
FH 102 LT
17+46

19+29
18+68
GAS SER CROSSING 17+38
16+86
19+00
18+82
17+29
16+71
16+54
15+89
15+67
15+52
14+65
SEW. LAT CROSSING 19+20
18+62
17+51
16+90
16+41
15+38
14+87
14+35

GV 50 E

6" WATER

15+36.3

15+18 BARK ST.

P. POLE
375403
15+10 53 RT.

GV 10 LT
15+09

P. POLE
584599
19+10 63 RT.

15+00

MH GAS 13+90 E

13+90 CURBLINE

13+72 SEW MH 142 LT

13+72 REDWOOD

13+52 CURBLINE

-10' x 10'

CONC. DRIVEWAY CURB ON RIGHT

16+82
16+72
16+31
16+19
15+81
15+69
15+29
15+17
14+79
14+67

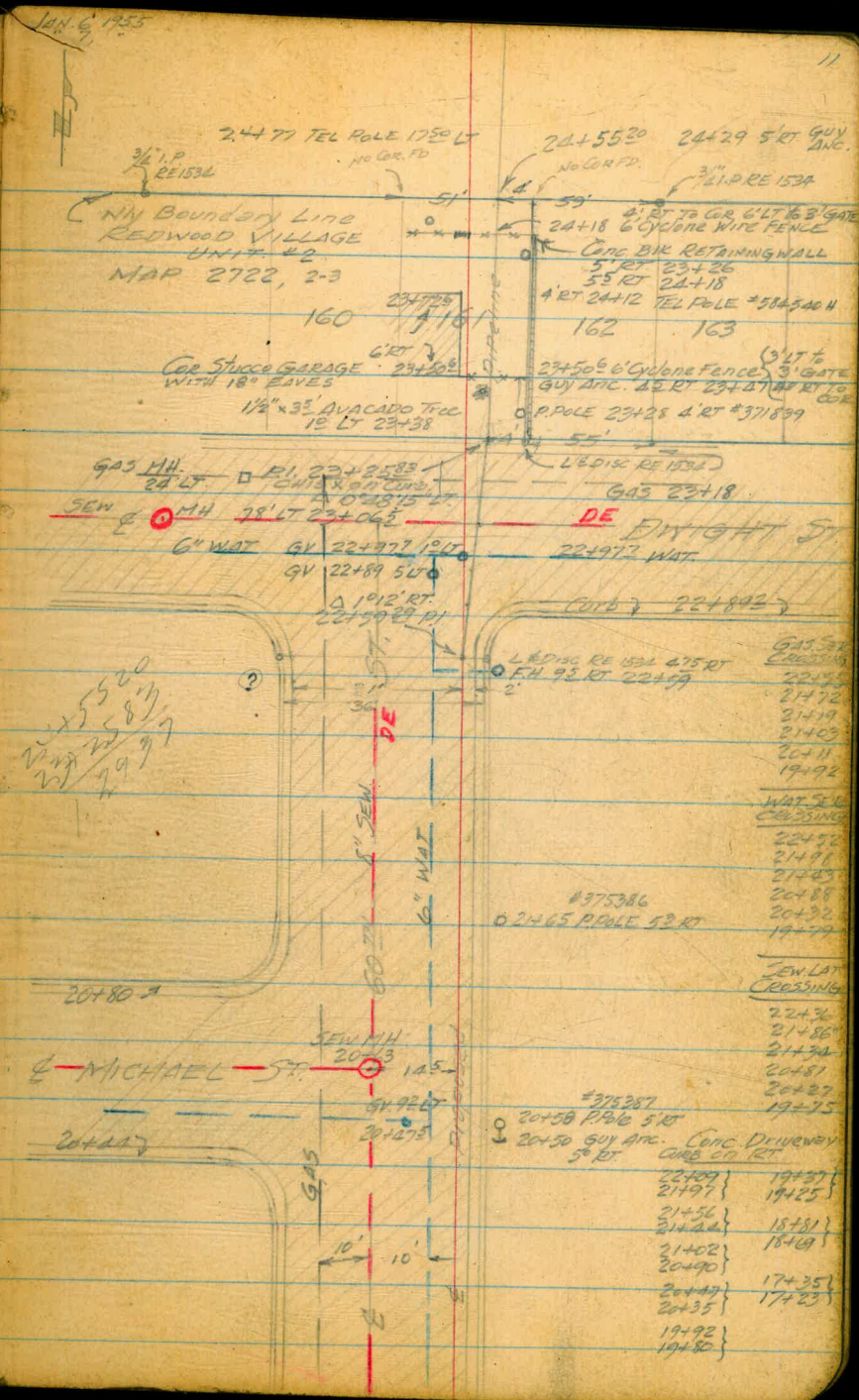
CHOLLA PUMP PLANT & PIPELINE
(Cont'd)

24+55.20 Intain Nly Bdry Redwood Village
UNIT #2 MAR 2788

24+1958 POT

23+2583 P.I. $\Delta = 0^{\circ}48'15" LT$

22+5929 P.I. $\Delta = 1^{\circ}12' RT$



Handwritten notes in the left margin of the diagram area:
 550
 811
 799
 799
 799

- 22+58
- 22+57
- 22+56
- 22+55
- 22+54
- 22+53
- 22+52
- 22+51
- 22+50
- 22+49
- 22+48
- 22+47
- 22+46
- 22+45
- 22+44
- 22+43
- 22+42
- 22+41
- 22+40
- 22+39
- 22+38
- 22+37
- 22+36
- 22+35
- 22+34
- 22+33
- 22+32
- 22+31
- 22+30
- 22+29
- 22+28
- 22+27
- 22+26
- 22+25
- 22+24
- 22+23
- 22+22
- 22+21
- 22+20
- 22+19
- 22+18
- 22+17
- 22+16
- 22+15
- 22+14
- 22+13
- 22+12
- 22+11
- 22+10
- 22+9
- 22+8
- 22+7
- 22+6
- 22+5
- 22+4
- 22+3
- 22+2
- 22+1
- 22+0
- 21+9
- 21+8
- 21+7
- 21+6
- 21+5
- 21+4
- 21+3
- 21+2
- 21+1
- 21+0
- 20+9
- 20+8
- 20+7
- 20+6
- 20+5
- 20+4
- 20+3
- 20+2
- 20+1
- 20+0
- 19+9
- 19+8
- 19+7
- 19+6
- 19+5
- 19+4
- 19+3
- 19+2
- 19+1
- 19+0

Cholla Pump Plant & Pipeline
(Cont'd)

34+92.40 E. HUGHES ST. from East
(produced)

34+63.20 P.I. $\Delta = 46^{\circ}10'45''$ LT (from Tang to Curve)
EC.

P.L. $\Delta = 22^{\circ}39'30''$ RT.
R = 233.5
L = 92.36

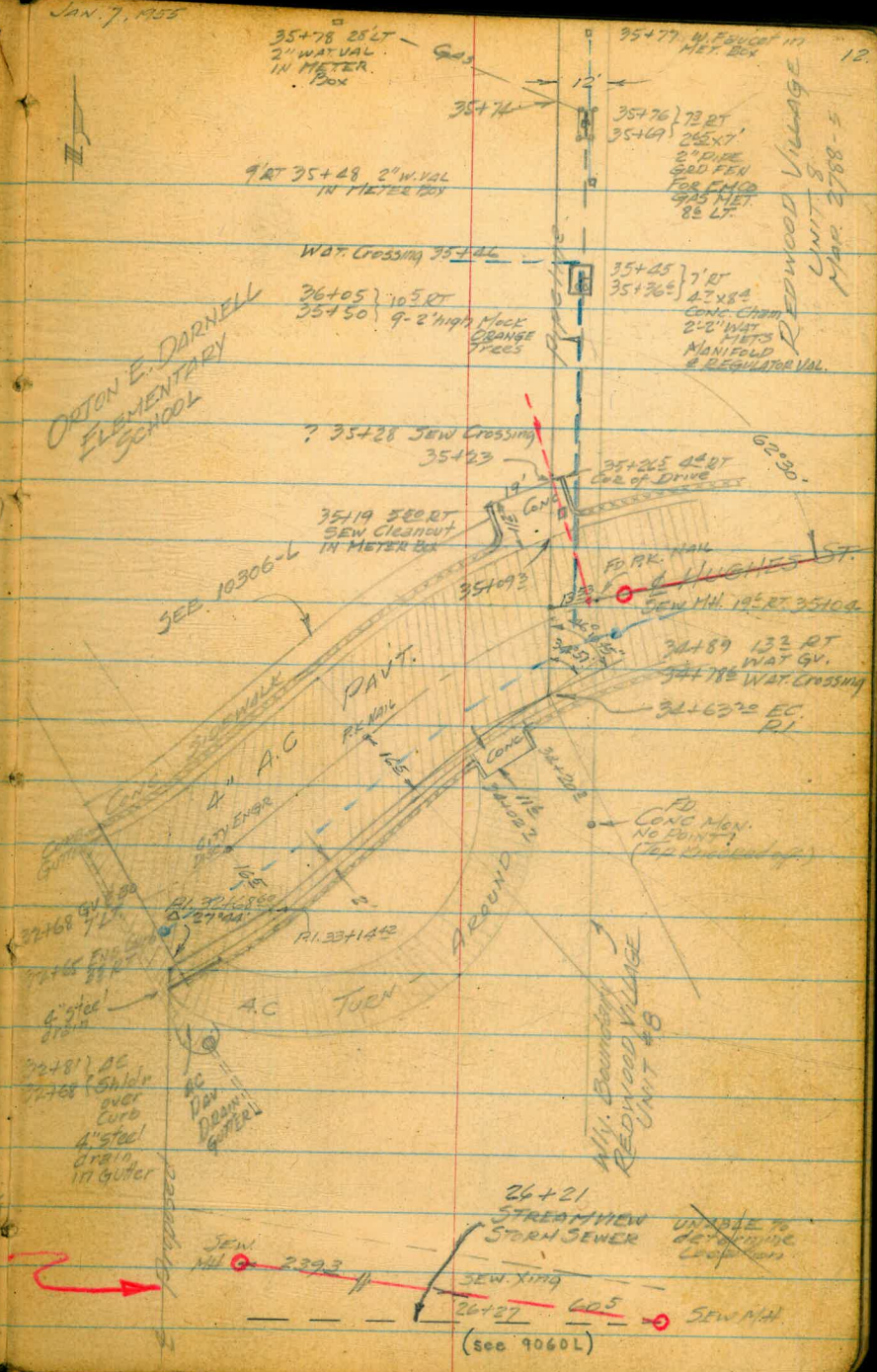
33+70.84 B.C.

33+10.42 P.L. $\Delta = 1^{\circ}36'$ LT

32+68.60 P.L. $\Delta = 27^{\circ}44'$ RT

NOTE:
See pg. 52-53 for
Revision of ALIGNMENT
& References.
STA. 24+55.20 - 34+98.20

JAN. 7, 1955



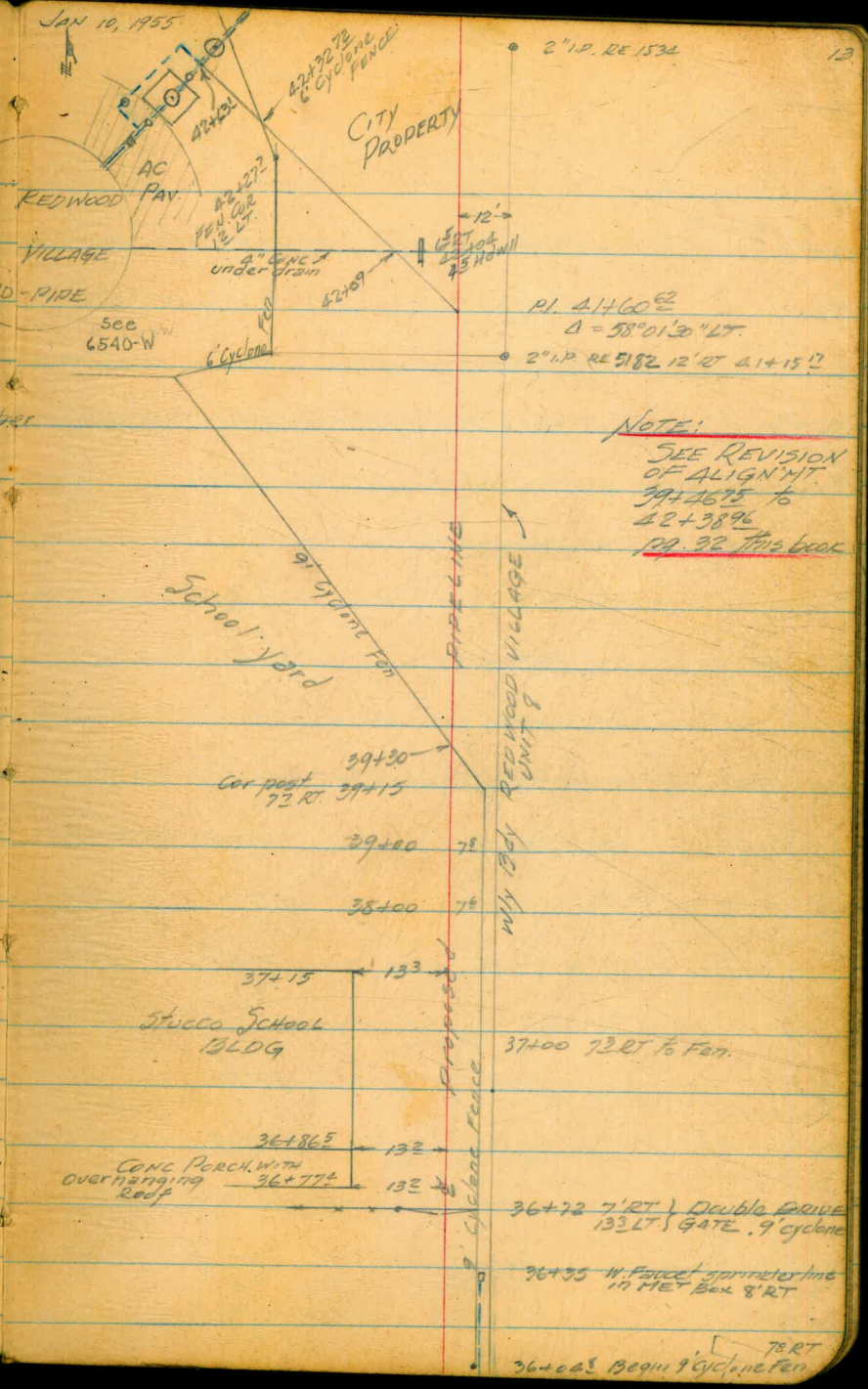
REDWOOD VILLAGE
UNIT #8
MAR 2788-5

(See 9060L)

CHOLLA PUMP PLANT & PIPELINE
(Cont'd)

42+68.8 GV. 12" LT on By Pass Line
 42+63.10 } Intersect By-Pass Tee (?)
 END OF RED VILLAGE PIPELINE
 PROPOSED PIPELINE
 7' RT to 6' cyclone fence
 3.55 RT to AVA, in 3.5' cir. chamb.
 3' LT to 12" GV.
 13.42 LT. to 12" GV.
 7.92 LT to 12" clay altitude valve in 7' chamber
 4.42 LT to Edge 7" val Chamb

41+60.62 P.I. $\Delta = 58^{\circ}01'30''$ LT.



2" I.P. RE 1534
 13
 P.I. 41+60.62
 $\Delta = 58^{\circ}01'30''$ LT.
 2" I.P. RE 5182 12" RT 41+15.12

NOTE:
 SEE REVISION
 OF ALIGNMENT
 39+26.25 to
 42+38.96
 pg. 32 this book

PROPOSED
CHOLLA PUMP PLANT
&
PIPE LINE
& PROFILE & CROSS-SECTIONS

BM.	12.16	354.88.	342.72
TBM.	0.75	352.16.	3.47 351.41.
IP	6.41	345.63.	12.94 339.22.
OK TBM.	7.53	346.91.	6.25 339.38. = 339.39
IP	10.44	353.62.	3.73 343.18.
IP	11.68	365.17.	0.13 353.49.
IP	13.32	377.92.	0.57 364.60.
IP	7.01	382.82.	1.11 376.81.
SET TBM	5.07	385.29.	3.60 380.22.
SET TBM	2.18	385.39.	2.08 383.21. ✓
OK TBM	4.28	384.50.	5.17 380.22. = 380.22.
0-25		10.2	384.7.
0-20		3.2	381.9.
0400		4.3	380.2.
0400 Top 36" Conc Pipe.		7.83	376.67.
0417		6.3	378.2.
0422		7.5	377.0.

DEC. 22 1954
DEATY
MARTELL
ALEXANDER

Chris X NW Cor Val Box Cholla Station (Ely) (FB 320-46)
FB

on SE Cor. AV Chamber.

NE Cor Val Chamber. South 300' of Warehouse (FB 794-29)

on Hub 0400

NW Cor Val Chamber 300' Ely of Wly Cholla RES. FENCE

on 0400 hub.

LT (Wly)

380.3 380.2 380.3
4.2 4.3 4.2
25 25 9 (at fence)

379.4 379.2 377.4
5.1 6.3 2.1
25 9 9

376.3 378.0 378.8 377.7 377.0 376.1
6.2 6.5 5.7 6.8 7.5 8.4
25 15 6 4 7.5 9

Red 5 ✓
No 12-23-54

0-58 }
0-158 } 90 RT.
Double
DRIVE
gate

RT. (Ely)

0+30 384.50 9.2
 0+50 0.50 371.99 13.01 371.49 1.4
 0+75 5.2
 0+85 6.4
 1+00 7.2
 1+30 8.1
 1+32.3 28" Drain Crossing
 1+50 7.7
 1+62 sly edge oiled road 7.4 364.6
 1+75 (8" oil) 7.2
 1+76 sly edge oiled road 7.1 364.9
 1+83 5.5
 2+00 3.3

374.2 375.0 376.7 375.3 374.6
 103 9.5 8.3 9.2 9.9
 25 10 7 2 9 (at fence)

370.5 371.0 370.6 370.6
 15 10 10 14
 25 12 8 9 at fence

368.4 366.8 366.7
 3.6 5.2 5.3
 25 " "

365.8 365.6 365.5
 6.2 6.4 6.5
 25 " "

363.8 364.4 364.8 364.4
 8.2 7.6 7.8 7.6
 50 25 25 " "

363.4 363.9 363.9 364.2 361.79 362.2
 8.6 8.1 8.1 7.8 10.20 10.0
 25 25 55 8 9 (at fence)
 # 28" Steel Drain

361.9 362.4 362.6 362.7 363.0 363.6 363.9 364.3 363.9
 10.1 9.6 9.4 9.3 9.0 8.4 8.1 7.7 8.1
 175 150 125 100 75 50 25 25 9 at fence

362.2 362.6 362.9 363.2 363.4 363.7 364.1 364.8 365.0
 9.8 9.4 9.1 8.8 8.6 8.3 7.9 7.2 7.0
 175 150 125 100 75 50 25 25 9

1458 } 92 FT
 1478 } DOUBLE
 DRIVE
 GATE

362.2 362.8 362.9 363.3 363.6 363.9 364.6 365.1 366.5 368.4 366.7 364.6
 9.8 9.2 9.1 8.7 8.4 8.1 7.6 6.9 5.5 3.6 3.3 3.4
 175 150 125 100 75 50 25 13 11 7 7 9

Red & ✓
 He 12-23-54

		371.99		
2+25			0.0	
P	8.57	379.54	1.02	370.97
2+50			3.7	
2+60			1.8	
2+70			+0.1	
P	13.03	391.10	1.47	378.07
2+80			9.2	
2+90			7.3	
2+100			5.4	
P	13.13	403.09	1.14	389.96

363.4	362.9	362.5							
8.6	9.1	9.5							
125	150	200							
363.9	364.3	364.9	365.3	366.1	369.5	370.1	371.0		372.4
8.1	7.7	7.1	6.7	5.9	2.5	1.3	0.0	+0.4	
100	75	50	25	12	10	6			9 at fence
366.1	366.3	366.9	368.5	369.1	374.0	374.1	375.6	375.8	376.2
12.4	12.2	12.6	11.0	10.4	5.5	5.4	3.9	3.7	
25	21	17	12	11	7	5	2	0	9 at fence
366.6	364.9	364.2	363.6	363.0	361.4				
12.9	14.6	15.3	15.9	16.5	17.1				
50	75	100	125	150	175				
365.2	366.2	366.9	367.3	368.3	370.1	376.0	376.2	377.3	377.7
14.3	13.7	12.6	12.2	11.2	9.4	3.5	3.3	2.2	1.8
75	50	25	13	11.0	7	5	3	0	9
364.3	362.0	363.2	362.6						
15.1	15.5	16.3	16.9						
100	125	150	175						
366.3	365.4	366.3	366.9	374.5	374.0	376.8	376.0	379.4	379.6
12.7	14.1	13.2	12.6	5.0	5.5	2.7	3.5	0.1	+0.1
100	75	50	37	28	21	12	8	4	9
363.3	363.4	362.3							
15.7	16.1	16.7							
125	150	175							
366.5	367.1	369.1	376.6	377.2	381.6	379.0	380.8	381.9	382.3
21.6	20.4	22.0	14.5	13.9	9.5	12.1	10.3	9.2	8.8
75	60	30	32	28	19	5	0	0	9
367.3	375.6	374.5	368.1	367.3	364.4	363.8	362.9		
24.3	16.5	16.6	23.0	23.1	26.7	27.3	28.3		
82	100	109	119	129	122	150	175		
368.5	368.7	374.1	375.4	378.5	379.7	382.7	378.6	383.2	383.8
22.6	22.1	17.0	15.7	12.6	11.4	8.4	12.5	7.9	7.3
77	67	58	50	42	34	25	10	5	7.0
370.8	372.9		372.4	370.1	371.3	369.4	366.6	369.9	364.3
20.2	19.2	18.7	20.2	19.8	21.7	24.5	21.2	26.8	27.9
85	100	102	104	114	122	128	122	150	175
373.1	369.5	368.8	370.8	375.2	376.1	376.3	385.2	385.7	386.4
18.0	21.6	22.2	20.3	15.9	13.0	14.8	15.0	5.9	5.2
95	93	80	54	50	43	33	12	4	4.7
374.5	373.3	370.9	365.1	364.8	366.9	364.5	363.3		
17.6	17.8	20.2	26.0	26.2	24.2	26.6	27.8		
100	110	123	134	144	150	167	175		

Ref 1/2 v
H6 12-23-54

203.09.

3+25 12.3

3+30 (7' LT. Cor of borrow pit) 11.2

3+50 5.3

P 12.96 415.13. 0.92 402.17.

4+00 15

P 8.62 423.27. 0.48 414.65.

5ET TBM 0.02 423.21. 0.08 423.19.

P 0.40 411.16. 12.45 410.76.

P 0.00 398.05. 13.11 398.05.

P 0.40 385.26. 13.19 384.86.

CK TBM 3.00 383.21. 5.05 380.21. = 380.22.

P 0.03 373.39. 9.85 373.36.

P 0.05 360.18. 13.26 360.13.

P 3.28 351.23. 12.23 347.95.

P 4.49 349.56. 6.16 345.07.

CK TBM 10.16 339.38. = 339.39.

12/22/54

318.3 318.6 382.0 382.0 384.9 390.2 390.8 392.0

248 245 211 211 182 129 123 111

25 18 16 12 7 4 2 9

27 fence

380.1 380.4 382.7 382.7 384.9 390.9 391.3 391.9 392.6

230 227 206 204 182 132 118 112 10.5

25 15 13 11 8 7 2 9

Top of borrow cut

317.9 390.9 394.5 396.5 397.2 398.2

25.2 12.2 8.6 6.6 5.3 4.3

25 15 25 15 2 9

Top of borrow cut

409.2 412.0 413.6 415.1

5.3 3.1 1.5 0.0

25 10 2 9

2" Capped pipe USN ⊕ 1918 Cor No. 1, (N 1202.1
8' RT 2+26.20 (E 1172.6 ELEV. -
on 4x4 Grid Post.

on 0+00 hub.

Red & ✓
H6 12-23-54

CHOLLA PUMP PLANT & PIPELINE
& PROFILE

JAN. 11 1955
BEATTY
SHOREY
MARTELL
ALEXANDER

Recd.
1/13/55
R.J.

18.

RT. Ely

TBM	12.61	435.80		423.19
4+25			16.2	419.60
4+50			10.7	425.10
4+78			5.5	430.30
5+00			0.6	435.20
Pipe Sta.	11.45	447.19	0.06	435.74
5+25			9.5	437.69
5+50			7.8	439.39
6+00			3.9	443.29
6+13			1.9	445.29
6+25			0.8	446.39

2 1/2" Capped pipe 8' RT 4+26.20

LT. Wly

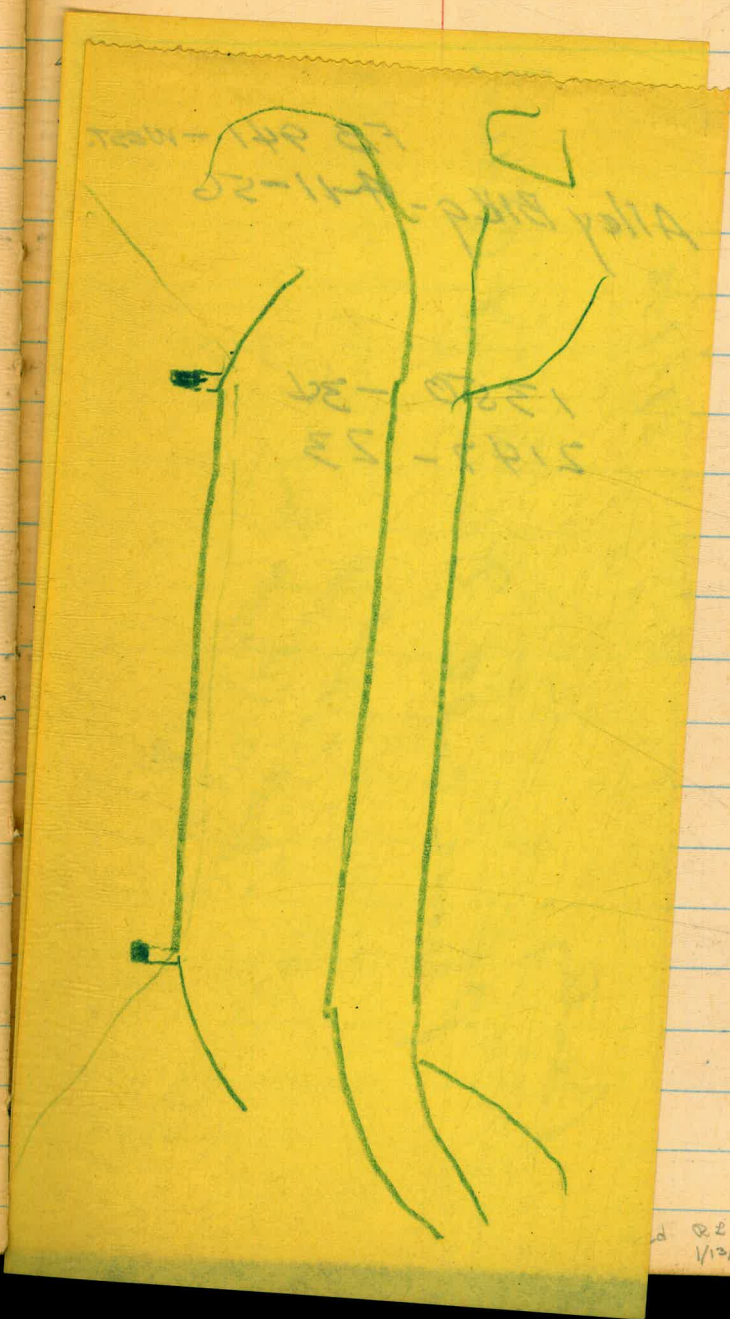
	17.6 18.2 10	19.6 16.2	19.8 3	422.1 13.7 9	at fence
	424.0 1.8 10		426.8 2.8 9		
	429.5 6.5 10		431.6 2.2 9		
	434.4 1.4 10		435.6 2.2 9		
	436.8 10.4 10		438.7 8.5 9		
	437.9 2.3 10		441.0 6.2 9		
	441.3 5.9 10		444.7 3.5 9		
	442.8 6.4 10		446.0 1.2 9		
	443.4 3.8 10		447.1 0.1 9		

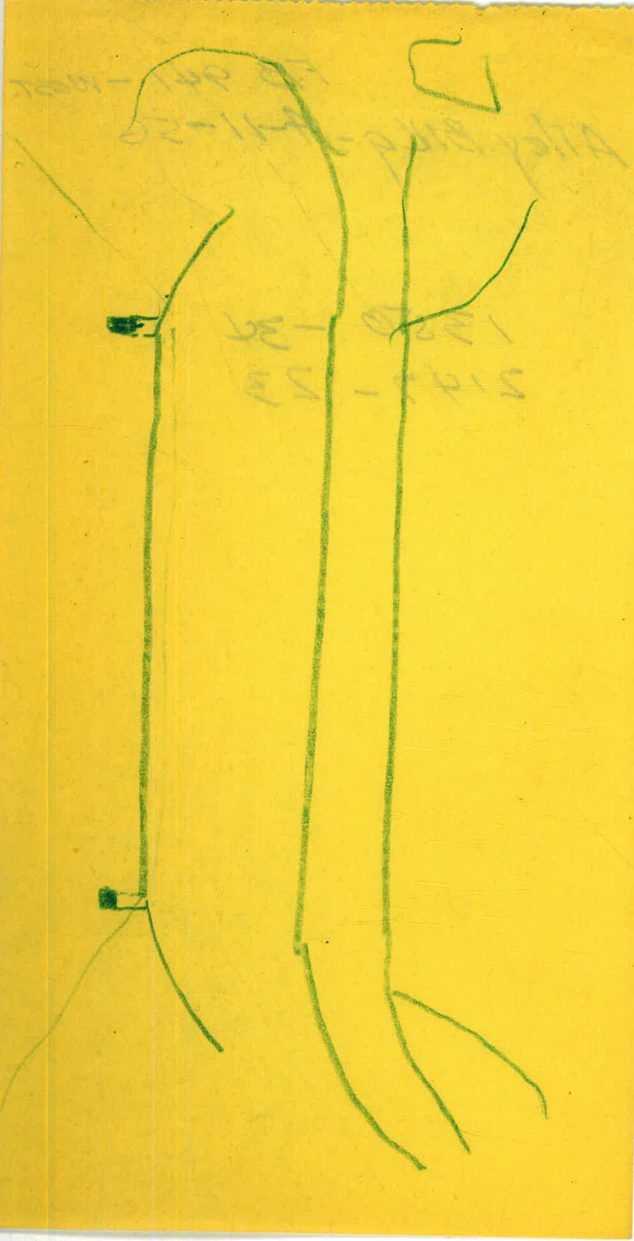
Reduced by
R.J.E
1/13/55

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd.)

447.19

6+50		1.2	445.99
Pipe Top	7.68	450.26	0.61 446.58
6+75		6.1	448.16
7+00		6.9	447.36
7+50		5.9	448.36
7+65		2.2	450.06
7+75		4.0	450.26
8+00		5.1	449.16
8+50		2.7	449.56
8+80		2.1	450.16
8+93		2.9	451.36





5/9/52

Betty,

Please call Denim at Chollas.

AT-33-224-1
 Machine, Terrace
 +
 North of Applegate Court

FIG. 94

10/10/52

FB 941 - West.

Atley Birk - 4-11-56

1350 - 34

2147 - 23

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd.)

	047.19		
6+50		1.2	445.99
P ¹ Top Stk	7.68	0.61	446.58
6+75		6.1	448.16
7+00		6.9	447.36
7+50		5.9	448.36
7+65		4.2	450.06
7+75		4.0	450.26
8+00		5.1	449.16
8+50		4.7	449.56
8+80		1.1	450.16
8+93		2.9	451.36

4/1/53
LT. WY.

444.1	447.7
3.1 10	+0.5 9 (at fence)
445.3	448.6
9.0 10	5.7 9
446.3	448.8
8.0 10	5.5 9
447.3	449.7
7.0 10	4.6 9
448.4	450.1
5.9 10	4.2 9
448.7	450.2
5.6 10	4.1 9
449.5	450.0
4.8 10	4.3 9
449.9	450.2
4.4 10	4.1 9
450.1	451.0
4.2 10	3.3 9
451.4	451.0
2.9 10	3.3 9

19.
RT ELY

Red R28
1/12/55

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd.)

452.26

1/11/55
LT. Wly

20.

6 9+00 32 451.06

451.0
33
10

451.2
31
9

(st. fence)

6 9+20 41 450.16

449.5
48
10

451.3
30
9

7 9+50 29 451.36

450.8
35
10

452.5 452.4
15 19
5 9

7 9+77.97 34 450.86

451.0
33
10

451.6
27
9

(RT 2 to BK Tang)

7 9+90 38 450.46

450.6
37
10

451.1
32
10

7 10+00 49 449.36

449.0
33
10

450.7
36
10

8 10+25 55 448.76

449.2
51
10

449.3
50
10

8 10+50 69 447.36

446.7
76
10

447.3
70
10

TBM 4.03 447.27 11.02 443.24

Fly End Curve 35 RT 11+30.81

8 10+75 11 446.17

445.9
14
10

445.5
18
10

8 10+85 25 444.77

445.7
16
10

445.3
20
10

Red. R.L.C.
1/13/55

CHOLLA PUMP PLANT & PIPELINE
& Profile
(Cont'd)

447.27

11+00 3.3 443.97

11+30⁸¹ on 4" A.C. pipe 4.40 442.87

11+50 " " " " 4.51 442.76

12+00 " " " " 4.76 442.51

12+50 " " " " 5.01 442.26

13+00 " " " " 5.36 441.91

13+50 " " " " 5.67 441.60

Rim 6.06 441.21

Inv. 11.96 435.31

14+00 " " " " 6.63 440.64

14+50 " " " " 8.69 438.58

15+00 " " " " 11.32 435.95

TP 0.33 436.03 11.57 435.70

Rim 1.26 434.77

Inv. 9.95 426.08

15+50 " " " " 3.65 432.38

16+00 " " " " 7.64 428.39

16+50 " " " " 11.62 424.41

TP 0.00 423.13 12.90 423.13

17+00 " " " " 2.77 420.36

1/13/55

21

443.8

3.5

10

444.0

3.3

10

8" Sew. M.H. 115 LT. 13+72

Prop. Disc 125 RT 15+10

8" Sew. N/H. 125 LT 15+18

Red. R.F.E.
1/13/55

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd.)

	423.13		
17+50		6.50	416.59
17+85		7.81	415.32
18+00		7.71	415.42
		Rim 8.23	412.90
		Low 12.88	405.25
18+20		7.87	415.26
18+50		7.14	415.99
19+00		4.02	419.11
19+50		0.31	422.82
TP		0.26	422.87
TP	13.08	427.98	412.90
		Rim 1.92	426.06
		Low 9.37	418.61
CRP		13.08	412.90
TP	12.89	435.76	422.87
20+00		9.40	426.36
20+50		5.83	429.93
		E. Rim 4.86	430.90
		Low 11.80	423.96
21+00		2.23	433.53
TP	12.50	447.80	0.46 435.30

4/11/55

8" Sew. M.H. 145 LT 18+02 ✓

Prep disc in curb 375 RT 19+46

Run of Sew. M.H. 145 LT 18+02

8" Sew. M.H. 2435 RT 18+02

8" Sew. M.H. 145 LT 20+63

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd.)

1/11/55

23

247.80

21+50 10.78 437.02

22+00 7.21 440.59

22+50 3.63 444.17

22+59.29 x PT 3.07 444.73

E. Rim 4.20 443.60

IRV. 11.83 435.97

8" Sew. M.H. 78' LT 23+06.5 (Dead end to rt of 4)

TP 23+00 4.30 450.51 1.56 446.21

24.5
23+29.5 Conc Gutter 4.50 446.04

24.75
23+23.25 Conc Curb 4.08 446.46

25.25
23+22.25 " " 4.08 446.46

23+50 3.8 446.74

24+00 3.7 446.84

24+18 3.9 446.64

24+20 4.6 445.94

TP 24+20 1.16 438.80 12.90 437.64

24+50 15.1 423.70

TP 0.79 429.73 9.86 428.94

SET TBM 0.37 420.49 9.61 420.12

3/2" I.P. 59' RT 24+55

24+63 6.6 413.89

24+75 8.2 412.49

413.1

411.0 411.1 412.6 412.7

7.4
10

8.5 9.2 2.9 7.8

Red. 1/13/55

R.E.E.

CHOLLA PUMP PLANT
& PIPE LINE
& Profile
(Cont'd)

420.09

24+77 2.6 412.89

24+85 13.1 407.39

Ⓟ 0.68 408.05 13.12 407.37

25+00 2.7 404.35

25+03 4.7 403.35

25+20 7.5 400.55

25+25 6.9 401.15

25+30 8.2 399.85

25+33 13.2 394.85

Ⓟ 0.61 395.35 13.31 392.72

25+40 3.9 391.45

25+50 6.5 388.85

25+57 8.2 387.15

25+67 13.1 382.25

Ⓟ 0.23 382.59 12.99 382.36

25+80 4.1 378.49

25+86 7.2 375.39

25+94 13.4 369.19

Ⓟ 3.14 372.73 13.00 369.39

DET. TBM. 5.10 372.25 5.58 367.15

JAN. 12, 1955

BESSIE
SUDDEY
MARTELL
ALEXANDER

24

412.3	411.1	411.1	412.9	410.5	410.3	412.1
8.2	7.2	9.2	7.6	10.2	10.2	8.2
10	8	5	3	4	6	10

401.2

398.1

6.9

10.2

10

10

395.4

394.6

12.7

13.5

10

10

394.3

392.3

1.1

3.1

10

10

387.5

390.0

7.9

5.2

10

10

Chis □ End curb Nly side STREAMVIEW DR.

Red. R.E.
1/12/55

1/12/55

25

CHOLLA PUMP PLANT & PIPELINE
 & PROFILE
 (Cont'd)

Mar. 2, 1955

	372.25	
26+00	3.4	368.85
26+15	9.5	362.75
26+21	Storm	360.15
26+22	Top 48" Conc Drain	362.65
26+28	10.6	361.65
26+36	9.2	363.05
26+50	7.9	364.35
	W. RIM 5.90	366.35
	Inv. 16.25	356.00
26+50	7.7	364.55
26+80	9.5	362.75
26+88	9.2	363.05
26+90	7.8	364.45
27+00	8.4	363.85
27+08	8.5	363.75
27+15	9.9	362.35
27+25	10.3	361.95
27+45	10.2	362.05
27+50	10.8	361.45
27+65	9.1	363.15
W.P.	100	371.25

367.15 TBM
 2.73
 369.88 &
 972
 360.15 Elev. Top
 48" Conc.
 Storm
 Drain
 2.73
 367.15 W. TBM

10.25 below

10" Sed. MH. 60' RT. 26+27

Red all
 1/12/55

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd)

1/12/55

26.

TP	0.53	366.88		366.35	W. Rim Sew. M.H. 605 RT 26+27
TP	2.02	355.80	1310	353.78	
		E. Rim	4.91	350.89	
		170	13.41	342.39	10" Sew; M.H. 2393 LT 26+27
TP	12.74	366.60	1.94	353.86	
CK TP			0.25	366.35	
TP	12.64	383.89		371.25	(from previous page)
28+00			9.0	374.9	
TP	12.99	396.87	0.01	383.88	
28+25			12.9	384.0	
28+40			7.4	389.5	
28+50			48	392.1	
TP	12.27	408.66	0.48	396.39	
29+00			0.3	396.6	408.36
TP	13.17	421.45	0.38	408.28	
29+15			8.9	412.6	
29+33			5.9	415.6	
29+45			3.5	418.0	
29+50			3.0	418.5	
TP	12.72	433.88	0.29	421.16	

Red. G.L.C.
1/13/55

1/12/55

27.

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd)

433.88

30+00		11.2	422.7
30+50		8.6	425.28
30+55		8.1	425.78
30+65		4.7	429.18
30+80		1.8	432.08
IP	12.71	445.97	0.62 433.26
31+00		11.9	434.07
31+50		3.4	442.57
31+75		0.7	445.27
IP	13.21	458.43	0.75 445.22
32+00		11.2	447.23
32+10		9.8	448.63
IP	12.85	470.88	0.40 458.03
32+42		1.2	469.68
32+50		1.3	469.58
IP	6.36	475.83	1.41 469.47
32+58.6	on A.C. par.	6.94	468.89
32+62	" " "	7.37	468.46
32+65	" " "	7.02	468.81
S.P.T. TBM	6.61	475.83	469.22

Chis. B, END of Curb 37' RT. 32+68.00

Red r.t.c.
1/13/55

1/12/55

28

C. HOLLA PUMP PLANT & PIPELINE
& Profile
(Cont'd)

		475.83	
32+68 ⁴⁰	PI. on AC pav.	6.80	469.63
33+00	" "	6.00	469.83
33+14 ²²	PI. " "	5.75	470.08
33+50	" "	5.17	470.66
33+70 ⁸⁴	B.C. " "	5.01	470.82
34+00	" "	5.08	470.75
34+50	" "	5.54	470.29
34+63 ²⁰	FC. " "	5.75	470.08
34+92 ⁴⁰	" "	5.90	469.93
	WRim	6.35	469.48
	Inv.	11.65	464.18
35+09 ³	Edge Conc Gutter	6.52	469.31
35+11	" "	6.61	469.22
35+23	Edge " driveway	6.30	469.53
35+34	on AC pav.	4.97	470.86
35+50		4.31	471.52
36+00		3.36	472.47
36	3.22 477.59	1.46	474.37
36+50		4.70	472.89
37+00		4.05	473.54

8" sed; M.H. 19⁶ RT. 35+04

Top. 2" Pipe Cor Gas MET. Grid FEN.

Red R.L.E.
1/13/55

CHOLLA PUMP PLANT & PIPELINE
 & PROFILE
 (Cont'd)

277.59

37+50	on A.C. pav.	4.80	472.79
38+00	" " "	6.02	471.55
38+01.8	End A.C. pav.	6.16	471.43
38+50		6.6	470.99
39+00		6.7	470.89
39+25		6.6	470.99
39+30	at 9' Cyclone fence	7.0	470.59
39+50		7.0	470.59
40+00		6.7	470.89
40+08		8.6	468.99
40+25	0.90	12.15	465.44
40+25		5.3	461.04
40+50		8.6	457.74
41+00		12.2	454.14

1/12/55

29

See revision of
 alignment, on
 page 32, this book

470.6	471.2	467.5	460.0
7.8	6.4	10.1	17.6
	10	17	20
470.7	471.2	466.2	460.7
6.9	6.4	11.2	16.9
	5	7	16
			19

470.6	469.6	466.6	463.5
7.8	8.0	11.0	12.1
	2	5	10
			15

469.7

7.9
10

464.2

13.4
10

462.9

3.2
10

460.3 457.9

6.0 8.2
5 12

460.1

6.2
10

456.4

9.9
10

456.5

9.8
10

452.9 451.9

13.4 14.4
5 8

Red & R.E.
 1/13/55

CHOLLA PUMP PLANT & PIPELINE
& PROFILE

1/12/55

30.

	466.34		LT. Wly		RT. Ely
41+15	13.4	452.94	455.6 $\frac{10.7}{10}$	452.1 452.3 450.6 $\frac{14.2}{5} \frac{16.8}{7} \frac{15.7}{10}$	
41+50	17.8	448.54	452.3 $\frac{14.0}{10}$	447.9 446.7 447.0 $\frac{18.2}{3} \frac{19.6}{5} \frac{19.3}{10}$	
41+60 ⁶² RI	19.2	447.14	450.9 $\frac{15.2}{10}$	446.6 445.6 445.9 $\frac{19.7}{3} \frac{20.7}{5} \frac{20.4}{10}$	
41+75	15.9	450.44	452.5 $\frac{13.8}{10}$	449.2 $\frac{17.1}{10}$	
41+86	14.3	452.04	455.4 453.6 $\frac{10.9}{10} \frac{12.7}{7}$	449.6 $\frac{15.7}{10}$	
41+91	12.3	454.04	456.5 454.8 $\frac{9.8}{10} \frac{11.5}{6}$	450.7 $\frac{15.6}{10}$	
42+00	11.7	454.64	459.6 $\frac{6.7}{10}$	452.5 $\frac{13.8}{10}$	
	12.65	453.69			
	13.55	452.79			
42+23	3.5	462.84	463.0 $\frac{3.3}{10}$	457.3 $\frac{9.0}{10}$	
42+50	3.1	463.24			
42+63 ¹⁰	3.0	463.34			
	7.07	459.27			

RT & BK Tang.

Top Conc Hdwall }
4" Conc pipe } End Conc. Pipe Underdrain
of 3" dia pipe foundation

Top 12" pipe 492 LT. 42+63¹⁰

Red R.R.
1/13/55

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd.)

466.34

2.79 463.55

OK TBM 5.51 468.90 2.95 463.39 = 463.363

OK TBM. 0.98 467.92 = 467.89

1/12/55

31.

Top of AVA Chamber 2¹⁰ RT 42+631⁰

this is NE Cor Val Chamber

on rock in conc Cor post, School ground fence & stand-
pipe fence.

CHOLLA PUMP PLANT & PIPELINE
 & ALIGNMENT REVISED
 STA 39+46.75 TO STA. 42+38.96

42+38.96 Δ 90°00' RT to & Elev. 12" C.I.

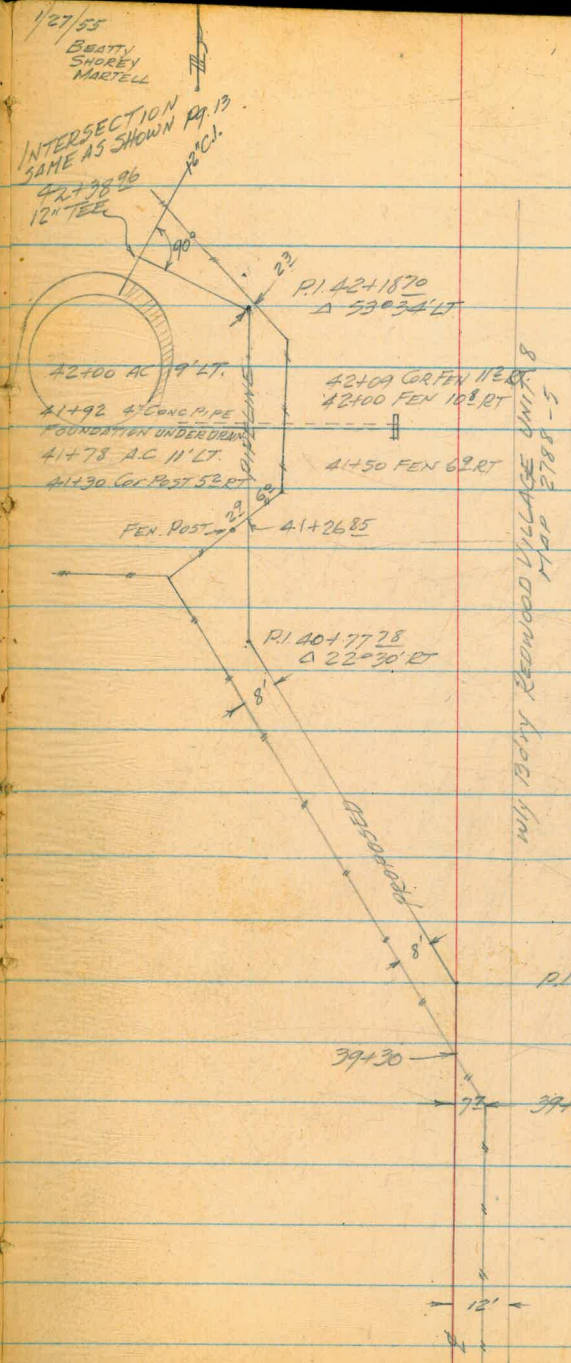
42+18.70 P.I. Δ = 53°34'

40+77.78 P.I. Δ = 22°30' RT

39+46.75 P.I. Δ = 26°48' LT.

1/27/55
 BEATTY
 SHOREY
 MARTELL

INTERSECTION
 SAME AS SHOWN PG. 13
 42+38.96
 12" TEE



MILBURY REDWOOD VILLAGE UNIT 8
 MAP 2788-5

P.I. 39+46.75
 Δ 26°28' LT.

CHOLLA PUMP PLANT & PIPELINE
 & PROFILE REVISED
 STA. 39+46.75 TO 42+38.96

1/27/55

39

TBM	385	471.74	467.89	pp 31 Rock at Fen. Cor	LT (WH)	RT (EIV)
39+46.75 (PI.)		1.2	470.5			
39+50		1.2	470.5		470.5 at fence 1.2 8	470.5 1.2 8
40+00		1.7	470.0		470.7 1.8 8	470.5 1.2 8
40+35		3.2	468.5		470.3 1.4 10	470.8 0.9 10
40+40		4.1	467.6		470.0 1.7 8	468.5 3.2 10
40+50		4.0	467.7		469.4 3.3 8	466.0 5.7 10
40+77.78 PI.		4.7	467.0		468.5 3.2 8	467.0 4.7 10
41+00		5.8	465.9		467.0 4.7 8	465.9 5.8 10
41+05		6.0	465.7		467.5 4.2 15	466.1 5.6 3
41+10		6.9	464.8		465.9 5.8 8	465.6 6.1 5
41+13		6.9	464.8		464.0 7.7 8	463.2 8.5 15
41+15		6.1	465.6			
41+26.9 at fence		6.5	465.2			
41+50		7.5	464.2		464.4 7.3 10	463.2 7.5 10

Shift of slope down

(RT. X to Blk Tang)

at fence Red & J.E.
1/28/55

1/27/55

31

CHOLLA DUMP PLANT & PIPELINE
REV. PROFILE
(Cont'd.)

471.74

42+00		8.7	463.0
42+18.70	PI.	8.7	463.0
42+38.96	End	8.4	463.3
CK TBM		8.37	463.37 = 463.36

463.0 463.2

8.7 8.5
2 108 at fan

Top Val Cham 8.37

this is on NE Cor Val Chamb

Red & ZC
V20/55

CHOLLA PUMP PLANT & PIPELINE
 REVISED ALIGNM'T
 STA. 0+00 TO 4+20

FEB. 23, 1955
 BEATTY
 SUREY
 KELLHOFFER

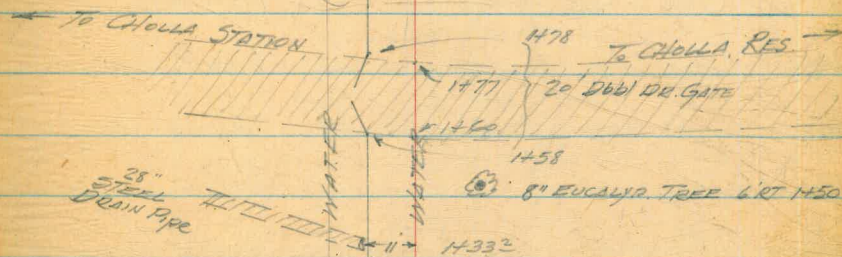
4+20 AH.
 4+27⁹⁰ BK P.I. 22° 30' RT

3+78²⁵ P.I. 22° 30' LT

4+20 AH
 4+27⁹⁰ BK P.I.
 22° 30' RT

4+04²

P.I. 3+78²⁵
 22° 30' LT



Orig. & Proposed WATER
 6" GALVANIZED
 REVISED & PROPOSED

8 0+75 EUC Tree 8" dia, 4³ RT

0+70

6 Eucalypt Trees
 (8"-10" dia.) 3 RT

0+25

See pg 43
 4+52

36" (conc) WATER

orig. 0+00
 See pg 8.

0+00

0+00

9' x 10'

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
REVISED ALIGNMENT
STA 0+00 TO 4+20

TBM	2.59	382.81		380.22
0+00			3.82 3.17	376.82
0+00			2.2	380.6
0+22			5.2	377.6
0+50			10.4	372.4
P	0.69	370.25	13.25	369.56
0+85			3.4	366.9
1+00			4.1	366.2
1+15			5.2	365.1
1+31			7.6	362.7
1+42			7.8	362.5
1+50			7.0	363.3
1+60 (3/4 Edge oiled Road)			5.30	365.0
1+77 (Nly " " ")			5.3	365.0
1+85			3.2	367.1
P	12.00	382.05	0.20	370.05

2/23/55
BEATTY
SHOREY
KELLYHOFFER

at Hub 0+00 (orig. Align.)

Top 36" Conc. Pipe

	380.3	380.6					
(at fan)	2.5						
	10						
	377.1	377.6		378.4	377.3		
	5.7			4.4	5.5		
	10			3	10		
	371.0	372.4		372.5	372.2	372.3	
	11.6			12.3	12.2	12.3	
	10			1	3	10	
	366.3	366.9	366.6	366.3			
	4.0		3.7	4.0			
	10		1	10			
	364.8	366.2	365.5	365.1			
	5.5		4.8	5.2			
	10		2	10			
	363.4	363.9	365.1	364.3	364.0		
	6.9	6.4	6.0	6.3			
	10	3	6	10			
	362.9	362.7		362.6			
	7.4			7.7			
(at fan)	10			10			
	363.2	362.5		362.8			
	7.1			7.5			
	10			10			
	363.0	363.3	363.3	364.5	365.2	365.6	364.9
	6.5		7.0	5.7	5.0	4.6	5.4
	10		12	21	50	73	100
			Edge	Edge	Edge	Edge	
			Oiled Rd	Oiled Rd	Oiled Rd	Oiled Rd	
	364.9	365.0	365.5	365.4	365.2	367.0	368.2
	5.4		1.74	4.86	5.1	3.3	2.1
	10		50	58	66	71	100
			FOX				
			Oiled Rd				
	365.1	365.0	364.9	366.3	368.6	371.0	
	5.2		5.4	4.0	1.7	375.2?	
	10		2	4	50	100	
	366.2	367.1	376.0	372.5			
	4.1		0.3	1.22			
	10		50	100			

Red. & E
2/24/55

CHOLLA PUMP PLANT
& PIPELINE
± PROFILE
REVISED ALIGNMT.

2/23/55

37

	382.05				368.4	368.7	372.0	374.6
2+00		12.4	368.7		(at fen.) 13.7 10	c	10.1 50	7.5 100
					372.4	373.1	376.1	378.4
2+25		9.0	373.1		" " 9.7 10	c	6.0 50	2.7 100
					375.7	376.3	379.9	382.4
2+50		5.8	376.3		" " 6.4 10	c	2.2 50	1.03 100
PI	12.87	394.29	0.63	381.42				
					385.6	386.4	386.3	390.2
3+00		7.9	386.4		" " 8.7 10	c	8.0 15	4.1 50
								2.1 100
					392.0	393.0	393.9	
3+30		1.3	393.0		2.3 10	c	0.4 10	
PI	13.04	406.97	0.36	393.93				
					398.1	399.1	400.6	
3+50		7.9	399.1		8.9 10	c	6.4 10	
PI	12.20	417.87	1.30	405.67				
					407.3	409.1	410.5	
3+78 ²⁵ P.I.		8.8	409.07		(ret. to bk. Tang) 10.6 10 (at fen.)	c	7.4 10	
					413.8	413.9	415.4	
4+00		4.0	413.9		10 4.1 1.5 fence	c	2.5 10	
PI	10.91	427.48	1.30	416.57				
					416.6	418.3	420.4	
4+27 ²⁵ BK.		9.2	418.3		12.9 10	c	7.1 9 (at fen.)	
4+20 AH.								

4.18 423.30 = 423.19, 2 1/2" capped pipe

Red. & E.E.
2/24/55

CHOLLA PUMP PLANT & PIPELINE

REVISED ALIGN'M'T.
STA 9+77.92 TO

FEB. 28 1955
BEATTY
MURTELL
KELLHOFFER

38.

Face Curb 15+57.7

← BARK ST

15+21.3

13' 33'
36'

SEW. MH
15+39

GV 15+29

15+25
3'
60'
7'-0"

GAS MH
12+11

SEW. MH
13+72

14+10

← REDWOOD

13+72

GAS MH 12+99

12+99
GAS 12+91

← REDWOOD

12+63 CURB

NATER GV

18' 23' 12+64 GV

← CONC CURB
& GUTTER

NOTE: -
BETTER CHECK
CITY ENGRS FOR
1945.

W 4" A.C.

3/2" I.P.
RE 1536

3/2" I.P.
RE 1534

2" I.P.
RE 1536

525'
P.I. 11+50.90
Δ = 51°22' RT.

107.42

11+50.90 P.I. Δ = 51°22' RT.

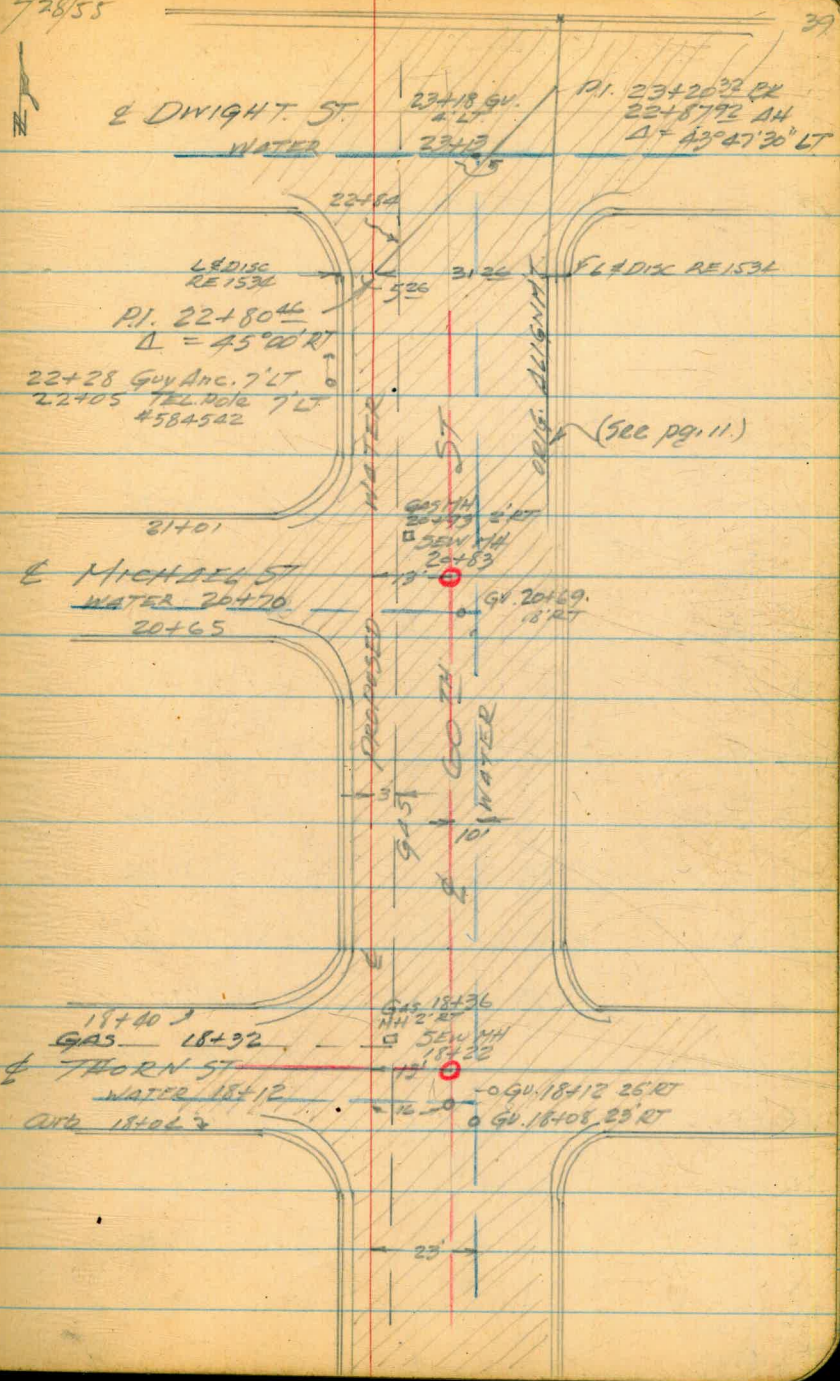
9+77.92 P.I. Δ = 51°22' LT.

P.I. 9+77.92
Δ = 51°22' LT

CITOLA PUMP PLANT & PIPELINE
 REVISED ALIGNMENT
 (Cont'd)

22+87⁹² AH. }
 23+20³² BK } P.I. Δ 43°47'30" LT
 22+80⁴⁶ P.I. Δ 45°00" RT

2/28/55



CHOLLA PUMP PLANT
& PIPELINE
REVISED & PROFILE

2/28/55

40

P	10.12	453.36	443.24	End of curb (Elev) (see pg. 20)
			10.71	442.65 = 442.83
				westly end of curb; Elev written in blue ??? whose?
9+77.97	P.I.		2.1	450.96
9+93			3.2	450.16
10+00			4.1	449.26
10+30			4.2	449.16
10+50			6.7	446.66
10+85			7.3	446.06
10+95			9.6	443.76
11+00			9.9	443.46
11+25			10.9	442.46
11+50 ⁹⁰	P.I. Edge		11.10	442.26
12+00			11.10	442.26
P				
12+50		2.81	441.83	11.30
12+64			2.96	441.87
12+81	(E + Redwood)		2.95	441.88
13+00			3.10	441.73
13+50			3.53	441.30
14+00			4.26	440.59

Red. & C.C.
3/1/55

GOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd)

444.83

14+50 5.83 439.00

15+00 8.04 436.79

15+39 (E + BARK) 10.35 434.48

15+50 11.21 433.62

16+00 0.42 432.24 13.01 431.82

16+00 2.58 429.66

16+50 6.65 425.59

17+00 1.43 423.02 10.65 421.59

17+50 5.39 417.63

18+00 8.90 414.12

18+08 9.02 414.00

18+22 (E + THORN ST) 8.71 414.28

18+40 9.06 413.96

18+50 8.69 414.33

19+00 5.83 417.19

19+50 2.21 420.81

Ely Rim 8.12 414.90

17V. 14.77 408.25

1.15 416.05 414.90

Sly Rim 10.85 405.20

17V. 16.35 399.70

1.15 414.90

2/28/55

41

Ely Rim Sew. MH. 18+22 ± 13' RT } see pg. 22

Sly Rim Sew. MH. 18+22, 22+5 LT.

Recd. R.E.E.
3/1/55

CHOLLA PUMP PLANT & PIPELINE
& PROFILE
(Cont'd)

2/28/53

42

P 19+50 11.92 432.73 120.81

20+00 8.24 424.49

20+50 4.63 428.10

20+83 & + Michael St 2.27 430.51

P 21+00 0.95 431.78
Ely Rim 1.85 430.88
TOW 8.79 423.94

0.00 430.88 430.88

Ely Rim 1254 418.34
TOW 1834 412.54

CL 0.00 430.88

P 21+00 12.95 444.73 431.78

21+50 9.53 435.20

22+00 6.02 438.71

22+50 2.48 442.25

P 22+80⁴⁶ P.I. 721 451.24 0.70 444.03

23+00 6.02 445.22

23+20³² BK 5.26 445.98

22+87⁹² AH.

CL 4) 23+00 5.01 446.23 = 446.24

8"
Ely Rim Sew M.H. 13' RT 20+83

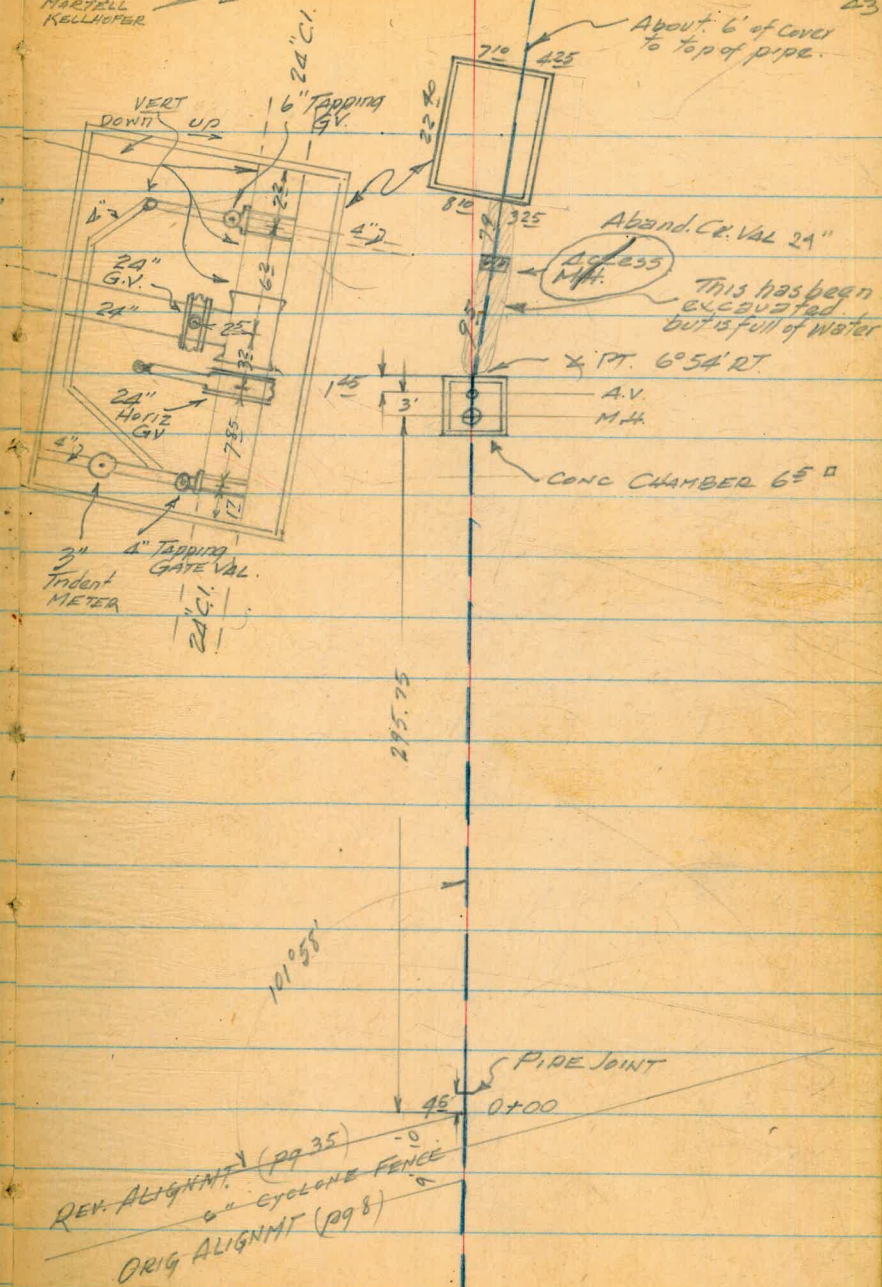
8"
Ely Rim Sew M.H. 397⁵⁰ LT 20+83

(see pg. 23)

CHOLLA PUMP PLANT
& PIPELINE
Details of Chamber
& 24" C.I.

3 - Circum.
Mess. { 6.71
6.69
6.70
Aver. 6.70
O.D. DIA. = 2.133

MAR 3 1955
BRATTY
MAYBELL
KELLHOFER



CHOLLA PUMP PLANT
& PIPELINE
Elev. of RES & Top of DAM

MAR. 1, 1955.
BEATTY
MARTIN
KELLNER

44

CROSS SECTION OF 36" EXISTING
CHOLLAS P.L.

SHOREY
MARTEL
KELLHOFER

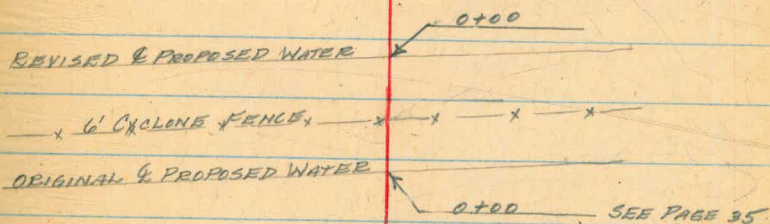
45



1+20

NOTE: 0+00 FOR X-SEL.
= 0+00 ON REVISED
& PROPOSED WATER - SEE
PAGE 35

36" EXISTING CHOLLAS P.L.



CROSS SECTIONS OF 36" EXISTING
CHOLLAS P.L. (CONT'D)

46

				LT	RT								
TBM	1102	391.24	380.22	ON HUB 0+00 (ORIG. ALIGN.) Pg. 36									
0-09	5	{ THIS SECTION TAKEN PARALLEL TO FENCE	11.0	371.1 20.1 50	373.3 17.9 37	375.5 15.7 27	378.7 12.5 11	380.2 X	381.1 10.1 14	390.7 0.9 50			
0+00			10.6	372.3 18.9 50	373.3 17.9 41	376.5 14.7 27	378.3 12.9 22	379.6 12.6 16	380.6 X	382.0 8.2 18	390.5 0.7 50		
0+20			10.5	373.1 18.1 50	374.2 17.0 38	376.9 14.3 26	377.8 13.4 17	379.6 11.6 12	380.7 X	381.5 9.7 20	383.6 7.6 23	384.9 1.3 50	
0+40			10.6	373.4 17.8 30	374.8 16.4 32	374.6 16.6 31	377.9 13.3 20	379.6 11.6 11	380.6 X	381.4 8.8 21	383.4 7.8 23	390.8 0.4 50	
0+60			10.9	373.6 17.6 50	374.8 16.4 38	377.1 14.1 22	379.3 11.9 11	380.3 X	381.2 10.0 22	383.1 8.1 23	386.5 5.7 35	389.4 1.8 50	
0+80			11.0	372.5 18.7 50	374.8 16.4 38	376.7 14.5 26	378.3 12.9 16	379.4 11.8 12	380.2 X	381.5 9.7 23	383.6 7.6 28	386.0 5.2 38	388.4 2.8 50
1+00			11.0	372.8 18.4 50	373.5 17.7 44	376.4 14.8 25	378.3 12.9 16	379.2 12.0 12	380.2 X	381.5 9.7 24	383.6 7.6 28	388.5 2.7 50	
1+20			10.8	373.7 17.5 50	377.0 14.2 24	378.7 12.5 14	379.4 11.8 11	380.4 X	381.8 8.4 24	383.8 7.4 30	388.0 3.2 50		
CK TBM			11.01									380.23 = 380.22	

Red 3-11-55 H6

CHOLLA PUMP PLANT & PIPELINE
 & ALIGNMENT REVISED
 STA. 42+18⁰¹ TO 42+45²⁹

3/15/55
 SHOREY
 MARTEL
 KELLHOFER

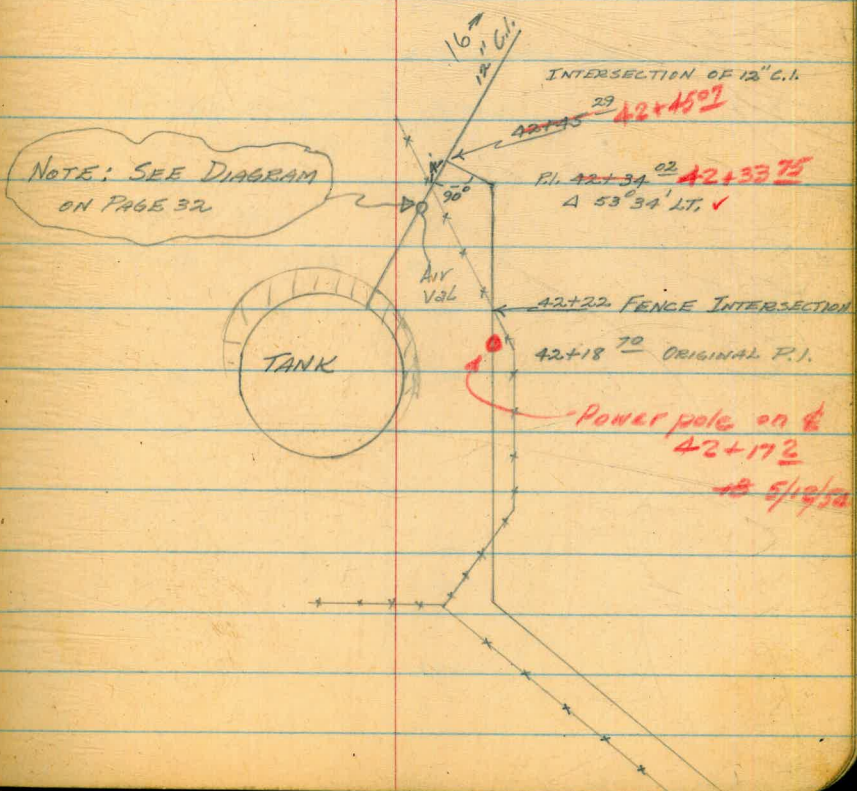
(47)

BM	5.07	468.43	463.36
42+18 ⁷⁰		5.4	463.03
42+27		5.6	462.83
42+34 ⁰² P.I. BACK TAN.		5.9	462.53
42+45 ²⁹ INTERSECTION 12" C.I.		5.6	462.83
CK. B.M.	5.07		463.36 ✓

Reduced by
 R. Barber
 3-16-54

CHISEL D. N.E. COR. VALVE BOX
 LT (PAGE 31)

462.43	ET
6.0	487.83
10	12.6
462.33	20
6.1	457.13
4	11.3
462.43	15
6.0	457.53
4	10.9
462.33	15
6.1	456.93
5	11.5
6	16

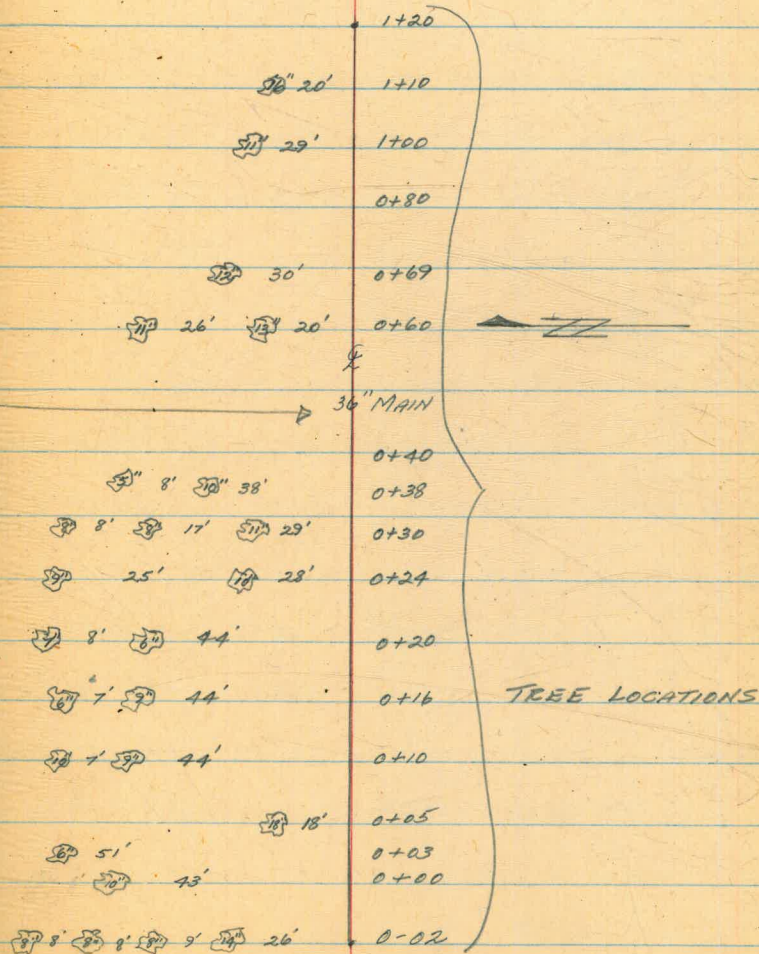


CROSS SECTIONS & TREE LOCATIONS
ON EXISTING 36" CHOLLAS P.L.

SHOBEY 3/22/55
MARTEL
KELLHOFER

(49)

NOTE: SEE PAGES 45 & 35
FOR SKETCH



CROSS SECTIONS OF EXISTING
36" CHOLLAS P.L.
(ADDITIONAL SECTIONS SOUTH)

TBM	13.01	393.23 [✓]		380.22
TP	13.20	407.61 [✓]	1.82	391.41 [✓]
TP	5.88	407.73 [✓]	2.76	401.85 [✓]
0+00				
0+01				
0+03				
0+10				
0+20				
0+40				
0+60				
0+80				
1+00				
1+20				
TP	0.50	395.65 [✓]	12.58	395.15 [✓]
TP	2.59	385.91 [✓]	12.33	383.32 [✓]
CK. TBM			5.70	380.21 = 380.22 [✓]

3/22/55

SHOREY
MARTEL
KELLHOFER

(49)

0+00 HUB ON ORIGINAL ALIGNMENT (Pg. 36)

LT

RT

401.03	405.43
6.7	2.3
87	100
	405.83
	1.9
	100
	404.83
	2.9
	100
	404.13
	3.6
	100
	403.93
	3.8
	100
	402.23
	5.5
	100
	402.73
	5.0
	100
	403.53
	4.2
	100
	403.23
	4.5
	100
	402.03
	5.7
	100

SEE PAGE 46 FOR OTHER SECTIONS

Reduced by R.G. Barber
3-29-55

CHOLLA PUMP PLANT PIPELINE
 ELEV. 16" C.I. AT
 REDWOOD VILLAGE STANDPIPE
 (SEE SKETCH PAGE 47.)

MAY 12 1955

Beatty
 Shores
 Marfell

30.

TBM	4.66	468.02	463.36
		10.17	457.85
		9.13	458.89
42+3375 P.I.		5.5	462.52
42+3375 P.I.		5.5	462.52
42+4507 Intersn 16" C.I.		5.2	462.82
CKBM	4.66	463.36	

CHIS II NE Cor Val Chamber

Top 16" C.I. PIPE 42+4507 Intersn & proposed Pipeline @ 16" C.I.

(437 on slope)
 Top 16" C.I. PIPE 42+4507 at joint.

(RT X To back Tang)
 463.1 462.5 462.4 458.6 453.7
 4.9 5.5 5.6 9.4 14.3
 7.5 0 3 10 20
 (at fence)

(RT X To Fwd Tang)
 463.0 462.5 462.4 457.4 456.5
 5.0 5.5 5.6 10.6 11.5
 7.5 0 4 13 20
 (at fence)

463.1 462.8 462.2 457.0 456.4
 4.9 5.2 5.8 11.0 11.6
 7.5 0 6 16 20
 (at fence)

463.48 Top Air Val Chamber
 4.16
 459.32 Top of 16" C.I. at Air Val.?

Red Q. Co.
 5/12/55

CHOLLA PUMP PLANT & PIPELINE
REFERENCE POINTS

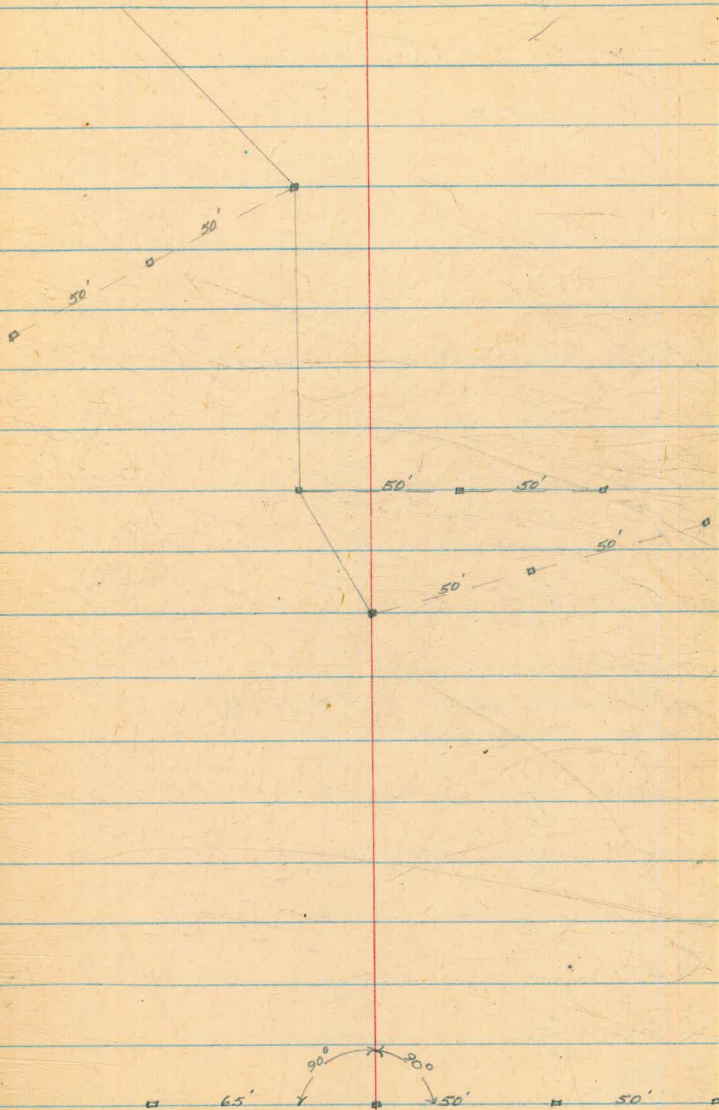
2+77²⁷ A REF. SPLIT OF ANGLE LT. (ANGLE 51° 22' LT.)

4+20^{AN} }
4+27²⁰ BK } A REF. 90° TO FWD. TANG. (ANGLE 22° 30' RT.)

3+78²⁵ A REF. SPLIT OF ANGLE RT. (ANGLE 22° 30' LT.)

0+00 REF. 90°

51



27+87²⁷ Δ REF. RT.



26+61²³ Δ REF. SPLIT OF ANGLE RT.



25+70²² Δ REF. SPLIT OF ANGLE LT.



24+55²⁰

SUBD. BWDY ♀

59'

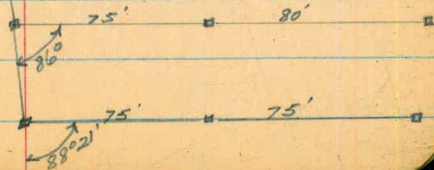
1/4" 3/4" PIPE

29+15² AH }
29+17³² BK } REF. A SPLIT OF ANGLE



28+12²⁷ A REF

27+87²⁷ A



CHOLLAS P.L.

STK'S 4' 6ED.

⑦

8/15/55

SHOREY
MAETEL
KEMP
HOLAHAN

54

B.M. ON 2" X 4" ORIG. 0+00 SEE PAGE 14

B.M	1.52	381.74	380.22	
⑦ LT				
0+29.72		6.8	374.9	370.2
0+50		10.6	371.1	367.0
TP	2.62	372.01	12.35	369.39
0+70		6.5	365.5	361.0
1+00		7.4	364.6	359.2
1+14		8.6	363.4	357.0
1+18	4 B.O. IN CHAMBER	8.7	363.3	357.0
1+50		8.3	363.7	357.0
1+62		7.1	364.9	357.0
1+70		5.2	366.8	361.1
2+00		3.5	368.5	362.9
TP	13.15	385.09	0.07	371.94
2+50		9.6	375.5	370.4
TP	12.74	377.50	0.33	384.76
3+00		11.9	385.6	380.8
3+30		5.3	392.2	387.0
TP	13.00	410.44	0.06	397.44
3+50		12.3	398.1	393.8
3+75		4.1	406.3	402.0
3+84.66 APT.		1.4	409.0	404.0
TP 1330	423.06	0.68	409.76	
4+00		11.4	411.7	407.1
4+20 AH	⑦ LT	6.5	416.6	412.5
4+26.47 BK	⑦ RT	2.9	420.2	

C4¹

C4¹

C4⁵

C5⁴

C6⁴

C6³

C6²

C7²

C5³

C5⁶

C5¹

C4⁸

C5²

C4³

C4³

C8⁰

C4⁶

C4¹

C2²

CHOLLAS P.L.
(CONT'D)

8/15/55

447.9

55.

34

	⑦ RT	423.06				
TP	12.76	434.61	1.21	421.85		
CK TBM			11.43	423.18 = 423.19	P6.18	
4+50			8.0	426.6	418.8	C7.8
	TP 12.86	447.00	0.47	434.14		
5+00			11.6	435.4	429.0	C6.4
5+50			6.3	440.7	433.4	C7.3
6+00			2.5	444.5	437.8	C6.7
	TP 5.46	451.80	0.66	446.34		
6+25			4.8	447.0	440.0	C7.0
6+50			4.6	447.2	440.5	C6.7
7+00			3.2	448.6	441.3	C7.3
7+43			2.3	449.5	442.1	C7.4
7+50			2.46	447.34	442.2	
8+00					443.1	
8+50					443.9	
9+00					444.2	
9+50					444.5	
9+77.97 APT.					443.2	
CK.						

CK. & 7+00 = 447.4

CHOLLAS P.L.

(CONT'D)

(63) LT.

BM	0.54	380.76		380.22	
0+29 ⁷²			5.68	375.08	370.26
0+61 ³³			11.43	369.33	365.25
TP	10.04	377.63	13.17	367.59	
0+90			12.10	365.53	360.76
1+21 ⁸⁶			14.57	363.12	357.00
1+53 ⁹³			13.61	364.02	357.00
1+85 ⁷⁸			11.30	366.33	360.62
2+17 ⁴¹			6.67	370.96	365.44
2+49 ⁰⁴			2.13	375.50	370.26
TP	13.11	390.42	0.32	377.31	
2+80 ³⁸			8.96	381.46	376.71
3+11 ²¹			2.47	387.95	383.21
TP	12.03	401.94	0.51	389.91	
3+42 ⁶⁹			6.02	395.92	391.23
TP	11.48	413.39	0.03	401.91	
3+73 ⁰⁵			7.73	405.66	401.35
3+84 ⁶⁶			4.13	409.26	404.00
X PT.					
3+86 ⁶²			4.11	409.28	404.40
TP	11.92	424.48	0.83	412.56	
4+20 ⁹⁴			7.40	417.08	412.50
4+26 ⁴³ BK			3.99	420.49	
OK. TBM.	12.96		1.24	423.24 = 423.19	
4+21 ⁹⁶				412.9	
4+53 ³⁰			9.02	427.13	419.36
4+84 ⁶⁴			3.30	432.85	425.82
TP	12.73	447.79	1.09	435.06	
5+16 ¹⁹			11.02	437.77	430.41

9/13/55

SHOREY
MARTEL
KEMP
MOLLOHAN

56

ON 2" x 4" 0+00 (ORIG. ALIGN.)

1.78	382.00	380.22
11.74	370.26	

SET 9. STK & G.R.D. 9/27/55.

(CONT'D)

⑧ RT.

447.79

5+47 ⁹⁵			2.02	440.77	433.20	07 ⁶
6+00			3.13	444.66	437.78	06 ²
6+11 ⁷⁰			1.87	445.92	438.81	07 ¹
TP	6.91	453.69	1.01	446.78		
6+43 ⁵⁶			6.37	447.32	440.32	07 ⁰
6+75 ⁵⁶			5.03	448.06	440.87	07 ²
7+00			5.10	448.59	441.29	07 ³
7+50			3.97	449.72	442.16	07 ⁶
8+00			3.78	449.91	443.03	06 ²
8+50 VPI			3.61	450.08	443.90	06 ²
9+00			2.62	451.07	444.20	06 ⁹
9+31 ⁵³			2.12	451.57	444.39	07 ²
9+63 ⁵³			1.85	451.84	443.87	08 ⁰
9+77 ⁹⁷ APT.			2.18	451.51	443.20	08 ³
9+80 ³⁷			3.00	450.69	443.07	07 ⁶
10+00			4.07	449.62	442.17	07 ⁵
TP	1.46	451.08	4.07	449.62		
10+50			3.95	447.13	437.82	07 ³
11+00			6.98	444.10	437.47	06 ⁶
11+08 ²³			7.47	443.61	437.09	06 ⁵
11+40 ²⁶			8.26	442.82	436.23	06 ⁶

(CONT'D)

58

⑧ RT.

457.08

11+50 ²⁰	X FT.		8.45	442.63	436.18	C6 ⁵	
11+53 ^{30 TP}	3.03	(55) LT. 446.27	8.86	442.22		C6 ⁰	
			7.83	443.25 = 443.24		C6 ⁵	(OK. TBM Pg. 20)
			3.65	442.62	436.17	C6 ⁵	
12+00			3.24	442.43	435.95	C6 ⁵	
12+50			4.70	441.57	435.71	C5 ⁹	
13+00			4.84	441.43	435.47	C6 ⁰	
13+50			4.75	441.52	435.23	C6 ³	
14+00			5.48	440.79	435.00	C5 ⁸	
14+50			7.03	439.24	433.05	C6 ²	
14+73 ²⁴			8.04	438.23	432.14	C6 ^L	
TP	1.17	436.89	10.56	435.71 = 435.70		OK. TP	76.22
15+05 ²⁰			0.47	436.42	430.57	C6 ⁰	
15+37 ⁰⁹			2.05	434.44	427.27	C6 ⁵	
15+69 ¹¹			5.09	431.80	426.30	C5 ⁵	
16+01 ⁰³			7.12	429.77	423.91	C5 ⁹	
16+50			11.18	425.71	420.00	C5 ³	
TP	0.91	424.78	13.02	423.87			
17+00			3.05	421.73	416.00	C5 ²	
17+50			7.04	417.74	412.00	C5 ⁷	
17+75			9.04	415.74	410.00	C5 ⁷	
17+92 ⁵²			10.62	414.16	409.16	C5 ⁰	
18+11 ⁹⁴			10.94	413.84	408.96	CA ⁹	

(CONT'D)

59

(5⁵) LT.

424.78

18+16²¹ 16" G.V.

18+21⁰²

10.71 414.07 409.07

C5⁰

18+53⁰²

10.61 414.17 409.48

C4²

18+85⁰⁴

8.54 416.24 410.81

C5A

19+17⁰¹

6.14 418.64 412.86

C5⁸

19+50

3.76 421.08 415.31

C5⁸

TP 12.44 436.18

1.04 423.74

20+00

11.48 424.70 419.03

C5²

20+50

8.24 427.94 422.75

C5²

21+76⁵⁹

6.27 429.91 424.72

C5²

21+08⁵²

3.92 432.26 426.92

C5³

21+50

0.74 435.44 429.72

C5²

TP 12.48 447.69

0.97 435.21

22+00

8.79 438.90 433.09

C5²

22+50

5.22 442.47 436.46

C6²

TBM 5.49 451.95

1.23 446.46 = 446.46

22+80⁴⁶ Δ PT.

7.67 444.28 438.51

C5⁸

22+87²² AH }
23+20³² BK } Δ PT.

6.10 445.85 440.3

C5⁶

23+25⁸³ Δ PT.

(5⁵) LT.

5.64 446.31 441.0

C5³

24+22

(5⁵) LT.

6.87 445.08 438.60

C6⁵

TP 1.86 440.56

13.25 438.170

24+35⁴⁰

5.76 434.80 428.28

C6⁵

24+55³⁰ Δ PT.

13.22 427.34

TP 1.41 428.75

9.07 419.68 413.18

C6⁵

24+60⁸¹

13.08 415.67

C4³

STA. 23+25²⁵ ORIG. STA.

JACK SECTION

5.19 451.65

446.46

23+32 (5⁵) LT. 4.96 446.69 440.60 C6⁰²

(5⁵) RT. 3.62 447.96 C7³⁶

24+19 (5⁵) LT. 5.47 446.18 438.34 C7⁸⁴

TP 5.48 451.66 5.47 446.18

(5⁵) RT. 5.63 446.03 C7⁶⁹

(5⁵) LT. 5.25 446.41 C8⁰⁷

6.58 445.67 C7⁸⁴

(CONT'D)

417.16

⑧ LT.

1	24+62			4.06	413.10	408.0	C5 ^L
1	24+75 ⁵⁶			4.19	412.97	404.13	C8 ^B
	TP 60	1.26	405.29	13.13	404.03		
1	25+06			1.95	403.34	397.10	C6 ^B
1	25+37 ⁰⁵	TP 1.00	393.99	12.30	392.99	387.25	C5 ^L
1	25+67 ³⁰			12.12	381.87	376.69	C5 ^L
	TP	0.59	381.69	12.89	381.10		
1	25+70 ²⁷	A.P.T.		1.19	380.50	375.47	C5 ^O
2	25+75			2.80	378.89	374.0	C4 [?]
2	25+95 ²⁹	(CONST)					
2	25+97 ¹			11.50	370.19	360.80	C9 ^L
	TP	1.85	370.53	13.01	368.68		
2	26+27			5.70	364.83	360.71	C4 ^L
2	26+59			6.75	363.78	360.72	C3 ^L
2	26+61 ³³	A.P.T.		6.68	363.85	360.72	C3 ^L
2	26+90 ⁹⁶			7.17	363.36	360.74	C2 ⁶
2	27+22 ⁹⁶			8.00	362.53	360.76	C1 ^B
2	27+54 ⁹⁶			6.33	364.20	360.79	C3 ^A
2	27+73			2.69	367.84	360.80	C7 ^O
	CR. TBM			3.38	367.15 = 367.15		P4.24
	TP 12.83	381.86		1.50	369.03		
2	27+87 ²⁷	A.P.T.		10.05	371.81	365.47	C6 ^B
2	28+04 ⁸⁶			5.03	376.83	371.23	C5 ⁶
2	28+12 ²⁷	A.P.T.		2.54	379.32	373.65	C5 ⁷

367.15 Pg. 24

90

(CONT'D)

61

⑧ LT.

		381.86					
TP	13.12	394.02	0.96	380.90			
28+35 ²⁹			7.54	386.48	381.18		C ₅ ³
TP	13.01	406.94	0.09	393.93			
28+65 ⁷⁰			11.02	395.92	391.13		C ₄ ⁸
28+96 ¹²			1.49	405.45	401.02		C ₄ ⁴
29+15 ²¹ AH	TP 12.92	419.06	0.80	406.14			
29+17 ³² BK	Δ PT.		6.75	412.91	404.07		C ₇ ²
29+24 ⁶³			5.50	413.56	408.32		C ₅ ²
29+56 ⁰⁸	TP 12.85	431.19	0.72	418.34	413.41		C ₄ ²
29+87 ⁸²			9.63	421.56	416.00		C ₅ ⁶
30+19 ²⁵			7.53	423.66	418.08		C ₅ ⁶
30+55 ⁵			3.67	427.52	420.00		C ₇ ⁵
TP	12.81	443.41	0.59	430.60			
30+83 ²⁰			11.22	432.19	426.03		C ₆ ²
31+14 ⁷⁰			6.66	436.75	431.00		C ₅ ⁶
31+46 ²⁸			1.93	441.48	436.39		C ₅ ⁴
TP	13.33	456.43	0.31	443.10			
31+78 ²¹			10.85	445.58	439.80		C ₅ ⁸
32+10			5.13	451.30	443.00		C ₈ ³
TP	13.32	469.51	0.24	456.19			
32+43	TP 6.88	476.32	0.07	469.44	463.60		C ₇ ⁴
			5.63	470.69			
32+48			6.01	470.31	463.62		C ₆ ⁷
32+80			6.79	469.53	463.75		C ₅ ⁸
33+12			6.38	469.94	463.89		C ₆ ⁴
CK. TBM	6.43	475.65	7.08	469.24 = 469.22			Pa. 27
33+15 ⁴⁴	Δ PT.		5.70	469.95	463.90		C ₆ ⁴

469.22 - 27

475.65

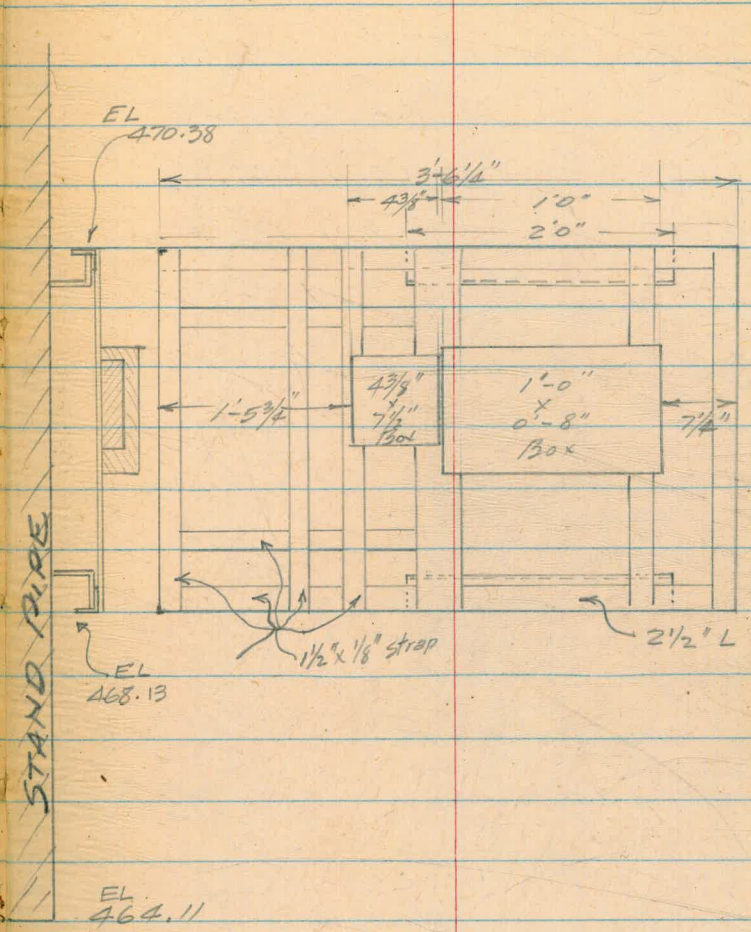
33+28 ²⁴	DLT	5.16	470.49	464.05	C6 ⁴
33+76 ³⁷	B.C.	4.92	470.73	464.17	C6 ⁶
34+12 ³⁷		4.96	470.69	464.32	C6 ⁴
34+44 ²³		5.20	470.45	464.46	C6 ⁰
34+76 ⁷⁹		5.58	470.07	464.59	C5 ⁵
34+98 ³⁵ AH	DLT 1 PI E.C. 50' 30" 59' 17" 10M 3:33 500 7:07	6.12	469.53	464.70	C4 ⁸
35+03 ⁵⁶ BK		5.83	469.82		C5 ¹
35+02 ³⁵		5.96	469.69	464.77	C4 ²
35+34 ³⁵		4.91	470.74	465.27	C5 ⁵
35+66 ³⁵		3.69	471.96	465.62	C6 ³
35+98 ³⁵		2.99	472.66	465.65	C7 ⁰
TP	4.16	476.66	3.15	472.50	
36+30 ³⁵		3.56	473.10	465.68	C7 ⁴
36+62 ³⁵		3.24	473.42	465.71	C7 ⁷
36+94 ³⁵		2.86	473.80	465.75	C8 ¹
37+26 ³⁵		3.28	473.38	465.78	C7 ⁶
37+58 ³⁵		3.93	472.73	465.81	C6 ⁹
37+90 ³⁵		4.74	471.92	465.85	C6 ¹
38+22 ³⁵		5.34	471.32	465.88	C6 ⁴
38+54 ³⁵		5.65	471.01	465.92	C5 ⁶
38+86 ³⁵		5.73	470.93	465.95	C5 ⁰

	⑥ RT	476.66				
39+18	³⁶ "		8.14	470.52	466.00	C4 ⁵
39+46	⁷⁵ A PT. 26° 48' LT.		5.92	470.74	465.32	C5 ⁴
	⑦ LT		5.78	470.68		C5 ⁴
39+48	⁷⁵ TP 1.64	472.37	5.93	470.73		
	OMIT				465.27	
39+80	⁷³ "		1.68	470.69	464.28	C6 ⁴
40+12	⁷¹ "		1.64	470.73	463.29	C7 ⁴
40+44	⁷⁰ "		3.09	469.28	462.30	C7 ⁰
40+87	⁷⁸ A PT. 22° 30' RT.		3.97	468.40	461.27	C7 ¹
41+11	²⁶ "		6.17	466.20	460.24	C6 ⁰
41+43	²⁴ "		7.54	464.83	459.22	C5 ⁶
41+75	²³ "		8.81	463.56	458.22	C5 ³
41+95	²¹ A PT. 8° 34' LT.		9.20	463.17	457.61	C5 ⁶
42+07	²¹ "		9.29	463.08	457.23	C5 ⁸
42+33	⁸² END 20" PIPE		8.99	463.38	456.50	C6 ³
42+35	²² END POINT.		8.80	463.57	456.50	C7 ¹
CK. TBM			8.96	463.41 = 463.363		CHISEL N.E. COR. VAL. CHANN. (Pg. 31)

Sept. 29 1955
 BEATTY
 MARTELL

CITOLLA - REDWOOD VILLAGE P.L.
 Elev. & Details Bracket at
 Redwood Stand pipe

BM	5.075	468.435	463.36	Cor Val Chain
		4.325		
Bottom of Stand pipe			464.11	
Bottom of 1 1/2" x 1/8" L		0.305	468.13	
Top of 1 1/2" x 1/8" L		+1.945	470.38	

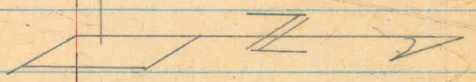
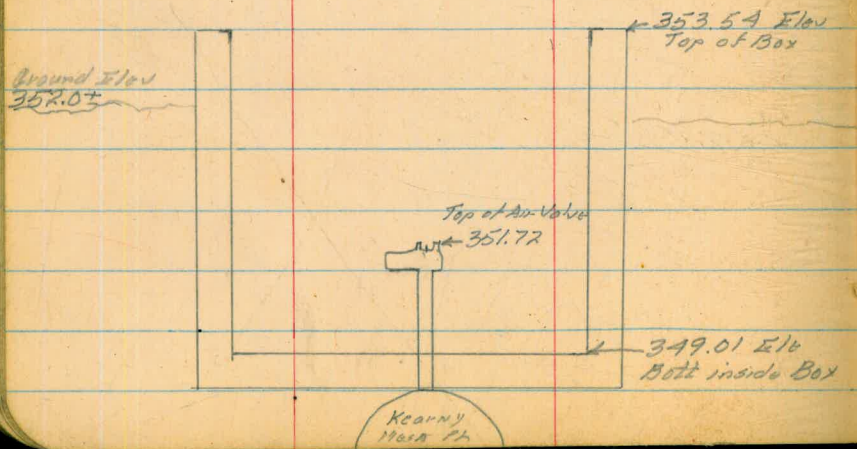
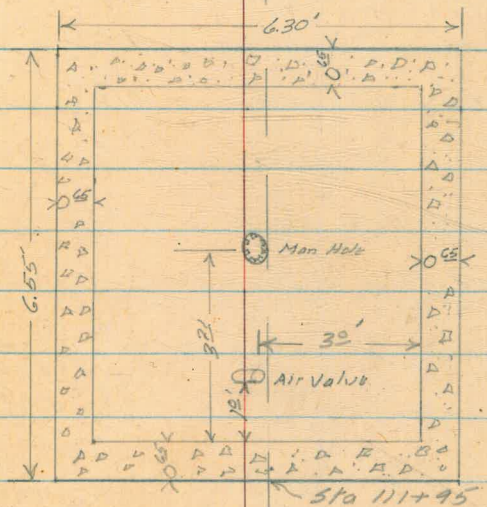


KEARNY MESA
AIR VALVE CHAMBER

West
Williams
Varonakis
Kallhofer
5/11/50

65

3.01	356.55	353.54	
	4.83	351.72	Top of Air Valve
	7.54	349.01	Bottom of Box
	4.6	352.0	Ground

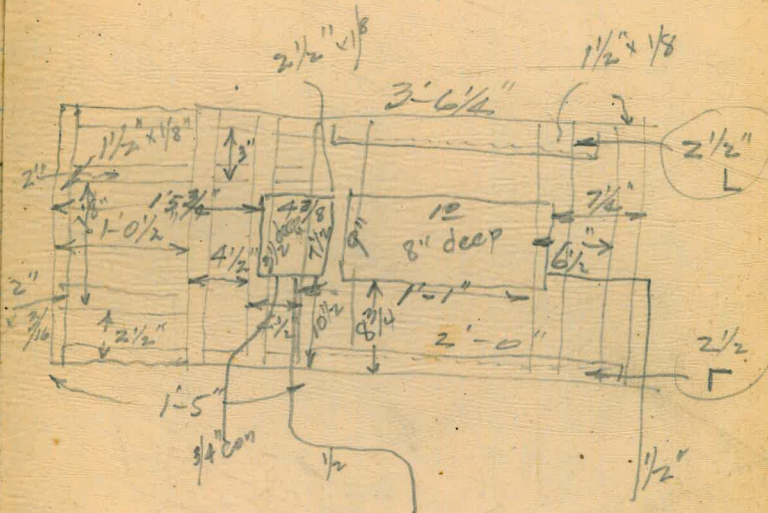


Montezuma Pump House

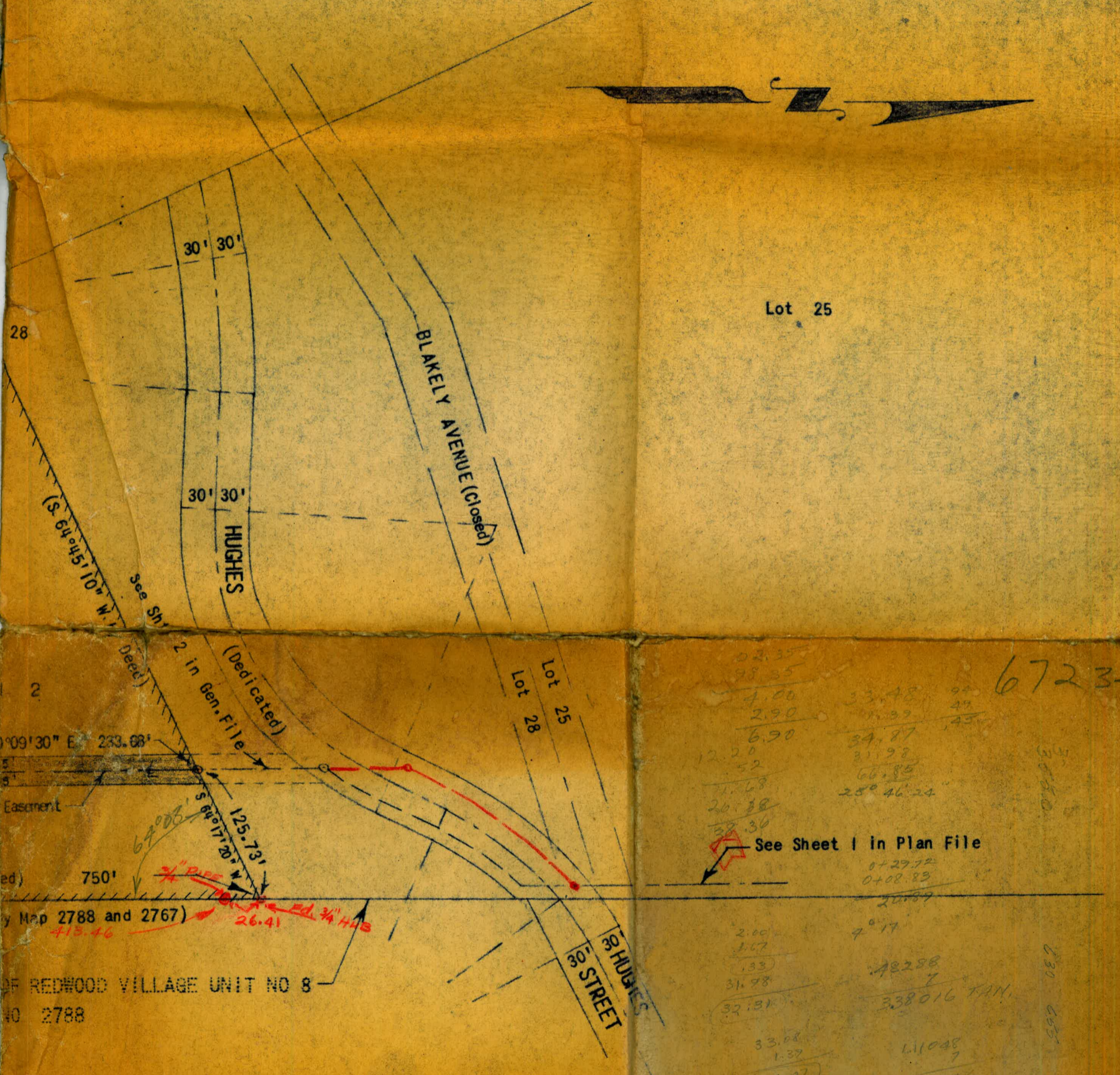
BM	9.93	457.88	447.95
± Nly Pump Line	3.65	454.23	
± Sly Pump Line	3.67	454.21	
CK BM	9.93	447.95	

BM	5.075	468.435	469.36
Bottom of Tank	4.325	464.11	
Bottom of L	0.305	468.13	
Top of L	0.325	468.11	
Top of L	+1.945	470.38	

BP SW Cor
Montezuma
Catactin. F.B. 2202-17



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6723-W

0+23.35
98.35
4.00
2.90
6.90
12.20
52
21.68
26.38
32.30

33.48
11.39
39.87
21.92
60.85
28°46'24"

0+27.72
0+08.83
20.89
7°17'

2.00
1.67
1.33
31.98
32.81

48288
7
338016 TAN.

33.08
1.39
34.47

111048
7
77336

See Sheet 1 in Plan File

REDWOOD VILLAGE UNIT NO 8
NO 2788

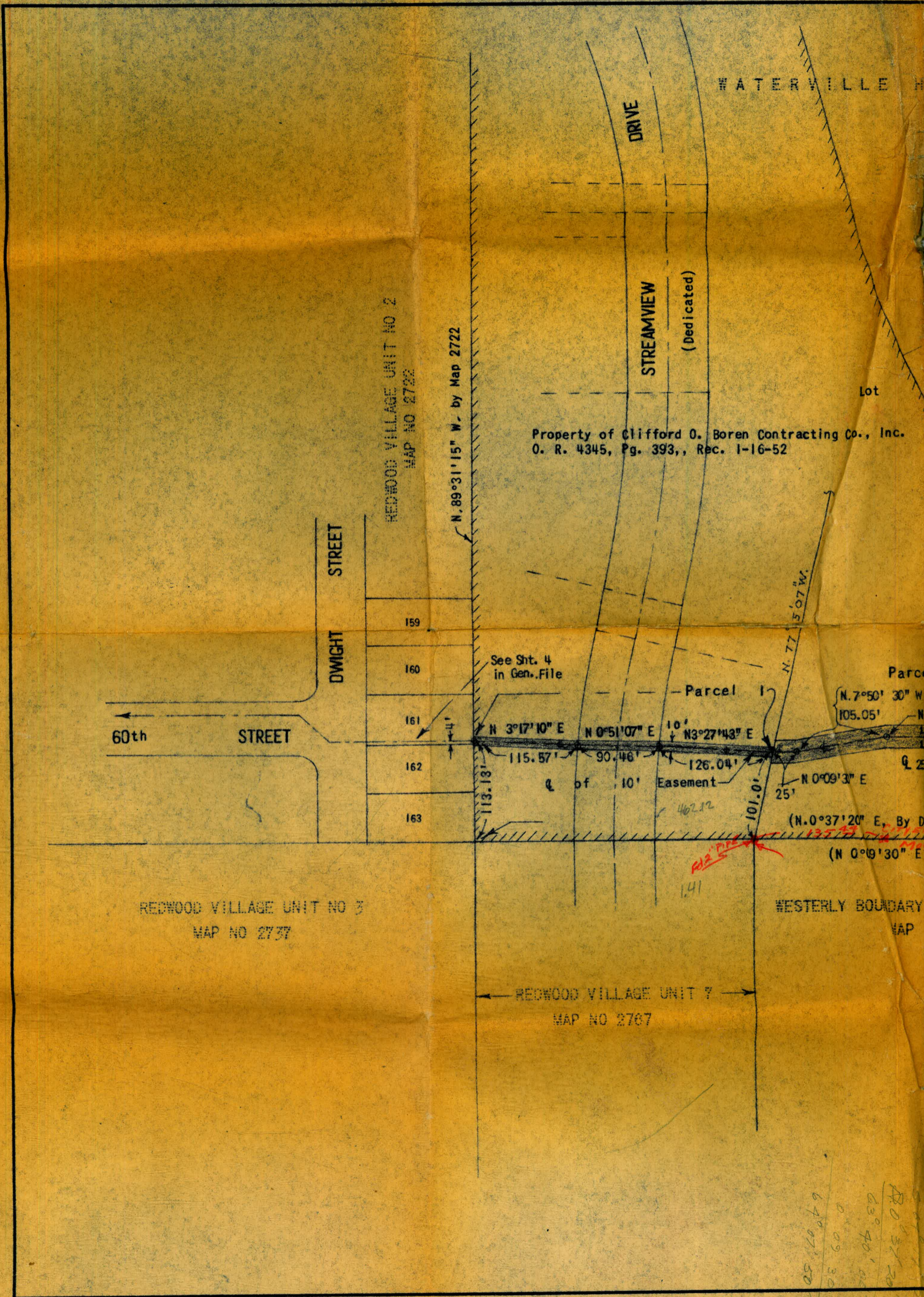
22335952
3466
6933312
6933312
6933
0494
18753

25992
26650
01733
19.4
68
1274

76001
556
936
880

REVISION		NO		DATE	

CITY OF SAN DIEGO CALIFORNIA WATER DEPARTMENT			
CHOLLAS-REDWOOD VILLAGE WATER MAIN - RIGHT OF WAY			
RECOMMENDED: <i>W.C. Brown</i> ENGINEER		APPROVED: <i>P. Beermann</i> DIRECTOR	
DATE: May 18, 1955		DATUM: City	
DRAWN: Holbeck		TRACED:	
F. B. 879,860		SCALE: 1" = 100'	
WD-	SHEET 3A of SHEETS		DWG NO. 6723-W-



REDWOOD VILLAGE UNIT NO 2
MAP NO 2722

N. 89° 31' 15" W. by Map 2722

DWIGHT STREET

60th STREET

DRIVE

STREAMVIEW
(Dedicated)

WATERVILLE

Lot

Property of Clifford O. Boren Contracting Co., Inc.
O. R. 4345, Pg. 393,, Rec. 1-16-52

159
160
161
162
163

See Sht. 4
in Gen. File

Parcel 1

Parcel

N 3° 17' 10" E N 0° 51' 07" E 10' N 3° 27' 43" E
115.57' 90.46' 126.04' 105.05'
10' Easement
N 0° 09' 3" E
25'
(N. 0° 37' 20" E, By D
(N 0° 09' 30" E

REDWOOD VILLAGE UNIT NO 3
MAP NO 2737

WESTERLY BOUNDARY
MAP

REDWOOD VILLAGE UNIT 7
MAP NO 2767

12" PIPE
1.41

Handwritten notes:
64° 07' 50"
0° 09' 30"
63° 40' 00"
R.O. 37' 20" E

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

29+66.75 26° 48' LT
 52° 36'

391.24
 383.99
 7.85

40+77.75 22 1/2° RT 12.16

1.0196
 7
 7.1372 566.

41+26.85 FENCE 28.5 LT 62 RT Cor post
 41+30 FEN Cor post 52 RT
 53° 32' LT
 40 2 107.68

.1989
 7

41+50 FEN 69° RT
 1372.3 TAN
 10.7

41+92 Drain

42+00 108 RT FEN
 13° 20'
 76° 36'

42+09 112 RT FEN Cor

42+18.70 8 RT
 53° 34' LT
 1.02799
 7
 7.19593 = 720

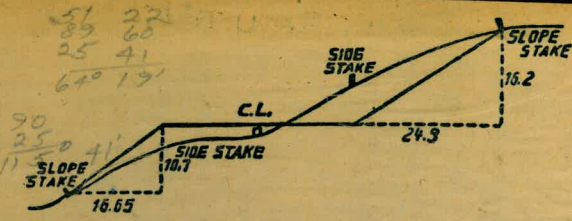
FEN 21° RT
 2.382
 7

42+00 9' RT Edge AC
 1667.9 = 1.67

41+78 11' LT

New P.I. 42+33.75
 Calc. P.I.
 D = 53° 34' LT.

Inter. 42+45.01 = 17470 Red
 Wood



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

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

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