

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

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

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

Please Return to
City of San Diego Water Dept.
Room 903 Civic Center
Telephone F-7511 Ext. 313

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	5.30	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	.771	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.266	.353	.440	.528	.618	.707	.797	.887	.977	1.07	1.18	1.29
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

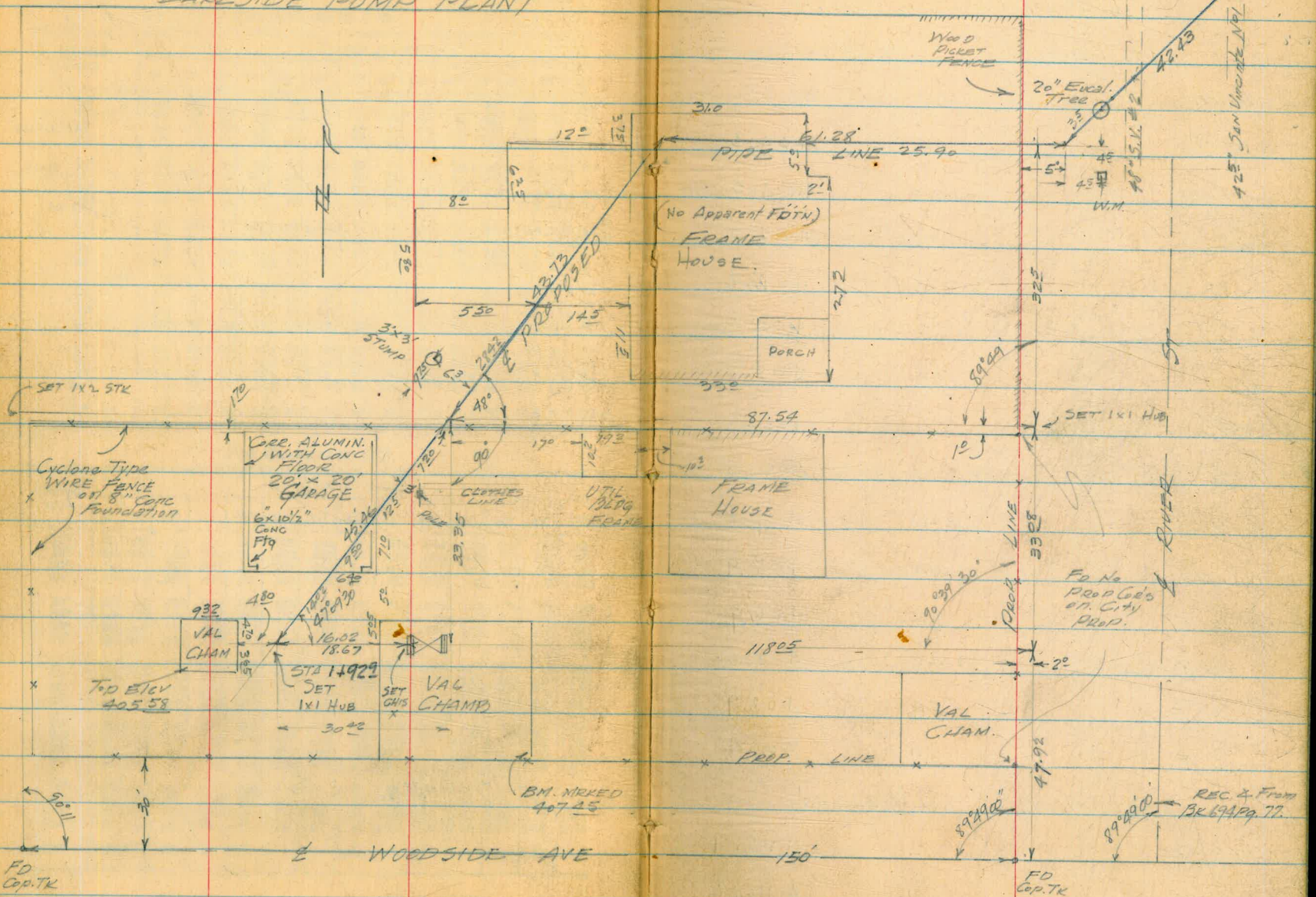
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PRELIMINARY ALIGNM'T
FOR PIPE OF PROPOSED
LAKESIDE PUMP PLANT

FEB. 16, 1951 - RAIN - 11:am

BEATTY
LEONARD
WELKER



FEB. 16 1951

2

PROFILE
Proposed Pipeline
Lakeside Pump Plant

BM	4.81	412.26	407.45		
1+92.90			8.4	403.9	SE Cor Main Val Chamber
+79.88			8.00	404.3	AT. Junction of EL MANTE PL West of Main Val. Cham.
+69.38			8.00	404.3	Edge garage floor
+69.38			7.25	405.0	on " " "
+68.4			7.25	405.0	on Conc fdn of garage
+68.4			7.5	404.8	" " " "
+61			7.3	405.0	edge " " " "
+56			6.0	406.3	
1+46			5.81	406.5	on Conc fdn of fence
1+19.03			4.45	407.8	against house
SW Cor			6.4	405.9	SW Cor of Transformer Pad
20' E			5.4	406.9	} south line of proposed pump platform
40' E			4.3	408.0	
60' E			3.6	408.7	
80' E			2.9	409.4	
TD	5.92	416.32	1.86	410.40	on conc at Cor. post NE Cor City prop.
0+68.33			6.2	410.1	against house
0+47.43			5.7	410.6	

2/16/51 Lam

3

Profile - Cont'd

	416.32		
0+42.43	5.6	410.7	
0+30	6.0	410.3	
0+275	5.81	410.5	
0+09	5.11	411.2	
0+00	4.95	411.3	

Edge of oil Road

on " "

on " "

NW Cor	10.2	406.1	
20' E	9.0	407.3	
40' E	8.0	408.3	
60' E	7.1	409.2	
80' E	6.3	410.0	

NW Cor of Transformer Pad

North Line of proposed pump platform

GNS
2/19/51

(Note! no BM closure)

ELEVATION
TOP OF PIPE
SAN VICENTE PIPE LINE
2nd MAIN

B.M.	5.89	413.34	407.45
	7.06	406.28	
	6.90	406.44	
	7.19	406.15	
	7.26	406.08	
CK B.M.	5.89	407.45	

P.I. 0+21² Top Conc. Pipe
Right. 63 " " "
Left. 59 " " "
Left: 96 " " "

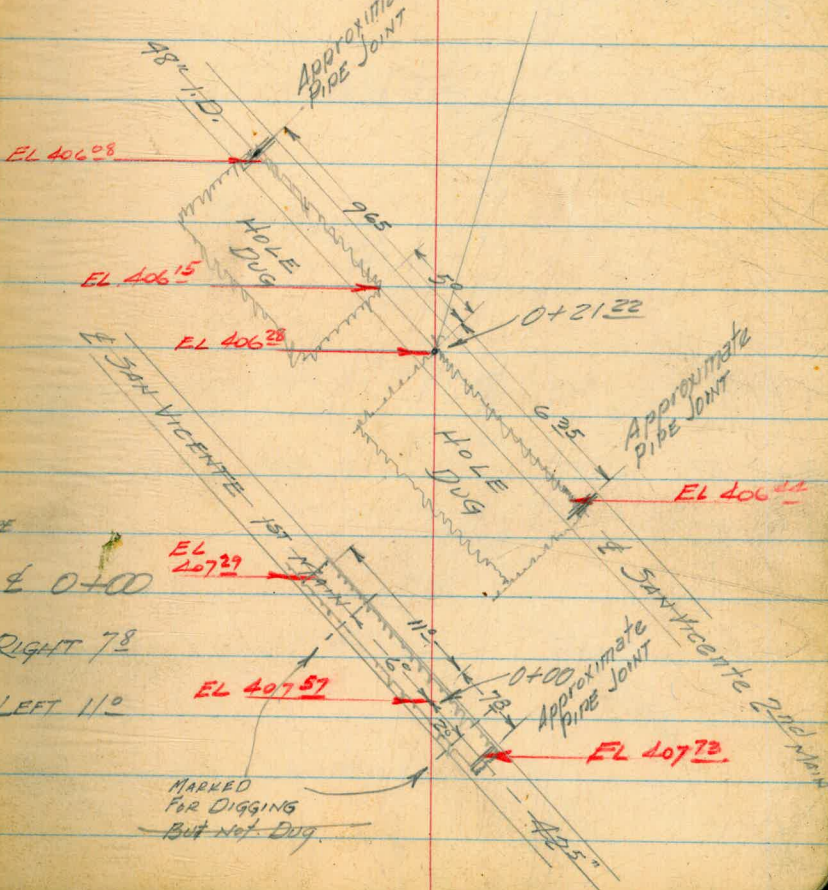
MAY 18, 1951

BEATTY,
LEONARD
NELSON

4.

May 21, 1951
Same Party

B.M.	7.10	414.55	407.45	Top Grouted Pipe
	6.98	407.57	"	"
	6.82	407.73	"	"
	7.26	407.29	"	"
CK B.M.	7.10	407.45	"	"



MARKED
FOR DIGGING
BUT NOT DUG

MAY 18, 1951 WARM & FAIR. 5.

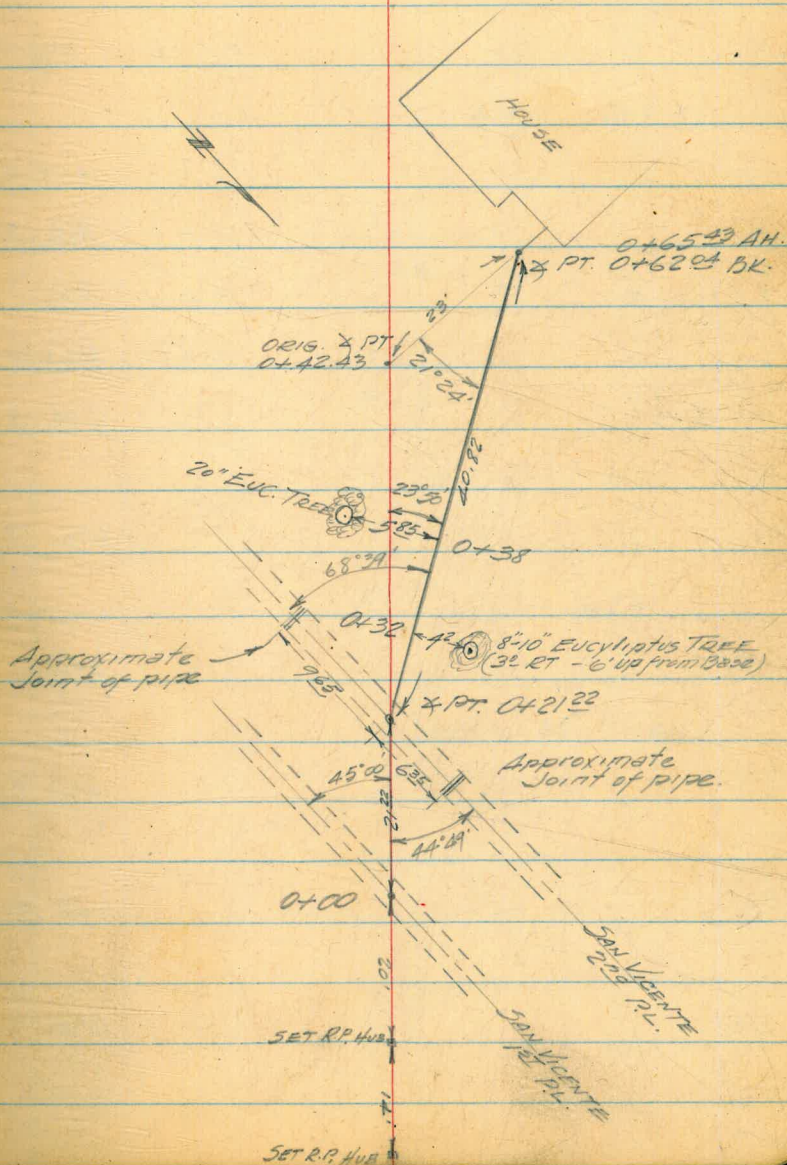
DEATHY,
LEONARD,
NELSON.

REVISION OF ALIGNMENT
PROPOSED PUMP PLANT
AT LAKE SIDE

0+65⁴³ AH. X PT. 21° 24' RT.
0+62⁰⁰ BK

0+21²² X PT. 23° 50' RT.

0+00 Begin. 45° RT From d San Vicente
1ST P.L.



X-sects. on lot
for Lakeside P. Plant
Base Line - So. P. Line of Lot

King
Leonard
Williams

6-18-51

6.

B.M.	507	412.52	407.45	S.E. COR. G.V. Box	410.4	410.6
0+00		2.3	410.2	S.E. COR OF LOT	$\frac{2.1}{25}$	$\frac{1.9}{50}$
0+25		3.1	409.4		$\frac{3.1}{25}$	$\frac{2.8}{50}$
0+49		7.0	405.5	Bottom 5x7 CONC. Well - 33' From So. Prop. Line	408.0	$\frac{3.5}{25}$ 408.8
0+50		4.4	408.1		$\frac{4.5}{25}$	$\frac{5.0}{50}$
0+57		11.5	401.0	Bottom Cistern 8' Diameter - 21' No. Prop Line	407.3	$\frac{5.2}{25}$ 408.0
0+75		5.7	406.8		$\frac{4.5}{25}$	$\frac{3.0}{50}$
1+00		7.0	405.5		$\frac{6.3}{25}$	$\frac{5.9}{50}$
1+13		7.5	405.0		$\frac{7.3}{25}$	$\frac{6.7}{50}$
1+18		7.8	404.7		$\frac{8.3}{25}$	$\frac{7.4}{50}$
1+25		8.3	404.2		$\frac{8.4}{25}$	$\frac{7.7}{50}$
1+50		9.3	403.2		403.9	$\frac{8.3}{50}$ 404.2
		5.07	407.45		$\frac{8.3}{25}$	$\frac{7.7}{50}$

Base Line - So. Prop. Line of Lot

Rt.

Sept. 11 1951

7

ELEV. & LOCATION OF
SEPTIC TANK AT LAKESIDE
PUMP PLANT

B.M.	2.49	409.94	407.45
	4.20	405.74	
	3.54	404.40	

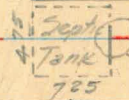
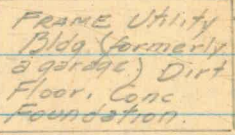
Cor. Val. Box

Top 4" C.I. Influent to Septic Tank

Top Conc Top of Septic Tank

SEE SKETCH
PAGE 1

Conc. Fly Cyclone wire FENCE 1920



4" C.I.
Influent To
Septic Tank
Elev. 405.74

LAKESIDE PUMP PLANT

SEPT 26 1951

8.

Offset Stakes for Pipe Excavation

B.M.	5.19	412.64		407.45		
SET TBM	5.14	415.57	2.21	410.43		Cor FENCE
0+62 ⁰⁶			5.58	409.99	408.47	c/52 (16°) Nor
0+62 ⁰⁶			6.08	409.49	408.47	c/02 (325) So
0+40			4.90	410.67	401.62	c905 (9) Nor
0+40						
0+21 ²²			4.64	410.93	401.62	c931 (10) So
0+21 ²²			5.08	410.49	401.62	c887 (10) Nor
0+00			4.17	411.40	404.0	c74 (10) So
0+00			4.35	411.22		c72 (10) Nor
0+00			4.07	411.50		c75 (10) E

LAKE SIDE PUMP PLANT
Offset Stakes for Pipe Excavation

9/26/51

9.

BM	+ 1.10	408.55		407.45	
1+929			-2.98	405.57	395.3
1+929					
1+70'2	5' RT.		-4.17	404.58	395.3 09.1
1+70'2	10' LT.		-3.94	404.61	395.3
1+56'50	5' RT.		-3.63	404.92	408.97 F4.05
1+56'50	10' LT.		-2.14	406.41	F2.56

Oct. 8 1951

TBM	4.55	414.98		410.43	
0+72'2" Ahead			7.00	407.98	408.47 Bot. Pipe
0+66'34"			6.63	408.35	408.27 (2) 0+66'34" BK F049
0+62'06"			6.46	408.52	408.47 0+66'34" & PIPE F012
0+40			13.90	401.08	401.62 0+62'06" & PIPE C005
0+21'22"			8.87	406.11	402.25 (2) End of pipe cut South C386
0+21'22"			8.48	406.50	402.50 (2) End " " North C40
0+00			7.63	407.35	402.25 (1) End " " South C51
0+00			7.32	407.66	402.50 (2) " " North C51b
CK BM			4.55		

OCT. 8 1951

10.

B.M.	1.63	409.08	407.45
		8.84	400.24 = 400.32
1470.17		14.34	394.74 395.30
1456.50			

ELEV Top of pipe 1492.9

FOSS

T.B.M.	5.00	415.43	410.43
			410.00

EL CAPITAN RESERVOIR
TIES TO GOV'T B.M.'S

SEPT. 29, 1951
CLEAR - HOT

LEONARD.

15.

ON U.S.G.S. B.M. 5-28 1117. SEC 1928

SIGHT TO PT 30 OF SALT SURVEY: N 24° 30' W MAG.
FROM PT 30 TO PT "X" (6 F - 538) N 52° 30' W MAG.
28° 0' LT. XY = 112° 0' 30"
" PT "X" TO PT 28 41° 54' LT XY = 167° 27"
" PT 28 TO PT 30 290° 05' 30" LT. XY = 1160° 22' 30"

NOTE: PT "X" IS 1 1/2" ROUND HOLE IN BOULDER AT ABOUT 10.75' ELEV.
ON WEST SIDE OF RESERVOIR BASIN. HAD 1" X 2" X 6" POLE
WIRED IN PLACE PLUMB OVER POINT. MIGHT BE PT. 6F-536.

FROM PT 528-1117 TO SEC. 1514
2228 (CONTINUED)
149.0 1.6' LT.

"X" Δ

N 52° 30' W
(MAG)

1.6' — 149.0' — Δ
USGS B.M.
528 1117

SEC COR

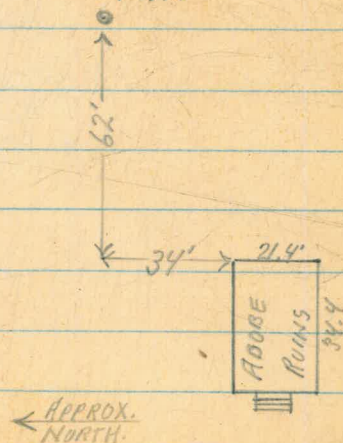
ON PT "X" (6 F - 538) (VERY WINDY - 2-3 P.M.)

FROM PT. 30 TO 5-28 1117. 51° 16' 30" RT. 205° 06' 30"
" PT. 528-1117 TO PT. 27. 41° 09' RT. 164° 36' 30"
" PT. 27 TO PT. 28. 29° 24' RT. 13° 26' 30"
" PT. 28 TO PT. 30. 244° 10' RT. 976° 41' 30"

ON PT "X" TO PT USGS B.M. 5-28 S 52° 30' E (MAG)

NOTE: USGS B.M. 722 IS NOT VISIBLE FROM ANY
OF THE ABOVE POINTS DUE TO DENSE GROWTH
OF LARGE OAK AND SYCAMORE TREES AROUND B.M.

TIE OF PT 28 TO OLD RUINS.
Pt. 25



EL CAPITAN RES.
TRIANGULATION OF RANGE ENDS
TO FAIRCHILD A. PT. 3
(CONTINUED FROM F.B. 753.)

DEC. 7, 1951

BEATH
LEONARD
POWELL

16.

T AT PT 30

B.S. F.S.

6F-538 - N° 34

1) 67° 53' 30"

6) 407° 19' 30"

M) 67° 53' 15"

N° 34 - N° 33

1) 16° 09' 00"

6) 96° 55' 00"

M) 16° 09' 10"

No 33 - ^{BM 5-28} 1117 (Elev 1117)

1) 16° 41' 00"

6) 100° 07' 30"

M) 16° 41' 15"

BM 5-28
1117 - N° 29

1. 33° 55' 30"

6. 203° 32' 30"

M) 33° 55' 25"

N° 29 - 6F-538

1. 225° 22' 15"

6) 222° 11' 00"

1352° 11' 00"

M) 225° 21' 50"

360° 00' 55"

EL CAPITAN RES
TRIANGULATION OF RANGE ENDS
TO FAIRCHILD Δ PTS.

12/7/51

17.

T. AT N° 34 B.S. F.S.
6F. 538 - N° 30
1) 58° 48' 30"
6) 352° 52' 00" M) 58° 48' 40"

N° 30 - N° 29
1) 29° 38' 30"
6) 177° 50' 30" M) 29° 38' 25"

N° 29 - B.M. 5-28
1) 87° 21' 30"
6) 164° 08' 30" M) 87° 21' 25"
524° 08' 30"

B.M.
5-28 - N° 33
1) 9° 03' 30"
6) 54° 20' 00" M) 9° 03' 20"

N° 33 - 6F. 538
1) 175° 08' 00"
6) 330° 49' 00" M) 175° 08' 10"
1050°

360° 00' 00"

EL CAPITAN RES.
TRIANGULATION OF RANGE ENDS
TO FAIRCHILD Δ PTS.

12/7/51

18.

π AT 6F-534
(ELEV. 1216)

P.S	ES
N° 26	SW. COR CHURCH.
1) 23° 48'	
6) 142° 45' 30"	M) 23° 47' 35"

SW COR CHURCH	N° 25
1) 0° 28' 30"	
6) 2° 51' 00"	M) 0° 28' 30"

N° 25	N° 23-A
1) 31° 23' 30"	
6) 188° 20' 30"	M) 31° 23' 25"

No 23-A	N° 23
1) 20° 39' 00"	
6) 123° 51' 00"	M) 20° 38' 30"

25-18~

N° 23 - N° 24	
1) 7° 22' 30"	
6) 44° 15' 30"	M) 7° 22' 35"

N° 24 - N° 26	
1) 276° 19' 30"	
6) 217° 56' 30"	M) 276° 19' 25"
1657° 56' 30"	
	360° 00' 00"

1/2 COR	No 23
1) 16° 24' 30"	
6) 98° 27' 30"	M) 16° 24' 35"

NW Cor Church to SW Cor Church. 0° 13'

SW Cor " to SE Cor " 0° 21' 30"

EL CAPITAN RES.
TRIANGULATION OF RANGE ENDS
TO FARCHILD Δ PTS

12/7/57

19.

TAT N° 23

B.S. F.S.

N° 24 - 6F-534

1) $7^{\circ}39'30''$

6) $45^{\circ}56'30''$

M) $7^{\circ}39'25''$

6F-534 - N° 26

1) $65^{\circ}17'00''$

6) $31^{\circ}43'00''$

$391^{\circ}43'00''$

M) $65^{\circ}17'10''$

TAT N° 25

N° 24 - 6F-534

1) $13^{\circ}23'30''$

6) $80^{\circ}15'00''$

M) $13^{\circ}22'30''$

6F-534 - N° 26

1) $37^{\circ}21'30''$

6) $224^{\circ}08'30''$

M) $37^{\circ}21'25''$

N° 26 - NW Cor Church

Stadia 103' $10^{\circ}24'30''$ LT

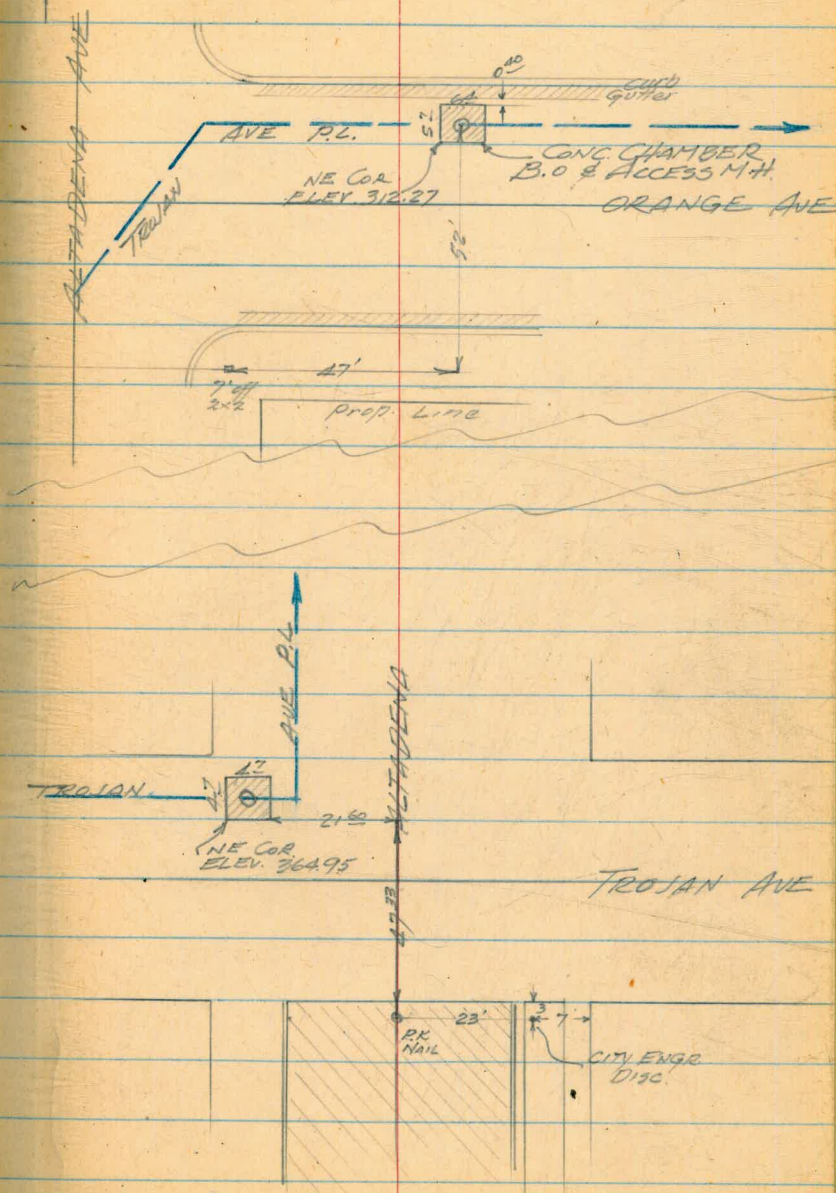
N° 26 - SW Cor Church

Stadia 1125' $20^{\circ}56'30''$ LT

TROJAN AVE PIPELINE
 LOCATION & ELEV. OF CHAMBERS
 IN Proposed Street Improvement.

FEB. 9 1955
 BEATH
 STORSEY
 MARTELL

PM.	0.32	329.07		328.75	NS 1/2 P.P.
TD	2.12	318.39	12.80	316.27	SW Cor Vivona & Orange
NW Cor Conc Chamber			5.95	312.44	
NE Cor. " "			6.12	312.27	
SE Cor. " "			6.54	311.85	
Edge GUTTER near SE Cor			6.65	311.72	
SW. Cor Conc Chamber			6.34	312.05	
Edge of GUTTER near SW. Cor.			6.49	311.90	
PM.	13.24	325.96	5.67	312.72	NW Cor Orange & Alameda off.
TD	13.70	339.24	0.02	325.94	32'
TD	12.69	351.65	0.28	338.96	
TD	13.08	364.34	0.39	351.26	
TD	8.54	372.28	0.40	363.74	
NW Cor Conc Chamber			7.31	364.97	
SW Cor " "			7.45	364.83	
SE Cor " "			7.42	364.86	
NE Cor " "			7.39	364.95	
Top AVA			11.95	360.83	
TD	3.01	373.83	1.46	370.82	CITY ENGR DISC NW COR. TROJAN & ALAMEDA
CK (5) FH (WEST) 5491 F22			17.66	361.17	= 361.12



215192
82

8275

61.74

2121

63 Nor

84

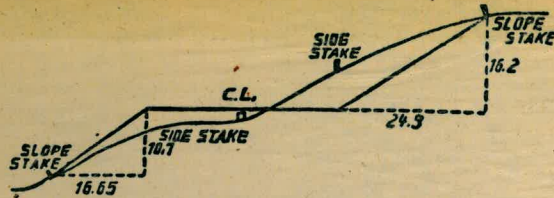
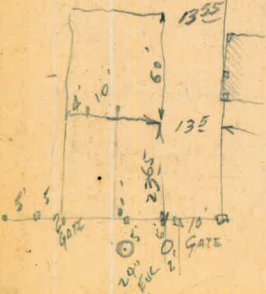
215+91 95

14 66

77 29



216+96
19
217+15
80
216+35



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	71.20	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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