MISSION BAY

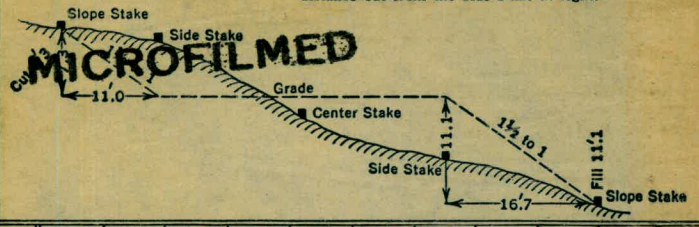
43

43

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30 3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	38.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

KEUFFEL & ESSER CO., N. Y.

#43

S/R To "CLARA" N 1° 14' 42" W
(358° 45' 18")

@ Famoss Blvd
R.R. Bridge

III Nail in Str. @ N.W. Cor. W. End

El. 13.51

INDEX

Pages		Date
1	Curve Data Ventura Blvd. & of So. Trafic Lane.	3-16-49
2-11	Original x Sections of Curve Running So on Ventura Blvd to an Intersection of Midway Drive.	3-16-49
12-21	Original x. Sections of. Proposed Detour Nashville St to Midway Dr.	8-29-49
22-23	Soundings Submarine Sewer (Ocean-Mission) X-Sections of 500' R. Curve Intersection	9-10-49
24-27	Of Detour & Midway Check Soundings of Cavein Area at	9-15-49
27-29	North End Submarine Sewer Topo for Drainage at South	9-18-49
30-31	End Of Santa Clara Point	9-20-49
33	T.B.M.s For Midway Drive Detour	10-49
34-41	Location Of Contours & Elevations Of Affected Private Property - Proposed Fill - Ocean Beach	10-18-49
41-45	Situation Survey Near Glenn's Drive Inn - Lots 53-58 - Proposed Storm Drain Extension	11-1-49
46	Location Of & Profile Of Proposed Drain N/Side - Boat Bldg. Santa Clara Bldg.	11-15-49
47-48	Trunk Sewer "A" along old Elec. Railroad — Bench levels	6-9-50
50-56	Soundings at Quiveca Basin	8-2-50
57-61	Shore sections of Slopes at Quiveca Basin —	8-3-50
65	Location of Shore Line at East End North Jetty	10-18-50
66	Location of Pier at East End North Jetty	10-19-50
67-68	Profile along ℄ of Proposed Pier East End N. Jetty	10-19-50
69	Layout of 8" Water Line Quiver Area from Ventura	

3-16-43

①

T. STAMPER

CURVE DATA VENTURA BLVD

℄ OF SOUTH TRAFFIC LANE

STA	DEF ℄	CHORD		BEARING
B.C. RT 63+91.02	0	0		S70°43'32"E
64+00	0°30'07"	8.98		
+50	3°17'49"	50.00	℄ = 37°38'26" R = 512.5 L = 336.69 T =	
65	6°05'31"	50.00		
+50	8°53'12"	50.00		
66	11°40'54"	50.00		
+50	14°28'36"	50.00		
67	17°16'17"	50.00		
E.C. 67+27.71	18°49'13"	27.71		
+50		22.29		
68		50.00		
+50		50.00		S33°05'06"E
69		50.00		
+50		50.00		
B.C. LT. 69+70.80		20.80		
70	0°59'12"	29.20		
+50	2°40'34"	50.00		
71	4°21'55"	50.00		
EC. 71+54.03	6°11'27"	54.03		
72+00		45.97		
+50		50.00		S 45°28'E
73+00		50.00		
+50		50.00		
73+71.60		21.60		S. END OF PROJ.

N. G.
REVISED

CROSS SECTIONS IN PROFILES - 7019

BARRAGAN SHERRY 3-16-49 (2)

ORIGINAL X-SECTIONS OF CURVE RUNNING SOUTH ON VENTURA BLVD. TO AN INTERSECTION WITH MIDWAY DRIVE - ℄ OF SOUTH TRAFFIC LANE - ℄ EQUALS ℄ FOR X-SECTIONS -

STA - 63 + 91.02 (B.C.)

DIST	+	H.I.	-	ELEV	
		8.51			
T.B.M.	6.33	17.51		11.18	0.5 NORTH BAK IN CURB L.M.P. POST
℄			7.9	+ 2.2	
N/ LEFT 25'			5.1	+ 3.4	
LEFT 50'			5.4	+ 3.1	
RIGHT 25'			5.2	+ 3.3	
RIGHT 50'			5.7	+ 2.8	

NOTE: ELEV. REDUCED TO CITY DATUM

STA - 64 + 00

DIST	+	H.I.	-	ELEV
		8.51		
℄		17.51		
LEFT 25'			5.1	+ 3.4
LEFT 50'			5.2	+ 3.3
RIGHT 25'			5.4	+ 3.1
RIGHT 50'			5.6	+ 2.9
			5.7	+ 2.8

REVISED

STA - 64 + 50

DIST	+	H.I.	-	ELEV
		8.51		
℄		17.51	6.1	+ 2.4
LEFT 25'			5.8	+ 2.7
LEFT 50'			5.3	+ 3.2
RIGHT 25'			6.1	+ 2.4
RIGHT 50'			6.0	+ 2.5

STA - 65+00

DIST	+	H.I.	−	ELEV	
		8.5			
℄		17.51	6.2	+2.3	
LEFT 25'			6.3	+2.2	
LEFT 50'			5.9	+2.6	
RIGHT 25'			6.1	+2.4	
RIGHT ~~50~~ 38'			6.2	+2.3	
RIGHT 50			7.8	+.7	

S

STA - 65+50

DIST	+	H.I.	−	ELEV	
		8.5			
℄		17.51	8.3	+.2	
LEFT 25'			6.2	+2.3	
LEFT 50'			5.9	+2.6	
RIGHT 36'			11.2	-2.7	TOE OF FILL
RIGHT 50'			11.6	-3.1	

STA - 66+00

DIST	+	H.I.	−	ELEV	
		8.5			
℄		17.51	11.4	-2.9	
LEFT 29			10.9	-2.4	
LEFT 40'			5.0	+3.5	
LEFT 54'			6.4	+2.1	TOP WEST CURB
RIGHT 25'			11.7	-3.2	
RIGHT 50'			12.0	-3.5	

STA - 66+50

DIST	+	H.I.	−	ELEV	
		8.5			
℄		17.51	11.2	-3.4	
LEFT 13			11.7	-3.2	
LEFT 24'			6.3	+2.2	
LEFT 34'			6.4	+2.1	TOP WEST CURB
LEFT 45			5.30	+3.2	GUTTER WEST
LEFT 46.5			5.37	+3.1	& MIDWAY
RIGHT 26'			12.0	-3.5	
RIGHT 50'			12.2	-3.7	

STA- 67+00

DIST	+	H.I.	−	ELEV	
		6.8			0.5' N/ELIM. CURB.
T.B.M.	4.64	~~6.82~~ 15.82		+2.2 11.18	11.18
℄			10.6	−3.8	
LEFT - 12'			4.6	+2.2	TOP BNK
LEFT - 22'			4.7	+2	TOP WEST C
LEFT - 22.5			5.36	+1.4	WEST GU
LEFT - 44'			5.40	+1.4	RAILROAD
RIGHT - 25'			10.7	−3.9	
RIGHT - 50'			10.6	−3.8	

STA- 67+27.21 (E.C.)

DIST	+	H.I.	−	ELEV	
		6.8			
℄		~~6.82~~ 15.82	8.8	−2.0	
LEFT - 6'			4.9	+1.9	
LEFT - 17'			4.7	+2	
LEFT - 18'			5.35	+1.4	GUTTER & RAILROAD
LEFT - 38'			5.46	+1.3	
LEFT - 58'			6.21	+0.6	EAST G
RIGHT - 4'			10.7	−3.9	
RIGHT - 25'			11.1	−4.3	
RIGHT - 38'			10.4	−3.6	
RIGHT - 50'			10.7	−3.9	

67+50

DIST	+	H.I.	−	ELEV	
		6.8			
℄		~~6.82~~ 15.82	7.3	−.5	
LEFT - 5'			9.7	+3.1	TOP CURB
LEFT - 15'			9.77	+2.1	
LEFT - 15.5			5.39	+7.4	WEST GUTTER
LEFT - 36'			5.98	+7.3	℄
RIGHT - 2'			10.6	−3.8	
RIGHT - 15'			10.8	−4.0	
RIGHT - 23'			11.2	−4.4	
RIGHT - 25'			10.7	−3.9	
RIGHT - 38'			10.5	−3.7	
RIGHT - 50'			10.7	−3.9	

STA - 68+00

DIST	+	H.I.	-	ELEV	
℄		6.8 ~~16.82~~ 15.82	5.0	+1.8	
LEFT - 12'			~~4.73~~	+2.1	TOP CURB WEST GUTTER ℄ MIDWAY
LEFT - 12 5			5.42	+1.4	
LEFT - 33'			5.55	+1.2	
RIGHT - 9'			9.7	-2.9	
RIGHT - 13'			10.8	-4.0	
RIGHT - 24'			11.1	-4.3	
RIGHT - 28'			10.8	-4.0	
RIGHT - 50'			10.7	-3.9	

STA - 68+50

DIST	+	H.I.	-	ELEV	
℄		6.8 ~~16.82~~ 15.82	4.8	+2.0	
LEFT - 3'			4.81	+2.0	TOP CURB WEST GUTTER ℄ MIDWAY
LEFT - 9.5'			5.45	+1.3	
LEFT - 30'			5.55	+1.2	
RIGHT - 3'			4.8	+2.0	
RIGHT - 11'		N.G.	10.8	-4.0	
RIGHT - 19'			11.0	-4.2	
RIGHT - 31'			10.7	-3.9	
RIGHT - 50'			10.7	-3.9	

STA - 69+00

DIST	+	H.I.	−	ELEV	
℄		6.8 ~~16.82~~ 15.82	4.7	+2.1	
LEFT - 7'			4.86	+1.9	TOP CURB WEST GUTTER & MIDWAY
LEFT - 7 5'			5.50	+1.3	
LEFT - 28'			5.64	+1.2	
RIGHT - 3'			4.8	+2.0	
RIGHT - 10'			7.5	+.7	
RIGHT - 15'			10.6	-3.8	
RIGHT - 30'			10.6	-3.8	
RIGHT - 50'			10.6	-3.8	

69+50

DIST	+	H.I.	−	ELEV	
℄		6.8 ~~16.82~~ 15.82	4.7	+2.1	
LEFT - 7'			4.83	+2.0	TOP CURB WEST GUTTER & MIDWAY
LEFT - 7 5'			5.46	+1.3	
LEFT - 28'			5.61	+1.2	
RIGHT - 3'			4.7	+2.1	
RIGHT - 16'			10.6	-3.8	
RIGHT - 25'			10.7	-3.9	
RIGHT - 40'			11.0	-4.2	
RIGHT - 50'			10.6	-4.8	

N.G.

STA - 69 + 70.8 (B.C.)

DIST	+	H.I.	−	ELEV	
T.B.M.	4.77	15.95		11.18	0.5' NORTH OF BMK. [illegible] CURB [illegible] LMP POST S/END OF [illegible] IN W/CURB [illegible] LAMP POST ↓
T.B.M			4.76	11.19	
T.B.M.	4.30	6.5 15.49		+2.2 11.19	
℄			4.3	+2.2	TOP
LEFT 7'			4.43	+2.1	W/CURB
LEFT 7 5			5.10	+1.4	GUTTER ℄
LEFT			5.18	+1.3	MIDWAY
RIGHT-4'			4.6	+1.9	
RIGHT-17'			10.3	-38	
RIGHT-25'			10.3	-38	
RIGHT-50'			10.4	-39	

STA - 70 + 00

DIST	+	H.I.	−	ELEV	
℄		6.5 15.49	4.4	+2.1	
LEFT-7'			4.35	+2.1	TOP W/CURB
LEFT-7 5			5.03	+1.5	W/GUTTER
LEFT-			5.13	+1.4	℄ MIDWAY
RIGHT-4'			4.4	+2.1	
RIGHT-16'			9.9	-3.4	
RIGHT-35'			10.6	-3.9	
RIGHT-50'			14.6	-8.1	
RIGHT-58'			10.6	-39	

STA 20+50 ℄

DIST	+	H.I.	−	ELEV	
		6.5			
℄		15.49	1.2	+2.3	T.O.P.
LEFT - 5'			1.32	+2.2	W/GUTTER
LEFT - 5.5'			5.00	+1.5	W/GUTTER & MIDWAY
LEFT -			5.02	+1.5	
RIGHT - 8'			5.4	+1.1	
RIGHT - 22'			11.5	-5.0	
RIGHT - 34'			11.1	-4.6	
RIGHT - 50'			10.5	-4.0	

7+00

10.1
22.
21

DIST	+	H.I.	−	ELEV	
		6.5			
℄		15.49	1.5	+2.0	T.O.P.
LEFT - 4'			1.36	+2.1	W/GUTTER
LEFT - 15'			4.95	+1.5	W/GUTTER & MIDWAY
LEFT			4.90	+1.6	
RIGHT - 5'			5.7	+0.8	
RIGHT - 22			6.6	-.1	
RIGHT - 31			10.2	-3.7	
RIGHT - 50			10.4	-3.9	

EC. 71+54.03

DIST	+	H.I.	−	ELEV	
		6.5			
℄		15.49	14.9	+1.6	W/EDGE PAVEMENT (NO CURB)
					℄
LEFT-21'			14.92	+1.6	MIDWAY
RIGHT-15'			15.7	+.8	
RIGHT-30'			16.8	-.3	
RIGHT-50'			17.8	-1.3	

STA- 72+00

DIST	+	H.I.	−	ELEV	
		6.5			
LEFT 15'		15.49	14.92	+1.6	℄ MIDWAY
℄			14.81	+1.7	℄ CURVE
RT.- 5'			14.80	+1.7	GUTTER
RT. 5.5'			14.13	+2.4	TOP CURB
RT- 12'			14.1	+2.4	
RIGHT-18'			14.9	+1.6	
RT- 28'			19.7	-3.2	
RT -30'			21.8	-5.3	
RT- 35'			21.8	-5.3	
RT. 40'			20.3	-3.8	
RT. 50'			20.3	-3.8	

STA- 72+50

DIST	+	H.I.	−	ELEV	
		6.5			
LEFT 11.5'		15.49	14.90	+1.6	℄ MIDWAY
℄			14.80	+1.7	℄ CURVE
RT 2.5'			14.79	+1.7	GUTTER
RT 3'			14.10	+2.4	TOP CURB
RT 12.5'			13.9	+2.6	
RT. 21'			14.4	+2.1	
RT. 31'			20.5	-4.0	
RT. 33'			21.7	-5.2	
RT- 39'			21.7	-5.2	
RT- 50'			20.2	-3.7	

STA - 73+00

DIST	+	H.I. 6.5 15.49	-	ELEV	
LEFT-10'			4.80	42.3	℄ MIDWAY
℄			4.76	+2.3	
RT. 11'			4.78	1.7	WEST GUTTER TOP CURB
RT. 11 5'			4.12	+2.4	
RT. 12 5'			4.1	+2.4	
RT. 22			3.7	+2.8	
RT. 33			2.8	- 3.3	
RT. 43'			10.4	- 3.9	
RT. 44'			11.7	-5.2	
RT. 50'			~~10.7~~ 11.3	- 4.8	
RT 52'			10.2	-3.7	

STA - 73+50

DIST	+	H.I. 6.5 15.49	-	ELEV	
LEFT 8'			4.70	+1.8	℄ MIDWAY
℄			4.70	+1.8	
RT. 12'			4.12	+1.8	W/GUTTER TOP CURB
RT. 12 5'			4.05	+2.4	
RT. 32'			4.4	+2.1	
RT. 33'			2.5	- 3.0	
RT. 46'			10.3	- 3.8	
RT. 46'			11.8	-5.3	
RT. 47'			11.8	-5.3	
RT 53'			10.7	-3.8	

STA - 73+71.60 (END PROJ.)

DIST	+	H.I.	−	ELEV	
		65			
LEFT - 7'		15.49	4.77	+1.7	℄ MIDW
℄			4.70	+1.8	℄
RT. - 12'			4.65	+1.8	W/GUTTER
RT. - 12.5			4.03	+2.5	CURB
RT. - 24			4.1	+2.4	
RT - 35'			9.7	-3.2	
RT - 38'			10.3	- 3.8	
RT. - 39			11.7	-5.2	
RT - 45'			11.7	-5.2	
RT - 46'			10.2	-3.7	
RT - 50'			10.2	-3.7	

N.G

REVISED

ORIGINAL X-SECTIONS OF PROPOSED DETOUR NASHVILLE ST. TO MIDWAY DR.

(0+00 = Cu. Disk P.I. Midway & Nashville)

PX 0+00

STA	+	H.I.	−	ELEV	
B.M.	1.63	13.32		11.69	Top Fire Plug Nashville & Midway
RT - 15'			2.66	10.66	
℄			2.74	10.58	
LT. - 15'			2.77	10.55	

PX 0+30

DIST	+	H.I.	−	ELEV	
RT-24'			2.65	10.67	Prop
RT-15'			2.83	10.49	Top C
RT. 15'			3.17	9.85	Gutt
℄			3.30	10.02	℄
LT-15'			3.45	9.87	Gutt
LT-15'			3.25	10.07	Top C
LT-24'			3.20	10.12	Prop

BARRAGAN
SHERRY
SMITH

8-29-49 (12)

PX 0+50

DIST	+	H.I.	−	ELEV	
		14.07			Fire Plug Nashville & Midway Drive
B.M.	2.38	14.17	11.69		
RT. 24'			3		Prop. Line
R-15'			8.00	9.07	T. Curb
RT. 15'			6.00	8.07	Gutter
℄			5.20	8.87	℄
LT. 15'			5.35	8.72	Gutter
LT. 15'			5.10	8.97	T. Curb
LT. 24'			5.11	8.96	Prop. Line
Sta		1+00			
RT. 24'		14.07	4.87	9.20	Prop. Line
RT. 15'			5.08	8.99	T. Curb
RT. 15'			5.89	8.18	Gutter
℄			5.40	8.67	℄
LT. 15'			5.66	8.41	Gutter
LT. 15'		?			Top Curb
LT. 24'			5.49	8.58	Prop Line

Sta 2+00

Sta	+	−	HI	Elev	
PX			14.07		
Rt 24'		5.95		8.12	Prop line
Rt 15'		5.66		8.41	
℄		5.50		8.57	℄
L 15'		5.73		8.34	
L 24'		5.37		8.70	Prop line

Sta 3+00

Sta	+	HI	−	Elev	
PX		14.07			
R 24			5.16	8.91	Prop line
R 15'			5.26	8.81	Top
R 15			6.05	8.02	Gutter
℄			5.50	8.57	℄
L 15			5.83	8.24	Top
L 15			5.20	8.87	Gutter
L 24			5.09	8.98	

8-29-49 (13)

4+00 PX

Sta	+	HI	−	Elev	
R 24		14.07 ~~14.07~~	5.33	8.74	Prop line
Rt 15			5.42	8.65	T.C
Rt 15			6.10	7.97	Gutter
℄			5.54	8.53	℄
L 15			6.00	8.07	Gutter
L 15			5.45	8.62	T. Curb
L 24			5.28	8.79	

Sta 4+38 PX

Sta	+	HI	−	Elev	
R 24		14.07	5.80	8.27	Prop line
R 15			5.57	8.50	
℄			5.56	8.51	℄
L 15			5.30	8.77	
L 24			5.28	8.79	Prop line
		~~.64~~	5.53	8.54 ~~8.64~~	End of curb return (North) W/side LaSalle

8-29-40 (14)

5+00

PX

Dist	+	H.I. 12.75 ~~12.85~~	−	Elev 8.54 ~~8.64~~	END OF CL RFT N&S
T.P.	4.21				
RT - 24'			4.17	8.58	Prop Line
RT - 15'			4.26	8.49	T.C
RT - 15'			4.55	8.20	Gutter
℄			4.00	8.75	
LT - 15'			4.75	8.00	Gutter
LT - 15'			4.20	8.55	T. Curb
LT - 24'			4.06	8.69	Prop Line

PX

Sta	5.19	6+00			
Rt 24		12.75	4.55	8.20	Prop Line
Rt 15'			4.54	8.21	T. Curb
Rt 15'			4.92	7.83	Gutter
℄			4.30	8.45	
L. 15'			4.87	7.91	Gutter
L. 15'			4.56	8.19	T. Curb
L 24			4.40	8.35	Prop Line

Sta 7+00

Dist	+	H.I. 12.75 ~~12.85~~	−	Elev	PX
Rt. 24			4.70	8.05	Prop. Line
Rt. 15			4.85	7.90	T.C
Rt. 15			4.85	7.90	Gutter
℄			4.53	8.22	
L. 15			4.90	7.85	Gutter
L. 15			4.90	7.85	T.C.
L. 24			4.74	8.01	Prop. Line

Sta 8+00

PX

Rt. 24		12.75	5.06	7.69	Prop. Line
Rt. 15			5.10	7.57	T. C.
Rt. 15			5.60	7.15	Gutter
℄			4.92	7.83	
L. 15			5.23	7.52	Gutter
L. 15			5.23	7.52	T. Curb
L. 24			5.07	7.68	Prop. Line

8-29-49 (15)

Sta 9+00

Dist	+	HI 12.75 ~~+2.85~~	−	Elev
	PX			
R 24			5.35	7.40
R 15			5.40	7.35
Rt 15			5.65	7.10
℄			5.44	7.31
L 15			5.65	7.10
L 15			5.45	7.30
L. 24			5.30	7.45
	PX	Sta 10+00		
Rt. 50		12.75	4.40	8.35
Rt 25			4.50	8.25
℄			4.80	7.95
L. 25			5.30	7.45
L. 50			5.25	7.50
T. P.		~~+2.85~~	2.73	10.02 ~~+0.12~~ Stump T.P.

Sta 11+00

Dist	+	HI 12.82 ~~+1.44~~	−	PX Elev 10.02 ~~8.64~~ Stump
T.P.	2.80			
R.I. 50			5.10	7.92
R. 25			5.25	7.57
℄			4.95	7.87
L. 25			5.25	7.57
L. 50			5.10	7.72
Sta		12+00		
		12.82	5.5	7.3 PX
			4.7	8.1
℄			4.7	8.1
			4.8	8.0
			4.9	7.9
		Sta 13+00		
Rt 50		12.82	5.4	7.4
Rt 25			5.0	7.8 PX
℄			5.2	7.6
L. 25			5.85	6.97
L. 50			5.4	7.4

PX

Sta 14+00

Dist	+	HI 12.82 ~~11.44~~	−	Elev
R. 50			5.70	7.12
R. 25			5.65	7.17
℄			5.40	7.42
L 25			5.35	7.47
L 50			5.3	7.5

PX

Sta. 15+00

R 50		12.82	5.60	7.22
Rt 25			6.10	6.72
℄			5.25	7.57
L. 25			5.55	7.27
L. 50			5.25	7.57

PX

Sta. 16+00

Rt. 50		12.82	5.70	7.12
Rt. 25			5.75	7.07
℄			5.45	7.37
L. 25			5.80	7.02
L. 50			5.60	7.22
T. P			5.02	7.80 ~~6.42~~

T. L. Sta 1

8-29-49 (16)

Sta 17+00

Dist	+	HI 11.64 ~~10.25~~	−	Elev 7.80 ~~6.42~~
T. P.	3.84			
Rt. 50			4.35	7.29
Rt. 25			4.25	7.39
℄			5.15	6.49
L 25			4.60	7.04
L. 50			4.60	7.04

PX

Sta 18+00

Rt 50		11.64	4.60	7.04
Rt 25			4.75	6.89
℄			4.55	7.09 ~~6.89~~
L 25			4.40	7.14
L 50			4.75	6.89

PX

Sta 19+00

Rt 50		11.64	5.10	6.54
Rt 25			5.15	6.49
℄			5.00	6.64
L 25			4.80	6.84
L 50			4.70	6.94

Sta 20+00

Dist	+	Hi. 11.64 +0.26	−	Elev
Rt 50			5.10	6.54
R. 50			5.10	6.54
℄			5.40	6.24
L. 25			5.50	6.14
L. 50			5.10	6.54

Sta 21+00

Rt. 50		11.64	4.95	6.69
Rt. 25			4.90	6.74
℄			5.10	6.54
L. 25			5.40	6.24
L. 50			5.60	6.04

Sta. 22+00

Rt 50		11.64	4.90	6.74
Rt 25			5.10	6.54
℄			5.15	6.49
L. 25			5.30	6.34
L. 50			5.25	6.39
T.P.			4.45 +4.5	7.19 Tan. L 5.81 Sta

Sta 23+00

Dist	+	HI 10.96	−	Elev 7.19
T.P.	3.77	9.58		5.81
Rt 50			4.85	6.11
Rt 25			4.70	6.26
℄			4.80	6.16
L 25			4.75	6.21
L 50			4.80	6.16

Sta. 24+00

Rt 50		10.96	4.85	6.11
Rt 25			4.75	6.21
℄			4.75	6.21
L 25			4.85	6.11
L 50			4.90	6.06

Sta 25+00

Rt. 50		10.96	4.95	6.01
Rt 25			5.00	5.96
℄			4.90	6.06
L 25			4.80	6.16
L 50			4.70	6.26

Sta 26+00

Dist	+	HI	−	Elev	
		10.96			
Rt 50		~~2.58~~	4.30	6.66	
Rt 25			4.50	6.46	
℄			4.70	6.26	
L 25			4.70	6.26	
L 50			4.70	6.26	
				~~5.21~~	Top Hub
T.P.			4.37	6.59	P.I
				7.16	Top Lath
T.P.			3.80	~~5.78~~	Stk. 23+
		11.74			
	4.58	~~10.36~~			
				7.76	Top Lath
T.P.			3.98	~~6.37~~	Stk. 25+
		12.68			
T.P.	4.92	~~11.29~~			
				9.94	Stake
T.P.			2.74	~~8.55~~	
		12.CC			
T.P.	2.72	~~12.27~~			
				8.45	N.W. Co
T.P.			4.21	~~8.06~~	Curb
		14.11			
T.P.	5.66	~~13.76~~			
				11.57	Fire
			2.54	~~11.32~~	

8-29-49 19

PX

STA - 27+00 88

DIST	+	H.I.	-	ELEV CORR.	TOP NOS P.I.
T.B.M	4.35	11.04		6.69	
RT. 50			4.40	6.64	
RT. 25			4.40	6.64	
℄			4.45	6.59	
LT. 25			4.50	6.54	
LT. 50			4.95	6.09	
		Sta. 28+00			
RT. 50			4.50	6.54	
RT. 25			4.25	6.79	
℄			4.20	6.84	
LT 25			4.20	6.84	
RT 42			44	6.64	
		Sta 29+00			
RT 50			4.80	6.24	
RT 25			4.70	6.34	
℄			4.60	6.44	
L. 25			4.5	6.54	
L. 50			4.4	6.6	

PX

Sta 29+66 68 EC

Dist	+	HI	-	Elev
RT 50		11.04	4.80	6.24
RT 25			4.80	6.24
℄			4.80	6.24
L. 25			4.70	6.34
L. 50			4.50	6.54
		Sta 30+00		
RT 50			4.40	6.44
RT 25			4.80	6.24
℄			4.80	6.24
L. 25			4.60	6.44
L. 50			4.65	6.39
		Sta. 31+00		
RT 50			4.80	6.24
RT 25			4.60	6.44
℄			5.7	5.3
L. 25			6.7	4.3
L. 50			5.0	6.0
L. 25			5.0	6.0
L. 50			4.8	6.2

PX

PX

Sta 32+00 PX

Dist	+	HI	−	Elev	
Rt. 50		11.04	4.9	6.1	
RT 25			5.0	6.0	
℄			5.1	5.9	
RT 25			4.8	6.2	
R. 50			5.0	6.0	
T.P.		11.04	4.18	6.86	Top Stake Sta. 33+…
T.P.	4.35	11.21			

Sta. 33 PX

Dist	+	HI	−	Elev
RT 50			5.4	5.8
RT 25			5.2	6.0
℄			5.1	6.1
L. 25			5.1	6.1
L. 50			5.1	6.1

Sta 34+00 PX

Dist	+	HI	−	Elev
RT. 50			5.2	6.0
25'			5.2	6.0
℄			5.3	5.9
L. 25			5.3	5.9
L. 50			5.2	5.9

8-29-49

T.P.s

Dist	+	HI	−	Elev	
TBM		11.21	4.99	6.22	50' S/W STA-34+00 (1"x2" IN CLEARING)
T.P.	4.92	11.14			
T.P.			4.46	6.68	
T.P.	4.52	11.20			
T.P.			3.99	7.21	TOP LATH STA 22+00

STA-35+00 PX

9-7-49

DIST	+	H.I.	−	ELEV	
T.B.M.	5.90	12.12		6.22	1"x2" IN CLEARING ±50 S/W STA-34+00
RT-50'			6.1	6.0	
RT-25'			6.2	5.9	
℄			6.2	5.9	
LT-08			6.4	5.7	
LT-09'			8.5	3.6	
LT-18'			6.8	5.3	
LT-25'			6.4	5.7	
LT-50'			6.2	5.9	

B.C. 35+20 09

DIST	+	H.I.	−	ELEV	
T.B.M	5.90	12.12		6.22	
RT-50'			6.2	5.9	
RT-31'	PX		6.2	5.9	
RT-27'			9.3	2.8	
RT-24'			8.6	3.5	
RT-02'			7.2	4.9	
• ℄			6.1	6.1	
LT-25'			5.8	6.3	
LT-47'			2.6	9.5	
LT-50'			2.0	10.1	
T.B.M.			1.47	10.65	TOP CURB OPPOSITE 36+00

SEE PAGE 24

SEPT 10, 1949

SOUNDINGS OF SUBMARINE SEWER MISSION BEACH TO OCEAN BEACH

ANGLE S. JETTY TO MIDDLE CHANNEL ℄ = 71° 25'

ANGLE ℄ CHANNEL TO N JETTY ℄ = 42° 50' = 0+00

Dist	Sound		Dist	Sound
0+00	22.3	-17.1		21.0
(5.2)	22.3	-17.1		21.3
	23.0	-17.8		21.4
11:35	23.3	-18.1	50	21.8
	23.0	-17.8		21.3
50	22.4	-17.2		21.7
	21.8	-16.6	11 38	21.5
	21.6	-16.4		21.2
	21.9	-16.7	2+00	21.3
	21.5	-16.3	(5.2)	21.7
				21.5
1+00	21.6	-16.4		
	21.4	-16.2		21.7
			2+40	21.7

Dist	Sound
0-10	21.5
0-20	21.7
0-30	21.8
(5.2)	
0-40	21.0
0-50	21.0
0-60	21.0
0+00	21.0 = 17+50
0-80	

1848

16

17+50

Barge = 75'

= 17+00

16+70

2+70

14+30 ✓

#A1

F.B. (55)

IN PAGE

240
80
320

1750
32
1430

Add +1.2' to f.l. grade

Soundings on top of pipe

	Dist	Sound	+80 = 0+00	Grade
3+10		+2.2		
30 (4.7)	1.3	+3.4	12:23	+1.2
40 30	2.5	+1.8 +2.2		+0.8
50 30	2.7	+0.8 +2.0		+0.4
60 30	2.7	+0.8 +2.0	12:26	0.0
70 30	3.2	+0.3 +1.5		-0.4

X-SECTIONS OF 500' R. CURVE AT INTERSECTION OF PROPOSED DETOUR & MIDWAY

(B.C. = 35+70.09 NOTE) 36+00 (ON CURVE)

DIST	+	H.I.	−	ELEV	
T.B.M	4.24	14.89		10.65	TOPSOIL OPPOSITE 36+00
RT-50'			8.8	6.1	
-25'			8.7	6.2	
℄			8.9	6.0	
LT. -20'			8.9	6.0	
LT. -18'			4.6	10.3	
LT-38.5'			4.25	10.64	E/O
LT-38.5'			4.9	10.0	E/ GUTTER
LT-50'			4.71	10.18	PAVE

STAMPER BARRAGAN WATSON SHERRY

9-15-49

(24)

36+25

DIST	+	H.I.	−	ELEV	
LT.-47		14.89	4.5	10.4	
LT.-25			4.87	10.02	GUTTER
LT-25'			4.24	10.65	CURB
LT-13'			5.9	9.0	
LT-07			8.4	6.5	
℄			9.0	5.9	
RT-25'			8.8	6.1	
RT-50'			8.8	6.1	

PX

36+50

DIST	+	H.I.	−	ELEV	
RT − 50'		14.83?	9.0	5.9	
RT − 25'			9.2	5.7	
RT − 09'			9.2	5.7	
℄			7.3	7.6	
LT. − 07			4.4	10.5	
LT − 14'			4.2'	10.68	CURB
LT 14'			4.82	10.07	GUTTER
LT 36			4.53?	10.36	

36+75

DIST	+	H.I.	−	ELEV	PX
LT − 25'		14.89?	4.52	10.37	
LT − 05			4.82	10.07	GUTTER
LT − 05			4.23	10.66	CURB
℄			4.3	10.6	
LT − 07			5.0	9.9	
LT − 14			9.3	5.6	
LT − 25			9.3	5.6	
LT 52'			9.1	5.8	

37+00 PI

DIST	+	H.I.	−	ELEV	
		9			
RT - 50		14.89	9.2	5.7	
RT - 25'			9.3	5.6	
RT - 20'			9.3	5.6	
RT - 15'			4.8	10.1	
RT - 2 5/5'			4.29	10.60	CURB
RT - 2 5'			4.86	10.03	GUTTER
℄			4.80	10.09	
LT. - 18 5'			4.55	10.34	

37+25 PI

DIST	+	H.I.	−	ELEV	
		9			
LT. 12		14.89	4.48	10.41	
℄			4.72	10.17	
RT - 08			4.85	10.04	GUTTER
RT - 08			4.20	10.69	CURB
RT - 18			4.8	10.1	
RT - 35			9.3	5.6	
RT - 50			9.3	5.6	

9-15-49

37+50

DIST	PT	H.I.	−	ELEV	
RT-50		14.89	9.3	5.6	
RT-31			9.3	5.6	
RT 23'			4.5	10.4	
RT 13'			4.11	10.78	CURB
RT 13'			4.79	10.10	GUTTER
℄			4.51	10.38	
LT-07			4.41	10.48	

CHECK SOUNDINGS ALONG & PARALLEL TO CENTER LINE AND CROSS SECTIONS OF DREDGED CHANNEL FOR SUBMARINE SEWER

MISSION BEACH SHORE

0+00 FOR ℄ = PT. 11 2/3' S 56°47'40" W OF U.S.E.D. "DIEGO"

NOTE

SOUNDINGS IN F.B. No 41 P.P. 62-68

9-18-49

PROFILE 40' EAST OF ℄ {0+60 ℄ / 0+40 EAST}

STA	+	H.I.	−	ELEV	
B.M.	4.72	13.06		9.33	U.S.E.D. "DIEGO"
0+70			9.9	3.2	
0+60			8.5	4.6	
0+50			7.1	6.0	
0+40			6.6	6.5	
0+30			5.7	7.4	

PROFILE ALONG ℄ OF SEWERLINE

0+80

DIST	+	H.I.	−	ELEV
0+85		13.06	9.7	3.4
0+80			7.8	5.3
0+70			6.9	6.2
0+60			6.2	6.9
0+50			5.5	7.6
0+40			5.4	7.7

(0+60 ℄ / 0+90 WEST) PROFILE 40' WEST OF ℄

STA	+	H.I.	−	ELEV	
0+65		13.06	5.2	7.9	
0+60			4.9	8.2	
0+50			4.2	8.9	
0+40			4.3	8.8	
0+39			4.21	8.75	SOUTH SIDEWALK
0+28			4.10	8.96	NORTH SIDEWALK

(0+85 WEST / 0+60 ℄) PROFILE 85' WEST OF ℄

STA	+	H.I.	−	ELEV	
1+15		13.06	7.1	6.0	
1+10			6.7	6.4	
1+00			5.8	7.3	
0+90			5.0	8.1	
0+80			4.7	8.4	
0+70			4.5	8.6	
0+67			4.3	8.8	SIDE WALK
0+61			4.2	8.9	SIDE WALK
0+60			4.2	8.9	

(0+80 WEST / 1+00 ℄) X-SECTION 9-18-13

STA	+	H.I.	−	ELEV
0+80W		13.06	8.0	5.1
0+90W			5.5	7.6
1+00W			5.1	8.0
1+10W			4.8	8.3
1+20W			4.2	8.9

(1+50 ℄ / 1+40W) X-SECTION

STA	+	H.I.	−	ELEV
1+36W		13.06	7.3	5.8
1+40W			2.5	5.6
1+42W			6.7	6.4
1+50W			6.6	6.5
1+60W			6.3	6.8
1+70W			6.1	7.0
1+80W			3.9	9.2

9-18-

(2+00 ℄ / 1+50W EST) X-SECTION

STA +	H.I.	-	ELEV
1+40W	13.06	10.0 / ~~9.8~~	3.1
1+50W		9.8	3.3
1+60W		9.1	4.0
1+70W (29')		7.6	5.5
1+74 W		6.5	6.6
1+80W		6.2	6.9
1+85W		5.1	8.0

(1+70W / 2+50℄) - X-SECTION

STA +	H.I.	-	ELEV
1+65W	13.06	7.1	6.0
1+70W		5.2	7.9
1+85W		4.8	8.3
1+90W		4.6	8.5

TOPO FOR DRAINAGE - SANTA CLARA POINT

⊼ @ SOUTH RADIUS SANTA CLARA POINT AZIM. TO CLARA = [358° 45' 18"]
H.I. = 16.22

STA	DIST	AZIM		ROD	ELEV
1.	123'	33°	13'	5.14	11.08
2.	116'	37°	12'	5.20	11.02
3.	109'	41°	30'	5.23	10.99
4.	103'	47°	12'	5.27	10.9[illegible]
5	96'	54°	53'	5.39	10.8[illegible]
6	83'	56°	06'	5.40	10.8[illegible]
7	72'	57°	45'	5.35	10.8[illegible]
8	60'	60°	40'	5.29	10.9[illegible]
9	49'	67°	20'	5.29	10.9[illegible]
10	39'	76°	15'	5.26	10.9[illegible]
11	27'	89°	05'	5.28	10.9[illegible]
12	17'	112°	15'	5.27	10.9[illegible]
13	10'	164°	20'	5.28	10.9[illegible]
14	15'	222°	05'	5.24	10.98
15	33' ?	246°	35'	5.24	10.98
16	39'	259°	55'	5.26	10.9[illegible]
17	50'	270°	09'	5.25	10.9[illegible]
18	63'	275°	32'	5.37	10.85
19	75'	275°	10'	5.45	10.77

STAMPER
BARRAGAN
WATSON
9-20-49
PX
(30)

STA	DIST	AZIM		ROD	ELEV
		H.I. = 16.22			
20	83'	(290°	00') ?	5.49	10.73
21 (8A)	94'	290° 00'		4.86	11.36 TOP WLK
22	85'	281°	35'	4.90	11.32
23	84'	279°	40'	4.90	11.32 TOP WLK BOAT HSE.
24	84'	276°	35'	4.88	11.34
25	89'	274°	50'	4.91	11.31
26	109'	271°	25'	4.92	11.30
27	128'	269°	13'	4.89	11.33
To [illegible] of drain head [illegible] Point [illegible] line [illegible]	97'	54°	50'	(65° To Payment)	
	130'	62°	18' } =	PT. ON ℄	
				5.	

ELEV. TOP OF FIRE HYDRANT → 15.81

+0.41
15.81
H.I. = 16.22

(DRAIN PROFILE) PX 9-20-43

PROFILE SOUTH OF BOAT HOUSE - SANTA CLARA RIVER

0+00 = PT. 2' SOUTH OF S/E COR. CONC. PAD. TOP

STA	DIST	AZIM	ROD	ELEV
0+00	82'	275° 00'	5.13	10.73
0+15	H.I. = 16.22		5.1	11.1
0+25			5.2	11.0
0+50	130'	268° 20' (88° 20)	5.2	11.0
0+60			5.9	10.3
0+70			6.0	10.2
0+80			7.5	8.7
0+90			9.5	6.7
1+00			10.1	6.1
1+10			11.9	4.3
1+20			12.6	3.6
1+30			13.3	2.9
1+40			13.2	3.0
1+50	230'	BOTTOM HAIR	13.0 + 1.15 = 14.2	2.0

(DRAIN PROFILE) RX 9-20-43 (31) 9-27-43

PROFILE @ EAST SHORE OF SOUTH RADIUS

STA	DIST	AZIM	ROD	ELEV
0+00	137'	54° 50' H.I. = 16.22	5.4	10.8
0+05			4.9	11.3
0+10			4.8	11.4
0+20			5.0	11.2
0+30			5.5	10.7
0+40			6.4	9.8
0+50			7.5	8.7
0+60			9.3	6.9
0+70			9.7	6.5
0+80			10.1	6.1
0+90			11.0	5.2
1+00			12.1	4.1
1+10			12.9	3.3
1+20	210'	69° 36'	BOTTOM HAIR 13.1 + 1.05 = 14.2	2.0

SLOPE STAKES & GRADES FOR DETOUR

MIDWAY DRIVE

0+00 = COPPER DISC P.I. MIDWAY DRIVE & NASHVILLE

STA	+	H.I.	−	ELEV	
CURB RETURN W/SIDE LA SALLE	4.37	12.91		8.54	
T.B.M.			5.53	7.38	
T.B.M.	5.49	12.87		7.38	
"			4.90	7.97	
"	3.96	11.93		7.97	
T.B.M.			4.53	7.40	
T.B.M.			4.59	7.34	
"	4.19	11.53		7.34	
T.P.			4.95	6.58	
"	4.87	11.45		6.58	
T.B.M.			4.89	6.59 6.56 .03	

6.59 P.I.

7.34
4.19
11.53

6.58
4.87
11.45
4.89
6.56

11.5
6.0
5.5

LOCATION OF CONTOURS FOR PROPOSED FILL - - -

OCEAN BEACH PARK ANNEX & TOPO ALONG REAR OF LOTS

STA	+	H.I.	-	ELEV	
B.M	9.80	18.89		9.09	U.S.E. "JEEP"
T.P. #1	4.31	17.37	5.78	13.06	
T.P #2	4.50	18.90	2.97	14.40	
B.M	1.76				
B.M.	1.76	3,4.81		33.05	
	2.68	24.94	12.55	22.26	
B.M	3.02	36.07		33.05	
	0.41	30.91	5.57	30.50	
		26.24	9.70 ~~5.04~~	21.21	
		26.29	5.43	20.81	WALL
	4.17	24.17		20.00	
			3.79	20.38	

T.P WALL LOTS - 31-35

FOUNDATION BUILDING BEHIND LOTS 36-37

CONTOURS FOR PROPOSED FILL				
STA	+	H.I.	−	ELEV
B.M.	4.67	37.72		33.05
T.P.	3.14	28.13	12.73	24.99
			7.0	21.1
			7.1	21.0
T.P.	3.14	23.96	7.31	20.82
			4.43	19.53
			3.65	20.31
			2.50	21.46
			2.31	21.65
			1.96	22.00
T.P.	9.05	29.05		22.00
			4.60	24.45
				20.81
				20.0
				20.0
				18.0
				21.5
				12.0
				17.7

SUN SET

T.P.

Top of Retaining Wall Lot - 38 - 39

Top of Retaining Wall Lot - ~~39~~ 40 - 41

T.P. of Wall (Conc) Lot - 42 - 43

Top of Conc. Steps Lot - 44 -

Floor Level House Rear Lot 44 -

T.P. of Paving of Steps (Conc) Lot - 46

Top of Wall Side Lot 3 -

T.P.

Floor Level Basement Gar. House - Lot 3 - 1

T.P. of Retaining (Conc) Wall - 32 - 33

Level to Bank Lots - 30 - 31 (Vacant)

T.P. Conc. Stairs Lots - 28 - 29

El. of Footing House Rear Lot - 28

El. of Footing House Rear Lot - 27

House in Rear
Fl. T.P. Conc Landing Head of Stairs - 24 - 25

Top Retaining Wall (Wooden) Lot - 24

CONTOURS FOR PROPOSED FILL

STA	+	H.I.	-	ELEV
				16.00
				18.0
				15.0
				18.9
T.B.M.	9.53	20.53		16.00
			3.3	17.2
			1.2	19.3
			1.07	19.46
			0.95	19.58
			4.15	16.38
			~~5.5~~	
			5.5	15.0
			2.85	12.68
T.P	9.40	20.40		16.00
			6.5	13.9

20.5
1.6
18.9

GROUND EL. OF FOOTING (WOOD) LATH HOUSE &
SUN DECK REAR HOUSE - LOT - 22-23

EL. OF GROUND INSIDE CONC BLOCK WALL
REAR HOUSES LOT - 20-21

G. FLOOR LATH HOUSE (DIRT) REAR HOUSE LOT-16-17

GROUND EL. @ REAR HOUSE - 16-17

HUB - LEFT CONTOUR

EL. OF GROUND @ CONC FOOTING OF GAR
FLOOR LEVEL SAME GAR) REAR - LOT - 14-15

FLOOR EL BASEMENT HOUSE REAR

GROUND EL. @ FOOT OF NORTH WALL HOUSE-H LOT-10-11
(LAWN)

EL. OF GROUND NORTH END OF GARDEN
HOUSE LOTS - 10-11

BRK IN BANK REAR LOTS — VACANT 3-9 INCLUSIVE

EL OF GROUND @ NORTH WALL GAR. REAR LOT-1-2

T.P

TRUE EL. @ NORTH WALL SMALL BUILDING (GAR.?)
REAR LOT - T-4

CONTROL LEVELS FOR TOPO OCEAN BEACH

STA	+	H.I.	−	ELEV		Description
B.M.	6.37	39.42		33.05		BRASS BUTTON @ SUNSET CLIFFS & WEST POINT LOMA
No I T.B.M.			4.18	35.24		W/EDGE SIDEWALK ⊗ BLUE No I
No II T.B.M.			3.62	35.80		W/ " " ⊗ BLUE No II (43.28 / 34 / 9.28)
No III T.P.	6.31	43.28	2.45	36.97		E/EDGE " ⊗ YELLOW No III
T.B.M. No IV			5.25	38.03		E/EDGE " ⊗ " No IV
T.B.M. No V			4.85	38.43		W/ " " ⊗ " No V
T.B.M. No VI			6.21	37.07		W/ " ⊗ " No VI
T.B.M. No VII	7.15	43.28	7.15	36.13		W/ " ⊗ " No VII
B.M.			4.15	39.13		TOP FIRE HYDRANT @ SEASIDE LANE & W/POINT LOMA
CHECK	4.46	43.59		39.13		" " " @ " " " " "
T.P. CHECK			6.26	37.33		BRASS CAP MON. (STD.) U.S. GEOLOGICAL SURVEY MARKED EL-34 FT. (39.13 / 3.71 / 42.84)
T.B.M.	3.71	42.84		39.13		TOP FIRE HYD. 34 / 3.73 @ SEASIDE LANE & W/POINT LOMA (38.38 / 33.05 / 5.33)
T.P.	5.31	42.26	5.89	36.95		T.P.
T.P.	1.50	40.37	3.39	38.87		
	2.62	38.38	4.61	35.76		
B.M.			5.33	33.05	EL.=33.??	BRASS BUTTON @ SUNSET CLIFFS & W/POINT LOMA
B.M.	1.27	34.32		33.05		
T.P.	0.84	22.86	12.30	22.02		
T.P.	1.13	12.19	11.80	11.06		12.19 / 4.98 / 7.21
			4.98	7.21		
			8.0	4.2		WATER @ (11:00 AM)

CONTOURS & LEVEL FOR PROPOSED FILL

STA	+	H.I.	−	ELEV
T.B.M I No	4.85	40.09		35.24
T.P	1.38	29.81	11.66	28.43
			4.47	25.34
			3.71	26.10
			12.3	17.5
				−4.5
				13.0
			12.7	12.1
				= −2.6
				14.3
				26.10
				2
				25.90
T.B.M.	3.58	38.82		35.24
T.P.	6.10	34.42	10.50	28.32
			4.55	29.87
			10.12	24.30
			1.00	23.42
				3.1
				20.0
T.P	0.80	29.23		28.43
			5.95	23.28
			3.42	25.81
T.P.	8.18	36.26	1.15	28.08

(21-22) 27.81
3.31
25.50

9-10

3.44
26.03
16.92

LOTS (11-12 10-11)

TOP CONC WALL (CONC) REAR LOTS - (11-12) (HIGHEST)

" " " " " (9-10)

MIDDLE RET. WALL (CONC) LOTS (9-10)

LOWER WALL (CONC) LOTS (9-10)

LOWER WALL (CONC) LOTS (11-12)

TOP OF CONC FOUNDATION (GAR.) SHED IN REAR LOTS (7-8)

No I

GRND @ W/WALL HOUSE LOTS - (8-7)

GRND @ FENCE REAR " (8-7)

TOP RETAINING WALL (ROCK & CONC) REAR LOT-(7)

" " " (" ") " LOT-(8)

CONC LANDING TOP CONC STAIRS REAR LOT - 13

GRND EL W/HSE HOUSE REAR LOT - 14

N END OF YARD LOTS - (15-17) VACANT

CONTOURS & LEVELS FOR PROPOSED FILL (CONT'D)

STA	+	H.I.	−	ELEV
T.P	8.18	36.26		28.08
			4.73	32.53
			9.0	27.3
			11.05	25.21
No IV				
T.B.M	0.30	38.33		38.03
			6.50	31.83
			8.4	29.9
			3.40	34.93
			5.50	32.83
T.P	9.05	37.05		28.00
			5.0	32.0
			11.43	25.62
No V				
T.B.M.	1.28	38.35		37.07
			10.4	27.9
				+0.4
			7.80	30.55
			2.05	31.30
T.P.	4.32	35.62		31.30
			5.87	29.75
			6.51	29.11

T.B.M No V

36.26
28
8.26

GRND @ N/WALL HOUSE LOTS - (17-18)

TOP OF SLOPE OF BANK (19-20) VACANT

(HEAVILY IMPROVED)
CONC. PATIO REAR HOUSE (21-22)

No IV @ E/SIDEWALK

CONC. PAD REAR HOUSE LOTS (21-22) (APPROX FIGURE)

GRND EL TOP OF SLOPE VACANT (23-24)

FLR EL. GAR REAR LOTS - (25-26), & (26)

T.P RETAINING WALL (WOODEN) LOT (27-28)

TOP GRND. FOOT OF RETAINING WALL
FLOOR EL. OF TOOL SHED REAR LOTS (29-30)

BACK
T.P OF SLOPE (VACANT) (31-38) (INC)

T.E PORT PATIO FLOOR LOT (39)

TOP CONC RET. WALL LOT (40)

GRUNDEL @ N/WALL OF HOUSE LOTS - (41-42)

FORMS BUILT FOR CONC RET. WALL LOTS - (41-42)

Levels For Proposed Fill (Cont'd)

STA	+	H.I.	−	ELEV	
T.B.M. N° VIII	0.75	36.88		36.13	
			8.3	28.6	Ground El. @ N/End Of Wire Fence & Hedge Lots (43-44)
			8.9	28.0	El. Grnd Outside Fence (Rear) Lots (43-44)
			7.0	29.9	El Door Level Garage (Rear) Lots (43-44)
			8.9	28.0	Grnd El. @ N/Wall of Gar. (Rear) Lots (43-44)
			8.9	28.0	Set Hub (Vacant) Lots (45-46)
			8.47	28.41	Top Conc Block Wall Around Patio (New) (47-48)
			9.37	27.61	Floor (Conc) of Patio (New) (47-48)
			9.5	27.4	Ground El @ Board Fence Rear Lot (48)
T.P.	4.71	32.29	9.30	27.58	T.P. N/E for Conc Patio 32.29 4.92 27.37
			6.4	25.9	Grnd El. @ N/Side of Conc Wall Lots (49-50)
			+0.10	32.4	Top Of Wall Conc Lots (49-50)
			3.7	28.6	Grnd. El. Inside Wall Lots (49-50)
			3.9	28.4	Top of Steps (Conc) Lots (49-50)
T.P.	4.31	32.31		28.00	
			2.8	29.5	Top Of Steps & Grnd. El. Of Yard Lots (51-52)
			1.2	31.1	Grnd El at N/Fence (53)
			10.8	21.5	Floor El. 2 Story Small Building, Rear Lots (53-54)
			1.7	30.6	Fl. @ Gate To Main Yard Lots (53-54)

℄ LEVELS

CONTOURS FOR PROPOSED FILL - OCEAN BEACH CONCLUDED

STA	+	H.I.	−	ELEV
B. M.	0.55	39.68		39.13
			11.68	28.0
			11.68	28.0
B. M.	−0.10	39.03		39.13
			11.03	28.0

39.0
2.1
29.7

39.68
11.68

TOP FIRE HYDRANT SEASIDE LANE ℄ W/ POINT LOMA

SET HUB NO IMPROVEMENTS (REAR) LOTS - (55-56)

(SET HUB IN MIDDLE) (NO IMPROVEMENTS VACANT) LOTS - (57-58)

(59-60) (61-62) (ALL VACANT),

TOP FIRE HYDRANT SEASIDE LANE

SET NUB IN CENTER OF YARD MARKED 28.0 CONTOUR

℄ EAST @ FOOT OF OLD CONC. FOUNDATION

ALSO ON WOODEN STEPS ON S/E SLOPE

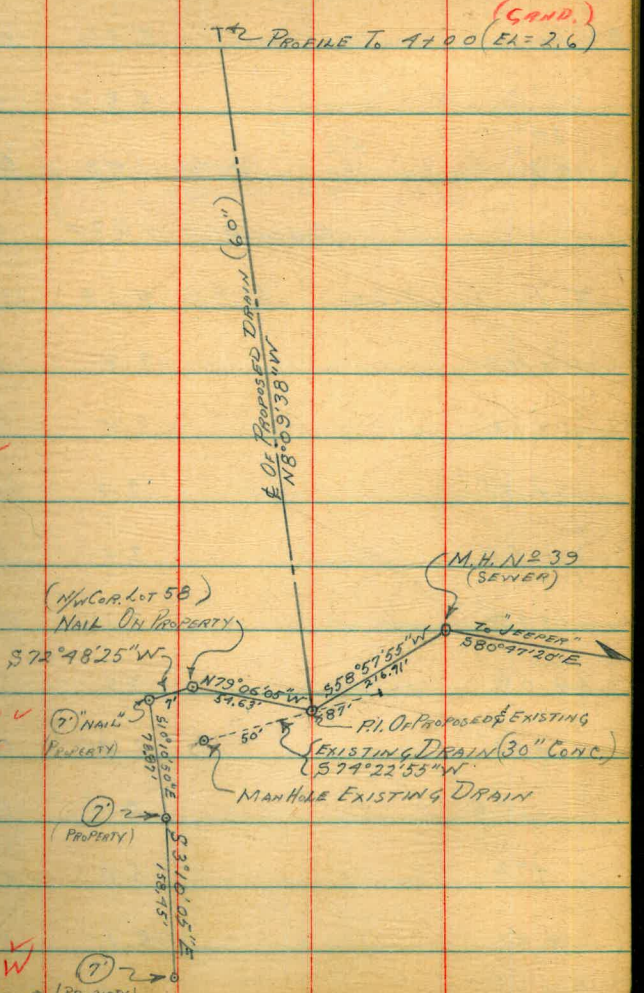
Situation Survey Near Glen's Drive In (Lots 53 to 58)
For Proposed Storm Drain Extension

(Block 103 Ocean Bay Beach)

Stamper Barragan Watson Sherry

11-1-49

Sta.	Object	Angle	Dist	Bearing
	"Jeeper"	① 40° 15'		S80°47'25"E To "Jeeper"
M.H. No 39	Def. Lt.	② 80° 29' 30"		
	P.I. Existing Drain & Proposed Drain	③ 40° 14' 45"	216.91'	S58°37'55"W
	M.H. No 39	④ 67° 07' 33"		
P.I.	L. Lt. -			
	& Proposed Drain		(Not Chained)	N8°09'38"W
	M.H. No 39	⑤ 164° 35'		
P.I.	L. Lt.			S74°22'55"W ~~S43°37'55"W~~
	M.H. Existing Drain		50.00'	
	M.H. No 39	⑥ 138° 01'		
P.I.	L. Lt.			N79°06'05"W ~~S41°01'55"W~~
	To Tack Prop Line		54.63'	
	P.I. Drains	⑦ 151° 54' 30"		
Tack On Prop	L. Right			S72°48'25"W ~~S45°07'35"W~~
	7" "Nail" (Off)		7.00'	



STA	+	H.I.	−	ELEV	
T.B.M	7.00	20.20		13.2	RIM OF MH No 37 TRENA GENERAL
BOTTOM M.H. (DRAIN)			12.90	7.30	BOTTOM M.H. DRAIN
RIM M.H. DRAIN			4.43	15.77	RIM M.H.
50' FROM EXISTING M.H. (DRAIN)			5.30	14.90	P.I. EXISTING & PROPOSED DRAIN
72' FROM M.H. (EXISTING)			5.5	14.7	GROUND
87' " " (F.L. ")			Top Pipe 12.08	5.37	F.L. END OF DRAIN 30" RCP OUTLET
89' " " (" ")			PIPE THICKNESS +2.75'		"
			Rod on F.L. = 14.83	5.4	
					RIM OF SEWER MAN HOLE
T.P.	3.30	18.82	4.68	15.52	
0+00			3.9	14.9	
+12'			3.4	15.4	
+25'			3.4	15.4	
+50'			3.4	15.4	
+75'			3.35	15.5	
1+00			3.5	15.3	
+25			3.85	14.9	
+50			4.35	13.5	
+72			5.0	13.8	
+81			5.1	13.7	
2+00			6.4	12.4	

2.22% Grade × 50' = 7.30 − 1.11 = 6.82 F.L.
at 0+00 of Proposed Drain

C.70

STA	+	H.I.	−	ELEV	
2+25		18.82	6.8	12.2	
+50			7.1	11.7	
+75			7.3	11.5	
3+00			7.8	11.0	
+25			8.0	10.8	
+33			8.1	10.7	
+36			8.5	10.3	
+39			10.1	8.7	
+51			11.0	7.8	
+80			~~13.9~~ ~~14.1~~ 12.0 ~~15.4~~	3.4.	
4+00			13.2 ~~13.0~~ ~~16.2~~	2.6	
SEWER M.H.			10.00	8.82	FLOWLINE 23³ TO P.I.

(15.52 - 6.70)

23³ FROM M.H. TO STA-0+25 & PROPOSED DRAIN

15.3
20.9

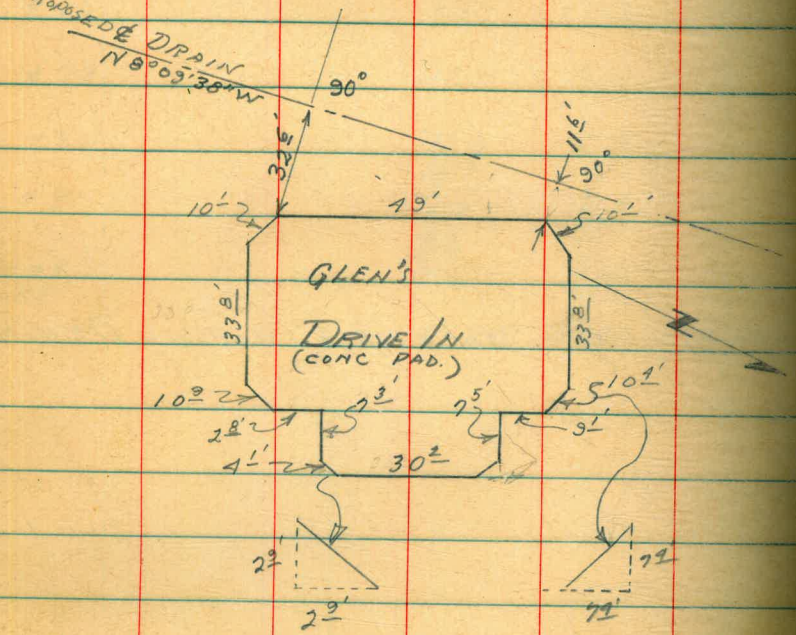
BARRAGAN 11-3-49
SHERIFF

45

LOCATION OF GLEN'S DRIVE IN

0+00 = P.I. OF EXISTING DRAIN & PROPOSED EXTENSION

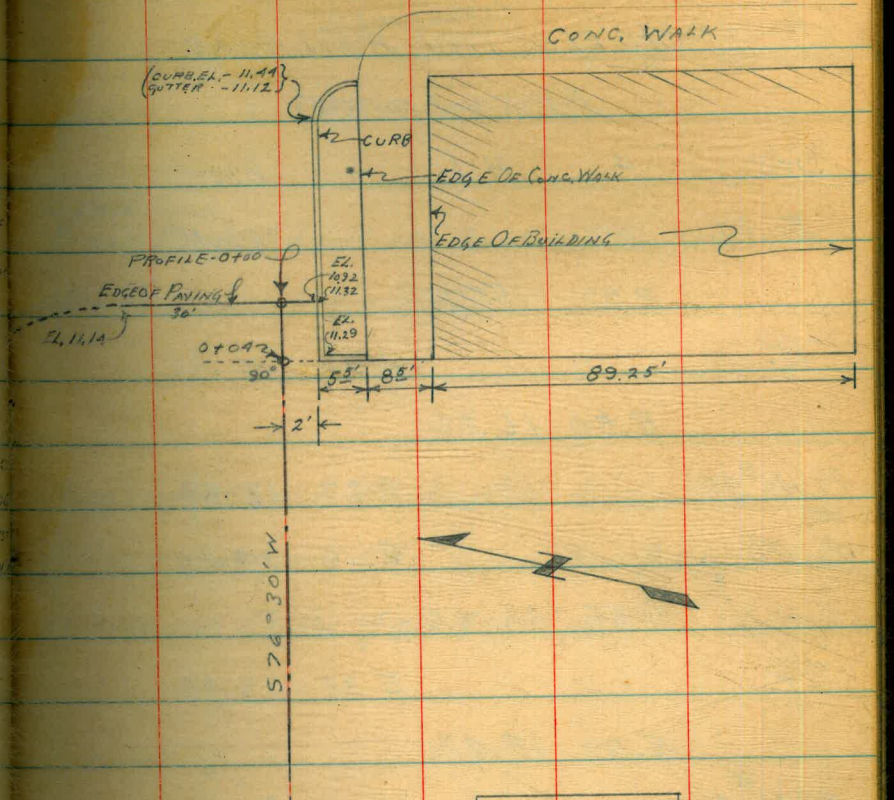
	@ 90° To B/L EAST
0+65.3	32.6'
0+70.1	23.9'
1+17.9	11.6'
1+26.6	16.8'
1+35.0	49.5'



LOCATION OF ℄

PROFILE OF PROPOSED DRAIN AT NORTH SIDE OF BOAT BUILDING SANTA CLARA

STA	+	H.I.	−	ELEV	
B.M.	1.30	17.11		15.81	
			5.81	11.30	N/E COR. OF CONC. PAD OF BLDG.
			5.82	11.29	N/W COR. CONC. PAD OF BLDG.
0+00 = POINT AT EDGE OF A.C. PAVING					
STA	+	H.I.	−	ELEV	
T.B.M.	9.20	15.49		11.29	N/W COR CONC. PAD OF CLUB
0+00			4.61	10.9	TOP OF WEST EDGE OF PAVING
+10			4.5	11.0	
+20			4.8	10.7	
+30			5.0	10.5	
+			5.2	10.3	
+39			7.1	8.4	
+50			9.0	6.5	
+60			10.0	5.5	
+70			10.8	4.7	
+80			11.7	3.8	
+90			12.4	3.1	
0+99			13.6	1.9	EDGE OF WATER



H.I. = 15.49

STA	- ROD CURB	- ROD GUTTER	ELEV CURB	ELEV GUTTER
ELEVATIONS ALONG TOP OF CURB & GUTTER				
0	- 4.20		11.29	
4'E	- 4.17	- 4.57	11.32	10.92
10'E	- 4.17	- 4.50	11.32	10.99
20'E	- 4.11	- 4.43	11.38	11.06
30'E	- 4.09	- 4.49	11.40	11.00
36'E	- 4.05	- 4.37	11.44	11.12

ELEVATIONS ALONG	PAVING - 4.51	A.C. PAVING 10.98
10' NORTH		
20' NORTH	- 4.44	11.05
30' NORTH	- 4.35	11.14

TRUNK SEWER No. 4 ALONG (ABANDONED) OLD ELECTRIC RAILROAD

BENCH LEVELS

June 9, 1950 — T. Stamper, H. Brown, A. Sherry

Datum = U.S.C.&G.S. M.L.L.W.

Sta	+	H.I.	−	Elev.	
B.M.				12.12	in East Curb Brass Plug About 10' South of South End of Mission Beach Bridge
	2.97	15.09			
T.P.			4.33	10.76	
	5.50	16.26			
M.H. #39			3.27	12.99	Top of Cover on ℄ MH side Shot
T.P. B.M.			2.16	14.10	U.S.E.D. Jeeper 6"x6" Conc Mon. Approx 200'E of Glenns Cafe & on Sly Crest of old BRDWK
	4.55	18.65			
T.P.			5.32	13.33	
	5.09	18.42			
M.H. #40			5.62	12.80	Top of Cover ℄ M.H.
T.P. MH #41			6.33	12.09	Top of Cover ℄ M.H.
	5.48	17.57			
T.P. MH #42			4.92	12.65	Top of Cover ℄ M.H.
	6.56	19.21			
T.P. MH #43			7.13 ~~7.17~~	12.09 ~~12.04~~	Top of Cover ℄ M.H.
	6.69	18.78			
T.P. M.H. #44			7.03	11.75	Top of Cover ℄ M.H.

June 9, 1950

BENCH LEVELS CONTD.

Sta	+	HI	−	Elev.	
T.P. MH #44				11.75	Top of Cover ℄ M.H.
	3.91	15.66			
T.P. MH #45			3.01	12.65	Top of Cover ℄ M.H.
	5.12	17.77			
T.P. MH #46			4.53	13.24	Top of Cover ℄ M.H
	3.76	17.00			
B.M			5.41	11.59 ? .41	Conc. Mon. City Engineers, "Famosa"
T.P. Elec. M.H.			5.41	11.59	Top of Cover ℄ M.H. South West side of RR Bridge
B.M			3.45	13.55	cluster of 3 nails in stringer at N.W. Corr. west end of R.R. Bridge Famosa Bl.
Elec. M.H.				11.59	South West Corner R.R. Bridge
	5.85	17.44			
M.H. #47			6.48	10.96	Top of Cover ℄ M.H.

Aug C. 1950

PX Sta 8+50

0+00 = Sta 8+50 on B/L SoonD South

Dist	SoonD		Dist	SoonD	
0+00	?		3+10	14.0	-11.1
(29)					(3.0)
1+38	0.0	2.9	+20	13.5	-10.6
+40	5.5	-2.6	+30	12.8	-9.9
+50	10.6	-7.7	+40	12.9	-10.0
+60	14.3	-11.4	+50	12.9	-10.0
+70	14.6	-11.7	+60	13.2	-10.3
+80	13.7	-10.8	+70	13.6	-10.6
+90	12.0	-9.1	+80	13.2	-10.2
2+00	12.0	-9.1	+90	13.7	-10
+10	12.0	-9.1	4+00	13.6	-10.
+20	11.9	-9.0	+10	12.9	-12.
+30	13.0	-10.1	+20	11.2	-8.
+40	13.6	-10.7	+30	7.7	-4.
+50	13.9	-11.0	+40	1.8	+1.
+60	14.3	-11.4	(10'07") (3.0)		
+70	14.4	-11.5			
+80	14.7	-11.8			
+90	14.8	-11.9			
3+00	14.5	-11.6			

PX Sta 9+00 (50)

0+00 = Sta 9+00 on B/L SoonD South

Dist.	SoonD		Dist.	SoonD	
0+00	?		3+10	14.3	-11.3
(3.0)					
1+27	0.0	3.0	+20	13.7	-10.1
+30	0.5	12.5	+30	13.3	-10.3
+40	3.1	-0.1	+40	13.7	-10.7
+50	6.0	-3.0	+50	13.6	-10.6
+60	9.0	-6.0	+60	13.9	-10.9
+70	10.3	-7.3	+70	13.8	-10.8
+80	11.5	-8.5	+80	13.1	-10.1
+90	12.7	-9.7	+90	12.4	-9.4
2+00	13.3	-10.3	4+00	12.8	-9.8
+10	13.5	-10.5	+10	16.0	-13.0
+20	13.1	-10.1	+20	16.4	-13.4
+30	13.7	-10.7	+30	13.8	-10.8
+40	14.1	-11.1	+40	11.3	-8.3
+50	12.6	-9.6	+50	8.7	-5.7
+60	13.2	-10.2	+60	4.7	-1.7
+70	3.1	-10.1			
+80	13.9	-10.9	+70	3.1	-0.1
+90	14.3	-11.3	+80	1.0	+2.0
3+00	14.4	-11.4	(10'20")		

AUG 2 1950

PX Sta 9+50

0+00 = Sta. 9+50 on B/L Sound South

Dist.	Sound		Dist.	Sound	
0+00	?		3+40	14.6	-11.2
1+51 (10:25) (3.4)	0.0	+3.4	+50	14.5	-11.1
+60	3.1	+0.3	+60	14.8	-11.4
+70	6.2	-2.8	+70	15.0	-11.6
+80	9.9	-6.5	+80	15.1	-11.7
+90	12.8	-9.4	+90	14.9	-11.5
2+00	13.3	-9.9	4+00	13.3	-9.9
+10	14.1	-10.7	+10	12.7	-9.3
+20	15.2	-11.8	+20	12.8	-9.4
+30	14.0	-10.6	+30	12.0	-8.6
+40	14.7	-11.3	+40	12.9	-9.5
+50	14.9	-11.5	+50	13.9	-10.5
+60	14.8	-11.4	+60	12.8	-9.4
+70	14.7	-11.3	+70	9.1	-5.7
+80	13.9	-10.5	+80	8.0	-4.6
+90	13.3	-9.9	+90	3.9	-0.5
3+00	14.0	-10.6	5+00	1.3	+2.1
+10	15.1	-11.7			
+20	15.2	-11.8	(10:33)		
+30	14.9	-11.5	(3.4)		

AUG 2 1950 (51)

PX Sta. 10+00

0+00 = Sta. 10+00 on B/L Sound South

Dist.	Sound		Dist.	Sound	
(3.4) 3+01	?		3+10	13.1	-9.7
+97	0.0	+3.4	+20	14.2	-10.8
4+15	0.3	+3.1	+30	14.8	-11.4
+20	0.6	+2.8	+40	14.6	-11.2
+30	1.0	+2.4	+50	14.7	-11.3
+40	1.3	+2.1	+60	15.0	-11.6
+50	1.5	+1.9	+70	15.5	-12.1
+60	2.0	+1.4	+80	15.2	-11.8
+70	3.0	+0.4	+90	15.0	-11.6
+80	6.8	-3.4	4+00	14.1	-10.7
+90	10.0	-6.6	+10	14.0	-10.6
5+00	14.8	-11.4	+20	15.2	-11.8
+10	15.9	-12.5	+30	14.4	-11.0
+20	13.7	-10.3	+40	15.0	-11.6
+30	13.8	-10.4			
+40	14.8	-11.4	+50	15.9	-12.5
+50	15.7	-12.3			
+60	15.2	-11.8	+60	14.7	-11.3
+70	15.1	-11.7	+70	10.4	-7.0
+80	15.0	-11.6	+80	5	
+90	15.1	-11.7	+90	5.3	-1.9
6+00	14.0	-10.6	8+00	3.8	-0.4
			+10	2.0	+1.4
			+20	1.0	+2.4

Px Sta 10+00

0+00 = Sta 10+00 on B/L Sound at 45° to B/L

Dist	Sound	
0+00 (10:58)	(4.2)	
+64	0.0	+4.2
+70	1.0	+3.2
+80	1.8	+2.4
+90	2.6	+1.6
1+00	3.6	+0.6
+10	3.5	+0.7
+20	4.0	+0.2
+30	4.5	-0.3
+40	5.0	-0.8
+50	4.6	-0.4
+60	4.5	-0.3
+70	4.5	-0.3
+80	4.8	-0.6
+90	5.0	-0.8
2+00	5.0	-0.8
+10		
+20	4.1	+0.1
+30	3.9	+0.3
+40	3.2	+1.0
+50	2.8	+1.4
	3.2	+1.0
+60	2.9	+1.3

Dist	Sound	
2+70	2.9	+1.3
+80	2.2	+2.0
+90	2.3	+1.9
3+00	2.5	+1.7
+10	2.6	+1.6
+20	3.0	+1.2
+30	3.7	+0.5
+40	4.2	0.0
+50	6.3	-2.1
+60	7.3	-3.2
+70	7.3	-3.2
+80	8.5	-4.3
+90	10.0	-5.8
4+00	7.3	-3.1
+10	11.2	-7.0
+20	13.0	-8.8
+30	13.2	-9.0
+40	13.3	-9.1

7-1-50 (58)

Px

Dist	Sound	
4+50	13.2	-9.0
+60	12.5	-8.3
+70	12.4	-8.2
+80	12.0	-7.8
+90	12.5	-8.3
5+00	12.8	-8.6
+10	13.0	-8.8
+20	13.0	-8.8
+30	13.2	-9.0
+40	13.0	-8.8
+50	13.0	-8.8
11:08		
([illegible])		

(4.2) Sta 10+00 PX

0+00 - Sta 10+00 on B/L Sound West

Dist	Sound		Dist	Sound	
0+00			2+30	2.4	+1.8
11:14					
+67	0.0	+4.2	+40	2.4	+1.8
+70	0.8	+3.4	+50	2.0	+2.2
+80	1.5	+2.7	+60	2.4	+1.8
+90	2.0	+2.2	+70	2.8	+1.4
1+00	2.8	+1.4	+80	3.0	+1.2
+10	3.1	+1.1	+90	3.2	+1.0
+20	5.6	-1.4	3+00	3.2	+1.0
+30	6.2	-2.0	+10	3.8	+0.4
+40	6.5	-2.3	+20	4.0	+0.2
+50	6.2	-2.0	+30	3.8	+0.4
+60	6.2	-2.0	+40	4.0	+0.2
+70	4.0	+0.2	+50	4.0	+0.2
+80	3.0	+1.2	+60	4.8	-0.6
+90	3.0	+1.2	+70	5.5	-1.3
2+00	3.0	+1.2	+80	5.9	-1.7
+10	2.8	+1.4	+90	6.8	-2.6
+20	2.6	+1.6	4+00	8.7	-4.5
				↘ 10.0	-5.8

PX

Dist	Sound	
4+10	10.7	-6.5
+20	11.6	-7.4
+30	12.1	-7.9
+40	12.8	-8.6
11:21		

Aug. 1950

Soundings East Slope Quivera Basin

PX Sta. 1+00 E

0+00 = Sta. 1+00 on B/L Sound West

Dist.	Sound		Dist.	Sound	
0+00	?		1+90	16.1	-11.1
1.53 (3.0)					
0+04	+1.1	+6.1	2+00	16.0	-11.0
0+04	0.0	+5.0			
0+10	2.5	+2.5			
+20	4.8	+0.2			
+30	6.2	-1.2			
+40	9.1	-4.1			
+50	10.8	-5.8			
+60	12.0	-7.0			
+70	13.0	-8.0			
+80	13.0	-8.0			
+90	13.9	-8.9			
1+00	14.0	-9.0			
+10	14.0	-9.0			
+20	14.5	-9.5			
+30	13.9	-8.9			
+40	13.8	-8.8			
+50	13.3	-8.3			
+60	14.0	-9.0			
+70	14.4	-9.4			
+80	15.2	-10.2			

Soundings East Slope Quivera Basin

PX Sta. 2+00 E

0+00 = Sta. 2+00 on B/L Sound West

Dist	Sound		Dist	Sound	
0+00	?		1+60	15.5	-10.6
+10	+1.0	+5.9	+70	15.6	-10.7
+10	0.0	+4.9	+80	15.8	-10.9
+20	5.0	-0.1	+90	14.0	-9.1
+30	6.0	-1.1	2+00	13.6	-8.7
+40	7.0	-2.1	+10	13.5	-8.6
+50	10.9	-6.0	+20	14.0	-9.1
+60	12.1	-7.5	+30	14.7	-9.8
+70	12.9	-8.0	+40	14.8	-9.9
+80	13.8	-8.9	+50	15.3	-10.4
+90	14.7	-9.8	+60	14.7	-9.8
2+00	14.8	-9.9	+70	16.0	-11.1
+10	14.7	-9.8	+80	16.2	-11.3
+20	15.3	-10.4	+90	14.7	-9.8
+30	15.0	-10.1	3+01	15.1	-10.2
+40	14.2	-9.3	+10	15.3	-10.4
+50	15.8	-10.9	+20	160	-11.1

Px 2+00 E (EAST SLOPE)

DIST	SOUND	
+30	16.1	-11.2
+40	16.5	-11.6
+50	16.1	-11.2
+60	15.9	-11.0
+70	15.6	-10.7
+80	15.3	-10.4
+90	15.0	-10.1
4+00	14.9	-10.0
+10	14.8	-9.7
+20	14.5	-9.6
+30	14.7	-9.8
+40	15.0	-10.1
+50	15.2	-10.3
+60	15.5	-10.6
+70	15.2	-10.3
+80	14.9	-10.0
1+21	(4.9)	

Soundings East Slope Quincy Basin

Px Sta 2+15 E

0+00 = Sta. 2+15 on ℄ Sound West

Dist	Sound		Dist.	Sound	
(41) 0+00	?		1+70	15.9	-11.1
+03	+0.8	+5.7	+80	17.0	-12.2
+33	0.0	+4.9	+90	17.0	-12.2
+30	2.1	+2.8	2+00	16.8	-12.0
+40	5.8	-0.9	+10	16.0	-11.2
+50	6.9	-2.0	+20	16.2	-11.4
+60	7.5	-4.1	+30	15.8	-11.0
+70	9.0	-4.1	+40	15.9	-11.1
+80	6.9	-2.0	+50	15.1	-10.3
+90	5.5	-0.6	+60	15.0	-10.2
1+00	5.6	-0.7	+70	15.0	-10.2
+10	5.0	-1.0	+80	15.0	-10.2
+20	9.8	-4.9	+90	14.9	-10.1
+30	10.9	-6.0	3+00	14.8	-10.0
+40	12.0	-7.1	+10	15.0	-10.2
+50	13.2	-8.3	+20	15.2	-10.4
+60	15.1	-10.2	+30	15.1 OVER	-10.3

Px STA -2+75E (EAST SLOPE)

DIST	SOUND	
3+40	15.0	-10.3
+50	15.7	-11.0
+60	15.6	-10.9
+70	15.5	-10.8
+80	15.2	-10.5
+90	14.9	-10.2
4+00	15.2	-10.5
+10	15.2	-10.5
+20	15.6	-10.9
+30	15.4	-10.7
+40	15.0	-10.3
+50	14.9	-10.2
+60	14.8	-10.1
+70	15.0	-10.3
+80	15.0	-10.3
+90	15.0	-10.3
5+00	15.2	-10.5

(4.7)

Px EXTENSION ON Sta. 4+00

4+00 = STA 4+00 ON ℄
SECTION @ 90° T. ℄

Sound South

(4.7) ±5°

Dist.	Sound	
4+00	14.0	-9.3
+10	13.2	-8.5
+20	13.3	-8.6
+30	13.8	-9.1
+40	14.0	-9.3
+50	15.1	-10.4
+60	15.2	-10.5
+70	15.2	-10.5
+80	15.8	-11.1
+90	15.8	-11.1
5+00	15.9	-11.2
+10	15.0	-10.3
+20	15.0	-10.3
+30	15.0	-10.3
+40	15.2	-10.5
+50	16.1	-10.4
+60	15.0	-10.3
+70	14.6	-9.9
+80	14.6	-9.9
+90	14.8	-10.1
6+00	14.8	-10.1
+10	14.8	-10.1
+20	14.9	-10.2
+30	14.5	-9.8
+40	14.5	-9.8
+50	14.3	-9.6
+60	13.0	-8.3
+70	11.5	-7.8
+80	5.5	-0.8
+90	1.5	+3.2

SHORE SECTIONS OF SLOPES CULVERT BASIN

3.22
8.87
1.7
12.7

Px

SEE PAGE (61) (BASELINE LAYOUT)

STA - 0-50

STA	+	H.I.	−	ELEV
T.P.	2.45	11.32		8.87
0+00			4.2	7.1
S +07			5.1	6.2
S +11			4.2	7.1
S +22			4.5	6.8
S +28			5.2	6.1
S +35			4.6	6.7
S +41			4.9	6.4
S +45			4.3	7.0
S +50			4.2	7.1
+58			6.2	5.1
N. 20'			1.9	9.4
N +50'			0.5	10.8
N 1+00'			+0.1	11.4

STA	+	H.I.	−	ELEV
1+00			0.1	11.5
0+50			0.4	10.9
[illegible] +23	Px		1.2	10.1
[illegible] +00		11.32	2.7	8.6
[illegible] .15			4.0	7.3
[illegible] +25			5.6	5.7
[illegible] +24			7.6	3.7

STA	+	H.I.	−	ELEV
[illegible] +00		11.32		11.3
[illegible] +50				10.8
0+35	Px		1.2	10.1
0+00		11.32	2.9	8.4
[illegible] +10			4.2	7.1
[illegible] +20			7.4	3.9

STA	+	H.I.	−	ELEV
[illegible] +26			0.0	11.3
0+13	Px		1.1	10.2
[illegible] +62			2.2	9.1
0+00		11.32	3.3	8.0
S +13			5.0	6.3
[illegible] +25 S			7.3	4.0
N 0+50			0.4	11.9
1+00			+1.0 64	12.3

STATION	+	3+00 H.I.	−	ELEV
N 1+00			0.5	10.8
N +50	Px		0.9	10.4
N +25			1.9	9.4
0+00		11.32	3.7	7.6
S +15			5.4	5.9
S +25			7.4	3.9

STATION	+	4+00 H.I.	−	ELEV
N 1+00			+0.4 (1.0)	11.7
+96			0.6	10.7
N +50	Px		1.3	10.0
+25			2.1	9.2
0+00		11.32	4.1	7.2
S +15			5.7	5.6
S +24.5			7.4	3.9

5+00

SECTION AT 45° TO B/L (EAST) SOUND SOUTH EAST

N/S 0+50			+0.7 (0.7)	12.0
N +29			0.0	11.3
N +22	Px		0.7	10.6
0+00		11.32	1.6	9.7
S +25			2.9	8.4
S +48			4.2	7.1
S +70			7.3	4.0

STA	+	6+00 H.I.	−	ELEV
				12.1
0+50			+0.9 (0.5)	12.2
+32	Px		+0.2 (1.2)	11.5
+25			0.6	10.7
0+00		11.32	2.0	9.3
+26			4.3	7.0
+35			5.3	6.0
+96			7.3	4.0

STA	+	7+00 H.I.	−	ELEV
0+50			+0.6 (0.8)	11.9
+35			0.0	11.3
+30	Px		1.0	10.3
0+00		11.32	2.7	8.3
+22			3.9	7.4
+39			5.0	6.3
+49			7.3	4.0

		8+00			12.7
SECT AT 90° TO B/L (N)					
STA	+	H.I.	−	ELEV	
N +50			0.8	10.5	
N +25	Pt		1.8	9.5	
0+00		11.32	3.4	7.9	
S +22			5.3	6.0	
S +42			7.3	4.0	
		8+00			
SECTION AT 135° TO B/L (NORTH)					
STA	+	H.I.	−	ELEV	
N 0+75			+0.4 (0.8)	11.7	
N 0+58		11.32	+0.1 (1.3)	11.4	
N +51			1.0	10.3	
+25	Pt		2.1	9.2	
0+00			3.4	7.9	
S +27			4.9	6.4	
S +57			7.2	4.1	
		8+00			
SECTION AT 90° TO B/L (WEST)					
STA	+	H.I.	−	ELEV	
N 0+50			3.8	7.5	
0+00	Pt	11.32	3.4	7.9	
S +25			3.7	7.6	
S +50			4.7	6.6	
S +73			7.3	4.0	
T.P.			3.35	7.97	

7-3-50

57

		8+50		
SECTION @ 90° TO B/L (WEST) SOUND SOUTH				
STA	+	H.I.	+	ELEV
-P	5.78	13.75		7.97
+50			2.0	11.8
+32			2.4	11.4
+20	Pt		2.9	10.9
+0			3.3	10.5
+25			3.6	10.2
+47			3.9	9.9
+69			5.2	8.6
+92			6.3	7.5
+10			8.9	4.9

7-3-50

9+00

SECTION @ 90° To B/L (N)

DIST	+	H.I.	−	ELEV
0+50		13.75	1.4	12.3
+20			1.7	12.1
+15			2.2	11.6
0+00			2.5	11.3
S- +50			3.9	9.9
S-1+00			6.1	7.7
S-1+16			8.9	4.9

7-3-50

(60)

9+50

SECTION AT 90° To B/L (WEST)

STA	+	H.I.	−	ELEV
0+50		13.75	2.1	11.7
0+00			2.6	11.2
+29			3.7	10.1
+50			4.3	9.5
+76			6.1	7.7
1+00			6.1	7.7
+37			6.5	7.3
1+42			8.8	5.0

10+00

SECT AT 90° To B/L (WEST)

STA	+	H.I.	−	ELEV
0+50		13.75	4.5	9.3
0+00			4.1	9.7
+13			7.9	8.5
+37			6.1	7.7
+50			7.6	6.2
+65			8.9	4.9

SHORE SECTIONS, QUIVERA 7-3-50

10+00

SECT. A.T. 135° TO B/L (EAST)

STA.	+	H.I.	-	ELEV.
N/E 0	+50	13.75	2.4	11.4
0	+00	P.T.	4.1	9.7
S/W	+24		6.2	7.6
S/W	+44		8.9	4.9

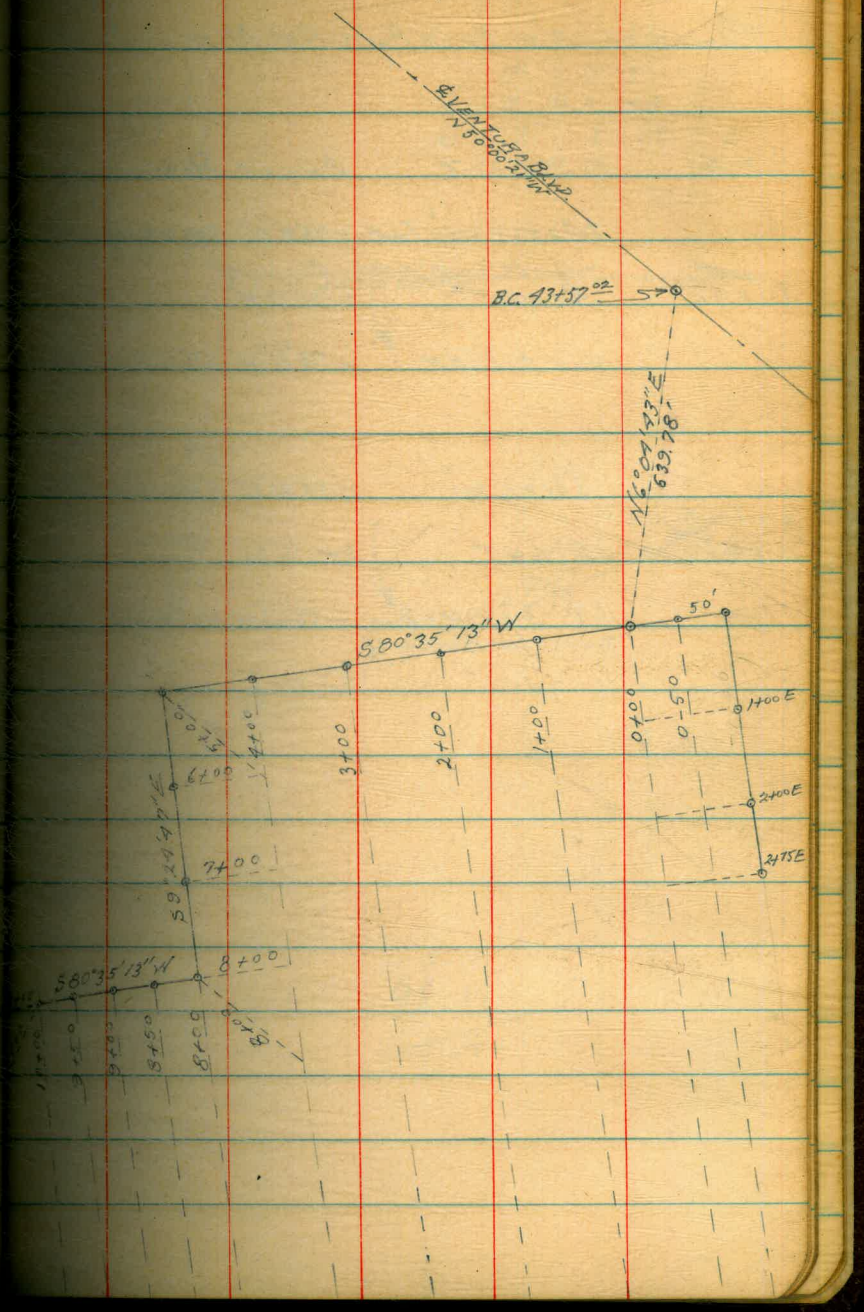
10+00

SECTION ALONG B/L (WEST)

STA	+	H.I.	-	ELEV.
E - 0	+50	13.75	2.6	11.2
0	+00	P.T.	4.1	9.7
W/	+28		5.8	8.0
W/	+36		6.9	7.9
W/	+57		8.9	4.9

(61)

BASE LINES FOR X-SECTIONS QUIVERA BASIN.



LOCATION OF PIER NEAR LIFEGUARD TOWER AT EAST END OF NORTH JETTY

STA	OJECT	ANGLE	BEARING	DIST
	MARSTON'S TWR. @ 98°33'30"		S89°22'57"E	7
"DIEGO"	RIGHT	@ 197°07'00"		
	HUB ℄ PIER	AV. 98°33'30"	S9°10'33"W	259.23
	"DIEGO"	@ 58°02'30"	N9°10'33"W	259.23
(0+20 ℄) HUB @ ℄ PIER	RIGHT	@ 116°05'30"		
	℄ PIER = LINE TOWARD LINDA VISTA TANK	AV. 58°02'45"	N67°13'18"E	

REFUSED

9.33

(62)

98 33 30

MARS - S 89° 22' 57" E

S 9° 10' 33" W

58 02 45

N 67° 13' 18" E

175.83
83.40
259.23'

U.S.E.D. "DIEGO"

TO MARSTON'S TOWER S89°22'57"E

259.23'

S 9° 10' 33" W

30

TO LINDA VISTA TNK.

N 67° 13' 18" E

HUB @ ℄ PIER

359 59 60
9 10 33
35 0° 49' 27"

160.55
98-33
6-72

PROFILE ALONG ℄ OF PROPOSED PIER

STA	+	H.I.	−	ELEV
B.M.	4.06	13.39		9.33
(GUTTER AT CURB)				
0-25 15		13.4	4.5	8.9
0+00			4.9	8.5
0+10			5.3	8.1
(H.O.B.) 0+20			5.3	8.1
+23			5.5	7.9
+24			6.7	6.7
+29			7.3	6.1
+33			8.5	4.9
+37			9.5	3.9
+38			9.0	4.4
+39 2			9.5	3.9
+41			9.7	3.7
+50			10.3	3.1

REVISED

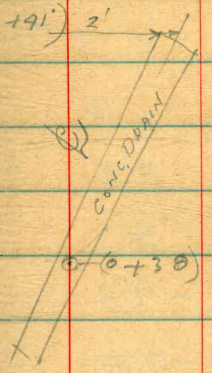
SEE NEXT PAGE

C. BARRAGAN OCT-17-50
A. SHEHRY
H. BROWN
W. CARVER

8.1
+5.3
12.4
5.3
4.9
4.5 cb

1.8
8.1
12.9

U.S.E.D. 11" DIEGO 14"



T.P. CONC. DRAIN PIPE (P.I. WITH ℄ PIER)

OPPOSITE END DRAIN (WHICH IS 2' SOUTH OF ℄ AT STA - 0+41)

SOUNDINGS ALONG ℄ OF PROPOSED PIER

DIST	SOUND		DIST	SOUND	
(9.2) (1:20 PM)			2+10	16.8	-12.6
0+60	3.1	+1.1		18.3	-14.1
	4.0	+0.2	(9.2)	19.0	-14.8
	6.1	-1.9		17.9	-13.7
	7.7	-3.5	+50	18.2	-14.0
1+00	9.3	-5.1		18.2	-14.0
	12.1	-7.9		19.0	-14.8
	15.2	-11.0			
	15.7	-11.5			
	15.7	-11.5			
+50	16.3	-12.1			
	16.6	-12.4			
	15.8	-11.6			
	15.4	-11.2			
	14.8	-10.6			
2+00	15.1	-10.9			

REVISED

Location Of Shore Line

At East End Of North Jetty

X @ 0+20 ; 0° 00' 00" = Linda Vista (N 67° 13' 18" E) Tank

STA	Object	Angle Left	Angle Right	Dist	
0+20	①		114° 45'	76'	1
"	②		94° 10'	75'	2
"	③		79° 04'	70'	3
"	④		71° 0'	98'	4
"	⑤		26° 35'	16'	5
"	⑥	28° 30'		30'	6
"	⑦	60° 30'		65'	7
"	⑧	62° 25'		107'	8
"	⑨	49° 45'		200'	9
"	⑩	38° 55'		237'	10
"	⑪	42° 10'		270'	11
"	⑫	45° 35'		305'	12
"	⑬	49° 25'		312'	13

H.I. = 12.9
8.7
4.6

C. Barnard
Sherry
Brown
Carver

10-18-50

(65)

Existing Pier & Ramp - Ventura Cove

Float 14x24 On Drums.

Ramp 2x30

Pier 5x52' (Old Ramp 2 Pile Bents)

} All Shots Approx. 4.6 El.

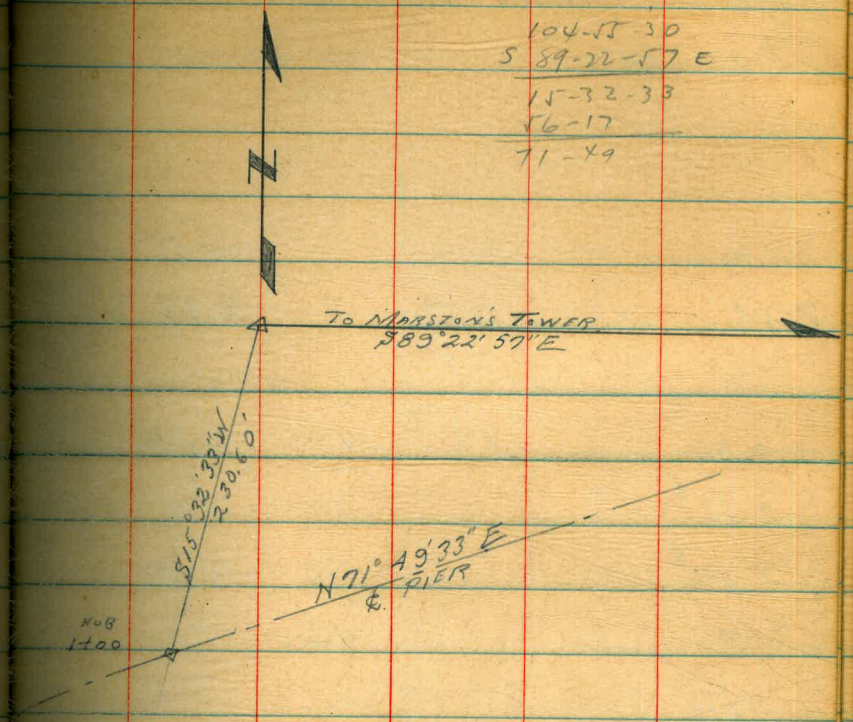
C. BARRAGAN
A. SHERRY
H. BROWN
W. CARVER

10-19-50

LOCATION OF PIER AT EAST END OF NORTH JETTY

STA	OJECT	ANGLE	BEARING	DIST
	MARSTON'S TOWER	@ 104°55'15"	S 89°22'57" E	?
U.S.E.D. "DIEGO"	RIGHT	@ 209°51'00"		
	HUB & PIER STA-1+00	AV. 104°55'30"	S 15°32'33" W	230.60
	U.S.E.D. "DIEGO"	@ 56°17'		
HUB & PIER STA-1+00	RIGHT	@ 112°39'0"		
	℄ OF PIER	AV. 56°17'00"	N 71°49'33" E	

104-55-30
S 89-22-57 E
15-32-33
56-17
71-49



PROFILE ALONG ℄ OF PROPOSED PIER
EAST END OF NORTH JETTY

STA	+	H.I.	−	ELEV
B.M.	3.39	12.72		9.33
0+30 (70)		12.2	4.95	7.77
+32.4			5.0	7.7
+32.4			4.3	8.4
+45 (15)			4.2	8.5
+62			5.6	7.1
+75			5.3	7.4
HUB 1+00			5.0	7.7
1+17			5.1	7.6
17.5			5.7	7.0
30			7.5	5.2
40			8.7	4.0

SEE NEXT PAGE

1-40 10-19-50 3-33 3.39 12.72 (67)

U.S.E.D. DIEGO"

PAVEMENT

GUTTER

TOP CURB

SOUNDINGS OF PROPOSED PIER

EAST END OF NORTH JETTY

DIST	SOUND		DIST	SOUND	
1+50	1.8	+1.2	3+20	16.8	-13.8
+60	5.3	-2.3		15.5	-12.5
(3.0)	9.8	-6.8	(3.0)	16.2	-13.2
	11.3	-8.3	3+50	16.5	-13.5
	11.9	-8.9			
2+00	12.2	-9.2			
	12.8	-9.8			
	13.3	-10.3			
	12.0	-9.0			
	11.3	-8.3			
50	10.2	-7.2			
	8.5	-5.5			
+70	6.8	-3.8			
	8.1	-5.1			
	10.8	-7.8			
3+00	14.0	-11.0			
+10	16.2	-13.2			

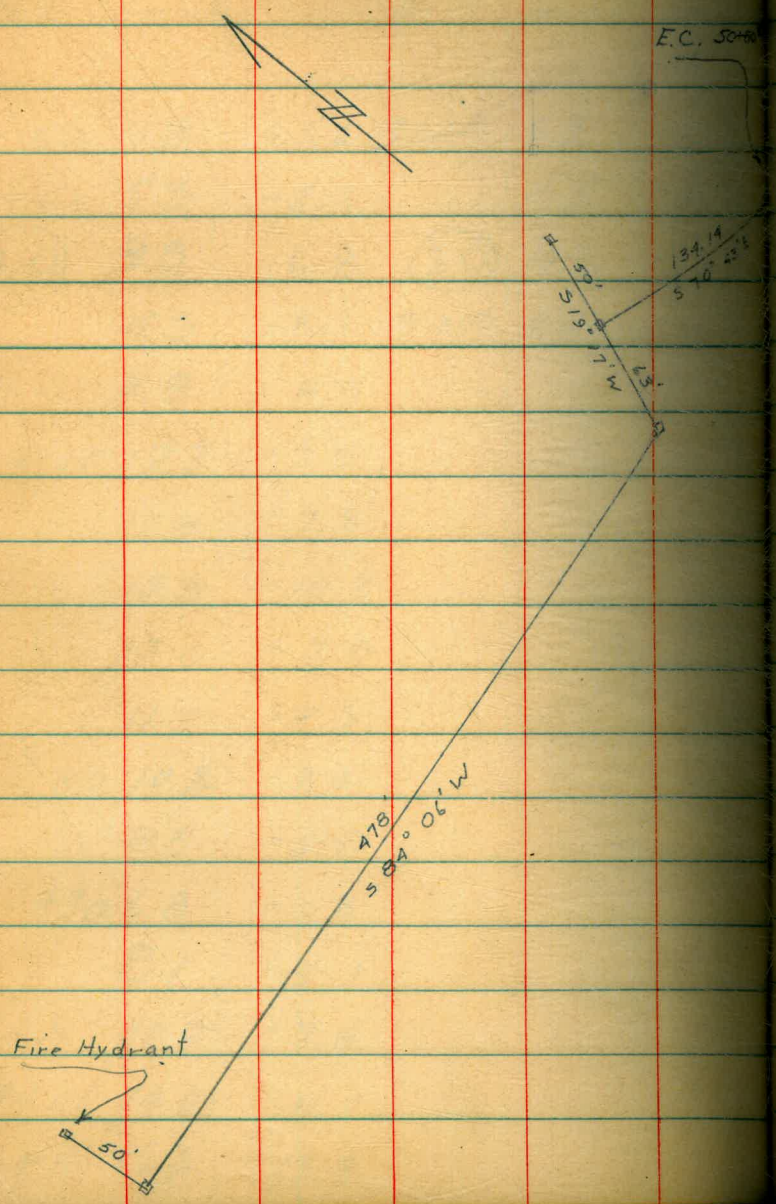
9.7
12.7
2.0

10-19-50

(61)

LAYOUT OF 8" WATER LINE QUIVERA

AREA FROM VENTURA BLVD



INVESTIGATION OF 12" FLEXIBLE C.I. SUMARINE PRESSURE SEWER FROM MISSION BEACH TO OCEAN BEACH PROJ N° 64340

9-21-51

T. Stamper
E. Watson
A. Sherry
R. Shorey.

0+00 = PT. OPPOSITE MON. DIEGO SOUND S.E.

DIST.	SOUND		DIST	SOUND	
0+50				5.4	-1.3
60			2+00	6.0	-1.9
70				6.0	-1.9 Leak
9:35 80	1.0	+3.1		6.4	-2.3
90	1.0	+3.1	(4.1)	7.1	-3.0
1+00	1.2	+2.9		8.4	-4.3
	1.4	+2.7	50	10.0	-5.9
(4.1)	2.0	+2.1		11.0	-6.9
	2.3	+1.8		11.0	-6.9
	2.7	+1.4		11.0	-6.9 -0.1 (End Leak
50	3.5	+0.6		13.8	
	4.4	-0.3	3+00	17.0	-12.9
	5.0	-0.9		17.8	-13.7
	5.3	-1.2		20.3	-16.2

DIST	SOUND		DIST.	SOUND
3+30	21.0	-16.9		
3.45	22.6	-18.5	5+00	
50	24.3	-20.2		
	25.7	-21.6		
(4.1)	27.0	-22.9		
	27.0	-22.9		
	26.4	-22.3	50	
4+00	26.7	-22.6		
	28.2	-24.1		
	28.5	-24.4		
	28.5	-24.4		
	28.0	-23.9	6+00	
50	28.5	-24.4		
	29.0	-24.9		
	28.8	-24.7		

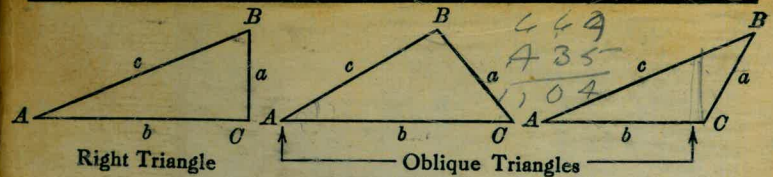
9-21-51

SEWER INVESTIGATION CONTD.

DIST	SOUND	DIST	SOUND
6+50			
		50	
7+00			
		9+00	
50			
		50	
8+00			
		10+00	

5

TRIGONOMETRIC FORMULÆ



Right Triangle — Oblique Triangles

Solution of Right Triangles

For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\operatorname{cosec} = \frac{c}{a}$

Given	Required	
a, b	A, B, c	$\tan A = \frac{a}{b} = \cot B, c = \sqrt{a^2 + b^2} = a\sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B, b = \sqrt{(c+a)(c-a)} = c\sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90° - A, b = a \cot A, c = \frac{a}{\sin A}$.
A, b	B, a, c	$B = 90° - A, a = b \tan A, c = \frac{b}{\cos A}$.
A, c	B, a, b	$B = 90° - A, a = c \sin A, b = c \cos A$,

Solution of Oblique Triangles

Given	Required	
A, B, a	b, c, C	$b = \frac{a \sin B}{\sin A}, C = 180° - (A + B), c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a}, C = 180° - (A + B), c = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A + B = 180° - C, \tan \frac{1}{2}(A - B) = \frac{(a-b)\tan \frac{1}{2}(A+B)}{a+b}$, $c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a+b+c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{bc}}$, $\sin \frac{1}{2}B = \sqrt{\frac{(s-a)(s-c)}{ac}}, C = 180° - (A+B)$
a, b, c	Area	$s = \frac{a+b+c}{2}$, area $= \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	area $= \frac{b c \sin A}{2}$
A, B, C, a	Area	area $= \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL

Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = 5° 10′. From Table, Page IX. cos 5° 10′ = .9959. Horizontal distance = 319.4 × .9959 = 318.09 ft. Horizontal distance also = Slope distance minus slope distance times (1 — cosine of vertical angle) With the same figures as in the preceding example, the following result is obtained. Cosine 5° 10′ = .9959. 1 — .9959 = .0041. 319.4 × .0041 = 1.31. 319.4 — 1.31 = 318.09 ft.

When the rise is known, the horizontal distance is approximately:—the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance $= 302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.