

MISSION BAY

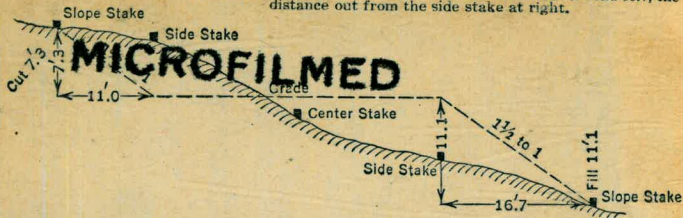
39



**DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING**

Roadway of any Width. Side Slopes 1/2 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	Distance out from Side or Shoulder Stake										Cut or Fill
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
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	33.8	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.

BOOK #39

N 77 25 44E

61+725

N-61+71<sup>35</sup>

$$\frac{7}{10} = \frac{19+89}{100}$$

$$\frac{6}{8} = \frac{23+89}{100}$$

$$\frac{6}{10} = \frac{25+89}{100}$$

The paper in this book No. 373A

is made of 50% high grade rag stock

with a WATER RESISTING surface sizing.



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FINAL SOUNDINGS PROJ. #9  
OCEAN FRONT

9-8-48

20°00'

STA. 85+00

ANGLE	SOUND	TIME + TIDE	ELEV	DIST.	TAN
39°46'	7.0	12:35	-1.5	600.83	.8321834
40°08	5.0	(5.5)	+0.5	593.07	.8430730
39°18	6.0		-0.5	610.88	.8184905
36°33	6.5		-1.0	674.18	.7413124
34°28	10.0		-4.5	728.41	.6864247
32°46	10.5		-5.0	776.81	.6436329
	12.0				
31°24	14.0		-8.5	819.13	.6104026
31°00	14.5		-9.0	832.14	.6008606
30°07	15.0		-9.5	861.97	.5800684
28°56	14.0		-10.5	904.50	.5527890
28°42	17.0		-11.5	913.27	.5474840
27°50	17.5		-12.0	946. <sup>7.00</sup>	.5279839
26°24'	18.0		-12.5	1007.24	.4964043
26°00	19.0		-13.5	1025.15	.4877326
23°52	22.0		-16.5	1130.09	.4424432
22°29'	24.5		-19.0	1208.10	.4138728
21°25	26.5	12:45	-21.0	1274.76	.3922313



PX

9-8-28

STA. 90+00

STA. 95+00

9-8-48 <sup>(2)</sup>

ANGLE	SOUND	TIDE + TIME	ELEV.	DIST.	TAN.	ANGLE	SOUND	TIDE & TIME	ELEV.	DIST.	TAN.
41° 0'	4.5	12:46	+1.1	575.18	.869286	40° 07'	4.5	12:55	+1.2	593.42	.8425755
40° 09'	5.0	(5.6)	+0.6	592.71	.8435708	37° 58'	5.0	(5.7)	+0.7	640.74	.7803492
37° 30'	6.0		-0.4	651.61	.767327	34° 57'	6.5		-0.8	715.40	.6989078
36° 59'	7.5		-1.9	663.92	.753098	9.0			-3.3		
34° 44'	9.0		-3.4	721.19	.693293	32° 17'	12.0		-6.3	791.43	.6317667
33° 40'	11.0	12:48	-5.4	750.66	.666076	30° 54'	14.0	12:57	-8.3	835.44	.5984877
32° 00'	13.0		-7.4	800.17	.624869	29° 54'	16.0		-10.3	869.53	.5750255
30° 45'	15.0		-9.4	840.42	.594937	28° 56'	18.0		-12.3	904.50	.5527890
29° 05'	16.5		-10.9	898.99	.5562119	26° 03'	20.0		-14.3	1022.89	.4888133
27° 05'	19.0	12:50	-13.4	977.79	.5113588	24° 25'	22.5	12:58	-16.8	1101.39	.4539709
25° 32'	21.0		-15.4	1046.70	.477689	22° 52'	24.0		-18.3	1185.59	.4217311
24° 10'	23.5		-17.9	1114.28	.448718	21° 26'	26.0		-20.3	1273.66	.3925670
23° 03'	24.5	12:51	-18.9	1175.07	.4255051	20° 31'	28.0	13:00	-22.3	1336.13	.3742163
21° 32'	26.0		-20.4	1267.16	.394582						
20° 26'	28.0	12:52	-22.4	1342.06	.372552						



9-8-78

STA. 100+00

STA. 105+00

9-8-78<sup>(3)</sup>

ANGLE	SOUND	TIDE & TIME	ELEV.	DIST.	TAN	ANGLE	SOUND	TIDE & TIME	ELEV.	DIST.	TAN
39° 31'	4.0	13:04	+1.8	606.19	.824825	45° 00'	4.0	13:12	+1.8	500.0	.000000
37° 42'	5.0	(5.8)	+0.8	646.92	.772887	42° 34'	4.5	(5.8)	+1.3	544.38	.9184740
36° 45'	6.0		-0.2	669.58	.746735	42° 11'	6.0		-0.2	551.75	.9062147
35° 02'	7.0		-1.2	713.19	.701074	40° 19'	6.5		-0.7	589.23	.8485619
33° 50'	8.5		-2.7	745.95	.670284	39° 02'	7.0		-1.2	616.71	.8107478
32° 47'	10.0		-4.2	776.34	.644044	37° 01'	8.5		-2.7	663.12	.7540102
31° 23'	12.0	13:05	-6.2	819.66	.610003	34° 45'	12.0		-6.2	720.75	.6937247
30° 10'	15.0		-9.2	860.24	.581235	32° 41'	14.0		-8.2	779.33	.6415779
28° 41'	17.5		-11.7	913.90	.547106	30° 24'	16.5	13:15	-10.7	852.23	.5866965
27° 09'	19.0	13:06	-13.2	974.99	.512827	28° 38'	18.5		-12.7	915.80	.5459727
25° 52'	21.0		-15.2	1031.24	.484855	26° 47'	20.0		-14.2	990.55	.5047713
24° 26'	22.5		-16.7	1100.54	.454321	25° 00'	22.0		-16.2	1072.25	.4663077
23° 07'	24.0		-18.2	1171.29	.426880	24° 03'	23.5		-17.7	1120.39	.4462747
22° 08'	25.0		-19.2	1229.30	.406735	23° 01'	25.0		-19.2	1176.97	.4248182
21° 12'	26.0	13:08	-20.2	1289.08	.387874	21° 24'	27.0		-21.2	1275.85	.3918957
20° 07'	28.0		-22.2	1365.08	.366277	19° 58'	28.0	13:19	-22.2	1376.23	.3633115



9-8-48

⑦

STA. 110+00

PT

ANGLE	SOUND	TIDE & TIME	ELEV	DIST.	TAN
39°52'	5.0	13:24	+0.8	598.70	.8351418
39°15'	6.0	5.8	-0.2	611.97	.8170349
37°40'	6.5		-0.7	647.70	.7719589
36°40'	7.5		-1.7	671.62	.7444724
35°39'	8.0	13:26	-2.2	697.11	.7172505
34°05'	10.0		-4.2	738.96	.6766268
32°06'	13.0		-7.2	797.07	.6272988
30°33'	15.0		-9.2	847.41	.5902211
28°49'	17.0		-11.2	908.07	.5501335
27°15'	19.5		-13.7	970.81	.5150338
25°53'	21.0	13:28	-15.2	1030.47	.4852145
24°38'	22.0		-16.2	1090.42	.4585397
23°10'	24.0		-18.2	1168.46	.4279121
21°55'	25.0		-19.2	1242.79	.4023354
20°39'	26.5	13:30	-20.7	1326.71	.3768716

0.85



A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W



9-8-48

STA-90+00

0+00 = PT. 270' W/STA-90+00 (SEA WALL) <sup>B/L</sup> SECT. AT 90° TO B/L  
 1.85 15.217  
~~14.17~~ 13.32  
 STA-90+00  
 BOTTOM OF  
 WALL

E-2+70 15.2 3.9 11.3

E-2+10 5.2 10.0

E-1+30 6.3 8.9

E-1+08 5.5 9.7

E-0+61 5.4 9.8

0+00 5.0 10.2

W-0+32 7.4 7.8

W-0+73 6.8 8.1

W-1+10 6.4 8.8

W-1+60 8.8 6.4

W-2+18 10.8 ~~4.4~~  
3.4

W-2+60 12.3 7.9

270  
 530  
 45

9-8-48

⑥

STA-91+00

0+00 = PT. 263' W/STA 91+00 (SEA WALL) <sup>B/L</sup> 90° TO B/L  
 2.18 15.50  
 13.32  
 STA-91+00  
 BOTTOM OF  
 WALL

E-2+ 5.1 10.4

E-2+04 5.4 10.1

E-1+38 6.4 9.1

E-1+00 5.2 10.3

0.0 5.0 10.5

W-0+14 5.3 10.2

W-0+46 7.4 8.1

W-0+88 7.0 8.5

W-1+39 6.7 8.8

W-1+76 8.7 6.8

W-2+20 10.6 4.9

W-2+68 12.5 3.0



STA-89+00

0+00 = PT. 250 W/STA-89+00 SEAWALL D/L: SECT. AT 90° TO D/L

STA	+	H.I.	-	ELEV
E	1.71	15.03		13.32
EE			1.72	13.31
EE 2+50			3.9	11.1
EE 1+95			5.5	9.5
EE 1+10			6.3	8.7
EO+52			5.8	9.2
O+00			5.0	10.0
WW 0+33			7.6	7.1
WW 0+66			6.8	8.2
WW 1+10			6.3	8.7
WW 1+57			8.7	6.3
WW 1+99			10.1	4.9
WZ+66			12.2	2.8

STA-89+00  
BOTTOM OF  
SEAWALL  
  
Ledge  
of Wall  
Sta 89+00

9-8-48

(7)

STA-88+00

0+00 = PT. 238 W/STA-88+00 SEAWALL D/L: SECT. AT 90° TO D/L

STA	+	H.I.	-	ELEV
E	1.71	15.02		13.31
E 2+38				
E 2+36				4.1
E 2+30				4.1
E 1+85				5.5
E 1+35				5.7
EO+85				6.0
O+00				5.0
WO+30				7.9
WO+92				6.5
W 1+45				8.6
W 2+12				10.6
W 2+60				11.7
				4.4
				3.3

LEDGE OF WALL  
WEST OF  
STA-89+00



9-13-48

⑧

STA-110+00

STA-109+00

SEA WALL

PX

0+00 PT 202' W of Sta. 110+00 B/L

0+00 = PT. 202' W/STA-109+00 SEAWALL B/L: SECT. 90° T. B/L.

Sta.	+	H.I.	-	Elev	PX
T.B.M.	←	13.06	(-0.10)	13.16	BM 105+00 W/EDGE OF LEDGE
E 1+85			1.2	11.8	
E 1+51			2.6	10.4	
E 1+14			3.2	9.8	
E 0+74			4.5	8.5	
E 0+40			4.9	8.1	
E 0+18			5.1	7.9	
0+00			5.2	7.8	
W 0+46			5.0	8.1	
W 1+01			4.4	8.7	
W 1+48			5.7	7.4	
W 1+85			7.6	5.5	
W 2+20			9.6	3.5	
T.P.			3.77	9.29	

STA.	+	H.I.	-	ELEV	
T.B.M.		7.46	13.75	9.29	T.P.
E			0.45	13.30	LEGE
E 1+90		7.5	1.6	12.1	
E 1+56		7.5	3.1	10.6	
E 1+25		7.5	3.3	10.4	
E 0+94		7.5	3.8	9.9	
E 0+60		7.5	4.4	9.3	
0+00		7.5	5.3	8.5	
W 0+54		7.5	5.9	7.9	
W 0+92		7.5	5.4	8.4	
W 1+40		7.5	4.7	9.1	
W 1+70		7.5	6.5	7.3	
W 2+06		7.5	8.5	5.3	
W 2+37		7.5	10.4	3.4	



Sta 108+00

PX

STA 107+00

PX

⑨

0+00 = PT 206' N of Sta. 108+00 Seawall B/L

0+00 = PT 209' W OF STA 107+00 SEAWALL B/L

Sta	+	H.I.	-	Elev	STA	+	H.I.	-	ELEV.
T.B.M.	5.04	14.33		9.29	T.B.M.	1.68	14.95		13.27
E 1+			1.08	13.25	E 2+04			2.6	12.3
E 2+00			2.4	11.9	E 1+75			4.0	10.9
E 1+60			3.0	11.3	E 1+32			3.9	11.0
E 1+12			3.1	11.2	E 0+70			3.9	11.0
E 0+70			4.0	10.3	E 0+41			4.3	10.6
E 0+29			4.7	9.6	0+00			5.1	9.8
0+00			5.3	9.0	0+58			5.6	9.4
W 0+29			5.5	8.8	W 1+10			6.1	8.9
W 0+60			6.2	8.1	W 1+78			5.3	9.7
W 0+97			5.8	8.5	W 2+10			7.8	7.2
W 1+65			5.1	9.2	W 2+37			9.8	5.2
W 1+92			7.4	6.9	W 2+63			11.7	3.3
W 2+18			8.9	5.4					
W 2+53			11.1	3.2					
T.B.M.			10.6	13.27					

Sta 107+

Ledge



STA. 106+00

0+00 = PT. 2+10 W/ OF STA. 106+00

SEA WALL  
B/L

STA.	+	H.I.	-	ELEV.	PT
T.B.M	2.22	15.49 <sup>5</sup>		13.27	Ledge
		2.22			Ledge
E. 2+08		3.3		12.2	
E 1+75		4.9		10.6	
E 1+34		4.8		10.7	
E 0+74		4.9		10.6	
E 0+00		5.0		10.5	
W 0+45		4.7		10.8	
W 1+03		4.7		10.8	
W 1+91		5.4		10.1	
W 2+15		7.6		7.9	
W 2+45		9.8		5.7	
W 2+75		12.2		3.3	

STA. 105+00

9-13-78

0+00 = PT. 225' W/ OF STA. 105+00

SEA WALL  
B/L

STA.	+	H.I.	-	ELEV.	PT
T.B.M	1.46	14.62		13.16	Ledge
E. 2+23				2.8	+11.8
E 1+75				3.3	11.3
E 1+43				3.8	10.8
E 0+75				4.3	10.3
0+00				4.5	10.1
W 0+53				4.9	9.7
W 1+10				4.8	9.8
W 1+88				3.9	10.7
W 2+22				7.2	7.4
W 2+45				9.1	5.5
W 2+75				11.7	+2.9
					1.8
					1.1



Sta 104+00

9-13-78

0+00 = PT. 225' W/STA-104+00 SEAWALL B/L; SECT. AT 90° To B/L

STA-	+	H.I.	-	ELEV
T.B.M	1.28	14.52		13.24
E 2+24			2.6	11.9
E 1+83			3.3	11.2
E 1+37			3.8	10.7
E 1+00			4.0	10.5
E 0+51			4.3	10.2
0+00			4.7	9.8
W 0+46			4.7	9.8
W 0+93			5.2	9.3
W 1+ <sup>39</sup> <del>45</del>			5.0	9.5
W 2+07			4.6	9.9
W 2+51			8.7	5.8
W 2+85			12.0	2.5

9-13-78

STA-103+00

0+00 = PT. 244' W/STA-103+00 SEAWALL B/L; SECT. AT 90° To B/L

STA-	+	H.I.	-	ELEV
T.B.M	1.47	14.71		13.24
E 2+42			2.4	12.3
E 1+97			3.3	11.4
E 1+50			4.1	10.6
E 0+83			4.1	10.6
0+00			4.7	10.0
W 0+64			5.1	9.6
W 1+35			5.2	9.5
W 1+95			7.8	7.9
W 2+30			7.9	6.8
W 2+60			10.9	3.8
W 3+10			12.6	2.1



STA 102+00

PX

0+00 = PT 247' W. OF STA 102+00 WALL SEA WALL 0+00 - PT 244' W of Sta 101+00 Sea Wall BL

STA	+	H.I	-	ELEV.
T.B.M.	1.5	14.79		13.29
E. 2+45			2.4	+12.9
E. 2+00			3.6	11.2
E. 1+50			4.4	10.4
E. 0+98			4.6	10.2
E. 0+52			4.7	10.1
0+00			4.8	10.0
W. 0+65			5.1	9.7
W. 1+35			5.4	9.4
W. 1+67			5.4	9.4
W. 2+08			5.0	9.8
W. 2+36			8.0	<del>5.8</del> 6.8
W. 2+80			11.1	3.7
W. 3+15			12.5	+2.3

Sta. 101+00

9-13-18

PX (12)

Sta	+	H.I	-	Elev
T.B.M.	1.45	14.77		13.32
E. 2+42			2.2	+12.6
E. 1+95			3.6	11.2
E. 1+48			4.2	10.6
E. 1+00			4.6	10.2
E. 0+50			4.5	10.3
0+00			4.8	10.0
W. 0+53			4.7	10.1
W. 0+98			5.0	9.8
W. 1+58			5.2	9.6
W. 2+25			5.0	9.8
W. 2+62			8.5	6.3
W. 2+85			11.0	3.8
W. 3+05			12.5	+2.3



244 STA. 100+00 SEA WALL  
 0+00 = PT. 236' W/OFF STA 100+00 B/L

STA. 99+00 SEA WALL (13)  
 0+00 = PT. 245' W/OFF STA. 99+00 B/L

STA	+	H.I.	-	ELEV.
T.B.M.	1.67	14.93		13.26 Ledge <small>Sta. 100+00</small>
E 2+37			3.8	+11.1
E 1+90			3.9	11.0
E 1+43			4.0	10.9
E 0+94			4.6	10.3
E 0+45			4.6	10.3
0+00			4.8	10.1 - .5
W. 0+18			5.0	9.9
W. 0+36			5.5	9.4
W. 1+58			5.5	9.4
W. 2+40			5.5	9.4
W. 2+83			10.3	4.6
W. 3+12			12.9	+2.0

STA.	+	H.I.	-	ELEV.
T.B.M.	1.70	15.03		13.33 Ledge <small>Sta 99+00</small>
E 2+44			2.1	+12.9
E 1+99			3.8	11.2
E 1+49			4.3	10.7
E 1+03			4.6	10.4
E 0+53			4.7	10.3
0+00			4.9	10.1
W. 0+51			5.3	9.7
W. 1+00			5.8	9.2
W. 1+59			5.6	9.4
W. 2+29			6.0	9.0
W. 2+90			11.1	3.9
W 3+15			12.8	+2.2



Sta 98100

0+00 - 248' w/ of Sta 98100 Sea Wall BL

Sta + H.I. - Elev

TBM 1.42 14.69 13.27

E 2+47 1.7 +13.0

E 2+27 3.3 11.9

E 1+80 3.4 11.3

E 1+32 3.6 11.1

E 0+82 4.4 10.3

E 0+30 4.3 10.1

0+00 4.7 10.0

W 0+48 4.8 9.9

W 1+10 5.2 9.5

W 1+72 5.9 8.8

W 2+45 5.5 9.2

W 2+95 10.8 3.9

W 3+14 12.3 +2.4

9-13-98

Sta. 97100

0+00 - 250' w/ of Sta 97100 on Sea Wall BL

Sta. + H.I. - Elev.

TBM 2.19 15.52 13.33

E 2+49 3.6 +11.9

E 2+02 4.1 11.9

E 1+53 4.0 11.5

E 1+02 4.4 11.1

E 0+50 5.0 10.5

0+00 5.0 10.5

W 0+58 5.3 10.2

W 1+13 5.5 10.0

W 1+74 5.9 9.6

W 2+35 6.9 8.6

W 2+68 9.1 6.4

W 2+90 11.8 3.7

W 3+05 13.1 +2.4

DX (19)



9-13-48

Sta 96+00

0+00 = 258' w/pt Sta 96+00 on Sea Wall Bit

Sta	t	HI	-	Elev
TBM	<sup>2.28</sup> <del>35</del>	15.65		13.37 <sup>2.28</sup> 15.65 Ledge
E 2+57		4.1		+11.5
E 2+03		4.8		10.8
E 1+58		4.4		11.2
E 1+13		4.1		11.5
E 0+48		4.3		11.3
0+00		4.5		11.1
W. 0+58		4.9		10.7
W. 1+14		4.9		10.7
W. 1+65		5.2		10.4
		6.4		
W. 2+30		5.3		9.2
W. 2+65		10.3		5.3
W. 3+01		13.0		+2.6

9-13-48

Sta 95+00

0+00 = 266' w/pt Sta 95+00 on Sea Wall Bit

Sta	t	HI	-	Elev
TBM	2.10	15.47		13.37 Ledge
E 2+65		4.2		+11.3
E 2+22		4.2		11.3
E 1+76		3.9		11.6
E 1+25		3.9		11.6
E 0+72		4.4		11.1
0+00		4.9		10.6
W. 0+58		4.7		10.8
W. 1+12		4.9		10.6
W. 1+48		5.9		9.6
W. 2+20		7.4		8.1
W. 2+60		11.3		7.2
W. 2+75		12.9		+2.6



9-14-48

Sta. 94+00

PX

0+00 = Pt. 201' W/pt Sta. 94+00 Sea Wall BL

Sta	+	H1	-	Elev	Sta. 94+00
TBM	2.50	15.83		13.33	Ledge
E 2+00			4.2	+11.6	
E 1+66			4.3	11.5	
E 1+25			4.8	11.0	
E 0+96			4.6	11.2	
E 0+63			4.7	11.1	
E 0+30			4.3	11.5	
0+00			4.3	11.5	
W 0+50			4.5	11.3	
W 0+95			4.7	11.1	
W 1+45			4.7	11.1	
W 2+03			5.7	10.1	
W 2+85			7.4	8.4	
W 3+22			11.7	4.1	
W 3+62			13.9	+1.9	

9-15-48

STA-93+00

PX (16)

0+00 = Pt. 207 W/STA-93+00 SEAWALL F/L. SECT. AT 90° To B/L

STA	+	H1	-	ELEV	Sta 93+00
TBM	2.27	15.59		13.32	Ledge
E 2+06			2.6	13.0	
E 1+67			4.8	10.8	
E 1+37			4.8	10.8	
E 0+87			5.0	10.6	
E 0+40			4.1	11.2	
0+00			4.6	11.0	
W 0+57			5.5	10.1	
W 1+11			5.4	10.2	
W 1+84			5.7	9.9	
W 2+58			7.2	8.4	
W 3+11			11.6	4.0	
W 3+63			13.8	1.8	



9-15-48

Sta 92+00

0+00 = Pt 208 W/ of Sta 92+00 Sea Wall B.L.

Dist	H.I.	Elev
T.B.M.	1.87	15.20

E 2+07 3.6 11.6

E 1+65 4.0 11.2

E 1+23 5.0 10.2

E 0+80 5.2 10.0

E 0+45 4.8 10.4

E 0+00 4.5 10.7

W 0+61 5.5 9.7

W 1+25 7.0 8.2

W 1+70 6.6 8.6

W 2+10 6.3 8.9

W 2+46 6.9 8.3

W 2+95 11.0 4.2

W 3+51 13.3 1.9

9-15-48

(17)

Sta 91+00

0+00 = Pt 209<sup>217'</sup> W/ of Sta 91+00 Sea Wall B.L.

Dist	H.I.	Elev
T.B.M.	1.75	14.47

E 2+08 4.0 10.5

E 1+65 4.3 10.2

E 1+30 5.0 9.5

E 0+95 5.1 9.4

E 0+50 4.5 10.0

E 0+10 4.5 10.0

W 0+51 4.5 10.0

W 1+12 6.2 8.3

W 1+72 5.6 8.9

W 2+30 6.3 8.2

W 2+83 10.5 4.0

W 3+32 12.5 2.0



9-15-48

Sta 90+00

PX  
Sta. 90+00  
Ledge

0+00 = Pt. 217' W/pt 90+00 Sea Wall Bl

Dist + H.1 - Elev.

TBM 0.85 14.17 13.32

E 2+16 2.8 11.4

E 1+70 4.0 10.2

E 1+25 5.0 9.2

E 0+85 5.0 9.2

E 0+50 4.8 9.4

0+00 4.5 9.7

W 0+55 4.7 9.5

W 1+05 5.9 8.3

W 1+62 5.4 8.8

W 2+17 6.5 7.7

W 2+71 10.1 4.1

W 3+30 12.1 2.1

9-15-48

(18)

Sta 89+00

PX  
Sta. 89+00  
Ledge

0+00 = Pt. 216' W/pt Sta 89+00 Sea Wall Bl

Dist + H1 - Elev

TBM 0.79 14.20 13.31

E 2+15 2.8 11.4

E 1+68 4.6 9.6

E 1+30 4.9 9.3

E 0+80 5.4 8.8

E 0+39 5.3 8.9

0+00 4.6 9.6

W 0+47 5.0 9.2

W 0+89 6.2 8.0

W 1+47 5.5 8.7

W 2+02 6.9 7.3

W 2+70 10.4 3.8

W 3+32 12.2 2.0



9-15-48

Sta 88+00

207

0+00 = Pt. 107' W/af Sta 88+00 Sea Wall T3/L

Dist	+	H.I.	-	Elev
TBM	0.93	14.25		13.32
E1+99			2.4	11.9
E1+50			4.9	9.4
E1+00			5.0	9.3
E0+51			5.2	9.1
0+00			4.6	9.7
W0+38			5.2	9.1
W0+85			6.2	8.1
W1+32			6.0	8.3
W2+00			6.9	7.4
W2+61			10.3	4.0
W3+39			12.6	1.7

Sta 88+00  
W/Ledge

9-15-48

(19)

Sta. 87+00

0+00 = Pt. 203' W/af Sta 87+00 Sea Wall T3/L

Dist	+	H.I.	-	Elev
TBM	0.79	14.11		13.32
E1+96			2.3	11.8
E1+58			2.7	11.4
E1+05			4.8	9.3
E0+69			5.1	9.0
0+00			4.6	9.5
W0+33			5.3	8.8
W0+68			6.1	8.0
W1+17			6.5	7.6
W1+84			6.8	7.3
W2+46			10.1	4.0
W3+30			12.1	2.0

Sta 87+00  
W/Ledge



9-15-48

Sta. 86+00

0+00 = Pt. 195 W/pt Sta. 86+00 Sea Wall Bl

Dist. + H.I. - Elev. Sta. 86+00

T.B.M. 0.40 13.72 13.32 Ledge

E 1+85 2.1 + 11.6

E 1+45 3.9 9.8

E 0+98 4.9 8.8

E 0+48 4.9 8.8

0+00 4.4 9.3

W 0+30 5.1 8.6

W 0+86 6.1 7.6

W 1+70 6.5 7.2

W 2+41 9.9 3.8

W 3+10 11.4 + 2.3

W

9-14-48

(20)

Sta. 85+00

PX

0+00 = Pt 183' w/pt Sta. 85+00 Sea Wall Bl

Dist. + H.I. - Elev. Sta. 90+00

T.B.M. 1.09 14.41 13.32

E 1+70 2.2 12.2

E 1+40 4.3 10.1

E 1+02 4.8 9.6

E 0+63 5.7 8.7

E 0+30 5.5 8.9

0+00 4.8 9.6

W 0+67 6.9 7.5

W 1+17 7.9 6.5

W 1+75 8.6 5.8

W 2+40 10.6 3.8

W 3+38 12.4 2.0

W



Sta. 74+00

9-27-48

(SECTION DUE WEST)

0+60 - Sta 74+00 De ANZA B.L.

STA	+	H.I.	-	ELEV	
T.B.M	4.99	17.10		12.11	2x2 N/100 OF ROAD ALONG FILE (W/100 P.)
0+60			5.0	12.1	
W-0+18			5.4	11.7	
W 0+43			5.7	11.4	
W 0+75			5.8	11.3	
W 1+05			6.3	10.8	
W 1+32			6.6	10.5	
W 1+61			6.5	10.6	
W 1+95			6.4	10.7	
W 2+15			6.3	10.8	

Sta 79+00

9-27-48

(21)

(SECT. DUE SOUTH)

0+00 - Sta 79+00 De ANZA B.L.

Sta	+	H I	-	Elev	
T.B.M.	4.49	16.58		12.09	T.B.M. (TOP BRASS BUTTER) State
0+00			5.0	11.5	
0+11			5.2	11.4	
0+38			5.2	11.4	
0+63			5.0	11.6	
0+75			5.5	11.1	
0+00			5.4	11.2	
0+20			5.4	11.2	
0+48			5.3	11.3	
0+69			5.2	11.4	
0+05			5.4	11.2	
0+76			5.7	10.9	
0+73			5.4	11.2	
0+80			5.7	10.9	
0+83			6.2	10.4	
0+90			6.1	10.5	
0+85			5.7	10.9	
0+20			5.4	11.2	
0+58			5.7	10.9	
0+6			5.9	10.7	



9-27-48

STA. 80+00

PX

0+00 = STA 80+00 DEANZA B/L  
(SECT. DUE SOUTH)

Sta	+	HI	-	Elev	B.M.
B.M.	3.90	16.0 15.99		12.09	State
0+00			4.9	11.1	
S 0+25			4.9	11.1	
S-0+52			5.5	10.5	
S-1+14			5.2	10.8	
#1 S.T.P.			3.32	12.67	

W/EDGE OF  
ON B/L

9-27-48

STA. 81+00

(22)

0+00 = STA 81+00 DEANZA B/L  
(SECT. DUE SOUTH)

STA	+	H.I	-	ELEV.	
B.M.	3.59	16.26 <sup>3</sup>		12.67	W/EDGE OF FILL ON B/L
0+00			5.0	11.3	
S 0+20			5.3	11.0	
S 0+32			5.3	11.0	
			5.4	10.9	
S 0+80			5.2	11.1	



9-27-48

STA 82+00

(SECT. DUE N &amp; S)

0+00 = STA. 82+00 DEANZA B/L

PX

Sta	+	H.I.	-	Elev.	
BM	3.44	16.11		12.67	W EDGE OFF FILL 0.0
0+00			4.8	11.3	
N 0+08			3.7	12.4	
N 0+20			4.9	11.2	
N 0+24			7.0	9.1	
N 0+51			6.4	9.7	
N 1+06			3.5	12.6	
S 0+27			4.7	11.4	
S 0+55			5.1	11.0	
S					
S					
S					

9-27-48

STA 94+00

 PT. 35' SOUTH OF  
 STA. 94+00 DEANZA B/L  
 SECT. DUE (N & S)

PX (23)

STA.	+	H.I.	-	Elev.	
BM	9.90	16.38 16.90		6.48 <del>7.00</del>	STA 93+00 DEANZA B/L
N 1+20			9.1	7.3	
N 0+70			9.5	6.9	
N 0+35			9.3	7.1	
N 0+16			8.5	7.9	
N 0+03			5.1	11.3	
0+00			4.9	11.5	
S 0+06			5.2	11.2	
S 0+63			5.7	10.7	
S 1+25			5.8	10.6	
S 1+86			6.2	10.2	
S 2+50			6.4	10.0	
S 3+22			6.6	9.8	
S 3+50			6.5	9.9	
S					
S					



9-27-48

STA 93+00

(SECT. DUE N. 6 S)

0+00 = PT. 35' SOUTH OF STA 93+00 DeAnza Bl.

Sta.	+	H.I.	-	Elev.	
		16.59		6.48	Sta. 93+00
B.M.	10.11	17.11		7.00	DeAnza Bl.
			9.7	6.9	
NO+74					
			10.1	6.5	
NO+35					
			10.0	6.6	
NO+15					
			5.2	11.4	
NO+05					
			4.8	11.8	
0+00					
			6.0	10.6	
S 0+65					
			6.0	10.6	
S 1+25					
			6.2	10.4	
S 1+82					
			6.5	10.1	
S 2+43					
			6.5	10.1	
S 3+25					
S					

9-27-48

STA 92+00

(SECT. DUE N. 6 S)

0+00 = PT. 35' SOUTH OF STA 92+00 DeAnza Bl.

Sta.	+	H.I.	-	Elev.	
		16.88		6.53	Sta. 92+00
B.M.	10.35	16.88		6.53	DeAnza Bl.
			10.5	6.4	
NO+63					
			10.3	6.6	
NO+35					
			10.5	6.4	
NO+12					
			4.9	12.0	
NO+04					
			4.8	12.1	
0+00					
			6.1	10.8	
0+63					
			6.1	10.8	
1+30					
			6.5	10.4	
1+90					
			6.5	10.4	
2+57					
			6.5	10.4	
3+50					
S					



9-27-48

STA. 91+00  
(SECT. DUE N. & S.)0+00 = PT. 35' SOUTH STA. 91+00 DeAnza Bl.  
Sta. 92+00

STA	+	H.I.	-	Elev.
BM	10.64	17.17		6.53
N. 0+90			10.8	6.4
N. 0+35			10.6	6.6
N. 0+11			10.5	6.7
N. 0+03			4.8	12.4
0+00			4.7	12.5
S. 0+56			6.2	11.0
S. 1+25			6.1	11.1
S. 2+14			6.4	10.8
S. 2+85			6.6	10.6
S. 3+58			6.9	10.3
BM			5.19	11.98

HUB S/OF  
STA 92+00

9-27-48

STA. 90+00  
(SECT. DUE N. & S.)

0+00 = PT. 35' SOUTH STA. 90+00 DeAnza Bl.

Sta.	+	H.I.	-	Elev.
BM	5.08	17.06		11.98
N. 1+09			10.6	6.5
N. 0+68			10.3	6.8
N. 0+35			9.9	7.2
N. 0+12			9.9	7.2
0+00			4.7	12.4
S. 0+04			4.6	12.5
S. 0+60			5.9	11.2
S. 1+18			5.7	11.4
S. 1+64			5.8	11.3
S. 2+25			6.1	11.0

HUB S/OF  
STA 92+00  
DeAnza Bl.



9-27-48

STA 89+00

SECT. DUE N 45° S

0+00 = PT. 35' S. OF STA 89+00 DeAnza B/L

STA	+	H.I.	-	Elev.
BM	5.45	17.43		11.98
N 1+25			10.9	6.5
N 0+73			10.5	6.9
N 0+35			10.2	7.2
N 0+11			9.3	8.1
N 0+04			4.8	12.6
0+00			5.1	12.3
S 0+55			5.7	11.7
S 1+25			6.0	11.4
			6.1	11.3
S 1+80			5.9	11.5

S

S

4UR SOUTH  
OF STA 89+00  
DeANZA B/L

9-30-48

STA 83+00

SECT DUE N 45° S

0+00 = PT 35' S OF STA 83+00 DeAnza B/L

STA	+	H.I.	-	ELEV
BM	4.52	17.19		12.67
N 0+90			10.0	7.2
N 0+46			10.3	6.9
N 0+35			10.2	7.0
N 0+10			10.0	7.2
N 0+02			4.9	12.3
0+00			4.9	12.3
S 0+06			5.3	11.9
S 0+52			6.1	11.1
S 0+96			6.7	10.5

W. EDGE  
FILL ON  
B/L

(26)



9-30-48

STA 84+00

SECT. DUE N &amp; S

0+00 = PT 35' S OF STA 84+00 DEANZA BL

STA	+ H.I.	- ELEV	HUB AT W EDGE OF FILL ON B/L
BM	4.40	17.07	12.67
N 1+ <del>68</del> <sup>14</sup>		10.5	6.6
N 0+68		10.3	6.8
N 0+35		10.0	7.1
N 0+11		9.6	7.5
N 0+03		5.0	12.1
0+00		5.0	12.1
S 0+46		5.6	11.5
S 0+91		5.9	11.2
S 1+37		6.4	10.7

9-30-48

(27)

STA 85+00

SECT. DUE N &amp; S

0+00 = P.T. 35' S. OF STA 85+00 DEANZA B/L

STA	+ H.I.	- ELEV.	HUB AT W EDGE OF FILL ON B/L
BM	4.00	16.67	12.67
N 1+61	5.31	10.5	6.2
N 0+87	5.01	10.2	6.5
N 0+35	3.05	9.8	6.9
N 0+13	4.75	9.4	7.3
N 0+09	3.8	5.1	11.6
0+00	3.11	5.0	11.7
S 0+44	2.5	5.8	10.9
S 0+96	5.3	6.1	10.6
S 1+08	2.2	6.0	10.7
T.P		5.64	11.03

HUB S OF  
STA 86+00  
DEANZA B/L



9/30/48

STA 86+00

Sect. DUE N&S

0+00 = PT. 35'S. OF STA 86+00 DEANZA B/L

STA.	+	H.I.	-	ELEV.	HUB S OF STA 86+00 DEANZA B/L
B.M.	5.75	16.78		11.03	
		<sup>8</sup> 5.9		10.9	
		<del>6.2</del>			
S 0+90					
S 0+40			6.1	10.7	
S 0+20			6.3	10.5	
S 0+07			5.7	11.1	
0+00			5.0	11.8	
N 0+02			5.1	11.7	
N 0+09			8.9	7.9	
N 0+35			10.1	6.7	
N 0+84			10.5	6.3	
N 1+31			10.6	6.2	

9/30/48 (28)

STA 87+00

SECT. DUE N&S

0+00 = PT. 35'S. OF STA, 87+00 DEANZA B/L

STA	+	H.I.	-	ELEV.	HUB S OF STA 86+00 DEANZA B/L
B.M.	5.80	16.83	<del>11.3</del>	11.03	
N 1+52				10.8	6.0
N 0+91				10.6	6.2
N 0+35				10.2	6.6
N 0+10				9.2	7.6
N 0+02				4.8	12.0
0+00				4.8	12.0
S 0+21				6.3	10.5



9/30/48

STA 88+00

SECT DUE N. &amp; S.

0+00 = PT 35' S OF STA 88+00 DE ANZA B/L

STA.	+	H.I.	-	ELEV
B.M.	6.16	17.19 <sup>2</sup>		11.03
				HUB S OF STA 86+00 DE ANZA B/L
N. 1+85		11.1		6.1
N. 1+20		10.5		6.7
N. 0+71		10.4		6.8
N. 0+35		10.1		7.1
N 0+13		9.2		8.0
N 0+04		4.8		12.4
0+00		5.1		12.1
S 0+43		5.9		11.3
S 0+83		6.0		11.2

9-30-48

(29)

STA. 95+00

SECT. DUE N &amp; S

0+00 = STA. 95+00 DE ANZA B/L

STA.	+	H.I.	-	ELEV.
BM	5.31	13.18 <sup>2</sup>		7.87
				STA 96+00 DE ANZA B/L
0+00		5.3		7.9
S 0+24		5.5		7.7
S 0+33		1.5		11.7
S 0+39		1.3		11.9
S 0+47		2.3		10.9
S 1+28		2.2		11.0
S 2+04		2.5		10.7
S 2+86		2.7		10.5
S 3+60		2.8		10.4
S 4+23		3.2		10.0



9-30-48

STA 96+00

sect Due N &amp; S.

0+00 = BTA 96+00 DeAnza B/L

STA.	+	H.I.	-	Elev.
B.M.	5.30	13.04		7.74 <small>STA 97+00 DeAnza B/L</small>
S 3+80			3.2	9.8
S 2+90			2.5	10.5
S 2+23			2.6	10.4
S 1+54			2.2	10.8
S 1+05			1.8	11.2
S 0+65			1.6	11.4
S 0+40			1.0	12.0
S 0+33			1.3	11.7
S 0+24			5.3	7.7
0+00			5.3	7.7

9-30-48 (30)

STA. 97+00

sect. Due N &amp; S

0+00 = STA. 97+00 DeAnza B/L

STA.	+	H.I.	-	Elev.
B.M.	5.02	12.89		7.87 <small>STA 96+00 DeAnza B/L</small>
0+00			5.2	7.7
S 0+22			5.1	7.8
S 0+33			1.5	11.4
S 0+40			1.3	11.6
S 0+43			1.8	11.1
S 1+22			2.3	10.6
S 2+00			2.5	10.4
S 2+80			2.7	10.2
S 3+51			2.8	10.1
S 4+32			3.0	9.9



9-30-48

STA 98+00

SECT DUE N &amp; S

0+00 = STA 98+00 DeAnza B/L

STA.	+	H.I.	-	Elev.
B.M.	4.88	12.84		7.96
			3.0	9.8
S 4+70			2.7	10.1
S 3+72			2.8	10.0
S 2+95			2.7	10.1
S 2+20			2.6	10.2
S 1+39			2.5	10.3
S 0+80			2.2	10.6
S 0+42			1.6	11.2
S 0+38			1.8	11.0
S 0+30			5.2	7.6
S 0+22			5.3	7.5
0+00				

9-30-48 (37)

STA 99+00

SECT. DUE N &amp; S

0+00 = STA 99+00 DeAnza B/L

STA	+	H.I.	-	Elev.
B.M.	5.54	13.21		7.67
0+00			5.3	7.9
S 0+23			5.3	7.9
S 0+32			2.1	11.1
S 0+39			2.3	10.9
S 0+42			2.7	10.5
S 1+30			3.2	10.0
S 2+05			3.2	10.0
S 3+04			3.2	10.0
S 3+85			3.2	10.0
S 4+50			3.3	9.9



9-30-48

STA. 100+00

sect. Due N45

0+00 = STA 100+00 DeAnza B/L

STA.	+	H.I.	-	Elev.
BM.	<sup>3</sup> <del>7</del> .79	12.05		8.26 <small>STA 101+00 DeAnza B/L</small>
S 3+08			2.2	9.9
S 2+27			1.8	10.3
S 1+47			2.0	10.1
S 0+82			2.3	9.8
S 0+57			2.2	9.9
S 0+41			1.3	10.8
S 0+31			1.8	10.3
S 0+23			5.1	7.0
0+00			5.3	6.8

9-30-48 (32)

STA 101+00

sect. Due N45

0+00 = STA. 101+00 DeAnza B/L

STA	+	H.I.	-	Elev.
BM.	6.62	13.42		6.80 <small>STA 100+00 DeAnza B/L</small>
0+00			5.2	8.2
S 0+22			5.2	8.2
S 0+32			2.6	10.8
S 0+40			2.6	10.8
S 0+42			3.1	10.3
S 0+94			3.7	9.7
S				
S				



9-30-48

STA. 102+00

Sect Due N&amp;S

0+00 = STA 102+00 DeAnza B/L

STA	+ H.I.	- ELEV.	
B.M.	4.78	13.04	8.26 DeAnza B/L
0+00		5.1	7.9
50+22		5.2	7.8
50+33		2.6	10.4
50+40		2.2	10.8
50+42		2.7	10.3
52+00		3.4	9.6

9-30-48 (23)

STA 103+00

Sect Due N&amp;S

0+00 = STA 103+00 DeAnza B/L

STA	+ H.I.	- ELEV.	
B.M.	5.31	13.14	7.83 DeAnza B/L
S 1+70		3.7	9.4
S 1+25		3.8	9.3
S 0+70		3.9	9.2
S 0+41		2.8	10.3
S 0+40		2.1	11.1
S 0+32		2.4	10.7
S 0+22		5.3	7.8
0+00		5.3	7.8



9-30-48

STA 104+00

sect Due N.E.S.

0+00 = STA. 104+00 DeAnza B/L

STA.	+	H.I.	-	Elev.
B.M.	4.26	12.44		8.18
0+00			5.1	7.3
S 0+24			4.9	7.5
S 0+32			2.0	10.4
S 0+38			2.0	10.4
S 0+42			2.8	9.6
S 0+53			3.4	9.0

STA 103100

DeAnza B/L

10-1-48

(34)

Sta N 167+00

0+00 = Sta N 167+00 DeAnza Crv. B/L

Sta.	+	H.I.	-	Elev.	T.B.M.
T.B.M.	1.50	13.61		12.11	PXL
W 0+73			10.5	3.6'	
W 0+50			8.8	4.8	
W 0+30			7.3	6.3	
W 0+13			5.9	7.7	
0+00			5.1	8.5	
E 0+14			4.0	9.6	
E 0+26			3.5	10.1	
E 0+52			3.7	9.9	
E 0+86			3.7	9.9	
E 1+20			3.9	9.7	
E 1+56			3.9	9.7	
E 1+72			3.7	9.9	
E 1+81			2.8	10.8	
E 1+88			2.4	11.2	
E 1+90			1.5	12.1	
E 1+93			3.2	10.4	
E 2+07			2.1	11.5	
T.P.			3.91	9.70	



10-1-48

Sta 166+00

0+00 = Sta 166+00 De Anza Cove TBL

Sta	+	M1	-	Elev
T.P.	3.40	13.10		9.70
0+00			5.2	7.9
E 0+19			3.7	9.4
E 0+30			3.3	9.8
E 0+61			3.3	9.8
E 1+06			3.3	9.8
E 1+42			3.3	9.8
E 1+81			3.3	9.8
E 2+00			2.8	10.3
E 2+08			2.2	10.9
E 2+10			0.8	12.3
E 2+15			3.1	10.0
E 2+26			2.3	10.8

10-1-48

35

Sta 165+00

0+00 = Sta 165+00 De Anza B.L.

Sta	+	H.1	-	Elev
T.P.	3.50	13.20		9.70
0+00			5.1	8.1
E 0+13			3.7	9.5
E 0+24			2.8	10.4
E 0+46			3.4	9.8
E 0+85			3.3	9.9
E 1+24			3.2	10.0
E 1+69			3.3	9.9
E 1+82			3.4	9.8
E 2+08			3.3	9.9
E 2+27			2.8	10.5
E 2+37			2.2	11.0
E 2+46			1.2	12.0
E 2+42			3.5	9.7
E 2+52			2.2	11.0



10-1-48

Sta. 164+00

0+00 = Sta. 164+00 DEANZA TR.

Sta	+	H.I.	Elev
T.P.	3.51	13.21	3.51 970
E 2+80		2.5	10.7
E 2+71		3.7	9.5
E 2+66		1.5	11.7
E 2+64		2.4	10.8
E 2+40		3.2	10.0
E 2+23		3.2	10.0
E 1+50		3.4	9.8
E 1+20		3.4	9.8
E 0+82		3.3	9.9
E 0+51		3.4	9.8
E 0+21		2.9	10.3
0+00		5.1	8.1

10-4-48 (36)

STA 79+00

SECT DUE N &amp; S

0+00 = STA 79+00 DEANZA COVE S, B/L

STA	+	H.I.	Elev
BM.	4.08	14.14	10.06
N 0+61		4.4	9.7
N 1+20		4.6	9.5
N 1+65		4.6	9.5
N 2+14		4.4	9.7

2x8 SE.  
CORNER  
DEANZA PT



10-7-98

(37)

STA. 80+00

SECT DUE N &amp; S

0+00 = STA 80+00 DeAnza Cove SOUTH B/L

STA.	+	H.I.	-	ELEV	
BM	4.61	14.67		10.06	28 SE CORNER DEANZA PT.
N 4+21			4.6	10.1	
N 3+53			5.2	9.5	
N, 2+95			5.3	9.4	
N, 2+20			5.4	9.3	
N. 1+70			5.5	9.2	
N. 1+21			5.5	9.2	
N. 0+60			5.2	9.5	

N.

N.



PROFILE ALONG C. OF PROPOSED DRAINAGE

DITCH ON EAST SIDE OF H.W. 101 FOR

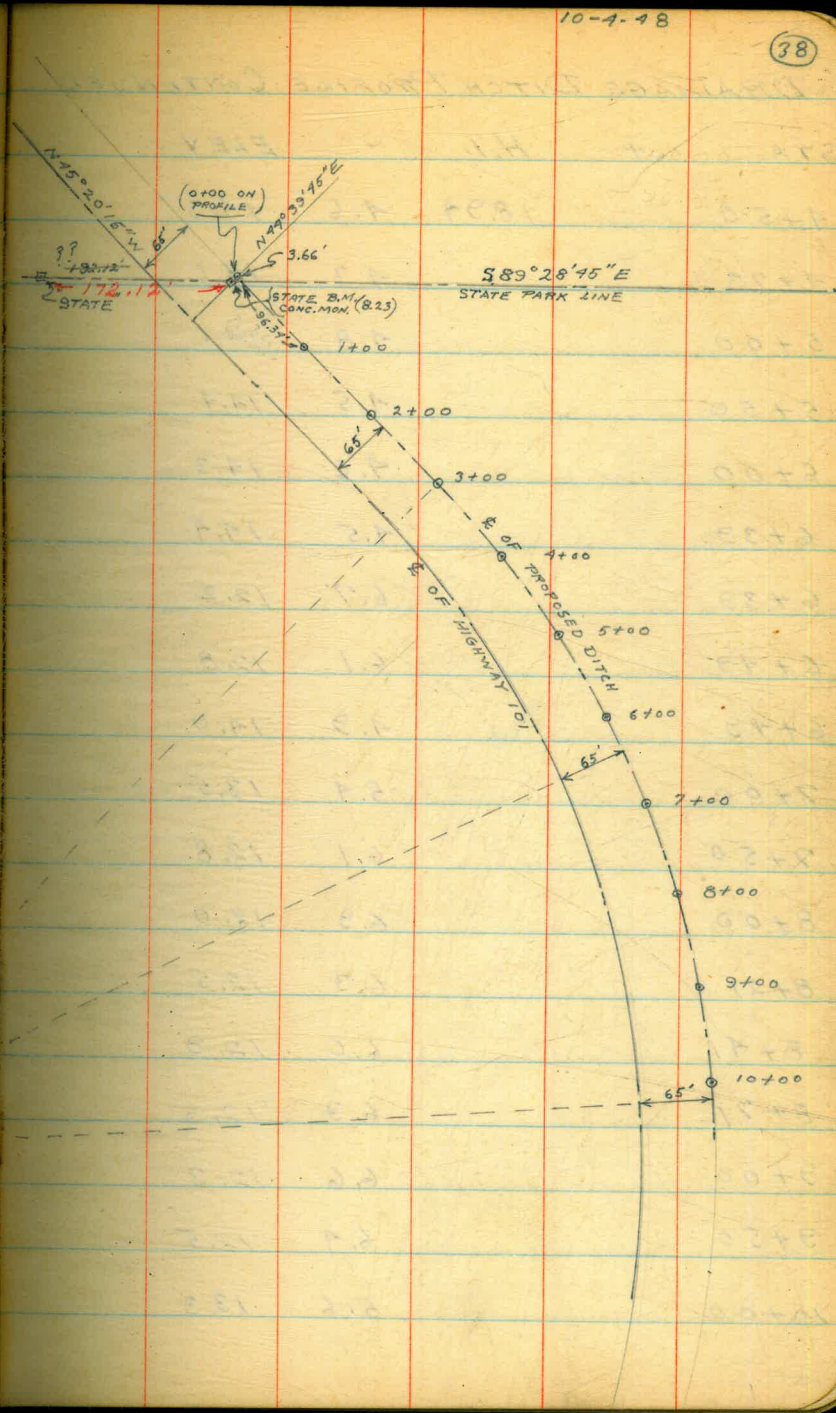
PROJ. # 3-1

0+000 (SEE OPPOSITE PAGE)

STATION	+	H.I.	-	ELEV
B.M.	6.85	18.94		12.09
B.M.			1.69	12.25
0+00			3.1	15.8
0+27			4.3	14.6
0+31			4.4	14.0
0+41			3.3	15.5
0+58			1.2	17.7
0+85			2.0	16.8
1+00			4.4	14.5
1+50			4.6	14.3
2+00			3.6	15.3
2+50			4.3	14.6
3+00			4.7	14.2
3+50			4.6	14.3
3+70			4.1	14.8
4+00			5.1	13.9

STATE B.M.  
TOP BRASS  
BOTTOM

TOP OF MON.  
ON STATE LINE  
E/OF H.W. MKD.  
B.M. 8.23





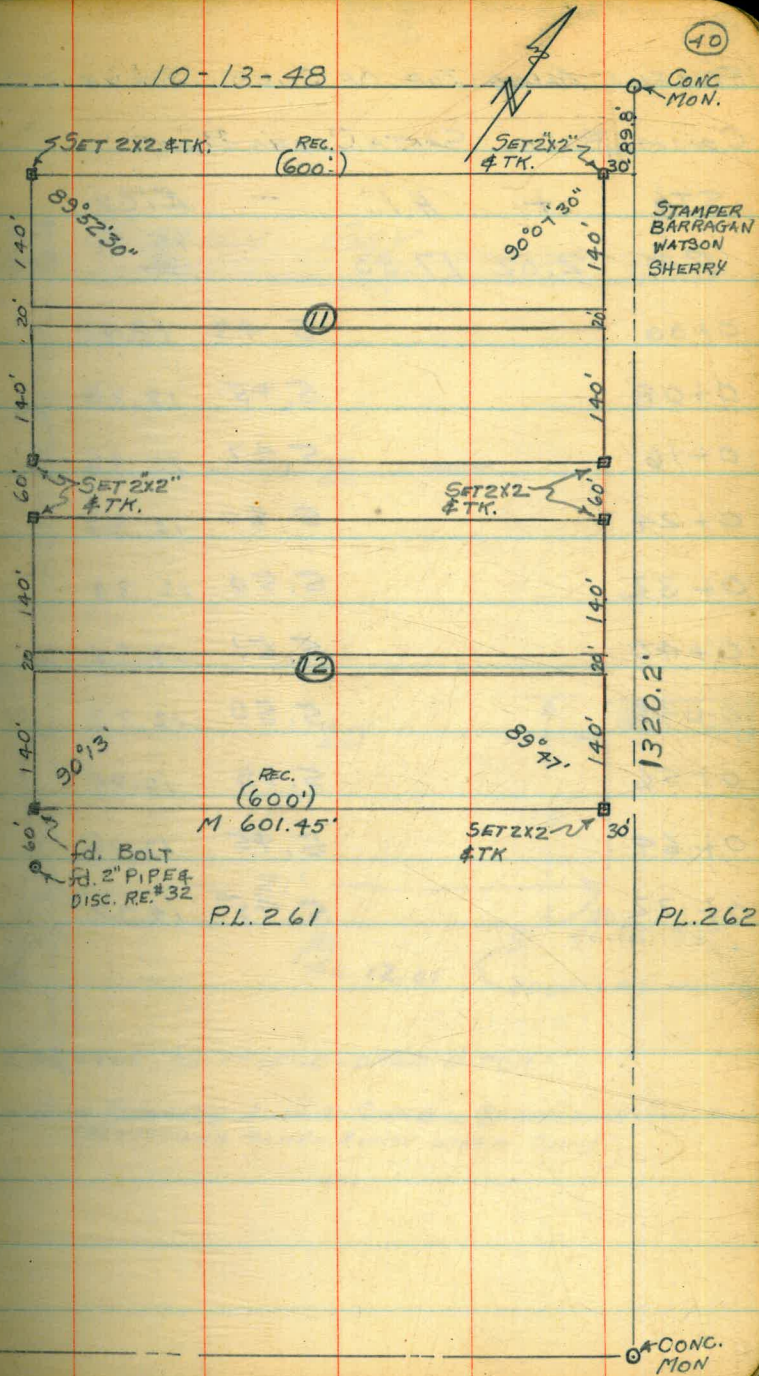
## DRAINAGE DITCH PROFILE CONTINUED

STA.	+	H.I.	-	ELEV
4+50		18.94	4.6	14.3
4+73			4.3	14.6
5+00			4.8	14.1
5+50			4.5	14.4
6+00			4.6	14.3
6+39			4.5	14.4
6+39			6.7	12.2
6+49			6.1	12.8
6+49			4.9	14.0
7+00			5.4	13.5
7+50			6.1	12.8
8+00			6.9	12.0
8+21			6.3	12.5
8+41			6.0	12.9
8+71			6.3	12.6
9+00			6.6	12.3
9+50			6.4	12.5
10+00			5.6	13.3



SURVEY OF BLOCKS NO'S  
 11 & 12 BAYSIDE MAP #453  
 & CITY MAP NO. 4501

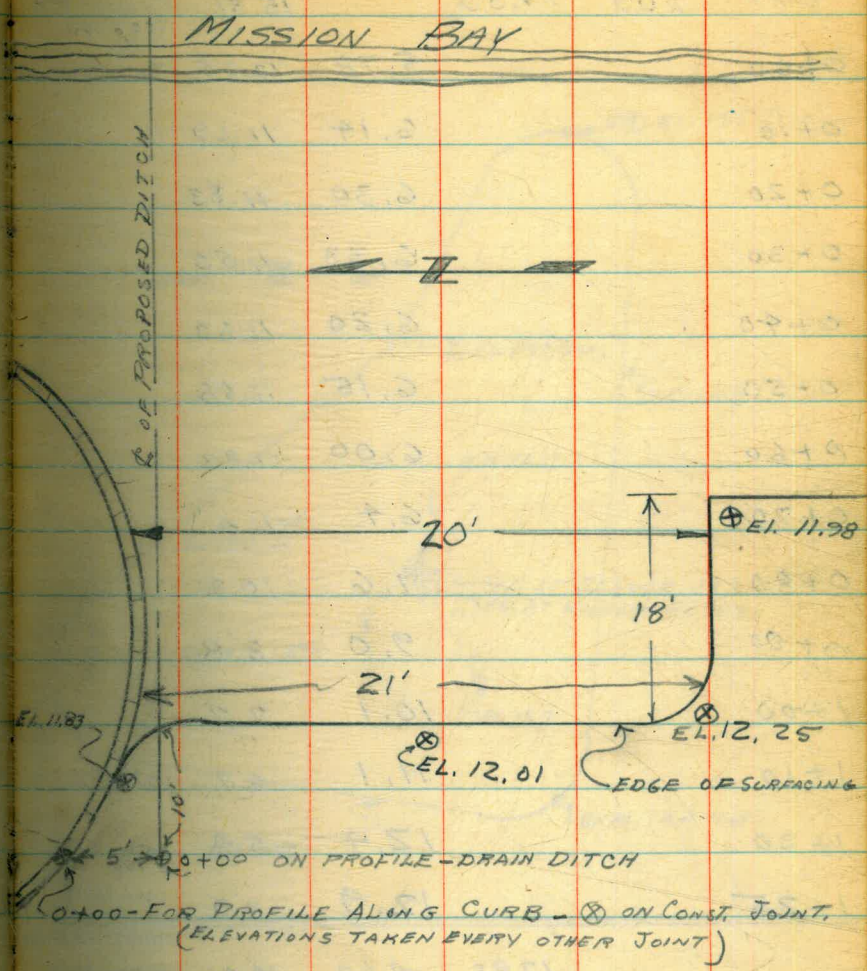
10-13-48





PROFILE ALONG TOP OF CURB SOUTH OF  
COMM. BLDG. SANTA CLARA POINT.

STA	+ H.I.	-	Elev
BM	2.02	17.83	15.81 <del>2</del>
0+00		5.43	12.40
0+08		5.45	12.38
0+16		5.47	12.36
0+24		5.50	12.33
0+32		5.50	12.33
0+40		5.51	12.32
0+48		5.50	12.33
0+56		5.48	12.35
0+64		5.45	12.38
0+72		5.45	12.38



MISSION BAY

E. OF PROPOSED DITCH



EL. 11.83

20'

18'

21'

EL. 12.01

EL. 12.25

EDGE OF SURFACING

5' - 0+00 ON PROFILE - DRAIN DITCH

0+00 - FOR PROFILE ALONG CURB - ON CONST. JOINT,  
(ELEVATIONS TAKEN EVERY OTHER JOINT)



PROFILE ALONG LINE OF PROPOSED

DRAIN DITCH - SANTA CLARA POINT

STA + HI - Elev

BM	2.02	17.83	15.81
0+00		5.78	12.05
0+10		6.14	11.69
0+20		6.30	11.53
0+30		6.33	11.50
0+40		6.20	11.63
0+50		6.15	11.68
0+60		6.00	11.83
0+70		6.4	11.4
0+80		7.6	10.2
0+90		9.0	8.8
1+00		10.1	7.7
1+10		11.1	6.7
1+20		12.4	5.4
1+25		12.9	4.9

	17.83	4.60	13.2
①		3.4	14.1
②		3.3	14.5
③		3.3	14.5
④		3.3	14.5

TOP OF  
FIRE PLUG  
SEE PAGE  
①  
THIS BOOK

EDGE OF  
WATER

CONNECTING FLANGE

OFF FIRE PLUG  
TOP CURB

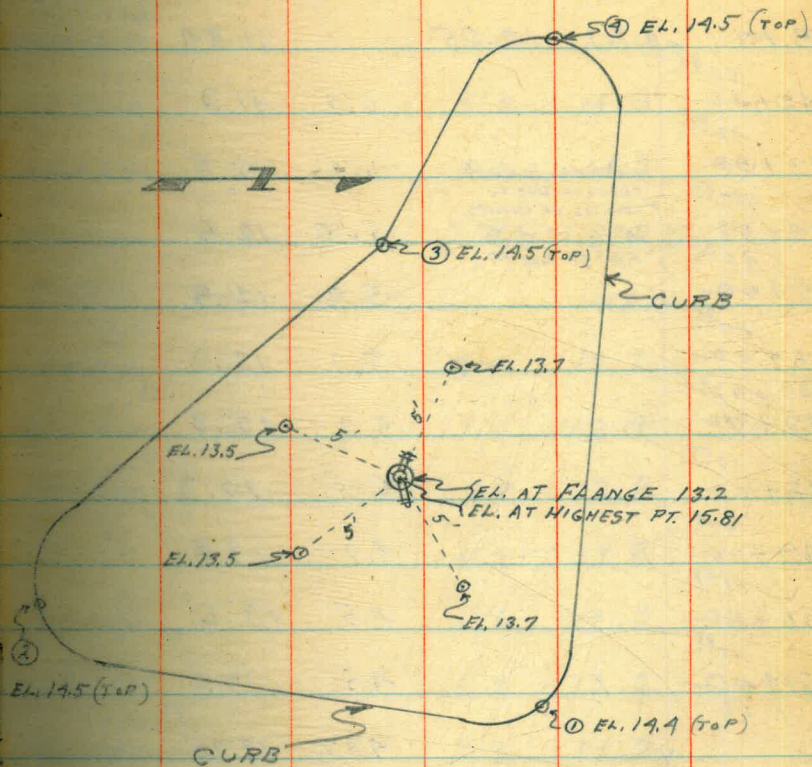
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||

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TOPO FEATURES OF AREA NEAR

FIRE PLUG SANTA CLARA POINT



HARRISAN NOV. 23, 1948  
SHERRY  
STANLEY



PROFILE ALONG  $\phi$  OF VENTURA BLVD.

$\phi$  PROFILE

To INTERSECTION WITH INGRAHAM BLVD.

(SEE BOOK #5 PP (73) & (77))

STA + H.I. - ELEV

B.M. 6.21 18.05 11.84

42+00 6.2 11.9

43+00 5.6 12.5

44+00 5.5 12.6

45+00 5.3 12.8

46+00 5.1 13.0

47+00 5.2 12.9

48+00 5.25 12.9

49+00 4.7 13.4

50+00 4.5 13.6

51+00 4.5 13.6

T.P. 4.57 13.98

T.P. 6.60 20.08 13.98

52+00 6.4 13.7

53+00 6.3 13.8

54+00 5.6 14.5

STA + H.I. - ELEV

55+00 20.08 5.0 15.1

56+00 4.8 15.3

57+00 5.0 15.1

58+00 5.2 14.9

59+00 5.2 14.2

T.P. 3.71 18.53 14.82

60+00 4.4 14.1

61+00 5.1 13.4

62+00 4.7 13.8

63+00 4.75 13.8

64+00 5.6 12.9

65+00 6.3 12.2

66+00 7.3 11.2

T.P. 7.22 11.31

T.P. 11.31

PK  
CONC. MON  
S/E END OF  
TEMP. BRIDGE

ORIGINAL STATIONS  
CHANGED DUE TO  
LENGTHS OF CURVES  
"A" "B" "C" & "D"  
F.B. #37 PAGE 47

14.82  
3.71  
18.53  
7.22  
11.31



§ PROFILE VENTURA BLVD EAST TO INGRAHAM

STA	+	H/L	-	ELEV	PX
T.P.	4.80	16.11		11.31	
66+35 <sup>5</sup>				5.65	10.96
87 <sup>85</sup>					
66+45 <sup>35</sup>				5.41	10.70
66+38 <sup>5</sup>					
66+55				5.45	10.66
67+07 <sup>85</sup>					
66+65				5.70	10.41
67+18 <sup>85</sup>					
66+75 <sup>2</sup>				6.16	9.95

W/EDGE OF MIDWAY DRIVE (INSIDE)

CENTER OF DRIVE (ON CURVE)

E/EDGE OF CURB (INSIDE) MID. DRIVE.

T.P. 5.16 16.47 11.31

T.P. 5.90 16.69 5.68 10.79

5.93 10.76

STA- 64+00 CAUSEWAY B/L. EL. = 10.79



CROSS SECTIONS OF  
MODEL YACHT POND SLOPES (EAST)  
FOR DRAINAGE CONTROL

T. STAMPER  
BARRAGAN  
SHERRY  
12-20-48  
COLD  
CLEAR  
CALM

PX (25)

STA-0+50

STA	+	H.I.	-	ELEV
B.M.	6.70	17.94		11.24
0+00			5.1	12.8
w/0+25			5.3	12.6
w/0+45			5.5	12.4
w/0+69			5.5	12.4
w/0+83			5.5	12.4
w/1+14			5.5	12.4
T.P.			4.95	12.99
T.P.			4.90	13.04

STA. 88+00  
CAUSEWAY  
B/L

w/0+00

w/0+23

w/0+50

w/0+75

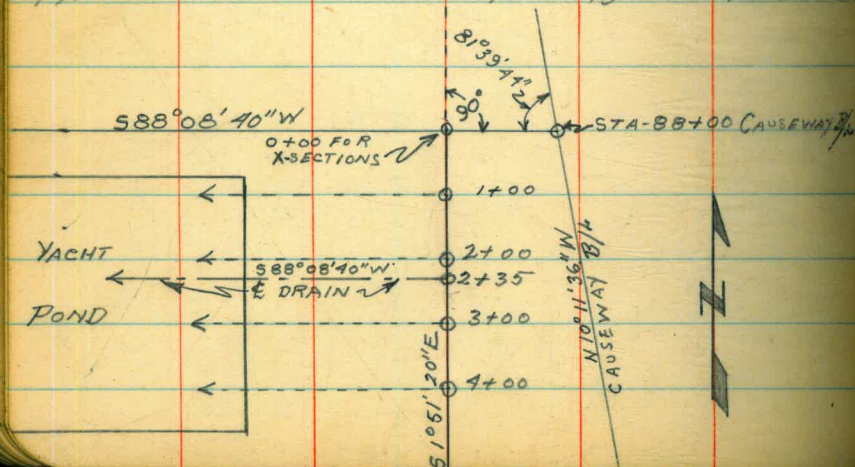
w/1+05

w/1+32

STA-1+00

STA	+	H.I.	-	ELEV
T.P.	4.88	17.87		12.99
0+00			5.2	12.7
w/0+22			5.5	12.4
w/0+46			5.9	12.0
w/0+72			6.3	11.6
w/0+98			7.6	10.3
w/1+28			8.5	9.7

TOP LAT#  
0+50  
TOP LAT#  
1+00





STA- 1+50

STA	+	H.I.	-	ELEV	TOP PLATH
T.P	4.68	17.72		13.04	1+00
0+00			5.1	12.6	PX
w/ 0+29			<del>6.4</del> 5.4	12.3	
w/ 0+48			5.6	12.1	
w/ 0+78			6.2	11.5	
w/ 0+80			4.9	12.8	
w/ 0+86			7.4	10.3	
w/ 1+10			9.8	7.9	
w/ 1+30			11.2	6.5	

STA- 2+00

STA	+	H.I.	-	ELEV	TOP PLATH
T.P	4.70	17.74		13.04	1+00
T.P			4.36	13.38	2+50
w/ 1+22			11.3	6.4	
w/ 1+06			10.0	7.7	
w/ 0+89			7.7	10.0	
w/ 0+78			4.9	12.8	
w/ 0+73			6.0	11.7	
w/ 0+53			5.8	11.9	
w/ 0+26			5.1	12.3	
0+00			5.0	12.7	
T.P			4.77	12.94	3+00

STA- 2+50

STA	+	H.I.	-	ELEV	TOP PLATH
T.P	5.34	18.28		12.94	3+00
0+00			5.4	12.9	PX
w/ 0+25			5.8	12.5	
w/ 0+50			6.4	11.9	
w/ 0+74			6.6	11.7	
w/ 0+88			5.3	13.0	2+00
w/ 0+89			8.4	9.9	35 4.85
w/ 1+06			11.0	7.3	
w/ 1+22			11.8	6.5	

STA- 3+00

STA	+	H.I.	-	ELEV	TOP PLATH
T.P	4.85	18.23		13.38	2+50
w/ 1+30			11.2	7.0	35 PX
w/ 1+06			9.9	8.3	
w/ 0+83			7.5	10.7	
w/ 0+80			7.9	10.3	
w/ 0+76			5.2	13.0	
w/ 0+73			6.0	12.2	
w/ 0+52			5.8	12.4	
w/ 0+27			5.3	12.9	
0+00			5.2	13.0	



364  
13.54  
17.02

17.02  
11.08  
5.79

12-20-48

STA-3+50

STA	T	H.I.	-	ELEV	TOP LATH
T.P	1.69	17.63		12.94	3+00
0+00			5.1	12.5	PK
w/0+23			5.0	12.6	
w/0+50			5.2	12.4	
w/0+76			5.1	12.5	
w/0+83			6.0	11.6	
1+10			6.8	10.8	
1+40			2.3	10.3	

STA-4+00

STA	T	H.I.	-	ELEV	TOP LATH
T.P	5.19	18.13		12.94	
w/1+40			5.2	12.9	PK
w/1+10			5.0	13.1	
w/0+83			5.4	12.7	
w/0+80			5.0	13.1	
w/0+65			5.4	12.7	
w/0+32			5.1	13.0	
0+00			5.2	12.9	

T. STAMPER  
C. BARTAGAN  
E. WATSON  
A. SHERRY

1-5-49

(47)

PROFILE OF PROPOSED DRAIN AT EAST

SEE PAGE (45)

END OF MODEL YACHT POOL

0+00=STA-2+35 SECTION AT 90° TO B/L

STA	T	H.I.	-	ELEV	TOP OF LATH
T.B.M	4.59	18.0		17.97	2+50
0+00			5.0	13.0	
0+25			5.5	12.5	
0+50			6.1	11.9	
0+76			6.4	11.6	
0+77			5.2	12.8	
0+84			7.7	10.3	
0+95			9.3	8.7	
1+06			10.4	7.6	
1+22			10.9	7.1	
1+31			12.10	5.87	WATER LEVEL
1+40		5.9	12.8	3.2	
1+43		↓	SOUND 2.4	3.5	
1+47			3.6	2.3	
1+51			4.8	1.1	
1+60			5.2	+0.7	
1+70			6.7	-0.8	
1+96			8.1	-2.2	



2-17-49

(48)

TRIANGULATION OF CONTROL POINT FOR  
LOCATION OF TRAFFIC INTERSECTION MIDWAY AND VENTURA BLVD.

MARSTONS ① 50° 30' 00"

BAYPOINT RT. } ② 101° 00' 00" MEAN = 50° 30' 10"

↳ L RT to

CONTROL ⑥ 303° 01' 00"

①

MARSTONS ① 14° 50' 00"

π at

Coaster

RT. } ② 29° 40' 00" MEAN = 14° 49' 50"

↳ L RT to

CONTROL ⑥ 88° 59' 00"

π at

Diego

↳ L Left to

MARSTONS ① 19° 26' 30"

L.T. } ② 38° 23' 00" MEAN = 19° 26' 20"

CONTROL ⑥ 116° 38' 00"

π at. Flg

↳ L RT to Diego  
CONTROL

MARSTONS ① 153° 14' 00"

RT. } ② 306° 27' 00" MEAN = 153° 13' 35"

DIEGO ⑥ 199° 21' 30"

919° 21' 30"



2-17-49

X-SECTIONS OF VENTURA BLVD NORTH OF TEMP

BRIDGE - (VENTURA CURVE)

STA-6+00

STA	+	H.I.	-	ELEV
B.M	5.67	17.06		11.39
☒			6.27	10.79
R/IGHT	25'		6.20	10.86
R/	50'		6.0	11.06
R/	63'		6.1	10.96
R/	75'		6.4	10.66
L/EFT	23'		6.70	10.36
L/	30'		7.1	9.96
L/	50'		7.1	9.96

NOTE - X-SECTIONS STA-14+00 To 24+00  
IN F.B. # 37

2-17-49

8.92.13  
5.02  
1394.73

(79)

STA-7+00

STA	+	H.I.	-	ELEV
☒			17.06	5.70
R/IGHT	25'			5.70
R/	43'			5.70
R/	45'			6.10
R/	50'			6.00
L/EFT	25'			5.90
L/	39'			5.95
L/	50'			6.72

STA-8+00

STA	+	H.I.	-	ELEV
☒			17.06	5.28
R/IGHT	30'			5.58
R/	32'			5.95
R/	50'			6.25
L/EFT	25'			5.38
L/	50'			5.60
L/	74'			5.90
L/	90'			6.05



STA-9+00

STA	+	H.I.	-	ELEV
±		17.06	5.10	11.96
R/IGHT				
	20'		5.50	11.56
R/				
	22'	/	6.05	11.01
R/				
	50		6.05	11.01
L/EFT				
	25'		5.10	11.96
L/				
	50'		4.98	12.08
L/				
	75'		5.00	12.06
L/				
	100'		5.00	12.06
L/				
	110'		5.10	11.96
L/				
	113'		5.60	11.96

STA-10+00

STA	+	H.I.	-	ELEV
±		17.06	5.60	11.46
R/IGHT				
	25'		5.70	16.36 11.36
R/				
	28'		6.30	10.76
R/				
	50'		6.15	10.91
L/EFT				
	11'		5.60	11.96
L/				
	18'		6.10	10.96
L/				
	29'		6.75	10.31
L/				
	50'		5.65	11.91

STA-11+00

STA	+	H.I.	-	ELEV
±		17.06	5.95	11.11
R/IGHT				
	12'		5.85	11.21
R/				
	16'		6.25	10.81
R/				
	50'		6.55	10.51
L/EFT				
	11'		5.68	11.38
L/				
	14'		6.10	10.96
L/				
	27'		6.25	10.81
L/				
	50		6.30	10.76

STA-12+00

STA	+	H.I.	-	ELEV
±		17.06	6.32	10.74
R/IGHT				
	12'		6.70	10.76
R/				
	17'		6.70	10.36
R/				
	25'		7.00	10.06
R/				
	50'		6.70	10.36
L/EFT				
	12'		6.20	10.86
L/				
	16'		5.70	11.36
L/				
	50		6.15	10.91



STA-13700

STA	+	H.I.	-	ELEV
⊕		17.06	6.30	10.76
R/	11'		6.30	10.76
R/	18'		6.50	10.56
R/	28'		6.35	10.71
	50'		7.20	9.86
L/EFT	12'		6.25	10.81
L/	17'		6.50	10.56
L/	25'		6.95	10.11
L/	50'		6.95	10.11



TRIANGULATION OF CONTROL POINT FOR  
LOCATION OF INTERSECTION VENTURA BLVD & MIDWAY DRIVE

CONTROL POINT  
DIEGO  
COASTER

①  $47^{\circ} 55'$   
②  $95^{\circ} 49' 45''$   
③  $287^{\circ} 29' 20''$   
AV  $47^{\circ} 54' 50''$   
53"

CONTROL POINT  
COASTER  
BAY POINT

①  $50^{\circ} 14'$   
②  $100^{\circ} 27' 30''$   
③  $301^{\circ} 23'$   
AV  $50^{\circ} 13' 50''$

CONTROL POINT  
DIEGO  
COASTER

①  $73^{\circ} 18' 30''$   
②  $146^{\circ} 36' 30''$   
③  $439^{\circ} 49' 15''$   
AV  $73^{\circ} 18' 12''$  } N.G.

CONTROL POINT  
COASTER  
DIEGO

①  $58^{\circ} 46' 30''$   
②  $117^{\circ} 33'$   
③  $352^{\circ} 40'$   
AV  $58^{\circ} 46' 40''$

CONTROL POINT  
COASTER  
BAY POINT

①  $69^{\circ} 16''$   
②  $138^{\circ} 31' 30''$   
③  $415^{\circ} 35'$   
AV  $69^{\circ} 15' 50''$



TRIANGULATION OF CONTROL POINT FOR INTERSECTING (TRAFFIC)

OF VENTURA BLVD. & MIDWAY DRIVE

CONTROL POINT  
Coaster ①  $50^{\circ}14'$   
Rt. ②  $100^{\circ}28'$   
③  $301^{\circ}23'$   
Bay Pt. Av.  $50^{\circ}13'50''$

CONTROL POINT  
Diego ①  $47^{\circ}55'$   
Rt. ②  $95^{\circ}50'$   
③  $287^{\circ}29'$   
Coaster Av.  $47^{\circ}54'50''$

BAY PT. POINT  
①  $60^{\circ}30'30''$   
Rt. ②  $121^{\circ}00'45''$   
③  $363^{\circ}01'30''$   
Coaster Av.  $60^{\circ}30'15''$

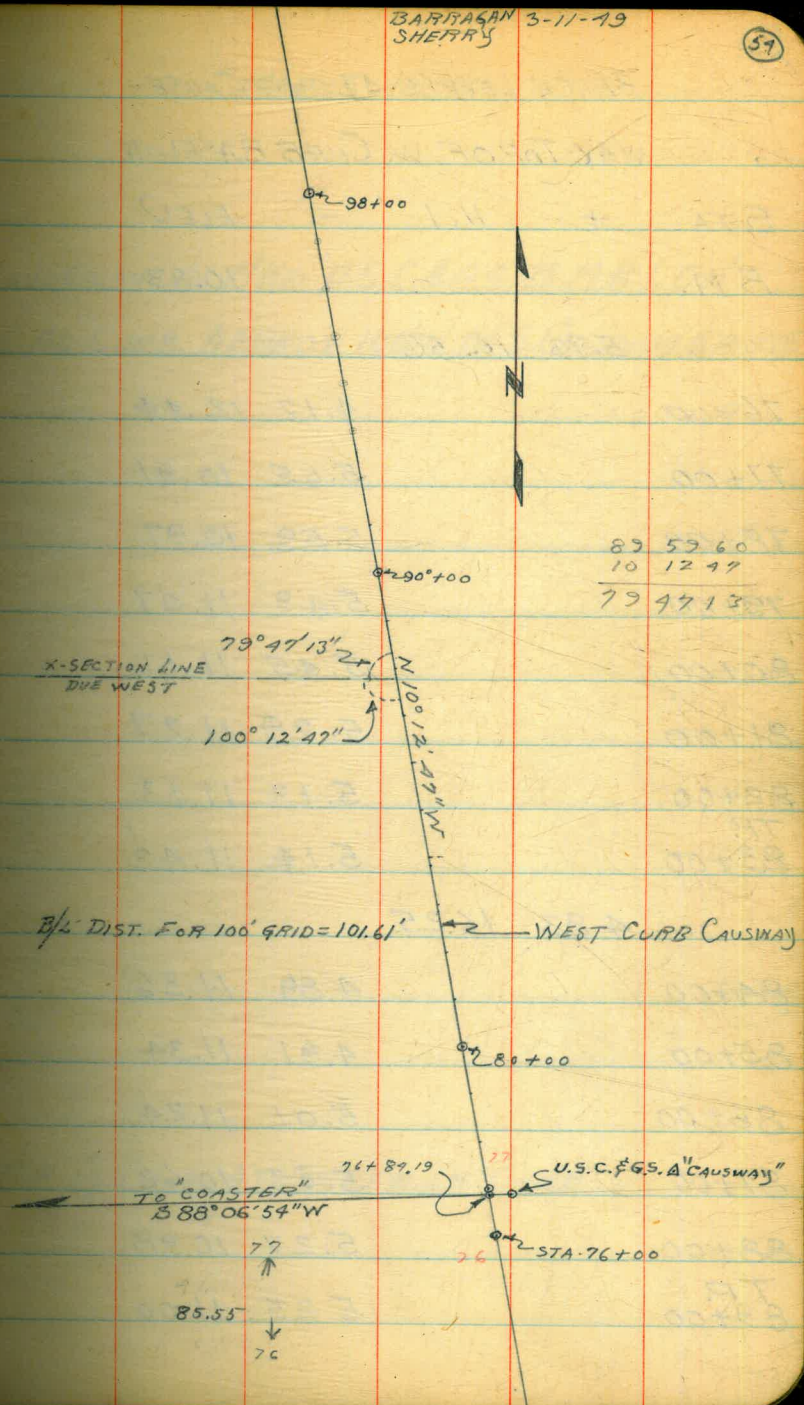
~~Bay Pt. ①  $69^{\circ}16'30''$   
Coaster Rt. ②  $138^{\circ}34'$   
③  $415^{\circ}41'$  N.G.  
POINT Av.  $69^{\circ}16'50''$~~

DIEGO  
CONTROL POINT  
Coaster ①  $73^{\circ}18'30''$   
Rt. ②  $146^{\circ}36'$   
③  $439^{\circ}50'$   
Av.  $73^{\circ}18'20''$



LOCATION OF B/L ON WEST CURB CAUSEWAY

STATION	OBJECT	ANGLE	DIST
"CAUSEWAY"	U.S.C. & G.S. "COASTER"	00° 00' 00"	41.25'
"CAUSEWAY"	"CAUSEWAY ECCENTRIC" STA-76+84.19		
"CAUSEWAY"	LINDA VISTA TANK		
"CAUSEWAY" ECCENTRIC STA-76+84.19	RT.		2133.81'
	☉ OF CURB STA. "98+00"		



89 59 60  
10 12 47  
79 47 13

X-SECTION LINE  
DUE WEST

B/L DIST. FOR 100' GRID = 101.61'

WEST CURB CAUSEWAY

"COASTER"  
88° 06' 54" W

U.S.C. & G.S. A "CAUSEWAY"

85.55

STA-76+00



MAR 15, 1949

BENCH LEVELS ALONG CAUSEWAY  
TOP OF W. CURB BASELINE

STA	+	H.I	-	ELEV
B.M.				10.83
	5.73	16.56		
76+00			4.12	12.44
77+00			5.65	10.91
78+00			5.59	10.97
79+00			5.49	11.07
80+00			5.45	11.11
81+00			5.29	11.27
82+00			5.13	11.43
TP. 83+00			5.14	11.42
	4.83	16.25		
84+00			4.89	11.36
85+00			4.91	11.34
86+00			5.01	11.24
87+00			5.63	10.62
88+00			5.27	10.98
TP. 89+00			5.25	11.00

CAUSEWAY Δ MKD U.S.C. & G.S. B.M.#1, ON  
E. RD CURB. APPROX. 100' N. OF S. CAUSEWAY BRIDGE

TOP 1X2" Hub AT BREAK IN CURB



W. CURB BENCH LEVELS CONTD

MAR 15, 1949

STA	+	H.I.	-	ELEV	
89+00				11.00	
	5.34	16.34			
90+00			5.16	11.18	
91+00			5.02	11.32	
92+00			4.89	11.45	
93+00			4.78	11.56	
94+00			4.69	11.65	
95+00			4.48	11.86	
96+00			4.44	11.90	
97+00			4.32	12.02	
98+00			3.70	12.64	
T.B.M.					
102+00			4.20	12.14	12.25 OLD B/L STA
89+00					
TR			5.35	10.99	
	5.30	16.29			
83+00					
TP.			4.89	11.40	
	5.20	16.60			
B.M			5.81	10.79	10.83 Δ CAUSEWAY



ORIGINAL X-SECTIONS OF TIERRA DEL FUEGO

STA- 77+00

WEST HALF - FOR LANDSCAPING & GRADING  
SEE PAGE (54)

DIST + H.I. - ELEV

STA- 76+00

B.M. 3.38 15.82 12.44 76+00

0+00=STATIONS ON 8/4 ON WEST CURB CAUSEWAY: SECTIONS DUE WEST-

DIST	+	H.I.	-	ELEV					
					CAUSEWAY	4.25	1.0	11.8	PX
B.M.	6.60	17.43		10.83	T.P. BRASS	3.95	3.3	12.5	
0+00			5.0	12.4	R+	3.45	3.4	12.4	
W/EST	25		4.9	12.5		3.40	2.8	13.0	
W/	53'		4.9	12.5	EDGE DIST	3.10	2.7	13.1	
W/	85'		4.9	12.5		2.85	2.7	13.1	
W/	120'		5.0	12.4	EDGE DIST	2.55	3.1	12.7	
W/	142'		4.5	12.9		2.20	3.2	12.6	
W/	205'		4.4	13.0		1.75	3.7	12.1	
W/	295'		4.5	12.9		1.25	3.6	12.2	
W/	300'		3.0	12.4		1.20	3.3	12.5	
W/	360'		5.2	12.2		.85	3.5	12.3	
W/	400'		5.3	12.1		.59	3.5	12.3	
						.30	3.7	12.1	
						.08	4.2	11.6	
						0+00	4.9	10.9	



STA-78+00

DIST	+	H.I.	-	ELEV	PX
T.B.M	4.68	15.59 <sup>6</sup>		10.91	77+00
"C. 0+00 WEST			4.6	11.0	
W/ 02'			4.3	11.3	
W/ 09'			3.9	11.7	
"CA 57 W/ 30'			3.3	12.3	
W/ 50'			3.2	12.4	E/EDGE
W/ 80'			3.2	12.4	W/EDGE
W/ 115'			3.0	12.6	
W/ 120'			3.5	12.1	
W/ 150'			3.6	12.0	FIRST DIRT PD
W/ 210'			3.2	12.4	
W/ 220'			2.8	12.8	
W/ 265'			2.6	13.0	
W/ 303'			2.4	13.2	W/EDGE
W/ 340'			2.4	13.2	W
W/ 360'			3.0	12.6	
W/ 425'			3.0	12.6	

STA-79+00

DIST	+	H.I.	-	ELEV	PX
T.B.M.	4.81	15.78 <sup>8</sup>		10.97	78+00
WEST 415'			2.3	13.5	
W/ 365'			2.4	13.4	
W/ 325'			2.5	13.3	
W/ 285'			2.6	13.2	
W/ 245'			2.7	13.1	
W/ 205'			2.7	13.1	
W/ 165'			3.1	12.7	
W/ 125'			3.2	12.6	
W/ 80'			3.5	12.3	W/EDGE DIRT PD
W/ 50'			3.7	12.1	E/EDGE DIRT PD
W/ 48'			3.6	12.2	
W/ 13'			3.9	11.9	
0+00			4.7	11.1	



STA - 80+00

STA - 81+00

	DIST	+	H.I.	-	ELEV
T.B.M.	4.77		15.84		11.07
0+00				4.7	11.1
W/EST				<del>4.7</del>	
W/	03'			4.3	11.5
W/	14'			3.8	12.0
W/	33'			3.8	12.0
W/	51'			3.7	12.1
W/	80'			3.3	12.5
W/	110'			2.8	13.0
W/	150'			2.5	13.3
W/	190'			2.9	12.9
W/	240'			2.9	12.9
W/	275'			3.3	12.5
W/	305'			3.1	12.4
W/	445'			3.3	12.5

	DIST	+	H.I.	-	ELEV	Pt
T.B.M.	4.66		15.77 <sup>8</sup>		11.11	80+00
W/EST						W/EDGE
W/	325'			4.0	11.8	DIST RD
W/	295'			3.6	12.2	
W/	261'			2.8	13.0	E/EDGE DIST RD
W/	220'			2.6	13.2	
W/	180'			3.0	12.8	
W/	135'			3.1	12.7	W/EDGE
W/	80'			3.4	12.4	DIST RD E/EDGE
W/	50'			4.1	11.7	DIST RD
W/	25'			4.2	11.6	
W/	03'			3.7	12.1	
W/	0+00			4.5	11.3	
W/				4.6		



STA-82+00

STA-83+00

DIST	+	H.I.	-	ELEV.	
T.B.M.	4.60	15.87 <sup>2</sup>		11.27	81+00
0+00	4.60		4.4	11.5	PT
WEST			3.8		
05'			<del>4.4</del>	12.1	
W/			4.4		
09'			4.4	11.5	
W/			4.3	11.6	
22'			4.0	11.9	E/EDGE
W/			4.0		DIRT RD
50'			3.6	12.3	W/EDGE
W/			3.6		DIRT RD
77'			3.2	12.7	
W/			3.0	12.9	
105'			2.9	13.0	
W/			3.4	12.5	E/EDGE
200'			3.4	12.5	DIRT RD
W/			3.6	12.3	
242'			4.3	11.6	W/EDGE
W/			4.3		DIRT RD
275'					
W/					
310'					

DIST	+	H.I.	-	ELEV.	
T.B.M.	4.58	16.01		11.43	82+00
WEST					W/EDGE
300'			4.0	12.0	DIRT RD
260'			3.9	12.1	
230'			3.5	12.5	E/EDGE
133'			2.9	13.1	DIRT RD
160'			3.0	13.0	
130'			3.1	12.9	
120'			3.7	12.3	
80'			3.6	12.4	W/EDGE
78'			4.0	12.0	DIRT RD
50'			4.2	11.8	E/EDGE
46'			4.0	12.0	DIRT RD
27'			4.3	11.7	
10'			4.2	11.8	
04'			3.7	12.6	
0+00			4.5	11.5	



STA-84+00

STA-85+00

	DIST	+	H.I.	-	ELEV
	T.B.M.	4.56	15.98		11.42
"C	0+00			4.6	11.4
	W/EST				
	02'			4.6	11.4
	W/				
	05'			3.0	13.0
	W/				
	12'			4.2	11.8
	W/				
	50'			4.1	11.9
	W/				
	90'			4.1	11.9
	W/				
	135'			3.4	11.6
	W/				
	180'			3.4	11.6
	W/				
	203'			3.5	11.5
	W/				
	210'			4.0	12.0
	W/				
	275'			4.0	12.0
	W/				
	330'			4.0	12.0
	W/				
	400'			4.3	11.7

	DIST	+	H.I.	-	ELEV
	T.B.M.	4.55	15.91		11.36
	W/EST				
	400'			3.7	12.2
	W/				
	360'			4.2	11.7
	W/				
	305'			4.6	11.3
	W/				
	260'			3.6	12.3
	W/				
	220'			3.9	12.0
	W/				
	160'			4.2	11.7
	W/				
	122'			4.2	11.7
	W/				
	112'			3.7	12.2
	W/				
	80'			3.9	12.0
	W/				
	50'			4.0	11.9
	W/				
	28'			3.5	12.4
	W/				
	10'			4.0	11.9
	W/				
	04'			3.2	12.7
	W/				
	0+00			4.6	11.3



STA-86+00

DIST	+	H.I.	-	ELEV
T.B.M.	4.38	15.72		11.34 85+00
0+00			4.5	11.2 <b>Pt</b>
W/EST				
04'			3.3	12.9
W/				
08'			3.9	11.8
W/				
23'			3.7	12.0
W/				
40'			3.1	12.6
W/				
50'			3.5	12.2 <b>F/EDGE DIRT FR.</b>
W/				
75'			3.5	12.2
W/				
109'			3.5	12.2 <b>W/EDGE DIRT FR.</b>
W/				
170'			3.3	12.4
W/				
235'			3.1	12.6
W/				
300'			3.0	12.7
W/				
350			3.0	12.7
W/				
430'			2.5	13.2

STA-87+00

98  
23  
11

3-15-49 (62)

DIST	+	H.I.	-	ELEV
T.B.M.	4.33	15.57		11.24 86+00
W/EST				
430'			1.7	13.9 <b>Pt</b>
W/				
365'			1.7	13.9
W/				
300'			1.8	13.8
W/				
240'			1.9	13.7
W/				
165'			2.9	12.7
W/				
150'			2.5	13.1 <b>W/EDGE DIRT FR.</b>
W/				
125'			3.2	12.9
W/				
50'			4.3	11.3
W/				
16'			4.8	10.8
W/				
0+00			5.0	10.6



STA-88+00

STA-89+00

DIST	+	H.I.	-	ELEV
T.B.M.	4.45	15.45		11.00 10.62 89+00
0+00			4.5	11.0 PX
W/EST				
05'			3.7	11.8
W/				
22'			4.3	11.2
W/				
40'			3.3	12.2
W/				
50'			3.5	12.0
W/				
80'			3.3	12.2
W/				
115'			3.5	12.0
W/				
155'			2.6	12.9
W/				
195'			1.9	13.6
W/				
235'			1.4	14.1
W/				
280'			1.3	14.2
W/				
325'			1.4	14.1
W/				
375'			1.1	14.4
W/				
420'			0.9	14.6

DIST	+	H.I.	-	ELEV
T.B.M.	4.41	15.39		10.98 88+00
W/EST				
430			2.3	13.1 PX
W/				
380'			2.0	13.4
W/				
330'			1.8	13.6
W/				
285'			2.1	13.3
W/				
235'			2.6	12.8
W/				
190'			3.0	12.4
W/				
140'			2.9	12.5
W/				
95'			3.4	12.0
W/				
82'			3.2	12.2
W/				
50'			3.1	12.3
W/				
48'			2.7	12.7
W/				
25'			3.5	11.9
W/				
15'			3.9	11.5
W/				
0+00			4.4	11.0

W/EDGE  
DIRT  
RD  
E/EDGE  
DIRT RD.



STA- 90+00

STA- 91+00

	DIST	+	H.I.	-	ELEV
	T.B.M.	4.65	15.65		11.00
"C	0+00		4.5		11.2
	W/EST				
	02'		4.5		11.2
	W/				
	03'		3.7		12.0
	W/				
"C/S	28'		3.8		11.9
	W/				
	50'		3.1		12.6
	W/				
	82'		3.6		12.1
	W/				
	130'		3.6		12.1
	W/				
	175'		3.6		12.1
	W/				
	225'		3.6		12.1
	W/				
	275'		3.6		12.1
	W/				
	310'		3.6		12.1
	W/				
	370'		3.7		12.0
	W/				
	420'		3.5		12.2

	DIST	+	H.I.	-	ELEV
	T.B.M.	4.73	15.91		11.18
	W/EST				
	420'		4.1		11.8
	W/				
	375'		3.9		12.0
	W/				
	325'		3.7		12.2
	W/				
	275'		4.0		11.9
	W/				
	230'		3.8		12.1
	W/				
	180'		4.1		11.8
	W/				
	135'		4.0		11.9
	W/				
	110'		3.9		12.0
	W/				
	80'		3.5		12.4
	W/				
	52'		3.5		12.4
	W/				
	30'		3.7		12.2
	W/				
	04'		3.8		12.1
	W/				
	0+00		4.6		11.3



STA-92+00

STA-93+00

DIST + H.I. - ELEV

DIST + H.I. - ELEV

T.B.M. 4.74 16.06 11.32 91+00

T.B.M. 4.76 16.21 11.45 92+00

0+00 WEST 4.6 11.5 PX

WEST 3.0 13.2 DIRT RD

W/ 04' 4.1 12.0

W/ 3.5 12.7 DIRT RD

W/ 30' 3.5 12.6

W/ 3.5 12.7 DIRT RD

W/ 50' 3.5 12.6

W/ 3.9 12.3 PX

W/ 82' 3.7 12.4

W/ 3.9 12.3 PX

W/ 130' 4.3 11.8

W/ 4.2 12.0

W/ 175' 4.0 12.1

W/ 4.2 12.0

W/ 220' 3.9 12.2

W/ 4.3 11.9

W/ 270' 3.8 12.3

W/ 4.3 11.9

W/ 320' 4.2 11.9

W/ 4.0 12.2

W/ 370' 4.1 12.0

W/ 4.0 12.2

W/ 400' 4.1 12.0

W/ 4.0 12.2

W/ 403' 3.7 12.4

W/ 4.0 12.2

W/ 4.0 12.2

W/ 4.0 12.2

W/ 4.0 12.2

W/ 4.1 12.1

W/ 4.1 12.1

W/ 3.8 12.4

W/ 3.8 12.4

W/ 3.6 12.6

W/ 3.6 12.6

W/ 3.4 12.8

W/ 3.4 12.8

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7

W/ 3.5 12.7



STA-94+00

DIST	+	H.I.	-	ELEV
T.B.M	4.79	16.35		11.56 93+00
0+00			9.7	11.7 PX
W/EST				
W/	04'		3.8	12.6
W/	25'		3.7	12.7
W/	54'		3.6	12.8
W/	83'		3.6	12.8
W/	85'		3.9	12.5
W/	130'		4.3	12.1
W/	180'		3.9	12.5
W/	225'		3.9	12.5
W/	275'		3.3	13.1
W/	315'		4.5	11.9
W/	320'		4.1	12.3
W/	350'		3.9	12.5

3-17-49

(66)

STA-95+00

DIST	+	H.I.	-	ELEV
T.B.M	4.77	16.42		11.65 94+00
W/				W/E
W/	340'		3.9	12.5
W/	310'		3.9	12.5
W/	305'		4.4	12.0
W/	250'		4.6	11.8
W/	210'		4.6	11.8
W/	160'		4.6	11.8
W/	115'		4.3	12.1
W/	88'		4.3	12.1
W/	83'		4.1	12.3
W/	53'		4.1	12.3
W/	20'		4.0	12.4
W/	04'		4.4	12.0
W/	0+00		4.6	11.8



96+00

STA - 97+00

DIST	+	H.I.	-	ELEV
T.B.M	4.53	16.39		11.86
0+00			9.5	11.9
W/EST				
69'			9.2	12.2
W/				
30'			3.9	13.0
W/				
59'			3.6	12.8
W/				
83'			3.9	13.0
W/				
115'			3.9	12.5
W/				
160'			4.1	12.3
W/				
210'			4.2	12.2
W/				
260'			4.7	11.7
W/				
295'			4.8	11.6
W/				
310'			4.3	12.1
W/				
340'			3.7	12.7

DIST	+	H.I.	-	ELEV
T.B.M	4.6	16.6		12.02 97+00
W/EST				11.90 96+00
285'			4.1	12.5
W/				
250'			4.1	12.5
W/				
220'			4.6	12.0
W/				
170'			4.9	11.7
W/				
170'			4.7	11.9
W/				
85'			4.7	11.9
W/				
82'			4.4	12.2
W/				
50'			4.4	12.2
W/				
20'			4.2	12.4
W/				
64'			4.7	12.2
W/				
0+00			4.6	12.0

W/EDGE  
DIRTDIRT  
TO  
CURB



STA-98+00

DIST	+	H.I.	-	ELEV	RA
T.B.M	5.33	17.35		12.02	97+00

0+00

W/EST

W/ 12'

W/ 42'

4.7

12.7

DIT

4.5

12.9

TO

5.1

12.3

CORRE

N(75+66 $\frac{1}{2}$ ) (66 $\frac{1}{2}$ )STA-75+67 $\frac{55}{2}$  AT NORTH END OF SOUTH BRIDGESTA-98+12 $\frac{9}{2}$  (12 $\frac{1}{2}$ )N AT SOUTH END OF NORTH BRIDGE(72 $\frac{0}{2}$ )NSTA-76+73.2' To  $\odot$  SOUTH DRAIN - EL-FLOWLINE AT OUTLET = 9.46

" " " INLET = 9.90

EL-END OF SPOUT (WEST) = 9.07

STA-97+49 $\frac{5}{2}$  (48 $\frac{1}{2}$ ) To  $\odot$  NORTH DRAIN - EL-FLOWLINE AT OUTLET = 10.76

" " " INLET = 11.24

100'

CONC. PAD.

7.0'

STREET INLET

"DO" ALL DRAINS



X-SECTIONS OF PROJECT #7 (DANA COVE)

N-60+00

FOR LANDSCAPING & GRADING

STA	+	H.I.	-	ELEV
T.B.M	5.11	16.38		11.27
60+00			5.26	11.12
61+00			5.14	11.24
62+00			5.78	10.60
63+00			5.00	11.38
64+00			4.95	11.13
65+00			4.97	11.11
66+00			5.09	11.29
67+00			5.18	11.20
68+00			3.45	12.93
C. JOINT AT S/END SOUTH BRIDGE				
			1.70	14.68
STA- N57+36 CENTER OF CURB/W/LET				
STA- N-61+08 S/END OF BREAK IN CURB (07°) N				
STA- N-62+43 <sup>6</sup> N/END OF BRK. IN CURB (42°) N				
STA- N-63+87 <sup>5</sup> WATERLINE (METER 2' W/CURB) (86°) N				
STA- N-67+21 <sup>0</sup> DRAIN SOUTH OF BRIDGE (20°) N				
STA- N-68+27 <sup>0</sup> SOUTH END OF SOUTH BRIDGE (26°) N				
STA- N-61+72 <sup>5</sup> TO E. OF AMP. POST # (71°) N				

STA	+	H.I.	-	ELEV	WEST CURB B/L
T.B.M	4.27	15.51		11.24	N-61+00
0+00			4.4	11.1	PX
23'			3.4	12.1	E/EDGE
50'			3.3	12.2	DIRT
70'			3.2	12.3	W/EDGE DIRT
97'			4.0	11.5	
112'			4.9	10.6	
130'			4.0	11.5	
137'			3.8	11.7	E/EDGE DIRT
185'			4.3	11.2	
195'			4.2	11.3	
200'			5.0	10.5	
225'			5.4	10.1	

LOCATION OF BAIT HOUSE (DANA BASIN)

STA-63+06<sup>2</sup> (06°) N DIST-211' TO S/W COR. BAIT HOUSE

STA-63+23<sup>2</sup> (22°) N DIST-189' TO S/E COR. BAIT HOUSE

STA-63+61<sup>1</sup> (60°) N DIST-216' TO N/E COR. BAIT HOUSE

CONG. FLOOR EL = 11.98

(S-0.52' OPEN BRK 7.6' N)



N-61+00

DIST	+	H.I.	-	ELEV
T.B.M.	4.49	15.61		11.12 60+00
W/EST				
W/	215'		6.2	9.3 PX
W/	183'		5.0	10.6
W/	181'		4.3	11.3 W/EDGE DIRT
W/	150'		4.6	11.0
W/	125'		4.7	10.9
W/	110'		4.5	11.1 E/EDGE DIRT
W/	105'		4.1	11.5
W/	75'		4.2	11.4
W/	72'		4.0	11.6
W/	50'		4.0	11.6 E/EDGE DIRT
W/	20'		1.0	11.6
0+00			4.4	11.2

3-21-49

(90)

N-62+00

DIST	+	H.I.	-	ELEV	RT
T.B.M.	4.41 <del>4.49</del>	15.53		11.12 60+00	
0+00			5.0	10.5	DIRT
W/EST					
W/	33'		7.4	11.1	TO
W/	69'		3.9	11.9	CURB
W/	100'		3.8	11.7	
W/	120'		7.1	11.4	
W/	130'		4.5	11.0	
W/	155'		4.4	11.1	
W/	185'		4.5	11.0	
W/	190'		4.2	11.3	W/EDGE DIRT
W/	195'		4.9	10.6	
W/	225'		5.8	9.7	



3-21-19

STA-63+00

DIST	+	H.I.	-	ELEV	FX
T.B.M	5.21	15.81		10.60	62+00
W/EST					
214'			3.8	12.0	
212'			4.25	11.56	FLOOR LEVEL BEAR CONC. WALK
190'			4.6	11.2	
160'			4.4	11.4	
120'			3.9	11.9	
80'			3.8	12.0	
50'			4.1	11.7	
27'			4.2	11.6	
14'			4.2	11.6	
0.3			3.5	12.3	
0+00			4.5	11.3	

3-22-19

(71)

STA-64+00

DIST	+	H.I.	-	ELEV	FX
T.B.M	4.45	15.83		11.38	N-63+00
0+00			7.4	11.4	
08'			4.0	11.8	
18'			4.2	11.6	
45'			4.2	11.6	
83'			3.6	12.2	
120'			4.0	11.8	
145'			3.9	11.9	
185'			3.9	11.9	
230'			4.0	11.8	
200'			4.4	11.4	
320'			4.4	11.4	
326 CONC. FLOOR			5.2	10.6	
			3.85	11.98	BATH USE CONC F.L.P. E.L.



STA- 65+00

PX

DIST	+	H.I.	-	ELEV
T.B.M	4.47	15.90		11.43 64+00
WEST				
W/	375		5.6	10.3
W/	360'		4.3	11.6
W/	330'		4.4	11.5
W/	305'		4.0	11.9
W/	275'		3.9	12.0
W/	250'		3.6	12.3
W/	220'		4.0	11.9
W/	185'		3.9	12.0
W/	160'		3.7	12.2
W/	130'		4.1	11.8
W/	100'		4.2	11.7
W/	75'		4.1	11.8
W/	55'		4.6	11.3
W/	35'		4.5	11.4
W/	16'		4.2	11.7
W/	05'		4.2	11.7
W/	05'		4.2	11.7
0+00			4.5	11.4

15.9

16.00

4.6

11.4

3-22-49

STA- 66+00

PX (22)

DIST	+	H.I.	-	ELEV
T.B.M	4.55	15.96		11.41 65+00
0+00				
WEST				
W/	08'		4.6	11.4
W/	30'		4.0	11.9
W/	65'		3.8	12.1
W/	75'		3.7	12.2
W/	105'		3.4	12.5
W/	130'		3.7	12.2
W/	165'		3.9	12.6
W/	200'		3.3	12.7
W/	230'		3.5	12.5
W/	265'		3.7	12.3
W/	305'		5.0	11.6
W/	320'	15.90	5.9	10.1
W/	350'		5.8	10.1
W/	360'		6.2	9.9
W/	360'		6.7	9.2
W/	363'		8.1	7.8
W/	373'		8.7	7.2



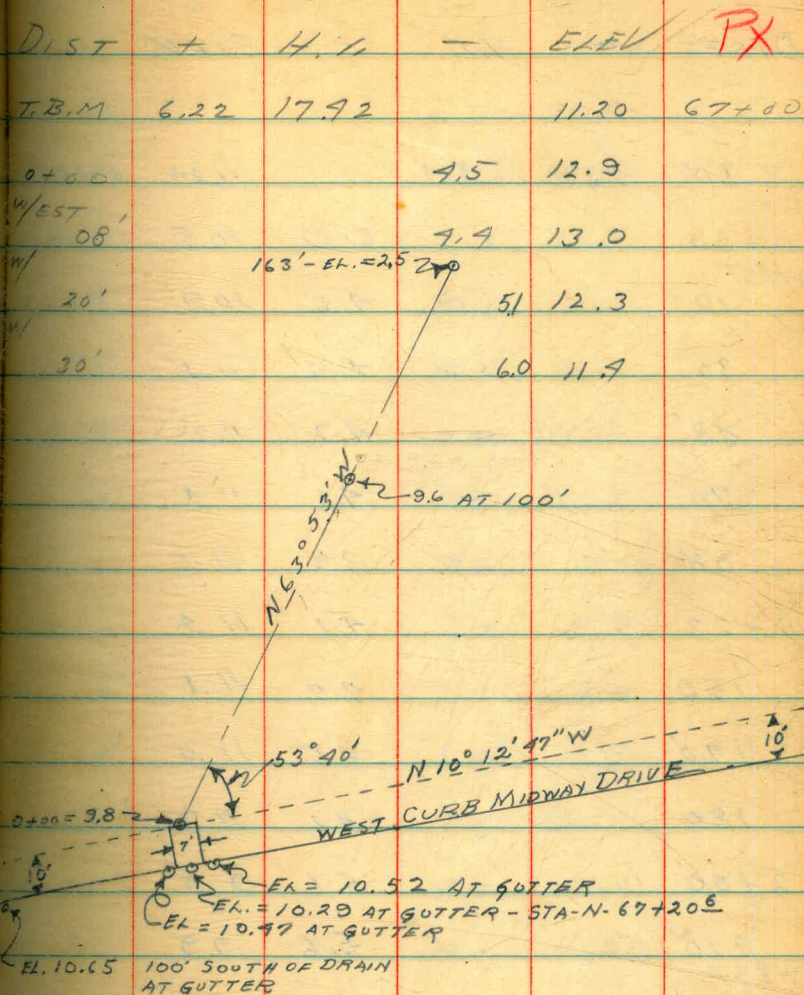
STA - 67+00

STA - 68+00

DIST	+	H.I.	-	ELEV	PX
T.B.M.	4.58	15.87		11.29	66+00
200'			6.3	9.6	
180'			5.6	10.3	
165'			5.9	10.0	
150'			5.3	10.6	
138'			5.5	10.4	
112'			4.9	11.0	
90'			4.8	11.1	
75'			4.7	11.2	
65'			4.1	11.8	
47'			4.4	11.5	
32'			4.7	11.2	
20'			4.0	11.9	
14'			4.1	11.8	
06'			4.1	11.8	
0+00			4.6	11.3	
			6.28	9.59	

OUTLET OF  
DRAIN  
F.L.E.L.

PROPOSED EXTENTION OF DRAIN AT  
SOUTH END OF SOUTH BRIDGE - WLY. LINE  
OF MIDWAY DRIVE, - (PROFILE ON PAGE 78)





STA-N- 61+50

PX

3-31-49

PX (24)

STA- 62+50 - N

DIST	+	H.I.	-	ELEV	
T.BM	4.30	15.59		11.29	61+00
0+00			5.0	10.5	
WEST					
10'			4.6	10.9	
30'			4.4	11.1	
48'			4.3	11.2	
70'			4.1	11.4	
98'			3.9	11.6	
1+23'			4.1	11.4	
150'			4.4	11.1	
170'			4.5	11.0	
180'			4.2	11.3	
2+00'			5.6	9.9	
210'			5.6	9.9	
WEST					
2+23'			6.8	8.7	

DIST	+	H.I.	-	ELEV	
T.BM	4.21	15.59		11.38	62+00
WEST					
2+12			5.1	10.0	
2+16			5.2	10.4	
2+04			3.9	11.7	
1+93			4.1	11.0	
175'			4.5	11.0	
155'			4.4	11.2	
130'			4.4	11.2	
116'			4.2	11.4	
1+00'			3.7	11.9	
97 79'			3.7	11.9	
68'			3.8	11.8	
55'			3.6	12.0	
45'			4.0	11.6	
31'			4.1	11.5	
17'			4.1	11.5	
WEST					
06'			3.6	12.0	
0+00			4.2	11.4	



DIST	+	H.I.	-	ELEV
T.B.M	4.43	15.81		11.38 63+00
0+00			7.4	11.4
WEST				
02'			3.6	12.2
13'			3.9	11.9
30'			7.2	11.5
45'			4.1	11.7
60'			3.8	12.0
75'			3.9	11.9
95'			3.8	12.0
1+05'			3.9	11.9
121			3.9	11.9
142			4.1	11.7
162			4.1	11.7
175			4.1	11.7
WEST				
1+90'			4.1	11.7

DIST	+	H.I.	-	ELEV
T.B.M	4.81	16.22		11.41 65+00
WEST				
3+82'			6.9	9.8 <del>8.8</del>
362'			5.7	10.5 9.5
360'			5.0	11.2 10.2
346'			9.8	11.4 <del>10.4</del>
340'			5.1	11.1 <del>10.1</del>
316'			9.8	11.4 <del>10.4</del>
307'			9.8	11.4 <del>10.4</del>
290'			9.6	11.6 <del>10.6</del>
280'			9.6	11.6 <del>10.6</del>
265'			9.9	11.8 <del>10.8</del>
260'			9.5	11.7 <del>10.7</del>
238'			9.2	12.0 11.8
215'			9.3	11.9 <del>10.9</del>
191'			9.1	12.1 <del>11.1</del>
170'			9.1	12.1 <del>11.1</del>
143'			9.1	12.1 <del>11.1</del>
120'			9.3	12.9 <del>10.9</del>
93'			9.2	12.0 <del>11.0</del>

OXER



64+50

DIST	+	H.I.	-	ELEV
WEST				11.9
71'		15.22	4.3	<del>10.9</del>
				11.5
50'			4.7	<del>10.5</del>
				11.4
38'			4.8	<del>10.1</del>
				11.6
11'			4.6	<del>10.6</del>
WEST				11.8
05'			4.4	<del>10.8</del>
				11.4
0+00			4.8	<del>10.9</del>

## PROFILE ALONG &amp; PROPOSED DRAIN DITCH-DANA

0+00 = WEST EDGE CURB CAUSEWAY

STA	+	H.I.	-	ELEV
T.B.M	5.27	16.77 <sup>5</sup>		11.20 67+00
0+00				11.3
0+10			6.6	9.8
20				
0+20			7.1	9.4
29				
0+29			6.7	9.6
37				
0+37			6.0	10.5
46				
0+36			4.8	11.7
60				
0+50			5.0	11.5
75				
0+65			5.1	11.4
0+88.98			5.0	11.5
0+95 <sup>1.05</sup>			5.8	10.7
1+00.10			7.0	9.5
1+20			3.1	7.4
1+26 <sup>26</sup>			10.2	6.3
1+26 <sup>30</sup>			11.8	4.7

3-31-19

(26)

PT

STA - N - 65+50

DIST	+	H.I.	-	ELEV
T.B.M	4.38	15.79 <sup>8</sup>		11.41 65+00
0+00				4.4 11.4
WEST				3.9 11.9
0+15				
32'			4.0	11.8
47'			4.1	11.7
70'			4.2	11.6
88'			4.1	11.7
112'			4.1	11.7
134'			4.2	11.6
152'			3.9	11.9
181'			3.5	12.3
206'			3.5	12.3
232'			3.6	12.2
260'			3.8	12.0
283'			4.1	11.7
303'			3.6	12.2
325'			3.6	12.2
335'			5.2	10.6
367'			6.1	9.7
W/396'			6.3	9.5



57A-N-66+50

DIST	+	H.I.	-	ELEV
T.B.M. WEST 283'	4.63	15.83		11.20 67+00
255'			6.2	9.1
230'			5.7	10.1
215'			5.5	10.3
200'			5.5	10.3
170'			4.9	10.9
150'			4.9	10.9
121'			5.4	10.4
100'			5.5	10.3
90'			5.3	10.5
80'			4.5	11.3
70'			4.6	11.2
60'			4.7	11.1
45'			4.1	11.7
23' WEST 10'			4.1	11.7
0+00			3.8	12.0
			4.1	11.7
			4.5	11.3

STA-N-67+50

DIST	+	H.I.	-	ELEV
T.B.M. 0+00 WEST 04'	4.66	15.86		11.20 67+00
06'			4.4	11.5
11'			3.8	12.1
33'			3.2	12.7
51'			3.9	12.0
66'			4.3	11.6
80'			4.3	11.6
100'			4.4	11.5
118'			5.3	10.6
132'			5.4	10.5
140'			5.9	10.0
160'			6.7	9.2
WEST 175'			8.3	7.6
			9.7	6.2
			14.1	4.8



STA - N - 60+50

(78)  
 OLD PL  
 11.27 (67+00)  
 272402

DIST + H.I. - ELEV

Profile of Drainage Ditch at  
 South End of Bridge

T.B.M 4.19 15.43 11.24 61+00

0+00 WEST 4.3 11.1

10' 3.8 11.6

33' 3.5 11.9

55' 3.3 12.1

70' 3.6 11.8

80' 4.0 11.4

90' 4.3 11.1

97' 4.9 10.5

108' 4.7 10.7

116' 3.8 11.6

135' 4.3 11.1

153' 4.3 11.1

170' 4.4 11.0

183' 4.5 10.9

190' WEST 5.2 10.2

220 6.3 9.1

Sta. T H.I. - Elev  
 T.B.M. 4.25 15.45 11.20 67+00

L 53°45' Def. LT. 67+00

0+00 15.45 5.6 9.8

0+02 5.8 9.6

0+15 5.8 10.1

0+25 4.1 11.3

0+35 3.8 11.6

0+~~34~~<sup>55</sup> 3.9 11.5

0+68 3.7 11.7

0+83 3.1 12.3

1+00 5.8 9.6

1+10 6.5 8.9

1+12 5.5 7.9

1+27 9.2 6.2

1+41 10.9 4.5

1+63 12.9 2.5

SEE PAGE (73)



79

7.65  
11.38  
16.03

3.71  $\frac{3}{4}$  3.68 = 12.01  
11.98  $\frac{1}{4}$  3.75 = 11.34  
15.69  $\frac{1}{4}$  3.75 = 12.24

-10' - 5.28 -

130 - 5.76 - 10.57

94.65 - CURB - 11.38

65.35 - GUT - 10.68

105.38 - GUT - 10.65

205.38 - GUT - 10.65

305.37 - GUT - 10.66

405.39 - GUT - 10.64

505.41 - GUT - 10.62

605.38 - GUT - 10.65

705.36 - GUT - 10.67

805.41 - GUT - 10.62

905.46 - GUT - 10.57

1005.45 - GUT - 10.58

1205.46 - GUT - 10.57

1305.42 - GUT - 10.61

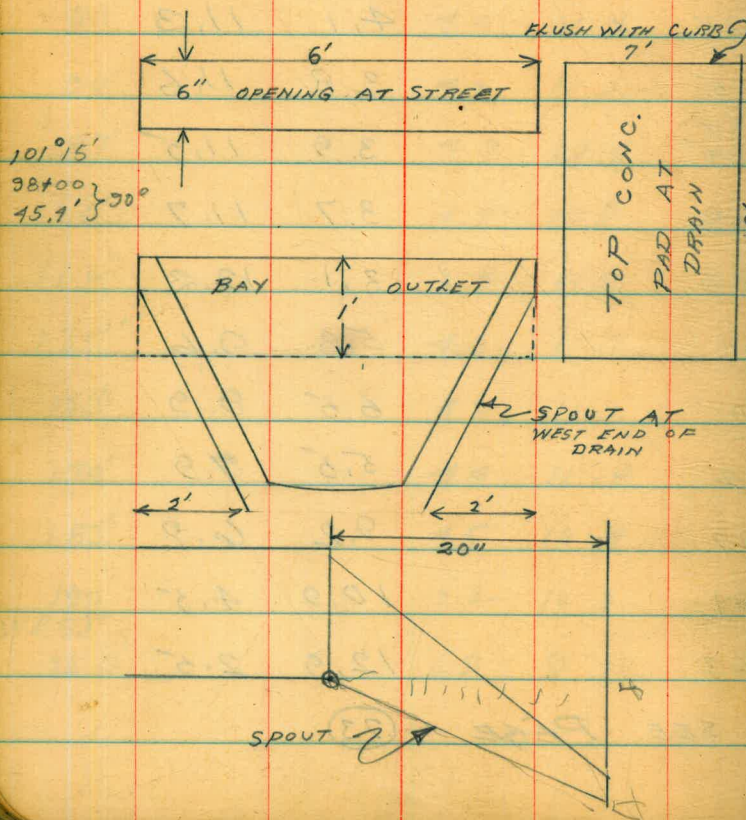
TOP (9.79 - 11.24)

9.81 - 11.22

GUT - 5.74 - 10.59

BASE OF IMP. STD. - 9.66 - 11.37

DETAILS OF DRAINS ALONG MIDWAY DRIVE

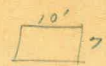


12.02 97100  
5.494  
17.51 = H.I.  
-6.27 - INLET  
-6.75 - OUTLET

98+12 To S/END OF N/B BRIDGE

97+46 To S/EDGE OF OPENING DRAIN  
97+49 To C of DRAIN (NORTH)

17.51 17.51  
-6.27 -6.27  
11.24 EL 10.76 EL  
(INLET NORTH OUTLET SOUTH)



76+73.2 To C DRAIN (SOUTH)  
75+67.55 To N/END OF SOUTH BRIDGE

77+00 10.91  
+ 5.89  
16.80 = H.I.

SOUTH

- 6.90 - INLET EL=9.90
- 7.39 - OUTLET EL=9.96
- 7.73 - END OF SPOUT EL=9.07

76+84.19  
2.5  
76+76.7  
3.5  
76+73.2

63+06.5 211' S/W COR BAIT HSE  
-3.81 FLR. OF BAIT HSE

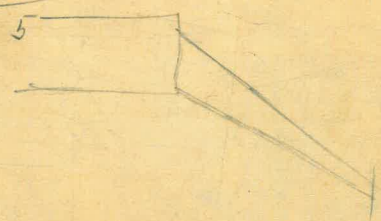
63+23.3 189' S/E COR B HSE

63+61 215' N/E COR B HSE

76+00  
32.75  
75+67.55

10161 / 72,500.0  
7 78127  
78127 60986  
11539

11.24  
10.59  
.65



B  
a  
C  
c  
a  
c  
n C  
A  
+B  
A+B  
18  
10  
50  
45  
by the  
319.4 ft.  
5° 10' =  
is slope  
with the  
follow-  
9 = .0041.  
ope dist-  
e = 14 ft.,  
.28 ft.  
DE IN U.S.A.



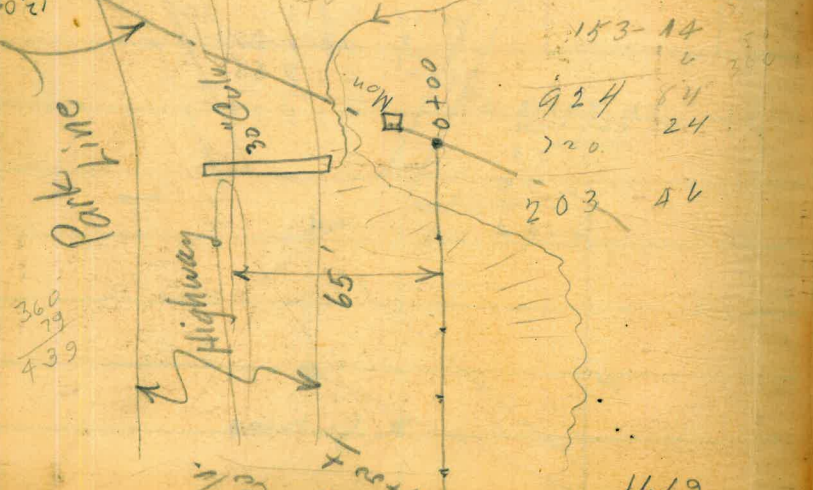
98-13.27  
99-13.33  
100-15.87 TOP 13.26  
101-13.32  
102-13.29  
103-13.27  
104-13.24  
105-13.16

87-13.32  
86-13.30  
85-13.32

27-13.33  
26-13.37  
25-13.37  
24-13.33  
23-13.32  
22-13.33  
21-13.32  
20-13.32

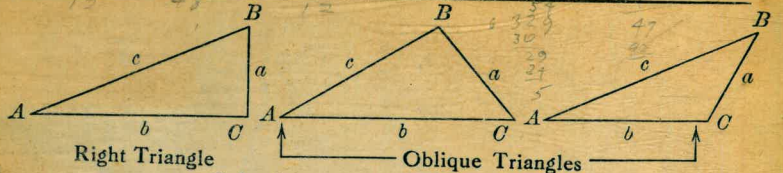
360  
55 35  
84 715 15  
58 49 60  
352 30 35  
30 15  
180 78 6 135 15 50  
12 63 15 50  
179 60 15  
189 29 12  
90 316 180 324  
114 15 4

17, 19  
5.26  
11, 93  
280  
29  
114 155  
1.000, 000  
30 240  
30 240



360  
439  
11.19

TRIGONOMETRIC FORMULAE



Solution of Right Triangles

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

Given	Required	Formulas
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	$B = 90^\circ - A$ , $b = a \cot A$ , $c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90^\circ - A$ , $a = b \tan A$ , $c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90^\circ - A$ , $a = c \sin A$ , $b = c \cos A$

Solution of Oblique Triangles

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

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,  $\cos 5^\circ 10' = .9959$ . Horizontal distance =  $319.4 \times .9959 = 318.09$  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.  $\cos 5^\circ 10' = .9959$ .  $1 - .9959 = .0041$ .  $319.4 \times .0041 = 1.31$ .  $319.4 - 1.31 = 318.09$  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.