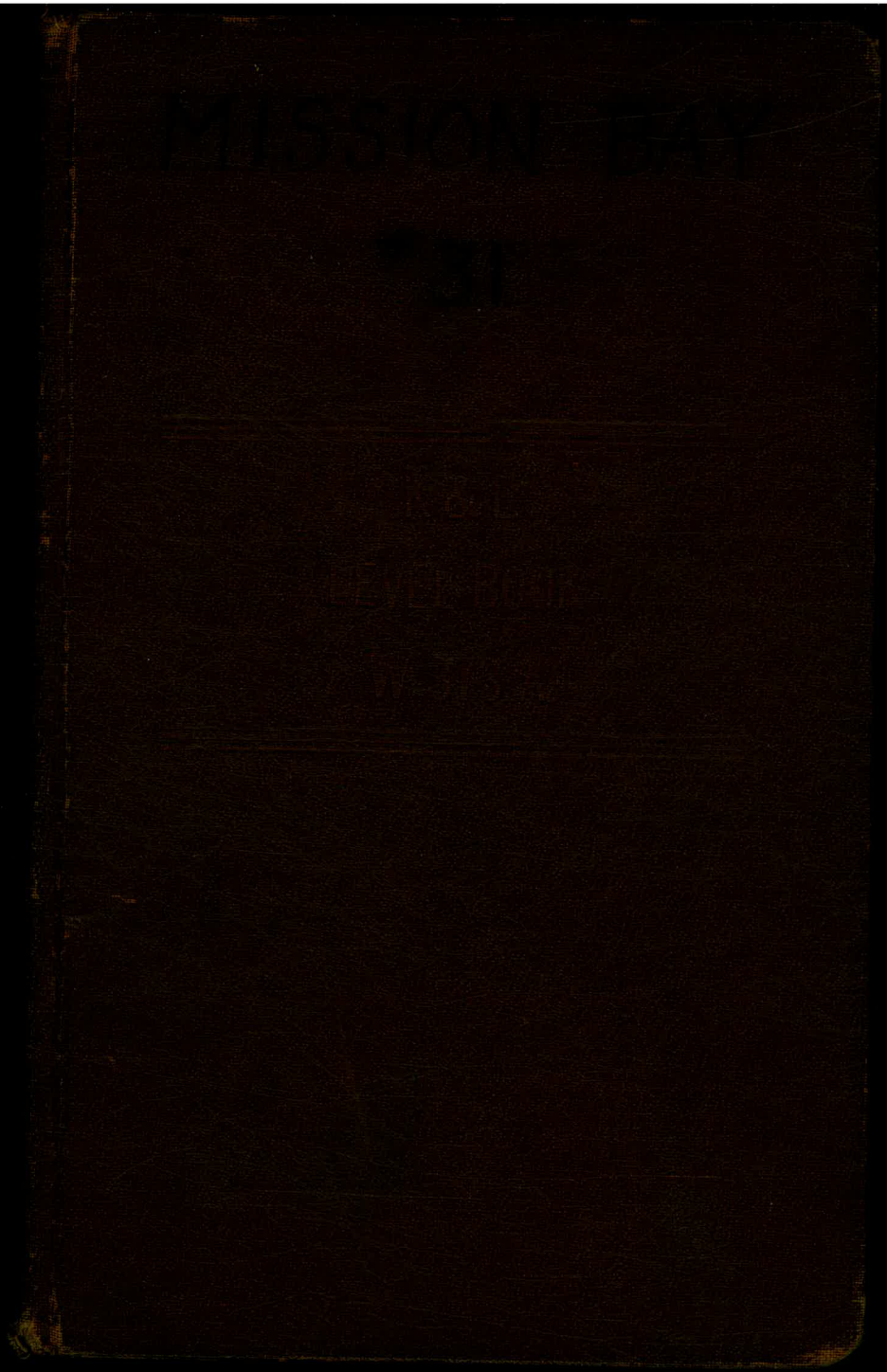
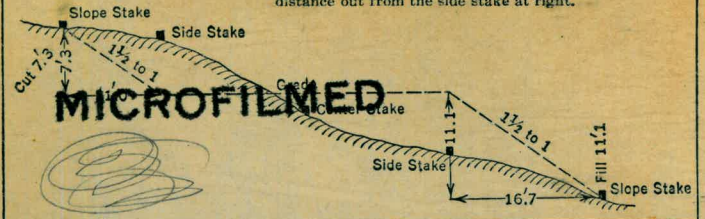


DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

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	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 No 31

S 18° 29' 13" E

The paper in this book **No. 373A** is made of **50%** high grade rag stock with a **WATER RESISTING** surface sizing.

12,321-4. kh, c, yx. chss.

#31

INDEX

PX

MEAN HIGH TIDE SURVEY

OF EL CARMEL POINT & SHORE LINE

FEB. 19, 1948 BARRAGAN SHERRY STANLEY

Indexed

STA	OBJECT +	AZIM H.I.	DIST	ROD	ELEV	
B.M.	4.36	12.78			8.42	STA-101+00 ⊕ IN SIDEWALK
			151.5			
	98+00		138.0'	7.98	4.80	
	99+00		125.0'	"	"	
	100+00		109.5'	"	"	
	101+00		94.0'	"	"	
	102+00		82.5'	"	"	
	103+00		67.0'	"	"	
	104+00		60.0'	"	"	
	105+00		82.5'	"	"	
	+	H.I.				
B.M.	6.88	15.32			8.44	STA-107+00 ⊗ IN SIDEWALK
	# 34		53.0'	10.52	4.80	
	# 33		45.0'	"	"	
	# 32		52.0'	"	"	
	# 31		51.0'	"	"	
	+	H.I.				
T.P.	6.32	15.72		5.92	9.40	TOP OF HUB # 31
	# 30		58.0'	10.92	4.80	
	# 29		61.0	"	"	

2-19-48

MEAN HIGH TIDE SURVEY OF EL CARMEL POINT & SHORE LINE

STA	OBJECT	AZIM	DIST	ROD	ELEV
		H.I. 15.72		10.92	4.80
✓	# 28		64.0'	"	"
✓	# 27		69.0'	"	"
✓	# 26		72.5'	"	"
✓	# 25		69.0'	"	"
✓	# 24		64.0'	"	"
✓	# 23		63.0'	"	"
✓	# 22		58.5'	"	"
✓	# 21		57.0'	"	"
✓	# 20		53.5'	"	"
✓	# 19		63.0'	"	"
✓	# 18		65.0'	"	"
✓	# 17		71.0'	"	"
✓	# 16		68.0'	"	"
✓ ✓	# 15		65.0'	"	"
✓	# 14		59.0'	"	"
✓	# 13		57.0'	"	"
✓	# 12		63.5'	"	"

STA	OBJECT	AZIM	DIST	ROD	ELEV
		H.I. 15.72		10.92	4.80
✓	# 11		58.0'	"	"
✓	# 10		69.0'	"	"
✓	# 9		68.0'	"	"
✓	# 8		63.0'	"	"
✓	# 7		66.0'	"	"
✓	# 6		66.0'	"	"
✓ ✓	# 5		59.5'	"	"
✓	# 4		51.0'	"	"
T.P	+ 6.70	H.I. 16.22		6.20	TOP # 4 9.52
✓	# 3		47.5'	11.42	4.80
✓	# 2		45.0'	"	4.80
T.P. B.M.				7.80	STA-109+00 8.44 = 8.42
B.M.	+ 4.90	H.I. 13.34			STA-109+00 8.44
✓	#1 (50'E/ OF ORIG. #1)		54.5'	8.54	4.80
✓	STA- 108+00		136.0'	"	"
B.M.	+ 5.06	H.I. 13.50			STA-109+00 8.44
✓	5.22 109+00		139.0' ~~149.0'~~	8.70	4.80
B.M.	+ 5.02	H.I. 13.45			STA-109+00 8.43
✓	110+00		140.0' ~~139.0'~~	8.65	4.80

MEAN HIGH TIDE SURVEY - SHORELINE
KINGSTON SOUTH TO STA 85+00

3-25-48
OVERCAST
COLD
V. STRONG WIND

(3)

STA	OBJECT +	AZIM H.I.	DIST	ROD	ELEV STA-110+00
B.M.	5.33	13.66		8.86	8.33
	111+00		149.5'	8.86	4.80
B.M.	+ 4.61	H.I. =	13.01		STA-97+00 8.40
	96+00	90°→84	140.'	8.21	4.8
	95+00	90°→84	114.'	"	"
	94+00		91.5	"	"
	93+00		82.'	"	"
	92+00		83.'	"	"
	91+00		86.'	"	"
T.P.	+ 4.60	H.I. =	13.08	4.53	8.78
	90+00		88.'	8.28	4.8
	89+00		89.'	"	"
	88+00		89.5'	"	"
	87+00		63.'	"	"
	86+00		27.'	"	"
	85+00		0.0'	"	"
T.P.	+ 11.08	H.I. =	16.00	- 8.16	4.92
				- 4.63	COASTER 11.39 11.37

Indexed.

NOTE - STATIONS 96+00 THROUGH 85+00 DISTANCES RECORDED ARE AT 90° TO B/L.

BARRAGAN
SHERRY
STANLEY

3-18-18
CLEAR
COOL
LIGHT WIND

(1)

Indexed

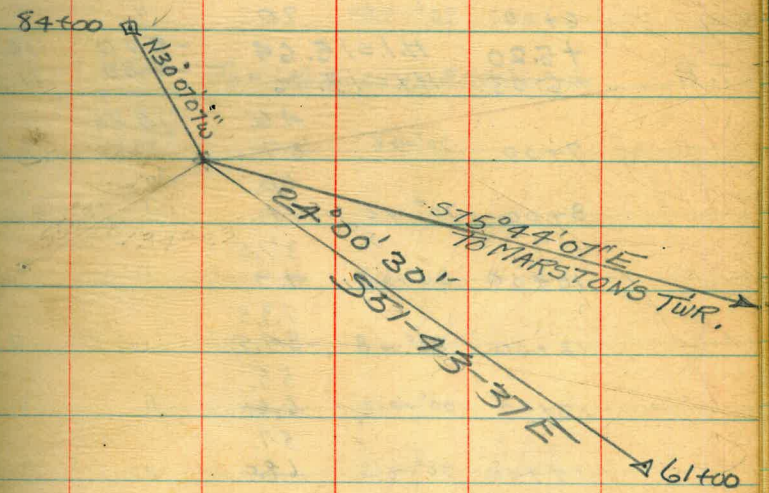
TRAVERSE ALONG GLEASON POINT & VENTURA POINT SHORE LINE FOR MEAN HIGH TIDE SURVEY

STA	OBJECT	ANGLE
↑ 600'		
	8+00	① 30° 02' 00"
12+00	DEF. L.T.	② 60° 04' 00"
	18+00	AV. 30° 02' 00"
100'		
	6+00	① 39° 32' 00
8+00	DEF. L.T.	② 79 04' 00
	12+00	AV. 39° 32' 00
200'		
	STA - 84+00	① 42° 23' 00"
6+00	DEF. LEFT	② 84° 16' 00"
	8+00	AV. 42° 23' 00"
600'		
	KINGSTON	① 116° 57' 00"
STA 84+00	INT. RT.	② 233° 54' 00"
	6+00	AV. 116° 57' 00"

STA	OBJECT	ANGLE
	34+00	① 83° 25' 00"
39+00	DEF. LT.	② 166° 50' 00"
	46+50	AV. 83° 25' 00"
	29+00	① 30° 24' 00"
34+00	DEF. RT.	② 60° 48' 00"
	39+00	AV. 30° 24' 00"
	23+00	① 31° 54' 00"
29+00	DEF. RT.	② 63° 48' 00"
	34+00	AV. 31° 54' 00"
	20+50	① 47° 10' 00"
23+00	DEF. RT.	② 94° 20' 00"
	29+00	AV. 47° 10' 00"
	18+00	① ~~31° 43' 00"~~ 52° 00' 00"
20+50	DEF. RT.	② ~~63° 36' 00"~~ 104° 00' 00"
	23+00	AV. ~~31° 43' 00"~~ 52° 00' 00"
	12+00	① 79° 43' 00"
18+00	DEF. RT.	② 159° 26' 00"
	20+50	AV. 79° 43' 00"

STA	OBJECT		ANGLE
COASTER ↑ 1811.35'		58+00	① 81° 43' 00"
61+00	DEF. RT.		② 163° 25' 30"
	U.S.E.D. △ COASTER		AV. 81° 42' 45"
		54+00	① 31° 38' 00"
58+00	DEF. RT		② 63 16 00"
		61+00	AV. 31° 38' 00"
		50+80	① 40° 25' 00"
54+00	DEF. RT.		② 80° 50' 00"
		58+00	AV. 40° 25' 00
		46+50	① 102° 21' 00"
50+80	DEF. RT		② 204° 42' 00"
		54+00	AV. 102° 21' 00"
		39+00	① 81° 18' 00"
46+50	DEF. LT		② 162 36' 00"
		50+80	AV. 81° 18' 00"

STA	OBJECT		ANGLE
		61+00	① 21° 36' 30"
COASTER	DEF. RT.		② 43° 13' 00
		STA 84+00	AV 21° 36' 30"
316.02'		U.S.E.D. △ COASTER	① 62° 13' 00
84+00	INT. LEFT		② 124° 26' 00
		6+00	AV. 62° 13' 00"
	STA 84+00		1. 134° 23' 00"
COASTER	INT. RT MARSTONS TOWER		2. 268° 46' 00"
			AV. 134° 23' 00"



BARRABAN
SHERRY
STANLEY

3-23-48
CLEAR
COOL
MOD. WIND

MEAN HIGH TIDE. SURVEY OF GLEASON POINT & VENTURA POINT SHORE LINE.

STA	OBJECT	AZIM.	DIST	ROD	ELEV
	+9.75		16.19		
B.M.	~~+4.92~~	H.I.=~~16.31~~		11.34	11.39
✓	84+00	90°→6	57	11.51	4.8
✓	2+00	90°→6	34	"	"
✓	4+00	90°→6	95	"	"
✓	6+00	90°→84	70	"	"
T.P.	+5.20	H.I.=15.64		-5.70	10.44
	~~+6.03~~	H.I.=~~17.46~~		~~-4.88~~	~~11.43~~
✓	7+00	90°→6	46. ~~57~~	10.84	4.8
✓	8+00	90°→6	60. ~~71~~	"	"
✓	10+00	90°→8	37.5 ~~43~~	"	"
✓	12+00	90°→8	73.5 ~~84.5~~	"	"
✓	13+00	90°→12	55. ~~66.~~	"	"
✓	14+00	90°→12	57. ~~68.5~~	"	"
✓	15+00	90°→12	66. ~~77.0~~	"	"
✓	16+00	90°→12	87. ~~95.~~	"	"
T.P.	+5.40	H.I.=17.22		-3.82	11.82

16+00

18+00 -62 57

Indexed

(7)

11.43
6.03
17.46

11.39
4.92
16.31

16.31
9.88
11.43

11.39
4.75
16.14
4.80
11.34

16.14
5.70
10.44

10.44
5.20
15.64

15.64
4.80
10.84

11.43
6.77
18.20
4.8
13.40
18.20

11.43
6.03
17.46
4.80
12.66
17.46

TOP HUB STA-8+00

15.64
3.82
11.82
5.40
17.22

17.22
4.80
12.42
17.22

	+6.66			-7.58	9.88
STA	OBJECT	AZIM	DIST	ROD	ELEV.
		H.I. = 17.22			
	17+00	90°→12	87.	12.42	4.8
T.P.	18+00	90°→12	62.'	12.42	4.8
	18+00	90°→20.5	46.; ~~57.~~	"	4.8
	19+00	90°→20.5	86.' ~~96.~~	"	"
	20+50	90°→18	77. ~~86.5~~'	"	"
	20+50	90°→23	89., ~~100.~~	"	"
	21+00	90°→23	89.5 ~~107.~~'	"	"
	22+00	90°→23	80. ~~88.5~~'	"	"
	23+00	90°→20.5	58.5 ~~69.~~'	"	"
	23+00	90°→29	57.5 ~~71.5~~'	"	"
	25+00	90°→29	87.5, ~~96.~~	"	"
	27+00	90°→29	91.5 ~~100.~~'	"	"
T.P.	+1.71 ~~+3.18~~	H.I. = 16.54 ~~H.I. = 16.03~~		-5.39 ~~-3.69~~	11.83 ~~12.85~~
	28+00	90°→23	79. ~~85.~~'	11.23	4.8
	29+00	90°→23	59. ~~84.5~~'	"	"
	30+00	90°→34	80. ~~86.~~'	"	"
	31+00	90°→34	92., ~~98.5~~	"	"
	32+00	90°→34	93. ~~98.~~'	"	"
	33+00	90°→34	78.5 ~~85.~~'	"	"

17.44 − 7.58 = 9.88

9.88 + 6.66 = 16.54 ; 16.54 − 4.80 = 11.74

T.P. 18+00 (HUB) 16.54 − 0 = 16.54

17.22 − 5.41 = 11.81

17.22 − 5.39 = 11.83

17.22 − 5.39 = 11.83 ; 11.83 + 4.71 = 16.54 ; 16.54 − 4.80 = 11.74

16.54 − 3.69 = 12.85

12.85 + 3.18 = 16.03 ; 16.03 − 4.80 = 11.23

T.P. HUB 28+00 16.03

STA	OBJECT	AZIM	DIST	ROD	ELEV
			16.54		
		H.I. = ~~16.03~~			
			49'		
34+00	34+00	90°→29	~~59.~~	11.23	4.8
				-6.79	9.75
T.P.	+6.71	H.I. = 16.46		~~5.55~~	~~10.48~~
	35+00	90°→31	51'	11.66	4.80
	36+00	90°→34	45'	"	"
	37+00	90°→34	38.5'	"	"
	38+00	90°→34	42.	"	"
T.P.	+5.23	H.I. = 15.59		-6.10	10.36
	40+00	90°→39	52'	10.79	4.8
	41+00	"	47'	"	"
	42+00	"	60'	"	"
	43+00	"	64'	"	"
	44+00	"	89'	"	"
	45+00	"	75'	"	"
	46+00	"	97'	"	"
T.P.	+9.74	H.I. = 15.00		-5.33	10.26
	47+50 ~~48+00~~	90°→46.5	89'	10.20	4.8
	49+00	"	82'	"	"
	50+00	"	82'	"	"

10.48
9.75
0.73

16.54
6.79
9.75
6.71
16.46
4.80
11.66

T.P. STA - 34+00

+6
39+00

10.36
5.23
15.59
4.80
10.79

15.59
5.33
10.26

10.26

T.P. 45+00

10.26
4.74
15.00
4.80
10.20

STA.	OBJECT	AZIM	DIST	ROD	ELEV
		H.I. = 15.00			
	50+80	90° → 46° 5'	52 5'	10.20	4.80
	50+80	90° → 54	44 5'	"	"
	52+00	"	91'	"	"
TP	+3.98	HI = 14.70		-4.28	10.72
	53+00	90° → 54	87'	9.90	4.80
	54+00	"	63 5'	"	"
	55+00	90° → 58	80'	"	"
	56+00	"	75 5'	"	"
	57+00	"	59 5'	"	"
	58+00	90° " 54	29'	"	"
TP	+5.00	HI = 14.57		-5.13	9.57
	59+00	90° → 61	38'	9.77	4.80
	60+00	"	47'	"	"
	61+00	"	62'	"	"
T.P.	+4.90	HI = 15.53		-3.94	10.63
TP.	+4.33	HI = 14.56		-5.30	10.23
				-3.25	11.31

TP
52+00 10.72
3.98
14.70
4.80
9.90

14.56
11.39
3.17

STA 57+00

14.57
4.80
9.77

5.1

PROFILE ALONG ℄ OF SAN RAFAEL PLACE

STA SAN RAFAEL = STA 2+00

STA	+	H.I.	-	ELEV.	
133+00				8.41	CHISL⊗IN SIDEWALK 4' W. B/L.
	5.08	13.49			
1+30			12.0	1.5	
1+54			11.1	2.4	
1+80			9.2	4.3	
1+98			7.7	5.8	
1+98			5.1	8.4	TOP S. WALK
2+00			5.1	8.4	℄ " "
2+50			5.8	7.7	
2+84			6.4	7.1	E. EDGE BAYSIDE LANE
2+92			6.6	6.9	℄ " "
3+00			6.5	7.0	W. " " "
3+50			5.9	7.6	
4+00			5.2	8.3	
4+13			4.7	8.8	E. EDGE PAVEMENT MISSION BLVD
4+23			5.3	8.2	E " ℄ GUTTER " "
4+52			4.6	8.9	℄ MISSION BLVD

4-13-48

T. STAMPER
C. BARRAGAN
A. SHERRY

SAN RAFAEL PROFILE CONTD

4-13-48

STA	+	H.I	-	ELEV	
		13.49			
4+83			5.0	8.5	W. GUTTER ON PAV. MISS. BLVD
4+93			4.6	8.9	" EDGE PAVEMENT " "
5+00			4.4	9.1	
5+50			2.9	10.6	
TP.			2.31	11.18	
	7.47	18.65			
6+00			4.5	14.1	
6+07			3.7	15.0	E. EDGE PAV. OCEAN FRONT LANE
6+17			3.8	14.8	℄ " " " "
6+27			3.6	15.0	W. " " " " "
6+50			3.9	14.7	
7+00			4.8	13.8	
7+19			5.1	13.5	E. EDGE OF PAV. OCEAN FR. SIDE WALK
7+30			5.4	13.2	W. " " " " " " "
T.B.M. 7+30 60			2.78	15.87	℄ TOP SEA WAL 8"
7+36 60			2.82	15.83	℄ " W CONC. WALL AT STAIRWAY TO BEACH
7+37			5.3	13.3	TOP OF FTG " " "
7+38			7.0	11.6	

SAN RAFAEL PROFILE CONTD

STA	+	H.I.	-	ELEV.
		18.65		
7+82			10.4	8.2
8+00			10.5	8.1
TP.			10.55	8.10
	4.67	12.77		
8+57			7.8	5.0
9+04			9.4	3.4
9+48			10.6	2.2
TP.			1.19	11.58
	4.72	16.30		
~~F.B.M.~~			~~8.05~~	~~8.25~~
TP.	4.43	12.98	7.75	8.55
			4.65	8.33

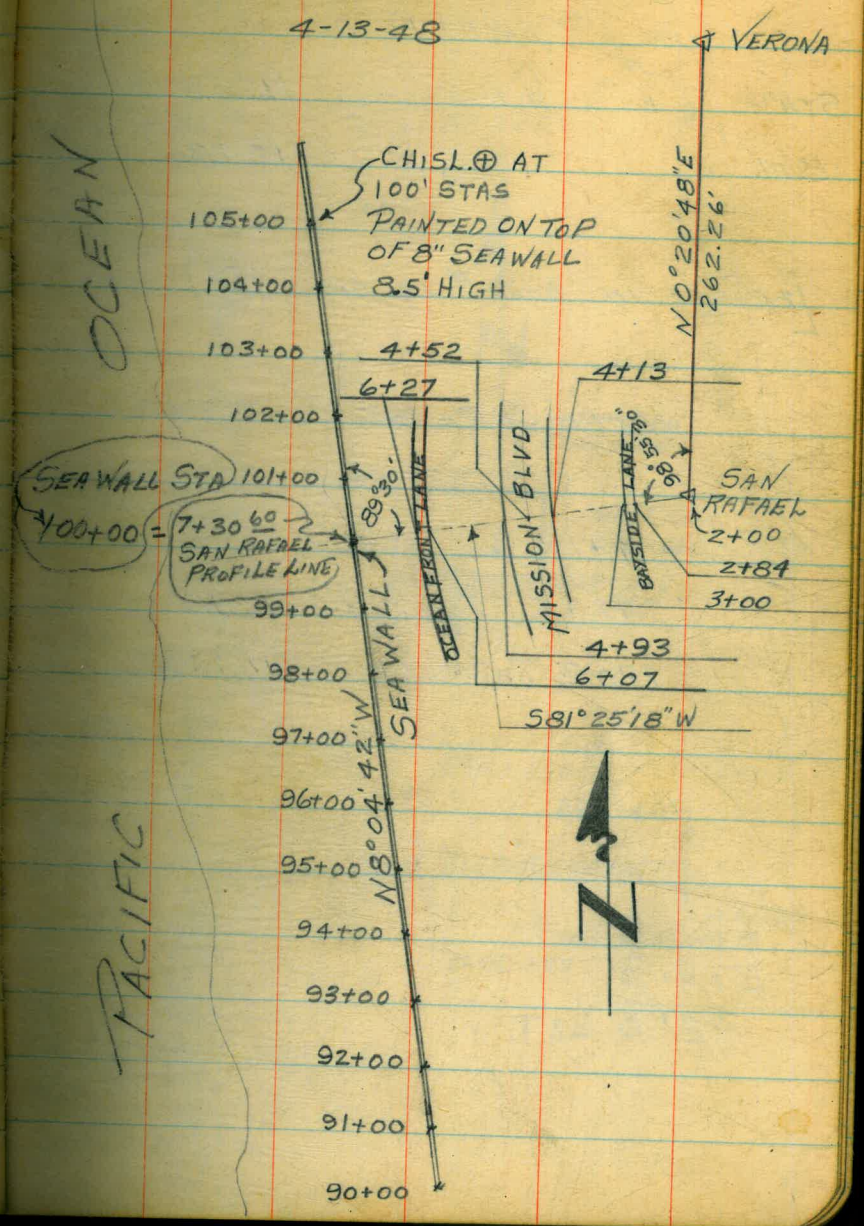
Indexed

(13)

BASELINE LAYOUT OF T. Stamper

SAN RAFAEL PROFILE DATA

4-13-48



LAYOUT OF PROPOSED H_2O CONTROL PIPE AT MODEL YACHT POND

STA	+	H.I.	-	ELEV.	GRADE
B.M.				12.23	

[PROFILE IN BOOK # 18 PAGE (70)]

NOTE GRADES PG. 27 & 40

℄ Box = 4+18.3

111.65 To B.L. = 5+29.95

130.3 To End Ext = 6+60.25

660.3
578.3
82'0 EXT.

4+18.3
111.65
529.95

578.30
529.95
48.35

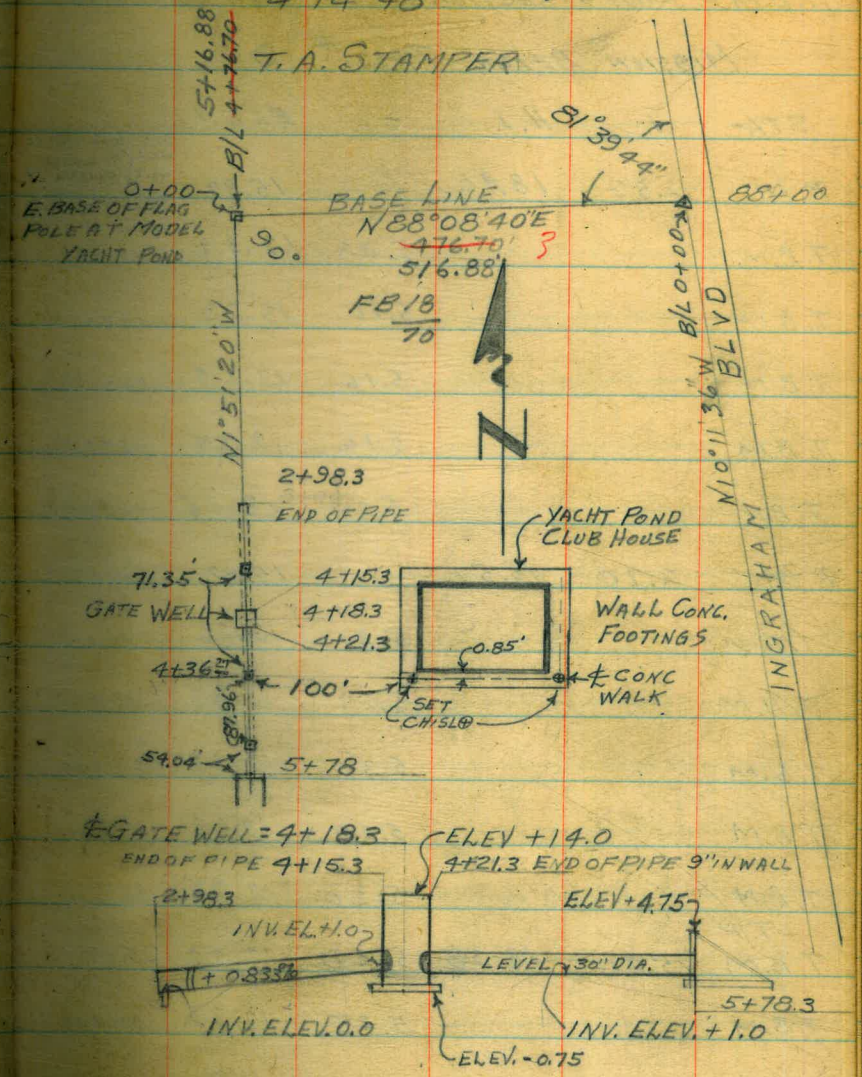
529.95
130.3
660.25

4-14-48

Indexed

(17)

T. A. STAMPER



NOTE: PROFILE

BARRAGAN
SHERRY
STANLEY

9-15-48

T.B.M.'s FOR X-SECTIONS OF SEA SHORE LINE

MISSION BEACH PROJ. # 9

STA-	+	H.I.	-	ELEV	
B.M.	2.53	18.40		15.87	STA-100+00 TOP OF WALL (PL. OF SEA WALL & SAN FRANCISCO
					BLUE X AT BOTTOM W/SIDE OF WALL
T.B.M.			5.08	13.32	101+00
T.B.M			5.11	13.29	102+00
T.B.M			5.16	13.24	103+00
T.B.M			5.16	13.24	104+00
T.B.M			5.24	13.16	105+00
B.M	2.70	18.57		15.87	100+00
T.B.M			5.31	13.26	100+00
T.B.M			5.24	13.33	99+00
T.B.M			5.30	13.27	98+00
T.B.M			5.24	13.33	97+00
T.B.M			5.20	13.37	96+00
T.P T.B.M	5.21	18.58	5.20	13.37	95+00
T.B.M			5.25	13.33	94+00
T.B.M			5.26	13.32	93+00
T.B.M			5.25	13.33	92+00
T.B.M			5.26	13.32	91+00
T.B.M			5.26	13.32	90+00

15.87
2.53
18.40

15.87
2.70
18.57

13.37
5.21
18.58

9-15-48

ORIGINAL

4-15-48

X-SECTIONS OF SEA SHORE LINE MISSION BEACH PROJ #9

STA - 105+00

0+00 = STA - 105+00 ON ℄ SEA WALL : SECT AT 90° TO SEA WALL

DIST	+	H.I.	−	ELEV	
T.B.M	+0.06	13.22		13.16	105+00
0+01			1.2	12.0	
0+50			4.1	9.1	
0+75			5.3	7.9	
1+00			5.5	7.7	
1+15			5.4	7.8	
1+75			9.1	4.1	
185 2+60			11.1	2.1	
247 3+22			11.8	1.4	
310 3+85			13.1	0.1	
350 4+25			14.0	-0.8	

Inclosed

4-15-48

(16)

STA - 104+00

0+00 = STA - 104+00 ON SEA WALL : SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M	+0.38	13.62		13.24	104+00
0+01			1.0	12.6	
0+30			3.6	10.0	
0+60			5.2	8.4	
1+00			5.8	7.8	
112 1+72			9.5	4.1	
180 2+40			11.3	2.3	
262 3+22			12.3	1.3	
320 3+80			14.0	-0.4	

4-15-18

STA-103+00

0+00 = STA-103+00 ON SEAWALL : SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M.	0.28	13.52		13.24	103+00
0+01			0.9	12.6	
0+30			3.7	9.8	
0+60			5.2	8.3	
1+00			6.9	7.1	
1+45 (85)			8.9	5.1	
2+13 (153)			10.9	2.6	
2+80 (220)			12.1	1.4	
3+72 (312)			14.1	-0.6	

4-15-18

(17)

STA-102+00

0+01 = STA-102+00 ON SEAWALL : SECT. AT 90° TO SEA WALL

DIST	+	H.I.	−	ELEV	
T.B.M.	0.16	13.45		13.29	102+00
0+01			0.7	12.7	
0+30			3.7	9.7	
0+60			5.3	8.1	
1+00			6.1	7.3	
1+36 (76)			8.1	5.3	
2+15 (155)			11.1	2.3	
2+82 (222)			12.3	1.1	
3+70 (310)			14.0	-0.6	

4-15-48

PX

STA-101+00

0+00 = STA-101+00 ON SEA WALL: SECT. AT 90° TO WALL.

DIST	+	H.I.	−	ELEV	
T.B.M.	0.07	13.39		13.32	101+00
0+01			0.7	12.7	
0+30			3.7	9.7	
0+60 (π)			5.2	8.2	
1+00			5.9	7.5	
1+50 (90)			9.1	4.3	
2+10 (150)			11.1	2.3	
2+80 (220)			12.2	1.2	
3+22 (262)			13.1	0.3	
3+68 (308)			14.0	-0.6	

4-15-48

(18)

STA-100+00

0+00 = STA-100+00 ON SEA WALL: SECT. AT 90° TO WALL.

PX

DIST	+	H.I.	−	ELEV	
T.B.M.	0.23	13.49		13.26	100+00
0+08			1.9	11.6	
0+30 (π)			4.2	9.3	
0+50			5.3	8.2	
1+00			6.5	7.0	
1+51 (101)			9.6	3.9	
2+05 (155)			11.3	2.2	
2+63 (213)			12.4	1.1	
3+12 (262)			13.4	0.1	
3+75 (325)			14.5	-0.5	

7-15-15

RX

STA - 99+00

0+00 = STA - 99+00 ON SEA WALL: SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M	0.48	13.81		13.33	99+00
0+01			1.3	12.5	
0+30			4.2	9.6	
0+50			5.2	8.6	
1+00			6.9	6.9	
90					
1+40			9.5	4.3	
152					
2+02			11.7	2.1	
220					
2+70			12.8	1.0	
300					
3+50			14.1	-0.3	

7-15-15

STA - 98+00

RX

0+00 = STA - 98+00 ON SEA WALL: SECT. AT 90° TO WALL.

DIST	+	H.I.	−	ELEV	
T.B.M	0.48	13.75		13.27	98+00
0+01			0.7	13.0	
0+75			3.9	9.8	
0+50			5.3	8.4	
1+00			6.8	7.0	
108					
1+58			10.5	3.2	
175					
2+25			12.0	1.7	
235					
2+85			13.1	0.6	
290					
3+40			13.7	0.0	

1-15-48

STA-97+00

0+00 = STA-97+00 ON SEA WALL : SECT AT 90° TO WALL.

DIST	+	H.I.	−	ELEV	
T.B.M	0.28	13.61		13.33	97+00
0+01			1.5	12.1	
0+25			4.0	9.6	
0+50			5.3	8.3	
1+00			6.9	6.7	
1+63 (113)			10.6	3.0	
2+25 (175)			11.9	1.7	
2+85 (235)			12.8	0.8	
3+53 (303)			13.8	-0.2	

1-15-48

(20)

STA-96+00

0+00 = STA-96+00 ON SEA WALL : SECT AT 90° TO WALL.

DIST	+	H.I.	−	ELEV	
T.B.M	0.28	13.65		13.37	96+00
0+01			1.8	11.8	
0+25			4.0	9.6	
0+50			5.2	8.4	
1+30 (107)			7.0	6.6	
1+57 (172)			10.5	3.1	
2+22 (240)			12.0	1.6	
2+80 (297)			13.1	0.5	
3+97			13.7	-0.1	

9-15-18

PX

STA-95+00

0+00=STA-95+00 ON SEA WALL: SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M	0.47	13.84		13.37	95+00
0+01			2.3	11.5	
0+25			4.2	9.6	
0+50			5.4	8.4	
1+00			6.9	6.9	
1+55 (105)			10.5	3.3	
2+23 (173)			12.2	1.6	
2+71 (221)			13.1	0.7	
3+42 (292)			13.7	+0.1	

9-15-18

(21)

PX

STA-94+00

0+00=STA-94+00 ON SEAWALL: SECT. AT 90° TO B/L.

DIST	+	H.I.	−	ELEV	
T.B.M	0.11	13.14		13.33	94+00
0+01			1.6	11.8	
0+25			3.9	9.5	
0+50			5.2	8.2	
1+00			6.6	6.8	
1+58 (108)			10.3	3.1	
2+20 (170)			11.8	1.6	
2+80 (230)			12.7	0.7	
3+65 (315)			13.7	−0.3	

4-15-48

STA - 93+00

0+00 = STA - 93+00 ON SEA WALL : SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M	0.26	13.58		13.32	93+00
0+01			1.2	12.4	
0+25			3.7	9.9	
0+50			5.2	8.4	
1+00			7.2	6.4	
1+58 (108)			10.4	3.2	
2+25 (175)			11.8	2.8	
2+80 (230)			12.9	0.7	
3+13 (263)			13.7	−0.1	

4-15-48

(21)

STA - 92+00

0+00 = STA - 92+00 ON SEA WALL : SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M	0.25	13.58		13.33	92+00
0+01			1.2	12.4	
0+25			3.8	9.8	
0+50			5.3	8.3	
1+00 (107)			6.8	6.8	
1+57 (175)			10.2	3.4	
2+25 (230)			11.7	1.9	
2+80 (283)			12.6	1.0	
3+33			13.9	−0.3	

4-15-48

STA-91+00

0+00 = STA-91+00 ON SEA WALL : SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M	0.06	13.38		13.32	91+00
0+08			2.8	10.6	
0+25			4.1	9.3	
0+50			5.3	8.1	
1+00			6.2	7.2	
1+55 (105)			9.9	3.5	
2+15 (165)			11.4	2.0	
2+81 (231)			12.1	1.3	
3+40 (290)			13.5	−0.1	

4-15-48

(23)

STA-90+00

0+00 = STA-90+00 ON SEA WALL: SECT. AT 90° TO WALL

DIST	+	H.I.	−	ELEV	
T.B.M	0.37	13.69		13.32	90+00
0+01			2.0	11.7	
0+25			4.0	9.7	
0+50			5.3	8.4	
1+00 (110)			6.9	6.8	
1+60 (170)			10.4	3.3	
2+20 (233)			11.7	2.0	
2+83 (270)			12.0	1.7	
3+20			13.3	+0.4	

7-26-46

STA-90+00

ANGLE	SOUND	TIDE TIME	EL TIDE	DIST
20°40'	25	09:18	(1.4)	
23°05'	23'	09:19	"	
24°40'	21'	09:20	"	
26°00'	15'	09:21	"	
25°50'	13.0	09:22	"	
26°43'	13.0	09:23	"	
27°45	13.0	09:25	"	

STA-105+00

ANGLE	SOUND		
26°24'	15.0	09:55	(1.9)
31°30'	12.0	10:02	(1.9)
35°16'	2.5	10:03	(1.9)
38°55'	7.0	10:04	(1.9)

SOUNDINGS PROJ #9 OCEAN FRONT

(27)

STA-95+00

Indexed

ANGLE	SOUND	TIME	TIDE
	14.0		
29°20'	12.0	09:30	(1.5)
30°10'	12.0	09:31?	(1.5)
30°30"	8.5	09:42	(1.6)

STA 100+00

27°39'	16.0	09:45	(1.7)
29°00'	11.0	"	"
30°25'	10.5	09:46	"
32°36	8.0	"	"

7-26-18

PROJ NO. 9 ORIGINAL X-SEC. DETAIL OF GROIN

STA - 123+85

0+00 = STA - 123+85 W/SHORE B/L: SECT. AT 109°26' TO B/L

DIST	+	H.I.	-	ELEV	
B.M	5.04	13.4		8.33	STA-123+03 ⊗ to W/L
0+00			5.1 4.4	8.3	
0+11			4.4	9.0	
0+17			5.4	8.0	
0+52			5.6	7.8	
0+81			6.5	6.9	
1+02			7.7	5.7	
1+20 LATH	SOUND		9.5	3.9 SOUND	
1+30	0.4	+3.5	2+20	6.0	-2.1
13:45 1+40	0.7	+3.2		6.0	-2.1
3.9 1+50	1.1	+2.8	3.9	6.6	-2.7
1+60	1.4	+2.5	50	6.8	-2.9
1+70	2.0	+1.9		7.0	-3.1
1+80	3.1	+0.8		7.0	-3.1
1+90	4.7	-0.8	13:48	7.1	-3.2
2+00	6.0	-2.1		7.5	-3.6
2+10	5.5	-1.6	3+00	7.3	-3.4

0+00 = STA-124+10 W/SHORE B/L: SOUND EAST.

DIST	+	H.I.	-	ELEV	
B.M	5.12	13.4		8.33	123+03
0+00			5.1	8.3	
0+27			4.8	8.6	
0+78			5.5	7.9	
0+82			5.5	7.9	
1+22			5.8	7.6	
1+30			7.7	5.7	
DIST of 1+40	SOUND		DIST	SOUND	
1+50	0.8	+3.1	2+60	7.1	-3.2
1+60	1.5	+2.4		7.4	-3.5
13:30	2.0	+1.9	3.9	7.5	-3.6
3.9	3.2	+0.7		7.5	-3.6
	4.6	-0.7	3+00	7.5	-3.6
2+00	5.9	-2.0			
	6.0	-2.1			
	6.0	-2.1			
	6.0	-2.1			
	6.8	-2.9			
2+50	6.7	-2.8			

7-26-18

STA-124+25

0+00 = STA. 124+25 W/SHORE B/L: SECT. AT 109°26" TO B/L

DIST	+	H.I.	−	ELEV	
B.M.	5.09	13.4		8.33	STA 123+00
0+00			5.1	8.3	
0+14			5.0	8.4	
0+27			5.9	7.5	
0+39			8.0	5.4	
0+57			8.3	5.1	
0+78			8.7	4.7	
1+20			6.9	6.5	
1+32			7.9	5.5	
1+40 LATH.			9.4	4.0	
DIST	SOUND		DIST	SOUND	
1+50	0.4	+3.5	2+30	6.0	-2.1
+60	1.1	+2.8		6.6	-2.7
13:55	2.0	+1.9	50	6.9	-3.0
(3.9)	3.3	+0.6	(3.9)	7.0	-3.1
	4.5	-0.6		7.2	-3.3
2+00	6.0	-2.1		7.5	-3.6
	6.0	-2.1		7.5	-3.6
2+20	6.0	-2.1	3+00	7.1	-3.2

7-26-18

(26)

STA-124+40

0+00 = STA-124+40 W/SHORE B/L: SECT. AT 109°26' TO B/L.

DIST	+	H.I.	−	ELEV	
B.M	5.02	13.3		8.33	123+00
0+00			5.1	8.2	
0+14			5.1	8.2	
0+28			6.2	7.1	
0+41			8.0	5.3	
0+65			8.2	5.1	
0+80			8.6	4.7	
1+30			9.3	4.0	
DIST	SOUND		DIST	SOUND	
1+40	0.2	+3.7	2+40	6.4	-2.5
50	0.7	+3.2	50	6.7	-2.8
13:12	1.7	+2.2		7.0	-3.1
	3.1	+0.8		7.1	-3.2
(3.9)	4.1	-0.5	(3.9)	7.1	-3.2
	5.0	-1.1		7.3	-3.4
2+80	6.5	-2.6	3+00	7.5	-3.6
	6.6	-2.7			
	6.4	-2.5			
2+30	6.0	-2.1			

+3.71

FLOWLINE GRADES FOR TIDE WATER CONTROL STRUCTURE FOR MODEL YACHT POOL

STA	+	H.I.	−	ELEV. GRADE	CUT
B.M.				12.23	
	2.50	14.73			
5+78			10.13	4.60	+1.0 3.60
5+62			8.00	6.73	+1.0 5.73
5+46			6.13	8.60	+1.0 7.60
5+30			4.75	9.98	+1.0 8.98
5+14			5.05	9.68	+1.0 8.68
4+98			4.75	9.98	+1.0 8.98
4+82			4.95	9.78	+1.0 8.78
4+66			4.22	10.51	+1.0 9.51
B.M.	5.45	17.68		12.23	
4+50			6.88	10.80	+1.0 9.80
4+34			7.83	9.85	+1.0 8.85
4+22			9.33	8.35	+1.0 7.35
4+16			9.26	8.42	+1.0 7.42
	+	H.	−	10.51	
T.P	3.72	14.23		10.51	
			10.57	3.66 ≠	TOP of PIPE NORTH END
			10.52	3.74	TOP of PIPE SOUTH END
				3.71 ≠ 3.74	

NOTE; LAYOUT SKETCH (P.14)

12.23
5.45
17.68

17.68
10.51
7.17

14.23
10.52
3.71

CURRENT FINAL — BARRAGAN SHERRY STANLEY — 5-3-98

SOUNDINGS OF DE-ANZA COVE - PROJECT # 3-1

PT

STA - 92+00

0+00 = STA - 92+00 DE-ANZA COVE B/L : SOUND SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+ ?		2+00	10.0	- 7.7
+46	0.0	+2.3		9.8	- 7.5
50	1.5	+0.8		9.3	- 7.0
11:25	4.0	- 1.7	(2.3)	9.1	- 6.8
(2.3)	5.5	- 3.2		9.2	- 6.9
	6.1	- 3.8	50	10.0	- 7.7
	6.5	- 4.2		10.0	- 7.7
1+00	7.1	- 4.8		10.0	- 7.7
	7.8	- 5.5		10.0	- 7.7
	8.7	- 6.4		10.0	- 7.7
	10.2	- 7.9	3+00	10.0	- 7.7
	10.3	- 8.0		10.1	- 8.1
50	10.1	- 7.8		11.0	- 8.7
	10.2	- 7.9		10.5	- 8.2
	10.2	- 7.9		10.9	- 8.6
	10.2	- 7.9	3+50	10.6	- 8.3
1+90	10.1	- 7.8	3+60	10.8	- 8.5

STA - 92+00 — 5-3-98 — (28)

PT — Indexed

DIST	SOUND		DIST	SOUND
3+70	10.3	- 8.0		
(2.3)	10.1	- 7.8		
11:30	10.1	- 7.8		
4+00	10.2	- 7.9		
(2.2)	10.2	- 8.0		
	10.2	- 8.0		
	10.4	- 8.2		
	10.6	- 8.4		
50	10.3	- 8.3		
	10.5	- 8.3		
	9.8	- 7.6		
	9.0	- 6.8		
	8.1	- 5.9		
5+00	8.1	- 5.9		
	6.8	- 3.6		
	5.3	- 3.1		
	2.1	- 0.2		
5+70	0.0	+ 2.2		
11:32				

PX

STA-91+00

5-3-18

0+00 = STA-91+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+ ?	—	2+10	10.5	-8.4
0+15	0.0	+2.2		10.5	-8.4
50	2.7	-0.5		10.4	-8.3
11:40	5.0	-2.8	(2.1)	10.8	-8.7
(2.1)	5.9	-3.8	50	10.7	-8.6
	7.4	-5.3		10.5	-8.4
	8.0	-5.9		10.1	-8.0
1+00	9.2	-7.1	11:43	10.5	-8.3
	9.3	-7.2		10.4	-8.2
	10.3	-8.1	3+00	10.2	-8.1
	10.5	-8.4		10.2	-8.1
	10.5	-8.4		10.1	-8.0
50	10.5	-8.4		10.1	-8.0
	10.5	-8.4		10.0	-7.9
	10.4	-8.3	50	10.1	-8.0
	10.4	-8.3		10.2	-8.1
	10.4	-8.3		10.2	-8.1
2+00	10.4	-8.3	3+80	10.3	-8.2

STA-91+00

PX

5-3-18

(29)

DIST	SOUND		DIST	SOUND	
3+90	10.4	-8.3	5+90	9.5	-7.4
4+00	10.0	-7.9	6+00	9.4	-7.3
	10.0	-7.9		9.4	-7.3
	10.2	-8.1	(2.1)	8.5	-6.4
(2.1)	10.0	-7.9		7.8	-5.7
	10.5	-8.4		6.2	-4.1
50	10.5	-8.4	50	4.7	-2.6
	10.4	-8.3		3.0	-0.9
11:45	10.4	-8.3		2.3	+0.2
	10.3	-8.2	6+78	0.0	+2.1
	10.3	-8.2	11:49		
5+00	10.3	-8.2			
	10.2	-8.1			
	10.4	-8.3			
	10.3	-8.2			
	10.2	-8.1			
50	10.2	-8.1			
	10.0	-7.9			
	9.8	-7.7			
5+80	9.5	7.4			

5-3-48

PX STA - 90+00

6+00 = STA - 90+00 DE ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
6+00	+ ?	—	2+10	10.2	-8.7
+30	0.0	+1.5		9.8	-8.3
50	1.0	+2.5	(1.5)	9.7	-8.2
12:45	1.2	-2.7		9.5	-8.0
(1.5)	5.0	-3.5	50	9.5	-8.0
	6.5	-4.0		10.0	-8.5
	7.1	-5.6		9.8	-8.3
1+00	8.8	-7.3		10.1	-8.6
	9.6	-8.1		10.5	-9.0
	10.2	-8.7	3+00	10.2	-8.7
	10.0	-8.5		10.2	-8.7
	10.1	-8.6		10.9	-9.4
50	10.1	-8.6		10.9	-9.4
	10.5	-9.0		10.8	-9.3
	10.5	-9.0	50	10.7	-9.2
	10.4	-8.9		10.5	-9.0
	10.7	-9.2	12:48	10.8	-9.3
2+00	10.5	-9.0	3+80	10.9	-9.4

5-3-48

PX STA - 90+00

DIST	SOUND		DIST	SOUND	
3+90	10.8	-9.3	5+90	10.6	-9.1
4+00	10.9	-9.4	6+00	10.5	-9.0
	10.9	-9.4	12:50	10.5	-9.0
	11.0	-9.5		10.8	-9.3
(1.5)	10.8	-9.3	(1.5)	10.8	-9.3
	10.5	-9.0		10.8	-9.3
50	10.2	-8.7	50	10.5	-9.0
	10.9	-9.4		10.1	-8.6
	10.9	-9.4		9.3	-7.8
	10.4	-8.9		8.0	-6.5
	10.2	-8.7		6.5 / ~~8.~~	-5.0
5+00	10.2	-8.7	7+20	5.3	-3.8
	9.7 / ~~10.~~	-8.2		4.0	-2.5
	9.7	-8.2	7+30	0.0	+1.5
	9.7	-8.2	12:52		
	10.0	-8.5			
50	10.1	-8.6			
	10.2	-8.7			
	10.5	-9.0			
5+80	10.5	-9.0			

5-3-18

PX STA-89+00

0+00 = STA-89+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+?	—	2+10	10.2	-8.8
+40	0.0	+1.4		10.1	-8.7
50	4.0	-2.6	(1.4)	10.4	-9.0
13:00	4.5	-3.1		10.4	-9.0
(1.4)	7.1	-5.7	50	10.8	-9.4
	7.7	-6.3		10.0	-8.6
	8.4	-7.0		10.4	-9.0
1+00	8.5	-7.1		10.7	-9.3
	8.7	-7.3		11.1	-9.7
	9.4	-8.0	3+00	11.2	-9.8
	10.0	-8.6		11.2	-9.8
	10.1	-8.7		11.2	-9.8
50	10.0	-8.6		11.4	-10.0
	9.7	-8.3		11.4	-10.0
	9.5	-8.1	50	11.4	-10.0
	9.5	-8.1		11.4	-10.0
	9.4	-8.0		11.4	-10.0
2+00	10.0	-8.6	3+80	11.3	-9.7

STA-89+00 PX 5-3-18 (31)

DIST	SOUND		DIST	SOUND	
3+90	11.5	-10.1	5+90	9.4	-8.0
4+00	11.2	-9.8	6+00	9.4	-8.0
13:05	11.0	-9.6		9.4	-8.0
	11.0	-9.6		9.5	-8.1
(1.4)	11.1	-9.7	(1.4)	9.6	-8.2
	11.5	-10.1		9.3	-7.9
50	11.8	-10.4	50	9.0	-7.6
	11.5	-10.1		9.2	-7.8
	10.0	-8.6		9.2	-7.8
	9.3	-7.9		8.7	-7.3
	9.0	-7.6		7.8	-6.4
5+00	9.0	-7.6	7+00	6.8	-5.4
	9.2	-7.8		5.0	-3.6
	9.2	-7.8		3.8	-2.4
	9.2	-7.8	7+30	0.0	+1.5
	9.0	-7.6	13:09		
50	9.0	-7.6			
	9.0	-7.6			
	9.4	-8.0			
5+80	9.4	-8.0			

5-3-18

PX STA-88+00

0+00 = STA-88+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+ ?		2+30	9.6	-8.3
+40	0.0	+1.3		9.4	-8.1
50	3.3	-2.0		9.2	-7.9
13:18	4.5	-3.2	(1.3)	9.5	-8.2
(1.3)	5.4	-4.1	50	10.0	-8.7
	6.2	-4.9		10.6	-9.3
	6.7	-5.4		10.8	-9.5
1+00	7.8	-6.5		11.0	-9.7
	8.0	-6.7	13:20	11.1	-9.8
	8.2	-6.9	3+00	11.0	-9.7
	9.0	-7.7		10.8	-9.5
	9.0	-7.7		10.8	-9.5
50	9.0	-7.7		10.5	-9.2
	9.0	-7.7		10.5	-9.2
	9.0	-7.7	50	10.7	-9.4
	9.1	-8.1		10.7	-9.4
	9.1	-8.1		10.8	-9.5
2+00	9.5	-8.2	3+80	10.8	-9.5

STA-88+00 PY 5-3-18 (32)

DIST	SOUND		DIST	SOUND	
3+90	10.9	-9.6	5+90	9.8	-8.5
4+00	10.9	-9.6	6+00	9.0	-7.7
	11.0	-9.7		8.7	-7.4
(1.3)	11.1	-9.8	(1.3)	8.4	-7.1
	11.3	-10.0		8.5	-7.2
	12.4	-11.1		8.4	-7.1
50	11.8	-10.5	50	8.0	-6.7
	10.4	-9.1		8.0	-6.7
	10.4	-9.1		7.7	-6.4
13:22	10.0	-8.7		7.4	-6.1
	10.0	-8.7		6.0	-4.7
5+00	10.0	-8.7	7+00	4.5	-3.2
	9.9	-8.6		2.8	-1.5
	9.8	-8.5	13:25	0.5	+0.8
	9.8	-8.5	7+23	0.0	+1.5
	10.0	-8.7			
50	10.0	-8.7	50		
	10.0	-8.7			
	10.4	-9.1			
5+80	9.8	-8.5			

PX

STA-87+00

0+00 = STA-87+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+?	—	2+00	10.5	-9.3
+38	0.0	+1.2		10.8	-9.6
+70	0.8	+0.4		11.2	-10.0
13:33					
50	3.2	-2.0		10.4	-9.2
(1.2)	5.5	-4.3	(1.2)	9.7	-8.5
	6.5	-5.3	50	9.6	-8.4
	7.3	-6.1		9.6	-8.4
	8.7	-7.5		9.6	-8.4
1+00	9.1	-7.9		9.6	-8.4
	9.8	-8.6		9.5	-8.3
	9.7	-8.5	3+00	9.5	-8.3
	9.7	-8.5		9.4	-8.2
	9.8	-8.6		9.5	-8.3
50	10.2	-9.0		9.5	-8.3
13:35					
	10.2	-9.0		9.5	-8.3
	10.2	-9.0	50	9.7	-8.5
	10.2	-9.0		9.5	-8.3
1+90	10.2	-9.0	3+70	9.7	-8.5

PX

5-3-78

(33)

DIST	SOUND		DIST	SOUND	
3+80	9.8	-8.6	5+80	9.6	-8.4
	9.8	-8.6	13:40	9.8	-8.6
4+00	10.0	-8.8	6+00	9.5	-8.3
13:38					
	10.4	-9.2		9.5	-8.3
	10.8	-9.6		9.7	-8.5
(1.2)	11.3	-10.1	(1.2)	9.9	-8.5
	10.0	-8.8		9.5	-8.3
50	10.2	-9.0	50	9.7	-8.2
	9.8	-8.6		9.7	-8.5
	9.8	-8.6		7.0	-5.8
	9.7	-8.5		6.8	-5.6
	9.8	-8.6		4.5	-3.3
5+00	9.6	-8.4	7+00	4.0	-2.8
	9.5	-8.3		2.6	-1.4
	10.0	-8.8	7+20	0.0	+1.2
	9.7	-8.5	13:42		
	9.5	-8.3			
50	9.5	-8.3			
	9.4	-8.2			
5+70	9.4	-8.2			

5-3-18

PX STA-86+00

0+00 = STA-86+00 DE ANZA COVE B/L. SOUND DUE SOUTH

DIST	SOUND		SOUND	SOUND	
0+00	+ ?	—	2+10	10.7	-9.5
+40	0.0	+1.2		10.8	-9.6
+50	3.5	-2.3		9.8	-8.6
13:50	3.8	-2.6	(1.2)	9.8	-8.6
(1.2)	5.1	-4.2	50	10.0	-8.8
	6.5	-5.3		10.5	-9.3
	7.8	-6.6	13:53	10.9	-9.7
1+00	7.8	-6.6		11.0	-9.8
	8.1	-7.2		10.9	-9.7
	8.8	-7.6	3+00	10.7	-9.5
	10.0	-8.8		10.7	-9.5
	10.1	-8.9		10.5	-9.3
50	10.0	-8.8		10.5	-9.3
	10.0	-8.8		10.5	-9.3
	10.0	-8.8	50	10.5	-9.3
	10.3	-9.1		10.6	-9.4
	10.4	-9.2		10.7	-9.5
2+00	10.5	-9.3	3+80	10.5	-9.3

STA-86+00 PX

DIST	SOUND		DIST	SOUND	
3+90	10.8	-9.6	5+90	9.8	-8.6
4+00	10.4	-9.2	6+00	10.0	-8.8
	10.6	-9.4		10.0	-8.8
	11.0	-9.8		9.6	-8.4
(1.2)	12.0	-10.8	(1.2)	10.5	-9.3
	12.3	-11.1		10.5	-9.3
50	10.5	-9.3	50	10.5	-9.3
	9.8	-8.6		8.0	-6.8
	9.6	-8.4		6.4	-5.2
13:55	9.4	-8.2		5.3	-4.1
	9.2	-8.0		5.0	-3.8
5+00	9.0	-7.8	7+00	4.5	-3.3
	9.0	-7.8		2.5	-1.3
	9.0	-7.8		0.2	+1.0
	9.0	-7.8	7+22	0.0	+1.2
	9.0	-7.8	13:59		
50	9.2	-8.0			
	9.1	-8.1			
	9.0	-8.1			
5+80	9.0	-8.1			

5-3-18

(37)

STA-85+00 PX 5-3-18

0+00 = STA-85+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+ ?		2+10 3+00	9.2	-8.0
+10	0.0	+1.2		9.0	-7.8
+50	3.0	-1.8		9.5	-8.3
14:05	4.8	-3.6	(1.2)	9.9	-8.7
	5.5	-4.3	50	10.5	-9.3
(1.2)	7.2	-6.0	~~50~~	10.5	-9.3
	8.5	-7.3		10.5	-9.3
1+00	8.8	-7.6		10.1	-8.9
	9.7	-8.5		10.0	-8.8
	10.0	-8.8	3+00	10.0	-8.8
	10.5	-9.3		10.2	-9.0
	10.5	-9.3		10.2	-9.0
50	10.5	-9.3	14:08	10.2	-9.0
	10.0	-8.8		10.2	-9.0
	10.0	-8.8	50	10.2	-9.0
	10.1	-8.9		10.5	-9.3
	10.0	-8.8		10.6	-9.4
2+00	9.8	-8.6	3+80	10.7	-9.5

STA-85+00 5-3-18 PX (35)

DIST	SOUND		DIST	SOUND	
3+30	10.7	-9.5	5+90	8.8	-7.6
4+00	11.0	-9.8	6+00	9.0	-7.8
	11.5	-10.3		9.0	-7.8
	11.5	-10.3		9.0	-7.8
(1.2)	11.0	-10.8	(1.2)	8.8	-7.6
	10.0	-8.8		8.1	-6.9
50	9.8	-8.6	50	7.6	-6.4
	9.4	-8.2		7.0	-5.8
	9.1	-7.9		6.8	-5.6
	9.1	-7.9		5.4	-4.2
	9.1	-7.9		4.7	-3.5
5+00	9.0	-7.8	7+00	3.4	-2.2
	9.0	-7.8		2.2	-1.0
	9.0	—	7+18	0.0	+1.2
	9.0	—	14:13		
	9.0	—			
50	9.0	-7.8			
	8.8	-7.6			
	8.5	-7.3			
5+80	8.7	-7.5			

5-3-18

PX

STA-84+00

0+00 = STA-84+00 DE ANZA COVE B/L; SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+?		2+10	12.0	-10.8
+12	0.0	+1.2		11.0	-9.8
+50	3.4	-2.2		10.1	-8.9
14:20	5.0	-3.8	(1.2)	9.8	-8.6
	6.1	-4.9	50	10.2	-9.0
(1.2)	7.5	-6.3		10.3	-9.1
	8.8	-7.6		10.5	-9.3
1+00	9.9	-8.7		10.2	-9.0
	10.0	-8.8	14:23	10.2	-9.0
	10.2	-9.0	3+00	10.2	-9.0
	10.3	-9.1		10.2	-9.0
	10.6	-9.4		10.0	-8.8
50	10.5	-9.3		10.3	-9.1
	10.7	-9.5		10.4	-9.2
	10.8	-9.6	50	10.4	—
	10.9	-9.7		10.4	—
	11.4	-10.2		10.4	—
2+00	12.5	-11.3	3+80	10.7	-9.5

STA-84+00

5-3-18

PX

(36)

DIST	SOUND		DIST	SOUND	
3+90	10.2	-9.0	5+90	8.8	-7.6
4+00	10.5	-9.3	6+00	8.7	-7.5
	11.0	-9.8		8.5	-7.3
(1.2)	11.8	-10.6	(1.2)	8.3	-7.1
	11.5	-10.3		8.0	-6.8
14:25	10.0	-8.8		7.5	-6.3
50	9.5	-8.3	50	7.2	-6.0
	9.3	-8.1		6.7	-5.5
	9.2	-8.0		6.3	-5.1
	9.0	-7.8		5.8	-4.6
	9.0	—		5.5	-4.3
5+00	9.0	—	7+00	4.0	-2.8
	9.0	—		2.0	-0.8
	9.0	—	7+18	0.0	+1.2
	9.1	-7.9	14:29		
	9.2	-8.0			
50	9.0 ~~9.0~~	-7.8			
	9.2	-8.0			
	9.0	-7.8			
5+80	9.0	—			

5-2-48

PX

STA - 83+00

0+00 = STA - 83+00 DE-ANZA COVE E/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+?		2+10	10.0	- 8.8
+40	0.0	+1.2		9.8	- 8.6
+50	4.0	- 2.8	(1.2)	11.0	- 9.8
14:40	4.9	- 3.7		10.7	- 9.5
	6.7	- 5.5	50	10.7	—
(1.2)	8.8	- 7.6	14:43	10.9	- 9.7
	9.0	- 7.8		10.9	—
1+00	9.5	- 8.3		10.8	- 9.6
	9.9	- 8.7		10.7	- 9.5
	10.1	- 8.9	3+00	10.7	—
	10.1	—		10.6	- 9.4
	10.3	- 9.1		10.4	- 9.2
50	10.3	—		10.3	- 9.1
	10.5	- 9.3		10.3	—
	10.8	- 9.6	50	10.5	- 9.3
	10.8	—		10.5	—
	10.7	- 9.5		10.6	- 9.4
2+00	10.7	—	3+80	10.8	- 9.6

STA - 83+00

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PX

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DIST	SOUND		DIST	SOUND	
3+90	11.0	- 9.8	5+90	9.5	- 8.3
4+00	11.1	- 9.9	6+00	9.5	—
	10.4	- 9.2		9.5	—
(1.2)	10.1	- 8.9	(1.2)	9.0	- 7.8
14:45	9.8	- 8.6		7.6	- 6.4
	9.7	- 8.5		7.3 6.3	- 6.1
50	9.7	—	50	6.8	- 5.6
	9.5	- 8.3		5.8	- 4.6
	9.5	—		5.0	- 3.8
	9.4	- 8.2		5.0	—
	9.1	- 7.9		3.5	- 2.3
5+00	9.1	—	7+00	3.2	- 2.0
	9.0	—		2.0	+ 0.8
	8.9	- 7.7	7+15	0.0	+ 1.2
	9.0	- 7.8	14:49		
	9.2	- 8.0			
60	9.2	—			
	9.3	- 8.1			
	9.4	- 8.2			
5+80	9.5	- 8.3			

5-3-48

STA-82+00. PX

0+00 = STA-82+00 DE ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+?		2+00	10.0	-8.7
+36	0.0	+1.3		10.3	- ~~10.0~~ 9.0
+70	2.0	-0.7		10.8	- 9.5
50	5.4	-4.1	(1.3)	10.8	—
17:58	8.0	-6.7		10.8	—
(1.3)	8.4	-7.1	50	10.6	-9.3
	9.2	-7.9		10.5	-9.2
	10.0	-8.7		10.5	—
1+00	10.0	—		10.5	—
	10.0	—		10.5	—
	10.1	-8.8	3+00	10.5	—
	10.1	—		10.7	9.7
	10.1	—		10.7	—
50	10.1	—		10.8	9.5
	10.1	—		10.8	—
	10.2	-8.9	50	10.8	—
	10.2	—		10.9	-9.6
1+90	10.1	-8.8	3+70	10.9	—

STA-82+00 5-3-48 PX (38)

DIST	SOUND		DIST	SOUND	
3+80	11.0	-9.7	5+80	10.6	-9.3
	11.1	-9.8		10.5	-9.2
4+00	11.1	—	6+00	10.5	—
	10.5	-9.2		10.0	-8.7
(1.3)	10.1	-8.8	(1.3)	8.6	-7.3
	10.3	-9.0		7.5	-6.2
	10.5	-9.2		7.0	-5.7
50	11.0	-9.7	50	6.0	-4.7
16:02	11.0	—		5.1	-3.8
	11.0	—		~~5.3~~ 4.3	-3.0
	10.7	-9.1		3.8	-2.5
	10.0	-8.7		3.8	-2.5
5+00	10.0	—	7+00	2.5	-1.2
	10.0	—	7+05	0.0	+1.3
	10.2	-8.9	15:05		
	10.5	-9.2			
	10.5	—			
50	10.5	—			
	10.5	—			
5+70	10.6	-9.3			

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STA-81+00

PX

0+00=STA-81+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST	SOUND		DIST	SOUND	
0+00	+?		2+10	10.1	-8.7
+43	0.0	+1.4		10.1	—
50	2.7	-1.3	(1.4)	10.0	-8.6
15:13	5.0	-3.6		10.0	—
	7.1	-5.7	50	10.2	-8.8
(1.4)	8.4	-7.0		10.7	-9.3
	9.4	-8.0		10.8	-9.4
1+00	9.4	-8.0		11.0	-9.6
	9.3	-7.9		11.0	—
	9.4	-8.0	3+00	11.0	—
	10.0	-8.6	15:15	10.8	-9.4
	10.2	-8.8		10.8	—
50	10.2	—		10.8	—
	10.2	—		10.8	—
	10.0	-8.6	50	10.8	—
	10.1	-8.7		10.8	—
	10.8	-9.4		10.8	—
2+00	10.1	-9.0	3+80	10.8	—

STA-81+00

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PX

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DIST	SOUND		DIST	SOUND	
3+90	11.0	-9.6	5+90	9.5	-8.1
4+00	9.7	-8.3	6+00	9.5	—
	10.3	-8.9		9.0	-7.6
	10.3	-8.9		8.5	-7.1
(1.4)	10.1	-8.7	(1.4)	7.4	-7.0
	10.5	-9.1		6.7	-5.3
50	10.8	-9.4	50	5.5	-4.1
	10.9	-9.5		5.0	-3.6
	10.8	-9.4		4.6	-3.2
	10.5	-9.1		4.0	-2.6
	10.4	-9.0		2.5	-1.1
5+00	10.2	-8.8	7+00	2.5	—
	10.2	—	7+10	0.0	+1.4
	10.1	-8.7	15:20		
	10.1	—			
	10.1	—			
50	10.1	—			
15:18	10.0	-8.6			
	10.0	—			
5+80	9.5	-8.1			

FLOW LINE GRADES OF WATER

CONTROL STRUCTURE AT MODEL YACHT POND

STA	+	H.I	−	ELEV.	GRADE	CUT
B.M				12.23		
	1.78	14.01				
4+16					1.00	
4+00			7.05	6.96	0.87	6.09
3+84			6.83	7.18	0.73	6.45
3+68			7.44	6.57	0.60	5.97
3+52			5.68	8.33	0.47	7.86
3+36			5.53	8.48	0.33	8.15
3+20			7.44	6.57	0.20	6.37
3+04			9.56	4.45	0.07	4.38
2+96					0.00	
			10.38	3.63		TOP OF PIPE
			10.7	3.3		TOP OF H_2O
	0.03	12.26				
N.W. Cor			11.54	0.72		
N.E "			11.52	0.74		
S.E "			11.54	0.72		
S.W "	8.84	9.56	8.85	0.71		

5-6-48

T. A. STAMPER

NOTE: SEE LAYOUT SKETCH (PG. 14)

BASE OF FLAG POLE AT YACHT POND

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Indexed

BARRAGAN
SHERRY
STANLEY

5-19-48

FINAL SOUNDINGS OF PROJ #3-1

P.X. DE-ANZA COVE

STA-93+00 W

0+00 = STA-93+00 DE-ANZA COVE B/L: SOUND DUE SOUTH

DIST.	SOUND		DIST	SOUND	
0+00	+P		2+10	3.2	+1.9
0+40	0.0	+4.6		3.0	+1.6
0+80	0.0	+4.6	(4.6)	2.4	+2.2
90	0.2	+4.4		1.8	+2.8
1+00	0.5	+4.1	50	1.6	+3.0
09:23	0.8	+3.8		1.4	+3.2
	0.6	+4.0		0.0	+4.6
(4.6)	0.9	+3.7		0.3	+4.3
	1.7	+2.9		0.6	+4.0
50	2.0	+2.6	3+00	0.3	+4.3
	2.5	+2.1	3+10	0.0	+4.6
	2.7	+1.9	3+40	0.0	+4.6
	3.1	+1.5			
	3.1	+1.5			
2+00	3.0	+1.6			

CURRENT FINAL

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RADIAL SOUNDINGS OF SLOPES DE-ANZA COVE

Indexed

P7

N-8 (1)

SOUND S/E

0+00 = PT. ON RADIUS 20' FROM POINT # N-8

DIST	SOUND	
0+00	+P	
+10	0.0	+4.5
+20	0.7	+3.8
09:37	2.0	+2.5
(4.5)	6.1	-1.6
50	8.2	-3.7
	9.8	-5.3
	11.4	-6.9
	12.0	-7.5
	12.5	-8.0
1+00	12.7	-8.2
	12.8	-8.3
	12.8	-8.3
	12.8	-8.3
	13.2	-8.7
1+50	13.1	-8.6

5-19-48

RADIAL SOUNDINGS OF SLOPE DE-ANZA COVE

PX N-6 ⊙ SOUND EAST

0+00 = PT. ON RADIUS 20' FROM POINT # N-6

DIST	SOUND		DIST	SOUND	
0+00	+?		1+80	12.5	-8.0
+25	0.0	+4.5		12.5	-8.0
+30	0.3	+4.2	2+00	12.7	-8.2
08:40	2.4	+2.1			
+50	5.2	-0.7			
(4.5)	8.0	-3.5			
	8.8	-4.3			
	9.0	-4.5			
	10.5	-6.0			
1+00	10.5	-6.0			
	11.0	-6.5			
	11.8	-7.3			
	12.4	-7.9			
	12.5	-8.0			
50	12.8	-8.3			
	12.6	-8.1			
1+70	12.6	-8.1			

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RADIAL SOUNDINGS OF SLOPE DE-ANZA COVE

PX N-4 ⊙ SOUND N/E

0+00 = PT. ON RADIUS 20' FROM POINT # N-4

DIST	SOUND		DIST	SOUND	
0+00	+?		1+80	12.5	-8.1
+20	0.0	+4.4		12.5	—
+30	0.9	+3.5	2+00	12.5	—
08:45	3.0	+1.4			
50	6.0	-1.6			
(4.4)	7.1	-2.7			
	9.8	-5.4			
	10.5	-6.1			
	11.4	-7.0			
1+00	11.5	-7.1			
	11.8	-7.4			
	11.8	—			
	12.0	-7.6			
	12.3	-7.9			
50	12.3	—			
	12.2	-7.8			
1+70	12.4	-8.0			

5-19-48

RADIAL SOUNDINGS OF SLOPES DE-ANZA POINT

PX

F-6

0+00 = PT.	# F-6		SOUND	EAST	
DIST	SOUND		DIST	SOUND	
0+00			2+10	12.6	-8.6
0+56	0.0	+4.0		12.6	—
60	0.2	+3.8	(4.0)	12.5	-8.5
10:20	0.6	+3.4		12.8	-8.8
	1.4	+2.6	50	12.5	-8.5
(4.0)	2.9	+1.1			
1+00	5.0	-1.0			
	5.5	-1.5			
	6.0	-2.0			
	7.4	-3.4			
	7.8	-3.8			
50	9.5	-5.5			
	11.3	-7.3			
	11.0	-7.0			
	11.6	-7.6			
	12.3	-8.3			
2+00	12.3	—			

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RADIAL SOUNDINGS OF SLOPES DE-ANZA POINT

PX

F-4

0+00 = PT.	# F-4.		SOUND	EAST	
DIST	SOUND		DIST	SOUND	
0+00	+?		2+20	12.8	-8.9
+65	0.0	+3.9		12.8	—
+70	0.4	+3.5	(3.9)	13.0	-9.1
10:33	1.0	+2.9	50	13.0	—
(3.9)	2.0	+1.9	10:35		
1+00	4.1	-0.2			
	5.2	-1.3			
	6.7	-2.8			
	7.2	-3.3			
	8.0	-4.1			
50	9.6	-5.7			
	10.5	-6.6			
	10.8	-6.9			
	11.0	-7.1			
	11.8	-7.9			
2+00	11.7	-7.8			
2+10	12.5	-8.6			

RADIAL SOUNDINGS OF SLOPES DE-ANZA POINT.

PX # F-2

0+00 = PT.	# F-2		SOUND	S/E.	
DIST	SOUND		DIST	SOUND	
0+00	+?		2+10	12.6	-8.9
+47	0.0	+3.7		12.0	-8.3
60	0.6	+3.1	(3.7)	12.3	-8.6
10:15	1.0	+2.7		13.0	-9.3
	1.3	+2.4	50	13.0	—
(3.7)	2.4	+1.3			
1+00	3.5	+0.2			
	1.5	-0.8			
	5.6	-1.9			
	6.9	-3.2			
	8.0	-4.3			
50	10.0	-6.3			
	11.4	-7.7			
	12.0	-8.3			
	12.0	-8.3			
	12.5	-8.8			
2+00	12.5	—			

SURVEY OF WATERSHED AREA
PROJ. # 3, 1 N. OF PAC. HI-WAY

BASE STATION	OBJECT	ANGLE	
$234\frac{26}{}'$	$9+33\frac{75}{}$	① 3° 29'	
$6+99\frac{49}{}$	DEF. RT.	AV. 3° 23' 30" ✓	S 35° 41' 13" E
$2\ 34\ \frac{26}{}$	$5+05\frac{87}{}$	② 6° 17' 00"	
$193\frac{62}{}$			
	$6+99\frac{49}{}$	① 3° 57'	
$5+05\frac{87}{}$	DEF. RT.	AV. 3° 57' 00" ✓	S 39° 05' 13" E
$1\ 93\ \frac{62}{}$	$2+50\frac{21}{}$	② 7° 54' 00	
$255\frac{66}{}$			
	$5+05\frac{87}{}$	① 2° 40'	
$2+50\frac{21}{66}$	DEF. RT.	AV. 2° 40' 00" ✓	S 43° 02' 13" E
$2\ 55$	$0+00$	② 5° 20' 00"	
$250\frac{21}{}$			
	$2+50\frac{21}{}$	① 37° 25'	
$0+00 =$			S 48° 29' 43" E
$1+58\frac{33}{}$	DEF. RT.	AV 37° 24' 30" ✓	S 45° 42' 13" E
	"STATE"	② 74° 49' 00"	S 83° 06' 43" E
$158\frac{33}{}'$			S 43° 02' 13" E
	$1+58\frac{33}{}$	① 34° 37'	
STATE	DEF. LT.	AV. 34° 37' 00" ✓	S 83° 06' 13" E
	HORSE	② 69° 14' 00"	

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(45)

159 59 60
39 05 13
120 54 47

120-54-47

39 05 13.

48° 29' 43" E
31 37
83 06 43 E
37 24 30
45 42 13 E
2 40 00
43° 02' 13" E
3° 57'
39° 05" 13"
3° 23' 30"
35° 41' 13"

STATION	OBJECT	ANGLE	
	21+67 85	① 0° 26'	
19+04 13 / 2 63 72	DEF. RT. ↑	AV. 0° 26' 30"	S 20° 23' 28" E
	16+42 27	② 0° 53' 00"	
			359-60-23-33 / 336-07
	19+04 13	① 3° 3'	
16+42 27 / 2 61 88	DEF. RT. ↑	AV. 3° 02' 45"	S 20° 49' 58" E
	14+16 92	② 6° 5' 30"	
	16+42 27	① 3° 49'	
14+16 92 / 2 25 35	DEF. RT. ↑	AV. 3° 49' 30"	S 23° 52' 43" E
	12+00 57	② 7° 39' 00	
	14+16 92	① 3° 03'	
12+00 57 / 2 16 35	DEF. RT. ↑	AV. 3° 03' 00"	S 27° 42' 13" E
	9+33 75	② 6° 06' 00"	
266 82			
	12+00 57	① 4° 56'	
9+33 75 / 2 66 82	DEF. RT. ↑	AV 4° 56' 30"	S 30° 45' 13" E
	6+99 49	② 9° 53' 00"	

35° 41' 13"
4 56 30
30 45 13
3 03
27 45 13
3 49 30
23 52 43
3 02 45
20 49' 58"
0 26 30
20 23 28

STATION	OBJECT	ANGLE
	"KENDAL"	① 58° 12'
N-151+00	DEF. LT. ↑	AV. 58° 12' 0"
	25+94 13	② 116° 27' 0"
	"HORSE"	① 76° 05'
N-151+00	INT. LT. ↑	AV 76° 04' 30"
	25+94 13	② 152° 09' 0"
	N-151+00 84 65	
	27+08	① 54° 06'
25+94 13	DEF. RT. ↑	AV 54° 06' 0"
1+14 52	23+75 28	② 108° 12' 0"
	25+94 13	① 2° 2'
23+75 28	DEF. RT ↑	AV. 2° 02' 0"
2+18 85	21+67 85	② 4° 4' 0"
	23+75 28	① 0° 40'
21+67 85 +5	DEF. RT. ↑	AV. 0° 40' 00"
2+07 45	19+04 13	② 1° 20' 00"

20° 23' 28"
6 40
19° 43' 28"
2° 02 00
17° 41' 28"

S 19° 43' 28"

1890
6 82
12.2

PROFILE ALONG LINE OF PROPOSED DRAINAGE DITCH - EAST SIDE OF PACIFIC HIGHWAY

STATION	+	H.I.	−	ELEV.
B.M.			6.68	
B.M.	6.81	18.90		12.09
B.M.			1.64	17.26
0+00			4.7	14.2
0+13			4.3	14.6
0+23			6.1	12.8
0+26			7.5	11.4
0+28 5			9.4	9.5
0+35 5			9.8 9.9	9.0
0+40 2			5.8	13.1
0+50			4.7	14.2
0+95			4.6	14.3
1+00			5.2	13.7
1+25			5.2	13.7
1+50			5.1	13.8
1+75			5.4	13.5
2+00			5.3	13.9
2+25			5.2	13.7
2+50		18.90	5.1	13.8

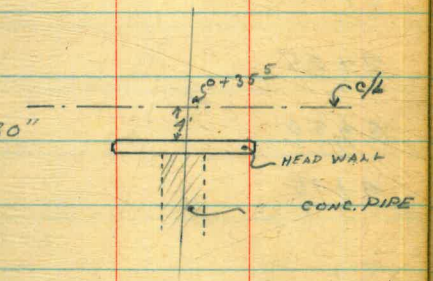
△ STATE

CITY B.M. BRASS PEG IN CONC. "STATE"

STATE B.M. MHD 8.23 = 17.24 M.L.L.W.

℄ OF TRAVERSE

FLOW LINE 4' W/ ℄



18.9
18.3

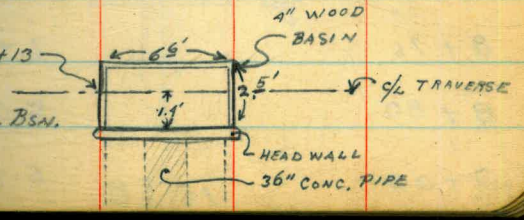
PROFILE CONT'D

STATION	+	H.I. 18.90	−	ELEV
T. P.	4.51	18.88	4.53	14.37
2+75			5.0	13.9
3+00			5.0	13.9
3+25			5.1	13.8
3+50			5.2	13.7
3+75			5.1	13.8
4+00			5.1	13.8
4+25			5.2	13.7
4+50			5.3	13.6
4+75			5.3	13.6
			5.7	13.2
T. P.	4.28	18.26	4.90	13.98
5+00			4.7	13.6
5+25			4.6	13.7
5+50			4.5	13.8
5+75			5.0	13.3
6+00			5.3	13.0
6+13			6.7	11.6
6+13			10.4	7.9
6+16 2		18.26	10.5	7.8

14.37
4.51
18.88

18.88
4.90
13.98

13.98
4.26
18.24



T.P. N/END WOODEN BLKHD. BSN.
BOTTOM OF BASIN

CENTER BOTTOM 1.4'

16.6

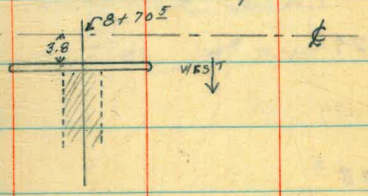
STATION	+	H.I.	−	ELEV
6+19 6		18.26	9.5	8.8
6+19 6			6.6	11.7
6+25			4.8	13.5
6+50			5.1	13.2
6+75			5.5	12.8
T.P.	4.14	17.66	4.74	13.52
T.B.M.	2.12	16.58	3.20	14.46
7+00			3.8	12.8
7+25			4.1	12.5
7+50			4.4	12.2
7+75			4.2	12.4
8+00			4.4	12.2
8+25			4.5	12.1
8+50			5.1	11.5
8+67			5.8	10.8
			6.0	10.6
8+70 5 (2.75)			6.9	9.7
8+76 (2.7)			6.4	10.2
8+80			5.0	11.6
9+00		16.58	5.3	11.3

18.26	13.52	17.66	14.46
4.74	4.14	3.20	2.12
13.52	17.66	14.46	16.58

TOP OF HY. CULVERT MARK.

TO TOP OF PIPE 3.8' FROM C/L.

C/L OF CULVERT 21"



STATION	+	H.I.	16.6 −	16.6 ELEV
9+25		16.58	4.8	11.8
P.I. 9+33.75			5.0	11.6
9+50			4.7	11.9
9+75			4.6	12.0
10+00			4.9	11.7
10+25			5.1	11.5
10+50			5.1	11.5
10+75			5.1	11.5
11+00			5.3	11.3
11+25			5.4	11.2
11+50			5.5	11.1
11+75			5.6	11.0
12+00			5.4	11.2
T.P.	4.12	16.09	4.61	11.97
12+16			4.9	11.2
12+19			6.7	9.4
12+21.5			8.5	7.6
			5.7	11.4
12+28.5			7.2	8.9
		16.09		

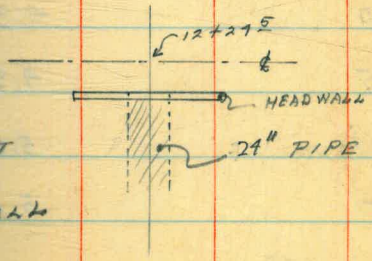
100.00
38.75
66.25
50.
16.25

16.58 11.97
4.12
11.97 16.09

N/EDGE ROCK & CONE

CENTER OF CULVERT (PIPE NOT VISIBLE)

TOP OF HEAD WALL



PROFILE CONT'D

16.1

STATION	+	H.I.	−	ELEV
12+34		16.09	5.5	10.6
12+50			5.1	11.0
12+75			5.1	11.0
13+00			5.1	11.0
13+25			5.0	11.1
13+50			5.0	11.1
13+75			5.0	11.1
14+00			4.9	11.2
T.P	4.46	16.22	4.33	11.76
14+25			4.9	11.3
14+50			4.8	11.4
14+75			4.8	11.4
15+00			4.8	11.4
15+25			4.7	11.5
15+50			4.9	11.3
15+75			4.9	11.3
16+00			5.0	11.2
16+25			5.0	11.2
T.P.	4.39	16.27	4.34	11.88
16+42			5.0	11.3

16.09 − 4.33 = 11.76

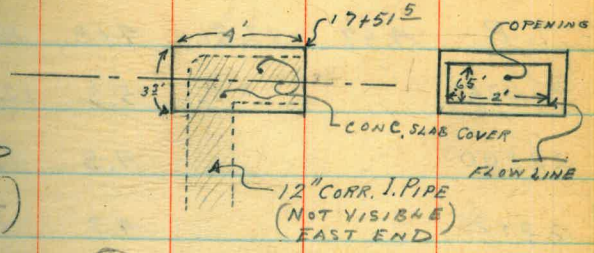
11.76 + 4.46 = 16.22

16.22 − 4.39 = 11.88

11.88 + 4.39 = 16.27

STATION	+	H.I.	−	ELEV
		16.27		
16+50			5.3	11.0
16+75			5.3	11.0
17+00			5.0	11.3
17+25			5.0	11.3
17+50			4.6	11.7
17+51.5			5.7	10.6
17+75			4.6	11.7
18+00			4.8	11.5
18+25			4.8	11.5
18+50			4.6	11.7
18+75			4.5	11.8
19+00			4.0	12.3
T.P.	4.94	17.42	3.79	12.48
19+25			5.4	12.0
19+50			5.4	12.0
19+75			5.4	12.0
20+00			5.3	12.1
20+25			5.2	12.2
20+50			5.1	12.3

16.3



FLOW LINE ?
(POSSIBLY LOWER PIPE NOT VISIBLE)

SEE BOOK # 36 PAGE (70)

16.27 − 3.79 = 12.48

12.48 + 4.94 = 17.42

STATION	+	H.I.	−	ELEV
20+75		17.42	5.2	12.2
21+00			5.5	11.9
21+25			5.4	12.0
21+50			5.2	12.2
T.P.	4.57	17.81	4.18	13.24
21+75			5.3	12.5
22+00			4.9	12.9
22+25			4.7	13.1
22+50			4.6	13.2
22+75			4.4	13.4
23+00			4.3	13.5
23+25			4.2	13.6
23+50			3.9	13.9
23+75			3.9	13.9
T.P.	4.54	18.86	3.49	14.32
24+00			4.7	14.1
24+25			4.7	14.1
24+50			4.8	14.0
24+75			4.5	14.3
25+00			4.7	14.1

17.42
4.18
13.24

13.24
4.57
17.81

17.81
3.49
14.32

14.32
4.54
18.86

13.16 – 150
12.58 – 151
12.92 152

5-21-98

(54)

6.66
9.01
15.67

13.24
5.34
18.58
15.67
2.91

2.12
2.91
.21

PROFILE CONT'D.

STATION	+	H.I.	−	ELEV
25+25		18.86	4.5	14.3
25+50			4.9	13.9
25+75			4.6	14.2
25+77.5			5.3	13.5
25+80			7.6	11.1
			5.5	13.3
25+83.5			8.0	10.8
25+85			7.8	11.0
25+86			5.6	13.2
25+88			4.6	14.2
25+94			4.2	14.6
T.P.	5.33	19.65		14.32
				12.42 ±
T.B.M.			7.23	12.58

54.67
59.85
114.52

5-21-48

(55)

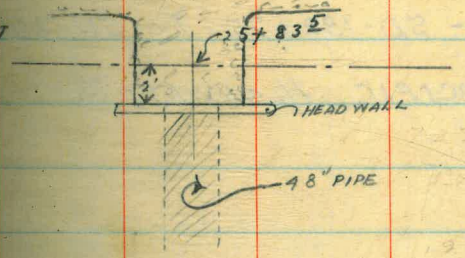
W/EDGE OF ROCK & CONC. APRON

BOTTOM OF APRON

(SD-182+25)

T.P OF PIPE CONC. 48" I.D. HEAD WALL 2' W/C/L

℄ CULVERT



STA- 151+00-N DE-ANZA B/L.

CULVERT = SD-206+32 | BARRAGAN SHERRY STANLEY | 5-24-48

179
~~180~~ 59 60
83 06 43

SET AT 108° 53' 17"
37° 39'

69° 14' 17"

206 39 00
180

386 39
26 39

359° 59' 60"
83 06 43

276° 53' 17

93° 56' 17"
70° 14 17

23° 42' 00"

107° 53' 17
70° 14 17

37° 39' 00
180

216° 39°

SURVEY OF WATER SHED AREAS FOR CULVERTS - SD-182+25 TO SD-206+32 ALONG PACIFIC HIGHWAY - PROJ - 3-1

STATION	OBJECT	AZIM	STADIA	VERT. ANGLE			AZIM
	NORTH = 0° AZIM.						
							AZIM 26° 39'
0+00	STATE	96° 53' 17" ~~276° 53' 17"~~			S 83° 06' 43" E		AZIM 276° 53' 17"
	"A"	206° 39' ~~26° 39'~~	228'	+3°			

STATION	OBJECT	AZIM (26° 39' ")		DIST	VERT. ∠
"A"	0+00	~~206°~~	~~39'~~	228'	-3°
	1	305°	43'	515'	-43'
	2	324°	58'	612'	0°
	3	335°	16'	570'	+39'
	4	356°	47'	600'	+1°16'
	5	00°	45'	730'	+1°30'
	6	2° ~~12°~~	55' ~~31'~~	820' 2(6-990)	+1°45'
	7	4°	41'	780'	+1°55'
	8	204°	57'	253'	-3°38'
	9	185°	46'	198'	0°
	10	134°	30'	137'	+2°25'
	11	114°	45'	209'	+1°05'
	12	111°	00	290'	+4°05'
	13	108°	37'	426'	+1°45'
	Ⓑ 14	278° ~~78°~~	54 ~~54'~~	680'	+5°33'
"B"	"A" 15	~~278°~~	~~54'~~	680' 3-60	-5°33'
"B"	"C"	267° ~~85°~~ 265°	54' ~~36'~~ 36	307'	+11°16'
"C"	"B"	254 ~~265°~~	36 ~~36'~~	307'	-11°16'
	16	~~85°~~	~~36'~~		
"C"		303°	02'	750'	-7°05'
	17	320°	25'	590'	-5°41'
	18	328°	28'	340'	-5°19'
	19	09°	50'	321'	0°

37 39
180
217 39

98 54
37 39
61° 15'
26 39
87 54
180
267 54

98° 54'
85° 36'
13° 18'

82 54
13 18
74° 36'

74 36
180
254 36

254° 36

87 54

98 54
37 39
61° 15

85 36
180
265 36

STATION	OBJECT	AZIM		STADIA DIST	VERT. ∠
"C"	"B"	~~259°~~ 265°	~~36~~ 36°	307'	-11° 16'
	20	30°	18'	422'	+2° 30'
				3-887	
	21	45°	48'	587'	+4° 42'
	x "D" x	~~285°~~ 91	~~53'~~ 53	6-1142	
	x 22 x	~~105°~~	~~53'~~	542'	+8° 48'
		106°	00'	3-702	
	23	~~105°~~	~~58'~~	402'	+8° 33'
BACK BAY "D"	"C"	~~285°~~	~~53'~~		
		~~286°~~	~~00'~~	402'	-8° 33'
		105°	53		
	24	85°	09'	215'	+2° 35'
				4-830	
	"A" 25	79°	10'	430'	+2° 14'
	"E"	237°	18	3-905	
	26	~~57°~~	~~18'~~	605'	+2° 13'
"E"	"D" 22	57°	18'		
		~~237°~~	~~18'~~	605'	-2° 13'
	28	22°	20'	270'	+1° 03'
	29	39°	20'	570'	+1° 41'
		~~341°~~	~~50~~		
	30	08°	35'	525'	+1° 0'
	31	337°	41'	480'	0°
	32	314°	17'	515'	-1° 47'
U.S.C.&G.S. △ "BACK BAY" "D"	"C"	105° ~~285°~~	53 ~~53'~~	542'	-8° 48'
	1 B	159°	59'	350'	0°
	2 B	175°	42'	415'	-0° 30'
	3 D	191°	18'	485'	-2° 30'
	4 B	202°	40'	593'	-4° 01'

U.S.C.&G.S. "BACK BAY"

11° 48'

105 53
180
285 53

.57 x 6
182
23 778

STATION	OBJECT	AZIM		DIST	VERT. ∠
	5 B	32°	02'	3-832	
		~~212°~~	~~02'~~	532'	-5°25'
	U.S.C.&G.S. △	212°	02'		
5 B	"BACK BAY"	~~32°~~	~~02'~~	532'	+5°25'
	"B" 6	85°	~~14'~~	3-515	
		~~265°~~	~~14'~~	215"	-9°26'
6	5	85°	14'		
		~~265°~~	~~14'~~	215'	+9°26'
		84°	17'	3-650	
	7	~~264°~~	~~17'~~	350'	-12°17'
7	6	91°	10'		
7	8	~~271°~~	~~10'~~	173'	-8°30'
8					
	5+05 87	247°	50'	177'	-11°05'
5+05 87		331°	59'		
		320	59		
	2+50 21	331°	59'		
7	6				
8	7	271°	10'		
	5+05 87	67°	50'		
5+05 87	8	247°	50'		
	250 21	151°	59		

35959
33159
28°00"
1' 48
3948

212°02'

212 02
180
392 02
360 00
32°02'

359 60
212 02
147 58

5D199+25/CULVERT

STATION	OBJECT	AZIM		DIST	VERT ANGLE
9+33.75	6+99.19	320°	54'47"	193.62'	0°
	C 1	145°	15'	123'	0°
	C 2	91°	30'	304'	+11°15'
C 2	9+33.75	271°	30'	304'	-11°15'
	C 3	40°	19'	295'	+10°40'
3	2	220°	19'	265'	-10°40'
	"B" 6 (BC)	358°	11'	228	+5°30'
2	9+33.75	271°	30'	304'	-11°15'
	P.I.	151°	09'	240'	0°
P.I.	2	331°	46'	240'	0°
	"D" 1	155°	46'	254'	0°
"D" 1	P.I.	335°	46'	254'	0°
	"D" 2	57°	34'	280'	+9°50'
"D" 2	"D" 1	337°	34'	280'	-9°50'
	"D" 3	75°	31'	255'	+8°50'
"D" 3	"D" 2	255°	31'	255	-8°50'
	"D" 4	68°	24'	343'	+8°50'

151
180
331

68
180
248

15546
180
33546

15731
180
33731

7531
180
25531

				3-554	
"D" 1	155°	46'	254		0°
				3-580	
2	57°	31'	280		+9°50
				5-755	
3	75°	31'	255		+8°50
				5-843	
4	68°	24'	343		+8°50

STATION	OBJECT	AZIM		STADIA DIST.	VERT ANGLE
"D"-4	D-3	248°	21'	343'	-8°50'
				1-742	
	"D"-5	64°	27'	342'	+1°45'
"D"-5	"D"-4	244°	27'	342'	-1°45'
				3-629	
	"D"-6	00°	26'	329'	+0°40'
"D"-6	"D"-5	180°	26'	329'	-0°40'
				2-675	
	"D"-7	339°	14'	475'	+1°8'
"D"-7	"D"-6	159°	14'	475'	-1°8'
	A-25	330°	39'	451'	0°50'
"D"-5	4	244	27'	342'	-1°45'
				3-629	
	"E"-1	138°	37'	420'	-1°40'
"E"-1	5	318	37'	420'	+1°40'
				4-797	
	"E"2	230°	33'	327'	-1°20'
"E"2	"E"1	50°	33'	327'	+1°20'
				8°-912	
	"E"3	228°	46'	112'	-7°4'
"E"3	"E"2	48°	46'	112'	+7°4'
				5-725	
	"E"4	198°	25'	225'	-4°20'
"E"4	"E"3	18°	25'	225'	+4°20'
				4-529	
	"E"5	232°	45'	194'	-9°0'
"E"5	"E"4	52°	45'	194'	+9°0'
				4-632	
	"E"6	265°	31'	232'	

-6427
180
24427

138 37
180
318

STATION	OBJECT	AZIM		STADIA DIST	VERT ANGLE
"E" 6	"E" 5	86°	31'	232' 1-639	-8° 52'
	"E" 7	235°	54'	234'	-9° 0'
"E" 2	"E" 6	55°	54'	234' 1-659	+9° 0'
	"E" 8	246°	00'	259'	-6° 25'
"E" 8	"E" 2	66°	00'	259' 1-742	+6° 25'
	25+91 13 ON B/L PROFILE OF DITCH	169°	53'	342'	-7° 17'

STADIA CHECK FOR VENTURA PT.

S-

M.H. TIDE STA NO. 66

STA.	+	H.I.	—	ELEV
BM				11.30
	4.10	15.40		

STA	OBV. ANGLE	DIST.	BEARING
S. TEMP BR. 2x2			S 50° E
N. TEMP BRIDGE 2x2	RT. 78° 41'	266.0'	S 28° 41' W
#66 4.8			

Indexed

6-11-48

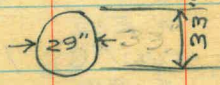
T. STAMPER
G. WATSON
N. STANLEY

CONC. MON. N END TEMP BRIDGE

CULVERT LOCATIONS ALONG A.T.&S.F.R.R. & PACIFIC HI-WAY-ELY, & ADJACENT TO PROJ. NO. 3.1

Inspected 6-22-48

STA	OBJECT	AZIM.	DIST.	BEARING	
	6+99.49	~~140°54'47"~~		S39°05E	
5+05.87					
	CULVERT "A"	91°42'		S88°18E	ALONG A T & S F. R.R.
	STA. 1	91°24'	257.00'	S88°36E	
6+99.49	5+05.87	——			
	STA. 1	42°44'	198.00'	N42°44E	
	CULV. "A"	37°22'		N37°22E	
STA. 1	6+99.49	——			
	E END CULV. "A"	319°34'	14'	N19°34E	
	W. END CULV. Z.	310°14'	58'	N10°14E	ALONG MORENA BLVD. 12" R.C.P.
	E. END CULV Z.	36°20'	98'	N36°20E	
	W. END CULV. Y.	350°22'	164'	N9°28W	ALONG MORENA BLVD. 12" R.C.P.
	E END CULV. Y	342°55'	168'	N2°55E	
	STA-2	330°54'	400'	N29°06W	
STA. 2	STA-1.	——			
	W END CULV. B.	331°59'	535'	N28°01W	ALONG AT & SF RR. 42" RCP



STA.	OBJ.	AZIM.	DIST.	BEARING	
STA. 2	E END CULV "B"	335° 33'	533'	N24°27'W	
	W END CULV. X	338° 33'	594'	N21°27'W	ALONG MORENA BLVD. ADD 3' TO E. END 18" R.C.P.
	E END CULV. X.	344° 27'	600'	N15°33'W	
	STA. 1	———			
STA. 1	STA-2	330° 54'		N29°06'W	
	W END CULV "C"	156° 40'	583'	S23°20E	ALONG AT. &SF R.R. 30" RCP
	E. END CULV. "C"	152° 49'	585'	S27°11E	
	W. END CULV. "W"	150° 17'	588'	S29°43E	ALONG MORENA BLVD. 12" RCP
	E. END CULV. "W"	146° 15'	593'	S33°45E	
	STA. 3	152° 38'	562'	S27°22E	
STA. 3	STA 1	———			
	E. END CULV. "D"	158° 23'	283'	S21°37E	ALONG A.T. & SF R.R. 30" RCP.
	W. END CULV. "D"	163° 05'	283'	S16°55E	
	STA. 4	164° 22'	370'	S15°38E	
STA 4	STA. 3	———			
	W END CULV "V"	19° 50'	118'	N19°50E	ALONG MORENA BLVD. 12" RCP.
	E. END CULV "V"	32° 46'	139'	N32°46E	
	STA 14+16.92	311° 22'	165'	N48°38'W	VERT. ∠ 10°41'
14+16.92	12+00.57	332° 22'		N27°38W	

24 JUNE 1948

KENDALL-PROPERTY
TOPOGRAPHIC SURVEY
FOR MEAN HIGH TIDE ALONG N.ELY SHORE MISSION BAY

Indexed

359 59 60
330 00 30
29 59 30

W29 T.A. STAMPER
180 E.F. WATSON
309 A.L. SHERRY
N. STANLEY

66

WEATHER - FAIR
VISIBILITY - GOOD

STA	OBJECT	AZIMUTH	DIST	BEARING	
MORRELL	MARSTON'S TWR.	136°14'39"		S 43°45'21"E	
		VA = 22°44'			HORIZ.
	STA "A"	136°14'39"	71.22	S 43°45'21"E	= 65.69'
"A"	STA "B"	185°48'30"	520.28	S 5°48'30"W	III 20.28
"B"	STA "A"	—			
	STA. "C"	53°42'	410.75	N. 53°42'E	III 10.75
"C"	STA. "B"	—			
	STA "D"	129°15'	516.43	S. 50°45'E	III 16.43
"D"	STA "C"	—			
	STA "E"	120°	334.94	S 60° E	III 34.94
"E"	STA "D"	—			
	STA "F"	80°01'	269.76	N 80°01'E	II 50.00 / 19.76
	STA "G"	5°08'		N. 5°08'E	
"G"	STA "E"	—			
	STA "F"	149°10'	443.21	S 30°50'E	III 43.21
	STA "H"	330°00'30"	515.38	N 29°59'30"W	III 15.38
"H"	STA "G"	—			
	STA. "I"	31°53'	558.15	N. 31°53'E	III 58.15

TOPO. SURVEY FOR M.H.T. LINE ALONG N.ELY SHORE MISSION BAY — Cont'd.

STA.	OBJECT	AZIMUTH	DIST.	BEARING	
"I"	STA "H"	—			
	STA. "J"	65° 03'	643.73	N 65° 03' E	NI 43.78
	PL. #1	158° 19'	148.17	S 21° 41' E	SIDE SHOT TO 2 X 2 HUB & TACK 1+48.17
"J"	STA "I"	—			
	STA "K"	313° 33' 30"	560.82	N. 46° 26' 30" W	NH 60.82
"K"	STA "J"	—			
	CONC. MON.	293° 58' 30"	303.42	N 66° 01' 30" W	III 3.42 CONC MON. SET BY NORMAN GLOVER L.S. 1880
CONC. MON.	STA "K"	—			255° 32' TO LATH - FOR TOPO MAP
	STA "L"	262° 15'	444.75	S 82° 15' W.	IIII 44.75
"L"	CONC. MON. N.E. COR LOT 73	— 234° 15'	226.15	S 54° 15' W.	I 48.00 78.15 CONC MON. ON N.E. CORNER OF LOT 73.
N.E. COR. LOT 73	"L"	—			
	"M"	179° 08'	342.11	S 0° 52 E	AZ. III
"M"	N.E. COR. LOT 73	—			
	"N"	182° 04'	392.00	S 2° 04' W.	III 92
"N"	"M"	—			
	"O"	198° 58'	270.64	S 18° 58' W	II 70.64
"O"	"N"	—			
	"A"	231° 33'	285.42	S 51° 33' W	II 85.42

TOPO SURVEY FOR M.H.T. LINE ALONG N.ELY SHORE MISSION BAY — Contd.

STA.	OBJECT	AZIMUTH	DIST.	BEARING	
A	"O"	—			
	MARSTONS TOWER	136° 18' 45"		S43°41'15"E	
	STA "B"	185° 53'			CHECK SHOT

179 54 30
136 18 45
43 41 15

BENCH LEVELS ALONG CROWN PT DRIVE FOR M.H.T. SURVEY CONTROL

28 JUNE 48

Indexed

T. A. STAMPER
C. Y. BARRAGAN
A. SHERRY
E. F. WATSON

VISIBILITY – GOOD

STA.	+	H.I.	–	ELEV	ADJ.
B.M.				25.72	
	2.72	28.44			
T.P.			3.50	24.94	
	7.53	32.47			
T.P.			3.50	28.97	
	7.14	36.11			
T.P.			4.12	31.99	
	6.50	38.49			
T.P.			4.53	33.96	
	3.55	37.51			
T.P.			9.48	28.03	
	4.44	32.47			
T.P.			2.89	29.58	
	6.01	35.59			
B.M.			6.30	29.29	29.28

OPPOSITE WATER METER – FRONT HOUSE 3444
L.M.K.D."W" IN CURB ALONG CROWN PT. DRIVE

U.S.E.D. CONC. MON "MORRELL"

BENCH LEVELS ALONG CROWN PT. DRIVE FOR M.H.T. LINE SURVEY CONTROL

STA.	+	H.I	—	ELEV.	
BM				29.29	
	5.67	34.96			
T.P.			6.58	28.38	
	3.80	32.18			
T.P.			3.06	29.12	
	9.00	38.12			
T.P.			4.74	33.38	
	4.51	37.89			
T.P.			6.27	31.62	
	3.99	35.61			
T.P.			7.43	28.18	
	3.45	31.63			
T.P.			7.66	23.97	
	5.31	29.28			
BM.			3.54	25.74	25.72

U.S.E.D. CONC. MON. "MORRELL"

"W" LEAD MK'D IN CURB OPPOSITE WATER METER IN FRONT OF HOUSE ~~3444~~ CROWN PT. DRIVE

PROFILE & CROSS SECTIONS

ALONG PACIFIC HI-WAY PROJ #3,1

STA	+	H.I.	-	ELEV.	
B.M.				12.09	CITY B.M STATE
	7.29	19.38			

PROFILE N. STA 0+00

-0+25		4.9	14.5
-0+50		4.9	14.5
-0+75		5.1	14.3
-1+00		4.8	14.6
-1+25		4.5	14.9
-1+50		4.6	14.8
-1+75		4.6	14.8
-2+00		4.4	15.0
-2+25		3.8	15.6
-2+50		3.5	15.9

7-26-48

SEE PG 48.

X-SEC. AT STA - 1+00

STA	+	H.I.	-	ELEV.
		19.38		
W 9			5.2	14.2
E 7			3.9	15.5
E 45			3.0	16.4
E 44			2.2	17.2
E 50			1.6	17.8
E 56			2.4	17.0
E 58			3.5	15.9
E 68			2.2	17.2
E 70			1.3	18.1
E 76			0.1	19.3
TP.			3.38	16.00
	3.23	19.23		

7-26-98

X-SEC. AT STA 1+00

STA	+	H.I.	+	ELEV.	
		19.23			
℄ 0+00			5.5	13.7	
W 9			5.6	13.6	E.PAV.
E 14			5.4	13.8	
E 24			4.6	14.6	
E 30			3.4	15.8	
E 34			1.9	17.3	

X SEC. AT 2+50.21

W 9			5.1	14.1	
℄			5.5	13.7	
E 23			4.5	14.7	
E 57			3.6	15.6	
E 87			2.7	16.5	
E 100			2.3	16.9	

X SEC AT 5+05.87

STA	+	H.I	−	ELEV
	PX	19.23		
W.9			5.6	13.6
℄			5.7	13.5
E16			5.0	14.2
E33			4.2	15.0
E64			3.1	16.1
E97			1.8	17.4
E100			0.5	18.7
TP.			6.99	12.24

N. END CONV. TO P/H 9, W.L. STA 5+01+50.

X-SEC. AT STA 6+99 99

	12.05	24.29		
W10	PX		11.0	13.3
℄			11.5	12.8
E16			10.9	13.4
E27			9.9	14.4
E ~~90~~ 60			9.0	15.3
E ~~99~~ 66			5.6	18.7
E91			5.4	18.9

X SEC AT STA 9+33.75

STA	+	H.I	−	ELEV
W9		24.29	11.7	12.6
℄			12.7	11.6
E17			12.2	12.1
E30			12.0	12.3
E36			9.0	15.3
E46			4.7	19.6
E55			2.3	22.0
E58			0.7	23.6

X-SEC AT 12+00.57

W7			12.3	12.9
℄			13.1	11.2
E2			12.9	11.4
E8			9.7	14.6
E32			5.6	18.7
E39			~~4.0~~ 3.7	20.6
E54			0.3	24.0
TP.			13.02	11.27

X-SEC AT 14+16.92

STA	+	H.I	−	ELEV.
TP.				11.27
	14.03	25.30		
W 5			13.3	12.0
℄			14.1	11.2
E 2			14.5	10.8
E 5			10.7	14.6
E 17			10.0	15.3
E 25			8.6	16.7
E 35			4.7	20.6
E 38			2.3	23.0
E 42			1.0	24.3
E 45			0.0	25.3
E 51			+13.0	38.3
E 61	+13.0	51.3	11.0	40.3
E 66			9.5	41.8
E 69			7.3	44.0
E 74			4.0	47.3
E 76			3.2	49.1
E 85			4.1	47.2
E 90			5.4	45.9

℄ GUTTER R.R.

7-26-48 (+25)

X-SEC AT STA. 16+42.27

STA	+	H.I	−	ELEV.	
		25.30			
TP.			3.65	21.65	
	7.37	29.02			
W 4			16.7	12.3	
℄			17.7	11.3	
E 2			17.7	11.3	
E 5			14.2	14.8	
E 14			12.5	16.5	
E 17			11.1	17.9	
E 28			6.7	22.3	
E 37			4.2	24.8	
E 42	+6.7	35.7	−0.	35.7	
	+14.0	49.7			
E 47			13.2	36.5	
E 54			0.7	49.0	
E 63			1.1	48.6	
E 71			5.8	43.9	℄ DITCH AT R.R.

7-26-48

X-SEC AT STA 19+04.13

STA	+	H.I.	−	ELEV.	
	5.61	27.26		21.65	
W 3'			14.9	12.4	
℄			15.0	12.3	
E 2			15.1	12.2	
E 12			7.7	19.6	
E 24			5.7	21.6	
E 32			3.0	24.3	
E 34			0.9	26.4	
E 37	+10.3	37.6	0.0	37.6	
	10.0	47.6			
E 57			2.4	45.2	
E 68			1.8	45.8	
E 77			5.6	42.0	℄ RR, DITCH
		27.26			16.36 3.11 19.47
T.P.	3.11	19.47	10.90	16.36	
			6.99	12.48	

5-19-58

PROFILE SEAWALL STA 90+00

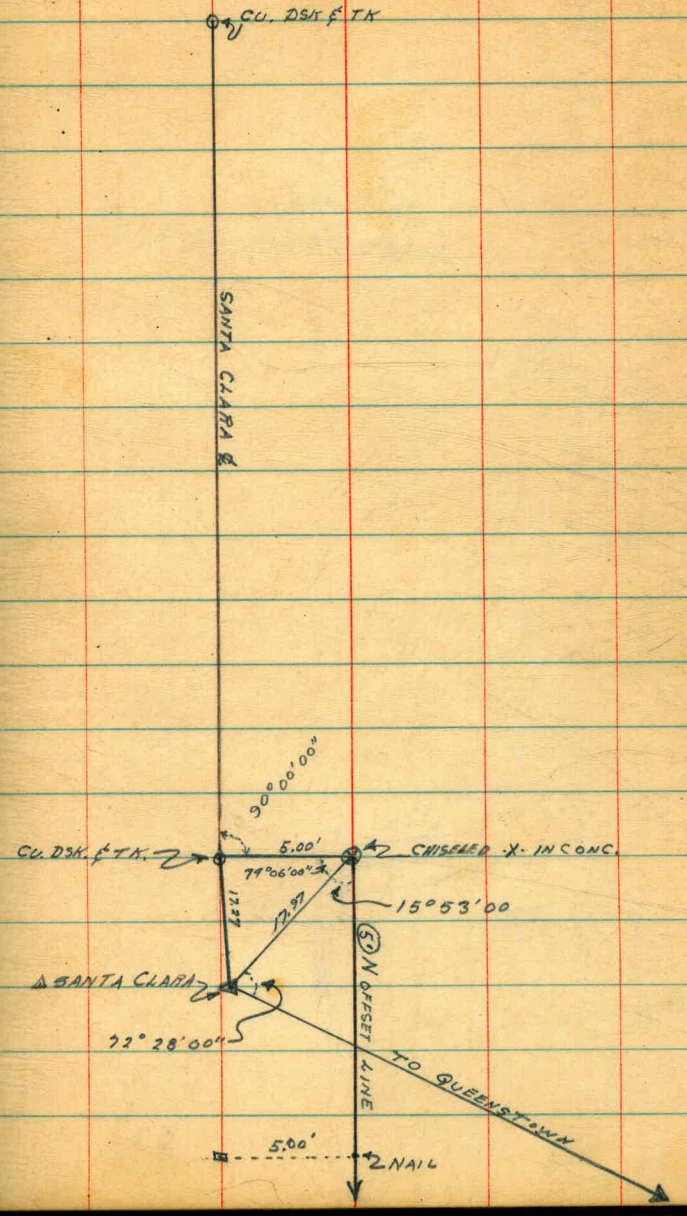
0+00 = ℄ TOP OF SEAWALL & 80' S.L. OF SAN JOSE PLACE W.O. 64501

Sta.	+ H.I.	-	Elev	
TBM.			15.9	90+00 Top Seawall
	0.68 / 16.58			
0+01		4.6	12.0	
0+40		5.8	10.8	
0+50		6.5	10.1	
0+80		6.8	9.8	
1+25		10.9	5.6	
1+90		14.2	2.4	
2+30		16.0	0.6	
2+40		16.3	0.3	
2+45		16.3	0.3	
2+90		16.5	0.1	
3+10		16.5	0.1	
3+15		17.0	-0.4	
3+40		17.4	-0.8	
3+70		18.2	-1.6	
3+80		18.2	-1.6	
4+00		20.0	-3.4	

		KENDAL To HORSE	HORSE To CHIMNEY	
	(2.6)			
(1)	12:15	56° 10′	63° 10′	APPROX. ± 1/6 ELEV
(2)		56° 10′	64° 10′	
(3)		55° 20′	64° 30′	
(4)		54° 10′	63° 00′	
(5)		53° 25′	61° 15′	
(6)		54° 35′	61° 50′	

TIE OF ℄ SANTA CLARA ST. & ℄ SANTA CLARA ST. (CITY)

Indexed



S 83° 06' 43"E

11.39 COASTER
4.92
16.31
4.80
11.51

16.31
11.6
4.7

10.48
9.87
.61

11.39
5.39
16.78
5.13
11.65

QUEENS
72°28'
144°56'
(5)

16.78
-6.28
10.50
+6.39
16.89
7.03
9.87

16.78
6.28
10.46

11.47
10.50
.93

MARS TWR
MORRELL S43°45'21"E

103°26"

90
68 45
158°45
79°27'30"

60
359 59 60
158 45
201 15
360 00
100° 32' 30"
179 27 30
180 05 00

B
a
C

$= \frac{c}{a}$

$\frac{b^2}{a^2}$

$\frac{a^2}{c^2}$

$\frac{C}{4}$

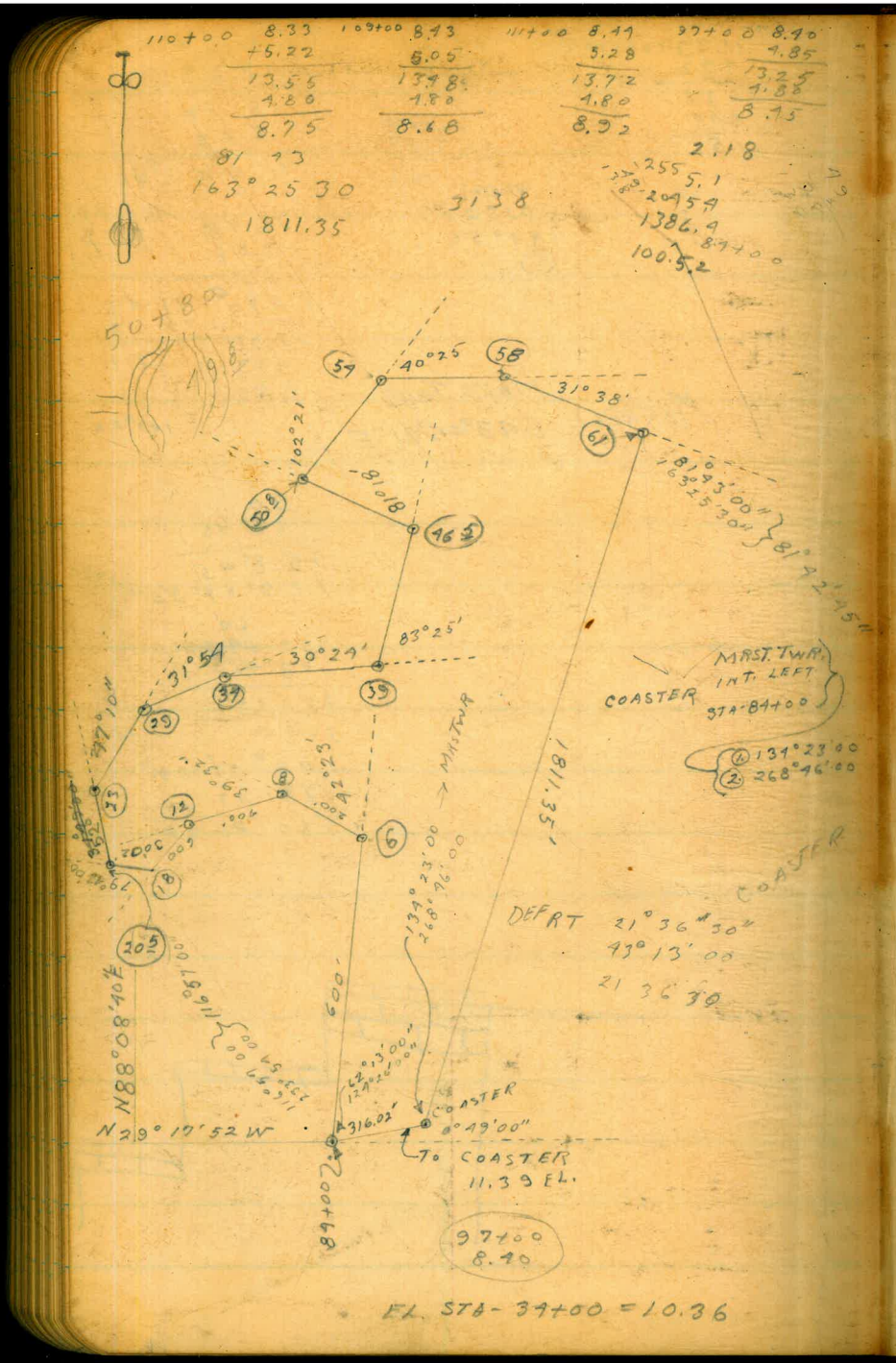
$\sin C$
$\sin A$
$(A+B)$,

$-(A+B)$

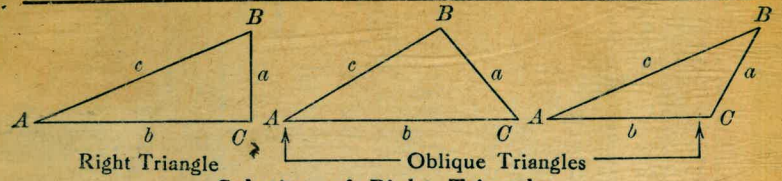
lied by the
ce = 319.4 ft.
cos 5° 10' =
9 ft.
inus slope
. With the
the follow-
.9959 = .0041.

e slope dist-
: rise = 14 ft.,
= 302.28 ft.

MADE IN U. S. A.



TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

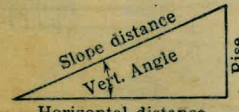
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\operatorname{cosec} = \frac{c}{a}$

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 $= \frac{bc \sin A}{2}$
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.