Notes ck'd by: K.R.K.	Survey of: Beach Erosion
Map No.	W. O. 0300 Tape No. St'd. °F
Office Work: J. S. Hale	Surveyed by: M. A. VanDeren
Checked: J. C. Newton	Notes: VaM Date: 7-57
Date: 9-25-57	Indexed: C. Johnson 8-5-57

F.B. 1304 Pg. 5

JN. 030002

BEACH EROSION STUDIES

AT

ZUMA BEACH

From 0+00 = Z-1A

TO

150+22.88 = Z-5

7-15-57

M. A. VanDeren & Party

W. Bay " "

E. English " "

Microfilmed Jan '86

F.B. 2306 Pg. 6

Tide Gauge Readings at Santa Monica

All Readings are on Daylight Savingtime

7-18-57

Scale on 2.7

Gauge Time	Watch Time	
7:00 A.M.		+1.7
7:30 A.M.		+1.6
8:00 "		+1.6
8:30 "		+1.7
9:00 "		+1.8
9:30 "		+2.1
10:00 "		+2.2
10:30 "		+2.7
11:00 "		+3.0
11:30 "		+3.3
12:00 "		+3.7
12:30 P.M.	1:30	+3.9
1:00 "		+4.2
1:30 "		+4.3
2:00 "		—

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76F309S S&E #247 1-56

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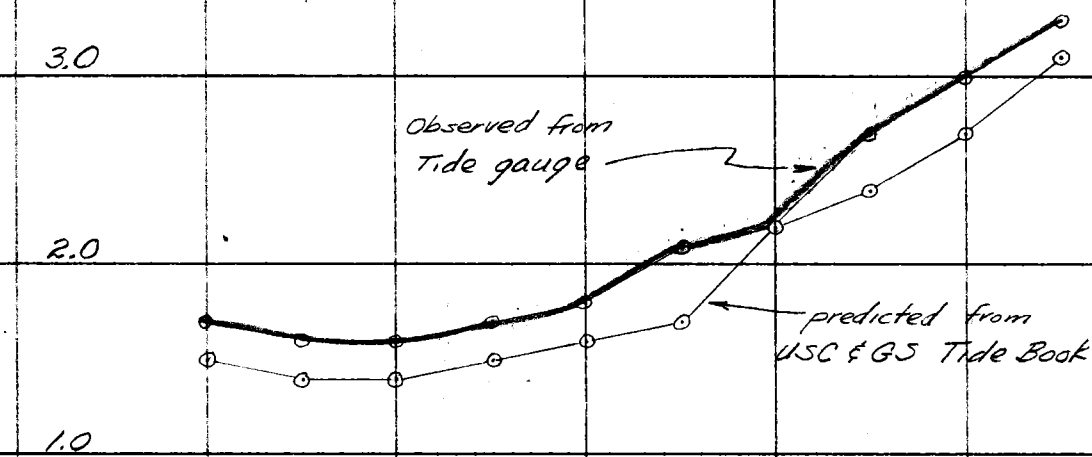

Notes Ck'd by K.R.K.
Map No.
Office Work J.S.H.
Checked J.C.N.
Date 9-5-57

Survey of Beach Erosion
JN 0300.02 Tape Std. °F
Surveyed by
Notes Date
Indexed

July 18, 1957

F. B. 2306 PG. 6 A

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 2+50	SIGHT ON 0+00
P.O.T. Z-1A	2 25	14 54		12 29	P.O.T. Z-1A, el=12.290 (M.L.L.W.) F.B. 2100-103	Inshore
0+00			1 3	13 2		0+00
			3 8	10 7	13° 30' Brk. 60	
			6 0	8 5	17 27 " 79	
			6 2	8 3	22 42 " 105	
T.P.	1 65	6 07	10 12	4 42		
		6 1	0 2	5 9	25 27 Brk 119	
			3 8	2 3	29 07 139	
			6 1	0 0	35 58 181	
			9 3	-3 2	43 27 237	
			11 5	-5 4	46 44 266	
			12 6	-6 5	49 53 297	
			13 8	-7 7	51 49 318	
			15 4	-9 3	53 16 335	
			16 7	-10 6	54 55 356	
T.P.			1.3 4	4 73		

Profile No. ____ Notes Red J.S. Hale Plotted J.C. Newton Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 7
Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd J.C. Newton Checked J.S. Hale Survey by ENGLISH Notes ED Date 7-18-57
No. 0+00 Date 9-57 Date 9-57 Map No. ____ Date 8-5-57

76298 S & E #307—7-55

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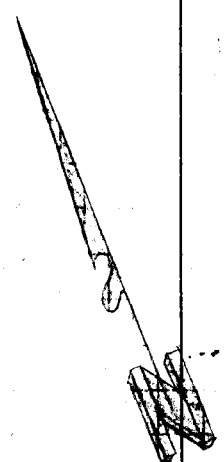
STATION Inst. At	STATION Sight On	S. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
5+00	Z-1	1	72.0	75.4	8:06	66° 00'	1145 Cut in Line 0+00 = Z-1A
		2	64.2	67.6		64° 47'	1062
		3	56.4	59.8		63° 46'	5+00 1015 Z-1
		4	48.6	52.0		62° 48'	973
		5	40.8	44.2		61° 46'	931
		6	36.0	39.4		60° 48'	895
		7	31.8	35.2		58° 33'	818
		8	27.6	31.0		56° 31'	756
		9	23.2	26.6		53° 45'	682
		10	—	—		52° 56'	662
		11	24.4	23.9		52° 25'	650
		12	23.4	22.9		51° 01'	618
		13	21.8	21.3		49° 56'	594
		14	20.9	20.4		48° 24'	571
		15	19.8	19.3		47° 23'	550
		16	18.6	18.1		46° 12'	521
		17	16.7	16.2		43° 57'	482
		18	14.9	14.4		40° 51'	432
		19	13.4	12.9		38° 42'	401
		20	11.8	11.3		36° 16'	367



Range Line = 0+00 = Z-1A

Shots 1 to 9
Zero + 4.0'
Boat + 1.0'
Tide − 1.6'
+3.4

Shots 10 to 21
Zero + 0.1'
Boat + 1.0'
Tide − 1.6'
−.5

Profile Notes Red. J. S. Hale Plotted J. C. Newton Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 9
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J. C. Newton Checked J. S. Hale Survey by Van Deren Notes P.T. Date 7-18-57
No. 0+00 Date 9-57 Date 9-57 Map No. Date

F. B. 2306 Pg. 10 | Job No. 2300.02 Division No. 10 | Notes Red J. S. Hale Plotted J. C. Newton | Profile

Survey of Beach Erosion | Date 9-57 Date 9-57 | No.

Survey by Van Deren Notes R.T. | Notes Chkd J. C. Newton Checked J. S. Hale | X-Sec.

Indexed C. Johnson Date 7-18-57 | Date 9-57 Date 9-57 | No. 0+00

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
5+00					
Z-2					
Inst. Sight At On	# Depth Rec. Adj.	Time	Hor. Ang.		
	21 9.8' 9.3'	8:14	33° 25'	330'	Cut in line 0+00 = Z-1 A
					Zero +0.1'
					Boat +1.0'
					Tide -1.6'
					-0.5'

76298 S & E #307—7-55

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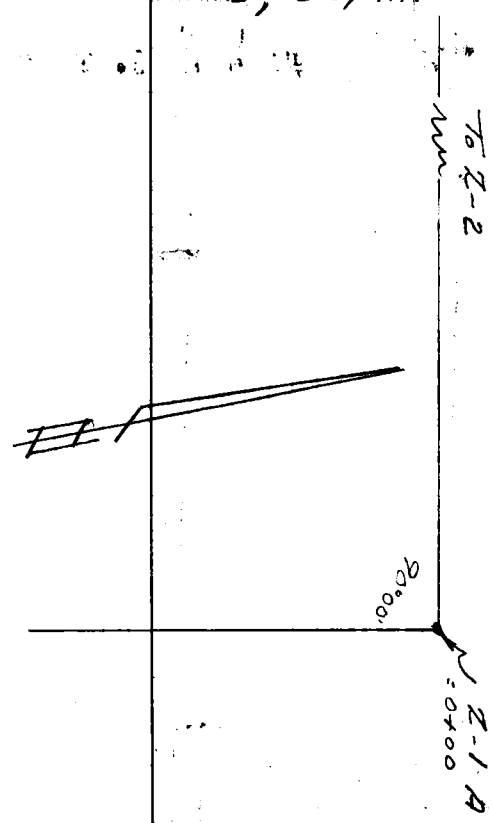
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
Z-1A 0+00	Z-2	1		8:06	90° 30'	Approx. 13 Fathoms, depth.
		2			90° 00'	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			90° 40	
		15			"	
		16			90° 00'	
		17			"	
		18			"	
		19			"	
		20			"	



Profile No. ____ Notes Red. J.S.H. Date 9-57 Plotted J.C.N. Date 9-57 Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 11

X-Sec. No. 0+00 Notes Chkd. J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey of Beach Erosion Survey by Van Deren Map No. ____ Notes Larch Date July 18, 57 Indexed C. Johnson Date ____

F. B. 2306 Pg. 12 | Job No. 0300.02 | Division No. 10 | Notes Red. J. S. H. | Plotted J. C. N. | Profile

Survey of Beach Erosion | Date 9-57 | Date 9-57 | No.

Survey by Van Deren | Notes E. Landa | Notes Chkd. J. C. N. | Checked J. S. H. | X-Sec.

Indexed A. C. Johnson | Date 7-18-57 | Date 9-57 | Date 9-57 | No. 0+00

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At 2-1A 0+00	Sight On 2-2	Depth # Rec. Adj. 21	Time 8:14	Hor. Ang. 90°00'		Remarks
						Zero Boat +1.0 Tide -1.6

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 2+50	SIGHT ON 5+00
T.P.	1 16	5 89		4 73		Inshore
5+00			+12 0	17 9		5+00
13' L			+9 3	15 2	Brk	
			+8 6	14 5	10° 20' 46 "	
			+6 5	12 4	14 22 64 "	
			+5 0	10 9	24 07 112 "	
			0 0	5 9	30 02 145	
			3 4	2 5	35 44 180	
			5 3	0 6	41 41 223	
			6 8	-0 9	44 56 250	
			9 3	-3 4	49 37 294	
			11 6	-5 7	51 01 309	
			13 0	-7 1	54 21 349	
			14 2	-8 3	56 45 381	
			15 6	-9 7	58 53 414	
			16 5	-10 6	59 59 433	
T.P.			1 91	3 98		

Profile No. ____ Date 9-57 Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 PG. 13
X-Sec. No. 5+00 Date 9-57 Notes Chkd J.C.N. Checked J.S.H. Survey of BEACH EROSION STUDIES
Date 9-57 Survey by ENGLISH Notes ED Date 7-18-57
Map No. ____ Date ____

76298 S & E #307—7-55

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Profile Notes Red J.S.H. Plotted J.C.N. Job No. 2300.02 Division No. 10 F. B. 2306 Pg. 15
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.H. Checked J.S.H. Survey by Hamilton Notes R.T. Date 2-18-57
No. 5+00 Date 9-57 Date 9-57 Map No. Modified Johnson Date

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
0+00 = Z-1A	Z-2	1	135.0	134.3	8:37	72° 08'	1551 Cut in Line 5+00
		2	122.0	121.3		70° 28'	1409
		3	96.0	95.3		69° 01'	Z-2 1304
		4	84.5	83.8		66° 56'	1174
		5	43.8	43.1	8.38	64° 43'	1059
		6	72.0 No Trans.	71.3 — — —	8.44	64° 08'	1031
		7	38.2	37.5		60° 43'	892
		8	34.8	34.1		59° 55'	863
		9	32.3	31.1		58° 38'	820
		10	30.7	29.0		57° 27'	783
		11	29.4	27.4		56° 25'	753
		12	27.6	25.6		55° 33'	729
		13	26.0	24.0		54° 30'	701
		14	23.7	21.7		53° 01'	664
		15	22.2	20.2		51° 40'	632
		16	20.8	18.8		50° 09'	599
		17	—			48° 45'	570
		18	—			46° 58'	536
		19	—		8:47	44° 37'	493
		20	42.0	40.7	9:00	61° 26'	918

Base Line = 5+00

Z-1A = 0+00

Shots 1 to 8
Zero 0.0'
Boat +1.0
Tide -1.7
-0.7

Shots 9 - 10
Zero -0.5 -1.0
Boat +1.0 +1.0
Tide -1.7 -1.7
-1.2 -1.7

Shots 11 to 19
Zero -1.3
Boat +1.0
Tide -1.7
-2.0

Shots 20 to 28
Zero - 0.5
Boat + 1.0
Tide - 1.8
-1.3

76298 S & E #307—7-55

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F. B. 2306 Pg. 16 Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. Newton Profile No.
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec. No. 5+00
Survey by Van Deren Notes R.T. Notes Chkd. J. C. N. Checked J. S. H.
Indexed K. C. Johnson Date 7-18-57 Date 9-57 Date 9-57

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	37.9	36.6		60° 17'	876	Cut in Line = 5+00
		22	34.9	33.6		59° 39'	854	Shots 20 to 28
		23	32.2	30.9		58° 34'	811	Zero -0.5
		24	30.3	29.0		57° 22'	781	Boat +1.0
		25	27.8	26.5		56° 08'	745	Tide -1.8
		26	26.0	24.7		54° 58'	713	-1.3
Z-14 = 0+00		27	23.9	22.6		53° 42'	681	Shots 29 to 36
		28	22.2	20.9	—	51° 47'	635	Zero 0.0
	Z-2	29	19.7	18.9		50° 05'	598	Boat +1.0
		30	18.0	17.2		48° 28'	564	Tide -1.8
		31	16.6	15.8		46° 29'	527	-0.8
		32	15.2	14.4		44° 16'	487	
		33	13.2	12.4		42° 31'	458	
		34	11.3	10.5		39° 52'	418	
		35	9.3	8.5		37° 17'	381	
		36	7.9	7.1	9:02	34° 27'	343	
		37						
		38						

76298 S & E #307—7-55

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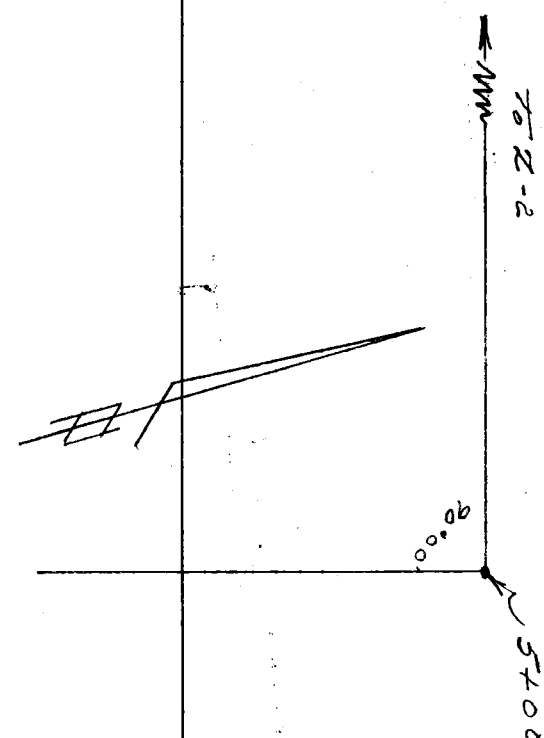
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
5+00	Z-2	1		8:37	90° 00'	
		2			"	
		3			"	
		4			"	
		5		8:38	"	
		6		8:44	"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19		8:47	"	
		20		9:00	"	



Profile No. ____ Notes Red. J.S.H. Date 9-57 Plotted J.C.H. Date 9-57 Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 17
X-Sec. No. 5+00 Notes Chkd. J.C.H. Date 9-57 Checked J.S.H. Date 9-57 Survey of Beach Erosion Survey by Von Deren Notes Land Date July 18, 57 Map No. ____ Date ____

F. B. 2306 Pg. 18 | Job No. 0300.02 | Division No. 10 | Notes Red. J. S. H. | Plotted J. C. N. | Profile

Survey of Beach Erosion | Date 9-57 | Date 9-57 | No.

Survey by Van Deren | Notes E. Landa | Notes Chkd. J. C. N. | Checked J. S. H. | X-Sec.

Indexed A. C. Johnson | Date 7-18-57 | Date 9-57 | Date 9-57 | No. 5+00

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
5+00 Z-2	21			90° 00'		
	22			"		
	23			90° 18'		
	24			90° 00'		
	25			"		
	26			"		
	27			"		
	28			"		
	29			"		
	30			"		
	31			"		
	32			"		
	33			89 13		
	34			89 13		
	35			"		
	36		9.02	89 00		

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 12+50	SIGHT ON 10+00
T.P.	1 85	5 83		3 98		Inshore
10+00			+ 10 0	15 8		10+00
			+ 9 3	~~15 1~~ 12.8	9° 23' 41 Brk.	
			+ 7 0	~~15 8~~	11 43 52 "	
			+ 4 8	10 6	21 44 100 "	
			0 0	5 8	27 07 128	
			3 2	2 6	32 50 161	
			5 0	0 8	38 39 200	
			6 4	- 0 6	43 30 237	
			8 1	-2 3	47 33 273	
			11 1	-5 3	51 50 318	
			12 4	-6 6	54 52 355	
			14 0	-8 2	57 30 392	
			16 5	-10 7	60 07 435	
T.P.			0 37	5 46		

Profile No. ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.07 Division No. 10 F.B. 2306 Pg. 19
Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd J.C.N. Checked J.S.H. Survey by ENGHLSH Notes ED Date 7-18-57
No. 10+00 Date 9-57 Date 9-57 Map No. ____ Date ____

F.B. 2306 PG. 20

Job No. 0300102 Division No. 10 Notes Red. Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by ENGLISH Notes ED Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

STATION	B.S.	H.I.	F.S.	ELEV.

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78L298 307 10-51

76298 S & E #307—7-55

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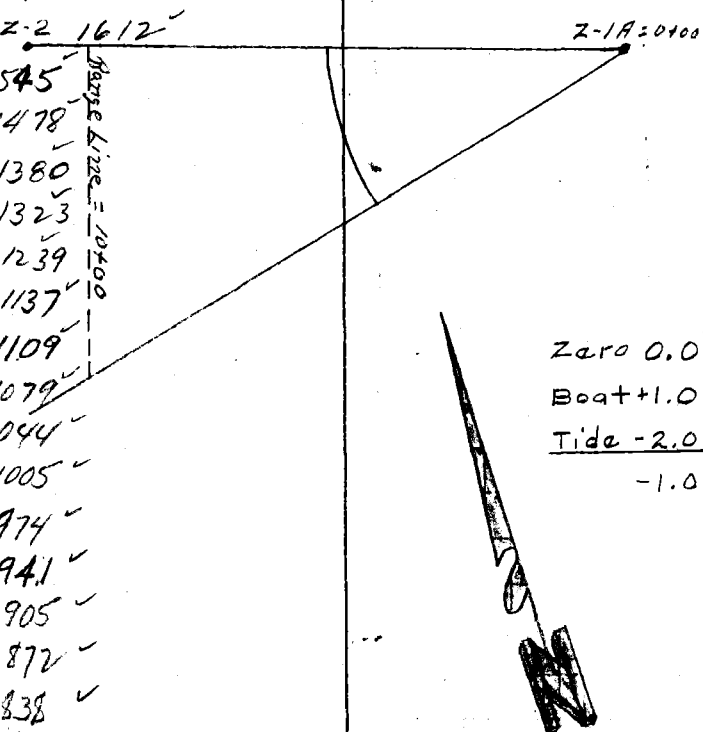
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
0+00 = Z-1A	Z-2 Transition	1	108.0	107.0	9:16	61° 37'	1851 Cut in Line 10+00
		2	96.0	95.0		59° 58'	1730
		3	87.0	86.0		58° 11'	Z-2 1612
		4	78.0	77.0		57° 05'	1545
		5	70.5	69.5		55° 55'	1478
		6	63.0	62.0		54° 04'	1380
		7	60.0	59.0		52° 55'	1323
		8	52.0	51.0		51° 05'	1239
		9	48.0 / 46.0	47.0 / 45.0		48° 40'	1137
		10	44.3	43.3		47° 58'	1109
		11	42.3	41.3		47° 10'	1079
		12	41.0	40.0		46° 14'	1044
		13	39.6	38.6		45° 08'	1005
		14	38.0	37.0		44° 14'	974
		15	36.5	35.5		43° 15'	941
		16	34.8	33.8		42° 08'	905
		17	33.2	32.2		41° 05'	872
		18	31.2	30.2		39° 57'	838
		19	30.0	29.0		38° 48'	804
		20	28.4	27.4		37° 31'	768



Zero 0.0
Boat +1.0
Tide -2.0
-1.0

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 21
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Doren Notes N.T. Date 7-18-57
No. 10+00 Date 9-57 Date 9-57 Map No. [illegible] Date

76298 S & E #307—7-55

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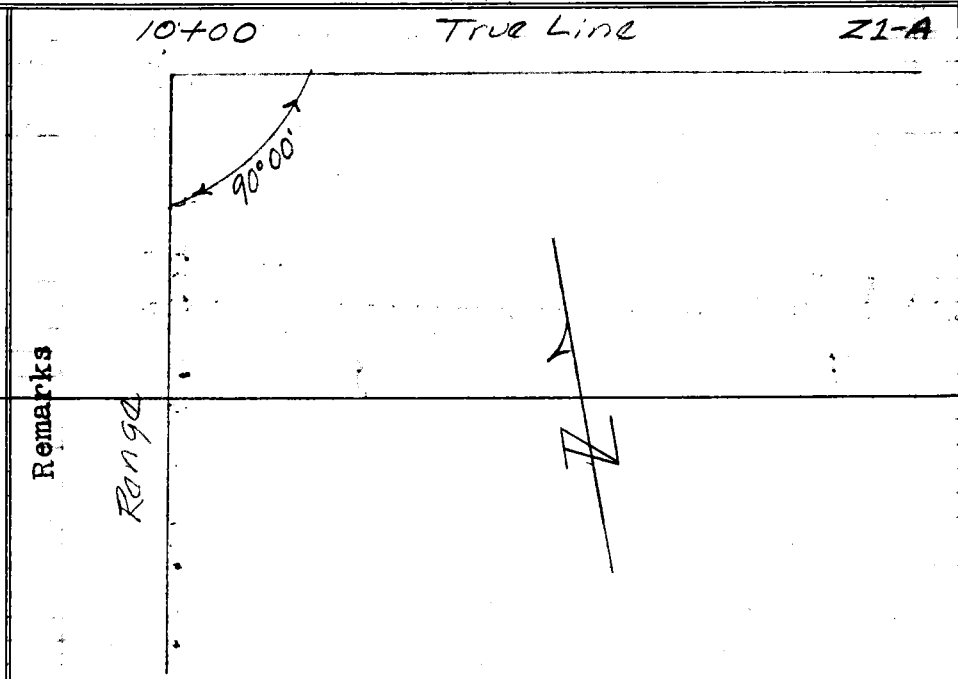
F. B. 2306 Pg. 22 Job No. 0700.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Date 9-57 No. Profile
Survey of Beach Erosion Date 7-57 Checked J. C. N. Date 9-57 X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. J. S. H. Date 9-57 No. 10+00
Indexed K. C. Johnson Date 7-18-57

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	# Rec.	Depth Adj.		Time	Hor. Ang.	Remarks	
		21	27.0	25.9		36° 20'	735	Cut in Line 10+00
		22	25.4	24.3		35° 08'	704	
		23	23.8	22.7		33° 57'	673	
		24	22.3'	21.2		32° 30'	637	
		25	21.0	19.9		31° 20'	609	Zero 0.0
		26	19.2'	18.1		30° 00'	577	Boat +1.0
		27	17.7'	16.6		28° 44'	548	Tide -2.1
Z-18 = 0+00		28	16.2'	15.1		27° 14'	515	-1.1
		29	14.3'	13.2		25° 48'	483	
	Z-2	30	12.6'	11.5		24° 12'	449	
		31	11.2'	10.1		22° 46'	420	
		32	9.8'	8.7	9:26	21° 32	395	

Profile No.	Notes Red. J. S. H. Date 9-57	Plotted J. C. N. Date 9-57	Job No. 0300.02	Division No. 10	F. B. 2306 Pg. 23
X-Sec. No. 10+00	Notes Chkd. J. C. N. Date 9-57	Checked J. S. H. Date 9-57	Survey of Beach Erosion	Survey by Van Deren Notes Goodwin Date 7-18-57	Map No. [illegible] Johnson Date



STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
10+00	Z1-A	1		9:16	90°00'	
		2			" "	
		3			" "	
		4			" "	
		5			" "	
		6			" "	
		7			" "	
		8			" "	
		9			" "	
		10			" "	
		11			" "	
		12			" "	
		13			" "	
		14			" "	
		15			" "	
		16			" "	
		17			" "	
		18			" "	
		19			" "	
		20			" "	

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F. B. 2306 Pg. 24 | Job No. 0300.02 Division No. 10 Notes Red J. S. H. Plotted J. C. N. No. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 No. X-Sec.
Survey by Van Daren Notes J.S. Goodwin Notes Chkd. J. C. N. Checked J. S. H.
Indexed E. C. Johnson Date 7-18-57 Date 9-57 Date 9-57 No. 10+00

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
10+00	Z1-A	21			90°	00'	
		22			"	"	
		23			"	"	
		24			"	"	
		25			"	"	
		26			"	"	
		27			"	"	
		28			89°	15'	
		29			"	"	
		30			89°	42'	
		31			89°	42'	
		32		9:26	90°	00'	

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 12+50	SIGHT ON 15+00
T.P.	1 40	6 86		5 46		Inshore
15+00			+ 1 15	1 84		15+00
			+ 8 8	1 57	0° 08' Brk 45	
		6 9	0 0	6 9	18 57 86	
			3 6	3 3	25 14 118	
			5 9	1 0	30 10 145	
			6 9	0 0	37 33 192	
			8 6	-1 7	47 33 273	
			12 0	-5 1	49 19 291	
			14 5	-7 6	53 11 334	
			15 6	-8 7	55 57 370	
			16 6	-9 7	58 45 412	
			17 5	-10 6	61 03 452	
T.P.			1 93	4 93		

Profile No. _____ Date 9-57 Notes Red J.S.H. Plotted J.C.N. Job No. 03D0.07 Division No. 10 F.B. 2306 Pg. 25
X-Sec. No. 15+00 Date 9-57 Notes Chkd J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey of BEACH EROSION STUDIES Survey by ENGLISH Notes ED Date 7-18-57 Map No. _____ Date _____

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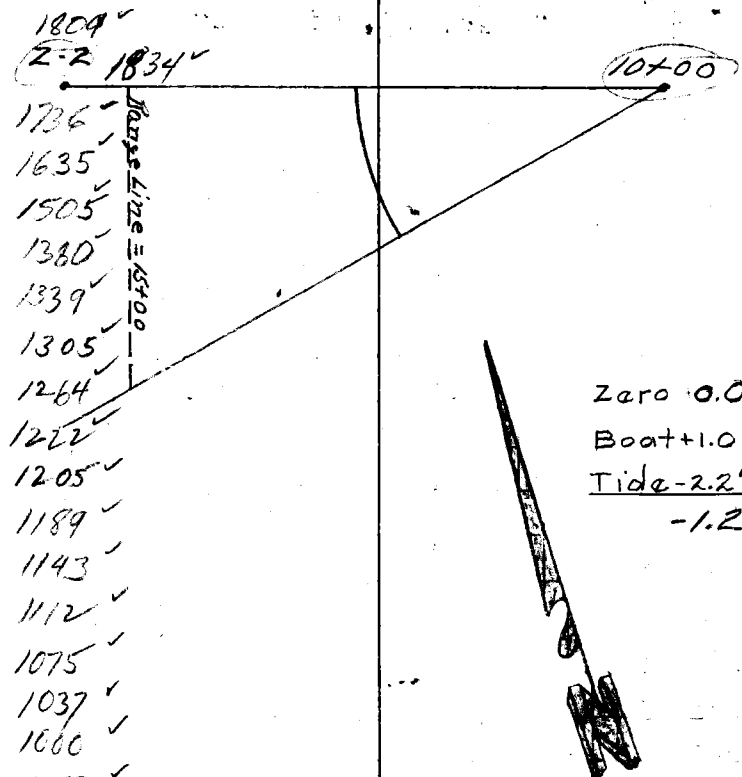
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
10+00	Z-2	1	135.0	133.8	9:40	75° 45'	2036 Cut in Line 15+00
		2	117.0	115.8		74° 33'	1809
		3	111.2	110.0		74° 45'	Z-2 1834
		4	95.4	94.2		73° 56'	1736
		5	81.0	79.8		73° 00'	1635
		6	61.2	60.0		71° 37'	1505
		7	50.4 / 50.4	49.2 / 49.2	Tran.	70° 05'	1380
		8	48.6	47.4		69° 17'	1339
		9	46.8	45.6		68° 48'	1305
		10	45.2	44.0		68° 12'	1264
		11	43.5	42.3		67° 32'	1222
		12	41.8	40.6		67° 28'	1205
		13	40.9	39.7		67° 12'	1189
		14	39.5	38.3		66° 22'	1143
		15	[illegible]	36.8		65° 49'	1112
		16	36.5	35.3		65° 03'	1075
		17	35.2	34.0		64° 15'	1037
		18	33.1	31.9		63° 26'	1000
		19	31.6	30.4		62° 26'	958
		20	30.4	29.2		61° 57'	938



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 27
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-18-57
No. 10+00 Date 9-57 Date 9-57 Map No. [illegible] Date

76298 S & E #307—7-55

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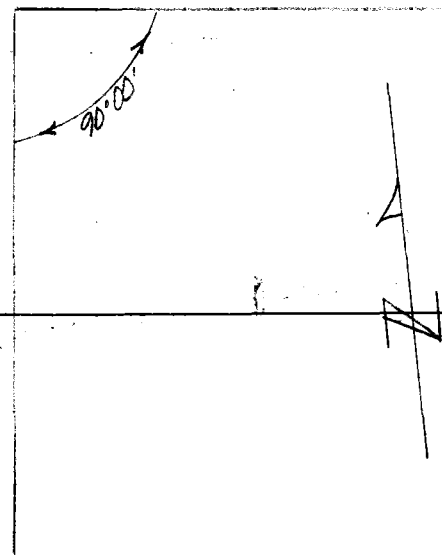
STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	29.2	28.0		61° 17'	913 Cut in Line 15+00	
		22	27.7	26.5		60° 21'	878	
		23	26.3	25.1		59° 40'	855	
		24	25.3	24.1		58° 23'	812	
		25	24.1	22.9		57° 37'	788	
		26	23.4	22.2		56° 30'	755	
		27	22.3	21.1		55° 13'	720	
		28	20.4	19.2		53° 21'	672	Zero +0.0
10+00	Z-2	29	19.1	17.9		51° 44'	634	Boat +1.0
		30	17.4	16.2		49° 38'	588	Tide -2.2
		31	15.6	14.4		47° 51'	552	-1.2
		32	13.8	12.6		45° 15'	504	
		33	12.2	11.0		42° 16'	454	
		34	11.1	9.9		39° 08'	407	
		35	9.9	8.7	9:50	35° 44'	360	

F. B. 2306 Pg. 28 Job No. 0300.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 No.
Survey by Van Deren Notes R.T. Notes Chkd. J.C.N. Checked J.S.H. X-Sec.
Indexed C. Johnson Date 7-18-57 Date 9-57 No. 15+00

Profile No. _____ Notes Red. J. S. H. Plotted J. C. N. Job No. 0300.02 Division No. 10 | F. B. 2306 Pg. 29
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 15+00 Notes Chkd. J. C. N. Checked J. S. H. Survey by Van Deren Notes Goodwin Date 7-18-57
Date 9-57 Date 9-57 Map No. [illegible] Date

15+00 True Line Z1-A



STATION		B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Range
15+00	Z1-A	1		9:40	90° 30'	
		2			90° 00'	
		3			" "	
		4			" "	
		5			" "	
		6			" "	
		7			" "	
		8			90° 17'	
		9			90° 17'	
		10			90° 17'	
		11			90° 18'	
		12			90° 00'	
		13			" "	
		14			" "	
		15			" "	
		16			" "	
		17			" "	
		18			" "	
		19			" "	
		20			" "	

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F. B. 2306 Pg. 30 | Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. No. X-Sec.
Survey of Beach Erosion Date 9-57 Date 9-57
Survey by Van Brian Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. Profile
Indexed C. Johnson Date 7-18-57 Date 9-57 Date 9-57 No. 15+00

STATION	S. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
15+00 Z1-A	21			90° 00'		
	22			" "		
	23			" "		
	24			" "		
	25			" "		
	26			" "		
	27			" "		
	28			" "		
	29			" "		
	30			" "		
	31			89° 45'		
	32			90° 00'		
	33			" "		
	34			" "		
	35		9:50	" "		

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 22+50	SIGHT ON 20+00
T.P.	1 55	6 48		4 93		Inshore
20+00			+ 9 4	15 9		20+00
			+ 8 2	14 7	2° 00' 9" Brk.	
			+ 5 3	17 8	14 26 64 "	
		6 5	0 0	6 5	21 01 96	
			3 4	-3 1	25 32 120	
			5 6	0 9	31 01 150	
			6 8	-0 3	36 58 188	
			7 8	-1 3	42 31 229	
			10 5	-4 0	47 41 275	
			13 4	-6 9	51 15 313	
			15 6	-9 1	54 18 348	
			16 8	-10 3	57 08 388	
T.P.			1 82	4 66		

Profile No. _____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 PG. 31
Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. No. 20+00 Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-18-57
Date 9-57 Date 9-57 Map No. [illegible] Date _____

76298 S & E #307—7-55

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STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
10+00	N-2	1	94.8	93.4	10:05	69° 51'	2725	Cut in Line 20+00
		2	93.6	92.2		68° 38'	2556	
		3	89.4	88.0		67° 04'	2363	
		4	78.6	77.2		65° 04'	2151	
		5	66.6	65.2		62° 56'	1957	
		6	60.0	58.6		61° 06'	1812	
		7	50.4 / 51.7	49.0 / 50.3		57° 35'	1575	
		8	47.8	46.4		54° 30'	1402	
		9	46.7	45.3		53° 26'	1348	
		10	45.1	43.7		52° 26'	1300	
		11	43.2	41.8		51° 38'	1263	
		12	41.5	40.1		50° 29'	1213	
		13	39.7	38.3		49° 09'	1156	
		14	38.2	36.9		48° 00'	1111	
		15	36.9	35.5		46° 56'	1070	
		16	34.8	33.4		45° 36'	1021	
		17	33.4	32.0		44° 18'	976	
		18	31.7	30.3		43° 16'	941	
		19	30.3	28.9		41° 59'	900	
		20	28.9	27.5		40° 43'	861	

Range Line = 20+00

10+00

Zero +0.0
Boat +1.0
Tide -2.4
-1.4

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 2300.02 Division No. 10 F. B. 2306 Pg. 33
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Keren Notes R.T. Date 9-18-57
No. 20+00 Date 9-57 Date 9-57 Map No. Date

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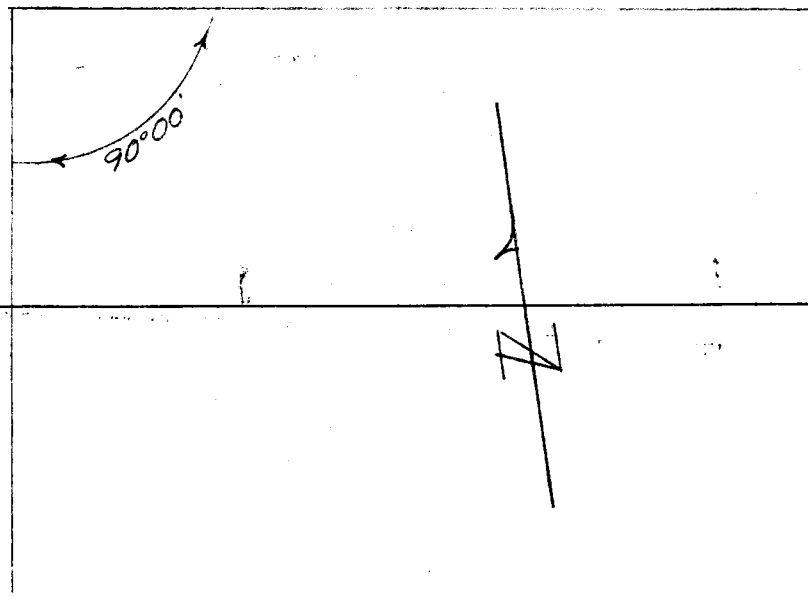
F. B. 2306 Pg. 34 Job No. 3302 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. 9-57 No. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. J.C.N. Checked J.S.H. No. 10+00
Indexed C. Johnson Date 7-18-57 Date 9-57

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec	Adj.	Time	Hor. Ang.	Remarks	
		21	27.3	25.8		39° 17'	818	Cut in Line 20+00
		22	25.9	24.4		38° 06'	784	
		23	24.8	23.3		36° 49'	749	
		24	23.2	21.7		35° 09'	699	
		25	21.7	20.2		33° 40'	661	
		26	20.1	19.2		32° 57'	619	
		27	19.1	17.6		30° 04'	579	
		28	16.7	15.2		28° 10'	535	Zero +0.0
10+00	Z-2	29	14.9	13.4		26° 49'	506	Boat +1.0
		30	13.5	12.0		24° 41'	460	Tide -2.5
		31	12.2	10.7		22° 48'	420	-1.5
		32	11.3	9.8	10:15	21° 09'	387	

Profile No.	Notes Red. J. S. H.	Plotted J. C. N.	Job No. 0300.02	Division No. 10	F. B. 2306 Pg. 35
	Date 9-57	Date 9-57	Survey of Beach Erosion		
X-Sec. No. 20+00	Notes Chkd. J. C. N.	Checked J. S. H.	Survey by Van Deren	Notes Goodwin	Date 7-18-57
	Date 9-57	Date 9-57	Map No. [redacted]	Indexed Johnson	Date

20+00 True Line Z1-A



STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
20+00	Z1-A	1		10:05	90° 00'	Range
		2			" "	
		3			" "	
		4			" "	
		5			" "	
		6			" "	
		7			" "	
		8			" "	
		9			" "	
		10			" "	
		11			" "	
		12			" "	
		13			" "	
		14			" "	
		15			" "	
		16			" "	
		17			" "	
		18			" "	
		19			" "	
		20			" "	

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F. B. 2306 Pg. 36 Job No. 0300.02 Division No. 10 Notes Red J. S. H. Plotted J. C. N. No. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec.
Survey by Van Deren Notes J.G. Goodwin Notes Chkd. J. C. N. Checked J. S. H. No. 20+00
Indexed L. C. Johnson Date 7-18-57 Date 9-57 Date 9-57

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
20+00	21-A	21			90° 00'		
		22			" "		
		23			" "		
		24			89° 28'		
		25			89° 25'		
		26			89° 17'		
		27			90° 00'		
		28			" "		
		29			" "		
		30			" "		
		31			" "		
		32		10:15	" "		

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 22+50	SIGHT ON 25+00
T.P.	1 86	6 52		4 66		Inshore
25+00		+	6 3	12 8		25+00
		+	3 9	10 4	21° 17' 98 Brk.	
		6 5	0 0	6 5	25 14 118	
			3 3	3 2	30 34 148	
			5 7	0 8	35 26 178	
			6 2	0 3	39 40 207	
			7 6	-1 1	43 21 236	
			10 7	-4 2	49 04 288	
			12 6	-6 1	52 30 326	
			14 0	-7 5	55 27 363	
			15 5	-9 0	58 03 401	
			17 2	-10 7	60 32 443	
T.P.	1688	32 36	+8 96	15 48		
Z-2	1 45	32 17	1 64	30 72	Z-2, el= 30.723, F.B. 2100-104	
			1688	15 29		

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 0308.02 Division No. 10 F.B. 2306 Pg. 37
No. Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes E.D. Date 7-18-57
No. 25+00 Date 9-57 Date 9-57 Map No. [redacted] Date

76298 S & E #307—7-55

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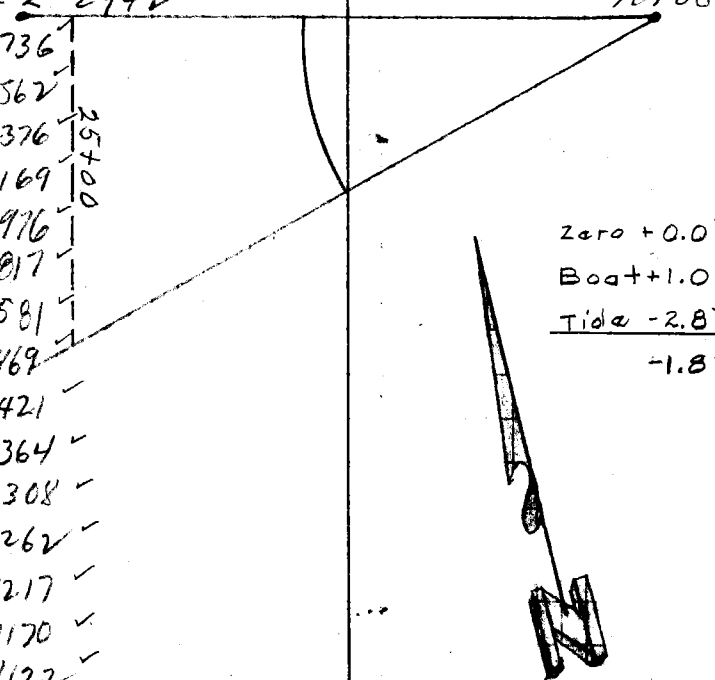
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
10+00	Z-2	1	98.4	96.6	10:32	66° 09'	3393 Cut in Line 25+00
		2	90.6	88.8		64° 28'	3140
		3	84.6	82.8		62° 59'	Z-2 2942
		4	78.6	76.8		61° 16'	2736
		5	75.6	73.8		59° 39'	2562
		6	69.6	67.8		57° 44'	2376
		7	63.7	61.9		55° 20'	2169
		8	57.6	55.8		52° 47'	1976
		9	53.4 / 53.2	51.6 / 51.4	Tran.	50° 27'	1817
		10	51.9	50.1		46° 30'	1581
		11	49.7	47.9		44° 23'	1469
		12	48.4	46.6		43° 27'	1421
		13	47.2	45.4		42° 16'	1364
		14	45.4	43.6		41° 05'	1308
		15	44.2	42.4		40° 04'	1262
		16	42.9	41.1		39° 02'	1217
		17	41.5	39.7		37° 57'	1170
		18	39.5	37.7		36° 48'	1122
		19	37.8	36.0		35° 24'	1067
		20	35.9	34.1		34° 15'	1022



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 39
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 9-18-57
No. 25+00 Date 9-57 Date 9-57 Map No. Date

76298 S & E #307—7-55

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STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	34.2	32.3		32° 50'	968	Cut in Line 25+00
		22	32.7	30.8		31° 43'	927	
		23	31.1	29.2		30° 24'	881	
		24	29.4	27.5		29° 05'	834	
		25	27.6	25.7		27° 37'	785	
		26	26.1	24.2		26° 18'	741	Zero +0.0
		27	24.6	22.7	10:43	24° 52'	695	Boat +1.0
10+00		28	23.0	21.1	10:50	23° 32'	654	Tide -2.9
	Z-2	29	20.7	18.8		21° 53'	603	-1.9
		30	18.3	16.4		20° 32'	563	
		31	15.4	13.5		18° 53'	513	
		32	13.5	11.6		17° 14'	465	
		33	11.8	9.9		15° 52'	426	
		34	10.3	8.4	10:51	14° 47'	396	

F. B. 2306 Pg. 40
Job No. 3000.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 No.
Survey by Van Deren Notes R.T. Notes Chkd. J.C.N. Checked J.S.H. X-Sec.
Indexed C. Johnson Date 7-18-57 Date 9-57 Date 9-57 No. 25+00

76298 S & E #307—7-55

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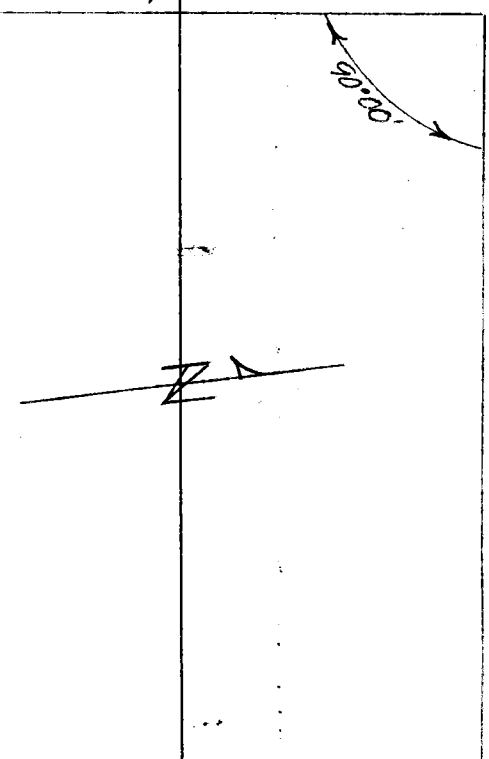
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
25+00	Z1-A	1			10:32	90° 00'		Range
		2				" "		
		3				" "		
		4				" "		
		5				" "		
		6				" "		
		7				" "		
		8				" "		
		9				" "		
		10				" "		
		11				" "		
		12				" "		
		13				" "		
		14				" "		
		15				" "		
		16				" "		
		17				" "		
		18				" "		
		19				" "		
		20				" "		



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 41
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Dam Notes Stockwell Date 7-18-57
No. 25+00 Date 9-57 Date 9-57 Map No. Job Date Date

76298 S & E #307—7-55

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F. B. 2306 Pg. 42 | Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Date 9-57 Plotted J. C. N. Date 9-57 No. X-Sec. No. 25+00 Profile

Survey of Beach Erosion Notes Chkd. J. C. N. Date 9-57 Checked J. S. H. Date 9-57

Survey by Van Doren Notes J. C. Goodwin Date 7-18-57

Indexed J. C. Johnson

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
25+00	Z1-A	21			90° 00'		
		22			" "		
		23			" "		
		24			" "		
		25			" "		
		26			" "		
		27		10:43	" "		
		28		10:50	" "		
		29			" "		
		30			" "		
		31			" "		
		32			" "		
		33			" "		
		34		10:51	" "		

Notes Ck'd by J. C. N.	Survey of Beach Erosion	F. B. 2306 PG. 43
Map No.	W. O. 0306.01 Tape No. St'd. °F	
Office Work J. S. H.	Surveyed by Van Doren	
Checked K. R. K.	Notes Van Date 7-19-57	
Date 9-57	Indexed ~~J. C. Johnson~~	

Tide Gauge Reading at Santa Monica

All Readings are on Daylight Savingtime

7-19-57

Scale on 2.7

Gauge Time		Watch Time	
7:00	A.M.		+ 2.1
7:30	"		+ 2.0
8:00	"		+ 1.9
8:30	"		+ 2.0
9:00	"		+ 2.0
9:30	"		+ 2.1
10:00	"		+ 2.2
10:30	"		+ 2.5
11:00	"		+ 2.6
11:30	"		+ 3.0
12:00	"		+ 3.2
12:30	P.M.		+ 3.7
1:00	"		+ 3.8
1:30	"		+ 4.1
2:00	"		+ 4.4
2:30	"		+ 4.6
3:00	"		+ 4.6

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76F309S S&E #247. 8-54

76F309S S&E #247 1-56

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Notes Ck'd by J.C.N.
Map No.
Office Work J.S.H.
Checked K.R.K.
Date 9-57

Survey of Beach Erosion
JN 0300 02 Tape Std. °F
Surveyed by
Notes Date
Indexed

July 19 1957

F. B. 2306 PG. 44

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 127+50	SIGHT ON 130+00
T.P.	134	16 63		15 29		Inshore
T.P.	156	6 17	12 00	4 63		30+00
30+00			+88	150		
			+88	150	7° 52′ 35 BRK	
			+69	131	11 29 51 BRK	
			00	62	22 56 106	
			37	25	30 19 146	
			53	09	36 21 184	
			70	- 08	42 33 230	
			120	- 58	49 19 291	
			134	- 72	54 29 350	
			150	- 88	57 33 393	
			161	- 99	60 28 441	
			178	- 116	63 00 491	
T.P.			093	526		

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 030010 Division No. 10 F.B. 2306 Pg. 45
No. Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-19-57
No. 30+00 Date 9-57 Date 9-57 Map No. [redacted] Date

76298 S & E #307—7-55

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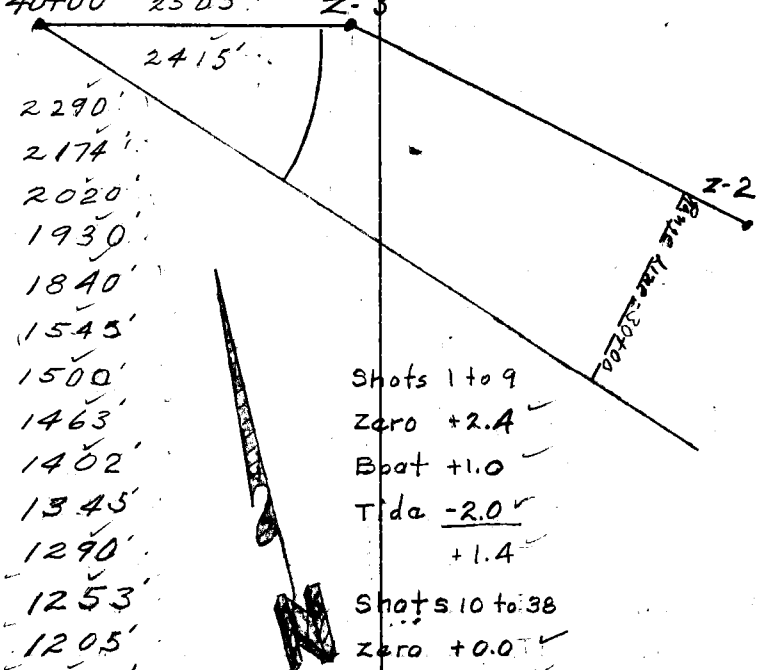
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
40+00	Z-3	1	71	72.4	7:31	79° 48'	2750' Cut in Line 30+00
		2	67	68.4		78° 53'	2608'
		3	64	65.4		78° 04'	40+00 2505' Z-3
		4	63	64.4		77° 22'	2415'
		5	61	62.4		76° 14'	2290'
		6	59	60.4		75° 03'	2174'
		7	55	56.4		73° 36'	2020'
		8	52	53.4		72° 24'	1930'
		9	51 No Transition	52.4		71° 24'	1840'
		10	51.3	50.3		66° 36'	1545'
		11	50.7	49.7		65° 54'	1500'
		12	49.0	48.0		65° 01'	1463'
		13	47.5	46.5		63° 57'	1402'
		14	45.4	44.4		62° 45'	1345'
		15	44.2	43.2		61° 38'	1290'
		16	42.8	41.8		60° 26'	1253'
		17	41.5	40.5		59° 27'	1205'
		18	40.0	39.0		58° 22'	1160'
		19	38.8	37.8		57° 39'	1130'
		20	37.4	36.4		56° 46'	1092'



Shots 1 to 9
Zero +2.4
Boat +1.0
Tide -2.0
+1.4

Shots 10 to 38
Zero +0.0
Boat +1.0
Tide +2.0
-1.0

Profile No. ____ Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 47
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 30+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deven Notes R.T. Date 7-19-57
Date 9-57 Date 9-57 Map No. ____ Date ____

76298 S & E #307—7-55

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STATION Inst. At	STATION Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
40+00	Z-3	21	36.4	35.4		56° 10'	1070' Cut in Line 30+00
		22	35.3	34.3		55° 29'	1049'
		23	34.3	33.3		54° 39'	1021'
		24	33.0	32.0		53° 34'	985'
		25	30.8	29.8		52° 00'	933'
		26	29.4	28.4		50° 48'	901'
		27	27.7	26.7		49° 28'	853'
		28	26.4	25.4		48° 28'	828'
		29	25.4	24.4		47° 09'	793'
		30	24.1	23.1		45° 53'	760'
		31	22.4	21.4		44° 12'	712'
		32	21.2	20.2		42° 42'	676'
		33	18.5	17.5		40° 35'	628'
		34	16.5	15.5		38° 23'	581'
		35	14.8	13.8		36° 36'	541'
		36	13.3	12.3		35° 08'	503'
		37	12.2	11.2		33° 40'	473'
		38	11.6	10.6	7:44	31° 55'	437'

Zero +0.0
Boat +1.0
Tide -2.0
-1.0

F. B. 2306 Pg. 48 Job No. 0300.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Date 9-57 Date 9-57 No. Profile
Survey of Beach Erosion Notes R.T. Notes Chkd. J.C.N. Checked J.S.H. Date 9-57 Date 9-57 No. X-Sec.
Survey by Van Deven Date 7-19-57
Indexed K. C. Johnson

76298 S & E #307—7-55

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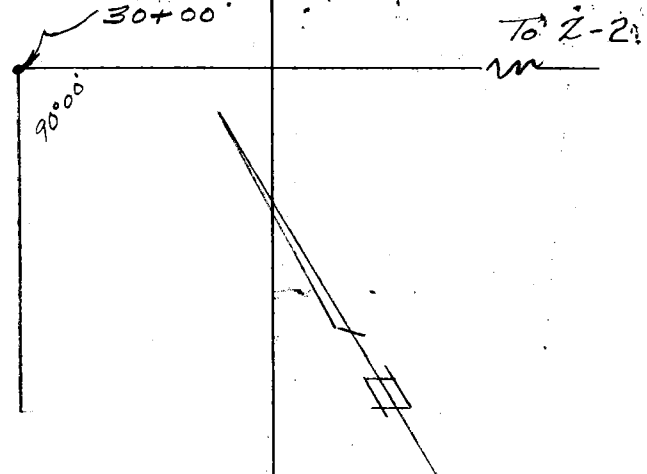
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
30+00	Z-2	1			7:31	90° 00'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				90° 08'	
		9				90° 19'	
		10				90° 00'	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				89° 44'	
		17				"	
		18				"	
		19				89° 45'	
		20				90° 00'	



Profile Notes Red J. S. H. Plotted J. C. N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 49
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J. C. N. Checked J. S. H. Survey by Notes Lands Date July 19 57
No. 30+00 Date 9-57 Date 9-57 Map No. Intered Johnson Date

76298 S & E #307—7-55

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F. B. 2306 Pg. 50 | Job No. 0300.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. No.
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec.
Survey by Notes E. Landa Notes Chkd. J.C.N. Checked J.S.H.
Indexed J.C. Johnson Date 7-19-57 Date 9-57 Date 9-57 No. 30+00 Profile

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
30+00 Z-2	21			90° 00'		
	22			"		
	23			"		
	24			"		
	25			"		
	26			89° 34'		
	27			90° 00		
	28			"		
	29			"		
	30			"		
	31			"		
	32			"		
	33			"		
	34			89° 12'		
	35			"		
	36			90°		
	37			"		
	38		7:44			

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 32+75		SIGHT ON 35+00
T.P.	097	623		526			Inshore
35+00			+130	192			35+00
6" L.			+130	192			[illegible]
			+80	142	9° 58'	40	"
			+36	93	15 23	62	
			00	62	22 18	92	
			37	25	30 44	134	
			52	10	36 48	168	
			109	-47	52 59	298	
			135	-73	55 48	331	
			145	-83	58 21	365	
			163	-101	61 01	406	
			172	-110	65 22	491	
T.P.			040	583			

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 51
X-Sec. No. 35+00 Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-19-57
Date 9-57 Date 9-57 Map No. ____ Indexed Johnson Date ____

76298 S & E #307—7-55

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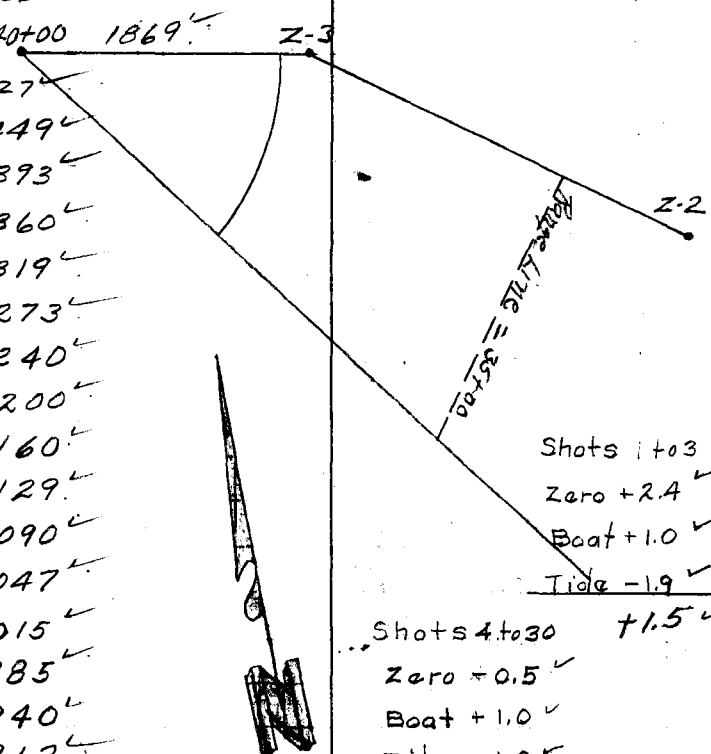
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
40+00	Z-3	1	59	57.5	7:57	87° 58'	2370 Cut in Line 35+00
		2	55	53.5		86° 44'	2136
		3	48 No Transition	46.5		84° 52'	40+00 1869
		4	50.7	49.3		81° 36'	1527
		5	49.0	47.6		80° 38'	1449
		6	47.8	46.4		79° 55'	1393
		7	46.9	45.5		79° 26'	1360
		8	45.9	44.5		78° 52'	1319
		9	44.3	42.9		78° 12'	1273
		10	42.8	41.4		77° 40'	1240
		11	41.4	40.0		76° 56'	1200
		12	40.2	38.8		76° 13'	1160
		13	38.5	37.1		75° 38'	1129
		14	37.4	36.0		74° 49'	1090
		15	36.0	34.6		73° 54'	1047
		16	34.3	32.9		72° 40'	1015
		17	32.8	31.4		71° 56'	985
		18	31.2	29.8		71° 17'	940
		19	29.6	28.2		70° 32'	912
		20	28.5	27.1		69° 18'	870



Shots 1 to 3
Zero +2.4
Boat +1.0
Tide -1.9
+1.5

Shots 4 to 30
Zero -0.5
Boat +1.0
Tide -1.9
-1.4

Profile No. ____ Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 53
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 35+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-19-57
Date 9-57 Date 9-57 Map No. ____ Date ____

76298 S & E #307—7-55

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F. B. 2306 Pg. 54 Job No. 300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Date 9-57 Date 9-57 No. Profile
Survey of Beach Erosion Notes R.T. Notes Chkd. J. C. N. Checked J. S. H. Date 9-57 X-Sec. No. 40+00
Survey by Van Deren Date 7-19-57
Indexed K. C. Johnson

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks	
		21	27.2	25.8		67° 32'	813 Cut in Line 35+00	
		22	25.4	24.0		65° 52'	768	
		23	21.7	20.3		62° 55'	690	
		24	20.7	19.3		61° 25'	655	Shots 4 to 30
		25	19.1	17.7		59° 24'	613	Zero -0.5
		26	16.6	15.2		56° 23'	563	Boat +1.0
		27	14.6	13.2		54° 24'	520	Tide -1.9
40+00	N-3	28	13.3	11.9		52° 23'	487	-1.4
		29	12.2	10.8		49° 26'	441	
		30	11.4	10.0	8:05	46° 40'	402	
		31						
		32						
		33						
		34						
		35						

76298 S & E #307—7-55

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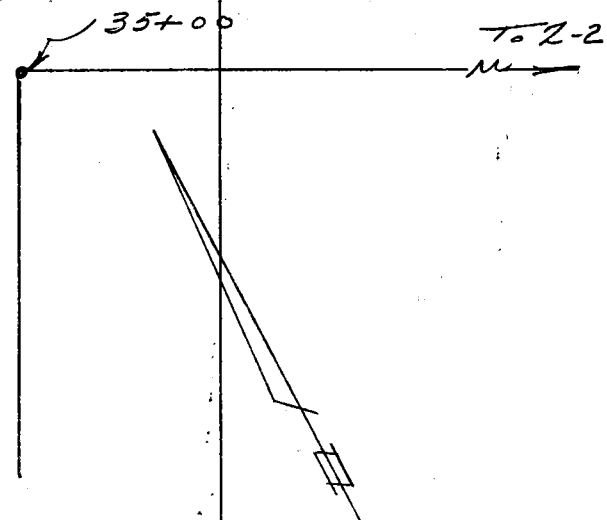
Do not extend notes this side of this line.

STATION Inst. At	Sight On	S. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
35+00	Z-2	1			7:57	90° 00'	
		2				"	
		3				"	
		4				"	
		5				"	
		6				"	
		7				"	
		8				"	
		9				"	
		10				"	
		11				"	
		12				"	
		13				"	
		14				"	
		15				"	
		16				89 25	
		17				"	
		18				90° 00	
		19				"	
		20				"	



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 55
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Lorraine Date July 19, 57
No. 35+00 Date 9-57 Date 9-57 Map No. Indexed on Recd. Date

F. B. 2306 Pg. 56 | Job No. 0300.02 | Division No. 10 | Notes Red. J. S. H. | Plotted J. C. N. | Profile

Survey of Beach Erosion | Date 9-57 | Date 9-57 | No.

Survey by Van Deren | Notes E. Landa | Notes Chkd. J. C. N. | Checked J. S. H. | X-Sec.

Indexed X C. Johnson | Date 7-19-57 | Date 9-57 | Date 9-57 | No. 35+00

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On 35+00 Z-2	# Rec. Depth Adj.		Time Hor. Ang.	90° 00'		Remarks
	21			"		
	22			"		
	23			"		
	24			"		
	25			"		
	26			"		
	27			"		
	28			89 36		
	29			89 40		
	30		8:05	89 40		

76L298 307 10-51

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 42+50		SIGHT ON 40+00
T.P.	0.09	5 92		583			Inshore
40+00			+90	149			40+00
			+67	126	7° 28'	33	Brk
		59	+41	100	11 36	51	"
			00	59	17 22	78	
			34	25	25 05	117	
			50	09	31 53	156	
			143	-84	56 41	380	
			166	-107	57 38	395'	
T.P.			210	382			

210

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 PG. 57
X-Sec. Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
No. 40+00 Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-17-57
Date 9-57 Date 9-57 Map No. ____ Inspector Johnson Date ____

76298 S & E #307—7-55

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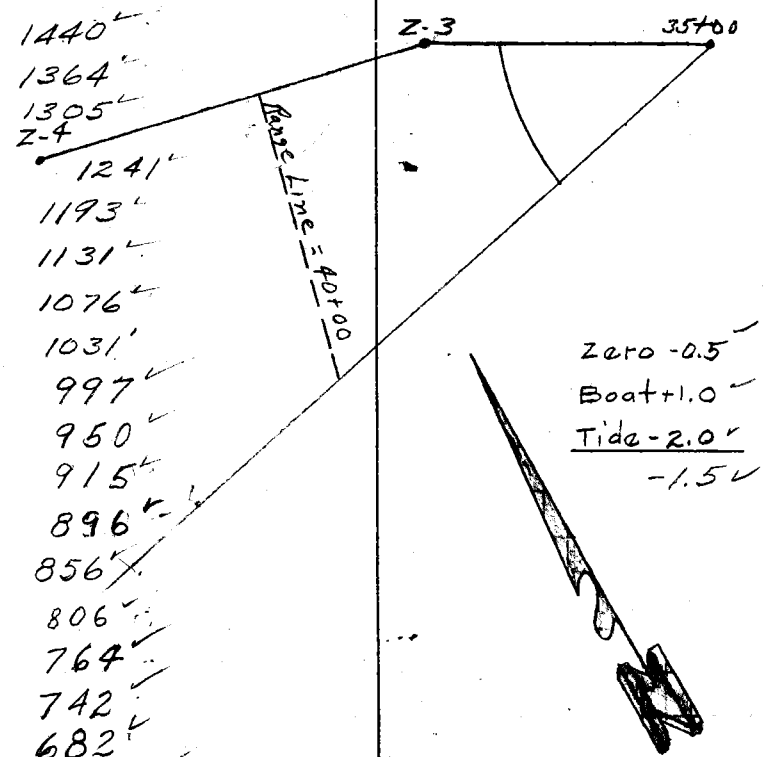
Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor.	ELEV. Ang.	Remarks
35+00	Z-3	1	51.3	49.8	S 18	82°	33'	1620 Cut in Line 40+00
		2	49.9	48.4		81°	22'	1520
		3	48.3	46.8		80°	24'	1440
		4	46.1	44.6		79°	22'	1364
		5	44.5	43.0		78°	30'	1305
		6	42.5	41.0		77°	31'	1241
		7	40.8	39.3		76°	38'	1193
		8	38.7	37.2		75°	35'	1131
		9	37.1	35.6		74°	14'	1076
		10	36.2	34.7		73°	12'	1031
		11	34.7	33.2		72°	25'	997
		12	33.2	31.7		71°	31'	950
		13	31.6	30.1		70°	34'	915
		14	30.2	28.7		69°	34'	896
		15	29.2	27.7		68°	28'	856
		16	27.8	26.3		66°	25'	806
		17	26.5	25.0		64°	51'	764
		18	25.0	23.5		64°	24'	742
		19	23.2	21.7		62°	23'	682
		20	21.5	20.0		60°	22'	640



Zero -0.5
Boat +1.0
Tide -2.0
-1.5

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 59
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-19-57
No. 40+00 Date 9-57 Date 9-57 Map No. Indexed G. Johnson Date

76298 S & E #307—7-55

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STATION Inst. At	STATION Sight On	S. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		21	19.4	17.9		58° 33'	609 Cut in Line 40+00
		22	15.7	14.2		53° 23'	520
		23	14.1	12.6		49° 42'	462
		24	11.7	10.2		45° 09'	400
		25	10.9	9.4	8:23	41° 00'	350
		26					
		27					
		28					
35+00	Z-3	29					
		30					

Zero -0.5
Boat +1.0
Tide -2.0
-1.5

F. B. 2306 Pg. 60 Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 No.
Survey by Van Deren Notes R.T. Notes Chkd. J. C. N. Checked J. S. H. X-Sec.
Indexed C. Johnson Date 7-19-57 Date 9-57 Date 9-57 No. 40+00

76298 S & E #307—7-55

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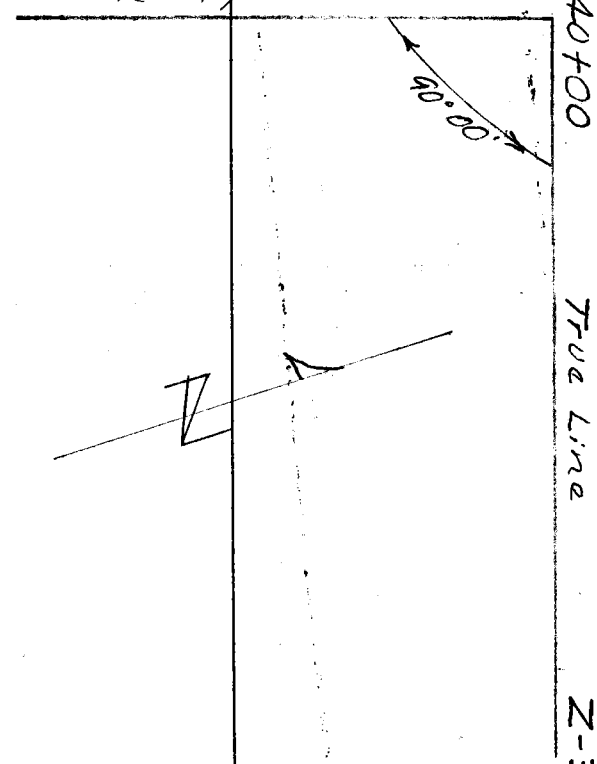
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
40+00	Z-3	1			8:18	90° 00'	Range
		2				" "	
		3				" "	
		4				" "	
		5				" "	
		6				" "	
		7				" "	
		8				" "	
		9				" "	
		10				" "	
		11				" "	
		12				89° 30'	
		13				89° 30'	
		14				89° 30'	
		15				90° 00'	
		16				90° 25'	
		17				90° 25'	
		18				90° 00'	
		19				89° 27'	
		20				89° 24'	



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 61
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Goodwin Date 7-19-57
No. 40+00 Date 9-57 Date 9-57 Map No. Index Johnson Date

F. B. 2306 Pg. 62 | Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed X C. Johnson Date 7-19-57 Date 9-57 Date 9-57 No. 40+00

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
40+00 Z-3	21			89° 42'		
	22			90° 00'		
	23			" "		
	24			89° 48'		
	25		8:23	90° 00'		

76L298 307 10-51

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 42+50		SIGHT ON 45+00
T.P.	230	6 12		3 82			Inshore
45+00			+11 3	17 4			45+00
9 R.		6 1	+11 0	17 1	Bott	Brk	
18 "			+8.4	14 5	Top	"	
40 "			+5 8	11 9			
			00	61	8° 50'	39'	
			33	23	15 44	70'	
			52	09	23 58	111	
			61	00	27 57	133	
			158	-9.7	55 35	365	
Z-3			+1331	19 43	Z-3 M.L.L.W. EL =		19.434 F.B. 2100-105

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300102 Division No. 10 F.B. 2306 PG. 63
X-Sec. No. 45+00 Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-19-57
Date 9-57 Date 9-57 Map No. ____ Indexed C. Johnson Date ____

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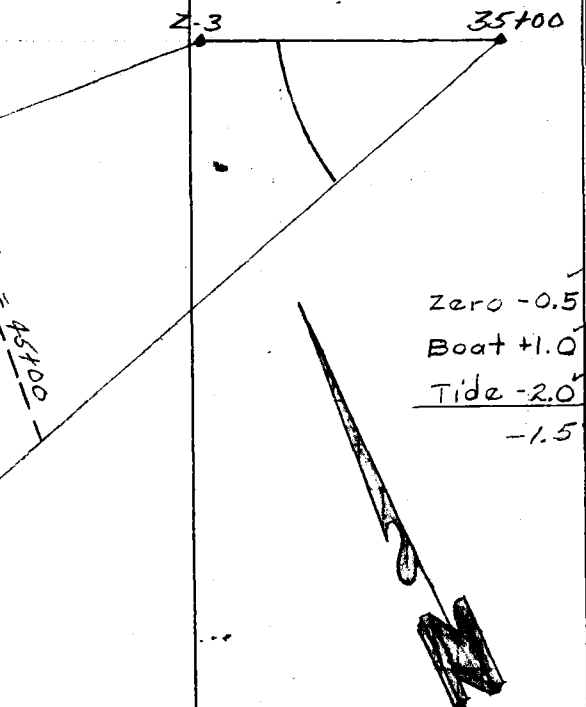
Profile No. 45+00 Date 9-57 Notes Red. J.S.H. Date 9-57 Chkd. J.C.N. Date 9-57 Plotted J.C.N. Date 9-57 Checked J.S.H. Map No. Job No. 030002 Survey of Beach Estates Survey by Ken Rice Notes R.T. Date 2-19-52 Division No. 40 Indexed Johnson Date

X-Sec. No.

F.B. 2306 Pg. 65

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
35+00	Z-3	1	51.4	49.9	8:33	69° 16'	1591 Cut in Line 45+00
		2	49.9	48.4		65° 58'	1494
		3	48.9	47.4		65° 05'	1475
		4	47.0	45.5		63° 45'	1400
		5	45.2	43.7		62° 02'	1322
		6	43.2	41.7		60° 03'	Z-4 1235
		7	41.8	40.3		58° 50'	1186
		8	40.7	39.2		57° 55'	1149
		9	39.6	38.1		57° 07'	1120
		10	38.4	36.9		56° 14'	1087
		11	38.2	36.7		55° 04'	1048
		12	37.7	36.2		54° 15'	1019
		13	36.5	35.0		52° 58'	978
		14	35.5	34.0		51° 38'	933
		15	34.1	32.6		50° 46'	908
		16	33.2	31.7		49° 53'	871
		17	31.6	30.1		48° 18'	827
		18	30.4	28.9		46° 36'	785
		19	29.0	27.5		45° 43'	769
		20	27.5	26.0		43° 56'	719



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F. B. 2306 Pg. 66 Job No. 0380.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile No.
Survey of Beach Erosion Date 9-57 Date 9-57 No.
Survey by Van Deren Notes R.T. Notes Chkd. J. C. N. Checked J. S. H. X-Sec. No. 45+00
Indexed J. C. Johnson Date 7-19-57 Date 9-57

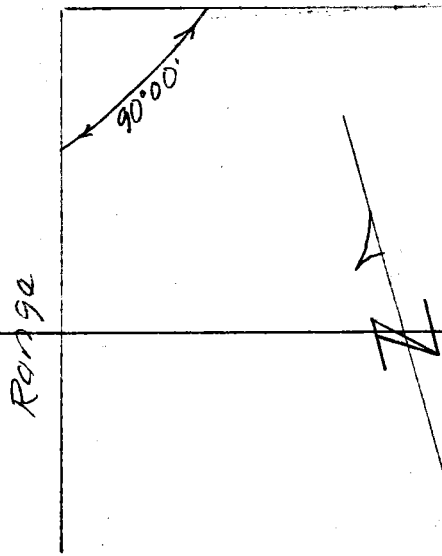
STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.	Remarks	
		21	25.9	24.4		42° 04'	670 Cut in Line 45+00	
		22	24.7	23.2		40° 23'	630	
		23	22.3	20.8		38° 32'	591	
		24	19.5	18.0		35° 48'	529	
		25	16.6	15.1		32° 32'	480	
		26	12.1	10.6	8:40	28° 02'	372	
		27						
35+00	N-3	28						
		29						Zero -0.5
		30						Boat +1.0
								Tide -2.0
								-1.5

Profile No. _____ Notes Red. J. S. H. Date 9-57 Plotted J. C. N. Date 9-57 Job No. 0300.02 Division No. 10 Survey of Beach Erosion

F. B. 2306 Pg. 67

X-Sec. No. 45+00 Notes Chkd. J. C. N. Date 9-57 Checked J. S. H. Date 9-57 Survey by Van Deren Notes Goodwin Date 7-19-57 Map No. ~~Indexed~~ A. C. Johnson Date _____

45+00 True Line Z-3



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
45+00 Z-3	1		8:33	90° 00'	
	2			" "	
	3			" "	
	4			" "	
	5			" "	
	6			" "	
	7			" "	
	8			" "	
	9			" "	
	10			" "	
	11			" "	
	12			" "	
	13			" "	
	14			" "	
	15			" "	
	16			89° 24'	
	17			89° 24'	
	18			89° 24'	
	19			90° 00'	
	20			" "	

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F. B. 2306 Pg. 68 | Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Doren Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed L. O. Johnson Date 7-19-57 Date 9-57 Date 9-57 No. 45+00

76298 S & E #307—7.55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On 45+00 Z-3						
	#	Depth Rec.	Adj.	time	Hor. Ang.	Remarks
	21				89° 32'	
	22				89° 32'	
	23				89° 45'	
	24				89° 45'	
	25				89° 23'	
	26			8:40	89° 18'	

Notes Ck'd by J.C.N.	Survey of Beach Erosion
Map No.	W. 8 89.00.02 Tape No. St'd. °F
Office Work J.S.H.	Surveyed by M. A. Von Deren
Checked K.R.K.	Notes Van Date 7-15-57
Date 9-57	Indexed C. Johnson

F.B. 2306 PG. 69

Tide Gauge Readings at Santa Monica

All Readings are on Daylight Saving Time

7-15-57

Scale on 2.7

Gauge Time		Watch Time	
7:00	A.M.		+0.6
7:30	"		+1.0
8:00	"		+1.3
8:30	"		+1.7
9:00	"		+2.0
9:30	"		+2.6
10:00	"		+3.0
10:30	"		+3.4
11:00	"		+3.7
11:30	"		+4.1
12:00	"		+4.3
12:30	P.M.		+4.4
1:00	"		+4.2
1:30	"		+4.1
2:00	"		+4.0
2:30	"		+3.8
3:00	"	3.00	+3.7

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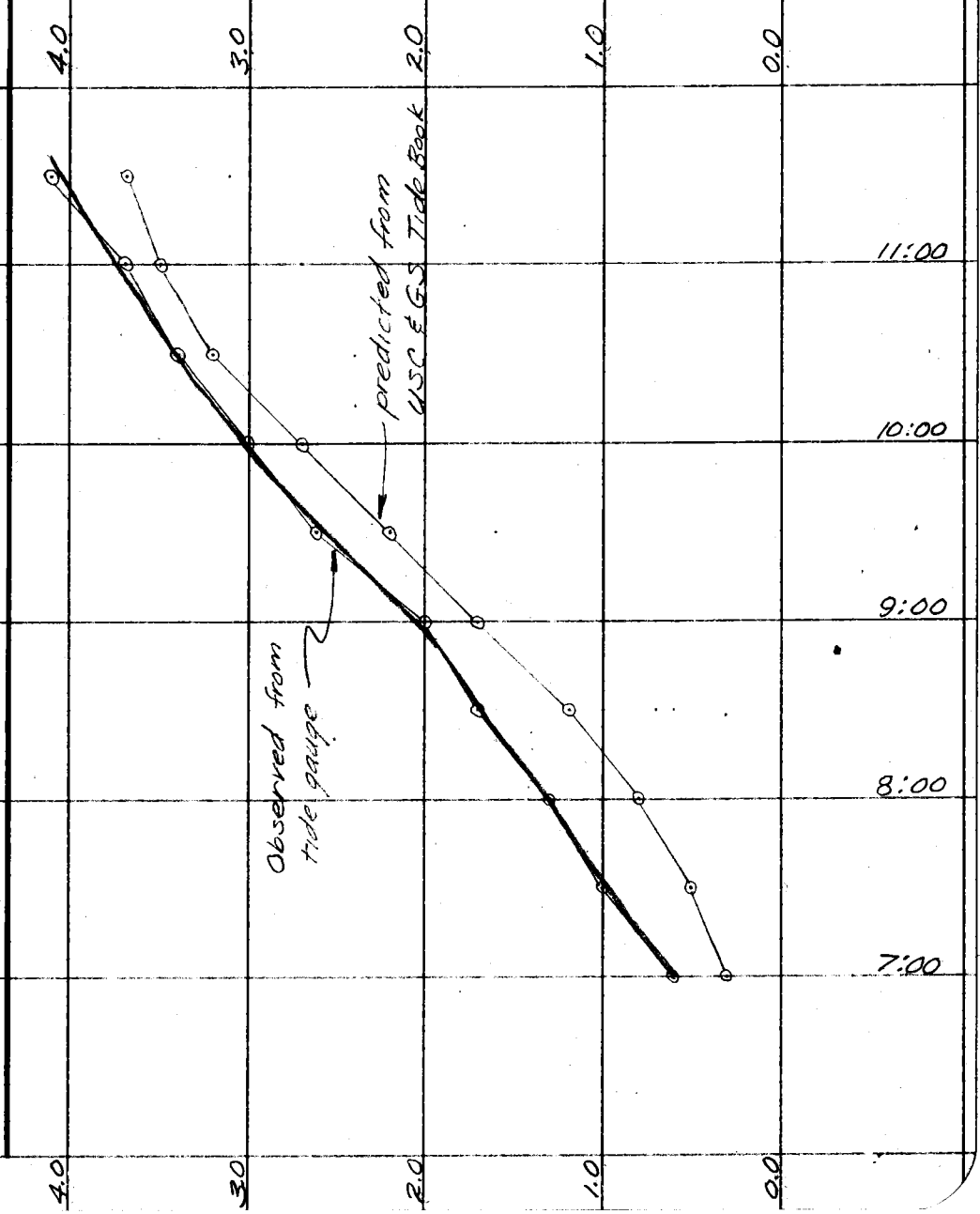
76F3098 S&E #247. 8-54

Notes Ck'd by J.C.N.	Survey of Beach Erosion
Map No.	JN 0300.02 Tape Std °F
Office Work J.S.H.	Surveyed by
Checked K.R.K.	Notes Date
Date 9-57	Indexed

F. B. 2306 PG. 70

July 15, 1957



Note: Any Additions or Changes on This Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.

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76F309S S&E #247 1-56

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 52+50	Sight on 50+00
Z-3	3.00	22 43		19 43	Z-3, el=19.434, F.B. 2100-105	Inshore 50+00
T.P.	3 37	9 06	16 74	5 69		
T.P.	2 38	6 41	5 03	4 03		
50+00		+	4 9	11 3	Brk.	
27' L		+	6 8	13 2	"	
33' L		+	8 5	14 9	"	
72' L		+	8 5	14 9	"	
		6 4	0 0	6 4	6 59	31
			2 8	3 6	13 46	61
			5 5	0 9	26 54	127
			8 5	-2 1	41 53	224
			10 0	-3 6	46 08	260
			11 2	-4 8	48 48	286
			13 8	-7 4	52 43	328
			17 4	-11 0	56 42	381
T.P.			2 78	3 63		

Profile No. 50+00 Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 71
Date 9-57 Date 9-57 Survey of Beach Erosion Studies
X-Sec. Notes Chkd J.C.N. Checked J.S.H. Survey by English Notes EG Date 7-15-57
Date 9-57 Date 9-57 Map No. Date

76298 S & E #307—7-55

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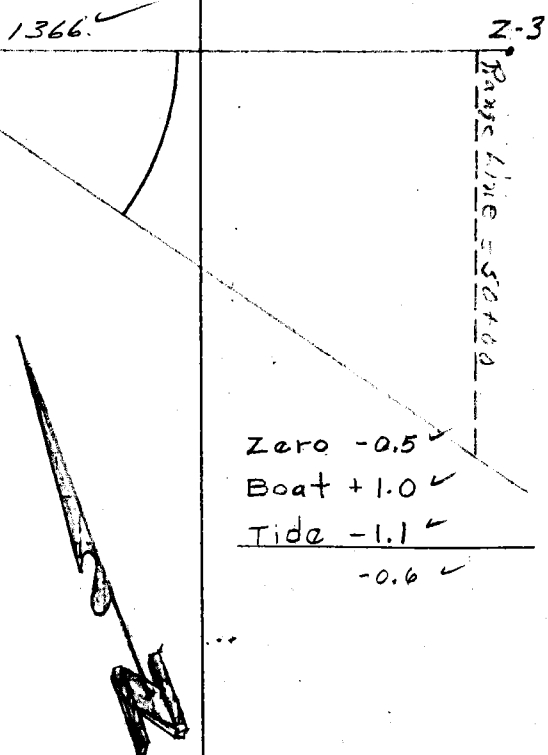
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	48.4	47.8	7:42	54° 37'	1408 Cut in Line 50+00
		2	46.2	45.6		54° 30'	1402
		3	43.8	43.2		53° 42'	60+00 1366
		4	40.9	40.3		51° 14'	1245
		5	39.1	38.5		48° 23'	1126
		6	36.7	36.1		46° 52'	1031
		7	34.8	34.2		43° 27'	947
60+00	Z-3	8	32.0	31.4		40° 41'	860
		9	29.7	29.1		37° 44'	774
		10	27.3	26.7		34° 25'	685
		11	24.2	23.6		31° 51'	621
		12	21.5	20.9		29° 05'	556
		13	17.2	16.6		26° 08'	491
		14	13.1	12.5		23° 06'	427
		15	10.5	9.9	7:45	19° 31'	354
		16					
		17					
		18					
		19					
		20					



Zero -0.5
Boat +1.0
Tide -1.1
-0.6

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 23002 Division No. 10 F. B. 2306 Pg. 73
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Doren Notes A.T. Date 7-15-57
No. 50+00 Date 9-57 Date 9-57 Map No. Date

F. B. 2306 Pg. 74 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-15-57 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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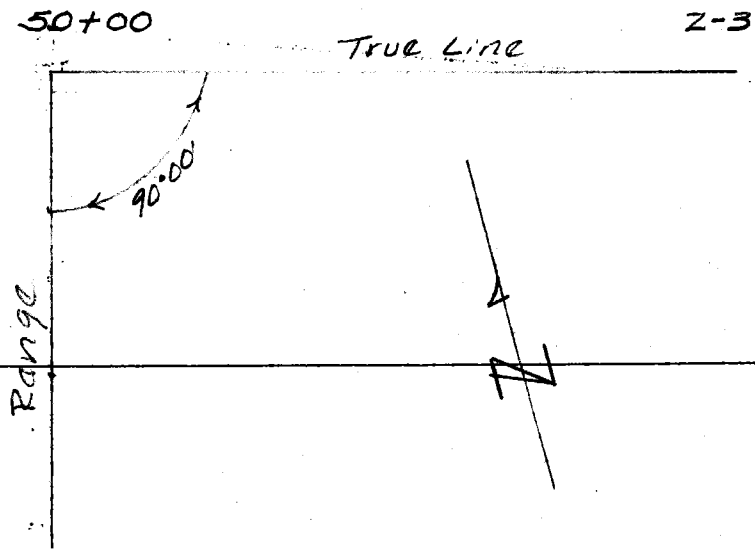
STATION	B. S.	H. I.	F. S.	ELEV.	
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks
60+00					
Z-3					
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
					Cut in Line 50+00

Profile No. _____ Notes Red. J. S. H. Date 9-57 Plotted J. C. N. Date 9-57 Job No. 0300.02 Division No. _____ F. B. 2306 Pg. 75

X-Sec. No. 50+00 Notes Chkd. J. C. N. Date 9-57 Checked J. S. H. Date 9-57 Survey of Beach Eursion Survey by Van Deren Notes Goodwin Date 7-15-57 Map No. _____ Indexed Johnson Date _____



STATION	B. B.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
50+00 Z-3	1		7:42	90°00'	
	2		7:42	90°00'	
	3		7:42	90°00'	
	4		7:42	90°00'	
	5		7:43	90°00'	
	6		7:43	90°00'	
	7		7:43	90°00'	
	8		7:44	90°00'	
	9		7:44	90°00'	
	10		7:44	90°00'	
	11		7:44	90°00'	
	12		7:45	90°00'	
	13		7:45	90°00'	
	14		7:45	90°00'	
	15		7:45	90°00'	

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76298 S & E #307—7-55

F. B. 2306 Pg. 76 Job No. 0300.02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Date — Date _____ No. _____

Survey by Van Deren Notes J. C. Goodwin Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date 7-15-57 Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight On	# Depth Rec. Adj.		Time Hor. Ang.			Remarks

76298 S & E #307—7-55

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76L298 307 10-51

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ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 52+50		Sight on 55+00
T.P.	291	6 54		3 63			Inshore 55+00
31' L		+	3 8	10 3			
55+00		+	5 0	11 5			
20' R.		+	5 0	11 5			
37' R.		+	5 8	12 3			
		6 5	0 0	6 5	13° 08'	58	
			4 0	2 5	26 10	123	
			5 3	+1 2	33 13	164	
			6 6	-0 1	38 28	199	
			8 9	-2 4	48 37	284	
			10 3	-3 8	51 18	312	
			12 6	-6 1	55 36	365	
			14 5	-8 0	57 35	394	
			16 5	-10 0	59 25	423	
T.P.			2 89	3 65			

Profile No. ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 77
Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. No. 55+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-15-57
Date 9-57 Date 9-57 Map No. ____ Indexed Date ____

76298 S & E #307—7-55

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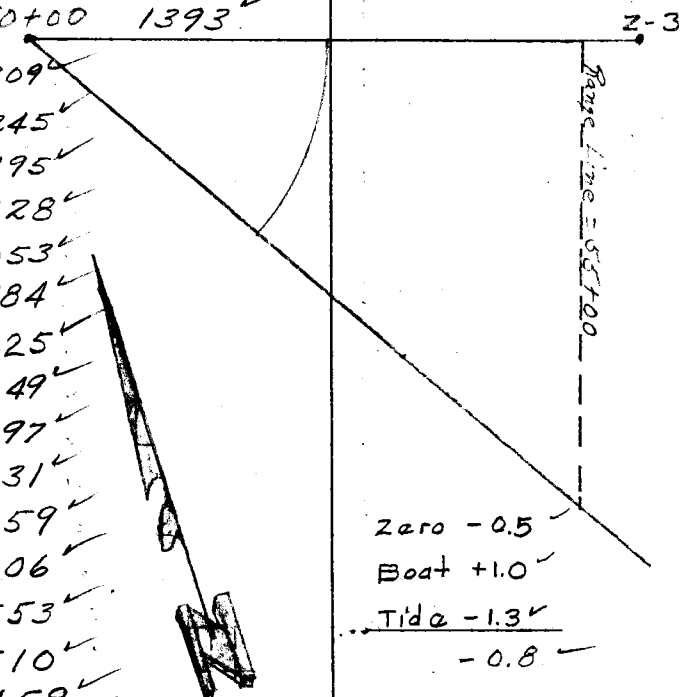
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
60+00	N-3	1	50.4	49.6	7 59	72° 25'	1578 Cut in Line 55+00
		2	48.9	48.1		71° 32'	1497
		3	47.2	46.4		70° 15'	60+00 1393
		4	45.3	44.5		69° 06'	1309
		5	43.9	43.1		68° 07'	1245
		6	41.8	41.0		67° 18'	1195
		7	40.0	39.2		66° 06'	1128
		8	37.3	36.5		64° 36'	1053
		9	35.2	34.4		63° 04'	984
		10	34.0	33.2		61° 37'	925
		11	31.4	30.6		59° 31'	849
		12	28.7	27.9		57° 54'	797
		13	26.7	25.9		55° 38'	731
		14	24.0	23.2		52° 50'	659
		15	21.2	20.4		50° 29'	606
		16	18.5	17.7		47° 52'	553
		17	14.7	13.9		45° 35'	510
		18	12.8	12.0		42° 36'	459
		19	—		8:04	37° 14'	380
		20					



Zero -0.5
Boat +1.0
Tide -1.3
-0.8

Profile No. ____ Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 79
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 55+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-15-57
Date 9-57 Date 9-57 Map No. [illegible] Date

F. B. 2306 Pg. 80 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-15-57 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
60+00						
Z-3						
						Cut in Line 55+00

76298 S & E #307—7-55

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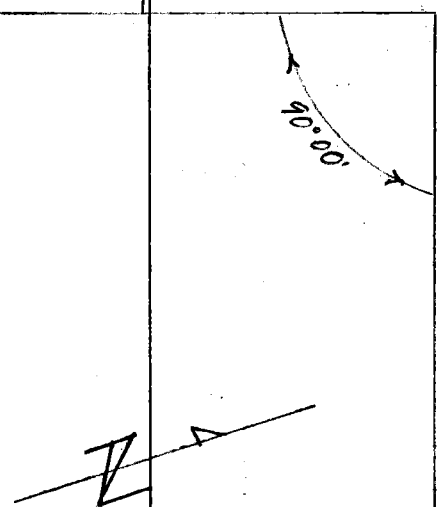
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	# Rec.	Depth Adj.	Time	Hor. Ang.	Remarks	
55+00	Z-3	1		7:59	90° 00'	Range	
		2			" "		
		3			" "		
		4			" "		
		5			" "		
		6			" "		
		7			" "		
		8			" "		
		9			" "		
		10			" "		
		11			" "		
		12			" "		
		13			" "		
		14			" "		
		15			" "		
		16			" "		
		17			" "		
		18			" "		
		19		8:04	" "		



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 81
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Geodetic Date 7-15-57
No. 55+00 Date 9-57 Date 9-57 Map No. [redacted] Date

F. B. 2306 Pg. 82 Job No. 0030.02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Date 7-15-57 Date _____ No. _____

Survey by Van Deren Notes J.C. Goodwin Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At On	Sight #	Depth Rec.	Adj.	Time	Hor. Ang.	

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76298 S & E #307—7-55

76L298 307 10-51

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ENGINEERING BLDG.

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 62+50	Sight on 60+00
T.P.	349	7 14		3 65		Inshore
60+00		+	4 4	11 5		60+00
28' L		+	3 8	10 9	Brk.	
71' L			0 0	~~7 7~~ 7.1	Brk.	
		7 1	4 0	3 1	24 47 116	
			5 4	1 7	34 15 170	
			6 7	0 4	40 11 211	
			9 4	-2 3	50 23 302	
			10 7	-3 6	52 30 326	
			12 6	-5 5	56 46 382	
			14 6	-7 5	59 25 423	
			16 5	-9 4	60 55 449	
T.P.			2 24	4 90		

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 PG. 83

X-Sec. No. 60+00 Date ____ Notes Chkd J.C.N. Checked J.S.H. Date 9-57 Survey of BEACH EROSION STUDIES Date 9-57 Survey by ENGLISH Notes ED Date 7-15-57 Map No. ____ Date ____

76298 S & E #307—7-55

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Profile No. 60+00 X-Sec. No. 55+00

Notes Red. J.S.H. Date 9-57 Chkd. J.C.N. Date 9-57 Checked J.S.H. Date 9-57

Plotted J.C.N. Date 9-57 Survey of Beach Erosion Map No.

Job No. 0340.02 Survey by Max Green Notes P.T. Date 7-25-57

Division No. 10 Inst. Johnson Date

F.B. 2306 Pg. 85

STATION Inst. At	Sight On	B.S. #	H.I. Rec.	H.I. Depth Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
55+00	Z-4	1	49.7	48.7	8:16	70° 29'	1411 Cut in Line 60+00
		2	48.5	47.5		69° 39'	1348
		3	45.8	44.8		68° 59'	Z-4 1301
		4	44.1	43.1		67° 55'	1232
		5	43.2	42.2		66° 40'	1159
		6	41.2	40.2		65° 38'	1104
		7	38.9	37.9		64° 31'	1049
		8	37.6	36.6		63° 53'	1020
		9	35.3	34.3		61° 32'	922
		10	33.2	32.2		59° 50'	860
		11	30.4	29.4		58° 18'	810
		12	28.2	27.2		56° 29'	755
		13	25.5	24.5		54° 32'	702
		14	22.4	21.4		52° 36'	654
		15	18.6	17.6		49° 45'	591
		16	15.4	14.4		47° 17'	542
		17	12.0	11.0		44° 37'	493
		18	10.0	9.0	8:20	40° 40'	430
		19					
		20					

Base Line - 60+00

55+00

Zero -0.5
Boat +1.0
Tide -1.5
-1.0

F. B. 2306 Pg. 86 Job No. 0300.02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Date 7-15-57 Date _____ No. _____

Survey by Van Deren Notes R.T. Notes Chkd _____ Checked _____ X-Sec.

Indexed K. C. Johnson Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
55+00					Cut in line 60+00
Z-4					

Inst. Sight At On # Depth Rec. Adj. Time Hor. Ang.

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76298 S & E #307—7-55

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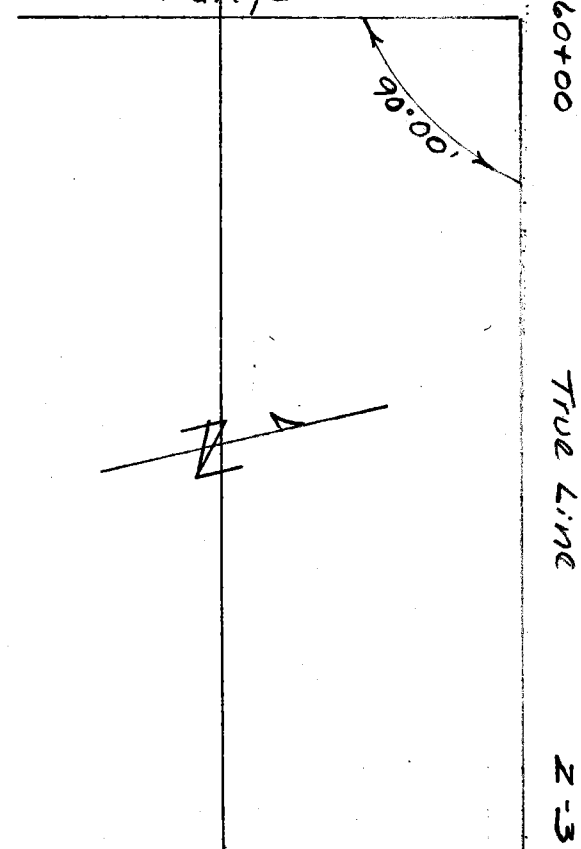
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
60+00	Z-3	1		8:16	90° 00'	Range	
		2			" "		
		3			" "		
		4			" "		
		5			" "		
		6			" "		
		7			" "		
		8			" "		
		9			" "		
		10			" "		
		11			" "		
		12			" "		
		13			" "		
		14			" "		
		15			" "		
		16			" "		
		17			" "		
		18		8:20	" "		



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 003002 Division No. F. B. 2306 Pg. 87
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Goodwin Date 7-15-57
No. 60+00 Date 9-57 Date 9-57 Map No. Index Johnson Date

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 62+50	Sight on 65+00
T.P.	274	7 64		4 90		Inshore
65+00		+	3 4	11 0		65+00
100' R.		+	4 6	12 2		
29' L		+	2 7	10 3	Brk.	
52' L		7 6	0 0	7 6		
			4 2	3 4	24° 07' 112	
			6 6	1 0	36 55 188	
			7 9	-0 3	41 05 218	
			10 0	-2 4	50 03 299	
			11 9	-4 3	54 23 349	
			14 7	-7 1	58 00 400	
			17 9	-10 3	61 32 461	
T.P.			3 44	4 20		

Profile No. ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 85
Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. No. 65+00 Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-15-57
Date 9-57 Date 9-57 Map No. ____ Checked [redacted] Date ____

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
55+00	Z-4	1	50.5	49.2	8:34	55° 50'	1473 Cut in Line 65+00
		2	49.1	47.8		54° 45'	1450
		3	47.7	46.4		53° 54'	Z-4 1371 55+00
		4	46.5	45.2		52° 07'	1285
		5	44.9	43.6		50° 45'	1224
		6	43.7	42.4		49° 29'	1170
		7	41.6	40.3		48° 00'	1111
		8	39.0	37.7		46° 13'	1043
		9	37.3	36.0		44° 27'	981
		10	35.5	34.2		43° 03'	962
		11	34.2	32.9		40° 58'	868
		12	31.3	30.0		39° 07'	813
		13	29.0	27.7		37° 05'	756
		14	26.3	25.0		35° 21'	709
		15	23.0	21.7		33° 43'	667
		16	18.5	17.2		30° 08'	580
		17	15.1	13.8		27° 40'	524
		18	12.2	10.9	8:38	25° 17'	472
		19					
		20					

Range Line = 65+00

Zero -0.5
Boat +1.0
Tide -1.8
-1.3

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 1300.02 Division No. 10 F. B. 2306 Pg. 91
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by [illegible] Notes [illegible] Date [illegible]
No. 65+00 Date 9-57 Date 9-57 Map No. [illegible] Date

F. B. 2306 Pg. 92 Job No. 2306.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-15-57 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
55+00						
Z-4						
						Cut in Line 65+00

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
65+00	Z-3	1		8:34	90° 00	Range
		2			" "	
		3			" "	
		4			" "	
		5			" "	
		6			" "	
		7			" "	
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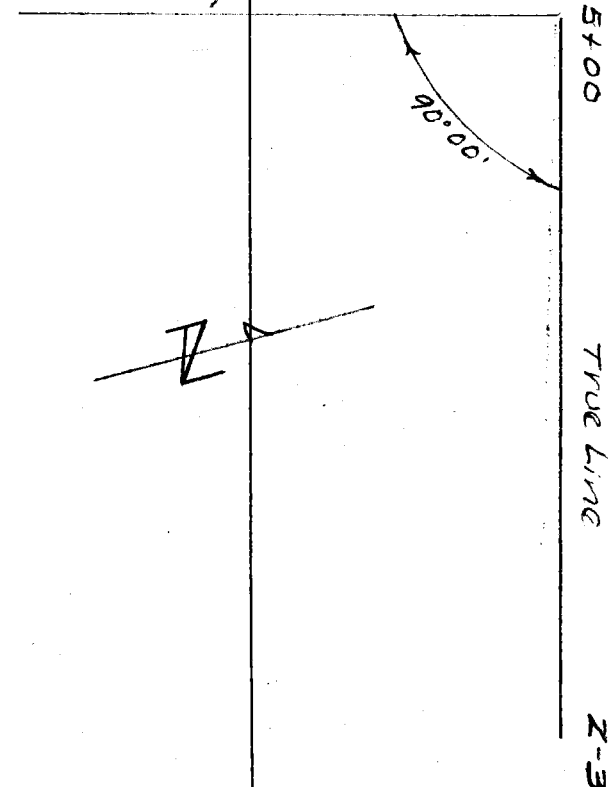
		10			" "	
		11			" "	
		12			" "	
		13			" "	
		14			" "	
		15			" "	
		16			" "	
		17			" "	
		18		8:38	89° 00'	



Profile No. ____ Notes Red. J.S.H. Plotted J.C.N. Job No. 0900.02 Division No. 10 F. B. 2306 Pg. 93
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 65+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Goodwin Date 7-15-57
Date 9-57 Date 9-57 Map No. ____ Date ____

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.		Remarks

F. B. 2306 Pg. 94 Job No. 0300.02 Division No. 10 Notes Red. Plotted
Profile No.
Survey of Beach Erosion Date 7-15-57 Date
X-Sec. No.
Survey by Van Deren Notes J. C. Goodwin Notes Chkd. Checked
Indexed Date Date Date

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. at 72+50	Sight on 70+00
T.P.	378	7 98		4.20		Inshore
70+00		+	4 0	12 0		70+00
100' R.		+	6 0	14 0		
24' L		8 0 +	3 4	11 4	Brk.	
52' L			0 0	8 0		
			4 4	3 6	23° 10' 107	
15.15			6 2	1 8	34 13 170	
			7 6	0 4	41 04 218	
			8 7	-0 7	46 50 268	
			12 0	-4 0	54 35 352	
			13 8	-5 8	57 06 387	
			16 9	-8 9	60 40 445	
T.P.	1352	18 95	2 55	5 43		
Z-3B			6 56	12 39		

Profile No. ____ Notes Red J.S.H. Plotted J.C.N. Job No. 00002 Division No. 10 F.B. 2306 Pg. 95
X-Sec. Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
No. 70+00 Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-15-57
Date 9-57 Date 9-57 Map No. ____ Indexed Johnson Date ____

76298 S & E #307—7-55

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Profile No. 70+00 X-Sec. No. ____ Notes Red. J.C.H. Date 9-57 Notes Chkd. J.C.N. Date 9-57 Plotted J.C.N. Date 9-57 Checked J.C.H. Date 9-57 Job No. 2306 Survey of Beach Erosion Survey by Kay Ivey Map No. ____ Division No. 10 Notes KT Date 2-15-52 Date ____ F. B. 2306 Pg. 87

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
55+00	Z-4	1	50.7	49.2	8:51	45° 28'	1524 Cut in Line 70+00
		2	48.6	47.1		43° 41'	1433
		3	47.0	45.5		42° 15'	Z-4 1362
		4	45.5	44.0		40° 45'	1293
		5	43.7	42.2		38° 24'	1189
		6	42.5	41.0		36° 33'	1111
		7	39.0	37.5		34° 04'	1014
		8	36.5	35.0		32° 14'	947
		9	34.2	32.7		30° 30'	884
		10	30.9	29.4		28° 20'	809
		11	27.8	26.3		26° 15'	740
		12	23.2	21.7		24° 27'	682
		13	19.3	17.8		22° 05'	609
		14	16.0	14.5		19° 51'	542
		15	12.9	11.4		17° 46'	480
		16	10.6	9.1	8:56	15° 20	411 check shore stats for rocks
		17					
		18					
		19					
		20					

Base Line = 70+00

55+00

Zero -0.5
Boat +1.0
Tide -2.0
-1.5

F. B. 2306 Pg. 98 Job No. 0300.02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Date 2-15-57 Date _____ No. _____

Survey by Van Deren Notes N.T. Notes Chkd. _____ Checked _____ X-Sec.

Indexed K. C. Johnson Date _____ Date _____ Date _____ No. _____

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. Sight At On # Depth Rec. Adj. Time Hor. Ang.	Remarks
55+00						
Z-4						
						Cut in line 70+00

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70298 S & E #307—7-55

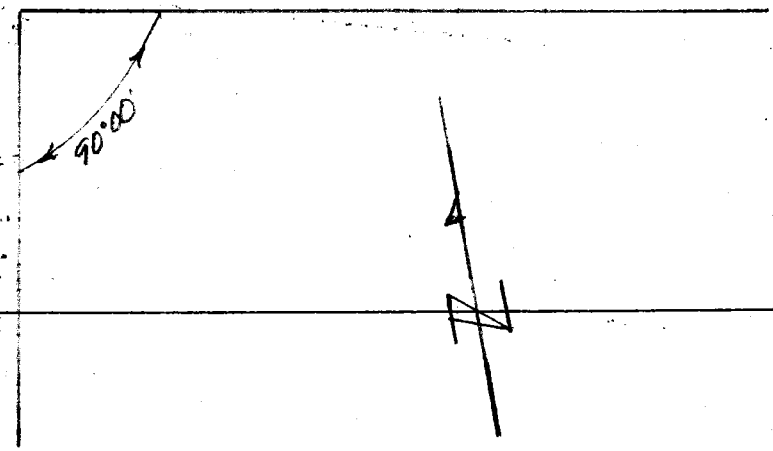
Profile No. _____ Notes Red. J. S. H. Plotted J. C. N. Job No. 0300.02 Division No. 10 | F. B. 2306 Pg. 99

Date 9-57 Date 9-57 Survey of Beach Erosion

X-Sec. No. 70+00 Notes Chkd. J. C. N. Checked J. S. H. Survey by Van Deren Notes Goodwin Date 7-15-57

Date 9-57 Date 9-57 Map No. ~~Indexed~~ Indexed Johnson Date

70+00 True Line Z-3



Remarks

Range

STATION	B. S.	H. I.	F. B.	ELEV.
Inst. Sight At On 70+00 Z-3	#	Depth Rec. Adj.	Time	Hor. Ang.
	1		8:51	90°00'
	2			" "
	3			" "
	4			" "
	5			" "
	6			" "
	7			" "
	8			" "
	9			" "
	10			" "
	11			" "
	12			" "
	13			" "
	14			" "
	15			" "
	16		8:56	" "

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76298 S & E #307—7-55

F. B. 2306 Pg. 100 | Job No. 0300.02 Division No. 10 Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Date 7-15-57 Date _____ No. _____

Survey by Van Deren Notes J. C. Goodwin Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ Date _____ No. _____

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	# Rec. Adj.	Depth	Time	Hor. Ang.	

Notes Ck'd by J. C. N.	Survey of Beach Erosion
Map No.	W. O. 8306.02 Tape No. St'd. °F
Office Work J. S. H.	Surveyed by M. A. Van Deren
Checked K. R. K.	Notes Van Date 7-16-57
Date 9-57	Indexed J. C. Johnson

F. B. 2300 PG. 101

Tide Gauge Reading at Santa Monica

All Readings are on Daylight Savingtime

Scale on 2.7

7-16-57

Gauge Time		
7:00 A.M.		+0.9
7:30 "		+1.0
8:00 "		+1.2
8:30 "		+1.7
9:00 "		+1.9
9:30 "		+2.3
10:00 "		+2.7
10:30 "		+3.3
11:00 "		+3.6
11:30 "		+4.0
12:00 "		+4.2
12:30 P.M.		+4.4
1:00 "		+4.4
1:30 "		+4.4
2:00 "		+4.4
2:30 "		+4.2
3:00 "		+4.1

Watch Time

3:00

Note: Any Additions or Changes on This Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.

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75F3095 S&E #247. 8-54

76F309S S&E #247 1-56

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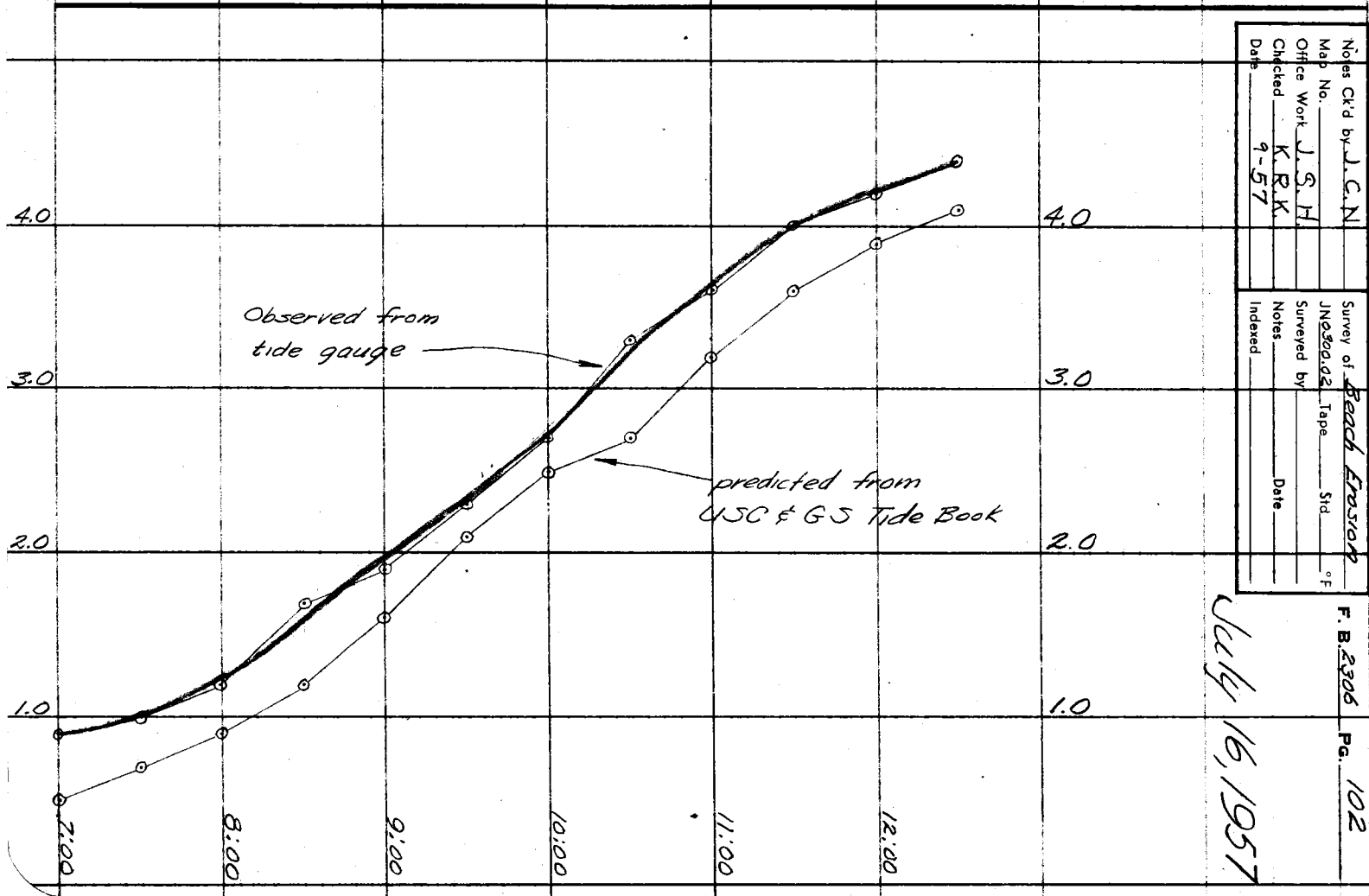

Notes Ck'd by J. C. N.
Map No.
Office Work J. S. H.
Checked K. R. K.
Date 9-57

Survey of Beach Erosion
JN 0300.02 Tape Std. °F
Surveyed by
Notes Date
Indexed

F. B. 2306 PG. 102

July 16, 1957

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. @ 77+50	Sight on 75+00
Z-3B	1 04	13 43		12 39		Inshore
T.P.	1 65	6 02	9 06	4 37		75+00
75+00		+	8 2	14 2		
35' L		+	5 8	11 8	Brk.	
80' L		+	1 5	7 5		
		6 0	3 0	3 0	30° 21' 147	
			4 8	1 2	39 32 206	
			5 3	0 7	42 55 233	
			6 3	-0 3	48 08 279	
			7 2	-1 2	51 45 317	
			10 7	-4 7	57 06 387	
			13 6	-7 6	61 51 467	
			17 0	-11 0	64 03 514	

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 103

X-Sec. No. 75+00 Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES

Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-16-57

Date 9-57 Date 9-57 Map No. [redacted] Date ____

76298 S & E #307—7-55

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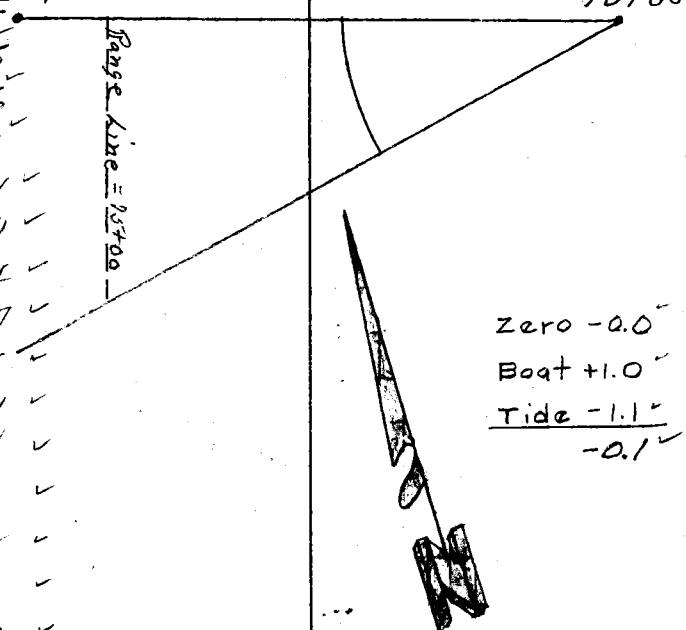
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
70+00	Z-4	1	48.7	48.6	7:40	71° 03'	1474 Cut in Line 75+00
		2	47.3	47.2		70° 23'	1403
		3	45.8	45.7		69° 27'	1334
		4	44.5	44.4		68° 07'	1245
		5	43.4	43.3		67° 19'	1196
		6	42.3	42.2		66° 42'	1161
		7	40.7	40.6		65° 23'	1091
		8	38.8	38.7		64° 34'	1051
		9	36.7	36.6		62° 50'	974
		10	34.8	34.7		61° 08'	907
		11	32.8	32.7		60° 00'	866
		12	30.4	30.3		58° 40'	821
		13	27.8	27.7		57° 37'	788
		14	24.9	24.8		55° 49'	736
		15	21.8	21.7		53° 22'	672
		16	18.5	18.4		51° 50'	636
		17	14.9	14.8		49° 52'	593
		18	12.0	11.9		47° 10'	539
		19	11.2	11.1	7:44	45° 22'	506
		20					



Zero -0.0
Boat +1.0
Tide -1.1
-0.1

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 2300.02 Division No. 10 F. B. 2306 Pg. 105
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-16-57
No. 75+00 Date 9-57 Date 9-57 Map No. Indexed C. Johnson Date

F. B. 2306 Pg. 106 Job No. 2300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-16-57 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed C. Johnson Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.	Remarks	
70+00						
Z-4						
					Cut in Line 75+00	

76298 S & E #307—7-55

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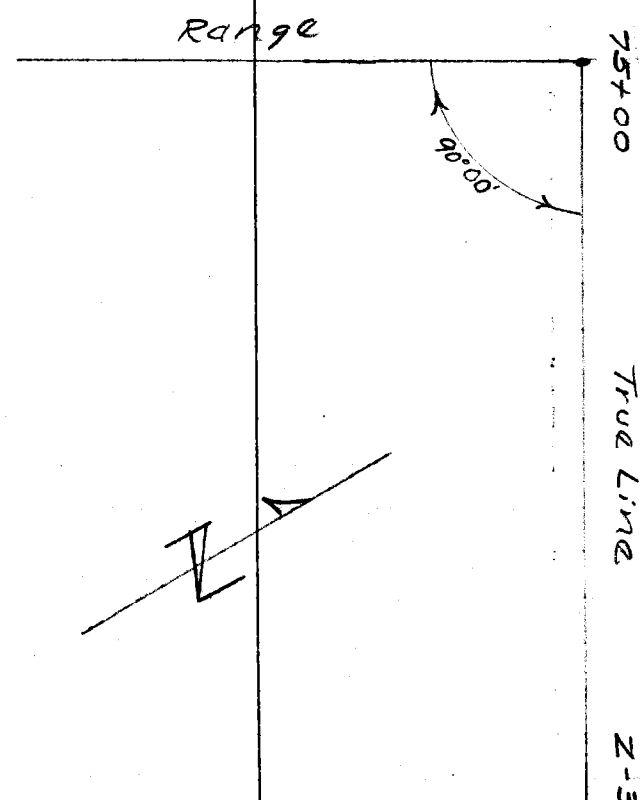
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.
75+00	Z-3	1		7:40	90° 15'
		2			90° 00'
		3			"
		4			"
		5			"
		6			"
		7			"
		8			"
		9			"
		10			"
		11			"
		12			"
		13			"
		14			"
		15			"
		16			"
		17			"
		18			"
		19		7:44	"

Remarks



Profile No. ____ Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.04 Division No. 10 F. B. 2306 Pg. 107
X-Sec. No. ____ Date 9-57 Date 9-57 Survey of Beach Erosion
Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Landa Date 7-16-57
No. 75+00 Date 9-57 Date 9-57 Map No. ____ Indexed C. Johnson Date ____

F. B. 2306 PG. 108 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-16-57 Date No.

Survey by Van Deren Notes Landa Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 75+00 R-3	# Depth Rec. Adj.	Time Hor. Ang.			

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 77+50	SIGHT ON 80+00
T.P.	1 72	6 09		4 37		Inshore
80+00		+	6 4	12 5		80+00
		+	5 2	11 3	16° 03' 72 Brk.	
		6 1	0 0	6 1	26 17 124	
			3 3	2 8	36 22 184	
			4 6	1 5	42 25 229	
			5 4	0 7	46 48 266	
			6 2	-0 1	49 42 295	
			7 3	-1 2	54 40 353	
			10 8	-4 7	61 43 465	
			14 0	-7 9	63 54 510	
			16 6	-10 5	64 31 525	
T.P.			2 65	3 44		

Profile No. ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 109
X-Sec. No. 80+00 Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-16-57
Date 9-57 Date 9-57 Map No. ____ Indexed Johnson Date ____

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
70+00	Z-4	1	48.9	48.4	8:00	57° 06'	1546 Cut in Line 80+00
		2	48.0	47.5		55° 23'	1442
		3	47.0	46.5		53° 58'	Z-4 1375 70+00
		4	45.6	45.1		53° 00'	1327
		5	43.7	43.2		51° 31'	1258
		6	42.7	42.2		50° 17'	1204
		7	41.1	40.6		49° 12'	1159
		8	39.9	39.4		47° 33'	1093
		9	38.1	37.6		45° 58'	1034
		10	36.2	35.7		44° 40'	988
		11	33.7	33.2		42° 52'	928
		12	30.9	30.4		41° 31'	885
		13	27.8	27.3		39° 50'	834
		14	26.1	25.6		38° 20'	791
		15	23.4	22.9		36° 31'	740
		16	20.7	20.2		35° 09'	704
		17	17.5	17.0		33° 46'	669
		18	15.2	14.7		32° 00'	625
		19	13.0	12.5		30° 40'	593
		20	11.7	11.2		29° 25'	564

Range Line = 80+00

Zero -0.2
Boat +1.0
Tide -1.3
-0.5

Profile No. ___ Date ___ X-Sec. No. 80+00 Date ___

Notes Red J.S.H. Plotted J.C.N. Job No. 2301.02 Division No. 10 F. B. 2306 Pg. 111
Date 9-57 Date 9-57 Survey of Beach Erosion
Notes Chkd. J.C.N. Checked J.S.H. Survey by K.J. Pelon Notes RT Date 7-16-57
Date 9-57 Date 9-57 Map No. ___ Inked Johnson Date ___

F. B. 2306 Pg. 112 Job No. 0300.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-16-57 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed X C. Johnson Date Date Date No.

76298 S & E #307—7-55

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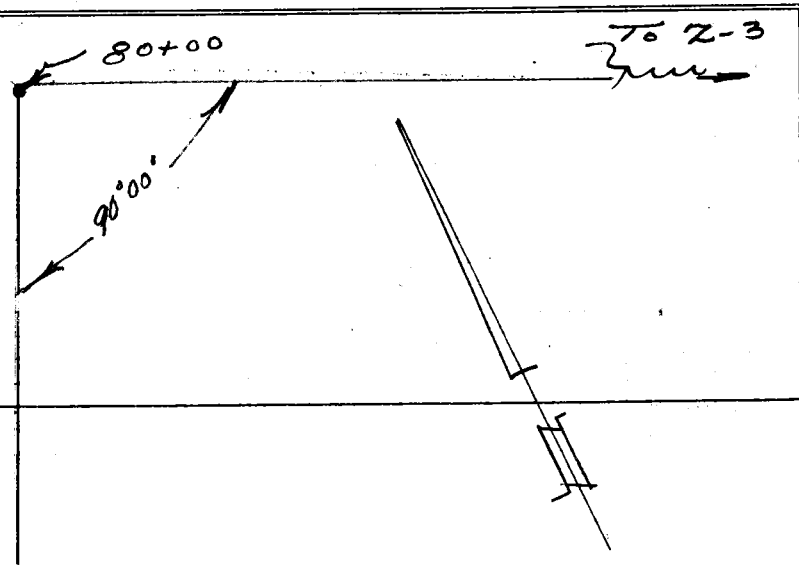
STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
70+00						
Z-4						
		21 9.8 9.3	8:04	27°31	521	Cut in Line 80+00
						Zero -0.2
						Boat +1.0
						Tide -1.3
						-0.5

Profile No.	Notes Red. J. S. H.	Plotted J. C. N.	Job No. 0300.02	Division No. 10	F. B. 2306 Pg. 113
	Date 9-57	Date 9-57	Survey of Beach Erosion		
X-Sec. No. 80+00	Notes Chkd. J. C. N.	Checked J. S. H.	Survey by Van Deren	Notes Landa	Date July 16, 57
	Date 9-57	Date 9-57	Map No. [redacted] Johnson		Date



STATION	B. S.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On 80+00 Z-3	#	Depth Rec. Adj.	Time	Hor. Ang.	
	1		8:00	90° 00	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

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76298 S & E #307—7-55

F. B. 2306 Pg. 114 | 0300.02 Job No. Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes E. Landa Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed L. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 80+00

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 80+00 Z-3	21	Depth # Rec. Adj.	Time Hor. Ang. 8:02 90°		

76L298 307 10-51

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726 LOS ANGELES COUNTY
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STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 87+50	SIGHT ON 85+00
T.P. 85+00	2 44	5 88		3 44		Inshore 85+00
		+	6 9	12 8		
		+	5 3	11 2	21° 33' 99 Brk.	
		5 9	0 0	5 9	31 26 153	
			3 2	2 7	40 04 210	
			4 6	1 3	45 59 259	
			5 7	0 2	50 08 299	
			6 3	-0 4	53 20 336	
			9 2	-3 3	59 43 428	
			12 5	-6 6	63 50 509	
			15 5	-9 6	66 20 575	
			17 3	-11 4	68 29 634	
T.P.			2 26	3 62		

Profile No. ____ Date ____ Notes Red J.S.H. Date 9-57 Plotted J.C.N. Date 9-57 Job No. 0300.02 Division No. 10 Survey of BEACH EROSION STUDIES

X-Sec. No. 85+00 Notes Chkd J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey by ENGLISH Notes ED Date 7-16-57 Map No. ____ Indexed Johnson Date ____

F.B. 2306 Pg. 1/15

76298 S & E #307—7-55

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Profile No. 85+00 Notes Red J.S.H. Date 9-57 Plotted J.C.N. Date 9-57 Job No. 0300-02 Division No. 10 F. B. 2306 Pg. 117
X-Sec. No. Notes Chkd. J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey of Beach Erosion Survey by Hydrographic Notes R.T. Date 2-16-57 Map No. Date

STATION Inst. At	Sight On	B. S. #	H. I. Rec	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
90+00	Z-4	1	50.6	50.0	8:16	47° 22'	1629 Cut in Line 85+00
		2	49.9	49.3		46° 32'	1583
		3	49.0	48.4		46° 10'	Z-4 1563
		4	48.4	47.8		44° 56'	1497
		5	47.6	47.0		44° 01'	1449
		6	46.3	45.7		42° 57'	1397
		7	44.6	44.0		41° 16'	1316
		8	43.5	42.9		39° 47'	1250
		9	42.0	41.4		38° 44'	1203
		10	40.5	39.9		37° 30'	1151
		11	39.3	38.7		36° 12'	1098
		12	37.9	37.3		34° 55'	1047
		13	36.3	35.7		34° 02'	1013
		14	35.3	34.7		33° 18'	986
		15	33.5	32.9		32° 20'	950
		16	30.4	29.8		31° 01'	902
		17	28.5	27.9		29° 50'	860
		18	25.7	25.1		28° 32'	815
		19	23.0	22.4		27° 10'	770
		20	19.3	18.7		25° 41'	722

Base Line = 85+00

90+00

Zero -0.2
Boat +1.0'
Tide -1.4'
-0.6

F. B. 2306 Pg. 118 Job No. 2300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes R.T. Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed K. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 85+00

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
70+00					
Z-4					
Inst. Sight At On					
#	Depth Rec.	Adj.	Time	Hor. Ang.	
21	16.0	15.4		24° 24'	681' Cut in Line 85+00
22	13.1	12.5		22° 56'	635'
23	11.5	10.9	8:21	21° 21'	587'
					Zero -0.2'
					Base +1.0'
					Tide +1.4'
					-0.6'

76298 S & E #907—7-55

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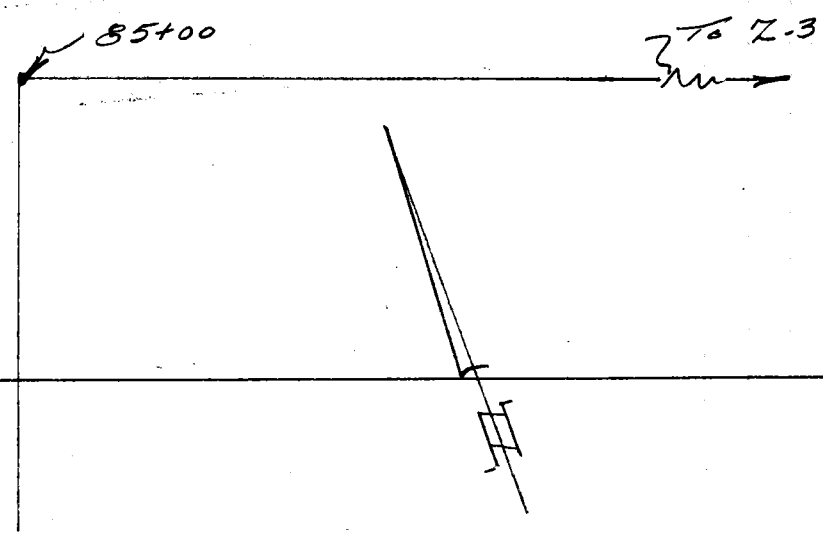
Profile No.	Notes Red. J. S. H. Date 9-57	Plotted J. C. N. Date 9-57	Job No. 0300.02	Division No. 10	F. B. 2306 Pg. 119
X-Sec. No. 85+00	Notes Chkd. J. C. N. Date 9-57	Checked J. S. H. Date 9-57	Survey of Beach Erosion	Survey by Van Deren Notes Landa Date 7-16-57	
			Map No.	Indexed X. C. Johnson Date	



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 85+00 Z-3	#	Depth Rec. Adj.	Time	Hor. Ang.	
	1		8:16	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

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76298 S & E #307—7-55

F. B. 2301 Pg. 120 | Job No. 6300.02 | Division No. 10 | Notes Red. J. S. H. | Plotted J. C. N. | Profile

Survey of Beach Erosion | Date 9-57 | Date 9-57 | No.

Survey by Van Deren | Notes E. Landa | Notes Chkd. J. C. N. | Checked J. S. H. | X-Sec.

Indexed A. C. Johnson | Date 7-16-57 | Date 9-57 | Date 9-57 | No. 85+00

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.	Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks
					85+00 Z-3	21			90° 00'	
						22			"	
						23		8:21	"	

76L298 307 10-51

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 92+50	SIGHT ON 90+00
T.P.	2 82	6 44		3 62	(M.L.L.W.)	Inshore
90+00		+	7 4	13 8		90+00
		+	4 2	10 6	18° 13' 82 Brk.	
		+	4 6	11 0	26 25 124 "	
		6 4	0 0	6 4	32 35 160	
			3 3	3 1	41 02 218	
			5 2	1 2	48 55 287	
			6 6	-0 2	52 27 325	
			7 2	-0 8	56 58 385	
			8 7	-2 3	61 01 451	
			10 4	-4 0	63 29 501	
			12 8	-6 4	64 45 530	
			15 0	-8 6	66 40 580	
			17 6	-11 2	68 11 625	
T.P.			1 93	4 51		

Profile No. ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 121
Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. No. 90+00 Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-16-57
Date 9-57 Date 9-57 Map No. [redacted] Indexed [redacted] Date

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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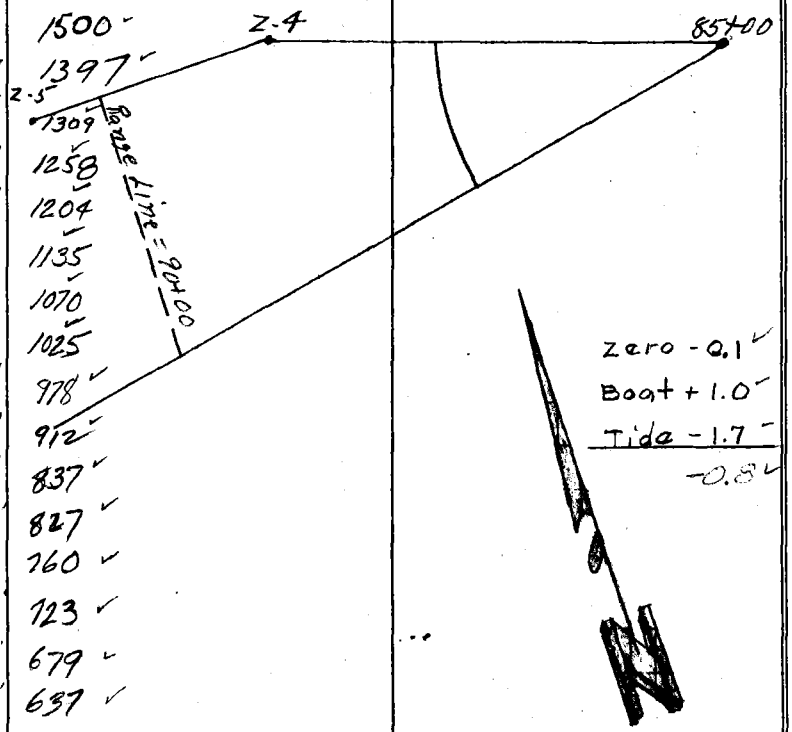
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor.	ELEV. Ang.	Remarks
85+00	Z-4	1	50.4	49.6	8:35	77°	38'	1640 Cut in Line 90+00
		2	49.2	48.4		76°	46'	1558
		3	48.2	47.4		76°	08	1500
		4	46.2	45.4		74°	47'	1397
		5	44.9	44.1		73°	33'	1309
		6	43.4	42.6		72°	47'	1258
		7	41.6	40.8		71°	50'	1204
		8	39.6	38.8		70°	36'	1135
		9	38.1	37.3		69°	13'	1070
		10	35.8	35.0		68°	14'	1025
		11	33.2	32.4		67°	04'	978
		12	30.5	29.7		65°	23'	912
		13	28.6	27.8		63°	10'	837
		14	25.2	24.4		62°	48'	827
		15	21.6	20.8		60°	23'	760
		16	18.5	17.7		59°	09	723
		17	14.4	13.6		57°	22'	679
		18	12.9	12.1		55°	21'	637
		19	10.4	9.6	8:39	52°	40	580
		20						



Profile Notes Red J.S.H. Plotted J.C.N. Job No. 2300.02 Division No. 10 F. B. 2306 Pg. 123
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-16-57
No. 90+00 Date 9-57 Date 9-57 Map No. [illegible] Date

F. B. 2306 Pg. 124 Job No. 0800.02 Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 2-16-57 Date No.

Survey by Van Deren Notes R.T. Notes Chkd. Checked X-Sec.

Indexed A. C. Johnson Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	Inst. Slight At On # Depth Rec. Adj. Time Hor. Ang.	Remarks
						Cut in line 90+00

76298 S & E #307—7-55

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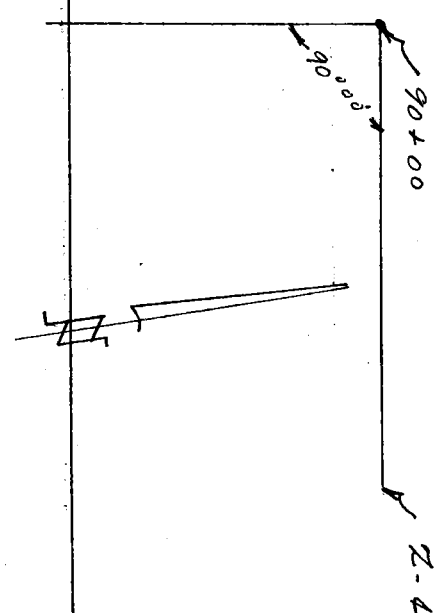
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
90+00	Z-4	1		8:35	90° 00'		
		2			"		
		3			"		
		4			"		
		5			"		
		6			"		
		7			"		
		8			"		
		9			"		
		10			"		
		11			"		
		12			"		
		13			"		
		14			"		
		15			"		
		16			"		
		17			"		
		18			"		
		19		8:39	"		



Profile No. ____ Notes Red J.S.H. Date 9-57 Plotted J.C.N. Date 9-57 Job No. 0300.02 Division No. 10 Survey of Beach Erosion Survey by Van Doren Notes Lamia Date July 16, 57 F. B. 2306 Pg. 125

X-Sec. No. 90+00 Notes Chkd. J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Map No. ____ Date ____

F. B. 2306 Pg. 126 | 0300.02 Job No. Division No. 10 Notes Red. Plotted Profile

Survey of Beach Erosion Date 7-16-57 Date No.

Survey by VanDeren Notes E. Landa Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	

76L298 307 10-51

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST @ 92+50	SIGHT ON 95+00
T.P.	1 92	6 43		4 51	(M.L.L.W.)	Inshore
95+00		+	6 6	13 0		95+00
		+	3 2	9 6	13° 02' 58 Brk.	
		+	4 2	10 6	24 28 114 "	
		X	0 0	6 4	31 42 154	
		6 4	3 3	3 1	39 44 208	
			4 8	1 6	45 39 256	
			6 7	-0 3	50 58 308	
			6 9	-0 5	55 55 370	
			9 0	-2 6	61 04 452	
			13 3	-6 9	65 25 547	
			15 0	-8 6	67 45 611	
			17 3	-10 9	67 25 601	
T.P.			0 65	5 78		

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 0300.07 Division No. 10 F.B. 2306 Pg. 127
No. Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes EP Date 7-16-57
No. 95+00 Date 9-57 Date 9-57 Map No. [redacted] Date

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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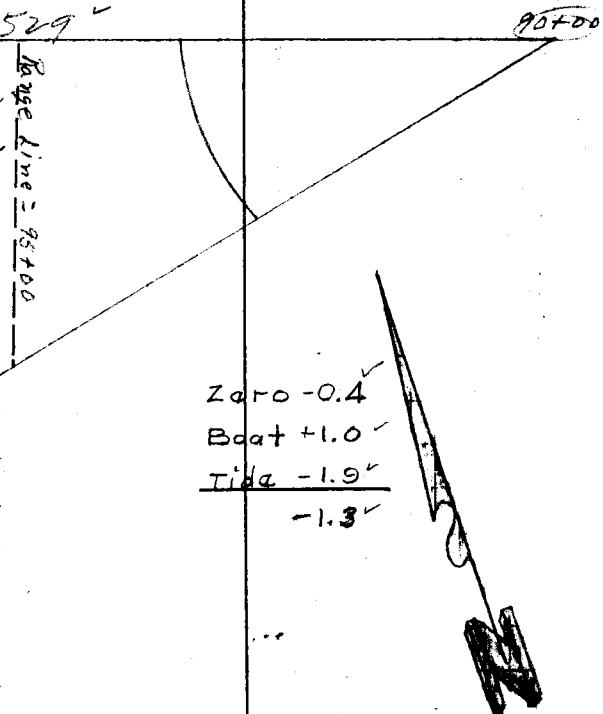
STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
90+00	N-5	1	50.8	49.5	8:49	73° 15'	1661 Cut in Line 95+00
		2	49.9	48.6		72° 28'	1583
		3	48.8	47.5		71° 54'	Z-5 1529
		4	47.8	46.5		71° 06'	1460
		5	46.8	45.5		70° 40'	1425
		6	45.9	44.6		69° 55'	1368
		7	44.3	43.0		69° 11'	1315
		8	43.3	42.0		68° 23'	1261
		9	42.2	40.9		67° 40'	1217
		10	40.9	39.6		66° 42'	1161
		11	39.6	38.3		65° 45'	1110
		12	38.5	37.2		64° 47'	1062
		13	36.6	35.3		64° 25'	1044
		14	35.0	33.7		63° 28'	1001
		15	33.2	31.9		62° 09'	946
		16	30.7	29.4		61° 08'	907
		17	28.6	27.3		60° 28'	883
		18	26.5	25.2		59° 16'	841
		19	24.6	23.3		58° 03'	802
		20	21.8	20.5		56° 46'	763



Zero -0.4
Boat +1.0
Tide -1.9
-1.3

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 2300.02 Division No. 10 F.B. 2306 Pg. 129
No. Date 9-27 Date 9-27 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Doren Notes R.T. Date 7-16-57
No. 95+00 Date 9-27 Date 9-27 Map No. Tobacco Date

F. B. 2306 Pg. 130 Job No. 6300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes R. T. Notes Chkd J. C. N. Checked J. S. H. X-Sec.

Indexed K. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 95+00

76298 S & E #307—7-55

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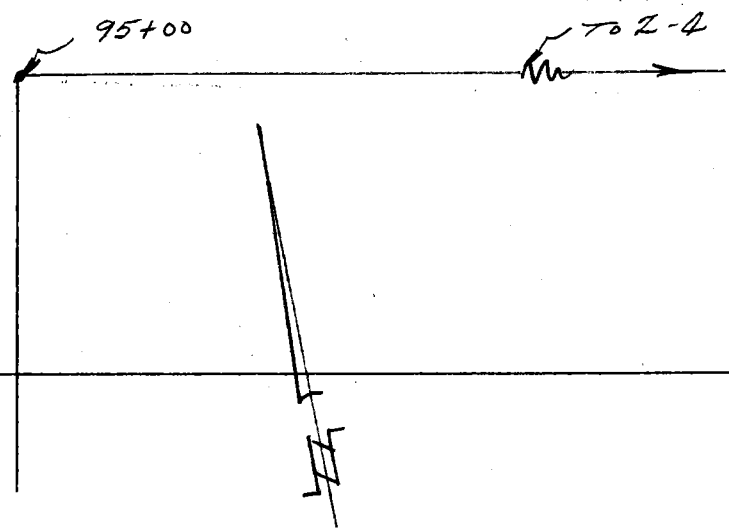
STATION	B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. Sight At On	Depth # Rec. Adj.		Time	Hor. Ang.		
90+00						
Z-5						
	21 19.2 17.9			55° 45'	734	Cut in Line 95+00
	22 16.4 15.1			54° 38'	704	
	23 14.6 13.3			53° 09'	667	Zero -0.4
	24 13.4 12.1		81.53	51° 43'	633	Boat +1.0'
						Tide -1.9'
						-1.3

Profile No.	Notes Red. J. S. H.	Plotted J. C. N.	Job No. 0300.02	Division No. 10	F. B. 2306 Pg. 131
	Date 9-57	Date 9-57	Survey of Beach Erosion		
X-Sec. No. 95+00	Notes Chkd. J. C. N.	Checked J. S. H.	Survey by Van Deren	Notes	Date 7-16-57
	Date 9-57	Date 9-57	Map No.	Indexed J. C. Johnson	Date



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 95+00 Z-4	#	Depth Rec. Adj.	Time	Hor. Ang.	
	1		8:49	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

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76298 S & E #307—7-55

F. B. 2306 Pg. 132 Job No. 0300.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Doren Notes Notes Chkd. J.C.N. Checked J.S.H. X-Sec.

Indexed A. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 95+00

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	# Depth Rec. Adj.		Time	Hor. Ang.	
	21			90° 00	
	22			"	
	23			"	
	22		8.53	"	

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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70298 S & E #307—7-55

76L298 307 10-51

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726 LOS ANGELES COUNTY
ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST @ 102+50	SIGHT ON 100+00
T.P.	145	7 23		5.78		Inshore
100+00		+	36	10 8		100+00
		+	36	10 8	22° 11' Brk. 102	
		7 2	00	7 2	28 43 137	
			36	3 6	36 43 187	
			51	2 1	42 00 225	
			69	0 3	47 13 270	
			81	-0 9	52 06 321	
			81	-0 9	56 25 377	
			101	-2 9	60 43 446	
			125	-5 3	63 21 498	
			143	-7 1	64 48 531	
			151	-7 9	65 02 537	
			164	-9 2	65 50 557	
T.P.			131	5 92		

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 133
X-Sec. No. 100+00 Date ____ Notes Chkd J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey of BEACH EROSION STUDIES Survey by ENGLISH Notes ED Date 7-16-57 Map No. ____ Indexed ____ Date ____

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S.	H. I. #	Depth Rec.	Depth Adj.	F. S.	Time	ELEV.	Hor. Ang.	Remarks
90+00	Z-5		1	50.4	48.9		9:06		58° 46'	1649 Cut in Line 100+00
			2	49.7	48.2				57° 52'	1592
			3	48.4	46.9				56° 55'	Z-5 1535
			4	47.6	46.1				56° 09'	1491
			5	46.8	45.3				54° 59'	1426
			6	45.7	44.2				54° 04'	1380
			7	44.7	43.2				52° 45'	1315
			8	43.4	41.9				51° 34'	1260
			9	42.6	41.1				50° 34'	1216
			10	40.8	39.3				49° 30'	1171
			11	39.8	38.3				48° 11'	1118
			12	38.4	36.9				46° 58'	1071
			13	36.4	34.9				45° 44'	1026
			14	34.5	33.0				44° 18'	976
			15	31.8	30.3				42° 42'	923
			16	29.8	28.3				41° 22'	881
			17	27.3	25.8				40° 12'	845
			18	24.9	23.4				38° 49'	805
			19	21.5	20.0				37° 02'	754
			20	18.5	17.0				35° 26'	712

Range Line = 100+00

90+00

Zero -0.4
Boat +1.0
Tide -2.1
-1.5

Profile No. 100+00 X-Sec. No.
Notes Red. J.S.H. Date 9-57 Plotted J.C.N. Date 9-57 Job No. 3300.02 Division No. 10
Notes Chkd. J.S.H. Date 9-57 Checked J.S.H. Date 9-57 Survey of Beach Erosion Survey by Van Derezn Notes R.T. Date 2-16-58
Map No. Inspected by Date
F. B. 2306 Pg. 135

F. B. 2306 Pg. 136 | Job No. 300.02 Division No. 10 | Notes Red. J. S. H. | Plotted J. C. N. | Profile

Survey of Beach Erosion | Date 9-57 | Date 9-57 | No.

Survey by Van Deren | Notes R.T. | Notes Chkd. J. C. N. | Checked J. S. H. | X-Sec.

Indexed K. C. Johnson | Date 7-16-57 | Date 9-57 | Date 9-57 | No. 100+00

76298 S & E #307—7-55

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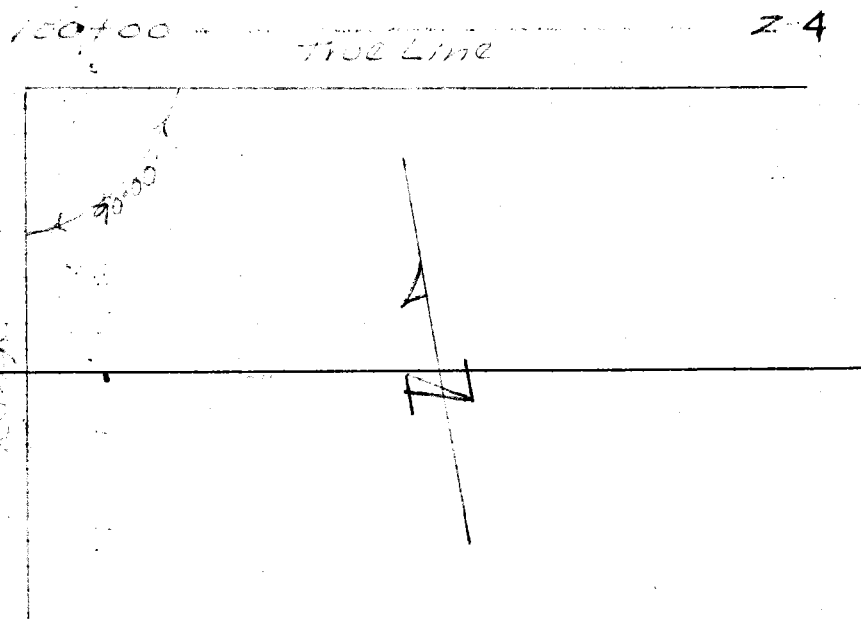
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
90+00						
Z-5						
		21 14.9 13.4		33° 42'	667	Cut in Line 100+00
		22 13.4 11.9	9:10	32° 32'	638	
						Zero -0.4
						Boat +1.0
						Tide -2.1
						-1.5

Profile No.	Notes Red. J. S. H. Date 9-57	Plotted J. C. N. Date 9-57	Job No. 0300.02	Division No. 10	F. B. 2306 Pg. 137
X-Sec. No. 100+00	Notes Chkd. J. C. N. Date 9-57	Checked J. S. H. Date 9-57	Survey of Beach Erosion	Survey by Van Deren Notes Goodwin Date 7-16-57	
			Map No. ~~Indexed~~ C. Johnson Date		



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 100+00 Z-L	# Depth Rec. Adj.		Time 9:06	Hor. Ang. 90° 00'	Range
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2306 Pg. 138 Job No. 0306.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed E. O. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 100+00

STATION	S. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
Z-4	21					
	22					
			9/10			

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76298 S & E #307—7-55

76L298 307 10-51

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 102+50	SIGHT ON 105+00
T.P.	1 20	7 1 2		5 9 2		Inshore
105+00			+ 4 5	11 6		105+00
			+ 4 1	11 2	19° 25' Brk.	
		7 1	0 0	7 1	26 47 126	
			3 5	3 6	35 04 176	
			5 1	2 0	41 33 222	
			6 7	0 4	46 39 265	
			7 6	-0 5	51 42 317	
			7 8	-0 7	54 03 345	
			8 2	-1 1	56 58 385	
			10 0	-2 9	60 12 437	
			10 9	-3 8	61 03 452	
			12 4	-5 3	62 32 481	
			14 4	-7 3	64 11 517	
			16 1	-9 0	64 58 535	
			17 0	-9 9	65 28 548	
T.P.			0 70	6 4 2		

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 135
X-Sec. ____ Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-16-57
Survey of BEACH EROSION STUDIES
No. 105+00 Date 9-57 Date 9-57 Date 9-57 Map No. ____ [redacted] Date ____

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	50.8	49.3	9:21	73° 40'	1706 Cut in Line 105+00
		2	49.4	47.9		72° 36'	1596
		3	47.9	46.4		71° 56'	2-5 1533
		4	46.7	45.2		70° 52'	1441
		5	45.5	44.0		69° 56'	1369
		6	44.3	42.8		69° 18'	1323
		7	43.1	41.6		68° 19'	1258
100+00	Z-5	8	41.7	40.2		67° 14'	1191
		9	39.8	38.3		65° 51'	1115
		10	38.3	36.8		64° 34'	1051
		11	36.7	35.2		64° 09'	1032
		12	34.8	33.3		62° 54'	977
		13	32.8	31.3		61° 54'	936
		14	30.5	29.0		60° 52'	897
		15	27.4	25.9		59° 26'	847
		16	24.1	22.6		57° 26'	783
		17	22.4	20.9		56° 30'	755
		18	18.5	17.0		54° 46'	708
		19	15.7	14.2		52° 48'	659
		20	13.7	12.2		51° 05'	619

Range Line = 105+00

100+00

Zero -0.2
Boat +1.0
Tide -2.3
-1.5

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 141
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-16-57
No. 105+00 Date 9-57 Date 9-57 Map No. Ind. Johnson Date

F. B. 2306 PG. 142 Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes R. T. Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed A. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 105+00

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	Depth # Rec. Adj.		Time	Hor. Ang.		Remarks
	21 11.7 10.2		9:25	49° 45'	59'	Cut in Line 105+00

100+00

Z-5

Zero -0.2

Boat +1.0

Tide -2.3

-1.5

76298 S & E #307—7-55

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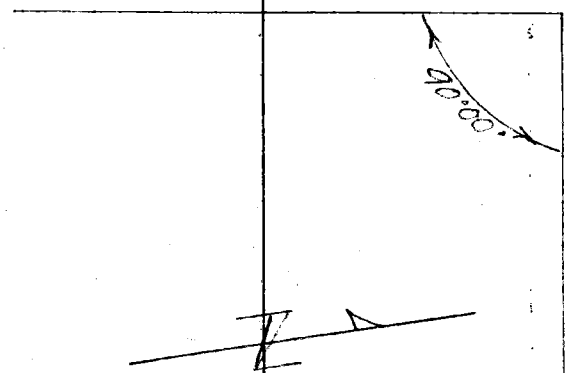
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
105+00 Z-4	1		9:21	90° 00'	Range	
	2			" "		
	3			" "		
	4			" "		
	5			" "		
	6			" "		
	7			" "		
	8			" "		
	9			" "		
	10			" "		
	11			" "		
	12			" "		
	13			" "		
	14			" "		
	15			" "		
	16			" "		
	17			" "		
	18			" "		
	19			" "		
	20			" "		



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 1/43
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Ken Dergin Notes Goodwin Date 7-16-57
No. 105+00 Date 9-57 Date 9-57 Map No. Date

F. B. 2306 Pg. 144 Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed A. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 105+00

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On		Depth # Rec. Adj.	Time	Hor. Ang.		Remarks
105+00 Z-4	Z1		9:25	[illegible]		

76L298 307 10-51

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED ink, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 107+50	SIGHT ON 118+00
T.P.	1 65	8 07		6 42		Inshore
110+00			+ 3 6	11 7		110+00
			+ 3 0	11 1	16 18 73 Brk.	
			0 0	8 1	22 52 106	
		8 1	3 9	4 2	21 01 150	
			6 1	2 0	38 55 202	
			7 8	0 3	45 21 253	
			8 4	-0 3	51 07 310	
			9 5	-1 4	56 59 385	
			11 2	-3 1	59 54 431	
			13 4	-5 3	62 31 481	
			15 1	-7 0	63 50 509	
			16 7	-8 6	64 56 535	
Z-4 A			+ 049	8 56	Z-4A, el.=8.555 (M.L.L.W.) F.B.	2100-109

Profile No. ____ Date ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.07 Division No. 10 F.B. 2306 Pg. 145
X-Sec. No. 110+00 Date 9-57 Notes Chkd J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey of BEACH EROSION STUDIES Survey by ENGLISH Notes ED Date 7-16-57
Map No. ____ Date ____

76298 S & E #307—7-55

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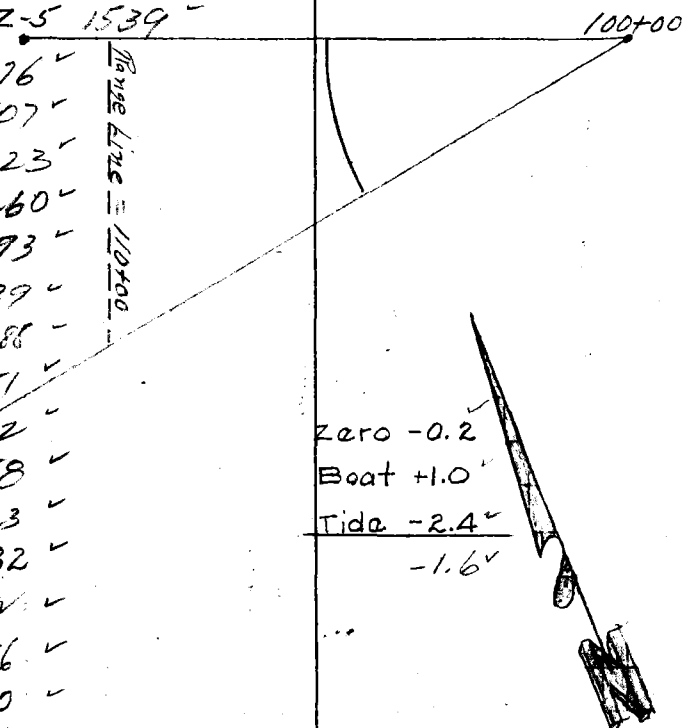
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
100+00	Z-5	1	50.3	48.7	9:35	58° 44'	1647 Cut in Line 110+00
		2	49.2	47.6		57° 46'	1586
		3	48.3	46.7		56° 59'	Z-5 1539
		4	47.2	45.6		55° 53'	1476
		5	46.3	44.7		54° 35'	1407
		6	44.6	43.0		52° 55'	1323
		7	43.2	41.6		51° 35'	1260
		8	42.1	40.5		50° 02'	1193
		9	40.7	39.1		48° 43'	1139
		10	39.5	37.9		47° 25'	1088
		11	38.4	36.8		46° 25'	1051
		12	36.7	35.1		45° 20'	1012
		13	34.8	33.2		43° 46'	958
		14	32.9	31.3		42° 42'	923
		15	30.8	29.2		41° 25'	882
		16	28.7	27.1		40° 06'	842
		17	26.4	24.8		38° 31'	796
		18	23.7	22.1		37° 14'	760
		19	20.7	19.1		35° 39'	717
		20	17.8	16.2		34° 02'	675



Zero -0.2
Boat +1.0
Tide -2.4
-1.6

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 147
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 9-16-57
No. 110+00 Date 9-57 Date 9-57 Map No. Ed Johnson Date

76298 S & E #307—7-55

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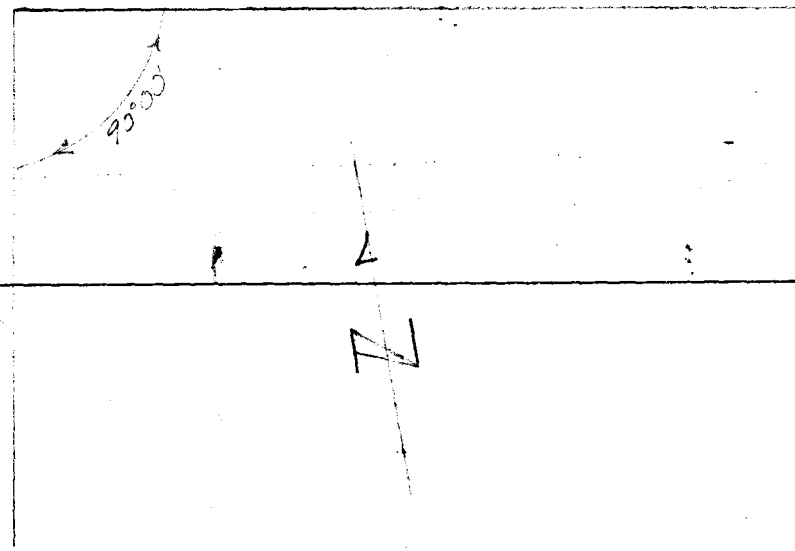
F. B. 2306 Pg. 146 Job No. 320.02 Division No. 10 Notes Red J. S. H. Plotted J. C. N. No.
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec.
Survey by Van Deren Notes R.T. Notes Chkd. J. C. N. Checked J. S. H.
Indexed E. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 110+00

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks	
		21	14.9	13.3		32° 06	627 Cut in Line	110+00
		22	12.7	11.1		30° 25	587	
		23	11.2	9.6	9:39	28° 38	546	
								Zero -0.2
								Boat +1.0
								Tide -2.4
								-1.6
100+00	N-5							

Profile No.	Notes Red. J. S. H.	Plotted J. C. N.	Job No. 0300.02	Division No. 10	F. B. 2306 Pg. 149
	Date 9-57	Date 9-57	Survey of Beach Erosion		
X-Sec. No. 110+00	Notes Chkd. J. C. N.	Checked J. S. H.	Survey by Van Doren	Notes Goodwin	Date 7-16-57
	Date 9-57	Date 9-57	Map No.	Indexed Johnson	Date

110+00 True Line Z-4



STATION	B. S.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
110+00 Z-4	1		9:35	90°00'	Range
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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76298 S & E #307—7-55

F. B. 2306 PG. 150 Job No. 0300 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed A. C. Johnson Date 7-16-57 Date 9-57 Date 9-57 No. 110+00

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
110+00 Z-4	21		91 39	89 26		
	22			" "		
	23					

Notes Ck'd by J.C.N.	Survey of Beach Erosion
Map No.	W. O. 8300.01 Tape No. St'd. °F
Office Work J.S.H.	Surveyed by Van Doren
Checked K.R.K.	Notes Van Date 9-17-57
Date 9-57	Indexed J. C. Johnson

F. B 2306 Pg. 151

Tide Gauge Readings at Santa Monica

All Readings are on Daylight Savingtime

7-17-57

Scale on 2.7

Gauge Time		Watch Time	
7:00	A.M.		+ 1.1
7:30	"		+ 1.1
8:00	"		+ 1.4
8:30	"		+ 1.6
9:00	"		+ 1.8
9:30	"		+ 2.0
10:00	"		+ 2.3
10:30	"		+ 2.9
11:00	"		+ 3.0
11:30	"		+ 3.6
12:00	"		+ 3.7
12:30	P.M.		+ 4.2
1:00	"		+ 4.2
1:30	"		+ 4.3
2:00	"	3:00	+ 4.4
2:30	"		+ 4.3
3:00	"		+ 4.3

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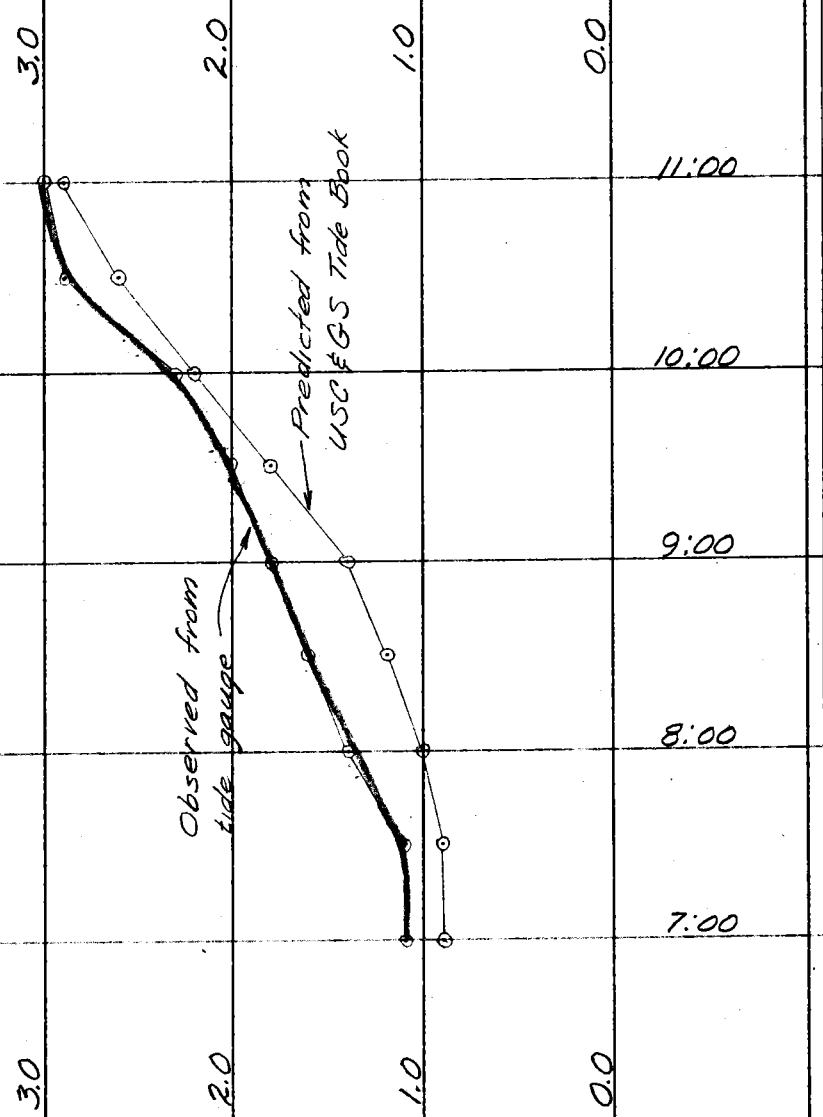
726 LOS ANGELES COUNTY
ENGINEERING BLDG.

76F3095 S&E #247. 8-54

Notes Ck'd by J.C.N.	Survey of Beach Erosion
Map No.	JN 0300.02 Tape Std °F
Office Work J.S.H.	Surveyed by
Checked K.R.K.	Notes Date
Date	Indexed

F. B. 2306 PG. 152

July 17, 1957



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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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76F309S S&E #247 1-56

76L298 307 10-51

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726 LOS ANGELES COUNTY
ENGINEERING BLDG.

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 117+50	SIGHT ON 115+00
Z-4A	476	13 32 ~~13 22~~		8 56	Z-4A, el = 8.555 (M.L.L.W.) F.B. 2100-109	Inshore 115+00
T.P.	1 16	6 09 ~~5 99~~	8 39	4 93 ~~4 83~~		
115+00		+	3 0	9 1 ~~9 0~~		
		+	4 5	10 6 ~~10 5~~	68 Brk.	
		6 1 ~~6 0~~	0 0	6 1 ~~6 0~~	110	
			3 2	2 9 ~~2 8~~	160	
			5 0	1.1 ~~1 0~~	214	
			6 4	-0.3 ~~-0 4~~	260	
			6 8	-0.7 ~~-0 8~~	310	
			7 4	-1.3 ~~-1 4~~	366	
			10 0	-3.9 ~~-4 0~~	431	
			12 7	-6.6 ~~-6 7~~	478	
			14 5	-8.4 ~~-8 5~~	512	
			16 2	-10.1 ~~-10 2~~	552	
T.P.			2 59	~~3 40~~ 3.50		

Profile No. ____ Date ____ X-Sec. No. 115+00 Date ____

Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 153

Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES

Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-17-57

Date 9-57 Date 9-57 Map No. ____ Date ____

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
110+00	Z-5	1	49.8	49.5	7:50	73° 35'	1697 Cut in Line: 115+00
		2	49.2	48.9		73° 17'	1664
		3	48.3	48.0		72° 32'	2.5 1589
		4	47.7	47.4		72° 13'	1559
		5	47.0	46.7		71° 33'	1499
		6	46.1	45.8		71° 04'	1458
		7	45.3	45.0		70° 10'	1386
		8	44.0	43.7		69° 36'	1344
		9	43.0	42.7		68° 50'	1291
		10	42.0	41.7		68° 08'	1246
		11	40.7	40.4		67° 25'	1202
		12	39.6	39.3		66° [illegible]	1152
		13	38.3	38.0		65° 38'	1104
		14	37.5	37.2		64° 44'	1059
		15	36.1	35.8		64° 04'	1028
		16	34.1	33.8		63° 10'	988
		17	32.4	32.1		61° 47'	932
		18	30.5	30.2		60° 37'	888
		19	28.4	28.1		59° 47'	859
		20	26.0	26.2		58° 30'	816

Range Line = 115+00

110+00

Shot 1 to 19
Zero 0.0
Boat +1.0
Tide -1.3
-0.3

Shot 20 to 21
Zero +0.5
Boat +1.0
Tide -1.3
+0.2

N

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F. B. 2306 Pg. 155
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-17-57
No. 115+00 Date 9-57 Date 9-57 Map No. [illegible] Date

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

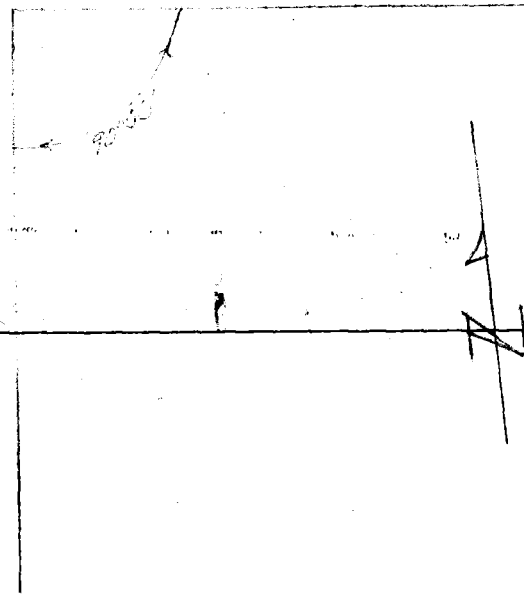
Do not extend notes this side of this line.

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Depth Adj.	Time	Hor. Ang.		Remarks
		21	24.5	24.7		57° 10'	775	Cat in Line 115+00
		22	22.9	22.3		56° 00'	741	Shot 20+21
		23	20.6	19.3		54° 35'	703	Zero +0.5
		24	17.0	15.7		52° 20'	648	Boat +1.0
		25	15.0	13.7		50° 45'	612	Tide -1.3
		26	12.6	11.3		48° 55'	573	+0.2
		27	11.5	10.2	71 55	47° 27'	545	Shot 22
110+00	Z-5							Zero -0.3
								Boat +1.0
								Tide -1.3
								-0.6
								Shot 23 to 27
								Zero -1.0
								Boat +1.0
								Tide -1.3
								-1.3

F. B. 2306 Pg. 156 Job No. 0300.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Date 9-57 Date 9-57 No. Profile
Survey of Beach Erosion Notes Chkd J.C.N. Checked J.S.H. Date 9-57 Date 9-57 No. X-Sec.
Survey by Van Deren Notes R.T. Date 7-17-57 No. 115+00
Indexed A. C. Johnson

Profile No.	Notes Red. J. S. H.	Plotted J. C. N.	Job No. 0306.02	Division No. 10	F. B. 2306 Pg. 157
	Date 9-57	Date 9-57	Survey of [illegible]		
X-Sec. No. 115+00	Notes Chkd. J. C. N.	Checked J. S. H.	Survey by [illegible]	Notes [illegible]	Date 7-17-57
	Date 9-57	Date 9-57	Map No.	Indexed Johnson	Date

115+00 [illegible] Z-4



STATION	B. S.	H. I.	F. B.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
Z-4	1		7:50	90 00	Range
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				

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76298 S & E #307—7-55

F. B. 2306 Pg. 158 Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of [illegible] Date 9-57 Date 9-57 No.

Survey by [illegible] Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed A. C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 115+00

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
[illegible]	21			[illegible]		
	22					
	23					
	24					
	25					
	26					
	27					

76L298 307 10-51

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STATION	B. S.	H. I.	F. S.	ELEV.	INST @ 117+50	SIGHT ON 120+00
T.P. 120+00	2 59	6 09 ~~5 99~~		3.50 ~~3 40~~		Inshore 120+00
		+	5 6	11.7 ~~11 6~~		
		+	4 2	10 3 ~~2~~	[illegible] 57' Brk.	
		6 1 ~~0~~	0 0	6 1 ~~0~~	[illegible] 96'	
			3 4	2 7 ~~6~~	[illegible] 152'	
			5 2	0 9 ~~8~~	[illegible] 201	
			6 5	-0 4 ~~5~~	[illegible] 237	
			6 8	-0 7 ~~8~~	[illegible] 293	
			8 5	-2 4 ~~5~~	[illegible] 379	
			13 0	-6 9 ~~7 0~~	[illegible] 472	
			14 9	-8 8 ~~8 9~~	[illegible] 504	
			16 4	-10 3 ~~4~~	[illegible] 526	
T.P.			2 33	3 76 ~~3 68~~		

Profile No. ____ Date ____ X-Sec. ____ Notes Chkd J.C.N. Date 9-57 Notes Red J.S.H. Date 9-57 Plotted J.C.N. Date 9-57 Job No. 0300.02 Division No. 10 Survey of BEACH EROSION STUDIES Survey by ENGLISH Notes ED Date 7-17-57 Map No. ____ Indexed ____ Date ____

F.B. 2306 PG. 15 9

76298 S & E #307—7-55

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Do not extend notes this side of this line.

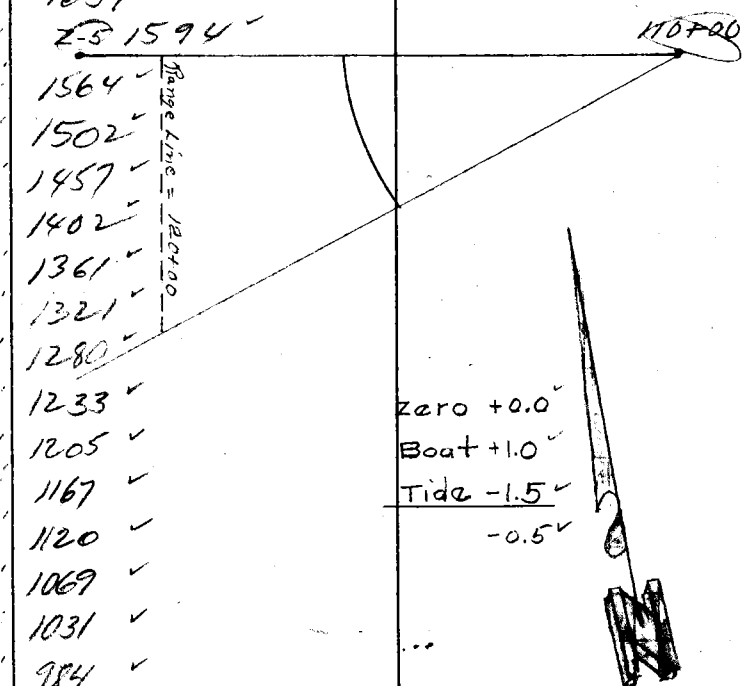
Profile No. ____ X-Sec. No. 120+00

Notes Red. J.S.H. Date 9-57 Notes Chkd. J.C.N. Date 9-57 Job No. 2306-02 Survey of Beach Erosion Survey by Van Keren Division No. 10 Notes R.T. Date 7-17-57 Plotted J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Map No. ____ Date ____

F. B. 2306 PG. 161

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
110+00	N-5	1	50.0	49.5	8:20	59° 44'	1714 Cut in Line 120+00
		2	49.3	48.8		58° 51'	1654
		3	48.7	48.2		59° 54'	Z-5 1594
		4	47.8	47.3		57° 29'	1564
		5	46.9	46.4		56° 21'	1502
		6	46.3	45.8		55° 32'	1457
		7	45.5	45.0		54° 30'	1402
		8	44.8	44.3		53° 42'	1361
		9	44.0	43.5		52° 52'	1321
		10	42.8	42.3		52° 00'	1280
		11	41.9	41.4		50° 59'	1233
		12	41.2	40.7		50° 19'	1205
		13	40.4	39.9		49° 25'	1167
		14	39.5	39.0		48° 14'	1120
		15	37.9	37.4		46° 55'	1069
		16	36.7	36.2		45° 32'	1031
		17	35.3	34.8		44° 32'	984
		18	33.3	32.8		43° 24'	946
		19	31.2	30.7		41° 50'	895
		20	29.3	28.8		40° 24'	851

Zero +0.0
Boat +1.0
Tide -1.5
-0.5



76298 S & E #307—7-55

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F. B. 2306 Pg. 162 Job No. 23402 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. No. Profile
Survey of Beach Erosion R.T. Date 9-57 Date 9-57 X-Sec.
Survey by Harrison Notes Notes Chkd. J.C.N. Checked J.S.H. No. 120+00
Indexed E. C. Johnson Date 7-17-57 Date 9-57 Date 9-57

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Adj.	Time	Hor. Ang.		Remarks
		21	27.4	26.9		38° 56'	808	Cut in Line 120+00
		22	25.2	24.7		39° 48'	776	
		23	22.9	22.4		36° 08'	730	Zero 0.0
		24	20.2	19.7		34° 22'	684	Boat +1.0
		25	16.5	16.0		32° 20'	633	Tide -1.5
		26	13.9	13.4		30° 39'	593	-0.5
		27	12.0	11.5		29° 09'	556	
110+00	Z-5	28	10.9	10.4	8:25	27° 25'	531	

Profile No.	Notes Red. J. S. H.	Plotted J. C. N.	Job No. 0300.02	Division No.	F. B. 2306 Pg. 163
	Date 9-57	Date 9-57	Survey of		
X-Sec. No. 120+00	Notes Chkd. J. C. N.	Checked J. S. H.	Survey by	Notes	Date 7-17-57
	Date 9-57	Date 9-57	Map No.	Indexed Johnson	Date

120+00

Z-4

True Line

90°00'

N

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
120+00 Z-4			8:20	90°00'	

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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76298 S & E #307—7-55

F. B. 2306 Pg. 164 | Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by [illegible] Notes [illegible] Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed K. C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 120+00

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	# Rec.	Depth Adj.	Time	Hor. Ang.	Remarks

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70298 S & E #307—7-55

76L298 307 10-51

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 127+50	SIGHT ON 125+00
T.P.	270	6 46 ~~6 36~~		3.76 ~~3 66~~		Inshore
125+00		+	4 5	11.0 ~~10 9~~		125+00
		+	4 2	10.7 ~~10 6~~	11° 47' 52 Brk.	
		6 54	0 0	6 54	12 13 87	
			3 5	3.0 ~~2 9~~	12 35 136	
			5 4	1.1	37 17 190	
			7 0	-0.5	44 27 245	
			[illegible]	-1.7	50 32 298	
			8 5	-2.0	55 30 364	
			11 4	-4.9 ~~-5 0~~	57 12 419	
			13 7	-6.7 ~~-6 8~~	61 16 456	
			16 4	-9.9 ~~-10 0~~	65 18 544	
T.P.			2 34	4.12 ~~4 02~~		

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 0300.07 Division No. 10 F.B. 2306 Pg. 165
No. Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES
X-Sec. Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-17-57
No. 125+00 Date 9-57 Date 9-57 Map No. [redacted] Date

76298 S & E #307—7-55

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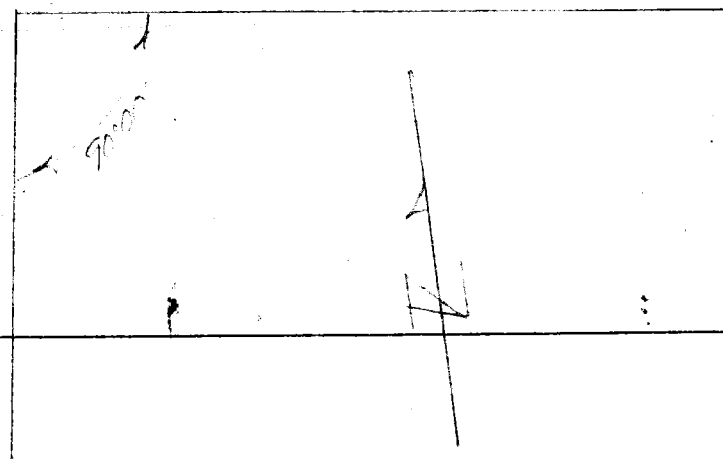
F. B. 2306 Pg. 168 Job No. 03002 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. No. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec.
Survey by Van Deren Notes K.T. Notes Chkd. J.C.N. Checked J.S.H.
Indexed K. C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 125+00

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		21	9.9 9.2	8:42	18° 01	488 Cut in Line 125+00	
110+00	Z-5						Zero +0.0 Boat +1.0 Tide -1.7 -0.7

Profile No. | Notes Red. J. S. H. | Plotted J. C. N. | Job No. 0300.02 | Division No. 10 | F. B. 2306 Pg. 169
Date 9-57 | Date 9-57 | Survey of Beach Erosion
X-Sec. No. 125+00 | Notes Chkd. J. C. N. | Checked J. S. H. | Survey by [illegible] | Notes [illegible] | Date [illegible]
Date 9-57 | Date 9-57 | Map No. [illegible] | Index Johnson | Date

125+00 True Line 7-4



STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sign At On	# Depth Rec. Adj.		Time	Hor. Ang.	
				90° 08'	
	20			90° 08'	

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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76298 S & E #307—7-55

F. B. 2306 PG. 120 Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by [illegible] Notes J. C. Goodwin Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed X C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 125+00

76298 S & E #307—7-55

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
125+00 Z-4	21		8:42	90 88		

76L298 307 10-51

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ENGINEERING BLDG.

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST @ 127+50	SIGHT ON 130+00
T.P.	1 88	6.00 ~~5 90~~		4.12 ~~4 02~~		Inshore
130+00			+ 4 7	10 7		130+00
			+ 5 2	11 2	11° 49' 52 Brk.	
		6.0 ~~5 9~~	0 0	6.0 ~~5 9~~	19 43 90	
			2 2	2 6	30 18 146	
			5 4	0 6	39 44 201	
			7 0	-1 0	45 33 255	
			6 7	-0 7	50 04 299	
			7 7	-1 7	55 04 358	
			10 8	-4 8	59 11 419	
			13 2	-7 2	61 39 463	
			16 1	-10 1	63 36 504	
T.P.			1 41	4 59 ~~4 49~~		

Profile No. _____ Date _____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.07 Division No. 10 F.B. 2306 Pg. 77
X-Sec. No. 130+00 Notes Chkd. J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey of BEACH EROSION STUDIES Survey by ENGLISH Notes E.D. Date 7-17-57 Map No. _____ Indexed C. Johnson Date _____

76298 S & E #307—7-55

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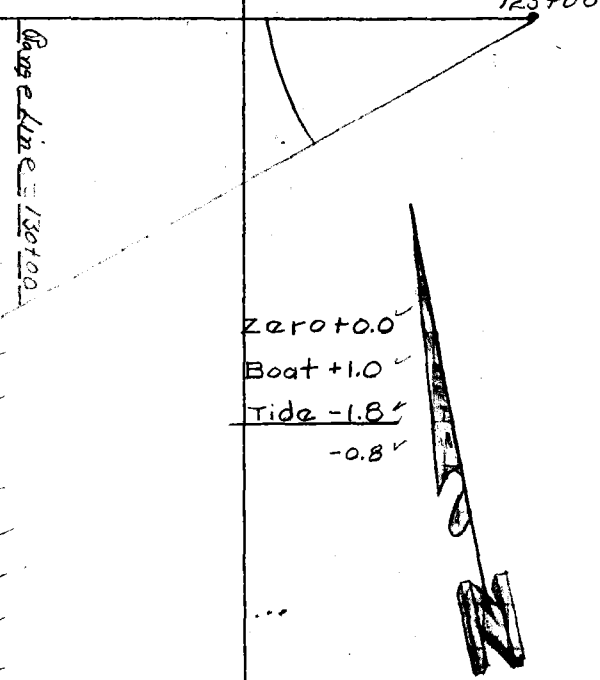
Profile No. 130+00 X-Sec. No. Notes Red. J.S.H. Date 9-57 Chkd. J.C.N. Date 9-57 Plotted J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Job No. 23006 Survey of Brush Eastern Survey by Notes KT Map No. Division No. 10 Date 8-12-57 Notes Checked Johnson Date F. B. 2306 Pg. 173

STATION Inst. At	Sight On	B. S.	H. I. Depth #	Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
125+00	N-5		1	50.8	50.0	9:01	74° 12'	1767'	Cut in Line 130+00
			2	49.7	48.9		73° 18'	1667'	
			3	48.3	47.5		72° 42'	1605'	
			4	47.4	46.6		71° 57'	1534'	
			5	46.5	45.7		71° 27'	1490'	
			6	45.5	44.7		70° 39'	1421'	
			7	44.0	43.2		69° 32'	1340'	
			8	42.7	41.9		68° 52'	1294'	
			9	41.5	40.7		67° 48'	1225'	
			10	39.8	39.0		66° 34'	1154'	Zero +0.0
			11	38.6	37.8		65° 23'	1091'	Boat +1.0
			12	37.0	36.2		64° 21'	1041'	Tide -1.8
			13	34.9	34.1		62° 56'	978'	-0.8
			14	32.3	31.5		61° 36'	924'	
			15	30.7	29.9		60° 19'	877'	
			16	29.3	28.5		59° 15'	840'	
			17	27.7	26.9		58° 42'	822'	
			18	26.2	25.4		57° 09'	774'	
			19	24.0	23.2		55° 29'	727'	
			20	21.7	20.9		54° 10'	692'	



F. B. 2306 Pg. 174 Job No. 0300.02 Division No. 10 Notes Red J. S. H. Plotted J. C. N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes R. T. Notes Chkd J. C. N. Checked J. S. H. X-Sec.

Indexed K. C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 130+00

76298 S & E #307—7-55

PLEASE RETURN TO

LOS ANGELES COUNTY ENGINEER

700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	Depth # Rec. Adj.		Time	Hor. Ang.	Remarks	
	21 18.2 17.4			52° 18'	647 Cut in Line 130+00	
	22 14.9 14.1			50° 00'	596	
	23 12.6 11.8			47° 58'	555	Zero +0.0
	24 10.4 9.6		9:06	45° 31'	509	Boat +1.0
	25					Tide -1.8
						-0.8

125+00

Z-5

Profile	Notes Red. J. S. H.	Plotted J. C. N.	Job No. 0300.02 Division No.
No.	Date 9-57	Date 9-57	Survey of
X-Sec.	Notes Chkd. J. C. N.	Checked J. S. H.	Survey by Notes Date
No. 130+00	Date 9-57	Date 9-57	Map No. Indexed Johnson Date

F. B. 2386 Pg. 175

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	
Inst. At / Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks
Z-4			9:01		Z-4

7629 S S & E #307—7-55

F. B. 2306 Pg. 176 | Job No. 0300.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Profile

Survey of Beach Erosion Date 9-57 Date 9-57 No.

Survey by Van Deren Notes J.C. Goodwin Notes Chkd. J.C.N. Checked J.S.H. X-Sec.

Indexed K. C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 130+00

STATION	S. B.	H. I.	F. S.	ELEV.		
Inst. Sight On At Z-0	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks

76298 S & E #307—7-55

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LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

76L298 307 10-51

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY
ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 137+50	SIGHT ON 135+00
T.P.	1.68	6 27 ~~6 17~~		4 59 ~~4 49~~		Inshore
135+00		+	4 6	10 9 ~~8~~		135+00
		+	4 8	11 1 ~~0~~	13° 37' 61' Brk.	
		6 3 ~~2~~	0 0	6 3 ~~2~~	20 59 96'	
			3 5	2 8 ~~7~~	30 40 148'	
			6 1	0 2 ~~1~~	43 15 235'	
			7 6	-0 8 ~~9~~	48 55 287	
			8 3	-1 0 ~~1~~	53 42 340	
			10 5	-2 0 ~~3~~	56 22 376	
			11 8	-4 2 ~~5~~	59 16 421	
			13 2	-5 5 ~~6~~	61 05 453	
			14 9	-6 9 ~~7~~	62 32 481	
			16 5	-8 6 ~~8~~	64 15 518	
T.P.			2 07	-10 2 ~~3~~	64 47 531	
				4 20 ~~10~~		

Profile No. ____ Date ____ X-Sec. No. 135+00 Date ____

Notes Red J.S.H. Plotted J.C.N. Date 9-57 Notes Chkd J.C.N. Checked J.S.H. Date 9-57

Job No. 0300.02 Division No. 10 Survey of BEACH EROSION STUDIES Survey by ENGLISH Notes ED Date 7-17-57 Map No. ____ Indexed Johnson Date ____

F.B. 2306 PG. 177

76298 S & E #307—7-55

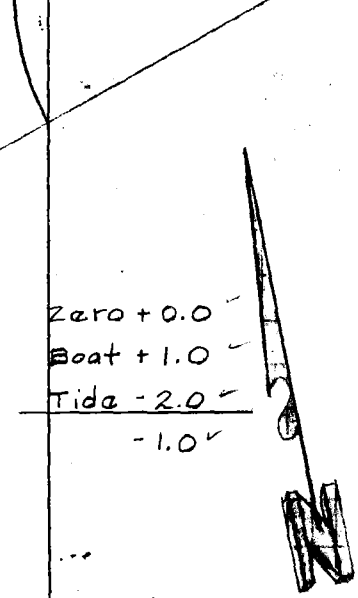
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S.	H. I. #	Depth Rec.	Depth Adj.	F. S.	Time	ELEV.	Hor. Ang.	Remarks
			1	48.5	47.5		9:25	1686	59° 20'	Cut in Line 135+00
			2	48.0	47.0			1619	58° 18'	
			3	46.7	45.7			Z-5 1530	56° 50'	
			4	45.4	44.4			1455	55° 30'	
			5	43.8	42.8			1385	54° 10'	
			6	42.8	41.8			1333	52° 08'	
			7	42.0	41.0		9:26	1263	51° 38'	
			8	42.7	41.7		9:31	1305	52° 32'	
125+00	Z-5		9	41.2	40.2			1240	[illegible]	
			10	39.6	38.6			1179	47° 42'	
			11	38.8	37.8			1120	48° 15'	
			12	37.5	36.5			1074	48° 02'	
			13	36.2	35.2			1036	46° 00'	
			14	34.8	33.8			1001	45° 02'	
			15	33.2	32.2			970	44° 07'	
			16	31.4	30.4			920	42° 39'	
			17	29.9	28.9			876	41° 33'	
			18	28.4	27.4			853	40° 28'	
			19	26.8	25.8			808	38° 56'	
			20	25.3	24.3			774	37° 44'	

Zero + 0.0
Boat + 1.0
Tide - 2.0
-1.0



Profile Notes Red J.S.H. Plotted J.C.N. Job No. 23000 Division No. 60 F. B. 2306 Pg. 179
No. Date 9-57 Date 9-57 Survey of Beach Erosion Date
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by [illegible] Notes [illegible] Date 8-12-57
No. 135+00 Date 9-57 Date 9-57 Map No. [illegible] Date

F. B. 2306 PG. 160 Job No. 4304.12 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Date 9-57 No. Profile

Survey of Beach Erosion Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Survey by Van Deren Notes R.T. Date 9-57 Date 9-57 No. 135+00

Indexed E. C. Johnson Date 7-17-57

76298 S & E #307—7-55

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LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks	
		21	23.7	22.7		36° 30'	740 Cut in Line 135+00	
		22	22.4	21.4		35° 19'	706	
		23	20.6	19.6		33° 52'	674	Zero +0.0
		24	18.3	17.3		32° 07'	652	Boat +1.0
		25	15.9	14.9		31° 33'	614	Tide -2.1
		26	14.2	13.2		30° 06'	580	-1.0
		27	12.3	11.3		28° 38'	546	
125+00	N-5	28	10.5	9.5	9:35	27° 02'	510	

76298 S & E #307—7-55

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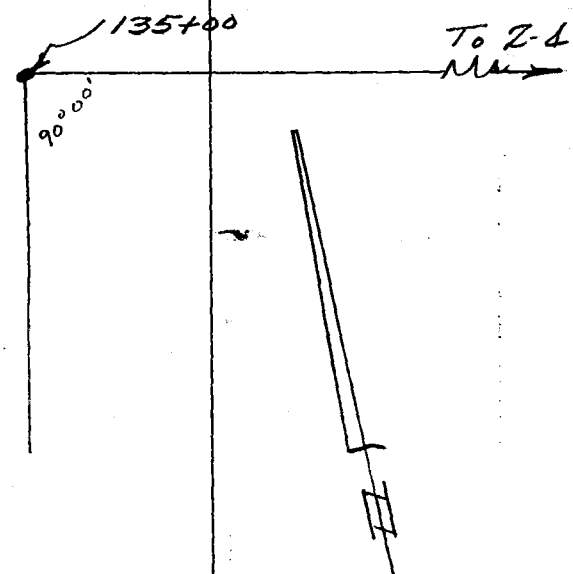
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
135+00	Z-4	1		9:25	90° 00'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7		9:26	"	
		8		9:31	"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



Profile No. ____ Notes Red. J.S.H. Plotted J.C.N. Job No. ____ Division No. 10 F.B. 2306 Pg. 481
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 135+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Land Date 7-17-57
Date 9-57 Date 9-57 Map No. ____ Indexed Johnson Date ____

76298 S & E #307—7-55

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

F. B. 2306 Pg. 181 Job No. 030002 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. No. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec.
Survey by Van Deren Notes E. Lando Notes Chkd. J. C. N. Checked J. S. H.
Indexed C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 135+00

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks
135+00	Z-4	21			90° 00'		
		22			"		
		23			"		
		24			"		
		25			"		
		26			"		
		27			"		
		28		9.35	"		

76L298 307 10-51

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR

726 LOS ANGELES COUNTY
ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 137+50	SIGHT ON 140+00
T.P.	256	6 ~~66~~ 76		4 ~~10~~ 20		Inshore
140+00		+	4 5	11 ~~2~~ 3		140+00
		+	4 5	~~11.2~~ 11.3	17° 43' 80 Brk.	
		6 ~~X~~ 8	0 0	6 ~~X~~ 8	23 50 111	
			3 5	3 ~~2~~ 3	31 44 154	
			5 5	1 ~~2~~ 3	38 06 196	
			6 5	0 ~~2~~ 3	43 30 237	
			7 1	-0 ~~4~~ 2	48 19 281	
			7 2	-0 ~~5~~ 4	52 21 324	
			8 5	-1 ~~8~~ 7	56 11 373	
			10 6	-3 ~~9~~ 7	59 28 424	
			12 0	-5 ~~3~~ 2	60 43 446	
			13 9	-7 ~~2~~ 1	62 29 480	
			15 4	-8 ~~X~~ 6	63 43 506	
			17 0	-10 ~~3~~ 2	64 47 531	
T.P.			1 19	5 ~~44~~ 57		

Profile No. ____ Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 PG. 183

X-Sec. Date 9-57 Date 9-57 Survey of BEACH EROSION STUDIES

No. 140+00 Notes Chkd J.C.N. Checked J.S.H. Survey by ENGLISH Notes ED Date 7-17-57

Date 9-57 Date 9-57 Map No. [redacted] Index Johnson Date

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 030062 Division No. 10 F. B. 2306 Pg. 185
No. Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Loen Notes R.T. Date 9-17-57
No. 140+00 Date 9-57 Date 9-57 Map No. Inst. G. Johnson Date

STATION Inst. At	Sight On	#	B. S.	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.		Remarks
		1	50.4	49.2	9:48		50° 48'	1840	Cut in Line 140+00
		2	49.1	47.9			49° 35'	1761	
		3	48.2	47.0			48° 51'	Z-5 1716	
		4	47.2	46.0			47° 44'	1650	
		5	46.4	45.2			46° 36'	1586	
		6	45.4	44.2			45° 21'	1518	
		7	44.1	42.9			44° 04'	1452	
125+00	Z-5	8	43.0	41.8			42° 43'	1385	
		9	41.8	40.6			41° 21'	1320	
		10	40.4	39.2			39° 52'	1253	
		11	39.0	37.8			38° 00'	1172	
		12	37.0	35.8			36° 34'	1113	
		13	35.3	34.1			34° 52'	1046	
		14	33.8	32.6			33° 29'	992	
		15	32.0	30.8			32° 05'	941	
		16	30.3	29.1			31° 04'	903	
		17	28.7	27.5			30° 07'	870	
		18	27.0	25.8			28° 52'	827	
		19	25.5	24.3			28° 02'	798	
		20	24.0	22.8			27° 03'	767	

Base Line = 140+00

125+00

Zero - 0.0
Boat + 1.0
Tide - 2.2
-1.2

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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F. B. 2306 Pg. 186 Job No. 430.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Date 9-57 Date 9-57 No. X-Sec.
Survey of Beach Erosion Notes Chkd. J. C. N. Checked J. S. H. Date 9-57 Date 9-57 No. 140+00
Survey by Van Deren Notes K.T.
Indexed K. C. Johnson Date 7-17-57

STATION Inst. At	Sight On	B. S. #	H. I. Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks	
		21	22.5	21.3		26° 04'	734 Cut in Line 140+00	
		22	20.7	19.5		25° 09'	702	
		23	18.5	17.3		24° 04'	669	
		24	16.6	15.4		23° 13'	644	Zero +0.0
		25	14.5	13.3		22° 04'	608	Boat +1.0
		26	13.1	11.9		20° 56'	575	Tide -2.2
		27	11.7	10.5		20° 02'	548	-1.2
128+00	N-5	28	10.0	8.8	9:53	18° 50'	512	

Profile No. | Notes Red. J.S.H. Date 9-57 | Plotted J.C.N. Date 9-57 | Job No. 0300.02 | Division No. 10 | F. B. 2306 | Pg. 187

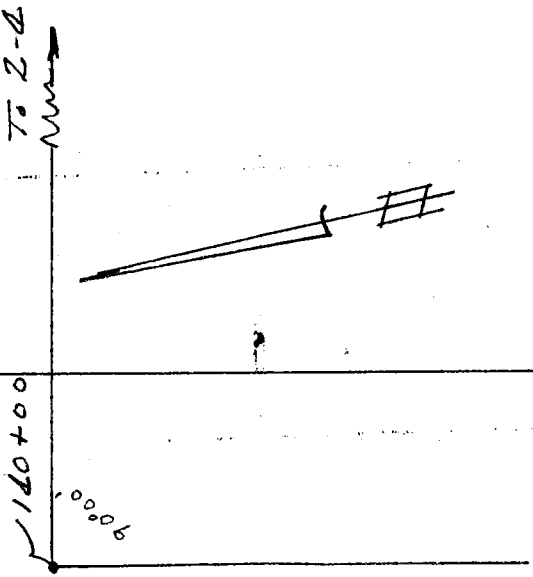
X-Sec. No. 140+00 | Notes Chkd. J.C.N. Date 9-57 | Checked J.S.H. Date 9-57 | Survey of Beach Erosion | Survey by VanDeren | Notes Landa | Date 7-17-57 | Map No. [illegible] | Indexed Johnson | Date

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

Do not extend notes this side of this line.

STATION Inst. Sight At On	B.S. #	H.I. Depth Rec. Adj.	F.S. Time	ELEV. Hor. Ang.	Remarks
140+00 Z-4	1		9:48	90° 00'	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	



76298 S & E #307—7-55

F. B. 2306 Pg. 188 | Job No. 0300.02 | Division No. 10 | Notes Red. J. S. H. | Plotted J. C. N. | Profile

Survey of Beach Erosion | Date 9-57 | Date 9-57 | No.

Survey by Van Deren Notes E. Landa | Notes Chkd. J. C. N. | Checked J. S. H. | X-Sec.

Indexed K. C. Johnson Date 7-17-57 | Date 9-57 | Date 9-57 | No. 140+00

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At 140+00 Z-4 On	# Depth Rec. Adj.		Time	Hor. Ang. 90° 00'		Remarks
	21			"		
	22			"		
	23			"		
	24			"		
	25			"		
	26			"		
	27			"		
	28		9:53	"		

76298 S & E #307—7-55

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LOS ANGELES COUNTY ENGINEER

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

76L298 307 10-51

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726 LOS ANGELES COUNTY
ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 147+50	SIGHT ON 145+00
T.P.	0 87	6 ~~34~~ 44		5 ~~47~~ 57		Inshore
145+00		+	4 8	11 ~~1~~ 2		145+00
		+	4 6	~~10~~ 11 ~~2~~ 0	23° 58' 111 Brk.	
		6 3	0 0	6 ~~3~~ 4	29 38 142	
			3 1	3 ~~2~~ 3	35 47 180	
			4 8	1 ~~5~~ 6	41 39 222	
			6 3	0 ~~0~~ 1	47 23 272	
			6 8	-0 ~~3~~ 4	50 37 305	
			7 8	-1 ~~5~~ 4	59 43 428	
			10 2	-~~3~~ 3 ~~9~~ 8	63 10 494	
			12 5	-6 ~~2~~ 1	64 06 515	
			15 6	-9 ~~3~~ 2	67 28 603	
T.P.			1 80	4 ~~3~~ ~~4~~ 6		

Profile No. ____ Date 9-57 Date 9-57 Notes Red J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 189

X-Sec. No. 145+00 Date 9-57 Date 9-57 Notes Chkd. J.C.N. Checked J.S.H. Survey of BEACH EROSION STUDIES Survey by ENGLISH Notes ED Date 7-17-57

Map No. ____ Indexed Johnson Date ____

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
140+00	Z-5	1	49.6	48.1	10:05	74° 54'	1853 Cut in Line 145+00
		2	48.9	47.4		74° 08'	1759
		3	47.9	46.4		73° 27'	Z-5 1683
		4	47.0	45.5		73° 03'	1641
		5	45.8	44.3		72° 16'	1564
		6	44.6	43.1		71° 32'	1497
		7	43.3	41.8		70° 54'	1444
		8	42.5	41.0		69° 58'	1371
		9	41.2	39.7		69° 08'	1312
		10	40.6	39.1		68° 21'	1260
		11	39.5	38.0		67° 46'	1223
		12	38.2	36.7		66° 47'	1166
		13	37.0	35.5		66° 02'	1125
		14	35.0	33.5		64° 34'	1055
		15	33.0	31.5		63° 38'	1009
		16	31.1	29.6		62° 13'	949
		17	29.0	27.5		61° 17'	913
		18	27.3	25.8		59° 46'	858
		19	25.8	24.3		58° 58'	831
		20	24.1	22.6		57° 28'	784

Range Line = 145+00

140+00

Zero 0.0
Boat +1.0
Tide -2.5
-1.5

Profile No. X-Sec. No. 145+00
Notes Red. J.S.H. Date 9-57 Plotted J.C.N. Date 9-57 Job No. 300-12 Division No. 10 Survey of Beach Erosion
Notes Chkd. J.C.N. Date 9-57 Checked J.S.H. Date 9-57 Survey by Van Deren Notes R.T. Date 7-17-57
Map No. Indexed C. Johnson Date
F. B. 2306 Pg. 191

76298 S & E #307—7-55

PLEASE RETURN TO
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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Depth Adj.	Time	Hor. Ang.	Remarks	
		21	21.6	20.1		55° 48'	736	Cut in Line 145+00
		22	19.6	18.1		54° 38'	704	
		23	17.1	15.6		52° 45'	658	Zero +0.0
		24	14.5	13.0		51° 14'	623	Boat +1.0
		25	12.5	11.0		49° 14'	580	Tide -2.5
		26	10.6	9.1		47° 19'	542	-1.5
		27	8.7	7.2	10:10	44° 59'	500	
140+00	Z-5							

F. B. 2306 Pg. 192 Job No. 0300.02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 No.
Survey by Van Deren Notes R.T. Notes Chkd. J.C.N. Checked J.S.H. X-Sec.
Indexed K. C. Johnson Date 7-17-47 Date 9-57 Date 9-57 No. 145+00

Profile No. ____ Notes Red. J. S. H. Date 9-57 Plotted J. C. N. Date 9-57 Job No. 0300.02 Division No. 10 Survey of Beach Erosion F. B. 2306 Pg. 193

X-Sec. No. 145+00 Notes Chkd. J. C. N. Date 9-57 Checked J. S. H. Date 9-57 Survey by Van Deren Notes Landa Date 7-17-59 Map No. ____ Indexed C. Johnson Date ____

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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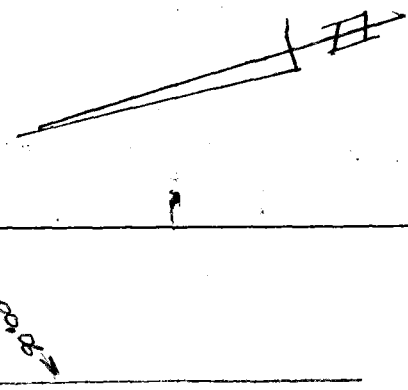
STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On 145+00 Z-4	#	Depth Rec. Adj.	Time	Hor. Ang.	145+00 To Z-4
	1		10:05	90° 00	
	2			"	
	3			"	
	4			"	
	5			"	
	6			"	
	7			"	
	8			"	
	9			"	
	10			"	
	11			"	
	12			"	
	13			"	
	14			"	
	15			"	
	16			"	
	17			"	
	18			"	
	19			"	
	20			"	



76298 S & E #307—7-55

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

F. B. 2306 Pg. 194 | Job No. 0300.02 Division No. Notes Red. J. S. H. Plotted J. C. N. Date 9-57 Date 9-57 No. Profile

Survey of Beach Erosion Date 9-57 No. X-Sec.

Survey by Van Deren Notes E. Landa Notes Chkd. J. C. N. Checked J. S. H.

Indexed K. C. Johnson Date 7-17-57 Date 9-57 No. 145+00

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Depth Rec. / Adj.	Time	Hor. Ang.		Remarks
145+00 / Z-2	21			90° 00'		
	22			"		
	23			"		
	24			"		
	25			"		
	26			"		
	27		10.10	"		

76L298 307 10-51

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY
ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	INST. @ 147+50	SIGHT ON 150+00
T.P. 150+00	2 22	6 ~~76~~ 86		4 ~~54~~ 64		Inshore 150+00
		+	4 0	10 ~~8~~ 9		
		+	4 6	11 ~~4~~ 5	30° 14' 146 Br-K.	
		6 ~~8~~ 9	0 0	6 ~~8~~ 9	35 18 177	
			3 1	3 ~~7~~ 8	40 37 215	
			5 1	1 ~~7~~ 8	46 00 259	
			6 6	0 ~~2~~ 3	50 40 305	
			7 0	-0 ~~2~~ 1	54 01 344	
			7 3	-0 ~~5~~ 4	56 39 380	
			8 3	-1 ~~5~~ 4	59 23 423	
			10 4	-3 ~~6~~ 5	62 08 473	
			13 2	-6 ~~4~~ 3	65 32 550	
			16 3	-9 ~~5~~ 4	67 12 595	
Z-5		+	3 05	9 ~~81~~ 91	Z-5, el. = 9.812 (M.L.L.W.)	F.B. 2100-112

Profile No. ____ Date ____ X-Sec. No. 150+00 Date ____ Notes Red J.S.H. Plotted J.C.N. Date 9-57 Notes Chkd J.C.N. Checked J.S.H. Date 9-57 Job No. 0300102 Division No. 10 Survey of BEACH EROSION STUDIES Survey by ENGR'S Notes ED Date 7-17-57 Map No. ____ Indexed C. Johnson Date ____

F.B. 2306 PG. 195

76298 S & E #307—7-55

PLEASE RETURN TO
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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	H. I. Depth Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
		1	49.6	47.5	10 22	61° 36'	1849 Cut in Line 150+00.
		2	49.0	46.9		61° 00'	1804
		3	48.4	46.3		60° 30'	Z-5 1776 140+00
		4	47.4	45.3		59° 57'	1729
		5	46.8	44.7		58° 53'	1657
		6	46.0	43.9		58° 08'	1609
		7	45.1	43.0		57° 30'	1570
140+00	Z-5	8	43.8	41.7		56° 23'	1504
		9	42.9	40.8		55° 10'	1437
		10	41.9	39.8		54° 14'	1388
		11	41.2	39.1		53° 03'	1329
		12	40.1	38.0		52° 07'	1285
		13	39.0	36.9		50° 45'	1224
		14	37.8	35.7		49° 52'	1186
		15	35.7	33.6		48° 08'	1116
		16	33.5	31.4		46° 48'	1065
		17	32.2	30.1		45° 18'	1011
		18	30.7	28.6		44° 26'	980
		19	29.0	26.9		43° 09'	937
		20	27.3	25.2		41° 38'	889

Range Line = 150+00

Zero -0.3
Boat +1.0
Tide -2.8
-2.1

Profile No. _____ Notes Red. J.S.H. Plotted J.C.N. Job No. 03000 Division No. 10 F. B. 2306 Pg. 197
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 150+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Doren Notes R.T. Date 7-17-57
Date 9-57 Date 9-57 Map No. _____ Date _____

76298 S & E #307—7-55

PLEASE RETURN TO
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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.		F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec.	Depth Adj.	Time	Hor. Ang.	Remarks	
		21	24.9	22.8		39° 51'	835	Cut in Line 150+00
		22	22.6	20.5		37° 48'	776	
		23	20.4	18.3		36° 28'	739	Zero -0.3
		24	17.3	15.2		34° 44'	693	Boat +1.0
		25	15.0	12.9		32° 52'	646	Tide -2.8
		26	13.3	11.2		31° 34'	614	-2.1
		27	11.3	9.2		29° 50'	573	
140+00	Z-5	28	9.0	6.9	10:28	28° 13'	537	

F. B. 2306 Pg. 198 Job No. 0300-02 Division No. 10 Notes Red. J.S.H. Plotted J.C.N. Profile
Survey of Beach Erosion Date 9-57 Date 9-57 No.
Survey by Van Deren Notes R.T. Notes Chkd. J.C.N. Checked J.S.H. X-Sec.
Indexed C. Johnson Date 7-17-57 Date 9-57 Date 9-57 No. 150+00

76298 S & E #307—7-55

PLEASE RETURN TO
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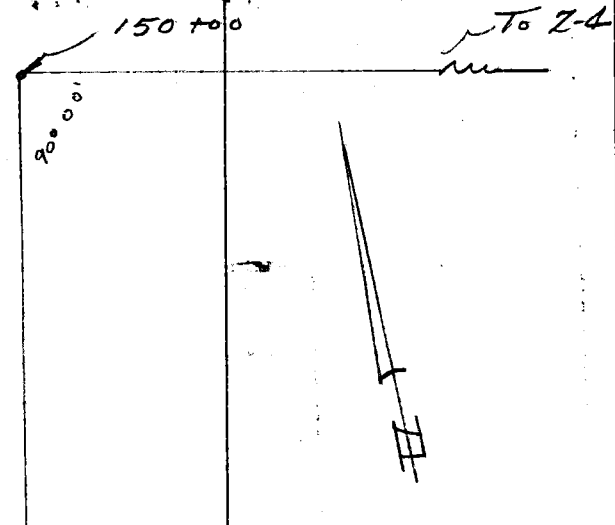
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
150+00	Z-4	1		10:22	90° 00'	
		2			"	
		3			"	
		4			"	
		5			"	
		6			"	
		7			"	
		8			"	
		9			"	
		10			"	
		11			"	
		12			"	
		13			"	
		14			"	
		15			"	
		16			"	
		17			"	
		18			"	
		19			"	
		20			"	



Profile No. ____ Notes Red. J.S.H. Plotted J.C.N. Job No. 0300.02 Division No. 10 F.B. 2306 Pg. 199
Date 9-57 Date 9-57 Survey of Beach Erosion
X-Sec. No. 150+00 Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Lunch Date 7-17-57
Date 9-57 Date 9-57 Map No. ____ Index Johnson Date ____

76298 S & E #307—7-55

PLEASE RETURN TO
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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

F. B. 230G Pg. 200 Job No. 0300.02 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile No.
Survey of Beach Erosion Date 9-57 Date 9-57 X-Sec. No.
Survey by Van Deren Notes E. Landa Notes Chkd. J. C. N. Checked J. S. H.
Indexed K. C. Johnson Date 7-17-57 Date 9-57 No. 150+00

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	# Rec	Depth Adj.	Time	Hor. Ang.	Remarks	
150+00 Z-1	21			90° "		
	22			"		
	23			"		
	24			"		
	25			"		
	26			"		
	27			"		
	28		10:28	"		

76298 S & E #307—7-55

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NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	# Rec.	Depth Adj.	Time	Hor. Ang.	Remarks	
						Locating of Reefs & Rocks @ Lachusa Point	
Z-8	Z-7	1		12:00	92°49'	Edge of Rock & Sand	
		2			95°16	Sandy spot @ center of Reef & Rck	
		3			97°16	Edge of Rock & Sand	
		4			102°42'	" " " "	
		5			108°11'	" " " "	
		6			116°29'	" " " "	
		7	Diver out of Sight			Center of Large Sandy spot between Rocks	
		8		" "	"	Edge of Rock & Sand	
		9			116°21	" " " "	
			See nxt. Pg. for cont. & sketch				

Profile Notes Red. J. S. H. Plotted J. C. N. Job No. 0075.24 Division No. 10 F. B. 2306 Pg. 161
No. Date 9-57 Date 9-57 Survey of Small craft Harbor
X-Sec. Notes Chkd. J. C. N. Checked J. S. H. Survey by Van Deren Notes Larry Date 7-23-57
No. Date 9-57 Date 9-57 Map No. [illegible] Date 8-5-57

76298 S & E #307—7-55

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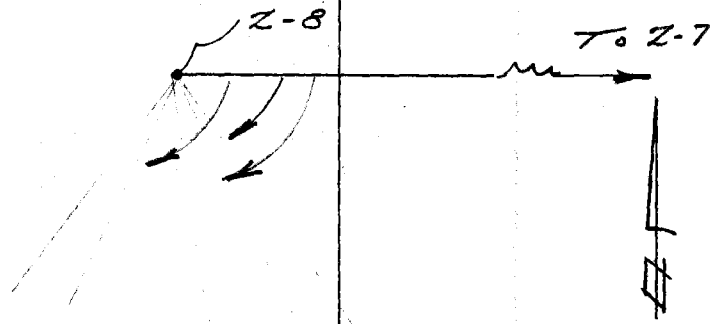
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
Z-8	Z-7	10				108°36	Center of large sandy spot
		11				79°27'	End of a low Reef
		12			12:36	68°17'	" " " " "



Note: All angle's turned clockwise.

F. B. 2306 Pg. 202 Job No. 0075.24 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile
Survey of Small Craft Harbor Date 9-57 Date 9-57 No.
Survey by Van Deren Notes Landa Notes Chkd. J. C. N. Checked J. S. H. X-Sec.
Indexed C. Johnson Date 7-23-57 Date 9-57 Date 9-57 No.

76298 S & E #307—7-55

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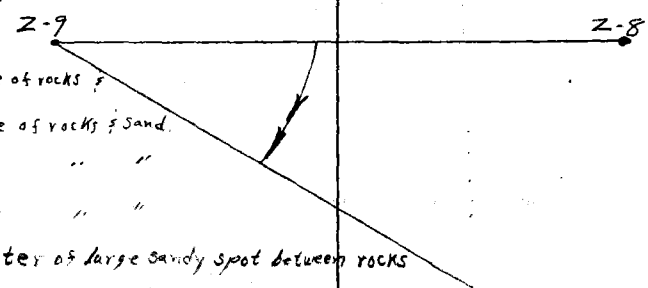
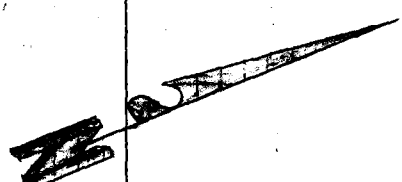
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
							Lachusa point
		1			12:00	86° 50'	Edge rocks & Sand
		2		Sandy spot between Rock & Reef		97° 50'	
		3				115° 48'	Edge of rocks &
		4				129° 28'	Edge of rocks & Sand
		5				147° 47'	" " "
Z-9	Z-8	6				163° 10'	" " "
		7				178° 02'	Center of large sandy spot between rocks
		8				195° 36'	Edge of rock & sand
		9				168° 09'	" " "
		10				143° 35'	Center of large sandy spot between Rocks
		11				93° 27'	End of Low Reef
		12			12:36	82° 28'	" " " "





Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0075.2A Division No. 10 F. B. 2306 Pg. 203
No. Date 9-57 Date 9-57 Survey of Small Craft Harbor
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Turrill Date 7-23-57
No. Date 9-57 Date 9-57 Map No. [illegible] Johnson Date

F. B. 2306 PG. 204 | Job No. 0075.24 Division No. 10 Notes Red. Plotted Profile

Survey of Small Craft Harbor Date Date No.

Survey by M.R. Van Doren Notes R. T. Notes Chkd. Checked X-Sec.

Indexed Date 7-23-57 Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	

Do not extend notes this side of this line.

PLEASE RETURN TO
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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

76298 S & E #307—7-55

76298 S & E #307—7-55

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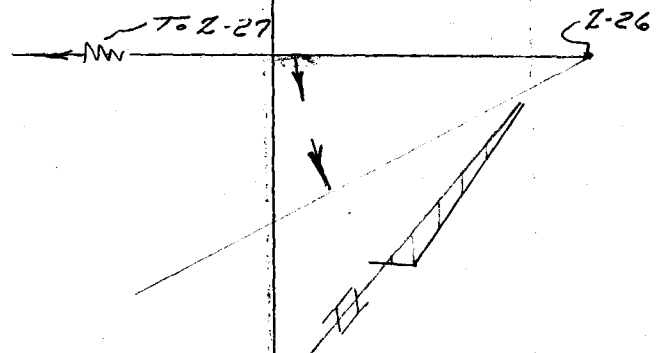
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION Inst. At	STATION Sight On	B. S. #	H. I. Depth Rec.	H. I. Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
							Locating Rocks & Reefs @ Arroyo Sequit Pt.
Z-26	Z-27	1			10:12	32° 29	Note: All angles
		2				35° 21	Turned Counter Clock.
		3				33° 45'	
		4				40° 05'	
		5				49° 48'	
		6				50° 32	
		7				47° 02'	
		8				45° 14	
		9				40° 36	
		10				37° 08	
		11				31° 05	
		12				28° 31	
		13				29° 17	
		14				35° 47	
		15				36° 52'	
		16				34 55'	
		17				32° 34	
		18				30° 02'	



Profile Notes Red J.S.H. Plotted J.C.N. Job No. 0075.24 Division No. 10 F.B. 2306 Pg. 205
No. Date 9-57 Date 9-57 Survey of Small Craft Harbor
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Landa Date 7-24-57
No. Date 9-57 Date 9-57 Map No. Checked C. Johnson Date

F. B. 2306 Pg. 206 | Job No. 0075.24 | Division No. 10 | Notes Red. J. S. H. | Plotted J. C. N. | Profile
Survey of Small Craft Harbor | Date 9-57 | Date 9-57 | No.
Survey by Van Deren | Notes E. Landa | Notes Chkd. J. C. N. | Checked J. S. H. | X-Sec.
Indexed C. Johnson | Date 7-24-57 | Date 9-57 | Date 9-57 | No.

298 S & E #307—7-55

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
Z-26	Z-27	19			26° 12'		
		20			25° 54		
		21			24 55		
		22			22° 03'		
		23		11:05	13° 00		

76298 S & E #307—7-55

PLEASE RETURN TO
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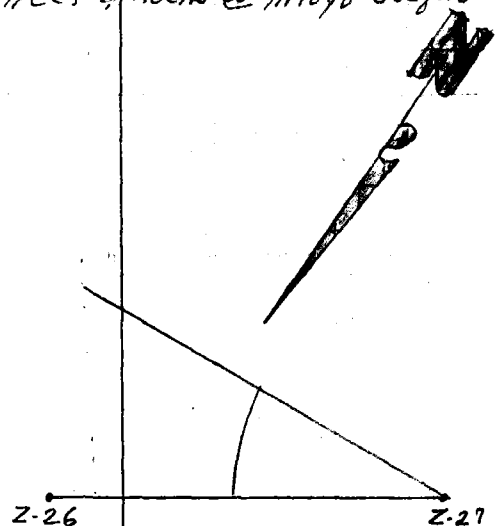
700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

35° 34'
32° 32'
32° 56'
37° 46'

STATION Inst. At	Sight On	B. S. #	H. I. Depth Rec.	Adj.	F. S. Time	ELEV. Hor. Ang.	Remarks
							Locating of Reef & Rocks @ Arroyo Seequit
		1			10: 12	32° 56'	
		2				36° 43'	
		3				29° 55'	
		4				32° 15'	
		5				35° 34'	
		6				32° 32'	
Z-27	Z-26	7				32° 56'	
		8				37° 46'	
		9				34° 39'	
		10					
		11				32° 50'	
		12				34° 50'	
		13				41° 31'	
		14				48° 23'	
		15				53° 36'	
		16				64° 41'	
		17				73° 54'	
		18				75° 02'	
		19				76° 24'	



Profile Notes Red. J. S. H. Plotted J. C. N. Job No. 0075.24 Division No. 10 F. B. 2306 Pg. 207
No. Date 9-57 Date 9-57 Survey of Small Craft Harbor
X-Sec. Notes Chkd. J. C. N. Checked J. S. H. Survey by Van Deren Notes R.T. Date 7-24-57
No. Date 9-57 Date 9-57 Map No. [illegible] Date

F. B. 2306 Pg. 208 Job No. 00528 Division No. 10 Notes Red. J. S. H. Plotted J. C. N. Profile

Survey of Small Craft Harbor Date 9-57 Date 9-57 No.

Survey by Van Deren Notes R. T. Notes Chkd. J. C. N. Checked J. S. H. X-Sec.

Indexed J. C. Johnson Date 7-24-57 Date 9-57 Date 9-57 No.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Z-27					
Z-26					
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	
	20			68° 48'	
	21			69° 19'	
	22			65° 43'	
	23		11.05	58° 54'	

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

76298 S & E #307—7-55

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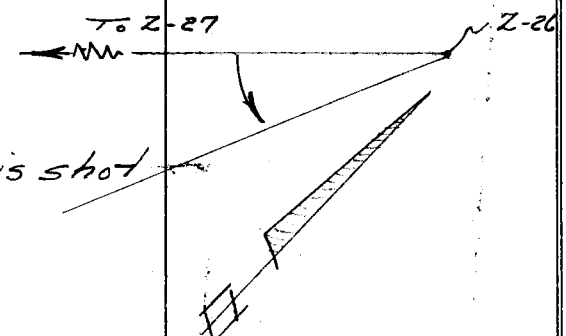
STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
Z-26	Z-27			9:50		Locating Reefs @ ~~Lachusa~~ Sequit Pt.	
		1					
		2			15° 20		
		3			14° 17		
		4			22° 48		
		5		10:24	22 17		
		6	Diver out of sight on this shot				
		7			19° 09		
		8			19° 52		
		9			21° 02		
		10			22 50		
		11		11:35	26 36		



Note: All angles turned Counter Clockwise frm. Sta. Z-27

Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0075.24 Division No. 10 F.B. 2306 Pg. 209
No. Date 9-57 Date 9-57 Survey of Small Craft Harbor
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes Land Date 7-25-57
No. Date 9-57 Date 9-57 Map No. ~~Kinded~~ Johnson Date

F. B. 2306 Pg. 210 Job No. 6075-24 Division No. 10 Notes Red. Plotted Profile

Survey of Small Craft Harbor Date Date No.

Survey by VanDeren Notes 7-25-57 Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76298 S & E #307—7-55

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.		Remarks

76298 S & E #307—7-55

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700 LOS ANGELES COUNTY ENGINEERING BLDG.

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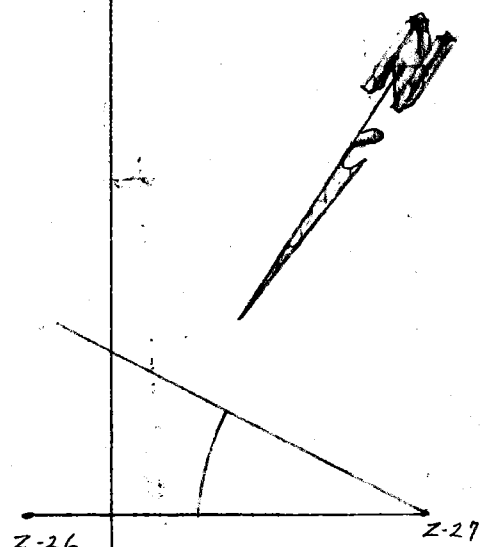
STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
						Plotting of rock & reef @ Arroyo Seguit	
		1			104° 18'		
		2			97° 55'		
		3			96° 06'		
		4			81° 35'		
		5			85° 49'		
		6	?		90° 43'		
Z-27	Z-26	7			92° 25'		
		8			95° 34'		
		9			101° 07'		
		10			101° 58'		
		11			113° 39'		
		12					



Profile Notes Red. J.S.H. Plotted J.C.N. Job No. 0075.24 Division No. 10 F. B. 2306 Pg. 211
No. Date 9-57 Date 9-57 Survey of Small Craft Harbor
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes R.T. Date 7-25-57
No. Date 9-57 Date 9-57 Map No. [illegible] Date

F. B. 2306 Pg. 2/2 | Job No. 25.24 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of Small Craft Harbor | Date 7-25-57 | Date | No.

Survey by Van Doren | Notes Turrill | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	

Do not extend notes this side of this line.

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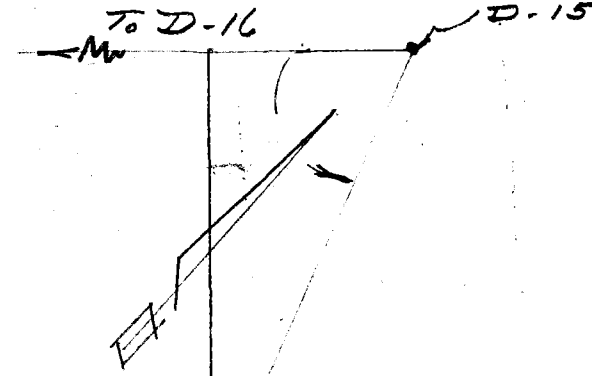
STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	# Rec.	Depth Adj.	Time	Hor. Ang.	Remarks	
D-15	D-16					Locating Tks. & Reefs @ Paradise Cove	
		1		9:30	81° 37		
		2			80° 30		
		3			70° 03		
		4			64° 08		
		5			60° 18		
		6			56° 28		
		7			50° 51		
		8			60° 13		
		9			73° 35		
		10			82 27		
		11		10:25	85 42		



Note: All Angles turned in Counter-clock direction from D-16

Profile Notes Red J. S. H. Plotted J. C. N. Job No. 0075.24 Division No. 10 F. B. 23306 Pg. 213
No. Date 9-57 Date 9-57 Survey of Small Craft Harbor
X-Sec. Notes Chkd. J. C. N. Checked J. S. H. Survey by Henderson Notes Loaded Date 7-26-57
No. Date 9-57 Date 9-57 Map No. Indexed Date

F. B. 2306 Pg. 214 Job No. 0075.24 Division No. 10 Notes Red. Plotted Profile

Survey of Small Craft Harbor Date 7-26-57 Date No.

Survey by M. A. VanDonge Notes Lands Notes Chkd. Checked X-Sec.

Indexed Date Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Depth Rec. Adj.	Time	Hor. Ang.	

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76298 S & E #307—7-55

76298 S & E #307—7-55

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STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Depth Rec. Adj.	Time	Hor. Ang.	Remarks	
		1			52° 27'	Locations of rocks & reefs @	
		2			50° 43'	Paradise Cove	
		3			56° 56'		
		4			54° 08'		
		5			52° 41'	D-17 D-16	
		6	?		51° 11'		
		7			53° 32'		
0-17	0-16	8			53° 12'		
		9			56° 31'		
		10			51° 53'		
		11			51° 16'		
		12					

Profile Notes Red J.S.H. Plotted J.C.N. Job No. 0075524 Division No. 10 F. B. 2306 Pg. 215
No. Date 9-57 Date 9-57 Survey of Small Craft Harbor
X-Sec. Notes Chkd. J.C.N. Checked J.S.H. Survey by Van Deren Notes P.T. Date 2-26-57
No. Date 9-57 Date 9-57 Map No. Inked Johnson Date

F. B. 2306 Pg. 216 Job No. 0025.24 Division No. 10 Notes Red. Plotted

Survey of Small Craft Harbor Date 7-26-57 Date

Survey by Van Deren Notes R.T. Notes Chkd. Checked

Indexed Date Date Date

Profile

Inst. Sight Depth

At On # Rec. Adj. Time Hor. Ang.

Remarks