F. B. 1889 Pg. 5

Notes Ck'd by	Survey of
Map No.	W. O. Tape No. St'd. °F
Office Work	Surveyed by
Checked	Notes Date
Date	Indexed E. C. Johnson 11-5-54

Book 5

BEACH EROSION STUDIES

~ SOUNDINGS ~

J.N. 8412

OCTOBER ~ 1953

FROM station 114+00N to station 188+00N

For onshore x sections
See L.A. City F.B.
23933 pages 20 to 57

PARTY
Blanchard
Shoemaker
Wharriet
Kvammen
Schanfeldt
Oben
Robbins
McCrath
Goodwin

Book 4 = FB 1888
Book 6 = FB 1504

Microfilmed Dec '86

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 [illegible] this side of the [illegible]
RETURN TO LOS ANGELES COUNTY SURVEYOR
LOS ANGELES COUNTY
ENGINEERING BLDG.
76F3096 [illegible]

F. B. 1889 PG. 8

RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY
ENGINEERING BLDG.

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Notes Ck'd by	Survey of
Map No.	W. O. Tape No. St'd. °F
Office Work	Surveyed by
Checked	Notes Date
Date	Indexed

F. B. 55 PG. 7

TIDE GAGE

STANDARD TIME

OCT 21 1953

HOUR	TIDE
6:00	5.9
6 30	6.2
7 00	6.6
7:30	6.7
8:00	6.7
8:30	6.4
9:00	5.9
9:30	5.2
10:00	4.4
10:30	3.7
11:00	3.2
11:30	2.3
12:00	1.5

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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RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY
ENGINEERING BLDG.

76F3095 247 2-51

F. B. 1889 PG. 8

TIDE GAGE

STANDARD TIME — OCT 22 1953

HOUR	TIDE
6.00	5.8
6:30	6.4
7:00	6.8
7:30	7.2
8:00	7.3
8:30	7.2
9:00	7.0
9:30	6.5
10:00	6.0
10:30	4.9
11:00	4.2
11:30	3.1
12:00	2.0
12:30	1.6
1:00	

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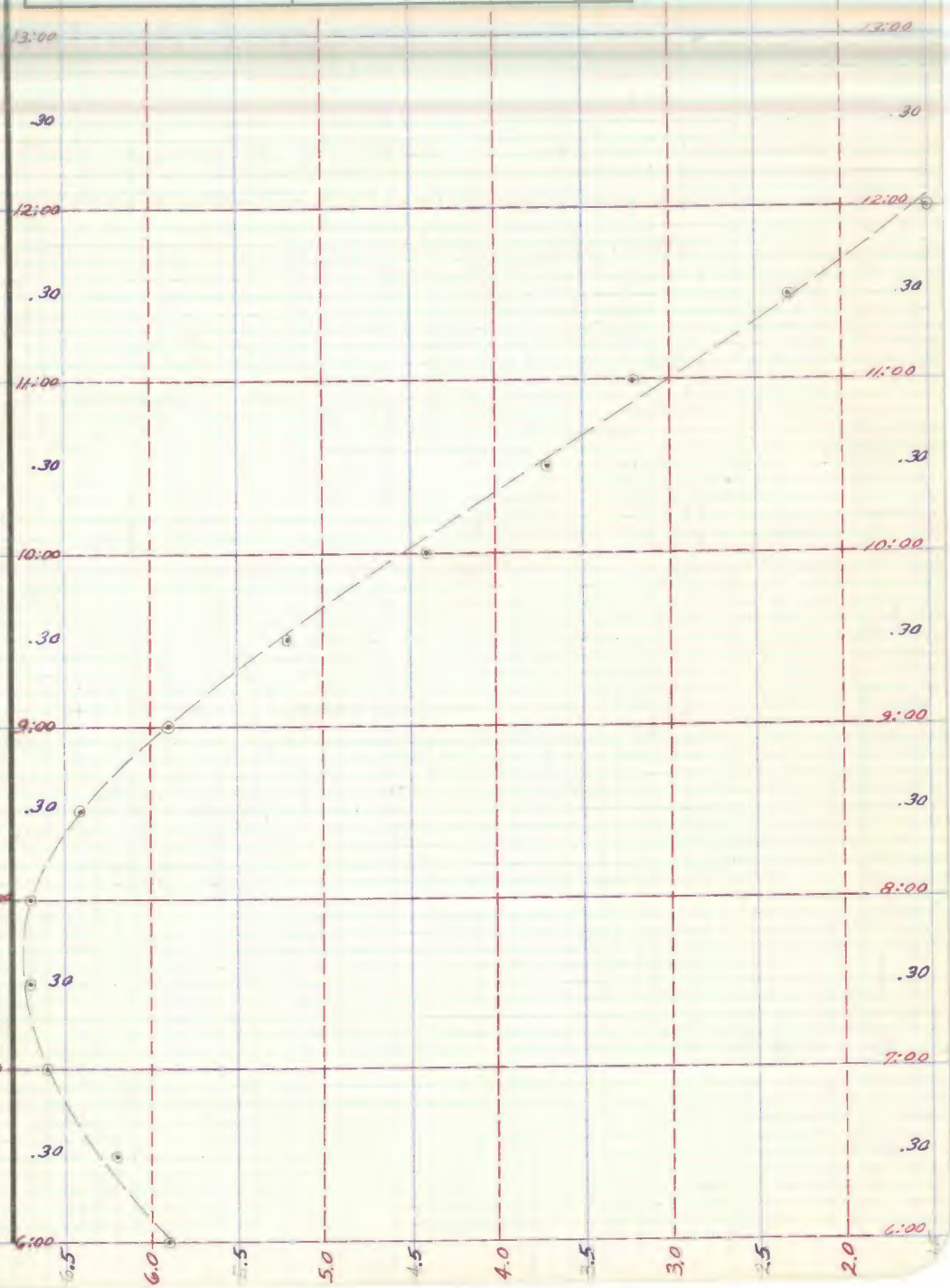
Notes Ck'd by	Survey of Tide Gage
Map No.	W. O 8412 Tape No. St'd. °F
Office Work	Surveyed by
Checked	Notes Date
Date	Indexed

F. B. 1989 PG.

Oct 21, 1953



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RETURN TO
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726 LOS ANGELES COUNTY
ENGINEERING BLDG.

76F3095 247 4-53

RETURN TO
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726 LOS ANGELES COUNTY
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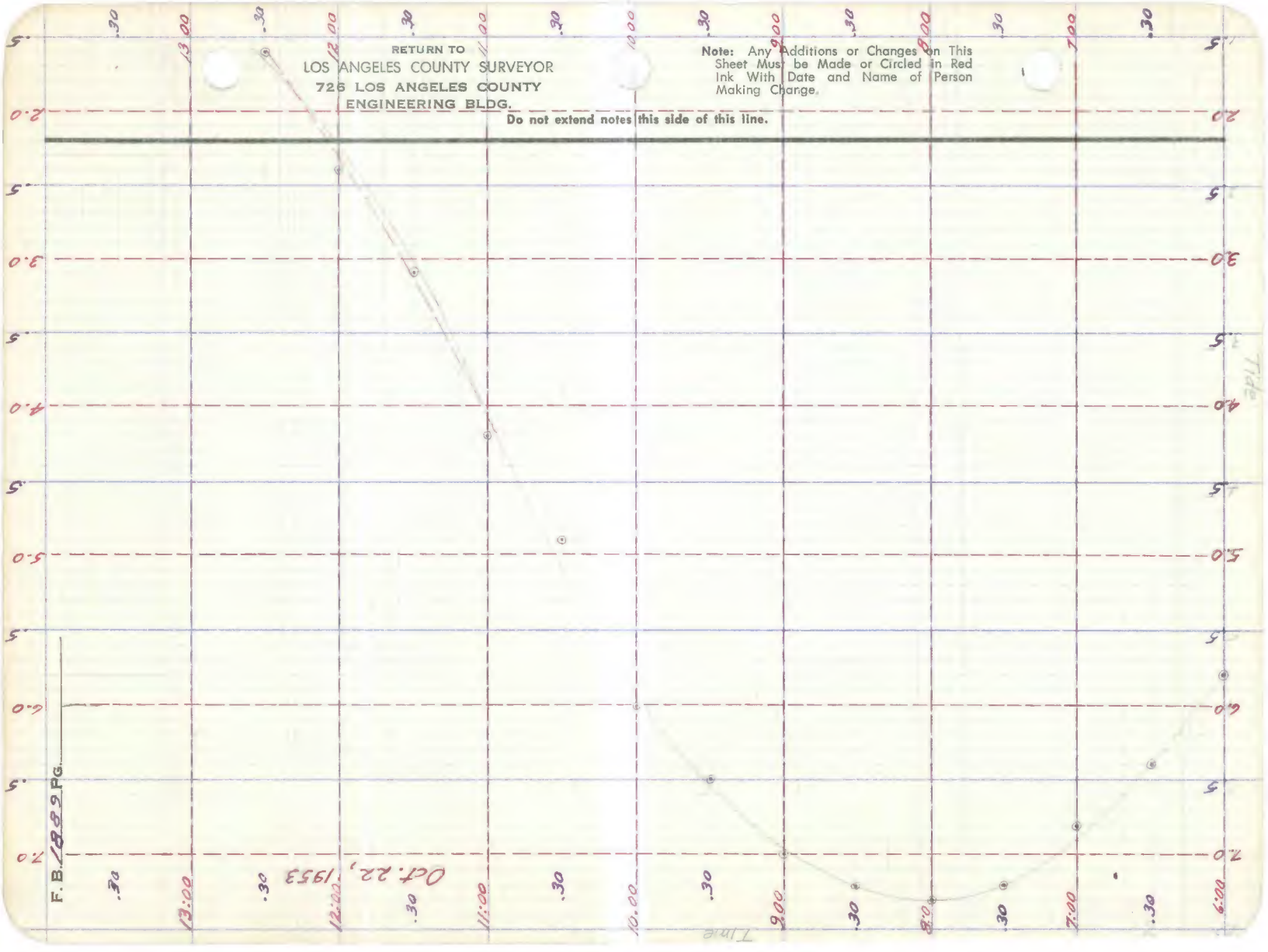

76L298 307 4-50

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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.	RANGE	114+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang		
114+00 N (550' Offset Line)	108+00 N (550' Offset Line)	1	B&W	6:18	89° 50'		
		2	R		90° 00'		
		3	Y		90° 00'	Range gun at	114+00 N
		4	B&W	6:21	90° 00'		
		5	R		90° 00'		
		6	Y		89° 47'		
		7	B&W	6:24	90° 00'		
		8	R		90° 00'		
		9	Y		90° 00'		
		10	B&W	6:26	90° 00'		
		11	R		90° 00'		
		12	Y		90° 00'		
		13	B&W	6:29	90° 00'	Sight on cut-in gun at	108+00 N
		14	R		90° 00'		
		15	Y		90° 00'		
		16	B&W	6:31	90° 00'		
		17	R		90° 00'		
		18	Y		90° 00'		
		19	B&W	6:33	90° 00'		
		20	R		90° 40'		

550' Offset Line

550'

Base Line

Profile Notes Red. Plotted Job No. 9412 Division No.

Notes Chkd. Checked Survey By Notes Chkd. Date

No. Date Date Map No. Date

F. B. 1889 Pg. 4

76L298 307 4-50

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Do not extend notes this side of this line.

STATION		S. S.	H. I.	F. S.	ELEV.	RANGE	114+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90°00'		
		22	B&W	6:36	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
114+00 N	108+00 N	25	B&W	6:38	90°00'		
		26	R		90°00'		
		27	Y		90°00'		
		28	B&W	6:40	90°00'		
		29	R		90°00'		
		30	Y		90°00'		
		31	B&W	6:42	90°00'		
		32	R		90°00'		
		33	Y		90°00'		
RANGE 114+00 N		34	B&W	6:44	90°00'		
		35	R		90°00'		
		36	Y		90°00'		
		37	B&W	6:47	90°00'		
		38	R		90°00'		
		39	Y		90°00'		
		40	B&W	6:48	90°00'		

F. S. 1889 Pg. 10
Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No. X-Sec.
Survey by EHB Notes CEM 10/21/53 Notes Chkd. Checked
Indexed C. Johnson Date Date Date No.

76L298 307 4-50

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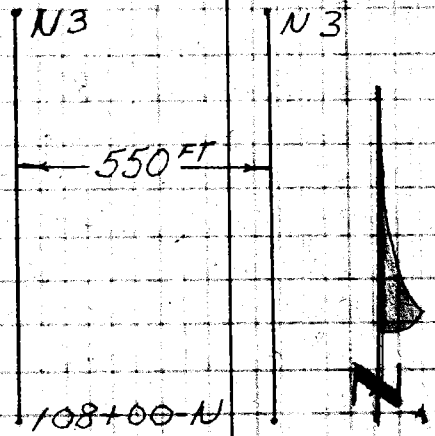
Do not extend notes this side of this line.

114+00-N CUT-IN

STATION		B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At	Sight On	#	Color	Time	Hor. Ang.	
108+00N	N-3	1	B&W	6:17	67°18'	
550 OFF	550 OFF	2	R		65°01'	
		3	Y		63°17'	
		4	B&W	6:21	60°45'	
		5	R		57°50'	
		6	Y		56°47'	
		7	B&W	6:24	55°49'	
		8	R		54°37'	
		9	Y		53°26'	
		10	B&W	6:26	51°55'	
		11	R		50°25'	
		12	Y		48°43'	
		13	B&W	6:29	49°06'	
		14	R		47°35'	
		15	Y		45°16'	
		16	B&W	6:31	43°12'	
		17	R		40°57'	
		18	Y		38°47'	
		19	B&W	6:33	35°59'	
		20	R		40°08' *	



Profile Notes Red. Plotted Job No. 5410 Division No.

Notes Chkd. Checked Survey by Date

No. Date Date Map No. Indexed Date

F.B. 1889 Pg. 11

CUT IN 114+00N

76L298 307 4-50

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	CUT-IN	114+00-N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
108+00	N 3	21	Y		39°50'		
		22	B&W	6:35	39°[illegible]6'		
		23	R		38°[illegible]4'		
		24	Y		38°[illegible]		
		25	B&W.	6:37	3[illegible]		
		26	R		3[illegible]		
		27	Y		34°[illegible]0'		
		28	B&W	6:40	34°[illegible]3'		
		29	R		33°[illegible]'		
		30	Y		32°[illegible]3'		
		31	B&W	6:42	31°[illegible]'		
		32	R		30°20'		
		33	Y		28°[illegible]4'		
		34	B&W.	6:44	26°27'		
		35	R		31°58'		
		36	Y		31°[illegible]'		
		37	B&W	6:46	30°[illegible]0'		
		38	R		28°[illegible]6'		
		39	Y		27°[illegible]8'		
		40	B&W	6:48	25°27'		

CUT IN 114+00N

F. B. 1889 Pg. 12 2
Survey of BEACH EROSION STUDY
Job No. 8412 Division No. Notes Red. Plotted Profile
Date Date No.
Survey by EHB Notes JRO Notes Chkd. Checked X-Sec.
Indexed E. C. Johnson Date Date Date No.

76L298-307 8-53

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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.	BOAT	114+00
# Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
	6:18	32.1 30.5	31.0	6.1	24.9	1985
		30.9 30.0	30.3	6.1	24.2	1840
		30.1 29.0	29.4	6.1	23.3	1741
	6:20	28.9 28.0	28.3	6.2	22.1	1622
		28.0 26.1	26.7	6.2	20.5	1505
		28.0 26.2	26.8	6.2	20.6	1466
	6:23	27.5 26.7	27.0	6.2	20.8	1433
		26.8 26.0	26.3	6.2	20.1	1395
		27.1 25.9	26.3	6.2	20.1	1359
	6:26	26.6 24.9	25.5	6.2	19.3	1315
		26.2 24.8	25.3	6.2	19.1	1275
		26.0 24.7	25.1	6.3	18.8	1233
	6:29	25.8 23.9	24.5	6.3	18.2	1243
		25.1 24.1	24.4	6.3	18.1	1207
		24.8 23.7	24.1	6.3	17.8	1155
	6:31	24.5 23.5	23.9	6.3	17.6	1114
		23.9 22.6	23.0	6.3	16.7	1070
		23.1 22.1	22.4	6.3	16.1	1031
	6:33	21.9 20.2	20.8	6.3	14.5	985
		24.4 22.0	22.8	6.3	16.5	1055

BOAT 114+00

Profile Notes Red. Plotted Job No. 4112 Division No.

Notes Chkd. Checked Survey by Date

No. Date 12-15-53 Date Map No. Indexed Date

F. B. 1889 Pg. 13

76L298 307 8-53

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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.	BOAT	[illegible]
#	Color Time	Meas. Depth	Bottom Tide		Adj. Depth	Remarks
21		23.2 22.1	22.5	6.3	16.2	1050
22	6.35	23.6 22.4	22.8	6.3	16.5	1052
23		22.9 21.5	22.2	6.3	15.9	1035
24		21.5 21.7	21.7	6.4	15.3	1021
25	6.37	22.1 21.0	21.4	6.4	15.0	1002
		21.6 19.0	20.5	6.4	14.1	985
		20.8 20.0	20.3	6.4	13.9	965
	6.39	20.5 19.0	20.1	6.4	13.7	956
		19.5 19.6	19.3	6.4	12.9	943
		19.6 18.3	18.7	6.4	12.3	936
	6.4[illegible]	19.6 18.5	18.9	6.4	12.5	914
		19.2 17.6	18.~~0~~1	6.4	11.~~8~~7	901
		17.1 16.5	16.9	6.4	10.5	872
	6.2[illegible]	16.5 15.1	15.6	6.4	9.2	849
		19.2 18.0	18.4	6.4	12.0	924
		18.0 17.0	18.1	6.5	11.6	912
	6.46	19.0 18.0	18.3	6.5	11.8	899
		18.0 16.1	16.7	6.5	10.2	882
		17.0 15.7	16.1	6.5	9.6	860
	6.48	15.8 14.5	14.9	6.5	8.4	836

BOAT 114 TOON

F.B. 1889 PG. 14
Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of [illegible] Freeway Study Date Date No.
Survey by EHB Notes EP (10/21/53) Notes Chkd. [illegible] Checked X-Sec.
Indexed C. Johnson Date Date 12-15-53 Date No.

76L298 307 4-50

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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.	RANGE	114+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		41	R		90°00'		
		42	Y		90°00'		
		43	B&W	6:51	90°00'		
		44	R		90°00'		
		45	Y		90°00'		
		46	B&W	6:54	90°00'		
114+00N	108+00N	47	R		90°00'		
		48	Y		90°00'		
		49	B&W	6:57	90°00'		
		50	R		90°00'		
		51	Y		90°00'		

RANGE 114+00N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 Pg. 15

No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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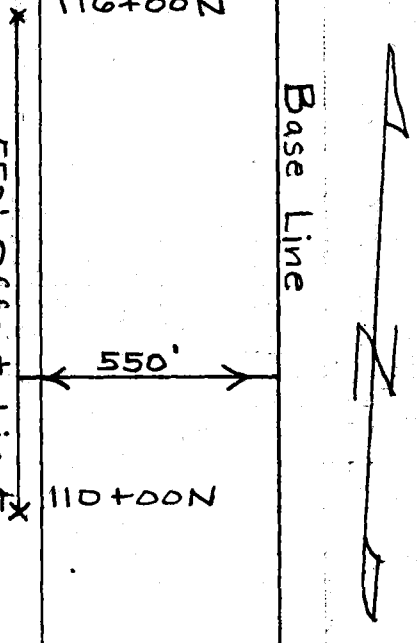
F. B. 1889 Pg. 16 | Job No. 8412 Division No. ____ Notes Red. ____ Plotted ____ Profile
Survey of Beach Erosion Study Date ____ No. ____
Survey by FHB Notes CEM 10/21/53 Notes Chkd. ____ Checked ____ X-Sec.
Indexed ____ Date ____ Date ____ Date ____ No. ____

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	116+00N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
		1	B&W	7:12	90°00'		
		2	R		90°00'		
		3	Y		90°00'	Range gun at	116+00N
		4	B&W	7:15	90°00'		
		5	R		90°00'	*	
		6	Y		90°00'		
		7	B&W	7:16	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
116+00N (Offset Line)	110+00N (Offset Line)	10	B&W	7:18	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	7:21	90°00'		
		14	R		90°00'	Sight on cut-in gun at	110+00N
		15	Y		90°00'		
		16	B&W	7:22	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	7:26	90°00'		
		20	R		90°00'		

Range 116+00N



76L298 307 4-56

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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STATION		B. S.	H. I.	F. S.	ELEV.	CUT-IN	114+00-N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
108+00	N 3	41	R		25°21'		
		42	Y		27°14'		
		43	B&W	6:51	24°57'		
		44	R		23°02'		
		45	Y		22°22'		
		46	B&W	6:53	21°39'		
		47	R		22°27'		
		48	Y		22°34'		
		49	B&W	6:56	20°09'		
		50	R		19°10'		
		51	Y		21°20'		

CUT IN 114+00 N

Profile Notes Red. ____ Plotted ____ Job No. 84K Division No. ____ F. B. 1889 Pg. 317

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ [illegible] Johnson Date ____

76L298 307 4-50

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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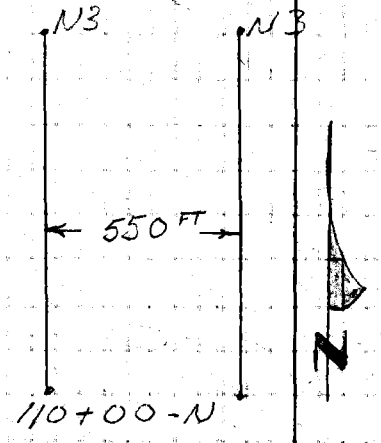
STATION		B. S.	H. I.	F. S.	ELEV.	CUT-IN	116+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
110+00	N3	1	B&W	7:12	6[illegible] 9'		
550 off	550 off	2	R		5[illegible] 0'		
		3	Y		5[illegible]		
		4	B&W	7:14	53[illegible]		
		5	R		50[illegible]		
		6	Y		48[illegible]		
		7	B&W	7:16	46[illegible]		
		8	R		4[illegible]		
		9	Y		41[illegible]		
		10	B&W	7:18	38[illegible]		
		11	R		36[illegible]		
		12	Y		34[illegible]		
		13	B&W	7:20	34[illegible]		
		14	R		33[illegible]		
		15	Y		30[illegible]		
		16	B&W	7:22	28[illegible]		
		17	R		28[illegible]		
		18	Y		27[illegible]		
		19	B&W	7:26	25[illegible]		
		20	R		27[illegible]		



CUT IN 116+00N

F. S. 1889 Pg. 18
Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No.
Survey by FHB Notes JRO Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date No.

76L298 307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	BOAT	114+00
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
41	R		15.0 13.8	14.2 ✓	6.5	7.7 ✓	834
42			16.0 15.1	16.1 ✓	6.5	9.6 ✓	859
43	BW	6:50	16.0 14.2	14.8 ✓	6.5	8.3 ~~6.3~~	829
44	R		13.5 12.7	13.0 ✓	6.5	6.5 ✓	805
45			12.7 11.7	12.0 ✓	6.5	5.5 ✓	797
46	BW	6:54	14.0 13.8	11.9 ✓	6.5	5.4 ✓	788
47	R		13.4 11.9	12.4 ✓	6.5	5.9 ✓	798
48	V		12.8 11.0	11.6 ✓	6.6	5.0 ✓	800
49	BW	6:56	10.1 9.3	9.4 ✓	6.6	2.8 ✓	770
50	R		11.0 8.4	9.3 ✓	6.6	2.7 ✓	758
51			12.0 9.8	10.5 ✓	6.6	3.9 ✓	774
	BW						

BOAT 114+00

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. 1889 Pg. 19

Notes Chkd ____ Checked ____ Survey by ____ Date ____

No. ____ Date 12-15-53 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 8-53

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.

F. B. 1179 PG. 20 Profile

Survey of BEACH & ZEUS 12 STUDIES Plotted No.

Survey by Blanchard Notes Reblins Date Notes Red. Date X-Sec.

Indexed R. D. Johnson Date Notes Chkd. Date Checked No.

Job No. 8412

STATION #	Color	B. S. Time	H. I. Meas. Depth	F. S. Bottom	ELEV. Tide	Adj. Depth	Remarks
							1167+00 N
		7:10		29.4	6.7	22.7	1682
				28.0	6.7	21.3	1498
				26.6	6.7	19.9	1406
		7:16		26.4	6.7	19.7	1355
				25.7	6.7	19.0	1288
				24.6	6.7	17.9	1237
		7:18		24.3	6.7	17.6	1175
				23.7	6.7	17.0	1120
				23.4	6.7	16.7	1083
		7:18		22.2	6.7	15.5	1025
				21.~~8~~ 2	6.7	14.5 ~~15.0~~	989
				20.1	6.7	13.4	965
		7:20		19.7	6.7	13.0	957
				19.3	6.7	12.6	944
				18.2	6.7	11.5	922
		7:22		17.4	6.7	10.7	870
				17.3	6.7	10.6	874
				16.4	6.7	9.7	862
		7:25		14.5	6.7	7.8	834
				16.1	6.7	9.4	860

BOAT 1167+00N

76L298 307 4-50

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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.	RANGE	116+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90°00'		
		22	B&W	7:28	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
		25	B&W	7:31	90°00'		
		26	R		90°00'		
116+00 N	110+00 N	27	Y		90°00'		
		28	B&W	7:34	90°00'		
		29	R		90°00'		
		30	Y		90°00'		

RANGE 116+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 Pg. 21

No. ____ Date ____ Date ____ Survey of [illegible]

No. ____ Date ____ Date ____ Map No. ____ [redacted] Date ____

76L298 307 4-50

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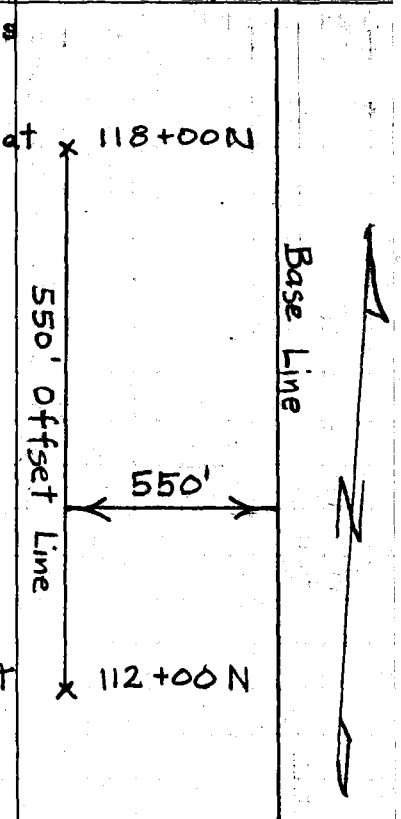
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.

F. B. 1889 Pg. 22 | Job No. 8412 | Division No. | Notes Red. | Plotted | Profile
Survey of Beach Erosion Study | Date | No.
Survey by FHB | Notes CEM 7/21/53 | Notes Chkd. | Date | Checked | X-Sec.
Indexed C. Johnson | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	118+00 N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
118+00 N (550' offset Line) / 112+00 N (550' offset Line)	1	B&W	7:46	90° 00'		
	2	R		90° 00'	Range gun at	118+00N
	3	Y		90° 00'		
	4	B&W	7:48	90° 00'		
	5	R		90° 00'		
	6	Y		90° 00'		
	7	B&W	7:51	90° 00'		
	8	R		90° 00'		
	9	Y		90° 00'		
	10	B&W	7:53	89° 41'		
	11	R		90° 00'		
	12	Y		90° 00'		
	13	B&W	7:56	90° 00'		
	14	R		90° 00'	Sight on cut-in gun at	112+00 N
	15	Y		90° 00'		
	16	B&W	7:59	90° 00'		
	17	R		89° 42'		
	18	Y		90° 00'		
	19	B&W	8:01	90° 00'		
	20	R		90° 00'		



74L298 307 4-50

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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.	CUT-IN	116+00-N
st. Sight On	#	Color	Time Hor.	Ang.	[illegible]	
110+00 N3	21	Y		26°46'		
	22	B&W	7:28	25°57'		
	23	R		24°06'		
	24	Y		22°12'		
	25	B&W	7:31	22°41'		
	26	R		21°54'		
	27	Y		22°01'		
	28	B&W	7:33	19°11'		
	29	R		21°11'		
	30	Y		17°43'		

Profile Notes Red. ____ Plotted ____ Job No. 7418 Division No. ____ F. B. 1889 Pg. 5 23

No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Survey by ____ Date ____ Map No. ____ End Ed. Johnson Date ____

CUT IN 116+00 N

76L298 307 4-50

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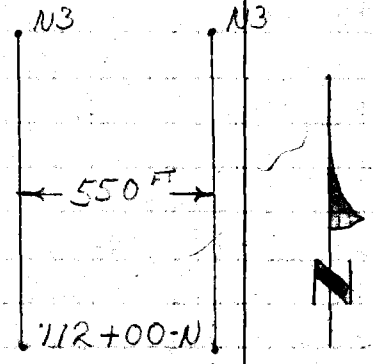
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	CUT-IN	118+00N
Inst. Sight On	# Color	[illegible]	[illegible]	Ang.	Remarks	
N2+00 N3	1	B&W	7:45	61°[illegible]		
550 FT OFF	2	R		6[illegible]		
	3	Y		5[illegible]		
	4	B&W	7:48	55°10'		
	5	R		51[illegible]		
	6	Y		4[illegible]		
	7	B&W	7:51	46°00'		
	8	R		43[illegible]		
	9	Y		42°06'		
	10	B&W	7:53	39°[illegible]		
	11	R		37°50'		
	12	Y		36[illegible]		
	13	B&W	7:56	40°53' *		
	14	R		45[illegible]		
	15	Y		38[illegible]		
	16	B&W	7:59	35[illegible]		
	17	R		33°35'		
	18	Y		31°27'		
	19	B&W	8:01	28°08'		
	20	R		31°07' *		



* BOAT WENT BACK OUT

Cut In 118+00N

F.S. 1889 Pg. 20
Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No. X-Sec.
Survey by EHB Notes JRO Notes Chkd. Checked
Indexed K. C. Johnson Date Date Date No.

76L298 307 8-53

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.	BOAT	116+00
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
[illegible]	[illegible]		16.8 / 12.0	16.3 ✓	6.7 ✓	9.6 ✓	852
[illegible]	[illegible]	7:27	15.1 / 14.0	14.7 ✓	6.7	8.0 ✓	842
[illegible]	R		15.7 / 13.5	14.2 ✓	6.7	7.5 ✓	818
[illegible]	Y		13.5 / 12.0	12.5 ✓	6.7	5.8 ✓	795
[illegible]	[illegible]	7:30	13.8 / 12.3	12.8 ✓	6.7 ✓	6.1 ✓	801
[illegible]	R		13.0 / 11.1	11.7 ✓	6.7	5.0 ✓	792
[illegible]	[illegible]		13.0 / 11.5	12.0 ✓	6.7	5.3 ✓	793
[illegible]	[illegible]	7:33	10.0 / 9.5	9.3 ✓	6.7 ✓	2.6 ✓	759
[illegible]	[illegible]		[illegible]	10.9 ✓	6.7	4.2 ✓	782
30	[illegible]		9.5 / 8.0	8.5 ✓	6.7 ✓	1.8 ✓	742
31	[illegible]						
32	[illegible]						
33							
34	[illegible]						
35	[illegible]						
36	[illegible]						
37	[illegible]						
38	R						
39	[illegible]						
40	[illegible]						

BOAT 116+00

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. 1889 Pg. 23

No. ____ Date 12-15-53 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 8-53

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.

F. B. 1889 PG. 26 Job No. 8414 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No.
Survey by Blanchard Notes Robbins 10/21/53 Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date 12-15-53 Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	Boat	115+00 N
# Color Time		Meas. Depth	Bottom Tide		Adj. Depth	Remarks
1	7:45	[illegible]	28.7	6.7	22.0	1656
2		[illegible]	29.3	6.7	22.6	1730
3		[illegible]	27.5	6.7	20.8	1521
4	7:45		26.2	6.7	19.5	1411
5		[illegible]	25.6	6.7	18.9	1300
6		24.5	25.0	6.7	18.3	1224
7	7:[illegible]	[illegible]	24.3	6.7	17.6	1171
8		23.3	23.6	6.7	16.9	1124
9		23.1	23.4	6.7	16.7	1092
10	7:5[illegible]	[illegible]	22.7	6.7	16.0	1053
11		[illegible]	22.1	6.7	15.4	1016
12		[illegible]	20.7	6.7	14.0	990
13	7:[illegible]	[illegible]	22.4	6.7	15.7	1070
14		22.5	23.0	6.7	16.3	1170
15		22.0	22.1	6.7	15.4	1028
16	7:59	20.0	20.4	6.7	13.7	981
17		[illegible]	19.5	6.7	12.8	948
18		[illegible]	18.4	6.7	11.7	918
19	[illegible]	15.0	16.4	6.7	9.7	871
20		15.0	18.4	6.7	11.7	912

BOAT 118+00 N

76L298 307 4-50

PLEASE RETURN TO
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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.	RANGE	118+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
118+00N	112+00N	21	Y		90°00'		
		22	B&W	8:04	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
		25	B&W	8:06	90°00'		
		26	R		90°00'		
		27	Y		90°00'		
		28	B&W	8:08	90°00'		
		29	R		90°00'		
		30	Y		90°00'		
		31	B&W	8:10	90°00'		
		32	R		90°00'		

RANGE 118+00N

Profile Notes Red. Plotted Job No. 8412 Division No. F. B. 1889 PG. 27

No. Date Date Survey of B[illegible] Fresion Study

No. Date Date Map No. End Ad Johnson Date

76L298 307 4-50

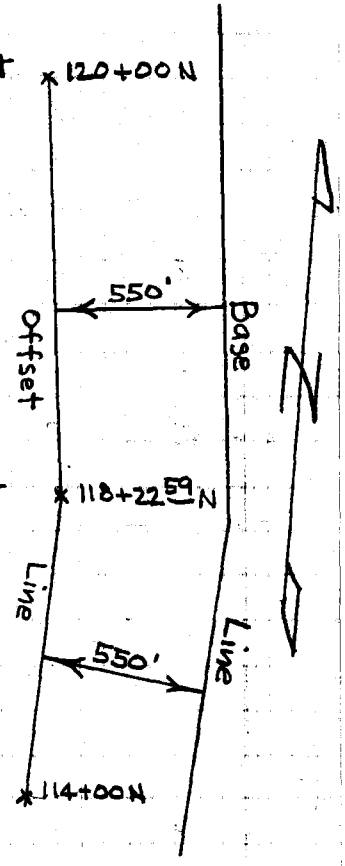
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.

F. B. 1889 Pg. 28 Job No. 8412 Division No. Notes Red Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by EHB Notes CEM 10/21/53 Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	120+00N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
120+00N (550' Offset Line)	118+22 59/100 N (550' Offset Line)	1	B&W	8:22	90°18'		
		2	R		90°00'	Range gun at	120+00N
		3	Y		90°00'		
		4	B&W	8:25	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	8:27	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	8:29	90°00'		
		11	R		90°00'		
		12	Y		90°00'	Sight on angle point at	118+22 59/100 N
		13	B&W	8:31	90°00'		
		14	R		90°00'		
		15	Y		90°00'		
		16	B&W	8:34	90°00'		
		17	R		90°00'		
		18	Y		90°00'	Cut-in gun at	114+00N
		19	B&W	8:36	90°00'		
		20	R		90°00'		



76L298 307 4-50

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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.	CUT-IN	118+00-N
Post Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
112+00	N3	21	Y		30°26'		
		22	B&W	8:04	28°31'		
		23	R		27°40'		
		24	Y		26°46'		
		25	B&W	8:06	25°09'		
		26	R		22°26'		
		27	Y		24°08'	*	
		28	B&W	8:08	23°35'		
		29	R		22°19'		
		30	Y		20°39'		
		31	B&W	8:10	19°41'		
		32	R		20°52'		

CUT IN 118+00N

Profile No. ____ Date ____ Notes Red. ____ Date ____ Plotted ____ Date ____ Job No. 8412 Division No. ____ Survey of ____ Map No. ____ Indexed Johnson Date ____ F. B. 1889 Pg. 29

761.298 307 4-50

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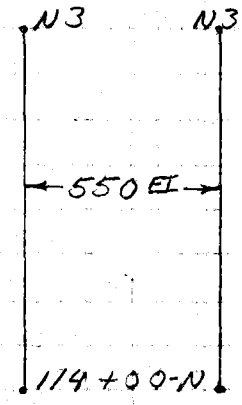
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	CUT-IN	120+00-N
Cut #	Color	Time	Hor. Ang.		Remarks	
114+00N N3						
550 EI OFF	1	B&W	8:22	64°31'		
	2	R		62°[illegible]'		
	3	Y		60°58'		
	4	B&W	8:24	60°[illegible]'		
	5	R		58°45'		
	6	Y		57°[illegible]'		
	7	B&W	8:27	56°[illegible]'		
	8	R		54°33'		
	9	Y		52°52'		
	10	B&W	8:29	50°[illegible]'		
	11	R		49°09'		
	12	Y		47°[illegible]'		
	13	B&W	8:31	45°00'		
	14	R		43°[illegible]'		
	15	Y		40°[illegible]'		
	16	B&W	8:33	38°[illegible]'		
	17	R		35°[illegible]'		
	18	Y		33°[illegible]'		
	19	B&W	8:36	32°[illegible]'		
	20	R		30°[illegible]'		



Profile
Plotted
Date
No.
X-Sec.
Checked
Date
No.
Notes Red
Date
Notes Chkd
Date
Job No. 8412 Division No.
Survey of BEACH EROSION STUDY
Survey by FHB Notes JRO
Indexed K. C. Johnson Date
F. B. 1119 Pg. 30

76L298 307 8-53

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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.	BOAT	118+00
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
2	[illegible]		18.0 17.2	17.5	6.7	10.8	903
22	[illegible]	8:03	17.1 16.2	16.5	6.7	9.8	876
23	[illegible]		17.1 15.8	16.2	6.7	9.5	864
24	[illegible]		16.1 14.4	15.3	6.7	8.6	853
25	[illegible]	8:05	15.1 14.0	14.4	6.7	7.7	842
26	[illegible]		12.5 11.0	11.5	6.7	4.8	798
27			12.2 13.0	13.4	6.7	6.7	819
28	[illegible]	8:08	12.5 12.5	13.2	6.6	6.6	812
29	[illegible]		12.0 12.0 11.8	12.3	6.6	5.7	796
30	[illegible]		9.8	10.3	6.6	3.7	776
31	[illegible]	8:09	10.0 8.1	8.7	6.6	2.1	765
32	[illegible]		9.0 9.2	9.8	6.6	3.2	778
33	[illegible]						
34	[illegible]						
35	[illegible]						
36	[illegible]						
37	[illegible]						
38	[illegible]						
39	[illegible]						
40	[illegible]						

Boat 118+00N

Profile Notes Red. ____ Plotted ____ Job No. 4810 Division No. ____ F. B. 1889 Pg. 31

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date 12-15-53 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 8-53

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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.	Boat	120+00 N		
#	Color	Time	Meas. Depth	Bottom Tide	Adj. Depth	Remarks		
1	[illegible]	8:22	[illegible]	29.4	6.5	22.9	1677	1737 1187+550
2	[illegible]		27.3 27.2	27.9	6.5	21.4	1614	1610 1060
3	[illegible]		[illegible]	27.3	6.5	20.8	1562	1560 1010
4	[illegible]	8:24	[illegible]	27.3	6.5	20.8	1538	1537 987
5	[illegible]		27.9 26.[illegible]	26.6	6.5	20.1	1479	1478 928 939 560 1297 21
6	[illegible]		[illegible]	26.0	6.5	19.5	1429	1430 880
7	[illegible]	8:26	26.5 26.[illegible]	26.2	6.4	19.8	1389	1390 840
8	[illegible]		[illegible] 25.2	25.8	6.4	19.4	1344	1340 797
9	[illegible]		[illegible]	25.3	6.4	18.9	1295	1300 750
10	[illegible]	8:28	25.6 24.0	24.5	6.4	18.1	1236	1240 690 696 560 1256 16
11	[illegible]		[illegible]	24.7	6.4	18.3	1203	1207 657
12	[illegible]		[illegible] 23.5	23.7	6.4	17.3	1155	1162 612
13	[illegible]	8:31	[illegible] 23.0	23.5	6.4	17.1	1113	1121 571
14	[illegible]		24.0 22.6	23.1	6.4	16.7	1080	1090 540
15	[illegible]		[illegible]	21.5	6.4	15.1	1030	1039 509 491 560 1051 12
16	[illegible]	8:33	[illegible]	21.0	6.4	14.6	999	1010 460
17	[illegible]		[illegible]	19.7	6.3	13.4	954	980 430
18	[illegible]		[illegible]	18.7	6.3	12.4	922	935 385
19	[illegible]	8:35	[illegible]	17.2	6.3	10.9	899	911 361
20	[illegible]		[illegible]	16.9	6.3	10.6	881	895 345

Some of these computations are in error

550' offset added to cut-in distances

BOAT 120+00 N

F. B. 1889 PG. 32 Job No. 4412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No.
Survey by Blanchard Notes Robbins 10/21/53 Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date Date No.

76L298 307 4-50

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.	RANGE	120+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90°00'		
		22	B&W	8:38	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
		25	B&W	8:43	90°00'		
		26	R		90°00'		
		27	Y		90°00'		
		28	B&W	8:47	90°00'		
		29	R		90°00'		
		30	Y		90°00'		
120+00 N	118+22 59 N	31	B&W	8:49	90°00'		
		32	R		90°00'		
		33	Y		90°00'		
		34	B&W	8:51	90°00'		

RANGE 120+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 PG. 33

No. ____ Date ____ Date ____ Survey of Beach Erosion Study

No. ____ Date ____ Date ____ Map No. ____ Indexed Job Date ____

76L298 307 4-50

PLEASE RETURN TO
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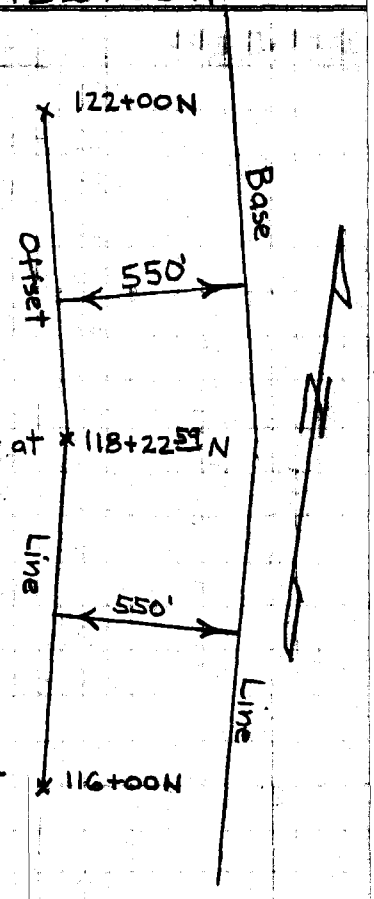
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	RANGE	122+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
122+00N (550' Offset Line)	118+22 59 N (550' Offset Line)	1	B&W	9:03	90°00'	Range gun at	122+00N
		2	R		90°00'		
		3	Y		90°00'		
		4	B&W	9:05	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	9:07	90°00'		
		8	R		90°00'		
		9	Y		90°00'	Sight on angle point at	118+22 59 N
		10	B&W	9:09	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	9:11	90°00'		
		14	R		90°00'		
		15	Y		90°00'		
		16	B&W	9:14	90°00'	Cut-in gun at	116+00N
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	9:16	90°00'		
		20	R		90°00'		

RANGE 122+00N



F. S. 1889 Pg. 34 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No. X-Sec.
Survey by EHB Notes CEM 10/21/53 Notes Chkd. Checked
Indexed R. C. Johnson Date Date Date No.

76L298 307 4-50

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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.	CUT-IN 120+00N
Inst. At / Sight On	#	Color	Time	Hor. Ang.	Remarks
119+00 N2	21	Y		28°37'	
	22	B&W	8:38	27°07'	
	23	R		35°48'	*
	24	Y		30°04'	
	25	B&W	8:43	27°17'	
	26	R		25°56'	
	27	Y		29°33'	*
	28	B&W	8:47	24°42'	
	29	R		22°43'	
	30	Y		24°26'	
	31	B&W	8:49	22°02'	
	32	R		21°47'	
	33	Y		20°00'	
	34	B&W	851	23°33'	*

Cut in 120+00N

* BOAT WENT BACK OUT

Profile Notes Red ____ Plotted ____ Job No. ____ Division No. ____ F. B. 1889 Pg. 31

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Inspected ____ Date ____

76L298 307 4-50

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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.

F. B. 1884 Pg. 36 | Profile | Plotted | Notes Red. | Division No. 8412 | Job No. | Date | No. | X-Sec. | Date | Notes Chkd. | Checked | Date | No.

Survey of BEACH ERO 5 LAN 5 STUDY

Survey by EWB Notes JRO

Indexed J. C. Johnson Date

STATION		B. S.	H. I.	F. S.	ELEV.	CUT-IN	122+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
116+00	N3	1	[illegible]	9:03	66° [illegible]		
550	EI OFF	2	[illegible]		64° [illegible]	N3	N3
		3	[illegible]		62° [illegible]		
		4	[illegible]	9:05	61° [illegible]		
		5	[illegible]		59° [illegible]		
		6	[illegible]		58° [illegible]	← 550 FT →	
		7	[illegible]	9:07	57° [illegible]		
		8	[illegible]		55° 38'		
		9	[illegible]		53° [illegible]		
		10	[illegible]	9:09	50° [illegible]	116+00-N	
		11	[illegible]		49° [illegible]		
		12	[illegible]		46° [illegible]		
		13	[illegible]	9:11	44° [illegible]		
		14	[illegible]		40° [illegible]		
		15	[illegible]		37° [illegible]		
		16	[illegible]	9:14	34° [illegible]		
		17	[illegible]		32° [illegible]		
		18	[illegible]		31° [illegible]		
		19	[illegible]	9:16	30° [illegible]		
		20	[illegible]		27° [illegible]		

CUT IN 122+00 N

76L298 307 8-53

PLEASE RETURN TO
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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.	BOAT		120+00	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks		
21	Y		16.1 15.3	15.6	6.3	9.3	850	861	311 + 250
22	B+W	8:37	15.5 13.5	14.2	6.3	7.9	830	843	293
23	K		20.6 18.8	19.4	6.3	13.1	952	962	412
24	Y		17.2 16.0	16.4	6.2	10.2	883	881	331
25	B+W	8:48	16.0 14.4	14.9	6.2	8.7	832	846	296
26	K		14.5 12.0	12.9	6.2	6.7	815	830	280
27	Y		[illegible]	16.3	6.2	10.1	862	875	325
28	B+W	8:46	14.6 13.0	13.5	6.2	7.3	799	827	277
29	K		12.8 10.0	10.9	6.1	4.8	775	790	240
30	Y		14.0 12.1	12.7	6.1	6.6	796	810	260
31	B+W	8:45	10.4 9.2	9.6	6.1	3.5	767	780	230
32	K		11.0 9.0	9.7	6.1	3.6	764	777	227
33			9.2 8.1	8.5	6.1	2.4	742	758	208
34	B+W	8:51	13.9 11.0	12.0	6.1	5.9	786	800	250
35	K								
36									
37	B+W								
38	K								
39	Y								
40	B+W								

Boat 120+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. 1889 Pg. 37

Notes Chkd. Checked Survey By Notes Date

No. Date 12-15-53 Date Map No. Undated Johnson Date

76L298 307 8-53

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.

F. B. 1889 Pg. 38 Job No. 2412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by FH13 Notes ER (Johnson) Notes Chkd. KDW Checked X-Sec.
Indexed E. C. Johnson Date Date 12-15-53 Date No.

STATION #	Color	Time	H. I. Meas. Depth	F. S. Bottom	Tide	ELEV. Adj. Depth	Remarks			
							Boat		12+00	N
1	Blue	9:03	29.[illegible]	29.9	5.9	24.0	1857	1840	1290	+550
2	"		[illegible]	28.6	5.8	22.8	1711	1700	1150	
3	"		[illegible]	27.7	5.8	21.9	1638	1630	1080	
4	Blue	9:05	[illegible]	27.0	5.8	21.2	1583	1572	1022	
5	"		[illegible]	26.7	5.8	20.9	1530	1524	974	
6	"		[illegible]	26.3	5.8	20.5	1485	1480	930	
7	Blue	9:06	[illegible]	25.6	5.8	19.8	1430	1422	872	
8	"		[illegible]	25.6	5.8	19.8	1380	1373	823	
9	"		25.0	24.3	5.7	18.6	1315	1312	762	
10	Blue	9:09	24.0	24.0	5.7	18.3	1247	1245	695	
11	"		23.5	23.7	5.7	18.0	1196	1201	651	
12	"		23.0	23.4	5.7	17.7	1159	1160	610	
13	Blue	9:11	23.6	23.2	5.7	17.5	1115	1110	560	
14	"		21.1	21.4	5.7	15.7	1040	1040	490	
15	"		19.5	20.0	5.6	14.4	989	990	440	
16	Blue	9:13	18.2	18.5	5.6	12.9	943	948	398	
17	"		17.5	17.3	5.6	11.7	914	920	370	
18	"		16.7	17.2	5.6	11.6	895	901	351	
19	Blue	9:15	16.9	16.3	5.6	10.7	879	884	334	
20	"		15.5	14.9	5.6	9.3	841	849	299	

Boat 12+00 N

Some of these distances are in error

550' offset added to cut-in distances

76L298 307 4-50

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.	RANGE	122+00N
Inst. At	Sight on	#	Color	Time	Hor Ang.		
		21	Y		90°00'		
		22	B&W	9:18	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
		25	B&W	9:20	90°00'		
	Z	26	R		90°00'		
122+00N	118+22 59	27	Y		90°00'		
		28	B&W	9:22	90°00'		
		29	R		90°00'	Waved B&W for red, then waved	
		30	Y		90°00'		

RANGE 122+00N

Profile Notes Red. Plotted Job No. B412 Division No. F. B. 1889 Pg. 39

No. Date Date Survey of

No. Date Date Map No. Made Job Date

Made Job Date

76L298 307 4-50

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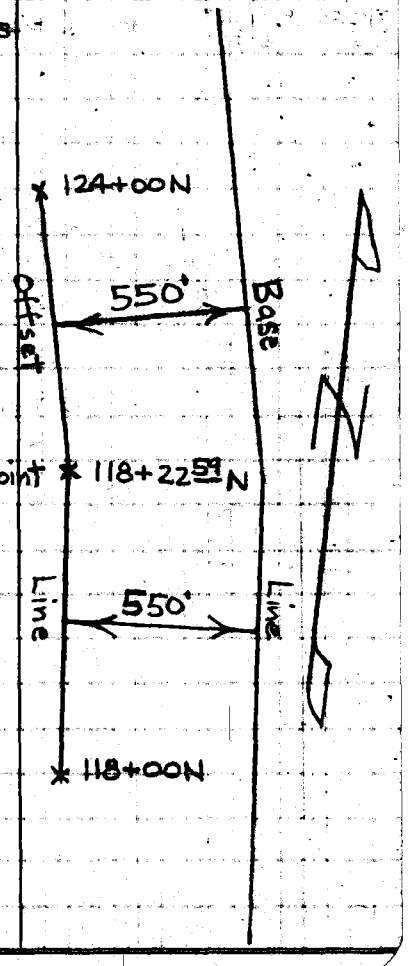
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	RANGE	124+00N
Inst. Sight At / On	#	Color	Time	Hor. Ang.	Remarks	
124+00N (Offset Line)	1	BEW	9:39	90°00'		
	2	R		90°00'		
	3	Y		90°00'	Range gun at	124+00N
	4	BEW	9:41	90°00'		
	5	R		90°00'		
	6	Y		90°00'		
	7	BEW	9:44	90°00'		
	8	R		90°00'		
	9	Y		90°00'		
118+22 59 N (Offset Line)	10	BEW	9:47	90°00'	Sight on angle point	118+22 59 N
	11	R		90°00'		
	12	Y		90°00'		
	13	BEW	9:50	90°00'		
	14	R		90°00'		
	15	Y		90°00'		
	16	BEW	9:53	90°00'	Cut-in gun at	118+00N
	17	R		90°00'		
	18	Y		90°00'		
	19	BEW	9:56	90°00'		
	20	R		90°00'		

RANGE 124+00 N



F. B. 1889 Pg. 60 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by EHB Notes CEM 10/21/53 Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date No.

76L298 307 4-50

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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.	CUT-IN	122+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
116+00	N3	21	Y		25°45'		
		22	B&W	9:18	29°38' *		
		23	R.		28°08'		
		24	Y		25°51'		
		25	B&W	9:20	23°26'		
		26	R		21°49'		
		27	Y		21°43'		
		28	B&W	9:22	23°49' *		
		29	R		23°02'		
		30	Y		22°36'		

* BOAT WENT BACK OUT

CUT IN 122+00 N

Profile Notes Red. Plotted Job No. Division No.
No. Date Date Survey of
No. Date Date Map No. Indexed Date
F. B. 1889 PG. 91

76L298 307 8-53

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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.	BOAT	124+00 N

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B+W	9:39	29.5 28.0	28.5 ✓	5.0 ✓	23.5 ✓	1729
2	R		27.0 26.2	26.5 ✓	5.0	21.5 ✓	1574
3	Y		26.9 25.0	25.6 ✓	5.0	20.6 ✓	1494
4	B+W	9:40	26.0 24.9	25.3 ✓	5.0	20.3 ✓	1400
5	R		25.0 24.0	24.3 ✓	5.0	19.3 ✓	1331
6	Y		24.0 22.0	22.7 ✓	4.9	17.8 ✓	1210
7	B+W	9:44	24.4 22.9	23.4 ✓	4.9	18.5 ✓	1233
8	R		[illegible]	22.5 ✓	4.9	17.6 ✓	1160
9	Y		22.4 21.5	22.0 ✓	4.9	17.1 ✓	1095
10	B+W	9:46	21.0 19.9	20.3 ✓	4.9	15.4 ✓	1024
11	R		19.1 17.6	17.7 ✓	4.8	12.9 ✓	950
12	Y		19.8 17.9	18.5 ✓	4.8	13.7 ✓	960
13	B+W	9:49	19.0 18.0	18.3 ✓	4.8	13.5 ✓	965
14	R		19.4 18.3	18.5 ✓	4.8	13.7 ✓	976
15	Y		20.0 19.0	19.3 ✓	4.7	14.6 ✓	1024
16	B+W	9:53	18.0 16.0	16.7 ✓	4.7	12.0 ✓	904
17	R		16.0 14.0	14.7 ✓	4.7	10.0 ✓	872
18	Y		15.0 14.0	14.3 ✓	4.7	9.6 ✓	862
19	B+W	9:56	15.7 14.0	14.6 ✓	4.6	10.0 ✓	866
20	R		16.2 14.9	15.3 ✓	4.6 ✓	10.7 ✓	902

Boat 124+00N

F. B. 1889 Pg. 44
Job No. Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by F.H.B. Notes ER. 10/21/53 Notes Chkd. LOW Checked X-Sec.
Indexed R. C. Johnson Date Date 12-15-53 Date No.

76L298 307 4-50

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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.	RANGE	124+00N
Just Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90° 00'		
		22	B&W	9:57	90° 00'		
		23	R		90° 00'		
		24	Y		90° 00'		
		25	B&W	9:58	90° 00'		
		26	R		90° 00'		
124+00N	118+22 59 N						

RANGE 124+00N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 Pg. 45

No. ____ Date ____ Date ____ Survey of Bond Erosion Study

No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

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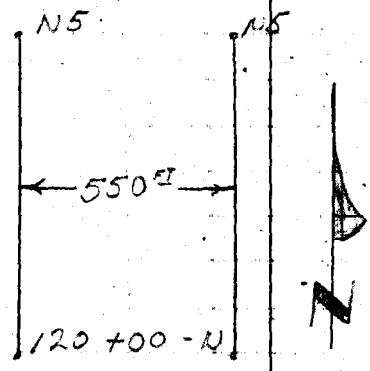
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	CUT-IN	126+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
120+00	N5	1	B&W	10:08	64		
		2	R		60		
		3	Y		60		
		4	B&W	10:11	57		
		5	R		54		
		6	Y		51		
		7	B&W	10:13	48		
		8	R		46		
		9	Y		44		
		10	B&W	10:17	41		
		11	R		38		
		12	Y		37		
		13	B&W	10:19	38	*	
		14	R		34		
		15	Y		30		
		16	B&W	10:22	30		
		17	R		34	*	
		18	Y		30		
		19	B&W	10:25	28		
		20	R		27		



* BOAT WENT BACK OUT

CUT IN 126+00 N

F. B. 1889 Pg. 14 48 Job No. 8812 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No.
Survey by FHB Notes JRO Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date No.

76L298 307 8-53

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.	Boat	124-00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		14.3 13.1	13.5 ✓	4.6 ✓	8.9 ✓	852
22	Bew	9.57	13.3 12.0	12.4 ✓	4.6	7.8 ✓	832
23	R		12.5 11.2	11.6 ✓	4.6	7.0 ✓	816
24	Y		12.0 10.2	10.8 ✓	4.6	6.2 ✓	798
25	Bew	9[illegible]	9.5 8.5	8.8 ✓	4.6	4.2 ✓	786
26	R		10.0 7.0	8.0 ✓	4.6 ✓	3.4 ✓	778
27	Y						
28	[illegible]						
29							
30							
31	Bew						
32	R						
33	Y						
34	Bew						
35	R						
36	Y						
37	Bew						
38	R						
39	Y						
40	Bew						

Boat 124100 N

Profile Notes Red. ____ Plotted ____ Job No. [illegible] Division No. ____ F. B. 1889 Pg. 49

No. ____ Date ____ Notes Chkd. ____ Checked ____ Survey by ____ Date ____

No. ____ Date 12-15-53 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 4-50

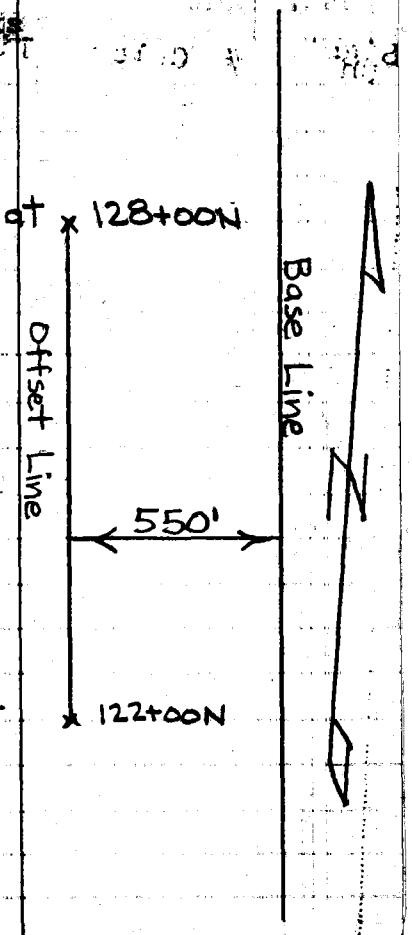
PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	RANGE	128+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
128+00N (550' Offset Line)	122+00N (550' Offset Line)	1	B&W	10:39	90°00'		
		2	R		90°00'		
		3	Y		90°00'		
		4	B&W	10:43	90°00'	Range gun at	128+00N
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	10:45	90°00'		
		8	R		90°00'		
		9	Y		89°41'		
		10	B&W	10:47	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	10:50	90°00'		
		14	R		90°00'		
		15	Y		90°00'	Sight on cut-in gun at	122+00N
		16	B&W	10:51	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	10:54	90°00'		
		20	R		90°00'		

RANGE 128+00N



F. B. 1889 Pg. 52 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No. X-Sec.
Survey by FHB Notes CEM 10/21/53 Notes Chkd. Checked
Indexed [illegible] Johnson Date Date No.

76L298 307 10-51

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR

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.	CUT-IN	126+00
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
120+00	N5	21	Y		26°14'		
		22	B&W	10:26	25°10'		
		23	R		24°23'		
		24	Y		22°44'		
		25	B&W	10:27	21°42'		
		26	R		20°17'		

Profile Notes Red ____ Plotted ____ Job No. 741 Division No. ____ F.B. 1889 Pg. 53

Notes Chkd. ____ Checked ____ Survey by ____ Notes ____

No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

Cut In 126+00 N

76L298 307 10-51

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Do not extend notes this side of this line.

F.B. 1889 PG. 54

Profile No. ____ X-Sec. No. ____

Plotted ____ Date ____ Notes Red ____ Date ____ Notes Chkd ____ Date ____

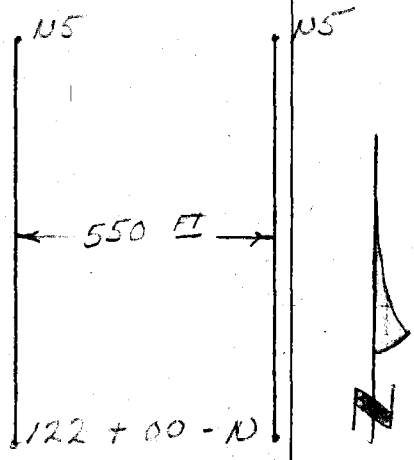
Division No. 2412 Job No. BEACH SEWER STUDY

Survey of BEACH SEWER STUDY

Survey by E.R.B. Notes JRS

Indexed C. Johnson Date ____

STATION	B. S.	H. I.	F. S.	ELEV.	CUT-IN	128+00-N
Inst. At / Sight On	#	Color	Time	Hor. Ang.	Remarks	
122+00 N5	1	B&W	10:39	6[illegible]		
	2	R		6[illegible]		
	3	Y		6[illegible]		
	4	B&W	10:43	57 [illegible]		
	5	R		5[illegible]		
	6	Y		5[illegible] 55		
	7	B&W	10:45	51 [illegible]		
	8	R		47 [illegible]		
	9	Y		43 [illegible]		
	10	B&W	10:48	40 [illegible]		
	11	R		41 [illegible]	* 122+00-N	
	12	Y		37 [illegible]		
	13	B&W	10:50	35 [illegible]		
	14	R		34 [illegible]		
	15	Y		32 [illegible]		
	16	B&W	10:52	33 [illegible]		
	17	R		32 [illegible]		
	18	Y		32 [illegible]		
	19	B&W	10:54	30 [illegible]	* BOAT WENT BACK OUT	
	20	R		29 [illegible]		



Cut In 128+00 N

76L298 307 8-53

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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.	Boat	126+00
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		14.0 12.0	12.7 ✓	3.9 ✓	8.8 ✓	846
22	B&W	10:25	12.4 11.3	11.7 ✓	3.9	7.8 ✓	832
23	R		11.2 10.0	10.4 ✓	3.8	6.6 ✓	822
24	Y		11.0 9.0	9.7 ✓	3.8	5.9 ✓	802
25	B&W	10:27	9.3 8.5	8.8 ✓	3.8	5.0 ✓	789
26	R		8.3 6.8	7.3 ✓	3.8 ✓	3.5 ✓	772
27	Y						
28	B&W						
29	R						
30	Y						
31	B&W						
32	R						
33	Y						
34	B&W						
35	R						
36							
37	B&W						
38	R						
39	B&W						

BOAT 126+00 N

Profile Notes Red ____ Plotted ____ Job No. ____ Division No. ____ F. B. 1889 Pg. 55

X-Sec. Notes Chkd. [illegible] Checked ____ Survey by ____ Notes ____ Date ____

No. ____ Date 12-15-53 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 8-53

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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.	BOAT	128+00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B&W	10:39	24.0	29.6	3.5	26.1	2012
2	P		27.0	27.4	3.5	23.9	1810
3			25.5	26.0	3.5	22.5	1639
4	B&W	10:43	25.0	25.4	3.5	21.9	1520
5	R		24.3	24.3	3.4	20.9	1448
6			23.0	23.3	3.4	19.9	1369
7		10:45	21.9	22.3	3.4	18.9	1291
8	P		21.0	21.4	3.4	18.0	1203
9	Y		20.0	20.7	3.3	17.4	1125
10	B&W	10:47	18.2	18.6	3.3	15.3	1055
11	R		19.1	19.5	3.3	16.2	1081
12	Y		17.0	17.5	3.3	14.2	1014
13	B&W	10:49	17.2	17.5	3.3	14.2	975
14	R		16.8	16.8	3.3	13.5	956
15	Y		15.0	15.3	3.2	12.1	933
16	B&W	10:52	16.0	16.4	3.2	13.2	954
17	R		14.7	15.1	3.2	11.9	936
18	Y		14.2	14.7	3.2	11.5	929
19	B&W	10:54	15.0	13.7	3.2	10.5	910
20	R		13.0	13.7	3.1	10.6	889

Boat 128+00 N

F. B. 1889 Pg. 56 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by F.H.B. Notes ER (10/21/53) Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date 12-15-53 Date No.

76L298 307 4-50

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	128+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90°00'		
		22	B&W	10:55	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
128+00 N	122+00 N	25	B&W	10:56	90°00'		
		26	R		90°00'		

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 Pg. 57

No. ____ Date ____ Date ____ Survey of Beach Erosion Study

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Range 128+00 N

76L298 307 4-50

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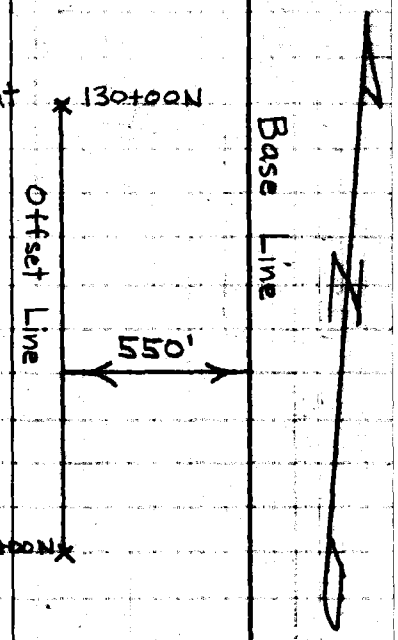
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	130+00 N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
130+00 N (550' Offset Line)	124+00N (550' Offset Line)	1	B&W	11:10	90° 00'		
		2	R		90° 00'		
		3	Y		90° 00'		
		4	B&W	11:14	90° 00'	Range gun at 130+00N	
		5	R		90° 00'		
		6	Y		90° 00'		
		7	B&W	11:17	90° 00'		
		8	R		90° 16'		
		9	Y		90° 00'		
		10	B&W	11:20	90° 00'		
		11	R		90° 00'		
		12	Y		90° 00'		
		13	B&W	11:23	90° 00'		
		14	R		90° 00'	Sight on cut-in gun at 124+00N	
		15	Y		90° 00'		
		16	B&W	11:26	90° 00'		
		17	R		90° 00'		
		18	Y		90° 00'		
		19	B&W	11:27	90° 00'		
		20	R		90° 00'		



F. B. 1889 Pg. 58 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No. X-Sec.
Survey by EHB Notes CEM 10/21/53 Notes Chkd. Checked
Indexed C. Johnson Date Date No.

76L298 307 10-51

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726 LOS ANGELES COUNTY
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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	CUT-IN	128+00
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
122+00	N5	21	Y		27°47'		
		22	B&W	10°55	26°13'		
		23	R		25°03'		
		24	Y		24°17'		
		25	B&W	10°56	23°13'		
		26	R		21°12'		

CUT IN 128+00 N

Profile Notes Red ____ Plotted ____ Job No. [illegible] Division No. ____

F.B. 1889 Pg. 59

No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey by ____ Notes ____ Date ____

No. ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 30,7 10-51

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Do not extend notes this side of this line.

F.B. 1899 Pg. 60 Profile

Job No. 2742 Division No. [illegible] Notes Red. [illegible] Plotted [illegible] No. [illegible]

Survey of [illegible] Date [illegible] X-Sec. [illegible]

Survey by [illegible] Notes [illegible] Notes Chkd. [illegible] Checked [illegible] Date [illegible]

Indexed [illegible] Date [illegible] Date [illegible] No. [illegible]

STATION		B. S.	H. I.	F. S.	ELEV.		CUT-IN 130+00-N	
Inst. At	Sight On	#	Color	Time	Hor. Ang.		Remarks	
124+00	N5	1	B&W	11:15	64 [illegible]			
		2	R		65 12	*	N5	N5
		3	Y		57 [illegible]			
		4	B&W	11:13	62 [illegible]	*		
		5	R		62 [illegible]	*		
		6	Y		54 [illegible]	*		
		7	B&W	11:18	61 [illegible]		550 FT	
		8	R		57 [illegible]			
		9	Y		55 [illegible]			
		10	B&W	11:21	51 [illegible]			
		11	R		48 [illegible]		124+00-N	
		12	Y		45 [illegible]			
		13	B&W	11:23	42 11			
		14	R		41 53			
		15	Y		39 52			
		16	B&W	11:26	38 17			
		17	R		37 24			
		18	Y		36 13			
		19	B&W	11:27	35 29		* BOAT WENT BACK OUT	
		20	R		34 [illegible]			

CUT IN 130+00 N

76L298.307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	Boat	128+00
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21			13.9				
		10:54	12.1	12.7	3.1	9.6	866
22	[illegible]	~~10:49~~	13.1				
			11.2	11.8	3.1	8.7	846
23			11.2				
			12.5	10.7	3.1	7.6	830
24			11.0				
		10:56	9.9	10.3	3.1	7.2	821
25	[illegible]	~~10:51~~	10.2				
			9.0	9.4	3.1	6.3	808
26			8.5				
			7.5	7.8	3.1	4.7	783
27							
28	[illegible]						
29							
30							
31	[illegible]						
32							
33							
34	[illegible]						
35							
36							
37	[illegible]						
38							
39							
40	[illegible]						

BOAT 128+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. 1889 Pg. 61

Notes Chkd. Checked Survey By Notes Date

No. Date 12-15-53 Date Map No. Date

Inspector Date

76L298 307 8-53

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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.	BOAT	130+00 -N-

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	[illegible]	11:12	26.3	26.9 ✓	2.7	24.2 ✓	1828
2	R		27.5	27.6 ✓	2.7	24.9 ✓	1879
3			[illegible]	23.8 ✓	2.7	21.1 ✓	1579
4	[illegible]	11:14	24.4	24.8 ✓	2.6	22.2 ✓	1691
5	R		[illegible]	25.4 ✓	2.6	22.8 ✓	1712
6			[illegible]	26.5 ✓	2.6	23.9 ✓	1824
7	BW	11:17	[illegible]	25.3 ✓	2.6	22.7 ✓	1650
8	R		[illegible]	24.3 ✓	2.5	21.8 ✓	~~1514~~ 1519
9			[illegible]	22.8 ✓	2.5	20.3 ✓	1410
10	[illegible]	11:20	[illegible]	22.5 ✓	2.5	20.0 ✓	1315
11			[illegible]	21.2 ✓	2.5	18.7 ✓	1232
12			[illegible]	20.3 ✓	2.5	17.8 ✓	1155
13	[illegible]	11:22	[illegible]	18.9 ✓	2.5	16.4 ✓	1094
14			[illegible]	19.0 ✓	2.4	16.6 ✓	1089
15			[illegible]	18.2 ✓	2.4	15.8 ✓	1051
16	[illegible]	11:25	[illegible]	18.2 ✓	2.4	15.8 ✓	1032
17			[illegible]	17.4 ✓	2.4	15.0 ✓	1010
18			[illegible]	16.4 ✓	2.4	14.0 ✓	990
19	[illegible]	11:27	[illegible]	15.7 ✓	2.3	13.4 ✓	978
20	R		[illegible]	15.3 ✓	2.3 ✓	13.0 ✓	957

Boat 130+00N

F. B. 1889 Pg. 62 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Expression Study Date Date No.
Survey by F.H.B. Notes E.R. (10/21/53) Notes Chkd. [illegible] Checked X-Sec.
Indexed C. Johnson Date Date 12-15-53 Date No.

76L298 307 4-50

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STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	130+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90°00'		
		22	B&W	11:28	90°29'		
		23	R		90°00'		
		24	Y		90°00'		
130+00 N	124+00 N	25	B&W	11:29	90°00'		
		26	R		90°00'		
		27	Y		90°00'		
		28	B&W	11:30	90°00'		
		29	R		90°00'		
		30	Y		90°00'		
		31	B&W	11:31	90°00'		

RANGE 130+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 PG. 63

No. ____ Date ____ Date ____ Survey of Beach Erosion Study

No. ____ Date ____ Date ____ Map No. ____ Indexed A. G. Johnson Date ____

F. B. 1889 Pg. 64

Job No. _____ Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of _____ Date _____ Date _____ No. _____

Survey by _____ Notes _____ Notes Chkd. _____ Checked _____ X-Sec.

Indexed R. C. Johnson Date _____ Date _____ Date _____ No. _____

76L298 307 4-50

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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	#	Color	Time	Hor. Ang.		Remarks

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.	CUT-IN	130+00-N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
124+05 N-5	21	Y		32°40'		
	22	B&W	11:28	31°45'		
	23	R		30°48'		
	24	Y		29°59'		
	25	B&W	11:29	28°57'		
	26	R		28°00'		
	27	Y		26°53'		
	28	B&W	11:29	25°38'		
	29	R		24°27'		
	30	Y		23°28'		
	31	B&W	11:30	22°39'		

CUT IN 130+00N

Profile Notes Red. Plotted Job No. 8412 Division No. F.B. 1889 Pg. 65

No. Date Date Survey of

Notes Chkd. Checked Survey by

No. Date Date Map No. Indexed Date

Johnson

76L298 307 10-51

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726 LOS ANGELES COUNTY
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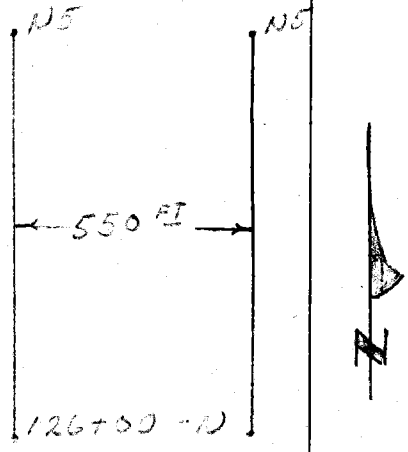
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	CUT-IN	132+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
126+00	N-5	1	B&W				
		2	R				
		3	Y				
		4	B&W				
		5	R				
		6	Y				
		7	B&W				
		8	R				
		9	Y				
		10	B&W				
		11	R				
		12	Y				
		13	B&W				
		14	R				
		15	Y				
		16	B&W				
		17	R				
		18	Y				
		19	B&W				
		20	R				

CUT IN 132+00



F.B. 1889 PG. 66 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No. X-Sec.
Survey by FKB Notes Notes Chkd. Checked
Indexed K. C. Johnson Date Date Date No.

76L298 307 8-53

PLEASE RETURN TO
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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.	BOAT		130+00 -N-
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21	Y		15.2 14.5	14.7 ✓	2.3 ✓	12.4 ✓	935	
22	B+W	11 28	14.2 13.5	13.7 ✓	2.3	11.4 ✓	922	
23	R		14.5 12.8	13.4 ✓	2.3	11.1 ✓	908	
24	Y		13.9 13.0	13.3 ✓	2.3	11.0 ✓	896	
25	B+W	11 29	13.4 12.5	12.7 ✓	2.3	10.4 ✓	882	
26	R		12.5 11.0	11.5 ✓	2.3	9.2 ✓	869	
27	Y		12.5 12.1	12.2 ✓	2.3	9.9 ✓	854	
28	B+W	11 29	12.0 10.0	10.7 ✓	2.3	8.4 ✓	838	
29	R		10.0 9.1	9.4 ✓	2.3	7.1 ✓	823	
30	Y		10.0 8.0	8.7 ✓	2.3	6.4 ✓	810	
31	B+W	11 30	8.0 7.5	7.7 ✓	2.3 ✓	5.4 ✓	800	
32	R							
33	Y							
34	B+W							
35	Y							
36	Y							
37	B+W							
38	R							
39	Y							
40	B+W							

BOAT 130+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. 1259 Pg. 67

Notes Chkd. Checked Survey by Notes Date

No. Date 12-15-53 Date Map No. Date

Inspector Johnson

F. B. 1889 PG. 68 | Job No. 8412 | Division No. | Notes Red. | Plotted | Profile

Survey of BEACH EROSION STUDIES | Date | Date | No.

Survey by Blanchard | Notes Robbins | Notes Chkd. | Checked | X-Sec.

Indexed C. Johnson | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.		Remarks
# Color Time		Meas Depth	Bottom Tide		Adj. Depth	

Do not extend notes this side of this line.

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76L298 307 8-53

76L298 307 4-50

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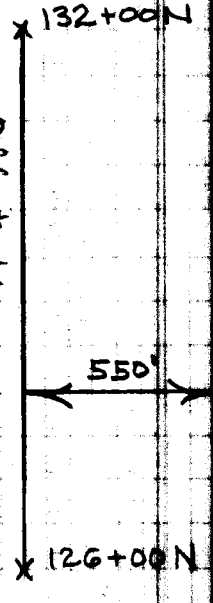
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	132+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
132+00N (550' Offset Line)	126+00N (550' Offset Line)	1	B&W	6:20	90° 00'		
		2	R		90° 00'		
		3	Y		90° 00'	Range gun at	132+00N
		4	B&W	6:22	90° 00'		
		5	R		90° 00'		
		6	Y		90° 00'		
		7	B&W	6:25	90° 00'		
		8	R		90° 00'		
		9	Y		90° 00'		
		10	B&W	6:27	90° 00'		
		11	R		90° 00'		
		12	Y		90° 00'		
		13	B&W	6:29	90° 00'		
		14	R		90° 00'		
		15	Y		90° 00'	Sight on cut-in gun at	126+00N
		16	B&W	6:31	90° 00'		
		17	R		90° 00'		
		18	Y		90° 00'		
		19	B&W	6:33	90° 00'		
		20	R		90° 00'		



Offset Line

550'

RANGE 132+00N

Profile Notes Red. Plotted Job No. 8412 Division No.
No. Date Date Survey of
No. Date Date Map No. Indexed Date
F. B. 1889 PG. 64

76L298 307 4-50

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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.

F.B. 1889 Pg. 70 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by FHB Notes CEM 10/22/53 Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE 132+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks
	21	Y		90° 00'	
	22	B&W	6:35	90° 00'	
	23	R		90° 00'	
	24	Y		90° 00'	
	25	B&W	6:37	90° 00'	
	26	R		90° 00'	
	27	Y		90° 00'	
	28	B&W	6:39	90° 00'	
132+00N 126+00N	29	R		90° 00'	
	30	Y		90° 00'	
	31	B&W	6:41	90° 00'	
	32	R		90° 00'	
	33	Y		90° 00'	
	34	B&W	6:42	90° 00'	
	35	R		90° 00'	
	36	Y		90° 00'	
	37	B&W	6:43	90° 00'	
	38	R		90° 00'	
	39	Y		90° 00'	

RANGE 132+00N

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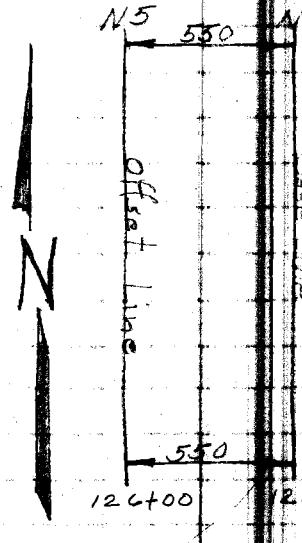
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
126+00	N.5 550 off	1	B+W	6 19	68°55	
		2	R		67°41	
		3	Y		66°00	
		4	B+W	6 22	63°55	
		5	R		61°52	
		6	Y		60°00	
		7	B+W	6 25	58°02	
		8	R		54°56	
		9	Y		51°43	
		10	B+W	6 27	48°18	
		11	R		45°17	
		12	Y		42°34	
		13	B+W	6 29	39°01	
		14	R		36°22	
		15	Y		40°42	* Boat went back off.
		16	B+W	6 31	37°38	
		17	R		35°25	
		18	Y		33°24	
		19	B+W	6 33	30°23	
		20	R		28°07	

CUT IN 132+00



CUT IN 132+00 RS

Profile Notes Red. Plotted Job No. 5412 Division No. F. B. 1888 Pg. 71

No. Date Date Map No. Date

Notes Chkd. Checked Survey by

76L298 307 8-53

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Do not extend notes this side of this line.

2

CUT IN 132+00

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.		Remarks
126+00	N5	21	Y		26° 20		
		22	B+W	6 35	24° 45		
		23	R		25° 14	*	
		24	Y		26° 03	*	
		25	B+W	6 37	24° 50		
		26	R		22° 29		
		27	Y		21° 03		
		28	B+W	6 39	19° 35		
		29	R		22° 52		
		30	Y		22° 13		
		31	B+W	6 41	22° 00		
		32	R		21° 46		
		33	Y		21° 21		
		34	B+W	6 42	20° 21		
		35	R		20° 03		
		36	Y		19° 33		
		37	B+W	6 43	19° 35		
		38	R		17° 46		
		39	Y		17° 08		

CUT IN 132+00N

F. B. 1888 Pg. 72 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by EHB Notes 13 Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date 10/22/53 Date Date No.

76L298 307 8-53

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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.		132700

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	BW	6:19	33.8 31.0 32.5	31.9 ✓	6.2 ✓	25.7 ✓	2108
2	R		31.0 31.5	31.5 ✓	6.2	25.3 ✓	2020
3	Y		30.0 30.6	30.5 ✓	6.2	24.3 ✓	1898
4	BW	6:22	29.0 29.2	29.5 ✓	6.2	23.3 ✓	1777
5	R		28.0 28.6	28.4 ✓	6.2	22.2 ✓	1671
6	Y		27.0 28.0	27.5 ✓	6.3	21.2 ✓	1590
7	BW	6:24	26.7 27.0	27.1 ✓	6.3	20.8 ✓	1511
8	R		26.0 26.5	26.3 ✓	6.3	20.0 ✓	1404
9	Y		25.0 26.2	25.5 ✓	6.3	19.2 ✓	1310
10	BW	6:26	24.5 25.1	25.1 ✓	6.3	18.8 ✓	1223
11			24.0 24.4	24.4 ✓	6.3	18.1 ✓	1155
12			23.2 23.0	23.6 ✓	6.3	17.3 ✓	1101
13		6:28	22.0 21.2	22.3 ✓	6.4	15.9 ✓	1037
14			19.9 23.0	20.3 ✓	6.4	13.9 ✓	991
			21.1 21.7	21.7 ✓	6.4	15.3 ✓	1066
16	BW	6:30	20.0 20.3	20.6 ✓	6.4	14.2 ✓	1013
17	R		19.0 20.1	19.4 ✓	6.4	13.0 ✓	977
18	Y		18.0 18.6	18.7 ✓	6.4	12.3 ✓	946
19	BW	6:32	17.0 17.4	17.5 ✓	6.4	11.1 ✓	902
20	R		15.9	16.4 ✓	6.4 ✓	10.0 ✓	871

Profile Notes Red. Plotted Job No. 241-2 Division No.

Notes Checked Survey By

No. Date 12-15-53 Date 12/12/53 Map No. Checked Johnson Date

F. B. 1888 PG. 73

Sort: 132700 N

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

F. B. 1889 Pg. 74 Profile No. X-Sec. No.
Plotted Date Notes Red Date Notes Chkd. Date Checked Date
Job No. 8417 Division No. Notes Notes Date
Survey of Erosion Studies
Survey by Bunkhouse Notes Feb 61
Indexed Date

STATION: BOAT 132+00 N

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21			16.0				
			14.9	15.3	6.5	8.8	847
			15.2				
22	BW	6:34	14.0	14.4	6.5	7.9	827
			14.9				
23			13.2	13.8	6.5	7.3	833
24			16.0				
			14.1	14.7	6.5	8.2	843
25	BW	6:36	15.0				
			13.2	13.8	6.5	7.3	828
26			13.5				
			12.1	12.6	6.5	6.1	798
27			12.1				
			11.0	11.4	6.5	4.9	781
28	BW	6:38	11.0				
			9.1	9.7	6.5	3.2	764
29			14.1				
			12.5	13.0	6.5	6.5	803
30			13.5				
			11.8	12.4	6.6	5.8	794
31	BW	6:40	13.0				
			11.9	12.3	6.6	5.7	792
32			12.8				
			11.0	11.6	6.6	5.0	790
33			11.8				
			10.8	11.1	6.6	4.5	784
34	BW	6:42	12.0				
			10.0	10.7	6.6	4.1	773
35			11.0				
			9.4	9.9	6.6	3.3	769
36			11.0				
			9.0	9.7	6.6	3.1	763
37	BW	6:43	10.1				
			9.0	9.4	6.6	2.8	758
38			9.2				
			8.0	8.4	6.6	1.8	742
39			9.0				
			7.4	7.9	6.6	1.3	735
40	BW						

132+00 N

76L298 307 4-50

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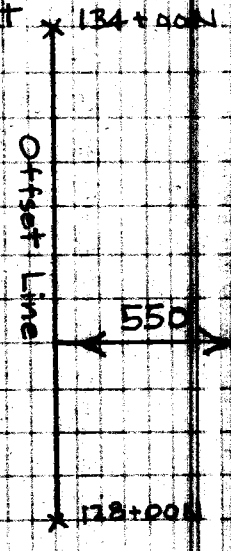
STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	134+00 N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
134+00 N (Offset Line)	128+00 N (Offset Line)	1	B&W	6:55	90°00'		
		2	R		90°00'		
		3	Y		90°00'	Range gun at	134+00 N
		4	B&W	7:05	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	7:08	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	7:10	90°00'		
		11	R		90°00'		
		12	Y		90°06'		
		13	B&W	7:12	90°00'		
		14	R		90°00'	Sight on cut-in gun at	128+00 N
		15	Y		90°00'		
		16	B&W	7:13	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	7:15	90°00'		
		20	R		90°00'		



RANGE 134+00 N

Profile Notes Red. Plotted Job No. 8412 Division No. F. B. 1889 Pg. 75

No. Date Date Date Map No. Date

Survey of Beach

No. Date Date Date

76L398 307 4-50

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STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	134+00 N
Inst. Sight At ON	# Color	Time	Hor. Ang.		Remarks	
	21	Y		90°00'		
	22	B&W	7:17	90°00'		
	23	R		90°00'		
	24	Y		90°00'		
	25	B&W	7:19	90°00'		
	26	R		90°00'		
	27	Y		90°00'		
	28	B&W	7:21	90°00'		
	29	R		90°00'		
	30	Y		90°00'		
	31	B&W	7:23	90°00'		
	32	R		90°00'		
	33	Y		90°00'		
	34	B&W	7:24	90°00'		
RANGE 134+00N	134+00 N					
	128+00 N					

F. B. 1889 Pg. 76 Job No. 8412 Division No. ____ Notes Red. ____ Plotted ____ No. ____ Profile
Survey of Beach Erosion Study Date ____ Date ____ X-Sec.
Survey by FHB Notes CEM 10/22/53 Notes Chkd. ____ Checked ____
Indexed ____ Date ____ Date ____ Date ____ No. ____

76L298 307 8-53

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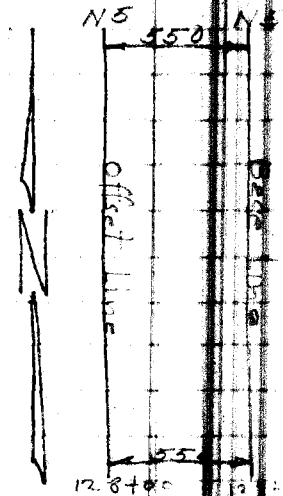
STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
128+00	N5 550 off	1	B+W	6 56	68° 41		
		2	R		68° 32		
		3	Y		66° 23		
		4	B+W	7 05	64° 09		
		5	R		61° 38		
		6	Y		58° 22		
		7	B+W	7 06	55° 16		
		8	R		53° 21		
		9	Y		51° 05		
		10	B+W	7 08	48° 46		
		11	R		46° 33		
		12	Y		43° 30		
		13	B+W	7 11	40° 57		
		14	R		38° 23		
		15	Y		35° 47		
		16	B+W	7 13	33° 56		
		17	R		37° 36		
		18	Y		34° 13		
		19	B+W	7 15	32° 02		
		20	R		30° 19		

CUT IN 134+00



CUT IN 134+00 N.

Profile Notes Red. Plotted Job No. Division No.
X-Sec. Notes Chkd. Checked Survey of
No. Date Date Map No. Indexed Date
F. B. PG. 77

76L298 307 8-53

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4

CUT IN 134+00

STATION		B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.		
128+00	N-5	21	Y		28° 12		
		22	B+W	7 17	26° 40		
		23	R		24° 38		
		24	Y		26° 57		
		25	B+W	7 18	23° 52		
		26	R		22° 51		
		27	Y		22° 21		
		28	B+W	7 20	21° 55		
		29	R		20° 32		
		30	Y		21° 10		
		31	B+W	7 22	20° 5		
		32	R		19° 23		
		33	Y		17° 30		
		34	B+W	7 24	18° 41 *		

CUT IN 134+00 N

F.B. 1889 PG. 78 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by E H B Notes JS Notes Chkd. Checked
Indexed C. Johnson Date Date Date No.

76L298 307 8-53

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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.	BOAT	134+00	N

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1.	Brd	6:56	34.0 33.0	33.3	6.8	26.5	2089
2	R		33.7 33.0	33.2	6.9	26.3	2076
3.	Y		32.8 31.9	32.2	6.9	25.3	1921
4.	Brd	7:04	31.0 29.3	29.9	6.9	23.0	1789
5.	R		29.1 28.4	28.6	7.0	21.6	1661
6.	Y		27.0 27.9	28.3	7.0	21.3 ~~23.3~~	1524
7	Brd	7:07	28.2 27.0	27.4	7.0	20.4	1415
8	R		27.6 26.3	26.7	7.0	19.7	1355
9	Y		26.8 26.0	26.3	7.0	19.3	1295
10	Brd	7:09	26.5 25.4	25.8	7.0	18.8	1235
11	R		26.0 24.5	24.9	7.0	17.9	1183
12	Y		25.1 24.3	24.6	7.0	17.6	1120
13	Brd	7:11	23.4 22.9	23.1	7.0	16.1	1070
14	R		22.5 21.9	22.1	7.0	15.1	1025
15	Y		20.9 19.7	20.1	7.0	13.1	983
16	Brd	7:13	21.1 19.2	19.8	7.1	12.7	954
17	R		22.0 21.0	21.3	7.1	14.2	1012
18	Y		21.0 19.5	20.0	7.1	12.9	959
19	Brd	7:15	19.6 18.7	19.0	7.1	11.9	926
20	R		18.0 18.0	18.3	7.1	11.2	901

Profile Notes Red. Plotted Job No. Division No.
No. Notes Chkd. Checked Survey by Date
Date Date Map No. Date

F. B. 1859 Pg. 79

Bd 1341 002

76L298 307 8-53

63

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Do not extend notes this side of this line.

F. B. 1889 Pg. 80 Job No. 842 Division No. Notes Red. Plotted Profile
Survey of Marina Peninsula Date Date No.
Survey by F.H.B. Notes Chkd. Checked X-Sec.
Indexed L. C. Johnson Date 12-15-53 Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	Boat	134+00 N

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		17.9	17.2	7.1	10.1	872
22	Br10	7:16	16.9 / 17.0 / 15.8	16.2	7.1	9.1	851
23	R		15.1 / 14.0	14.4	7.1	7.3	826
24	Y		16.5 / 15.4	15.8	7.1	8.7	855
25	Br10	7:18	15.0 / 13.9	14.3	7.1	7.2	816
26	R		14.0 / 13.0	13.3	7.1	6.2	803
27	Y		13.4 / 12.1	12.5	7.1	5.4	797
28	Br11	7:20	12.1 / 12.0	12.4	7.1	5.3	792
29	R		12.0 / 11.1	11.4	7.1	4.3	779
30	Y		12.9 / 11.9 ?	12.2	7.1	5.1	782
31	Br	7:22	12.1 / 11.6	11.4	7.1	4.3	772
32	R		10.9 / 9.8	10.2	7.1	3.1	761
33	Y		9.2 / 8.0	8.4	7.2	1.2	743
34	Br10	7:24	10.0 / 9.0	9.3	7.2	2.1	753
35	Y						
36							
37	Br10						
38	Y						
39							
40	Br10						

Boat 134+00 N

76L298 307 4-50

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.	RANGE	136+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
136+00N (Offset Line)	130+00N (Offset Line)	1	B&W	7:39	90°00'		
		2	R		90°00'		
		3	Y		90°00'		
		4	B&W	7:41	90°00'	Range gun at	136+00N
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	7:44	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	7:45	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	7:47	90°00'		
		14	R		90°00'	Sight on cut-in gun at	130+00N
		15	Y		90°00'		
		16	B&W	7:49	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	7:50	90°00'		
		20	R		90°00'		

Offset Line

550'

Range 136+00N

Profile No. ____ Date ____ Notes Red. ____ Date ____ Plotted ____ Date ____ Job No. 8412 Division No. ____ Survey of Beach Erosion Study

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

F. B. 1889 Pg. 81

76L298 307 4-50

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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.

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F. B. 1889 Pg. 92 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date No.
Survey by EHB Notes CEM 10/22/53 Notes Chkd. Checked X-Sec.
Indexed M. Tobacco Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	136+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	21	Y		90°00'		
	22	B & W	7:52	90° 00'		
	23	R		90°00'		
	24	Y		90°00'		
	25	B & W	7:55	90°00'		
	26	R		90°00'		
	27	Y		90°00'		
	28	B & W	7:57	90°00'		
	29	R		90°00'		
	30	Y		90°49'		
	31	B & W	7:59	90°00'		
	32	R		90°00'		
	33	Y		90°00'		
	34	B & W	8:01	90°00'		
	35	R		90°00'		
	36	Y		90°00'		
	37	B & W	8:03	90°00'		
	38	R		90°00'		
	39	Y		90°00'		

RANGE 136+00 N

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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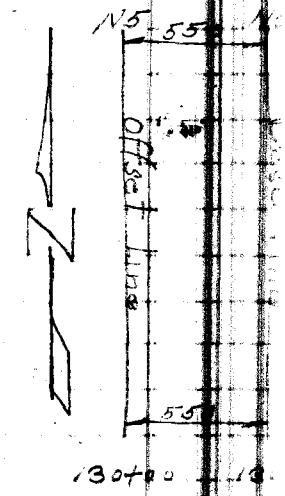
Do not extend notes this side of this line.

5

CUT IN 136+00

STATION		B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.		
130+00	N5	1	B+W	7 39	64° 37		
		2	R		62° 53		
		3	Y		61° 06		
		4	B+W	7 41	59° 04		
		5	R		57° 10		
		6	Y		54° 39		
		7	B+W	7 43	50° 28		
		8	R		46° 57		
		9	Y		42° 58		
		10	B+W	7 45	45° 19		
		11	R		44° 33		
		12	Y		43° 15		
		13	B+W	7 46	41° 26		
		14	R		39° 00		
		15	Y		36° 43		
		16	B+W	7 48	35° 02		
		17	R		36° 47		
		18	Y		35° 37		
		19	B+W	7 50	33° 46		
		20	R		31° 55		



Cut In 136+00 N5

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 83

No. Date Notes Chkd. Checked Survey of Date Date Map No. Indexed Date

76L298 307 8-53

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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.

6

CUT IN 138+00

STATION		B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.		
130+00	N5	21	Y		2[illegible]4		
		22	B+W	7 52	26°59		
		23	R		31°22	*	
		24	Y		2[illegible]2		
		25	B+W	7 59	27°[illegible]2	*	
		26	R		25°[illegible]7		
		27	Y		24°[illegible]7		
		28	B+W	7 56	22°46		
		29	R		25°16	*	
		30	Y		23°[illegible]4		
		31	B+W	7 59	22°48		
		32	R		22°[illegible]7		
		33	Y		20°22		
		34	B+W	8:00	18°19		
		35	R		16°57		
		36	Y		19°35	*	
		37	B+W	8 02	19°11		
		38	R		18°50		
		39	Y		19°08		

136+00 N

Cut In 138+00 N

F.B. 1889 Pg. 84 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by E H B Notes J S Notes Chkd. Checked
Indexed R. C. Johnson Date 10/22/53 Date Date No.

76L298 307 8-53

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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.	BOAT	136+00 N

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B&W	7:39	32.1 31.5	31.7 ✓	7.2 ✓	24.5 ✓	1815
2	R		30.9 30.0	30.3 ✓	7.3	23.0 ✓	1721
3	Y		30.5 29.9	30.1 ✓	7.3	22.8 ✓	1637
4	B&W	7:41	29.4 28.5	29.0 ✓	7.3	21.7 ✓	1551
5	R		28.9 28.0	28.3 ✓	7.3	21.0 ✓	1479
6	Y		28.8 27.5	27.9 ✓	7.3	20.6 ✓	1396
7	B&W	7:43	27.9 26.4	27.2 ✓	7.3	19.9 ✓	1277
8	R		26.9 25.8	26.2 ✓	7.3	18.9 ✓	1191
9	Y		24.2 23.4	23.7 ✓	7.3	16.4 ✓	1109
10	B&W	7:45	25.3 25.0	25.3 ✓	7.3	18.0 ✓	1155
11	R		25.7 25.0	25.2 ✓	7.3	17.9 ✓	1140
12	Y		25.1 24.2	24.5 ✓	7.3	17.2 ✓	1115
13	B&W	7:47	24.3 23.0	23.4 ✓	7.3	16.1 ✓	1080
14	R		23.1 22.5	22.7 ✓	7.3	15.4 ✓	1035
15	Y		22.5 21.7	22.0 ✓	7.3	14.7 ✓	998
16	B&W	7:48	21.5 20.0	20.5 ✓	7.3	13.2 ✓	971
17	R		22.6 21.4	21.8 ✓	7.3	14.5 ✓	999
18	Y		22.1 21.0	21.4 ✓	7.3	14.1 ✓	980
19	B&W	7:50	20.8 19.8	20.1 ✓	7.3	12.8 ✓	951
20	R		19.9 19.0	19.3 ✓	7.3 ✓	12.0 ✓	924

Profile Notes Red. ____ Plotted ____ Job No. [illegible] Division No. ____ F. B. [illegible] Pg. 85

No. ____ Date ____ Notes Chkd. [illegible] Checked ____ Survey By ____ Date ____

No. ____ Date 12-16-53 Date ____ Map No. ____ Indexed Johnson Date ____

Boat 136+00 N

76L298 307 8-53

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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.

3.

Do not extend notes this side of this line.

F. B. 1889 Pg. 86 Job No. 8417 Division No. Notes Red. Plotted
Survey of Beach Erosion Study Date Date No.
Survey by Sundberg Notes 30 6 Notes Chkd. Checked X-Sec.
Indexed E. C. Johnson Date Date/2-15-53 Date No.
Profile

STATION #	Color	Time	H. I. Meas. Depth	F. S. Bottom	ELEV. Tide	Adj. Depth	Remarks
						BOAT	136+00 N
21	Y		15.4 / 15.5	17.2	7.3	9.9	872
22	Brw	7:52	17.0 / 15.8	16.2	7.3	8.9	856
23	Y		18.0 / 18.0	18.3	7.3	11.0	916
24	Y		16.9 / 14.1	15.0	7.3	7.7	837
25	Brw	7:54	17.4 / 16.0	16.5	7.3	9.2	860
26	Y		16.0 / 14.3	14.9	7.3	7.6	836
27	Y		12.5 / 13.9	14.1	7.3	6.8	819
28	Brw	7:56	13.5 / 12.0	12.5	7.3	5.2	807
29	Y		16.0 / 14.3	14.7	7.3	7.4	833
30	Y		14.0 / 13.2	13.5	7.3	6.2	812
31	Brw	7:59	12.4 / 13.0	13.6	7.3	6.3	802
32	Y		14.0 / 12.2	12.8	7.3	5.5	794
33	Y		12.0 / 11.0	11.3	7.3	4.0	773
34	Brw	8:00	10.0 / 8.9	9.3	7.3	2.0	749
35	Y		9.2 / 7.2	7.9	7.3	0.6	733
36	Y		11.8 / 9.0	9.9	7.3	2.6	764
37	Brw	8:01	10.9 / 9.0	9.6	7.3	2.3	759
38	Y		9.9 / 8.1	8.7	7.3	1.4	755
39	Y		10.7 / 9.8	10.1	7.3	2.8	758
40	Brw						

Boat 136+00 N

76L298 307 4-50

PLEASE RETURN TO
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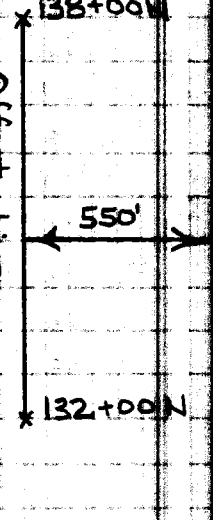
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	RANGE	138+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
138+00 N (Offset Line)	132+00 N (Offset Line)	1	B&W	8:19	90°00'		
		2	R		90°00'		
		3	Y		90°00'		
		4	B&W	8:21	90°00'		
		5	R		90°00'	Range gun at	138+00 N
		6	Y		90°00'		
		7	B&W	8:23	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	8:25	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	8:26	90°00'		
		14	R		90°00'	Sight on cut-in gun at	132+00 N
		15	Y		90°00'		
		16	B&W	8:28	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	8:29	90°00'		
		20	R		90°00'		



Offset Line

550'

Range 138+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 Pg. 87

No. ____ Date ____ Date ____ Survey of Beach Erosion Study

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 4-50

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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.	RANGE	138+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90° 00'		
		22	B & W	8:31	90° 00'		
		23	R		90° 00'		
		24	Y		90° 00'		
		25	B & W	8:32	90° 00'		
		26	R		90° 00'		
		27	Y		90° 00'		
138+00N	132+00N	28	B & W	8:34	90° 00'		
		29	R		90° 00'		
		30	Y		90° 00'		
		31	B & W	8:35	90° 00'		
		32	R		90° 00'		
		33	Y		90° 00'		

Range 138+00N

F. B. 1889 Pg. 28 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by FHB Notes CEM 10/22/53 Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date Date Date No.

76L298 307 8-53

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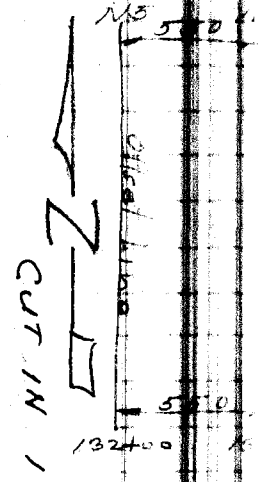
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
132+00	N5 559	1	B+W	8 19	66° 41		
		2	R		64° 46		
		3	Y		62° 34		
		4	B+W	8 21	60° 37		
		5	R		58° 12		
		6	Y		55° 52		
		7	B+W	8 22	52° 47		
		8	R		50° 16		
		9	Y		47° 36		
		10	B+W	8 24	44° 14		
		11	R		42° 05		
		12	Y		39° 04		
		13	B+W	8 26	36° 50		
		14	R		35° 12		
		15	Y		33° 48		
		16	B+W	8 27	31° 04		
		17	R		32° 57 *		
		18	Y		31° 11		
		19	B+W	8 29	29° 55		
		20	R		28° 02		

CUT IN 138+00



Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 89

X-Sec. Notes Chkd. Checked Survey By Notes Date

No. Date Date Map No. Indexed Johnson Date

76L298 307 8-53

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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.

8

STATION		B. S.	H. I.	F. S.	ELEV.		CUT IN 138+00
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
132+00	N5	21	Y		30° 41		
		22	B+W	8 31	2[illegible]° 50		
		23	R		27° 56		
		24	Y		26° 46		
		25	B+W	8 32	2[illegible]° 02		
		26	R		22° 58		
		27	Y		24° 52		
		28	B+W	8 33	23° 59		
		29	R		21° [illegible]6		
		30	Y		21° 13		
		31	B+W	8 35	19° 33		
		32	R		17° 24		
		33	Y		19° 07		

CUT IN 138+00 N

F.B. 1889 Pg. 40 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by E.H.B. Notes N5 Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date 10/22/53 Date Date No.

76L298 307 8-53

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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+ 00 | B. S. | H. I. | F. S. | ELEV. | BOAT | 138+00

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B+W	8:19	33.0 31.3	31.9	7.3	24.6	1941
2	R		32.0 31.0	31.3	7.3	24.0	1822
3	Y		31.0 30.4	30.4	7.3	23.1	1708
4	B+W	8:21	30.6 29.0	29.5	7.3	22.2	1617
5	R		29.2 28.1	28.5	7.3	21.2	1517
6	Y		28.9 27.9	27.9	7.3	20.6	1435
7	B+W	8:23	27.8 26.8	27.1	7.2	19.9	1340
8	R		26.8 26.1	26.6	7.2	19.4	1272
9	Y		26.1 25.2	25.5	7.2	18.3	1206
10	B+W	8:24	25.6 24.0	24.5	7.2	17.3	1135
11	R		24.2 23.2	23.5	7.2	16.3	1092
12	Y		23.1 22.1	22.4	7.2	15.2	1037
13	B+W	8:26	22.1 21.1	21.4	7.2	14.2	1000
14	R		21.3 19.9	20.4	7.2	13.2	974
15	Y		20.6 19.7	20.0	7.2	12.8	951
16	B+W	8:27	19.0 18.0	18.3	7.2	11.1	912
17	R		20.0 19.0	19.3	7.2	12.1	938
18	Y		19.1 18.2	18.5	7.2	11.3	913
19	B+W	8:29	18.3 17.7	17.9	7.2	10.7	896
20	R		19.0 16.8	17.0	7.2	9.8	870

Boat 138+00

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ Pg. ____

Notes Chkd. ____ Checked ____ Survey By ____ Notes ____ Date ____

No. ____ Date 12-[illegible]-53 Date ____ Map No. ____ Edward Johnson Date ____

76L298 307 8-53

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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.	BOAT		138+00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21	Y		19.0 17.2	17.8	7.2	10.6	906	
22	B+W	8:31	19.3 16.4	17.4	7.2	10.2	880	
23	R		17.4 16.0	16.4	7.2	9.2	868	
24	Y		16.1 15.2	15.5	7.2	8.3	853	
25	B+W	8:32	15.4 14.4	14.7	7.2	7.5	830	
26	R		14.1 12.5	13.0	7.2	5.8	804	
27	Y		15.8 14.0	14.6	7.2	7.4	828	
28	B+W	8:33	15.0 13.7	14.1	7.2	6.9	817	
29	R		13.0 12.2	12.5	7.2	5.3	792	
30	Y		12.6 11.0	11.5	7.2	4.3	783	
31	B+W	8:35	10.9 9.9	10.2	7.2	3.0	763	
32	R		9.0 7.7	8.1	7.2	0.9	738	
33	Y		10.2 9.0	9.4	7.2	2.2	764	
34	B+W							
35	R							
36	Y							
37	B+W							
38	R							
39	Y							
40	B+W							

Boat 138+00 N

F. B. 1889 Pg. 92 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by Blanchard Notes Stebbins Notes Chkd. Checked X-Sec.
Indexed R. Johnson Date Date 12-15-53 Date No.

76L298 307 4-50

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.	RANGE	140+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
140+00 N (Offset Line)	134+00 N (Offset Line)	1	B&W	8:50	90°00'		
		2	R		90°00'		
		3	Y		90°00'		
		4	B&W	8:53	90°00'	Range gun at	140+00N
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	8:56	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	8:59	90°00'		550'
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	9:01	90°00'	ran out of gas	
		14	R		90°00'	Sight on cut-in gun at	134+00N
		15	Y		90°00'		
		16	B&W	9:07	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	9:09	90°00'		
		20	R		90°00'		

Offset Line

Profile Notes Red. Plotted Job No. 8412 Division No.

No. Date Date Survey of Beach Erosion Study

No. Date Date Map No. Date

F. B. 1889 Pg. 93

RANGE 140+00N

76L298 307 4-50

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Do not extend notes this side of this line.

F. B. 1889 Pg. 94 Job No. 8412 Division No. ____ Notes Red. ____ Plotted ____ Profile
Survey of Beach Erosion Study Date ____ No. ____
Survey by FHB Notes CEM 10/22/53 Notes Chkd. ____ Checked ____ X-Sec.
Indexed J. C. Johnson Date ____ Date ____ Date ____ No. ____

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	140 +00N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90° 00'		
		22	B&W	9:11	90° 00'		
		23	R		90° 00'		
		24	Y		90° 00'		
		25	B&W	9:13	90° 00'		
		26	R		90° 00'		
		27	Y		90° 00'		
		28	B&W	9:14	90° 00'		
140 +00 N	134 +00 N	29	R		90° 00'		
		30	Y		90° 00'		
		31	B&W	9:16	90° 00'		
		32	R		90° 00'		
		33	Y		90° 00'		
		34	B&W	9:17	90° 00'		
		35	R		90° 00'		
		36	Y		90° 00'		
		37	B&W	9:19	90° 00'		
		38	R		90° 00'		

Range 140 +00 N

76L298 307 8-53

PLEASE RETURN TO
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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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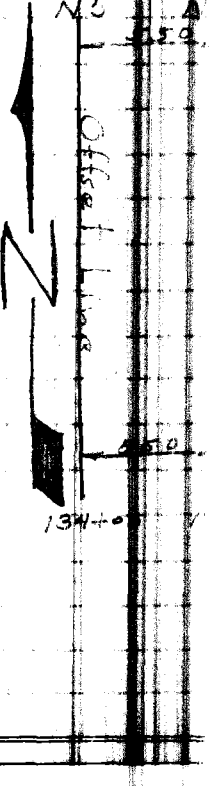
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	
Inst. At	Sight On	#	Color	Time	Hor. Ang.
134+00	N5	1	B+W	8 50	65° 03
		2	R		67° 58 * Boat went back out.
		3	Y		65° 14
		4	B+W	8 53	62° 24
		5	R		59° 54
		6	Y		56° 08
		7	B+W	8 55	51° 05
		8	R		46° 30
		9	Y		43° 22
		10	B+W	8 59	43° 44
		11	R		41° 40
		12	Y		40° 14
		13	B+W	9:00	37° 36
		14	R		37° 44 *
		15	Y		34° 12
		16	B+W	9 07	33° 23
		17	R		31° 07
		18	Y		35° 18
		19	B+W	9 09	33° 51
		20	R		31° 57

Remarks

Cut in 140+00 N



Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____
Notes Chkd. ____ Date ____ Survey of ____ Pg. 95
No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

10

CUT IN 140+00

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.		Remarks
134+00	N5	21	Y		30° 44		
		22	B+W	9 10	29° 50		
		23	R		28° 06		
		24	Y		26° 40		
		25	B+W	9 12	28° 1	*	
		26	R		27° 27		
		27	Y		26° 07		
		28	B+W	9 14	25° 05		
		29	R		23° 02		
		30	Y		26° 37	*	
		31	B+W	9 15	24° 28		
		32	R		23° 53		
		33	Y		24° 14	*	
		34	B+W	9 17	20° 45		
		35	R		21° 45	*	
		36	Y		18° 45		
		37	B+W	9 19	18° 17		
		38	R		19° 53		

CUT IN 140+00

F. B. 1289 Pg. 96 Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of Bozch Erosion Studies Date Date X-Sec.
Survey by [illegible] Notes JS Notes Chkd. Checked No.
Indexed [illegible] C. Johnson Date 10/22/53 Date Date

76L298 307 8-53

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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.		140+00 N
# Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1. B+W	8:50	31.5 / 30.5 / 33.6	30.8 ✓	7.1	23.7 ✓	1844
2. K		32.0 / 32.0	32.5 ✓	7.1	25.4 ✓	2032
3 Y		30.0 / 30.0	30.8 ✓	7.0	23.8 ✓	1851
4 B+W	8:53	30.5 / 29.7	30.0 ✓	7.0	23.0 ✓	1699
5. K		29.2 / 28.5	28.7 ✓	7.0	21.7 ✓	1576
6 Y		28.9 / 27.2	27.8 ✓	7.0	20.8 ✓	1445
7 B+W	8:55	26.0 / 26.3	26.3 ✓	7.0	19.3 ✓	1294
8 R		25.8 / 25.0	25.3 ✓	7.0	18.3 ✓	1182
9 Y		25.8 / 23.4	24.2 ✓	7.0	17.2 ✓	1116
10 B+W	8:58	25.2 / 24.0	24.4 ✓	7.0	17.4 ✓	1124
11 K		24.0 / 23.0	23.3 ✓	7.0	16.3 ✓	1084
12 Y		23.9 / 21.6	22.4 ✓	7.0	15.4 ✓	1058
13 B+W	9:01	21.9 / 21.0	21.4 ✓	7.0	14.4 ✓	1012
14 K		22.0 / 20.5	21.0 ✓	6.9	14.1 ✓	1014
15 Y		20.3 / 19.0	19.4 ✓	6.9	12.5 ✓	958
16 B+W	9:07	19.9 / 19.0	19.3 ✓	6.9	12.4 ✓	945
17 K		18.7 / 17.3	17.8 ✓	6.9	10.9 ✓	912
18 Y		20.5 / 20.6	20.2 ✓	6.9	13.3 ✓	975
19 B+W	9:09	20.5 / 19.0	19.5 ✓	6.9	12.6 ✓	953
20 K		19.3 / 18.0	18.4 ✓	6.8	11.6 ✓	924

Cont 140+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. Pg.

No. Date Map No. Date

Notes Checked Date Survey by Chief Johnson Date

76L298 307 8-53

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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.	BOAT	140+00 N
#	Color	Time	Meas. Depth	Bottom Tide	Adj. Depth	Remarks
21			15.8 17.0	17.6	6.8	10.8	906
22	B+W	9:10	15.0 17.0	17.3	6.8	10.5	894
23			17.2 16.0	16.4	6.8	9.6	870
24			15.9 14.2	14.8	6.8	8.0	851
25	B+W	9:13	17.1 16.0	16.4	6.8	9.6	871
26			16.2 15.8	15.9	6.8	9.1	862
27			16.0 15.0	15.3	6.8	8.5	844
28	B+W	9:14	15.1 14.0	14.4	6.8	7.6	831
29			13.7 12.0	12.6	6.8	5.8	805
30			16.2 15.0	15.4	6.8	8.6	850
31	B+W	9:16	15.1 13.2	13.8	6.7	7.1	823
32			13.5 13.1	13.7	6.7	7.0	816
33			13.0 12.0	12.3	6.7	5.6	826
34	B+W	9:17	11.8 9.9	10.5	6.7	3.8	777
35			12.2 11.0	11.4	6.7	4.7	789
36			8.0 8.3	8.3	6.7	1.6	754
37	B+W	9:19	8.0 7.5	8.0	6.7	1.3	748
38			15.3 9.0	9.4	6.7	2.7	766
39							
40	B+W						

Boat 140+00 N

F. B. 1889 Pg. 88 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by Blanchard Notes F. Robbins Notes Chkd. Checked
Indexed K. C. Johnson Date Date 12-16-53 Date No.

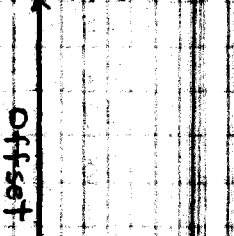
76L298 307 4-50

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.	RANGE 142+00N
Inst. Sight At / On	#	Color	Time	Hor. Ang.	Remarks
142+00N (Offset Line) / 136+00N (Offset Line)	1	B&W	9:53	90°00'	
	2	R		90°00'	
	3	Y		90°00'	
	4	B&W	9:55	90°00'	Range gun at 142+00N
	5	R		90°00'	
	6	Y		90°00'	
	7	B&W	9:58	90°00'	
	8	R		90°00'	
	9	Y		90°00'	caught sunfish
	10	B&W	10:04	90°18'	
	11	R		90°00'	
	12	Y		90°00'	
	13	B&W	10:05	90°00'	
	14	R		90°00'	
	15	Y		90°00'	Sight on cut-in gun at 136+00N
	16	B&W	10:07	90°00'	
	17	R		90°00'	
	18	Y		90°00'	
	19	B&W	10:09	90°00'	
	20	R		90°00'	



Offset Line

550'

Range 142+00N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. S. 1889 Pg. 90

No. ____ Date ____ Date ____ Survey of Beach Erosion Study

No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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.	RANGE	142+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90° 00'		
		22	B&W	10:10	90° 00'		
		23	R		90° 00'		
		24	Y		90° 00'		
		25	B&W	10:11	90° 00'		
		26	R		90° 00'		
		27	Y		90° 00'		
142+00N	136+00N	28	B&W	10:12	90° 00'		
		29	R		90° 00'		
		30	Y		90° 00'		
		31	B&W	10:13	90° 00'		
		32	R		90° 00'		
		33	Y		90° 00'		
		34	B&W	10:15	90° 00'		
		35	R		90° 00'		

Range 142+00N

F. B. 1889 Pg. 100 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by FHB Notes CEM 10/22/53 Notes Chkd. Checked X-Sec.
Indexed [illegible] Date Date No.

76L298 307 8-53

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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.

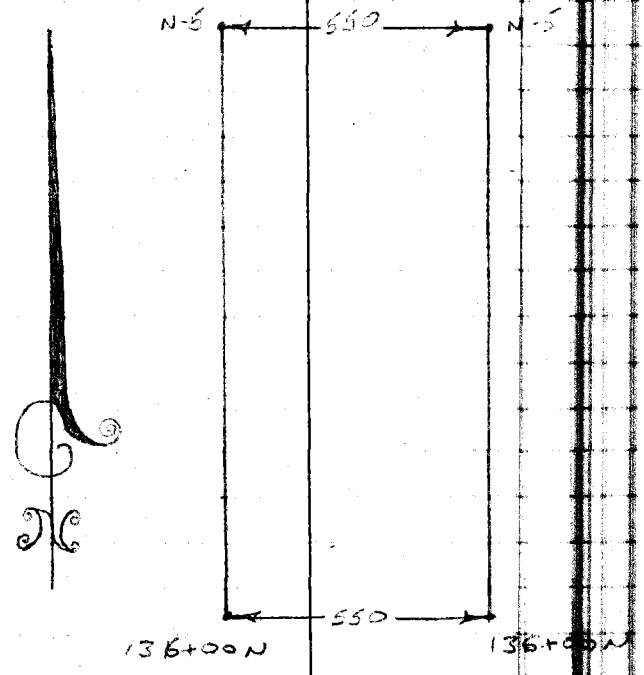
Do not extend notes this side of this line.

2

CUT IN 142+00N

STATION		B. S.	H. I.	F. S.	ELEV.
Inst. At	Sight On	#	Color	Time	Hor. Ang.
136+00N	N-5	1	B+W	9 52	68° 42
[illegible]	[illegible]	2	R		66° 50
		3	Y		64° 33
		4	B+W	9 55	62° 07
		5	R		59° 29
		6	Y		55° 16
		7	B+W	9 57	52° 34
		8	R		49° 48
		9	Y		46° 33
		10	B+W	10 03	41° 22
		11	R		42° 32
		12	Y		40° 16
		13	B+W	10 05	37° 59
		14	R		38° 08
		15	Y		41° 22 *
		16	B+W	10 07	38° 59
		17	R		37° 36
		18	Y		36° 46
		19	B+W	10 08	35° 32
		20	R		34° 25

Remarks



CUT IN 142+00N

Profile Notes Red. Plotted Job No. 8412 Division No.
No. Date Date Survey of
Notes Chkd. Checked
No. Date Date Map No. 4 S Johnson Indexed Date
F. B. 1889 Pg. 101

76L298 307 8-53

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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.

13

CUT IN 142+00 N

STATION		B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.		
136+00N	N-5	21	Y		33 2		
550 OFF	550 OFF	22	B&W	10 09	32 [illegible]		
		23	R		31 8		
		24	Y		29 7		
		25	B&W	10 10	2[illegible] 9		
		26	R		2[illegible] 2		
		27	Y		2[illegible] 1		
		28	B&W	10 [illegible]	2[illegible] [illegible]		
		29	R		[illegible]		
		30	Y		21° 35		
		31	B&W	10 12	20° 32		
		32	R		21° 9	*	
		33	Y		19° 9		
		34	B&W	10 15	18° 5		
		35	R		20° 11	*	

CUT IN 142+00 N

F. B. 1889 PG. 102 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH FRONTIER STUDIES Date Date No.
Survey by E.H.B. Notes J.S. Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date 10/22/53 Date Date No.

76L298 307 8-53

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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.	BOAT	142+00

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B+W	9:52	33.4 / 31.0 / 31.6	31.9	6.1	25.8	2089
2	R		30.0 / 30.9	30.5	6.1	24.4	1951
3	Y		29.0 / 29.4	29.6	6.1	23.5	1810
4	B+W	9:54	28.0 / 29.0	28.5	6.1	22.4	1683
5	R		27.0 / 27.2	27.7	6.0	21.7	1570
6	Y		26.1 / 26.7	26.5	6.0	20.5	1416
7	B+W	9:57	25.5 / 25.9	25.9	6.0	19.9	1333
8	R		24.6 / 25.2	25.0	5.9	19.1	1260
9	Y		24.1 / 23.7	24.5	5.9	18.6	1183
10	B+W	10:04	22.4 / 24.2	22.8	5.8	17.0	1079
11	R		23.0 / 23.0	23.4	5.8	17.6	1100
12	Y		22.0 / 21.4	22.3	5.8	16.5	1060
13	B+W	10:06	20.0 / 21.2	20.5	5.8	14.7	1019
14	R		20.0 / 23.0	20.4	5.8	14.6	1020
15	Y		22.0 / 22.1	22.3	5.8	16.5	1079
16	B+W	10:08	21.0 / 20.9	21.4	5.7	15.7	1035
17	R		20.0 / 20.0	20.3	5.7	14.6	1012
18	Y		19.1 / 19.1	19.4	5.7	13.7	998
19	B+W	10:09	18.3 / 18.8	18.6	5.7	12.9	979
20	R		18.0	18.3	5.7	12.6	961

Boat 142100 N

Profile Notes Red. ____ Plotted ____ Job No. [illegible] Division No. ____ F. B. [illegible] Pg. 103

No. ____ Date ____ Date ____ Survey of [illegible]

No. ____ Date [illegible] Date ____ Map No. ____ Indexed A. C. Johnson Date ____

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

F. B. 1789 Pg. 169 Job No. 2412 Division No. Notes Red. Plotted Profile No.
Survey of BEACH EROSION STUDIES Date Date X-Sec. No.
Survey by Bonchard Notes Ph. Robins Notes Chkd. Lowe Checked
Indexed H. C. Johnson Date Date 12-16-53 Date No.

STATION		B. S.	H. I.	F. S.	ELEV.	Boat	1427.00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		18.3				
			17.0	17.4	5.7	11.7	945
22	Bk W	10:00	18.0				
			16.6	17.1	5.7	11.4	930
23	R		15.9				
			16.9	17.0	5.7	11.3	915
			17.2				
24	Y		15.3	15.9	5.7	10.2	892
25	Bk W	10:10	15.9				
			15.2	15.4	5.7	9.7	870
26	R		14.5				
			13.8	14.1	5.6	8.5	852
27	Y		13.5				
			13.1	13.7	5.6	8.1	832
28	Bk W	10:12	13.5				
			12.2	12.2	5.6	6.6	813
29	R		12.2				
			11.0	11.4	5.6	5.8	804
30			10.8				
			10.1	10.2	5.6	4.6	787
31	Y	10:14	10.2				
			9.5	9.4	5.5	3.9	775
32	R		9.5				
			9.1	10.0	5.5	4.5	790
33			8.7				
			8.1	8.8	5.5	3.3	768
34	Bk W	10:15	7.1				
			7.1	6.7	5.5	1.2	750
35	R		8.1	8.8	5.5	3.3	776
36	Y						
37	Bk W						
38							
39							
40	Bk W						

Boat 1427.00 N

76L298 307 4-50

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
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.	RANGE	144+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
144+00N (Offset Line)	138+00N (Offset Line)	1	B&W	10:31	90°00'		
		2	R		90°00'		
		3	Y		90°00'	Range gun at	144+00N
		4	B&W	10:34	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	10:36	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	10:38	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	10:40	90°00'		
		14	R		90°00'	Sight on cut-in gun at	138+00N
		15	Y		90°00'		
		16	B&W	10:42	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	10:43	90°00'		
		20	R		90°00'		

Offset Line

550'

RANGE 144+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 PG. 105

No. ____ Date ____ Date ____ Survey of [illegible]

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 4-50

PLEASE RETURN TO
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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.	RANGE	144 +00 N	ft

Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks
		21	Y		90°00'	
		22	B&W	10:44	90°00'	
		23	R		90°00'	
144+00 N	138+00 N	24	Y		90°00'	
		25	B&W	10:45	90°00'	
		26	R		90°00'	
		27	Y		90°00'	

Range 144+00 N

F. B. 1889 Pg. 106 Job No. 8412 Division No. Notes Bkd. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by EHB Notes CEM 10/22/53 Notes Chkd. Checked X-Sec.
Indexed J. C. Jackson Date Date Date No.

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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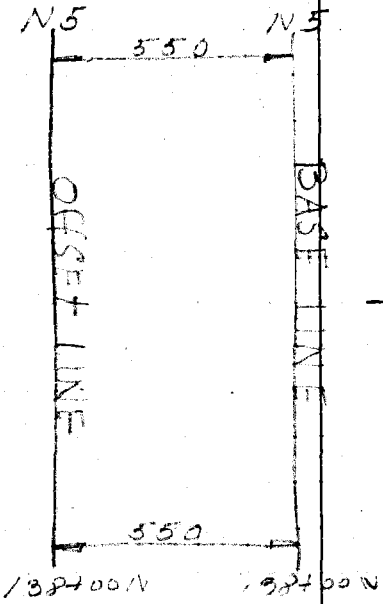
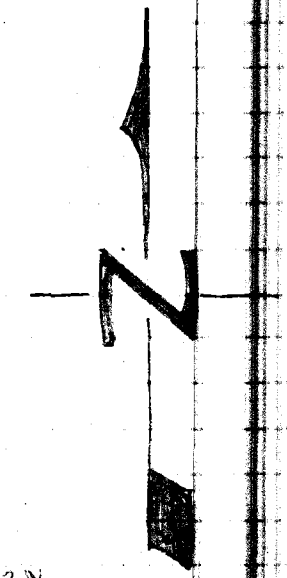
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.	
138+00	N5	1	B+W	10 30	68° 17	
	550 off	2	R		65° 52	
		3	Y		62° 15	
		4	B+W	10 33	58° 58	
		5	R		56° 52	
		6	Y		53° 16	
		7	B+W	10 35	49° 56	
		8	R		46° 59	
		9	Y		43° 55	
		10	B+W	10 37	41° 44	
		11	R		39° 26	
		12	Y		36° 17	
		13	B+W	10 40	36° 44	
		14	R		35° 09	
		15	Y		33° 58	
		16	B+W	10 41	32° 33	
		17	R		31° 37	
		18	Y		30° 30	
		19	B+W	10 42	28° 53	
		20	R		27° 29	





Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 107

No. Date Date Survey of

No. Date Date Map No. Date

CUT IN 144+00 N

76L298 307 8-53

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Do not extend notes this side of this line.

15

CUT IN 144+00 N

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
138+00	N5	21	Y		26° 14		
		22	B+W	10 43	25° 14		
		23	R		24° 02		
		24	Y		23° 12		
		25	B+W	10 44	22° 05		
		26	R		20° 08		
		27	Y		19° 25		

CUT IN 144+00 N

F. B. 1889 Pg. 108 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH FROSTAIN STUDIES Date Date No.
Survey by EHB Notes JS Notes Chkd. Checked X-Sec.
Indexed X C. Johnson Date 10/22/53 Date Date No.

76L298 307 8-53

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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. 4T 144+00 R

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B+W	10:31	31.9 / 30.0	30.6 ✓	5.1 ✓	25.5 ✓	2056
2	R		30.0 / 28.7	29.1 ✓	5.0	24.1 ✓	1889
3	Y		29.0 / 28.0	28.3 ✓	5.0	23.3 ✓	1690
4	B+W	10:33	27.1 / 26.1	26.4 ✓	5.0	21.4 ✓	1546
5	R		26.5 / 25.5	25.8 ✓	5.0	20.8 ✓	1470
6	Y		25.8 / 24.8	25.1 ✓	5.0	20.1 ✓	1354
7	B+W	10:35	24.8 / 24.0	24.3 ✓	4.9	19.4 ✓	1262
8	R		24.0 / 22.8	23.2 ✓	4.9	18.3 ✓	1192
9	Y		23.3 / 21.9	22.4 ✓	4.9	17.5 ✓	1128
10	B+W	10:37	22.3 / 20.5	21.1 ✓	4.9	16.2 ✓	1085
11	R		20.4 / 19.9	20.1 ✓	4.9	15.2 ✓	1044
12	Y		19.9 / 18.5	19.0 ✓	4.8	14.2 ✓	990
13	B+W	10:39	19.3 / 18.4	18.8 ✓	4.8	14.0 ✓	998
14	R		18.9 / 17.9	18.2 ✓	4.8	13.4 ✓	972
15	Y		18.3 / 16.6	17.2 ✓	4.7	12.5 ✓	954
16	B+W	10:41	16.9 / 16.1	16.4 ✓	4.7	11.7 ✓	932
17	R		17.0 / 16.8	16.9 ✓	4.7	12.2 ✓	920
18	Y		16.5 / 15.2	15.6 ✓	4.7	10.9 ✓	904
19	B+W	10:42	16.6 / 14.3	14.9 ✓	4.7 ✓	10.2 ✓	881
20	R		15.8 / 13.7	14.4 ✓	4.7	9.7 ✓	862

Profile Notes Red ____ Plotted ____ Job No. ____ Division No. ____

No. ____ Date 12-16-53 Date ____ Map No. ____ Date ____

F. B. 1 59 Pg. 109

B.O.T. 144+00 R

76L298 307 8-53

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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.	BOAT	144+00 N

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y	1	13.8 12.2 ✓	12.7	4.7	8.0 ✓	846
22	B+W	10:42	12.8 11.8 ✓	12.1	4.7 ✓	7.4 ✓	833
23	R		12.1 10.9 ✓	11.3	4.7	6.6 ✓	818
24	Y		11.7 9.9 ✓	10.5	4.7	5.8 ✓	807
25	B+W	10:44	10.0 9.0 ✓	9.3	4.6 ✓	4.7 ✓	794
26	R		9.0 8.0 ✓	8.3	4.6	3.7 ✓	780
27	Y		8.3 6.2 ✓	6.9	4.6	2.3 ✓	762
28	B+W						
29	R						
30	Y						
31	B+W						
32	R						
33	Y						
34	B+W						
35	R						
36	Y						
37	B+W						
38	R						
39	Y						
40	B+W						

Boat 144+00 N

F.B. 1889 Pg. 110 Job No. 841 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by F.H.B. Notes FR (10/22/53 Notes Chkd. RMW Checked X-Sec.
Indexed C. Johnson Date Date 12-16-53 Date No.

76L298 307 4-60

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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.	RANGE 146+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
146+00N (Offset Line)	140+00N (Offset Line)	1	B&W	11:00	90°00'	
		2	R		90°00'	
		3	Y		90°00'	
		4	B&W	11:02	90°00'	Range gun at 146+00N
		5	R		90°00'	
		6	Y		90°00'	
		7	B&W	11:04	90°00'	
		8	R		90°00'	
		9	Y		90°00'	
		10	B&W	11:06	90°00'	
		11	R		90°00'	
		12	Y		90°00'	
		13	B&W	11:07	90°00'	
		14	R		90°00'	Sight on cut-in gun at 140+00N
		15	Y		90°00'	
		16	B&W	11:08	90°00'	
		17	R		90°00'	
		18	Y		90°00'	
		19	B&W	11:09	90°00'	
		20	R		90	

Offset Line

550'

Range 146+00N

Profile No. ____ Date ____ Notes Red. ____ Date ____ Plotted ____ Date ____ Job No. 8412 Division No. ____ Survey of ____ Map No. ____ Indexed ____ Date ____

F. B. 1889 Pg. 111

76L298 307 4-50

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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.	RANGE	146+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90° 00'		
		22	B & W	11:10	90° 00'		
		23	R		90° 00'		
		24	Y		90° 00'		
		25	B & W	11:12	90° 00'		
		26	R		90° 00'		
		27	Y		90° 00'		
		28	B & W	11:13	90° 00'		
146+00N	140+00N						
Range 146+00N							

F. B. 1889 Pg. 1/2 Job No. 8412 Division No. ____ Notes Red. ____ Plotted ____ Profile ____
Survey of Beach Erosion Study Date ____ Date ____ No. ____
Survey by EHB Notes CEM 10/22/53 Notes Chkd. ____ Checked ____ X-Sec. ____
Indexed [illegible] C. Johnson Date ____ Date ____ Date ____ No. ____

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

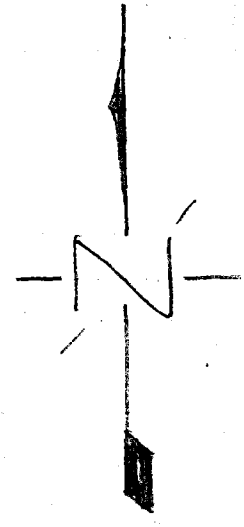
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

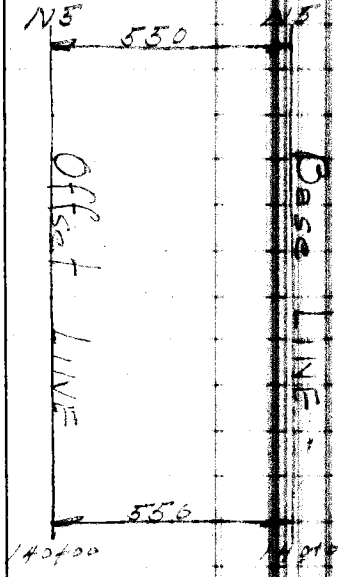
Do not extend notes this side of this line.

16

CUT IN 146+00N

STATION		B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.	
140+00	N5 550 ot	1	B&W	10 59	69° 59	
		2	R		67° 43	
		3	Y		65° 38	
		4	B&W	11 01	63° 29	
		5	R		60° 59	
		6	Y		58° 31	
		7	B&W	11 03	56° 40	
		8	R		54° 38	
		9	Y		52° 05	
		10	B&W	11 05	49° 09	
		11	R		46° 31	
		12	Y		43° 13	
		13	B&W	11 07	40° 25	
		14	R		38° 22	
		15	Y		36° 35	
		16	B&W	11 08	34° 53	
		17	R		34° 02	
		18	Y		32° 40	
		19	B&W	11 09	31° 37	
		20	R		30° 21	





Profile Notes Red. Plotted Job No. 5412 Division No. F. B. 1851 PG. 113

No. Date Date Survey of

No. Date Date Map No. Indexed Date

CUT IN 146+00N

4

76L298 307 8-53

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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.

17

CUT IN 146+00

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor, Ang.	Remarks	
140+00	NS	21	Y		29 4		
		22	B+W	11 09	27 6		
		23	R		26 3		
		24	Y		24 2		
		25	B+W	11 11	25 3 X		
		26	R		24 2		
		27	Y		23 1		
		28	B+W	11 12	21 6		

CUT IN 146+00 N

F.B. 1889 Pg. 114 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No.
Survey by F H B Notes 15 Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date 10/22/53 Date Date No.

76L298 307 8-53

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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.	BOAT	146+00	
# Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
1 B&W	10:59	33.0 31.2	31.8	4.1	27.7	2199	
2 R		30.9 30.3	30.6	4.1	26.5	2015	
3 Y		29.8 28.1	28.7	4.0	24.7	1877	
4 B&W	11:01	28.0 27.0	27.3	4.0	23.3	1752	
5 R		27.5 25.1	25.9	4.0	21.9	1632	
6 Y		26.0 25.1	25.4	4.0	21.4	1530	
7 B&W	11:03	26.0 24.5	25.0	4.0	21.0	1463	
8 R		24.9 23.7	24.1	3.9	20.2	1395	
9 Y		24.9 23.3	24.0	3.9	20.1	1320	
10 B&W	11:05	23.5 22.8	23.0	3.9	19.1	1243	
11 R		23.0 22.2	22.5	3.8	18.7	1182	
12 Y		22.0 21.0	21.3	3.8	17.5	1114	
13 B&W	11:06	20.9 19.8	20.2	3.8	16.4	1061	
14 R		20.6 18.2	19.0	3.8	15.2	1025	
15 Y		19.4 18.0	18.5	3.8	14.7	993	
16 B&W	11:08	18.0 17.0	17.3	3.8	13.5	969	
17 R		17.1 16.2	16.5	3.7	12.8	955	
18 Y		16.8 15.0	15.6	3.7	11.9	935	
19 B&W	11:09	17.0 15.5	16.0	3.7	12.3	920	
20 R		15.6 14.7	15.0	3.7	11.3	901	

Boat 146+00 N

Profile Notes Red. Plotted Job No. 1412 Division No. F. B. 1888 Pg. 145

No. Date Date Date Map No. Date Date

76L298 307 8-53

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	-BOAT-	146+00 -N-

#	Color	Time	Meas. Depth	Bottom Tide	Adj. Depth	Remarks
21	Y		15.1 13.9	14.3 ✓	3.7	10.6 ✓	886
22	B+W	11:09	15.0 12.9	13.6 ✓	3.7 ✓	9.9 ✓	866
23	R		13.0 11.5	12.0 ✓	3.6	8.4 ✓	848
24	Y		12.0 9.2	10.1 ✓	3.6	6.5 ✓	826
25	B+W	11:11	12.0 11.0	11.3 ✓	3.6	7.7 ✓	837
26	R		11.7 10.0	10.6 ✓	3.6	7.0 ✓	820
27	Y		10.4 9.5	9.8 ✓	3.6	6.2 ✓	805
28	B+W	11:12	9.0 7.7	8.1 ✓	3.6 ✓	4.5 ✓	780
29	R					
30	Y					
31	B+W					
32	R					
33	Y					
34	B+W					
35	R					
36	Y					
37	B+W					
38	R					
39	Y					
40	B+W					

Boat 146+00N

F. B. 1889 Pg. 116 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by F.H.B. Notes ER (10/22/53 Notes Chkd RCWC Checked X-Sec.
Indexed C. Johnson Date Date 12-16-53 Date No.

76L298 307 4-50

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE 148+00
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
148+00N (Offset Line)	142+00N (Offset Line)	1	B&W	11:24	90°00'	
		2	R		90°00'	
		3	Y		90°00'	Range gun at 148+00N
		4	B&W	11:26	90°00'	
		5	R		90°00'	
		6	Y		90°00'	
		7	B&W	11:29	90°00'	
		8	R		90°00'	
		9	Y		90°00'	
		10	B&W	11:30	90°00'	
		11	R		90°00'	
		12	Y		90°00'	
		13	B&W	11:31	90°00'	
		14	R		90°00'	
		15	Y		90°00'	Sight on cut-in gun at 142+00N
		16	B&W	11:32	90°00'	
		17	R		90°00'	
		18	Y		90° [illegible]	
		19	B&W	11:34	90° [illegible]	
		20	R		90° [illegible]	

Offset Line

550'

Range 148+00 N

Profile Notes Red. Plotted Job No. 8412 Division No. F. B. 1889 Pg. 117

No. Date Date Survey of

No. Date Date Map No. Indexed Johnson Date

Range 148+00 N

F. B. 1889 Pg. 118 Job No 8412 Division No. Notes Red. Plotted Profile

Survey of Beach Erosion Study Date Date No.

Survey by FHB Notes CEM 10/22/53 Notes Chkd. Checked X-Sec.

Indexed R. F. Johnson Date Date Date No.

Range 148+00 N

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	Remarks
~~Transit Right~~ At On	#	Color	Time	Hzr. Ang.		
	21	Y		90° 00'		
	22	B & W	11:35	90° 00'		
	23	R		90° 00'		
	24	Y		90° 00'		
148+00 N					148+00 N	
142+00 N						

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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76L298 307 4-50

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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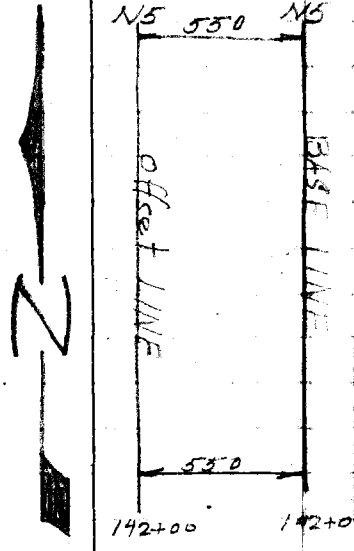
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
142+00	N5 550 off	1	B+W	11 24	68°33	
		2	R		66°29	
		3	Y		64°20	
		4	B+W	11 26	61°27	
		5	R		57°51	
		6	Y		54°30	
		7	B+W	11 30	50°53	
		8	R		47°18	
		9	Y		44°40	
		10	B+W	11 30	41°37	
		11	R		39°41	
		12	Y		38°05	
		13	B+W	11 31	36°43	
		14	R		35°09	
		15	Y		33°27	
		16	B+W	11 31	32°21	
		17	R		29°48	
		18	Y		30°55	
		19	B+W	11 34	29°05	
		20	R		25°39	

19

CUT IN 148+00 N



Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 119

No. Date Date Survey of

No. Notes Chkd. Checked Survey by

No. Date Date Map No. Indexed Date

Cut In 148+00 N

F. B. 1889 Pg. 120 Job No. 8412 Division No. Notes Red. Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by E H B Notes JS Notes Chkd. Checked X-Sec.

Indexed X. C. Johnson Date 10/22/53 Date Date No.

Cut In 148+00N

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Color	Time	Hor. Ang.		Remarks
142+00 NS	21	Y		25 [illegible]		
	22	Bdw	11 35	25 [illegible]		
	23	[illegible]		24 [illegible]		
	24	Y		23 [illegible]		

Cut In 148+00N

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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76L298 307 8-53

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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.	- BOAT -	148 + 00	- N -
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
1.	B+W	11:24	31.6 / 30.0	30.3	3.2	27.1	2079	
2.	R		30.1 / 29.0	29.4	3.2	26.2	1930	
3.	Y		29.0 / 28.0	28.3	3.2	25.1	1800	
4.	B+W	11:26	27.3 / 26.0	26.4	3.2	23.2	1652	
5.	R		27.0 / 25.0	25.7	3.1	22.6	1505	
6.	Y		25.0 / 24.0	24.3	3.1	21.2	1390	
7.	B+W	11:29	24.7 / 23.1	23.6	3.1	20.5	1289	
8.	R		23.1 / 22.0	22.4	3.0	19.4	1200	
9.	Y		22.0 / 21.0	21.3	3.0	18.3	1144	
10.	B+W	11:30	21.5 / 20.0	20.5	3.0	17.5	1084	
11.	R		19.2 / 18.5	18.7	3.0	15.7	1048	
12.	Y		19.0 / 17.0	17.7	3.0	14.7	1020	
13.	B+W	11:31	18.0 / 16.3	16.9	3.0	13.9	997	
14.	R		16.9 / 16.0	16.3	3.0	13.3	972	
15.	Y		16.2 / 15.5	15.7	3.0	12.7	946	
16.	B+W	11:31	15.9 / 15.0	15.3	3.0	12.3	930	
17.	R		15.0 / 13.8	14.2	3.0	11.2	894	
18.	Y		15.2 / 13.5	14.1	3.0	11.1	908	
19.	B+W	11:33	14.0 / 12.4	12.9	2.9	10.0	884	
20.	R		12.5 / 12.0	12.2	2.9	9.3	838	

Boat 148+00 N

Profile Notes Red. ____ Plotted ____ Job No. 9113 Division No. ____ F. B. 1889 Pg. 121

Notes Chkd. [illegible] Checked ____ Survey by [illegible] Notes [illegible]

No. ____ Date 12-16-53 Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

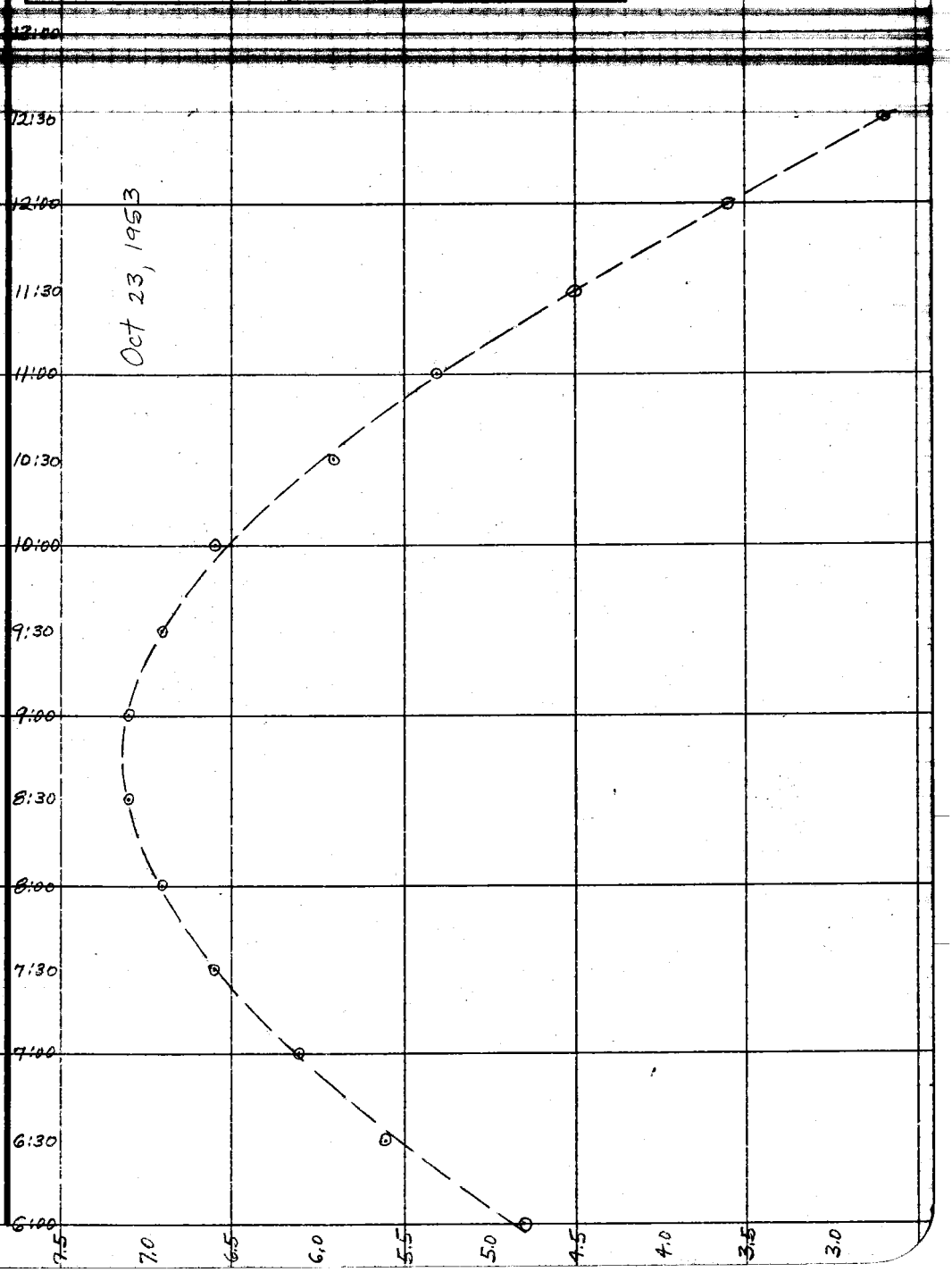
STATION		B. S.	H. I.	F. S.	ELEV.	BOAT		148+00-N-
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21.	Y		12.0 10.5	11.0 ✓	2.9	8.1 ✓	835	
22.	B&W	11:34	12.4 10.0	10.8 ✓	2.9 ✓	7.9 ✓	832	
23.	R		11.0 9.0	9.7 ✓	2.9	6.8 ✓	818	
24.	Y		5.6 7.4	7.8 ✓	2.9	4.9 ✓	807	
25.	B&W							
26.	R							
27.	Y							
28.	B&W							
29.	R							
30.	Y							
31.	B&W							
32.	R							
33.	Y							
34.	B&W							
35.	R							
36.	Y							
37.	B&W							
38.	R							
39.	Y							
40.	B&W							

Boat 148+00N

F. B. 1889 Pg. 122 Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of Beach Erosion Study Date Date X-Sec.
Survey by FHB Notes ER (10/22/53 Notes Chkd. RCW Checked No.
Indexed R. C. Johnson Date Date 12-16-53 Date

F. B._____ PG._____

Notes Chk'd by	Survey of
Map No._____	W. O._____ Tape No._____ Std._____
Office Work_____	Surveyed by_____
Checked_____	Notes_____ Date_____
Date_____	Indexed_____



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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RETURN TO
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726 LOS ANGELES COUNTY
ENGINEERING BLDG.

76F3098 247 4-53

6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
F. B.
PG.
Oct. 26, 1953
13:00
12:30
12:00
11:30
11:00
10:30
10:00
9:30
9:00
8:30
8:00
7:30
7:00
6:30
6:00
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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.

F. B. 1000 PG. 32

Map No.
Office Work
Checked
Date

W. O. Tape No. Sta.
Surveyed by
Notes Date
Indexed R. C. Johnson

TIDE GAGE

STANDARD TIME

Oct 23 1953

HOUR	TIDE
6:00	4.8
6:30	5.6
7:00	6.1
7:30	6.6
8:00	6.9
8:30	7.1
9:00	7.1
9:30	6.9
10:00	6.6
10:30	5.9
11:00	5.3
11:30	4.5
12:00	3.6
12:30	2.7

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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726 LOS ANGELES COUNTY
ENGINEERING BLDG.

76F309S 247 2-51

F. B. 1889 PG. 124

TIDE GAGE

STANDARD TIME — OCT 26 1953

HOUR	TIDE
6:00	3.3
6:30	3.6
7:00	3.9
7:30	4.3
8:00	4.7
8:30	5.2
9:00	5.5
9:30	5.7
10:00	6.0
10:30	6.2
11:00	6.3
11:30	6.2
12:00	6.1
12:30	5.7
1:00	5.3

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725 LOS ANGELES COUNTY
ENGINEERING BLDG.

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76L298 307 4-50

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STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	150+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	1	B&W	6:17	90°00'		
	2	R		90°00'		
	3	Y		90°00'		
	4	B&W	6:19	90°00'		
	5	R		90°00'	Range gun at	150+00N
	6	Y		90°00'		
		B&W	6:21	90°00'		
		R		90°00'		
		Y		90°00'		
		B&W	6:23	90°00'		
		R		90°00'		
		Y		90°00'		550'
		B&W	6:25	90°00'		
		R		90°00'		
		Y		90°00'	Sight on cut-in gun at	144+00N
		B&W	6:27	90°00'		
		R		90°00'		
		Y		90°00'		
		B&W	6:28	90°00'		
	20	R		90°00'		

Range 150+00N

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____

No. ____ Date ____ Date ____ Map No. ____ Date ____

F. B. 1889 Pg. 135

76L298 307 4-50

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STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	150+00 N
~~Inst. Sight~~ At	On	#	Color	Time	Hor. Ang.		Remarks
150+00		21	Y				
		22	B&W	6:30	90° 00'		
		23	R		90° 00'		
		24	Y		90° 00'		
		25	B&W	6:32	90° 00'		
		26	R		90° 00'		
		27	Y		90° 00'		
		28	B&W	6:34	90° 00'		
		29	R		90° 00'		
		30	Y		90° 00'		
		31	B&W	6:35	90° 00'		
		32	R		90° 00'		
		33	Y		90° 00'		
		34	B&W	6:37	90° 00'		
		35	R		90° 00'		
		36	Y		90° 00'		
		37	B&W	6:38	90° 00'		
		38	R		90° 00'		
		39	Y		89° 32'		
		40	B&W	6:40	90° 00'		

Range 150+00 N

F. B. 1889 Pg. 126

Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile

Survey of ____ Notes ____ Date ____ Date ____ No. ____ X-Sec.

Survey by ____ 10/23/53 Notes Chkd. ____ Checked ____

Indexed ____ Date ____ Date ____ Date ____ No. ____

76L298 307 8-53

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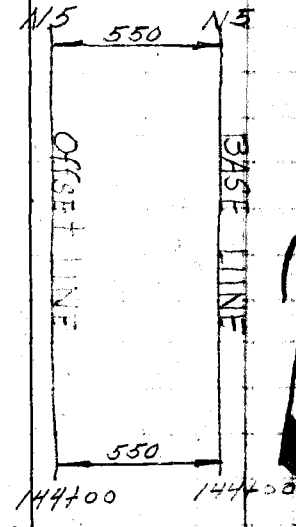
Do not extend notes this side of this line.

CUT IN 150+00 N

STATION		B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.	
144+00	N5 550	1	B+W	6 17	71° 36	
		2	R		70° 38	
		3	Y		69° 25	
		4	B+W	6 19	68° 11	
		5	R		66° 33	
		6	Y		64° 26	
		7	B+W	6 21	62° 33	
		8	R		60° 22	
		9	Y		58° 00	
		10	B+W	6 23	54° 53	
		11	R		52° 34	
		12	Y		51° 14	
		13	B+W	6 25	49° 12	
		14	R		47° 02	
		15	Y		45° 23	
		16	B+W	6 27	44° 02	
		17	R		42° 40	
		18	Y		41° 29	
		19	B+W	6 29	40° 35	
		20	R		39° 18	



Cut In 150+00 N

Profile Notes Red. ____ Plotted ____ Job No. 5412 Division No. ____ F. B. ____ Pg. 127

Notes Chkd. ____ Checked ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

76L298 307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.		
144+00	N 5	21	Y		42 14		
		22	B+W	6 30	42 42	*	
		23	R		43 0	*	
		24	Y		42 7		
		25	B+W	6 31	42 2		
		26	R		41 55		
		27	Y		40 4		
		28	B+W	6 34	38 7		
		29	R		37 7		
		30	Y		36 2		
		31	B+W	6 35	34 8		
		32	R		32 5		
		33	Y		31 2		
		34	B+W	6 37	29 5		
		35	R		28 4		
		36	Y		28 5		
		37	B+W	6 38	28 5		
		38	R		28 4		
		39	Y		27 9		
		40	B+W	6 39	26 0		

Cut in 150+00 N

Cut in 150+00 N

F. B. 1889 Pg. 128 Job No. 8912 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by E.H.B. Notes 43 Notes Chkd. Checked X-Sec.
Indexed E. Johnson Date 10/23/53 Date Date No.

76L298 307 8-53

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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.	BOAT	150+00 N
#	Color [redacted]	Depth	Bottom	Tide	Adj. Depth	Remarks
1.	R+W	6:17	33.4 / 33.0	33.1 ✓	5.2 ✓	27.9 ✓	2353
2.			33.0 / 32.8	32.9 ✓	5.3	27.6 ✓	2259
3.			32.0 / 31.4	31.6 ✓	5.3	26.3 ✓	2150
4.	R+W	6:19	31.6 / 30.5	30.9 ✓	5.3 ✓	25.6 ✓	2041
5			30.8 / 29.0	29.6 ✓	5.3	24.3 ✓	1932
6.			29.8 / 28.9	29.2 ✓	5.3	23.9 ✓	1804
7.	R+W	6:21	29.0 / 27.9	28.3 ✓	5.3 ✓	23.0 ✓	1707
8			28.0 / 27.6	27.3 ✓	5.4	21.9 ✓	1605
9			27.4 / 26.0	26.5 ✓	5.4	21.1 ✓	1510
10	R+W	6:23	27.0 / 25.9	26.3 ✓	5.4 ✓	20.9 ✓	1404
11			25.6 / 25.2	25.3 ✓	5.4	19.9 ✓	1344
12			25.3 / 24.5	24.8 ✓	5.4	19.4 ✓	1299
13	R+W	6:25	25.0 / 23.9	24.3 ✓	5.4 ✓	18.9 ✓	1245
14			24.5 / 23.6	23.9 ✓	5.5	18.4 ✓	1195
15			24.3 / 23.5	23.8 ✓	5.5	18.3 ✓	1158
16	R+W	6:27	24.3 / 22.9	23.4 ✓	5.5 ✓	17.9 ✓	1130
17			22.4 / 21.5	21.8 ✓	5.5	16.3 ✓	1104
18			22.0 / 21.3	21.5 ✓	5.5	16.0 ✓	1080
19	R+W	6:28	22.0 / 20.9	21.3 ✓	5.5 ✓	15.8 ✓	1064
20	R		20.1 / 19.0	19.4 ✓	5.5	13.9 ✓	1041

Profile Notes Red. Plotted Job No. 5417 Division No.

No. Date 12-16-53 Date Map No. Indexed Johnson Date

Notes Chkd Checked Survey by Date

Boat 150+00 N

F. B. 1889 Pg. 129

76L298 307 8-53

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F. B. 1889 Pg. 130 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes Notes Chkd. Checked X-Sec.
Indexed L. C. Johnson Date Date 12-16-53 Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	Beat 150+00 N	
# Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21 Y		22.7 21.8	22.1	5.5	16.6	1095
22 Rew	6:30	22.1 21.8	21.9	5.5	16.4	1104
23 Y		22.9 22.0	22.3	5.6	16.7	1113
24 Y		22.0 21.3	21.5	5.6	15.9	1103
25 Rew	6:32	22.6 21.9	22.1	5.6	16.5	1095
26 Y		22.1 21.9	22.0	5.6	16.4	1089
27 Y		21.8 21.0	21.3	5.6	15.7	1059
28 Rew	6:33	21.1 19.5	20.0	5.6	14.4	1020
29 Y		21.0 18.9	19.6	5.6	14.0	1010
30 Y		20.0 18.7	19.1	5.6	13.5	987
31 Rew	6:35	19.0 18.5	18.7	5.6	13.1	970
32 Y		17.9 17.1	17.4	5.6	11.8	936
33 Y		17.6 16.0	16.5	5.7	10.8	912
34 Rew	6:37	16.6 15.0	15.5	5.7	9.8	886
35 Y		15.1 14.3	14.6	5.7	8.9	876
36 Y		15.6 14.8	14.3	5.7	8.6	875
37 Rew	6:38	15.0 14.0	14.3	5.7	8.6	876
38 Y		15.5 14.0	14.5	5.7	8.8	875
39 Y		14.9 13.3	13.8	5.7	8.1	869
40 Rew	6:40	13.4 13.0	13.1	5.7	7.4	854

Boat 150+00 N

76L298 307 4-50

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	150+00 N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	41	R		90°00'		
	42	Y		90°00'		
	43	B&W	6:42	90°00'		
	44	R		90°00'		
	45	Y		90°00'		
	46	B&W	6:44	90°00'		
	47	R		90°00'		
	48	Y		90°00'		
	49	B&W	6:46	90°00'		
	50	R		90°00'		

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ [redacted] Date ____

Range 150+00 N

F. B. 1889 Pg. 131

76L298 307 4-50

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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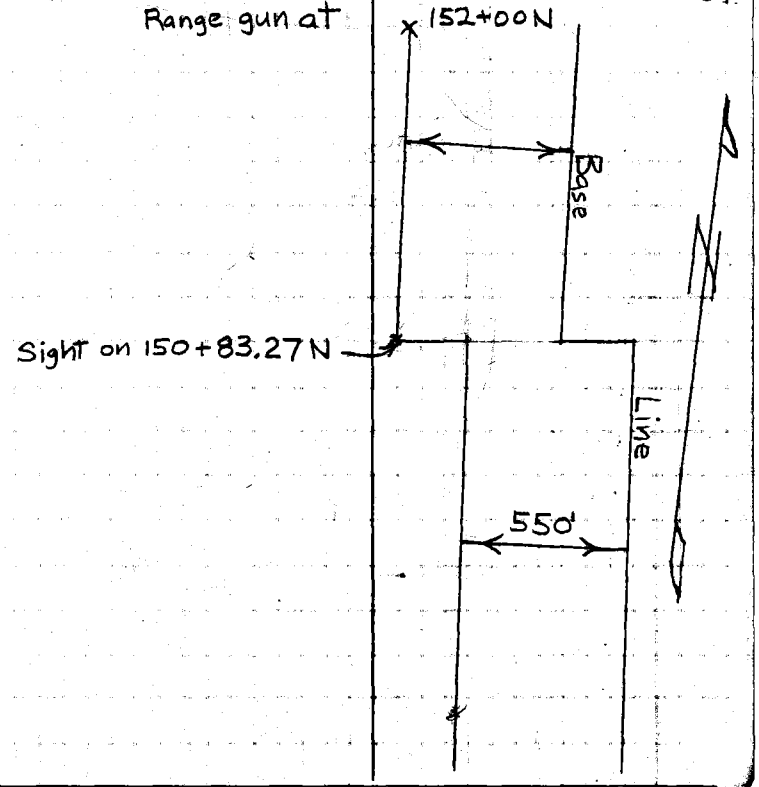
STATION Inst. Sight At	On	B. S. #	H. I. Color	F. S. Time	ELEV. Hor. Ang.	RANGE	152+00N Remarks
		1	B&W	6:57	90° 00'		
		2	R		90° 00'		
		3	Y		90° 00'		
		4	B&W	7:00	90° 00'		
		5	R		90° 00'		
		6	Y		90° 00'		
		7	B&W	7:02	90° 00'		
		8	R		90° 00'		
		9	Y		90° 00'		
152+00 N	150+83.27 N	10	B&W	7:04	90° 00'		
		11	R		90° 00'		
		12	Y		90° 00'		
		13	B&W	7:06	90° 00'		
		14	R		90° 00'		
		15	Y		90° 00'		
		16	B&W	7:07	90° 00'		
		17	R		90° 00'		
		18	Y		90° 00'		
		19	B&W	7:09	90° 00'		
		20	R		90° 00'		

Range gun at 152+00N



Profile No. X-Sec. No.
Plotted Date Checked Date
Notes Red Date Notes Chkd Date
Division No. 10/23/53
Job No.
Survey of
Survey by
Indexed C. Johnson Date
F. B. 1889 Pg. 132

76L298 307 8-53

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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.	
					CUT IN 150+00

Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
144+00	IN5	41	R		25°34	
		42	Y		27°35	
		43	B+W	6 42	26°48	
		44	R		25°17	
		45	Y		23°52	
		46	B+W	6 44	22°45	
		47	R		20°49	
		48	Y		22°32	
		49	B+W	6 46	21°42	
		50	R		18°59	

CUT IN 150+00 N5

Profile Notes Red ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ Pg. 33

X-Sec. Notes Chkd ____ Checked ____ Survey By ____ Note ____

No. ____ Date ____ Date ____ Map No. ____ Indexed Johnson Date ____

76L298 307 8-53

PLEASE RETURN TO
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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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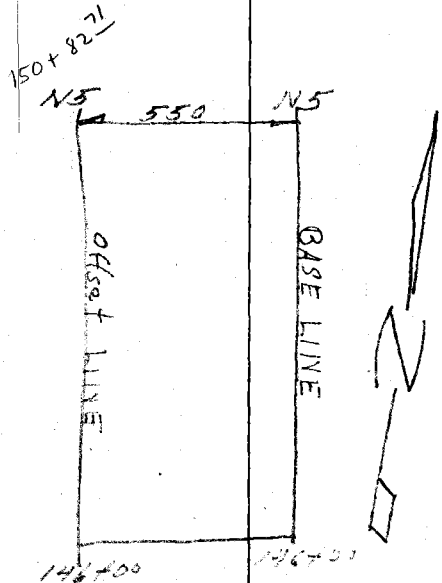
Do not extend notes this side of this line.

4
CUT IN 152+00 N

STATION		B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.	
146+00	N5	1	R+W	6 58	70° 21	
	550	2	R		68° 51	
		3	Y		66° 58	
		4	R+W	7:00	6[illegible] 18	
		5	R		6[illegible] 21	
		6	Y		6[illegible] 7	
		7	R+W	7 02	5[illegible] 25	
		8	R		57° 04	
		9	Y		54° 27	
		10	R+W	7 04	5[illegible] 49	
		11	R		49° 38	
		12	Y		48° 2	
		13	R+W	7 06	4[illegible] 50	
		14	R		44° 57	
		15	Y		43° 23	
		16	R+W	7 08	41° [illegible]7	
		17	R		39° [illegible]7	
		18	Y		37° [illegible]7	
		19	R+W	7 09	35° 37	
		20	R		33° 55	

CUT IN 152+00 N



F. B. 1889 Pg. 134 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No. X-Sec.
Survey by F.H.B. Notes J.S. Notes Chkd. Checked
Indexed R. S. Johnson Date 10/23/53 Date Date No.

76L298 307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	BOAT		150+00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
41	R		13.3 12.0	12.4 ✓	5.7 ✓	6.7 ✓	837	
42	Y		14.1 13.0	13.4 ✓	5.8	7.6 ✓	864	
43	R&W	6:42	13.7 13.0	13.2 ✓	5.8	7.4 ✓	853	
44	R		13.5 11.8	12.4 ✓	5.8	6.6 ✓	834	
45	Y		12.0 10.6	11.1 ✓	5.8	5.3 ✓	816	
46	R&W	6:44	10.9 9.6	10.0 ✓	5.8	4.2 ✓	802	
47	R		9.7 8.1	8.6 ✓	5.8	2.8 ✓	778	
48	Y		10.0 9.1	9.4 ✓	5.8	3.6 ✓	799	
49	R&W	6:46	10.0 8.2	8.8 ✓	5.8	3.0 ✓	789	
50	R		7.9 6.0	6.6 ✓	5.9 ✓	0.7 ✓	756	

Boat 150+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 135

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date 12-16-53 Date Map No. Indexed Johnson Date

76L298 307 8-53

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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.	-BOAT-		52+00-N-	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks		
1	R+W	6:58	30.0 / 33.0	33.3 ✓	6.1 ✓	27.2 ✓	2237	2234	1684
2	R		33.1 / 31.5	32.2 ✓	6.1	26.1 ✓	2099		
3	Y		32.0 / 31.0	31.3 ✓	6.1	25.2 ✓	1954		
4	R+W	6:59	30.9 / 30.0	30.3 ✓	6.1	24.2 ✓	1838		
5	Y		30.2 / 27.7	28.5 ✓	6.1	22.4 ✓	1726		
6	Y		28.0 / 28.0	28.3 ✓	6.1	22.2 ✓	1621		
7	R+W	7:02	28.4 / 27.4	27.6 ✓	6.1	21.5 ✓	1537		
8	Y		28.1 / 26.8	27.2 ✓	6.2	21.0 ✓	1446		
9	Y		27.7 / 27.0	27.2 ✓	6.2	21.0 ✓	1356		
10	R+W	7:04	27.6 / 25.9	26.3 ✓	6.2	20.1 ✓	1277		
11	R		25.8 / 25.0	25.6 ✓	6.2	19.4 ✓	1219		
12	Y		25.5 / 25.0	25.2 ✓	6.2	19.0 ✓	1183		
13	R+W	7:06	25.7 / 24.2	24.7 ✓	6.2	18.5 ✓	1151		599
14	R		25.1 / 23.9	24.3 ✓	6.2	18.1 ✓	1113		
15	Y		24.0 / 23.0	23.3 ✓	6.2	17.1 ✓	1076		
16	R+W	7:07	23.0 / 22.0	22.3 ✓	6.2	16.1 ✓	1041		
17	R		22.4 / 21.0	21.5 ✓	6.2	15.3 ✓	1005		
18	Y		21.6 / 20.0	20.5 ✓	6.3	14.2 ✓	966		
19	R+W	7:09	21.0 / 18.8	19.5 ✓	6.3	13.2 ✓	936		
20	R		19.0 / 18.0	18.3 ✓	6.3 ✓	12.0 ✓	910		360

Boat 153+00 N

F. B. Pg. 136 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes 10/23/53 Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date 12-16-53 Date No.

76L298 307 4-50

[redacted] PLEASE RETURN TO
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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.		152+00
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	21	Y		90°00'		
	22	B&W	7:10	90°00'		
	23	R		90°00'		
	24	Y		90°00'		
	25	B&W	7:12	90°00'		
	26	R		90°00'		
	27	Y		90°00'		
	28	B&W	7:13	90°00'		
	29	R		90°00'		
	30	Y		90°00'		
	31	B&W	7:15	90°00'		

Profile Notes Red. Plotted Job No. Division No. F. B. 1889 Pg. 137

No. Date Date Date Date

Notes Chkd. Checked Survey By Notes Date

No. Date Date Map No. Date

Range 152+00 W

76L298 307 4-50

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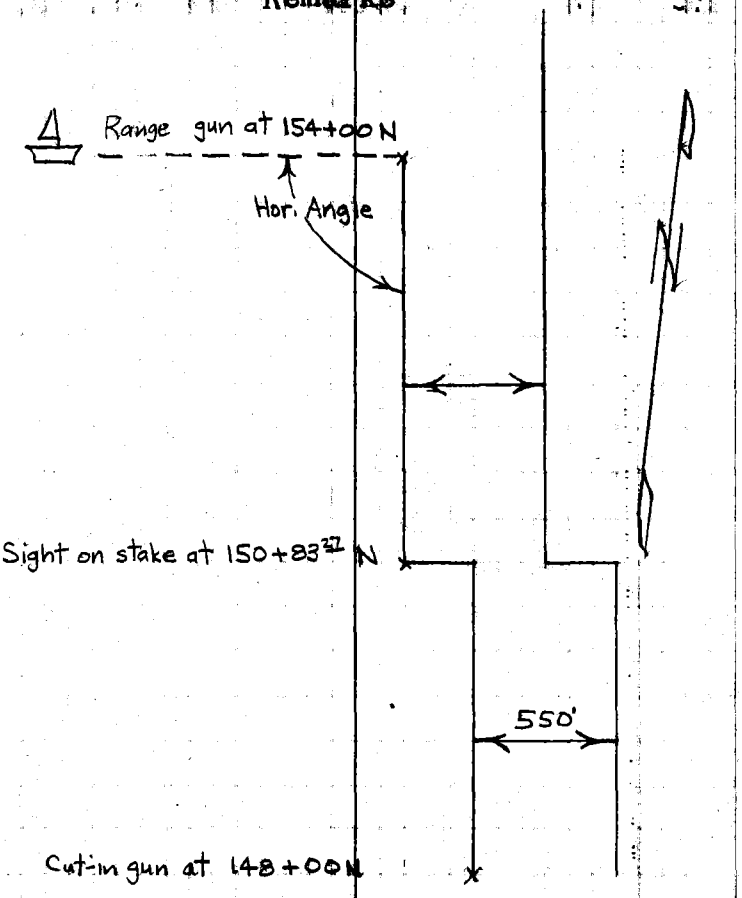
726 LOS ANGELES COUNTY ENGINEERING BLDG.

NOTE: ANY ADDITIONS OR [redacted] 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.	RANGE	154 +00 N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
		1	B&W	7:26	90°00'		
		2	R		90°00'		
		3	Y		90°00'		
		4	B&W	7:28	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	7:30	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	7:32	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
154+00 N	150+83.27 N		B&W	7:33	90°00'		
			R		90°00'		
			Y		90°00'		
			B&W	7:35	90°00'		
			R		90°00'		
			Y		90°00'		
			B&W	7:36	90°00'		
			R		90°00'		

Range 154+00 N



F. B. 1889 Pg. 138
Job No. 8418 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No.
Survey by EHB Notes JRO 10/23/53 Notes Chkd. Checked X-Sec.
Indexed H. J. Johnson Date Date No.

76L298 307 8-53

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Do not extend notes this side of this line.

5

CUT IN 152+00 N

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
[illegible]	N5	21	Y		32° 08		
		22	R & W	7 10	30° 56		
		23	R		28° 50		
		24	Y		27° 16		
		25	R & W	7 11	26° 27		
		26	R		25° 11		
		27	Y		24° 26		
		28	R & W	7 13	23° 47		
		29	R		22° 30		
		30	Y		21° 37		
		31	R & W	7 15	20° 50		

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ Pg. 139

X-Sec. Notes Chkd. ____ Checked ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Cut IN 152+00 N

F.B. 1889 PG. 140 Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by F H B Notes J S Notes Chkd. _____ Checked _____ X-Sec.

Indexed [illegible] Johnson Date 10/23/53 Date _____ Date _____ No. _____

76L298 307 8-53

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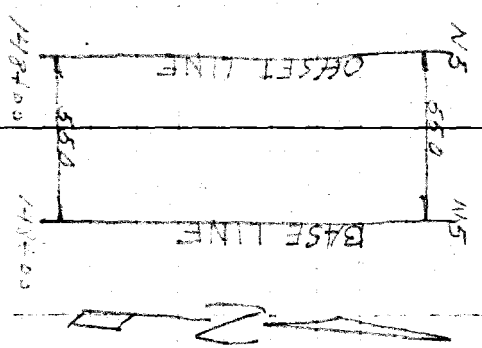
Do not extend notes this side of this line.

STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
148+00 N3 550 off	1	R+W	7 26	68° 49		
	2	R		67° 34		
	3	Y		66° 05		
	4	R+W	7 27	64° 12		
	5	R		62° 2		
	6	Y		59° 41		
	7	R+W	7 29	57° 25		
	8	Y		54° 56		
	9	R		52° 05		
	10	R+W	7 32	48° 55		
	11	R		45° 30		
	12	Y		43° 33		
	13	R+W	7 33	45° 07		
	14	R		44° 2		
	15	Y		42° 12		
	16	R+W	7 35	40° 8		
	17	R		38° 21		
	18	Y		39° 28		
	19	R+W	7 36	38° 7		
	20	R		37° 2		

Cut In 154+00 N



Cut In 154+00 N

6

76L298 307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	BOAT	152+00	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21	Y		18.2 16.9	17.3	6.3	11.0	882	
22	R+W	7:10	17.8 16.0	16.6	6.3	10.3	865	
23	R		16.9 15.0	15.3	6.3	9.0	836	
24	Y		15.1 13.9	14.3	6.3	8.0	814	
25	R+W	7:11	14.1 12.5	13.0	6.3	6.7	803	
26	R		13.5 12.0	12.5	6.3	6.2	786	
27	Y		12.3 11.7	11.9	6.3	5.6	777	
28	R+W	7:12	11.9 10.9	11.2	6.3	4.9	768	
29	R		11.3 10.1	10.5	6.3	4.2	752	
30	Y		10.6 9.0	9.5	6.3	3.2	742	
31	R+W	7:15	9.0 8.1	8.4	6.4	2.0	732	
32	R							
33	Y							
34	R+W							
35	R							
36	Y							
37	R+W							
38	R							
39	Y							
40	R+W							

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 141

Notes Chkd. Checked Survey by Notes Date

No. Date 12-16-53 Date Map No. Indexed Date

Boat 152+00 N

76L298 307 8-53

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STATION	B. S.	H. I.	F. S.	ELEV.	— BOAT —	154+00 —N—
#	Color	Time	Meas. Depth	Bottom Tide	Adj. Depth	Remarks
R+W	1	7:26	33.6 33.6	33.2 ✓ 6.5 ✓	26.7 ✓	2100
R	2		33.0 31.7	32.1 ✓ 6.5	25.6 ✓	2011
Y	3		32.6 31.0	31.3 ✓ 6.5	24.8 ✓	1895
R+W	4	7:27	31.0 29.2	29.8 ✓ 6.5	23.3 ✓	1788
R	5		30.7 29.2	29.5 ✓ 6.6	22.9 ✓	1669
Y	6		28.7 28.0	28.3 ✓ 6.6	21.7 ✓	1551
R+W	7	7:29	28.0 27.0	27.5 ✓ 6.6	20.9 ✓	1463
R	8		27.2 26.5	26.7 ✓ 6.6	20.1 ✓	1374
Y	9		27.2 26.0	26.4 ✓ 6.6	19.8 ✓	1286
R+W	10	7:31	26.5 25.0	25.5 ✓ 6.6	18.9 ✓	1195
R	11		26.0 25.2	25.5 ✓ 6.6	18.9 ✓	1123
Y	12		24.0 23.2	23.5 ✓ 6.6	16.9 ✓	1083
R+W	13	7:33	25.8 24.9	25.2 ✓ 6.6	18.6 ✓	1126
R	14		25.7 24.0	24.6 ✓ 6.6	18.0 ✓	1097
Y	15		23.7 22.2	22.8 ✓ 6.6	16.2 ✓	1056
R+W	16	7:34	23.0 22.3	22.5 ✓ 6.6	15.9 ✓	1019
R	17		21.7 20.0	20.6 ✓ 6.7	13.9 ✓	984
Y	18		22.1 21.6	21.8 ✓ 6.7	15.1 ✓	1004
R+W	19	7:36	21.2 20.5	20.7 ✓ 6.7 ✓	14.0 ✓	980
R	20		20.6 20.0	20.2 ✓ 6.7	13.5 ✓	974

Boat 154+00 N

F. B. 1889 Pg. 142 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes 10/23/53 Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date 12-16-53 Date No.

76L298 307 4-50

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STATION	B. S.	H. I.	F. S.	ELEV.		154+00
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	21	Y		90°00		
	22	B&W	7:38	90°00		
	23	R		90°00		
	24	Y		90°00		
	25	B&W	7:39	90°00		
	26	R		90°00		
	27	Y		90°00		
	28	B&W	7:41	90°00		
	29	R		90°00		
	30	Y		90°00		
	31	B&W	7:42	90°00		
	32	R		90°00		
	33	Y		90°00		
	34	B&W	7:43	90°00		
	35	R		90°00		
	36	Y		90°00		
	37	B&W	7:45	90°00		
	38	R		90°00		
	39	Y		90°00		
	40	B&W	7:46	90°00		

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. 1889 Pg. 143

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Date ____

Boot 154+00 N
Range

76L298 307 4-50

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STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	154+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		41	R		90 00		
		42	Y		90 00		
		43	B&W	7:48	90 00		
		44	R		90		
		45	Y		90		

Range 154+00 N

F. B. 1889 Pg. 144 Job No. 8413 Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date Date No.

76L298 307 8-53

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Do not extend notes this side of this line.

7

STATION		B. S.	H. I.	F. S.	ELEV.		Cut in 154+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
145+00	N5	21	Y		37°42		
		22	R+W	7 37	35° 29		
		23	R		34° 06		
		24	Y		32° 35		
		25	R+W	7 34	31 09		
		26	R		29° 31		
		27	Y		31° 57		
		28	R+W	7 40	31° 45		
		29	R		0° 57		
		30	Y		30° 00		
		31	R+W	7 41	28° 16		
		32	R		26° 47		
		33	Y		24° 57		
		34	R+W	7 43	27° 47		
		35	R		27° 32		
		36	Y		26° 20		
		37	R+W	7 46	24° 52		
		38	R		23° 34		
		39	Y		25° 19		
		40	R+W	7 47	24° 50		

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ PG. 14

No. ____ Date ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey of ____ Map No. ____ Date ____ Indexed ____ Date ____

Cut in 154+00 N

F. B. 1889 Pg. 146 Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Studies Date _____ Date _____ No. _____

Survey by FHB Notes JS Notes Chkd. _____ Checked _____ X-Sec.

Indexed A. C. Johnson Date 10/23/53 Date _____ Date _____ No. _____

76L298 307 8-53

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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.

8

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Color	Time	Hor. Ang.		Remarks
148+00 N5	41	R		33		
	42	Y		2		
	43	R+W	7 47	22		
	44	R				
	45	Y		21 3		

Cut In 154+00 N

Cut In 154+00 N

76L298 307 8-53

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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.	— BOAT —	154+00 — N —
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	✓		19.6 / 19.0	19.2 ✓	6.7	12.5 ✓	974
22	[illegible]	7:37	20.6 / 19.0	19.5 ✓	6.7 ✓	12.8 ✓	937
23	[illegible]		19.1 / 18.6	18.6 ✓	6.7	11.9 ✓	914
24	✓		17.9 / 17.0	17.3 ✓	6.7	10.6 ✓	893
25	[illegible]	7:39	17.0 / 15.3	15.9 ✓	6.7	9.2 ✓	871
26	[illegible]		19.0 / 17.9	18.3 ✓	6.7	11.6 ✓	847
27	[illegible]		18.6 / 17.7	18.0 ✓	6.7	11.3 ✓	883
28	[illegible]	7:40	18.2 / 16.9	17.3 ✓	6.7	10.6 ✓	880
29	P		17.3 / 16.1	16.5 ✓	6.7	9.8 ✓	867
30			15.8 / 15.0	15.3 ✓	6.7	8.6 ✓	855
31	[illegible]	7:41	14.8 / 14.0	14.3 ✓	6.7	7.6 ✓	831
32	[illegible]		13.1 / 12.0	12.4 ✓	6.7	5.7 ✓	811
33			15.1 / 13.7	14.2 ✓	6.7	7.5 ✓	787
34	[illegible]	7:43	15.1 / 14.0	14.4 ✓	6.7	7.7 ✓	824
35			14.7 / 13.0	13.6 ✓	6.7	6.9 ✓	821
36	✓		12.8 / 12.0	12.3 ✓	6.8	5.5 ✓	805
37	[illegible]	7:45	12.1 / 10.6	11.1 ✓	6.8	4.3 ✓	786
38	[illegible]		13.7 / 12.0	12.6 ✓	6.8	5.8 ✓	769
39	[illegible]		12.7 / 12.0	12.2 ✓	6.8	5.4 ✓	791
40	[illegible]	7:46	11.0 / 10.0	10.3 ✓	6.8 ✓	3.5 ✓	785

Boat 154+00 N

Profile Notes Red. ____ Plotted ____ Job No. 2417 Division No. ____ F. B. 1889 Pg. 147

No. ____ Date 12-16-53 Date ____ Map No. ____ Indexed ____ Date ____

Notes Chkd. ____ Checked ____ Survey By ____ Notes ____ Date ____

Date ____ Date ____ Date ____

76L298 307 8-53

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STATION	B. S.	H. I.	F. S.	ELEV.	— BOAT —		154+00 N
#	Color	Time	Meas. Depth	Bottom Tide	Adj. Depth	Remarks	
41	R		9.7 8.5	8.9 ✓	6.8	2.1 ✓	757
42	Y		11.3 10.0	10.4 ✓	6.8	3.6 ✓	741
43	R+W	7:47	11.0 10.0	10.3 ✓	6.8	3.5 ✓	767
44	R		9.5 8.9	9.1 ✓	6.8	2.3 ✓	758
45	Y		8.7 7.7	8.0 ✓	6.8	1.2 ✓	730

196
220
210
194
550
744

Cut Boat 154+00 N

F. B. 1889 Pg. 148 Job No. Division No. Notes Red. Plotted No. Profile
Survey of Date Date X-Sec.
Survey by Notes Notes Chkd. RLW Checked
Indexed E. C. Johnson Date Date 12-16-53 Date No.

76L298 307 4-50

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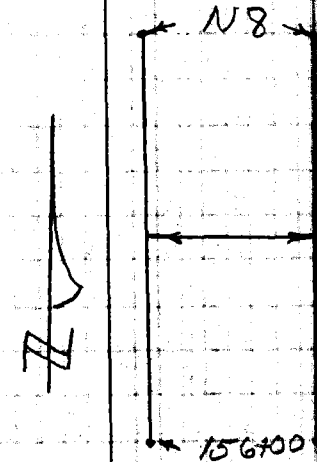
STATION		B. S.	H. I.	F. S.	ELEV.	RANGE 156+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
156+00	N8	1	B&W	8:01	90°00	
		2	R		90°00	
		3	Y		90°00	
		4	B&W	8:04	90°00	
		5	R		90°00	
		6	Y		90°00	
		7	B&W	8:05	90°00	
		8	R		90°00	
		9	Y		90°00	
		10	B&W	8:07	90°00	
		11	R		90°00	
		12	Y		90°00	
		13	B&W	8:09	90°00	
		14	R		90°00	
		15	Y		90°00	
		16	B&W	8:10	90°00	
		17	R		90°00	
		18	Y		90°00	
		19	B&W	8:11	90°00	
		20	R		90°00	



Range 156+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 Pg. 740

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	156+00-N
Inst. Sight At	On	#	Color	Time	Hor. Ang.	Remarks	
156+00	N8	21	Y		90°00		
		22	B&W	8:12	90°00		
		23	R		90°00		
		24	Y		90°00		
		25	B&W	8:14	90°00		
		26	R		90°00		
		27	Y		90°00		
		28	B&W	8:16	90°00		
		29	R		90°00		
		30	Y		90°00		
		31	B&W	8:25	90°00		
		32	R		90°00		
		33	Y		90°00		
		34	B&W	8:26	90°00		
		35	R		90°00		
		36	Y		90°00		
		37	B&W	8:28	90°00		
		38	R		90°00		
		39	Y		90°00		

Range 156+00 N

F. S. 1889 Pg. 150 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No. X-Sec.
Survey by FHB Notes JRO Notes Chkd. Checked
Indexed A. C. Johnson Date Date Date No.

76L298 307 8-53

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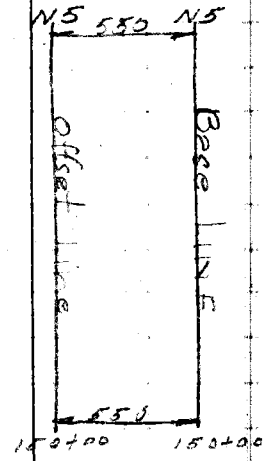
9

CUT IN 156+00 N

STATION Inst. At	Sight On	B. S. #	H. I. Color	F. S. Time	ELEV. Hor. Ang.	Remarks
150+00	N5 550 off	1	R & W	8 01	74° 14	
		2	R		72° 50	
		3	Y		70° 39	
		4	R & W	8 03	68° 58	
		5	R		66° 48	
		6	Y		64° 22	
		7	R & W	8 05	61° 35	
		8	R		59° 20	
		9	Y		56° 33	
		10	R & W	8 07	54° 51	
		11	R		52° 40	
		12	Y		50° 35	
		13	R & W	8 08	48° 21	
		14	R		46° 08	
		15	Y		44° 11	
		16	R & W	8 09	42° 16	
		17	R		40° 20	
		18	Y		38° 52	
		19	R & W	8 10	36° 25	
		20	R		34° 34	



CUT IN 156+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 157

No. Date Date Map No. Date

Notes Chkd. Checked Survey By Notes Date

X-Sec. Date Date

76L298 307 8-53

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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	#	Color	Time	Hor. Ang.	Remarks	
148+00	N5	21	Y		32° 40		
		22	R+W	8 11	31° 07		
		23	R		33° 23		
		24	Y		35° 5		
		25	R+W	8 14	35° 25		
		26	R		34° 4		
		27	Y		34° 13		
		28	R+W	8 15	33° 47		
		29	R		32° 0		
		30	Y		30° 0		
		31	R+W	8 24	31° 53		
		32	R		30° 2		
		33	Y		28° 42		
		34	R+W	8 26	27° 50		
		35	R		26° 36		
		36	Y		25° 39		
		37	R+W	8 28	24° 25		
		38	R		24° 12		
		39	Y		23° 36		

CUT IN 156+00

F. B. 1889 Pg. 152 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No. X-Sec.
Survey by E.H.B. Notes V.S. Notes Chkd. Checked
Indexed K. C. Johnson Date 10/23/53 Date Date No.

76L298 307 8-53

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STATION	B. S.	H. I.	F. S.	ELEV.	— BOAT —	156+00 —	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1.	R+W	8:01	33.5 / 32.8 / 33.0	33.0 ✓	6.9	26.1 ✓	2218
2.	R		31.4 / 31.7 / 31.0	32.3 ✓	6.9	25.4 ✓	2095
3.	V		31.0 / 30.0	31.2 ✓	6.9	24.3 ✓	1937
4.	R+W	8:03	29.9 / 29.0	30.3 ✓	6.9	23.4 ✓	1836
5.	R		29.0 / 28.0	29.3 ✓	6.9	22.4 ✓	1716
6.	V		28.2 / 27.7	28.3 ✓	7.0	21.3 ✓	1647
7.	R+W	8:05	27.9 / 27.1	27.9 ✓	7.0	20.9 ✓	1492
8.	R		27.3 / 26.4	27.4 ✓	7.0	20.4 ✓	1414
9.	V		27.1 / 26.0	26.7 ✓	7.0	19.7 ✓	1331
10.	R+W	8:07	26.4 / 25.0	26.4 ✓	7.0	19.4 ✓	1284
11.	R		26.3 / 25.0	25.5 ✓	7.0	18.5 ✓	1228
12.	V		25.9 / 24.0	25.4 ✓	7.0	18.4 ✓	1181
13.	R+W	8:08	23.3 / 23.0	24.6 ✓	7.0	17.6 ✓	1134
14.	R		22.3 / 22.0	23.1 ✓	7.0	16.1 ✓	1090
15.	V		22.1 / 21.0	22.1 ✓	7.0	15.1 ✓	1055
16.	R+W	8:09	21.3 / 20.0	21.4 ✓	7.0	14.4 ✓	1021
17.	R		20.9 / 19.5	20.4 ✓	7.0	13.4 ✓	988
18.	V		20.0 / 18.8	20.0 ✓	7.0	13.0 ✓	965
19.	R+W	8:10	18.9 / 18.0	19.2 ✓	7.0	12.2 ✓	928
20.	R			18.3 ✓	7.0	11.3 ✓	902

City figures

County figures by scaling

Boat 156+00 N

Profile Notes Red. ____ Plotted ____ Job No. 9113 Division No. ____ F. B. 1119 Pg. 452

No. ____ Date 12-16-53 Date ____ Map No. ____ Date ____

76L298 307 8-53

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STATION		B. S.	H. I.	F. S.	ELEV.	-BOAT-	156+00 -N-	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21	Y		18.7 / 18.0	18.2 ✓	7.0	11.2 ✓	875	848
22	R+W	8:12	16.2 / 14.9	15.3 ✓	7.0 ✓	8.3 ✓	854	831
23	R		18.1 / 16.2	16.8 ✓	7.0	9.8 ✓	884	861
24	Y		19.1 / 18.2	18.5 ✓	7.0	11.5 ✓	911	888
25	R+W	8:14	19.0 / 18.2	18.5 ✓	7.0	11.5 ✓	914	889
26	R		19.0 / 18.0	18.3 ✓	7.0	11.3 ✓	904	880
27	Y		18.8 / 17.3	17.8 ✓	7.0	10.8 ✓	896	872
28	R+W	8:15	18.7 / 17.2	17.7 ✓	7.0	10.7 ✓	890	868
29	R		16.6 / 15.9	16.1 ✓	7.1	9.0 ✓	866	843
30	Y		15.1 / 14.0	14.4 ✓	7.1	7.3 ✓	846	826
31	R+W	8:25	16.7 / 15.0	15.6 ✓	7.1	8.5 ✓	864	842
32	R		15.0 / 14.0	14.3 ✓	7.1	7.2 ✓	840	820
33	Y		14.0 / 13.5	13.7 ✓	7.1	6.6 ✓	825	806
34	R+W	8:26	13.5 / 12.2	12.6 ✓	7.1	5.5 ✓	812	795
35	R		12.8 / 11.7	12.1 ✓	7.1	5.0 ✓	796	781
36	Y		12.0 / 10.9	11.3 ✓	7.1	4.2 ✓	785	770
37	R+W	8:27	11.0 / 9.9	10.3 ✓	7.1 ✓	3.2 ✓	770	756
38	R		11.0 / 9.0	9.7 ✓	7.1	2.6 ✓	768	752
39	Y		8.7 / 7.5	7.9 ✓	7.1	0.8 ✓	749	734
40	R+W							

Boat 156+00 N

City figures

County figures by scaling

F. B. 1889 PG. 954

Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile

Survey of ____ Date ____ Date ____ No. ____

Survey by ____ Notes ____ Notes Chkd. RCW Checked ____ X-Sec.

Indexed R. C. Johnson Date ____ Date 12-17-53 Date ____ No. ____

76L298 307 4-50

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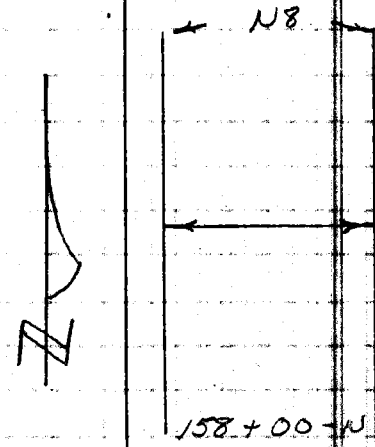
STATION		B. S.	H. I.	F. S.	ELEV.	RANGE 158+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
158+00	N8	1	B&W	8:38	90°00	
		2	R		90°00	
		3	Y		90°00	
		4	B&W	8:41	90°00	
		5	R		90°00	
		6	Y		90°00	
		7	B&W	8:42	90°00	
		8	R		90°00	
		9	Y		90°00	
		10	B&W	8:44	90°00	
		11	R		90°00	
		12	Y		90°00	
		13	B&W	8:46	90°00	
		14	R		90°00	
		15	Y		90°00	
		16	B&W	8:48	90°00	
		17	R		90°00	
		18	Y		90°00	
		19	B&W	8:49	90°00	
		20	R		90°00	



Range 158+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8412 Division No. ____ F. B. 1889 Pg. 155

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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STATION Inst. Sight At	On	B. S. #	H. I. Color	F. S. Time	ELEV. Hor. Ang.	RANGE	158+00 Remarks
158+00	NE	21	Y		90°00		
		22	B&W	8:50	90°00		
		23	R		90°00		
		24	Y		90°00		
		25	B&W	8:52	90°00		
		26	R		90°00		
		27	Y		90°00		
		28	B&W	8:54	90°00		
		29	R		90°00		
		30	Y		90°00		
		31	B&W	8:56	90°00		

Range 158+00 N

F. B. 1889 Pg. 156 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDY Date Date No.
Survey by FHB Notes JRO Notes Chkd. Checked X-Sec.
Indexed [illegible] Date Date Date No.

76L298 307 8-53

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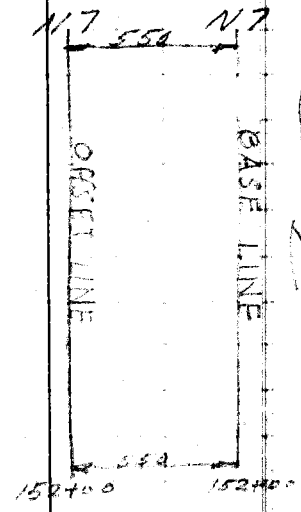
11.

CUT IN 158+00 N

STATION		B. S.	H. I.	F. S.	ELEV.	
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
152+00	N7 550	1	R+W	8 38	77° 27	
		2	R		68° 41	
		3	Y		66° 27	
		4	R+W	8 40	64° 20	
		5	R		62° 01	
		6	Y		59° 26	
		7	R+W	8 42	56° 20	
		8	R		52° 50	
		9	Y		49° 03	
		10	R+W	8 44	45° 15	
		11	R		47° 03	
		12	Y		43° 34	
		13	R+W	8 46	40° 50	
		14	R		38° 26	
		15	Y		36° 12	
		16	R+W	8 47	33° 59	
		17	R		33° 13	
		18	Y		30° 35	
		19	R+W	8 49	29° 07	
		20	R		30° 39	



Cut in 158+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 167

No. Date Notes Chkd. Checked Survey By Date

No. Date Date Map No. Date

76L298 307 8-53

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12

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	CUT IN 158+00 N
152+00	N7	21	Y		2[illegible] [illegible]7		
		22	R+W	8 50	26° [illegible]1		
		23	R		25° [illegible]0		
		24	Y		23° [illegible]2		
		25	R+W	8 51	21° [illegible]7		
		26	R		21° 28		
		27	Y		24° 52		
		28	R+W	8 54	23° [illegible]2		
		29	R		23° [illegible]6		
		30	Y		21° 49		
		31	R+W	8 55	20° [illegible]9		

CUT IN 158+00 N

F.B. 1889 PG. 158 Job No. 8412 Division No. Notes Red. Plotted Date No. Profile
Survey of Bazch Erosion Studies Date Date X-Sec.
Survey by F.H.B. Notes V.S. Notes Chkd. Checked
Indexed R. C. Johnson Date 10/23/53 Date Date No.

76L298 307 8-53

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STATION		B. S.	H. I.	F. S.	ELEV.	BOAT		158+00	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks		
1.	R&W	8:35	32.1 30.9	31.3 ✓	7.1 ✓	24.2 ✓	1979	186	
2.	R		30.5 29.9	30.1 ✓	7.1	23.0 ✓	1810	1710	10
3.	Y		29.7 28.9	29.2 ✓	7.1	22.1 ✓	1698	1611	10
4.	R&W	8:40	28.9 28.0	28.3 ✓	7.1	21.2 ✓	1606	1520	9
5.	R		29.0 27.6	28.1 ✓	7.1	21.0 ✓	1516	1441	8
6.	Y		28.0 26.9	27.3 ✓	7.1	20.2 ✓	1439	1361	8
7.	R&W	8:42	27.5 27.0	27.2 ✓	7.1	20.1 ✓	1338	1280	7
8.	R		27.0 26.0	26.3 ✓	7.1	19.2 ✓	1250	1198	6
9.	Y		26.0 25.0	25.3 ✓	7.1	18.2 ✓	1167	1120	5
10.	[illegible]	8.43	24.0 22.3	23.2 ✓	7.1	16.1 ✓	1094	1053	50
11.	R		25.1 24.2	24.5 ✓	7.1	17.4 ✓	1127	1083	5
12.	Y		22.9 22.0	22.3 ✓	7.1	15.2 ✓	1063	1023	4
13.	[illegible]	8.45	22.3 20.9	21.4 ✓	7.1	14.3 ✓	1018	980	4
14.	R		20.9 20.0	20.3 ✓	7.1	~~14.2~~ 13.2	980	948	3
15.	Y		20.8 19.1	19.7 ✓	7.1	12.6 ✓	947	919	3
16.	R&W	8:47	19.4 18.0	18.5 ✓	7.1	11.4 ✓	916	890	3
17.	R		18.6 18.0	18.2 ✓	7.1	11.1 ✓	905	880	3
18.	Y		18.0 16.6	17.1 ✓	7.1	10.0 ✓	871	840	2
19.	R&W	8:49	15.6 15.0	15.2 ✓	7.1 ✓	8.1 ✓	852	830	2
20.	R		17.0 15.9	16.3 ✓	7.1	9.2 ✓	871	84[illegible]	2

City figures

County figures by scaling

Boat 158+00

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 159

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date 12-17-53 Date Map No. Indexed Date

S. Johnson

76L298 307 8-53

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	— BOAT —	158+00	— N —

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks		
21	Y		15.4 14.1	14.5 ✓	7.1	7.4 ✓	843	822	272
22	R+W	8:50	14.4 13.6	13.5 ✓	7.1 ✓	6.4 ✓	820	800	250
23	R		13.8 12.0	12.6 ✓	7.1	5.5 ✓	804	783	233
24	Y		12.1 11.0	11.4 ✓	7.1	4.3 ✓	786	768	218
25	R+W	8:52	10.0 9.0	9.3 ✓	7.1	2.2 ✓	764	749	199
26	R		10.1 9.0	9.4 ✓	7.1	2.3 ✓	760	745	195
27	Y		13.3 12.5	12.8 ✓	7.1	5.7 ✓	800	780	230
28	R+W	8:54	12.0 11.0	11.3 ✓	7.1	4.2 ✓	779	760	210
29	R		11.8 10.1	10.7 ✓	7.1	3.6 ✓	779	761	211
30	Y		10.6 8.5	9.2 ✓	7.1	2.1 ✓	764	749	199
31	R+W	8:56	9.0 8.0	8.3 ✓	7.1 ✓	1.2 ✓	746	731	181
32	R								
33	Y								
34	R+W								
35	R								
36	Y								
37	R+W								
38	R								
39	Y								
40	R+W								

City figures

County figures by scaling

Boat 158+00 N

F. B. 1889 PG. 160 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes Notes Chkd. Checked X-Sec.
Indexed R. C. Johnson Date Date 12-17-53 Date No.

76L298 307 4-50

PLEASE RETURN TO
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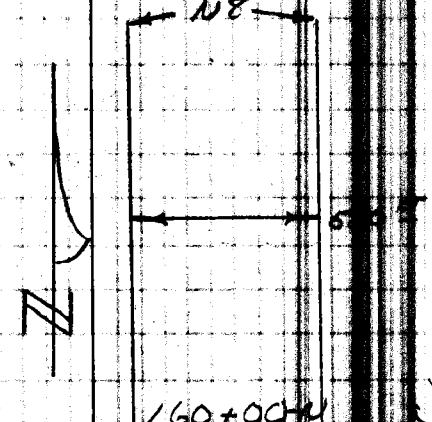
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	RANGE	160+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
160+00	N8	1	B&W	9:19	90°00		
		2	R		90°00		
		3	Y		90°00		
		4	B&W	9:22	90°00		
		5	R		90°00		
		6	Y		90°00		
		7	B&W	9:24	90°00		
		8	R		90°00		
		9	Y		90°00		
		10	B&W	9:25	90°00		
		11	R		90°00		
		12	Y		90°00		
		13	B&W	9:27	90°00		
		14	R		90°00		
		15	Y		90°00		
		16	B&W	9:29	90°00		
		17	R		90°00		
		18	Y		90°00		
		19	B&W	9:31	90°00		
		20	R		90°00		



Range 160+00 N

Profile No. Date Notes Red. Date Plotted Date Job No. 8412 Division No. Survey of

No. Date Date Map No. Indexed Johnson Date

F. B. 1889 Pg. 161

76L298 307 4-50

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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.	RANGE	160+00-N
~~Inst. Sight~~ At	On	#	Color	Time	Hor. Ang.	Remarks	
160+00	N-8	21	Y		90°00		
		22	B&W	9:32	90°00		
		23	R		90°00		
		24	Y		90°00		
		25	B&W	9:34	90°00		
		26	R		90°00		
		27	Y		90°00		
		28	B&W	9:35	90°00		
		29	R		90°00		
		30	Y		90°00		
		31	B&W	9:38	90°00		
		32	R		90°00		
		33	Y		90°00		
		34	B&W	9:40	90°00		
		35	R		90°00		
		36	Y		90°00		
		37	B&W	9:42	90°00		
		38	R		90°00		
		39	Y		90°00		
		40	B&W	9:43	90°00		

Range 160+00N

F. B. 1889 Pg. 162
Job No. 8412 Division No.
Survey of BEACH EROSION STUDY
Survey by FNB Notes JRO
Indexed R. C. Johnson Date
Notes Red. Plotted
Date Date
Notes Chkd. Checked
Date Date
Profile No.
X-Sec. No.

76L298 307 8-53

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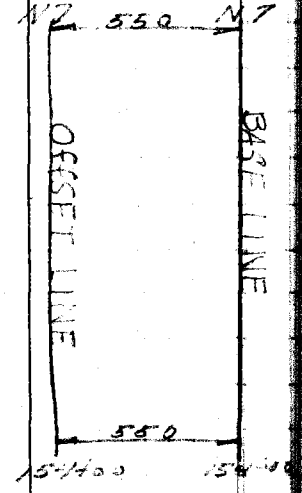
13

CUT IN 160+00 N

STATION		B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.		
154+00	N7	1	R+W	9 19	70° 38		
		2	R		68° 14		
		3	Y		66° 23		
		4	R+W	9 21	64° 22		
		5	R		62° 13		
		6			59° 42		
		7	R+W	9 23	57° 09		
		8	R		54° 49		
		9	Y		52° 33		
		10	R+W	9 25	50° 28		
		11	R		47° 24		
		12	Y		49° 11		
		13	R+W	9 26	47° 02		
		14	R		44° 12		
		15	Y		41° 58		
		16	R+W	9 29	43° 26		
		17	R		40° 32		
		18	Y		41° 27		
		19	R+W	9 31	39° 26		
		20	R		38° 01		



CUT IN 160+00 N

Profile Notes Red. ____ Plotted ____ Job No. 8402 Division No. ____ F. B. 1889 Pg. 163

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Notes Chkd. ____ Checked ____ Date ____

Johnson

76L298 3Q7 8-53

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Do not extend notes this side of this line.

14

STATION		B. S.	H. I.	F. S.	ELEV.		Cut In 160+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
154+00	N7	21	Y		36° [illegible]		
		22	R+W	9 32	33° [illegible]6		
		23	R		30° [illegible]8		
		24	Y		34° [illegible]1		
		25	R+W	9 34	33° [illegible]1		
		26	R		31° [illegible]6		
		27	Y		30° 24		
		28	R+W	9 35	29° [illegible]0		
		29	R		27° [illegible]8		
		30	Y		26° [illegible]3		
		31	R+W	9 38	27° [illegible]6		
		32	R		26° [illegible]9		
		33	Y		25° [illegible]3		
		34	R+W	9 40	26° [illegible]		
		35	R		24° 53		
		36	Y		26° [illegible]5		
		37	R+W	9 41	24° 25		
		38	R		22° 01		
		39	Y		23° 12		
		40	R+W	9 43	23° 57		

Cut In 160+00 N

F.B. 1829 Pg. 164 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by EHB Notes Notes Chkd. Checked X-Sec.
Indexed R. F. Johnson Date 10/23/53 Date Date No.

76L298 307 8-53

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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.	— BOAT —		160+00 N	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks		
1	R+W	9:18	31.5 30.1	30.6	7.0	23.6	1915	1803	1253+56
2	R		30.3 29.1	29.5	7.0	22.5	1775	1673	1123
3	Y		29.5 28.5	28.8	7.0	21.8	1683	1592	1042
4	R+W	9:21	28.5 27.9	28.1	7.0	21.1	1594	1510	96[illegible]
5	R		28.5 26.9	27.4	7.0	20.4	1511	1432	88[illegible]
6	Y		27.9 27.0	27.3	7.0	20.3	1424	1355	80[illegible]
7	R+W	9:23	27.6 26.7	27.0	7.0	20.0	1347	1283	73[illegible]
8			27.5 26.0	26.5	7.0	19.5	1285	1210	66[illegible]
9			26.8 25.2	25.7	7.0	18.7	1228	1178	62[illegible]
10	R+W	9:24	26.0 25.0	25.3	7.0	18.3	1183	1131	5[illegible]
11			24.8 23.2	23.7	6.9	16.8	1118	1072	5[illegible]
12			25.9 24.0	24.6	6.9	17.7	1153	1107	5[illegible]
13		9:26	24.5 23.5	23.8	6.9	16.9	1111	1068	5[illegible]
14			23.2 22.0	22.4	6.9	15.5	1058	1020	4[illegible]
15			21.6 20.5	20.9	6.9	14.0	1021	983	4[illegible]
16		9:28	22.2 21.3	21.6	6.9	14.7	1046	1008	4[illegible]
17			20.2 19.8	19.9	6.9	13.0	997	962	4[illegible]
18			21.6 20.6	20.9	6.9	14.0	1013	975	4[illegible]
19	R+W	9:30	20.5 19.2	19.6	6.9	12.7	980	946	3[illegible]
20	R		20.6 19.6	19.9	6.9	13.0	959	927	3[illegible]

City figures

County figures by scaling

Boat 160+00 N

Profile Notes Red. ____ Plotted ____ Job No. [illegible] Division No. ____ F. B. [illegible] Pg. 165

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date 12-17-53 Date ____ Map No. ____ Indexed S. Johnson Date ____

76L298 307 8-53

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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.	— Boat —	160+00 — N —		
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21			19.4 18.8	19.0	6.9	12.1	933	905 355 +550
22		9:32	18.7 17.1 16.8	17.6	6.9	10.7	893	867 317
23			14.9	15.5	6.9	8.6	858	833 283
24			18.0 17.7	17.8	6.9	10.9	903	876 326
25		9:33	18.0 17.0	17.3	6.9	10.4	889	863 313
26			16.9 16.0	16.3	6.9	9.4	867	841 291
27			15.2 14.3	14.6	6.9	7.7	853	830 280
28		9:35	16.0 14.7	15.1	6.8	8.3	843	821 271
29			14.0 13.5	13.7	6.8	6.9	819	800 250
30			14.0 12.7	13.1	6.8	6.3	805	781 231
31		9:36	14.6 13.0	13.5	6.8	6.7	815	792 242
32			13.7 12.9	13.2	6.8	6.4	806	783 233
33			13.3 11.0	11.8	6.8	5.0	789	769 219
34		9:39	13.6 12.7	13.0	6.8	6.2	808	786 236
35			12.3 11.0	11.4	6.8	4.6	785	765 215
36			13.0 12.2	12.5	6.8	5.7	801	780 230
37		9:41	11.9 10.7	11.1	6.8	4.3	779	760 210
38			9.8 8.0	8.6	6.8	1.8	751	735 185
39			10.6 9.7	10.0	6.8	3.2	765	748 198
40		9:42	11.5 9.9	10.4	6.8	3.6	773	754 204

Boat 160+00 2

City figures

County figures by scaling

F. B. 1889 Pg. 166 Job No. Division No. Notes Red. Plotted Profile No.
Survey of Date Date X-Sec.
Survey by Notes Chkd Checked
Indexed R. C. Johnson Date Date 12-17-53 No.

Profile No. _____ Notes Red. _____ Date _____ Plotted _____ Date _____ Job No. 8412 Division No. _____ F. B. 1889 PG. 167

Survey of _____

No. _____ Date _____ Date _____ Map No. _____ Indexed Johnson Date _____

Range 160+00N

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PLEASE RETURN TO
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726 LOS ANGELES COUNTY ENGINEERING BLDG.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	160+00-N
160+00-N N8	41	R		90°00		

76L298 307 4-50

76L298 307 4-50

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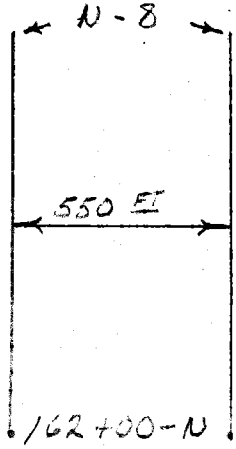
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	162+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
162+00	N8	1	B&W	9:56	90		
		2	R		90		
		3	Y		90		
		4	B&W	9:59			
		5	R				
		6	Y		90		
		7	B&W	10:01	9		
		8	R		90		
		9	Y		9		
		10	B&W	10:0	9		
		11	R				
		12	Y		90		
		13	B&W	10:06	9		
		14	R		90		
		15	Y		90		
		16	B&W	10:08			
		17	R				
		18	Y		90		
		19	B&W	10:09	90		
		20	R		90°00		

Range 162+00 N



F. B. 1889 Pg. 168 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH CROSSING STUDY Date Date No.
Survey by FHB Notes TRO Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

Profile No. Notes Red. Date Plotted Date Job No. Division No. F. B. Pg. 169

Notes Chkd. Checked Survey of Survey by Date

No. Date Date Map No. Indexed Date

Cut IN 160 + 00 N

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STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At On	#	Color	Time	Hor. Ang.	
154+00 N7	41	R		22° 19	

76L298 307 8-53

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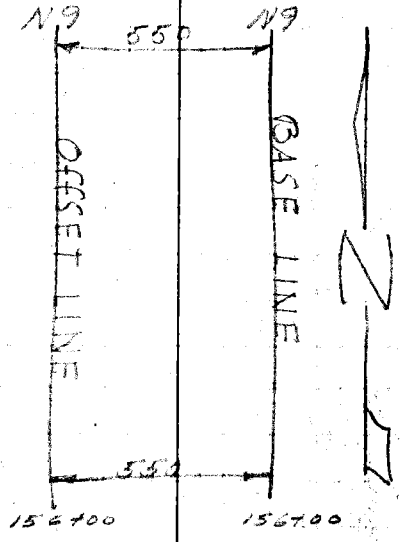
STATION		B. S.	H. I.	F. S.	ELEV.	CUT IN 162+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
156+00	N9 550 off	1	R+W	9 56	66° 09	
		2	R		68 [illegible]4	
		3	Y		6[illegible] 46	
		4	R+W	9 59	57 [illegible]2	
		5	R		54 [illegible]5	
		6	Y		51° 27	
		7	R+W	10:00	48 [illegible]6	
		8	R		44 [illegible]4	
		9	Y		41 17	
		10	R+W	10 03	40 [illegible]2	
		11	R		37 [illegible]8	
		12	Y		35° 53	
		13	R+W	10 05	37 [illegible]2	
		14	R		40° 00	
		15	Y		35° 32	
		16	R+W	10 07	32 [illegible]7	
		17	R		30° 14	
		18	Y		28° 21	
		19	R+W	10 09	26° 14	
		20	R		24° 15	

CUT IN 162+00N



F.B. 1889 Pg. 170 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No.
Survey by E.H.B. Notes VS Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date 12/23/53 Date Date No.

Profile No. Notes Red. Date Plotted Date Job No. Division No. F. B. Pg. 171

[redacted]

No. Date 12-17-53 Date Map No. Indexed A. C. Johnson Date

Bout 160+00 N

STATION	B. S.	H. I.	F. S.	ELEV.	Bottom Tide	Adj. Depth	Remarks
# 41 Color R	Time	Meas. Depth 9.5 87	9.0	6.8	2.2	755	740 190 155

— BOAT —

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76L298 307 8-53

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7.

Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	BOAT	162+00 -N-
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	R&W	9.56	32.0 31.0	31.3	6.6	24.7	1908
2	R		30.9 29.0	29.6	6.6	23.0	~~1757~~ 1771
3	Y		29.5 28.7	29.1	6.6	22.5	1621
4	R&W	9.58	28.4 27.6	27.9	6.5	21.4	1500
5	R		28.0 26.9	27.3	6.5	20.8	1395
6	Y		27.0 25.9	26.3	6.5	19.8	1305
7	R&W	10.01	26.7 25.7	26.0	6.5	19.5	1220
8	R		25.8 25.0	25.3	6.5	18.8	1148
9	Y		25.0 23.7	24.1	6.5	17.6	1077
10	R&W	10.02	24.1 23.6	23.8	6.5	17.3	1063
11	R		23.0 21.7	22.1	6.5	15.6	1015
12	Y		21.6 20.0	20.5	6.4	14.1	985
13	R&W	10.06	22.5 21.7	22.0	6.4	15.6	1014
14	R		24.0 22.5	23.0	6.4	16.6	1054
15	Y		22.0 21.0	21.3	6.4	14.9	979
16	R&W	10.07	20.1 19.0	19.4	6.4	13.0	938
17	R		19.0 18.2	18.5	6.4	12.1	900
18	Y		18.9 17.5	18.0	6.4	11.6	874
19	R&W	10.08	17.6 16.5	16.9	6.4	10.5	846
20	R		15.0 14.0	14.3	6.4	7.9	820

Boat 162+00 N

F. B. 1889 PG. 172 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes Notes Chkd. Checked X-Sec.
Indexed K. C. Johnson Date Date 12-17-53 Date No.

76L298 307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	162+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
162+00	N8	21	Y		90°00		
		22	B&W	10:10	90°00		
		23	R		90°00		
		24	Y		90°00		
		25	B&W	10:12	90°00		
		26	R		90°00		
		27	Y		90°00		
		28	B&W	10:14	90°00		
		29	R		90°00		
		30	Y		90°00		
		31	B&W	10:16	90°00		
		[illegible]	[illegible]		90°00		

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 173

No. Date Date Date Date

Notes Chkd. Checked Survey by Notes Date

No. Date Date Map No. End Date

Range 162+00 N

76L298 307 8-53

PLEASE RETURN TO
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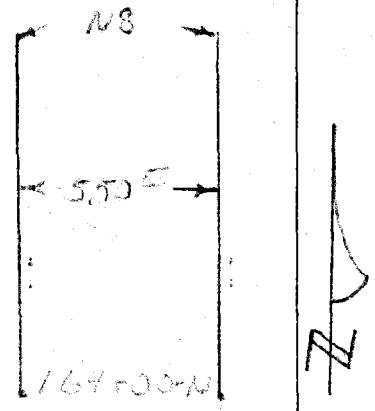
726 LOS ANGELES COUNTY ENGINEERING BLDG.

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.	Range	164+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
164+00	N8	1	B&W	10:27	[illegible]		
		2	R		[illegible]		
		3	Y		[illegible]		
		4	B&W	10:33	[illegible]		
		5	R		90 00		
		6	Y		90 00		
		7	B&W	10:33	[illegible]		
		8	R		90 00		
		9	Y		90 [illegible]		
		10	B&W	10:35	[illegible]		
		11	R		90 00		
		12	Y		[illegible]		
		13	B&W	10:37	90 00		
		14	R		90 00		
		15	Y		[illegible]		
		16	B&W	10:39	90 00		
		17	R		90 00		
		18	Y		90 00		
		19	B&W	10:40	90 00		
		20	R		90 00		



Range 164+00N

F.B. 1229 Pg. 174 Job No. 8412 Division No. Notes Red. Plotted Date No. Profile
Survey of [illegible] Notes [illegible] Date Checked Date No. X-Sec.
Survey by [illegible] C. Johnson Notes Chkd. Date
Indexed Date

76L298 307 8-53

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Do not extend notes this side of this line.

17

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
156+00	9	21	Y		25°14		
		22	R+W	10 10	22°37		
		23	R		19 18		
		24	Y		20°46		
		25	R+W	10 12	22°13		
		26	R		17°20		
		27	Y		17°58		
		28	R+W	10 13	19°15		
		29	R		19°13		
		30	Y		17°04		
		31	R+W	10 15	17°52		
		32	R		17°50		
		33					

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 175

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date Date Map No. Date

Cut In 162+00N

76L298 307 8-53

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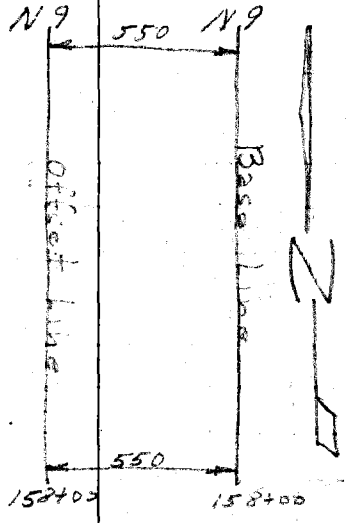
Do not extend notes this side of this line.

18

Cut in 164+00N

STATION Inst. At	Sight On	B. S. #	H. I. Color	F. S. Time	ELEV. Hor. Ang.	Remarks
158+00	N9	1	R & W	10 26	67° 09	
		2	R		63° 35	
		3			5[illegible] 45	
		4	R & W	10 30	5[illegible] [illegible]	
		5	R		51° 07	
		6			47 [illegible]9	
		7	R & W	10 32	42 [illegible]6	
		8	R		42 [illegible]6	
		9			39 [illegible]2	
		10	R & W	10 35	35 [illegible]3	
		11	R		3[illegible] [illegible]0	
		12	Y		32 [illegible]1	
		13	R & W	10 37	31 [illegible]24	
		14	R		29 [illegible]0	
		15	Y		27 [illegible]7	
		16	R & W	10 39	25 [illegible]9	
		17	R		2[illegible] [illegible]5	
		18	Y		22 [illegible]6	
		19	R & W	10 40	21 [illegible]6	
		20	R		20 [illegible]1	

Cut In 164+00N



F. B. [illegible] Pg. 176 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No. X-Sec.
Survey by F.H.B. Notes Notes Chkd. Checked
Indexed R. C. Johnson Date 10/23/53 Date Date No.

76L298 307 8-53

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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.	— Boat —		162+00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21	Y		16.0 14.9	15.3 ✓	6.4 ✓	8.9 ✓	833	
22	R+W	10:09	14.8 13.0	13.6 ✓	6.4	7.2 ✓	800	
23	R		11.4 10.0	10.5 ✓	6.4	4.1 ✓	760	
24	Y		12.0 11.0	11.3 ✓	6.3	5.0 ✓	776	
25	R+W	10:11	14.3 12.1	12.8 ✓	6.3	6.5 ✓	795	
26	R		9.1 8.0	8.4 ✓	6.3	2.1 ✓	737	
27			9.7 8.0	8.6 ✓	6.3	2.3 ✓	744	
28	R+W	10:13	11.3 10.0	10.4 ✓	6.3	4.1 ✓	760	
29	R		11.1 9.9	10.3 ✓	6.3	4.0 ✓	759	
30	Y		10.0 8.0	8.7 ✓	6.3	2.4 ✓	734	
31	R+W	10:15	9.9 8.0	8.6 ✓	6.3	2.3 ✓	743	
32	R		9.4 8.7	8.9 ✓	6.3 ✓	2.6 ✓	743	
33	Y							
34	R+W							
35	R							
36	Y							
37	R+W							
38	R							
39	Y							
40	R+W							

Boat 162+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. 1119 Pg. 177

X-Sec. Notes Chkd. [illegible] Checked Survey by [illegible] Notes [illegible] Date [illegible]

No. Date 12-17-53 Date Map No. Ind. Ind. Johnson Date

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

F. B. 1889 Pg. 178 Job No. Boat 164+00 N Division No. Notes Red. Plotted Profile No.
Survey of Date Date X-Sec. No.
Survey by Notes Chkd. Checked
Indexed H. C. Johnson Date Date 12-11-53 Date

STATION	B. S.	H. I.	F. S.	ELEV.	- BOAT -	164+00 -N-
# Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1 Red	10:26	32.2 31.0 31.0	31.4	6.0	25.4	1972
2		29.8 29.5	30.2	6.0	24.2	1758
3		28.3 27.6	28.7	6.0	22.7	1579
4 Red	10:28	26.5 26.5	26.9	6.0	20.9	1425
5		25.6 26.3	25.9	6.0	19.9	1294
6		25.5 25.0	25.8	6.0	19.8	1195
7 Red	10:31	23.7 25.1	24.1	5.9	18.2	1105
8		24.0 23.9	24.4	5.9	18.5	1103
9		22.8 21.2	23.2	5.9	17.3	1037
10 Red	10:34	20.0 22.0	20.4	5.9	14.5	974
11		20.0 19.7	20.7	5.9	14.8	975
12		18.9 19.3	19.2	5.9	13.3	928
13 Red	10:36	17.9 18.2	18.4	5.8	12.6	916
14		17.1 17.7	17.5	5.8	11.7	883
15		16.3 17.0	16.8	5.8	11.0	868
16 Red	10:38	15.0 15.7	15.7	5.8	9.9	836
17		14.1 14.2	14.6	5.8	8.8	816
18		13.0 14.2	13.4	5.8	7.6	804
19 Red	10:39	12.2 12.3	12.9	5.8	7.1	790
20		11.1	11.5	5.8	5.7	770

76L298 307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	164+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
164+00	N8	21	Y		90°00		
		22	B+W	10:41	90°00		
		23	R		90°00		

Range 164+00 N

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ PG. 179

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date ____ Date ____ Map No. ____ Indexed ____ Date ____

Notes Chkd. ____ Checked ____ Survey by ____ Indexed Johnson

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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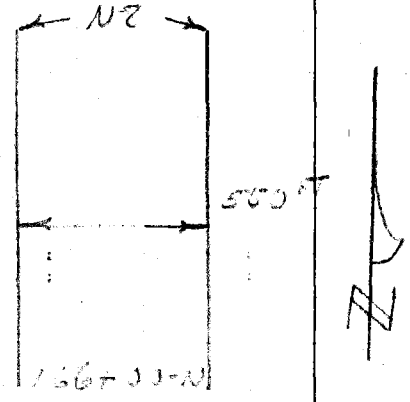
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	166+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
166+00	N2	1	B&W	10:50	90 00		
		2	R		90 00		
		3	Y		90 00		
		4	B&W	10:55	90 00		
		5	R		90 00		
		6	Y		90 00		
		7	B&W	10:55	90 00		
		8	R		90 00		
		9	Y		90 00		
		10	B&W	10:59	90 00		
		11	R		90 00		
		12	Y		90 00		
		13	B&W	11:02	90 00		
		14			90 00		
		15	Y		90 00		
		16	B&W	11:04	90 00		
		17	R		90 00		
		18	Y		90 00		
		19	B&W	11:05	90 00		
		20	R		90 00		



Range 166+00N

F.B. 1729 PG. 180 Job No. 2412 Division No. Notes Red. Plotted Date Date No. Profile
Survey of BEDRO EROSION STUDY Date Date X-Sec.
Survey by FAB Notes JRO Notes Chkd. Checked
Indexed H. C. Johnson Date Date Date No.

76L298 307 4-50

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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. Sight At On		# Color	Time	Hor. Ang.		Remarks
158+00 NO	21	Y		19° 13		
	22	R+W	1041	18° 17		
	23	R		16° 25		

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ Pg. ____

No. ____ Date ____ Date ____ Map No. ____ Date ____

76L298 307 4-50

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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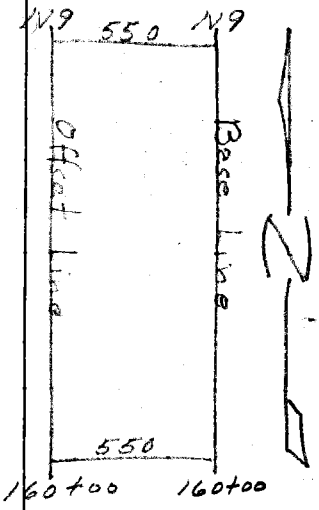
Do not extend notes this side of this line.

20

Cut IN 166+00N

STATION		B. S.	M. I.	F. S.	ELEV.	Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.	
160+00	N9	1	R+W	10 50	[illegible] 18	
		2	R		[illegible]	
		3	Y		60 [illegible]9	
		4	R+W	10 52	57 [illegible]2	
		5	R		54 [illegible]3	
		6	Y		50 [illegible]	
		7	R+W	10 54	[illegible]	
		8	R		42 [illegible]	
		9	Y		37 50	
		10	R+W	10 59	37 45	
		11	R		36 23	
		12	Y		34 00	
		13	R+W	11 01	31 38	
		14	R		29 59	
		15	Y		27 43	
		16	R+W	11 03	26 [illegible]4	
		17	R		25 [illegible]6	
		18	Y		23 [illegible]4	
		19	R+W	11 04	22 [illegible]3	
		20	R		24 25	

Cut IN 166+00 N



F. B. 1889 PG. 182

Survey of Beach Erosion Studies

Survey by E.H.B. Notes J.S.

Indexed S. Johnson Date 10/23/53

Job No. 8412 Division No.

Notes Red. Date

Notes Chkd. Date

Plotted Date

Checked Date

Profile No.

X-Sec. No.

76L298 307 8-53

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STATION	B. S.	H. I.	F. S.	ELEV.	BOAT	164+00	N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		11.8				
			10.1	10.7 ✓	5.7	5.0 ✓	759
22	R+W	10:41	10.2				
			8.8	9.3 ✓	5.7 ✓	3.6 ✓	748
23	R		10.0				
			7.0	8.0 ✓	5.7	2.3 ✓	727
24	Y						
25	R+W						
26	R						
27	Y						
28	R+W						
29	R						
30	Y						
31	R+W						
32	R						
33	Y						
34	R+W						
35	R						
36	Y						
37	R+W						
38	R						
39	Y						
40	R+W						

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 183

Notes Chkd. Checked Survey by Notes Date

No. Date 12-17-53 Date Map No. Indexed Date

Boat 164+00 N

76L298 307 8-53

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9.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	- Boat -	166+00 -N-
#	Color	Time	Meas. Depth	Bottom Tide	Adj. Depth	Remarks
1	R&W	10:50	31.0 29.8	30.2	5.5	24.7	1918
2	R		30.2 29.0	29.4	5.5	23.9	1757
3	Y		28.7 27.5	27.9	5.5	22.4	1597
4	R&W	10:52	27.3 26.4	26.7	5.5	21.2	1475
5	R		27.0 25.2	25.8	5.5	20.3	1382
6	Y		26.0 24.6	25.1	5.5	19.6	1278
7	R&W	10:54	25.5 24.0	24.5	5.4	19.1	1183
8	R		24.7 23.1	23.6	5.4	18.2	1098
9	Y		23.3 22.1	22.5	5.4	17.1	1016
10	R&W	10:56	22.2 21.0	21.4	5.4	16.0	1014
11	R		21.2 19.9	20.3	5.4	14.9	991
12	Y		20.0 19.0	19.3	5.3	14.0	955
13	R&W	11:00	18.8 18.0	18.3	5.3	13.0	920
14	R		18.3 17.0	17.4	5.3	12.1	896
15	Y		17.2 16.0	16.4	5.3	11.1	866
16	R&W	11:02	16.3 15.0	15.4	5.2	10.2	844
17	R		15.7 14.0	14.6	5.2	9.4	831
18	Y		14.5 13.9	14.1	5.2	8.9	816
19	R&W	11:04	13.4 12.0	12.5	5.2	7.3	795
20	R		14.8 13.0	13.6	5.2	8.4	822

Boat 166+00 N

F. B. 1889 Pg. 184 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes 10/23/53 Notes Chkd. LCW Checked X-Sec.
Indexed R. C. Johnson Date Date 12-17-53 Date No.

76L298 307 8-53

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Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	Range	166+00-N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
166+00	107	21	Y		90°00		
		22	R+W	1400	90°00		
		23	R		90°00		
		24	Y		90°00		
		25	R+W	1407	90°00		

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. 1500 Pg. 185

No. ____ Date ____ Date ____ Survey of ____

Notes Chkd. ____ Checked ____ Survey by ____

No. ____ Date ____ Date ____ Map No. ____ Date ____

Range 166+00 N

F.B. 1887 PG. 186 Job No. 842 Division No. _____ Notes Red. _____ Plotted _____ Profile

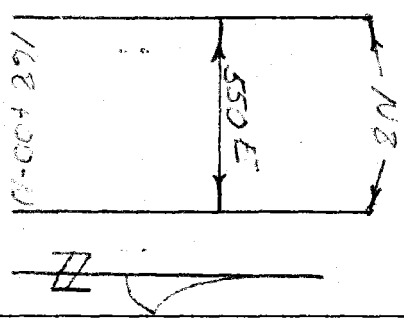
Survey of [illegible] EROSION STUDY Date _____ Date _____ No. _____

Survey by EKB Notes JRO Notes Chkd. _____ Checked _____ X-Sec.

Indexed A. C. Johnson Date _____ Date _____ Date _____ No. _____

Range 168+00 N

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. Sight At On 168+00 N8					Range 168+00 N
#	Color	Time	Hor. Ang.		
1	BFW	11:12	90 00		
2	R		90 00		
3	Y		90 00		
4	BFW	11:15	90 00		
5	R		90 00		
6	Y		90 00		
7	BFW	11:17	90 00		
8	R		90 00		
9	Y		90 00		
10	BFW	11:18	90 00		
11	R		90 00		
12	Y		90 00		
13	BFW	11:20	90 00		
14	R		90 00		
15	Y		90 00		
16	BFW	11:22	90 00		
17	R		90 00		
18	Y		90 00		
19	BFW	11:23	90 00		
20	R		90 00		



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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 182

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date Date Map No. Indexed Date

Range 168+00 N

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

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	Range	168+00 N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
[illegible]	21	Y		70°00		

76L298 307 8-53

F. B. 1889 Pg. 188 | Job No. 8412 Division No. | Notes Red. | Plotted | Profile

Survey of BEACH CROSSING STUDY | Date | Date | No.

Survey by FAB | Notes 520 | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At	#	Color	Time	Hor. Ang.	

76L298 307 8-53

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76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

2.1

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	cut in 166+00 N
160+00	189	21	Y		22° 32		
		22	R+W	11 06	21° 07		
		23	R		20° 08		
		24	Y		18° 04		
		25	R+W	11 07	17° 32		

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 189

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date Date Map No. Indexed Date

Cut in 166+00 N

76L298 307 8-53

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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.

22

CUT IN 168+00 N

STATION		B. S.	H. I.	F. S.	ELEV.	
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
162+00	[illegible]	1	R+W	11 12	[illegible]	
		2	R		61° 41	Note
		3	Y		56° 30	Inst on 550 foot offset.
		4	R+W	11 14	55° 25	
		5	R		51° 24	
		6	Y		47° [illegible]	
		7	R+W	11 16	[illegible]	
		8	R		40° 27	
		9	Y		39° 14	
		10	R+W	11 18	37° 18	
		11	R		36° 41	
		12	Y		33° 35	
		13	R+W	11 20	29° 11	
		14	R		28° 20	
		15	Y		26° 31	
		16	R+W	11 21	24° 58	
		17	R		23° 56	
		18	Y		22° 03	
		19	R+W	11 22	21° 11	
		20	R		19° 52	

CUT 168+00 N

F.B. 1889 Pg. 190 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Studies Date Date No.
Survey by [illegible] Notes [illegible] Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date 10/23/53 Date Date No.

Profile Notes Red. _____ Plotted _____ Job No. _____ Division No. _____ F. B. _____ Pg. 191

X-Sec. Notes Chkd. _____ Checked _____ Survey by _____ Notes _____ Date _____

No. _____ Date _____ Date _____ Map No. _____ Indexed A. C. Johnson Date _____

Cut IN 168100 N

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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STATION	B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. Sight At OH	#	Color	Time	Hor. Ang.	
162400 1'9	21			18° 45	

76L298 307 8-53

F.B. 1889 PG. 192 Job No. Division No. Notes Red. Plotted Profile

Survey of Date Date No.

Survey by Notes Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

STATION	B.S.	H.I.	F.S.	ELEV.	Remarks
Inst. Sight At	#	Color	Time	Hor. Ang.	

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

76L298 307 8-53

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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.	— BOAT —	166+00	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21	Y		13.3 12.1	12.5 ✓	5.1	7.4 ✓	799	
22	R+W	11.05	12.2 11.1	11.5 ✓	5.1 ✓	6.4 ✓	782	
23	R		10.3 9.9	10.0 ✓	5.1	4.9 ✓	770	
24	Y		10.0 8.9	9.4 ✓	5.1	4.3 ✓	746	
25	R+W	11.07	9.6 8.0	8.5 ✓	5.1 ✓	3.4 ✓	740	
26	R							
27	Y							
28	R+W							
29	R							
30	Y							
31	R+W							
32	R							
33								
34	R+W							
35								
36								
37	R+W							
38	R							
39	Y							
40	R+W							

Profile Notes Red. Plotted Job No. Division No. F. B. 1119 Pg. 103

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date 12-11-53 Date Map No. Indexed C. Johnson Date

Boat 166+00 N

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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.	Boat	168+00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1.	R+W	11:11	30.3 / 28.8	29.3	5.0	24.3	1822
2.	R		28.8 / 27.5	27.9	5.0	22.9	1662
3.	Y	11:13	26.9 / 26.0	26.3	5.0	21.3	1529
4	R+W		26.0 / 25.1	25.4	4.9	20.5	1420
5	R		25.5 / 24.3	24.7	4.9	19.8	1301
6	Y		24.7 / 23.9	24.2	4.9	19.3	1200
7	R+W	11:15	24.2 / 22.4	23.0	4.9	18.1	1092
8	R		23.2 / 21.4	22.0	4.9	17.1	1062
9	Y		22.1 / 21.0	21.4	4.8	16.6	1040
10	R+W	11:17	21.6 / 20.1	20.6	4.8	15.8	1006
11	R		20.3 / 19.2	19.6	4.8	14.8	980
12	Y		19.2 / 18.2	18.5	4.8	13.7	941
13	R+W	11:19	18.3 / 17.0	17.4	4.8	12.6	892
14	R		17.4 / 16.0	16.5	4.8	11.7	874
15	Y		16.9 / 14.9	15.6	4.8	10.8	850
16	R+W	11:21	14.1 / 13.8	13.9	4.7	9.2	829
17	R		13.5 / 12.0	12.6	4.7	7.9	816
18	Y		12.9 / 11.0	11.6	4.7	6.9	793
19	R+W	11:22	10.8 / 10.0	10.3	4.7	5.6	782
20	R		10.1 / 9.0	9.4	4.7	4.7	766

Boat 168+00 N

F. B. 1889 Pg. 194 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No. X-Sec.
Survey by Notes 10/23/53 Notes Chkd. Checked
Indexed C. Johnson Date Date 12-17-53 Date No.

76L298 307 8-53

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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.	— BOAT —		168+00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
21	Y		8.9 7.8	8.2	4.7	3.5	754	
22	R&W							
23	R							
24	Y							
25	R&W							
26	R							
27	Y							
28	R&W							
29	R							
30	Y							
31	R&W							
32	R							
33	Y							
34	R&W							
35	R							
36	Y							
37	R&W							
38	R							
39	Y							
40	R&W							

Boat 168+00 N

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____

X-Sec. Notes Chkd. [illegible] Checked ____ Survey by [illegible] Notes [illegible] Date [illegible]

No. ____ Date 12-17-53 Date ____ Map No. ____ Indexed J. C. Johnson Date ____

F. B. [illegible] Pg. 19[illegible]

F.B. 1889 Pg. 196 Job No. Division No. Notes Red. Plotted Profile

Survey of Date Date No.

Survey by Notes Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

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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.	
# Color Time	Meas. Depth	Bottom Tide	Adj. Depth		Remarks

76L298 307 8-53

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STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	170+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
170+00N (Offset Line)	164+00N (Offset Line)	1	B&W	6:12	90°00'		
		2	R		90°00'		
		3	Y		90°00'	Range gun at	170+00N
		4	B&W	6:15	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	6:17	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	6:19	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	6:21	90°00'	*	
		14	R		90°00'		
		15	Y		90°00'		
		16	B&W	6:23	90°00'	Sight on cut-in gun at	164+00N
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	6:24	90°00'		
		20	R		90°00'		

Offset Line

550'

Base Line

Range 170+00N

Profile Notes Red. Plotted Job No. 2410 Division No.

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date Date Map No. Indexed C. Johnson Date

F. B. 1889 Pg. 197

76L298 307 8-53

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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.	RANGE	170+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90° 00'		
		22	B & W	6:26	90° 00'		
		23	R		90° 00'		
		24	Y		90° 00'		
		25	B & W	6:28	90° 00'		
		26	R		90° 00'		
		27	Y		90° 00'		
170+00N	164+00N	28	B & W	6:29	90° 00'		
		29	R		90° 00'		
		30	Y		90° 00'		
		31	B & W	6:31	90° 00'		

Range 170+00N

F.B. 1889 Pg. 198 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by Notes Notes Chkd. Checked X-Sec.
Indexed C. Johnson Date Date Date No.

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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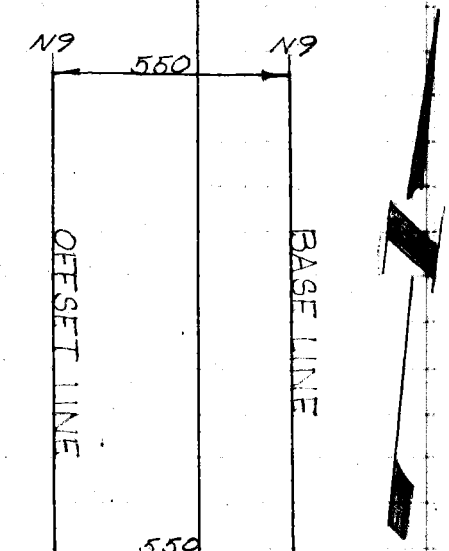
Do not extend notes this side of this line.

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

CUT IN 170+00 N

Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
164+00	N9	1	Btw	6 12	69° 41	
		2	R		[illegible]	
		3	Y		[illegible]	
		4	Btw	6 15	64° 17	
		5	R		62° 11	
		6	Y		60° 01	
		7	Btw	6 17	58° 43	
		8	R		55° 20	
		9	Y		52° 28	
		10	Btw	6 19	49° 16	
		11	R		46° 19	
		12	Y		44° 19	
		13	Btw	6 21	41° 42	
		14	R		39° 54	
		15	Y		38° 13	
		16	Btw	6 23	36° 18	
		17	R		34° 17	
		18	Y		32° 34	
		19	Btw	6 24	31° 07	
		20	R		29° 46	



CUT IN 170+00 N

Profile Notes Red. Plotted Job No. Division No.
X-Sec. Notes Chkd. Checked Survey by Notes Date
No. Date Date Map No. Date Date
F. B. Pg.

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

2

Cut in 170+00 N

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
164+00	N9	21	Y		2[illegible] 04		
		22	B&W	6 27	2[illegible] [illegible]		
		23	R		2[illegible] [illegible]		
		24	Y		2[illegible] 43		
		25	B&W	6 23	2[illegible] [illegible]		
		26	R		2[illegible] 57		
		27	Y		2[illegible] 26		
		28	B&W	6 29	2[illegible] 50		
		29	R		2[illegible] 27		
		30	Y		2[illegible] 05		
		31	B&W	6 31	2[illegible] 14		

Cut in 170+00 N

F. B. 1889 Pg. 200 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No. X-Sec.
Survey by F.H.B. Notes US Notes Chkd. Checked
Indexed K. C. Johnson Date 10/26/53 Date Date No.

76L298 307 8-53

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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.			170-03
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
1	R&W	6:13	33.4 / 29.6 / 29.2	29.9 ✓	3.4 ✓	26.5 ✓	2170	
2	R		28.5 / 28.0	28.7 ✓	3.4	25.3 ✓	2020	
3	Y		27.0 / 27.5	27.3 ✓	3.4	23.9 ✓	1910	
4	R&W	6:15	26.5 / 26.0	26.7 ✓	3.4	23.3 ✓	1791	
5	R		25.0 / 25.5	25.3 ✓	3.4	21.9 ✓	1687	
6			25.0 / 25.4	25.2 ✓	3.4	21.8 ✓	1590	
7	R&W	6:17	24.5 / 24.9	24.8 ✓	3.4	21.4 ✓	1486	
8	R		23.6 / 23.8	24.2 ✓	3.4	20.8 ✓	1416	
9	Y		23.1 / 23.7	23.3 ✓	3.5	19.8 ✓	1331	
10	R&W	6:19	22.0 / 22.7	22.6 ✓	3.5	19.1 ✓	1244	
11	R		21.8 / 21.8	22.1 ✓	3.5	18.6 ✓	1178	
12	Y		21.0 / 23.1	21.3 ✓	3.5	17.8 ✓	1135	
13	R	6:21	20.7 / 21.1	21.5 ✓	3.5	18.0 ✓	1085	
14			19.9 / 20.2	20.3 ✓	3.5	16.8 ✓	1051	
15			19.1 / 19.7	19.5 ✓	3.5	16.0 ✓	1023	
16	R	6:23	18.3 / 18.7	18.8 ✓	3.5	15.3 ✓	990	
17	R		17.0 / 18.0	17.6 ✓	3.5	14.1 ✓	959	
18			16.5 / 17.0	17.0 ✓	3.5	13.5 ✓	933	
19	R&W	6:25	15.8 / 17.6	16.2 ✓	3.5 ✓	12.7 ✓	912	
20	R		16.0	16.5 ✓	3.5	13.0 ✓	893	

Profile Notes Red.____ Plotted____ Job No.____ Division No.____ F. B. 1999 Pg. 7

X-Sec. Notes Chkd. [illegible] Checked____ Survey by____ Notes____ Date____

No.____ Date 12-11-53 Date____ Map No.____ [illegible] Date____

Boat 170+00

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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STATION		B. S.	H. I.	F. S.	ELEV.	Boat	[illegible]
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		15.0 13.8	14.2	3.5	10.7	860
22	R&W	6:20	16.0 15.0	15.3	3.5	11.8	890
23	R		14.6 12.5	13.2	3.5	9.7	854
24	Y		13.2 12.0	12.4	3.6	8.8	852
25	R&W	6:28	12.4 11.5	12.0	3.6	8.4	832
26	R		11.5 10.0	10.9	3.6	7.3	830
27	Y		11.2 10.5	10.7	3.6	7.1	822
28	R&W	6:29	11.3 10.0	10.4	3.6	6.8	815
29	R		10.0 9.0	9.3	3.6	5.7	786
30	Y		9.9 8.8	9.2	3.6	5.6	781
31	R&W	6:30	9.7 8.0	8.6	3.6	5.0	783
32							
33							
34							
35							
36							
37							
38							
39							
40							

Boat 170+00N

F. B. 1889 Pg. 202 Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile ____
Survey of ____ Date ____ Date ____ No. ____ X-Sec. ____
Survey by ____ Notes ____ Notes Chkd. [illegible] Checked ____
Indexed R. C. Johnson Date ____ Date 12-17-53 Date ____ No. ____

76L298 307 8-53

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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.	RANGE	172+00N
Inst. At / Sight On	#	Color	Time	Hor. Ang.	Remarks	
172+00N (Offset Line) / 166+00N (Offset Line)	1	B&W	6:41	90°00'		
	2	R		90°00'		
	3	Y		90°00'	Range gun at	172+00N
	4	B&W	6:43	90°00'		
	5	R		90°00'		
	6	Y		90°00'		
	7	B&W	6:46	90°00'		
	8	R		90°00'		
	9	Y		90°00'		
	10	B&W	6:48	90°00'		
	11	R		90°00'		
	12	Y		90°00'		
	13	B&W	6:50	90°00'		
	14	R		90°00'		
	15	Y		90°00'	Sight on cut-in gun at	166+00N
	16	B&W	6:51	90°00'		
	17	R		90°00'		
	18	Y		90°00'		
	19	B&W	6:53	90°00'		
	20	R		90°00'		

Offset Line

550'

Base Line

Range 172+00N

Profile Notes Red. Plotted Job No. 8416 Division No. F. B. 889 Pg. 203

Notes Chkd. Date Survey of

No. Date Date Map No. Indexed Date

Range 172+00N

76L298 307 8-53

PLEASE RETURN TO
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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.

F.B. 1889 Pg. 204 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No. X-Sec.
Survey by FHB Notes CEM 10/26/53 Notes Chkd. Checked
Indexed Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	172+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	21	Y		90° 00'		
	22	B & W	6:55	90° 00'		
	23	R		90° 00'		
	24	Y		90° 00'		
	25	B & W	6:57	90° 00'		
	26	R		90° 00'		
	27	Y		90° 00'		
	28	B & W	6:58	90° 00'		
	29	R		90° 00'		
	30	Y		90° 00'		
	31	B & W	7:00	90° 00'		
	32	R		90° 00'		
	33	Y		90° 00'		
	34	B & W	7:02	90° 00'		
	35	R		90° 00'		
	36	Y		90° 00'	Busted Shear Pin	

172+00N
RANGE 172+00N
166+00N

76L298 307 8-53

PLEASE RETURN TO
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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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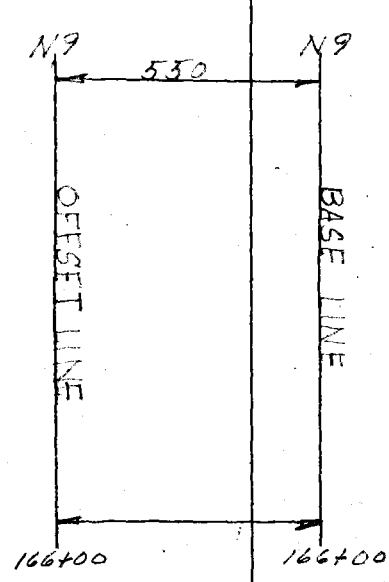
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
166+00	N9	1	B+W	6 41	69° 53		
		2	R		68° 03		
		3	Y		66° 24		
		4	B+W	6 44	64° 52		
		5	R		62° 33		
		6	Y		60° 15		
		7	B+W	6 46	58° 29		
		8	R		56° 51		
		9	Y		54° 45		
		10	B+W	6 48	53° 02		
		11	R		50° 51		
		12	Y		48° 21		
		13	B+W	6 50	45° 41		
		14	R		44° 28		
		15	Y		42° 53		
		16	B+W	6 51	41° 00		
		17	R		39° 11		
		18	Y		37° 30		
		19	B+W	6 53	35° 49		
		20	R		35° 28		

CUT IN 172+00 N



Profile Notes Red. Plotted Job No. Division No. F. B. Pg.
X-Sec. Notes Chkd. Checked Survey of
No. Date Date Map No. Indexed G. Johnson Date
CUT IN 172+00 N

F. B. 1889 Pg. 206 Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by EHB Notes JS Notes Chkd. _____ Checked _____ X-Sec.

Indexed E. C. Johnson Date 10/26/53 Date _____ Date _____ No. _____

76L298 307 8-53

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.

Cut IN 172+00 N

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Color	Time	Hor. Ang.		Remarks
166+00 N 9	21	Y		33° 5		
	22	Btw	6 55	31° 18		
	23	R		31° 06		
	24	Y		30° 06		
	25	Btw	6 57	29° 04		
	26	R		23° 18		
	27	Y		29° 15	*	
	28	Btw	6 58	28° 0		
	29	R		27° 8		
	30	Y		27° 3		
	31	Btw	7 00	23° 5		
	32	R		23° 0		
	33	Y		26° 31		
	34	Btw	7 02	25° 40		
	35	R		23° 0		
	36	Y		21° 0		
	37					

76L298 307 8-53

PLEASE RETURN TO
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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.	BOAT	172+00

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	R+W	6:41	31.0 30.1 30.0	30.4	3.7	26.7	2188
2	R		29.0 29.8	29.3	3.7	25.6	2040
3	Y		27.0 28.1	27.9	3.7	24.2 ~~23.9~~	1922
4	R+W	6:45	27.7 23.0	27.8	3.7	24.1	1829
5	R		27.0 26.8	27.3	3.7	23.6	1706
6	Y		25.2 25.4	25.7	3.7	22.0	1600
7	R+W	6:45	24.6 25.7	24.9	3.7	21.2	1528
8	R		24.3 24.5	24.8	3.8	21.0	1470
9	Y		23.7 24.0	24.1	3.8	20.3	1399
10	R+W	6:48	23.3 23.0	23.5	3.8	19.7	1347
11	R		22.9 23.4	23.2	3.8	19.4	1287
12	Y		22.0 22.1	22.5	3.8	18.7	1225
13	R+W	6:49	21.8 22.0	21.9	3.8	18.1	1165
14	R		21.1 21.9	21.4	3.8	17.6	1140
15	Y		20.9 21.9	21.2	3.8	17.4	1107
16	R+W	6:51	20.5 21.2	21.0	3.8	17.2	1070
17	R		19.8 20.6	20.3	3.8	16.5	1039
18	Y		19.0 19.1	19.3	3.8	15.5	1010
19	R+W	6:53	17.7 19.3	18.2	3.8	14.4	984
20	R		18.0	18.4	3.8	14.6	978

Boat 172+00

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 207

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date 12-17-53 Date Map No. Indexed A. C. Johnson Date

76L298 307 8-53

PLEASE RETURN TO
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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.

F. B. 889 Pg. 208 Job No. Division No. Notes Red. Plotted Profile No.
Survey of Date Date X-Sec. No.
Survey by Notes Notes Chkd. Checked
Indexed Date Date 12-17-53 Date

STATION	B. S.	H. I.	F. S.	ELEV.	— BOAT —	172+00 — N —
# Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
		19.1				
		17.5	18.0	3.9	14.2	952
		18.0				
20 B+W	6:55	16.8	17.2	3.9	13.3	922
		17.0				
23 R		16.0	17.0	3.9	13.1	912
		16.8				
24 Y		15.6	16.0	3.9	12.1	898
		15.3				
25 B+W	6:57	14.3	14.6	3.9	10.7	883
		15.4				
26 R		14.0	14.5	3.9	10.6	882
		15.8				
27 Y		14.9	15.2	3.9	11.3	886
		14.9				
28 B+W	6:58	13.0	13.6	3.9	9.7	873
		13.0				
29 R		12.0	12.3	3.9	8.4	862
		14.0				
30 Y		12.0	12.7	3.9	8.8	856
		12.9				
31 B+W	7:00	11.7	12.1	3.9	8.2	842
		11.0				
32 R		10.0	10.3	3.9	6.4	816
		13.2				
33 Y		12.0	12.4	3.9	8.5	854
		12.5				
34 B+W	7:02	11.0	11.5	3.9	7.6	838
		10.5				
35 R		10.0	10.2	3.9	6.3	808
		9.0				
36 Y		8.0	8.3	3.9	4.4	788
37 B+W	7:					
38 R						
39 Y						
40 B+W						

Boat 172+00 N

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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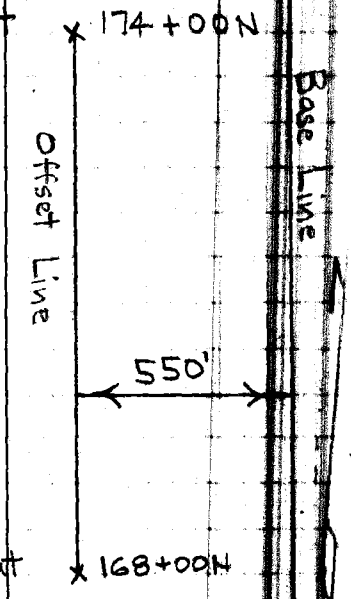
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	174+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		1	B&W	7:42	90°00'		
		2	R		90°00'		
		3	Y		90°00'	Range gun at	174+00N
		4	B&W	7:46	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	7:48	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	7:50	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
174+00N	168+00N	13	B&W	7:52	90°00'		
		14	R		90°00'		
		15	Y		90°00'	Sight on cut-in gun at	168+00N
		16	B&W	7:54	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	7:56	90°00'		
		20	R		90°00'		



Range 174+00N

Profile Notes Red. Plotted Job No. 8412 Division No. F. B. 1889 Pg. 209

Survey of

Notes Chkd. Checked Date

No. Date Date Map No. Indexed Date

Date

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

F.B. 1889 Pg. 210 Job No. 8412 Division No. 10 | 26 | 53 Notes Red. Plotted Notes Chkd. Checked Notes CEM Date Survey of Survey by C. Johnson Indexed

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE 174+00N	
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90° 00'		
		22	B&W	7:58	90° 00'		
174+00N	168+00N	23	R		90° 00'		
		24	Y		90° 00'		
		25	B&W	8:00	90° 00'		
		26	R		90° 00'		
		27	Y		90° 00'		
		28	B&W	8:02	90° 00'	~~Dropped sounding chain overboard~~	
				8:15		~~chain found~~ Weight droped off end of sounding chain. Recovered by diving.	

Range 174+00N

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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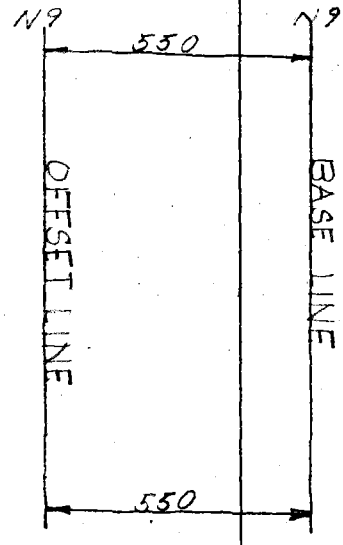
Do not extend notes this side of this line.

5

174+00N

STATION Inst. At	Sight On	B. S. #	H. I. Color	F. S. Time	ELEV. Hor. Ang.
168+00	N9	1	B+W	7 42	66° 27
		2	R		62° 54
		3	Y		59° 42
		4	B+W	7 46	58° 02
		5	R		55° 20
		6	Y		52° 38
		7	B+W	7 48	50° 00
		8	R		48° 31
		9	Y		45° 33
		10	B+W	7 50	43° 40
		11	R		41° 04
		12	Y		38° 46
		13	B+W	7 52	35° 29
		14	R		32° 35
		15	Y		30° 40
		16	B+W	7 54	33° 55
		17	R		31° 57
		18	Y		29° 59
		19	B+W	7 56	28° 25
		20	R		26° 39

Remarks



Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 211

X-Sec. Notes Chkd. Checked Survey of

No. Date Date Map No. Indexed Date

Cut In 174+00N

76L298 307 8-53

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. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	CUT IN 174+00
168+00	N 9	21	Y		2[illegible] 26		
		22	B&W	7 38	2[illegible] 25		
		23	R		2[illegible] 19		
		24	Y		2[illegible] 00		
		25	B&W	8:00	22 39		
		26	R		20 50		
		27	Y		22 48		
		28	B&W	8 02	21 [illegible]5		
		[illegible]	R				

Cut in 174+00 N

F. B. 1889 Pg. 212 Job No. 8912 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No. X-Sec.
Survey by E H B Notes US Notes Chkd. Checked
Indexed H. C. Johnson Date 10/26/53 Date Date No.

76L298 307 8-53

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
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.	BOAT	174+00
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B+W	7:42	29.8 28.2	28.7 ✓	4.4 ✓	24.3 ✓	1929
2	R		27.8 27.1	27.3 ✓	4.5	22.8 ✓	1724
3	Y		26.0 26.0	26.2 ✓	4.5	21.7 ✓	1577
4	B+W	7:46	26.0 25.0	25.3 ✓	4.5	20.8 ✓	1511
5	R		25.3 24.0	24.4 ✓	4.5	19.9 ✓	1416
6	Y		24.2 23.5	23.7 ✓	4.5	19.2 ✓	1345
7	B+W	7:48	24.2 23.0	23.4 ✓	4.5	18.9 ✓	1265
8	R		24.6 22.8	23.4 ✓	4.5	18.9 ✓	1228
9	Y		22.9 21.8	22.2 ✓	4.5	17.7 ✓	1161
10	B+W	7:50	23.1 21.8	22.2 ✓	4.5	17.7 ✓	1124
11	R		23.0 21.0	21.7 ✓	4.6	17.1 ✓	1074
12	Y		22.1 19.8	20.6 ✓	4.6	16.0 ✓	1032
13	B+W	7:52	20.8 18.0	18.9 ✓	4.6	14.3 ✓	978
14	R		19.1 17.9	18.3 ✓	4.6	13.7 ✓	934
15			17.0 15.0	15.7 ✓	4.6	11.1 ✓	906
16	B+W	7:54	21.0 18.2	19.1 ✓	4.6	14.5 ✓	952
17	R		18.0 16.5	17.0 ✓	4.6	12.4 ✓	924
18	Y		15.7 14.0	14.6 ✓	4.6	10.0 ✓	896
19	B+W	7:56	14.5 13.5	13.8 ✓	4.6 ✓	9.2 ✓	875
20	R		14.0 12.1	12.7 ✓	4.6	8.1 ✓	852

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 263

Notes Chkd. Checked Survey By Notes Date

No. Date 12-17-53 Date Map No. Indexed Johnson Date

Boat 174+00 N

76L298 307 8-53

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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.	— BOAT —	174+00 — N —
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	X		12.2 11.3	11.6 ✓	4.7	6.9 ✓	836
22	B+W	7:58	11.7 10.8	11.1 ✓	4.7 ✓	6.4 ✓	831
23	X		11.2 10.0	10.4 ✓	4.7	5.7 ✓	822
24	Y		11.1 9.8	10.2 ✓	4.7	5.5 ✓	817
25	B+W	8:00	10.9 9.5	10.0 ✓	4.7	5.3 ✓	800
26	X		9.5 7.4	8.1 ✓	4.7	3.4 ✓	778
27	Y		11.0 8.9	9.6 ✓	4.7	4.9 ✓	802
28	B+W	8:02	9.1 8.0	8.4 ✓	4.7 ✓	3.7 ✓	788
29	X						
30	Y						
31	B+W						
32	X						
33	Y						
34	B+W						
35	X						
36	Y						
37	B+W						
38	X						
39	Y						
40	B+W						

Boat 174+00 N

F. B. 1889 Pg. 214
Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile
Survey of ____ Date ____ Date ____ No. ____
Survey by ____ Notes ____ Notes Chkd [illegible] Checked ____ X-Sec.
Indexed E. C. Johnson Date ____ Date 12-17-53 Date ____ No. ____

76L298 307 8-53

PLEASE RETURN TO
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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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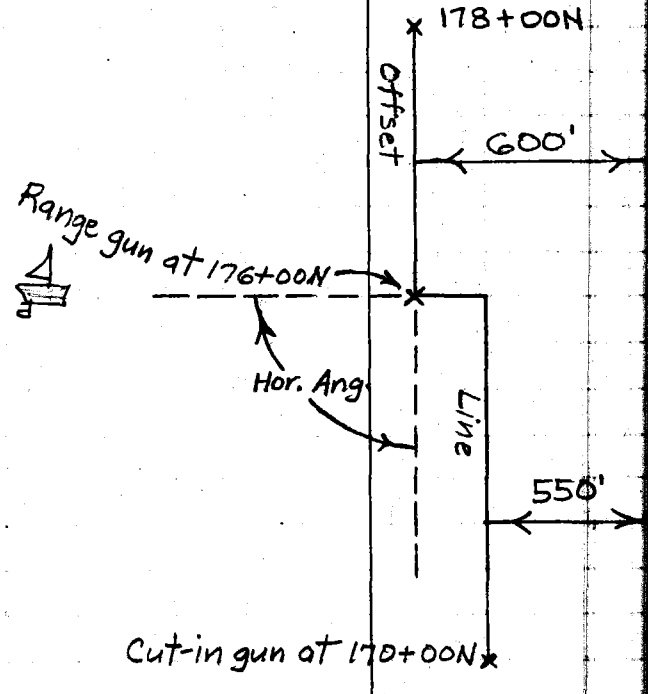
STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	176+00N
Inst. At / Sight On	#	Color	Time	Hor. Ang.	Remarks	
176+00N (600' Offset Line) / 178+00N (600' Offset Line) Plunged Telescope	1	BεW	8:38	90°00'		
	2	R		90°00'		
	3	Y		90°00'		
	4	BεW	8:40	90°00'		
	5	R		90°00'		
	6	Y		90°00'		
	7	BεW	8:43	90°00'		
	8	R		90°00'		
	9	Y		90°00'		
	10	BεW	8:45	90°00'		
	11	R		90°00'		
	12	Y		90°00'		
	13	BεW	8:47	90°00'		
	14	R		90°00'		
	15	Y		90°00'		
	16	BεW	8:50	90°00'		
	17	R		90°00'		
	18	Y		90°00'		
	19	BεW	8:52	90°00'		
	20	R		90°00'		



Range 176+00N

Profile Notes Red. Plotted Job No. 8412 Division No.
X-Sec. Notes Chkd. Checked Survey by Notes Date
No. Date Date Map No. Indexed Johnson Date
F. B. 1889 Pg. 215

F. B. 1889 Pg. 216

Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of Beach Erosion Study Date _____ Date _____ No. _____

Survey by FHB Notes CEM 10/26/53 Notes Chkd. _____ Checked _____ X-Sec.

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

76L298 307 8-53

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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.	RANGE	176+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.		Remarks
	21	Y		90°00'		
	22	B&W	8:54	90°00'		
	23	R		90°00'		
	24	Y		90°00'		
	25	B&W	8:56	90°00'		
	26	R		90°00'		
	27	Y		90°00'		
	28	B&W	8:57	90°00'		
	29	R		90°00'		
	30	Y		90°00'		
	31	B&W	8:59	90°00'		
	32	R		90°00'		
	33	Y		90°00'		
	34	B&W	9:03	90°00'		
	35	R		90°00'		

176 +00 N (600' Offset)

Range 176+00 N

Reverse direction from 178 +00 N (600' offset)

76L298 307 8-53

PLEASE RETURN TO
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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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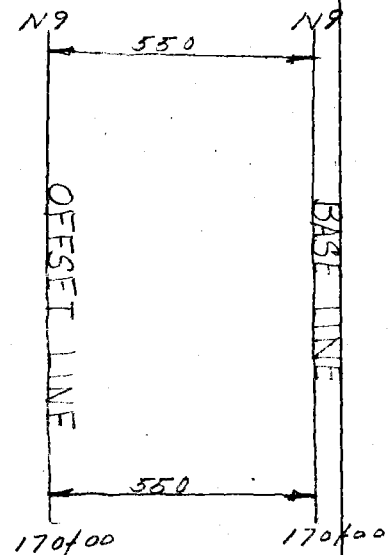
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	
					CUT IN 176+00 N

Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
170+00	N9	1	B+W	8 38	70° 20	
		2	R		68° 11	
		3	Y		66° 52	
		4	B+W	8 40	65° 01	
		5	R		63° 53	
		6	Y		62° 01	
		7	B+W	8 43	60° 49	
		8	R		59° 50	
		9	Y		58° 28	
		10	B+W	8 45	56° 34	
		11	R		54° 50	
		12	Y		52° 16	
		13	B+W	8 47	50° 57	
		14	R		48° 45	
		15	Y		45° 39	
		16	B+W	8 49	43° 11	
		17	R		39° 52	
		18	Y		36° 40	
		19	B+W	8 52	34° 08	
		20	R		36° 00	



CUT IN 176+00 N

Profile Notes Red. Plotted Job No. Division No. F. B.
X-Sec. Notes Chkd. Checked Survey of
No. Date Date Map No. Indexed Johnson Date
Pg. 217

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

8

Cut In 176+00 N

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.		Remarks
170+00	N9	21	Y		3[illegible] 15		
		22	B+W	8 54	[illegible] 42		
		23	R		3[illegible] 7		
		24	Y		30° [illegible]		
		25	B+W	8 56	31 [illegible]		
		26	R		29° [illegible]8		
		27	Y		2[illegible] [illegible]8		
		28	B+W	8 57	27° [illegible]6		
		29	R		25° [illegible]3		
		30	Y		27 [illegible]1	*	
		31	B+W	8 59	24° 03		
		32	R		21° [illegible]6		
		33	Y		20° [illegible]0		
		34	B+W	9 02	22° [illegible]9	*	
		35	R		21° [illegible]0		
		36	Y				

Cut In 176+00 N

F. B. 1889 Pg. 218 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of BEACH EROSION STUDIES Date Date No.
Survey by F.H.B. Notes JS Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date 10/26/53 Date Date No.

76L298 307 8-53

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.	— BOAT —	176+00 — N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1.	B+W	8:38	33.0 31.0	31.7 ✓	5.2 ✓	26.5 ✓	2230
2.	R		31.5 30.3	30.7 ✓	5.2	25.5 ✓	2050
3.	Y		30.5 29.8	30.0 ✓	5.2	24.8 ✓	1960
4.	B+W	8:40	29.0 28.0	28.3 ✓	5.2	23.1 ✓	1839
5	R		29.0 27.5	28.0 ✓	5.2	22.8 ✓	1764
6	Y		28.0 26.7	27.1 ✓	5.2	21.9 ✓	1680
7	B+W	8:42	27.0 26.0	26.3 ✓	5.2	21.1 ✓	1627
8	R		27.0 26.0	26.3 ✓	5.2	21.1 ✓	1584
9	Y		26.9 25.9	26.2 ✓	5.3	20.9 ✓	1530
10	B+W	8:44	27.0 25.0	25.7 ✓	5.3	20.4 ✓	1459
11	R		25.2 24.0	24.4 ✓	5.3	19.1 ✓	1402
12	Y		25.0 24.0	24.3 ✓	5.3	19.0 ✓	1326
13	B+W	8:47	25.0 23.2	23.8 ✓	5.3	18.5 ✓	1290
14	R		24.2 23.0	23.4 ✓	5.3	18.1 ✓	1234
15	Y		24.0 22.5	23.0 ✓	5.3	17.7 ✓	1168
16	B+W	8:49	23.8 22.0	22.6 ✓	5.3	17.3 ✓	1113
17	R		22.8 21.3	21.8 ✓	5.3	16.5 ✓	1051
18	Y		21.7 20.1	20.6 ✓	5.3	15.3 ✓	996
19	B+W	8:51	19.9 18.8	19.2 ✓	5.3 ✓	13.9 ✓	956
20	R		21.3 20.0	20.4 ✓	5.3	15.1 ✓	985

Boat 176+00 N

Profile Notes Red. Plotted Job No. 9117 Division No. F. B. Pg. 219

Notes Chkd. Checked Survey by Notes Date

No. Date 12-17-53 Date Map No. Index Johnson Date

76L298 307 8-53

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
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.	[illegible]	176+00 -N-

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		19.6 / 18.4	18.8 ✓	5.4	13.4 ✓	944
22	B+W	8.53	16.9 / 15.4	15.9 ✓	5.4 ✓	10.5 ✓	906
23	K		19.0 / 17.8	18.2 ✓	5.4	12.8 ✓	938
24	Y		17.0 / 15.2	15.8 ✓	5.4	10.4 ✓	909
25	B+W	8.55	17.3 / 16.0	16.4 ✓	5.4	11.0 ✓	918
26	K		15.3 / 14.0	14.4 ✓	5.4	9.0 ✓	889
27	Y		14.3 / 13.0	13.4 ✓	5.4	8.0 ✓	875
28	B+W	8.57	14.0 / 13.0	13.3 ✓	5.4	7.9 ✓	857
29	[illegible]		12.2 / 11.0	11.4 ✓	5.4	6.0 ✓	833
30			13.7 / 12.0	12.6 ✓	5.4	7.2 ✓	856
31	[illegible]	8.59	11.7 / 10.1	10.6 ✓	5.4	5.2 ✓	818
32	[illegible]		10.1 / 8.9	9.3 ✓	5.5	3.8 ✓	792
33			9.5 / 7.0	7.8 ✓	5.5	2.3 ✓	772
34	[illegible]	9:02	11.7 / 9.2	10.0 ✓	5.5 ✓	4.5 ✓	804
35	K		9.2 / 8.2	8.5 ✓	5.5	3.0 ✓	784
36	Y						
37	B+W						
38	K						
39	Y						
40	B+W						

Boat 176+00 N

F. B. 1889 Pg. 220 Job No. 8411 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No.
Survey by FHB Notes FR (10/26/53) Notes Chkd LCW Checked X-Sec.
Indexed E. C. Johnson Date Date 12-17-53 Date No.

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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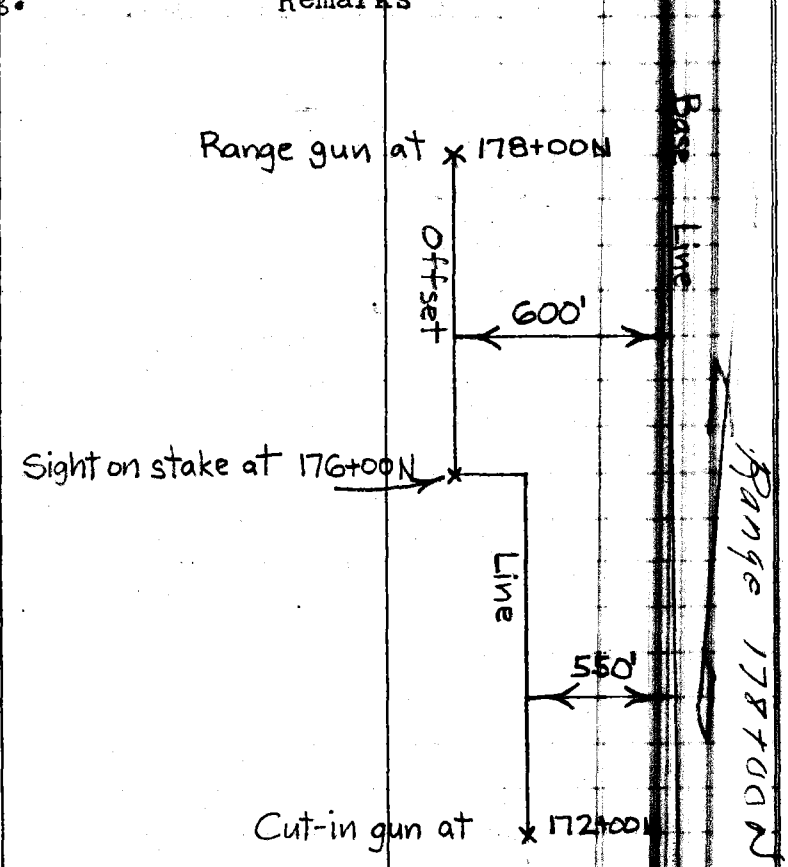
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	178+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
178+00N (600' Offset)	176+00N (600' Offset)	1	B&W	9:16	90°00'		
		2	R		90°00'		
		3	Y		90°00'		
		4	B&W	9:19	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	9:21	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B&W	9:24	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B&W	9:25	90°00'		
		14	R		90°00'		
		15	Y		90°00'		
		16	B&W	9:27	90°00'		
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	9:29	90°00'		
		20	R		90°00'		



Profile Notes Red. Plotted Job No. 8412 Division No.
Notes Chkd. Checked Survey of
No. Date Date Map No. Indexed Date
F. B. 1889 Pg. 221

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	178+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	21	Y		90°00'		
	22	B&W	9:31	90°00'		
	23	R		90°00'		
	24	Y		90°00'		
	25	B&W	9:33	90°00'		
	26	R		90°00'		
	27	Y		90°00'		
	28	B&W	9:34	90°00'		
	29	R		90°00'		
	30	Y		90°00'		
178+00N Range 178+00N						
176+00N						

F. B. 1889 PG. 222 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Beach Erosion Study Date Date No. X-Sec.
Survey by EHB Notes SEM 10/26/53 Notes Chkd. Checked No.
Indexed E. C. Johnson Date Date Date

76L298 307 8-53

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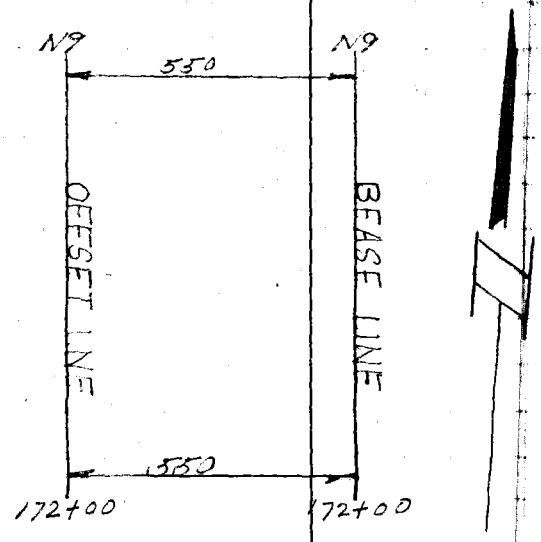
Do not extend notes this side of this line.

9

Cat IN 178+00N

STATION		B. S.	H. I.	F. S.	ELEV.	Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.	
172+00	N9	1	B+W	9 16	66° 15	
		2	R		68° 38 ✓	
		3	Y		63° 32	
		4	B+W	9 19	61° 08	
		5	R		58° 08	
		6	Y		54° 32	
		7	B+W	9 21	51° 52	
		8	R		48° 53	
		9	Y		46° 30	
		10	B+W	9 24	43° 58	
		11	R		41° 36	
		12	Y		39° 08	
		13	B+W	9 25	36° 51	
		14	R		34° 32	
		15	Y		36° 46 ✓	
		16	B+W	9 27	35° 04	
		17	R		32° 33	
		18	Y		33° 49	
		19	B+W	9 29	32° 24	
		20	R		30° 24	



Cat IN 178+00N

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 223

X-Sec. Notes Chkd. Checked Date Survey of

No. Date Date Map No. Indexed Date

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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10

cut in 178+00

STATION		B. S.	H. I.	F. S.	ELEV.		Remarks
Inst. At	Sight On	#	Color	Time	Hor. Ang.		
172+00	N9	21	Y		2[illegible] 54		
		22	B+W	9 31	2[illegible] 54	X	
		23	R		2[illegible] 20		
		24	Y		2[illegible] 2		
		25	B+W	9 33	2[illegible] 18		
		[illegible]	R		22 [illegible]8		
		27	Y		21 [illegible]4		
		28	B+W	9 34	23 [illegible]7		
		29	R		21 [illegible]9		
		30	Y		22 [illegible]7	X	

Cut in 178+00

F. B. 1889 Pg. 224 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Board Erosion Studies Date Date No. X-Sec.
Survey by EHB Notes 15 Notes Chkd. Checked
Indexed A. G. Johnson Date 10/26/53 Date Date No.

76L298 307 8-53

PLEASE RETURN TO
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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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STATION		B. S.	H. I.	F. S.	ELEV.	BOAT	178+00	N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
1	B+W	9:14	30.5 29.2	29.6 ✓	5.6 ✓	24.0 ✓	1914	
2	R		33.0 31.0	31.7 ✓	5.6	26.1 ✓	2085	
3	Y		29.0 28.0	28.3 ✓	5.6	22.7 ✓	1758	
4	B+W	9:19	28.1 27.0	27.4 ✓	5.6	21.8 ✓	1640	
5	R		27.0 26.0	26.3 ✓	5.7	20.6 ✓	1515	
6	Y		26.0 24.5	25.0 ✓	5.7	19.3 ✓	1391	
7	B+W	9:21	25.1 23.8	24.2 ✓	5.7	18.5 ✓	1315	
8	R		24.9 23.8	24.2 ✓	5.7	18.5 ✓	1238	
9	Y		24.[illegible] 22.5	23.0 ✓	5.7	17.3 ✓	1182	
10	B+W	9:23	23.3 22.0	22.4 ✓	5.7	16.7 ✓	1129	
11	R		23.1 21.0	21.7 ✓	5.7	16.0 ✓	1083	
12	Y		22.0 20.0	20.7 ✓	5.7	15.0 ✓	1038	
13	B+W	9:25	20.5 20.0	20.2 ✓	5.7	14.5 ✓	1000	
14	R		19.8 18.2	18.7 ✓	5.7	13.0 ✓	963	
15	Y		21.3 20.0	20.4 ✓	5.7	14.7 ✓	998	
16	B+W	9:27	20.2 19.0	19.4 ✓	5.7	13.7 ✓	971	
17			17.3 16.3	16.6 ✓	5.7	10.9 ✓	932	
18			19.2 17.4	18.0 ✓	5.7	12.3 ✓	952	
19	B+W	9:28	18.6 15.8	16.7 ✓	5.7 ✓	11.0 ✓	931	
20	R		16.2 14.0	14.7 ✓	5.8	8.9 ✓	902	

Profile Notes Red. ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ Pg. 225

X-Sec. Notes Chkd. [illegible] Checked ____ Survey by ____ Notes ____ Date ____

No. ____ Date 12-17-53 Date ____ Map No. ____ Indexed Johnson Date ____

Boat TN 178+00 N

76L298 307 8-53

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STATION	B. S.	H. I.	F. S.	ELEV.	— Boat —	178+00 — N —
#	Color	Time	Meas. Depth	Bottom Tide.	Adj. Depth	Remarks
21	Y		14.0 12.2	12.8	5.8	7.0	868
22	B+W	9:31	15.0 13.0	13.7	5.8	7.9	882
23	R		12.8 12.0	12.3	5.8	6.5	847
24	Y		10.9 10.0	10.3	5.8	4.5	805
25	B+W	9:33	12.1 11.0	11.4	5.8	5.6	828
26	R		11.0 9.6	10.1	5.8	4.3	804
27	Y		9.1 8.0	8.4	5.8	2.6	790
28	B+W	9:35	11.2 10.0	10.4	5.8	4.6	806
29	R		9.4 8.0	8.5	5.8	2.7	790
30	Y		11.0 9.5 ?	10.0	5.8	4.2 ?	798
31	B+W					
32	R					
33	Y					
34	B+W					
35	R					
36	Y					
37	B+W					
38	R					
39	Y					
40	B+W					

Boat 178+00 N

F. B. 1889 Pg. 226 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes Notes Chkd. Checked X-Sec.
Indexed H. C. Johnson Date Date 12-17-53 Date No.

76L298 307 8-53

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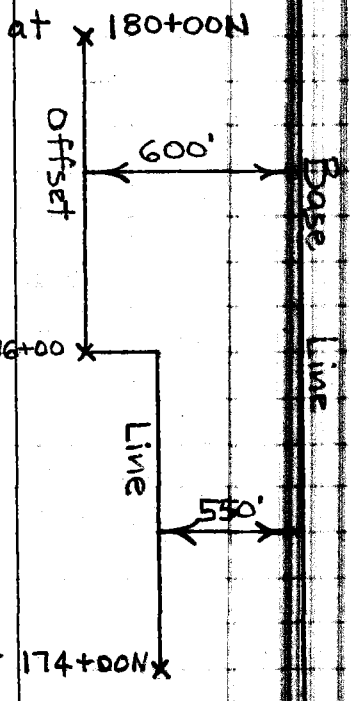
STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	180+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		1	B&W	9:47	90°00'		
		2	R		90°00'	Range gun at 180+00N	
		3	Y		90°00'		
		4	B&W	9:50	90°00'		
		5	R		90°00'		
		6	Y		90°00'		
		7	B&W	9:52	90°00'		
		8	R		90°00'		
		9	Y		89°46'	Sight on stake at 176+00	
		10	B&W	9:54	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
180+00N	176+00N	13	B&W	9:56	90°00'		
		14	R		90°00'		
		15	Y		90°00'		
		16	B&W	9:57	90°00'	Cut-in gun at 174+00N	
		17	R		90°00'		
		18	Y		90°00'		
		19	B&W	9:59	90°00'		
		20	R		90°00'		



Range 180+00N

Profile Notes Red. Plotted Job No. 8412 Division No.
Notes Chkd. Checked Survey Date
No. Date Date Map No. Indexed Date
F. B. 1889 Pg. 227

76L298 307 8-53

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F.B. 1889 Pg. 228 Job No. 8412 Division No. Notes Red. Plotted Profile No.
Survey of Beach Erosion Study Date Date X-Sec. No.
Survey by FHB Notes CEM 10/26/53 Notes Chkd. Checked
Indexed K. C. Johnson Date Date Date

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	180+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.		Remarks
		21	Y		90°00'	*	
		22	B&W	9:01	90°00'		
		23	R		90°00'		
		24	Y		89°15'		
180+00N	176+00N	25	B&W	9:03	90°00'		
		26	R		90°00'		
		27	Y		90°00'		
		28	B&W	9:05	90°00'		
		29	R		90°00'		
		30	Y		90°00'		
Range 180+00N		31	B&W	9:07	90°00'		
		32	R		90°00'		
		33	Y		90°00'		
		34	B&W	9:09	90°00'		
		35	R		90°00'		
		36	Y		90°		
		37	B&W	9:11	90°00'		
		38	R		90°00'		

76L298 307 8-53

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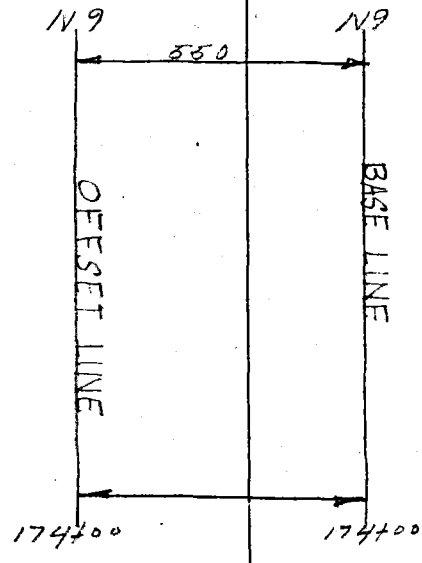
STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
174+00	N9	1	B+W	9 47	70° 12		
		2	R		68° 08		
		3	Y		66° 21		
		4	B+W	9 50	64° 07		
		5	R		61° 48		
		6	Y		59° 38		
		7	B+W	9 52	57° 23		
		8	R		55° 03		
		9	Y		53° 05		
		10	B+W	9 54	50° 16		
		11	R		47° 04		
		12	Y		44° 12		
		13	B+W	9 55	41° 48		
		14	R		39° 02		
		15	Y		30° 57		
		16	B+W	9 57	33° 27		
		17	R		36° 03		
		18	Y		34° 53		
		19	B+W	9 59	32° 49		
		20	R		34° 51		

Cut in 180+00 N



Profile Notes Red. Plotted Job No. Division No. F. B. 1989 Pg. 229

X-Sec. Notes Chkd. Checked Survey by Notes

No. Date Date Map No. Date

Cut in 180+00 N

76L298 307 8-53

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STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
174+00	N 9	21	Y		33 17		
		22	Btw	10:01	35 23 *		
		23	R		33 [illegible]		
		24	Y		34 37		
		25	Btw	10 03	31 [illegible]8		
		26	R		33 36		
		27	Y		2[illegible] [illegible]3		
		28	Btw	10 05	32 [illegible]0		
		29	R		2[illegible] [illegible]8		
		30	Y		27 [illegible]6		
		31	Btw	10 07	28 26 *		
		32	R		26 [illegible]3		
		33	Y		25 [illegible]1		
		35	Btw	10 09	24 [illegible]		
		36	R		22 [illegible]4		
		36	Y		23 [illegible]5		
		37	Btw	10 10	20 [illegible]3		
		38	R		21 [illegible]9		

Cut IN 180+00 N

Cut IN 180+00 N

F. B. 1889 Pg. 230 Job No. 8412 Division No. Notes Red. Plotted Profile
Survey of Bezek Erosion Studies Date Date No.
Survey by EHH Notes JS Notes Chkd. Checked X-Sec.
Indexed A. C. Johnson Date 10/26/53 Date Date No.

76L298 307 8-53

PLEASE RETURN TO
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STATION	B. S.	H. I.	F. S.	ELEV.	- BOAT -	180+00

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	BW	9:[illegible]	33.2 / 32.3	32.6 ✓	5.9 ✓	26.7 ✓	2217
2	P		31.8 / 31.0	31.3 ✓	5.9	25.4 ✓	2047
3	Y		31.0 / 30.0	30.3 ✓	5.9	24.4 ✓	1920
4	BW	9:49	29.5 / 28.4	28.8 ✓	5.9	22.9 ✓	1788
5	P		28.8 / 28.0	28.3 ✓	5.9	22.4 ✓	1670
6	Y		28.4 / 26.1	26.9 ✓	6.0	20.9 ✓	1576
7	BW	9:52	26.8 / 25.9	26.2 ✓	6.0	20.2 ✓	1486
8	P		26.1 / 25.0	25.4 ✓	6.0	19.4 ✓	1410
9	Y		25.2 / 24.8	24.9 ✓	6.0	18.9 ✓	1349
10	BW	9:53	25.6 / 24.6	24.5 ✓	6.0	18.5 ✓	1271
11			24.5 / 23.0	23.5 ✓	6.0	17.5 ✓	1195
12			23.6 / 22.0	22.5 ✓	6.0	16.5 ✓	1134
13		9:55	22.3 / 21.9	22.0 ✓	6.0	16.0 ✓	1086
14			22.2 / 20.0	20.7 ✓	6.0	14.7 ✓	1036
15			19.0 / 18.9	19.2 ✓	6.0	13.2 ✓	910
16		9:57	18.0 / 16.0	16.7 ✓	6.0	10.7 ✓	947
17			20.7 / 19.0	19.6 ✓	6.0	13.6 ✓	987
18			19.0 / 18.0	18.3 ✓	6.0	12.3 ✓	969
19	BW	9:59	17.0 / 16.0	16.~~7~~ 3	6.0 ✓	10.~~7~~ 3	937
20			18.2 / 17.8	18.3 ✓	6.0	12.3 ✓	968

Boat 180+00 N

Profile Notes Red. Plotted Job No. 8411 Division No. F. B. 1115 PG. 231

Notes Chkd. Date 2-17-53 Checked Date Survey by Date Map No. Date

No. Date

76L298 307 8-53

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.

Profile No. X-Sec. No.

Plotted Date Checked Date

Notes Red. Date Notes Chkd. Date 12-17-53

Division No. Notes Date

Job No. Notes Date

F. B. 1889 PG. 232

Survey of
Survey by A. C. Johnson
Indexed

STATION	B. S.	H. I.	F. S.	ELEV.	Boat	180+00 - N
# Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21 Y		18.3 16.2 19.0	16.9	6.0	10.9	951
22 Blue	10:01	17.9 17.0	18.3	6.0	12.3	975
23 R		16.0 18.1	16.3	6.0	10.3	942
24 Y		17.0 15.6	17.4	6.0	11.4	965
25 Blue	10:03	14.1 18.0	14.4	6.0	8.4	912
26 R		16.8 15.2	17.2	6.1	11.1	954
27 Y		14.0 16.8	14.4	6.1	8.3	896
28 Blue	10:05	13.0 14.0	15.6	6.1	9.5	930
29 R		13.0 12.6	13.3	6.1	7.2	894
30		11.3 13.9	11.7	6.1	5.6	857
31	10:07	13.3 13.0	12.8	6.1	6.7	875
32		12.6 12.7	12.3	6.1	6.2	854
33		11.4 11.2	11.8	6.1	5.7	838
34 Blue	10:09	10.1 11.0	10.5	6.1	4.4	824
35 R		9.0 10.4	9.7	6.1	3.6	800
36 Y		8.8 8.8	9.3	6.1	3.2	808
37 Blue	10:10	7.0 8.5	7.6	6.1	1.5	773
38 R		7.4	7.8	6.1	1.7	782
39						
40 Blue						

Boat 18 Station N

76L298 307 8-53

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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.		182+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		1	B & W	10:23	90°00'		
		2	R		90°00'		
		3	Y		90°00'		
		4	B & W	10:26	90°00'	Range gun at	182+00N
		5	R		90°00'		
		6	Y		90°00'		
		7	B & W	10:28	90°00'		
		8	R		90°00'		
		9	Y		90°00'		
		10	B & W	10:30	90°00'		
		11	R		90°00'		
		12	Y		90°00'		
		13	B & W	10:32	90°00'		
		14	R		90°00'		
		15	Y		90°00'		
182+00N	176+00N	16	B & W	10:34	90°00'	Sight on cut-in gun at	176+00N
		17	R		90°00'		
		18	Y		90°00'		
		19	B & W	10:36	90°00'		
		20	R		90°00'		

Offset Line

600'

Base Line

Range 182+00N

Profile Notes Red. Plotted Job No. 8412 Division No.

X-Sec. Notes Chkd. Checked Survey by

No. Date Date Map No. Indexed Date

F. B. 1889 PG. 233

76L298 307 8-53

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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.

F.B. 1889 Pg. 234 Job No. 8412 Division No. Notes Red. Plotted Profile No.
Survey of Beach Erosion Study Date Date X-Sec. No.
Survey by EHB Notes CEM 10/26/53 Notes Chkd. Checked
Indexed A. C. Johnson Date Date Date

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE	182+00 N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
		21	Y		90°00'		
		22	B&W	10:37	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
182+00 N	176+00 N	25	B&W	10:39	90°00'		
		26	R		90°00'		
		27	Y		90°00'		
		28	B&W	10:40	90°00'		
		29	R		90°00'		
		30	Y		90°00'		

Range 182+00 N

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

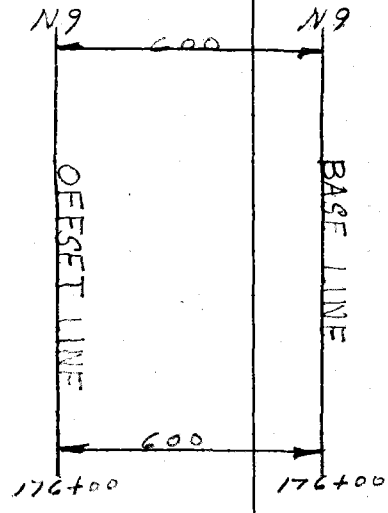
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK, WITH DATE AND NAME OF PERSON MAKING CHANGE.

Do not extend notes this side of this line.

13

CUT IN 182+00 N

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.		Remarks
176+00	N9	1	[illegible]	[illegible]	67°50		
		2			[illegible]		
		3			68°53		
		4	[illegible]	10 26	[illegible]		
		5			50°29		
		6			58°12		
		7	B+W	10 2[illegible]	55°35		
		8	R		53°[illegible]		
		9			50°16		
		10	B+W	10 30	47°54		
		11	R		45°05		
		12	Y		41°48		
		13	B+W	10 31	38°15		
		14	R		35°04		
		15	Y		36°00	*	
		16	B+W	10 33	32°48		
		17	R		34°00		
		18	Y		31°38		
		19	B+W	10 35	29°46		
		20	R		30°38	*	



Cut in 182+00 N

Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 235

X-Sec. Notes Chkd. Checked Survey By [illegible] Note [illegible] Date

No. Date Date Map No. Indexed C. Johnson Date

Cut in 182+00 N

F. B. 1889 Pg. 236 Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION STUDIES Date _____ Date _____ No. _____

Survey by EHB Notes JS Notes Chkd. _____ Checked _____ X-Sec.

Indexed A. C. Johnson Date 10/26/53 Date _____ Date _____ No. _____

Cut IN 182+00N

76L298 307 8-53

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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.		Remarks
Inst. Sight At On 176+00 N9	#	Color	Time	Hor. Ang.		Cut IN 182+00N
	21	Y		20 17		
	22	B&W	10 31	20 19		
	23	R		24 27		
	24	Y		21 02		
	25	B&W	10 39	20 35		
	26	R		21 13		
	27	Y		19 1		
	28	B&W	10 40	17 10		
	29	R		18 12		
	30	Y		18 6		

76L298 307 8-53

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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.	— BOAT —	182+00
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
1	B&W	10:23	32.8 32.0 32.6	32.3	6.2	26.1	2072
2	R		30.7 30.6	31.3	6.2	25.1	1944
3	Y		29.4 29.6	29.8	6.2	23.6	1828
4	B&W	10:26	28.1 29.0	28.6	6.2	22.4	1733
5	R		27.2 28.0	27.8	6.2	21.6	1660
6	Y		27.0 26.9	27.3	6.2	21.1	1568
7	B&W	10:28	25.3 26.0	25.8	6.2	19.6	1486
8	R		25.0 25.4	25.3	6.2	19.1	1410
9	Y		24.7 25.6	24.9	6.2	18.7	1322
10	B&W	10:30	23.4 24.3	23.9	6.2	17.7	1261
11	R		23.0 23.0	23.4	6.2	17.2	1201
12	Y		21.0 22.0	21.7	6.2	15.5	1136
13	B&W	10:31	21.1 20.0	21.4	6.2	15.2	1074
14	R		18.8 21.1	19.2	6.2	13.0	1021
15	Y		20.0 18.1	20.4	6.2	14.2	1035
16	B&W	10:33	17.1 19.1	17.4	6.2	11.2	987
17	R		18.3 17.1	18.6	6.2	12.4	1005
18	Y		16.0 15.2	16.4	6.2	10.2	970
19	B&W	10:35	14.5 16.8	14.7	6.2	8.5	943
20	R		15.2	15.7	6.2	9.5	956

Profile Notes Red. Plotted Job No. 9410 Division No.

X-Sec. Notes Chkd. Checked Survey By Notes Date

No. Date 12-17-53 Date Map No. Date

Boat 182+00 N

F. B. 1869 Pg. 237

76L298 307 8-53

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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.

F. B. 1881 Pg. 238 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No.
Survey by Notes Notes Chkd. Checked X-Sec.
Indexed E. C. Johnson Date Date Date No.

STATION	B. S.	H. I.	F. S.	ELEV.	Boat	182+00 -N-

#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
			15.0				
21	Y		14.0	14.3	6.2	8.1	923
			14.8				
22	Blu	10:37	13.0	13.6	6.2	7.4	899
			13.0				
23	R		12.9	12.3	6.2	6.1	873
			12.0				
24	Y		10.2	10.8	6.2	4.6	831
			13.6				
25	Blu	10:38	12.0	12.5	6.2	6.3	870
			11.8				
26	R		11.0	11.3	6.3	5.0	842
			11.0				
27	Y		9.0	9.7	6.3	3.4	813
			8.0				
28	Blu	10:40	6.7	7.1	6.3	0.8	785
			6.6				
29			8.8 ?	9.1 ?	6.3	2.8 ?	802
			9.9				
30			5.0	8.6	6.3	2.3	798
31							
32							
33							
34	Blu						
35	R						
36	Y						
37	Blu						
38	R						
39	Y						
40	Blu						

Boat 182+00 N

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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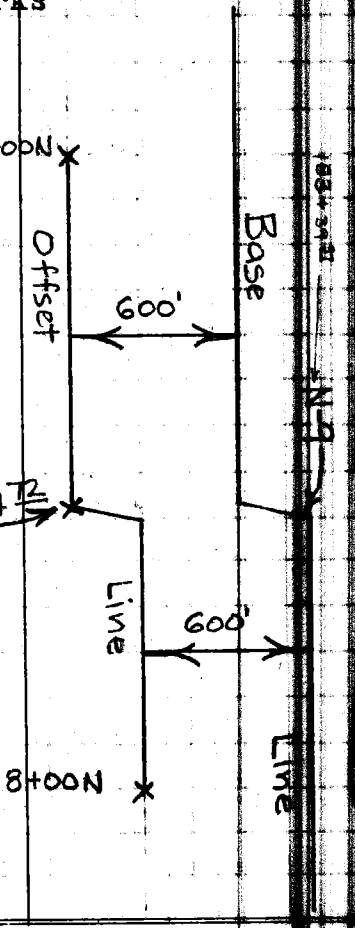
Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	184+00N
Inst. At / Sight On	#	Color	Time	Hor. Ang.	Remarks	
	1	B&W	10:55	90° 11"		
	2	R		90° 00'		
	3	Y		90°00'	Range gun at 184+00N	
	4	B&W	10:57	90° 00'		
	5	R		90°00'		
	6	Y		90°00'		
	7	B&W	10:59	90°00'		
	8	R		90°00'		
	9	Y		90°00'		
	10	B&W	11:02	90°00'		
	11	R		90°00'	Sight on stake at 183+54 72	
	12	Y		90°00'		
	13	B&W	11:04	90°00'		
	14	R		90°00'		
	15	Y		90°00'		
	16	B&W	11:05	90°00'		
	17	R		90°00'	Cut-in gun at 178+00N	
	18	Y		90°00'		
	19	B&W	11:08	90°00'		
	20	R		90°00'		

184+00N

183+54 72 N



Profile Notes Red. Plotted Job No. Division No.
No. Date Date Survey of
Notes Chkd. Checked Survey By
No. Date Date Map No. Indexed Johnson Date
F. B. 1889 PG. 239

76L298 307 8-53

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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.	RANGE	184+00N
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
184+00N	183+54 72 N	21	Y		90°00'		
		22	B&W	11:09	90°00'		
		23	R		90°00'		
		24	Y		90°00'		
		25	B&W	11:11	90°00'		
		26	R		90°00'		
		27	Y		90°00'		
		28	B&W	11:12	90°00'		
		29	R		90°00'		
		30	Y		90°00'		
		31	B&W	11:14	90°00'		
		32	R		90°00'		
		33	Y		90°00'		
		34	B&W	11:16	90°00'		

Range 184+00N

F. B. 1889 Pg. 240 Job No. 8412 Division No. Notes Red. Plotted No. Profile
Survey of Beach Erosion Study Date Date X-Sec.
Survey by FHB Notes CEM 10/26/53 Notes Chkd. Checked
Indexed A. C. Johnson Date Date Date No.

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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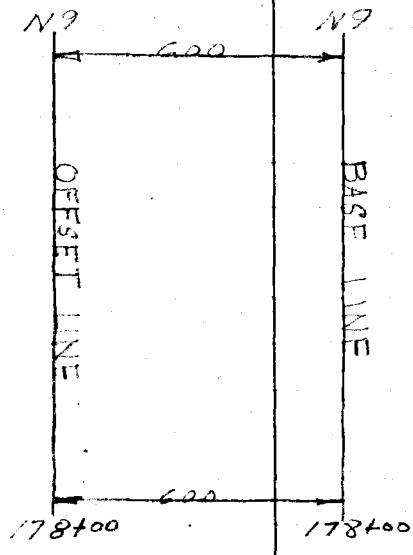
Do not extend notes this side of this line.

13

Cut IN 184+00 N

STATION Inst. At	Sight On	B. S. #	H. I. Color	F. S. Time	ELEV. Hor. Ang.
178+00	N9	1	B+W	10 55	67° 48
		2	R		65° 44
		3	Y		63° 24
		4	B+W	10 57	61° 33
		5	R		59° 22
		6	Y		56° 57
		7	B+W	10 59	53° 56
		8	R		50° 24
		9	Y		47° 29
		10	B+W	11 01	46° 12
		11	R		43° 29
		12	Y		41° 07
		13	B+W	11 3	38° 35
		14	R		34° 45
		15	Y		36° 27 *
		16	B+W	11 05	34° 34
		17	R		36° 35
		18	Y		35° 27
		19	B+W	11 07	35° 12
		20	R		34° 49

Remarks



Cut In 184+00 N

Profile Notes Red. Plotted Job No. Division No.
X-Sec. Notes Chkd. Checked Survey by
No. Date Date Map No. Date
F. B. Pg. 241

F.B. 1889 Pg. 242 Job No. 8412 Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of BEACH EROSION Studies Date _____ Date _____ No. _____

Survey by EHB Notes JS Notes Chkd. _____ Checked _____ X-Sec.

Indexed K. C. Johnson Date 10/26/53 Date _____ Date _____ No. _____

Cut In 184+00 N

STATION	B.S.	H.I.	F.S.	ELEV.		
Inst. Sight At On 178+00 N9	#	Color	Time	Hor. Ang.		Remarks
	21	Y		32° 13		
	22	B+W	11 09	30° 39		
	23	R		28° 02		
	24	Y		29° 04 *		
	25	B+W	11 10	26° 37		
	26	R		25° 46		
	27	Y		24° 08		
	28	B+W	11 12	24° 09		
	29	R		23° 17		
	30	Y		22° 35		
	31	B+W	11 13	22° 41		
	32	R		20° 58		
	33	Y		19° 35		
	34	B+W	11 15	19° 47		

Cut In 184+00

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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Do not extend notes this side of this line.

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.	BOAT	184+00	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
1	B&W	10:55	33.0 / 32.0	32.3 ✓	6.3 ✓	26.0 ✓	2040	
2	R		31.4 / 30.3	30.7 ✓	6.3	24.4 ✓	~~1901~~	discrepancy too much, use
3	Y		30.4 / 29.3	29.7 ✓	6.3	23.4 ✓	1770	
4	B&W	10:57	30.0 / 28.0	28.7 ✓	6.3	22.4 ✓	~~1680~~	discrepancy too much, use
5	R		28.8 / 27.0	27.6 ✓	6.3	21.3 ✓	~~1588~~	discrepancy too much, use
6	Y		27.4 / 26.0	26.5 ✓	6.3	20.2 ✓	1496	
7	B&W	10:59	26.8 / 25.0	25.6 ✓	6.3	19.3 ✓	1399	
8	R		25.3 / 24.0	24.4 ✓	6.3	18.1 ✓	1303	
9	Y		24.2 / 23.8	23.9 ✓	6.3	17.6 ✓	1230	
10	B&W	11:01	24.0 / 23.0	23.3 ✓	6.3	17.0 ✓	1203	
11	R		23.3 / 22.1	22.5 ✓	6.3	16.2 ✓	1145	
12	Y		22.2 / 21.1	21.5 ✓	6.3	15.2 ✓	1100	
13	B&W	11:03	21.2 / 20.1	20.5 ✓	6.3	14.2 ✓	1056	
14	R		17.8 / 17.0	17.3 ✓	6.3	11.0 ✓	994	
15	Y		19.0 / 19.0	19.0 ✓	6.3	12.7 ✓	1020	
16	B&W	11:05	18.5 / 17.0	17.5 ✓	6.3	11.2 ✓	991	
17	R		20.8 / 18.2	19.1 ✓	6.3	12.8 ✓	1023	
18			18.1 / 17.0	17.4 ✓	6.3	11.1 ✓	1005	
19	B&W	11:07	17.7 / 16.1	16.6 ✓	6.3 ✓	10.3 ✓	1001	
20	R		18.1 / 17.0	17.4 ✓	6.3	11.1 ✓	995	

City figures

County figures by scaling

Boat 184+00 N

Profile Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1189 PG. 243

No. ____ Date ____ Date ____ Survey of ____

No. ____ Date 12-17-53 Date ____ Map No. ____ Rod Jackson Date ____

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.	— BOAT —	184+00 — N —
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		16.0 15.0	15.3	6.3	9.0	956
22	B&W	11:09	15.0 14.0	14.3	6.3	8.0	926
23	R		14.0 12.2	12.8	6.3	6.5	897
24	Y		14.5 13.0	13.5	6.3	7.2	912
25	B&W	11:09	14.0 11.2	12.1	6.3	5.8	878
26	R		12.5 11.1	11.6	6.3	5.3	868
27	Y		13.0 11.1	11.7	6.3	5.4	847
28	B&W	11:11	12.1 10.5	11.0	6.3	4.7	847
29	R		11.7 9.9	10.5	6.3	4.2	836
30	Y		11.0 10.0	10.3	6.3	4.0	828
31	B&W	11:13	10.9 10.0	10.3	6.3	4.0	829
32	R		10.0 9.0	9.3	6.3	3.0	804
33	Y		9.4 7.0	7.8	6.3	1.5	792
34	B&W	11:15	9.2 8.0	8.4	6.3	2.1	794
35	R						
36	Y						
37	B&W						
38	R						
39	Y						
40	B&W						

Boat 184+00

F.B. 1889 PG 24

Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile ____

Survey of ____ Date ____ Date ____ No. ____

Survey by ____ Notes ____ Notes Chkd. ____ Checked ____ X-Sec. ____

Indexed H. C. Johnson Date ____ Date ____ Date ____ No. ____

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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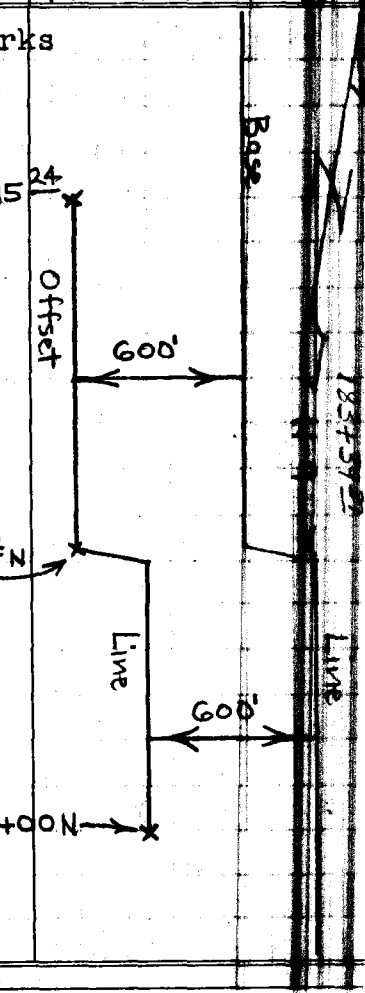
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.	RANGE 185+95 24
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
185+95 24 N (600' Offset)	183+54 72 N (600' Offset)	1	B&W	11:25	90°00'	
		2	R		90°00'	
		3	Y		90°00'	Range gun at 185+95 24
		4	B&W	11:28	90°00'	
		5	R		90°00'	
		6	Y		90°00'	
		7	B&W	11:31	90°00'	
		8	R		90°00'	
		9	Y		89°45'	
		10	B&W	11:33	90°00'	
		11	R		90°00'	Sight on stake at 183+54 72 N
		12	Y		90°00'	
		13	B&W	11:35	90°00'	
		14	R		90°00'	
		15	Y		90°00'	
		16	B&W	11:36	90°00'	
		17	R		90°00'	Cut-in gun at 180+00 N
		18	Y		90°00'	
		19	B&W	11:40	90°00'	
		20	R		90°00'	



Range 185+98.24 N

Profile Notes Red. Plotted Job No. 8412 Division No.
X-Sec. Notes Chkd. Checked Survey of Benchmark
No. Date Date Map No. Indexed G. Johnson Date
F. B. 1889 Pg. 245

F.B. 1889 Pg. 246

Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile

Survey of ____ Date ____ Date ____ No. ____

Survey by ____ Notes ____ Notes Chkd. ____ Checked ____ X-Sec.

Indexed K. C. Johnson Date ____ Date ____ Date ____ No. ____

76L298 307 8-53

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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					
	#	Color	Time	Hor. Ang.		Remarks
	21	Y		90° 00'		
	22	BEW	11:41	90° 00'		
	23	R		90° 00'		
	24	Y		90° 00'		
	25	BEW	11:43	90° 00'		
	26	R		90° 00'		
	27	Y		90° 00'		
	28	BEW	11:45	90° 00'		
	29	R		90° 00'		
	30	Y		90° 00'		

Range 185+95.24 N

185+95 24 N

183+54 72 N

185+95 24

76L298 307 8-53

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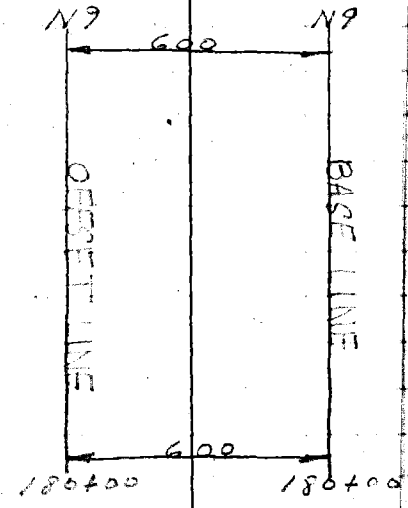
Do not extend notes this side of this line.

STATION		B. S.	H. I.	F. S.	ELEV.		
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks	
[illegible]	N9	1	B+W	11 25	67° 38		
		2	R		65° 50		
		3	Y		63° 53		
		4	B+W	11 27	[illegible]		
		5	R		[illegible]		
		6	Y		56° 52		
		7	B+W	11 30	51° 45		
		8	R		54° 55		
		9	Y		52° 50 *		
		10	B+W	11 33	53° 11		
		11	R		50° 53		
		12	Y		49° 24		
		13	B+W	11 35	48° 16		
		14	R		46° 29		
		15	Y		44° 39		
		16	B+W	11 36	42° 31		
		17	R		43° 37		
		18	Y		41° 42		
		19	B+W	11 39	39° 40		
		20	R		37° 38		

15
CUT IN 185+00



Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 247
X-Sec. Notes Chkd. Checked Survey of
No. Date Date Map No. Indexed Johnson Date

CUT IN 185+95.24 N

F. B. 1889 Pg. 248 Job No. 8412 Division No. Notes Red. Plotted Profile

Survey of BEACH EROSION STUDIES Date Date No.

Survey by F H B Notes JS Notes Chkd. Checked X-Sec.

Indexed A. C. Johnson Date 10/26/53 Date Date No.

Cut IN 185+95.24 N

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STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. Sight At On	#	Color	Time	Hor. Ang.		Remarks
180+00 NG	121	Y		35° 00		
	122	BSW	11 41	33° 16		
	23	Q		31° 02		
	24	Y		30° 01		
	25	BSW	11 48	32° 15		
	26	R		30° 03		
	27	Y		29° 15		
	28	BSW	11 48	30° 03		
	29	R		29° 04		
	30	Y		29° 05		

Cut IN 185+00

16

76L298 307 10-51

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Do not extend notes this side of this line.

185+95 24

STATION #	Color	Time	B. S.	H. I. Meas. Depth	F. S. Bottom	ELEV. Tide	Adj. Depth	Remarks
1	Blue	11:25		31.0	31.7	6.3	25.4	2017
2	R			30.4	30.6	6.3	24.3	1898
3				29.7	29.9	6.2	23.7	1788
4	Blue	11:27		28.0	28.7	6.2	22.5	1654
5				27.0	27.3	6.2	21.1	1574
6				26.2	26.5	6.2	20.3	1485
7	Blue	11:30		23.0	23.3	6.2	17.1	1329
8				24.9	25.3	6.2	19.1	1420
9				25.0	23.5	6.2	17.3	~~1359~~ 1351
10		11:32		23.8	24.1	6.2	17.9	1370
11				22.0	22.4	6.2	16.2	1306
12				21.3	21.5	6.2	15.3	1270
13		11:34		20.5	20.9	6.2	14.7	1243
14				20.0	20.4	6.2	14.2	1202
15				18.9	19.2	6.2	13.0	1164
16	Blue	11:36		17.0	17.3	6.2	11.1	1121
17				18.1	18.4	6.2	12.2	1144
18				17.0	17.3	6.2	11.1	1106
19	Blue	11:38		16.3	17.0	6.2	10.8	1069
20				15.0	15.5	6.2	9.3	1036

Profile No.____ Notes Red____ Plotted____ Job No. 8412 Division No.____

F.B. 1159 Pg. 2449

Survey of

Map No.____ Checked Johnson Date____

No.____ Date____ Date____ Date____

Page 18 of 24 N

76L298 307 10-51

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Do not extend notes this side of this line.

185+9424

STATION		B. S.	H. I.	F. S.	ELEV.	BOAT	186+00 N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	X		14.6 14.2	14.3 ✓	6.2	8.1 ✓	1004
22	B&W	11:41	14.2 13.1	13.5 ✓	6.2 ✓	7.3 ✓	967
23	R		12.8 12.0	12.3 ✓	6.2	6.1 ✓	942
24	Y		12.1 10.1	10.8 ✓	6.2	4.6 ✓	921
25	B&W	11:43	12.7 12.0	12.2 ✓	6.2	6.0 ✓	955
26	X		12.6 11.7	12.0 ✓	6.2	5.8 ✓	935
27			10.7 10.0	10.2 ✓	6.1	4.1 ✓	901
28	B&W	11:45	12.1 11.2 10.0	11.5 ✓	6.1 ✓	5.4 ✓	921
29	X		9.1	9.4 ✓	6.1	3.3 ✓	888
30			9.6 8.0	8.5 ✓	6.1 ✓	2.4 ✓	869
31	B&W						
32	X						
33							
34	B&W						
35	R						
36	Y						
37	B&W						
38	X						
39	Y						
40	B&W						

Boat 185+95.24 N

F.B. 1887 PG. 250 Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile ____
Survey of ____ Date ____ Date ____ No. ____ X-Sec. ____
Survey by ____ Notes ____ Notes Chkd Rowe Checked ____ Date ____ No. ____
Indexed R. C. Johnson Date 12-17-53

76L298 307 8-53

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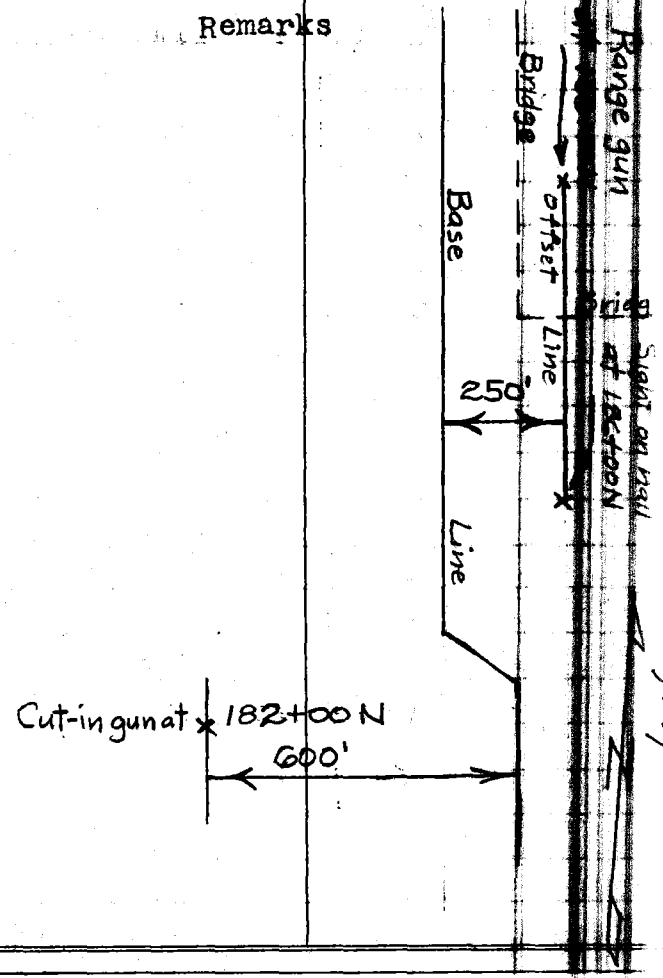
STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	·188+00N
Inst. At / Sight On	#	Color	Time	Hor. Ang.	Remarks	
	1	B&W	12:02	90°00'		
	2	R		90°00'		
	3	Y		90°00'		
	4	B&W	12:04	90°00'		
	5	R		90°00'		
	6	Y		90°00'		
	7	B&W	12:07	90°00'		
	8	R		90°00'		
	9	Y		90°00'		
	10	B&W	12:08	90°00'		
	11	R		90°00'		
	12	Y		90°00'		
	13	B&W	12:10	90°00'		
	14	R		90°00'		
	15	Y		90°00'		
	16	B&W	12:12	90°00'		
	17	R		90°00'		
	18	Y		90°00'		
	19	B&W	12:14	90°00'		
	20	R		90°00'		

On Bridge over Ballona Creek Channel
188+00N
186+00N



Profile Notes Red. Plotted Job No. 8412 Division No.
X-Sec. Notes Chkd. Checked Survey of
No. Date Date Map No. Date
F. B. 1889 Pg. 251

76L298 307 8-53

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Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	188+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	21	Y		90° 00'		
	22	B&W	12:16	90° 00'		
	23	R		90° 00'		
	24	Y		90° 00'		
	25	B&W	12:18	90° 00'		
	26	R		90° 00'		
	27	Y		90° 00'		
	28	B&W	12:20	90° 00'		
	29	R		90° 00'		
	30	Y		90° 00'		
Range 188+00N 188+00N 186+00N	31	B&W	12:21	90° 00'		
	32	R		90° 00'		
	33	Y		90° 00'		
	34	B&W	12:23	90° 00'		
	35	R		90° 00'		
	36	Y		90° 00'		
	37	B&W	12:25	90° 00'		
	38	R		90° 00'		
	39	Y		90° 00'		
	40	B&W	12:27	90° 00'		

F. B. 1889 Pg. 252 Job No. Division No. Notes Red. Plotted Profile
Survey of Date Date No. X-Sec.
Survey by Notes 10/26 Notes Chkd. Checked
Indexed E. C. Johnson Date Date No.

76L298 307 8-53

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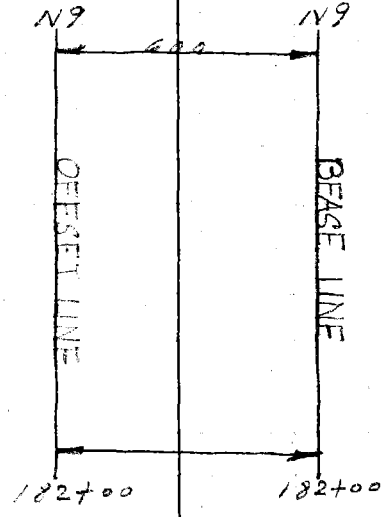
17

CUT IN 188+00

STATION Inst. At	Sight On	B. S. #	H. I. Color	F. S. Time	ELEV. Hor. Ang.	Remarks
182+00	N9	1	B+W	12 01	65°54	∠ To the Left
		2	R		62°51	
		3	Y		60°25	
		4	B+W	12 05	56°35	
		5	R		57°32	
		6	Y		54°37	
		7	B+W	12 07	56°43	
		8	R		55°52	
		9	Y		53°50	
		10	B+W	12 08	51°34	
		11	R		52°00	
		12	Y		50°41	
		13	B+W	12 10	48°56	
		14	R		47°40	
		15	Y		46°14	
		16	B+W	12 12	44°35	
		17	R		45°26	
		18	Y		44°14	
		19	B+W	12 14	42°33	
		20	R		41°13	



Profile Notes Red. Plotted Job No. Division No. F. B. Pg. 243

X-Sec. Notes Chkd. Checked Survey by Notes Date

No. Date Date Map No. E. Johnson Date

CUT IN 188+00

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F. B. 1289 Pg. 254 Job No. 2412 Division No. Notes Red. Plotted Profile No.
Survey of BEACH EROSION STUDIES Date Date X-Sec. No.
Survey by EHB Notes Chkd. Checked
Indexed A. C. Johnson Date 12/26/53 Date Date

STATION	B. S.	H. I.	F. S.	ELEV.		
Inst. At / Sight On	#	Color	Time	Hor. Ang.		Remarks
182+00 N9	21	Y		40 00		
	22	B+W	12 16	38 30	*	
	23	R		45 29		
	24	Y		37 39		
	25	B+W	12 18	37 19		
	26	R		37 12		
	27	Y		36 31		
	28	B+W	12 20	35 1		
	29	R		34 6		
	30	Y		31 4		
	31	B+W	12 21	34 2	*	
	32	R		32 18		
	33	Y		30 4		
	34	B+W	12 23	28 53		
	35	R		26 51		
	36	Y		25 3		
	37	B+W	12 25	22 7		
	38	R		19 1		
	39	Y		14 7		
	40	B+W	12 26	12 27		

Cut In 188+00 N

18
Cut In 188+00

76L298 307 10-51

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STATION		B. S.	H. I.	F. S.	ELEV.	BOAT	188+00	
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks	
1	[illegible]	12:01	31.0 / 30.0	30.3 ✓	6.0 ✓	24.3 ✓	1911	19[illegible]
2	[illegible]		29.5 / 28.5	28.8 ✓	6.0	22.8 ✓	1741	17[illegible]
3			28.0 / 26.4	26.9 ✓	6.0	20.9 ✓	1629	16[illegible]
4	[illegible]	12:03	24.1 / 23.7	23.8 ✓	6.0	17.8 ✓	1484	14[illegible]
5			23.0 / 24.0	24.3 ✓	6.0	18.3 ✓	1520	
6			23.0 / 21.2	21.8 ✓	6.0	15.8 ✓	1419	
7		12:06	25.1 / 23.0	23.7 ✓	6.0	17.7 ✓	1488	
8			24.0 / 22.2	22.8 ✓	6.0	16.8 ✓	1462	
9			22.0 / 21.0	21.3 ✓	6.0	15.3 ✓	1399	
10	[illegible]	12:07	20.1 / 19.0	19.4 ✓	6.0	13.4 ✓	1334	
11			21.1 / 19.8	20.2 ✓	5.9	14.3 ✓	1347	
12			19.0 / 18.2	18.5 ✓	5.9	12.6 ✓	1309	
13		12:10	18.3 / 17.6	17.8 ✓	5.9	11.9 ✓	1266	
14			18.0 / 17.0	17.3 ✓	5.9	11.4 ✓	1237	
15			17.0 / 16.0	16.3 ✓	5.9	10.4 ✓	1204	
16		12:12	15.2 / 14.5	14.7 ✓	5.9	8.8 ✓	1168	
17			16.1 / 14.9	15.3 ✓	5.9	9.4 ✓	1188	
18			16.0 / 13.0	14.0 ✓	5.9	8.1 ✓	1160	
19	[illegible]	12:13	14.9 / 13.0	13.6 ✓	5.9	7.7 ✓	1127	
20	[illegible]		13.1 / 11.3	11.9 ✓	5.9	6.0 ✓	1102	

Boat 188+00

Profile No. ____ Date ____ Notes Red ____ Plotted ____ Job No. [illegible] Division No. ____ F.B. [illegible] Pg. 2[illegible]

No. ____ Date 12-17-53 Date ____ Map No. ____ Survey of ____ Indexed A. G. Johnson Date ____

76L298 307 10-51

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STATION		B. S.	H. I.	F. S.	ELEV.	BOAT	188+00 -N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
21	Y		11.3 10.5	10.8 ✓	5.9	4.9 ✓	1079
22	BLW	12:15	10.0 9.0	9.3 ✓	5.9 ✓	3.4 ✓	1054
23	R		12.0 11.0	11.3 ✓	5.9	5.4 ✓	1098
24	Y		10.8 9.9	10.2 ✓	5.8	4.4 ✓	1070
25	[illegible]	12:17	10.5 9.0	9.5 ✓	5.8	3.7 ✓	1045
26	R		9.9 9.0	9.3 ✓	5.8	3.5 ✓	1035
27	Y		9.4 8.9	9.1 ✓	5.8	3.3 ✓	1020
28	BLW	12:19	10.0 9.0	9.3 ✓	5.8	3.5 ✓	1018
29			9.7 9.0	9.2 ✓	5.8	3.4 ✓	989
30			8.7 7.2	7.7 ✓	5.8	1.9 ✓	948 950
31		12:20	9.0 8.4	8.6 ✓	5.8	2.8 ✓	984
32			8.8 7.9	8.2 ✓	5.8	2.4 ✓	961
33			8.6 7.8	8.1 ✓	5.8	2.3 ✓	933
34		12:22	8.5 7.2	7.6 ✓	5.8	1.8 ✓	907
35			7.9 6.8	7.2 ✓	5.8	1.4 ✓	881
36			7.9 7.1	7.4 ✓	5.8	1.6 ✓	859
37		12:24	8.1 6.9	7.3 ✓	5.8	1.5 ✓	829
38			7.6 6.5	6.9 ✓	5.8	1.1 ✓	792
39			7.5 7.0	7.2 ✓	5.8	1.4 ✓	736
40		12:25	7.4 6.2	6.6 ✓	5.8 ✓	0.8 ✓	710

Boat 188+00 N

F.B. 1889 PG. 256

Job No. ____ Division No. ____ Notes Red. ____ Plotted ____ Profile ____

Survey of ____ Date ____ Date ____ No. ____

Survey by ____ Notes ____ Notes Chkd. ____ Checked ____ X-Sec. ____

Indexed ____ Date ____ Date ____ Date ____ No. ____

76L298 307 8-53

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STATION	B. S.	H. I.	F. S.	ELEV.	RANGE	188+00N
Inst. Sight At On	#	Color	Time	Hor. Ang.	Remarks	
	41	R		90°00'		
	42	Y		90°00'		
	43	B&W	12:28	90°00'		
	44	R		90°00'		
	45	Y		90°00'		
	46	B&W	12:30	90°32'		
	47	R		90°00'		
	48	Y		90°00'		
	49	B&W	12:34	90°00'		
	50	R		90°00'		
	51	Y		90°00'		
	52	B&W	12:36	90°00'		
	53	R		90°00'		
	54	Y		90°00'		
	55	B&W	12:38	90°00'		
	56	R		90°00'		

On Bridge over Ballona Creek Channel
188+00N
186+00N

Range 188+00N

Profile Notes Red. Plotted Job No. 8412 Division No.
X-Sec. Notes Chkd. Checked Survey by
No. Date Date Map No. Date
F. B. 1889 Pg. 257

F. B. 1889 Pg. 258 Job No. Division No. Notes Red. Plotted Profile

Survey of Date Date No.

Survey by Notes Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

76L298 307 8-53

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. Sight At	#	Color	Time	Hor. Ang.	Remarks

76L298 307 8-53

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726 LOS ANGELES COUNTY ENGINEERING BLDG.

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19

CUT IN 188+00

STATION		B. S.	H. I.	F. S.	ELEV.	
Inst. At	Sight On	#	Color	Time	Hor. Ang.	Remarks
182+00	N9	41	R		08° 26	
		42	Y		02° 39	
		43	B+W	12 28	04° 50	∠ To the Right
		44	R		11° 17	
		45	Y		15° 32	
		46	B+W	12 30	21° 09	
		47	R		12° 47	
		48	Y		20° 09	
		49	B+W	12 34	23° 16	
		50	R		26° 08	
		51	Y		30° 28	
186 77 40	N 190+00	52	B+W	12 36	36° 54	
		53	R		39° 54	
		54	Y		7° 37	∠ Left
		55	B+W	12 38	24° 15	∠ Right
		56	R		40° 29	∠ Right

CUT IN 188+00 N

Profile Notes Red ____ Plotted ____ Job No. ____ Division No. ____ F. B. ____ Pg. 259

X-Sec. Notes Chkd ____ Checked ____ Survey By ____ Notes ____ Date ____

No. ____ Date ____ Date ____ Map No. ____ Date ____

F.B. 1884 Pg. 260

Job No. _____ Division No. _____ Notes Red. _____ Plotted _____ Profile

Survey of _____ Date _____ Date _____ No. _____

Survey by _____ Notes _____ Notes Chkd. _____ Checked _____ X-Sec.

Indexed _____ Date _____ Date _____ Date _____ No. _____

76L298 307 8-53

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

76L298 307 10-51

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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.	BOAT	188+00N
#	Color	Time	Meas. Depth	Bottom	Tide	Adj. Depth	Remarks
41	R		7.2 6.1	6.5 ✓	5.8	0.7 ✓	663
42			6.8 6.0	6.3 ✓	5.7	0.6 ✓	605
43	B&W	12:28	6.2 5.7	5.9 ✓	5.7	0.2 ✓	527
44	R		6.9 5.0	5.6 ✓	5.7	-0.1 ✓	458 High level sailing
45	Y		5.6 5.0	5.2 ✓	5.7	-0.5 ✓	411 (Shore fooled that whale!)
46	B&W	12:29	6.0 5.2	5.5 ✓	5.7	-0.2 ✓	345
47	R		6.4 5.0	5.5 ✓	5.7	-0.2 ✓	441
48	Y		6.0 5.2	5.5	5.7	-0.2	357
49	B&W	12:33	6.1 5.5	5.7 ✓	5.7	0.0 ✓	319
50	R		7.0 6.0	6.3 ✓	5.6	0.7 ✓	283
51	Y		6.9 6.0	6.3 ✓	5.6	0.7 ✓	219
52	B&W	12 35	6.6 6.0	6.2 ✓	5.6	0.6 ✓	123
53	R		6.0 5.5	5.7 ✓	5.6	0.1 ✓	74
54	Y		5.8 5.1	5.3 ✓	5.6	-0.3 ✓	Resumed flight 16'
55	B&W	12 37	6.0 5.0	5.3 ✓	5.6	-0.3 ✓	-55' (East of [illegible]
56	R		5.6 5.0	5.2 ✓	5.6	-0.4 ✓	-105' "
57	Y						Streaked to port
58	B&W						You know what.

Profile No. ____ Date ____ Notes Red ____ Plotted ____ Job No. 8412 Division No. ____ F.B. 1889 Pg. 261

No. ____ Date 12-11-53 Date ____ Map No. ____ Indexed Johnson Date ____ Survey of ____

Boat 188+00N

8 307 10-51

L[redacted]

[redacted]

STATION [redacted] ELEV.

Color T[redacted]e [redacted]th [redacted]ottom [redacted]de [redacted]dj. [redacted]oth [redacted] Remarks

1889

F.B. 1889 PG. 262 Job No. Division No. Notes Red. Plotted Profile

Survey of Date Date

Survey by Notes Notes Chkd. Checked

Indexed Date Date Date No.