Notes Ck'd by	Survey of PORTUGUESE BEND LANDSLIDE STUDIES	F.B. 4338 PG. 1
Map No.	JN 0021.64 Tape — Std — °F	
Office Work	Surveyed by W. A. RICHARDS	
Checked	Notes W. A. R. Date 11-76	
Date	Indexed	

J. N. 0021.64

PORTUGUESE BEND LANDSLIDE OBSERVATIONS

GENERAL INDEX

JOB	DESCRIPTION	DATE
HORIZONTAL	"Q" LINE OFFSETS	10-76
HORIZONTAL	"WAYFARER" TRIANGLE	10-76
HORIZONTAL	"P" LINE TRAVERSE	11-76
HORIZONTAL	"SAN" LINE OFFSETS & TRIANGLE	11-76
"	"DAVIS" TO NORTH FIX - H.P. DISTANCE	10-76
"	RADIAL #1 " EAST FIX - " "	10-76
"	" " NORTH FIX - " "	10-76
"	K-1 " SHIELDS - " "	10-76
"	" " POINT - " "	10-76
"	RADIAL #2, ECC. #2 TO "POINT" " "	10-76
"	" " " WEST FIX " "	10-76
"	K-3A, ECC. #2 " "POINT" " "	10-76
"	" " " K-6 " "	10-76
"	BLAKESLEY " SHIELDS " "	10-76
"	" " POINT " "	10-76
"	P-4A " EAST FIX " "	10-76
"	" " "POINT" " "	10-76
"	Q-1 " EAST FIX " "	10-76
"	" " H-8A " "	10-76
"	Q-5 " Q-1 " "	10-76
"	Q-1 " Q-5 " "	10-76
"	" " Q-4A " "	10-76
"	" " Q-4B " "	10-76
"	" " Q-3 " "	10-76
"	" " Q-2 " "	10-76
"	" " Q-1A " "	10-76
"	H-8A " P-2 " "	10-76
"	" " H-7A, ECC. #5 " "	10-76
"	P-2 " P-2A " "	10-76
"	" " H-8A " "	10-76
"	P-2A " P-3 " "	10-76
"	" " P-2 " "	10-76
"	WAYFAYER-2 " E-8B " "	10-76
"	" " G-6 " "	10-76
"	G-6 " WAYFARER-2 " "	10-76
"	" " E-8B " "	10-76
"	SAN-1 " H-7A, ECC #5 " "	11-76
"	" " P-4A " "	11-76
"	" " SAN-5 " "	11-76
"	" " SAN-4 " "	11-76

No ~~S.W.D.~~ file ~~out~~ '88 & No microfilm.

F.B. 4338 PG. 2

PAGE	JOB	DESCRIPTION					DATE
32	HORIZONTAL	SAN-1	TO	"INT."	H.P.	DIST.	11-76
"	"	"	"	SAN-3	"	"	11-76
33	"	"	"	SAN-2	"	"	11-76
"	"	"	"	SAN-5	"	"	11-76
34	"	"	"	SAN-4	"	"	11-76
35	"	H-7A, ECC. #5	"	P-4A	"	"	11-76
"	"	" "	"	H-8A	"	"	11-76
36	"	" "	"	SAN-1	"	"	11-76
37	"	P-4A	"	"	"	"	11-76
"	"	"	"	P-3	"	"	11-76
38	"	"	"	H-7A, ECC #5	"	"	11-76
"	"	"	"	P-3	"	"	11-76
39	"	E-8B	"	WAYFARER-2	"	"	11-76
"	"	"	"	G-6	"	"	11-76
40	"	P-3	"	P-4A	"	"	11-76
"	"	"	"	P-2A	"	"	11-76
41	"	TABULATION OF MISC. DISTANCES			"	"	11-76
42	"	" " "		"	"	"	"

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 10-25-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 7

J.N. 0021.64

PORTUGUESE BEND LANDSLIDE STUDIES

"Q" LINE OBSERVATIONS

HORIZONTAL CONTROL REF: "Q-1 TO Q-4": FB. 949-199
" " " "Q-4A & Q-5": " 2485-25

HORIZONTAL ANGLE TIES. F.B.-G-1482 PG. 5-38-42, INC.
VERTICAL " " " " " 43
DISTANCES MEAS. WITH H.P. DISTANCE METER # 1225A02170
ANGLES " " T-2 # 128760

RICHARDS
MOODY
TURRILL
BUSTRUM

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

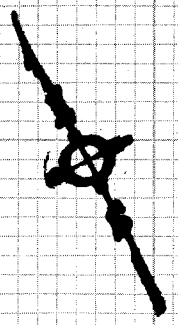
Do not extend notes this side of this line

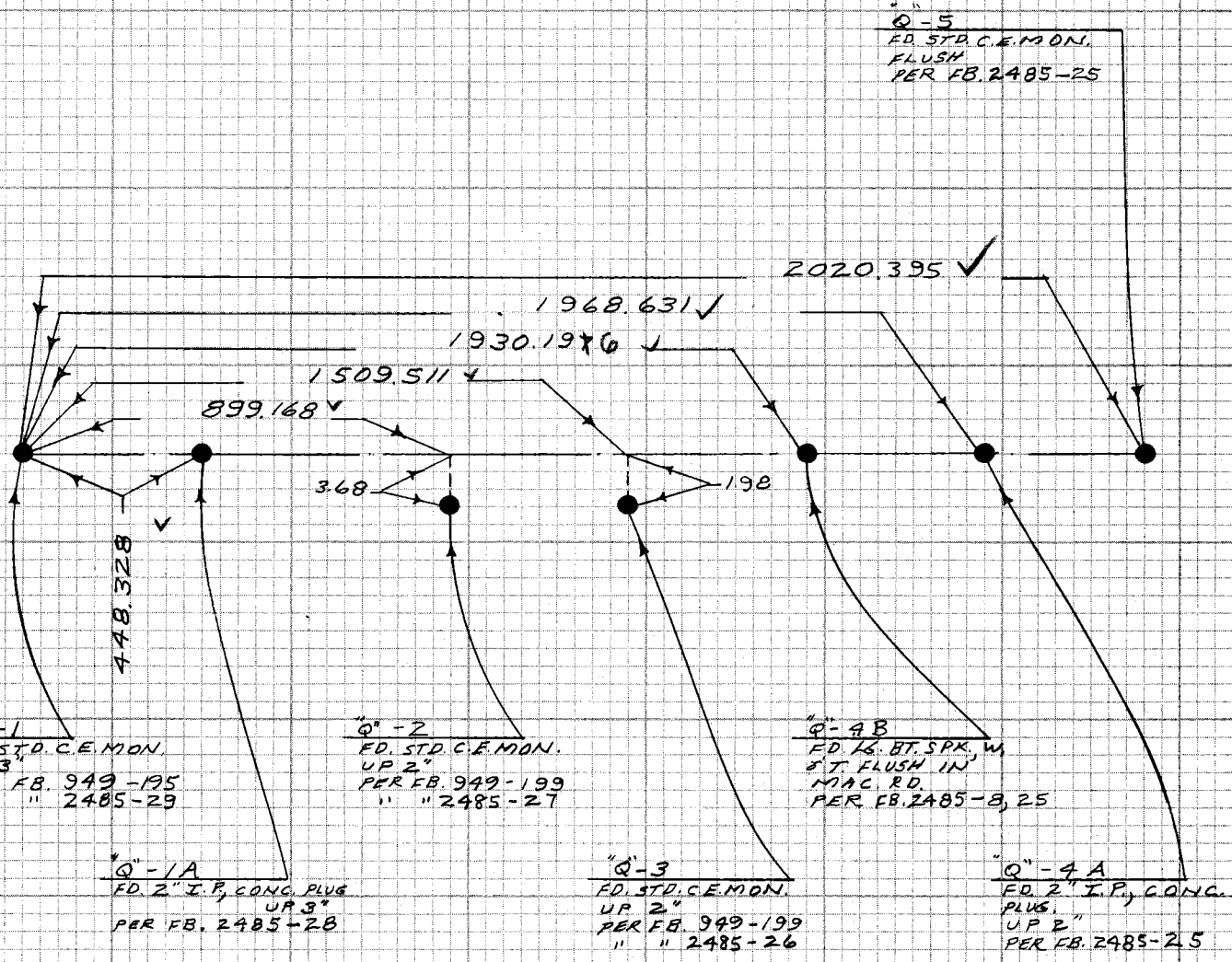
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 8

"Q" LINE OBSERVED DATA
10-25-76





PER PG. 21

"Q"-5 TO "Q"-1
H.I. 4.95 4.43
VERT. ∡ = 92° 27' 11"
SLOPE DIST. = 2022.242
HOR. " = 2020.389 ✓

"Q"-1 TO "Q"-5 PER PG. 22
5.10 H.I. 5.32
VERT. ∡ = 87° 33' 36"
SLOPE DIST. = 2022.234
HOR. " = 2020.401 ✓
AVE. HOR. " = 2020.395 ✓

"Q"-1 TO "Q"-4A PER PG. 22
5.10 H.I. 4.08
VERT. ∡ = 87° 58' 28"
SLOPE DIST. = 1969.862
HOR. " = 1968.631 ✓

PER PG. 23

"Q"-1 TO "Q"-4B
5.10 H.I. 5.05
VERT. ∡ = 88° 20' 57"
SLOPE DIST. = 1930.998
HOR. " 1930.1976 ✓

"Q"-1 TO "Q"-3 PER PG. 23
5.10 H.I. 5.05
VERT. ∡ = 92° 22' 34"
SLOPE DIST. = 1510.810
HOR. " = 1509.511 ✓

"Q"-1 TO "Q"-2 PER PG. 24
5.10 H.I. 4.70
VERT. ∡ = 94° 51' 36"
SLOPE DIST. = 902.412
HOR. " = 899.168 ✓

"Q"-1 TO "Q"-1A PER PG. 24
5.10 H.I. 4.95
VERT. ∡ = 99° 33' 37"
SLOPE DIST. = 454.642
HOR. " = 448.328 ✓

CE 340
76F3095-4/73

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

Do not extend notes this side of this line

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

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-2-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4538 PG. 9

J.N. 0021.64

PORTUGUESE BEND LANDSLIDE STUDIES

POSITION OBSERVATIONS FOR "WAYFARER 2"

STATION DESCRIPTION FOR "WAYFARER 2"; FB. 2899 PG.s 151, 152
" " " S.P.H. E-8B " " " 153
" " " S.P.H. 6-6 "

RICHARDS
MOODY
TURRILL
BUSTRUM

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

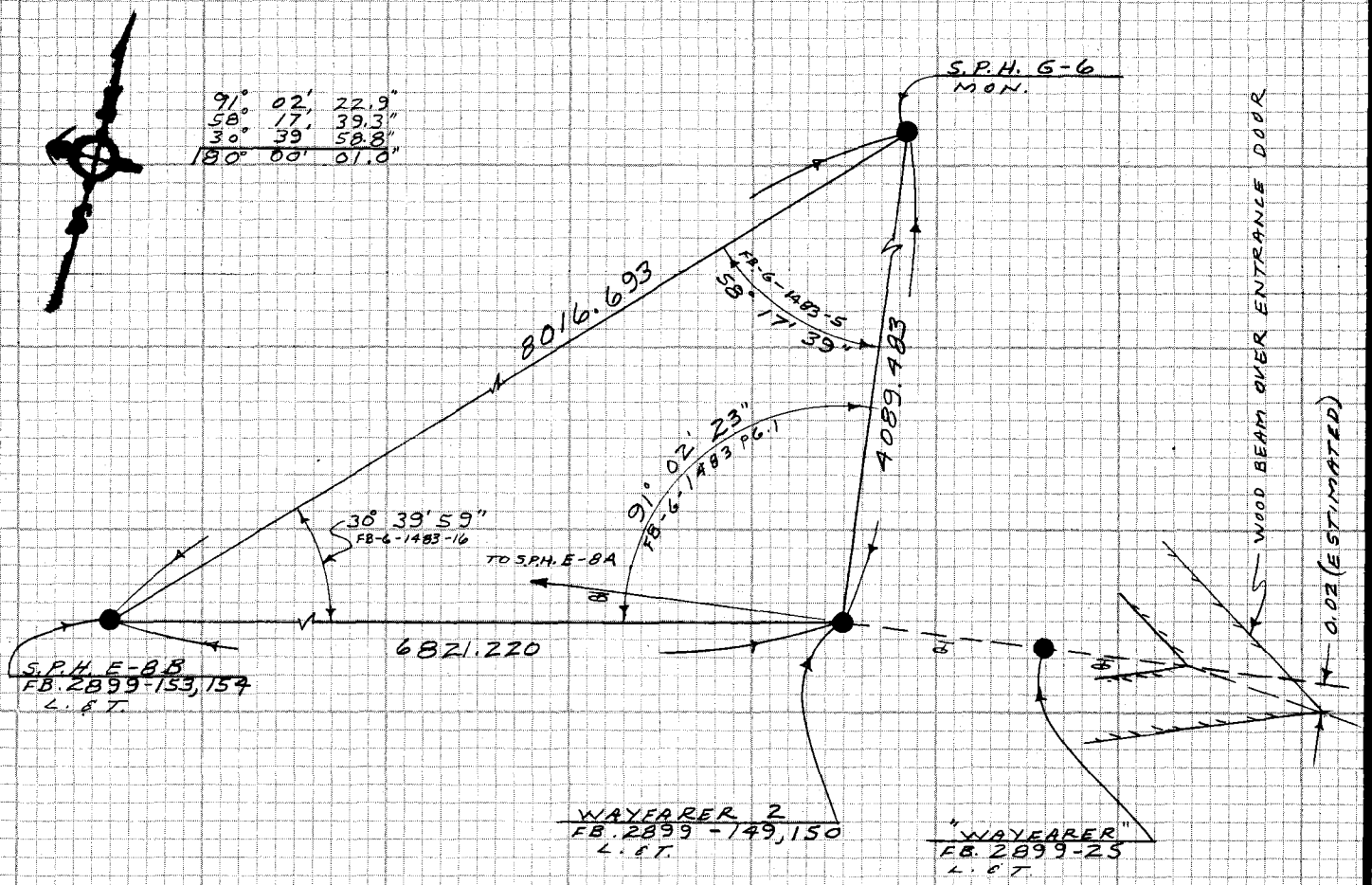
Do not extend notes this side of this line

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 10

OBSERVED DATA 10-29-76



WAYFARER-2 TO S.P.H. E-8B SEE PG. 28
H.I. = 5.33 ∫∫ H.I. = 4.55
VERT. ∡ = 90° 38' 44"
SLOPE DIST. = 6821.694
HOR. " = 6821.261✓
P.P.M. COR. = +07

WAYFARER-2 TO S.P.H. G-6 SEE PG. 28
H.I. = 5.33 ∫∫ H.I. = 5.25
VERT. ∡ = 78° 04' 39"
SLOPE DIST. = 4179.692
HOR. " = 4089.527✓
P.P.M. COR. = +07

S.P.H. E-8B TO S.P.H. G-6 SEE PG. 39
H.I. = 5.30 ∫∫ H.I. = 4.92
VERT. ∡ = 83° 20' 23"
SLOPE DIST. = 8071.244
HOR. " = 8016.774✓
P.P.M. COR. = +10

S.P.H. E-8B TO "WAYFARER-2" SEE PG. 39
H.I. = 5.30 ∫∫ H.I. = 5.35
VERT. ∡ = 89° 23' 00"
SLOPE DIST. = 6821.624
HOR. " = 6821.229 (6821.179)✓
(LIETZ REFLECTOR)
P.P.M. COR. = +10

S.P.H. G-6 TO WAYFARER-2 SEE PG. 29
H.I. = 4.96 ∫∫ H.I. = 5.15
VERT. ∡ = 101° 55' 45"
SLOPE DIST. = 4179.704
HOR. DIST. = 4089.439✓
P.P.M. COR. = +18

S.P.H. G-6 TO S.P.H. E-8B SEE PG. 29
H.I. = 4.96 ∫∫ H.I. = 3.35
VERT. ∡ = 96° 41' 44"
SLOPE DIST. = 8071.662
HOR. " = 8016.611✓
P.P.M. COR. = +18

CE-310
76F 3095 '73
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend notes this side of this line
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK WITH DATE AND NAME OF PERSON MAKING CHANGE

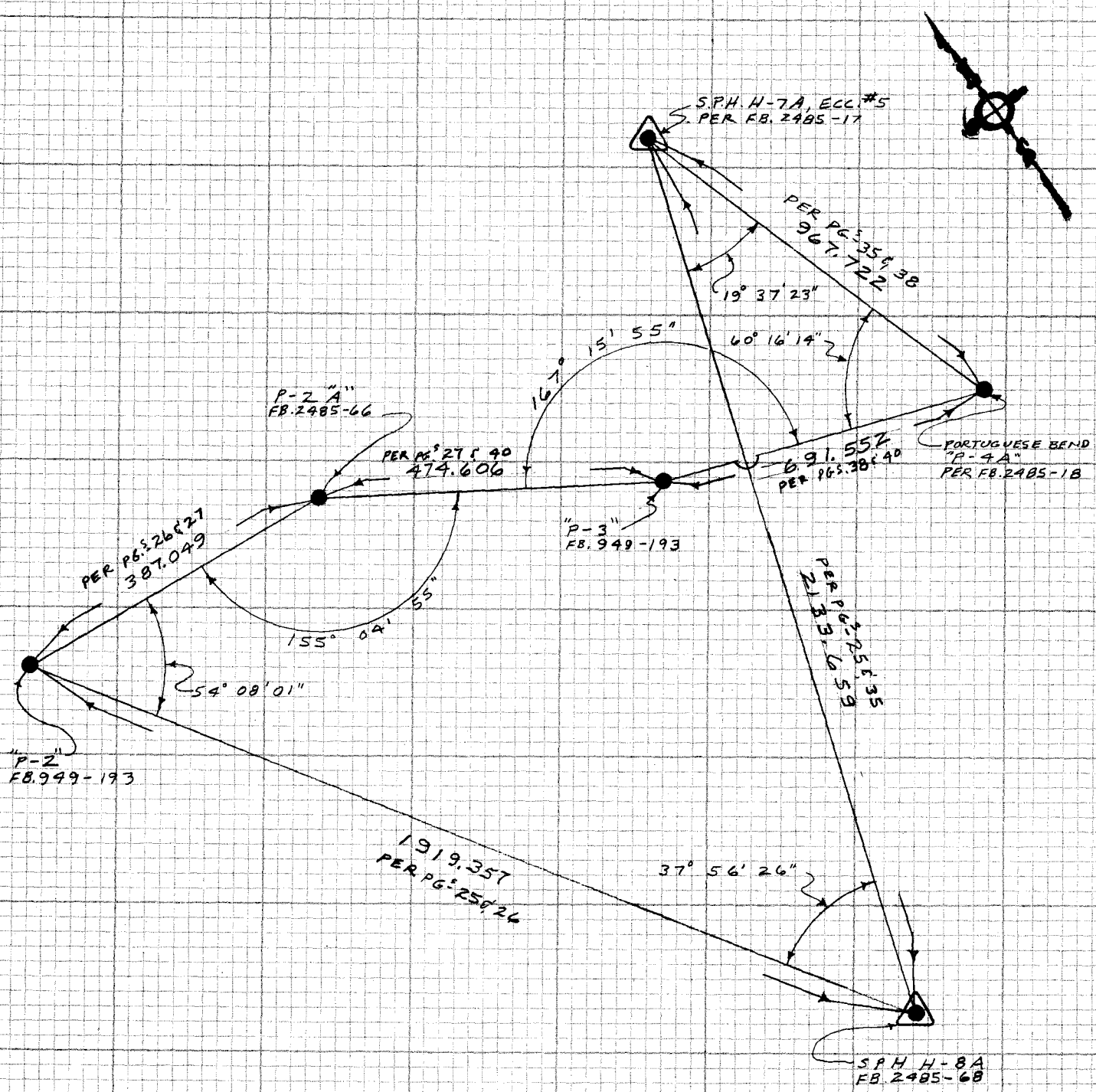
Notes Ck'd by R. EDUARDO	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-5-76.
Date	Indexed L. H. DEC 1 1976

F.B. 4338 PG. 11

RICHARDS
MOODY
TURRILL
BUSTRUM

J. N. 0021.64

PORTUGUESE BEND LANDSLIDE STUDIES
"P" LINE TRAVERSE, OBSERVED DATA 11-5-76
HORIZONTAL & VERTICAL ANGLES - F.B.-G-1482, 1483



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

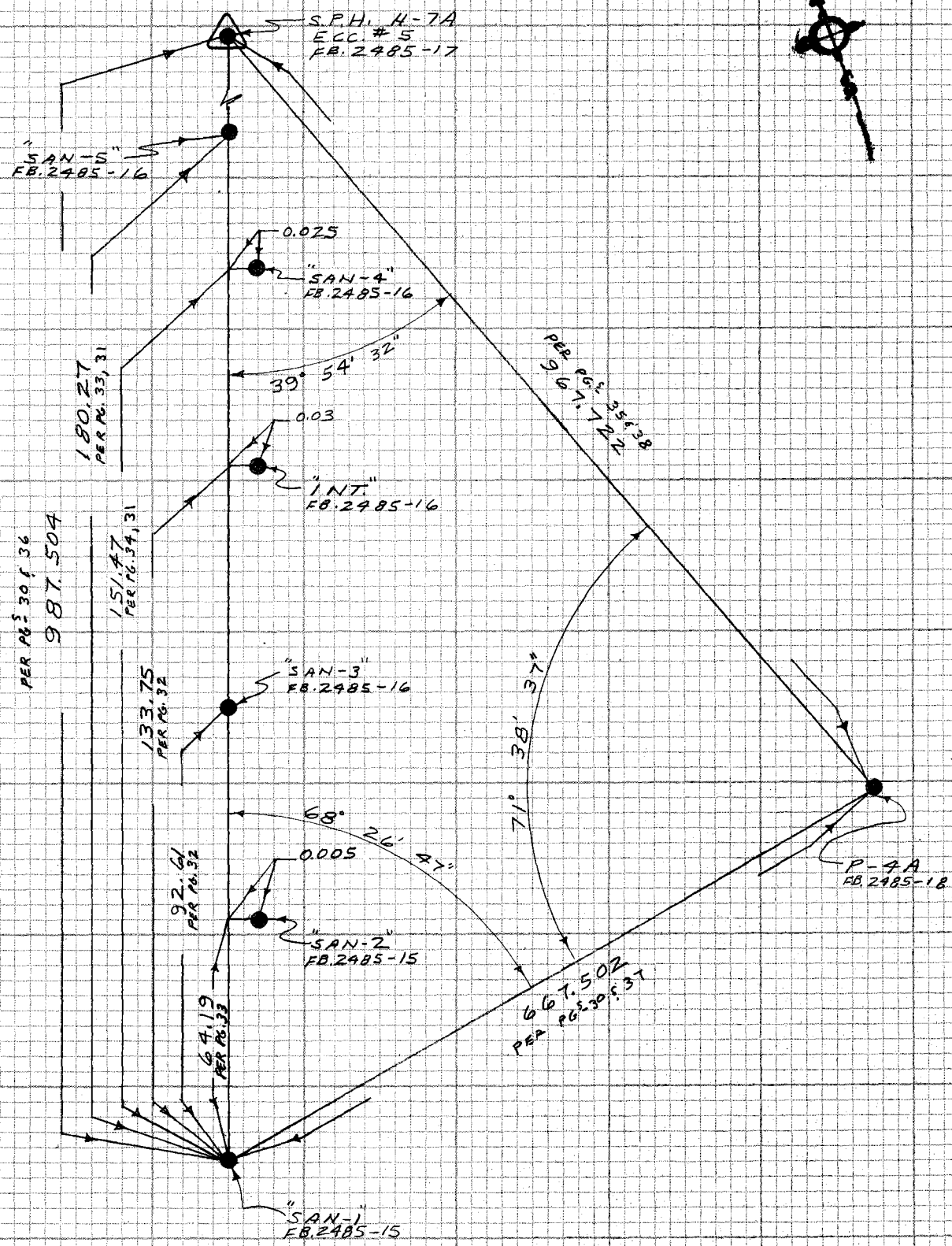
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 12

PORTUGUESE BEND LANDSLIDE STUDIES

"SAN" LINE OBSERVATIONS, 11-2-76



CE 310
76F3095-73

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

Do not ex[illegible] notes this side of this line

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

LANDSLIDE

Notes Ck'd by	Survey of PORTUGESE BEND
Map No.	JN0021.64 Tape ___ Std ___ °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 10-15-76
Date	Indexed ~~T. M. PALMER~~ DEC 1 1976

F.B. 4338 PG. 13

#1225A02170

STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY ~~+AHD~~ -BACK	ELEV.
3800A	DAVIS	2899-11	BUSTRUM	4.60	11.35 ✓
REFLECTOR	N. FIX	949-73	"	4.60	—

F.B G-1482-19

VERTICAL ANGLE

D	78-19-39
R	281-40-50
S	360-00-29 ✓
M	78-19-24 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. Cor.
78°	29.8	11 ✓

FB-G-1482-19

VERTICAL ANGLE

D	78-23-08
R	281.36-50
S	359-59-58 ✓
M	78-23-09 ✓

SLOPE DISTANCE (FEET)

	1	8	4	5	4	2	7 ✓

SLOPE DISTANCE (FEET)

	1	8	5	6	5	7	0

HORIZONTAL DISTANCE

	1	8	0	7	2	3	6 ✓

HORIZONTAL DISTANCE

	1	8	1	8	5	5	8 ✓

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. -BACK	ELEV.
3800A	RADIAL #1	949-9	TURRILL	6.90	—
REFLECTOR	E. FIX	949-75,76		5.00	—

F.B.-G-1482 PG,24

VERTICAL ANGLE

D	78-38-57
R	281-21-40 ✓
S	360 00 37 ✓
M	78-38-39 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	PPM. COR.
78°	29.8	11 ✓

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

	1	4	8	0	4	1	0.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

	1	4	5	1	4	2	8 ✓

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

Do not extend notes this side of this line

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

CENTERLINE
CE 310
76F3095-4/7

LANDSLIDE

Notes Ck'd by	Survey of PORTUGESE BEND S.L.
Map No	JN 0021.64 Tape Std °F
Office Work	Surveyed by WA RICHARDS.
Check'd	Notes MOODY Date 10-18-76
Date	Indexed Y. M. PALMERI DEC 1 1976

F.B. 4338 PG. 14

#1225A02170

STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A RADIAL #1	949-9	TURRILL	6.90	—	
REFLECTOR NO. FIX	949-73,74		4.77	—	

FB-G-1482 PG.24

VERTICAL ANGLE

D	79-51-08 ✓
R	280-09.36 ✓
S	360-00 44 ✓
M	79-50-46 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78°	29.8	11 ✓

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 2234382 ✓

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE 2199387 ✓

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

#1225A02170

STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A K-1	949-60	MOODY	4.60	—	
REFLECTOR SHIELD	949-22		5.04	—	

FB-G-1482 PG.27

VERTICAL ANGLE

D	88-09-58
R	271-50-30
S	360-00-28
M	88-09-44 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
T=76°	30.0	+06 ✓

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 3177608. ✓

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE 3175974 ✓

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLINE
CE 310
76F3095-4/7

LANDSLIDE

Notes Ck'd by [illegible]	Survey of PORTUGESE BEND
Map No.	JN 0021.6A Tape ____ Std ____ °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes MOODY Date 10-19-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 15

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	K-1	949-60	MOODY	4.60	—	
REFLECTOR	POINT			4.80	—	

FB-6-1482 PG. 27

VERTICAL ANGLE

D	95-25-22
R	264-35-00
S	360-00-22 ✓
M	95-25-11 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
76°	30.0	+06 ✓

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 8 7 0 0 6 2

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 8 6 6 1 7 2 ✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A						
REFLECTOR						

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET):

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

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

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

CENTERLIN
CE 310
76F3095-4/7

LANDSLIDE

Notes Ck'd by [illegible]	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape ____ Std ____ °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 10-20-76
Date	Indexed Y. M. PALMERI

F.B. 4338 PG. 16

DEC 1 1976

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	RADIAL 2 ECC. 2		DREIER MOODY	5.77	12.24	
REFLECTOR	POINT			4.48		

FB-G-1482 PG 31

VERTICAL ANGLE

D	91° 36' 29
R	268 24 03
S	360 00 32
M	91° 36' 13

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. Cor.
70°	29.9	+06

VERTICAL ANGLE

D	91° 37' 02"
R	268 23 34
S	360 00 36
M	91° 36' 44"

SLOPE DISTANCE (FEET)

2 5 4 4 9 2 0

SLOPE DISTANCE (FEET)

2 5 3 2 6 6 3

HORIZONTAL DISTANCE

2 5 4 3 9 2 3

HORIZONTAL DISTANCE

2 5 3 1 6 6 0

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	RADIAL 2 ECC. 2		DREIER MOODY	5.77	12.21	
REFLECTOR	W. FIX	949-79,80		4.85		

FB-G-1482 PG. 31

VERTICAL ANGLE

D	84° 57' 12"
R	275 03 21
S	360 00 33
M	84° 56' 56"

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
70°	29.9	+06

VERTICAL ANGLE

D	84° 56' 01"
R	275 04 14
S	360 00 15
M	84° 55' 54"

SLOPE DISTANCE (FEET)

2 2 3 9 9 1 0.

SLOPE DISTANCE (FEET)

2 2 2 7 6 6

HORIZONTAL DISTANCE

2 2 3 1 2 1 1

HORIZONTAL DISTANCE

2 2 1 8 9 5 2

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLIN
CE 310
76F3095-4/73

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No	JN 00 21.64 Tape ____ Std ____ °F
Office Work	Surveyed by RICHARDS
Checked	Notes DREIER Date 10-20-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 17

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD	ECCENTRICITY −BACK	ELEV.
3800A	K-3A Ecc. 2	2899-13, 14	MOODY	4.58	0	0	
REFLECTOR	POINT			4.95			

FB-G-1482 PG. 29

VERTICAL ANGLE

D	88	56	43
R	271	03	28
S	360	00	11
M	88°	56'	38"

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
76°	30.0"	7+

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1893.98

HORIZONTAL DISTANCE: 1893576

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD.	ECCENTRICITY −BACK	ELEV.
3800A	K-3A, Ecc. 2	2899-13, 14	MOODY	4.58	.0	0.	
REFLECTOR	K-6	949-59		4.65			

FB-G-1482 PG. 29

VERTICAL ANGLE

D	84°	21'	07"
R	275	39	32
S	360	00	39
M	84°	20	47'

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
76°	30.0	7+

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1473783.

HORIZONTAL DISTANCE: 1466614

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

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

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

CENTERLIN
CE 310
76F3095-4/

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map Nr	JN 0021.64 Tape Std °F
Office Work	Surveyed by W A RICHARDS
Check'd	Notes MOODY Date 10-21-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 18

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD	ECCENTRICITY −BACK	ELEV.
3800A	BLAKESLEY	949-18	MOODY	4.15	—		—
REFLECTOR	SHIELDS	949-22		3.50	—		—

FB 6-1482 PG. 34

VERTICAL ANGLE

D	89° 25′ 00″
R	270° 35′ 23″
S	360° 00′ 23″
M	89° 24′ 48″

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
74°	29.9	+ 7.5

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2458772

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2458643

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD.	ECCENTRICITY −BACK	ELEV.
3800A	BLAKESLEY	949-18	MOODY	4.15			
REFLECTOR	POINT			4.48			

FB-6-1482 PG. 34

VERTICAL ANGLE

D	95° 02′ 57″
R	264° 57′ 27″
S	360-00-24″
M	95° 02′ 45″

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
74°	29.9	+ 7.5

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 17993 60.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 17923 71

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

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

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

ENTERLINE
E 310
GF3095-4/73

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W A RICHARDS
Checked	Notes GOBLE Date 10-21-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 19

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-21-76
TIME 1:50 PM
RECORDER GOBLE

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P 4 A	1225A02170	MOODY	4.49	NONE	
REFLECTOR	E. FIX			4.75	"	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72	29.85	
REFLECTOR	—	—	
MEAN	72	29.85	+ 7.0

SLOPE DISTANCE (FEET)

4	8	6	9	3	9	2

VERTICAL ANGLE FB-G-1482 PG. 37

D 86-09-04	INST. H.I. 4.49
R 273-51-32	
S 360 00 36	TARG. H.I. 4.75
M 86.08-46 ✓	

VISIBILITY: ☐ GOOD ☒ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:
TYPE OF REFLECTOR: 2
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
HOR. DIST. = 4858.381 ✓

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-21-76
TIME 2:00 PM
RECORDER GOBLE

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO.ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P 4 A	1225A02170	MOODY	4.49	NONE	
REFLECTOR	POINT			3.20	"	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72	29.85	
REFLECTOR	—	—	
MEAN	72	29.85	+ 7.0

SLOPE DISTANCE (FEET)

1	9	7	0	3	9	2

VERTICAL ANGLE FB-G-1482 PG. 37

D 95-15-43	INST. H.I. 4.49
R 264-44-53	
S 360-00.36	TARG. H.I. 3.20
M 95-15-25 ✓	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
HOR. DIST. = 1962.104 ✓

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 405 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 70F 3095-4/7

LANDSLIDE

Notes Ck'd by R. MIRARIO	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape ____ Std ____ °F
Office Work	Surveyed by W A RICHARDS
Checked	Notes MOODY Date 10-22-76
Date	Indexed Y. M. PALMERI DEC 1 1976

F.B. 4338 PG. 20

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-22-76
TIME 10:45 A.M.
RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225 A02170	RICHARDS	5.07	—	
REFLECTOR	E. FIX			4.90	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.0	
REFLECTOR	—	—	
MEAN	—	—	+09

SLOPE DISTANCE (FEET) 6 8 3 1 7 8 5

VERTICAL ANGLE FB-G-1482 P6.39

D	85-55-25	INST. H.I. 5.07
R	274-05-11	
S	360-00-36	TARG. H.I. 4.90
M	85-55-061	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:
TYPE OF REFLECTOR: 3
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
HOR. DIST = 6814.~~508~~ .459
NOTE:
(HIS CALC. HOR. DIST CKS USING D & NOT MNA) ZEKE

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-22-76
TIME
RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A02170	RICHARDS	5.07	—	
REFLECTOR	H-8A			5.40	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.0	
REFLECTOR	—	—	
MEAN	—	—	+09

SLOPE DISTANCE (FEET) 2 1 1 9 3 9 6

VERTICAL ANGLE FB-G-1482 P6.39

D	90-12-24	INST. H.I. 5.07
R	269-47-55	
S	360-00-19	TARG. H.I. 5.40
M	90-12-14.5	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
HOR. DIST = 2119.382

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 466 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE-310 76F3086-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 10-22-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 21

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-22-76
TIME 2:00 PM
RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5	1225A02170	RICHARDS	4.95	—	
REFLECTOR	Q-1			4.43	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78	30.0	X
REFLECTOR	—	—	
MEAN	—	—	+09 ✓

SLOPE DISTANCE (FEET)

	2	0	2	2	2	4	2

VERTICAL ANGLE FB-G-1482 PG. 42

D 92-27-34	INST. H.I. 4.95
R 267-33-13	
S 360-00-47	TARG. H.I. 4.43
M 92-27-11 ✓	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
HOR. DIST. 2020.389 ✓
FB-G-1482-42

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			X
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY:
TYPE OF REFLECTOR:
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☐ NO
COMMENTS:

PART NO. 9320-2060

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

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

CENTERLINE
CE 310
76F3085-4/1

Notes Ck'd by: [illegible]	Survey of: PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by: W. A. RICHARDS
Checked	Notes: W.A.R. Date: 10-25-76
Date	Indexed: T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 22

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-25-76
TIME 10:45 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A02170	MOODY	5.10	—	—
REFLECTOR	Q-5			5.32	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.2	X
REFLECTOR	—	—	X
MEAN	—	—	+06 ✓

SLOPE DISTANCE (FEET): 2 0 2 2 . 2 3 4

VERTICAL ANGLE

D 87° 33' 40"	INST. H.I. 5.10
R 272° 26' 27"	
S 360° 00' 07"	TARG. H.I. 5.32
M 87° 33' 36" ✓	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: 2020.401 ✓
FB-6-1482 PG. 43

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-25-76
TIME 10:50 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A02170	MOODY	5.10	—	—
REFLECTOR	Q-4 A		—	4.08	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.2	X
REFLECTOR	—	—	X
MEAN	—	—	+06 ✓

SLOPE DISTANCE (FEET): 1 9 6 9 . 8 6 2

VERTICAL ANGLE

D 87° 58' 30"	INST. H.I. 5.10
R 272° 01' 35	
S 360° 00' 05"	TARG. H.I. 4.08
M 87° 58' 28" ✓	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: 1968.631 ✓
FB-6-1482 PG. 43 ✓

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3005-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 10-25-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 23

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-25-76
TIME 10:55 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225 A0 2170	MOODY	5.10	—	—
REFLECTOR	Q-4B	—	—	5.05	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.2	
REFLECTOR	—	—	
MEAN	—	—	+06

SLOPE DISTANCE (FEET) 1 9 3 0 9 9 8

VERTICAL ANGLE

D 88° 21' 02"	INST. H.I. 5.10
R 271° 39' 09"	
S 360° 00' 11"	TARG. H.I. 5.05
M 88° 20' 57"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: 1930.197
FB-G-1482-43

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-25-76
TIME 11:00 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225 A0 2170	MOODY	5.10	—	—
REFLECTOR	Q-3	—	—	5.05	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.2	
REFLECTOR	—	—	
MEAN	—	—	+0.6

SLOPE DISTANCE (FEET) 1 5 1 0 8 1 0

VERTICAL ANGLE

D 92° 22' 43"	INST. H.I. 5.10
R 267° 37' 35"	
S 360° 00' 18"	TARG. H.I. 5.05
M 92° 22' 34"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: 1509.511
FB-G-1482 PG. 43

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 708F3085-4/7.

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 10-25-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 24

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-25-76
TIME 11:25
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A0 2170	MOODY	5.10	—	—
REFLECTOR	Q-2	—	—	4.70	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.2	X
REFLECTOR	—	—	X
MEAN	—	—	+06

SLOPE DISTANCE (FEET) ✓

0	9	0	2	4	1	2

VERTICAL ANGLE

D 94° 51' 56"	INST. H.I. 5.10
R 265° 08' 43"	
S 360° 00' 39"	TARG. H.I. 4.70
M 94° 51' 36" ✓	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 90
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: 899.168 = HOR. DIST. ✓
FB-6-1482 PG. 43

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-25-76
TIME 11:35
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A0 2170	MOODY	5.10	—	—
REFLECTOR	Q-1A	—	—	4.95	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.2	X
REFLECTOR	—	—	X
MEAN	—	—	+06

SLOPE DISTANCE (FEET)

0	4	5	4	6	4	2

VERTICAL ANGLE

D 99° 34' 00"	INST. H.I. 5.10
R 260° 26' 45"	
S 360° 00' 45"	TARG. H.I. 4.95
M 99° 33' 37" ✓	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☑ YES ☐ NO
COMMENTS: HOR. DIST. = 448.328 ✓
FB-6-1482 PG. 43

PART NO. 9320-2060

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
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3095-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 10-26-76
Date	Indexed T. G. PALMERI DEC 1 1976

F.B. 4338 PG. 25

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-26-76
TIME 11:45
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. H-8A	1225A02170	MOODY	5.54	—	—
REFLECTOR	"P"-2	H.P.	—	5.42	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.5	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	1	9	1	9	5	3	2

VERTICAL ANGLE FB-G-1482 PG. 44

D 89° 14' 34"	INST. H.I. 5.54
R 270° 46' 06"	
S 360 00' 40"	TARG. H.I. 5.42
M 89° 14' 14"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
HOR. DIST. = 1919.362

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-26-76
TIME 11:50
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH. H-8A	1225A02170	MOODY	5.54	—	—
REFLECTOR	H-7A ECC #5	H.P.	—	5.70	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.5	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	2	1	3	8	6	8	2

VERTICAL ANGLE FB-G-1482 PG. 44

D 86° 04' 21"	INST. H.I. 5.54
R 273° 56' 03	
S 360 00' 24	TARG. H.I. 5.70
M 86° 04' 09	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 1
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
HOR. DIST. = 2133.651

PART NO. 9320-2060

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.
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F 3095-4

Notes Ck'd by T. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes MOODY Date 10-27-76
Date	Indexed T. W. PALMERI DEC 1 1976

F.B. 4338 PG. 26

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-27-76

TIME

RECORDER

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES

CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	"P" -2	3800A	Bustrum	5.08	—	—
REFLECTOR	"P" -2 A			5.46	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.1	
REFLECTOR	1 H.P		
MEAN			+.08 ✓

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY:

SLOPE DISTANCE (FEET)

	3	8	7	0	6	6

TYPE OF REFLECTOR: 1 H.P

REFLECTOR CONSTANT: —

VERTICAL ANGLE FB-6-1482 PG. 47

D 90-09-15	INST. H.I. 5.08
R 269-50-59	
S 360 00-14	TARG. H.I. 5.46
M 90-09-08 ✓	

ATTENUATOR USED: ☑ YES ☐ NO

COMMENTS: 387.065 ✓

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-27-76

TIME

RECORDER

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES

CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	"P" -2	3800A	Bustrum	5.08		
REFLECTOR	S.P.H. H-8 A			5.63		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.1	
REFLECTOR	1 H.P		
MEAN			+.08 ✓

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY:

SLOPE DISTANCE (FEET)

	1	9	1	9	5	2	4

TYPE OF REFLECTOR: 1 H.P

REFLECTOR CONSTANT:

VERTICAL ANGLE FB-6-1482 PG. 47

D 90-45-21	INST. H.I. 5.08
R 269-15-08	
S 360-00-29	TARG. H.I. 5.63
M 90-45-06 ✓	

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: 1919.3529 ✓

PART NO. 9320-2060

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

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

CENTERLIN
CE 310
76F3085-4/7

Notes Ck'd by J. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 10-27-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 27

HEWLETT PACKARD

MODEL 3800A DISTANCE METER

DATE 10-27-76

TIME 11:00 A.M.

RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE

CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-2A	3800A	TURRILL	4.92	—	
REFLECTOR	P-3	—	—	5.14	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.1	
REFLECTOR	—	—	
MEAN	—	—	+08

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 75

STABILITY:

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: 474.569 ✓

SLOPE DISTANCE (FEET)

0 4 7 4 . 5 8 2

VERTICAL ANGLE FB-6-1482 PG. 50

D 90-25-49	INST. H.I. 4.92
R 269 34-45	
S 360 00-34	TARG. H.I. 5.14
M 90-25-32 ✓	

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A DISTANCE METER

DATE 10-27-76

TIME 11:10 A.M.

RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE

CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-2A	3800A	TURRILL	4.92	—	
REFLECTOR	P-2	—	—	5.03	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.1	
REFLECTOR	—	—	
MEAN	—	—	+08 ✓

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 95

STABILITY:

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT:

ATTENUATOR USED: ☑ YES ☐ NO

COMMENTS: 387.033 ✓

SLOPE DISTANCE (FEET)

0 3 8 7 . 0 3 6

VERTICAL ANGLE FB-6-1482 PG. 50

D 89-46-05	INST. H.I. 4.92
R 270-14-00	
S [illegible]	TARG. H.I. 5.03
M 89-46-03 ✓	

PART NO. 9320-2060

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE CE 310 76F3095-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by M.A. RICHARDS
Checked	Notes W.A.R. Date 10-29-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 28

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-29-76
TIME 10:20 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WAYFARER 2		MOODY	5.33	—	
REFLECTOR	S.PH. E-8B			4.55	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.15	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	6	8	2	1	6	9	4

VERTICAL ANGLE FB-G-1483 PG. 2

D 90° 38′ 58″	INST. H.I. 5.33
R 269° 21′ 30	
S 360° 00′ 28″	TARG. H.I. 4.55
M 90° 38′ 44″ ✓	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY:
TYPE OF REFLECTOR: 3 - H.P.
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 6821.261 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-29-76
TIME 10:30
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WAYFARER-2		MOODY	5.33	—	
REFLECTOR	SPH 6-6	—	—	5.25	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.15	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	4	1	7	9	6	9	2

VERTICAL ANGLE FB-G-1483 PG. 2

D 78° 04′ 53″	INST. H.I. 5.33
R 281° 55′ 35″	
S 360° 00′ 28″	TARG. H.I. 5.25
M 78° 04′ 39″ ✓	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY:
TYPE OF REFLECTOR: 3 - H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 4089.527 ✓

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
ENTERLINK E-310 F3095-4/73

Notes Ck'd by [illegible]	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 10-29-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 29

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-29-76
TIME 12:10 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. 6-6	H.P.	MOODY	4.96	—	
REFLECTOR	WAYFARER-2	—	—	5.15	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	82°	29.15	
REFLECTOR	—	—	
MEAN	—	—	+18

SLOPE DISTANCE (FEET) 4179.704

VERTICAL ANGLE FB-G-1483 PG. 5

D 101° 55' 55"	INST. H.I. 4.96
R 258° 04' 25"	
S 360° 00' 20"	TARG. H.I. 5.15
M 101° 55' 45"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:
TYPE OF REFLECTOR: 3 - H.P.
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 4089.439

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 10-29-76
TIME 12.15 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. 6-6	H.P.	MOODY	4.96	—	
REFLECTOR	S.P.H. E-8B	—	—	3.35	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	82°	29.15	
REFLECTOR	—	—	
MEAN	—	—	+18

SLOPE DISTANCE (FEET) 8071.662

VERTICAL ANGLE FB-G-1483 PG. 5

D 96° 41' 58"	INST. H.I. 4.96
R 263° 18' 30"	
S 360 00' 28"	TARG. H.I. 3.35
M 96° 41' 44"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 60
STABILITY:
TYPE OF REFLECTOR:
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 8016.611

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
INTERLINE 310 F3095-4/73

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 002164 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 11-2-76
Date	Indexed T.M. PALMERI DEC 1 1976

F.B. 4338 PG. 30

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 11:00 AM
RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		MOODY	4.85	—	
REFLECTOR	S.P.H. H-7A, ECCS	H.P.	—	5.25	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	86°	30.1	
REFLECTOR	—	—	
MEAN	—	—	+12

SLOPE DISTANCE (FEET)

		9	9	4	6	2	6

VERTICAL ANGLE FB-G-1483 PG. 11

D 83-09-14	INST. H.I. 4.85
R 276-51-18	
S 360-00-32	TARG. H.I. 5.25
M 83-08-58 ✓	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 85
STABILITY:
TYPE OF REFLECTOR: 1 H.P.
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
HOR. DIST. 987.525 ✓

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 11:10 AM
RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN. 1		MOODY	4.85		
REFLECTOR	P.B. P-4A	(LIETZ)	—	4.31		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	86°	30.1	
REFLECTOR	—	—	
MEAN	—	—	+12

SLOPE DISTANCE (FEET)

		6	8	1	8	9	8

VERTICAL ANGLE FB-G-1483 PG. 11

D 78-14-35	INST. H.I. 4.85
R 281-46-15	
S 360-00-50	TARG. H.I. 4.31

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 90
STABILITY:
TYPE OF REFLECTOR: 1 LIETZ
REFLECTOR CONSTANT: – 0.050
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
HOR. DIST. = 667.575 ✓
LIETZ REF. MEAS. 0.05 LONGER

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

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

ITERLINE
310
3095-4/7

Notes Ck'd by A. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.69 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-2-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 31

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 1:25 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN-1	H.P.	MOODY	4.70	—	—
REFLECTOR	SAN-5	HIGHWAY	—	2.80	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	30.5	
REFLECTOR	—	—	
MEAN	—	—	+15

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:

SLOPE DISTANCE (FEET): 1 8 0 . 5 2 4

TYPE OF REFLECTOR: HIGHWAY-1
REFLECTOR CONSTANT: + 0.070
ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 86° 34' 27"	INST. H.I. 4.70
R 273° 26' 05"	
S 360° 00' 32"	TARG. H.I. 2.80
M 86° 34' 11"	

COMMENTS:
HOR. DIST. = 180.200
REF. CONST. + 0.070
180.270

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 1:30 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN-1	H.P.	MOODY	4.70	—	—
REFLECTOR	SAN-4	HIGHWAY	—	3.65	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	30.5	
REFLECTOR	—	—	
MEAN	—	—	+15

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:

SLOPE DISTANCE (FEET): 1 5 1 . 6 7 2

TYPE OF REFLECTOR: HIGHWAY-1
REFLECTOR CONSTANT: + 0.070
ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 93° 19' 23"	INST. H.I. 4.70
R 266° 41' 14"	
S 360° 00' 37"	TARG. H.I. 3.65
M 93° 19' 25"	

COMMENTS:
HOR. DIST. = 151.418
REF. CONST. + 0.070
151.488

PART NO. 9320-2060

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

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

CENTERLINE
CE 310
76F3095-4/75

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape ___ Std ___ °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-2-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 32

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 1:40
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN-1	H.P.	MOODY	4.70	—	
REFLECTOR	"INT."	—	—	3.66		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92°	30.5	
REFLECTOR	—	—	
MEAN	—	—	+15

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:

SLOPE DISTANCE (FEET) 1 3 4 0 0 0

TYPE OF REFLECTOR: HIGHWAY -1
REFLECTOR CONSTANT: +0.070
ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 93° 57' 12"	INST. H.I. 4.70
R 266° 03' 25"	
S 360° 00' 37"	TARG. H.I. 3.66
M 93° 56' 54"	

COMMENTS:
HOR. DIST. = 133.682
REF. CONST. +0.070
133.752

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 1:48
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN-1	H.P.	MOODY	4.70	—	
REFLECTOR	SAN-3	—	—	4.23		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	30.5	
REFLECTOR	—	—	
MEAN	—	—	+15

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:

SLOPE DISTANCE (FEET) 9 3 0 0 8

TYPE OF REFLECTOR: HIGHWAY -1
REFLECTOR CONSTANT: +0.070
ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 95° 45' 43"	INST. H.I. 4.70
R 264° 14' 48"	
S 360° 00' 31"	TARG. H.I. 4.23
M 95° 45' 28"	

COMMENTS:
HOR. DIST. = 92.539
REF. CONST. +0.070
92.609

PART NO. 9320-2060

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.

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

CENTERLINE
CE 310
76F3095-4/73

Notes Ck'd by: [illegible]	Survey of: PORTUGUESE BEND
Map No.	JN 002164 Tape ___ Std ___ °F
Office Work	Surveyed by: W. A. RICHARDS
Checked	Notes: W.A.R. Date: 11-2-76
Date	Indexed: T. M. PALMER DEC 1 1976

F.B. 4338 PG. 33

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 1.54 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LAND SLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN-1	H.P.	MOODY	4.70	—	
REFLECTOR	SAN-2	—	—	4.33		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	30.5	
REFLECTOR	—	—	
MEAN	—	—	+15

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY:

SLOPE DISTANCE (FEET): 6 5 . 1 4 8

TYPE OF REFLECTOR: HIGHWAY-1
REFLECTOR CONSTANT: +0.070
ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D	100° 10' 40"	INST. H.I. 4.70
R	259° 49' 35"	
S	360° 00' 15"	TARG. H.I. 4.33
M	100° 10' 32" ✓	

COMMENTS:
HOR. DIST. = 64.123✓
REF. CONST. + 0.070
64.193✓

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 2.30 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN-1	H.P.	MOODY	4.70		
REFLECTOR	SAN-5	H.P.	—	4.14		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	30.5	
REFLECTOR	—	—	
MEAN	—	—	+15

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 85
STABILITY:

SLOPE DISTANCE (FEET): 1 8 0 . 6 8 0

TYPE OF REFLECTOR: H-P. 1
REFLECTOR CONSTANT: —0—
ATTENUATOR USED: ☑ YES ☐ NO

VERTICAL ANGLE

D	86° 08' 35"	INST. H.I. 4.70
R	273° 51' 53"	
S	360° 00' 28"	TARG. H.I. 4.14
M	86° 08' 21" ✓	

COMMENTS:
HOR. DIST. = 180.270✓

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3095-4/73

Notes Ck'd by: [illegible]	Survey of: PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by: W. A. RICHARDS
Checked	Notes: RICHARDS Date: W. A. R.
Date	Indexed: T. M. PALMER DEC 1 1976

F.B. 4338 PG. 34

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-2-76
TIME 2:25
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN – 1	H.P.	MOODY	4.70		
REFLECTOR	SAN – 4	H.P.	—	5.04		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	30.5	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET): 151.654

VERTICAL ANGLE

D 92° 48′ 05″	INST. H.I. 4.70
R 267° 12′ 36″	
S 360° 00′ 41″	TARG. H.I. 5.04
M 92° 47′ 45″	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 85
STABILITY:
TYPE OF REFLECTOR: H.P.
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☑ YES ☐ NO
COMMENTS: HOR. DIST. = 151.473

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY:
TYPE OF REFLECTOR:
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☐ NO
COMMENTS:

PART NO. 9320-2060

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

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

CENTERLINE
CE 310
76F3095-4/73

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE STUDY
Map No.	JN 0121.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-3-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 35

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-3-76
TIME 11:10 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH H-7A ECC 5	H.P.	MOODY	5.45	—	
REFLECTOR	PORTUGUESE BEND P-4A		—	4.57	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	84	30.0	
REFLECTOR	—	—	
MEAN	—	—	+11

SLOPE DISTANCE (FEET)

		9	6	8	0	0	0

VERTICAL ANGLE FB-G-1483 PG. 13

D 88° 47' 34"	INST. H.I. 5.45
R 271° 12' 52"	
S 360° 00' 26"	TARG. H.I. 4.57
M 88° 47' 21"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 85
STABILITY:
TYPE OF REFLECTOR: LIETZ -1
REFLECTOR CONSTANT: -0.05
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 967.784
LIETZ REFLECTOR MEASURED 0.05 LONGER DIST. THAN H.P. REFLECTOR
967.734

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-3-76
TIME 11:20 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH. H-7A ECC-5	H.P.	MOODY	5.45	—	
REFLECTOR	S.P.H. H-8A			5.60	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	84	30.0	
REFLECTOR	—	—	
MEAN	—	—	+11

SLOPE DISTANCE (FEET)

	2	1	3	8	6	8	8

VERTICAL ANGLE FB-G-1483 PG. 13

D 93° 55' 55"	INST. H.I. 5.45
R 266° 04' 39"	
S 360 00' 34"	TARG. H.I. 5.60
M 93 55' 38"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: H.P. -1
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
HOR. DIST. = 2133.666

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3096-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 11-3-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 36

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-3-76

TIME 12:20 P.M.

RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES

CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. H-7A ECC.-S	H.P.	MOODY	5.45	—	
REFLECTOR	PORTUGUESE BEND SAN-1		—	4.34	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	84°	30.0	
REFLECTOR	—	—	
MEAN	—	—	+11

SLOPE DISTANCE (FEET)

		9	9	4	6	4	6

VERTICAL ANGLE FB-6-1483 PG. 13

D 96° 53' 03"	INST. H.I. 5.45
R 263° 07' 25"	
S 360° 00' 28"	TARG. H.I. 4.34
M 96° 52' 49"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 90

STABILITY: 0 25 50 75 100 — +

TYPE OF REFLECTOR: H.P.-1

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 987.483

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING:

STABILITY: 0 25 50 75 100 — +

TYPE OF REFLECTOR:

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☐ NO

COMMENTS:

PART NO. 9320-2060

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

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

CENTERLINE
CE 310
76F3095-4/7

Notes Ck'd by	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-3-76
Date	Indexed DEC 1 1976

F.B. 4338 PG. 37

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-3-76
TIME 3:05 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A	H.P.	MOODY	4.40	—	
REFLECTOR	SAN-1	H.P.	—	4.43	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	29.9	
REFLECTOR	—	—	
MEAN	—	—	+16

SLOPE DISTANCE (FEET) 6 8 1 . 8 9 6

VERTICAL ANGLE FB-6-1483 PG. 15

D 101° 48' 44"	INST. H.I. 4.40
R 258 12' 19"	
S 360 01' 03"	TARG. H.I. 4.43
M 101° 48' 12"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: H.P.
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☐ NO
COMMENTS: HOR. DIST. = 667.478

PART NO. 9320-2080

THIS OBSERVATION TAKEN TO COMPARE A HIGHWAY REFLECTOR WITH A STD. H.P. REFLECTOR. SEE PG. 38, BOT., FOR ~~H.P. REFLECTOR~~ DATA.

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-3-76
TIME 3:08 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A	H.P.	MOODY	4.40	—	
REFLECTOR	P-3	HIGHWAY	—	3.65	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	29.9	
REFLECTOR	—	—	
MEAN	—	—	+16

SLOPE DISTANCE (FEET) 7 0 7 . 1 3 6

VERTICAL ANGLE FB-6-1483 PG. 15

D 102° 05' 17"	INST. H.I. 4.40
R 257° 55' 41"	
S 360° 00' 58"	TARG. H.I. 3.65
M 102° 04' 48"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 55
STABILITY:
TYPE OF REFLECTOR: HIGHWAY-1-3" LENS
REFLECTOR CONSTANT: +0.07
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 691.477
+ 0.070
691.547

PART NO. 9320-2080

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3095-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-3-76
Date	Indexed T. M. PALMERI DEC 1 1976

F.B. 4338 PG. 38

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-03-76
TIME 3:10 P.M
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A	H.P.	MOODY	4.40	—	
REFLECTOR	SPH H-7A ECL-5	H.P.	—	5.35	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	29.9	
REFLECTOR	—	—	
MEAN	—	—	+16

SLOPE DISTANCE (FEET) 9 6 7 . 9 2 2

VERTICAL ANGLE FB-G-1483 PG. 15

D 91° 12' 25"	INST. H.I. 4.40
R 268° 48' 10"	
S 360° 00' 35"	TARG. H.I. 5.35
M 91° 12' 08" ✓	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 90
STABILITY: 0 25 50 75 100 — +
TYPE OF REFLECTOR: H.P. -1
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 967.709 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-3-76
TIME 3:21 P.M
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A	H.P.	MOODY	4.40		
REFLECTOR	P-3	H.P.	—	3.65		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	92	29.9	
REFLECTOR	—	—	
MEAN	—	—	+16

SLOPE DISTANCE (FEET) 7 0 7 . 2 0 0

VERTICAL ANGLE FB-G-1483 PG. 15

D 102° 05' 17"	INST. H.I. 4.40
R 257° 55' 41"	
S 360° 00' 58"	TARG. H.I. 3.65
M 102° 04' 48" ✓	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 90
STABILITY: 0 25 50 75 100 — +
TYPE OF REFLECTOR: H.P.
REFLECTOR CONSTANT: ~~+0~~
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 691.540 ✓

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3095-4/7

Notes Ck'd by D. VILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape ____ Std ____ °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 11-5-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 39

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-5-76
TIME 10:50 AM
RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H.E.8B	H.P.	MOODY	5.30	—	
REFLECTOR	WAYFARER #2	LIETZ	—	5.35	—	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	84	30.1	
REFLECTOR	3 LIETZ	—	
MEAN	—	—	+10 ✓

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 60
STABILITY:

SLOPE DISTANCE (FEET)

6	8	2	1	6	2	4

TYPE OF REFLECTOR: LIETZ - 3
REFLECTOR CONSTANT: - 0.05

VERTICAL ANGLE FB-6-1483 PG. 17

D 89° 23' 19"	INST. H.I. 5.30
R 270° 37' 21"	
S 360° 00' 40"	TARG. H.I. 5.35
M 89° 23' 00" ✓	

ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: (LIETZ MEAS 0.05 LONGER IN DIST THEN H.P REFLECTOR.)
HOR DIST = 6821.229 ✓
" " = 6821.179 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-5-76
TIME 11:00 AM
RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H.E.8B	H.P.	MOODY	5.30		
REFLECTOR	S.P.H.G-6	H.P.	—	4.92		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	84	30.1	
REFLECTOR	3 H.P.	—	
MEAN	—	—	+10 ✓

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 60
STABILITY:

SLOPE DISTANCE (FEET)

8	0	7	1	2	4	4

TYPE OF REFLECTOR: H.P. -3
REFLECTOR CONSTANT:

VERTICAL ANGLE FB-6-1483 PG. 17

D 83° 20' 43"	INST. H.I. 5.30
R 276° 39' 58"	
S 360 00' 41"	TARG. H.I. 4.92
M 83° 20' 23" ✓	

ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
HOR. DIST = 8016.774 ✓

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F 3095-4/7

Notes Ck'd by	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 002164 Tape Std °F
Office Work	Surveyed by K.A. RICHARDS
Checked	Notes MOODY Date 11-5-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 40

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-5-76
TIME 2:00 PM
RECORDER BUSTRUM

PROJECT PORTUGESE BEND LANDSLIDE
CLIENT LA. CO. ENGR

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-3		BUSTRUM	5.22		
REFLECTOR	P-4A			4.33		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	90°	30°	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET) 7 0 6 . 8 7 2

VERTICAL ANGLE

D 78-03-42	INST. H.I. 5.22
R 281-57-13	
S 360-00-55 ✓	TARG. H.I. 4.33
M 78-03-15 ✓	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 1 H.P
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: HOR DIST = 691.564 ✓

PART NO. 9320-2080

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-5-76
TIME 2:10 P.M.
RECORDER BUSTRUM

PROJECT PORTUGESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-3		BUSTRUM	5.22		
REFLECTOR	P-2A			4.94		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	90°	30°	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET) 4 7 4 . 6 5 4

VERTICAL ANGLE

D 89-36-00	INST. H.I. 5.22
R 270-24-45	
S 360-00-45	TARG. H.I. 4.94
M 89-35-38 ✓	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 1. H.P
REFLECTOR CONSTANT:
ATTENUATOR USED: ☒ YES ☐ NO
COMMENTS: HOR DIST = 474.642 ✓

PART NO. 9320-2080

CENTERLINE CE 310 76F3095-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-76
Date	Indexed T. M. PALMER DEC 1 1976

F.B. 4338 PG. 41

J.N. 0021.64

PORTUGUESE BEND LANDSLIDE OBSERVATIONS – 11-76 –

TABULATION OF DISTANCES MEASURED WITH AN H.P. 3800A DISTANCE METER BETWEEN STATIONS AT THE LANDSLIDE AREA

STATION	TO	STATION				
DAVIS	"	NORTH FIX	= 1807.236	PER	PG.	13
RADIAL #1	"	EAST FIX	= 1451.428	"	"	13
"	"	NORTH FIX	= 2199.387	"	"	14
K-1	"	SHIELDS	= 3175.974	"	"	14
"	"	POINT	= 866.172	"	"	15
RADIAL #2, ECC. # 2	"	POINT	= 2543.923	"	"	16
" "	"	WEST FIX	= 2231.211	"	"	16
K-3A, ECC. # 2	"	POINT	= 1893.576	"	"	17
" "	"	K-6	= 1466.614	"	"	17
BLAKESLEY	"	SHIELDS	= 2458.643	"	"	18
"	"	POINT	= 1792.387	"	"	18
P-4A	"	EAST FIX	= 4858.381	"	"	19
"	"	POINT	= 1962.104	"	"	19
Q-1	"	EAST FIX	= 6814.~~502~~459	"	"	20
Q-1	"	S.P.H. H-8A	= 2119.382	"	"	20
Q-5	"	Q-1	= 2020.389	"	"	21
Q-1	"	Q-5	= 2020.401	"	"	22
"	"	Q-4A	= 1968.631	"	"	22
"	"	Q-4B	= 1930.197	"	"	23
"	"	Q-3	= 1509.511	"	"	23
"	"	Q-2	= 899.168	"	"	24
"	"	Q-1 A	= 448.328	"	"	24
S.P.H. H-8A	"	P-2	= 1919.362	"	"	25
" "	"	S.P.H. H-7A, ECC.#5	= 2133.651	"	"	25
P-2	"	P-2 "A"	= 387.065	"	"	26
"	"	S.P.H. H-8A	= 1919.352	"	"	26
P-2 "A"	"	P-3	= 474.569	"	"	27
"	"	P-2	= 387.033	"	"	27
WAYFARER-2	"	S.P.H. E-8B	= 6821.261	"	"	28
"	"	S.P.H. G-6	= 4089.527	"	"	28
S.P.H. G-6	"	WAYFARER-2	= 4089.439	"	"	29
" "	"	S.P.H. E-8B	= 8016.611	"	"	29
SAN-1	"	S.P.H. H-7A, ECC.#5	= 987.525	"	"	30
"	"	P-4A	= 667.525	"	"	30
"	"	SAN-5	= 180.270	"	"	31
"	"	SAN-4	= 151.487	"	"	31
"	"	"INT."	= 133.752	"	"	32
"	"	SAN-3	= 92.609	"	"	32
"	"	SAN-2	= 64.193	"	"	33
"	"	SAN-5	= 180.270	"	"	33

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 42

STATION	TO	STATION				
SAN-1	"	SAN-4	= 151.473	PER	PG.	34
S.P.H. H-7A, ECC. #5	"	P-4A	= 967.734	"	"	35
" " "	"	S.P.H. H-8A	= 2133.666	"	"	35
" " "	"	SAN-1	= 987.483	"	"	36
P-4A	"	SAN-1	= 667.478	"	"	37
"	"	P-3	= 691.547	"	"	37
"	"	S.P.H. H-7A, ECC. #5	= 967.709	"	"	38
"	"	P-3	= 691.540	"	"	38
S.P.H. E-8B	"	WAYFARER-2	= 6821.179	"	"	39
" "	"	S.P.H. G-6	= 8016.774	"	"	39
P-3	"	P-4A	= 691.564	"	"	40
"	"	P-2 "A"	= 474.642	"	"	40

CE 310
76F30 3
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend notes this side of this line
NOTE: ANY ADDITIONS OR CHANGES
ON THIS SHEET MUST BE MADE OR
CIRCLED IN RED INK WITH DATE AND
NAME OF PERSON MAKING CHANGE

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE LANDSLIDE STUDIES — F.B. 4338 PG. 43
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 1-3-77
Date 1-20-76	Indexed L. M. PALMERI JAN 20 1977

J.N. 0021.64

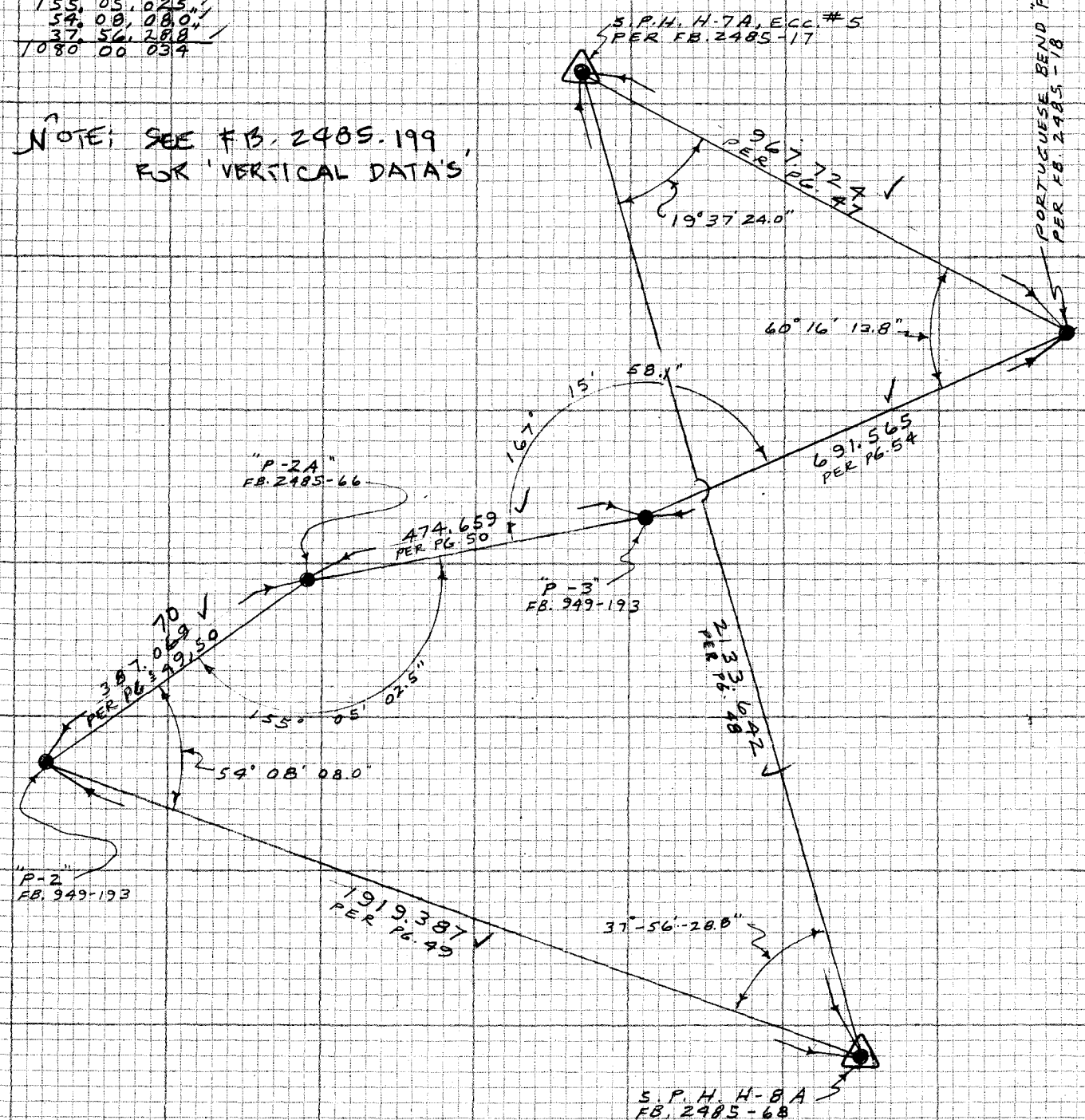
ABALONE COVE LANDSLIDE STUDIES

"P" LINE TRAVERSE OBSERVED DATA 1-3-77

HORIZONTAL AND VERTICAL ANGLES: FB-G-1488 PG.'s 1-9, INC.

340° 22' 36.0"
299° 43' 46.2"
192° 44' 01.9"
155° 05' 02.5"
54° 08' 08.0"
37° 56' 28.8"
1080° 00' 03.4"

NOTE: SEE FB. 2485-199 FOR 'VERTICAL DATA'S'



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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 44

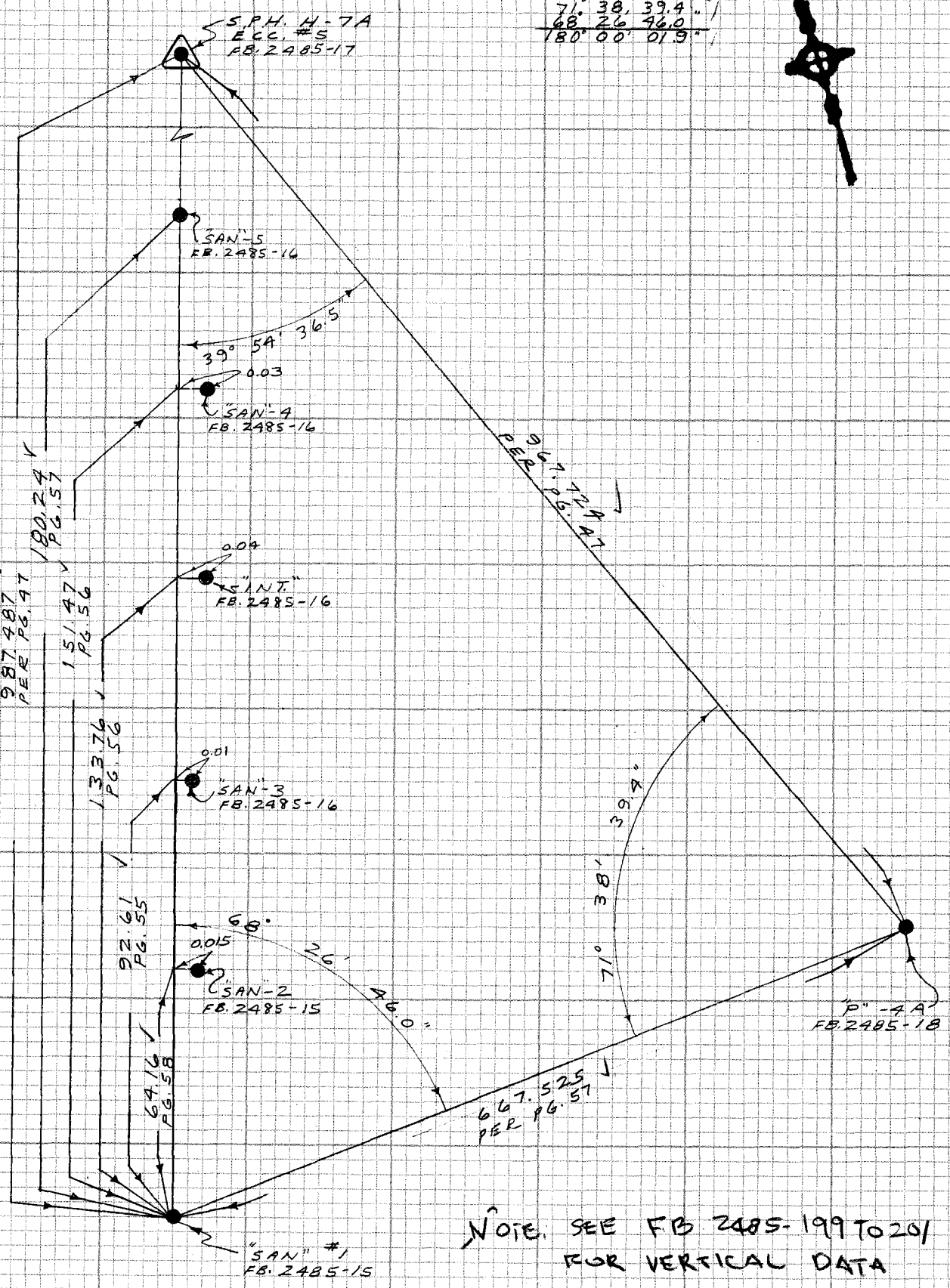
J. N. 002164

ABALONE COVE STABILITY STUDIES

"SAN" LINE OBSERVATIONS 1-11-77

HORIZONTAL ANGLES PER F.B.-G-1488 PG. 1-11

39°	54' 36.5"
71°	38' 39.4"
68°	26' 46.0"
180°	00' 01.9"



NOTE. SEE FB 2485-199 TO 201 FOR VERTICAL DATA

CE 310
76F3095 A '73

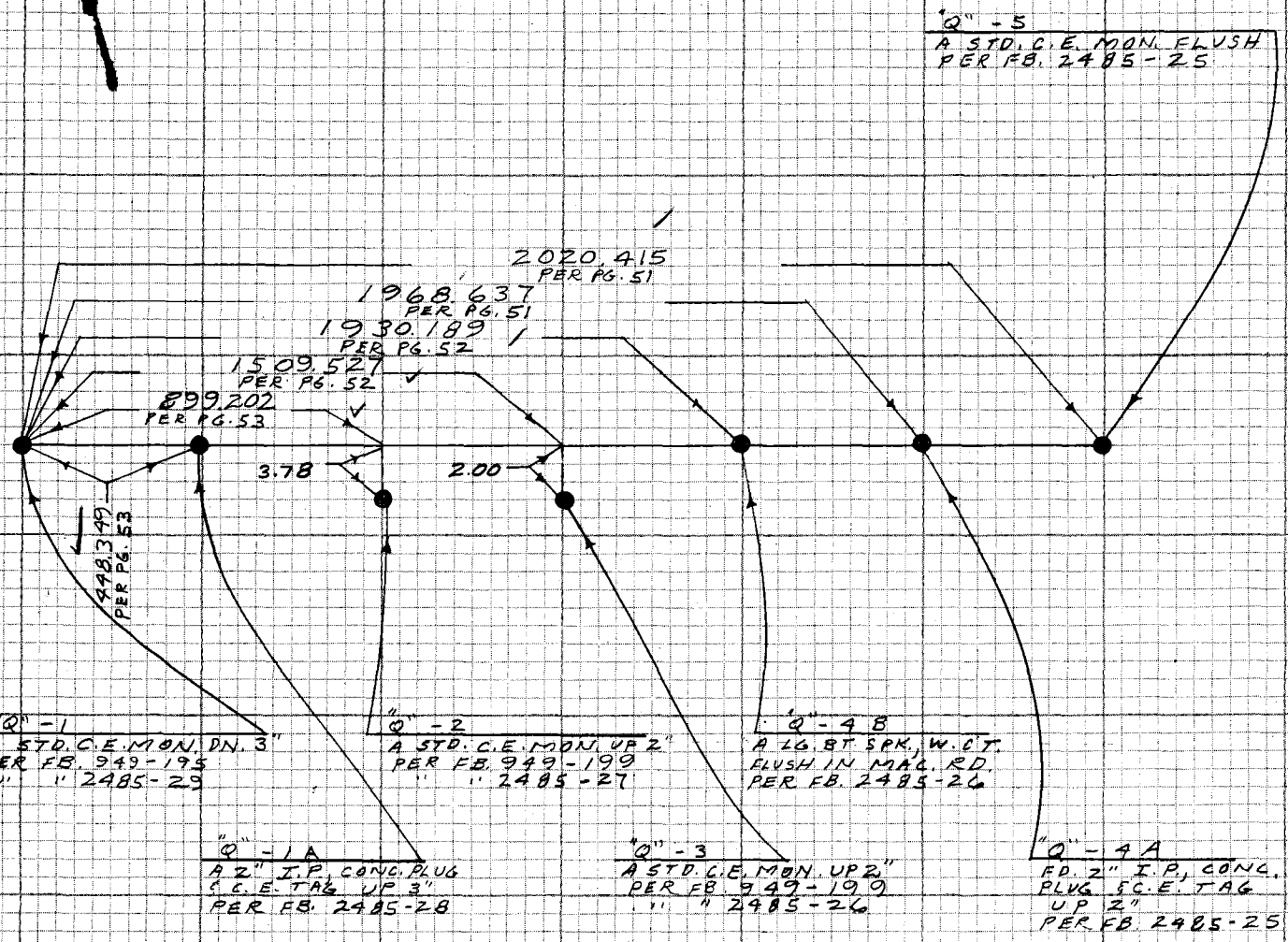
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.

Do not extend notes this side of this line.

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

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE STABILITY STUDY — F.B. 4338 PG. 45
Map No.	JN 00216.4 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 1-10-77
Date	Indexed L. M. PALMER JAN 20 1977

J. N. 00216.4
ABALONE COVE STABILITY STUDIES
"Q" LINE OBSERVED DATA 1-10-77



PER PG. 51
"Q-1 TO Q-5"
H.I. 5.10 5.10
VERT ∡ = 87°34' 15"
SLOPE DIST. = 2022.232
HOR. " = 2020.415 ✓

PER PG. 52
"Q-1 TO "Q-4B
H.I. 5.10 5.20
VERT. ∡ = 88°20' 43"
SLOPE DIST. = 1930.994
HOR. " = 1930.189 ✓

PER PG. 53
"Q-1 TO "Q-2
H.I. 5.10 5.10
VERT. ∡ = 94°50' 24.5"
SLOPE DIST. = 902.420
HOR. " = 899.202 ✓

PER PG. 51
"Q-1 TO "Q-4A
H.I. = 5.10 4.60
VERT. ∡ = 87°57' 40"
SLOPE DIST. = 1969.884
HOR. " = 1968.637 ✓

PER PG. 52
"Q-1 TO Q-3
H.I. 5.10 5.00
VERT. ∡ = 92°22' 59.5"
SLOPE DIST. = 1510.834
HOR. " = 1509.527 ✓

PER PG. 53
Q-1 TO Q-1A
H.I. = 5.10 4.10
VERT. ∡ = 99°40' 04.5"
SLOPE DIST. = 454.808
HOR. " = 448.349 ✓

NOTE: SEE F.B. 2485-203 TO 212
FOR 'VERTICAL DATA'

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
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 46

CE 310
76F-30954-1/73

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

Do not extend notes this side of this line

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

ABALONE COVE

Notes Ck'd by P. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 00 21 64 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 1-5 77
Date	Indexed L. M. PALMER JAN 20 1977

F.B. 4338 PG. 47

1 LIETZ

STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A SPH H-7A ECC5	G-1488-7	Moody	5.70		
REFLECTOR P-4A			3.95	−0.05	

VERTICAL ANGLE

D	88-50-15
R	271-09-19
S	359-59-34
M	88-50-28

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
60	29.7	+ 2

Ref. READING 90

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 967972

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 967774 ✓

HORIZONTAL DISTANCE:

967.774
− 0.050 REF. ELE.
967.724 ✓

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

1 HP

STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A SPH H-7A ECC5	G-1488-7	Moody	5.70		
REFLECTOR SAN #1			4.60		

VERTICAL ANGLE

D	96-53-13
R	263-06-46
S	359-59-59
M	96-53-13.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
60	29.7	+ 2

Ref. READING 85

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 994664

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 987487 ✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLINE N
CE 310
76F3095-4/73

ABALONE COVE

Notes Ck'd by R HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes MOODY Date 1-5 77
Date	Indexed L. M. PALMERI JAN 20 1977

F.B. 4338 PG. 48

1 H.P	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SP H H-7A ECC5	G-1488-7	Moody	5.70	ok	
REFLECTOR	H-8A			5.70	ok	

VERTICAL ANGLE

D	93-55-53
R	266-03-58
S	339-59-51
M	93-55-57.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
60	29.7	+ 2

REF READING 9 75

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2138678

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2133642 ✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	H-8A	G-1488-	Moody			
REFLECTOR						

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

REF READING

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLINE
CE 310
76F3095-4/7

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE LANDSLIDE
Map No.	JN 0021.64 Tape Std °F
Office Work	Surveyed by W A RICHARDS
Checked	Notes Bustrum Date 1-77
Date	Indexed L. M. PALMER JAN 20 1977

F.B. 4338 PG. 49

I.H.P REF	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P-2	6-1488-1	moody	4.90	—	—
REFLECTOR	P-2A			3.70	—	—

NOTE: USED [illegible]

VERTICAL ANGLE

D	90-23-10
R	269-36-46
S	359-59-56
M	90-23-12

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
68°	29.95	+04

VERTICAL ANGLE

D	
R	
S	
M	

RET. READING - 70

SLOPE DISTANCE (FEET): 3870.70

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3870.61 ✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

I.H.P REF.	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	P-2	6-1488-1	moody	4.90	—	—
REFLECTOR	H-8A			5.50	—	—

VERTICAL ANGLE

D	90-44-42
R	269-15-06
S	359-59-48
M	90-44-48

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
68°	29.95	+04

VERTICAL ANGLE

D	
R	
S	
M	

RET. READING - 80

SLOPE DISTANCE (FEET): 1919.550

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1919.387 ✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

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

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

CENTERLINE
CE 310
76F3095-4/7.

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE LANDSLIDE
Map No.	JN 0021764 Tape Std °F
Office Work	Surveyed by
Checked	Notes Date 1-77
Date	Indexed L. M. PALMERI JAN 20 [illegible]

F.B. 4338 PG. 50

1-HP REF.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P 2A	G-1488-2	MOODY	4.95	—	—
REFLECTOR	P-3	—	—	3.55	—	—

VERTICAL ANGLE

D	90 - 36 - 29
R	269 - 23 - 08
S	359 - 59 - 37
M	90 - 36 - 41

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
66°	29.95	+03

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4 7 4 6 8 6

HORIZONTAL DISTANCE: 4 7 4 6 5 9 ✓✓

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

1-H.P.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	P-2A	G-1488-2	MOODY	4.95	—	—
REFLECTOR	P-2	—	—	3.70	—	—

VERTICAL ANGLE

D	89 - 57 - 47
R	270 - 01 - 47
S	359 - 59 - 34
M	89 - 58 - 00

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G.	P.P.M. COR.
66°	29.95	+03

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 8 7 0 7 8

HORIZONTAL DISTANCE: 3 8 7 0 7 8 ✓✓

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE M
CE 310
76F3095-4/7

ABALONE COVE

Notes Ck'd by R. HILARIO	Survey of Portuguese Bend Landslide
Map No.	JN0021.64 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes Moody, WAR Date 1-10-77
Date	Indexed L. M. PALMER JAN 20 1977

F.B. 4338 PG. 51

1-H.P. REF.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD -BACK	ELEV.
3800A	Q-1		MOODY	5.10	—	—
REFLECTOR	Q-5		—	5.10	—	—

VERTICAL ANGLE

D	87-33-58
R	272-25-28
S	359-59-26
M	87-34-15

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
64	30.1	+01

REF READING 80

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2022232

HORIZONTAL DISTANCE: 2020415

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

1-H.P. REF. 1-10-77

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. -BACK	ELEV.
3800A	Q-1		MOODY	5.10	—	—
REFLECTOR	Q-4A		—	4.60	—	—

VERTICAL ANGLE

D	87-57-35
R	272-02-15
S	359-59-50
M	87-57-40

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
64	30.1	+01

REF. READING 80

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1969884

HORIZONTAL DISTANCE: 1968637

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE M... CE 310 76F3095-4/7.

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE
Map No.	JN 0021,64 Tape ___ Std ___ °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 1-10-77
Date	Indexed L. M. PALMER JAN 20 1977

F.B. 4338 PG. 52

1-H.P.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q-1		MOODY	5.10	—	—
REFLECTOR	Q-4B			5.20	—	

VERTICAL ANGLE

D	88-20-34
R	271-39-08
S	359-59-42
M	88-20-43

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
62	30.1	+01

REF. RESP. = 80

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 19309.94

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 19301.89

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

1-H.P.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q-1		MOODY	5.10	—	—
REFLECTOR	Q-3			5.00	—	

VERTICAL ANGLE

D	92-22-50
R	267-36-51
S	359-59-41
M	92-22-59.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
62	30.1	+01

REF. RESP. = 85

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 15108.34

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 15095.27

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

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

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

CENTERLINE M
CE 310
76F3095-4/7:

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 1-10-77
Date	Indexed L. M. PALMERI JAN 20 1977

F.B. 4338 PG. 53

1-H.P. REF.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q-1		MOODY	5.10	—	—
REFLECTOR	Q-2		—	5.10	—	—

VERTICAL ANGLE

D	99-50-18
R	265-09-29
S	359-59-47
M	94-50-24.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
62	30.1	+01

REF. RESPONSE = 90

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 9024.20

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 8992.02

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

1-H.P. REF. + ATTENUATOR

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q-1		MOODY	5.10		
REFLECTOR	Q-1-A		—	4.10		

VERTICAL ANGLE

D	99-40-13
R	260-20-04
S	360-00-17
M	99-40-04.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
62	30.1	+01

REF. RESP. = 80

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4548.08

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 4483.49

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

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

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

CENTERLINE
CE 310
76F3095-4/7

ABALONE COVE

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape ~~Std~~ °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes moody Date 1-10-77
Date	Indexed T. M. PALMERI JAN 20 1977

F.B. 4338 PG. 54

1 H.P. REF.	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD	ECCENTRICITY −BACK	ELEV.
3800A	P-3	G-1488-	Bustrum	4.95			
REFLECTOR	P-4A	—	—	4.50			

VERTICAL ANGLE

D	78-01-23
R	281-58-52
S	360-00-15
M	78-01-15.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
62°	30.5	+01

RET. READING .80

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 7 0 6 9 6 0

HORIZONTAL DISTANCE: 6 9 1 5 6 5 ✓

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD.	ECCENTRICITY −BACK	ELEV.
3800A							
REFLECTOR							

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/7

ABALONE COVE

Notes Ck'd by R. HILARIO	Survey of Portuguese Bend Landslide
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes moody Date 1-11-77
Date	Indexed T. M. PALMERI JAN 20 1977

F.B. 4338 PG. 55

NOTE: HIGHWAY REF MEAS. 0.07 SHORTER THAN H.P. REF.

1 Highway REF.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN #1	5-1488-	moody	4.70	—	—
REFLECTOR	SAN #2			5.85	+ 0.07	—

0.015 E'ly of line

VERTICAL ANGLE

D	98-51-18
R	261-08-31
S	359-59-49
M	98-51-23.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
70	30.05	+04

REF READING = 65.125 CORR DIST

SLOPE DISTANCE (FEET) 65.055

HORIZONTAL DISTANCE 64349

CORRECT HORIZ. DIST.

VERTICAL ANGLE D R S M

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

---

1 Highway REF.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN #1	5-1488-	moody	4.70	—	—
REFLECTOR	SAN #3			5.30	+ 0.07	—

0.01 E'ly of line

VERTICAL ANGLE

D	95-42-29
R	264-17-25
S	359-59-54
M	95-42-32

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
70	30.05	+04

REF READING = 70

SLOPE DISTANCE (FEET) 93.074 CORR DIST

HORIZONTAL DISTANCE 92612

CORRECT HORIZ. DIST.

VERTICAL ANGLE D R S M

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE CE 310 76F3095-4/7

ABALONE COVE

Notes Ck'd by P. HILARIO	Survey of Portuguese Bend Landslide F.B. 4338 PG. 56
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes Moody Date 1-11-77
Date	Indexed L. M. PALMERI JAN 20 1977

NOTE: HIGHWAY REF MEAS 0.07 SHORTER THAN H.P. REF

1 Highway REF.	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN #1	6-1488	Moody	4.70	—	—
REFLECTOR	Inter			3.60	+0.07	—

0.04 E'LY OF LINE

VERTICAL ANGLE

D	93-58-27
R	266 01-29
S	359-59-56
M	93-58-29

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
70	30.05	+04

Ref. READING = 75

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 134.082 CORR DIST.

1 3 4 ~~0 1 2~~

HORIZONTAL DISTANCE

1 3 3 7 5 9

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

---

1 Highway REF.	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN #1	6-1488-	Moody	4.70	—	—
REFLECTOR	SAN #4			3.60	+0.07	—

0.04 E'LY OF LINE

VERTICAL ANGLE

D	93-20-11
R	266-39-41
S	359-59-52
M	93-20-15

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G.	P.P.M. COR.
70°	30.05	+04

Ref. READING = 75

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) .728 CORR DIST.

1 5 1 ~~6 5 8~~

HORIZONTAL DISTANCE

1 5 1 4 7 1

CORRECT HORIZ. DIST.

HIGHWAY REFLECTOR MEASURES 0.07 SHORT = REFLECTOR ECC. CONSTANT OF +0.07

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE CE 310 76F3005 4/71

ABALONE COVE

Notes Ck'd by D. HILARIO	Survey of Portuguese Bend Landslide
Map No.	JN 00 21 64 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes Moody Date 1-11-77
Date	Indexed L. M. PALMERI JAN 20 1979

F.B. 4338 PG. 57

NOTE: HIGHWAY REFLECTOR MEAS. 0.07 SHORTER THAN H.P. REFLECTOR

1 Highway REF

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN #1	6-1488-	Moody	4.70	—	—
REFLECTOR	SAN #5			2.90	+0.07	—

Note: on line

VERTICAL ANGLE

D	86-31-52
R	273-27-53
S	359 59 45
M	86-31-59.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
70	30.05	+04

Ref. READING = 75

572 CORR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 8 0 5 0 2

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1 8 0 2 4 2 ✓✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

---

1. H.P. REF.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN #1	6-1488-	Moody	4.70	—	—
REFLECTOR	P.4A			4.30	—	—

VERTICAL ANGLE

D	78-13-31
R	281-46-18
S	359-59-49
M	78-13-36.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
70	30.05	+04

Ref. READING = 90

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 6 8 1 8 7 0

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 6 6 7 5 2 5 ✓✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/7:

ABALONE COVE

Notes Ck'd by R HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes Moody Date 1-12-77
Date	Indexed L. M. PALMENI JAN 20 1977

F.B. 4338 PG. 58

Note: Highway REF. MEAS. 0.07 SHORTER THAN H.P REF.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN 1		Moody	4.65		
REFLECTOR	SAN 2		R.T.	480		

0.015 E'LY OF LINE

VERTICAL ANGLE

D	99-45-29
R	260-14-23
S	359-59-52
M	99-45-34

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
65	30.05	+01

REF. READING 70

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 0 9 8

6 5 0 2 8

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

6 4 1 5 6

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A						
REFLECTOR						

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE
Map No.	JN 002164 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes Bushrum Date 1-14-77
Date	Indexed L. M. PALMERI JAN 20 1977

F.B. 4338 PG. 59

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 1-14-77
TIME 9:59 A.M.
RECORDER Bushrum

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N FIX	1225A 02170	moody	5.40	—	—
REFLECTOR	G-1		RICHARDS	4.50	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	65°	29.50	X
REFLECTOR			
MEAN			+0.7

SLOPE DISTANCE (FEET)

2	5	9	8	3	4	0

VERTICAL ANGLE

D 99-19-56	INST. H.I. 5.40
R 260-39-34	
S 359-59-20	TARG. H.I. 4.50
M 99-20-16	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD HAZE
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 2-HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: REDUCE SLOPE DIST = 2563.909 ✓

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 1-14-77
TIME 10:30 AM
RECORDER Bushrum

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N FIX	1225A 02170	moody	5.40	—	—
REFLECTOR	W. FIX		RICHARDS	4.65	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	65°	29.50	X
REFLECTOR			
MEAN			+0.7

SLOPE DISTANCE (FEET)

3	2	1	3	1	3	8

VERTICAL ANGLE

D 96-07-55	INST. H.I. 5.40
R 263-51-55	
S 359-59-50	TARG. H.I. 4.65
M 96-08-00	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD HAZE
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 3-HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: REDUCE SLOPE DIST. = 3194.746 ✓

PART NO. 9320-2060

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 900 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3085-4/7.

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE F.B. 4338 PG. 60
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by K.A. RICHARDS
Checked	Notes moody Date 1-13-77
Date	Indexed L. M. PALMER JAN 20 1977

HEWLETT PACKARD

MODEL 3800A DISTANCE METER

DATE 1-13-77
TIME 1:30 PM
RECORDER moody

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	W. FIX	1225A 02170	moody	4.95	—	—
REFLECTOR	G-1		RICHARDS	4.45	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.80	X
REFLECTOR			X
MEAN			+03

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 3 LIE 43
REFLECTOR CONSTANT: –0.05
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: REDUCE SLOPE DIST.
= 2987.479 ✓
–0.050
2987.429 ✓

SLOPE DISTANCE (FEET)

	2	9	8	8	5	2	0

VERTICAL ANGLE

D	91-30-41	INST. H.I.	4.95
R	268-29-13		
S	359-59-54	TARG. H.I.	4.45
M	91-30-44.0		

PART NO. 9320-2080

HEWLETT PACKARD

MODEL 3800A DISTANCE METER

DATE 1-13-77
TIME 2:20 PM
RECORDER moody

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	W. FIX	1225A 02170	moody	4.95	—	—
REFLECTOR	W. FIX		TURRILL	5.00	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.80	X
REFLECTOR			X
MEAN			+03

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 3 H.P
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: REDUCE SLOPE DIST.
= 3194.787 ✓

SLOPE DISTANCE (FEET)

	3	2	1	3	0	6	4

VERTICAL ANGLE

D	83-53-04	INST. H.I.	4.95
R	276-06-46		
S	359-59-50	TARG. H.I.	5.00
M	83-53-09.0		

PART NO. 9320-2080

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
PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE CE 310 76F3085-4/7

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND LANDSLIDE F.B. 4338 PG. 61
Map No.	JN0021.64 Tape ____ Std ____ °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes Moody Date 1-13-77
Date	Indexed L. E. PALMER JAN 20 1977

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 1-13-77
TIME 11:00 AM
RECORDER Moody

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	G-1	1225A 02170	Moody	4.85	—	—
REFLECTOR	W. FIX		RICHARDS	4.35	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.90	X
REFLECTOR			X
MEAN			+03

SLOPE DISTANCE (FEET)

	2	9	8	8	5	0	8

VERTICAL ANGLE

D 88-30-46	INST. H.I. 4.85
R 271-29-15	
S 360-00-01	TARG. H.I. 4.35
M 88-30-45.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY:
TYPE OF REFLECTOR: 3" LIETZ
REFLECTOR CONSTANT: –0.05
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: REDUCE SLOPE DIST.
= 2987.501
– 0.050
2987.451

PART NO. 9320-2060

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 1-13-77
TIME 11:10 AM
RECORDER Moody

PROJECT PORTUGUESE BEND LANDSLIDE
CLIENT LA. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	G-1	1225A 02170	Moody	4.85	—	—
REFLECTOR	W. FIX		TURRILL	4.80	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.90	X
REFLECTOR			X
MEAN			+03

SLOPE DISTANCE (FEET)

	2	5	9	8	2	4	0

VERTICAL ANGLE

D 80-41-13	INST. H.I. 4.85
R 279-18-39	
S 359-59-52	TARG. H.I. 4.80
M 80-41-17.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY:
TYPE OF REFLECTOR: 2 H.P.
REFLECTOR CONSTANT: –0–
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: REDUCE SLOPE DIST.
= 2564.000

PART NO. 9320-2060

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

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

CENTERLINE
CE 310
76F-3085-4/7.

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 5-77
Date	Indexed R. D. BAILEY JUN 2 2 1977

F.B. 4338 PG. 63

— 5-77 —

J. N. 0021.64

PORTUGUESE BEND LANDSLIDE OBSERVATIONS
TABULATION OF DISTANCES MEASURED WITH AN H.P. DISTANCE METER BETWEEN STATIONS AT THE LANDSLIDE AREA

STATION		TO	STATION	DISTANCE	PG.
NORTH	FIX	"	RADIAL #1	2205.195	69
"	"	"	DAVIS	1811.507	70
"	"	"	SHIELDS	3116.857	71
"	"	"	RADIAL #2, ECC. #3	3426.336	72
"	"	"	EAST FIX	2607.926	73
"	"	"	K-3A, ECC. #2	4190.158	74
"	"	"	WEST FIX	3194.768	75
"	"	"	K-1	4697.339	76
"	"	"	P-4A	3858.200	77
"	"	"	BLAKESLEY	3665.756	78
EAST	"	"	BLAKESLEY	3280.120	79
"	"	"	NORTH FIX	2607.917	80
"	"	"	DAVIS	1182.127	81
"	"	"	RADIAL #1	1451.335	82
"	"	"	K-1	4119.816	83
"	"	"	P-4A	4858.323	84
"	"	"	WEST FIX	3508.384	85
"	"	"	RADIAL #2, ECC. #3	1947.962	86
"	"	"	K-3A, ECC. #2	2677.150	87
"	"	"	K-6	1759.172	88
"	"	"	"Q"-1	6814.111	89
WEST	"	"	NORTH FIX	3194.829	128
"	"	"	EAST "	3508.451	128
"	"	"	SHIELDS	2909.178	129
"	"	"	K-1	1728.571	129
"	"	"	P-4A	1571.730	130
H-7A, ECC. #5		"	SAN. #1	987.489	90
"	"	"	H-8A	2133.745	91
"	"	"	P-4A	967.705	92
P-4A		"	H-7A, ECC. #5	967.787	93
"		"	P-3	691.557	94
"		"	SAN. #1	667.472	95
H-8A		"	POINT	1700.347	98
"		"	"Q"-#5	550.686	97
"		"	"Q"-#1	2119.367	96
"		"	"P"-2	1919.391	99
"		"	H-7A, ECC. #5	2133.711	100
POINT		"	H-8A	1700.293	101
"		"	"Q"-5	1683.778	102
"		"	EAST FIX	4487.325	103

CONTINUED ON PAGE 64

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
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.
CENTERLINE NOTES
CE 310
76F3095-4/73

CONTINUED FROM PAGE 63

F.B. 4338 PG. 64

STATION	TO	STATION	DISTANCE	PG
SAN. #1	"	SAN. #5	180.266	104
" "	"	" #4	151.486	105
" "	"	"INT."	133.750	106
" "	"	SAN. #3	92.607	107
" "	"	" #2	64.192	108
P-2	"	S.P.H. H-8A	1919.428	109
"	"	P-2 A	387.070	110
P-2 A	"	P-3	474.636	111
"	"	P-2	387.088	112
P-3	"	P-2 A	474.635	113
"	"	P-4 A	691.573	114
Q-1	"	Q-5	2020.330	115
"	"	Q-1 A	448.346	116
"	"	Q-2 (OFFSET)	899.068	117
"	"	Q-2 (MON., 3.97 S.)	899.137	118
"	"	Q-3	1509.477	119
P.O.T., 28.89 W/O Q-5	"	Q-4B	61.298	120
Q-5	"	Q-4A	51.79 (LEVEL)	121
WAYFARER #2	"	S.P.H. E-8B	6821.237	122
" "	"	S.P.H. G-6	4089.596	123
S.P.H. G-6	"	" E-8B	8016.557	124
" "	"	WAYFARER #2	4089.376	125
" E-8B	"	S.P.H. G-6	8016.871	126
" "	"	WAYFARER #2	6821.233	127

CE 310
76F3095-473

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

Do not extend notes this side of this line

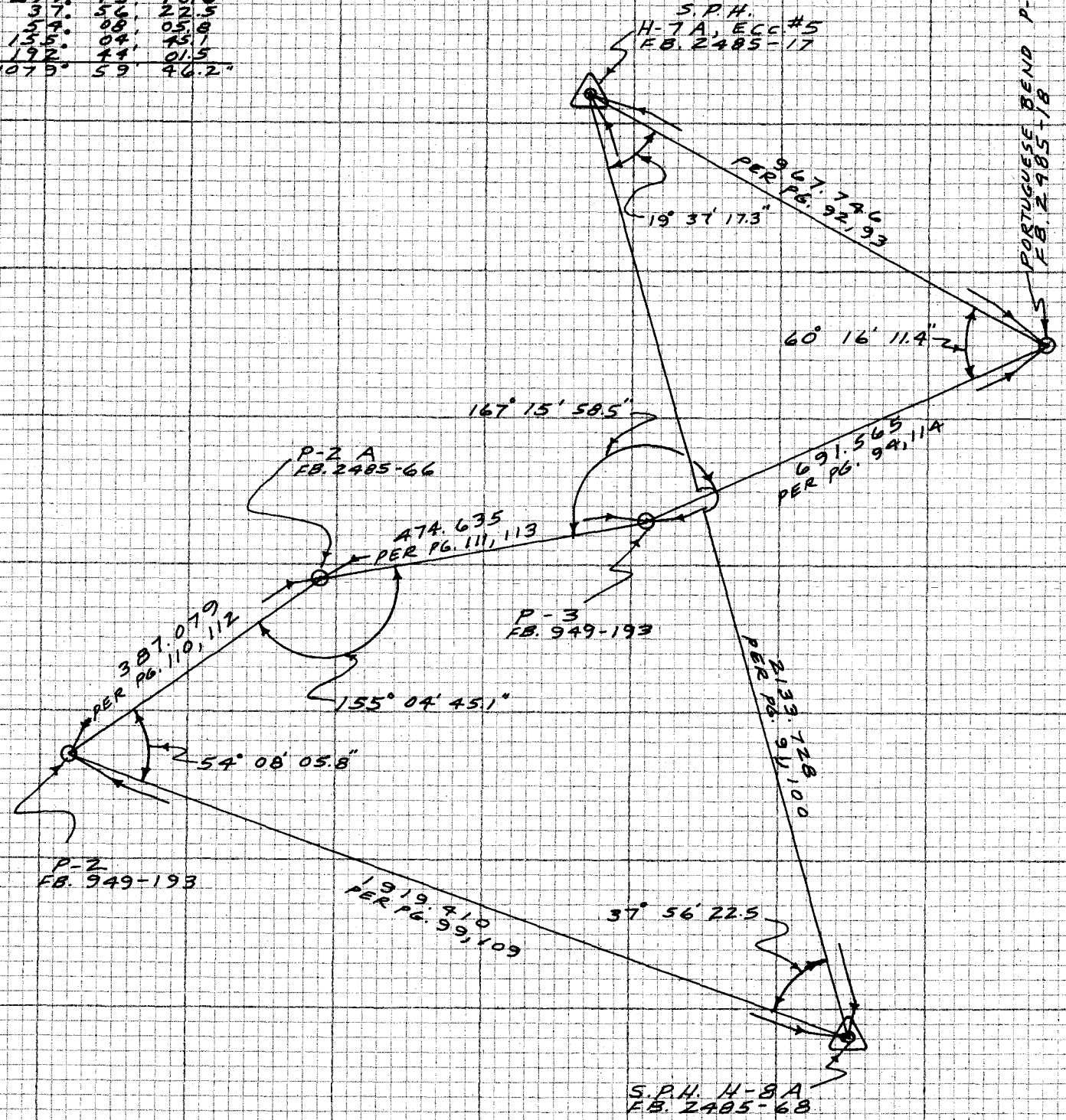
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK WITH DATE AND NAME OF PERSON MAKING CHANGE

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE LANDSLIDE STUDIES — F.B. 4338 PG. 65
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 5-77
Date	Indexed G. D. BAILEY JUN 2 2 1977

"P" LINE TRAVERSE OBSERVED DATA

HORIZONTAL AND VERTICAL ANGLES: F.B.G-1373 PG.S 16-25, INC.

340°	22'	42.7
299°	43'	48.6
37°	56'	22.5
54°	08'	05.8
155°	04'	45.1
192°	41'	01.5
1079°	59'	46.2"



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

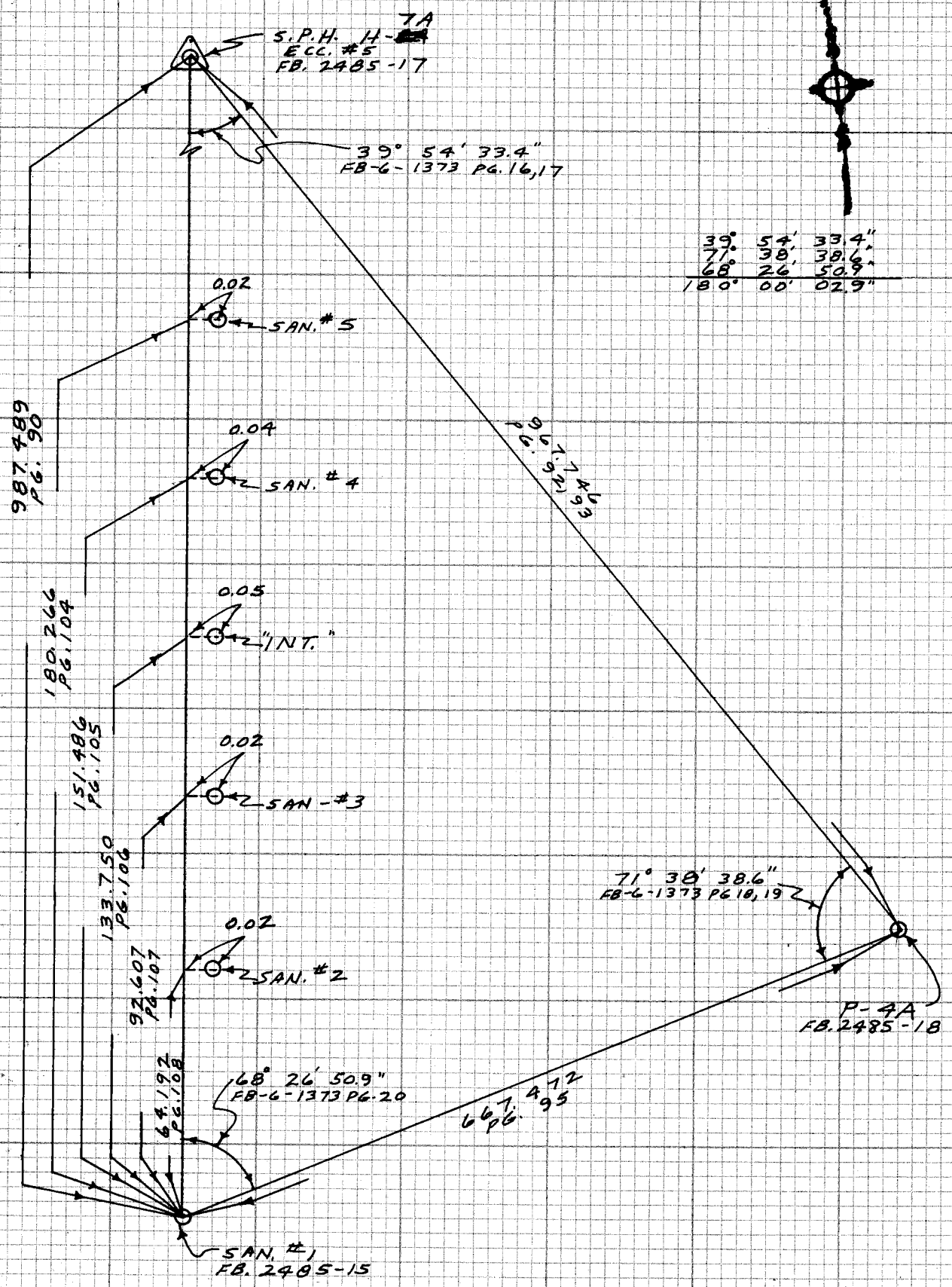
Do not extend notes ...is side of this line

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

CENTERLINE NOTES
CE 310
76F3096-4/73

F.B. 4338 PG. 66

ABALONE COVE STABILITY STUDIES
"SAN" LINE OBSERVATIONS 5-77
HORIZONTAL ANGLES - F.B.-6-1373



39°	54'	33.4"
71°	38'	38.6"
68°	26'	50.9"
180°	00'	02.9"

CE 310
76F3096-4/73

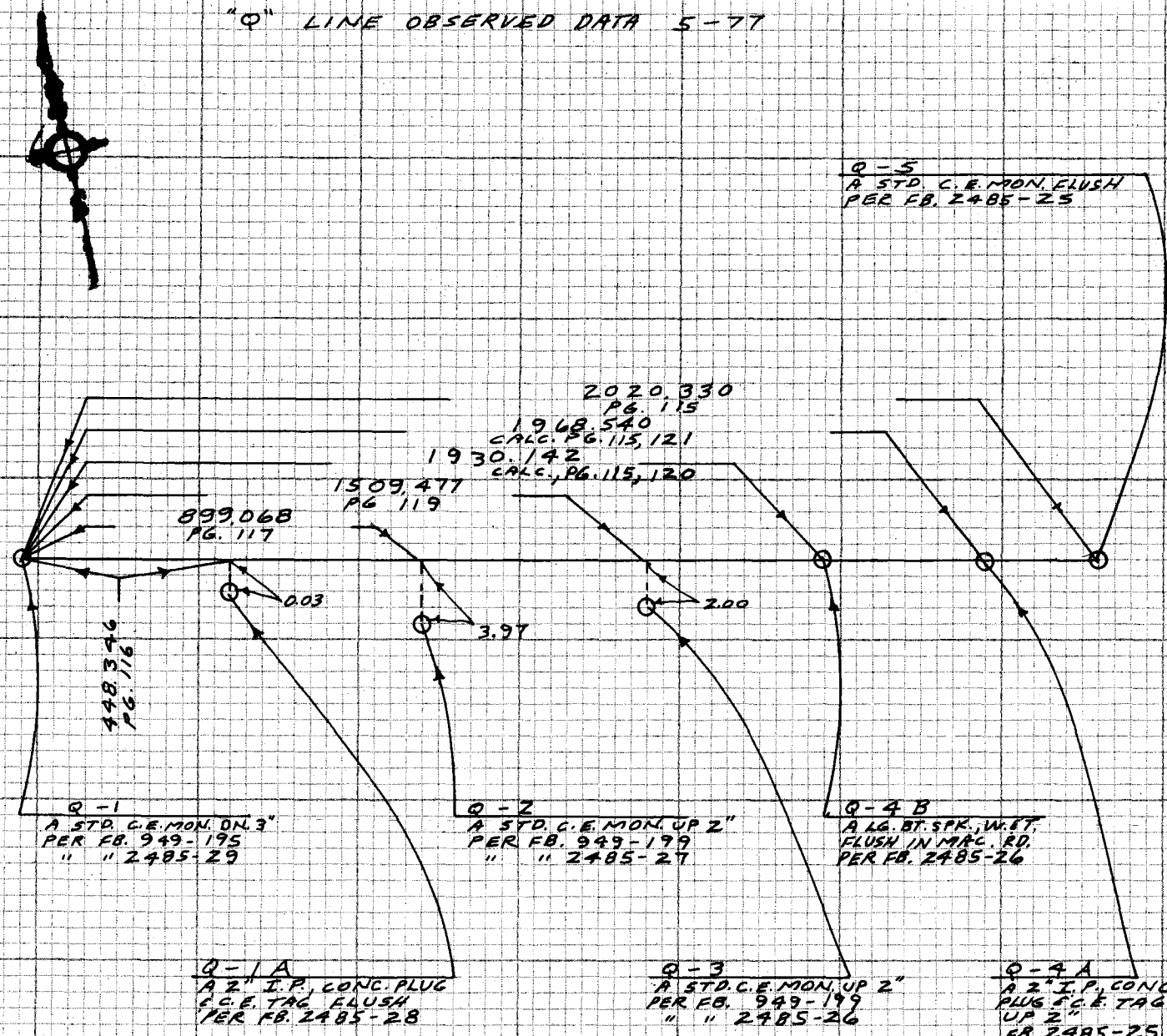
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.

Do not ex. notes this side of this line

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

Notes Ck'd by R. HILARIO	Survey of ABALONE COVE STABILITY STUDY — F.B. 4338 PG. 67
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 5-77
Date	Indexed B. D. BAILEY JUN 2 2 1977

ABALONE COVE STABILITY STUDIES
"Q" LINE OBSERVED DATA 5-77



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

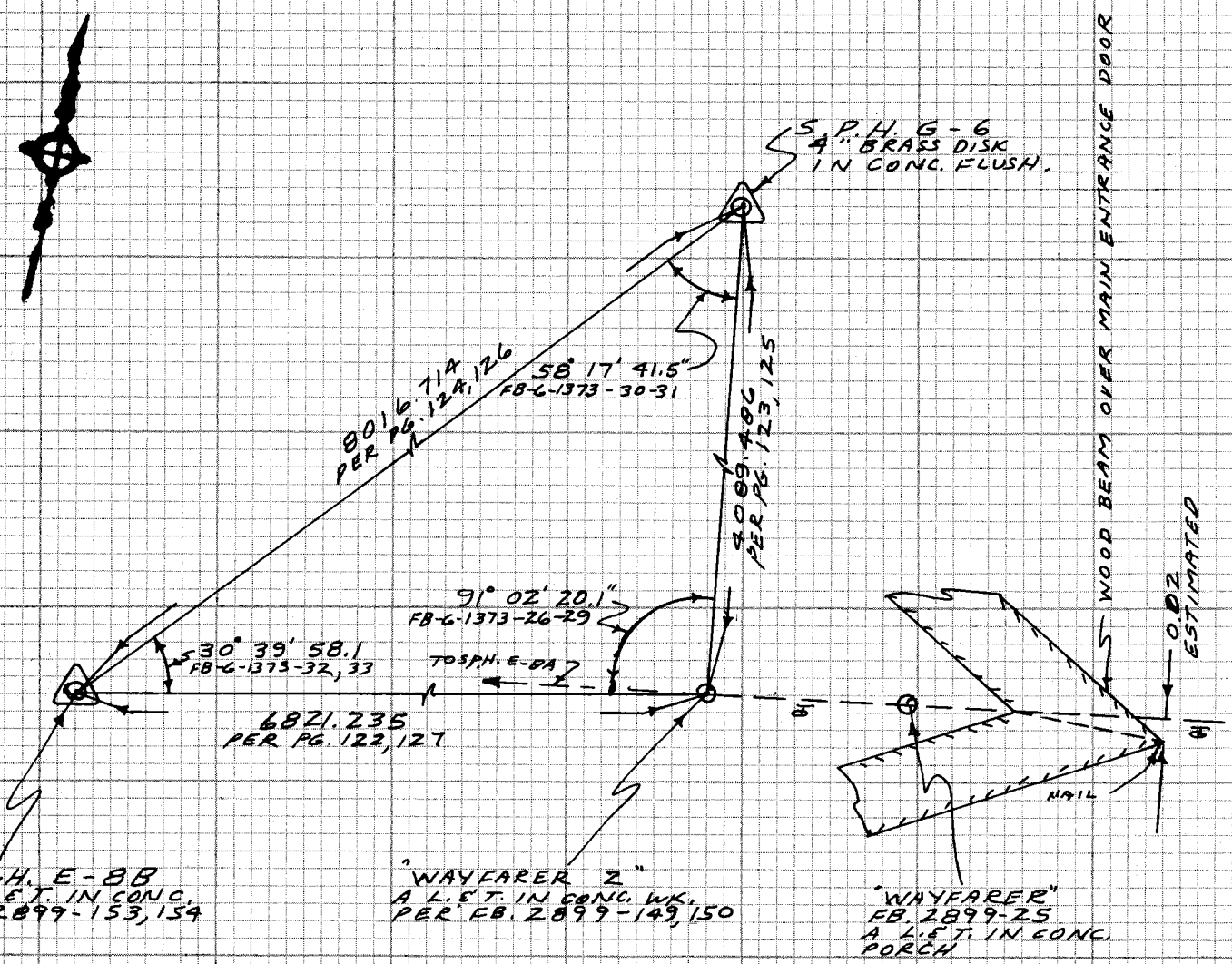
Do not extend notes this side of this line

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 68

ABALONE COVE STABILITY STUDY
POSITION OBSERVATIONS FOR "WAYFARER 2"



CE 310
76F3095-A173

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

Do not exceed notes this side of this line

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

Ck'd by R. HILARIO
Survey of PORTUGUESE BEND
Survey Type — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F. # 4338 Pg. 69

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-16-77

TIME

RECORDER RICHARDS

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N.FIX		Moody	5.58	—	—
REFLECTOR	RAD #1		R.E.T.	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG.	PPM CORR.
3800A	68°	29.85	X
REFLECTOR	—	—	
MEAN	—	—	+.05

SLOPE DISTANCE (FEET)

	2	2	4	0	7	0	2

VERTICAL ANGLE

D	100-14-25	INST. H.I.	5.58
R	259-46-32		
S	360-00-57	TARG. H.I.	5.00
M	100-13-56.5		

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY:

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT: —

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: Corr. 2205.065
Ecc. + 0.13
2205.195

PART NO. 9320-8000

76P3006 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002144 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-77
Indexed D. BAILEY JUN 22 1977

F. B. 4338 Pg. 70

DATE 5-16-77

TIME 12:20 P.M.

RECORDER RICHARDS

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

PROJECT PORTUGUESE BEND
LANDSLIDE STUDIES

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	3800	MOODY	5.58	—	—
REFLECTOR	DAVIS		RET.	5.00	+ 0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.8	
REFLECTOR	—	—	
MEAN	—	—	+05

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 50 75 100 — – +

TYPE OF REFLECTOR: L. H. P.

REFLECTOR CONSTANT: —0—

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1811.377
REF ECC = + 0.13
1811.507

SLOPE DISTANCE (FEET)

1 8 4 9 8 0 6

VERTICAL ANGLE

D	101° 42' 25"	INST. H.I. 5.58
R	258° 18' 30"	
S	360° 00' 55"	TARG. H.I. 5.00
M	101° 41' 57.5"	

PART NO. 9320-2080

26F3096 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-16-77
TIME 12:30
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX		MOODY	5.58	—	—
REFLECTOR	SHIELDS		M.L.B.	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.8	
REFLECTOR	—	—	
MEAN	—	—	+05

SLOPE DISTANCE (FEET)

3 1 4 5 7 9 2

VERTICAL ANGLE

D 97-48-06	INST. H.I. 5.58
R 262.12.45	TARG. H.I. 5.00
S 360.00.51	
M 97.47.40.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 50 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DISTANCE = 3116.727
ECC +0.13
3116.857

PART NO. 9320-2080

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 2121 Tape Std °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-77
Indexed G. D. BAILEY JUN 2 2 1977

F. B. 4338 Pg. 71

76F3096 CE#310 3-66

PLEASE RETURN TO
COUNTY O[illegible]OS ANGELES
DEPARTMENT [illegible]UNTY ENGINEER
405 LOS ANGELES C[illegible]Y 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 this side of this line.

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-16-77

TIME

RECORDER moody

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX		moody	5.58	—	—
REFLECTOR	RAD #2 ECC. #3		M.L.B.	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.8	
REFLECTOR	—	—	
MEAN	—	—	+.05

SLOPE DISTANCE (FEET)

	3	4	6	8	8	6	0

VERTICAL ANGLE

D 99.00.20	INST. H.I. 5.58
R 261.01.01	
S 360.01.21	TARG. H.I. 5.00
M 98.59.39.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY:

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: 3426.206
ECC. +0.13
3426.336

PART NO. 9320-2080

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN002168 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 Pg. 72

76F3098 CE#310 3-66

PLEASE RETURN TO
COUNTY / OS ANGELES
DEPARTMENT DUNTY ENGINEER
403 LOS ANGELES C TY 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 this side of this line.

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-16-77

TIME

RECORDER Moody

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N FIX		moody	5.58	—	—
REFLECTOR	E FIX		RET.	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.8	
REFLECTOR	—	—	
MEAN	—	—	+05

SLOPE DISTANCE (FEET)

	2	6	0	9	8	6	2

VERTICAL ANGLE

D	92-17-21	INST. H.I.	5.58
R	267-43-46		
S	360-01-07	TARG. H.I.	5.00
M	92-16-47.5		

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY:

TYPE OF REFLECTOR: I.H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 2607.796
ECC. CORRECTION +0.13
TOTAL 2607.926

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. HAILEY JUN 22 1977

F.B. 4338 Pg. 73

76P3090 CE2310 3-66

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BAND
JN0021 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes M. R. R. Date 5-77
Indexed G. D. BAILEY JUN 2 2 1977

F. B. 4330 Pg. 74

DATE 5-16-77

TIME

RECORDER moody

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. F. X		moody	5.58	—	—
REFLECTOR	K3 A ECC #2		M. L. B	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.8	
REFLECTOR	—	—	
MEAN	—	—	+.05

SLOPE DISTANCE (FEET)

4 2 3 9 6 5 0

VERTICAL ANGLE

D	98-47-03	INST. H.I. 5.58
R	261 14 05	
S	360-01-08	TARG. H.I. 5.00
M	98-46-29	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 45

STABILITY:

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 4190.028
REF. ECC. +0.13
TOTAL 4190.158

PART NO. 9320-2080

76F3098 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-16-77

TIME

RECORDER moody

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX		moody	5.58	—	—
REFLECTOR	W. FIX		R.E.T.	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.8	
REFLECTOR	—	—	
MEAN	—	—	+.05

SLOPE DISTANCE (FEET)

	3	2	1	2	9	7	6

VERTICAL ANGLE

D	96-08-21
R	263-53-25
S	360-01-46
M	96-07-28.0 ✓

INST. H.I. 5.58

TARG. H.I. 5.00

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY:

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 3194.638 ✓
REF. ECC. + 0.130
TOTAL = 3194.768 ✓

PART NO. 9320-2080

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN002168 Type — Std — °F
Surveyed by W. A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 Pg. 75

76F3095 CE#810 3-66

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-16-76

TIME

RECORDER Moody

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N FIX		Moody	5.58	—	—
REFLECTOR	K-1		M.L.B	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.8	
REFLECTOR	—	—	
MEAN	—	—	+0.5

SLOPE DISTANCE (FEET)

	4	7	2	6	9	2	0

VERTICAL ANGLE

D 96-26-21	INST. H.I. 5.58
R 263-35-04	
S 360-01-25	TARG. H.I. 5.00
M 96-25-38.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 45

STABILITY:

TYPE OF REFLECTOR: I.H.P

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 4697.209
REF. ECC. +0.130
TOTAL. 4697.339

PART NO. 9320-2080

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed D. BAILEY JUN 22 1977

F.B. 4338 Pg. 76

76F3098 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-16-77

TIME

RECORDER moody

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N FIX		Moody	5.58	—	—
REFLECTOR	P-4A		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR
3800A	68	298	
REFLECTOR	—	—	
MEAN	—	—	+.05

SLOPE DISTANCE (FEET)

	3	8	7	3	9	7	0

VERTICAL ANGLE

D 95-12-19	INST. H.I. 5.58
R 264-49-10	
S 360-01-29	TARG. H.I. 5.00
M 95-11-34.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 40

STABILITY:

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 3858.070
REF. ECC. +0.130
TOTAL 3858.200

SEE PG. 158

PART NO. 9320-2080

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F.B. 4338 Pg. 77

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	BLAKESLEY		—	5.00	+0.13	—

METEOROLDGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62°	29.5	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

	3	2	9	8	5	8	4

VERTICAL ANGLE

D	96° 05' 40"	INST. H.I. 5.13
R	263° 55' 18"	
S	360° 00' 58"	TARG. H.I. 5.00
M	96° 05' 11.0"	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 2-H. P.

REFLECTOR CONSTANT: ~~0~~

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 3279.990
REF. ECC. = +0.130
TOTAL = 3280.120

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002169 Tape — Std — °F
Surveyed by W.A.R. RICHARDS Date 5-77
Notes
Indexed D. BAILEY JUN 22 1977

F.B. 9338 PG. 79

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 1:30 P.M
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	NORTH FIX			5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

	2	6	0	9	8	0	6

VERTICAL ANGLE

D	87° 45' 26"	INST. H.I. 5.13
R	272° 15' 54"	
S	360°-01'-20"	TARG. H.I. 5.00
M	87° 44' 46.0"	

VERY WINDY

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 - H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 2607.787
REF. ECC. + 0.130
2607.917

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 00216 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed B.D. BAILEY JUN 22 1977

F. B. 4338 PG. 80

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 1:45 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	DAVIS		TURRILL	5.00	+0.130	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

	1	2	1	2	7	7	0

VERTICAL ANGLE

D	102° 56′ 35″	INST. H.I. 5.13
R	257° 04′ 25″	
S	360° 01′ 00″	TARG. H.I. 5.00
M	102° 56′ 05.0″ ✓	

WINDY

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 75

STABILITY: 0 25 75 100 — –

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1181.997 ✓
REF. ECC. +0.130
TOTAL 1182.127

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Noted W. A. R. Date 5-17-77
Indexed D. BAILEY JUN 22 1977

F. B. 4338 Pg. 81

26F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 LOS ANGELES CITY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 2:00 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	RADIAL #1		TURRILL	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

WINDY

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1451.205
REF. ECC. = +0.130
TOTAL 1451.335

SLOPE DISTANCE (FEET)

	1	4	8	0	7	7	2

VERTICAL ANGLE

D	101° 28' 48"	INST. H.I. 5.13
R	258° 32' 32"	
S	360° 01' 20"	TARG. H.I. 5.00
M	101° 28' 080" ✓	

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 0021,04 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F.B. 4338 PG. 82

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 2:10 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	K-1		BUSTRUM	5.00	+ 0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

	4	1	4	1	6	1	6

VERTICAL ANGLE

D	95° 54' 25"	INST. H.I. 5.13
R	264° 06' 34"	
S	360° 00' 59"	TARG. H.I. 5.00
M	95° 53' 55.5	

WINDY

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 4119.686
REF ECC. + 0.130
TOTAL 4119.816

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 02164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-17-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 PG. 83

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77

TIME 2:25 P.M.

RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES

CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	P-4A		TURRILL	4.85	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

WINDY

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-LIETZ

REFLECTOR CONSTANT: – 0.05

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 4858.373
REF. CONST. – 0.05
TOTAL 4858.323

SLOPE DISTANCE (FEET)

	4	8	6	9	4	8	0

VERTICAL ANGLE

D 93° 52′ 41″	INST. H.I. 5.13
R 266° 08′ 13″	
S 360° 00′ 54″	TARG. H.I. 4.85
M 93° 52′ 14.0″	

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 0221 69 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed B.D. BAILEY JUN 22 1977

F. B. 4338 Pg. 84

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 2:40 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.C.O.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	WEST FIX		TURRILL	5.00	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

	3	5	1	6	6	1	2

VERTICAL ANGLE

D	93° 55′ 08″	INST. H.I. 5.13
R	266° 06′ 09″	
S	360° 01′ 17″	TARG. H.I. 5.00
M	93° 54′ 29.5″	

WINDY

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 2-LIET 2

REFLECTOR CONSTANT: – 0.05

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 3508.434
REF. CONST. – 0.050
TOTAL = 3508.384

PART NO. 9320-2060

Notes Ck'd by F. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 0216 Tape – Std – °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed B.E. BAILEY JUN 23 1977

F.B. 4338 PG. 85

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 2:55 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	RADIAL #2 ECC. #3		BUSTRUM	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

	1	9	9	6	6	8	2

VERTICAL ANGLE

D 102° 42' 49"	INST. H.I. 5.13
R 257° 18' 49"	
S 360 01' 38"	TARG. H.I. 5.00
M 102° 42' 00.0"	

WINDY

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: —0—

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1947.832
ECC. CORRECTION + 0.130
TOTAL 1947.962

PART NO. 9320-2060

Notes Ck'd by [illegible]ARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 00 2164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F. B. 4338 PG. 86

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMEN[illegible] COUNTY ENGINEER
403 LOS ANGELE[illegible] [illegible]NTY 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 00216 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-17-77
Indexed W. D. BAILEY JUN 2 2 1977

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 3:15 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	K-3 A ECC. #2		BUSTRUM	5.00	+0.130	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

2 7 3 1 5 6 0

VERTICAL ANGLE

D	101° 28′ 42″	INST. H.I. 5.13
R	258° 32′ 27″	
S	360° 01′ 09″	TARG. H.I. 5.00
M	101° 28′ 07.5″ ✓	

WINDY

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-H.P.

REFLECTOR CONSTANT: -0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 2677.020
ECC. CORRECTION + 0.130
TOTAL. 2677.150

PART NO. 9320-2060

F. B. 4338 PG. 87

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-17-77
TIME 3:30 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.13	—	—
REFLECTOR	K-6		BUSTRUM	8.00	+0.130	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	62	29.6	
REFLECTOR	—	—	
MEAN	—	—	+01

SLOPE DISTANCE (FEET)

	1	8	0	2	6	8	~~4~~ 2

VERTICAL ANGLE

D 102° 38' 26"	INST. H.I. 5.13
R 257° 22' 28"	
S 360 00' 54"	TARG. H.I. 8.00
M 102° 37' 59.0" ✓	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD WINDY

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: ~~0~~

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1759.04~~2~~ 0
ECC. CORRECTION + 0.130
TOTAL, 1759.17~~2~~ 0

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F.B. 4338 PG. 88

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTME' 'F COUNTY ENGINEER
403 LOS ANGEL 'UNTY 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 this side of this line.

106 53 — 108 53 / 55

FBG 1373 PG. 36

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-26-77
TIME 3:30 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.05	—	—
REFLECTOR	"Q" – 1		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.5	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	6	8	3	1	4	5	2

VERTICAL ANGLE

D 94° 06' 48"	INST. H.I. 5.05
R 265° 54' 58"	
S 360° 01' 46"	TARG. H.I. 5.00
M 94° 05' 55.0"	

WINDY

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 40

STABILITY: 0 25 75 100 — + −

TYPE OF REFLECTOR: 3-H.P.

REFLECTOR CONSTANT: -0-

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DISTANCE = 6813.981
REF. CONST. + 0.130
TOTAL. 6814.111

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No. ___
Office Work ___
Checked ___
Date ___

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A.R. RICHARDS
Notes W.A.R. Date 5-77
Indexed [illegible] 22 1977

F.B. 4338 PG. 89

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME 10:30 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	H-7A ECC. #5		MOODY	5.63	—	—
REFLECTOR	SAN #1			5.00	+0.29	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.5	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	0	9	9	4	3	3	0

VERTICAL ANGLE

D 96-52-25	INST. H.I. 5.63
R 263-08-31	
S 360-00-56	TARG. H.I. 5.00
M 96-51-57.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 987.199
+ REF. ECC. + 0.290
987.489

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F. B. 4338 PG. 90

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT (COUNTY ENGINEER
403 LOS ANGELES Y 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 this side of this line.

28/49

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002169 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes M.A.R. Date 5-77
Indexed E. D. BAILEY JUN 22 1977

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME 10:40 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	H-7A ECC. #5		MOODY	5.63	—	—
REFLECTOR	H-8A		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.5	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	2	1	3	8	6	8	8

VERTICAL ANGLE

D 93-57-18	INST. H.I. 5.63
R 266-03-40	
S 360-00-58	TARG. H.I. 5.00
M 93-56-49.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — + −

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 2133.615
+ REF ECC. = 0.130
TOTAL = 2133.745

PART NO. 9320-2060

F. B. 4338 PG. 91

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77

TIME 10:50 A.M.

RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	H-7A ECC. #5		MOODY	5.63	—	—
REFLECTOR	P-9 A			5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.5	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	0	9	6	7	7	9	8

VERTICAL ANGLE

D 88-46-35	INST. H.I. 5.63
R 271-14-05	
S 360-00-40	TARG. H.I. 5.00
M 88-46-15.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 75

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: —0—

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 967.575
REF. ECC. = +0.130
TOTAL 967.705

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 021,64 Tape — Std — °F
Surveyed by W.A. RICHARDS Date 5-77
Notes W.A.R.
Indexed G. E. BAILEY JUN 22 1977

F. B. 4338 PG. 92

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

DATE 5-19-77

TIME 11:35

RECORDER RICHARDS

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

PROJECT PORTUGUESE BEND LANDSLIDE STUDY

CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A		MOODY	4.50	—	—
REFLECTOR	H-7A, ECC.#5		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66	29.9	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	0	9	6	7	8	8	2

VERTICAL ANGLE

D 91-14-32	INST. H.I. 4.50
R 268-46-23	
S 360-00-55	TARG. H.I. 5.00
M 91-14-04.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — + −

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 967.657
REF. ECC. + 0.130
TOTAL 967.787

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN002169 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed D. BAILEY JUN 22 1977

F.B. 4338 PG. 93

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES Y 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 this side of this line.

36.5
2173

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME 11:38
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A		MOODY	4.50	—	—
REFLECTOR	P-3			5.00	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66	29.9	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	0	7	0	6	9	6	6

VERTICAL ANGLE

D 101-59-40	INST. H.I. 4.50
R 258-01-33	
S 360-01-13	TARG. H.I. 5.00
M 101-59-03.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 691.557

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 0021.64 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed D. BAILEY JUN 22 1977

F.B. 4338 PG. 94

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

43.0
28.5
14.5

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed D. D. BAILEY JUN 22 1977

F. B. 4338 PG. 95

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME 11:50 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A		MOODY	4.50	—	—
REFLECTOR	SAN. #1		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66	29.9	
REFLECTOR	—	—	
MEAN	—	—	+04

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 667.342
REF. ECC. = + 0.130
TOTAL = 667.472

SLOPE DISTANCE (FEET)

	0	6	8	1	6	7	6

VERTICAL ANGLE

D 101-46-43	INST. H.I. 4.50
R 258-14-14	
S 360-00-57	TARG. H.I. 5.00
M 101-46-14.5	

PART NO. 9320-2060

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

98
49

98
49

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-31-77
TIME 11:45 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPA. H-8A		BUSTRUM	5.50	-0-	—
REFLECTOR	"Q-1"		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.1	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	2	1	1	9	2	4	8

VERTICAL ANGLE

D 89° 49' 38"	INST. H.I. 5.50
R 270° 12' 00"	
S 360° 01' 38"	TARG. H.I. 5.00
M 89° 48' 49"	

VISIBILITY: ☐ GOOD ☐ FAIR ☑ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: -0-

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 2119.237
REF. ECC. + 0.130
TOTAL 2119.367

PART NO. 9320-2088

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 00 2 Tape Std
Surveyed by W.A. RICHARDS
Notes W.A.R. 5-27-77
Indexed G.D. BAILEY JUN 22 1977

F.B. 4338 Pg. 96

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-31-77
TIME 11:50 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH. H-8A		BUSTRUM	5.50	-0-	—
REFLECTOR	"Q-5"			5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.1	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	0	5	5	8	3	8	2

VERTICAL ANGLE

D	80° 23' 50"	INST. H.I. 5.50
R	279° 36' 17"	
S	360° 00' 07"	TARG. H.I. 5.00
M	80° 23' 46.5"	

VISIBILITY: ☐ GOOD ☐ FAIR ☑ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: -0-

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 550.556
REF. ECC. + 0.130
TOTAL = 550.686

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W.A.R. Date 5-31-77
Indexed J. D. BARRY JUN 22 1977

F. B. 4338 Pg. 97

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMEN[illegible] COUNTY ENGINEER
403 LOS ANGELE[illegible] UNTY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-31-77
TIME 11:55 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH. H-8A		BUSTRUM	5.50	—	—
REFLECTOR	"POINT"		—	5.00	-0-	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76°	30.1	
REFLECTOR	—	—	
MEAN	—	—	+07

VISIBILITY: ☐ GOOD ☐ FAIR ☑ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: -0-

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1700.347

SLOPE DISTANCE (FEET)

	1	7	0	0	3	9	2

VERTICAL ANGLE

D 90° 25' 15"	INST. H.I. 5.50
R 269° 35' 08"	
S 360° 00' 23"	TARG. H.I. 5.00
M 90° 25' 03.5"	

15.0

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-31-77
Indexed D.D. BAILEY JUN 22 1977

F.B. 4338 PG. 98

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTME' OF COUNTY ENGINEER
403 LOS ANGEL UNTY 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No. ____
Office Work ____
Checked ____
Date ____

Survey of PORTUGUESE BEND
JN 002169 Tape ____ Std ____ °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed J. D. BAILEY JUN 22 1977

F. B. 4338 PG. 101

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-26-77
TIME AM
RECORDER B

PROJECT ____
CLIENT ____

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	POINT		JM	[illegible]	0	—
REFLECTOR	H8A		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70°	30.05	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	1	7	0	0	2	0	2

VERTICAL ANGLE

D 89° 37' 19"	INST. H.I. 4.90
R 270-23-45	
S 360-01-04	TARG. H.I. 5.00
M 89° 36' 47.0"	✓

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1700.163
REF. ECC. = +0.130
TOTAL = 1700.293

PART NO. 9320-2060

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77
TIME 9:45 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. H-8A		MOODY	5.67	—	—
REFLECTOR	PORTUGUESE BEND P-2			5.00	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

	1	9	1	9	5	5	2

VERTICAL ANGLE

D 89-16-06	INST. H.I. 5.67
R 270-45-05	
S 360-01-11	TARG. H.I. 5.00
M 89-15-30.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1919.391

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002169 Tape — Std — °F
Surveyed by W.A.R. RICHARDS
Notes W.A.R. Date 5-77
Indexed D. BALLEW JUN 22 1977

F.B. 4338 PG. 99

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77
TIME 9:50 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A.CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. H-8A		MOODY	5.67	—	—
REFLECTOR	S.P.H. H-7A, ECC.#5		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

	2	1	3	8	5	4	6

VERTICAL ANGLE

D 86-06-03	INST. H.I. 5.67
R 273-54-38	
S 360-00-41	TARG. H.I. 5.00
M 86-05-42.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: —0—

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 2133.581
REF. ECC. = 0.130
TOTAL. = 2133.711

PART NO. 9320-2060

Notes Ck'd by R. FILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 00216 4 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F. B. 4338 PG. 100

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-27
Indexed G.D. BAILEY JUN 22 1977

F. B. 4338 Pg. 102

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-26-77
TIME AM
RECORDER B

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	POINT		J.M.	4.90	—	—
REFLECTOR	Q-5		RALPH	5.00	+ 0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.05	
REFLECTOR	—	—	
MEAN	—	—	+04

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1683.648
REF. ECC. = + 0.13
TOTAL = 1683.778

SLOPE DISTANCE (FEET)

	1	6	8	6	9	3	2

VERTICAL ANGLE

D 86-20-30	INST. H.I. 4.90
R 273-35-35	
S 360-02-05	TARG. H.I. 5.00
M 86-25-27.5" ✓	

PART NO. 9320-2060

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMF OF COUNTY ENGINEER
403 LOS ANGEL OUNTY 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 PG. 103

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-26-77
TIME AM
RECORDER BUS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	POINT		moody	4.90	—	—
REFLECTOR	EAST FIX		RALPH	5.00	+ 0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70°	30.05	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	4	5	1	5	6	3	4

VERTICAL ANGLE

D 83-34-42	INST. H.I. 4.90
R 276-26-45	
S 360-01-27	TARG. H.I. 5.00
M 83-33-58.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3. H.P

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 4487.195
REF. ECC. = +0.130
TOTAL = 4487.325

PART NO. 9320-2060

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT ' COUNTY ENGINEER
403 LOS ANGELES 'Y 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 this side of this line.

SAN #5 = 0.03 EAST OF LINE

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME PM
RECORDER moody

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN #1		moody	480	—	—
REFLECTOR	SAN #5			2.82	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.05	
REFLECTOR	—	—	
MEAN	—	—	+.04

SLOPE DISTANCE (FEET)

	0	1	8	0	.5	2	8

VERTICAL ANGLE

D 86.34.58	INST. H.I. 4.80
R 273.25.50	
S 360.00.48	TARG. H.I. 2.82
M 86° 34' 34.0"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: HIGH WAY

REFLECTOR CONSTANT: +0.06

ATTENUATOR USED: ☐ YES ☐ NO

COMMENTS: REDUCED DIST. = 180.~~206~~ 195
REF. CONST. = +0.060
TOTAL. 180.2~~66~~ 55

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 00264 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILES JUN 22 1977

F. B. 4338 PG. 104

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES ITY 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 this side of this line.

SAN #4 = 0.04' EAST OF LINE

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME PM
RECORDER moody

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN #1		moody	4.80	—	—
REFLECTOR	SAN #4			3.69		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.05	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

		1	5	1	6	8	0

VERTICAL ANGLE

D	93-19-35	INST. H.I. 4.80
R	266-41-15	
S	360-00-50	TARG. H.I. 3.69
M	93° 19' 10.0"	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR 1 HIGH WAY

REFLECTOR CONSTANT: +0.060

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 151.42
REF. CONST. = +0.060
TOTAL = 151.48

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A.R. RICHARDS
Notes W.A.R. Date 5-77
Indexed D.D. BAILEY JUN 22 1977

F.B. 4338 PG. 105

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

inter = 0.05 EAST OF LINE

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME PM
RECORDER Moody

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	San #1		Moody	4.80	—	—
REFLECTOR	inter		—	3.60	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.05	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	0	1	3	4	0	1	6

VERTICAL ANGLE

D	94.00.15	INST. H.I. 4.80
R	266.00.40	
S	360.00.55	TARG. H.I. 3.60
M	93° 59' 47.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 HIGH WAY

REFLECTOR CONSTANT: +0.06

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 133.6~~90~~ 85
REF. CONST. = +0.06
TOTAL. = 133.7~~50~~ 45

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-77
Indexed G. O. BAILEY JUN 22 1977

F. B. 4338 PG. 106

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

SAN #3 = 0.02 EAST OF LINE

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME PM
RECORDER Moody

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN #1		Moody	4.80	—	—
REFLECTOR	SAN #3			5.03	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.5	
REFLECTOR	—	—	
MEAN	—	—	+04

SLOPE DISTANCE (FEET)

	0	0	9	3	0	4	2

VERTICAL ANGLE

D 95-55-05	INST. H.I. 4.80
R 264-05-38	
S 360-00-43	TARG. H.I. 5.03
M 95° 54' 43.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 High Way

REFLECTOR CONSTANT: +0.06

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 92.547
REF. CONST = +0.060
TOTAL = 92.607

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 PG. 107

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

SAN #2 = 0.02 EAST OF LINE

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-19-77
TIME P.M.
RECORDER Moody

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN #1		Moody	4.80	—	—
REFLECTOR	SAN #2			5.52	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.5	
REFLECTOR			
MEAN			+04

SLOPE DISTANCE (FEET)

	0	0	6	4	9	6	8

VERTICAL ANGLE

D	99-12-24	INST. H.I. 4.80
R	260 48 25	
S	360-00-49	TARG. H.I. 5.52
M	99° 11' 59.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 50

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 High Way

REFLECTOR CONSTANT: +0.06

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 64.1~~32~~ 24
REF. CONST. = +0.060
TOTAL = 64.1~~92~~ 84

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002169 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed T.D. BAILEY JUN 22 1977

F.B. 4338 PG. 108

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77
TIME 10:30 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-2		MOODY	5.25	—	—
REFLECTOR	S.P.H. H-8A		—	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

	1	9	1	9	4	7	4

VERTICAL ANGLE

D	90-46-57	INST. H.I. 5.25
R	269-13-46	
S	360-00-43	TARG. H.I. 5.00
M	90-46-35.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: —0—

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 1919.298'
REF. ECC. = + 0.130
1919.428'

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No. ___
Office Work ___
Checked ___
Date ___

Survey of PORTUGUESE BEND
JN002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F.B. 4338 PG. 109

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77
TIME 10:35 A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-2		MOODY	5.25	—	—
REFLECTOR	P-2A			3.60	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

		3	8	7	0	~~2~~ 6	~~2~~

VERTICAL ANGLE

D 90-27-40	INST. H.I. 5.25
R 269-32-55	
S 360-00-35	TARG. H.I. 3.60
M 90-27-22.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-HIGHWAY LENS

REFLECTOR CONSTANT: + 0.06

ATTENUATOR USED: ☐ YES ☐ NO

COMMENTS: REDUCED DIST. = 387.0~~70~~ 06
REF. CONST. + 0.060
387.0~~70~~ 66

PART NO. 9320-2060

Notes Ck'd by R. HILTRO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN002164 Tape — Std — °F
Surveyed by W.A.R. RICHARDS
Notes W.A.R. Date 5-77
Indexed J.D. BAILEY JUN 2 2 1977

F.B. 4338 PG. 110

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77

TIME 11:15 A.M.

RECORDER RICHARDS

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-2A		MOODY	5.05	—	—
REFLECTOR	P-3			3.60	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

		4	7	4	6	0	✱

VERTICAL ANGLE

D 90-38-05	INST. H.I. 5.05
R 269-22-58	
S 360-01-03	TARG. H.I. 3.60
M 90-37-33.5 ✓	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 45

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-HIGHWAY LENS

REFLECTOR CONSTANT: +0.06

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 474.57
REF. CONST. + 0.060
474.63

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F.B. 4338 Pg. 111

76P 3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 LOS ANGELES NTY 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 02164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 PG. 112

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77
TIME 11:20 A.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-2A		MOODY	5.05	—	—
REFLECTOR	P-2			3.60	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

	0	3	8	7	0	2	~~8~~ 5

VERTICAL ANGLE

D 90-00-48	INST. H.I. 5.05
R 270-00-19	
S 360-01-07	TARG. H.I. 3.60
M 90-00-145	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 50

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-HIGHWAY LENS

REFLECTOR CONSTANT: +0.06

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 387.02~~8~~ 5
REF. CONST. +0.060
387.08~~8~~ 5

PART NO. 9320-2060

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMEN[illegible] COUNTY ENGINEER
403 LOS ANGELE[illegible] NTY 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 this side of this line.

70
35

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77
TIME 12:20 P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-3		MOODY	5.15	—	—
REFLECTOR	P-2A			3.60	—	—

METEDRDLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

	0	4	7	4	5	~~8~~ 7	~~0~~ 7

VERTICAL ANGLE

D 89-45-10	INST. H.I. 5.15
R 270-16-00	
S 360-01-10	TARG. H.I. 3.60
M 89-44-35 ✓	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 50

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-HIGHWAY LENS

REFLECTOR CONSTANT: +0.060

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 474.57~~5~~2
REF. CONST. + 0.060
TOTAL 474.63~~5~~2

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F. B. 4338 PG. 113

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT COUNTY ENGINEER
403 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 this side of this line.

2171/35.5 97.0/35.5/51.5

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-23-77
TIME 12:25 P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-3		MOODY	5.15	—	—
REFLECTOR	P-4A			5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	66°	29.95	
REFLECTOR	—	—	
MEAN	—	—	+03

SLOPE DISTANCE (FEET)

	0	7	0	6	9	4	0

VERTICAL ANGLE

D 77-59-27	INST. H.I. 5.15
R 282-01-44	
S 360-01-11	TARG. H.I. 5.00
M 77-58-51.5 ✓	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 691.443 ✓
REF. ECC. = + 0.130
TOTAL = 691.573 ✓

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 00216 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed J. D. BAILEY JUN 22 1977

F.B. 4338 PG. 114

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 LOS ANGELES C 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 021,64 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-77
Indexed G. D. BAILEY JUN 23 1977

F. B 4338 Pg. 115

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25-77
TIME P.M.
RECORDER BUS.

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1		J.M	5.30		
REFLECTOR	Q-5			5.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72°	30.05	
REFLECTOR	—	—	
MEAN	—	—	+06

SLOPE DISTANCE (FEET)

	2	0	2	2	0	1	4

VERTICAL ANGLE

D 87-34-50	INST. H.I. 5.30
R 272-26-05	
S 360-00-55	TARG. H.I. 5.00
M 87° 34' 22.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 2020.200
REF. ECC. = +0.130
TOTAL = 2020.330

PART NO. 9320-2060

76F3093 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 LOS ANGELES C Y 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 Pg. 116

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25-77
TIME P.M.
RECORDER BUS.

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1		J.M.	5.30	—	—
REFLECTOR	Q-1A			4.31	NONE	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72°	30.05	
REFLECTOR	—	—	
MEAN	—	—	+06

SLOPE DISTANCE (FEET)

	0	4	5	4	8	0	~~2~~ 1

VERTICAL ANGLE

D 99-40-24	INST. H.I. 5.30
R 260-20-32	
S 360-00-56	TARG. H.I. 4.31
M 99° 39' 56.0	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☒ YES ☐ NO

COMMENTS: REDUCED DIST. = 448.345

PART NO. 9320-2060

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

OFFSET POINT 3.97 50.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE

TIME PM

RECORDER B

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	0 - 1		J.M	5.30	—	—
REFLECTOR	0 - 2 OFFSET			4.62	NONE	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72°	30.05	
REFLECTOR	—	—	
MEAN	—	—	+06

SLOPE DISTANCE (FEET)

	0	9	0	2	4	0	0

VERTICAL ANGLE

D 94- 56- 00	INST. H.I. 5.30
R 265- 05-00	
S 360- 01-00	TARG. H.I. 4.62
M 94° 55' 30.0"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — – +

TYPE OF REFLECTOR: 1 HP.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 899.068

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 02216 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.P. BAILEY JUN 2 2 1977

F.B. 433 & PG. 117

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT (COUNTY ENGINEER
403 LOS ANGELES (Y 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25
TIME P.M.
RECORDER B

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1		J.M	5.30		
REFLECTOR	Q-2 ACTUAL POINT			4.25	None	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72°	30.05	X
REFLECTOR	—	—	
MEAN	—	—	+06

SLOPE DISTANCE (FEET)

	0					3	9

VERTICAL ANGLE

D 94° 55' 03"	INST. H.I. 5.30
R 265 06 39	
S 360-01-42	TARG. H.I. 4.25
M 94° 54' 12.0"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 80

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 899.136

PART NO. 9320-2060

OVER FOR ∡

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BAND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W.A.R. Date 5-77
Indexed D. BAILEY JUN 22 1977

F. B. 4338 PG. 118

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

5.00 9.5

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25-77

TIME PM

RECORDER B

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A			J.N.	[illegible]	—	—
REFLECTOR	P-3			4.65	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	[illegible]	30.05	
REFLECTOR			
MEAN			[illegible]

SLOPE DISTANCE (FEET)

	1	5	1	0	8	2	6

VERTICAL ANGLE

D 92° 24' 50"	INST. H.I. 5.30
R 267 - 36 - 27	
S 36 [illegible]	TARG. H.I. 4.65
M 92° 24' 11.5"	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: [illegible]

STABILITY: 0 25 75 100 — –

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 1509.477'

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 12/64 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed C.D. BAILEY JUN 2 2 1977

F. B-3338 PG. 119

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25-77
TIME AM
RECORDER BUS.

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH E8B		Moody	5.40	—	—
REFLECTOR	WAYFARER #2		RICHARDS	[illegible]	NONE	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64°	30.0[illegible]	
REFLECTOR			
MEAN			+0

SLOPE DISTANCE (FEET)

	6	8	2	1	6	2	8

VERTICAL ANGLE

D 89 - 23 - 19	INST. H.I. 5.40
R 270 - 37 - 20	
S 360 - 00 - 39	TARG. H.I. [illegible]
M 89° 22' 59.5"	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 5-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 6821.233

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. R. R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 Pg. 127

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

ON LINE ROT. 23.88 W of Q-5

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25-77
TIME P.M
RECORDER B

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	[illegible] W of Q5		J.M	[illegible]	—	—
REFLECTOR	Q-4-B			[illegible]	NONE	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72°	29.95	
REFLECTOR			
MEAN			+06

SLOPE DISTANCE (FEET)

	0	0	6	6	3	4	0

VERTICAL ANGLE

D 112 - 29 - 16	INST. H.I.
R 247 - 31 - 19	
S 360 - 00 - 35	TARG. H.I.
M 112° 28' 58.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 75

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR:

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☒ YES ☐ NO

COMMENTS: REDUCED DIST. = 61.298

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed R. D. FAILEY JUN 22 1977

F.B. 4338 PG. 120

76F3095 CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTME F COUNTY ENGINEER
403 LOS ANGEL UNTY 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 this side of this line.

OH LINE

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 2021.64 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 22 1977

F. B. 4338 PG. 121

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25-77

TIME P.M.

RECORDER B

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5					
REFLECTOR	Q-4A					

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING:

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR:

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☐ NO

COMMENTS: LEVEL 51.79

(100' TAPE @ 68°) T=62° - NO CORR!

PART NO. 9320-2060

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-24-77
TIME PM
RECORDER Bustrum

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WAYFARER #2		moody	545	—	—
REFLECTOR	SPHE-8B		RALPH	4.83	NONE	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.9	
REFLECTOR	—	—	
MEAN	—	—	+02

SLOPE DISTANCE (FEET)

	6	8	2	1	6	6	8

VERTICAL ANGLE

D 90-39-18	INST. H.I. 545
R 269 22.00	
S 360-01-18	TARG. H.I. 4.83
M 90-38-3[illegible]	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 45

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3 H.P

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 6821.237

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std. — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B. 4338 PG. 122

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 LOS ANGELES C[illegible]TY 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 this sid[illegible] of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-24-77
TIME P.M.
RECORDER Bustrum

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WAYFAKER #2		Moody	545	—	—
REFLECTOR	SPH.G-6		RICHARDS	5.00	+0.29	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.9	
REFLECTOR	—	—	
MEAN	—	—	+02

SLOPE DISTANCE (FEET)

	4	1	7	9	4	1	0

VERTICAL ANGLE

D 78-05-35	INST. H.I. 545
R 281-55-27	
S 360-01-02	TARG. H.I. 500
M 78-05-04	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3 LIETZ

REFLECTOR CONSTANT: – 0.05

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 4089.356
REF. ECC. = +0.29 – REF. CONST. 0.05 = +0.240
TOTAL 4089.596

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G. D. BAILEY JUN 22 1977

F. B 4338 Pg. 123

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 LOS ANGELES C TY 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 1 [illegible] 77

TIME [illegible]

RECORDER Instrum

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH G-6		Moody	4.85	—	—
REFLECTOR	SPH E88		RALPH	4.83	NONE	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	58°	29.0	
REFLECTOR	—	—	
MEAN	—	—	+08

SLOPE DISTANCE (FEET)

	8	0	7	1	4	4	0

VERTICAL ANGLE

D	96 - 41 - 23	INST. H.I. 4.85
R	263 - 19 - 08	
S	360 - 00 - 31	TARG. H.I. 4.83
M	96 - 41 - 07.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 45

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 2-HP

REFLECTOR CONSTANT: —

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 8016.557

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 022164 Tape — Std — °F
Surveyed by W. A. RICHARDS Date 5-77
Notes W.A.R.
Indexed C.D. BAILEY JUN 2 2 1977

F. B-4338 PG. 124

76F309S CE#310 3-68

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 LOS ANGELES C[illegible]Y 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 this side of this line.

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W. A. RICHARDS
Notes W. A. R. Date 5-77
Indexed G. D. HAILEY JUN 22 1977

F. B. 4338 Pg. 125

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-[illegible]-77
TIME [illegible] M.
RECORDER BUS.

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH 3-6		Moody	4.85	—	—
REFLECTOR	[illegible]		RICHARDS	5.40	NONE	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	58°	29.0	
REFLECTOR	—	—	
MEAN	—	—	+08

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-LIETZ

REFLECTOR CONSTANT: -0.05

ATTENUATOR USED: ☐ YES ☒ NO

COMMENTS: REDUCED DIST. = 4089.426
REF. CONST. = -0.050
TOTAL = 4089.376

SLOPE DISTANCE (FEET)

	4	1	7	7	6	4	0

VERTICAL ANGLE

D 101-56-00	INST. H.I. 4.85
R 258-04-54	
S 360-00-[illegible]	TARG. H.I. 5.40
M 101-55-33	

PART NO. 9320-2060

PLEASE RETURN TO
COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
403 LOS ANGELES C[illegible]Y 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 this side of this line.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-25-77
TIME AM
RECORDER BUS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SPH [illegible]		[illegible]	5.40	—	—
REFLECTOR	SPH G-6		RICHARDS	5.00	+0.31	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64°	30.05	
REFLECTOR	—	—	
MEAN	—	—	+4

SLOPE DISTANCE (FEET)

	3	0	[illegible]	1	0	4	[illegible]

VERTICAL ANGLE

D 83-20-35	INST. H.I. [illegible]
R 276-39-55	
S 360-00-30	TARG. H.I. [illegible]
M 83-[illegible]-2[illegible]	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 5[illegible]

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 5-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: REDUCED DIST. = 8016.561
REF. ECC. = +0.310
TOTAL = 8016.871

PART NO. 9320-2060

Notes Ck'd by R. HILARIO
Map No.
Office Work
Checked
Date

Survey of PORTUGUESE BEND
JN 002164 Tape — Std — °F
Surveyed by W.A. RICHARDS
Notes W.A.R. Date 5-77
Indexed G.D. BAILEY JUN 2 2 1977

F. B. 4338 PG. 126

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No	JN002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 5-77
Date	Indexed B. D. BAILEY JUN 2 2 1977

F.B. 4338 PG. 128

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	W. FIX		Moody	5.00	—	—
REFLECTOR	W. FIX			5.00	+ 0.13	—

VERTICAL ANGLE

D	83° 53' 58"
R	276 -07-33
S	360-01-31
M	83-53-12.5 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
68°	29.85	+.05

2. H.P. GLASS
65 RET.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 3 2 1 3 9 7 0

HORIZONTAL DISTANCE 3 1 9 4 6 9 9 ✓

REF. ECC. + 0 1 3 0

CORRECT HORIZ. DIST. 3 1 9 4 8 2 9 ✓

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	W. FIX		Moody	5.00	—	—
REFLECTOR	W. FIX			5.00	+0.13	—

VERTICAL ANGLE

D	86-07-06
R	273-54-59
S	360-02-05
M	86-06-035 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
68°	29.85	+.05

2. H.P. GLASS
65 RET.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 3 5 1 6 4 6 0.

HORIZONTAL DISTANCE 3 5 0 8 3 2 1 ✓

REF. ECC. + 0 1 3 0

CORRECT HORIZ. DIST. 3 5 0 8 4 5 1 ✓

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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 n side of this line

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 5-77
Date	Indexed B. D. BAILEY JUN 22 1977

F.B. 4338 PG. 129

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	W. FIX		Moody	5.00	—	—
REFLECTOR	[illegible]			5.00	+ 0.13	—

VERTICAL ANGLE

D	91-39-26
R	268-21-20
S	360-00-46
M	91-39-03 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
68°	27.85	+3.5

1 H.P GLASS
60. RET.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2910256

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2909048 ✓

HORIZONTAL DISTANCE:

REF. ECC. + 0130

CORRECT HORIZ. DIST.: 2909178 ✓

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	W. FIX		Moody	5.00	—	—
REFLECTOR	[illegible]			7.00	+ 0.13	—

VERTICAL ANGLE

D	96-04-58
R	263-55-54
S	360-00-52
M	96-04-32 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
68°	27.55	+1.2

1 H.P. GLASS
70. RET.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1738204.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1728441 ✓

HORIZONTAL DISTANCE:

REF. ECC. + 0130

CORRECT HORIZ. DIST.: 1728571 ✓

CORRECT HORIZ. DIST.:

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 side of this line

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

INTERLINE NOTES
310
F3095-4/73

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 5-77
Date	Indexed G. D. BAILEY JUN 22 1977

F.B. 4338 PG. 130

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	W. FIN		moody	5.00	—	—
REFLECTOR	P. 4A			5.00	+ 0.13	—

VERTICAL ANGLE

D	93°-14'-44"
R	266-46-45
S	360°01'29"
M	93-13-595 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
68°	29.85	+.05

1 H.P. GLASS
70. RET.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 5 7 4 1 0 6

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1 5 7 1 6 0 0 ✓

HORIZONTAL DISTANCE:

REF. ECC. + 0 1 3 0

CORRECT HORIZ. DIST.: 1 5 7 1 7 3 0 ✓

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A						
REFLECTOR						

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	PPM. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

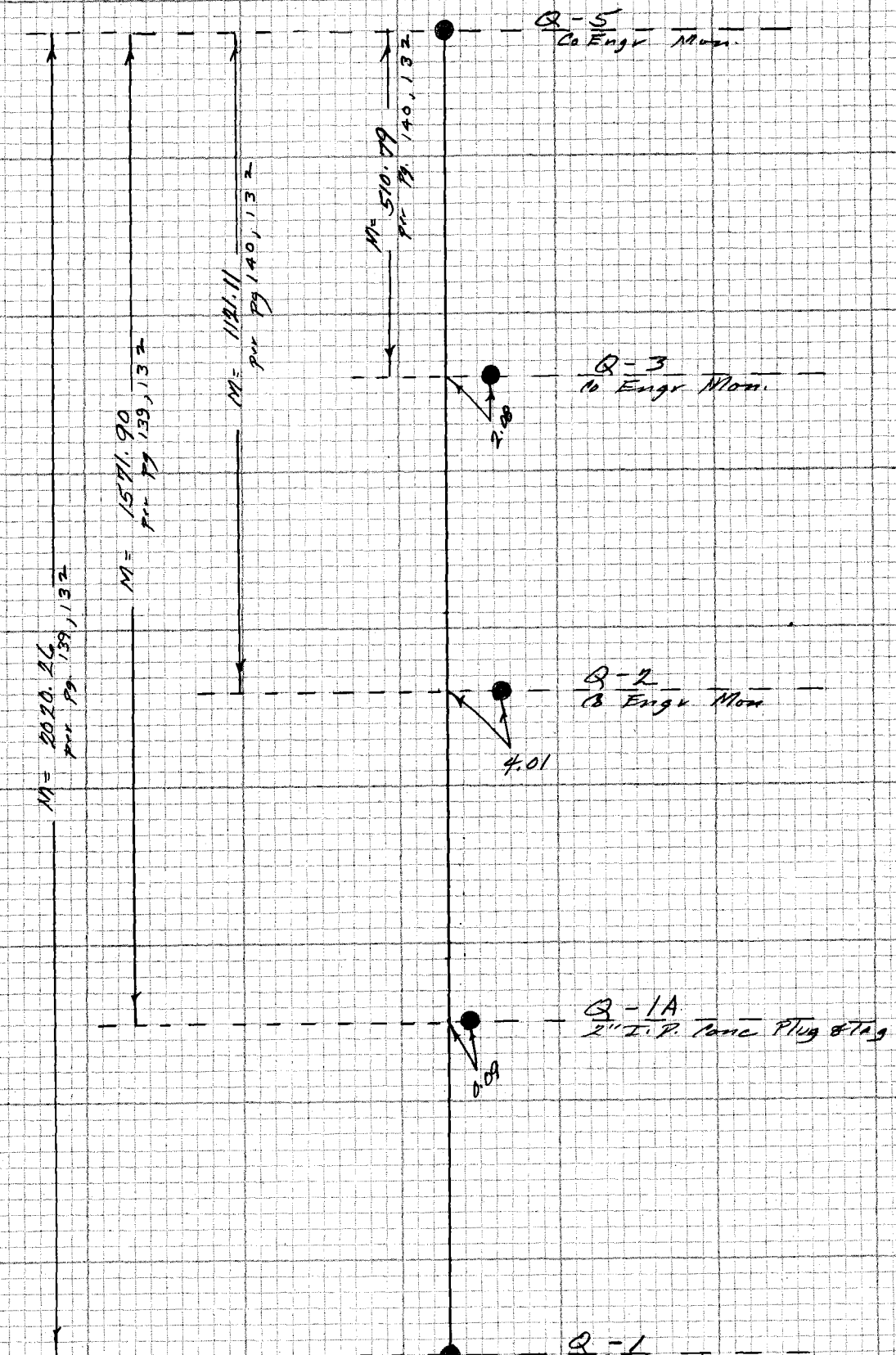
CENTERLINE NOTES
E 310
F3095-4/73

Notes Ck'd by R. HILARIO	Survey of PORTUGESE BEND
Map No.	JN 10H.L4 Tape HP 3800A Std °F
Office Work	Surveyed by PE Brooks
Checked	Notes FEB Date 28 July 77
Date	Indexed L. M. PALMER SEP 1 1977

F.B. 4338 PG. 131

Q LINE

ABALONE COVE



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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 132

HP 3800A

Q-5 To Q 1

T = 78°
Bar = 29.9
EV = +10

Inst HI@ Q-5 = 5.00
Target HI@ Q-1 = 5.03

mean Ver ∡ = -2° 25' 42.
machine dist = 2022.080.
Corrected dist = 2020.264. ✓

Q-5 To Q 1A

T = 76°
Bar = 29.9
EV = +9

Inst HI@ Q-5 = 5.00
Target HI@ Q-1A = 4.75

mean Ver ∡ = -5° 51' 52".
machine dist = 1580.174.
Corrected dist = 1571.904.

Q-5 To Q-2

T = 80°
Bar = 29.9
EV = +11

Inst HI@ Q5 = 5.00
Target HI@ Q 2 = 4.78

mean Ver ∡ = -8° 14' 25".
machine dist = 1132.804.
corrected dist. = 1121.108.

Q-5 To Q-3

T = 80°
Bar = 29.9
EV = +11

Inst. HI@ Q-5 = 5.00
Target HI@ Q-3 = 5.20

mean Ver ∡ = -16° 11' 29".
machine dist = 531.891.
corrected dist. = 510.793.

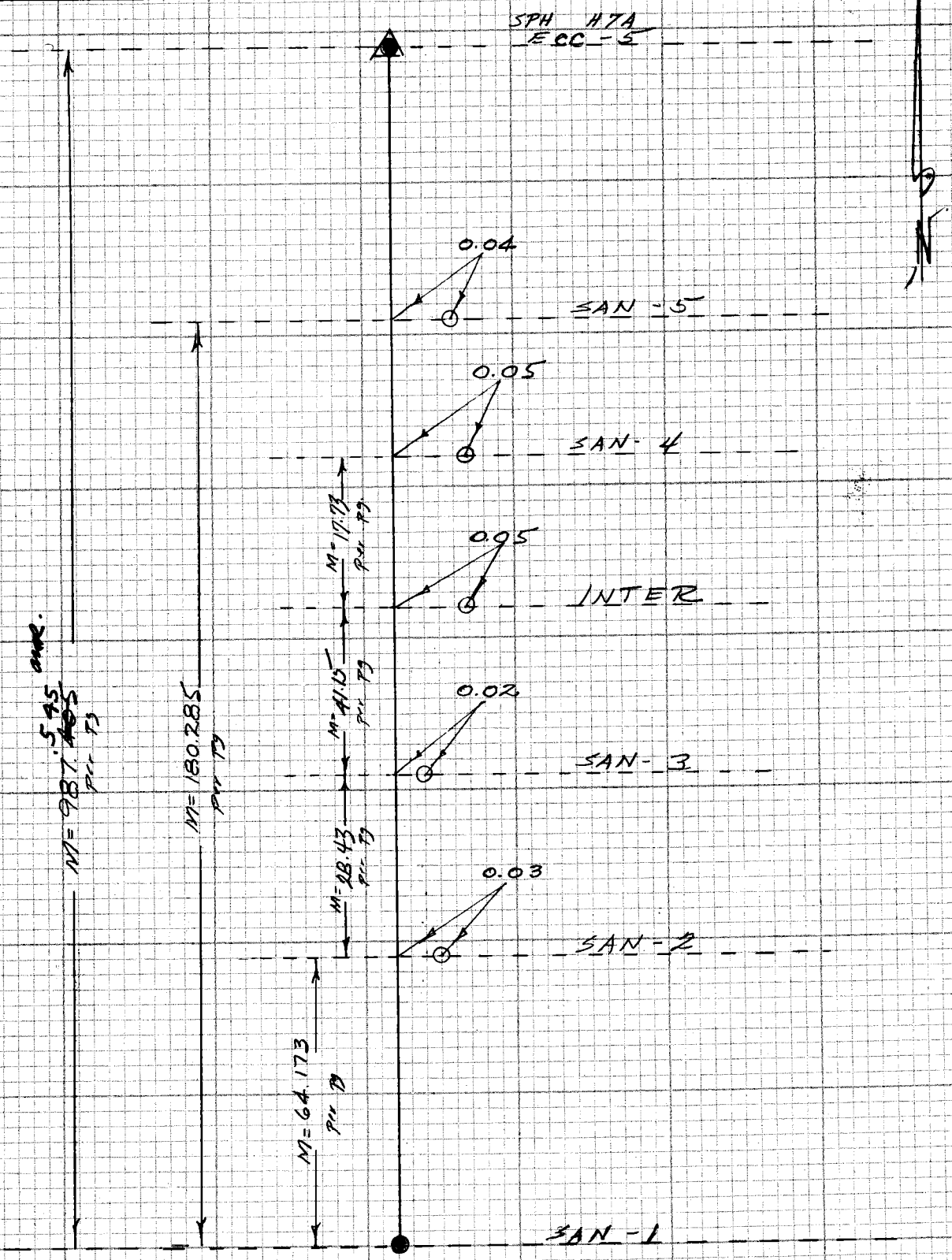
CE 310
76F3095-4/73

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

Do not extend notes this side of this line

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

Notes Ck'd by R. HILARIO	Survey of PORTUGESE BEND	F.B. 4338 PG. 133
Map No.	JN 0021.64 Tape HP 3800 Std °F	SAN LINE
Office Work	Surveyed by FE Brooks	ABALONE COVE
Checked	Notes Date	
Date	Indexed L. M. PALMER SEP 1 1977	



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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 139

HP 3800A

SAN - 1 To SAN - 2

T = 70.0
Bar = 30.0
EV = +5

Inst HI @ SAN 1 = 5.02
Target HI @ SAN 2 = 5.45

mean Ver ∡ = 9°02'-45"
machine dist = 64.981.
corrected dist = 64.173.

SAN - 1 To SAN - 5

T = 72°
Bar = 30
EV = +6

Inst HI @ SAN 1 = 5.02
Target HI @ SAN 5 = 4.28

mean Ver ∡ = 3-43-14.
machine dist = 180.664.
corrected dist. = 180.285.

SAN - 1 To ECC - 5

T = 72°
Bar = 30
EV = +6

Inst HI @ SAN 1 = 5.02
Target HI @ ECC 5 = 5.00

mean Ver ∡ = 6°-49'.35"
machine dist = 994.455.
corrected dist. = 987.405. + 0.140 = 987.545.

Tape # 0104

SAN 2 To SAN - 3
28.43 T = 82° = 28.43 '

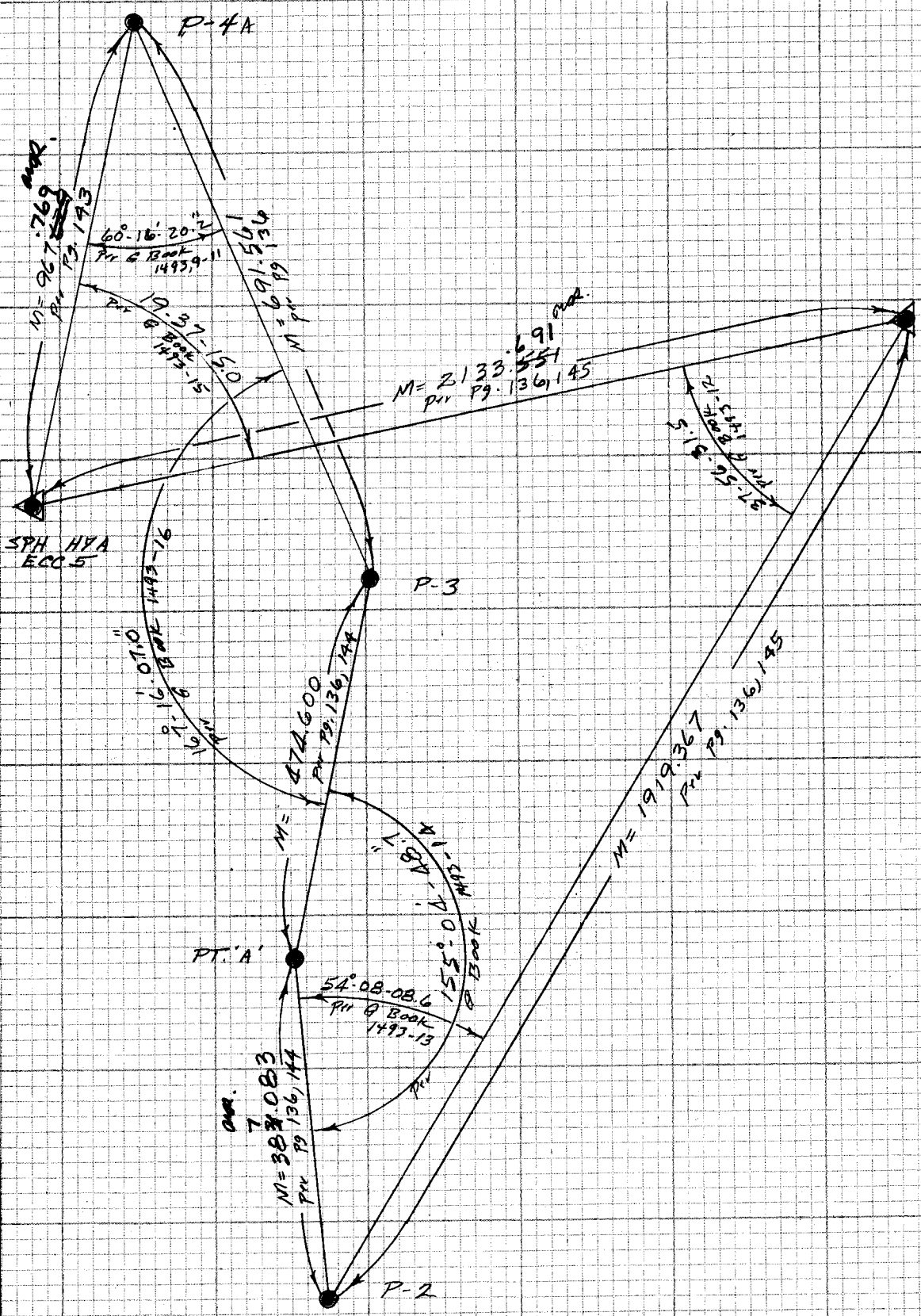
SAN 3 To INTER
41.15 T = 82° = 41.15 '

INTER. To SAN 4
17.73 T = 82° = 17.73 '

CE 310
76F 3095-4/73
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend notes this side of this line
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK WITH DATE AND NAME OF PERSON MAKING CHANGE

Notes Ck'd by R. HILARIO	Survey of PORTUGESE BEND	F.B. 4338	PG. 135
Map No.	JN 2021.4 Tape HP 3800 Std °F		
Office Work	Surveyed by FE BROOKS	P-LINE TRAVERSE	
Checked	Notes Date		
Date	Indexed L. M. PALMER SEP 1 1977		

ABALONE COVE.



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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 136

ECC - 5 T. P-4A

See Pg.

P-4A To P-3

T = 86°
Bar = 29.8
EV = +12

Inst HI @ P-4A = 4.66
Target HI @ P-3 = 4.90

mean Ver ∡ = 12°00'18.5"
machine dist = 707.074
corrected dist = 691.561

P-3 To PT 'A'

T = 70°
Bar = 30.4
EV = +5

Inst HI @ PT 'A' = 5.03
Target HI @ P-3 = 4.05

mean Ver ∡ = 0°25'33"
machine dist = 474.613
corrected dist = 474.600

PT 'A' To P-2

T = 78°
Bar = 30.4
EV = +5

Inst HI @ PT 'A' = 5.03
Target HI @ P-2 = 4.83

mean Ver ∡ = 0-10-19
machine dist = 387.085
corrected dist = 388.083
7
mar

P-2 To HBA

T = 72°
Bar = 30.4
EV = +2

Inst HI @ HBA = 5.75
Target HI @ P-2 = 4.85

mean Ver ∡ = 0°44'42"
machine dist = 1919.529
corrected dist = 1919.367

HBA To ECC5

T = 72°
Bar = 30.4
EV = +2

Inst HI @ HBA = 5.75
Target HI @ ECC5 = 5.00

mean Ver ∡ = 3-53-37.5
machine dist = 2138.487
corrected dist = 2133.551
REF. ECC. +0.140
2133.691 mar

CE 310
76F3095-4/73

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

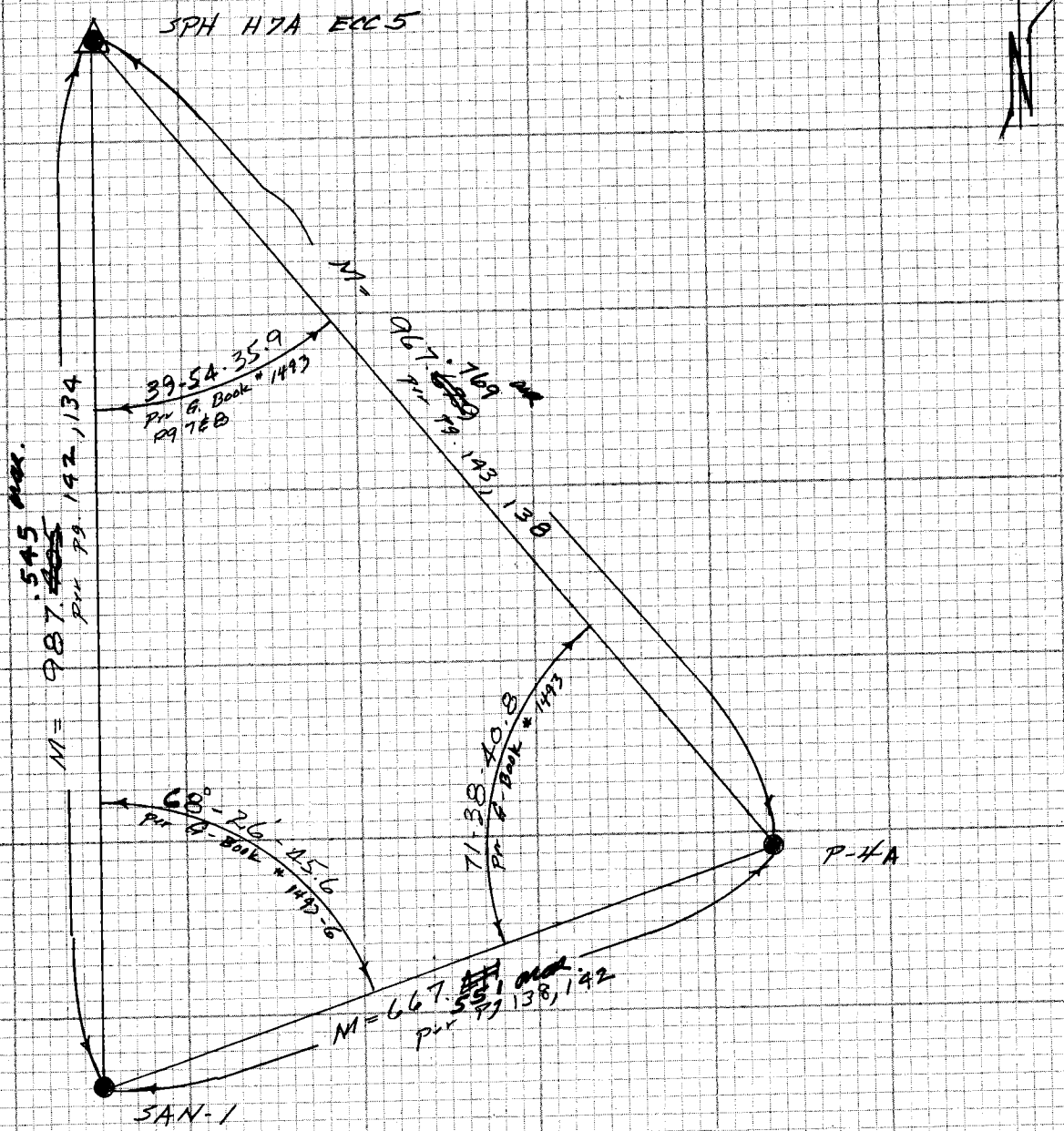
Do not extend notes this side of this line

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

Notes Ck'd by R. HILARIO	Survey of PORTOGESE BEND	F.B. 4338	PG. 137
Map No.	JN 0021.64 Tape HP 3800 Std °F		
Office Work	Surveyed by FE BROOKS		
Checked	Notes FEB Date 7-77		
Date	Indexed T. M. PALMERT SEP 1 1977		

SAN LINE TRAVERSE

ABALONE COVE



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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 138

HP 3800A

SAN-1 — ECC 5

see Pg.

SAN-1 To P-4A

T = 70°
Bar = 30.0
EV = +5

Inst HI @ SAN 1 = 5.02
Target HI @ P4A = 5.00

mean Ver ∡ = 11-48-20
machine dist = 681.833
Corrected dist. = 681.481
REF. ECC + 0.140
681.551 and. SEE PG. 142

ECC 5 To P-4A

T = 76°
Bar = 29.9
EV = +14

Inst HI @ ECC 5 = 6.00
Target HI @ P-4A = 5.00

mean Ver ∡ = 1-11-40.5
machine dist = 967.839
Corrected dist. = 967.629
REF. ECC + 140
967.769 and. SEE PG. 143

CE 310
76F 3095-4/73
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend notes this side of this line
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK WITH DATE AND NAME OF PERSON MAKING CHANGE

Abalone Cove

Notes Ck'd by R. HILARIO	Survey of PORTUGESE BEND
Map No.	JN 0021 64 Tape Std °F
Office Work	Surveyed by F. L. BROOKS
Checked	Notes A. L. GOBLE Date 2 & JULY 77
Date	Indexed L. M. PALMERI SEP 1 1977

F.B. 4338 PG. 139

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q-5		Goble	5.00	NONE	
REFLECTOR	Q-1		"	5.03		

VERTICAL ANGLE

D	92	26	16
R	267	34	52
S	360	01	08
M	− 2	25	42

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78	29.9	+10.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 2022080

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE 2020264

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q-5			5.00		
REFLECTOR	Q-1A			4.75		

VERTICAL ANGLE

D	95	52	16
R	264	08	32
S	360	00	48
M	− 5	51	52

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
76	29.9	+9.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 1580174

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE 1571904

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Abalone Cove

Notes Ck'd by R. HILARIO	Survey of PORTUGESE BEND
Map No.	JN 0021.64 Tape Std °F
Office Work	Surveyed by F. E BROOKS
Checked	Notes A. L. GOBLE Date 22 JULY 77
Date	Indexed V. M. PALMER SEP 1 1977

F.B. 4338 PG. 140

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q-5		Goble	5.00	NONE	
REFLECTOR	Q-2		"	4.78		

VERTICAL ANGLE

D	98	15	02
R	261	46	12
S	360	61	14
M	− 8	14	25

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
80	29.9	+ 11.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 1132.804

HORIZONTAL DISTANCE 1121108

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q-5			5.00		
REFLECTOR	Q-3			5.20		

VERTICAL ANGLE

D	106	12	10
R	253	49	12
S	360	01	24
M	− 16	11	28

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
80	29.9	+ 11.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 5318.91

HORIZONTAL DISTANCE 5107.94

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
E 310
6F3095-4/73

Abalone Cove

Notes Ck'd by R. HILARIO	Survey of PORTUGESE BEND
Map No	JN 0021.64 Tape Std °F
Office Work	Surveyed by F. E. BROOKS
Checked	Notes AL GOBLE Date 28 JULY 77
Date	Indexed T. M. PALMER SEP 1 1977

F.B. 4338 PG. 141

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN-1		Goble	5.02	NONE	
REFLECTOR	SAN-2		Brooks	5.45		

I.H.P. REF.

VERTICAL ANGLE

D	99	02	59
R	260	57	29
S	360	00	28
M	− 9	02	45

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
70	30.0	+5.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 6 4 9 8 1

HORIZONTAL DISTANCE: 6 4 1 7 3

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN-1		Goble	5.02	NONE.	
REFLECTOR	SAN-5		Brooks	4.28		

I.H.P. REF

VERTICAL ANGLE

D	86°	17'	11"
R	273	43	39
S	360	00	50
M	86	16	46

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
72	30.0	+6.0

POINT IS 0.04 EAST

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 8 0 6 6 6.

HORIZONTAL DISTANCE: 1 8 0 2 8 5.

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Abalone cove

Notes Ck'd by R. HILARIO	Survey of Portuguese Bend
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Brooks
Checked	Notes Date 7-28-77
Date	Indexed V. M. PALMERI SEP 1 1977

F.B. 4338 PG. 142

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN-1		Goble	5.02	+0.14	
REFLECTOR	~~N-1A~~ ECC-5			5.00		

1 HP REF. W/BKT.

VERTICAL ANGLE

D	83-10-40
R	276-49-50
S	360-00-30
M	83-10-25

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
72	30	+6.0 ✓

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 9 9 4 4 5 5

HORIZONTAL DISTANCE ~~0140~~ 9 8 7 ~~5~~ ~~4~~ ~~5~~ .405.

REF. ECC. + 0 1 4 0

INST. ECC. 0 0 0 0

CORRECT HORIZ. DIST. 9 8 7 5 4 5

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN-1		Goble	5.02	+0.14	
REFLECTOR	P-4A			5.00		

1 HP REF W/BKT.

VERTICAL ANGLE

D	78-12-02
R	281-48-42
S	360-00-44
M	78-11-40

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
70	30	+5.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 6 8 1 8 3 3.

HORIZONTAL DISTANCE ~~0~~ ~~X~~ ~~X~~ ~~0~~ 6 6 7 ~~5~~ 4 ~~5~~ 1 ~~X~~ 1

REF. ECC. + 0 1 4 0

INST. ECC. 0 0 0 0

CORRECT HORIZ. DIST. 6 6 7 5 5 1

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

ENTERLINE NOTES
E 310
SF3095-4/73

Abalone Cove

Notes Ck'd by R. HILARIO	Survey of Portuguese Bend
Map Nr	JN002164 Tape — Std °F
Office Work	Surveyed by BROOKS
Checked	Notes Date 28 JULY 77
Date	Indexed R. M. PALMER SEP 1 1977

F.B. 4338 PG. 143

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	~~H-7A~~ ECC-5		SIEMAN	6.00	+0.14	
REFLECTOR	P-4A			5.00		

1 H.P w/BRT.

VERTICAL ANGLE

D	88 48-53
R	271-12-14
S	360-01-07
M	88-48-19.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
76	29.9	~~+14.0~~ +9.1

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 9 6 7 8 3 9

HORIZONTAL DISTANCE ~~+0.140~~: 9 6 7 ~~4~~ ~~6~~ 2 9

REF. ECC. + 0 1 4 0

INST. ECC. 0 0 0 0

CORRECT HORIZ. DIST.: 9 6 7 7 6 9

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	~~P-3~~	P-4A	SIEMAN	4.66		
REFLECTOR	~~P-4A~~	P-3		4.90		

VERTICAL ANGLE

D	102-01-01
R	258-00-24
S	360-01-25
M	102-00-18.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
86	29.8	+12.°

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 7 0 7 0 2 4.

HORIZONTAL DISTANCE: 6 9 1 5 6 1

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
6F3095-4/73

ABALONE COVE

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape Std °F
Office Work	Surveyed by
Checked	Notes Date 8-1-77
Date	Indexed L. M. PALMER SEP 1 1977

F.B. 4338 PG. 149

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 8-1-77
TIME 11:35
RECORDER B

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	PT 'A'		A.G.	5.03		
REFLECTOR	P-3			4.85		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.4	
REFLECTOR			
MEAN			+05.6

SLOPE DISTANCE (FEET)

		4	7	4	6	1	3

VERTICAL ANGLE

D 90-26-07	INST. H.I. 5.03
R 269-35-01	
S 360-01-08	TARG. H.I. 4.85
M 90-25-33	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1-HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: HOR. DIST 474.600

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 8-1-77
TIME 11:40
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	PT 'A'		A.G	5.03		
REFLECTOR	P-2			4.85		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78°	30.4	
REFLECTOR			
MEAN			+05.6

SLOPE DISTANCE (FEET)

		3	8	7	0	8	5

VERTICAL ANGLE

D 89-50-16	INST. H.I. 5.03
R 270-10-54	
S 360-01-10	TARG. H.I. 4.85
M 89-49-41	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR:
REFLECTOR CONSTANT:
ATTENUATOR USED: ☒ YES ☐ NO
COMMENTS: 387.083
HOR DIST ~~383.083~~

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
6F3095-4/73

ABALONE COVE

Notes Ck'd by R. HILARIO	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape Std °F
Office Work	Surveyed by
Checked	Notes Date 8-1-77
Date	Indexed L. M. PALMER SEP 1 1977

F.B. 4338 PG. 145

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 8-1-77
TIME 10:20
RECORDER B.

PROJECT PORTUGESE BEND L.S
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	H-8A		GOBLE	5.75		
REFLECTOR	P-2			4.85		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72°	30.4	
REFLECTOR			
MEAN			+025

SLOPE DISTANCE (FEET)

	1	9	1	9	5	2	9

VERTICAL ANGLE

D 89-15-49	INST. H.I. 5.75
R 270-45-13	
S 360-01-02	TARG. H.I. 4.85
M 89 15-18	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:
TYPE OF REFLECTOR: 1-HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
HOR. DIST. 1919.367.

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 8-1-77
TIME 10:20
RECORDER B.

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	H-8A		GOBLE	5.75		
REFLECTOR	ECC-5			5.00	+0.14	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72°	30.4	
REFLECTOR			
MEAN			+025

SLOPE DISTANCE (FEET)

	2	1	3	8	4	8	7

VERTICAL ANGLE

D 86-07-01	INST. H.I. 5.75
R 273-54-16	
S 360-01-17	TARG. H.I. 5.00
M 86-06-22.5	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY:
TYPE OF REFLECTOR: 1-HP
REFLECTOR CONSTANT: +0.14
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: 2133.551.
+0.140
HOR. DIST 2133.691.

PART NO. 9320-2060

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

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

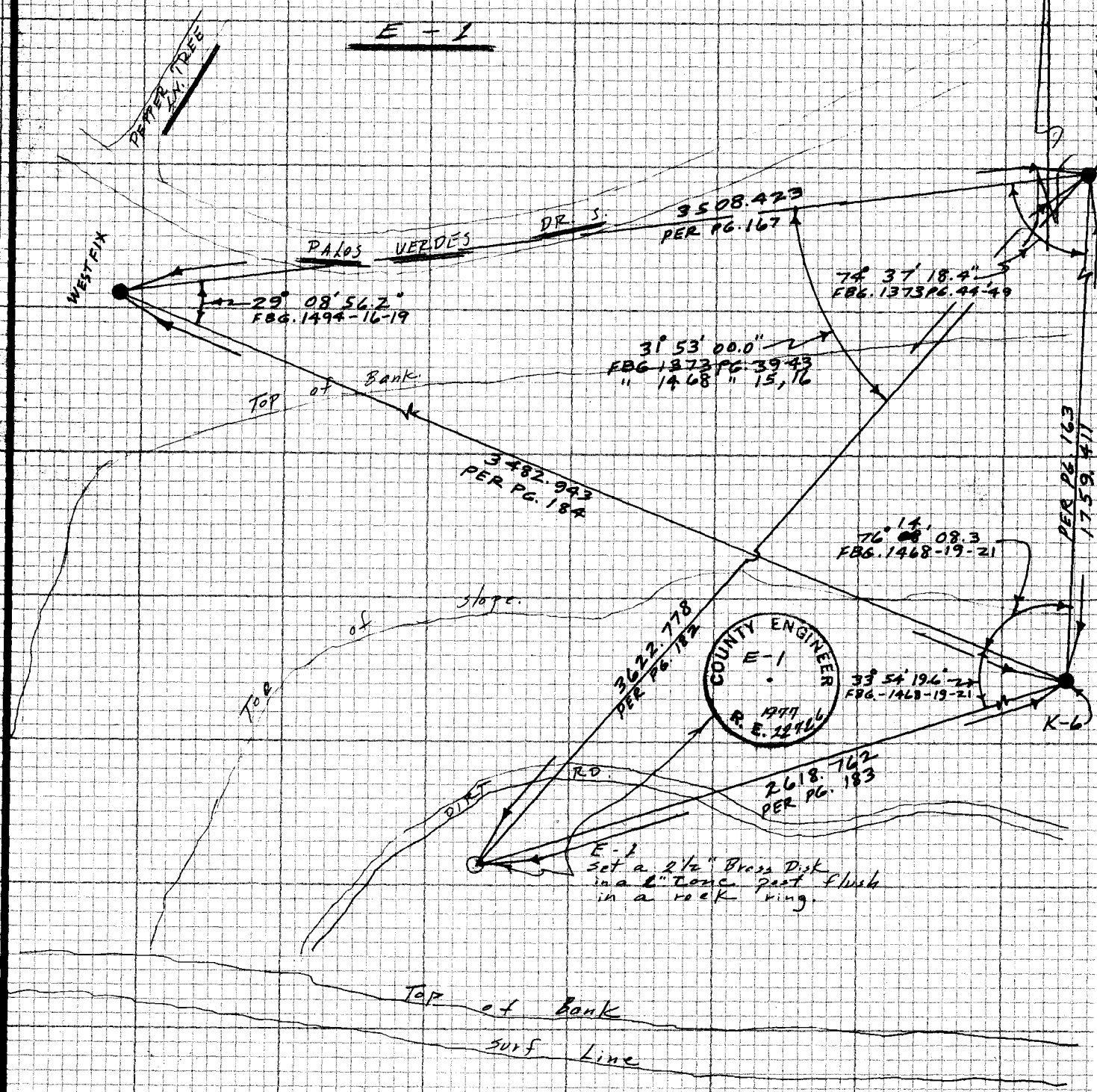
CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of PORTUGESE BEND LANDSLIDE
Map No.	JN 0021.64 Tape Std °F
Office Work	Surveyed by F.E. BROOKS
Checked	Notes FEB Date 17 NOV. 1977
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 147

29° 08' 56.2"
74° 37' 18.4"
76° 14' 08.3"
180° 00' 22.9"

E - 1



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

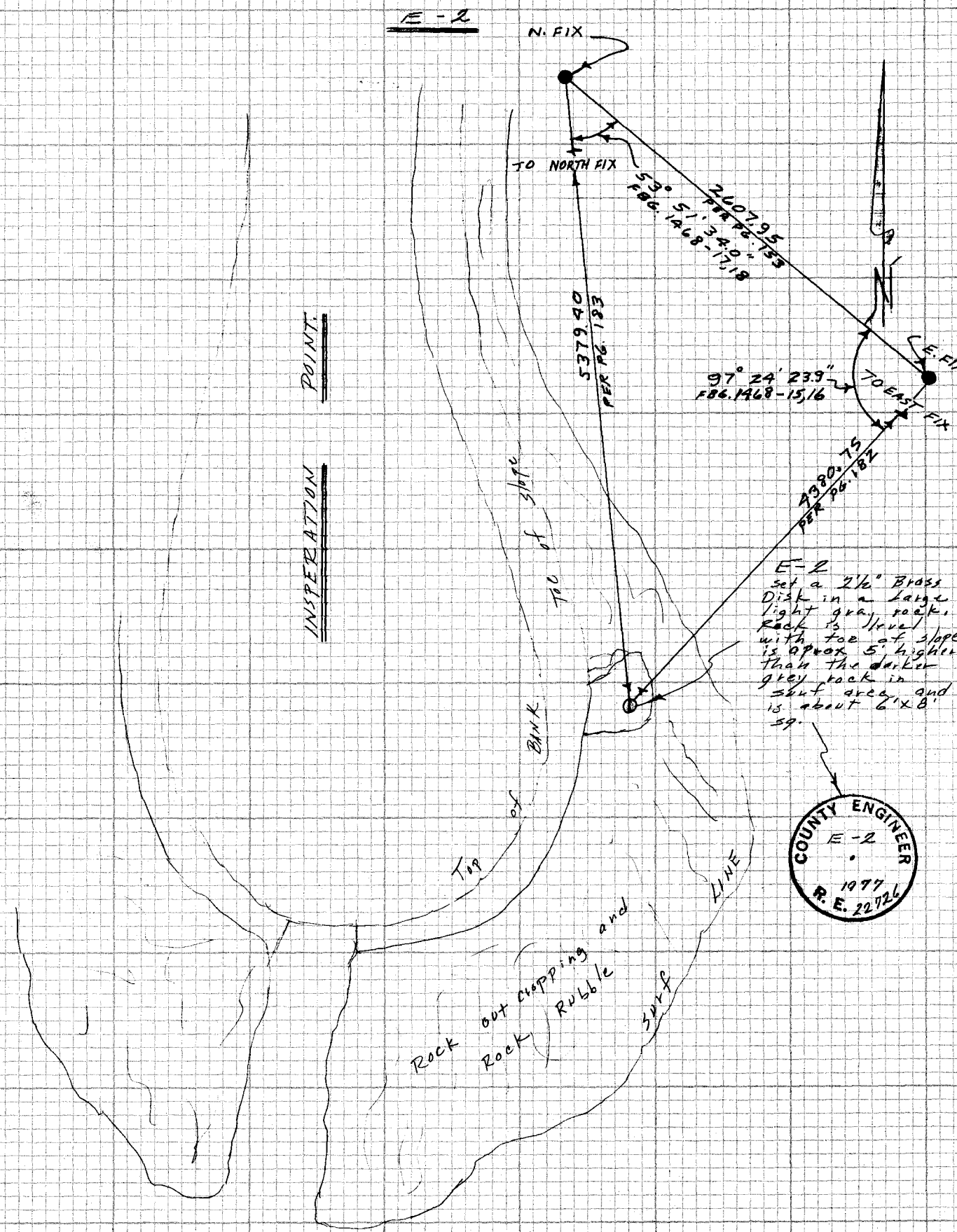
Do not extend notes this side of this line

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 148

E-2



CE 310
76F3095-4/73

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

Do not extend notes this side of this line

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

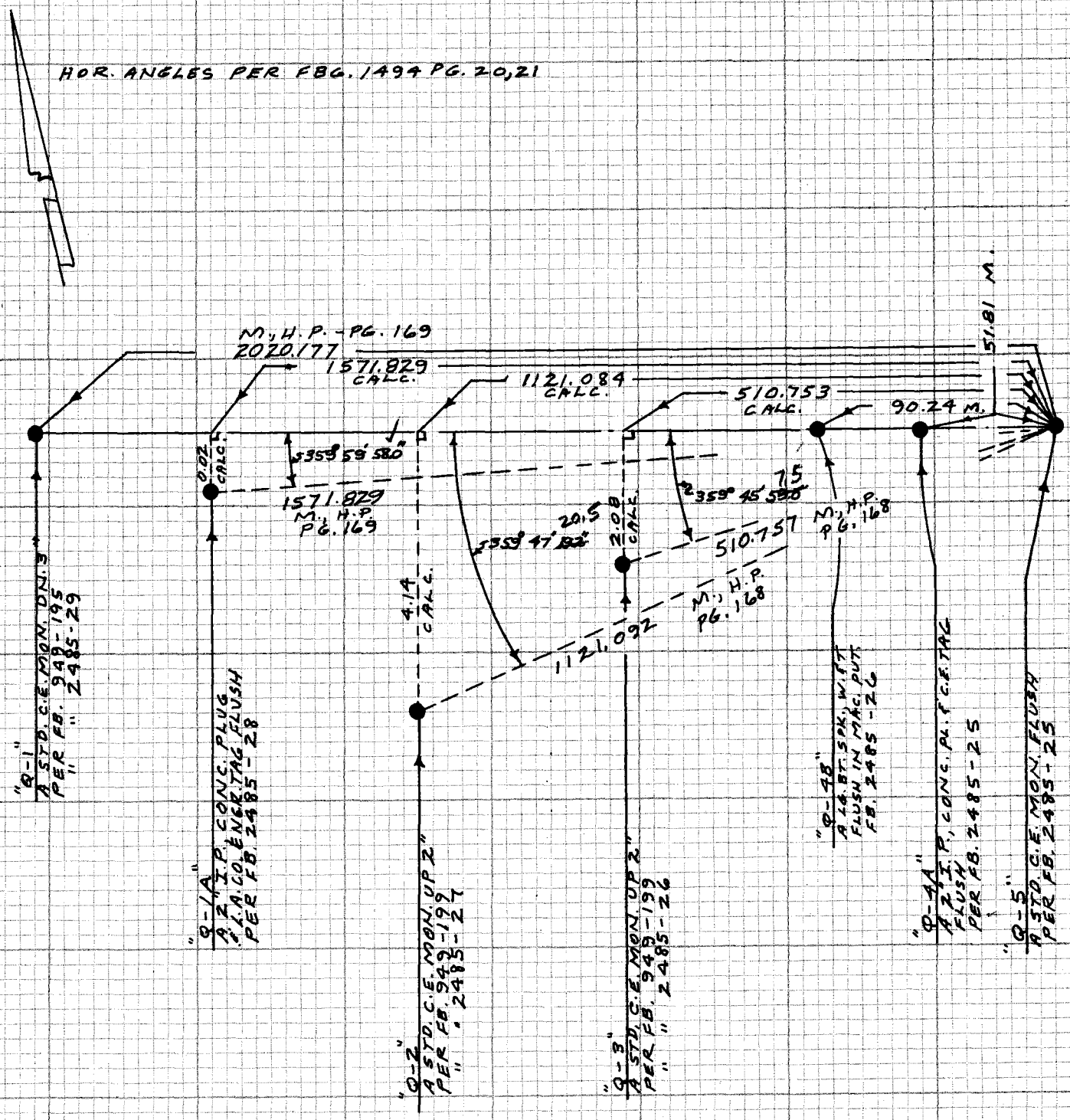
Notes Ck'd by	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN 0021.69 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 149

100' TAPE @ 68° F. STD.
51.81 T = 70° F = 51.81 (LEVEL)
66.73 @ 23°11'44" = 61.34 "
28.90 "
TOTAL = 90.24

ABALONE COVE
STABILITY STUDY
"Q"-LINE OBSERVED DATA - 11-77

HOR. ANGLES PER FBG. 1494 PG. 20,21



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

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

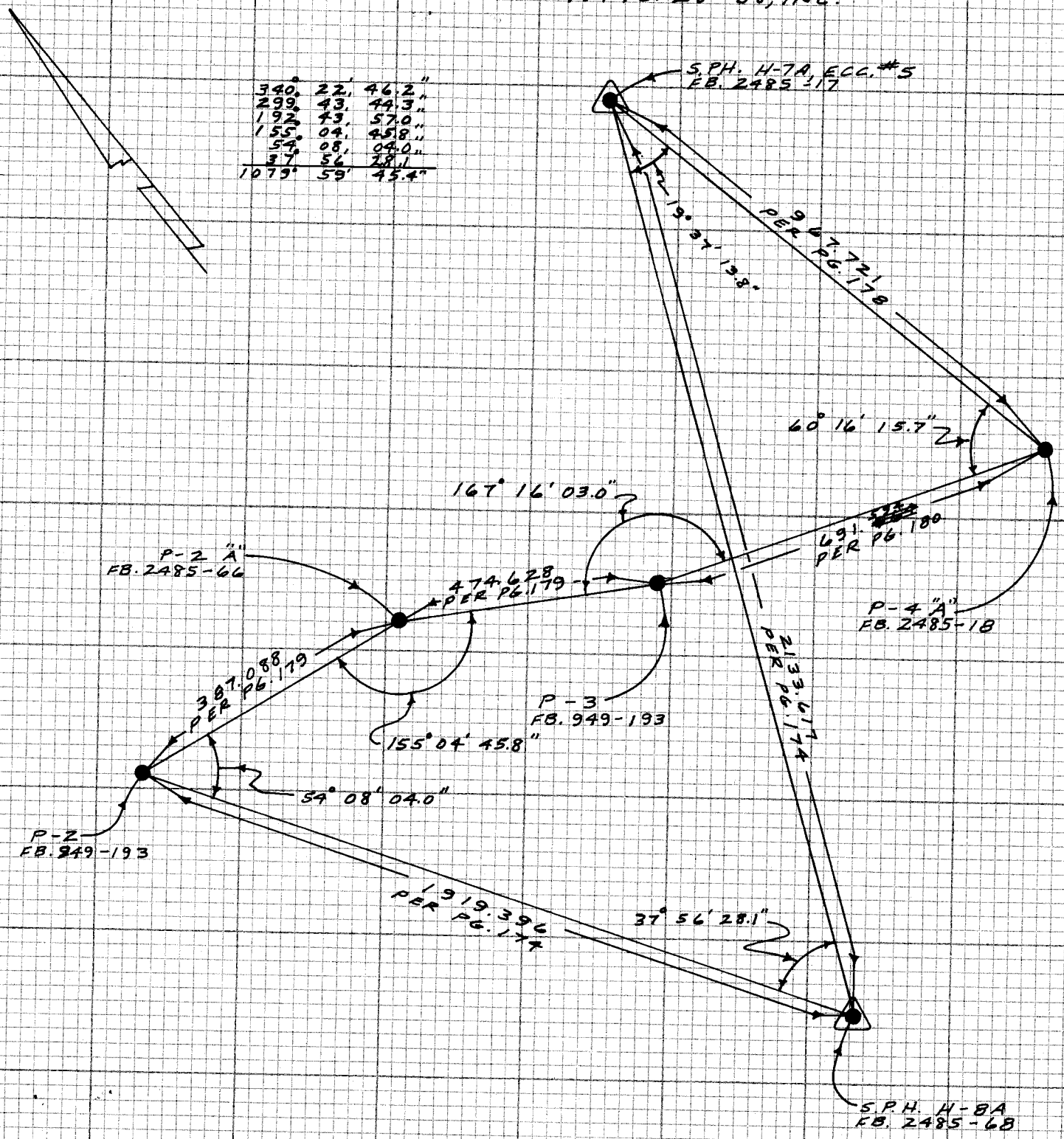
CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 150

"P"-LINE TRAVERSE OBSERVED DATA 11-77

HORIZONTAL AND VERTICAL ANGLES: FBG. 1494 PG. 28-38, INC.

340°	22'	46.2"
299°	43'	44.3"
192°	43'	57.0"
155°	04'	45.8"
54°	08'	04.0"
37°	56'	28.1
1079°	59'	45.4"



CE 310
76F3095-4/73

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

Do not extend notes this side of this line

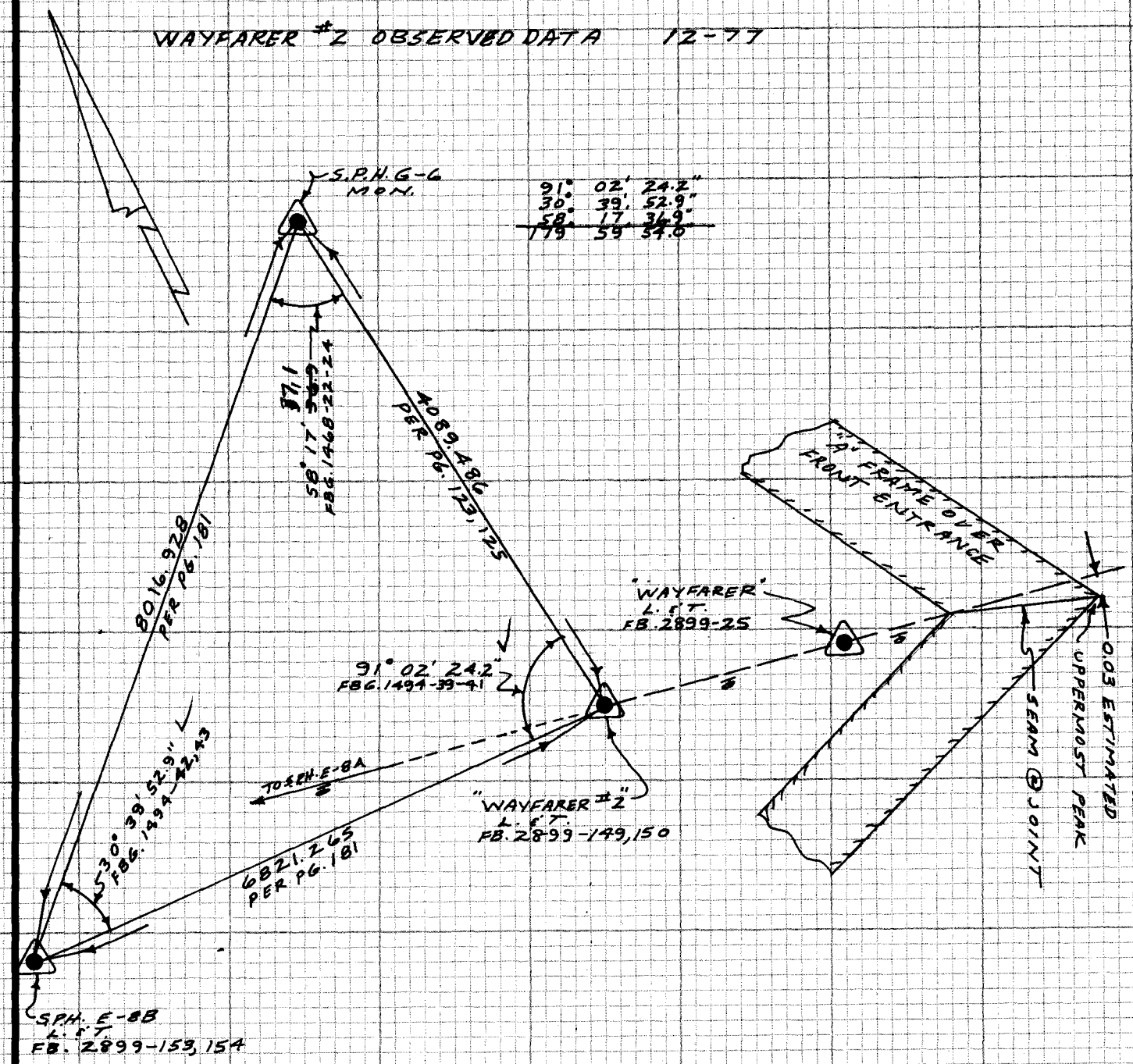
NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST BE MADE OR CIRCLED IN RED INK WITH DATE AND NAME OF PERSON MAKING CHANGE

N / COMMENT	INV/DOC NO	INV DATE	NO DAYS DELNQNT	AMOUNT DELINQUENT	REFRD TO TTC
				154.14	
NT	90000008723	10 31 89		117.86	YES
				117.86	
	M9100001801	10 31 90		1,021.62	YES
				1,021.62	
SPECTION	12000010222	05 31 89		3,040.02	YES
SPECTION	90000004410	08 30 89		3,423.06	YES
SPECTION	90000006693	08 31 89		859.59	YES
SPECTION	90000008639	10 31 89		5,137.59	YES
SPECTION	90000009965	11 30 89		571.53	YES
SPECTION	90000011172	12 31 89		627.63	YES
SPECTION	90000012374	01 31 90		498.83	YES
SPECTION	90000013429	02 28 90		874.54	YES
SPECTION	90000014316	03 31 90		560.85	YES
SPECTION	90000015262	04 30 90		91.36	YES
SPECTION	90000016493	05 31 90		78.72	YES
				15,763.72	
	90000006083	08 31 89	1,017	4,375.50	
				4,375.50	
RS	90000002293	08 30 89		7.00	YES
RS	91000006101	12 26 90		25.00	YES
				32.00	
	92000004462	10 28 91		7,906.85	YES
IT	90000003755	08 30 89		43.13	YES
				7,949.98	
2 4-970PC	90000002761	08 30 89		483.21	YES
				483.21	

Notes Ck'd by	Survey of LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 12-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 151

WAYFARER #2 OBSERVED DATA 12-77



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

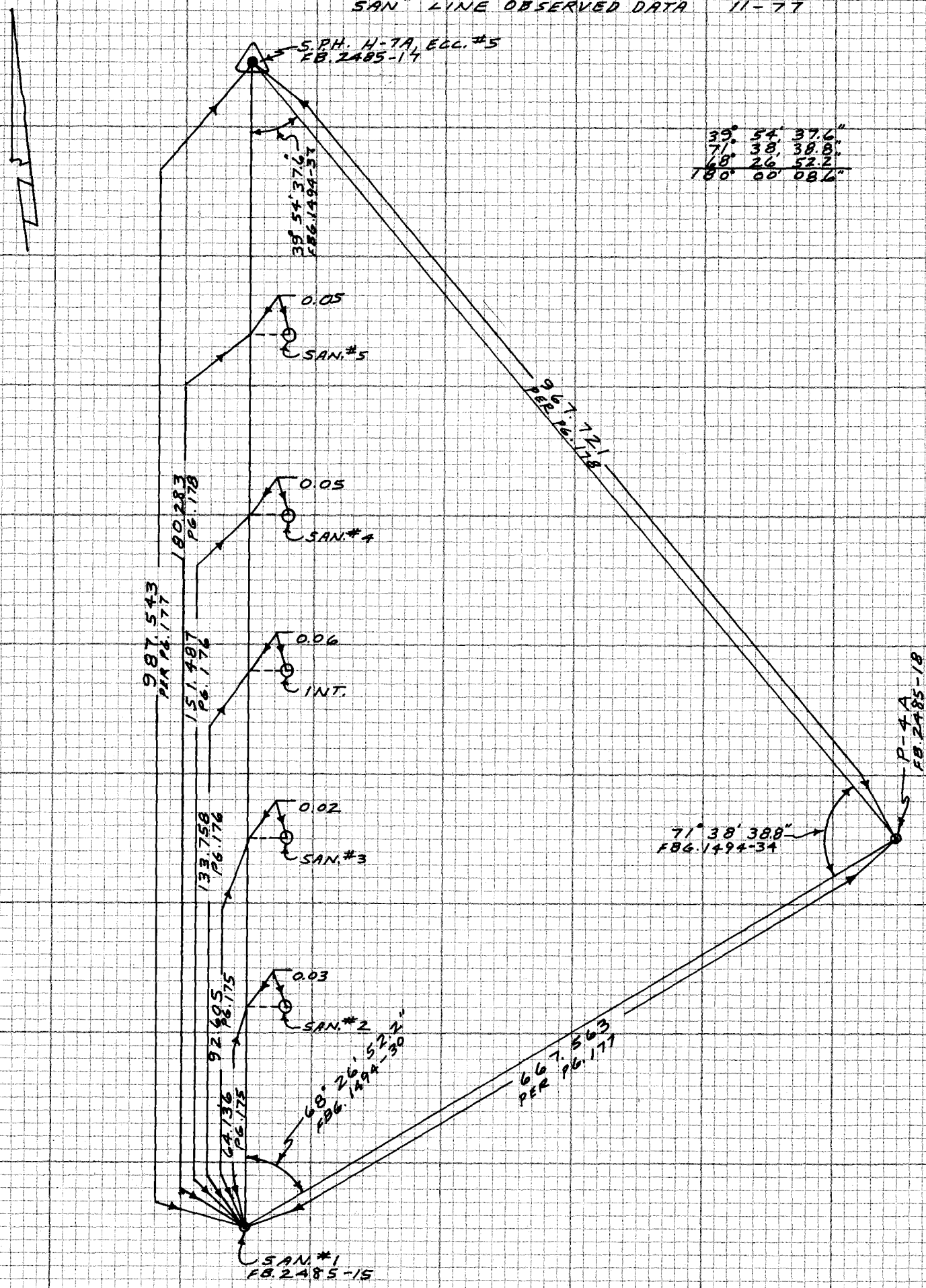
Do not extend notes this side of this line

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 152

"SAN" LINE OBSERVED DATA 11-77



CE 310
78F3095-4/73

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

Do not extend notes this side of this line

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

Notes Ck'd by BRG	Survey of P.B. LANDSLIDE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 11-10-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 153

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-10-77
TIME A.M
RECORDER B

PROJECT PALOS VERDE LANDSLIDE STUDY
CLIENT L.A. CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	NORTH FIX		MOODY	5.40	—	—
REFLECTOR	EAST FIX		RICHARDS	5.00	+ 0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	80°	29.5	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET)

	2	6	0	9	8	8	4

VERTICAL ANGLE

D 92-17-10	INST. H.I. 5.40
R 267-44-00	
S 360-01-10	TARG. H.I. 5.0
M 92-16-35.0	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-HP
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: + 0.13 REF. ECC.
HOR. DIST. = 2607.824
TOTAL = 2607.954

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-10-77
TIME P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX		MOODY	5.40	—	—
REFLECTOR	DAVIS		BUSTRUM	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	80	29.5	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET)

	1	8	5	3	2	5	4

VERTICAL ANGLE

D 101-41-30	INST. H.I. 5.40
R 258-19-06	
S 360-00-36	TARG. H.I. 5.00
M 101-41-12.0	

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT: —
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: HOR. DIST. = 1814.836
REF. ECC. = + 0.130
1814.966

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by Blg	Survey of P.B. LANDSLIDE
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-10-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 154

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-10-77
TIME 1:05
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	—	MOODY	5.40	—	—
REFLECTOR	W. FIX	—	SIEMAN	4.00	+0.29	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	80	29.5	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET)

	3	2	1	3	0	7	6

VERTICAL ANGLE

D 96-09-22	INST. H.I. 5.40
R 263-51-40	
S 360-01-02	TARG. H.I. 4.00
M 96-08-51.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 2-H.P.
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 3194.599
+ ECC. = + 0.290
3194.889

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-10-77
TIME P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	—	MOODY	5.40	0	—
REFLECTOR	RADIAL #1	—	BUSTRUM	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	80	29.5	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D 100-14-35	INST. H.I. 5.40
R 259-46-35	
S 360-01-10	TARG. H.I. 5.00
M 100-14-00.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:

PART NO. 9320-2060

Do not extend notes this side of this line

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

Noted on Geo. Index Card
Placed on U.S.G.S. Quad. Shts.
Placed on Sur. Div. W.S. No.
Sketch on Geo. Desc. Card

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

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by Bly	Survey of PORTUGUESE BEND LANDSLIDE STUDIES
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 155

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-14-77
TIME P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	—	MOODY	5.15	0	—
REFLECTOR	K-3A ECC. # 2	—	BUSTRUM	5.00	0.290	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74	29.5	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 50
STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

	4	2	4	5	6	4	0

TYPE OF REFLECTOR: 3-H.P.
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 98-46-28	INST. H.I. 5.15
R 261-14-21	
S 360-00-49	TARG. H.I. 5.00
M 98-46 03.51	

COMMENTS: HOR. DIST. = 4196.028 ✓
ECC. + 0.290
TOTAL = 4196.318 ✓

28.0
24.5
03.5

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

TYPE OF REFLECTOR:
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☐ NO

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

COMMENTS:

PART NO. 9320-2060

Noted on Gen. Index Card
Placed on U.S.G.S. Quad. Shts.
Placed on Sur. Div. W.S. No.
Sketch on Gen. Desc. Card

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

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

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by Blg	Survey of PORTUGUESE BEND LANDSLIDE STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 156

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-14-77

TIME P.M.

RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY

CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	—	MOODY	5.15	0	—
REFLECTOR	BLAKESLY	—	SIEMAN	4.00	+0.300	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74	29.5	
REFLECTOR	—	—	
MEAN	—	—	+11

SLOPE DISTANCE (FEET)

	3	6	9	5 .	4	9	2

VERTICAL ANGLE

D 97-04-35	INST. H.I. 5.15
R 262-56-25	
S 360-01-00	TARG. H.I. 4.00
M 97-04-05.0	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-LIETZ

REFLECTOR CONSTANT: -0.05

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 3667.409
REF. ECC. = + 0.300
" CONST. – 0.050
TOTAL. = 3667.659

PART NO. 9320-2060

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

Noted on Geo. Index Card
Traverse Diagram Sheet Sills
Placed on Geo. Index W.S. No.
Sketch on Geo. Desc. Card

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-14-77

TIME P.M.

RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY

CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	—	MOODY	5.15	0	—
REFLECTOR	K-1	—	SIEMAN	4.00	+0.300	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74	29.5	
REFLECTOR	—	—	
MEAN	—	—	+11

SLOPE DISTANCE (FEET)

	4	7	2	7 .	7	2	0

VERTICAL ANGLE

D 96-26-23	INST. H.I. 5.15
R 263-34-08	
S 360-00-31	TARG. H.I. 4.00
M 96-26-07.5	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 55

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-LIETZ

REFLECTOR CONSTANT: -0.05

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 4697.930
REF. ECC. = + 0.300
" CONST. = – 0.050
4698.180

PART NO. 9320-2060

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

230
155
5

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by BRJ	Survey of PORTUGUESE BEND
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-14-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 157

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-14-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDIES
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX		MOODY	5.15	~~0~~	—
REFLECTOR	RAD. #1		SIEMAN	5.00	+ 0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70°	29.5	
REFLECTOR	—	—	
MEAN	—	—	+09

SLOPE DISTANCE (FEET)

	2	2	4	5	6	9	6

VERTICAL ANGLE

D 100-13-22	INST. H.I. 5.15
R 259-47-16	
S 360-00-38	TARG. H.I. 5.00
M 100-13-03.0	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT: ~~0~~
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 2210.083
REF. ECC. = + 0.130
TOTAL 2210.213

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-14-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE AREA.
CLIENT L.A. CO. ENGR

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	—	MOODY	5.15	~~0~~	—
REFLECTOR	SHIELDS		BUSTRUM	5.00	+ 0.290	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74°	29.5	
REFLECTOR	—	—	
MEAN	—	—	+11

SLOPE DISTANCE (FEET)

	3	1	4	5	6	2	8

VERTICAL ANGLE

D 97-47-59	INST. H.I. 5.15
R 262-13-20	
S 360-01-19	TARG. H.I. 5.00
M 97-47-~~19.5~~	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 3-H.P.
REFLECTOR CONSTANT: ~~0~~
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 3116.608
ECC. + 0.290
~~3116.898~~
ok ~~3116.908~~
(3116.898)

PART NO. 9320-2060

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

Noted on Topo. Map
Placed on U.S.C.&G.S. Aerial Shts.
Placed on Photo. Grid
Sketch on Back

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

59.0
39.5
2179
19.5

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by BRG	Survey of PORTUGUESE BEND
Map No.	JN 00216A Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 11-14-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 158

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-14-77
TIME P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
LANDSLIDE STUDY
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX.		MOODY	5.15	-0-	—
REFLECTOR	P-4A		SIEMAN	4.00	+0.30	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74	29.5	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

SLOPE DISTANCE (FEET)

	4	7	7	3	9	7	2

TYPE OF REFLECTOR: 3-LIETZ

REFLECTOR CONSTANT: -0.05

ATTENUATOR USED: ☐ YES ☐ NO

VERTICAL ANGLE

D 95-12-39	INST. H.I. 5.15
R 264-48-35	
S 360-01-14	TARG. H.I. 4.00
M 95-12-02.0	

COMMENTS: HOR. DIST. = 4754.320
REF. ECC. = +0.300
" CONST. = -0.050
4754.570

PART NO. 9320-2060

37.0
37.0
74
02.0

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

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-14-77
TIME P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
LANDSLIDE STUDY
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	—	MOODY	5.15	-0-	—
REFLECTOR	RADIAL #2 ECC. #3	—	BUSTRUM	5.00	+0.29	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74	29.5	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

SLOPE DISTANCE (FEET)

	3	4	7	3	8	2	0

TYPE OF REFLECTOR: 3-HP

REFLECTOR CONSTANT: -0-

ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 99-00-15	INST. H.I. 5.15
R 261-00-28	
S 360-00-43	TARG. H.I. 5.00
M 98-59-53.5	

COMMENTS: HOR. DIST. = 3431.069
ECC. COR. + 0.290
TOTAL = 3431.359

PART NO. 9320-2060

73.0
74.5
53.5

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

Noted on Sheet ... Plotted on ... Placed on ... Sketch on Back

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by BRG	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-15-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 159

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-15-77
TIME P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A.CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	-0-	—
REFLECTOR	NORTH FIX	—	BUSTRUM	5.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78	29.5	
REFLECTOR	—	—	
MEAN	—	—	+14

SLOPE DISTANCE (FEET)

	2	6	0	9	8	2	0

VERTICAL ANGLE

D 87-44-34	INST. H.I. 4.80
R 272-16-20	
S 360-00-54	TARG. H.I. 5.00
M 87-44-07.0	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 60
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT: -0-
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 2607.782
REFF. ECC. = +0.130
TOTAL, 2607.912

PART NO. 9320-2060

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

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

Noted on Geo. Index Card
Placed on U.S.G.S. Quad. Shts.
Placed on Sur. Div. W. Shts.
Sketch on Geo. Dev. Card

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-15-77
TIME P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	-0-	—
REFLECTOR	WEST FIX	—	SIEMAN	5.00	+0.30	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78	29.5	
REFLECTOR	—	—	
MEAN	—	—	+14

SLOPE DISTANCE (FEET)

	3	5	1	6	3	1	8

VERTICAL ANGLE

D 93-54-39	INST. H.I. 4.80
R 266-06-12	
S 360-00-51	TARG. H.I. 5.00
M 93-54-13.5	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 60
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 2-LIETZ
REFLECTOR CONSTANT: -0.05
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 3508.160
REF. ECC. = +0.300
REF. CONST. = -0.050
TOTAL = 3508.410

PART NO. 9320-2060

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BRJ	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-15-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 160

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-15-77
TIME P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	-0-	—
REFLECTOR	P-4A		SIEMAN	4.00	+ 0.30	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78	29.5	
REFLECTOR	—	—	
MEAN	—	—	+14

SLOPE DISTANCE (FEET)

	4	8	6	9	2	4	4

VERTICAL ANGLE

D 93-53-27	INST. H.I. 4.80
R 266-07-26	
S 360-00-53	TARG. H.I. 4.00
M 93-53-00	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 55
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 3-LIETZ
REFLECTOR CONSTANT: -0.05
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 4858.064
REF. ECC. = + 0.300
REF. CONST. = - 0.050
TOTAL. = 4858.314

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-15-77
TIME P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	-0-	—
REFLECTOR	DAVIS	—	BUSTRUM	5.00	+ 0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	78	29.5	
REFLECTOR	—	—	
MEAN	—	—	+15

SLOPE DISTANCE (FEET)

	1	2	1	1	2	6	0

VERTICAL ANGLE

D 102-58-15	INST. H.I. 4.80
R 257-02-32	
S 360-00-47	TARG. H.I. 5.00
M 102-57-51.5	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT: -0-
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 1180.385
REF. ECC. = + 0.130
1180.515

PART NO. 9320-2060

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

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

Noted on Cen. Line Rec. Card
Placed on Sec. Sheets
Placed on Sec. Sheets
Sketch on Cen. Line Card

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BRG	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 11-16-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 161

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-16-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	0	—
REFLECTOR	RADIAL #1	—	BUSTRUM	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76	29.6	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 1451.267
REF. ECC. = +0.130
TOTAL 1451.397

SLOPE DISTANCE (FEET)

	1	4	8	0	9	2	0

VERTICAL ANGLE

D 101-29-22	INST. H.I. 4.80
R 258-31-09	
S 360-00-31	TARG. H.I. 5.00
M 101-29-06.5	

PART NO. 9320-2060

22.0
15.5
06.5

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

Do not extend notes this side of this line

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

Noted on Geo. Index Card
Placed on U.S.G.S. Quad. Shts.
Placed on Sur. Div. W.S. No.
Sketch on Geo. Desc. Card

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-16-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	0	—
REFLECTOR	BLAKESLY	—	SIEMAN	4.00	+0.310	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76	29.6	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 2-LIETZ
REFLECTOR CONSTANT: −0.05
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 3280.588
REF. ECC. = +0.310
REF. CONST. = −0.050
TOTAL. = 3280.848

SLOPE DISTANCE (FEET)

	3	2	9	9	3	0	4

VERTICAL ANGLE

D 96-06-40	INST. H.I. 4.80
R 263-53-59	
S 360-00-39	TARG. H.I. 4.00
M 96-06-20.51	

PART NO. 9320-2060

40.0
19.5
20.5

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of PORTUGUESE BEND LANDSLIDE STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 162

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

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-16-77

TIME A.M.

RECORDER RICHARDS

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	0	—
REFLECTOR	K-1	—	SIEMAN	4.00	+0.31	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76	29.6	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 50

STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

	4	1	4	2	2	2	6

TYPE OF REFLECTOR: 2-LIETZ

REFLECTOR CONSTANT: -0.05

ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 95-54-29	INST. H.I. 4.80
R 264-05-36	
S 360-00-05	TARG. H.I. 4.00
M 95-54-26.5	

COMMENTS: HOR. DIST. = 4120.229
REF. ECC. = +0.310
REF. CONST. = -0.050
TOTAL = 4120.489

PART NO. 9320-2060

29.0
2.5
26.5

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

Noted
Plotted on Grid Only, W.S.M.
Sketch on Geo. Desc. Card

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-16-77

TIME A.M.

RECORDER RICHARDS

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	0	—
REFLECTOR	RADIAL #2 ECC. #3	—	BUSTRUM	5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76	29.6	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

	2	0	0	0	5	8	0

TYPE OF REFLECTOR: 1-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☐ NO

VERTICAL ANGLE

D 102-41-49	INST. H.I. 4.80
R 257-18-58	
S 360-00-47	TARG. H.I. 5.00
M 102-41-25.5	

COMMENTS: HOR. DIST. 1951.708
+0.130
1951.838

PART NO. 9320-2060

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by BPG	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. RICHARDS
Checked	Notes W.A.R. Date 11-16-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 163

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-16-77
TIME A.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	~~0~~	—
REFLECTOR	K-6	—	SIEMAN	7.00	+0.31	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76	29.6	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 2 – LIETZ
REFLECTOR CONSTANT: -0.05
ATTENUATOR USED: ☐ YES ☑ NO

SLOPE DISTANCE (FEET)

	1	8	0	2	7	5	6

VERTICAL ANGLE

D 102-37-40	INST. H.I. 4.80
R 257-22-22	
S 360-00-02	TARG. H.I. 7.00
M 102-37-39.01	

COMMENTS: HOR. DIST. = 1759.15M
REF. ECC. = + 0.310
REF. CONST. = – 0.050
TOTAL = 1759.411

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-16-77
TIME A.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX	—	MOODY	4.80	~~0~~	—
REFLECTOR	K-3A ECC. #2	—	BUSTRUM	5.00	+0.29	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76	29.6	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 3-H.P.
REFLECTOR CONSTANT: ~~0~~
ATTENUATOR USED: ☐ YES ☑ NO

SLOPE DISTANCE (FEET)

	2	7	3	6	1	8	0

VERTICAL ANGLE

D 101-27-27	INST. H.I. 4.80
R 258-32-52	
S 360-00-19	TARG. H.I. 5.00
M 101-27-17.5	

COMMENTS: HOR. DIST. = 2681.679
REF. ECC. = + 0.290
TOTAL = 2681.969

PART NO. 9320-2060

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

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

Noted on Sec. Div. Key Card
Placed on Sur. Div. W.S.M.
Sketch on Geol. Desc. Card

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by BRg	Survey of PORTUGESE BEND
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by WAR
Checked	Notes B Date 11-16-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 164

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-16-77
TIME P.M
RECORDER B

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	E. FIX		Moody	4.80	—	—
REFLECTOR	Q-1		SIEMANN	5.00	+0.31	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	76	29.6	
REFLECTOR	—	—	
MEAN	—	—	+11

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 40
STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

	6	8	3	1	8	3	

TYPE OF REFLECTOR: 3-LIETZ
REFLECTOR CONSTANT: — 0.05
ATTENUATOR USED: ☐ YES ☑ NO

VERTICAL ANGLE

D 94-06-00	INST. H.I. 4.80
R 265-54-02	
S 360-00-02	TARG. H.I. 5.00
M 94-05-59.01	

COMMENTS: HOR. DIST. = 6814.348
REF. ECC. = + 0.310
" CONST. = — 0.050
TOTAL = 6814.608

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

TYPE OF REFLECTOR:
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☐ NO

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

COMMENTS:

PART NO. 9320-2060

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

814-39

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by Bdg	Survey of PORTUGUESE BEND
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-17-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 165

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-17-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A.CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WEST FIX	—	MOODY	4.85	-0-	—
REFLECTOR	P-4A	—	SIEMAN	4.00	+0.31	—

FOG AND HAZE

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72	29.8	X
REFLECTOR	—	—	
MEAN	—	—	+07

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-LIETZ
REFLECTOR CONSTANT: -0.05
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 1571.609
REF. ECC. = +0.310
" CONST. = -0.050
TOTAL. = 1571.869

SLOPE DISTANCE (FEET)

	1	5	7	4	1	5	6

VERTICAL ANGLE

D 93-15-39	INST. H.I. 4.85
R 266-44-27	
S 360-00-06	TARG. H.I. 4.00
M 93-15-36.0	

PART NO. 9320-2060

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

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

Noted
Placed on U.S.G.S. Quad. Shts.
Placed on Sur. Div. W.S. No.
Sketch on Geo. Desc. Card

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-17-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A.CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WEST FIX	—	MOODY	4.85	-0-	—
REFLECTOR	K-1	—	BUSTRUM	7.00	+0.29	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72	29.8	X
REFLECTOR	—	—	
MEAN	—	—	+07

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT: -0-
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 1729.086
REF. CONST. = +0.290
TOTAL = 1729.376

SLOPE DISTANCE (FEET)

	1	7	3	8	8	4	0

VERTICAL ANGLE

D 96-04-44	INST. H.I. 4.85
R 263-56-08	
S 360-00-52	TARG. H.I. 7.00
M 96-04-18.0	

PART NO. 9320-2060

CENTERLINE NOTES
CE 310
76F3095-4/73

44
26
18

Notes Ck'd by BRG	Survey of PORTUGUESE BEND
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. RICHARDS
Checked	Notes W.A.R. Date 11-17-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 166

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-17-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WEST FIX	—	MOODY	4.85	-0-	—
REFLECTOR	NORTH FIX	—	SIEMAN	4.00	+0.31	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72	29.8	
REFLECTOR	—	—	
MEAN	—	—	+07

FOG-HAZE

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 50

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 2-LIETZ

REFLECTOR CONSTANT: – 0.05

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 3194.509 ✓
REF. CONST. = –0.050
" ECC. = +0.310
TOTAL = 3194.769 ✓

SLOPE DISTANCE (FEET)

	3	2	1	2	7	0	0

VERTICAL ANGLE

D 83-54-19	INST. H.I. 4.85
R 276-06-20	
S 360-00-39	TARG. H.I. 4.00
M 83-53-59.5 ✓	

PART NO. 9320-2060

19.5
139

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-17-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WEST FIX	—	MOODY	4.85	-0-	—
REFLECTOR	K-6	—	BUSTRUM	4.00	+0.29	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72	29.8	
REFLECTOR	—	—	
MEAN	—	—	+07

FOG-HAZE

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 2-H.P.

REFLECTOR CONSTANT: -0-

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 3482.678
REF. ECC. = +0.290
3482.968 ✓

SLOPE DISTANCE (FEET)

	3	4	8	6	2	8	0

VERTICAL ANGLE

D 92-36-49	INST. H.I. 4.85
R 267-24-15	
S 360-01-04	TARG. H.I. 4.00
M 92-36-17.0	

PART NO. 9320-2060

Noted on Geo. Index Card
Placed on U.S.G.S. Quad. Shts.
Placed on Sur. Div. W.S.M.
Sketch on Geo. Desc. Card

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

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

32
64

CENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by BRJ	Survey of PORTUGUESE BEND
Map No.	JN0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-17-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 167

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-17-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	WEST FIX	—	MOODY	4.85	~~0~~	—
REFLECTOR	EAST FIX	—	SIEMAN	4.00	+0.31	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	72	29.8	
REFLECTOR	—	—	
MEAN	—	—	+07

SLOPE DISTANCE (FEET)

	3	5	1	6	2	5	6

VERTICAL ANGLE

D 86-07-08	INST. H.I. 4.85
R 273-53-42	
S 360-00-50	TARG. H.I. 4.00
M 86-06-43.01	

FOG-HAZE

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3 – LIETZ

REFLECTOR CONSTANT: – 0.05

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 3508.163
REF. ECC. = + 0.310
" CONST. = – 0.050
HOR. DIST. = 3508.423

PART NO. 9320-2060

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

SE RETURN TO
S COUNTY ENGINEER
UNTY ENGINEERING BLDG.

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-17-77
TIME A.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
	T FIX	—	MOODY	4.85	~~0~~	—
	LDS		BUSTRUM	6.00	+0.29	—

	PRESS. IN. HG	PPM CORR.
	29.8	
	—	
	—	+07

0	3	0

4.85
6.00

FOG-HAZE

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 2 – H.P.

REFLECTOR CONSTANT: ~~0~~

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 2908.861
REF. ECC. = + 0.290
TOTAL = 2909.151

PART NO. 9320-2060

Notes Ck'd by BRG	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes moody Date 11-18-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 168

PALOS VERDES COVE LAND STUDY

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-18-77

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		Moody	4.73		
REFLECTOR	Q-2			4.60		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.9	
REFLECTOR			
MEAN			+3

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 75

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: L.H.P.

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS:

SLOPE DIST. 1132.766

CORR " 1121.092 ✓

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D 98-14-10	INST. H.I. 4.73
R 261-46-13	
S 360-00-23	TARG. H.I. 4.60
M 98-13-58.5	

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 11-18-77

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		Moody	4.73		
REFLECTOR	Q-3			4.94		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.9	
REFLECTOR			
MEAN			+3

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING:

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: L.H.P.

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS:

SLOPE DIST 531.896

CORR " 510.757 ✓

SLOPE DISTANCE (FEET) 5 3 1 8 9 6

VERTICAL ANGLE

D 106-12-43	INST. H.I. 4.73
R 253-47-50	
S 360-00-33	TARG. H.I. 4.94
M 106-12-26.5	

PART NO. 9320-2060

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

ENTERLINE NOTES E 310 6F3095-4/73

Notes Ck'd by BRJ.	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes Moody Date 11-18-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 169

ABALONE COVE LAND STUDY

DATE 11-18-77

TIME

RECORDER

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		Moody	4.73	0	—
REFLECTOR	Q-1			5.00	+0.13	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.9	
REFLECTOR			
MEAN			+3

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 1 H.P.

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D 92-26-05	INST. H.I. 4.73
R 267-34-23	
S 360-00-28	TARG. H.I. 5.00
M 92-25-51	

COMMENTS:

SLOPE DIST. 2021.866
CORR. " 2020.047
ECC. COR. + 0.130
2020.177

PART NO. 9320-2060

DATE 11-18-77

TIME

RECORDER

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		Moody	4.73		
REFLECTOR	Q-1A			4.60		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.9	
REFLECTOR			
MEAN			+3

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 1. H.P.

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D 95-52-15	INST. H.I. 4.73
R 262-08-12	
S 360-00-27	TARG. H.I. 4.60
M 95-52-01	

COMMENTS:

SLOPE DIST 1580.106
CORR. " 1571.829

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by Bly	Survey of PORTUGUESE BEND
Map No.	JN 002164 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes moody Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 170

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-18-77

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		moody	485		
REFLECTOR	H-7A ECC #5			4.00	0.29	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.9	
REFLECTOR			
MEAN			+5

SLOPE DISTANCE (FEET)

	1	6	1	7	0	3	0

VERTICAL ANGLE

D 88 09 [illegible]	INST. H.I. 4.85
R 271 50 58	
S 360 00 45	TARG. H.I. 4.00
M 88-09 24.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS:

Corr Slope 1616.~~200~~ 193
+0 29
1616.~~490~~ .483

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		moody	485		
REFLECTOR	Point			438	None	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.9	
REFLECTOR			
MEAN			+5

SLOPE DISTANCE (FEET)

	1	6	8	7	1	7	[illegible]

VERTICAL ANGLE

D 93 35 40	INST. H.I. 4.85
R 266 24 40	
S 360 00 20	TARG. H.I. 4.38
M 93 35 30	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 75

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS:

Corr Slope 1683.858

PART NO. 9320-2060

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

5,300 ± E. FIX
1,640 ± H7A ECC
1700 ± POINT
550 ± H-8A

Notes Ck'd by Blg	Survey of ABALONE COVE LANDSLIDE STUDY
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 171

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-18-77

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		Moody	4.85		
REFLECTOR	H-8A		RICHARDS	5.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.9	
REFLECTOR			
MEAN			+5

SLOPE DISTANCE (FEET)

		5	5	8	4	6	0

VERTICAL ANGLE

D	99-38-40	INST. H.I. 4.85
R	260-21-40	
S	360-00-00	TARG. H.I. 5.00
M	99-38-30	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT:

ATTENUATOR USED: ☑ YES ☐ NO

COMMENTS:

CORR SLOPE DIST. 550.571
+0.130
550.701

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-18-77

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-5		Moody	4.85		
REFLECTOR	E-17			4.00	+0.29	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.9	
REFLECTOR			
MEAN			+5

SLOPE DISTANCE (FEET)

	5	3	1	0	7	7	0

VERTICAL ANGLE

D	85-40-46	INST. H.I. 4.85
R	274-19-56	
S	360-00-42	TARG. H.I. 4.00
M	85-20-25	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 3 HP

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS:

5295.637
+0.290
5295.927

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BRJ	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 172

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-22-77
TIME [illegible]
RECORDER Moody

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LA.CO

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	[illegible]	Bustrum	5.10		
REFLECTOR	G-6		Richards	7.00	+0.29	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+4

SLOPE DISTANCE (FEET)

	4	3	8	2	2	3	0

VERTICAL ANGLE

D	77-47-06	INST. H.I.	5.10
R	282-13-26		
S	[illegible]	TARG. H.I.	7.00
M	[illegible]		

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 55
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 3 HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
CORR SLOPE DIST. 4282.947
ECC + 0.29
4283.237

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-22-77
TIME 11:30 AM.
RECORDER Moody

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LA.CO

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A 02170	Bustrum	5.10		
REFLECTOR	P-4A		Crowder	4.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+4

SLOPE DISTANCE (FEET)

	2	0	6	3	1	1	2

VERTICAL ANGLE

D	85-35-25	INST. H.I.	5.10
R	274-25-05		
S	360-00-30	TARG. H.I.	4.00
M	85-35-10		

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 65
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1 HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☐ NO
COMMENTS:
CORR SLOPE DIST. 20~~63.112~~ 56.993
ECC + ~~0.13~~ 0.13
~~2063.242~~
2057.123 ok

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BRG	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 11-77
Date	Indexed G.D. BAILEY DEC 30

F.B. 4338 PG. 173

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-22-77
TIME 11:55 AM
RECORDER Moody

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LA.CO

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A 02170	Bustrum	5.10		
REFLECTOR	H-8 A		CROUSTER	4.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+4

OVERCAST
VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1 HIT
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
CORR SLOPE DIST. 2119.284
ECC +0.130
2119.414

SLOPE DISTANCE (FEET)

	2	1	1	9	3	0	2

VERTICAL ANGLE

D	90 14 44	INST. H.I.	5.10
R	269 46 05		
S	360 00 49	TARG. H.I.	4.00
M	90 14 19.6		

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-22-77
TIME 12:00
RECORDER Moody

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LA.CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Q-1	1225A 02170	BUSTRUM	5.10		
REFLECTOR	E-FIX		RICHARDS	5.00	+0.29	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+4

OVERCAST
VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 50
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 3 HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
CORR. SLOPE DIST. 6814.108
ECC +0.290
6814.398

SLOPE DISTANCE (FEET)

	6	8	3	1	4	6	0

VERTICAL ANGLE

D	85 55 15	INST. H.I.	5.10
R	274 05 24		
S	360 00 39	TARG. H.I.	5.00
M	85 51 55.5		

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BRY	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes J. A. M. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 174

DATE 11-22-77
TIME 7:30
RECORDER

HEWLETT hp PACKARD
MODEL 3800A
DISTANCE METER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	H-8 A		moody	5.55	ø	ø
REFLECTOR	H-7 A ECC #5			6.00	+0.13	ø

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	30.15	
REFLECTOR			
MEAN			-1

SLOPE DISTANCE (FEET)

	2	1	3	8	5	3	8

VERTICAL ANGLE

D	86.03.50	INST. H.I. 5.55
R	273.56.30	
S	360.00.20	TARG. H.I. 6.00
M	86-03-40.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1. HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 2133.487
REF. ECC. = +0.130
TOTAL = 2133.617

PART NO. 9320-2060

DATE 11-22-77
TIME 7:45
RECORDER

HEWLETT hp PACKARD
MODEL 3800A
DISTANCE METER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	H 8 A		moody	5.55	ø	—
REFLECTOR	P-2			5.25	ø	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	30.15	
REFLECTOR			
MEAN			-1

SLOPE DISTANCE (FEET)

	1	9	1	9	5	6	4

VERTICAL ANGLE

D	89-14.40	INST. H.I. 5.55
R	270.45.40	
S	360.00.20	TARG. H.I. 5.25
M	89-14-30.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1. H.P
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 1919.346

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by BPJ	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 175

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-23-77
TIME 11:55 AM
RECORDER [illegible]

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LACO

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Sta #1		[illegible]	4.50	None	
REFLECTOR	Sta #2		[illegible]	5.70		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+5

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: [illegible]

STABILITY: 0 25 75 100 — +

SLOPE DISTANCE (FEET)

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT:

ATTENUATOR USED: ☑ YES ☐ NO

VERTICAL ANGLE

D	[illegible]	INST. H.I.
R	261 18 5[illegible]	
S	36[illegible]	TARG. H.I.
M	[illegible] 18.1	

COMMENTS: [illegible] 0.02 E. OF LINE
[illegible] HOR DIST. 64.436
64.175

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-23-77
TIME 11:20 AM
RECORDER [illegible]

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LACO

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	Sta #1		[illegible]	4.50	None	
REFLECTOR	Sta #3		[illegible]	5.35		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+5

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 75

STABILITY: 0 25 75 100 — +

SLOPE DISTANCE (FEET)

			9	3	0	3	6

TYPE OF REFLECTOR: 1 HP

REFLECTOR CONSTANT:

ATTENUATOR USED: ☑ YES ☐ NO

VERTICAL ANGLE

D	95 31 32	INST. H.I.
R	264 29 11	
S	360 00 43	TARG. H.I.
M	95 31 10.5	

COMMENTS: PRISM IS 0.02 E. OF LINE
[illegible] HOR. DIST 93.605V

PART NO. 9320-2060

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BJ	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes J. A. M. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 176

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAM #1		Bustrum	4.50	NONE	
REFLECTOR	MKER		CROWDER	5.20		

NOTE: POINT IS 0.06E OF LINE

VERTICAL ANGLE

D	93 11-05
R	266 49 25
S	360-00-30
M	93-10-50

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
70	30.15	+5

RET. SIGNAL = 75 1.H.P.
USED ATTEN.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 13964

HORIZONTAL DISTANCE 13758

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAM #1		Bustrum	4.50	NONE	
REFLECTOR	SAM #4		CROWDER	5.15		

NOTE: POINT IS 0.05E OF LINE

VERTICAL ANGLE

D	92-38-40
R	267-22-02
S	360-00-42
M	92-38-19

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
70	30.15	+5

RET. SIGNAL = 75 1.H.P.
USED ATTEN.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 15164.8

HORIZONTAL DISTANCE 15148.7

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BBG	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes J. A. M. Date 11-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 177

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-23-77
TIME 10:40 AM
RECORDER Moody

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LACO

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN #1		Bostrum	4.50	NONE	
REFLECTOR	H-7AEC#5		RICHARDS	6.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+5

SLOPE DISTANCE (FEET)

		9	9	1	6	4	5

VERTICAL ANGLE

D	83-05-37	INST. H.I.	4.50
R	276-55-23		
S	360-01-00	TARG. H.I.	6.00
M	83-05-07		

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: I.H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS: USED FOR CONTROL LINE
[illegible] DIST: 987.413
ECC +0.130
987.543

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 11-23-77
TIME 11:00 AM
RECORDER Moody

PROJECT PORTUGUESE BEND
ABALONE COVE LAND STUDY
CLIENT LACO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN #1		Bostrum	4.50	NONE	
REFLECTOR	P4A		CROWDER	2.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70	30.15	
REFLECTOR			
MEAN			+5

SLOPE DISTANCE (FEET)

		6	8	1	3	5	8

VERTICAL ANGLE

D	78-24-13	INST. H.I.	4.50
R	281-36-38		
S	360-00-51	TARG. H.I.	2.00
M	78-23-47.5		

VISIBILITY: ☒ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: I.H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☒ NO
COMMENTS:
[illegible] DIST 667.433
ECC +0.130
667.563

PART NO. 9320-2060

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by Bdg	Survey of ABALONE COVE LANDSLIDE STUDIES
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 12-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 178

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN #1		Bustrum	4.50	NONE	
REFLECTOR	SAN #5		Crowder	5.00		

NOTE: POINT IS 0.05 E OF LINE

VERTICAL ANGLE

D	85-52-10
R	274-08-40
S	360-00-50
M	85-51-45

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
70	30.15	+5

RET SIGNAL = 75 1 HP USED AFTER

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 8 0 7 5 4

HORIZONTAL DISTANCE: 1 8 0 2 8 3

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

12-1-77

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	P-4A	—	MOODY	4.55	0	—
REFLECTOR	H-7A ECC. #5	—	RICHARDS	6.00	+0.13	—

RET. SIG. = 70

VERTICAL ANGLE

D	91-10-32
R	268-49-46
S	360-00-18
M	91-10-23.0

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G.	P.P.M. COR.
80°	30.0	+10

NO ATTENUATOR 1-H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 9 6 7 7 9 4.

HORIZONTAL DISTANCE: 9 6 7 5 9 1

+ 0 1 3 0

CORRECT HORIZ. DIST.: 9 6 7 7 2 1

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BBJ	Survey of ABALONE COVE STABILITY STUDY
Map No	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Check'd	Notes W. A. R. Date 12-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 179

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P2A		BUS.	5.00	NONE	
REFLECTOR	P. 2			4.80		

RET Signal - 75

VERTICAL ANGLE

D	89-49-01
R	270-11-20
S	360 00 21
M	89-48-50.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
64	30.15	+2

USED ATTEN.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 8 7 0 9 0

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3 8 7 0 8 8

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	P2A		BUS.	5.00	NONE	
REFLECTOR	P. 3			5.12		

RET. Signal - 70

VERTICAL ANGLE

D	90-26-42
R	269-31-05
S	360 00 47
M	90-26-18.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
64	30.15	+2

USED ATTEN.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4 7 4 6 4 2

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 4 7 4 6 2 8

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
GF 3095-4/73

Notes Ck'd by BRG	Survey of ABALONE COVE STABILITY STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 12-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 180

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P-3		JM	5.05		
REFLECTOR	P-4A			300	+ 0.13	

RET. SIGNAL = 65

VERTICAL ANGLE
D 78-09-05
R 281-51-42
S 360-00-47
M 78-08-43

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. Cor.
64°	30.15	+ 2

USED ATTEN.

VERTICAL ANGLE
D
R
S
M

SLOPE DISTANCE (FEET) 7065354

HORIZONTAL DISTANCE 6914644 ✓

REF. ECC. + 0130

CORRECT HORIZ. DIST. 6915944 ✓

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A						
REFLECTOR						

VERTICAL ANGLE
D
R
S
M

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE
D
R
S
M

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by BRG	Survey of PORTUGUESE BEND LANDSLIDE F.B. 4338 PG. 181
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 12-2-77
Date	Indexed G.D. BAILEY DEC 30 1977

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 12-2-77

TIME 11:45 A.M.

RECORDER CROWDER

PROJECT PORTUGUESE BEND LANDSLIDE STUDY

CLIENT L.A.CO.ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. E-8B	—	MOODY	5.25	-0-	—
REFLECTOR	S.P.H. 6-6		RICHARDS	5.55	-0-	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74	30.1	
REFLECTOR	—	—	
MEAN	—	—	+06

SLOPE DISTANCE (FEET)

	8	0	7	1	4	5	0

VERTICAL ANGLE

D 83° 20' 36"	INST. H.I. 5.25
R 276° 40' 12"	
S 360° 00' 48"	TARG. H.I. 5.55
M 83° 20' 12.0"	

VISIBILITY: ☐ GOOD ☐ FAIR ☑ BAD (SMOG)

RETURN SIGNAL READING: 40

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-H.P. & 3-LIETZ

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 8,016.928 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A DISTANCE METER

DATE 12-2-77

TIME 1:10 P.M.

RECORDER MOODY

PROJECT PORTUGUESE BEND LANDSLIDE STUDY

CLIENT L.A.CO.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	S.P.H. E-8B	—	MOODY	5.25	—	—
REFLECTOR	WAYFARER 2	—	RICHARDS	5.35	—	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	74	30.1	
REFLECTOR	—	—	
MEAN	—	—	+06

SLOPE DISTANCE (FEET)

	6	8	2	1	6	6	0

VERTICAL ANGLE

D 89° 23' 06"	INST. H.I. 5.25
R 270° 37' 05"	
S 360° 00' 11"	TARG. H.I. 5.35
M 89° 23' 00.5"	

VISIBILITY: ☐ GOOD ☐ FAIR ☑ BAD (SMOG)

RETURN SIGNAL READING: 40

STABILITY: 0 25 75 100 — +

TYPE OF REFLECTOR: 3-H.P.

REFLECTOR CONSTANT: -0-

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 6,821.265 ✓

PART NO. 9320-2060

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE NOTES CE 310 6F3095-4/73

Notes Ckd by Blq	Survey of PORTUGUESE BEND LANDSLIDE STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 12-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 182

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 12-7-77
TIME P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.08	0	—
REFLECTOR	E-2		BUSTRUM	4.18	0	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.4	
REFLECTOR	—	—	
MEAN	—	—	+07

VISIBILITY: ☐ GOOD ☐ FAIR ☒ BAD FOG-HAZE

RETURN SIGNAL READING: 60

STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

4 7 2 5 . 4 2 0

TYPE OF REFLECTOR: 3-H.P.

REFLECTOR CONSTANT: 0

ATTENUATOR USED: ☐ YES ☒ NO

VERTICAL ANGLE

D 98-09-04
R 261-51-19
S 360-00-23
M 98-08-52.5

INST. H.I. 5.08
TARG. H.I. 4.18

COMMENTS:
HOR. DIST. = 4380.747 ✓

PART NO. 9320-2060

64.0
11.5
525

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 12-7-77
P.M.
RECORDER RICHARDS

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	EAST FIX		MOODY	5.08	0	—
REFLECTOR	E-1		BUSTRUM	5.20	0	—

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64	29.4	
REFLECTOR	—	—	
MEAN	—	—	+07

VISIBILITY: ☐ GOOD ☐ FAIR ☒ BAD FOG-HAZE

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 – +

SLOPE DISTANCE (FEET)

3 6 7 0 . 9 0 6

TYPE OF REFLECTOR: 3-H.P.

REFLECTOR CONSTANT 0

ATTENUATOR USED: ☐ YES ☒ NO

VERTICAL ANGLE

D 99-17-44
R 260-43-10
S 360-00-54
M 99-17-17.0

INST. H.I. 5.08
TARG. H.I. 5.20

COMMENTS:
HOR. DIST. 3622.778 ✓

44
27
11

Noted on Plat Book
Plotted on Sheet No.
Placed on Sheets
Sketch on Desc. Card

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 beyond this line

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
40 LOS ANGELES COUNTY ENGINEER BLDG.

CENTERLINE NOTES
E 310
F 3095 4/73

Notes Ck'd by BRG	Survey of PORTUGUESE BEND LANDSLIDE STUDY
Map No	JN0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 12-77
Date	Indexed G. D. BAILEY DEC 30 1977

F.B. 4338 PG. 183

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 12-8-77
TIME A.M.
RECORDER B

PROJECT P.V. Slide
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	N. FIX	T2	JM.	5.25	NONE	
REFLECTOR	E 2			4.0		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68°	29.4	
REFLECTOR			
MEAN			+09

SLOPE DISTANCE (FEET)

	5	4	2	8	7	9	6

VERTICAL ANGLE

D 97-44-15	INST. H.I. 5.25
R 262-16-00	
S 360-00-15	TARG. H.I. 4.00
M 97-44-07.5	

VISIBILITY: ☐ GOOD ☐ FAIR ☑ BAD HAZEY
RETURN SIGNAL READING: 50
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 3 H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
Hor. DIST. 5379.395

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 12-8-77
TIME P.M.
RECORDER B

PROJECT P.V. Slide
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	K-6	T2	JM	4.90	NONE	
REFLECTOR	E-1			5.25		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.9	
REFLECTOR			
MEAN			+5

SLOPE DISTANCE (FEET)

	2	6	2	6	0	0	6

VERTICAL ANGLE

D 94 15-38	INST. H.I. 4.90
R 265 44 50	
S 360-00-28	TARG. H.I. 5.25
M 94 15-24	

VISIBILITY: ☐ GOOD ☑ FAIR HAZEY ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 2 HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS:
Hor. DIST. 2618.762

Noted on Geo. Index Card
Placed on U.S.G.S. Quad. Slds.
Placed on Gen. div. W.S.P.
Sketch on Geo. Desc. Card

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by BJ	Survey of PORTUGUESE BEND LANDSLIDE STUDY
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 12-77
Date	Indexed G.D. BAILEY DEC 30 1977

F.B. 4338 PG. 184

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 12-8-77
TIME P.M
RECORDER Z

PROJECT P.V. Slide
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	K-6	T2	J.M	4.90		
REFLECTOR	W, F14			3.00	+0.29	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	29.9	
REFLECTOR			
MEAN			+5

VISIBILITY: ☐ GOOD ☑ FAIR (HAZEY) ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 — +

SLOPE DISTANCE (FEET)

	3	4	8	6	1	3	4

TYPE OF REFLECTOR:

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☐ NO

VERTICAL ANGLE

D 87-26-23	INST. H.I. 4.90
R 272-33-39	
S 360-00-02	TARG. H.I. 3.00
M 87-26-22	

COMMENTS:
Hor. DIST. 3482.653 ✓
Ecc + +0.290
Corr Hor. DIST. 3482.943 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING:

STABILITY: 0 25 75 100 — +

SLOPE DISTANCE (FEET)

TYPE OF REFLECTOR:

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☐ NO

VERTICAL ANGLE

D	INST H.I.
R	
S	TARG. H.I.
M	

COMMENTS:

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

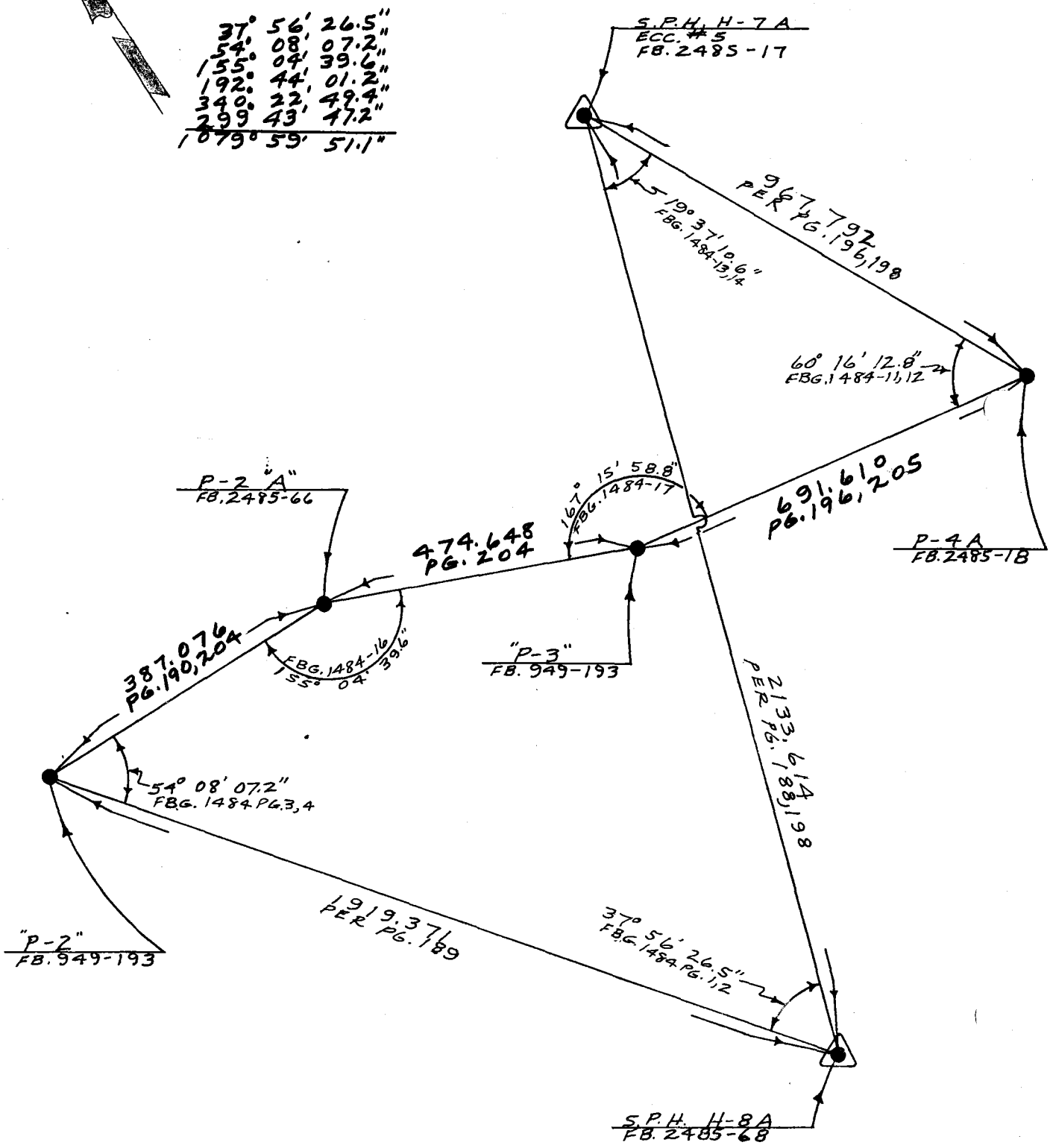
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
403 LOS ANGELES COUNTY ENGINEERING BLDG.

ENTERLINE NOTES
E 310
3F3095-4/73

Notes Ck'd by	Survey of STABILITY STUDY ABALONE COVE
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 1-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 185

ABALONE COVE AREA STABILITY STUDY OBSERVED DATA
"P" LINE TRAVERSE
1-78



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

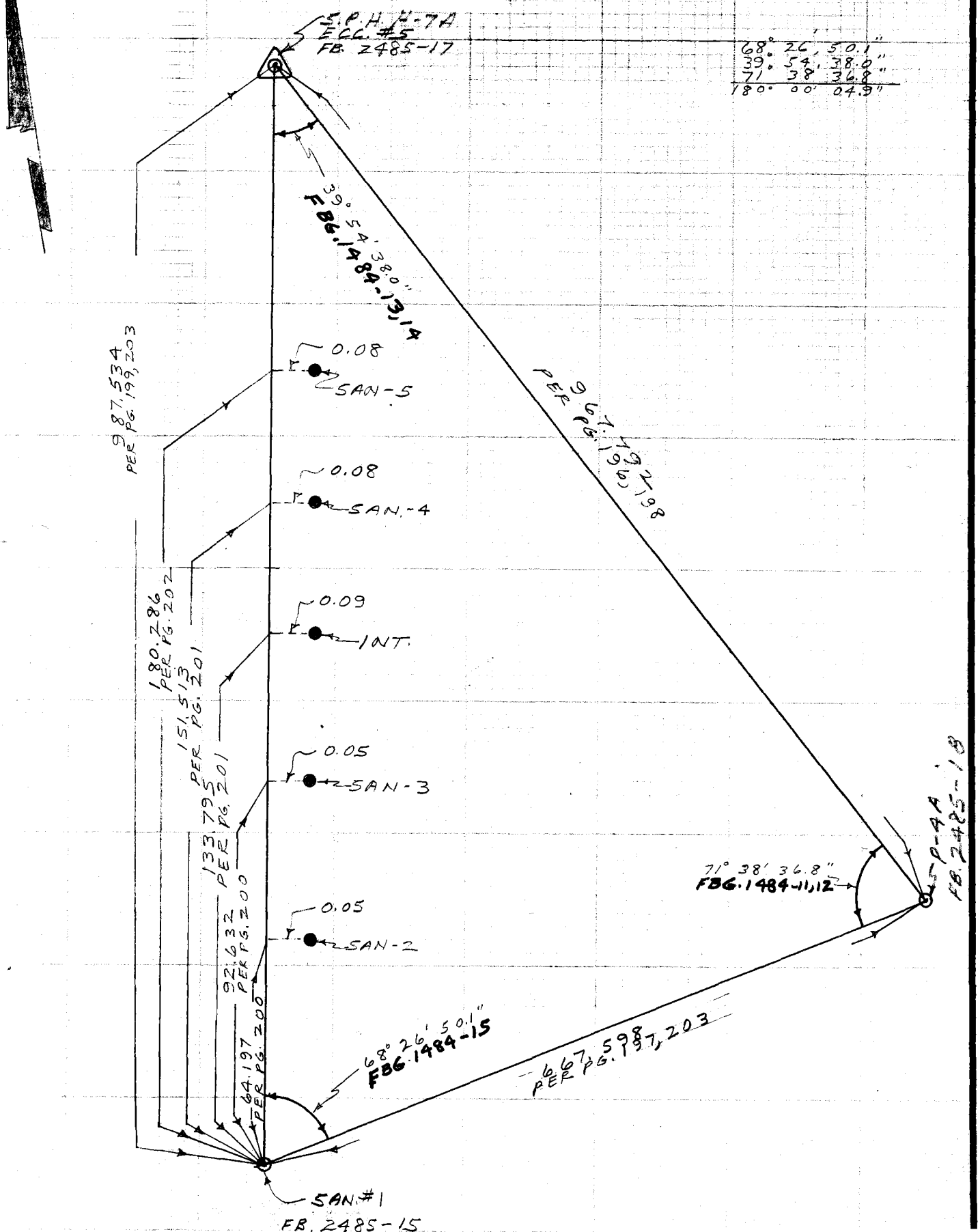
Do not extend notes this side of this line

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

CENTERLINE NOTES
CE 310
76F3095-4/73

F.B. 4338 PG. 186

ABALONE COVE AREA STABILITY STUDY OBSERVED DATA
"SAN" LINE TRIANGLE
1-78



CE 310
76F3095-4/73

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

Do not exte... notes this side of this line

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

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R Date 1-78
Date	Indexed B. D. BAILEY MAR 2 1978

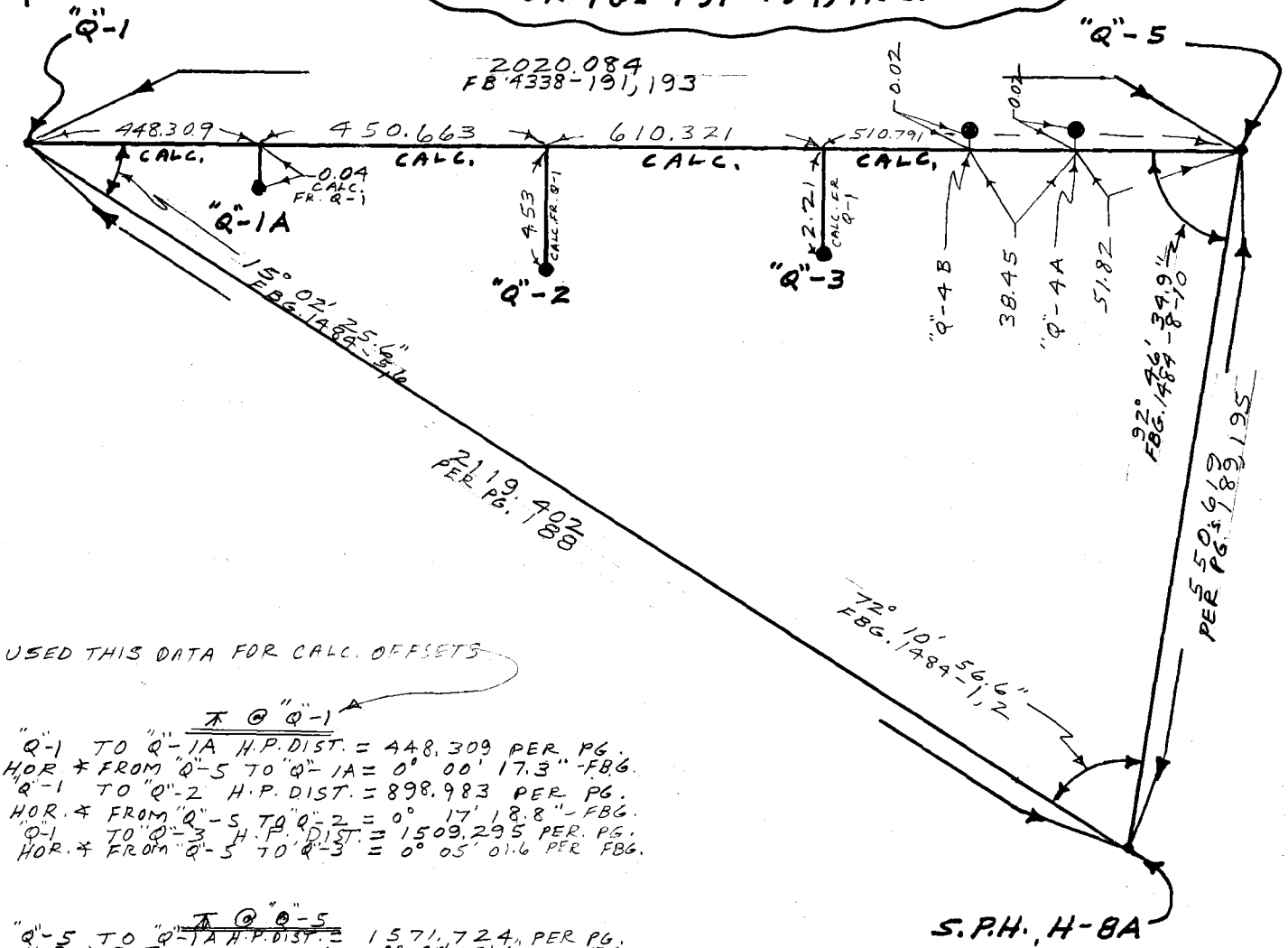
F.B. 4338 PG. 187

100' TAPE @ 68° F.
28.90 LEVEL T=64° = 28.90
22.92 " " = 22.92
TOTAL 51.82
1. 66.81 ∡ = -23° 16' 56" = 61.37
2. 66.96 ∡ = 23° 32' 58" = 61.38
T=64° AVE. = 61.37
- 22.92
38.45

ABALONE COVE STABILITY STUDY
"Q" LINE OBSERVED DATA
1 - 78

15° 02' 25.6"
72° 10' 56.6"
92° 46' 34.9"
179° 59° 57.1"

NOTE: DISTANCES BETWEEN Q-1 & Q-5 ARE CALCULATED FROM DATA ON PGS 191-194, INC.



USED THIS DATA FOR CALC. OFFSETS

∡ @ "Q"-1

"Q"-1 TO "Q"-1A H.P. DIST. = 448.309 PER PG.
HOR. ∡ FROM "Q"-5 TO "Q"-1A = 0° 00' 17.3" - FBG.
"Q"-1 TO "Q"-2 H.P. DIST. = 898.983 PER PG.
HOR. ∡ FROM "Q"-5 TO "Q"-2 = 0° 17' 18.8" - FBG.
"Q"-1 TO "Q"-3 H.P. DIST. = 1509.295 PER PG.
HOR. ∡ FROM "Q"-5 TO "Q"-3 = 0° 05' 01.6 PER FBG.

∡ @ "Q"-5

"Q"-5 TO "Q"-1A H.P. DIST. = 1571.724 PER PG.
HOR. ∡ BET. Q-1 TO Q-1A = 0° 00' 01.6 " FBG.
"Q"-5 TO "Q"-2 H.P. DIST. = 1121.080 " PG.
HOR. ∡ BET. "Q"-1 TO "Q"-2 = 0° 13' 50.6" " FBG.
Q-5 TO Q-3 H.P. DIST. = 510.754 " PG.
HOR. ∡ BET. "Q"-1 TO Q-3 = 0° 14' 41.9" " FBG.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 1-27-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 188

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H8A		B	5.25	0	
REFLECTOR	Q-1			5.00	+0.13	

VERTICAL ANGLE

D	89-47-50
R	270-12-30
S	360-00-20
M	89-47-40.0 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
66°	20.15	+02

1-H.P.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2119286 ✓

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2119272 ✓

HORIZONTAL DISTANCE:

0130

CORRECT HORIZ. DIST.: 2119402 ✓

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	H8A		B	5.25	0	
REFLECTOR	H7AECC5			4.00	+0.13	

VERTICAL ANGLE

D	86-06-14
R	273-53-56
S	360-00-10
M	86-06-09.0 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
66°	30.15	+02

1-H.P.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2138425.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 21334791

HORIZONTAL DISTANCE:

0130

CORRECT HORIZ. DIST.: 2133609 ✓

CORRECT HORIZ. DIST.:

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

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

NTERLINE NOTES
: 310
F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 1-27-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 189

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H8A		B	5.25	-0-	
REFLECTOR	R 2			5.15	-0-	

VERTICAL ANGLE

D	89 - 14 - 27
R	270 - 46 - 07
S	360 - 00 - 34
M	89 - 14 - 11.5 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
66°	30.15	+02

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 19194.2

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 19371 ✓

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 19371 ✓

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	H8A		B	5.25	-0-	
REFLECTOR	Q-5			5.00	+0.13	

VERTICAL ANGLE

D	80 - 21 - 57
R	279 - 38 - 42
S	360 - 00 - 34
M	80 - 21 - 35.0

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
66°	30.15	+02

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 5583.4

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 55049.9 ✓

HORIZONTAL DISTANCE:

0130

CORRECT HORIZ. DIST.: 55062.9 ✓

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
SF3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No	JN 022164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 1-27-78
Date	Indexed G. D. BAILEY MAR 2

F.B. 4338 PG. 190

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P-2		B	4.90	0	
REFLECTOR	P-2A			5.25	0	

VERTICAL ANGLE

D	90 09 55
R	269-50-24
S	360-00-19
M	90-09-455

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
66°	30.1	+02

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 8 7 0 7 8

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3 8 7 0 7 6

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 3 8 7 0 7 6

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A						
REFLECTOR						

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No	JN 22109 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 1-78
Date	Indexed G.D. BAILEY MAR 2 1978

F.B. 4338 PG. 191

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q-1			5.00	-0-	
REFLECTOR	Q-3			4.94	-0-	

VERTICAL ANGLE

D	92°	23'	00"
R	267°	36	46
S	359	59	46
M	92°	22'	53.0

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
60°	30.0	

REF. 75

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 1510600

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE 1509295

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST. 1509295

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q-1		BUSTRUM	5.00	-0-	
REFLECTOR	Q-5			5.00	+0.13	

VERTICAL ANGLE

D	87	34	27
R	272	25	54
S	359	00	21
M	87-34-16.5		

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 2021775.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE 2019959

HORIZONTAL DISTANCE

0130

CORRECT HORIZ. DIST. 2020089

CORRECT HORIZ. DIST.

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

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

ENTERLINE NOTES
E 310
F 3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 1-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 192

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	0-1		B.	5.00	0	
REFLECTOR	0-1A			4.55	0	

VERTICAL ANGLE

D	99	36	36
R	260	23	45
S	360	00	21
M	99	36	25.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
60°	30.0	

1-HP. GLASS ANTEN.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4546 8 6

HORIZONTAL DISTANCE: 4483091

CORRECT HORIZ. DIST.: 4483091

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	0-1		Bugyrum	5.00	0	
REFLECTOR	0-2			4.95	0	

VERTICAL ANGLE

D	94	51	27
R	265	08	51
S	360	00	18
M	94°	51'	18.0"

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	PPM. COR.
60°	30.0	

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 9 6 2 2 2 0

HORIZONTAL DISTANCE: 8 9 8 9 8 3

CORRECT HORIZ. DIST.: 8 9 8 9 8 3

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
GF3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 02164 Tape Std °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes C. YASUI Date 2-31-78
Date	Indexed G.D. BAILEY MAR 2 1978

F.B. 4338 PG. 193

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q 5		BUSTRUM	4.84	-0-	
REFLECTOR	Q 1			5.00	+0.13	

VERTICAL ANGLE

D	92	26	11
R	267	34	17
S	360	00	28
M	92°	25	57.0

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
62	30.0	0.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2021770

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2019948

HORIZONTAL DISTANCE:

REF. ECC. 0130

CORRECT HORIZ. DIST.: 2020078

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q 5		BUSTRUM	4.84	-0-	
REFLECTOR	Q-1A			4.65	-0-	

VERTICAL ANGLE

D	95	52	21
R	264	08	07
S	360	00	28
M	95	52	07.0

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1580005.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1571724

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 1571724

CORRECT HORIZ. DIST.:

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

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

NTERLINE NOTES
310
F3095-4/73

Notes Ck'd by	Survey of [illegible] COVE
Map No	JN [illegible] Tape ____ Std ____ °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 1-31-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 194

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q 5		Bustrum	4.84	⊖	
REFLECTOR	Q 2			4.53	⊖	

VERTICAL ANGLE

D	98	14	35
R	261	45	37
S	360	00	12
M	98	14	290

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
62°	30.0	0.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1132778

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1121080.1

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 1121080.1

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q 5		Bustrum	4.84	⊖	
REFLECTOR	Q 3			5.15	⊖	

VERTICAL ANGLE

D	106	11	39
R	253	48	35
S	360	00	14
M	16	11	320

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	PPM. COR.
62	30.0	0.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 5318.52

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 5107.54

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 5107.54

CORRECT HORIZ. DIST.:

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

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

NTERLINE NOTES
310
F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes C. Yasui Date 1-31-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 195

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	Q S		Bustrum	4.84	-0-	
REFLECTOR	H-8 A			5.00	+0.13	

VERTICAL ANGLE

D	99°	39'	05
R	260	21	01
S	360	00	00
M	99°	39	02.0

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
64	30.0	2.0

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 5583.80

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 5504.78

HORIZONTAL DISTANCE:

ECC. 0.130

CORRECT HORIZ. DIST.: 5506.08

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A						
REFLECTOR						

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

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

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

NTERLINE NOTES
310
F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 2-1-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 196

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-1 78
TIME AM
RECORDER B

PROJECT P.V. Slide
Grid
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-4A		C. YASUI	3.93	0	
REFLECTOR	SPH 17A 5005			5.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64°	30.0	
REFLECTOR			
MEAN			0.0

SLOPE DISTANCE (FEET)

		9	6	7	8	6	0

VERTICAL ANGLE

91°11'37"	INST. H.I. 3.93
R 268 48 [illegible]	
S 360 [illegible]	TARG. H.I. 5.00
M [illegible] .0 ✓	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1-HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: RED. DIST. = 967.650 ✓
ECC. REF. = +0.130
967.780 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-1-78
TIME AM.
RECORDER B

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P 4A		C. YASUI	3.93	0	
REFLECTOR	P 3			4.62	0	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	64°	30.0	
REFLECTOR			
MEAN			0.0

SLOPE DISTANCE (FEET)

		7	0	6	9	4	1

VERTICAL ANGLE

D 101-58-20	INST. H.I. 3.93
258-02-30	
S 360-00-50	TARG. H.I. 4.62
M 101-57-55.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1 HP
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: RED. DIST. = 691.582 ✓

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

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

ENTERLINE NOTES
E 310
SF 3095-4/73

Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 2-1-78
Date	Indexed G.D. BAILEY MAR 2 1978

LP 4238 197

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-1-78
TIME AM
RECORDER B

PROJECT P.V. Slide
Fred
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY (AHD., BACK)	ELEV
3800A	P-4A		YASUI	3.93	0	
REFLECTOR	SAN 1			4.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS IN HG	PPM CORR
3800A	64°	30.0	
REFLECTOR			
MEAN			0.0

SLOPE DISTANCE (FEET)

		6	8	1	8	6	3

VERTICAL ANGLE

D 101-48-29	INST H.I. 3.93
R 258-12-09	
S 360-00-38	TARG H.I. 4.00
M 101-48-10.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING

STABILITY 0 25 75 100 − +

TYPE OF REFLECTOR 1-HP

REFLECTOR CONSTANT

ATTENUATOR USED ☐ YES ☑ NO

COMMENTS REF. DIST. = 667.447 ✓
REF. ECC. = +0.130
667.577 ✓

PART NO. 9220 2660

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER		ECCENTRICITY (AHD., BACK)	ELEV
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS IN HG	PPM CORR
3800A			
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING

STABILITY

TYPE OF REFLECTOR

REFLECTOR CONSTANT

ATTENUATOR USED ☐ YES ☐ NO

COMMENTS

Office Work	ABALONE COVE
Checked	Surveyed by W. A. RICHARDS
Date	Notes W.A.R. Date 2-1-78
	Indexed G. D. BAILEY MAR 2 1978

LP 4338 ; 198

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-1-78
TIME P.M
RECORDER B

PROJECT ABALONE COVE
Lnd. slide
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY (AHD.) BACK	ELEV
3800A	SPH H 7A ECC5		YASUI	5.23		
REFLECTOR	SPH H8A			7.00	+ 0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS IN HG	PPM CORR
3800A	64°	30.0	
REFLECTOR			
MEAN			0.0

VISIBILITY ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING
STABILITY 0 25 75 100 − +
TYPE OF REFLECTOR 1 HP
REFLECTOR CONSTANT
ATTENUATOR USED ☐ YES ☑ NO
COMMENTS HOR. DIST. = 2133.489
REF. ECC. = + 0.130
TOTAL 2133.619

SLOPE DISTANCE (FEET)

	2	1	3	8	4	0	0

VERTICAL ANGLE

D 93° 52' 57"	5.23
R 266 06 53	
S 359-59-50	TARG HI 7.00
m 93-53-02.0	

PART NO 9220 2000

HEWLETT PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-1-78
TIME P.M
RECORDER B

PROJECT ABALONE COVE
Lnd slide
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY (AHD.) BACK	ELEV
3800A	SPH. H7A ECC5		YASUI	5.23		
REFLECTOR	P 4A.			4.00	+ 0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS IN HG	PPM CORR
3800A	64	30.0	
REFLECTOR			
MEAN			0.0

VISIBILITY ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING
STABILITY 25
TYPE OF REFLECTOR 1 HP
REFLECTOR CONSTANT
ATTENUATOR USED ☐ YES ☑ NO
COMMENTS HOR. DIST. = 967.674
REF. ECC. + 0.13
TOTAL 967.804

SLOPE DISTANCE (FEET)

		9	6	7	8	8	0

VERTICAL ANGLE

D 88-49-18	5.23
R 271-11-12	
S 360-00-30	4.00

Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 2-1-78
Date	Indexed G. D. BAILEY MAR 2 1978

PERSONE COVE

FB 4338 ; 199

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-1-78
TIME PM
RECORDER B

PROJECT ABALONE COVE
Lnd Slide
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY (AHD.) BACK	ELEV
3800A	SPH H7A ECCS		YASUI	5.23		
REFLECTOR	SAN 1			5.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS IN HG	PPM CORR
3800A	64°	30.0	
REFLECTOR			
MEAN			0.0

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING
STABILITY: 0 25 75 100 − +

SLOPE DISTANCE (FEET)

		9	9	4	4	7	2

TYPE OF REFLECTOR 1-HP
REFLECTOR CONSTANT
ATTENUATOR USED ☐ YES ☑ NO

VERTICAL ANGLE

D 76-50-32	INST HI 5.23
R 263 09 41	
S 360-00-13	TARG HI 5.00
m 96-50.25.5	

COMMENTS HOR DIST = 987.393
REF ECC = 0.13
TOTAL = 987.523

PART NO 9220 2000

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER		ECCENTRICITY (AHD.) BACK	ELEV
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS IN HG	PPM CORR
3800A			
REFLECTOR			
MEAN			

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING
STABILITY: 0 25 75 100 − +

SLOPE DISTANCE (FEET)

TYPE OF REFLECTOR
REFLECTOR CONSTANT
ATTENUATOR USED ☐ YES ☐ NO

VERTICAL ANGLE

	INST HI

COMMENTS

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN0021,69 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 2-2-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 200

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME A.M.
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		BUSTRUM	4.57	0	
REFLECTOR	SAN 2	0.05 ELY		5.00	0	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68°	30.2	
REFLECTOR			
MEAN			+02

SLOPE DISTANCE (FEET)

			6	5	1	0	8

VERTICAL ANGLE

D	99° 36 20	INST. H.I. 4.57
R	260 24 35	
S	360 00 55	TARG. H.I. 5.00
M	99° 35 52.5	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☑ YES ☐ NO
COMMENTS: HOR. DIST. = 64.197

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME A.M.
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		BUSTRUM	4.57	0	
REFLECTOR	SAN 3	0.05 ELY		5.20	0	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	30.2	
REFLECTOR			
MEAN			+02

SLOPE DISTANCE (FEET)

			9	3	1	0	0

VERTICAL ANGLE

D	95° 45 03	INST. H.I. 4.57
R	264 15 42	
S	360 00 45	TARG. H.I. 5.20
M	95° 44 40.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1-H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☑ YES ☐ NO
COMMENTS: HOR. DIST. = 92.632

PART NO. 9320-2060

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

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

NTERLINE NOTES
310
F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 22169 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 2-2-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 201

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME A.M.
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		BUSTRUM	4.57	0	
REFLECTOR	INT.	0.09 ELY		4.85	0	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	30.~	
REFLECTOR			
MEAN			+02

SLOPE DISTANCE (FEET)

		1	3	4	0	3	5

VERTICAL ANGLE

D 93° 25 43	INST. H.I. 4.57
R 266° 34' 30"	
S 360 00 13	TARG. H.I. 4.85
M 93° 25 33.5	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1 H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☑ YES ☐ NO
COMMENTS: HOR. DIST. = 133.795 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME A.M.
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		BUSTRUM	4.57	0	
REFLECTOR	SAN 4	0.08 ELY		4.90	0	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	30.2	
REFLECTOR			
MEAN			+02

SLOPE DISTANCE (FEET)

		1	5	1	6	9	8

VERTICAL ANGLE

D 92 49 54	INST. H.I. 4.57
R 267 10 10	
S 360 00 04	TARG. H.I. 4.90
M 92 49 52	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 75
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 1 H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☑ YES ☐ NO
COMMENTS: HOR DIST. = 151.513 ✓

PART NO. 9320-2060

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

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

ENTERLINE NOTE
E 310
3F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 2-2-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 202

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78

TIME A.M.

RECORDER

PROJECT ABALONE COVE STABILITY STUDY

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		BUSTRUM	4.57	0	
REFLECTOR	SAN 5	0.08 ELY		4.35	0	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68°	30.2	
REFLECTOR			
MEAN			+02

SLOPE DISTANCE (FEET)

		1	8	0	7	0	7

VERTICAL ANGLE

D 86° 05' 15"	INST. H.I. 4.57
R 273 54 55	
S 360 00 10	TARG. H.I. 4.35
M 86° 05' 10.0	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 70

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR:

REFLECTOR CONSTANT:

ATTENUATOR USED: ☑ YES ☐ NO

COMMENTS: HOR. DIST. = 180.286 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE

TIME

RECORDER

PROJECT

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING:

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR:

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☐ NO

COMMENTS:

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

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

ENTERLINE NOTES
: 310
F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN002169 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W.A.R. Date 2-2-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 203

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME A.M.
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		BUSTRUM	4.57	-0-	
REFLECTOR	SPH. H-7A ECC #5			6.00	+ 0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	30.2	
REFLECTOR			
MEAN			+ 02

SLOPE DISTANCE (FEET)

		9	9	4	6	2	6

VERTICAL ANGLE

D 83 05 57	INST. H.I. 4.57
R 276 54 23	
S 360 00 20	TARG. H.I. 6.00
M 83° 05' 47.0"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1 H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 987.415
REF. ECC. = + 0.13
TOTAL = 987.545

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME A.M.
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	SAN 1		BUSTRUM	4.57	-0-	
REFLECTOR	P 4A			6.00	+ 0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68	30.2	
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

		6	8	2	1	9	3

VERTICAL ANGLE

D 78° 05' 03"	INST. H.I. 4.57
R 281 55 11	
S 360 00 14	TARG. H.I. 6.00
M 78° 04' 56.0"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 80
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1 H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 667.488
REF. ECC. = + 0.13
TOTAL = 667.618

PART NO. 9320-2060

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

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

ENTERLINE NOTES
E 310
3F3095-4/73

63/56

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002'6M Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 2-78
Date	Indexed G. D. BAILEY MAR 2 1978

F.B. 4338 PG. 204

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME P.M
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P 2 A		BUSTRUM	4.95	~~0~~	
REFLECTOR	P 3			4.65	~~0~~	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68°	30.2	
REFLECTOR			
MEAN			+03

SLOPE DISTANCE (FEET)

	4	7	4	6	6	5

VERTICAL ANGLE

D	90	28	40	
R	269	31	00	INST. H.I.
S	359	59	40	TARG. H.I.
M	90	28	50.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1 H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 474.648 ✓

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78
TIME P.M
RECORDER YASUI

PROJECT ABALONE COVE STABILITY STUDY
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P 2A		BUSTRUM	4.95		
REFLECTOR	P 2			5.00		

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68°	30.2	
REFLECTOR			
MEAN			+03

SLOPE DISTANCE (FEET)

	3	8	7	0	8	0

VERTICAL ANGLE

D	89	46	27	
R	270	13	53	INST. H.I.
S	360	00	20	TARG. H.I.
M	89°	46'	17.0	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING: 70
STABILITY: 0 25 75 100 — +
TYPE OF REFLECTOR: 1 H.P.
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: HOR. DIST. = 387.077 ✓

PART NO. 9320-2060

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

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

ENTERLINE NOTES
E 310
F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002169 Tape — Std — °F
Office Work	Surveyed by W.A. RICHARDS
Checked	Notes W.A.R. Date 2-12-78
Date	Indexed B. D. BAILEY MAR 2 1978

F.B. 4338 PG. 205

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 2-2-78

TIME P.M

RECORDER YASU

PROJECT ABALONE COVE STABILITY STUDY

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-3		BUSTRUM	4.97		
REFLECTOR	P2-A					

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68°	30.2	
REFLECTOR			
MEAN			+03

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING:

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR:

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☐ NO

COMMENTS:

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE

TIME

RECORDER

PROJECT ABALONE COVE STABILITY STUDY

CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	P-3		BUSTRUM	4.97	-0-	
REFLECTOR	P4A			5.00	+0.13	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	68°	30.2	
REFLECTOR			
MEAN			+03

SLOPE DISTANCE (FEET) 7 0 6 7 9 5

VERTICAL ANGLE

D 78° 03' 45"	INST. H.I. 4.97
R 281 56 20	
S 360 00 05	TARG. H.I.
M 78 03' 42.5"	

VISIBILITY: ☑ GOOD ☐ FAIR ☐ BAD

RETURN SIGNAL READING: 65

STABILITY: 0 25 75 100 – +

TYPE OF REFLECTOR: 1 - H.P.

REFLECTOR CONSTANT:

ATTENUATOR USED: ☐ YES ☑ NO

COMMENTS: HOR. DIST. = 691.508 6 /
REF. ECC. = + 0.130
691.638 6

PART NO. 9320-2060

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

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

NTERLINE NOTES
E 310
F3095-4/73

Notes Ck'd by	Survey of PORTUGUESE BEND
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Checked	Notes RICHARDS Date 5-2-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 206

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE 5-2-78
TIME 2:10 P.M.
RECORDER RICHARDS

PROJECT PORTUGUESE BEND LANDSLIDE STUDY
CLIENT L.A. CO. ENGR.

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A	NORTH FIX	3800	MOODY	5.55	0	—
REFLECTOR	E-2	—			0	

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A	70°	29.9	
REFLECTOR	—	—	
MEAN	—	—	+10

SLOPE DISTANCE (FEET)

	5	4	2	8	8	3	6

VERTICAL ANGLE

D 97-44-42	INST. H.I. 5.55
R 262-15-30	
S 360-00-12	TARG. H.I.
M 97-44-36.0	

VISIBILITY: ☐ GOOD ☑ FAIR ☐ BAD HAZE
RETURN SIGNAL READING: 50
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR: 3-H.P.
REFLECTOR CONSTANT: 0
ATTENUATOR USED: ☐ YES ☑ NO
COMMENTS: 5379.333

PART NO. 9320-2060

HEWLETT hp PACKARD

MODEL 3800A
DISTANCE METER

DATE
TIME
RECORDER

PROJECT
CLIENT

	STATION	INST. NO.	OBSERVER	H.I.	ECCENTRICITY +AHD., – BACK	ELEV.
3800A						
REFLECTOR						

METEOROLOGICAL DATA	TEMP °F	PRESS. IN. HG	PPM CORR.
3800A			
REFLECTOR			
MEAN			

SLOPE DISTANCE (FEET)

VERTICAL ANGLE

D	INST. H.I.
R	
S	TARG. H.I.
M	

VISIBILITY: ☐ GOOD ☐ FAIR ☐ BAD
RETURN SIGNAL READING:
STABILITY: 0 25 75 100 – +
TYPE OF REFLECTOR:
REFLECTOR CONSTANT:
ATTENUATOR USED: ☐ YES ☐ NO
COMMENTS:

PART NO. 9320-2060

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

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

INTERLINE NO.
E 310
F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide F.B. 4338 PG. 207
Map Nr	JN 00216 4 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-8-78
Date	Indexed G.D. BAILEY JUN 23 1978

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD ~~Back~~	ELEV.
3800A	P-4A		Bus.	4.48	—	
REFLECTOR	W. FIX		Richards	5.00	+ 0.25	

Ret. Signal = 75

VERTICAL ANGLE

D	86-45-05
R	273-14-54
S	359-59-59
M	86-45-05.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. Cor.
84°	29.9	+12

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1574262

HORIZONTAL DISTANCE: 1571732

ECC. CORR. = +0250

CORRECT HORIZ. DIST.: 1571982

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. ~~Back~~	ELEV.
3800A	P-4A		Bus	4.48	—	
REFLECTOR	H-7A		Richards	6.00	+ 0.25	

ECC #5

Ret. Signal = 70

VERTICAL ANGLE

D	91-09-40
R	268-49-45
S	259-59-25
M	91-09-57.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	PPM COR.
84°	29.9	+12

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 967726.

HORIZONTAL DISTANCE: 967526

ECC. CORR. 0250

CORRECT HORIZ. DIST.: 967776

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

NTERLINE NOTES
: 310
F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards.
Checked	Notes Moody Date 5-9-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 208

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P-4A		BUS	4.48	—	
REFLECTOR	P-3		Richard.	4.95	—	

Ret 75

VERTICAL ANGLE

D	101-58-59
R	258-01-55
S	360-00-54
M	101-58-32.0

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
84	29.9	+12

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 7070.70

HORIZONTAL DISTANCE: 69168.1

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	P-4A		BUS	4.42	—	
REFLECTOR	Q-1		Richards	5.0	+0.30	

Ret Signal = 70

VERTICAL ANGLE

D	94-26-28
R	265-34-30
S	360-00-58
M	94-25-59

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
76°	29.8	+8

3 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 20629 86.

HORIZONTAL DISTANCE: 20568 14

ECC. CORR. +0300

CORRECT HORIZ. DIST.: 20571 14

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

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

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

NTERLINE NOTES
310
F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 002164 Tape ____ Std ____ °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-9-78
Date	Indexed ~~G.D. BAILEY~~ JUN 23 1978

F.B. 4338 PG. 209

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P-4A		BUS	4.48	———	
REFLECTOR	SAM #1		Richards	6.00	+0.30	

Ret. Signal = 75

VERTICAL ANGLE

D	101-40-26
R	258-20-25
S	360-00-51
M	101-40-00.5

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
76	29.8	+8

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 6817.60

HORIZONTAL DISTANCE: 667675

ECC. CORR. + 0.300

CORRECT HORIZ. DIST.: 667975

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	P-4A		BUS	4.48	———	
REFLECTOR	Q-5		Richards	7.00	+0.30	

RET. Signal = 65

VERTICAL ANGLE

D	95-42-29
R	264-18-03
S	360-00-32
M	95-42-13

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G.	P.P.M. COR.
76	29.8	+8

1 H.P. REF.

Used Atten.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 7180.04

HORIZONTAL DISTANCE: 714449

ECC. Corr. + 0.300

CORRECT HORIZ. DIST.: 714749

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

INTERLINE NOTES
310
F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map Nr	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Check'd	Notes Moody Date 5-9-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 210

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	N. Fix		J.M	4.90	—	
REFLECTOR	SHIELDS		WAR	6.00	+0.30	

Ret. Signal = 67

VERTICAL ANGLE

D	97-45-20
R	262 15 20
S	360-00 40
M	97-45-00

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78	29.35	+15

3 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)		3	1	4	5	5	8	0
HORIZONTAL DISTANCE		3	1	1	6	8	4	8
REF. ECC. +			0	3	0	0		
REF. CONST.								
CORRECT HORIZ. DIST.		3	1	1	7	1	4	8

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	N. Fix		J.M.	4.90	—	
REFLECTOR	E-Fix		Bus.	5.00	+0.30	

Ret. Signal = 65

VERTICAL ANGLE

D	92-16-12
R	267-44-08
S	360-00-20
M	92-16-02

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.35	+15

2 Lietz REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)		2	6	0	9	7	1	8
HORIZONTAL DISTANCE		2	6	0	7	6	7	5
REF. ECC. +			0	3	0	0		
REF. CONST. −			0	0	5	0		
CORRECT HORIZ. DIST.		2	6	0	7	9	2	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

Do not extend notes this side of this line

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

ENTERLINE NOTES
E 310
GF3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-9-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 211

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	N. FIX		Moody	4.90	—	
REFLECTOR	Davis		Richards	6.00	+0.30	

Ret Signal: 75

VERTICAL ANGLE

D	101-38-46
R	258-22-05
S	360-00-51
M	101-38-20.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78	29.35	+15

3 H.P REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1864598

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1826258

HORIZONTAL DISTANCE:

REF. ECC. + 0300

CORRECT HORIZ. DIST.: 1826558

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	N. FIX		Moody	4.90	—	
REFLECTOR	W. FIX		Bus.	4.00	+0.30	

Ret. Signal: 65

VERTICAL ANGLE

D	96-08-40
R	263-52-08
S	360-00-48
M	96-08-16

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.35	+15

3 LIET3 REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3212994

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3194576

HORIZONTAL DISTANCE:

REF. ECC. + 0300

REF. CONST. − 0050

CORRECT HORIZ. DIST.: 3194826

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
GF3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 21.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-9-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 212

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	N.FIX		Moody	4.90	—	
REFLECTOR	P-4A		B.W.S.	3.00	+0.30	

RET. Signal = 55

VERTICAL ANGLE

D	95-12-40
R	264-47-33
S	360-00-13
M	95-12-33.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78	29.35	+15

3 LIETZ REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4774320

HORIZONTAL DISTANCE: 4754600

ECC. CORR. + 0300

REF. CONST. − 0050

CORRECT HORIZ. DIST.: 4754850

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	N.FIX		Moody	4.90	—	
REFLECTOR	Rad. #1		Richards	7.00	+0.30	

RET Signal = 75

VERTICAL ANGLE

D	100-09-15
R	259-51-18
S	360-00-33
M	100-08-58.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.35	+15

3 HP. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2262462

HORIZONTAL DISTANCE: 2227057

ECC. CORR. + 0300

CORRECT HORIZ. DIST.: 2227357

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-9-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 213

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	N. FIX		Moody	4.90		
REFLECTOR	Blakesly		Bus.	4.00	+0.30	

Ref. signal = 70

VERTICAL ANGLE

D	97-04-20
R Z	62-56-10
S	360-00-30
M	97-04-05

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78	29.35	+15

~~HP~~ REF.
3-LETZ

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 7 . 0 1 5 6 0

HORIZONTAL DISTANCE: 3 6 7 3 4 3 0

ECC. Corr. + 0 3 0 0

REF. CONSTANT − 0 0 5 0

CORRECT HORIZ. DIST.: 3 6 7 3 6 8 0

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	N. FIX		moody	4.90		
REFLECTOR	Rod #2 ecc #3		Richards	7.00	+0.30	

Ref. signal = 65

VERTICAL ANGLE

D	98-59-22
R Z	261-01-07
S	360-00-29
M	98-59-07.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.35	+15

3 HP. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 4 9 0 3 6 2

HORIZONTAL DISTANCE: 3 4 4 7 5 2 9

ECC. Corr. + 0 3 0 0

CORRECT HORIZ. DIST.: 3 4 4 7 8 2 9

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

ENTERLINE NOTES
E 310
GF3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 00216A Tape ____ Std ____ °F
Office Work	Surveyed by Richards
Checked	Notes ____ Date 5-9-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 214

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	N. FIX		Moody	5.15	———	
REFLECTOR	Blakely		Richards	4.00	+03.0	

Ret. Signal: 65

VERTICAL ANGLE

D	97-04-18
R	262-55-59
S	260.00.17
M	97-04-09.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
66	29.45	+7

3 HP Ref.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3701578

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3673439

HORIZONTAL DISTANCE:

ECC. Corr. + 0300

CORRECT HORIZ. DIST.: 3673739

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	N. FIX		Moody	5.15		
REFLECTOR	K-1		Richards	6.0	+03.0	

Ret Signal: 55

VERTICAL ANGLE

D	96-25-01
R	263 35 15
S	360-00-16
M	96-24-53

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
66°	29.45	+7

3-HP Ref.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4730496

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 4700880

HORIZONTAL DISTANCE:

+ 0300

CORRECT HORIZ. DIST.: 4701180

CORRECT HORIZ. DIST.:

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

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

INTERLINE NOTES
E 310
F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes moody Date 5-10-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 215

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	N. FIX		moody	5.15		
REFLECTOR	K-3AECC 2		Richards	6.0	+0.30	

RET SIGNAL - 55

VERTICAL ANGLE

D	98-44-30
R	261-15-21
S	359-59-51
M	98-44-34.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
66°	29.45	+7

3HP REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4 2 6 5 7 1 2

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 4 2 1 6 1 4 6

HORIZONTAL DISTANCE:

+ 0 3 0 0

CORRECT HORIZ. DIST.: 4 2 1 6 4 4 6

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	E. FIX		Moody	4.90	—	
REFLECTOR	K-3A ECC. #2		Richards	6.00	+0.30	

70' RET.

VERTICAL ANGLE

D	101-25-33
R	258-34-50
S	360-00-23
M	101-25-205

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
74°	29.55	+11

3HP REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2 7 5 1 6 8 2.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2 6 9 7 1 8 2

HORIZONTAL DISTANCE:

+ 0 3 0 0

CORRECT HORIZ. DIST.: 2 6 9 7 4 8 2

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes moody Date 5-10-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 216

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	E. FIX		moody	4.90	—	
REFLECTOR	W. FIX		Buz	4.00	+0.30	

60 RET.

VERTICAL ANGLE

D	93-56-10
R	266-05-05
S	360.01.15
M	93-55.325

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
74°	29.55	+11

3 LIETZ REF

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 5 1 6 4 1 0

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3 5 0 8 1 5 9

HORIZONTAL DISTANCE:

+ 0 3 0 0

CORRECT HORIZ. DIST.: 3 5 0 8 4 5 9

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	E. FIX		moody	4.90	—	
REFLECTOR	E-1		Richards	6.00	+.0.30	

65 RET.

VERTICAL ANGLE

D	99-13-30
R	260 46-55
S	360-00-25
M	99-13-175

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
74	29.55	+11

3 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 6 7 4 3 8 2

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3 6 2 6 8 9 5

HORIZONTAL DISTANCE:

+ 0 3 0 0

CORRECT HORIZ. DIST.: 3 6 2 7 1 9 5

CORRECT HORIZ. DIST.:

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

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

NTERLINE NOTES
310
F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-10-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 217

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	E-FIX		Moody	4.90	0	
REFLECTOR	P.4A		Buz	4.00	+0.30	

50 RET

VERTICAL ANGLE

D	93-53-14
R	266-07-47
S	360-01-01
M	93-52-435

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
74	29.55	+11

3 LIET 3 REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4869360

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 4858206

HORIZONTAL DISTANCE:

REF. ECC. + 0300

REF. CONST. − 0050

CORRECT HORIZ. DIST.: 4858456

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	E-FIX		Moody	4.90	—	
REFLECTOR	E-2		Richards	4.50	—	

60 RET

VERTICAL ANGLE

D	98-08-50
R	261-51-50
S	360-00-40
M	98-08-30

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
74	29.55	+11

3 H.P.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4425424

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 4380820

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 4380820

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
GF3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-10-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 218

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	E-FIX		Moody	4.90	0	
REFLECTOR	Blakesley			4.00	+0.30	

65 RET

VERTICAL ANGLE

D	96-07-16
R	263-53-23
S	360 00 39
M	96-06-56.5

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
74	29.55	+11

3 LIETZ

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3301752

HORIZONTAL DISTANCE: 3282961

REF. ECC. + 0300

REF. CONST − 0050

CORRECT HORIZ. DIST.: 3283211

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	E-FIX		Moody	5.10	—	
REFLECTOR	K-6		Richards	6.00	+0.30	

70 RET

VERTICAL ANGLE

D	102-41-42
R	257-18-40
S	360.00.22
M	102-41-31

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G.	P.P.M. COR.
72	29.7	+8

3 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1803050.

HORIZONTAL DISTANCE: 1758993

+ 0300

CORRECT HORIZ. DIST.: 1759293

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

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

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

ENTERLINE NOTES E 310 6F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 002164 Tape — Std → °F
Office Work	Surveyed by Richards
Checked	Notes moody Date 5-11-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 219

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	E FIX		moody	5.10	—	
REFLECTOR	K-1		Richards	6.00	+0.30	

60 Ret

VERTICAL ANGLE

D	95-54-02
R	264-06-59
S	360.00.59
M	95-53-32.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
72	29.7	+8

3 H.P. Ref.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4144400

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 4122503

HORIZONTAL DISTANCE:

+ 0300

CORRECT HORIZ. DIST.: 4122803

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	E-FIX		moody	5.10	—	
REFLECTOR	Davis		Buz	4.00	+0.30	

75 Ret

VERTICAL ANGLE

D	103-11-31
R	256-49-09
S	360.00.40
M	103-17-11

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
72	29.7	+8

2 Lie 3 Ref.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1206608

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1174793

HORIZONTAL DISTANCE:

REF. ECC. + 0300

REF. CONST. − 00050

CORRECT HORIZ. DIST.: 1175043

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-11-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 220

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	E-FIX		moody	5.10	—	
REFLECTOR	Rod #1		Buz	5.00	+0.30	

70 RET

VERTICAL ANGLE

D	101-34-03
R	258-26-18
S	360-00-21
M	101-34-525

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
72	29.7	+8

1 LieT3 REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 4 8 0 8 3 6

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1 4 5 0 6 8 8

HORIZONTAL DISTANCE:

REF. ECC. + 0 3 0 0

REF. CONST. — 0 0 5 0

CORRECT HORIZ. DIST.: 1 4 5 0 9 3 8

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	E-FIX		moody	5.10	—	
REFLECTOR	Rod #2		Richards	6.00	+0.30	

ECC #3 75 RET

VERTICAL ANGLE

D	102-41-13
R	257-19-19
S	360-00-32
M	102-40-57

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
72	29.7	+8

3 HP

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2 0 1 3 0 2 0.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1 9 6 3 9 0 6

HORIZONTAL DISTANCE:

+ 0 3 0 0

CORRECT HORIZ. DIST.: 1 9 6 4 2 0 6

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
GF3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes Moody Date 5-11-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 221

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	K-6		moody	460	—	
REFLECTOR	W.FIX		Buz		+0.30	

60 Ret.

VERTICAL ANGLE

D	87-25-36
R	272-34-44
S	360-00-20
M	87-25-26

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
78	30.05	+9

3 Liotz Ref

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3486252

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 3457028

HORIZONTAL DISTANCE:

REF. ECC. + 0300

REF. CONST. − 0050

CORRECT HORIZ. DIST.: 3457278

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	K-6		Moody	460	—	
REFLECTOR	E-1		Richards	6.00	+0.30	

70 Ref.

VERTICAL ANGLE

D	94-14-48
R	265-45-41
S	360-00-29
M	94-14-33.5

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G.	P.P.M. COR.
78	31.05	+9

HP Ref

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2623524

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2616335

HORIZONTAL DISTANCE:

+ 0300

CORRECT HORIZ. DIST.: 2616635

CORRECT HORIZ. DIST.:

48.0
14.5
33.5

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

Do not extend notes this side of this line

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 403 LOS ANGELES COUNTY ENGINEERING BLDG.

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by	Survey of Portuguese Bend Landslide
Map No.	JN 0 021.64 Tape — Std — °F
Office Work	Surveyed by Richards
Checked	Notes moody Date 5-11-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 222

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	W. FIX		moody	4.75	—	
REFLECTOR	K-1		Buz		+0.30	

75 RET

VERTICAL ANGLE

D	96-04-47
R	263 55-22
S	360-00-09
M	96-04 425

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.9	+10

3 LIET 3 REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1741688

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1731896

HORIZONTAL DISTANCE:

REF. ECC. + 0300

REF. CONST. − 0050

CORRECT HORIZ. DIST.: 1732146

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	W. FIX		moody	4.75	—	
REFLECTOR	Shields		Richards	6.00	+0.30	

70 RET

VERTICAL ANGLE

D	91-37-25
R	268-23-05
S	360-00-30
M	91-37-10

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.9	+10

3 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2910032

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2908870

HORIZONTAL DISTANCE:

+ 0300

CORRECT HORIZ. DIST.: 2909170

CORRECT HORIZ. DIST.:

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN002164 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Checked	Notes MOODY Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 223

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H-8A		moody	5.20	—	
REFLECTOR	Q-1		Richards	6.00	+0.30	

65 Ret

VERTICAL ANGLE

D	89-46-07
R	270-13-49
S	359.59.56
M	89.46-09

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
84	30.0	+12

1.H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2119082

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 2119065

HORIZONTAL DISTANCE:

REF. ECC. + 0300

CORRECT HORIZ. DIST.: 2119365

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	H-8A		moody	5.20	—	
REFLECTOR	Q-5		Bug	5.00	+0.30	

65 Ret

VERTICAL ANGLE

D	80-21-27
R	279.38.26
S	359.59.53
M	80-21-30.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
84	30.0	+12

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 55806.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 5501124

HORIZONTAL DISTANCE:

REF. ECC. + 0306

CORRECT HORIZ. DIST.: 5504224

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
GF3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Checked	Notes MOODY Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 224

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H-8A		Moody	5.20	—	
REFLECTOR	H-7A		Bill	6.00	+0.30	

ECC #5 70 REF.

VERTICAL ANGLE

D	86-04-04
R	273-57-08
S	360-01-12
M	86-03-28 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
84	30.0	+12

2 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 21382.10

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 21331.51 ✓

HORIZONTAL DISTANCE:

REF. ECC. + 0.300

CORRECT HORIZ. DIST.: 21334.51

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	H-8A		Moody	5.20	—	
REFLECTOR	Q-1A		Richards	6.00	+0.30	

70 REF

VERTICAL ANGLE

D	92-16-28
R	267-44-40
S	360-01-08
M	92-15-54 ✓

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
84	30.0	+12

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 16913.16

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 16899.95 ✓

HORIZONTAL DISTANCE:

REF. ECC. + 0.300

CORRECT HORIZ. DIST.: 16902.95

CORRECT HORIZ. DIST.:

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Checked	Notes MOODY Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 225

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H-8A		moody	5.20	—	
REFLECTOR	Q-2		Richards	6.00	+0.30	

70 RET.

VERTICAL ANGLE

D	93-04-16
R	266-57-08
S	360-01-24
M	93-03-34

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
82	30.0	+12

1 H.P. REF

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1271852

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1270039

HORIZONTAL DISTANCE:

REF. ECC. + 0300

CORRECT HORIZ. DIST.: 1270339

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	H-8A		moody	5.20	—	
REFLECTOR	Q-3		Bug	5.00	+0.30	

65 RET.

VERTICAL ANGLE

D	94-08-23
R	265-52-35
S	360-00-58
M	94-07-54

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
82	30.0	+12

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 76852

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 76685 4

HORIZONTAL DISTANCE:

REF. ECC. + 0300

CORRECT HORIZ. DIST.: 76715 4

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No	JN002169 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Checked	Notes MOODY Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 226

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H-8A		moody	5.20	—	
REFLECTOR	P-2		Richards	5.30	—	

RET 65

VERTICAL ANGLE

D	89-14-23
R	270-46-29
S	360-00-52
M	89-13-57

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
84	30.0	+12

1-HP REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1919.456

HORIZONTAL DISTANCE: 1919.284

CORRECT HORIZ. DIST.: 1919.284

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN 1		J.M	4.80		
REFLECTOR	H7AECCS		W.A.R.	6.00	+0.30	

RET = 80

VERTICAL ANGLE

D	83° 07' 02"
R	276-53-50
S	360-00-52
M	83-06-36

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	PPM. COR.
70°	29.9	+5

1 HP REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 9947.30

HORIZONTAL DISTANCE: 9875.46

REF ECC. + 0.300

CORRECT HORIZ. DIST.: 9878.46

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No	JN 0021.64 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Check'd	Notes MOODY Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 227

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN 1		moody	4.80	—	
REFLECTOR	SAN 5		Richards	4.85	—	

70 RET. POINT IS EAST 0.30 ℄

VERTICAL ANGLE

D	85-57-57
R	274-02-32
S	360-00-29
M	85-57-42.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.9	+9

I.H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 8 0 8 3 0

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1 8 0 3 8 1

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 1 8 0 3 8 1

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN 1		moody	4.80	—	
REFLECTOR	SAN 4		Richards	5.25	—	

RET. 75 POINT IS 0.27 E. ℄

VERTICAL ANGLE

D	92-46-02
R	267-14-42
S	360-00-44
M	92-45-40

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.9	+9

I.H.P. REF

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 5 1 8 0 6.

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 1 5 1 6 3 0

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 1 5 1 6 3 0

CORRECT HORIZ. DIST.:

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

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

ENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN0021.64 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Checked	Notes MOODY Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 228

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN 1		moody	4.80	—	
REFLECTOR	inter		Richards	5.15	—	

RET. 75 POINT IS 0.29 E. O/L

VERTICAL ANGLE

D	93 - 21 - 39
R	266 - 39 06
S	360 - 00 - 45
M	93 - 21 - 165

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78	29.9	+9

1. H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 1 3 4 1 3 8

HORIZONTAL DISTANCE: 1 3 3 9 0 8

CORRECT HORIZ. DIST.: 1 3 3 9 0 8

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	SAN 1		moody	4.80	—	
REFLECTOR	SAN 3		Richards	5.25	—	

RET. 75 POINT IS 0.22 E O/L.

VERTICAL ANGLE

D	95 - 49 - 28
R	264 - 11 36
S	360 - 01 - 04
M	95 - 48 - 56

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
78	29.9	+9

1. H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 9 3 1 8 0.

HORIZONTAL DISTANCE: 9 2 7 0 0

CORRECT HORIZ. DIST.: 9 2 7 0 0

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No.	JN 002164 Tape — Std — °F
Office Work	Surveyed by RICHARDS
Checked	Notes MOODY Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 229

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	SAN 1		Moody	4.80	—	
REFLECTOR	SAN 2		Richards	5.60	—	

RET. 75 POINT IS 0.23 E. °/L

VERTICAL ANGLE

D	99-11-40
R	260-48-54
S	360-00-34
M	99-11-23

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
78	29.9	+9

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 65084

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE: 64249

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 64249

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	P-2A		MOODY	5.0	—	
REFLECTOR	P-2		BUZ	4.9	—	

RET 70

VERTICAL ANGLE

D	89° 47' 41"
R	270° 13' 07"
S	360° 00' 48"
M	89° 47' 17"

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
76°	29.9	+7

1 HP REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 386990

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.: 386987

CORRECT HORIZ. DIST.:

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

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

CENTERLINE NOTES
CE 310
76F3095-4/73

Notes Ck'd by	Survey of ABALONE COVE
Map No	JN 002164 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes MYERS Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 230

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	P-2A		MOODY	5.0	—	
REFLECTOR	P-3		BUZ	4.67	—	

RET. TO

VERTICAL ANGLE

D	90°28'41"
R	269°31'30"
S	360°00'11"
M	90°28'35.5

METEOROLOGICAL DATA

TEMP. °F	PRESS. IN H.G	P.P.M. COR.
76°	29.9	+7

1 H.P. REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 4746.24

HORIZONTAL DISTANCE: 4746.08

CORRECT HORIZ. DIST.: 4746.08

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	Q-5		Moody	5.1	—	
REFLECTOR	Q-1		RICH.	6.0	+0.30	

VERTICAL ANGLE

D	92-25-10
R	267-35-34
S	360 00 44
M	92-24-48

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.
80	29.9	+12

2 H.P REF.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2021126.

HORIZONTAL DISTANCE: 2019333

REF. ECC. +300

CORRECT HORIZ. DIST.: 2019633

SLOPE DISTANCE (FEET):

HORIZONTAL DISTANCE:

CORRECT HORIZ. DIST.:

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

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

CENTERLINE NOTES
E 310
6F3095-4/73

Notes Ck'd by	Survey of PORTUGUESE BEND
Map No.	JN002164 Tape ___ Std ___ °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes M. B. Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B 4338 PG. 231

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H8A		Myers	5.20	—0—	
REFLECTOR	WAYTARCE #2			5.30	—0—	

65 RET.

VERTICAL ANGLE

D	88-06-12
R	271-54-20
S	360-00-32
M	88-05-56.0

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
68°	30.05	+03

1 HP

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 2 1 0 6 3 7 2

HORIZONTAL DISTANCE: 2 1 0 5 2 1 3

CORRECT HORIZ. DIST.

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A	H8A		Myers	5.20	—0—	
REFLECTOR	G-7			6.00	+0.30	

55 RET.

VERTICAL ANGLE

D	84° 48' 53"
R	275-11-48
S	360 00-41
M	84° 48-325

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
68°	30.05	+03

1 HP

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET): 3 1 3 4 3 4 5

HORIZONTAL DISTANCE: 3 1 2 1 4 9 0

REF. ECC + 0 3 0 0

CORRECT HORIZ. DIST.: 3 1 2 1 7 9 0

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

CORRECT HORIZ. DIST.

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

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

CENTERLINE NOTES
CE 310
6F3095-4/73

Notes Ck'd by	Survey of PORTUGUESE BEND
Map No.	JN 0021 64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes M. B. Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 232

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD −BACK	ELEV.
3800A	H8A		Myers	5.20	0	
REFLECTOR	H8			4.00	+ 0.13	

REF = 80

VERTICAL ANGLE

D	93°20'46
R	266 39 35
S	360 00 21
M	93 20 35.5

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G	P.P.M. COR.
68°	30.05	+03

1 HP

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET) 4195.74

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE 418860

HORIZONTAL DISTANCE

REF. ECC. + 0.130

CORRECT HORIZ. DIST. 418990

CORRECT HORIZ. DIST.

	STATION	F.B.	OBSERVER	H.I.	ECCENTRICITY +AHD. −BACK	ELEV.
3800A						
REFLECTOR						

VERTICAL ANGLE

D	
R	
S	
M	

METEOROLOGICAL DATA

TEMP. °F.	PRESS. IN H.G.	P.P.M. COR.

VERTICAL ANGLE

D	
R	
S	
M	

SLOPE DISTANCE (FEET)

SLOPE DISTANCE (FEET)

HORIZONTAL DISTANCE

HORIZONTAL DISTANCE

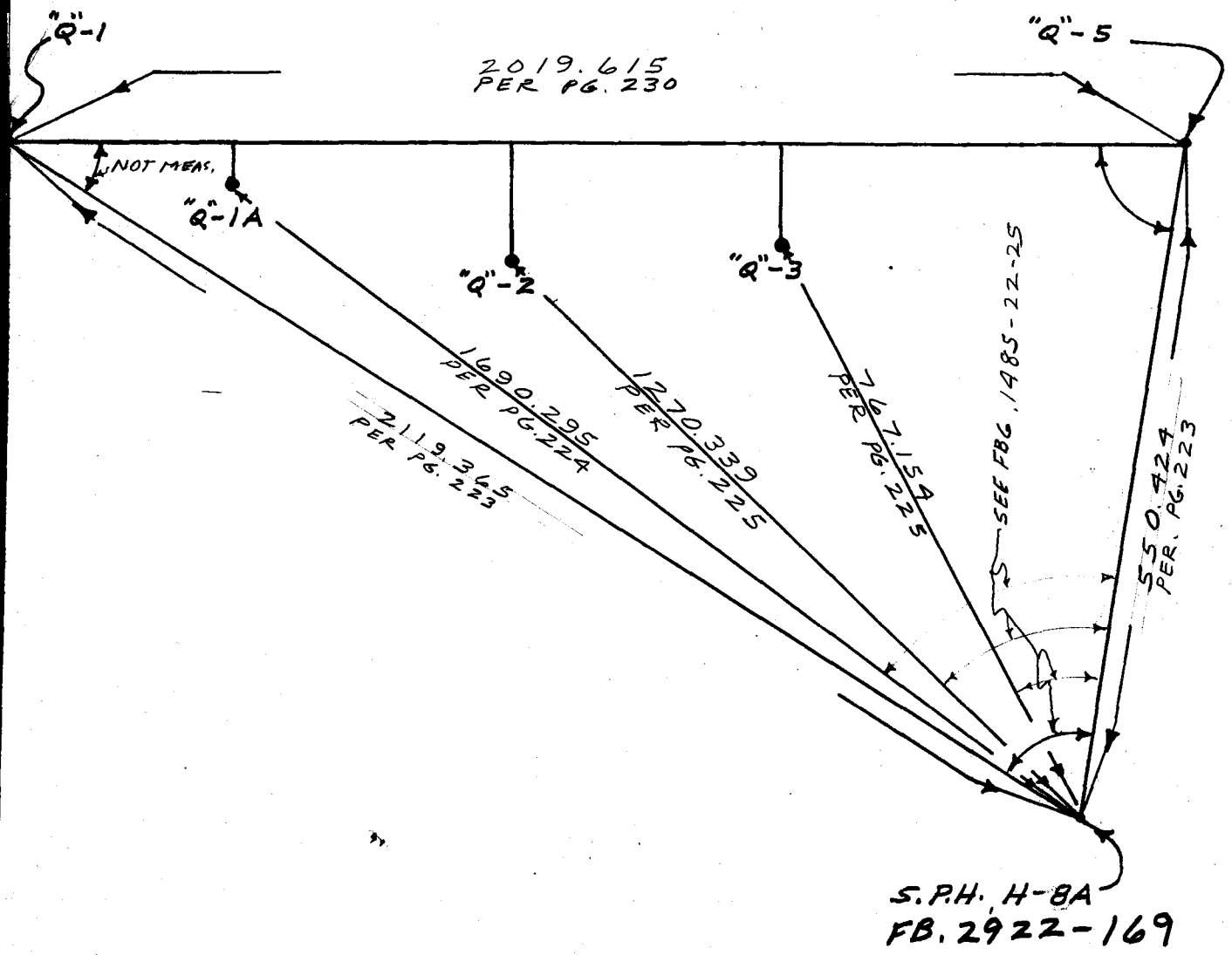
CORRECT HORIZ. DIST.

CORRECT HORIZ. DIST.

Plotted by	Survey of ABALONE COVE
Map No.	JN 0021,64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

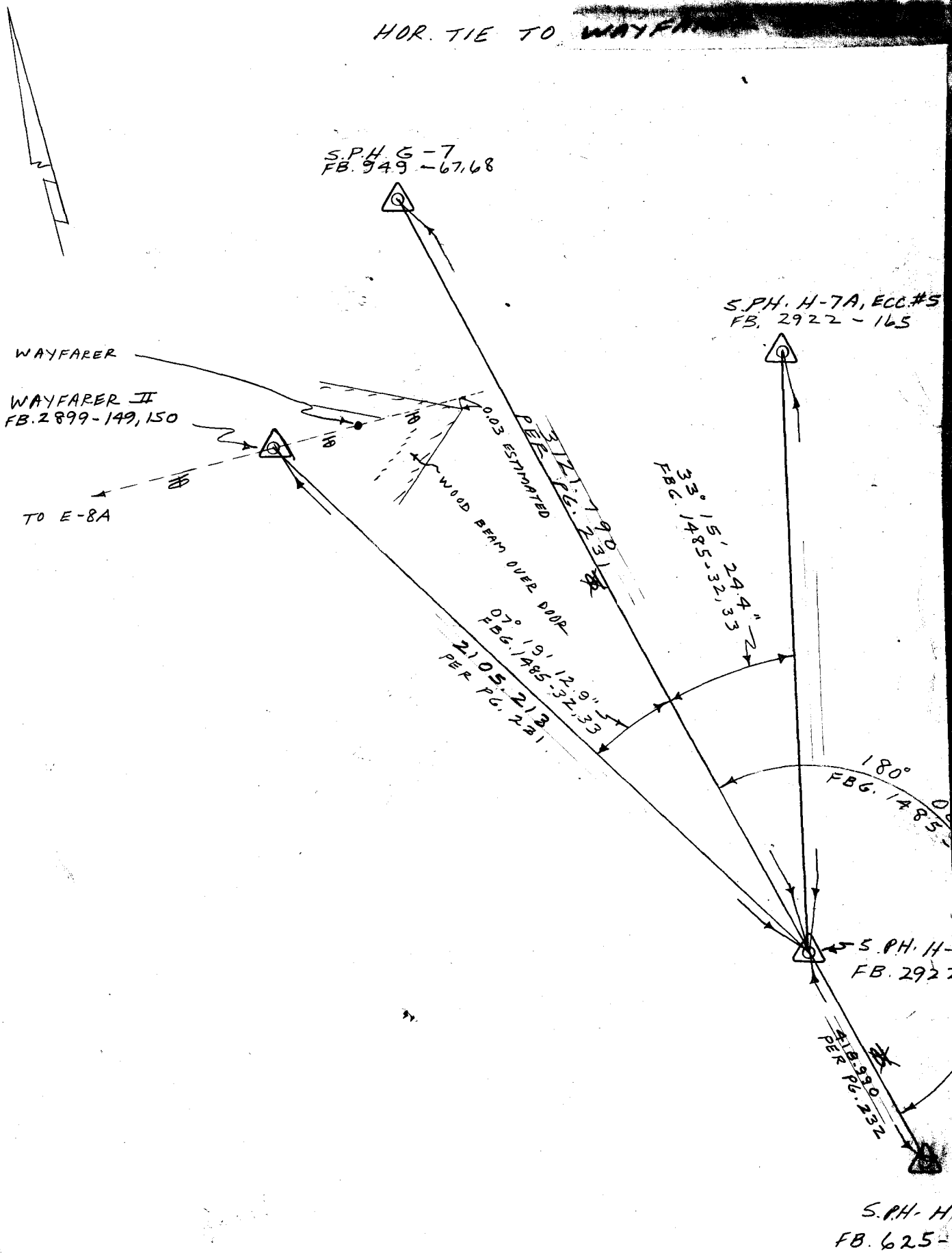
F.B. 4338 PG. 233

ABALONE COVE STABILITY STUDY
"Q" LINE OBSERVED DATA
5-78



F.B. 4338 PG. 234 5 - [redacted]

HOR. TIE TO WAYFA[redacted]

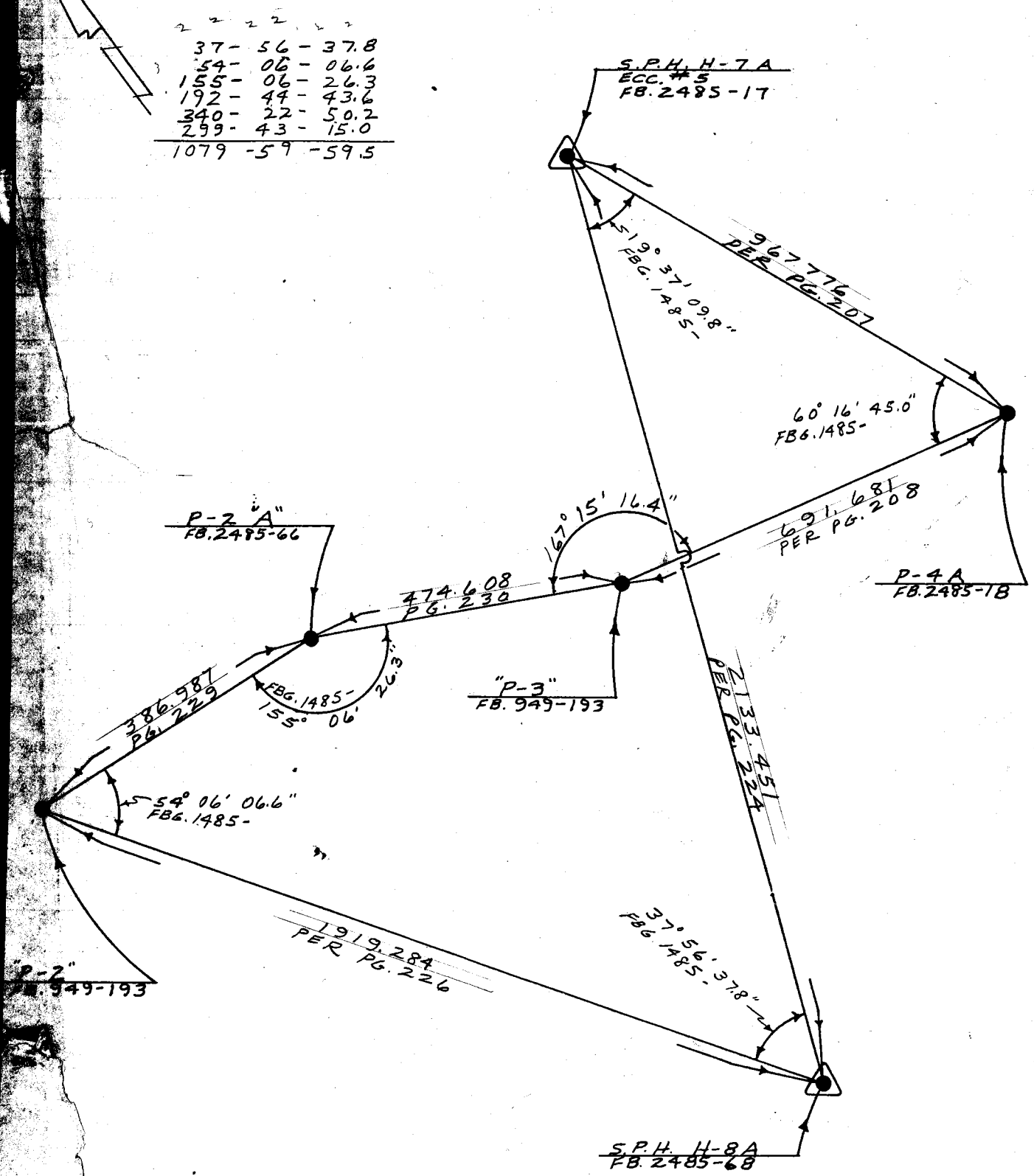


Notes Ck'd by	Survey of STABILITY STUDY ABALONE COVE
Map No.	JN 0071.64 Tape — Std — °F
Office Work	Surveyed by W. A. RICHARDS
Checked	Notes W. A. R. Date 5-78
Date	Indexed G.D. BAILEY JUN 23 1978

F.B. 4338 PG. 235

ABALONE COVE AREA STABILITY STUDY OBSERVED DATA
"P" LINE TRAVERSE

5-78



F.B. 4338 PG. 236

5 - 78

ABALONE COVE AREA STABILITY STUDY OBSERVED D
"SAN" LINE TRIANGLE

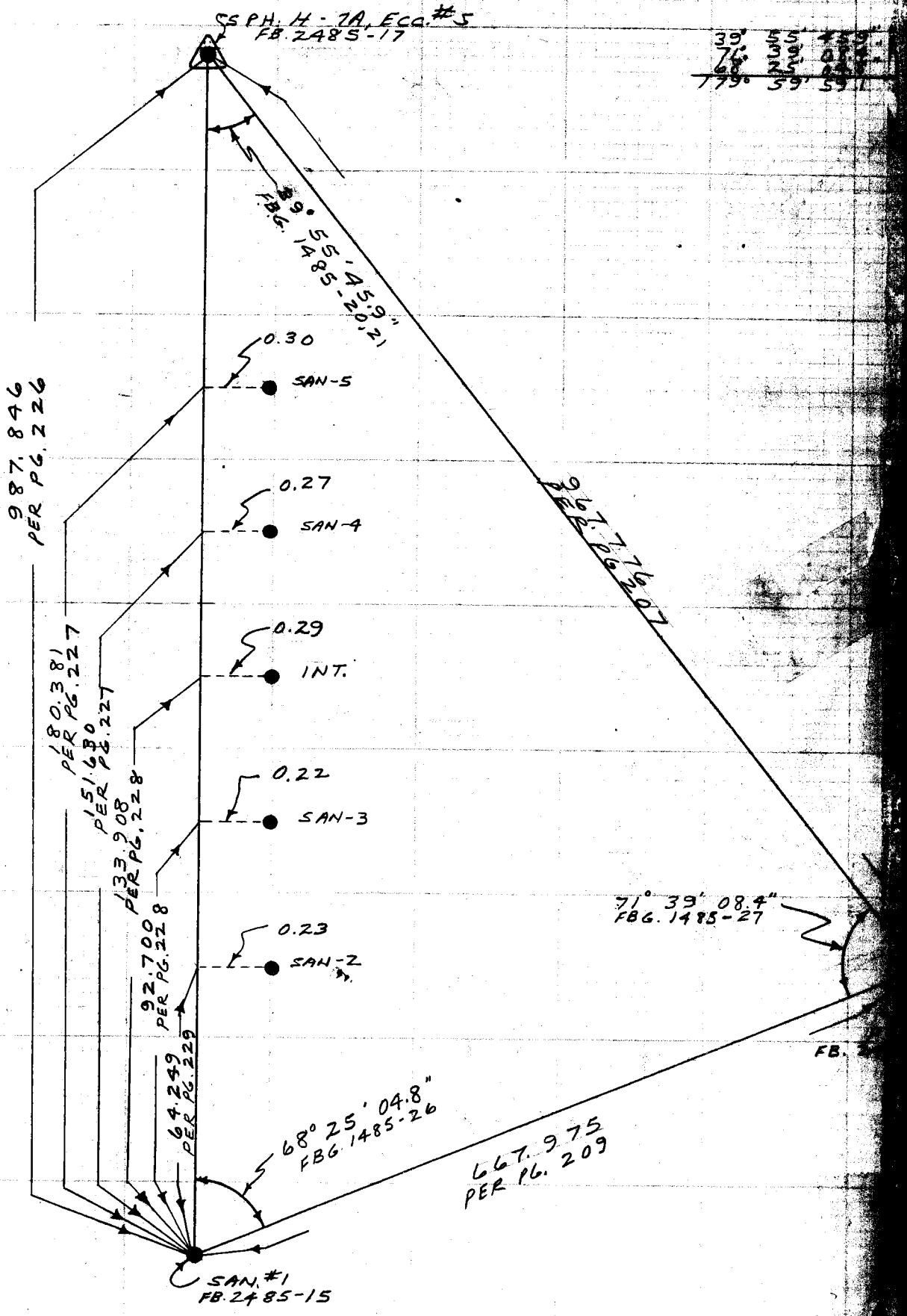


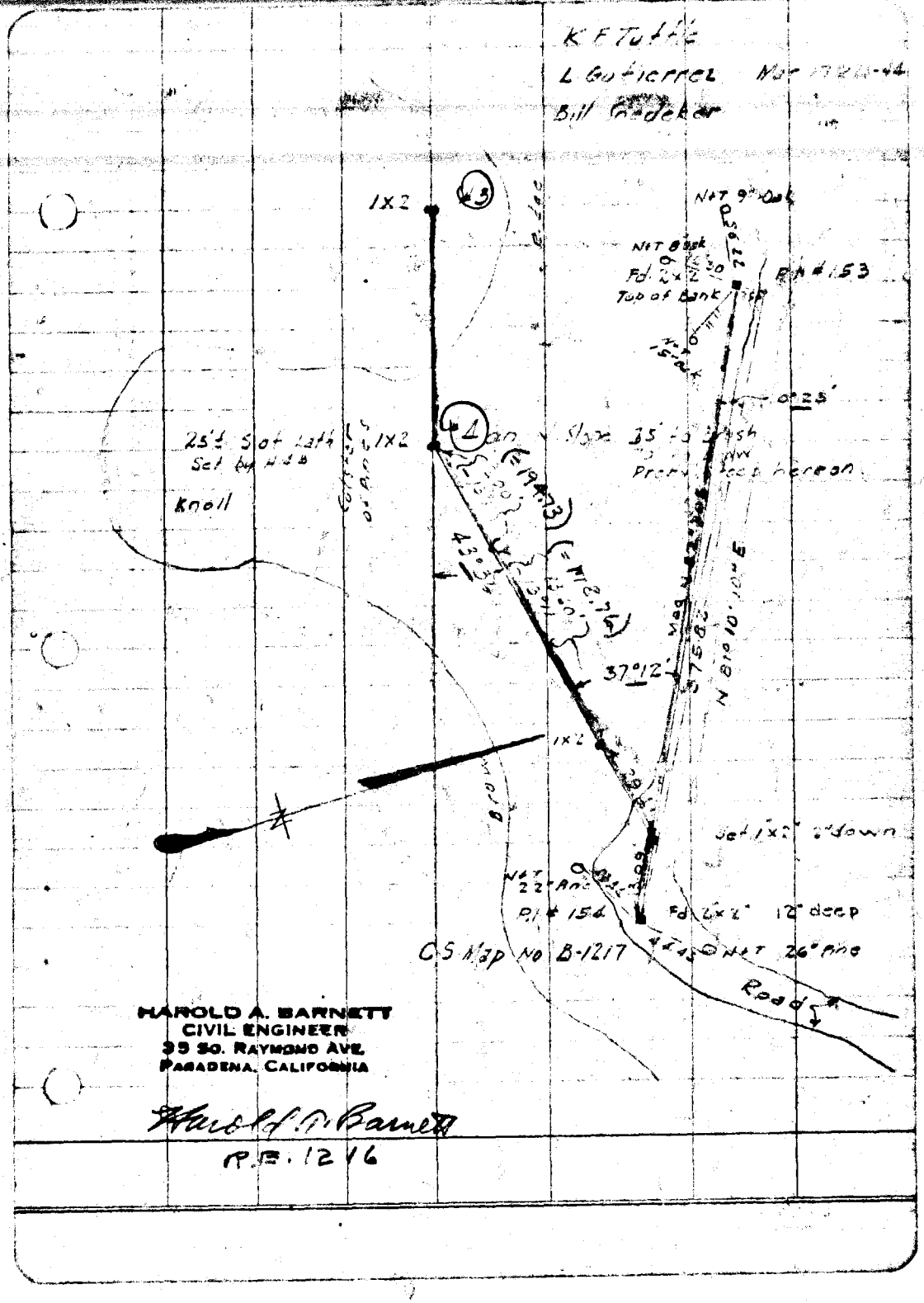
EXHIBIT "A"

LINE "A"

Commencing at the Northwest corner of said Lot 3; thence South 66° 10' 31" East along the Northerly line of said Lot 3 a distance of 1527.10 feet to an angle point in said Northerly line; thenced North 33° 02' 42" East along the Northwesterly line of said Lot 3 a distance of 1876.69 feet to the True Point of Beginning; thence South 12° 08' 40" East 5.40 feet; thence South 20° 24' 32" East 72.19 feet; thence South 21° 09' 27" East 58.59 feet; thence South 23° 33' 49" East 61.48 feet; thence South 26° 23' 21" East 66.50 feet; thence South 28° 06' 23" East 95.06 feet; thence South 30° 40' 53" East 70.93 feet; thence South 20° 17' 36" East 85.88 feet; thence South 12° 49' 18" East 84.42 feet; thence South 2° 04' 47" East 71.02 feet to the beginning of a tangent curve concave Northwesterly having a radius of 50.00 feet; thence Southwesterly along said curve through a central angle of 48° 40' 18" a distance of 42.47 feet; thence tangent to said curve South 46° 35' 31" West 23.14 feet; thence South 68° 41' 57" West 61.45 feet; thence South 55° 24' 23" West 32.42 feet to the beginning of a tangent curve concave Northeasterly having a radius of 7.00 feet; thence northwesterly along said last mentioned curve through a central angle of 130° 06' 56" a distance of 15.90 feet; thence tangent to said last mentioned curve North 5° 31' 19" East 2.77 feet to the beginning of a tangent curve concave Westerly having a radius of 360.00 feet; thence Northerly along said last mentioned curve through a central angle of 28° 44' 00" a distance of 180.54 feet; thence tangent to said last mentioned curve North 23° 12' 41" West 26.08 feet to the beginning of a tangent curve concave Southwesterly having a radius of 50.00 feet; thence Northwesterly along said last mentioned curve through a central angle of 67° 05' 28" a distance of 58.55 feet; thence tangent to said last mentioned curve South 89° 41' 52" West 61.82 feet; thence South 83° 46' 03" West 67.81 feet; thence South 89° 48' 55" West 41.41 feet; thence ~~South~~ North 73° 56' 13" West 34.41 feet to the beginning of a tangent curve concave Southeasterly having a radius of 110.00 feet; thence Southwesterly along said last mentioned curve through a central angle of 79° 49' 07" a distance of 153.24

~~83- 487663~~

83- 1228535


K F Tuttle
L Gutierrez
Bill Snedeker
1X2
#3
#4
Knoll
Top of Bank
Pl # 153
Pl # 154
Fd 2x2 12" deep
C.S. Map No B-1217
Road
HAROLD A. BARNETT
CIVIL ENGINEER
35 SO. RAYMOND AVE.
PASADENA, CALIFORNIA
Harold A. Barnett
R.E. 1216

DESCRIPTION OF BENCH MARK

344

ion 354.1 C (DWR) State California County Los Angeles
Pearblossom Pump Plant County Los Angeles Chief of party C. Symns
direction from nearest town 8.55 miles west Leveling date Aug. 1971
mark DWR bench mark disk Stamping 354.1 C B M
y DWR Section 8 T5N R11W
ription
les west along the California Aqueduct from the Pearblossom
nt, about 250 feet northwest of bench mark 352.0 A (DWR),
north of the north levee road, 0.6 foot north of the right-
fence, 1.6 feet east of a witness post, about 10 feet lower
e road, and set in the top of a concrete post projecting 0.1
ove the ground.

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

345

DESCRIPTION OF BENCH MARK

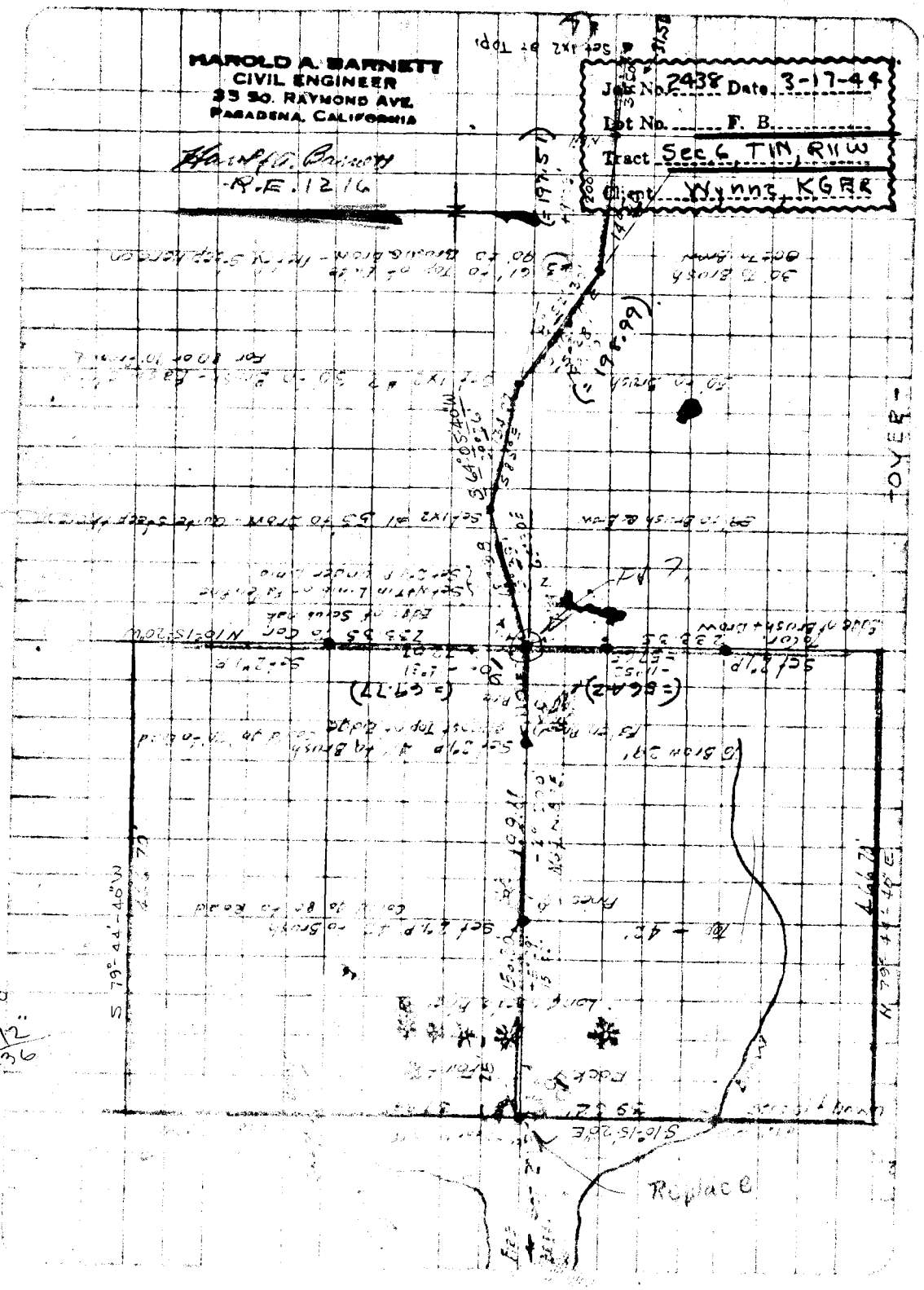
VOK

52.0 A (DWR) State California County Los Angeles
earblossom Pump Plant County Los Angeles Chief of party C. Symns
ection from nearest town 8.55 miles west Leveling date Aug. 1971
rk DWR bench mark disk Stamping 352.0 A B M
DWR 1971
ption Section 8 T5N R11W
les west along the California Aqueduct from the Pearblossom
nt, at the crossing of 47th Street East, in the top and 0.6
uth of the north end of the west concrete curb of bridge
15.0 feet west of the center line of the street, 0.7 foot
the east edge of the curb, and about 1 foot higher than
eet.

J LINE END

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

110.52
199.88
156.30
466.70



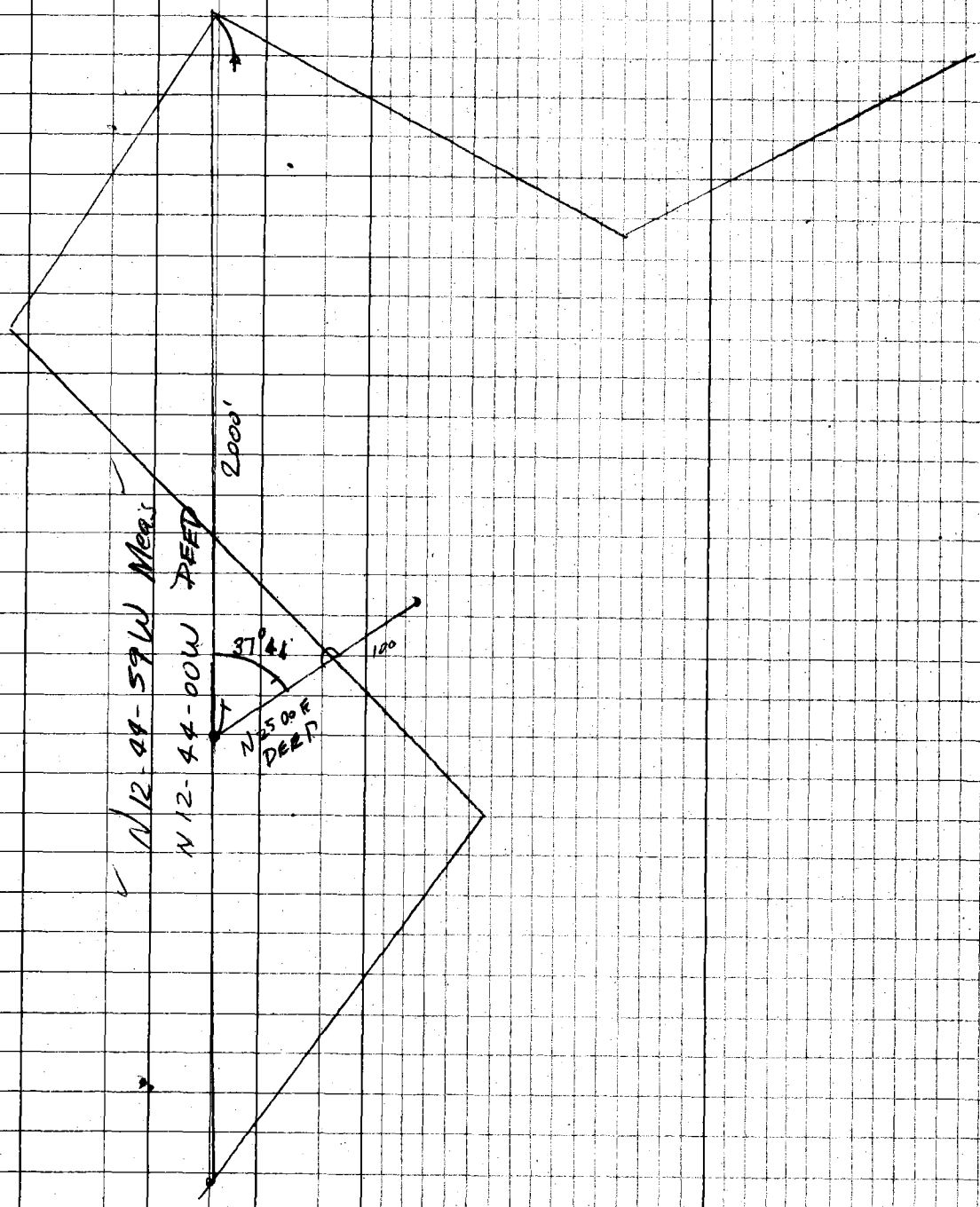
199.88
110.52
310.40

① 21-54-40
② 43°-49'-12"
2°-54-36

JOB NO. _____ SURVEY OF _____ F.B. _____ PG. _____

SURVEY BY _____

NOTES BY _____ DATE _____

INDEXED H. HOLMAN DATE _____

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